

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: P842704

Luminaire Tested: **ARCH4-80-750-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10599 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

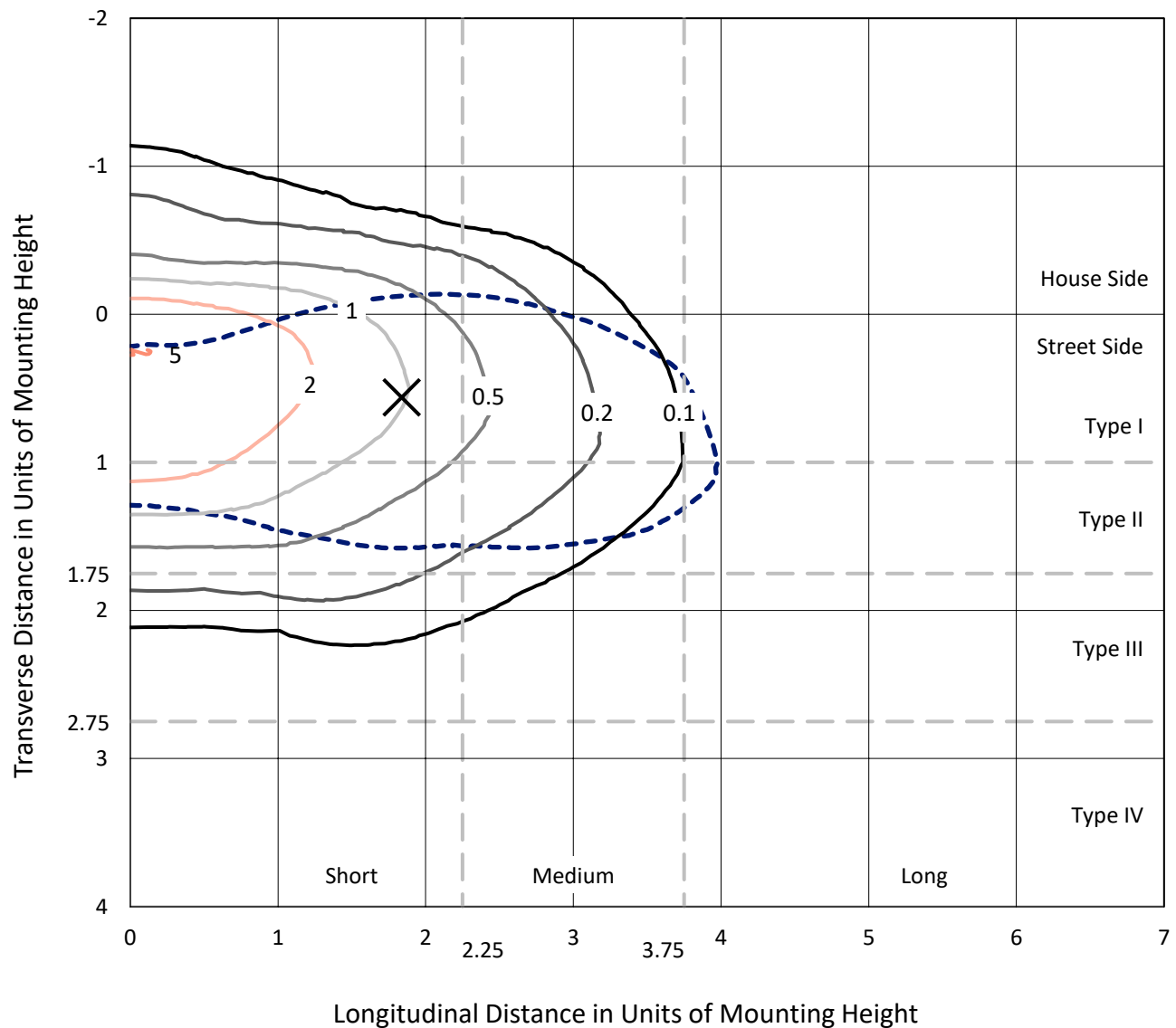
Input Watts (W): 83.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

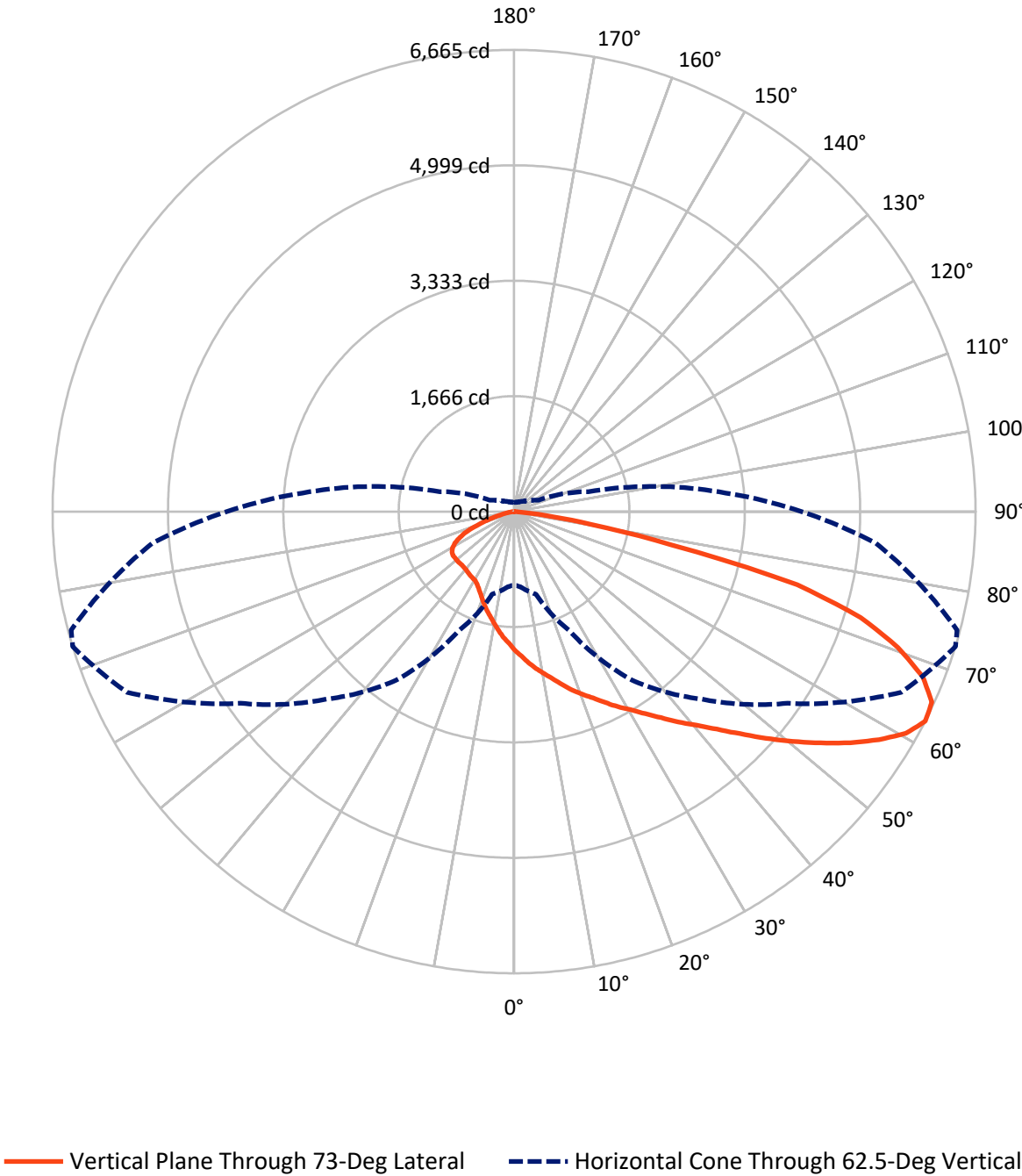
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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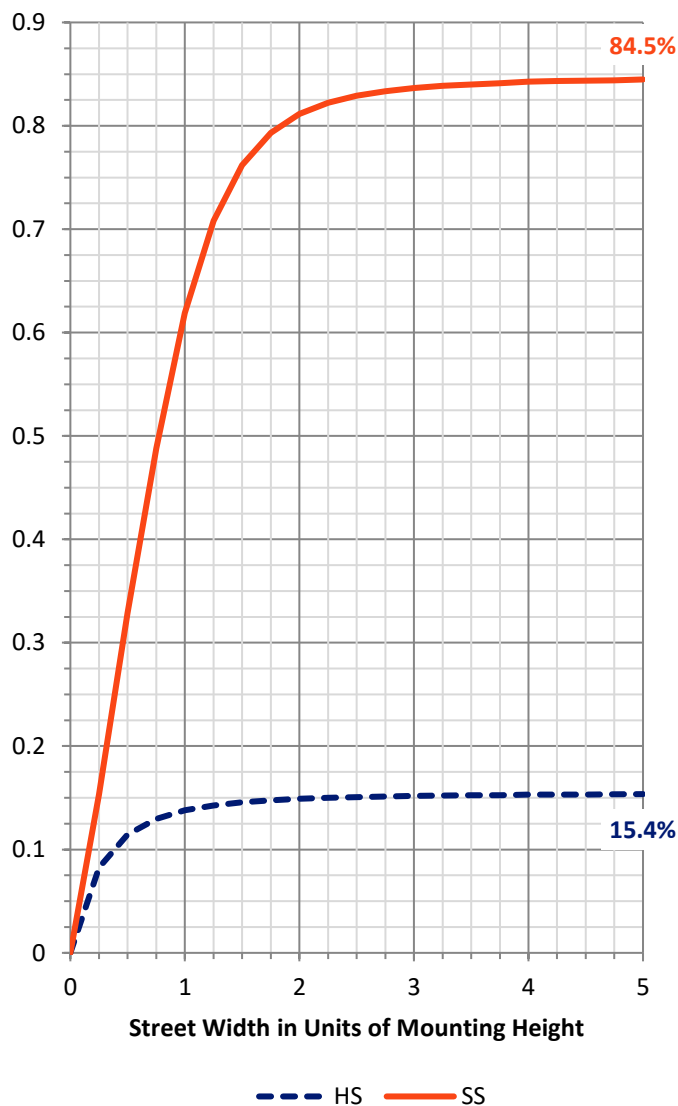
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1643.0	0.0	1643.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	8956.0	0.0	8956.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	10599.0	0.0	10599.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.9	1.8
10°-20°	585.0	5.5
20°-30°	973.8	9.2
30°-40°	1469.4	13.9
40°-50°	2053.8	19.4
50°-60°	2268.5	21.4
60°-70°	1976.2	18.6
70°-80°	998.3	9.4
80°-90°	80.1	0.8
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°	10599.0	100.0
0°-180°	10599.0	100.0

Coefficient of Utilization



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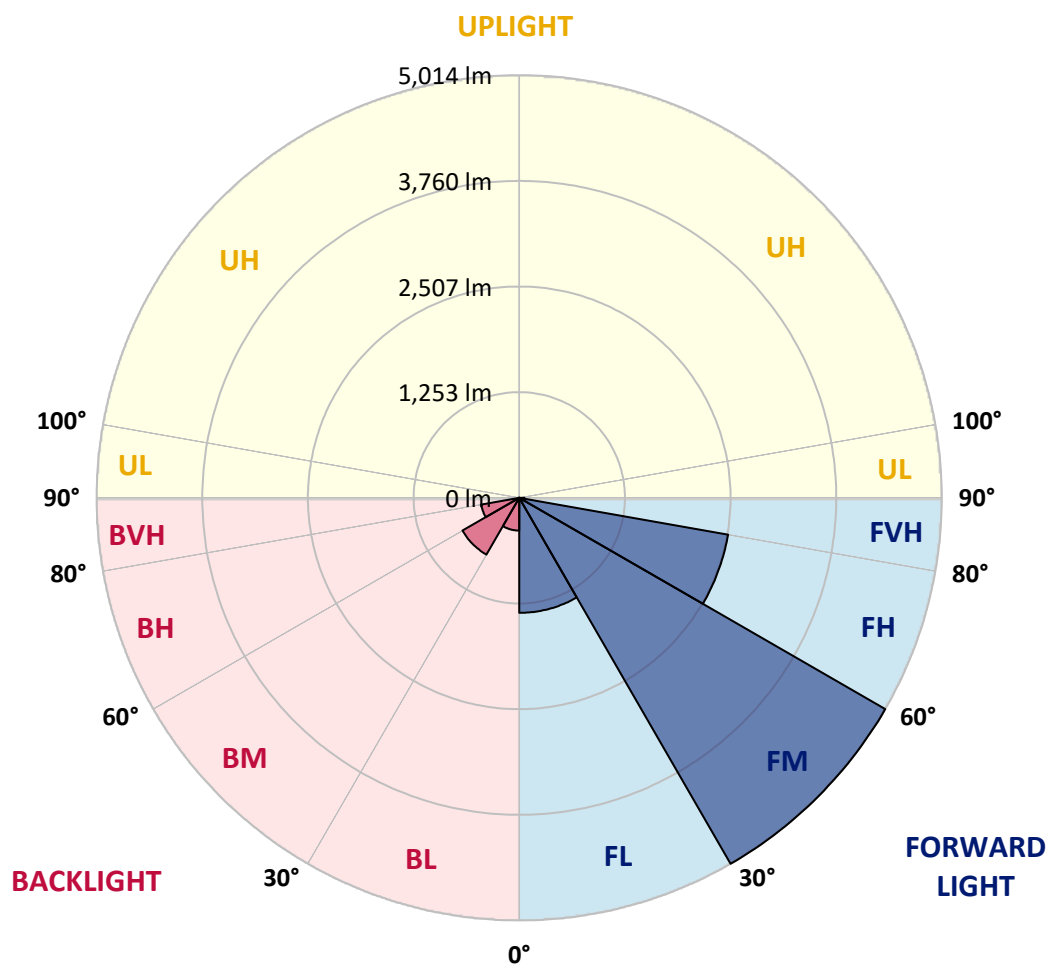
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1364.4	12.9			
FM	(30°-60°)	5013.7	47.3			
FH	(60°-80°)	2515.9	23.7			G2/5000
FVH	(80°-90°)	62.0	0.6			G1/100
BL	(0°-30°)	388.3	3.7	B1/500		
BM	(30°-60°)	778.0	7.3	B1/1000		
BH	(60°-80°)	458.6	4.3	B1/500		G1/500
BVH	(80°-90°)	18.1	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9
2.5°	2284.1	2309.5	2295.6	2304.9	2258.7	2228.7	2194.0	2127.0	2090.1	2085.5	2041.6
5°	2619.0	2646.7	2623.6	2616.6	2535.8	2466.5	2388.0	2270.2	2191.7	2177.8	2080.8
7.5°	2953.8	2979.2	2951.5	2930.7	2822.2	2699.8	2584.3	2411.1	2288.7	2265.6	2113.2
10°	3189.4	3212.5	3191.7	3170.9	3057.8	2933.0	2769.1	2542.7	2376.5	2339.5	2134.0
12.5°	3367.2	3381.1	3371.8	3353.4	3247.1	3113.2	2956.1	2690.6	2475.8	2429.6	2166.3
15°	3512.7	3535.8	3524.3	3510.4	3408.8	3274.9	3124.7	2845.3	2591.2	2533.5	2214.8
17.5°	3609.7	3625.9	3628.2	3628.2	3538.1	3406.5	3261.0	2986.2	2706.7	2632.8	2261.0
20°	3653.6	3672.1	3683.6	3702.1	3628.2	3515.0	3367.2	3106.3	2815.3	2732.1	2304.9
22.5°	3674.4	3690.6	3720.6	3762.2	3702.1	3607.4	3471.2	3217.1	2923.8	2836.0	2355.7
25°	3690.6	3711.3	3755.2	3833.7	3792.2	3711.3	3593.6	3344.1	3053.1	2963.1	2429.6
27.5°	3734.4	3759.8	3801.4	3896.1	3845.3	3806.0	3722.9	3480.4	3189.4	3097.0	2519.6
30°	3886.9	3907.6	3905.3	3965.4	3903.0	3891.5	3833.7	3612.0	3321.0	3228.7	2625.9
32.5°	4164.0	4184.8	4134.0	4110.9	3974.6	3976.9	3953.8	3752.9	3478.1	3383.4	2748.3
35°	4461.9	4485.0	4418.0	4378.8	4150.1	4083.2	4094.7	3928.4	3653.6	3558.9	2900.7
37.5°	4727.5	4755.2	4697.5	4639.8	4408.8	4254.1	4251.8	4124.7	3854.5	3757.5	3069.3
40°	4873.0	4905.3	4940.0	4907.7	4665.2	4494.3	4420.4	4325.7	4053.1	3953.8	3251.8
42.5°	4942.3	5032.4	5094.7	5073.9	4875.3	4702.1	4614.4	4535.8	4295.6	4198.6	3468.8
45°	4748.3	4750.6	4882.3	4995.4	4958.5	4843.0	4826.8	4771.4	4572.8	4480.4	3713.7
47.5°	4505.8	4487.3	4579.7	4780.6	4884.6	4914.6	5009.3	5032.4	4889.2	4796.8	3963.1
50°	3923.8	3935.4	4235.6	4524.3	4727.5	4921.5	5138.6	5300.3	5214.8	5127.1	4226.4
52.5°	3191.7	3219.4	3563.5	4198.6	4519.7	4852.2	5214.8	5568.2	5547.4	5464.2	4489.6
55°	2558.9	2602.8	2967.7	3655.9	4254.1	4697.5	5247.2	5813.0	5891.5	5815.3	4748.3
57.5°	1956.1	2002.3	2309.5	3016.2	3914.6	4445.8	5224.1	6027.8	6212.5	6164.0	4986.2
60°	1473.5	1519.6	1715.9	2445.7	3489.6	4164.0	5108.6	6168.6	6501.2	6450.4	5159.4
62.5°	1055.4	1092.4	1237.9	1903.0	2972.3	3829.1	4824.5	6170.9	6665.2	6623.6	5242.5
65°	759.8	759.8	877.6	1358.0	2487.3	3427.3	4395.0	5886.9	6630.5	6619.0	5184.8
67.5°	547.3	552.0	646.7	949.2	1983.8	2940.0	3838.4	5381.1	6362.6	6420.4	4976.9
70°	388.0	399.5	443.4	662.8	1498.9	2321.0	3242.5	4718.3	5880.0	5981.6	4575.1
72.5°	300.2	307.2	337.2	461.9	1094.7	1725.2	2584.3	3979.2	5235.6	5351.1	4027.7
75°	230.9	237.9	261.0	339.5	785.2	1210.2	1836.0	3087.8	4221.7	4427.3	3235.6
77.5°	168.6	177.8	194.0	247.1	457.3	769.1	1113.2	1736.7	2330.3	2427.3	1695.2
80°	78.5	90.1	113.2	159.4	247.1	362.6	394.9	669.8	1120.1	1170.9	919.2
82.5°	43.9	55.4	64.7	97.0	124.7	129.3	134.0	168.6	422.6	466.5	385.7
85°	20.8	27.7	30.0	41.6	41.6	37.0	43.9	32.3	69.3	83.1	80.8
87.5°	0.0	2.3	4.6	11.5	9.2	6.9	6.9	6.9	6.9	9.2	6.9
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°	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9	2006.9
2.5°	2020.8	1990.8	1921.5	1861.4	1822.2	1787.5	1741.4	1720.6	1683.6	1690.5	1669.8
5°	2032.3	1976.9	1854.5	1741.4	1658.2	1584.3	1503.5	1457.3	1406.5	1401.9	1385.7
7.5°	2039.3	1953.8	1778.3	1618.9	1491.9	1378.8	1270.2	1210.2	1147.8	1134.0	1120.1
10°	2032.3	1919.2	1699.8	1491.9	1323.3	1182.5	1060.1	983.8	919.2	903.0	889.2
12.5°	2039.3	1900.7	1625.9	1374.1	1173.2	1013.9	875.3	796.8	736.7	720.6	711.3
15°	2055.4	1889.2	1563.5	1267.9	1039.3	861.4	725.2	658.2	609.7	593.5	588.9
17.5°	2069.3	1877.6	1496.5	1164.0	905.3	727.5	609.7	554.3	512.7	496.5	491.9
20°	2087.8	1861.4	1429.6	1064.7	787.5	621.3	517.3	468.8	436.5	424.9	422.6
22.5°	2103.9	1849.9	1367.2	965.4	679.0	535.8	448.0	408.8	385.7	374.1	374.1
25°	2145.5	1854.5	1314.1	873.0	598.2	468.8	394.9	364.9	346.4	339.5	339.5
27.5°	2194.0	1873.0	1272.5	794.5	528.9	418.0	358.0	332.6	323.3	314.1	316.4
30°	2263.3	1909.9	1244.8	729.8	478.1	378.8	327.9	309.5	300.2	297.9	297.9
32.5°	2351.1	1970.0	1242.5	688.2	441.1	348.7	307.2	291.0	286.4	284.1	284.1
35°	2455.0	2023.1	1228.6	669.8	418.0	327.9	291.0	279.4	277.1	277.1	277.1
37.5°	2579.7	2110.9	1219.4	644.3	406.5	316.4	279.4	270.2	270.2	270.2	270.2
40°	2709.0	2182.5	1205.6	621.3	401.9	309.5	272.5	261.0	261.0	261.0	261.0
42.5°	2863.8	2286.4	1200.9	609.7	394.9	304.9	263.3	249.4	251.7	251.7	254.0
45°	3050.8	2404.2	1198.6	598.2	392.6	300.2	254.0	237.9	240.2	237.9	237.9
47.5°	3240.2	2540.4	1205.6	591.2	390.3	295.6	247.1	226.3	226.3	224.0	224.0
50°	3438.8	2665.1	1210.2	584.3	385.7	286.4	235.6	217.1	212.5	207.9	210.2
52.5°	3625.9	2780.6	1212.5	572.8	371.8	272.5	226.3	205.5	198.6	191.7	194.0
55°	3813.0	2891.5	1217.1	558.9	353.4	258.7	214.8	194.0	184.8	175.5	175.5
57.5°	3981.6	2988.5	1205.6	524.3	332.6	244.8	203.2	180.1	166.3	157.0	157.0
60°	4097.0	3057.8	1170.9	473.4	304.9	228.6	191.7	166.3	150.1	143.2	143.2
62.5°	4152.5	3069.3	1108.6	390.3	270.2	212.5	177.8	152.4	138.6	134.0	134.0
65°	4099.3	3018.5	1011.6	293.3	233.3	194.0	164.0	140.9	127.0	115.5	115.5
67.5°	3914.6	2875.3	877.6	221.7	198.6	175.5	150.1	129.3	113.2	103.9	103.9
70°	3542.8	2577.4	679.0	177.8	168.6	152.4	136.3	115.5	101.6	90.1	90.1
72.5°	3055.4	2184.8	478.1	143.2	143.2	129.3	115.5	101.6	87.8	78.5	78.5
75°	2344.1	1616.6	321.0	115.5	117.8	108.5	94.7	83.1	73.9	67.0	67.0
77.5°	1279.5	799.1	196.3	85.5	87.8	83.1	73.9	67.0	62.4	55.4	55.4
80°	621.3	351.0	113.2	60.0	62.4	60.0	55.4	48.5	48.5	43.9	43.9
82.5°	261.0	131.6	60.0	41.6	41.6	37.0	34.6	34.6	34.6	32.3	32.3
85°	64.7	25.4	25.4	23.1	23.1	23.1	20.8	20.8	20.8	16.2	18.5
87.5°	9.2	9.2	9.2	9.2	9.2	9.2	6.9	2.3	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)