

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: P198855

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-7050-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198855  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-SL2-7050-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9838 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

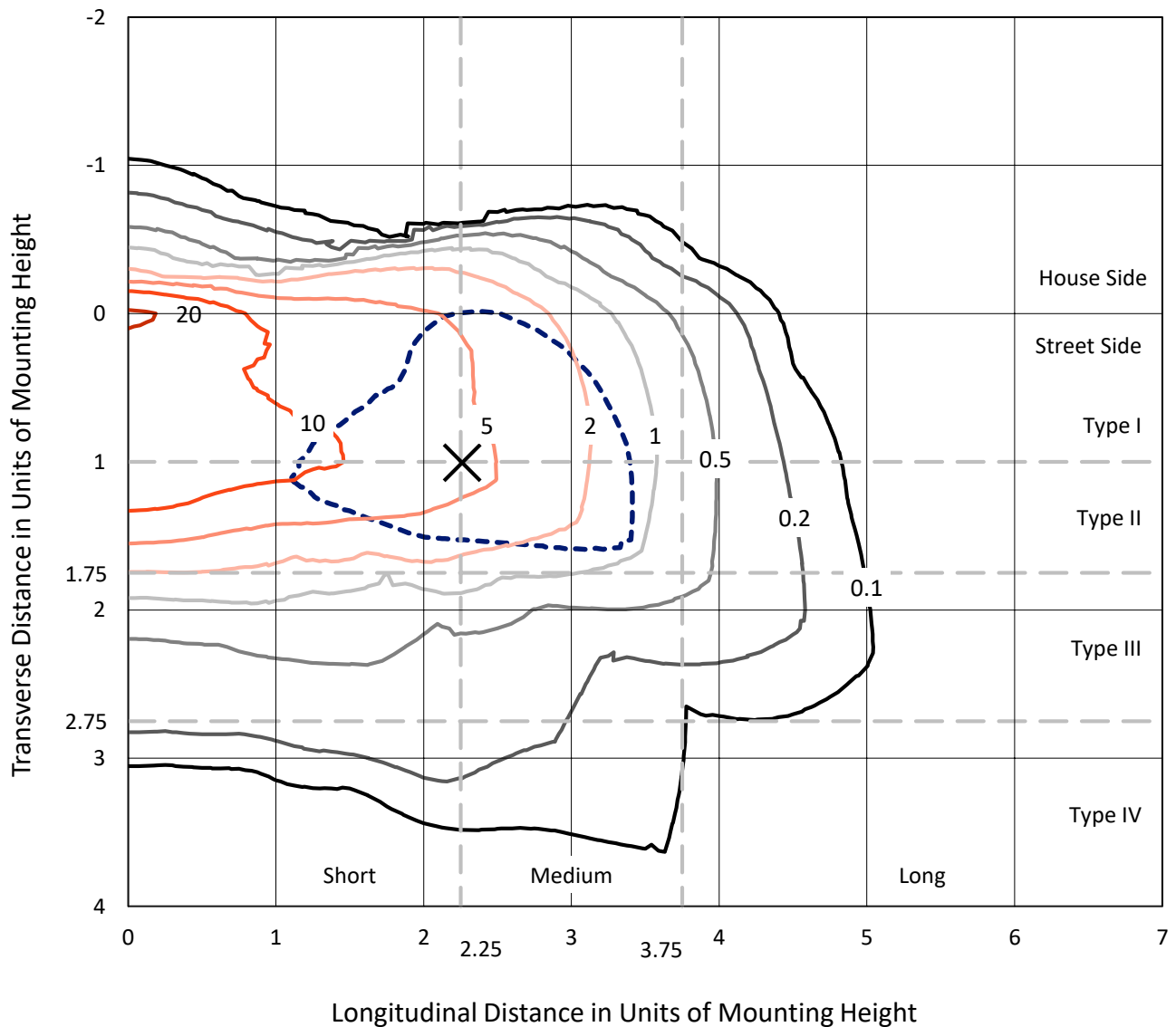


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

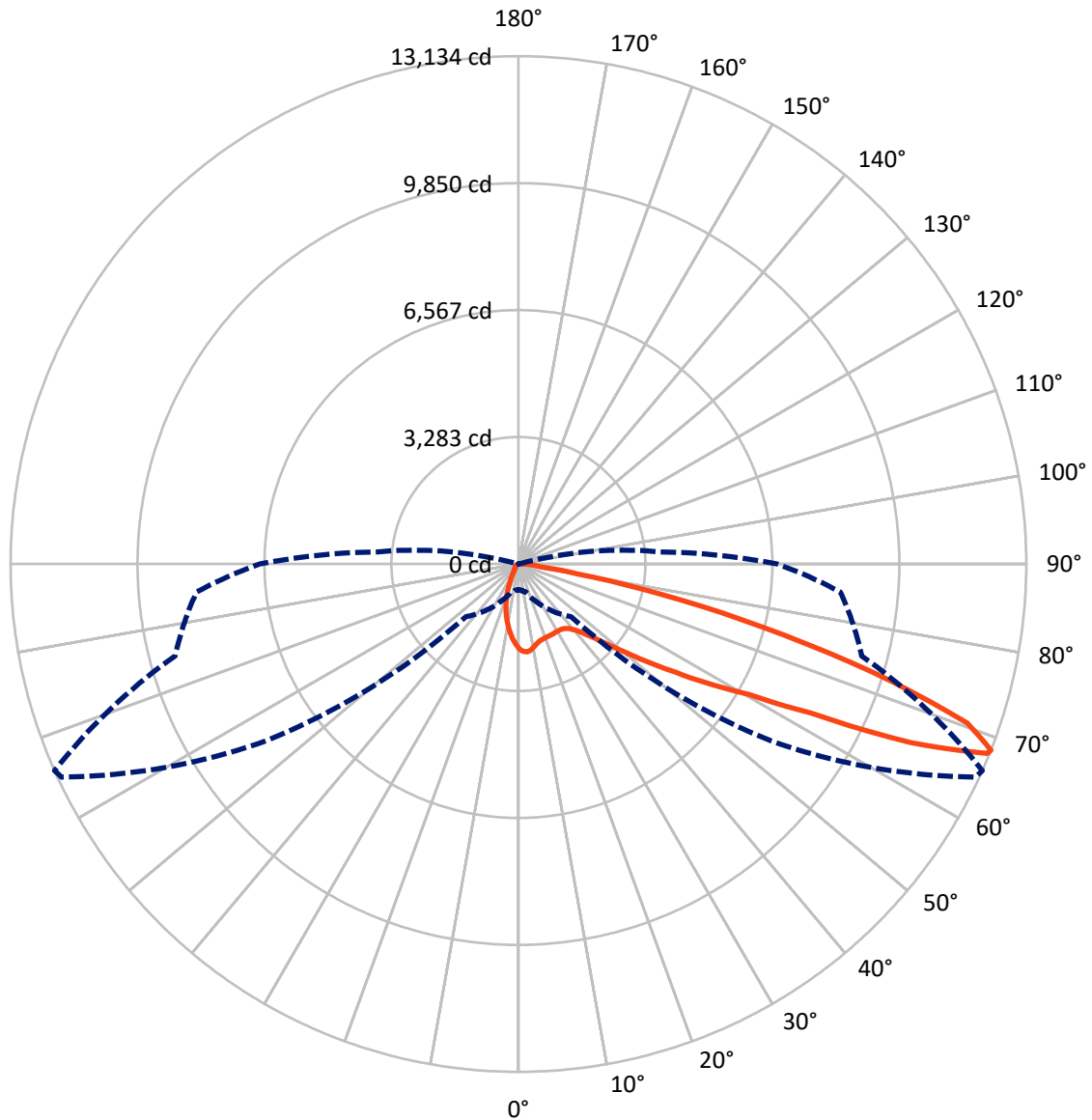


Based on 10 foot mounting height. Maximum calculated value = 21.9 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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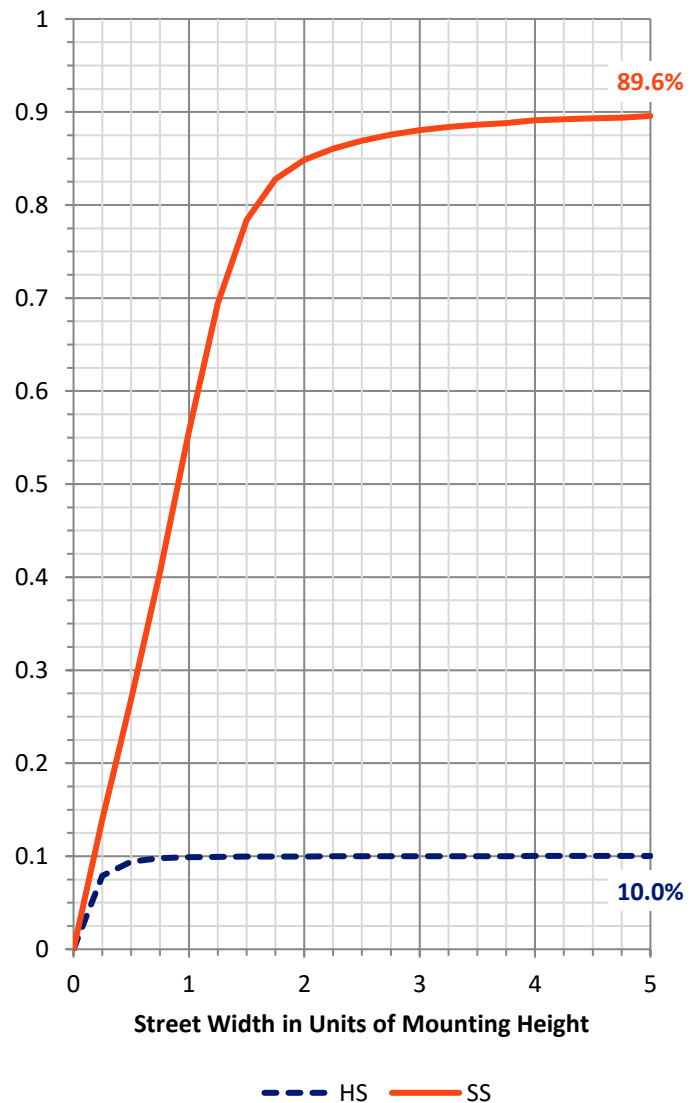
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	996.5	0.0	996.5
	% Fixture	10.1	0.0	10.1
<b>Street Side</b>	Lumens	8841.5	0.0	8841.5
	% Fixture	89.9	0.0	89.9
<b>Total</b>	Lumens	9838.0	0.0	9838.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.7	1.8
10°-20°	386.6	3.9
20°-30°	560.2	5.7
30°-40°	857.6	8.7
40°-50°	1466.9	14.9
50°-60°	2294.6	23.3
60°-70°	2642.2	26.9
70°-80°	1322.2	13.4
80°-90°	128.1	1.3
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°	9838.0	100.0
0°-180°	9838.0	100.0

**Coefficient of Utilization**



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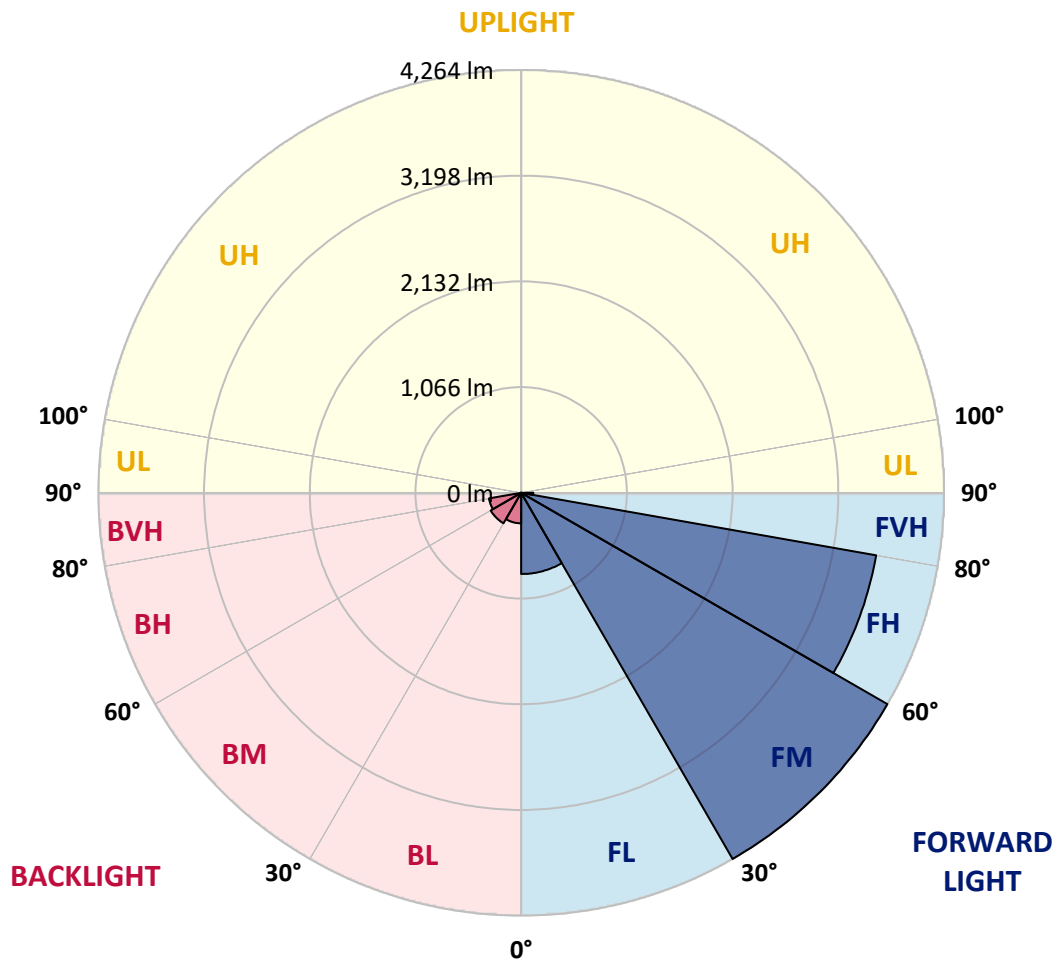
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	819.0	8.3			
FM	(30°-60°)	4264.3	43.3			
FH	(60°-80°)	3635.1	36.9			G2/5000
FVH	(80°-90°)	123.2	1.3			G2/225
BL	(0°-30°)	307.6	3.1	B1/500		
BM	(30°-60°)	354.8	3.6	B1/1000		
BH	(60°-80°)	329.2	3.3	B1/500		G1/500
BVH	(80°-90°)	4.9	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°	66°	75°	85°
0°	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8
2.5°	2305.3	2306.9	2306.1	2308.4	2306.9	2295.3	2282.9	2256.7	2259.0	2225.0	2187.2
5°	2143.2	2156.3	2169.4	2182.5	2214.2	2242.0	2275.2	2282.9	2282.9	2253.6	2198.0
7.5°	1977.9	1978.7	1993.3	2011.1	2053.6	2104.5	2181.8	2251.3	2252.8	2260.5	2199.5
10°	1853.5	1857.4	1867.4	1886.8	1929.2	1979.4	2065.9	2174.8	2183.3	2240.5	2184.1
12.5°	1757.0	1761.6	1772.4	1794.8	1833.5	1885.2	1976.3	2100.7	2112.3	2221.2	2179.5
15°	1682.9	1689.0	1697.5	1719.9	1761.6	1816.5	1916.1	2051.3	2065.2	2213.4	2194.1
17.5°	1652.0	1652.0	1651.2	1666.6	1708.3	1764.0	1868.2	2025.0	2042.8	2219.6	2218.8
20°	1665.1	1662.8	1646.6	1642.7	1668.2	1723.8	1830.4	2008.0	2028.1	2231.2	2249.0
22.5°	1734.6	1730.0	1693.7	1663.6	1655.8	1692.9	1804.9	1996.4	2020.4	2255.1	2289.1
25°	1882.1	1868.2	1818.0	1750.1	1689.0	1685.2	1787.1	1990.2	2015.7	2282.9	2333.1
27.5°	2073.7	2069.8	1989.5	1898.3	1780.9	1710.7	1781.7	1985.6	2011.1	2303.0	2368.7
30°	2311.5	2313.1	2220.4	2101.5	1923.8	1782.5	1798.7	1983.3	2009.5	2304.6	2384.1
32.5°	2557.1	2558.7	2481.4	2354.0	2119.2	1906.1	1846.6	1994.1	2018.0	2298.4	2383.3
35°	2793.4	2795.8	2749.4	2646.7	2380.3	2077.5	1937.0	2031.2	2048.2	2302.3	2381.8
37.5°	3092.3	3101.6	3044.4	2948.7	2707.7	2329.3	2084.5	2106.1	2120.0	2333.9	2393.4
40°	3602.0	3589.7	3426.0	3263.8	3063.0	2635.9	2297.6	2235.1	2239.7	2415.8	2437.4
42.5°	4196.0	4180.5	3900.2	3620.6	3428.3	3005.8	2570.2	2432.8	2432.0	2553.3	2533.2
45°	4707.2	4698.0	4402.9	4029.9	3833.0	3414.4	2906.2	2717.8	2708.5	2791.1	2707.7
47.5°	5070.2	5062.5	4839.3	4465.5	4301.0	3863.9	3325.6	3106.2	3086.9	3102.4	2991.2
50°	5105.7	5097.2	5019.2	4779.0	4847.8	4523.4	3843.8	3615.2	3590.5	3566.5	3419.8
52.5°	4773.6	4772.9	4813.8	4798.4	5230.8	5372.2	4479.4	4244.6	4215.3	4154.3	4008.3
55°	4094.8	4090.9	4246.2	4471.7	5222.4	6248.0	5448.6	4993.8	4955.1	4833.1	4641.6
57.5°	2991.9	2971.8	3296.2	3774.3	4855.5	6631.0	6987.9	5924.4	5860.3	5473.4	5178.3
60°	1652.0	1659.7	2076.7	2642.8	3986.7	6555.4	8404.3	7009.5	6841.1	6025.6	5728.2
62.5°	926.0	945.3	1255.8	1717.6	2541.7	5941.4	9164.2	8876.9	8471.5	6669.7	6423.3
65°	700.5	712.1	868.1	1325.3	1602.5	4151.9	9285.5	11488.1	11138.2	7645.9	7530.0
67.5°	659.6	668.8	745.3	1099.0	1459.7	2153.2	8372.6	13032.7	13076.7	8977.3	8387.3
68°	664.2	675.8	752.2	1057.3	1457.3	1926.1	7983.4	13040.4	13133.9	9192.0	8357.9
70°	610.1	613.2	795.5	1037.2	1412.6	1517.6	5775.3	12146.9	12314.5	9447.7	7587.2
72.5°	233.2	234.0	356.8	898.2	1479.7	1526.1	2909.3	9600.6	9609.1	8222.0	5915.1
75°	121.3	101.9	112.0	281.1	1413.3	1487.5	1459.7	6555.4	6514.4	5560.6	3624.4
77.5°	83.4	71.1	74.9	97.3	587.7	1486.7	1054.2	3769.6	3761.1	2365.6	1034.1
80°	47.1	40.9	44.8	81.9	206.2	1395.6	982.4	1620.3	1526.9	415.5	167.6
82.5°	23.9	20.1	23.9	68.7	128.2	878.1	955.3	635.6	566.1	98.9	108.9
85°	6.2	6.2	11.6	47.9	79.5	288.1	856.5	458.8	412.4	43.2	77.2
87.5°	1.5	0.8	4.6	17.8	28.6	62.6	475.0	255.6	220.1	22.4	44.8
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°	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8
2.5°	2171.7	2150.1	2107.6	2059.7	2025.8	1988.7	1967.1	1940.8	1920.7	1903.0	1916.1
5°	2164.0	2122.3	2028.1	1922.3	1833.5	1748.5	1685.2	1624.9	1579.4	1550.8	1562.4
7.5°	2143.9	2082.1	1929.2	1764.0	1618.8	1482.1	1370.8	1271.2	1194.0	1152.3	1165.4
10°	2109.9	2022.7	1817.2	1587.9	1384.8	1191.7	1026.4	878.1	766.1	713.6	726.0
12.5°	2085.2	1970.2	1701.4	1418.0	1150.7	876.6	657.2	487.3	400.1	347.5	352.2
15°	2074.4	1929.2	1593.3	1238.8	895.1	563.0	355.3	257.2	227.1	216.2	217.0
17.5°	2076.0	1896.8	1490.6	1052.7	637.2	323.6	217.8	196.2	191.5	189.2	189.2
20°	2079.8	1864.4	1384.0	858.8	407.8	208.5	181.5	174.5	172.2	169.1	169.9
22.5°	2091.4	1839.6	1276.6	664.2	251.0	169.9	160.6	154.5	150.6	146.0	146.7
25°	2109.2	1821.1	1170.8	478.1	176.9	148.3	139.8	131.3	124.3	118.9	119.7
27.5°	2120.0	1794.8	1058.1	325.9	146.7	129.7	118.2	106.6	98.9	94.2	93.4
30°	2112.3	1752.4	929.9	213.9	129.7	112.0	98.1	85.0	77.2	73.4	73.4
32.5°	2091.4	1697.5	788.5	156.0	115.1	96.5	79.5	68.0	62.6	60.2	61.0
35°	2067.5	1640.4	637.9	132.1	103.5	81.9	64.9	55.6	53.3	52.5	52.5
37.5°	2054.3	1591.0	493.5	119.7	92.7	68.0	53.3	47.9	45.6	45.6	45.6
40°	2069.0	1553.1	365.3	110.4	81.9	56.4	44.8	40.9	40.2	40.2	40.2
42.5°	2131.6	1540.0	267.2	102.7	71.1	47.1	38.6	35.5	34.8	35.5	35.5
45°	2253.6	1568.6	202.3	95.0	61.0	38.6	33.2	30.9	30.9	31.7	31.7
47.5°	2460.6	1641.9	166.0	87.3	51.0	32.4	28.6	27.0	27.0	27.8	27.8
50°	2781.9	1777.9	149.1	78.8	42.5	27.8	23.9	23.2	23.2	23.9	24.7
52.5°	3270.0	2036.6	140.6	70.3	34.8	23.2	20.1	19.3	20.1	20.9	20.9
55°	3812.9	2367.9	130.5	61.8	29.3	19.3	16.2	16.2	17.0	18.5	18.5
57.5°	4318.8	2687.6	121.3	51.0	25.5	15.4	13.1	13.1	14.7	16.2	16.2
60°	4853.2	3001.2	108.9	40.9	21.6	12.4	10.8	10.8	13.1	14.7	15.4
62.5°	5513.5	3365.7	92.7	32.4	17.0	9.3	7.7	10.0	12.4	14.7	14.7
65°	6468.1	3819.1	72.6	25.5	13.1	7.0	6.2	9.3	11.6	13.9	14.7
67.5°	6814.9	3761.1	54.8	20.9	10.0	5.4	5.4	8.5	11.6	13.9	13.9
68°	6688.2	3634.5	52.5	20.1	9.3	5.4	5.4	8.5	11.6	13.9	13.9
70°	5827.8	2971.1	43.2	15.4	7.7	4.6	4.6	7.7	11.6	13.1	13.9
72.5°	4363.5	1974.0	37.1	10.0	7.0	4.6	3.9	7.7	10.8	13.1	13.1
75°	2503.1	819.4	31.7	7.7	6.2	3.9	3.9	7.0	10.8	13.1	13.1
77.5°	707.4	191.5	25.5	6.2	5.4	3.9	3.1	7.0	10.0	12.4	12.4
80°	129.7	57.2	20.1	5.4	4.6	3.9	3.1	7.0	10.0	12.4	12.4
82.5°	85.7	27.0	14.7	5.4	4.6	3.9	3.1	6.2	9.3	11.6	11.6
85°	64.1	19.3	9.3	5.4	4.6	3.9	3.1	6.2	9.3	11.6	11.6
87.5°	35.5	8.5	7.0	6.2	5.4	3.9	3.1	5.4	8.5	10.8	10.8
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)