

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: P233573

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233573  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-15)  
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  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1210mA LED AND TYPE IV OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5730 lumens  
Efficiency: N/A  
Efficacy: 114.6 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

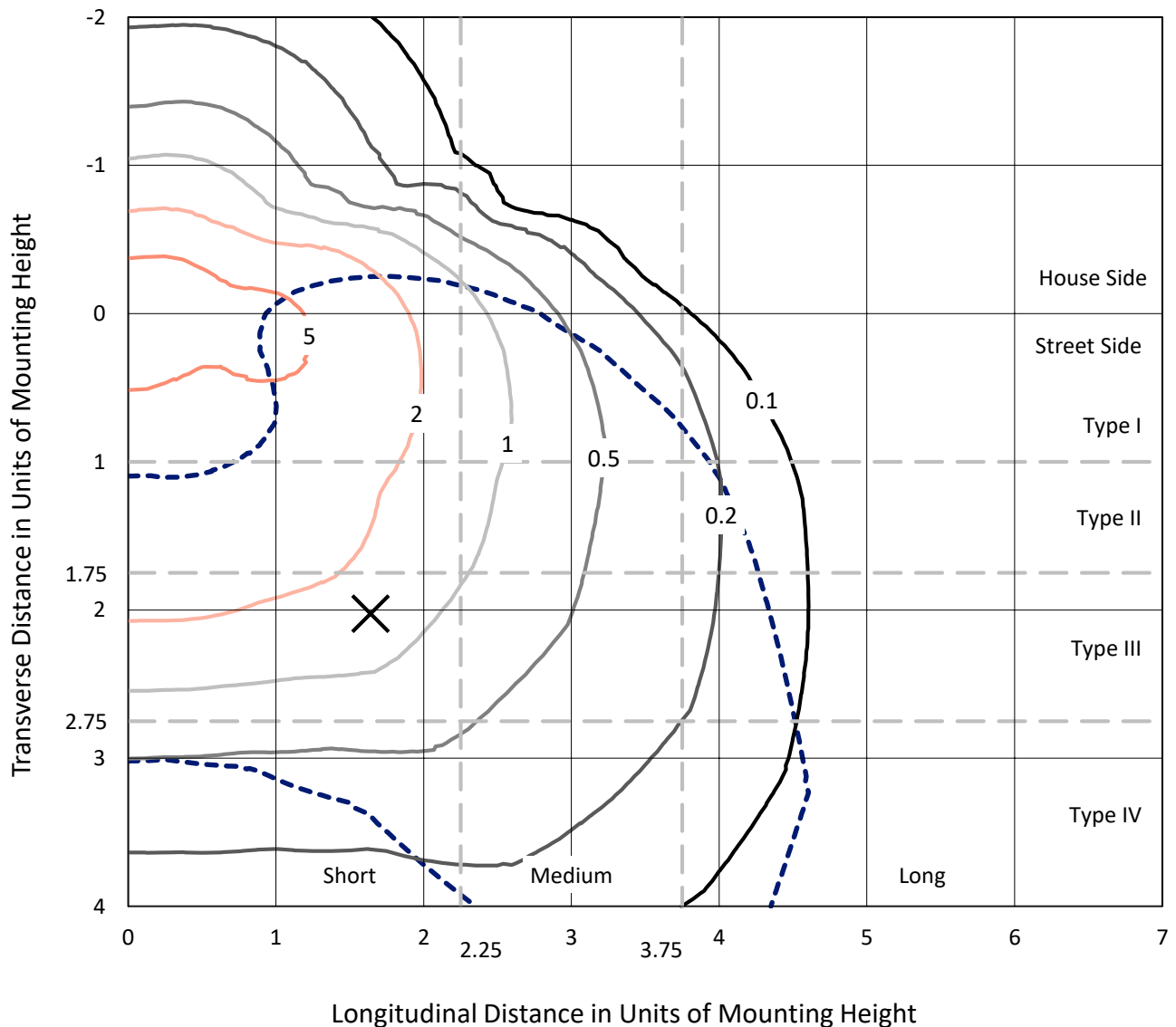
Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

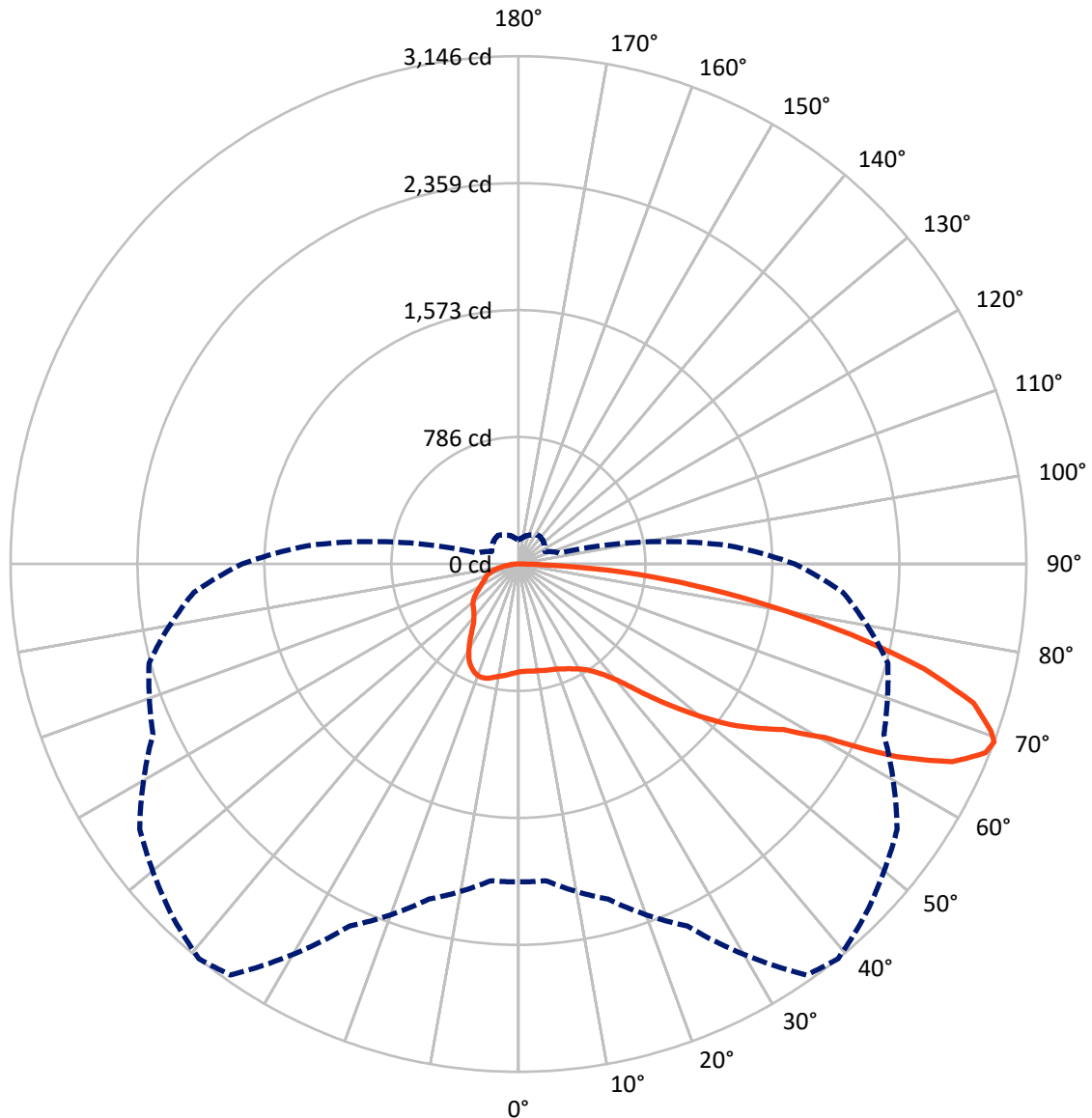
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.9 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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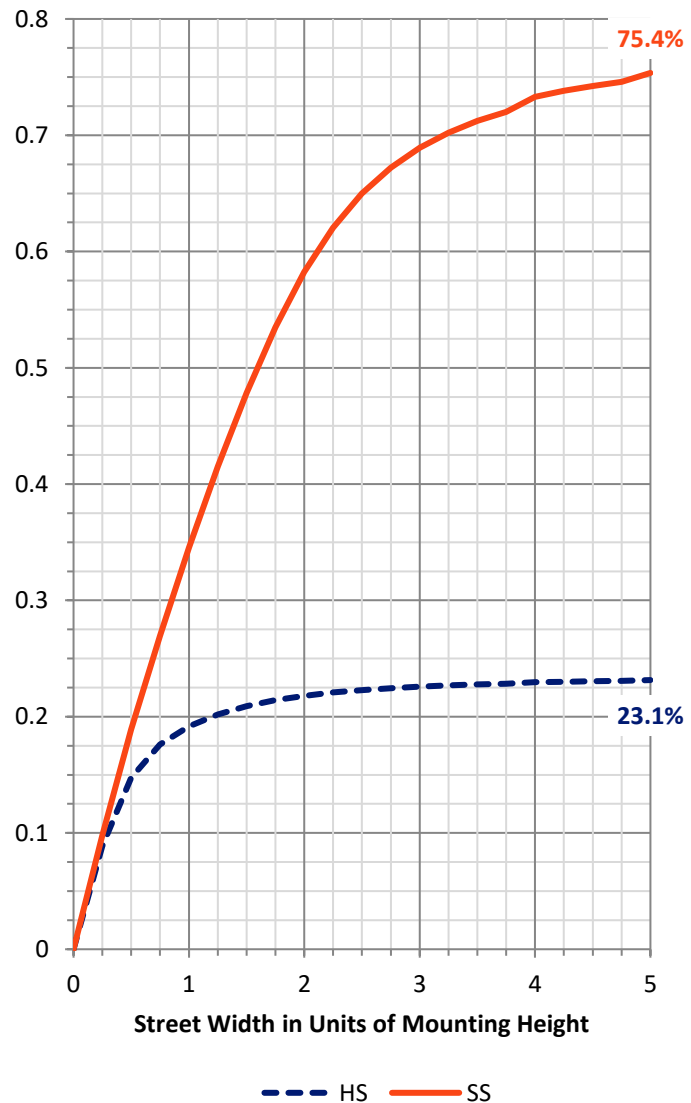
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1343.2	0.0	1343.2
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	4386.8	0.0	4386.8
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	5730.0	0.0	5730.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.9	1.1
10°-20°	200.5	3.5
20°-30°	337.5	5.9
30°-40°	488.9	8.5
40°-50°	790.3	13.8
50°-60°	1157.0	20.2
60°-70°	1448.1	25.3
70°-80°	1035.3	18.1
80°-90°	207.6	3.6
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°	5730.0	100.0
0°-180°	5730.0	100.0



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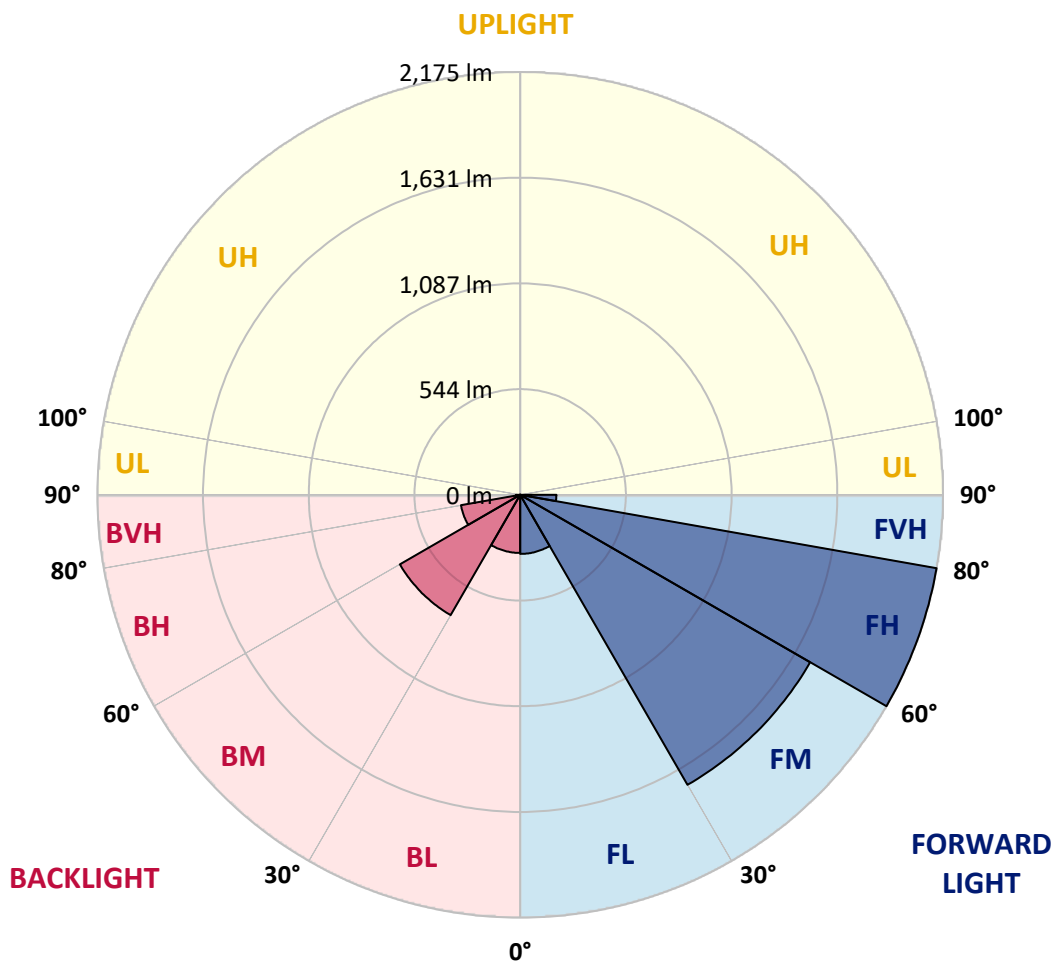
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	304.0	5.3			
FM (30°-60°)	1721.9	30.1			
FH (60°-80°)	2174.5	37.9			G2/5000
FVH (80°-90°)	186.4	3.3			G2/225
BL (0°-30°)	298.8	5.2	B1/500		
BM (30°-60°)	714.3	12.5	B1/1000		
BH (60°-80°)	308.9	5.4	B1/500		G1/500
BVH (80°-90°)	21.2	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4
2.5°	679.1	678.0	675.9	667.4	666.4	665.8	666.9	663.7	663.2	664.3	663.2
5°	679.6	678.5	675.9	668.5	667.4	666.4	666.9	664.3	664.8	667.4	667.4
7.5°	680.6	679.6	676.9	669.0	671.1	670.1	672.2	668.5	668.5	670.6	671.1
10°	678.0	677.5	675.9	670.1	673.2	671.1	673.2	673.8	675.9	677.5	676.9
12.5°	671.1	671.1	671.1	668.5	677.5	676.9	680.6	684.3	689.6	692.3	693.8
15°	666.9	666.4	670.1	669.5	680.6	682.2	688.6	698.1	706.0	712.8	715.0
17.5°	671.1	671.1	675.9	674.8	685.9	687.0	693.8	707.6	720.8	734.0	739.8
20°	675.9	676.4	682.2	683.8	694.4	693.8	700.7	717.6	735.5	755.1	765.1
22.5°	690.7	690.1	694.9	691.7	703.9	706.0	711.8	726.6	751.9	776.7	793.1
25°	701.8	703.3	708.1	706.0	716.0	718.7	728.2	742.4	772.5	802.1	831.1
27.5°	712.3	715.5	719.2	718.7	732.4	735.5	742.9	765.1	800.0	835.3	876.0
30°	728.2	727.1	729.7	734.5	752.4	754.6	763.5	790.5	832.7	878.6	933.0
32.5°	749.3	748.2	750.9	755.1	776.7	782.0	794.2	823.2	876.5	932.0	998.5
35°	782.5	785.2	787.3	792.6	813.7	821.1	837.5	874.4	936.2	1024.9	1120.0
37.5°	898.2	892.4	880.8	859.6	865.4	873.9	897.1	949.9	1039.7	1190.2	1277.3
40°	1078.8	1071.9	1035.5	973.7	945.7	947.8	970.5	1042.3	1164.8	1384.5	1464.8
42.5°	1248.8	1240.3	1197.1	1120.0	1064.5	1058.2	1060.3	1143.2	1302.1	1578.8	1621.6
45°	1409.3	1413.5	1347.5	1288.4	1225.0	1196.0	1187.0	1248.8	1454.7	1747.3	1760.5
47.5°	1563.0	1566.1	1491.7	1434.7	1373.4	1339.6	1322.2	1370.2	1595.2	1883.5	1871.3
50°	1719.8	1728.3	1626.3	1577.8	1521.3	1497.0	1480.1	1511.8	1750.4	2013.9	1976.4
52.5°	1941.0	1905.7	1772.1	1703.4	1663.3	1655.9	1638.5	1664.4	1915.2	2129.0	2050.9
55°	2187.1	2111.6	1971.1	1851.3	1795.8	1795.8	1780.5	1810.6	2085.2	2215.1	2111.6
57.5°	2266.8	2274.2	2225.7	2095.2	1946.3	1934.7	1919.9	1961.1	2230.9	2292.2	2134.3
60°	2406.2	2426.8	2464.3	2355.6	2282.2	2183.4	2093.7	2115.8	2356.6	2355.6	2158.6
62.5°	2475.4	2495.0	2612.2	2553.6	2622.7	2629.6	2461.7	2290.6	2449.5	2387.2	2170.2
65°	2409.9	2423.7	2580.0	2657.1	2857.7	2953.3	2870.4	2525.6	2498.7	2374.0	2126.9
67.5°	2195.0	2220.9	2350.3	2585.2	3067.3	3120.7	3043.1	2848.2	2519.8	2378.3	2092.1
69°	1969.0	1969.6	2149.1	2474.9	3108.5	3145.5	3050.4	2863.5	2497.6	2368.2	2017.6
70°	1841.8	1855.0	1988.0	2379.3	3093.2	3105.4	3032.5	2863.0	2482.3	2365.1	1946.9
72.5°	1437.3	1430.4	1563.0	1989.6	2920.0	2947.0	2866.7	2782.2	2469.6	2228.8	1646.9
75°	1004.8	1026.0	1155.9	1507.5	2516.1	2596.9	2596.9	2672.9	2273.2	1904.6	1190.7
77.5°	747.7	750.9	854.9	1151.6	2024.5	2108.4	2185.5	2249.4	1776.8	1304.8	532.3
80°	506.4	511.1	606.2	849.6	1500.1	1577.2	1699.2	1547.7	1057.1	451.5	60.7
82.5°	318.9	325.3	400.8	596.7	1069.3	1104.1	1141.6	873.9	352.2	52.3	38.5
85°	189.6	190.6	241.8	381.2	652.1	654.2	614.1	402.4	94.5	31.2	24.3
87.5°	79.2	83.4	105.6	169.0	191.1	151.0	94.0	32.2	14.3	12.7	8.4
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°	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4
2.5°	660.0	665.8	664.8	666.4	668.5	672.7	677.5	675.4	678.0	683.8	683.8
5°	665.8	670.6	672.2	675.4	678.0	682.2	685.4	684.3	690.1	698.6	698.6
7.5°	670.6	674.3	679.6	683.3	685.9	694.4	697.5	695.4	699.6	709.7	710.2
10°	677.5	681.2	689.1	692.8	698.1	702.3	706.5	706.0	710.2	719.2	720.8
12.5°	694.4	697.0	708.1	713.4	713.4	718.7	715.5	710.2	712.3	717.6	718.7
15°	716.5	720.2	734.5	737.1	734.5	735.5	728.2	711.3	702.8	704.4	704.9
17.5°	741.9	748.2	764.6	760.9	757.7	749.8	730.8	705.5	680.1	670.6	672.2
20°	768.8	776.7	795.7	787.8	776.2	755.6	725.0	681.7	642.6	619.9	618.9
22.5°	800.0	810.0	828.0	814.2	788.4	752.4	705.5	652.6	603.0	567.6	565.5
25°	842.7	853.8	860.2	832.7	790.5	740.8	677.5	613.0	550.7	508.5	505.3
27.5°	891.3	897.1	884.5	843.3	780.4	716.0	642.6	562.9	494.2	459.4	454.6
30°	945.2	940.4	900.8	838.0	754.6	676.9	588.2	499.0	444.1	416.1	411.9
32.5°	1007.5	992.7	913.5	823.2	720.2	625.7	529.1	458.3	414.5	386.5	384.4
35°	1109.9	1067.7	934.1	800.5	674.8	565.5	474.7	423.5	389.2	354.3	349.0
37.5°	1258.3	1178.6	964.2	779.4	625.7	507.4	433.5	395.5	365.4	326.3	318.9
40°	1412.5	1309.0	1013.8	756.1	579.8	464.7	410.8	383.9	354.3	317.3	307.3
42.5°	1553.5	1433.1	1071.9	727.1	531.7	430.3	399.7	380.7	351.1	316.3	308.4
45°	1681.3	1549.8	1131.6	693.8	478.9	402.9	390.7	374.9	344.8	311.5	305.2
47.5°	1789.0	1649.0	1191.8	655.3	428.2	386.0	381.2	364.3	336.4	304.1	298.9
50°	1878.2	1720.3	1226.1	614.6	386.5	373.3	367.5	346.4	317.9	287.8	284.6
52.5°	1944.2	1764.7	1257.2	593.0	353.8	352.7	349.0	328.4	301.0	269.8	263.5
55°	1990.2	1801.1	1243.5	576.1	318.9	326.9	324.7	312.1	288.8	252.4	247.1
57.5°	1992.8	1804.3	1213.9	475.8	284.6	295.7	299.4	301.5	275.6	243.4	237.1
60°	1990.2	1781.1	1159.0	349.0	251.3	264.5	278.3	278.3	260.3	228.6	223.9
62.5°	1978.0	1735.1	1031.2	248.7	224.9	242.4	260.3	252.4	237.1	211.7	207.0
65°	1922.6	1658.6	806.8	202.8	213.9	229.7	238.1	227.1	207.5	181.1	179.0
67.5°	1821.7	1483.2	466.8	185.9	204.3	218.6	225.5	208.6	190.1	164.7	163.7
69°	1710.8	1305.8	263.0	181.6	198.5	211.2	217.0	198.5	180.6	156.3	151.5
70°	1611.6	1147.4	171.1	177.9	192.7	206.5	210.7	191.7	174.8	150.0	146.8
72.5°	1220.8	691.2	115.1	162.6	176.9	187.5	193.8	175.8	156.8	132.0	125.7
75°	666.9	188.0	101.4	139.4	157.4	171.6	173.2	150.5	123.0	97.7	95.0
77.5°	129.9	64.4	87.1	115.1	125.1	142.0	141.0	125.7	106.7	82.9	79.7
80°	49.1	46.5	72.9	82.4	88.2	106.1	112.5	101.4	88.7	56.5	48.6
82.5°	33.3	34.3	54.4	48.6	53.9	62.8	79.2	77.1	70.2	38.5	34.3
85°	23.2	26.9	30.1	20.6	26.4	39.6	52.3	50.7	43.3	26.9	24.3
87.5°	6.9	7.4	8.4	10.6	16.4	29.6	42.8	35.4	23.8	20.1	17.4
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)