

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: P836282

Luminaire Tested: **ARCH3-160-750-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836282
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23552 lumens
Efficiency: N/A
Efficacy: 146.3 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): 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



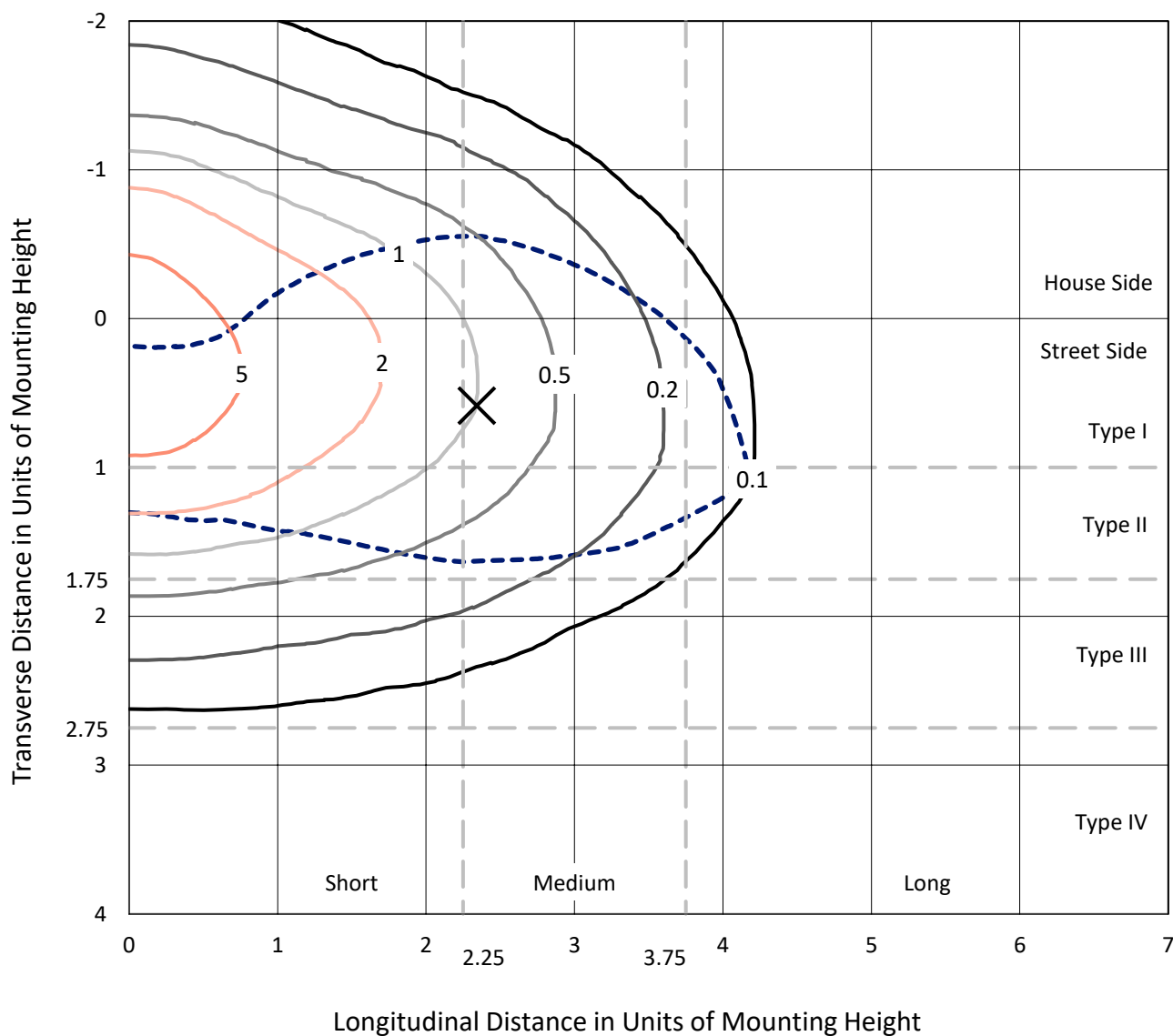
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

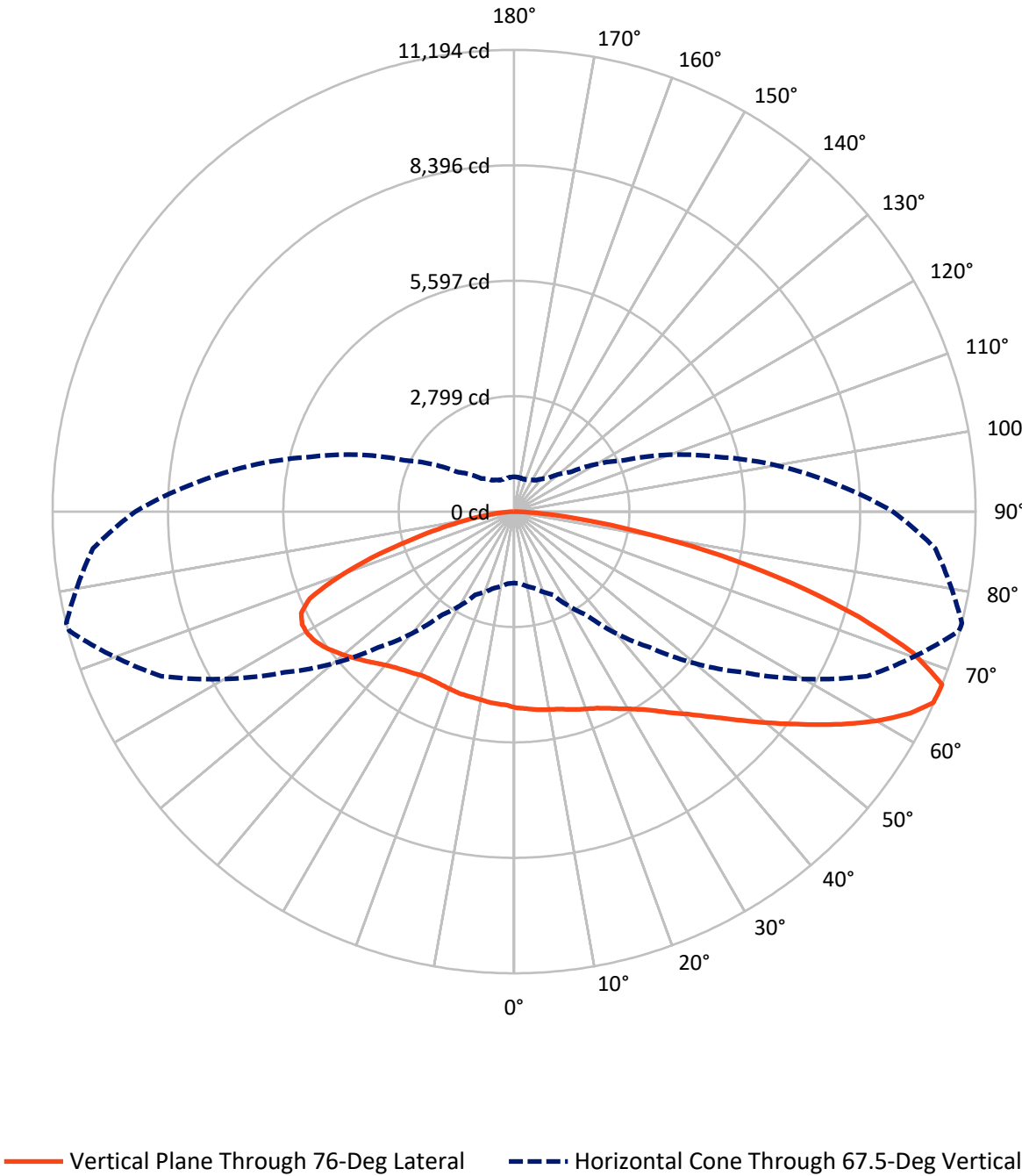


Based on 25 foot mounting height. Maximum calculated value = 8.6 fc

Type II - Medium - N/A

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Luminous Intensity Polar Plot



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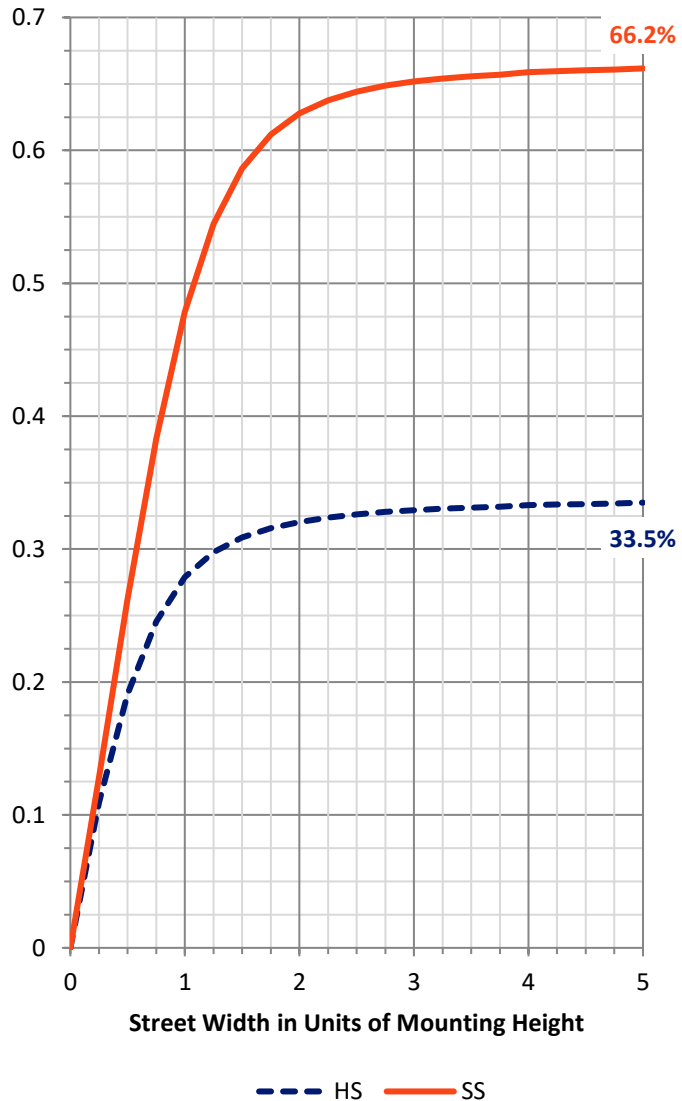
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7958.3	0.0	7958.3
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	15593.7	0.0	15593.7
	% Fixture	66.2	0.0	66.2
Total	Lumens	23552.0	0.0	23552.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	458.7	1.9
10°-20°	1402.5	6.0
20°-30°	2382.9	10.1
30°-40°	3390.5	14.4
40°-50°	4282.0	18.2
50°-60°	4636.1	19.7
60°-70°	4312.1	18.3
70°-80°	2316.0	9.8
80°-90°	371.1	1.6
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°	23552.0	100.0
0°-180°	23552.0	100.0

Coefficient of Utilization



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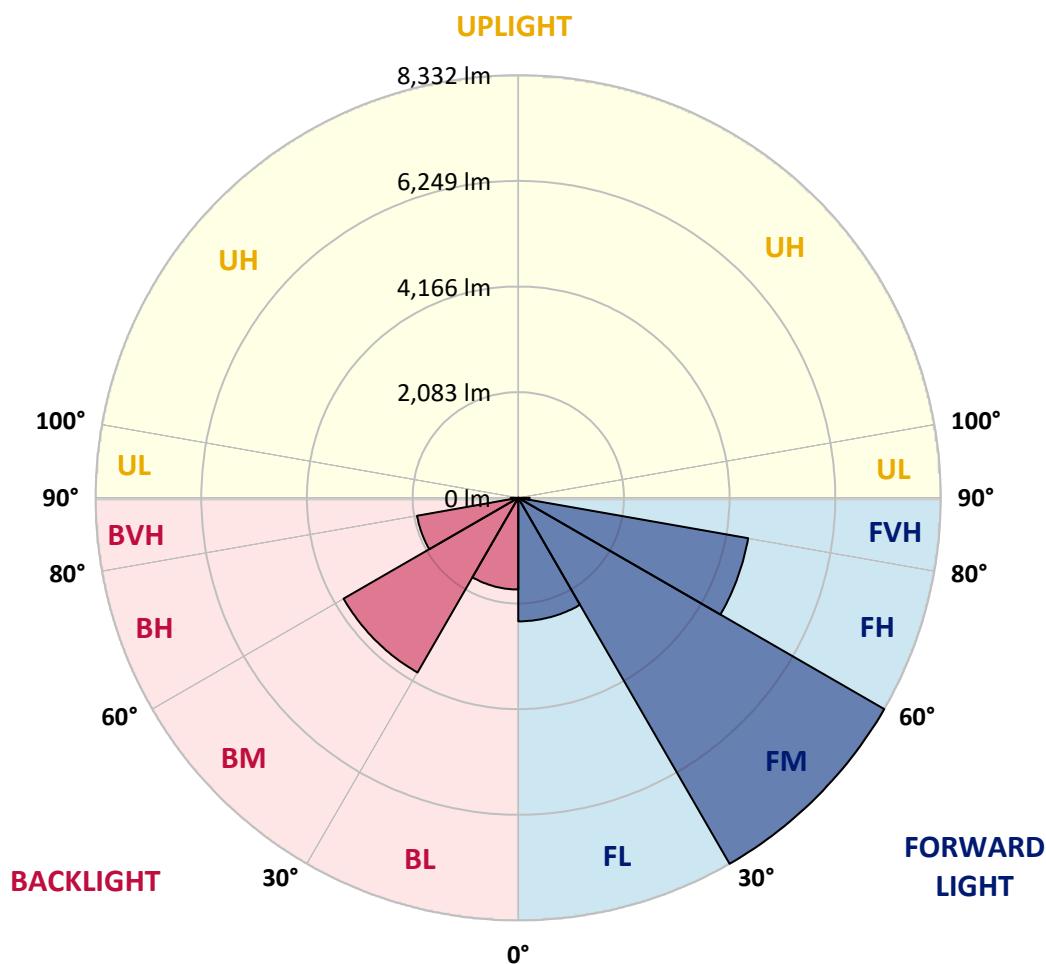
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2435.5	10.3			
FM	(30°-60°)	8331.8	35.4			
FH	(60°-80°)	4601.8	19.5			G2/5000
FVH	(80°-90°)	224.5	1.0			G2/225
BL	(0°-30°)	1808.6	7.7	B3/2500		
BM	(30°-60°)	3976.9	16.9	B3/5000		
BH	(60°-80°)	2026.3	8.6	B3/2500		G3/2500
BVH	(80°-90°)	146.6	0.6			G2/225
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°	76°	85°
0°	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5
2.5°	4901.7	4893.0	4858.0	4862.4	4862.4	4858.0	4805.6	4783.7	4783.7	4779.3	4731.2
5°	5076.7	5063.5	5024.2	5015.4	4997.9	4976.1	4893.0	4844.9	4823.0	4818.7	4753.1
7.5°	5282.2	5264.7	5216.6	5190.3	5146.6	5089.8	4984.8	4910.5	4858.0	4853.7	4761.8
10°	5487.7	5470.2	5413.4	5365.3	5304.0	5212.2	5076.7	4967.3	4884.3	4875.5	4766.2
12.5°	5732.6	5715.1	5645.1	5583.9	5492.1	5369.6	5190.3	5041.7	4928.0	4914.9	4779.3
15°	5990.5	5964.3	5894.3	5824.4	5710.7	5553.3	5339.0	5142.2	4997.9	4976.1	4818.7
17.5°	6204.8	6169.8	6113.0	6043.0	5916.2	5732.6	5487.7	5242.8	5063.5	5046.0	4858.0
20°	6388.5	6362.2	6301.0	6235.4	6099.9	5898.7	5627.6	5343.4	5124.8	5102.9	4888.6
22.5°	6563.4	6528.4	6493.4	6445.3	6296.6	6073.6	5789.4	5465.8	5203.5	5177.2	4928.0
25°	6764.5	6725.1	6712.0	6685.8	6510.9	6283.5	5986.2	5618.9	5312.8	5282.2	4997.9
27.5°	7013.7	6970.0	6943.8	6943.8	6733.9	6497.8	6196.1	5798.1	5439.6	5413.4	5085.4
30°	7276.1	7223.6	7184.3	7184.3	6948.2	6712.0	6401.6	5977.4	5583.9	5553.3	5199.1
32.5°	7507.9	7455.4	7411.7	7407.3	7162.4	6926.3	6615.8	6174.2	5758.8	5719.4	5339.0
35°	7687.1	7639.0	7599.7	7608.4	7376.7	7144.9	6856.3	6436.6	5977.4	5933.7	5522.7
37.5°	7796.4	7779.0	7757.1	7787.7	7573.4	7354.8	7105.6	6690.2	6226.7	6187.3	5750.0
40°	7853.3	7840.2	7927.6	7967.0	7739.6	7542.8	7354.8	6952.5	6497.8	6454.0	6012.4
42.5°	7936.4	8045.7	8080.7	8071.9	7862.0	7687.1	7582.2	7236.7	6817.0	6777.6	6327.2
45°	7639.0	7612.8	7805.2	7910.1	7870.8	7779.0	7796.4	7577.8	7188.6	7149.3	6690.2
47.5°	7241.1	7206.1	7315.5	7573.4	7726.5	7813.9	7988.8	7932.0	7617.2	7582.2	7114.3
50°	6401.6	6449.7	6856.3	7201.8	7503.5	7805.2	8150.6	8312.4	8089.4	8054.4	7569.1
52.5°	5470.2	5518.3	5942.4	6738.3	7232.4	7739.6	8268.7	8692.8	8601.0	8561.7	8054.4
55°	4792.4	4897.4	5378.4	5955.6	6847.6	7534.1	8338.7	9082.0	9152.0	9117.0	8583.5
57.5°	4119.0	4197.8	4560.7	5072.3	6322.9	7175.5	8334.3	9444.9	9729.2	9694.2	9121.4
60°	3327.6	3428.2	3716.8	4267.7	5623.2	6747.0	8211.9	9729.2	10284.5	10258.3	9641.7
62.5°	2785.4	2816.0	3021.5	3498.1	4722.5	6204.8	7936.4	9882.2	10787.3	10769.9	10109.6
65°	2243.2	2247.5	2435.6	2833.5	3852.3	5531.4	7468.5	9825.4	11167.8	11176.5	10446.3
67.5°	1731.6	1753.4	1924.0	2225.7	3060.9	4656.9	6799.5	9440.6	11172.1	11194.0	10253.9
70°	1198.1	1215.6	1473.6	1766.6	2365.6	3712.4	5894.3	8421.7	10253.9	10271.4	9191.3
72.5°	843.9	852.7	1128.1	1412.4	1849.6	2798.5	4447.0	6965.6	8740.9	8754.1	7730.9
75°	629.7	638.4	795.8	1071.3	1416.7	1937.1	3039.0	5334.6	6983.1	6983.1	6104.2
77.5°	446.0	450.4	516.0	739.0	944.5	1307.4	1827.8	3493.8	5124.8	5133.5	4447.0
80°	301.7	306.1	336.7	498.5	590.3	708.4	992.6	1832.1	3231.4	3244.5	2824.7
82.5°	157.4	166.2	188.0	253.6	297.3	393.5	511.6	931.4	1788.4	1823.4	1696.6
85°	61.2	61.2	70.0	83.1	109.3	153.0	236.1	354.2	808.9	835.2	747.7
87.5°	21.9	21.9	26.2	26.2	30.6	35.0	39.4	52.5	91.8	91.8	87.5
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°	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5	4757.5
2.5°	4713.7	4713.7	4691.9	4700.6	4696.2	4687.5	4678.7	4691.9	4678.7	4648.1	4643.8
5°	4722.5	4713.7	4678.7	4674.4	4661.3	4643.8	4621.9	4630.6	4608.8	4582.5	4578.2
7.5°	4726.8	4709.4	4661.3	4643.8	4617.5	4582.5	4547.6	4547.6	4517.0	4490.7	4486.3
10°	4718.1	4696.2	4630.6	4595.7	4547.6	4495.1	4447.0	4433.9	4398.9	4368.3	4368.3
12.5°	4722.5	4691.9	4608.8	4551.9	4486.3	4420.8	4359.5	4342.0	4311.4	4280.8	4276.5
15°	4748.7	4705.0	4600.0	4525.7	4429.5	4355.2	4289.6	4276.5	4250.2	4228.4	4228.4
17.5°	4774.9	4718.1	4586.9	4482.0	4363.9	4280.8	4219.6	4219.6	4202.1	4189.0	4189.0
20°	4788.1	4722.5	4560.7	4420.8	4285.2	4197.8	4140.9	4149.7	4145.3	4140.9	4140.9
22.5°	4818.7	4731.2	4538.8	4363.9	4202.1	4110.3	4057.8	4070.9	4066.6	4066.6	4070.9
25°	4866.8	4753.1	4521.3	4311.4	4123.4	4022.8	3966.0	3974.7	3974.7	3974.7	3974.7
27.5°	4932.4	4796.8	4517.0	4263.3	4044.7	3931.0	3861.1	3861.1	3843.6	3847.9	3852.3
30°	5032.9	4879.9	4525.7	4219.6	3961.6	3817.3	3734.3	3721.1	3716.8	3725.5	3729.9
32.5°	5155.4	4993.6	4578.2	4189.0	3874.2	3690.5	3585.6	3581.2	3568.1	3568.1	3568.1
35°	5308.4	5102.9	4626.3	4184.6	3786.7	3555.0	3441.3	3428.2	3397.6	3384.4	3384.4
37.5°	5505.2	5273.4	4683.1	4154.0	3712.4	3423.8	3288.2	3244.5	3209.5	3205.2	3205.2
40°	5745.7	5465.8	4766.2	4119.0	3633.7	3288.2	3109.0	3034.6	3039.0	3056.5	3056.5
42.5°	6029.9	5701.9	4871.1	4101.6	3520.0	3148.3	2899.1	2811.6	2842.2	2859.7	2864.1
45°	6362.2	5981.8	4989.2	4079.7	3415.0	2990.9	2676.1	2566.8	2579.9	2584.2	2588.6
47.5°	6747.0	6292.3	5111.6	4062.2	3297.0	2794.1	2431.2	2286.9	2282.5	2256.3	2265.0
50°	7149.3	6620.2	5238.4	4031.6	3152.7	2562.4	2173.2	2002.7	1967.7	1928.3	1932.7
52.5°	7577.8	6956.9	5356.5	3983.5	2973.4	2326.3	1928.3	1744.7	1674.7	1631.0	1639.7
55°	8050.1	7302.3	5470.2	3909.2	2785.4	2090.1	1709.7	1521.7	1434.2	1399.3	1403.6
57.5°	8483.0	7634.7	5553.3	3817.3	2579.9	1875.9	1517.3	1333.7	1276.8	1272.4	1276.8
60°	8902.7	7914.5	5588.3	3690.5	2370.0	1679.1	1338.0	1198.1	1158.8	1180.6	1185.0
62.5°	9256.9	8093.8	5570.8	3520.0	2155.7	1491.1	1193.7	1093.2	1066.9	1110.7	1115.0
65°	9462.4	8150.6	5448.3	3275.1	1924.0	1307.4	1058.2	948.9	935.7	962.0	975.1
67.5°	9191.3	7796.4	5116.0	2938.4	1666.0	1136.9	927.0	839.6	817.7	839.6	839.6
70°	8146.3	6755.8	4328.9	2405.0	1381.8	970.7	804.6	743.4	725.9	743.4	739.0
72.5°	6786.4	5618.9	3410.7	1875.9	1088.8	817.7	699.6	642.8	625.3	607.8	599.1
75°	5264.7	4267.7	2474.9	1377.4	822.1	655.9	585.9	533.5	489.7	507.2	498.5
77.5°	3856.7	2995.3	1753.4	953.2	590.3	507.2	459.1	419.8	389.2	424.1	419.8
80°	2483.7	1937.1	1171.9	638.4	406.7	354.2	336.7	314.8	345.4	450.4	459.1
82.5°	1517.3	1228.7	699.6	415.4	266.7	236.1	218.6	218.6	354.2	389.2	393.5
85°	677.8	651.5	380.4	214.3	148.7	135.6	122.4	157.4	144.3	104.9	109.3
87.5°	109.3	113.7	83.1	74.3	56.8	56.8	43.7	30.6	21.9	13.1	13.1
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)