

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: P233521

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233521
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-C018-D-UNV-T3-7030
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1210mA LED AND TYPE III OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5807 lumens
Efficiency: N/A
Efficacy: 116.1 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

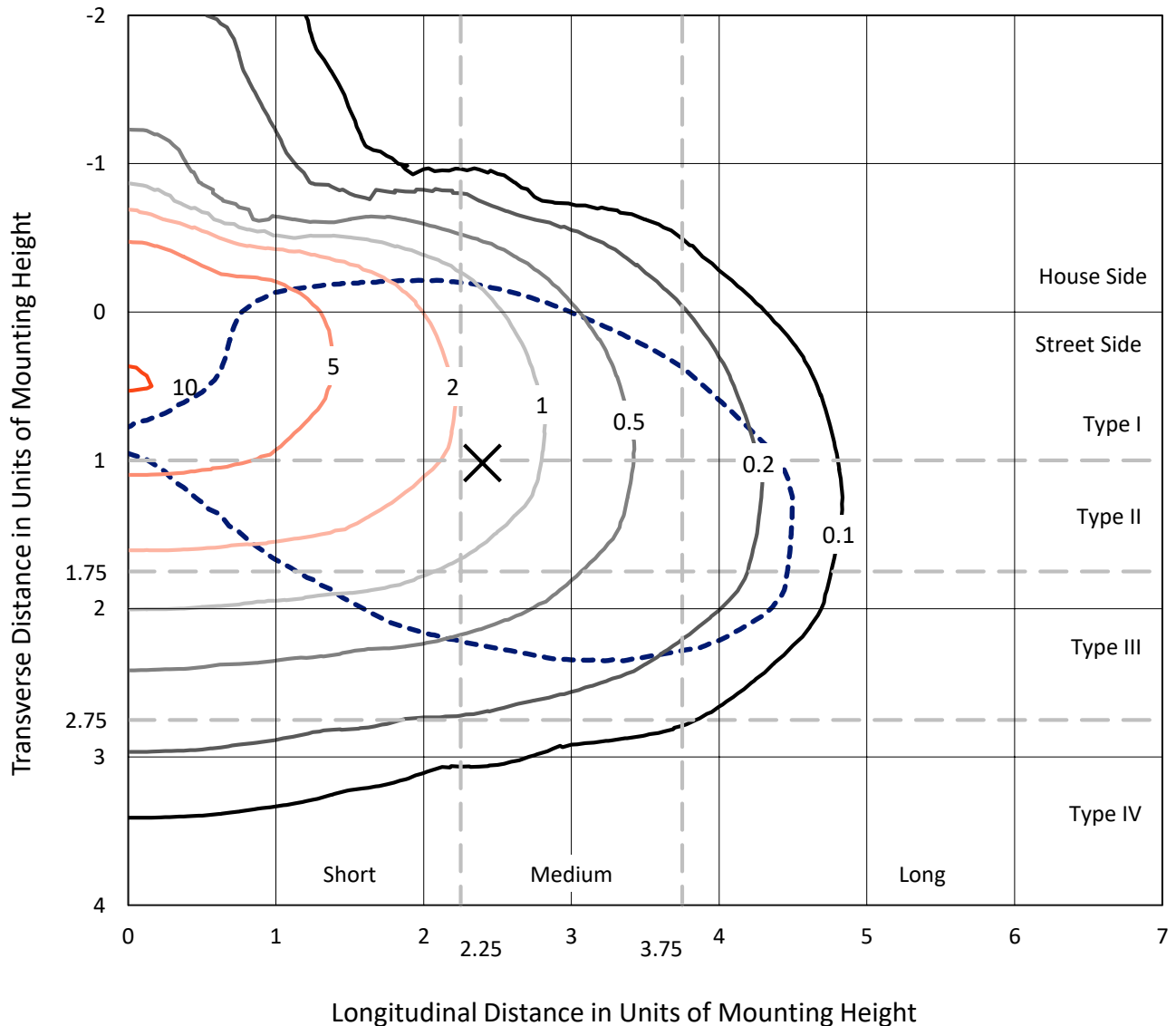
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

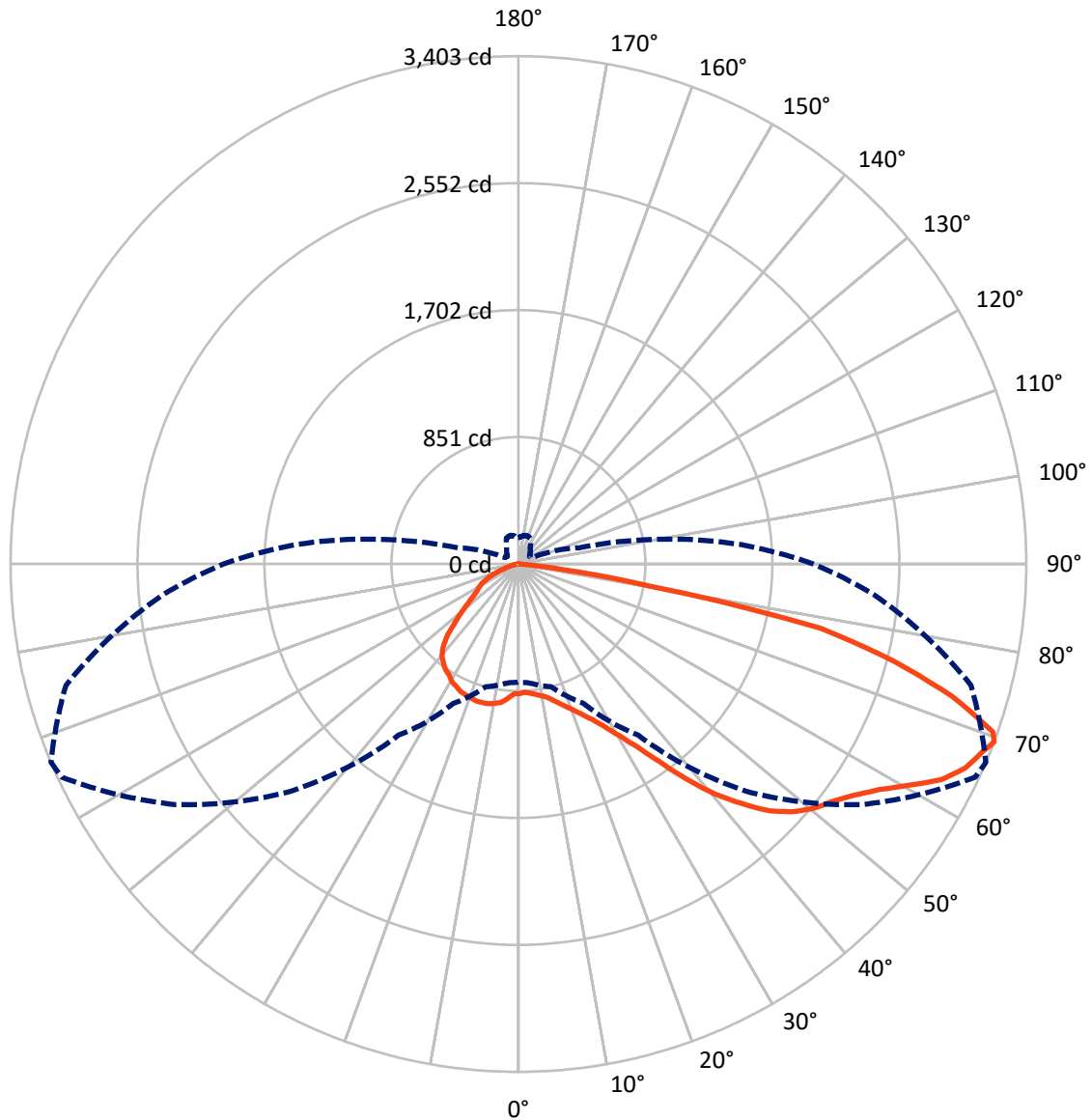
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.1 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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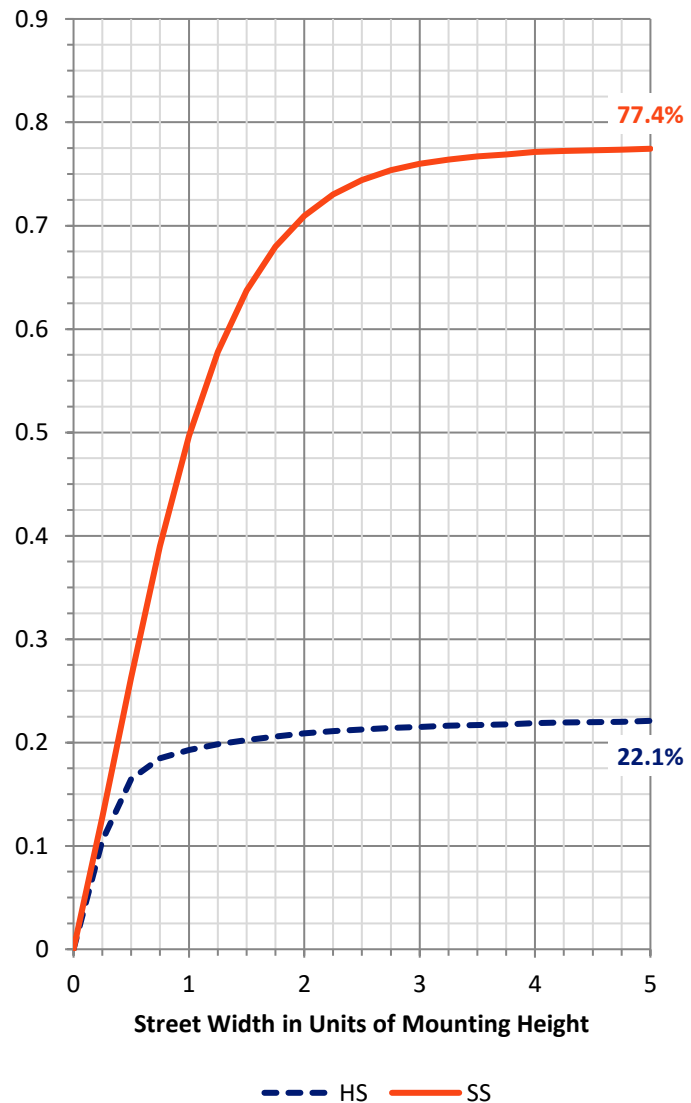
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1307.7	0.0	1307.7
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	4499.3	0.0	4499.3
	% Fixture	77.5	0.0	77.5
Total	Lumens	5807.0	0.0	5807.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	1.5
10°-20°	280.4	4.8
20°-30°	483.0	8.3
30°-40°	718.4	12.4
40°-50°	989.4	17.0
50°-60°	1182.8	20.4
60°-70°	1248.2	21.5
70°-80°	748.0	12.9
80°-90°	68.8	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°	5807.0	100.0
0°-180°	5807.0	100.0



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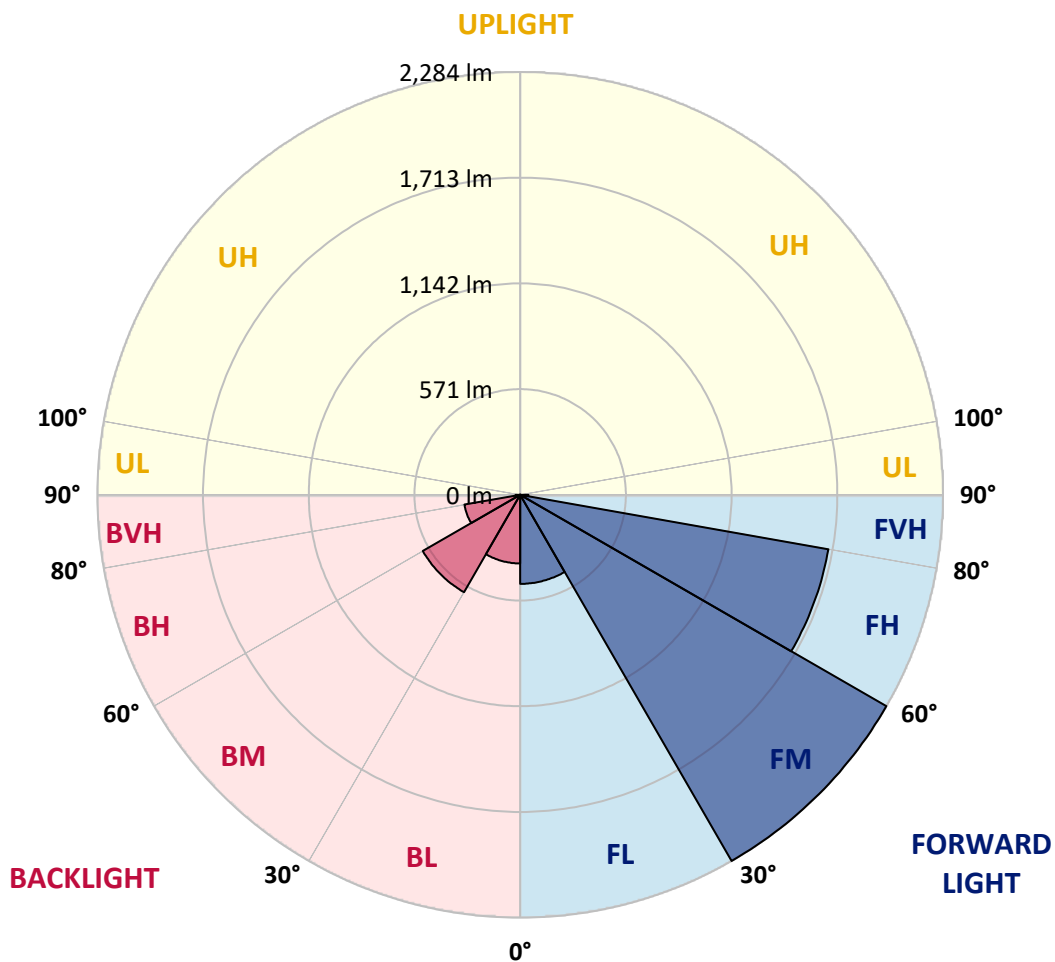
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	480.8	8.3			
FM	(30°-60°)	2283.6	39.3			
FH	(60°-80°)	1690.4	29.1			G1/1800
FVH	(80°-90°)	44.5	0.8			G1/100
BL	(0°-30°)	370.5	6.4	B1/500		
BM	(30°-60°)	607.1	10.5	B1/1000		
BH	(60°-80°)	305.8	5.3	B1/500		G1/500
BVH	(80°-90°)	24.3	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-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6
2.5°	882.9	882.3	879.7	870.2	869.1	868.1	861.7	862.3	860.7	862.3	862.8
5°	907.2	905.0	902.4	892.4	888.7	883.9	874.4	873.9	870.2	871.2	872.3
7.5°	937.3	935.1	933.0	921.4	917.7	909.3	894.5	887.1	883.9	885.0	886.6
10°	977.9	974.2	971.0	954.1	948.3	934.1	916.1	903.5	899.2	900.8	905.0
12.5°	1024.4	1019.6	1014.3	996.9	989.0	966.8	945.7	929.3	923.0	926.7	929.9
15°	1072.4	1069.8	1067.7	1047.1	1036.0	1011.7	985.3	964.7	958.9	962.1	963.7
17.5°	1135.8	1134.2	1130.5	1109.4	1088.3	1060.3	1026.0	1004.3	998.5	1000.1	996.4
20°	1205.0	1200.7	1198.6	1174.9	1152.7	1114.1	1074.5	1043.9	1042.3	1042.9	1031.2
22.5°	1282.6	1277.8	1273.6	1252.0	1224.5	1179.6	1127.9	1093.5	1094.6	1095.7	1069.8
25°	1361.8	1358.1	1354.4	1333.8	1306.3	1257.2	1194.9	1156.4	1155.9	1156.4	1120.5
27.5°	1444.7	1440.5	1439.9	1423.0	1395.6	1345.4	1273.6	1234.5	1234.5	1232.4	1178.0
30°	1518.6	1522.8	1522.8	1513.3	1487.5	1437.3	1369.7	1330.6	1335.9	1331.7	1262.5
32.5°	1599.4	1598.3	1605.7	1598.3	1577.2	1530.8	1474.3	1449.4	1458.4	1472.1	1403.0
35°	1646.4	1653.8	1672.3	1682.8	1672.8	1634.8	1593.6	1612.6	1624.7	1686.5	1603.6
37.5°	1700.8	1707.1	1732.5	1758.3	1762.6	1742.0	1742.0	1804.3	1828.0	1908.8	1812.2
40°	1738.3	1744.6	1772.1	1802.2	1843.3	1857.6	1894.6	1991.2	2025.0	2079.4	1967.4
42.5°	1716.1	1719.3	1778.4	1851.8	1912.5	1981.2	2039.8	2162.3	2194.5	2232.5	2095.2
45°	1677.0	1682.8	1748.3	1866.6	1971.1	2107.4	2181.3	2323.3	2360.3	2356.6	2193.4
47.5°	1633.7	1642.7	1715.6	1847.6	2021.3	2216.7	2310.7	2458.5	2479.6	2453.2	2261.5
50°	1585.7	1601.0	1678.6	1828.6	2057.7	2312.2	2406.8	2559.9	2571.0	2517.1	2321.2
52.5°	1530.8	1540.8	1626.9	1792.1	2083.1	2375.6	2483.3	2635.4	2640.1	2596.3	2384.1
55°	1454.7	1463.7	1559.3	1743.6	2086.8	2413.1	2532.4	2716.2	2732.0	2689.3	2441.1
57.5°	1372.9	1384.0	1482.2	1673.3	2053.0	2428.4	2591.6	2820.2	2850.8	2789.6	2487.0
60°	1277.8	1292.1	1391.4	1587.8	1986.4	2452.2	2701.9	2971.7	3009.8	2903.1	2530.8
62.5°	1179.1	1187.0	1278.4	1469.5	1883.0	2464.3	2802.2	3144.9	3181.4	3010.3	2551.4
65°	1040.2	1052.9	1134.2	1327.5	1737.2	2412.0	2849.2	3265.9	3292.3	3097.4	2531.4
67.5°	892.9	892.9	962.1	1157.4	1542.9	2273.7	2830.2	3323.9	3355.6	3158.7	2468.0
69°	791.0	798.9	851.7	1029.7	1400.3	2150.7	2809.6	3377.3	3403.1	3139.1	2395.1
70°	712.8	719.7	773.0	936.7	1294.2	2053.5	2765.3	3353.5	3372.5	3078.9	2318.6
72.5°	524.3	530.1	567.1	652.6	973.2	1657.0	2493.4	3031.9	3043.6	2769.0	2045.6
75°	357.5	360.6	388.6	440.9	567.6	1158.5	2037.1	2560.9	2595.3	2401.5	1674.9
77.5°	123.6	133.1	150.0	202.8	242.9	455.2	1380.8	2018.1	2069.3	1859.7	1171.7
80°	42.2	41.7	80.3	104.0	127.8	209.1	436.7	845.9	894.0	766.7	421.9
82.5°	31.7	32.7	53.3	57.6	39.1	77.1	170.0	258.7	283.6	247.6	174.8
85°	20.1	19.5	23.8	24.8	18.0	32.7	41.2	41.7	43.3	37.5	38.0
87.5°	11.1	11.1	10.6	9.0	4.8	4.2	3.7	3.7	3.2	3.2	3.2
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°	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6
2.5°	860.2	867.6	869.1	871.2	876.5	883.4	892.9	892.9	896.6	907.7	911.4
5°	872.3	881.3	892.9	905.0	919.3	934.6	949.9	955.2	962.6	977.4	980.5
7.5°	890.8	900.8	920.9	937.3	949.4	964.7	977.4	979.5	989.0	1002.7	1005.4
10°	909.8	918.8	938.8	947.3	963.7	980.5	986.9	990.1	998.0	1008.5	1007.0
12.5°	935.7	938.3	952.6	958.4	966.3	976.9	980.0	980.0	984.8	1001.7	1002.2
15°	961.0	961.0	963.1	960.0	961.0	966.3	966.8	960.0	965.2	973.7	970.5
17.5°	987.9	980.5	971.0	957.3	945.2	944.6	933.6	917.2	912.4	924.6	924.1
20°	1013.3	1000.6	977.9	946.8	929.9	907.2	879.2	869.7	869.1	871.2	869.7
22.5°	1046.6	1020.7	979.5	936.7	890.3	854.4	831.1	798.9	797.9	793.1	785.7
25°	1086.2	1049.2	986.4	925.6	858.0	811.6	755.6	721.3	701.8	706.0	693.3
27.5°	1137.4	1092.5	989.0	901.3	813.7	735.0	667.4	623.1	606.2	598.8	590.3
30°	1207.6	1138.4	1008.0	880.8	758.8	654.8	571.9	507.4	483.1	489.5	490.5
32.5°	1320.1	1225.6	1018.0	840.1	695.4	567.1	459.4	389.7	375.4	393.4	398.1
35°	1516.0	1360.7	1041.8	815.8	623.1	464.7	341.6	313.1	316.3	331.6	332.7
37.5°	1708.7	1531.8	1115.2	763.0	536.5	344.3	265.1	249.8	265.1	284.6	287.2
40°	1843.9	1665.4	1180.1	710.7	415.0	249.2	202.2	183.8	205.9	237.1	242.9
42.5°	1963.7	1771.5	1226.1	638.4	284.1	177.9	145.2	150.0	182.7	205.4	210.7
45°	2049.8	1844.4	1257.8	544.4	181.1	134.6	129.9	145.2	176.4	194.3	195.9
47.5°	2104.2	1887.2	1234.5	428.8	136.2	127.3	127.8	147.3	178.5	198.5	198.0
50°	2153.3	1909.9	1159.0	340.1	129.4	122.0	130.4	153.1	185.3	203.8	202.8
52.5°	2205.6	1932.1	1067.1	266.7	124.1	119.3	133.6	156.8	185.3	197.0	195.4
55°	2250.5	1951.6	998.0	214.4	120.4	118.8	136.8	162.6	184.3	189.0	185.9
57.5°	2273.7	1918.3	923.0	180.1	116.7	118.8	138.9	161.6	190.6	205.9	202.8
60°	2261.0	1887.2	862.3	167.4	111.4	118.3	139.9	173.2	233.9	248.2	247.1
62.5°	2237.8	1852.9	777.3	150.5	105.6	119.3	139.4	183.8	269.3	264.5	251.3
65°	2190.3	1784.2	661.1	131.0	99.8	121.4	139.4	207.0	235.0	229.7	223.9
67.5°	2088.9	1635.8	529.1	112.5	93.5	115.1	137.3	197.0	202.2	188.5	181.6
69°	1975.4	1494.3	418.7	102.4	89.8	111.9	136.8	190.1	199.1	184.3	176.4
70°	1886.6	1384.0	338.5	95.0	86.1	110.9	136.2	185.3	197.5	181.1	172.7
72.5°	1571.4	1118.4	177.4	76.6	73.4	100.9	131.5	181.1	198.0	173.7	161.6
75°	1234.5	795.7	117.8	58.6	56.5	88.2	120.4	174.2	186.4	156.3	137.8
77.5°	761.4	348.5	81.3	40.7	41.2	68.6	103.5	155.8	188.0	157.9	134.1
80°	221.2	134.6	51.7	27.5	25.3	40.7	81.3	134.1	178.5	162.1	146.3
82.5°	127.8	87.7	34.8	17.4	15.3	18.5	51.2	104.0	157.4	148.4	151.5
85°	29.0	24.3	12.7	8.4	8.4	10.6	17.4	60.2	108.8	127.3	143.6
87.5°	3.2	3.2	3.2	3.2	3.2	2.6	3.2	16.4	47.5	67.6	78.7
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)