

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: P836612

Luminaire Tested: **ARCH3-50-730-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836612
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6246 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 53.6
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

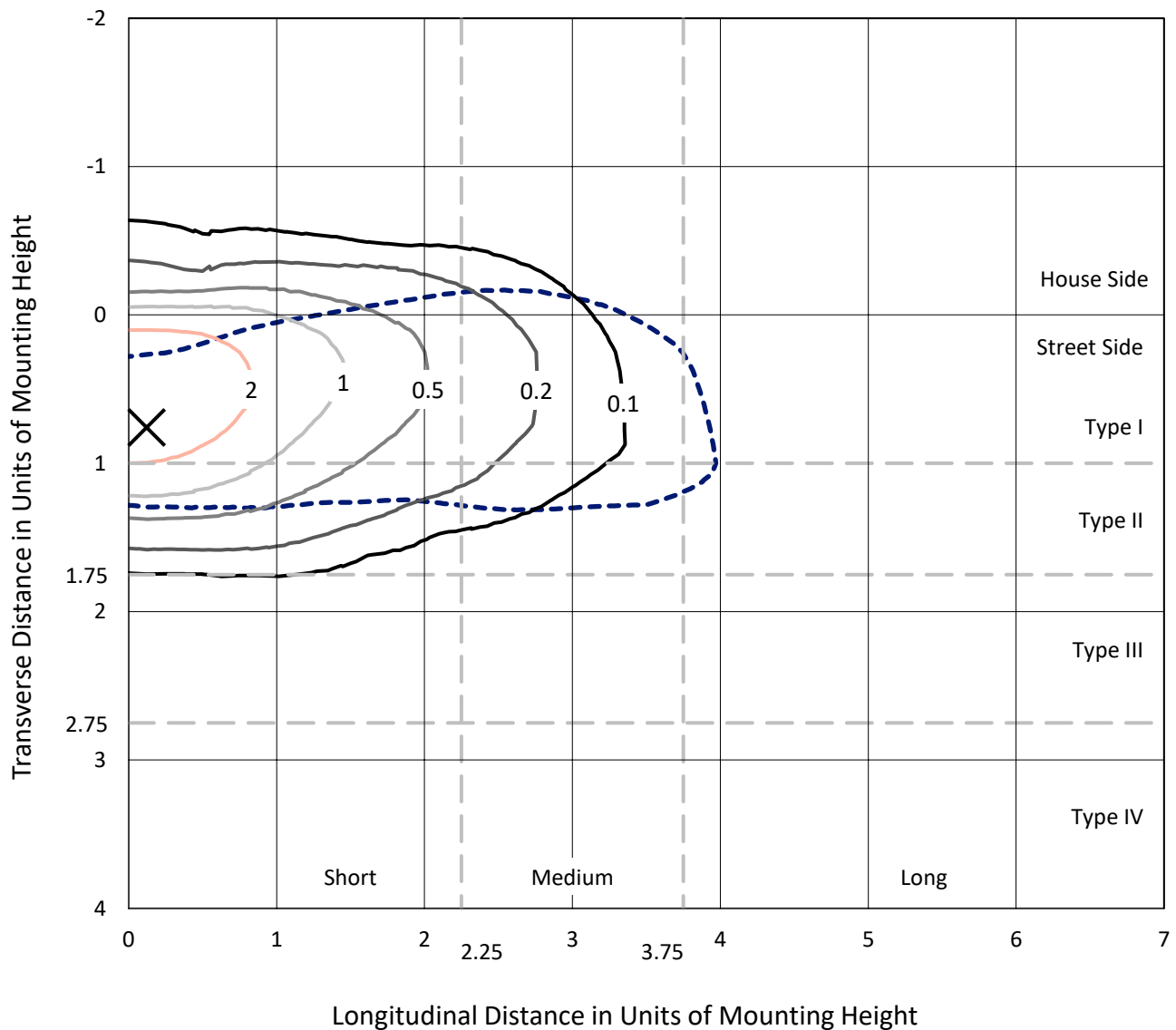


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



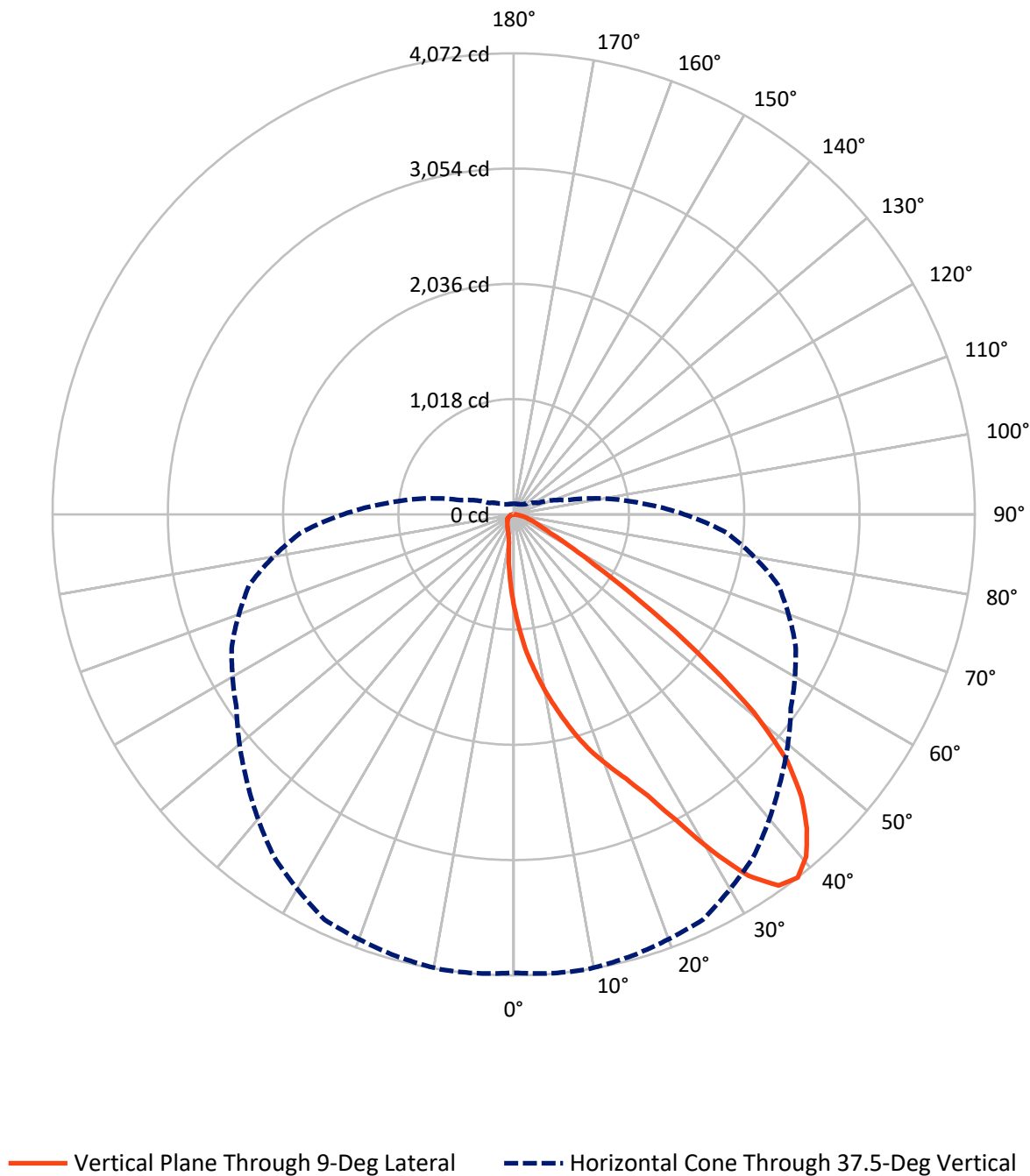
Based on 25 foot mounting height. Maximum calculated value = 3.7 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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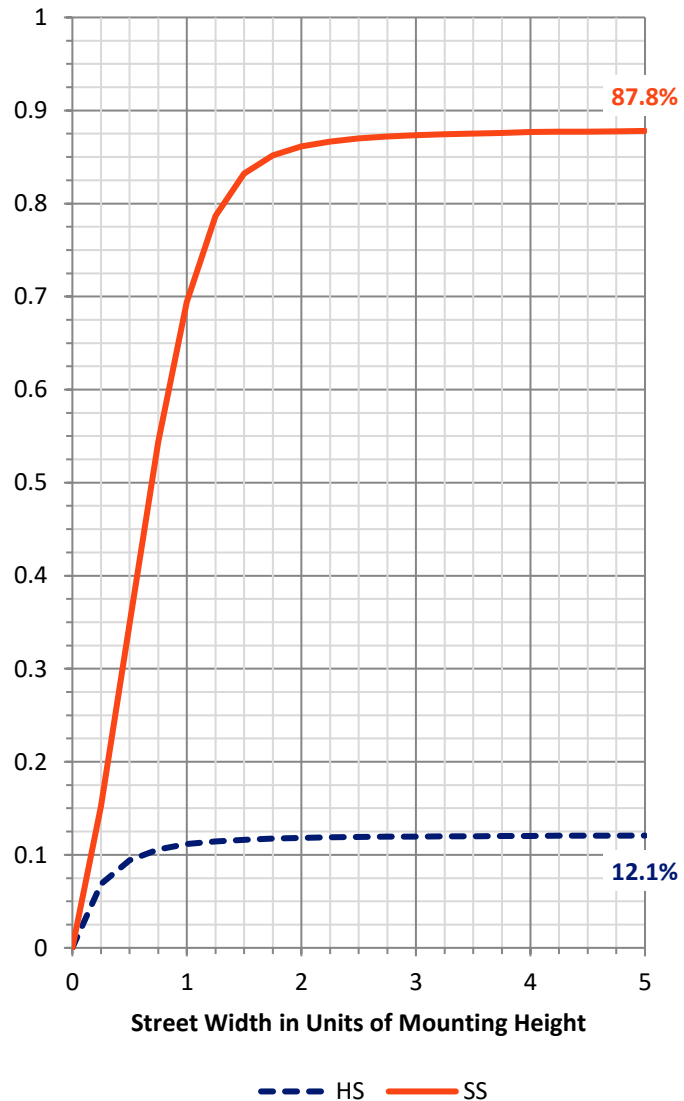
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	759.6	0.0	759.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	5486.4	0.0	5486.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	6246.0	0.0	6246.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	1.3
10°-20°	288.4	4.6
20°-30°	592.7	9.5
30°-40°	1047.6	16.8
40°-50°	1391.7	22.3
50°-60°	1319.9	21.1
60°-70°	1007.0	16.1
70°-80°	488.2	7.8
80°-90°	27.5	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°	6246.0	100.0
0°-180°	6246.0	100.0

Coefficient of Utilization



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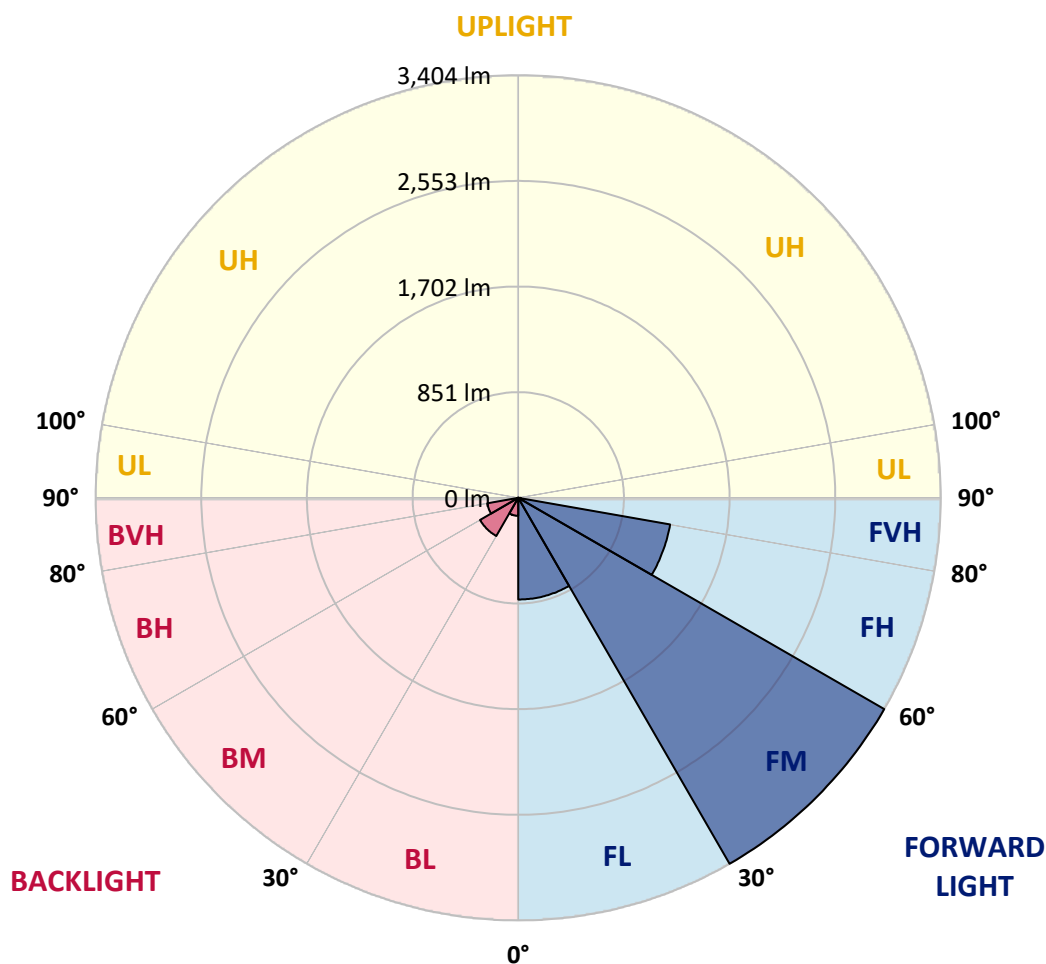
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	819.2	13.1			
FM	(30°-60°)	3403.8	54.5			
FH	(60°-80°)	1241.7	19.9			G1/1800
FVH	(80°-90°)	21.8	0.3			G1/100
BL	(0°-30°)	145.0	2.3	B1/500		
BM	(30°-60°)	355.5	5.7	B1/1000		
BH	(60°-80°)	253.5	4.1	B1/500		G1/500
BVH	(80°-90°)	5.7	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6
2.5°	1023.1	1005.1	1025.6	1023.1	1005.1	993.6	957.7	946.2	903.9	873.1	846.2
5°	1233.3	1215.4	1233.3	1228.2	1202.6	1174.4	1115.4	1076.9	1001.3	934.6	874.4
7.5°	1407.7	1407.7	1415.4	1416.7	1385.9	1342.3	1269.2	1211.5	1105.1	1002.6	906.4
10°	1596.2	1597.4	1614.1	1602.6	1561.5	1502.6	1410.3	1337.2	1209.0	1074.4	937.2
12.5°	1797.4	1798.7	1803.9	1798.7	1750.0	1674.4	1562.8	1466.7	1319.2	1156.4	979.5
15°	1998.7	2000.0	2006.4	1997.4	1943.6	1855.1	1728.2	1610.3	1435.9	1248.7	1030.8
17.5°	2187.2	2189.8	2194.9	2183.3	2126.9	2021.8	1892.3	1750.0	1560.3	1347.4	1088.5
20°	2356.4	2359.0	2362.8	2347.4	2291.0	2185.9	2046.2	1897.4	1687.2	1448.7	1151.3
22.5°	2526.9	2529.5	2535.9	2515.4	2452.6	2332.1	2194.9	2041.0	1821.8	1560.3	1224.4
25°	2744.9	2747.5	2752.6	2723.1	2637.2	2496.2	2351.3	2193.6	1968.0	1685.9	1314.1
27.5°	3064.1	3061.6	3061.6	3007.7	2860.3	2676.9	2509.0	2348.7	2125.7	1820.5	1412.8
30°	3459.0	3452.6	3448.7	3375.7	3165.4	2880.8	2670.5	2493.6	2276.9	1962.8	1519.2
32.5°	3812.8	3812.8	3805.1	3728.2	3505.1	3155.1	2842.3	2634.6	2423.1	2106.4	1629.5
35°	4021.8	4030.8	4026.9	3969.3	3806.4	3450.0	3074.4	2803.9	2576.9	2256.4	1761.5
37.5°	4050.0	4068.0	4071.8	4037.2	3951.3	3691.0	3332.1	2987.2	2746.2	2418.0	1889.8
40°	3935.9	3974.4	3974.4	3969.3	3938.5	3805.1	3548.7	3200.0	2920.5	2585.9	2019.2
42.5°	3760.3	3800.0	3794.9	3814.1	3806.4	3778.2	3670.5	3398.7	3094.9	2759.0	2137.2
45°	3530.8	3571.8	3561.6	3596.2	3611.6	3642.3	3657.7	3537.2	3266.7	2947.5	2269.2
47.5°	3162.8	3232.1	3247.5	3309.0	3373.1	3469.3	3542.3	3587.2	3426.9	3150.0	2412.8
50°	2619.2	2716.7	2747.5	2876.9	3052.6	3251.3	3369.2	3525.7	3539.8	3357.7	2568.0
52.5°	1875.7	1988.5	2035.9	2248.7	2610.3	2956.4	3169.2	3389.8	3583.4	3556.4	2735.9
55°	1212.8	1309.0	1355.1	1555.1	2035.9	2579.5	2933.3	3214.1	3559.0	3738.5	2928.2
57.5°	747.4	802.6	833.3	1005.1	1447.4	2096.2	2624.4	3052.6	3484.6	3896.2	3128.2
60°	503.8	535.9	551.3	632.1	983.3	1566.7	2200.0	2883.3	3387.2	4002.6	3310.3
62.5°	334.6	344.9	360.3	410.3	648.7	1100.0	1689.8	2580.8	3314.1	4009.0	3444.9
65°	259.0	264.1	270.5	292.3	400.0	769.2	1188.5	2091.0	3205.1	3873.1	3487.2
67.5°	203.8	209.0	216.7	228.2	289.7	521.8	809.0	1532.1	2982.1	3660.3	3418.0
70°	160.3	164.1	169.2	179.5	225.6	378.2	534.6	1018.0	2532.1	3457.7	3200.0
72.5°	126.9	130.8	135.9	146.2	183.3	276.9	366.7	634.6	1952.6	3210.3	2780.8
75°	100.0	102.6	106.4	116.7	147.4	215.4	248.7	379.5	1326.9	2757.7	2166.7
77.5°	50.0	61.5	70.5	80.8	107.7	148.7	165.4	210.3	560.3	1415.4	1033.3
80°	29.5	35.9	38.5	44.9	70.5	89.7	89.7	84.6	176.9	543.6	421.8
82.5°	16.7	23.1	24.4	25.6	42.3	51.3	41.0	30.8	35.9	182.1	123.1
85°	5.1	7.7	9.0	10.3	14.1	15.4	14.1	12.8	10.3	17.9	11.5
87.5°	0.0	0.0	0.0	0.0	1.3	2.6	2.6	2.6	3.8	3.8	3.8
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°	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6	825.6
2.5°	830.8	814.1	782.1	752.6	724.4	703.9	684.6	666.7	653.8	643.6	642.3
5°	842.3	809.0	747.4	689.7	637.2	593.6	556.4	526.9	505.1	489.7	488.5
7.5°	857.7	806.4	712.8	626.9	548.7	485.9	432.1	392.3	364.1	352.6	343.6
10°	870.5	803.9	678.2	564.1	461.5	382.1	318.0	278.2	257.7	250.0	246.2
12.5°	892.3	806.4	648.7	506.4	385.9	292.3	243.6	221.8	212.8	206.4	205.1
15°	924.4	818.0	620.5	450.0	309.0	235.9	207.7	193.6	184.6	183.3	182.1
17.5°	956.4	828.2	594.9	392.3	256.4	205.1	185.9	174.4	167.9	166.7	166.7
20°	993.6	841.0	566.7	337.2	219.2	184.6	169.2	160.3	152.6	151.3	151.3
22.5°	1037.2	859.0	539.7	288.5	194.9	169.2	156.4	146.2	139.7	138.5	138.5
25°	1096.2	885.9	518.0	252.6	178.2	156.4	144.9	135.9	130.8	128.2	128.2
27.5°	1161.5	923.1	502.6	230.8	166.7	146.2	134.6	126.9	121.8	119.2	119.2
30°	1234.6	964.1	492.3	221.8	160.3	137.2	126.9	119.2	112.8	111.5	111.5
32.5°	1315.4	1011.5	485.9	223.1	159.0	130.8	119.2	111.5	106.4	103.8	103.8
35°	1405.1	1064.1	482.1	230.8	161.5	125.6	112.8	105.1	100.0	97.4	97.4
37.5°	1505.1	1125.6	482.1	238.5	167.9	124.4	106.4	98.7	94.9	92.3	92.3
40°	1598.7	1191.0	487.2	247.4	174.4	124.4	101.3	94.9	89.7	87.2	87.2
42.5°	1671.8	1228.2	491.0	256.4	178.2	123.1	96.2	89.7	85.9	83.3	83.3
45°	1755.1	1268.0	483.3	260.3	178.2	120.5	92.3	85.9	82.1	79.5	79.5
47.5°	1847.4	1316.7	482.1	262.8	174.4	115.4	88.5	82.1	79.5	76.9	76.9
50°	1941.0	1370.5	484.6	261.5	169.2	107.7	83.3	79.5	75.6	73.1	73.1
52.5°	2047.4	1426.9	489.7	259.0	157.7	98.7	79.5	75.6	71.8	69.2	67.9
55°	2165.4	1488.5	500.0	253.8	142.3	89.7	75.6	71.8	66.7	64.1	62.8
57.5°	2301.3	1564.1	511.5	243.6	125.6	82.1	71.8	66.7	59.0	55.1	53.8
60°	2430.8	1650.0	524.4	219.2	109.0	74.4	67.9	60.3	52.6	50.0	48.7
62.5°	2552.6	1734.6	530.8	175.6	92.3	67.9	64.1	55.1	47.4	44.9	43.6
65°	2630.8	1826.9	516.7	119.2	75.6	62.8	59.0	51.3	43.6	39.7	39.7
67.5°	2635.9	1870.5	468.0	78.2	61.5	56.4	53.8	46.2	38.5	35.9	34.6
70°	2506.4	1805.1	357.7	61.5	51.3	48.7	48.7	41.0	33.3	30.8	29.5
72.5°	2209.0	1598.7	228.2	50.0	43.6	41.0	41.0	34.6	29.5	25.6	24.4
75°	1743.6	1233.3	121.8	41.0	35.9	34.6	32.1	28.2	24.4	21.8	20.5
77.5°	801.3	543.6	56.4	29.5	26.9	26.9	24.4	20.5	19.2	16.7	16.7
80°	316.7	184.6	28.2	19.2	17.9	17.9	17.9	14.1	14.1	11.5	10.3
82.5°	87.2	38.5	14.1	11.5	11.5	11.5	10.3	9.0	9.0	7.7	7.7
85°	9.0	6.4	6.4	6.4	6.4	5.1	5.1	3.8	2.6	2.6	2.6
87.5°	3.8	3.8	3.8	3.8	3.8	2.6	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)