

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: P835842

Luminaire Tested: **ARCH3-100-740-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P835842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-100-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 805mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11438 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 102.6
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



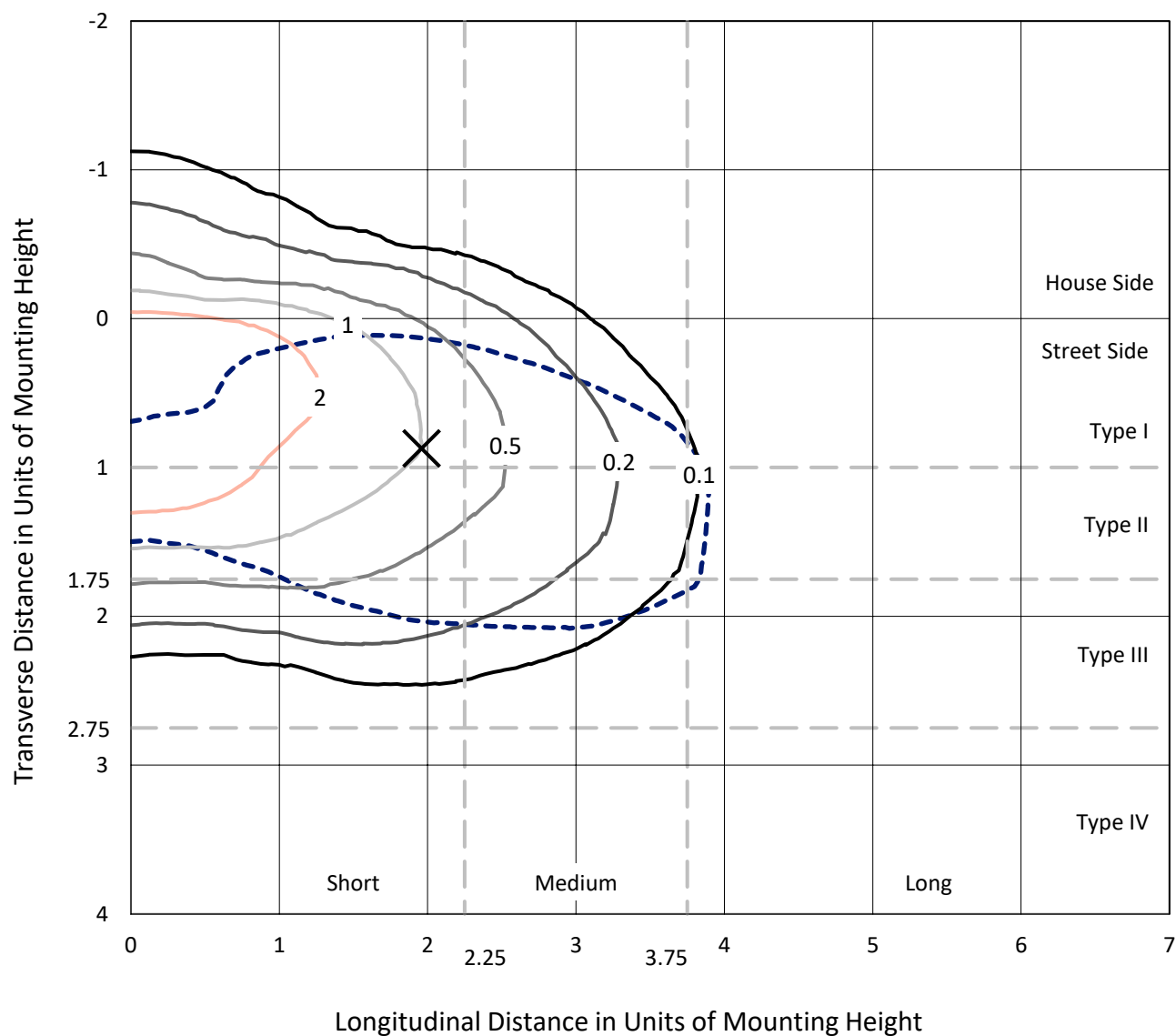
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

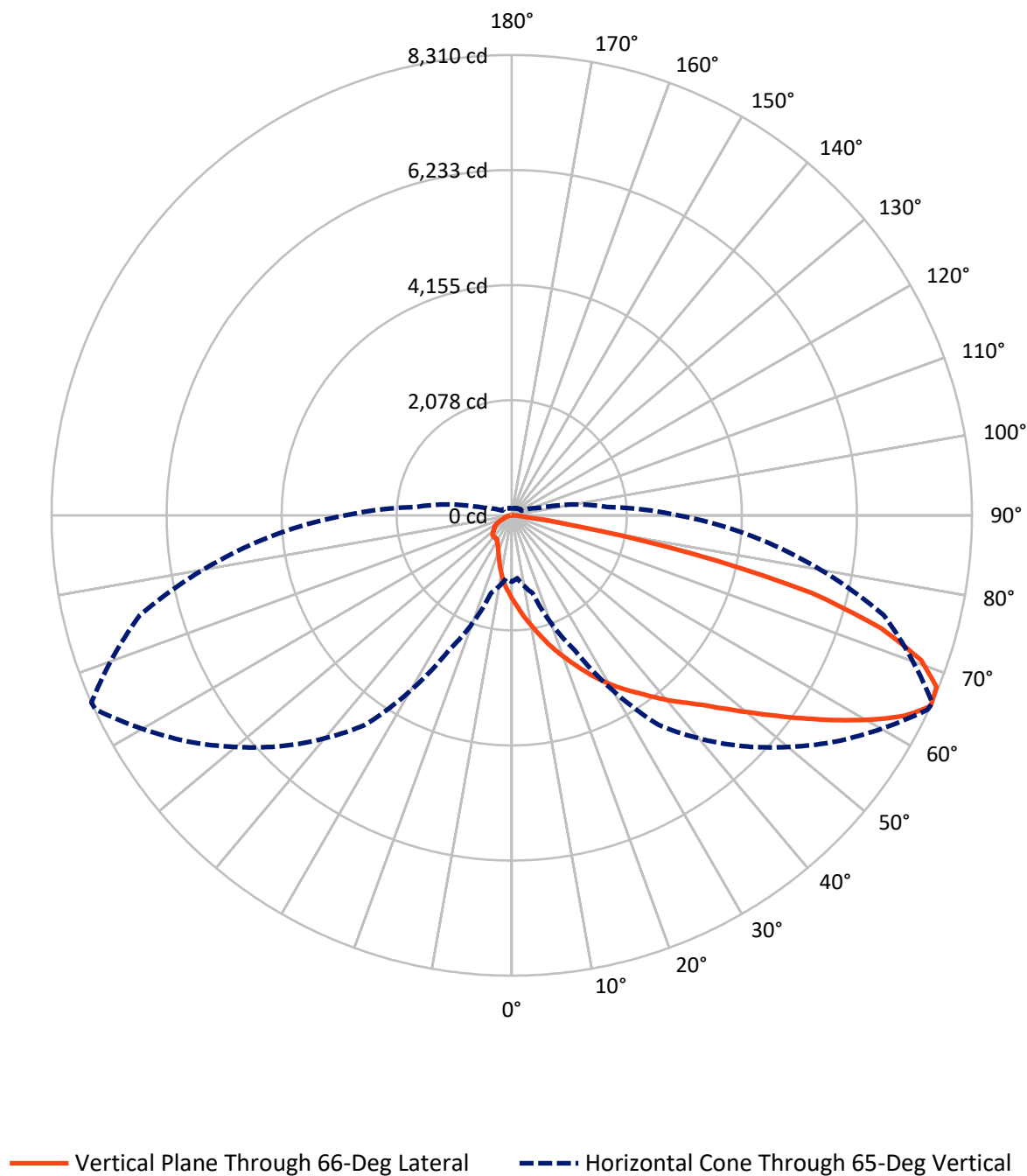


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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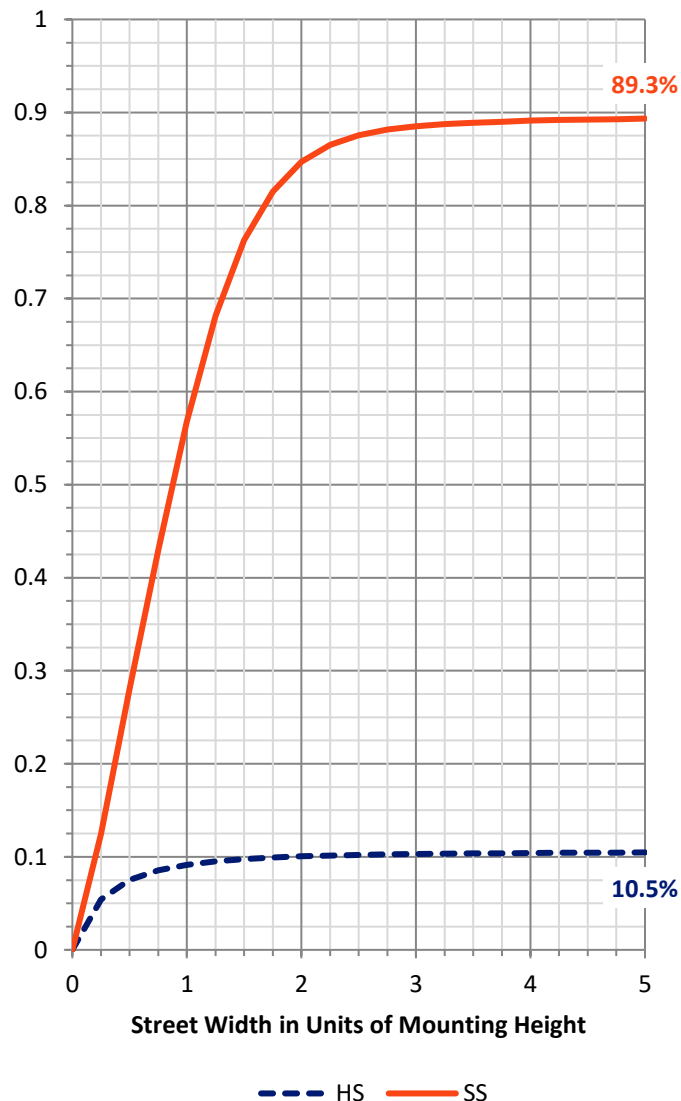
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1209.8	0.0	1209.8
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	10228.2	0.0	10228.2
	% Fixture	89.4	0.0	89.4
Total	Lumens	11438.0	0.0	11438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.4	1.3
10°-20°	487.0	4.3
20°-30°	881.1	7.7
30°-40°	1377.8	12.0
40°-50°	2090.0	18.3
50°-60°	2655.5	23.2
60°-70°	2481.3	21.7
70°-80°	1233.2	10.8
80°-90°	82.9	0.7
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°	11438.0	100.0
0°-180°	11438.0	100.0

Coefficient of Utilization



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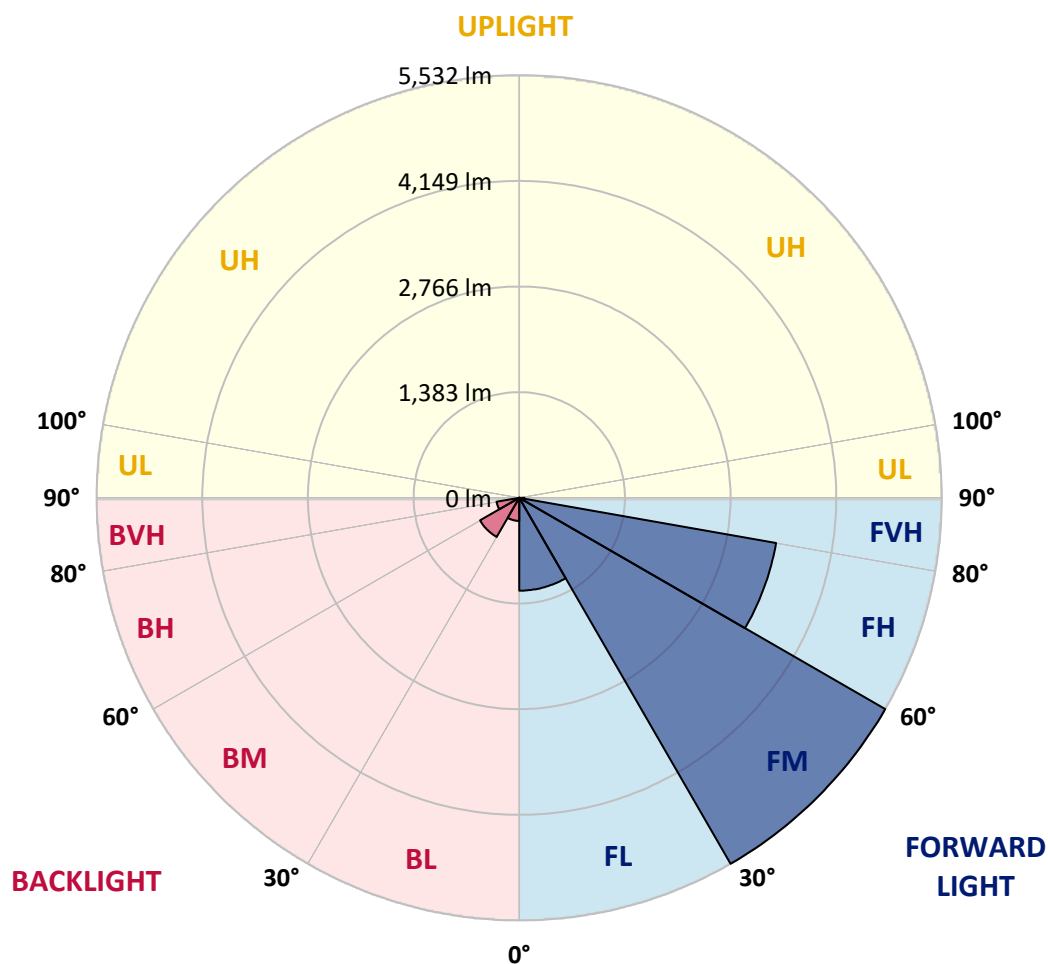
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1215.3	10.6			
FM	(30°-60°)	5531.5	48.4			
FH	(60°-80°)	3413.1	29.8			G2/5000
FVH	(80°-90°)	68.2	0.6			G1/100
BL	(0°-30°)	302.2	2.6	B1/500		
BM	(30°-60°)	591.7	5.2	B1/1000		
BH	(60°-80°)	301.3	2.6	B1/500		G1/500
BVH	(80°-90°)	14.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8
2.5°	1768.0	1782.4	1789.6	1792.0	1736.9	1712.9	1688.9	1633.7	1621.7	1590.5	1549.7
5°	2079.9	2099.1	2094.3	2084.7	2017.5	1940.8	1878.4	1775.2	1758.5	1684.1	1592.9
7.5°	2387.0	2403.8	2399.0	2363.0	2288.6	2180.7	2077.5	1926.4	1902.4	1782.4	1636.1
10°	2643.7	2658.1	2655.7	2619.7	2530.9	2399.0	2274.2	2072.7	2043.9	1873.6	1672.1
12.5°	2854.8	2874.0	2871.6	2847.6	2768.4	2624.5	2482.9	2240.6	2204.7	1984.0	1722.5
15°	3020.3	3044.3	3044.3	3034.7	2979.5	2859.6	2698.9	2425.4	2382.2	2111.1	1784.8
17.5°	3121.1	3140.3	3157.1	3173.9	3135.5	3044.3	2898.0	2610.1	2564.5	2235.8	1849.6
20°	3173.9	3193.0	3205.0	3241.0	3248.2	3202.6	3087.5	2792.4	2744.4	2377.4	1924.0
22.5°	3260.2	3277.0	3279.4	3310.6	3325.0	3337.0	3265.0	2972.3	2934.0	2533.3	2007.9
25°	3404.2	3423.3	3416.1	3430.5	3432.9	3447.3	3440.1	3178.6	3140.3	2710.8	2108.7
27.5°	3588.9	3612.9	3608.1	3593.7	3572.1	3560.1	3591.3	3387.4	3351.4	2888.4	2211.9
30°	3788.0	3816.8	3809.6	3780.8	3723.2	3672.8	3716.0	3584.1	3550.5	3070.7	2327.0
32.5°	3989.5	4023.1	4020.7	3972.7	3874.4	3788.0	3852.8	3768.8	3744.8	3267.4	2451.8
35°	4121.4	4164.6	4159.8	4131.0	4003.9	3929.5	4008.7	3958.3	3941.5	3507.3	2631.7
37.5°	4335.0	4380.5	4339.8	4267.8	4121.4	4083.1	4179.0	4171.8	4159.8	3761.6	2821.2
40°	4853.1	4920.3	4812.4	4517.3	4277.4	4243.8	4380.5	4409.3	4397.3	4013.5	2991.5
42.5°	5395.3	5496.1	5328.1	4920.3	4560.5	4438.1	4601.2	4642.0	4627.6	4229.4	3145.1
45°	5724.0	5767.1	5599.2	5282.6	5061.8	4673.2	4836.3	4903.5	4891.5	4488.5	3341.8
47.5°	5992.7	5975.9	5783.9	5570.4	5611.2	5004.3	5102.6	5234.6	5225.0	4774.0	3557.7
50°	6050.2	6011.8	5935.1	5800.7	5908.7	5340.1	5383.3	5611.2	5601.6	5090.6	3776.0
52.5°	5644.8	5594.4	5803.1	5915.9	5879.9	5584.8	5692.8	6023.8	6019.0	5433.7	3984.7
55°	4632.4	4591.6	5153.0	5736.0	5848.7	5757.6	6035.8	6453.3	6479.6	5798.3	4174.2
57.5°	3644.1	3600.9	4152.6	5285.0	5733.6	5915.9	6436.5	6945.0	6978.6	6194.2	4354.1
60°	2905.2	2840.4	3262.6	4574.9	5517.7	6038.2	6822.7	7484.8	7489.6	6556.4	4464.5
62.5°	1974.4	1902.4	2370.2	3675.2	5155.4	6057.4	7120.2	7950.2	7969.4	6827.5	4483.7
65°	1199.5	1139.5	1456.2	2684.5	4620.4	5894.3	7125.0	8293.3	8310.1	6952.2	4368.5
67.5°	695.7	671.7	832.4	1672.1	3732.8	5455.3	6825.1	8240.5	8271.7	6899.5	4107.1
70°	405.4	403.0	463.0	827.6	2634.1	4584.5	6155.8	7796.7	7842.3	6623.6	3706.4
72.5°	297.5	302.3	326.3	443.8	1525.8	3301.0	5213.0	6904.3	6973.8	6083.8	3135.5
75°	235.1	237.5	259.1	302.3	801.3	1866.4	3905.5	5541.6	5596.8	5121.8	2449.4
77.5°	175.1	179.9	196.7	213.5	371.8	856.4	2197.5	3413.7	3322.6	2811.6	1182.7
80°	127.1	139.1	146.3	153.5	196.7	331.1	659.7	1189.9	1180.3	1228.3	559.0
82.5°	81.6	91.2	98.4	103.2	117.6	158.3	196.7	266.3	287.9	477.4	223.1
85°	36.0	40.8	45.6	55.2	50.4	55.2	81.6	52.8	45.6	72.0	40.8
87.5°	0.0	0.0	7.2	12.0	9.6	4.8	14.4	9.6	7.2	7.2	7.2
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°	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8	1513.8
2.5°	1528.2	1501.8	1446.6	1393.8	1362.6	1321.8	1285.9	1252.3	1249.9	1240.3	1223.5
5°	1547.3	1497.0	1393.8	1295.4	1221.1	1141.9	1074.7	1022.0	1002.8	988.4	969.2
7.5°	1566.5	1487.4	1333.8	1189.9	1072.3	962.0	882.8	810.9	789.3	770.1	758.1
10°	1573.7	1470.6	1264.3	1072.3	918.8	801.3	717.3	664.5	645.3	635.7	628.5
12.5°	1595.3	1461.0	1199.5	962.0	784.5	676.5	616.5	585.4	578.2	571.0	563.8
15°	1624.1	1461.0	1134.7	854.0	678.9	592.5	556.6	535.0	530.2	527.8	523.0
17.5°	1655.3	1461.0	1072.3	762.9	602.1	537.4	511.0	499.0	496.6	494.2	491.8
20°	1698.5	1463.4	1005.2	683.7	547.0	496.6	475.0	460.6	458.2	455.8	455.8
22.5°	1741.7	1468.2	940.4	623.7	511.0	465.4	439.0	424.6	419.8	419.8	419.8
25°	1796.8	1482.6	880.4	573.4	479.8	436.6	403.0	391.0	388.6	388.6	386.2
27.5°	1861.6	1499.4	827.6	535.0	448.6	403.0	369.4	357.4	352.7	352.7	350.3
30°	1931.2	1516.2	784.5	506.2	417.4	369.4	338.3	323.9	319.1	321.5	319.1
32.5°	2007.9	1540.1	750.9	487.0	388.6	340.7	311.9	295.1	292.7	292.7	290.3
35°	2137.5	1607.3	746.1	477.4	364.6	319.1	290.3	273.5	271.1	271.1	268.7
37.5°	2276.6	1684.1	767.7	472.6	345.5	299.9	273.5	256.7	254.3	254.3	254.3
40°	2394.2	1741.7	791.7	472.6	333.5	283.1	259.1	244.7	244.7	244.7	244.7
42.5°	2473.3	1746.5	786.9	472.6	323.9	271.1	249.5	235.1	235.1	237.5	235.1
45°	2590.9	1770.4	767.7	465.4	316.7	261.5	239.9	227.9	225.5	227.9	227.9
47.5°	2730.0	1813.6	748.5	436.6	314.3	251.9	232.7	218.3	215.9	218.3	215.9
50°	2862.0	1852.0	738.9	398.2	309.5	242.3	223.1	208.7	206.3	208.7	206.3
52.5°	2972.3	1868.8	722.1	371.8	297.5	232.7	213.5	199.1	194.3	196.7	196.7
55°	3061.1	1864.0	698.1	350.3	275.9	223.1	201.5	189.5	182.3	182.3	179.9
57.5°	3142.7	1866.4	676.5	328.7	251.9	208.7	191.9	177.5	167.9	165.5	163.1
60°	3173.9	1854.4	638.1	299.9	227.9	196.7	179.9	163.1	153.5	151.1	148.7
62.5°	3130.7	1811.2	587.8	249.5	206.3	182.3	167.9	151.1	141.5	139.1	136.7
65°	3008.3	1729.7	511.0	196.7	187.1	165.5	153.5	141.5	129.5	124.7	122.3
67.5°	2799.6	1612.1	415.0	158.3	165.5	151.1	143.9	129.5	115.2	110.4	108.0
70°	2502.1	1456.2	311.9	134.3	146.3	134.3	129.5	115.2	103.2	98.4	96.0
72.5°	2084.7	1204.3	218.3	115.2	127.1	117.6	112.8	103.2	91.2	84.0	84.0
75°	1576.1	863.6	143.9	98.4	105.6	100.8	93.6	86.4	79.2	74.4	72.0
77.5°	678.9	335.9	88.8	74.4	86.4	84.0	74.4	69.6	67.2	62.4	62.4
80°	292.7	136.7	55.2	55.2	62.4	60.0	57.6	52.8	52.8	50.4	48.0
82.5°	108.0	55.2	33.6	40.8	45.6	40.8	40.8	40.8	40.8	38.4	38.4
85°	26.4	16.8	16.8	24.0	26.4	24.0	26.4	24.0	24.0	24.0	21.6
87.5°	7.2	7.2	9.6	9.6	9.6	9.6	9.6	7.2	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)