

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: P836823

Luminaire Tested: **ARCH3-80-727-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836823
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: ARCH3-80-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 8710 lumens
Efficiency: N/A
Efficacy: 106.3 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



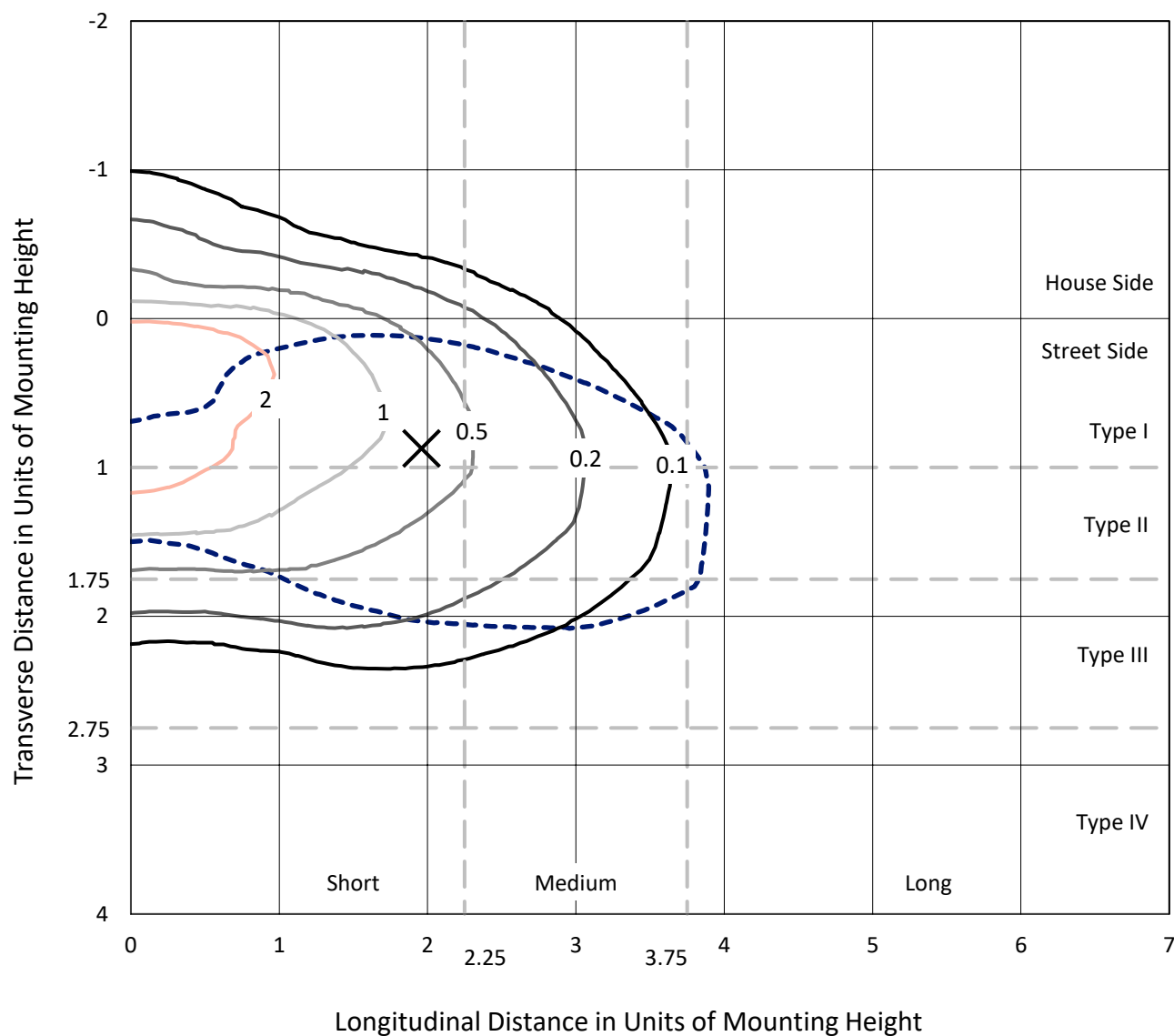
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



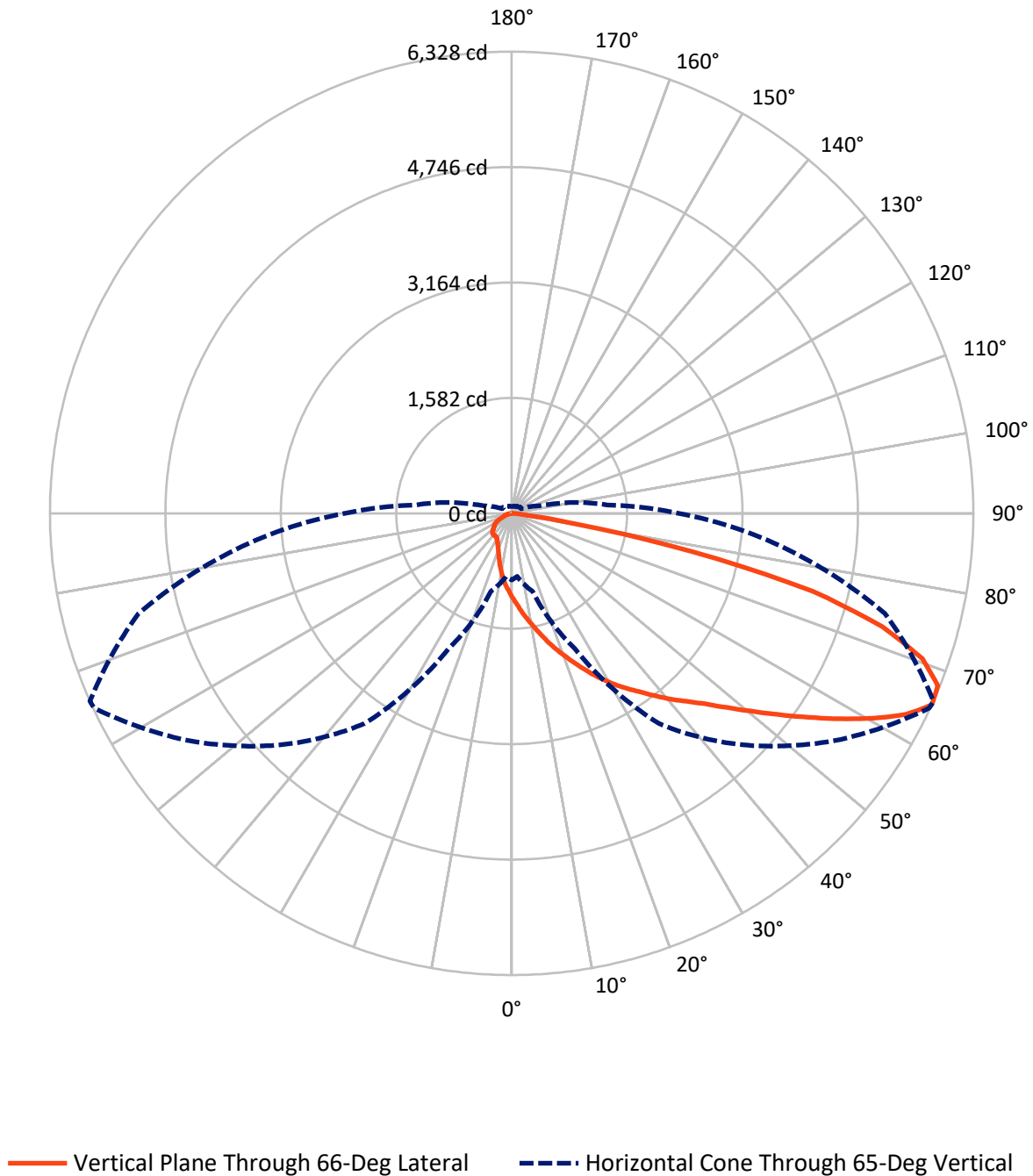
Based on 25 foot mounting height. Maximum calculated value = 3.3 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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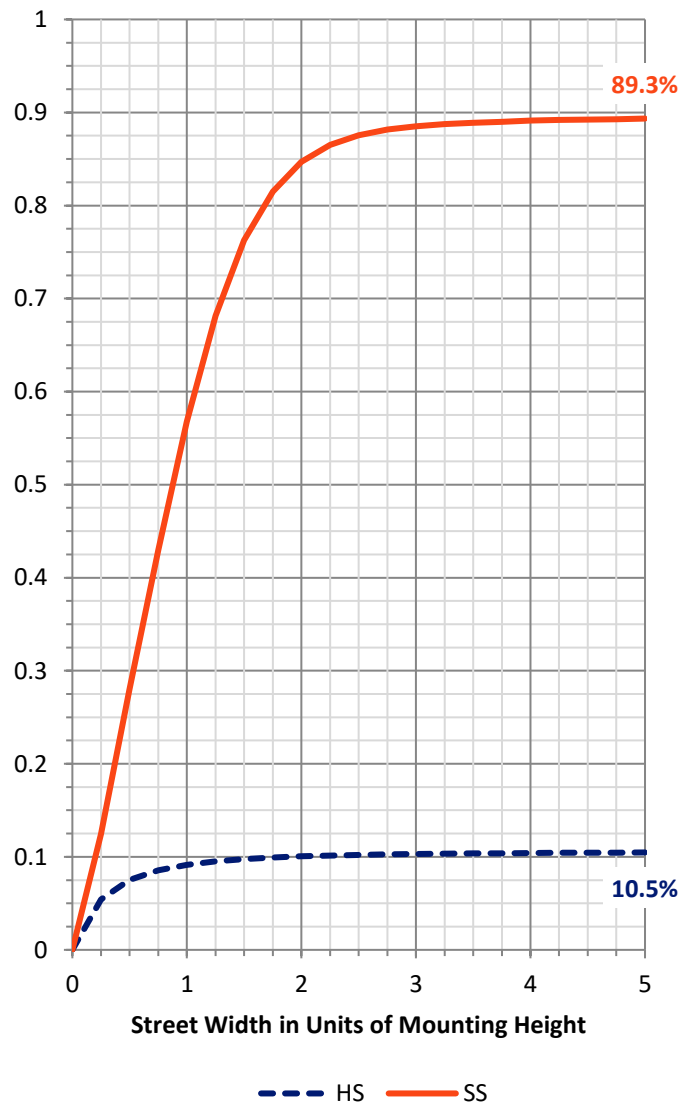
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	921.3	0.0	921.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7788.7	0.0	7788.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	8710.0	0.0	8710.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.8	1.3
10°-20°	370.8	4.3
20°-30°	670.9	7.7
30°-40°	1049.2	12.0
40°-50°	1591.6	18.3
50°-60°	2022.1	23.2
60°-70°	1889.5	21.7
70°-80°	939.1	10.8
80°-90°	63.1	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°	8710.0	100.0
0°-180°	8710.0	100.0

Coefficient of Utilization



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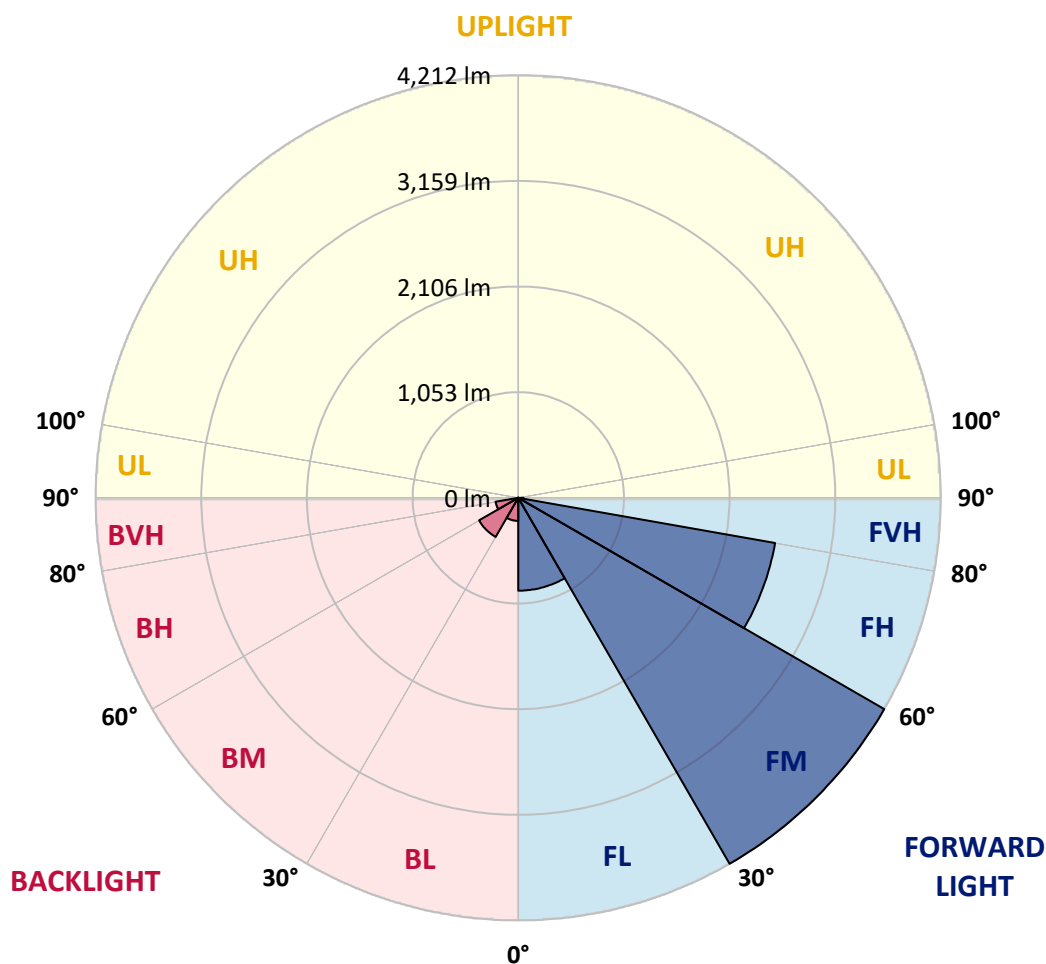
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	925.4	10.6			
FM	(30°-60°)	4212.3	48.4			
FH	(60°-80°)	2599.1	29.8			G2/5000
FVH	(80°-90°)	51.9	0.6			G1/100
BL	(0°-30°)	230.1	2.6	B1/500		
BM	(30°-60°)	450.6	5.2	B1/1000		
BH	(60°-80°)	229.4	2.6	B1/500		G1/500
BVH	(80°-90°)	11.2	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°	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7
2.5°	1346.4	1357.3	1362.8	1364.6	1322.6	1304.3	1286.1	1244.1	1234.9	1211.2	1180.1
5°	1583.8	1598.5	1594.8	1587.5	1536.4	1477.9	1430.4	1351.8	1339.1	1282.4	1213.0
7.5°	1817.7	1830.5	1826.8	1799.4	1742.8	1660.6	1582.0	1466.9	1448.7	1357.3	1245.9
10°	2013.2	2024.1	2022.3	1994.9	1927.3	1826.8	1731.8	1578.4	1556.4	1426.7	1273.3
12.5°	2173.9	2188.5	2186.7	2168.4	2108.1	1998.5	1890.8	1706.2	1678.8	1510.8	1311.7
15°	2300.0	2318.2	2318.2	2310.9	2268.9	2177.6	2055.2	1846.9	1814.0	1607.6	1359.2
17.5°	2376.7	2391.3	2404.1	2416.9	2387.6	2318.2	2206.8	1987.6	1952.9	1702.6	1408.5
20°	2416.9	2431.5	2440.6	2468.0	2473.5	2438.8	2351.1	2126.4	2089.9	1810.4	1465.1
22.5°	2482.6	2495.4	2497.3	2521.0	2532.0	2541.1	2486.3	2263.4	2234.2	1929.1	1529.0
25°	2592.3	2606.9	2601.4	2612.3	2614.2	2625.1	2619.7	2420.5	2391.3	2064.3	1605.8
27.5°	2732.9	2751.2	2747.5	2736.6	2720.1	2711.0	2734.7	2579.5	2552.1	2199.5	1684.3
30°	2884.5	2906.5	2901.0	2879.1	2835.2	2796.9	2829.7	2729.3	2703.7	2338.3	1772.0
32.5°	3038.0	3063.6	3061.7	3025.2	2950.3	2884.5	2933.9	2869.9	2851.7	2488.1	1867.0
35°	3138.5	3171.4	3167.7	3145.8	3049.0	2992.3	3052.6	3014.2	3001.5	2670.8	2004.0
37.5°	3301.1	3335.8	3304.7	3249.9	3138.5	3109.2	3182.3	3176.8	3167.7	2864.4	2148.3
40°	3695.6	3746.8	3664.6	3439.9	3257.2	3231.6	3335.8	3357.7	3348.6	3056.3	2278.0
42.5°	4108.5	4185.2	4057.4	3746.8	3472.8	3379.6	3503.8	3534.9	3523.9	3220.7	2395.0
45°	4358.8	4391.7	4263.8	4022.6	3854.6	3558.6	3682.9	3734.0	3724.9	3418.0	2544.8
47.5°	4563.4	4550.6	4404.5	4241.9	4272.9	3810.7	3885.6	3986.1	3978.8	3635.4	2709.2
50°	4607.2	4578.0	4519.5	4417.2	4499.4	4066.5	4099.4	4272.9	4265.6	3876.5	2875.4
52.5°	4298.5	4260.1	4419.1	4504.9	4477.5	4252.8	4335.0	4587.1	4583.5	4137.7	3034.3
55°	3527.6	3496.5	3924.0	4367.9	4453.8	4384.4	4596.3	4914.1	4934.2	4415.4	3178.7
57.5°	2774.9	2742.1	3162.2	4024.5	4366.1	4504.9	4901.3	5288.6	5314.2	4716.8	3315.7
60°	2212.3	2162.9	2484.5	3483.7	4201.7	4598.1	5195.5	5699.7	5703.3	4992.7	3399.7
62.5°	1503.5	1448.7	1804.9	2798.7	3925.8	4612.7	5422.0	6054.1	6068.7	5199.1	3414.3
65°	913.4	867.7	1108.9	2044.2	3518.4	4488.5	5425.6	6315.3	6328.1	5294.1	3326.6
67.5°	529.8	511.5	633.9	1273.3	2842.5	4154.2	5197.3	6275.1	6298.9	5253.9	3127.5
70°	308.7	306.9	352.6	630.3	2005.8	3491.0	4687.6	5937.2	5971.9	5043.8	2822.4
72.5°	226.5	230.2	248.4	338.0	1161.9	2513.7	3969.7	5257.6	5310.6	4632.8	2387.6
75°	179.0	180.9	197.3	230.2	610.2	1421.3	2974.1	4219.9	4262.0	3900.3	1865.2
77.5°	133.4	137.0	149.8	162.6	283.2	652.2	1673.4	2599.6	2530.1	2141.0	900.6
80°	96.8	106.0	111.4	116.9	149.8	252.1	502.4	906.1	898.8	935.3	425.6
82.5°	62.1	69.4	74.9	78.6	89.5	120.6	149.8	202.8	219.2	363.5	169.9
85°	27.4	31.1	34.7	42.0	38.4	42.0	62.1	40.2	34.7	54.8	31.1
87.5°	0.0	0.0	5.5	9.1	7.3	3.7	11.0	7.3	5.5	5.5	5.5
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°	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7
2.5°	1163.7	1143.6	1101.6	1061.4	1037.6	1006.6	979.2	953.6	951.8	944.5	931.7
5°	1178.3	1139.9	1061.4	986.5	929.8	869.6	818.4	778.2	763.6	752.6	738.0
7.5°	1192.9	1132.6	1015.7	906.1	816.6	732.6	672.3	617.5	601.0	586.4	577.3
10°	1198.4	1119.8	962.7	816.6	699.7	610.2	546.2	506.0	491.4	484.1	478.6
12.5°	1214.8	1112.5	913.4	732.6	597.4	515.2	469.5	445.7	440.3	434.8	429.3
15°	1236.8	1112.5	864.1	650.3	517.0	451.2	423.8	407.4	403.7	401.9	398.2
17.5°	1260.5	1112.5	816.6	580.9	458.5	409.2	389.1	380.0	378.2	376.3	374.5
20°	1293.4	1114.4	765.4	520.6	416.5	378.2	361.7	350.7	348.9	347.1	347.1
22.5°	1326.3	1118.0	716.1	475.0	389.1	354.4	334.3	323.3	319.7	319.7	319.7
25°	1368.3	1129.0	670.4	436.6	365.4	332.5	306.9	297.8	295.9	295.9	294.1
27.5°	1417.6	1141.8	630.3	407.4	341.6	306.9	281.3	272.2	268.5	268.5	266.7
30°	1470.6	1154.5	597.4	385.5	317.9	281.3	257.6	246.6	243.0	244.8	243.0
32.5°	1529.0	1172.8	571.8	370.8	295.9	259.4	237.5	224.7	222.9	222.9	221.0
35°	1627.7	1224.0	568.1	363.5	277.7	243.0	221.0	208.3	206.4	206.4	204.6
37.5°	1733.6	1282.4	584.6	359.9	263.1	228.4	208.3	195.5	193.6	193.6	193.6
40°	1823.2	1326.3	602.8	359.9	253.9	215.6	197.3	186.3	186.3	186.3	186.3
42.5°	1883.4	1329.9	599.2	359.9	246.6	206.4	190.0	179.0	179.0	180.9	179.0
45°	1973.0	1348.2	584.6	354.4	241.1	199.1	182.7	173.5	171.7	173.5	173.5
47.5°	2078.9	1381.1	570.0	332.5	239.3	191.8	177.2	166.2	164.4	166.2	164.4
50°	2179.4	1410.3	562.7	303.3	235.7	184.5	169.9	158.9	157.1	158.9	157.1
52.5°	2263.4	1423.1	549.9	283.2	226.5	177.2	162.6	151.6	148.0	149.8	149.8
55°	2331.0	1419.4	531.6	266.7	210.1	169.9	153.5	144.3	138.8	138.8	137.0
57.5°	2393.1	1421.3	515.2	250.3	191.8	158.9	146.1	135.2	127.9	126.1	124.2
60°	2416.9	1412.1	485.9	228.4	173.5	149.8	137.0	124.2	116.9	115.1	113.3
62.5°	2384.0	1379.2	447.6	190.0	157.1	138.8	127.9	115.1	107.8	106.0	104.1
65°	2290.8	1317.1	389.1	149.8	142.5	126.1	116.9	107.8	98.6	95.0	93.2
67.5°	2131.9	1227.6	316.0	120.6	126.1	115.1	109.6	98.6	87.7	84.0	82.2
70°	1905.4	1108.9	237.5	102.3	111.4	102.3	98.6	87.7	78.6	74.9	73.1
72.5°	1587.5	917.1	166.2	87.7	96.8	89.5	85.9	78.6	69.4	63.9	63.9
75°	1200.2	657.7	109.6	74.9	80.4	76.7	71.2	65.8	60.3	56.6	54.8
77.5°	517.0	255.8	67.6	56.6	65.8	63.9	56.6	53.0	51.2	47.5	47.5
80°	222.9	104.1	42.0	42.0	47.5	45.7	43.8	40.2	40.2	38.4	36.5
82.5°	82.2	42.0	25.6	31.1	34.7	31.1	31.1	31.1	31.1	29.2	29.2
85°	20.1	12.8	12.8	18.3	20.1	18.3	20.1	18.3	18.3	18.3	16.4
87.5°	5.5	5.5	7.3	7.3	7.3	7.3	7.3	5.5	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)