

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: P836852

Luminaire Tested: **ARCH3-80-740-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-80-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9378 lumens
Efficiency: N/A
Efficacy: 114.5 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

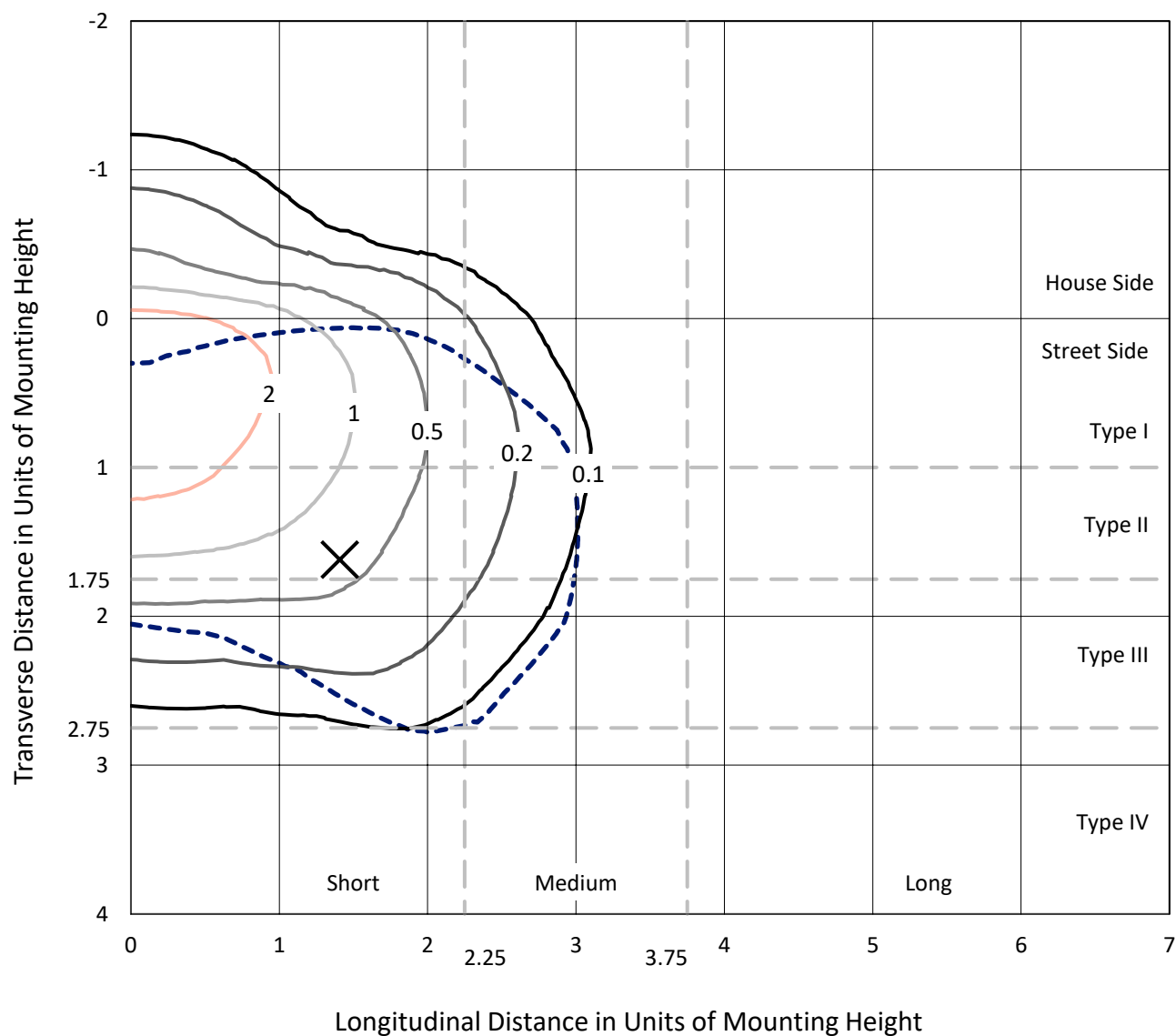
Input Watts (W): 81.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

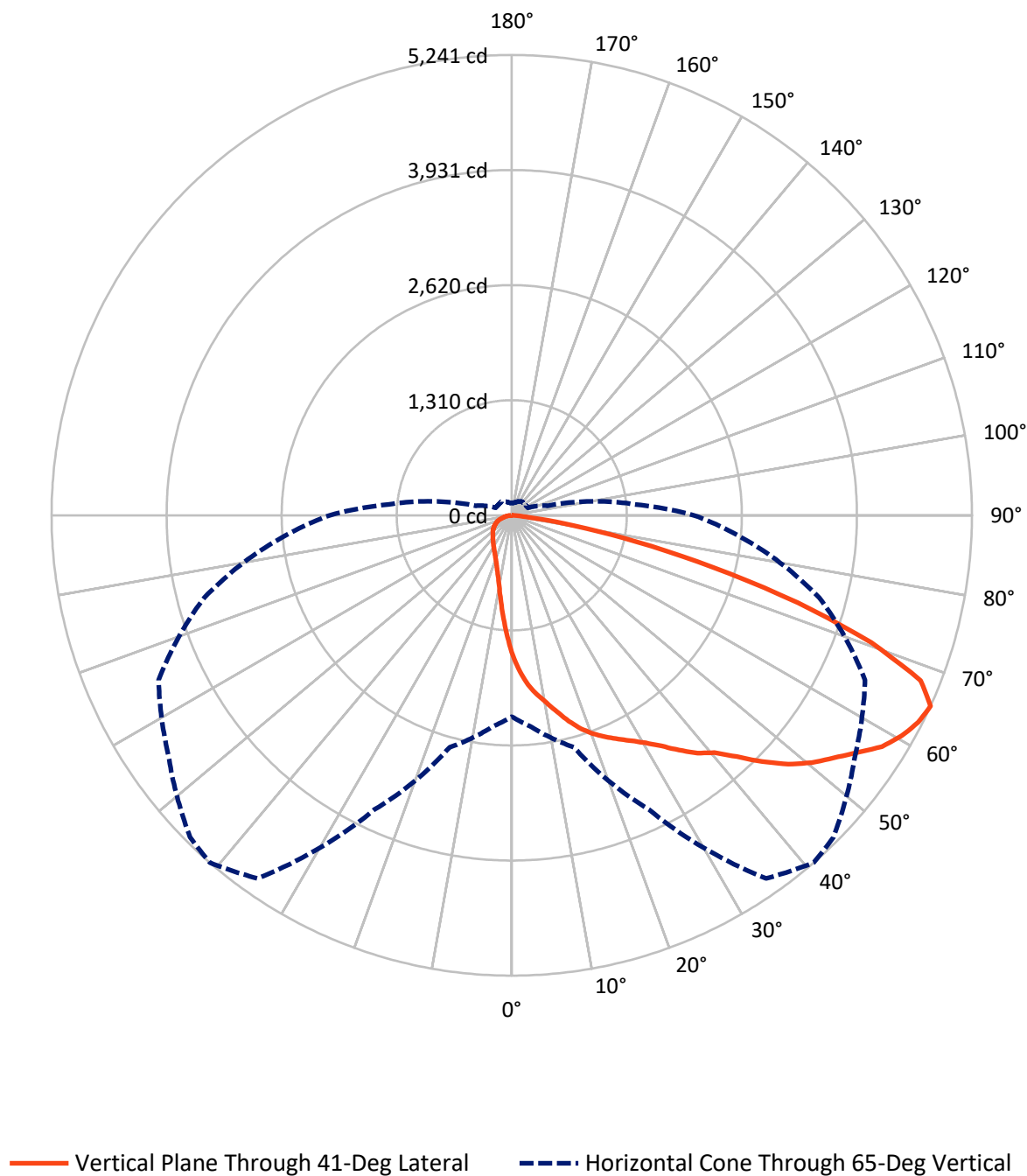
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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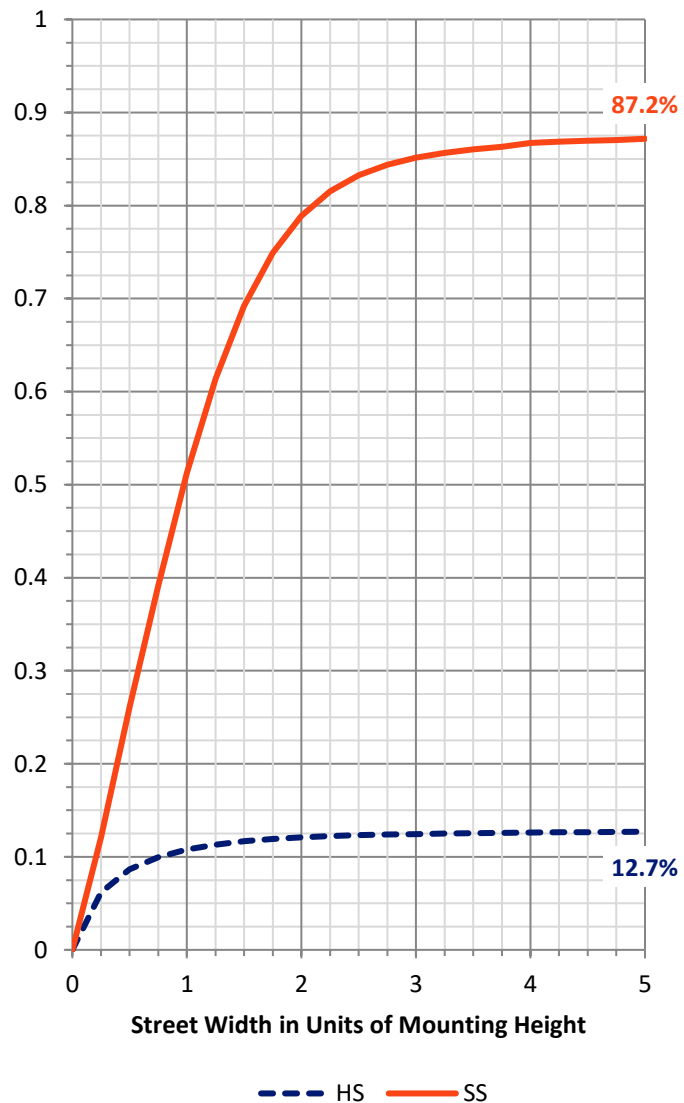
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1204.0	0.0	1204.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8174.0	0.0	8174.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	9378.0	0.0	9378.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	1.6
10°-20°	446.5	4.8
20°-30°	768.1	8.2
30°-40°	1164.9	12.4
40°-50°	1706.6	18.2
50°-60°	2155.0	23.0
60°-70°	2020.7	21.5
70°-80°	900.6	9.6
80°-90°	66.7	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°	9378.0	100.0
0°-180°	9378.0	100.0

Coefficient of Utilization



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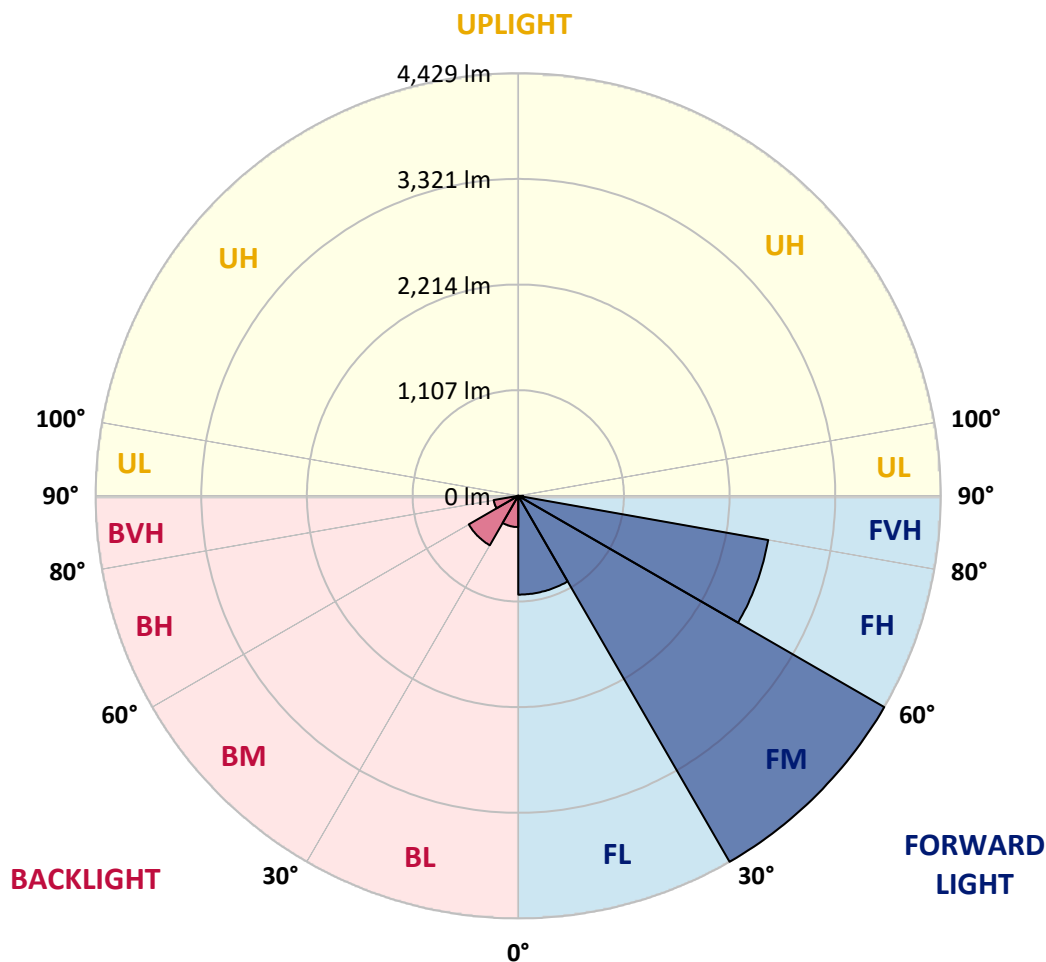
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1035.7	11.0			
FM	(30°-60°)	4428.7	47.2			
FH	(60°-80°)	2659.8	28.4			G2/5000
FVH	(80°-90°)	49.8	0.5			G1/100
BL	(0°-30°)	327.7	3.5	B1/500		
BM	(30°-60°)	597.8	6.4	B1/1000		
BH	(60°-80°)	261.5	2.8	B1/500		G1/500
BVH	(80°-90°)	16.9	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0
2.5°	1843.2	1837.3	1833.3	1811.6	1811.6	1781.9	1783.9	1756.2	1722.6	1669.2	1611.8
5°	2017.2	2009.3	1999.4	1977.7	1969.8	1940.1	1936.1	1896.6	1839.2	1746.3	1643.4
7.5°	2169.5	2161.6	2147.8	2116.1	2094.4	2058.8	2048.9	1997.5	1934.2	1819.5	1675.1
10°	2307.9	2302.0	2284.2	2244.7	2215.0	2171.5	2153.7	2084.5	2005.4	1878.8	1700.8
12.5°	2448.4	2440.5	2416.7	2383.1	2347.5	2296.1	2274.3	2185.3	2084.5	1944.1	1738.4
15°	2578.9	2567.0	2549.2	2513.6	2482.0	2432.5	2408.8	2304.0	2181.4	2017.2	1787.8
17.5°	2663.9	2654.0	2638.2	2618.4	2592.7	2555.2	2531.4	2428.6	2278.3	2088.4	1839.2
20°	2715.3	2711.4	2705.5	2693.6	2681.7	2656.0	2638.2	2541.3	2383.1	2157.6	1888.7
22.5°	2754.9	2750.9	2749.0	2749.0	2750.9	2741.1	2729.2	2646.1	2484.0	2230.8	1934.2
25°	2816.2	2814.2	2810.3	2806.3	2820.2	2822.1	2818.2	2760.8	2610.5	2327.7	1991.5
27.5°	2901.3	2895.3	2887.4	2883.5	2897.3	2907.2	2915.1	2875.5	2745.0	2426.6	2056.8
30°	3031.8	3014.0	2994.2	2980.4	2990.2	3006.1	3023.9	3000.1	2883.5	2549.2	2124.0
32.5°	3186.0	3164.3	3118.8	3093.1	3118.8	3130.7	3144.5	3132.6	3027.8	2681.7	2191.3
35°	3373.9	3348.2	3300.7	3263.2	3308.7	3282.9	3277.0	3265.1	3164.3	2812.3	2266.4
37.5°	3686.4	3648.8	3573.7	3490.6	3490.6	3435.2	3413.5	3377.9	3286.9	2928.9	2339.6
40°	4048.3	3998.9	3902.0	3779.3	3666.6	3551.9	3538.1	3512.4	3431.3	3063.4	2422.7
42.5°	4445.8	4350.9	4216.4	4068.1	3886.1	3755.6	3724.0	3650.8	3571.7	3199.9	2505.7
45°	4886.8	4689.1	4493.3	4418.1	4117.5	3998.9	3939.5	3807.0	3718.0	3342.3	2592.7
47.5°	4958.0	4803.8	4673.2	4661.4	4333.1	4234.2	4167.0	3977.1	3876.2	3494.6	2683.7
50°	4918.5	4825.5	4839.4	4791.9	4491.3	4426.0	4374.6	4159.1	4032.5	3640.9	2766.8
52.5°	4752.4	4803.8	4882.9	4795.9	4641.6	4588.2	4562.5	4354.8	4178.8	3775.4	2841.9
55°	4554.6	4590.2	4760.3	4867.1	4815.6	4768.2	4744.4	4582.3	4323.2	3888.1	2911.1
57.5°	4265.8	4250.0	4437.9	4855.2	4997.6	4969.9	4944.2	4805.8	4457.7	3969.2	2954.6
60°	3832.7	3799.1	4036.4	4617.9	5056.9	5100.4	5088.6	4954.1	4560.5	3967.2	2936.8
62.5°	3083.2	3166.3	3494.6	4230.2	5082.6	5193.4	5171.6	4965.9	4594.1	3852.5	2824.1
65°	2292.1	2410.8	2733.1	3696.3	5047.0	5240.8	5181.5	4772.1	4437.9	3625.1	2576.9
67.5°	1651.4	1756.2	1991.5	3041.7	4704.9	5023.3	4954.1	4455.7	4078.0	3302.7	2234.8
70°	1129.3	1204.4	1364.6	2215.0	4016.7	4343.0	4299.5	3983.0	3510.4	2919.0	1815.5
72.5°	797.0	828.6	931.5	1461.5	3051.6	3407.5	3356.1	3277.0	2820.2	2426.6	1412.1
75°	597.3	617.0	672.4	945.3	2058.8	2361.3	2313.9	2359.4	2106.2	1837.3	1028.4
77.5°	225.5	245.2	381.7	603.2	1218.2	1449.6	1402.2	1429.9	1170.8	927.5	512.2
80°	61.3	65.3	126.6	286.8	553.7	721.9	656.6	563.6	435.1	427.2	270.9
82.5°	25.7	29.7	57.4	154.3	197.8	197.8	166.1	205.7	166.1	199.7	130.5
85°	9.9	11.9	13.8	39.6	25.7	27.7	29.7	39.6	33.6	41.5	29.7
87.5°	0.0	0.0	0.0	2.0	2.0	4.0	2.0	4.0	5.9	5.9	5.9
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°	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0	1598.0
2.5°	1588.1	1566.3	1534.7	1483.3	1429.9	1400.2	1362.6	1356.7	1317.1	1313.2	1297.4
5°	1598.0	1552.5	1471.4	1372.5	1275.6	1200.4	1145.1	1115.4	1058.1	1058.1	1042.2
7.5°	1605.9	1534.7	1404.1	1257.8	1125.3	1024.4	949.3	917.6	866.2	862.3	850.4
10°	1607.9	1512.9	1331.0	1141.1	978.9	876.1	802.9	767.3	721.9	717.9	710.0
12.5°	1623.7	1501.1	1265.7	1040.3	874.1	763.4	692.2	662.5	626.9	623.0	615.1
15°	1649.4	1501.1	1210.3	955.2	781.2	678.3	617.0	589.3	563.6	559.7	555.7
17.5°	1675.1	1497.1	1155.0	876.1	704.1	611.1	557.7	536.0	516.2	514.2	510.2
20°	1698.8	1495.1	1099.6	808.9	644.7	555.7	514.2	494.4	478.6	478.6	476.6
22.5°	1722.6	1491.2	1046.2	745.6	593.3	514.2	478.6	456.8	445.0	445.0	443.0
25°	1758.2	1491.2	996.7	692.2	551.8	482.6	447.0	431.1	421.2	419.3	419.3
27.5°	1799.7	1503.0	953.2	644.7	516.2	450.9	423.2	407.4	395.5	391.6	393.6
30°	1845.2	1512.9	913.7	603.2	482.6	427.2	397.5	381.7	369.8	365.9	367.8
32.5°	1890.7	1524.8	878.1	565.6	448.9	405.4	375.8	358.0	346.1	344.1	344.1
35°	1940.1	1536.7	842.5	534.0	421.2	383.7	356.0	336.2	328.3	324.3	326.3
37.5°	1989.5	1556.4	808.9	504.3	401.5	363.9	338.2	318.4	312.5	310.5	310.5
40°	2048.9	1586.1	795.0	484.5	383.7	346.1	324.3	304.6	298.6	298.6	298.6
42.5°	2098.3	1609.8	783.2	462.8	369.8	330.3	310.5	294.7	290.7	288.7	290.7
45°	2147.8	1631.6	767.3	443.0	352.0	314.5	298.6	282.8	278.9	278.9	278.9
47.5°	2197.2	1643.4	745.6	423.2	336.2	300.6	286.8	272.9	269.0	269.0	269.0
50°	2236.8	1653.3	713.9	401.5	318.4	288.7	274.9	261.1	257.1	257.1	257.1
52.5°	2276.3	1655.3	680.3	375.8	300.6	274.9	263.0	249.2	245.2	243.3	243.3
55°	2311.9	1653.3	640.8	346.1	280.8	259.1	249.2	237.3	229.4	221.5	225.5
57.5°	2337.6	1651.4	595.3	316.4	261.1	243.3	239.3	223.5	207.7	187.9	191.8
60°	2327.7	1629.6	545.8	278.9	239.3	227.4	227.4	205.7	178.0	168.1	170.1
62.5°	2264.4	1568.3	494.4	239.3	217.5	211.6	209.6	185.9	164.1	154.3	156.2
65°	2074.6	1414.0	419.3	203.7	195.8	193.8	193.8	172.1	152.3	140.4	142.4
67.5°	1785.8	1186.6	342.1	172.1	174.0	178.0	178.0	158.2	138.4	126.6	128.5
70°	1431.8	927.5	272.9	148.3	150.3	156.2	160.2	142.4	124.6	112.7	112.7
72.5°	1077.8	704.1	219.5	124.6	134.5	134.5	140.4	126.6	108.8	96.9	98.9
75°	781.2	504.3	174.0	104.8	116.7	114.7	114.7	106.8	93.0	85.0	85.0
77.5°	369.8	265.0	138.4	75.2	91.0	89.0	91.0	85.0	79.1	71.2	73.2
80°	181.9	130.5	89.0	53.4	63.3	65.3	71.2	67.2	65.3	59.3	59.3
82.5°	87.0	51.4	41.5	37.6	43.5	45.5	49.4	49.4	51.4	47.5	47.5
85°	23.7	13.8	17.8	23.7	27.7	29.7	33.6	35.6	35.6	33.6	35.6
87.5°	5.9	5.9	7.9	11.9	13.8	15.8	17.8	17.8	7.9	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)