

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: P841370

Luminaire Tested: **ARCH4-170-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841370
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: ARCH4-170-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 18299 lumens
Efficiency: N/A
Efficacy: 107.8 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

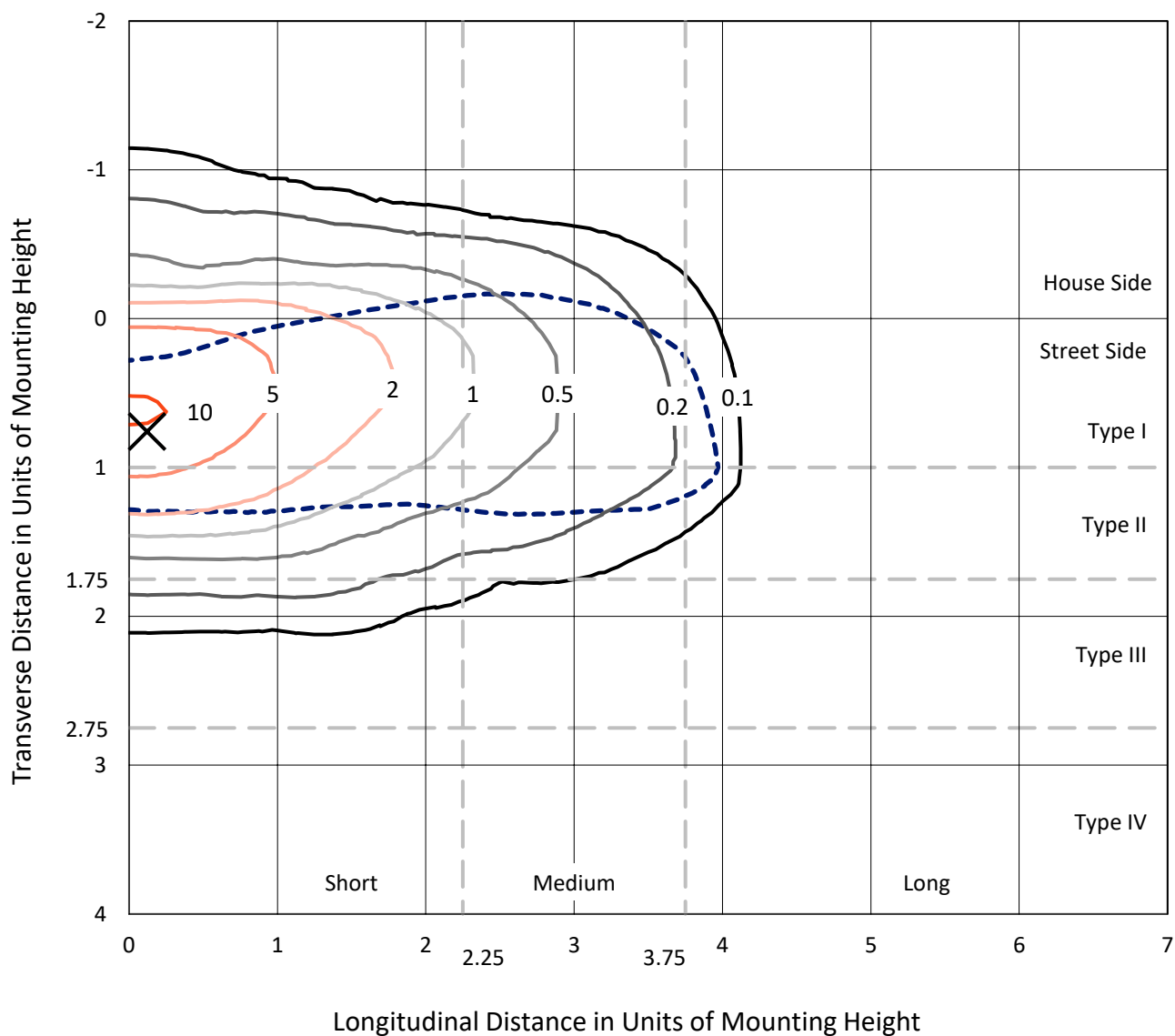
Input Watts (W): 169.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

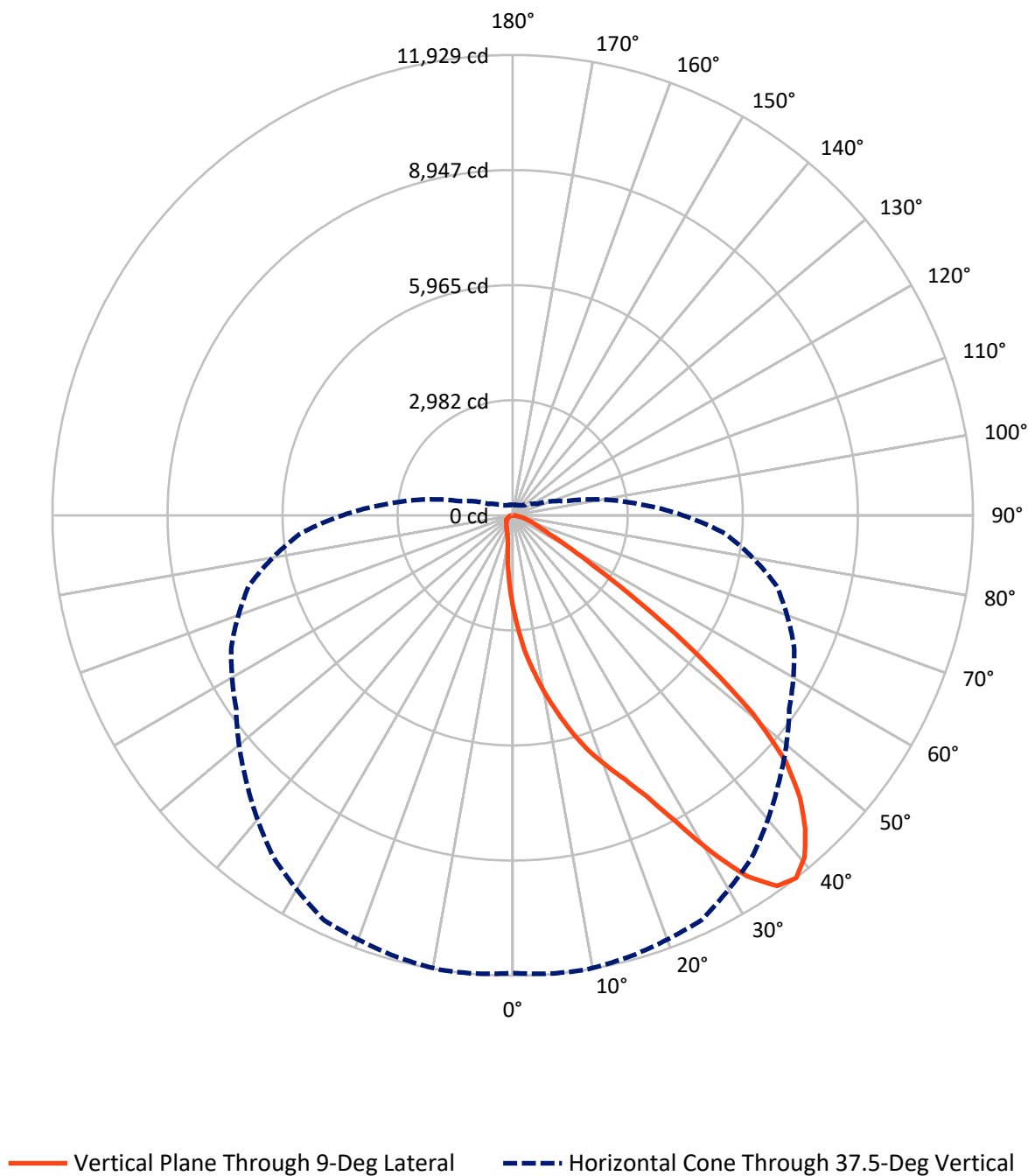
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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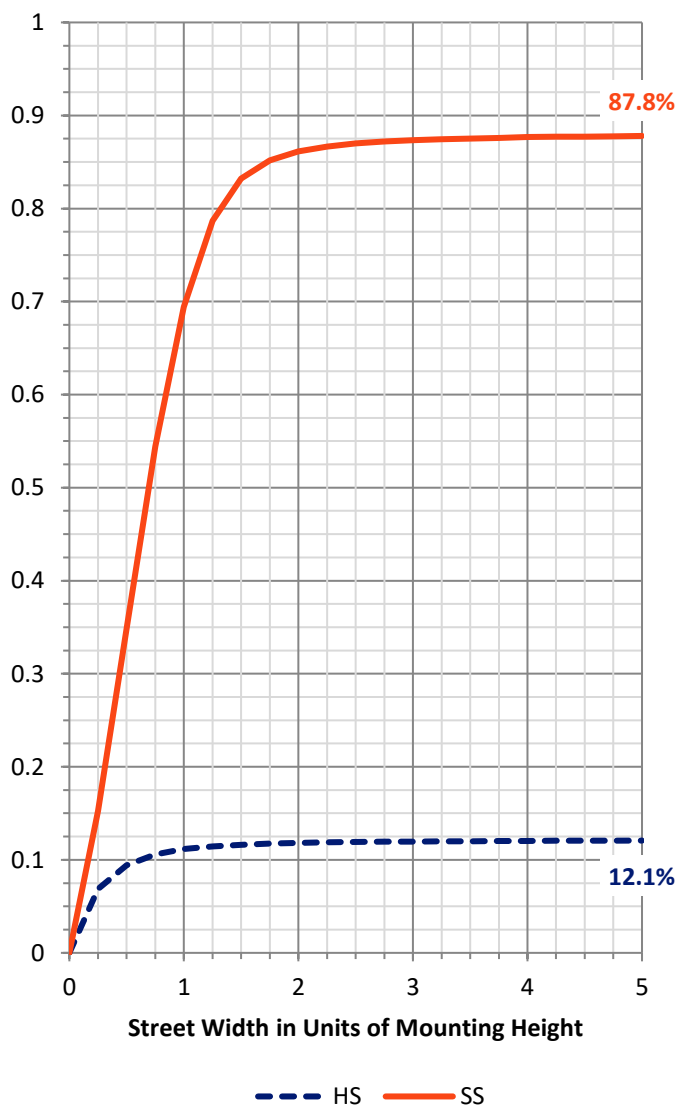
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2225.5	0.0	2225.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	16073.5	0.0	16073.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	18299.0	0.0	18299.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.1	1.3
10°-20°	845.1	4.6
20°-30°	1736.4	9.5
30°-40°	3069.2	16.8
40°-50°	4077.2	22.3
50°-60°	3867.0	21.1
60°-70°	2950.2	16.1
70°-80°	1430.2	7.8
80°-90°	80.5	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°	18299.0	100.0
0°-180°	18299.0	100.0

Coefficient of Utilization



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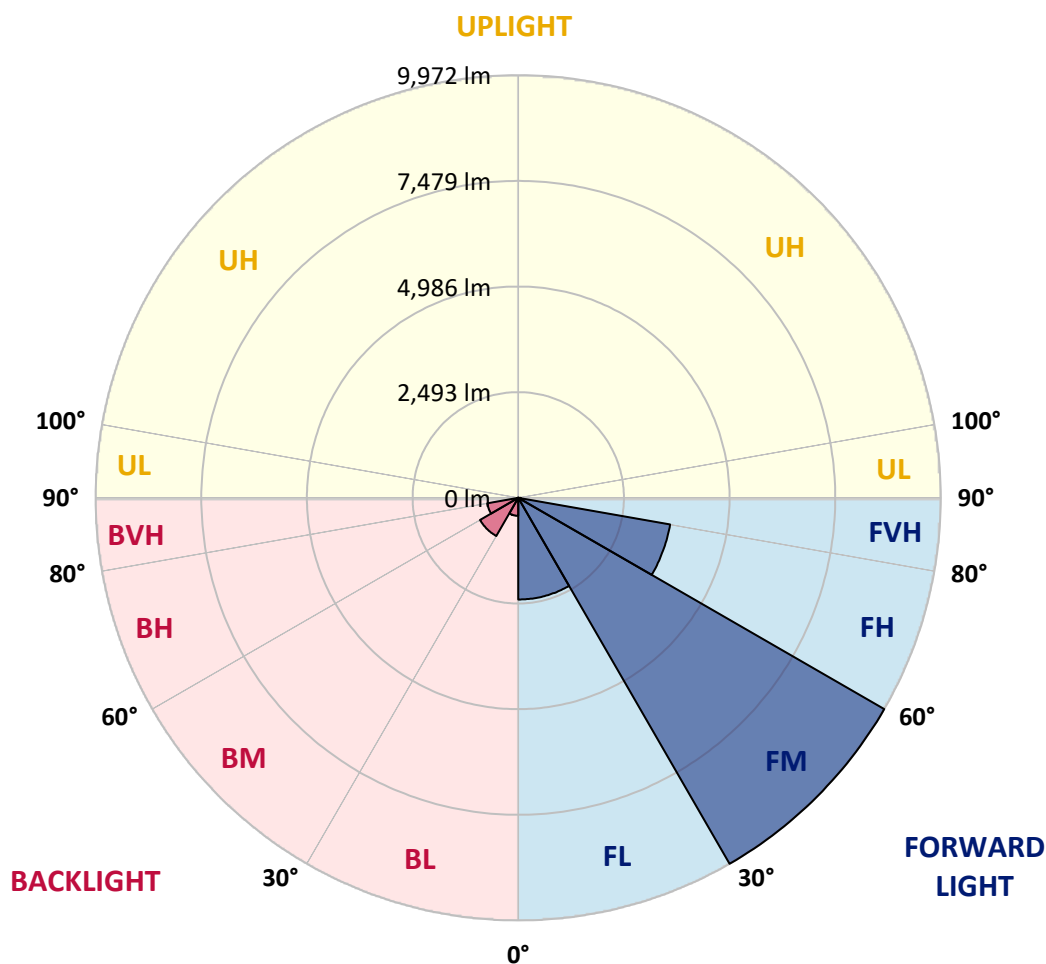
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2399.9	13.1			
FM	(30°-60°)	9972.1	54.5			
FH	(60°-80°)	3637.8	19.9			G2/5000
FVH	(80°-90°)	63.7	0.3			G1/100
BL	(0°-30°)	424.7	2.3	B1/500		
BM	(30°-60°)	1041.4	5.7	B2/2500		
BH	(60°-80°)	742.6	4.1	B2/1000		G2/1000
BVH	(80°-90°)	16.8	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°	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9
2.5°	2997.3	2944.8	3004.9	2997.3	2944.8	2911.0	2805.8	2772.0	2648.0	2557.9	2479.0
5°	3613.3	3560.8	3613.3	3598.3	3523.2	3440.6	3267.8	3155.1	2933.5	2738.2	2561.6
7.5°	4124.2	4124.2	4146.7	4150.5	4060.3	3932.6	3718.5	3549.5	3237.7	2937.2	2655.5
10°	4676.3	4680.1	4728.9	4695.1	4574.9	4402.1	4131.7	3917.6	3542.0	3147.6	2745.7
12.5°	5266.0	5269.8	5284.8	5269.8	5127.0	4905.4	4578.6	4296.9	3865.0	3388.0	2869.6
15°	5855.7	5859.5	5878.2	5852.0	5694.2	5435.0	5063.2	4717.6	4206.8	3658.4	3019.9
17.5°	6407.8	6415.4	6430.4	6396.6	6231.3	5923.3	5544.0	5127.0	4571.1	3947.6	3188.9
20°	6903.6	6911.2	6922.4	6877.4	6712.1	6404.1	5994.7	5559.0	4943.0	4244.4	3372.9
22.5°	7403.2	7410.7	7429.5	7369.4	7185.4	6832.3	6430.4	5979.7	5337.4	4571.1	3587.0
25°	8041.7	8049.2	8064.3	7977.9	7726.2	7313.1	6888.6	6426.6	5765.6	4939.2	3850.0
27.5°	8977.0	8969.5	8969.5	8811.7	8379.8	7842.7	7350.6	6881.1	6227.6	5333.6	4139.2
30°	10133.9	10115.1	10103.8	9889.7	9273.7	8439.9	7823.9	7305.5	6670.8	5750.5	4450.9
32.5°	11170.5	11170.5	11148.0	10922.6	10269.1	9243.7	8327.2	7718.7	7099.0	6171.2	4774.0
35°	11782.8	11809.1	11797.8	11628.8	11151.8	10107.6	9007.0	8214.5	7549.7	6610.7	5160.8
37.5°	11865.4	11918.0	11929.3	11827.9	11576.2	10813.7	9762.0	8751.6	8045.5	7083.9	5536.4
40°	11531.1	11643.8	11643.8	11628.8	11538.6	11148.0	10396.8	9375.1	8556.3	7576.0	5915.8
42.5°	11016.5	11133.0	11118.0	11174.3	11151.8	11069.1	10753.6	9957.3	9067.1	8083.1	6261.4
45°	10344.2	10464.4	10434.4	10535.8	10580.8	10671.0	10716.1	10363.0	9570.5	8635.2	6648.2
47.5°	9266.2	9469.0	9514.1	9694.4	9882.2	10163.9	10378.0	10509.5	10040.0	9228.7	7068.9
50°	7673.6	7959.1	8049.2	8428.6	8943.2	9525.4	9870.9	10329.2	10370.5	9837.1	7523.4
52.5°	5495.1	5825.7	5964.6	6588.1	7647.4	8661.5	9285.0	9931.0	10498.2	10419.3	8015.4
55°	3553.2	3834.9	3970.2	4556.1	5964.6	7557.2	8593.9	9416.5	10426.8	10952.7	8578.9
57.5°	2189.8	2351.3	2441.4	2944.8	4240.6	6141.2	7688.7	8943.2	10209.0	11414.7	9164.8
60°	1476.1	1570.0	1615.1	1851.7	2880.9	4589.9	6445.4	8447.4	9923.5	11726.4	9698.2
62.5°	980.3	1010.4	1055.5	1201.9	1900.6	3222.7	4950.5	7561.0	9709.4	11745.2	10092.5
65°	758.7	773.7	792.5	856.4	1171.9	2253.6	3481.9	6126.1	9390.2	11347.1	10216.5
67.5°	597.2	612.2	634.8	668.6	848.9	1528.7	2370.1	4488.5	8736.6	10723.6	10013.7
70°	469.5	480.8	495.8	525.8	661.1	1108.0	1566.3	2982.3	7418.2	10130.1	9375.1
72.5°	371.9	383.1	398.1	428.2	537.1	811.3	1074.2	1859.3	5720.5	9405.2	8146.9
75°	293.0	300.5	311.8	341.8	431.9	631.0	728.7	1111.8	3887.5	8079.3	6347.8
77.5°	146.5	180.3	206.6	236.6	315.5	435.7	484.5	616.0	1641.4	4146.7	3027.4
80°	86.4	105.2	112.7	131.5	206.6	262.9	262.9	247.9	518.3	1592.6	1235.7
82.5°	48.8	67.6	71.4	75.1	124.0	150.2	120.2	90.1	105.2	533.4	360.6
85°	15.0	22.5	26.3	30.0	41.3	45.1	41.3	37.6	30.0	52.6	33.8
87.5°	0.0	0.0	0.0	0.0	3.8	7.5	7.5	7.5	11.3	11.3	11.3
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°	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9	2418.9
2.5°	2433.9	2385.1	2291.2	2204.8	2122.2	2062.1	2005.7	1953.2	1915.6	1885.5	1881.8
5°	2467.7	2370.1	2189.8	2020.8	1866.8	1739.1	1630.1	1543.7	1479.9	1434.8	1431.1
7.5°	2512.8	2362.6	2088.4	1836.7	1607.6	1423.5	1265.8	1149.4	1066.7	1032.9	1006.6
10°	2550.4	2355.1	1987.0	1652.7	1352.2	1119.3	931.5	815.1	755.0	732.4	721.2
12.5°	2614.2	2362.6	1900.6	1483.6	1130.6	856.4	713.7	649.8	623.5	604.7	601.0
15°	2708.1	2396.4	1817.9	1318.4	905.2	691.1	608.5	567.2	540.9	537.1	533.4
17.5°	2802.0	2426.4	1742.8	1149.4	751.2	601.0	544.6	510.8	492.0	488.3	488.3
20°	2911.0	2464.0	1660.2	987.8	642.3	540.9	495.8	469.5	447.0	443.2	443.2
22.5°	3038.7	2516.6	1581.3	845.1	570.9	495.8	458.2	428.2	409.4	405.7	405.7
25°	3211.4	2595.4	1517.5	739.9	522.1	458.2	424.4	398.1	383.1	375.6	375.6
27.5°	3403.0	2704.4	1472.4	676.1	488.3	428.2	394.4	371.9	356.8	349.3	349.3
30°	3617.1	2824.6	1442.3	649.8	469.5	401.9	371.9	349.3	330.5	326.8	326.8
32.5°	3853.7	2963.5	1423.5	653.6	465.8	383.1	349.3	326.8	311.8	304.2	304.2
35°	4116.6	3117.5	1412.3	676.1	473.3	368.1	330.5	308.0	293.0	285.5	285.5
37.5°	4409.6	3297.8	1412.3	698.6	492.0	364.3	311.8	289.2	277.9	270.4	270.4
40°	4683.8	3489.4	1427.3	724.9	510.8	364.3	296.7	277.9	262.9	255.4	255.4
42.5°	4897.9	3598.3	1438.6	751.2	522.1	360.6	281.7	262.9	251.7	244.1	244.1
45°	5142.1	3714.7	1416.0	762.5	522.1	353.1	270.4	251.7	240.4	232.9	232.9
47.5°	5412.5	3857.5	1412.3	770.0	510.8	338.0	259.2	240.4	232.9	225.4	225.4
50°	5686.7	4015.2	1419.8	766.2	495.8	315.5	244.1	232.9	221.6	214.1	214.1
52.5°	5998.4	4180.5	1434.8	758.7	462.0	289.2	232.9	221.6	210.3	202.8	199.1
55°	6344.0	4360.8	1464.9	743.7	416.9	262.9	221.6	210.3	195.3	187.8	184.0
57.5°	6742.1	4582.4	1498.7	713.7	368.1	240.4	210.3	195.3	172.8	161.5	157.8
60°	7121.5	4834.1	1536.2	642.3	319.3	217.9	199.1	176.5	154.0	146.5	142.7
62.5°	7478.3	5082.0	1555.0	514.6	270.4	199.1	187.8	161.5	139.0	131.5	127.7
65°	7707.4	5352.4	1513.7	349.3	221.6	184.0	172.8	150.2	127.7	116.4	116.4
67.5°	7722.5	5480.1	1371.0	229.1	180.3	165.3	157.8	135.2	112.7	105.2	101.4
70°	7343.1	5288.5	1047.9	180.3	150.2	142.7	142.7	120.2	97.7	90.1	86.4
72.5°	6471.7	4683.8	668.6	146.5	127.7	120.2	120.2	101.4	86.4	75.1	71.4
75°	5108.2	3613.3	356.8	120.2	105.2	101.4	93.9	82.6	71.4	63.9	60.1
77.5°	2347.5	1592.6	165.3	86.4	78.9	78.9	71.4	60.1	56.3	48.8	48.8
80°	927.7	540.9	82.6	56.3	52.6	52.6	52.6	41.3	41.3	33.8	30.0
82.5°	255.4	112.7	41.3	33.8	33.8	33.8	30.0	26.3	26.3	22.5	22.5
85°	26.3	18.8	18.8	18.8	18.8	15.0	15.0	11.3	7.5	7.5	7.5
87.5°	11.3	11.3	11.3	11.3	11.3	7.5	3.8	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)