

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: P836388

Luminaire Tested: **ARCH3-180-727-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23242 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 180.5
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



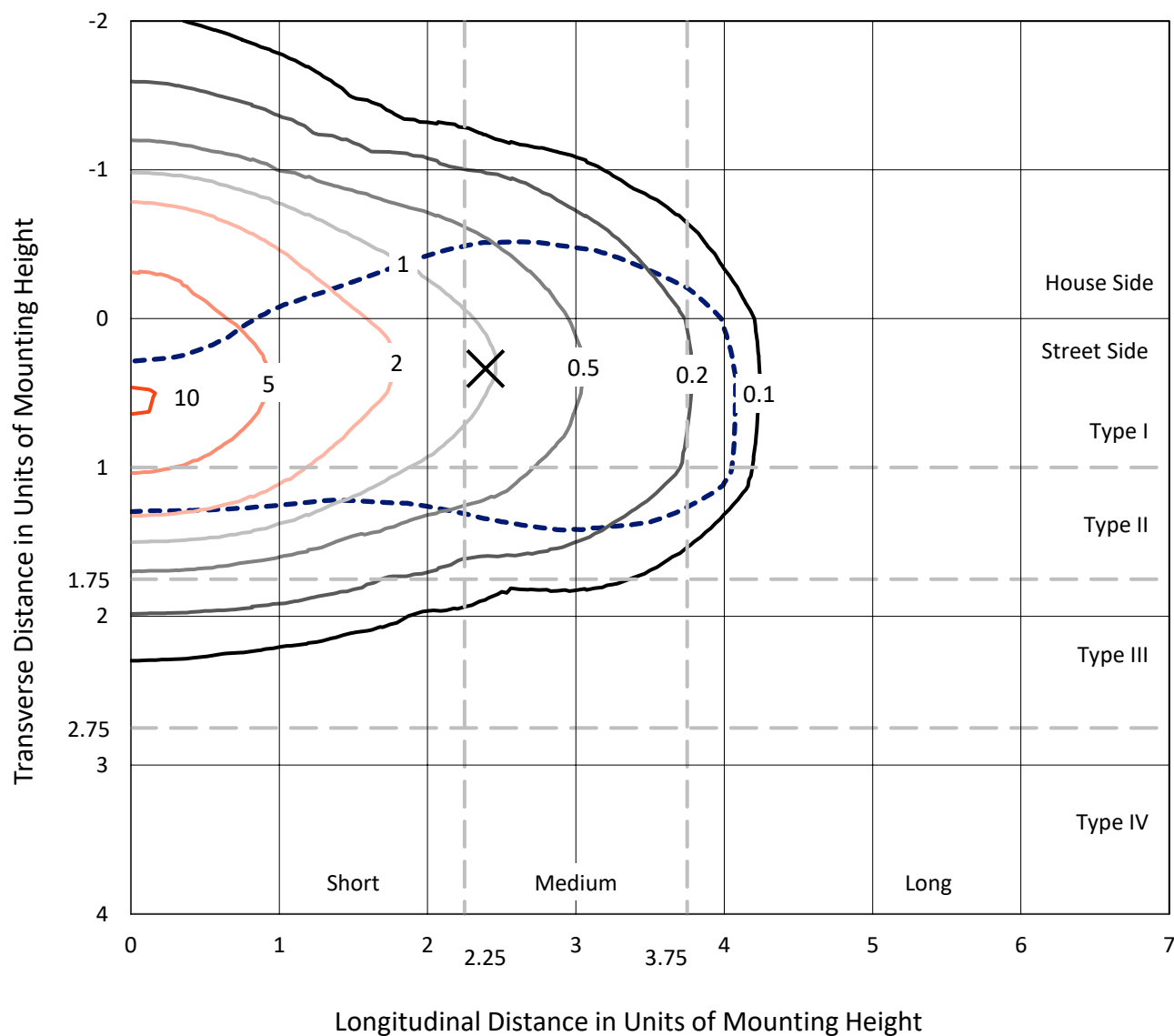
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

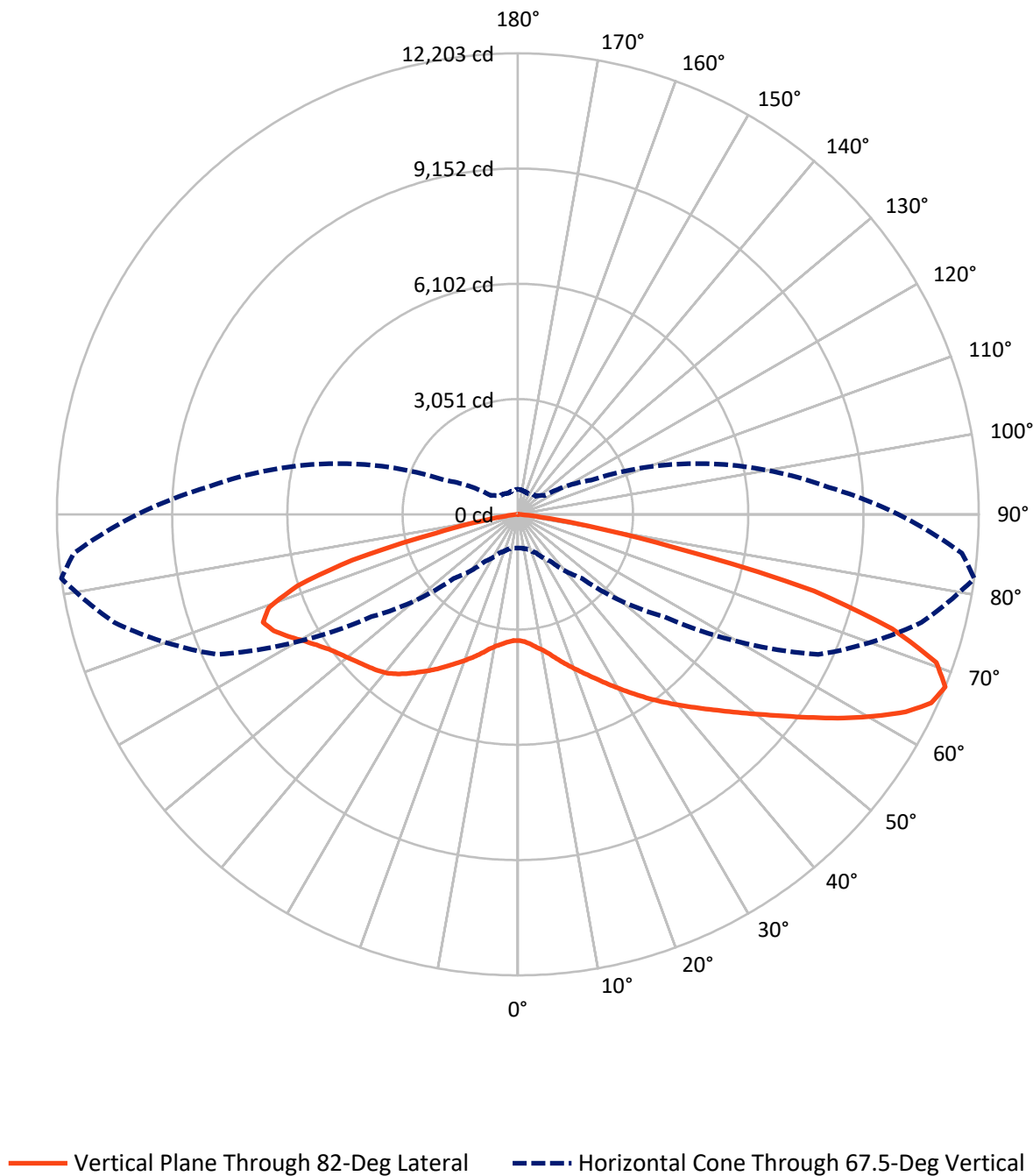
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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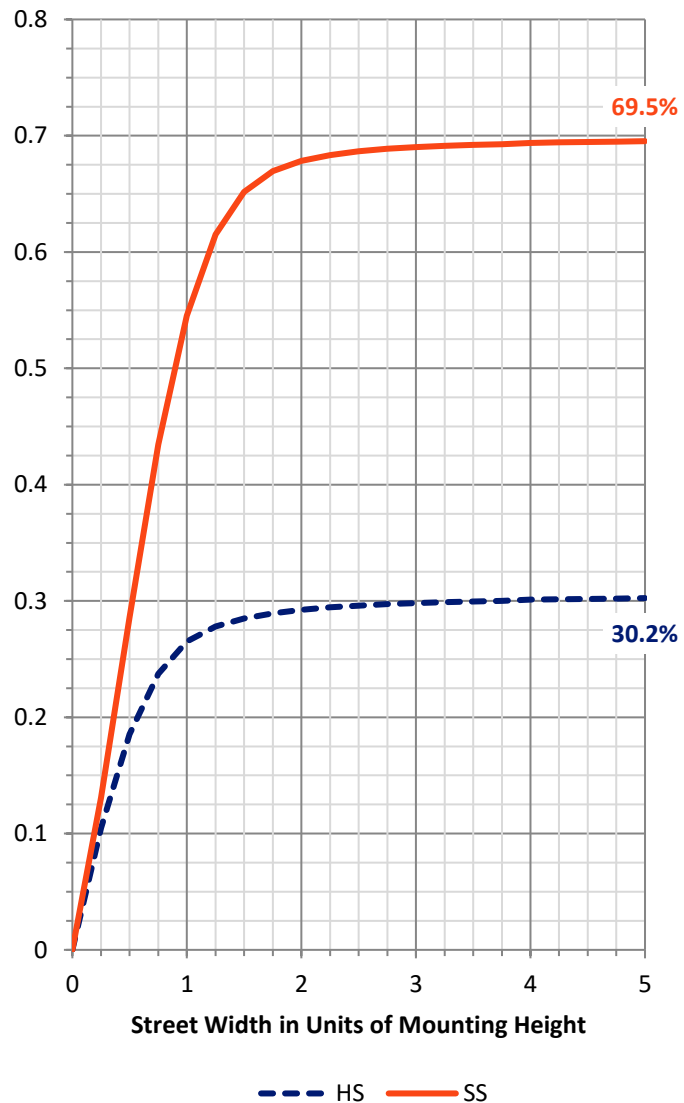
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7078.1	0.0	7078.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	16163.9	0.0	16163.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	23242.0	0.0	23242.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.3	1.5
10°-20°	1243.7	5.4
20°-30°	2499.6	10.8
30°-40°	3926.5	16.9
40°-50°	4783.2	20.6
50°-60°	4519.5	19.4
60°-70°	3732.1	16.1
70°-80°	2032.3	8.7
80°-90°	159.8	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°	23242.0	100.0
0°-180°	23242.0	100.0

Coefficient of Utilization



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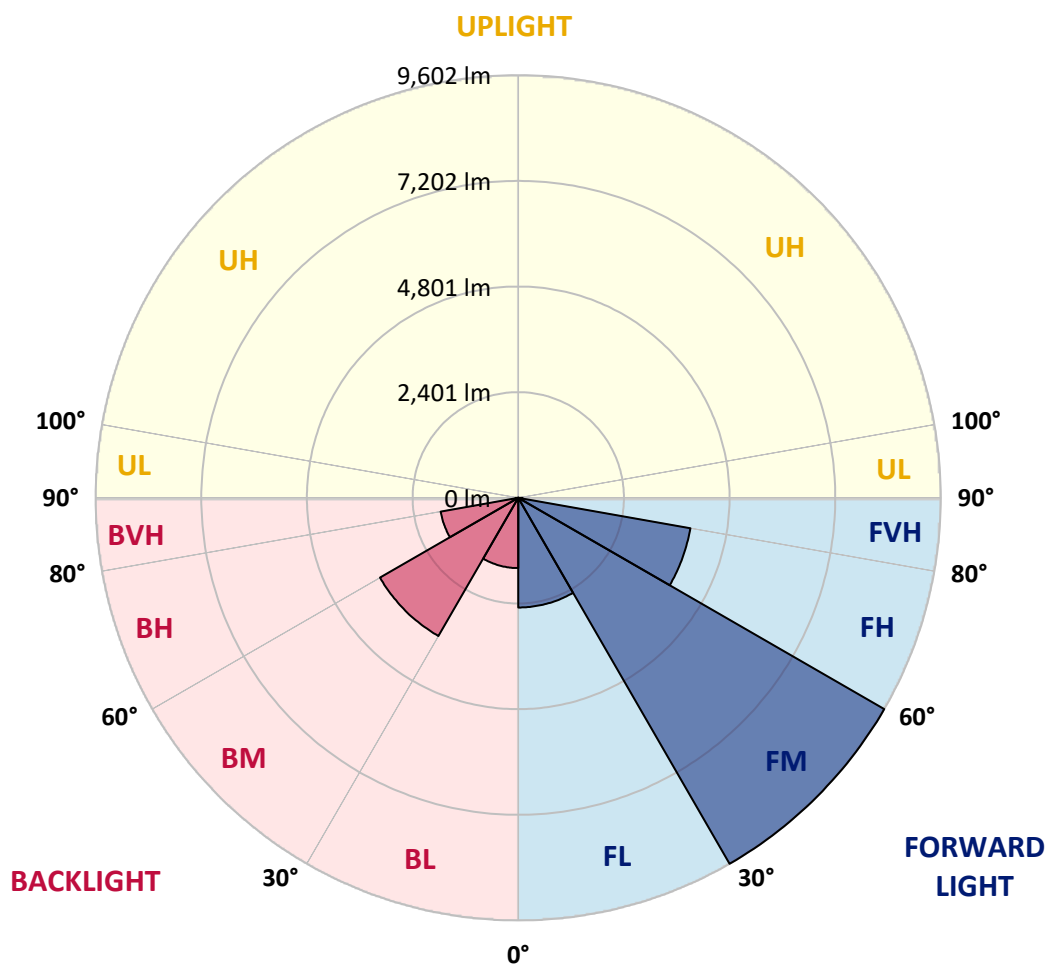
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2492.4	10.7			
FM	(30°-60°)	9602.3	41.3			
FH	(60°-80°)	3972.9	17.1			G2/5000
FVH	(80°-90°)	96.3	0.4			G1/100
BL	(0°-30°)	1596.2	6.9	B3/2500		
BM	(30°-60°)	3627.0	15.6	B3/5000		
BH	(60°-80°)	1791.5	7.7	B3/2500		G3/2500
BVH	(80°-90°)	63.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0
2.5°	3492.9	3492.9	3519.9	3519.9	3496.3	3459.1	3449.0	3408.5	3371.4	3371.4	3374.8
5°	3827.0	3823.6	3843.9	3816.9	3759.5	3685.3	3634.6	3546.9	3472.6	3449.0	3445.6
7.5°	4235.3	4232.0	4242.1	4198.2	4090.2	3968.7	3867.5	3725.7	3604.3	3553.6	3540.1
10°	4690.9	4687.6	4677.4	4603.2	4458.1	4269.1	4117.2	3921.5	3739.2	3658.3	3641.4
12.5°	5214.0	5207.3	5183.7	5075.7	4876.5	4633.6	4414.2	4161.1	3918.1	3806.7	3769.6
15°	5797.9	5787.7	5743.9	5612.2	5345.6	5038.5	4755.1	4431.1	4134.1	3989.0	3938.4
17.5°	6412.1	6412.1	6344.6	6148.8	5851.9	5470.5	5119.5	4707.8	4360.2	4181.3	4120.6
20°	7036.4	7033.0	6948.7	6712.4	6361.4	5922.7	5477.3	5025.0	4593.1	4377.1	4302.8
22.5°	7694.5	7687.7	7583.1	7313.1	6894.7	6398.6	5878.9	5338.9	4849.5	4589.7	4495.2
25°	8450.4	8440.3	8312.1	7981.3	7485.2	6925.0	6331.1	5706.7	5143.2	4825.9	4714.6
27.5°	9253.6	9240.1	9088.3	8703.5	8160.2	7485.2	6830.5	6132.0	5467.1	5089.2	4964.3
30°	9969.1	9959.0	9793.6	9398.7	8774.4	8042.1	7306.4	6557.2	5808.0	5369.3	5214.0
32.5°	10509.0	10509.0	10360.6	9972.5	9324.5	8575.3	7785.6	6958.8	6162.3	5669.6	5487.4
35°	10836.4	10846.5	10718.3	10407.8	9797.0	9078.1	8281.7	7431.3	6540.3	5990.2	5794.5
37.5°	10883.6	10917.4	10843.1	10633.9	10124.3	9496.6	8767.7	7886.8	6931.8	6314.2	6094.8
40°	10664.3	10687.9	10691.3	10610.3	10259.3	9797.0	9196.3	8369.4	7346.9	6655.1	6401.9
42.5°	10225.6	10242.4	10272.8	10296.4	10161.4	9928.6	9523.6	8818.3	7789.0	7002.7	6705.7
45°	9658.6	9655.2	9705.8	9807.1	9800.3	9854.3	9705.8	9226.6	8247.9	7397.5	7043.2
47.5°	8811.5	8794.7	8973.5	9203.0	9317.7	9570.9	9709.2	9547.2	8747.4	7832.8	7427.9
50°	7485.2	7468.4	7859.8	8399.8	8737.3	9122.0	9523.6	9739.6	9270.5	8322.2	7846.3
52.5°	5872.1	5855.2	6351.3	7296.3	8032.0	8592.2	9149.0	9783.5	9766.6	8868.9	8318.8
55°	4367.0	4353.5	4836.1	5858.6	7049.9	7978.0	8690.0	9668.7	10232.3	9496.6	8892.5
57.5°	3077.8	3071.0	3489.5	4336.6	5787.7	7228.8	8247.9	9446.0	10660.9	10178.3	9540.5
60°	2159.9	2149.7	2453.5	3108.2	4377.1	6098.2	7809.2	9149.0	10981.5	10849.9	10228.9
62.5°	1454.5	1447.8	1663.8	2210.5	3108.2	4694.3	7144.4	8949.9	11163.7	11524.9	10924.1
65°	1103.6	1100.2	1198.0	1498.4	2200.4	3371.4	6088.1	8926.3	11187.4	12031.1	11514.7
67.5°	890.9	894.3	948.3	1120.4	1522.0	2396.1	4721.3	8777.8	11062.5	12203.2	11801.6
70°	729.0	729.0	752.6	867.3	1123.8	1616.5	3297.2	8102.8	10714.9	11754.3	11460.7
72.5°	556.8	560.2	634.5	702.0	847.1	1133.9	2112.6	6705.7	9894.8	10363.9	10141.2
75°	442.1	438.7	482.6	577.1	658.1	809.9	1295.9	4809.1	8420.1	8099.5	7957.7
77.5°	317.2	313.9	347.6	428.6	499.5	573.7	772.8	2426.5	4579.6	4208.3	4103.7
80°	216.0	209.2	239.6	297.0	330.7	337.5	378.0	931.4	1997.9	1883.1	1859.5
82.5°	111.4	111.4	128.2	168.7	172.1	175.5	168.7	300.4	661.5	617.6	590.6
85°	43.9	43.9	47.2	57.4	57.4	60.7	60.7	77.6	70.9	67.5	64.1
87.5°	3.4	3.4	6.7	6.7	10.1	10.1	10.1	13.5	16.9	16.9	16.9
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°	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0	3341.0
2.5°	3368.0	3354.5	3310.7	3300.5	3293.8	3283.7	3287.0	3263.4	3253.3	3256.7	3243.2
5°	3428.8	3405.1	3351.1	3327.5	3320.8	3310.7	3320.8	3303.9	3287.0	3293.8	3287.0
7.5°	3513.1	3479.4	3411.9	3388.3	3384.9	3374.8	3388.3	3374.8	3361.3	3368.0	3354.5
10°	3600.9	3557.0	3482.8	3459.1	3459.1	3455.8	3469.3	3449.0	3435.5	3438.9	3432.1
12.5°	3729.1	3671.8	3590.8	3570.5	3560.4	3570.5	3573.9	3546.9	3523.3	3526.6	3516.5
15°	3884.4	3820.2	3732.5	3702.1	3695.4	3692.0	3678.5	3644.8	3614.4	3611.0	3600.9
17.5°	4053.1	3972.1	3867.5	3837.1	3806.7	3796.6	3762.9	3719.0	3671.8	3671.8	3658.3
20°	4215.1	4124.0	3999.1	3955.2	3911.4	3870.9	3813.5	3742.6	3681.9	3671.8	3658.3
22.5°	4390.6	4282.6	4137.5	4073.4	3995.7	3914.7	3816.9	3722.4	3644.8	3627.9	3617.8
25°	4586.3	4451.3	4279.2	4184.7	4059.9	3935.0	3789.9	3668.4	3577.3	3550.3	3543.5
27.5°	4802.3	4640.3	4431.1	4292.7	4110.5	3914.7	3729.1	3584.0	3472.6	3438.9	3428.8
30°	5021.7	4829.3	4569.4	4367.0	4110.5	3850.6	3617.8	3449.0	3320.8	3273.5	3266.8
32.5°	5241.0	5025.0	4694.3	4407.5	4070.0	3742.6	3472.6	3273.5	3128.4	3071.0	3084.5
35°	5504.3	5241.0	4809.1	4424.3	4002.5	3611.0	3307.3	3074.4	2925.9	2875.3	2885.4
37.5°	5777.6	5457.0	4900.2	4410.8	3908.0	3462.5	3121.7	2895.6	2709.9	2622.2	2632.3
40°	6013.8	5652.7	4964.3	4363.6	3786.5	3293.8	2939.4	2642.4	2386.0	2301.6	2291.5
42.5°	6236.6	5797.9	4998.0	4292.7	3648.1	3098.0	2679.6	2298.2	2041.7	1937.1	1940.5
45°	6469.4	5939.6	4984.5	4198.2	3476.0	2868.6	2345.5	1960.7	1734.6	1640.1	1643.5
47.5°	6736.0	6091.5	4971.0	4097.0	3266.8	2571.6	2024.9	1663.8	1468.0	1400.5	1393.8
50°	7019.5	6260.2	4954.2	3972.1	3033.9	2240.8	1707.6	1387.0	1221.7	1177.8	1167.7
52.5°	7340.1	6442.4	4944.0	3823.6	2753.8	1889.9	1424.2	1144.0	1032.7	1002.3	998.9
55°	7724.9	6655.1	4957.5	3644.8	2416.3	1559.1	1184.5	985.4	911.2	894.3	890.9
57.5°	8193.9	6928.4	4998.0	3435.5	2062.0	1272.3	1009.1	887.6	840.3	826.8	826.8
60°	8703.5	7238.9	5072.3	3199.3	1707.6	1049.6	894.3	809.9	789.7	806.6	806.6
62.5°	9253.6	7603.4	5203.9	2912.4	1376.9	887.6	803.2	745.8	732.3	766.1	769.4
65°	9763.2	7957.7	5288.3	2568.2	1093.4	769.4	732.3	681.7	688.5	722.2	718.8
67.5°	10077.1	8251.3	5170.2	2136.2	867.3	681.7	658.1	614.2	631.1	658.1	661.5
70°	9884.7	8086.0	4586.3	1613.1	678.3	594.0	577.1	550.1	563.6	597.3	610.8
72.5°	8943.1	7242.3	3567.1	1090.1	546.7	499.5	506.2	492.7	509.6	540.0	570.3
75°	7259.1	5473.9	2392.7	698.6	432.0	425.2	435.3	425.2	432.0	462.3	479.2
77.5°	3789.9	2669.4	1191.3	435.3	320.6	330.7	347.6	351.0	371.2	378.0	384.7
80°	1768.4	1201.4	496.1	243.0	212.6	232.9	266.6	270.0	276.7	286.9	290.2
82.5°	577.1	361.1	229.5	131.6	121.5	131.6	172.1	205.9	209.2	229.5	229.5
85°	60.7	37.1	50.6	54.0	47.2	57.4	77.6	74.2	33.7	20.2	20.2
87.5°	16.9	13.5	16.9	16.9	13.5	13.5	10.1	3.4	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)