

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: P300340

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300340  
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: GLNA-AF-08-LED-E1-AFL  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

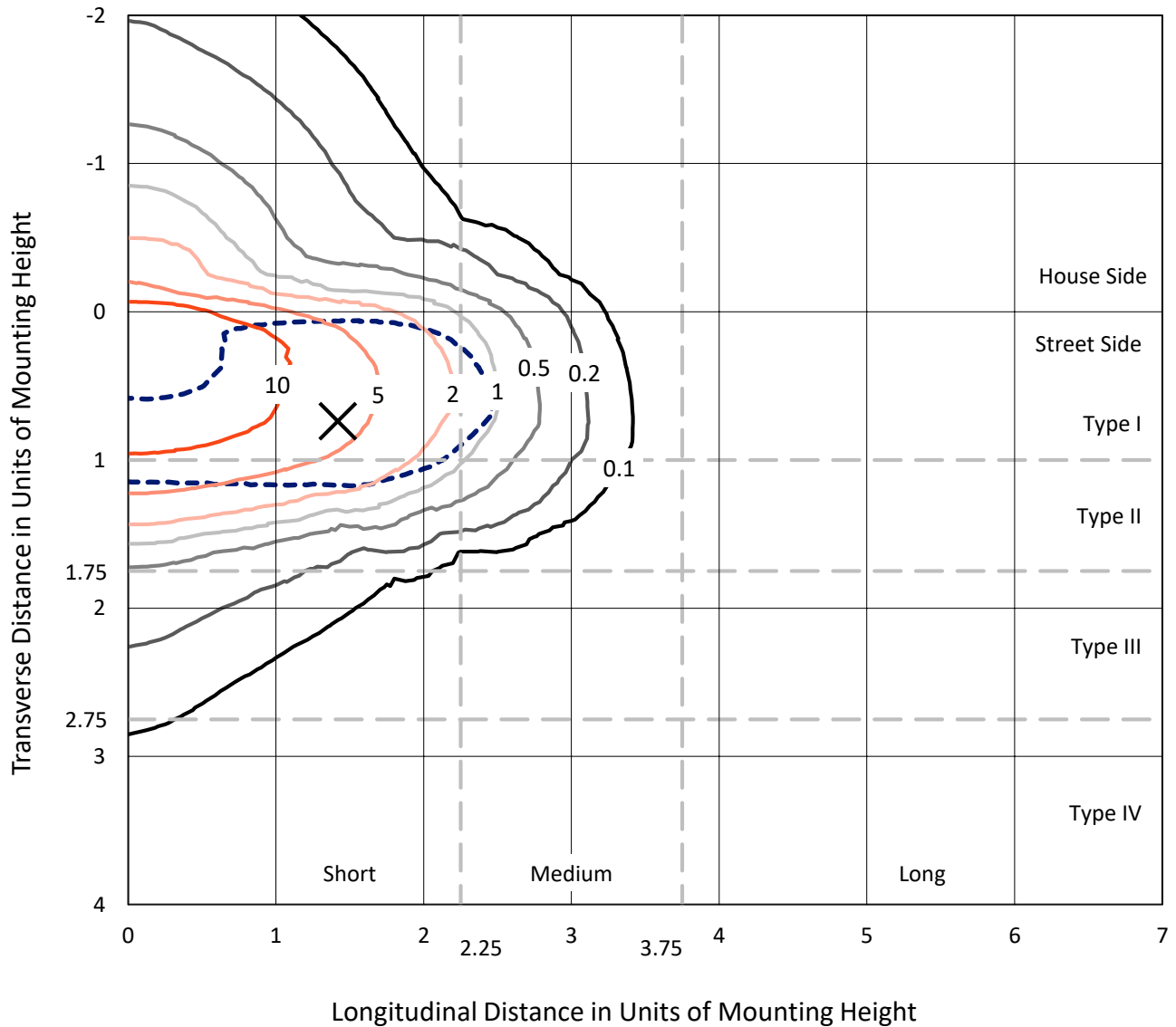
Lumens per Lamp: N/A  
Luminaire Lumens: 48774 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (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

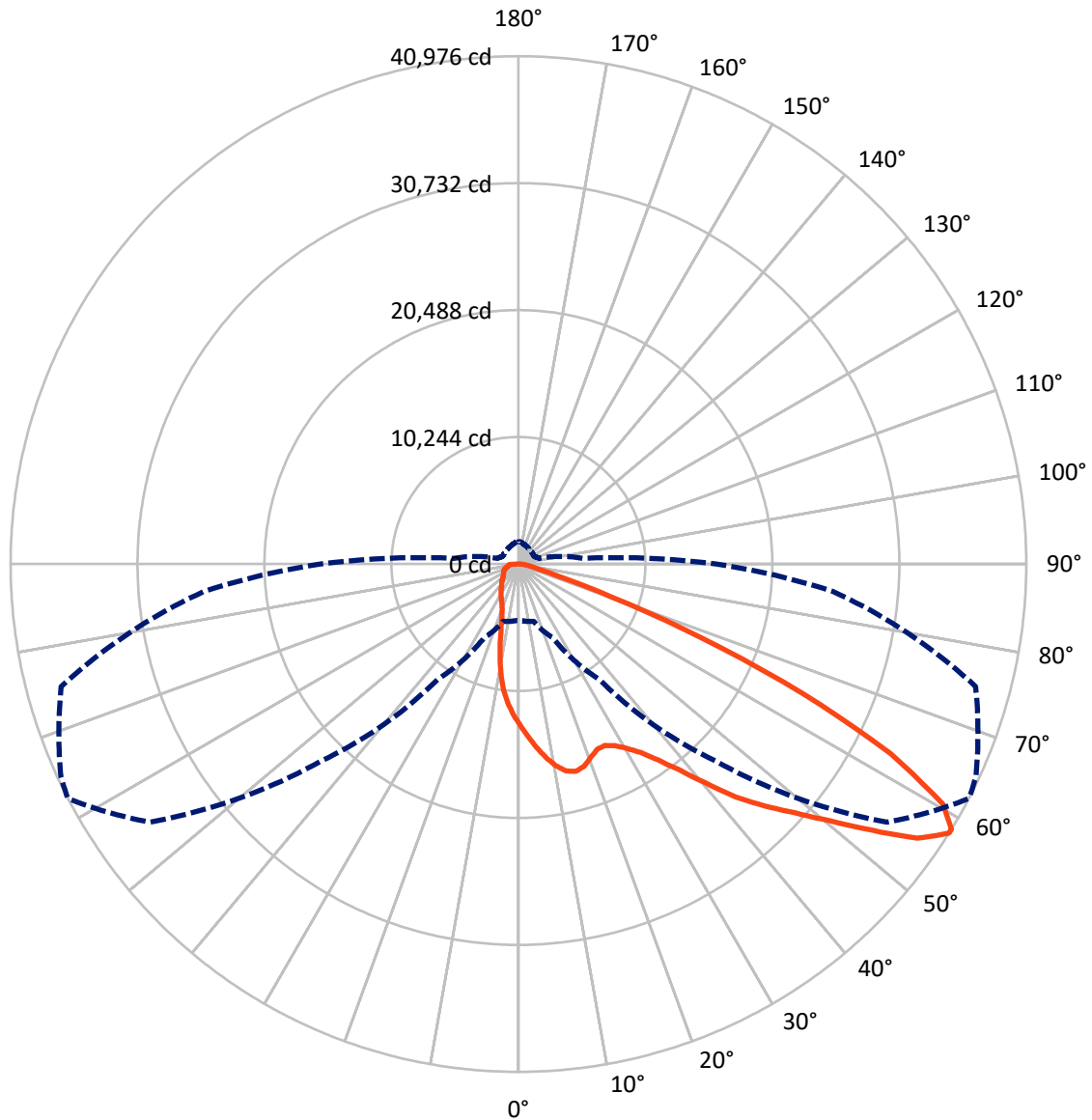
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.5 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	7438.2	0.0	7438.2
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	41335.7	0.0	41335.7
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	48774.0	0.0	48774.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1158.7	2.4
10°-20°	2961.8	6.1
20°-30°	4787.9	9.8
30°-40°	7600.8	15.6
40°-50°	11121.5	22.8
50°-60°	11632.2	23.8
60°-70°	6872.3	14.1
70°-80°	1936.0	4.0
80°-90°	702.9	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°	48774.0	100.0
0°-180°	48774.0	100.0



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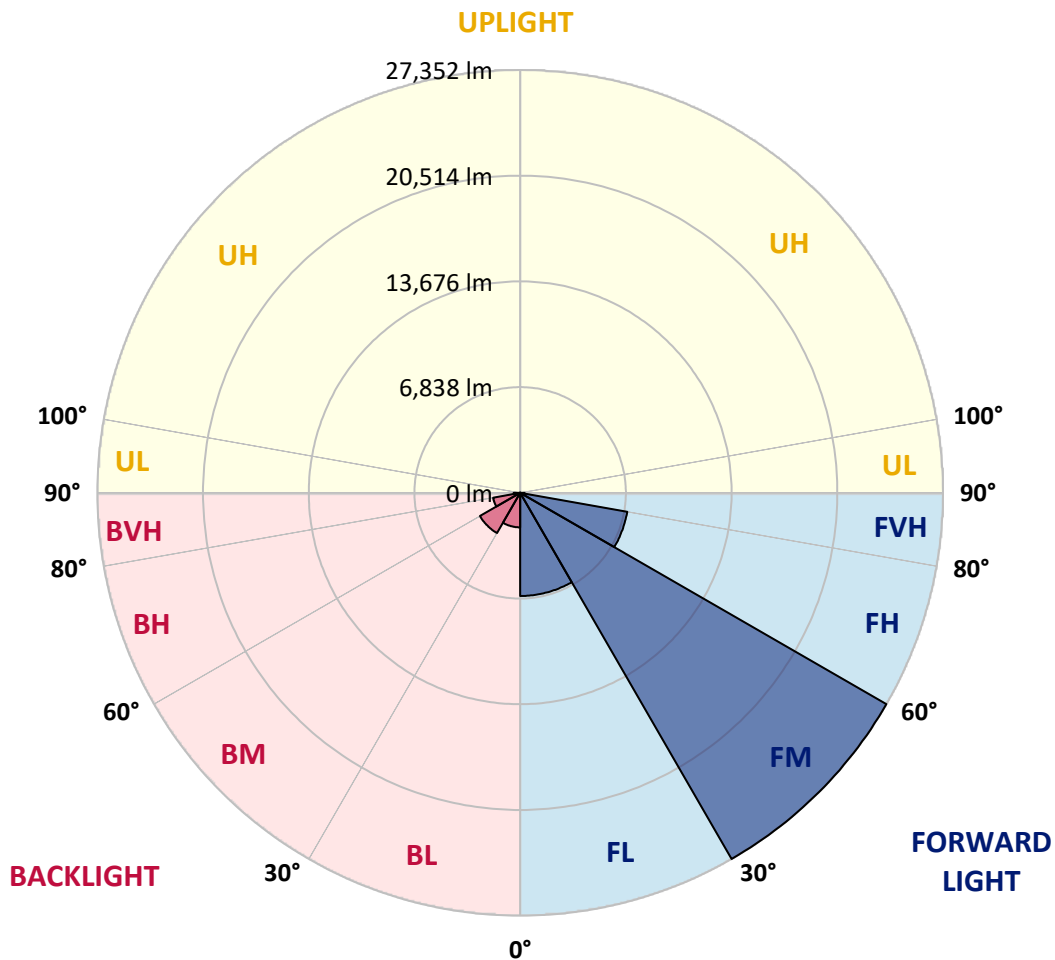
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6672.9	13.7			
FM	(30°-60°)	27352.2	56.1			
FH	(60°-80°)	7033.4	14.4			G3/7500
FVH	(80°-90°)	277.3	0.6			G3/500
BL	(0°-30°)	2235.6	4.6	B3/2500		
BM	(30°-60°)	3002.2	6.2	B3/5000		
BH	(60°-80°)	1774.8	3.6	B3/2500		G3/2500
BVH	(80°-90°)	425.6	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-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8
2.5°	14804.7	14685.2	14609.4	14542.8	14455.6	14269.5	14019.2	13860.7	13780.3	13507.0	13183.2
5°	16256.2	16150.5	16072.5	15982.9	15826.7	15535.0	15130.8	14809.3	14650.8	14104.2	13456.5
7.5°	15916.3	15959.9	16095.4	16332.0	16534.1	16495.1	16134.5	15725.7	15516.7	14756.4	13773.4
10°	13867.6	13943.4	14177.7	14731.2	15626.9	16545.6	16825.8	16543.3	16332.0	15401.8	14099.6
12.5°	13456.5	13454.2	13472.6	13619.6	14152.4	15445.5	16848.8	17133.5	17007.2	16017.3	14432.6
15°	13624.2	13628.7	13615.0	13677.0	13842.3	14354.5	16146.0	17360.9	17450.5	16637.5	14777.1
17.5°	14065.1	14053.6	14000.8	14000.8	14060.5	14260.3	15319.1	17149.6	17563.0	17186.4	15080.3
20°	14804.7	14751.8	14611.7	14483.1	14418.8	14526.8	14979.2	16662.7	17367.8	17666.4	15330.6
22.5°	15700.4	15659.1	15431.7	15156.1	14933.3	14931.0	15153.8	16237.8	17030.2	18118.8	15541.9
25°	16857.9	16791.3	16453.7	16012.7	15622.3	15473.0	15535.0	16217.2	16846.5	18610.3	15730.2
27.5°	18217.6	18095.9	17696.2	17060.1	16485.9	16185.0	16095.4	16591.5	17014.1	19219.0	15992.1
30°	19866.6	19726.5	19214.4	18385.3	17574.5	17080.7	16890.1	17255.3	17569.9	19960.8	16412.4
32.5°	21743.1	21541.0	20948.4	20034.3	18968.6	18215.3	17905.2	18132.6	18383.0	20854.2	16938.3
35°	24336.1	24094.9	23238.2	21977.3	20773.8	19738.0	19241.9	19407.3	19650.8	22186.3	17698.5
37.5°	26104.5	25996.6	25427.0	24241.9	22932.8	21740.8	20973.7	21070.1	21207.9	23851.5	18672.3
40°	26088.5	26132.1	26143.6	26155.1	25263.9	24122.5	23297.9	23196.9	23169.3	25679.6	19779.4
42.5°	24781.6	24960.8	25539.5	26713.2	27255.2	26731.5	25975.9	25684.2	25539.5	27834.0	20953.0
45°	22781.2	22877.6	23961.7	26253.8	28274.9	29315.4	28743.5	27824.8	27563.0	29813.7	21926.8
47.5°	21750.0	21855.6	22537.7	25036.6	28263.5	31403.1	31733.8	29983.7	29515.2	31536.3	22767.4
50°	19294.8	19515.2	20374.2	22919.0	27232.2	32363.1	34859.6	32556.0	31586.8	33212.9	23610.3
52.5°	14786.3	15126.2	16088.5	19437.2	24616.3	31887.7	37360.8	35675.0	34306.1	34949.2	24333.8
55°	9327.0	9579.6	10388.1	13727.5	19692.1	29414.1	38309.3	39048.9	37831.6	36593.7	24960.8
57.5°	5071.2	5183.7	5486.9	7579.2	12808.8	23945.6	36926.7	40968.9	40463.6	37990.1	25433.9
58°	4538.3	4614.1	4802.4	6568.6	11359.6	22450.5	36313.5	40975.8	40723.2	38194.5	25470.6
60°	3367.0	3328.0	3160.3	3748.3	6322.9	15509.8	32606.6	39336.0	40077.8	38444.8	25291.5
62.5°	2958.2	2864.0	2521.8	2482.8	3075.3	7145.1	24949.3	33695.2	35447.6	37016.3	24202.9
65°	2779.0	2678.0	2237.0	2094.6	2218.6	3022.5	14696.7	25270.8	27468.8	32684.6	21419.2
67.5°	2645.8	2514.9	2055.6	1860.3	1869.5	1998.1	5891.1	15916.3	18389.9	24816.1	16660.4
70°	2517.2	2374.8	1901.7	1676.6	1623.8	1580.1	2342.7	7967.3	10211.2	15675.1	10622.3
72.5°	2379.4	2239.3	1766.2	1531.9	1428.6	1283.9	1529.6	3259.0	4552.1	7416.1	4818.5
75°	2179.6	2053.3	1630.7	1403.3	1256.3	1063.4	1155.3	1701.9	2041.8	2953.6	2322.0
77.5°	1933.8	1830.5	1479.1	1297.6	1113.9	863.6	888.8	1180.5	1309.1	1690.4	1380.3
80°	1389.5	1426.3	1316.0	1166.7	992.2	700.5	682.1	861.3	930.2	1086.3	898.0
82.5°	976.1	996.8	1088.6	953.1	819.9	551.2	503.0	606.3	647.7	714.3	484.6
85°	672.9	650.0	746.4	663.8	592.6	367.5	344.5	411.1	436.4	443.3	250.3
87.5°	404.2	404.2	431.8	356.0	319.2	190.6	186.0	234.3	250.3	238.9	137.8
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°	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8	12955.8
2.5°	12990.3	12827.2	12480.4	12202.5	11851.1	11485.9	11281.5	11063.3	10914.0	10806.1	10978.3
5°	13089.0	12756.0	12039.4	11359.6	10608.6	9827.7	9235.1	8683.9	8300.4	8061.5	8286.6
7.5°	13245.2	12733.0	11591.6	10429.4	9081.2	7781.3	6619.2	5891.1	5466.2	5257.2	5388.1
10°	13424.3	12696.3	11065.6	9168.5	7239.3	5601.7	4733.5	4439.6	4343.1	4304.1	4322.4
12.5°	13573.6	12618.2	10420.2	7643.5	5436.3	4423.5	4173.1	4166.3	4186.9	4191.5	4198.4
15°	13679.3	12503.4	9462.5	6054.2	4347.7	4030.7	4017.0	4058.3	4097.4	4113.4	4122.6
17.5°	13750.5	12266.8	8380.7	4786.4	3895.2	3840.1	3872.3	3925.1	3966.4	3977.9	3987.1
20°	13743.6	11920.0	7092.3	3991.7	3649.5	3649.5	3704.6	3746.0	3748.3	3734.5	3741.4
22.5°	13672.4	11444.6	5842.9	3569.1	3431.3	3470.3	3525.5	3486.4	3325.7	3220.0	3226.9
25°	13553.0	10877.3	4772.6	3300.4	3229.2	3298.1	3282.0	2988.0	2758.4	2655.0	2655.0
27.5°	13447.3	10206.6	3950.4	3066.1	3027.1	3112.1	2827.3	2560.8	2464.4	2416.2	2400.1
30°	13371.5	9483.2	3401.4	2841.0	2836.5	2774.4	2452.9	2379.4	2363.3	2324.3	2310.5
32.5°	13389.9	8750.5	3050.0	2643.5	2659.6	2374.8	2273.8	2289.8	2276.1	2234.7	2216.3
35°	13541.5	8054.6	2820.4	2464.4	2416.2	2145.1	2168.1	2198.0	2193.4	2136.0	2117.6
37.5°	13812.5	7395.4	2668.8	2315.1	2108.4	2030.3	2067.0	2113.0	2101.5	2062.5	2048.7
40°	14097.3	6775.3	2544.8	2198.0	1926.9	1952.2	1984.4	2009.6	2021.1	2032.6	2023.4
42.5°	14375.2	6127.7	2393.2	2078.5	1851.2	1878.7	1892.5	1917.8	1979.8	2023.4	2021.1
45°	14540.5	5519.0	2237.0	1908.6	1791.4	1807.5	1798.3	1848.9	1924.7	1995.9	1998.1
47.5°	14724.3	5045.9	2113.0	1752.4	1734.0	1745.5	1717.9	1768.5	1837.4	1924.7	1933.8
50°	14947.1	4763.4	2014.2	1628.4	1655.9	1655.9	1649.0	1695.0	1791.4	1892.5	1910.9
52.5°	15199.7	4708.3	1931.5	1538.8	1577.8	1575.6	1582.4	1651.3	1757.0	1855.8	1871.8
55°	15507.5	4857.6	1842.0	1472.2	1502.1	1511.2	1534.2	1612.3	1701.9	1814.4	1821.3
57.5°	15865.8	5160.7	1770.8	1419.4	1433.2	1463.0	1499.8	1571.0	1667.4	1791.4	1798.3
58°	15925.5	5225.0	1759.3	1414.8	1419.4	1453.8	1495.2	1564.1	1660.5	1796.0	1802.9
60°	15927.8	5438.6	1734.0	1394.1	1366.5	1424.0	1469.9	1538.8	1649.0	1812.1	1828.2
62.5°	15362.8	5436.3	1715.7	1364.3	1311.4	1382.6	1435.5	1515.8	1637.6	1851.2	1883.3
65°	13527.7	4940.2	1628.4	1318.3	1267.8	1345.9	1405.6	1499.8	1669.7	2021.1	2041.8
67.5°	10581.0	4049.1	1465.3	1254.0	1210.4	1309.1	1387.2	1497.5	1704.2	2060.2	2073.9
70°	6995.8	3029.4	1286.2	1180.5	1150.7	1265.5	1396.4	1575.6	1665.1	1977.5	1940.7
72.5°	3631.1	2126.8	1141.5	1088.6	1081.8	1226.4	1529.6	1566.4	1626.1	1860.3	1814.4
75°	1906.3	1476.8	1015.2	987.6	999.1	1217.3	1805.2	1525.0	1575.6	1780.0	1867.2
77.5°	1166.7	1192.0	907.2	895.7	918.7	1189.7	1802.9	1472.2	1502.1	1637.6	1734.0
80°	780.9	966.9	824.5	826.8	842.9	1088.6	1619.2	1389.5	1412.5	1548.0	1646.7
82.5°	493.8	571.9	748.7	787.8	767.1	898.0	1375.7	1265.5	1297.6	1770.8	1871.8
85°	250.3	358.3	650.0	757.9	691.3	629.3	1116.2	1109.3	1125.4	1277.0	1334.4
87.5°	114.8	197.5	507.6	661.5	521.4	392.7	810.7	822.2	886.5	907.2	907.2
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)