

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: P271324

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271324  
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-SL4-7027-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 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: 8074.6 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

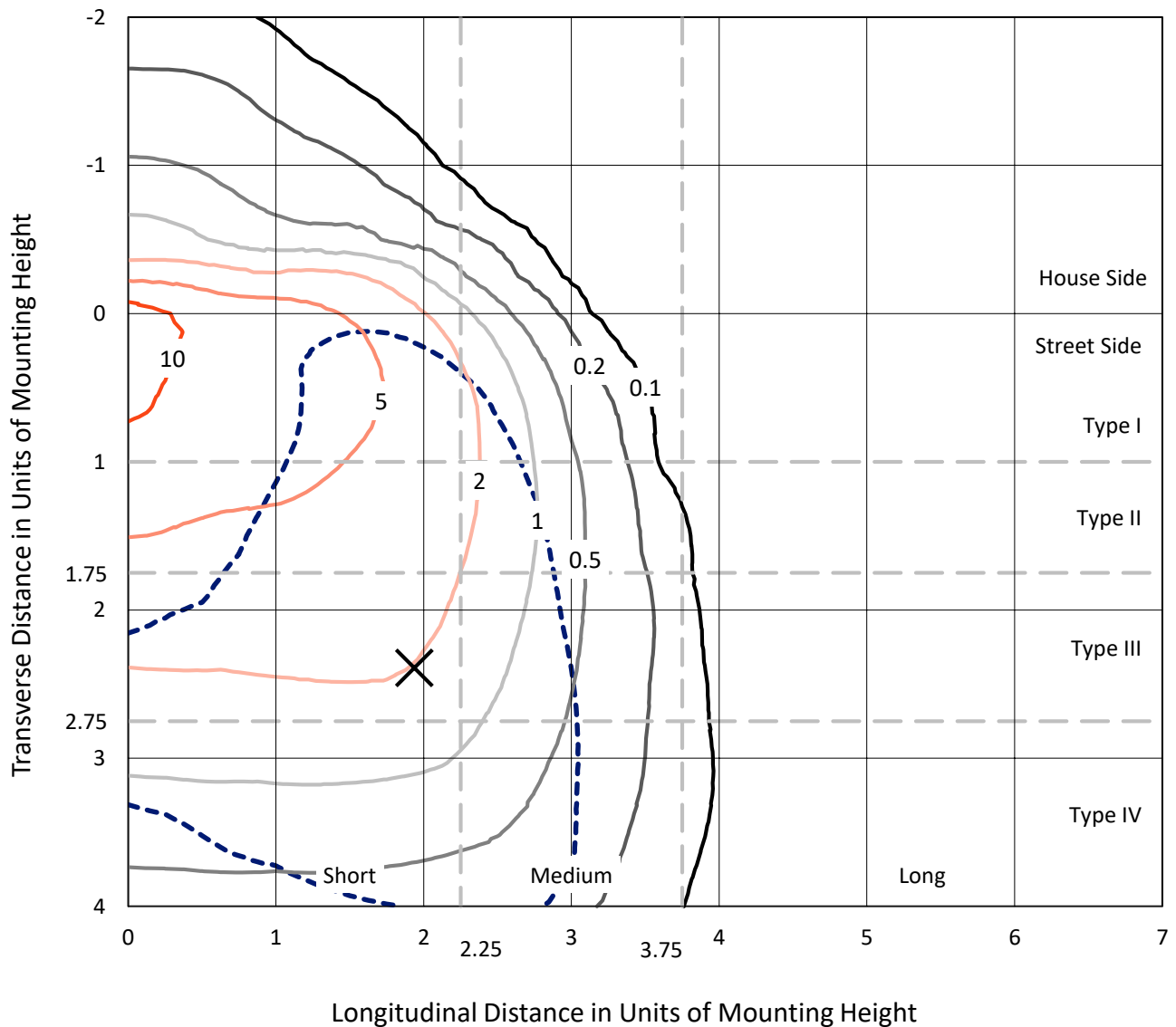


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

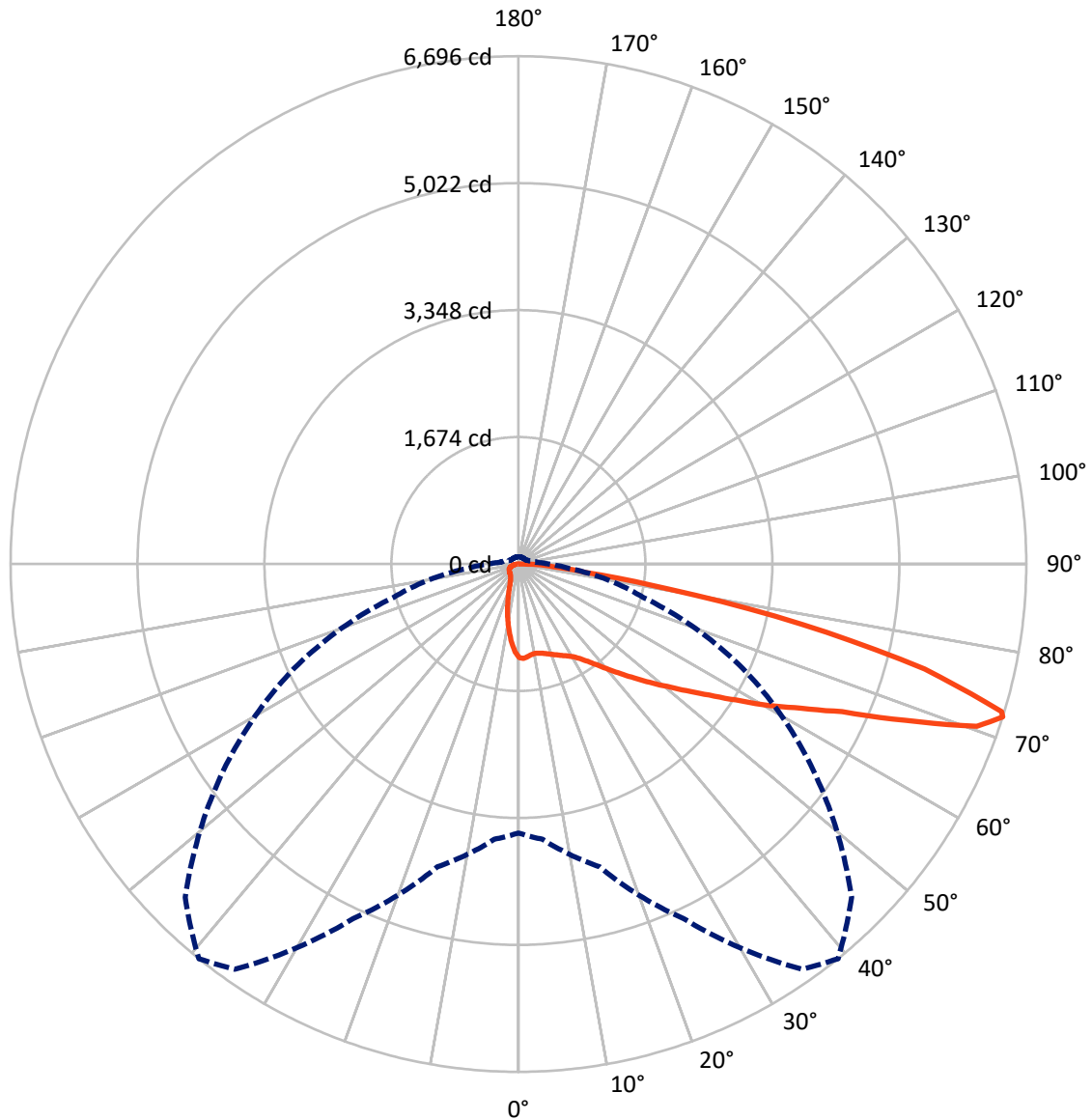


Based on 10 foot mounting height. Maximum calculated value = 12.3 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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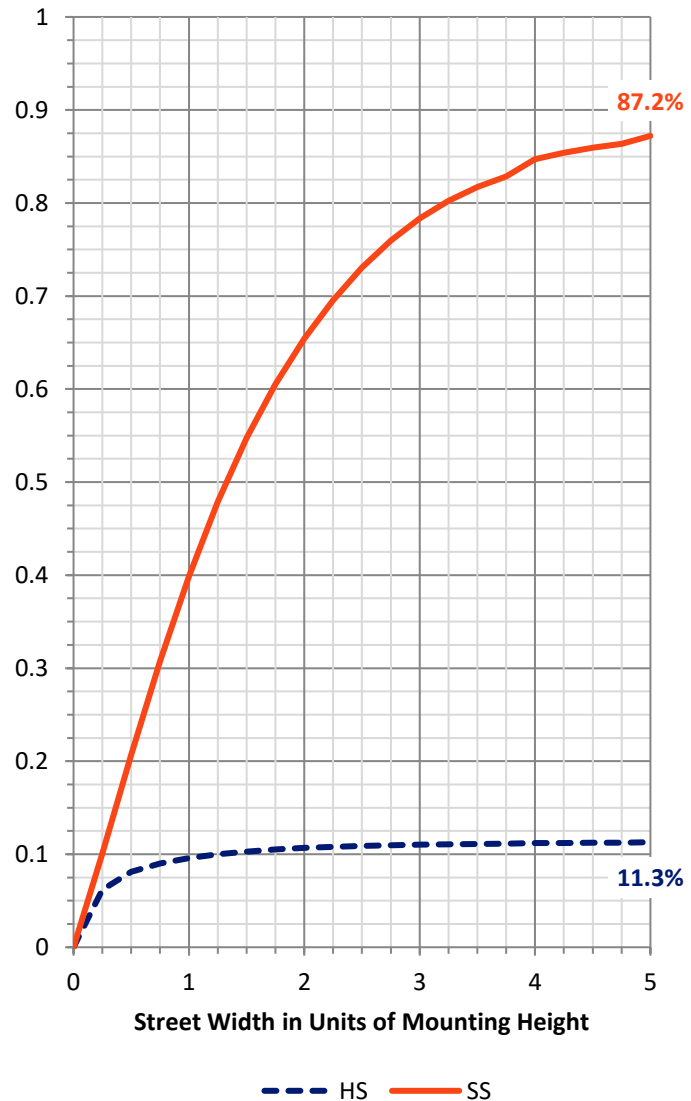
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	925.9	0.0	925.9
	% Fixture	11.5	0.0	11.5
<b>Street Side</b>	Lumens	7148.8	0.0	7148.8
	% Fixture	88.5	0.0	88.5
<b>Total</b>	Lumens	8074.6	0.0	8074.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	1.3
10°-20°	266.3	3.3
20°-30°	415.0	5.1
30°-40°	638.9	7.9
40°-50°	1041.6	12.9
50°-60°	1618.5	20.0
60°-70°	2166.3	26.8
70°-80°	1557.9	19.3
80°-90°	264.1	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°	8074.6	100.0
0°-180°	8074.6	100.0



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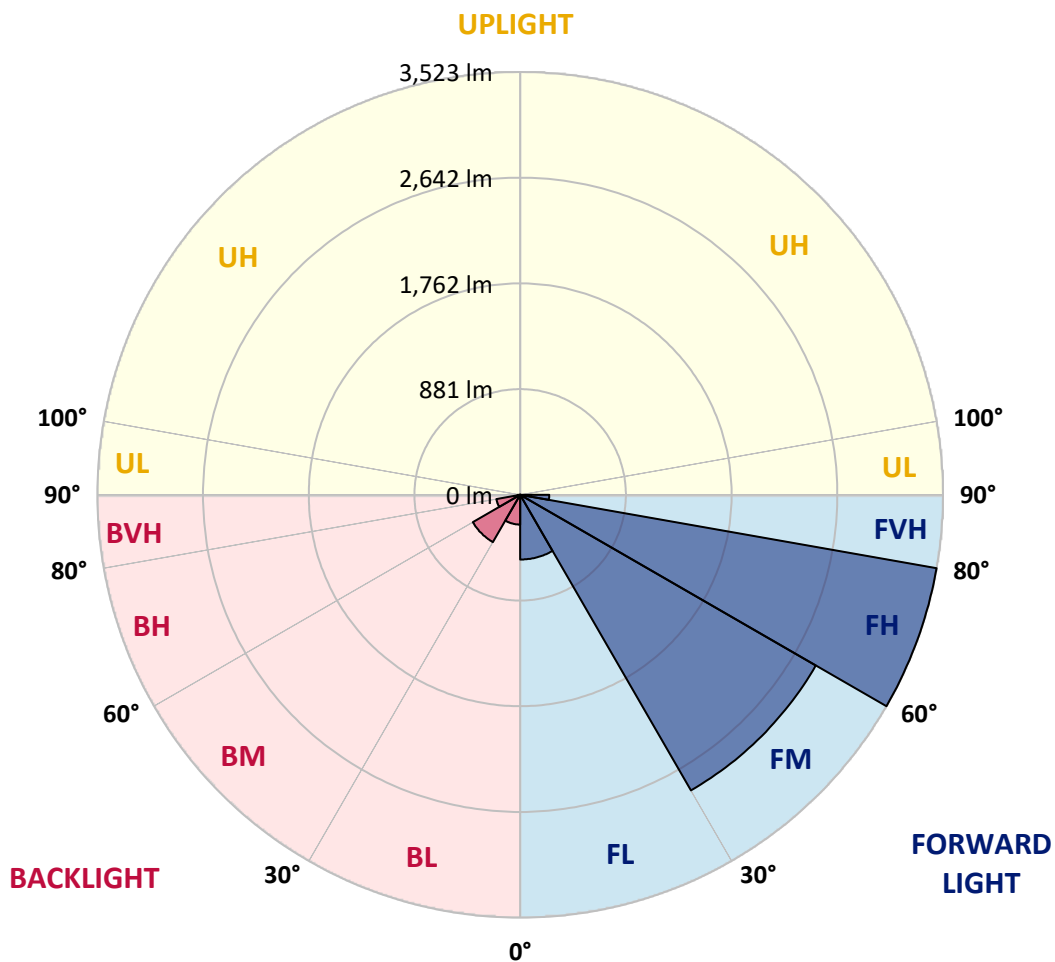
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	539.4	6.7			
FM (30°-60°)	2844.0	35.2			
FH (60°-80°)	3523.1	43.6			G2/5000
FVH (80°-90°)	242.3	3.0			G3/500
BL (0°-30°)	247.9	3.1	B1/500		
BM (30°-60°)	455.0	5.6	B1/1000		
BH (60°-80°)	201.2	2.5	B1/500		G1/500
BVH (80°-90°)	21.8	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°	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2
2.5°	1259.8	1260.2	1258.6	1253.8	1249.5	1247.2	1243.4	1237.0	1228.3	1222.4	1217.5
5°	1247.7	1249.5	1248.4	1240.2	1232.7	1228.3	1222.4	1213.2	1201.8	1196.8	1185.5
7.5°	1238.6	1239.7	1236.3	1227.2	1212.5	1207.1	1196.4	1184.3	1174.1	1167.0	1153.5
10°	1232.0	1233.2	1230.4	1221.2	1204.9	1198.5	1185.5	1172.5	1158.9	1150.2	1135.1
12.5°	1222.9	1225.0	1225.0	1220.6	1209.8	1205.4	1192.5	1178.3	1165.9	1156.7	1137.8
15°	1221.2	1223.9	1228.8	1228.3	1225.0	1221.8	1211.5	1197.4	1186.5	1175.7	1152.3
17.5°	1234.8	1240.6	1250.5	1253.8	1251.6	1244.5	1232.7	1219.5	1207.7	1197.4	1168.7
20°	1268.9	1272.2	1286.8	1293.3	1282.5	1272.2	1256.5	1239.7	1228.8	1220.6	1183.8
22.5°	1320.4	1324.7	1336.7	1337.1	1314.5	1302.0	1281.9	1261.3	1251.0	1247.7	1204.4
25°	1402.9	1401.7	1404.9	1391.5	1350.2	1335.6	1311.2	1287.4	1280.4	1286.8	1234.8
27.5°	1501.4	1498.7	1488.4	1453.2	1390.8	1371.9	1342.6	1321.4	1321.4	1336.7	1276.0
30°	1615.3	1612.5	1579.0	1519.9	1439.2	1417.4	1386.5	1364.3	1375.8	1404.9	1331.7
32.5°	1735.6	1725.9	1678.8	1599.5	1508.0	1484.1	1454.3	1431.4	1453.2	1503.0	1412.0
35°	1848.9	1843.5	1785.6	1691.7	1596.8	1576.7	1556.3	1527.9	1562.7	1640.2	1525.3
37.5°	1966.0	1961.7	1890.7	1791.0	1705.3	1691.7	1674.4	1654.9	1710.7	1812.6	1678.8
40°	2096.6	2087.9	1998.5	1898.7	1831.6	1825.0	1815.8	1810.4	1900.5	2052.2	1872.7
42.5°	2244.5	2227.7	2112.4	2017.5	1969.3	1974.7	1969.8	1991.5	2129.2	2328.5	2103.7
45°	2413.7	2380.1	2225.6	2143.7	2121.5	2143.3	2153.5	2208.8	2399.6	2647.8	2361.6
47.5°	2571.9	2528.5	2349.7	2280.8	2293.4	2330.8	2360.0	2457.7	2696.2	2963.4	2625.0
50°	2717.8	2669.0	2482.6	2422.9	2483.6	2536.8	2597.4	2735.1	3011.6	3288.1	2866.9
52.5°	2825.7	2790.4	2615.3	2578.0	2702.1	2772.6	2869.5	3043.5	3330.2	3597.5	3082.7
55°	2909.2	2890.1	2745.0	2755.7	2949.2	3050.0	3167.8	3367.7	3667.4	3875.1	3256.0
57.5°	3005.5	2991.5	2892.9	2970.3	3256.0	3382.8	3521.6	3743.9	3988.4	4119.4	3392.1
60°	3107.5	3107.5	3057.7	3229.0	3639.8	3785.1	3923.3	4096.2	4308.1	4339.6	3447.3
62.5°	3184.5	3204.6	3222.4	3504.3	4004.0	4184.6	4336.3	4502.1	4639.3	4448.0	3317.4
65°	3296.2	3339.0	3439.8	3822.5	4455.1	4691.4	4896.2	5035.5	4907.6	4361.8	2892.9
67.5°	3487.9	3551.4	3766.1	4296.2	5145.6	5499.6	5698.5	5457.8	4855.1	3819.2	2215.8
70°	3661.0	3750.3	4117.3	4897.3	6043.2	6410.8	6319.0	5359.6	4228.4	2799.7	1363.3
72°	3546.0	3643.5	4133.6	5159.1	6523.0	6696.3	6213.4	4749.9	3267.4	1708.5	672.1
72.5°	3470.7	3572.0	4081.0	5152.7	6536.0	6660.0	6066.6	4507.6	2966.1	1495.0	543.7
75°	2899.4	2986.1	3509.1	4566.8	5759.8	5532.1	4734.2	2917.2	1363.3	483.0	279.7
77.5°	1893.4	1959.6	2419.7	3163.9	4034.4	3815.5	2881.6	1366.0	511.1	293.2	210.4
80°	951.2	998.5	1294.9	1663.5	2177.4	2003.4	1330.2	660.8	342.1	211.9	165.3
82.5°	661.8	705.2	891.7	849.3	910.2	880.8	625.5	551.3	255.8	133.8	86.7
85°	555.1	600.1	737.7	605.5	495.4	451.5	448.3	520.8	169.2	66.1	73.2
87.5°	484.0	552.4	608.7	442.3	339.9	299.8	330.0	477.4	53.7	36.3	22.2
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°	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2	1233.2
2.5°	1209.3	1207.7	1199.5	1187.1	1177.9	1171.8	1160.5	1160.0	1161.1	1151.3	1155.1
5°	1175.2	1168.7	1147.6	1118.7	1095.5	1073.3	1048.9	1040.7	1033.7	1019.0	1020.7
7.5°	1139.4	1128.0	1091.1	1044.0	998.9	957.9	917.1	897.0	881.9	862.9	862.9
10°	1118.2	1100.3	1044.0	975.1	903.5	843.4	782.8	746.4	719.8	695.5	693.9
12.5°	1117.1	1090.1	1011.4	916.6	818.4	733.9	651.0	595.1	555.6	526.9	524.2
15°	1125.8	1087.8	984.4	861.8	738.2	628.3	525.8	454.8	404.3	372.3	369.2
17.5°	1133.4	1085.2	955.1	804.4	660.3	526.3	412.5	338.8	291.1	265.1	262.3
20°	1140.5	1079.3	917.7	743.6	574.0	430.9	322.5	262.9	231.5	216.9	215.2
22.5°	1150.8	1073.7	878.6	675.3	489.4	350.7	266.2	223.3	206.5	199.5	198.3
25°	1167.5	1074.4	840.8	605.5	412.0	292.2	230.3	203.8	194.7	189.7	189.7
27.5°	1192.0	1080.8	803.4	534.4	346.3	252.1	209.2	193.6	187.6	183.8	182.6
30°	1227.8	1092.8	763.6	467.3	294.4	224.3	196.8	186.9	182.1	178.9	178.4
32.5°	1279.7	1113.9	722.0	405.9	254.8	205.0	187.6	181.5	177.8	175.1	174.5
35°	1357.2	1151.3	681.4	353.9	226.6	190.8	180.0	175.1	173.0	171.8	171.2
37.5°	1471.2	1211.5	642.8	313.2	208.1	181.5	172.4	169.7	168.6	168.6	168.6
40°	1614.3	1290.7	608.2	284.6	197.8	174.5	166.9	164.7	164.7	165.3	165.3
42.5°	1788.2	1389.8	578.4	265.1	191.9	169.7	163.1	162.1	161.5	161.5	162.1
45°	1990.4	1506.8	560.0	249.9	187.6	166.9	160.4	159.9	157.7	156.7	156.7
47.5°	2193.7	1632.1	558.8	241.3	182.1	163.8	157.7	157.7	153.4	151.3	151.8
50°	2383.4	1744.2	570.8	239.0	178.9	158.8	155.0	155.5	149.6	147.0	146.3
52.5°	2536.3	1829.9	585.3	241.7	178.9	154.5	150.1	152.8	146.3	143.1	142.6
55°	2654.4	1889.6	590.8	247.8	181.1	150.6	145.9	150.1	145.3	140.9	140.9
57.5°	2738.9	1908.4	567.5	250.4	184.3	150.1	141.5	149.6	147.0	141.5	141.5
60°	2708.0	1798.4	480.9	240.1	183.8	149.1	138.2	150.6	152.4	146.3	146.3
62.5°	2466.8	1504.8	385.9	216.9	174.5	145.3	134.4	149.6	156.1	153.9	152.8
65°	2008.3	1103.6	299.2	189.2	158.8	137.1	126.3	139.9	147.4	149.6	150.1
67.5°	1415.3	698.7	232.5	160.9	139.2	125.3	117.0	123.5	126.3	127.4	129.5
70°	774.0	378.4	184.8	135.6	119.3	113.2	107.3	107.8	106.8	105.7	106.8
72°	388.6	247.2	156.1	117.6	105.7	101.9	99.3	97.6	97.6	95.9	96.5
72.5°	334.3	229.8	150.6	113.2	102.4	99.3	97.0	95.4	94.9	93.8	94.3
75°	222.8	182.1	125.8	94.9	87.2	85.1	86.1	84.6	85.1	84.0	84.6
77.5°	180.0	156.7	106.8	80.2	74.7	71.5	73.8	74.3	75.4	74.3	73.8
80°	150.6	133.4	89.4	66.1	62.3	59.6	60.7	64.5	65.0	61.9	61.3
82.5°	97.6	107.3	70.4	51.6	47.7	46.6	49.3	53.1	54.2	49.9	48.8
85°	81.8	86.1	50.9	35.3	31.4	30.4	35.8	39.5	42.3	38.0	36.9
87.5°	22.7	42.3	25.0	16.8	14.2	14.2	17.3	20.7	24.4	25.0	25.0
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)