

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: P298957

Luminaire Tested: **GLNA-AF-08-LED-E1-T2-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298957
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-08-LED-E1-T2-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32746.6 lumens
Efficiency: N/A
Efficacy: 98.0 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): 334
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

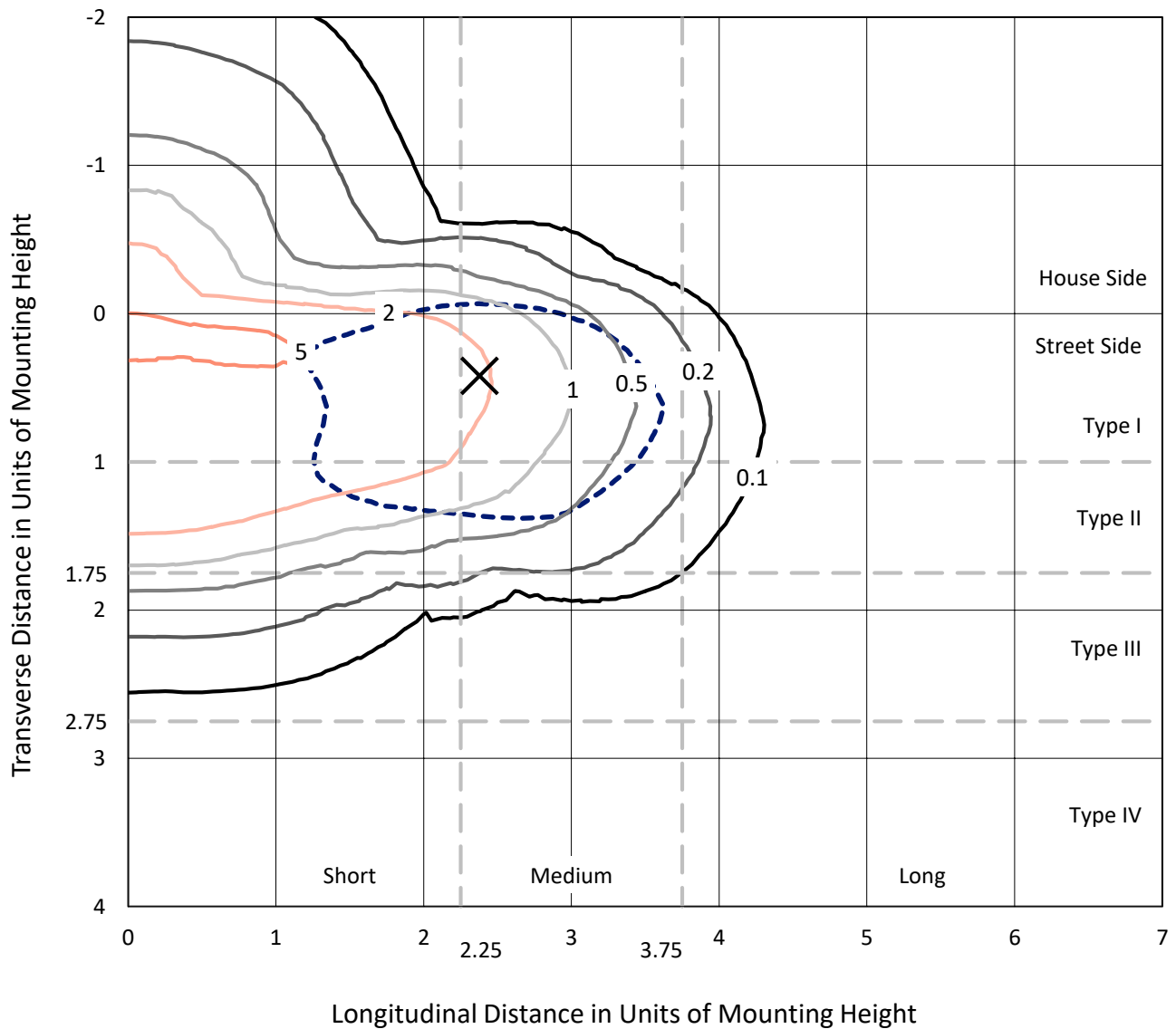


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Iso-Footcandle Lines of Horizontal Illumination

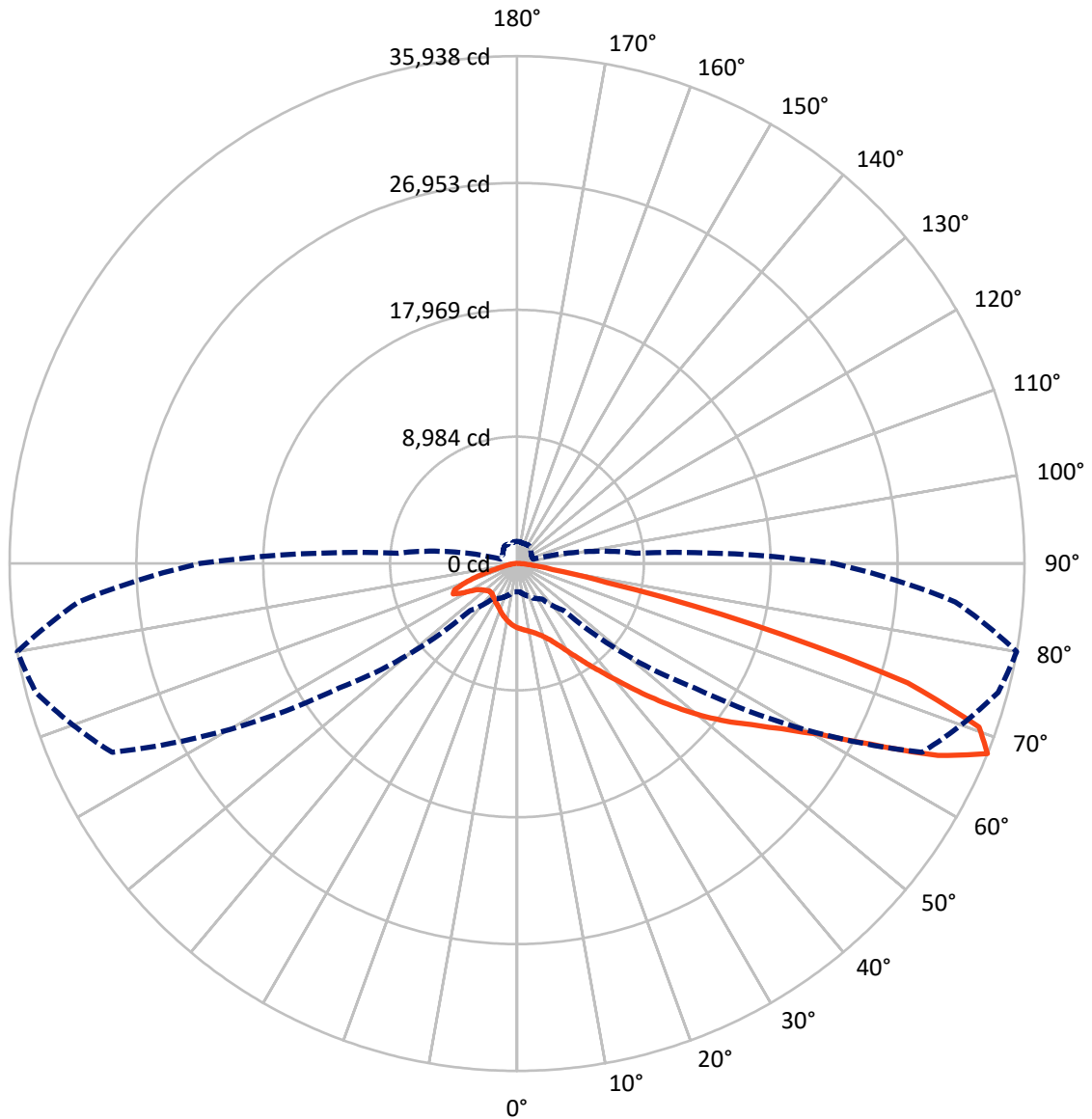
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 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	6030.7	0.0	6030.7
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	26716.0	0.0	26716.0
	% Fixture	81.6	0.0	81.6
Total	Lumens	32746.6	0.0	32746.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	419.7	1.3
10°-20°	1208.9	3.7
20°-30°	2001.1	6.1
30°-40°	3273.2	10.0
40°-50°	5284.9	16.1
50°-60°	7629.9	23.3
60°-70°	8420.1	25.7
70°-80°	3881.1	11.9
80°-90°	627.7	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°	32746.6	100.0
0°-180°	32746.6	100.0



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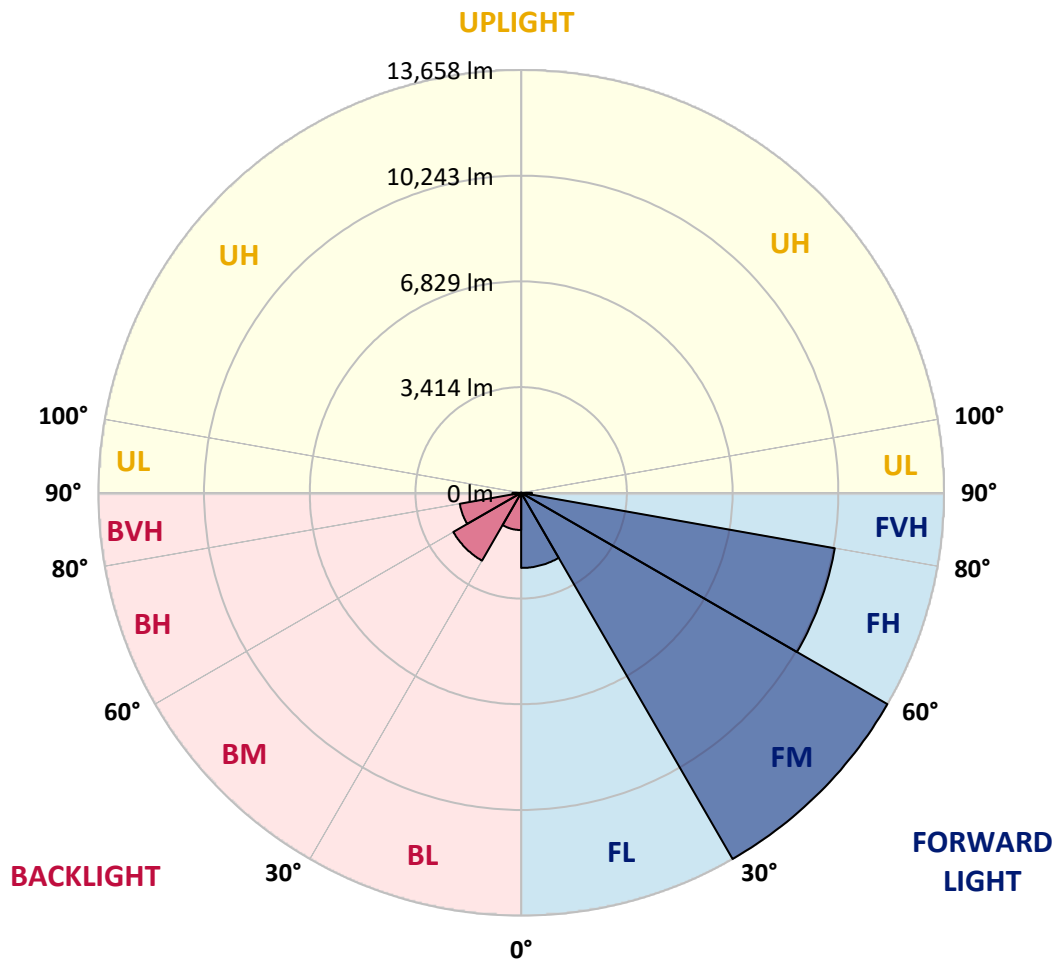
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2426.5	7.4			
FM	(30°-60°)	13657.8	41.7			
FH	(60°-80°)	10286.6	31.4			G4/12000
FVH	(80°-90°)	345.1	1.1			G3/500
BL	(0°-30°)	1203.2	3.7	B3/2500		
BM	(30°-60°)	2530.3	7.7	B3/5000		
BH	(60°-80°)	2014.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	282.6	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°	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5
2.5°	4976.7	4947.7	4952.5	4944.4	4920.3	4878.3	4833.2	4751.0	4665.5	4620.4	4584.9
5°	5392.6	5384.5	5373.3	5347.5	5286.2	5199.2	5091.1	4946.0	4789.7	4707.4	4628.5
7.5°	5703.8	5698.9	5684.4	5668.3	5608.6	5503.8	5341.0	5134.7	4907.4	4794.5	4672.0
10°	5729.5	5737.6	5748.9	5792.4	5800.5	5744.1	5578.0	5328.1	5029.9	4884.8	4728.4
12.5°	5510.3	5528.0	5571.6	5682.8	5800.5	5869.8	5784.4	5531.3	5173.4	4997.6	4799.3
15°	5220.1	5229.8	5283.0	5436.1	5647.3	5861.7	5942.3	5755.3	5358.8	5142.7	4905.7
17.5°	5096.0	5100.8	5137.9	5239.5	5436.1	5742.4	6031.0	5998.8	5586.1	5323.3	5036.3
20°	5033.1	5044.4	5097.6	5197.5	5321.7	5589.3	6043.9	6261.6	5856.9	5549.0	5200.8
22.5°	5212.0	5207.2	5226.6	5276.5	5381.3	5542.5	6034.2	6532.4	6201.9	5839.2	5415.2
25°	5629.6	5647.3	5613.5	5557.0	5590.9	5703.8	6085.8	6825.8	6634.0	6211.6	5695.7
27.5°	6224.5	6206.7	6156.8	6024.6	5955.2	6003.6	6256.7	7141.8	7170.8	6701.7	6066.5
30°	6817.7	6803.2	6754.9	6593.7	6451.8	6411.5	6588.8	7504.5	7810.8	7290.1	6521.1
32.5°	7433.6	7417.5	7372.3	7211.1	7040.2	6946.7	7061.2	7923.7	8565.3	7993.0	7056.3
35°	8192.9	8162.3	8067.1	7843.1	7675.4	7602.9	7656.1	8450.8	9435.9	8824.9	7706.0
37.5°	8907.1	8953.8	8857.1	8547.6	8329.9	8304.1	8363.8	9094.1	10374.1	9755.1	8452.5
40°	9624.5	9632.5	9545.5	9292.4	9068.3	9026.4	9176.3	9874.4	11481.7	10867.4	9360.1
42.5°	10366.1	10382.2	10235.5	10001.7	9837.3	9845.3	10016.2	10788.4	12752.0	12178.1	10404.8
45°	11244.7	11268.9	11107.6	10801.3	10651.4	10952.9	10881.9	11813.8	14144.9	13667.7	11604.2
47.5°	12163.6	12200.7	12078.2	11791.2	11604.2	12018.5	11747.7	12950.3	15644.2	15265.4	12921.3
50°	12665.0	12718.2	12837.5	12816.5	12776.2	12706.9	12713.3	14169.1	17190.3	16929.1	14275.5
52.5°	12395.7	12394.1	12829.4	13358.2	13922.4	13964.4	13890.2	15454.0	18634.7	18555.7	15550.7
55°	11164.1	11247.9	11907.3	12931.0	14472.2	15434.6	15653.9	16925.9	20053.4	20145.3	16845.3
57.5°	9113.4	9182.8	10072.7	11499.4	13730.6	16308.4	18162.4	19065.2	21639.8	22068.6	18568.6
60°	6180.9	6264.8	7207.9	8921.6	11734.8	15821.5	20550.0	22882.7	23538.9	24514.2	20986.8
62.5°	3632.2	3707.9	4476.9	5628.0	8262.2	13559.7	21597.8	28314.0	26555.2	28204.4	24675.4
65°	2500.4	2552.0	2926.0	3503.2	4747.8	9132.8	20298.5	32063.9	31196.5	32776.4	28952.4
67.5°	2012.0	2005.5	2302.1	2695.5	3056.6	4709.1	15349.2	31639.9	35278.5	35937.8	31172.3
70°	1657.3	1650.8	1852.3	2178.0	2442.4	2652.0	8360.6	26700.3	34446.6	34714.2	29128.1
72.5°	1386.4	1392.9	1521.9	1763.7	2003.9	1997.4	3674.1	18783.0	27098.5	28949.2	23219.7
75°	1170.4	1173.6	1259.1	1430.0	1626.6	1608.9	1992.6	10175.8	15752.2	17040.3	12871.3
77.5°	996.3	999.5	1054.3	1149.5	1289.7	1283.3	1454.2	4396.3	6571.1	6490.5	4402.8
80°	888.3	888.3	914.1	931.8	1009.2	980.2	1078.5	2111.9	2777.7	2564.9	1757.2
82.5°	696.4	699.7	857.7	851.2	794.8	757.7	757.7	1244.6	1471.9	1360.6	1028.5
85°	391.8	390.1	553.0	667.4	699.7	533.6	528.8	696.4	801.2	706.1	498.2
87.5°	167.7	170.9	256.3	296.6	396.6	332.1	327.3	359.5	407.9	353.1	230.5
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°	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5	4549.5
2.5°	4551.1	4509.2	4417.3	4302.8	4199.6	4131.9	4070.7	3982.0	3986.8	3925.6	3880.4
5°	4547.8	4460.8	4248.0	3994.9	3751.5	3575.7	3443.5	3324.2	3295.2	3238.8	3204.9
7.5°	4551.1	4409.2	4051.3	3646.7	3345.2	3122.7	3009.9	2947.0	2932.5	2913.1	2914.7
10°	4562.4	4362.5	3835.3	3321.0	3005.0	2858.3	2830.9	2850.3	2872.8	2879.3	2880.9
12.5°	4588.2	4320.5	3598.3	3030.8	2792.2	2747.1	2793.8	2859.9	2903.5	2924.4	2922.8
15°	4646.2	4288.3	3371.0	2803.5	2674.5	2698.7	2785.8	2879.3	2942.2	2971.2	2972.8
17.5°	4709.1	4241.5	3137.2	2629.4	2587.5	2648.7	2756.8	2866.4	2943.8	2976.0	2982.5
20°	4791.3	4183.5	2892.2	2498.8	2505.3	2574.6	2676.2	2785.8	2871.2	2898.6	2911.5
22.5°	4899.3	4120.6	2677.8	2392.4	2411.8	2465.0	2544.0	2639.1	2713.2	2726.1	2737.4
25°	5044.4	4052.9	2506.9	2295.7	2303.7	2334.4	2387.6	2444.0	2495.6	2481.1	2492.4
27.5°	5239.5	3994.9	2379.5	2207.0	2192.5	2199.0	2226.4	2244.1	2271.5	2231.2	2236.0
30°	5468.4	3932.0	2281.2	2129.6	2089.3	2078.0	2084.5	2094.2	2115.1	2060.3	2052.3
32.5°	5734.4	3856.2	2189.3	2061.9	2005.5	1982.9	1986.2	2012.0	2092.6	2058.7	2041.0
35°	6043.9	3770.8	2092.6	1987.8	1949.1	1916.8	1913.6	1994.2	2234.4	2213.5	2197.3
37.5°	6406.6	3685.4	1995.8	1903.9	1907.2	1871.7	1860.4	1952.3	2261.8	2179.6	2168.3
40°	6867.7	3640.2	1913.6	1815.3	1855.6	1850.7	1828.2	1874.9	2081.3	1931.3	1912.0
42.5°	7438.4	3646.7	1852.3	1720.2	1794.3	1845.9	1810.4	1812.0	1886.2	1773.4	1755.6
45°	8142.9	3722.4	1808.8	1644.4	1725.0	1841.1	1804.0	1778.2	1784.6	1725.0	1715.3
47.5°	8965.1	3878.8	1778.2	1581.5	1658.9	1823.3	1802.4	1768.5	1754.0	1721.8	1713.7
50°	9879.2	4106.1	1755.6	1521.9	1599.2	1794.3	1804.0	1758.8	1742.7	1729.8	1725.0
52.5°	10777.2	4365.7	1721.8	1470.3	1552.5	1758.8	1808.8	1749.2	1731.4	1721.8	1716.9
55°	11778.3	4689.7	1670.2	1426.7	1513.8	1713.7	1808.8	1734.7	1715.3	1716.9	1715.3
57.5°	13130.9	5213.7	1608.9	1389.7	1467.0	1658.9	1778.2	1718.5	1694.4	1696.0	1697.6
60°	15244.4	6137.4	1534.8	1352.6	1409.0	1594.4	1736.3	1683.1	1658.9	1665.3	1667.0
62.5°	18352.6	7493.2	1438.0	1297.8	1347.7	1525.1	1678.2	1637.9	1613.8	1629.9	1629.9
65°	21583.3	8689.4	1318.7	1228.5	1283.3	1449.3	1605.7	1581.5	1557.3	1594.4	1592.8
67.5°	22452.3	8421.8	1199.4	1152.7	1218.8	1365.5	1518.6	1505.7	1492.8	1557.3	1554.1
70°	19945.4	6761.3	1089.8	1075.3	1147.8	1275.2	1425.1	1425.1	1417.1	1465.4	1454.2
72.5°	15196.0	4794.5	985.0	993.1	1067.2	1176.9	1323.6	1334.9	1322.0	1346.1	1336.5
75°	8134.9	2743.9	880.2	902.8	967.3	1076.9	1210.7	1222.0	1213.9	1212.3	1217.2
77.5°	2703.6	1341.3	770.6	806.1	862.5	973.7	1093.0	1110.8	1091.4	1088.2	1086.6
80°	1204.3	843.1	649.7	696.4	746.4	856.0	968.9	983.4	962.4	991.5	954.4
82.5°	773.8	554.6	520.7	572.3	620.7	738.4	844.8	848.0	828.6	962.4	820.6
85°	375.6	343.4	391.8	438.5	480.4	580.4	699.7	701.3	652.9	594.9	573.9
87.5°	187.0	199.9	261.2	303.1	324.0	398.2	509.4	499.8	478.8	435.3	401.4
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)