

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: P840877

Luminaire Tested: **ARCH4-100-730-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-730-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12283 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

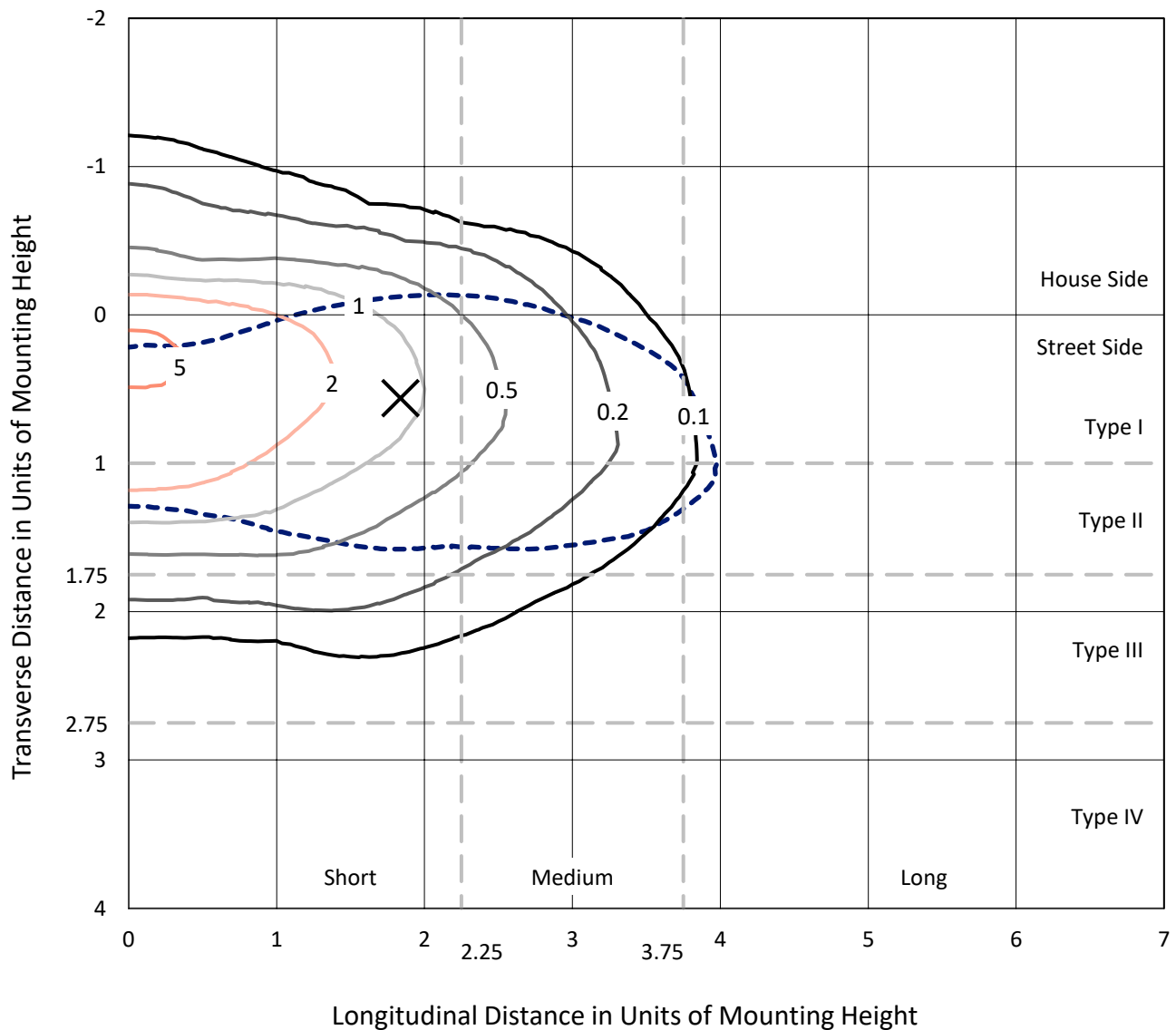
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

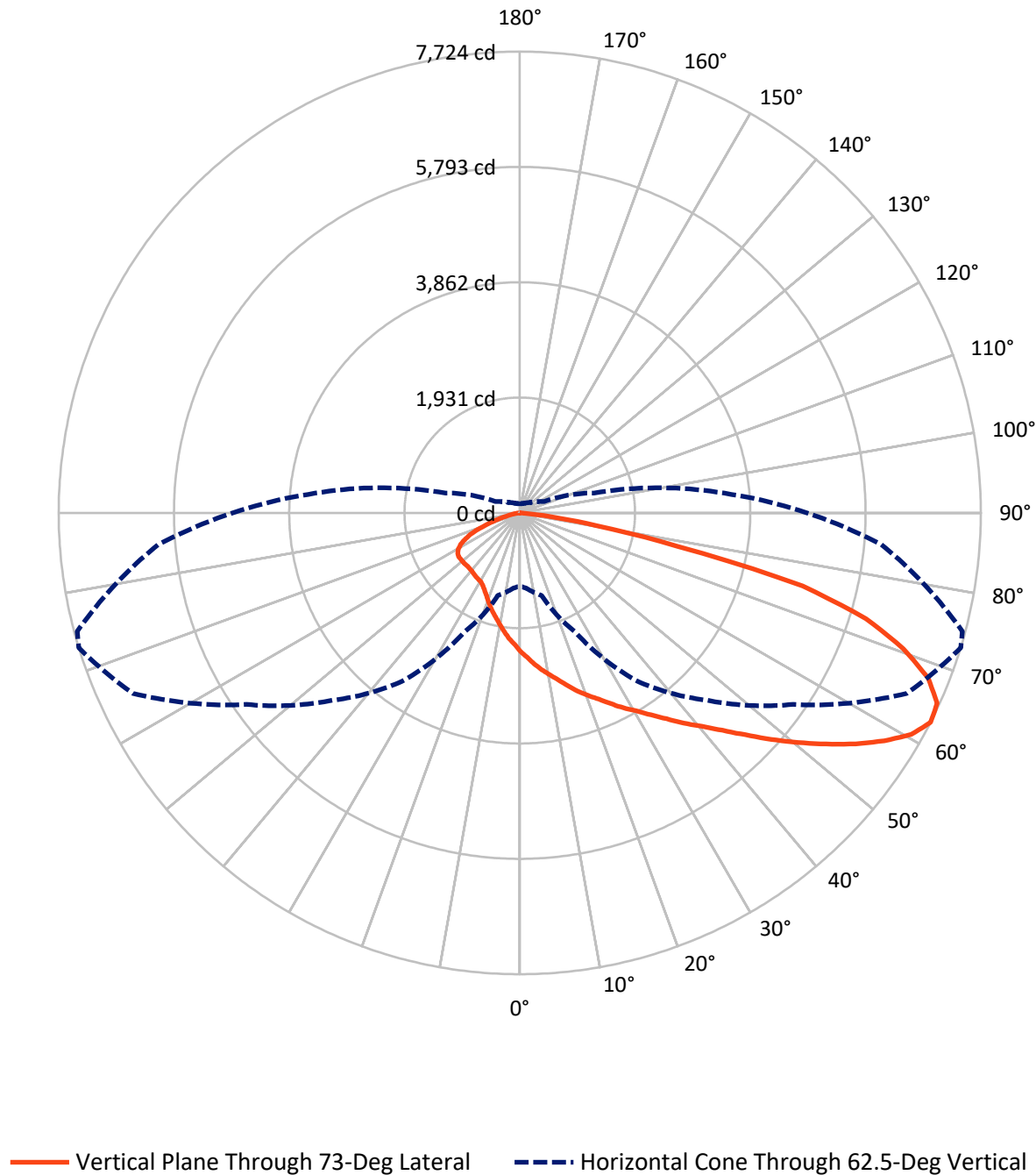
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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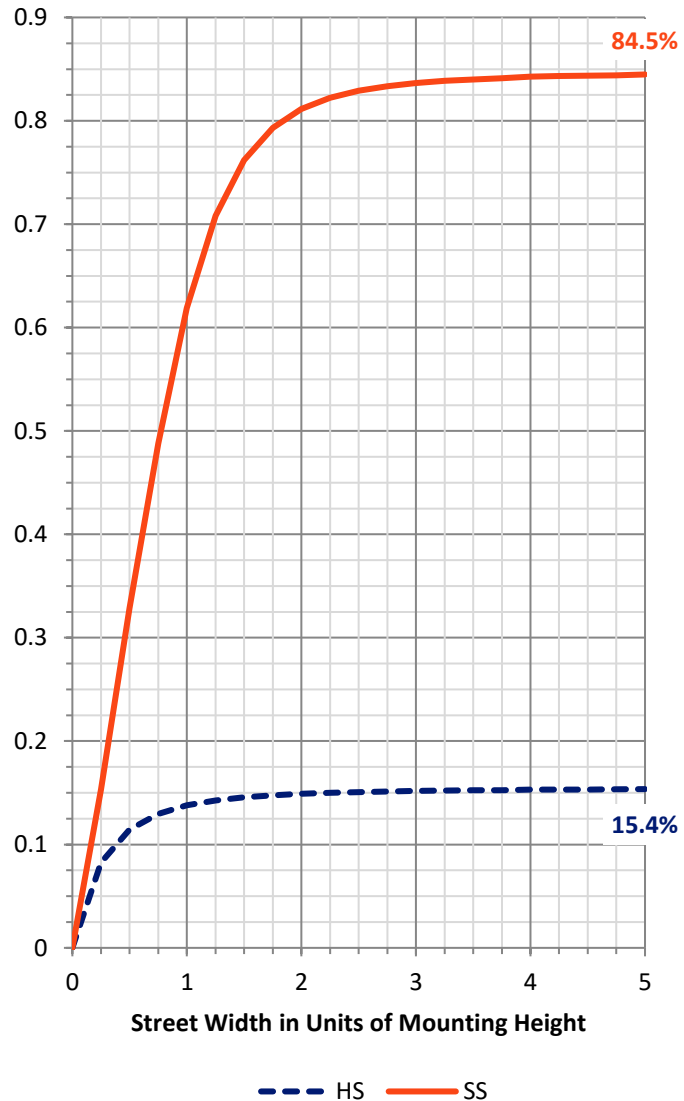
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1904.0	0.0	1904.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	10379.0	0.0	10379.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	12283.0	0.0	12283.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.7	1.8
10°-20°	678.0	5.5
20°-30°	1128.5	9.2
30°-40°	1702.8	13.9
40°-50°	2380.1	19.4
50°-60°	2629.0	21.4
60°-70°	2290.2	18.6
70°-80°	1156.9	9.4
80°-90°	92.9	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°	12283.0	100.0
0°-180°	12283.0	100.0

Coefficient of Utilization



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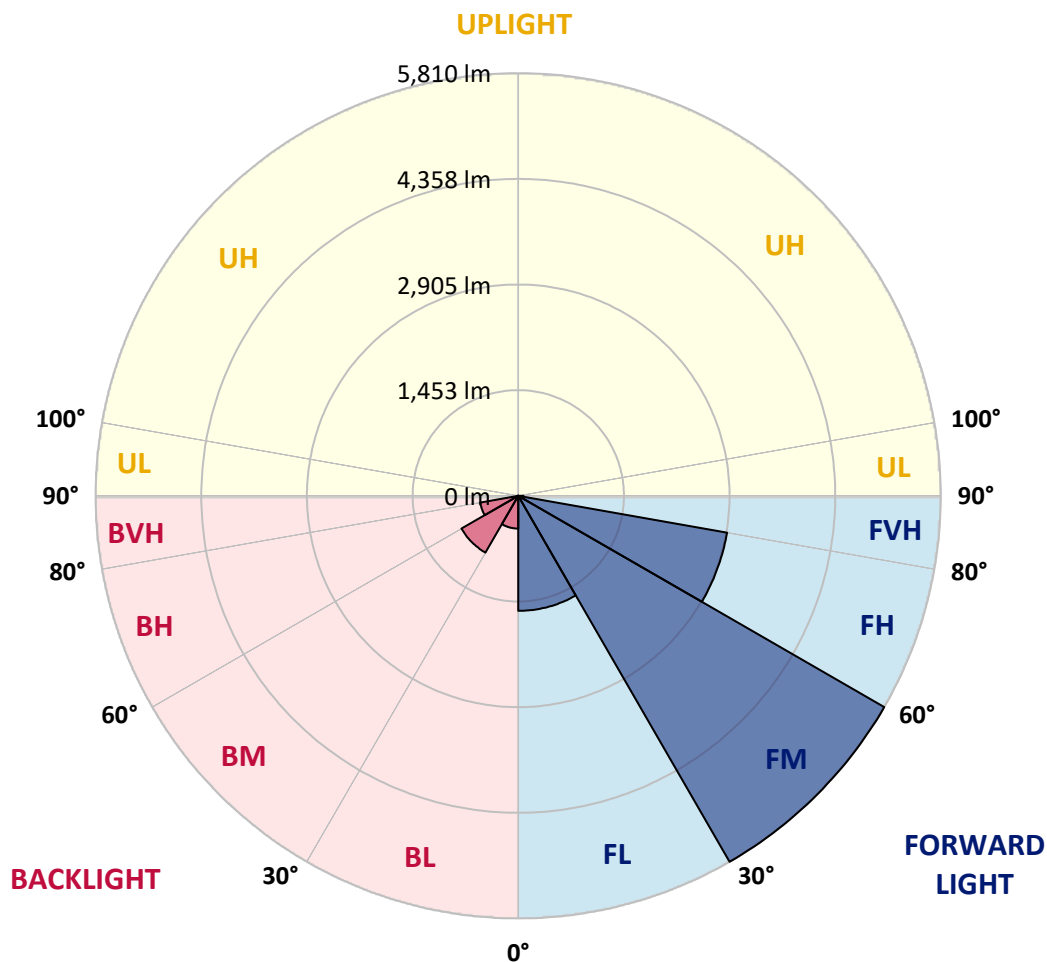
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1581.2	12.9			
FM	(30°-60°)	5810.3	47.3			
FH	(60°-80°)	2915.6	23.7			G2/5000
FVH	(80°-90°)	71.9	0.6			G1/100
BL	(0°-30°)	450.0	3.7	B1/500		
BM	(30°-60°)	901.6	7.3	B1/1000		
BH	(60°-80°)	531.4	4.3	B2/1000		G2/1000
BVH	(80°-90°)	21.0	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°	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8
2.5°	2647.0	2676.4	2660.4	2671.1	2617.5	2582.7	2542.6	2465.0	2422.2	2416.8	2366.0
5°	3035.1	3067.2	3040.4	3032.4	2938.7	2858.4	2767.4	2630.9	2539.9	2523.9	2411.5
7.5°	3423.1	3452.6	3420.5	3396.4	3270.6	3128.7	2994.9	2794.2	2652.3	2625.6	2448.9
10°	3696.1	3722.9	3698.8	3674.7	3543.6	3399.1	3209.0	2946.7	2754.0	2711.2	2473.0
12.5°	3902.2	3918.3	3907.6	3886.2	3763.1	3607.8	3425.8	3118.0	2869.1	2815.6	2510.5
15°	4070.8	4097.6	4084.2	4068.2	3950.4	3795.2	3621.2	3297.4	3002.9	2936.0	2566.7
17.5°	4183.3	4202.0	4204.7	4204.7	4100.3	3947.7	3779.1	3460.6	3136.8	3051.1	2620.2
20°	4234.1	4255.5	4268.9	4290.3	4204.7	4073.5	3902.2	3599.8	3262.6	3166.2	2671.1
22.5°	4258.2	4276.9	4311.7	4359.9	4290.3	4180.6	4022.7	3728.3	3388.4	3286.6	2730.0
25°	4276.9	4301.0	4351.9	4442.9	4394.7	4301.0	4164.5	3875.5	3538.2	3433.9	2815.6
27.5°	4327.8	4357.2	4405.4	4515.1	4456.2	4410.7	4314.4	4033.4	3696.1	3589.1	2920.0
30°	4504.4	4528.5	4525.8	4595.4	4523.2	4509.8	4442.9	4185.9	3848.7	3741.6	3043.1
32.5°	4825.6	4849.7	4790.8	4764.0	4606.1	4608.8	4582.0	4349.2	4030.7	3921.0	3184.9
35°	5170.9	5197.6	5120.0	5074.5	4809.5	4731.9	4745.3	4552.6	4234.1	4124.4	3361.6
37.5°	5478.6	5510.8	5443.8	5376.9	5109.3	4930.0	4927.3	4780.1	4467.0	4354.5	3557.0
40°	5647.3	5684.7	5724.9	5687.4	5406.4	5208.3	5122.7	5012.9	4697.1	4582.0	3768.4
42.5°	5727.5	5831.9	5904.2	5880.1	5649.9	5449.2	5347.5	5256.5	4978.1	4865.7	4020.0
45°	5502.7	5505.4	5658.0	5789.1	5746.3	5612.5	5593.7	5529.5	5299.3	5192.3	4303.7
47.5°	5221.7	5200.3	5307.3	5540.2	5660.6	5695.4	5805.2	5831.9	5666.0	5558.9	4592.7
50°	4547.2	4560.6	4908.6	5243.1	5478.6	5703.5	5955.0	6142.4	6043.4	5941.7	4897.9
52.5°	3698.8	3730.9	4129.7	4865.7	5237.8	5623.2	6043.4	6452.9	6428.8	6332.4	5203.0
55°	2965.5	3016.3	3439.2	4236.8	4930.0	5443.8	6080.8	6736.6	6827.6	6739.2	5502.7
57.5°	2266.9	2320.5	2676.4	3495.4	4536.5	5152.1	6054.1	6985.5	7199.6	7143.4	5778.4
60°	1707.6	1761.1	1988.6	2834.3	4044.1	4825.6	5920.2	7148.7	7534.1	7475.3	5979.1
62.5°	1223.1	1265.9	1434.6	2205.4	3444.6	4437.5	5591.0	7151.4	7724.2	7676.0	6075.5
65°	880.5	880.5	1017.0	1573.7	2882.5	3971.8	5093.2	6822.2	7684.0	7670.6	6008.6
67.5°	634.3	639.7	749.4	1100.0	2299.0	3407.1	4448.2	6236.1	7373.5	7440.5	5767.7
70°	449.6	463.0	513.9	768.1	1737.0	2689.8	3757.7	5467.9	6814.2	6931.9	5302.0
72.5°	347.9	356.0	390.8	535.3	1268.6	1999.3	2994.9	4611.5	6067.5	6201.3	4667.7
75°	267.6	275.7	302.4	393.4	910.0	1402.4	2127.8	3578.4	4892.5	5130.7	3749.7
77.5°	195.4	206.1	224.8	286.4	529.9	891.2	1290.0	2012.7	2700.5	2812.9	1964.5
80°	91.0	104.4	131.1	184.7	286.4	420.2	457.7	776.2	1298.1	1356.9	1065.2
82.5°	50.9	64.2	74.9	112.4	144.5	149.9	155.2	195.4	489.8	540.6	447.0
85°	24.1	32.1	34.8	48.2	48.2	42.8	50.9	37.5	80.3	96.4	93.7
87.5°	0.0	2.7	5.4	13.4	10.7	8.0	8.0	8.0	8.0	10.7	8.0
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°	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8	2325.8
2.5°	2341.9	2307.1	2226.8	2157.2	2111.7	2071.6	2018.0	1993.9	1951.1	1959.1	1935.1
5°	2355.3	2291.0	2149.2	2018.0	1921.7	1836.0	1742.4	1688.8	1629.9	1624.6	1605.9
7.5°	2363.3	2264.3	2060.8	1876.2	1729.0	1597.8	1472.0	1402.4	1330.2	1314.1	1298.1
10°	2355.3	2224.1	1969.8	1729.0	1533.6	1370.3	1228.5	1140.2	1065.2	1046.5	1030.4
12.5°	2363.3	2202.7	1884.2	1592.5	1359.6	1174.9	1014.4	923.4	853.8	835.0	824.3
15°	2382.0	2189.3	1811.9	1469.4	1204.4	998.3	840.4	762.8	706.6	687.8	682.5
17.5°	2398.1	2175.9	1734.3	1348.9	1049.2	843.1	706.6	642.3	594.2	575.4	570.1
20°	2419.5	2157.2	1656.7	1233.8	912.7	720.0	599.5	543.3	505.8	492.5	489.8
22.5°	2438.2	2143.8	1584.4	1118.7	786.9	620.9	519.2	473.7	447.0	433.6	433.6
25°	2486.4	2149.2	1522.9	1011.7	693.2	543.3	457.7	422.9	401.5	393.4	393.4
27.5°	2542.6	2170.6	1474.7	920.7	612.9	484.4	414.8	385.4	374.7	364.0	366.7
30°	2622.9	2213.4	1442.6	845.7	554.0	438.9	380.1	358.6	347.9	345.3	345.3
32.5°	2724.6	2283.0	1439.9	797.6	511.2	404.1	356.0	337.2	331.9	329.2	329.2
35°	2845.0	2344.5	1423.9	776.2	484.4	380.1	337.2	323.8	321.2	321.2	321.2
37.5°	2989.6	2446.3	1413.2	746.7	471.1	366.7	323.8	313.1	313.1	313.1	313.1
40°	3139.4	2529.2	1397.1	720.0	465.7	358.6	315.8	302.4	302.4	302.4	302.4
42.5°	3318.8	2649.7	1391.7	706.6	457.7	353.3	305.1	289.1	291.7	291.7	294.4
45°	3535.6	2786.2	1389.1	693.2	455.0	347.9	294.4	275.7	278.3	275.7	275.7
47.5°	3755.0	2944.1	1397.1	685.2	452.3	342.6	286.4	262.3	262.3	259.6	259.6
50°	3985.2	3088.6	1402.4	677.1	447.0	331.9	273.0	251.6	246.2	240.9	243.6
52.5°	4202.0	3222.4	1405.1	663.8	430.9	315.8	262.3	238.2	230.2	222.1	224.8
55°	4418.8	3350.9	1410.5	647.7	409.5	299.8	248.9	224.8	214.1	203.4	203.4
57.5°	4614.2	3463.3	1397.1	607.5	385.4	283.7	235.5	208.8	192.7	182.0	182.0
60°	4748.0	3543.6	1356.9	548.7	353.3	265.0	222.1	192.7	174.0	165.9	165.9
62.5°	4812.2	3557.0	1284.7	452.3	313.1	246.2	206.1	176.6	160.6	155.2	155.2
65°	4750.7	3498.1	1172.3	339.9	270.3	224.8	190.0	163.3	147.2	133.8	133.8
67.5°	4536.5	3332.1	1017.0	256.9	230.2	203.4	174.0	149.9	131.1	120.4	120.4
70°	4105.6	2986.9	786.9	206.1	195.4	176.6	157.9	133.8	117.8	104.4	104.4
72.5°	3540.9	2531.9	554.0	165.9	165.9	149.9	133.8	117.8	101.7	91.0	91.0
75°	2716.6	1873.5	372.0	133.8	136.5	125.8	109.7	96.4	85.6	77.6	77.6
77.5°	1482.7	926.0	227.5	99.0	101.7	96.4	85.6	77.6	72.3	64.2	64.2
80°	720.0	406.8	131.1	69.6	72.3	69.6	64.2	56.2	56.2	50.9	50.9
82.5°	302.4	152.6	69.6	48.2	48.2	42.8	40.1	40.1	40.1	37.5	37.5
85°	74.9	29.4	29.4	26.8	26.8	26.8	24.1	24.1	24.1	18.7	21.4
87.5°	10.7	10.7	10.7	10.7	10.7	10.7	8.0	2.7	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)