

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: P836893

Luminaire Tested: **ARCH3-90-727-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9699 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.1
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



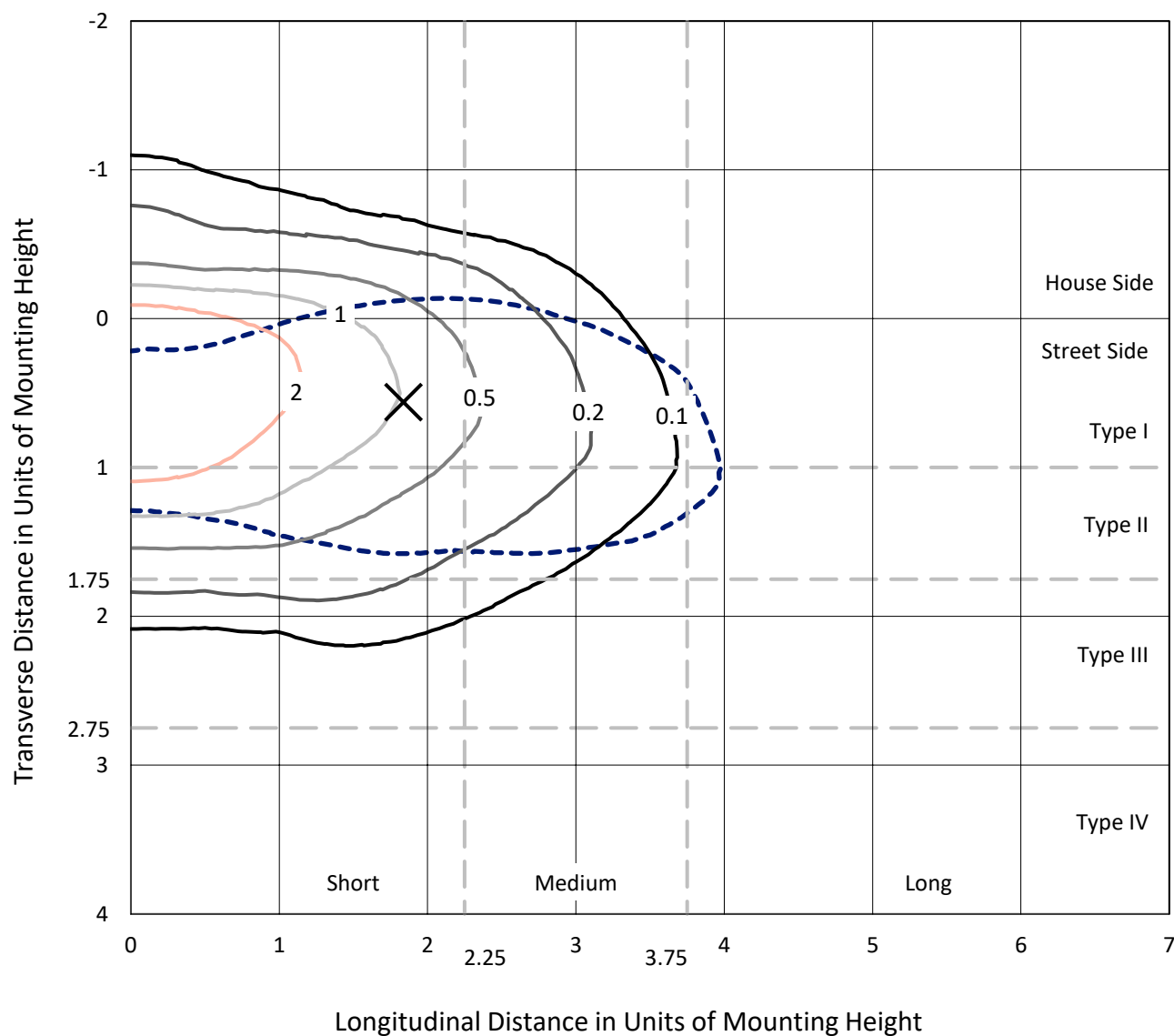
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

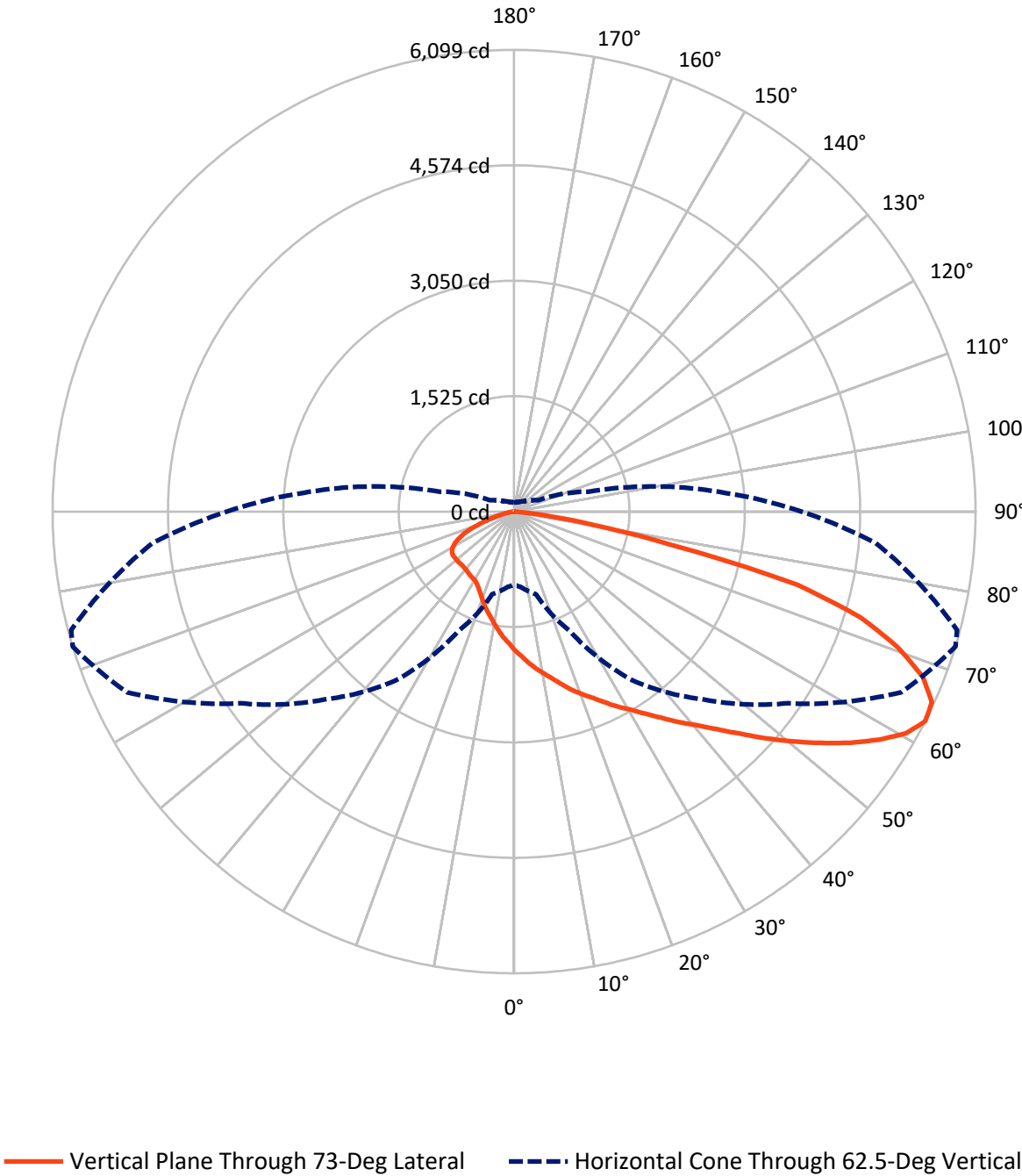


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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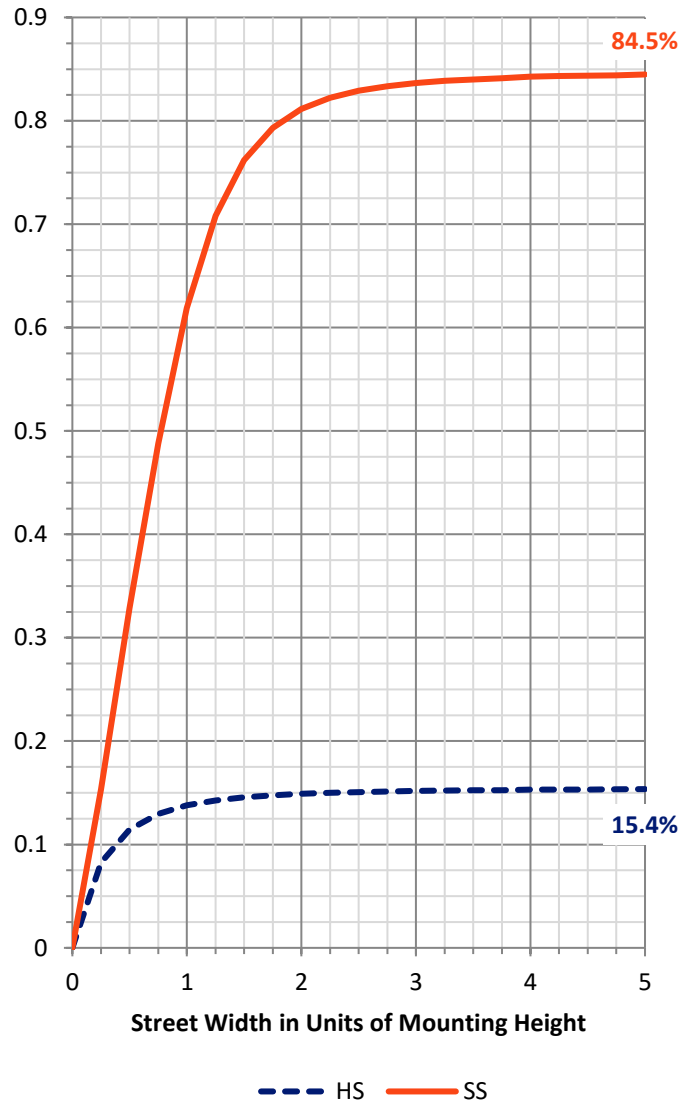
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1503.5	0.0	1503.5
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	8195.5	0.0	8195.5
	% Fixture	84.5	0.0	84.5
Total	Lumens	9699.0	0.0	9699.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	1.8
10°-20°	535.4	5.5
20°-30°	891.1	9.2
30°-40°	1344.6	13.9
40°-50°	1879.4	19.4
50°-60°	2075.9	21.4
60°-70°	1808.4	18.6
70°-80°	913.5	9.4
80°-90°	73.3	0.8
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°	9699.0	100.0
0°-180°	9699.0	100.0

Coefficient of Utilization



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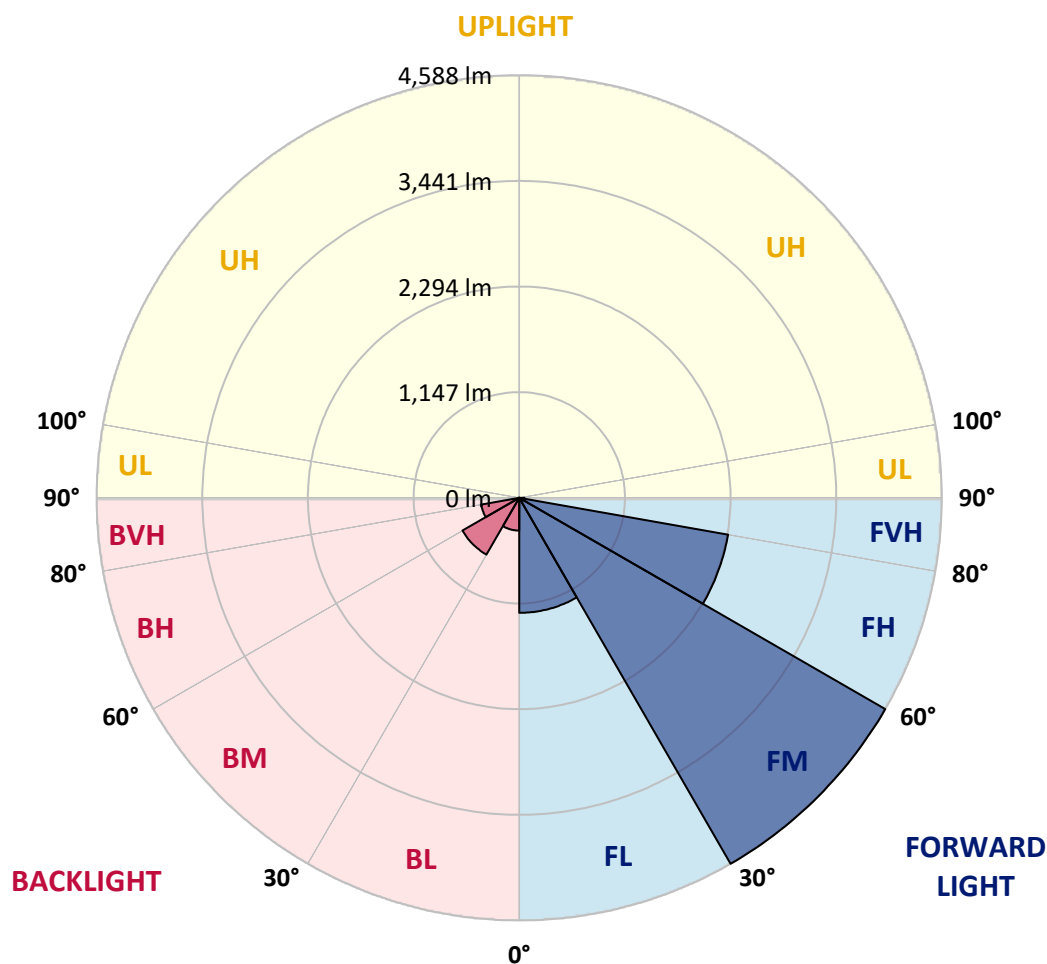
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1248.6	12.9			
FM	(30°-60°)	4588.0	47.3			
FH	(60°-80°)	2302.2	23.7			G2/5000
FVH	(80°-90°)	56.7	0.6			G1/100
BL	(0°-30°)	355.4	3.7	B1/500		
BM	(30°-60°)	711.9	7.3	B1/1000		
BH	(60°-80°)	419.6	4.3	B1/500		G1/500
BVH	(80°-90°)	16.6	0.2			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5
2.5°	2090.1	2113.4	2100.7	2109.2	2066.9	2039.4	2007.7	1946.4	1912.6	1908.4	1868.2
5°	2396.6	2421.9	2400.8	2394.5	2320.5	2257.1	2185.2	2077.5	2005.6	1992.9	1904.2
7.5°	2703.0	2726.3	2700.9	2681.9	2582.5	2470.5	2364.9	2206.4	2094.4	2073.2	1933.7
10°	2918.6	2939.7	2920.7	2901.7	2798.1	2684.0	2533.9	2326.8	2174.7	2140.9	1952.8
12.5°	3081.3	3094.0	3085.5	3068.6	2971.4	2848.8	2705.1	2462.1	2265.5	2223.3	1982.3
15°	3214.4	3235.6	3225.0	3212.3	3119.3	2996.8	2859.4	2603.7	2371.2	2318.4	2026.7
17.5°	3303.2	3318.0	3320.1	3320.1	3237.7	3117.2	2984.1	2732.6	2476.9	2409.3	2069.0
20°	3343.4	3360.3	3370.8	3387.7	3320.1	3216.6	3081.3	2842.5	2576.2	2500.1	2109.2
22.5°	3362.4	3377.2	3404.7	3442.7	3387.7	3301.1	3176.4	2943.9	2675.5	2595.2	2155.6
25°	3377.2	3396.2	3436.4	3508.2	3470.2	3396.2	3288.4	3060.2	2793.9	2711.5	2223.3
27.5°	3417.3	3440.6	3478.6	3565.3	3518.8	3482.8	3406.8	3184.9	2918.6	2834.0	2305.7
30°	3556.8	3575.8	3573.7	3628.7	3571.6	3561.0	3508.2	3305.3	3039.0	2954.5	2402.9
32.5°	3810.4	3829.4	3782.9	3761.8	3637.1	3639.2	3618.1	3434.2	3182.7	3096.1	2514.9
35°	4083.0	4104.2	4042.9	4007.0	3797.7	3736.5	3747.0	3594.9	3343.4	3256.7	2654.4
37.5°	4326.1	4351.4	4298.6	4245.8	4034.4	3892.8	3890.7	3774.5	3527.2	3438.5	2808.7
40°	4459.2	4488.8	4520.5	4490.9	4269.0	4112.6	4045.0	3958.4	3709.0	3618.1	2975.6
42.5°	4522.6	4605.1	4662.1	4643.1	4461.3	4302.8	4222.5	4150.7	3930.9	3842.1	3174.3
45°	4345.1	4347.2	4467.7	4571.2	4537.4	4431.8	4417.0	4366.2	4184.5	4100.0	3398.3
47.5°	4123.2	4106.3	4190.8	4374.7	4469.8	4497.3	4583.9	4605.1	4474.0	4389.5	3626.6
50°	3590.6	3601.2	3875.9	4140.1	4326.1	4503.6	4702.3	4850.2	4772.0	4691.7	3867.5
52.5°	2920.7	2946.1	3260.9	3842.1	4135.9	4440.2	4772.0	5095.4	5076.3	5000.3	4108.4
55°	2341.6	2381.8	2715.7	3345.5	3892.8	4298.6	4801.6	5319.4	5391.2	5321.5	4345.1
57.5°	1790.0	1832.3	2113.4	2760.1	3582.2	4068.3	4780.5	5515.9	5685.0	5640.6	4562.8
60°	1348.3	1390.6	1570.2	2238.1	3193.3	3810.4	4674.8	5644.8	5949.2	5902.7	4721.3
62.5°	965.8	999.6	1132.8	1741.4	2719.9	3504.0	4414.8	5646.9	6099.2	6061.2	4797.4
65°	695.3	695.3	803.1	1242.7	2276.1	3136.3	4021.8	5387.0	6067.5	6056.9	4744.5
67.5°	500.9	505.1	591.7	868.6	1815.4	2690.3	3512.4	4924.2	5822.4	5875.2	4554.3
70°	355.0	365.6	405.8	606.5	1371.6	2123.9	2967.2	4317.6	5380.7	5473.7	4186.6
72.5°	274.7	281.1	308.6	422.7	1001.7	1578.7	2364.9	3641.4	4791.0	4896.7	3685.7
75°	211.3	217.7	238.8	310.7	718.5	1107.4	1680.1	2825.6	3863.3	4051.3	2960.8
77.5°	154.3	162.7	177.5	226.1	418.4	703.8	1018.6	1589.3	2132.4	2221.2	1551.2
80°	71.9	82.4	103.6	145.8	226.1	331.8	361.4	612.9	1025.0	1071.5	841.1
82.5°	40.2	50.7	59.2	88.8	114.1	118.3	122.6	154.3	386.7	426.9	352.9
85°	19.0	25.4	27.5	38.0	38.0	33.8	40.2	29.6	63.4	76.1	74.0
87.5°	0.0	2.1	4.2	10.6	8.5	6.3	6.3	6.3	6.3	8.5	6.3
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°	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5
2.5°	1849.2	1821.7	1758.3	1703.4	1667.5	1635.8	1593.5	1574.5	1540.7	1547.0	1528.0
5°	1859.8	1809.1	1697.0	1593.5	1517.4	1449.8	1375.8	1333.5	1287.0	1282.8	1268.0
7.5°	1866.1	1787.9	1627.3	1481.5	1365.2	1261.7	1162.4	1107.4	1050.3	1037.7	1025.0
10°	1859.8	1756.2	1555.4	1365.2	1211.0	1082.0	970.0	900.3	841.1	826.3	813.7
12.5°	1866.1	1739.3	1487.8	1257.5	1073.6	927.8	801.0	729.1	674.2	659.4	650.9
15°	1880.9	1728.7	1430.8	1160.2	951.0	788.3	663.6	602.3	557.9	543.1	538.9
17.5°	1893.6	1718.2	1369.5	1065.1	828.4	665.7	557.9	507.2	469.2	454.4	450.1
20°	1910.5	1703.4	1308.2	974.3	720.7	568.5	473.4	429.0	399.4	388.9	386.7
22.5°	1925.3	1692.8	1251.1	883.4	621.3	490.3	410.0	374.1	352.9	342.4	342.4
25°	1963.3	1697.0	1202.5	798.9	547.4	429.0	361.4	333.9	317.0	310.7	310.7
27.5°	2007.7	1714.0	1164.5	727.0	484.0	382.5	327.6	304.3	295.9	287.4	289.5
30°	2071.1	1747.8	1139.1	667.8	437.5	346.6	300.1	283.2	274.7	272.6	272.6
32.5°	2151.4	1802.7	1137.0	629.8	403.7	319.1	281.1	266.3	262.1	259.9	259.9
35°	2246.5	1851.3	1124.3	612.9	382.5	300.1	266.3	255.7	253.6	253.6	253.6
37.5°	2360.6	1931.6	1115.9	589.6	372.0	289.5	255.7	247.3	247.3	247.3	247.3
40°	2479.0	1997.1	1103.2	568.5	367.7	283.2	249.4	238.8	238.8	238.8	238.8
42.5°	2620.6	2092.2	1099.0	557.9	361.4	279.0	240.9	228.2	230.4	230.4	232.5
45°	2791.8	2200.0	1096.8	547.4	359.3	274.7	232.5	217.7	219.8	217.7	217.7
47.5°	2965.1	2324.7	1103.2	541.0	357.2	270.5	226.1	207.1	207.1	205.0	205.0
50°	3146.8	2438.8	1107.4	534.7	352.9	262.1	215.6	198.7	194.4	190.2	192.3
52.5°	3318.0	2544.5	1109.5	524.1	340.3	249.4	207.1	188.1	181.8	175.4	177.5
55°	3489.2	2646.0	1113.8	511.4	323.3	236.7	196.5	177.5	169.1	160.6	160.6
57.5°	3643.5	2734.7	1103.2	479.7	304.3	224.0	186.0	164.8	152.2	143.7	143.7
60°	3749.1	2798.1	1071.5	433.2	279.0	209.2	175.4	152.2	137.4	131.0	131.0
62.5°	3799.9	2808.7	1014.4	357.2	247.3	194.4	162.7	139.5	126.8	122.6	122.6
65°	3751.2	2762.2	925.7	268.4	213.5	177.5	150.0	128.9	116.2	105.7	105.7
67.5°	3582.2	2631.2	803.1	202.9	181.8	160.6	137.4	118.3	103.6	95.1	95.1
70°	3241.9	2358.5	621.3	162.7	154.3	139.5	124.7	105.7	93.0	82.4	82.4
72.5°	2796.0	1999.3	437.5	131.0	131.0	118.3	105.7	93.0	80.3	71.9	71.9
75°	2145.1	1479.4	293.8	105.7	107.8	99.3	86.6	76.1	67.6	61.3	61.3
77.5°	1170.8	731.2	179.6	78.2	80.3	76.1	67.6	61.3	57.1	50.7	50.7
80°	568.5	321.2	103.6	54.9	57.1	54.9	50.7	44.4	44.4	40.2	40.2
82.5°	238.8	120.5	54.9	38.0	38.0	33.8	31.7	31.7	31.7	29.6	29.6
85°	59.2	23.2	23.2	21.1	21.1	21.1	19.0	19.0	19.0	14.8	16.9
87.5°	8.5	8.5	8.5	8.5	8.5	8.5	6.3	2.1	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)