

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: P265694

Luminaire Tested: **ARCH-L-AF72-220-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265694  
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-AF72-220-D-U-T3-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 945mA 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: 16526.2 lumens  
Efficiency: N/A  
Efficacy: 74.4 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): 222  
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

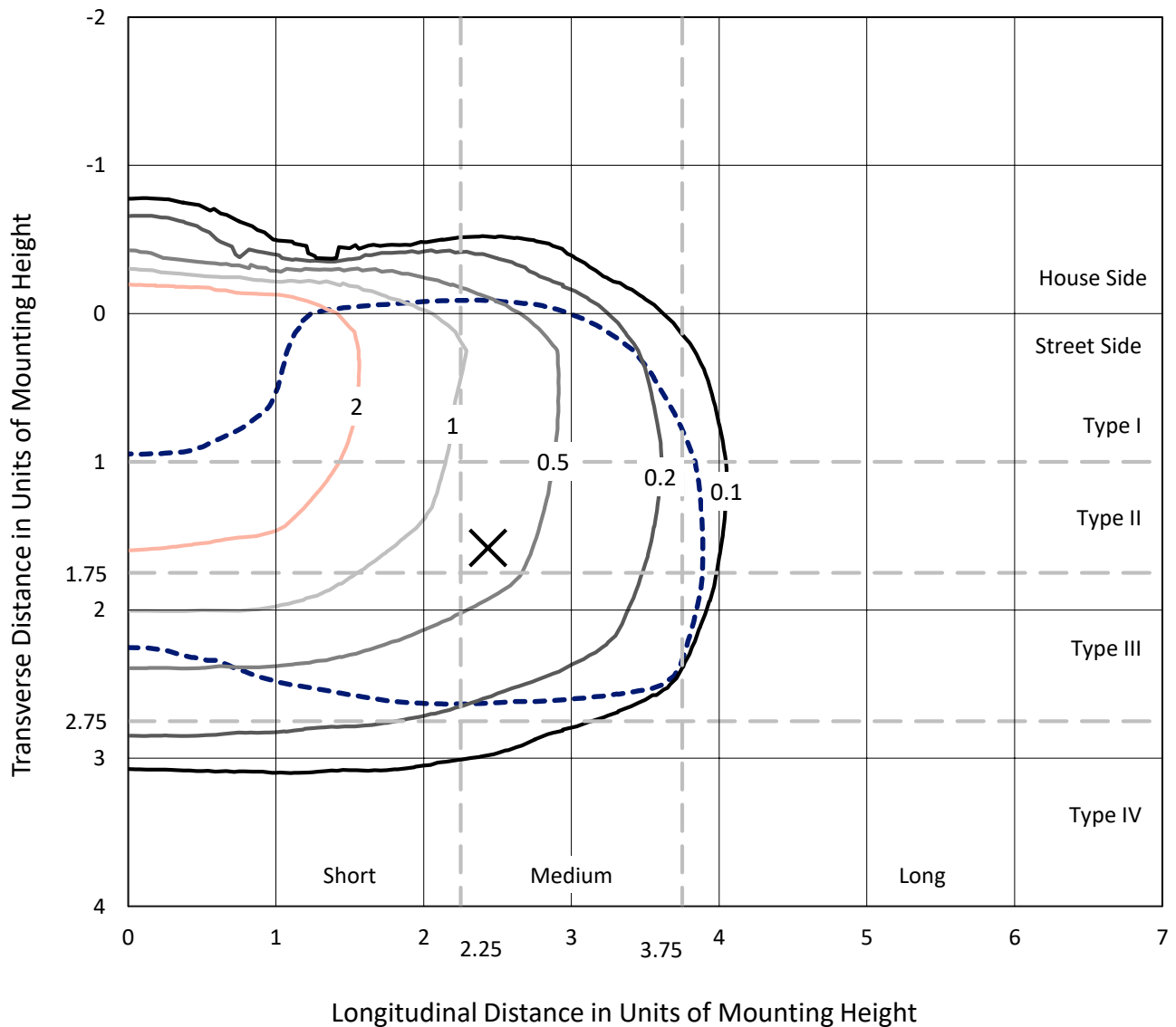


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

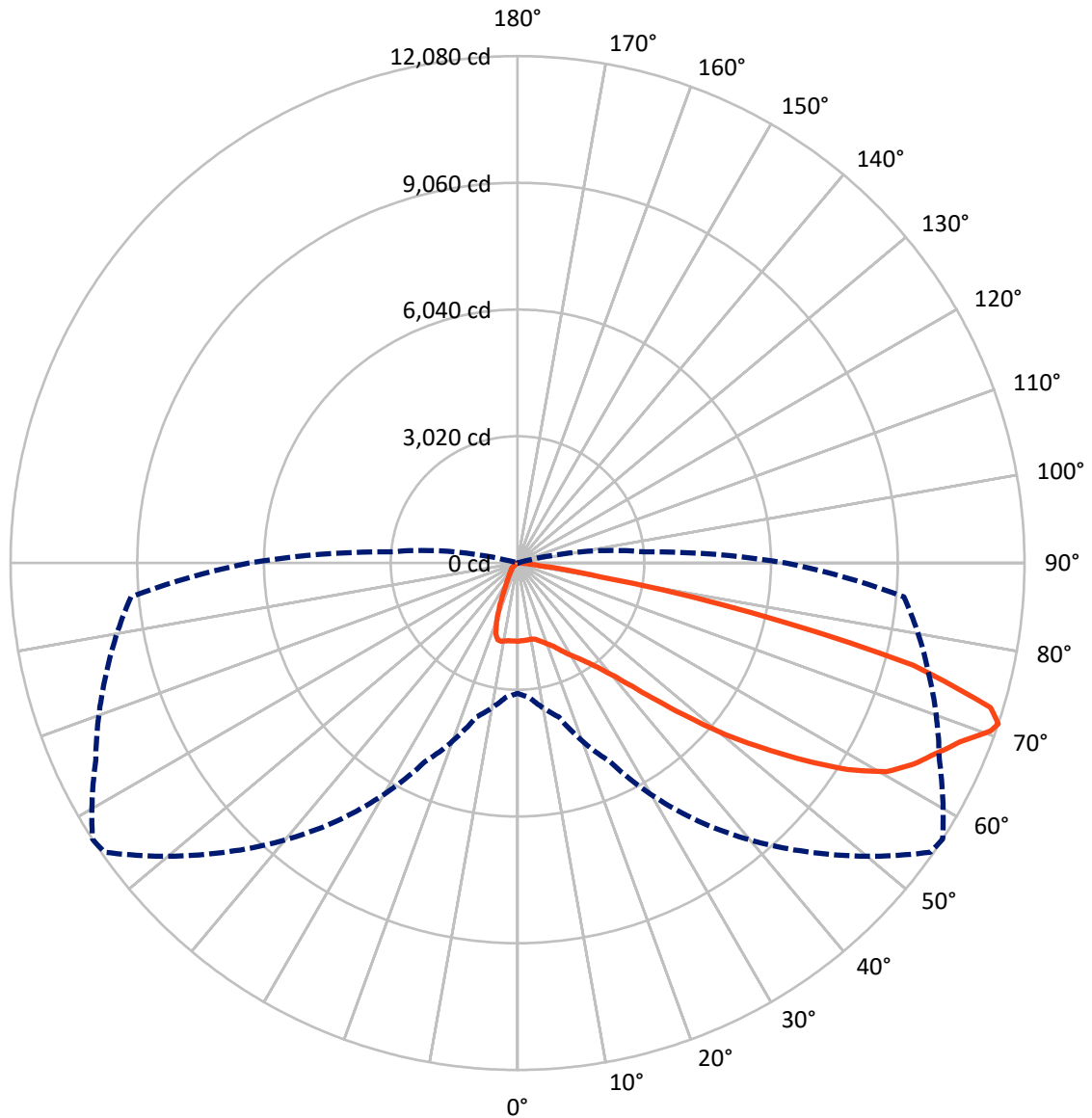


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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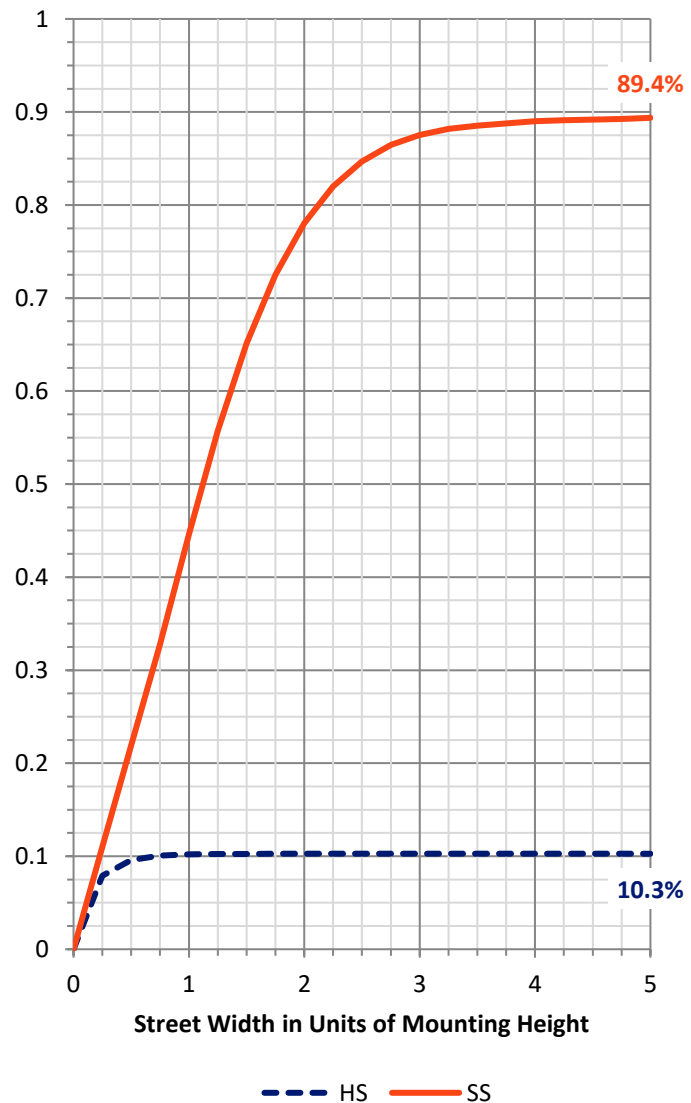
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1712.6	0.0	1712.6
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	14813.5	0.0	14813.5
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	16526.2	0.0	16526.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.4	1.1
10°-20°	469.0	2.8
20°-30°	731.6	4.4
30°-40°	1236.5	7.5
40°-50°	2401.7	14.5
50°-60°	4033.2	24.4
60°-70°	4813.2	29.1
70°-80°	2536.6	15.3
80°-90°	128.9	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°	16526.2	100.0
0°-180°	16526.2	100.0

**Coefficient of Utilization**



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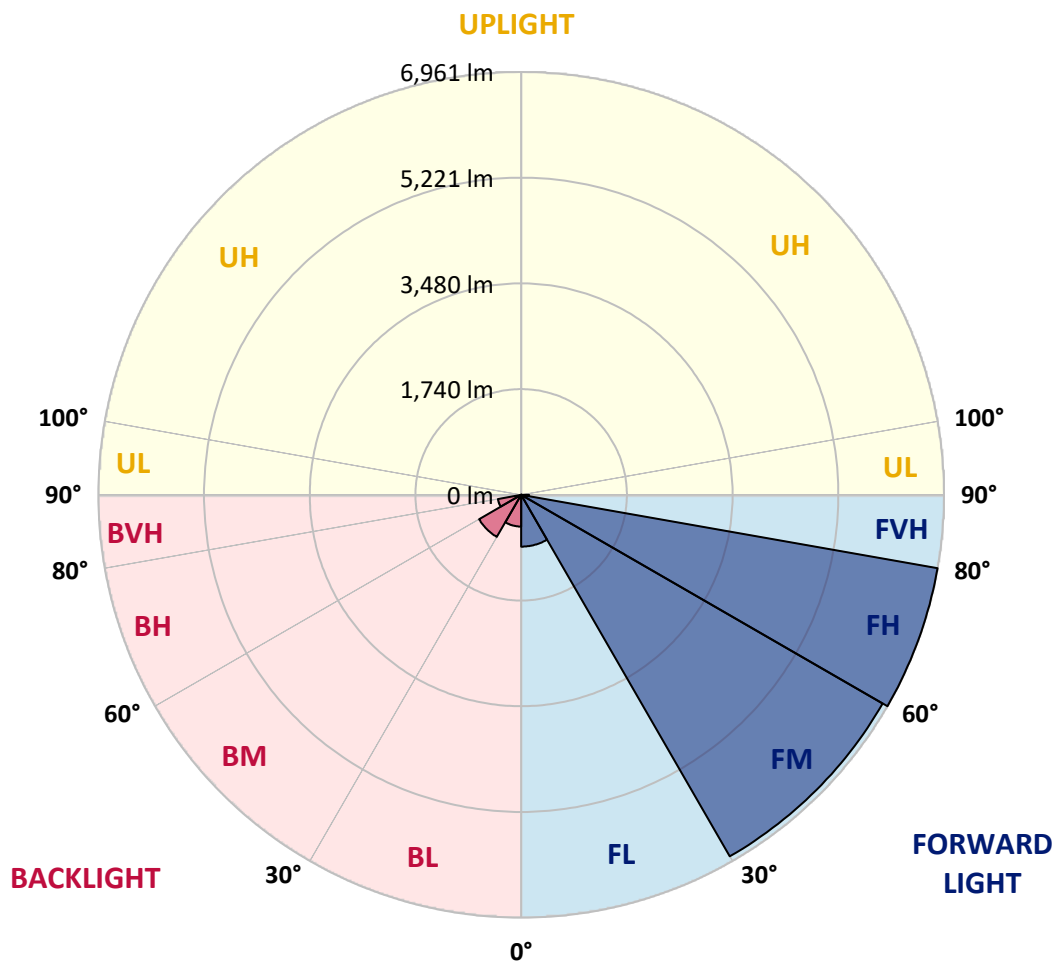
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	853.2	5.2			
FM	(30°-60°)	6871.7	41.6			
FH	(60°-80°)	6960.9	42.1			G3/7500
FVH	(80°-90°)	127.7	0.8			G2/225
BL	(0°-30°)	522.8	3.2	B2/1000		
BM	(30°-60°)	799.7	4.8	B1/1000		
BH	(60°-80°)	388.9	2.4	B1/500		G1/500
BVH	(80°-90°)	1.2	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°	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7
2.5°	1840.7	1840.7	1840.7	1844.6	1848.4	1848.4	1856.2	1852.3	1852.3	1852.3	1860.0
5°	1790.7	1794.5	1798.3	1806.1	1821.6	1833.0	1852.3	1852.3	1856.2	1863.9	1867.7
7.5°	1721.4	1725.3	1736.8	1752.1	1783.0	1809.9	1840.7	1848.4	1860.0	1879.3	1887.0
10°	1679.0	1686.7	1702.1	1721.4	1756.0	1790.7	1829.2	1840.7	1875.4	1910.1	1929.3
12.5°	1667.4	1671.2	1686.7	1717.5	1759.9	1802.2	1852.3	1863.9	1913.8	1967.8	1998.6
15°	1686.7	1690.6	1698.2	1732.9	1783.0	1836.9	1902.4	1917.8	1979.3	2040.9	2079.4
17.5°	1721.4	1721.4	1729.1	1759.9	1813.8	1875.4	1960.1	1983.3	2052.5	2121.8	2164.2
20°	1744.5	1744.5	1756.0	1786.9	1848.4	1929.3	2029.5	2060.3	2137.2	2214.3	2252.8
22.5°	1767.5	1771.5	1783.0	1817.6	1887.0	1998.6	2114.3	2145.0	2233.5	2314.5	2352.9
25°	1833.0	1829.2	1833.0	1863.9	1944.7	2083.3	2229.8	2268.2	2360.7	2449.1	2468.5
27.5°	2014.0	2006.4	1956.2	1937.0	1998.6	2171.9	2376.0	2414.6	2522.4	2611.0	2611.0
30°	2429.9	2414.6	2291.2	2133.5	2083.3	2252.8	2514.6	2568.6	2707.2	2784.2	2761.1
32.5°	2957.5	2922.8	2765.0	2495.4	2295.2	2360.7	2661.0	2722.7	2899.8	2965.2	2915.2
35°	3535.2	3531.2	3334.9	2988.3	2703.4	2584.0	2849.8	2922.8	3146.3	3204.0	3123.0
37.5°	4147.5	4162.8	4032.0	3554.5	3219.3	2949.9	3100.1	3184.8	3458.1	3527.5	3450.5
40°	4829.1	4825.2	4775.2	4209.1	3839.4	3469.8	3462.0	3539.1	3870.2	3978.1	3870.2
42.5°	5691.8	5683.9	5502.9	4994.7	4590.2	4147.5	3989.6	4016.5	4386.2	4563.4	4405.5
45°	6569.8	6515.8	6307.9	5868.8	5510.7	4987.0	4686.5	4686.5	5002.4	5245.1	4998.4
47.5°	7058.8	7004.9	6920.2	6677.6	6569.8	5984.4	5541.6	5487.6	5734.2	5980.6	5633.9
50°	7701.9	7701.9	7490.1	7397.6	7582.6	7170.5	6485.0	6431.1	6550.5	6746.9	6292.4
52.5°	8210.1	8117.9	7967.5	8048.5	8576.1	8387.4	7428.4	7324.5	7416.9	7467.0	6866.3
55°	8422.0	8333.4	8321.9	8618.3	9434.8	9173.0	8395.1	8302.7	8294.9	8048.5	7366.9
57.5°	8464.4	8387.4	8533.7	9053.6	10270.5	9816.0	9357.9	9288.5	9072.8	8456.6	7879.0
60°	8106.2	8144.8	8499.0	9292.3	10763.4	10374.4	10170.3	10097.2	9600.5	8803.3	8449.0
62.5°	7370.8	7463.1	8125.4	9315.5	10582.5	10601.6	10620.9	10570.9	10008.6	9119.1	9022.8
65°	6500.3	6527.4	7324.5	8995.7	10266.5	10532.4	10952.0	10948.3	10320.5	9473.3	9669.7
67.5°	5356.7	5402.9	6092.1	7917.5	9635.1	10501.5	11387.3	11375.6	10674.7	9877.8	10054.8
70°	3985.7	4043.5	4601.8	6157.6	8225.6	10116.4	11957.2	11964.9	11048.3	10185.7	9789.1
71°	3107.7	3211.7	3797.0	5229.7	7505.5	9727.4	12011.1	12080.4	11090.7	10143.4	9242.3
72.5°	1525.0	1648.2	2383.7	3681.6	6176.9	8857.2	11656.9	11791.6	10825.0	9615.7	7902.1
75°	396.6	419.8	712.4	1505.6	3311.8	5868.8	9400.1	9742.8	8849.5	7320.6	4829.1
77.5°	250.3	258.1	335.1	585.3	1240.0	2229.8	5522.3	5691.8	5056.3	3708.5	1702.1
80°	177.1	181.0	211.8	377.4	723.9	650.8	1987.1	2060.3	1829.2	981.9	304.3
82.5°	107.8	107.8	154.0	242.6	446.6	354.3	523.7	558.3	492.9	273.4	100.2
85°	61.7	65.4	96.3	165.6	211.8	173.4	196.4	208.0	211.8	181.0	42.4
87.5°	50.0	53.9	84.7	138.6	115.5	84.7	84.7	88.6	92.4	107.8	19.3
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°	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7	1867.7
2.5°	1860.0	1860.0	1863.9	1860.0	1860.0	1860.0	1863.9	1863.9	1863.9	1871.6	1875.4
5°	1867.7	1867.7	1867.7	1863.9	1860.0	1860.0	1867.7	1871.6	1871.6	1883.0	1883.0
7.5°	1887.0	1887.0	1879.3	1871.6	1863.9	1852.3	1856.2	1860.0	1856.2	1860.0	1860.0
10°	1929.3	1929.3	1917.8	1902.4	1879.3	1844.6	1798.3	1740.6	1686.7	1667.4	1659.8
12.5°	1998.6	1994.7	1971.7	1944.7	1894.6	1775.3	1601.9	1397.9	1228.4	1182.2	1166.9
15°	2075.7	2068.0	2040.9	1994.7	1860.0	1544.2	1182.2	920.4	758.7	720.1	712.4
17.5°	2156.6	2145.0	2106.4	2014.0	1702.1	1147.6	762.5	577.6	489.0	481.4	485.3
20°	2241.2	2225.8	2171.9	1975.6	1374.8	766.3	492.9	446.6	439.0	439.0	442.9
22.5°	2337.5	2318.3	2245.1	1836.9	1001.3	508.4	423.6	419.8	415.8	412.1	412.1
25°	2449.1	2426.1	2314.5	1586.5	689.3	415.8	404.3	392.7	385.2	377.4	373.5
27.5°	2584.0	2553.3	2368.3	1278.5	473.6	389.0	381.2	361.9	346.6	331.1	331.1
30°	2718.8	2680.3	2352.9	962.8	385.2	361.9	346.6	323.5	300.4	284.9	281.1
32.5°	2861.2	2822.7	2252.8	647.0	350.3	331.1	311.9	277.2	250.3	231.0	227.2
35°	3073.0	3042.2	2056.4	427.5	315.8	292.7	265.7	231.0	196.4	177.1	173.4
37.5°	3388.9	3350.3	1813.8	327.3	277.2	242.6	219.5	181.0	146.3	127.1	123.2
40°	3812.4	3697.0	1525.0	288.9	242.6	200.2	169.4	131.0	103.9	92.4	92.4
42.5°	4305.3	4032.0	1213.0	261.9	215.7	165.6	123.2	88.6	73.1	69.3	69.3
45°	4829.1	4343.8	901.1	242.6	188.7	131.0	88.6	61.7	53.9	50.0	50.0
47.5°	5368.2	4598.1	627.6	219.5	157.9	100.2	61.7	46.3	38.4	34.7	34.7
50°	5872.7	4763.6	442.9	196.4	134.7	73.1	46.3	34.7	26.9	26.9	26.9
52.5°	6223.1	4748.3	319.6	169.4	103.9	50.0	30.8	23.0	23.0	23.0	23.0
55°	6531.1	4690.5	250.3	146.3	80.8	34.7	23.0	19.3	19.3	15.5	15.5
57.5°	6793.1	4598.1	211.8	119.4	57.9	26.9	15.5	15.5	11.6	11.6	11.6
60°	7016.4	4482.5	177.1	100.2	38.4	19.3	11.6	7.6	7.6	3.9	7.6
62.5°	7320.6	4409.3	154.0	77.1	26.9	11.6	7.6	3.9	3.9	0.0	0.0
65°	7544.0	4270.7	131.0	53.9	15.5	7.6	3.9	3.9	0.0	0.0	0.0
67.5°	7551.7	4020.4	96.3	30.8	11.6	7.6	3.9	0.0	0.0	0.0	0.0
70°	6943.3	3427.4	61.7	15.5	7.6	3.9	3.9	0.0	0.0	0.0	0.0
71°	6384.9	3034.6	50.0	11.6	7.6	3.9	0.0	0.0	0.0	0.0	0.0
72.5°	5260.4	2229.8	38.4	11.6	3.9	3.9	0.0	0.0	0.0	0.0	0.0
75°	2899.8	808.7	19.3	7.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	928.0	246.4	11.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	157.9	38.4	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	53.9	15.5	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.5	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.6	3.9	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)