

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: P301186

Luminaire Tested: **GLNA-AF-08-LED-E1-T3R-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301186  
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-08-LED-E1-T3R-7050-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 39266.3 lumens  
Efficiency: N/A  
Efficacy: 117.6 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

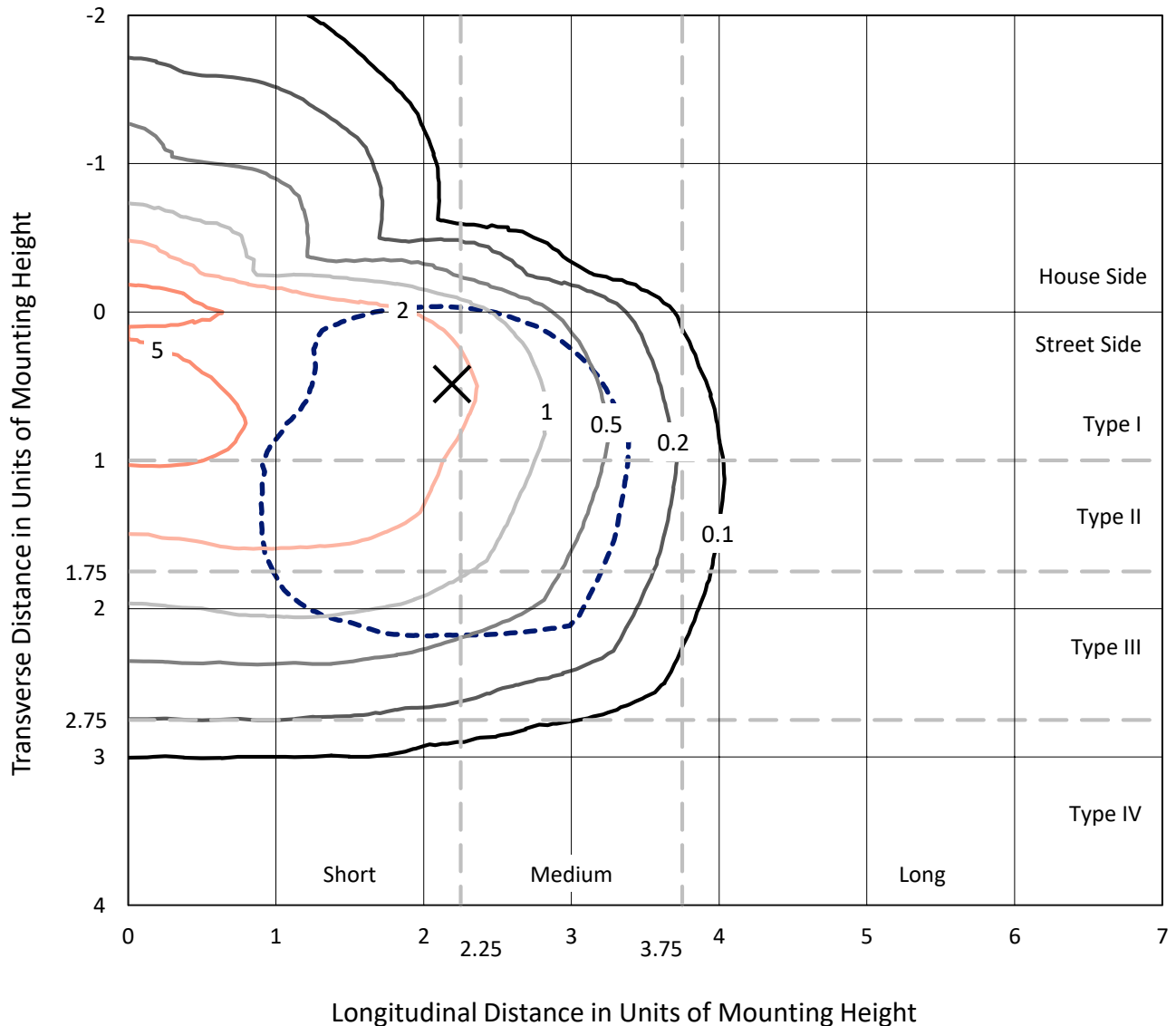
Input Watts (W): 334  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

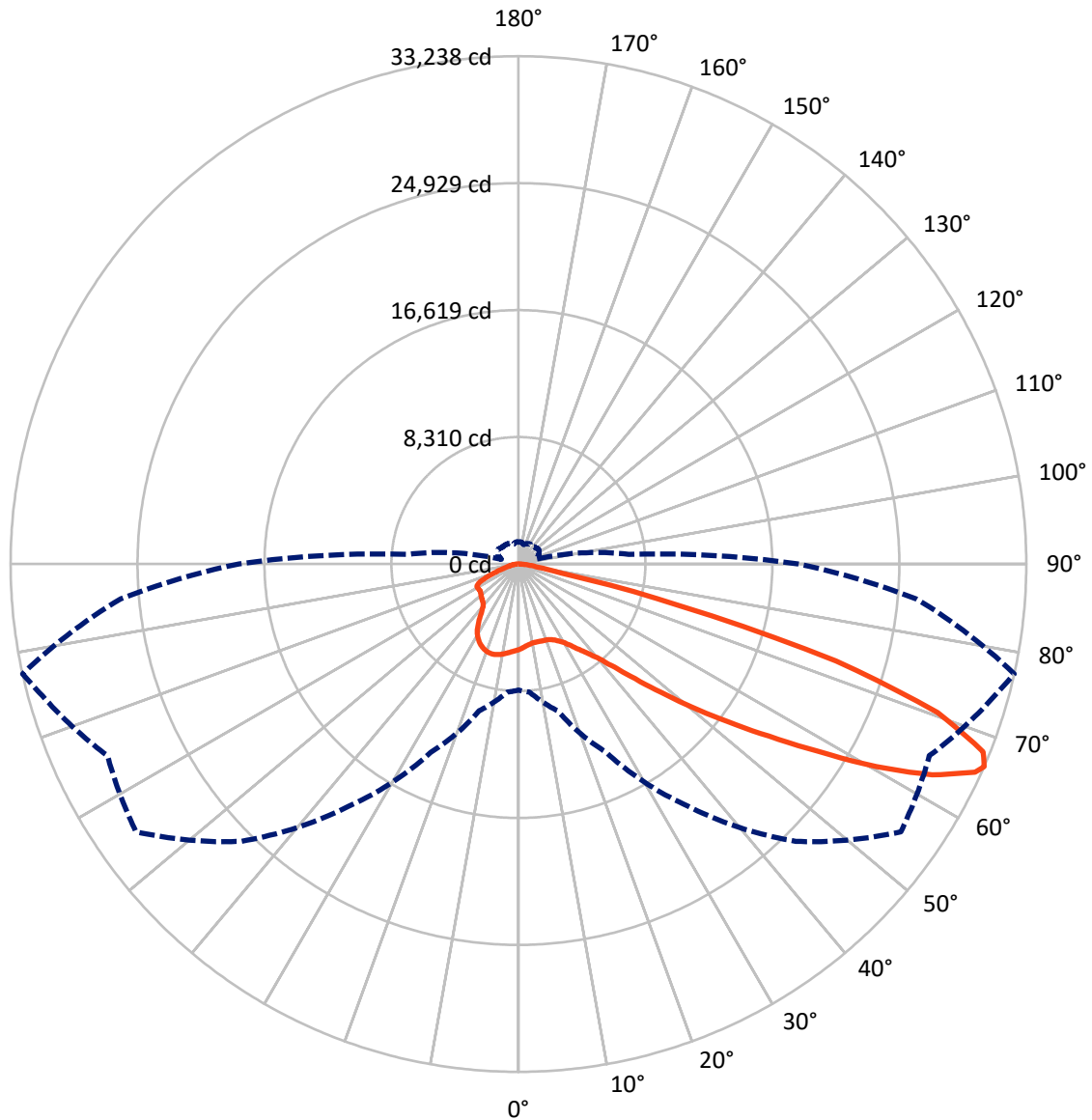
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 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	6708.4	0.0	6708.4
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	32557.8	0.0	32557.8
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	39266.3	0.0	39266.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	499.9	1.3
10°-20°	1410.4	3.6
20°-30°	2407.0	6.1
30°-40°	3853.2	9.8
40°-50°	5952.8	15.2
50°-60°	8443.1	21.5
60°-70°	11294.6	28.8
70°-80°	4905.1	12.5
80°-90°	500.2	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°	39266.3	100.0
0°-180°	39266.3	100.0

**Coefficient of Utilization**



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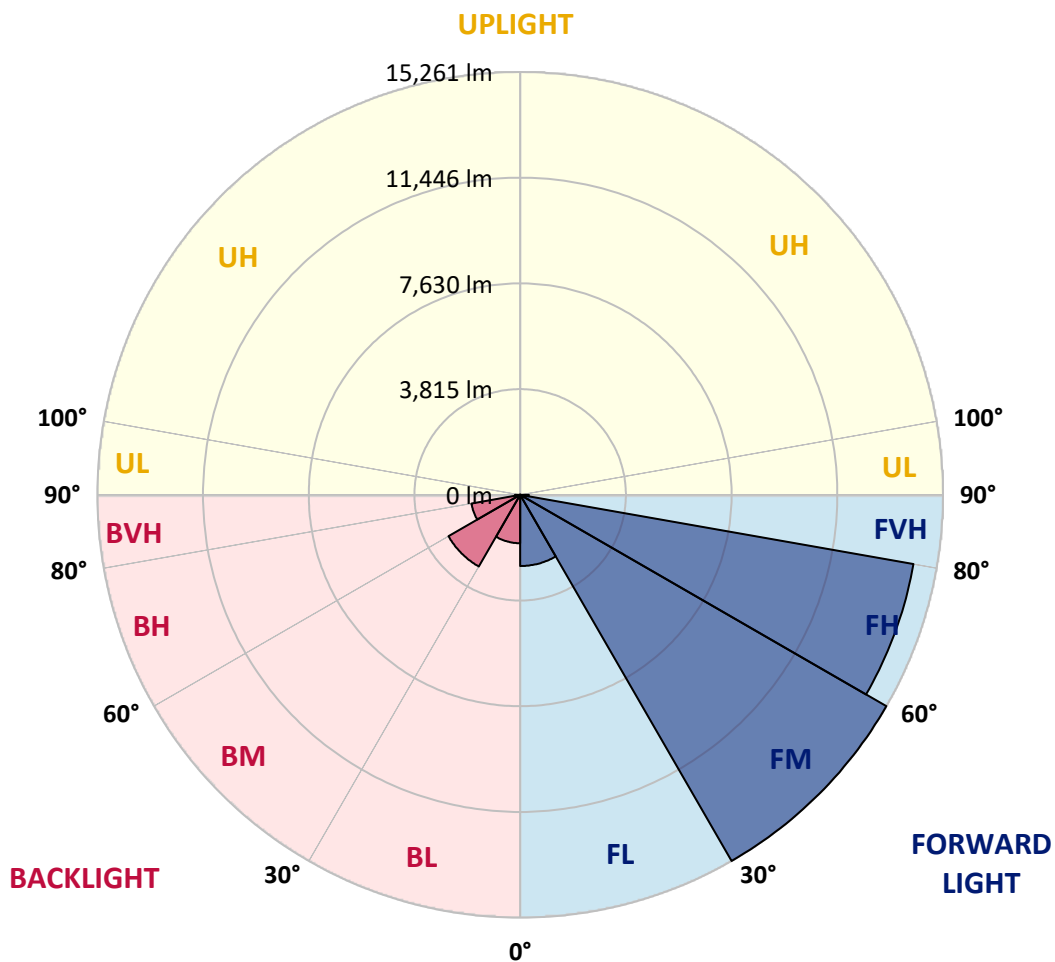
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2570.2	6.5			
FM	(30°-60°)	15260.9	38.9			
FH	(60°-80°)	14413.1	36.7			G5
FVH	(80°-90°)	313.7	0.8			G3/500
BL	(0°-30°)	1747.1	4.4	B3/2500		
BM	(30°-60°)	2988.2	7.6	B3/5000		
BH	(60°-80°)	1786.6	4.5	B3/2500		G3/2500
BVH	(80°-90°)	186.5	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°	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6
2.5°	4950.1	4983.3	5011.4	5037.2	5088.9	5174.3	5272.6	5352.3	5467.5	5490.0	5551.2
5°	4495.7	4495.7	4517.6	4556.9	4627.1	4755.2	4888.9	5067.0	5317.5	5376.5	5540.0
7.5°	4274.9	4276.6	4289.5	4322.7	4383.9	4500.7	4647.3	4857.4	5196.7	5295.0	5573.1
10°	4356.4	4337.8	4309.7	4293.4	4302.4	4371.0	4510.3	4744.0	5122.6	5248.4	5647.8
12.5°	4812.5	4777.7	4681.0	4553.0	4430.5	4380.5	4462.0	4690.0	5091.1	5237.7	5746.1
15°	5558.5	5543.9	5363.6	5098.4	4801.8	4553.0	4497.4	4669.8	5094.5	5250.7	5863.0
17.5°	6493.8	6473.0	6236.0	5850.0	5365.8	4881.6	4621.5	4686.7	5107.4	5272.6	5975.9
20°	7438.1	7374.6	7119.0	6659.0	6037.1	5328.2	4827.7	4729.4	5124.3	5296.7	6095.0
22.5°	8143.1	8090.9	7861.1	7413.9	6697.7	5846.1	5104.0	4803.5	5178.2	5367.5	6241.0
25°	8762.7	8766.1	8538.0	8106.0	7365.6	6395.5	5460.2	5001.8	5315.3	5511.9	6441.6
27.5°	9528.9	9484.6	9271.1	8842.5	8026.3	6949.9	5890.5	5274.8	5519.7	5718.0	6705.0
30°	10445.1	10413.7	10167.1	9681.2	8758.8	7545.4	6382.0	5591.6	5783.2	5988.8	7049.9
32.5°	11523.1	11508.5	11252.4	10627.1	9604.8	8247.0	6959.5	6011.3	6176.4	6389.9	7545.4
35°	12788.8	12790.4	12488.2	11736.6	10530.5	9063.2	7613.9	6551.1	6655.0	6877.5	8135.8
37.5°	13567.9	13662.3	13549.4	12783.1	11578.7	9976.1	8463.9	7267.3	7200.5	7425.2	8768.3
40°	13734.7	13849.9	14207.7	13818.4	12751.7	10981.6	9217.2	7955.5	7872.3	8146.5	9582.9
42.5°	13501.1	13660.6	14417.8	14692.0	13996.5	12220.8	10230.0	8977.9	8872.2	9241.3	10595.7
45°	13361.7	13480.8	14356.6	15147.0	15076.2	13621.8	11519.8	10261.4	10222.7	10706.9	11764.7
47.5°	13120.7	13228.6	14070.7	15252.6	15711.0	14905.4	13069.1	11831.5	11907.4	12542.1	13083.7
50°	13250.5	13294.9	13751.6	14983.5	15894.7	15846.3	14799.8	13649.4	13909.4	14701.5	14577.4
52.5°	13232.0	13347.1	13714.5	14542.0	15918.8	16427.2	16504.7	15677.3	16225.0	17133.9	16234.0
55°	10697.9	10909.1	13278.6	14430.7	16003.6	16996.2	18022.6	17814.7	18834.8	19894.3	18104.0
57.5°	10215.4	10349.1	11662.4	14664.4	16456.4	18083.8	19710.6	20167.3	21873.9	23104.1	20382.5
60°	10120.5	10285.6	11645.6	14950.4	17374.9	19855.5	22213.8	23015.4	25571.9	26919.0	23024.4
62.5°	9825.5	10003.6	11536.1	14912.7	18679.2	22306.4	25418.0	26043.2	29078.3	30388.3	25234.3
65°	8890.8	9057.6	10644.0	14313.9	19558.9	24922.5	29209.8	28818.8	31846.6	32831.4	26335.9
66°	8250.4	8413.9	9940.7	13608.9	19354.5	25664.6	30553.5	29677.7	32466.2	33238.1	26120.7
67.5°	7079.7	7207.8	8575.1	12029.8	18269.2	25872.4	31683.1	30323.2	32530.8	32803.8	24891.1
70°	4473.2	4510.3	5573.1	8304.3	13829.7	22437.9	29963.1	28720.5	29848.5	29109.8	20866.7
72.5°	1940.8	1927.9	2675.6	4224.3	7829.6	15056.0	24237.7	23697.9	23414.2	21729.5	14607.1
75°	1079.7	1094.8	1389.8	1961.1	3181.7	7395.4	15855.3	15172.8	12810.7	10931.6	6623.6
77.5°	866.2	887.0	1152.1	1391.4	1428.5	2579.0	7419.6	6037.1	3634.5	2916.6	1840.3
80°	684.8	721.8	1005.5	1083.6	962.8	1062.8	2397.0	1916.7	1438.1	1319.0	953.8
82.5°	541.5	567.9	862.8	820.2	673.5	716.2	1148.2	1119.0	935.3	851.6	551.1
85°	389.9	437.6	708.9	617.9	441.5	482.5	762.3	730.8	535.9	437.6	243.2
87.5°	159.5	207.8	501.1	410.1	246.6	224.7	380.3	357.8	253.9	185.4	120.8
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°	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6	5595.6
2.5°	5590.0	5634.3	5692.2	5727.6	5746.1	5759.0	5779.3	5777.6	5783.2	5784.9	5792.2
5°	5627.0	5701.2	5784.9	5807.4	5807.4	5786.6	5766.3	5732.6	5719.7	5716.3	5719.7
7.5°	5723.6	5805.1	5877.6	5851.7	5796.1	5714.1	5608.5	5515.8	5465.8	5449.0	5445.6
10°	5846.1	5944.4	5974.2	5875.9	5712.4	5515.8	5306.3	5154.0	5067.0	5042.8	5035.5
12.5°	5994.4	6087.1	6046.7	5838.8	5536.0	5219.2	4929.3	4686.7	4504.7	4447.4	4443.4
15°	6157.9	6230.3	6087.1	5723.6	5272.6	4805.2	4289.5	3870.4	3644.1	3571.6	3566.0
17.5°	6310.1	6347.2	6062.9	5523.1	4885.0	4128.3	3443.5	3120.5	3043.0	3061.5	3064.9
20°	6439.9	6439.9	5981.5	5235.5	4274.9	3235.7	2803.1	2798.1	2853.7	2909.3	2920.5
22.5°	6582.6	6497.2	5838.8	4829.3	3409.8	2647.5	2584.6	2636.3	2699.2	2760.4	2770.0
25°	6759.0	6543.8	5639.9	4213.7	2680.7	2404.3	2428.4	2471.1	2502.6	2541.9	2547.5
27.5°	6955.6	6602.8	5378.7	3365.4	2326.8	2252.6	2271.1	2285.8	2281.8	2297.0	2300.4
30°	7190.9	6671.9	5020.3	2630.7	2180.1	2122.3	2089.1	2076.2	2076.2	2100.4	2109.4
32.5°	7506.6	6773.6	4506.3	2254.3	2109.4	2029.6	1922.3	1874.0	1892.5	1974.0	1992.5
35°	7853.8	6883.1	3810.9	2126.2	2094.8	1986.9	1820.1	1730.7	1733.0	1808.8	1833.0
37.5°	8231.9	7022.4	3048.0	2102.1	2127.9	1989.1	1766.1	1643.7	1593.7	1593.7	1603.2
40°	8716.1	7165.1	2467.8	2118.9	2198.7	2011.1	1738.6	1575.1	1434.1	1438.1	1445.4
42.5°	9346.9	7287.6	2156.0	2153.7	2284.1	2040.8	1736.4	1484.1	1361.7	1445.4	1521.2
45°	10048.5	7348.8	2018.4	2185.8	2352.6	2059.4	1707.2	1469.5	1371.2	1619.5	1764.5
47.5°	10855.2	7313.4	1942.5	2196.4	2369.5	2059.4	1673.4	1504.9	1435.8	1875.7	2044.8
50°	11740.5	7211.7	1868.4	2174.5	2363.8	2055.4	1704.9	1539.8	1460.0	1920.1	2036.9
52.5°	12781.5	7126.3	1790.3	2126.2	2324.5	2035.2	1742.0	1525.1	1384.1	1745.9	1827.4
55°	13968.4	7150.5	1703.2	2057.7	2263.3	1996.5	1729.1	1465.6	1304.4	1538.1	1588.1
57.5°	15486.3	7438.1	1599.3	1970.6	2180.1	1931.3	1683.0	1438.1	1280.2	1395.4	1425.2
60°	17179.9	7938.6	1469.5	1883.0	2076.2	1827.4	1647.6	1451.0	1291.5	1384.1	1398.8
62.5°	18423.1	8230.2	1358.3	1754.9	1935.2	1712.2	1603.2	1467.3	1321.2	1422.9	1419.5
65°	18760.7	7751.6	1219.0	1567.8	1744.2	1592.0	1547.1	1485.8	1334.2	1454.4	1438.1
66°	18287.7	7235.9	1157.8	1480.8	1647.6	1532.4	1519.5	1484.1	1328.5	1458.3	1430.2
67.5°	17139.5	6178.1	1052.2	1352.7	1493.7	1443.7	1475.2	1467.3	1313.4	1454.4	1415.6
70°	13978.0	4215.4	899.9	1126.3	1243.1	1270.7	1389.8	1408.3	1265.1	1389.8	1304.4
72.5°	9766.5	2567.7	796.0	874.1	1005.5	1083.6	1272.9	1326.3	1200.5	1213.4	1131.9
75°	4719.8	1363.9	721.8	677.5	780.8	905.5	1131.9	1215.1	1098.2	1015.1	985.3
77.5°	1471.2	833.1	612.3	545.5	612.3	730.8	946.0	1065.1	978.0	849.9	838.7
80°	790.4	612.3	471.3	437.6	484.2	573.5	743.8	888.7	840.4	762.3	680.8
82.5°	521.3	397.2	348.8	339.3	369.1	437.6	552.8	736.5	736.5	653.3	475.2
85°	269.1	243.2	239.3	239.3	257.8	291.5	376.4	567.9	605.0	344.9	285.9
87.5°	133.7	139.3	129.8	135.4	144.9	142.7	179.8	285.9	341.5	209.5	174.1
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)