

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: P299995

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-7060-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-SL3-7060-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29908.3 lumens  
Efficiency: N/A  
Efficacy: 89.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4  
  
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

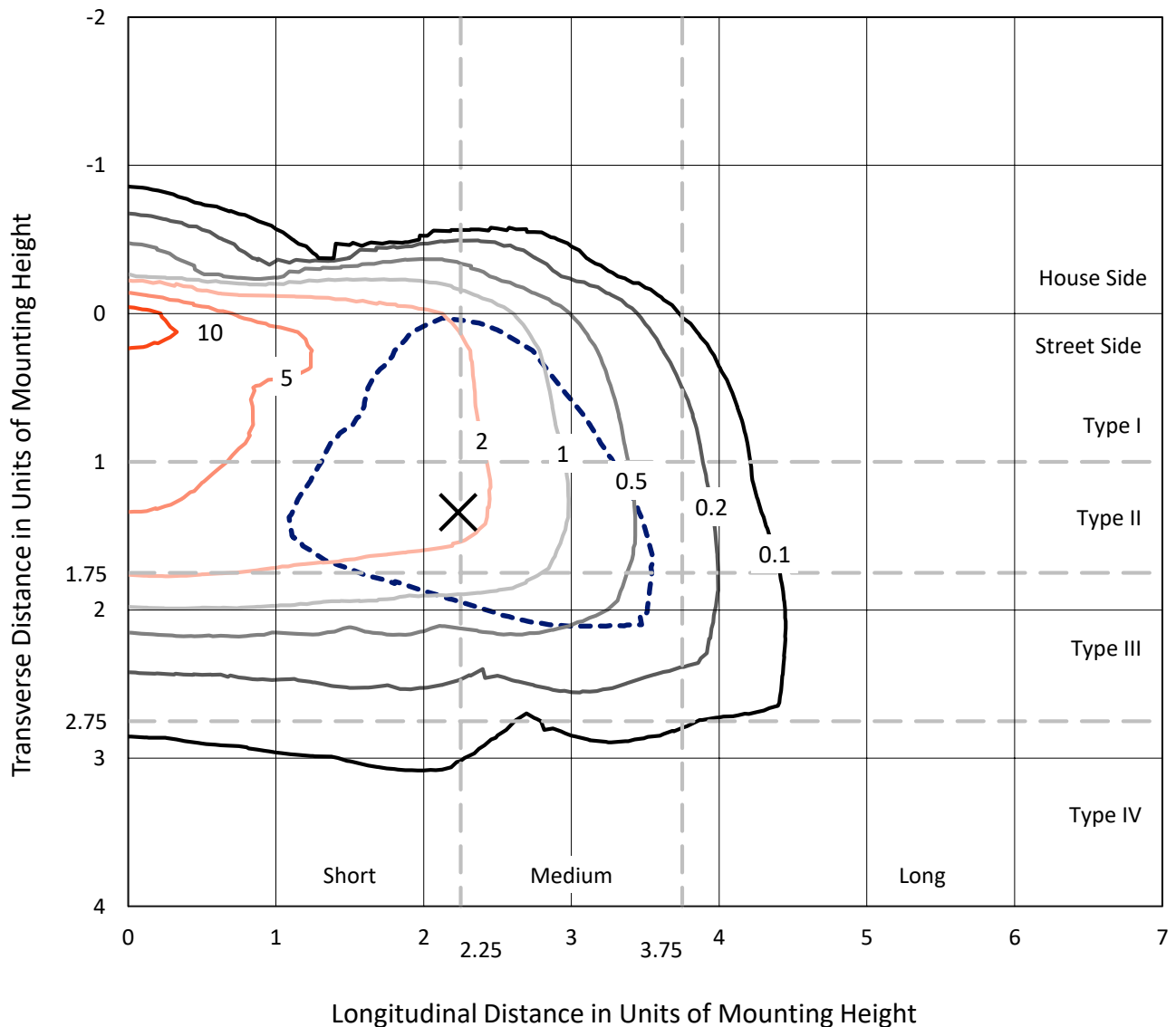


REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7060-800-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

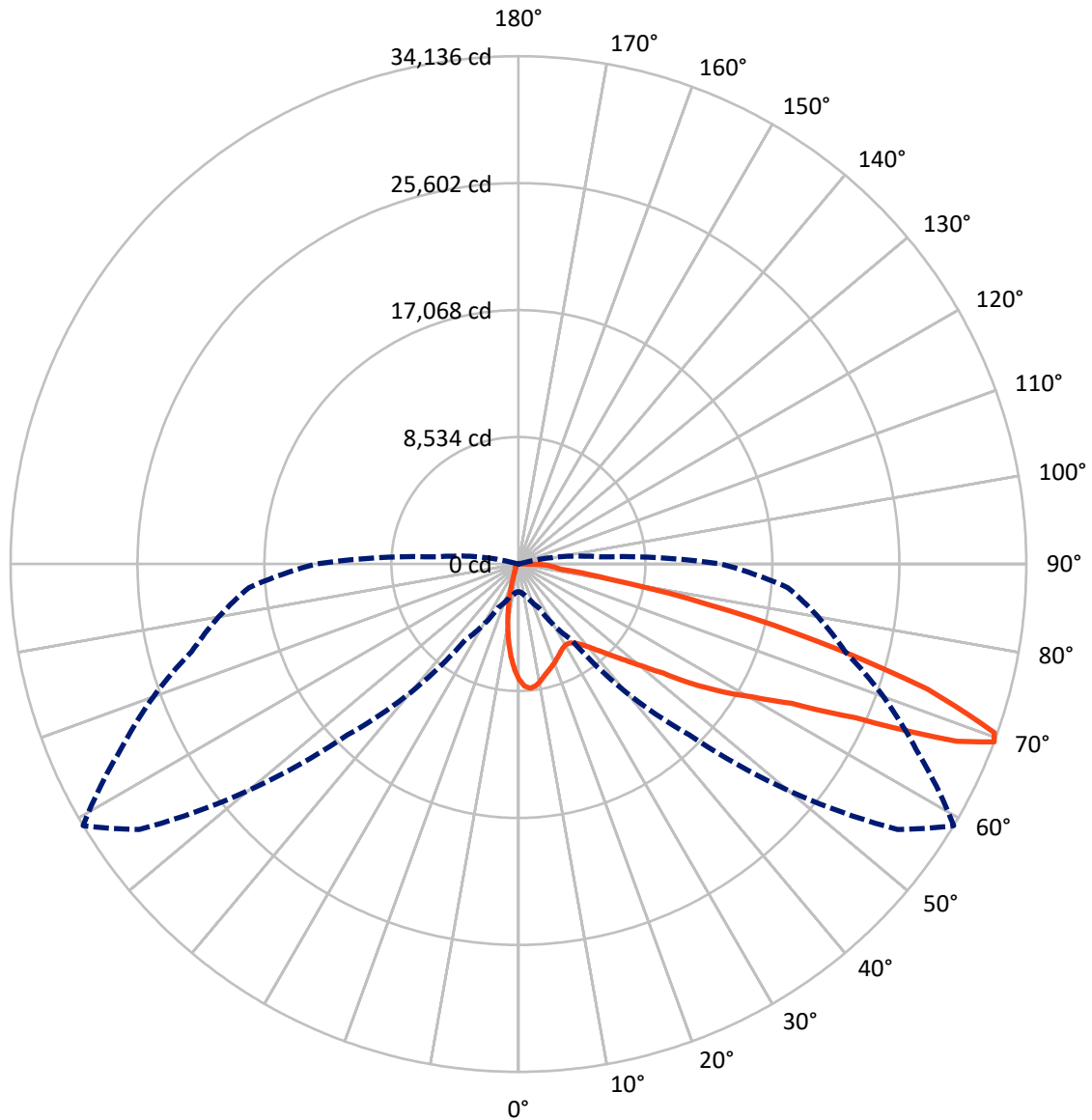


Based on 25 foot mounting height. Maximum calculated value = 12.5 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7060-800-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7060-800-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2435.6	0.0	2435.6
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	27472.7	0.0	27472.7
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	29908.3	0.0	29908.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	631.9	2.1
10°-20°	1305.7	4.4
20°-30°	1756.9	5.9
30°-40°	2550.9	8.5
40°-50°	4247.5	14.2
50°-60°	6626.0	22.2
60°-70°	8199.2	27.4
70°-80°	4155.3	13.9
80°-90°	434.8	1.5
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°	29908.3	100.0
0°-180°	29908.3	100.0



REPORT NUMBER: P299995

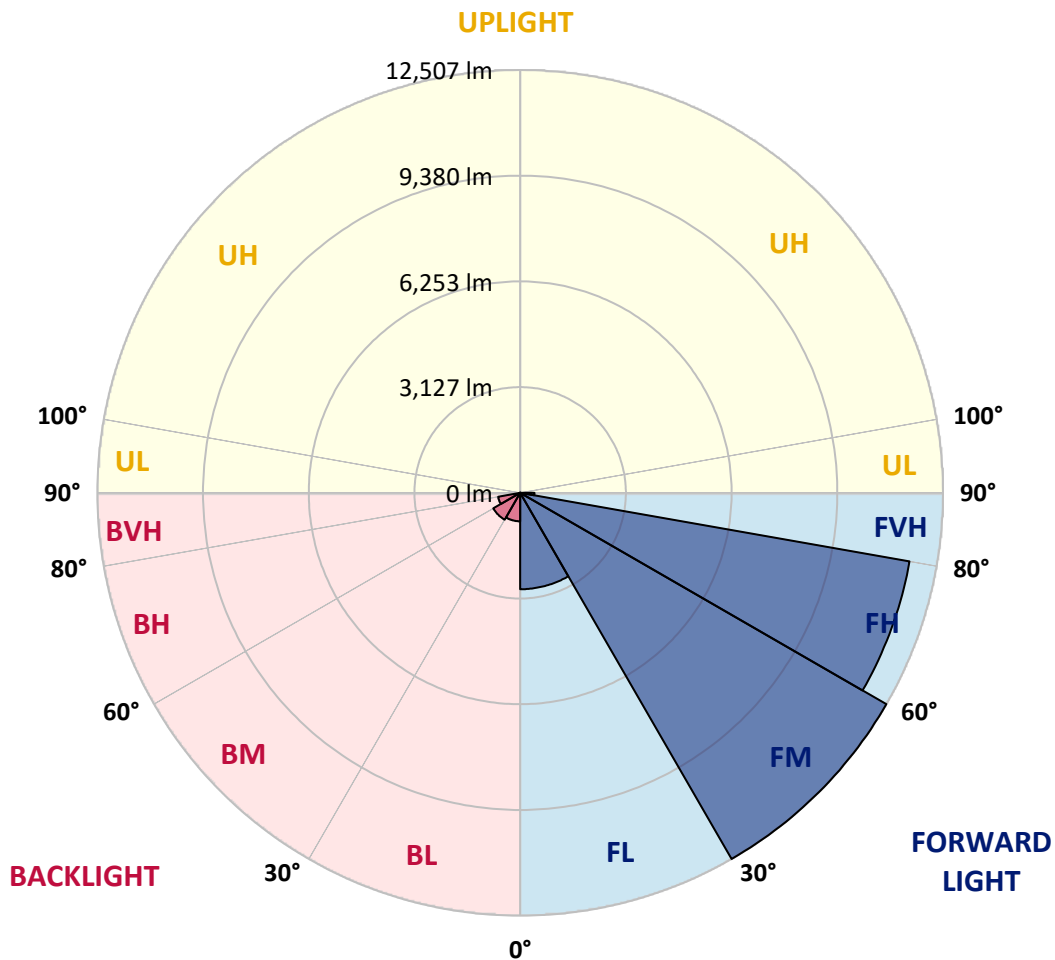
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7060-800-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2851.4	9.5			
FM	(30°-60°)	12506.8	41.8			
FH	(60°-80°)	11693.1	39.1			G4/12000
FVH	(80°-90°)	421.4	1.4			G3/500
BL	(0°-30°)	843.0	2.8	B2/1000		
BM	(30°-60°)	917.7	3.1	B1/1000		
BH	(60°-80°)	661.5	2.2	B2/1000		G2/1000
BVH	(80°-90°)	13.4	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7060-800-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5
2.5°	8532.1	8529.1	8491.7	8474.8	8444.1	8380.0	8280.2	8228.0	8143.5	7996.0	7798.4
5°	8454.3	8495.3	8516.8	8518.8	8540.8	8516.8	8427.2	8383.6	8266.9	8029.8	7675.0
7.5°	7926.9	7941.7	8004.7	8058.5	8163.5	8263.3	8295.6	8276.6	8207.5	7954.0	7481.9
10°	7362.1	7377.0	7451.7	7522.4	7664.7	7818.3	7980.7	8015.0	8043.6	7845.5	7296.1
12.5°	6874.7	6890.0	6966.3	7059.0	7224.9	7414.3	7666.3	7722.1	7849.1	7742.6	7147.1
15°	6455.3	6461.9	6536.7	6651.4	6849.6	7092.8	7379.0	7468.6	7663.2	7669.8	7017.0
17.5°	6098.4	6115.3	6161.4	6271.0	6487.5	6788.6	7122.0	7250.5	7478.3	7608.9	6890.0
20°	5880.3	5897.2	5895.6	5956.6	6151.1	6472.2	6864.9	7018.5	7296.1	7546.4	6776.9
22.5°	5838.3	5838.3	5794.2	5785.5	5900.8	6169.6	6597.6	6785.0	7131.7	7519.3	6697.5
25°	5988.8	5981.7	5872.1	5782.5	5787.6	5947.9	6338.5	6561.8	6993.4	7537.7	6655.0
27.5°	6306.8	6298.1	6159.3	5988.8	5851.6	5850.1	6142.4	6382.6	6883.4	7625.8	6671.9
30°	6746.1	6743.1	6592.5	6377.5	6129.1	5900.8	6074.8	6293.0	6812.2	7784.5	6710.8
32.5°	7226.4	7221.3	7108.1	6881.8	6566.9	6129.1	6146.0	6328.8	6832.7	7996.0	6805.5
35°	7735.9	7727.2	7678.0	7480.4	7133.7	6550.0	6379.5	6521.3	6961.2	8312.5	6991.4
37.5°	8286.9	8295.6	8330.9	8141.4	7777.9	7140.4	6770.2	6866.5	7219.8	8742.1	7294.0
40°	9100.5	9099.0	9110.7	8861.9	8512.2	7862.4	7316.0	7346.8	7653.0	9312.0	7754.3
42.5°	10576.7	10473.8	10160.9	9653.5	9301.7	8687.8	8004.7	7972.5	8182.4	10017.0	8398.5
45°	12560.9	12340.7	11529.1	10556.7	10106.6	9618.2	8851.6	8748.7	8882.4	10864.5	9193.7
47.5°	14267.0	14038.6	12890.6	11496.8	10960.7	10500.9	9844.5	9658.6	9702.6	11813.3	10201.4
50°	14847.1	14735.5	13732.9	12315.6	11787.7	11612.0	10996.6	10769.7	10707.3	12910.6	11369.9
52.5°	14645.9	14637.7	13969.5	12846.6	12545.5	12762.1	12445.6	12183.5	11953.6	14067.8	12558.8
55°	14322.8	14365.3	14065.7	13311.5	13301.3	13812.3	14427.8	14209.6	13543.5	15324.3	13583.9
57.5°	13431.8	13612.6	14012.0	14191.2	14607.0	15129.8	16078.6	16207.1	15419.1	16286.5	14434.4
60°	10898.3	11295.6	12601.3	14317.7	16290.0	17592.2	18070.9	18180.5	16957.7	17086.3	15582.9
62.5°	7735.9	8141.4	9797.4	12701.2	16315.1	20827.2	21038.7	20607.6	18652.6	18272.2	17563.5
65°	4106.1	4419.4	5772.2	9168.1	14145.6	21578.4	26229.3	24944.0	21642.4	20604.0	20122.2
67.5°	2100.4	2195.1	2733.3	4487.0	9724.7	19166.7	30881.7	31786.4	26795.6	22917.9	19998.8
69°	1858.7	1914.5	2271.4	3243.8	6226.9	16234.2	31108.5	34135.7	29493.5	22724.9	18173.8
70°	1799.3	1848.5	2173.1	2936.0	4867.5	13614.1	30240.6	33929.3	30183.2	21991.1	16810.8
72.5°	1527.4	1569.4	1935.0	2594.5	3956.0	6757.9	24565.1	28751.1	27084.9	18319.3	12168.1
75°	1021.5	1160.3	1857.2	2432.2	3680.0	3839.3	16195.3	20776.5	19300.3	12356.0	6338.5
77.5°	245.3	263.7	524.3	1935.0	3365.6	3379.0	8329.4	12915.7	10534.7	4404.1	1498.2
80°	132.1	127.0	147.0	384.0	3133.7	3171.1	3749.7	6269.4	3761.4	730.7	493.6
82.5°	93.2	88.1	94.7	160.8	986.2	2888.4	2712.8	2837.7	1559.2	280.6	221.7
85°	33.8	32.3	52.2	145.4	309.3	1660.5	2787.0	2340.5	1263.2	128.5	162.3
87.5°	11.8	10.2	20.5	79.4	94.7	707.1	1719.9	1769.1	497.2	77.8	76.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7060-800-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5	7784.5
2.5°	7715.4	7610.5	7417.9	7219.8	7037.0	6817.3	6707.2	6599.2	6553.6	6536.7	6457.3
5°	7492.2	7314.5	6905.4	6494.2	6115.3	5712.8	5447.6	5234.6	5109.1	5048.2	4951.9
7.5°	7206.5	6915.6	6294.5	5660.6	5070.2	4488.5	4057.4	3725.6	3497.2	3387.7	3287.8
10°	6928.9	6541.8	5659.1	4794.7	3992.9	3221.8	2626.3	2195.1	1919.6	1792.7	1711.8
12.5°	6680.6	6178.3	5045.1	3950.9	2944.2	2041.5	1435.8	1092.7	921.7	862.3	833.6
15°	6458.9	5843.4	4465.0	3149.0	1993.9	1166.9	785.0	668.2	641.1	641.1	637.5
17.5°	6248.9	5515.2	3904.8	2396.3	1251.4	713.8	597.0	581.7	581.7	588.3	588.3
20°	6047.7	5202.3	3363.6	1719.9	788.0	566.3	539.7	536.1	539.7	547.9	547.9
22.5°	5875.1	4918.1	2858.2	1180.3	585.3	510.5	497.2	492.1	493.6	498.7	502.3
25°	5746.6	4678.0	2381.5	799.8	503.8	464.9	450.1	441.4	434.7	434.7	437.8
27.5°	5665.7	4475.2	1919.6	581.7	453.2	422.9	398.9	385.6	370.2	362.0	365.1
30°	5606.3	4282.2	1486.5	475.2	406.0	375.3	345.1	323.1	301.1	290.8	294.4
32.5°	5584.3	4126.5	1111.1	419.4	363.5	329.8	292.4	263.7	240.1	231.4	233.5
35°	5643.7	4003.1	813.6	378.9	329.8	287.3	245.3	213.0	194.6	189.5	191.0
37.5°	5799.4	3937.1	608.8	345.1	299.5	251.9	204.8	174.1	162.3	162.3	163.9
40°	6093.3	3935.5	489.0	321.6	272.4	218.1	169.0	147.0	140.3	143.9	145.4
42.5°	6522.9	4025.1	426.0	299.5	248.9	185.9	140.3	124.9	123.4	127.0	128.5
45°	7109.7	4189.0	392.2	280.6	223.2	155.7	118.3	108.0	108.0	113.2	115.2
47.5°	7828.6	4429.1	363.5	262.2	197.6	130.1	101.4	94.7	96.3	101.4	102.9
50°	8694.4	4732.3	334.9	241.7	179.2	108.0	88.1	83.0	84.5	91.1	93.2
52.5°	9680.6	5139.9	311.3	223.2	155.7	89.6	74.2	71.2	74.2	81.4	83.0
55°	10526.0	5504.9	282.6	207.9	124.9	74.2	60.9	60.9	64.5	72.7	74.2
57.5°	11339.6	5886.9	257.0	179.2	98.3	59.4	50.7	52.2	57.3	66.1	67.6
60°	12533.7	6534.7	226.8	150.5	74.2	47.1	42.5	44.0	50.7	59.4	60.9
62.5°	14561.4	7520.8	196.1	124.9	57.3	37.4	33.8	37.4	45.6	55.8	57.3
65°	16391.4	7921.8	160.8	105.0	44.0	28.7	28.7	33.8	44.0	54.3	55.8
67.5°	15371.4	6668.3	124.9	83.0	33.8	22.0	23.6	32.3	42.5	54.3	55.8
69°	13594.2	5452.7	106.5	66.1	28.7	20.5	22.0	32.3	42.5	52.2	54.3
70°	12209.1	4603.8	94.7	55.8	25.6	20.5	22.0	30.2	42.5	52.2	54.3
72.5°	8177.3	2486.0	76.3	40.5	23.6	18.4	18.4	30.2	40.5	50.7	52.2
75°	3514.1	686.6	60.9	28.7	20.5	16.9	16.9	28.7	38.9	49.2	52.2
77.5°	642.6	174.1	49.2	25.6	20.5	16.9	15.4	27.1	37.4	47.1	49.2
80°	255.5	86.0	38.9	22.0	18.4	15.4	13.3	25.6	35.3	45.6	47.1
82.5°	154.1	49.2	32.3	20.5	18.4	13.3	11.8	22.0	33.8	44.0	45.6
85°	124.9	33.8	25.6	20.5	16.9	13.3	10.2	20.5	30.2	42.5	44.0
87.5°	60.9	23.6	23.6	18.4	16.9	13.3	10.2	18.4	28.7	40.5	42.5
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)