

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: P842418

Luminaire Tested: **ARCH4-40-750-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842418
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: ARCH4-40-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 355mA 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: 5434 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - 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



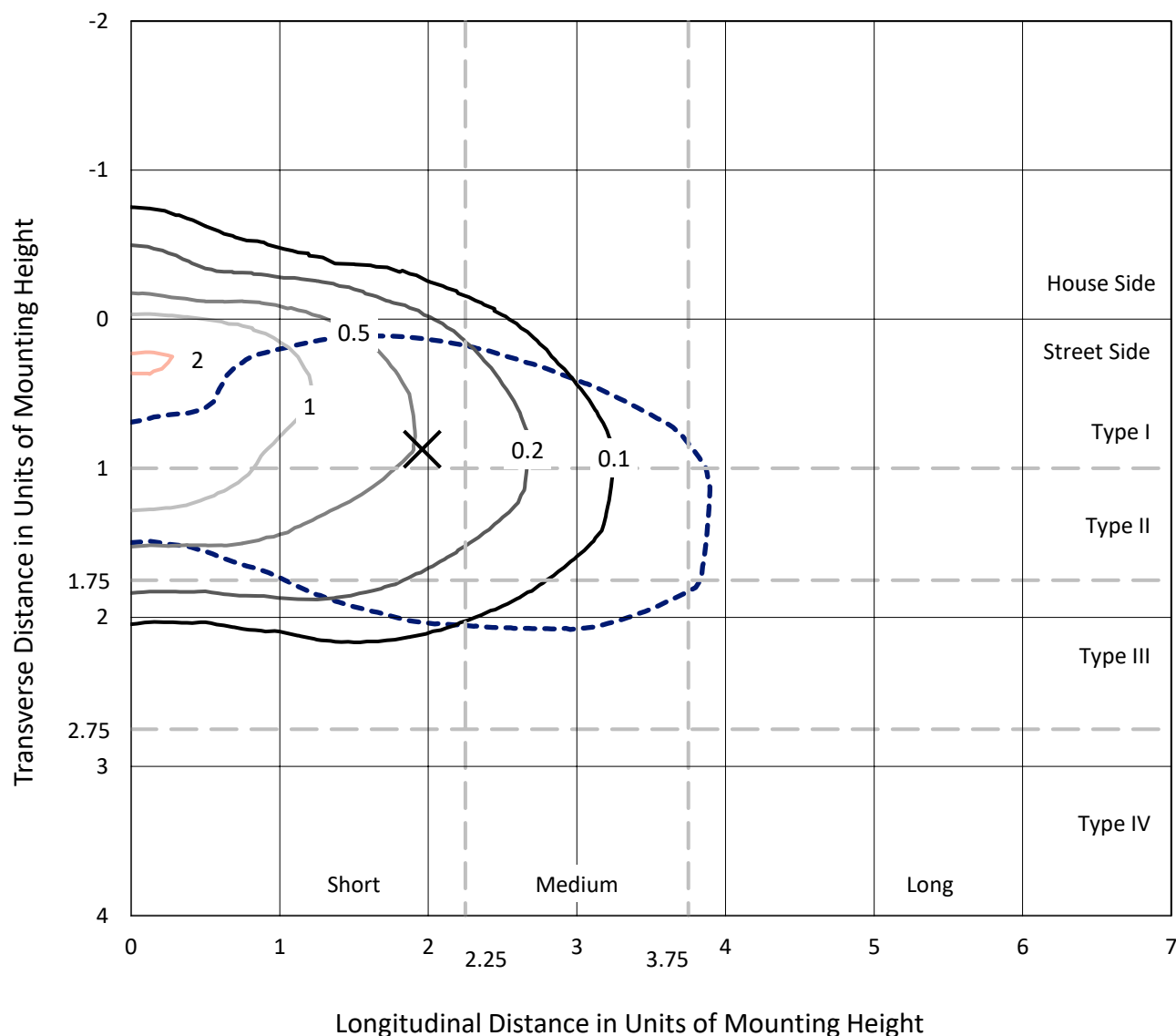
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

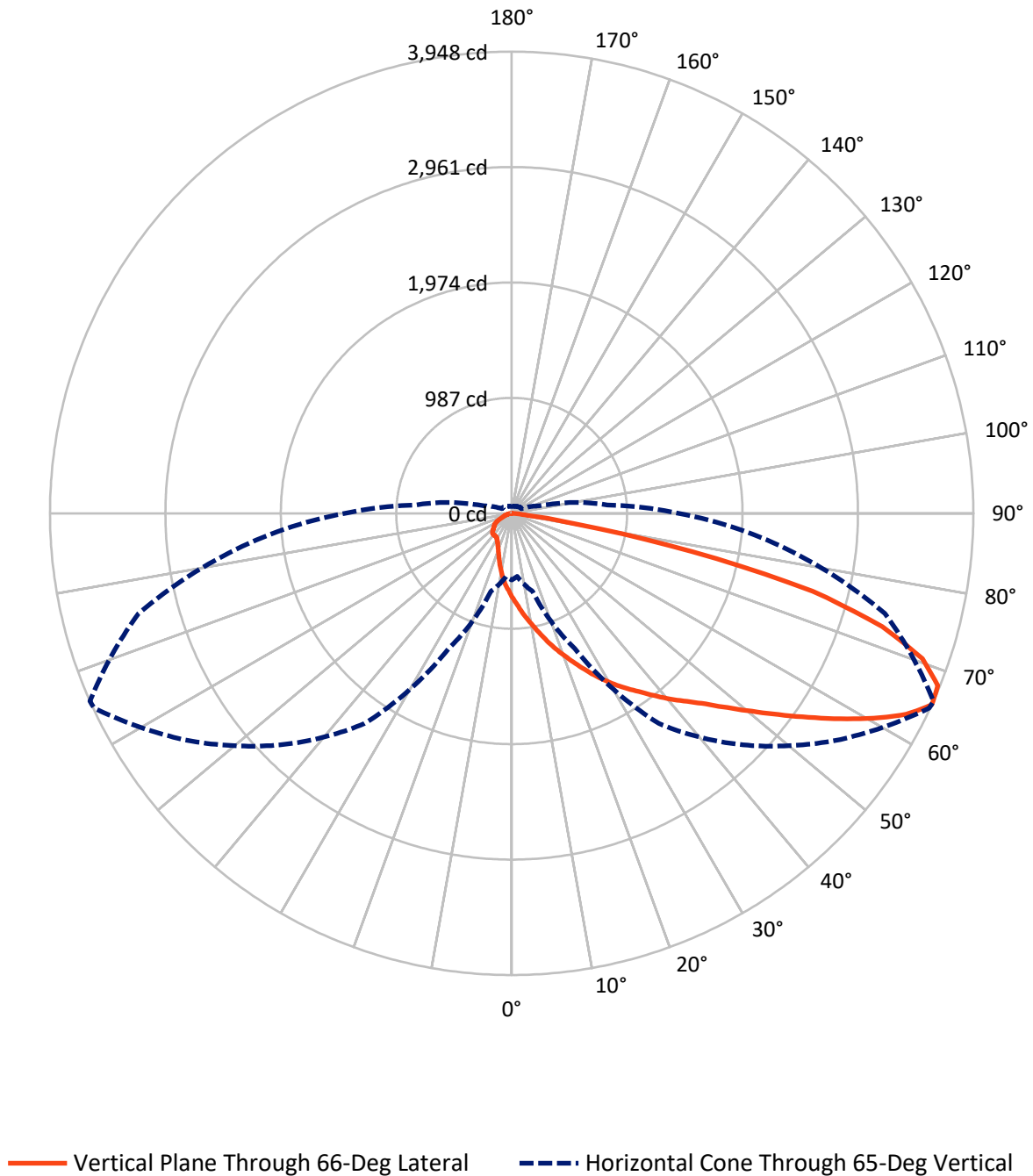


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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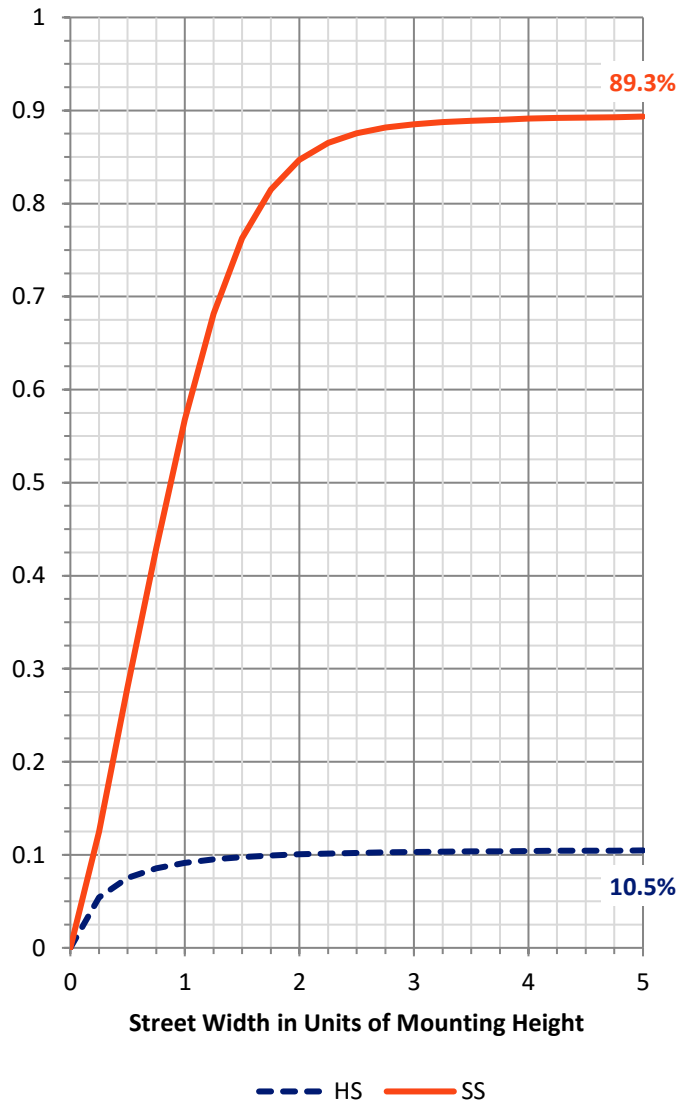
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	574.8	0.0	574.8
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4859.2	0.0	4859.2
	% Fixture	89.4	0.0	89.4
Total	Lumens	5434.0	0.0	5434.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	1.3
10°-20°	231.3	4.3
20°-30°	418.6	7.7
30°-40°	654.5	12.0
40°-50°	992.9	18.3
50°-60°	1261.6	23.2
60°-70°	1178.8	21.7
70°-80°	585.9	10.8
80°-90°	39.4	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°	5434.0	100.0
0°-180°	5434.0	100.0

Coefficient of Utilization



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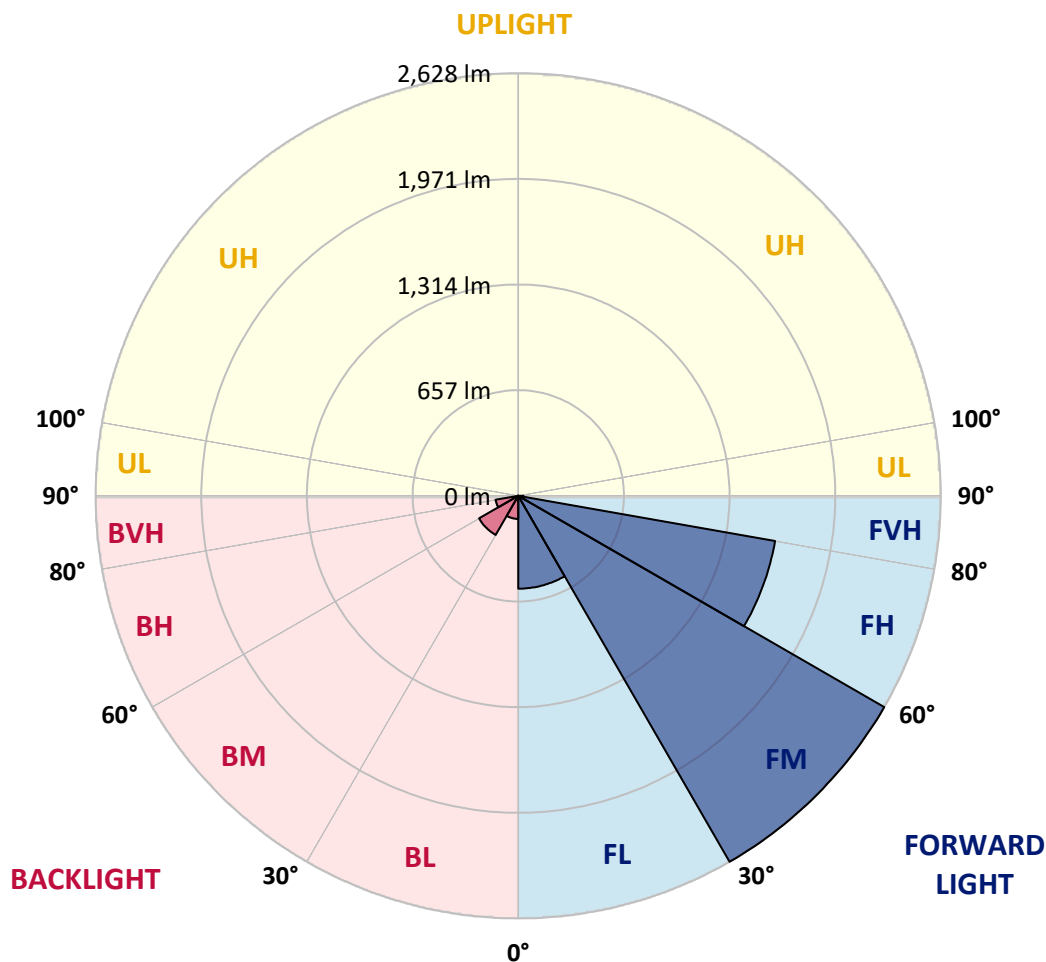
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	577.4	10.6			
FM	(30°-60°)	2627.9	48.4			
FH	(60°-80°)	1621.5	29.8			G1/1800
FVH	(80°-90°)	32.4	0.6			G1/100
BL	(0°-30°)	143.5	2.6	B1/500		
BM	(30°-60°)	281.1	5.2	B1/1000		
BH	(60°-80°)	143.1	2.6	B1/500		G1/500
BVH	(80°-90°)	7.0	0.1			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2
2.5°	840.0	846.8	850.2	851.4	825.2	813.8	802.4	776.1	770.4	755.6	736.3
5°	988.1	997.3	995.0	990.4	958.5	922.0	892.4	843.4	835.4	800.1	756.8
7.5°	1134.0	1142.0	1139.7	1122.6	1087.3	1036.0	987.0	915.2	903.8	846.8	777.3
10°	1256.0	1262.8	1261.7	1244.6	1202.4	1139.7	1080.4	984.7	971.0	890.1	794.4
12.5°	1356.3	1365.4	1364.2	1352.8	1315.2	1246.8	1179.6	1064.5	1047.4	942.5	818.3
15°	1434.9	1446.3	1446.3	1441.7	1415.5	1358.5	1282.2	1152.3	1131.7	1002.9	847.9
17.5°	1482.8	1491.9	1499.9	1507.8	1489.6	1446.3	1376.8	1240.0	1218.4	1062.2	878.7
20°	1507.8	1517.0	1522.7	1539.8	1543.2	1521.5	1466.8	1326.6	1303.8	1129.5	914.1
22.5°	1548.9	1556.9	1558.0	1572.8	1579.6	1585.3	1551.2	1412.1	1393.9	1203.5	953.9
25°	1617.3	1626.4	1623.0	1629.8	1630.9	1637.8	1634.4	1510.1	1491.9	1287.9	1001.8
27.5°	1705.0	1716.4	1714.1	1707.3	1697.0	1691.3	1706.2	1609.3	1592.2	1372.2	1050.8
30°	1799.6	1813.3	1809.9	1796.2	1768.8	1744.9	1765.4	1702.7	1686.8	1458.8	1105.5
32.5°	1895.3	1911.3	1910.2	1887.4	1840.6	1799.6	1830.4	1790.5	1779.1	1552.3	1164.8
35°	1958.0	1978.5	1976.3	1962.6	1902.2	1866.9	1904.5	1880.5	1872.6	1666.3	1250.3
37.5°	2059.5	2081.1	2061.7	2027.6	1958.0	1939.8	1985.4	1982.0	1976.3	1787.1	1340.3
40°	2305.6	2337.6	2286.3	2146.1	2032.1	2016.2	2081.1	2094.8	2089.1	1906.7	1421.2
42.5°	2563.2	2611.1	2531.3	2337.6	2166.6	2108.5	2186.0	2205.3	2198.5	2009.3	1494.2
45°	2719.4	2739.9	2660.1	2509.7	2404.8	2220.2	2297.7	2329.6	2323.9	2132.4	1587.6
47.5°	2847.0	2839.0	2747.9	2646.4	2665.8	2377.4	2424.2	2486.9	2482.3	2268.0	1690.2
50°	2874.4	2856.1	2819.7	2755.8	2807.1	2537.0	2557.5	2665.8	2661.2	2418.5	1793.9
52.5°	2681.7	2657.8	2757.0	2810.5	2793.4	2653.3	2704.5	2861.8	2859.5	2581.5	1893.1
55°	2200.8	2181.4	2448.1	2725.1	2778.6	2735.3	2867.5	3065.8	3078.4	2754.7	1983.1
57.5°	1731.2	1710.7	1972.8	2510.8	2723.9	2810.5	3057.9	3299.5	3315.4	2942.7	2068.6
60°	1380.2	1349.4	1550.0	2173.4	2621.3	2868.7	3241.3	3555.9	3558.2	3114.8	2121.0
62.5°	938.0	903.8	1126.0	1746.0	2449.2	2877.8	3382.7	3777.0	3786.1	3243.6	2130.1
65°	569.9	541.4	691.8	1275.3	2195.1	2800.3	3385.0	3940.0	3948.0	3302.9	2075.4
67.5°	330.5	319.1	395.5	794.4	1773.4	2591.7	3242.5	3914.9	3929.7	3277.8	1951.2
70°	192.6	191.5	220.0	393.2	1251.4	2178.0	2924.5	3704.1	3725.7	3146.8	1760.9
72.5°	141.3	143.6	155.0	210.8	724.9	1568.2	2476.6	3280.1	3313.2	2890.3	1489.6
75°	111.7	112.8	123.1	143.6	380.7	886.7	1855.5	2632.7	2659.0	2433.3	1163.6
77.5°	83.2	85.5	93.5	101.4	176.7	406.9	1044.0	1621.8	1578.5	1335.7	561.9
80°	60.4	66.1	69.5	72.9	93.5	157.3	313.4	565.3	560.7	583.5	265.6
82.5°	38.8	43.3	46.7	49.0	55.8	75.2	93.5	126.5	136.8	226.8	106.0
85°	17.1	19.4	21.7	26.2	23.9	26.2	38.8	25.1	21.7	34.2	19.4
87.5°	0.0	0.0	3.4	5.7	4.6	2.3	6.8	4.6	3.4	3.4	3.4
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°	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2	719.2
2.5°	726.0	713.5	687.2	662.2	647.4	628.0	610.9	594.9	593.8	589.2	581.3
5°	735.1	711.2	662.2	615.4	580.1	542.5	510.6	485.5	476.4	469.6	460.4
7.5°	744.2	706.6	633.7	565.3	509.5	457.0	419.4	385.2	375.0	365.8	360.1
10°	747.7	698.6	600.6	509.5	436.5	380.7	340.8	315.7	306.6	302.0	298.6
12.5°	757.9	694.1	569.9	457.0	372.7	321.4	292.9	278.1	274.7	271.3	267.8
15°	771.6	694.1	539.1	405.7	322.5	281.5	264.4	254.2	251.9	250.7	248.5
17.5°	786.4	694.1	509.5	362.4	286.1	255.3	242.8	237.1	235.9	234.8	233.6
20°	806.9	695.2	477.5	324.8	259.9	235.9	225.7	218.8	217.7	216.5	216.5
22.5°	827.4	697.5	446.8	296.3	242.8	221.1	208.6	201.7	199.5	199.5	199.5
25°	853.6	704.3	418.3	272.4	227.9	207.4	191.5	185.8	184.6	184.6	183.5
27.5°	884.4	712.3	393.2	254.2	213.1	191.5	175.5	169.8	167.5	167.5	166.4
30°	917.5	720.3	372.7	240.5	198.3	175.5	160.7	153.9	151.6	152.7	151.6
32.5°	953.9	731.7	356.7	231.4	184.6	161.8	148.2	140.2	139.0	139.0	137.9
35°	1015.5	763.6	354.5	226.8	173.2	151.6	137.9	129.9	128.8	128.8	127.6
37.5°	1081.6	800.1	364.7	224.5	164.1	142.5	129.9	121.9	120.8	120.8	120.8
40°	1137.4	827.4	376.1	224.5	158.4	134.5	123.1	116.3	116.3	116.3	116.3
42.5°	1175.0	829.7	373.8	224.5	153.9	128.8	118.5	111.7	111.7	112.8	111.7
45°	1230.9	841.1	364.7	221.1	150.4	124.2	114.0	108.3	107.1	108.3	108.3
47.5°	1297.0	861.6	355.6	207.4	149.3	119.7	110.6	103.7	102.6	103.7	102.6
50°	1359.7	879.9	351.0	189.2	147.0	115.1	106.0	99.2	98.0	99.2	98.0
52.5°	1412.1	887.8	343.1	176.7	141.3	110.6	101.4	94.6	92.3	93.5	93.5
55°	1454.3	885.6	331.7	166.4	131.1	106.0	95.7	90.0	86.6	86.6	85.5
57.5°	1493.0	886.7	321.4	156.1	119.7	99.2	91.2	84.3	79.8	78.6	77.5
60°	1507.8	881.0	303.2	142.5	108.3	93.5	85.5	77.5	72.9	71.8	70.7
62.5°	1487.3	860.5	279.2	118.5	98.0	86.6	79.8	71.8	67.2	66.1	65.0
65°	1429.2	821.7	242.8	93.5	88.9	78.6	72.9	67.2	61.5	59.3	58.1
67.5°	1330.0	765.9	197.2	75.2	78.6	71.8	68.4	61.5	54.7	52.4	51.3
70°	1188.7	691.8	148.2	63.8	69.5	63.8	61.5	54.7	49.0	46.7	45.6
72.5°	990.4	572.1	103.7	54.7	60.4	55.8	53.6	49.0	43.3	39.9	39.9
75°	748.8	410.3	68.4	46.7	50.1	47.9	44.4	41.0	37.6	35.3	34.2
77.5°	322.5	159.6	42.2	35.3	41.0	39.9	35.3	33.1	31.9	29.6	29.6
80°	139.0	65.0	26.2	26.2	29.6	28.5	27.4	25.1	25.1	23.9	22.8
82.5°	51.3	26.2	16.0	19.4	21.7	19.4	19.4	19.4	19.4	18.2	18.2
85°	12.5	8.0	8.0	11.4	12.5	11.4	12.5	11.4	11.4	11.4	10.3
87.5°	3.4	3.4	4.6	4.6	4.6	4.6	4.6	3.4	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)