

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P233743

Luminaire Tested: **VRDN-C01-D-UNV-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233743  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-33)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: VRDN-C01-D-UNV-T3-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1230mA LED AND TYPE III OPTIC WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6595 lumens  
Efficiency: N/A  
Efficacy: 117.8 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 56  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

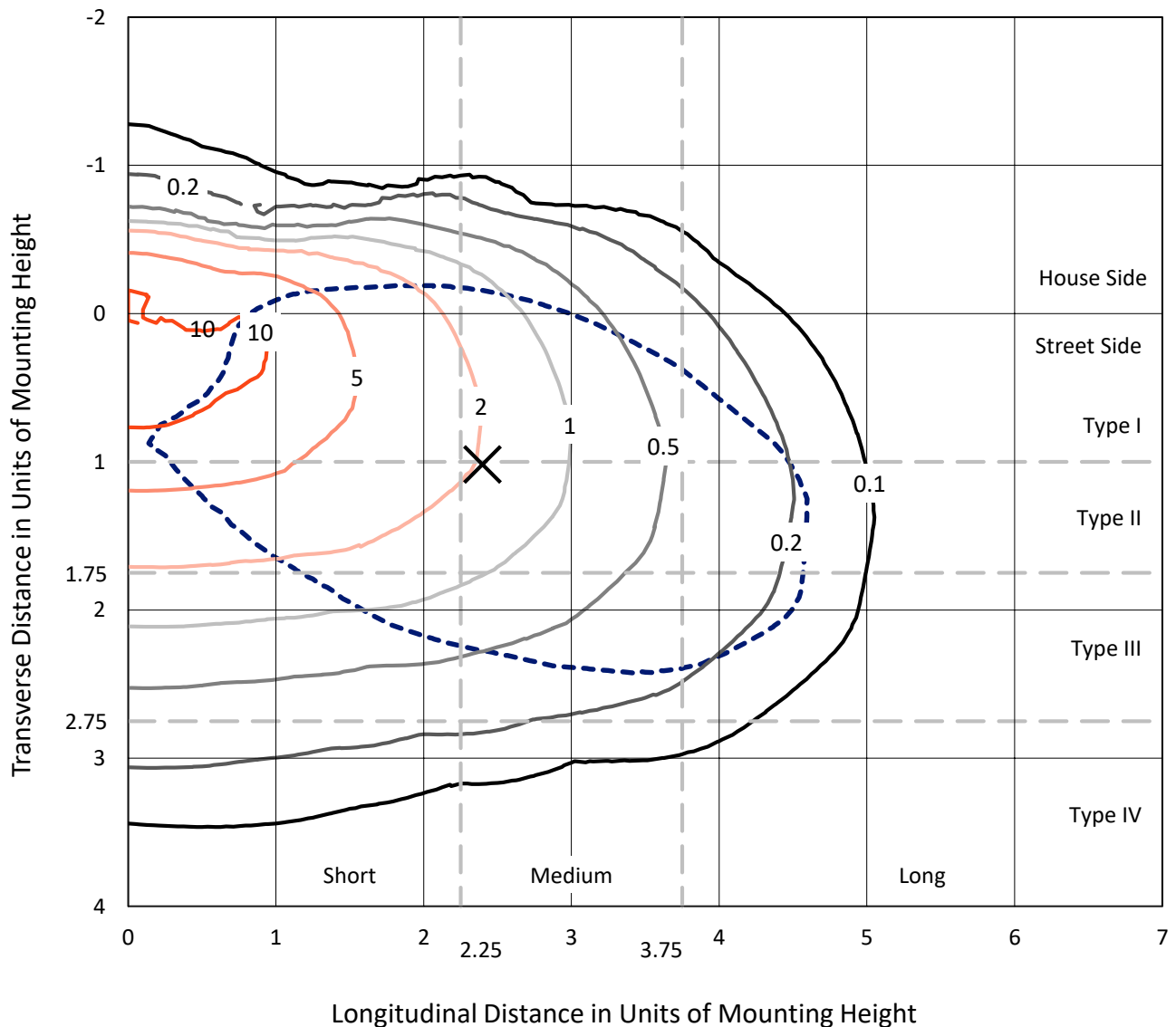


REPORT NUMBER: P233743

CATALOG NUMBER: VRDN-C01-D-UNV-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

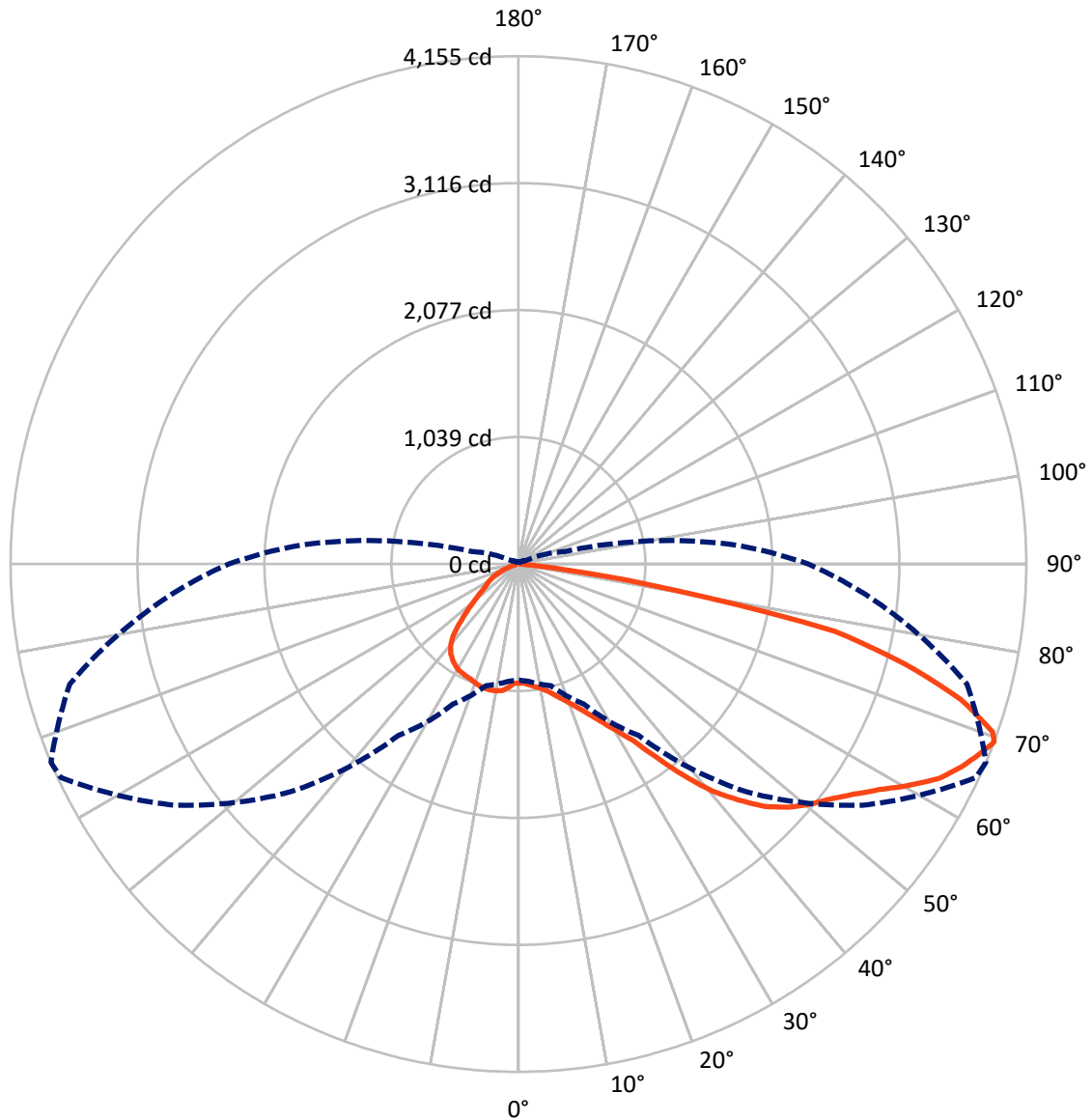


Based on 10 foot mounting height. Maximum calculated value = 11.9 fc  
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P233743

CATALOG NUMBER: VRDN-C01-D-UNV-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P233743

CATALOG NUMBER: VRDN-C01-D-UNV-T3-HSS

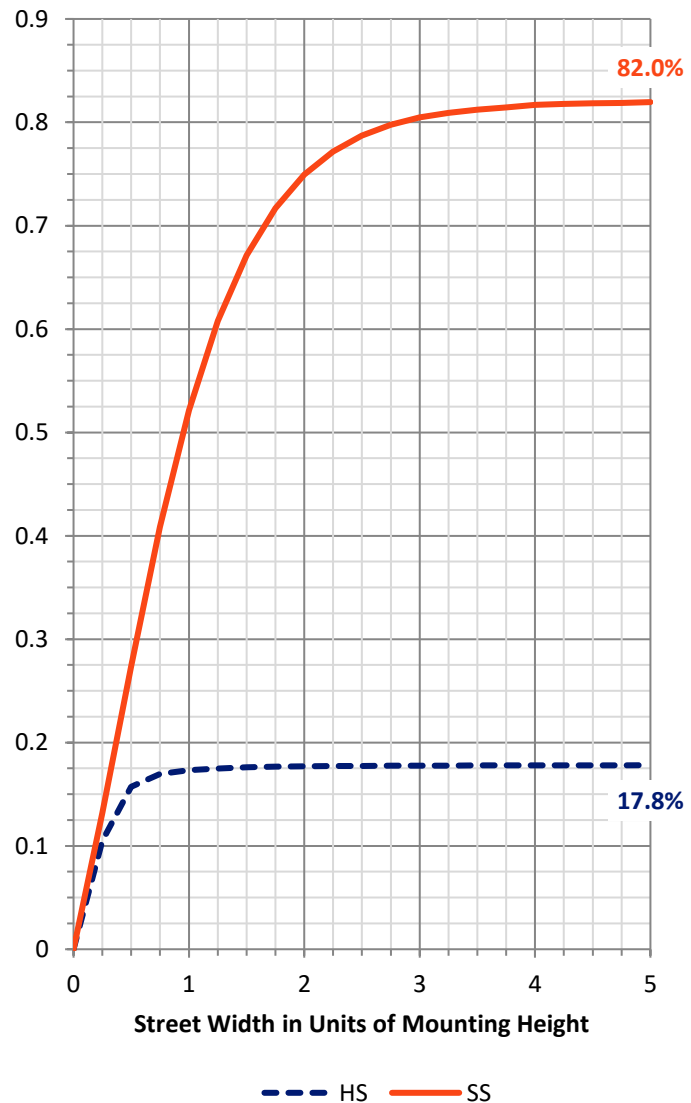
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1188.9	0.0	1188.9
	% Fixture	18.0	0.0	18.0
<b>Street Side</b>	Lumens	5406.1	0.0	5406.1
	% Fixture	82.0	0.0	82.0
<b>Total</b>	Lumens	6595.0	0.0	6595.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	1.5
10°-20°	309.6	4.7
20°-30°	528.5	8.0
30°-40°	799.0	12.1
40°-50°	1128.8	17.1
50°-60°	1364.2	20.7
60°-70°	1439.4	21.8
70°-80°	866.5	13.1
80°-90°	60.6	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6595.0	100.0
0°-180°	6595.0	100.0



REPORT NUMBER: P233743

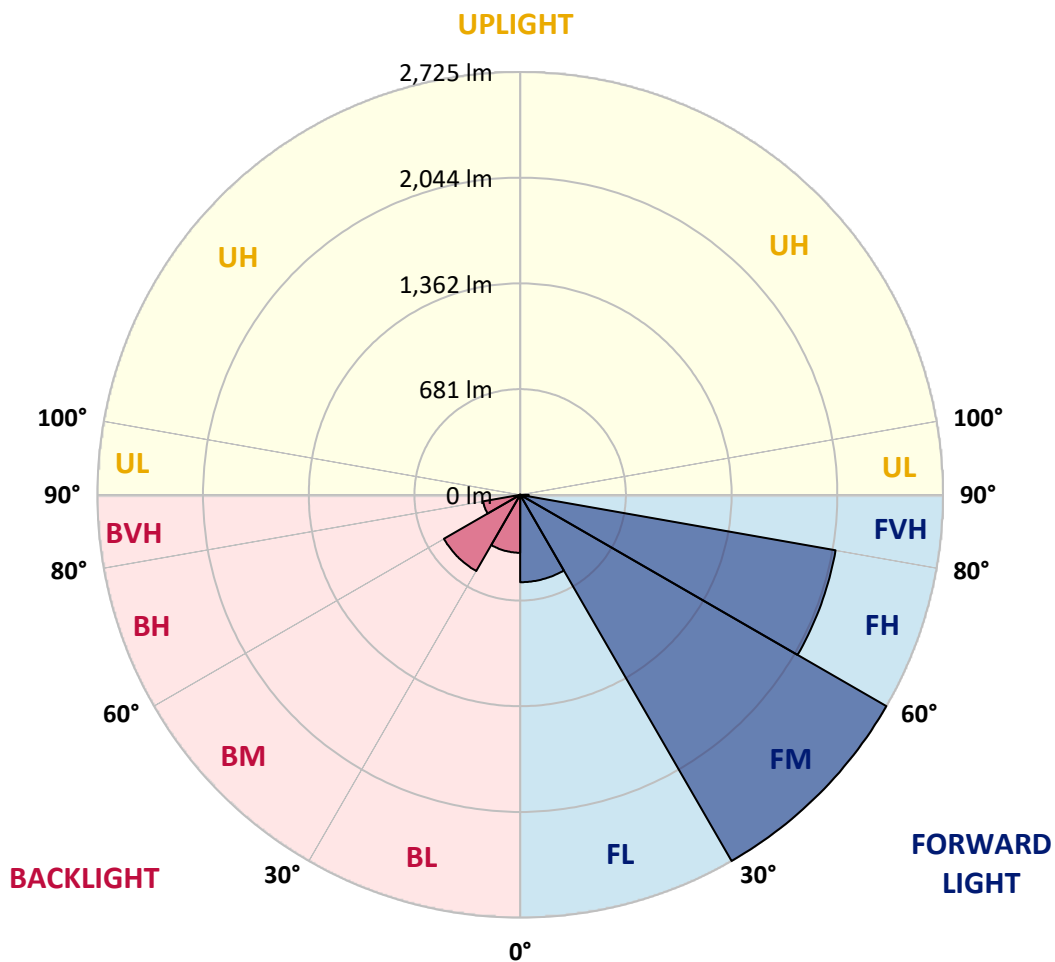
CATALOG NUMBER: VRDN-C01-D-UNV-T3-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	563.1	8.5			
FM	(30°-60°)	2724.7	41.3			
FH	(60°-80°)	2063.6	31.3			G2/5000
FVH	(80°-90°)	54.7	0.8			G1/100
BL	(0°-30°)	373.4	5.7	B1/500		
BM	(30°-60°)	567.3	8.6	B1/1000		
BH	(60°-80°)	242.4	3.7	B1/500		G1/500
BVH	(80°-90°)	5.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Medium





REPORT NUMBER: P233743

CATALOG NUMBER: VRDN-C01-D-UNV-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3
2.5°	1000.5	998.9	998.9	990.0	981.6	979.5	979.0	976.4	976.9	973.2	969.5
5°	1029.4	1029.4	1028.4	1016.8	1007.9	1002.1	998.4	993.7	994.2	991.6	988.4
7.5°	1073.0	1073.6	1071.5	1056.2	1047.3	1033.1	1024.7	1015.8	1015.2	1012.1	1013.1
10°	1126.6	1128.2	1125.1	1105.6	1090.4	1070.9	1053.1	1037.3	1036.3	1032.6	1035.7
12.5°	1187.1	1189.2	1181.3	1161.3	1144.0	1113.5	1092.0	1070.9	1067.8	1067.3	1069.4
15°	1256.4	1257.5	1254.9	1225.4	1204.4	1176.6	1141.4	1114.6	1111.4	1111.9	1109.3
17.5°	1333.7	1336.3	1330.5	1304.3	1276.4	1238.0	1196.0	1162.9	1161.3	1159.7	1148.2
20°	1415.7	1418.3	1414.6	1389.9	1356.8	1308.5	1257.0	1219.1	1218.6	1214.9	1188.1
22.5°	1508.1	1511.8	1509.7	1479.8	1444.6	1392.0	1327.9	1288.5	1287.4	1275.9	1235.4
25°	1608.5	1607.5	1609.6	1577.5	1544.4	1489.2	1409.9	1368.9	1368.9	1354.7	1294.8
27.5°	1705.7	1705.2	1708.9	1686.3	1651.6	1599.6	1503.9	1462.4	1466.1	1445.6	1366.3
30°	1800.3	1800.3	1809.2	1794.5	1768.8	1714.1	1620.6	1577.0	1581.7	1560.2	1456.6
32.5°	1888.6	1892.8	1908.0	1899.1	1879.7	1830.3	1750.4	1710.5	1721.5	1730.4	1624.8
35°	1953.8	1958.0	1993.2	1996.3	1991.6	1958.5	1899.1	1924.9	1938.0	2008.4	1890.7
37.5°	2011.0	2016.3	2058.3	2084.6	2099.8	2079.3	2083.0	2169.2	2193.9	2276.9	2117.7
40°	2053.1	2064.6	2106.1	2142.4	2196.0	2220.2	2280.1	2402.5	2442.5	2475.6	2273.8
42.5°	2024.2	2032.1	2105.1	2202.3	2280.6	2365.7	2463.0	2608.5	2638.5	2628.0	2411.5
45°	1981.6	1991.1	2067.8	2218.1	2347.9	2517.6	2636.4	2794.0	2828.2	2769.8	2530.2
47.5°	1933.8	1946.9	2030.0	2197.1	2404.1	2657.4	2793.5	2953.2	2973.2	2896.5	2630.1
50°	1885.4	1900.2	1994.2	2179.7	2447.7	2774.0	2908.0	3083.0	3088.8	3001.6	2719.9
52.5°	1820.3	1835.5	1938.5	2143.5	2478.2	2850.8	3008.4	3189.7	3193.4	3115.1	2805.0
55°	1737.8	1757.2	1866.0	2089.9	2485.5	2895.4	3072.0	3300.6	3325.3	3238.0	2874.9
57.5°	1640.6	1658.4	1778.2	2012.6	2448.8	2910.7	3160.8	3447.2	3481.3	3362.6	2932.7
60°	1528.6	1549.1	1669.5	1912.8	2374.7	2953.2	3307.9	3654.2	3674.7	3492.9	2983.7
62.5°	1414.1	1428.8	1538.1	1772.5	2259.1	2979.0	3438.3	3848.7	3862.3	3618.5	3014.2
65°	1251.2	1269.6	1376.2	1611.7	2092.5	2929.6	3488.2	3981.6	3990.0	3723.6	2999.5
67.5°	1074.1	1088.8	1166.6	1417.8	1873.9	2773.0	3467.7	4070.4	4097.2	3805.6	2932.7
69°	948.5	963.2	1030.5	1262.7	1711.5	2634.3	3438.8	4130.8	4154.5	3799.8	2847.6
70°	850.8	865.5	929.1	1147.1	1584.3	2517.1	3393.1	4100.4	4115.6	3735.2	2764.6
72.5°	608.5	623.2	675.2	806.6	1200.2	2068.8	3109.8	3762.0	3782.4	3424.6	2470.8
75°	318.4	353.7	447.2	521.3	711.0	1456.6	2585.4	3235.4	3265.4	3005.3	2032.1
77.5°	41.0	43.1	126.1	211.8	293.7	614.3	1836.6	2598.0	2645.3	2405.1	1405.1
80°	33.1	33.6	43.6	105.6	146.1	249.1	651.6	1216.0	1273.3	1068.8	516.6
82.5°	23.1	24.2	34.2	55.7	47.8	90.9	226.5	343.7	354.2	306.4	206.0
85°	13.1	13.1	16.3	21.5	15.2	34.2	46.8	49.9	44.7	44.1	33.1
87.5°	3.7	4.2	4.7	3.7	1.6	1.6	2.1	2.1	2.1	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P233743

CATALOG NUMBER: VRDN-C01-D-UNV-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3
2.5°	975.3	974.3	974.8	976.9	980.0	991.6	999.5	1000.5	1004.2	1017.9	1016.3
5°	992.1	998.4	1002.1	1013.1	1020.5	1036.3	1045.7	1046.8	1052.0	1066.2	1066.7
7.5°	1015.8	1026.3	1031.5	1044.1	1046.8	1054.1	1056.8	1054.1	1054.6	1067.3	1068.3
10°	1036.3	1049.4	1049.4	1052.5	1047.8	1048.3	1039.9	1032.1	1027.8	1038.9	1041.5
12.5°	1067.8	1071.5	1063.1	1053.6	1039.4	1026.8	1012.6	1000.0	990.0	996.3	992.6
15°	1100.4	1094.6	1074.1	1049.4	1024.2	1002.6	973.2	954.8	937.5	941.1	938.0
17.5°	1132.9	1114.0	1082.0	1041.0	1004.2	963.2	922.2	893.3	861.8	859.2	854.4
20°	1164.5	1137.2	1084.1	1023.6	972.1	914.3	850.8	801.4	754.6	742.5	734.6
22.5°	1202.3	1162.9	1086.7	1006.8	937.5	858.6	762.5	685.8	635.3	618.5	610.6
25°	1250.7	1198.6	1094.1	994.2	902.3	789.8	657.9	570.2	515.5	486.6	484.0
27.5°	1307.9	1241.7	1106.7	977.9	852.3	697.8	549.7	458.2	399.9	370.5	361.0
30°	1383.1	1295.3	1118.2	965.3	781.9	597.5	436.2	334.2	264.8	245.9	235.9
32.5°	1525.5	1382.6	1132.9	935.9	698.9	487.7	309.0	206.0	158.7	146.1	146.1
35°	1757.2	1574.4	1169.7	895.4	599.1	355.2	185.5	115.6	94.6	87.2	83.6
37.5°	1966.4	1767.7	1261.7	832.9	477.7	210.2	106.1	71.5	64.6	65.7	65.7
40°	2114.0	1900.2	1363.1	748.3	324.2	112.5	67.3	57.3	58.3	58.9	58.9
42.5°	2240.7	2013.1	1418.8	647.9	176.6	73.0	57.8	52.0	53.6	53.1	52.5
45°	2346.8	2105.1	1437.2	509.7	85.7	64.6	52.5	47.8	47.8	47.3	47.3
47.5°	2437.7	2186.5	1403.0	378.9	69.4	59.4	49.9	44.1	43.6	46.2	46.2
50°	2520.8	2249.6	1317.9	286.9	67.3	54.7	47.3	41.0	41.5	45.2	45.2
52.5°	2590.1	2286.9	1191.8	214.9	62.5	50.4	43.6	38.4	38.4	42.0	42.0
55°	2641.6	2286.9	1095.6	160.8	59.9	46.2	40.5	36.8	34.7	35.7	36.3
57.5°	2667.4	2243.8	1018.4	130.3	56.8	42.0	37.3	32.1	28.4	29.4	28.9
60°	2660.5	2219.1	929.6	116.1	53.1	38.9	33.1	27.3	23.6	22.6	22.6
62.5°	2647.9	2191.3	818.7	100.9	49.4	36.3	27.3	22.1	20.0	18.9	19.4
65°	2600.1	2100.9	678.4	84.1	45.7	35.2	23.1	19.4	17.3	16.3	16.3
67.5°	2484.5	1938.0	512.9	70.9	42.6	28.4	20.0	16.8	14.7	13.7	13.7
69°	2369.9	1782.4	393.6	64.6	40.5	25.7	18.4	15.2	13.7	12.1	12.1
70°	2271.1	1662.1	308.5	60.4	38.9	24.7	17.9	14.7	13.1	11.6	11.6
72.5°	1933.8	1318.4	156.6	52.5	32.6	21.5	15.8	13.1	11.0	9.5	9.5
75°	1500.3	908.6	103.5	41.5	25.2	19.4	14.2	11.6	9.5	7.9	7.4
77.5°	902.8	355.2	74.1	26.8	16.3	15.2	11.6	9.5	7.9	6.3	6.3
80°	249.1	152.4	49.9	17.9	9.5	10.0	8.4	6.8	5.8	4.7	4.7
82.5°	149.8	98.8	33.1	11.6	6.3	6.3	4.7	4.7	3.7	3.7	3.7
85°	25.7	20.0	7.9	4.7	3.7	3.7	2.6	1.6	1.6	1.6	1.6
87.5°	1.6	1.6	1.6	2.1	2.1	1.6	1.1	0.5	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)