

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: P836533

Luminaire Tested: **ARCH3-40-727-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836533
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: ARCH3-40-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 345mA 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: 4824 lumens
Efficiency: N/A
Efficacy: 110.6 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

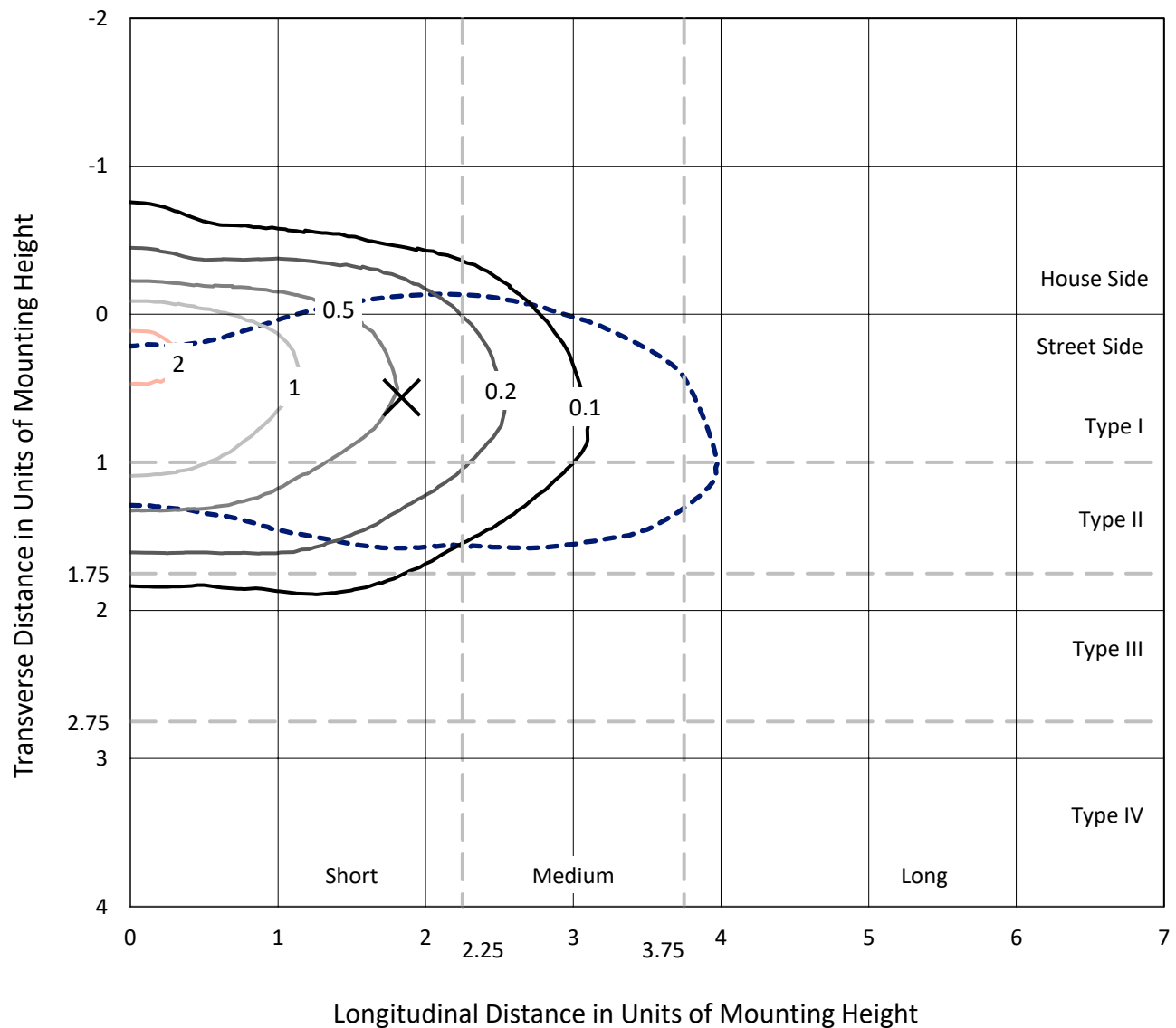
Input Watts (W): 43.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

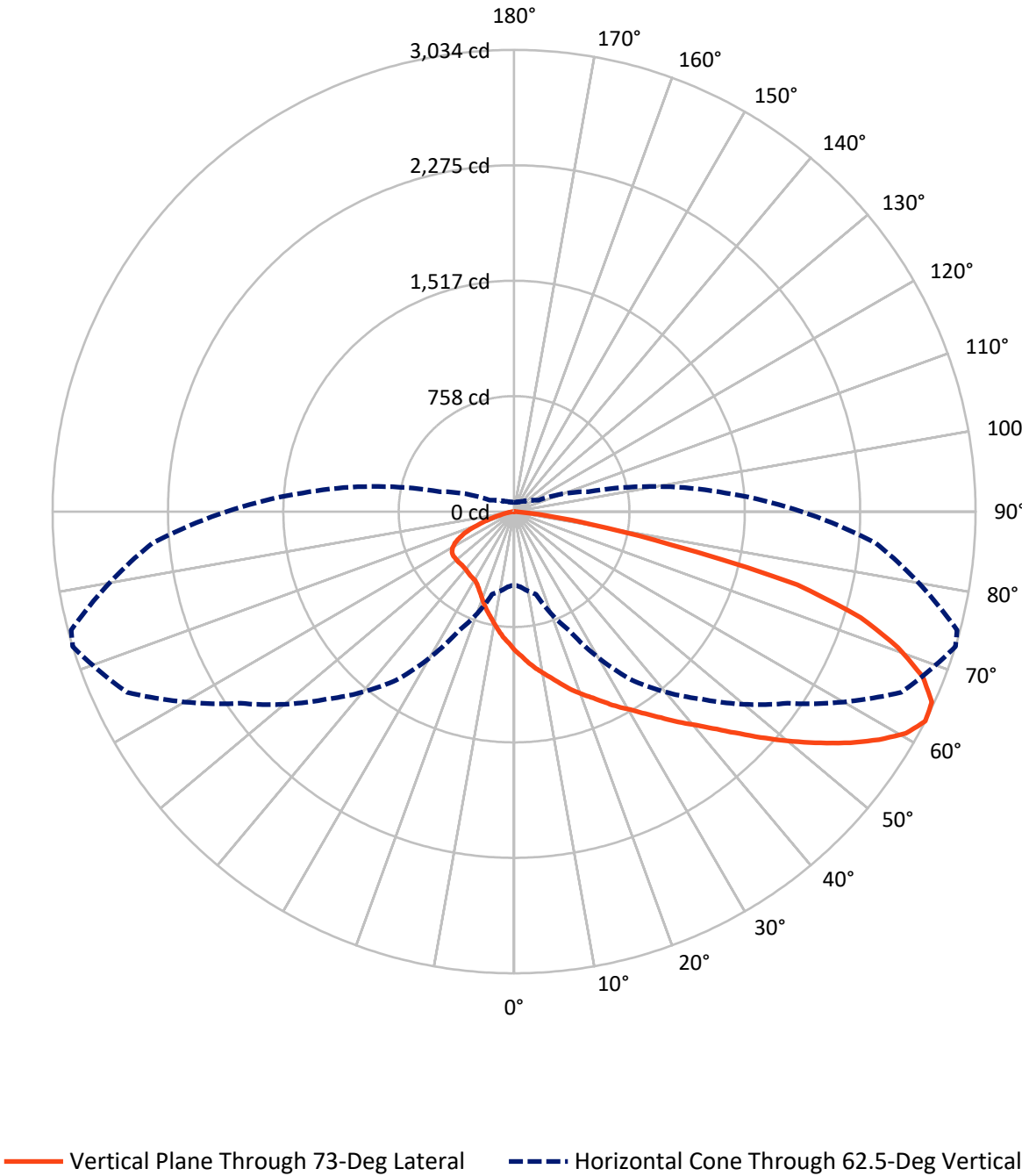
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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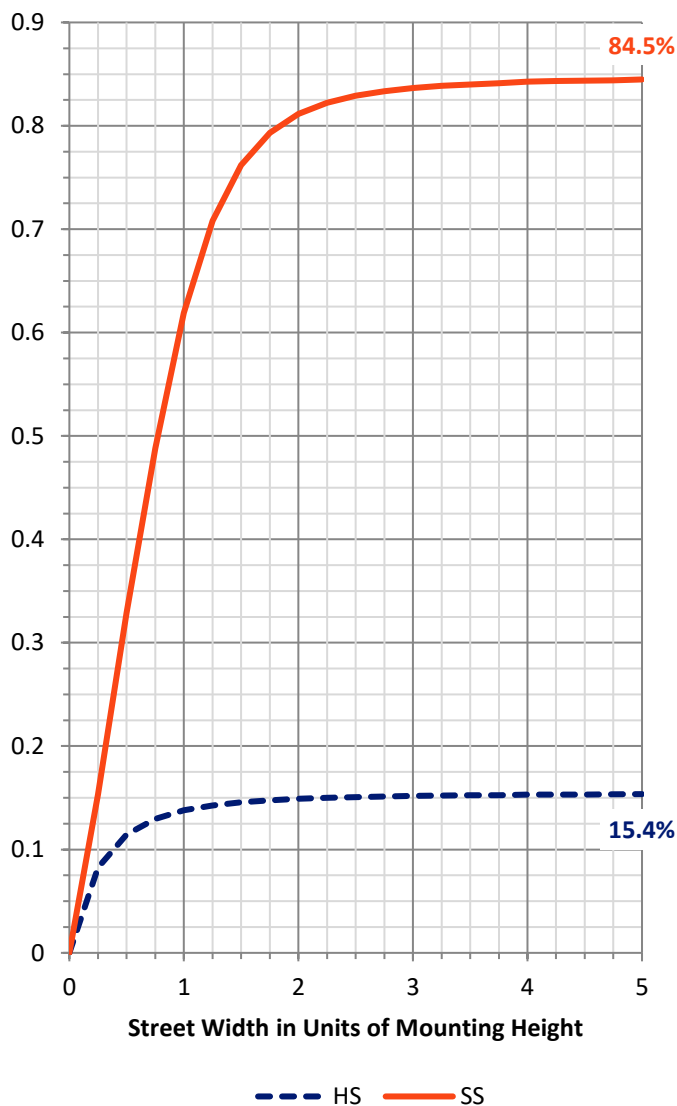
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	747.8	0.0	747.8
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	4076.2	0.0	4076.2
	% Fixture	84.5	0.0	84.5
Total	Lumens	4824.0	0.0	4824.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	1.8
10°-20°	266.3	5.5
20°-30°	443.2	9.2
30°-40°	668.8	13.9
40°-50°	934.7	19.4
50°-60°	1032.5	21.4
60°-70°	899.4	18.6
70°-80°	454.3	9.4
80°-90°	36.5	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°	4824.0	100.0
0°-180°	4824.0	100.0

Coefficient of Utilization



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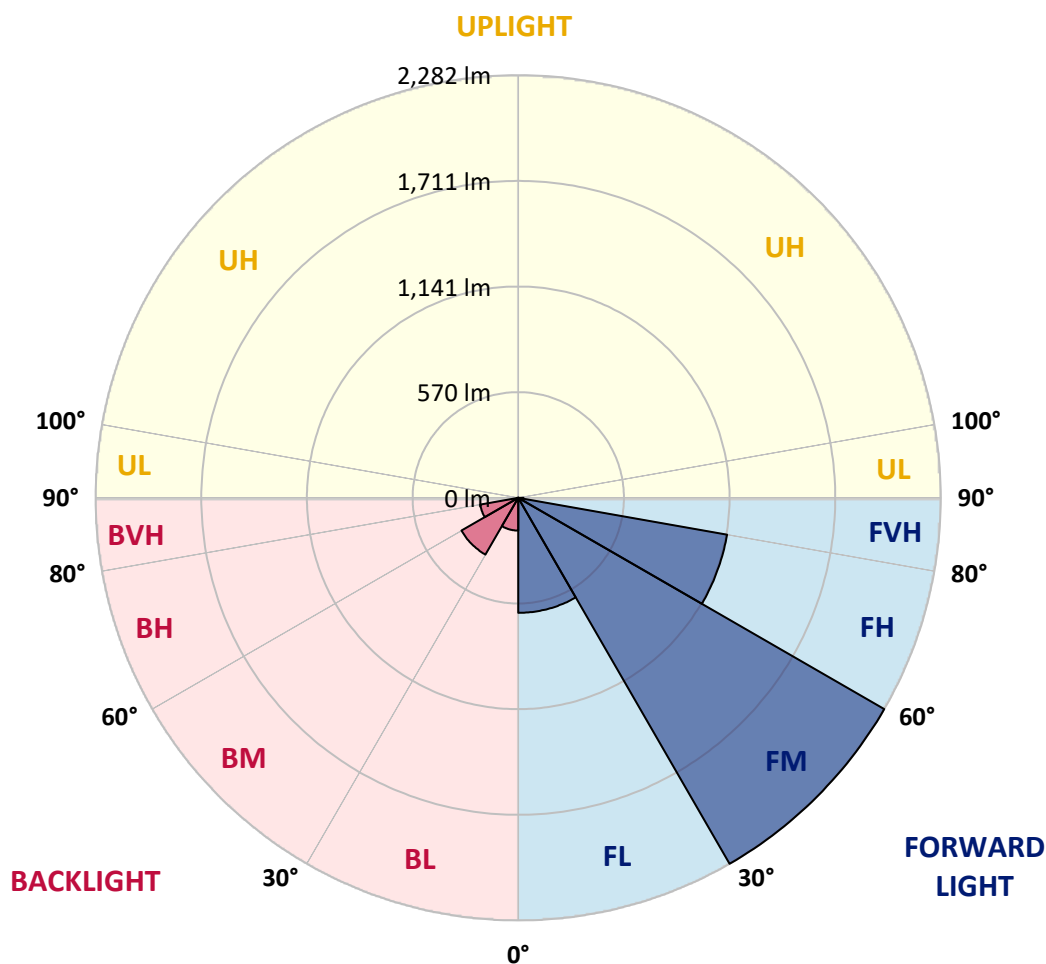
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	621.0	12.9			
FM	(30°-60°)	2281.9	47.3			
FH	(60°-80°)	1145.1	23.7			G1/1800
FVH	(80°-90°)	28.2	0.6			G1/100
BL	(0°-30°)	176.8	3.7	B1/500		
BM	(30°-60°)	354.1	7.3	B1/1000		
BH	(60°-80°)	208.7	4.3	B1/500		G1/500
BVH	(80°-90°)	8.2	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°	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4
2.5°	1039.6	1051.1	1044.8	1049.0	1028.0	1014.3	998.6	968.1	951.3	949.2	929.2
5°	1192.0	1204.6	1194.1	1190.9	1154.1	1122.6	1086.9	1033.3	997.5	991.2	947.1
7.5°	1344.4	1356.0	1343.3	1333.9	1284.5	1228.8	1176.2	1097.4	1041.7	1031.2	961.8
10°	1451.6	1462.1	1452.7	1443.2	1391.7	1334.9	1260.3	1157.3	1081.6	1064.8	971.2
12.5°	1532.6	1538.9	1534.7	1526.2	1477.9	1416.9	1345.5	1224.6	1126.8	1105.8	986.0
15°	1598.8	1609.3	1604.0	1597.7	1551.5	1490.5	1422.2	1295.0	1179.4	1153.1	1008.0
17.5°	1642.9	1650.3	1651.3	1651.3	1610.3	1550.4	1484.2	1359.1	1231.9	1198.3	1029.1
20°	1662.9	1671.3	1676.6	1685.0	1651.3	1599.8	1532.6	1413.8	1281.3	1243.5	1049.0
22.5°	1672.4	1679.7	1693.4	1712.3	1685.0	1641.9	1579.9	1464.2	1330.7	1290.8	1072.2
25°	1679.7	1689.2	1709.1	1744.9	1726.0	1689.2	1635.6	1522.0	1389.6	1348.6	1105.8
27.5°	1699.7	1711.2	1730.2	1773.3	1750.1	1732.3	1694.4	1584.1	1451.6	1409.6	1146.8
30°	1769.1	1778.5	1777.5	1804.8	1776.4	1771.2	1744.9	1644.0	1511.5	1469.5	1195.1
32.5°	1895.2	1904.7	1881.5	1871.0	1809.0	1810.1	1799.5	1708.1	1583.0	1539.9	1250.8
35°	2030.8	2041.3	2010.8	1992.9	1888.9	1858.4	1863.7	1788.0	1662.9	1619.8	1320.2
37.5°	2151.7	2164.3	2138.0	2111.7	2006.6	1936.2	1935.1	1877.3	1754.3	1710.2	1397.0
40°	2217.9	2232.6	2248.4	2233.7	2123.3	2045.5	2011.9	1968.8	1844.7	1799.5	1480.0
42.5°	2249.4	2290.4	2318.8	2309.3	2218.9	2140.1	2100.2	2064.4	1955.1	1911.0	1578.8
45°	2161.1	2162.2	2222.1	2273.6	2256.8	2204.2	2196.9	2171.6	2081.2	2039.2	1690.2
47.5°	2050.8	2042.4	2084.4	2175.8	2223.1	2236.8	2279.9	2290.4	2225.2	2183.2	1803.7
50°	1785.9	1791.1	1927.8	2059.2	2151.7	2240.0	2338.8	2412.4	2373.5	2333.5	1923.6
52.5°	1452.7	1465.3	1621.9	1911.0	2057.1	2208.4	2373.5	2534.3	2524.8	2487.0	2043.4
55°	1164.7	1184.6	1350.7	1663.9	1936.2	2138.0	2388.2	2645.7	2681.4	2646.8	2161.1
57.5°	890.3	911.3	1051.1	1372.8	1781.7	2023.4	2377.7	2743.5	2827.5	2805.5	2269.4
60°	670.6	691.6	781.0	1113.1	1588.3	1895.2	2325.1	2807.6	2958.9	2935.8	2348.2
62.5°	480.4	497.2	563.4	866.1	1352.8	1742.8	2195.8	2808.6	3033.6	3014.6	2386.1
65°	345.8	345.8	399.4	618.1	1132.1	1559.9	2000.3	2679.3	3017.8	3012.5	2359.8
67.5°	249.1	251.2	294.3	432.0	902.9	1338.1	1747.0	2449.1	2895.9	2922.1	2265.2
70°	176.6	181.8	201.8	301.7	682.2	1056.4	1475.8	2147.5	2676.2	2722.4	2082.3
72.5°	136.6	139.8	153.5	210.2	498.2	785.2	1176.2	1811.1	2382.9	2435.5	1833.2
75°	105.1	108.3	118.8	154.5	357.4	550.8	835.7	1405.4	1921.5	2015.0	1472.6
77.5°	76.7	80.9	88.3	112.5	208.1	350.0	506.6	790.5	1060.6	1104.7	771.5
80°	35.7	41.0	51.5	72.5	112.5	165.0	179.7	304.8	509.8	532.9	418.4
82.5°	20.0	25.2	29.4	44.1	56.8	58.9	61.0	76.7	192.4	212.3	175.5
85°	9.5	12.6	13.7	18.9	18.9	16.8	20.0	14.7	31.5	37.8	36.8
87.5°	0.0	1.1	2.1	5.3	4.2	3.2	3.2	3.2	3.2	4.2	3.2
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°	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4	913.4
2.5°	919.7	906.1	874.5	847.2	829.3	813.6	792.6	783.1	766.3	769.4	760.0
5°	925.0	899.8	844.1	792.6	754.7	721.1	684.3	663.3	640.1	638.0	630.7
7.5°	928.2	889.3	809.4	736.8	679.0	627.5	578.1	550.8	522.4	516.1	509.8
10°	925.0	873.5	773.6	679.0	602.3	538.2	482.5	447.8	418.4	411.0	404.7
12.5°	928.2	865.1	740.0	625.4	534.0	461.4	398.4	362.6	335.3	328.0	323.7
15°	935.5	859.8	711.6	577.1	473.0	392.1	330.1	299.6	277.5	270.1	268.0
17.5°	941.8	854.6	681.1	529.8	412.0	331.1	277.5	252.3	233.4	226.0	223.9
20°	950.2	847.2	650.7	484.6	358.4	282.8	235.5	213.4	198.7	193.4	192.4
22.5°	957.6	842.0	622.3	439.4	309.0	243.9	203.9	186.1	175.5	170.3	170.3
25°	976.5	844.1	598.1	397.3	272.2	213.4	179.7	166.1	157.7	154.5	154.5
27.5°	998.6	852.5	579.2	361.6	240.7	190.3	162.9	151.4	147.2	143.0	144.0
30°	1030.1	869.3	566.6	332.2	217.6	172.4	149.3	140.9	136.6	135.6	135.6
32.5°	1070.1	896.6	565.5	313.2	200.8	158.7	139.8	132.4	130.3	129.3	129.3
35°	1117.4	920.8	559.2	304.8	190.3	149.3	132.4	127.2	126.1	126.1	126.1
37.5°	1174.1	960.7	555.0	293.3	185.0	144.0	127.2	123.0	123.0	123.0	123.0
40°	1233.0	993.3	548.7	282.8	182.9	140.9	124.0	118.8	118.8	118.8	118.8
42.5°	1303.4	1040.6	546.6	277.5	179.7	138.7	119.8	113.5	114.6	114.6	115.6
45°	1388.5	1094.2	545.5	272.2	178.7	136.6	115.6	108.3	109.3	108.3	108.3
47.5°	1474.7	1156.2	548.7	269.1	177.6	134.5	112.5	103.0	103.0	102.0	102.0
50°	1565.1	1213.0	550.8	265.9	175.5	130.3	107.2	98.8	96.7	94.6	95.7
52.5°	1650.3	1265.6	551.8	260.7	169.2	124.0	103.0	93.6	90.4	87.2	88.3
55°	1735.4	1316.0	553.9	254.4	160.8	117.7	97.8	88.3	84.1	79.9	79.9
57.5°	1812.2	1360.2	548.7	238.6	151.4	111.4	92.5	82.0	75.7	71.5	71.5
60°	1864.7	1391.7	532.9	215.5	138.7	104.1	87.2	75.7	68.3	65.2	65.2
62.5°	1889.9	1397.0	504.5	177.6	123.0	96.7	80.9	69.4	63.1	61.0	61.0
65°	1865.8	1373.8	460.4	133.5	106.2	88.3	74.6	64.1	57.8	52.6	52.6
67.5°	1781.7	1308.7	399.4	100.9	90.4	79.9	68.3	58.9	51.5	47.3	47.3
70°	1612.4	1173.1	309.0	80.9	76.7	69.4	62.0	52.6	46.2	41.0	41.0
72.5°	1390.6	994.4	217.6	65.2	65.2	58.9	52.6	46.2	39.9	35.7	35.7
75°	1066.9	735.8	146.1	52.6	53.6	49.4	43.1	37.8	33.6	30.5	30.5
77.5°	582.3	363.7	89.3	38.9	39.9	37.8	33.6	30.5	28.4	25.2	25.2
80°	282.8	159.8	51.5	27.3	28.4	27.3	25.2	22.1	22.1	20.0	20.0
82.5°	118.8	59.9	27.3	18.9	18.9	16.8	15.8	15.8	15.8	14.7	14.7
85°	29.4	11.6	11.6	10.5	10.5	10.5	9.5	9.5	9.5	7.4	8.4
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	3.2	1.1	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)