

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: P299168

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299168
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
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-SL2-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13863.4 lumens
Efficiency: N/A
Efficacy: 111.8 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

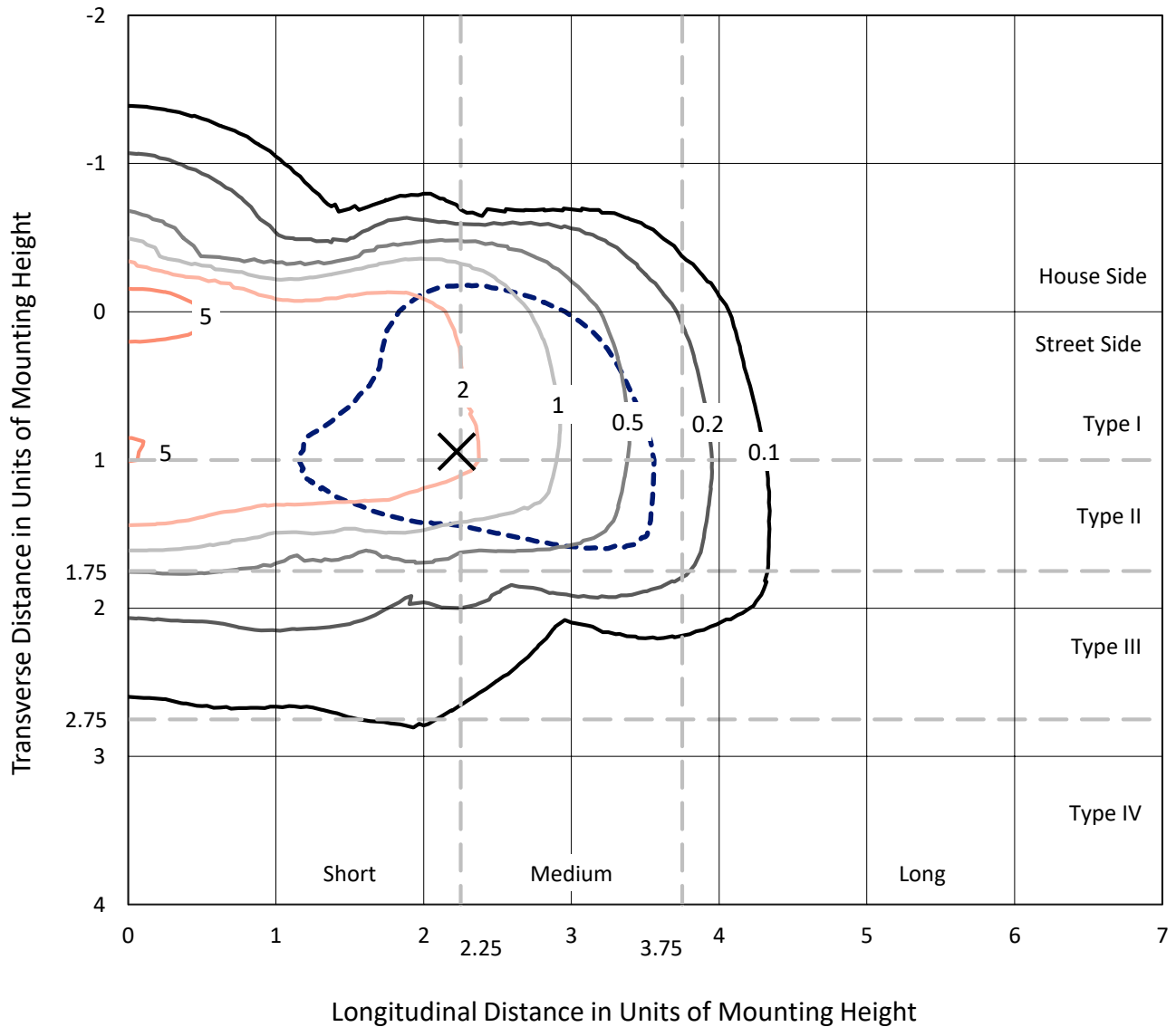
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

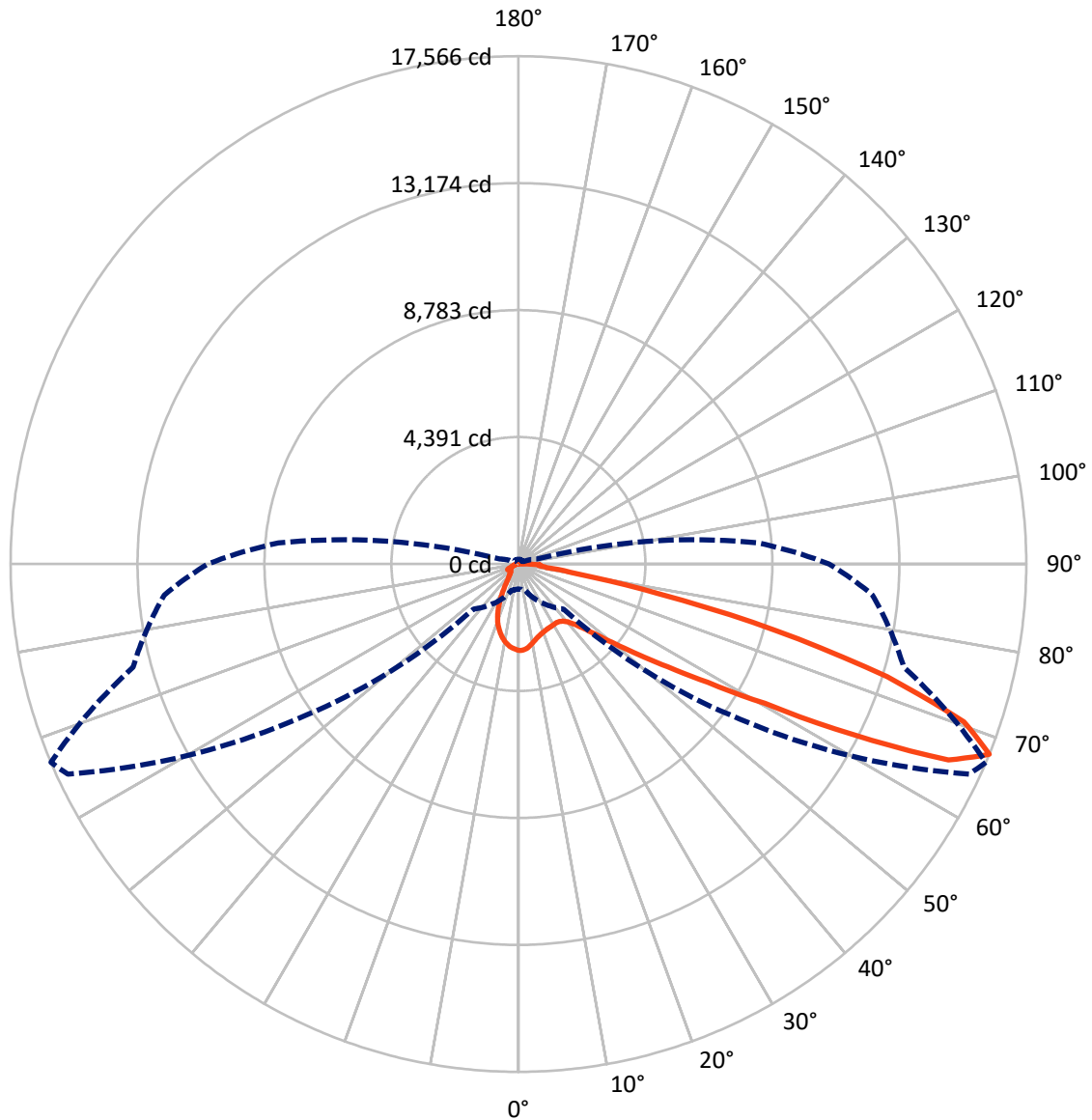
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299168
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-800

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2297.0	0.0	2297.0
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	11566.3	0.0	11566.3
	% Fixture	83.4	0.0	83.4
Total	Lumens	13863.4	0.0	13863.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.1	1.8
10°-20°	590.3	4.3
20°-30°	800.2	5.8
30°-40°	1137.5	8.2
40°-50°	1903.1	13.7
50°-60°	3010.7	21.7
60°-70°	3835.3	27.7
70°-80°	2008.9	14.5
80°-90°	322.2	2.3
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°	13863.4	100.0
0°-180°	13863.4	100.0



REPORT NUMBER: P299168

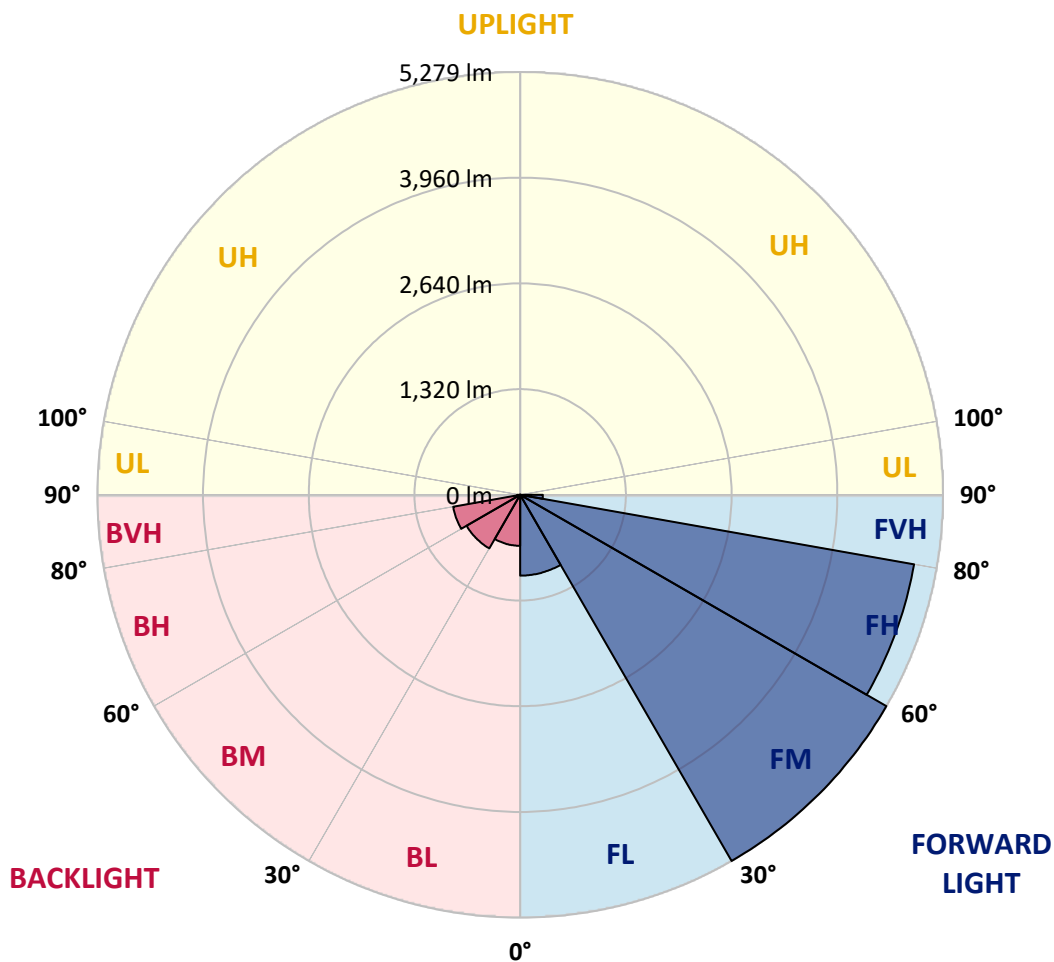
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1008.9	7.3			
FM (30°-60°)	5279.4	38.1			
FH (60°-80°)	4994.7	36.0			G2/5000
FVH (80°-90°)	283.3	2.0			G3/500
BL (0°-30°)	636.7	4.6	B2/1000		
BM (30°-60°)	771.9	5.6	B1/1000		
BH (60°-80°)	849.6	6.1	B2/1000		G2/1000
BVH (80°-90°)	38.9	0.3			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: P299168
 CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3
2.5°	2867.2	2872.0	2887.1	2896.6	2939.7	2958.2	2971.1	2984.1	2986.2	2992.3	2986.2
5°	2566.4	2576.7	2604.7	2636.2	2719.6	2785.2	2854.2	2926.0	2939.0	2985.5	2998.5
7.5°	2333.3	2330.6	2353.8	2391.4	2476.9	2567.8	2688.8	2831.7	2859.7	2964.3	3014.9
10°	2163.1	2161.0	2185.6	2224.6	2306.0	2392.1	2528.8	2724.3	2764.0	2930.8	3030.6
12.5°	2037.3	2038.0	2062.6	2105.6	2188.4	2275.2	2414.0	2620.4	2671.0	2891.8	3047.0
15°	1953.9	1959.3	1979.2	2025.0	2105.6	2192.5	2328.5	2542.5	2599.2	2861.1	3065.5
17.5°	1925.8	1934.7	1941.6	1975.1	2044.1	2130.9	2264.3	2485.1	2545.2	2839.9	3081.9
20°	1951.8	1962.1	1949.1	1960.7	2004.5	2081.0	2213.7	2440.0	2501.5	2816.0	3083.9
22.5°	2063.3	2072.8	2034.5	2001.0	1998.3	2044.8	2172.0	2404.4	2468.0	2798.2	3084.6
25°	2259.5	2265.6	2201.4	2123.4	2047.5	2031.8	2142.6	2379.8	2447.5	2782.5	3071.6
27.5°	2500.1	2504.9	2431.1	2316.2	2163.8	2062.6	2132.3	2365.4	2435.8	2768.8	3049.8
30°	2792.7	2815.3	2716.1	2571.2	2349.0	2153.5	2152.8	2357.9	2422.9	2745.5	3006.7
32.5°	3092.2	3101.7	3033.4	2886.4	2598.6	2313.5	2210.2	2363.4	2419.4	2717.5	2952.0
35°	3395.7	3408.0	3363.6	3245.3	2939.7	2548.0	2322.4	2395.5	2440.6	2707.9	2913.7
37.5°	3788.8	3805.2	3743.7	3606.9	3354.7	2865.9	2509.0	2476.2	2505.6	2735.3	2902.1
40°	4410.2	4402.7	4222.9	4019.2	3808.6	3272.6	2775.6	2612.9	2630.0	2823.5	2937.6
42.5°	5133.5	5115.1	4805.4	4485.4	4307.7	3764.9	3128.4	2850.1	2846.7	2997.1	3062.8
45°	5710.5	5695.5	5416.6	5022.1	4879.9	4325.5	3584.4	3203.6	3178.3	3272.6	3293.8
47.5°	6023.0	6023.6	5863.0	5541.0	5537.6	5037.8	4170.3	3715.0	3671.2	3715.6	3693.1
50°	5913.6	5927.9	5910.8	5808.3	6137.8	5971.7	4935.3	4428.0	4339.8	4383.6	4296.7
52.5°	5384.4	5402.9	5504.1	5661.3	6390.1	7100.4	6059.2	5314.0	5211.5	5195.7	5099.4
55°	4446.5	4469.0	4675.5	5102.8	6180.2	7858.6	7832.6	6443.4	6280.0	6131.7	6090.6
57.5°	3064.8	3102.4	3434.7	4069.1	5501.3	8087.6	9944.4	8053.4	7721.2	7202.9	7212.5
60°	1727.6	1771.3	2163.1	2739.4	4131.3	7838.7	11551.0	10492.0	9790.6	8457.4	8528.5
62.5°	1098.6	1145.8	1443.2	1903.3	2478.9	6498.8	12209.3	13882.2	12991.4	10003.9	10073.6
65°	889.4	909.9	1050.1	1571.0	1800.1	3915.3	11709.6	16674.9	16342.7	11966.6	11641.2
67.5°	868.2	875.1	947.5	1318.8	1726.2	2200.7	9340.0	17197.2	17565.7	13799.5	12294.1
70°	858.0	881.9	1067.9	1258.6	1653.1	1856.1	5612.8	15765.7	16347.5	14278.7	11425.2
72.5°	416.3	415.0	537.3	1138.3	1862.3	1925.2	2883.6	12756.2	13340.1	12370.7	9388.6
75°	335.7	307.0	293.3	417.0	1790.5	1988.1	1837.7	8777.4	9199.9	8294.1	5771.4
77.5°	318.6	284.4	260.5	261.2	756.8	2108.4	1556.7	4858.0	4981.1	3746.4	1581.3
80°	263.9	232.4	215.4	242.7	366.4	2007.9	1683.1	2198.6	2017.5	920.2	526.4
82.5°	183.2	166.8	162.0	203.7	293.3	1430.9	1957.3	1181.3	990.6	460.8	324.7
85°	116.9	99.8	110.8	148.4	228.3	660.4	2016.1	920.9	732.2	292.6	183.2
87.5°	54.0	43.8	54.7	82.0	149.0	227.7	1918.3	1034.4	754.1	154.5	115.5
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: P299168

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3	2990.3
2.5°	2991.7	2978.7	2968.4	2949.3	2928.1	2907.6	2889.1	2865.9	2859.0	2852.9	2862.4
5°	3001.2	2988.2	2950.6	2891.8	2826.9	2766.1	2705.2	2653.2	2621.1	2603.3	2613.6
7.5°	3015.6	2997.1	2919.2	2811.2	2694.3	2587.6	2477.6	2389.4	2324.4	2293.6	2302.5
10°	3028.6	2993.0	2865.9	2703.8	2532.9	2374.3	2200.7	2057.1	1950.5	1894.4	1908.1
12.5°	3034.0	2977.3	2791.3	2569.8	2335.4	2102.9	1847.2	1632.6	1479.4	1423.4	1411.7
15°	3039.5	2959.5	2709.3	2417.4	2096.8	1767.9	1409.7	1152.6	1025.5	997.4	991.3
17.5°	3040.9	2928.8	2616.3	2251.9	1817.1	1369.4	963.9	800.6	801.2	846.4	851.8
20°	3026.5	2883.0	2503.5	2046.2	1482.2	946.9	661.8	633.7	737.0	849.8	863.5
22.5°	2993.7	2822.1	2375.7	1806.2	1098.6	623.5	512.1	542.8	676.1	814.2	830.0
25°	2952.0	2748.3	2224.6	1528.0	727.4	445.7	429.3	466.9	557.2	649.5	658.4
27.5°	2895.3	2660.8	2055.1	1209.4	472.4	367.1	378.1	403.4	440.3	481.3	485.4
30°	2822.1	2556.2	1873.9	881.9	356.9	330.2	345.9	359.6	375.3	398.6	400.6
32.5°	2738.0	2455.7	1687.9	609.1	316.5	311.1	323.4	330.2	342.5	356.9	358.2
35°	2667.6	2360.0	1495.1	430.7	299.4	296.7	304.9	307.6	319.3	335.0	336.4
37.5°	2627.3	2282.0	1296.2	347.3	287.8	283.7	288.5	288.5	304.9	328.2	331.6
40°	2630.0	2239.0	1097.3	313.8	278.2	272.8	273.5	273.5	294.7	319.9	322.0
42.5°	2704.5	2249.9	920.9	300.8	270.7	264.6	261.2	263.2	281.0	297.4	298.8
45°	2879.5	2327.1	755.4	292.6	263.2	261.2	253.6	253.0	259.8	267.3	267.3
47.5°	3166.7	2479.6	643.3	287.1	257.1	256.4	247.5	238.6	237.9	240.6	240.6
50°	3633.6	2742.1	568.1	281.0	253.0	247.5	237.2	223.6	218.8	220.8	220.8
52.5°	4333.7	3210.4	539.4	272.8	244.1	235.2	223.6	209.9	205.8	206.5	206.5
55°	5251.8	3929.6	535.3	263.2	234.5	220.1	210.6	200.3	195.5	196.9	196.9
57.5°	6373.7	4924.3	608.4	248.2	221.5	205.1	199.6	192.8	189.4	191.4	190.7
60°	7737.6	6226.0	902.4	232.4	208.5	191.4	191.4	186.0	183.2	185.3	184.6
62.5°	9308.6	7721.2	1268.9	220.8	194.8	180.5	183.2	180.5	177.7	179.1	178.4
65°	10701.9	8695.4	1188.2	211.9	181.2	170.2	175.0	173.6	171.6	173.0	172.3
67.5°	10742.2	8334.4	667.2	202.4	168.2	160.0	166.8	166.1	164.8	166.1	165.4
70°	9586.8	7037.5	376.0	184.6	154.5	147.7	157.2	156.6	155.2	157.9	157.2
72.5°	7680.8	5106.9	274.8	162.7	140.8	134.7	145.6	144.9	144.9	149.0	147.0
75°	4419.8	2628.0	219.5	139.5	126.5	121.7	131.3	131.9	133.3	138.8	134.7
77.5°	1260.0	819.0	179.1	118.3	108.7	106.6	116.2	117.6	118.3	124.4	119.0
80°	468.3	377.4	147.7	99.1	88.9	89.6	98.4	100.5	101.2	107.3	100.5
82.5°	298.8	248.8	119.6	76.6	69.7	69.0	80.0	82.7	82.7	83.4	79.3
85°	174.3	149.0	90.2	55.4	49.2	47.2	59.5	64.3	62.2	60.8	58.1
87.5°	116.9	102.5	55.4	30.8	26.7	25.3	34.9	38.3	36.9	34.9	32.8
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)