

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: P190842

Luminaire Tested: **GLEON-AF-04-LED-E1-5NQ-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190842  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
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-E1-5NQ-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20470.3 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

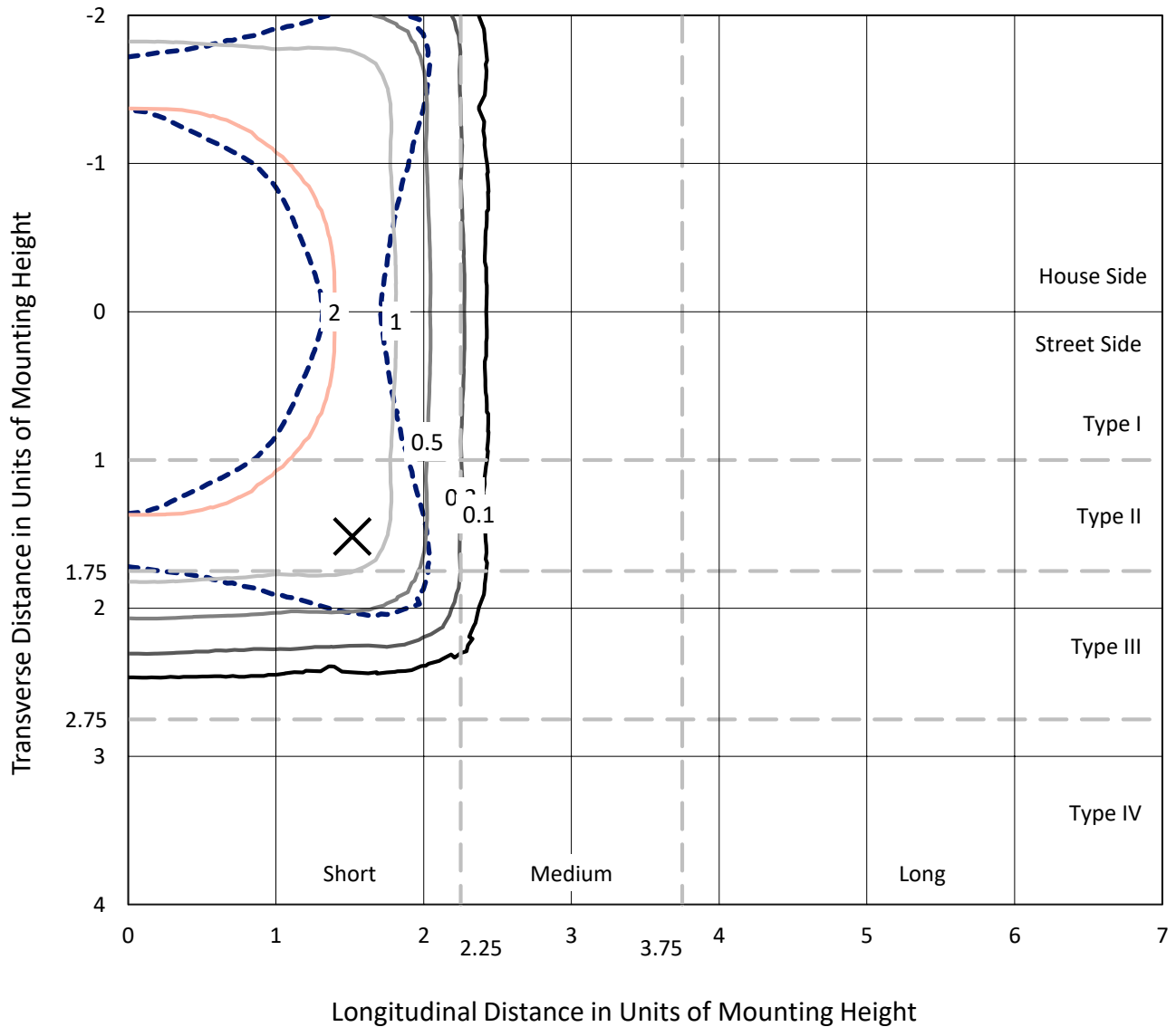
Input Watts (W): 171  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

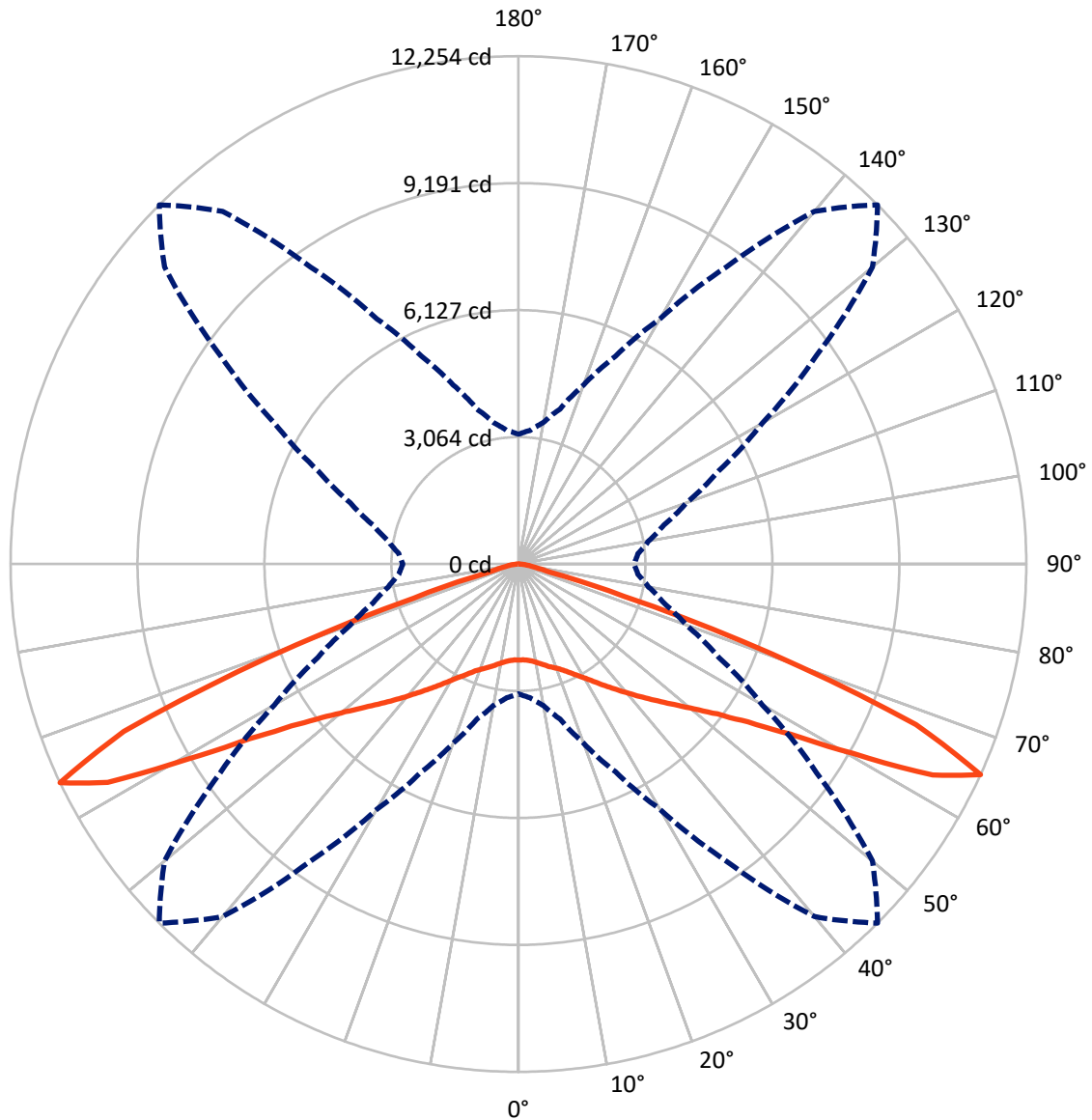
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10235.1	0.0	10235.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10235.1	0.0	10235.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	20470.3	0.0	20470.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.8	1.1
10°-20°	724.0	3.5
20°-30°	1353.8	6.6
30°-40°	2289.7	11.2
40°-50°	3743.9	18.3
50°-60°	5953.4	29.1
60°-70°	5381.5	26.3
70°-80°	681.1	3.3
80°-90°	117.2	0.6
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°	20470.3	100.0
0°-180°	20470.3	100.0

**Coefficient of Utilization**



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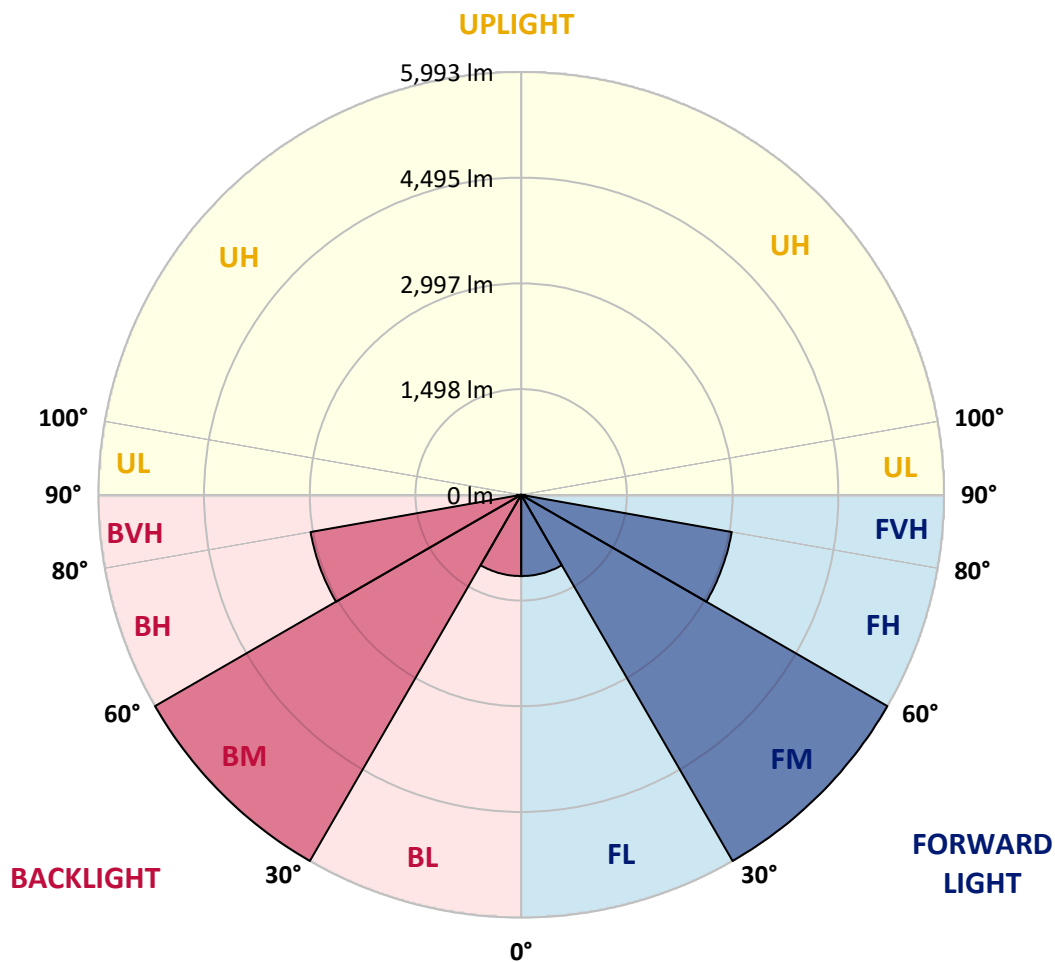
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1151.8	5.6			
FM	(30°-60°)	5993.5	29.3			
FH	(60°-80°)	3031.3	14.8			G2/5000
FVH	(80°-90°)	58.6	0.3			G1/100
BL	(0°-30°)	1151.8	5.6	B3/2500		
BM	(30°-60°)	5993.5	29.3	B4/8500		
BH	(60°-80°)	3031.3	14.8	B4/5000		G2/5000
BVH	(80°-90°)	58.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3
2.5°	2318.1	2320.1	2322.0	2320.1	2322.0	2319.1	2317.2	2320.1	2317.2	2314.3	2316.3
5°	2338.3	2339.2	2339.2	2336.3	2339.2	2337.3	2334.5	2338.3	2335.4	2332.5	2334.5
7.5°	2371.8	2375.7	2372.7	2369.9	2371.8	2369.9	2368.0	2368.9	2368.0	2365.2	2366.1
10°	2416.9	2419.8	2417.8	2416.9	2418.8	2417.8	2415.9	2415.0	2415.9	2413.0	2413.0
12.5°	2471.6	2470.5	2469.6	2470.5	2473.5	2473.5	2472.5	2473.5	2475.3	2476.4	2474.4
15°	2525.3	2527.1	2527.1	2527.1	2532.9	2537.6	2540.6	2542.4	2546.3	2547.2	2543.5
17.5°	2592.4	2592.4	2591.3	2592.4	2598.1	2605.8	2608.6	2612.4	2616.3	2619.2	2614.4
20°	2667.1	2669.0	2669.0	2670.9	2678.6	2687.2	2687.2	2689.1	2687.2	2689.1	2686.3
22.5°	2758.2	2763.9	2763.9	2764.9	2772.6	2783.1	2780.3	2783.1	2778.3	2782.1	2778.3
25°	2877.0	2885.6	2883.8	2883.8	2889.5	2896.3	2897.2	2902.9	2902.0	2906.8	2904.0
27.5°	3011.3	3024.7	3028.5	3027.6	3031.4	3038.2	3040.0	3046.8	3042.9	3046.8	3044.8
30°	3172.4	3178.1	3185.8	3188.6	3193.4	3200.1	3200.1	3201.1	3196.3	3202.0	3204.9
32.5°	3339.1	3349.7	3357.3	3374.6	3383.2	3388.0	3387.1	3389.0	3384.2	3391.9	3397.6
35°	3559.7	3567.3	3579.8	3593.2	3604.7	3603.8	3600.9	3601.8	3601.8	3608.6	3614.3
37.5°	3825.2	3827.2	3843.4	3862.6	3868.4	3862.6	3845.4	3841.5	3832.9	3841.5	3851.1
40°	4106.1	4112.9	4145.4	4157.9	4160.8	4150.2	4125.3	4110.9	4091.7	4102.2	4115.7
42.5°	4400.4	4413.8	4443.6	4465.6	4475.2	4468.6	4434.0	4412.0	4387.0	4392.8	4406.2
45°	4726.4	4742.7	4784.9	4805.9	4824.1	4813.6	4780.0	4746.5	4707.2	4710.1	4731.1
47.5°	5090.7	5107.0	5161.6	5197.1	5206.7	5204.8	5167.4	5121.4	5067.7	5065.8	5084.0
50°	5499.1	5515.4	5583.5	5638.1	5665.9	5663.1	5619.0	5553.8	5488.5	5489.6	5512.6
52.5°	5897.9	5918.1	5989.0	6083.0	6137.6	6176.9	6150.1	6088.7	6009.1	6011.1	6032.1
55°	6271.8	6305.4	6386.9	6514.4	6616.0	6726.2	6757.9	6756.0	6708.0	6721.5	6742.6
57.5°	6453.0	6502.9	6628.4	6829.8	7036.9	7261.2	7451.1	7593.0	7653.3	7744.4	7723.3
60°	6109.8	6189.4	6374.4	6670.7	7080.0	7547.8	8049.3	8539.2	8957.2	9272.5	9091.4
62.5°	5002.5	5106.1	5330.4	5710.0	6329.3	7078.1	8037.7	9195.8	10457.5	11218.7	10675.1
65°	3130.1	3237.5	3465.7	3872.2	4596.9	5527.8	6829.8	8749.1	11106.6	12254.1	11147.8
67.5°	1220.4	1278.9	1402.6	1662.4	2206.9	3035.2	4341.9	6520.1	9339.6	10345.3	9166.2
70°	611.6	617.5	640.4	688.3	805.3	1046.0	1591.4	3022.8	5356.3	6469.3	5163.5
72.5°	441.9	442.9	454.4	475.5	512.9	566.6	670.1	925.2	1742.0	2662.3	1632.6
75°	338.4	342.3	348.9	360.5	380.6	407.4	444.9	533.1	660.5	766.0	644.3
77.5°	260.8	268.4	273.2	283.8	296.2	314.5	325.0	358.5	417.1	439.1	432.4
80°	198.5	205.2	215.7	224.3	232.9	241.6	237.7	253.1	283.8	302.0	292.4
82.5°	126.5	134.2	164.9	172.6	176.4	182.2	175.4	176.4	189.9	201.3	189.9
85°	81.5	86.2	104.5	114.1	115.1	118.9	116.0	109.3	109.3	99.7	112.2
87.5°	37.4	38.4	47.0	55.6	57.5	51.8	50.8	48.9	39.3	37.4	40.3
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3	2316.3
2.5°	2315.2	2317.2	2318.1	2321.0	2322.0	2322.0	2322.9	2324.9
5°	2333.5	2336.3	2337.3	2341.1	2342.1	2341.1	2343.1	2344.0
7.5°	2366.1	2370.9	2372.7	2376.6	2373.8	2377.5	2378.6	2378.6
10°	2414.0	2418.8	2419.8	2423.6	2421.6	2423.6	2423.6	2421.6
12.5°	2477.3	2478.2	2475.3	2478.2	2474.4	2476.4	2473.5	2471.6
15°	2547.2	2544.4	2537.6	2537.6	2531.9	2532.9	2531.9	2531.0
17.5°	2615.4	2609.5	2604.8	2602.9	2598.1	2597.2	2594.2	2594.2
20°	2690.2	2687.2	2684.3	2680.5	2675.7	2670.9	2670.0	2671.9
22.5°	2780.3	2779.3	2779.3	2777.3	2770.7	2765.9	2763.0	2763.0
25°	2901.0	2892.4	2892.4	2891.5	2888.6	2885.6	2879.9	2882.8
27.5°	3037.1	3032.3	3036.2	3035.2	3032.3	3032.3	3028.5	3028.5
30°	3204.9	3203.1	3208.8	3204.0	3194.4	3193.4	3189.6	3184.9
32.5°	3398.5	3396.7	3405.3	3399.6	3384.2	3375.6	3368.0	3364.1
35°	3614.3	3615.3	3625.8	3622.0	3604.7	3598.9	3585.5	3583.6
37.5°	3850.2	3865.5	3883.7	3887.5	3873.2	3869.3	3854.9	3847.3
40°	4127.2	4147.3	4175.2	4181.8	4166.5	4163.6	4143.5	4132.9
42.5°	4422.5	4457.0	4491.5	4497.3	4482.0	4466.6	4447.4	4439.7
45°	4752.3	4793.5	4838.6	4850.1	4827.1	4808.9	4783.9	4783.9
47.5°	5122.3	5174.1	5224.9	5256.5	5235.5	5216.3	5186.6	5167.4
50°	5559.5	5630.4	5696.6	5729.2	5695.7	5659.2	5607.4	5590.2
52.5°	6107.8	6184.6	6242.1	6224.9	6173.1	6122.3	6065.7	6042.7
55°	6807.7	6833.6	6833.6	6768.5	6664.9	6579.5	6490.4	6460.7
57.5°	7683.1	7583.3	7429.9	7235.3	6990.8	6778.0	6634.2	6566.1
60°	8711.8	8232.4	7690.7	7158.6	6721.5	6361.0	6147.2	6049.4
62.5°	9397.2	8143.2	7058.0	6203.8	5574.9	5140.5	4845.3	4730.2
65°	8782.6	6791.5	5338.1	4316.0	3630.6	3188.6	2896.3	2788.9
67.5°	6432.9	4255.7	2842.6	2037.2	1492.7	1190.7	1070.8	1021.0
70°	2887.6	1498.4	918.4	717.1	618.4	567.5	545.5	537.9
72.5°	870.5	629.8	531.1	479.4	440.1	415.1	396.9	395.0
75°	525.4	437.2	388.3	357.6	332.7	312.5	303.0	300.0
77.5°	367.1	321.2	298.2	276.1	257.0	241.6	232.9	226.3
80°	257.9	235.8	225.3	212.9	200.4	186.0	173.5	167.8
82.5°	172.6	167.8	167.8	160.1	149.6	136.2	111.2	105.5
85°	111.2	110.3	112.2	109.3	101.6	87.3	71.9	68.0
87.5°	51.8	52.7	58.5	57.5	55.6	46.0	36.4	34.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)