

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: P191852

Luminaire Tested: **GLEON-AF-04-LED-E1-SL2-7050-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191852  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-SL2-7050-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19888 lumens  
Efficiency: N/A  
Efficacy: 88.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

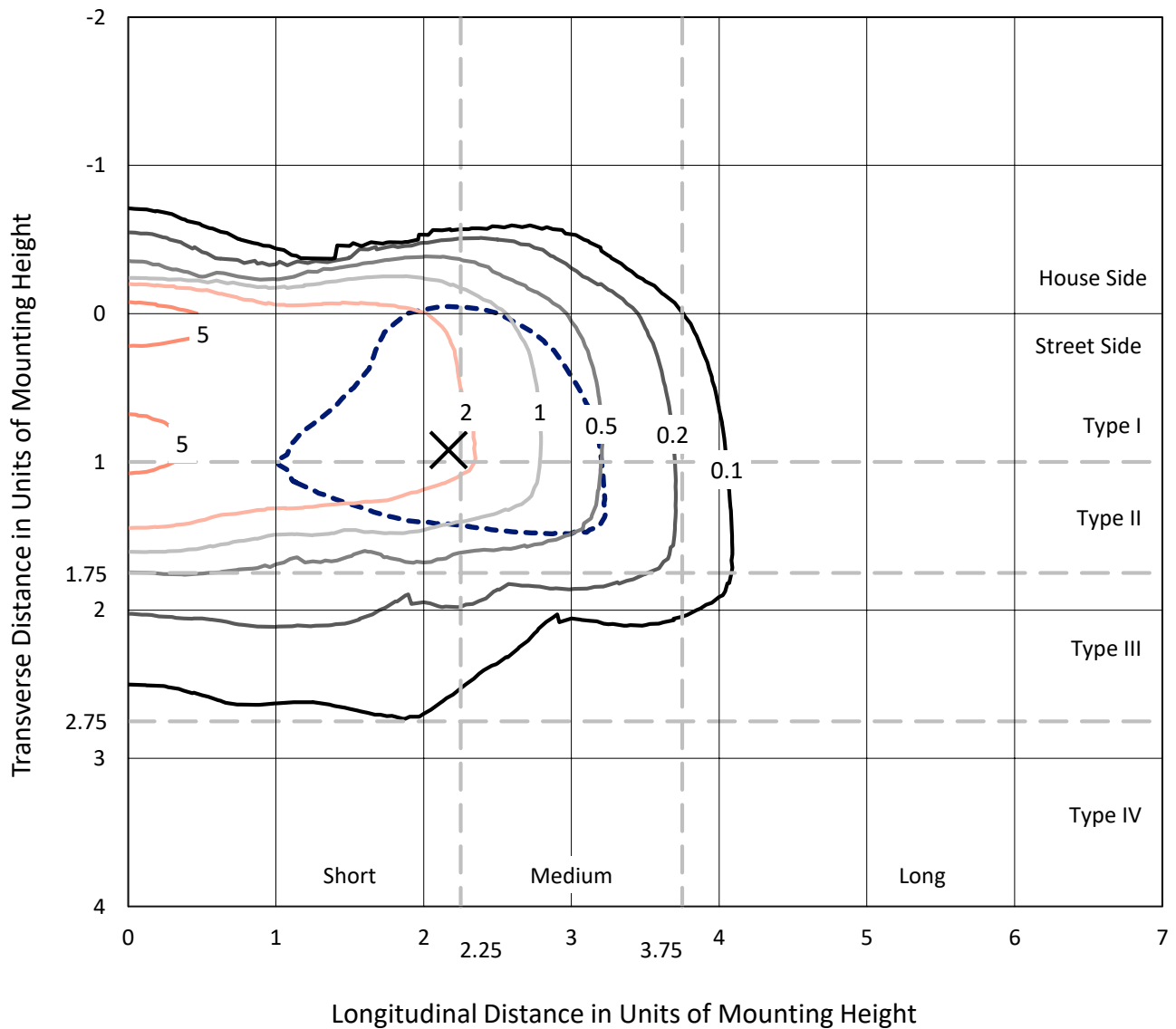


REPORT NUMBER: P191852

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7050-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

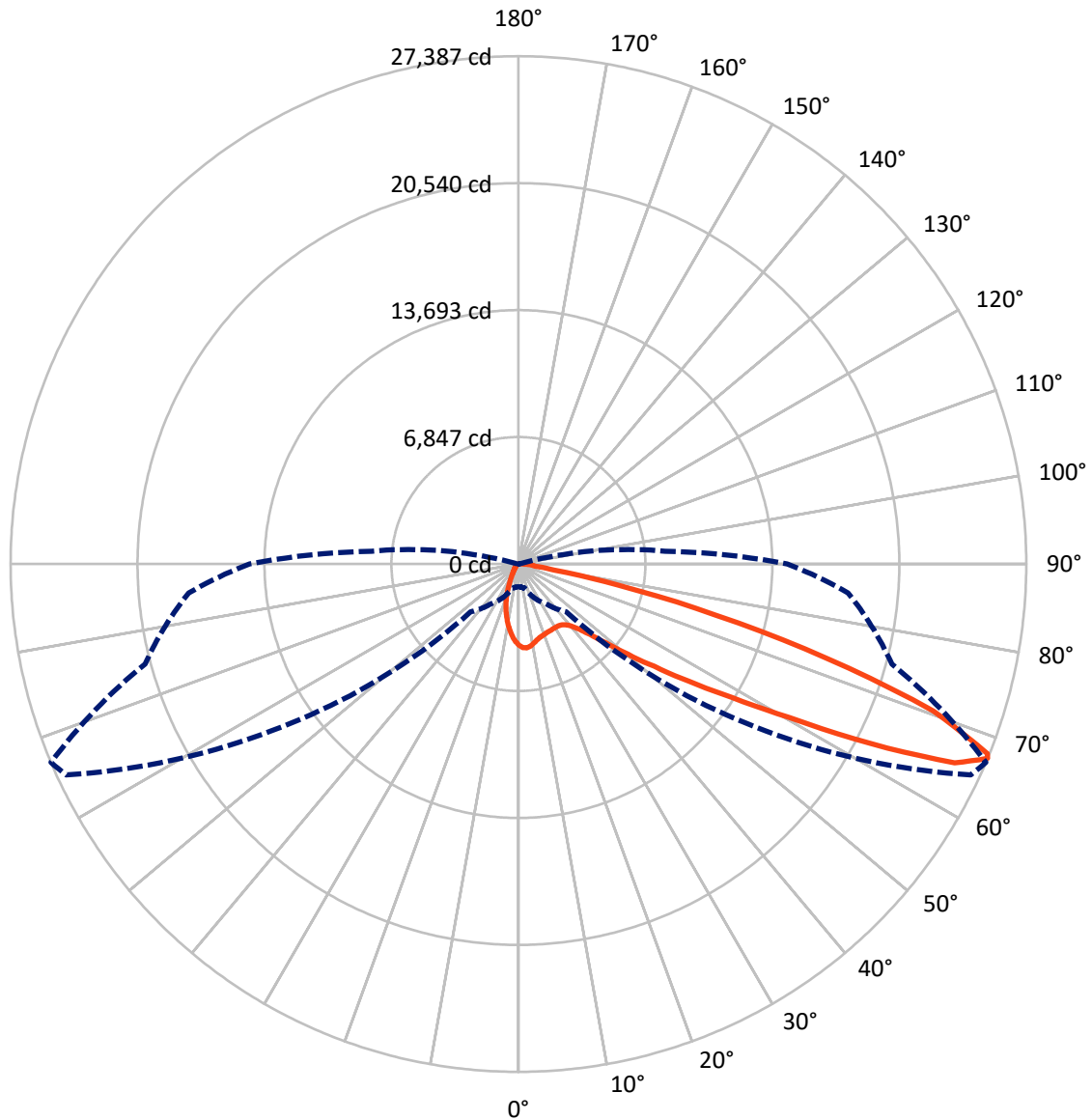


Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P191852

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7050-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P191852

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7050-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2065.0	0.0	2065.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	17823.0	0.0	17823.0
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	19888.0	0.0	19888.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.9	1.8
10°-20°	759.6	3.8
20°-30°	1104.4	5.6
30°-40°	1722.9	8.7
40°-50°	3052.0	15.3
50°-60°	4829.4	24.3
60°-70°	5531.5	27.8
70°-80°	2294.4	11.5
80°-90°	237.0	1.2
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°	19888.0	100.0
0°-180°	19888.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P191852

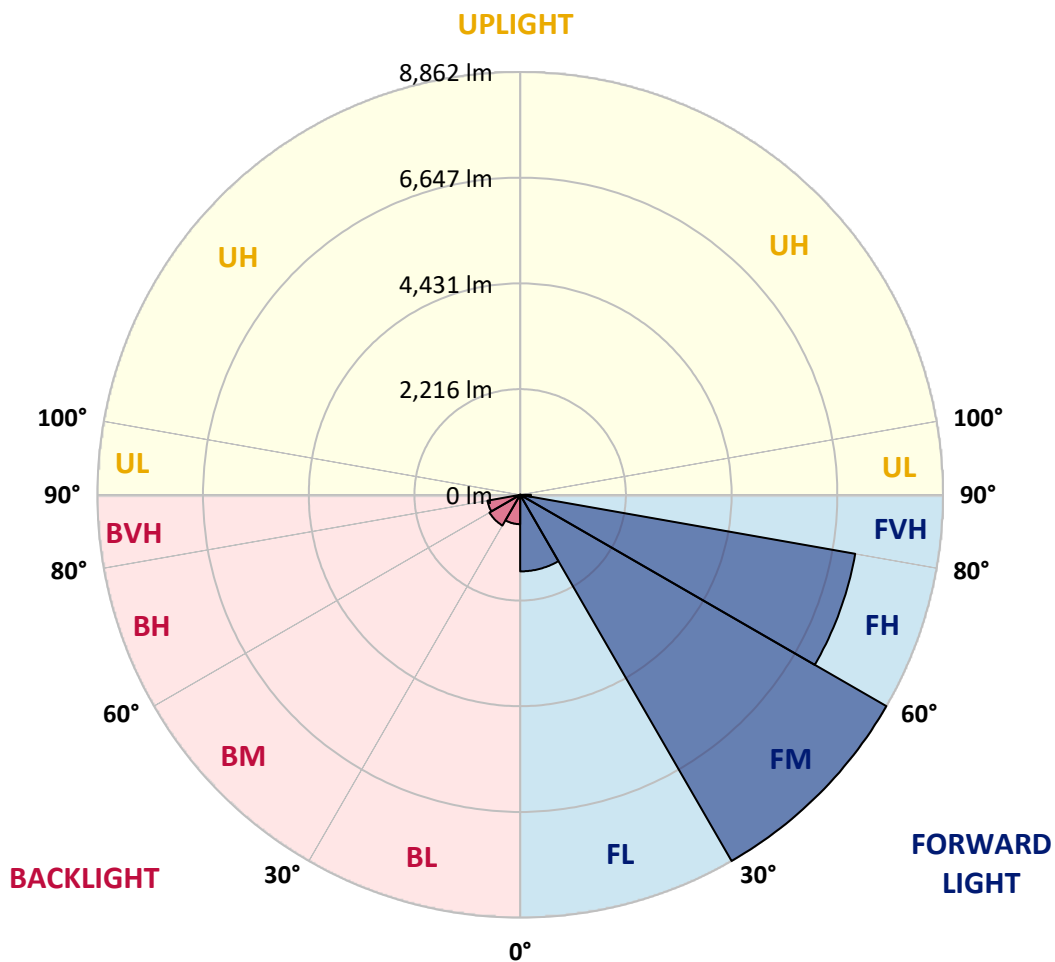
CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7050-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1604.7	8.1			
FM (30°-60°)	8862.1	44.6			
FH (60°-80°)	7129.9	35.9			G3/7500
FVH (80°-90°)	226.3	1.1			G3/500
BL (0°-30°)	616.2	3.1	B2/1000		
BM (30°-60°)	742.1	3.7	B1/1000		
BH (60°-80°)	696.0	3.5	B2/1000		G2/1000
BVH (80°-90°)	10.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Short





REPORT NUMBER: P191852

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7050-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0
2.5°	4534.5	4543.8	4542.6	4549.6	4565.8	4567.0	4550.8	4519.4	4512.5	4471.9	4401.1
5°	4181.9	4208.6	4224.8	4290.9	4365.2	4454.5	4521.8	4546.1	4542.6	4513.6	4406.9
7.5°	3779.3	3806.0	3824.6	3902.3	4000.9	4154.0	4329.2	4473.0	4485.8	4517.1	4402.3
10°	3511.4	3516.0	3541.5	3615.8	3719.0	3875.6	4084.4	4336.2	4374.4	4489.3	4390.7
12.5°	3291.0	3294.5	3328.1	3408.1	3518.3	3676.1	3895.3	4186.5	4245.7	4454.5	4388.4
15°	3134.4	3147.1	3177.3	3260.8	3378.0	3534.6	3759.6	4076.3	4147.1	4441.7	4409.2
17.5°	3082.2	3096.1	3105.4	3165.7	3272.4	3425.5	3656.4	4004.4	4084.4	4448.7	4449.8
20°	3136.7	3147.1	3126.3	3141.3	3207.5	3344.3	3569.4	3942.9	4038.0	4456.8	4502.0
22.5°	3339.7	3344.3	3287.5	3221.4	3209.8	3285.2	3500.9	3894.2	3996.3	4478.8	4563.5
25°	3687.7	3679.6	3586.8	3444.1	3309.5	3274.7	3460.3	3864.0	3975.4	4502.0	4627.3
27.5°	4107.6	4119.2	3991.6	3784.0	3527.6	3344.3	3454.5	3851.3	3966.1	4518.3	4683.0
30°	4618.0	4634.3	4488.1	4227.1	3859.4	3516.0	3507.9	3848.9	3960.3	4507.8	4687.6
32.5°	5138.9	5158.6	5043.8	4774.6	4302.5	3803.7	3628.5	3874.5	3971.9	4471.9	4661.0
35°	5684.1	5711.9	5635.4	5404.5	4903.4	4219.0	3840.8	3952.2	4026.4	4468.4	4634.3
37.5°	6437.0	6462.5	6318.6	6073.9	5630.7	4775.8	4181.9	4098.4	4155.2	4524.1	4641.2
40°	7561.0	7557.5	7186.3	6811.6	6430.0	5483.4	4661.0	4362.8	4391.8	4692.3	4727.1
42.5°	8786.0	8780.2	8231.5	7661.9	7317.4	6354.6	5290.9	4819.9	4800.2	5002.0	4949.8
45°	9730.3	9729.1	9281.3	8639.8	8385.8	7354.5	6105.2	5455.6	5425.4	5505.5	5360.5
47.5°	10132.8	10139.7	9914.7	9463.4	9570.2	8707.1	7131.8	6376.6	6331.4	6298.9	6078.5
50°	9819.6	9833.5	9852.1	9763.9	10439.0	10524.9	8508.8	7674.7	7652.7	7507.7	7163.1
52.5°	8796.4	8867.2	9085.3	9364.8	10740.6	12269.5	10667.6	9287.1	9168.8	9014.5	8635.2
55°	7072.6	7150.4	7564.5	8243.1	10291.7	13415.6	13692.9	11365.9	11168.7	10708.2	10160.6
57.5°	4680.7	4801.3	5402.2	6265.3	8987.8	13600.1	16711.3	14250.9	13564.1	12303.2	11686.0
60°	2578.7	2694.7	3346.7	4128.5	6491.5	12688.3	18741.3	18007.0	16793.6	14086.1	13538.6
62.5°	1588.1	1650.7	2132.1	2859.5	3893.0	10014.5	19161.2	22727.1	21322.3	16381.8	15776.3
65°	1264.4	1291.1	1526.6	2337.4	2791.0	5956.7	17805.2	26325.5	25856.9	19161.2	17779.6
67°	1227.3	1237.7	1349.1	2006.8	2630.9	3651.7	14916.7	26911.3	27386.9	20843.3	17842.3
67.5°	1235.4	1247.0	1352.6	1915.2	2626.3	3355.9	13921.4	26680.5	27281.4	20976.7	17565.0
70°	1191.3	1227.3	1548.6	1914.0	2497.5	2788.7	8337.1	23116.9	23742.1	19490.7	14903.9
72.5°	422.2	424.6	669.3	1548.6	2715.6	2818.9	4186.5	16946.7	17409.6	14909.7	10745.3
75°	250.6	213.4	222.7	440.8	2595.0	2737.6	2415.2	10828.8	11001.6	8543.6	5441.7
77.5°	172.8	150.8	155.4	194.9	988.3	2699.4	1918.7	5647.0	5462.5	2996.3	1158.9
80°	98.6	87.0	92.8	170.5	359.6	2518.4	1809.6	2289.9	1952.3	508.1	320.2
82.5°	52.2	44.1	53.4	140.4	250.6	1569.5	1813.1	1106.7	877.0	171.7	218.1
85°	18.6	15.1	25.5	96.3	167.0	481.4	1680.9	930.3	730.8	83.5	165.9
87.5°	3.5	3.5	10.4	39.4	67.3	147.3	994.1	552.2	370.0	49.9	113.7
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: P191852

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7050-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0	4386.0
2.5°	4372.1	4322.2	4255.0	4172.6	4075.2	3989.3	3925.5	3859.4	3845.5	3822.3	3818.8
5°	4343.1	4257.3	4090.2	3898.8	3694.7	3510.2	3360.6	3227.2	3168.0	3117.0	3111.2
7.5°	4300.2	4171.4	3887.2	3578.7	3259.7	2969.7	2723.7	2549.7	2389.6	2313.1	2301.5
10°	4250.3	4065.9	3658.7	3230.7	2789.8	2380.4	2015.0	1708.7	1523.1	1412.9	1399.0
12.5°	4203.9	3962.6	3425.5	2869.9	2284.1	1736.6	1266.7	974.4	779.5	700.7	691.4
15°	4181.9	3879.1	3207.5	2501.0	1755.1	1105.5	692.5	535.9	472.1	453.6	452.4
17.5°	4179.6	3808.3	2994.0	2119.4	1229.6	642.7	451.2	411.8	399.0	394.4	394.4
20°	4178.4	3741.1	2780.6	1723.8	780.7	428.0	375.8	366.6	357.3	351.5	351.5
22.5°	4191.2	3680.7	2557.8	1320.1	491.8	346.8	330.6	321.3	309.7	301.6	300.4
25°	4203.9	3634.3	2330.5	939.6	356.1	301.6	285.4	272.6	256.4	245.9	244.8
27.5°	4206.2	3576.3	2086.9	628.7	298.1	263.3	242.4	222.7	204.2	193.7	192.6
30°	4171.4	3478.9	1816.6	424.6	263.3	228.5	200.7	179.8	162.4	154.3	154.3
32.5°	4103.0	3358.3	1519.6	320.2	234.3	196.0	165.9	146.2	134.6	131.1	129.9
35°	4041.5	3228.3	1214.5	271.4	210.0	165.9	135.7	123.0	116.0	114.8	113.7
37.5°	4005.6	3123.9	928.0	245.9	186.8	139.2	114.8	105.6	102.1	99.8	100.9
40°	4033.4	3036.9	685.6	225.0	163.6	116.0	97.4	92.8	89.3	88.2	88.2
42.5°	4155.2	3021.9	509.2	206.5	141.5	96.3	84.7	81.2	78.9	77.7	78.9
45°	4475.4	3114.7	395.6	189.1	119.5	81.2	71.9	70.8	69.6	69.6	69.6
47.5°	4956.8	3306.1	329.4	169.4	99.8	69.6	62.6	61.5	60.3	61.5	61.5
50°	5772.3	3656.4	294.6	149.6	82.4	59.2	53.4	53.4	53.4	53.4	54.5
52.5°	7012.3	4345.4	271.4	129.9	67.3	49.9	45.2	45.2	46.4	46.4	47.6
55°	8393.9	5259.5	250.6	110.2	56.8	41.8	37.1	38.3	39.4	40.6	40.6
57.5°	9892.7	6272.2	233.2	90.5	48.7	33.6	31.3	32.5	33.6	36.0	36.0
60°	11701.1	7368.5	207.6	70.8	40.6	26.7	24.4	26.7	30.2	32.5	33.6
62.5°	13687.1	8428.7	175.2	55.7	33.6	20.9	19.7	24.4	29.0	31.3	32.5
65°	15044.3	8761.6	134.6	45.2	25.5	15.1	16.2	22.0	27.8	31.3	31.3
67°	14494.5	7943.8	110.2	38.3	20.9	11.6	15.1	22.0	27.8	30.2	31.3
67.5°	14112.8	7623.7	105.6	37.1	19.7	11.6	15.1	22.0	27.8	31.3	31.3
70°	11483.0	5727.0	88.2	27.8	16.2	10.4	12.8	20.9	26.7	30.2	30.2
72.5°	7978.6	3531.1	78.9	19.7	13.9	9.3	11.6	19.7	25.5	29.0	30.2
75°	3793.3	1278.3	67.3	15.1	12.8	8.1	10.4	19.7	25.5	29.0	29.0
77.5°	773.7	297.0	54.5	12.8	10.4	8.1	9.3	18.6	24.4	27.8	27.8
80°	254.0	114.8	40.6	11.6	10.4	8.1	9.3	17.4	24.4	26.7	27.8
82.5°	183.3	58.0	26.7	11.6	10.4	8.1	8.1	17.4	23.2	26.7	26.7
85°	140.4	40.6	17.4	11.6	10.4	8.1	8.1	16.2	22.0	25.5	25.5
87.5°	92.8	16.2	13.9	11.6	10.4	8.1	8.1	16.2	20.9	24.4	25.5
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)