

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: P198725

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198725  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)  
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-SL4-800-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8119.2 lumens  
Efficiency: N/A  
Efficacy: 95.5 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 - G2

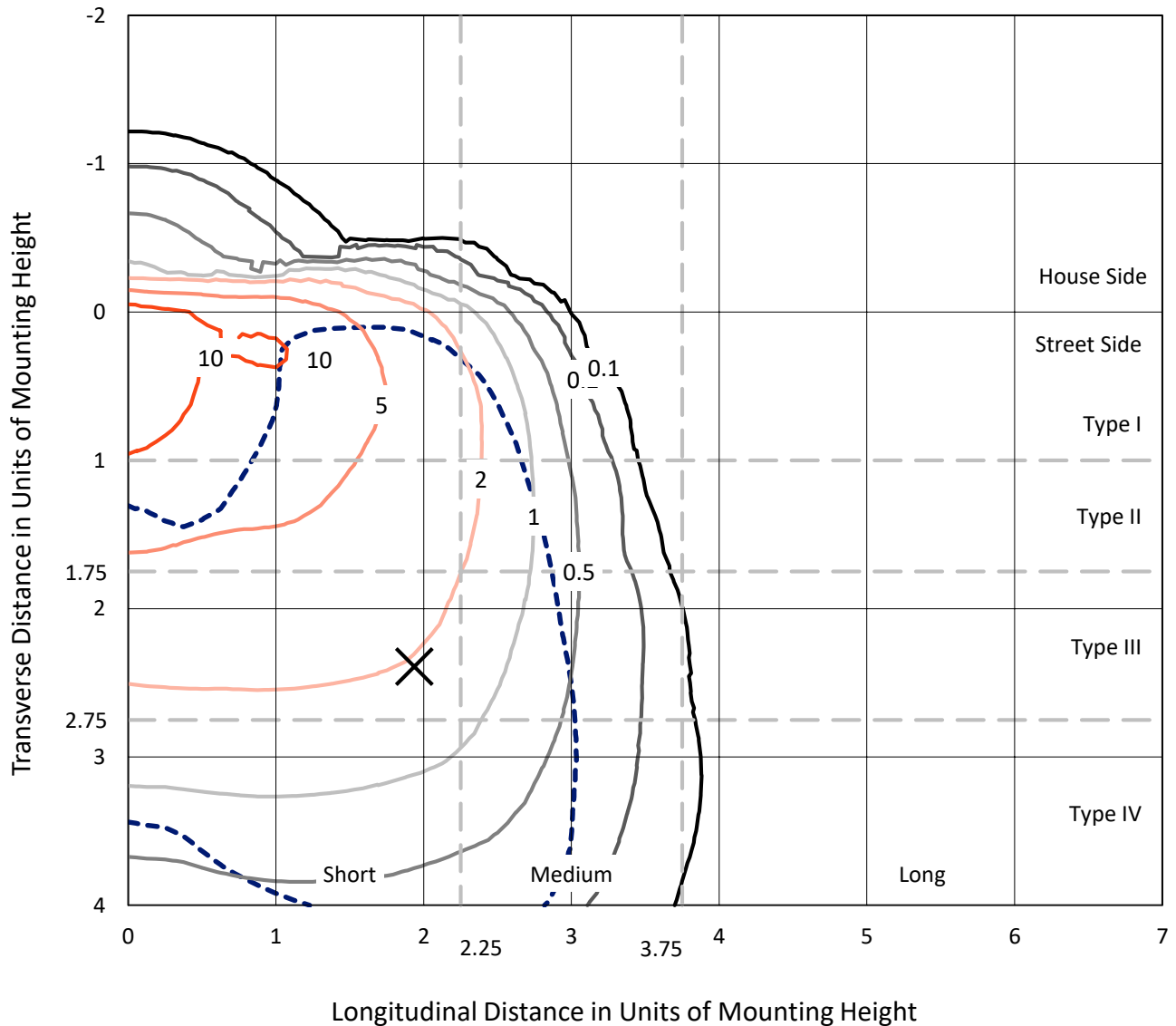
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

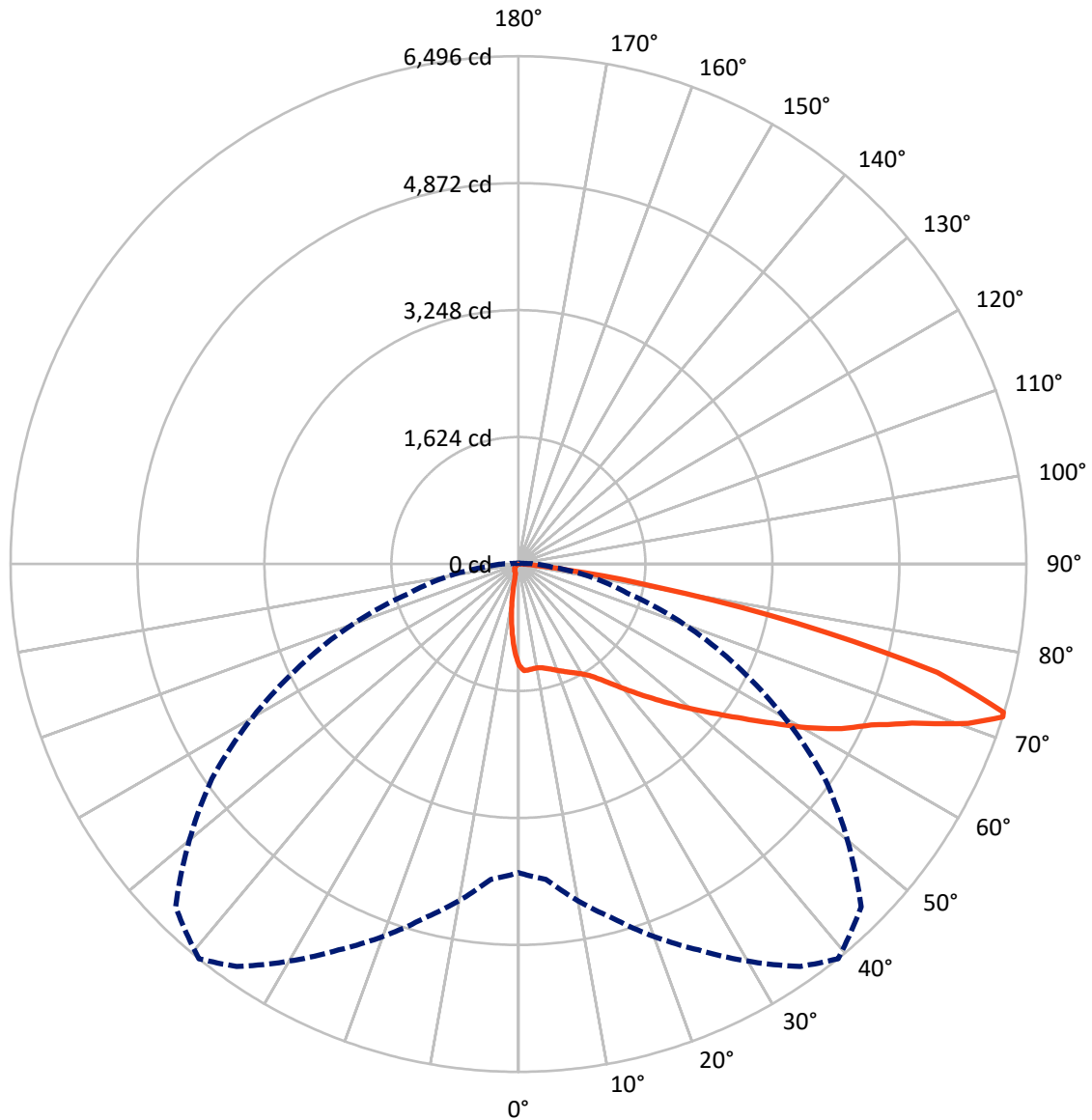
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.7 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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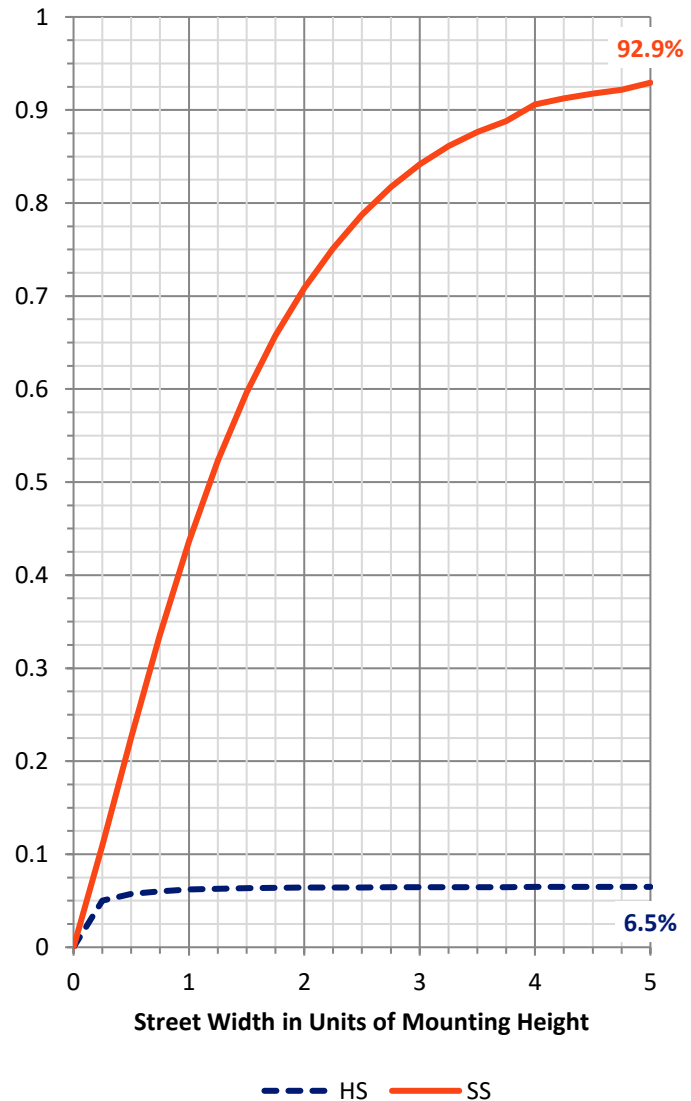
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	532.1	0.0	532.1
	% Fixture	6.6	0.0	6.6
<b>Street Side</b>	Lumens	7587.0	0.0	7587.0
	% Fixture	93.4	0.0	93.4
<b>Total</b>	Lumens	8119.2	0.0	8119.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	1.3
10°-20°	255.9	3.2
20°-30°	425.0	5.2
30°-40°	677.4	8.3
40°-50°	1118.1	13.8
50°-60°	1688.5	20.8
60°-70°	2199.6	27.1
70°-80°	1486.3	18.3
80°-90°	162.8	2.0
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°	8119.2	100.0
0°-180°	8119.2	100.0

**Coefficient of Utilization**



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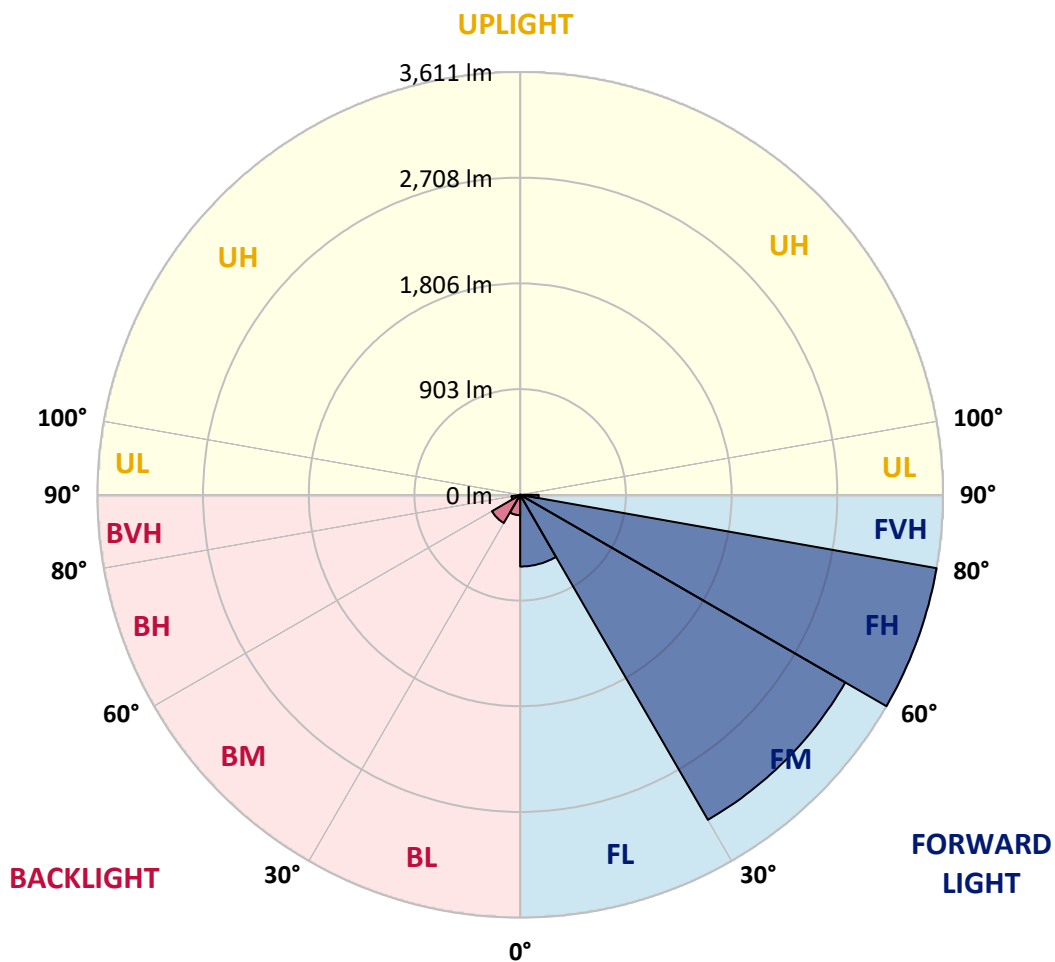
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	612.4	7.5			
FM	(30°-60°)	3205.5	39.5			
FH	(60°-80°)	3611.0	44.5			G2/5000
FVH	(80°-90°)	158.1	1.9			G2/225
BL	(0°-30°)	174.2	2.1	B1/500		
BM	(30°-60°)	278.4	3.4	B1/1000		
BH	(60°-80°)	74.8	0.9	B0/110		G0/110
BVH	(80°-90°)	4.7	0.1			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6
2.5°	1383.7	1386.3	1383.1	1377.4	1369.1	1364.0	1356.9	1341.6	1322.5	1305.9	1286.8
5°	1394.6	1395.9	1392.0	1381.2	1368.5	1361.4	1352.5	1335.9	1316.1	1293.1	1258.6
7.5°	1397.9	1397.1	1392.7	1379.3	1359.5	1350.6	1335.3	1314.8	1294.4	1273.4	1234.4
10°	1396.5	1396.5	1393.4	1380.6	1358.3	1350.0	1332.7	1311.0	1285.4	1264.5	1222.9
12.5°	1392.0	1394.6	1392.7	1385.7	1369.1	1362.7	1347.4	1325.7	1301.4	1279.7	1235.7
15°	1397.9	1401.6	1405.4	1402.9	1393.4	1387.6	1373.5	1351.2	1331.5	1308.5	1261.2
17.5°	1420.8	1429.1	1438.1	1438.7	1428.4	1418.2	1402.3	1379.3	1360.1	1339.1	1288.0
20°	1464.1	1470.6	1487.2	1490.3	1470.0	1455.2	1432.9	1406.1	1386.9	1369.1	1313.0
22.5°	1528.7	1535.7	1549.1	1544.7	1510.2	1492.9	1464.9	1434.2	1414.4	1404.2	1341.6
25°	1626.3	1628.2	1631.4	1611.7	1554.8	1535.7	1501.2	1466.7	1450.7	1449.5	1382.5
27.5°	1741.2	1743.7	1729.7	1685.7	1604.6	1579.7	1540.8	1509.5	1501.9	1511.4	1434.2
30°	1872.7	1873.3	1834.4	1763.0	1662.1	1634.6	1594.4	1559.9	1567.0	1590.6	1500.6
32.5°	2007.3	2001.0	1947.4	1854.2	1740.6	1707.4	1672.9	1638.5	1658.9	1706.8	1597.6
35°	2130.6	2128.0	2064.8	1956.3	1842.7	1813.4	1788.4	1752.1	1785.3	1863.1	1729.7
37.5°	2253.8	2251.8	2179.7	2066.8	1968.5	1947.4	1928.9	1900.7	1955.1	2069.3	1906.5
40°	2389.7	2386.5	2297.8	2189.3	2114.6	2103.1	2092.2	2080.2	2172.6	2331.6	2126.7
42.5°	2557.6	2543.6	2422.9	2322.7	2275.5	2278.6	2279.2	2291.4	2436.3	2643.7	2386.5
45°	2750.3	2719.0	2548.6	2465.6	2452.2	2471.3	2490.6	2541.0	2743.2	3003.1	2673.7
47.5°	2937.3	2886.9	2693.5	2619.5	2646.9	2686.5	2732.4	2830.7	3088.0	3379.0	2934.1
50°	3098.2	3046.4	2837.2	2775.9	2863.3	2922.1	3003.7	3152.4	3451.7	3696.8	3098.2
52.5°	3224.5	3183.7	2989.1	2948.1	3103.3	3183.7	3312.0	3507.3	3795.1	3906.2	3213.1
55°	3317.7	3297.3	3134.5	3140.3	3370.1	3486.2	3645.8	3866.7	4084.9	4069.0	3299.2
57.5°	3423.1	3407.1	3287.2	3366.9	3691.1	3841.1	4025.6	4203.0	4295.6	4199.8	3383.5
60°	3530.9	3536.0	3472.2	3641.4	4088.1	4254.0	4415.0	4458.9	4476.2	4332.6	3472.2
62.5°	3612.7	3634.3	3640.1	3937.5	4495.4	4637.0	4706.6	4675.4	4671.5	4510.7	3465.1
65°	3706.5	3763.2	3857.8	4262.4	4865.6	4958.8	5008.6	5053.9	4958.1	4563.7	3124.3
67.5°	3868.6	3957.9	4170.5	4660.7	5293.2	5431.1	5572.1	5524.2	5000.9	4025.6	2380.1
70°	4086.9	4196.0	4571.4	5180.8	5873.4	6104.5	6222.5	5486.6	4245.8	2781.6	1255.5
72°	3949.0	4047.9	4695.1	5446.4	6284.4	6496.4	6200.8	4785.8	3077.8	1441.8	420.6
72.5°	3815.0	3917.1	4655.6	5443.2	6325.3	6487.5	6059.8	4509.4	2723.5	1122.1	289.8
75°	2646.9	2775.9	3991.1	4893.0	5712.0	5533.9	4636.4	2730.6	986.7	192.7	95.7
77.5°	1368.5	1468.0	2421.0	3457.6	3980.9	3645.8	2740.1	1184.7	273.2	102.1	63.2
80°	848.2	897.4	1132.3	1703.5	2068.0	1808.9	1208.9	478.7	174.9	60.7	50.4
82.5°	439.2	476.8	713.0	687.4	764.0	635.0	446.1	400.8	107.8	37.6	51.7
85°	144.2	153.1	437.8	457.1	326.8	219.5	197.8	382.3	31.3	24.2	44.1
87.5°	19.1	22.3	153.9	261.7	160.8	99.5	118.8	134.7	10.8	13.4	12.2
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°	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6	1299.6
2.5°	1274.0	1265.7	1239.5	1213.3	1183.3	1155.9	1134.2	1120.1	1126.6	1105.5	1108.7
5°	1237.6	1216.6	1159.1	1097.2	1030.2	967.6	917.8	880.9	873.8	841.9	843.1
7.5°	1202.5	1168.0	1074.8	972.7	861.6	771.7	690.0	618.5	593.0	566.8	551.5
10°	1183.3	1136.1	1004.0	855.3	698.9	566.8	451.9	361.9	324.3	296.8	283.4
12.5°	1189.1	1126.6	951.0	748.7	543.2	375.3	255.3	189.6	166.6	153.9	149.4
15°	1208.2	1128.4	903.2	644.7	395.1	227.2	150.0	128.3	126.3	125.7	125.1
17.5°	1226.1	1130.4	852.7	536.1	264.2	144.8	120.6	118.8	118.8	118.8	118.8
20°	1244.6	1131.0	797.2	422.6	173.6	118.8	113.6	112.3	113.6	113.6	113.6
22.5°	1266.3	1135.5	743.6	312.1	128.3	111.7	108.5	107.8	108.5	108.5	107.8
25°	1293.1	1145.1	685.5	223.4	116.2	107.2	104.0	103.4	104.0	103.4	103.4
27.5°	1328.9	1157.9	617.9	160.2	111.1	102.8	99.5	99.5	99.5	98.9	98.9
30°	1374.8	1173.1	527.2	126.3	106.0	98.3	95.7	95.7	95.1	94.4	94.4
32.5°	1440.6	1198.1	428.3	114.3	100.2	92.6	90.0	90.6	90.0	89.4	88.7
35°	1533.8	1237.0	330.6	107.8	94.4	86.8	84.3	84.3	84.3	83.0	83.0
37.5°	1665.9	1296.3	247.7	101.5	88.7	81.0	77.8	77.8	77.2	76.0	76.6
40°	1829.2	1371.1	179.3	95.7	83.0	74.7	72.1	70.9	69.6	68.3	68.3
42.5°	2025.9	1443.8	134.7	90.0	77.2	69.6	66.4	65.1	62.5	61.3	60.7
45°	2246.1	1521.0	111.7	83.0	70.9	63.8	61.3	58.7	55.5	53.6	53.0
47.5°	2431.9	1568.3	99.5	76.0	64.4	58.1	55.5	51.7	47.9	46.5	46.5
50°	2543.6	1548.4	89.4	68.9	58.1	52.4	49.1	44.1	41.5	40.2	39.6
52.5°	2606.1	1489.7	81.0	63.2	52.4	45.9	41.5	37.0	35.7	34.5	34.5
55°	2648.8	1404.8	72.1	57.5	47.3	40.2	35.1	31.9	30.6	30.0	29.4
57.5°	2689.6	1301.4	63.8	52.4	42.1	35.7	30.0	28.7	26.2	25.6	25.6
60°	2701.8	1159.1	56.2	46.5	37.6	31.3	26.2	24.2	21.7	21.1	21.1
62.5°	2547.4	922.3	49.8	39.6	33.1	26.8	23.0	20.5	17.9	17.9	17.9
65°	2128.7	626.1	42.8	34.5	29.4	23.0	19.7	16.6	15.3	15.3	15.3
67.5°	1482.7	349.1	36.4	29.4	24.9	19.1	16.6	14.0	13.4	14.0	14.0
70°	668.3	138.5	30.6	24.2	20.5	16.0	14.0	12.2	13.4	13.4	13.4
72°	200.4	74.1	25.6	19.7	16.6	14.0	12.2	11.5	12.8	13.4	13.4
72.5°	148.7	66.4	24.2	19.1	16.6	13.4	11.5	11.5	12.8	13.4	13.4
75°	76.6	45.3	18.5	14.0	12.2	10.8	9.6	10.8	12.8	12.8	12.8
77.5°	60.0	37.0	15.3	10.8	10.2	9.6	8.9	10.2	11.5	11.5	11.5
80°	56.2	24.2	12.2	10.2	8.9	8.3	8.3	8.9	10.2	10.8	10.8
82.5°	56.8	19.7	10.8	9.6	8.3	7.7	7.7	8.3	9.6	10.2	10.2
85°	36.4	13.4	9.6	8.3	7.7	7.1	7.1	7.7	8.9	9.6	9.6
87.5°	12.2	10.2	8.3	7.7	6.3	6.3	6.3	6.3	7.7	8.3	8.9
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)