

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: P842486

Luminaire Tested: **ARCH4-50-750-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842486
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: ARCH4-50-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 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: 6820 lumens
Efficiency: N/A
Efficacy: 128.2 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

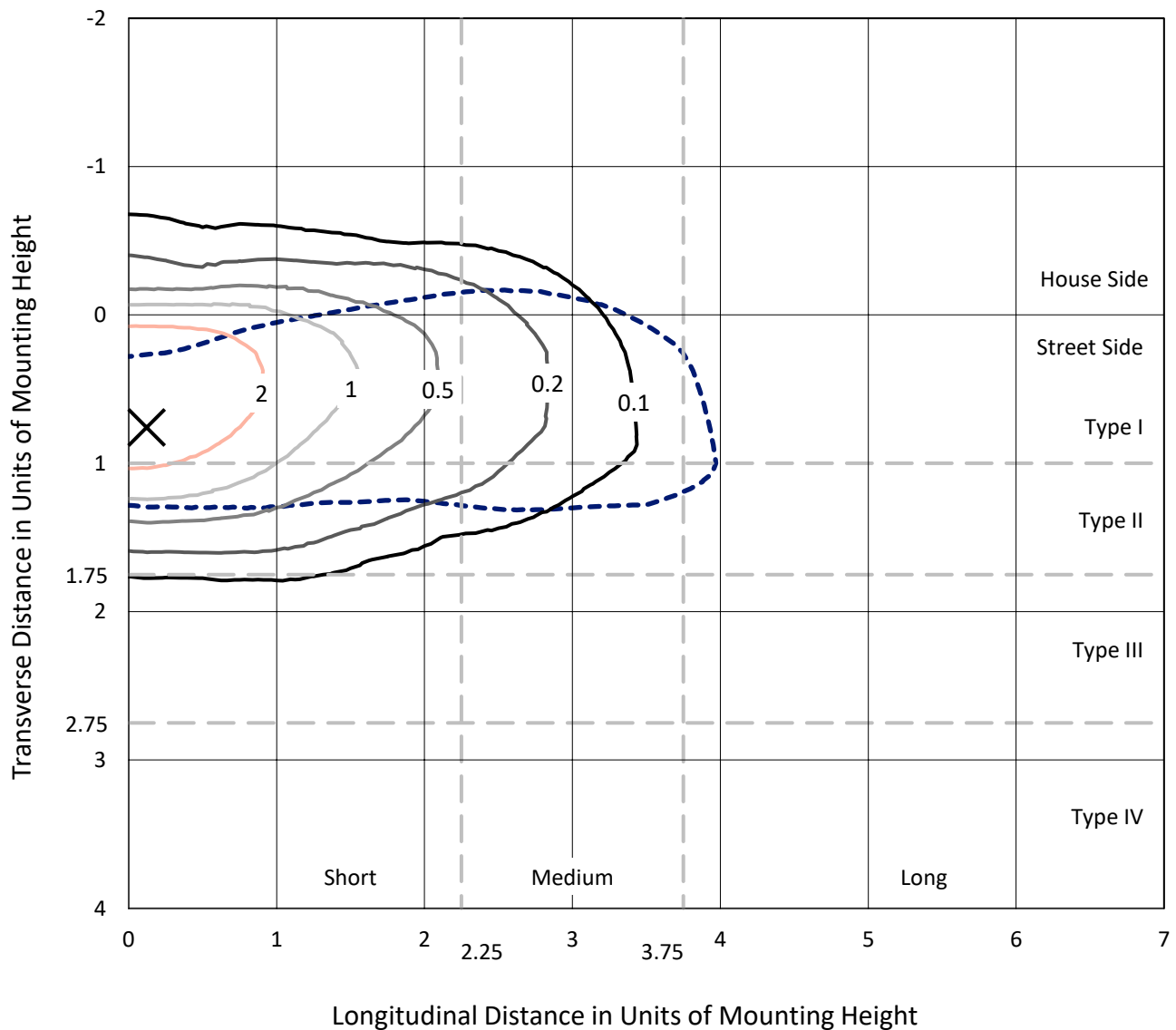


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

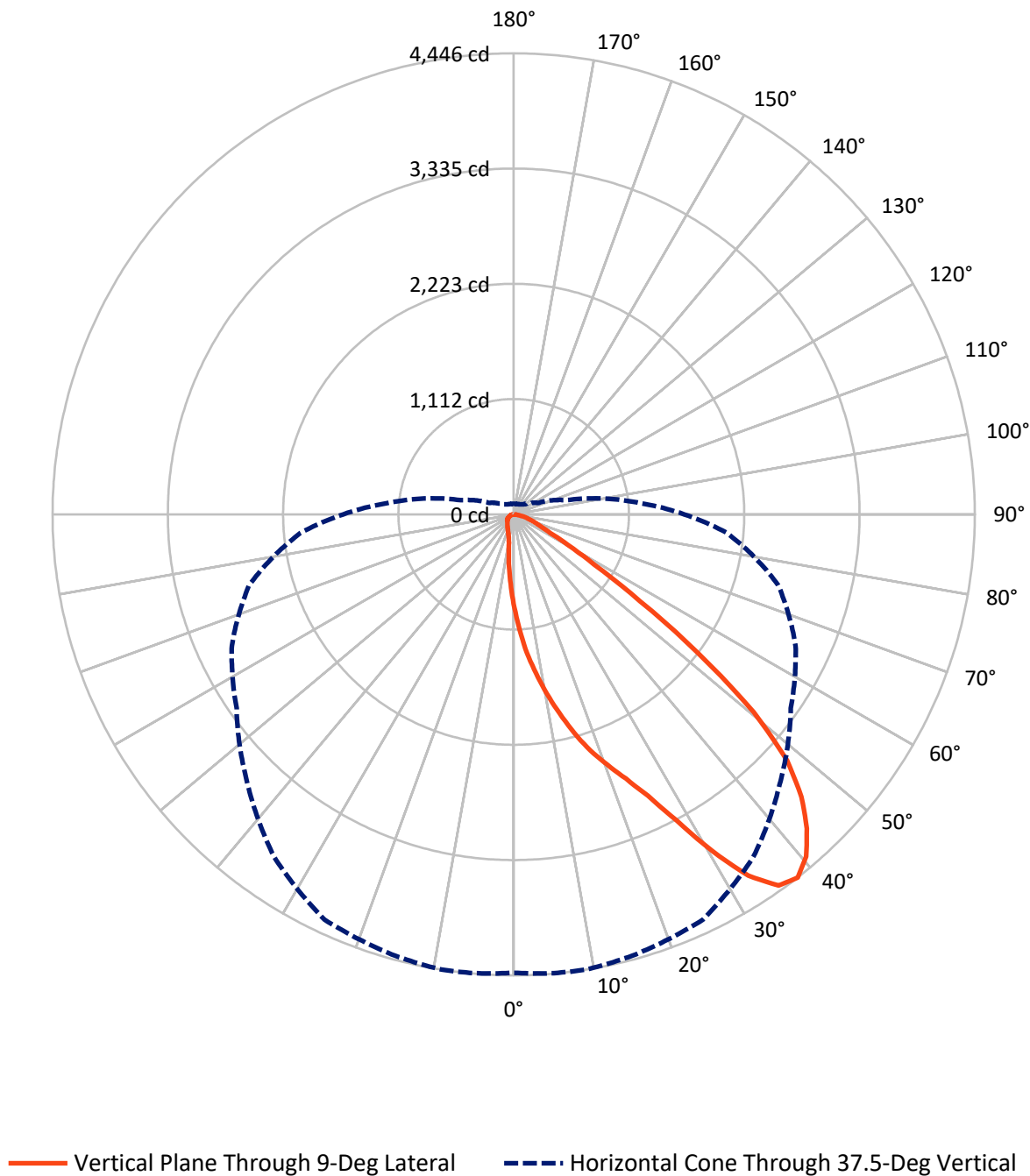


Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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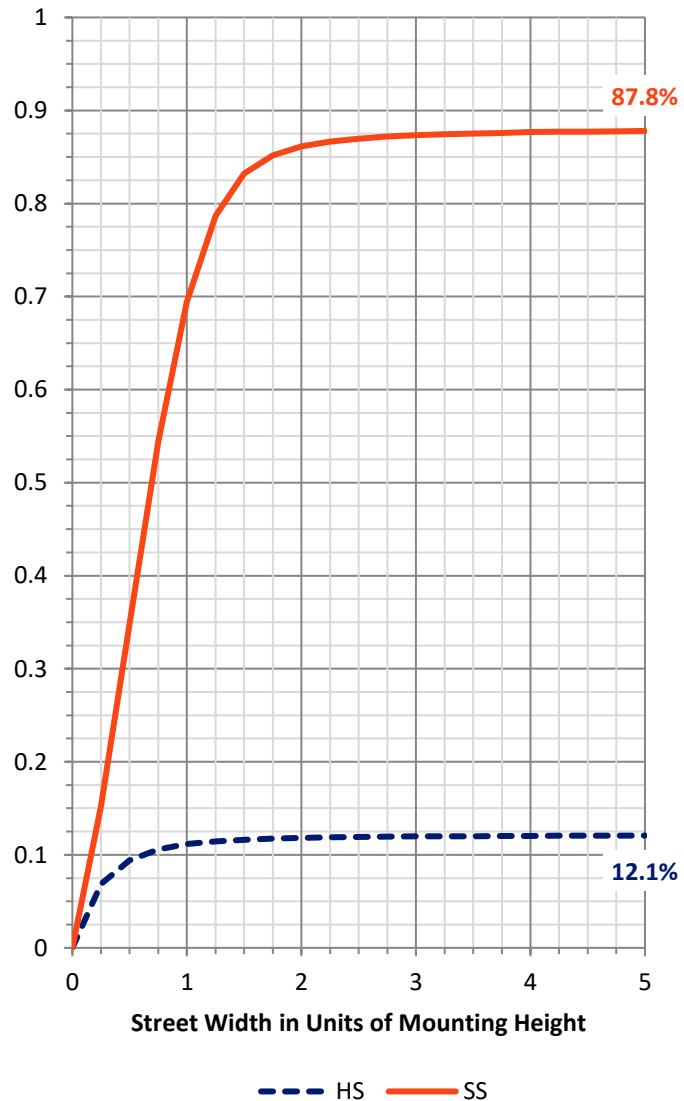
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	829.5	0.0	829.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	5990.6	0.0	5990.6
	% Fixture	87.8	0.0	87.8
Total	Lumens	6820.0	0.0	6820.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.3
10°-20°	315.0	4.6
20°-30°	647.2	9.5
30°-40°	1143.9	16.8
40°-50°	1519.6	22.3
50°-60°	1441.2	21.1
60°-70°	1099.5	16.1
70°-80°	533.1	7.8
80°-90°	30.0	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°	6820.0	100.0
0°-180°	6820.0	100.0

Coefficient of Utilization



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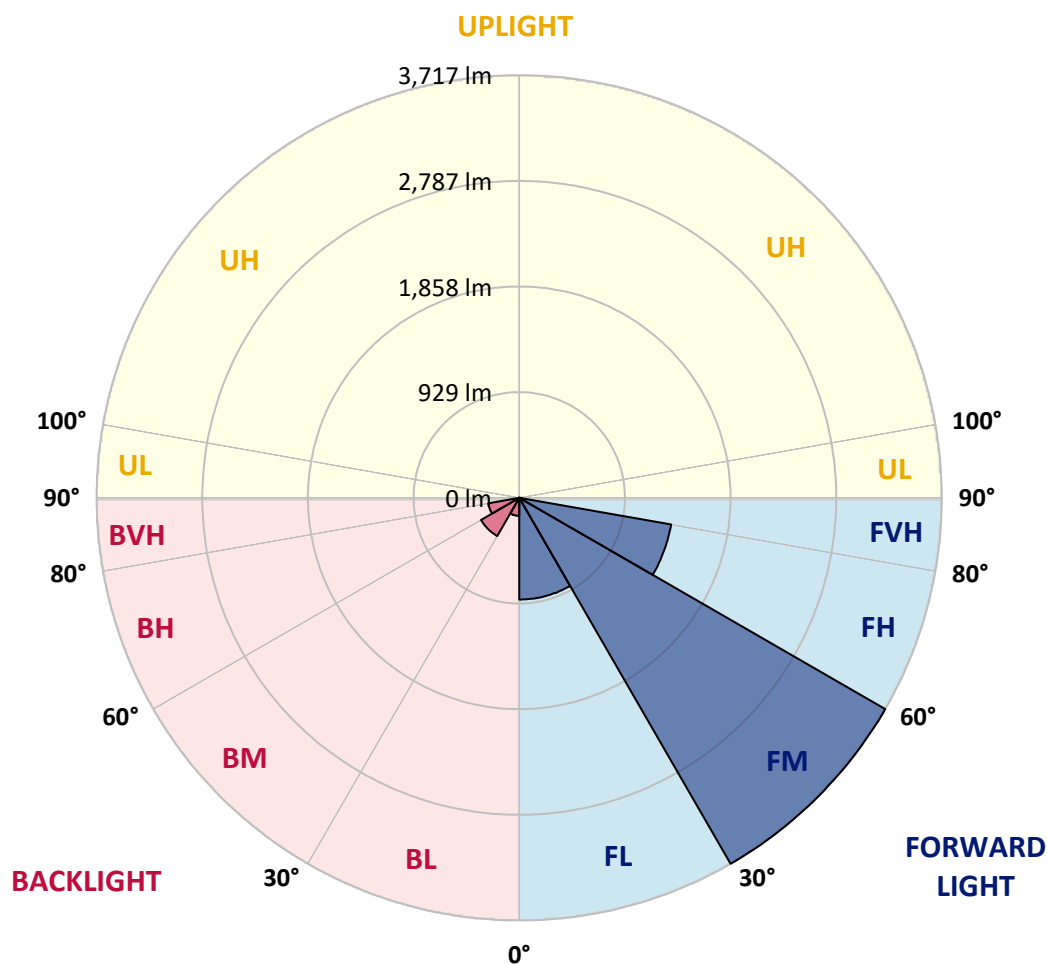
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	894.4	13.1			
FM	(30°-60°)	3716.6	54.5			
FH	(60°-80°)	1355.8	19.9			G1/1800
FVH	(80°-90°)	23.8	0.3			G1/100
BL	(0°-30°)	158.3	2.3	B1/500		
BM	(30°-60°)	388.1	5.7	B1/1000		
BH	(60°-80°)	276.8	4.1	B1/500		G1/500
BVH	(80°-90°)	6.2	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°	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5
2.5°	1117.1	1097.5	1119.9	1117.1	1097.5	1084.9	1045.7	1033.1	986.9	953.3	923.9
5°	1346.7	1327.1	1346.7	1341.1	1313.1	1282.3	1217.9	1175.9	1093.3	1020.5	954.7
7.5°	1537.1	1537.1	1545.5	1546.9	1513.3	1465.7	1385.9	1322.9	1206.7	1094.7	989.7
10°	1742.8	1744.2	1762.4	1749.8	1705.1	1640.7	1539.9	1460.1	1320.1	1173.1	1023.3
12.5°	1962.6	1964.0	1969.6	1964.0	1910.8	1828.2	1706.5	1601.5	1440.5	1262.7	1069.5
15°	2182.4	2183.8	2190.8	2181.0	2122.2	2025.6	1887.0	1758.2	1567.9	1363.5	1125.5
17.5°	2388.2	2391.0	2396.6	2384.0	2322.4	2207.6	2066.2	1910.8	1703.7	1471.3	1188.5
20°	2573.0	2575.8	2580.0	2563.2	2501.6	2386.8	2234.2	2071.8	1842.2	1581.9	1257.1
22.5°	2759.2	2762.0	2769.0	2746.6	2678.0	2546.4	2396.6	2228.6	1989.2	1703.7	1336.9
25°	2997.1	2999.9	3005.5	2973.3	2879.5	2725.6	2567.4	2395.2	2148.8	1840.8	1434.9
27.5°	3345.7	3342.9	3342.9	3284.1	3123.1	2922.9	2739.6	2564.6	2321.0	1987.8	1542.7
30°	3776.9	3769.9	3765.7	3685.9	3456.3	3145.5	2915.9	2722.8	2486.2	2143.2	1658.9
32.5°	4163.2	4163.2	4154.8	4070.8	3827.3	3445.1	3103.5	2876.7	2645.8	2300.0	1779.2
35°	4391.4	4401.2	4397.0	4334.0	4156.2	3767.1	3356.9	3061.5	2813.8	2463.8	1923.4
37.5°	4422.2	4441.8	4446.0	4408.2	4314.4	4030.2	3638.3	3261.7	2998.5	2640.2	2063.4
40°	4297.6	4339.6	4339.6	4334.0	4300.4	4154.8	3874.9	3494.1	3188.9	2823.6	2204.8
42.5°	4105.8	4149.2	4143.6	4164.6	4156.2	4125.4	4007.9	3711.1	3379.3	3012.5	2333.6
45°	3855.3	3900.1	3888.9	3926.7	3943.5	3977.1	3993.9	3862.3	3566.9	3218.3	2477.8
47.5°	3453.5	3529.1	3545.9	3613.1	3683.1	3788.1	3867.9	3916.9	3741.9	3439.5	2634.6
50°	2860.0	2966.3	2999.9	3141.3	3333.1	3550.1	3678.9	3849.7	3865.1	3666.3	2804.0
52.5°	2048.0	2171.2	2223.0	2455.4	2850.2	3228.1	3460.5	3701.3	3912.7	3883.3	2987.3
55°	1324.3	1429.3	1479.7	1698.1	2223.0	2816.6	3202.9	3509.5	3886.1	4082.0	3197.3
57.5°	816.1	876.3	909.9	1097.5	1580.5	2288.8	2865.6	3333.1	3804.9	4254.2	3415.7
60°	550.2	585.1	601.9	690.1	1073.7	1710.7	2402.2	3148.3	3698.5	4370.4	3614.5
62.5°	365.4	376.6	393.4	448.0	708.3	1201.1	1845.0	2818.0	3618.7	4377.4	3761.5
65°	282.8	288.4	295.4	319.2	436.8	839.9	1297.7	2283.2	3499.7	4229.0	3807.7
67.5°	222.6	228.2	236.6	249.2	316.4	569.8	883.3	1672.9	3256.1	3996.7	3732.1
70°	175.0	179.2	184.8	196.0	246.4	413.0	583.7	1111.5	2764.8	3775.5	3494.1
72.5°	138.6	142.8	148.4	159.6	200.2	302.4	400.4	692.9	2132.0	3505.3	3036.3
75°	109.2	112.0	116.2	127.4	161.0	235.2	271.6	414.4	1448.9	3011.1	2365.8
77.5°	54.6	67.2	77.0	88.2	117.6	162.4	180.6	229.6	611.7	1545.5	1128.3
80°	32.2	39.2	42.0	49.0	77.0	98.0	98.0	92.4	193.2	593.5	460.6
82.5°	18.2	25.2	26.6	28.0	46.2	56.0	44.8	33.6	39.2	198.8	134.4
85°	5.6	8.4	9.8	11.2	15.4	16.8	15.4	14.0	11.2	19.6	12.6
87.5°	0.0	0.0	0.0	0.0	1.4	2.8	2.8	2.8	4.2	4.2	4.2
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°	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5	901.5
2.5°	907.1	888.9	853.9	821.7	790.9	768.5	747.5	727.9	713.9	702.7	701.3
5°	919.7	883.3	816.1	753.1	695.7	648.1	607.5	575.3	551.6	534.8	533.4
7.5°	936.5	880.5	778.3	684.5	599.1	530.6	471.8	428.4	397.6	385.0	375.2
10°	950.5	877.7	740.5	615.9	504.0	417.2	347.2	303.8	281.4	273.0	268.8
12.5°	974.3	880.5	708.3	553.0	421.4	319.2	266.0	242.2	232.4	225.4	224.0
15°	1009.3	893.1	677.5	491.4	337.4	257.6	226.8	211.4	201.6	200.2	198.8
17.5°	1044.3	904.3	649.5	428.4	280.0	224.0	203.0	190.4	183.4	182.0	182.0
20°	1084.9	918.3	618.7	368.2	239.4	201.6	184.8	175.0	166.6	165.2	165.2
22.5°	1132.5	937.9	589.3	315.0	212.8	184.8	170.8	159.6	152.6	151.2	151.2
25°	1196.9	967.3	565.6	275.8	194.6	170.8	158.2	148.4	142.8	140.0	140.0
27.5°	1268.3	1007.9	548.8	252.0	182.0	159.6	147.0	138.6	133.0	130.2	130.2
30°	1348.1	1052.7	537.6	242.2	175.0	149.8	138.6	130.2	123.2	121.8	121.8
32.5°	1436.3	1104.5	530.6	243.6	173.6	142.8	130.2	121.8	116.2	113.4	113.4
35°	1534.3	1161.9	526.4	252.0	176.4	137.2	123.2	114.8	109.2	106.4	106.4
37.5°	1643.5	1229.1	526.4	260.4	183.4	135.8	116.2	107.8	103.6	100.8	100.8
40°	1745.6	1300.5	532.0	270.2	190.4	135.8	110.6	103.6	98.0	95.2	95.2
42.5°	1825.4	1341.1	536.2	280.0	194.6	134.4	105.0	98.0	93.8	91.0	91.0
45°	1916.4	1384.5	527.8	284.2	194.6	131.6	100.8	93.8	89.6	86.8	86.8
47.5°	2017.2	1437.7	526.4	287.0	190.4	126.0	96.6	89.6	86.8	84.0	84.0
50°	2119.4	1496.5	529.2	285.6	184.8	117.6	91.0	86.8	82.6	79.8	79.8
52.5°	2235.6	1558.1	534.8	282.8	172.2	107.8	86.8	82.6	78.4	75.6	74.2
55°	2364.4	1625.3	546.0	277.2	155.4	98.0	82.6	78.4	72.8	70.0	68.6
57.5°	2512.8	1707.9	558.6	266.0	137.2	89.6	78.4	72.8	64.4	60.2	58.8
60°	2654.2	1801.6	572.6	239.4	119.0	81.2	74.2	65.8	57.4	54.6	53.2
62.5°	2787.2	1894.0	579.5	191.8	100.8	74.2	70.0	60.2	51.8	49.0	47.6
65°	2872.5	1994.8	564.2	130.2	82.6	68.6	64.4	56.0	47.6	43.4	43.4
67.5°	2878.1	2042.4	511.0	85.4	67.2	61.6	58.8	50.4	42.0	39.2	37.8
70°	2736.8	1971.0	390.6	67.2	56.0	53.2	53.2	44.8	36.4	33.6	32.2
72.5°	2412.0	1745.6	249.2	54.6	47.6	44.8	44.8	37.8	32.2	28.0	26.6
75°	1903.8	1346.7	133.0	44.8	39.2	37.8	35.0	30.8	26.6	23.8	22.4
77.5°	874.9	593.5	61.6	32.2	29.4	29.4	26.6	22.4	21.0	18.2	18.2
80°	345.8	201.6	30.8	21.0	19.6	19.6	19.6	15.4	15.4	12.6	11.2
82.5°	95.2	42.0	15.4	12.6	12.6	12.6	11.2	9.8	9.8	8.4	8.4
85°	9.8	7.0	7.0	7.0	7.0	5.6	5.6	4.2	2.8	2.8	2.8
87.5°	4.2	4.2	4.2	4.2	4.2	2.8	1.4	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)