

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: P842416

Luminaire Tested: **ARCH4-40-750-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842416
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: ARCH4-40-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 355mA 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: 5607 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 43.8
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

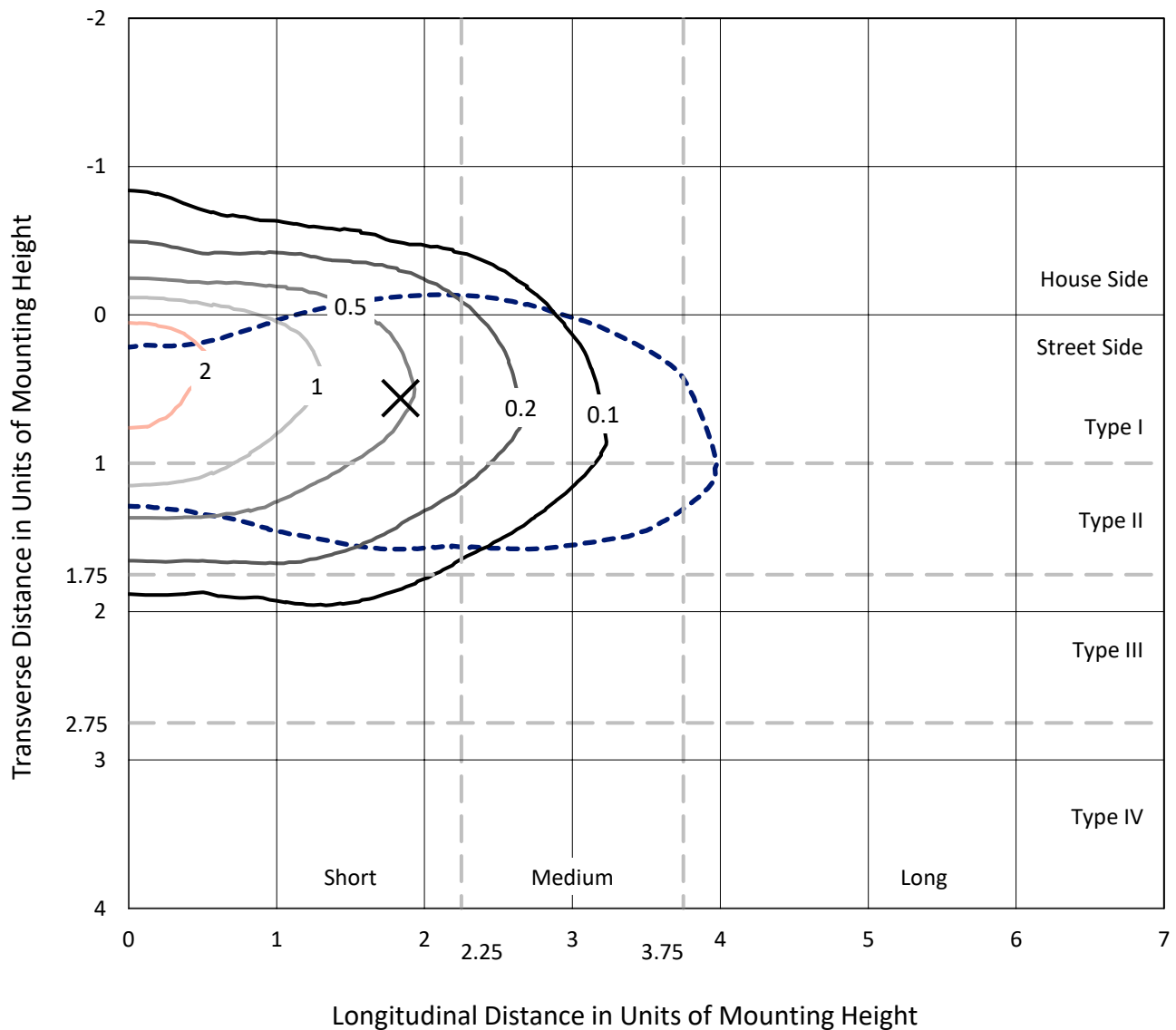


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Iso-Footcandle Lines of Horizontal Illumination

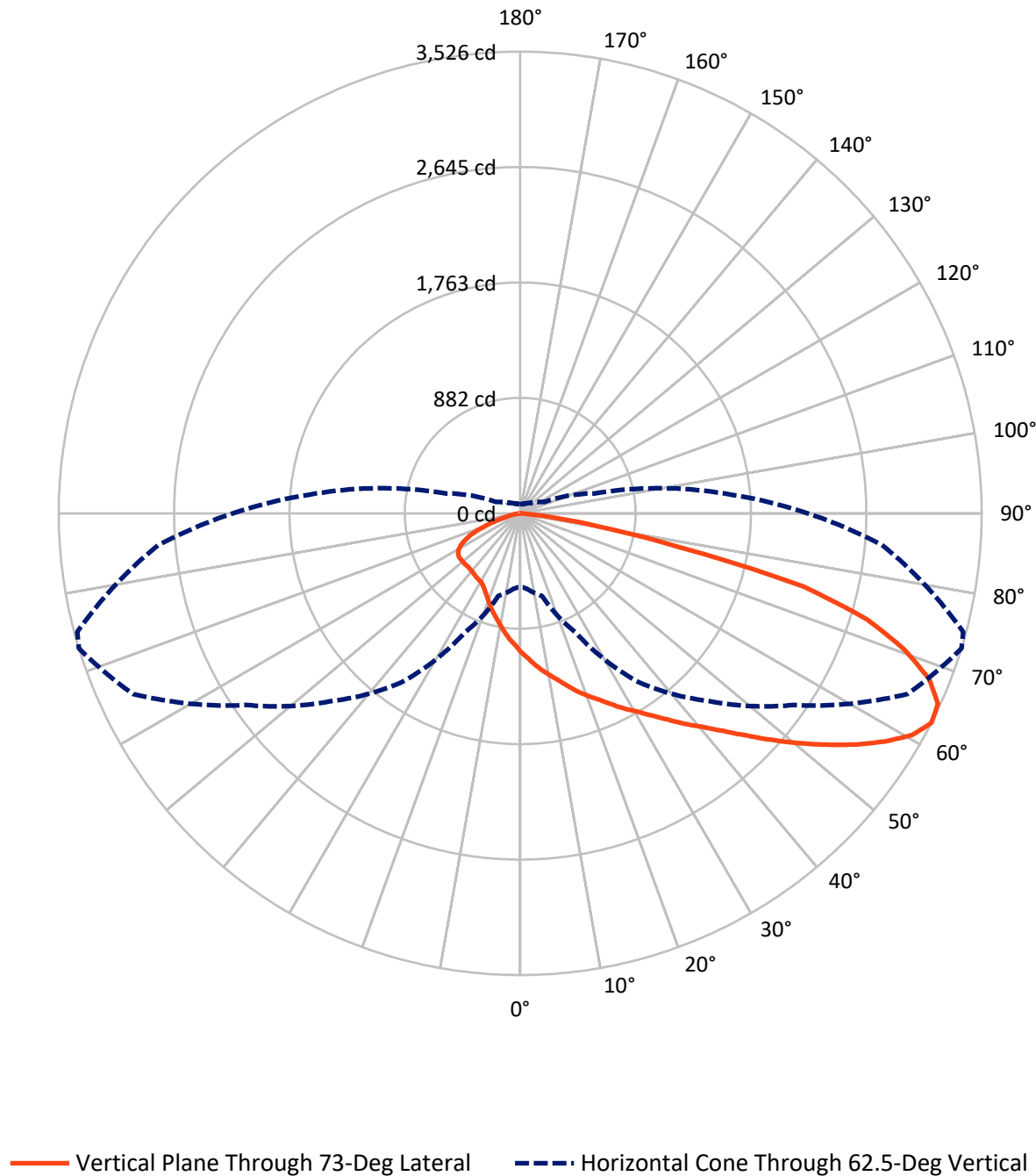
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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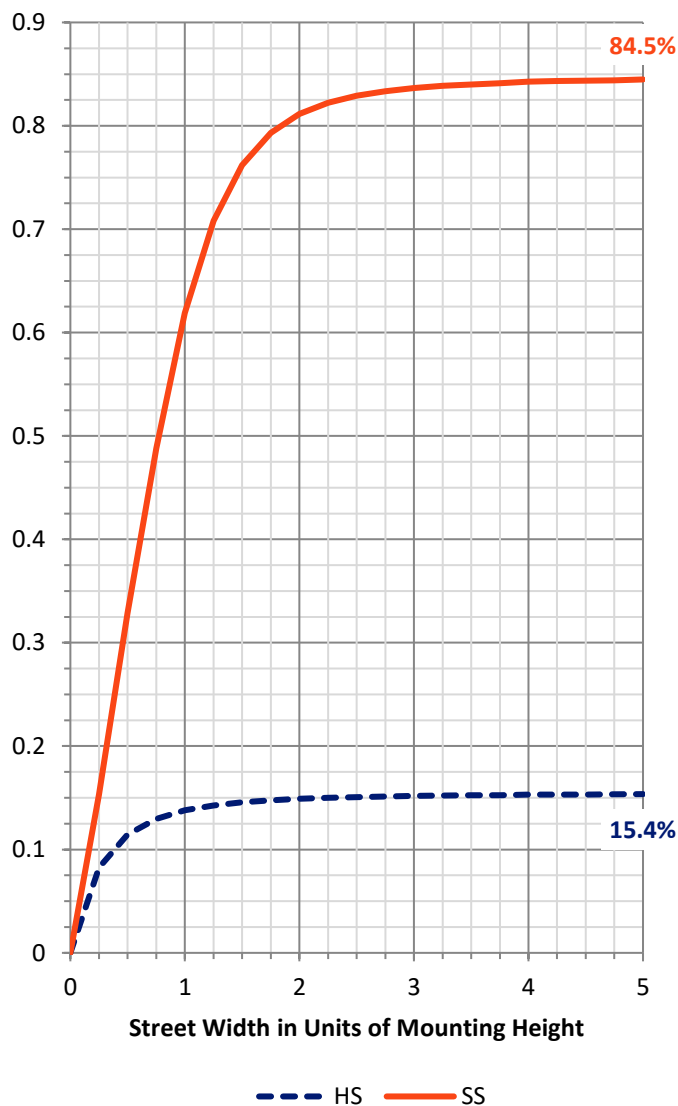
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	869.2	0.0	869.2
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	4737.8	0.0	4737.8
	% Fixture	84.5	0.0	84.5
Total	Lumens	5607.0	0.0	5607.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.6	1.8
10°-20°	309.5	5.5
20°-30°	515.2	9.2
30°-40°	777.3	13.9
40°-50°	1086.5	19.4
50°-60°	1200.1	21.4
60°-70°	1045.4	18.6
70°-80°	528.1	9.4
80°-90°	42.4	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°	5607.0	100.0
0°-180°	5607.0	100.0

Coefficient of Utilization



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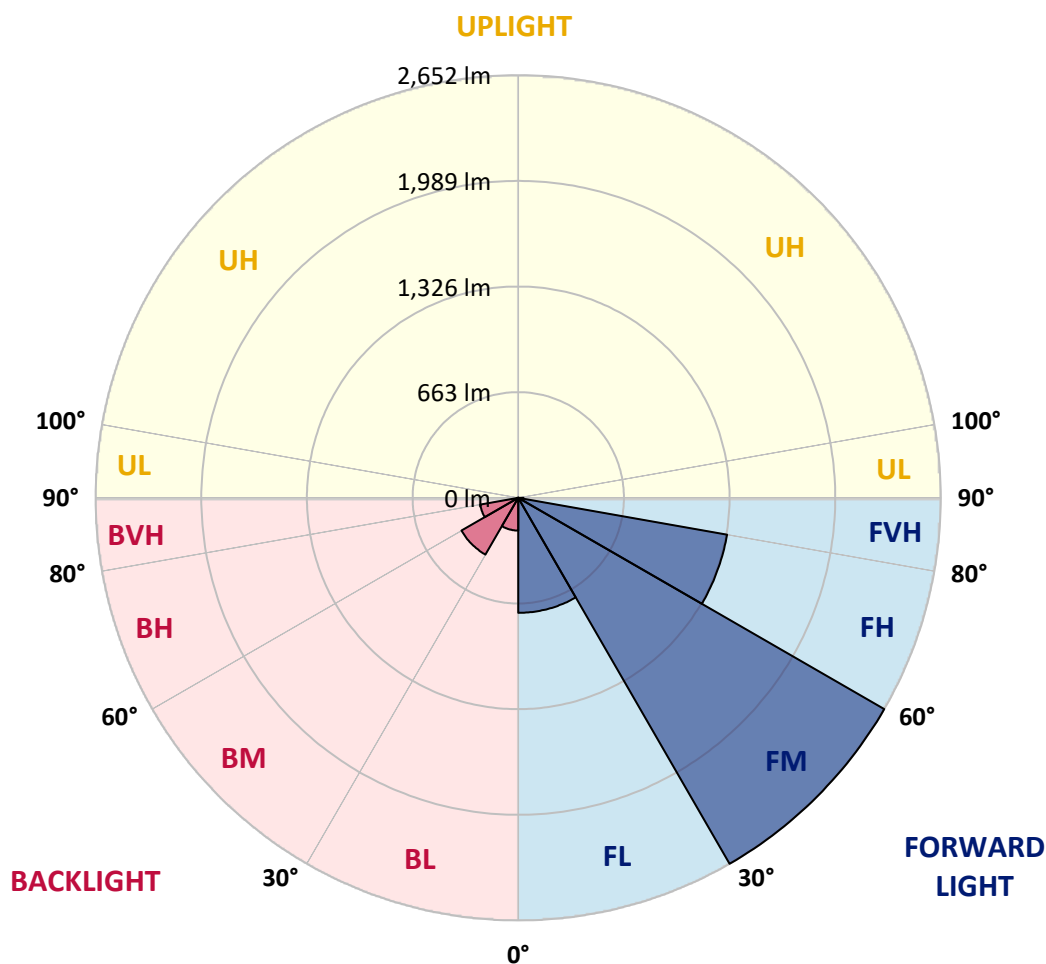
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	721.8	12.9			
FM	(30°-60°)	2652.3	47.3			
FH	(60°-80°)	1330.9	23.7			G1/1800
FVH	(80°-90°)	32.8	0.6			G1/100
BL	(0°-30°)	205.4	3.7	B1/500		
BM	(30°-60°)	411.5	7.3	B1/1000		
BH	(60°-80°)	242.6	4.3	B1/500		G1/500
BVH	(80°-90°)	9.6	0.2			G0/10
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°	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7
2.5°	1208.3	1221.7	1214.4	1219.3	1194.9	1179.0	1160.7	1125.2	1105.7	1103.2	1080.0
5°	1385.5	1400.1	1387.9	1384.2	1341.5	1304.8	1263.3	1201.0	1159.4	1152.1	1100.8
7.5°	1562.6	1576.1	1561.4	1550.4	1493.0	1428.2	1367.1	1275.5	1210.8	1198.5	1117.9
10°	1687.2	1699.4	1688.5	1677.5	1617.6	1551.6	1464.9	1345.1	1257.2	1237.6	1128.9
12.5°	1781.3	1788.6	1783.7	1774.0	1717.8	1646.9	1563.8	1423.3	1309.7	1285.3	1146.0
15°	1858.3	1870.5	1864.4	1857.1	1803.3	1732.4	1653.0	1505.2	1370.8	1340.3	1171.7
17.5°	1909.6	1918.1	1919.4	1919.4	1871.7	1802.1	1725.1	1579.7	1431.9	1392.8	1196.1
20°	1932.8	1942.6	1948.7	1958.5	1919.4	1859.5	1781.3	1643.2	1489.3	1445.3	1219.3
22.5°	1943.8	1952.4	1968.2	1990.2	1958.5	1908.4	1836.3	1701.9	1546.7	1500.3	1246.2
25°	1952.4	1963.3	1986.6	2028.1	2006.1	1963.3	1901.0	1769.1	1615.1	1567.5	1285.3
27.5°	1975.6	1989.0	2011.0	2061.1	2034.2	2013.4	1969.5	1841.2	1687.2	1638.4	1332.9
30°	2056.2	2067.2	2066.0	2097.7	2064.8	2058.6	2028.1	1910.8	1756.9	1708.0	1389.1
32.5°	2202.8	2213.8	2186.9	2174.7	2102.6	2103.8	2091.6	1985.3	1839.9	1789.9	1453.9
35°	2360.4	2372.6	2337.2	2316.4	2195.5	2160.0	2166.2	2078.2	1932.8	1882.7	1534.5
37.5°	2500.9	2515.6	2485.0	2454.5	2332.3	2250.5	2249.2	2182.0	2039.1	1987.8	1623.7
40°	2577.9	2595.0	2613.3	2596.2	2467.9	2377.5	2338.4	2288.3	2144.2	2091.6	1720.2
42.5°	2614.5	2662.2	2695.2	2684.2	2579.1	2487.5	2441.0	2399.5	2272.4	2221.1	1835.1
45°	2511.9	2513.1	2582.8	2642.6	2623.1	2562.0	2553.4	2524.1	2419.1	2370.2	1964.6
47.5°	2383.6	2373.9	2422.7	2529.0	2584.0	2599.9	2650.0	2662.2	2586.4	2537.6	2096.5
50°	2075.7	2081.9	2240.7	2393.4	2500.9	2603.5	2718.4	2803.9	2758.7	2712.3	2235.8
52.5°	1688.5	1703.1	1885.2	2221.1	2391.0	2566.9	2758.7	2945.6	2934.6	2890.7	2375.1
55°	1353.7	1376.9	1569.9	1934.0	2250.5	2485.0	2775.8	3075.1	3116.7	3076.4	2511.9
57.5°	1034.8	1059.3	1221.7	1595.6	2070.9	2351.9	2763.6	3188.8	3286.5	3260.8	2637.7
60°	779.5	803.9	907.8	1293.8	1846.1	2202.8	2702.5	3263.3	3439.2	3412.3	2729.4
62.5°	558.3	577.9	654.9	1006.7	1572.4	2025.7	2552.2	3264.5	3526.0	3504.0	2773.4
65°	402.0	402.0	464.3	718.4	1315.8	1813.1	2325.0	3114.2	3507.6	3501.5	2742.8
67.5°	289.6	292.0	342.1	502.1	1049.5	1555.3	2030.5	2846.7	3365.9	3396.5	2632.9
70°	205.3	211.4	234.6	350.6	792.9	1227.9	1715.3	2496.0	3110.6	3164.3	2420.3
72.5°	158.8	162.5	178.4	244.3	579.1	912.6	1367.1	2105.1	2769.7	2830.8	2130.7
75°	122.2	125.8	138.1	179.6	415.4	640.2	971.3	1633.5	2233.4	2342.1	1711.7
77.5°	89.2	94.1	102.6	130.7	241.9	406.8	588.9	918.8	1232.7	1284.1	896.8
80°	41.5	47.6	59.9	84.3	130.7	191.8	208.9	354.3	592.5	619.4	486.3
82.5°	23.2	29.3	34.2	51.3	66.0	68.4	70.9	89.2	223.6	246.8	204.0
85°	11.0	14.7	15.9	22.0	22.0	19.5	23.2	17.1	36.7	44.0	42.8
87.5°	0.0	1.2	2.4	6.1	4.9	3.7	3.7	3.7	3.7	4.9	3.7
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°	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7	1061.7
2.5°	1069.0	1053.1	1016.5	984.7	964.0	945.6	921.2	910.2	890.7	894.3	883.3
5°	1075.1	1045.8	981.1	921.2	877.2	838.1	795.4	770.9	744.0	741.6	733.0
7.5°	1078.8	1033.6	940.7	856.4	789.2	729.4	672.0	640.2	607.2	599.9	592.5
10°	1075.1	1015.3	899.2	789.2	700.1	625.5	560.8	520.5	486.3	477.7	470.4
12.5°	1078.8	1005.5	860.1	726.9	620.6	536.3	463.0	421.5	389.7	381.2	376.3
15°	1087.4	999.4	827.1	670.7	549.8	455.7	383.6	348.2	322.5	314.0	311.5
17.5°	1094.7	993.3	791.7	615.8	478.9	384.9	322.5	293.2	271.2	262.7	260.2
20°	1104.5	984.7	756.3	563.2	416.6	328.6	273.7	248.0	230.9	224.8	223.6
22.5°	1113.0	978.6	723.3	510.7	359.2	283.4	237.0	216.2	204.0	197.9	197.9
25°	1135.0	981.1	695.2	461.8	316.4	248.0	208.9	193.0	183.3	179.6	179.6
27.5°	1160.7	990.8	673.2	420.3	279.8	221.1	189.4	175.9	171.0	166.2	167.4
30°	1197.3	1010.4	658.5	386.1	252.9	200.4	173.5	163.7	158.8	157.6	157.6
32.5°	1243.7	1042.1	657.3	364.1	233.4	184.5	162.5	153.9	151.5	150.3	150.3
35°	1298.7	1070.2	650.0	354.3	221.1	173.5	153.9	147.8	146.6	146.6	146.6
37.5°	1364.7	1116.7	645.1	340.9	215.0	167.4	147.8	142.9	142.9	142.9	142.9
40°	1433.1	1154.6	637.8	328.6	212.6	163.7	144.2	138.1	138.1	138.1	138.1
42.5°	1515.0	1209.5	635.3	322.5	208.9	161.3	139.3	131.9	133.2	133.2	134.4
45°	1613.9	1271.8	634.1	316.4	207.7	158.8	134.4	125.8	127.1	125.8	125.8
47.5°	1714.1	1343.9	637.8	312.8	206.5	156.4	130.7	119.7	119.7	118.5	118.5
50°	1819.2	1409.9	640.2	309.1	204.0	151.5	124.6	114.8	112.4	110.0	111.2
52.5°	1918.1	1471.0	641.4	303.0	196.7	144.2	119.7	108.7	105.1	101.4	102.6
55°	2017.1	1529.6	643.9	295.7	186.9	136.8	113.6	102.6	97.7	92.9	92.9
57.5°	2106.3	1580.9	637.8	277.3	175.9	129.5	107.5	95.3	88.0	83.1	83.1
60°	2167.4	1617.6	619.4	250.5	161.3	121.0	101.4	88.0	79.4	75.7	75.7
62.5°	2196.7	1623.7	586.4	206.5	142.9	112.4	94.1	80.6	73.3	70.9	70.9
65°	2168.6	1596.8	535.1	155.2	123.4	102.6	86.7	74.5	67.2	61.1	61.1
67.5°	2070.9	1521.1	464.3	117.3	105.1	92.9	79.4	68.4	59.9	55.0	55.0
70°	1874.2	1363.5	359.2	94.1	89.2	80.6	72.1	61.1	53.8	47.6	47.6
72.5°	1616.4	1155.8	252.9	75.7	75.7	68.4	61.1	53.8	46.4	41.5	41.5
75°	1240.1	855.2	169.8	61.1	62.3	57.4	50.1	44.0	39.1	35.4	35.4
77.5°	676.8	422.7	103.8	45.2	46.4	44.0	39.1	35.4	33.0	29.3	29.3
80°	328.6	185.7	59.9	31.8	33.0	31.8	29.3	25.7	25.7	23.2	23.2
82.5°	138.1	69.6	31.8	22.0	22.0	19.5	18.3	18.3	18.3	17.1	17.1
85°	34.2	13.4	13.4	12.2	12.2	12.2	11.0	11.0	11.0	8.6	9.8
87.5°	4.9	4.9	4.9	4.9	4.9	4.9	3.7	1.2	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)