

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: P190987

Luminaire Tested: **GLEON-AF-09-LED-E1-AFL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190987
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-AFL-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61262.5 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

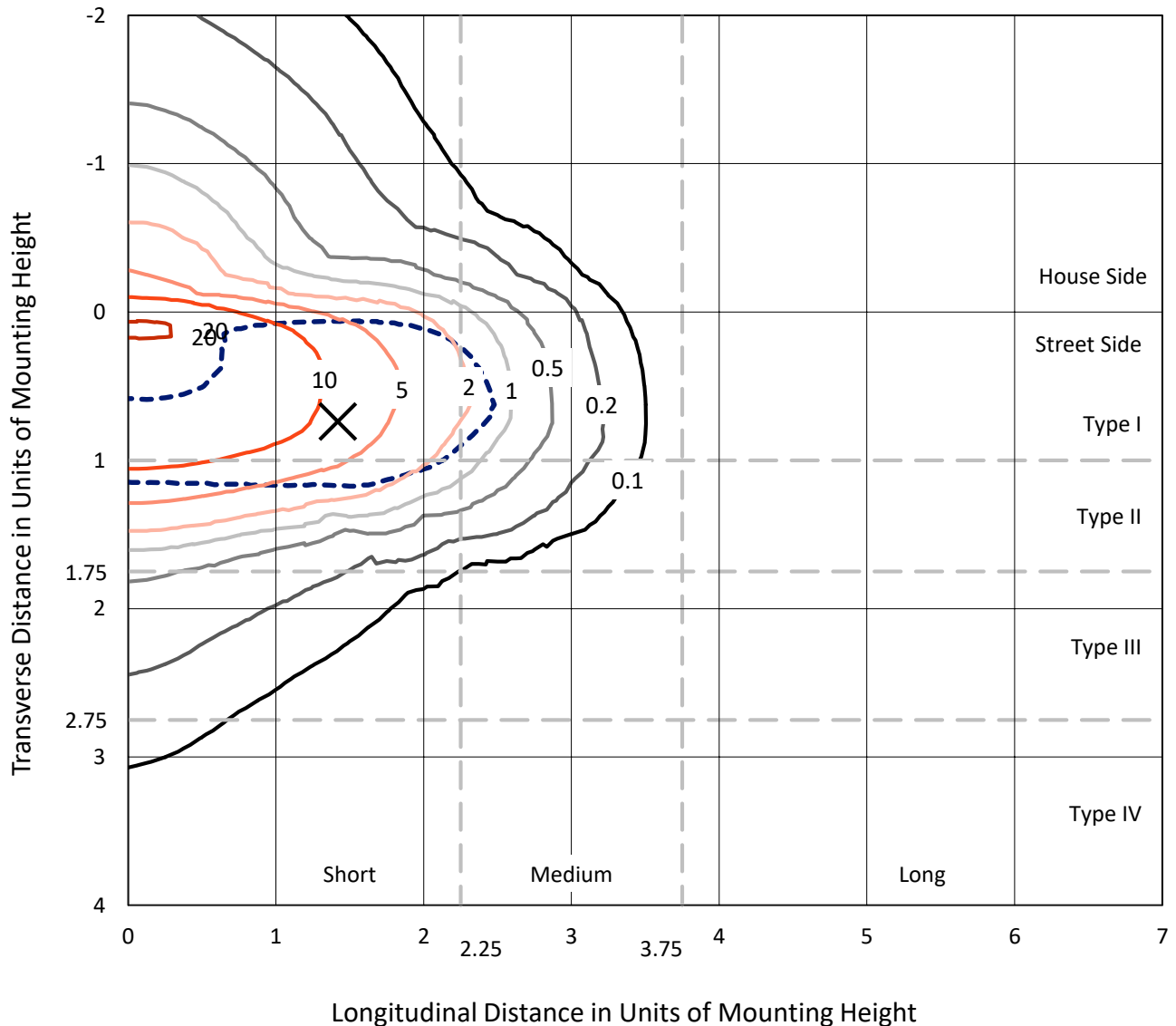
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P190987
 CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-1200

Iso-Footcandle Lines of Horizontal Illumination

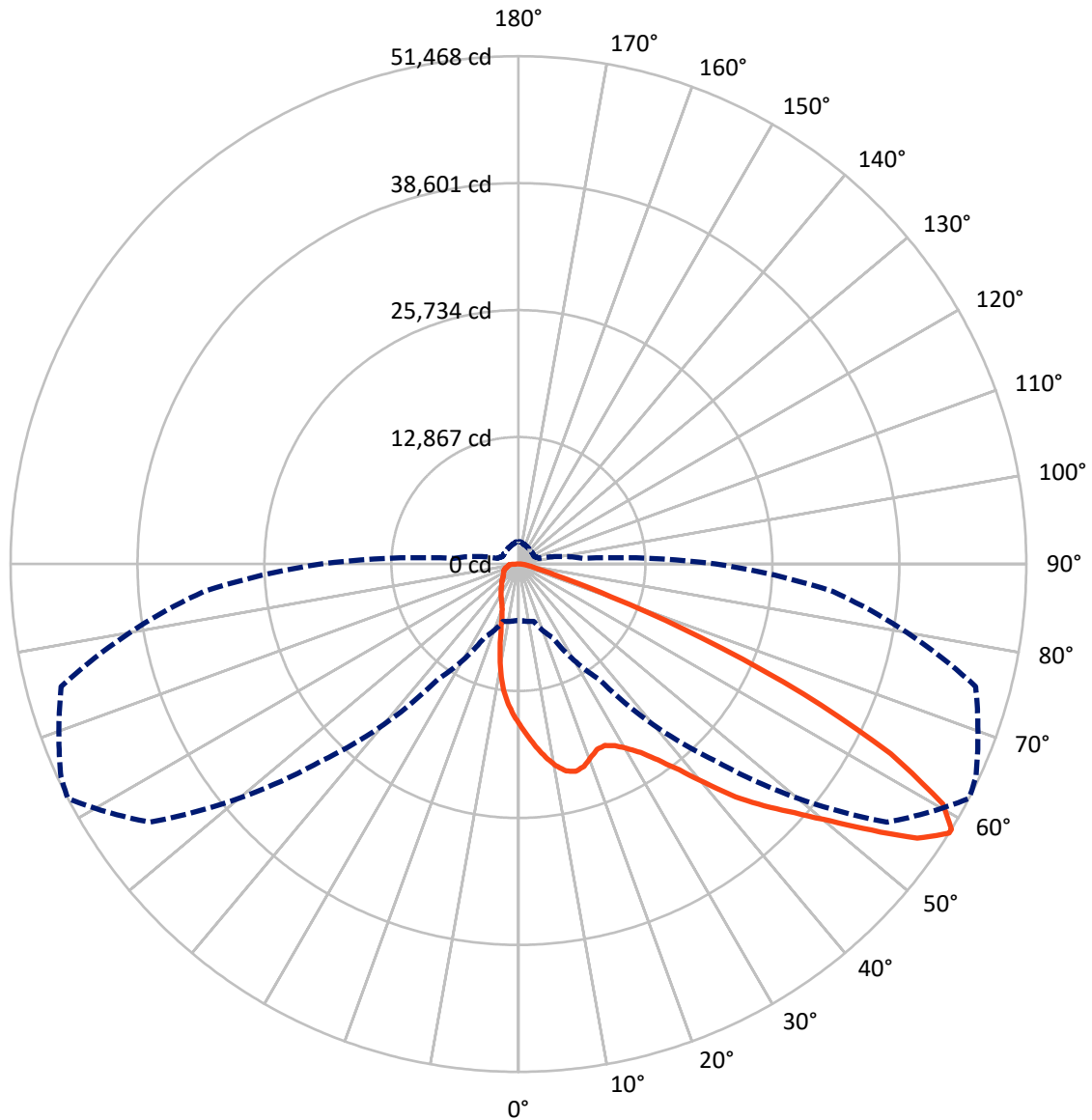
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 22 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P190987
CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-1200

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9342.8	0.0	9342.8
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	51919.7	0.0	51919.7
	% Fixture	84.7	0.0	84.7
Total	Lumens	61262.5	0.0	61262.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1455.4	2.4
10°-20°	3720.2	6.1
20°-30°	6013.8	9.8
30°-40°	9546.9	15.6
40°-50°	13969.1	22.8
50°-60°	14610.6	23.8
60°-70°	8631.9	14.1
70°-80°	2431.7	4.0
80°-90°	882.8	1.4
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°	61262.5	100.0
0°-180°	61262.5	100.0



REPORT NUMBER: P190987

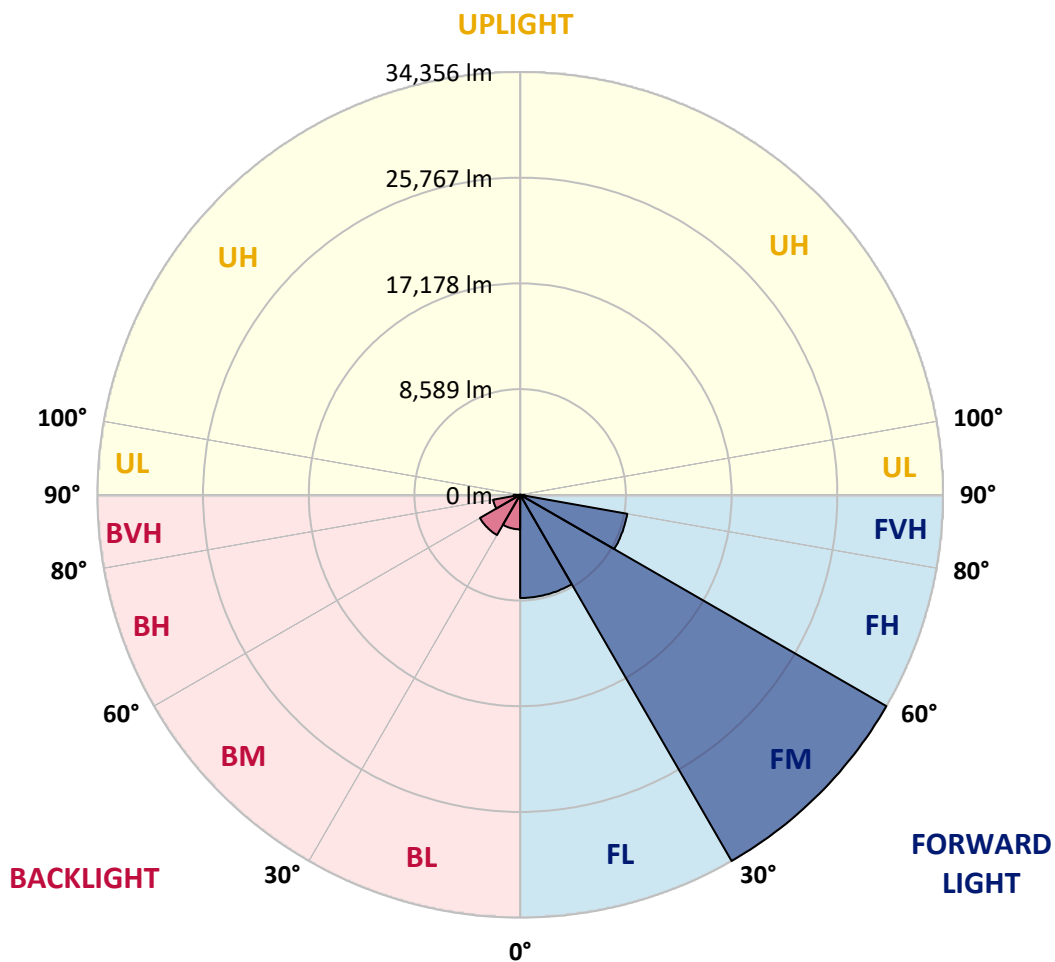
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8381.5	13.7			
FM	(30°-60°)	34355.7	56.1			
FH	(60°-80°)	8834.3	14.4			G4/12000
FVH	(80°-90°)	348.3	0.6			G3/500
BL	(0°-30°)	2808.0	4.6	B4/5000		
BM	(30°-60°)	3771.0	6.2	B3/5000		
BH	(60°-80°)	2229.3	3.6	B3/2500		G3/2500
BVH	(80°-90°)	534.5	0.9			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P190987

CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1
2.5°	18595.4	18445.3	18350.2	18266.5	18156.9	17923.2	17608.8	17409.7	17308.7	16965.4	16558.7
5°	20418.6	20285.8	20187.8	20075.3	19879.1	19512.8	19005.0	18601.1	18402.1	17715.6	16902.0
7.5°	19991.6	20046.5	20216.7	20513.7	20767.6	20718.6	20265.7	19752.2	19489.7	18534.8	17300.1
10°	17418.4	17513.6	17807.8	18503.0	19628.2	20782.1	21134.0	20779.2	20513.7	19345.4	17709.7
12.5°	16902.0	16899.1	16922.2	17106.8	17776.1	19400.3	21162.9	21520.5	21361.9	20118.6	18128.0
15°	17112.6	17118.4	17101.1	17178.9	17386.7	18030.0	20280.1	21806.1	21918.7	20897.5	18560.7
17.5°	17666.5	17652.0	17585.8	17585.8	17660.7	17911.7	19241.6	21540.8	22060.0	21586.9	18941.6
20°	18595.4	18529.0	18353.1	18191.5	18110.7	18246.4	18814.6	20929.2	21814.8	22189.8	19256.0
22.5°	19720.4	19668.6	19383.0	19036.8	18756.9	18754.1	19033.8	20395.5	21390.7	22758.2	19521.4
25°	21174.4	21090.7	20666.7	20112.7	19622.3	19434.8	19512.8	20369.5	21159.9	23375.4	19758.0
27.5°	22882.2	22729.3	22227.4	21428.3	20707.1	20329.1	20216.7	20839.8	21370.6	24140.0	20086.9
30°	24953.5	24777.5	24134.2	23092.8	22074.5	21454.2	21214.8	21673.5	22068.7	25071.7	20614.7
32.5°	27310.3	27056.5	26312.2	25164.1	23825.5	22879.3	22489.9	22775.5	23089.9	26194.0	21275.3
35°	30567.3	30264.4	29188.4	27604.6	26093.0	24791.9	24168.8	24376.5	24682.3	27867.1	22230.3
37.5°	32788.5	32653.0	31937.5	30449.1	28804.7	27307.5	26344.0	26465.1	26638.2	29958.6	23453.4
40°	32768.4	32823.2	32837.6	32852.1	31732.8	30299.0	29263.3	29136.4	29101.8	32254.9	24843.9
42.5°	31127.0	31351.9	32078.9	33553.1	34233.9	33576.1	32627.0	32260.7	32078.9	34960.9	26318.0
45°	28614.3	28735.4	30097.1	32976.0	35514.7	36821.5	36103.2	34949.3	34620.4	37447.6	27541.1
47.5°	27319.0	27451.7	28308.5	31447.1	35500.3	39443.8	39859.2	37661.0	37072.5	39611.1	28597.0
50°	24235.1	24512.2	25591.1	28787.4	34205.0	40649.6	43785.5	40891.9	39674.6	41717.1	29655.7
52.5°	18572.3	18999.3	20208.0	24414.1	30919.2	40052.5	46926.9	44809.5	43090.2	43897.9	30564.4
55°	11715.1	12032.5	13047.9	17242.4	24734.2	36945.6	48118.4	49047.3	47518.3	45963.4	31351.9
57.5°	6369.6	6511.0	6891.8	9519.8	16088.5	30076.9	46381.7	51458.9	50824.3	47717.4	31946.2
58°	5700.4	5795.5	6032.1	8250.5	14268.2	28198.9	45611.5	51467.6	51150.3	47974.1	31992.4
60°	4229.1	4180.1	3969.5	4708.0	7941.9	19481.0	40955.5	49407.9	50339.7	48288.6	31767.3
62.5°	3715.7	3597.3	3167.5	3118.5	3862.8	8974.6	31337.5	42322.9	44523.9	46494.2	30400.0
65°	3490.6	3363.7	2809.8	2630.9	2786.7	3796.4	18459.8	31741.4	34502.2	41053.5	26903.6
67.5°	3323.3	3158.9	2581.9	2336.7	2348.2	2509.8	7399.5	19991.6	23098.5	31170.2	20926.3
70°	3161.7	2982.9	2388.6	2105.9	2039.6	1984.7	2942.5	10007.3	12825.8	19688.7	13342.1
72.5°	2988.7	2812.7	2218.4	1924.2	1794.4	1612.6	1921.3	4093.5	5717.7	9315.0	6052.3
75°	2737.6	2579.0	2048.3	1762.6	1578.0	1335.7	1451.1	2137.7	2564.5	3709.8	2916.5
77.5°	2429.0	2299.2	1857.8	1629.9	1399.1	1084.6	1116.4	1482.8	1644.3	2123.2	1733.8
80°	1745.3	1791.5	1653.0	1465.5	1246.3	879.8	856.8	1081.8	1168.3	1364.5	1127.9
82.5°	1226.0	1252.0	1367.4	1197.2	1029.9	692.3	631.8	761.6	813.6	897.1	608.7
85°	845.3	816.4	937.5	833.7	744.3	461.6	432.7	516.4	548.1	556.8	314.5
87.5°	507.7	507.7	542.4	447.1	401.0	239.5	233.6	294.2	314.5	300.0	173.1
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°	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1	16273.1
2.5°	16316.4	16111.6	15676.0	15326.9	14885.6	14426.9	14170.1	13896.1	13708.6	13572.9	13789.3
5°	16440.5	16022.2	15122.1	14268.2	13324.9	12344.0	11599.8	10907.4	10425.6	10125.7	10408.3
7.5°	16636.7	15993.3	14559.6	13099.8	11406.5	9773.7	8313.9	7399.5	6865.8	6603.2	6767.7
10°	16861.6	15947.2	13898.9	11516.1	9092.9	7036.1	5945.6	5576.3	5455.2	5406.1	5429.2
12.5°	17049.1	15849.1	13088.3	9600.6	6828.3	5556.2	5241.7	5233.0	5259.0	5264.7	5273.4
15°	17181.9	15704.9	11885.4	7604.3	5460.9	5062.8	5045.5	5097.5	5146.5	5166.6	5178.2
17.5°	17271.3	15407.7	10526.6	6011.9	4892.6	4823.4	4863.7	4930.1	4982.1	4996.5	5008.0
20°	17262.6	14972.1	8908.3	5013.8	4583.9	4583.9	4653.2	4705.1	4708.0	4690.6	4699.3
22.5°	17173.2	14374.9	7339.0	4483.0	4309.9	4358.9	4428.1	4379.2	4177.2	4044.4	4053.1
25°	17023.1	13662.4	5994.6	4145.4	4056.0	4142.5	4122.4	3753.1	3464.6	3334.8	3334.8
27.5°	16890.5	12820.0	4961.8	3851.2	3802.2	3908.9	3551.2	3216.6	3095.3	3034.8	3014.6
30°	16795.3	11911.3	4272.4	3568.5	3562.7	3484.8	3080.9	2988.7	2968.5	2919.4	2902.1
32.5°	16818.3	10991.1	3831.1	3320.4	3340.5	2982.9	2856.0	2876.1	2858.8	2806.9	2783.9
35°	17008.7	10117.0	3542.5	3095.3	3034.8	2694.4	2723.2	2760.7	2755.0	2682.9	2659.8
37.5°	17349.1	9289.0	3352.1	2907.8	2648.2	2550.1	2596.4	2654.0	2639.6	2590.5	2573.2
40°	17706.9	8510.1	3196.3	2760.7	2420.3	2452.1	2492.4	2524.2	2538.7	2553.1	2541.5
42.5°	18055.9	7696.7	3005.9	2610.8	2325.2	2359.7	2377.0	2408.8	2486.7	2541.5	2538.7
45°	18263.7	6932.1	2809.8	2397.3	2250.2	2270.3	2258.8	2322.3	2417.4	2506.8	2509.8
47.5°	18494.4	6337.9	2654.0	2201.1	2178.1	2192.5	2157.8	2221.3	2307.9	2417.4	2429.0
50°	18774.2	5983.0	2530.0	2045.3	2080.0	2080.0	2071.3	2129.0	2250.2	2377.0	2400.1
52.5°	19091.5	5913.8	2426.1	1932.8	1981.9	1979.0	1987.6	2074.1	2206.9	2330.9	2351.2
55°	19478.1	6101.4	2313.6	1849.2	1886.6	1898.2	1927.0	2025.1	2137.7	2279.0	2287.6
57.5°	19928.2	6482.1	2224.2	1782.8	1800.1	1837.6	1883.8	1973.2	2094.4	2250.2	2258.8
58°	20003.2	6562.9	2209.8	1777.1	1782.8	1826.1	1878.0	1964.6	2085.7	2255.9	2264.6
60°	20006.1	6831.2	2178.1	1751.1	1716.4	1788.5	1846.2	1932.8	2071.3	2276.1	2296.3
62.5°	19296.4	6828.3	2154.9	1713.5	1647.3	1736.7	1803.0	1903.9	2056.8	2325.2	2365.6
65°	16991.4	6205.2	2045.3	1655.9	1592.4	1690.5	1765.5	1883.8	2097.3	2538.7	2564.5
67.5°	13290.3	5085.9	1840.5	1575.1	1520.3	1644.3	1742.4	1880.9	2140.5	2587.7	2604.9
70°	8787.0	3805.1	1615.4	1482.8	1445.3	1589.6	1754.0	1979.0	2091.5	2483.8	2437.7
72.5°	4560.8	2671.3	1433.8	1367.4	1358.8	1540.5	1921.3	1967.4	2042.4	2336.7	2279.0
75°	2394.4	1854.9	1275.1	1240.4	1254.9	1528.9	2267.5	1915.5	1979.0	2235.8	2345.3
77.5°	1465.5	1497.2	1139.5	1125.0	1153.9	1494.3	2264.6	1849.2	1886.6	2056.8	2178.1
80°	980.8	1214.5	1035.6	1038.5	1058.8	1367.4	2033.8	1745.3	1774.1	1944.3	2068.4
82.5°	620.2	718.3	940.4	989.5	963.5	1127.9	1728.0	1589.6	1629.9	2224.2	2351.2
85°	314.5	450.0	816.4	952.0	868.3	790.4	1402.1	1393.4	1413.5	1604.0	1676.1
87.5°	144.2	248.1	637.5	830.8	654.9	493.3	1018.3	1032.8	1113.5	1139.5	1139.5
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)