

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: P237207

Luminaire Tested: **ARCH-L-AF72-140-D-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237207  
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-AF72-140-D-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 620mA 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: 14129 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

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

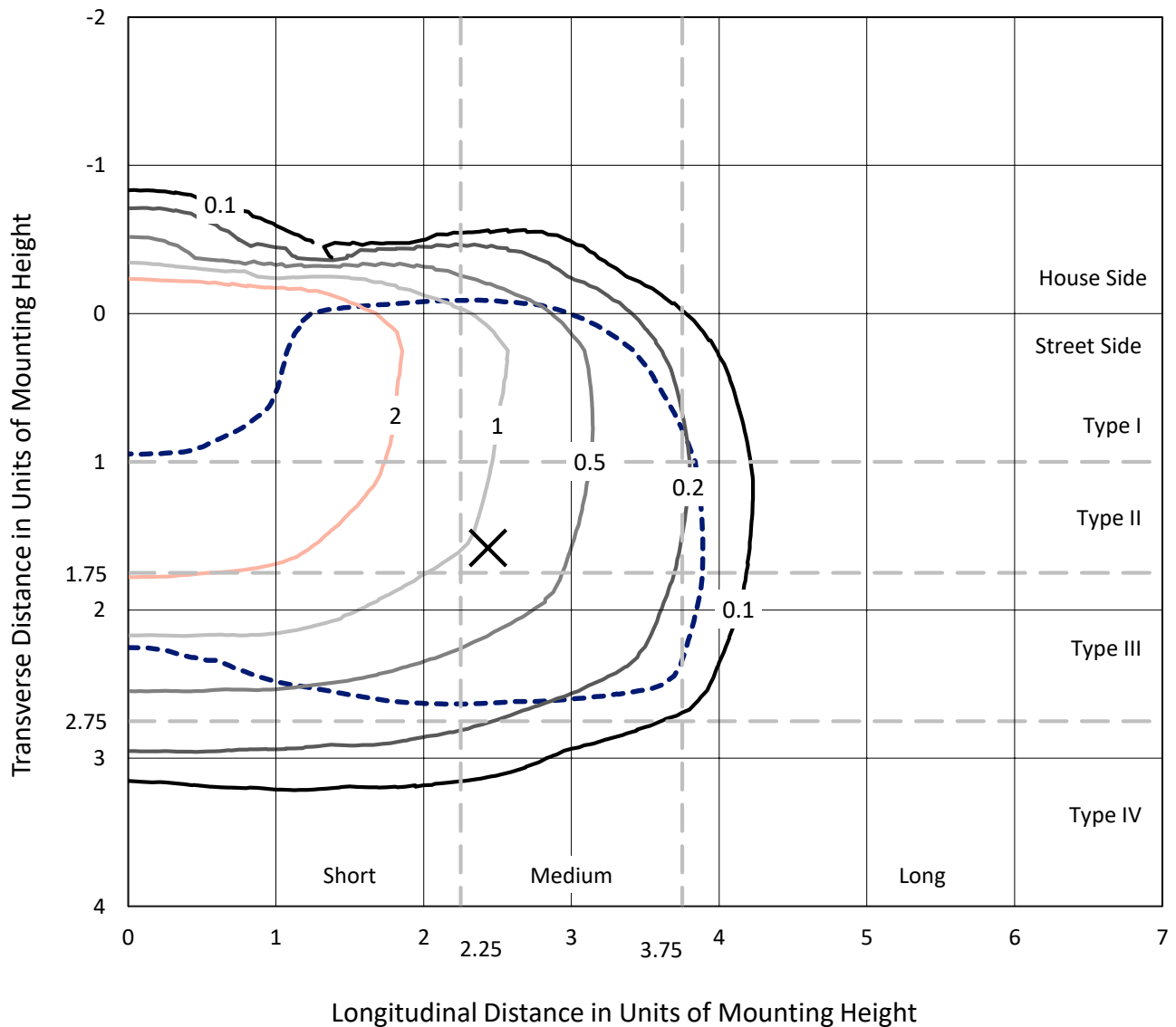


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

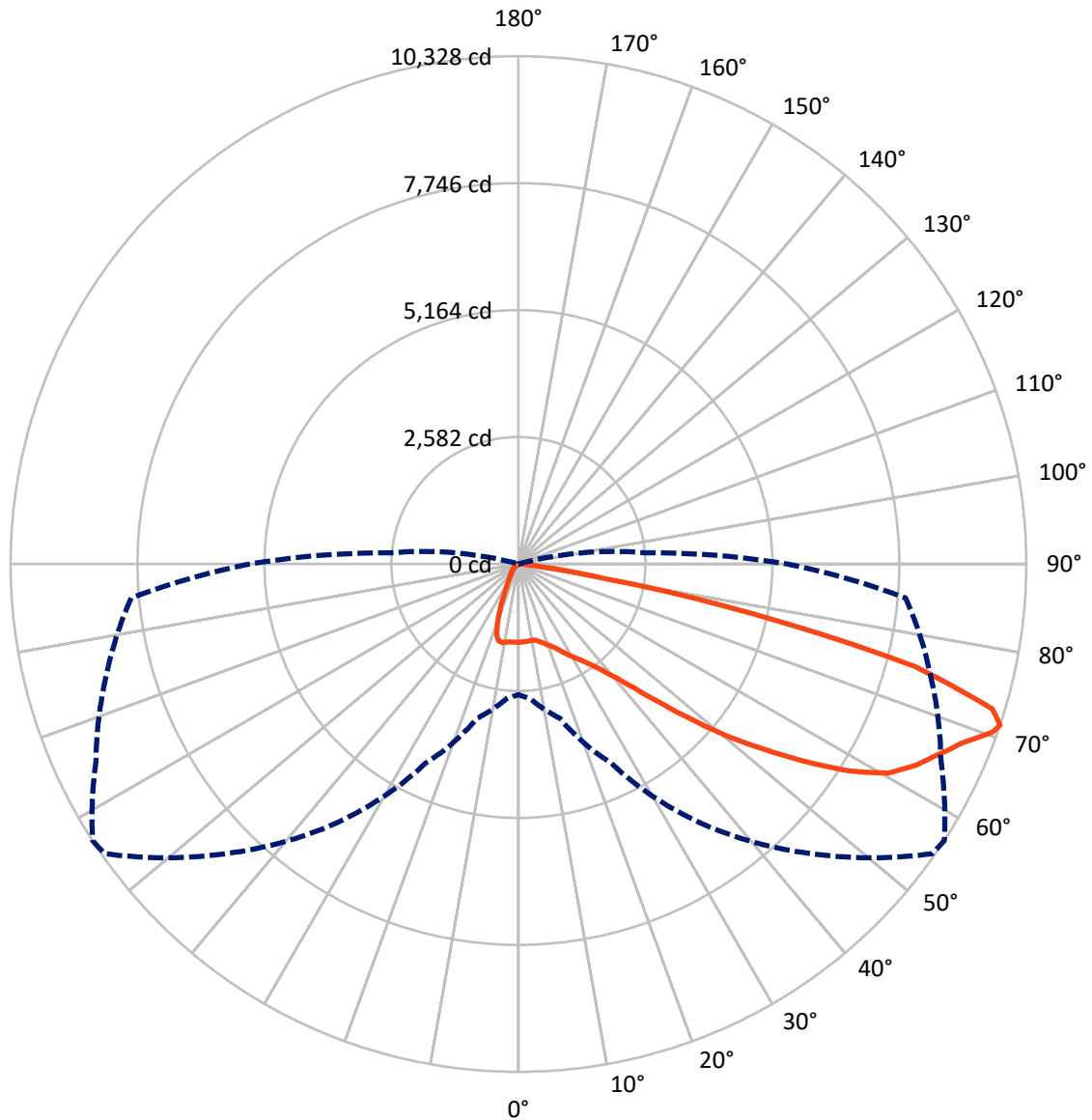


Based on 20 foot mounting height. Maximum calculated value = 5 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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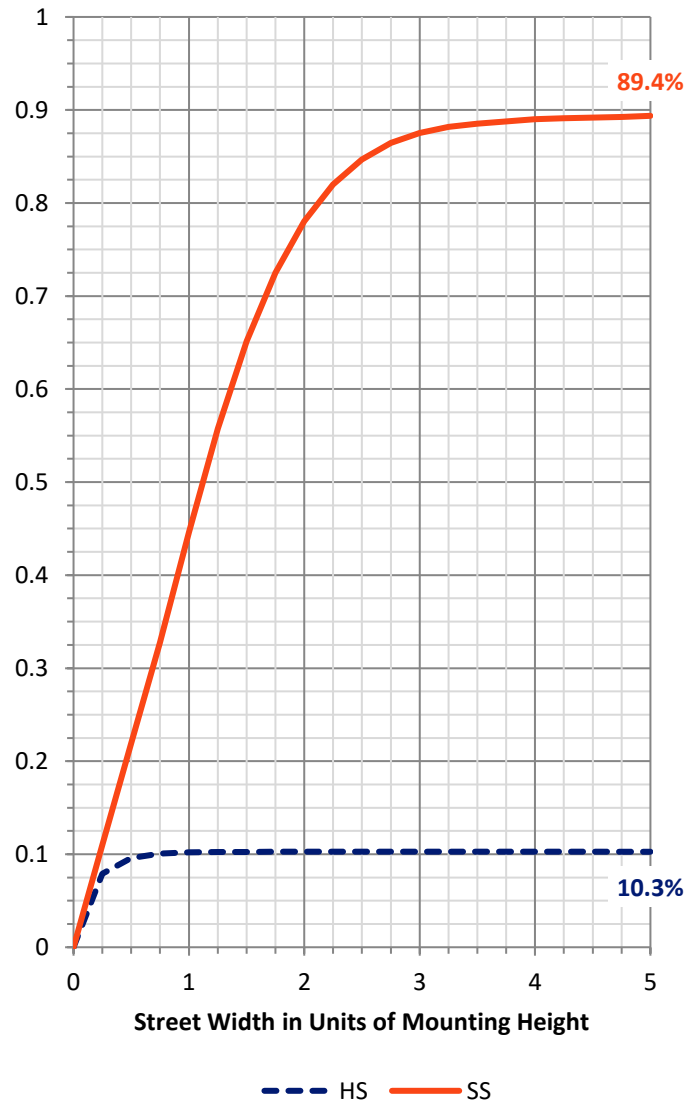
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1464.2	0.0	1464.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	12664.8	0.0	12664.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	14129.0	0.0	14129.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.0	1.1
10°-20°	401.0	2.8
20°-30°	625.5	4.4
30°-40°	1057.2	7.5
40°-50°	2053.3	14.5
50°-60°	3448.2	24.4
60°-70°	4115.1	29.1
70°-80°	2168.7	15.3
80°-90°	110.2	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°	14129.0	100.0
0°-180°	14129.0	100.0



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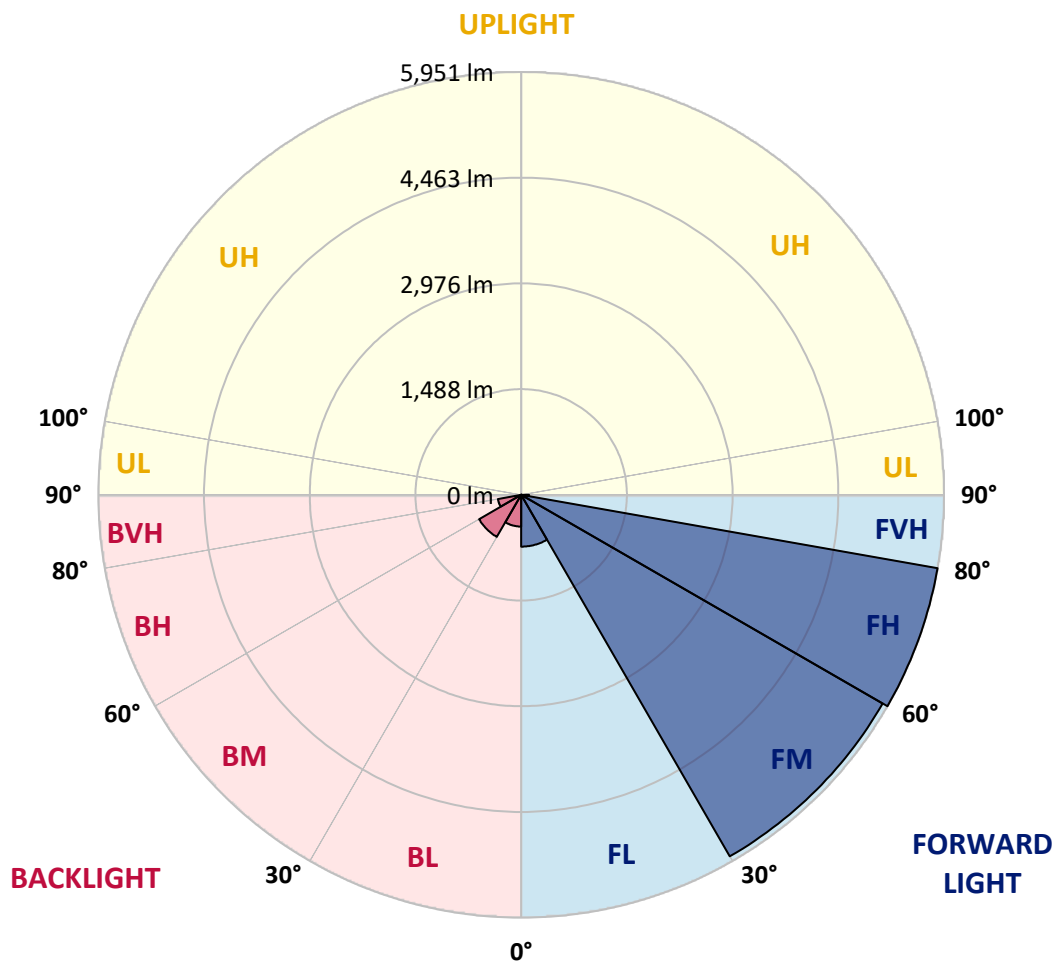
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	729.5	5.2			
FM	(30°-60°)	5875.0	41.6			
FH	(60°-80°)	5951.2	42.1			G3/7500
FVH	(80°-90°)	109.2	0.8			G2/225
BL	(0°-30°)	447.0	3.2	B1/500		
BM	(30°-60°)	683.7	4.8	B1/1000		
BH	(60°-80°)	332.5	2.4	B1/500		G1/500
BVH	(80°-90°)	1.0	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-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8
2.5°	1573.7	1573.7	1573.7	1577.1	1580.4	1580.4	1586.9	1583.6	1583.6	1583.6	1590.2
5°	1530.9	1534.2	1537.5	1544.1	1557.2	1567.2	1583.6	1583.6	1586.9	1593.5	1596.8
7.5°	1471.7	1475.0	1484.8	1498.0	1524.4	1547.4	1573.7	1580.4	1590.2	1606.6	1613.3
10°	1435.5	1442.1	1455.2	1471.7	1501.3	1530.9	1563.9	1573.7	1603.4	1633.0	1649.5
12.5°	1425.6	1428.9	1442.1	1468.3	1504.6	1540.9	1583.6	1593.5	1636.3	1682.3	1708.7
15°	1442.1	1445.3	1452.0	1481.5	1524.4	1570.4	1626.4	1639.6	1692.3	1744.9	1777.9
17.5°	1471.7	1471.7	1478.3	1504.6	1550.7	1603.4	1675.8	1695.5	1754.9	1814.1	1850.3
20°	1491.5	1491.5	1501.3	1527.7	1580.4	1649.5	1735.0	1761.4	1827.3	1893.1	1926.0
22.5°	1511.2	1514.5	1524.4	1554.0	1613.3	1708.7	1807.5	1833.8	1909.5	1978.7	2011.6
25°	1567.2	1563.9	1567.2	1593.5	1662.6	1781.2	1906.3	1939.2	2018.2	2094.0	2110.3
27.5°	1721.9	1715.3	1672.5	1656.1	1708.7	1856.9	2031.4	2064.3	2156.5	2232.2	2232.2
30°	2077.5	2064.3	1959.0	1823.9	1781.2	1926.0	2149.9	2196.0	2314.5	2380.4	2360.7
32.5°	2528.5	2498.9	2363.9	2133.5	1962.2	2018.2	2275.0	2327.7	2479.1	2535.1	2492.3
35°	3022.4	3019.1	2851.2	2554.8	2311.3	2209.2	2436.4	2498.9	2689.8	2739.3	2670.1
37.5°	3545.9	3559.1	3447.1	3038.9	2752.5	2522.0	2650.4	2722.8	2956.5	3015.8	2950.0
40°	4128.6	4125.4	4082.5	3598.5	3282.4	2966.5	2959.8	3025.7	3308.8	3401.0	3308.8
42.5°	4866.1	4859.5	4704.8	4270.2	3924.4	3545.9	3410.9	3433.9	3750.0	3901.4	3766.4
45°	5616.7	5570.7	5392.9	5017.6	4711.4	4263.6	4006.8	4006.8	4276.8	4484.2	4273.5
47.5°	6034.9	5988.8	5916.3	5709.0	5616.7	5116.3	4737.7	4691.6	4902.3	5113.0	4816.7
50°	6584.7	6584.7	6403.7	6324.6	6482.6	6130.3	5544.3	5498.3	5600.2	5768.2	5379.7
52.5°	7019.3	6940.3	6811.8	6881.0	7332.1	7170.8	6351.0	6262.1	6341.1	6383.8	5870.3
55°	7200.3	7124.6	7114.7	7368.3	8066.3	7842.4	7177.3	7098.4	7091.7	6881.0	6298.3
57.5°	7236.6	7170.8	7295.9	7740.4	8780.7	8392.2	8000.4	7941.2	7756.8	7230.0	6736.1
60°	6930.4	6963.3	7266.2	7944.4	9202.2	8869.6	8695.1	8632.6	8207.9	7526.4	7223.5
62.5°	6301.6	6380.6	6946.9	7964.2	9047.4	9063.9	9080.3	9037.5	8556.8	7796.3	7714.0
65°	5557.5	5580.5	6262.1	7691.0	8777.4	9004.6	9363.5	9360.2	8823.5	8099.2	8267.1
67.5°	4579.6	4619.1	5208.5	6769.1	8237.5	8978.2	9735.5	9725.6	9126.4	8444.9	8596.4
70°	3407.6	3457.0	3934.4	5264.5	7032.5	8649.0	10222.8	10229.3	9445.7	8708.3	8369.2
71°	2656.9	2745.8	3246.2	4471.0	6416.8	8316.5	10268.9	10328.1	9481.9	8672.1	7901.7
72.5°	1303.8	1409.1	2037.9	3147.5	5281.0	7572.4	9966.0	10081.2	9254.8	8221.0	6755.9
75°	339.1	358.9	609.1	1287.3	2831.4	5017.6	8036.6	8329.7	7565.8	6258.7	4128.6
77.5°	214.0	220.5	286.4	500.4	1060.2	1906.3	4721.2	4866.1	4322.9	3170.5	1455.2
80°	151.5	154.8	181.1	322.6	619.0	556.4	1698.8	1761.4	1563.9	839.5	260.1
82.5°	92.2	92.2	131.7	207.5	381.9	302.9	447.7	477.4	421.5	233.7	85.6
85°	52.7	56.0	82.3	141.6	181.1	148.1	167.9	177.8	181.1	154.8	36.2
87.5°	42.8	46.1	72.4	118.6	98.8	72.4	72.4	75.7	79.0	92.2	16.5
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°	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8	1596.8
2.5°	1590.2	1590.2	1593.5	1590.2	1590.2	1590.2	1593.5	1593.5	1593.5	1600.1	1603.4
5°	1596.8	1596.8	1596.8	1593.5	1590.2	1590.2	1596.8	1600.1	1600.1	1609.9	1609.9
7.5°	1613.3	1613.3	1606.6	1600.1	1593.5	1583.6	1586.9	1590.2	1586.9	1590.2	1590.2
10°	1649.5	1649.5	1639.6	1626.4	1606.6	1577.1	1537.5	1488.2	1442.1	1425.6	1419.0
12.5°	1708.7	1705.5	1685.7	1662.6	1619.8	1517.8	1369.6	1195.1	1050.3	1010.8	997.6
15°	1774.6	1768.0	1744.9	1705.5	1590.2	1320.2	1010.8	786.9	648.6	615.7	609.1
17.5°	1843.8	1833.8	1800.9	1721.9	1455.2	981.1	651.9	493.9	418.1	411.5	414.8
20°	1916.2	1903.0	1856.9	1689.0	1175.4	655.2	421.5	381.9	375.3	375.3	378.6
22.5°	1998.4	1982.0	1919.5	1570.4	856.0	434.5	362.1	358.9	355.6	352.3	352.3
25°	2094.0	2074.1	1978.7	1356.4	589.3	355.6	345.7	335.8	329.2	322.6	319.4
27.5°	2209.2	2182.9	2024.8	1093.0	405.0	332.6	325.9	309.4	296.3	283.2	283.2
30°	2324.5	2291.5	2011.6	823.1	329.2	309.4	296.3	276.6	256.8	243.7	240.3
32.5°	2446.2	2413.2	1926.0	553.1	299.6	283.2	266.7	237.0	214.0	197.5	194.3
35°	2627.3	2601.0	1758.1	365.5	270.0	250.2	227.2	197.5	167.9	151.5	148.1
37.5°	2897.3	2864.4	1550.7	279.9	237.0	207.5	187.7	154.8	125.1	108.6	105.4
40°	3259.4	3160.6	1303.8	246.9	207.5	171.2	144.8	111.9	88.9	79.0	79.0
42.5°	3680.9	3447.1	1037.1	223.9	184.3	141.6	105.4	75.7	62.6	59.2	59.2
45°	4128.6	3713.8	770.4	207.5	161.3	111.9	75.7	52.7	46.1	42.8	42.8
47.5°	4589.6	3931.1	536.6	187.7	135.0	85.6	52.7	39.5	32.9	29.7	29.7
50°	5020.8	4072.7	378.6	167.9	115.2	62.6	39.5	29.7	23.0	23.0	23.0
52.5°	5320.5	4059.5	273.2	144.8	88.9	42.8	26.3	19.7	19.7	19.7	19.7
55°	5583.9	4010.1	214.0	125.1	69.2	29.7	19.7	16.5	16.5	13.2	13.2
57.5°	5807.7	3931.1	181.1	102.1	49.4	23.0	13.2	13.2	9.9	9.9	9.9
60°	5998.7	3832.3	151.5	85.6	32.9	16.5	9.9	6.5	6.5	3.3	6.5
62.5°	6258.7	3769.8	131.7	65.9	23.0	9.9	6.5	3.3	3.3	0.0	0.0
65°	6449.7	3651.2	111.9	46.1	13.2	6.5	3.3	3.3	0.0	0.0	0.0
67.5°	6456.3	3437.2	82.3	26.3	9.9	6.5	3.3	0.0	0.0	0.0	0.0
70°	5936.1	2930.2	52.7	13.2	6.5	3.3	3.3	0.0	0.0	0.0	0.0
71°	5458.7	2594.4	42.8	9.9	6.5	3.3	0.0	0.0	0.0	0.0	0.0
72.5°	4497.4	1906.3	32.9	9.9	3.3	3.3	0.0	0.0	0.0	0.0	0.0
75°	2479.1	691.4	16.5	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	793.5	210.7	9.9	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	135.0	32.9	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.1	13.2	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.2	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	3.3	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)