

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: P191612

Luminaire Tested: **GLEON-AF-04-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191612
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-7050
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5000K, 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: 25224 lumens
Efficiency: N/A
Efficacy: 112.1 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

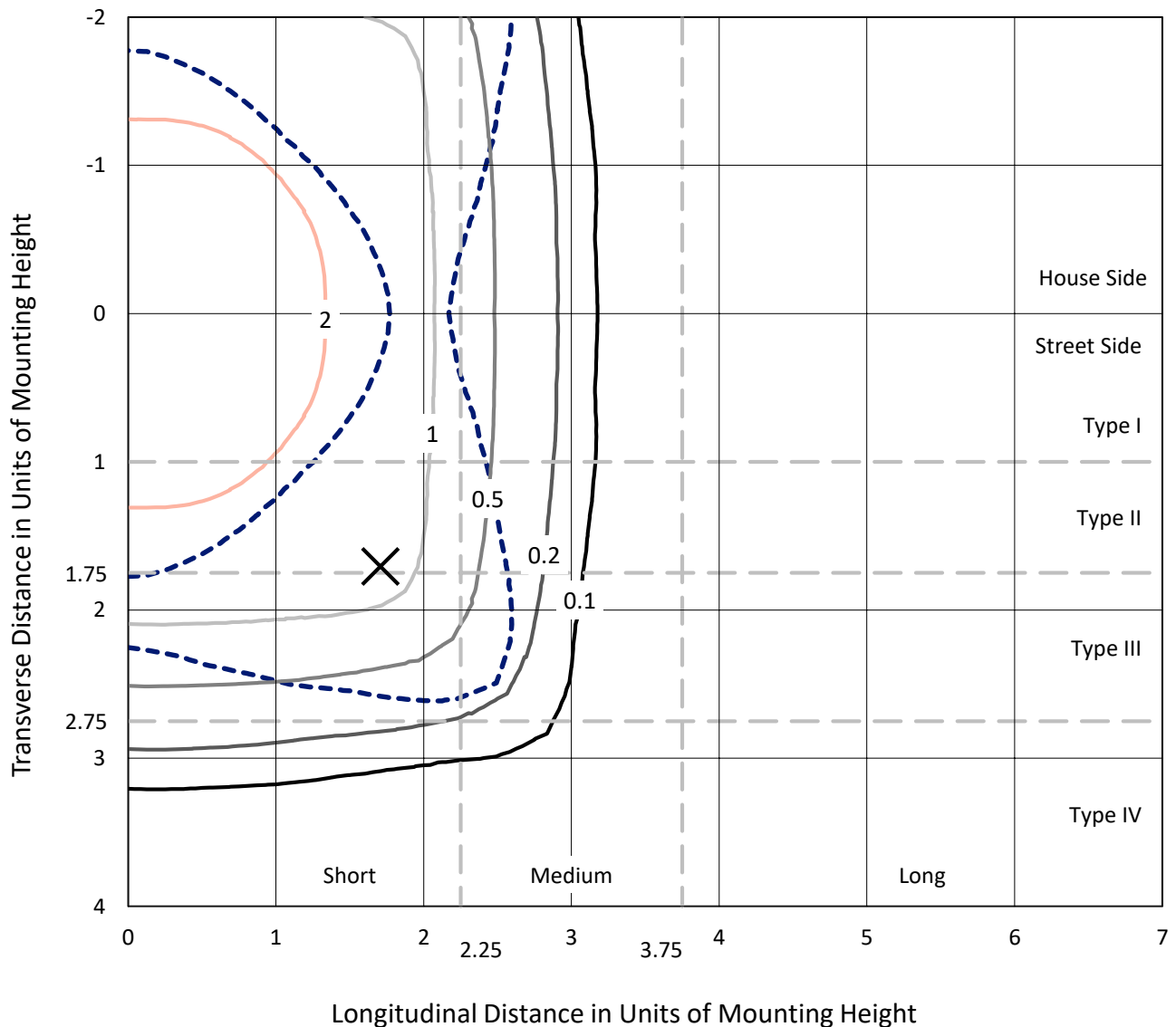
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P191612
 CATALOG NUMBER: GLEON-AF-04-LED-E1-5MQ-7050

Iso-Footcandle Lines of Horizontal Illumination

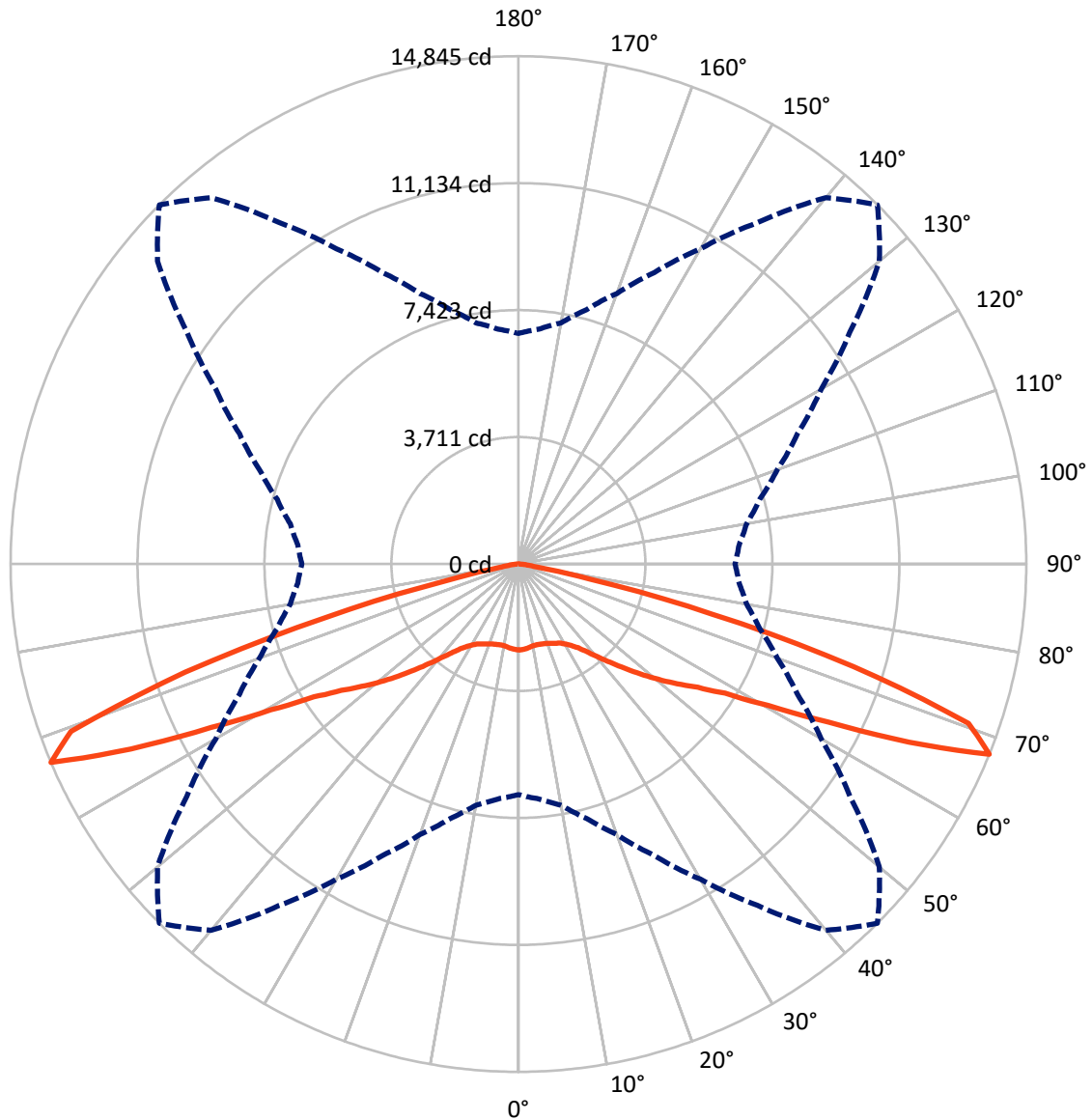
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P191612
CATALOG NUMBER: GLEON-AF-04-LED-E1-5MQ-7050

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191612

CATALOG NUMBER: GLEON-AF-04-LED-E1-5MQ-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12612.0	0.0	12612.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12612.0	0.0	12612.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	25224.0	0.0	25224.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.3	0.9
10°-20°	682.7	2.7
20°-30°	1160.6	4.6
30°-40°	1897.2	7.5
40°-50°	3386.9	13.4
50°-60°	5710.3	22.6
60°-70°	8861.6	35.1
70°-80°	3113.6	12.3
80°-90°	176.0	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°	25224.0	100.0
0°-180°	25224.0	100.0



REPORT NUMBER: P191612

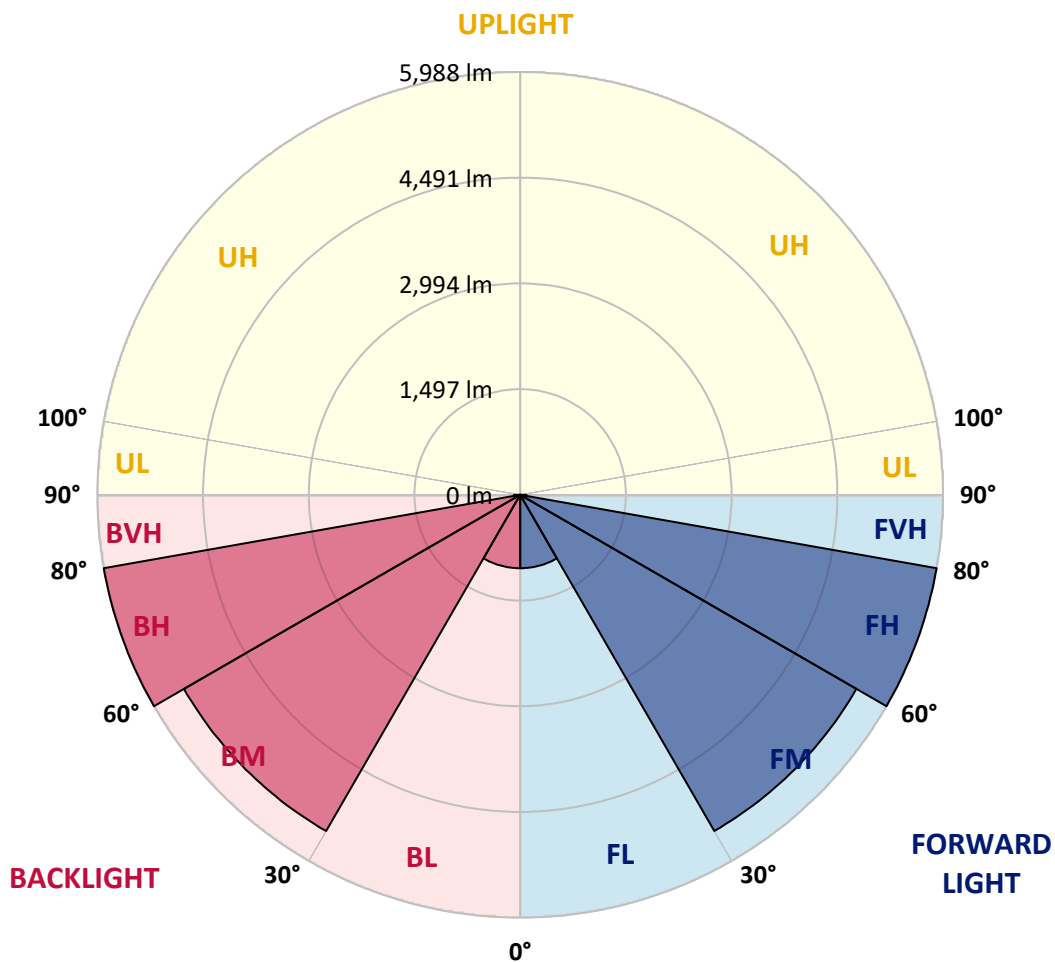
CATALOG NUMBER: GLEON-AF-04-LED-E1-5MQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1039.3	4.1			
FM	(30°-60°)	5497.2	21.8			
FH	(60°-80°)	5987.6	23.7			G3/7500
FVH	(80°-90°)	88.0	0.3			G1/100
BL	(0°-30°)	1039.3	4.1	B3/2500		
BM	(30°-60°)	5497.2	21.8	B4/8500		
BH	(60°-80°)	5987.6	23.7	B5		G3/7500
BVH	(80°-90°)	88.0	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





REPORT NUMBER: P191612
 CATALOG NUMBER: GLEON-AF-04-LED-E1-5MQ-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7
2.5°	2504.4	2506.7	2506.7	2506.7	2505.6	2505.6	2503.2	2505.6	2504.4	2500.9	2502.1
5°	2483.5	2485.8	2485.8	2484.7	2488.2	2487.0	2483.5	2485.8	2484.7	2482.4	2483.5
7.5°	2453.4	2456.8	2456.8	2455.7	2459.2	2458.0	2455.7	2456.8	2456.8	2453.4	2453.4
10°	2419.7	2422.0	2422.0	2420.9	2426.7	2426.7	2425.5	2429.0	2430.2	2426.7	2424.4
12.5°	2388.4	2391.9	2391.9	2396.5	2402.3	2404.6	2410.4	2415.1	2419.7	2418.6	2413.9
15°	2369.8	2372.2	2376.8	2382.6	2391.9	2400.0	2409.3	2419.7	2429.0	2431.3	2424.4
17.5°	2358.2	2361.7	2368.7	2376.8	2389.6	2403.5	2417.4	2431.3	2444.1	2448.7	2440.6
20°	2354.8	2357.1	2364.0	2378.0	2395.4	2416.2	2436.0	2452.2	2469.6	2475.4	2469.6
22.5°	2361.7	2366.4	2374.5	2390.7	2413.9	2440.6	2463.8	2485.8	2507.9	2518.3	2510.2
25°	2393.0	2397.7	2408.1	2429.0	2454.5	2482.4	2509.0	2534.6	2554.3	2564.7	2558.9
27.5°	2451.0	2456.8	2469.6	2490.5	2518.3	2548.5	2577.5	2598.4	2614.6	2618.1	2611.1
30°	2538.0	2550.8	2565.9	2589.1	2621.6	2647.1	2676.1	2694.6	2714.4	2714.4	2708.6
32.5°	2673.8	2686.5	2702.8	2724.8	2750.3	2778.2	2803.7	2819.9	2840.8	2842.0	2828.0
35°	2876.8	2882.6	2896.5	2910.4	2933.6	2958.0	2980.0	2990.4	3007.8	3009.0	2996.2
37.5°	3144.7	3145.9	3155.1	3159.8	3180.7	3207.3	3228.2	3235.2	3251.4	3249.1	3236.3
40°	3456.7	3462.5	3466.0	3473.0	3495.0	3520.5	3542.6	3546.1	3563.5	3560.0	3543.7
42.5°	3817.5	3819.8	3839.5	3850.0	3870.9	3883.6	3911.5	3914.9	3935.8	3926.5	3908.0
45°	4222.3	4243.2	4261.8	4282.6	4304.7	4319.8	4341.8	4337.2	4351.1	4337.2	4326.7
47.5°	4648.0	4663.1	4704.9	4737.4	4773.3	4786.1	4817.4	4803.5	4817.4	4797.7	4794.2
50°	5116.7	5143.4	5179.3	5216.4	5254.7	5275.6	5316.2	5298.8	5317.4	5298.8	5288.4
52.5°	5578.3	5585.3	5664.2	5718.7	5772.1	5796.4	5820.8	5812.7	5813.8	5812.7	5802.2
55°	6016.8	6033.1	6111.9	6186.2	6279.0	6347.4	6389.2	6384.5	6374.1	6363.7	6346.3
57.5°	6511.0	6527.2	6617.7	6709.3	6814.9	6912.3	6997.0	7084.0	7117.6	7126.9	7088.6
60°	7179.1	7178.0	7298.6	7410.0	7560.8	7705.8	7891.3	8080.4	8297.3	8398.3	8264.9
62.5°	7858.9	7886.7	8060.7	8257.9	8568.8	8871.5	9213.7	9550.1	9893.5	10173.0	9876.1
65°	7777.7	7884.4	8143.1	8589.7	9163.8	9845.9	10583.7	11364.3	12069.6	12554.5	12010.4
67.5°	6740.6	6892.6	7155.9	7698.8	8416.8	9400.5	10639.3	12183.3	13977.8	14845.4	13770.1
70°	4885.8	5057.5	5333.6	5863.7	6574.8	7509.7	8855.3	10708.9	13084.6	13959.2	12774.9
72.5°	2431.3	2524.1	2694.6	3032.2	3570.4	4329.0	5549.3	7331.1	9433.0	10235.7	9153.4
75°	825.9	868.8	897.8	1008.0	1178.5	1476.7	2083.3	3205.0	4889.3	5861.4	4819.7
77.5°	476.8	477.9	497.6	517.4	546.4	578.8	660.0	866.5	1498.7	2128.6	1550.9
80°	308.6	307.4	323.6	338.7	358.4	374.7	379.3	401.4	462.8	548.7	490.7
82.5°	160.1	179.8	215.8	235.5	272.6	279.6	270.3	262.2	277.2	287.7	294.6
85°	88.2	76.6	114.8	148.5	164.7	167.0	167.0	157.8	163.6	160.1	174.0
87.5°	40.6	37.1	45.2	73.1	77.7	66.1	69.6	61.5	44.1	42.9	48.7
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: P191612

CATALOG NUMBER: GLEON-AF-04-LED-E1-5MQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7	2513.7
2.5°	2502.1	2503.2	2503.2	2506.7	2507.9	2510.2	2512.5	2513.7
5°	2482.4	2485.8	2483.5	2487.0	2487.0	2489.3	2489.3	2490.5
7.5°	2453.4	2456.8	2456.8	2456.8	2455.7	2459.2	2459.2	2459.2
10°	2423.2	2425.5	2424.4	2422.0	2419.7	2423.2	2422.0	2420.9
12.5°	2413.9	2408.1	2403.5	2401.2	2396.5	2397.7	2394.2	2394.2
15°	2419.7	2409.3	2401.2	2397.7	2393.0	2390.7	2388.4	2389.6
17.5°	2434.8	2422.0	2411.6	2405.8	2400.0	2396.5	2391.9	2393.0
20°	2461.5	2446.4	2431.3	2419.7	2409.3	2403.5	2400.0	2398.8
22.5°	2500.9	2478.9	2456.8	2439.4	2425.5	2417.4	2413.9	2411.6
25°	2546.2	2521.8	2496.3	2476.6	2462.6	2452.2	2445.2	2445.2
27.5°	2603.0	2583.3	2560.1	2536.9	2524.1	2513.7	2509.0	2506.7
30°	2698.1	2679.6	2661.0	2639.0	2622.7	2612.3	2604.2	2597.2
32.5°	2819.9	2804.8	2789.8	2773.5	2758.4	2744.5	2731.8	2726.0
35°	2991.6	2980.0	2969.6	2951.0	2945.2	2937.1	2930.1	2924.3
37.5°	3228.2	3223.6	3223.6	3203.9	3199.2	3195.7	3188.8	3189.9
40°	3539.1	3543.7	3537.9	3531.0	3527.5	3518.2	3518.2	3526.3
42.5°	3906.8	3910.3	3923.1	3911.5	3924.2	3912.6	3905.7	3911.5
45°	4333.7	4346.4	4372.0	4360.4	4368.5	4348.8	4324.4	4325.6
47.5°	4812.8	4824.4	4834.8	4826.7	4827.8	4795.4	4762.9	4754.8
50°	5310.4	5315.0	5320.8	5309.2	5311.6	5275.6	5238.5	5239.6
52.5°	5802.2	5824.3	5847.5	5816.1	5809.2	5768.6	5716.4	5695.5
55°	6364.8	6396.1	6369.5	6314.9	6260.4	6205.9	6137.5	6125.9
57.5°	7058.5	7005.1	6921.6	6818.4	6743.0	6666.4	6596.8	6567.8
60°	8023.6	7822.9	7672.1	7519.0	7422.7	7328.8	7237.1	7223.2
62.5°	9387.7	9040.9	8740.5	8423.8	8165.1	7963.3	7802.0	7756.8
65°	11097.5	10277.4	9566.4	8902.9	8326.3	7891.3	7617.6	7497.0
67.5°	11833.0	10213.6	8994.5	8052.6	7298.6	6772.0	6476.2	6328.9
70°	10398.1	8470.2	7144.3	6201.3	5514.5	4953.1	4685.2	4527.4
72.5°	7153.6	5388.1	4260.6	3477.6	2929.0	2459.2	2273.6	2259.6
75°	3212.0	2127.4	1466.2	1129.8	951.2	827.1	788.8	759.8
77.5°	899.0	664.7	592.8	554.5	517.4	474.4	458.2	461.7
80°	437.3	413.0	396.7	372.4	338.7	302.8	286.5	293.5
82.5°	290.0	286.5	297.0	279.6	230.8	196.0	164.7	150.8
85°	176.3	178.6	182.1	183.3	155.4	109.0	74.2	83.5
87.5°	69.6	80.0	87.0	90.5	84.7	52.2	41.8	42.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)