

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: P836419

Luminaire Tested: **ARCH3-180-740-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836419
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: ARCH3-180-740-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25164 lumens
Efficiency: N/A
Efficacy: 139.4 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): 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

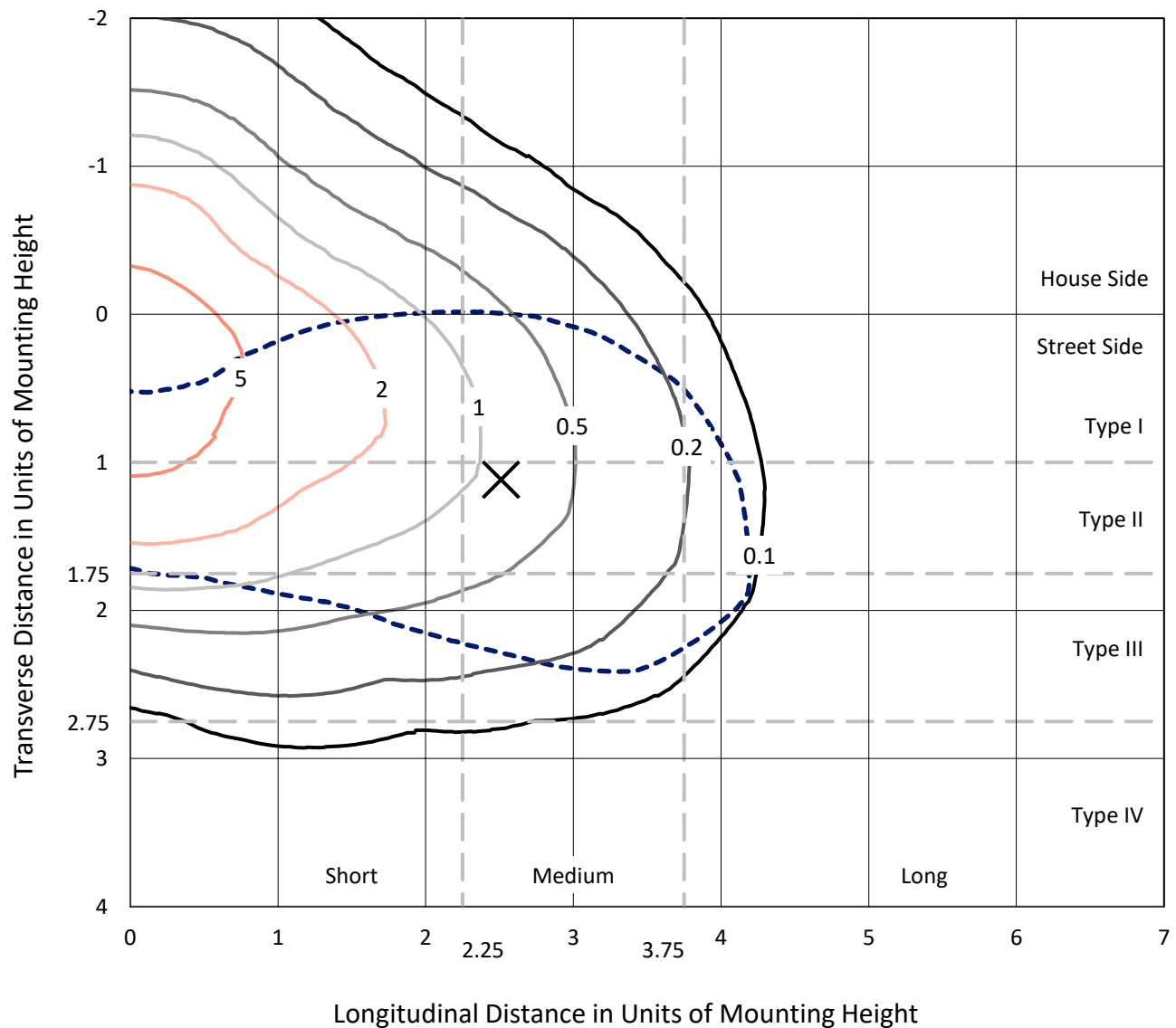


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Iso-Footcandle Lines of Horizontal Illumination

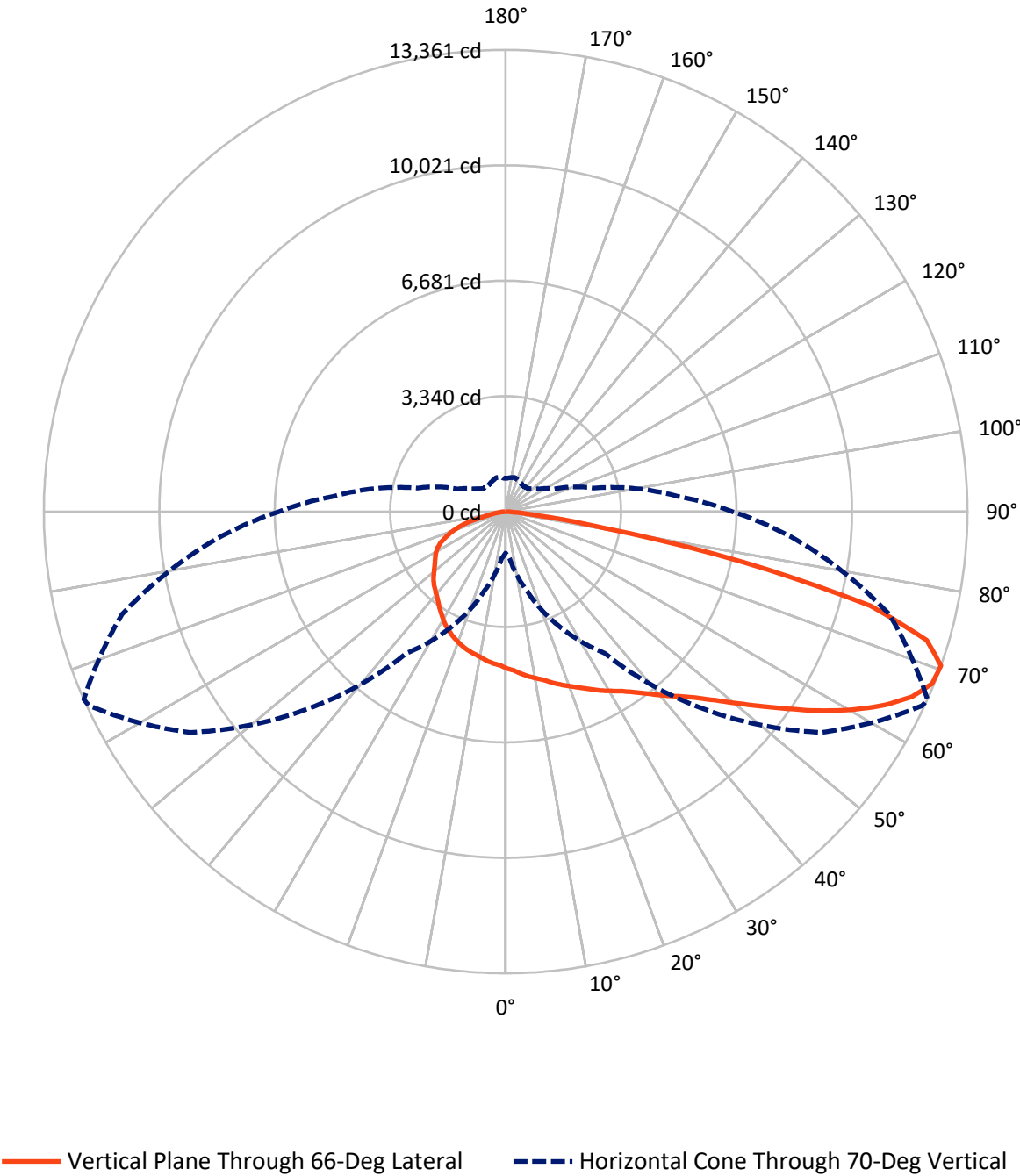
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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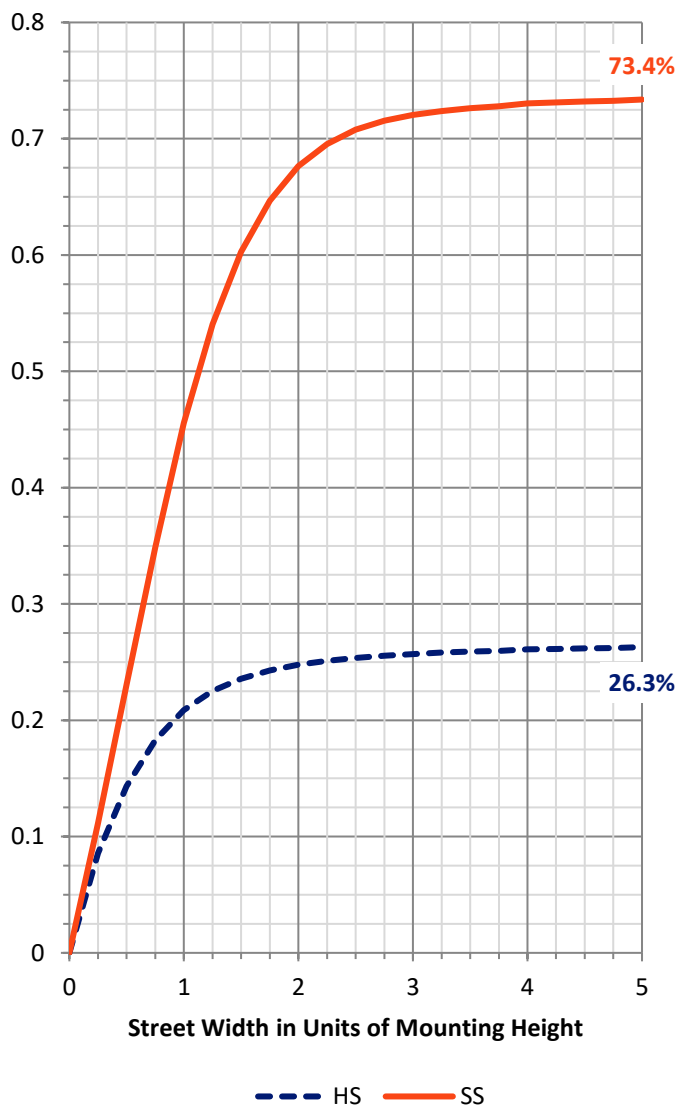
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6667.9	0.0	6667.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	18496.1	0.0	18496.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	25164.0	0.0	25164.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	436.4	1.7
10°-20°	1309.0	5.2
20°-30°	2194.3	8.7
30°-40°	3285.7	13.1
40°-50°	4392.9	17.5
50°-60°	5128.9	20.4
60°-70°	5099.9	20.3
70°-80°	3019.2	12.0
80°-90°	297.6	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°	25164.0	100.0
0°-180°	25164.0	100.0

Coefficient of Utilization



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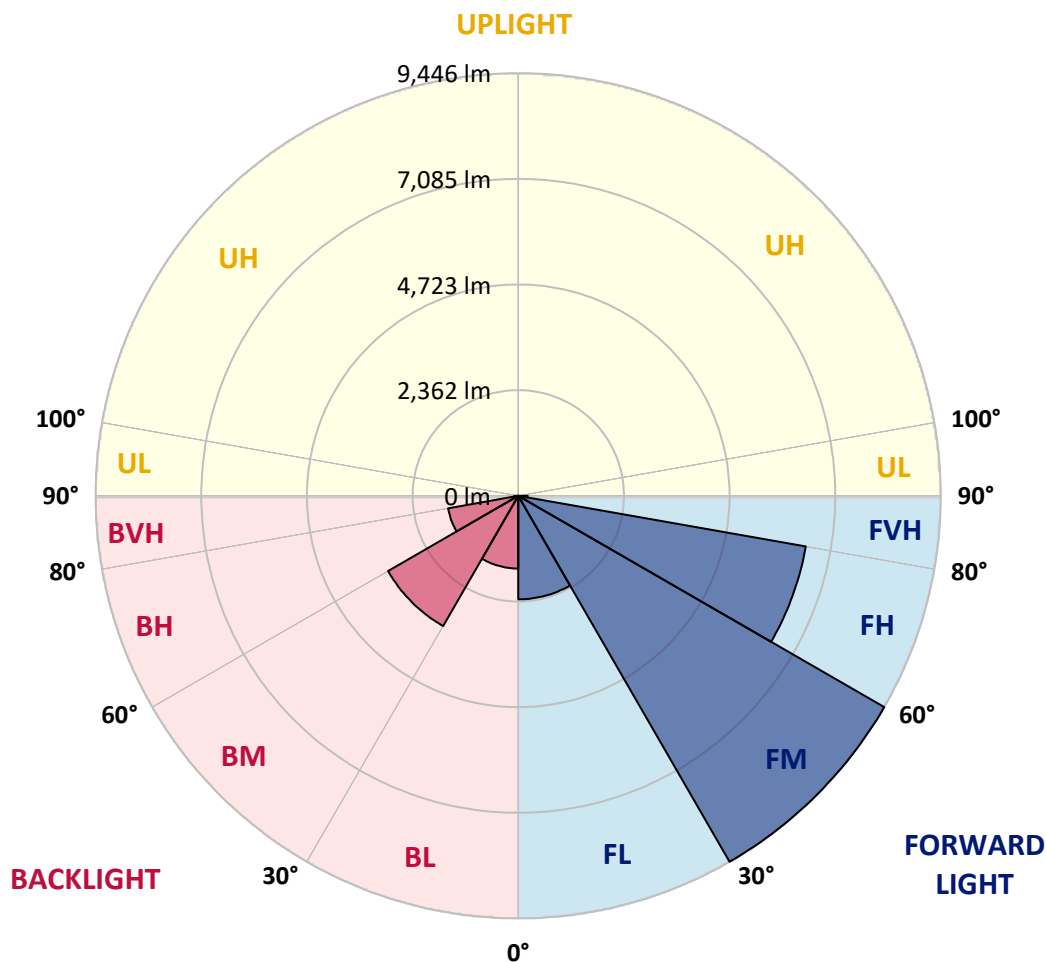
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2314.4	9.2			
FM	(30°-60°)	9446.2	37.5			
FH	(60°-80°)	6526.3	25.9			G3/7500
FVH	(80°-90°)	209.1	0.8			G2/225
BL	(0°-30°)	1625.3	6.5	B3/2500		
BM	(30°-60°)	3361.3	13.4	B3/5000		
BH	(60°-80°)	1592.8	6.3	B3/2500		G3/2500
BVH	(80°-90°)	88.4	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°	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5
2.5°	4708.5	4701.1	4697.4	4682.5	4649.1	4664.0	4630.6	4608.3	4604.6	4552.7	4523.0
5°	4901.4	4897.7	4890.3	4868.0	4816.1	4823.5	4767.9	4727.0	4715.9	4634.3	4571.2
7.5°	5064.7	5057.3	5053.6	5023.9	4968.2	4964.5	4897.7	4838.4	4819.8	4708.5	4612.0
10°	5190.8	5179.7	5187.1	5157.5	5098.1	5087.0	5001.6	4923.7	4905.1	4764.2	4630.6
12.5°	5298.5	5291.0	5302.2	5276.2	5228.0	5216.8	5131.5	5031.3	5009.0	4845.8	4671.4
15°	5417.2	5391.2	5413.5	5402.3	5368.9	5365.2	5287.3	5176.0	5146.3	4949.7	4734.5
17.5°	5480.3	5465.4	5491.4	5495.1	5480.3	5506.2	5432.0	5298.5	5272.5	5046.1	4790.1
20°	5524.8	5502.5	5532.2	5554.5	5565.6	5617.5	5558.2	5428.3	5398.6	5138.9	4842.1
22.5°	5676.9	5628.7	5632.4	5647.2	5654.6	5728.9	5691.8	5565.6	5535.9	5253.9	4905.1
25°	6059.1	5962.6	5899.5	5855.0	5803.1	5866.1	5843.9	5721.4	5695.5	5391.2	4983.1
27.5°	6652.7	6530.3	6404.1	6274.3	6070.2	6044.2	6007.1	5895.8	5866.1	5528.5	5061.0
30°	7328.0	7205.6	7057.2	6849.4	6467.2	6266.9	6181.5	6059.1	6025.7	5650.9	5135.2
32.5°	7999.6	7892.0	7743.6	7491.3	6945.9	6537.7	6355.9	6229.8	6196.4	5784.5	5224.2
35°	8522.8	8456.0	8359.5	8044.1	7420.8	6856.8	6608.2	6456.1	6419.0	5996.0	5387.5
37.5°	8945.8	8897.5	8815.9	8485.7	7765.9	7175.9	6897.6	6723.2	6682.4	6226.1	5561.9
40°	9569.1	9443.0	9376.2	8897.5	8066.4	7465.3	7224.1	7042.3	6997.8	6470.9	5702.9
42.5°	10099.7	10006.9	9925.3	9264.9	8352.1	7713.9	7532.1	7365.1	7305.8	6712.1	5855.0
45°	10188.8	10225.9	10185.0	9446.7	8804.8	7958.8	7843.8	7736.2	7680.5	7038.6	6085.1
47.5°	10192.5	10192.5	9951.3	9550.6	9365.0	8233.4	8177.7	8214.8	8155.5	7454.2	6359.6
50°	9925.3	9973.6	9847.4	9576.5	9513.5	8507.9	8585.9	8786.2	8726.9	7895.7	6656.5
52.5°	9372.5	9532.0	9528.3	9535.7	9298.3	8741.7	9016.3	9472.6	9372.5	8392.9	6971.8
55°	8396.6	8715.7	9001.4	9246.3	9112.7	8882.7	9543.1	10203.6	10099.7	8949.5	7290.9
57.5°	7561.8	7765.9	8122.1	8815.9	8893.8	9005.1	10036.6	10967.9	10875.2	9565.4	7624.9
60°	6608.2	6890.2	7246.4	8233.4	8626.7	9164.7	10578.3	11713.7	11624.7	10188.8	7947.7
62.5°	5142.6	5506.2	6218.6	7339.2	8237.1	9264.9	11005.0	12370.5	12329.7	10778.7	8237.1
65°	3584.2	3907.1	4905.1	6240.9	7617.5	9220.3	11346.4	12956.7	12919.6	11261.1	8441.2
67.5°	2092.7	2467.4	3595.4	5023.9	6522.9	8912.4	11457.7	13301.8	13301.8	11554.2	8496.8
70°	1194.7	1369.1	2370.9	3662.2	5001.6	8062.7	11146.0	13298.1	13361.1	11487.4	8266.8
72.5°	834.8	912.8	1595.5	2463.7	3391.3	6522.9	10329.8	12656.2	12741.5	10856.6	7480.2
75°	649.3	705.0	1124.3	1680.8	2137.2	4430.2	8545.0	10671.1	10897.4	9253.7	6048.0
77.5°	493.5	534.3	656.7	1050.0	1369.1	2545.3	5639.8	6997.8	7012.7	5665.8	3242.9
80°	359.9	400.7	437.8	641.9	727.2	1191.0	2129.8	2923.8	2842.2	2742.0	1755.0
82.5°	215.2	256.0	267.1	348.8	356.2	508.3	745.8	942.4	905.3	1205.9	823.7
85°	92.8	129.9	137.3	159.5	152.1	207.8	296.8	248.6	222.6	256.0	178.1
87.5°	22.3	37.1	37.1	40.8	33.4	51.9	55.7	40.8	37.1	44.5	44.5
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°	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5	4541.5
2.5°	4515.6	4504.4	4508.1	4445.1	4426.5	4408.0	4396.8	4389.4	4382.0	4393.1	4404.2
5°	4548.9	4523.0	4493.3	4400.5	4363.4	4322.6	4292.9	4267.0	4255.8	4255.8	4267.0
7.5°	4574.9	4530.4	4467.3	4344.9	4278.1	4222.4	4174.2	4140.8	4122.3	4122.3	4133.4
10°	4578.6	4515.6	4415.4	4267.0	4177.9	4096.3	4040.6	4003.5	3977.5	3977.5	3985.0
12.5°	4600.9	4515.6	4385.7	4207.6	4096.3	3996.1	3929.3	3873.7	3862.5	3862.5	3869.9
15°	4638.0	4534.1	4367.1	4155.6	4022.1	3907.1	3832.8	3773.5	3751.2	3766.1	3769.8
17.5°	4671.4	4545.2	4333.7	4088.9	3929.3	3803.2	3721.5	3669.6	3639.9	3673.3	3673.3
20°	4693.7	4545.2	4285.5	4003.5	3829.1	3688.1	3610.2	3547.1	3524.9	3565.7	3569.4
22.5°	4727.0	4541.5	4233.6	3918.2	3721.5	3573.1	3495.2	3447.0	3435.8	3480.4	3495.2
25°	4764.2	4548.9	4177.9	3821.7	3602.8	3458.1	3398.7	3376.5	3383.9	3439.5	3458.1
27.5°	4805.0	4563.8	4122.3	3714.1	3472.9	3343.1	3309.7	3320.8	3350.5	3421.0	3443.3
30°	4842.1	4567.5	4044.3	3588.0	3324.5	3202.1	3216.9	3265.2	3309.7	3380.2	3406.1
32.5°	4890.3	4571.2	3962.7	3450.7	3165.0	3075.9	3142.7	3220.6	3265.2	3331.9	3361.6
35°	5009.0	4634.3	3899.6	3317.1	3016.6	2968.3	3079.6	3179.8	3205.8	3265.2	3291.1
37.5°	5146.3	4738.2	3866.2	3179.8	2871.8	2860.7	3001.7	3101.9	3109.3	3146.4	3172.4
40°	5231.7	4782.7	3829.1	3064.8	2742.0	2749.4	2894.1	2972.0	2957.2	2983.2	3001.7
42.5°	5317.0	4797.5	3751.2	2968.3	2619.5	2627.0	2738.3	2793.9	2801.4	2857.0	2883.0
45°	5461.7	4838.4	3665.9	2879.3	2508.2	2482.3	2549.0	2623.3	2719.7	2827.3	2857.0
47.5°	5654.6	4923.7	3576.8	2771.7	2400.6	2315.3	2341.3	2471.1	2571.3	2671.5	2690.0
50°	5851.3	5009.0	3495.2	2641.8	2293.0	2137.2	2148.3	2267.1	2348.7	2426.6	2437.7
52.5°	6044.2	5083.2	3424.7	2519.4	2170.6	1925.7	1970.2	2092.7	2148.3	2185.4	2196.6
55°	6237.2	5146.3	3361.6	2415.5	2029.6	1758.7	1799.5	1914.6	1970.2	1988.8	1996.2
57.5°	6437.5	5220.5	3313.4	2326.4	1870.0	1610.3	1636.3	1717.9	1769.9	1792.1	1784.7
60°	6604.5	5283.6	3287.4	2233.7	1710.5	1473.0	1465.6	1539.8	1614.0	1636.3	1628.9
62.5°	6734.4	5324.4	3246.6	2114.9	1569.5	1335.7	1298.6	1395.1	1473.0	1487.9	1499.0
65°	6804.9	5328.1	3146.4	1962.8	1424.8	1187.3	1161.4	1257.8	1306.1	1320.9	1320.9
67.5°	6793.7	5268.8	2949.8	1758.7	1291.2	1053.8	1031.5	1090.9	1161.4	1172.5	1161.4
70°	6563.7	5023.9	2634.4	1543.5	1131.7	935.0	894.2	953.6	1020.4	979.5	961.0
72.5°	5910.7	4389.4	2170.6	1306.1	953.6	786.6	768.1	827.4	831.1	838.6	820.0
75°	4664.0	3268.9	1625.2	1016.6	771.8	660.5	656.7	645.6	660.5	690.1	667.9
77.5°	2448.9	1632.6	879.4	623.3	560.3	530.6	504.6	500.9	545.4	564.0	541.7
80°	1328.3	916.5	504.6	374.8	341.4	345.1	378.5	371.0	419.3	430.4	411.9
82.5°	578.8	434.1	248.6	226.3	226.3	222.6	233.8	259.7	311.7	311.7	248.6
85°	126.2	107.6	96.5	111.3	126.2	126.2	126.2	126.2	89.0	48.2	33.4
87.5°	40.8	40.8	40.8	44.5	48.2	48.2	40.8	29.7	18.6	3.7	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)