

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: P841766

Luminaire Tested: **ARCH4-220-750-U-T2R-HSS**

Issue Date: 5/27/2024

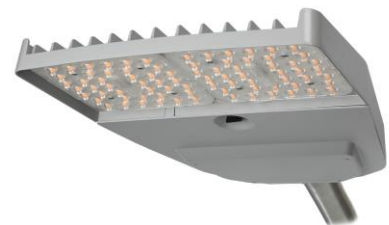
Test Information

Test Method: LM-79-08
Report Number: P841766
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24493 lumens
Efficiency: N/A
Efficacy: 110.4 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

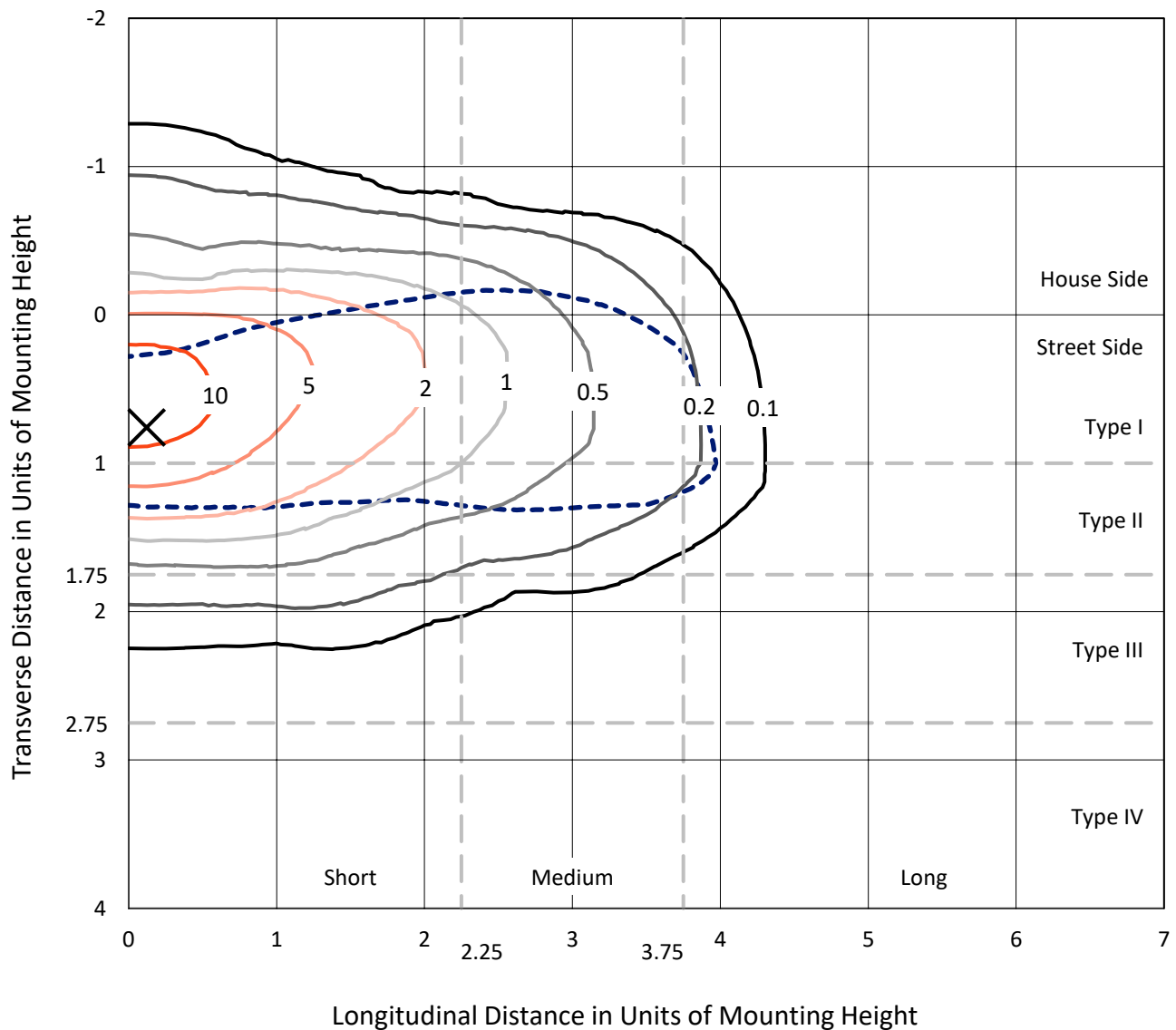
Input Watts (W): 221.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

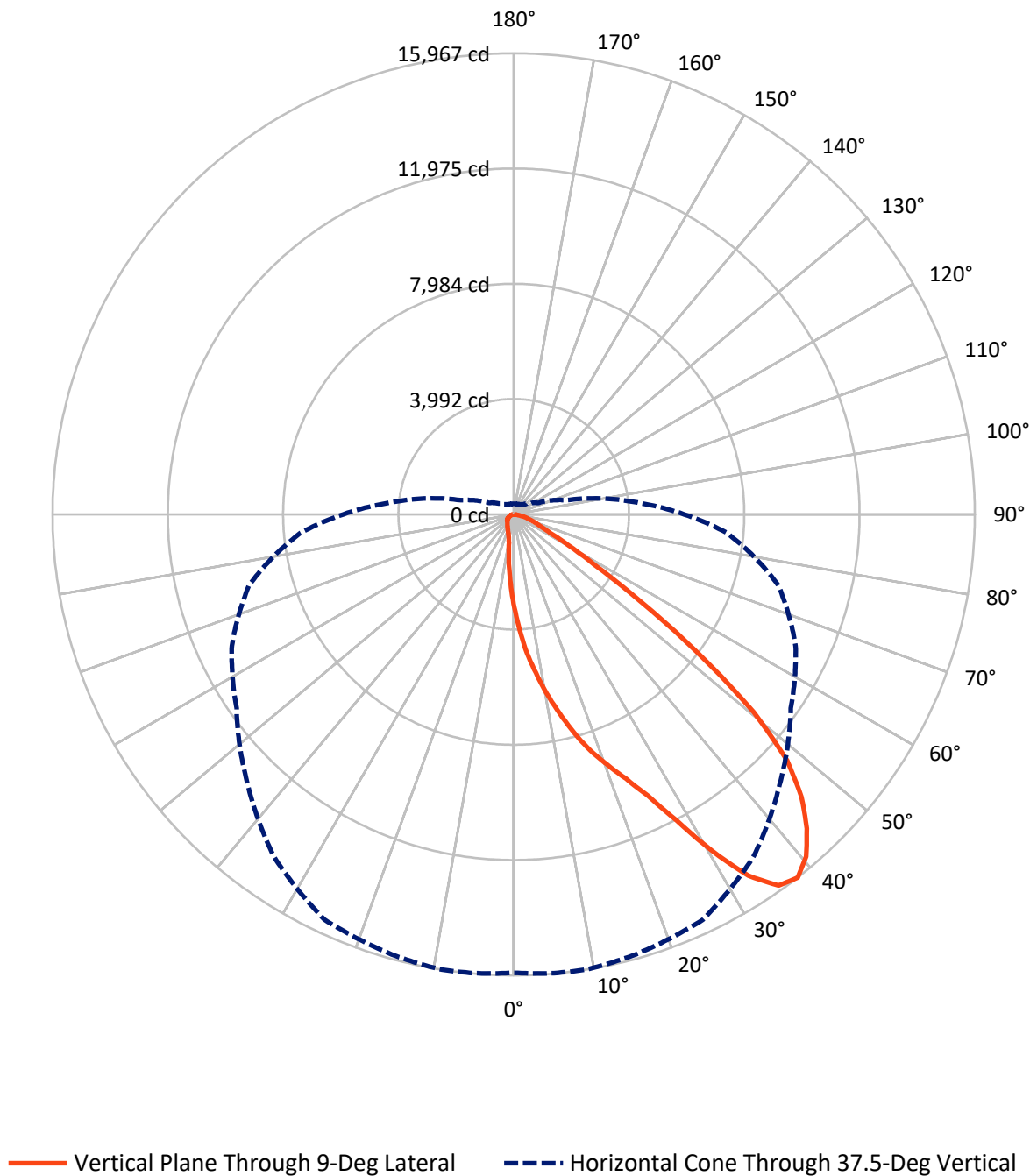
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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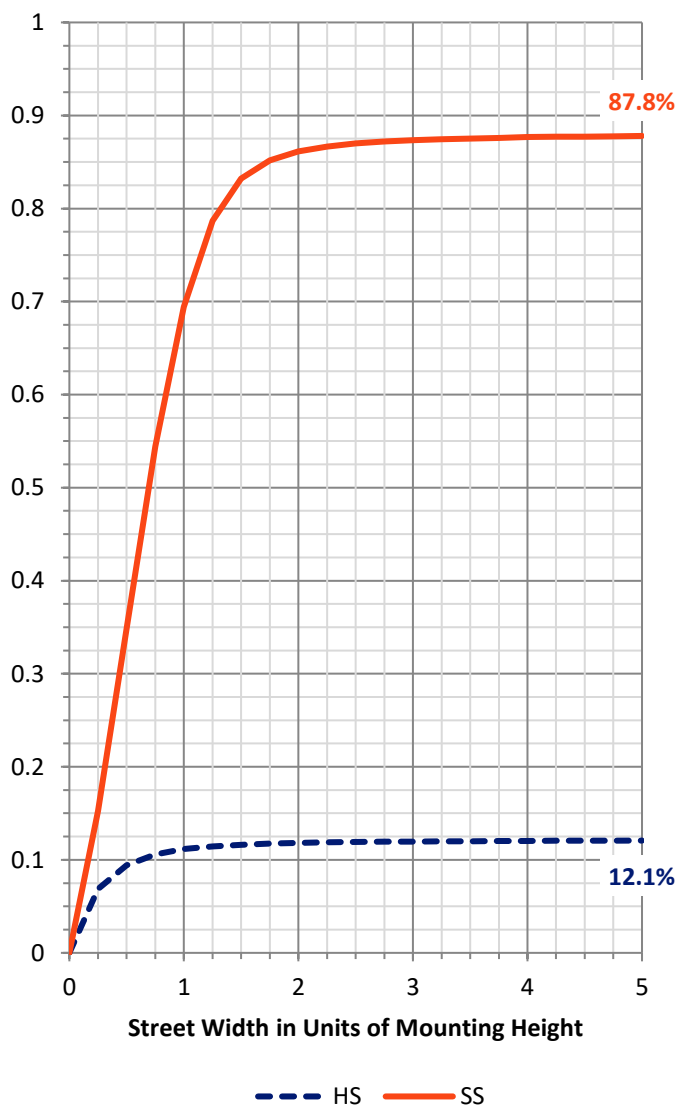
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2978.8	0.0	2978.8
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	21514.2	0.0	21514.2
	% Fixture	87.8	0.0	87.8
Total	Lumens	24493.0	0.0	24493.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.4	1.3
10°-20°	1131.1	4.6
20°-30°	2324.2	9.5
30°-40°	4108.1	16.8
40°-50°	5457.3	22.3
50°-60°	5175.9	21.1
60°-70°	3948.8	16.1
70°-80°	1914.3	7.8
80°-90°	107.8	0.4
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°	24493.0	100.0
0°-180°	24493.0	100.0

Coefficient of Utilization



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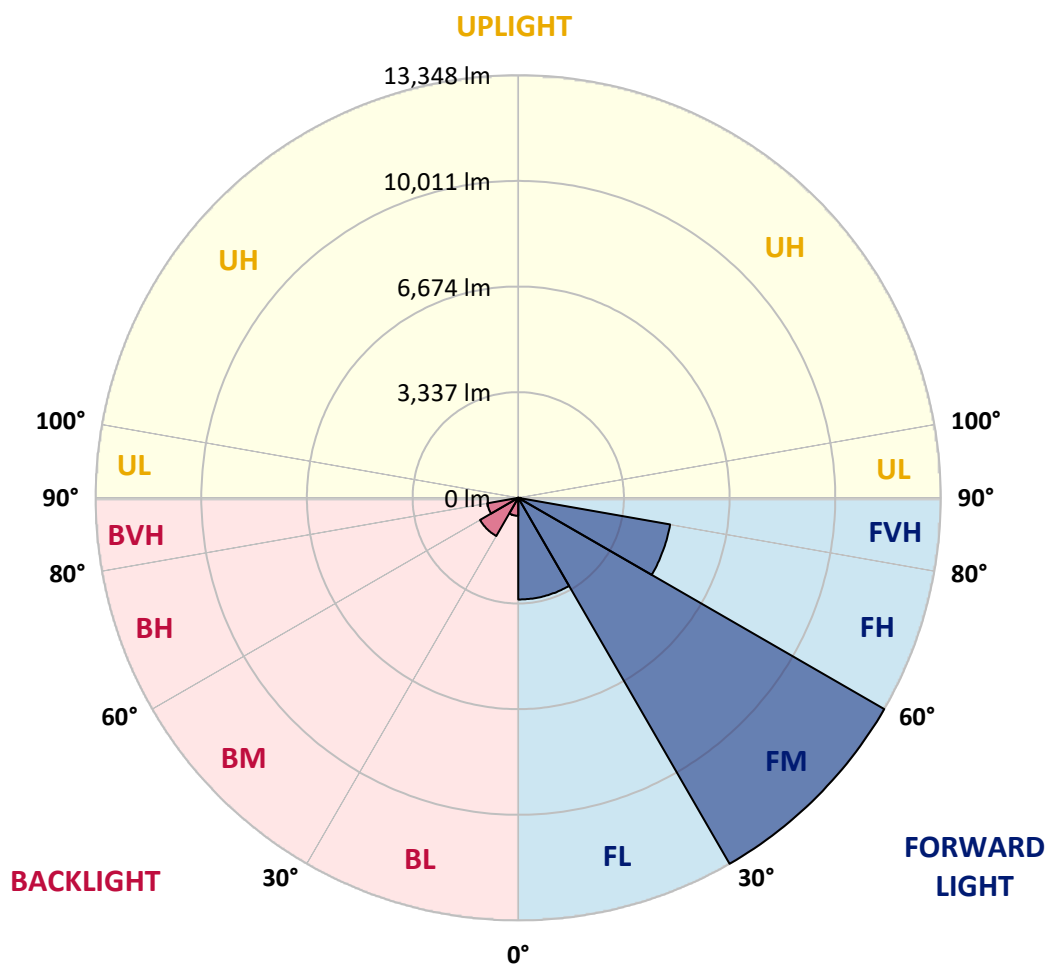
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3212.3	13.1			
FM	(30°-60°)	13347.5	54.5			
FH	(60°-80°)	4869.1	19.9			G2/5000
FVH	(80°-90°)	85.3	0.3			G1/100
BL	(0°-30°)	568.5	2.3	B2/1000		
BM	(30°-60°)	1393.9	5.7	B2/2500		
BH	(60°-80°)	994.0	4.1	B2/1000		G2/1000
BVH	(80°-90°)	22.4	0.1			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°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7
2.5°	4011.9	3941.5	4022.0	4011.9	3941.5	3896.3	3755.5	3710.3	3544.4	3423.7	3318.1
5°	4836.4	4766.0	4836.4	4816.3	4715.7	4605.1	4373.9	4223.1	3926.4	3665.0	3428.7
7.5°	5520.1	5520.1	5550.3	5555.3	5434.7	5263.7	4977.2	4750.9	4333.7	3931.5	3554.4
10°	6259.2	6264.2	6329.6	6284.3	6123.4	5892.2	5530.2	5243.6	4740.9	4213.0	3675.1
12.5°	7048.5	7053.5	7073.6	7053.5	6862.5	6565.9	6128.5	5751.4	5173.2	4534.8	3841.0
15°	7837.8	7842.8	7868.0	7832.8	7621.6	7274.7	6777.0	6314.5	5630.7	4896.7	4042.1
17.5°	8576.8	8586.9	8607.0	8561.7	8340.5	7928.3	7420.5	6862.5	6118.4	5283.9	4268.3
20°	9240.5	9250.5	9265.6	9205.3	8984.1	8571.8	8023.8	7440.6	6616.1	5681.0	4514.7
22.5°	9909.1	9919.2	9944.3	9863.9	9617.5	9144.9	8607.0	8003.7	7144.0	6118.4	4801.2
25°	10763.8	10773.8	10793.9	10678.3	10341.5	9788.4	9220.3	8602.0	7717.1	6611.1	5153.1
27.5°	12015.6	12005.6	12005.6	11794.4	11216.2	10497.3	9838.7	9210.3	8335.5	7139.0	5540.3
30°	13564.1	13538.9	13523.8	13237.3	12412.8	11296.7	10472.2	9778.4	8928.8	7697.0	5957.5
32.5°	14951.6	14951.6	14921.5	14619.8	13745.1	12372.6	11145.9	10331.4	9501.9	8260.1	6389.9
35°	15771.1	15806.3	15791.2	15565.0	14926.5	13528.9	12055.8	10995.0	10105.2	8848.3	6907.7
37.5°	15881.7	15952.1	15967.2	15831.4	15494.6	14474.0	13066.3	11714.0	10768.8	9481.8	7410.5
40°	15434.3	15585.1	15585.1	15565.0	15444.3	14921.5	13916.0	12548.5	11452.5	10140.4	7918.2
42.5°	14745.5	14901.4	14881.3	14956.7	14926.5	14815.9	14393.6	13327.8	12136.3	10819.1	8380.8
45°	13845.6	14006.5	13966.3	14102.0	14162.3	14283.0	14343.3	13870.7	12809.9	11558.1	8898.6
47.5°	12402.7	12674.2	12734.5	12975.9	13227.2	13604.3	13890.8	14066.8	13438.4	12352.4	9461.7
50°	10271.1	10653.2	10773.8	11281.6	11970.4	12749.6	13212.1	13825.5	13880.8	13166.9	10070.0
52.5°	7355.2	7797.6	7983.6	8818.1	10235.9	11593.3	12427.9	13292.6	14051.7	13946.1	10728.6
55°	4756.0	5133.0	5314.0	6098.3	7983.6	10115.2	11502.8	12603.8	13956.2	14660.0	11482.7
57.5°	2931.0	3147.2	3267.8	3941.5	5676.0	8219.9	10291.2	11970.4	13664.6	15278.4	12267.0
60°	1975.8	2101.5	2161.8	2478.5	3856.1	6143.5	8627.1	11306.7	13282.5	15695.7	12980.9
62.5°	1312.2	1352.4	1412.7	1608.8	2543.9	4313.6	6626.2	10120.3	12996.0	15720.8	13508.8
65°	1015.5	1035.7	1060.8	1146.3	1568.6	3016.5	4660.4	8199.8	12568.6	15187.9	13674.7
67.5°	799.4	819.5	849.6	894.9	1136.2	2046.2	3172.3	6007.8	11693.9	14353.4	13403.2
70°	628.4	643.5	663.6	703.8	884.8	1483.1	2096.4	3991.8	9929.2	13559.0	12548.5
72.5°	497.7	512.8	532.9	573.1	718.9	1085.9	1437.9	2488.6	7656.8	12588.7	10904.5
75°	392.1	402.2	417.3	457.5	578.2	844.6	975.3	1488.1	5203.4	10814.0	8496.4
77.5°	196.1	241.3	276.5	316.7	422.3	583.2	648.5	824.5	2197.0	5550.3	4052.1
80°	115.6	140.8	150.8	176.0	276.5	351.9	351.9	331.8	693.8	2131.6	1654.0
82.5°	65.4	90.5	95.5	100.5	165.9	201.1	160.9	120.7	140.8	713.9	482.6
85°	20.1	30.2	35.2	40.2	55.3	60.3	55.3	50.3	40.2	70.4	45.2
87.5°	0.0	0.0	0.0	0.0	5.0	10.1	10.1	10.1	15.1	15.1	15.1
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°	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7	3237.7
2.5°	3257.8	3192.4	3066.7	2951.1	2840.5	2760.1	2684.7	2614.3	2564.0	2523.8	2518.8
5°	3303.0	3172.3	2931.0	2704.8	2498.6	2327.7	2181.9	2066.3	1980.8	1920.5	1915.5
7.5°	3363.4	3162.3	2795.3	2458.4	2151.7	1905.4	1694.3	1538.4	1427.8	1382.5	1347.4
10°	3413.6	3152.2	2659.5	2212.1	1809.9	1498.2	1246.8	1091.0	1010.5	980.4	965.3
12.5°	3499.1	3162.3	2543.9	1985.8	1513.3	1146.3	955.2	869.7	834.6	809.4	804.4
15°	3624.8	3207.5	2433.3	1764.6	1211.6	925.1	814.4	759.1	724.0	718.9	713.9
17.5°	3750.5	3247.7	2332.7	1538.4	1005.5	804.4	729.0	683.7	658.6	653.6	653.6
20°	3896.3	3298.0	2222.1	1322.2	859.7	724.0	663.6	628.4	598.3	593.2	593.2
22.5°	4067.2	3368.4	2116.6	1131.2	764.2	663.6	613.3	573.1	548.0	543.0	543.0
25°	4298.5	3474.0	2031.1	990.4	698.8	613.3	568.1	532.9	512.8	502.7	502.7
27.5°	4554.9	3619.8	1970.8	904.9	653.6	573.1	527.9	497.7	477.6	467.6	467.6
30°	4841.4	3780.6	1930.5	869.7	628.4	537.9	497.7	467.6	442.4	437.4	437.4
32.5°	5158.2	3966.7	1905.4	874.8	623.4	512.8	467.6	437.4	417.3	407.2	407.2
35°	5510.1	4172.8	1890.3	904.9	633.5	492.7	442.4	412.3	392.1	382.1	382.1
37.5°	5902.2	4414.1	1890.3	935.1	658.6	487.7	417.3	387.1	372.0	362.0	362.0
40°	6269.2	4670.5	1910.4	970.3	683.7	487.7	397.2	372.0	351.9	341.9	341.9
42.5°	6555.8	4816.3	1925.5	1005.5	698.8	482.6	377.1	351.9	336.8	326.8	326.8
45°	6882.6	4972.1	1895.3	1020.6	698.8	472.6	362.0	336.8	321.8	311.7	311.7
47.5°	7244.6	5163.2	1890.3	1030.6	683.7	452.5	346.9	321.8	311.7	301.6	301.6
50°	7611.6	5374.3	1900.4	1025.6	663.6	422.3	326.8	311.7	296.6	286.6	286.6
52.5°	8028.8	5595.6	1920.5	1015.5	618.4	387.1	311.7	296.6	281.5	271.5	266.5
55°	8491.4	5836.9	1960.7	995.4	558.0	351.9	296.6	281.5	261.4	251.4	246.3
57.5°	9024.3	6133.5	2006.0	955.2	492.7	321.8	281.5	261.4	231.3	216.2	211.2
60°	9532.0	6470.3	2056.2	859.7	427.3	291.6	266.5	236.3	206.1	196.1	191.0
62.5°	10009.7	6802.1	2081.4	688.8	362.0	266.5	251.4	216.2	186.0	176.0	170.9
65°	10316.3	7164.1	2026.1	467.6	296.6	246.3	231.3	201.1	170.9	155.9	155.9
67.5°	10336.4	7335.1	1835.0	306.7	241.3	221.2	211.2	181.0	150.8	140.8	135.7
70°	9828.7	7078.7	1402.7	241.3	201.1	191.0	191.0	160.9	130.7	120.7	115.6
72.5°	8662.3	6269.2	894.9	196.1	170.9	160.9	160.9	135.7	115.6	100.5	95.5
75°	6837.3	4836.4	477.6	160.9	140.8	135.7	125.7	110.6	95.5	85.5	80.4
77.5°	3142.2	2131.6	221.2	115.6	105.6	105.6	95.5	80.4	75.4	65.4	65.4
80°	1241.8	724.0	110.6	75.4	70.4	70.4	70.4	55.3	55.3	45.2	40.2
82.5°	341.9	150.8	55.3	45.2	45.2	45.2	40.2	35.2	35.2	30.2	30.2
85°	35.2	25.1	25.1	25.1	25.1	20.1	20.1	15.1	10.1	10.1	10.1
87.5°	15.1	15.1	15.1	15.1	15.1	10.1	5.0	0.0	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)