

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: McGRAW-EDISON

Report Number: P299641

Luminaire Tested: **GLNA-AF-02-LED-E1-5MQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-5MQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8949.4 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 85
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

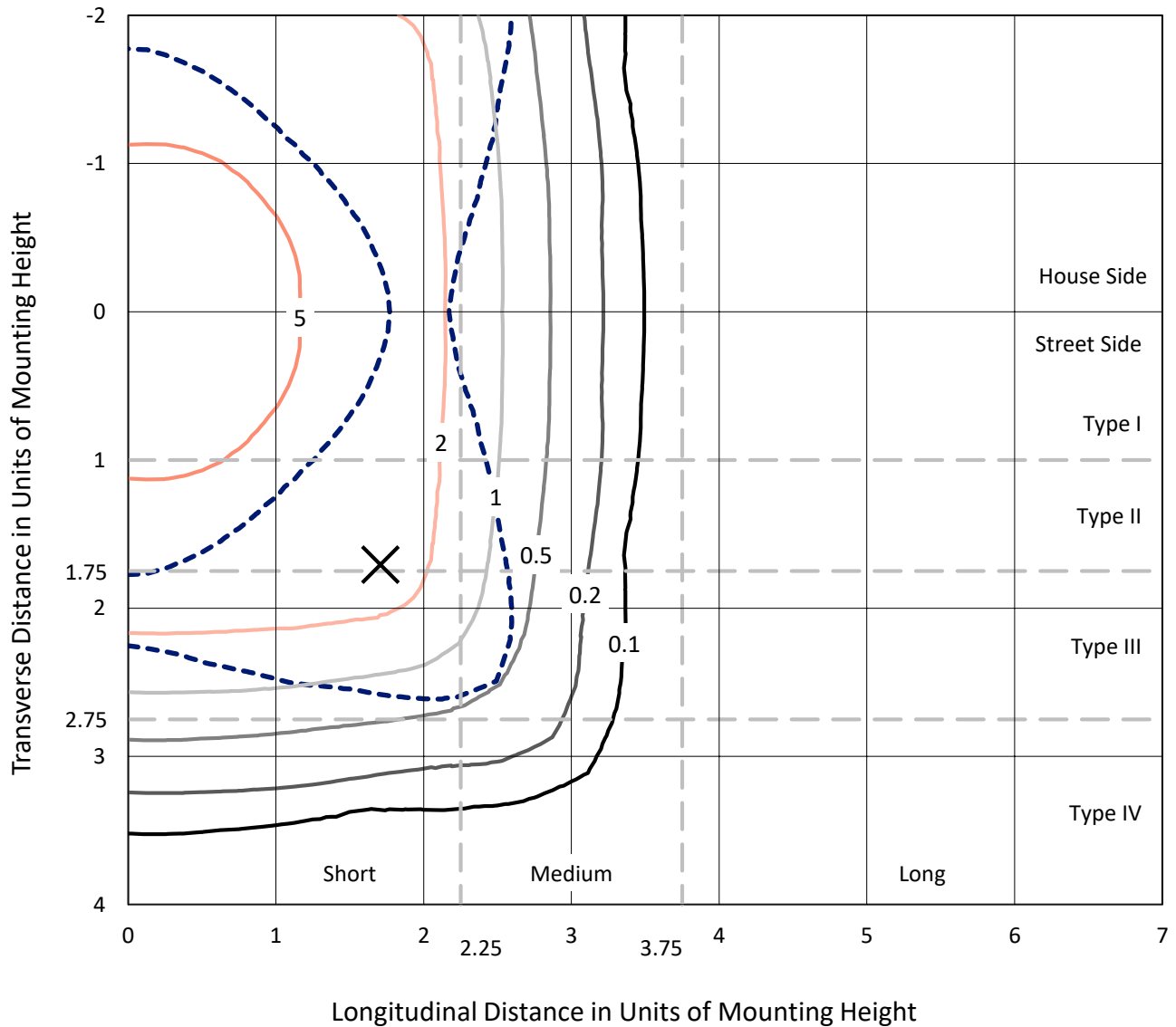


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

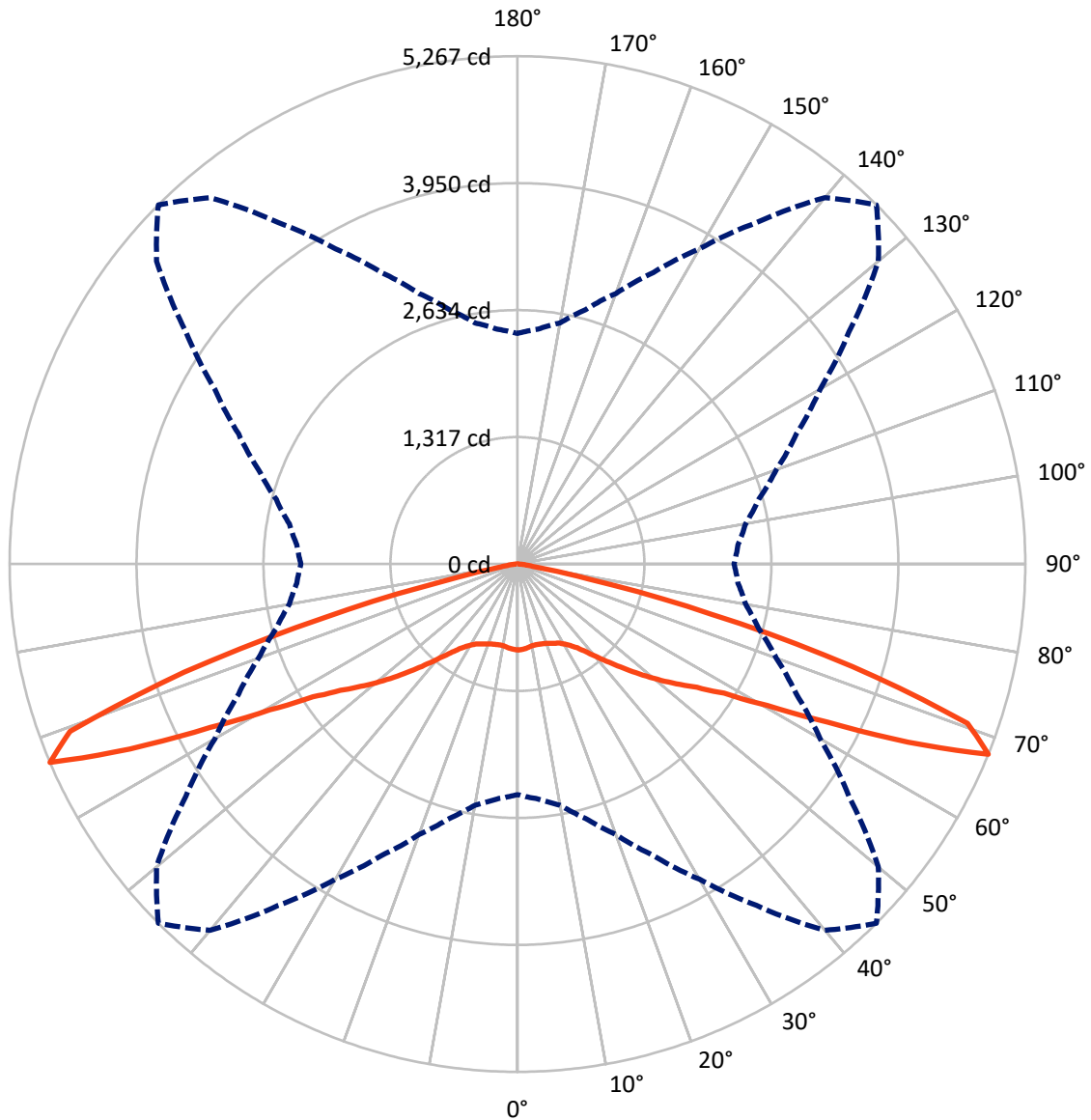


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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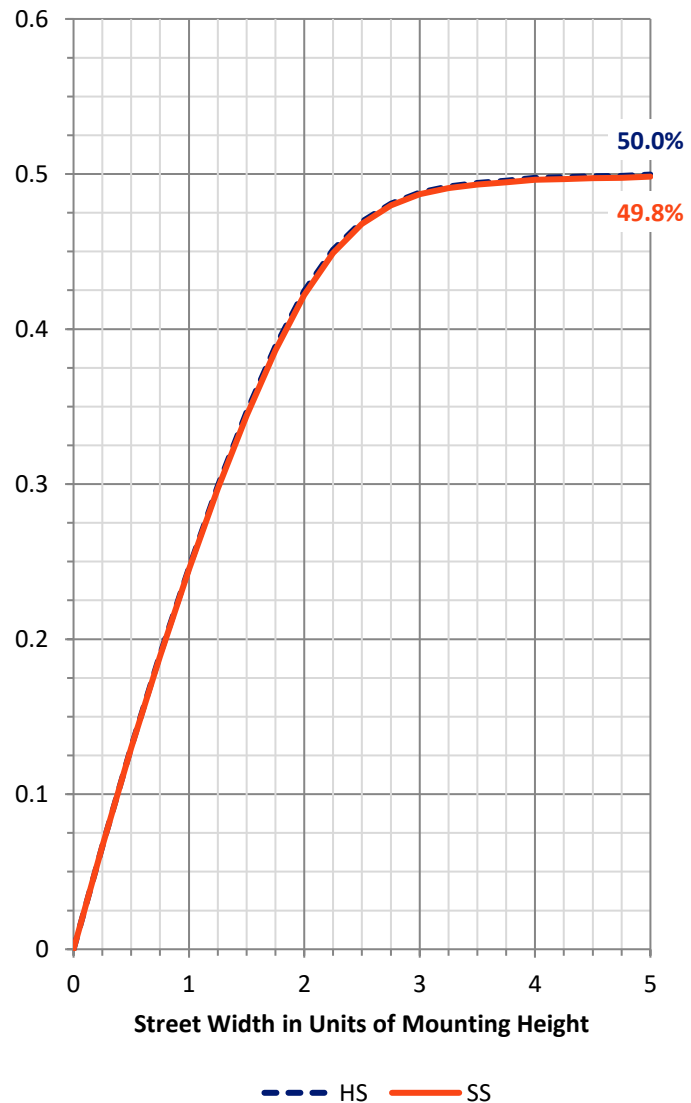
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4474.7	0.0	4474.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4474.7	0.0	4474.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	8949.4	0.0	8949.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	0.9
10°-20°	242.2	2.7
20°-30°	411.8	4.6
30°-40°	673.1	7.5
40°-50°	1201.6	13.4
50°-60°	2026.0	22.6
60°-70°	3144.0	35.1
70°-80°	1104.7	12.3
80°-90°	62.4	0.7
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°	8949.4	100.0
0°-180°	8949.4	100.0



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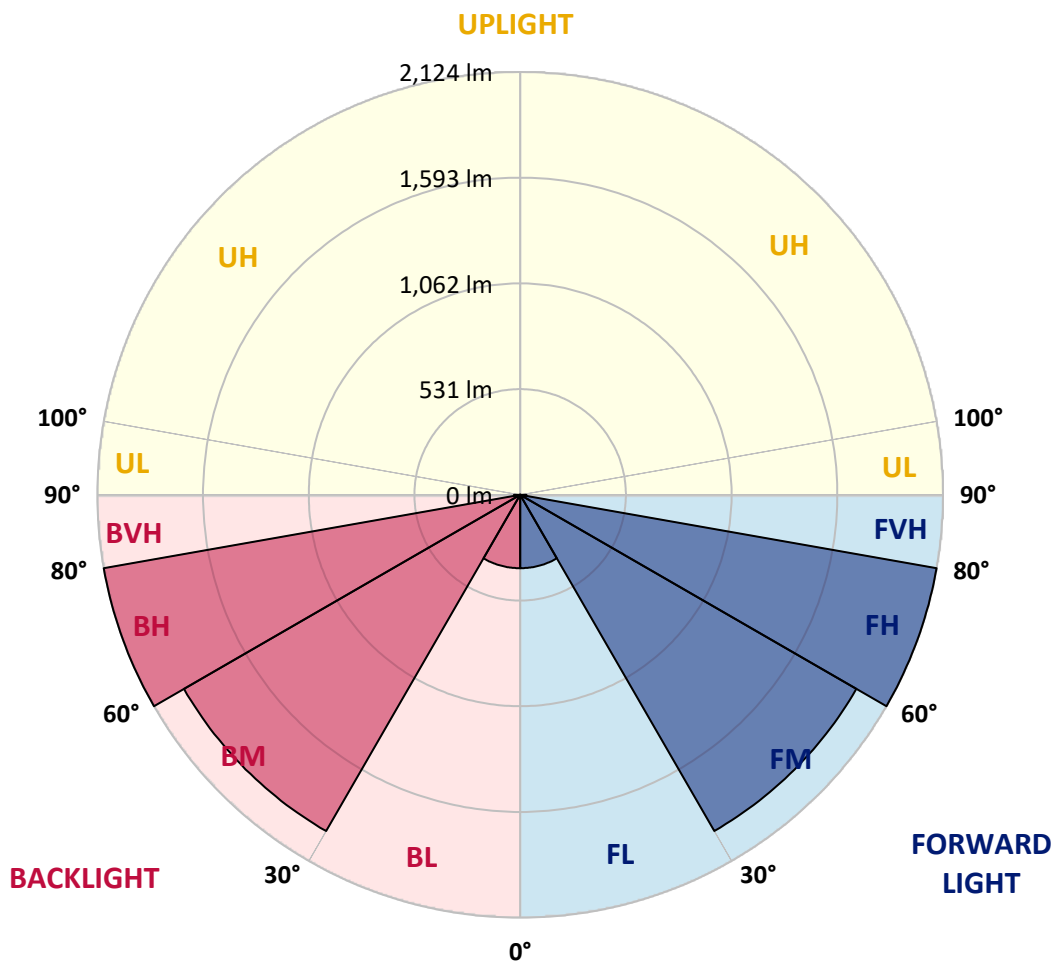
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	368.7	4.1			
FM	(30°-60°)	1950.4	21.8			
FH	(60°-80°)	2124.4	23.7			G2/5000
FVH	(80°-90°)	31.2	0.3			G1/100
BL	(0°-30°)	368.7	4.1	B1/500		
BM	(30°-60°)	1950.4	21.8	B2/2500		
BH	(60°-80°)	2124.4	23.7	B3/2500		G2/5000
BVH	(80°-90°)	31.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8
2.5°	888.5	889.4	889.4	889.4	889.0	889.0	888.1	889.0	888.5	887.3	887.7
5°	881.1	882.0	882.0	881.6	882.8	882.4	881.1	882.0	881.6	880.7	881.1
7.5°	870.4	871.7	871.7	871.3	872.5	872.1	871.3	871.7	871.7	870.4	870.4
10°	858.5	859.3	859.3	858.9	861.0	861.0	860.6	861.8	862.2	861.0	860.2
12.5°	847.4	848.6	848.6	850.3	852.3	853.2	855.2	856.9	858.5	858.1	856.4
15°	840.8	841.6	843.3	845.3	848.6	851.5	854.8	858.5	861.8	862.6	860.2
17.5°	836.7	837.9	840.4	843.3	847.8	852.7	857.7	862.6	867.1	868.8	865.9
20°	835.5	836.3	838.7	843.7	849.9	857.3	864.3	870.0	876.2	878.3	876.2
22.5°	837.9	839.6	842.5	848.2	856.4	865.9	874.1	882.0	889.8	893.5	890.6
25°	849.0	850.7	854.4	861.8	870.9	880.7	890.2	899.2	906.2	909.9	907.9
27.5°	869.6	871.7	876.2	883.6	893.5	904.2	914.5	921.9	927.6	928.9	926.4
30°	900.5	905.0	910.4	918.6	930.1	939.2	949.5	956.0	963.0	963.0	961.0
32.5°	948.6	953.2	958.9	966.7	975.8	985.7	994.7	1000.5	1007.9	1008.3	1003.4
35°	1020.7	1022.7	1027.7	1032.6	1040.8	1049.5	1057.3	1061.0	1067.2	1067.6	1063.0
37.5°	1115.7	1116.1	1119.4	1121.1	1128.5	1137.9	1145.4	1147.8	1153.6	1152.8	1148.2
40°	1226.4	1228.5	1229.7	1232.2	1240.0	1249.1	1256.9	1258.1	1264.3	1263.1	1257.3
42.5°	1354.4	1355.3	1362.2	1366.0	1373.4	1377.9	1387.8	1389.0	1396.4	1393.1	1386.5
45°	1498.1	1505.5	1512.1	1519.5	1527.3	1532.6	1540.5	1538.8	1543.7	1538.8	1535.1
47.5°	1649.1	1654.5	1669.3	1680.8	1693.5	1698.1	1709.2	1704.2	1709.2	1702.2	1701.0
50°	1815.4	1824.8	1837.6	1850.8	1864.3	1871.8	1886.2	1880.0	1886.6	1880.0	1876.3
52.5°	1979.2	1981.6	2009.6	2029.0	2047.9	2056.5	2065.2	2062.3	2062.7	2062.3	2058.6
55°	2134.7	2140.5	2168.5	2194.8	2227.7	2252.0	2266.8	2265.2	2261.5	2257.8	2251.6
57.5°	2310.1	2315.8	2347.9	2380.4	2417.9	2452.5	2482.5	2513.4	2525.3	2528.6	2515.0
60°	2547.1	2546.7	2589.5	2629.0	2682.5	2734.0	2799.8	2866.9	2943.9	2979.7	2932.3
62.5°	2788.3	2798.2	2859.9	2929.9	3040.2	3147.6	3269.0	3388.3	3510.2	3609.3	3504.0
65°	2759.5	2797.3	2889.1	3047.6	3251.3	3493.3	3755.0	4032.0	4282.2	4454.3	4261.2
67.5°	2391.5	2445.5	2538.9	2731.5	2986.2	3335.2	3774.8	4322.6	4959.2	5267.1	4885.6
70°	1733.5	1794.4	1892.3	2080.4	2332.7	2664.4	3141.8	3799.5	4642.3	4952.7	4532.5
72.5°	862.6	895.5	956.0	1075.8	1266.8	1535.9	1968.9	2601.0	3346.8	3631.6	3247.6
75°	293.0	308.3	318.5	357.6	418.1	523.9	739.2	1137.1	1734.7	2079.6	1710.0
77.5°	169.1	169.6	176.6	183.6	193.8	205.4	234.2	307.4	531.7	755.2	550.2
80°	109.5	109.1	114.8	120.2	127.2	132.9	134.6	142.4	164.2	194.7	174.1
82.5°	56.8	63.8	76.5	83.5	96.7	99.2	95.9	93.0	98.4	102.1	104.5
85°	31.3	27.2	40.7	52.7	58.4	59.3	59.3	56.0	58.0	56.8	61.7
87.5°	14.4	13.2	16.1	25.9	27.6	23.5	24.7	21.8	15.6	15.2	17.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8
2.5°	887.7	888.1	888.1	889.4	889.8	890.6	891.4	891.8
5°	880.7	882.0	881.1	882.4	882.4	883.2	883.2	883.6
7.5°	870.4	871.7	871.7	871.7	871.3	872.5	872.5	872.5
10°	859.7	860.6	860.2	859.3	858.5	859.7	859.3	858.9
12.5°	856.4	854.4	852.7	851.9	850.3	850.7	849.4	849.4
15°	858.5	854.8	851.9	850.7	849.0	848.2	847.4	847.8
17.5°	863.9	859.3	855.6	853.6	851.5	850.3	848.6	849.0
20°	873.3	868.0	862.6	858.5	854.8	852.7	851.5	851.1
22.5°	887.3	879.5	871.7	865.5	860.6	857.7	856.4	855.6
25°	903.4	894.7	885.7	878.7	873.7	870.0	867.6	867.6
27.5°	923.5	916.5	908.3	900.1	895.5	891.8	890.2	889.4
30°	957.3	950.7	944.1	936.3	930.5	926.8	923.9	921.5
32.5°	1000.5	995.1	989.8	984.0	978.7	973.7	969.2	967.2
35°	1061.4	1057.3	1053.6	1047.0	1044.9	1042.1	1039.6	1037.5
37.5°	1145.4	1143.7	1143.7	1136.7	1135.1	1133.8	1131.4	1131.8
40°	1255.7	1257.3	1255.2	1252.8	1251.5	1248.2	1248.2	1251.1
42.5°	1386.1	1387.4	1391.9	1387.8	1392.3	1388.2	1385.7	1387.8
45°	1537.6	1542.1	1551.2	1547.0	1549.9	1542.9	1534.3	1534.7
47.5°	1707.5	1711.7	1715.4	1712.5	1712.9	1701.4	1689.8	1687.0
50°	1884.1	1885.7	1887.8	1883.7	1884.5	1871.8	1858.6	1859.0
52.5°	2058.6	2066.4	2074.6	2063.5	2061.1	2046.7	2028.1	2020.7
55°	2258.2	2269.3	2259.8	2240.5	2221.2	2201.8	2177.5	2173.4
57.5°	2504.3	2485.4	2455.7	2419.1	2392.4	2365.2	2340.5	2330.2
60°	2846.7	2775.5	2722.0	2667.7	2633.5	2600.2	2567.7	2562.8
62.5°	3330.7	3207.7	3101.1	2988.7	2896.9	2825.3	2768.1	2752.1
65°	3937.3	3646.4	3394.1	3158.7	2954.1	2799.8	2702.7	2659.9
67.5°	4198.3	3623.7	3191.2	2857.0	2589.5	2402.7	2297.7	2245.4
70°	3689.2	3005.2	2534.8	2200.2	1956.5	1757.3	1662.3	1606.3
72.5°	2538.1	1911.7	1511.6	1233.8	1039.2	872.5	806.6	801.7
75°	1139.6	754.8	520.2	400.9	337.5	293.4	279.9	269.6
77.5°	319.0	235.8	210.3	196.7	183.6	168.3	162.6	163.8
80°	155.2	146.5	140.8	132.1	120.2	107.4	101.7	104.1
82.5°	102.9	101.7	105.4	99.2	81.9	69.6	58.4	53.5
85°	62.6	63.4	64.6	65.0	55.1	38.7	26.3	29.6
87.5°	24.7	28.4	30.9	32.1	30.0	18.5	14.8	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)