

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: P233729

Luminaire Tested: **VRDN-C018-D-UNV-T3-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233729  
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-C018-D-UNV-T3-7030-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1210mA LED AND TYPE III OPTIC WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5362 lumens  
Efficiency: N/A  
Efficacy: 107.2 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 - G1

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

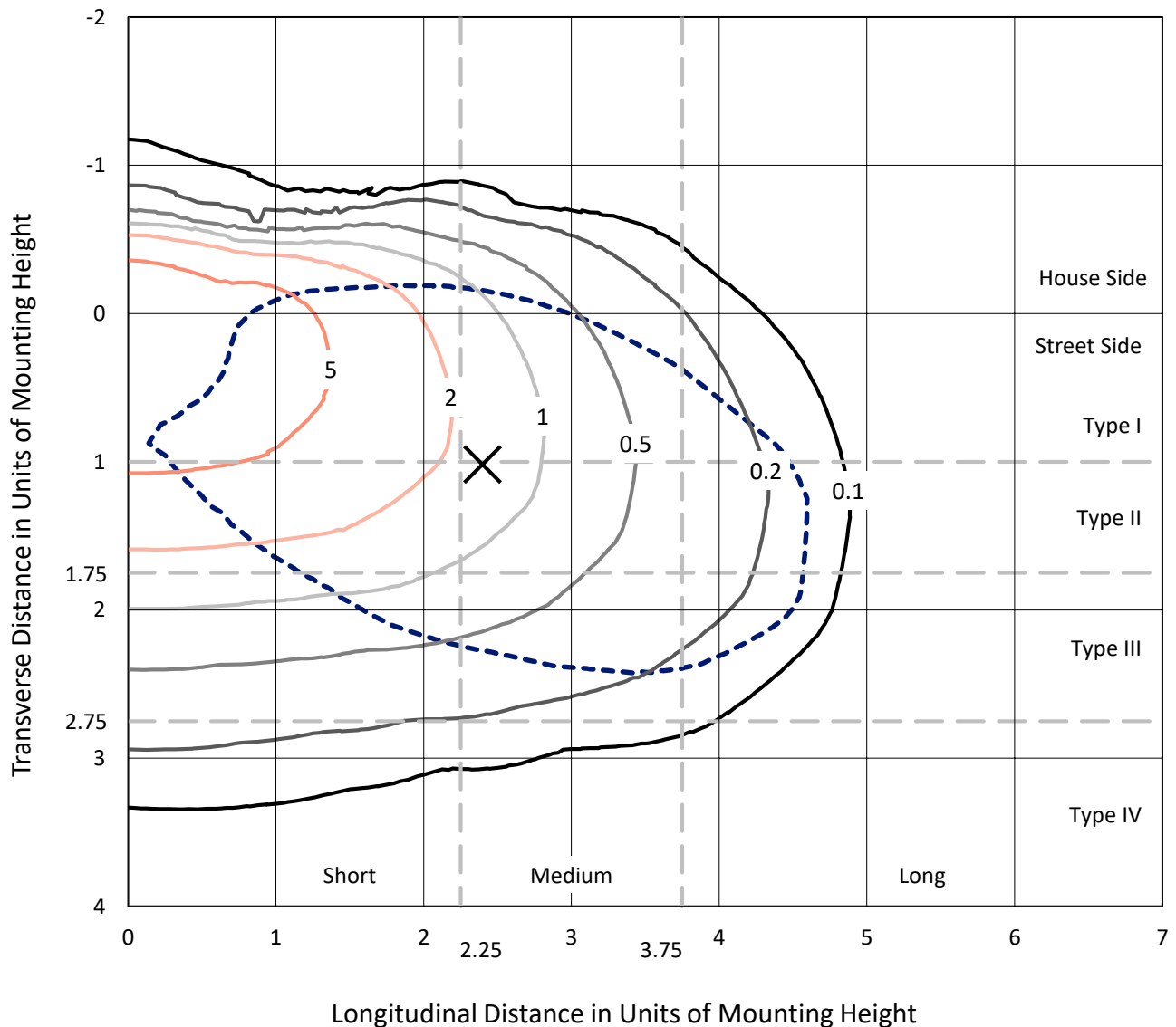


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### Iso-Footcandle Lines of Horizontal Illumination

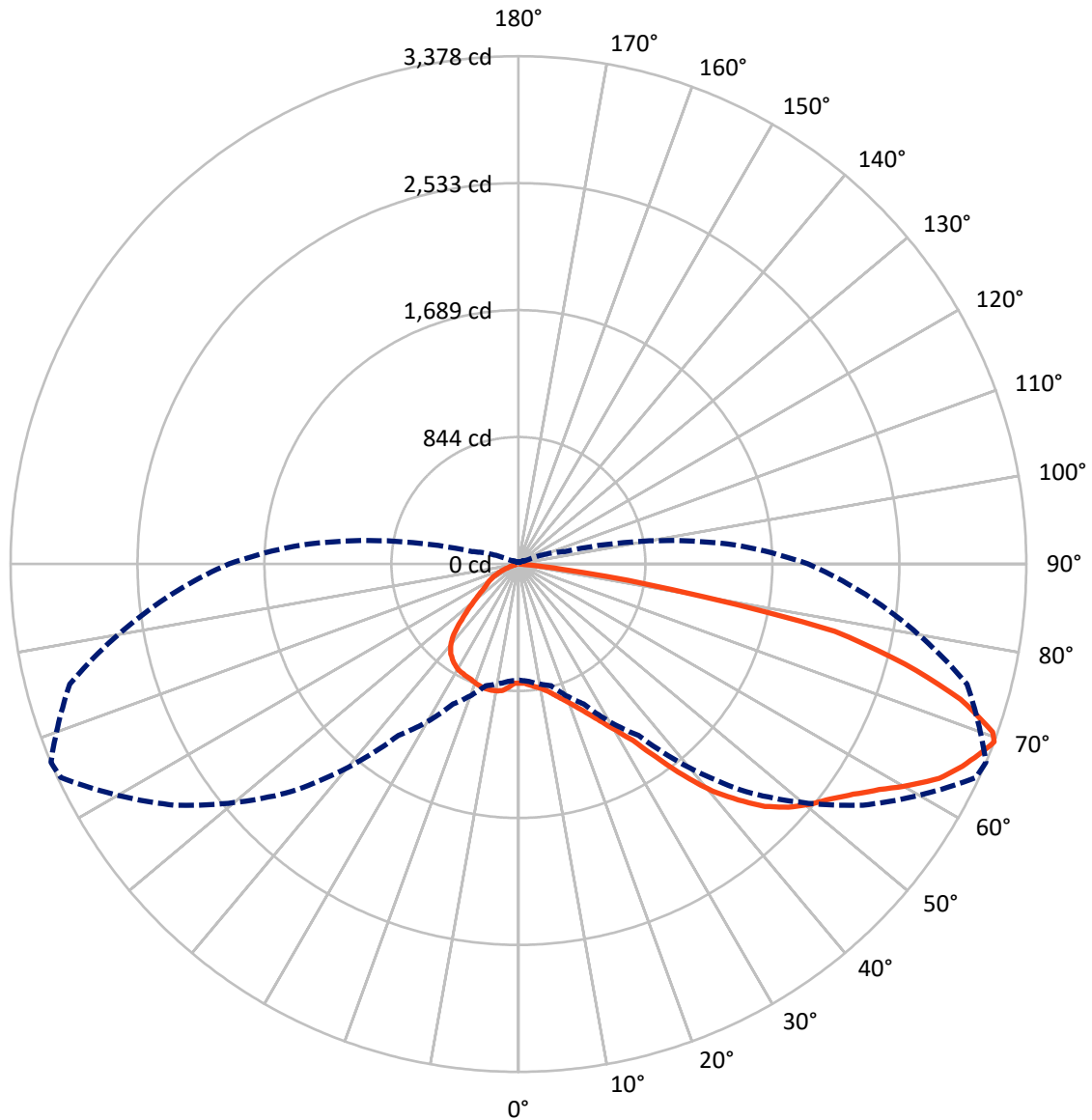
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.7 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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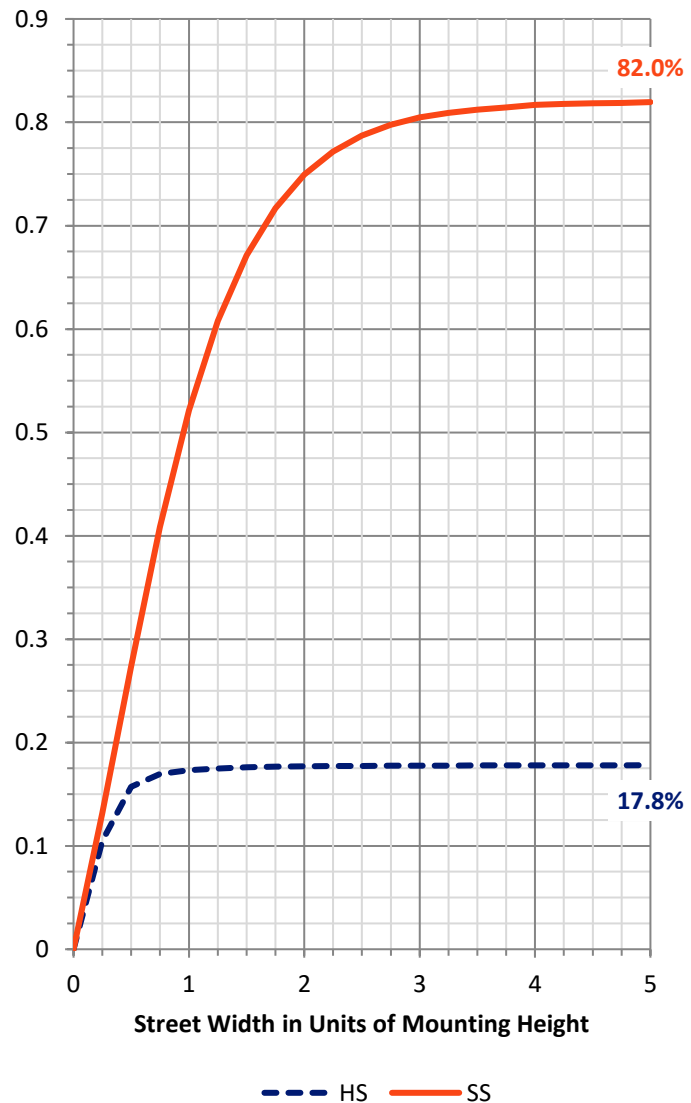
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	966.6	0.0	966.6
	% Fixture	18.0	0.0	18.0
<b>Street Side</b>	Lumens	4395.4	0.0	4395.4
	% Fixture	82.0	0.0	82.0
<b>Total</b>	Lumens	5362.0	0.0	5362.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.1	1.5
10°-20°	251.7	4.7
20°-30°	429.7	8.0
30°-40°	649.6	12.1
40°-50°	917.7	17.1
50°-60°	1109.1	20.7
60°-70°	1170.3	21.8
70°-80°	704.5	13.1
80°-90°	49.2	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°	5362.0	100.0
0°-180°	5362.0	100.0



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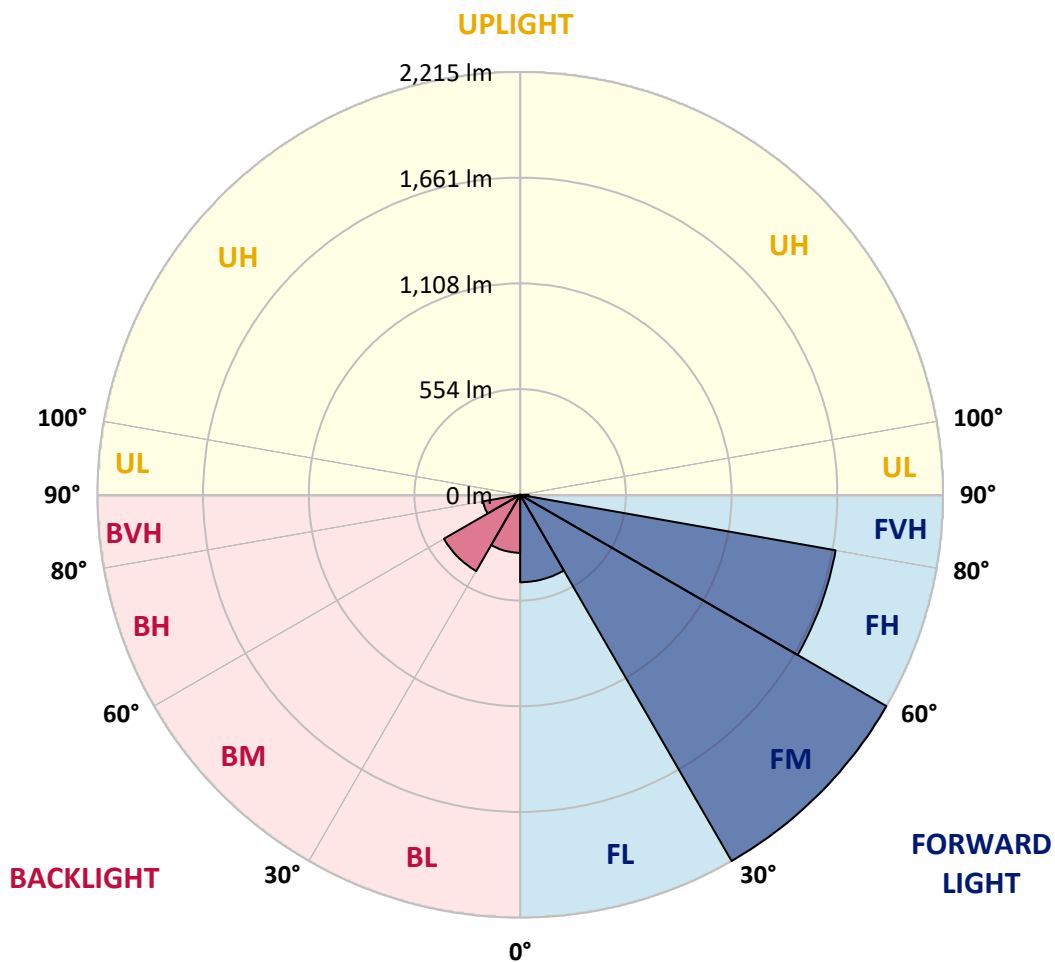
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	457.9	8.5			
FM	(30°-60°)	2215.3	41.3			
FH	(60°-80°)	1677.8	31.3			G1/1800
FVH	(80°-90°)	44.5	0.8			G1/100
BL	(0°-30°)	303.6	5.7	B1/500		
BM	(30°-60°)	461.2	8.6	B1/1000		
BH	(60°-80°)	197.1	3.7	B1/500		G1/500
BVH	(80°-90°)	4.8	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-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0
2.5°	813.5	812.2	812.2	804.9	798.1	796.4	795.9	793.8	794.2	791.2	788.3
5°	837.0	837.0	836.1	826.7	819.4	814.7	811.8	807.9	808.3	806.2	803.6
7.5°	872.4	872.9	871.1	858.8	851.5	840.0	833.1	825.9	825.4	822.9	823.7
10°	916.0	917.3	914.7	898.9	886.5	870.7	856.2	843.4	842.5	839.5	842.1
12.5°	965.1	966.8	960.4	944.2	930.1	905.3	887.8	870.7	868.2	867.7	869.4
15°	1021.5	1022.4	1020.3	996.3	979.2	956.6	928.0	906.2	903.6	904.0	901.9
17.5°	1084.3	1086.5	1081.8	1060.4	1037.8	1006.6	972.4	945.5	944.2	942.9	933.5
20°	1151.0	1153.1	1150.1	1130.1	1103.1	1063.8	1022.0	991.2	990.8	987.8	966.0
22.5°	1226.2	1229.2	1227.5	1203.1	1174.5	1131.8	1079.6	1047.6	1046.7	1037.3	1004.4
25°	1307.8	1306.9	1308.6	1282.6	1255.7	1210.8	1146.3	1113.0	1113.0	1101.4	1052.7
27.5°	1386.8	1386.4	1389.4	1371.0	1342.8	1300.5	1222.8	1189.0	1192.0	1175.3	1110.8
30°	1463.7	1463.7	1471.0	1459.0	1438.1	1393.7	1317.6	1282.1	1286.0	1268.5	1184.3
32.5°	1535.5	1538.9	1551.3	1544.0	1528.2	1488.1	1423.1	1390.7	1399.6	1406.9	1321.0
35°	1588.5	1591.9	1620.5	1623.1	1619.2	1592.3	1544.0	1565.0	1575.7	1632.9	1537.2
37.5°	1635.1	1639.3	1673.5	1694.9	1707.3	1690.6	1693.6	1763.7	1783.7	1851.2	1721.8
40°	1669.2	1678.6	1712.4	1741.9	1785.4	1805.1	1853.8	1953.3	1985.8	2012.7	1848.7
42.5°	1645.7	1652.1	1711.5	1790.6	1854.2	1923.4	2002.5	2120.8	2145.2	2136.6	1960.6
45°	1611.1	1618.8	1681.2	1803.4	1908.9	2046.9	2143.5	2271.6	2299.4	2252.0	2057.2
47.5°	1572.2	1582.9	1650.4	1786.3	1954.6	2160.6	2271.2	2401.1	2417.3	2355.0	2138.3
50°	1532.9	1544.9	1621.4	1772.2	1990.1	2255.4	2364.4	2506.6	2511.3	2440.4	2211.4
52.5°	1480.0	1492.4	1576.1	1742.7	2014.9	2317.8	2446.0	2593.4	2596.3	2532.7	2280.6
55°	1412.9	1428.7	1517.1	1699.1	2020.8	2354.1	2497.6	2683.5	2703.6	2632.7	2337.4
57.5°	1333.8	1348.4	1445.8	1636.3	1990.9	2366.5	2569.9	2802.7	2830.5	2733.9	2384.4
60°	1242.8	1259.5	1357.3	1555.2	1930.7	2401.1	2689.5	2971.0	2987.7	2839.9	2425.9
62.5°	1149.7	1161.7	1250.5	1441.1	1836.7	2422.0	2795.4	3129.1	3140.2	2942.0	2450.7
65°	1017.3	1032.2	1118.9	1310.3	1701.3	2381.9	2836.0	3237.2	3244.0	3027.4	2438.7
67.5°	873.3	885.2	948.5	1152.7	1523.5	2254.5	2819.4	3309.4	3331.2	3094.1	2384.4
69°	771.2	783.1	837.8	1026.7	1391.5	2141.8	2795.9	3358.5	3377.8	3089.4	2315.2
70°	691.7	703.7	755.4	932.7	1288.1	2046.5	2758.7	3333.8	3346.2	3036.8	2247.7
72.5°	494.7	506.7	549.0	655.8	975.8	1682.0	2528.4	3058.6	3075.3	2784.3	2008.9
75°	258.9	287.5	363.6	423.8	578.1	1184.3	2102.0	2630.5	2654.9	2443.4	1652.1
77.5°	33.3	35.0	102.5	172.2	238.8	499.4	1493.2	2112.3	2150.7	1955.5	1142.4
80°	26.9	27.3	35.5	85.9	118.8	202.5	529.8	988.6	1035.2	869.0	420.0
82.5°	18.8	19.7	27.8	45.3	38.9	73.9	184.1	279.4	288.0	249.1	167.5
85°	10.7	10.7	13.2	17.5	12.4	27.8	38.0	40.6	36.3	35.9	26.9
87.5°	3.0	3.4	3.8	3.0	1.3	1.3	1.7	1.7	1.7	1.3	1.3
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°	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0	793.0
2.5°	793.0	792.1	792.5	794.2	796.8	806.2	812.6	813.5	816.5	827.6	826.3
5°	806.6	811.8	814.7	823.7	829.7	842.5	850.2	851.1	855.3	866.9	867.3
7.5°	825.9	834.4	838.7	848.9	851.1	857.0	859.2	857.0	857.5	867.7	868.6
10°	842.5	853.2	853.2	855.8	851.9	852.3	845.5	839.1	835.7	844.7	846.8
12.5°	868.2	871.1	864.3	856.6	845.1	834.8	823.3	813.0	804.9	810.0	807.1
15°	894.6	889.9	873.3	853.2	832.7	815.2	791.2	776.3	762.2	765.2	762.6
17.5°	921.1	905.8	879.7	846.4	816.5	783.1	749.8	726.3	700.7	698.5	694.7
20°	946.8	924.5	881.4	832.3	790.4	743.4	691.7	651.5	613.5	603.7	597.3
22.5°	977.5	945.5	883.5	818.6	762.2	698.1	619.9	557.5	516.5	502.9	496.5
25°	1016.8	974.5	889.5	808.3	733.6	642.1	534.9	463.6	419.1	395.6	393.5
27.5°	1063.4	1009.6	899.8	795.1	693.0	567.4	446.9	372.6	325.1	301.2	293.5
30°	1124.5	1053.1	909.2	784.8	635.7	485.8	354.6	271.7	215.3	199.9	191.8
32.5°	1240.3	1124.1	921.1	760.9	568.2	396.5	251.2	167.5	129.0	118.8	118.8
35°	1428.7	1280.0	951.0	728.0	487.1	288.8	150.8	94.0	76.9	70.9	67.9
37.5°	1598.7	1437.2	1025.8	677.2	388.4	170.9	86.3	58.1	52.6	53.4	53.4
40°	1718.8	1544.9	1108.3	608.4	263.6	91.4	54.7	46.6	47.4	47.9	47.9
42.5°	1821.8	1636.8	1153.6	526.8	143.6	59.4	47.0	42.3	43.6	43.2	42.7
45°	1908.1	1711.5	1168.5	414.4	69.6	52.6	42.7	38.9	38.9	38.5	38.5
47.5°	1982.0	1777.7	1140.7	308.0	56.4	48.3	40.6	35.9	35.5	37.6	37.6
50°	2049.5	1829.0	1071.5	233.3	54.7	44.4	38.5	33.3	33.8	36.7	36.7
52.5°	2105.9	1859.4	969.0	174.7	50.8	41.0	35.5	31.2	31.2	34.2	34.2
55°	2147.7	1859.4	890.8	130.7	48.7	37.6	32.9	29.9	28.2	29.1	29.5
57.5°	2168.7	1824.3	828.0	106.0	46.1	34.2	30.3	26.1	23.1	23.9	23.5
60°	2163.1	1804.2	755.8	94.4	43.2	31.6	26.9	22.2	19.2	18.4	18.4
62.5°	2152.9	1781.6	665.6	82.0	40.2	29.5	22.2	17.9	16.2	15.4	15.8
65°	2114.0	1708.1	551.6	68.4	37.2	28.6	18.8	15.8	14.1	13.2	13.2
67.5°	2020.0	1575.7	417.0	57.7	34.6	23.1	16.2	13.7	12.0	11.1	11.1
69°	1926.9	1449.2	320.0	52.6	32.9	20.9	15.0	12.4	11.1	9.8	9.8
70°	1846.5	1351.4	250.8	49.1	31.6	20.1	14.5	12.0	10.7	9.4	9.4
72.5°	1572.2	1071.9	127.3	42.7	26.5	17.5	12.8	10.7	9.0	7.7	7.7
75°	1219.8	738.7	84.2	33.8	20.5	15.8	11.5	9.4	7.7	6.4	6.0
77.5°	734.0	288.8	60.2	21.8	13.2	12.4	9.4	7.7	6.4	5.1	5.1
80°	202.5	123.9	40.6	14.5	7.7	8.1	6.8	5.6	4.7	3.8	3.8
82.5°	121.8	80.3	26.9	9.4	5.1	5.1	3.8	3.8	3.0	3.0	3.0
85°	20.9	16.2	6.4	3.8	3.0	3.0	2.1	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.7	1.7	1.3	0.9	0.4	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)