

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: P842706

Luminaire Tested: **ARCH4-80-750-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842706
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10272 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 83.4
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



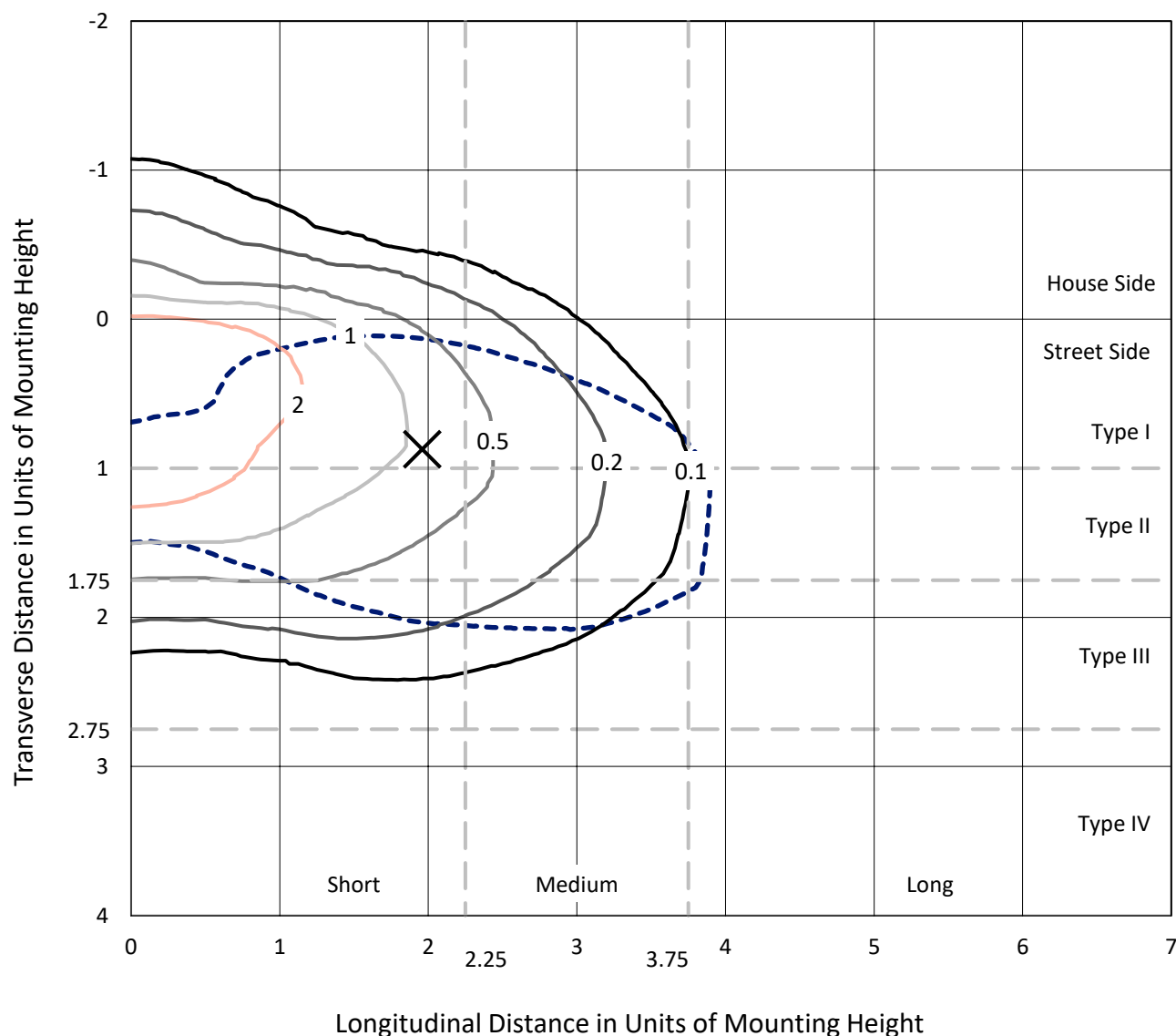
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



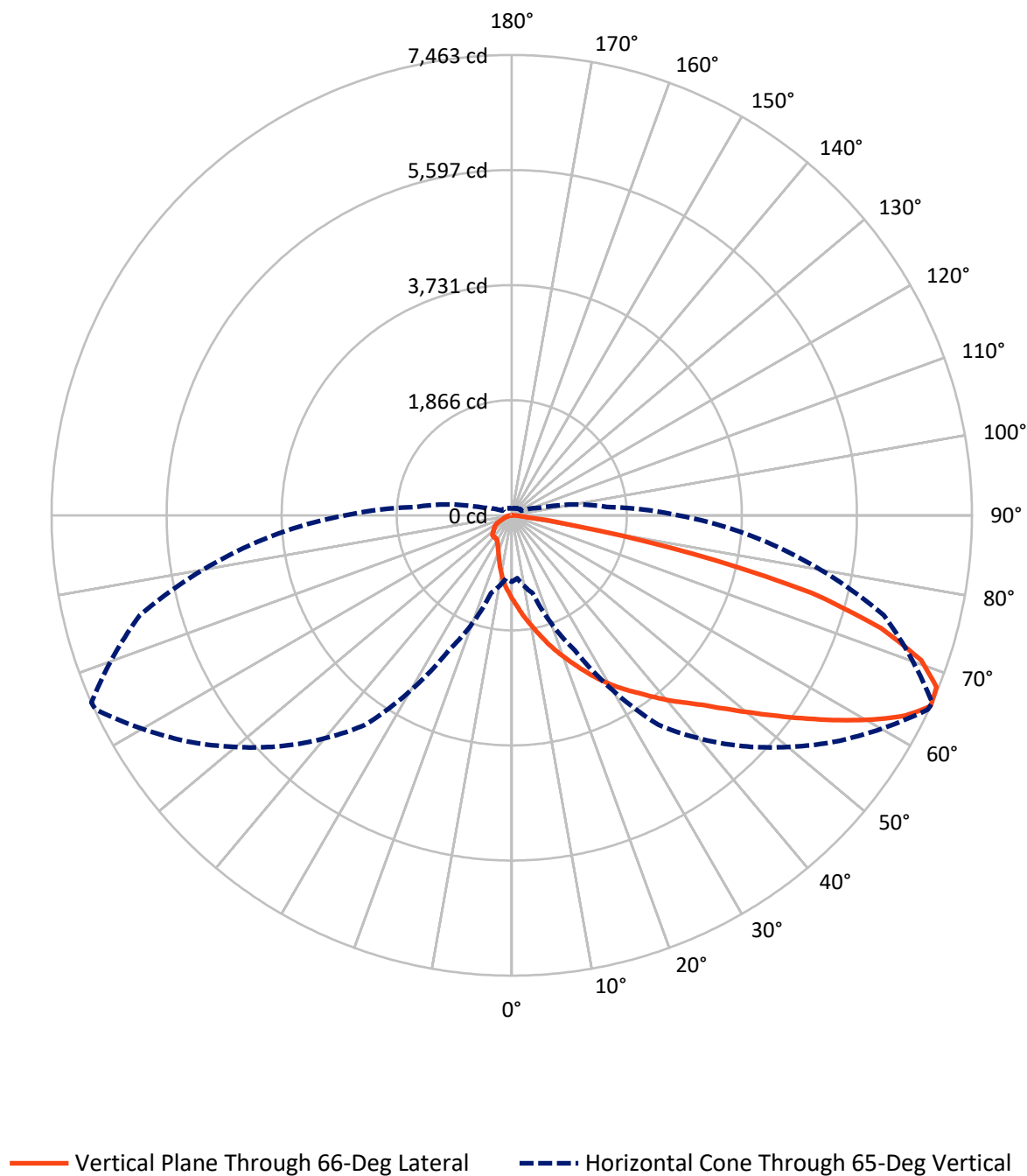
Based on 25 foot mounting height. Maximum calculated value = 3.9 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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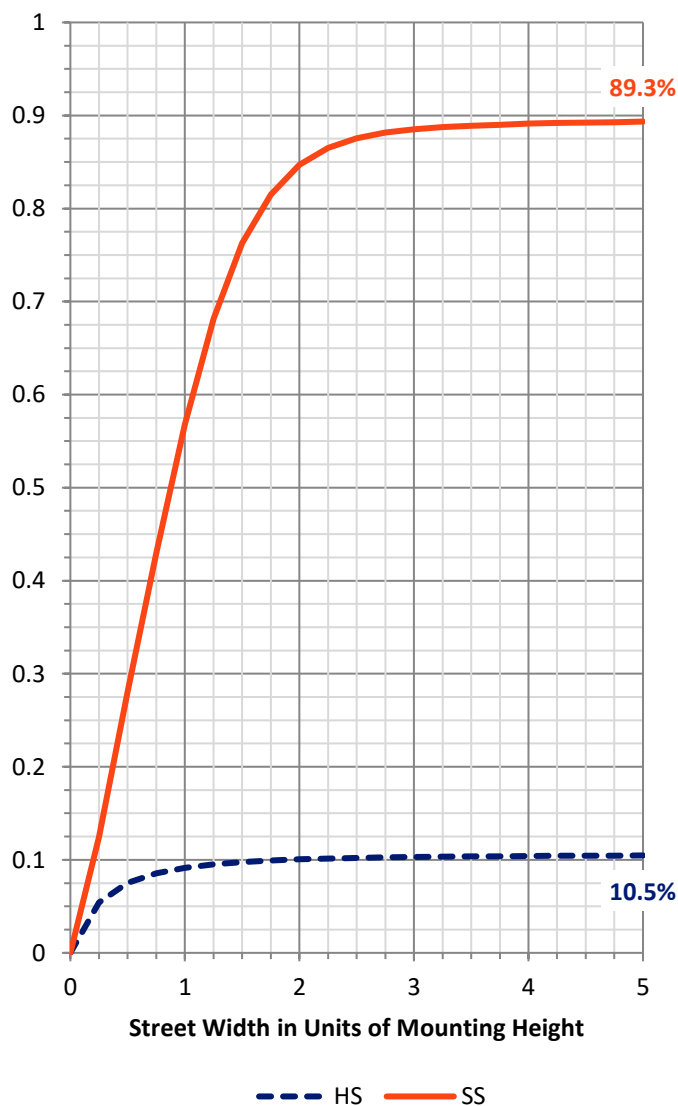
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1086.5	0.0	1086.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	9185.5	0.0	9185.5
	% Fixture	89.4	0.0	89.4
Total	Lumens	10272.0	0.0	10272.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	1.3
10°-20°	437.3	4.3
20°-30°	791.2	7.7
30°-40°	1237.3	12.0
40°-50°	1877.0	18.3
50°-60°	2384.8	23.2
60°-70°	2228.3	21.7
70°-80°	1107.5	10.8
80°-90°	74.4	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°	10272.0	100.0
0°-180°	10272.0	100.0

Coefficient of Utilization



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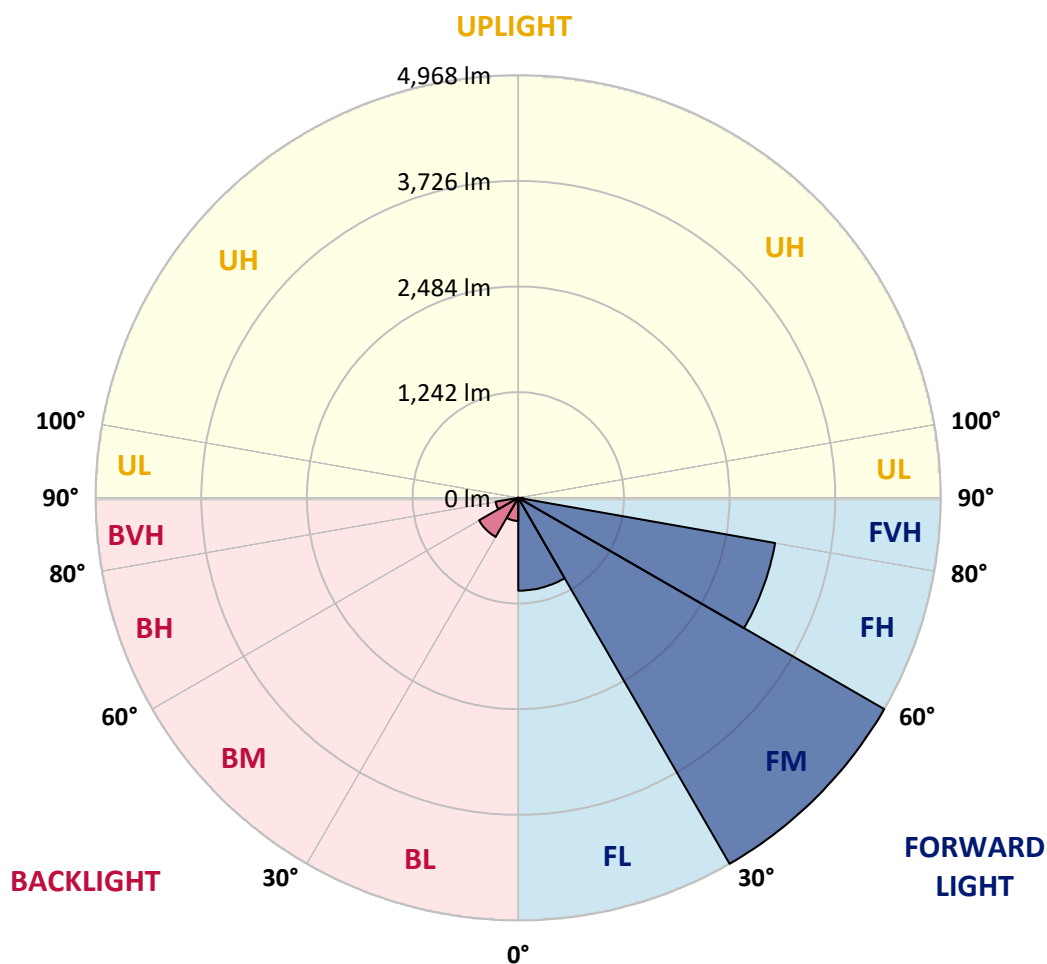
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1091.4	10.6			
FM	(30°-60°)	4967.7	48.4			
FH	(60°-80°)	3065.2	29.8			G2/5000
FVH	(80°-90°)	61.2	0.6			G1/100
BL	(0°-30°)	271.3	2.6	B1/500		
BM	(30°-60°)	531.4	5.2	B1/1000		
BH	(60°-80°)	270.6	2.6	B1/500		G1/500
BVH	(80°-90°)	13.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4
2.5°	1587.8	1600.7	1607.2	1609.4	1559.8	1538.3	1516.7	1467.2	1456.4	1428.4	1391.8
5°	1867.9	1885.1	1880.8	1872.2	1811.9	1742.9	1686.9	1594.3	1579.2	1512.4	1430.5
7.5°	2143.7	2158.7	2154.4	2122.1	2055.3	1958.4	1865.7	1730.0	1708.5	1600.7	1469.3
10°	2374.2	2387.1	2384.9	2352.6	2272.9	2154.4	2042.4	1861.4	1835.6	1682.6	1501.6
12.5°	2563.8	2581.0	2578.8	2557.3	2486.2	2356.9	2229.8	2012.2	1979.9	1781.7	1546.9
15°	2712.4	2734.0	2734.0	2725.3	2675.8	2568.1	2423.7	2178.1	2139.3	1895.9	1602.9
17.5°	2802.9	2820.1	2835.2	2850.3	2815.8	2734.0	2602.5	2344.0	2303.1	2007.9	1661.1
20°	2850.3	2867.5	2878.3	2910.6	2917.1	2876.2	2772.7	2507.8	2464.7	2135.0	1727.8
22.5°	2927.9	2942.9	2945.1	2973.1	2986.0	2996.8	2932.2	2669.3	2634.9	2275.1	1803.3
25°	3057.1	3074.4	3067.9	3080.8	3083.0	3095.9	3089.4	2854.6	2820.1	2434.5	1893.7
27.5°	3223.0	3244.6	3240.3	3227.3	3207.9	3197.2	3225.2	3042.0	3009.7	2593.9	1986.4
30°	3401.8	3427.7	3421.2	3395.4	3343.7	3298.4	3337.2	3218.7	3188.6	2757.7	2089.8
32.5°	3582.8	3613.0	3610.8	3567.7	3479.4	3401.8	3460.0	3384.6	3363.1	2934.3	2201.8
35°	3701.3	3740.1	3735.8	3709.9	3595.7	3528.9	3600.0	3554.8	3539.7	3149.8	2363.4
37.5°	3893.0	3934.0	3897.4	3832.7	3701.3	3666.8	3753.0	3746.5	3735.8	3378.1	2533.6
40°	4358.4	4418.7	4321.8	4056.8	3841.3	3811.2	3934.0	3959.8	3949.1	3604.4	2686.6
42.5°	4845.3	4935.8	4785.0	4418.7	4095.6	3985.7	4132.2	4168.8	4155.9	3798.3	2824.5
45°	5140.5	5179.2	5028.4	4744.0	4545.8	4196.8	4343.3	4403.6	4392.9	4030.9	3001.1
47.5°	5381.8	5366.7	5194.3	5002.6	5039.2	4494.1	4582.5	4701.0	4692.3	4287.3	3195.0
50°	5433.5	5399.0	5330.1	5209.4	5306.4	4795.8	4834.5	5039.2	5030.6	4571.7	3391.1
52.5°	5069.4	5024.1	5211.6	5312.8	5280.5	5015.5	5112.5	5409.8	5405.5	4879.8	3578.5
55°	4160.2	4123.6	4627.7	5151.2	5252.5	5170.6	5420.5	5795.4	5819.1	5207.2	3748.7
57.5°	3272.6	3233.8	3729.3	4746.2	5149.1	5312.8	5780.3	6237.1	6267.2	5562.7	3910.3
60°	2609.0	2550.8	2930.0	4108.5	4955.2	5422.7	6127.2	6721.8	6726.1	5888.0	4009.4
62.5°	1773.1	1708.5	2128.6	3300.6	4629.9	5439.9	6394.3	7139.8	7157.0	6131.5	4026.6
65°	1077.2	1023.4	1307.7	2410.8	4149.4	5293.4	6398.6	7447.9	7462.9	6243.5	3923.2
67.5°	624.8	603.2	747.6	1501.6	3352.3	4899.2	6129.3	7400.5	7428.5	6196.1	3688.4
70°	364.1	361.9	415.8	743.3	2365.6	4117.1	5528.3	7001.9	7042.8	5948.4	3328.6
72.5°	267.1	271.5	293.0	398.6	1370.2	2964.5	4681.6	6200.4	6262.9	5463.6	2815.8
75°	211.1	213.3	232.7	271.5	719.6	1676.1	3507.4	4976.7	5026.3	4599.7	2199.7
77.5°	157.3	161.6	176.7	191.7	333.9	769.1	1973.5	3065.7	2983.9	2525.0	1062.1
80°	114.2	125.0	131.4	137.9	176.7	297.3	592.5	1068.6	1060.0	1103.1	502.0
82.5°	73.3	81.9	88.3	92.6	105.6	142.2	176.7	239.1	258.5	428.7	200.4
85°	32.3	36.6	40.9	49.6	45.2	49.6	73.3	47.4	40.9	64.6	36.6
87.5°	0.0	0.0	6.5	10.8	8.6	4.3	12.9	8.6	6.5	6.5	6.5
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°	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4	1359.4
2.5°	1372.4	1348.7	1299.1	1251.7	1223.7	1187.1	1154.8	1124.6	1122.5	1113.8	1098.8
5°	1389.6	1344.4	1251.7	1163.4	1096.6	1025.5	965.2	917.8	900.6	887.6	870.4
7.5°	1406.8	1335.7	1197.9	1068.6	963.0	863.9	792.8	728.2	708.8	691.6	680.8
10°	1413.3	1320.7	1135.4	963.0	825.1	719.6	644.2	596.8	579.5	570.9	564.5
12.5°	1432.7	1312.0	1077.2	863.9	704.5	607.5	553.7	525.7	519.2	512.8	506.3
15°	1458.5	1312.0	1019.0	767.0	609.7	532.1	499.8	480.4	476.1	474.0	469.7
17.5°	1486.6	1312.0	963.0	685.1	540.8	482.6	458.9	448.1	446.0	443.8	441.7
20°	1525.3	1314.2	902.7	614.0	491.2	446.0	426.6	413.6	411.5	409.3	409.3
22.5°	1564.1	1318.5	844.5	560.2	458.9	418.0	394.3	381.3	377.0	377.0	377.0
25°	1613.7	1331.4	790.7	514.9	430.9	392.1	361.9	351.2	349.0	349.0	346.9
27.5°	1671.8	1346.5	743.3	480.4	402.9	361.9	331.8	321.0	316.7	316.7	314.5
30°	1734.3	1361.6	704.5	454.6	374.9	331.8	303.8	290.8	286.5	288.7	286.5
32.5°	1803.3	1383.1	674.3	437.3	349.0	305.9	280.1	265.0	262.8	262.8	260.7
35°	1919.6	1443.5	670.0	428.7	327.5	286.5	260.7	245.6	243.5	243.5	241.3
37.5°	2044.6	1512.4	689.4	424.4	310.2	269.3	245.6	230.5	228.4	228.4	228.4
40°	2150.1	1564.1	711.0	424.4	299.5	254.2	232.7	219.8	219.8	219.8	219.8
42.5°	2221.2	1568.4	706.7	424.4	290.8	243.5	224.1	211.1	211.1	213.3	211.1
45°	2326.8	1590.0	689.4	418.0	284.4	234.8	215.4	204.7	202.5	204.7	204.7
47.5°	2451.7	1628.7	672.2	392.1	282.2	226.2	209.0	196.1	193.9	196.1	193.9
50°	2570.2	1663.2	663.6	357.6	277.9	217.6	200.4	187.4	185.3	187.4	185.3
52.5°	2669.3	1678.3	648.5	333.9	267.1	209.0	191.7	178.8	174.5	176.7	176.7
55°	2749.0	1674.0	626.9	314.5	247.8	200.4	181.0	170.2	163.7	163.7	161.6
57.5°	2822.3	1676.1	607.5	295.2	226.2	187.4	172.4	159.4	150.8	148.7	146.5
60°	2850.3	1665.4	573.1	269.3	204.7	176.7	161.6	146.5	137.9	135.7	133.6
62.5°	2811.5	1626.6	527.8	224.1	185.3	163.7	150.8	135.7	127.1	125.0	122.8
65°	2701.7	1553.3	458.9	176.7	168.0	148.7	137.9	127.1	116.3	112.0	109.9
67.5°	2514.2	1447.8	372.7	142.2	148.7	135.7	129.3	116.3	103.4	99.1	96.9
70°	2247.1	1307.7	280.1	120.6	131.4	120.6	116.3	103.4	92.6	88.3	86.2
72.5°	1872.2	1081.5	196.1	103.4	114.2	105.6	101.3	92.6	81.9	75.4	75.4
75°	1415.5	775.6	129.3	88.3	94.8	90.5	84.0	77.6	71.1	66.8	64.6
77.5°	609.7	301.6	79.7	66.8	77.6	75.4	66.8	62.5	60.3	56.0	56.0
80°	262.8	122.8	49.6	49.6	56.0	53.9	51.7	47.4	47.4	45.2	43.1
82.5°	96.9	49.6	30.2	36.6	40.9	36.6	36.6	36.6	36.6	34.5	34.5
85°	23.7	15.1	15.1	21.5	23.7	21.5	23.7	21.5	21.5	21.5	19.4
87.5°	6.5	6.5	8.6	8.6	8.6	8.6	8.6	6.5	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)