

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: P233535

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233535  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-14)  
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  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1230mA LED AND TYPE III OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7143 lumens  
Efficiency: N/A  
Efficacy: 127.6 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

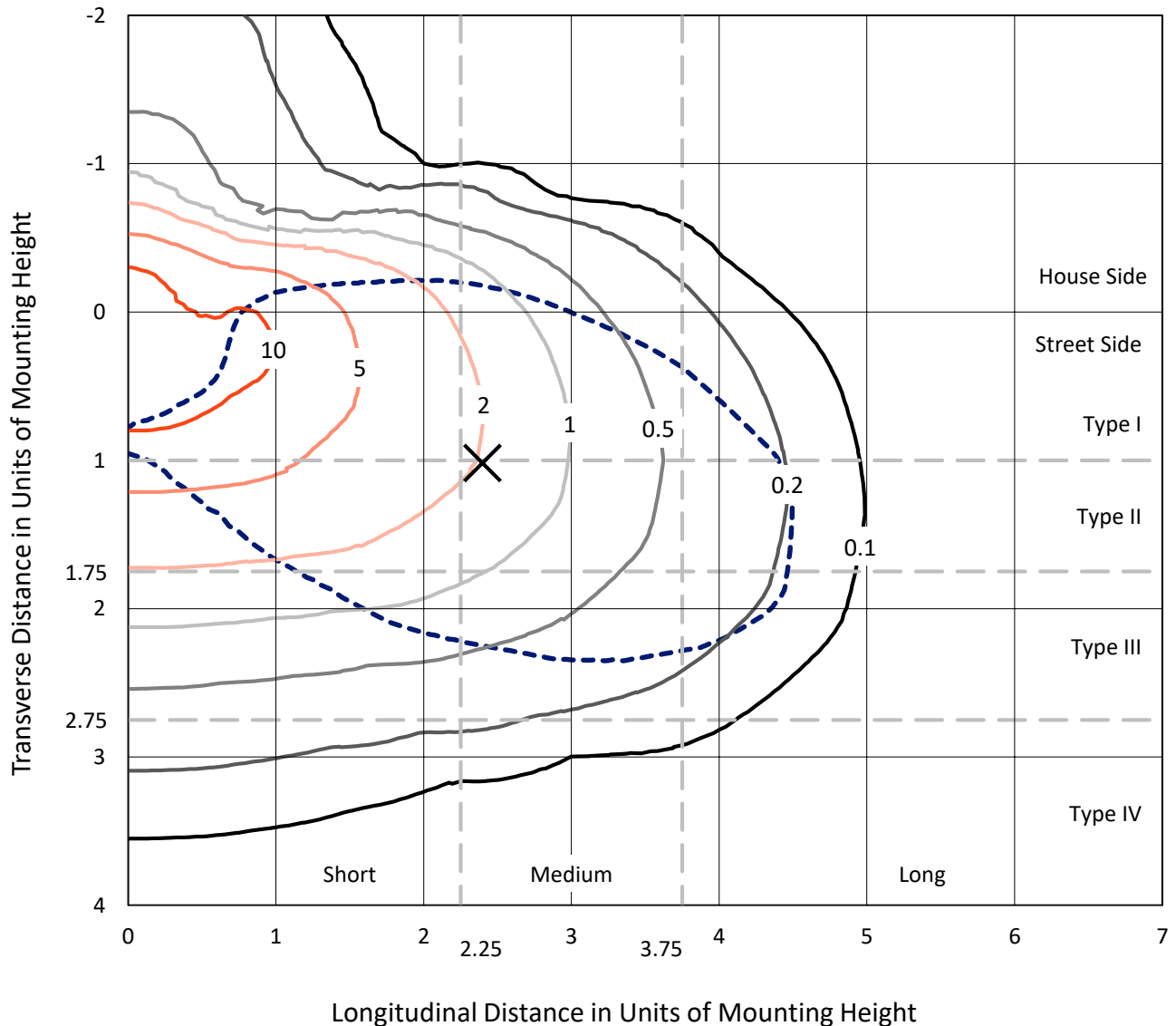
Input Watts (W): 56  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

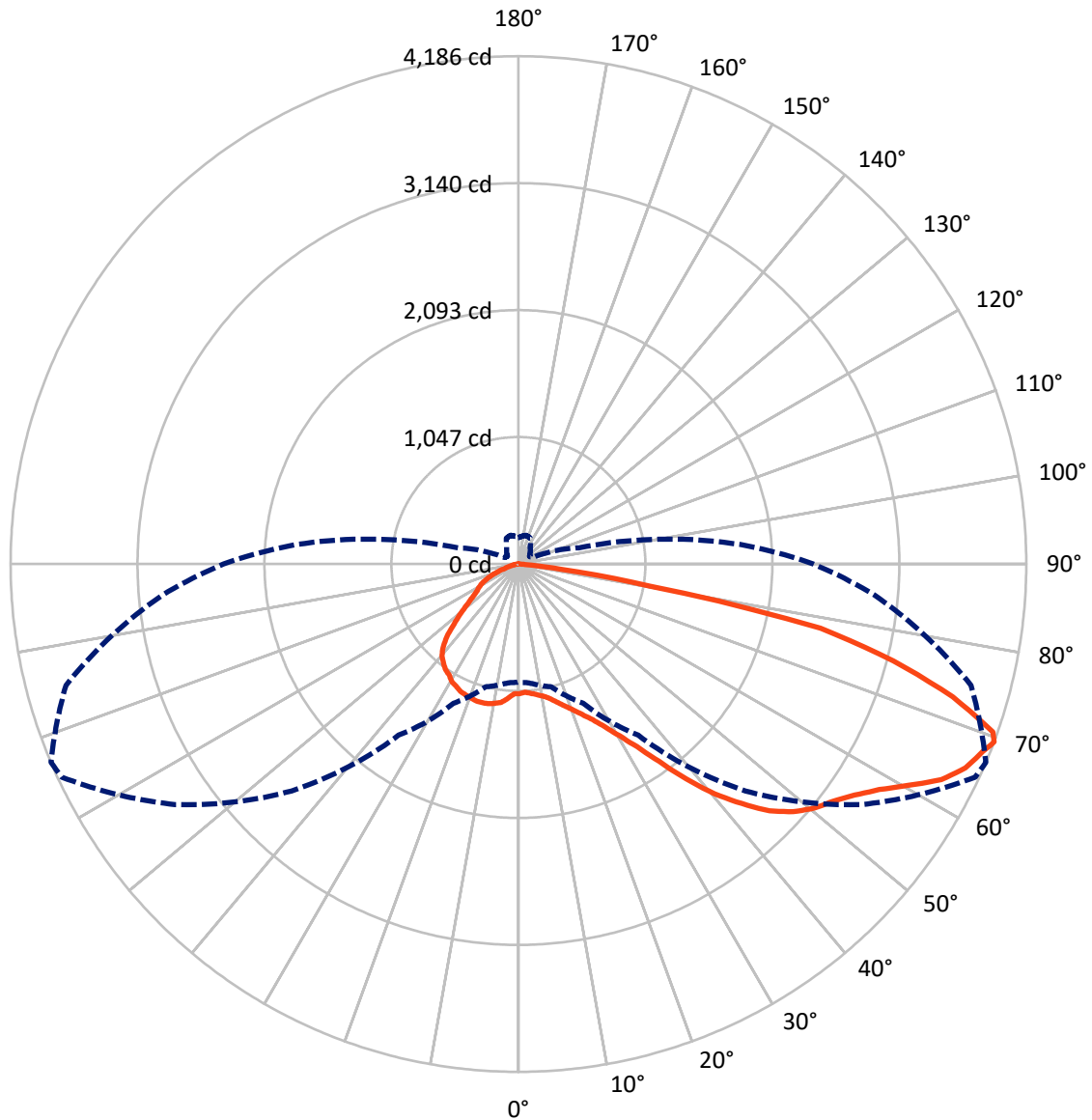
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.4 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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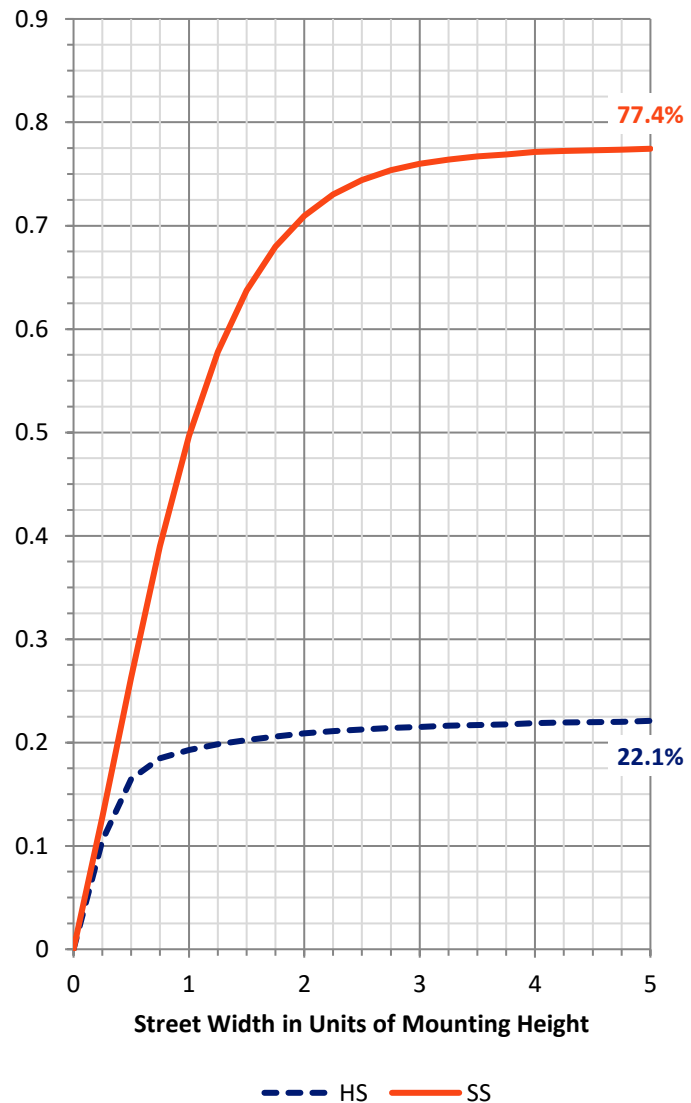
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1608.5	0.0	1608.5
	% Fixture	22.5	0.0	22.5
<b>Street Side</b>	Lumens	5534.5	0.0	5534.5
	% Fixture	77.5	0.0	77.5
<b>Total</b>	Lumens	7143.0	0.0	7143.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.2	1.5
10°-20°	344.9	4.8
20°-30°	594.1	8.3
30°-40°	883.7	12.4
40°-50°	1217.1	17.0
50°-60°	1454.9	20.4
60°-70°	1535.4	21.5
70°-80°	920.1	12.9
80°-90°	84.6	1.2
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°	7143.0	100.0
0°-180°	7143.0	100.0



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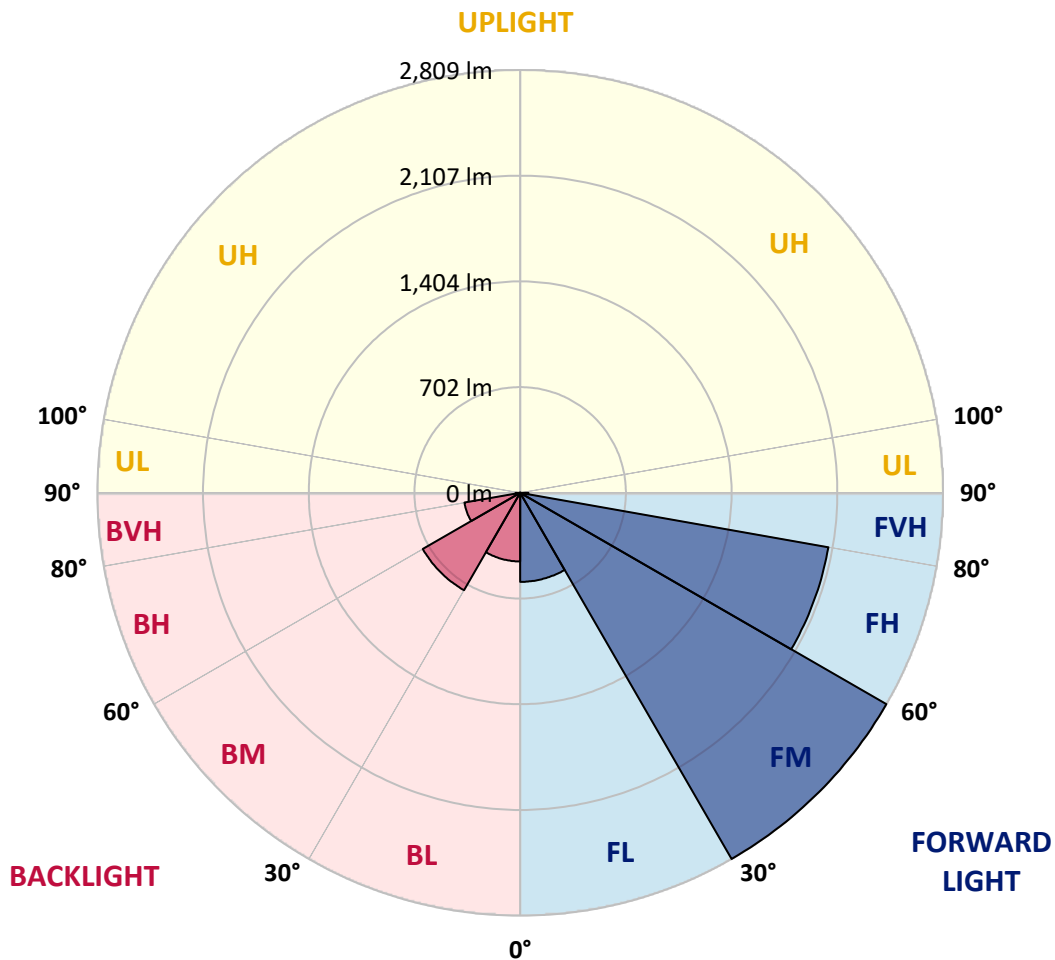
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	591.5	8.3			
FM	(30°-60°)	2808.9	39.3			
FH	(60°-80°)	2079.3	29.1			G2/5000
FVH	(80°-90°)	54.7	0.8			G1/100
BL	(0°-30°)	455.8	6.4	B1/500		
BM	(30°-60°)	746.7	10.5	B1/1000		
BH	(60°-80°)	376.1	5.3	B1/500		G1/500
BVH	(80°-90°)	29.9	0.4			G1/100
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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4
2.5°	1086.0	1085.3	1082.1	1070.4	1069.1	1067.8	1060.0	1060.7	1058.7	1060.7	1061.3
5°	1115.9	1113.3	1110.0	1097.7	1093.1	1087.3	1075.6	1074.9	1070.4	1071.7	1073.0
7.5°	1152.9	1150.3	1147.7	1133.4	1128.9	1118.5	1100.3	1091.2	1087.3	1088.6	1090.5
10°	1202.9	1198.3	1194.5	1173.7	1166.5	1149.0	1126.9	1111.3	1106.1	1108.1	1113.3
12.5°	1260.1	1254.2	1247.7	1226.3	1216.5	1189.3	1163.3	1143.1	1135.3	1139.9	1143.8
15°	1319.2	1315.9	1313.3	1288.0	1274.3	1244.5	1212.0	1186.7	1179.5	1183.4	1185.4
17.5°	1397.1	1395.1	1390.6	1364.6	1338.6	1304.2	1262.0	1235.4	1228.2	1230.2	1225.6
20°	1482.2	1477.0	1474.4	1445.2	1417.9	1370.5	1321.8	1284.1	1282.1	1282.8	1268.5
22.5°	1577.7	1571.8	1566.6	1540.0	1506.2	1451.0	1387.4	1345.1	1346.4	1347.7	1315.9
25°	1675.1	1670.5	1666.0	1640.7	1606.9	1546.5	1469.8	1422.4	1421.8	1422.4	1378.3
27.5°	1777.1	1771.9	1771.2	1750.4	1716.7	1655.0	1566.6	1518.6	1518.6	1516.0	1449.1
30°	1868.0	1873.2	1873.2	1861.5	1829.7	1768.0	1684.8	1636.8	1643.3	1638.1	1553.0
32.5°	1967.4	1966.1	1975.2	1966.1	1940.1	1882.9	1813.4	1782.9	1793.9	1810.8	1725.8
35°	2025.2	2034.3	2057.0	2070.0	2057.7	2010.9	1960.2	1983.6	1998.5	2074.5	1972.6
37.5°	2092.1	2099.9	2131.0	2162.9	2168.1	2142.7	2142.7	2219.4	2248.6	2348.0	2229.1
40°	2138.2	2146.0	2179.8	2216.8	2267.4	2285.0	2330.4	2449.3	2490.9	2557.8	2420.1
42.5°	2110.9	2114.8	2187.6	2277.8	2352.5	2437.0	2509.1	2659.7	2699.4	2746.1	2577.3
45°	2062.8	2070.0	2150.5	2296.0	2424.6	2592.2	2683.1	2857.8	2903.3	2898.8	2698.1
47.5°	2009.6	2020.6	2110.3	2272.6	2486.3	2726.6	2842.3	3024.1	3050.1	3017.6	2781.9
50°	1950.5	1969.3	2064.8	2249.3	2531.1	2844.2	2960.5	3148.8	3162.5	3096.2	2855.3
52.5°	1882.9	1895.3	2001.1	2204.4	2562.3	2922.2	3054.7	3241.7	3247.6	3193.6	2932.5
55°	1789.4	1800.4	1918.0	2144.7	2566.9	2968.3	3115.1	3341.1	3360.6	3308.0	3002.7
57.5°	1688.7	1702.4	1823.2	2058.3	2525.3	2987.1	3187.8	3469.0	3506.7	3431.4	3059.2
60°	1571.8	1589.4	1711.5	1953.1	2443.5	3016.3	3323.5	3655.4	3702.2	3571.0	3113.1
62.5°	1450.4	1460.1	1572.5	1807.6	2316.2	3031.3	3447.0	3868.5	3913.3	3702.9	3138.4
65°	1279.5	1295.1	1395.1	1632.9	2136.9	2967.0	3504.8	4017.2	4049.7	3810.0	3113.8
67.5°	1098.3	1098.3	1183.4	1423.7	1897.9	2796.8	3481.4	4088.7	4127.6	3885.4	3035.8
69°	973.0	982.7	1047.7	1266.5	1722.5	2645.5	3456.0	4154.3	4186.1	3861.3	2946.2
70°	876.8	885.3	950.9	1152.2	1592.0	2525.9	3401.5	4125.0	4148.4	3787.3	2852.0
72.5°	645.0	652.1	697.6	802.8	1197.0	2038.2	3067.0	3729.5	3743.8	3406.0	2516.2
75°	439.7	443.6	478.0	542.3	698.2	1425.0	2505.8	3150.1	3192.3	2954.0	2060.2
77.5°	152.0	163.7	184.5	249.4	298.8	559.9	1698.5	2482.4	2545.4	2287.6	1441.3
80°	52.0	51.3	98.7	128.0	157.2	257.2	537.1	1040.5	1099.6	943.1	519.0
82.5°	39.0	40.3	65.6	70.8	48.1	94.8	209.1	318.3	348.8	304.6	215.0
85°	24.7	24.0	29.2	30.5	22.1	40.3	50.7	51.3	53.3	46.1	46.8
87.5°	13.6	13.6	13.0	11.0	5.8	5.2	4.5	4.5	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4	1068.4
2.5°	1058.1	1067.1	1069.1	1071.7	1078.2	1086.6	1098.3	1098.3	1102.9	1116.5	1121.1
5°	1073.0	1084.0	1098.3	1113.3	1130.8	1149.6	1168.5	1175.0	1184.1	1202.2	1206.1
7.5°	1095.7	1108.1	1132.7	1152.9	1167.8	1186.7	1202.2	1204.8	1216.5	1233.4	1236.7
10°	1119.1	1130.1	1154.8	1165.2	1185.4	1206.1	1213.9	1217.8	1227.6	1240.6	1238.6
12.5°	1150.9	1154.2	1171.7	1178.9	1188.6	1201.6	1205.5	1205.5	1211.3	1232.1	1232.8
15°	1182.1	1182.1	1184.7	1180.8	1182.1	1188.6	1189.3	1180.8	1187.3	1197.7	1193.8
17.5°	1215.2	1206.1	1194.5	1177.6	1162.6	1162.0	1148.3	1128.2	1122.4	1137.3	1136.6
20°	1246.4	1230.8	1202.9	1164.6	1143.8	1115.9	1081.4	1069.7	1069.1	1071.7	1069.7
22.5°	1287.3	1255.5	1204.8	1152.2	1095.1	1050.9	1022.3	982.7	981.4	975.6	966.5
25°	1336.0	1290.6	1213.3	1138.6	1055.5	998.3	929.5	887.2	863.2	868.4	852.8
27.5°	1399.0	1343.8	1216.5	1108.7	1000.9	904.1	821.0	766.4	745.6	736.5	726.2
30°	1485.4	1400.3	1239.9	1083.4	933.3	805.4	703.4	624.2	594.3	602.1	603.4
32.5°	1623.8	1507.5	1252.3	1033.4	855.4	697.6	565.1	479.3	461.8	483.9	489.7
35°	1864.7	1673.8	1281.5	1003.5	766.4	571.6	420.2	385.2	389.1	407.9	409.2
37.5°	2101.8	1884.2	1371.8	938.5	659.9	423.5	326.1	307.2	326.1	350.1	353.3
40°	2268.1	2048.6	1451.7	874.2	510.5	306.6	248.8	226.0	253.3	291.6	298.8
42.5°	2415.5	2179.1	1508.2	785.3	349.4	218.9	178.6	184.5	224.7	252.7	259.2
45°	2521.4	2268.7	1547.1	669.6	222.8	165.6	159.8	178.6	216.9	239.0	241.0
47.5°	2588.3	2321.4	1518.6	527.4	167.6	156.5	157.2	181.2	219.5	244.2	243.6
50°	2648.7	2349.3	1425.7	418.3	159.1	150.0	160.4	188.4	228.0	250.7	249.4
52.5°	2713.0	2376.6	1312.7	328.0	152.6	146.8	164.3	192.9	228.0	242.3	240.3
55°	2768.2	2400.6	1227.6	263.7	148.1	146.1	168.2	200.0	226.7	232.5	228.6
57.5°	2796.8	2359.7	1135.3	221.5	143.5	146.1	170.8	198.8	234.5	253.3	249.4
60°	2781.2	2321.4	1060.7	205.9	137.0	145.5	172.1	213.0	287.7	305.3	304.0
62.5°	2752.6	2279.1	956.1	185.1	129.9	146.8	171.5	226.0	331.3	325.4	309.2
65°	2694.2	2194.7	813.2	161.1	122.8	149.4	171.5	254.6	289.0	282.5	275.4
67.5°	2569.5	2012.2	650.8	138.3	115.0	141.6	168.9	242.3	248.8	231.9	223.4
69°	2429.8	1838.1	515.1	126.0	110.4	137.7	168.2	233.8	244.9	226.7	216.9
70°	2320.7	1702.4	416.3	116.9	105.9	136.4	167.6	228.0	242.9	222.8	212.4
72.5°	1932.9	1375.7	218.2	94.2	90.3	124.1	161.7	222.8	243.6	213.7	198.8
75°	1518.6	978.8	144.8	72.1	69.5	108.5	148.1	214.3	229.3	192.3	169.5
77.5°	936.6	428.7	100.0	50.0	50.7	84.4	127.3	191.6	231.2	194.2	165.0
80°	272.1	165.6	63.7	33.8	31.2	50.0	100.0	165.0	219.5	199.4	179.9
82.5°	157.2	107.8	42.9	21.4	18.8	22.7	63.0	128.0	193.6	182.5	186.4
85°	35.7	29.9	15.6	10.4	10.4	13.0	21.4	74.0	133.8	156.5	176.7
87.5°	3.9	3.9	3.9	3.9	3.9	3.2	3.9	20.1	58.5	83.1	96.8
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)