

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: P842405

Luminaire Tested: **ARCH4-40-740-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5576 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 43.8
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: 24 FT



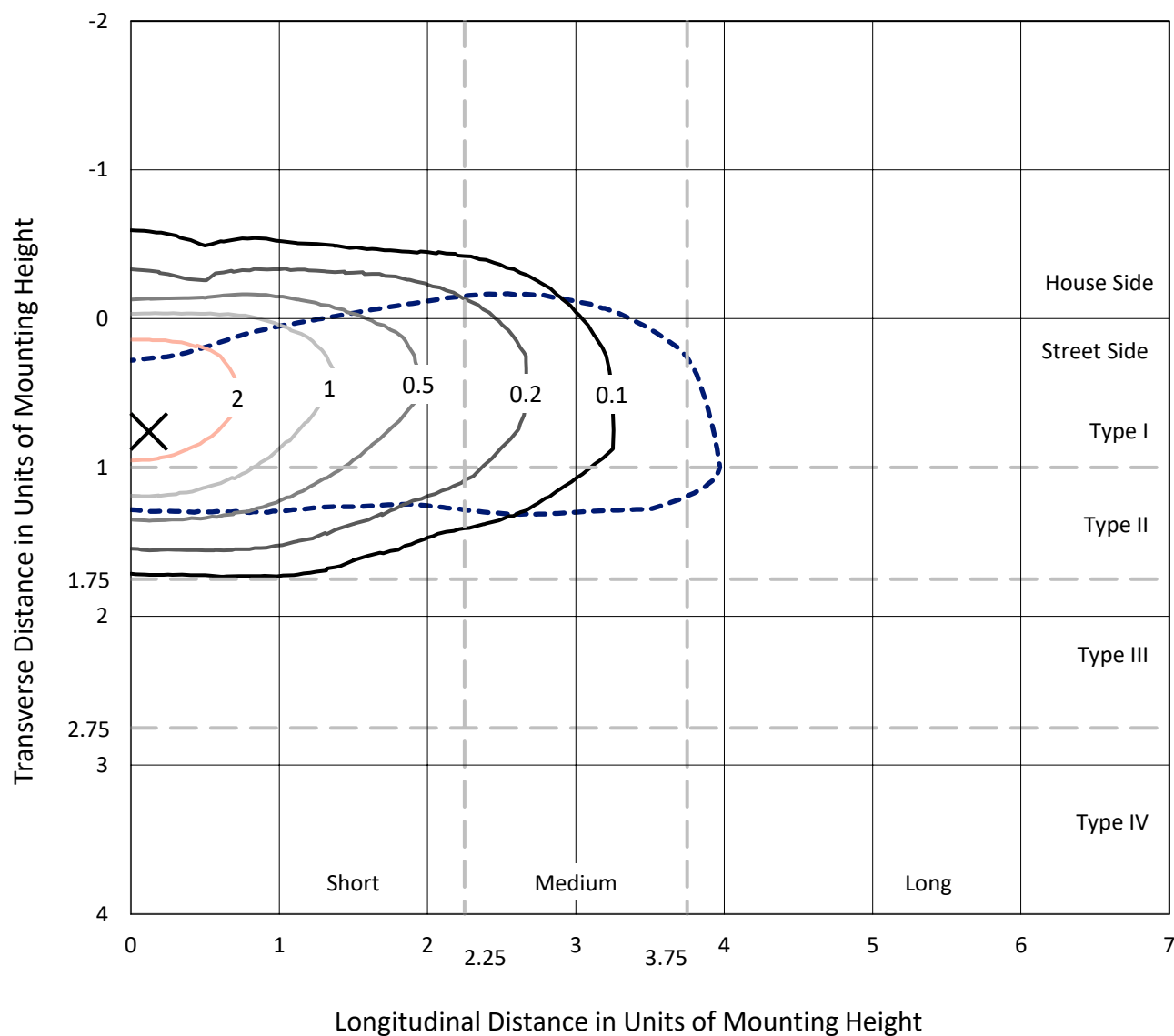
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

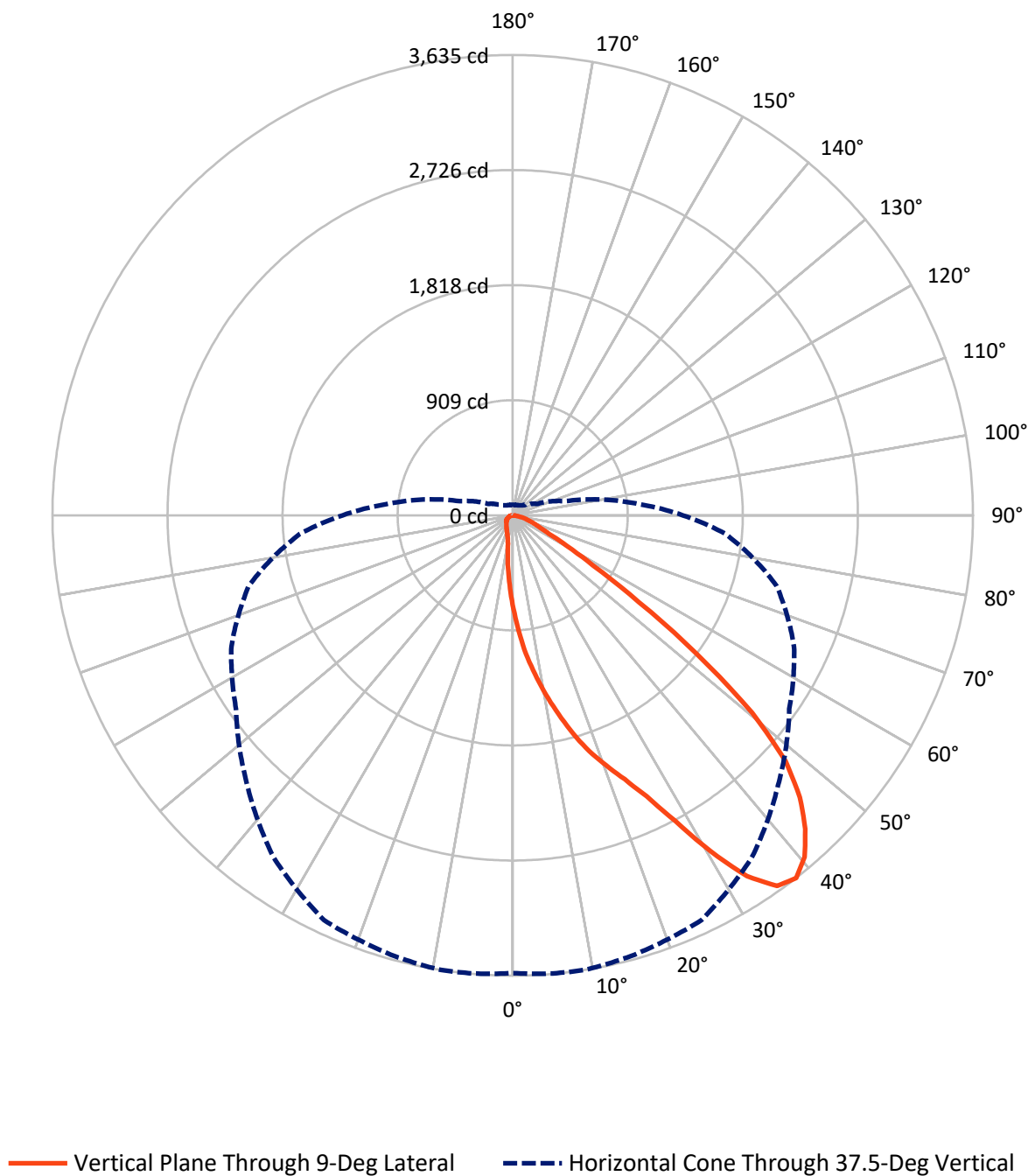


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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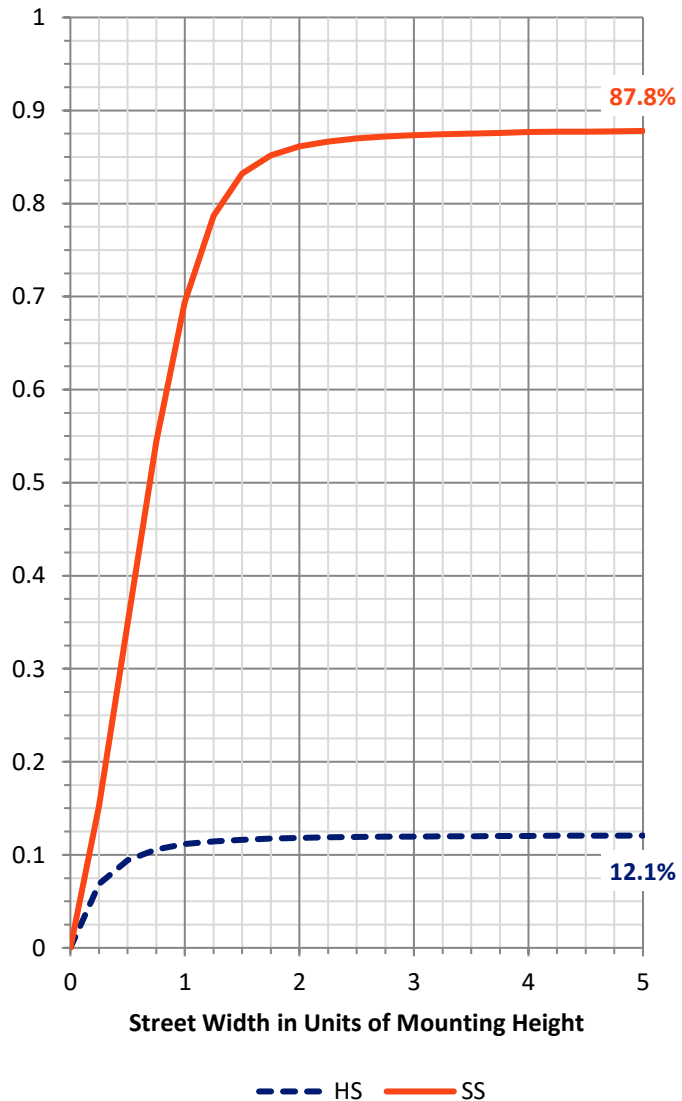
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	678.1	0.0	678.1
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	4897.9	0.0	4897.9
	% Fixture	87.8	0.0	87.8
Total	Lumens	5576.0	0.0	5576.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	1.3
10°-20°	257.5	4.6
20°-30°	529.1	9.5
30°-40°	935.2	16.8
40°-50°	1242.4	22.3
50°-60°	1178.3	21.1
60°-70°	899.0	16.1
70°-80°	435.8	7.8
80°-90°	24.5	0.4
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°	5576.0	100.0
0°-180°	5576.0	100.0

Coefficient of Utilization



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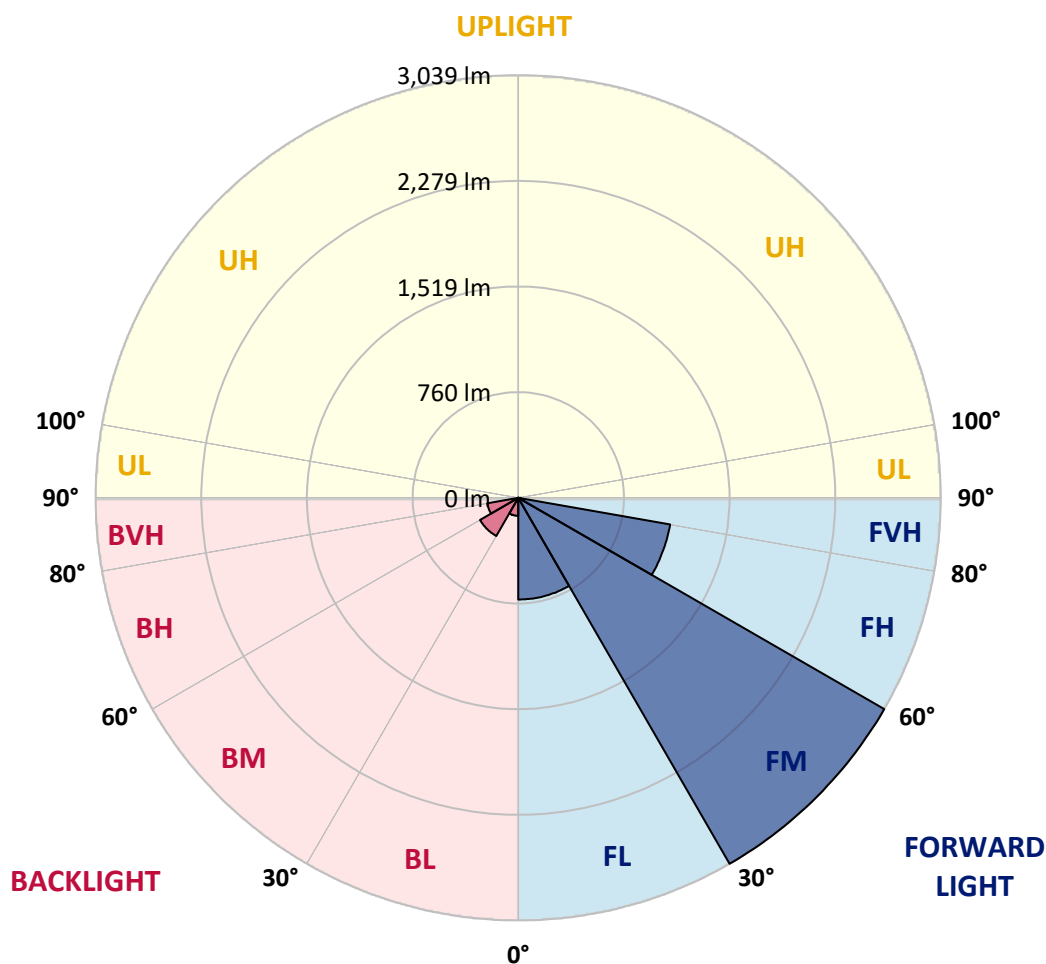
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	731.3	13.1			
FM	(30°-60°)	3038.6	54.5			
FH	(60°-80°)	1108.5	19.9			G1/1800
FVH	(80°-90°)	19.4	0.3			G1/100
BL	(0°-30°)	129.4	2.3	B1/500		
BM	(30°-60°)	317.3	5.7	B1/1000		
BH	(60°-80°)	226.3	4.1	B1/500		G1/500
BVH	(80°-90°)	5.1	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1
2.5°	913.3	897.3	915.6	913.3	897.3	887.0	855.0	844.7	806.9	779.4	755.4
5°	1101.0	1085.0	1101.0	1096.5	1073.6	1048.4	995.7	961.4	893.9	834.4	780.6
7.5°	1256.7	1256.7	1263.6	1264.7	1237.2	1198.3	1133.1	1081.6	986.6	895.0	809.2
10°	1424.9	1426.1	1441.0	1430.7	1394.0	1341.4	1259.0	1193.7	1079.3	959.1	836.7
12.5°	1604.6	1605.8	1610.4	1605.8	1562.3	1494.8	1395.2	1309.3	1177.7	1032.4	874.4
15°	1784.3	1785.5	1791.2	1783.2	1735.1	1656.1	1542.8	1437.5	1281.9	1114.8	920.2
17.5°	1952.6	1954.9	1959.4	1949.1	1898.8	1804.9	1689.3	1562.3	1392.9	1202.9	971.7
20°	2103.7	2105.9	2109.4	2095.6	2045.3	1951.4	1826.7	1693.9	1506.2	1293.3	1027.8
22.5°	2255.9	2258.2	2263.9	2245.6	2189.5	2081.9	1959.4	1822.1	1626.4	1392.9	1093.0
25°	2450.4	2452.7	2457.3	2431.0	2354.3	2228.4	2099.1	1958.3	1756.9	1505.1	1173.1
27.5°	2735.4	2733.1	2733.1	2685.1	2553.5	2389.8	2239.9	2096.8	1897.6	1625.2	1261.3
30°	3088.0	3082.2	3078.8	3013.6	2825.9	2571.8	2384.1	2226.1	2032.7	1752.3	1356.3
32.5°	3403.8	3403.8	3397.0	3328.3	3129.2	2816.7	2537.4	2352.0	2163.2	1880.5	1454.7
35°	3590.4	3598.4	3595.0	3543.5	3398.1	3079.9	2744.6	2503.1	2300.5	2014.4	1572.6
37.5°	3615.6	3631.6	3635.0	3604.1	3527.5	3295.1	2974.6	2666.8	2451.6	2158.6	1687.0
40°	3513.7	3548.1	3548.1	3543.5	3516.0	3397.0	3168.1	2856.8	2607.2	2308.5	1802.6
42.5°	3356.9	3392.4	3387.8	3405.0	3398.1	3372.9	3276.8	3034.2	2762.9	2463.0	1907.9
45°	3152.0	3188.7	3179.5	3210.4	3224.2	3251.6	3265.4	3157.8	2916.3	2631.3	2025.8
47.5°	2823.6	2885.4	2899.1	2954.0	3011.3	3097.1	3162.3	3202.4	3059.3	2812.1	2154.0
50°	2338.3	2425.3	2452.7	2568.3	2725.1	2902.5	3007.8	3147.5	3160.1	2997.5	2292.5
52.5°	1674.5	1775.2	1817.5	2007.5	2330.3	2639.3	2829.3	3026.1	3199.0	3174.9	2442.4
55°	1082.7	1168.6	1209.8	1388.3	1817.5	2302.8	2618.7	2869.3	3177.2	3337.5	2614.1
57.5°	667.3	716.5	743.9	897.3	1292.2	1871.3	2342.9	2725.1	3110.8	3478.2	2792.7
60°	449.8	478.4	492.1	564.3	877.9	1398.6	1964.0	2574.1	3023.9	3573.2	2955.2
62.5°	298.7	307.9	321.6	366.3	579.1	982.0	1508.5	2303.9	2958.6	3579.0	3075.4
65°	231.2	235.8	241.5	261.0	357.1	686.7	1061.0	1866.7	2861.3	3457.6	3113.1
67.5°	182.0	186.6	193.4	203.7	258.7	465.8	722.2	1367.7	2662.2	3267.6	3051.3
70°	143.1	146.5	151.1	160.2	201.4	337.6	477.3	908.8	2260.5	3086.8	2856.8
72.5°	113.3	116.7	121.3	130.5	163.7	247.2	327.3	566.5	1743.1	2865.9	2482.5
75°	89.3	91.6	95.0	104.2	131.6	192.3	222.0	338.8	1184.6	2461.9	1934.3
77.5°	44.6	54.9	62.9	72.1	96.1	132.8	147.6	187.7	500.2	1263.6	922.5
80°	26.3	32.0	34.3	40.1	62.9	80.1	80.1	75.5	157.9	485.3	376.6
82.5°	14.9	20.6	21.7	22.9	37.8	45.8	36.6	27.5	32.0	162.5	109.9
85°	4.6	6.9	8.0	9.2	12.6	13.7	12.6	11.4	9.2	16.0	10.3
87.5°	0.0	0.0	0.0	0.0	1.1	2.3	2.3	2.3	3.4	3.4	3.4
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°	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1	737.1
2.5°	741.7	726.8	698.2	671.8	646.7	628.3	611.2	595.2	583.7	574.6	573.4
5°	752.0	722.2	667.3	615.8	568.8	529.9	496.7	470.4	450.9	437.2	436.1
7.5°	765.7	719.9	636.4	559.7	489.9	433.8	385.7	350.2	325.0	314.7	306.7
10°	777.1	717.6	605.5	503.6	412.0	341.1	283.8	248.4	230.1	223.2	219.8
12.5°	796.6	719.9	579.1	452.1	344.5	261.0	217.5	198.0	190.0	184.3	183.1
15°	825.2	730.2	554.0	401.7	275.8	210.6	185.4	172.8	164.8	163.7	162.5
17.5°	853.8	739.4	531.1	350.2	228.9	183.1	166.0	155.7	149.9	148.8	148.8
20°	887.0	750.8	505.9	301.0	195.7	164.8	151.1	143.1	136.2	135.1	135.1
22.5°	925.9	766.8	481.8	257.5	174.0	151.1	139.6	130.5	124.8	123.6	123.6
25°	978.6	790.9	462.4	225.5	159.1	139.6	129.3	121.3	116.7	114.5	114.5
27.5°	1036.9	824.1	448.7	206.0	148.8	130.5	120.2	113.3	108.7	106.4	106.4
30°	1102.2	860.7	439.5	198.0	143.1	122.5	113.3	106.4	100.7	99.6	99.6
32.5°	1174.3	903.0	433.8	199.1	141.9	116.7	106.4	99.6	95.0	92.7	92.7
35°	1254.4	950.0	430.3	206.0	144.2	112.2	100.7	93.9	89.3	87.0	87.0
37.5°	1343.7	1004.9	430.3	212.9	149.9	111.0	95.0	88.1	84.7	82.4	82.4
40°	1427.2	1063.3	434.9	220.9	155.7	111.0	90.4	84.7	80.1	77.8	77.8
42.5°	1492.5	1096.5	438.4	228.9	159.1	109.9	85.8	80.1	76.7	74.4	74.4
45°	1566.9	1131.9	431.5	232.3	159.1	107.6	82.4	76.7	73.3	71.0	71.0
47.5°	1649.3	1175.4	430.3	234.6	155.7	103.0	79.0	73.3	71.0	68.7	68.7
50°	1732.8	1223.5	432.6	233.5	151.1	96.1	74.4	71.0	67.5	65.2	65.2
52.5°	1827.8	1273.9	437.2	231.2	140.8	88.1	71.0	67.5	64.1	61.8	60.7
55°	1933.1	1328.8	446.4	226.6	127.0	80.1	67.5	64.1	59.5	57.2	56.1
57.5°	2054.4	1396.3	456.7	217.5	112.2	73.3	64.1	59.5	52.6	49.2	48.1
60°	2170.0	1473.0	468.1	195.7	97.3	66.4	60.7	53.8	46.9	44.6	43.5
62.5°	2278.8	1548.6	473.8	156.8	82.4	60.7	57.2	49.2	42.3	40.1	38.9
65°	2348.6	1631.0	461.2	106.4	67.5	56.1	52.6	45.8	38.9	35.5	35.5
67.5°	2353.2	1669.9	417.8	69.8	54.9	50.4	48.1	41.2	34.3	32.0	30.9
70°	2237.6	1611.5	319.3	54.9	45.8	43.5	43.5	36.6	29.8	27.5	26.3
72.5°	1972.0	1427.2	203.7	44.6	38.9	36.6	36.6	30.9	26.3	22.9	21.7
75°	1556.6	1101.0	108.7	36.6	32.0	30.9	28.6	25.2	21.7	19.5	18.3
77.5°	715.3	485.3	50.4	26.3	24.0	24.0	21.7	18.3	17.2	14.9	14.9
80°	282.7	164.8	25.2	17.2	16.0	16.0	16.0	12.6	12.6	10.3	9.2
82.5°	77.8	34.3	12.6	10.3	10.3	10.3	9.2	8.0	8.0	6.9	6.9
85°	8.0	5.7	5.7	5.7	5.7	4.6	4.6	3.4	2.3	2.3	2.3
87.5°	3.4	3.4	3.4	3.4	3.4	2.3	1.1	0.0	0.0	0.0	0.0
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)