

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: P191577

Luminaire Tested: **GLEON-AF-09-LED-E1-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)
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-T4W
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54055.8 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G5

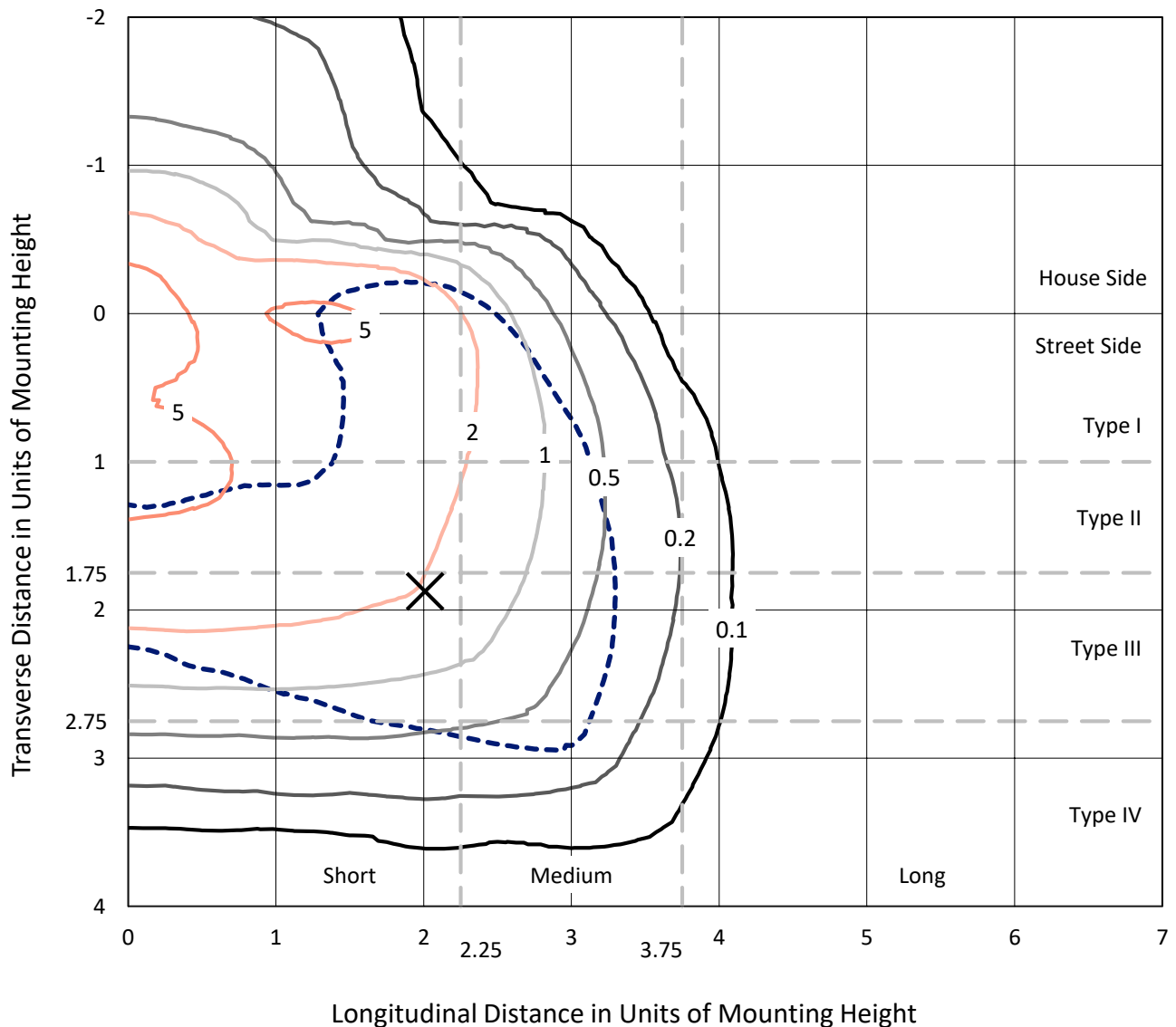
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

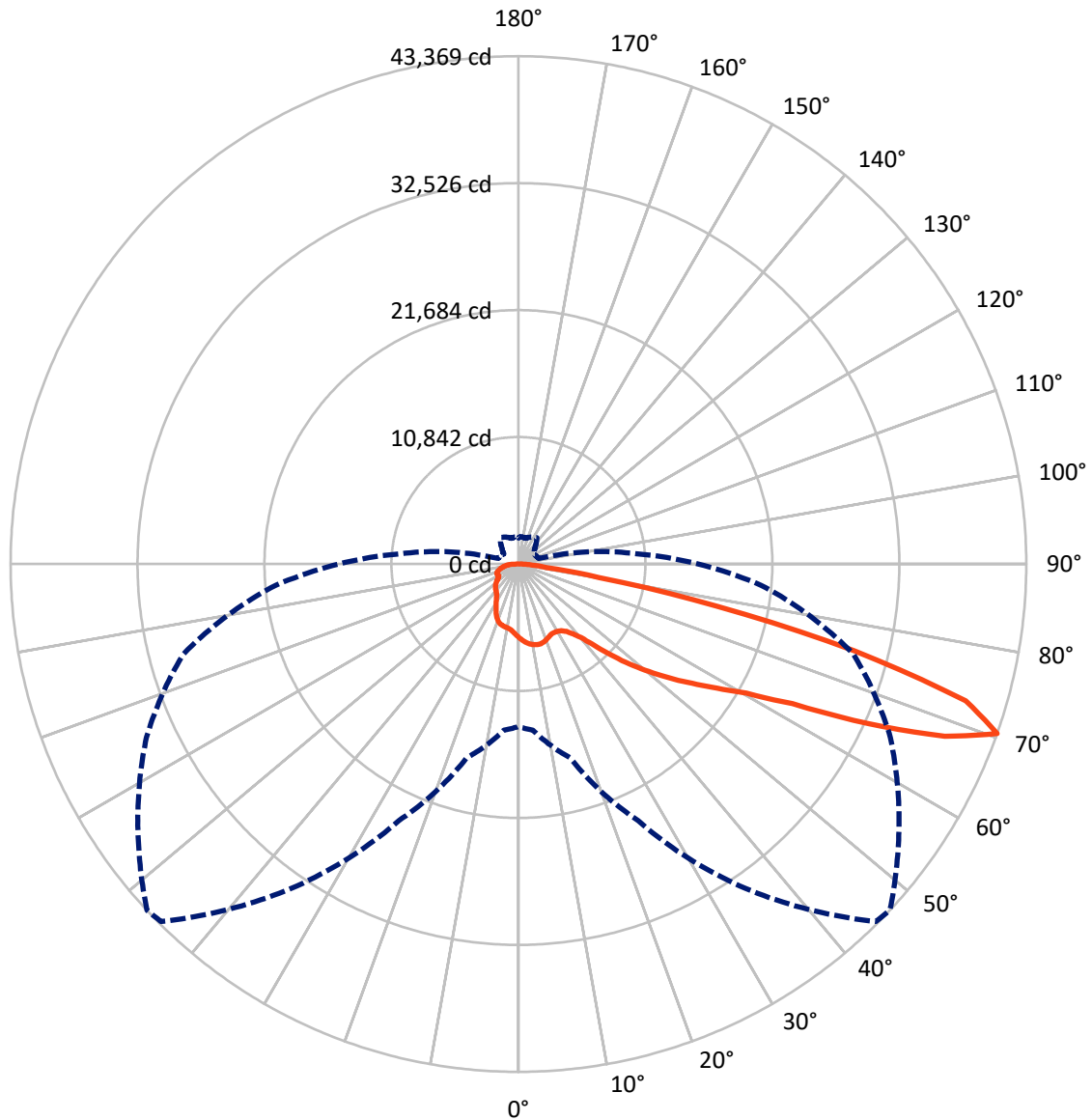
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11277.1	0.0	11277.1
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	42778.7	0.0	42778.7
	% Fixture	79.1	0.0	79.1
Total	Lumens	54055.8	0.0	54055.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	601.0	1.1
10°-20°	1763.1	3.3
20°-30°	2603.6	4.8
30°-40°	3784.3	7.0
40°-50°	6810.5	12.6
50°-60°	11798.5	21.8
60°-70°	16839.8	31.2
70°-80°	8644.6	16.0
80°-90°	1210.3	2.2
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°	54055.8	100.0
0°-180°	54055.8	100.0



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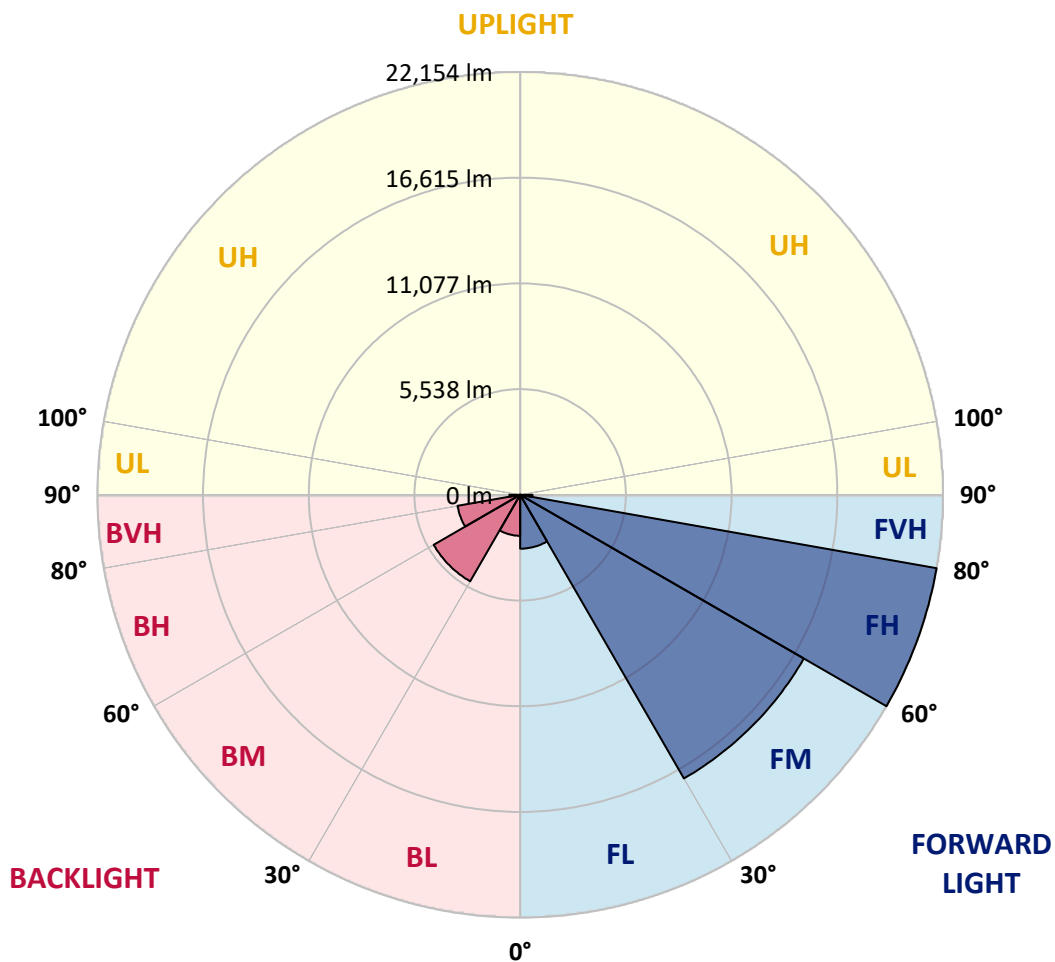
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2820.5	5.2			
FM	(30°-60°)	17158.8	31.7			
FH	(60°-80°)	22153.5	41.0			G5
FVH	(80°-90°)	645.8	1.2			G4/750
BL	(0°-30°)	2147.2	4.0	B3/2500		
BM	(30°-60°)	5234.5	9.7	B4/8500		
BH	(60°-80°)	3330.9	6.2	B4/5000		G4/5000
BVH	(80°-90°)	564.5	1.0			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1
2.5°	6640.3	6627.2	6622.0	6611.4	6598.2	6532.5	6519.4	6472.0	6406.2	6337.9	6266.9
5°	7076.9	7074.2	7045.4	6992.7	6908.6	6764.0	6729.8	6614.0	6458.9	6308.9	6159.1
7.5°	7460.8	7437.2	7381.9	7276.8	7129.5	6932.2	6884.9	6724.5	6511.5	6306.4	6103.8
10°	7742.2	7729.1	7608.1	7463.4	7271.4	7053.2	6998.0	6819.2	6585.1	6324.7	6072.2
12.5°	7902.6	7876.3	7737.0	7563.4	7334.6	7121.6	7066.3	6884.9	6622.0	6324.7	6027.5
15°	7892.2	7873.8	7734.3	7545.0	7313.6	7126.9	7076.9	6895.4	6614.0	6298.4	5969.7
17.5°	7681.7	7689.6	7571.3	7384.6	7195.2	7053.2	7008.5	6840.2	6561.4	6245.8	5901.3
20°	7313.6	7350.4	7271.4	7105.8	7000.7	6903.3	6874.4	6732.3	6479.9	6169.6	5827.8
22.5°	6945.4	6979.6	6948.0	6808.7	6792.9	6735.0	6719.3	6616.7	6408.9	6122.3	5783.0
25°	6674.5	6706.1	6700.8	6579.8	6627.2	6624.5	6611.4	6561.4	6393.1	6122.3	5790.9
27.5°	6600.9	6611.4	6600.9	6490.4	6556.2	6608.8	6598.2	6590.4	6440.5	6198.5	5890.9
30°	6853.4	6837.6	6756.1	6532.5	6593.0	6666.7	6656.1	6661.4	6582.5	6398.4	6114.4
32.5°	7860.6	7789.6	7531.9	6903.3	6742.9	6782.4	6787.6	6874.4	6887.5	6706.1	6461.5
35°	9367.5	9288.6	8954.6	7897.4	7208.3	7071.7	7071.7	7203.1	7282.0	7147.9	7000.7
37.5°	10963.8	10877.0	10698.1	9275.4	8186.7	7573.9	7560.7	7652.8	7765.9	7797.4	7834.3
40°	12778.4	12686.3	12736.2	10821.8	9551.6	8444.4	8257.7	8191.9	8497.0	8699.5	8994.0
42.5°	14763.8	14721.8	14740.2	12544.3	11105.8	9746.2	9480.5	9141.3	9509.5	9869.7	10487.8
45°	16602.2	16639.0	16620.6	14387.8	12836.2	11334.6	11053.2	10395.7	10756.0	11374.0	12381.3
47.5°	18211.6	18059.1	18295.8	16402.3	14774.4	13112.4	12765.2	11884.2	12249.7	13012.4	14716.6
50°	20165.5	20144.6	19797.4	19090.0	17117.5	14898.1	14443.0	13422.6	13990.7	15050.6	17659.3
52.5°	22219.5	21838.2	21519.9	21180.7	19602.8	16728.4	16170.8	14955.8	16036.7	17370.0	21246.4
55°	22640.3	22469.3	22863.8	23434.5	21998.6	18629.8	17980.2	16878.3	18340.5	20020.9	25383.2
57.5°	23539.6	23537.0	24352.3	25370.0	24465.3	20646.8	19992.0	19200.4	20930.8	23058.4	29775.0
60°	24147.2	24318.1	25832.9	27807.9	26887.4	22976.9	22374.6	21880.2	23876.3	26453.5	33867.0
62.5°	24465.3	24696.8	26763.9	28796.7	30311.5	26855.8	26253.6	25540.9	27773.7	30177.4	36260.1
65°	23142.5	23597.5	26619.2	29651.4	33309.5	33143.8	32872.9	31621.1	32646.8	33120.2	35394.9
67.5°	19481.8	19947.3	23466.0	28854.6	35450.2	39208.2	39266.1	37128.0	35644.7	33372.6	29759.2
70°	13880.2	14245.8	17157.0	24191.9	33819.7	43171.4	43368.6	39665.8	35047.8	29596.1	20791.5
72.5°	6590.4	6813.9	9570.0	15744.8	26837.4	39555.4	39936.6	36425.8	29801.3	21911.8	11342.5
75°	2422.0	2490.5	3234.7	6698.2	15566.0	29170.2	29619.8	26111.6	19755.3	10908.5	4320.8
77.5°	1451.7	1496.4	1814.6	2827.0	6122.3	16673.2	17338.5	14201.1	8633.7	4060.5	2124.9
80°	1015.1	1046.7	1301.8	1759.4	2892.8	6353.6	6945.4	5796.1	3439.8	2569.3	1546.3
82.5°	686.4	702.2	915.1	1188.7	1922.4	2269.5	2448.3	2577.2	2319.5	1911.9	980.9
85°	449.7	465.4	620.6	783.7	1222.8	1172.9	1199.2	1517.4	1693.6	1299.1	544.4
87.5°	257.7	268.2	373.5	418.2	599.6	497.1	502.3	799.4	1083.5	875.7	331.3
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°	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1	6272.1
2.5°	6248.5	6214.3	6138.0	6090.6	6045.9	6035.5	6017.1	6014.4	6011.8	6011.8	6003.9
5°	6109.1	6051.3	5932.9	5867.1	5811.9	5806.7	5804.0	5817.2	5822.4	5827.8	5819.9
7.5°	6019.7	5940.8	5793.5	5698.9	5633.1	5617.3	5643.6	5704.1	5743.6	5759.3	5751.4
10°	5964.4	5867.1	5696.2	5593.7	5538.5	5530.6	5564.8	5635.7	5717.3	5748.8	5746.2
12.5°	5901.3	5790.9	5609.5	5501.6	5470.0	5485.9	5530.6	5596.3	5680.4	5730.4	5733.0
15°	5838.2	5709.4	5522.6	5428.0	5414.8	5435.9	5477.9	5527.9	5593.7	5643.6	5648.8
17.5°	5762.0	5627.9	5441.2	5343.8	5333.3	5343.8	5346.5	5372.7	5414.8	5462.1	5475.3
20°	5680.4	5543.7	5349.1	5251.8	5204.5	5162.3	5115.1	5120.3	5133.5	5180.7	5191.3
22.5°	5622.5	5485.9	5278.1	5143.9	5017.7	4891.4	4796.8	4783.6	4788.9	4828.3	4841.5
25°	5627.9	5483.2	5259.7	5028.2	4752.1	4549.6	4423.3	4402.4	4399.7	4428.7	4447.1
27.5°	5730.4	5585.7	5328.0	4909.9	4462.8	4163.0	4028.9	4013.1	3992.1	3999.9	4021.0
30°	5959.2	5825.1	5493.8	4788.9	4149.9	3784.3	3645.0	3629.1	3600.3	3587.1	3602.8
32.5°	6332.7	6222.2	5735.7	4673.2	3836.9	3460.8	3318.9	3284.7	3266.3	3250.4	3263.6
35°	6953.3	6905.9	6059.1	4547.0	3560.8	3211.0	3082.2	3029.6	3003.3	3032.2	3053.2
37.5°	7926.3	7952.6	6482.5	4349.8	3347.8	3045.3	2937.5	2877.0	2837.6	2861.3	2884.9
40°	9304.4	9322.8	6950.6	4070.9	3163.7	2948.0	2832.3	2777.1	2721.9	2679.8	2677.2
42.5°	11113.6	10927.0	7410.9	3768.6	2950.7	2887.6	2758.7	2690.4	2606.2	2490.5	2466.7
45°	13259.6	12604.8	7760.6	3421.5	2711.3	2813.9	2677.2	2582.5	2451.0	2324.8	2311.7
47.5°	15731.7	14406.2	7931.6	3061.1	2487.8	2706.1	2577.2	2427.4	2261.6	2198.5	2190.6
50°	18750.7	16544.3	8013.1	2711.3	2293.3	2564.1	2432.6	2256.4	2117.0	2103.9	2096.0
52.5°	22187.9	19116.3	8039.4	2424.7	2132.8	2380.0	2314.2	2143.3	2032.9	2043.3	2043.3
55°	25785.5	21772.4	7681.7	2216.9	1985.5	2190.6	2235.4	2098.6	2006.5	2048.7	2064.4
57.5°	29088.6	24126.1	6556.2	2056.5	1846.1	2046.0	2206.4	2140.7	2077.6	2248.5	2259.0
60°	31623.7	25517.3	4896.8	1911.9	1743.6	1996.1	2282.7	2301.1	2316.9	2724.5	2779.8
62.5°	32155.0	25054.4	3366.2	1798.8	1696.3	2038.1	2422.0	2424.7	2406.3	2690.4	2724.5
65°	29717.1	22127.4	2448.3	1735.6	1656.8	2114.3	2540.4	2485.2	2364.2	2579.9	2516.8
67.5°	23600.1	16670.5	2038.1	1688.4	1599.0	2109.1	2666.6	2540.4	2340.5	2527.3	2424.7
70°	15318.8	10080.2	1814.6	1648.9	1530.5	2009.2	2740.3	2535.2	2272.2	2351.0	2230.1
72.5°	7474.0	4507.5	1664.6	1591.1	1459.5	1869.9	2737.6	2487.8	2201.2	2195.9	2130.2
75°	2924.4	2064.4	1528.0	1504.2	1338.6	1712.0	2664.1	2419.5	2117.0	2032.9	2009.2
77.5°	1712.0	1472.7	1354.4	1375.4	1194.0	1554.3	2556.1	2301.1	2001.3	1901.4	1875.1
80°	1246.6	1101.9	1154.5	1188.7	1020.4	1396.4	2411.6	2156.5	1872.4	1922.4	1885.6
82.5°	799.4	710.0	936.2	970.4	849.5	1236.0	2253.8	2004.0	1690.9	1535.9	1499.0
85°	407.6	449.7	696.9	739.0	654.8	1015.1	2061.8	1801.4	1485.8	1278.1	1299.1
87.5°	228.8	307.7	444.5	497.1	462.9	781.0	1672.5	1485.8	1212.4	986.2	867.9
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)