

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: P836139

Luminaire Tested: **ARCH3-140-750-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836139
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: ARCH3-140-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14800 lumens
Efficiency: N/A
Efficacy: 103.9 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): 142.5
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



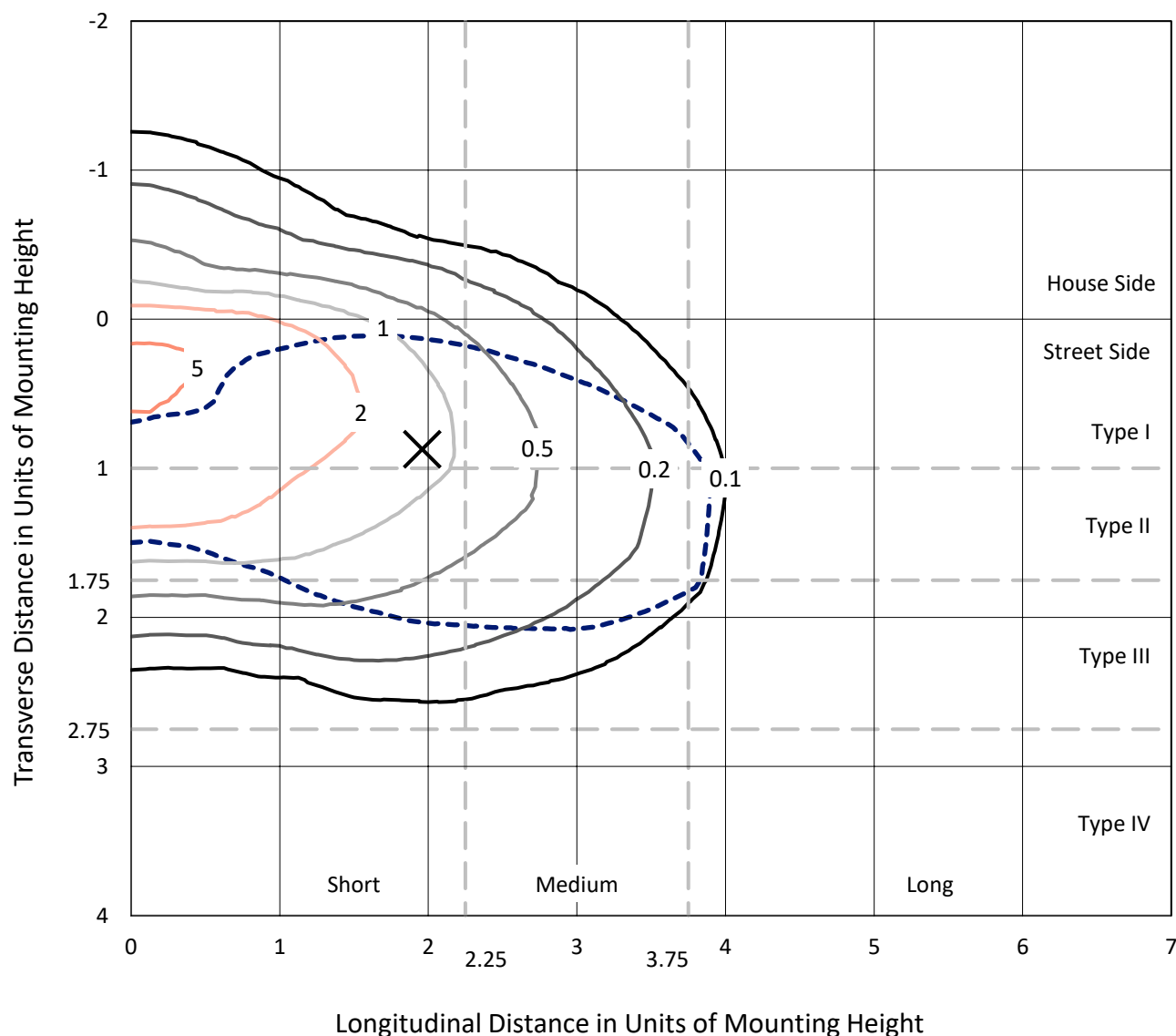
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

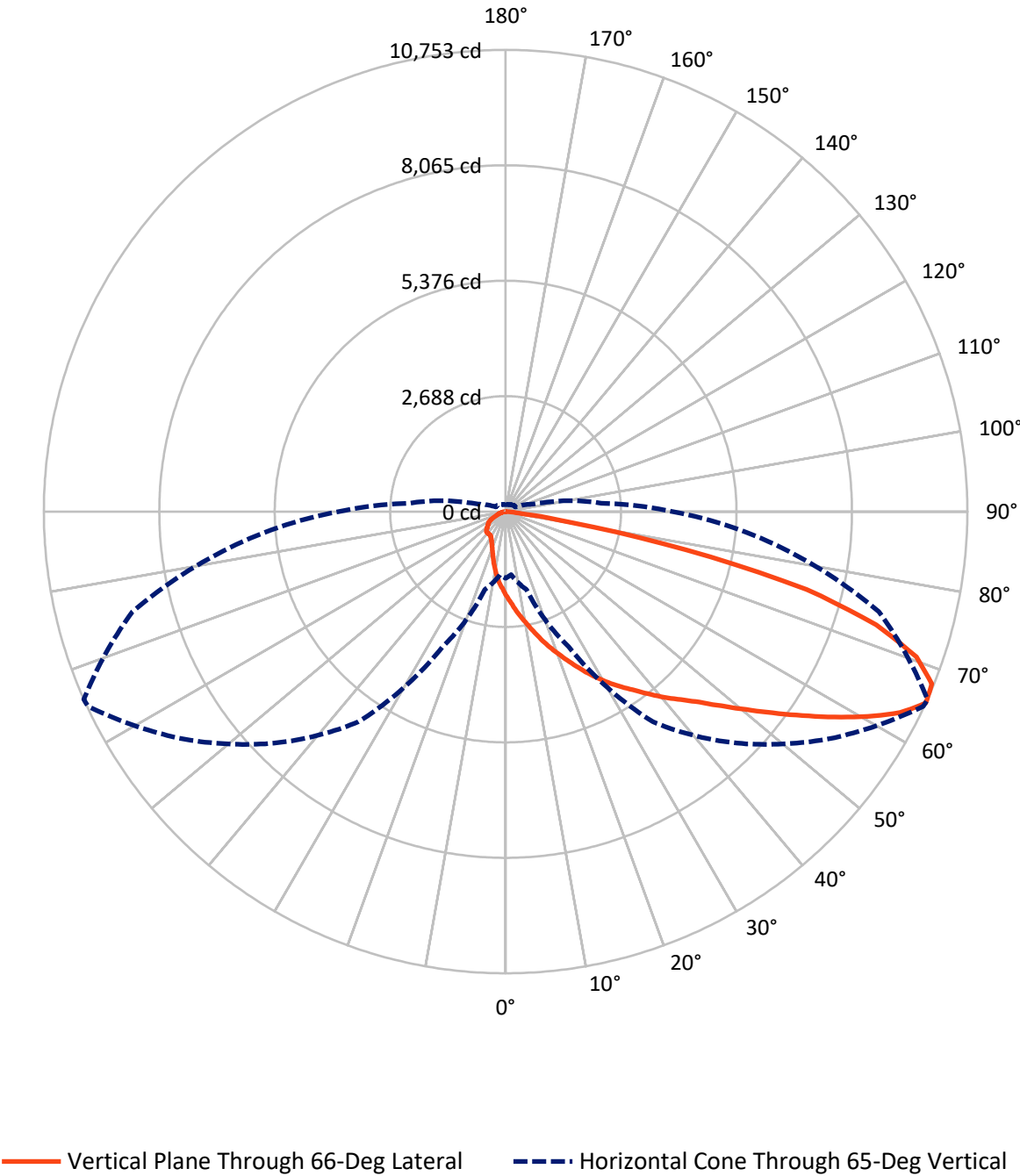


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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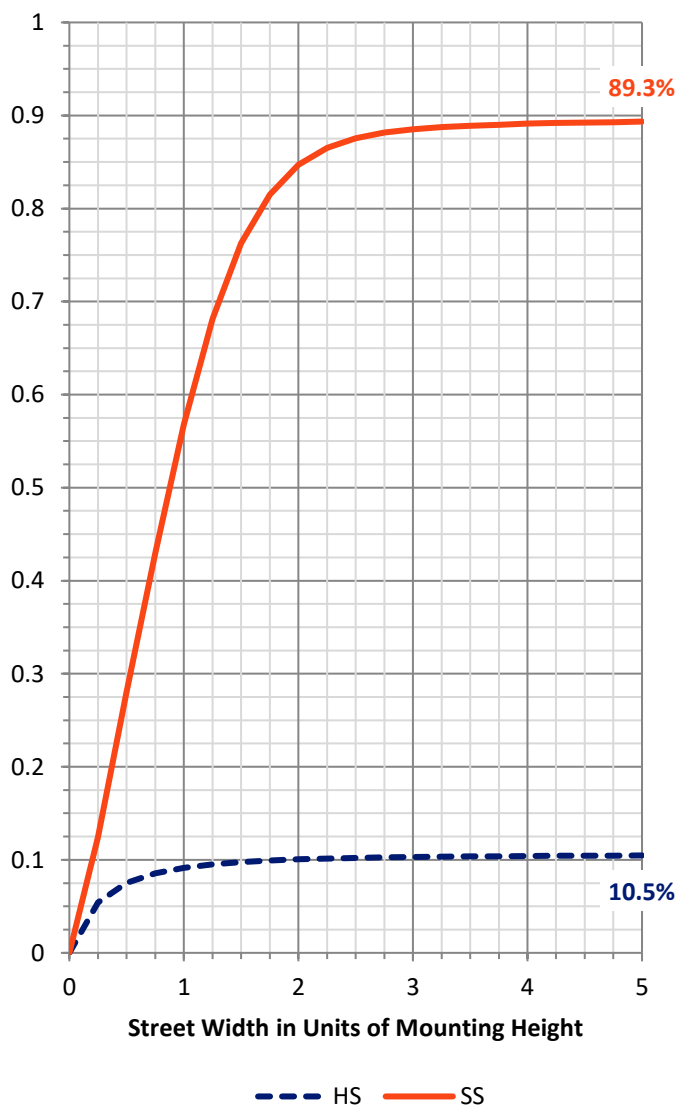
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1565.4	0.0	1565.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	13234.6	0.0	13234.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	14800.0	0.0	14800.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	1.3
10°-20°	630.1	4.3
20°-30°	1140.0	7.7
30°-40°	1782.7	12.0
40°-50°	2704.4	18.3
50°-60°	3436.0	23.2
60°-70°	3210.6	21.7
70°-80°	1595.6	10.8
80°-90°	107.2	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°	14800.0	100.0
0°-180°	14800.0	100.0

Coefficient of Utilization



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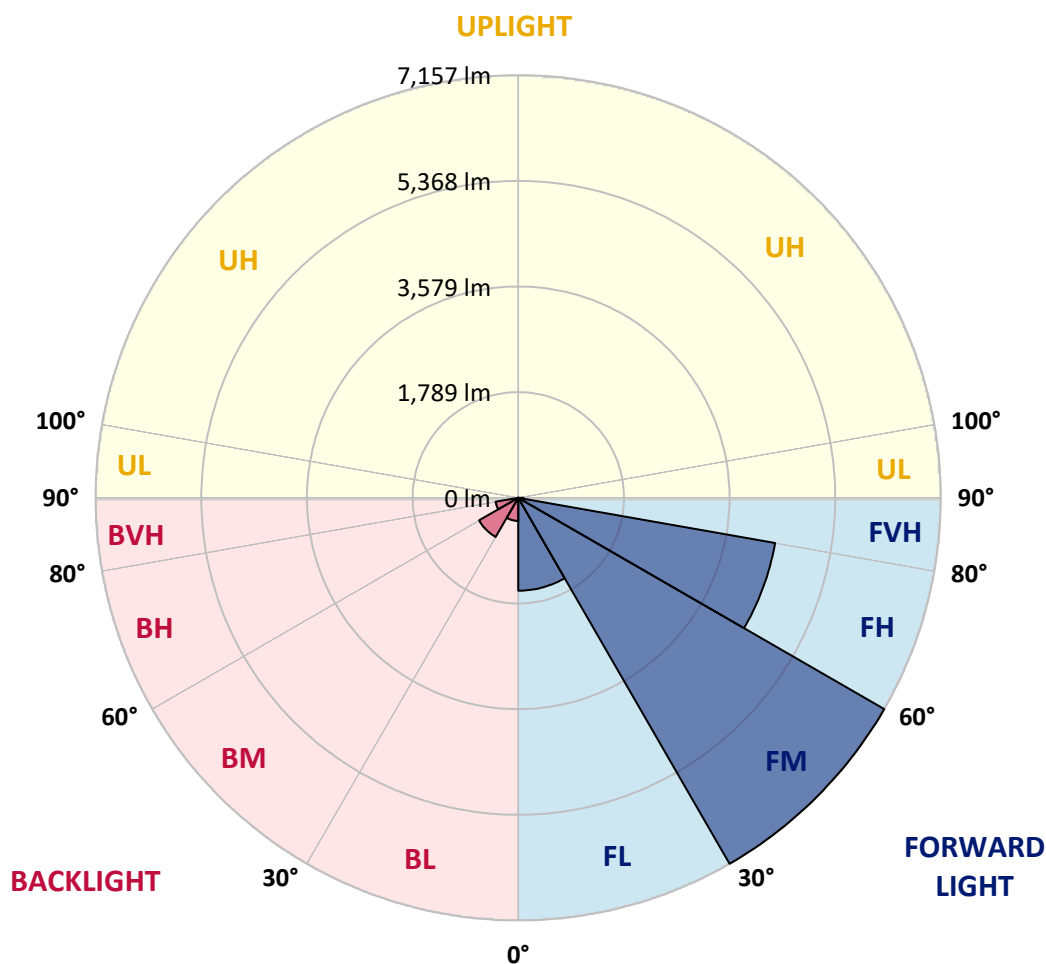
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1572.5	10.6			
FM	(30°-60°)	7157.4	48.4			
FH	(60°-80°)	4416.4	29.8			G2/5000
FVH	(80°-90°)	88.2	0.6			G1/100
BL	(0°-30°)	391.0	2.6	B1/500		
BM	(30°-60°)	765.7	5.2	B1/1000		
BH	(60°-80°)	389.8	2.6	B1/500		G1/500
BVH	(80°-90°)	19.0	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°	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7
2.5°	2287.7	2306.4	2315.7	2318.8	2247.4	2216.3	2185.3	2113.9	2098.4	2058.0	2005.3
5°	2691.3	2716.1	2709.9	2697.5	2610.6	2511.2	2430.5	2297.0	2275.3	2179.1	2061.1
7.5°	3088.6	3110.3	3104.1	3057.6	2961.3	2821.6	2688.2	2492.6	2461.6	2306.4	2117.0
10°	3420.7	3439.4	3436.3	3389.7	3274.8	3104.1	2942.7	2682.0	2644.7	2424.3	2163.6
12.5°	3693.9	3718.7	3715.6	3684.6	3582.2	3395.9	3212.8	2899.2	2852.7	2567.1	2228.8
15°	3908.1	3939.1	3939.1	3926.7	3855.3	3700.1	3492.1	3138.3	3082.4	2731.6	2309.5
17.5°	4038.5	4063.3	4085.0	4106.7	4057.1	3939.1	3749.8	3377.3	3318.3	2893.0	2393.3
20°	4106.7	4131.6	4147.1	4193.7	4203.0	4144.0	3995.0	3613.2	3551.1	3076.2	2489.5
22.5°	4218.5	4240.2	4243.3	4283.7	4302.3	4317.8	4224.7	3846.0	3796.3	3277.9	2598.1
25°	4404.7	4429.6	4420.3	4438.9	4442.0	4460.6	4451.3	4113.0	4063.3	3507.7	2728.5
27.5°	4643.8	4674.8	4668.6	4650.0	4622.0	4606.5	4646.9	4383.0	4336.5	3737.4	2862.0
30°	4901.4	4938.7	4929.3	4892.1	4817.6	4752.4	4808.3	4637.6	4594.1	3973.3	3011.0
32.5°	5162.1	5205.6	5202.5	5140.4	5013.2	4901.4	4985.2	4876.6	4845.5	4227.8	3172.4
35°	5332.9	5388.7	5382.5	5345.3	5180.8	5084.5	5187.0	5121.8	5100.1	4538.2	3405.2
37.5°	5609.1	5668.1	5615.4	5522.2	5332.9	5283.2	5407.4	5398.1	5382.5	4867.3	3650.4
40°	6279.6	6366.5	6226.9	5845.1	5534.6	5491.2	5668.1	5705.4	5689.8	5193.2	3870.8
42.5°	6981.2	7111.5	6894.2	6366.5	5900.9	5742.6	5953.7	6006.5	5987.8	5472.6	4069.5
45°	7406.4	7462.3	7245.0	6835.3	6549.7	6046.8	6257.9	6344.8	6329.3	5807.8	4324.0
47.5°	7754.1	7732.4	7484.0	7207.8	7260.5	6475.2	6602.5	6773.2	6760.8	6177.2	4603.4
50°	7828.6	7778.9	7679.6	7505.8	7645.4	6909.8	6965.6	7260.5	7248.1	6586.9	4885.9
52.5°	7304.0	7238.8	7508.9	7654.8	7608.2	7226.4	7366.1	7794.4	7788.2	7030.8	5155.9
55°	5994.1	5941.3	6667.6	7421.9	7567.8	7449.9	7810.0	8350.1	8384.2	7502.7	5401.2
57.5°	4715.2	4659.3	5373.2	6838.4	7418.8	7654.8	8328.4	8986.4	9029.9	8014.8	5634.0
60°	3759.1	3675.3	4221.6	5919.6	7139.5	7813.1	8828.1	9684.8	9691.1	8483.6	5776.8
62.5°	2554.7	2461.6	3066.9	4755.5	6670.8	7837.9	9213.0	10287.0	10311.9	8834.3	5801.6
65°	1552.1	1474.5	1884.2	3473.5	5978.5	7626.8	9219.2	10730.9	10752.7	8995.7	5652.6
67.5°	900.2	869.2	1077.1	2163.6	4830.0	7058.8	8831.2	10662.6	10703.0	8927.4	5314.3
70°	524.6	521.5	599.1	1070.9	3408.3	5932.0	7965.2	10088.4	10147.4	8570.5	4795.9
72.5°	384.9	391.1	422.2	574.3	1974.2	4271.3	6745.2	8933.7	9023.7	7872.0	4057.1
75°	304.2	307.3	335.2	391.1	1036.8	2415.0	5053.5	7170.5	7241.9	6627.3	3169.3
77.5°	226.6	232.8	254.5	276.3	481.1	1108.2	2843.4	4417.2	4299.2	3638.0	1530.3
80°	164.5	180.0	189.4	198.7	254.5	428.4	853.6	1539.6	1527.2	1589.3	723.3
82.5°	105.5	118.0	127.3	133.5	152.1	204.9	254.5	344.6	372.5	617.7	288.7
85°	46.6	52.8	59.0	71.4	65.2	71.4	105.5	68.3	59.0	93.1	52.8
87.5°	0.0	0.0	9.3	15.5	12.4	6.2	18.6	12.4	9.3	9.3	9.3
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°	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7	1958.7
2.5°	1977.3	1943.2	1871.8	1803.5	1763.1	1710.4	1663.8	1620.3	1617.2	1604.8	1583.1
5°	2002.2	1937.0	1803.5	1676.2	1580.0	1477.6	1390.6	1322.4	1297.5	1278.9	1254.1
7.5°	2027.0	1924.6	1725.9	1539.6	1387.5	1244.8	1142.3	1049.2	1021.3	996.4	980.9
10°	2036.3	1902.8	1635.9	1387.5	1188.9	1036.8	928.1	859.8	835.0	822.6	813.3
12.5°	2064.2	1890.4	1552.1	1244.8	1015.0	875.4	797.8	757.4	748.1	738.8	729.5
15°	2101.5	1890.4	1468.2	1105.1	878.5	766.7	720.2	692.2	686.0	682.9	676.7
17.5°	2141.8	1890.4	1387.5	987.1	779.1	695.3	661.2	645.7	642.6	639.4	636.3
20°	2197.7	1893.5	1300.6	884.7	707.7	642.6	614.6	596.0	592.9	589.8	589.8
22.5°	2253.6	1899.7	1216.8	807.1	661.2	602.2	568.1	549.4	543.2	543.2	543.2
25°	2325.0	1918.3	1139.2	741.9	620.8	564.9	521.5	506.0	502.9	502.9	499.8
27.5°	2408.8	1940.1	1070.9	692.2	580.5	521.5	478.0	462.5	456.3	456.3	453.2
30°	2498.8	1961.8	1015.0	655.0	540.1	478.0	437.7	419.1	412.8	416.0	412.8
32.5°	2598.1	1992.8	971.6	630.1	502.9	440.8	403.5	381.8	378.7	378.7	375.6
35°	2765.8	2079.8	965.4	617.7	471.8	412.8	375.6	353.9	350.8	350.8	347.7
37.5°	2945.8	2179.1	993.3	611.5	447.0	388.0	353.9	332.1	329.0	329.0	329.0
40°	3097.9	2253.6	1024.4	611.5	431.5	366.3	335.2	316.6	316.6	316.6	316.6
42.5°	3200.3	2259.8	1018.2	611.5	419.1	350.8	322.8	304.2	304.2	307.3	304.2
45°	3352.4	2290.8	993.3	602.2	409.7	338.3	310.4	294.9	291.8	294.9	294.9
47.5°	3532.5	2346.7	968.5	564.9	406.6	325.9	301.1	282.5	279.4	282.5	279.4
50°	3703.2	2396.4	956.1	515.3	400.4	313.5	288.7	270.1	267.0	270.1	267.0
52.5°	3846.0	2418.1	934.3	481.1	384.9	301.1	276.3	257.6	251.4	254.5	254.5
55°	3960.9	2411.9	903.3	453.2	357.0	288.7	260.7	245.2	235.9	235.9	232.8
57.5°	4066.4	2415.0	875.4	425.3	325.9	270.1	248.3	229.7	217.3	214.2	211.1
60°	4106.7	2399.5	825.7	388.0	294.9	254.5	232.8	211.1	198.7	195.6	192.5
62.5°	4050.9	2343.6	760.5	322.8	267.0	235.9	217.3	195.6	183.1	180.0	176.9
65°	3892.6	2238.1	661.2	254.5	242.1	214.2	198.7	183.1	167.6	161.4	158.3
67.5°	3622.5	2086.0	537.0	204.9	214.2	195.6	186.2	167.6	149.0	142.8	139.7
70°	3237.6	1884.2	403.5	173.8	189.4	173.8	167.6	149.0	133.5	127.3	124.2
72.5°	2697.5	1558.3	282.5	149.0	164.5	152.1	145.9	133.5	118.0	108.6	108.6
75°	2039.4	1117.5	186.2	127.3	136.6	130.4	121.1	111.7	102.4	96.2	93.1
77.5°	878.5	434.6	114.9	96.2	111.7	108.6	96.2	90.0	86.9	80.7	80.7
80°	378.7	176.9	71.4	71.4	80.7	77.6	74.5	68.3	68.3	65.2	62.1
82.5°	139.7	71.4	43.5	52.8	59.0	52.8	52.8	52.8	52.8	49.7	49.7
85°	34.1	21.7	21.7	31.0	34.1	31.0	34.1	31.0	31.0	31.0	27.9
87.5°	9.3	9.3	12.4	12.4	12.4	12.4	12.4	9.3	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)