

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: P265618

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265618  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-140-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13114.6 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 143  
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

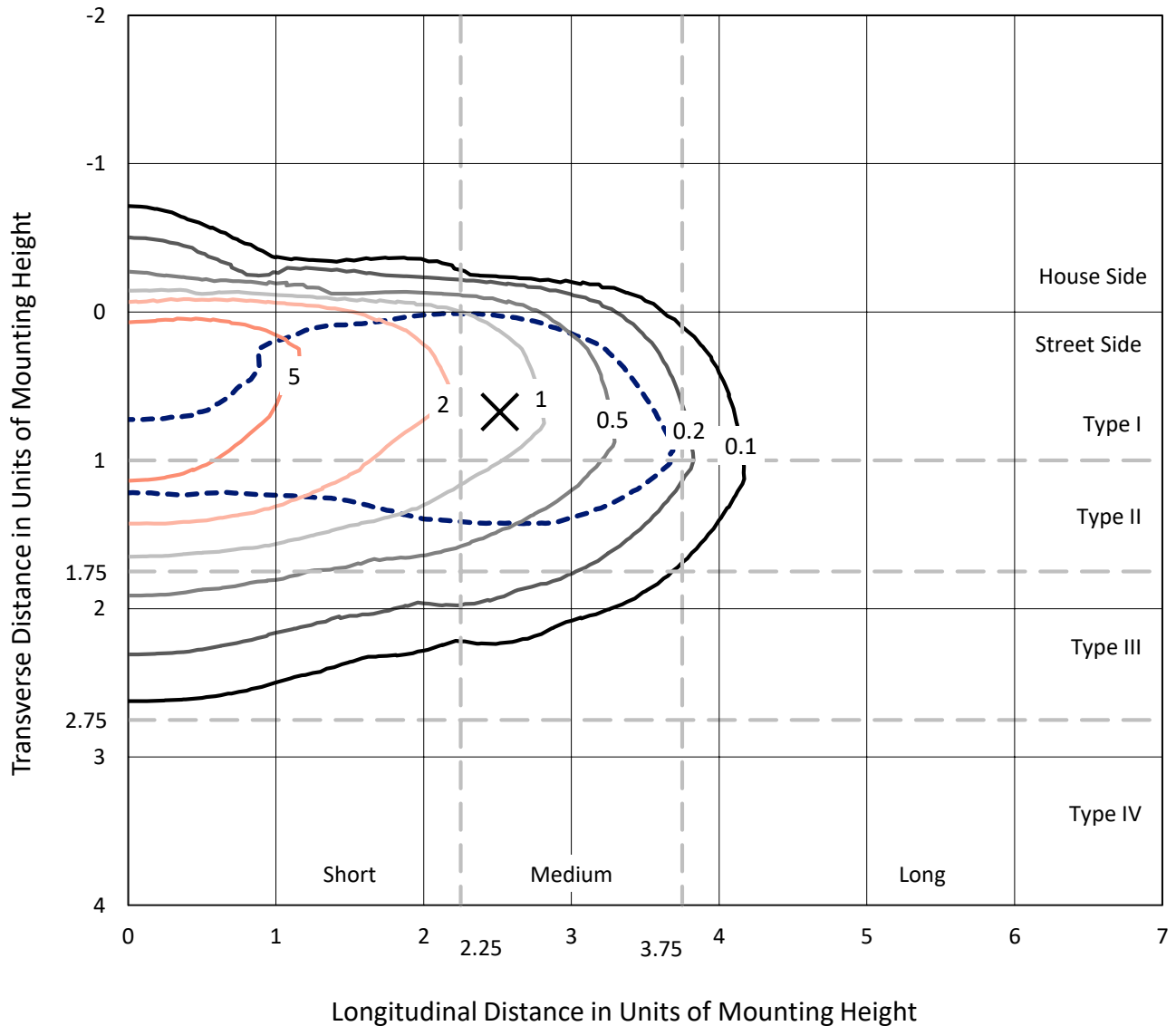


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

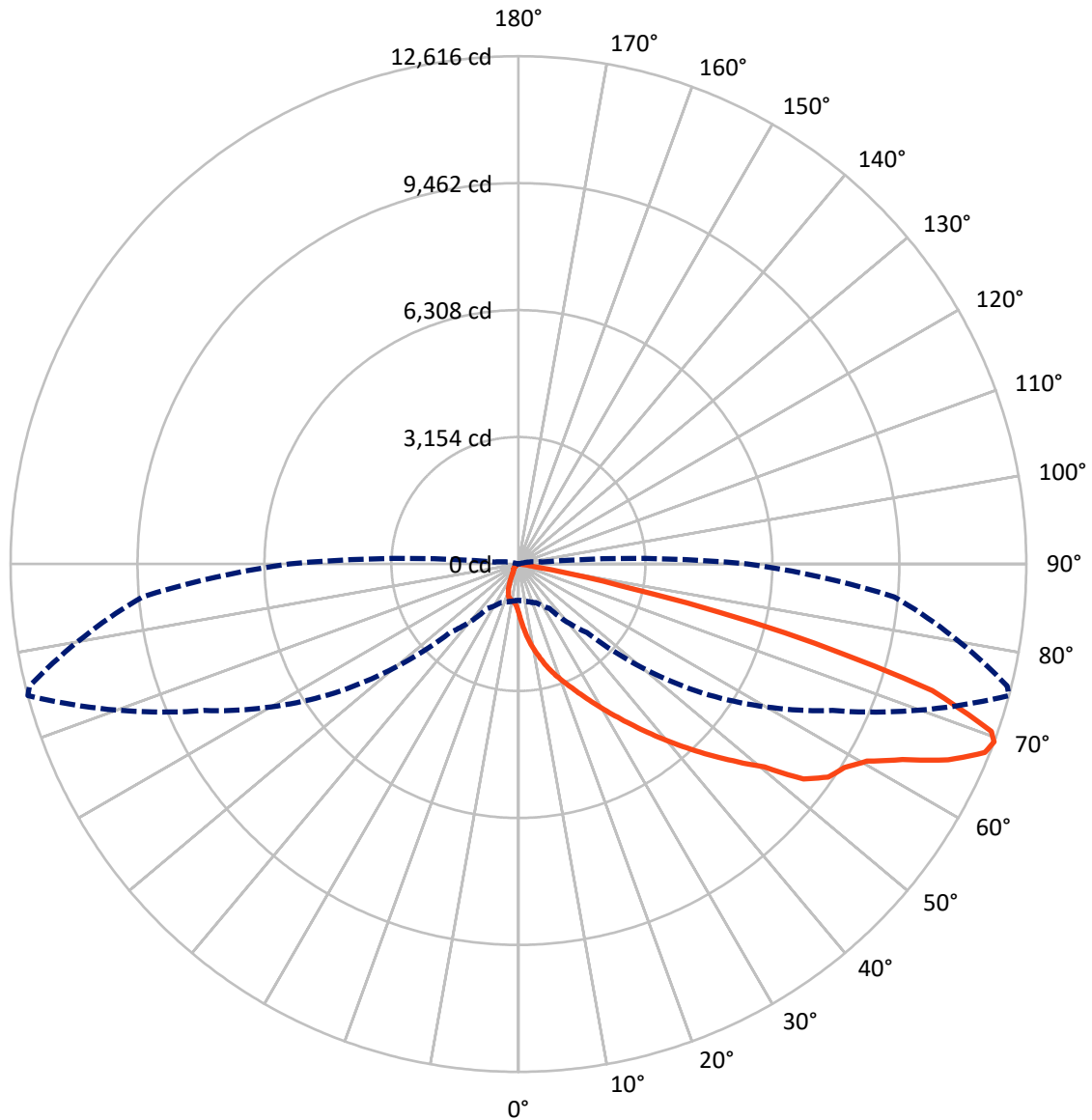


Based on 20 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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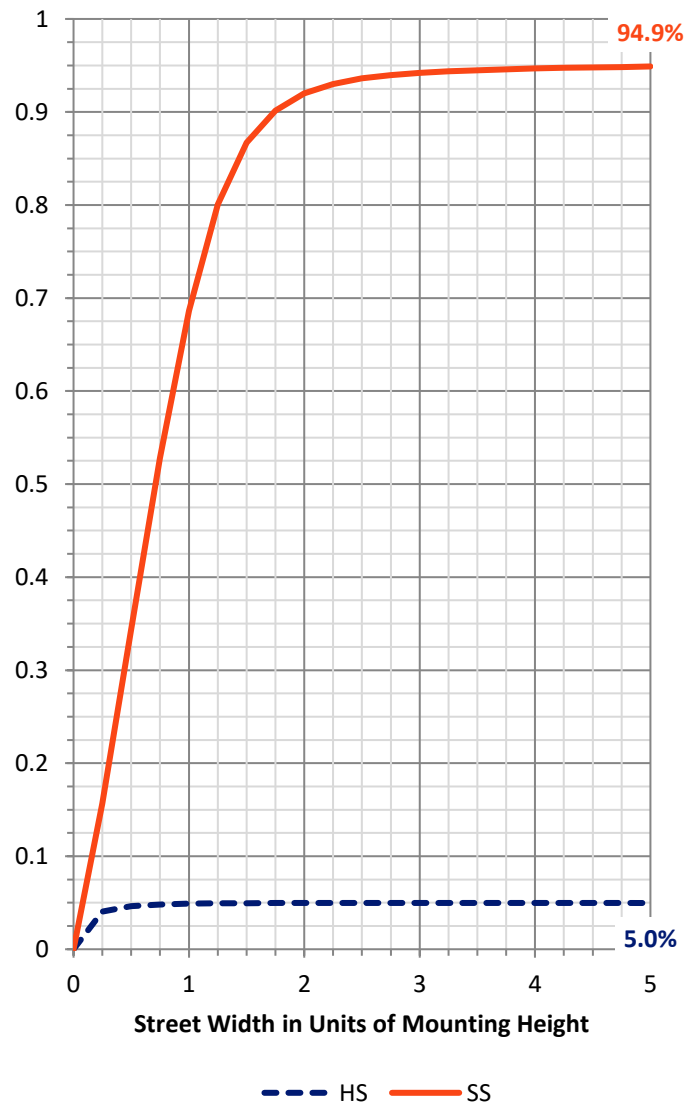
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	654.4	0.0	654.4
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	12460.2	0.0	12460.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	13114.6	0.0	13114.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.3	1.1
10°-20°	508.7	3.9
20°-30°	971.2	7.4
30°-40°	1742.1	13.3
40°-50°	2669.0	20.4
50°-60°	3102.1	23.7
60°-70°	2746.9	20.9
70°-80°	1184.9	9.0
80°-90°	47.5	0.4
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°	13114.6	100.0
0°-180°	13114.6	100.0

**Coefficient of Utilization**



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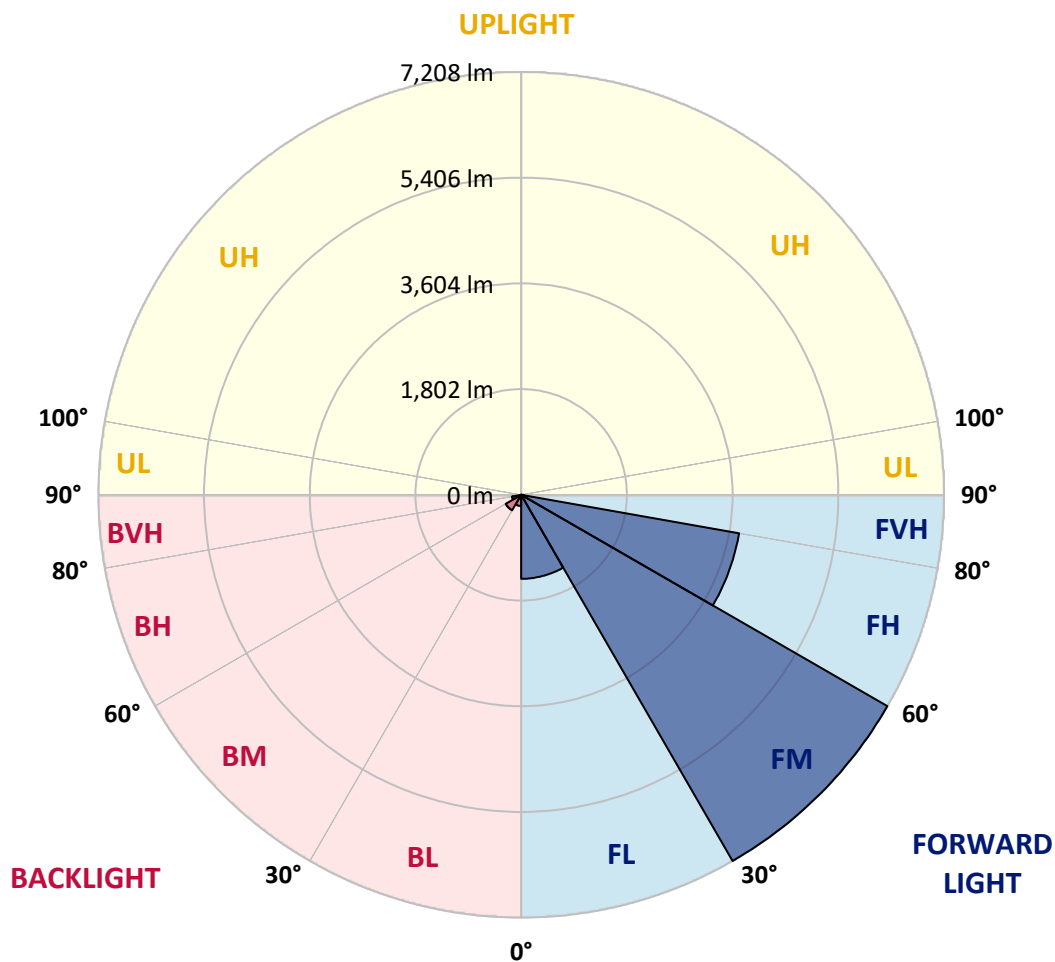
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1432.1	10.9			
FM (30°-60°)	7208.1	55.0			
FH (60°-80°)	3773.2	28.8			G2/5000
FVH (80°-90°)	46.8	0.4			G1/100
BL (0°-30°)	190.0	1.4	B1/500		
BM (30°-60°)	305.1	2.3	B1/1000		
BH (60°-80°)	158.5	1.2	B1/500		G1/500
BVH (80°-90°)	0.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3
2.5°	2010.2	1990.5	1970.6	1948.0	1897.0	1809.2	1698.9	1579.8	1432.6	1407.1	1288.3
5°	2440.7	2432.2	2412.3	2381.1	2324.5	2228.2	2103.7	1928.1	1681.7	1639.3	1387.3
7.5°	2743.6	2737.9	2720.8	2684.0	2633.1	2536.9	2406.6	2216.9	1930.9	1882.8	1511.9
10°	3015.4	3012.6	2998.5	2964.3	2913.5	2808.7	2669.9	2471.7	2168.8	2115.0	1656.4
12.5°	3261.7	3264.5	3259.0	3241.9	3205.1	3106.0	2947.3	2732.3	2398.1	2338.6	1829.0
15°	3406.2	3414.5	3437.3	3471.2	3482.5	3403.3	3239.1	3001.1	2633.1	2582.2	2027.3
17.5°	3358.0	3366.5	3437.3	3553.3	3663.7	3675.1	3527.9	3256.0	2865.4	2814.3	2222.5
20°	3241.9	3253.2	3326.9	3485.3	3700.6	3850.7	3791.1	3533.6	3086.1	3023.9	2409.4
22.5°	3372.1	3372.1	3394.8	3491.1	3686.5	3921.5	4000.7	3811.0	3312.7	3236.2	2596.3
25°	3819.5	3811.0	3762.8	3723.3	3785.5	3995.0	4159.2	4094.1	3578.8	3491.1	2794.5
27.5°	4385.7	4425.4	4334.9	4190.4	4048.8	4139.4	4300.7	4374.3	3873.2	3782.7	2998.5
30°	5020.0	5036.9	4929.4	4736.9	4487.7	4399.9	4467.8	4615.0	4193.2	4094.1	3210.7
32.5°	5591.9	5577.8	5487.1	5286.0	4977.5	4787.7	4683.0	4807.5	4541.4	4428.3	3428.7
35°	6098.8	6110.0	5999.6	5767.4	5464.5	5263.4	5014.2	5025.6	4932.1	4801.9	3680.7
37.5°	6554.6	6534.7	6430.0	6197.8	5923.2	5705.1	5441.8	5252.1	5359.6	5223.9	3964.0
40°	6925.5	6905.6	6795.1	6568.6	6311.0	6132.6	5925.9	5555.1	5809.9	5654.2	4266.8
42.5°	7219.9	7197.2	7103.7	6885.8	6636.7	6478.0	6379.0	5928.9	6291.2	6135.6	4606.6
45°	7364.2	7344.5	7287.9	7123.6	6905.6	6766.9	6815.0	6359.2	6806.5	6676.4	4980.4
47.5°	7194.4	7185.9	7251.1	7222.7	7098.1	7024.6	7191.7	6829.2	7347.2	7219.9	5410.8
50°	6679.1	6693.4	6883.0	7118.0	7177.5	7265.2	7500.2	7324.7	7927.7	7791.8	5906.1
52.5°	5407.8	5504.2	6076.0	6642.2	7081.2	7412.5	7862.7	8032.5	8873.4	8740.2	6679.1
55°	4037.5	4077.0	4700.0	5668.3	6693.4	7401.0	8131.5	8448.6	9340.5	9204.7	6883.0
57.5°	3202.3	3216.4	3524.9	4513.2	5894.9	7146.2	8273.2	8598.8	9544.4	9431.1	7185.9
60°	2514.3	2531.2	2754.9	3434.4	4770.8	6458.3	8069.3	8729.0	9943.7	9853.0	7715.5
62.5°	1956.5	1973.4	2109.3	2508.5	3578.8	5399.4	7658.8	8938.6	10702.4	10659.9	8581.8
65°	1514.7	1520.4	1613.8	1800.7	2528.4	4252.7	7157.6	9133.8	11727.5	11690.6	9284.0
67.5°	1118.4	1126.8	1192.1	1308.1	1707.3	3055.0	6336.6	8983.8	12500.4	12392.7	9538.7
69°	903.2	911.7	968.4	1061.7	1347.6	2406.6	5586.2	8612.9	12616.4	12514.5	9377.3
70°	772.9	778.7	835.2	914.6	1149.6	2044.3	4991.6	8293.0	12463.5	12364.5	9009.3
72.5°	495.4	523.8	580.5	631.4	761.7	1353.3	3369.4	6877.3	10753.4	10583.6	7055.6
75°	274.6	283.1	385.1	447.4	506.9	880.6	1874.4	4289.4	6840.6	6721.6	3774.1
77.5°	226.6	232.1	271.7	339.7	339.7	492.6	707.9	1690.3	2602.0	2347.2	1022.1
80°	158.6	164.2	206.7	223.7	243.5	277.4	229.3	370.9	402.0	356.7	152.9
82.5°	110.4	116.2	141.6	184.1	195.3	130.3	84.9	110.4	116.2	116.2	59.5
85°	19.9	28.2	104.7	152.9	116.2	39.6	48.1	39.6	36.8	39.6	14.2
87.5°	0.0	0.0	65.0	73.7	62.3	17.0	19.9	14.2	8.5	11.3	5.7
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°	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3	1220.3
2.5°	1228.8	1169.4	1067.5	993.7	931.5	883.4	863.6	832.4	809.7	821.1	806.9
5°	1262.7	1158.0	993.7	889.1	815.4	753.0	702.1	662.5	631.4	625.7	620.1
7.5°	1316.6	1166.4	951.3	821.1	710.6	614.4	535.1	475.7	430.4	430.4	413.4
10°	1390.1	1189.1	925.9	753.0	588.8	458.7	379.4	322.9	300.2	297.2	291.6
12.5°	1492.2	1231.7	906.0	665.4	458.7	334.1	286.0	266.2	257.6	254.8	252.0
15°	1630.9	1293.9	883.4	557.8	348.3	274.6	254.8	237.8	229.3	226.6	223.7
17.5°	1763.9	1350.5	835.2	447.4	283.1	249.2	226.6	212.4	201.0	198.2	198.2
20°	1888.4	1398.8	753.0	348.3	254.8	223.7	201.0	184.1	172.7	169.9	169.9
22.5°	2018.8	1438.4	651.2	283.1	232.1	198.2	175.6	158.6	147.2	144.4	141.6
25°	2157.5	1466.7	535.1	252.0	209.6	175.6	150.0	136.0	127.4	124.5	121.7
27.5°	2307.6	1477.9	424.7	229.3	184.1	152.9	130.3	116.2	110.4	107.5	107.5
30°	2443.4	1466.7	328.4	203.8	161.3	133.0	113.2	102.0	96.3	93.5	93.5
32.5°	2585.1	1438.4	263.4	181.2	141.6	113.2	96.3	87.8	84.9	82.1	82.1
35°	2735.1	1401.5	226.6	161.3	121.7	99.2	84.9	79.3	76.4	73.7	73.7
37.5°	2910.6	1356.3	206.7	144.4	107.5	87.8	73.7	70.7	67.9	67.9	67.9
40°	3108.9	1299.6	192.5	130.3	96.3	76.4	65.0	62.3	59.5	59.5	59.5
42.5°	3318.2	1234.5	178.4	116.2	84.9	65.0	56.7	56.7	53.8	53.8	50.9
45°	3553.3	1169.4	164.2	102.0	73.7	56.7	48.1	45.4	45.4	42.5	42.5
47.5°	3830.8	1109.9	150.0	90.5	65.0	48.1	42.5	39.6	36.8	34.0	34.0
50°	4221.6	1104.2	133.0	79.3	59.5	39.6	34.0	31.1	28.2	25.5	25.5
52.5°	4609.5	1053.3	113.2	65.0	48.1	34.0	25.5	22.6	19.9	19.9	17.0
55°	4697.1	968.4	99.2	56.7	36.8	25.5	19.9	14.2	14.2	11.3	11.3
57.5°	4889.7	928.7	84.9	45.4	28.2	19.9	11.3	8.5	8.5	8.5	8.5
60°	5269.1	917.3	73.7	39.6	19.9	14.2	8.5	5.7	5.7	2.9	2.9
62.5°	5792.9	906.0	62.3	34.0	14.2	8.5	5.7	2.9	0.0	0.0	0.0
65°	6081.7	829.6	50.9	25.5	11.3	8.5	2.9	0.0	0.0	0.0	0.0
67.5°	6005.3	685.1	45.4	17.0	8.5	5.7	2.9	0.0	0.0	0.0	0.0
69°	5685.4	577.6	36.8	14.2	8.5	5.7	2.9	0.0	0.0	0.0	0.0
70°	5300.3	498.3	34.0	11.3	5.7	2.9	2.9	0.0	0.0	0.0	0.0
72.5°	3762.8	260.5	22.6	8.5	5.7	2.9	0.0	0.0	0.0	0.0	0.0
75°	1758.3	116.2	14.2	5.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0
77.5°	387.9	53.8	8.5	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	73.7	19.9	5.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	25.5	8.5	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)