

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: P199213

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199213  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)  
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-SL4-8030-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7584 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 85  
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

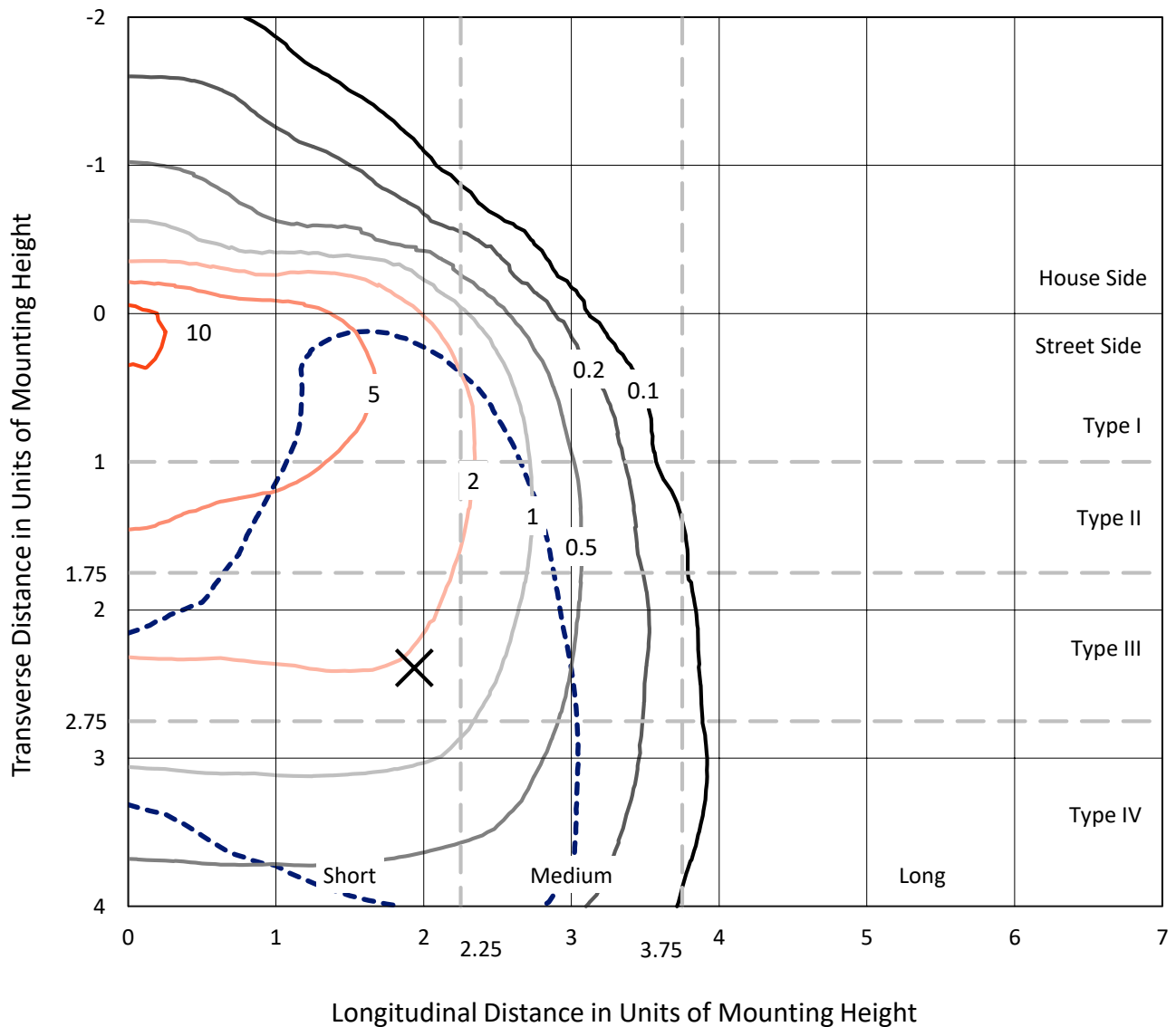


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

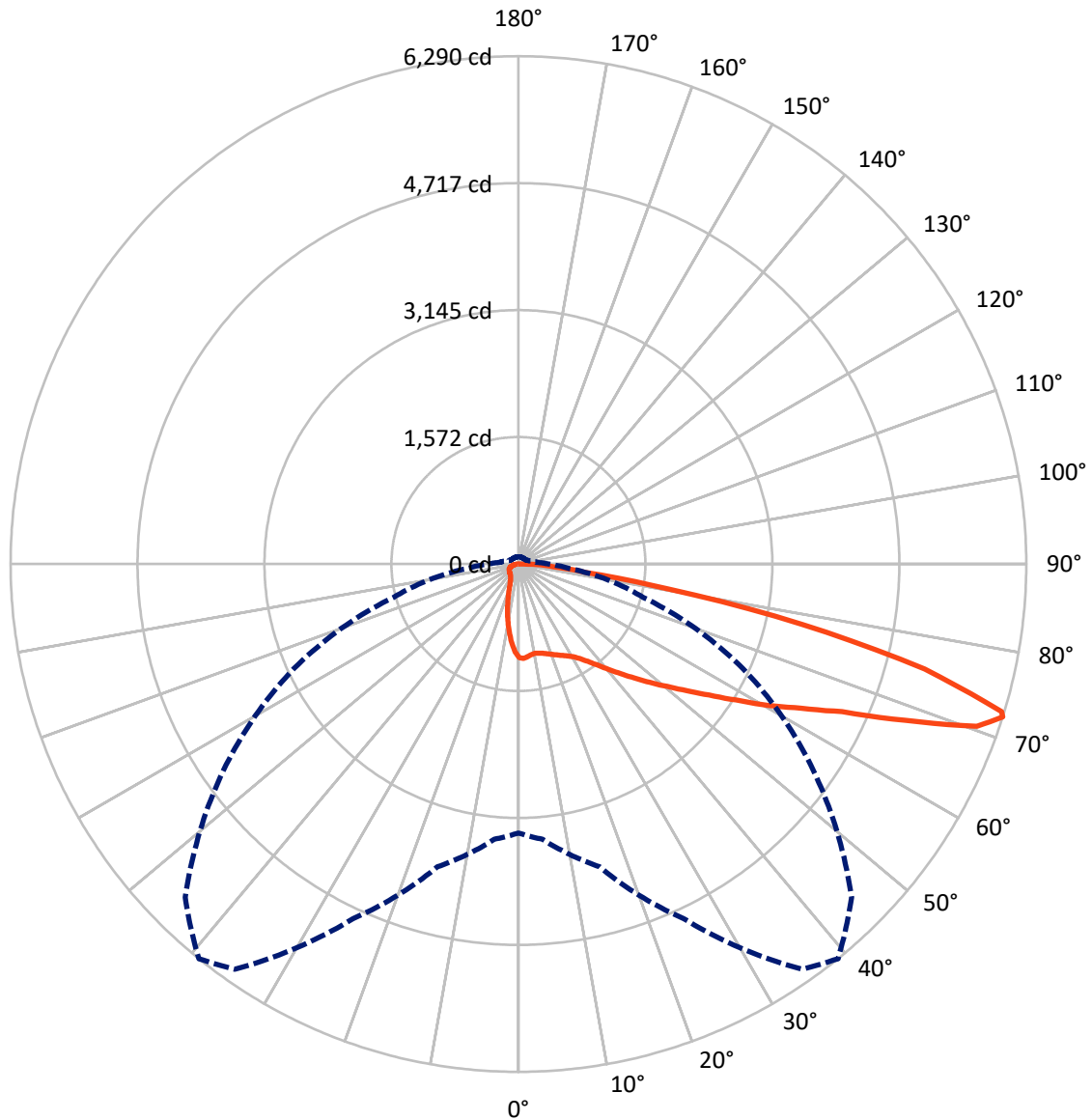


Based on 10 foot mounting height. Maximum calculated value = 11.6 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

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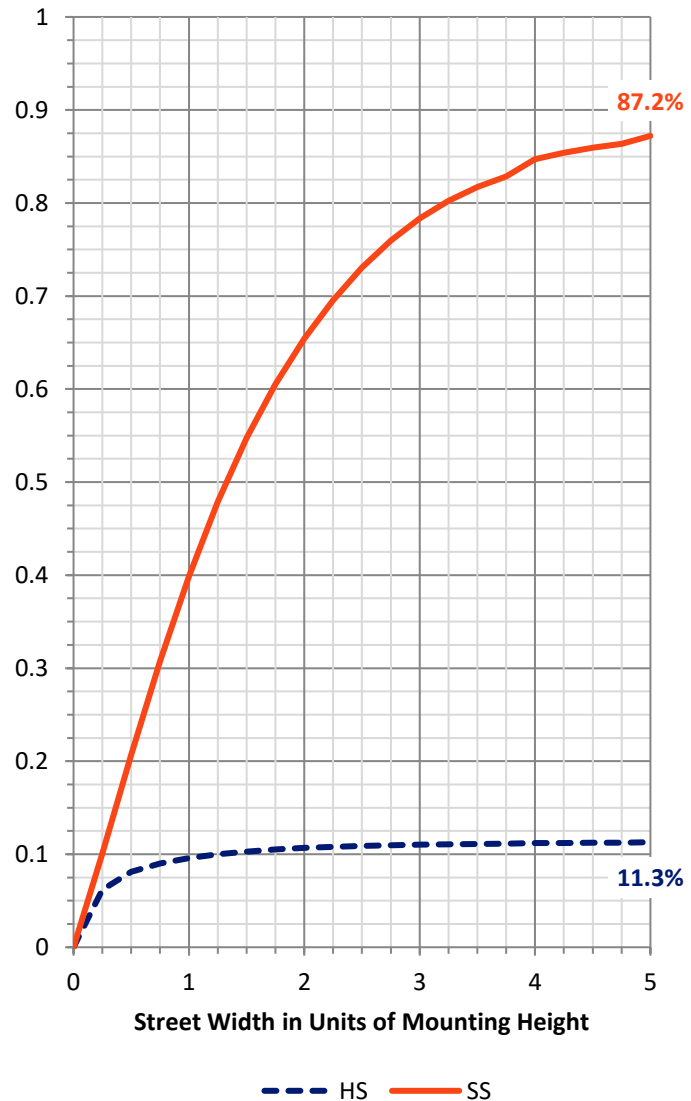
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	869.6	0.0	869.6
	% Fixture	11.5	0.0	11.5
<b>Street Side</b>	Lumens	6714.4	0.0	6714.4
	% Fixture	88.5	0.0	88.5
<b>Total</b>	Lumens	7584.0	0.0	7584.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.5	1.3
10°-20°	250.1	3.3
20°-30°	389.8	5.1
30°-40°	600.1	7.9
40°-50°	978.3	12.9
50°-60°	1520.2	20.0
60°-70°	2034.7	26.8
70°-80°	1463.2	19.3
80°-90°	248.0	3.3
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°	7584.0	100.0
0°-180°	7584.0	100.0



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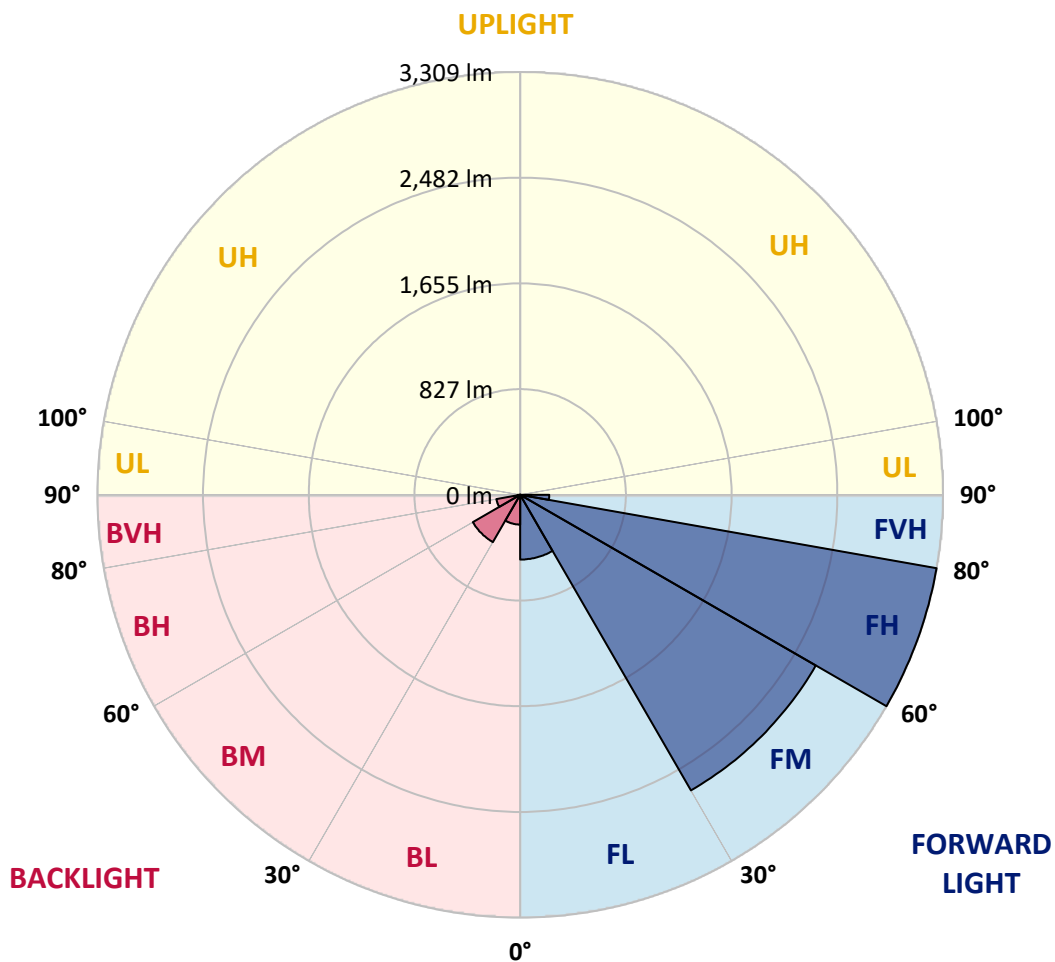
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	506.6	6.7			
FM	(30°-60°)	2671.2	35.2			
FH	(60°-80°)	3309.0	43.6			G2/5000
FVH	(80°-90°)	227.5	3.0			G3/500
BL	(0°-30°)	232.8	3.1	B1/500		
BM	(30°-60°)	427.4	5.6	B1/1000		
BH	(60°-80°)	188.9	2.5	B1/500		G1/500
BVH	(80°-90°)	20.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2
2.5°	1183.2	1183.7	1182.1	1177.6	1173.5	1171.4	1167.9	1161.8	1153.6	1148.0	1143.4
5°	1172.0	1173.5	1172.5	1164.8	1157.7	1153.6	1148.0	1139.4	1128.7	1124.1	1113.4
7.5°	1163.3	1164.3	1161.3	1152.6	1138.9	1133.8	1123.6	1112.4	1102.7	1096.1	1083.4
10°	1157.2	1158.2	1155.7	1147.0	1131.7	1125.6	1113.4	1101.2	1088.5	1080.3	1066.1
12.5°	1148.5	1150.6	1150.6	1146.5	1136.3	1132.2	1120.0	1106.8	1095.1	1086.4	1068.6
15°	1147.0	1149.6	1154.1	1153.6	1150.6	1147.5	1137.8	1124.6	1114.4	1104.2	1082.4
17.5°	1159.7	1165.3	1174.5	1177.6	1175.5	1168.9	1157.7	1145.5	1134.3	1124.6	1097.6
20°	1191.8	1194.9	1208.6	1214.7	1204.5	1194.9	1180.1	1164.3	1154.1	1146.5	1111.9
22.5°	1240.2	1244.3	1255.5	1256.0	1234.6	1222.9	1204.0	1184.7	1175.0	1172.0	1131.2
25°	1317.6	1316.5	1319.6	1306.9	1268.2	1254.4	1231.5	1209.1	1202.5	1208.6	1159.7
27.5°	1410.2	1407.7	1398.0	1364.9	1306.4	1288.5	1261.1	1241.2	1241.2	1255.5	1198.4
30°	1517.1	1514.6	1483.0	1427.5	1351.7	1331.3	1302.3	1281.4	1292.1	1319.6	1250.9
32.5°	1630.2	1621.0	1576.7	1502.4	1416.3	1393.9	1365.9	1344.5	1364.9	1411.7	1326.2
35°	1736.6	1731.5	1677.0	1588.9	1499.8	1481.0	1461.6	1435.2	1467.7	1540.6	1432.6
37.5°	1846.5	1842.4	1775.8	1682.1	1601.6	1588.9	1572.6	1554.3	1606.7	1702.4	1576.7
40°	1969.2	1961.1	1877.1	1783.4	1720.3	1714.2	1705.5	1700.4	1784.9	1927.5	1759.0
42.5°	2108.2	2092.4	1984.0	1894.9	1849.6	1854.7	1850.1	1870.5	1999.8	2187.1	1975.8
45°	2267.0	2235.5	2090.4	2013.5	1992.6	2013.0	2022.7	2074.6	2253.8	2487.0	2218.2
47.5°	2415.7	2375.0	2207.0	2142.3	2154.0	2189.1	2216.6	2308.3	2532.3	2783.3	2465.6
50°	2552.7	2506.8	2331.7	2275.7	2332.7	2382.6	2439.6	2568.9	2828.6	3088.2	2692.7
52.5°	2654.0	2620.9	2456.4	2421.3	2537.9	2604.1	2695.2	2858.6	3127.9	3378.9	2895.3
55°	2732.4	2714.5	2578.1	2588.3	2770.0	2864.7	2975.2	3163.1	3444.6	3639.6	3058.2
57.5°	2823.0	2809.7	2717.1	2789.9	3058.2	3177.3	3307.7	3516.4	3746.0	3869.2	3186.0
60°	2918.7	2918.7	2871.9	3032.7	3418.6	3555.1	3684.9	3847.3	4046.4	4075.9	3237.9
62.5°	2991.0	3009.8	3026.6	3291.4	3760.8	3930.3	4072.8	4228.6	4357.4	4177.7	3115.7
65°	3095.9	3136.1	3230.8	3590.2	4184.3	4406.3	4598.7	4729.6	4609.4	4096.8	2717.1
67.5°	3276.1	3335.7	3537.3	4035.2	4832.9	5165.4	5352.2	5126.2	4560.0	3587.2	2081.2
70°	3438.5	3522.5	3867.2	4599.8	5676.0	6021.2	5935.1	5034.0	3971.5	2629.5	1280.4
72°	3330.6	3422.2	3882.4	4845.7	6126.6	6289.5	5835.9	4461.3	3068.9	1604.7	631.3
72.5°	3259.8	3355.0	3833.0	4839.5	6138.8	6255.4	5697.9	4233.7	2785.8	1404.1	510.6
75°	2723.2	2804.7	3295.9	4289.2	5409.7	5195.9	4446.5	2740.0	1280.4	453.6	262.7
77.5°	1778.3	1840.4	2272.6	2971.6	3789.3	3583.6	2706.4	1282.9	480.1	275.4	197.5
80°	893.5	937.8	1216.3	1562.4	2045.1	1881.7	1249.3	620.6	321.2	199.1	155.3
82.5°	621.6	662.3	837.5	797.8	854.8	827.3	587.5	517.8	240.3	125.7	81.5
85°	521.3	563.6	692.9	568.7	465.3	424.1	421.0	489.2	158.8	62.1	68.7
87.5°	454.6	518.8	571.7	415.4	319.2	281.5	310.0	448.5	50.4	34.1	20.9
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°	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2	1158.2
2.5°	1135.8	1134.3	1126.6	1114.9	1106.3	1100.7	1090.0	1089.5	1090.5	1081.3	1084.9
5°	1103.7	1097.6	1077.8	1050.8	1028.9	1008.0	985.1	977.5	970.9	957.1	958.6
7.5°	1070.1	1059.4	1024.8	980.5	938.3	899.6	861.4	842.6	828.3	810.5	810.5
10°	1050.3	1033.5	980.5	915.9	848.7	792.2	735.1	701.0	676.1	653.2	651.7
12.5°	1049.3	1023.8	950.0	860.9	768.7	689.3	611.4	559.0	521.8	494.8	492.3
15°	1057.4	1021.8	924.5	809.5	693.4	590.1	493.8	427.1	379.8	349.8	346.7
17.5°	1064.5	1019.2	897.0	755.5	620.1	494.3	387.4	318.2	273.4	249.0	246.4
20°	1071.2	1013.6	861.9	698.5	539.1	404.7	302.9	246.9	217.4	203.6	202.1
22.5°	1080.8	1008.5	825.3	634.3	459.7	329.4	250.0	209.8	194.0	187.4	186.3
25°	1096.6	1009.0	789.6	568.7	386.9	274.4	216.4	191.4	182.8	178.2	178.2
27.5°	1119.5	1015.2	754.5	502.0	325.3	236.7	196.5	181.8	176.2	172.6	171.6
30°	1153.1	1026.4	717.3	438.8	276.4	210.8	184.8	175.6	171.1	168.0	167.5
32.5°	1202.0	1046.2	678.1	381.3	239.3	192.4	176.2	170.6	167.0	164.4	163.9
35°	1274.8	1081.3	639.9	332.4	212.8	179.2	169.0	164.4	162.4	161.4	160.9
37.5°	1381.7	1137.8	603.8	294.3	195.5	170.6	161.9	159.3	158.3	158.3	158.3
40°	1516.1	1212.2	571.2	267.3	185.8	163.9	156.8	154.8	154.8	155.3	155.3
42.5°	1679.5	1305.3	543.2	249.0	180.2	159.3	153.2	152.2	151.7	151.7	152.2
45°	1869.4	1415.3	525.9	234.7	176.2	156.8	150.7	150.2	148.1	147.1	147.1
47.5°	2060.3	1532.9	524.9	226.6	171.1	153.7	148.1	148.1	144.1	142.0	142.5
50°	2238.5	1638.3	536.1	224.5	168.0	149.2	145.6	146.1	140.5	138.0	137.5
52.5°	2382.1	1718.7	549.8	227.1	168.0	145.1	141.0	143.6	137.5	134.4	133.9
55°	2493.1	1774.7	554.9	232.7	170.0	141.5	136.9	141.0	136.4	132.4	132.4
57.5°	2572.5	1792.6	533.0	235.2	173.1	141.0	132.9	140.5	138.0	132.9	132.9
60°	2543.5	1689.2	451.6	225.5	172.6	140.0	129.8	141.5	143.1	137.5	137.5
62.5°	2316.9	1413.3	362.5	203.6	163.9	136.4	126.3	140.5	146.6	144.6	143.6
65°	1886.2	1036.5	281.0	177.7	149.2	128.8	118.6	131.3	138.5	140.5	141.0
67.5°	1329.3	656.2	218.4	151.2	130.8	117.6	110.0	116.1	118.6	119.6	121.7
70°	727.0	355.4	173.6	127.3	112.0	106.4	100.8	101.3	100.3	99.3	100.3
72°	365.0	232.2	146.6	110.5	99.3	95.7	93.2	91.6	91.6	90.1	90.6
72.5°	314.1	215.9	141.5	106.4	96.2	93.2	91.1	89.6	89.1	88.1	88.6
75°	209.2	171.1	118.1	89.1	82.0	79.9	80.9	79.4	79.9	78.9	79.4
77.5°	169.0	147.1	100.3	75.3	70.3	67.2	69.2	69.7	70.8	69.7	69.2
80°	141.5	125.2	84.0	62.1	58.5	56.0	57.0	60.6	61.1	58.0	57.5
82.5°	91.6	100.8	66.2	48.4	44.8	43.8	46.3	49.9	50.9	46.8	45.8
85°	76.9	80.9	47.9	33.1	29.5	28.5	33.6	37.2	39.7	35.6	34.6
87.5°	21.4	39.7	23.4	15.8	13.2	13.2	16.3	19.3	22.9	23.4	23.4
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)