

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: P233587

Luminaire Tested: **VRDN-C01-D-UNV-T4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233587
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-C01-D-UNV-T4
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1230mA LED AND TYPE IV OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7048 lumens
Efficiency: N/A
Efficacy: 125.9 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 - G3

Input Watts (W): 56
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

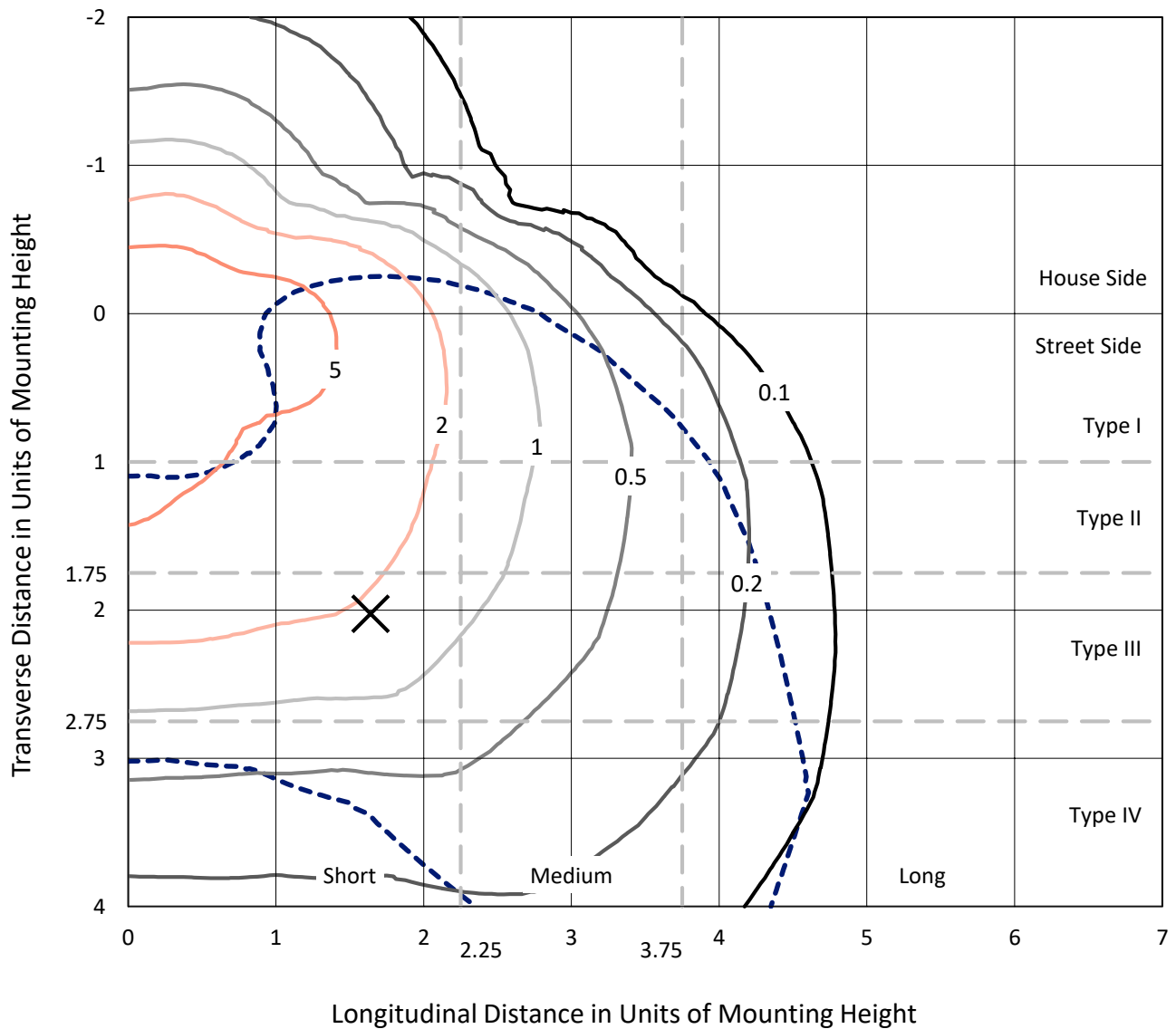


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Iso-Footcandle Lines of Horizontal Illumination

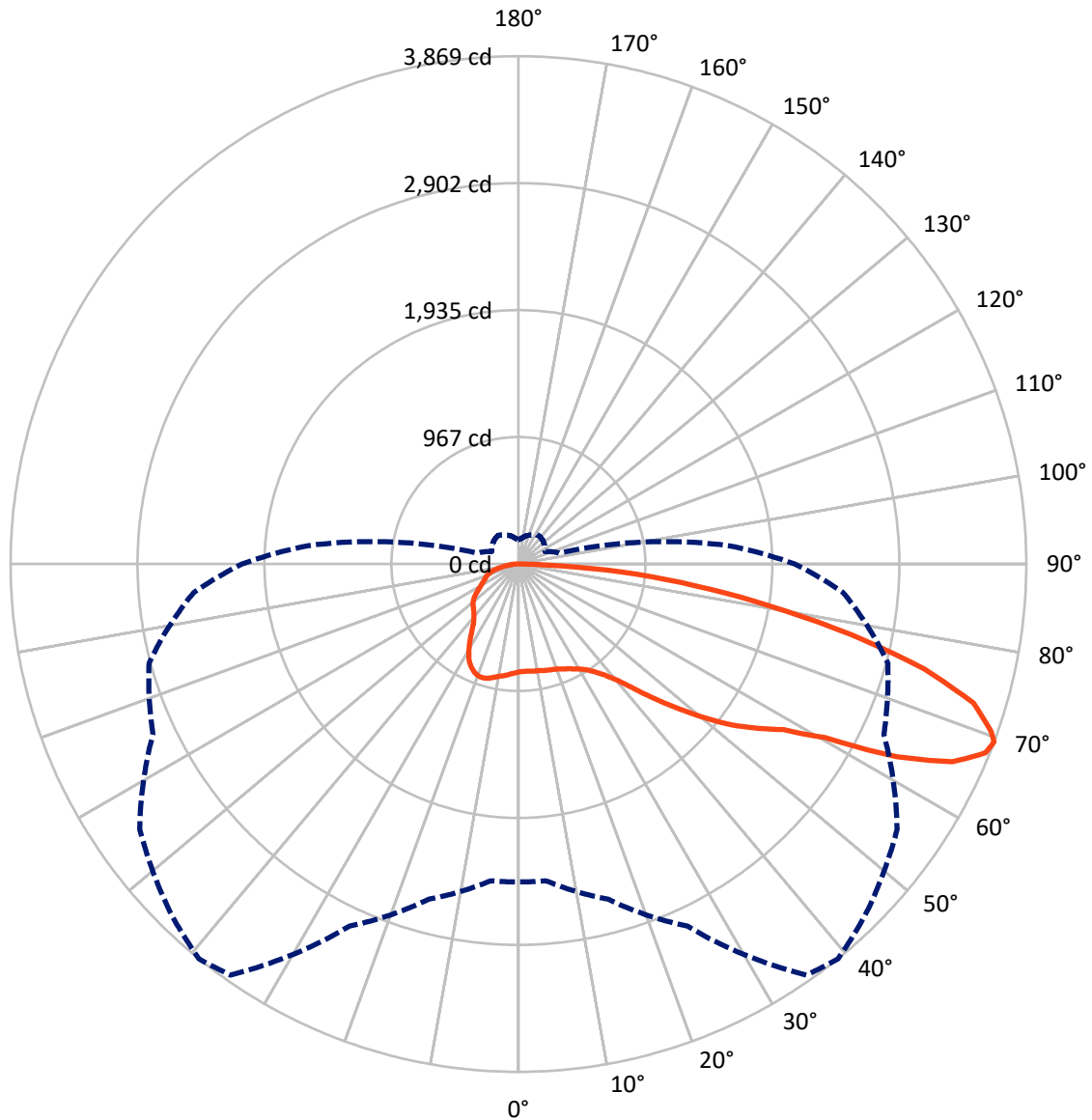
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.5 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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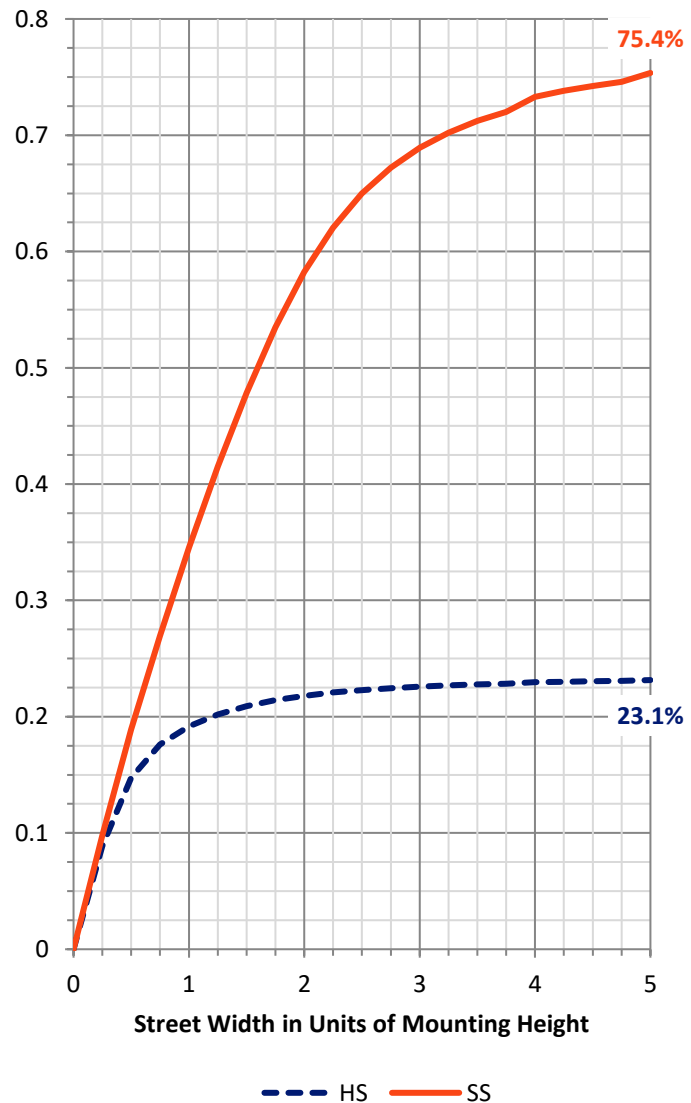
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1652.2	0.0	1652.2
	% Fixture	23.4	0.0	23.4
Street Side	Lumens	5395.8	0.0	5395.8
	% Fixture	76.6	0.0	76.6
Total	Lumens	7048.0	0.0	7048.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	1.1
10°-20°	246.6	3.5
20°-30°	415.1	5.9
30°-40°	601.4	8.5
40°-50°	972.1	13.8
50°-60°	1423.1	20.2
60°-70°	1781.2	25.3
70°-80°	1273.4	18.1
80°-90°	255.3	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°	7048.0	100.0
0°-180°	7048.0	100.0



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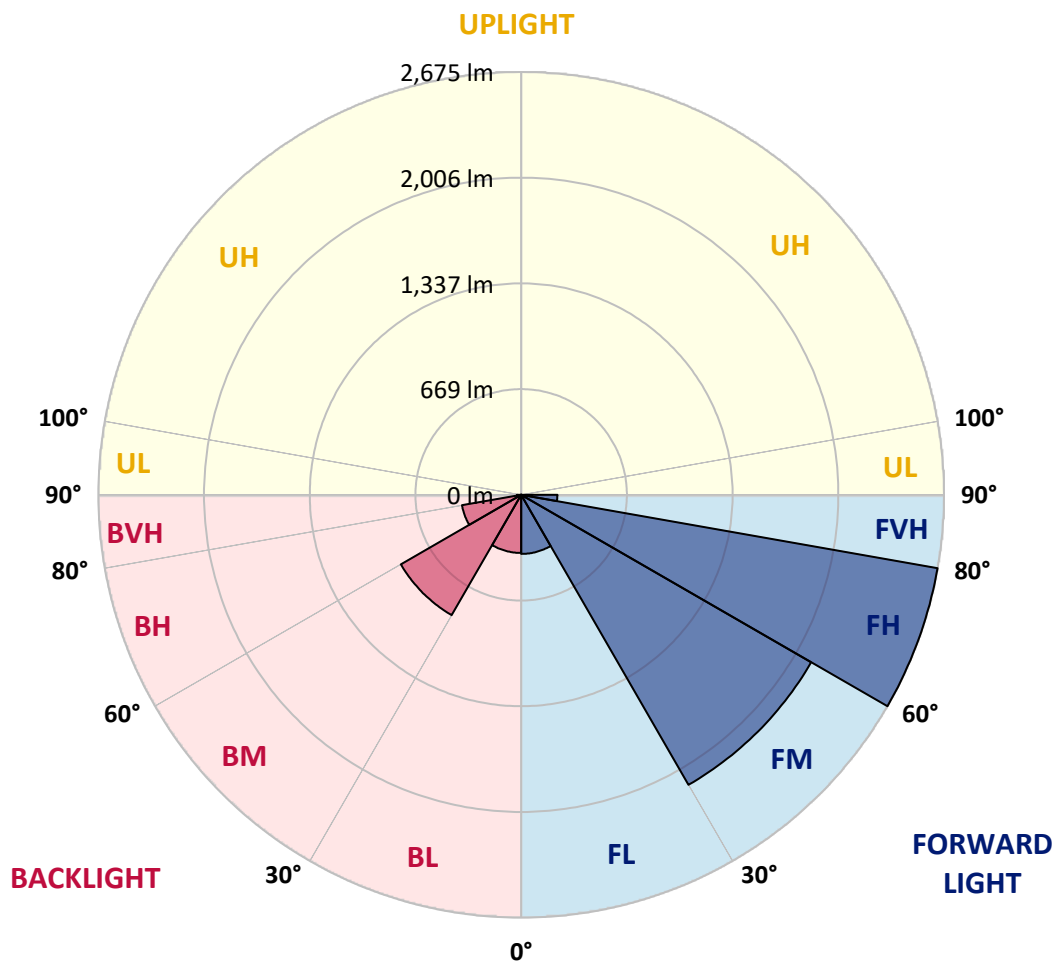
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	373.9	5.3			
FM	(30°-60°)	2118.0	30.1			
FH	(60°-80°)	2674.7	37.9			G2/5000
FVH	(80°-90°)	229.2	3.3			G3/500
BL	(0°-30°)	367.5	5.2	B1/500		
BM	(30°-60°)	878.6	12.5	B1/1000		
BH	(60°-80°)	379.9	5.4	B1/500		G1/500
BVH	(80°-90°)	26.1	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0
2.5°	835.2	833.9	831.3	821.0	819.7	819.0	820.3	816.4	815.8	817.1	815.8
5°	835.9	834.6	831.3	822.3	821.0	819.7	820.3	817.1	817.7	821.0	821.0
7.5°	837.2	835.9	832.6	822.9	825.5	824.2	826.8	822.3	822.3	824.9	825.5
10°	833.9	833.3	831.3	824.2	828.1	825.5	828.1	828.7	831.3	833.3	832.6
12.5°	825.5	825.5	825.5	822.3	833.3	832.6	837.2	841.7	848.2	851.5	853.4
15°	820.3	819.7	824.2	823.6	837.2	839.1	846.9	858.6	868.4	876.8	879.4
17.5°	825.5	825.5	831.3	830.0	843.7	845.0	853.4	870.3	886.6	902.8	909.9
20°	831.3	832.0	839.1	841.1	854.1	853.4	861.9	882.7	904.7	928.8	941.1
22.5°	849.5	848.9	854.7	850.8	865.8	868.4	875.5	893.7	924.9	955.4	975.5
25°	863.2	865.1	871.0	868.4	880.7	884.0	895.6	913.2	950.2	986.6	1022.3
27.5°	876.2	880.1	884.6	884.0	900.8	904.7	913.8	941.1	984.0	1027.5	1077.5
30°	895.6	894.3	897.6	903.4	925.5	928.1	939.2	972.3	1024.2	1080.8	1147.6
32.5°	921.6	920.3	923.6	928.8	955.4	961.9	976.8	1012.6	1078.2	1146.3	1228.2
35°	962.5	965.8	968.4	974.9	1000.9	1010.0	1030.1	1075.6	1151.5	1260.7	1377.6
37.5°	1104.8	1097.6	1083.3	1057.4	1064.5	1074.9	1103.5	1168.4	1278.8	1464.0	1571.1
40°	1326.9	1318.5	1273.6	1197.7	1163.2	1165.8	1193.8	1282.1	1432.8	1703.0	1801.7
42.5°	1536.0	1525.7	1472.4	1377.6	1309.4	1301.6	1304.2	1406.1	1601.6	1942.0	1994.6
45°	1733.5	1738.7	1657.5	1584.8	1506.8	1471.1	1460.1	1536.0	1789.3	2149.2	2165.4
47.5°	1922.5	1926.4	1834.8	1764.7	1689.3	1647.8	1626.3	1685.4	1962.1	2316.7	2301.8
50°	2115.4	2125.8	2000.4	1940.7	1871.2	1841.3	1820.5	1859.5	2153.1	2477.2	2431.0
52.5°	2387.5	2344.0	2179.7	2095.3	2045.9	2036.8	2015.4	2047.2	2355.7	2618.7	2522.6
55°	2690.2	2597.3	2424.5	2277.1	2208.9	2208.9	2190.1	2227.1	2564.8	2724.6	2597.3
57.5°	2788.3	2797.4	2737.6	2577.2	2394.0	2379.7	2361.5	2412.2	2744.1	2819.4	2625.2
60°	2959.7	2985.1	3031.2	2897.4	2807.1	2685.6	2575.2	2602.5	2898.7	2897.4	2655.1
62.5°	3044.8	3068.8	3213.0	3140.9	3226.0	3234.5	3027.9	2817.5	3013.0	2936.3	2669.4
65°	2964.3	2981.2	3173.4	3268.2	3515.0	3632.6	3530.6	3106.5	3073.4	2920.1	2616.1
67.5°	2699.9	2731.8	2890.9	3179.9	3772.9	3838.5	3743.0	3503.3	3099.4	2925.3	2573.3
69°	2421.9	2422.6	2643.4	3044.2	3823.5	3869.0	3752.1	3522.2	3072.1	2913.0	2481.7
70°	2265.4	2281.7	2445.3	2926.6	3804.7	3819.6	3730.0	3521.5	3053.3	2909.1	2394.7
72.5°	1767.9	1759.5	1922.5	2447.3	3591.7	3624.8	3526.1	3422.2	3037.7	2741.5	2025.8
75°	1236.0	1262.0	1421.7	1854.3	3094.8	3194.2	3194.2	3287.7	2796.1	2342.7	1464.6
77.5°	919.7	923.6	1051.5	1416.5	2490.1	2593.4	2688.2	2766.8	2185.5	1604.9	654.7
80°	622.9	628.7	745.6	1045.0	1845.2	1940.0	2090.1	1903.7	1300.3	555.3	74.7
82.5°	392.3	400.1	493.0	733.9	1315.2	1358.1	1404.2	1074.9	433.2	64.3	47.4
85°	233.2	234.5	297.5	468.9	802.1	804.7	755.4	494.9	116.3	38.3	29.9
87.5°	97.4	102.6	129.9	207.8	235.1	185.8	115.6	39.6	17.5	15.6	10.4
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°	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0
2.5°	811.9	819.0	817.7	819.7	822.3	827.5	833.3	830.7	833.9	841.1	841.1
5°	819.0	824.9	826.8	830.7	833.9	839.1	843.0	841.7	848.9	859.3	859.3
7.5°	824.9	829.4	835.9	840.4	843.7	854.1	858.0	855.4	860.6	872.9	873.6
10°	833.3	837.8	847.6	852.1	858.6	863.8	869.0	868.4	873.6	884.6	886.6
12.5°	854.1	857.3	871.0	877.5	877.5	884.0	880.1	873.6	876.2	882.7	884.0
15°	881.4	885.9	903.4	906.7	903.4	904.7	895.6	874.9	864.5	866.4	867.1
17.5°	912.5	920.3	940.5	935.9	932.0	922.3	898.9	867.7	836.5	824.9	826.8
20°	945.7	955.4	978.8	969.0	954.8	929.4	891.7	838.5	790.4	762.5	761.2
22.5°	984.0	996.3	1018.4	1001.5	969.7	925.5	867.7	802.8	741.7	698.2	695.6
25°	1036.6	1050.2	1058.0	1024.2	972.3	911.2	833.3	754.1	677.4	625.5	621.6
27.5°	1096.3	1103.5	1087.9	1037.2	959.9	880.7	790.4	692.4	607.9	565.1	559.2
30°	1162.6	1156.7	1108.0	1030.7	928.1	832.6	723.5	613.8	546.2	511.8	506.6
32.5°	1239.2	1221.0	1123.6	1012.6	885.9	769.6	650.8	563.8	509.8	475.4	472.8
35°	1365.2	1313.3	1148.9	984.6	830.0	695.6	583.9	520.9	478.7	435.8	429.3
37.5°	1547.7	1449.7	1186.0	958.6	769.6	624.2	533.2	486.5	449.4	401.4	392.3
40°	1737.4	1610.1	1247.0	930.1	713.1	571.6	505.3	472.2	435.8	390.3	378.0
42.5°	1910.8	1762.7	1318.5	894.3	654.0	529.3	491.7	468.3	431.9	389.0	379.3
45°	2068.0	1906.3	1391.9	853.4	589.1	495.6	480.6	461.1	424.1	383.2	375.4
47.5°	2200.5	2028.4	1465.9	806.0	526.7	474.8	468.9	448.1	413.7	374.1	367.6
50°	2310.2	2116.0	1508.1	756.0	475.4	459.2	452.0	426.1	391.0	354.0	350.1
52.5°	2391.4	2170.6	1546.4	729.4	435.2	433.9	429.3	404.0	370.2	331.9	324.1
55°	2447.9	2215.4	1529.5	708.6	392.3	402.0	399.4	383.8	355.3	310.5	304.0
57.5°	2451.2	2219.3	1493.2	585.2	350.1	363.7	368.3	370.9	339.0	299.4	291.6
60°	2447.9	2190.7	1425.6	429.3	309.2	325.4	342.3	342.3	320.2	281.2	275.4
62.5°	2433.0	2134.2	1268.5	305.9	276.7	298.1	320.2	310.5	291.6	260.4	254.6
65°	2364.8	2040.0	992.4	249.4	263.0	282.5	292.9	279.3	255.2	222.8	220.2
67.5°	2240.7	1824.4	574.1	228.6	251.4	268.9	277.3	256.5	233.8	202.6	201.3
69°	2104.3	1606.2	323.4	223.4	244.2	259.8	266.9	244.2	222.1	192.2	186.4
70°	1982.2	1411.3	210.4	218.9	237.1	254.0	259.1	235.8	215.0	184.5	180.6
72.5°	1501.6	850.2	141.6	200.0	217.6	230.6	238.4	216.3	192.9	162.4	154.6
75°	820.3	231.2	124.7	171.5	193.5	211.1	213.0	185.1	151.3	120.2	116.9
77.5°	159.8	79.2	107.2	141.6	153.9	174.7	173.4	154.6	131.2	102.0	98.1
80°	60.4	57.2	89.6	101.3	108.5	130.5	138.3	124.7	109.1	69.5	59.8
82.5°	40.9	42.2	66.9	59.8	66.2	77.3	97.4	94.8	86.4	47.4	42.2
85°	28.6	33.1	37.0	25.3	32.5	48.7	64.3	62.4	53.3	33.1	29.9
87.5°	8.4	9.1	10.4	13.0	20.1	36.4	52.6	43.5	29.2	24.7	21.4
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)