

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: P233781

Luminaire Tested: **VRDN-C018-D-UNV-T4-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233781
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-34)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: VRDN-C018-D-UNV-T4-7030-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1210mA LED AND TYPE IV OPTIC WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5927 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

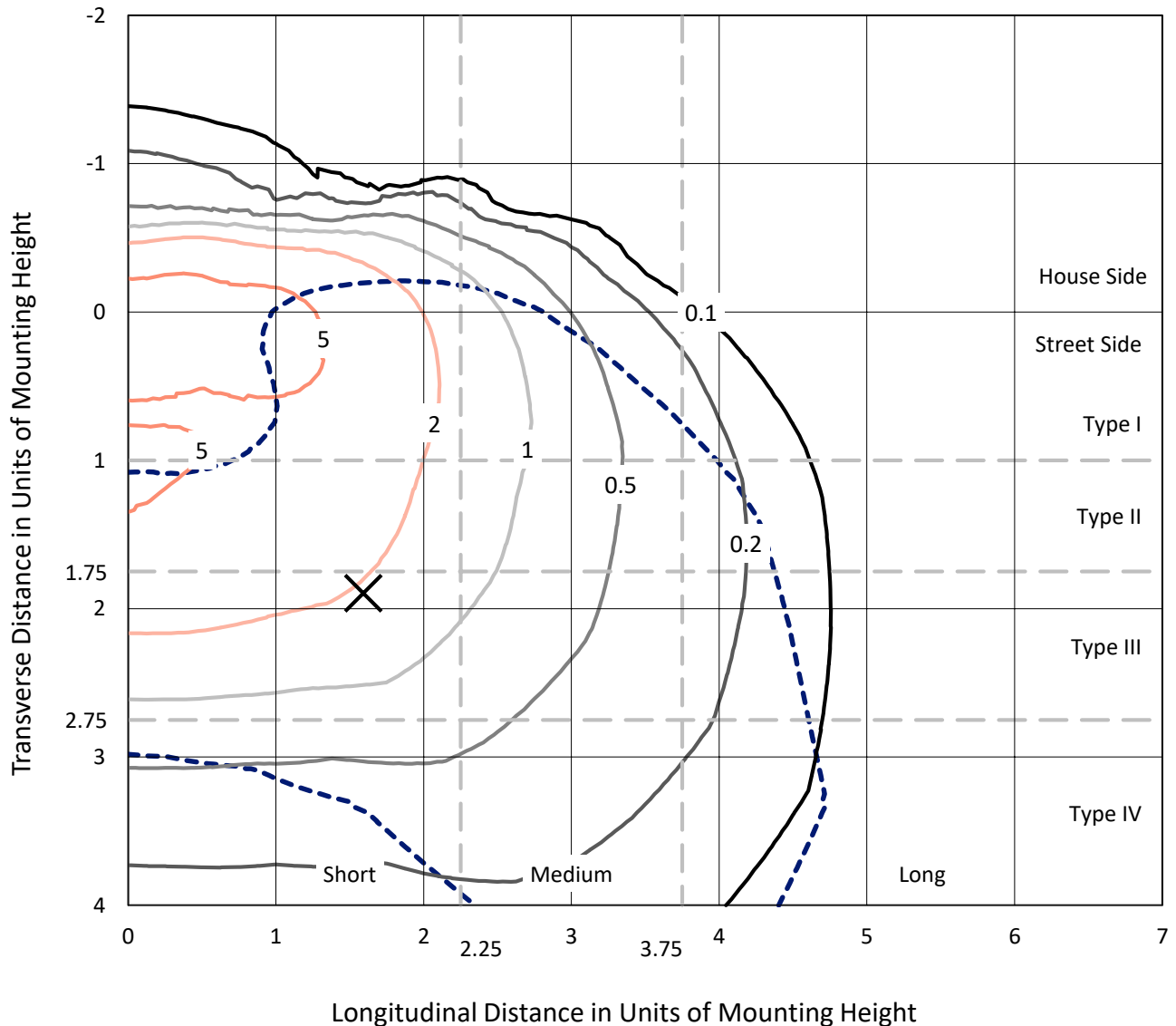
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

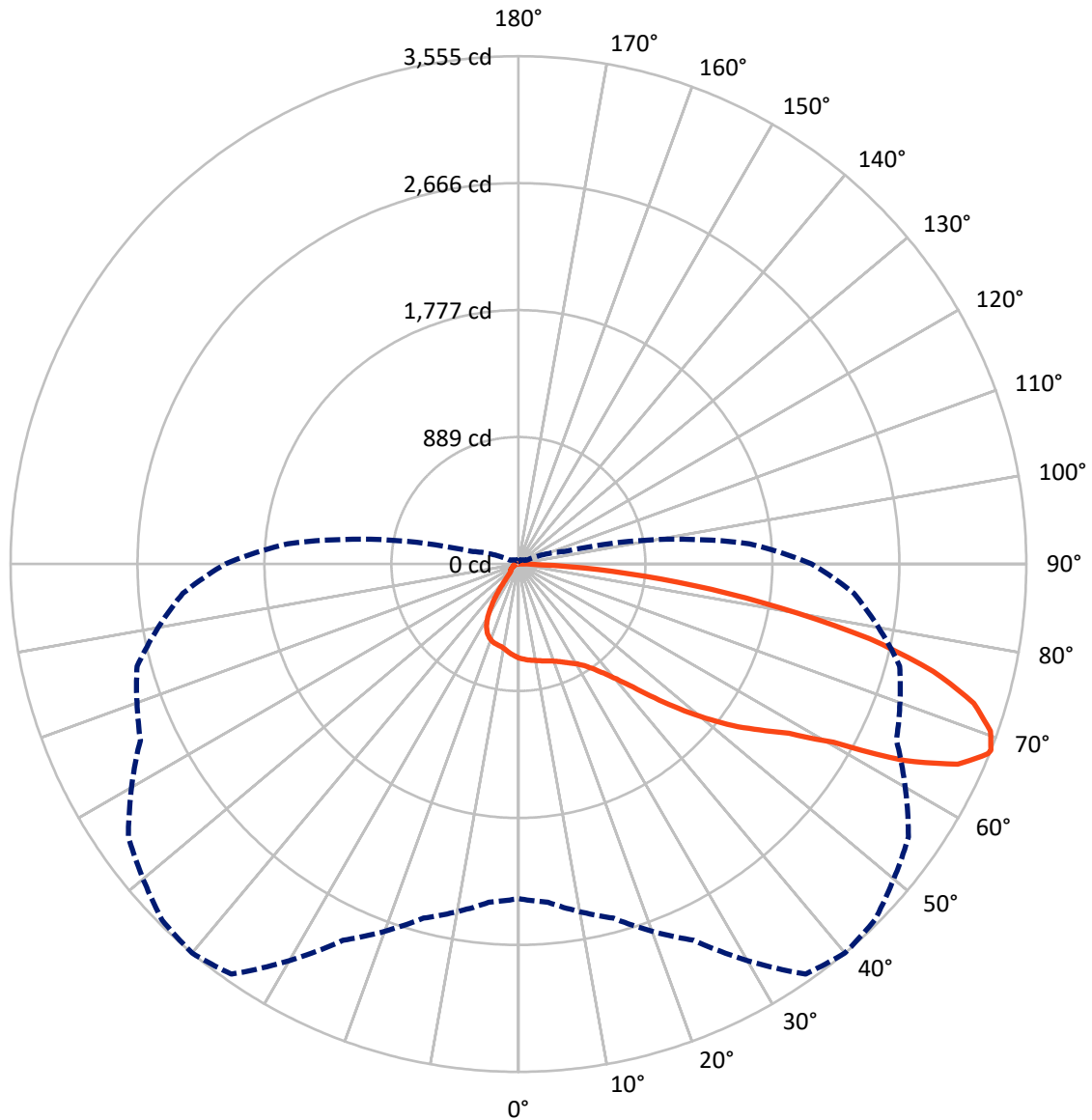


Based on 10 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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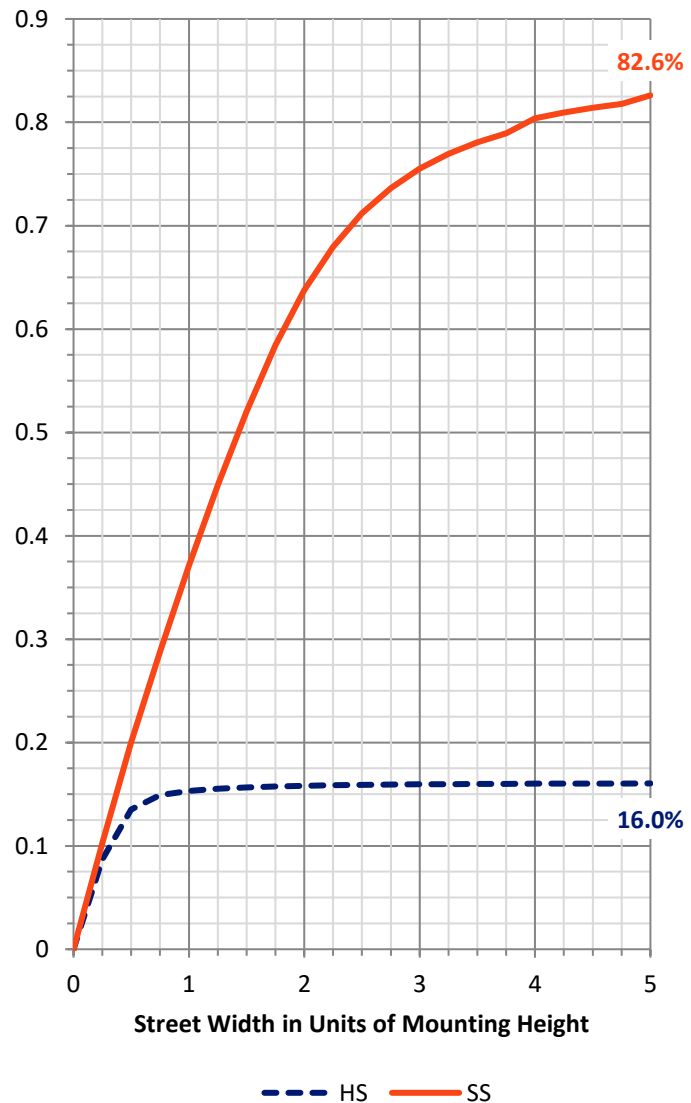
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	961.5	0.0	961.5
	% Fixture	16.2	0.0	16.2
Street Side	Lumens	4965.5	0.0	4965.5
	% Fixture	83.8	0.0	83.8
Total	Lumens	5927.0	0.0	5927.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	1.1
10°-20°	187.1	3.2
20°-30°	314.1	5.3
30°-40°	465.2	7.8
40°-50°	786.9	13.3
50°-60°	1201.0	20.3
60°-70°	1572.6	26.5
70°-80°	1130.6	19.1
80°-90°	207.0	3.5
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°	5927.0	100.0
0°-180°	5927.0	100.0



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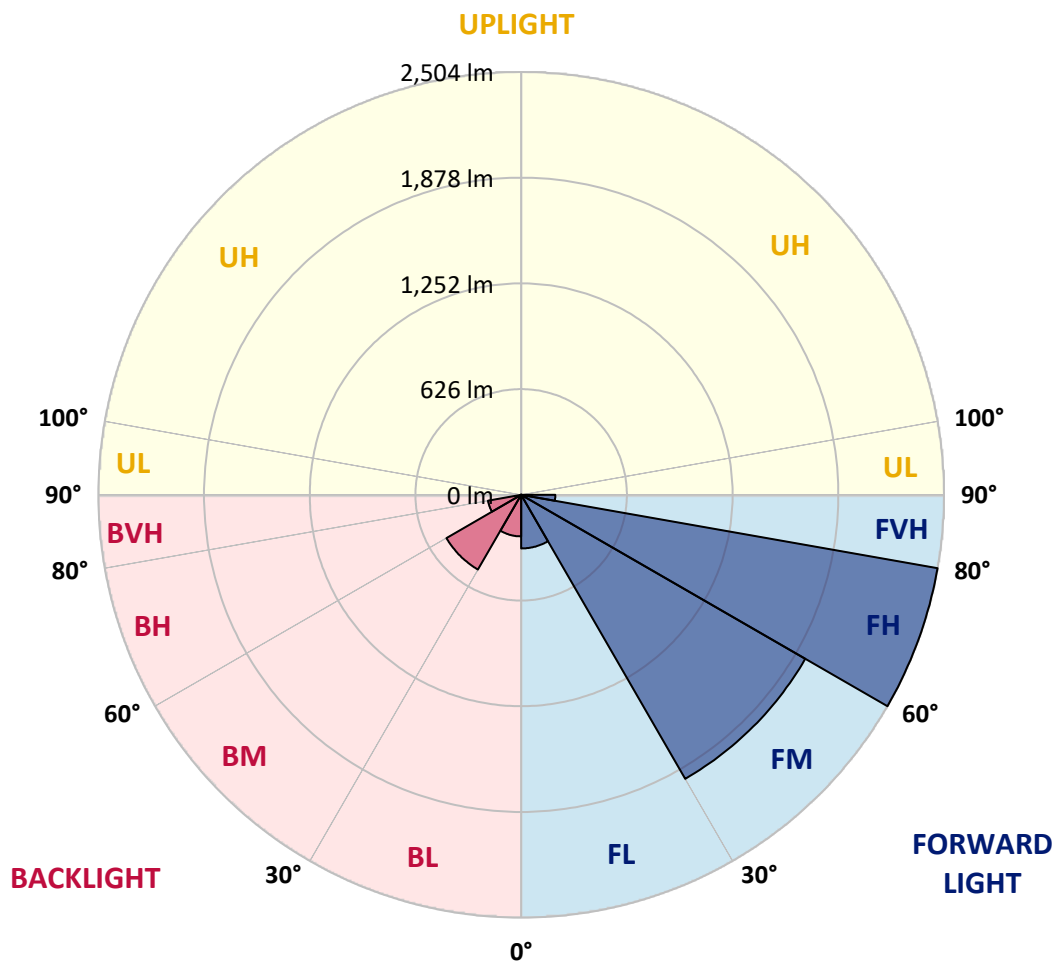
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	317.7	5.4			
FM (30°-60°)	1942.1	32.8			
FH (60°-80°)	2503.7	42.2			G2/5000
FVH (80°-90°)	202.1	3.4			G2/225
BL (0°-30°)	246.0	4.2	B1/500		
BM (30°-60°)	511.0	8.6	B1/1000		
BH (60°-80°)	199.5	3.4	B1/500		G1/500
BVH (80°-90°)	4.9	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6
2.5°	679.4	680.9	679.0	674.0	668.5	665.6	665.1	664.6	662.1	658.6	653.6
5°	686.4	686.9	684.9	680.9	676.0	675.0	673.5	674.0	672.5	669.0	663.6
7.5°	689.4	690.4	687.9	683.9	679.9	679.9	679.4	680.9	679.9	678.5	672.0
10°	688.4	689.9	688.4	686.9	685.4	686.9	685.9	689.4	689.9	689.9	682.4
12.5°	686.9	688.9	689.4	690.9	693.3	694.8	696.8	704.3	707.7	710.2	704.3
15°	688.4	689.4	693.3	695.8	700.8	704.3	708.7	721.1	727.1	734.0	731.1
17.5°	694.8	697.3	703.3	705.8	710.7	713.2	718.7	734.0	746.0	758.4	760.3
20°	708.7	710.2	720.1	721.1	723.6	726.1	732.1	748.9	766.8	784.7	789.6
22.5°	724.1	727.6	737.0	735.5	740.5	741.5	746.9	765.3	790.1	812.0	822.9
25°	740.0	743.0	752.4	753.4	759.4	763.3	769.8	787.6	819.4	847.2	866.6
27.5°	753.4	759.4	768.3	769.3	780.7	785.7	795.1	815.4	853.7	887.9	919.7
30°	778.2	779.7	788.1	791.1	806.5	811.0	821.9	847.7	894.4	937.0	986.7
32.5°	809.0	808.5	816.4	821.4	840.3	848.2	862.1	891.9	943.5	996.6	1067.1
35°	865.6	860.6	865.6	870.5	892.4	900.8	915.7	960.4	1020.9	1111.2	1198.1
37.5°	995.6	988.2	977.7	952.9	958.4	969.3	991.1	1051.7	1141.0	1308.8	1392.6
40°	1220.9	1204.5	1160.9	1095.4	1056.6	1057.6	1078.0	1157.4	1288.4	1535.1	1598.1
42.5°	1424.9	1413.5	1360.9	1271.1	1181.7	1176.8	1183.7	1276.5	1449.2	1745.0	1777.8
45°	1617.0	1622.4	1546.0	1475.5	1368.8	1336.1	1327.6	1403.6	1627.4	1932.1	1935.1
47.5°	1794.7	1803.6	1711.3	1644.8	1539.6	1511.3	1485.0	1537.1	1795.7	2091.5	2067.1
50°	1985.7	1992.7	1864.6	1810.0	1721.7	1695.4	1675.5	1698.4	1967.9	2239.4	2184.8
52.5°	2249.8	2211.1	2050.3	1959.9	1881.5	1879.5	1864.1	1878.5	2163.9	2372.4	2274.1
55°	2561.5	2460.2	2289.5	2145.1	2044.3	2049.8	2031.4	2055.2	2358.0	2486.5	2357.0
57.5°	2671.6	2669.2	2589.7	2451.3	2246.8	2234.4	2202.6	2229.4	2525.7	2593.2	2415.5
60°	2824.5	2837.9	2846.8	2763.5	2645.3	2532.7	2426.5	2424.0	2682.1	2690.5	2444.3
62.5°	2923.3	2935.7	3005.2	2994.2	3067.2	3030.0	2908.9	2640.4	2801.7	2753.5	2455.2
65°	2738.6	2769.4	2944.6	3078.1	3326.8	3378.9	3361.5	2972.9	2883.1	2771.9	2434.9
67.5°	2404.6	2444.8	2636.9	2949.1	3487.6	3545.6	3513.9	3307.9	2918.3	2764.0	2378.8
68°	2342.1	2376.8	2565.4	2905.9	3504.0	3554.6	3525.8	3332.7	2919.8	2763.0	2357.5
70°	2041.3	2069.6	2253.7	2684.5	3458.3	3505.4	3501.5	3356.1	2906.9	2732.2	2214.0
72.5°	1583.7	1612.0	1775.3	2226.4	3247.4	3333.7	3330.2	3262.7	2883.1	2575.4	1856.2
75°	1145.0	1176.3	1325.1	1710.8	2810.1	3000.2	3038.4	3102.9	2635.4	2167.4	1320.7
77.5°	826.9	849.7	978.2	1292.4	2295.4	2512.8	2590.2	2655.3	2157.0	1579.8	628.3
80°	551.4	567.8	691.9	960.9	1729.1	1857.2	1940.6	1831.9	1227.4	571.3	68.0
82.5°	339.5	349.9	447.7	674.0	1196.1	1236.3	1236.8	977.2	395.6	54.6	36.7
85°	182.1	185.6	243.2	367.8	631.8	662.1	650.2	410.4	79.9	29.3	19.9
87.5°	29.3	31.8	76.4	138.0	195.1	150.4	96.3	30.3	7.9	4.5	3.0
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°	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6
2.5°	656.1	654.6	650.7	648.7	643.7	645.2	645.2	641.2	643.2	651.2	650.2
5°	662.1	662.6	653.1	648.2	637.3	634.3	629.8	623.9	623.4	628.8	629.3
7.5°	667.0	669.5	656.1	646.2	631.3	620.9	612.0	601.5	599.0	602.5	602.5
10°	675.0	677.5	660.6	646.7	624.9	608.0	592.6	579.2	573.7	573.7	574.2
12.5°	695.8	694.3	675.0	653.6	627.8	601.0	576.7	558.8	545.9	545.4	543.5
15°	724.6	719.2	700.3	668.0	634.8	600.5	566.8	539.0	516.7	510.7	508.2
17.5°	755.4	748.4	725.6	686.4	645.7	600.0	555.4	516.7	479.4	465.0	460.6
20°	788.6	780.2	756.9	707.7	656.6	596.6	538.5	484.4	433.8	406.5	399.5
22.5°	825.4	818.4	790.1	729.6	664.1	589.1	512.2	443.7	379.2	340.0	337.0
25°	873.0	866.6	824.9	748.9	664.6	575.2	477.5	391.6	310.7	264.5	255.1
27.5°	930.1	918.7	852.7	760.8	656.6	550.9	432.3	322.1	230.8	192.1	191.1
30°	992.1	971.3	875.0	763.8	638.8	512.2	370.2	236.7	163.8	137.5	137.5
32.5°	1065.1	1026.9	897.8	758.9	609.5	458.6	283.4	164.3	112.7	100.3	100.3
35°	1171.8	1112.7	927.1	746.5	568.3	384.6	201.5	108.7	88.8	87.4	87.4
37.5°	1340.5	1242.3	966.8	725.6	511.7	293.3	131.0	83.9	84.9	84.9	84.4
40°	1520.2	1392.2	1021.4	692.4	440.7	202.5	85.9	79.4	80.9	81.9	81.4
42.5°	1682.5	1534.6	1081.0	647.7	356.8	127.6	78.4	76.4	75.4	76.4	76.9
45°	1822.9	1658.2	1141.0	589.6	263.5	83.4	76.4	72.0	69.0	69.5	70.0
47.5°	1943.1	1755.5	1181.7	528.6	174.7	74.0	74.0	66.0	63.0	63.0	63.0
50°	2048.3	1841.8	1206.5	455.6	104.2	73.0	69.5	60.5	57.6	57.1	57.6
52.5°	2124.7	1902.4	1203.6	366.8	70.0	70.5	63.5	55.6	52.1	53.1	53.6
55°	2185.3	1940.6	1177.2	268.5	65.5	66.0	59.1	50.1	47.6	48.1	48.1
57.5°	2223.5	1950.0	1123.6	174.7	64.0	59.1	53.1	44.7	41.7	41.7	41.7
60°	2235.9	1945.0	1050.7	111.7	63.5	53.1	48.1	40.2	37.2	37.2	37.2
62.5°	2225.5	1916.3	927.1	80.4	59.1	49.6	43.7	35.7	32.8	31.8	31.8
65°	2188.2	1839.3	714.7	66.5	53.1	45.7	39.7	32.3	28.3	26.8	26.3
67.5°	2079.5	1672.6	415.9	62.5	48.1	41.7	36.7	29.3	24.8	22.3	21.8
68°	2051.3	1622.9	342.0	62.0	48.1	41.2	36.2	28.3	23.8	21.3	20.8
70°	1848.8	1309.3	98.3	59.1	47.1	39.7	33.3	25.8	21.3	18.4	17.9
72.5°	1392.2	767.3	61.5	52.6	46.7	35.2	32.3	25.8	18.9	15.9	14.9
75°	777.2	174.7	52.1	39.2	43.7	34.7	31.8	23.3	16.9	12.9	12.4
77.5°	159.8	50.6	44.7	27.3	33.3	30.3	26.8	19.9	15.4	9.9	9.4
80°	45.2	37.7	39.7	19.9	18.9	21.3	19.9	17.4	11.4	7.4	7.4
82.5°	29.3	27.8	35.7	13.4	9.9	9.9	12.9	10.4	9.9	6.0	6.0
85°	17.9	23.3	17.4	6.0	5.0	4.0	4.5	4.5	6.0	4.0	4.0
87.5°	2.5	2.5	2.5	2.5	2.5	2.0	1.5	1.5	1.5	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

(END OF REPORT)