

4-4 REPEATERS (J99343SA, SB)
2-4 TERMINAL REPEATERS (J99343RA, RF)
4-WIRE COMBINED FUNCTION UNITS (J99343HA, SF)
PRESCRIPTION SETTING PROCEDURES
METALLIC FACILITY TERMINAL

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1. GENERAL

1.01 This section gives prescription equalizer setting procedures based on cable makeup

in 4-wire Metallic Facility Terminal (MFT) transmission units. These settings are for use only on 4-wire circuits without 2-wire extensions. For 4-wire circuits with 2-wire extensions, see Section 332-912-222.

1.02 This section is being reissued to include prescription information on the J99343SF and the J99343HA combined function units (CFU) which are similar to the J99343SB 4-4 repeater.

1.03 Chart 1 provides a convenient cross-reference for the type cable facility and the corresponding table of this section. It can be used when only the equalizer settings or other table information is needed. Explanation, procedures, and examples of how to use the tables are given in the text portions of this section.

1.04 This section gives the prescription equalizer settings for the 4-4 repeaters (J99343SA and SB), 2-4 terminal repeaters (J99343RA and RF) and the new combined function units (J99343SF) and (J99343HA) which contain a 4-4 repeater.

1.05 A simplified procedure for determining 309B and integrated circuit-type equalizer settings for nonloaded cable is described in Part 2. This procedure requires only the total nonloaded facility length and its dc resistance.

1.06 The prescription setting tables for nonloaded cable discussed in Part 3 will supply 309B equalizer and integrated-type equalizer settings based on cable makeup. Also, for convenience the 1-kHz equalizer gain, cable loss, and dc resistance of the facility are given.

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1.07 The prescription equalizer setting tables for H88 loaded cable are discussed in Part 4.

1.08 To obtain the correct equalizer settings, the proper circuit design rules must be used. The maximum 1-kHz insertion loss of the facility is limited by crosstalk as shown in Table A. Also, the proper terminating impedance, 600 ohms for nonloaded cable or 1200 ohms for loaded cable must be used to obtain the correct equalization.

1.09 The procedures in this section cannot be used to determine equalizer settings for equalizers which address a combination of loaded and nonloaded cable in a repeater section. For facilities of this type the settings may be calculated using actual loss measurements as described in Section 332-912-231 for the J99343SA, SB, RA, and RF units, Section 332-912-251 for the J99343SF, and Section 332-912-261 for the J99343HA.

1.10 The proper use of the simplified procedures in Part 2 of this section will result in an equalized repeater section with rolloff between 2.0 dB (more loss) and -0.67 dB (less loss) from 300 Hz to 3 kHz with respect to the 1-kHz loss. Proper use of the tables in Parts 3 and 4 will result in an equalized repeater section with rolloff between 0.8 dB (more loss) and -0.3 dB (less loss) from 300 Hz to 3 kHz with respect to the 1-kHz loss.

2. SIMPLIFIED EQUALIZER SETTINGS FOR NONLOADED CABLE

2.01 A simplified method for determining 309B or the integrated circuit-type equalizer settings for nonloaded cable may be used instead of the prescription setting procedures in Part 3. This simplified method requires only the length of the nonloaded facility (including the length of any bridged taps) and the dc resistance of the nonloaded facility (do not include the bridged tap resistance). These two values determine the height (HT) and slope (SL) required to equalize the facility.

2.02 Chart 2 may be used to determine 309B equalizer settings for 4-4 repeaters (J99343SA, SB) and 2-4 terminal repeaters (J99343RA, RF) and the integrated circuit-type equalizer settings for the J99343SF and J99343HA CFUs, which interface nonloaded cable. The repeater input impedance and cable termination must be 600 ohms.

2.03 To use Chart 2:

(1) Determine the total length (TL) of the nonloaded facility. (Include the length of any bridged taps.)

Note: 25-gauge MAT cable must be converted to an equivalent length of 26 gauge. Multiply the length of MAT cable by .77 before determining total length.

(2) Compute the dc resistance (R) of the nonloaded facility. See Table B for dc resistance factors. (Do not include resistance of bridged taps.)

(3) The values determined in Steps 1 and 2 are used to locate a point (TL, R) on Chart 2. The region of the chart located by the point specifies the HT (first number) and SL (second number) setting required. The bandwidth (BW) is set to 14 for all facilities. If the point falls on a boundary line, select the region to the right of the boundary.

(4) Equalizer gain may be determined from Table C, and Fig. 1 may be used to determine the 1-kHz cable loss using the values from Steps 2 and 3. (See paragraph 3.04 for procedures for using Fig. 1.)

3. PRESCRIPTION EQUALIZER SETTING PROCEDURES FOR NONLOADED CABLE

A. General

3.01 The procedures for using the prescription setting tables for nonloaded cable are divided into five categories:

- Single-Gauge
- Two-Gauge
- More than Two Gauges
- Bridged Tap (BT)
- 19-Gauge.

3.02 The use of the tables referenced by the procedures varies with the cable makeup and the correct procedure must be used to determine accurate equalizer settings. Also the facility must

be terminated in 600 ohms and the NL/L switch must be in the NL position.

3.03 The 1-kHz insertion loss of the facility is included in the table for calculating repeater gain. The table loss values are accurate only for single- or two-gauge facilities and should not be used for facilities composed of more than two gauges or with BT.

3.04 The 1-kHz insertion loss may be determined for any nonloaded cable section by using Fig. 1. To determine the insertion loss:

- (a) Calculate the total length of the cable in kilofeet. (25-gauge MAT cable must be converted to an equivalent length of 26-gauge cable. Multiply the length of MAT cable by .77 for the 26-gauge equivalent.)
- (b) Calculate the total resistance of the cable (see Table B).
- (c) Enter Fig. 1 at the values determined in (a) and (b), and read the estimated insertion loss.
- (d) If BT is present, include the length of BT in the total facility length, but do not include the resistance of the BT in the total resistance.

B. Single-Gauge

3.05 For single-gauge facilities, the prescription equalizer settings may be taken directly from the tables. Tables D, E, F, and G are for 19-, 22-, 24-, and 26-gauge cable, respectively. The 26-gauge table may be used for nonloaded 25-gauge cable after conversion to an equivalent length of 26-gauge. To use the tables:

- (a) Round the facility length to the nearest whole number in kft to obtain the table entry point.
- (b) From the table obtain BANDWIDTH (BW), HEIGHT (HT), SLOPE (SL), EQUALIZER GAIN (EQL GN), and CABLE LOSS.
- (c) Correct the cable loss for round-off error by interpolation or use Fig. 1.

Example: Given 14.6 kft of 26-gauge cable

- (1) Round off to 15 kft to get table entry point.
- (2) From Table G, 15 kft of 26-gauge cable has the following settings:

BW = 13
 HT = 6
 SL = 3
 EQL GN = 1.6 dB
 Cable Loss = 7.6 dB.

- (3) By interpolation, 14.6 kft of 26-gauge cable has 1-kHz loss of 7.4 dB, or from Fig. 1

Total length = 14.6 kft
 Total resistance = $14.6 \times 83.3 = 1216$ ohms
 1-kHz loss = 7.4 dB.

C. Two-Gauge

3.06 For facilities composed of two segments of different gauge nonloaded cable, prescription settings may be obtained from the tables. Table H is for 24- and 22-gauge combinations; Table I is for 26- and 22-gauge combinations, and Table J is for 26- and 24-gauge combinations. Combinations of 19-gauge cable are covered separately in paragraph 3.13. To find equalizer settings for two-gauge cable sections:

- (a) Determine the table entry point by adding the length of the two gauges together and rounding to the nearest kft for the working length (WL). Enter the table at the WL and round the finer gauge to the nearest whole number.
- (b) Obtain the BW, HT, SL, EQL GN, and the cable loss from the appropriate table.
- (c) Correct the cable loss from (b) by interpolation for round-off error or use Fig. 1.

Example: Given a facility composed of 10.4 kft of 24-gauge and 8.2 kft of 26-gauge cable.

- (1) Determine table entry points by finding WL.

10.4	kft 24 gauge	
+	<u>8.2</u>	kft 26 gauge
18.6	kft or rounding WL =	19 kft

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Round the finer gauge (26) to the nearest kft (8.2 = 8.0).

Therefore, the table entry points become:

WL = 19 kft
8 kft of 26 gauge

(2) From Table J:

BW = 14
HT = 8
SL = 2
EQL GN = 1.6 dB
Cable loss = 8.3 dB.

(3) Alternatively, use Fig. 1 to determine the cable loss of 8.2 kft of 26-gauge and 10.4 kft of 24-gauge.

Total Length = 18.6 kft
Total resistance = 1223 ohms
Cable loss = 8.1 dB.

gauges, it is necessary to obtain an equivalent facility. This equivalent facility is composed of major and minor gauge segments. The two longest segments are designated the major gauges and the remaining segments of cable are minor gauges. The minor gauge segments are converted to major gauge equivalents. Table K lists the constants for equivalent length conversion. The rules for conversion of a minor gauge to the equivalent major gauge are:

Rule a: Convert a minor gauge to the major gauge that is in closest physical proximity in the actual makeup of the cable.

Rule b: Convert the minor gauges to the major gauge that is nearest in gauge size.

Note: 25-gauge MAT cable must be converted to an equivalent length of 26 gauge before determining major and minor gauges.

D. More Than Two Gauges

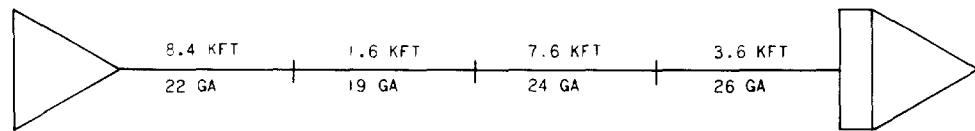
3.07 To determine prescription equalizer settings for facilities composed of more than two

3.08 The following procedures are used to determine the equalizer settings for facilities composed of more than two gauges.

STEP	PROCEDURE
1	Select the two longest sections of cable as the major gauges. The remaining sections are minor gauges.
2	Convert a minor gauge to a major gauge. (a) Select the proper constant from Table K. (b) Multiply the length of the minor gauge by the constant. (c) Add the results to the length of the major gauge.
3	Repeat Step 2 for all minor gauges.
4	Use the results of Step 3 to enter the tables for two-gauge facilities (Tables H, I, or J).
5	Obtain BW, HT, SL, and EQL GN from the table. DO NOT USE THE CABLE LOSS VALUE IN THE TABLE.
6	Compute the cable loss using Fig. 1.

STEP

PROCEDURE

Example:

- (1) Select 22- and 24-gauge segments as the major gauges.
- (2) Convert 19 gauge to 22 gauge (Rule b).

$$\begin{array}{r}
 1.6 \text{ kft 19 gauge} \\
 \times \quad .87 \text{ 19 to 22 conversion factor (Table K)} \\
 \hline
 1.39 \text{ kft equivalent length of 22 gauge}
 \end{array}$$

$$\begin{array}{r}
 8.4 \text{ kft 22 gauge} \\
 + \quad 1.39 \text{ kft 22 gauge equivalent} \\
 \hline
 9.79 \text{ kft 22 gauge table entry}
 \end{array}$$

- (3) Convert 26 gauge to 24 gauge (Rule a or b).

$$\begin{array}{r}
 3.6 \text{ kft 26 gauge} \\
 \times \quad 1.17 \text{ 26 to 24 conversion factor (Table K)} \\
 \hline
 4.21 \text{ kft 24 gauge equivalent}
 \end{array}$$

$$\begin{array}{r}
 7.6 \text{ kft 24 gauge} \\
 + \quad 4.21 \text{ kft 24 gauge equivalent} \\
 \hline
 11.81 \text{ kft 24 gauge table entry}
 \end{array}$$

- (4) From paragraph 3.06:

$$\begin{array}{r}
 \text{WL} = 9.79 \text{ kft 22 gauge} \\
 + \quad 11.81 \text{ kft 24 gauge} \\
 \hline
 21.6 \text{ kft or WL} = 22 \text{ kft}
 \end{array}$$

STEP

PROCEDURE

Round the finer gauge (24) to the nearest whole number.

11.81 kft = 12 kft 24 gauge

Table entry points are:

WL = 22 kft

24 gauge = 12 kft

(5) From Table H:

BW = 14

HT = 7

SL = 4

EQL GN = 2.4 dB

(6) Calculate the 1-kHz cable loss from Fig. 1.

	1.6	kft 19 gauge
	8.4	kft 22 gauge
	7.6	kft 24 gauge
+	3.6	kft 26 gauge
	<u>21.2</u>	kft total length

	26	ohms 19 gauge
	276	ohms 22 gauge
	394	ohms 24 gauge
+	300	ohms 26 gauge
	<u>996</u>	ohms total resistance

From Fig. 1, cable loss equals 7.5 dB.

E. Bridged Tap

3.09 The procedure for determining equalizer settings for nonloaded cable with BT requires that the BT be converted to an equivalent length of cable. The gauge of the BT is not pertinent since loss and amplitude distortion is caused primarily by cable capacitance. The four gauges of cable considered in this section have essentially the same capacitance (0.083 μ F) per mile. Bridged tap should be converted to an equivalent length as follows.

- If the BT is connected at the junction of two gauges, convert to the equivalent length of the longer gauge.
- Convert the BT to an equivalent length of the gauge to which it connects.
- If the location of the BT is unknown, convert to the gauge which makes up the largest part of the facility.

3.10 Table L lists the constants (K) used in computing the equivalent length of BT. The conversion formula is:

EQUIVALENT length of BT equals constant K plus 0.023 times the length of BT times the length of BT.

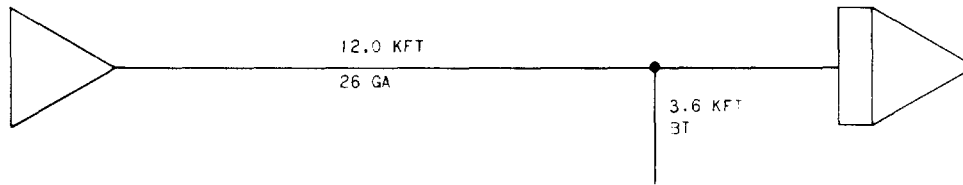
$$ELBT = [K + (LBT \times 0.023)] \times LBT$$

The resultant equivalent length of BT is added to the length of the conversion gauge. This resultant

length is used to obtain the prescription equalizer settings as previously described for single-, two-, or more than two-gauge facilities.

3.11 The 1-kHz insertion loss of cable containing BT can be estimated using Fig. 1. However, 0.5-dB errors can occur particularly in long 26-gauge facilities with long BT.

3.12 An example of computing equalizer settings for a facility containing BT is shown below.

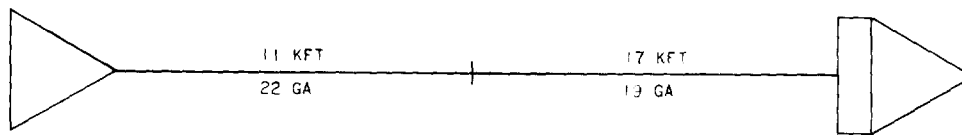


STEP	PROCEDURE						
1	Determine constant K for 12 kft of 26-gauge cable from Table L. K = .57						
2	Apply the formula $ELBT = [K + (0.023 \times LBT)] \times LBT$ ELBT = [.57 + (0.023 × 3.6)] × 3.6 ELBT = 2.35 kft						
3	Add facility length to ELBT. <table style="margin-left: 40px;"> <tr> <td style="padding-right: 10px;">12.0</td> <td>kft facility length</td> </tr> <tr> <td style="padding-right: 10px;">+ 2.35</td> <td>kft equivalent length of BT</td> </tr> <tr> <td style="border-top: 1px solid black; padding-top: 2px;">14.35</td> <td>kft equivalent length of facility</td> </tr> </table>	12.0	kft facility length	+ 2.35	kft equivalent length of BT	14.35	kft equivalent length of facility
12.0	kft facility length						
+ 2.35	kft equivalent length of BT						
14.35	kft equivalent length of facility						
4	From single gauge table determine the equalizer settings. Use Table G with an entry point of 14 kft. <table style="margin-left: 40px;"> <tr> <td>BW = 13</td> </tr> <tr> <td>HT = 6</td> </tr> <tr> <td>SL = 2</td> </tr> <tr> <td>EQL GN = 1.1</td> </tr> </table>	BW = 13	HT = 6	SL = 2	EQL GN = 1.1		
BW = 13							
HT = 6							
SL = 2							
EQL GN = 1.1							

STEP	PROCEDURE
5	Determine the estimated cable loss from Fig. 1. Total resistance 12 kft 26 gauge = 1000 ohms Total length 12 kft 26 gauge + 3.6 kft BT = 15.6 kft Cable loss = 6.6 dB
F. 19-Gauge	in the two-gauge tables. When two-gauge facilities containing 19-gauge cable are encountered, the facility should be reduced to an equivalent single gauge as follows:
3.13 Since only small quantities of 19-gauge cable exist in outside plant, it was not included	

STEP	PROCEDURE
1	Select the longer of the two gauges as the major gauge and the shorter as the minor gauge.
2	Obtain the constant from Table K to convert the minor gauge to the major gauge.
3	Multiply the length of the minor gauge by the constant to obtain the equivalent length of major gauge.
4	Use the result of Step 3 to enter the appropriate single gauge table and obtain BW, HT, SL and EQL GN settings.
5	Determine cable loss using Fig. 1.

Example:



(1) Major gauge is 19 gauge.

Minor gauge is 22 gauge.

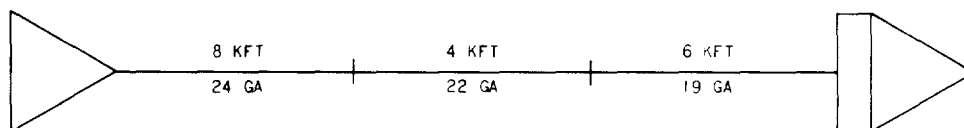
(2) From Table K the constant K is 1.19.

STEP	PROCEDURE
(3)	$\begin{array}{r} 11 \text{ kft} \quad \text{Length of minor gauge} \\ \times 1.19 \quad \text{Constant K} \\ \hline 13.09 \text{ kft} \quad \text{Equivalent 19 gauge length} \end{array}$
	$\begin{array}{r} 17 \text{ kft 19 gauge} \\ + 13.09 \text{ kft 19 gauge equivalent} \\ \hline 30.09 \text{ kft} \end{array}$
(4)	<p>From Table D, BW, HT, SL and EQL GN for 30 kft of 19 gauge:</p> <p>BW = 14 HT = 7 SL = 5 EQL GN = 2.8 dB</p>
(5)	<p>Total resistance = 637.9 ohms</p> <p>Total length = 28 kft Cable loss from Fig. 1 = 6.6 dB.</p>

3.14 When the facility contains more than two gauges and the 19-gauge segment is a minor gauge, the procedure discussed in paragraph 3.07 should be used. If the 19-gauge segment comprises more than one-half of the total length, the facility should be reduced to a 19-gauge equivalent as

described in paragraph 3.13. If neither of the cases described in this paragraph fit the facility, consider the 19-gauge segment for minor gauge and follow the procedure in paragraph 3.07.

Example:



STEP	PROCEDURE
1	<p>Since the length of the 19-gauge segment is less than one-half of the total length, the major gauges are 24 and 22.</p>

STEP	PROCEDURE
2	Convert 19 gauge to 22 gauge. $\begin{array}{r} 6 \text{ kft 19 gauge (minor gauge)} \\ \times .87 \text{ (Constant from Table K)} \\ \hline 5.22 \text{ kft 22 gauge equivalent} \end{array}$
3	Determine table entry points. $\begin{array}{r} 5.22 \text{ kft 22 gauge equivalent} \\ 4.00 \text{ kft 22 gauge} \\ + 8.00 \text{ kft 24 gauge} \\ \hline \text{WL} = 17.22 = 17.0 \text{ kft} \\ \text{24 gauge} = 8.0 \text{ kft} \end{array}$
4	From Table H 24- and 22-gauge: $\begin{array}{l} \text{WL} = 17 \text{ kft 24 gauge} = 8 \text{ kft} \\ \text{BW} = 14 \\ \text{HT} = 6 \\ \text{SL} = 2 \\ \text{EQL GN} = 1.3 \text{ dB} \end{array}$
5	Determine cable loss. $\begin{array}{l} \text{Total length} = 18 \text{ kft} \\ \text{Total resistance} = 644 \text{ ohms} \\ \text{From Fig. 1 cable loss} = 5.2 \text{ dB.} \end{array}$

4. PRESCRIPTION EQUALIZER SETTING PROCEDURES FOR H88 LOADED CABLE

Section 332-912-231, Section 332-912-251, or Section 332-912-261.

A. General

4.01 To use the procedures and tables in this section, loaded cable must be terminated in 1200 ohms and the NL/L switch on the 309B repeater unit must be in the L position. The tables are computed for nominal 3.0-kft end sections. End sections from 1.5- to 4.5-kft will result in additional rolloff at 3.0 kHz up to 0.8 dB. End sections over 4.5 kft or BT in the end sections will require field touch-up as described in either

4.02 The tables contain 1-kHz insertion loss values for facilities with 3-kft end sections and 6-kft load coil spacing. Insertion loss may be calculated by multiplying the gauge length by the 1-kHz loss per kft constants in Table M.

4.03 The procedures in this section for H88 loaded cable are divided into two categories; single- and two-gauge facilities and more than two-gauge facilities.

4.04 No procedures are given for loaded facilities with BT. If the BT is at the end of the facility and fairly short, the prescription settings may be used as follows:

- (2) Disregard the BT and obtain settings from the appropriate table for the facility.
- (b) Make touch up adjustments as described in either Section 332-912-231, 332-912-251, or 332-912-261 as required.

Note: If the above steps do not equalize the facility, the BT must be removed or actual loss measurements as described in either Section 332-912-231, 332-912-251, or 332-912-261 used to determine the equalizer settings.

B. Single- or Two-Gauge

4.05 Prescription equalizer settings for single-gauge facilities of 19-, 22-, 24-, 25- and 26-gauge loaded cable are found in Tables N, O, P, Q, and R, respectively. Settings for facilities composed of two gauges, 26/24, 26/22, or 24/22 may be found in Tables S, T, and U, respectively. For facilities composed of mixtures of 25H88 MAT and H88 loaded Hi-Cap. cable, equalizer settings must be determined by the manual procedures in Section 332-912-231 for the J99343SA, SB, RA, and RF units, 332-912-251 for the J99343SF CFU, or the 332-912-261 for the J99343HA CFU.

4.06 The following procedures are used for single- or two-gauge facilities.

STEP	PROCEDURE
------	-----------

- | | |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Obtain BW, HT, and SL settings and EQL GN from the appropriate table for the entry nearest to the facility length. |
| 2 | If the facility length is greater than 500 feet from the table entry length, the 1-kHz cable loss must be calculated using the loss constants in Table M. |

Note: Table entry points for two-gauge facilities should be determined as follows:

- (a) Choose the table entry closer to the actual cable segment length.

Example:

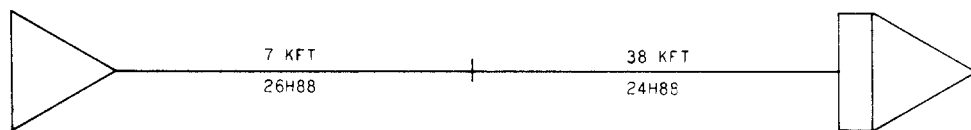


Table entry is 6 kft 26 gauge and 36 kft 24 gauge.

- (b) If one segment rounds to a lower entry length and the other segment is exactly midway between entry points, that segment should be rounded to the higher entry point.

Example:

STEP	PROCEDURE
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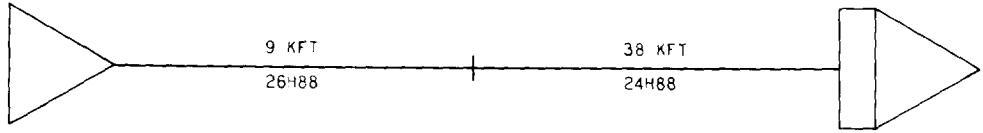


Table Entry 12 kft 26 gauge and 36 kft 24 gauge.

(c) If one segment rounds to a higher entry length and the other segment is exactly midway between entry points, that segment should be rounded to the lower entry point.

Example:

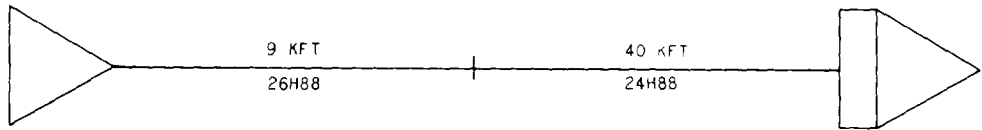


Table entry is 6 kft 26 gauge and 42 kft 24 gauge.

(d) If both segments are exactly midway between entry points, round one to the lower entry length and the other to the higher entry length.

Example:

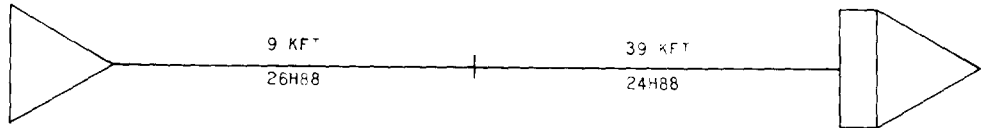
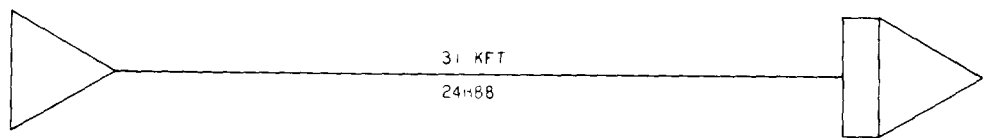


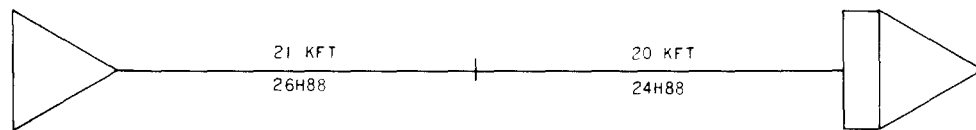
Table entry points 12 kft 26 gauge and 36 kft 24 gauge.

4.07 The following examples are for single- and two-gauge facilities, respectively.

Example 1:



STEP	PROCEDURE
1	Obtain BW, HT, and SL settings and EQL GN from Table P (24 gauge) BW = 3 HT = 4 SL = 2 EQL GN = 2.6 dB
2	Since the facility length differs by more than 500 feet from the table entry point, the cable loss must be calculated $\begin{array}{r} 31 \text{ kft } 24\text{H}88 \\ \times \text{ .23 } \text{ loss constant from Table M} \\ \hline 7.13 \text{ dB cable loss} \end{array}$

Example 2:

- 1 Obtain settings from Table S 26/24 gauge

 Entry Point = 24 kft of 26 gauge = 18 kft of 24 gauge
 BW = 5
 HT = 5
 SL = 11
 EQL GN = 9.5 dB
- 2 Since the facility length differs by more than 500 feet from the table entry point, the cable loss must be calculated.

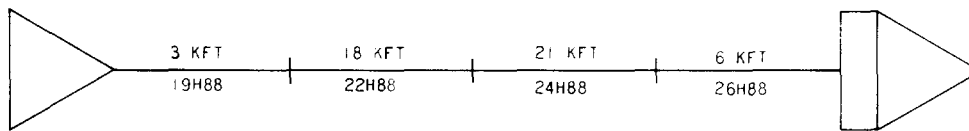
STEP	PROCEDURE
$\begin{array}{r} 21 \text{ kft 26 gauge} \\ \times \quad .34 \text{ constant from Table M} \\ \hline 7.14 \text{ dB loss of 26 gauge segment} \end{array}$	
$\begin{array}{r} 20 \text{ kft 24 gauge} \\ \times \quad .23 \text{ constant Table M} \\ \hline 4.60 \text{ dB loss of 24 gauge segment} \end{array}$	
$\begin{array}{r} 7.14 \text{ dB loss of 26 gauge} \\ + \quad 4.60 \text{ dB loss of 24 gauge} \\ \hline 11.74 \text{ dB total cable loss} \end{array}$	

C. More Than Two Gauges

4.08 When more than two gauges make up the facility, the 1-kHz insertion loss for the individual segments is used to determine the two major gauges. The remaining segments are minor

gauges. The length of the minor gauges is added to the length of the nearest gauge size of major gauge to determine the table entry points. The settings are then determined from the appropriate two-gauge table.

Example:



STEP	PROCEDURE
1	Compute the 1-kHz insertion loss of each segment using the constants in Table M.

STEP	PROCEDURE
	$\begin{array}{r} 3 \text{ kft 19H88} \\ \times .08 \text{ constant} \\ \hline .24 \text{ dB 1-kHz loss} \end{array}$
	$\begin{array}{r} 18 \text{ kft 22H88} \\ \times .15 \text{ constant} \\ \hline 2.7 \text{ dB 1-kHz loss} \end{array}$
	$\begin{array}{r} 21 \text{ kft 24H88} \\ \times .23 \text{ constant} \\ \hline 4.83 \text{ dB 1-kHz loss} \end{array}$
	$\begin{array}{r} 6 \text{ kft 26H88} \\ \times .34 \text{ constant} \\ \hline 2.04 \text{ dB 1-kHz loss} \end{array}$
	$\begin{array}{r} .24 \text{ dB 19 gauge} \\ 2.7 \text{ dB 22 gauge} \\ 4.83 \text{ dB 24 gauge} \\ + 2.04 \text{ dB 26 gauge} \\ \hline 9.81 \text{ dB total 1-kHz insertion loss} \end{array}$
2	Select two major gauges as segments with greatest loss in Step 1. 22 gauge and 24 gauge are major gauges.
3	Add length of 19 gauge to 22 gauge.
	$\begin{array}{r} 18 \text{ kft 22 gauge} \\ + 3 \text{ kft 19 gauge} \\ \hline 21 \text{ kft 22 gauge for table Entry} \end{array}$
4	Add length of 26 gauge to 24 gauge.
	$\begin{array}{r} 21 \text{ kft 24 gauge} \\ + 6 \text{ kft 26 gauge} \\ \hline 27 \text{ kft 24 gauge for table Entry} \end{array}$
5	From Table U, the closest table entry to 21 kft of 22 gauge is 18 kft. The closest entry to 27 kft of 24 gauge is 30 kft.
	$\begin{array}{l} \text{BW} = 3 \\ \text{HT} = 5 \\ \text{SL} = 2 \\ \text{EQL GN} = 2.6 \text{ dB} \end{array}$

SECTION 332-912-232

5. REFERENCES

5.01 The following references contain additional information:

REFERENCE	TITLE		
		332-912-231	MFT—4-4 Repeaters—2-4 Terminal Repeaters—Installation and Testing
		332-912-233	MFT—4-4 Repeaters (J99343SA, SB) — 2-4 Terminal Repeaters (J99343RA, RF)—SF Signaling/4-Wire Repeater (J99343SF)—Prescription Setting Tables
332-910-100	General Description of MFT		
332-910-180	MFT—General Application		
332-912-131	MFT—4-4 Repeaters—2-4 Terminal Repeaters—Description	332-912-251	MFT—SF Signaling/4-Wire Repeater (J99343SF)—Installation and Testing.
332-912-151	MFT—SF Signaling/4-wire Repeater (J99343SF)—Description		
332-912-161	J99343HA DX1-DX2/4-4 Wire Terminal (Pre- and Post-Eql) Repeater-Description—MFT	332-912-261	J99343HA DX1-DX2/4-4 Wire Terminal (Pre- and Post-Eql) Repeater—Installation and Testing—MFT

CHART 1			
CROSS-REFERENCE CHART FOR PRESCRIPTION SETTINGS TABLES			
		<u>TABLE</u>	<u>PAGE</u>
Single Gauge	—19 (NL)	D	21
	—22 (NL)	E	23
	—24 (NL)	F	24
	—26 (NL)	G	25
	—19 (L)	N	57
	—22 (L)	O	58
	—24 (L)	P	59
	—25 (L)	Q	59
	—26 (L)	R	60
	Mixed Gauge	—24 (NL)/22 (NL)	H
—26 (NL)/22 (NL)		I	35
—26 (NL)/24 (NL)		J	45
—24 (L)/22 (L)		U	65
—26 (L)/22 (L)		T	63
—26 (L)/24 (L)		S	61
NL Cable Equivalent Length Conversion	K	55	
Bridged Tap Equivalent Length	L	56	
H88 Loaded Cable 1kHz Loss Constants	M	56	
DC Resistance constants for N. L. Cable	B	20	
309B EQ-Settings for N.L. Cable	Chart 2	18	

Chart 1—Cross Reference Chart for Prescription Settings Tables

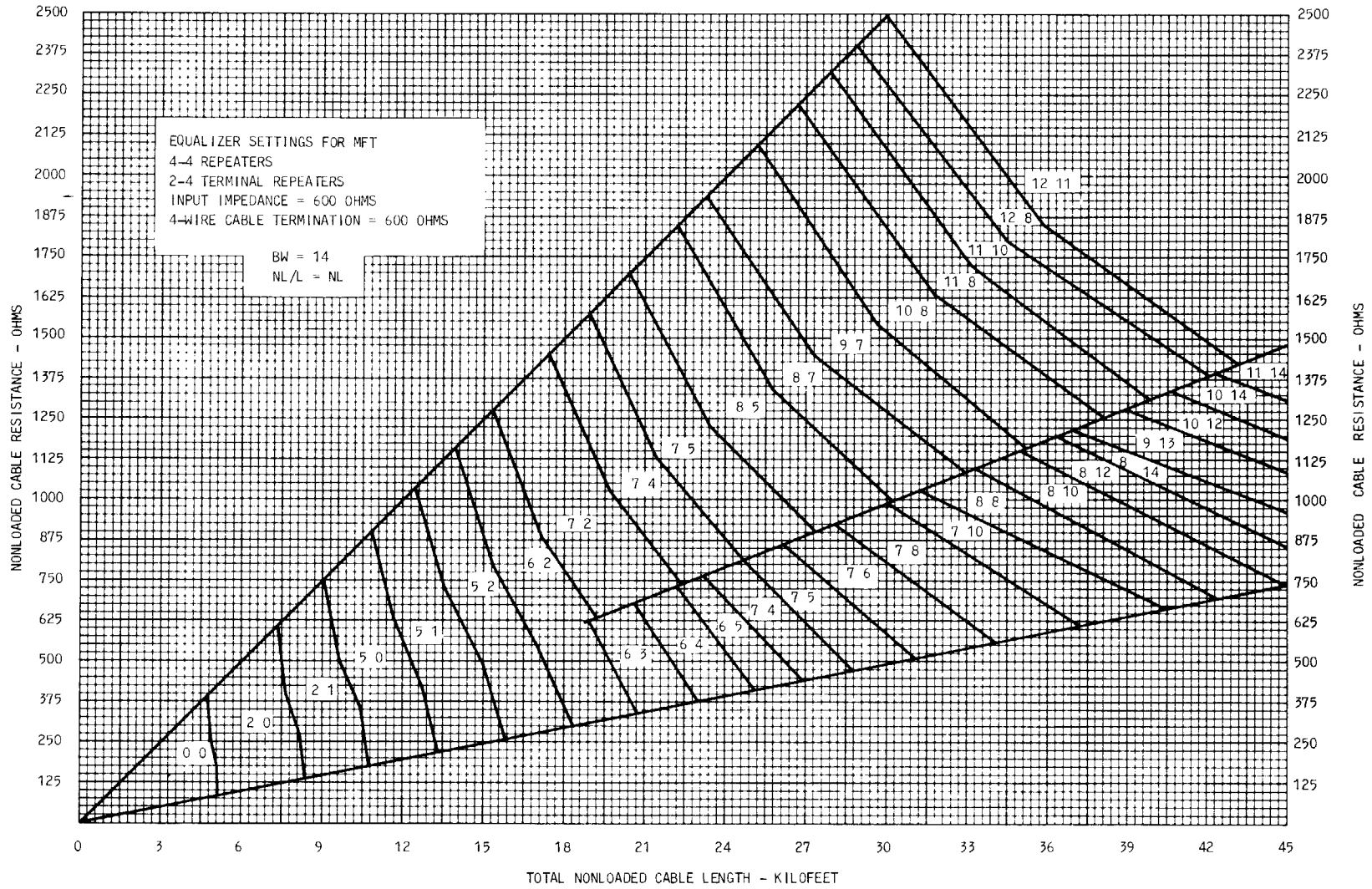


Chart 2—Equalizer Settings for MFT 4-4 Repeaters and 2-4 Terminal Repeaters

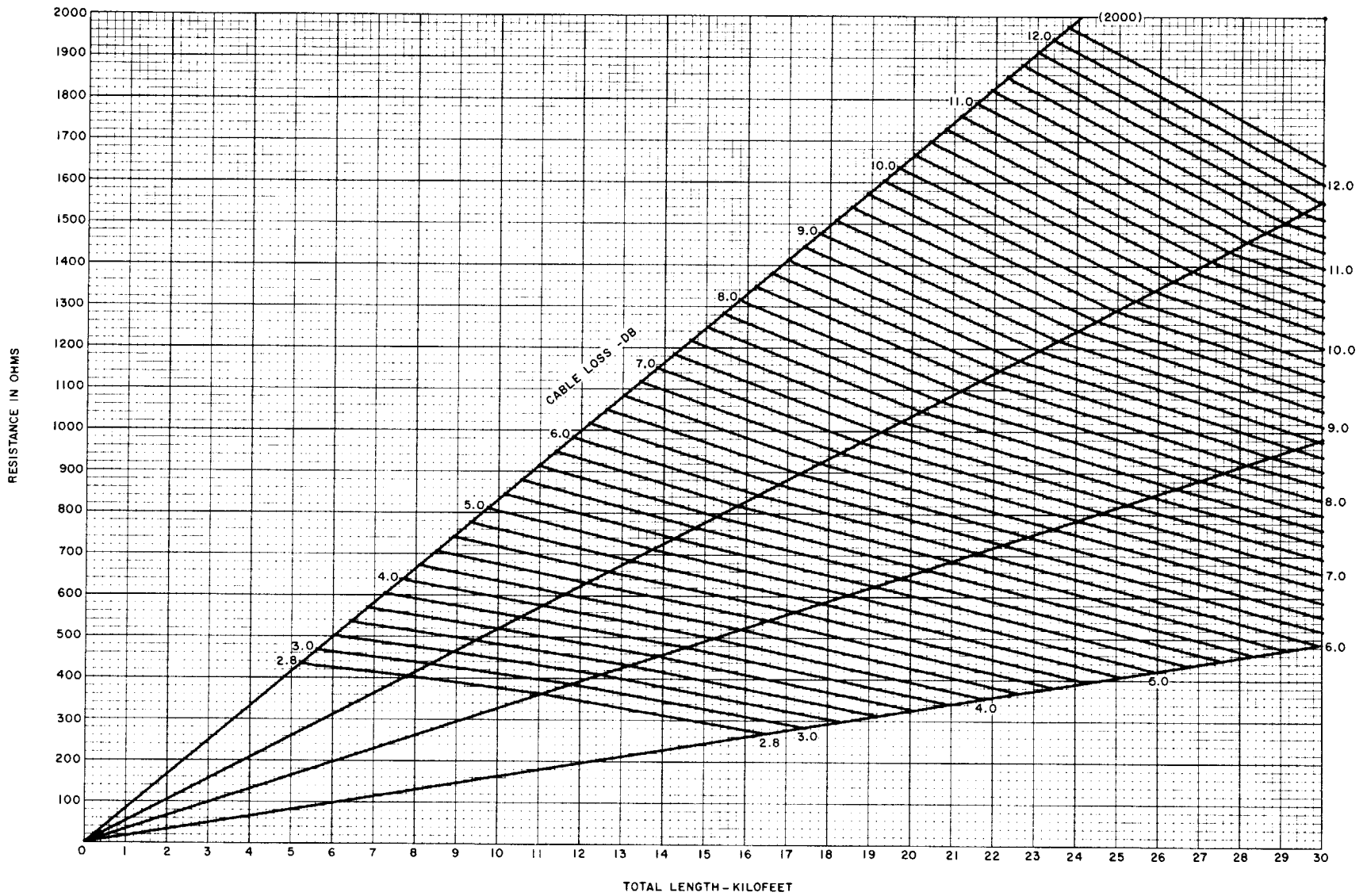


Fig. 1—1-kHz Cable Loss Nonloaded Hi-Cap ($0.083 \mu\text{F}/\text{mile}$) Cable Between 600-ohm Termination

TABLE A

MAXIMUM 1KHz INSERTION LOSS OF CABLE SECTIONS

CABLE SECTION	MAXIMUM LENGTH IN DB	
	NON LOADED	H88 LOADED
PBX or Cust to PBX or Cust	15	9
PBX or Cust to CO	15	12
CO to CO	15	15

TABLE B

DC RESISTANCE
CONSTANTS FOR
NL CABLE

GAUGE	OHMS/KFT
19	16.3
22	32.8
24	51.9
25	65.5
26	83.3

TABLE C

EQUALIZER GAIN BY SETTINGS

BW = 14

NL/L = NL

HEIGHT SETTING	SLOPE SETTING															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	0.4	0.9	1.4	1.8	2.3	2.8	3.4	3.7	4.2	4.6	5.0	5.4	5.8	6.2	6.6
1	0	0.4	0.9	1.4	1.8	2.3	2.8	3.4	3.7	4.2	4.6	5.0	5.4	5.8	6.2	6.6
2	0.1	0.5	1.0	1.5	1.9	2.4	2.9	3.5	3.8	4.3	4.7	5.1	5.5	5.9	6.3	6.7
3	0.1	0.5	1.0	1.5	1.9	2.4	2.9	3.5	3.8	4.3	4.7	5.1	5.5	5.9	6.3	6.7
4	0.2	0.6	1.1	1.6	2.0	2.5	3.0	3.6	3.9	4.4	4.8	5.2	5.6	6.0	6.4	6.8
5	0.3	0.7	1.2	1.7	2.1	2.6	3.1	3.7	4.0	4.5	4.9	5.3	5.7	6.1	6.5	6.9
6	0.4	0.8	1.3	1.8	2.2	2.7	3.2	3.8	4.1	4.6	5.0	5.4	5.8	6.2	6.6	7.0
7	0.5	0.9	1.4	1.9	2.3	2.8	3.3	3.9	4.2	4.7	5.1	5.5	5.9	6.3	6.7	7.1
8	0.7	1.1	1.6	2.1	2.5	3.0	3.5	4.1	4.4	4.9	5.3	5.7	6.1	6.5	6.9	7.3
9	0.8	1.2	1.7	2.2	2.6	3.1	3.6	4.2	4.5	5.0	5.4	5.8	6.2	6.6	7.0	7.4
10	1.0	1.4	1.9	2.4	2.8	3.3	3.8	4.4	4.7	5.2	5.6	6.0	6.4	6.8	7.2	7.6
11	1.2	1.6	2.1	2.6	3.0	3.5	4.0	4.6	4.9	5.4	5.8	6.2	6.6	7.0	7.4	7.8
12	1.4	1.8	2.3	2.8	3.2	3.7	4.2	4.8	5.1	5.6	6.0	6.4	6.8	7.2	7.6	8.0
13	1.7	2.1	2.6	3.1	3.5	4.0	4.5	5.1	5.4	5.9	6.3	6.7	7.1	7.5	7.9	8.3
14	2.0	2.4	2.9	3.4	3.8	4.3	4.8	5.4	5.7	6.2	6.6	7.0	7.4	7.8	8.2	8.6
15	2.5	2.9	3.4	3.9	4.3	4.8	5.3	5.9	6.2	6.7	7.1	7.5	7.9	8.3	8.7	9.1

TABLE D

EQUALIZER SETTINGS FOR 19-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
10.0	14	4	0	0.2	1.5	162.9
11.0	14	3	1	0.6	1.7	179.2
12.0	14	5	0	0.3	1.9	195.5
13.0	14	4	1	0.6	2.1	211.7
14.0	14	6	0	0.4	2.3	228.0
15.0	14	5	1	0.7	2.5	244.3
16.0	13	5	2	1.1	2.7	260.6
17.0	14	5	2	1.2	2.9	276.9
18.0	13	5	3	1.5	3.1	293.2
19.0	14	6	2	1.3	3.4	309.5
20.0	14	6	2	1.3	3.6	325.8
21.0	14	6	3	1.7	3.8	342.0
22.0	14	7	2	1.4	4.1	358.3
23.0	14	6	4	2.2	4.3	374.6
24.0	14	6	4	2.2	4.5	390.9
25.0	14	7	3	1.9	4.8	407.2
26.0	14	6	5	2.7	5.0	423.5
27.0	14	7	4	2.4	5.3	439.8
28.0	14	7	4	2.4	5.5	456.1
29.0	14	7	5	2.8	5.8	472.3
30.0	14	7	5	2.8	6.0	488.6
31.0	14	7	6	3.3	6.3	504.9
32.0	14	7	6	3.3	6.5	521.2
33.0	14	7	6	3.3	6.8	537.5
34.0	14	7	7	3.9	7.0	553.8
35.0	14	7	8	4.2	7.3	570.1
36.0	14	7	8	4.2	7.6	586.4
37.0	14	7	9	4.7	7.8	602.7
38.0	14	7	10	5.1	8.1	618.9
39.0	14	7	11	5.5	8.3	635.2

TABLE D (CONTD)

EQUALIZER SETTINGS FOR 19-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
40.0	14	7	11	5.5	8.6	651.5
41.0	14	8	8	4.4	8.8	667.8
42.0	14	8	9	4.9	9.1	684.1
43.0	14	8	9	4.9	9.3	700.4
44.0	14	8	10	5.3	9.6	716.7
45.0	14	8	11	5.7	9.8	733.0
46.0	14	8	12	6.1	10.1	749.2
47.0	14	8	13	6.5	10.3	765.5
48.0	14	8	14	6.9	10.6	781.8
49.0	14	9	12	6.2	10.8	798.1
50.0	14	9	13	6.6	11.1	814.4
51.0	14	9	14	7.0	11.3	830.7
52.0	14	9	15	7.4	11.6	847.0
53.0	14	9	15	7.4	11.8	863.3
54.0	14	10	13	6.8	12.1	879.5
55.0	14	10	14	7.2	12.3	895.8
56.0	14	10	15	7.5	12.6	912.1
57.0	14	10	15	7.5	12.8	928.4
58.0	14	11	14	7.4	13.1	944.7
59.0	14	11	15	7.7	13.3	961.0
60.0	14	11	15	7.7	13.6	977.3
61.0	14	11	15	7.7	13.8	993.6
62.0	14	12	14	7.6	14.0	1009.8
63.0	14	12	15	8.0	14.3	1026.1
64.0	14	12	15	8.0	14.5	1042.4
65.0	14	12	15	8.0	14.8	1058.7
66.0	14	13	15	8.2	15.0	1075.0

TABLE E
EQUALIZER SETTINGS FOR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
8.0	14	3	0	0.1	2.0	262.1
9.0	13	2	1	0.5	2.2	294.9
10.0	14	4	0	0.2	2.5	327.7
11.0	14	5	0	0.3	2.8	360.4
12.0	14	4	1	0.6	3.1	393.2
13.0	14	6	0	0.4	3.4	425.9
14.0	14	5	1	0.7	3.6	458.7
15.0	13	5	2	1.1	3.9	491.5
16.0	14	6	1	0.8	4.2	524.2
17.0	13	5	3	1.5	4.6	557.0
18.0	14	6	2	1.3	4.9	589.8
19.0	13	6	3	1.6	5.2	622.5
20.0	14	7	2	1.4	5.5	655.3
21.0	14	6	4	2.2	5.8	688.1
22.0	14	7	3	1.9	6.1	720.8
23.0	14	6	5	2.7	6.5	753.6
24.0	14	7	4	2.4	6.8	786.4
25.0	14	7	5	2.8	7.1	819.1
26.0	14	7	5	2.8	7.5	851.9
27.0	14	8	4	2.5	7.8	884.7
28.0	14	8	5	3.0	8.2	917.4
29.0	14	8	5	3.0	8.5	950.2
30.0	14	8	6	3.5	8.8	983.0
31.0	14	8	7	4.1	9.2	1015.7
32.0	14	8	8	4.4	9.5	1048.5
33.0	14	8	9	4.9	9.9	1081.3
34.0	14	9	8	4.5	10.2	1114.0
35.0	14	9	9	5.0	10.6	1146.8
36.0	14	9	10	5.4	10.9	1179.5
37.0	14	10	8	4.7	11.3	1212.3
38.0	14	10	9	5.1	11.6	1245.1
39.0	14	10	11	6.0	12.0	1277.8
40.0	14	11	9	5.3	12.3	1310.6
41.0	14	11	10	5.8	12.7	1343.4
42.0	14	11	12	6.6	13.0	1376.1
43.0	14	11	13	7.0	13.4	1408.9
44.0	14	12	11	6.4	13.7	1441.7
45.0	14	12	12	6.8	14.1	1474.4
46.0	14	12	14	7.6	14.4	1507.2
47.0	14	13	11	6.7	14.8	1540.0
48.0	13	13	15	7.7	15.1	1572.7

TABLE F
EQUALIZER SETTINGS FOR 24-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
6.0	14	2	0	0.1	2.2	311.4
7.0	13	3	0	0.1	2.5	363.3
8.0	14	3	0	0.1	2.9	415.2
9.0	14	4	0	0.2	3.2	467.0
10.0	14	3	1	0.6	3.6	518.9
11.0	14	4	1	0.6	4.0	570.8
12.0	14	6	0	0.4	4.3	622.7
13.0	14	5	1	0.7	4.7	674.6
14.0	14	6	1	0.8	5.1	726.5
15.0	13	5	3	1.5	5.5	778.4
16.0	14	6	2	1.3	5.9	830.3
17.0	13	6	3	1.6	6.3	882.2
18.0	14	7	2	1.4	6.7	934.1
19.0	14	7	3	1.9	7.1	986.0
20.0	14	8	2	1.6	7.5	1037.9
21.0	14	7	4	2.4	7.9	1089.8
22.0	14	7	5	2.8	8.4	1141.7
23.0	14	8	4	2.5	8.8	1193.6
24.0	14	8	5	3.0	9.2	1245.5
25.0	14	8	5	3.0	9.6	1297.3
26.0	14	9	5	3.1	10.1	1349.2
27.0	14	9	6	3.6	10.5	1401.1
28.0	14	9	7	4.2	11.0	1453.0
29.0	14	9	8	4.5	11.4	1504.9
30.0	14	10	7	4.3	11.8	1556.8
31.0	14	10	9	5.1	12.3	1608.7
32.0	14	10	10	5.6	12.7	1660.6
33.0	14	11	9	5.3	13.2	1712.5
34.0	13	11	13	6.6	13.6	1764.4
35.0	14	12	9	5.6	14.0	1816.3
36.0	13	12	13	6.7	14.5	1868.2
37.0	13	12	15	7.5	14.9	1920.1
38.0	13	13	12	6.5	15.4	1972.0

TABLE G

EQUALIZER SETTINGS FOR 26-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
4.0	13	1	0	0.0	2.2	333.3
5.0	15	1	0	0.1	2.7	416.7
6.0	14	2	0	0.1	3.2	500.0
7.0	13	3	0	0.1	3.7	583.3
8.0	13	2	1	0.5	4.2	666.7
9.0	13	3	1	0.5	4.7	750.0
10.0	14	5	0	0.3	5.1	833.3
11.0	14	6	0	0.4	5.6	916.7
12.0	14	5	1	0.7	6.1	1000.0
13.0	14	6	1	0.8	6.6	1083.3
14.0	13	6	2	1.1	7.1	1166.7
15.0	13	6	3	1.6	7.6	1250.0
16.0	14	7	2	1.4	8.1	1333.3
17.0	14	7	3	1.9	8.6	1416.7
18.0	14	8	2	1.6	9.1	1500.0
19.0	14	8	3	2.1	9.7	1583.3
20.0	14	8	4	2.5	10.2	1666.7
21.0	14	8	5	3.0	10.7	1750.0
22.0	14	8	6	3.5	11.3	1833.3
23.0	14	9	6	3.6	11.8	1916.7
24.0	14	9	7	4.2	12.4	2000.0
25.0	14	11	5	3.5	12.9	2083.3
26.0	14	11	6	4.0	13.5	2166.7
27.0	13	11	9	4.9	14.0	2250.0
28.0	13	11	11	5.8	14.6	2333.3
29.0	13	12	10	5.5	15.1	2416.7

TABLE H
 EQUALIZER SETTINGS FOR MIXED 24- AND
 22- GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
 INPUT IMPEDANCE = 600 OHMS
 CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 9.0							
7.0	2.0	14	4	0	0.2	3.0	428.8
8.0	1.0	14	4	0	0.2	3.1	447.9
WL= 10.0							
5.0	5.0	13	3	1	0.5	3.1	423.3
6.0	4.0	13	3	1	0.5	3.2	442.4
7.0	3.0	13	3	1	0.5	3.3	461.6
8.0	2.0	13	3	1	0.5	3.4	480.7
9.0	1.0	14	3	1	0.6	3.5	499.8
WL= 11.0							
2.0	9.0	14	5	0	0.3	3.0	398.7
3.0	8.0	14	5	0	0.3	3.1	417.8
4.0	7.0	14	5	0	0.3	3.2	436.9
5.0	6.0	14	5	0	0.3	3.3	456.1
6.0	5.0	14	5	0	0.3	3.4	475.2
7.0	4.0	14	5	0	0.3	3.5	494.3
8.0	3.0	14	5	0	0.3	3.7	513.4
9.0	2.0	13	4	1	0.5	3.8	532.6
10.0	1.0	13	4	1	0.5	3.9	551.7
WL= 12.0							
1.0	11.0	14	4	1	0.6	3.2	412.3
2.0	10.0	14	4	1	0.6	3.3	431.4
3.0	9.0	14	4	1	0.6	3.4	450.6
4.0	8.0	14	4	1	0.6	3.5	469.7
5.0	7.0	14	4	1	0.6	3.6	488.8
6.0	6.0	14	4	1	0.6	3.7	508.0
7.0	5.0	14	4	1	0.6	3.8	527.1
8.0	4.0	14	4	1	0.6	3.9	546.2
9.0	3.0	14	4	1	0.6	4.0	565.3
10.0	2.0	14	6	0	0.4	4.1	584.5
11.0	1.0	14	6	0	0.4	4.2	603.6
WL= 13.0							
1.0	12.0	14	6	0	0.4	3.5	445.1
2.0	11.0	14	6	0	0.4	3.6	464.2
3.0	10.0	14	6	0	0.4	3.7	483.3
4.0	9.0	14	5	1	0.7	3.8	502.5
5.0	8.0	14	5	1	0.7	3.9	521.6
6.0	7.0	14	5	1	0.7	4.0	540.7
7.0	6.0	14	5	1	0.7	4.1	559.8
8.0	5.0	14	5	1	0.7	4.2	579.0
9.0	4.0	14	5	1	0.7	4.3	598.1
10.0	3.0	14	5	1	0.7	4.4	617.2
11.0	2.0	14	5	1	0.7	4.5	636.4
12.0	1.0	14	5	1	0.7	4.6	655.5
WL= 14.0							
1.0	13.0	14	5	1	0.7	3.8	477.8

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°FNL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 14.0							
2.0	12.0	14	5	1	0.7	3.9	497.0
3.0	11.0	14	4	2	1.1	4.0	516.1
4.0	10.0	14	4	2	1.1	4.1	535.2
5.0	9.0	14	4	2	1.1	4.2	554.4
6.0	8.0	14	4	2	1.1	4.3	573.5
7.0	7.0	14	4	2	1.1	4.4	592.6
8.0	6.0	12	5	2	1.0	4.5	611.7
9.0	5.0	13	5	2	1.1	4.6	630.9
10.0	4.0	13	5	2	1.1	4.7	650.0
11.0	3.0	13	5	2	1.1	4.8	669.1
12.0	2.0	13	5	2	1.1	4.9	688.3
13.0	1.0	14	7	0	0.5	5.0	707.4
WL= 15.0							
1.0	14.0	13	5	2	1.1	4.1	510.6
2.0	13.0	14	6	1	0.8	4.2	529.7
3.0	12.0	14	6	1	0.8	4.3	548.9
4.0	11.0	14	6	1	0.8	4.4	568.0
5.0	10.0	14	6	1	0.8	4.5	587.1
6.0	9.0	14	6	1	0.8	4.6	606.3
7.0	8.0	14	6	1	0.8	4.7	625.4
8.0	7.0	14	6	1	0.8	4.8	644.5
9.0	6.0	14	6	1	0.8	4.9	663.6
10.0	5.0	14	6	1	0.8	5.0	682.8
11.0	4.0	14	6	1	0.8	5.1	701.9
12.0	3.0	14	5	2	1.2	5.2	721.0
13.0	2.0	14	5	2	1.2	5.3	740.2
14.0	1.0	14	5	2	1.2	5.4	759.3
WL= 16.0							
1.0	15.0	14	5	2	1.2	4.4	543.4
2.0	14.0	14	5	2	1.2	4.5	562.5
3.0	13.0	14	5	2	1.2	4.6	581.6
4.0	12.0	13	5	3	1.5	4.7	600.8
5.0	11.0	13	5	3	1.5	4.8	619.9
6.0	10.0	13	5	3	1.5	4.9	639.0
7.0	9.0	13	5	3	1.5	5.0	658.1
8.0	8.0	13	5	3	1.5	5.1	677.3
9.0	7.0	13	5	3	1.5	5.2	696.4
10.0	6.0	13	5	3	1.5	5.3	715.5
11.0	5.0	13	6	2	1.1	5.4	734.7
12.0	4.0	13	6	2	1.1	5.5	753.8
13.0	3.0	14	6	2	1.3	5.6	772.9
14.0	2.0	14	6	2	1.3	5.7	792.0
15.0	1.0	14	6	2	1.3	5.8	811.2
WL= 17.0							
1.0	16.0	13	5	3	1.5	4.7	576.1
2.0	15.0	14	6	2	1.3	4.8	595.3
3.0	14.0	14	6	2	1.3	4.9	614.4

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 17.0							
4.0	13.0	14	6	2	1.3	5.0	633.5
5.0	12.0	14	6	2	1.3	5.1	652.7
6.0	11.0	14	6	2	1.3	5.2	671.8
7.0	10.0	14	6	2	1.3	5.3	690.9
8.0	9.0	14	6	2	1.3	5.4	710.0
9.0	8.0	14	6	2	1.3	5.5	729.2
10.0	7.0	14	6	2	1.3	5.6	748.3
11.0	6.0	14	6	2	1.3	5.7	767.4
12.0	5.0	14	6	2	1.3	5.8	786.6
13.0	4.0	14	6	2	1.3	5.9	805.7
14.0	3.0	14	6	2	1.3	6.0	824.8
15.0	2.0	13	6	3	1.6	6.1	843.9
16.0	1.0	13	6	3	1.6	6.2	863.1
WL= 18.0							
1.0	17.0	14	6	2	1.3	5.0	608.9
2.0	16.0	14	6	2	1.3	5.1	628.0
3.0	15.0	13	5	4	2.0	5.2	647.2
4.0	14.0	13	5	4	2.0	5.3	666.3
5.0	13.0	13	6	3	1.6	5.4	685.4
6.0	12.0	13	6	3	1.6	5.5	704.5
7.0	11.0	13	6	3	1.6	5.6	723.7
8.0	10.0	13	6	3	1.6	5.7	742.8
9.0	9.0	13	6	3	1.6	5.8	761.9
10.0	8.0	14	6	3	1.7	5.9	781.1
11.0	7.0	14	6	3	1.7	6.0	800.2
12.0	6.0	14	6	3	1.7	6.1	819.3
13.0	5.0	14	6	3	1.7	6.2	838.4
14.0	4.0	14	6	3	1.7	6.3	857.6
15.0	3.0	14	7	2	1.4	6.4	876.7
16.0	2.0	14	7	2	1.4	6.5	895.8
17.0	1.0	14	7	2	1.4	6.6	915.0
WL= 19.0							
1.0	18.0	14	6	3	1.7	5.3	641.7
2.0	17.0	14	6	3	1.7	5.4	660.8
3.0	16.0	14	6	3	1.7	5.5	679.9
4.0	15.0	14	6	3	1.7	5.6	699.1
5.0	14.0	14	7	2	1.4	5.7	718.2
6.0	13.0	14	7	2	1.4	5.8	737.3
7.0	12.0	14	7	2	1.4	5.9	756.4
8.0	11.0	14	7	2	1.4	6.0	775.6
9.0	10.0	14	7	2	1.4	6.1	794.7
10.0	9.0	14	7	2	1.4	6.2	813.8
11.0	8.0	14	7	2	1.4	6.3	833.0
12.0	7.0	14	7	2	1.4	6.4	852.1
13.0	6.0	14	7	2	1.4	6.5	871.2
14.0	5.0	13	6	4	2.1	6.6	890.3
15.0	4.0	13	6	4	2.1	6.7	909.5
16.0	3.0	14	6	4	2.2	6.8	928.6

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 19.0							
17.0	2.0	14	6	4	2.2	6.9	947.7
18.0	1.0	14	6	4	2.2	7.0	966.9
WL= 20.0							
1.0	19.0	14	7	2	1.4	5.6	674.4
2.0	18.0	14	7	2	1.4	5.7	693.6
3.0	17.0	14	7	2	1.4	5.9	712.7
4.0	16.0	13	6	4	2.1	6.0	731.8
5.0	15.0	13	6	4	2.1	6.1	750.9
6.0	14.0	14	6	4	2.2	6.2	770.1
7.0	13.0	14	6	4	2.2	6.3	789.2
8.0	12.0	14	6	4	2.2	6.4	808.3
9.0	11.0	14	6	4	2.2	6.4	827.5
10.0	10.0	14	6	4	2.2	6.5	846.6
11.0	9.0	14	6	4	2.2	6.6	865.7
12.0	8.0	14	7	3	1.9	6.7	884.8
13.0	7.0	14	7	3	1.9	6.8	904.0
14.0	6.0	14	7	3	1.9	6.9	923.1
15.0	5.0	14	7	3	1.9	7.0	942.2
16.0	4.0	14	7	3	1.9	7.1	961.4
17.0	3.0	14	7	3	1.9	7.2	980.5
18.0	2.0	14	7	3	1.9	7.3	999.6
19.0	1.0	14	8	2	1.6	7.4	1018.7
WL= 21.0							
1.0	20.0	14	6	4	2.2	5.9	707.2
2.0	19.0	14	6	4	2.2	6.1	726.3
3.0	18.0	14	6	4	2.2	6.2	745.5
4.0	17.0	14	7	3	1.9	6.3	764.6
5.0	16.0	14	7	3	1.9	6.4	783.7
6.0	15.0	14	7	3	1.9	6.5	802.8
7.0	14.0	14	7	3	1.9	6.6	822.0
8.0	13.0	14	7	3	1.9	6.7	841.1
9.0	12.0	14	7	3	1.9	6.8	860.2
10.0	11.0	14	7	3	1.9	6.9	879.4
11.0	10.0	14	7	3	1.9	6.9	898.5
12.0	9.0	14	8	2	1.6	7.0	917.6
13.0	8.0	14	8	2	1.6	7.1	936.7
14.0	7.0	14	8	2	1.6	7.2	955.9
15.0	6.0	14	8	2	1.6	7.3	975.0
16.0	5.0	14	8	2	1.6	7.4	994.1
17.0	4.0	14	7	4	2.4	7.5	1013.3
18.0	3.0	14	7	4	2.4	7.6	1032.4
19.0	2.0	14	7	4	2.4	7.7	1051.5
20.0	1.0	14	7	4	2.4	7.8	1070.6
WL= 22.0							
1.0	21.0	14	7	3	1.9	6.3	740.0
2.0	20.0	14	7	3	1.9	6.4	759.1
3.0	19.0	14	7	3	1.9	6.5	778.2

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 22.0							
4.0	18.0	14	7	3	1.9	6.6	797.3
5.0	17.0	14	6	5	2.7	6.7	816.5
6.0	16.0	14	6	5	2.7	6.8	835.6
7.0	15.0	14	6	5	2.7	6.9	854.7
8.0	14.0	14	7	4	2.4	7.0	873.9
9.0	13.0	14	7	4	2.4	7.1	893.0
10.0	12.0	14	7	4	2.4	7.2	912.1
11.0	11.0	14	7	4	2.4	7.3	931.3
12.0	10.0	14	7	4	2.4	7.4	950.4
13.0	9.0	14	7	4	2.4	7.5	969.5
14.0	8.0	14	7	4	2.4	7.5	988.6
15.0	7.0	14	7	4	2.4	7.6	1007.8
16.0	6.0	14	7	4	2.4	7.7	1026.9
17.0	5.0	14	8	3	2.1	7.8	1046.0
18.0	4.0	14	8	3	2.1	7.9	1065.2
19.0	3.0	14	8	3	2.1	8.0	1084.3
20.0	2.0	14	8	3	2.1	8.1	1103.4
21.0	1.0	14	8	3	2.1	8.2	1122.5
WL= 23.0							
1.0	22.0	14	7	4	2.4	6.6	772.7
2.0	21.0	14	7	4	2.4	6.7	791.9
3.0	20.0	14	7	4	2.4	6.8	811.0
4.0	19.0	14	7	4	2.4	7.0	830.1
5.0	18.0	14	7	4	2.4	7.1	849.2
6.0	17.0	14	7	4	2.4	7.2	868.4
7.0	16.0	14	7	4	2.4	7.3	887.5
8.0	15.0	14	7	4	2.4	7.3	906.6
9.0	14.0	14	7	4	2.4	7.4	925.8
10.0	13.0	14	7	4	2.4	7.5	944.9
11.0	12.0	14	8	3	2.1	7.6	964.0
12.0	11.0	14	8	3	2.1	7.7	983.1
13.0	10.0	14	8	3	2.1	7.8	1002.3
14.0	9.0	14	8	3	2.1	7.9	1021.4
15.0	8.0	14	7	5	2.8	8.0	1040.5
16.0	7.0	14	7	5	2.8	8.1	1059.7
17.0	6.0	14	7	5	2.8	8.2	1078.8
18.0	5.0	14	7	5	2.8	8.2	1097.9
19.0	4.0	14	7	5	2.8	8.3	1117.0
20.0	3.0	14	7	5	2.8	8.5	1136.2
21.0	2.0	14	8	4	2.5	8.6	1155.3
22.0	1.0	14	8	4	2.5	8.7	1174.4
WL= 24.0							
1.0	23.0	14	7	4	2.4	6.9	805.5
2.0	22.0	14	7	4	2.4	7.1	824.6
3.0	21.0	14	7	4	2.4	7.2	843.8
4.0	20.0	14	8	3	2.1	7.3	862.9
5.0	19.0	14	7	5	2.8	7.4	882.0
6.0	18.0	14	7	5	2.8	7.5	901.1

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 24.0							
7.0	17.0	14	7	5	2.8	7.6	920.3
8.0	16.0	14	7	5	2.8	7.7	939.4
9.0	15.0	14	7	5	2.8	7.8	958.5
10.0	14.0	14	7	5	2.8	7.9	977.7
11.0	13.0	14	7	5	2.8	8.0	996.8
12.0	12.0	14	7	5	2.8	8.0	1015.9
13.0	11.0	14	7	5	2.8	8.1	1035.0
14.0	10.0	14	7	6	3.3	8.2	1054.2
15.0	9.0	14	8	4	2.5	8.3	1073.3
16.0	8.0	14	8	4	2.5	8.4	1092.4
17.0	7.0	14	8	4	2.5	8.5	1111.6
18.0	6.0	14	8	4	2.5	8.6	1130.7
19.0	5.0	14	8	4	2.5	8.7	1149.8
20.0	4.0	14	8	4	2.5	8.8	1168.9
21.0	3.0	14	8	4	2.5	8.9	1188.1
22.0	2.0	14	8	4	2.5	9.0	1207.2
23.0	1.0	14	8	4	2.5	9.1	1226.3
WL= 25.0							
1.0	24.0	14	7	5	2.8	7.3	838.3
2.0	23.0	14	7	5	2.8	7.4	857.4
3.0	22.0	14	7	5	2.8	7.5	876.5
4.0	21.0	14	7	5	2.8	7.6	895.6
5.0	20.0	14	7	5	2.8	7.7	914.8
6.0	19.0	14	7	5	2.8	7.8	933.9
7.0	18.0	14	7	6	3.3	7.9	953.0
8.0	17.0	14	7	6	3.3	8.0	972.2
9.0	16.0	14	7	6	3.3	8.1	991.3
10.0	15.0	14	8	4	2.5	8.2	1010.4
11.0	14.0	14	8	4	2.5	8.3	1029.5
12.0	13.0	14	8	4	2.5	8.4	1048.7
13.0	12.0	14	8	4	2.5	8.5	1067.8
14.0	11.0	14	8	4	2.5	8.6	1086.9
15.0	10.0	14	8	4	2.5	8.6	1106.1
16.0	9.0	14	8	4	2.5	8.7	1125.2
17.0	8.0	14	8	5	3.0	8.8	1144.3
18.0	7.0	14	8	5	3.0	8.9	1163.4
19.0	6.0	14	8	5	3.0	9.0	1182.6
20.0	5.0	14	8	5	3.0	9.1	1201.7
21.0	4.0	14	8	5	3.0	9.2	1220.8
22.0	3.0	14	8	5	3.0	9.3	1240.0
23.0	2.0	14	8	5	3.0	9.4	1259.1
24.0	1.0	14	8	5	3.0	9.5	1278.2
WL= 26.0							
1.0	25.0	14	7	6	3.3	7.6	871.0
2.0	24.0	14	7	6	3.3	7.7	890.2
3.0	23.0	14	7	6	3.3	7.9	909.3
4.0	22.0	14	7	6	3.3	8.0	928.4
5.0	21.0	14	8	4	2.5	8.1	947.5

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 26.0							
6.0	20.0	14	8	4	2.5	8.2	966.7
7.0	19.0	14	8	4	2.5	8.3	985.8
8.0	18.0	14	8	4	2.5	8.4	1004.9
9.0	17.0	14	8	4	2.5	8.5	1024.1
10.0	16.0	14	7	7	3.9	8.5	1043.2
11.0	15.0	14	7	7	3.9	8.6	1062.3
12.0	14.0	14	8	5	3.0	8.7	1081.4
13.0	13.0	14	8	5	3.0	8.8	1100.6
14.0	12.0	14	8	5	3.0	8.9	1119.7
15.0	11.0	14	8	5	3.0	9.0	1138.8
16.0	10.0	14	8	5	3.0	9.1	1158.0
17.0	9.0	14	8	5	3.0	9.2	1177.1
18.0	8.0	14	8	5	3.0	9.2	1196.2
19.0	7.0	14	8	6	3.5	9.3	1215.3
20.0	6.0	14	8	6	3.5	9.4	1234.5
21.0	5.0	14	8	6	3.5	9.5	1253.6
22.0	4.0	14	8	6	3.5	9.6	1272.7
23.0	3.0	14	8	6	3.5	9.7	1291.9
24.0	2.0	14	9	5	3.1	9.8	1311.0
25.0	1.0	14	9	5	3.1	10.0	1330.1
WL= 27.0							
1.0	26.0	14	8	4	2.5	8.0	903.8
2.0	25.0	14	7	6	3.3	8.1	922.9
3.0	24.0	14	7	7	3.9	8.2	942.0
4.0	23.0	14	7	7	3.9	8.3	961.2
5.0	22.0	14	7	7	3.9	8.4	980.3
6.0	21.0	14	7	7	3.9	8.5	999.4
7.0	20.0	14	8	5	3.0	8.6	1018.6
8.0	19.0	14	8	5	3.0	8.7	1037.7
9.0	18.0	14	8	5	3.0	8.8	1056.8
10.0	17.0	14	8	5	3.0	8.9	1075.9
11.0	16.0	14	8	5	3.0	9.0	1095.1
12.0	15.0	14	8	5	3.0	9.1	1114.2
13.0	14.0	14	8	5	3.0	9.2	1133.3
14.0	13.0	14	8	6	3.5	9.2	1152.5
15.0	12.0	14	8	6	3.5	9.3	1171.6
16.0	11.0	14	8	6	3.5	9.4	1190.7
17.0	10.0	14	8	6	3.5	9.5	1209.8
18.0	9.0	14	9	5	3.1	9.6	1229.0
19.0	8.0	14	9	5	3.1	9.7	1248.1
20.0	7.0	14	9	5	3.1	9.8	1267.2
21.0	6.0	14	9	5	3.1	9.9	1286.4
22.0	5.0	14	9	5	3.1	10.0	1305.5
23.0	4.0	14	8	7	4.1	10.1	1324.6
24.0	3.0	14	8	7	4.1	10.2	1343.7
25.0	2.0	14	9	6	3.6	10.3	1362.9
26.0	1.0	14	9	6	3.6	10.4	1382.0
WL= 28.0							

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 28.0							
1.0	27.0	14	8	5	3.0	8.3	936.6
2.0	26.0	14	8	5	3.0	8.4	955.7
3.0	25.0	14	8	5	3.0	8.5	974.8
4.0	24.0	14	8	5	3.0	8.7	993.9
5.0	23.0	14	8	5	3.0	8.8	1013.1
6.0	22.0	14	8	5	3.0	8.9	1032.2
7.0	21.0	14	8	5	3.0	9.0	1051.3
8.0	20.0	14	8	6	3.5	9.1	1070.5
9.0	19.0	14	8	6	3.5	9.2	1089.6
10.0	18.0	14	8	6	3.5	9.2	1108.7
11.0	17.0	14	8	6	3.5	9.3	1127.8
12.0	16.0	14	8	6	3.5	9.4	1147.0
13.0	15.0	14	8	6	3.5	9.5	1166.1
14.0	14.0	14	9	5	3.1	9.6	1185.2
15.0	13.0	14	9	5	3.1	9.7	1204.4
16.0	12.0	14	8	7	4.1	9.8	1223.5
17.0	11.0	14	8	7	4.1	9.8	1242.6
18.0	10.0	14	8	7	4.1	9.9	1261.7
19.0	9.0	14	9	6	3.6	10.0	1280.9
20.0	8.0	14	9	6	3.6	10.1	1300.0
21.0	7.0	14	9	6	3.6	10.2	1319.1
22.0	6.0	14	9	6	3.6	10.3	1338.3
23.0	5.0	14	9	6	3.6	10.4	1357.4
24.0	4.0	14	9	6	3.6	10.5	1376.5
25.0	3.0	14	10	5	3.3	10.6	1395.6
26.0	2.0	14	10	5	3.3	10.7	1414.8
27.0	1.0	14	9	7	4.2	10.8	1433.9
WL= 29.0							
1.0	28.0	14	8	5	3.0	8.6	969.3
2.0	27.0	14	8	6	3.5	8.8	988.4
3.0	26.0	14	8	6	3.5	8.9	1007.6
4.0	25.0	14	8	6	3.5	9.0	1026.7
5.0	24.0	14	8	6	3.5	9.1	1045.8
6.0	23.0	14	8	6	3.5	9.2	1065.0
7.0	22.0	14	8	6	3.5	9.3	1084.1
8.0	21.0	14	8	6	3.5	9.4	1103.2
9.0	20.0	14	8	6	3.5	9.5	1122.3
10.0	19.0	14	8	6	3.5	9.6	1141.5
11.0	18.0	14	8	7	4.1	9.7	1160.6
12.0	17.0	14	8	7	4.1	9.8	1179.7
13.0	16.0	14	8	7	4.1	9.8	1198.9
14.0	15.0	14	9	6	3.6	9.9	1218.0
15.0	14.0	14	9	6	3.6	10.0	1237.1
16.0	13.0	14	9	6	3.6	10.1	1256.3
17.0	12.0	14	9	6	3.6	10.2	1275.4
18.0	11.0	14	9	6	3.6	10.3	1294.5
19.0	10.0	14	10	5	3.3	10.4	1313.6
20.0	9.0	14	9	7	4.2	10.4	1332.8
21.0	8.0	14	9	7	4.2	10.5	1351.9

TABLE H (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 29.0							
22.0	7.0	14	9	7	4.2	10.6	1371.0
23.0	6.0	14	9	7	4.2	10.7	1390.2
24.0	5.0	14	9	7	4.2	10.8	1409.3
25.0	4.0	14	9	7	4.2	10.9	1428.4
26.0	3.0	14	10	6	3.8	11.0	1447.5
27.0	2.0	14	10	6	3.8	11.2	1466.7
28.0	1.0	14	10	6	3.8	11.3	1485.8
WL= 30.0							
1.0	29.0	14	8	6	3.5	9.0	1002.1
2.0	28.0	14	8	6	3.5	9.1	1021.2
3.0	27.0	14	8	6	3.5	9.2	1040.3
4.0	26.0	14	8	6	3.5	9.3	1059.5
5.0	25.0	14	8	7	4.1	9.5	1078.6
6.0	24.0	14	8	7	4.1	9.6	1097.7
7.0	23.0	14	8	7	4.1	9.7	1116.9
8.0	22.0	14	8	7	4.1	9.8	1136.0
9.0	21.0	14	8	7	4.1	9.8	1155.1
10.0	20.0	14	8	7	4.1	9.9	1174.2
11.0	19.0	14	9	6	3.6	10.0	1193.4
12.0	18.0	14	9	6	3.6	10.1	1212.5
13.0	17.0	14	9	6	3.6	10.2	1231.6
14.0	16.0	14	8	8	4.4	10.3	1250.8
15.0	15.0	14	9	7	4.2	10.4	1269.9
16.0	14.0	14	9	7	4.2	10.5	1289.0
17.0	13.0	14	9	7	4.2	10.5	1308.1
18.0	12.0	14	9	7	4.2	10.6	1327.3
19.0	11.0	14	9	7	4.2	10.7	1346.4
20.0	10.0	14	10	6	3.8	10.8	1365.5
21.0	9.0	14	10	6	3.8	10.9	1384.7
22.0	8.0	14	10	6	3.8	11.0	1403.8
23.0	7.0	14	10	6	3.8	11.1	1422.9
24.0	6.0	14	10	6	3.8	11.2	1442.0
25.0	5.0	14	9	9	5.0	11.3	1461.2
26.0	4.0	14	9	9	5.0	11.4	1480.3
27.0	3.0	14	10	7	4.3	11.5	1499.4
28.0	2.0	14	10	7	4.3	11.6	1518.6
29.0	1.0	14	10	7	4.3	11.7	1537.7

TABLE I

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 7.0							
5.0	2.0	13	3	0	0.1	3.2	482.2
6.0	1.0	13	3	0	0.1	3.4	532.8
WL= 8.0							
4.0	4.0	14	3	0	0.1	3.1	464.4
5.0	3.0	14	3	0	0.1	3.4	515.0
6.0	2.0	14	3	0	0.1	3.7	565.5
7.0	1.0	12	2	1	0.5	3.9	616.1
WL= 9.0							
3.0	6.0	14	4	0	0.2	3.1	446.6
4.0	5.0	14	4	0	0.2	3.4	497.2
5.0	4.0	14	4	0	0.2	3.6	547.7
6.0	3.0	14	4	0	0.2	3.9	598.3
7.0	2.0	14	4	0	0.2	4.2	648.9
8.0	1.0	14	4	0	0.2	4.4	699.4
WL= 10.0							
2.0	8.0	13	3	1	0.5	3.1	428.8
3.0	7.0	14	3	1	0.6	3.4	479.4
4.0	6.0	14	3	1	0.6	3.7	529.9
5.0	5.0	14	3	1	0.6	3.9	580.5
6.0	4.0	14	3	1	0.6	4.2	631.1
7.0	3.0	14	3	1	0.6	4.4	681.6
8.0	2.0	14	5	0	0.3	4.6	732.2
9.0	1.0	14	5	0	0.3	4.9	782.8
WL= 11.0							
1.0	10.0	14	5	0	0.3	3.1	411.0
2.0	9.0	14	5	0	0.3	3.4	461.6
3.0	8.0	13	4	1	0.5	3.7	512.1
4.0	7.0	13	4	1	0.5	3.9	562.7
5.0	6.0	13	4	1	0.5	4.2	613.3
6.0	5.0	14	4	1	0.6	4.4	663.8
7.0	4.0	14	4	1	0.6	4.7	714.4
8.0	3.0	14	4	1	0.6	4.9	765.0
9.0	2.0	14	4	1	0.6	5.1	815.5
10.0	1.0	14	4	1	0.6	5.4	866.1
WL= 12.0							
1.0	11.0	14	4	1	0.6	3.4	443.8
2.0	10.0	14	4	1	0.6	3.7	494.3
3.0	9.0	14	4	1	0.6	3.9	544.9
4.0	8.0	14	6	0	0.4	4.2	595.5
5.0	7.0	14	6	0	0.4	4.4	646.0
6.0	6.0	14	6	0	0.4	4.7	696.6
7.0	5.0	14	6	0	0.4	4.9	747.2
8.0	4.0	14	6	0	0.4	5.2	797.7
9.0	3.0	14	6	0	0.4	5.4	848.3
10.0	2.0	14	5	1	0.7	5.6	898.9

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26-AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 12.0							
11.0	1.0	14	5	1	0.7	5.9	949.4
WL= 13.0							
1.0	12.0	14	6	0	0.4	3.7	476.5
2.0	11.0	14	5	1	0.7	4.0	527.1
3.0	10.0	14	5	1	0.7	4.2	577.7
4.0	9.0	14	5	1	0.7	4.5	628.2
5.0	8.0	14	5	1	0.7	4.7	678.8
6.0	7.0	14	5	1	0.7	5.0	729.4
7.0	6.0	14	5	1	0.7	5.2	779.9
8.0	5.0	14	5	1	0.7	5.4	830.5
9.0	4.0	14	4	2	1.1	5.7	881.1
10.0	3.0	12	5	2	1.0	5.9	931.6
11.0	2.0	13	5	2	1.1	6.1	982.2
12.0	1.0	14	7	0	0.5	6.4	1032.8
WL= 14.0							
1.0	13.0	14	4	2	1.1	4.0	509.3
2.0	12.0	12	4	3	1.4	4.2	559.8
3.0	11.0	13	5	2	1.1	4.5	610.4
4.0	10.0	13	5	2	1.1	4.8	661.0
5.0	9.0	14	7	0	0.5	5.0	711.6
6.0	8.0	14	7	0	0.5	5.3	762.1
7.0	7.0	14	6	1	0.8	5.5	812.7
8.0	6.0	14	6	1	0.8	5.7	863.3
9.0	5.0	14	6	1	0.8	5.9	913.8
10.0	4.0	14	6	1	0.8	6.2	964.4
11.0	3.0	14	6	1	0.8	6.4	1015.0
12.0	2.0	14	5	2	1.2	6.6	1065.5
13.0	1.0	13	5	3	1.5	6.9	1116.1
WL= 15.0							
1.0	14.0	14	6	1	0.8	4.3	542.0
2.0	13.0	14	6	1	0.8	4.5	592.6
3.0	12.0	14	6	1	0.8	4.8	643.2
4.0	11.0	14	5	2	1.2	5.1	693.8
5.0	10.0	14	5	2	1.2	5.3	744.3
6.0	9.0	14	5	2	1.2	5.6	794.9
7.0	8.0	13	5	3	1.5	5.8	845.5
8.0	7.0	13	5	3	1.5	6.0	896.0
9.0	6.0	13	5	3	1.5	6.2	946.6
10.0	5.0	13	6	2	1.1	6.4	997.2
11.0	4.0	13	6	2	1.1	6.7	1047.7
12.0	3.0	14	7	1	0.9	6.9	1098.3
13.0	2.0	14	7	1	0.9	7.1	1148.9
14.0	1.0	14	7	1	0.9	7.4	1199.4
WL= 16.0							
1.0	15.0	14	5	2	1.2	4.6	574.8
2.0	14.0	13	5	3	1.5	4.9	625.4

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 16.0							
3.0	13.0	13	5	3	1.5	5.1	675.9
4.0	12.0	13	6	2	1.1	5.4	726.5
5.0	11.0	14	6	2	1.3	5.6	777.1
6.0	10.0	14	6	2	1.3	5.9	827.7
7.0	9.0	14	6	2	1.3	6.1	878.2
8.0	8.0	14	7	1	0.9	6.3	928.8
9.0	7.0	14	7	1	0.9	6.5	979.4
10.0	6.0	14	7	1	0.9	6.7	1029.9
11.0	5.0	14	6	2	1.3	6.9	1080.5
12.0	4.0	13	6	3	1.6	7.2	1131.1
13.0	3.0	13	6	3	1.6	7.4	1181.6
14.0	2.0	13	6	3	1.6	7.6	1232.2
15.0	1.0	14	7	2	1.4	7.9	1282.8
WL= 17.0							
1.0	16.0	14	6	2	1.3	4.9	607.6
2.0	15.0	14	6	2	1.3	5.2	658.1
3.0	14.0	14	6	2	1.3	5.4	708.7
4.0	13.0	14	6	2	1.3	5.7	759.3
5.0	12.0	14	6	2	1.3	5.9	809.8
6.0	11.0	13	6	3	1.6	6.2	860.4
7.0	10.0	13	6	3	1.6	6.4	911.0
8.0	9.0	13	6	3	1.6	6.6	961.6
9.0	8.0	13	6	3	1.6	6.8	1012.1
10.0	7.0	14	6	3	1.7	7.0	1062.7
11.0	6.0	14	7	2	1.4	7.2	1113.3
12.0	5.0	14	7	2	1.4	7.5	1163.8
13.0	4.0	14	7	2	1.4	7.7	1214.4
14.0	3.0	14	8	1	1.1	7.9	1265.0
15.0	2.0	14	8	1	1.1	8.1	1315.5
16.0	1.0	13	7	3	1.7	8.4	1366.1
WL= 18.0							
1.0	17.0	13	5	4	2.0	5.2	640.3
2.0	16.0	13	6	3	1.6	5.5	690.9
3.0	15.0	14	6	3	1.7	5.8	741.5
4.0	14.0	14	6	3	1.7	6.0	792.0
5.0	13.0	14	6	3	1.7	6.3	842.6
6.0	12.0	14	7	2	1.4	6.5	893.2
7.0	11.0	14	7	2	1.4	6.7	943.8
8.0	10.0	14	7	2	1.4	6.9	994.3
9.0	9.0	14	7	2	1.4	7.1	1044.9
10.0	8.0	14	7	2	1.4	7.3	1095.5
11.0	7.0	13	6	4	2.1	7.5	1146.0
12.0	6.0	13	7	3	1.7	7.8	1196.6
13.0	5.0	13	7	3	1.7	8.0	1247.2
14.0	4.0	14	7	3	1.9	8.2	1297.7
15.0	3.0	14	7	3	1.9	8.4	1348.3
16.0	2.0	14	7	3	1.9	8.6	1398.9
17.0	1.0	14	8	2	1.6	8.9	1449.4

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 19.0							
1.0	18.0	14	6	3	1.7	5.5	673.1
2.0	17.0	14	7	2	1.4	5.8	723.7
3.0	16.0	14	7	2	1.4	6.1	774.2
4.0	15.0	14	7	2	1.4	6.3	824.8
5.0	14.0	13	6	4	2.1	6.6	875.4
6.0	13.0	14	6	4	2.2	6.8	925.9
7.0	12.0	14	6	4	2.2	7.0	976.5
8.0	11.0	14	6	4	2.2	7.2	1027.1
9.0	10.0	14	7	3	1.9	7.5	1077.7
10.0	9.0	14	7	3	1.9	7.7	1128.2
11.0	8.0	14	7	3	1.9	7.9	1178.8
12.0	7.0	14	7	3	1.9	8.1	1229.4
13.0	6.0	14	8	2	1.6	8.3	1279.9
14.0	5.0	14	8	2	1.6	8.5	1330.5
15.0	4.0	14	8	2	1.6	8.7	1381.1
16.0	3.0	14	7	4	2.4	8.9	1431.6
17.0	2.0	14	7	4	2.4	9.2	1482.2
18.0	1.0	14	9	2	1.7	9.4	1532.8
WL= 20.0							
1.0	19.0	14	7	2	1.4	5.8	705.9
2.0	18.0	14	6	4	2.2	6.1	756.4
3.0	17.0	14	6	4	2.2	6.4	807.0
4.0	16.0	14	6	4	2.2	6.7	857.6
5.0	15.0	14	7	3	1.9	6.9	908.1
6.0	14.0	14	7	3	1.9	7.1	958.7
7.0	13.0	14	7	3	1.9	7.4	1009.3
8.0	12.0	14	7	3	1.9	7.6	1059.8
9.0	11.0	14	8	2	1.6	7.8	1110.4
10.0	10.0	14	8	2	1.6	8.0	1161.0
11.0	9.0	14	7	4	2.4	8.2	1211.6
12.0	8.0	14	7	4	2.4	8.4	1262.1
13.0	7.0	14	7	4	2.4	8.6	1312.7
14.0	6.0	14	7	4	2.4	8.8	1363.3
15.0	5.0	14	9	2	1.7	9.0	1413.8
16.0	4.0	14	8	3	2.1	9.2	1464.4
17.0	3.0	14	8	3	2.1	9.5	1515.0
18.0	2.0	14	8	3	2.1	9.7	1565.5
19.0	1.0	13	8	4	2.3	9.9	1616.1
WL= 21.0							
1.0	20.0	14	6	4	2.2	6.1	738.6
2.0	19.0	14	7	3	1.9	6.4	789.2
3.0	18.0	14	7	3	1.9	6.7	839.8
4.0	17.0	14	7	3	1.9	7.0	890.3
5.0	16.0	14	6	5	2.7	7.2	940.9
6.0	15.0	14	6	5	2.7	7.5	991.5
7.0	14.0	14	7	4	2.4	7.7	1042.0
8.0	13.0	14	7	4	2.4	7.9	1092.6
9.0	12.0	14	7	4	2.4	8.1	1143.2

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 21.0							
10.0	11.0	14	7	4	2.4	8.3	1193.8
11.0	10.0	14	8	3	2.1	8.5	1244.3
12.0	9.0	14	8	3	2.1	8.7	1294.9
13.0	8.0	14	8	3	2.1	8.9	1345.5
14.0	7.0	14	8	3	2.1	9.1	1396.0
15.0	6.0	14	8	3	2.1	9.3	1446.6
16.0	5.0	13	8	4	2.3	9.5	1497.2
17.0	4.0	14	8	4	2.5	9.8	1547.7
18.0	3.0	14	8	4	2.5	10.0	1598.3
19.0	2.0	14	8	4	2.5	10.2	1648.9
20.0	1.0	13	8	5	2.8	10.5	1699.4
WL= 22.0							
1.0	21.0	14	7	3	1.9	6.5	771.4
2.0	20.0	14	6	5	2.7	6.8	822.0
3.0	19.0	14	7	4	2.4	7.1	872.5
4.0	18.0	14	7	4	2.4	7.3	923.1
5.0	17.0	14	7	4	2.4	7.6	973.7
6.0	16.0	14	7	4	2.4	7.8	1024.2
7.0	15.0	14	7	4	2.4	8.0	1074.8
8.0	14.0	14	6	3	2.1	8.2	1125.4
9.0	13.0	14	8	3	2.1	8.4	1175.9
10.0	12.0	14	7	5	2.8	8.6	1226.5
11.0	11.0	14	7	5	2.8	8.8	1277.1
12.0	10.0	14	7	5	2.8	9.0	1327.7
13.0	9.0	14	8	4	2.5	9.2	1378.2
14.0	8.0	14	6	4	2.5	9.4	1428.8
15.0	7.0	14	8	4	2.5	9.6	1479.4
16.0	6.0	14	8	4	2.5	9.9	1529.9
17.0	5.0	13	8	5	2.8	10.1	1580.5
18.0	4.0	14	8	5	3.0	10.3	1631.1
19.0	3.0	14	9	4	2.7	10.5	1681.6
20.0	2.0	14	9	4	2.7	10.6	1732.2
21.0	1.0	14	9	4	2.7	11.0	1782.8
WL= 23.0							
1.0	22.0	14	7	4	2.4	6.8	804.2
2.0	21.0	14	7	4	2.4	7.1	854.7
3.0	20.0	14	7	4	2.4	7.4	905.3
4.0	19.0	14	7	4	2.4	7.7	955.9
5.0	18.0	14	7	5	2.8	7.9	1006.4
6.0	17.0	14	7	5	2.8	8.1	1057.0
7.0	16.0	14	7	5	2.8	8.4	1107.6
8.0	15.0	14	7	5	2.8	8.6	1158.1
9.0	14.0	14	7	5	2.8	8.8	1208.7
10.0	13.0	14	8	4	2.5	9.0	1259.3
11.0	12.0	14	8	4	2.5	9.2	1309.8
12.0	11.0	14	8	4	2.5	9.4	1360.4
13.0	10.0	14	8	4	2.5	9.6	1411.0
14.0	9.0	14	8	5	3.0	9.8	1461.6

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 23.0							
15.0	8.0	14	8	5	3.0	10.0	1512.1
16.0	7.0	14	9	4	2.7	10.2	1562.7
17.0	6.0	14	9	4	2.7	10.4	1613.3
18.0	5.0	14	9	4	2.7	10.6	1663.8
19.0	4.0	14	8	6	3.5	10.8	1714.4
20.0	3.0	14	9	5	3.1	11.1	1765.0
21.0	2.0	14	9	5	3.1	11.3	1815.5
22.0	1.0	14	10	4	2.8	11.6	1866.1
WL= 24.0							
1.0	23.0	14	7	4	2.4	7.1	836.9
2.0	22.0	14	7	5	2.8	7.5	887.5
3.0	21.0	14	7	5	2.8	7.7	938.1
4.0	20.0	14	7	5	2.8	8.0	988.6
5.0	19.0	14	7	5	2.8	8.3	1039.2
6.0	18.0	14	7	6	3.3	8.5	1089.8
7.0	17.0	14	7	6	3.3	8.7	1140.3
8.0	16.0	14	8	4	2.5	8.9	1190.9
9.0	15.0	14	8	4	2.5	9.1	1241.5
10.0	14.0	14	8	4	2.5	9.3	1292.0
11.0	13.0	14	8	5	3.0	9.5	1342.6
12.0	12.0	14	8	5	3.0	9.7	1393.2
13.0	11.0	14	9	4	2.7	9.9	1443.8
14.0	10.0	14	9	4	2.7	10.1	1494.3
15.0	9.0	14	8	6	3.5	10.3	1544.9
16.0	8.0	14	9	5	3.1	10.5	1595.5
17.0	7.0	14	9	5	3.1	10.7	1646.0
18.0	6.0	14	10	4	2.8	10.9	1696.6
19.0	5.0	14	10	4	2.8	11.1	1747.2
20.0	4.0	14	9	6	3.6	11.4	1797.7
21.0	3.0	14	9	6	3.6	11.6	1848.3
22.0	2.0	14	10	5	3.3	11.8	1898.9
23.0	1.0	14	10	5	3.3	12.1	1949.4
WL= 25.0							
1.0	24.0	14	7	5	2.8	7.5	869.7
2.0	23.0	14	7	5	2.8	7.8	920.3
3.0	22.0	14	7	6	3.3	8.1	970.8
4.0	21.0	14	7	6	3.3	8.4	1021.4
5.0	20.0	14	7	6	3.3	8.6	1072.0
6.0	19.0	14	7	6	3.3	8.8	1122.5
7.0	18.0	14	7	7	3.9	9.1	1173.1
8.0	17.0	14	7	7	3.9	9.3	1223.7
9.0	16.0	14	8	5	3.0	9.5	1274.2
10.0	15.0	14	8	5	3.0	9.7	1324.8
11.0	14.0	14	8	5	3.0	9.9	1375.4
12.0	13.0	14	8	6	3.5	10.1	1425.9
13.0	12.0	14	8	6	3.5	10.3	1476.5
14.0	11.0	14	9	5	3.1	10.5	1527.1
15.0	10.0	14	10	4	2.8	10.6	1577.7

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 25.0							
16.0	9.0	14	10	4	2.8	10.8	1628.2
17.0	8.0	14	9	6	3.6	11.0	1678.8
18.0	7.0	14	9	6	3.6	11.3	1729.4
19.0	6.0	14	10	5	3.3	11.5	1779.9
20.0	5.0	14	10	5	3.3	11.7	1830.5
21.0	4.0	14	10	5	3.3	11.9	1881.1
22.0	3.0	14	10	6	3.8	12.1	1931.6
23.0	2.0	14	10	6	3.8	12.4	1982.2
24.0	1.0	14	10	6	3.8	12.7	2032.8
WL= 26.0							
1.0	25.0	14	7	6	3.3	7.8	902.5
2.0	24.0	14	7	6	3.3	8.1	953.0
3.0	23.0	14	7	6	3.3	8.4	1003.6
4.0	22.0	14	7	7	3.9	8.7	1054.2
5.0	21.0	14	7	7	3.9	8.9	1104.7
6.0	20.0	14	8	5	3.0	9.2	1155.3
7.0	19.0	14	8	5	3.0	9.4	1205.9
8.0	18.0	14	8	5	3.0	9.6	1256.4
9.0	17.0	14	8	6	3.5	9.8	1307.0
10.0	16.0	14	8	6	3.5	10.0	1357.6
11.0	15.0	14	9	5	3.1	10.2	1408.1
12.0	14.0	14	9	5	3.1	10.4	1458.7
13.0	13.0	14	8	7	4.1	10.6	1509.3
14.0	12.0	14	9	6	3.6	10.8	1559.8
15.0	11.0	14	9	6	3.6	11.0	1610.4
16.0	10.0	14	10	5	3.3	11.2	1661.0
17.0	9.0	14	10	5	3.3	11.4	1711.6
18.0	8.0	14	9	7	4.2	11.6	1762.1
19.0	7.0	14	10	6	3.8	11.8	1812.7
20.0	6.0	14	10	6	3.8	12.0	1863.3
21.0	5.0	14	11	5	3.5	12.2	1913.8
22.0	4.0	14	11	5	3.5	12.5	1964.4
23.0	3.0	13	10	8	4.3	12.7	2015.0
24.0	2.0	14	10	7	4.3	12.9	2065.5
25.0	1.0	14	11	6	4.0	13.2	2116.1
WL= 27.0							
1.0	26.0	14	7	7	3.9	8.2	935.2
2.0	25.0	14	7	7	3.9	8.5	985.8
3.0	24.0	14	8	5	3.0	8.8	1036.4
4.0	23.0	14	8	5	3.0	9.0	1086.9
5.0	22.0	14	8	5	3.0	9.3	1137.5
6.0	21.0	14	8	5	3.0	9.5	1188.1
7.0	20.0	14	8	6	3.5	9.8	1238.6
8.0	19.0	14	8	6	3.5	10.0	1289.2
9.0	18.0	14	8	6	3.5	10.2	1339.8
10.0	17.0	14	9	5	3.1	10.4	1390.3
11.0	16.0	14	8	7	4.1	10.6	1440.9
12.0	15.0	14	9	6	3.6	10.8	1491.5

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER	1KHZ CABLE	DC CABLE
26-GA	22-GA	BW	HT	SL	GAIN (DB)	LOSS (DB)	RES (OHMS)
WL= 27.0							
13.0	14.0	14	9	6	3.6	11.0	1542.0
14.0	13.0	14	10	5	3.3	11.1	1592.6
15.0	12.0	14	9	7	4.2	11.3	1643.2
16.0	11.0	14	10	6	3.8	11.5	1693.8
17.0	10.0	14	10	6	3.8	11.7	1744.3
18.0	9.0	14	11	5	3.5	11.9	1794.9
19.0	8.0	14	11	5	3.5	12.1	1845.5
20.0	7.0	14	10	7	4.3	12.3	1896.0
21.0	6.0	13	10	9	4.8	12.6	1946.6
22.0	5.0	14	11	6	4.0	12.8	1997.2
23.0	4.0	14	11	6	4.0	13.0	2047.7
24.0	3.0	14	11	6	4.0	13.2	2098.3
25.0	2.0	13	11	8	4.5	13.5	2148.9
26.0	1.0	14	11	7	4.5	13.8	2199.4
WL= 28.0							
1.0	27.0	14	8	5	3.0	8.5	968.0
2.0	26.0	14	8	5	3.0	8.8	1018.6
3.0	25.0	14	8	6	3.5	9.1	1069.1
4.0	24.0	14	8	6	3.5	9.4	1119.7
5.0	23.0	14	8	6	3.5	9.6	1170.3
6.0	22.0	14	8	6	3.5	9.9	1220.8
7.0	21.0	14	8	6	3.5	10.1	1271.4
8.0	20.0	14	8	7	4.1	10.3	1322.0
9.0	19.0	14	8	7	4.1	10.5	1372.5
10.0	18.0	14	9	6	3.6	10.7	1423.1
11.0	17.0	14	9	6	3.6	10.9	1473.7
12.0	16.0	14	9	7	4.2	11.1	1524.2
13.0	15.0	14	9	7	4.2	11.3	1574.8
14.0	14.0	14	10	6	3.8	11.5	1625.4
15.0	13.0	14	10	6	3.8	11.7	1675.9
16.0	12.0	14	11	5	3.5	11.9	1726.5
17.0	11.0	14	10	7	4.3	12.1	1777.1
18.0	10.0	13	10	9	4.8	12.3	1827.7
19.0	9.0	14	11	6	4.0	12.5	1878.2
20.0	8.0	14	11	6	4.0	12.7	1928.8
21.0	7.0	13	11	8	4.5	12.9	1979.4
22.0	6.0	13	11	8	4.5	13.1	2029.9
23.0	5.0	14	11	7	4.5	13.3	2080.5
24.0	4.0	13	11	9	4.9	13.6	2131.1
25.0	3.0	13	11	9	4.9	13.8	2181.6
26.0	2.0	13	11	10	5.3	14.0	2232.2
27.0	1.0	13	11	10	5.3	14.3	2282.8
WL= 29.0							
1.0	28.0	14	8	6	3.5	8.9	1000.8
2.0	27.0	14	8	6	3.5	9.2	1051.3
3.0	26.0	14	8	6	3.5	9.5	1101.9
4.0	25.0	14	8	6	3.5	9.7	1152.5
5.0	24.0	14	8	7	4.1	10.0	1203.0

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 29.0							
6.0	23.0	14	8	7	4.1	10.2	1253.6
7.0	22.0	14	8	7	4.1	10.5	1304.2
8.0	21.0	14	8	8	4.4	10.7	1354.7
9.0	20.0	14	8	8	4.4	10.9	1405.3
10.0	19.0	14	9	7	4.2	11.1	1455.9
11.0	18.0	14	9	7	4.2	11.3	1506.4
12.0	17.0	14	10	6	3.8	11.5	1557.0
13.0	16.0	14	10	6	3.8	11.7	1607.6
14.0	15.0	14	10	7	4.3	11.9	1658.1
15.0	14.0	14	10	7	4.3	12.0	1708.7
16.0	13.0	14	11	6	4.0	12.2	1759.3
17.0	12.0	14	11	6	4.0	12.4	1809.8
18.0	11.0	13	10	10	5.2	12.6	1860.4
19.0	10.0	14	11	7	4.5	12.8	1911.0
20.0	9.0	14	11	7	4.5	13.0	1961.6
21.0	8.0	13	11	9	4.9	13.2	2012.1
22.0	7.0	13	11	10	5.3	13.4	2062.7
23.0	6.0	13	11	10	5.3	13.6	2113.3
24.0	5.0	13	11	11	5.8	13.9	2163.8
25.0	4.0	13	11	11	5.8	14.1	2214.4
26.0	3.0	14	12	7	4.7	14.3	2265.0
27.0	2.0	14	12	7	4.7	14.6	2315.5
28.0	1.0	13	12	9	5.1	14.9	2366.1
WL= 30.0							
1.0	29.0	14	8	6	3.5	9.2	1033.5
2.0	28.0	14	8	7	4.1	9.5	1084.1
3.0	27.0	14	8	7	4.1	9.8	1134.7
4.0	26.0	14	8	7	4.1	10.1	1185.2
5.0	25.0	14	8	8	4.4	10.4	1235.8
6.0	24.0	14	8	8	4.4	10.6	1286.4
7.0	23.0	14	8	8	4.4	10.8	1336.9
8.0	22.0	14	8	9	4.9	11.0	1387.5
9.0	21.0	14	9	7	4.2	11.3	1438.1
10.0	20.0	14	9	7	4.2	11.5	1488.6
11.0	19.0	14	9	8	4.5	11.6	1539.2
12.0	18.0	14	9	9	5.0	11.8	1589.8
13.0	17.0	14	10	7	4.3	12.0	1640.3
14.0	16.0	14	10	7	4.3	12.2	1690.9
15.0	15.0	14	10	8	4.7	12.4	1741.5
16.0	14.0	14	10	9	5.1	12.6	1792.0
17.0	13.0	14	11	7	4.5	12.8	1842.6
18.0	12.0	13	11	9	4.9	13.0	1893.2
19.0	11.0	14	12	6	4.2	13.2	1943.7
20.0	10.0	13	11	10	5.3	13.4	1994.3
21.0	9.0	13	11	11	5.8	13.6	2044.9
22.0	8.0	13	12	8	4.6	13.8	2095.5
23.0	7.0	13	12	9	5.1	14.0	2146.0
24.0	6.0	13	12	9	5.1	14.2	2196.6
25.0	5.0	13	12	9	5.1	14.4	2247.2

TABLE I (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 30.0							
26.0	4.0	13	12	10	5.5	14.7	2297.7
27.0	3.0	13	12	10	5.5	14.9	2348.3
28.0	2.0	13	12	11	5.9	15.2	2398.9

TABLE J
 EQUALIZER SETTINGS FOR MIXED 26- AND
 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
 INPUT IMPEDANCE = 600 OHMS
 CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 6.0							
5.0	1.0	14	2	0	0.1	3.0	468.6
WL= 7.0							
3.0	4.0	13	3	0	0.1	3.0	457.6
4.0	3.0	13	3	0	0.1	3.2	489.0
5.0	2.0	13	3	0	0.1	3.4	520.5
6.0	1.0	13	3	0	0.1	3.5	551.9
WL= 8.0							
1.0	7.0	14	3	0	0.1	3.1	446.6
2.0	6.0	12	2	1	0.5	3.2	478.0
3.0	5.0	12	2	1	0.5	3.4	509.5
4.0	4.0	12	2	1	0.5	3.5	540.9
5.0	3.0	12	2	1	0.5	3.7	572.3
6.0	2.0	12	2	1	0.5	3.9	603.8
7.0	1.0	12	2	1	0.5	4.0	635.2
WL= 9.0							
1.0	8.0	14	4	0	0.2	3.4	498.5
2.0	7.0	14	4	0	0.2	3.6	529.9
3.0	6.0	14	4	0	0.2	3.7	561.4
4.0	5.0	14	4	0	0.2	3.9	592.8
5.0	4.0	14	4	0	0.2	4.0	624.2
6.0	3.0	14	4	0	0.2	4.2	655.7
7.0	2.0	14	4	0	0.2	4.3	687.1
8.0	1.0	13	3	1	0.5	4.5	718.6
WL= 10.0							
1.0	9.0	14	3	1	0.6	3.8	550.4
2.0	8.0	14	5	0	0.3	3.9	581.8
3.0	7.0	14	5	0	0.3	4.1	613.3
4.0	6.0	14	5	0	0.3	4.3	644.7
5.0	5.0	14	5	0	0.3	4.4	676.1
6.0	4.0	14	5	0	0.3	4.5	707.6
7.0	3.0	14	5	0	0.3	4.7	739.0
8.0	2.0	14	5	0	0.3	4.8	770.5
9.0	1.0	14	5	0	0.3	5.0	801.9
WL= 11.0							
1.0	10.0	14	4	1	0.6	4.1	602.3
2.0	9.0	14	4	1	0.6	4.3	633.7
3.0	8.0	14	4	1	0.6	4.5	665.2
4.0	7.0	14	4	1	0.6	4.6	696.6
5.0	6.0	14	4	1	0.6	4.8	728.0
6.0	5.0	14	4	1	0.6	4.9	759.5
7.0	4.0	14	4	1	0.6	5.0	790.9
8.0	3.0	14	4	1	0.6	5.2	822.3
9.0	2.0	14	4	1	0.6	5.3	853.8
10.0	1.0	14	4	1	0.6	5.5	885.2
WL= 12.0							

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 12.0							
1.0	11.0	14	6	0	0.4	4.5	654.2
2.0	10.0	14	6	0	0.4	4.7	685.6
3.0	9.0	14	5	1	0.7	4.8	717.0
4.0	8.0	14	5	1	0.7	5.0	748.5
5.0	7.0	14	5	1	0.7	5.1	779.9
6.0	6.0	14	5	1	0.7	5.3	811.4
7.0	5.0	14	5	1	0.7	5.4	842.8
8.0	4.0	14	5	1	0.7	5.5	874.2
9.0	3.0	14	5	1	0.7	5.7	905.7
10.0	2.0	14	5	1	0.7	5.8	937.1
11.0	1.0	14	5	1	0.7	6.0	968.6
WL= 13.0							
1.0	12.0	14	4	2	1.1	4.9	706.1
2.0	11.0	14	4	2	1.1	5.1	737.5
3.0	10.0	12	5	2	1.0	5.2	768.9
4.0	9.0	13	5	2	1.1	5.4	800.4
5.0	8.0	13	5	2	1.1	5.5	831.8
6.0	7.0	13	5	2	1.1	5.6	863.3
7.0	6.0	13	5	2	1.1	5.8	894.7
8.0	5.0	13	5	2	1.1	5.9	926.1
9.0	4.0	13	5	2	1.1	6.0	957.6
10.0	3.0	14	7	0	0.5	6.2	989.0
11.0	2.0	14	7	0	0.5	6.3	1020.5
12.0	1.0	14	6	1	0.8	6.5	1051.9
WL= 14.0							
1.0	13.0	14	6	1	0.8	5.3	758.0
2.0	12.0	14	6	1	0.8	5.4	789.4
3.0	11.0	14	6	1	0.8	5.6	820.8
4.0	10.0	14	6	1	0.8	5.7	852.3
5.0	9.0	14	6	1	0.8	5.9	883.7
6.0	8.0	14	6	1	0.8	6.0	915.2
7.0	7.0	14	5	2	1.2	6.1	946.6
8.0	6.0	14	5	2	1.2	6.3	978.0
9.0	5.0	14	5	2	1.2	6.4	1009.5
10.0	4.0	12	5	3	1.5	6.5	1040.9
11.0	3.0	13	5	3	1.5	6.7	1072.3
12.0	2.0	13	5	3	1.5	6.8	1103.8
13.0	1.0	13	5	3	1.5	6.9	1135.2
WL= 15.0							
1.0	14.0	13	5	3	1.5	5.7	809.8
2.0	13.0	13	5	3	1.5	5.8	841.3
3.0	12.0	13	6	2	1.1	6.0	872.7
4.0	11.0	13	6	2	1.1	6.1	904.2
5.0	10.0	14	6	2	1.3	6.3	935.6
6.0	9.0	14	6	2	1.3	6.4	967.0
7.0	8.0	14	6	2	1.3	6.5	998.5
8.0	7.0	14	6	2	1.3	6.7	1029.9

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 15.0							
9.0	6.0	14	7	1	0.9	6.8	1061.4
10.0	5.0	14	7	1	0.9	6.9	1092.8
11.0	4.0	14	7	1	0.9	7.0	1124.2
12.0	3.0	14	7	1	0.9	7.2	1155.7
13.0	2.0	14	7	1	0.9	7.3	1187.1
14.0	1.0	14	6	2	1.3	7.5	1218.6
WL= 16.0							
1.0	15.0	14	6	2	1.3	6.1	861.7
2.0	14.0	14	6	2	1.3	6.2	893.2
3.0	13.0	14	6	2	1.3	6.4	924.6
4.0	12.0	14	6	2	1.3	6.5	956.1
5.0	11.0	13	6	3	1.6	6.7	987.5
6.0	10.0	13	6	3	1.6	6.8	1018.9
7.0	9.0	13	6	3	1.6	6.9	1050.4
8.0	8.0	13	6	3	1.6	7.0	1081.8
9.0	7.0	13	6	3	1.6	7.2	1113.3
10.0	6.0	13	6	3	1.6	7.3	1144.7
11.0	5.0	13	6	3	1.6	7.4	1176.1
12.0	4.0	14	6	3	1.7	7.5	1207.6
13.0	3.0	14	6	3	1.7	7.7	1239.0
14.0	2.0	14	7	2	1.4	7.8	1270.5
15.0	1.0	14	7	2	1.4	8.0	1301.9
WL= 17.0							
1.0	16.0	14	6	3	1.7	6.5	913.6
2.0	15.0	14	6	3	1.7	6.6	945.1
3.0	14.0	14	6	3	1.7	6.8	976.5
4.0	13.0	14	7	2	1.4	6.9	1008.0
5.0	12.0	14	7	2	1.4	7.1	1039.4
6.0	11.0	14	7	2	1.4	7.2	1070.8
7.0	10.0	14	7	2	1.4	7.3	1102.3
8.0	9.0	14	7	2	1.4	7.4	1133.7
9.0	8.0	14	7	2	1.4	7.6	1165.2
10.0	7.0	14	7	2	1.4	7.7	1196.6
11.0	6.0	14	8	1	1.1	7.8	1228.0
12.0	5.0	14	8	1	1.1	7.9	1259.5
13.0	4.0	14	8	1	1.1	8.1	1290.9
14.0	3.0	13	7	3	1.7	8.2	1322.3
15.0	2.0	13	7	3	1.7	8.3	1353.8
16.0	1.0	13	7	3	1.7	8.5	1385.2
WL= 18.0							
1.0	17.0	14	7	2	1.4	6.9	965.5
2.0	16.0	13	6	4	2.1	7.0	997.0
3.0	15.0	14	6	4	2.2	7.2	1028.4
4.0	14.0	14	6	4	2.2	7.3	1059.8
5.0	13.0	14	6	4	2.2	7.5	1091.3
6.0	12.0	14	6	4	2.2	7.6	1122.7
7.0	11.0	14	6	4	2.2	7.7	1154.2

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 18.0							
8.0	10.0	14	7	3	1.9	7.8	1185.6
9.0	9.0	14	7	3	1.9	8.0	1217.0
10.0	8.0	14	7	3	1.9	8.1	1248.5
11.0	7.0	14	7	3	1.9	8.2	1279.9
12.0	6.0	14	7	3	1.9	8.3	1311.4
13.0	5.0	14	7	3	1.9	8.4	1342.8
14.0	4.0	14	7	3	1.9	8.6	1374.2
15.0	3.0	14	8	2	1.6	8.7	1405.7
16.0	2.0	14	8	2	1.6	8.8	1437.1
17.0	1.0	14	8	2	1.6	9.0	1468.6
WL= 19.0							
1.0	18.0	14	7	3	1.9	7.3	1017.4
2.0	17.0	14	7	3	1.9	7.5	1048.9
3.0	16.0	14	7	3	1.9	7.6	1080.3
4.0	15.0	14	7	3	1.9	7.8	1111.7
5.0	14.0	14	7	3	1.9	7.9	1143.2
6.0	13.0	14	8	2	1.6	8.0	1174.6
7.0	12.0	14	8	2	1.6	8.1	1206.1
8.0	11.0	14	8	2	1.6	8.3	1237.5
9.0	10.0	14	8	2	1.6	8.4	1268.9
10.0	9.0	14	8	2	1.6	8.5	1300.4
11.0	8.0	14	7	4	2.4	8.6	1331.8
12.0	7.0	14	7	4	2.4	8.7	1363.3
13.0	6.0	14	7	4	2.4	8.8	1394.7
14.0	5.0	14	7	4	2.4	9.0	1426.1
15.0	4.0	14	7	4	2.4	9.1	1457.6
16.0	3.0	14	7	4	2.4	9.2	1489.0
17.0	2.0	14	9	2	1.7	9.4	1520.5
18.0	1.0	14	8	3	2.1	9.5	1551.9
WL= 20.0							
1.0	19.0	14	8	2	1.6	7.7	1069.3
2.0	18.0	14	7	4	2.4	7.9	1100.8
3.0	17.0	14	7	4	2.4	8.0	1132.2
4.0	16.0	14	7	4	2.4	8.2	1163.6
5.0	15.0	14	7	4	2.4	8.3	1195.1
6.0	14.0	14	7	4	2.4	8.4	1226.5
7.0	13.0	14	7	4	2.4	8.6	1258.0
8.0	12.0	14	7	4	2.4	8.7	1289.4
9.0	11.0	14	7	4	2.4	8.8	1320.8
10.0	10.0	14	8	3	2.1	8.9	1352.3
11.0	9.0	14	8	3	2.1	9.0	1383.7
12.0	8.0	14	8	3	2.1	9.1	1415.2
13.0	7.0	14	8	3	2.1	9.2	1446.6
14.0	6.0	14	8	3	2.1	9.4	1478.0
15.0	5.0	14	8	3	2.1	9.5	1509.5
16.0	4.0	14	8	3	2.1	9.6	1540.9
17.0	3.0	14	8	3	2.1	9.8	1572.3
18.0	2.0	13	8	4	2.3	9.9	1603.8

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 20.0							
19.0	1.0	14	8	4	2.5	10.0	1635.2
WL= 21.0							
1.0	20.0	14	7	4	2.4	8.1	1121.2
2.0	19.0	14	8	3	2.1	8.3	1152.7
3.0	18.0	14	8	3	2.1	8.4	1184.1
4.0	17.0	14	8	3	2.1	8.6	1215.5
5.0	16.0	14	8	3	2.1	8.7	1247.0
6.0	15.0	14	7	5	2.8	8.9	1278.4
7.0	14.0	14	7	5	2.8	9.0	1309.8
8.0	13.0	14	7	5	2.8	9.1	1341.3
9.0	12.0	14	7	5	2.8	9.2	1372.7
10.0	11.0	14	7	5	2.8	9.3	1404.2
11.0	10.0	14	8	4	2.5	9.4	1435.6
12.0	9.0	14	8	4	2.5	9.6	1467.0
13.0	8.0	14	8	4	2.5	9.7	1498.5
14.0	7.0	14	8	4	2.5	9.8	1529.9
15.0	6.0	14	8	4	2.5	9.9	1561.4
16.0	5.0	14	8	4	2.5	10.0	1592.8
17.0	4.0	14	8	4	2.5	10.2	1624.2
18.0	3.0	14	8	4	2.5	10.3	1655.7
19.0	2.0	13	8	5	2.8	10.4	1687.1
20.0	1.0	14	8	5	3.0	10.6	1718.6
WL= 22.0							
1.0	21.0	14	7	5	2.8	8.5	1173.1
2.0	20.0	14	7	5	2.8	8.7	1204.5
3.0	19.0	14	7	5	2.8	8.9	1236.0
4.0	18.0	14	7	6	3.3	9.0	1267.4
5.0	17.0	14	8	4	2.5	9.2	1298.9
6.0	16.0	14	8	4	2.5	9.3	1330.3
7.0	15.0	14	8	4	2.5	9.4	1361.7
8.0	14.0	14	8	4	2.5	9.5	1393.2
9.0	13.0	14	8	4	2.5	9.6	1424.6
10.0	12.0	14	8	4	2.5	9.8	1456.1
11.0	11.0	14	8	4	2.5	9.9	1487.5
12.0	10.0	14	8	4	2.5	10.0	1518.9
13.0	9.0	14	8	5	3.0	10.1	1550.4
14.0	8.0	14	8	5	3.0	10.2	1581.8
15.0	7.0	14	8	5	3.0	10.3	1613.3
16.0	6.0	14	9	4	2.7	10.4	1644.7
17.0	5.0	14	9	4	2.7	10.6	1676.1
18.0	4.0	14	9	4	2.7	10.7	1707.6
19.0	3.0	14	9	4	2.7	10.8	1739.0
20.0	2.0	14	9	4	2.7	11.0	1770.5
21.0	1.0	14	8	6	3.5	11.1	1801.9
WL= 23.0							
1.0	22.0	14	8	4	2.5	9.0	1225.0
2.0	21.0	14	8	4	2.5	9.1	1256.4

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL = 23.0							
3.0	20.0	14	8	4	2.5	9.3	1287.9
4.0	19.0	14	8	4	2.5	9.5	1319.3
5.0	18.0	14	8	4	2.5	9.6	1350.8
6.0	17.0	14	8	5	3.0	9.7	1382.2
7.0	16.0	14	8	5	3.0	9.8	1413.6
8.0	15.0	14	8	5	3.0	10.0	1445.1
9.0	14.0	14	8	5	3.0	10.1	1476.5
10.0	13.0	14	8	5	3.0	10.2	1508.0
11.0	12.0	14	9	4	2.7	10.3	1539.4
12.0	11.0	14	9	4	2.7	10.4	1570.8
13.0	10.0	14	9	4	2.7	10.5	1602.3
14.0	9.0	14	8	6	3.5	10.6	1633.7
15.0	8.0	14	8	6	3.5	10.7	1665.2
16.0	7.0	14	9	5	3.1	10.8	1696.6
17.0	6.0	14	9	5	3.1	11.0	1728.0
18.0	5.0	14	9	5	3.1	11.1	1759.5
19.0	4.0	14	9	5	3.1	11.2	1790.9
20.0	3.0	14	10	4	2.8	11.4	1822.3
21.0	2.0	14	10	4	2.8	11.5	1853.8
22.0	1.0	14	10	4	2.8	11.7	1885.2
WL = 24.0							
1.0	23.0	14	8	5	3.0	9.4	1276.9
2.0	22.0	14	8	5	3.0	9.6	1308.3
3.0	21.0	14	8	5	3.0	9.7	1339.8
4.0	20.0	14	8	5	3.0	9.9	1371.2
5.0	19.0	14	8	5	3.0	10.0	1402.7
6.0	18.0	14	8	5	3.0	10.2	1434.1
7.0	17.0	14	8	6	3.5	10.3	1465.5
8.0	16.0	14	8	6	3.5	10.4	1497.0
9.0	15.0	14	8	6	3.5	10.5	1528.4
10.0	14.0	14	8	6	3.5	10.6	1559.8
11.0	13.0	14	9	5	3.1	10.7	1591.3
12.0	12.0	14	9	5	3.1	10.8	1622.7
13.0	11.0	14	9	5	3.1	10.9	1654.2
14.0	10.0	14	10	4	2.8	11.1	1685.6
15.0	9.0	14	10	4	2.8	11.2	1717.0
16.0	8.0	14	9	6	3.6	11.3	1748.5
17.0	7.0	14	9	6	3.6	11.4	1779.9
18.0	6.0	14	9	6	3.6	11.5	1811.4
19.0	5.0	14	9	6	3.6	11.6	1842.8
20.0	4.0	14	10	5	3.3	11.8	1874.2
21.0	3.0	14	10	5	3.3	11.9	1905.7
22.0	2.0	14	10	5	3.3	12.1	1937.1
23.0	1.0	14	10	5	3.3	12.2	1968.6
WL = 25.0							
1.0	24.0	14	8	6	3.5	9.8	1328.8
2.0	23.0	14	8	6	3.5	10.0	1360.2
3.0	22.0	14	8	6	3.5	10.2	1391.7

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 25.0							
4.0	21.0	14	8	6	3.5	10.3	1423.1
5.0	20.0	14	9	5	3.1	10.5	1454.5
6.0	19.0	14	9	5	3.1	10.6	1486.0
7.0	18.0	14	9	5	3.1	10.7	1517.4
8.0	17.0	14	9	5	3.1	10.8	1548.9
9.0	16.0	14	8	7	4.1	10.9	1580.3
10.0	15.0	14	8	7	4.1	11.1	1611.7
11.0	14.0	14	9	6	3.6	11.2	1643.2
12.0	13.0	14	9	6	3.6	11.3	1674.6
13.0	12.0	14	9	6	3.6	11.4	1706.1
14.0	11.0	14	10	5	3.3	11.5	1737.5
15.0	10.0	14	10	5	3.3	11.6	1768.9
16.0	9.0	14	10	5	3.3	11.7	1800.4
17.0	8.0	14	10	5	3.3	11.8	1831.8
18.0	7.0	14	9	7	4.2	11.9	1863.3
19.0	6.0	14	10	6	3.8	12.1	1894.7
20.0	5.0	14	10	6	3.8	12.2	1926.1
21.0	4.0	14	10	6	3.8	12.3	1957.6
22.0	3.0	14	10	6	3.8	12.5	1989.0
23.0	2.0	14	10	6	3.8	12.6	2020.5
24.0	1.0	14	10	6	3.8	12.8	2051.9
WL= 26.0							
1.0	25.0	14	9	5	3.1	10.3	1380.7
2.0	24.0	14	8	7	4.1	10.4	1412.1
3.0	23.0	14	8	7	4.1	10.6	1443.6
4.0	22.0	14	8	7	4.1	10.8	1475.0
5.0	21.0	14	9	6	3.6	10.9	1506.4
6.0	20.0	14	9	6	3.6	11.0	1537.9
7.0	19.0	14	9	6	3.6	11.2	1569.3
8.0	18.0	14	9	6	3.6	11.3	1600.8
9.0	17.0	14	9	6	3.6	11.4	1632.2
10.0	16.0	14	10	5	3.3	11.5	1663.6
11.0	15.0	14	9	7	4.2	11.6	1695.1
12.0	14.0	14	9	7	4.2	11.7	1726.5
13.0	13.0	14	9	7	4.2	11.8	1758.0
14.0	12.0	14	10	6	3.8	11.9	1789.4
15.0	11.0	14	10	6	3.8	12.0	1820.8
16.0	10.0	14	10	6	3.8	12.1	1852.3
17.0	9.0	14	11	5	3.5	12.2	1883.7
18.0	8.0	14	11	5	3.5	12.4	1915.2
19.0	7.0	14	11	5	3.5	12.5	1946.6
20.0	6.0	14	10	7	4.3	12.6	1978.0
21.0	5.0	14	10	7	4.3	12.7	2009.5
22.0	4.0	14	10	7	4.3	12.9	2040.9
23.0	3.0	13	10	9	4.8	13.0	2072.3
24.0	2.0	14	11	6	4.0	13.1	2103.8
25.0	1.0	14	11	6	4.0	13.3	2135.2
WL= 27.0							

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 27.0							
1.0	26.0	14	9	6	3.6	10.7	1432.6
2.0	25.0	14	9	6	3.6	10.9	1464.0
3.0	24.0	14	9	6	3.6	11.0	1495.5
4.0	23.0	14	9	7	4.2	11.2	1526.9
5.0	22.0	14	9	7	4.2	11.3	1558.3
6.0	21.0	14	9	7	4.2	11.5	1589.8
7.0	20.0	14	9	7	4.2	11.6	1621.2
8.0	19.0	14	9	7	4.2	11.7	1652.7
9.0	18.0	14	9	7	4.2	11.8	1684.1
10.0	17.0	14	10	6	3.8	11.9	1715.5
11.0	16.0	14	10	6	3.8	12.0	1747.0
12.0	15.0	14	10	6	3.8	12.2	1778.4
13.0	14.0	14	9	9	5.0	12.3	1809.8
14.0	13.0	14	10	7	4.3	12.4	1841.3
15.0	12.0	14	10	7	4.3	12.5	1872.7
16.0	11.0	14	10	7	4.3	12.6	1904.2
17.0	10.0	14	11	6	4.0	12.7	1935.6
18.0	9.0	14	11	6	4.0	12.8	1967.0
19.0	8.0	14	11	6	4.0	12.9	1998.5
20.0	7.0	14	11	6	4.0	13.0	2029.9
21.0	6.0	13	10	10	5.2	13.1	2061.4
22.0	5.0	13	11	8	4.5	13.3	2092.8
23.0	4.0	13	11	8	4.5	13.4	2124.2
24.0	3.0	14	11	7	4.5	13.6	2155.7
25.0	2.0	14	11	7	4.5	13.7	2187.1
26.0	1.0	14	11	7	4.5	13.9	2218.6
WL= 28.0							
1.0	27.0	14	9	7	4.2	11.1	1484.5
2.0	26.0	14	9	7	4.2	11.3	1515.9
3.0	25.0	14	9	8	4.5	11.5	1547.3
4.0	24.0	14	9	8	4.5	11.6	1578.8
5.0	23.0	14	9	8	4.5	11.8	1610.2
6.0	22.0	14	9	8	4.5	11.9	1641.7
7.0	21.0	14	9	8	4.5	12.0	1673.1
8.0	20.0	14	9	9	5.0	12.2	1704.5
9.0	19.0	14	9	9	5.0	12.3	1736.0
10.0	18.0	14	10	7	4.3	12.4	1767.4
11.0	17.0	14	10	7	4.3	12.5	1798.9
12.0	16.0	14	10	7	4.3	12.6	1830.3
13.0	15.0	14	10	8	4.7	12.7	1861.7
14.0	14.0	14	10	8	4.7	12.8	1893.2
15.0	13.0	13	10	10	5.2	12.9	1924.6
16.0	12.0	14	10	9	5.1	13.0	1956.1
17.0	11.0	14	11	7	4.5	13.1	1987.5
18.0	10.0	14	11	7	4.5	13.2	2018.9
19.0	9.0	14	11	7	4.5	13.3	2050.4
20.0	8.0	13	11	9	4.9	13.5	2081.8
21.0	7.0	13	11	9	4.9	13.6	2113.3
22.0	6.0	13	11	9	4.9	13.7	2144.7

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26-AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 28.0							
23.0	5.0	13	11	10	5.3	13.8	2176.1
24.0	4.0	13	11	10	5.3	14.0	2207.6
25.0	3.0	13	11	10	5.3	14.1	2239.0
26.0	2.0	13	11	10	5.3	14.3	2270.5
27.0	1.0	13	11	11	5.8	14.4	2301.9
WL= 29.0							
1.0	28.0	14	9	8	4.5	11.6	1536.4
2.0	27.0	14	9	9	5.0	11.8	1567.8
3.0	26.0	14	10	7	4.3	11.9	1599.2
4.0	25.0	14	10	7	4.3	12.1	1630.7
5.0	24.0	14	10	7	4.3	12.2	1662.1
6.0	23.0	14	10	7	4.3	12.4	1693.6
7.0	22.0	14	10	7	4.3	12.5	1725.0
8.0	21.0	14	10	8	4.7	12.6	1756.4
9.0	20.0	14	10	8	4.7	12.7	1787.9
10.0	19.0	14	10	8	4.7	12.8	1819.3
11.0	18.0	14	10	8	4.7	12.9	1850.8
12.0	17.0	14	10	9	5.1	13.0	1882.2
13.0	16.0	14	11	7	4.5	13.1	1913.6
14.0	15.0	14	11	7	4.5	13.3	1945.1
15.0	14.0	14	11	7	4.5	13.4	1976.5
16.0	13.0	14	11	8	4.9	13.5	2008.0
17.0	12.0	14	11	8	4.9	13.6	2039.4
18.0	11.0	13	11	10	5.3	13.7	2070.8
19.0	10.0	13	11	10	5.3	13.8	2102.3
20.0	9.0	13	11	11	5.8	13.9	2133.7
21.0	8.0	13	11	11	5.8	14.0	2165.2
22.0	7.0	13	11	12	6.2	14.1	2196.6
23.0	6.0	14	12	7	4.7	14.3	2228.0
24.0	5.0	14	12	7	4.7	14.4	2259.5
25.0	4.0	13	12	9	5.1	14.5	2290.9
26.0	3.0	13	12	9	5.1	14.7	2322.3
27.0	2.0	13	12	9	5.1	14.8	2353.8
28.0	1.0	14	12	8	5.1	15.0	2385.2
WL= 30.0							
1.0	29.0	14	10	7	4.3	12.0	1588.3
2.0	28.0	14	10	8	4.7	12.2	1619.7
3.0	27.0	14	10	8	4.7	12.4	1651.1
4.0	26.0	14	10	8	4.7	12.5	1682.6
5.0	25.0	14	10	8	4.7	12.7	1714.0
6.0	24.0	14	10	8	4.7	12.8	1745.5
7.0	23.0	14	10	9	5.1	12.9	1776.9
8.0	22.0	14	10	9	5.1	13.1	1808.3
9.0	21.0	14	10	9	5.1	13.2	1839.8
10.0	20.0	14	11	7	4.5	13.3	1871.2
11.0	19.0	14	11	7	4.5	13.4	1902.7
12.0	18.0	14	11	8	4.9	13.5	1934.1
13.0	17.0	14	11	8	4.9	13.6	1965.5

TABLE J (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = NL
INPUT IMPEDANCE = 600 OHMS
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL = 30.0							
14.0	16.0	14	11	8	4.9	13.7	1997.0
15.0	15.0	13	11	10	5.3	13.8	2028.4
16.0	14.0	13	11	11	5.8	13.9	2059.8
17.0	13.0	13	11	12	6.2	14.0	2091.3
18.0	12.0	14	12	7	4.7	14.1	2122.7
19.0	11.0	13	12	9	5.1	14.2	2154.2
20.0	10.0	13	12	9	5.1	14.3	2185.6
21.0	9.0	13	12	10	5.5	14.4	2217.0
22.0	8.0	13	12	10	5.5	14.6	2248.5
23.0	7.0	13	12	10	5.5	14.7	2279.9
24.0	6.0	13	12	10	5.5	14.8	2311.4
25.0	5.0	13	12	11	5.9	14.9	2342.8
26.0	4.0	13	12	11	5.9	15.1	2374.2
27.0	3.0	13	12	11	5.9	15.2	2405.7
28.0	2.0	13	12	12	6.3	15.4	2437.1

TABLE K
EQUIVALENT LENGTH CONVERSION CONSTANTS

		MINOR GAUGE			
		19	22	24	26
MAJOR GAUGE	19	1.00	1.19	1.41	1.70
	22	0.87	1.00	1.17	1.38
	24	0.76	0.86	1.00	1.17
	26	0.67	0.74	0.86	1.00

TABLE L

CONSTANTS FOR CONVERTING BTs TO EQUIVALENT LENGTHS OF CABLE

FACILITY LENGTH	26 GA	24 GA	22 GA	19 GA
2	.91	.96	1.04	1.07
3	.86	.92	1.01	1.04
4	.82	.89	.98	1.0
5	.78	.85	.95	.98
6	.74	.82	.92	.97
7	.70	.79	.89	.95
8	.66	.77	.87	.93
9	.63	.74	.84	.91
10	.61	.72	.82	.90
11	.59	.70	.80	.88
12	.57	.68	.79	.87
13	.56	.67	.78	.86
14	.55	.65	.77	.85
15	.54	.64	.75	.84
16	.53	.62	.74	.83
17	.53	.62	.73	.83
18	.52	.61	.72	.82
19	.52	.61	.72	.82
20	.52	.6	.72	.81
21	.52	.6	.72	.81
22	.52	.6	.71	.80
Over 22	.51	.6	.7	.8

TABLE M

H88 LOADED CABLE LOSS

GAUGE	LOSS/KFT(dB)
26	.34
25	.25
24	.23
22	.15
19	.08

TABLE N
 EQUALIZER SETTINGS FOR 19-GAUGE
 H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
 END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
18.0	1	3	0	0.0	1.5	318.4
24.0	5	2	0	0.0	2.0	424.5
30.0	5	3	0	0.0	2.4	530.6
36.0	5	4	0	0.0	2.9	636.8
42.0	5	4	0	0.0	3.4	742.9
48.0	5	4	0	0.0	3.9	849.0
54.0	4	5	0	0.0	4.4	955.1
60.0	6	4	0	0.0	4.9	1061.3
66.0	5	5	0	0.0	5.3	1167.4
72.0	6	5	0	0.0	5.8	1273.5
78.0	6	5	0	0.0	6.3	1379.7
84.0	6	5	0	0.0	6.8	1485.8
90.0	5	6	0	0.0	7.3	1591.9
96.0	6	6	0	0.0	7.7	1698.0
102.0	6	6	0	0.0	8.2	1804.2
108.0	6	6	0	0.0	8.7	1910.3
114.0	5	7	0	0.0	9.2	2016.4
120.0	5	7	0	0.0	9.7	2122.5
126.0	5	7	0	0.0	10.1	2228.7
132.0	6	7	0	0.0	10.6	2334.8
138.0	6	7	0	0.0	11.1	2440.9
144.0	6	7	0	0.0	11.6	2547.1
150.0	5	8	0	0.0	12.1	2653.2
156.0	5	8	0	0.0	12.5	2759.3
162.0	5	9	0	0.0	13.0	2865.4
168.0	5	9	0	0.0	13.5	2971.6
174.0	5	9	0	0.0	14.0	3077.7
180.0	5	9	0	0.0	14.5	3183.8
186.0	5	10	0	0.0	14.9	3289.9
192.0	5	10	0	0.0	15.4	3396.1

TABLE O
EQUALIZER SETTINGS FOR 22-GAUGE
H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
 END SECTION - 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
18.0	3	3	0	0.0	2.7	615.0
24.0	6	2	0	0.0	3.6	820.0
30.0	4	4	0	0.0	4.5	1025.0
36.0	3	4	1	1.4	5.3	1229.9
42.0	4	4	1	1.4	6.2	1434.9
48.0	4	4	1	1.4	7.1	1639.9
54.0	3	5	1	1.4	8.1	1844.9
60.0	4	5	1	1.4	9.0	2049.9
66.0	4	5	1	1.4	9.8	2254.9
72.0	3	6	1	1.4	10.7	2459.9
78.0	4	6	1	1.4	11.6	2664.9
84.0	4	6	1	1.4	12.5	2869.9
90.0	3	7	1	1.4	13.4	3074.9
96.0	3	7	1	1.4	14.3	3279.9
102.0	4	7	1	1.4	15.2	3484.9

TABLE P
EQUALIZER SETTINGS FOR 24-GAUGE
H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

NL/L = L
 END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
18.0	3	4	1	1.4	4.0	959.3
24.0	3	4	1	1.4	5.4	1279.1
30.0	3	4	2	2.6	6.8	1598.8
36.0	3	5	2	2.6	8.2	1918.6
42.0	4	5	2	2.6	9.5	2238.3
48.0	3	6	3	3.7	10.9	2558.1
54.0	3	6	3	3.7	12.3	2877.9
60.0	2	7	4	4.7	13.7	3197.6
66.0	3	7	5	5.6	15.1	3517.4

TABLE Q
EQUALIZER SETTINGS FOR 25-GAUGE
H88 LOADED MAT CABLE WITHOUT BRIDGED TAP AT 68° F

NL/L = L
 END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
12.0	15	1	0	0.1	3.0	803.2
18.0	15	1	0	0.1	4.5	1204.8
24.0	15	0	2	2.6	6.0	1606.4
30.0	15	0	3	3.7	7.5	2008.0
36.0	15	0	3	3.7	9.0	2409.6
42.0	15	0	4	4.7	10.5	2811.2
48.0	15	0	5	5.5	12.0	3212.8
54.0	15	0	7	7.2	13.5	3614.4
60.0	15	0	10	9.0	15.0	4016.0

TABLE R

EQUALIZER SETTINGS FOR 26-GAUGE
H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1 KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
12.0	8	3	1	1.4	3.8	1016.8
18.0	5	4	3	3.7	5.9	1525.2
24.0	5	4	7	7.2	8.1	2033.6
30.0	6	4	15	11.4	10.2	2542.0
36.0	5	5	15	11.4	12.2	3050.4
42.0	6	5	15	11.4	14.3	3558.8
48.0	6	6	15	11.4	16.4	4067.2

TABLE S

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT) 26-GA 24-GA	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
WL= 12.0 6.0 6.0	7	3	1	1.4	3.2	828.2
WL= 18.0 6.0 12.0 12.0 6.0	4 6	3 3	2 3	2.6 3.7	4.7 5.3	1147.9 1336.6
WL= 24.0 6.0 18.0 12.0 12.0 18.0 6.0	4 4 5	3 4 4	2 3 6	2.6 3.7 6.3	6.1 6.8 7.4	1467.7 1656.3 1845.0
WL= 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	4 5 3 4	4 4 5 5	2 3 6 13	2.6 3.7 6.3 10.5	7.5 8.2 8.8 9.5	1787.5 1976.1 2164.7 2353.4
WL= 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	4 5 4 4 5	5 5 5 5 5	2 3 6 13 15	2.6 3.7 6.3 10.5 11.4	8.8 9.5 10.2 10.9 11.6	2107.2 2295.9 2484.5 2673.1 2861.8
WL= 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	4 5 5 5 4 6	5 5 5 5 6 5	3 4 6 11 15 15	3.7 4.7 6.3 9.5 11.4 11.4	10.2 10.8 11.5 12.3 13.0 13.6	2427.0 2615.6 2804.3 2992.9 3181.5 3370.2
WL= 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0	3 4 4 4 4 5	6 6 6 6 6 6	3 5 8 15 15 15	3.7 5.6 7.8 11.4 11.4 11.4	11.6 12.2 12.9 13.6 14.4 15.1	2746.7 2935.4 3124.0 3312.7 3501.3 3689.9
WL= 54.0 6.0 48.0 12.0 42.0 18.0 36.0 24.0 30.0 30.0 24.0	3 4 5 5 5	6 6 6 6 6	4 6 7 15 15	4.7 6.3 7.2 11.4 11.4	13.0 13.6 14.3 15.0 15.8	3066.5 3255.1 3443.8 3632.4 3821.1
WL= 60.0 6.0 54.0	3	7	4	4.7	14.4	3386.3

TABLE S (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	24-GA	BW	HT	SL			
WL= 60.0							
12.0	48.0	3	7	7	7.2	15.0	3574.9
18.0	42.0	3	7	15	11.4	15.7	3763.5
WL= 66.0							
6.0	60.0	3	7	5	5.6	15.7	3706.0

TABLE T
 EQUALIZER SETTINGS FOR MIXED 26- AND
 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
 END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 18.0							
6.0	12.0	2	3	1	1.4	3.8	918.4
12.0	6.0	6	3	2	2.6	4.8	1221.8
WL= 24.0							
6.0	18.0	4	2	1	1.4	4.8	1123.4
12.0	12.0	5	3	2	2.6	5.8	1426.8
18.0	6.0	5	4	5	5.5	6.9	1730.2
WL= 30.0							
6.0	24.0	4	3	1	1.4	5.6	1328.4
12.0	18.0	5	4	2	2.6	6.7	1631.8
18.0	12.0	4	4	4	4.7	7.9	1935.2
24.0	6.0	4	5	9	8.4	9.0	2238.6
WL= 36.0							
6.0	30.0	4	4	1	1.4	6.4	1533.4
12.0	24.0	6	4	1	1.4	7.5	1836.8
18.0	18.0	4	5	3	3.7	8.8	2140.2
24.0	12.0	3	5	7	7.2	10.0	2443.6
30.0	6.0	5	5	15	11.4	11.1	2747.0
WL= 42.0							
6.0	36.0	5	4	1	1.4	7.3	1738.3
12.0	30.0	7	4	1	1.4	8.4	2041.8
18.0	24.0	5	5	3	3.7	9.6	2345.2
24.0	18.0	4	5	6	6.3	10.9	2648.6
30.0	12.0	4	5	15	11.4	12.1	2952.0
36.0	6.0	6	5	15	11.4	13.2	3255.4
WL= 48.0							
6.0	42.0	5	4	1	1.4	8.2	1943.3
12.0	36.0	7	4	1	1.4	9.3	2246.7
18.0	30.0	6	5	2	2.6	10.5	2550.2
24.0	24.0	5	5	5	5.6	11.7	2853.6
30.0	18.0	5	5	11	9.5	13.0	3157.0
36.0	12.0	4	6	15	11.4	14.2	3460.4
WL= 54.0							
6.0	48.0	4	5	1	1.4	9.2	2148.3
12.0	42.0	5	5	2	2.6	10.3	2451.7
18.0	36.0	6	5	3	3.7	11.4	2755.1
24.0	30.0	4	6	6	6.3	12.6	3058.6
30.0	24.0	4	6	11	9.5	13.8	3362.0
36.0	18.0	4	6	15	11.4	15.1	3665.4
WL= 60.0							
6.0	54.0	4	5	1	1.4	10.1	2353.3
12.0	48.0	5	5	2	2.6	11.2	2656.7
18.0	42.0	4	6	4	4.7	12.3	2960.1

TABLE T (CONTD)

EQUALIZER SETTINGS FOR MIXED 26- AND
22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
26-GA	22-GA	BW	HT	SL			
WL= 60.0							
24.0	36.0	4	6	7	7.2	13.5	3263.5
30.0	30.0	5	6	9	8.4	14.7	3567.0
WL= 66.0							
6.0	60.0	5	5	1	1.4	10.9	2558.3
12.0	54.0	6	5	2	2.6	12.0	2861.7
18.0	48.0	5	6	3	3.7	13.2	3165.1
24.0	42.0	5	6	6	6.4	14.4	3468.5
30.0	36.0	5	6	12	10.0	15.6	3771.9
WL= 72.0							
6.0	66.0	4	6	1	1.4	11.8	2763.3
12.0	60.0	5	6	2	2.6	12.9	3066.7
18.0	54.0	5	6	4	4.7	14.1	3370.1
24.0	48.0	5	6	7	7.2	15.3	3673.5
WL= 78.0							
6.0	72.0	4	6	1	1.4	12.7	2968.3
12.0	66.0	5	6	2	2.6	13.8	3271.7
18.0	60.0	5	6	5	5.6	15.0	3575.1
WL= 84.0							
6.0	78.0	5	6	1	1.4	13.6	3173.3
12.0	72.0	5	6	3	3.7	14.7	3476.7
18.0	66.0	4	7	5	5.6	15.9	3780.1
WL= 90.0							
6.0	84.0	5	6	1	1.4	14.5	3378.3
12.0	78.0	4	7	3	3.7	15.6	3681.7
WL= 96.0							
6.0	90.0	3	7	2	2.6	15.4	3583.3

TABLE U

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT) 24-GA 22-GA	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
WL= 18.0						
6.0 12.0	4	3	0	0.0	3.1	729.7
12.0 6.0	4	3	1	1.4	3.6	844.5
WL= 24.0						
6.0 18.0	5	3	0	0.0	4.1	934.7
12.0 12.0	4	3	1	1.4	4.5	1049.5
18.0 6.0	5	3	1	1.4	5.0	1164.3
WL= 30.0						
6.0 24.0	2	4	1	1.4	4.9	1139.7
12.0 18.0	3	4	1	1.4	5.4	1254.5
18.0 12.0	3	4	1	1.4	5.9	1369.3
24.0 6.0	3	4	2	2.6	6.4	1484.0
WL= 36.0						
6.0 30.0	4	4	1	1.4	5.8	1344.7
12.0 24.0	5	4	1	1.4	6.2	1459.5
18.0 18.0	3	5	1	1.4	6.7	1574.3
24.0 12.0	1	5	2	2.6	7.3	1689.0
30.0 6.0	3	5	2	2.6	7.7	1803.8
WL= 42.0						
6.0 36.0	5	4	1	1.4	6.7	1549.7
12.0 30.0	5	4	1	1.4	7.1	1664.5
18.0 24.0	4	5	1	1.4	7.6	1779.3
24.0 18.0	3	5	2	2.6	8.1	1894.0
30.0 12.0	3	5	2	2.6	8.6	2008.8
36.0 6.0	4	5	2	2.6	9.1	2123.6
WL= 48.0						
6.0 42.0	5	4	1	1.4	7.6	1754.7
12.0 36.0	4	5	1	1.4	8.0	1869.5
18.0 30.0	4	5	1	1.4	8.5	1984.2
24.0 24.0	4	5	2	2.6	9.0	2099.0
30.0 18.0	3	5	2	2.6	9.5	2213.8
36.0 12.0	3	5	2	2.6	10.0	2328.6
42.0 6.0	2	6	3	3.7	10.5	2443.3
WL= 54.0						
6.0 48.0	4	5	1	1.4	8.5	1959.7
12.0 42.0	4	5	1	1.4	9.0	2074.5
18.0 36.0	5	5	1	1.4	9.4	2189.2
24.0 30.0	4	5	2	2.6	9.9	2304.0
30.0 24.0	2	6	2	2.6	10.4	2418.8
36.0 18.0	3	6	2	2.6	10.9	2533.6
42.0 12.0	2	6	3	3.7	11.4	2648.3
48.0 6.0	3	6	3	3.7	11.9	2763.1
WL= 60.0						

TABLE U (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
24-GA	22-GA	BW	HT	SL			
WL= 60.0							
6.0	54.0	4	5	1	1.4	9.4	2164.7
12.0	48.0	5	5	1	1.4	9.9	2279.5
18.0	42.0	3	6	1	1.4	10.3	2394.2
24.0	36.0	3	6	2	2.6	10.8	2509.0
30.0	30.0	3	6	2	2.6	11.3	2623.8
36.0	24.0	3	6	2	2.6	11.8	2738.5
42.0	18.0	3	6	3	3.7	12.3	2853.3
48.0	12.0	3	6	3	3.7	12.8	2968.1
54.0	6.0	2	7	4	4.7	13.2	3082.9
WL= 66.0							
6.0	60.0	5	5	1	1.4	10.3	2369.7
12.0	54.0	4	6	1	1.4	10.7	2484.4
18.0	48.0	4	6	1	1.4	11.2	2599.2
24.0	42.0	3	6	2	2.6	11.7	2714.0
30.0	36.0	4	6	2	2.6	12.2	2828.8
36.0	30.0	4	6	2	2.6	12.7	2943.5
42.0	24.0	2	7	3	3.7	13.2	3058.3
48.0	18.0	2	7	3	3.7	13.7	3173.1
54.0	12.0	2	7	4	4.7	14.2	3287.9
60.0	6.0	3	7	4	4.7	14.6	3402.6
WL= 72.0							
6.0	66.0	4	6	1	1.4	11.2	2574.7
12.0	60.0	4	6	1	1.4	11.6	2689.4
18.0	54.0	4	6	2	2.6	12.1	2804.2
24.0	48.0	4	6	2	2.6	12.6	2919.0
30.0	42.0	4	6	2	2.6	13.1	3033.8
36.0	36.0	3	7	2	2.6	13.6	3148.5
42.0	30.0	3	7	3	3.7	14.0	3263.3
48.0	24.0	3	7	3	3.7	14.5	3378.1
54.0	18.0	2	7	4	4.7	15.0	3492.8
60.0	12.0	2	7	5	5.5	15.5	3607.6
WL= 78.0							
6.0	72.0	4	6	1	1.4	12.1	2779.7
12.0	66.0	5	6	1	1.4	12.5	2894.4
18.0	60.0	4	6	2	2.6	13.0	3009.2
24.0	54.0	3	7	2	2.6	13.5	3124.0
30.0	48.0	3	7	2	2.6	14.0	3238.7
36.0	42.0	3	7	3	3.7	14.5	3353.5
42.0	36.0	3	7	3	3.7	15.0	3468.3
48.0	30.0	3	7	3	3.7	15.4	3583.1
WL= 84.0							
6.0	78.0	4	6	1	1.4	13.0	2984.6
12.0	72.0	5	6	1	1.4	13.4	3099.4
18.0	66.0	3	7	2	2.6	13.9	3214.2
24.0	60.0	3	7	2	2.6	14.4	3329.0

TABLE U (CONTD)

EQUALIZER SETTINGS FOR MIXED 24- AND
22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68°F

NL/L = L
END SECTION = 3.0 KFT
INPUT IMPEDANCE = 1200 OHMS
CABLE TERMINATION = 1200 OHMS

LENGTH (KFT) 24-GA 22-GA	EQUALIZER SETTINGS			EQUALIZER GAIN (DB)	1KHZ CABLE LOSS (DB)	DC CABLE RES (OHMS)
	BW	HT	SL			
WL= 84.0						
30.0 54.0	3	7	2	2.6	14.9	3443.7
36.0 48.0	3	7	3	3.7	15.4	3558.5
42.0 42.0	3	7	3	3.7	15.9	3673.3
WL= 90.0						
6.0 84.0	3	7	1	1.4	13.9	3189.6
12.0 78.0	3	7	2	2.6	14.3	3304.4
18.0 72.0	3	7	2	2.6	14.8	3419.2
24.0 66.0	3	7	2	2.6	15.3	3534.0
30.0 60.0	3	7	3	3.7	15.8	3648.7
WL= 96.0						
6.0 90.0	4	7	1	1.4	14.8	3394.6
12.0 84.0	4	7	2	2.6	15.2	3509.4
18.0 78.0	4	7	2	2.6	15.7	3624.2
WL= 102.0						
6.0 96.0	3	7	2	2.6	15.7	3599.6