

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: P191507

Luminaire Tested: **GLEON-AF-09-LED-E1-T3R-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-T3R-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61055.8 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G5

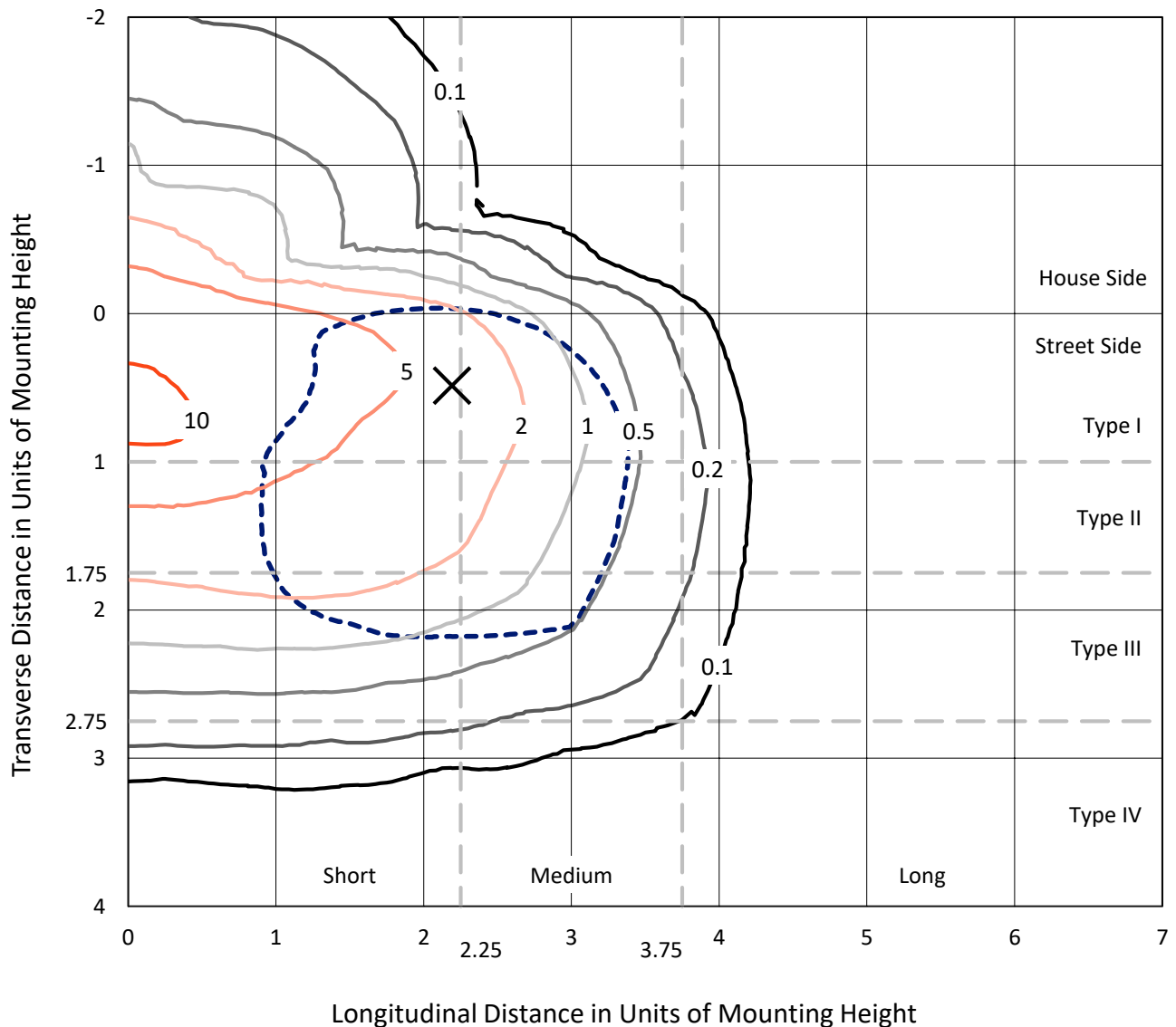
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

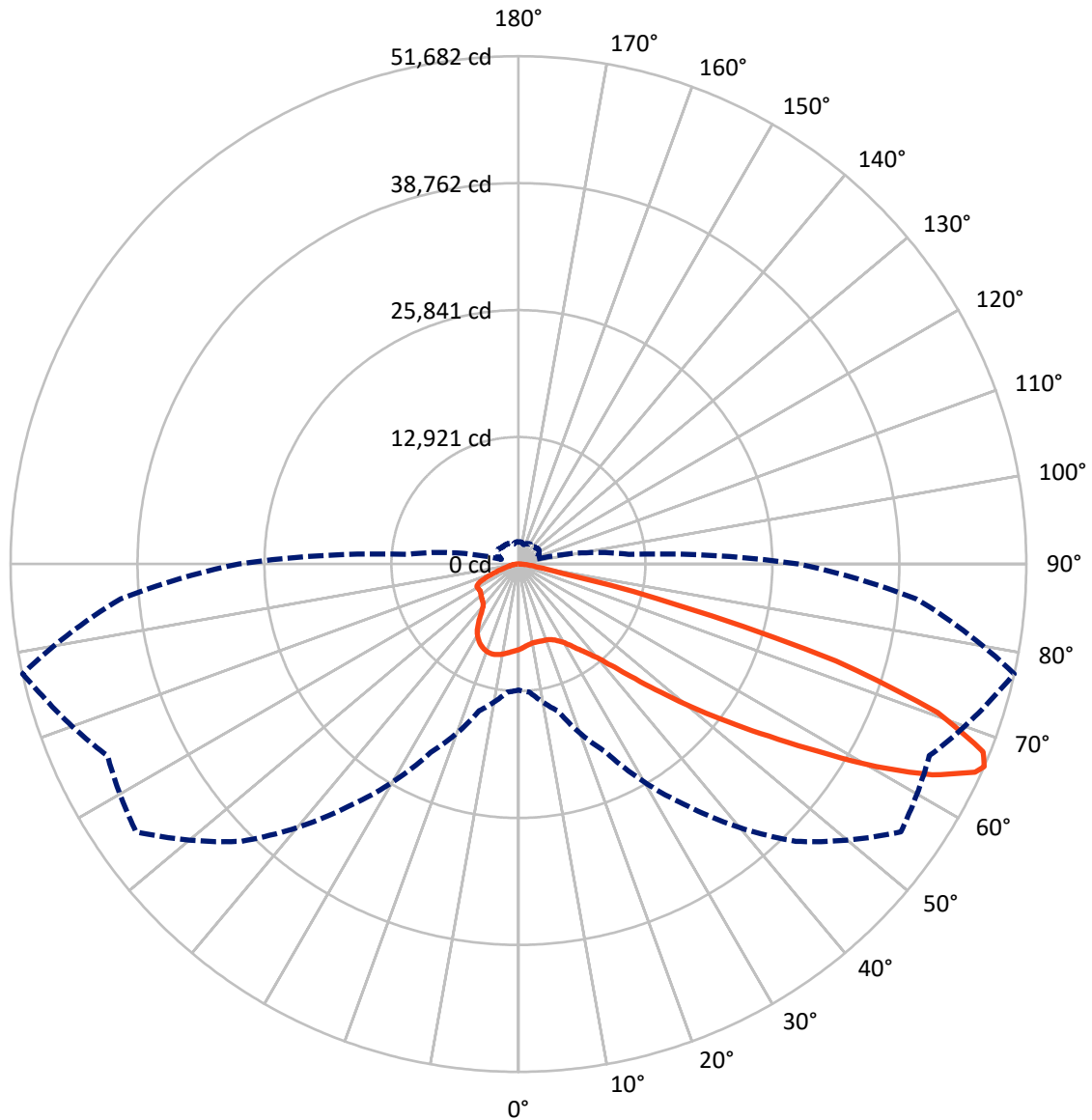
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.9 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
House Side	Lumens	10431.0	0.0	10431.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	50624.8	0.0	50624.8
	% Fixture	82.9	0.0	82.9
Total	Lumens	61055.8	0.0	61055.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	777.3	1.3
10°-20°	2193.0	3.6
20°-30°	3742.7	6.1
30°-40°	5991.4	9.8
40°-50°	9256.1	15.2
50°-60°	13128.4	21.5
60°-70°	17562.2	28.8
70°-80°	7626.9	12.5
80°-90°	777.7	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°	61055.8	100.0
0°-180°	61055.8	100.0



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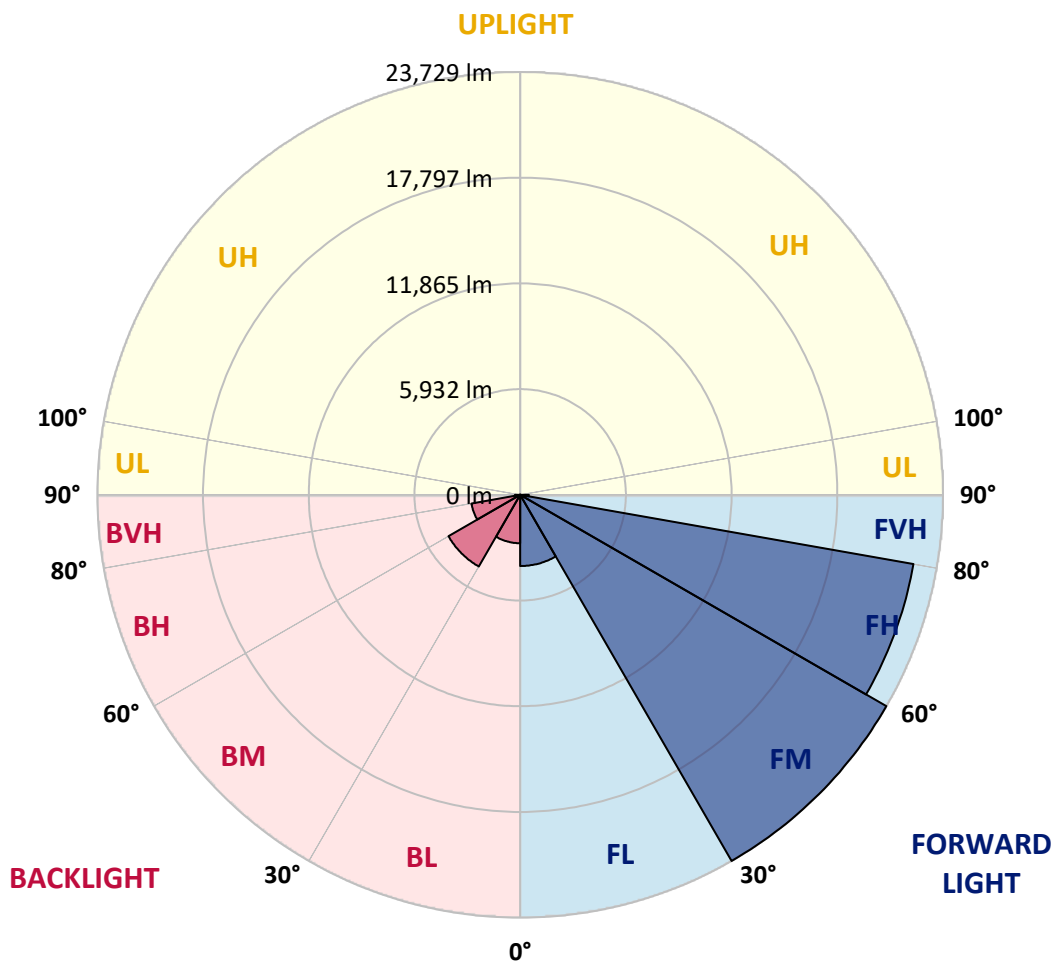
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3996.4	6.5			
FM (30°-60°)	23729.5	38.9			
FH (60°-80°)	22411.2	36.7			G5
FVH (80°-90°)	487.8	0.8			G3/500
BL (0°-30°)	2716.7	4.4	B4/5000		
BM (30°-60°)	4646.4	7.6	B3/5000		
BH (60°-80°)	2778.0	4.5	B4/5000		G4/5000
BVH (80°-90°)	290.0	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-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°	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7
2.5°	7696.8	7748.8	7792.0	7832.4	7913.1	8045.9	8198.7	8322.8	8501.6	8536.3	8631.6
5°	6990.0	6990.0	7024.6	7085.3	7194.8	7393.9	7601.6	7878.6	8268.0	8360.4	8614.2
7.5°	6646.7	6649.6	6669.8	6721.7	6816.9	6998.7	7226.5	7552.5	8080.5	8233.4	8666.1
10°	6773.7	6744.8	6701.6	6675.6	6690.0	6796.7	7013.1	7376.6	7965.1	8161.3	8781.5
12.5°	7483.3	7428.6	7278.5	7079.4	6889.1	6811.1	6938.1	7292.9	7916.1	8144.0	8934.5
15°	8643.0	8620.0	8340.1	7927.6	7466.0	7079.4	6992.9	7261.2	7921.8	8164.2	9116.1
17.5°	10097.0	10065.3	9696.0	9096.0	8343.0	7590.1	7186.2	7287.2	7942.0	8198.7	9292.2
20°	11565.4	11467.4	11069.2	10353.8	9387.3	8285.3	7506.4	7353.5	7968.0	8236.3	9476.8
22.5°	12661.7	12580.9	12223.1	11527.9	10414.4	9090.2	7936.3	7468.9	8051.6	8345.9	9704.6
25°	13625.2	13631.0	13276.2	12604.0	11453.0	9944.1	8490.2	7777.6	8265.1	8570.9	10016.2
27.5°	14816.6	14747.4	14415.6	13749.3	12479.9	10806.7	9159.4	8201.7	8582.5	8891.2	10425.9
30°	16241.8	16192.7	15809.1	15053.2	13619.5	11732.7	9924.0	8695.0	8992.1	9312.3	10962.5
32.5°	17917.9	17894.8	17496.7	16524.5	14935.0	12823.2	10821.1	9346.9	9603.7	9935.5	11732.7
35°	19885.3	19888.2	19418.1	18249.6	16374.5	14092.6	11839.4	10186.4	10348.0	10694.2	12650.1
37.5°	21097.0	21244.1	21068.2	19876.8	18004.4	15511.9	13160.8	11300.0	11196.2	11545.2	13633.9
40°	21356.7	21535.5	22092.3	21486.5	19827.7	17075.5	14332.0	12370.3	12240.4	12667.4	14900.3
42.5°	20993.2	21241.3	22418.3	22845.3	21763.4	19002.6	15907.1	13959.9	13795.4	14369.5	16475.4
45°	20776.7	20961.4	22323.0	23552.0	23442.4	21180.7	17912.1	15956.2	15895.6	16648.5	18292.9
47.5°	20401.7	20569.1	21878.8	23716.5	24429.0	23177.0	20321.0	18396.7	18515.1	19501.6	20344.0
50°	20603.7	20672.9	21382.6	23298.1	24714.6	24639.6	23012.5	21224.0	21627.8	22859.7	22666.3
52.5°	20574.8	20753.7	21324.9	22611.5	24752.1	25542.6	25663.8	24377.1	25228.1	26641.7	25242.5
55°	16634.1	16963.0	20646.9	22438.4	24884.8	26428.2	28023.5	27700.5	29287.1	30934.3	28150.5
57.5°	15884.1	16091.7	18134.3	22802.0	25588.7	28118.8	30648.8	31358.5	34012.5	35925.2	31693.1
60°	15737.0	15993.6	18108.3	23246.3	27016.7	30873.8	34540.4	35786.7	39762.1	41856.5	35801.1
62.5°	15278.3	15555.2	17938.1	23188.6	29044.8	34684.7	39522.6	40494.8	45214.4	47251.2	39237.0
65°	13824.3	14083.9	16550.4	22256.8	30412.2	38752.3	45419.3	44810.6	49518.7	51050.6	40950.7
66°	12829.0	13082.8	15457.1	21160.5	30094.9	39906.3	47507.9	46146.2	50482.2	51682.3	40616.0
67.5°	11008.6	11207.7	13333.9	18705.5	28407.2	40229.4	49264.8	47150.2	50583.2	51007.3	38703.3
70°	6955.5	7013.1	8666.1	12912.6	21503.8	34889.6	46590.5	44657.6	46411.7	45263.5	32446.1
72.5°	3017.6	2997.3	4159.9	6568.9	12174.1	23410.6	37687.9	36848.3	36407.0	33787.6	22712.6
75°	1679.0	1702.1	2160.8	3049.3	4947.5	11499.1	24654.0	23592.4	19920.0	16997.7	10299.0
77.5°	1347.2	1378.9	1791.5	2163.6	2221.3	4010.0	11536.5	9387.3	5651.5	4535.0	2861.8
80°	1064.5	1122.2	1563.6	1684.8	1497.3	1653.0	3727.2	2980.1	2235.8	2051.1	1482.9
82.5°	842.4	882.8	1341.5	1275.1	1047.2	1113.6	1785.8	1739.5	1453.9	1324.1	856.8
85°	605.8	680.9	1102.0	960.7	686.6	750.0	1185.7	1136.6	833.7	680.9	377.9
87.5°	248.1	323.2	778.9	637.6	383.7	349.0	591.4	556.8	395.3	288.5	187.5
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°	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7	8700.7
2.5°	8692.1	8761.4	8850.8	8905.6	8934.5	8954.6	8986.3	8983.5	8992.1	8995.0	9006.6
5°	8749.8	8865.2	8995.0	9029.6	9029.6	8997.9	8966.2	8914.2	8894.0	8888.2	8894.0
7.5°	8899.8	9026.7	9139.2	9098.8	9012.3	8885.4	8721.0	8576.7	8498.8	8472.8	8467.1
10°	9090.2	9243.1	9289.2	9136.4	8882.5	8576.7	8250.7	8014.1	7878.6	7841.0	7829.6
12.5°	9321.0	9465.3	9401.7	9078.7	8608.4	8115.2	7665.1	7287.2	7004.5	6915.0	6909.2
15°	9574.8	9687.3	9465.3	8899.8	8198.7	7471.8	6669.8	6017.8	5665.9	5553.4	5544.7
17.5°	9811.4	9869.1	9427.7	8588.3	7595.8	6418.8	5354.3	4852.4	4731.1	4760.0	4765.8
20°	10013.4	10013.4	9300.8	8141.1	6646.7	5031.2	4359.0	4350.4	4436.9	4523.5	4540.8
22.5°	10235.5	10102.8	9078.7	7509.3	5302.4	4116.7	4018.7	4099.4	4197.5	4292.7	4307.1
25°	10509.6	10174.9	8770.0	6551.5	4168.6	3738.8	3776.3	3842.6	3891.7	3952.3	3961.0
27.5°	10815.4	10267.3	8363.2	5233.1	3617.7	3502.2	3531.0	3554.1	3548.4	3571.4	3577.3
30°	11181.8	10373.9	7806.4	4090.8	3389.8	3300.2	3248.4	3228.1	3228.1	3265.7	3280.1
32.5°	11672.2	10532.6	7007.3	3505.1	3280.1	3156.0	2988.8	2913.7	2942.5	3069.5	3098.3
35°	12211.6	10702.8	5925.5	3306.1	3257.0	3089.7	2830.1	2691.6	2694.5	2812.7	2850.2
37.5°	12800.2	10919.2	4739.8	3268.5	3308.9	3092.6	2746.4	2555.9	2478.1	2478.1	2492.5
40°	13553.1	11141.4	3836.9	3294.5	3418.6	3127.2	2703.1	2449.3	2230.0	2235.8	2247.3
42.5°	14534.0	11331.7	3352.2	3349.3	3551.3	3173.4	2700.2	2307.9	2117.5	2247.3	2365.6
45°	15624.4	11427.0	3138.7	3398.3	3658.0	3202.2	2654.0	2284.8	2131.9	2518.5	2743.6
47.5°	16879.3	11372.1	3020.5	3415.6	3684.0	3202.2	2602.2	2339.6	2232.9	2916.6	3179.1
50°	18255.4	11213.5	2905.1	3381.1	3675.4	3196.4	2651.2	2394.4	2270.3	2985.8	3167.6
52.5°	19873.8	11080.8	2783.9	3306.1	3614.7	3164.7	2708.9	2371.4	2152.1	2714.7	2841.6
55°	21720.1	11118.2	2648.3	3199.3	3519.6	3104.1	2688.7	2279.0	2028.1	2391.6	2469.4
57.5°	24080.0	11565.4	2486.8	3063.7	3389.8	3003.2	2616.6	2235.8	1990.6	2169.4	2215.6
60°	26713.8	12344.4	2284.8	2928.1	3228.1	2841.6	2561.8	2255.9	2007.8	2152.1	2175.2
62.5°	28646.7	12797.2	2111.7	2729.1	3008.9	2662.7	2492.5	2281.9	2054.0	2212.6	2206.9
65°	29171.7	12052.9	1895.3	2437.7	2711.7	2475.2	2406.0	2310.7	2074.2	2261.7	2235.8
66°	28436.1	11250.9	1800.2	2302.2	2561.8	2382.9	2362.7	2307.9	2065.5	2267.5	2224.2
67.5°	26650.3	9606.6	1635.7	2103.1	2322.3	2244.5	2293.5	2281.9	2042.5	2261.7	2201.2
70°	21734.5	6554.5	1399.2	1751.1	1932.9	1976.1	2160.8	2189.6	1967.4	2160.8	2028.1
72.5°	15185.9	3992.7	1237.6	1358.8	1563.6	1684.8	1979.0	2062.7	1866.5	1886.7	1759.8
75°	7339.1	2120.4	1122.2	1053.0	1214.5	1407.8	1759.8	1889.6	1707.8	1578.0	1531.9
77.5°	2287.7	1295.3	952.0	848.1	952.0	1136.6	1471.3	1656.0	1520.3	1321.2	1304.0
80°	1229.0	952.0	732.7	680.9	753.0	891.4	1156.9	1381.8	1306.8	1185.7	1058.8
82.5°	810.7	617.4	542.4	527.9	574.1	680.9	859.7	1145.3	1145.3	1015.5	738.6
85°	418.3	377.9	372.1	372.1	401.0	453.0	585.6	882.8	940.5	536.5	444.3
87.5°	207.7	216.4	201.9	210.6	225.0	222.2	279.9	444.3	530.8	326.0	271.2
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)