

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: P299348

Luminaire Tested: **GLNA-AF-03-LED-E1-5NQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299348
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: GLNA-AF-03-LED-E1-5NQ-7030
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18069.4 lumens
Efficiency: N/A
Efficacy: 108.9 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

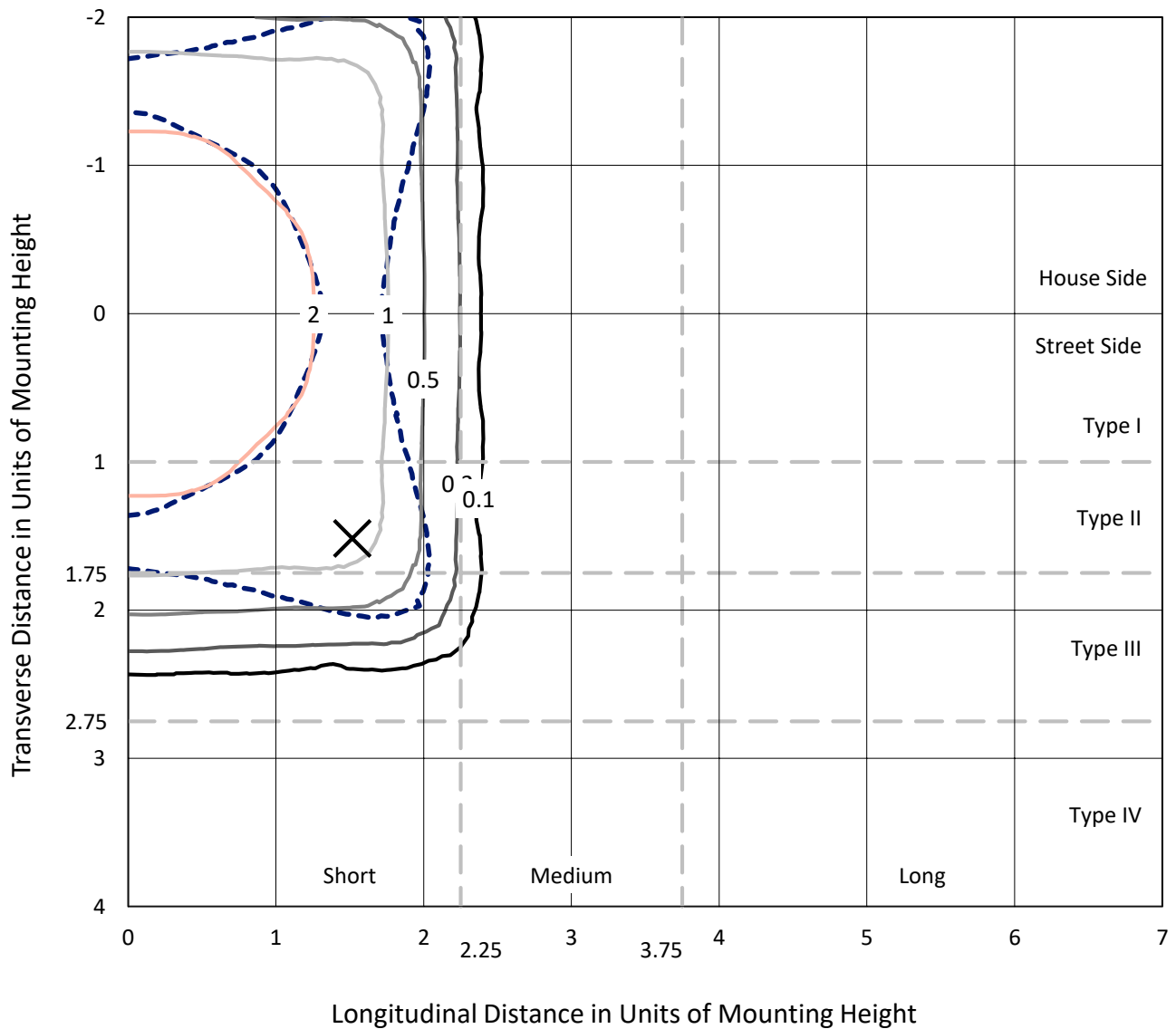
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

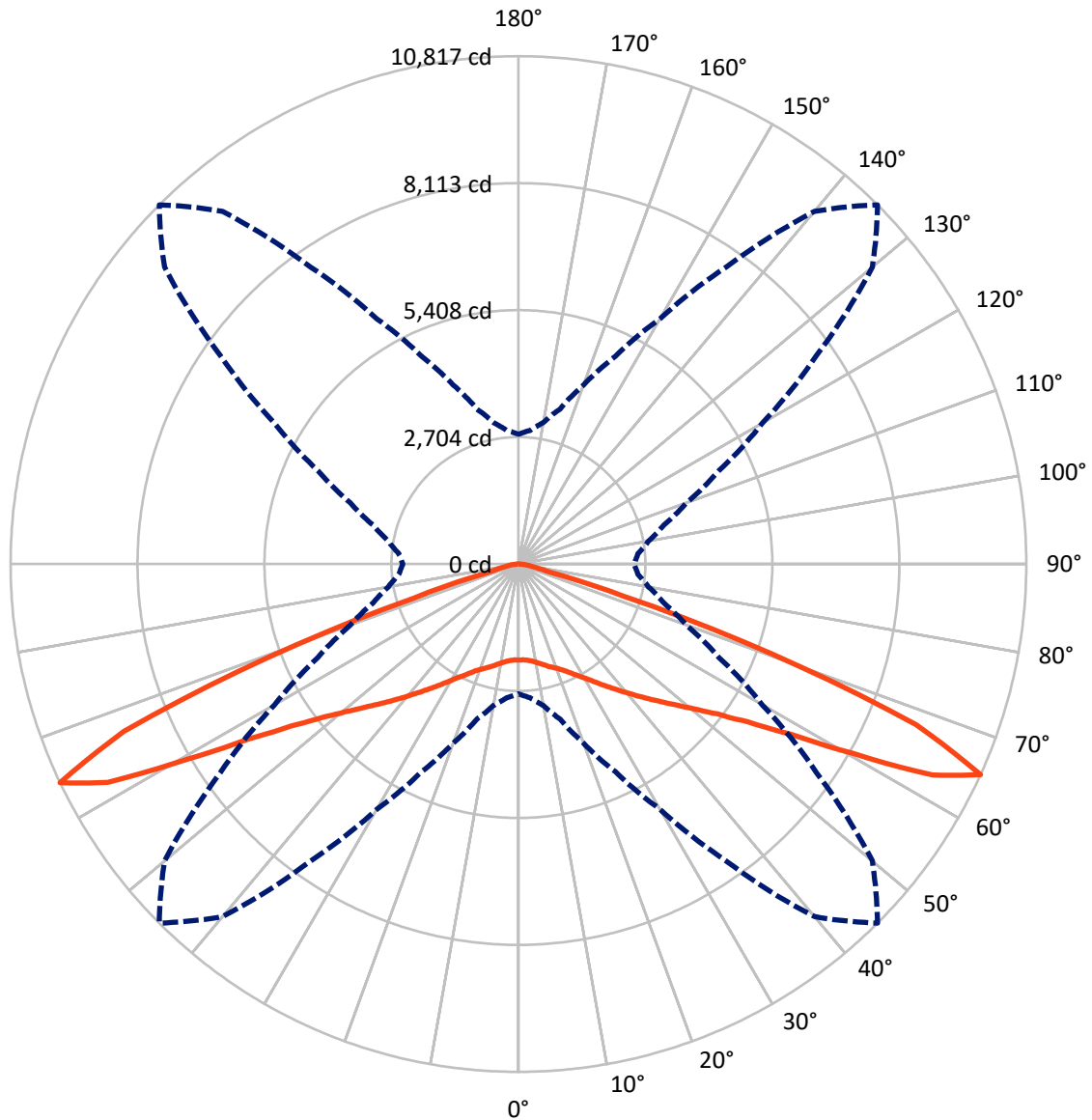
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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
House Side	Lumens	9034.7	0.0	9034.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9034.7	0.0	9034.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	18069.4	0.0	18069.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.3	1.1
10°-20°	639.1	3.5
20°-30°	1195.0	6.6
30°-40°	2021.1	11.2
40°-50°	3304.8	18.3
50°-60°	5255.1	29.1
60°-70°	4750.3	26.3
70°-80°	601.2	3.3
80°-90°	103.4	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°	18069.4	100.0
0°-180°	18069.4	100.0



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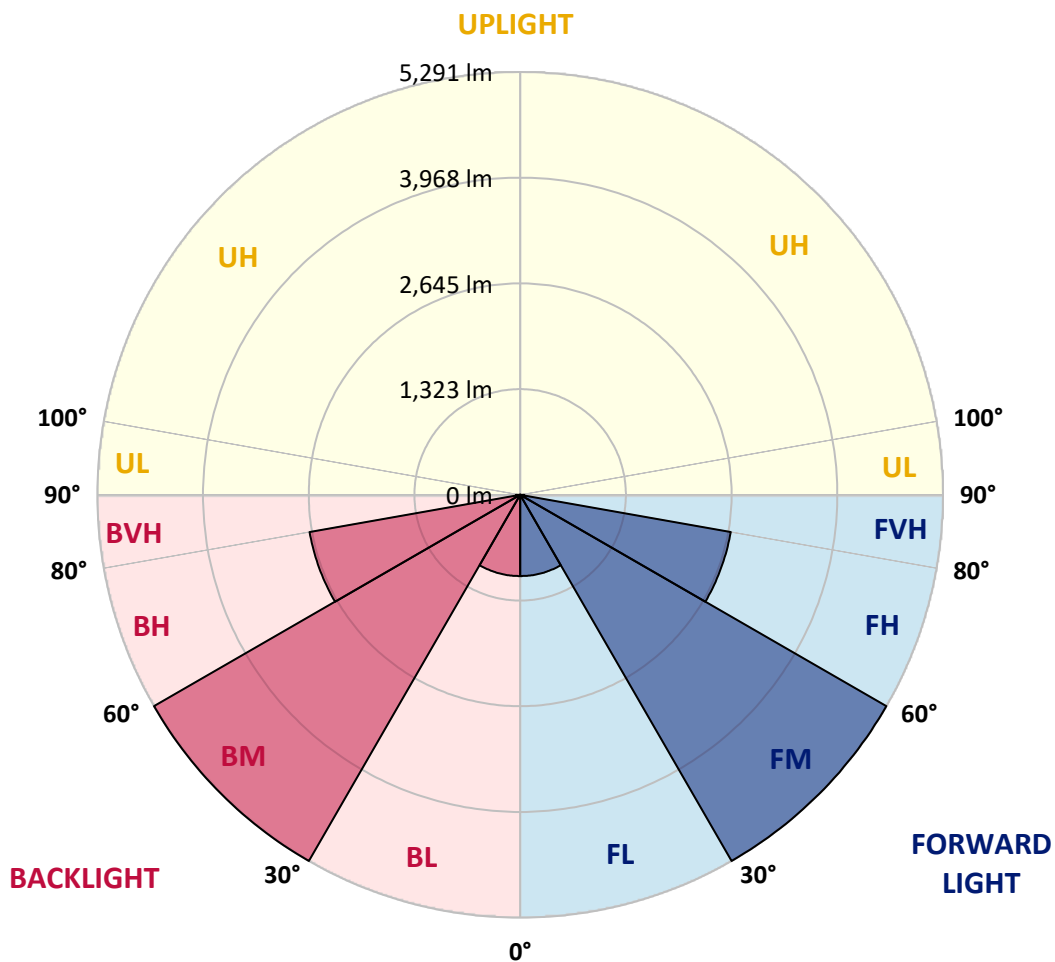
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1016.7	5.6			
FM	(30°-60°)	5290.5	29.3			
FH	(60°-80°)	2675.7	14.8			G2/5000
FVH	(80°-90°)	51.7	0.3			G1/100
BL	(0°-30°)	1016.7	5.6	B3/2500		
BM	(30°-60°)	5290.5	29.3	B4/8500		
BH	(60°-80°)	2675.7	14.8	B4/5000		G2/5000
BVH	(80°-90°)	51.7	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°	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6
2.5°	2046.3	2047.9	2049.6	2047.9	2049.6	2047.1	2045.4	2047.9	2045.4	2042.9	2044.6
5°	2064.0	2064.9	2064.9	2062.3	2064.9	2063.2	2060.6	2064.0	2061.5	2058.9	2060.6
7.5°	2093.6	2097.0	2094.5	2091.9	2093.6	2091.9	2090.3	2091.1	2090.3	2087.7	2088.6
10°	2133.4	2136.0	2134.3	2133.4	2135.1	2134.3	2132.6	2131.7	2132.6	2130.0	2130.0
12.5°	2181.7	2180.8	2180.0	2180.8	2183.3	2183.3	2182.5	2183.3	2185.0	2185.9	2184.2
15°	2229.0	2230.7	2230.7	2230.7	2235.8	2240.0	2242.6	2244.3	2247.7	2248.5	2245.1
17.5°	2288.3	2288.3	2287.4	2288.3	2293.4	2300.1	2302.7	2306.1	2309.4	2312.0	2307.7
20°	2354.3	2356.0	2356.0	2357.7	2364.4	2372.1	2372.1	2373.8	2372.1	2373.8	2371.2
22.5°	2434.7	2439.8	2439.8	2440.6	2447.4	2456.7	2454.1	2456.7	2452.5	2455.8	2452.5
25°	2539.6	2547.2	2545.5	2545.5	2550.6	2556.5	2557.4	2562.5	2561.6	2565.9	2563.3
27.5°	2658.1	2669.9	2673.3	2672.5	2675.9	2681.8	2683.5	2689.4	2686.0	2689.4	2687.7
30°	2800.3	2805.3	2812.1	2814.7	2818.9	2824.8	2824.8	2825.7	2821.4	2826.5	2829.0
32.5°	2947.5	2956.8	2963.6	2978.8	2986.4	2990.7	2989.8	2991.5	2987.3	2994.1	2999.1
35°	3142.2	3148.9	3159.9	3171.8	3181.9	3181.1	3178.5	3179.4	3179.4	3185.3	3190.4
37.5°	3376.6	3378.3	3392.6	3409.6	3414.6	3409.6	3394.3	3391.0	3383.3	3391.0	3399.4
40°	3624.5	3630.4	3659.2	3670.2	3672.8	3663.4	3641.4	3628.8	3611.8	3621.1	3633.0
42.5°	3884.3	3896.2	3922.4	3941.9	3950.3	3944.4	3913.9	3894.5	3872.5	3877.6	3889.4
45°	4172.0	4186.4	4223.7	4242.3	4258.4	4249.1	4219.4	4189.8	4155.1	4157.7	4176.3
47.5°	4493.6	4508.0	4556.2	4587.6	4596.0	4594.3	4561.3	4520.7	4473.3	4471.6	4487.7
50°	4854.1	4868.5	4928.6	4976.8	5001.4	4998.8	4959.9	4902.4	4844.8	4845.7	4866.0
52.5°	5206.2	5223.9	5286.6	5369.5	5417.7	5452.4	5428.7	5374.6	5304.3	5306.0	5324.7
55°	5536.2	5565.8	5637.8	5750.3	5840.0	5937.3	5965.3	5963.6	5921.3	5933.1	5951.7
57.5°	5696.2	5740.2	5851.0	6028.7	6211.5	6409.6	6577.1	6702.4	6755.7	6836.1	6817.4
60°	5393.2	5463.4	5626.8	5888.3	6249.6	6662.6	7105.2	7537.6	7906.6	8185.0	8025.1
62.5°	4415.8	4507.2	4705.2	5040.3	5587.0	6247.9	7095.0	8117.3	9231.0	9902.9	9423.1
65°	2763.0	2857.8	3059.2	3418.0	4057.8	4879.5	6028.7	7722.9	9803.9	10816.9	9840.3
67.5°	1077.3	1128.9	1238.1	1467.4	1948.1	2679.3	3832.7	5755.4	8244.2	9132.0	8091.1
70°	539.9	545.0	565.3	607.6	710.9	923.3	1404.8	2668.2	4728.0	5710.5	4557.9
72.5°	390.1	391.0	401.1	419.7	452.7	500.1	591.5	816.6	1537.6	2350.1	1441.2
75°	298.7	302.1	308.0	318.2	336.0	359.7	392.7	470.5	583.1	676.2	568.7
77.5°	230.2	237.0	241.2	250.5	261.5	277.6	286.9	316.5	368.1	387.6	381.7
80°	175.2	181.1	190.4	198.0	205.6	213.3	209.9	223.4	250.5	266.6	258.1
82.5°	111.7	118.5	145.6	152.3	155.7	160.8	154.9	155.7	167.6	177.7	167.6
85°	71.9	76.2	92.2	100.7	101.6	104.9	102.4	96.5	96.5	88.0	99.0
87.5°	33.0	33.9	41.5	49.1	50.8	45.7	44.9	43.2	34.7	33.0	35.5
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°	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6	2044.6
2.5°	2043.7	2045.4	2046.3	2048.8	2049.6	2049.6	2050.5	2052.2
5°	2059.8	2062.3	2063.2	2066.6	2067.4	2066.6	2068.3	2069.1
7.5°	2088.6	2092.8	2094.5	2097.9	2095.3	2098.7	2099.6	2099.6
10°	2130.9	2135.1	2136.0	2139.3	2137.6	2139.3	2139.3	2137.6
12.5°	2186.7	2187.6	2185.0	2187.6	2184.2	2185.9	2183.3	2181.7
15°	2248.5	2246.0	2240.0	2240.0	2235.0	2235.8	2235.0	2234.1
17.5°	2308.6	2303.5	2299.3	2297.6	2293.4	2292.5	2290.0	2290.0
20°	2374.6	2372.1	2369.5	2366.1	2361.9	2357.7	2356.8	2358.5
22.5°	2454.1	2453.3	2453.3	2451.6	2445.7	2441.5	2438.9	2438.9
25°	2560.8	2553.2	2553.2	2552.3	2549.8	2547.2	2542.2	2544.7
27.5°	2680.9	2676.7	2680.1	2679.3	2676.7	2676.7	2673.3	2673.3
30°	2829.0	2827.3	2832.4	2828.2	2819.7	2818.9	2815.5	2811.3
32.5°	3000.0	2998.3	3005.9	3000.8	2987.3	2979.7	2972.9	2969.5
35°	3190.4	3191.2	3200.5	3197.2	3181.9	3176.9	3165.0	3163.3
37.5°	3398.6	3412.1	3428.2	3431.6	3418.9	3415.5	3402.8	3396.0
40°	3643.1	3660.9	3685.5	3691.4	3677.8	3675.3	3657.5	3648.2
42.5°	3903.8	3934.3	3964.7	3969.8	3956.3	3942.7	3925.8	3919.0
45°	4194.9	4231.3	4271.1	4281.2	4260.9	4244.8	4222.8	4222.8
47.5°	4521.6	4567.3	4612.1	4640.0	4621.4	4604.5	4578.3	4561.3
50°	4907.4	4970.1	5028.5	5057.2	5027.6	4995.5	4949.8	4934.5
52.5°	5391.5	5459.2	5510.0	5494.7	5449.1	5404.2	5354.3	5334.0
55°	6009.3	6032.1	6032.1	5974.6	5883.2	5807.9	5729.2	5702.9
57.5°	6781.9	6693.9	6558.5	6386.7	6170.9	5983.0	5856.1	5796.0
60°	7689.9	7266.8	6788.7	6319.0	5933.1	5614.9	5426.2	5339.9
62.5°	8295.0	7188.1	6230.1	5476.1	4921.0	4537.6	4277.0	4175.4
65°	7752.6	5994.9	4712.0	3809.9	3204.8	2814.7	2556.5	2461.8
67.5°	5678.4	3756.5	2509.2	1798.3	1317.6	1051.1	945.3	901.3
70°	2548.9	1322.7	810.7	633.0	545.8	501.0	481.5	474.8
72.5°	768.4	556.0	468.8	423.1	388.4	366.4	350.4	348.7
75°	463.7	385.9	342.7	315.7	293.7	275.9	267.4	264.9
77.5°	324.1	283.5	263.2	243.7	226.8	213.3	205.6	199.7
80°	227.6	208.2	198.9	187.9	176.9	164.2	153.2	148.1
82.5°	152.3	148.1	148.1	141.3	132.0	120.2	98.2	93.1
85°	98.2	97.3	99.0	96.5	89.7	77.0	63.5	60.1
87.5°	45.7	46.5	51.6	50.8	49.1	40.6	32.2	30.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)