

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: P836641

Luminaire Tested: **ARCH3-50-750-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6414 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 53.6
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

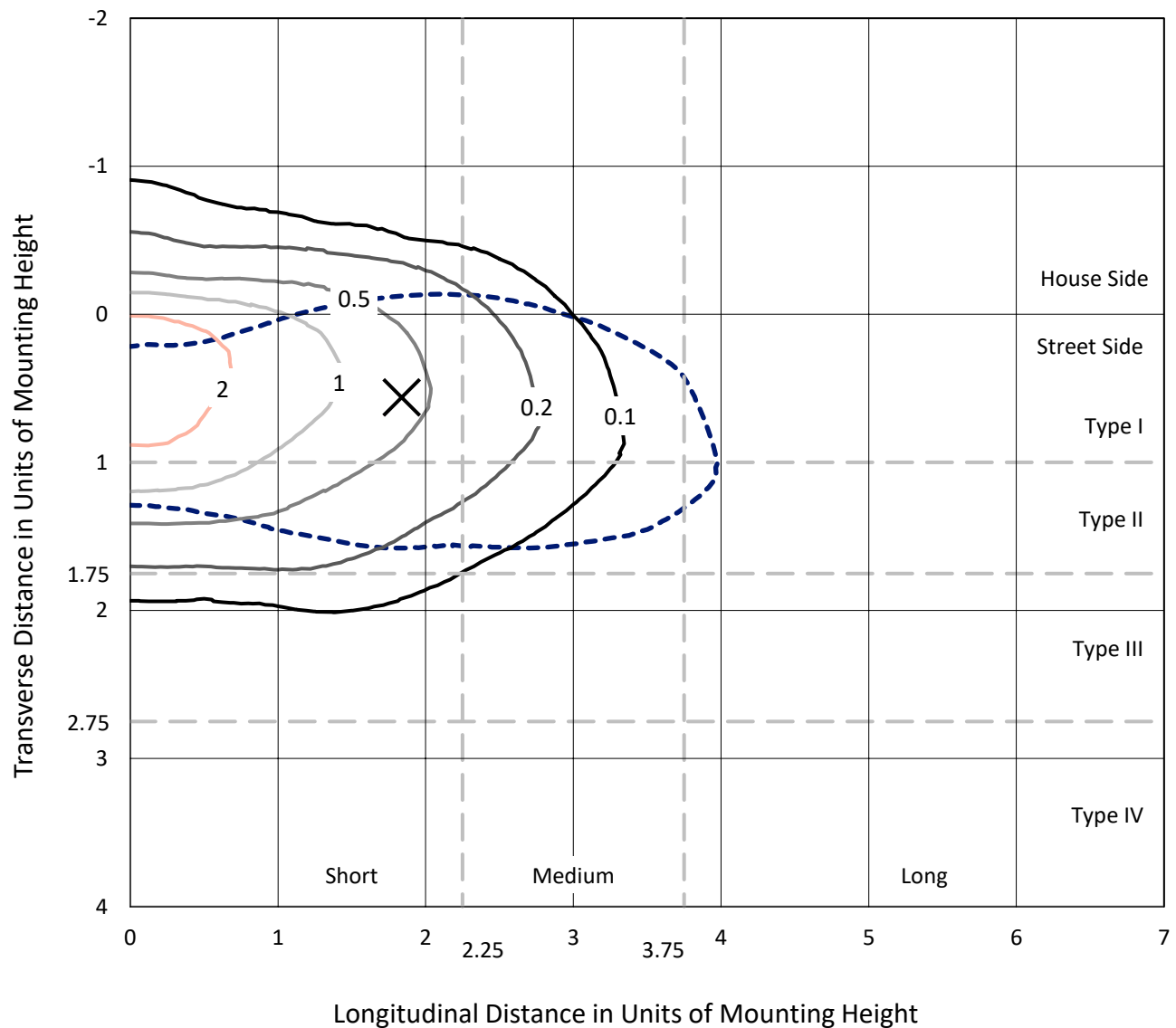


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Iso-Footcandle Lines of Horizontal Illumination

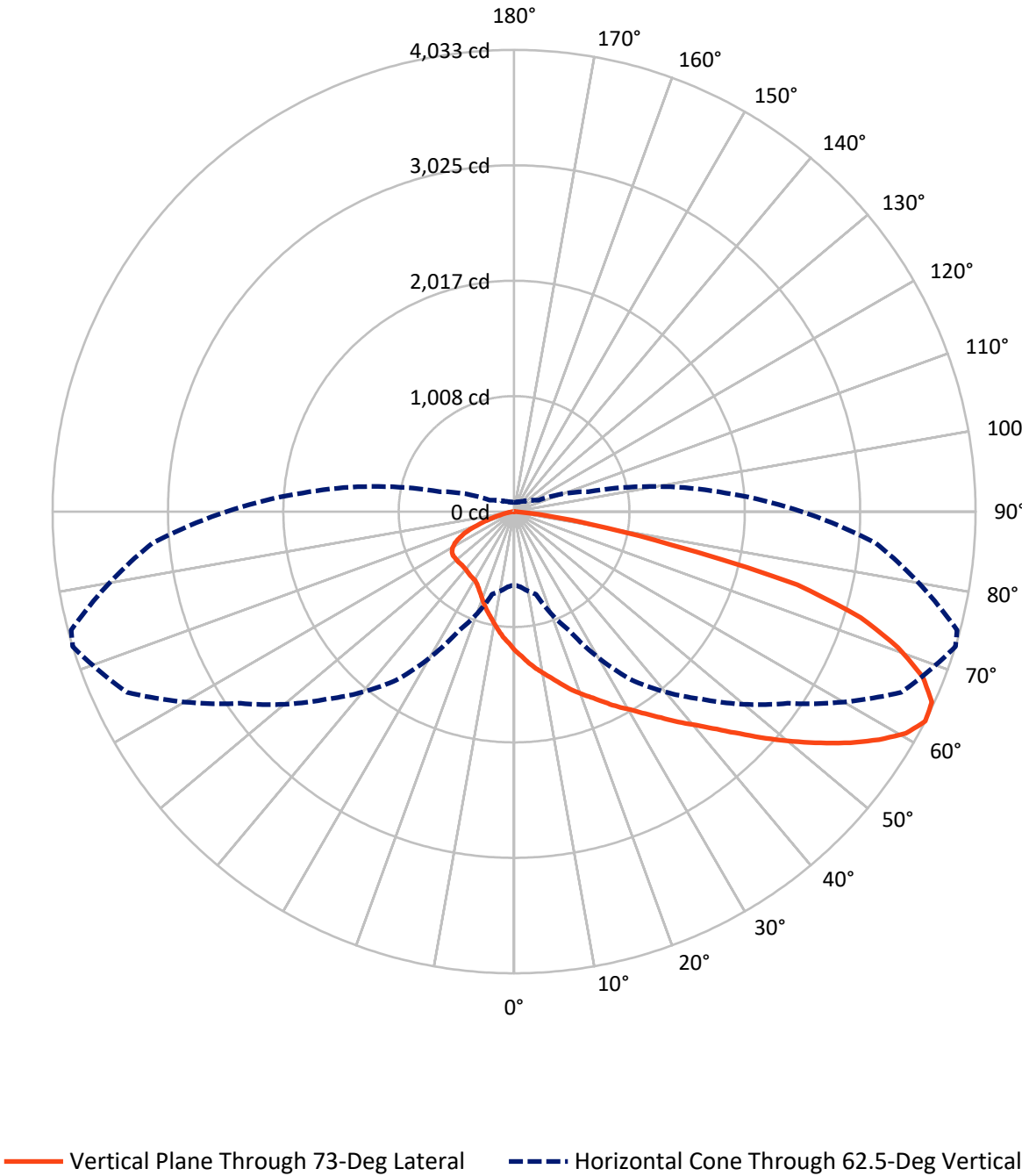
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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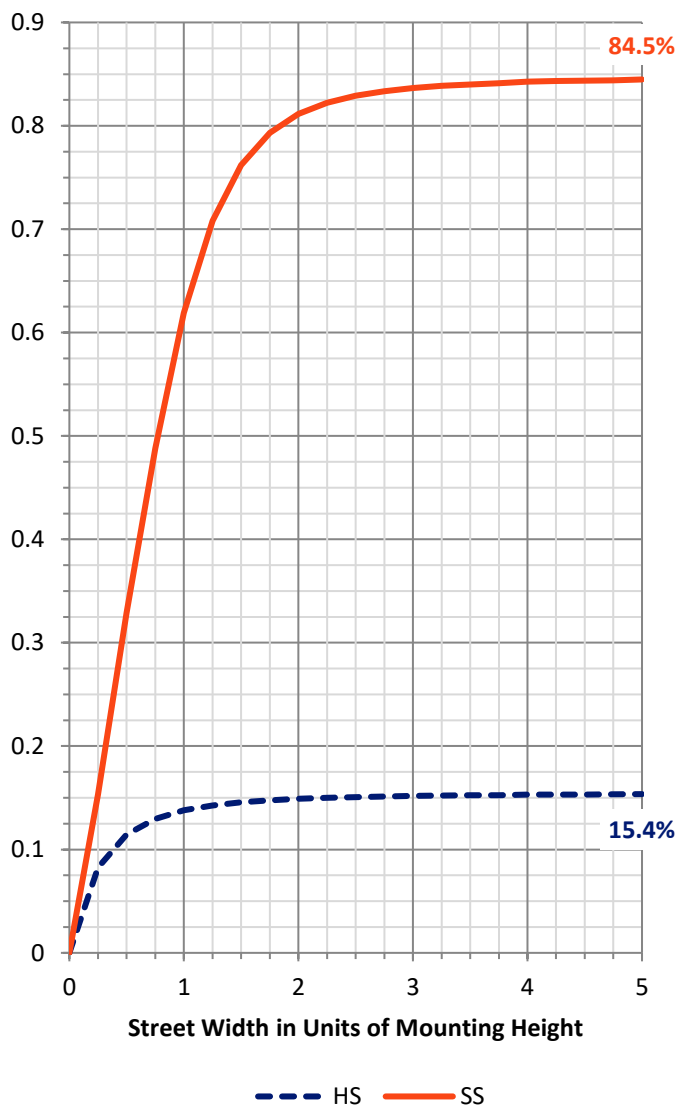
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	994.3	0.0	994.3
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	5419.7	0.0	5419.7
	% Fixture	84.5	0.0	84.5
Total	Lumens	6414.0	0.0	6414.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	1.8
10°-20°	354.0	5.5
20°-30°	589.3	9.2
30°-40°	889.2	13.9
40°-50°	1242.8	19.4
50°-60°	1372.8	21.4
60°-70°	1195.9	18.6
70°-80°	604.1	9.4
80°-90°	48.5	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°	6414.0	100.0
0°-180°	6414.0	100.0

Coefficient of Utilization



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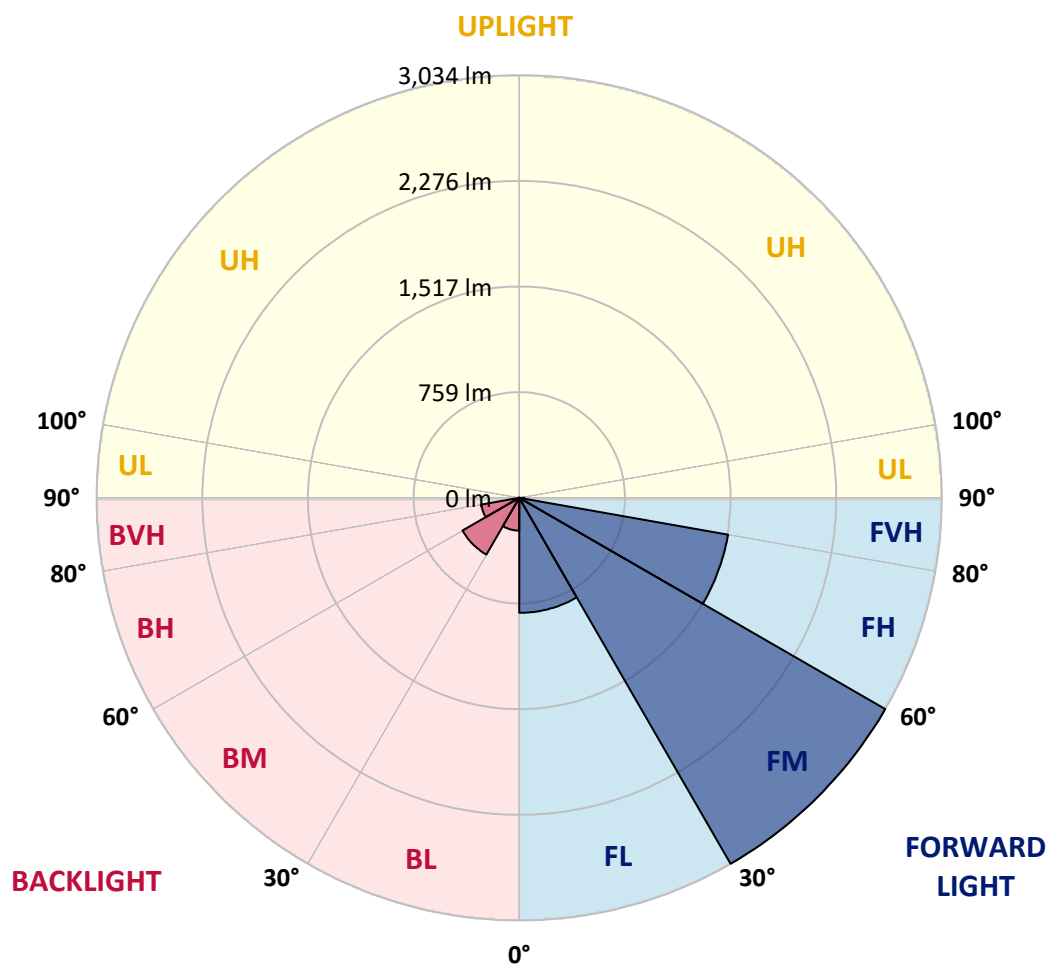
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	825.7	12.9			
FM	(30°-60°)	3034.1	47.3			
FH	(60°-80°)	1522.5	23.7			G1/1800
FVH	(80°-90°)	37.5	0.6			G1/100
BL	(0°-30°)	235.0	3.7	B1/500		
BM	(30°-60°)	470.8	7.3	B1/1000		
BH	(60°-80°)	277.5	4.3	B1/500		G1/500
BVH	(80°-90°)	11.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1382.2	1397.6	1389.2	1394.8	1366.8	1348.7	1327.7	1287.2	1264.8	1262.0	1235.5
5°	1584.9	1601.6	1587.7	1583.5	1534.6	1492.6	1445.1	1373.8	1326.3	1317.9	1259.2
7.5°	1787.5	1802.9	1786.1	1773.5	1707.9	1633.8	1563.9	1459.1	1385.0	1371.0	1278.8
10°	1930.1	1944.0	1931.5	1918.9	1850.4	1774.9	1675.7	1538.7	1438.1	1415.8	1291.4
12.5°	2037.7	2046.1	2040.5	2029.3	1965.0	1883.9	1788.9	1628.2	1498.2	1470.3	1310.9
15°	2125.7	2139.7	2132.7	2124.3	2062.8	1981.8	1890.9	1721.8	1568.1	1533.2	1340.3
17.5°	2184.4	2194.2	2195.6	2195.6	2141.1	2061.4	1973.4	1807.1	1638.0	1593.3	1368.2
20°	2211.0	2222.2	2229.2	2240.3	2195.6	2127.1	2037.7	1879.8	1703.7	1653.3	1394.8
22.5°	2223.6	2233.3	2251.5	2276.7	2240.3	2183.0	2100.6	1946.8	1769.3	1716.2	1425.5
25°	2233.3	2245.9	2272.5	2320.0	2294.8	2245.9	2174.6	2023.7	1847.6	1793.1	1470.3
27.5°	2259.9	2275.3	2300.4	2357.7	2327.0	2303.2	2252.9	2106.2	1930.1	1874.2	1524.8
30°	2352.1	2364.7	2363.3	2399.7	2361.9	2354.9	2320.0	2185.8	2009.7	1953.8	1589.1
32.5°	2519.9	2532.4	2501.7	2487.7	2405.2	2406.6	2392.7	2271.1	2104.8	2047.5	1663.1
35°	2700.1	2714.1	2673.6	2649.8	2511.5	2470.9	2477.9	2377.3	2211.0	2153.7	1755.4
37.5°	2860.9	2877.6	2842.7	2807.8	2668.0	2574.4	2573.0	2496.1	2332.6	2273.9	1857.4
40°	2948.9	2968.5	2989.4	2969.9	2823.1	2719.7	2675.0	2617.7	2452.8	2392.7	1967.8
42.5°	2990.8	3045.3	3083.1	3070.5	2950.3	2845.5	2792.4	2744.9	2599.5	2540.8	2099.2
45°	2873.4	2874.8	2954.5	3023.0	3000.6	2930.7	2921.0	2887.4	2767.2	2711.3	2247.3
47.5°	2726.7	2715.5	2771.4	2893.0	2955.9	2974.1	3031.4	3045.3	2958.7	2902.8	2398.3
50°	2374.5	2381.5	2563.2	2737.9	2860.9	2978.3	3109.6	3207.5	3155.8	3102.6	2557.6
52.5°	1931.5	1948.2	2156.5	2540.8	2735.1	2936.3	3155.8	3369.6	3357.0	3306.7	2716.9
55°	1548.5	1575.1	1795.9	2212.4	2574.4	2842.7	3175.3	3517.7	3565.2	3519.1	2873.4
57.5°	1183.8	1211.7	1397.6	1825.3	2368.9	2690.4	3161.3	3647.7	3759.5	3730.2	3017.4
60°	891.7	919.6	1038.4	1480.0	2111.8	2519.9	3091.5	3733.0	3934.2	3903.5	3122.2
62.5°	638.7	661.1	749.1	1151.6	1798.7	2317.2	2919.6	3734.4	4033.4	4008.3	3172.5
65°	459.8	459.8	531.1	821.8	1505.2	2074.0	2659.6	3562.5	4012.5	4005.5	3137.6
67.5°	331.2	334.0	391.3	574.4	1200.5	1779.1	2322.8	3256.4	3850.4	3885.3	3011.8
70°	234.8	241.8	268.3	401.1	907.0	1404.6	1962.2	2855.3	3558.3	3619.8	2768.6
72.5°	181.7	185.9	204.0	279.5	662.5	1044.0	1563.9	2408.0	3168.3	3238.2	2437.4
75°	139.8	144.0	157.9	205.4	475.2	732.3	1111.1	1868.6	2554.8	2679.2	1958.0
77.5°	102.0	107.6	117.4	149.5	276.7	465.4	673.6	1051.0	1410.2	1468.9	1025.8
80°	47.5	54.5	68.5	96.4	149.5	219.4	239.0	405.3	677.8	708.6	556.2
82.5°	26.6	33.5	39.1	58.7	75.5	78.3	81.1	102.0	255.8	282.3	233.4
85°	12.6	16.8	18.2	25.2	25.2	22.4	26.6	19.6	41.9	50.3	48.9
87.5°	0.0	1.4	2.8	7.0	5.6	4.2	4.2	4.2	4.2	5.6	4.2
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°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1222.9	1204.7	1162.8	1126.5	1102.7	1081.7	1053.8	1041.2	1018.8	1023.0	1010.5
5°	1229.9	1196.3	1122.3	1053.8	1003.5	958.7	909.8	881.9	851.1	848.3	838.6
7.5°	1234.1	1182.4	1076.1	979.7	902.8	834.4	768.7	732.3	694.6	686.2	677.8
10°	1229.9	1161.4	1028.6	902.8	800.8	715.6	641.5	595.4	556.2	546.5	538.1
12.5°	1234.1	1150.2	983.9	831.6	710.0	613.5	529.7	482.2	445.8	436.0	430.5
15°	1243.9	1143.2	946.2	767.3	628.9	521.3	438.8	398.3	369.0	359.2	356.4
17.5°	1252.2	1136.2	905.6	704.4	547.9	440.2	369.0	335.4	310.3	300.5	297.7
20°	1263.4	1126.5	865.1	644.3	476.6	376.0	313.1	283.7	264.1	257.2	255.8
22.5°	1273.2	1119.5	827.4	584.2	410.9	324.2	271.1	247.4	233.4	226.4	226.4
25°	1298.4	1122.3	795.2	528.3	362.0	283.7	239.0	220.8	209.6	205.4	205.4
27.5°	1327.7	1133.4	770.1	480.8	320.0	253.0	216.6	201.3	195.7	190.1	191.5
30°	1369.6	1155.8	753.3	441.6	289.3	229.2	198.5	187.3	181.7	180.3	180.3
32.5°	1422.7	1192.1	751.9	416.5	266.9	211.0	185.9	176.1	173.3	171.9	171.9
35°	1485.6	1224.3	743.5	405.3	253.0	198.5	176.1	169.1	167.7	167.7	167.7
37.5°	1561.1	1277.4	737.9	389.9	246.0	191.5	169.1	163.5	163.5	163.5	163.5
40°	1639.4	1320.7	729.5	376.0	243.2	187.3	164.9	157.9	157.9	157.9	157.9
42.5°	1733.0	1383.6	726.7	369.0	239.0	184.5	159.3	150.9	152.3	152.3	153.7
45°	1846.2	1454.9	725.3	362.0	237.6	181.7	153.7	144.0	145.3	144.0	144.0
47.5°	1960.8	1537.3	729.5	357.8	236.2	178.9	149.5	137.0	137.0	135.6	135.6
50°	2081.0	1612.8	732.3	353.6	233.4	173.3	142.6	131.4	128.6	125.8	127.2
52.5°	2194.2	1682.7	733.7	346.6	225.0	164.9	137.0	124.4	120.2	116.0	117.4
55°	2307.4	1749.8	736.5	338.2	213.8	156.5	130.0	117.4	111.8	106.2	106.2
57.5°	2409.4	1808.5	729.5	317.3	201.3	148.1	123.0	109.0	100.6	95.0	95.0
60°	2479.3	1850.4	708.6	286.5	184.5	138.4	116.0	100.6	90.8	86.7	86.7
62.5°	2512.9	1857.4	670.8	236.2	163.5	128.6	107.6	92.2	83.9	81.1	81.1
65°	2480.7	1826.6	612.1	177.5	141.2	117.4	99.2	85.3	76.9	69.9	69.9
67.5°	2368.9	1740.0	531.1	134.2	120.2	106.2	90.8	78.3	68.5	62.9	62.9
70°	2143.9	1559.7	410.9	107.6	102.0	92.2	82.5	69.9	61.5	54.5	54.5
72.5°	1849.0	1322.1	289.3	86.7	86.7	78.3	69.9	61.5	53.1	47.5	47.5
75°	1418.6	978.3	194.3	69.9	71.3	65.7	57.3	50.3	44.7	40.5	40.5
77.5°	774.3	483.6	118.8	51.7	53.1	50.3	44.7	40.5	37.7	33.5	33.5
80°	376.0	212.4	68.5	36.3	37.7	36.3	33.5	29.3	29.3	26.6	26.6
82.5°	157.9	79.7	36.3	25.2	25.2	22.4	21.0	21.0	21.0	19.6	19.6
85°	39.1	15.4	15.4	14.0	14.0	14.0	12.6	12.6	12.6	9.8	11.2
87.5°	5.6	5.6	5.6	5.6	5.6	5.6	4.2	1.4	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)