

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: P836275

Luminaire Tested: **ARCH3-160-740-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-740-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23408 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

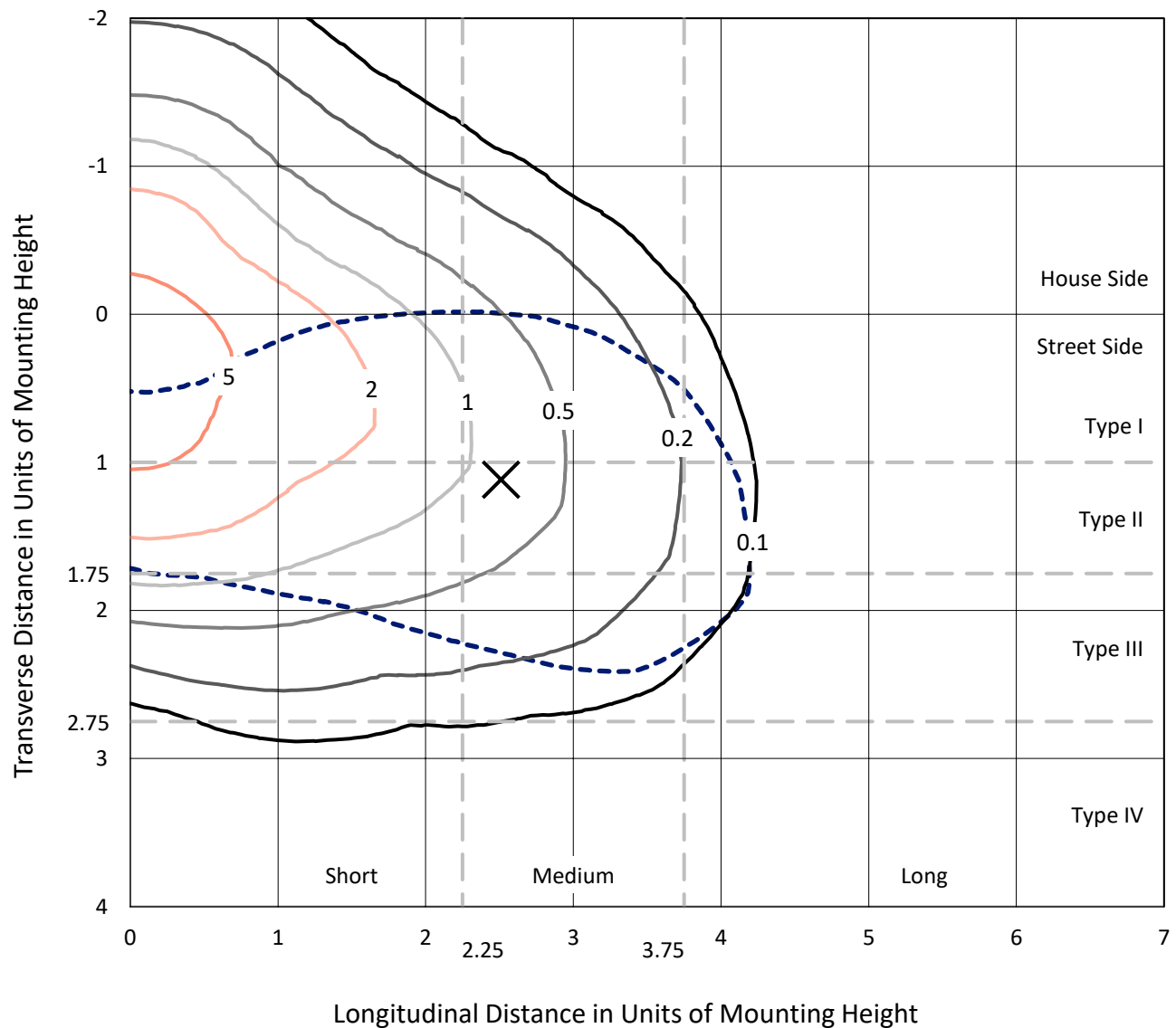
Input Watts (W): 161
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

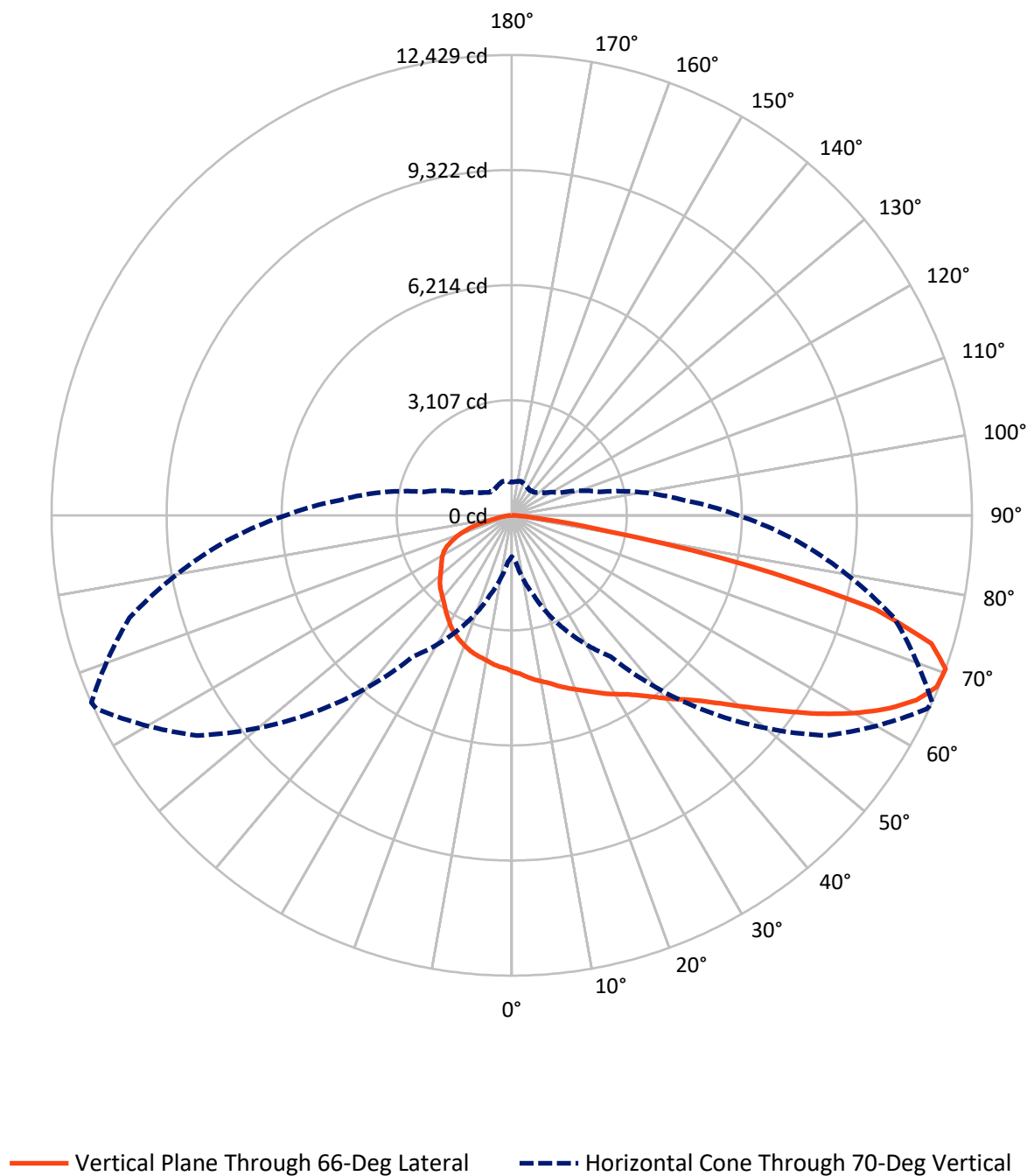
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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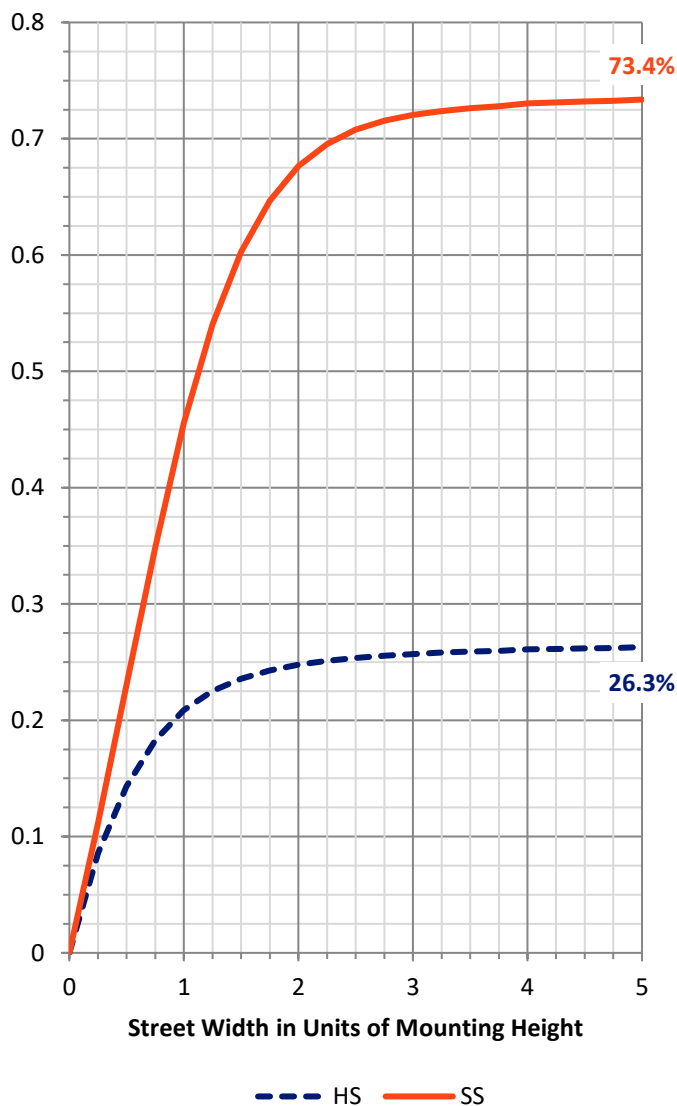
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6202.6	0.0	6202.6
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	17205.4	0.0	17205.4
	% Fixture	73.5	0.0	73.5
Total	Lumens	23408.0	0.0	23408.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.9	1.7
10°-20°	1217.7	5.2
20°-30°	2041.2	8.7
30°-40°	3056.4	13.1
40°-50°	4086.4	17.5
50°-60°	4771.0	20.4
60°-70°	4744.0	20.3
70°-80°	2808.5	12.0
80°-90°	276.8	1.2
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°	23408.0	100.0
0°-180°	23408.0	100.0

Coefficient of Utilization



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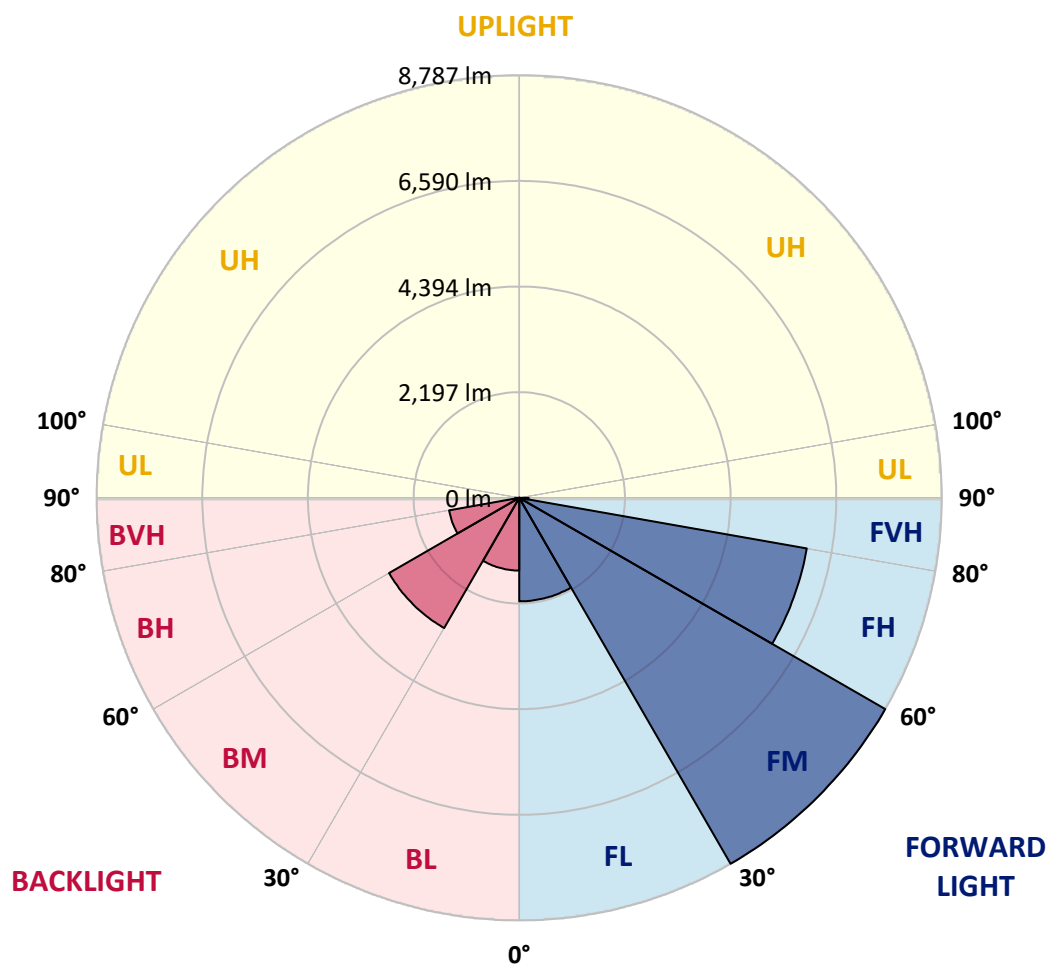
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2152.9	9.2			
FM	(30°-60°)	8787.0	37.5			
FH	(60°-80°)	6070.9	25.9			G3/7500
FVH	(80°-90°)	194.5	0.8			G2/225
BL	(0°-30°)	1511.9	6.5	B3/2500		
BM	(30°-60°)	3126.7	13.4	B3/5000		
BH	(60°-80°)	1481.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	82.3	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6
2.5°	4379.9	4373.0	4369.6	4355.8	4324.7	4338.5	4307.4	4286.7	4283.3	4235.0	4207.4
5°	4559.4	4556.0	4549.1	4528.3	4480.0	4486.9	4435.2	4397.2	4386.8	4310.9	4252.2
7.5°	4711.3	4704.4	4700.9	4673.3	4621.5	4618.1	4556.0	4500.7	4483.5	4379.9	4290.2
10°	4828.6	4818.3	4825.2	4797.6	4742.3	4732.0	4652.6	4580.1	4562.9	4431.7	4307.4
12.5°	4928.7	4921.8	4932.2	4908.0	4863.1	4852.8	4773.4	4680.2	4659.5	4507.6	4345.4
15°	5039.2	5015.0	5035.7	5025.4	4994.3	4990.8	4918.4	4814.8	4787.2	4604.3	4404.1
17.5°	5097.8	5084.0	5108.2	5111.6	5097.8	5122.0	5053.0	4928.7	4904.6	4694.0	4455.9
20°	5139.3	5118.5	5146.2	5166.9	5177.2	5225.5	5170.3	5049.5	5021.9	4780.3	4504.2
22.5°	5280.8	5235.9	5239.3	5253.2	5260.1	5329.1	5294.6	5177.2	5149.6	4887.3	4562.9
25°	5636.3	5546.5	5487.9	5446.4	5398.1	5456.8	5436.1	5322.2	5298.0	5015.0	4635.3
27.5°	6188.5	6074.6	5957.3	5836.5	5646.6	5622.5	5587.9	5484.4	5456.8	5142.7	4707.8
30°	6816.7	6702.8	6564.7	6371.4	6015.9	5829.5	5750.2	5636.3	5605.2	5256.6	4776.8
32.5°	7441.4	7341.3	7203.2	6968.5	6461.2	6081.5	5912.4	5795.0	5764.0	5380.9	4859.7
35°	7928.0	7865.9	7776.2	7482.8	6903.0	6378.3	6147.1	6005.6	5971.1	5577.6	5011.5
37.5°	8321.5	8276.6	8200.7	7893.5	7223.9	6675.2	6416.3	6254.1	6216.1	5791.6	5173.8
40°	8901.4	8784.0	8721.9	8276.6	7503.5	6944.4	6720.0	6550.9	6509.5	6019.4	5304.9
42.5°	9394.9	9308.6	9232.7	8618.3	7769.3	7175.6	7006.5	6851.2	6796.0	6243.7	5446.4
45°	9477.8	9512.3	9474.3	8787.5	8190.4	7403.4	7296.4	7196.3	7144.6	6547.5	5660.4
47.5°	9481.2	9481.2	9256.9	8884.1	8711.5	7658.8	7607.1	7641.6	7586.4	6934.0	5915.8
50°	9232.7	9277.6	9160.2	8908.3	8849.6	7914.2	7986.7	8173.1	8117.9	7344.7	6192.0
52.5°	8718.4	8866.9	8863.4	8870.3	8649.4	8131.7	8387.1	8811.6	8718.4	7807.2	6485.3
55°	7810.7	8107.5	8373.3	8601.1	8476.8	8262.8	8877.2	9491.6	9394.9	8325.0	6782.2
57.5°	7034.1	7223.9	7555.3	8200.7	8273.2	8376.7	9336.3	10202.6	10116.3	8897.9	7092.8
60°	6147.1	6409.4	6740.7	7658.8	8024.7	8525.2	9840.2	10896.3	10813.5	9477.8	7393.1
62.5°	4783.8	5122.0	5784.7	6827.0	7662.3	8618.3	10237.1	11507.2	11469.3	10026.5	7662.3
65°	3334.1	3634.4	4562.9	5805.4	7085.9	8576.9	10554.6	12052.6	12018.1	10475.2	7852.1
67.5°	1946.6	2295.2	3344.5	4673.3	6067.7	8290.5	10658.2	12373.6	12373.6	10747.9	7903.9
70°	1111.4	1273.6	2205.5	3406.6	4652.6	7500.1	10368.2	12370.1	12428.8	10685.8	7689.9
72.5°	776.6	849.1	1484.1	2291.8	3154.7	6067.7	9608.9	11773.0	11852.4	10099.0	6958.2
75°	604.0	655.8	1045.8	1563.5	1988.1	4121.1	7948.8	9926.5	10137.0	8608.0	5625.9
77.5°	459.0	497.0	610.9	976.8	1273.6	2367.7	5246.2	6509.5	6523.3	5270.4	3016.6
80°	334.8	372.8	407.3	597.1	676.5	1107.9	1981.1	2719.8	2643.8	2550.6	1632.5
82.5°	200.2	238.2	248.5	324.4	331.3	472.9	693.7	876.7	842.2	1121.7	766.2
85°	86.3	120.8	127.7	148.4	141.5	193.3	276.1	231.2	207.1	238.2	165.7
87.5°	20.7	34.5	34.5	38.0	31.1	48.3	51.8	38.0	34.5	41.4	41.4
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°	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6	4224.6
2.5°	4200.5	4190.1	4193.5	4134.9	4117.6	4100.4	4090.0	4083.1	4076.2	4086.6	4096.9
5°	4231.5	4207.4	4179.7	4093.5	4058.9	4021.0	3993.4	3969.2	3958.8	3958.8	3969.2
7.5°	4255.7	4214.3	4155.6	4041.7	3979.6	3927.8	3882.9	3851.9	3834.6	3834.6	3844.9
10°	4259.1	4200.5	4107.3	3969.2	3886.4	3810.4	3758.7	3724.1	3700.0	3700.0	3706.9
12.5°	4279.8	4200.5	4079.6	3914.0	3810.4	3717.2	3655.1	3603.3	3593.0	3593.0	3599.9
15°	4314.3	4217.7	4062.4	3865.7	3741.4	3634.4	3565.4	3510.2	3489.4	3503.3	3506.7
17.5°	4345.4	4228.1	4031.3	3803.5	3655.1	3537.8	3461.8	3413.5	3385.9	3417.0	3417.0
20°	4366.1	4228.1	3986.5	3724.1	3561.9	3430.8	3358.3	3299.6	3278.9	3316.9	3320.3
22.5°	4397.2	4224.6	3938.1	3644.8	3461.8	3323.8	3251.3	3206.4	3196.1	3237.5	3251.3
25°	4431.7	4231.5	3886.4	3555.0	3351.4	3216.8	3161.6	3140.8	3147.7	3199.5	3216.8
27.5°	4469.7	4245.3	3834.6	3454.9	3230.6	3109.8	3078.7	3089.1	3116.7	3182.3	3203.0
30°	4504.2	4248.8	3762.1	3337.6	3092.5	2978.6	2992.4	3037.3	3078.7	3144.3	3168.5
32.5°	4549.1	4252.2	3686.2	3209.9	2944.1	2861.3	2923.4	2995.9	3037.3	3099.4	3127.0
35°	4659.5	4310.9	3627.5	3085.6	2806.1	2761.2	2864.7	2957.9	2982.1	3037.3	3061.5
37.5°	4787.2	4407.5	3596.4	2957.9	2671.4	2661.1	2792.2	2885.4	2892.3	2926.9	2951.0
40°	4866.6	4449.0	3561.9	2850.9	2550.6	2557.5	2692.2	2764.6	2750.8	2775.0	2792.2
42.5°	4946.0	4462.8	3489.4	2761.2	2436.7	2443.6	2547.2	2599.0	2605.9	2657.6	2681.8
45°	5080.6	4500.7	3410.1	2678.3	2333.2	2309.0	2371.2	2440.2	2529.9	2630.0	2657.6
47.5°	5260.1	4580.1	3327.2	2578.3	2233.1	2153.7	2177.9	2298.7	2391.9	2485.1	2502.3
50°	5443.0	4659.5	3251.3	2457.5	2133.0	1988.1	1998.4	2108.9	2184.8	2257.3	2267.6
52.5°	5622.5	4728.5	3185.7	2343.6	2019.1	1791.3	1832.7	1946.6	1998.4	2032.9	2043.3
55°	5801.9	4787.2	3127.0	2246.9	1888.0	1636.0	1674.0	1781.0	1832.7	1850.0	1856.9
57.5°	5988.3	4856.2	3082.2	2164.1	1739.5	1497.9	1522.1	1598.0	1646.4	1667.1	1660.2
60°	6143.6	4914.9	3058.0	2077.8	1591.1	1370.2	1363.3	1432.4	1501.4	1522.1	1515.2
62.5°	6264.4	4952.9	3020.0	1967.3	1460.0	1242.5	1208.0	1297.8	1370.2	1384.0	1394.4
65°	6330.0	4956.3	2926.9	1825.8	1325.4	1104.5	1080.3	1170.1	1214.9	1228.7	1228.7
67.5°	6319.7	4901.1	2743.9	1636.0	1201.1	980.2	959.5	1014.7	1080.3	1090.7	1080.3
70°	6105.7	4673.3	2450.6	1435.8	1052.7	869.8	831.8	887.0	949.2	911.2	893.9
72.5°	5498.2	4083.1	2019.1	1214.9	887.0	731.7	714.5	769.7	773.1	780.0	762.8
75°	4338.5	3040.8	1511.7	945.7	717.9	614.4	610.9	600.6	614.4	642.0	621.3
77.5°	2278.0	1518.7	818.0	579.8	521.2	493.6	469.4	465.9	507.4	524.6	503.9
80°	1235.6	852.5	469.4	348.6	317.5	321.0	352.1	345.1	390.0	400.4	383.1
82.5°	538.4	403.8	231.2	210.5	210.5	207.1	217.4	241.6	289.9	289.9	231.2
85°	117.4	100.1	89.7	103.5	117.4	117.4	117.4	117.4	82.8	44.9	31.1
87.5°	38.0	38.0	38.0	41.4	44.9	44.9	38.0	27.6	17.3	3.5	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)