

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: P842117

Luminaire Tested: **ARCH4-270-740-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842117
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: ARCH4-270-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1045mA 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: 28068 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

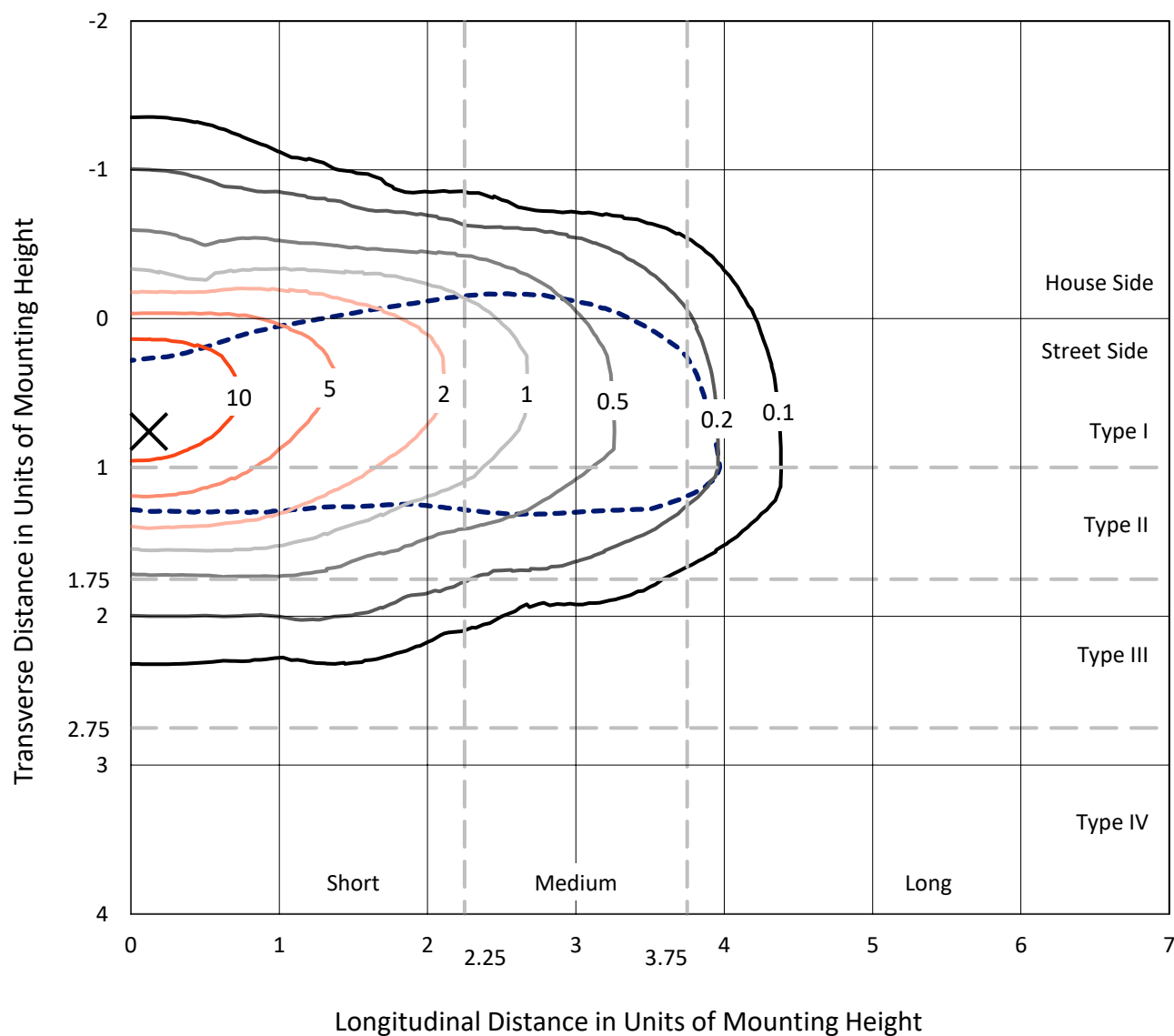
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

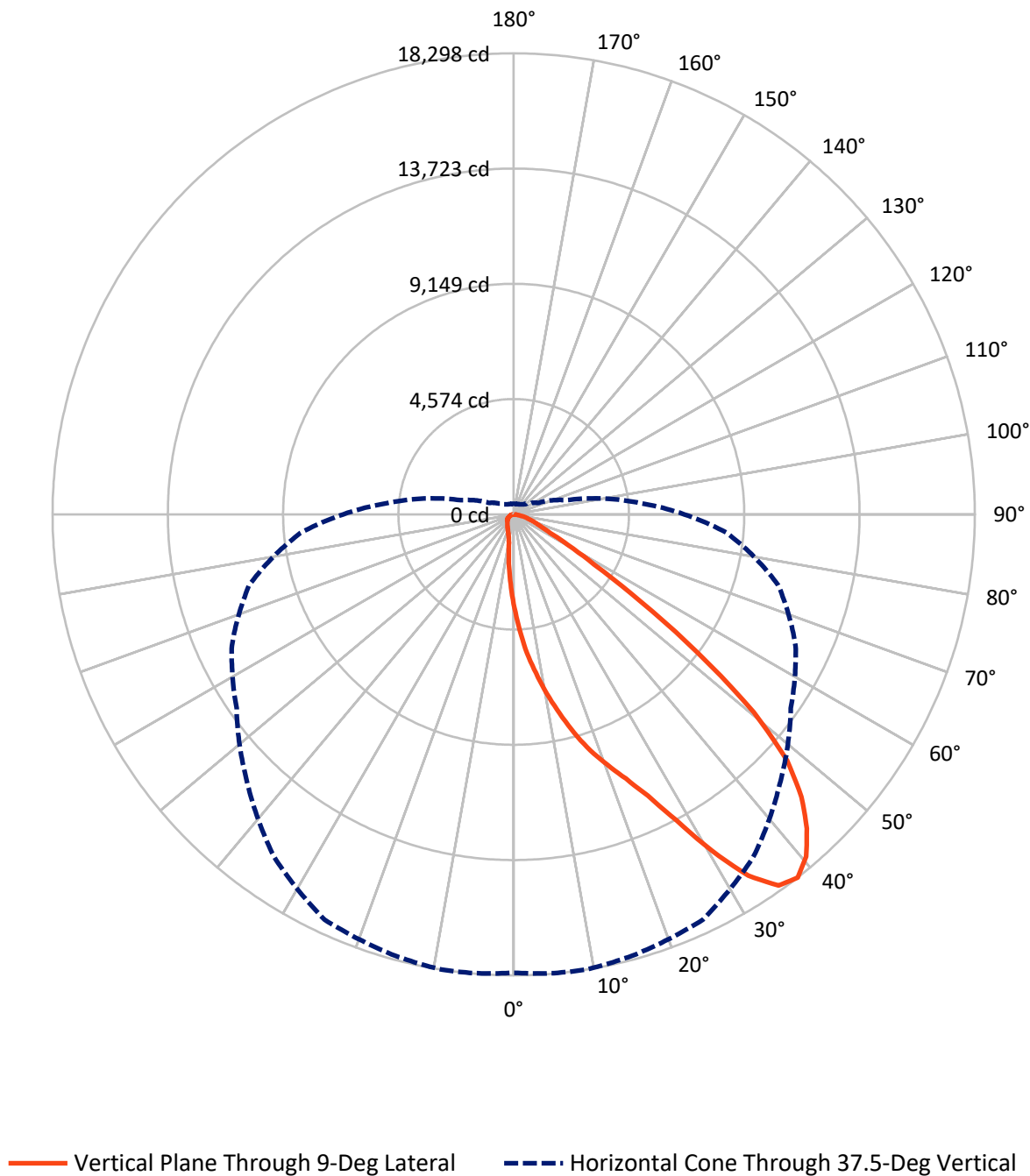
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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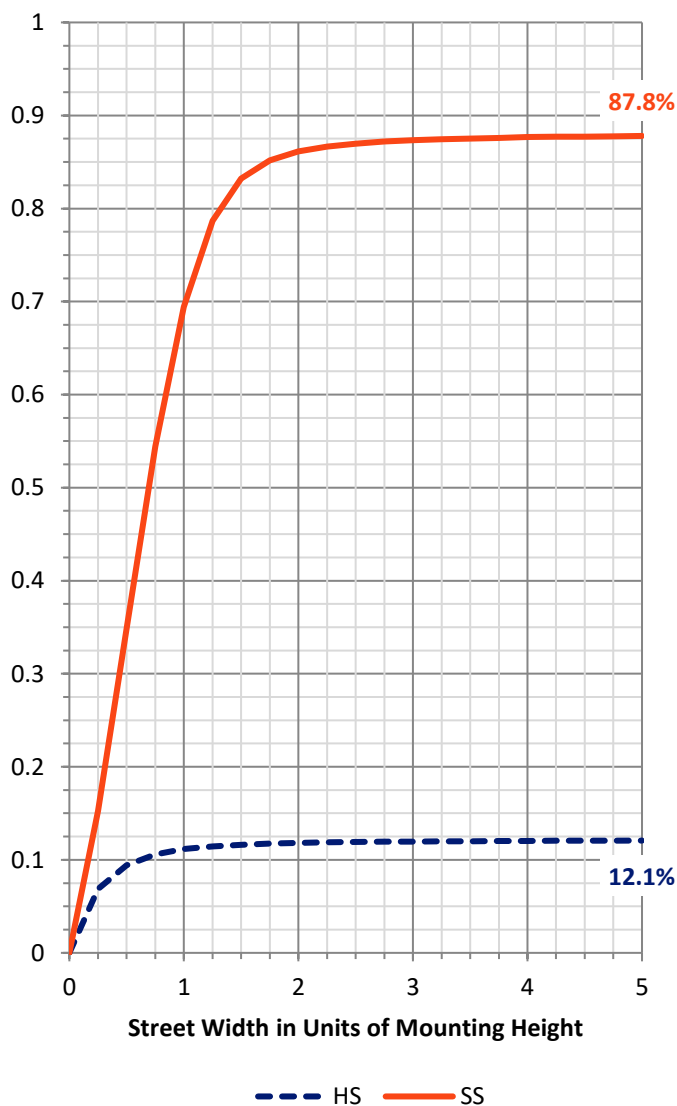
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3413.6	0.0	3413.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	24654.4	0.0	24654.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	28068.0	0.0	28068.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.9	1.3
10°-20°	1296.2	4.6
20°-30°	2663.4	9.5
30°-40°	4707.8	16.8
40°-50°	6253.9	22.3
50°-60°	5931.4	21.1
60°-70°	4525.1	16.1
70°-80°	2193.8	7.8
80°-90°	123.5	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°	28068.0	100.0
0°-180°	28068.0	100.0

Coefficient of Utilization



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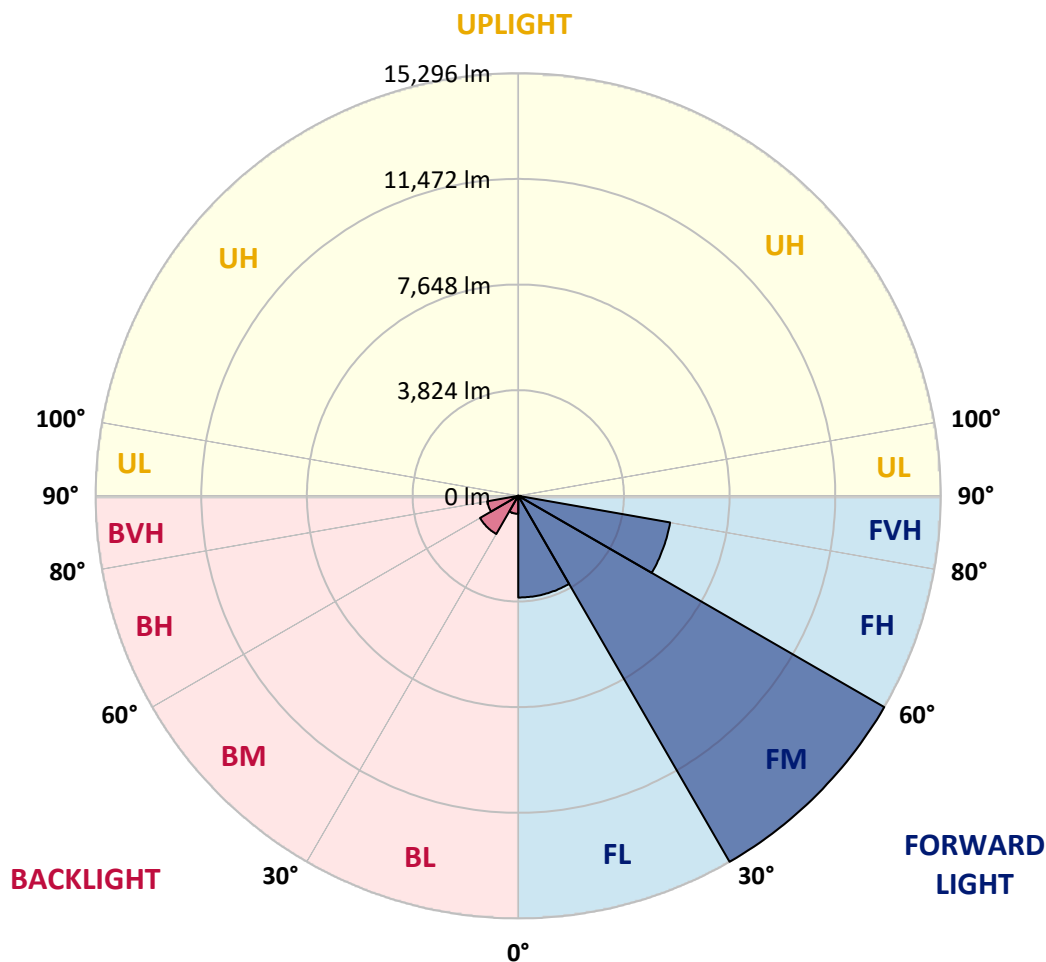
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3681.1	13.1			
FM	(30°-60°)	15295.7	54.5			
FH	(60°-80°)	5579.8	19.9			G3/7500
FVH	(80°-90°)	97.8	0.3			G1/100
BL	(0°-30°)	651.4	2.3	B2/1000		
BM	(30°-60°)	1597.3	5.7	B2/2500		
BH	(60°-80°)	1139.1	4.1	B3/2500		G3/2500
BVH	(80°-90°)	25.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2
2.5°	4597.5	4516.8	4609.0	4597.5	4516.8	4465.0	4303.7	4251.8	4061.7	3923.4	3802.4
5°	5542.3	5461.7	5542.3	5519.3	5404.1	5277.3	5012.3	4839.5	4499.5	4200.0	3929.2
7.5°	6325.9	6325.9	6360.4	6366.2	6227.9	6032.0	5703.6	5444.4	4966.2	4505.3	4073.2
10°	7172.8	7178.5	7253.4	7201.6	7017.2	6752.2	6337.4	6009.0	5432.9	4827.9	4211.5
12.5°	8077.3	8083.0	8106.1	8083.0	7864.1	7524.2	7023.0	6590.9	5928.3	5196.7	4401.6
15°	8981.8	8987.6	9016.4	8976.0	8734.1	8336.5	7766.2	7236.1	6452.6	5611.5	4632.1
17.5°	9828.7	9840.2	9863.3	9811.4	9557.9	9085.5	8503.6	7864.1	7011.5	6055.1	4891.3
20°	10589.2	10600.7	10618.0	10548.9	10295.4	9822.9	9195.0	8526.7	7581.8	6510.2	5173.6
22.5°	11355.4	11367.0	11395.8	11303.6	11021.3	10479.7	9863.3	9171.9	8186.7	7011.5	5502.0
25°	12334.9	12346.4	12369.4	12236.9	11850.9	11217.2	10566.1	9857.5	8843.5	7576.1	5905.3
27.5°	13769.4	13757.9	13757.9	13515.9	12853.4	12029.5	11274.8	10554.6	9552.2	8181.0	6348.9
30°	15543.9	15515.1	15497.8	15169.4	14224.5	12945.5	12000.7	11205.6	10232.0	8820.5	6827.1
32.5°	17134.0	17134.0	17099.4	16753.7	15751.3	14178.5	12772.7	11839.4	10888.8	9465.7	7322.6
35°	18073.1	18113.4	18096.1	17836.9	17105.2	15503.5	13815.5	12599.9	11580.1	10139.8	7916.0
37.5°	18199.8	18280.5	18297.8	18142.2	17756.2	16586.7	14973.5	13423.7	12340.6	10865.7	8492.1
40°	17687.1	17859.9	17859.9	17836.9	17698.6	17099.4	15947.2	14380.1	13124.1	11620.5	9074.0
42.5°	16897.8	17076.4	17053.3	17139.7	17105.2	16978.4	16494.5	15273.1	13907.7	12398.2	9604.0
45°	15866.5	16050.9	16004.8	16160.3	16229.5	16367.7	16436.9	15895.3	14679.7	13245.1	10197.4
47.5°	14213.0	14524.1	14593.3	14869.8	15157.9	15590.0	15918.4	16120.0	15399.8	14155.4	10842.7
50°	11770.2	12208.1	12346.4	12928.3	13717.6	14610.5	15140.6	15843.5	15906.8	15088.7	11539.8
52.5°	8428.7	8935.7	9148.9	10105.2	11729.9	13285.5	14241.8	15232.8	16102.7	15981.7	12294.5
55°	5450.1	5882.2	6089.6	6988.4	9148.9	11591.7	13181.8	14443.5	15993.3	16799.8	13158.7
57.5°	3358.8	3606.5	3744.8	4516.8	6504.5	9419.7	11793.3	13717.6	15659.1	17508.5	14057.5
60°	2264.2	2408.2	2477.3	2840.3	4418.9	7040.3	9886.3	12957.1	15221.2	17986.6	14875.6
62.5°	1503.7	1549.8	1618.9	1843.6	2915.2	4943.2	7593.3	11597.4	14892.9	18015.5	15480.5
65°	1163.8	1186.8	1215.6	1313.6	1797.5	3456.8	5340.7	9396.6	14403.1	17404.8	15670.6
67.5°	916.0	939.1	973.7	1025.5	1302.0	2344.8	3635.4	6884.7	13400.7	16448.4	15359.5
70°	720.2	737.4	760.5	806.6	1014.0	1699.6	2402.4	4574.4	11378.5	15538.1	14380.1
72.5°	570.4	587.6	610.7	656.8	823.9	1244.4	1647.7	2851.8	8774.4	14426.2	12496.2
75°	449.4	460.9	478.2	524.3	662.5	967.9	1117.7	1705.3	5962.9	12392.5	9736.5
77.5°	224.7	276.5	316.9	363.0	483.9	668.3	743.2	944.8	2517.7	6360.4	4643.6
80°	132.5	161.3	172.8	201.6	316.9	403.3	403.3	380.2	795.1	2442.8	1895.5
82.5°	74.9	103.7	109.5	115.2	190.1	230.5	184.4	138.3	161.3	818.1	553.1
85°	23.0	34.6	40.3	46.1	63.4	69.1	63.4	57.6	46.1	80.7	51.9
87.5°	0.0	0.0	0.0	0.0	5.8	11.5	11.5	11.5	17.3	17.3	17.3
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°	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2	3710.2
2.5°	3733.3	3658.4	3514.4	3381.9	3255.1	3162.9	3076.5	2995.9	2938.2	2892.2	2886.4
5°	3785.1	3635.4	3358.8	3099.6	2863.3	2667.5	2500.4	2367.9	2269.9	2200.8	2195.0
7.5°	3854.3	3623.8	3203.3	2817.3	2465.8	2183.5	1941.5	1762.9	1636.2	1584.3	1544.0
10°	3911.9	3612.3	3047.7	2535.0	2074.1	1716.9	1428.8	1250.2	1158.0	1123.4	1106.2
12.5°	4009.8	3623.8	2915.2	2275.7	1734.1	1313.6	1094.6	996.7	956.4	927.6	921.8
15°	4153.9	3675.7	2788.4	2022.2	1388.5	1060.1	933.3	869.9	829.6	823.9	818.1
17.5°	4297.9	3721.8	2673.2	1762.9	1152.3	921.8	835.4	783.5	754.7	749.0	749.0
20°	4465.0	3779.4	2546.5	1515.2	985.2	829.6	760.5	720.2	685.6	679.8	679.8
22.5°	4660.9	3860.0	2425.5	1296.3	875.7	760.5	702.9	656.8	628.0	622.2	622.2
25°	4925.9	3981.0	2327.5	1135.0	800.8	702.9	651.0	610.7	587.6	576.1	576.1
27.5°	5219.7	4148.1	2258.4	1037.0	749.0	656.8	604.9	570.4	547.3	535.8	535.8
30°	5548.1	4332.5	2212.3	996.7	720.2	616.5	570.4	535.8	507.0	501.2	501.2
32.5°	5911.1	4545.6	2183.5	1002.5	714.4	587.6	535.8	501.2	478.2	466.7	466.7
35°	6314.3	4781.8	2166.2	1037.0	725.9	564.6	507.0	472.4	449.4	437.9	437.9
37.5°	6763.7	5058.4	2166.2	1071.6	754.7	558.8	478.2	443.6	426.3	414.8	414.8
40°	7184.3	5352.2	2189.3	1111.9	783.5	558.8	455.1	426.3	403.3	391.8	391.8
42.5°	7512.7	5519.3	2206.6	1152.3	800.8	553.1	432.1	403.3	386.0	374.5	374.5
45°	7887.2	5697.9	2172.0	1169.5	800.8	541.6	414.8	386.0	368.7	357.2	357.2
47.5°	8302.0	5916.8	2166.2	1181.1	783.5	518.5	397.5	368.7	357.2	345.7	345.7
50°	8722.5	6158.8	2177.8	1175.3	760.5	483.9	374.5	357.2	339.9	328.4	328.4
52.5°	9200.7	6412.3	2200.8	1163.8	708.6	443.6	357.2	339.9	322.6	311.1	305.3
55°	9730.8	6688.8	2246.9	1140.7	639.5	403.3	339.9	322.6	299.6	288.1	282.3
57.5°	10341.5	7028.7	2298.7	1094.6	564.6	368.7	322.6	299.6	265.0	247.7	242.0
60°	10923.3	7414.7	2356.4	985.2	489.7	334.2	305.3	270.8	236.2	224.7	218.9
62.5°	11470.7	7795.0	2385.2	789.3	414.8	305.3	288.1	247.7	213.2	201.6	195.9
65°	11822.1	8209.8	2321.8	535.8	339.9	282.3	265.0	230.5	195.9	178.6	178.6
67.5°	11845.1	8405.7	2102.9	351.4	276.5	253.5	242.0	207.4	172.8	161.3	155.6
70°	11263.3	8111.9	1607.4	276.5	230.5	218.9	218.9	184.4	149.8	138.3	132.5
72.5°	9926.6	7184.3	1025.5	224.7	195.9	184.4	184.4	155.6	132.5	115.2	109.5
75°	7835.3	5542.3	547.3	184.4	161.3	155.6	144.0	126.7	109.5	97.9	92.2
77.5°	3600.8	2442.8	253.5	132.5	121.0	121.0	109.5	92.2	86.4	74.9	74.9
80°	1423.0	829.6	126.7	86.4	80.7	80.7	80.7	63.4	63.4	51.9	46.1
82.5°	391.8	172.8	63.4	51.9	51.9	51.9	46.1	40.3	40.3	34.6	34.6
85°	40.3	28.8	28.8	28.8	28.8	23.0	23.0	17.3	11.5	11.5	11.5
87.5°	17.3	17.3	17.3	17.3	17.3	11.5	5.8	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)