

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: P233733

Luminaire Tested: **VRDN-C028-D-UNV-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233733
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-C028-D-UNV-T3-7030-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 930mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8375 lumens
Efficiency: N/A
Efficacy: 114.7 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): 73
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

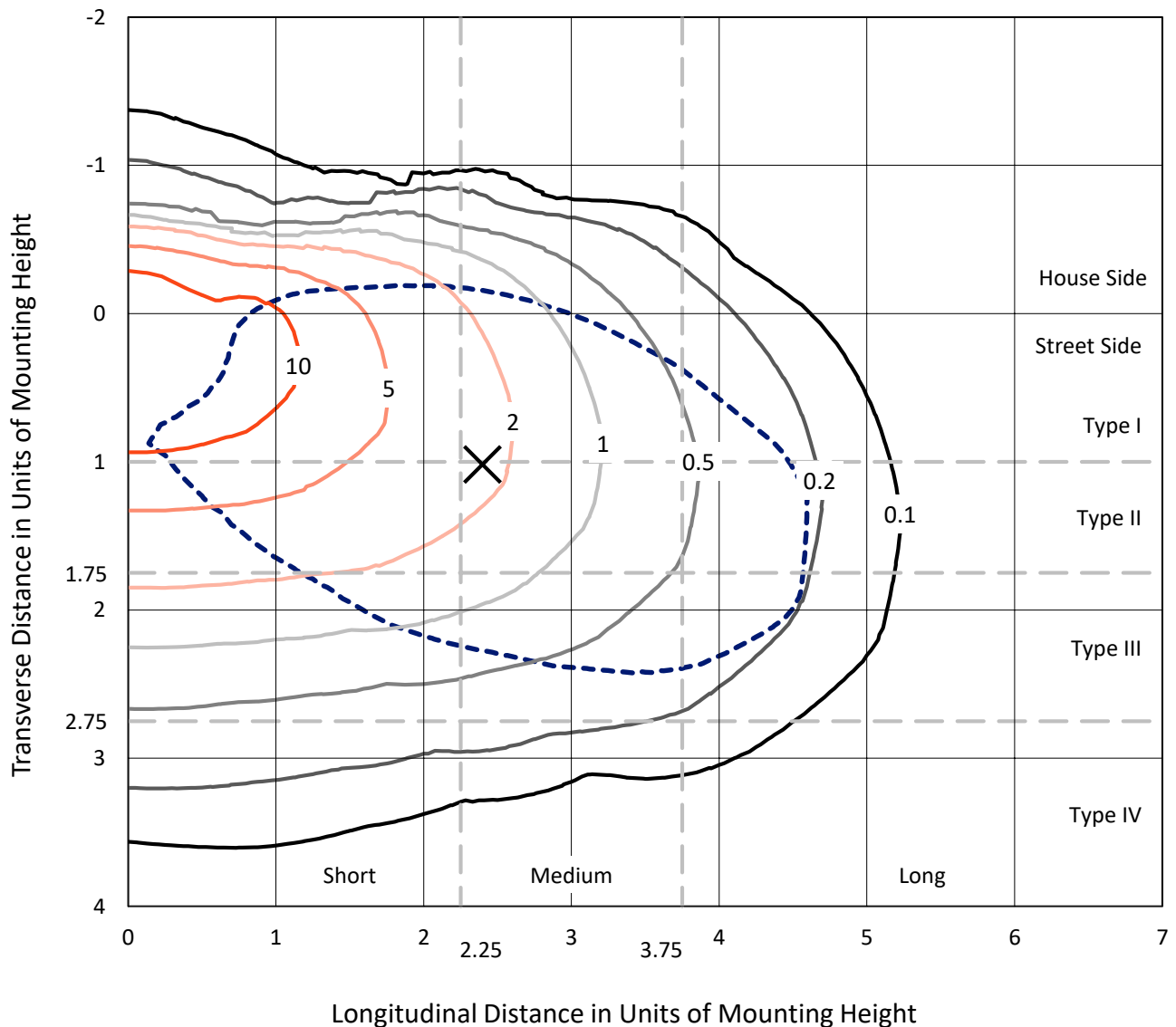


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

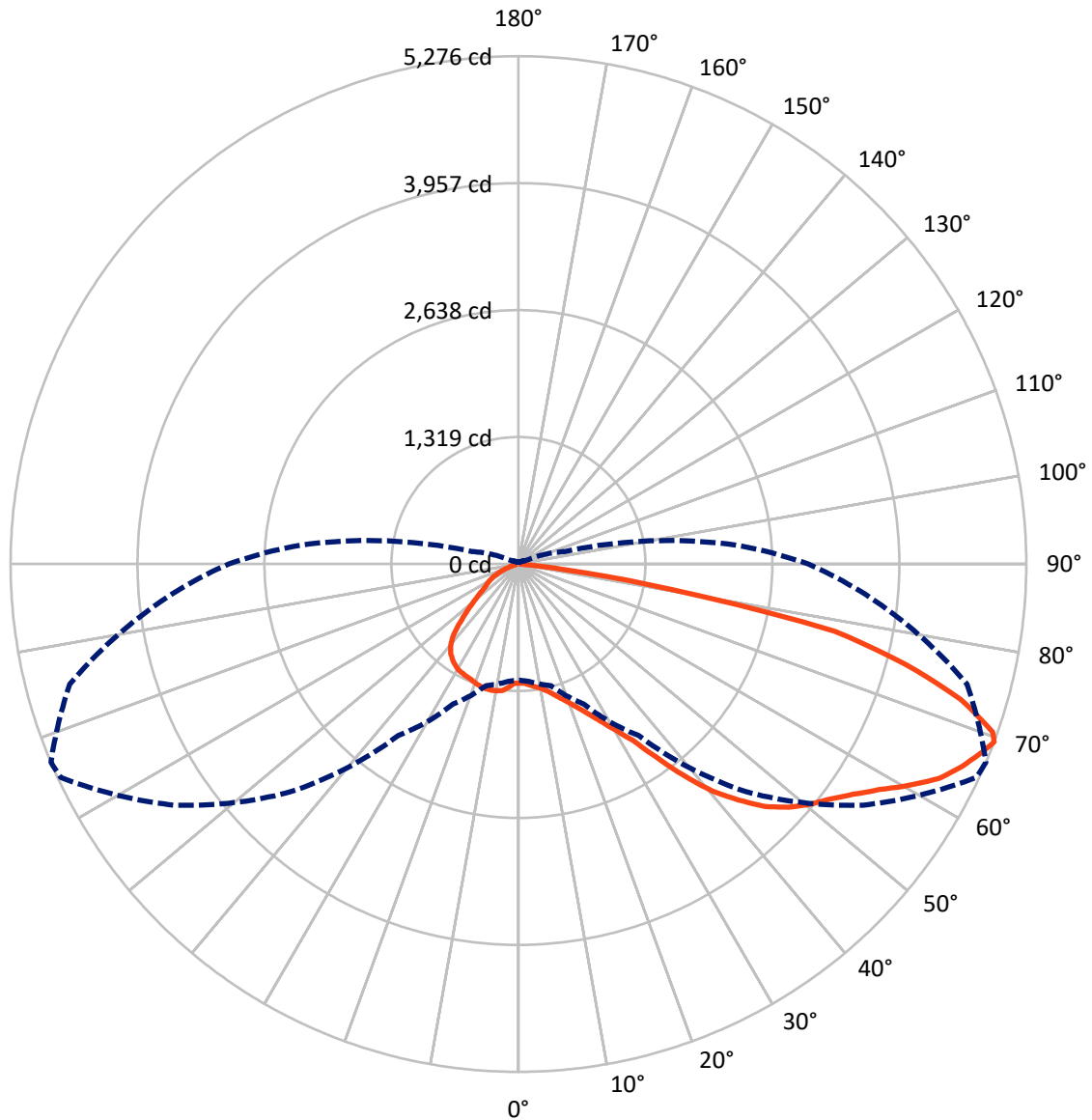


Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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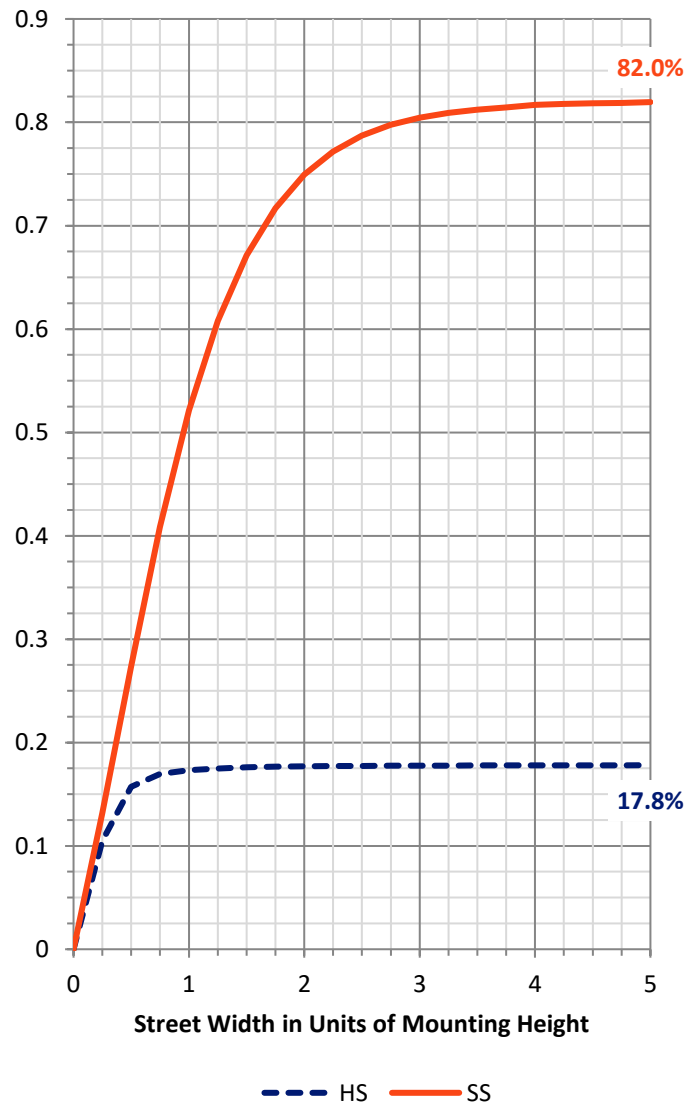
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1509.8	0.0	1509.8
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	6865.2	0.0	6865.2
	% Fixture	82.0	0.0	82.0
Total	Lumens	8375.0	0.0	8375.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	1.5
10°-20°	393.2	4.7
20°-30°	671.1	8.0
30°-40°	1014.7	12.1
40°-50°	1433.4	17.1
50°-60°	1732.4	20.7
60°-70°	1827.9	21.8
70°-80°	1100.4	13.1
80°-90°	76.9	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°	8375.0	100.0
0°-180°	8375.0	100.0



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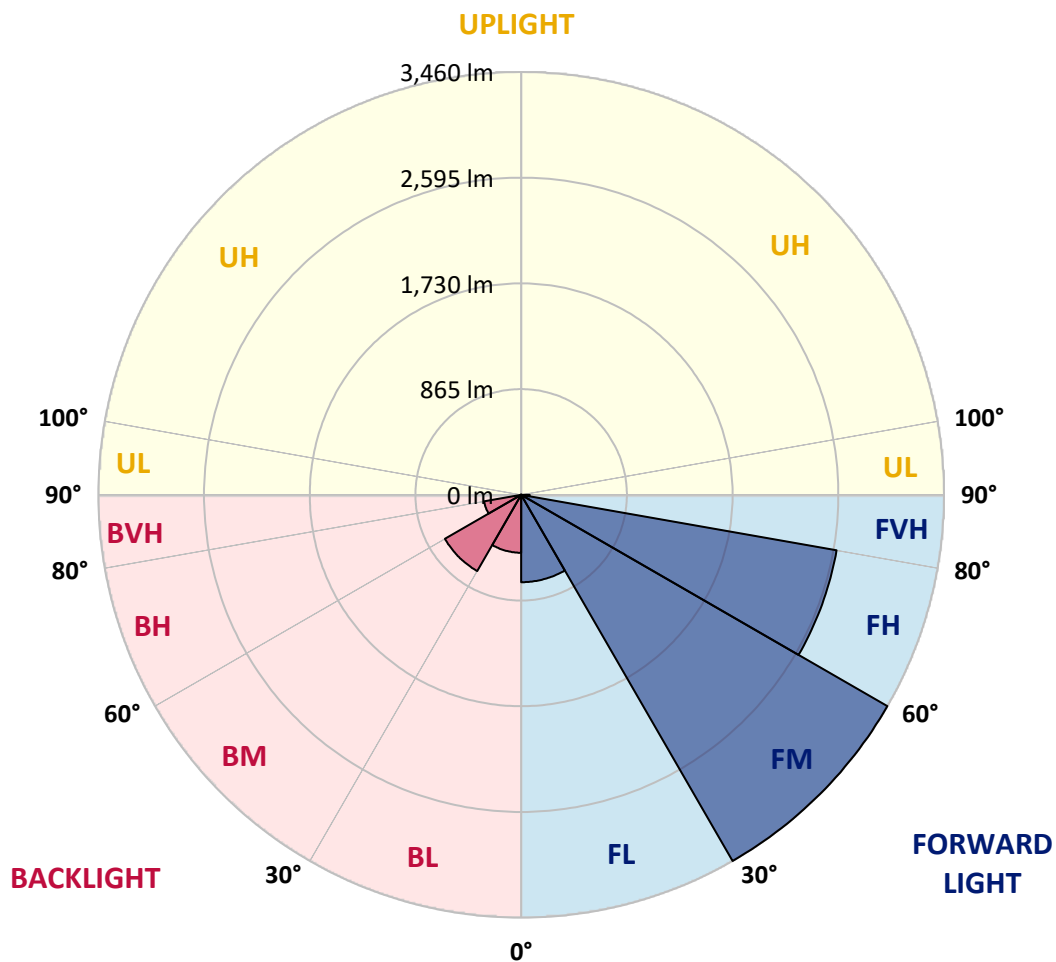
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	715.1	8.5			
FM	(30°-60°)	3460.1	41.3			
FH	(60°-80°)	2620.5	31.3			G2/5000
FVH	(80°-90°)	69.5	0.8			G1/100
BL	(0°-30°)	474.2	5.7	B1/500		
BM	(30°-60°)	720.4	8.6	B1/1000		
BH	(60°-80°)	307.8	3.7	B1/500		G1/500
BVH	(80°-90°)	7.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5
2.5°	1270.6	1268.6	1268.6	1257.2	1246.5	1243.9	1243.2	1239.9	1240.5	1235.9	1231.2
5°	1307.3	1307.3	1305.9	1291.3	1279.9	1272.6	1267.9	1261.9	1262.6	1259.2	1255.2
7.5°	1362.7	1363.3	1360.7	1341.3	1330.0	1311.9	1301.3	1289.9	1289.3	1285.2	1286.6
10°	1430.7	1432.7	1428.7	1404.0	1384.7	1360.0	1337.3	1317.3	1315.9	1311.3	1315.3
12.5°	1507.5	1510.1	1500.1	1474.8	1452.7	1414.0	1386.7	1360.0	1356.0	1355.3	1358.0
15°	1595.5	1596.9	1593.5	1556.2	1529.5	1494.1	1449.4	1415.4	1411.4	1412.0	1408.7
17.5°	1693.6	1697.0	1689.6	1656.3	1620.9	1572.2	1518.8	1476.8	1474.8	1472.8	1458.1
20°	1797.7	1801.1	1796.4	1765.0	1723.0	1661.6	1596.2	1548.2	1547.5	1542.8	1508.8
22.5°	1915.2	1919.9	1917.2	1879.2	1834.4	1767.7	1686.3	1636.3	1634.9	1620.2	1568.9
25°	2042.7	2041.3	2044.0	2003.3	1961.2	1891.2	1790.4	1738.4	1738.4	1720.3	1644.3
27.5°	2166.1	2165.4	2170.1	2141.4	2097.4	2031.3	1909.9	1857.1	1861.8	1835.8	1735.0
30°	2286.2	2286.2	2297.6	2278.9	2246.2	2176.8	2058.0	2002.6	2008.6	1981.3	1849.8
32.5°	2398.3	2403.7	2423.0	2411.7	2387.0	2324.3	2222.8	2172.1	2186.1	2197.5	2063.3
35°	2481.1	2486.4	2531.1	2535.1	2529.1	2487.1	2411.7	2444.4	2461.1	2550.5	2401.0
37.5°	2553.8	2560.5	2613.9	2647.2	2666.6	2640.6	2645.2	2754.7	2786.0	2891.5	2689.3
40°	2607.2	2621.9	2674.6	2720.6	2788.7	2819.4	2895.5	3051.0	3101.7	3143.7	2887.5
42.5°	2570.5	2580.5	2673.3	2796.7	2896.1	3004.3	3127.7	3312.6	3350.6	3337.2	3062.3
45°	2516.4	2528.5	2625.9	2816.7	2981.6	3197.1	3347.9	3548.1	3591.5	3517.4	3213.1
47.5°	2455.7	2472.4	2577.8	2790.0	3053.0	3374.6	3547.4	3750.3	3775.7	3678.2	3339.9
50°	2394.3	2413.0	2532.5	2768.0	3108.4	3522.8	3692.9	3915.1	3922.5	3811.7	3454.0
52.5°	2311.6	2330.9	2461.7	2722.0	3147.1	3620.2	3820.4	4050.6	4055.3	3955.8	3562.1
55°	2206.8	2231.5	2369.6	2653.9	3156.4	3676.9	3901.1	4191.4	4222.8	4112.0	3650.9
57.5°	2083.4	2106.0	2258.2	2555.8	3109.7	3696.3	4013.9	4377.6	4421.0	4270.1	3724.3
60°	1941.2	1967.2	2120.1	2429.0	3015.6	3750.3	4200.7	4640.5	4666.5	4435.6	3789.0
62.5°	1795.7	1814.4	1953.2	2250.9	2868.8	3783.0	4366.2	4887.4	4904.8	4595.1	3827.7
65°	1588.9	1612.2	1747.7	2046.7	2657.2	3720.3	4429.6	5056.2	5066.9	4728.6	3809.0
67.5°	1364.0	1382.7	1481.4	1800.4	2379.6	3521.4	4403.6	5169.0	5203.1	4832.7	3724.3
69°	1204.5	1223.2	1308.6	1603.6	2173.4	3345.2	4366.9	5245.8	5275.8	4825.4	3616.2
70°	1080.4	1099.1	1179.8	1456.7	2012.0	3196.4	4308.9	5207.1	5226.4	4743.3	3510.7
72.5°	772.8	791.4	857.5	1024.3	1524.1	2627.2	3949.2	4777.3	4803.3	4348.9	3137.7
75°	404.4	449.1	567.9	662.0	902.9	1849.8	3283.2	4108.7	4146.7	3816.4	2580.5
77.5°	52.1	54.7	160.2	268.9	373.0	780.1	2332.3	3299.2	3359.3	3054.3	1784.4
80°	42.0	42.7	55.4	134.1	185.5	316.3	827.5	1544.2	1616.9	1357.3	656.0
82.5°	29.4	30.7	43.4	70.7	60.7	115.4	287.6	436.4	449.8	389.0	261.6
85°	16.7	16.7	20.7	27.4	19.4	43.4	59.4	63.4	56.7	56.1	42.0
87.5°	4.7	5.3	6.0	4.7	2.0	2.0	2.7	2.7	2.7	2.0	2.0
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°	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5	1238.5
2.5°	1238.5	1237.2	1237.9	1240.5	1244.5	1259.2	1269.2	1270.6	1275.2	1292.6	1290.6
5°	1259.9	1267.9	1272.6	1286.6	1295.9	1315.9	1328.0	1329.3	1336.0	1354.0	1354.6
7.5°	1289.9	1303.3	1309.9	1326.0	1329.3	1338.6	1342.0	1338.6	1339.3	1355.3	1356.7
10°	1315.9	1332.6	1332.6	1336.6	1330.6	1331.3	1320.6	1310.6	1305.3	1319.3	1322.6
12.5°	1356.0	1360.7	1350.0	1338.0	1319.9	1303.9	1285.9	1269.9	1257.2	1265.2	1260.6
15°	1397.4	1390.0	1364.0	1332.6	1300.6	1273.2	1235.9	1212.5	1190.5	1195.2	1191.2
17.5°	1438.7	1414.7	1374.0	1322.0	1275.2	1223.2	1171.1	1134.4	1094.4	1091.1	1085.1
20°	1478.8	1444.1	1376.7	1299.9	1234.5	1161.1	1080.4	1017.7	958.3	942.9	932.9
22.5°	1526.8	1476.8	1380.0	1278.6	1190.5	1090.4	968.3	870.8	806.8	785.4	775.4
25°	1588.2	1522.1	1389.3	1262.6	1145.8	1003.0	835.5	724.0	654.6	617.9	614.6
27.5°	1660.9	1576.9	1405.4	1241.9	1082.4	886.2	698.0	581.9	507.8	470.5	458.4
30°	1756.4	1644.9	1420.0	1225.9	993.0	758.7	553.9	424.4	336.3	312.3	299.6
32.5°	1937.2	1755.7	1438.7	1188.5	887.5	619.3	392.4	261.6	201.5	185.5	185.5
35°	2231.5	1999.3	1485.4	1137.1	760.7	451.1	235.6	146.8	120.1	110.8	106.1
37.5°	2497.1	2244.8	1602.2	1057.7	606.6	266.9	134.8	90.8	82.1	83.4	83.4
40°	2684.6	2413.0	1731.0	950.3	411.7	142.8	85.4	72.7	74.1	74.7	74.7
42.5°	2845.4	2556.5	1801.7	822.8	224.2	92.8	73.4	66.1	68.1	67.4	66.7
45°	2980.2	2673.3	1825.1	647.3	108.8	82.1	66.7	60.7	60.7	60.1	60.1
47.5°	3095.7	2776.7	1781.7	481.1	88.1	75.4	63.4	56.1	55.4	58.7	58.7
50°	3201.1	2856.8	1673.6	364.4	85.4	69.4	60.1	52.1	52.7	57.4	57.4
52.5°	3289.2	2904.2	1513.5	272.9	79.4	64.1	55.4	48.7	48.7	53.4	53.4
55°	3354.6	2904.2	1391.4	204.2	76.1	58.7	51.4	46.7	44.0	45.4	46.0
57.5°	3387.3	2849.4	1293.3	165.5	72.1	53.4	47.4	40.7	36.0	37.4	36.7
60°	3378.6	2818.1	1180.5	147.5	67.4	49.4	42.0	34.7	30.0	28.7	28.7
62.5°	3362.6	2782.7	1039.7	128.1	62.7	46.0	34.7	28.0	25.4	24.0	24.7
65°	3301.9	2667.9	861.5	106.8	58.1	44.7	29.4	24.7	22.0	20.7	20.7
67.5°	3155.1	2461.1	651.3	90.1	54.1	36.0	25.4	21.4	18.7	17.4	17.4
69°	3009.6	2263.5	499.8	82.1	51.4	32.7	23.4	19.4	17.4	15.3	15.3
70°	2884.1	2110.7	391.7	76.7	49.4	31.4	22.7	18.7	16.7	14.7	14.7
72.5°	2455.7	1674.3	198.9	66.7	41.4	27.4	20.0	16.7	14.0	12.0	12.0
75°	1905.2	1153.8	131.5	52.7	32.0	24.7	18.0	14.7	12.0	10.0	9.3
77.5°	1146.4	451.1	94.1	34.0	20.7	19.4	14.7	12.0	10.0	8.0	8.0
80°	316.3	193.5	63.4	22.7	12.0	12.7	10.7	8.7	7.3	6.0	6.0
82.5°	190.2	125.5	42.0	14.7	8.0	8.0	6.0	6.0	4.7	4.7	4.7
85°	32.7	25.4	10.0	6.0	4.7	4.7	3.3	2.0	2.0	2.0	2.0
87.5°	2.0	2.0	2.0	2.7	2.7	2.0	1.3	0.7	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)