

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: P298891

Luminaire Tested: **GLNA-AF-07-LED-E1-T2-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-T2-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35774.4 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G4

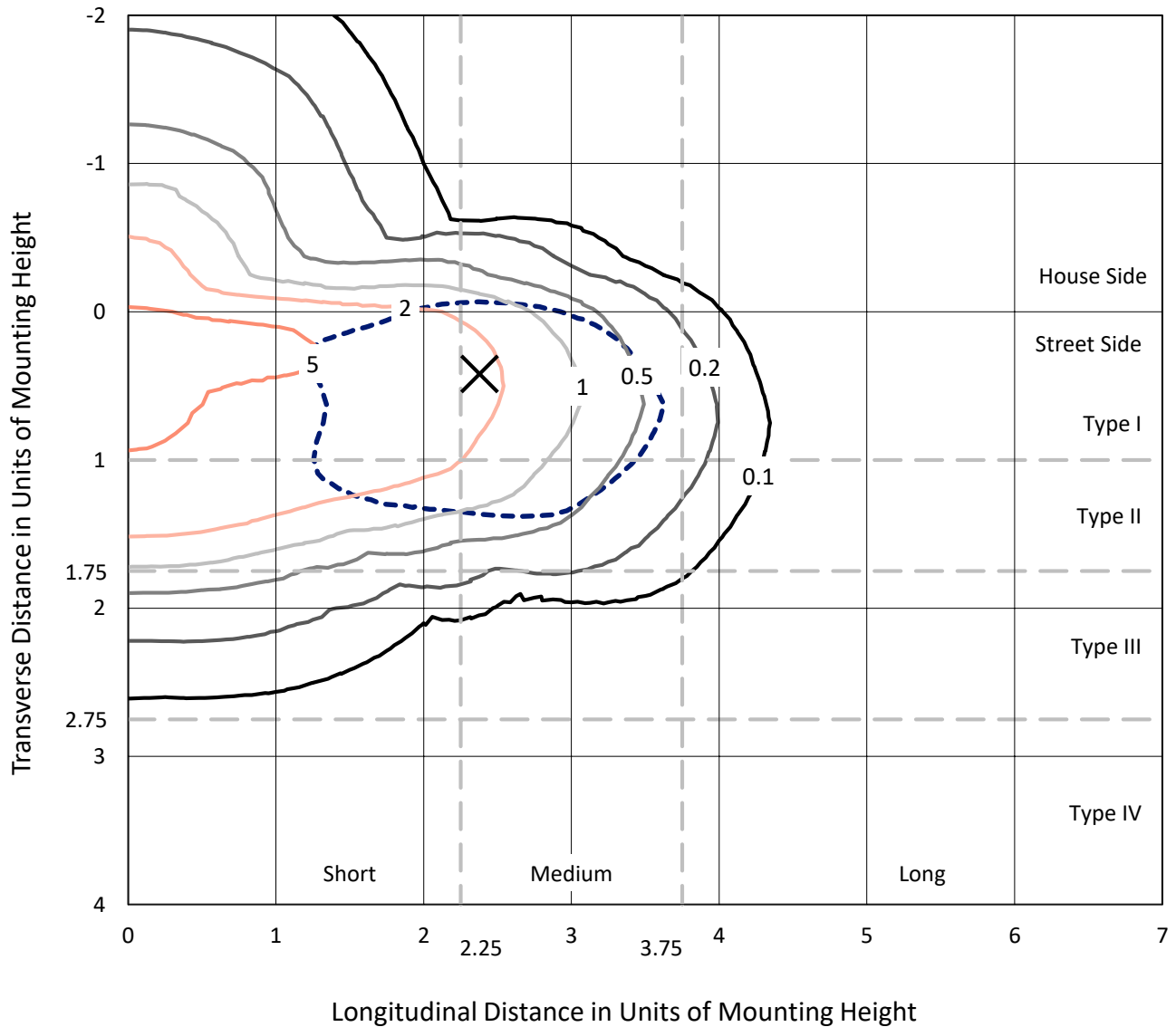
Input Watts (W): 391
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

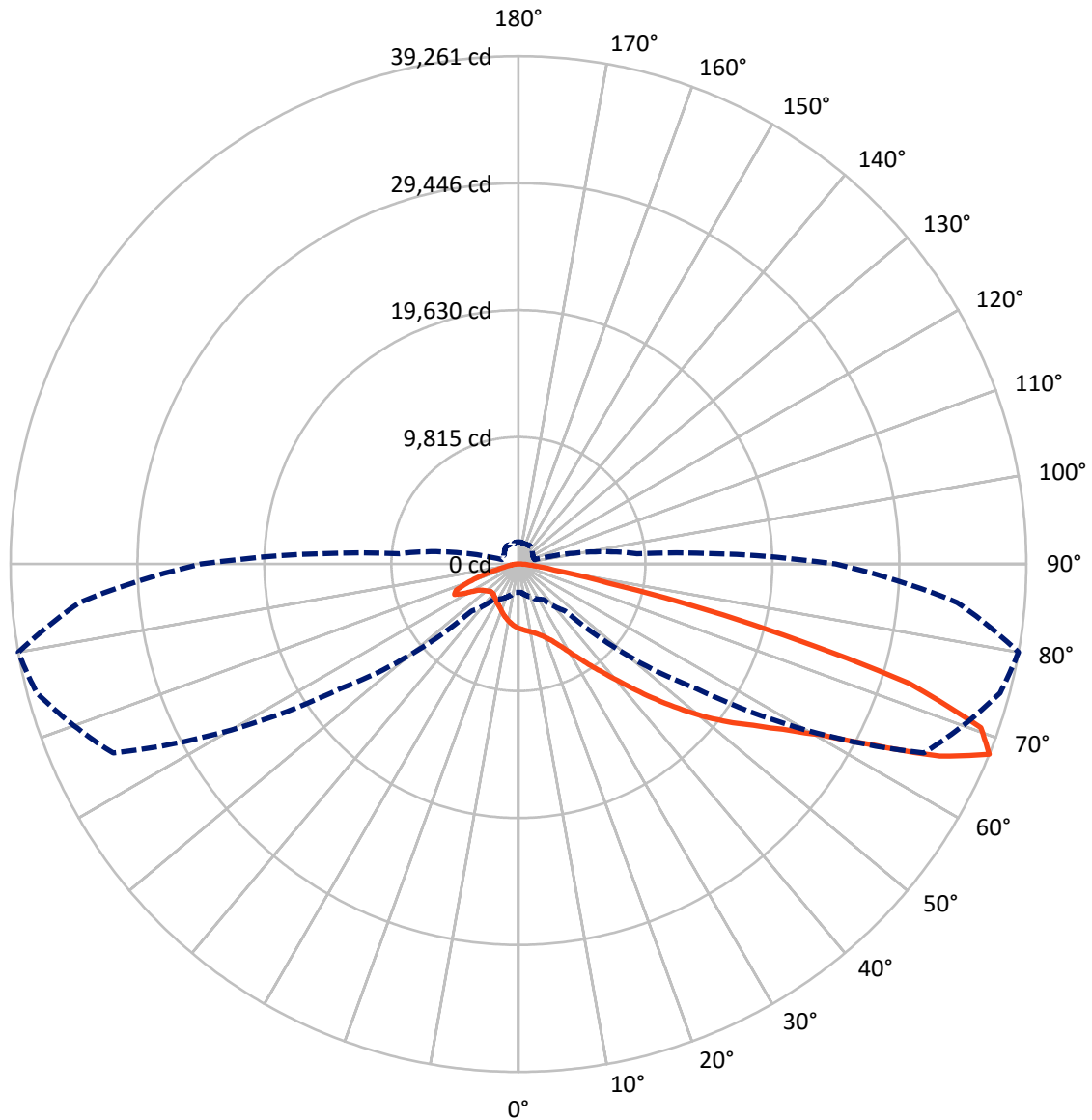
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6588.3	0.0	6588.3
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	29186.1	0.0	29186.1
	% Fixture	81.6	0.0	81.6
Total	Lumens	35774.4	0.0	35774.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	458.5	1.3
10°-20°	1320.7	3.7
20°-30°	2186.1	6.1
30°-40°	3575.9	10.0
40°-50°	5773.6	16.1
50°-60°	8335.4	23.3
60°-70°	9198.6	25.7
70°-80°	4240.0	11.9
80°-90°	685.8	1.9
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°	35774.4	100.0
0°-180°	35774.4	100.0



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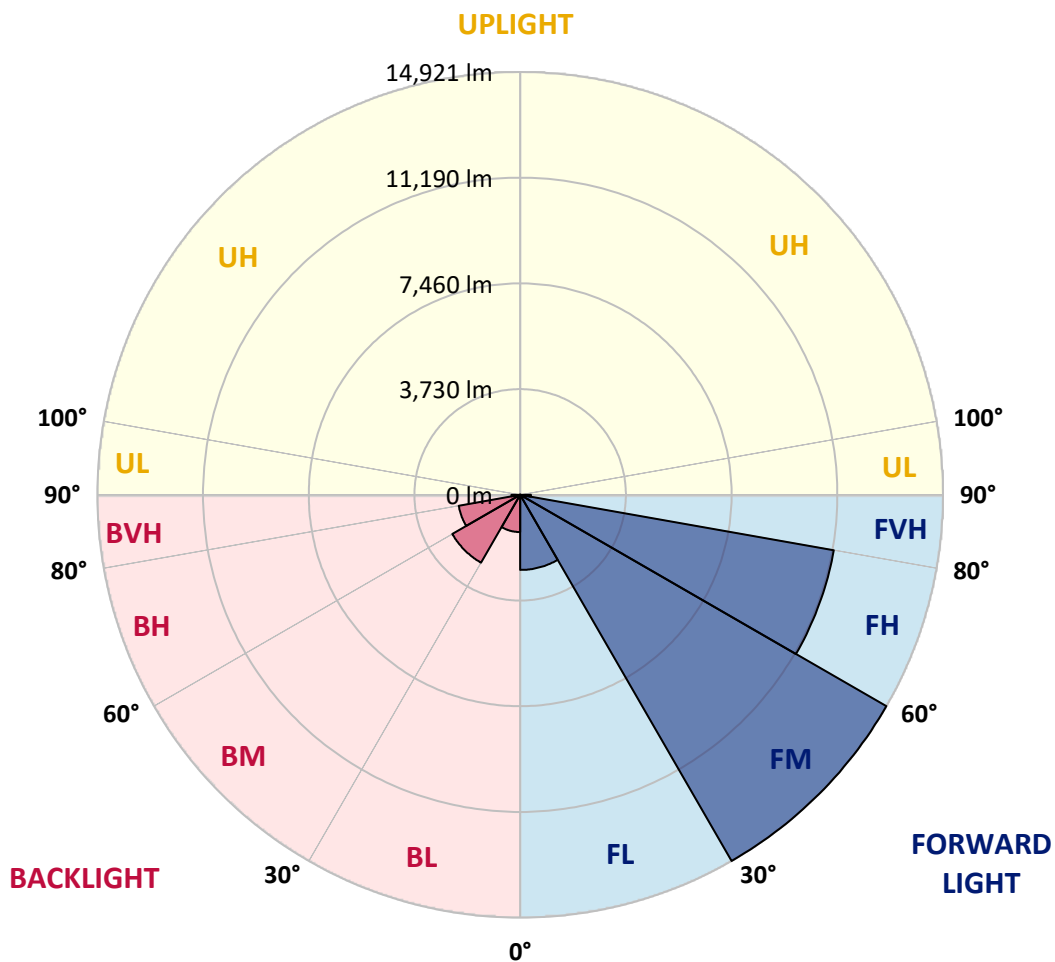
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2650.8	7.4			
FM (30°-60°)	14920.6	41.7			
FH (60°-80°)	11237.7	31.4			G4/12000
FVH (80°-90°)	377.0	1.1			G3/500
BL (0°-30°)	1314.5	3.7	B3/2500		
BM (30°-60°)	2764.2	7.7	B3/5000		
BH (60°-80°)	2200.9	6.2	B3/2500		G3/2500
BVH (80°-90°)	308.7	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1
2.5°	5436.8	5405.1	5410.4	5401.6	5375.2	5329.4	5280.1	5190.3	5096.9	5047.6	5008.9
5°	5891.2	5882.4	5870.1	5841.9	5775.0	5679.9	5561.9	5403.4	5232.5	5142.7	5056.4
7.5°	6231.1	6225.8	6210.0	6192.4	6127.2	6012.7	5834.9	5609.4	5361.1	5237.8	5104.0
10°	6259.3	6268.1	6280.4	6328.0	6336.8	6275.2	6093.7	5820.8	5494.9	5336.4	5165.6
12.5°	6019.8	6039.2	6086.7	6208.2	6336.8	6412.5	6319.2	6042.7	5651.7	5459.7	5243.1
15°	5702.8	5713.3	5771.4	5938.8	6169.5	6403.7	6491.8	6287.5	5854.2	5618.2	5359.3
17.5°	5567.2	5572.4	5612.9	5723.9	5938.8	6273.4	6588.6	6553.4	6102.6	5815.5	5502.0
20°	5498.5	5510.8	5568.9	5678.1	5813.7	6106.1	6602.7	6840.5	6398.4	6062.0	5681.6
22.5°	5694.0	5688.7	5709.8	5764.4	5878.9	6055.0	6592.2	7136.4	6775.3	6379.1	5915.9
25°	6150.1	6169.5	6132.5	6070.9	6107.8	6231.1	6648.5	7456.9	7247.3	6785.9	6222.3
27.5°	6800.0	6780.6	6726.0	6581.6	6505.9	6558.7	6835.2	7802.1	7833.8	7321.3	6627.4
30°	7448.1	7432.3	7379.4	7203.3	7048.3	7004.3	7198.0	8198.4	8533.0	7964.1	7124.1
32.5°	8120.9	8103.3	8054.0	7877.8	7691.2	7589.0	7714.1	8656.3	9357.3	8732.0	7708.8
35°	8950.4	8917.0	8813.0	8568.2	8385.1	8305.8	8363.9	9232.2	10308.3	9640.8	8418.5
37.5°	9730.6	9781.7	9676.0	9337.9	9100.1	9071.9	9137.1	9934.9	11333.3	10657.0	9234.0
40°	10514.4	10523.2	10428.1	10151.6	9906.7	9861.0	10024.7	10787.3	12543.3	11872.2	10225.5
42.5°	11324.5	11342.1	11181.9	10926.5	10746.8	10755.6	10942.3	11785.9	13931.1	13304.1	11366.8
45°	12284.4	12310.8	12134.7	11800.0	11636.2	11965.6	11888.1	12906.1	15452.8	14931.4	12677.1
47.5°	13288.2	13328.8	13194.9	12881.4	12677.1	13129.7	12833.9	14147.7	17090.7	16676.8	14116.0
50°	13836.0	13894.1	14024.4	14001.5	13957.5	13881.8	13888.8	15479.2	18779.7	18494.4	15595.4
52.5°	13541.9	13540.1	14015.6	14593.3	15209.7	15255.5	15174.5	16882.9	20357.7	20271.4	16988.5
55°	12196.3	12287.9	13008.2	14126.6	15810.3	16861.7	17101.2	18490.8	21907.6	22007.9	18402.8
57.5°	9956.1	10031.8	11004.0	12562.6	15000.1	17816.3	19841.7	20827.9	23640.6	24109.1	20285.5
60°	6752.4	6844.0	7874.3	9746.5	12819.8	17284.4	22450.0	24998.5	25715.3	26780.8	22927.3
62.5°	3968.0	4050.8	4890.9	6148.3	9026.1	14813.4	23594.8	30931.9	29010.5	30812.2	26956.9
65°	2731.6	2788.0	3196.6	3827.1	5186.7	9977.2	22175.3	35028.5	34081.0	35806.9	31629.4
67.5°	2198.0	2190.9	2515.0	2944.7	3339.2	5144.5	16768.4	34565.3	38540.3	39260.7	34054.5
70°	1810.5	1803.5	2023.6	2379.4	2668.2	2897.2	9133.6	29169.0	37631.5	37923.9	31821.3
72.5°	1514.6	1521.7	1662.6	1926.8	2189.2	2182.1	4013.8	20519.7	29604.0	31625.9	25366.6
75°	1278.6	1282.2	1375.5	1562.2	1777.0	1757.7	2176.8	11116.7	17208.7	18615.9	14061.4
77.5°	1088.4	1091.9	1151.8	1255.7	1409.0	1401.9	1588.6	4802.8	7178.6	7090.6	4809.8
80°	970.4	970.4	998.6	1018.0	1102.5	1070.8	1178.2	2307.2	3034.5	2802.1	1919.7
82.5°	760.8	764.4	937.0	929.9	868.3	827.8	827.8	1359.6	1608.0	1486.5	1123.6
85°	428.0	426.2	604.1	729.1	764.4	583.0	577.7	760.8	875.3	771.4	544.2
87.5°	183.2	186.7	280.0	324.1	433.3	362.8	357.5	392.7	445.6	385.7	251.9
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°	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1	4970.1
2.5°	4971.9	4926.1	4825.7	4700.6	4587.9	4514.0	4447.0	4350.2	4355.4	4288.5	4239.2
5°	4968.3	4873.2	4640.8	4364.3	4098.3	3906.3	3761.9	3631.6	3599.9	3538.2	3501.3
7.5°	4971.9	4816.9	4425.9	3983.8	3654.5	3411.4	3288.2	3219.5	3203.6	3182.5	3184.2
10°	4984.2	4765.8	4189.9	3628.1	3282.9	3122.6	3092.7	3113.8	3138.5	3145.5	3147.3
12.5°	5012.4	4720.0	3931.0	3311.1	3050.4	3001.1	3052.2	3124.4	3171.9	3194.8	3193.1
15°	5075.8	4684.8	3682.7	3062.7	2921.8	2948.2	3043.4	3145.5	3214.2	3245.9	3247.7
17.5°	5144.5	4633.7	3427.3	2872.5	2826.7	2893.7	3011.7	3131.4	3215.9	3251.2	3258.2
20°	5234.3	4570.3	3159.6	2729.9	2736.9	2812.6	2923.6	3043.4	3136.7	3166.6	3180.7
22.5°	5352.3	4501.6	2925.4	2613.6	2634.8	2692.9	2779.2	2883.1	2964.1	2978.2	2990.5
25°	5510.8	4427.7	2738.7	2507.9	2516.8	2550.2	2608.3	2670.0	2726.3	2710.5	2722.8
27.5°	5723.9	4364.3	2599.5	2411.1	2395.2	2402.3	2432.2	2451.6	2481.5	2437.5	2442.8
30°	5974.0	4295.6	2492.1	2326.5	2282.5	2270.2	2277.2	2287.8	2310.7	2250.8	2242.0
32.5°	6264.6	4212.8	2391.7	2252.6	2190.9	2166.3	2169.8	2198.0	2286.0	2249.1	2229.7
35°	6602.7	4119.4	2286.0	2171.6	2129.3	2094.1	2090.5	2178.6	2441.0	2418.1	2400.5
37.5°	6999.0	4026.1	2180.4	2080.0	2083.5	2044.8	2032.4	2132.8	2471.0	2381.1	2368.8
40°	7502.7	3976.8	2090.5	1983.1	2027.1	2021.9	1997.2	2048.3	2273.7	2109.9	2088.8
42.5°	8126.2	3983.8	2023.6	1879.2	1960.2	2016.6	1977.8	1979.6	2060.6	1937.3	1917.9
45°	8895.8	4066.6	1976.1	1796.4	1884.5	2011.3	1970.8	1942.6	1949.6	1884.5	1873.9
47.5°	9794.0	4237.4	1942.6	1727.7	1812.3	1991.9	1969.0	1932.0	1916.2	1881.0	1872.2
50°	10792.6	4485.8	1917.9	1662.6	1747.1	1960.2	1970.8	1921.5	1903.9	1889.8	1884.5
52.5°	11773.6	4769.3	1881.0	1606.2	1696.0	1921.5	1976.1	1910.9	1891.5	1881.0	1875.7
55°	12867.3	5123.3	1824.6	1558.7	1653.8	1872.2	1976.1	1895.1	1873.9	1875.7	1873.9
57.5°	14345.0	5695.7	1757.7	1518.2	1602.7	1812.3	1942.6	1877.4	1851.0	1852.8	1854.5
60°	16653.9	6704.9	1676.7	1477.6	1539.3	1741.8	1896.8	1838.7	1812.3	1819.3	1821.1
62.5°	20049.5	8186.1	1571.0	1417.8	1472.4	1666.1	1833.4	1789.4	1763.0	1780.6	1780.6
65°	23578.9	9492.9	1440.7	1342.0	1401.9	1583.3	1754.2	1727.7	1701.3	1741.8	1740.1
67.5°	24528.2	9200.5	1310.3	1259.3	1331.5	1491.7	1659.0	1645.0	1630.9	1701.3	1697.8
70°	21789.6	7386.5	1190.6	1174.7	1254.0	1393.1	1556.9	1556.9	1548.1	1600.9	1588.6
72.5°	16601.1	5237.8	1076.1	1084.9	1165.9	1285.7	1445.9	1458.3	1444.2	1470.6	1460.0
75°	8887.0	2997.6	961.6	986.3	1056.7	1176.5	1322.7	1335.0	1326.2	1324.4	1329.7
77.5°	2953.5	1465.3	841.9	880.6	942.2	1063.8	1194.1	1213.5	1192.3	1188.8	1187.0
80°	1315.6	921.1	709.8	760.8	815.4	935.2	1058.5	1074.3	1051.4	1083.1	1042.6
82.5°	845.4	605.9	568.9	625.2	678.1	806.6	922.9	926.4	905.3	1051.4	896.5
85°	410.4	375.1	428.0	479.0	524.8	634.0	764.4	766.1	713.3	649.9	627.0
87.5°	204.3	218.4	285.3	331.1	354.0	435.0	556.5	546.0	523.1	475.5	438.5
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)