

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: P841049

Luminaire Tested: **ARCH4-120-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841049
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-120-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1000mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21626 lumens
Efficiency: N/A
Efficacy: 177.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

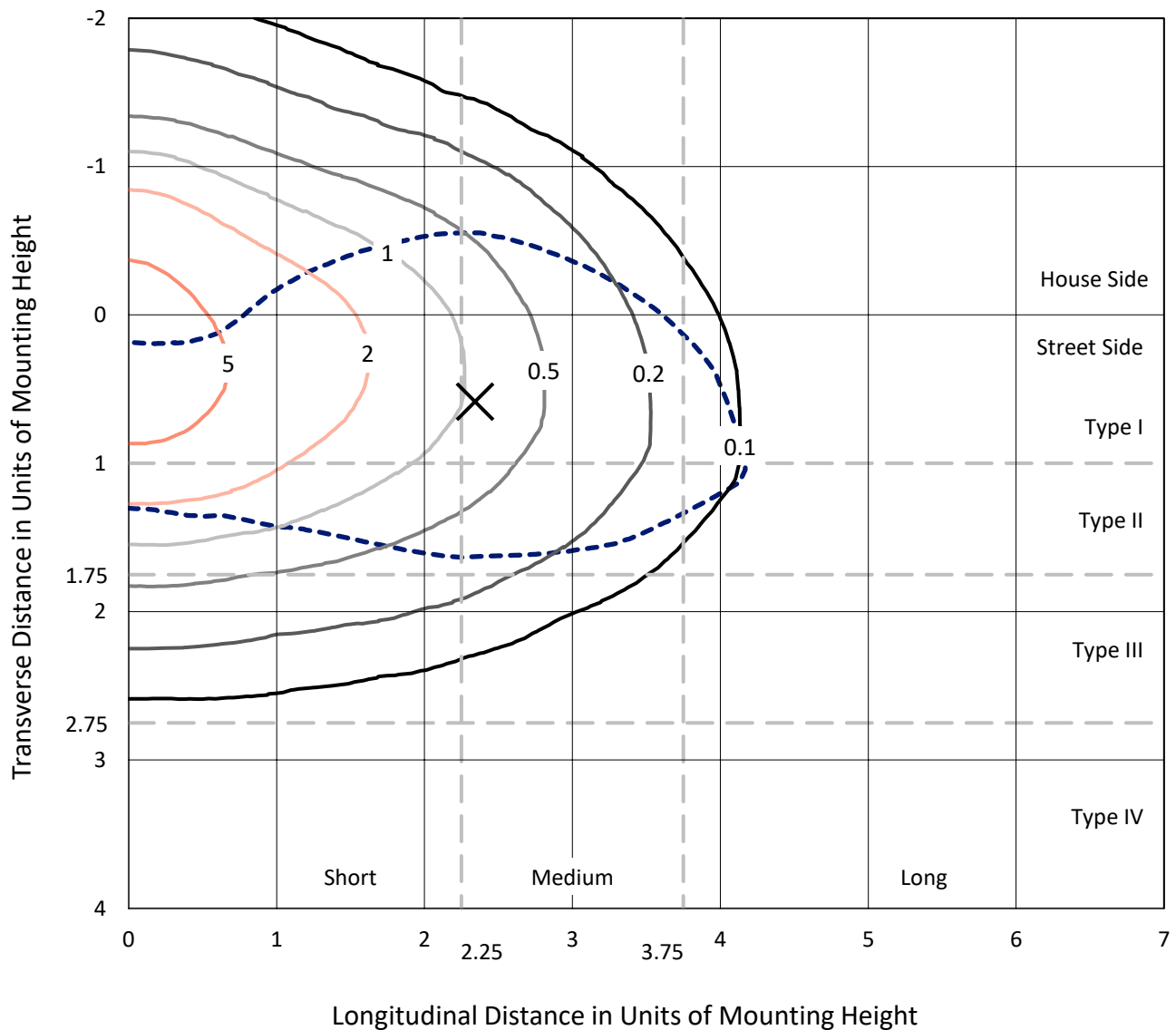
Input Watts (W): 122
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

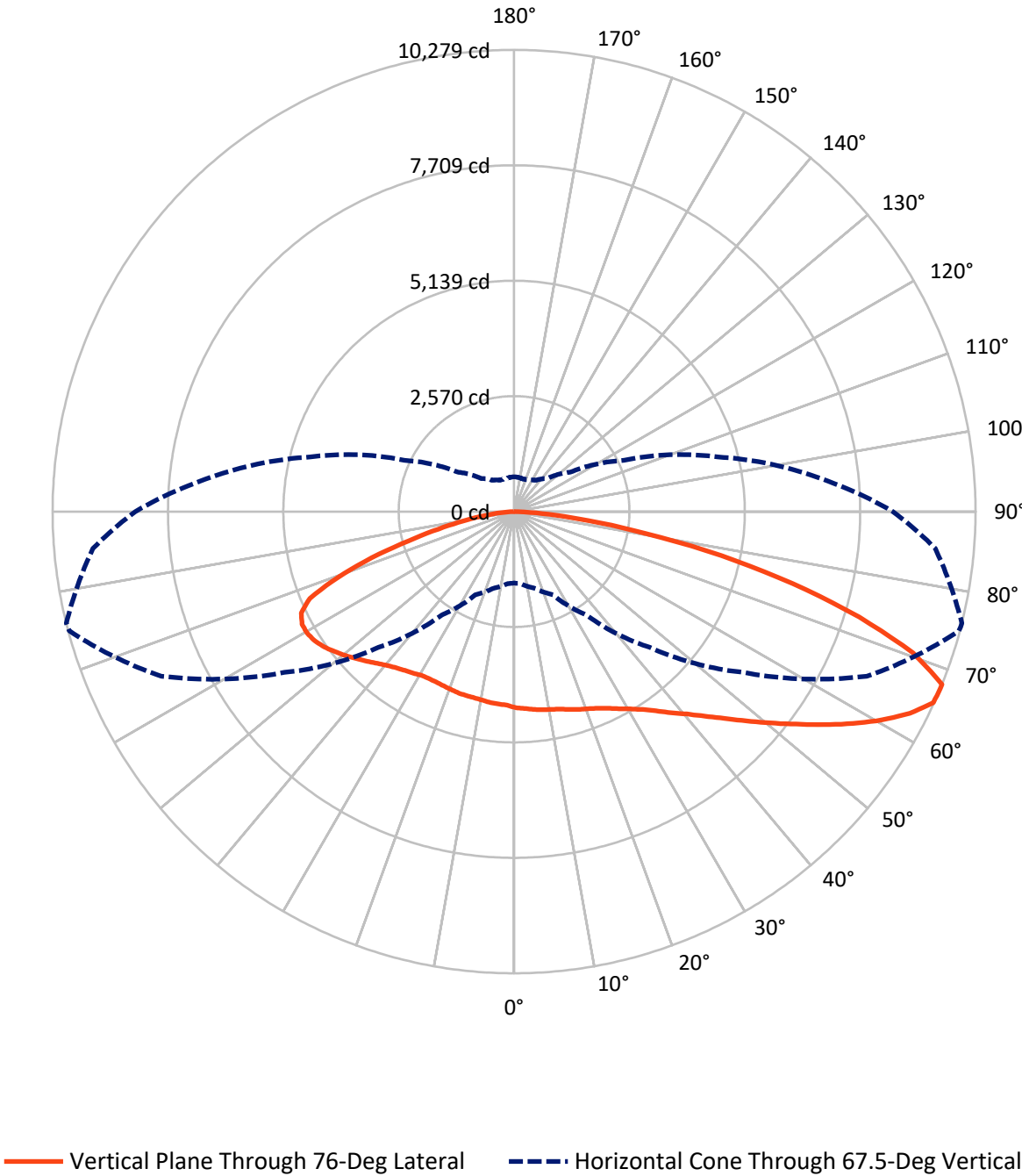
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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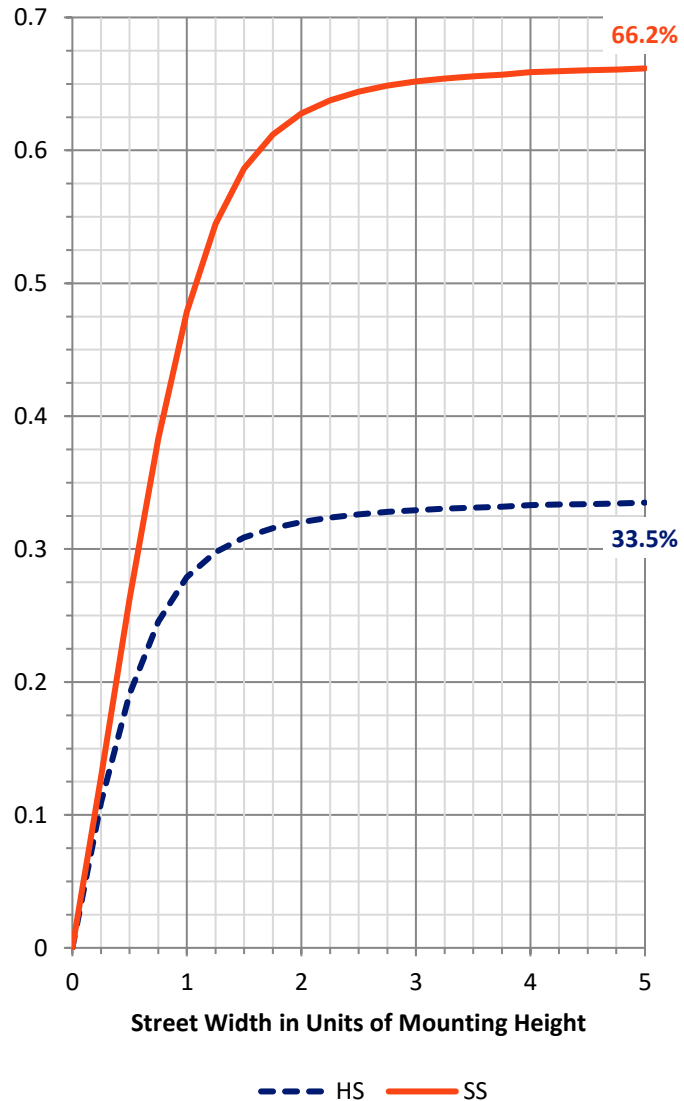
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7307.5	0.0	7307.5
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	14318.5	0.0	14318.5
	% Fixture	66.2	0.0	66.2
Total	Lumens	21626.0	0.0	21626.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.2	1.9
10°-20°	1287.8	6.0
20°-30°	2188.0	10.1
30°-40°	3113.2	14.4
40°-50°	3931.9	18.2
50°-60°	4257.0	19.7
60°-70°	3959.5	18.3
70°-80°	2126.6	9.8
80°-90°	340.8	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°	21626.0	100.0
0°-180°	21626.0	100.0

Coefficient of Utilization



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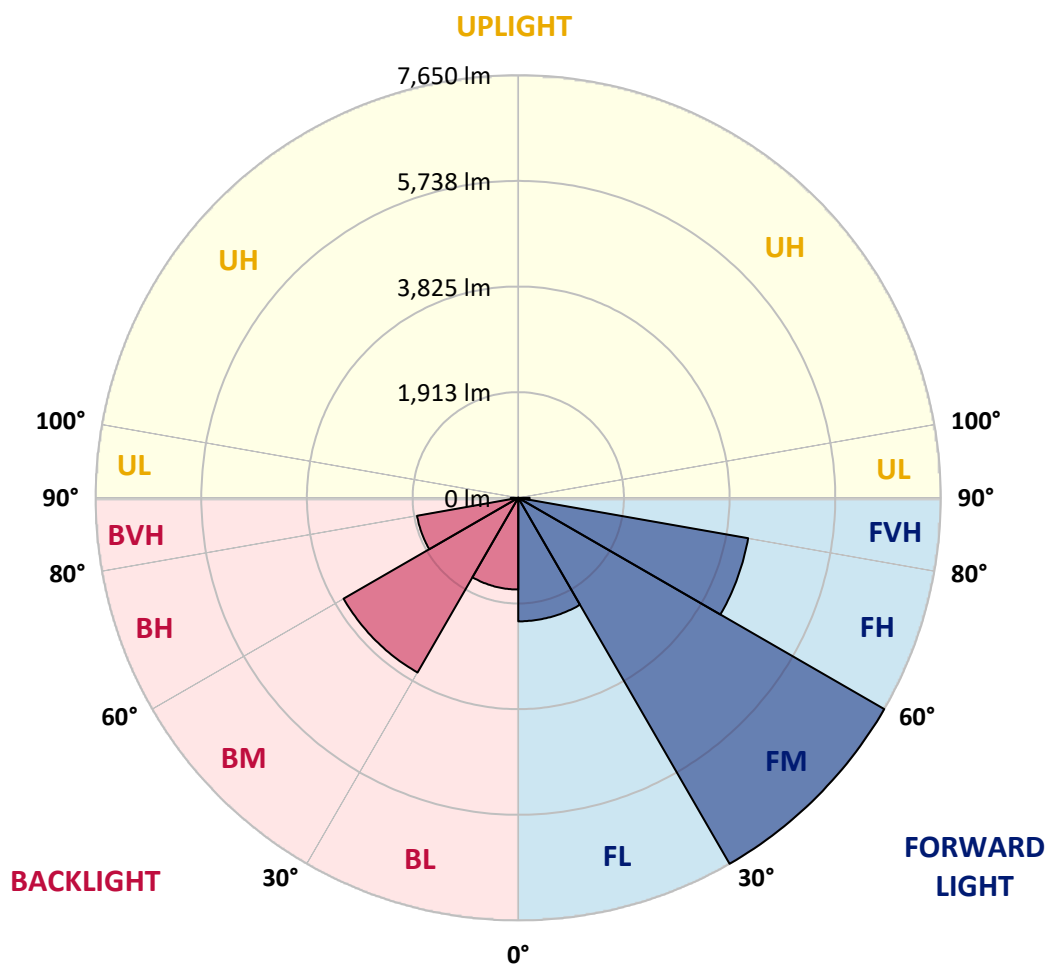
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2236.4	10.3			
FM	(30°-60°)	7650.4	35.4			
FH	(60°-80°)	4225.5	19.5			G2/5000
FVH	(80°-90°)	206.1	1.0			G2/225
BL	(0°-30°)	1660.7	7.7	B3/2500		
BM	(30°-60°)	3651.7	16.9	B3/5000		
BH	(60°-80°)	1860.6	8.6	B3/2500		G3/2500
BVH	(80°-90°)	134.6	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°	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4
2.5°	4500.9	4492.9	4460.8	4464.8	4464.8	4460.8	4412.6	4392.5	4392.5	4388.5	4344.3
5°	4661.5	4649.5	4613.3	4605.3	4589.2	4569.2	4492.9	4448.7	4428.6	4424.6	4364.4
7.5°	4850.2	4834.2	4790.0	4765.9	4725.7	4673.6	4577.2	4508.9	4460.8	4456.7	4372.4
10°	5038.9	5022.9	4970.7	4926.5	4870.3	4786.0	4661.5	4561.1	4484.8	4476.8	4376.4
12.5°	5263.8	5247.7	5183.5	5127.3	5042.9	4930.5	4765.9	4629.4	4525.0	4512.9	4388.5
15°	5500.7	5476.6	5412.3	5348.1	5243.7	5099.1	4902.4	4721.7	4589.2	4569.2	4424.6
17.5°	5697.4	5665.3	5613.1	5548.8	5432.4	5263.8	5038.9	4814.1	4649.5	4633.4	4460.8
20°	5866.0	5841.9	5785.7	5725.5	5601.0	5416.3	5167.4	4906.4	4705.7	4685.6	4488.9
22.5°	6026.6	5994.5	5962.4	5918.2	5781.7	5576.9	5316.0	5018.8	4777.9	4753.9	4525.0
25°	6211.3	6175.2	6163.1	6139.1	5978.5	5769.7	5496.6	5159.4	4878.3	4850.2	4589.2
27.5°	6440.2	6400.0	6375.9	6375.9	6183.2	5966.4	5689.4	5324.0	4994.8	4970.7	4669.5
30°	6681.1	6632.9	6596.8	6596.8	6380.0	6163.1	5878.1	5488.6	5127.3	5099.1	4773.9
32.5°	6893.9	6845.7	6805.6	6801.5	6576.7	6359.9	6074.8	5669.3	5287.9	5251.7	4902.4
35°	7058.5	7014.3	6978.2	6986.2	6773.4	6560.6	6295.6	5910.2	5488.6	5448.5	5071.0
37.5°	7158.9	7142.8	7122.7	7150.9	6954.1	6753.4	6524.5	6143.1	5717.5	5681.3	5279.8
40°	7211.1	7199.0	7279.3	7315.5	7106.7	6926.0	6753.4	6384.0	5966.4	5926.3	5520.7
42.5°	7287.4	7387.7	7419.9	7411.8	7219.1	7058.5	6962.1	6645.0	6259.5	6223.4	5809.8
45°	7014.3	6990.2	7166.9	7263.3	7227.1	7142.8	7158.9	6958.1	6600.8	6564.7	6143.1
47.5°	6649.0	6616.8	6717.2	6954.1	7094.6	7174.9	7335.5	7283.4	6994.3	6962.1	6532.5
50°	5878.1	5922.2	6295.6	6612.8	6889.9	7166.9	7484.1	7632.7	7427.9	7395.8	6950.1
52.5°	5022.9	5067.0	5456.5	6187.2	6640.9	7106.7	7592.5	7982.0	7897.7	7861.5	7395.8
55°	4400.5	4496.9	4938.5	5468.5	6287.6	6918.0	7656.8	8339.3	8403.6	8371.4	7881.6
57.5°	3782.2	3854.5	4187.7	4657.5	5805.8	6588.7	7652.7	8672.6	8933.5	8901.4	8375.5
60°	3055.5	3147.8	3412.8	3918.7	5163.4	6195.3	7540.3	8933.5	9443.5	9419.4	8853.2
62.5°	2557.6	2585.7	2774.4	3212.1	4336.3	5697.4	7287.4	9074.1	9905.2	9889.1	9282.9
65°	2059.7	2063.7	2236.4	2601.8	3537.3	5079.1	6857.8	9021.9	10254.5	10262.5	9592.0
67.5°	1590.0	1610.0	1766.6	2043.7	2810.6	4276.1	6243.4	8668.6	10258.5	10278.6	9415.4
70°	1100.1	1116.2	1353.1	1622.1	2172.2	3408.8	5412.3	7733.0	9415.4	9431.4	8439.7
72.5°	774.9	782.9	1035.9	1296.9	1698.4	2569.6	4083.3	6396.0	8026.1	8038.2	7098.7
75°	578.2	586.2	730.7	983.7	1300.9	1778.7	2790.5	4898.4	6412.1	6412.1	5605.0
77.5°	409.5	413.6	473.8	678.5	867.3	1200.5	1678.3	3208.0	4705.7	4713.7	4083.3
80°	277.0	281.1	309.2	457.7	542.0	650.4	911.4	1682.3	2967.1	2979.2	2593.7
82.5°	144.5	152.6	172.6	232.9	273.0	361.4	469.8	855.2	1642.2	1674.3	1557.9
85°	56.2	56.2	64.2	76.3	100.4	140.5	216.8	325.2	742.8	766.9	686.6
87.5°	20.1	20.1	24.1	24.1	28.1	32.1	36.1	48.2	84.3	84.3	80.3
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°	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4	4368.4
2.5°	4328.3	4328.3	4308.2	4316.2	4312.2	4304.2	4296.1	4308.2	4296.1	4268.0	4264.0
5°	4336.3	4328.3	4296.1	4292.1	4280.1	4264.0	4243.9	4252.0	4231.9	4207.8	4203.8
7.5°	4340.3	4324.2	4280.1	4264.0	4239.9	4207.8	4175.7	4175.7	4147.6	4123.5	4119.5
10°	4332.3	4312.2	4252.0	4219.8	4175.7	4127.5	4083.3	4071.3	4039.2	4011.1	4011.1
12.5°	4336.3	4308.2	4231.9	4179.7	4119.5	4059.2	4003.0	3987.0	3958.9	3930.8	3926.7
15°	4360.4	4320.2	4223.9	4155.6	4067.3	3999.0	3938.8	3926.7	3902.7	3882.6	3882.6
17.5°	4384.5	4332.3	4211.8	4115.5	4007.0	3930.8	3874.5	3874.5	3858.5	3846.4	3846.4
20°	4396.5	4336.3	4187.7	4059.2	3934.8	3854.5	3802.3	3810.3	3806.3	3802.3	3802.3
22.5°	4424.6	4344.3	4167.7	4007.0	3858.5	3774.2	3726.0	3738.0	3734.0	3734.0	3738.0
25°	4468.8	4364.4	4151.6	3958.9	3786.2	3693.9	3641.7	3649.7	3649.7	3649.7	3649.7
27.5°	4529.0	4404.5	4147.6	3914.7	3713.9	3609.6	3545.3	3545.3	3529.3	3533.3	3537.3
30°	4621.4	4480.8	4155.6	3874.5	3637.7	3505.2	3428.9	3416.8	3412.8	3420.8	3424.9
32.5°	4733.8	4585.2	4203.8	3846.4	3557.4	3388.7	3292.4	3288.3	3276.3	3276.3	3276.3
35°	4874.3	4685.6	4248.0	3842.4	3477.1	3264.3	3159.9	3147.8	3119.7	3107.7	3107.7
37.5°	5055.0	4842.2	4300.1	3814.3	3408.8	3143.8	3019.3	2979.2	2947.1	2943.1	2943.1
40°	5275.8	5018.8	4376.4	3782.2	3336.5	3019.3	2854.7	2786.5	2790.5	2806.5	2806.5
42.5°	5536.8	5235.7	4472.8	3766.1	3232.1	2890.9	2662.0	2581.7	2609.8	2625.9	2629.9
45°	5841.9	5492.6	4581.2	3746.1	3135.8	2746.3	2457.2	2356.9	2368.9	2372.9	2376.9
47.5°	6195.3	5777.7	4693.6	3730.0	3027.4	2565.6	2232.4	2099.9	2095.9	2071.8	2079.8
50°	6564.7	6078.8	4810.1	3701.9	2894.9	2352.8	1995.5	1838.9	1806.8	1770.6	1774.7
52.5°	6958.1	6388.0	4918.5	3657.7	2730.3	2136.0	1770.6	1602.0	1537.8	1497.6	1505.7
55°	7391.8	6705.2	5022.9	3589.5	2557.6	1919.2	1569.9	1397.2	1316.9	1284.8	1288.8
57.5°	7789.3	7010.3	5099.1	3505.2	2368.9	1722.5	1393.2	1224.6	1172.4	1168.4	1172.4
60°	8174.7	7267.3	5131.3	3388.7	2176.2	1541.8	1228.6	1100.1	1064.0	1084.1	1088.1
62.5°	8499.9	7431.9	5115.2	3232.1	1979.4	1369.1	1096.1	1003.8	979.7	1019.8	1023.8
65°	8688.6	7484.1	5002.8	3007.3	1766.6	1200.5	971.6	871.3	859.2	883.3	895.4
67.5°	8439.7	7158.9	4697.6	2698.1	1529.7	1043.9	851.2	770.9	750.8	770.9	770.9
70°	7480.1	6203.3	3974.9	2208.3	1268.8	891.3	738.8	682.6	666.5	682.6	678.5
72.5°	6231.4	5159.4	3131.8	1722.5	999.8	750.8	642.4	590.2	574.2	558.1	550.1
75°	4834.2	3918.7	2272.5	1264.7	754.8	602.3	538.0	489.8	449.7	465.7	457.7
77.5°	3541.3	2750.3	1610.0	875.3	542.0	465.7	421.6	385.4	357.3	389.5	385.4
80°	2280.6	1778.7	1076.0	586.2	373.4	325.2	309.2	289.1	317.2	413.6	421.6
82.5°	1393.2	1128.2	642.4	381.4	244.9	216.8	200.8	200.8	325.2	357.3	361.4
85°	622.3	598.2	349.3	196.7	136.5	124.5	112.4	144.5	132.5	96.4	100.4
87.5°	100.4	104.4	76.3	68.3	52.2	52.2	40.2	28.1	20.1	12.0	12.0
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)