

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: P836859

Luminaire Tested: **ARCH3-80-750-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836859
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: ARCH3-80-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9478 lumens
Efficiency: N/A
Efficacy: 115.7 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): 81.9
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



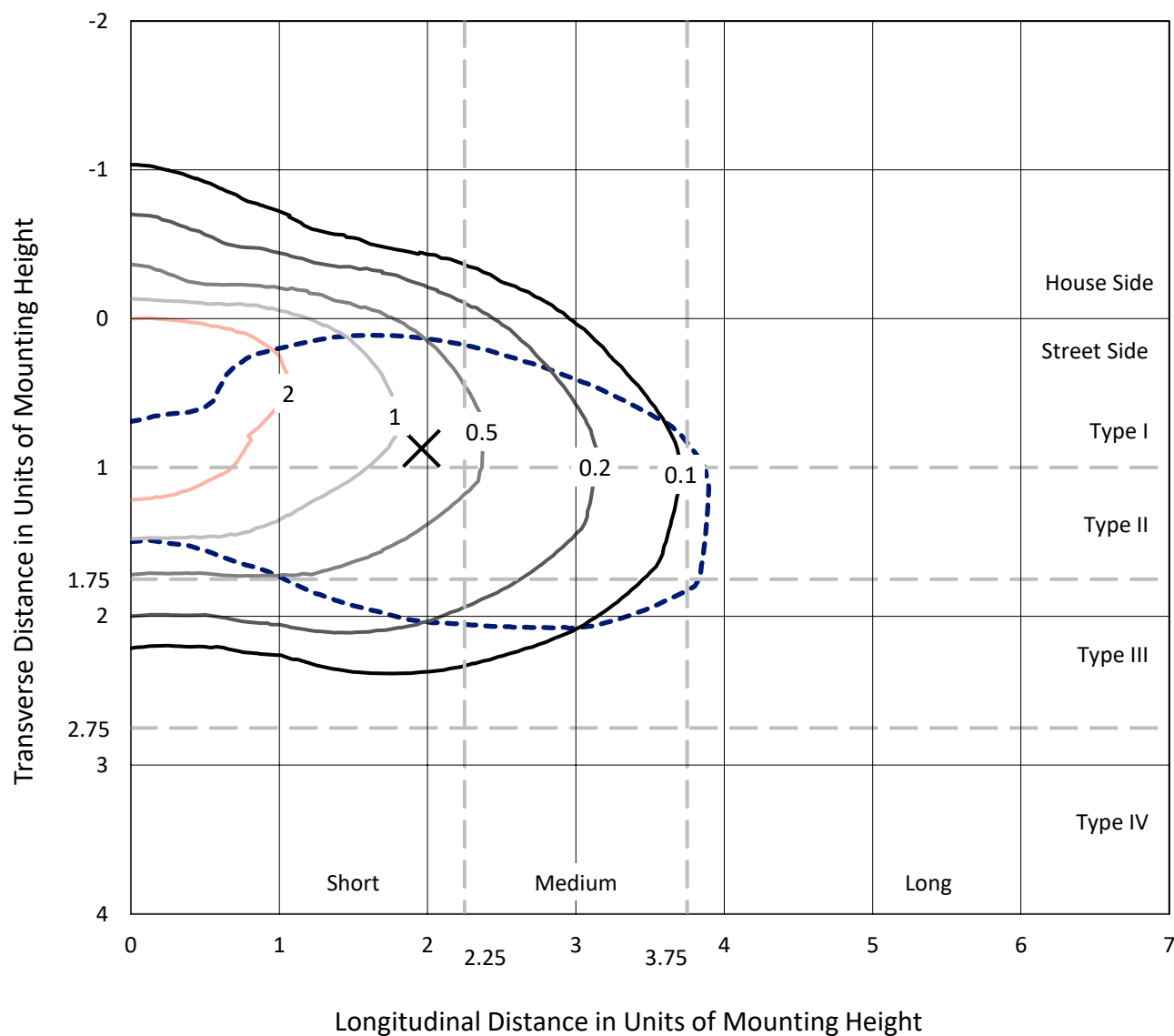
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



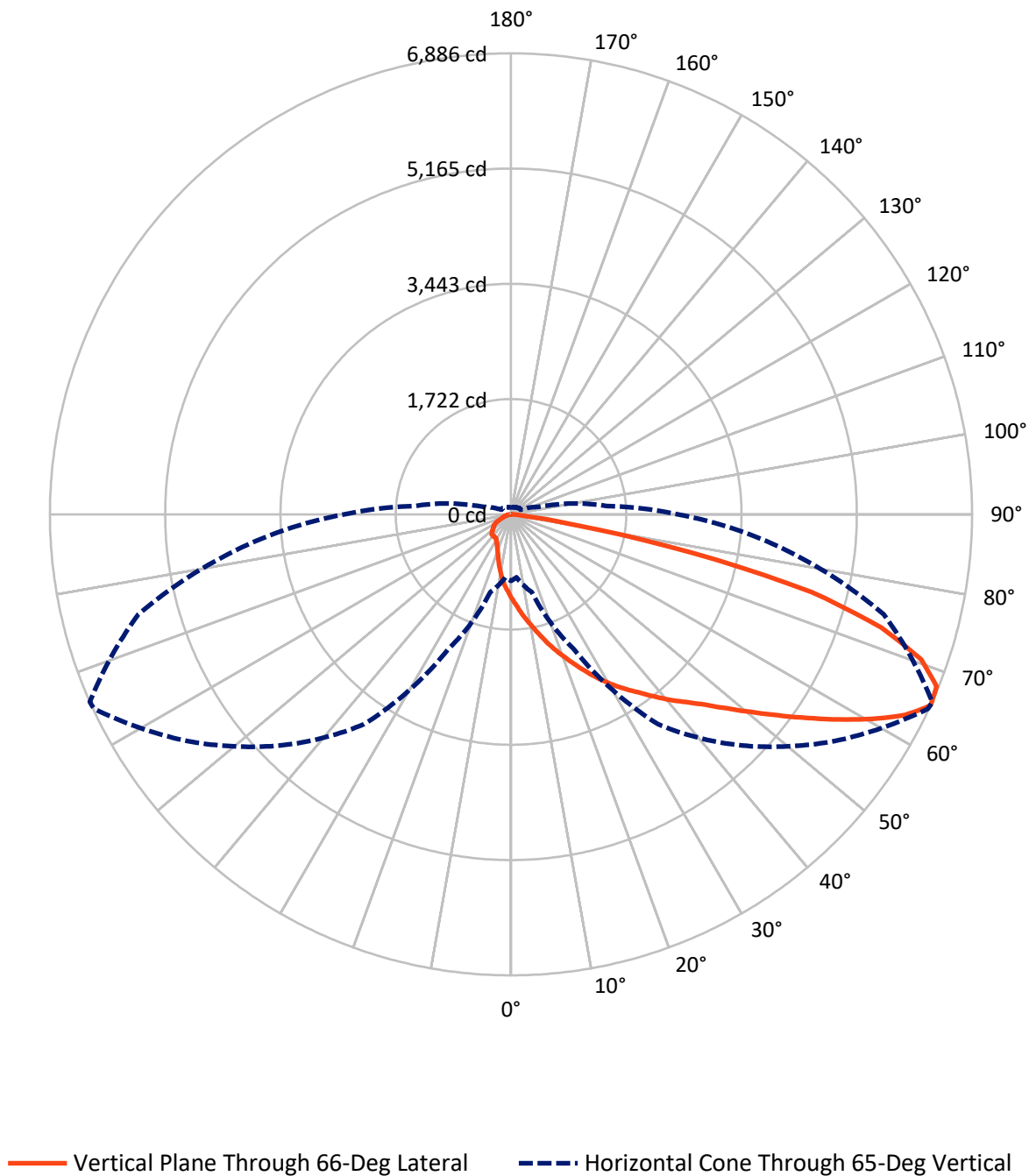
Based on 25 foot mounting height. Maximum calculated value = 3.6 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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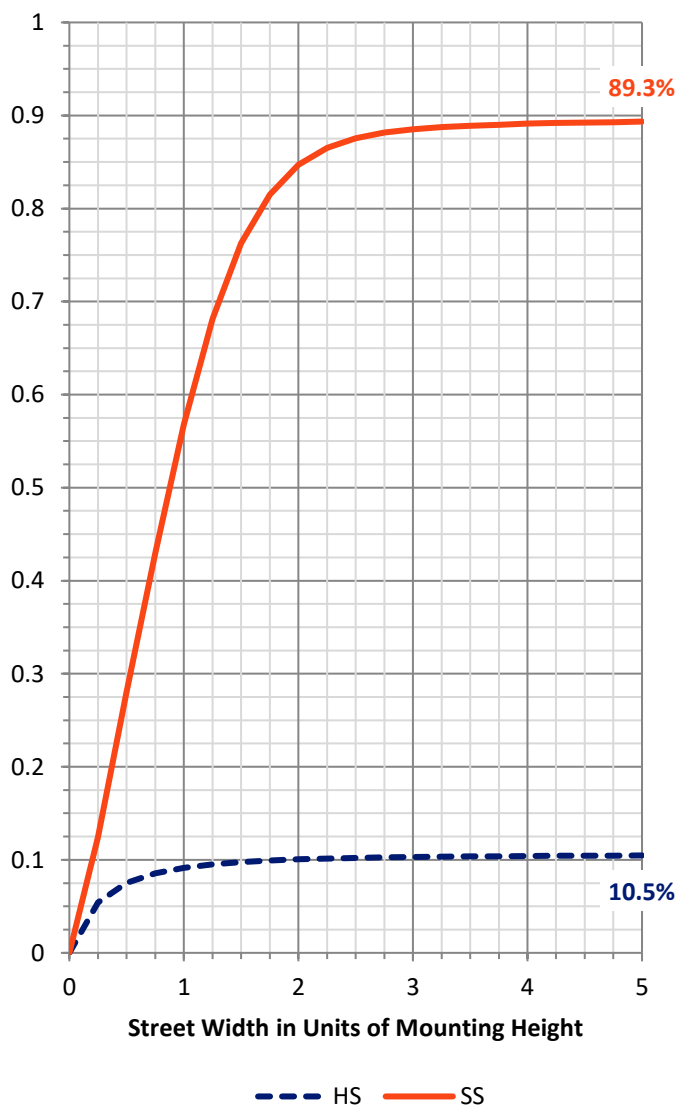
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1002.5	0.0	1002.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	8475.5	0.0	8475.5
	% Fixture	89.4	0.0	89.4
Total	Lumens	9478.0	0.0	9478.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.3
10°-20°	403.5	4.3
20°-30°	730.1	7.7
30°-40°	1141.7	12.0
40°-50°	1731.9	18.3
50°-60°	2200.4	23.2
60°-70°	2056.1	21.7
70°-80°	1021.9	10.8
80°-90°	68.7	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°	9478.0	100.0
0°-180°	9478.0	100.0

Coefficient of Utilization



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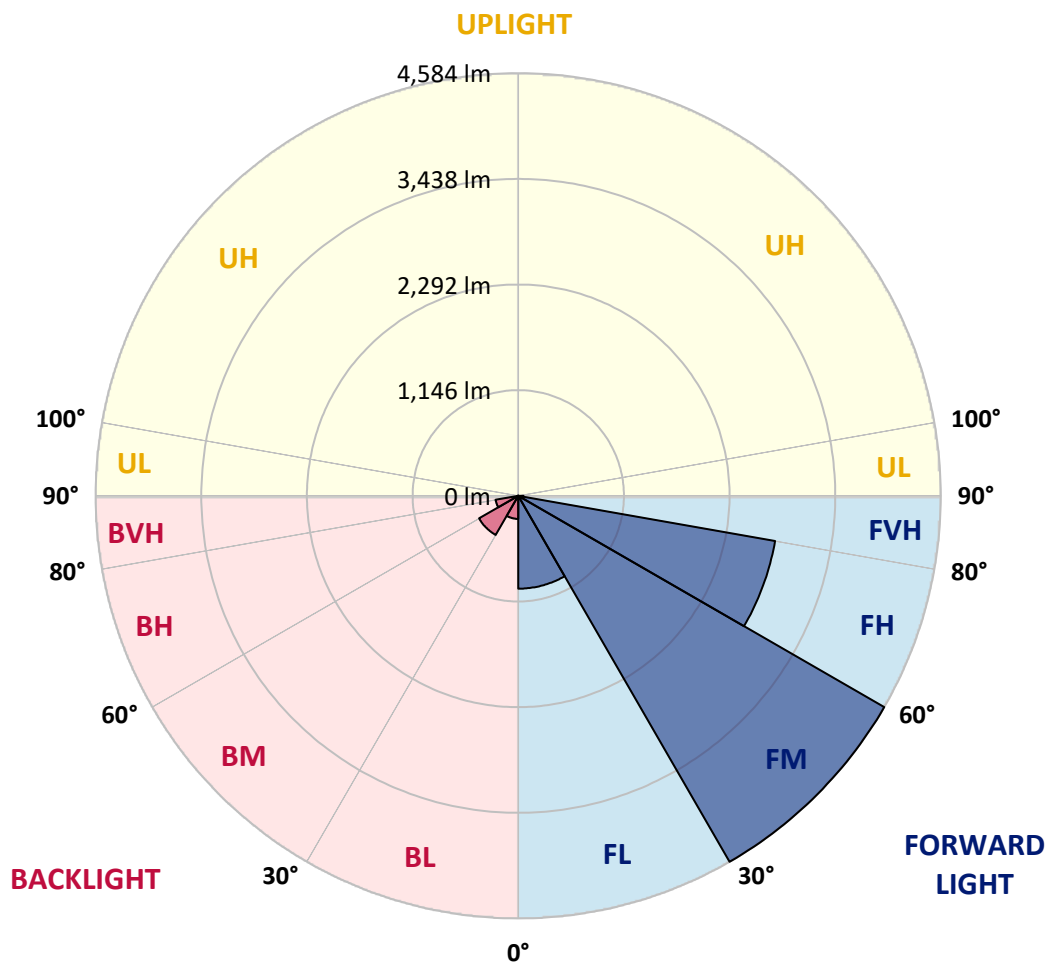
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1007.0	10.6			
FM	(30°-60°)	4583.7	48.4			
FH	(60°-80°)	2828.3	29.8			G2/5000
FVH	(80°-90°)	56.5	0.6			G1/100
BL	(0°-30°)	250.4	2.6	B1/500		
BM	(30°-60°)	490.3	5.2	B1/1000		
BH	(60°-80°)	249.7	2.6	B1/500		G1/500
BVH	(80°-90°)	12.2	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°	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4
2.5°	1465.1	1477.0	1483.0	1485.0	1439.2	1419.4	1399.5	1353.8	1343.8	1318.0	1284.2
5°	1723.5	1739.4	1735.4	1727.5	1671.8	1608.2	1556.5	1471.0	1457.1	1395.5	1320.0
7.5°	1978.0	1991.9	1987.9	1958.1	1896.5	1807.0	1721.5	1596.3	1576.4	1477.0	1355.7
10°	2190.7	2202.6	2200.6	2170.8	2097.2	1987.9	1884.5	1717.5	1693.7	1552.5	1385.6
12.5°	2365.6	2381.5	2379.5	2359.6	2294.0	2174.8	2057.5	1856.7	1826.9	1644.0	1427.3
15°	2502.8	2522.6	2522.6	2514.7	2469.0	2369.6	2236.4	2009.8	1974.0	1749.3	1479.0
17.5°	2586.3	2602.2	2616.1	2630.0	2598.2	2522.6	2401.4	2162.8	2125.1	1852.7	1532.7
20°	2630.0	2645.9	2655.8	2685.6	2691.6	2653.8	2558.4	2313.9	2274.2	1970.0	1594.3
22.5°	2701.5	2715.5	2717.5	2743.3	2755.2	2765.2	2705.5	2463.0	2431.2	2099.2	1663.9
25°	2820.8	2836.7	2830.8	2842.7	2844.7	2856.6	2850.6	2634.0	2602.2	2246.3	1747.4
27.5°	2973.9	2993.8	2989.8	2977.9	2960.0	2950.0	2975.9	2806.9	2777.1	2393.4	1832.8
30°	3138.9	3162.7	3156.8	3132.9	3085.2	3043.5	3079.2	2969.9	2942.1	2544.5	1928.3
32.5°	3305.9	3333.7	3331.7	3292.0	3210.4	3138.9	3192.6	3123.0	3103.1	2707.5	2031.6
35°	3415.2	3451.0	3447.0	3423.2	3317.8	3256.2	3321.8	3280.0	3266.1	2906.3	2180.7
37.5°	3592.1	3629.9	3596.1	3536.5	3415.2	3383.4	3462.9	3456.9	3447.0	3117.0	2337.8
40°	4021.5	4077.2	3987.7	3743.2	3544.4	3516.6	3629.9	3653.7	3643.8	3325.7	2478.9
42.5°	4470.8	4554.3	4415.1	4077.2	3779.0	3677.6	3812.8	3846.6	3834.6	3504.7	2606.1
45°	4743.1	4778.9	4639.7	4377.3	4194.5	3872.4	4007.6	4063.3	4053.3	3719.4	2769.1
47.5°	4965.8	4951.8	4792.8	4615.9	4649.7	4146.7	4228.3	4337.6	4329.6	3955.9	2948.0
50°	5013.5	4981.7	4918.1	4806.7	4896.2	4425.1	4460.8	4649.7	4641.7	4218.3	3128.9
52.5°	4677.5	4635.8	4808.7	4902.1	4872.3	4627.8	4717.3	4991.6	4987.6	4502.6	3301.9
55°	3838.6	3804.8	4270.0	4753.1	4846.5	4770.9	5001.5	5347.4	5369.3	4804.7	3458.9
57.5°	3019.6	2983.8	3441.0	4379.3	4751.1	4902.1	5333.5	5755.0	5782.8	5132.7	3608.0
60°	2407.3	2353.7	2703.5	3790.9	4572.2	5003.5	5653.6	6202.2	6206.2	5432.9	3699.5
62.5°	1636.0	1576.4	1964.0	3045.5	4272.0	5019.4	5900.1	6587.9	6603.8	5657.5	3715.4
65°	993.9	944.2	1206.7	2224.5	3828.7	4884.3	5904.0	6872.2	6886.1	5760.9	3620.0
67.5°	576.5	556.6	689.8	1385.6	3093.2	4520.5	5655.6	6828.4	6854.3	5717.2	3403.3
70°	336.0	334.0	383.7	685.8	2182.7	3798.9	5100.9	6460.7	6498.4	5488.6	3071.3
72.5°	246.5	250.5	270.4	367.8	1264.3	2735.3	4319.7	5721.2	5778.8	5041.3	2598.2
75°	194.8	196.8	214.7	250.5	664.0	1546.6	3236.3	4592.0	4637.8	4244.2	2029.6
77.5°	145.1	149.1	163.0	176.9	308.1	709.7	1820.9	2828.8	2753.2	2329.8	980.0
80°	105.4	115.3	121.3	127.2	163.0	274.3	546.7	986.0	978.0	1017.8	463.2
82.5°	67.6	75.5	81.5	85.5	97.4	131.2	163.0	220.7	238.5	395.6	184.9
85°	29.8	33.8	37.8	45.7	41.7	45.7	67.6	43.7	37.8	59.6	33.8
87.5°	0.0	0.0	6.0	9.9	8.0	4.0	11.9	8.0	6.0	6.0	6.0
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°	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4	1254.4
2.5°	1266.3	1244.4	1198.7	1155.0	1129.1	1095.3	1065.5	1037.7	1035.7	1027.7	1013.8
5°	1282.2	1240.4	1155.0	1073.5	1011.8	946.2	890.6	846.8	830.9	819.0	803.1
7.5°	1298.1	1232.5	1105.3	986.0	888.6	797.1	731.5	671.9	654.0	638.1	628.2
10°	1304.1	1218.6	1047.6	888.6	761.4	664.0	594.4	550.6	534.7	526.8	520.8
12.5°	1321.9	1210.6	993.9	797.1	650.0	560.6	510.9	485.0	479.1	473.1	467.2
15°	1345.8	1210.6	940.3	707.7	562.6	491.0	461.2	443.3	439.3	437.3	433.4
17.5°	1371.6	1210.6	888.6	632.2	499.0	445.3	423.4	413.5	411.5	409.5	407.5
20°	1407.4	1212.6	832.9	566.5	453.2	411.5	393.6	381.7	379.7	377.7	377.7
22.5°	1443.2	1216.6	779.3	516.9	423.4	385.7	363.8	351.9	347.9	347.9	347.9
25°	1488.9	1228.5	729.6	475.1	397.6	361.8	334.0	324.0	322.0	322.0	320.1
27.5°	1542.6	1242.4	685.8	443.3	371.7	334.0	306.1	296.2	292.2	292.2	290.2
30°	1600.3	1256.3	650.0	419.4	345.9	306.1	280.3	268.4	264.4	266.4	264.4
32.5°	1663.9	1276.2	622.2	403.5	322.0	282.3	258.4	244.5	242.5	242.5	240.5
35°	1771.2	1331.9	618.2	395.6	302.2	264.4	240.5	226.6	224.6	224.6	222.6
37.5°	1886.5	1395.5	636.1	391.6	286.3	248.5	226.6	212.7	210.7	210.7	210.7
40°	1983.9	1443.2	656.0	391.6	276.3	234.6	214.7	202.8	202.8	202.8	202.8
42.5°	2049.5	1447.2	652.0	391.6	268.4	224.6	206.7	194.8	194.8	196.8	194.8
45°	2146.9	1467.1	636.1	385.7	262.4	216.7	198.8	188.8	186.9	188.8	188.8
47.5°	2262.2	1502.8	620.2	361.8	260.4	208.7	192.8	180.9	178.9	180.9	178.9
50°	2371.6	1534.7	612.3	330.0	256.4	200.8	184.9	172.9	171.0	172.9	171.0
52.5°	2463.0	1548.6	598.4	308.1	246.5	192.8	176.9	165.0	161.0	163.0	163.0
55°	2536.6	1544.6	578.5	290.2	228.6	184.9	167.0	157.0	151.1	151.1	149.1
57.5°	2604.1	1546.6	560.6	272.3	208.7	172.9	159.0	147.1	139.2	137.2	135.2
60°	2630.0	1536.6	528.8	248.5	188.8	163.0	149.1	135.2	127.2	125.2	123.2
62.5°	2594.2	1500.9	487.0	206.7	171.0	151.1	139.2	125.2	117.3	115.3	113.3
65°	2492.8	1433.3	423.4	163.0	155.1	137.2	127.2	117.3	107.3	103.4	101.4
67.5°	2319.9	1335.9	343.9	131.2	137.2	125.2	119.3	107.3	95.4	91.4	89.5
70°	2073.4	1206.7	258.4	111.3	121.3	111.3	107.3	95.4	85.5	81.5	79.5
72.5°	1727.5	997.9	180.9	95.4	105.4	97.4	93.4	85.5	75.5	69.6	69.6
75°	1306.0	715.6	119.3	81.5	87.5	83.5	77.5	71.6	65.6	61.6	59.6
77.5°	562.6	278.3	73.6	61.6	71.6	69.6	61.6	57.6	55.7	51.7	51.7
80°	242.5	113.3	45.7	45.7	51.7	49.7	47.7	43.7	43.7	41.7	39.8
82.5°	89.5	45.7	27.8	33.8	37.8	33.8	33.8	33.8	33.8	31.8	31.8
85°	21.9	13.9	13.9	19.9	21.9	19.9	21.9	19.9	19.9	19.9	17.9
87.5°	6.0	6.0	8.0	8.0	8.0	8.0	8.0	6.0	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)