

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: P841457

Luminaire Tested: **ARCH4-180-730-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841457
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: ARCH4-180-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 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: 19728 lumens
Efficiency: N/A
Efficacy: 109.6 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



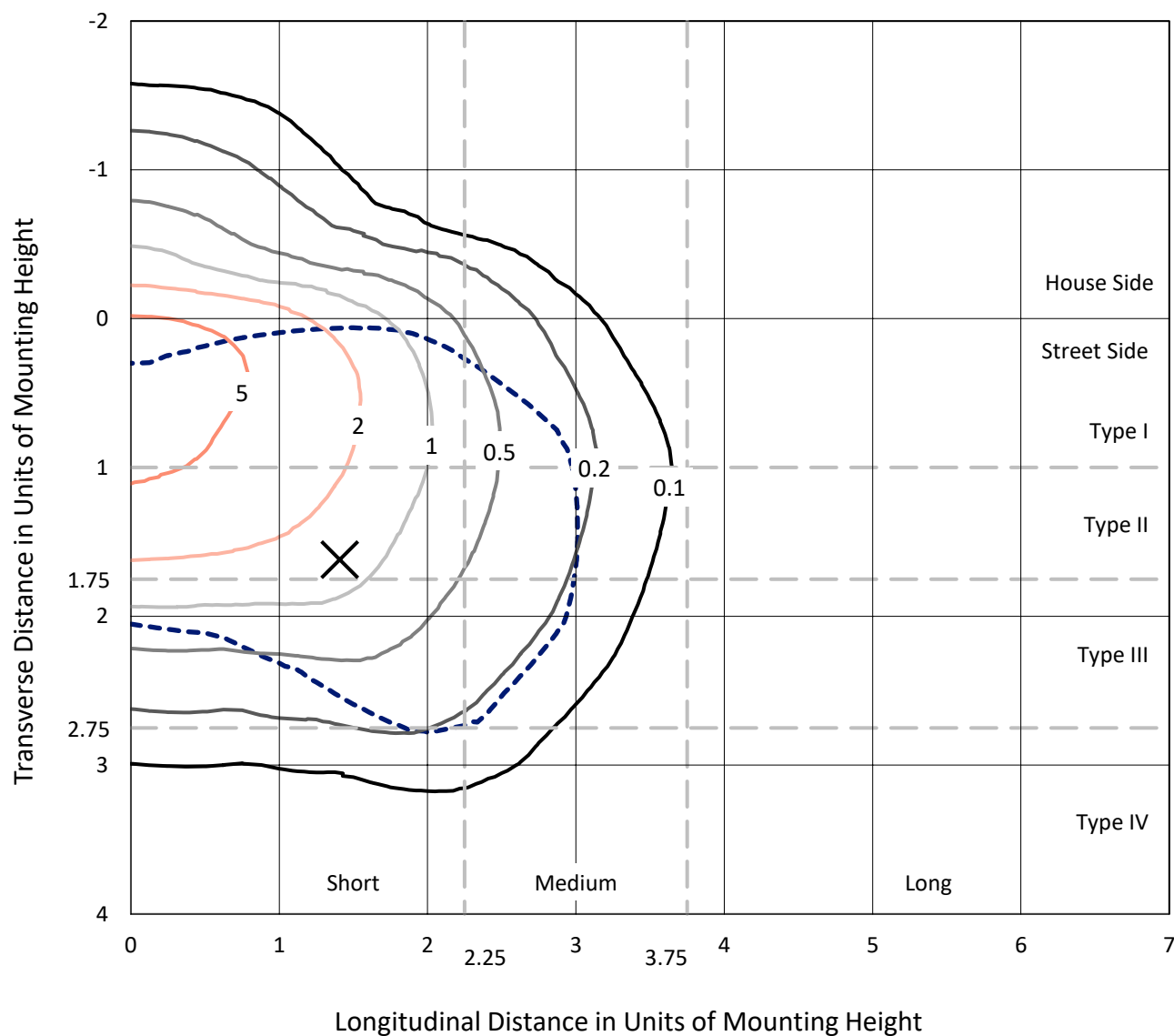
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

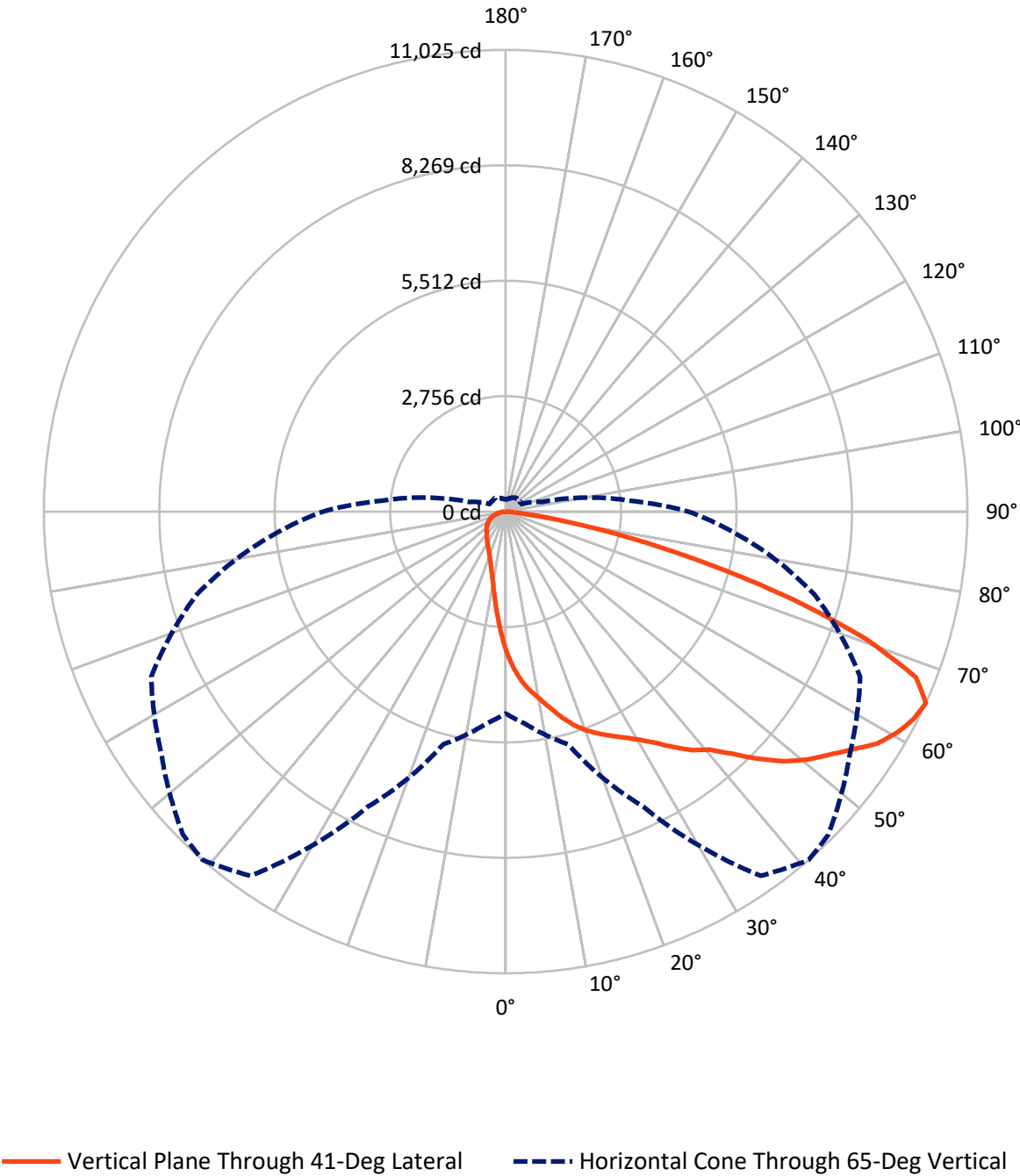


Based on 25 foot mounting height. Maximum calculated value = 7.8 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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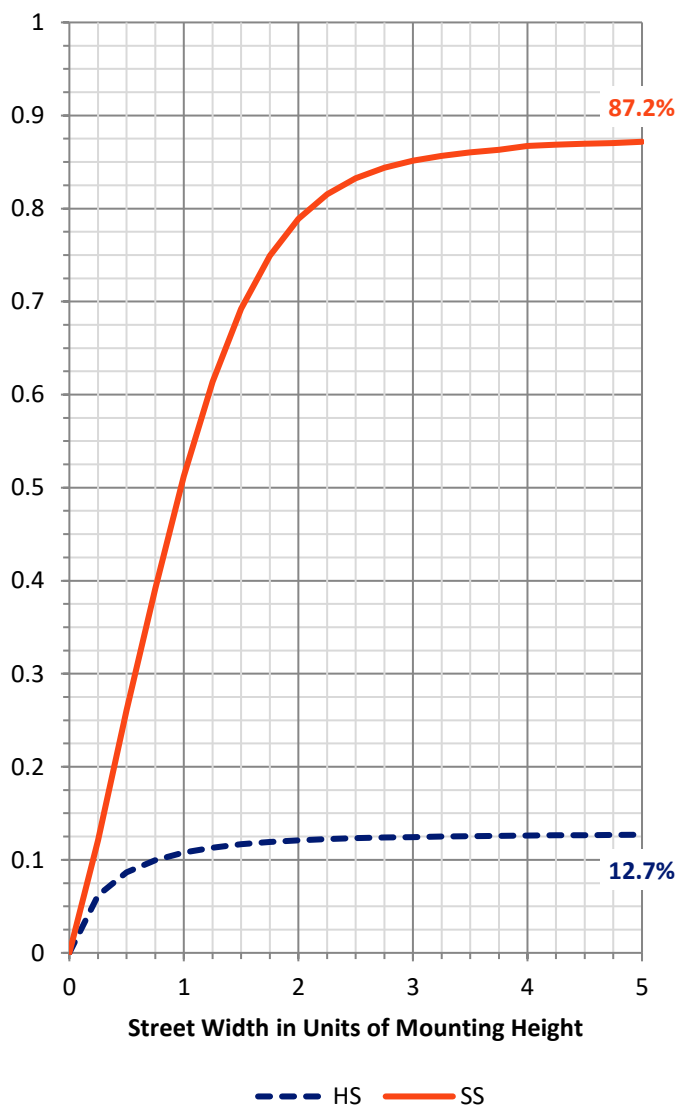
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2532.8	0.0	2532.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	17195.2	0.0	17195.2
	% Fixture	87.2	0.0	87.2
Total	Lumens	19728.0	0.0	19728.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.2	1.6
10°-20°	939.2	4.8
20°-30°	1615.7	8.2
30°-40°	2450.5	12.4
40°-50°	3590.0	18.2
50°-60°	4533.4	23.0
60°-70°	4250.9	21.5
70°-80°	1894.6	9.6
80°-90°	140.4	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°	19728.0	100.0
0°-180°	19728.0	100.0

Coefficient of Utilization



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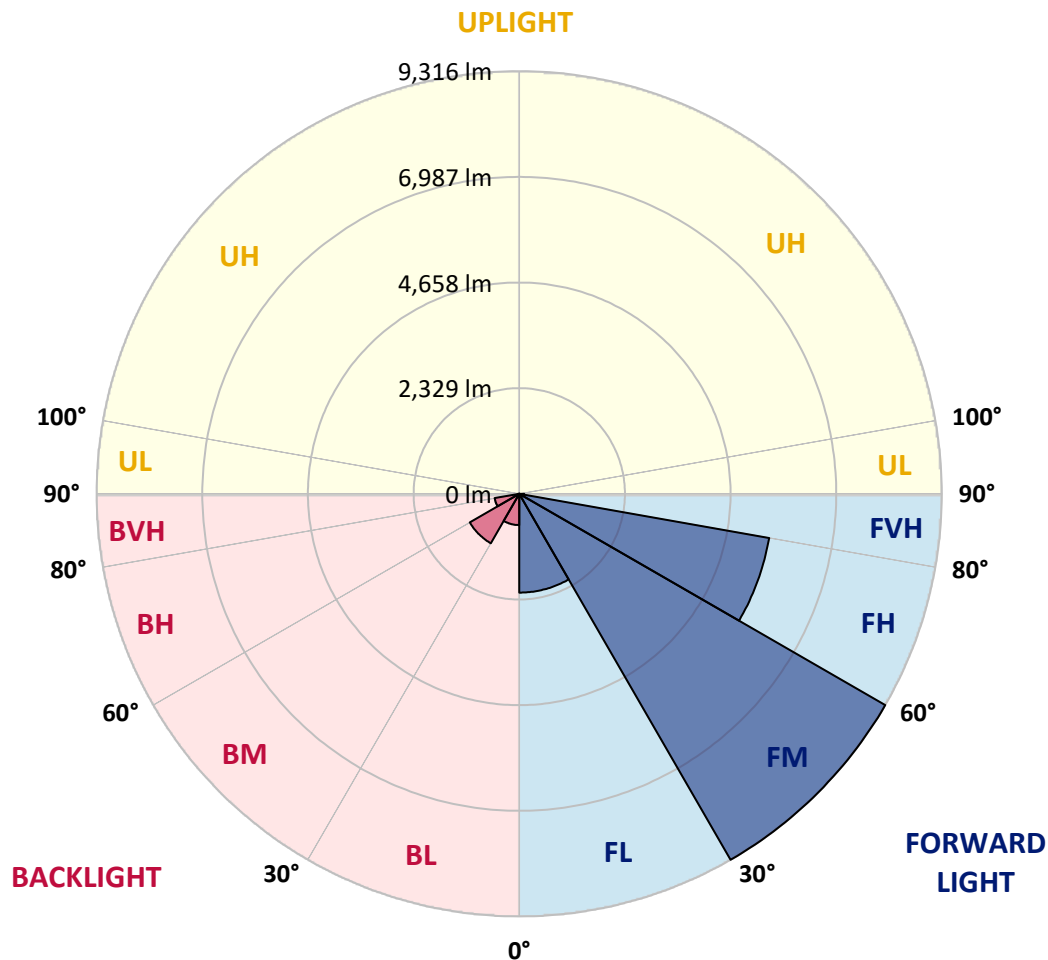
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2178.7	11.0			
FM	(30°-60°)	9316.3	47.2			
FH	(60°-80°)	5595.4	28.4			G3/7500
FVH	(80°-90°)	104.8	0.5			G2/225
BL	(0°-30°)	689.4	3.5	B2/1000		
BM	(30°-60°)	1257.7	6.4	B2/2500		
BH	(60°-80°)	550.2	2.8	B2/1000		G2/1000
BVH	(80°-90°)	35.5	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5
2.5°	3877.4	3864.9	3856.6	3810.9	3810.9	3748.5	3752.6	3694.4	3623.6	3511.3	3390.7
5°	4243.5	4226.9	4206.1	4160.3	4143.7	4081.3	4073.0	3989.8	3869.1	3673.6	3457.2
7.5°	4563.9	4547.2	4518.1	4451.6	4405.8	4330.9	4310.1	4201.9	4068.8	3827.5	3523.8
10°	4855.1	4842.6	4805.2	4722.0	4659.6	4568.0	4530.6	4385.0	4218.6	3952.3	3577.9
12.5°	5150.5	5133.8	5083.9	5013.2	4938.3	4830.1	4784.4	4597.2	4385.0	4089.6	3656.9
15°	5425.1	5400.1	5362.7	5287.8	5221.2	5117.2	5067.3	4846.8	4588.8	4243.5	3760.9
17.5°	5604.0	5583.2	5549.9	5508.3	5454.2	5375.1	5325.2	5108.9	4792.7	4393.3	3869.1
20°	5712.1	5703.8	5691.3	5666.4	5641.4	5587.3	5549.9	5346.0	5013.2	4538.9	3973.1
22.5°	5795.3	5787.0	5782.9	5782.9	5787.0	5766.2	5741.3	5566.5	5225.4	4692.9	4068.8
25°	5924.3	5920.2	5911.8	5903.5	5932.6	5936.8	5928.5	5807.8	5491.6	4896.7	4189.5
27.5°	6103.2	6090.7	6074.1	6065.8	6094.9	6115.7	6132.3	6049.1	5774.5	5104.7	4326.7
30°	6377.8	6340.3	6298.7	6269.6	6290.4	6323.7	6361.1	6311.2	6065.8	5362.7	4468.2
32.5°	6702.3	6656.5	6560.8	6506.8	6560.8	6585.8	6614.9	6590.0	6369.5	5641.4	4609.6
35°	7097.5	7043.4	6943.6	6864.5	6960.2	6906.2	6893.7	6868.7	6656.5	5916.0	4767.7
37.5°	7754.9	7675.8	7517.7	7343.0	7343.0	7226.5	7180.7	7105.8	6914.5	6161.5	4921.7
40°	8516.2	8412.2	8208.3	7950.4	7713.3	7472.0	7442.8	7388.7	7218.2	6444.4	5096.4
42.5°	9352.4	9152.7	8869.8	8557.8	8175.1	7900.5	7833.9	7680.0	7513.6	6731.4	5271.1
45°	10280.2	9864.1	9452.3	9294.2	8661.8	8412.2	8287.4	8008.6	7821.4	7031.0	5454.2
47.5°	10430.0	10105.4	9830.9	9805.9	9115.3	8907.3	8765.8	8366.4	8154.3	7351.3	5645.6
50°	10346.7	10151.2	10180.3	10080.5	9448.1	9310.8	9202.7	8749.2	8482.9	7659.2	5820.3
52.5°	9997.3	10105.4	10271.9	10088.8	9764.3	9652.0	9597.9	9161.1	8790.8	7942.1	5978.4
55°	9581.2	9656.1	10013.9	10238.6	10130.4	10030.6	9980.6	9639.5	9094.5	8179.2	6124.0
57.5°	8973.8	8940.6	9335.8	10213.6	10513.2	10454.9	10400.8	10109.6	9377.4	8349.8	6215.5
60°	8062.7	7992.0	8491.2	9714.4	10638.0	10729.5	10704.5	10421.6	9593.7	8345.6	6178.1
62.5°	6486.0	6660.7	7351.3	8898.9	10692.1	10925.0	10879.3	10446.6	9664.5	8104.3	5941.0
65°	4821.8	5071.4	5749.6	7775.7	10617.2	11024.9	10900.1	10038.9	9335.8	7625.9	5420.9
67.5°	3473.9	3694.4	4189.5	6398.6	9897.4	10567.2	10421.6	9373.2	8578.6	6947.8	4701.2
70°	2375.5	2533.6	2870.6	4659.6	8449.6	9136.1	9044.6	8378.9	7384.6	6140.6	3819.2
72.5°	1676.6	1743.2	1959.5	3074.5	6419.4	7168.3	7060.1	6893.7	5932.6	5104.7	2970.5
75°	1256.4	1298.0	1414.5	1988.6	4330.9	4967.4	4867.6	4963.3	4430.8	3864.9	2163.4
77.5°	474.3	515.9	802.9	1268.9	2562.8	3049.5	2949.7	3007.9	2462.9	1951.2	1077.5
80°	129.0	137.3	266.3	603.2	1164.9	1518.5	1381.2	1185.7	915.3	898.6	570.0
82.5°	54.1	62.4	120.6	324.5	416.0	416.0	349.5	432.7	349.5	420.2	274.6
85°	20.8	25.0	29.1	83.2	54.1	58.2	62.4	83.2	70.7	87.4	62.4
87.5°	0.0	0.0	0.0	4.2	4.2	8.3	4.2	8.3	12.5	12.5	12.5
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°	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5
2.5°	3340.7	3295.0	3228.4	3120.2	3007.9	2945.5	2866.5	2854.0	2770.8	2762.5	2729.2
5°	3361.5	3265.9	3095.3	2887.3	2683.4	2525.3	2408.8	2346.4	2225.8	2225.8	2192.5
7.5°	3378.2	3228.4	2953.8	2646.0	2367.2	2155.1	1997.0	1930.4	1822.2	1813.9	1788.9
10°	3382.3	3182.7	2799.9	2400.5	2059.4	1843.0	1689.1	1614.2	1518.5	1510.2	1493.6
12.5°	3415.6	3157.7	2662.6	2188.3	1838.9	1605.9	1456.1	1393.7	1318.8	1310.5	1293.9
15°	3469.7	3157.7	2546.1	2009.4	1643.3	1427.0	1298.0	1239.8	1185.7	1177.4	1169.1
17.5°	3523.8	3149.4	2429.6	1843.0	1481.1	1285.5	1173.2	1127.4	1085.8	1081.7	1073.4
20°	3573.7	3145.2	2313.1	1701.6	1356.3	1169.1	1081.7	1040.1	1006.8	1006.8	1002.6
22.5°	3623.6	3136.9	2200.8	1568.4	1248.1	1081.7	1006.8	961.0	936.1	936.1	931.9
25°	3698.5	3136.9	2096.8	1456.1	1160.7	1015.1	940.2	907.0	886.2	882.0	882.0
27.5°	3785.9	3161.9	2005.3	1356.3	1085.8	948.6	890.3	857.0	832.1	823.7	827.9
30°	3881.6	3182.7	1922.1	1268.9	1015.1	898.6	836.2	802.9	778.0	769.7	773.8
32.5°	3977.3	3207.6	1847.2	1189.9	944.4	852.9	790.5	753.0	728.1	723.9	723.9
35°	4081.3	3232.6	1772.3	1123.3	886.2	807.1	748.9	707.3	690.6	682.3	686.5
37.5°	4185.3	3274.2	1701.6	1060.9	844.5	765.5	711.4	669.8	657.3	653.2	653.2
40°	4310.1	3336.6	1672.5	1019.3	807.1	728.1	682.3	640.7	628.2	628.2	628.2
42.5°	4414.1	3386.5	1647.5	973.5	778.0	694.8	653.2	619.9	611.6	607.4	611.6
45°	4518.1	3432.3	1614.2	931.9	740.5	661.5	628.2	594.9	586.6	586.6	586.6
47.5°	4622.1	3457.2	1568.4	890.3	707.3	632.4	603.2	574.1	565.8	565.8	565.8
50°	4705.3	3478.0	1501.9	844.5	669.8	607.4	578.3	549.2	540.8	540.8	540.8
52.5°	4788.5	3482.2	1431.2	790.5	632.4	578.3	553.3	524.2	515.9	511.7	511.7
55°	4863.4	3478.0	1347.9	728.1	590.8	545.0	524.2	499.2	482.6	466.0	474.3
57.5°	4917.5	3473.9	1252.3	665.7	549.2	511.7	503.4	470.1	436.8	395.2	403.6
60°	4896.7	3428.1	1148.3	586.6	503.4	478.4	478.4	432.7	374.4	353.6	357.8
62.5°	4763.6	3299.1	1040.1	503.4	457.6	445.2	441.0	391.1	345.3	324.5	328.7
65°	4364.2	2974.6	882.0	428.5	411.9	407.7	407.7	361.9	320.3	295.4	299.5
67.5°	3756.8	2496.2	719.7	361.9	366.1	374.4	374.4	332.8	291.2	266.3	270.4
70°	3012.1	1951.2	574.1	312.0	316.2	328.7	337.0	299.5	262.1	237.1	237.1
72.5°	2267.4	1481.1	461.8	262.1	282.9	282.9	295.4	266.3	228.8	203.9	208.0
75°	1643.3	1060.9	366.1	220.5	245.5	241.3	241.3	224.7	195.5	178.9	178.9
77.5°	778.0	557.5	291.2	158.1	191.4	187.2	191.4	178.9	166.4	149.8	153.9
80°	382.8	274.6	187.2	112.3	133.1	137.3	149.8	141.5	137.3	124.8	124.8
82.5°	183.1	108.2	87.4	79.0	91.5	95.7	104.0	104.0	108.2	99.8	99.8
85°	49.9	29.1	37.4	49.9	58.2	62.4	70.7	74.9	74.9	70.7	74.9
87.5°	12.5	12.5	16.6	25.0	29.1	33.3	37.4	37.4	16.6	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)