

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: P191587

Luminaire Tested: **GLEON-AF-09-LED-E1-T4W-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191587  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
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-T4W-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59298.4 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G5

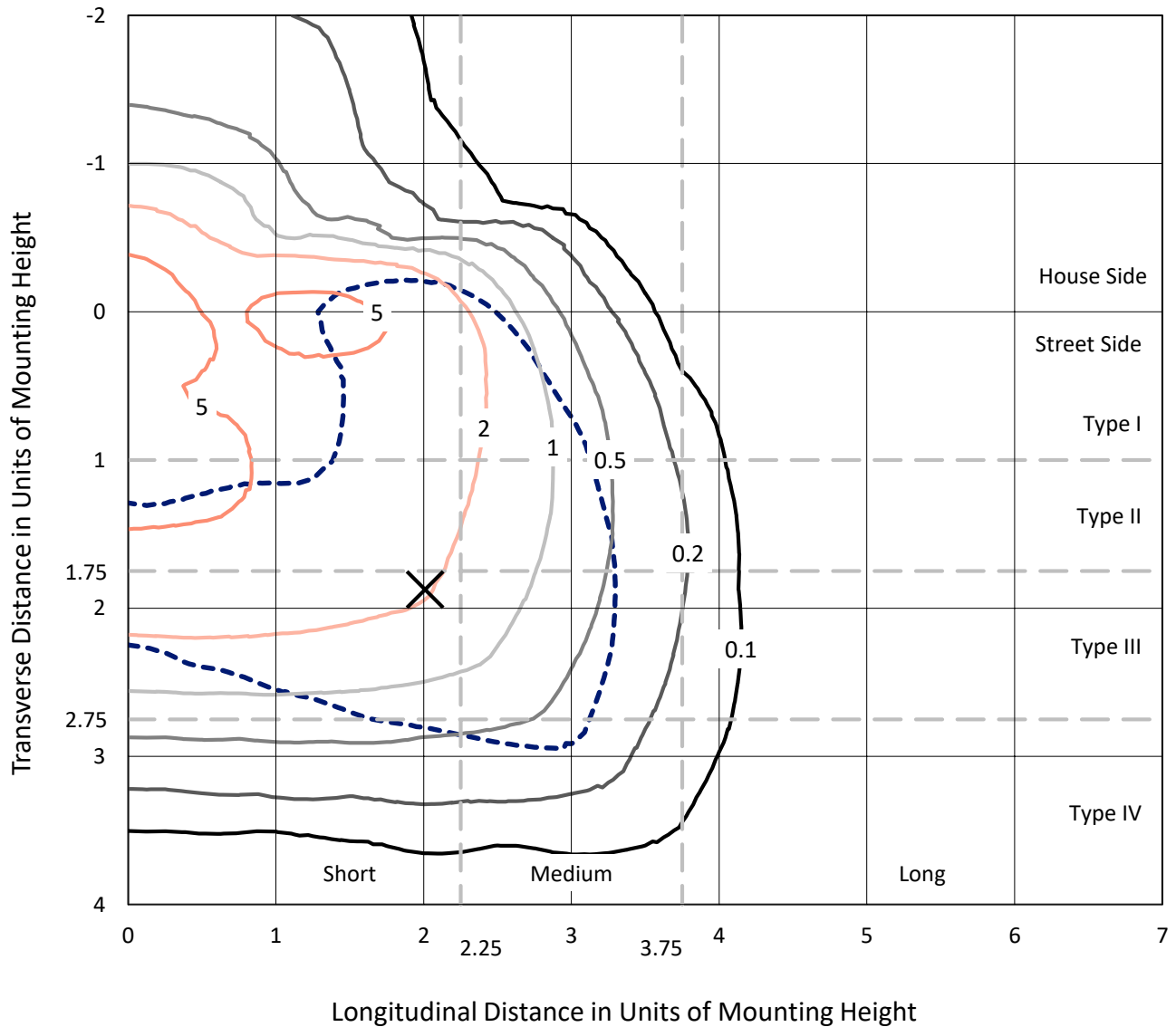
Input Watts (W): 575  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

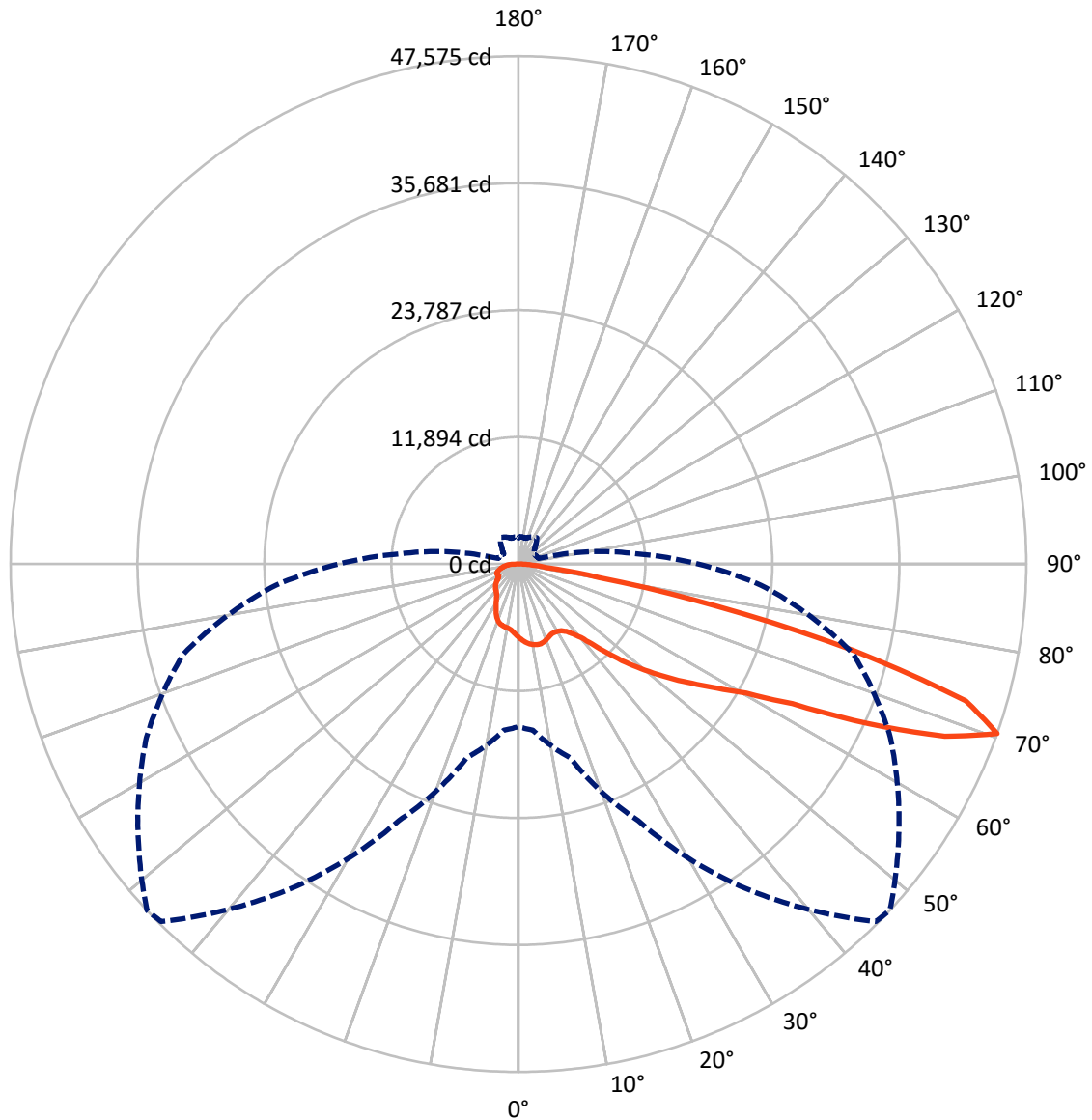
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.8 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12370.8	0.0	12370.8
	% Fixture	20.9	0.0	20.9
<b>Street Side</b>	Lumens	46927.6	0.0	46927.6
	% Fixture	79.1	0.0	79.1
<b>Total</b>	Lumens	59298.4	0.0	59298.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	659.3	1.1
10°-20°	1934.1	3.3
20°-30°	2856.2	4.8
30°-40°	4151.4	7.0
40°-50°	7471.0	12.6
50°-60°	12942.7	21.8
60°-70°	18473.0	31.2
70°-80°	9483.0	16.0
80°-90°	1327.7	2.2
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°	59298.4	100.0
0°-180°	59298.4	100.0

**Coefficient of Utilization**



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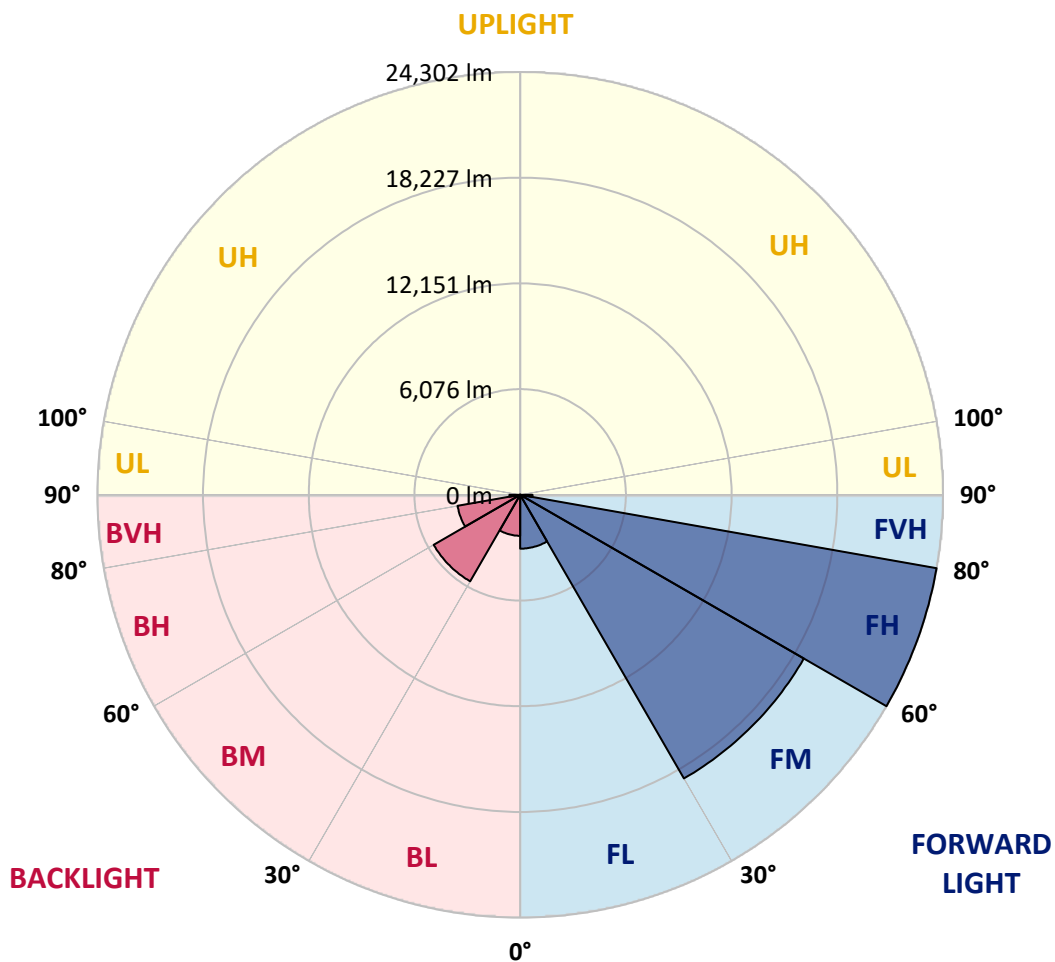
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3094.1	5.2			
FM	(30°-60°)	18823.0	31.7			
FH	(60°-80°)	24302.1	41.0			G5
FVH	(80°-90°)	708.5	1.2			G4/750
BL	(0°-30°)	2355.5	4.0	B3/2500		
BM	(30°-60°)	5742.2	9.7	B4/8500		
BH	(60°-80°)	3654.0	6.2	B4/5000		G4/5000
BVH	(80°-90°)	619.2	1.0			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5
2.5°	7284.3	7269.9	7264.2	7252.6	7238.2	7166.1	7151.7	7099.7	7027.6	6952.6	6874.7
5°	7763.3	7760.3	7728.6	7670.9	7578.6	7420.0	7382.4	7255.5	7085.3	6920.9	6756.4
7.5°	8184.4	8158.4	8097.9	7982.5	7821.0	7604.6	7552.7	7376.7	7143.0	6918.0	6695.8
10°	8493.2	8478.7	8345.9	8187.3	7976.8	7737.3	7676.7	7480.5	7223.8	6938.2	6661.3
12.5°	8669.1	8640.3	8487.3	8296.9	8045.9	7812.3	7751.7	7552.7	7264.2	6938.2	6612.1
15°	8657.5	8637.4	8484.5	8276.8	8022.9	7818.0	7763.3	7564.2	7255.5	6909.3	6548.7
17.5°	8426.8	8435.5	8305.6	8100.7	7893.1	7737.3	7688.2	7503.5	7197.8	6851.6	6473.6
20°	8022.9	8063.3	7976.8	7795.0	7679.6	7572.8	7541.1	7385.3	7108.4	6767.9	6392.9
22.5°	7619.0	7656.5	7621.9	7469.0	7451.7	7388.2	7370.9	7258.3	7030.4	6716.0	6343.8
25°	7321.9	7356.4	7350.7	7218.0	7269.9	7267.0	7252.6	7197.8	7013.1	6716.0	6352.5
27.5°	7241.1	7252.6	7241.1	7119.9	7192.1	7249.8	7238.2	7229.5	7065.1	6799.7	6462.2
30°	7518.0	7500.7	7411.3	7166.1	7232.5	7313.2	7301.6	7307.4	7220.9	7019.0	6707.4
32.5°	8623.0	8545.0	8262.4	7572.8	7396.9	7440.1	7445.9	7541.1	7555.5	7356.4	7088.1
35°	10276.0	10189.4	9823.1	8663.4	7907.5	7757.4	7757.4	7901.7	7988.2	7841.1	7679.6
37.5°	12027.1	11931.9	11735.7	10175.0	8980.7	8308.5	8294.1	8395.1	8519.0	8553.7	8594.1
40°	14017.7	13916.7	13971.6	11871.3	10477.9	9263.3	9058.5	8986.4	9321.1	9543.2	9866.4
42.5°	16195.8	16149.6	16169.8	13760.9	12182.9	10691.4	10400.0	10027.9	10431.7	10827.0	11504.9
45°	18212.3	18252.7	18232.5	15783.2	14081.1	12433.9	12125.2	11404.0	11799.2	12477.1	13582.0
47.5°	19977.8	19810.6	20070.2	17993.1	16207.3	14384.0	14003.3	13036.8	13437.8	14274.5	16143.8
50°	22121.3	22098.3	21717.5	20941.4	18777.8	16342.9	15843.8	14724.5	15347.6	16510.2	19372.0
52.5°	24374.5	23956.1	23607.0	23234.9	21504.0	18350.8	17739.2	16406.4	17592.1	19054.7	23307.0
55°	24836.0	24648.5	25081.2	25707.3	24132.1	20436.5	19724.0	18515.2	20119.2	21962.7	27844.9
57.5°	25822.7	25819.8	26714.1	27830.5	26838.1	22649.3	21930.9	21062.6	22960.8	25294.7	32662.7
60°	26489.1	26676.6	28338.3	30504.8	29495.2	25205.3	24544.7	24002.3	26191.9	29019.1	37151.6
62.5°	26838.1	27092.0	29359.5	31589.5	33251.2	29460.5	28799.9	28018.0	30467.4	33104.1	39776.8
65°	25387.0	25886.1	29200.8	32527.2	36540.0	36358.2	36061.2	34688.0	35813.0	36332.3	38827.7
67.5°	21371.3	21881.8	25741.8	31653.0	38888.3	43010.8	43074.3	40728.9	39101.8	36609.3	32645.4
70°	15226.4	15627.4	18821.1	26538.1	37099.7	47358.3	47574.7	43512.7	38446.9	32466.5	22807.9
72.5°	7229.5	7474.7	10498.1	17271.8	29440.3	43391.6	43809.9	39958.6	32691.6	24036.9	12442.6
75°	2657.0	2732.0	3548.4	7347.9	17075.7	31999.2	32492.5	28644.1	21671.3	11966.5	4739.8
77.5°	1592.4	1641.5	1990.6	3101.3	6716.0	18290.2	19020.0	15578.4	9471.1	4454.2	2331.0
80°	1113.6	1148.2	1428.0	1930.0	3173.4	6969.9	7619.0	6358.3	3773.5	2818.5	1696.4
82.5°	753.0	770.3	1003.9	1304.0	2108.8	2489.7	2685.9	2827.2	2544.5	2097.4	1076.0
85°	493.3	510.7	680.9	859.7	1341.5	1286.7	1315.5	1664.5	1857.9	1425.2	597.2
87.5°	282.7	294.3	409.7	458.7	657.8	545.2	551.1	877.0	1188.6	960.7	363.5
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°	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5	6880.5
2.5°	6854.5	6816.9	6733.4	6681.4	6632.4	6620.8	6600.6	6597.7	6594.9	6594.9	6586.2
5°	6701.6	6638.1	6508.3	6436.2	6375.6	6369.8	6366.9	6381.4	6387.1	6392.9	6384.2
7.5°	6603.6	6517.0	6355.4	6251.6	6179.4	6162.2	6191.0	6257.3	6300.6	6317.9	6309.3
10°	6542.9	6436.2	6248.7	6136.2	6075.6	6066.9	6104.5	6182.3	6271.7	6306.4	6303.5
12.5°	6473.6	6352.5	6153.5	6035.2	6000.5	6017.9	6066.9	6139.0	6231.4	6286.1	6289.1
15°	6404.5	6263.1	6058.2	5954.4	5940.0	5963.1	6009.2	6064.1	6136.2	6191.0	6196.7
17.5°	6320.8	6173.7	5968.8	5862.1	5850.6	5862.1	5865.0	5893.8	5940.0	5991.9	6006.4
20°	6231.4	6081.3	5867.9	5761.2	5709.2	5663.1	5611.1	5616.9	5631.3	5683.2	5694.8
22.5°	6167.9	6017.9	5790.0	5642.8	5504.4	5365.9	5262.1	5247.6	5253.4	5296.6	5311.1
25°	6173.7	6015.0	5769.7	5516.0	5213.0	4990.9	4852.4	4829.4	4826.4	4858.2	4878.4
27.5°	6286.1	6127.5	5844.8	5386.0	4895.6	4566.8	4419.7	4402.4	4379.3	4387.9	4411.0
30°	6537.2	6390.1	6026.5	5253.4	4552.3	4151.3	3998.4	3981.1	3949.4	3935.0	3952.3
32.5°	6946.9	6825.6	6292.0	5126.4	4209.0	3796.5	3640.7	3603.2	3583.0	3565.7	3580.1
35°	7627.6	7575.8	6646.8	4988.0	3906.1	3522.4	3381.1	3323.4	3294.5	3326.2	3349.3
37.5°	8695.1	8723.9	7111.2	4771.7	3672.5	3340.8	3222.4	3156.1	3112.8	3138.7	3164.7
40°	10206.7	10227.0	7624.8	4465.8	3470.6	3234.0	3107.0	3046.4	2985.9	2939.7	2936.8
42.5°	12191.5	11986.7	8129.6	4134.1	3236.8	3167.6	3026.3	2951.2	2858.9	2732.0	2706.0
45°	14545.6	13827.2	8513.3	3753.2	2974.3	3086.9	2936.8	2833.0	2688.7	2550.2	2535.8
47.5°	17257.4	15803.5	8700.8	3358.0	2729.1	2968.5	2827.2	2662.7	2481.0	2411.8	2403.1
50°	20569.3	18148.9	8790.2	2974.3	2515.6	2812.8	2668.6	2475.2	2322.3	2307.9	2299.3
52.5°	24339.8	20970.3	8819.1	2659.9	2339.7	2610.8	2538.7	2351.2	2230.0	2241.6	2241.6
55°	28286.3	23884.0	8426.8	2432.0	2178.1	2403.1	2452.1	2302.2	2201.2	2247.3	2264.6
57.5°	31909.7	26466.0	7192.1	2256.0	2025.2	2244.5	2420.4	2348.3	2279.0	2466.5	2478.1
60°	34690.8	27992.1	5371.6	2097.4	1912.7	2189.6	2504.1	2524.2	2541.6	2988.8	3049.3
62.5°	35273.6	27484.3	3692.6	1973.3	1860.7	2235.8	2657.0	2659.9	2639.7	2951.2	2988.8
65°	32599.3	24273.5	2685.9	1904.0	1817.5	2319.4	2786.8	2726.3	2593.5	2830.1	2760.8
67.5°	25889.0	18287.3	2235.8	1852.1	1754.1	2313.7	2925.2	2786.8	2567.5	2772.4	2659.9
70°	16804.5	11057.8	1990.6	1808.8	1679.0	2204.0	3006.0	2781.0	2492.5	2579.1	2446.4
72.5°	8198.8	4944.7	1826.2	1745.4	1601.1	2051.1	3003.2	2729.1	2414.7	2408.8	2336.7
75°	3208.0	2264.6	1676.1	1650.1	1468.4	1878.0	2922.4	2654.1	2322.3	2230.0	2204.0
77.5°	1878.0	1615.5	1485.7	1508.8	1309.8	1705.0	2804.1	2524.2	2195.4	2085.8	2056.9
80°	1367.5	1208.7	1266.5	1304.0	1119.3	1531.9	2645.5	2365.6	2054.1	2108.8	2068.5
82.5°	877.0	778.9	1027.0	1064.5	931.8	1355.9	2472.4	2198.3	1855.0	1684.8	1644.4
85°	447.1	493.3	764.5	810.7	718.3	1113.6	2261.7	1976.1	1630.0	1402.1	1425.2
87.5°	251.0	337.6	487.5	545.2	507.7	856.8	1834.8	1630.0	1329.9	1081.9	952.1
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)