

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: P301117

Luminaire Tested: **GLNA-AF-07-LED-E1-T3R-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-T3R-7030  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 41493.2 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

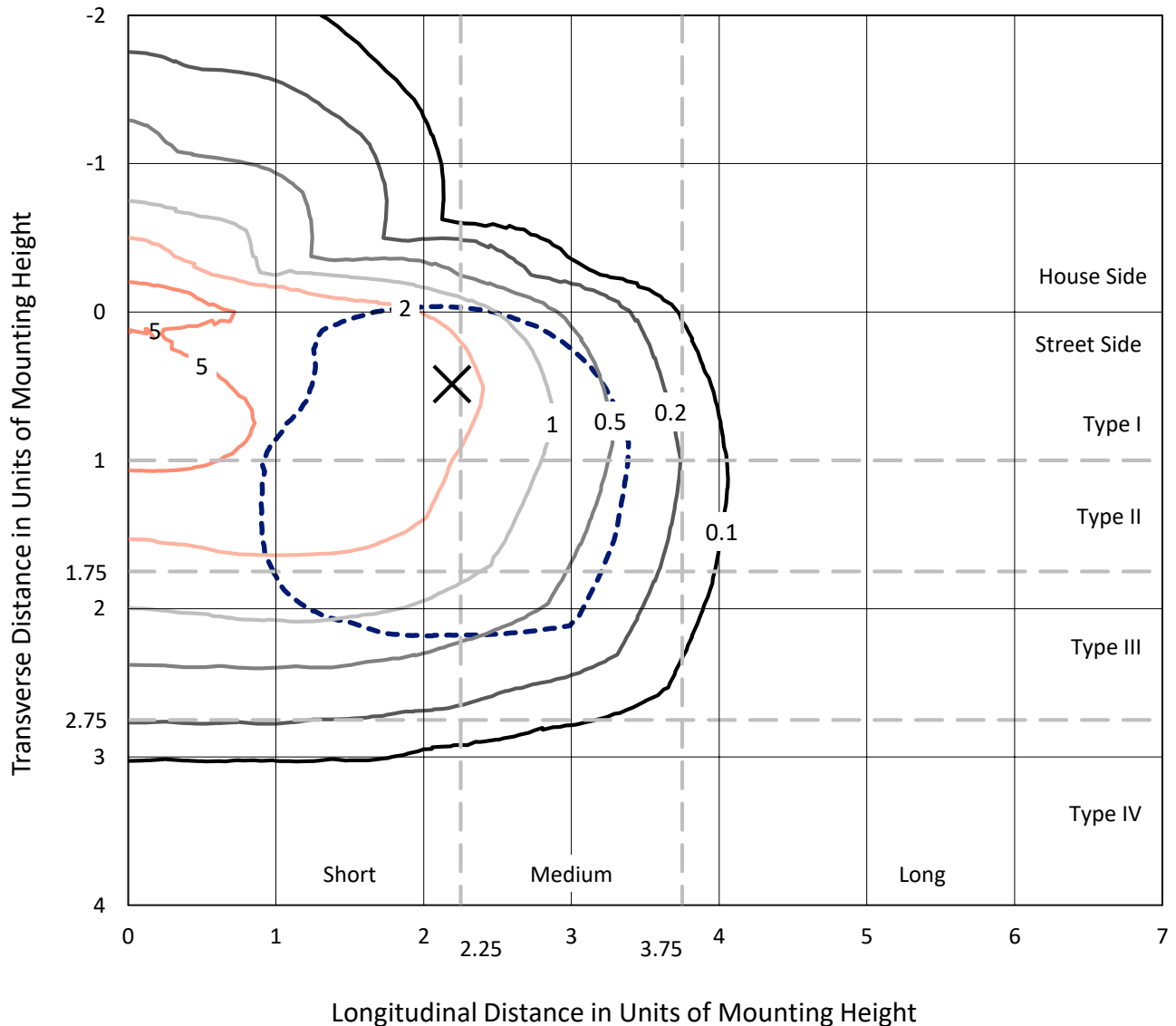
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

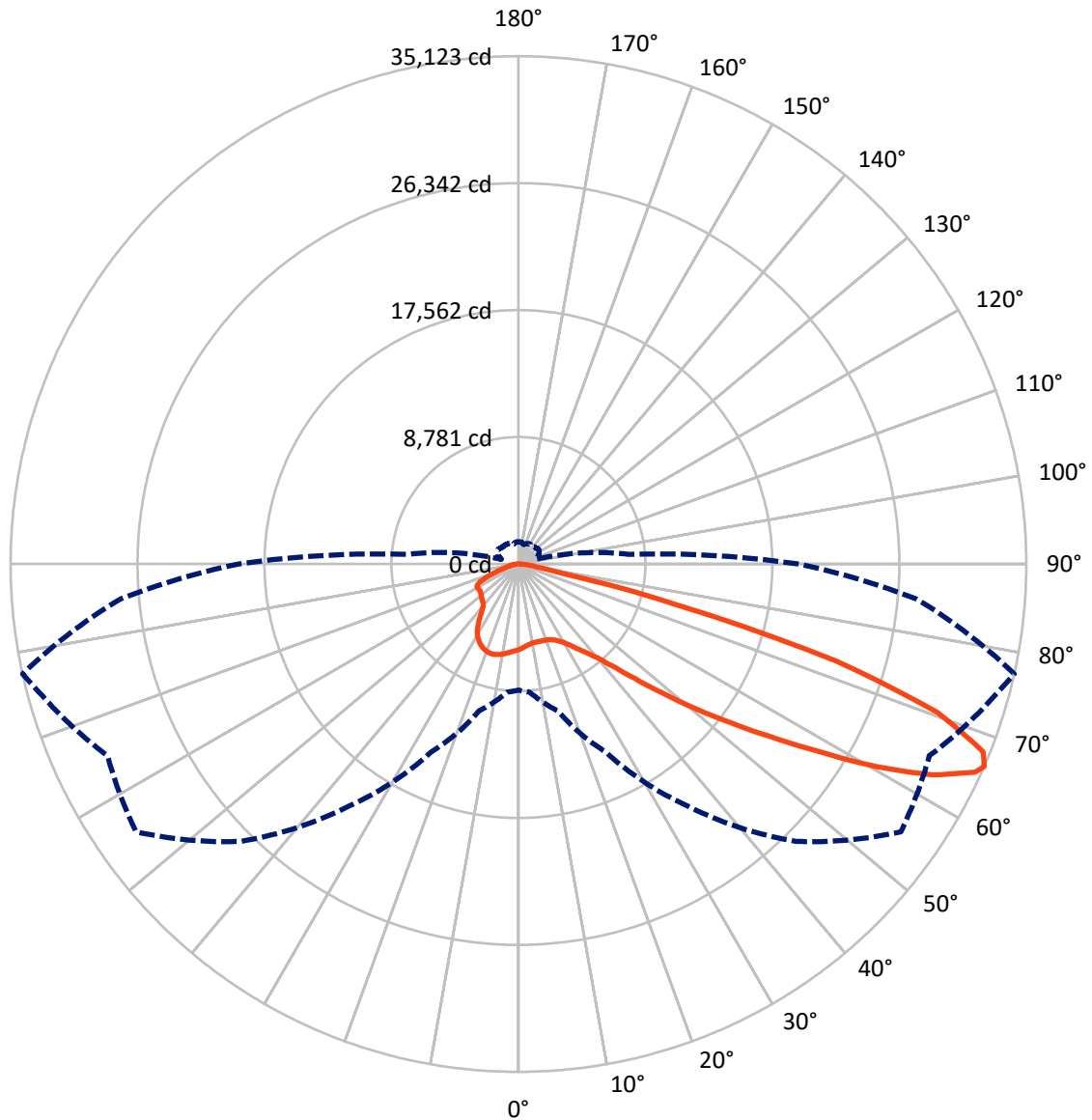
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.1 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7088.9	0.0	7088.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	34404.3	0.0	34404.3
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	41493.2	0.0	41493.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	528.3	1.3
10°-20°	1490.4	3.6
20°-30°	2543.5	6.1
30°-40°	4071.7	9.8
40°-50°	6290.4	15.2
50°-60°	8922.0	21.5
60°-70°	11935.2	28.8
70°-80°	5183.3	12.5
80°-90°	528.5	1.3
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°	41493.2	100.0
0°-180°	41493.2	100.0



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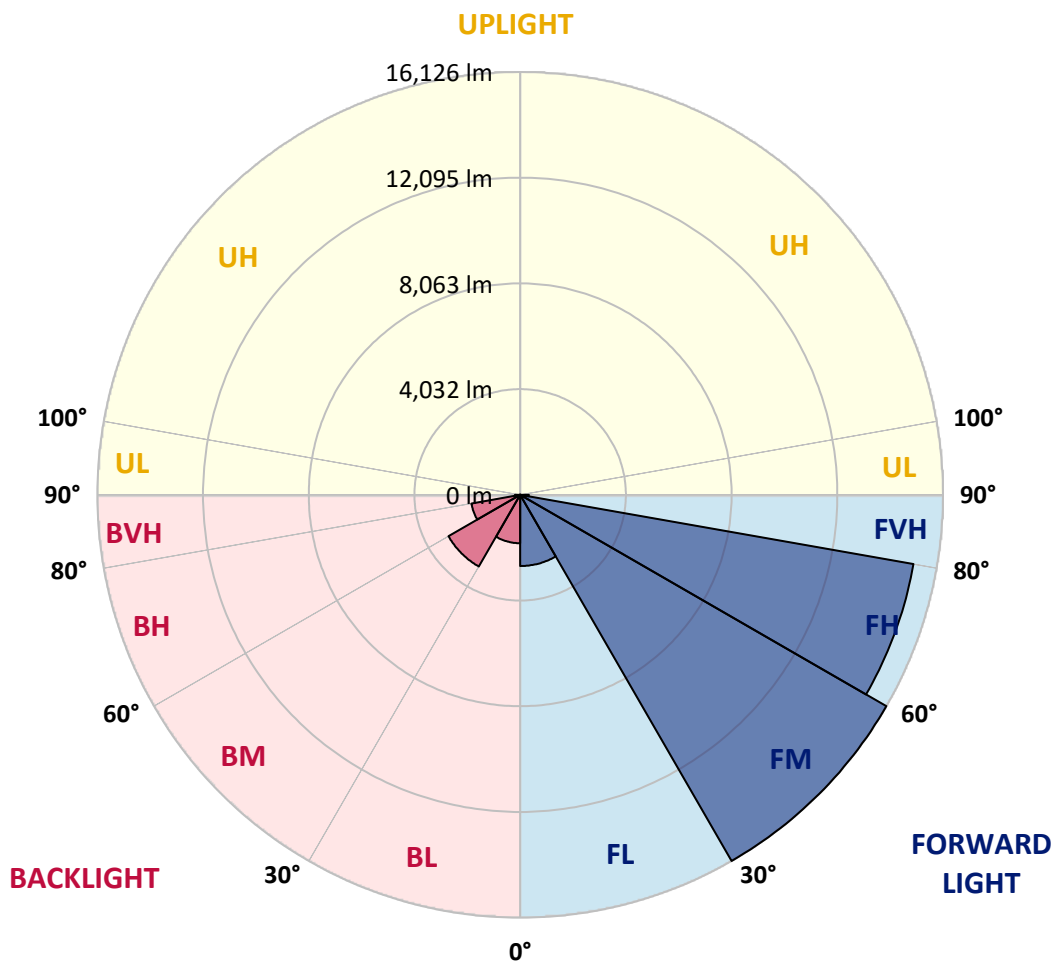
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2715.9	6.5			
FM	(30°-60°)	16126.4	38.9			
FH	(60°-80°)	15230.5	36.7			G5
FVH	(80°-90°)	331.5	0.8			G3/500
BL	(0°-30°)	1846.2	4.4	B3/2500		
BM	(30°-60°)	3157.7	7.6	B3/5000		
BH	(60°-80°)	1887.9	4.5	B3/2500		G3/2500
BVH	(80°-90°)	197.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9
2.5°	5230.9	5265.9	5295.6	5322.9	5377.5	5467.7	5571.6	5655.9	5777.6	5801.3	5866.0
5°	4750.6	4750.6	4773.8	4815.3	4889.5	5024.9	5166.2	5354.3	5619.1	5681.4	5854.2
7.5°	4517.3	4519.1	4532.8	4567.8	4632.5	4756.0	4910.9	5132.9	5491.5	5595.3	5889.2
10°	4603.4	4583.8	4554.2	4536.9	4546.4	4618.9	4766.1	5013.0	5413.1	5546.1	5968.1
12.5°	5085.4	5048.6	4946.5	4811.2	4681.8	4628.9	4715.0	4956.0	5379.9	5534.8	6072.0
15°	5873.7	5858.3	5667.8	5387.6	5074.2	4811.2	4752.4	4934.7	5383.4	5548.4	6195.5
17.5°	6862.1	6840.1	6589.6	6181.8	5670.1	5158.4	4883.6	4952.5	5397.1	5571.6	6314.8
20°	7860.0	7792.9	7522.8	7036.6	6379.5	5630.4	5101.5	4997.6	5414.9	5597.1	6440.6
22.5°	8604.9	8549.7	8306.9	7834.4	7077.6	6177.7	5393.5	5075.9	5471.9	5671.9	6595.0
25°	9259.7	9263.2	9022.2	8565.7	7783.4	6758.2	5769.9	5285.5	5616.7	5824.5	6806.9
27.5°	10069.4	10022.5	9796.9	9344.0	8481.5	7344.1	6224.6	5574.0	5832.8	6042.3	7085.3
30°	11037.5	11004.3	10743.7	10230.2	9255.5	7973.3	6744.0	5908.8	6111.2	6328.4	7449.8
32.5°	12176.7	12161.2	11890.5	11229.9	10149.5	8714.7	7354.2	6352.2	6526.7	6752.3	7973.3
35°	13514.1	13515.8	13196.5	12402.2	11127.8	9577.3	8045.7	6922.6	7032.5	7267.5	8597.2
37.5°	14337.4	14437.1	14317.8	13508.1	12235.4	10541.9	8943.9	7679.5	7608.9	7846.3	9265.6
40°	14513.7	14635.4	15013.5	14602.1	13474.9	11604.4	9739.9	8406.7	8318.8	8608.5	10126.3
42.5°	14266.8	14435.3	15235.5	15525.2	14790.3	12913.9	10810.2	9487.0	9375.4	9765.4	11196.6
45°	14119.5	14245.4	15170.8	16006.0	15931.2	14394.4	12173.1	10843.4	10802.5	11314.2	12431.9
47.5°	13864.9	13978.9	14868.7	16117.6	16602.0	15750.8	13810.3	12502.6	12582.7	13253.5	13825.7
50°	14002.0	14048.9	14531.5	15833.3	16796.1	16745.1	15639.2	14423.5	14698.3	15535.3	15404.1
52.5°	13982.4	14104.1	14492.3	15366.7	16821.6	17358.9	17440.8	16566.4	17145.2	18105.6	17154.6
55°	11304.7	11527.8	14031.7	15249.2	16911.3	17960.2	19044.7	18825.1	19903.1	21022.6	19130.8
57.5°	10794.7	10936.0	12323.9	15496.1	17389.7	19109.4	20828.5	21311.1	23114.5	24414.5	21538.4
60°	10694.4	10868.9	12306.1	15798.3	18360.3	20981.6	23473.6	24320.7	27022.2	28445.6	24330.2
62.5°	10382.8	10571.0	12190.3	15758.5	19738.6	23571.5	26859.5	27520.2	30727.5	32111.8	26665.4
65°	9395.0	9571.3	11247.7	15125.7	20668.2	26336.0	30866.4	30453.2	33652.8	34693.4	27829.5
66°	8718.3	8891.0	10504.5	14380.7	20452.1	27120.1	32286.3	31360.9	34307.5	35123.1	27602.1
67.5°	7481.2	7616.6	9061.4	12712.1	19305.3	27339.8	33480.0	32042.9	34375.8	34664.3	26302.7
70°	4726.9	4766.1	5889.2	8775.3	14614.0	23710.4	31662.4	30349.3	31541.3	30760.7	22050.1
72.5°	2050.9	2037.3	2827.4	4463.9	8273.7	15909.9	25612.4	25041.9	24742.1	22961.9	15435.6
75°	1140.9	1156.9	1468.6	2072.3	3362.2	7814.8	16754.6	16033.3	13537.2	11551.6	6999.2
77.5°	915.3	937.3	1217.5	1470.4	1509.5	2725.2	7840.4	6379.5	3840.6	3082.0	1944.7
80°	723.6	762.8	1062.6	1145.1	1017.4	1123.1	2532.9	2025.4	1519.6	1393.8	1007.9
82.5°	572.2	600.1	911.8	866.7	711.7	756.8	1213.3	1182.5	988.4	899.9	582.3
85°	412.0	462.4	749.1	653.0	466.6	509.9	805.5	772.3	566.3	462.4	257.0
87.5°	168.6	219.6	529.5	433.3	260.6	237.4	401.9	378.1	268.3	195.9	127.6
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°	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9	5912.9
2.5°	5907.0	5953.9	6015.0	6052.4	6072.0	6085.7	6107.0	6105.2	6111.2	6113.0	6120.7
5°	5946.2	6024.5	6113.0	6136.7	6136.7	6114.7	6093.4	6057.8	6044.1	6040.5	6044.1
7.5°	6048.3	6134.3	6210.9	6183.6	6124.8	6038.2	5926.6	5828.6	5775.8	5758.0	5754.4
10°	6177.7	6281.5	6313.0	6209.1	6036.4	5828.6	5607.2	5446.3	5354.3	5328.8	5321.1
12.5°	6334.4	6432.3	6389.6	6170.0	5850.0	5515.2	5208.9	4952.5	4760.1	4699.6	4695.4
15°	6507.1	6583.7	6432.3	6048.3	5571.6	5077.7	4532.8	4090.0	3850.7	3774.2	3768.2
17.5°	6668.0	6707.2	6406.8	5836.3	5162.0	4362.4	3638.8	3297.5	3215.6	3235.2	3238.7
20°	6805.1	6805.1	6320.7	5532.4	4517.3	3419.2	2962.1	2956.8	3015.5	3074.3	3086.2
22.5°	6955.9	6865.7	6170.0	5103.2	3603.2	2797.7	2731.2	2785.8	2852.3	2917.0	2927.1
25°	7142.3	6914.9	5959.8	4452.6	2832.7	2540.6	2566.2	2611.3	2644.5	2686.1	2692.0
27.5°	7350.0	6977.3	5683.8	3556.3	2458.7	2380.4	2400.0	2415.4	2411.2	2427.3	2430.8
30°	7598.8	7050.3	5305.1	2779.9	2303.8	2242.6	2207.6	2194.0	2194.0	2219.5	2229.0
32.5°	7932.4	7157.7	4761.9	2382.1	2229.0	2144.7	2031.3	1980.3	1999.9	2085.9	2105.5
35°	8299.2	7273.5	4027.0	2246.8	2213.6	2099.6	1923.3	1828.9	1831.3	1911.4	1936.9
37.5°	8698.7	7420.7	3220.9	2221.3	2248.6	2102.0	1866.3	1736.9	1684.1	1684.1	1694.2
40°	9210.4	7571.5	2607.7	2239.1	2323.4	2125.1	1837.2	1664.5	1515.5	1519.6	1527.4
42.5°	9877.0	7700.9	2278.3	2275.9	2413.6	2156.6	1834.8	1568.3	1438.9	1527.4	1607.5
45°	10618.4	7765.6	2132.8	2309.7	2486.0	2176.2	1804.0	1552.9	1449.0	1711.4	1864.5
47.5°	11470.9	7728.2	2052.7	2321.0	2503.8	2176.2	1768.4	1590.3	1517.3	1982.1	2160.7
50°	12406.4	7620.7	1974.3	2297.9	2497.9	2172.0	1801.6	1627.1	1542.8	2028.9	2152.4
52.5°	13506.3	7530.5	1891.8	2246.8	2456.3	2150.6	1840.8	1611.6	1462.6	1844.9	1931.0
55°	14760.6	7556.0	1799.8	2174.4	2391.6	2109.7	1827.1	1548.7	1378.4	1625.3	1678.1
57.5°	16364.6	7860.0	1690.0	2082.4	2303.8	2040.8	1778.4	1519.6	1352.8	1474.5	1506.0
60°	18154.3	8388.9	1552.9	1989.8	2194.0	1931.0	1741.0	1533.3	1364.7	1462.6	1478.1
62.5°	19467.9	8696.9	1435.3	1854.4	2045.0	1809.3	1694.2	1550.5	1396.2	1503.6	1500.0
65°	19824.7	8191.2	1288.1	1656.8	1843.1	1682.3	1634.8	1570.1	1409.8	1536.8	1519.6
66°	19324.9	7646.3	1223.4	1564.7	1741.0	1619.4	1605.7	1568.3	1403.9	1541.0	1511.3
67.5°	18111.5	6528.5	1111.8	1429.4	1578.4	1525.6	1558.8	1550.5	1387.9	1536.8	1495.9
70°	14770.7	4454.4	951.0	1190.2	1313.7	1342.7	1468.6	1488.2	1336.8	1468.6	1378.4
72.5°	10320.5	2713.4	841.1	923.7	1062.6	1145.1	1345.1	1401.5	1268.5	1282.2	1196.1
75°	4987.5	1441.3	762.8	715.9	825.1	956.9	1196.1	1284.0	1160.5	1072.6	1041.2
77.5°	1554.7	880.3	647.0	576.4	647.0	772.3	999.6	1125.5	1033.5	898.1	886.3
80°	835.2	647.0	498.0	462.4	511.7	606.1	785.9	939.1	888.0	805.5	719.5
82.5°	550.9	419.7	368.6	358.5	390.0	462.4	584.1	778.2	778.2	690.4	502.2
85°	284.3	257.0	252.9	252.9	272.5	308.1	397.7	600.1	639.3	364.5	302.1
87.5°	141.3	147.2	137.1	143.1	153.2	150.8	190.0	302.1	360.9	221.4	184.0
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)