

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: P841397

Luminaire Tested: **ARCH4-170-740-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841397
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: ARCH4-170-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1380mA 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: 19911 lumens
Efficiency: N/A
Efficacy: 117.3 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

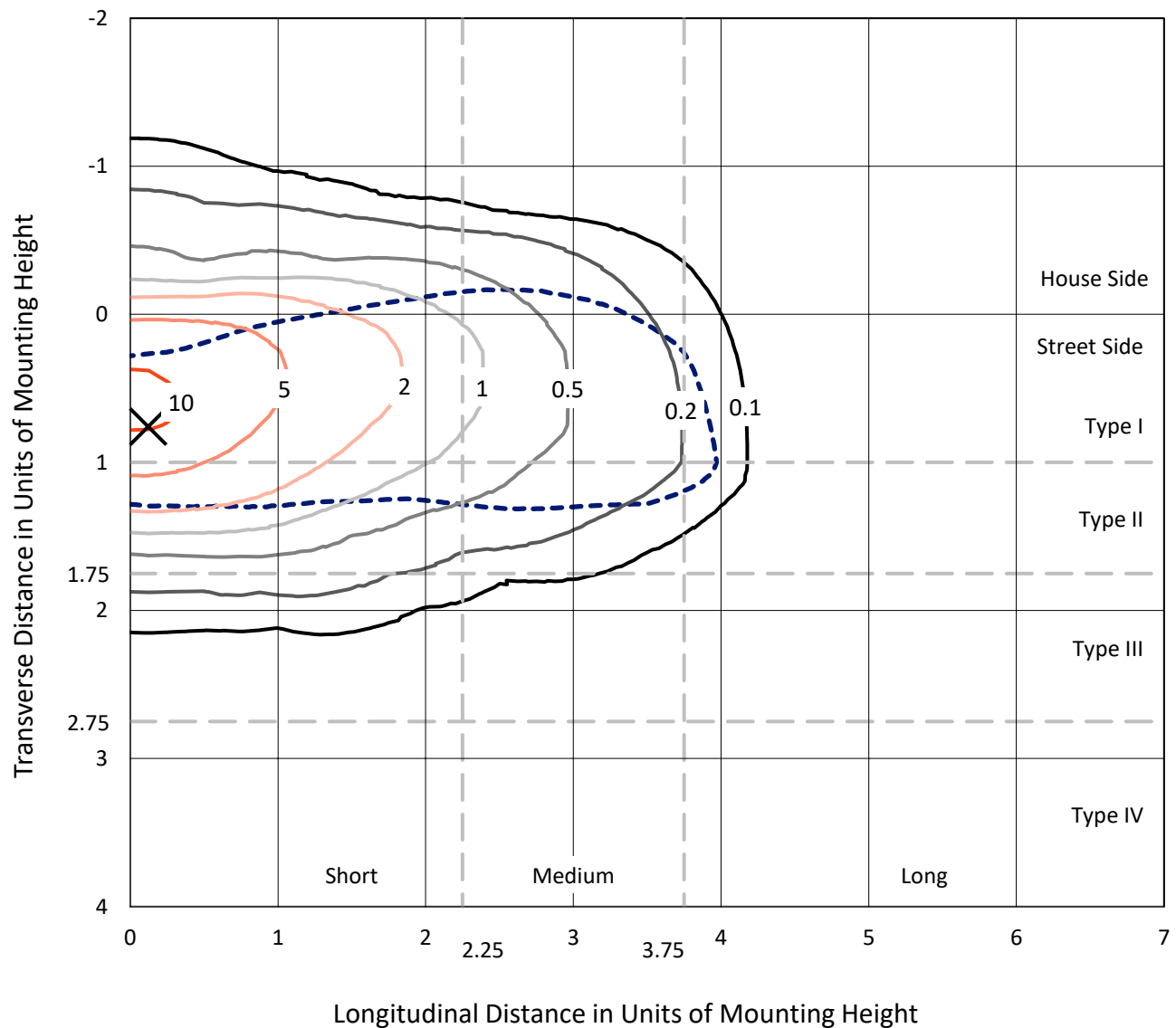
Input Watts (W): 169.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

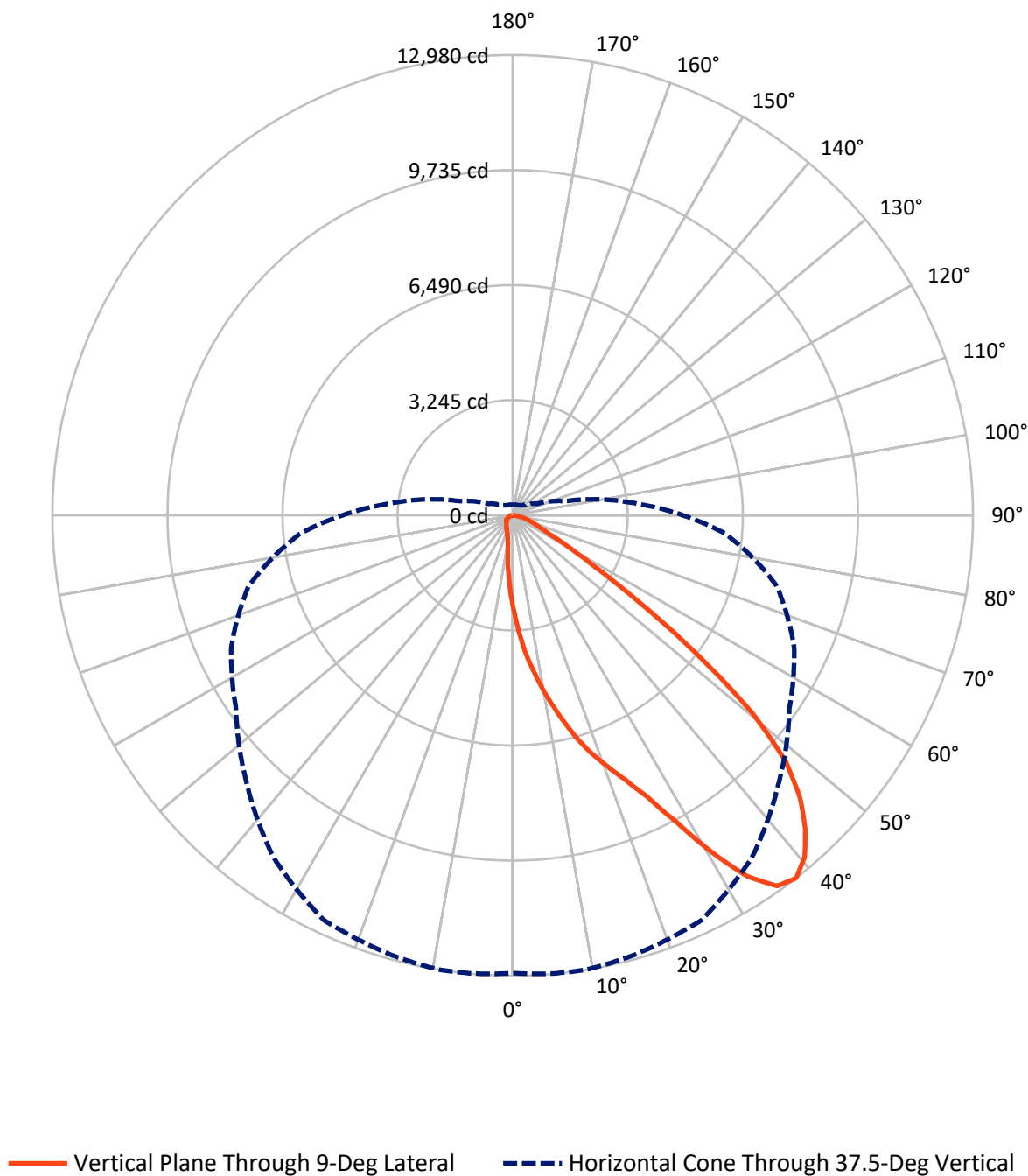
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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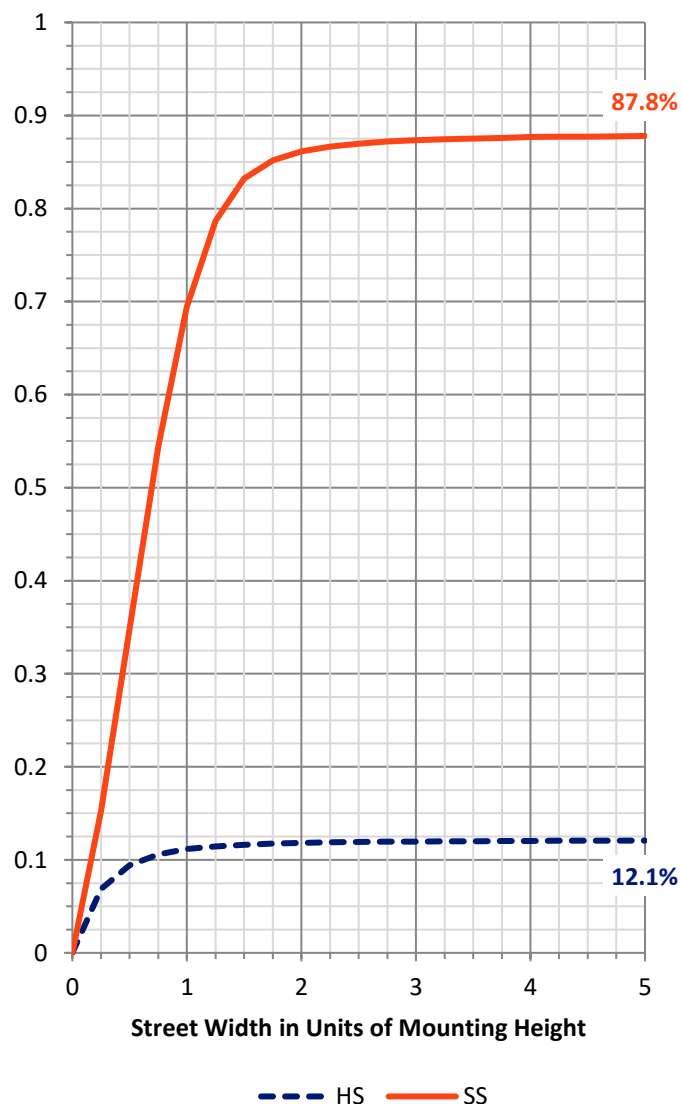
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2421.5	0.0	2421.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	17489.5	0.0	17489.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	19911.0	0.0	19911.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	1.3
10°-20°	919.5	4.6
20°-30°	1889.4	9.5
30°-40°	3339.6	16.8
40°-50°	4436.4	22.3
50°-60°	4207.6	21.1
60°-70°	3210.1	16.1
70°-80°	1556.2	7.8
80°-90°	87.6	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°	19911.0	100.0
0°-180°	19911.0	100.0

Coefficient of Utilization



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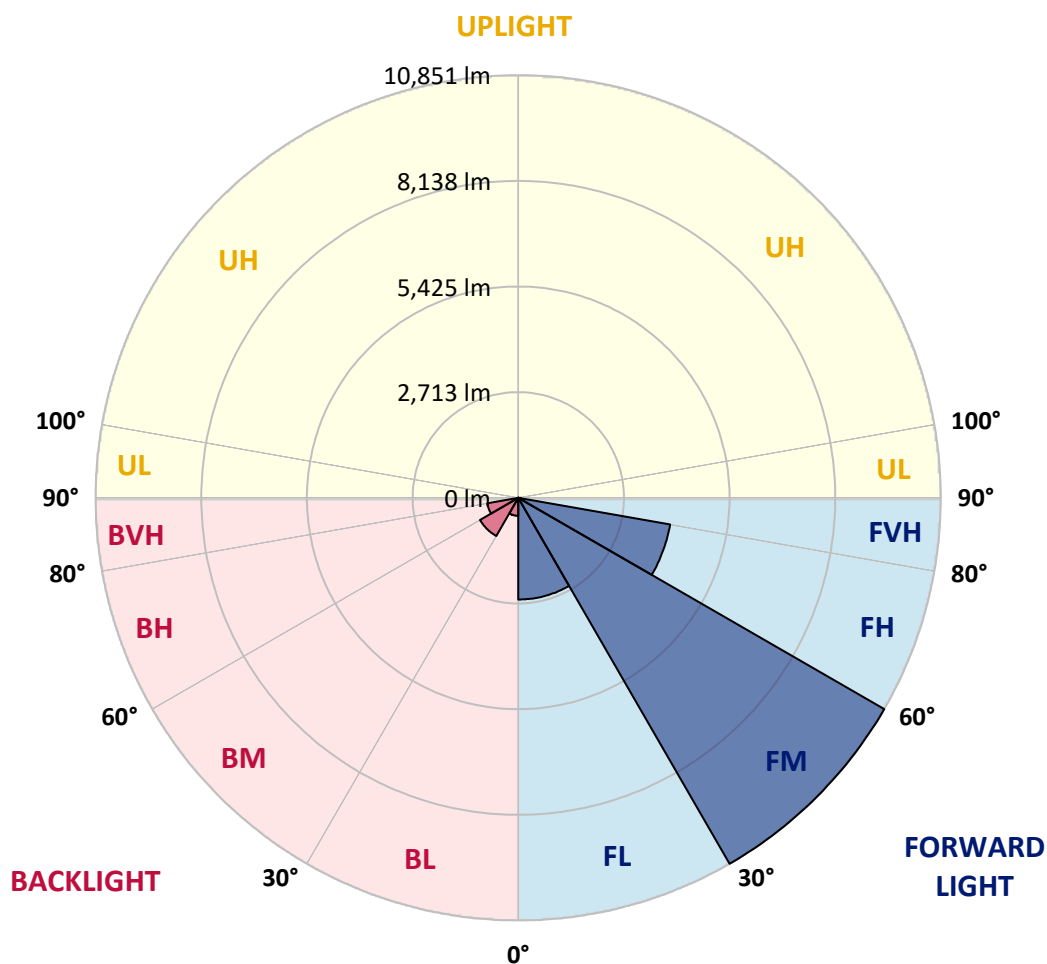
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2611.3	13.1			
FM	(30°-60°)	10850.5	54.5			
FH	(60°-80°)	3958.2	19.9			G2/5000
FVH	(80°-90°)	69.4	0.3			G1/100
BL	(0°-30°)	462.1	2.3	B1/500		
BM	(30°-60°)	1133.1	5.7	B2/2500		
BH	(60°-80°)	808.1	4.1	B2/1000		G2/1000
BVH	(80°-90°)	18.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0
2.5°	3261.4	3204.2	3269.6	3261.4	3204.2	3167.4	3052.9	3016.2	2881.3	2783.2	2697.4
5°	3931.6	3874.4	3931.6	3915.3	3833.6	3743.6	3555.6	3433.0	3191.9	2979.4	2787.3
7.5°	4487.5	4487.5	4512.0	4516.1	4418.0	4279.0	4046.1	3862.2	3522.9	3196.0	2889.5
10°	5088.2	5092.3	5145.5	5108.7	4977.9	4789.9	4495.6	4262.7	3854.0	3424.9	2987.6
12.5°	5729.9	5734.0	5750.3	5734.0	5578.7	5337.6	4982.0	4675.5	4205.5	3686.4	3122.4
15°	6371.5	6375.6	6396.1	6367.5	6195.8	5913.8	5509.2	5133.2	4577.4	3980.7	3285.9
17.5°	6972.3	6980.5	6996.9	6960.1	6780.2	6445.1	6032.3	5578.7	4973.8	4295.4	3469.8
20°	7511.8	7520.0	7532.2	7483.2	7303.4	6968.2	6522.8	6048.7	5378.4	4618.2	3670.1
22.5°	8055.4	8063.5	8084.0	8018.6	7818.3	7434.2	6996.9	6506.4	5807.6	4973.8	3903.0
25°	8750.2	8758.3	8774.7	8680.7	8406.8	7957.3	7495.5	6992.8	6273.5	5374.3	4189.1
27.5°	9767.8	9759.6	9759.6	9588.0	9118.0	8533.5	7998.2	7487.3	6776.2	5803.5	4503.8
30°	11026.6	11006.1	10993.9	10760.9	10090.7	9183.4	8513.1	7949.1	7258.4	6257.1	4843.0
32.5°	12154.6	12154.6	12130.1	11884.8	11173.7	10058.0	9060.8	8398.7	7724.3	6714.9	5194.5
35°	12820.7	12849.4	12837.1	12653.2	12134.1	10998.0	9800.5	8938.2	8214.8	7193.0	5615.5
37.5°	12910.7	12967.9	12980.1	12869.8	12596.0	11766.3	10622.0	9522.6	8754.2	7708.0	6024.2
40°	12546.9	12669.5	12669.5	12653.2	12555.1	12130.1	11312.7	10201.0	9310.1	8243.4	6436.9
42.5°	11987.0	12113.7	12097.4	12158.7	12134.1	12044.2	11700.9	10834.5	9865.9	8795.1	6812.9
45°	11255.4	11386.2	11353.5	11463.9	11512.9	11611.0	11660.1	11275.9	10413.5	9395.9	7233.9
47.5°	10082.5	10303.2	10352.2	10548.4	10752.8	11059.3	11292.2	11435.3	10924.4	10041.6	7691.6
50°	8349.6	8660.2	8758.3	9171.1	9731.0	10364.5	10740.5	11239.1	11284.1	10703.7	8186.2
52.5°	5979.2	6338.9	6490.1	7168.5	8321.0	9424.5	10102.9	10805.9	11423.0	11337.2	8721.5
55°	3866.3	4172.8	4319.9	4957.5	6490.1	8222.9	9350.9	10246.0	11345.4	11917.5	9334.6
57.5°	2382.7	2558.4	2656.5	3204.2	4614.2	6682.2	8366.0	9731.0	11108.3	12420.2	9972.1
60°	1606.2	1708.3	1757.4	2014.9	3134.7	4994.2	7013.2	9191.5	10797.7	12759.4	10552.5
62.5°	1066.7	1099.4	1148.4	1307.8	2068.0	3506.6	5386.6	8227.0	10564.8	12779.9	10981.6
65°	825.6	841.9	862.3	931.8	1275.1	2452.2	3788.6	6665.8	10217.4	12346.7	11116.5
67.5°	649.8	666.2	690.7	727.5	923.6	1663.4	2578.9	4883.9	9506.2	11668.2	10895.8
70°	510.9	523.1	539.5	572.2	719.3	1205.6	1704.3	3245.0	8071.7	11022.5	10201.0
72.5°	404.6	416.9	433.2	465.9	584.4	882.8	1168.9	2023.0	6224.4	10233.7	8864.6
75°	318.8	327.0	339.2	371.9	470.0	686.6	792.9	1209.7	4230.0	8791.0	6906.9
77.5°	159.4	196.2	224.8	257.5	343.3	474.1	527.2	670.3	1786.0	4512.0	3294.1
80°	94.0	114.4	122.6	143.0	224.8	286.1	286.1	269.7	564.0	1732.9	1344.6
82.5°	53.1	73.6	77.7	81.7	134.9	163.5	130.8	98.1	114.4	580.3	392.3
85°	16.3	24.5	28.6	32.7	45.0	49.0	45.0	40.9	32.7	57.2	36.8
87.5°	0.0	0.0	0.0	0.0	4.1	8.2	8.2	8.2	12.3	12.3	12.3
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°	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0	2632.0
2.5°	2648.3	2595.2	2493.0	2399.0	2309.1	2243.7	2182.4	2125.2	2084.3	2051.6	2047.6
5°	2685.1	2578.9	2382.7	2198.8	2031.2	1892.3	1773.7	1679.7	1610.3	1561.2	1557.1
7.5°	2734.2	2570.7	2272.3	1998.5	1749.2	1549.0	1377.3	1250.6	1160.7	1123.9	1095.3
10°	2775.0	2562.5	2162.0	1798.3	1471.3	1217.9	1013.6	886.9	821.5	797.0	784.7
12.5°	2844.5	2570.7	2068.0	1614.3	1230.2	931.8	776.5	707.0	678.4	658.0	653.9
15°	2946.7	2607.5	1978.1	1434.5	985.0	752.0	662.1	617.1	588.5	584.4	580.3
17.5°	3048.9	2640.2	1896.3	1250.6	817.4	653.9	592.6	555.8	535.4	531.3	531.3
20°	3167.4	2681.0	1806.4	1074.9	698.9	588.5	539.5	510.9	486.3	482.3	482.3
22.5°	3306.3	2738.3	1720.6	919.6	621.2	539.5	498.6	465.9	445.5	441.4	441.4
25°	3494.3	2824.1	1651.1	805.1	568.1	498.6	461.8	433.2	416.9	408.7	408.7
27.5°	3702.8	2942.6	1602.1	735.7	531.3	465.9	429.1	404.6	388.3	380.1	380.1
30°	3935.7	3073.4	1569.4	707.0	510.9	437.3	404.6	380.1	359.7	355.6	355.6
32.5°	4193.2	3224.6	1549.0	711.1	506.8	416.9	380.1	355.6	339.2	331.0	331.0
35°	4479.3	3392.2	1536.7	735.7	515.0	400.5	359.7	335.1	318.8	310.6	310.6
37.5°	4798.1	3588.3	1536.7	760.2	535.4	396.4	339.2	314.7	302.4	294.3	294.3
40°	5096.4	3796.8	1553.0	788.8	555.8	396.4	322.9	302.4	286.1	277.9	277.9
42.5°	5329.4	3915.3	1565.3	817.4	568.1	392.3	306.5	286.1	273.8	265.7	265.7
45°	5595.0	4042.0	1540.8	829.7	568.1	384.2	294.3	273.8	261.6	253.4	253.4
47.5°	5889.3	4197.3	1536.7	837.8	555.8	367.8	282.0	261.6	253.4	245.2	245.2
50°	6187.6	4368.9	1544.9	833.7	539.5	343.3	265.7	253.4	241.1	233.0	233.0
52.5°	6526.9	4548.8	1561.2	825.6	502.7	314.7	253.4	241.1	228.9	220.7	216.6
55°	6902.9	4744.9	1593.9	809.2	453.7	286.1	241.1	228.9	212.5	204.3	200.3
57.5°	7336.1	4986.1	1630.7	776.5	400.5	261.6	228.9	212.5	188.0	175.7	171.7
60°	7748.8	5259.9	1671.6	698.9	347.4	237.0	216.6	192.1	167.6	159.4	155.3
62.5°	8137.1	5529.6	1692.0	559.9	294.3	216.6	204.3	175.7	151.2	143.0	139.0
65°	8386.4	5823.9	1647.0	380.1	241.1	200.3	188.0	163.5	139.0	126.7	126.7
67.5°	8402.8	5962.9	1491.7	249.3	196.2	179.8	171.7	147.1	122.6	114.4	110.3
70°	7990.0	5754.4	1140.3	196.2	163.5	155.3	155.3	130.8	106.3	98.1	94.0
72.5°	7041.8	5096.4	727.5	159.4	139.0	130.8	130.8	110.3	94.0	81.7	77.7
75°	5558.2	3931.6	388.3	130.8	114.4	110.3	102.2	89.9	77.7	69.5	65.4
77.5°	2554.3	1732.9	179.8	94.0	85.8	85.8	77.7	65.4	61.3	53.1	53.1
80°	1009.5	588.5	89.9	61.3	57.2	57.2	57.2	45.0	45.0	36.8	32.7
82.5°	277.9	122.6	45.0	36.8	36.8	36.8	32.7	28.6	28.6	24.5	24.5
85°	28.6	20.4	20.4	20.4	20.4	16.3	16.3	12.3	8.2	8.2	8.2
87.5°	12.3	12.3	12.3	12.3	12.3	8.2	4.1	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)