

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: P842459

Luminaire Tested: **ARCH4-50-730-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842459
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: ARCH4-50-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 435mA 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: 6495 lumens
Efficiency: N/A
Efficacy: 122.1 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): 53.2
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

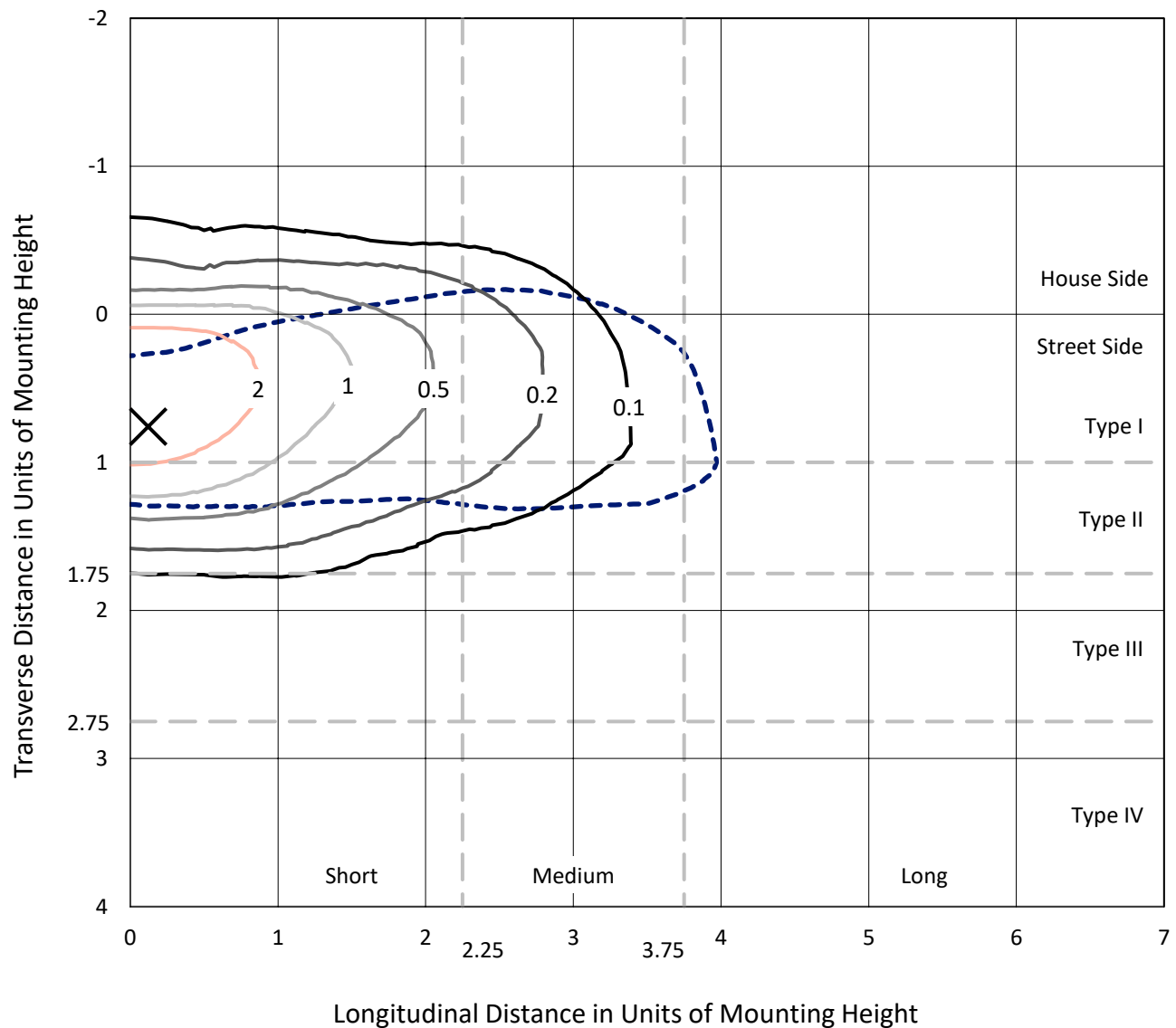


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Iso-Footcandle Lines of Horizontal Illumination

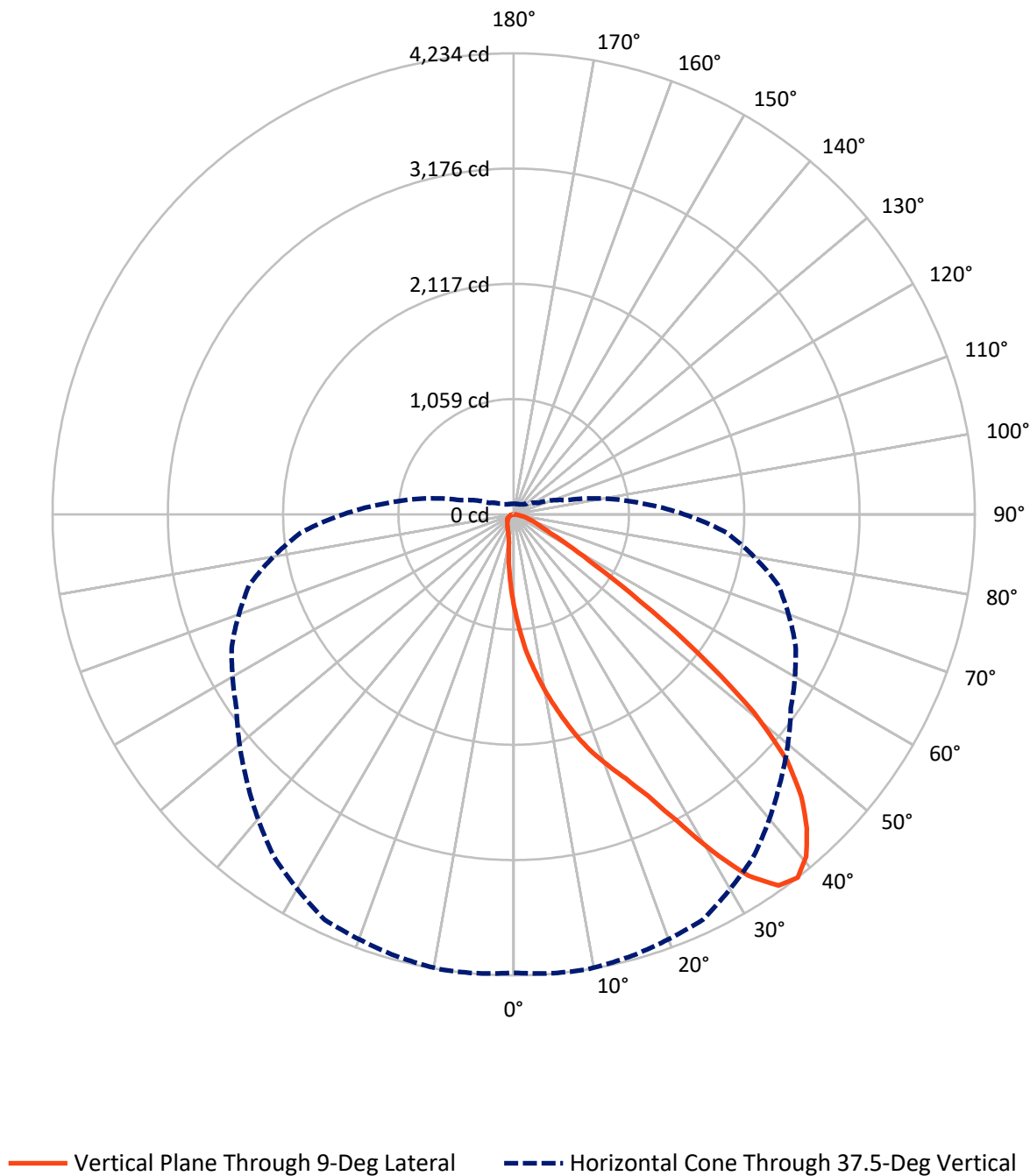
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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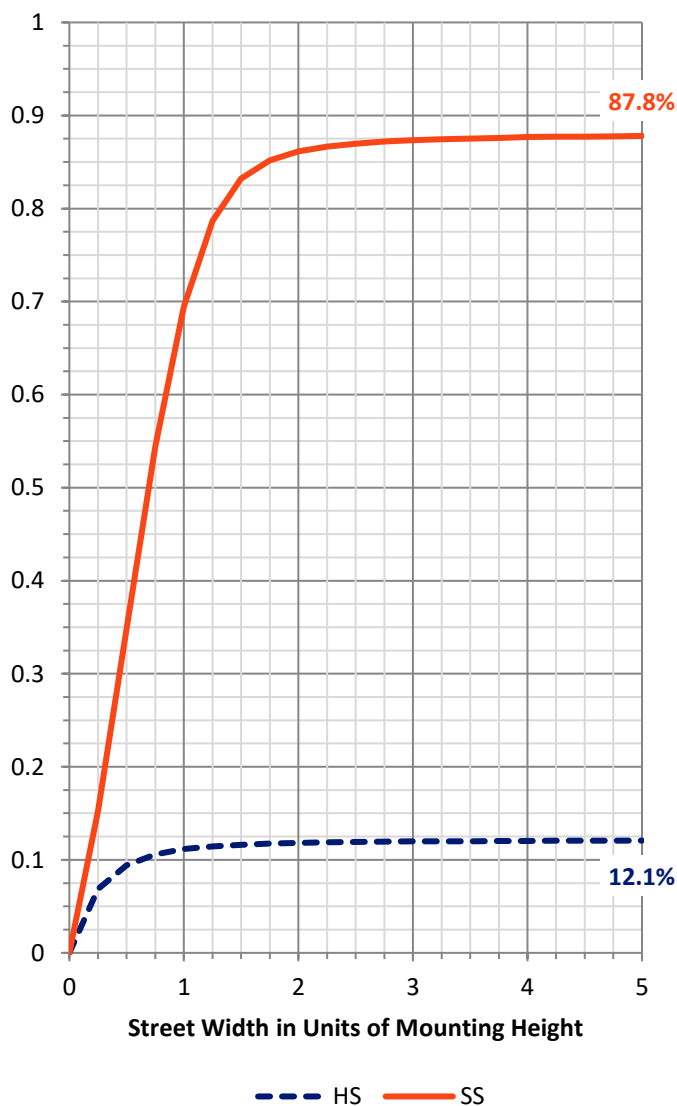
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	789.9	0.0	789.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	5705.1	0.0	5705.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	6495.0	0.0	6495.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.3
10°-20°	299.9	4.6
20°-30°	616.3	9.5
30°-40°	1089.4	16.8
40°-50°	1447.2	22.3
50°-60°	1372.5	21.1
60°-70°	1047.1	16.1
70°-80°	507.6	7.8
80°-90°	28.6	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°	6495.0	100.0
0°-180°	6495.0	100.0

Coefficient of Utilization



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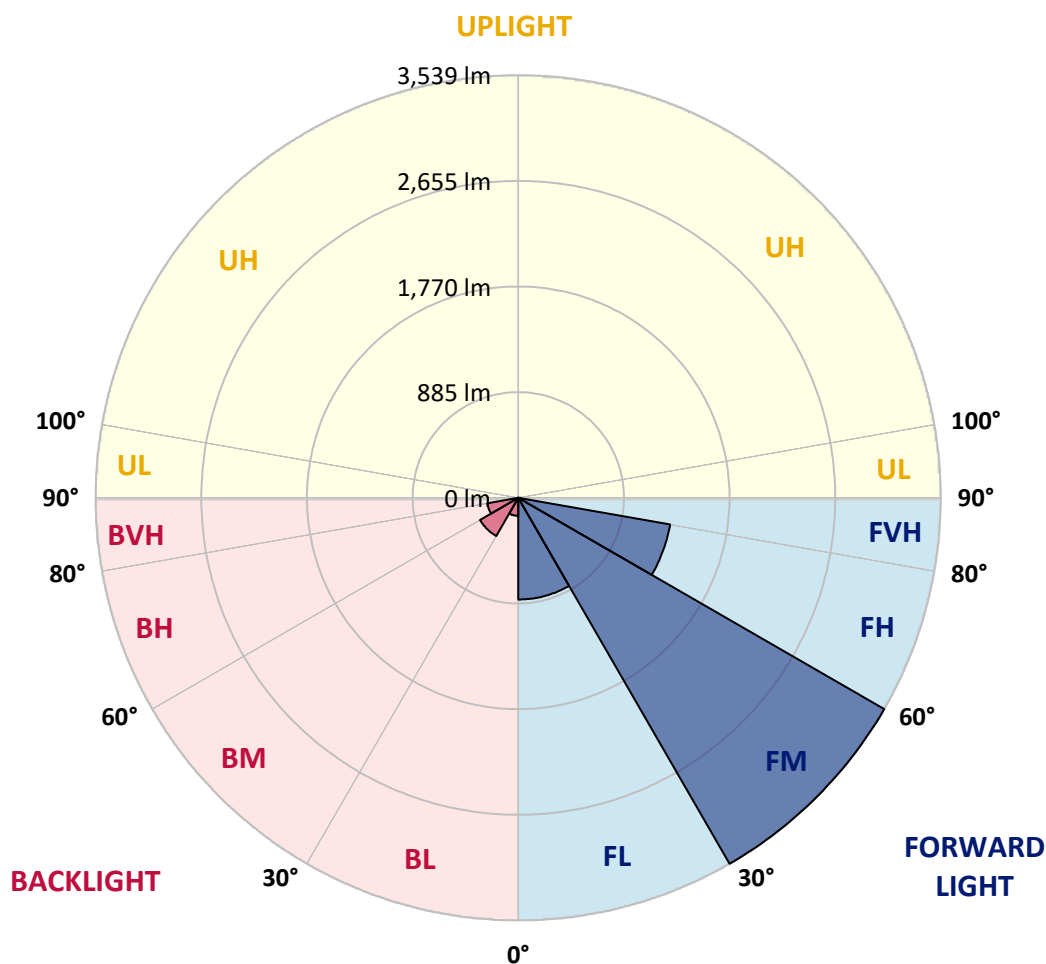
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	851.8	13.1			
FM	(30°-60°)	3539.5	54.5			
FH	(60°-80°)	1291.2	19.9			G1/1800
FVH	(80°-90°)	22.6	0.3			G1/100
BL	(0°-30°)	150.7	2.3	B1/500		
BM	(30°-60°)	369.6	5.7	B1/1000		
BH	(60°-80°)	263.6	4.1	B1/500		G1/500
BVH	(80°-90°)	6.0	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°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
2.5°	1063.9	1045.2	1066.5	1063.9	1045.2	1033.2	995.9	983.9	939.9	907.9	879.9
5°	1282.5	1263.8	1282.5	1277.2	1250.5	1221.2	1159.9	1119.9	1041.2	971.9	909.2
7.5°	1463.8	1463.8	1471.8	1473.2	1441.2	1395.8	1319.8	1259.8	1149.2	1042.5	942.6
10°	1659.8	1661.1	1678.5	1666.5	1623.8	1562.5	1466.5	1390.5	1257.2	1117.2	974.5
12.5°	1869.1	1870.4	1875.8	1870.4	1819.8	1741.1	1625.1	1525.1	1371.8	1202.5	1018.5
15°	2078.4	2079.7	2086.4	2077.1	2021.1	1929.1	1797.1	1674.5	1493.1	1298.5	1071.9
17.5°	2274.4	2277.1	2282.4	2270.4	2211.7	2102.4	1967.8	1819.8	1622.5	1401.2	1131.9
20°	2450.4	2453.0	2457.0	2441.0	2382.4	2273.1	2127.7	1973.1	1754.4	1506.5	1197.2
22.5°	2627.7	2630.3	2637.0	2615.7	2550.4	2425.0	2282.4	2122.4	1894.4	1622.5	1273.2
25°	2854.3	2857.0	2862.3	2831.6	2742.3	2595.7	2445.0	2281.1	2046.4	1753.1	1366.5
27.5°	3186.3	3183.6	3183.6	3127.6	2974.3	2783.7	2609.0	2442.4	2210.4	1893.1	1469.2
30°	3596.9	3590.2	3586.2	3510.2	3291.6	2995.6	2777.0	2593.0	2367.7	2041.1	1579.8
32.5°	3964.8	3964.8	3956.8	3876.9	3644.9	3280.9	2955.6	2739.7	2519.7	2190.4	1694.5
35°	4182.1	4191.5	4187.5	4127.5	3958.2	3587.6	3196.9	2915.6	2679.7	2346.4	1831.8
37.5°	4211.5	4230.1	4234.1	4198.1	4108.8	3838.2	3464.9	3106.3	2855.6	2514.4	1965.1
40°	4092.8	4132.8	4132.8	4127.5	4095.5	3956.8	3690.2	3327.6	3037.0	2689.0	2099.7
42.5°	3910.2	3951.5	3946.2	3966.2	3958.2	3928.8	3816.9	3534.2	3218.3	2869.0	2222.4
45°	3671.5	3714.2	3703.5	3739.5	3755.5	3787.5	3803.5	3678.2	3396.9	3065.0	2359.7
47.5°	3288.9	3360.9	3376.9	3440.9	3507.6	3607.6	3683.5	3730.2	3563.6	3275.6	2509.0
50°	2723.7	2825.0	2857.0	2991.6	3174.3	3380.9	3503.6	3666.2	3680.9	3491.6	2670.3
52.5°	1950.4	2067.7	2117.1	2338.4	2714.3	3074.3	3295.6	3524.9	3726.2	3698.2	2845.0
55°	1261.2	1361.2	1409.2	1617.1	2117.1	2682.3	3050.3	3342.3	3700.9	3887.5	3045.0
57.5°	777.2	834.6	866.6	1045.2	1505.1	2179.7	2729.0	3174.3	3623.6	4051.5	3252.9
60°	523.9	557.3	573.3	657.3	1022.5	1629.1	2287.7	2998.3	3522.2	4162.2	3442.2
62.5°	348.0	358.6	374.6	426.6	674.6	1143.9	1757.1	2683.7	3446.2	4168.8	3582.2
65°	269.3	274.6	281.3	304.0	415.9	799.9	1235.8	2174.4	3332.9	4027.5	3626.2
67.5°	212.0	217.3	225.3	237.3	301.3	542.6	841.2	1593.1	3100.9	3806.2	3554.2
70°	166.6	170.6	176.0	186.6	234.6	393.3	555.9	1058.5	2633.0	3595.6	3327.6
72.5°	132.0	136.0	141.3	152.0	190.6	288.0	381.3	659.9	2030.4	3338.3	2891.6
75°	104.0	106.7	110.7	121.3	153.3	224.0	258.6	394.6	1379.8	2867.6	2253.1
77.5°	52.0	64.0	73.3	84.0	112.0	154.6	172.0	218.6	582.6	1471.8	1074.5
80°	30.7	37.3	40.0	46.7	73.3	93.3	93.3	88.0	184.0	565.3	438.6
82.5°	17.3	24.0	25.3	26.7	44.0	53.3	42.7	32.0	37.3	189.3	128.0
85°	5.3	8.0	9.3	10.7	14.7	16.0	14.7	13.3	10.7	18.7	12.0
87.5°	0.0	0.0	0.0	0.0	1.3	2.7	2.7	2.7	4.0	4.0	4.0
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°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
2.5°	863.9	846.6	813.2	782.6	753.2	731.9	711.9	693.2	679.9	669.3	667.9
5°	875.9	841.2	777.2	717.2	662.6	617.3	578.6	547.9	525.3	509.3	507.9
7.5°	891.9	838.6	741.2	651.9	570.6	505.3	449.3	407.9	378.6	366.6	357.3
10°	905.2	835.9	705.2	586.6	479.9	397.3	330.6	289.3	268.0	260.0	256.0
12.5°	927.9	838.6	674.6	526.6	401.3	304.0	253.3	230.6	221.3	214.6	213.3
15°	961.2	850.6	645.3	467.9	321.3	245.3	216.0	201.3	192.0	190.6	189.3
17.5°	994.5	861.2	618.6	407.9	266.6	213.3	193.3	181.3	174.6	173.3	173.3
20°	1033.2	874.6	589.3	350.6	228.0	192.0	176.0	166.6	158.6	157.3	157.3
22.5°	1078.5	893.2	561.3	300.0	202.6	176.0	162.6	152.0	145.3	144.0	144.0
25°	1139.9	921.2	538.6	262.6	185.3	162.6	150.6	141.3	136.0	133.3	133.3
27.5°	1207.9	959.9	522.6	240.0	173.3	152.0	140.0	132.0	126.7	124.0	124.0
30°	1283.8	1002.5	511.9	230.6	166.6	142.6	132.0	124.0	117.3	116.0	116.0
32.5°	1367.8	1051.9	505.3	232.0	165.3	136.0	124.0	116.0	110.7	108.0	108.0
35°	1461.2	1106.5	501.3	240.0	168.0	130.7	117.3	109.3	104.0	101.3	101.3
37.5°	1565.1	1170.5	501.3	248.0	174.6	129.3	110.7	102.7	98.7	96.0	96.0
40°	1662.5	1238.5	506.6	257.3	181.3	129.3	105.3	98.7	93.3	90.7	90.7
42.5°	1738.5	1277.2	510.6	266.6	185.3	128.0	100.0	93.3	89.3	86.7	86.7
45°	1825.1	1318.5	502.6	270.6	185.3	125.3	96.0	89.3	85.3	82.7	82.7
47.5°	1921.1	1369.2	501.3	273.3	181.3	120.0	92.0	85.3	82.7	80.0	80.0
50°	2018.4	1425.2	503.9	272.0	176.0	112.0	86.7	82.7	78.7	76.0	76.0
52.5°	2129.1	1483.8	509.3	269.3	164.0	102.7	82.7	78.7	74.7	72.0	70.7
55°	2251.7	1547.8	519.9	264.0	148.0	93.3	78.7	74.7	69.3	66.7	65.3
57.5°	2393.0	1626.5	531.9	253.3	130.7	85.3	74.7	69.3	61.3	57.3	56.0
60°	2527.7	1715.8	545.3	228.0	113.3	77.3	70.7	62.7	54.7	52.0	50.7
62.5°	2654.3	1803.8	551.9	182.6	96.0	70.7	66.7	57.3	49.3	46.7	45.3
65°	2735.7	1899.8	537.3	124.0	78.7	65.3	61.3	53.3	45.3	41.3	41.3
67.5°	2741.0	1945.1	486.6	81.3	64.0	58.7	56.0	48.0	40.0	37.3	36.0
70°	2606.3	1877.1	372.0	64.0	53.3	50.7	50.7	42.7	34.7	32.0	30.7
72.5°	2297.0	1662.5	237.3	52.0	45.3	42.7	42.7	36.0	30.7	26.7	25.3
75°	1813.1	1282.5	126.7	42.7	37.3	36.0	33.3	29.3	25.3	22.7	21.3
77.5°	833.2	565.3	58.7	30.7	28.0	28.0	25.3	21.3	20.0	17.3	17.3
80°	329.3	192.0	29.3	20.0	18.7	18.7	18.7	14.7	14.7	12.0	10.7
82.5°	90.7	40.0	14.7	12.0	12.0	12.0	10.7	9.3	9.3	8.0	8.0
85°	9.3	6.7	6.7	6.7	6.7	5.3	5.3	4.0	2.7	2.7	2.7
87.5°	4.0	4.0	4.0	4.0	4.0	2.7	1.3	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)