

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: P299733

Luminaire Tested: **GLNA-AF-07-LED-E1-5MQ-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299733
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: GLNA-AF-07-LED-E1-5MQ-8030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23696.6 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 226
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

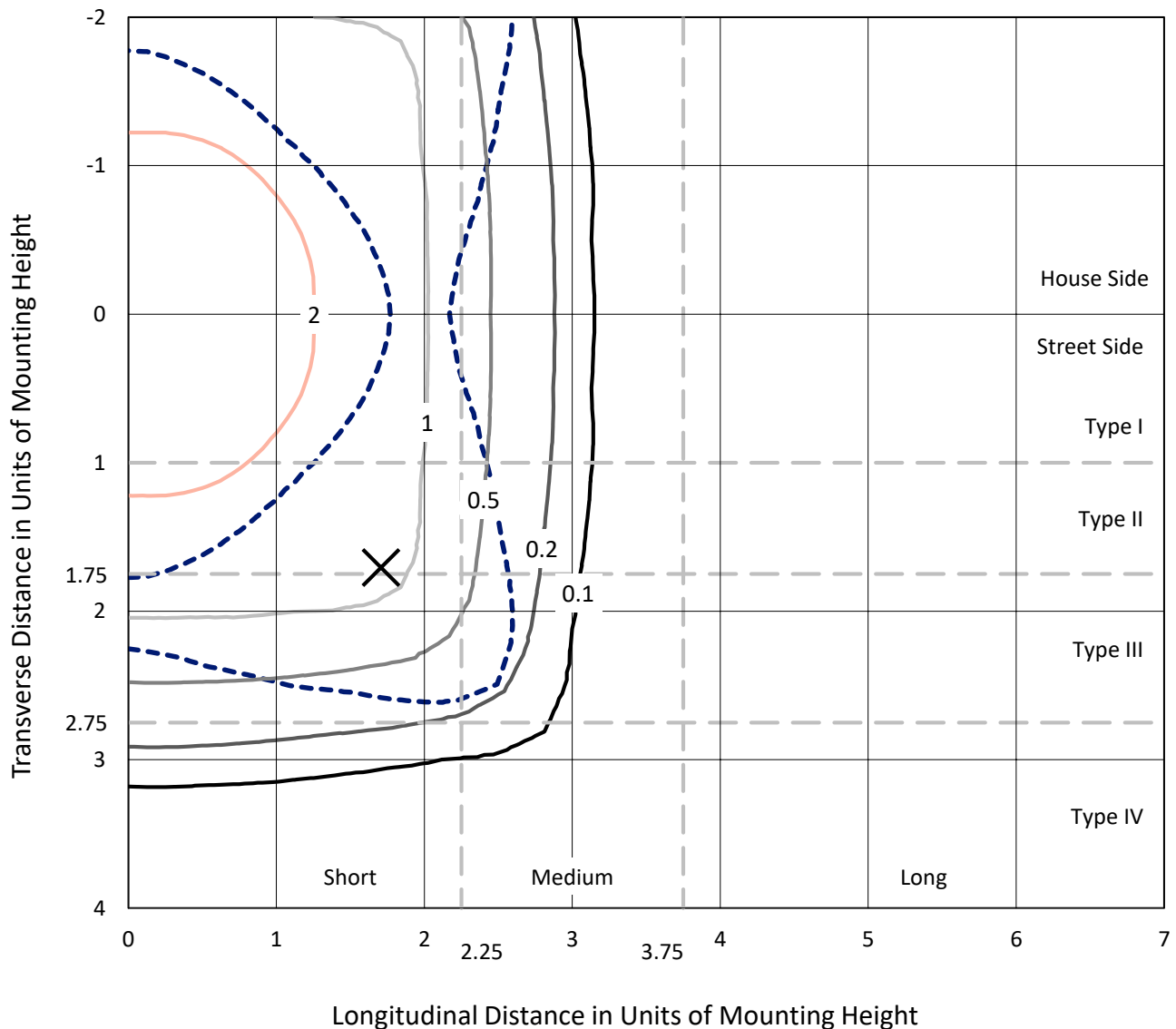


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

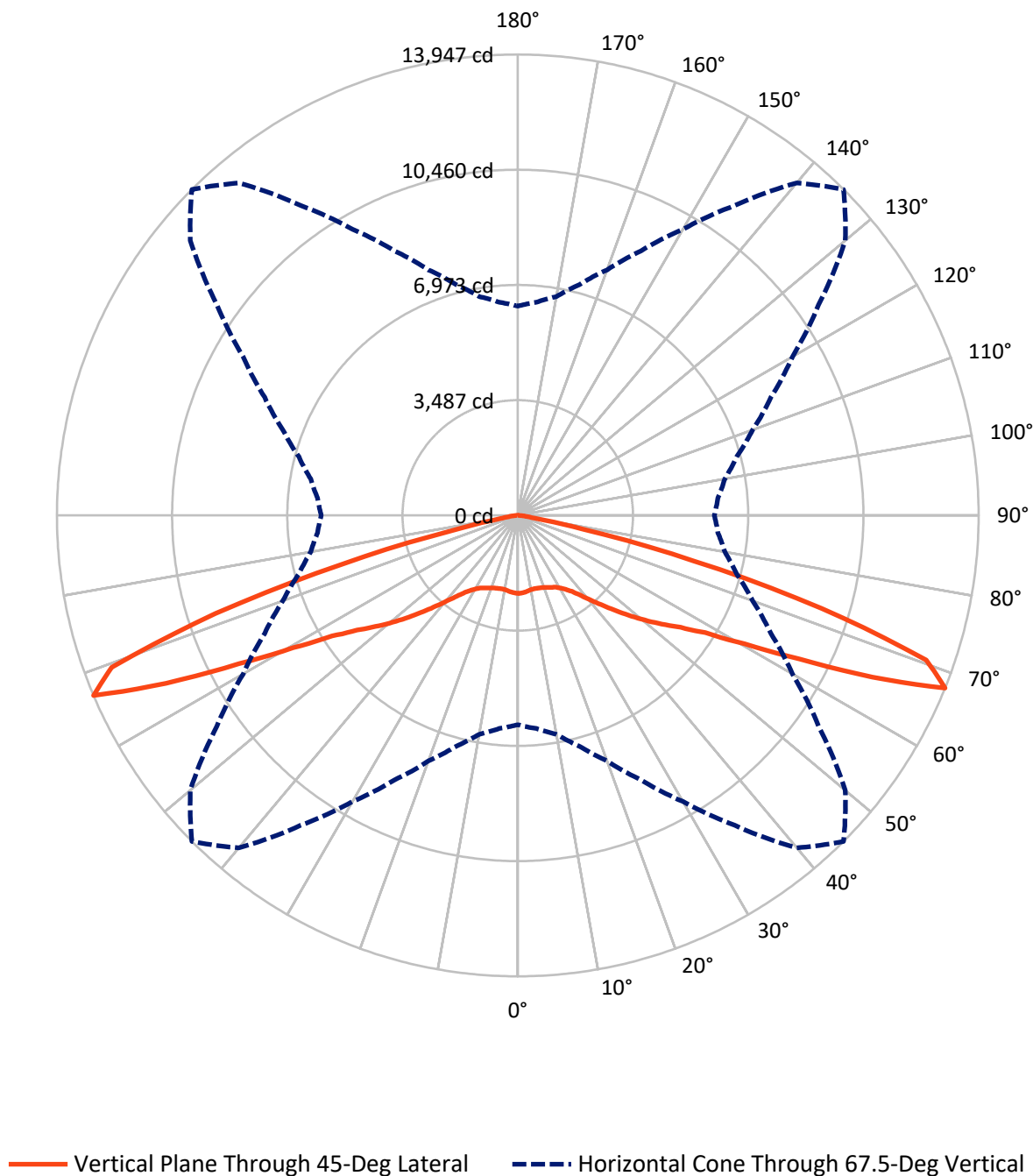


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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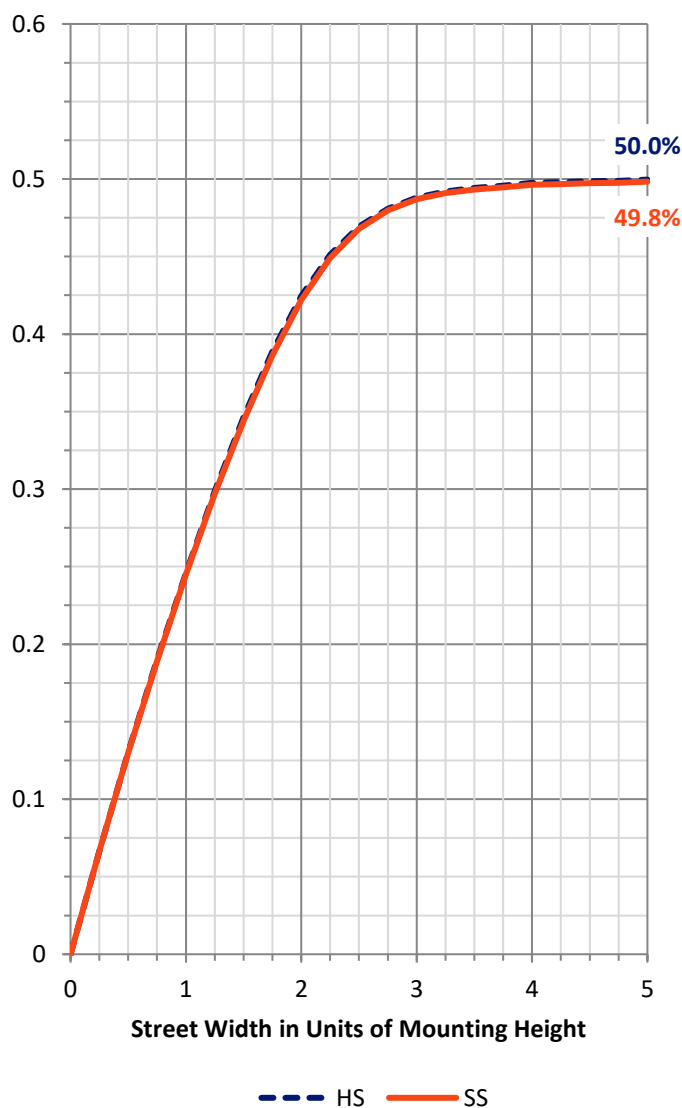
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11848.3	0.0	11848.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11848.3	0.0	11848.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	23696.6	0.0	23696.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.0	0.9
10°-20°	641.4	2.7
20°-30°	1090.3	4.6
30°-40°	1782.3	7.5
40°-50°	3181.8	13.4
50°-60°	5364.5	22.6
60°-70°	8324.9	35.1
70°-80°	2925.0	12.3
80°-90°	165.3	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°	23696.6	100.0
0°-180°	23696.6	100.0

Coefficient of Utilization



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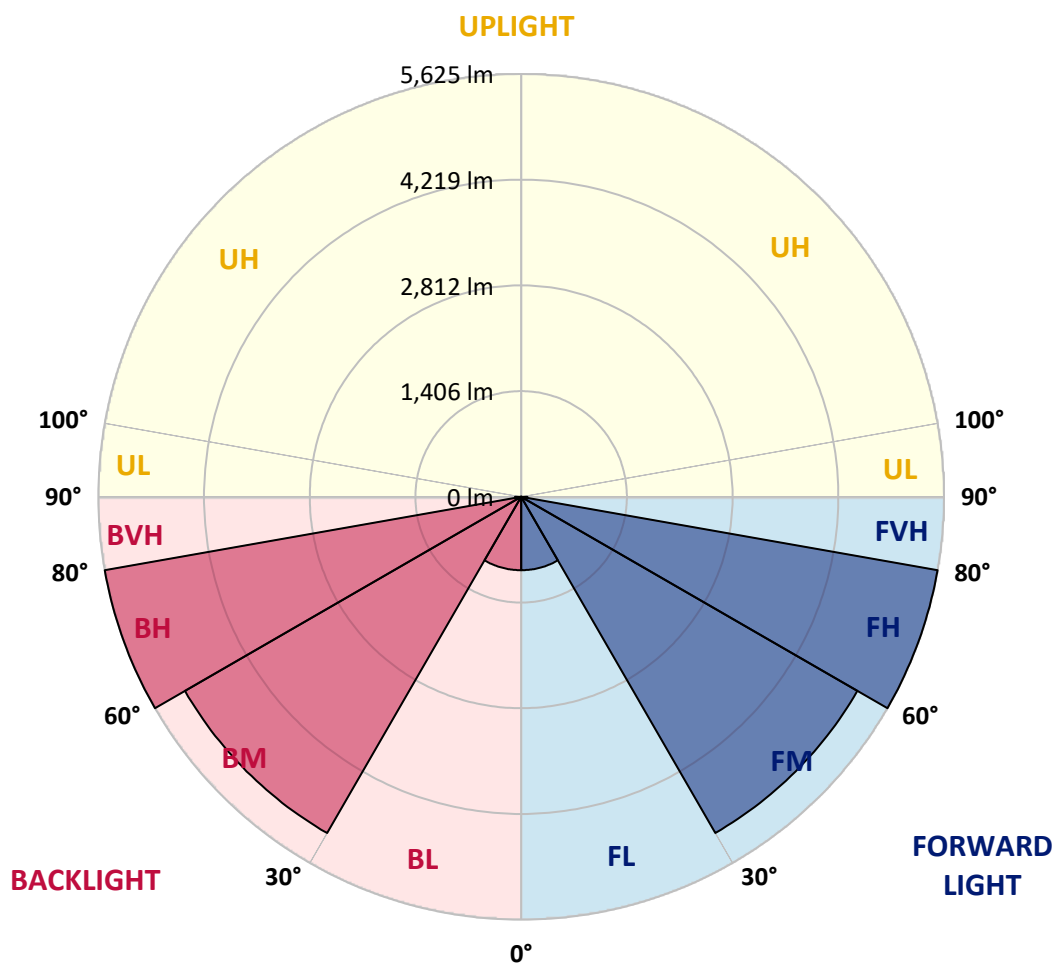
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	976.3	4.1			
FM	(30°-60°)	5164.3	21.8			
FH	(60°-80°)	5625.0	23.7			G3/7500
FVH	(80°-90°)	82.7	0.3			G1/100
BL	(0°-30°)	976.3	4.1	B2/1000		
BM	(30°-60°)	5164.3	21.8	B4/8500		
BH	(60°-80°)	5625.0	23.7	B5		G3/7500
BVH	(80°-90°)	82.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5
2.5°	2352.7	2354.9	2354.9	2354.9	2353.8	2353.8	2351.7	2353.8	2352.7	2349.5	2350.6
5°	2333.1	2335.3	2335.3	2334.2	2337.5	2336.4	2333.1	2335.3	2334.2	2332.0	2333.1
7.5°	2304.8	2308.1	2308.1	2307.0	2310.2	2309.2	2307.0	2308.1	2308.1	2304.8	2304.8
10°	2273.2	2275.4	2275.4	2274.3	2279.7	2279.7	2278.6	2281.9	2283.0	2279.7	2277.6
12.5°	2243.8	2247.0	2247.0	2251.4	2256.8	2259.0	2264.5	2268.8	2273.2	2272.1	2267.7
15°	2226.3	2228.5	2232.9	2238.3	2247.0	2254.7	2263.4	2273.2	2281.9	2284.1	2277.6
17.5°	2215.4	2218.7	2225.2	2232.9	2244.9	2257.9	2271.0	2284.1	2296.1	2300.4	2292.8
20°	2212.2	2214.3	2220.9	2234.0	2250.3	2269.9	2288.4	2303.7	2320.1	2325.5	2320.1
22.5°	2218.7	2223.1	2230.7	2245.9	2267.7	2292.8	2314.6	2335.3	2356.0	2365.8	2358.2
25°	2248.1	2252.5	2262.3	2281.9	2305.9	2332.0	2357.1	2381.1	2399.6	2409.4	2404.0
27.5°	2302.6	2308.1	2320.1	2339.7	2365.8	2394.2	2421.4	2441.0	2456.3	2459.5	2453.0
30°	2384.3	2396.3	2410.5	2432.3	2462.8	2486.8	2514.0	2531.5	2550.0	2550.0	2544.5
32.5°	2511.8	2523.8	2539.1	2559.8	2583.8	2609.9	2633.9	2649.2	2668.8	2669.9	2656.8
35°	2702.5	2708.0	2721.1	2734.2	2755.9	2778.8	2799.5	2809.3	2825.7	2826.8	2814.8
37.5°	2954.3	2955.4	2964.1	2968.4	2988.1	3013.1	3032.7	3039.3	3054.5	3052.4	3040.4
40°	3247.4	3252.9	3256.1	3262.7	3283.4	3307.4	3328.1	3331.3	3347.7	3344.4	3329.1
42.5°	3586.3	3588.5	3607.0	3616.8	3636.5	3648.4	3674.6	3677.9	3697.5	3688.8	3671.3
45°	3966.6	3986.3	4003.7	4023.3	4044.0	4058.2	4078.9	4074.5	4087.6	4074.5	4064.7
47.5°	4366.6	4380.7	4420.0	4450.5	4484.3	4496.3	4525.7	4512.6	4525.7	4507.2	4503.9
50°	4806.8	4831.9	4865.7	4900.6	4936.5	4956.1	4994.3	4977.9	4995.4	4977.9	4968.1
52.5°	5240.5	5247.1	5321.2	5372.4	5422.5	5445.4	5468.3	5460.7	5461.8	5460.7	5450.9
55°	5652.5	5667.7	5741.8	5811.6	5898.8	5963.0	6002.3	5997.9	5988.1	5978.3	5962.0
57.5°	6116.7	6132.0	6217.0	6303.0	6402.2	6493.7	6573.3	6655.0	6686.6	6695.3	6659.4
60°	6744.4	6743.3	6856.6	6961.2	7102.9	7239.1	7413.5	7591.1	7794.9	7889.7	7764.4
62.5°	7383.0	7409.1	7572.6	7757.8	8049.9	8334.3	8655.8	8971.8	9294.4	9557.0	9278.0
65°	7306.7	7406.9	7650.0	8069.5	8608.9	9249.7	9942.8	10676.2	11338.7	11794.2	11283.1
67.5°	6332.5	6475.2	6722.6	7232.6	7907.1	8831.2	9995.1	11445.5	13131.3	13946.5	12936.3
70°	4590.0	4751.3	5010.6	5508.6	6176.6	7055.0	8319.1	10060.5	12292.2	13113.9	12001.3
72.5°	2284.1	2371.3	2531.5	2848.6	3354.2	4066.9	5213.3	6887.1	8861.7	9615.8	8599.1
75°	775.9	816.2	843.5	947.0	1107.2	1387.2	1957.2	3010.9	4593.2	5506.4	4527.9
77.5°	447.9	449.0	467.5	486.0	513.3	543.8	620.1	814.0	1407.9	1999.7	1457.0
80°	289.9	288.8	304.0	318.2	336.7	352.0	356.3	377.0	434.8	515.4	461.0
82.5°	150.4	168.9	202.7	221.2	256.1	262.6	253.9	246.3	260.4	270.3	276.8
85°	82.8	71.9	107.9	139.5	154.7	156.9	156.9	148.2	153.7	150.4	163.5
87.5°	38.1	34.9	42.5	68.7	73.0	62.1	65.4	57.8	41.4	40.3	45.8
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°	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5	2361.5
2.5°	2350.6	2351.7	2351.7	2354.9	2356.0	2358.2	2360.4	2361.5
5°	2332.0	2335.3	2333.1	2336.4	2336.4	2338.6	2338.6	2339.7
7.5°	2304.8	2308.1	2308.1	2308.1	2307.0	2310.2	2310.2	2310.2
10°	2276.5	2278.6	2277.6	2275.4	2273.2	2276.5	2275.4	2274.3
12.5°	2267.7	2262.3	2257.9	2255.8	2251.4	2252.5	2249.2	2249.2
15°	2273.2	2263.4	2255.8	2252.5	2248.1	2245.9	2243.8	2244.9
17.5°	2287.4	2275.4	2265.6	2260.1	2254.7	2251.4	2247.0	2248.1
20°	2312.4	2298.3	2284.1	2273.2	2263.4	2257.9	2254.7	2253.6
22.5°	2349.5	2328.8	2308.1	2291.7	2278.6	2271.0	2267.7	2265.6
25°	2392.0	2369.1	2345.1	2326.6	2313.5	2303.7	2297.2	2297.2
27.5°	2445.4	2426.8	2405.1	2383.3	2371.3	2361.5	2357.1	2354.9
30°	2534.7	2517.3	2499.9	2479.2	2463.9	2454.1	2446.5	2439.9
32.5°	2649.2	2635.0	2620.8	2605.6	2591.4	2578.3	2566.3	2560.9
35°	2810.4	2799.5	2789.7	2772.3	2766.8	2759.2	2752.7	2747.2
37.5°	3032.7	3028.4	3028.4	3009.9	3005.5	3002.2	2995.7	2996.8
40°	3324.8	3329.1	3323.7	3317.2	3313.9	3305.2	3305.2	3312.8
42.5°	3670.2	3673.5	3685.5	3674.6	3686.6	3675.7	3669.1	3674.6
45°	4071.3	4083.2	4107.2	4096.3	4104.0	4085.4	4062.5	4063.6
47.5°	4521.3	4532.2	4542.0	4534.4	4535.5	4505.0	4474.5	4466.8
50°	4988.8	4993.2	4998.6	4987.7	4989.9	4956.1	4921.3	4922.3
52.5°	5450.9	5471.6	5493.4	5463.9	5457.4	5419.3	5370.2	5350.6
55°	5979.4	6008.8	5983.8	5932.5	5881.3	5830.1	5765.8	5754.9
57.5°	6631.1	6580.9	6502.5	6405.5	6334.6	6262.7	6197.3	6170.1
60°	7537.7	7349.2	7207.5	7063.7	6973.2	6885.0	6798.9	6785.8
62.5°	8819.2	8493.4	8211.2	7913.7	7670.7	7481.1	7329.6	7287.1
65°	10425.5	9655.1	8987.1	8363.7	7822.1	7413.5	7156.3	7043.0
67.5°	11116.4	9595.1	8449.8	7565.0	6856.6	6361.9	6084.0	5945.6
70°	9768.4	7957.3	6711.7	5825.7	5180.6	4653.2	4401.5	4253.2
72.5°	6720.4	5061.8	4002.6	3267.0	2751.6	2310.2	2135.9	2122.8
75°	3017.5	1998.6	1377.4	1061.4	893.6	777.0	741.0	713.8
77.5°	844.5	624.4	556.9	520.9	486.0	445.7	430.4	433.7
80°	410.8	387.9	372.7	349.8	318.2	284.4	269.2	275.7
82.5°	272.4	269.2	279.0	262.6	216.9	184.2	154.7	141.7
85°	165.6	167.8	171.1	172.2	146.0	102.4	69.7	78.5
87.5°	65.4	75.2	81.7	85.0	79.6	49.0	39.2	40.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)