

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: P190986

Luminaire Tested: **GLEON-AF-08-LED-E1-AFL-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190986  
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-08-LED-E1-AFL-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 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: 54920.2 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B4 - U0 - G4

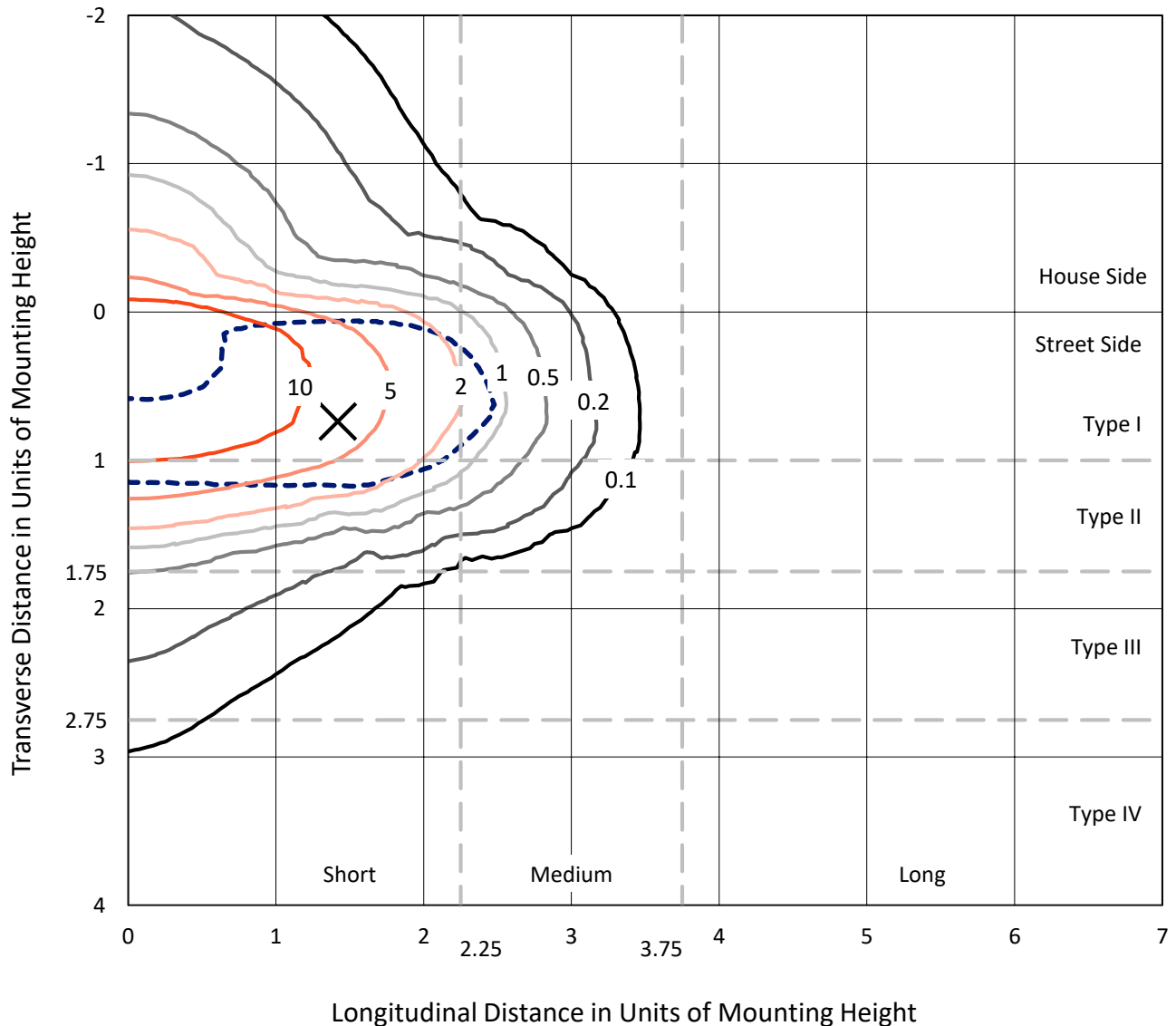
Input Watts (W): 511  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

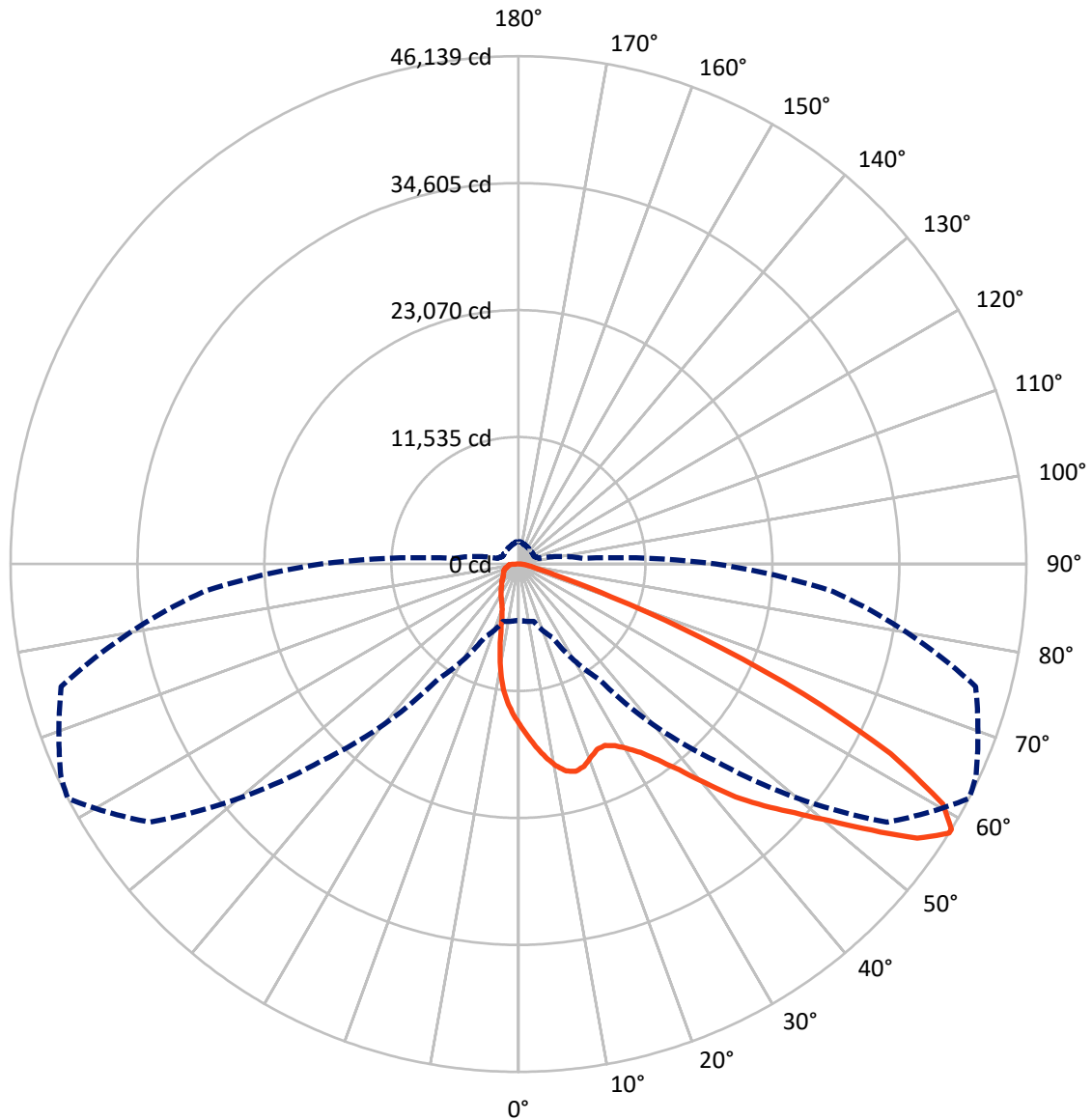
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.8 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8375.5	0.0	8375.5
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	46544.6	0.0	46544.6
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	54920.2	0.0	54920.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1304.7	2.4
10°-20°	3335.1	6.1
20°-30°	5391.3	9.8
30°-40°	8558.6	15.6
40°-50°	12523.0	22.8
50°-60°	13098.0	23.8
60°-70°	7738.3	14.1
70°-80°	2179.9	4.0
80°-90°	791.4	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°	54920.2	100.0
0°-180°	54920.2	100.0

**Coefficient of Utilization**



REPORT NUMBER: P190986

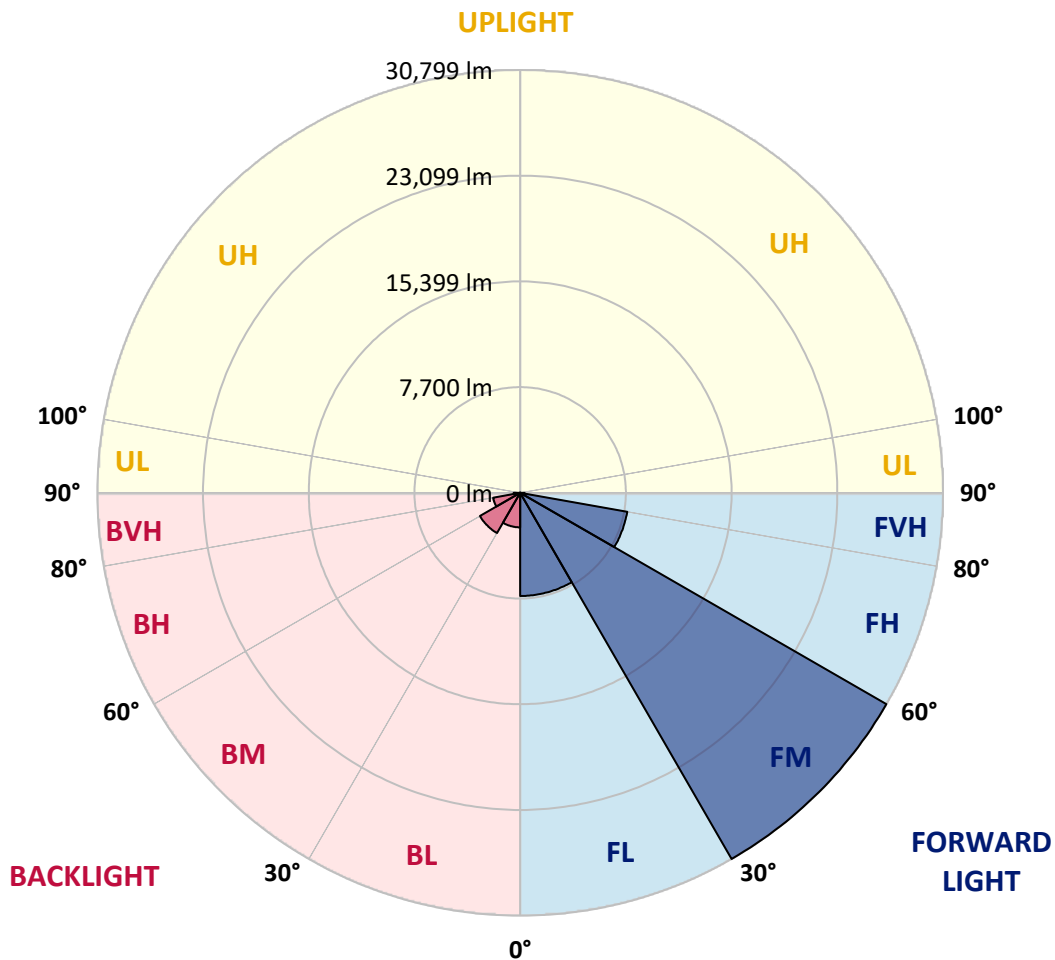
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7513.8	13.7			
FM	(30°-60°)	30798.9	56.1			
FH	(60°-80°)	7919.7	14.4			G4/12000
FVH	(80°-90°)	312.2	0.6			G3/500
BL	(0°-30°)	2517.3	4.6	B4/5000		
BM	(30°-60°)	3380.6	6.2	B3/5000		
BH	(60°-80°)	1998.5	3.6	B3/2500		G3/2500
BVH	(80°-90°)	479.2	0.9			G3/500
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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4
2.5°	16670.3	16535.8	16450.5	16375.5	16277.2	16067.7	15785.8	15607.4	15516.8	15209.1	14844.4
5°	18304.7	18185.7	18097.8	17997.0	17821.1	17492.7	17037.6	16675.4	16497.0	15881.5	15152.3
7.5°	17922.0	17971.1	18123.7	18390.1	18617.6	18573.7	18167.6	17707.3	17472.0	16616.0	15509.1
10°	15615.1	15700.5	15964.3	16587.6	17596.1	18630.6	18946.1	18627.9	18390.1	17342.7	15876.3
12.5°	15152.3	15149.6	15170.4	15335.9	15935.8	17391.8	18972.0	19292.6	19150.4	18035.7	16251.3
15°	15341.0	15346.2	15330.7	15400.5	15586.7	16163.3	18180.6	19548.7	19649.6	18734.0	16639.2
17.5°	15837.5	15824.6	15765.1	15765.1	15832.3	16057.4	17249.6	19310.8	19776.2	19352.1	16980.6
20°	16670.3	16610.8	16453.0	16308.2	16235.8	16357.4	16866.8	18762.5	19556.4	19892.6	17262.5
22.5°	17678.8	17632.3	17376.3	17066.0	16815.1	16812.5	17063.3	18284.0	19176.2	20402.0	17500.4
25°	18982.3	18907.3	18527.2	18030.6	17591.0	17422.8	17492.7	18260.8	18969.4	20955.6	17712.5
27.5°	20513.2	20376.3	19926.3	19209.9	18563.3	18224.6	18123.7	18682.3	19158.1	21640.8	18007.3
30°	22370.1	22212.4	21635.7	20702.1	19789.2	19233.1	19018.5	19429.7	19784.0	22476.2	18480.5
32.5°	24483.0	24255.4	23588.2	22558.9	21358.9	20510.7	20161.5	20417.6	20699.5	23482.1	19072.8
35°	27402.8	27131.2	26166.6	24746.8	23391.6	22225.3	21666.7	21852.9	22127.0	24982.1	19928.8
37.5°	29394.1	29272.6	28631.2	27296.7	25822.7	24480.4	23616.7	23725.3	23880.5	26857.1	21025.3
40°	29376.0	29425.1	29438.1	29451.0	28447.5	27162.2	26233.8	26120.0	26089.0	28915.6	22271.9
42.5°	27904.5	28106.2	28757.9	30079.5	30689.8	30100.1	29249.2	28920.9	28757.9	31341.5	23593.3
45°	25651.9	25760.6	26981.2	29562.2	31838.0	33009.5	32365.6	31331.1	31036.3	33570.7	24689.9
47.5°	24490.8	24609.7	25377.8	28191.5	31825.0	35360.3	35732.7	33762.1	33234.5	35510.3	25636.5
50°	21726.1	21974.4	22941.7	25807.1	30663.9	36441.3	39252.5	36658.6	35567.2	37398.2	26585.6
52.5°	16649.5	17032.3	18115.9	21886.5	27718.3	35906.0	42068.8	40170.6	38629.2	39353.3	27400.1
55°	10502.3	10786.8	11697.1	15457.4	22173.6	33120.7	43136.8	43969.6	42598.9	41205.0	28106.2
57.5°	5710.2	5837.0	6178.3	8534.3	14422.9	26963.1	41580.0	46131.6	45562.6	42777.3	28638.9
58°	5110.3	5195.6	5407.6	7396.3	12791.1	25279.6	40889.5	46139.4	45854.9	43007.5	28680.3
60°	3791.3	3747.3	3558.5	4220.6	7119.6	17464.2	36715.4	44292.8	45128.2	43289.4	28478.6
62.5°	3330.9	3225.0	2839.6	2795.6	3462.9	8045.5	28093.3	37941.2	39914.5	41680.8	27252.7
65°	3129.2	3015.5	2518.9	2358.5	2498.3	3403.4	16548.7	28455.3	30930.2	36803.4	24118.3
67.5°	2979.2	2831.8	2314.6	2094.8	2105.1	2250.0	6633.4	17922.0	20707.3	27943.2	18759.9
70°	2834.4	2674.1	2141.3	1887.9	1828.4	1779.2	2637.9	8971.3	11498.0	17650.4	11961.0
72.5°	2679.2	2521.5	1988.7	1725.0	1608.6	1445.6	1722.3	3669.7	5125.7	8350.7	5425.7
75°	2454.3	2312.0	1836.2	1580.2	1414.6	1197.4	1300.8	1916.3	2299.1	3325.8	2614.6
77.5°	2177.6	2061.1	1665.5	1461.2	1254.2	972.4	1000.9	1329.3	1474.1	1903.4	1554.3
80°	1564.6	1606.0	1481.8	1313.8	1117.2	788.8	768.1	969.8	1047.4	1223.2	1011.2
82.5°	1099.2	1122.4	1225.8	1073.3	923.2	620.6	566.4	682.7	729.3	804.2	545.6
85°	757.7	731.9	840.5	747.4	667.3	413.8	387.9	462.9	491.3	499.1	281.9
87.5°	455.1	455.1	486.2	400.9	359.5	214.6	209.5	263.8	281.9	268.9	155.2
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°	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4	14588.4
2.5°	14627.2	14443.6	14053.1	13740.2	13344.5	12933.3	12703.1	12457.5	12289.3	12167.8	12361.7
5°	14738.5	14363.5	13556.6	12791.1	11945.4	11066.1	10398.9	9778.2	9346.3	9077.4	9330.8
7.5°	14914.3	14337.6	13052.2	11743.7	10225.6	8761.9	7453.2	6633.4	6155.0	5919.7	6067.1
10°	15116.0	14296.1	12460.1	10323.9	8151.5	6307.6	5330.1	4999.1	4890.4	4846.4	4867.1
12.5°	15284.1	14208.3	11733.3	8606.7	6121.4	4981.0	4699.0	4691.3	4714.6	4719.7	4727.5
15°	15403.1	14079.0	10655.0	6817.0	4895.5	4538.7	4523.2	4569.7	4613.7	4631.8	4642.2
17.5°	15483.3	13812.6	9436.8	5389.5	4386.1	4324.0	4360.2	4419.8	4466.3	4479.2	4489.5
20°	15475.5	13422.0	7986.0	4494.7	4109.4	4109.4	4171.5	4218.0	4220.6	4205.0	4212.8
22.5°	15395.3	12886.7	6579.1	4018.9	3863.7	3907.7	3969.8	3925.8	3744.7	3625.7	3633.5
25°	15260.8	12248.0	5374.0	3716.3	3636.1	3713.7	3695.6	3364.6	3106.0	2989.6	2989.6
27.5°	15141.8	11492.9	4448.2	3452.5	3408.6	3504.2	3183.5	2883.6	2775.0	2720.6	2702.5
30°	15056.5	10678.2	3830.0	3199.1	3193.9	3124.1	2762.0	2679.2	2661.1	2617.2	2601.7
32.5°	15077.2	9853.2	3434.4	2976.7	2994.8	2674.1	2560.2	2578.3	2562.9	2516.4	2495.6
35°	15247.9	9069.6	3175.8	2775.0	2720.6	2415.5	2441.3	2474.9	2469.8	2405.2	2384.4
37.5°	15553.0	8327.3	3005.1	2606.8	2374.1	2286.2	2327.5	2379.3	2366.3	2322.4	2306.9
40°	15873.7	7629.2	2865.5	2474.9	2169.8	2198.2	2234.4	2262.9	2275.8	2288.8	2278.4
42.5°	16186.7	6899.8	2694.8	2340.4	2084.5	2115.5	2131.0	2159.4	2229.2	2278.4	2275.8
45°	16372.8	6214.5	2518.9	2149.1	2017.2	2035.3	2024.9	2081.8	2167.2	2247.3	2250.0
47.5°	16579.8	5681.8	2379.3	1973.3	1952.5	1965.5	1934.4	1991.4	2068.9	2167.2	2177.6
50°	16830.6	5363.6	2268.1	1833.5	1864.6	1864.6	1856.9	1908.6	2017.2	2131.0	2151.7
52.5°	17115.1	5301.5	2174.9	1732.7	1776.7	1774.1	1781.9	1859.4	1978.4	2089.6	2107.7
55°	17461.7	5469.7	2074.1	1657.7	1691.3	1701.7	1727.6	1815.4	1916.3	2043.0	2050.8
57.5°	17865.1	5811.1	1993.9	1598.3	1613.7	1647.4	1688.8	1768.9	1877.5	2017.2	2024.9
58°	17932.3	5883.5	1980.9	1593.0	1598.3	1637.0	1683.6	1761.1	1869.7	2022.4	2030.1
60°	17934.9	6124.0	1952.5	1569.8	1538.7	1603.4	1655.1	1732.7	1856.9	2040.5	2058.6
62.5°	17298.7	6121.4	1931.8	1536.2	1476.7	1556.8	1616.4	1706.9	1843.9	2084.5	2120.7
65°	15232.4	5562.8	1833.5	1484.4	1427.5	1515.5	1582.7	1688.8	1880.1	2275.8	2299.1
67.5°	11914.3	4559.4	1649.9	1412.1	1362.9	1474.1	1562.0	1686.1	1919.0	2319.7	2335.3
70°	7877.4	3411.1	1448.2	1329.3	1295.7	1425.0	1572.4	1774.1	1875.0	2226.7	2185.3
72.5°	4088.7	2394.7	1285.3	1225.8	1218.0	1381.0	1722.3	1763.8	1831.0	2094.8	2043.0
75°	2146.5	1662.9	1143.0	1112.0	1124.9	1370.7	2032.7	1717.2	1774.1	2004.3	2102.6
77.5°	1313.8	1342.2	1021.5	1008.6	1034.4	1339.7	2030.1	1657.7	1691.3	1843.9	1952.5
80°	879.3	1088.7	928.4	931.0	949.1	1225.8	1823.2	1564.6	1590.5	1743.1	1854.3
82.5°	556.0	643.9	843.1	887.0	863.8	1011.2	1549.1	1425.0	1461.2	1993.9	2107.7
85°	281.9	403.5	731.9	853.4	778.5	708.6	1256.9	1249.1	1267.2	1437.9	1502.5
87.5°	129.3	222.4	571.5	744.8	587.1	442.2	912.9	925.9	998.3	1021.5	1021.5
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)