

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: P841154

Luminaire Tested: **ARCH4-140-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841154
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15670 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

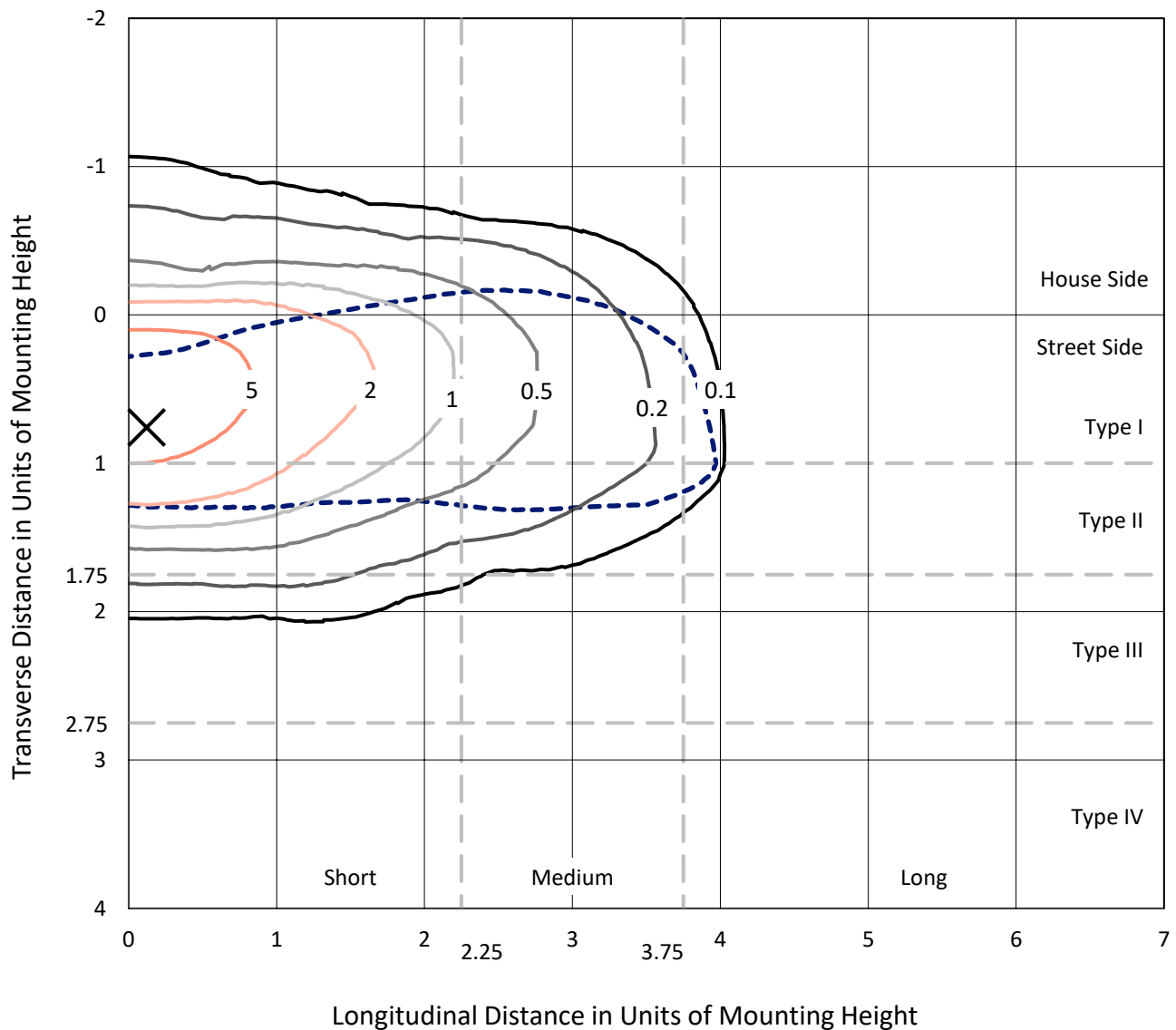
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

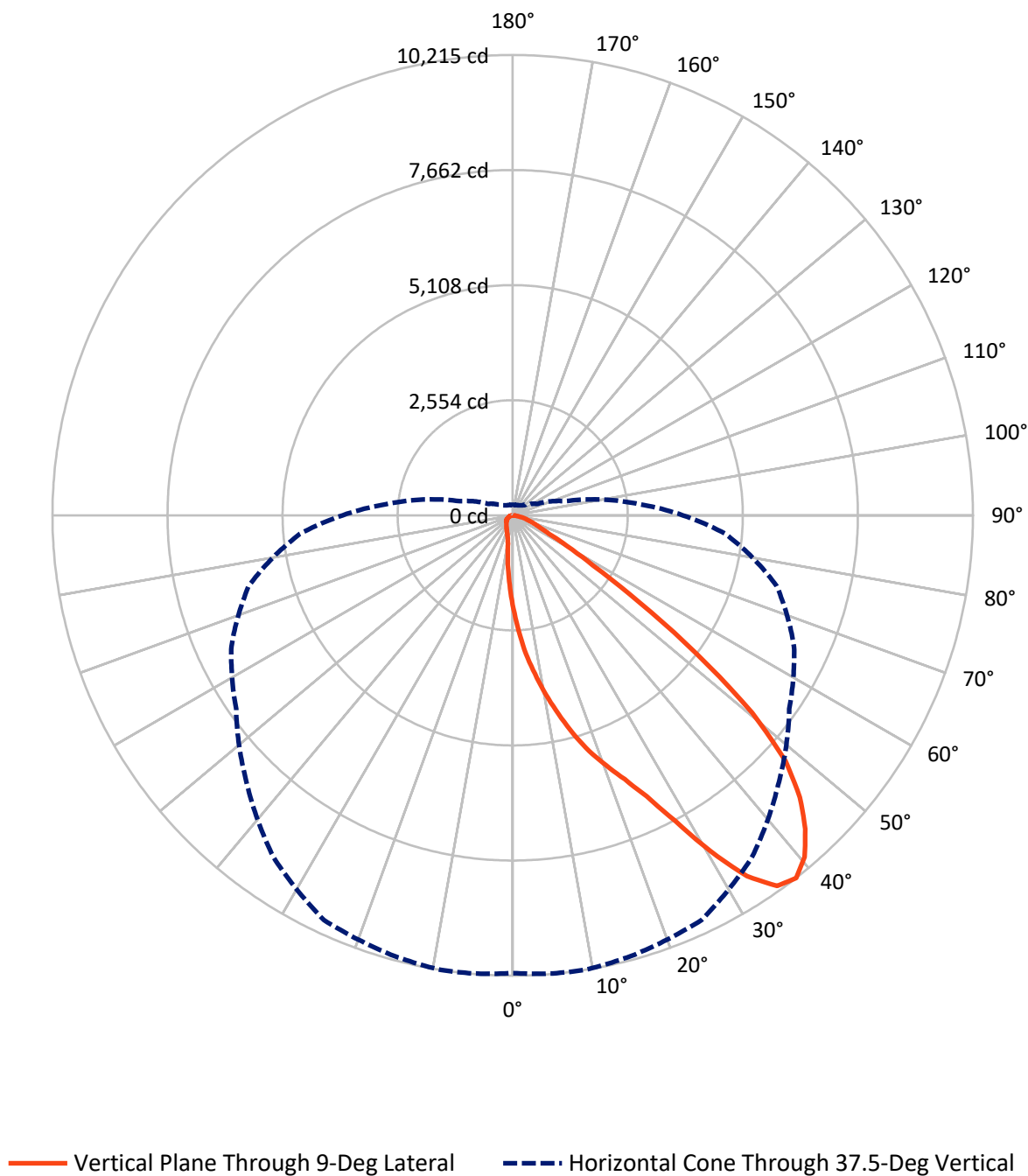
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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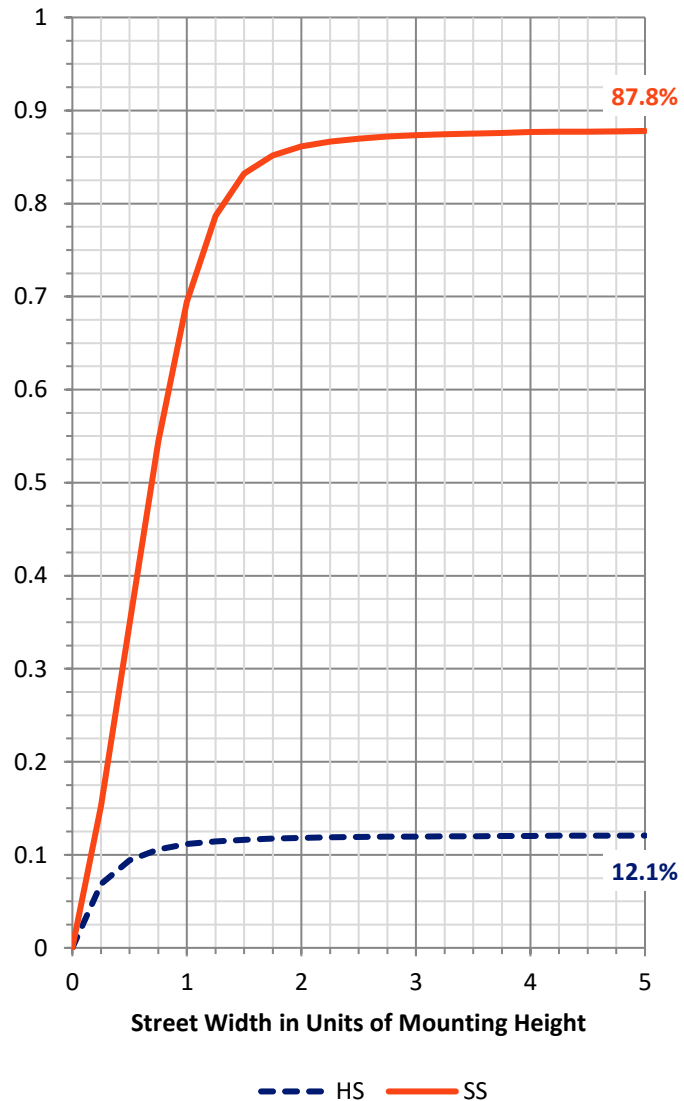
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1905.8	0.0	1905.8
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	13764.2	0.0	13764.2
	% Fixture	87.8	0.0	87.8
Total	Lumens	15670.0	0.0	15670.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.2	1.3
10°-20°	723.7	4.6
20°-30°	1486.9	9.5
30°-40°	2628.3	16.8
40°-50°	3491.5	22.3
50°-60°	3311.4	21.1
60°-70°	2526.3	16.1
70°-80°	1224.8	7.8
80°-90°	68.9	0.4
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°	15670.0	100.0
0°-180°	15670.0	100.0

Coefficient of Utilization



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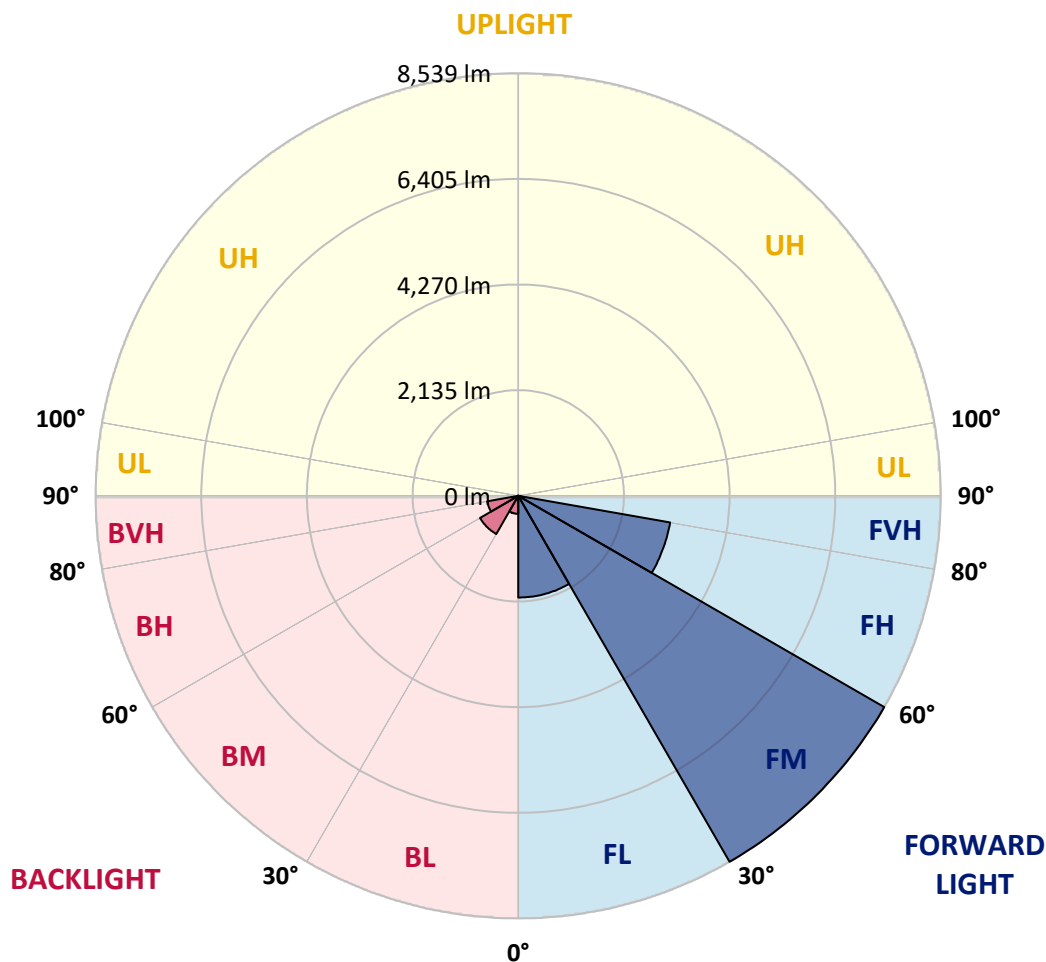
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2055.1	13.1			
FM	(30°-60°)	8539.4	54.5			
FH	(60°-80°)	3115.1	19.9			G2/5000
FVH	(80°-90°)	54.6	0.3			G1/100
BL	(0°-30°)	363.7	2.3	B1/500		
BM	(30°-60°)	891.8	5.7	B1/1000		
BH	(60°-80°)	635.9	4.1	B2/1000		G2/1000
BVH	(80°-90°)	14.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4
2.5°	2566.7	2521.7	2573.1	2566.7	2521.7	2492.7	2402.7	2373.7	2267.6	2190.4	2122.8
5°	3094.2	3049.2	3094.2	3081.3	3017.0	2946.3	2798.3	2701.8	2512.0	2344.8	2193.6
7.5°	3531.6	3531.6	3550.9	3554.2	3477.0	3367.6	3184.3	3039.5	2772.6	2515.3	2274.0
10°	4004.5	4007.7	4049.5	4020.5	3917.6	3769.7	3538.1	3354.7	3033.1	2695.4	2351.2
12.5°	4509.4	4512.7	4525.5	4512.7	4390.4	4200.7	3920.8	3679.6	3309.7	2901.2	2457.4
15°	5014.4	5017.6	5033.7	5011.2	4876.1	4654.2	4335.8	4039.8	3602.4	3132.8	2586.0
17.5°	5487.2	5493.7	5506.5	5477.6	5336.1	5072.3	4747.5	4390.4	3914.4	3380.5	2730.8
20°	5911.8	5918.2	5927.9	5889.3	5747.8	5484.0	5133.4	4760.3	4232.8	3634.6	2888.4
22.5°	6339.6	6346.0	6362.1	6310.6	6153.0	5850.7	5506.5	5120.6	4570.6	3914.4	3071.7
25°	6886.4	6892.8	6905.7	6831.7	6616.2	6262.4	5898.9	5503.3	4937.2	4229.6	3296.8
27.5°	7687.3	7680.8	7680.8	7545.8	7175.9	6715.9	6294.6	5892.5	5332.8	4567.3	3544.5
30°	8677.9	8661.9	8652.2	8468.9	7941.4	7227.3	6699.8	6256.0	5712.4	4924.4	3811.5
32.5°	9565.7	9565.7	9546.4	9353.4	8793.7	7915.6	7130.8	6609.8	6079.1	5284.6	4088.1
35°	10090.0	10112.5	10102.8	9958.1	9549.6	8655.4	7713.0	7034.3	6465.0	5660.9	4419.4
37.5°	10160.7	10205.7	10215.4	10128.6	9913.1	9260.1	8359.5	7494.3	6889.6	6066.2	4741.0
40°	9874.5	9970.9	9970.9	9958.1	9880.9	9546.4	8903.1	8028.2	7327.0	6487.6	5065.9
42.5°	9433.8	9533.5	9520.6	9568.9	9549.6	9478.8	9208.7	8526.8	7764.5	6921.8	5361.8
45°	8858.1	8961.0	8935.3	9022.1	9060.7	9137.9	9176.5	8874.1	8195.5	7394.6	5693.1
47.5°	7934.9	8108.6	8147.2	8301.6	8462.4	8703.7	8887.0	8999.6	8597.5	7902.8	6053.3
50°	6571.2	6815.6	6892.8	7217.7	7658.3	8156.9	8452.8	8845.2	8880.6	8423.8	6442.5
52.5°	4705.6	4988.7	5107.7	5641.6	6548.7	7417.1	7951.0	8504.3	8989.9	8922.4	6863.9
55°	3042.7	3284.0	3399.8	3901.5	5107.7	6471.5	7359.2	8063.6	8928.8	9379.1	7346.3
57.5°	1875.2	2013.5	2090.7	2521.7	3631.4	5258.9	6584.0	7658.3	8742.3	9774.7	7848.1
60°	1264.1	1344.5	1383.1	1585.7	2467.0	3930.5	5519.4	7233.8	8497.8	10041.7	8304.8
62.5°	839.5	865.2	903.8	1029.3	1627.5	2759.7	4239.3	6474.7	8314.5	10057.8	8642.6
65°	649.7	662.6	678.7	733.3	1003.5	1929.9	2981.6	5246.0	8041.1	9716.9	8748.7
67.5°	511.4	524.3	543.6	572.5	726.9	1309.1	2029.6	3843.6	7481.4	9182.9	8575.0
70°	402.1	411.7	424.6	450.3	566.1	948.8	1341.3	2553.8	6352.5	8674.7	8028.2
72.5°	318.4	328.1	340.9	366.7	460.0	694.8	919.9	1592.1	4898.6	8054.0	6976.4
75°	250.9	257.3	267.0	292.7	369.9	540.4	624.0	952.1	3329.0	6918.6	5435.8
77.5°	125.4	154.4	176.9	202.6	270.2	373.1	414.9	527.5	1405.6	3550.9	2592.4
80°	74.0	90.1	96.5	112.6	176.9	225.2	225.2	212.3	443.9	1363.8	1058.2
82.5°	41.8	57.9	61.1	64.3	106.1	128.7	102.9	77.2	90.1	456.7	308.8
85°	12.9	19.3	22.5	25.7	35.4	38.6	35.4	32.2	25.7	45.0	28.9
87.5°	0.0	0.0	0.0	0.0	3.2	6.4	6.4	6.4	9.6	9.6	9.6
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°	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4	2071.4
2.5°	2084.3	2042.4	1962.0	1888.0	1817.3	1765.8	1717.6	1672.5	1640.4	1614.7	1611.4
5°	2113.2	2029.6	1875.2	1730.4	1598.6	1489.2	1395.9	1322.0	1267.3	1228.7	1225.5
7.5°	2151.8	2023.1	1788.3	1572.8	1376.6	1219.0	1083.9	984.2	913.5	884.5	862.0
10°	2184.0	2016.7	1701.5	1415.2	1157.9	958.5	797.7	698.0	646.5	627.2	617.6
12.5°	2238.6	2023.1	1627.5	1270.5	968.1	733.3	611.1	556.4	533.9	517.8	514.6
15°	2319.0	2052.1	1556.8	1129.0	775.2	591.8	521.1	485.7	463.2	460.0	456.7
17.5°	2399.5	2077.8	1492.4	984.2	643.3	514.6	466.4	437.4	421.4	418.1	418.1
20°	2492.7	2110.0	1421.7	845.9	550.0	463.2	424.6	402.1	382.8	379.5	379.5
22.5°	2602.1	2155.0	1354.1	723.7	488.9	424.6	392.4	366.7	350.6	347.4	347.4
25°	2750.1	2222.6	1299.4	633.6	447.1	392.4	363.5	340.9	328.1	321.6	321.6
27.5°	2914.1	2315.8	1260.8	579.0	418.1	366.7	337.7	318.4	305.6	299.1	299.1
30°	3097.4	2418.8	1235.1	556.4	402.1	344.2	318.4	299.1	283.0	279.8	279.8
32.5°	3300.1	2537.8	1219.0	559.7	398.8	328.1	299.1	279.8	267.0	260.5	260.5
35°	3525.2	2669.6	1209.4	579.0	405.3	315.2	283.0	263.7	250.9	244.4	244.4
37.5°	3776.1	2824.0	1209.4	598.3	421.4	312.0	267.0	247.7	238.0	231.6	231.6
40°	4010.9	2988.1	1222.2	620.8	437.4	312.0	254.1	238.0	225.2	218.7	218.7
42.5°	4194.2	3081.3	1231.9	643.3	447.1	308.8	241.2	225.2	215.5	209.1	209.1
45°	4403.3	3181.1	1212.6	652.9	447.1	302.3	231.6	215.5	205.9	199.4	199.4
47.5°	4634.9	3303.3	1209.4	659.4	437.4	289.5	221.9	205.9	199.4	193.0	193.0
50°	4869.7	3438.4	1215.8	656.2	424.6	270.2	209.1	199.4	189.8	183.3	183.3
52.5°	5136.6	3579.9	1228.7	649.7	395.6	247.7	199.4	189.8	180.1	173.7	170.5
55°	5432.6	3734.3	1254.4	636.9	357.0	225.2	189.8	180.1	167.3	160.8	157.6
57.5°	5773.5	3924.1	1283.4	611.1	315.2	205.9	180.1	167.3	148.0	138.3	135.1
60°	6098.4	4139.6	1315.5	550.0	273.4	186.6	170.5	151.2	131.9	125.4	122.2
62.5°	6403.9	4351.8	1331.6	440.7	231.6	170.5	160.8	138.3	119.0	112.6	109.4
65°	6600.1	4583.4	1296.2	299.1	189.8	157.6	148.0	128.7	109.4	99.7	99.7
67.5°	6613.0	4692.8	1174.0	196.2	154.4	141.5	135.1	115.8	96.5	90.1	86.8
70°	6288.1	4528.7	897.4	154.4	128.7	122.2	122.2	102.9	83.6	77.2	74.0
72.5°	5541.9	4010.9	572.5	125.4	109.4	102.9	102.9	86.8	74.0	64.3	61.1
75°	4374.4	3094.2	305.6	102.9	90.1	86.8	80.4	70.8	61.1	54.7	51.5
77.5°	2010.3	1363.8	141.5	74.0	67.5	67.5	61.1	51.5	48.2	41.8	41.8
80°	794.5	463.2	70.8	48.2	45.0	45.0	45.0	35.4	35.4	28.9	25.7
82.5°	218.7	96.5	35.4	28.9	28.9	28.9	25.7	22.5	22.5	19.3	19.3
85°	22.5	16.1	16.1	16.1	16.1	12.9	12.9	9.6	6.4	6.4	6.4
87.5°	9.6	9.6	9.6	9.6	9.6	6.4	3.2	0.0	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)