

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: P836281

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

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836281
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
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-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16093 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

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



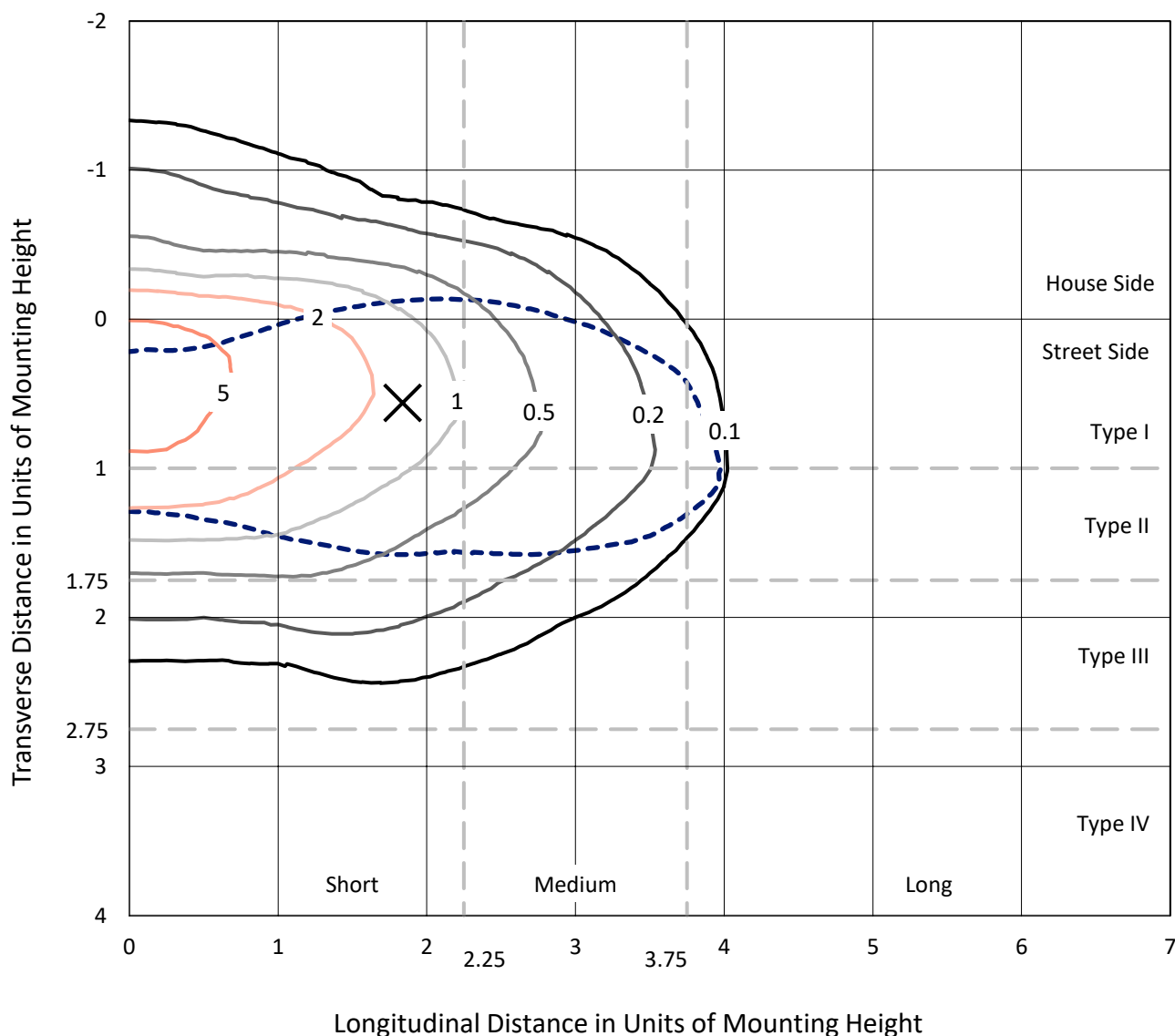
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

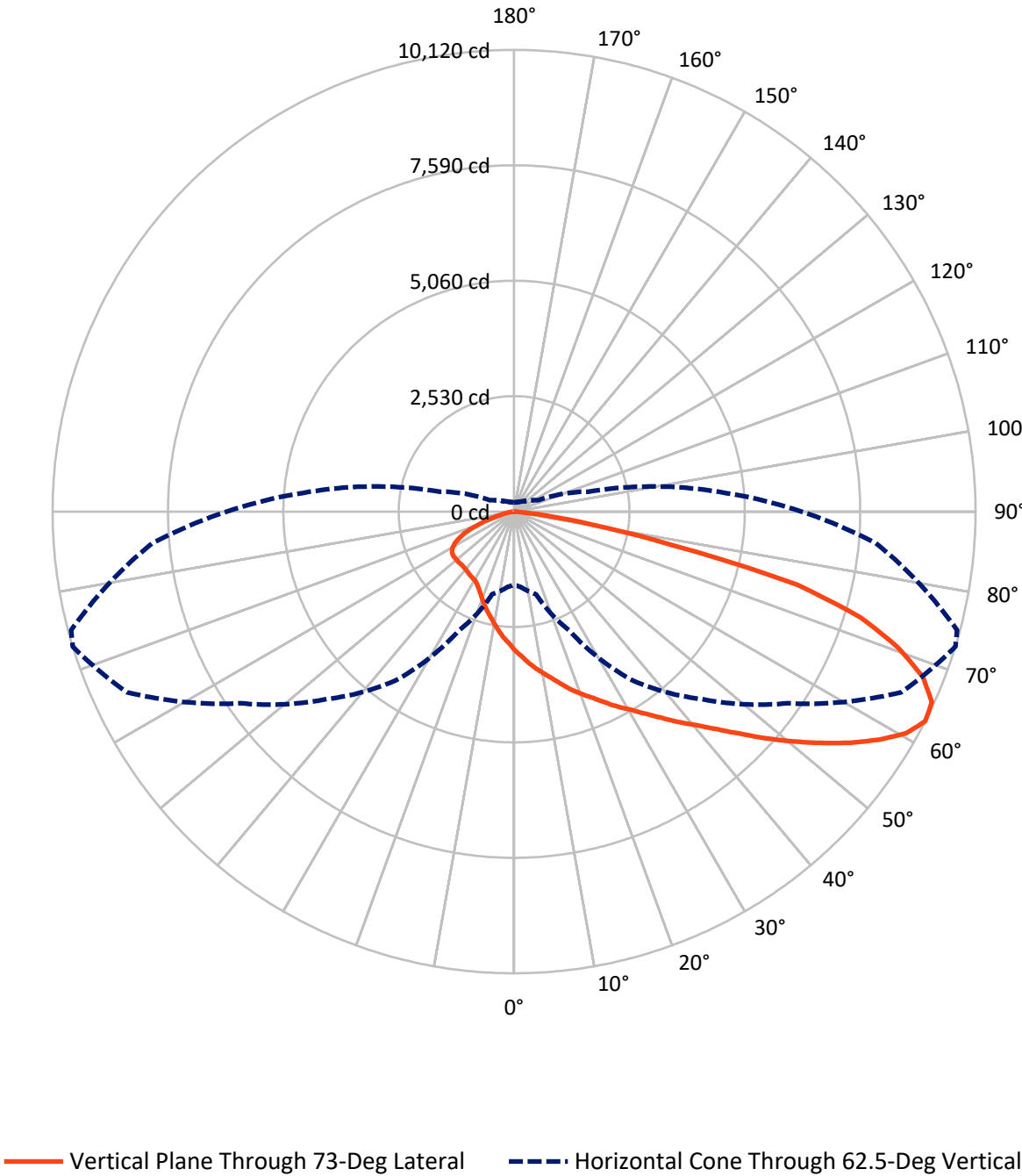
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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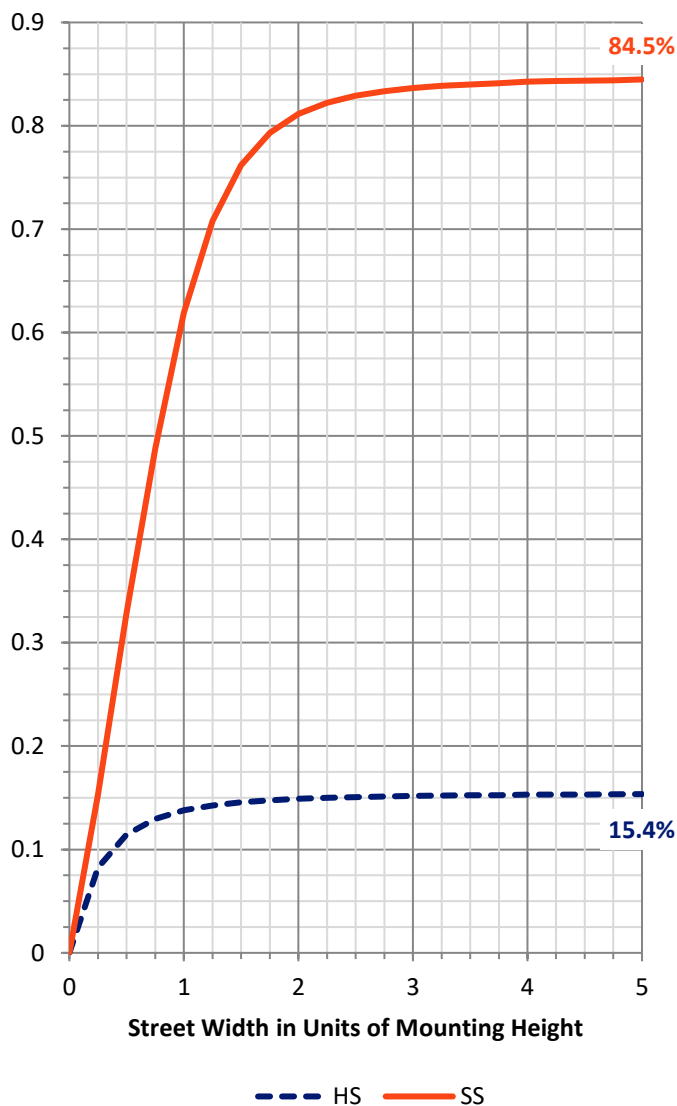
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2494.7	0.0	2494.7
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	13598.3	0.0	13598.3
	% Fixture	84.5	0.0	84.5
Total	Lumens	16093.0	0.0	16093.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.4	1.8
10°-20°	888.3	5.5
20°-30°	1478.6	9.2
30°-40°	2231.0	13.9
40°-50°	3118.4	19.4
50°-60°	3444.4	21.4
60°-70°	3000.5	18.6
70°-80°	1515.7	9.4
80°-90°	121.7	0.8
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°	16093.0	100.0
0°-180°	16093.0	100.0

Coefficient of Utilization



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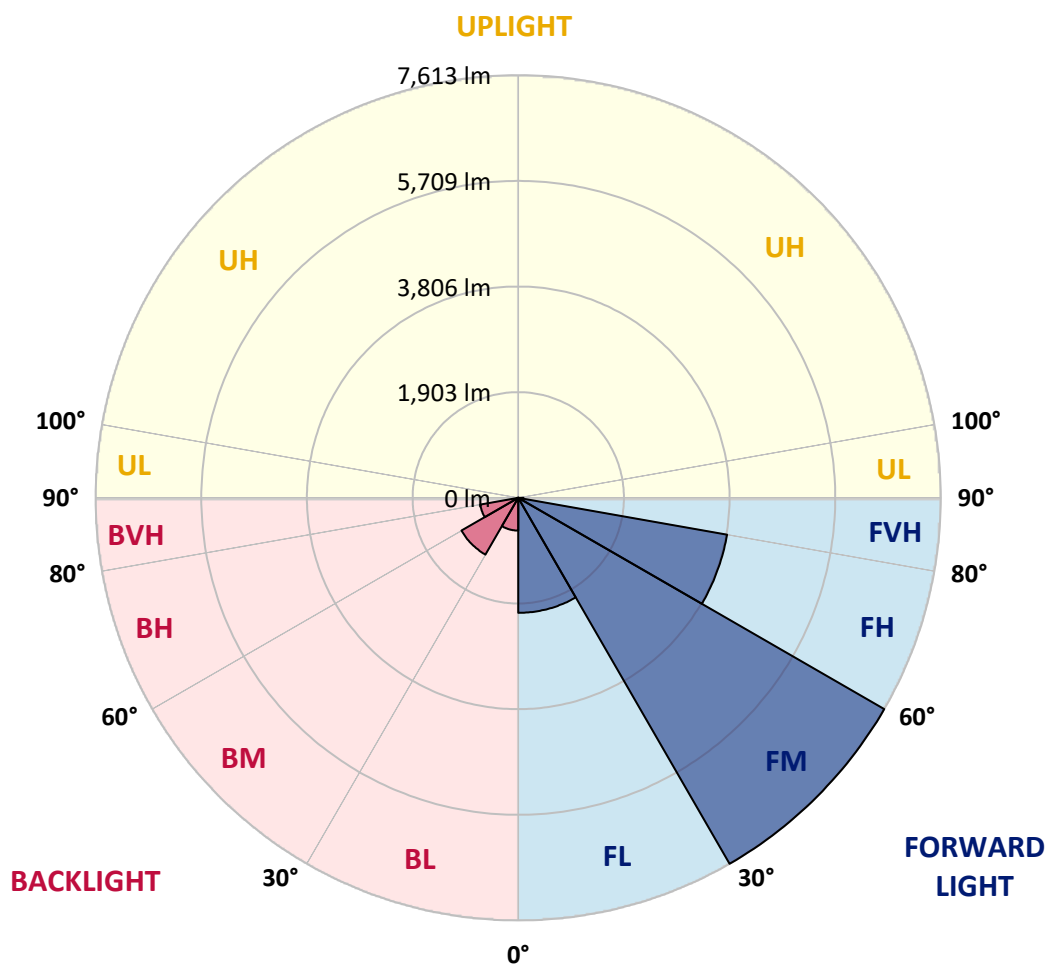
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2071.7	12.9			
FM	(30°-60°)	7612.6	47.3			
FH	(60°-80°)	3820.0	23.7			G2/5000
FVH	(80°-90°)	94.1	0.6			G1/100
BL	(0°-30°)	589.6	3.7	B2/1000		
BM	(30°-60°)	1181.2	7.3	B2/2500		
BH	(60°-80°)	696.3	4.3	B2/1000		G2/1000
BVH	(80°-90°)	27.5	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2
2.5°	3468.0	3506.6	3485.6	3499.6	3429.5	3383.9	3331.3	3229.6	3173.5	3166.5	3099.8
5°	3976.5	4018.6	3983.5	3973.0	3850.3	3745.1	3625.8	3447.0	3327.8	3306.7	3159.5
7.5°	4485.0	4523.5	4481.4	4449.9	4285.1	4099.2	3923.9	3660.9	3475.1	3440.0	3208.5
10°	4842.6	4877.7	4846.1	4814.6	4642.8	4453.4	4204.4	3860.8	3608.3	3552.2	3240.1
12.5°	5112.6	5133.7	5119.6	5091.6	4930.3	4726.9	4488.5	4085.2	3759.1	3689.0	3289.2
15°	5333.6	5368.6	5351.1	5330.0	5175.8	4972.4	4744.4	4320.1	3934.4	3846.8	3362.8
17.5°	5480.8	5505.4	5508.9	5508.9	5372.1	5172.2	4951.3	4534.0	4109.7	3997.5	3433.0
20°	5547.5	5575.5	5593.0	5621.1	5508.9	5337.1	5112.6	4716.4	4274.6	4148.3	3499.6
22.5°	5579.0	5603.6	5649.1	5712.3	5621.1	5477.3	5270.4	4884.7	4439.4	4306.1	3576.7
25°	5603.6	5635.1	5701.7	5821.0	5757.9	5635.1	5456.3	5077.6	4635.7	4499.0	3689.0
27.5°	5670.2	5708.8	5771.9	5915.7	5838.5	5778.9	5652.7	5284.5	4842.6	4702.4	3825.7
30°	5901.6	5933.2	5929.7	6020.8	5926.2	5908.6	5821.0	5484.3	5042.5	4902.2	3987.0
32.5°	6322.4	6354.0	6276.8	6241.8	6034.9	6038.4	6003.3	5698.2	5281.0	5137.2	4172.9
35°	6774.8	6809.8	6708.1	6648.5	6301.4	6199.7	6217.2	5964.7	5547.5	5403.7	4404.3
37.5°	7178.0	7220.1	7132.4	7044.8	6694.1	6459.2	6455.7	6262.8	5852.5	5705.3	4660.3
40°	7398.9	7448.0	7500.6	7451.5	7083.4	6823.9	6711.7	6567.9	6154.1	6003.3	4937.3
42.5°	7504.1	7640.9	7735.6	7704.0	7402.5	7139.5	7006.2	6887.0	6522.3	6375.0	5266.9
45°	7209.6	7213.1	7413.0	7584.8	7528.7	7353.4	7328.8	7244.7	6943.1	6802.8	5638.6
47.5°	6841.4	6813.3	6953.6	7258.7	7416.5	7462.1	7605.8	7640.9	7423.5	7283.2	6017.3
50°	5957.7	5975.3	6431.1	6869.4	7178.0	7472.6	7802.2	8047.7	7917.9	7784.7	6417.1
52.5°	4846.1	4888.2	5410.7	6375.0	6862.4	7367.4	7917.9	8454.4	8422.9	8296.6	6816.8
55°	3885.3	3951.9	4506.0	5551.0	6459.2	7132.4	7967.0	8826.1	8945.4	8829.6	7209.6
57.5°	2970.1	3040.2	3506.6	4579.6	5943.7	6750.2	7932.0	9152.3	9432.8	9359.1	7570.8
60°	2237.2	2307.3	2605.4	3713.5	5298.5	6322.4	7756.6	9366.2	9871.1	9794.0	7833.8
62.5°	1602.5	1658.6	1879.5	2889.4	4513.0	5814.0	7325.3	9369.7	10120.1	10057.0	7960.0
65°	1153.7	1153.7	1332.5	2061.9	3776.6	5203.8	6673.1	8938.3	10067.5	10049.9	7872.3
67.5°	831.1	838.1	981.9	1441.2	3012.2	4463.9	5828.0	8170.4	9660.7	9748.4	7556.7
70°	589.1	606.6	673.3	1006.4	2275.8	3524.1	4923.3	7164.0	8927.8	9082.1	6946.6
72.5°	455.9	466.4	512.0	701.3	1662.1	2619.4	3923.9	6041.9	7949.5	8124.8	6115.5
75°	350.7	361.2	396.2	515.5	1192.2	1837.5	2787.8	4688.3	6410.1	6722.2	4912.8
77.5°	256.0	270.0	294.6	375.2	694.3	1167.7	1690.2	2637.0	3538.2	3685.4	2573.9
80°	119.2	136.8	171.8	242.0	375.2	550.5	599.6	1016.9	1700.7	1777.9	1395.6
82.5°	66.6	84.2	98.2	147.3	189.4	196.4	203.4	256.0	641.7	708.3	585.6
85°	31.6	42.1	45.6	63.1	63.1	56.1	66.6	49.1	105.2	126.2	122.7
87.5°	0.0	3.5	7.0	17.5	14.0	10.5	10.5	10.5	10.5	14.0	10.5
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°	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2	3047.2
2.5°	3068.3	3022.7	2917.5	2826.3	2766.7	2714.1	2644.0	2612.4	2556.3	2566.8	2535.3
5°	3085.8	3001.7	2815.8	2644.0	2517.7	2405.5	2282.8	2212.7	2135.5	2128.5	2104.0
7.5°	3096.3	2966.6	2700.1	2458.1	2265.3	2093.4	1928.6	1837.5	1742.8	1721.7	1700.7
10°	3085.8	2914.0	2580.9	2265.3	2009.3	1795.4	1609.5	1493.8	1395.6	1371.1	1350.0
12.5°	3096.3	2885.9	2468.7	2086.4	1781.4	1539.4	1329.0	1209.8	1118.6	1094.1	1080.0
15°	3120.9	2868.4	2374.0	1925.1	1578.0	1308.0	1101.1	999.4	925.7	901.2	894.2
17.5°	3141.9	2850.9	2272.3	1767.3	1374.6	1104.6	925.7	841.6	778.5	753.9	746.9
20°	3170.0	2826.3	2170.6	1616.5	1195.8	943.3	785.5	711.8	662.7	645.2	641.7
22.5°	3194.5	2808.8	2075.9	1465.8	1030.9	813.5	680.3	620.7	585.6	568.1	568.1
25°	3257.6	2815.8	1995.3	1325.5	908.2	711.8	599.6	554.0	526.0	515.5	515.5
27.5°	3331.3	2843.9	1932.1	1206.3	803.0	634.7	543.5	505.0	490.9	476.9	480.4
30°	3436.5	2900.0	1890.1	1108.1	725.9	575.1	497.9	469.9	455.9	452.4	452.4
32.5°	3569.7	2991.1	1886.6	1045.0	669.8	529.5	466.4	441.8	434.8	431.3	431.3
35°	3727.5	3071.8	1865.5	1016.9	634.7	497.9	441.8	424.3	420.8	420.8	420.8
37.5°	3916.9	3205.0	1851.5	978.3	617.2	480.4	424.3	410.3	410.3	410.3	410.3
40°	4113.3	3313.7	1830.5	943.3	610.2	469.9	413.8	396.2	396.2	396.2	396.2
42.5°	4348.2	3471.5	1823.4	925.7	599.6	462.9	399.8	378.7	382.2	382.2	385.7
45°	4632.2	3650.4	1819.9	908.2	596.1	455.9	385.7	361.2	364.7	361.2	361.2
47.5°	4919.8	3857.3	1830.5	897.7	592.6	448.8	375.2	343.6	343.6	340.1	340.1
50°	5221.3	4046.6	1837.5	887.2	585.6	434.8	357.7	329.6	322.6	315.6	319.1
52.5°	5505.4	4222.0	1841.0	869.6	564.6	413.8	343.6	312.1	301.6	291.0	294.6
55°	5789.4	4390.3	1848.0	848.6	536.5	392.7	326.1	294.6	280.5	266.5	266.5
57.5°	6045.4	4537.6	1830.5	796.0	505.0	371.7	308.6	273.5	252.5	238.4	238.4
60°	6220.7	4642.8	1777.9	718.9	462.9	347.2	291.0	252.5	227.9	217.4	217.4
62.5°	6304.9	4660.3	1683.2	592.6	410.3	322.6	270.0	231.4	210.4	203.4	203.4
65°	6224.2	4583.1	1535.9	445.3	354.2	294.6	249.0	213.9	192.9	175.3	175.3
67.5°	5943.7	4365.7	1332.5	336.6	301.6	266.5	227.9	196.4	171.8	157.8	157.8
70°	5379.1	3913.4	1030.9	270.0	256.0	231.4	206.9	175.3	154.3	136.8	136.8
72.5°	4639.2	3317.3	725.9	217.4	217.4	196.4	175.3	154.3	133.3	119.2	119.2
75°	3559.2	2454.6	487.4	175.3	178.8	164.8	143.8	126.2	112.2	101.7	101.7
77.5°	1942.7	1213.3	298.1	129.7	133.3	126.2	112.2	101.7	94.7	84.2	84.2
80°	943.3	533.0	171.8	91.2	94.7	91.2	84.2	73.6	73.6	66.6	66.6
82.5°	396.2	199.9	91.2	63.1	63.1	56.1	52.6	52.6	52.6	49.1	49.1
85°	98.2	38.6	38.6	35.1	35.1	35.1	31.6	31.6	31.6	24.5	28.1
87.5°	14.0	14.0	14.0	14.0	14.0	14.0	10.5	3.5	0.0	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)