

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: P451995

Luminaire Tested: **GALN-SA2D-830-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-830-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12340 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

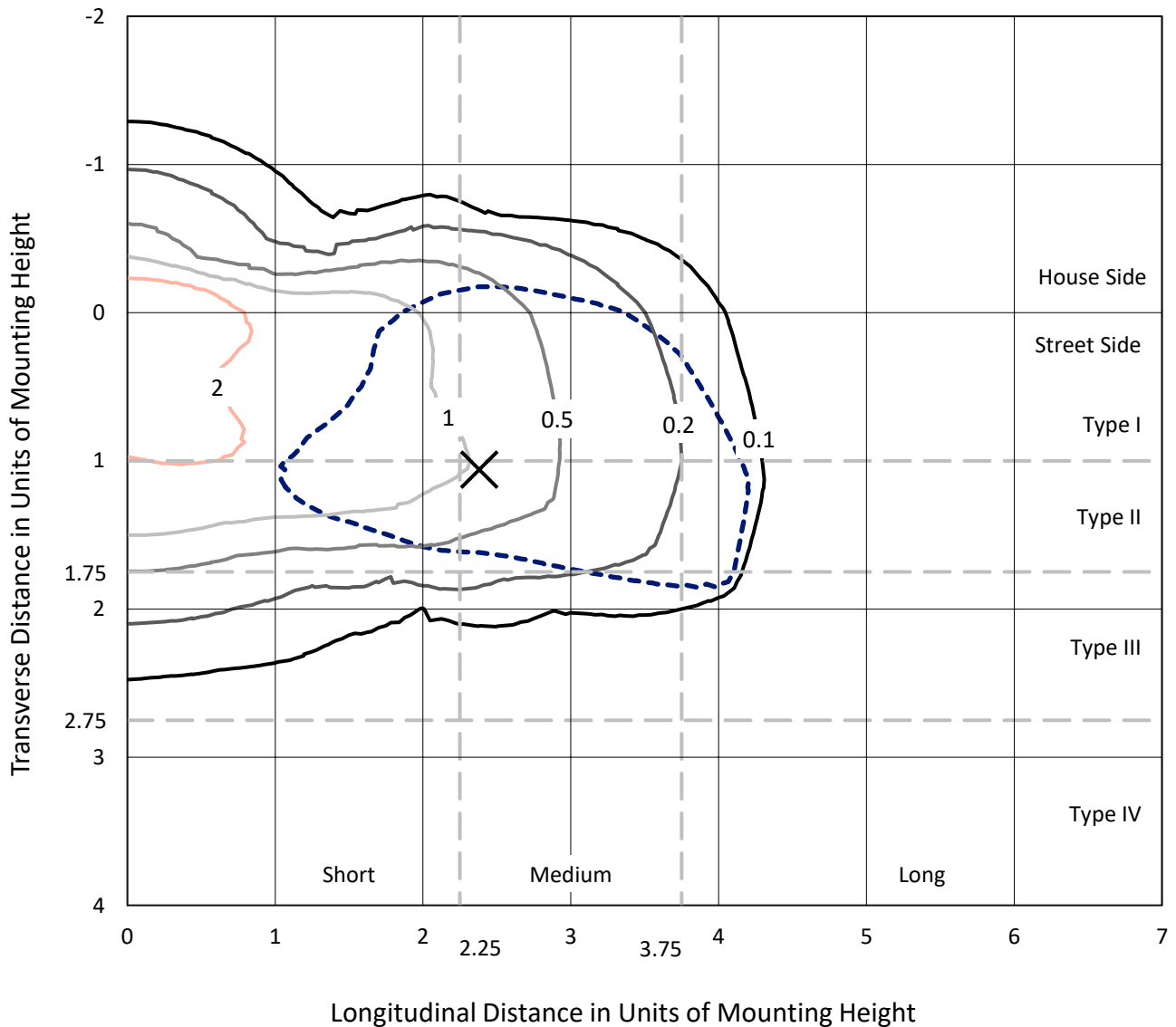
Input Watts (W): 125
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

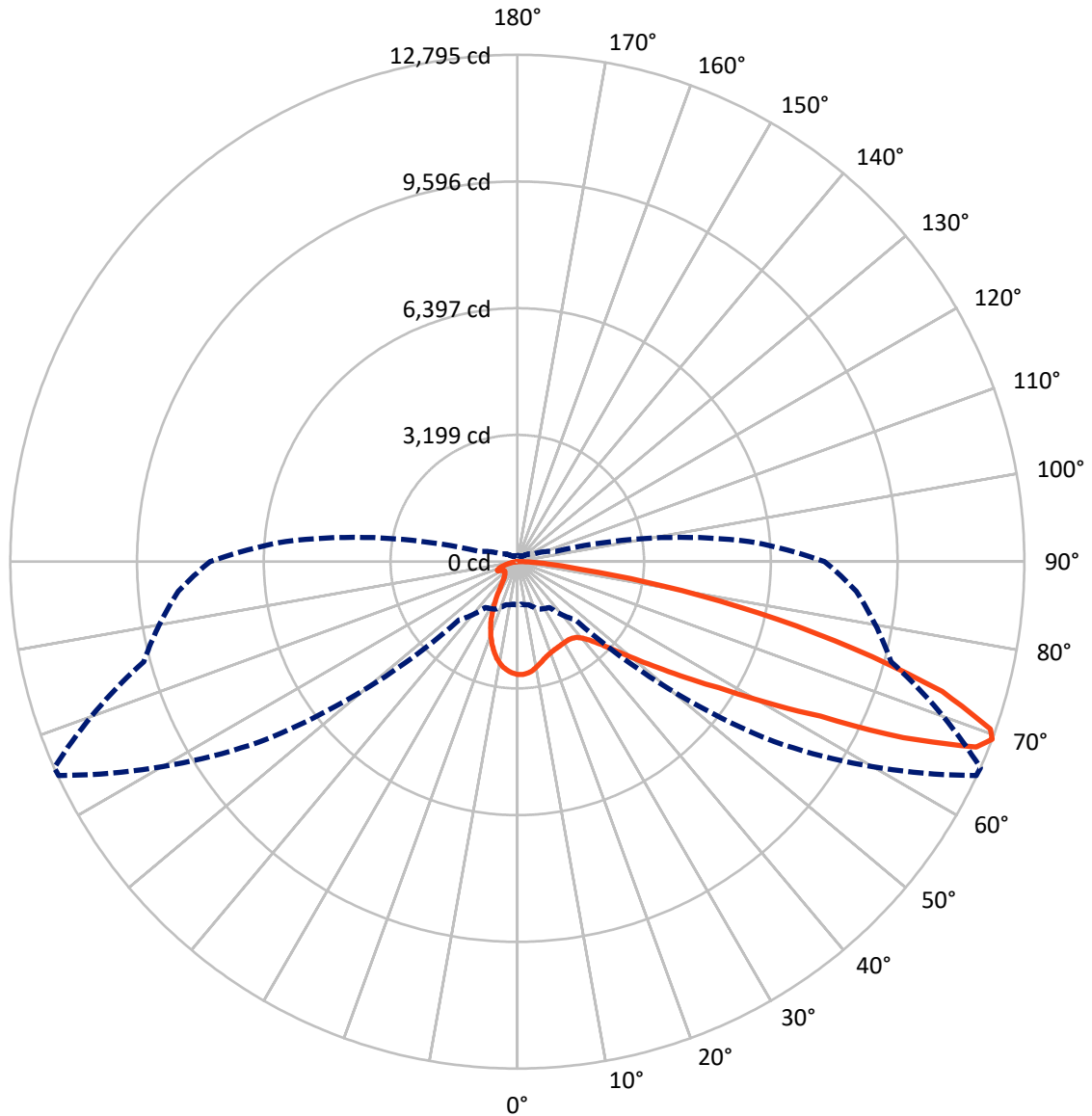
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2320.7	0.0	2320.7
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	10019.3	0.0	10019.3
	% Fixture	81.2	0.0	81.2
Total	Lumens	12340.0	0.0	12340.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.5	2.0
10°-20°	587.0	4.8
20°-30°	799.1	6.5
30°-40°	1073.8	8.7
40°-50°	1603.3	13.0
50°-60°	2550.3	20.7
60°-70°	3136.8	25.4
70°-80°	2040.9	16.5
80°-90°	301.4	2.4
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°	12340.0	100.0
0°-180°	12340.0	100.0

Coefficient of Utilization



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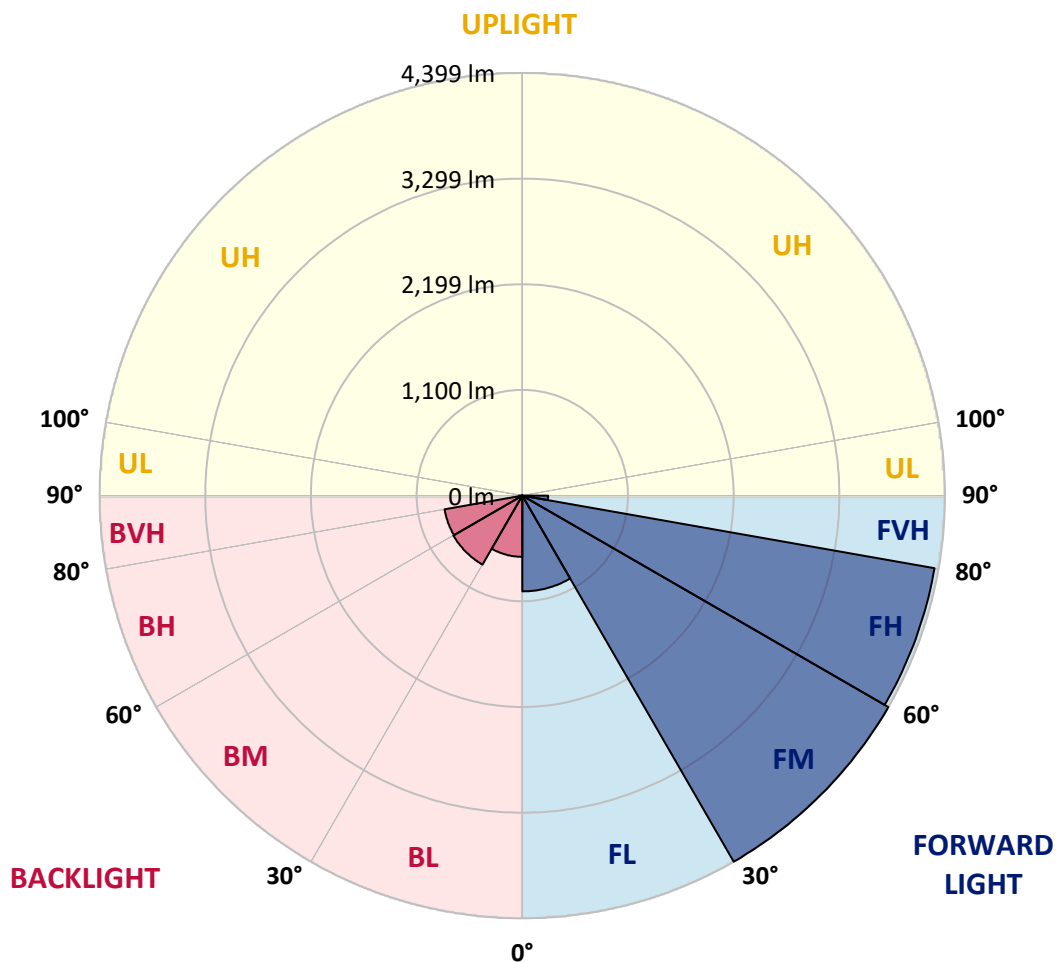
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	996.4	8.1			
FM	(30°-60°)	4398.8	35.6			
FH	(60°-80°)	4356.1	35.3			G2/5000
FVH	(80°-90°)	267.9	2.2			G3/500
BL	(0°-30°)	637.0	5.2	B2/1000		
BM	(30°-60°)	828.6	6.7	B1/1000		
BH	(60°-80°)	821.6	6.7	B2/1000		G2/1000
BVH	(80°-90°)	33.4	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6
2.5°	2749.9	2760.8	2773.1	2786.8	2812.7	2827.1	2837.3	2849.0	2850.3	2856.5	2851.7
5°	2546.9	2559.9	2578.4	2604.3	2643.3	2704.1	2767.0	2818.2	2824.4	2853.1	2861.3
7.5°	2377.4	2385.0	2400.0	2441.7	2497.0	2564.7	2656.3	2760.1	2775.2	2843.5	2867.4
10°	2239.4	2246.9	2264.7	2307.7	2362.4	2447.1	2547.6	2684.3	2696.6	2814.1	2868.8
12.5°	2136.2	2143.0	2162.2	2204.5	2267.4	2346.7	2457.4	2602.3	2620.0	2775.2	2855.8
15°	2057.6	2070.6	2086.3	2121.2	2187.5	2264.0	2371.3	2527.1	2541.4	2734.2	2846.9
17.5°	2024.1	2030.3	2041.2	2073.3	2121.9	2197.0	2305.0	2468.3	2485.4	2705.5	2844.9
20°	2025.5	2031.7	2033.7	2051.5	2086.3	2151.2	2257.9	2421.9	2442.4	2680.2	2848.3
22.5°	2072.0	2072.7	2065.1	2059.0	2072.7	2126.6	2224.4	2387.0	2410.9	2669.2	2851.0
25°	2143.7	2156.0	2145.1	2116.4	2091.1	2117.1	2211.4	2367.9	2390.4	2653.5	2847.6
27.5°	2259.9	2262.0	2253.1	2214.1	2148.5	2129.4	2205.9	2353.5	2372.7	2641.9	2830.5
30°	2415.7	2409.6	2401.4	2358.3	2255.1	2176.5	2217.5	2340.5	2360.4	2624.8	2810.0
32.5°	2573.6	2592.7	2585.2	2534.6	2400.7	2268.1	2255.1	2339.2	2355.6	2611.8	2787.5
35°	2741.0	2749.9	2785.4	2759.4	2622.1	2416.4	2325.5	2360.4	2373.3	2612.5	2771.7
37.5°	2872.2	2896.1	2979.5	3002.0	2872.9	2612.5	2439.6	2420.5	2426.0	2646.0	2777.9
40°	3030.7	3071.7	3179.0	3271.3	3186.5	2867.4	2633.7	2531.9	2538.7	2726.6	2818.2
42.5°	3231.7	3260.4	3404.5	3529.6	3515.9	3204.3	2868.8	2714.3	2717.8	2887.2	2931.0
45°	3466.7	3507.7	3669.7	3857.6	3889.7	3585.6	3208.4	2990.4	2988.4	3136.7	3141.4
47.5°	3767.4	3792.7	3953.3	4158.3	4288.1	4064.7	3620.5	3386.8	3364.9	3500.2	3461.3
50°	4044.2	4083.8	4205.5	4429.6	4752.8	4625.7	4162.4	3900.7	3849.4	3975.8	3910.2
52.5°	4160.4	4202.0	4304.5	4582.7	5151.2	5351.5	4850.6	4513.7	4428.2	4525.3	4501.4
55°	3958.8	4012.7	4108.4	4446.7	5326.2	6188.6	5778.6	5222.3	5160.1	5118.4	5125.3
57.5°	3416.8	3468.1	3597.3	3970.4	5117.1	6796.1	7103.6	6133.2	6000.0	5808.0	5840.8
60°	2600.9	2633.0	2700.0	3113.4	4497.3	6954.0	8608.4	7284.7	7200.0	6494.7	6518.0
62.5°	1847.1	1883.4	1929.8	2136.2	3292.5	6509.1	9786.5	8892.7	8589.9	7206.1	7183.6
65°	1500.0	1475.4	1531.4	1627.8	1931.9	5044.6	10051.7	11124.6	10707.7	8143.0	7830.0
67.5°	1233.5	1207.5	1262.9	1434.4	1469.2	2928.2	9096.3	12573.3	12489.9	9161.9	8486.8
69°	1092.0	1078.4	1126.9	1322.3	1410.5	2079.5	7924.3	12774.9	12794.7	9762.6	8587.9
70°	984.1	989.5	1036.7	1265.6	1383.8	1714.6	6772.9	12496.8	12664.9	10062.6	8478.6
72.5°	724.4	736.0	801.6	1048.3	1358.5	1454.9	4030.5	10915.5	11212.7	10080.4	7756.2
75°	506.4	500.9	559.0	789.3	1283.4	1441.9	2367.2	8441.7	8778.6	8713.0	6517.3
77.5°	331.4	340.3	386.8	557.6	1079.7	1431.0	1543.0	5989.0	6207.7	5827.1	3854.9
80°	233.7	233.0	259.0	380.6	800.9	1374.9	1263.5	3774.9	3719.6	2290.0	1143.3
82.5°	133.9	143.5	173.6	267.9	535.8	1210.2	1162.4	1805.5	1648.3	652.6	386.1
85°	74.5	77.9	103.2	162.0	313.0	911.6	1014.8	821.4	774.9	272.7	166.1
87.5°	23.9	26.0	43.1	82.0	142.1	430.5	574.7	379.3	349.9	98.4	67.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6	2849.6
2.5°	2853.7	2861.9	2840.1	2818.9	2799.8	2773.1	2749.2	2729.4	2715.7	2713.7	2706.8
5°	2863.3	2864.0	2822.3	2766.3	2711.6	2651.5	2589.3	2544.9	2503.2	2479.9	2468.3
7.5°	2870.1	2864.0	2788.8	2697.9	2592.7	2483.4	2374.0	2286.6	2218.9	2192.2	2202.5
10°	2867.4	2848.3	2738.3	2592.7	2439.6	2276.3	2119.1	1996.1	1883.4	1825.3	1826.6
12.5°	2852.4	2820.9	2663.1	2474.5	2249.7	2031.0	1790.4	1624.4	1493.8	1416.6	1392.7
15°	2839.4	2784.7	2574.9	2313.9	2034.4	1722.1	1428.9	1223.9	1114.6	1053.8	1053.1
17.5°	2825.7	2749.9	2478.6	2143.7	1787.0	1385.2	1077.7	921.2	869.9	876.1	865.8
20°	2811.4	2708.9	2378.1	1954.4	1485.6	1033.3	807.1	743.5	757.9	785.9	790.0
22.5°	2795.0	2665.1	2270.2	1746.0	1168.6	777.7	654.7	645.1	682.0	725.7	731.9
25°	2769.7	2610.5	2134.2	1528.0	901.4	626.6	573.3	580.2	616.4	653.3	657.4
27.5°	2734.2	2542.8	1996.8	1256.0	677.2	537.8	524.1	533.0	550.8	573.3	578.8
30°	2686.3	2466.3	1838.9	1021.0	542.6	493.4	487.9	492.7	503.0	512.5	515.3
32.5°	2638.5	2392.5	1679.7	781.8	483.8	464.0	458.5	458.5	458.5	459.9	460.6
35°	2594.1	2322.8	1508.9	608.9	453.1	440.8	433.3	425.1	423.7	418.9	418.9
37.5°	2569.5	2259.2	1327.1	509.8	430.5	421.6	411.4	397.7	390.2	390.9	389.5
40°	2574.3	2217.5	1161.7	453.8	412.1	402.5	386.8	371.1	366.3	366.3	364.9
42.5°	2628.2	2203.9	1003.2	424.4	394.3	383.4	363.6	349.2	346.5	345.8	347.2
45°	2752.6	2237.4	861.0	405.2	379.3	362.9	343.1	330.1	327.3	327.3	326.7
47.5°	2995.2	2346.0	759.2	392.9	368.3	347.2	326.7	313.7	308.9	307.5	307.5
50°	3372.4	2581.8	683.4	382.0	354.7	332.8	311.6	296.6	289.1	288.4	287.7
52.5°	3896.6	2949.4	654.0	373.8	339.6	317.8	294.5	280.2	270.6	268.6	267.2
55°	4509.6	3462.6	694.3	367.7	323.9	300.7	276.8	261.7	252.8	248.7	248.1
57.5°	5219.6	4079.0	847.4	359.5	309.6	282.2	259.0	244.0	234.4	229.6	228.2
60°	5857.2	4712.5	1114.6	354.7	297.3	262.4	238.5	224.8	215.9	211.2	210.5
62.5°	6557.6	5316.6	1433.7	367.7	291.8	243.3	219.4	207.1	199.5	194.8	194.8
65°	7305.9	5921.4	1644.9	411.4	300.0	228.2	198.9	188.6	181.8	178.4	177.7
67.5°	7810.2	6130.5	1355.1	456.5	320.5	211.8	179.0	170.8	166.7	163.3	163.3
69°	7755.6	5866.0	999.8	468.1	326.7	203.6	168.1	162.0	156.5	155.1	153.8
70°	7582.7	5564.7	837.8	460.6	321.9	196.1	161.3	153.8	149.0	147.6	146.9
72.5°	6753.7	4826.0	623.9	400.5	274.0	170.2	142.8	136.0	131.9	129.8	129.8
75°	5611.1	3944.4	487.2	318.4	214.6	143.5	122.3	116.9	113.4	112.1	111.4
77.5°	3144.9	2202.5	349.9	249.4	162.6	116.2	102.5	97.7	94.3	92.9	92.9
80°	876.1	629.4	205.7	164.7	110.7	88.2	81.3	77.9	73.1	69.7	71.8
82.5°	330.1	272.7	117.5	99.1	70.4	58.8	56.7	54.0	51.9	47.2	47.2
85°	160.6	132.6	75.2	52.6	39.0	30.8	29.4	28.0	26.7	23.2	23.9
87.5°	55.4	58.8	32.8	19.1	11.6	7.5	6.2	3.4	3.4	3.4	3.4
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)