

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: P301123

Luminaire Tested: **GLNA-AF-08-LED-E1-T3R-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301123  
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-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 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: 47013.7 lumens  
Efficiency: N/A  
Efficacy: 105.6 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): 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

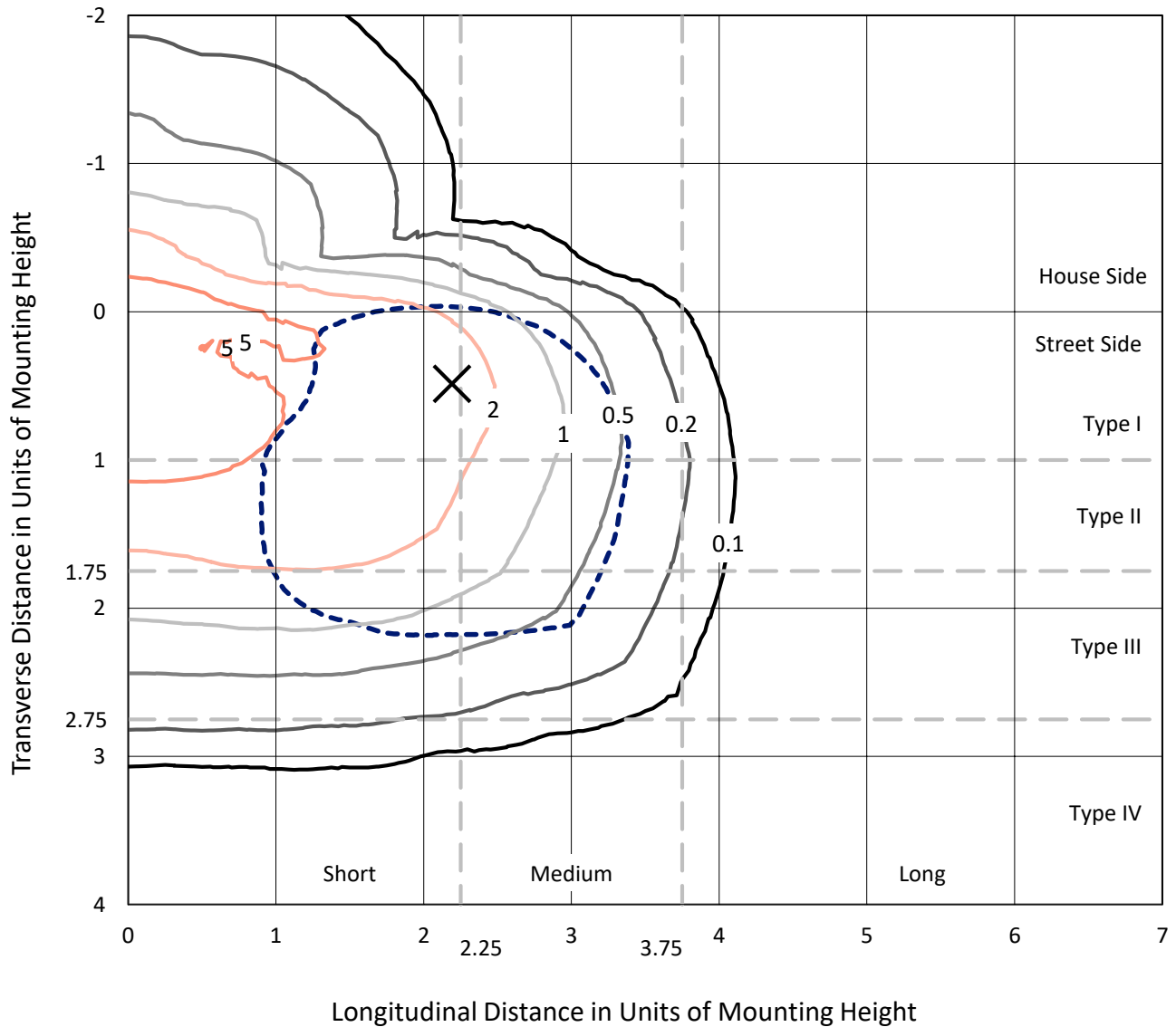


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

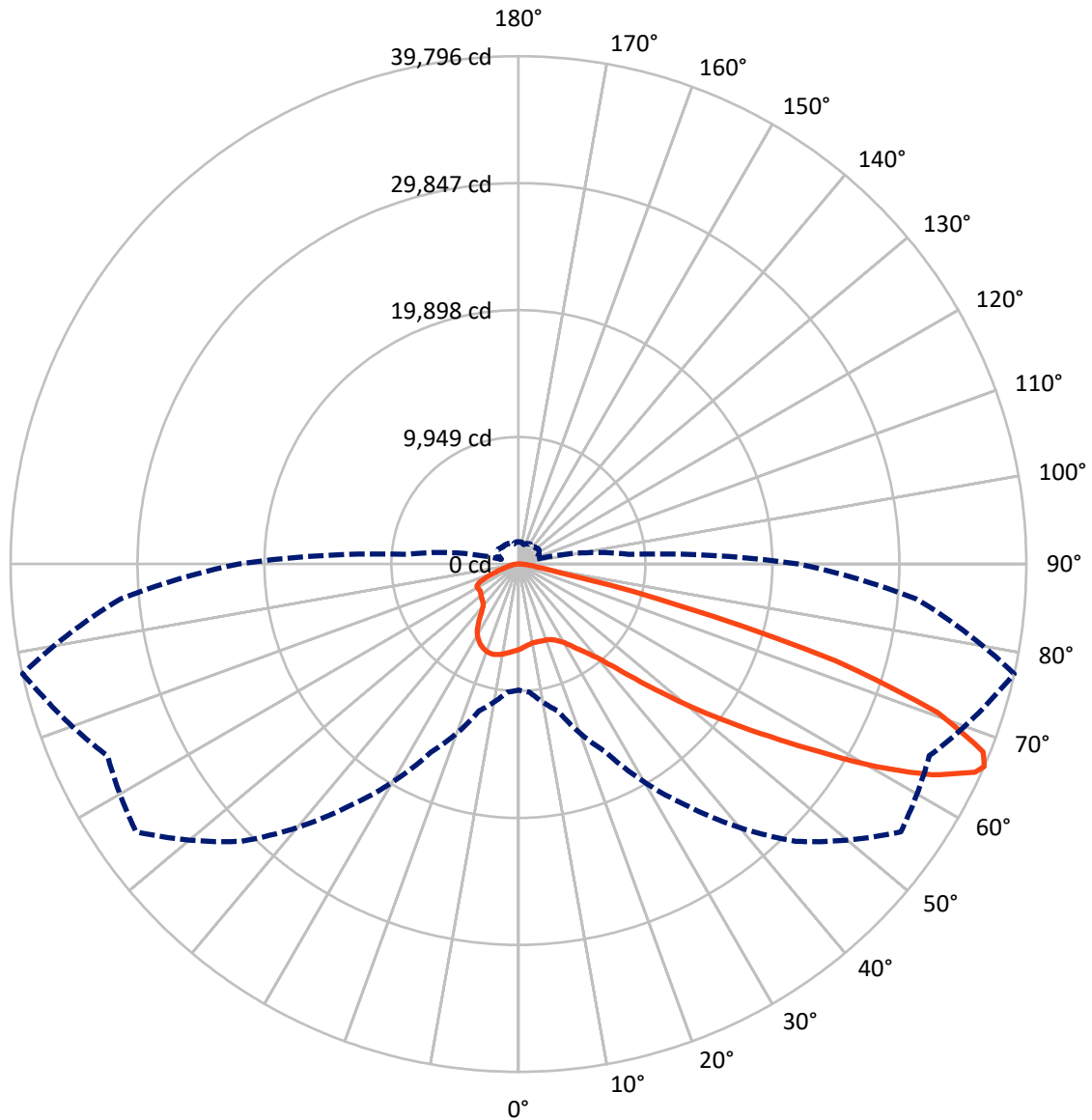


Based on 30 foot mounting height. Maximum calculated value = 9.2 fc  
 Type III - Short - Full Cutoff

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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	8032.0	0.0	8032.0
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	38981.6	0.0	38981.6
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	47013.7	0.0	47013.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	598.6	1.3
10°-20°	1688.6	3.6
20°-30°	2881.9	6.1
30°-40°	4613.4	9.8
40°-50°	7127.3	15.2
50°-60°	10109.0	21.5
60°-70°	13523.1	28.8
70°-80°	5872.9	12.5
80°-90°	598.8	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°	47013.7	100.0
0°-180°	47013.7	100.0



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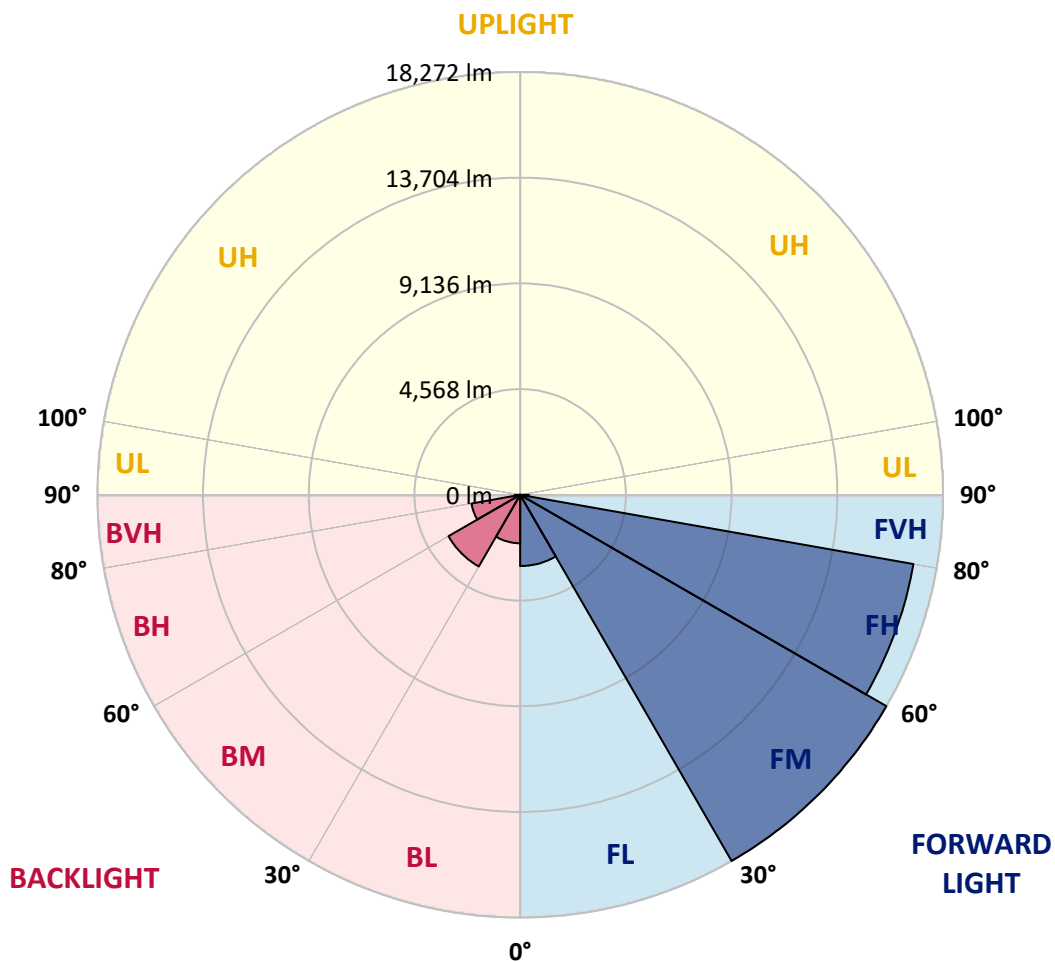
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3077.3	6.5			
FM	(30°-60°)	18271.9	38.9			
FH	(60°-80°)	17256.9	36.7			G5
FVH	(80°-90°)	375.6	0.8			G3/500
BL	(0°-30°)	2091.9	4.4	B3/2500		
BM	(30°-60°)	3577.8	7.6	B3/5000		
BH	(60°-80°)	2139.1	4.5	B3/2500		G3/2500
BVH	(80°-90°)	223.3	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°	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6
2.5°	5926.8	5966.5	6000.1	6031.1	6092.9	6195.2	6312.9	6408.4	6546.3	6573.2	6646.5
5°	5382.7	5382.7	5408.9	5456.0	5540.1	5693.4	5853.5	6066.7	6366.7	6437.3	6633.0
7.5°	5118.4	5120.4	5135.8	5175.5	5248.8	5388.7	5564.3	5815.8	6222.1	6339.8	6672.7
10°	5215.9	5193.7	5160.1	5140.6	5151.3	5233.4	5400.2	5680.0	6133.3	6283.9	6762.2
12.5°	5762.0	5720.3	5604.6	5451.3	5304.7	5244.8	5342.3	5615.4	6095.6	6271.2	6879.9
15°	6655.2	6637.7	6421.8	6104.4	5749.2	5451.3	5384.7	5591.2	6099.7	6286.6	7019.8
17.5°	7775.1	7750.2	7466.3	7004.3	6424.5	5844.7	5533.3	5611.4	6115.1	6312.9	7154.9
20°	8905.7	8829.7	8523.6	7972.8	7228.3	6379.5	5780.2	5662.5	6135.3	6341.8	7297.5
22.5°	9749.8	9687.2	9412.1	8876.8	8019.2	6999.6	6111.1	5751.3	6199.9	6426.5	7472.4
25°	10491.6	10495.7	10222.6	9705.4	8818.9	7657.4	6537.5	5988.7	6364.0	6599.4	7712.5
27.5°	11409.0	11355.9	11100.3	10587.1	9609.9	8321.2	7052.7	6315.6	6608.8	6846.2	8028.0
30°	12506.0	12468.3	12173.1	11591.3	10486.9	9034.1	7641.2	6694.9	6924.2	7170.4	8440.9
32.5°	13796.7	13779.2	13472.5	12723.9	11499.8	9874.2	8332.6	7197.3	7395.1	7650.6	9034.1
35°	15312.0	15314.0	14952.2	14052.3	12608.2	10851.5	9116.2	7843.7	7968.1	8234.4	9741.0
37.5°	16244.9	16357.9	16222.7	15305.3	13863.3	11944.4	10133.8	8701.2	8621.2	8890.2	10498.4
40°	16444.7	16582.5	17011.0	16544.9	15267.6	13148.3	11035.7	9525.1	9425.6	9753.8	11473.6
42.5°	16164.9	16355.9	17262.5	17590.7	16758.1	14632.0	12248.4	10749.2	10622.8	11064.7	12686.3
45°	15998.1	16140.7	17189.2	18135.5	18050.8	16309.5	13792.7	12286.1	12239.7	12819.4	14085.9
47.5°	15709.5	15838.7	16846.9	18262.0	18810.8	17846.3	15647.6	14165.9	14256.7	15016.8	15665.1
50°	15864.9	15918.0	16464.8	17939.8	19030.7	18972.9	17719.9	16342.4	16653.8	17602.2	17453.5
52.5°	15842.7	15980.6	16420.4	17411.2	19059.7	19668.4	19761.2	18770.5	19426.2	20514.5	19437.0
55°	12808.7	13061.6	15898.5	17278.0	19161.2	20349.7	21578.5	21329.6	22551.0	23819.5	21676.0
57.5°	12230.9	12391.0	13963.5	17557.8	19703.3	21651.8	23599.6	24146.4	26189.7	27662.7	24404.0
60°	12117.3	12315.0	13943.3	17900.1	20803.0	23773.1	26596.6	27556.4	30617.3	32230.2	27567.2
62.5°	11764.2	11977.4	13812.2	17855.1	22364.7	26707.6	30433.0	31181.6	34815.6	36384.1	30213.1
65°	10645.0	10844.7	12744.1	17138.1	23418.0	29839.8	34973.0	34504.9	38130.1	39309.1	31532.0
66°	9878.2	10074.0	11902.0	16294.0	23173.2	30728.3	36581.8	35533.2	38871.9	39796.1	31274.4
67.5°	8476.6	8629.9	10267.0	14403.4	21873.8	30977.2	37934.4	36306.0	38949.3	39276.2	29802.2
70°	5355.8	5400.2	6672.7	9942.8	16558.3	26865.0	35874.9	34387.2	35737.7	34853.3	24983.8
72.5°	2323.8	2308.3	3203.5	5057.8	9374.5	18026.6	29019.9	28373.6	28033.9	26016.9	17489.2
75°	1292.7	1310.9	1664.0	2348.0	3809.5	8854.6	18983.7	18166.5	15338.3	13088.5	7930.4
77.5°	1037.1	1062.0	1379.5	1666.0	1710.4	3087.8	8883.5	7228.3	4351.6	3492.1	2203.4
80°	819.9	864.3	1203.9	1297.4	1152.8	1272.5	2869.9	2294.9	1721.8	1579.2	1142.0
82.5°	648.4	680.0	1033.1	982.0	806.4	857.5	1374.8	1339.8	1119.9	1019.6	659.8
85°	466.8	523.9	848.8	739.8	528.7	577.7	912.7	875.0	641.6	523.9	291.2
87.5°	191.0	248.9	599.9	491.0	295.3	269.0	455.3	428.4	304.0	222.0	144.6
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°	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6	6699.6
2.5°	6692.9	6746.0	6815.3	6857.7	6879.9	6895.3	6919.5	6917.5	6924.2	6926.3	6935.0
5°	6737.3	6826.0	6926.3	6953.2	6953.2	6928.3	6904.1	6863.7	6848.2	6844.2	6848.2
7.5°	6853.0	6950.5	7037.2	7006.3	6939.7	6841.5	6715.1	6604.1	6544.2	6524.1	6520.0
10°	6999.6	7117.3	7152.9	7035.2	6839.5	6604.1	6353.2	6171.0	6066.7	6037.8	6029.0
12.5°	7177.1	7288.1	7239.7	6990.8	6628.3	6249.0	5901.9	5611.4	5393.4	5324.8	5320.1
15°	7372.9	7459.6	7288.1	6853.0	6312.9	5753.3	5135.8	4634.1	4363.0	4276.3	4269.6
17.5°	7555.1	7599.5	7259.2	6612.8	5848.8	4942.8	4122.9	3736.2	3643.4	3665.6	3669.6
20°	7710.5	7710.5	7161.7	6268.5	5118.4	3874.1	3356.2	3350.1	3416.7	3483.3	3496.8
22.5°	7881.3	7779.1	6990.8	5782.2	4082.6	3169.9	3094.6	3156.4	3231.8	3305.1	3316.5
25°	8092.5	7834.9	6752.7	5045.0	3209.6	2878.7	2907.6	2958.7	2996.4	3043.4	3050.2
27.5°	8327.9	7905.5	6440.0	4029.4	2785.8	2697.1	2719.3	2736.7	2732.0	2750.2	2754.2
30°	8609.7	7988.3	6010.9	3149.7	2610.3	2541.0	2501.3	2485.9	2485.9	2514.8	2525.5
32.5°	8987.7	8110.0	5395.5	2699.1	2525.5	2430.0	2301.6	2243.7	2265.9	2363.5	2385.7
35°	9403.4	8241.2	4562.8	2545.7	2508.1	2378.9	2179.2	2072.2	2074.9	2165.7	2194.6
37.5°	9856.0	8408.0	3649.4	2516.8	2547.7	2381.6	2114.6	1968.0	1908.1	1908.1	1919.6
40°	10435.8	8578.8	2954.7	2537.0	2632.5	2407.8	2081.6	1885.9	1717.1	1721.8	1730.6
42.5°	11191.1	8725.4	2581.4	2578.7	2734.7	2443.5	2079.0	1777.0	1630.3	1730.6	1821.4
45°	12031.2	8798.7	2416.6	2617.0	2816.8	2465.7	2044.0	1759.5	1641.8	1939.1	2112.6
47.5°	12997.0	8756.4	2325.8	2629.8	2837.0	2465.7	2003.6	1801.9	1719.1	2245.8	2448.2
50°	14057.0	8634.6	2237.0	2603.6	2830.2	2461.0	2041.3	1843.6	1748.0	2298.9	2438.8
52.5°	15303.3	8532.4	2143.5	2545.7	2783.1	2436.8	2085.7	1826.1	1657.2	2090.4	2187.9
55°	16724.5	8561.3	2039.3	2463.7	2709.8	2390.4	2070.2	1754.8	1561.7	1841.5	1901.4
57.5°	18541.8	8905.7	1914.8	2359.4	2610.3	2312.3	2015.1	1721.8	1532.8	1670.7	1706.3
60°	20569.6	9504.9	1759.5	2254.5	2485.9	2187.9	1972.7	1737.3	1546.3	1657.2	1674.7
62.5°	22058.0	9854.0	1626.3	2101.1	2317.0	2050.0	1919.6	1756.8	1581.9	1703.7	1699.6
65°	22462.3	9281.0	1459.5	1877.2	2088.4	1906.1	1852.3	1779.0	1597.4	1741.3	1721.8
66°	21895.9	8663.5	1386.2	1772.9	1972.7	1834.8	1819.3	1777.0	1590.7	1746.0	1712.4
67.5°	20521.2	7397.1	1259.7	1619.6	1788.4	1728.5	1766.2	1756.8	1572.5	1741.3	1694.9
70°	16735.9	5047.1	1077.5	1348.5	1488.4	1521.4	1664.0	1686.2	1514.7	1664.0	1561.7
72.5°	11693.5	3074.4	953.1	1046.5	1203.9	1297.4	1524.1	1588.0	1437.3	1452.8	1355.3
75°	5651.0	1633.0	864.3	811.1	934.9	1084.2	1355.3	1454.8	1314.9	1215.4	1179.7
77.5°	1761.5	997.4	733.1	653.1	733.1	875.0	1132.6	1275.2	1171.0	1017.6	1004.2
80°	946.3	733.1	564.3	523.9	579.8	686.7	890.5	1064.0	1006.2	912.7	815.2
82.5°	624.2	475.5	417.7	406.2	441.9	523.9	661.8	881.8	881.8	782.2	569.0
85°	322.2	291.2	286.5	286.5	308.7	349.1	450.6	680.0	724.4	413.0	342.3
87.5°	160.1	166.8	155.4	162.1	173.5	170.8	215.2	342.3	408.9	250.9	208.5
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)