

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: P841448

Luminaire Tested: **ARCH4-180-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

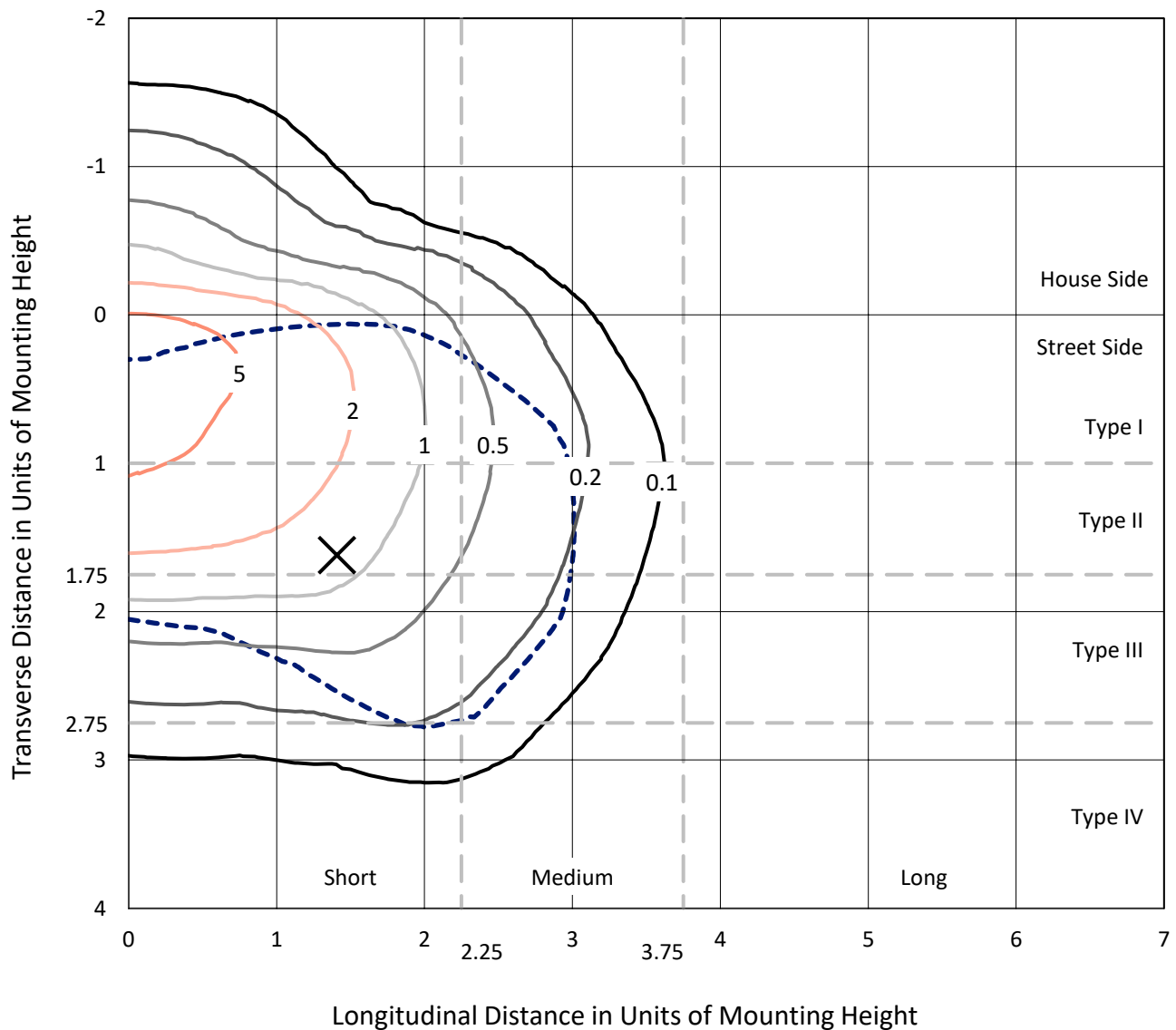
Lumens per Lamp: N/A
Luminaire Lumens: 19037 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 180
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



Iso-Footcandle Lines of Horizontal Illumination

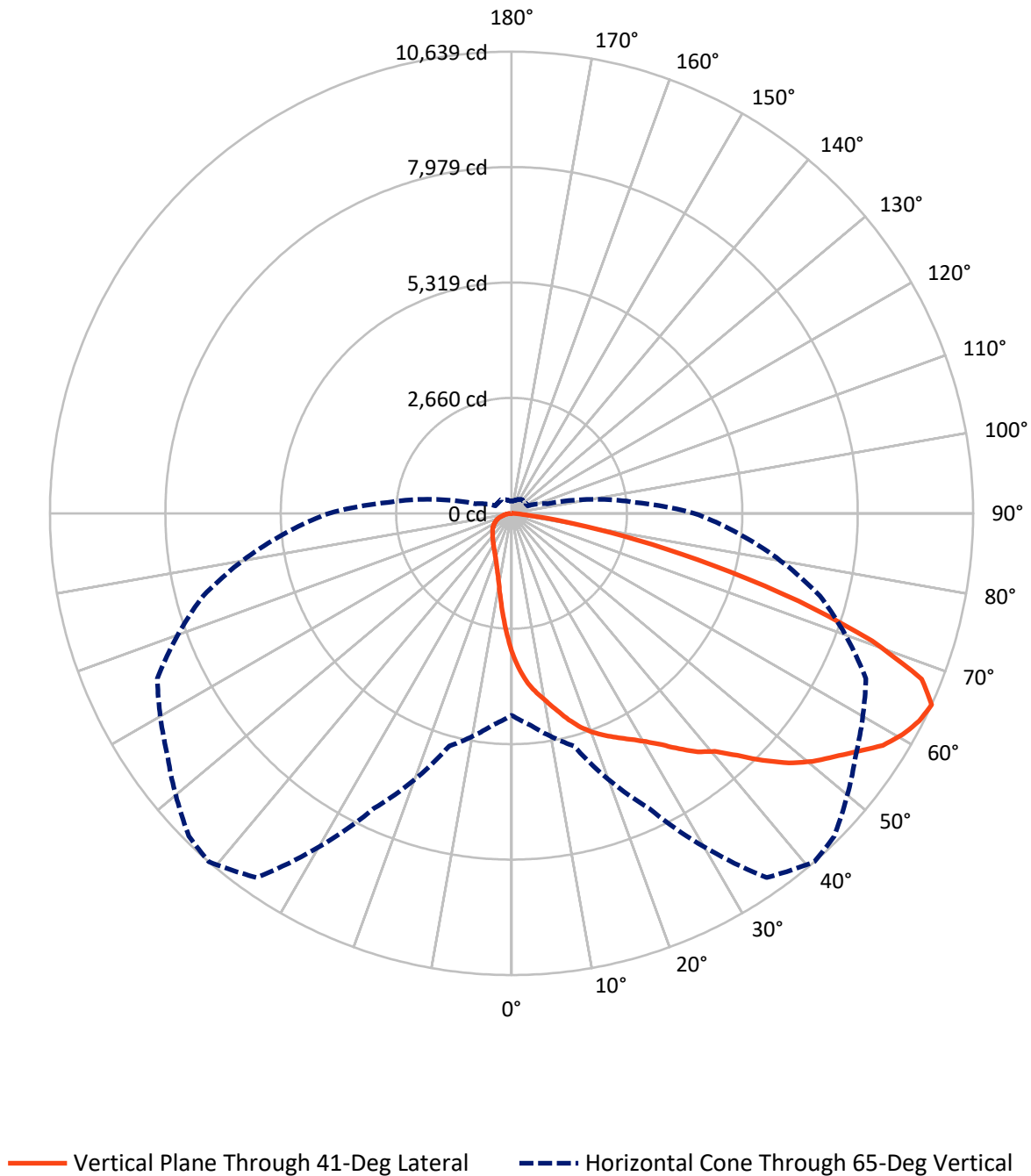
✕ Max cd
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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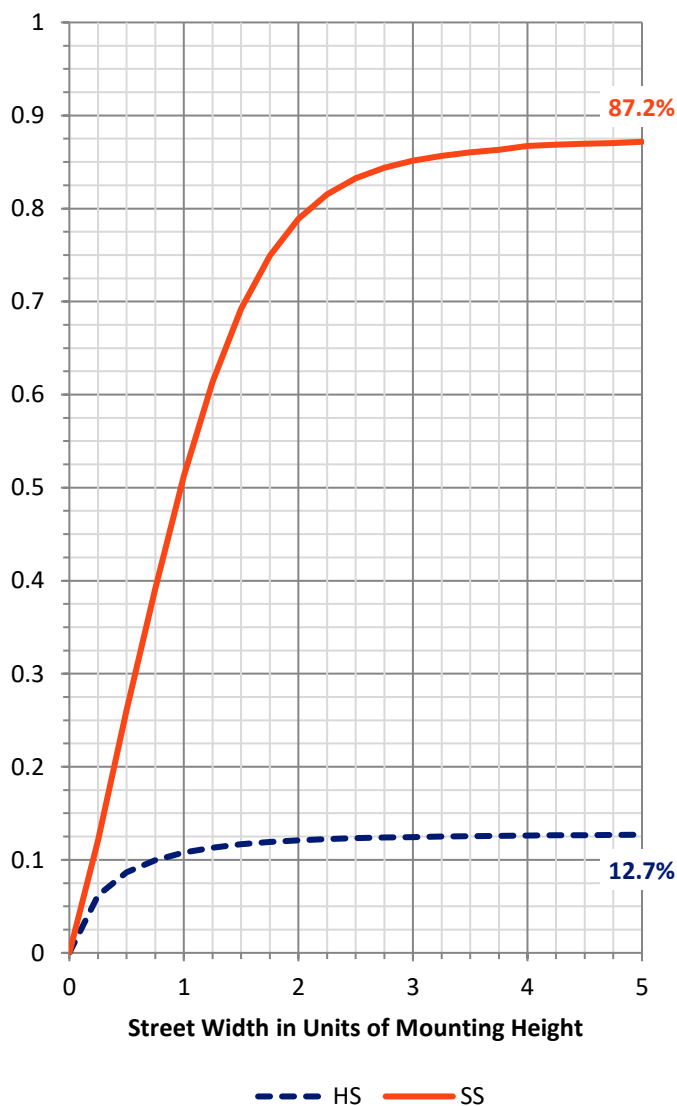
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2444.1	0.0	2444.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	16592.9	0.0	16592.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	19037.0	0.0	19037.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.2	1.6
10°-20°	906.3	4.8
20°-30°	1559.1	8.2
30°-40°	2364.7	12.4
40°-50°	3464.3	18.2
50°-60°	4374.7	23.0
60°-70°	4102.0	21.5
70°-80°	1828.3	9.6
80°-90°	135.4	0.7
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°	19037.0	100.0
0°-180°	19037.0	100.0

Coefficient of Utilization



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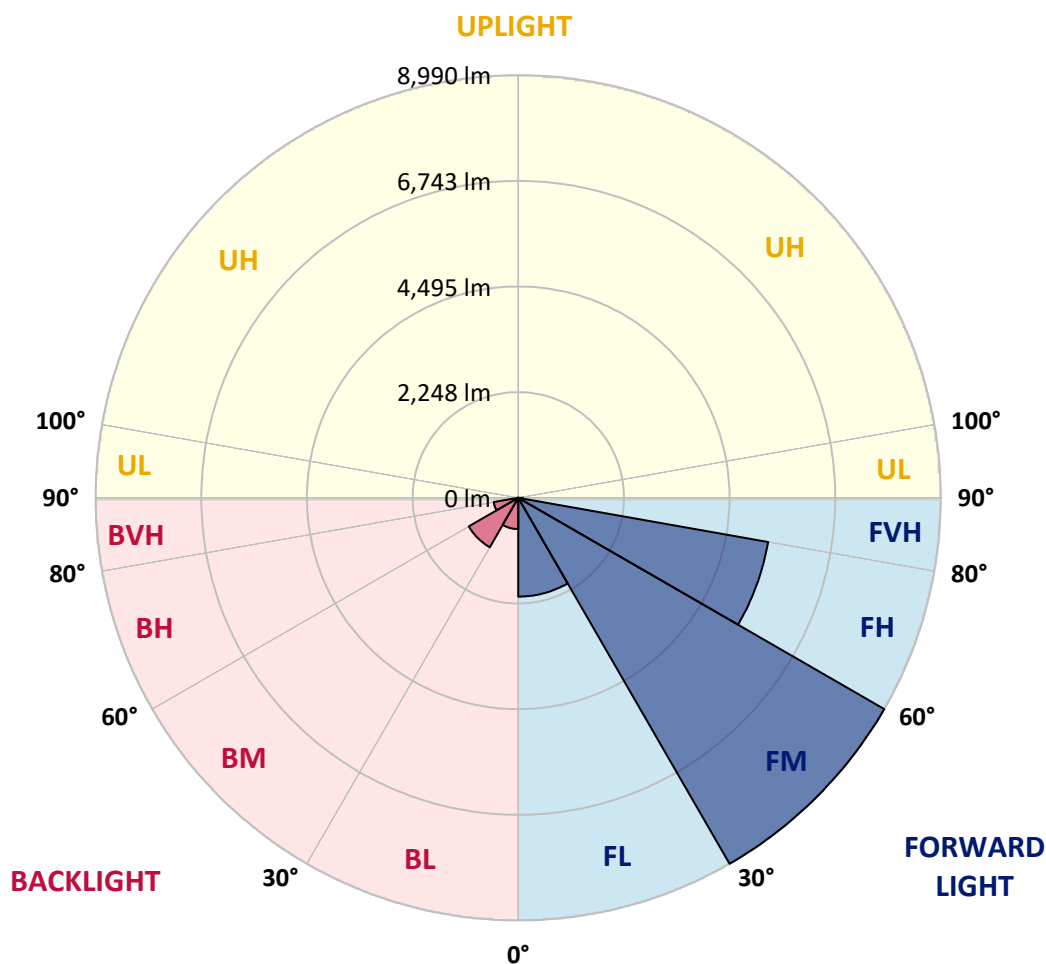
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2102.4	11.0			
FM	(30°-60°)	8990.0	47.2			
FH	(60°-80°)	5399.4	28.4			G3/7500
FVH	(80°-90°)	101.1	0.5			G2/225
BL	(0°-30°)	665.2	3.5	B2/1000		
BM	(30°-60°)	1213.6	6.4	B2/2500		
BH	(60°-80°)	530.9	2.8	B2/1000		G2/1000
BVH	(80°-90°)	34.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8
2.5°	3741.6	3729.6	3721.5	3677.4	3677.4	3617.2	3621.2	3565.0	3496.7	3388.3	3271.9
5°	4094.9	4078.8	4058.8	4014.6	3998.6	3938.3	3930.3	3850.0	3733.6	3544.9	3336.1
7.5°	4404.0	4388.0	4359.9	4295.6	4251.5	4179.2	4159.1	4054.8	3926.3	3693.4	3400.4
10°	4685.1	4673.0	4636.9	4556.6	4496.4	4408.0	4371.9	4231.4	4070.8	3813.9	3452.6
12.5°	4970.1	4954.0	4905.9	4837.6	4765.3	4661.0	4616.8	4436.1	4231.4	3946.4	3528.8
15°	5235.1	5211.0	5174.8	5102.6	5038.3	4938.0	4889.8	4677.0	4428.1	4094.9	3629.2
17.5°	5407.7	5387.6	5355.5	5315.3	5263.2	5186.9	5138.7	4929.9	4624.8	4239.4	3733.6
20°	5512.1	5504.0	5492.0	5467.9	5443.8	5391.6	5355.5	5158.8	4837.6	4379.9	3834.0
22.5°	5592.4	5584.3	5580.3	5580.3	5584.3	5564.3	5540.2	5371.5	5042.4	4528.5	3926.3
25°	5716.8	5712.8	5704.8	5696.7	5724.8	5728.8	5720.8	5604.4	5299.3	4725.2	4042.7
27.5°	5889.4	5877.4	5861.3	5853.3	5881.4	5901.5	5917.5	5837.2	5572.3	4925.9	4175.2
30°	6154.4	6118.3	6078.1	6050.0	6070.1	6102.2	6138.3	6090.2	5853.3	5174.8	4311.7
32.5°	6467.5	6423.4	6331.0	6278.9	6331.0	6355.1	6383.2	6359.1	6146.4	5443.8	4448.2
35°	6848.9	6796.7	6700.4	6624.1	6716.4	6664.3	6652.2	6628.1	6423.4	5708.8	4600.7
37.5°	7483.2	7407.0	7254.4	7085.8	7085.8	6973.4	6929.2	6857.0	6672.3	5945.6	4749.3
40°	8217.9	8117.5	7920.8	7671.9	7443.1	7210.2	7182.1	7129.9	6965.3	6218.6	4917.9
42.5°	9024.8	8832.1	8559.1	8258.1	7888.7	7623.7	7559.5	7411.0	7250.4	6495.6	5086.5
45°	9920.1	9518.6	9121.2	8968.6	8358.4	8117.5	7997.1	7728.1	7547.5	6784.7	5263.2
47.5°	10064.6	9751.5	9486.5	9462.4	8796.0	8595.3	8458.8	8073.4	7868.6	7093.8	5447.8
50°	9984.3	9795.6	9823.8	9727.4	9117.2	8984.7	8880.3	8442.7	8185.8	7390.9	5616.4
52.5°	9647.1	9751.5	9912.1	9735.4	9422.3	9313.9	9261.7	8840.2	8482.9	7663.9	5769.0
55°	9245.6	9317.9	9663.2	9880.0	9775.6	9679.2	9631.1	9301.9	8775.9	7892.7	5909.5
57.5°	8659.5	8627.4	9008.8	9855.9	10144.9	10088.7	10036.5	9755.5	9048.9	8057.3	5997.8
60°	7780.3	7712.1	8193.8	9374.1	10265.4	10353.7	10329.6	10056.6	9257.7	8053.3	5961.7
62.5°	6258.8	6427.4	7093.8	8587.3	10317.5	10542.4	10498.2	10080.7	9325.9	7820.5	5732.9
65°	4652.9	4893.8	5548.2	7503.3	10245.3	10638.7	10518.3	9687.3	9008.8	7358.8	5231.0
67.5°	3352.2	3565.0	4042.7	6174.5	9550.8	10197.1	10056.6	9044.9	8278.1	6704.4	4536.5
70°	2292.3	2444.9	2770.1	4496.4	8153.7	8816.1	8727.8	8085.4	7125.9	5925.6	3685.4
72.5°	1617.9	1682.1	1890.9	2966.8	6194.5	6917.2	6812.8	6652.2	5724.8	4925.9	2866.4
75°	1212.4	1252.6	1365.0	1919.0	4179.2	4793.4	4697.1	4789.4	4275.6	3729.6	2087.6
77.5°	457.7	497.8	774.8	1224.5	2473.0	2942.7	2846.4	2902.6	2376.6	1882.9	1039.8
80°	124.5	132.5	256.9	582.1	1124.1	1465.3	1332.9	1144.2	883.2	867.2	550.0
82.5°	52.2	60.2	116.4	313.1	401.5	401.5	337.2	417.5	337.2	405.5	265.0
85°	20.1	24.1	28.1	80.3	52.2	56.2	60.2	80.3	68.2	84.3	60.2
87.5°	0.0	0.0	0.0	4.0	4.0	8.0	4.0	8.0	12.0	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8	3243.8
2.5°	3223.7	3179.6	3115.3	3011.0	2902.6	2842.3	2766.1	2754.0	2673.7	2665.7	2633.6
5°	3243.8	3151.5	2986.9	2786.1	2589.4	2436.9	2324.5	2264.2	2147.8	2147.8	2115.7
7.5°	3259.9	3115.3	2850.4	2553.3	2284.3	2079.6	1927.0	1862.8	1758.4	1750.4	1726.3
10°	3263.9	3071.2	2701.8	2316.4	1987.2	1778.5	1629.9	1557.7	1465.3	1457.3	1441.2
12.5°	3296.0	3047.1	2569.4	2111.7	1774.5	1549.6	1405.1	1344.9	1272.6	1264.6	1248.5
15°	3348.2	3047.1	2456.9	1939.1	1585.8	1377.0	1252.6	1196.4	1144.2	1136.1	1128.1
17.5°	3400.4	3039.1	2344.5	1778.5	1429.2	1240.5	1132.1	1088.0	1047.8	1043.8	1035.8
20°	3448.6	3035.0	2232.1	1642.0	1308.8	1128.1	1043.8	1003.7	971.5	971.5	967.5
22.5°	3496.7	3027.0	2123.7	1513.5	1204.4	1043.8	971.5	927.4	903.3	903.3	899.3
25°	3569.0	3027.0	2023.4	1405.1	1120.1	979.6	907.3	875.2	855.1	851.1	851.1
27.5°	3653.3	3051.1	1935.0	1308.8	1047.8	915.3	859.1	827.0	802.9	794.9	798.9
30°	3745.6	3071.2	1854.8	1224.5	979.6	867.2	806.9	774.8	750.7	742.7	746.7
32.5°	3838.0	3095.3	1782.5	1148.2	911.3	823.0	762.8	726.6	702.6	698.5	698.5
35°	3938.3	3119.4	1710.2	1083.9	855.1	778.8	722.6	682.5	666.4	658.4	662.4
37.5°	4038.7	3159.5	1642.0	1023.7	815.0	738.7	686.5	646.4	634.3	630.3	630.3
40°	4159.1	3219.7	1613.9	983.6	778.8	702.6	658.4	618.3	606.2	606.2	606.2
42.5°	4259.5	3267.9	1589.8	939.4	750.7	670.4	630.3	598.2	590.1	586.1	590.1
45°	4359.9	3312.1	1557.7	899.3	714.6	638.3	606.2	574.1	566.1	566.1	566.1
47.5°	4460.2	3336.1	1513.5	859.1	682.5	610.2	582.1	554.0	546.0	546.0	546.0
50°	4540.5	3356.2	1449.3	815.0	646.4	586.1	558.0	529.9	521.9	521.9	521.9
52.5°	4620.8	3360.2	1381.0	762.8	610.2	558.0	533.9	505.8	497.8	493.8	493.8
55°	4693.1	3356.2	1300.7	702.6	570.1	525.9	505.8	481.8	465.7	449.6	457.7
57.5°	4745.3	3352.2	1208.4	642.3	529.9	493.8	485.8	453.7	421.5	381.4	389.4
60°	4725.2	3308.0	1108.0	566.1	485.8	461.7	461.7	417.5	361.3	341.2	345.3
62.5°	4596.7	3183.6	1003.7	485.8	441.6	429.6	425.5	377.4	333.2	313.1	317.2
65°	4211.3	2870.4	851.1	413.5	397.4	393.4	393.4	349.3	309.1	285.0	289.1
67.5°	3625.2	2408.8	694.5	349.3	353.3	361.3	361.3	321.2	281.0	256.9	260.9
70°	2906.6	1882.9	554.0	301.1	305.1	317.2	325.2	289.1	252.9	228.8	228.8
72.5°	2188.0	1429.2	445.6	252.9	273.0	273.0	285.0	256.9	220.8	196.7	200.7
75°	1585.8	1023.7	353.3	212.8	236.9	232.8	232.8	216.8	188.7	172.6	172.6
77.5°	750.7	538.0	281.0	152.6	184.7	180.7	184.7	172.6	160.6	144.5	148.5
80°	369.3	265.0	180.7	108.4	128.5	132.5	144.5	136.5	132.5	120.4	120.4
82.5°	176.6	104.4	84.3	76.3	88.3	92.3	100.4	100.4	104.4	96.4	96.4
85°	48.2	28.1	36.1	48.2	56.2	60.2	68.2	72.3	72.3	68.2	72.3
87.5°	12.0	12.0	16.1	24.1	28.1	32.1	36.1	36.1	16.1	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)