

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: P198857

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-7050-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198857  
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-SL2-7050-1200-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1200mA 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: 10791 lumens  
Efficiency: N/A  
Efficacy: 84.3 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): 128  
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

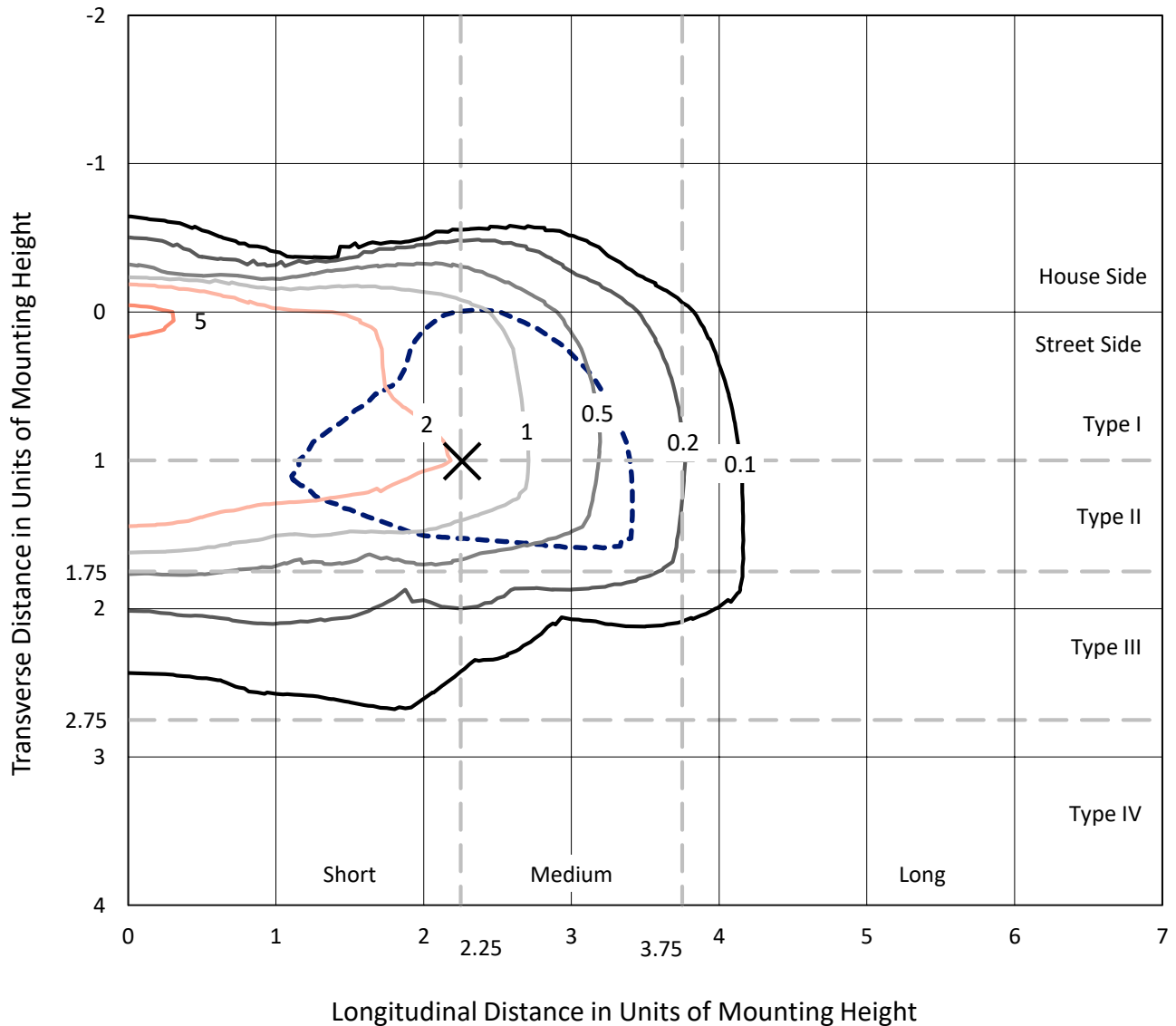


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

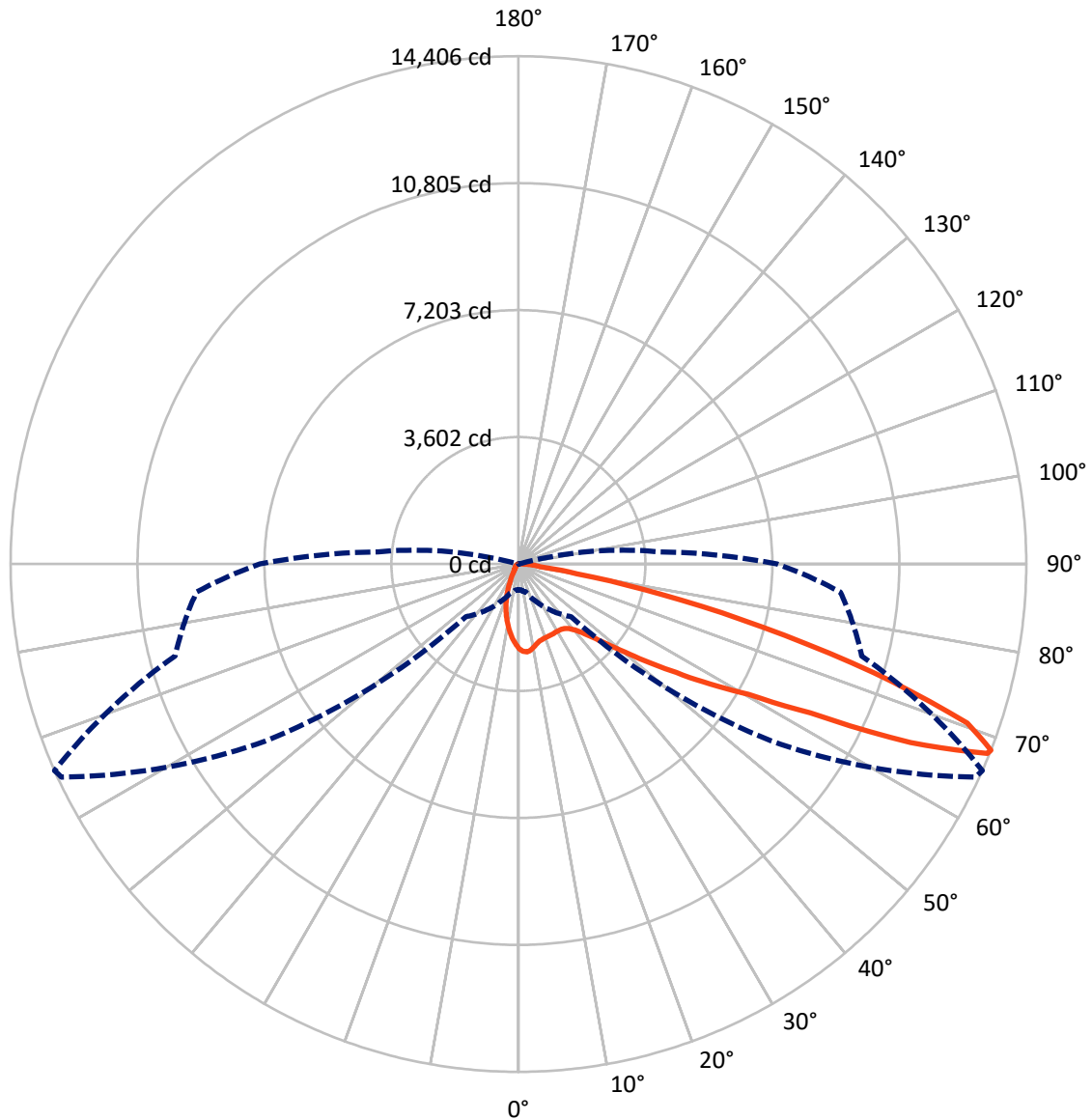


Based on 20 foot mounting height. Maximum calculated value = 6 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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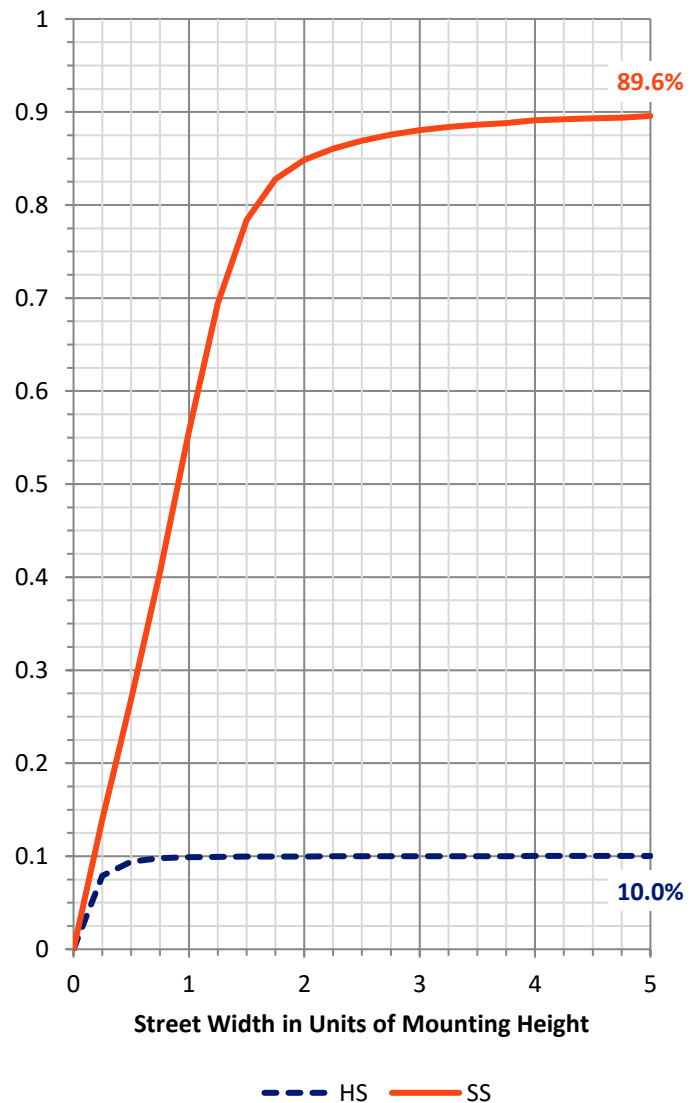
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1093.0	0.0	1093.0
	% Fixture	10.1	0.0	10.1
<b>Street Side</b>	Lumens	9698.0	0.0	9698.0
	% Fixture	89.9	0.0	89.9
<b>Total</b>	Lumens	10791.0	0.0	10791.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.1	1.8
10°-20°	424.1	3.9
20°-30°	614.5	5.7
30°-40°	940.7	8.7
40°-50°	1609.0	14.9
50°-60°	2516.9	23.3
60°-70°	2898.1	26.9
70°-80°	1450.3	13.4
80°-90°	140.5	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°	10791.0	100.0
0°-180°	10791.0	100.0

**Coefficient of Utilization**



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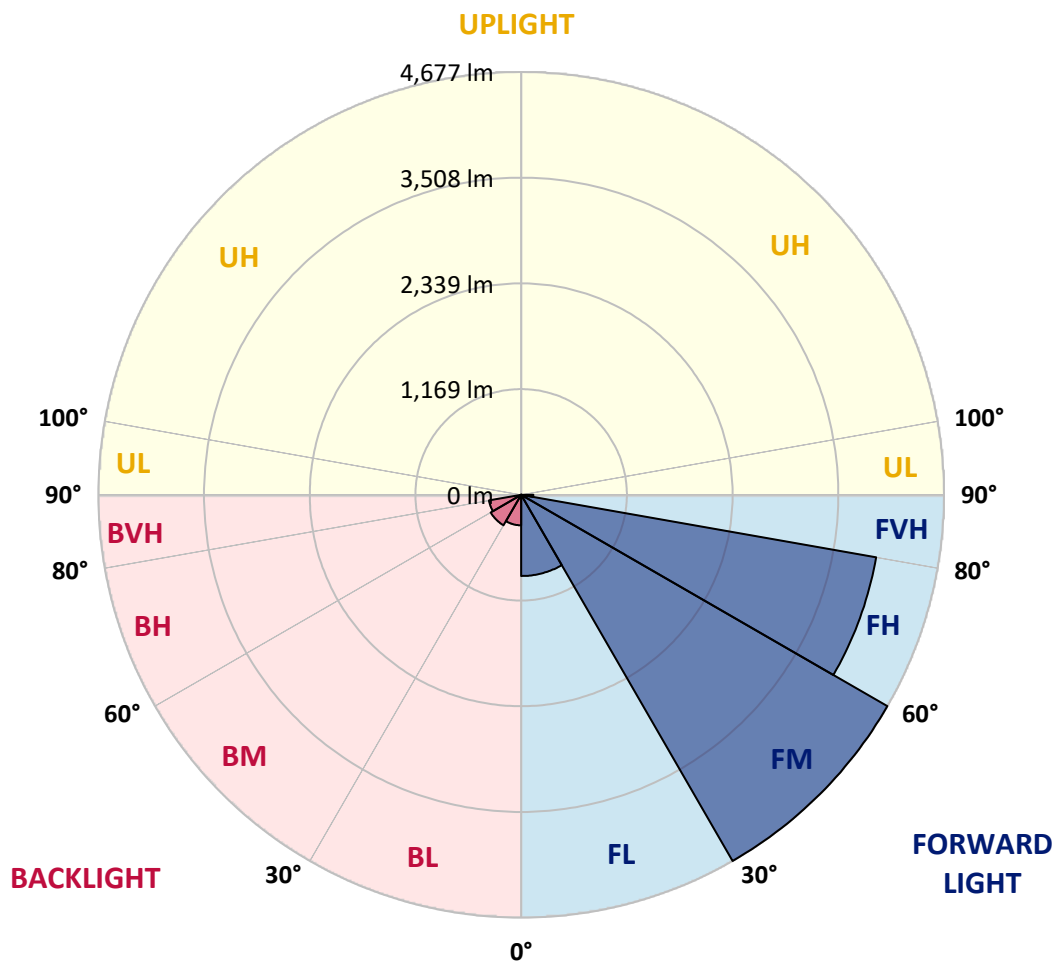
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	898.3	8.3			
FM (30°-60°)	4677.3	43.3			
FH (60°-80°)	3987.2	36.9			G2/5000
FVH (80°-90°)	135.1	1.3			G2/225
BL (0°-30°)	337.4	3.1	B1/500		
BM (30°-60°)	389.2	3.6	B1/1000		
BH (60°-80°)	361.1	3.3	B1/500		G1/500
BVH (80°-90°)	5.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1
2.5°	2528.7	2530.4	2529.5	2532.0	2530.4	2517.6	2504.1	2475.3	2477.8	2440.6	2399.1
5°	2350.8	2365.2	2379.6	2394.0	2428.7	2459.2	2495.6	2504.1	2504.1	2471.9	2410.9
7.5°	2169.5	2170.3	2186.4	2205.9	2252.5	2308.4	2393.1	2469.4	2471.1	2479.5	2412.6
10°	2033.1	2037.3	2048.3	2069.5	2116.1	2171.2	2266.1	2385.5	2394.8	2457.5	2395.7
12.5°	1927.2	1932.3	1944.1	1968.7	2011.1	2067.8	2167.8	2304.2	2316.9	2436.3	2390.6
15°	1845.9	1852.7	1862.0	1886.5	1932.3	1992.4	2101.7	2250.0	2265.2	2427.9	2406.7
17.5°	1812.0	1812.0	1811.1	1828.1	1873.8	1934.8	2049.2	2221.2	2240.6	2434.6	2433.8
20°	1826.4	1823.9	1806.1	1801.8	1829.8	1890.8	2007.7	2202.5	2224.5	2447.3	2466.8
22.5°	1902.6	1897.6	1857.7	1824.7	1816.2	1856.9	1979.7	2189.8	2216.1	2473.6	2510.9
25°	2064.4	2049.2	1994.1	1919.6	1852.7	1848.4	1960.2	2183.0	2211.0	2504.1	2559.2
27.5°	2274.5	2270.3	2182.2	2082.2	1953.5	1876.4	1954.3	2178.0	2205.9	2526.1	2598.1
30°	2535.4	2537.1	2435.5	2305.0	2110.2	1955.2	1972.9	2175.4	2204.2	2527.8	2615.1
32.5°	2804.8	2806.5	2721.8	2582.0	2324.5	2090.7	2025.5	2187.3	2213.5	2521.0	2614.2
35°	3064.0	3066.6	3015.8	2903.1	2610.8	2278.8	2124.6	2227.9	2246.6	2525.3	2612.5
37.5°	3391.9	3402.0	3339.4	3234.3	2970.0	2554.9	2286.4	2310.1	2325.4	2560.0	2625.2
40°	3951.0	3937.4	3757.8	3579.9	3359.7	2891.2	2520.2	2451.6	2456.7	2649.8	2673.5
42.5°	4602.4	4585.5	4278.0	3971.3	3760.4	3297.0	2819.2	2668.4	2667.6	2800.6	2778.6
45°	5163.2	5153.0	4829.4	4420.3	4204.3	3745.1	3187.7	2981.0	2970.9	3061.5	2970.0
47.5°	5561.4	5552.9	5308.1	4898.1	4717.6	4238.2	3647.7	3407.1	3385.9	3402.9	3280.9
50°	5600.3	5591.0	5505.4	5242.0	5317.4	4961.6	4216.1	3965.4	3938.3	3912.0	3751.1
52.5°	5236.1	5235.2	5280.1	5263.2	5737.6	5892.6	4913.3	4655.8	4623.6	4556.7	4396.6
55°	4491.4	4487.2	4657.5	4904.8	5728.2	6853.2	5976.4	5477.5	5435.1	5301.3	5091.2
57.5°	3281.8	3259.7	3615.5	4139.9	5325.9	7273.4	7664.8	6498.3	6428.0	6003.6	5680.0
60°	1812.0	1820.5	2277.9	2898.9	4372.8	7190.4	9218.4	7688.5	7503.8	6609.2	6283.1
62.5°	1015.7	1036.9	1377.4	1884.0	2787.9	6516.9	10052.0	9736.8	9292.1	7315.7	7045.5
65°	768.3	781.0	952.2	1453.7	1757.8	4554.1	10185.0	12600.9	12217.2	8386.5	8259.4
67.5°	723.4	733.6	817.5	1205.5	1601.1	2361.8	9183.7	14295.2	14343.5	9846.9	9199.7
68°	728.5	741.2	825.1	1159.7	1598.5	2112.7	8756.7	14303.7	14406.2	10082.4	9167.6
70°	669.2	672.6	872.5	1137.7	1549.4	1664.6	6334.8	13323.5	13507.4	10362.8	8322.1
72.5°	255.8	256.7	391.4	985.2	1623.1	1673.9	3191.1	10530.6	10539.9	9018.5	6488.1
75°	133.0	111.8	122.8	308.4	1550.2	1631.6	1601.1	7190.4	7145.5	6099.3	3975.5
77.5°	91.5	77.9	82.2	106.7	644.7	1630.7	1156.3	4134.8	4125.5	2594.7	1134.3
80°	51.7	44.9	49.1	89.8	226.2	1530.7	1077.5	1777.3	1674.8	455.8	183.8
82.5°	26.3	22.0	26.3	75.4	140.6	963.2	1047.9	697.2	620.9	108.4	119.4
85°	6.8	6.8	12.7	52.5	87.3	316.0	939.5	503.2	452.4	47.4	84.7
87.5°	1.7	0.8	5.1	19.5	31.3	68.6	521.0	280.4	241.4	24.6	49.1
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°	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1	2404.1
2.5°	2382.1	2358.4	2311.8	2259.3	2222.0	2181.3	2157.6	2128.8	2106.8	2087.3	2101.7
5°	2373.6	2327.9	2224.5	2108.5	2011.1	1917.9	1848.4	1782.3	1732.4	1701.0	1713.7
7.5°	2351.6	2283.8	2116.1	1934.8	1775.6	1625.6	1503.6	1394.4	1309.7	1263.9	1278.3
10°	2314.3	2218.6	1993.3	1741.7	1518.9	1307.1	1125.8	963.2	840.3	782.7	796.3
12.5°	2287.2	2161.0	1866.2	1555.3	1262.2	961.5	720.9	534.5	438.8	381.2	386.3
15°	2275.4	2116.1	1747.6	1358.8	981.8	617.6	389.7	282.1	249.1	237.2	238.0
17.5°	2277.1	2080.5	1634.9	1154.6	698.9	354.9	238.9	215.2	210.1	207.5	207.5
20°	2281.3	2045.0	1518.0	942.0	447.3	228.7	199.1	191.4	188.9	185.5	186.4
22.5°	2294.0	2017.8	1400.3	728.5	275.3	186.4	176.2	169.4	165.2	160.1	161.0
25°	2313.5	1997.5	1284.2	524.4	194.0	162.6	153.3	144.0	136.4	130.5	131.3
27.5°	2325.4	1968.7	1160.6	357.5	161.0	142.3	129.6	116.9	108.4	103.3	102.5
30°	2316.9	1922.1	1019.9	234.7	142.3	122.8	107.6	93.2	84.7	80.5	80.5
32.5°	2294.0	1862.0	864.9	171.1	126.2	105.9	87.3	74.5	68.6	66.1	66.9
35°	2267.7	1799.3	699.7	144.9	113.5	89.8	71.2	61.0	58.5	57.6	57.6
37.5°	2253.3	1745.1	541.3	131.3	101.7	74.5	58.5	52.5	50.0	50.0	50.0
40°	2269.4	1703.6	400.7	121.1	89.8	61.8	49.1	44.9	44.1	44.1	44.1
42.5°	2338.1	1689.2	293.1	112.7	77.9	51.7	42.4	39.0	38.1	39.0	39.0
45°	2471.9	1720.5	221.9	104.2	66.9	42.4	36.4	33.9	33.9	34.7	34.7
47.5°	2698.9	1801.0	182.1	95.7	55.9	35.6	31.3	29.6	29.6	30.5	30.5
50°	3051.3	1950.1	163.5	86.4	46.6	30.5	26.3	25.4	25.4	26.3	27.1
52.5°	3586.7	2233.9	154.2	77.1	38.1	25.4	22.0	21.2	22.0	22.9	22.9
55°	4182.2	2597.3	143.2	67.8	32.2	21.2	17.8	17.8	18.6	20.3	20.3
57.5°	4737.1	2948.0	133.0	55.9	28.0	16.9	14.4	14.4	16.1	17.8	17.8
60°	5323.3	3291.9	119.4	44.9	23.7	13.6	11.9	11.9	14.4	16.1	16.9
62.5°	6047.6	3691.8	101.7	35.6	18.6	10.2	8.5	11.0	13.6	16.1	16.1
65°	7094.6	4189.0	79.6	28.0	14.4	7.6	6.8	10.2	12.7	15.2	16.1
67.5°	7475.0	4125.5	60.1	22.9	11.0	5.9	5.9	9.3	12.7	15.2	15.2
68°	7336.1	3986.6	57.6	22.0	10.2	5.9	5.9	9.3	12.7	15.2	15.2
70°	6392.4	3258.9	47.4	16.9	8.5	5.1	5.1	8.5	12.7	14.4	15.2
72.5°	4786.2	2165.2	40.7	11.0	7.6	5.1	4.2	8.5	11.9	14.4	14.4
75°	2745.5	898.8	34.7	8.5	6.8	4.2	4.2	7.6	11.9	14.4	14.4
77.5°	776.0	210.1	28.0	6.8	5.9	4.2	3.4	7.6	11.0	13.6	13.6
80°	142.3	62.7	22.0	5.9	5.1	4.2	3.4	7.6	11.0	13.6	13.6
82.5°	94.0	29.6	16.1	5.9	5.1	4.2	3.4	6.8	10.2	12.7	12.7
85°	70.3	21.2	10.2	5.9	5.1	4.2	3.4	6.8	10.2	12.7	12.7
87.5°	39.0	9.3	7.6	6.8	5.9	4.2	3.4	5.9	9.3	11.9	11.9
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)