

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: P198885

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7050-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198885
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-SL4-7050-800-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 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: 7937 lumens
Efficiency: N/A
Efficacy: 93.4 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 (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

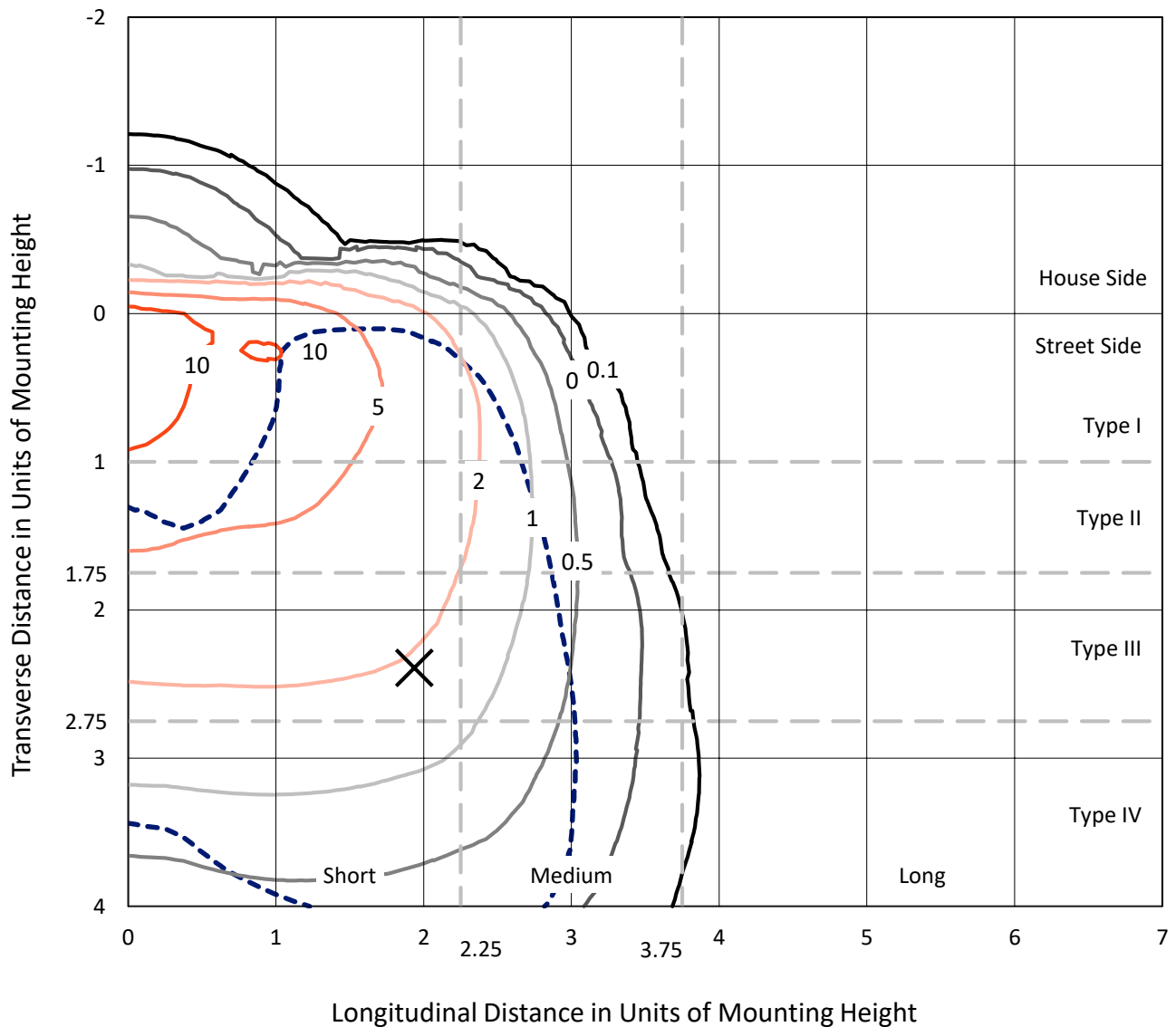


REPORT NUMBER: P198885

CATALOG NUMBER: XNV2-AF-02-LED-U-SL4-7050-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

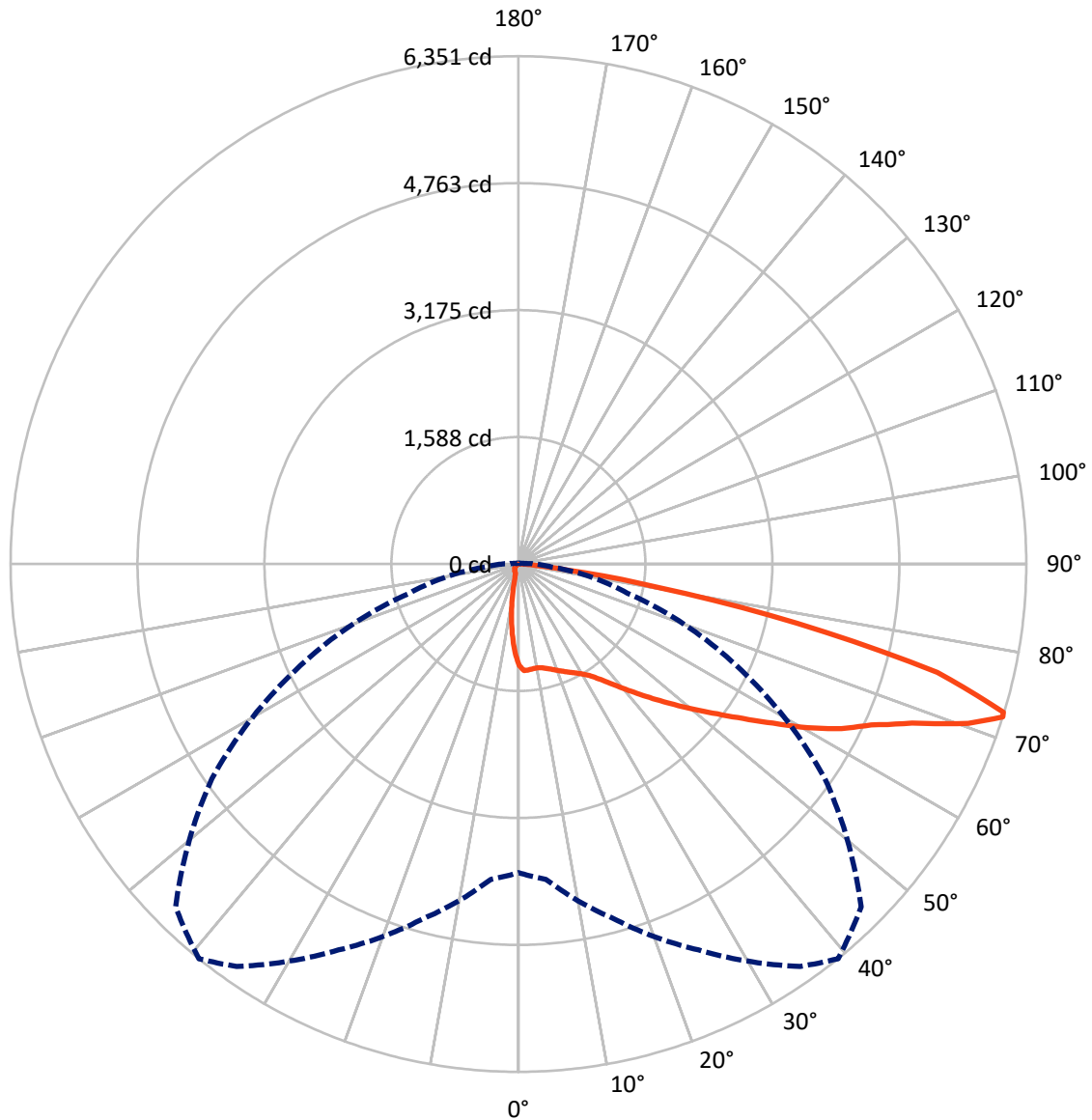


Based on 10 foot mounting height. Maximum calculated value = 13.3 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198885

CATALOG NUMBER: XNV2-AF-02-LED-U-SL4-7050-800-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P198885

CATALOG NUMBER: XNV2-AF-02-LED-U-SL4-7050-800-HSS

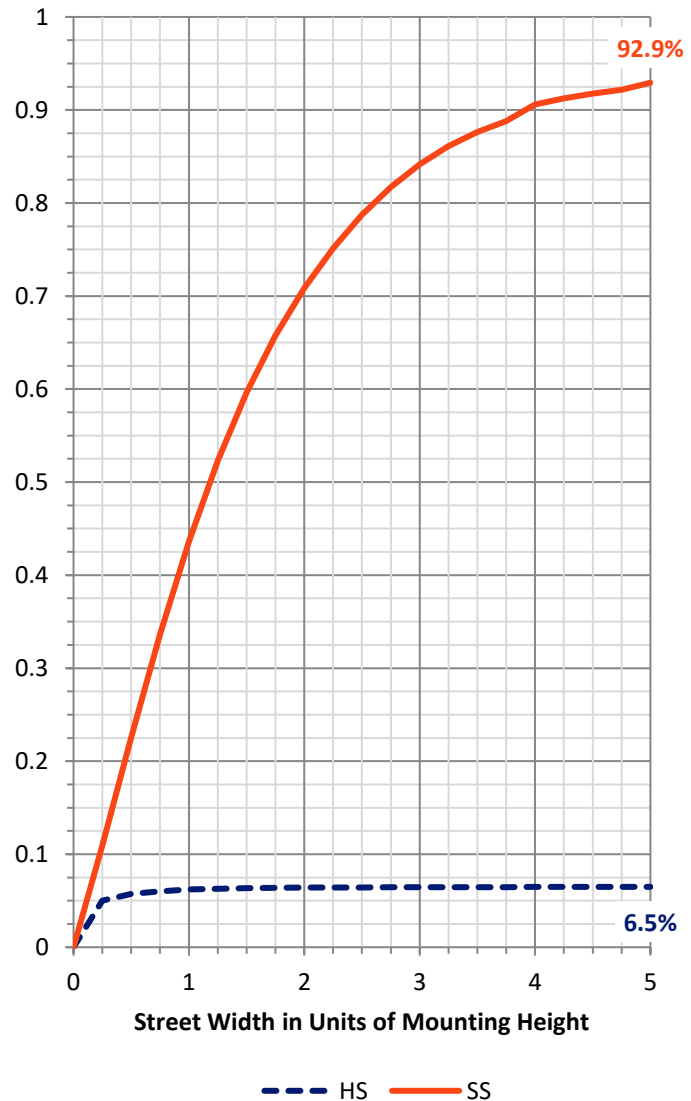
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	520.2	0.0	520.2
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	7416.8	0.0	7416.8
	% Fixture	93.4	0.0	93.4
Total	Lumens	7937.0	0.0	7937.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	1.3
10°-20°	250.2	3.2
20°-30°	415.5	5.2
30°-40°	662.2	8.3
40°-50°	1093.0	13.8
50°-60°	1650.6	20.8
60°-70°	2150.2	27.1
70°-80°	1452.9	18.3
80°-90°	159.1	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°	7937.0	100.0
0°-180°	7937.0	100.0



REPORT NUMBER: P198885

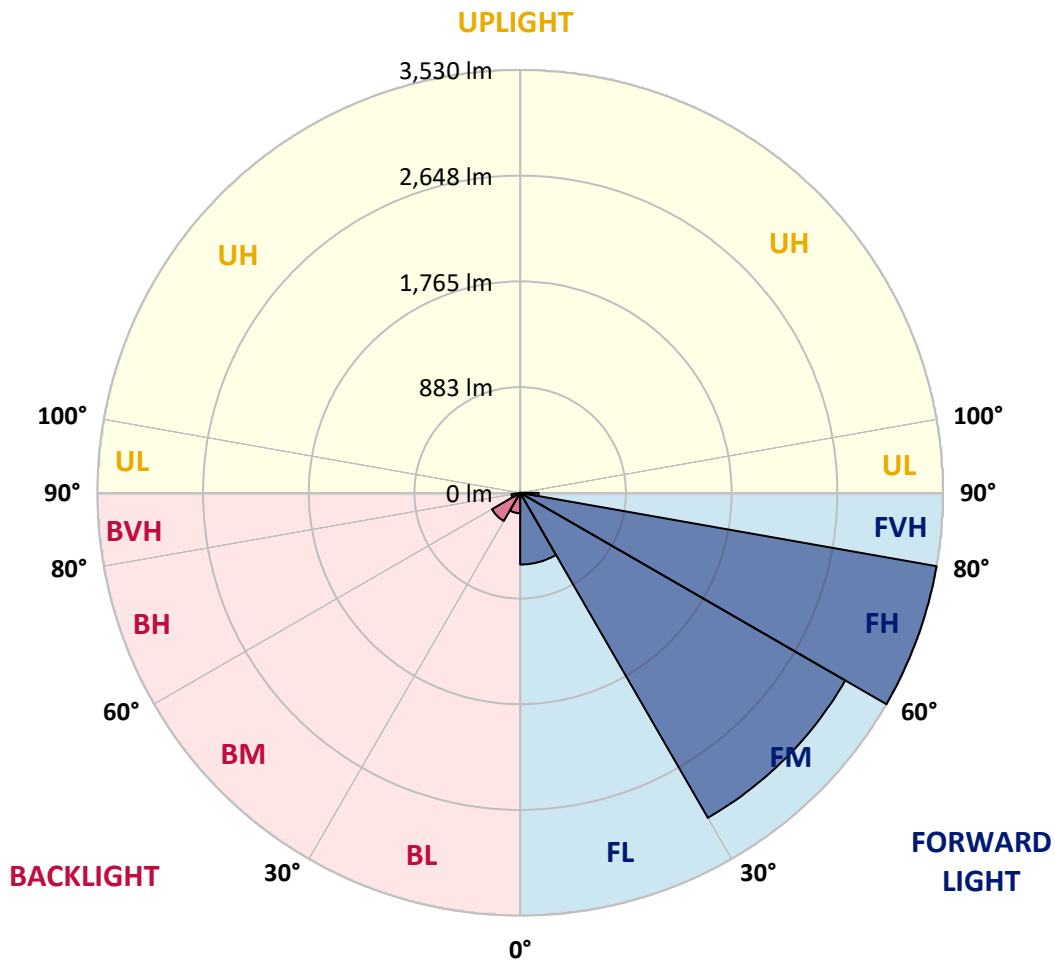
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	598.6	7.5			
FM	(30°-60°)	3133.6	39.5			
FH	(60°-80°)	3530.0	44.5			G2/5000
FVH	(80°-90°)	154.5	1.9			G2/225
BL	(0°-30°)	170.3	2.1	B1/500		
BM	(30°-60°)	272.2	3.4	B1/1000		
BH	(60°-80°)	73.1	0.9	B0/110		G0/110
BVH	(80°-90°)	4.6	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





REPORT NUMBER: P198885

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4
2.5°	1352.7	1355.2	1352.1	1346.5	1338.4	1333.4	1326.5	1311.5	1292.8	1276.6	1257.9
5°	1363.3	1364.6	1360.8	1350.2	1337.8	1330.9	1322.2	1305.9	1286.6	1264.1	1230.4
7.5°	1366.5	1365.8	1361.5	1348.4	1329.0	1320.3	1305.3	1285.3	1265.4	1244.8	1206.7
10°	1365.2	1365.2	1362.1	1349.6	1327.8	1319.7	1302.8	1281.6	1256.6	1236.1	1195.5
12.5°	1360.8	1363.3	1361.5	1354.6	1338.4	1332.1	1317.2	1296.0	1272.2	1251.0	1208.0
15°	1366.5	1370.2	1373.9	1371.4	1362.1	1356.5	1342.7	1320.9	1301.6	1279.1	1232.9
17.5°	1388.9	1397.0	1405.8	1406.4	1396.4	1386.4	1370.8	1348.4	1329.6	1309.1	1259.1
20°	1431.3	1437.6	1453.8	1456.9	1437.0	1422.6	1400.8	1374.6	1355.8	1338.4	1283.5
22.5°	1494.4	1501.2	1514.3	1510.0	1476.3	1459.4	1432.0	1402.0	1382.7	1372.7	1311.5
25°	1589.8	1591.7	1594.8	1575.5	1519.9	1501.2	1467.5	1433.8	1418.2	1417.0	1351.5
27.5°	1702.1	1704.6	1690.9	1647.9	1568.6	1544.3	1506.2	1475.6	1468.2	1477.5	1402.0
30°	1830.7	1831.3	1793.2	1723.4	1624.8	1597.9	1558.6	1524.9	1531.8	1554.9	1466.9
32.5°	1962.3	1956.1	1903.7	1812.6	1701.5	1669.1	1635.4	1601.7	1621.7	1668.5	1561.8
35°	2082.8	2080.3	2018.5	1912.4	1801.4	1772.7	1748.3	1712.8	1745.2	1821.3	1690.9
37.5°	2203.2	2201.3	2130.8	2020.4	1924.3	1903.7	1885.6	1858.1	1911.2	2022.9	1863.7
40°	2336.1	2333.0	2246.2	2140.2	2067.2	2055.9	2045.3	2033.5	2123.9	2279.3	2079.0
42.5°	2500.2	2486.5	2368.5	2270.6	2224.4	2227.5	2228.1	2240.0	2381.6	2584.4	2333.0
45°	2688.6	2658.0	2491.4	2410.3	2397.2	2415.9	2434.7	2484.0	2681.7	2935.7	2613.7
47.5°	2871.4	2822.1	2633.1	2560.7	2587.5	2626.2	2671.1	2767.2	3018.7	3303.2	2868.3
50°	3028.7	2978.1	2773.5	2713.6	2799.1	2856.5	2936.3	3081.7	3374.3	3613.9	3028.7
52.5°	3152.2	3112.3	2922.0	2882.0	3033.7	3112.3	3237.7	3428.6	3710.0	3818.6	3141.0
55°	3243.3	3223.3	3064.2	3069.8	3294.5	3408.0	3564.0	3779.9	3993.3	3977.7	3225.2
57.5°	3346.3	3330.7	3213.4	3291.4	3608.3	3754.9	3935.3	4108.7	4199.2	4105.6	3307.6
60°	3451.7	3456.7	3394.3	3559.7	3996.4	4158.6	4315.9	4358.9	4375.8	4235.4	3394.3
62.5°	3531.6	3552.8	3558.4	3849.2	4394.5	4533.0	4601.0	4570.5	4566.7	4409.5	3387.4
65°	3623.3	3678.8	3771.2	4166.8	4756.4	4847.5	4896.2	4940.5	4846.9	4461.3	3054.2
67.5°	3781.8	3869.1	4076.9	4556.1	5174.4	5309.2	5447.1	5400.3	4888.7	3935.3	2326.7
70°	3995.2	4101.9	4468.8	5064.6	5741.6	5967.5	6082.9	5363.5	4150.5	2719.2	1227.3
72°	3860.4	3957.1	4589.8	5324.2	6143.4	6350.6	6061.7	4678.4	3008.7	1409.5	411.2
72.5°	3729.4	3829.2	4551.1	5321.1	6183.4	6341.9	5923.8	4408.2	2662.4	1096.9	283.3
75°	2587.5	2713.6	3901.6	4783.2	5583.8	5409.7	4532.4	2669.3	964.6	188.4	93.6
77.5°	1337.8	1435.1	2366.7	3380.0	3891.6	3564.0	2678.6	1158.1	267.1	99.8	61.8
80°	829.2	877.3	1106.9	1665.3	2021.6	1768.3	1181.8	468.0	171.0	59.3	49.3
82.5°	429.3	466.1	697.0	672.0	746.9	620.8	436.1	391.8	105.4	36.8	50.5
85°	141.0	149.7	428.0	446.8	319.5	214.6	193.4	373.7	30.6	23.7	43.1
87.5°	18.7	21.8	150.4	255.8	157.2	97.3	116.1	131.7	10.6	13.1	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4	1270.4
2.5°	1245.4	1237.3	1211.7	1186.1	1156.8	1130.0	1108.8	1095.0	1101.3	1080.7	1083.8
5°	1209.8	1189.3	1133.1	1072.6	1007.1	945.9	897.2	861.1	854.2	823.0	824.2
7.5°	1175.5	1141.8	1050.7	950.9	842.3	754.4	674.5	604.6	579.7	554.1	539.1
10°	1156.8	1110.6	981.5	836.1	683.2	554.1	441.8	353.8	317.0	290.1	277.0
12.5°	1162.4	1101.3	929.7	731.9	531.0	366.9	249.6	185.3	162.9	150.4	146.0
15°	1181.1	1103.1	882.9	630.2	386.2	222.1	146.6	125.4	123.5	122.9	122.3
17.5°	1198.6	1105.0	833.6	524.1	258.3	141.6	117.9	116.1	116.1	116.1	116.1
20°	1216.7	1105.6	779.3	413.1	169.7	116.1	111.1	109.8	111.1	111.1	111.1
22.5°	1237.9	1110.0	726.9	305.1	125.4	109.2	106.1	105.4	106.1	106.1	105.4
25°	1264.1	1119.4	670.1	218.4	113.6	104.8	101.7	101.1	101.7	101.1	101.1
27.5°	1299.1	1131.9	604.0	156.6	108.6	100.5	97.3	97.3	97.3	96.7	96.7
30°	1344.0	1146.8	515.4	123.5	103.6	96.1	93.6	93.6	93.0	92.3	92.3
32.5°	1408.3	1171.2	418.7	111.7	98.0	90.5	88.0	88.6	88.0	87.4	86.7
35°	1499.4	1209.2	323.2	105.4	92.3	84.9	82.4	82.4	82.4	81.1	81.1
37.5°	1628.5	1267.2	242.1	99.2	86.7	79.2	76.1	76.1	75.5	74.3	74.9
40°	1788.2	1340.3	175.3	93.6	81.1	73.0	70.5	69.3	68.0	66.8	66.8
42.5°	1980.4	1411.4	131.7	88.0	75.5	68.0	64.9	63.6	61.1	59.9	59.3
45°	2195.7	1486.9	109.2	81.1	69.3	62.4	59.9	57.4	54.3	52.4	51.8
47.5°	2377.3	1533.1	97.3	74.3	63.0	56.8	54.3	50.5	46.8	45.5	45.5
50°	2486.5	1513.7	87.4	67.4	56.8	51.2	48.0	43.1	40.6	39.3	38.7
52.5°	2547.6	1456.3	79.2	61.8	51.2	44.9	40.6	36.2	34.9	33.7	33.7
55°	2589.4	1373.3	70.5	56.2	46.2	39.3	34.3	31.2	29.9	29.3	28.7
57.5°	2629.3	1272.2	62.4	51.2	41.2	34.9	29.3	28.1	25.6	25.0	25.0
60°	2641.2	1133.1	54.9	45.5	36.8	30.6	25.6	23.7	21.2	20.6	20.6
62.5°	2490.2	901.6	48.7	38.7	32.4	26.2	22.5	20.0	17.5	17.5	17.5
65°	2080.9	612.1	41.8	33.7	28.7	22.5	19.3	16.2	15.0	15.0	15.0
67.5°	1449.4	341.3	35.6	28.7	24.3	18.7	16.2	13.7	13.1	13.7	13.7
70°	653.3	135.4	29.9	23.7	20.0	15.6	13.7	11.9	13.1	13.1	13.1
72°	195.9	72.4	25.0	19.3	16.2	13.7	11.9	11.2	12.5	13.1	13.1
72.5°	145.4	64.9	23.7	18.7	16.2	13.1	11.2	11.2	12.5	13.1	13.1
75°	74.9	44.3	18.1	13.7	11.9	10.6	9.4	10.6	12.5	12.5	12.5
77.5°	58.7	36.2	15.0	10.6	10.0	9.4	8.7	10.0	11.2	11.2	11.2
80°	54.9	23.7	11.9	10.0	8.7	8.1	8.1	8.7	10.0	10.6	10.6
82.5°	55.5	19.3	10.6	9.4	8.1	7.5	7.5	8.1	9.4	10.0	10.0
85°	35.6	13.1	9.4	8.1	7.5	6.9	6.9	7.5	8.7	9.4	9.4
87.5°	11.9	10.0	8.1	7.5	6.2	6.2	6.2	6.2	7.5	8.1	8.7
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)