

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: P265712

Luminaire Tested: **ARCH-L-AF72-240-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265712  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-240-D-U-T3-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17513.6 lumens  
Efficiency: N/A  
Efficacy: 72.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 242  
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

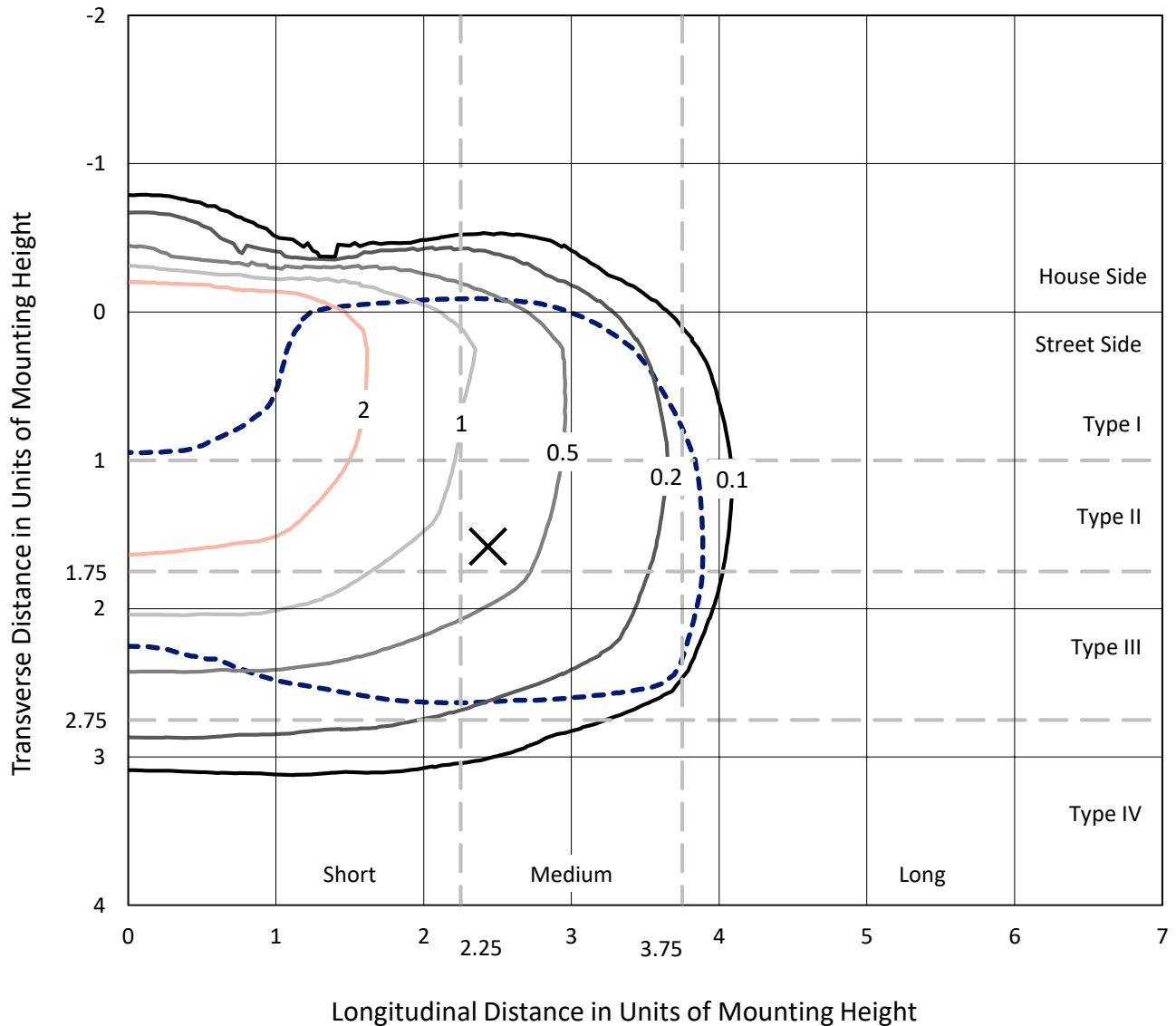


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

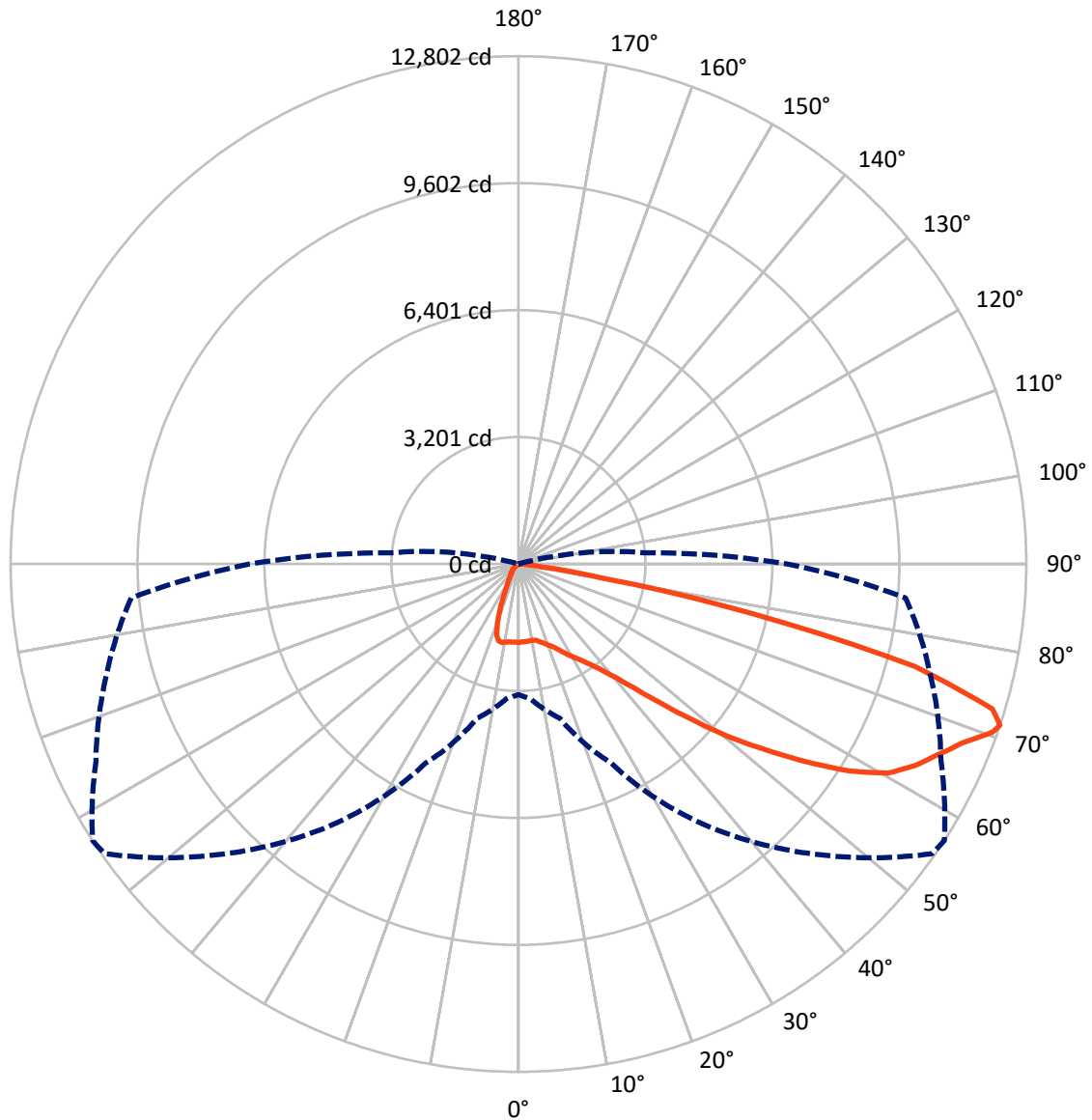


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical



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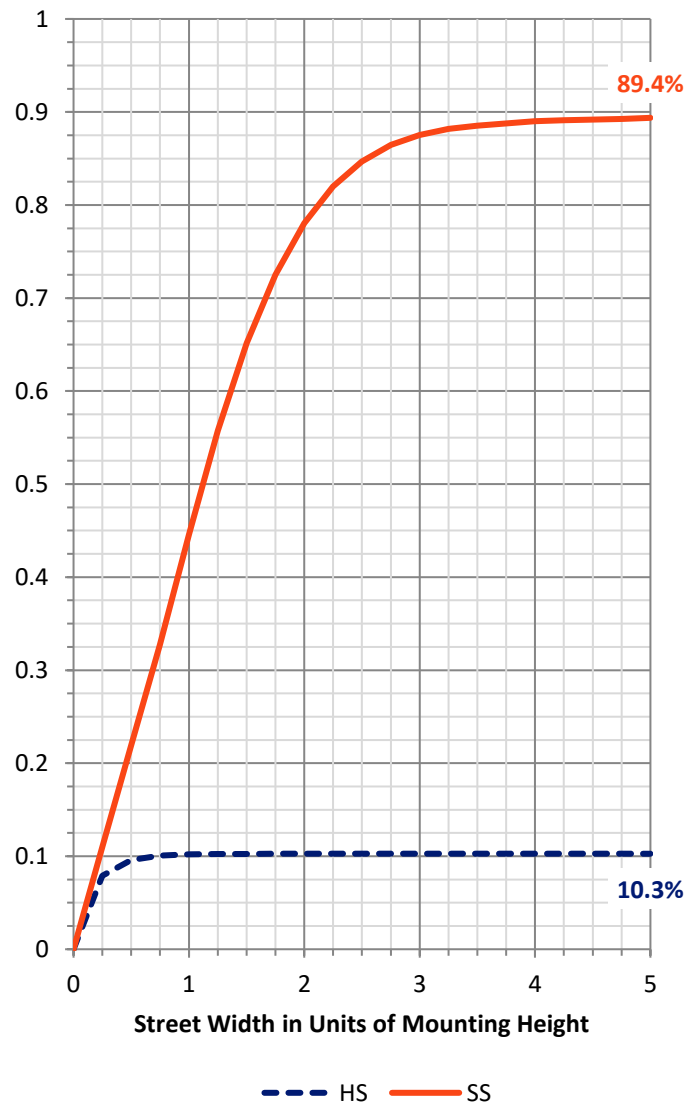
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1815.0	0.0	1815.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	15698.6	0.0	15698.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	17513.6	0.0	17513.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.9	1.1
10°-20°	497.0	2.8
20°-30°	775.3	4.4
30°-40°	1310.4	7.5
40°-50°	2545.2	14.5
50°-60°	4274.2	24.4
60°-70°	5100.8	29.1
70°-80°	2688.2	15.3
80°-90°	136.6	0.8
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°	17513.6	100.0
0°-180°	17513.6	100.0

**Coefficient of Utilization**



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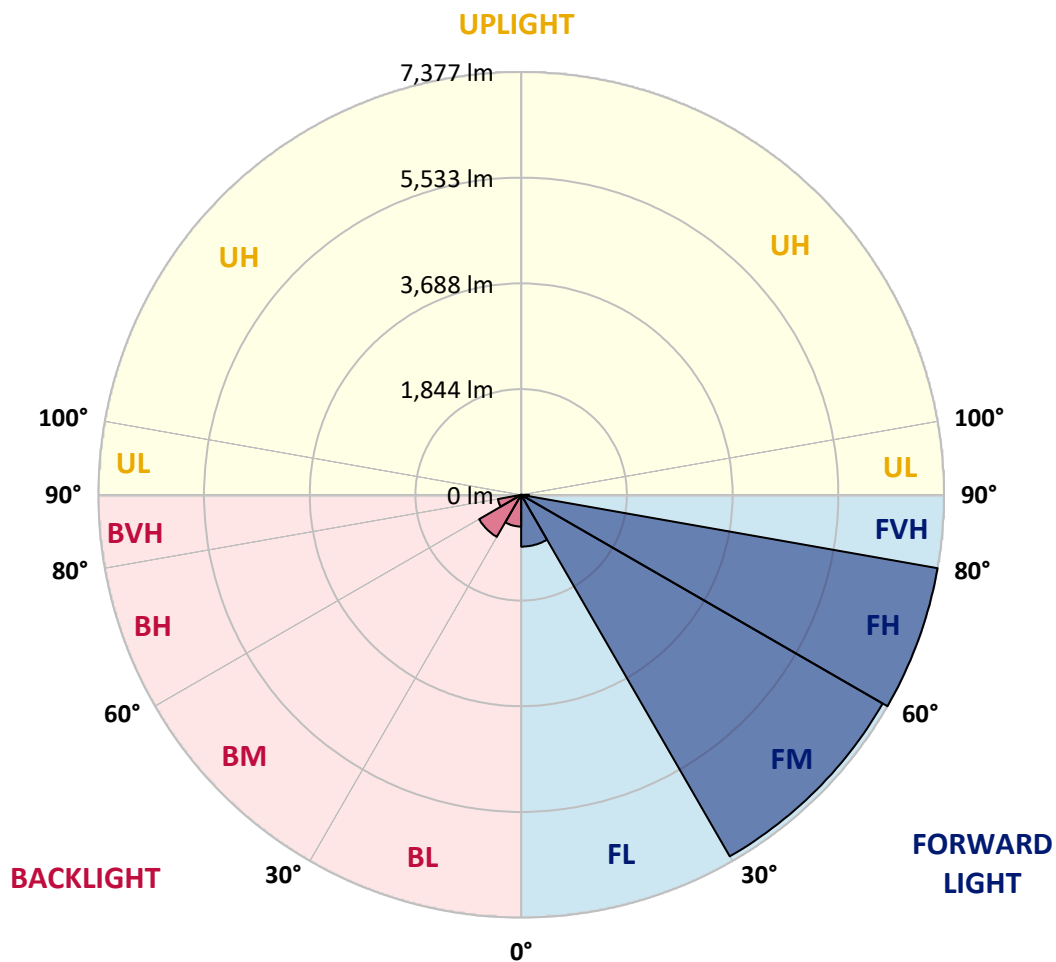
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	904.2	5.2			
FM	(30°-60°)	7282.3	41.6			
FH	(60°-80°)	7376.8	42.1			G3/7500
FVH	(80°-90°)	135.3	0.8			G2/225
BL	(0°-30°)	554.0	3.2	B2/1000		
BM	(30°-60°)	847.5	4.8	B1/1000		
BH	(60°-80°)	412.2	2.4	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
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°	57°	65°	75°	85°
0°	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2
2.5°	1950.7	1950.7	1950.7	1954.8	1958.9	1958.9	1967.1	1962.9	1962.9	1962.9	1971.2
5°	1897.7	1901.7	1905.8	1914.0	1930.3	1942.6	1962.9	1962.9	1967.1	1975.3	1979.2
7.5°	1824.2	1828.3	1840.5	1856.8	1889.6	1918.2	1950.7	1958.9	1971.2	1991.5	1999.6
10°	1779.4	1787.4	1803.7	1824.2	1861.0	1897.7	1938.5	1950.7	1987.5	2024.2	2044.6
12.5°	1767.1	1771.2	1787.4	1820.1	1865.1	1909.9	1962.9	1975.3	2028.3	2085.4	2118.1
15°	1787.4	1791.6	1799.8	1836.5	1889.6	1946.6	2016.1	2032.3	2097.6	2162.9	2203.7
17.5°	1824.2	1824.2	1832.5	1865.1	1922.2	1987.5	2077.2	2101.8	2175.2	2248.6	2293.6
20°	1848.7	1848.7	1861.0	1893.5	1958.9	2044.6	2150.7	2183.3	2264.9	2346.6	2387.3
22.5°	1873.1	1877.3	1889.6	1926.2	1999.6	2118.1	2240.6	2273.2	2367.0	2452.7	2493.5
25°	1942.6	1938.5	1942.6	1975.3	2060.9	2207.9	2362.9	2403.8	2501.7	2595.6	2616.0
27.5°	2134.4	2126.2	2073.2	2052.7	2118.1	2301.6	2517.9	2558.8	2673.0	2766.9	2766.9
30°	2575.1	2558.8	2428.2	2260.9	2207.9	2387.3	2664.9	2722.0	2868.9	2950.7	2926.0
32.5°	3134.2	3097.4	2930.2	2644.5	2432.3	2501.7	2820.0	2885.3	3073.0	3142.5	3089.4
35°	3746.4	3742.2	3534.2	3166.9	2864.9	2738.4	3019.9	3097.4	3334.1	3395.5	3309.7
37.5°	4395.2	4411.5	4272.9	3766.9	3411.8	3126.0	3285.2	3375.0	3664.7	3738.2	3656.6
40°	5117.6	5113.5	5060.5	4460.5	4068.9	3677.0	3668.9	3750.5	4101.4	4215.7	4101.4
42.5°	6031.8	6023.6	5831.7	5293.2	4864.6	4395.2	4228.0	4256.4	4648.3	4836.0	4668.8
45°	6962.3	6905.1	6684.6	6219.4	5839.9	5284.9	4966.5	4966.5	5301.3	5558.4	5297.1
47.5°	7480.5	7423.4	7333.7	7076.5	6962.3	6341.9	5872.6	5815.4	6076.7	6337.8	5970.6
50°	8162.1	8162.1	7937.7	7839.7	8035.6	7598.9	6872.5	6815.4	6941.8	7150.0	6668.4
52.5°	8700.8	8602.8	8443.7	8529.3	9088.4	8888.5	7872.2	7762.2	7860.1	7913.1	7276.5
55°	8925.2	8831.3	8819.1	9133.3	9998.6	9721.0	8896.6	8798.7	8790.5	8529.3	7807.0
57.5°	8970.0	8888.5	9043.5	9594.4	10884.1	10402.6	9916.8	9843.4	9614.9	8961.9	8349.7
60°	8590.5	8631.4	9006.9	9847.5	11406.5	10994.3	10778.0	10700.4	10174.1	9329.2	8953.8
62.5°	7811.1	7909.0	8611.0	9872.1	11214.7	11235.0	11255.5	11202.5	10606.6	9663.8	9561.9
65°	6888.7	6917.4	7762.2	9533.3	10880.0	11161.6	11606.5	11602.4	10937.1	10039.3	10247.4
67.5°	5676.7	5725.6	6456.2	8390.6	10210.8	11128.9	12067.7	12055.3	11312.5	10467.8	10655.5
70°	4223.9	4285.1	4876.8	6525.6	8717.1	10720.8	12671.6	12679.8	11708.5	10794.4	10373.9
71°	3293.4	3403.6	4023.9	5542.1	7954.0	10308.7	12728.8	12802.1	11753.3	10749.4	9794.5
72.5°	1616.1	1746.7	2526.2	3901.5	6545.9	9386.4	12353.2	12496.1	11471.7	10190.4	8374.3
75°	420.3	444.8	754.9	1595.7	3509.7	6219.4	9961.8	10324.9	9378.1	7758.0	5117.6
77.5°	265.3	273.4	355.0	620.3	1314.1	2362.9	5852.2	6031.8	5358.4	3930.1	1803.7
80°	187.7	191.8	224.4	399.9	767.2	689.7	2105.7	2183.3	1938.5	1040.6	322.4
82.5°	114.3	114.3	163.2	257.2	473.3	375.4	555.1	591.8	522.4	289.8	106.1
85°	65.2	69.3	102.0	175.4	224.4	183.7	208.1	220.4	224.4	191.8	44.8
87.5°	53.1	57.1	89.8	147.0	122.3	89.8	89.8	93.9	97.9	114.3	20.4
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°	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2	1979.2
2.5°	1971.2	1971.2	1975.3	1971.2	1971.2	1971.2	1975.3	1975.3	1975.3	1983.4	1987.5
5°	1979.2	1979.2	1979.2	1975.3	1971.2	1971.2	1979.2	1983.4	1983.4	1995.7	1995.7
7.5°	1999.6	1999.6	1991.5	1983.4	1975.3	1962.9	1967.1	1971.2	1967.1	1971.2	1971.2
10°	2044.6	2044.6	2032.3	2016.1	1991.5	1954.8	1905.8	1844.6	1787.4	1767.1	1758.9
12.5°	2118.1	2114.0	2089.5	2060.9	2007.8	1881.3	1697.6	1481.5	1301.9	1252.9	1236.5
15°	2199.7	2191.5	2162.9	2114.0	1971.2	1636.5	1252.9	975.4	804.0	763.2	754.9
17.5°	2285.4	2273.2	2232.3	2134.4	1803.7	1216.1	808.0	612.1	518.3	510.1	514.2
20°	2375.2	2358.8	2301.6	2093.6	1457.0	812.1	522.4	473.3	465.2	465.2	469.4
22.5°	2477.2	2456.8	2379.3	1946.6	1061.1	538.8	449.0	444.8	440.8	436.7	436.7
25°	2595.6	2571.0	2452.7	1681.4	730.5	440.8	428.5	416.3	408.1	399.9	395.9
27.5°	2738.4	2705.8	2509.9	1355.0	502.0	412.2	404.0	383.7	367.2	351.0	351.0
30°	2881.3	2840.4	2493.5	1020.3	408.1	383.7	367.2	342.9	318.3	302.0	297.9
32.5°	3032.1	2991.4	2387.3	685.5	371.4	351.0	330.5	293.8	265.3	244.9	240.7
35°	3256.6	3223.9	2179.3	452.9	334.7	310.2	281.6	244.9	208.1	187.7	183.7
37.5°	3591.3	3550.6	1922.2	346.8	293.8	257.2	232.7	191.8	155.0	134.7	130.7
40°	4040.1	3917.8	1616.1	306.1	257.2	212.2	179.7	138.8	110.2	97.9	97.9
42.5°	4562.6	4272.9	1285.6	277.4	228.4	175.4	130.7	93.9	77.6	73.4	73.4
45°	5117.6	4603.5	955.0	257.2	200.0	138.8	93.9	65.2	57.1	53.1	53.1
47.5°	5689.0	4872.8	665.3	232.7	167.4	106.1	65.2	49.0	40.9	36.7	36.7
50°	6223.5	5048.3	469.4	208.1	142.8	77.6	49.0	36.7	28.6	28.6	28.6
52.5°	6594.9	5031.9	338.8	179.7	110.2	53.1	32.7	24.4	24.4	24.4	24.4
55°	6921.4	4970.7	265.3	155.0	85.7	36.7	24.4	20.4	20.4	16.3	16.3
57.5°	7198.9	4872.8	224.4	126.5	61.3	28.6	16.3	16.3	12.2	12.2	12.2
60°	7435.6	4750.2	187.7	106.1	40.9	20.4	12.2	8.2	8.2	4.1	8.2
62.5°	7758.0	4672.8	163.2	81.7	28.6	12.2	8.2	4.1	4.1	0.0	0.0
65°	7994.7	4525.9	138.8	57.1	16.3	8.2	4.1	4.1	0.0	0.0	0.0
67.5°	8002.9	4260.7	102.0	32.7	12.2	8.2	4.1	0.0	0.0	0.0	0.0
70°	7358.0	3632.0	65.2	16.3	8.2	4.1	4.1	0.0	0.0	0.0	0.0
71°	6766.4	3215.8	53.1	12.2	8.2	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	5574.7	2362.9	40.9	12.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0
75°	3073.0	857.1	20.4	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	983.6	261.1	12.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	167.4	40.9	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.1	16.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.3	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.2	4.1	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)