

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: P190812

Luminaire Tested: **GLEON-AF-04-LED-E1-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
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-E1-5MQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25802.9 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 225
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

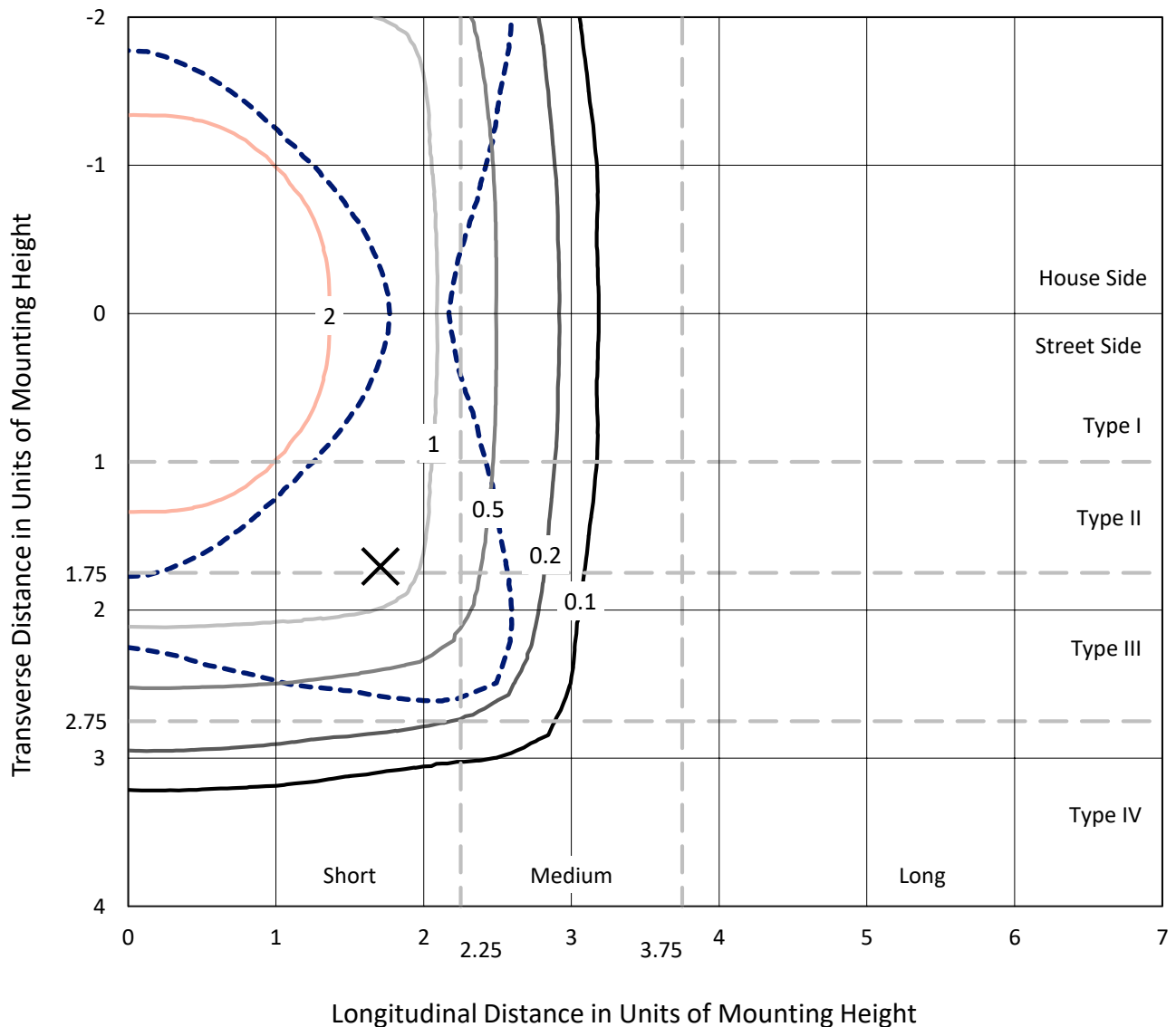


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Iso-Footcandle Lines of Horizontal Illumination

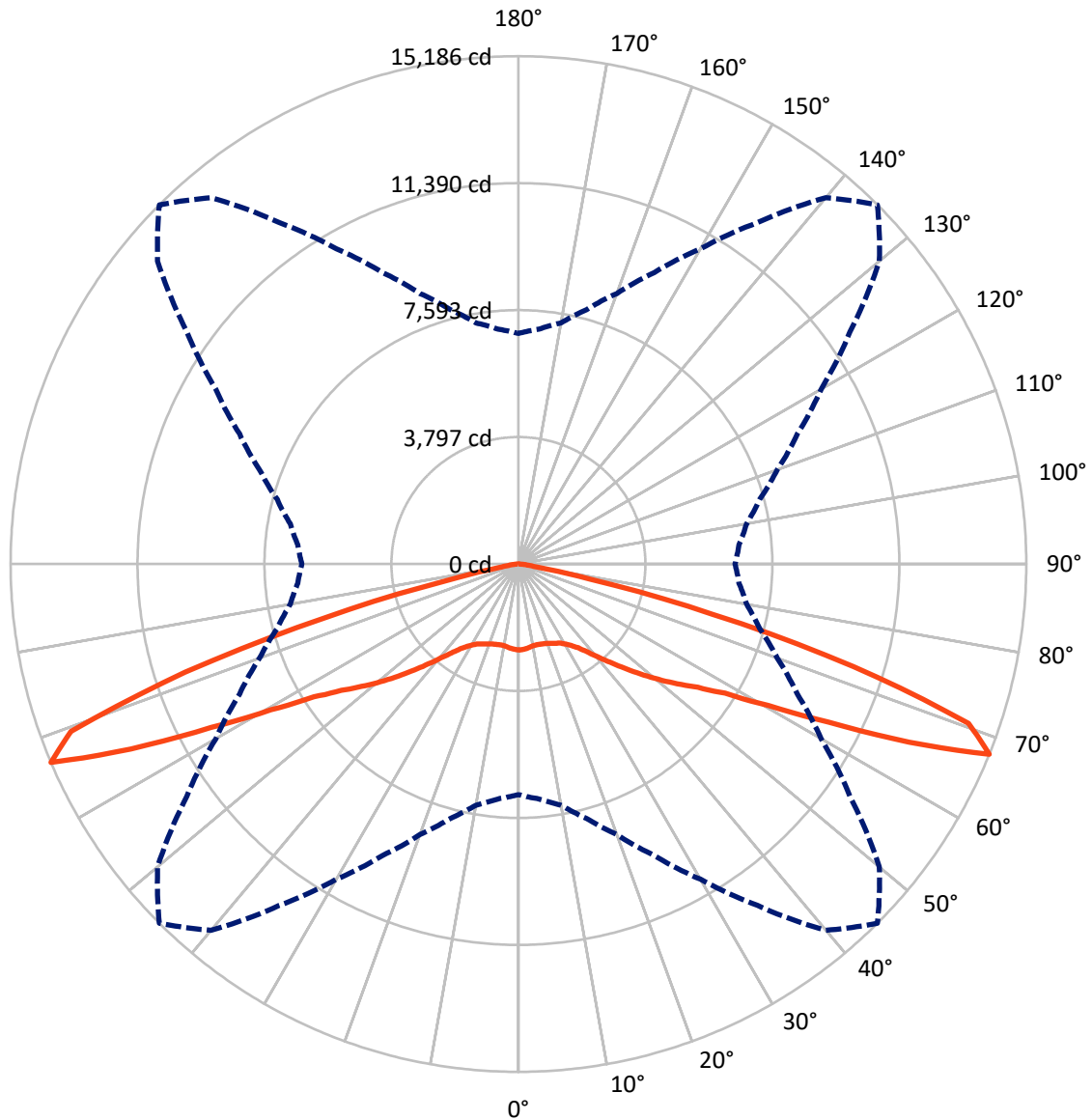
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12901.5	0.0	12901.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12901.5	0.0	12901.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	25802.9	0.0	25802.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.7	0.9
10°-20°	698.4	2.7
20°-30°	1187.2	4.6
30°-40°	1940.7	7.5
40°-50°	3464.6	13.4
50°-60°	5841.4	22.6
60°-70°	9064.9	35.1
70°-80°	3185.0	12.3
80°-90°	180.0	0.7
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°	25802.9	100.0
0°-180°	25802.9	100.0



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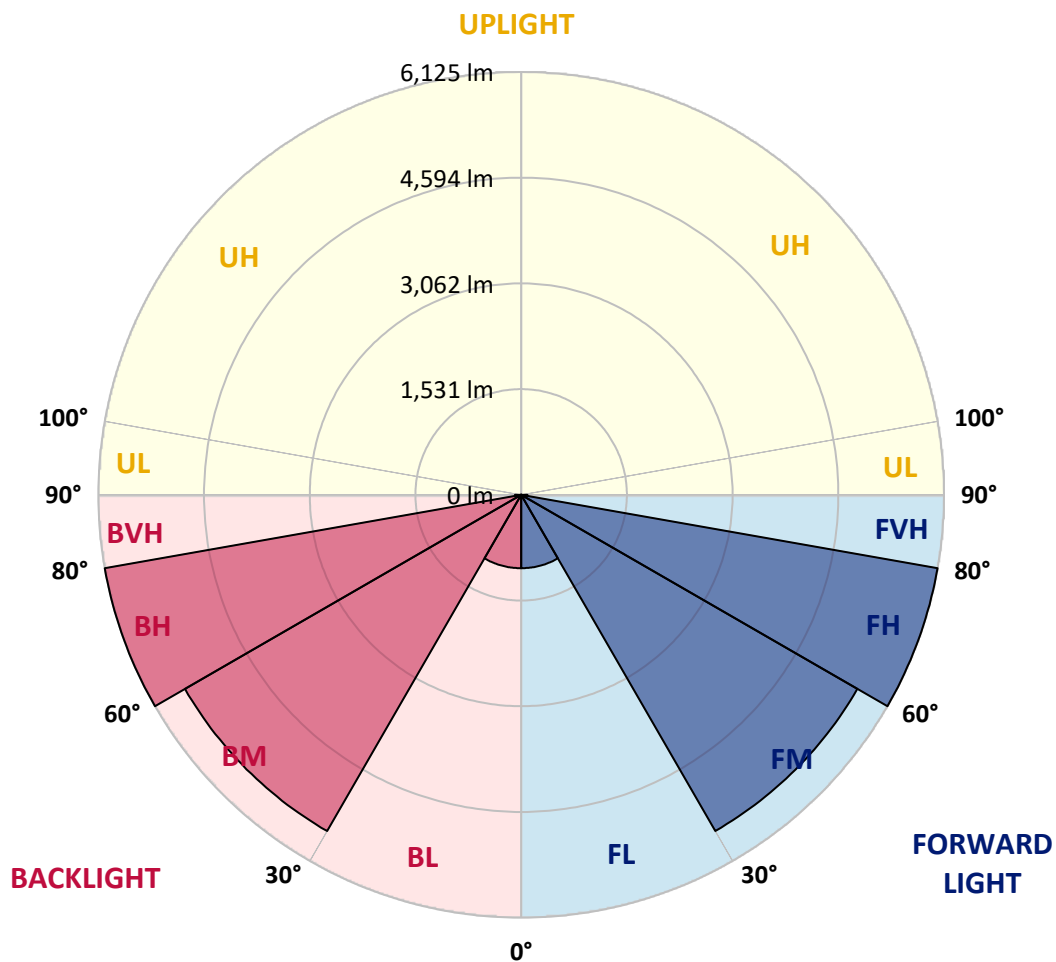
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1063.1	4.1			
FM	(30°-60°)	5623.4	21.8			
FH	(60°-80°)	6125.0	23.7			G3/7500
FVH	(80°-90°)	90.0	0.3			G1/100
BL	(0°-30°)	1063.1	4.1	B3/2500		
BM	(30°-60°)	5623.4	21.8	B4/8500		
BH	(60°-80°)	6125.0	23.7	B5		G3/7500
BVH	(80°-90°)	90.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4
2.5°	2561.9	2564.2	2564.2	2564.2	2563.1	2563.1	2560.7	2563.1	2561.9	2558.3	2559.5
5°	2540.5	2542.9	2542.9	2541.7	2545.3	2544.1	2540.5	2542.9	2541.7	2539.4	2540.5
7.5°	2509.7	2513.2	2513.2	2512.1	2515.6	2514.4	2512.1	2513.2	2513.2	2509.7	2509.7
10°	2475.2	2477.6	2477.6	2476.5	2482.4	2482.4	2481.2	2484.7	2486.0	2482.4	2480.0
12.5°	2443.2	2446.8	2446.8	2451.5	2457.4	2459.8	2465.7	2470.5	2475.2	2474.1	2469.3
15°	2424.2	2426.6	2431.3	2437.3	2446.8	2455.1	2464.6	2475.2	2484.7	2487.1	2480.0
17.5°	2412.3	2415.9	2423.1	2431.3	2444.4	2458.7	2472.9	2487.1	2500.2	2504.9	2496.6
20°	2408.8	2411.2	2418.3	2432.6	2450.4	2471.7	2491.9	2508.5	2526.3	2532.2	2526.3
22.5°	2415.9	2420.7	2429.0	2445.6	2469.3	2496.6	2520.3	2542.9	2565.5	2576.1	2567.8
25°	2447.9	2452.7	2463.4	2484.7	2510.8	2539.4	2566.6	2592.8	2612.9	2623.6	2617.6
27.5°	2507.3	2513.2	2526.3	2547.7	2576.1	2607.0	2636.7	2658.0	2674.6	2678.2	2671.0
30°	2596.2	2609.3	2624.8	2648.5	2681.8	2707.9	2737.5	2756.4	2776.7	2776.7	2770.8
32.5°	2735.2	2748.2	2764.8	2787.3	2813.4	2842.0	2868.0	2884.6	2906.0	2907.2	2892.9
35°	2942.8	2948.8	2963.0	2977.2	3000.9	3025.9	3048.4	3059.0	3076.8	3078.1	3065.0
37.5°	3216.9	3218.1	3227.5	3232.3	3253.7	3280.9	3302.3	3309.5	3326.0	3323.7	3310.6
40°	3536.0	3542.0	3545.5	3552.7	3575.2	3601.3	3623.9	3627.5	3645.3	3641.7	3625.0
42.5°	3905.1	3907.5	3927.6	3938.4	3959.7	3972.7	4001.3	4004.8	4026.1	4016.6	3997.7
45°	4319.2	4340.6	4359.6	4380.9	4403.5	4418.9	4441.4	4436.7	4451.0	4436.7	4426.0
47.5°	4754.7	4770.1	4812.9	4846.1	4882.9	4895.9	4928.0	4913.7	4928.0	4907.8	4904.2
50°	5234.1	5261.4	5298.2	5336.1	5375.3	5396.7	5438.2	5420.4	5439.4	5420.4	5409.8
52.5°	5706.3	5713.5	5794.2	5849.9	5904.6	5929.4	5954.4	5946.1	5947.2	5946.1	5935.4
55°	6154.9	6171.6	6252.2	6328.2	6423.1	6493.1	6535.8	6531.0	6520.4	6509.8	6492.0
57.5°	6660.4	6677.0	6769.6	6863.3	6971.3	7070.9	7157.6	7246.6	7281.0	7290.5	7251.3
60°	7343.9	7342.7	7466.1	7580.1	7734.3	7882.7	8072.4	8265.9	8487.7	8591.0	8454.6
62.5°	8039.3	8067.7	8245.7	8447.4	8765.5	9075.1	9425.2	9769.3	10120.6	10406.5	10102.8
65°	7956.2	8065.4	8330.0	8786.8	9374.1	10071.9	10826.6	11625.1	12346.6	12842.6	12286.0
67.5°	6895.3	7050.8	7320.1	7875.5	8610.0	9616.2	10883.5	12462.9	14298.6	15186.1	14086.1
70°	4997.9	5173.6	5456.0	5998.3	6725.7	7682.1	9058.5	10954.7	13384.9	14279.6	13068.1
72.5°	2487.1	2582.0	2756.4	3101.8	3652.3	4428.4	5676.7	7499.4	9649.5	10470.6	9363.5
75°	844.9	888.7	918.4	1031.1	1205.5	1510.6	2131.1	3278.6	5001.5	5995.9	4930.3
77.5°	487.7	488.9	509.0	529.3	558.9	592.1	675.1	886.4	1533.1	2177.5	1586.5
80°	315.7	314.5	331.0	346.5	366.6	383.3	388.0	410.6	473.4	561.3	502.0
82.5°	163.8	183.9	220.8	240.9	278.9	286.0	276.5	268.2	283.6	294.3	301.4
85°	90.2	78.4	117.4	151.9	168.5	170.8	170.8	161.4	167.4	163.8	178.0
87.5°	41.5	38.0	46.2	74.8	79.5	67.6	71.2	62.9	45.1	43.9	49.8
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°	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4	2571.4
2.5°	2559.5	2560.7	2560.7	2564.2	2565.5	2567.8	2570.2	2571.4
5°	2539.4	2542.9	2540.5	2544.1	2544.1	2546.4	2546.4	2547.7
7.5°	2509.7	2513.2	2513.2	2513.2	2512.1	2515.6	2515.6	2515.6
10°	2478.8	2481.2	2480.0	2477.6	2475.2	2478.8	2477.6	2476.5
12.5°	2469.3	2463.4	2458.7	2456.3	2451.5	2452.7	2449.1	2449.1
15°	2475.2	2464.6	2456.3	2452.7	2447.9	2445.6	2443.2	2444.4
17.5°	2490.7	2477.6	2466.9	2461.0	2455.1	2451.5	2446.8	2447.9
20°	2518.0	2502.5	2487.1	2475.2	2464.6	2458.7	2455.1	2453.9
22.5°	2558.3	2535.8	2513.2	2495.4	2481.2	2472.9	2469.3	2466.9
25°	2604.6	2579.7	2553.6	2533.4	2519.1	2508.5	2501.3	2501.3
27.5°	2662.7	2642.6	2618.9	2595.1	2582.0	2571.4	2566.6	2564.2
30°	2760.0	2741.1	2722.1	2699.6	2682.9	2672.3	2664.0	2656.8
32.5°	2884.6	2869.2	2853.8	2837.2	2821.7	2807.5	2794.5	2788.6
35°	3060.3	3048.4	3037.8	3018.7	3012.8	3004.5	2997.3	2991.4
37.5°	3302.3	3297.6	3297.6	3277.4	3272.6	3269.0	3262.0	3263.1
40°	3620.3	3625.0	3619.1	3612.0	3608.5	3598.9	3598.9	3607.2
42.5°	3996.5	4000.0	4013.1	4001.3	4014.3	4002.4	3995.3	4001.3
45°	4433.2	4446.2	4472.3	4460.5	4468.8	4448.6	4423.6	4424.9
47.5°	4923.3	4935.1	4945.8	4937.5	4938.6	4905.5	4872.2	4863.9
50°	5432.3	5437.0	5442.9	5431.1	5433.5	5396.7	5358.7	5359.9
52.5°	5935.4	5958.0	5981.7	5949.6	5942.5	5901.0	5847.6	5826.2
55°	6510.9	6542.9	6515.7	6459.8	6404.1	6348.3	6278.4	6266.5
57.5°	7220.5	7165.9	7080.5	6974.9	6897.8	6819.4	6748.2	6718.5
60°	8207.7	8002.4	7848.2	7691.6	7593.1	7497.0	7403.2	7389.0
62.5°	9603.2	9248.4	8941.1	8617.1	8352.5	8146.1	7981.1	7934.8
65°	11352.2	10513.3	9786.0	9107.2	8517.4	8072.4	7792.4	7669.1
67.5°	12104.6	10448.0	9200.9	8237.4	7466.1	6927.4	6624.8	6474.2
70°	10636.7	8664.6	7308.3	6343.6	5641.1	5066.8	4792.7	4631.3
72.5°	7317.8	5511.8	4358.4	3557.4	2996.2	2515.6	2325.8	2311.5
75°	3285.7	2176.2	1499.9	1155.7	973.0	846.1	806.9	777.2
77.5°	919.6	680.0	606.4	567.2	529.3	485.3	468.7	472.3
80°	447.3	422.5	405.8	380.9	346.5	309.7	293.1	300.2
82.5°	296.7	293.1	303.8	286.0	236.1	200.5	168.5	154.3
85°	180.3	182.7	186.3	187.5	159.0	111.5	75.9	85.4
87.5°	71.2	81.8	89.0	92.6	86.6	53.4	42.8	43.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)