

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: STREETWORKS

Report Number: P301879

Luminaire Tested: **GAA-AF-04-LED-U-SL4-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301879  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-04-LED-U-SL4-7030-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13836.6 lumens  
Efficiency: N/A  
Efficacy: 80.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 171  
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: 28.75 FT

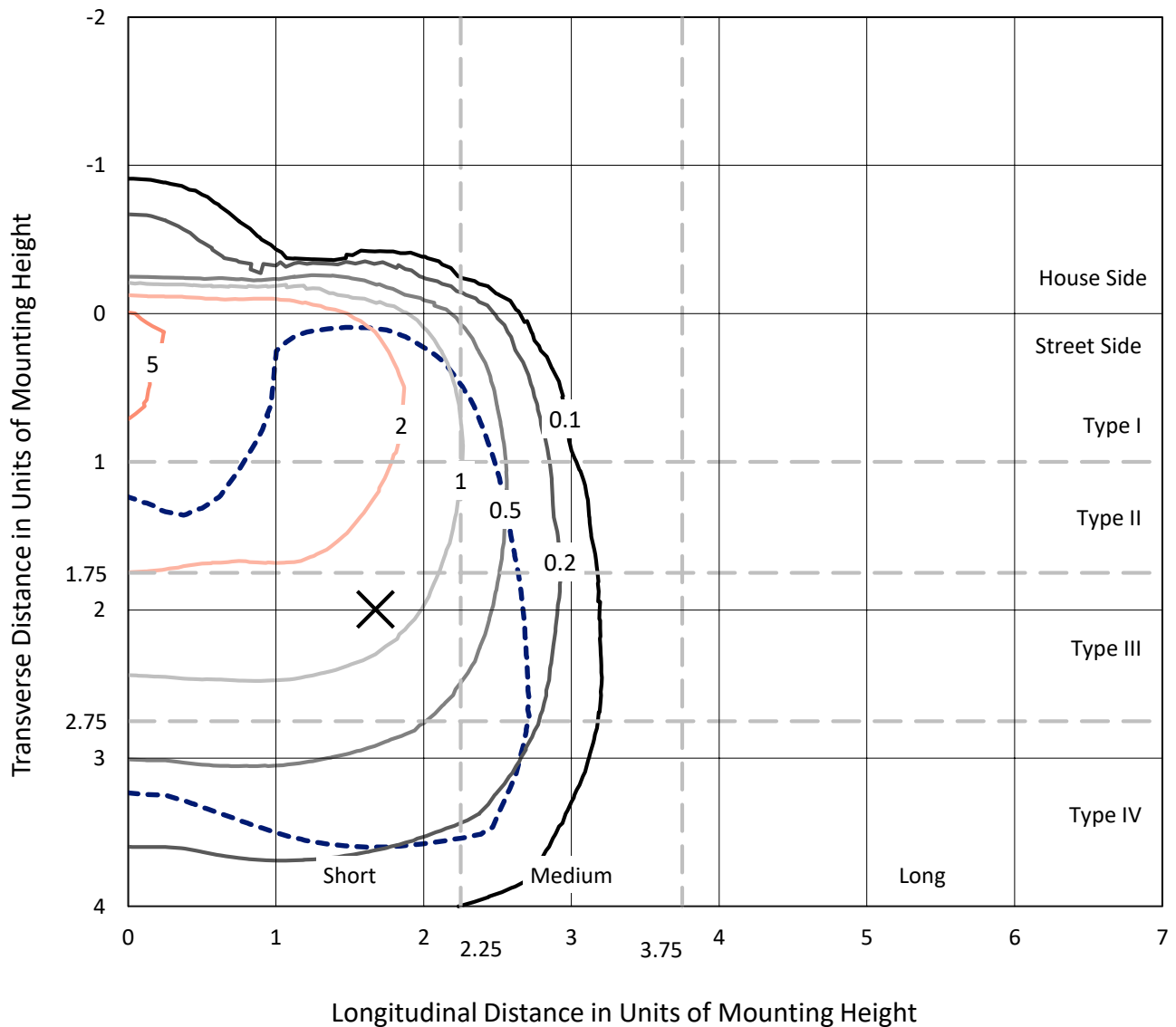


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

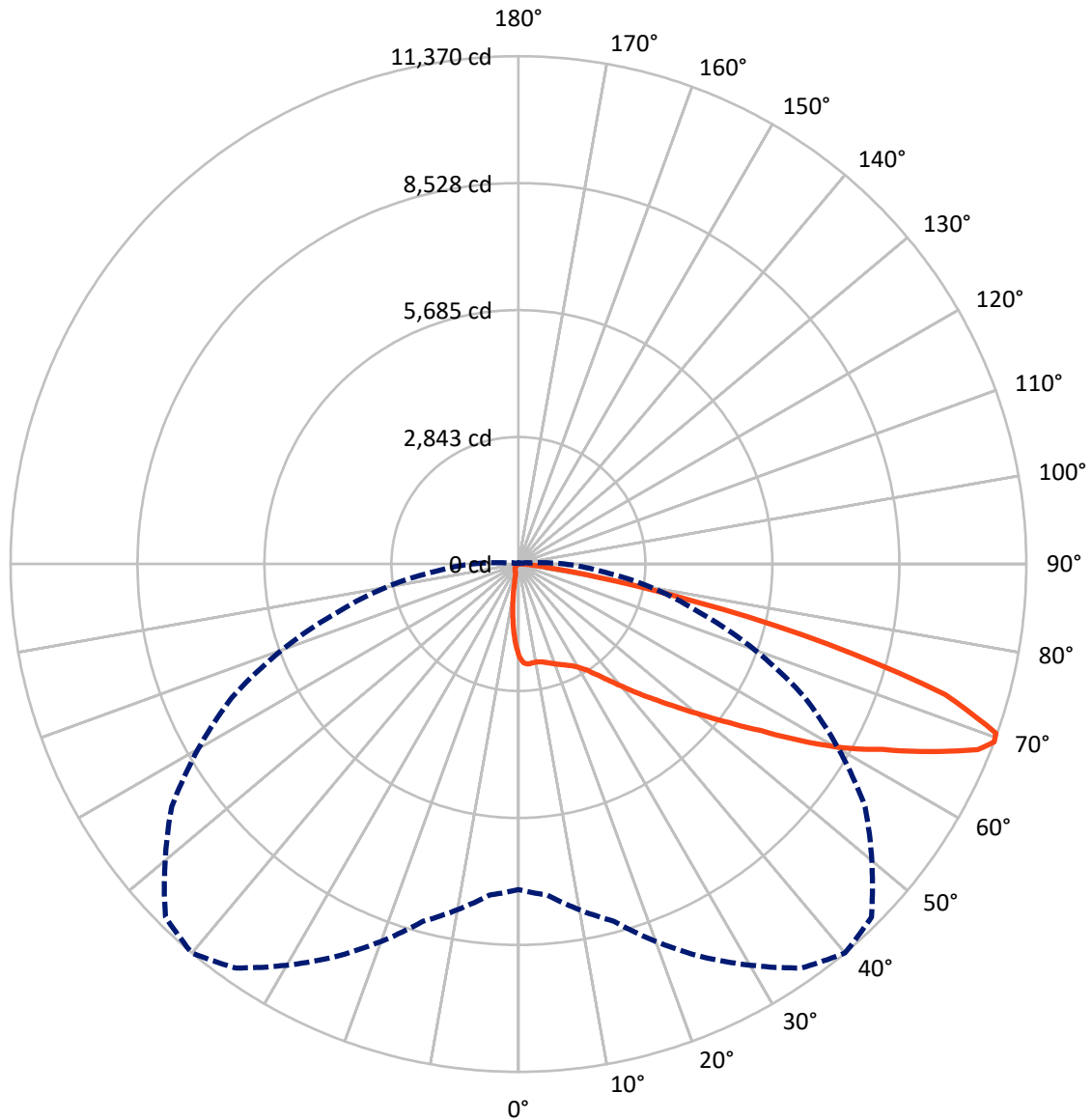


Based on 20 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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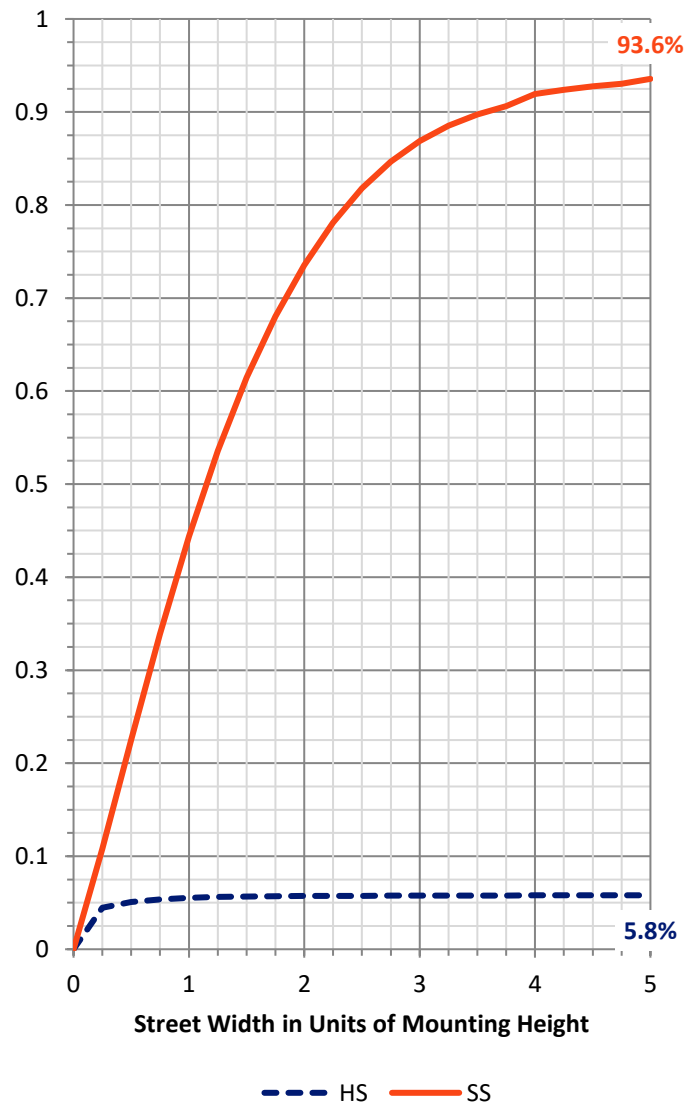
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	809.5	0.0	809.5
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	13027.1	0.0	13027.1
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	13836.6	0.0	13836.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.6	1.2
10°-20°	412.2	3.0
20°-30°	694.3	5.0
30°-40°	1136.6	8.2
40°-50°	1967.9	14.2
50°-60°	3099.6	22.4
60°-70°	4048.0	29.3
70°-80°	2084.9	15.1
80°-90°	225.5	1.6
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°	13836.6	100.0
0°-180°	13836.6	100.0

**Coefficient of Utilization**



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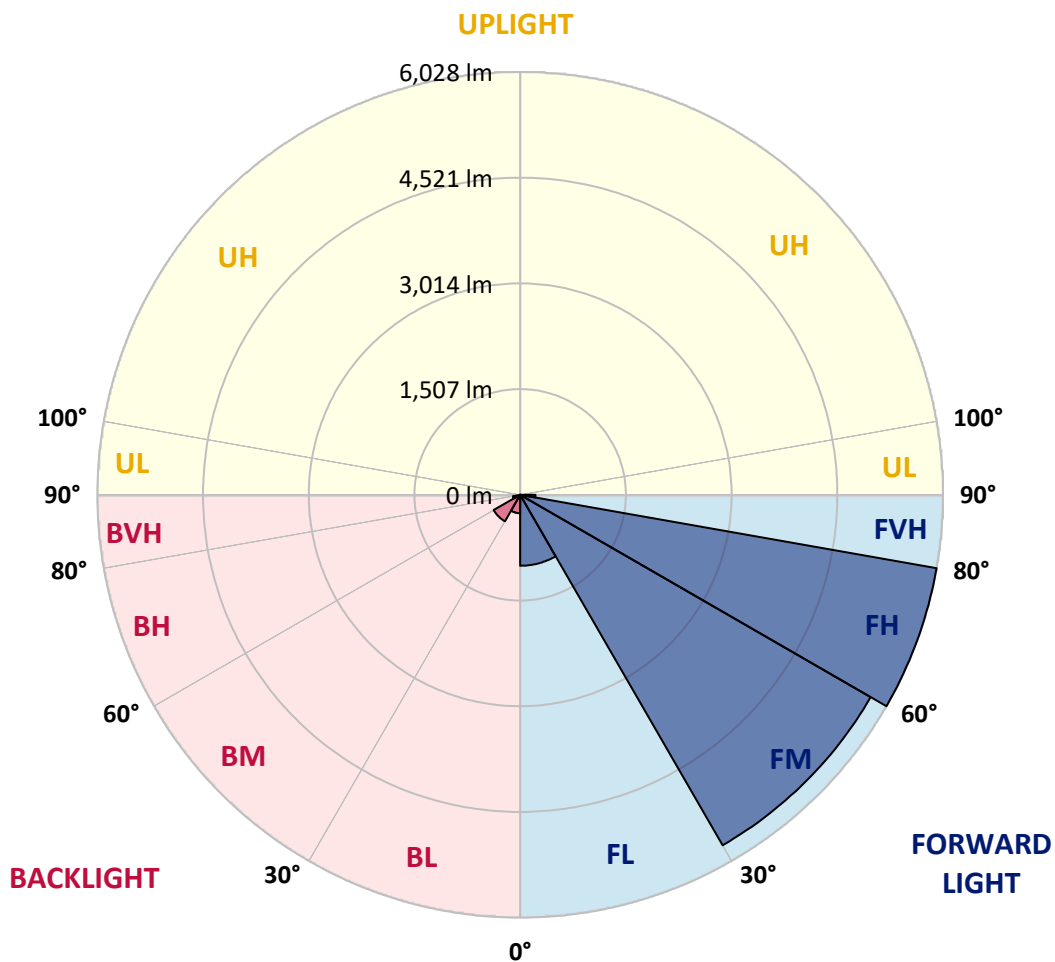
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1011.9	7.3			
FM	(30°-60°)	5769.0	41.7			
FH	(60°-80°)	6027.8	43.6			G3/7500
FVH	(80°-90°)	218.4	1.6			G2/225
BL	(0°-30°)	262.2	1.9	B1/500		
BM	(30°-60°)	435.1	3.1	B1/1000		
BH	(60°-80°)	105.1	0.8	B0/110		G0/110
BVH	(80°-90°)	7.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3
2.5°	2269.9	2257.5	2250.1	2240.2	2227.9	2217.2	2213.0	2182.6	2153.7	2114.2	2068.9
5°	2311.9	2307.8	2294.6	2281.4	2266.6	2250.1	2241.0	2204.8	2163.6	2106.0	2026.9
7.5°	2316.0	2311.1	2294.6	2276.5	2255.9	2236.1	2220.5	2184.2	2146.3	2087.9	1991.5
10°	2309.4	2303.6	2291.3	2271.5	2246.0	2227.0	2211.4	2176.8	2144.7	2092.0	1984.9
12.5°	2302.0	2296.2	2290.5	2280.6	2258.3	2245.2	2232.0	2199.0	2170.2	2125.7	2008.8
15°	2309.4	2306.1	2312.7	2308.6	2296.2	2284.7	2271.5	2241.9	2215.5	2178.5	2052.4
17.5°	2340.7	2340.7	2361.3	2363.8	2352.2	2335.8	2316.8	2287.2	2264.9	2233.6	2104.3
20°	2414.0	2411.5	2437.9	2442.8	2414.8	2389.3	2361.3	2325.1	2307.8	2288.0	2155.4
22.5°	2540.0	2528.5	2544.1	2539.2	2484.0	2444.5	2409.9	2365.4	2356.4	2347.3	2212.2
25°	2703.9	2697.3	2708.0	2659.4	2562.3	2508.7	2467.5	2417.3	2417.3	2426.4	2276.5
27.5°	2941.9	2917.2	2881.0	2795.3	2649.6	2581.2	2536.7	2483.2	2497.2	2531.0	2361.3
30°	3185.7	3158.5	3075.4	2943.6	2755.8	2684.1	2632.3	2576.3	2609.2	2671.0	2475.0
32.5°	3426.2	3395.7	3278.0	3111.6	2908.2	2836.5	2786.3	2724.5	2779.7	2883.5	2641.3
35°	3659.3	3632.1	3496.2	3300.2	3110.8	3051.5	3005.4	2951.8	3022.7	3167.6	2876.1
37.5°	3921.2	3891.6	3726.0	3513.5	3357.0	3314.2	3280.4	3226.9	3350.5	3562.9	3203.0
40°	4243.2	4193.0	3969.8	3758.1	3642.0	3621.4	3598.4	3590.9	3782.8	4076.9	3638.7
42.5°	4612.2	4529.9	4225.1	4015.9	3955.0	3969.8	3964.0	3997.0	4324.0	4716.0	4169.1
45°	4981.2	4875.0	4509.3	4291.0	4299.3	4351.1	4383.3	4515.0	5001.8	5449.0	4739.9
47.5°	5294.2	5189.6	4781.9	4588.3	4687.2	4789.3	4876.6	5126.2	5698.6	6170.5	5183.8
50°	5561.8	5463.0	5071.0	4915.3	5137.7	5302.4	5444.1	5813.9	6448.1	6719.8	5495.1
52.5°	5780.9	5715.0	5370.8	5290.1	5652.4	5893.8	6101.3	6544.4	7111.9	7166.2	5737.3
55°	5994.2	5947.3	5692.8	5735.6	6257.0	6585.6	6848.3	7319.4	7683.5	7538.5	5969.5
57.5°	6239.7	6196.9	6060.1	6300.6	7051.8	7465.2	7751.8	8006.3	8186.7	7919.0	6188.6
60°	6490.1	6465.3	6468.6	6928.2	7964.3	8361.3	8519.4	8585.3	8680.9	8277.3	6201.0
62.5°	6728.9	6775.9	6935.6	7626.6	8838.2	9142.9	9222.8	9287.9	9175.9	8334.1	5729.0
65°	7133.3	7209.9	7591.2	8561.4	9799.3	10125.5	10207.8	9984.6	9254.1	7599.5	4660.0
67.5°	7331.0	7471.0	8151.3	9432.8	10731.7	11094.0	11063.6	10029.9	8304.5	5794.9	2990.5
69°	7289.8	7438.9	8280.6	9699.7	11041.3	11370.0	11176.4	9475.6	7074.8	4197.9	1835.8
70°	7126.7	7277.4	8213.9	9689.8	11080.9	11341.1	10967.2	8791.2	5981.9	3069.6	1148.1
72.5°	5951.4	6081.5	7292.3	8758.3	10207.8	9996.2	9175.0	6090.6	2914.8	836.0	258.6
75°	3663.4	3735.9	5232.4	6598.0	7709.8	7166.2	6112.8	3030.1	868.9	236.4	143.3
77.5°	1935.5	1968.4	2864.5	3889.1	4887.3	4043.9	3133.0	1181.9	400.3	148.3	103.8
80°	1144.0	1168.7	1542.6	1778.2	2115.0	1766.6	1252.7	725.6	286.6	93.1	92.2
82.5°	654.8	670.4	1118.5	988.3	833.5	711.6	623.5	687.7	172.1	62.6	95.5
85°	240.5	243.8	629.2	752.0	495.8	294.9	309.7	569.9	46.1	39.5	74.9
87.5°	112.0	109.5	323.7	460.4	289.9	187.0	241.3	125.2	18.1	25.5	20.6
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°	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3	2067.3
2.5°	2042.6	2012.1	1956.9	1900.1	1842.4	1797.9	1754.3	1719.7	1708.2	1686.8	1688.4
5°	1980.0	1924.0	1808.7	1691.7	1569.8	1469.3	1374.6	1298.0	1260.9	1223.1	1223.1
7.5°	1925.6	1844.1	1663.7	1473.4	1276.6	1111.1	962.0	850.0	788.2	738.8	738.0
10°	1905.0	1794.6	1542.6	1270.0	995.7	770.1	593.0	479.3	420.9	383.0	381.3
12.5°	1914.1	1777.4	1449.6	1082.2	738.0	495.0	343.4	270.1	245.4	233.9	233.9
15°	1940.4	1772.4	1356.5	898.6	521.3	309.7	228.1	208.4	206.7	206.7	206.7
17.5°	1972.5	1774.1	1260.9	719.8	355.0	221.6	196.8	194.4	196.0	196.0	196.0
20°	2005.5	1774.9	1158.0	554.3	250.4	192.7	185.3	184.5	186.1	186.1	187.0
22.5°	2045.9	1779.0	1055.0	414.3	206.7	182.0	176.3	176.3	177.1	177.1	176.3
25°	2092.0	1787.2	948.0	307.2	188.6	174.6	169.7	168.8	169.7	168.8	168.0
27.5°	2149.6	1798.8	828.6	240.5	180.4	167.2	163.1	163.1	162.3	161.4	160.6
30°	2222.1	1811.9	694.3	204.3	172.1	160.6	156.5	155.7	154.8	153.2	153.2
32.5°	2332.5	1840.8	561.7	185.3	163.1	151.5	148.3	148.3	146.6	145.0	144.1
35°	2502.1	1897.6	443.1	173.8	153.2	141.7	137.5	137.5	135.9	135.1	134.2
37.5°	2736.9	1984.1	344.3	163.1	143.3	131.0	126.8	126.0	124.4	122.7	121.9
40°	3049.0	2091.1	271.0	153.2	133.4	120.2	117.0	115.3	112.0	109.5	109.5
42.5°	3441.0	2213.0	219.9	142.5	121.9	110.4	107.9	105.4	99.7	97.2	96.4
45°	3851.2	2322.6	186.1	130.1	110.4	100.5	98.8	94.7	87.3	84.8	84.8
47.5°	4146.9	2348.1	163.9	118.6	99.7	89.8	89.0	81.5	74.9	73.3	72.5
50°	4331.4	2297.9	145.8	107.1	89.8	79.9	77.4	68.4	64.2	62.6	61.8
52.5°	4455.7	2208.1	131.0	97.2	80.7	70.8	65.1	58.5	55.2	53.5	53.5
55°	4555.4	2081.3	116.1	88.1	73.3	63.4	55.2	50.2	46.9	45.3	45.3
57.5°	4583.4	1909.1	101.3	80.7	65.9	56.0	46.9	43.7	39.5	38.7	38.7
60°	4380.0	1598.6	89.8	71.7	59.3	48.6	41.2	37.1	32.9	32.1	31.3
62.5°	3843.8	1237.1	79.1	63.4	51.9	42.0	35.4	30.5	27.2	27.2	27.2
65°	2932.1	829.4	69.2	55.2	45.3	35.4	30.5	24.7	23.1	23.1	23.9
67.5°	1755.1	451.3	59.3	46.9	38.7	29.7	25.5	21.4	20.6	21.4	21.4
69°	1028.7	265.2	53.5	42.0	33.8	26.4	22.2	18.9	20.6	21.4	21.4
70°	635.0	178.7	49.4	37.9	30.5	23.9	20.6	18.1	19.8	20.6	20.6
72.5°	177.1	92.2	39.5	29.7	24.7	19.8	16.5	16.5	18.9	19.8	19.8
75°	115.3	68.4	30.5	22.2	18.9	15.6	14.0	15.6	18.1	18.9	18.9
77.5°	95.5	56.0	24.7	18.1	15.6	14.8	13.2	14.0	16.5	17.3	17.3
80°	87.3	39.5	19.8	16.5	14.0	13.2	12.4	11.5	14.8	15.6	15.6
82.5°	83.2	31.3	17.3	14.8	13.2	11.5	10.7	11.5	13.2	14.0	14.8
85°	51.9	20.6	15.6	14.0	11.5	10.7	10.7	10.7	12.4	13.2	13.2
87.5°	18.9	16.5	14.0	11.5	9.9	9.9	9.9	9.9	10.7	12.4	12.4
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)