

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: P1210843

Luminaire Tested: **ARCH3-90-727-U-T3RE**

Issue Date: 11/5/2025

Test Information

Test Method: LM-79-08
Report Number: P1210843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2510-578-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-727-U-T3RE
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE III ROADWAY
ILLUMINANCE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13662 lumens
Efficiency: N/A
Efficacy: 146.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 93.1
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

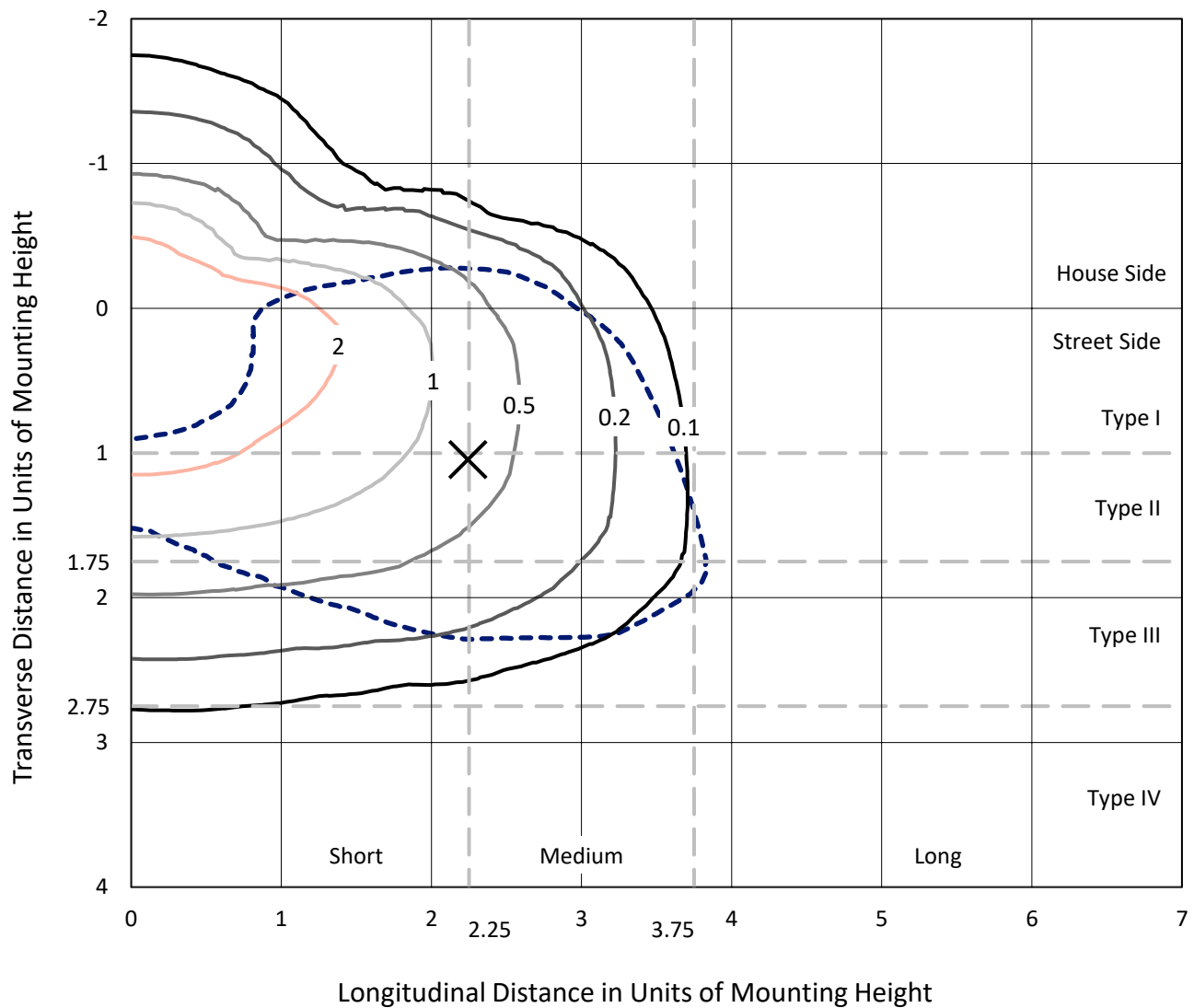


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

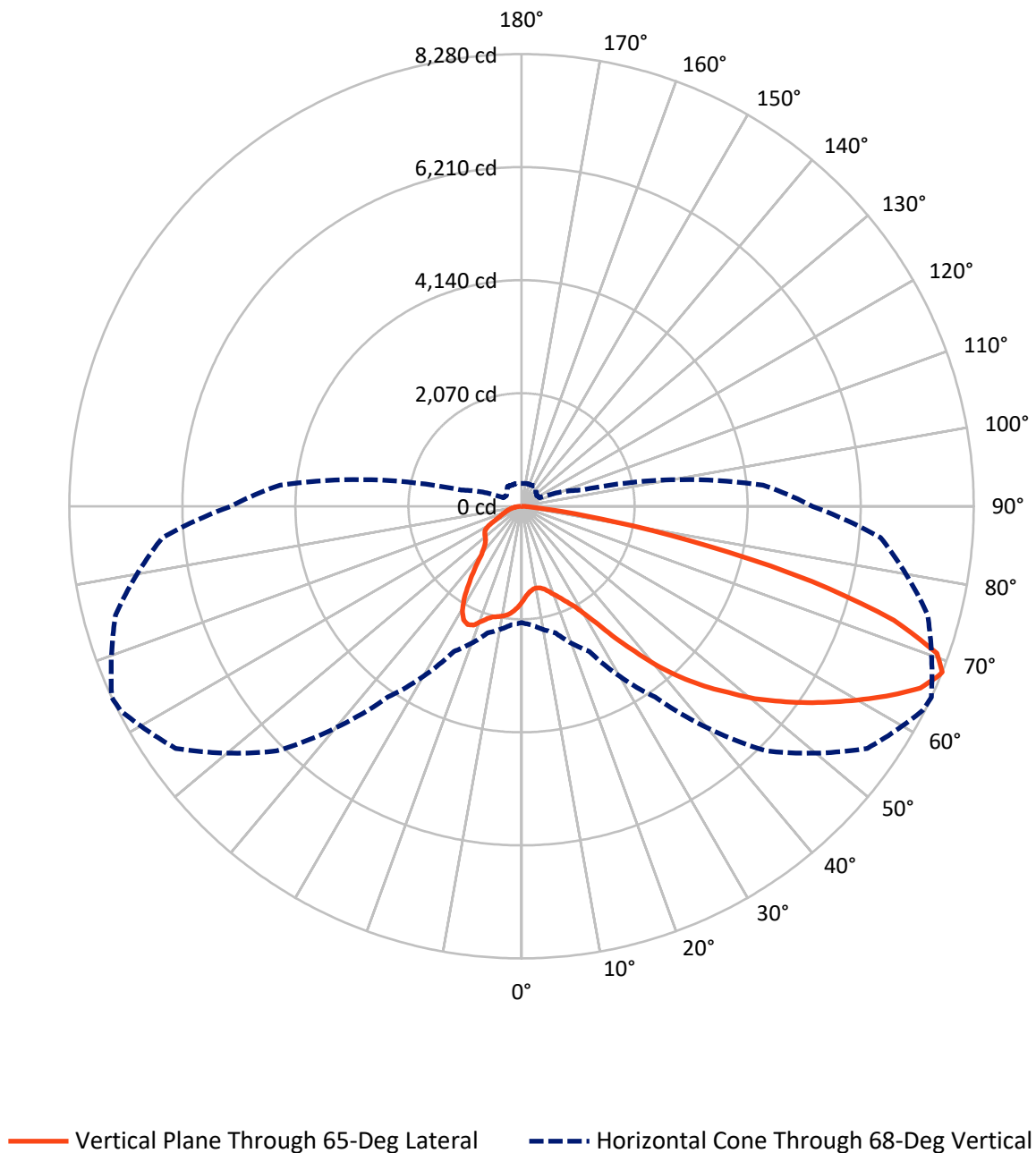


Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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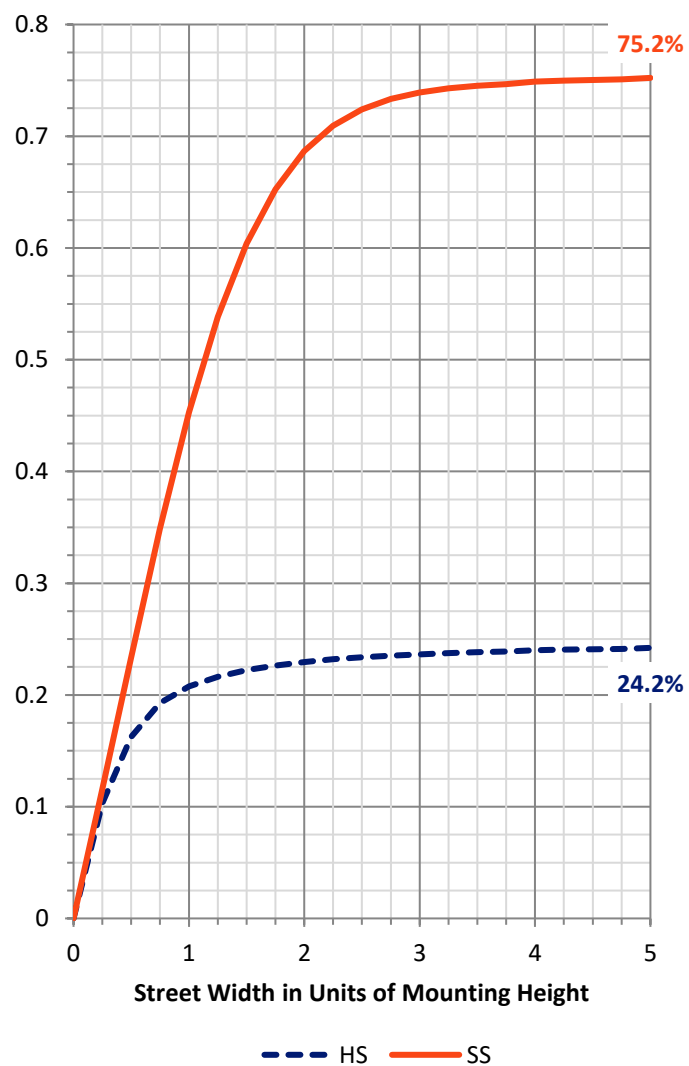
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3349.5	0.0	3349.5
	% Fixture	24.5	0.0	24.5
Street Side	Lumens	10312.5	0.0	10312.5
	% Fixture	75.5	0.0	75.5
Total	Lumens	13662.0	0.0	13662.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	1.2
10°-20°	543.3	4.0
20°-30°	983.3	7.2
30°-40°	1546.8	11.3
40°-50°	2303.7	16.9
50°-60°	3022.0	22.1
60°-70°	3304.8	24.2
70°-80°	1635.3	12.0
80°-90°	156.0	1.1
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°	13662.0	100.0
0°-180°	13662.0	100.0

Coefficient of Utilization



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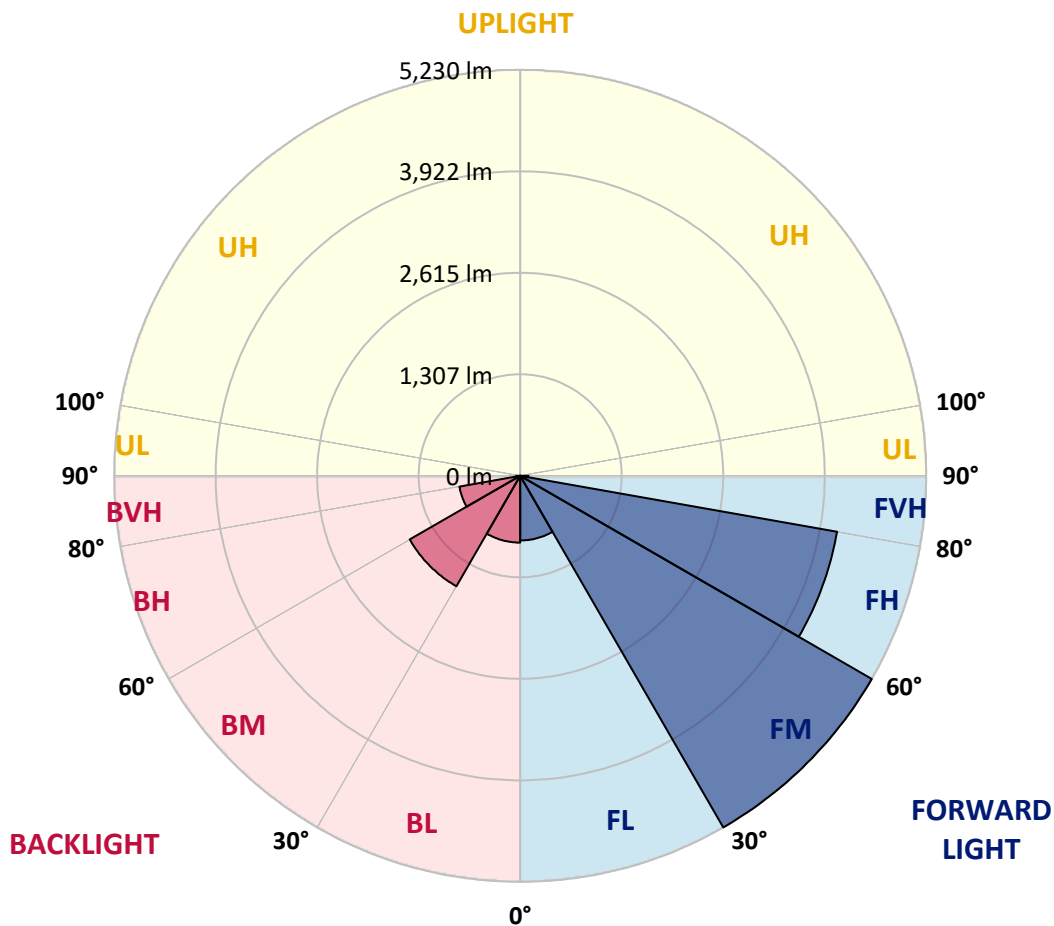
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	832.9	6.1			
FM	(30°-60°)	5229.6	38.3			
FH	(60°-80°)	4145.1	30.3			G2/5000
FVH	(80°-90°)	104.9	0.8			G2/225
BL	(0°-30°)	860.5	6.3	B2/1000		
BM	(30°-60°)	1642.9	12.0	B2/2500		
BH	(60°-80°)	795.0	5.8	B2/1000		G2/1000
BVH	(80°-90°)	51.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8
2.5°	1523.9	1520.3	1529.1	1538.0	1557.3	1580.2	1611.9	1638.4	1641.9	1691.2	1730.0
5°	1434.0	1428.7	1437.5	1448.1	1456.9	1485.1	1518.6	1557.3	1573.2	1645.4	1728.2
7.5°	1442.8	1441.1	1444.6	1441.1	1441.1	1453.4	1476.3	1515.1	1532.7	1619.0	1737.0
10°	1493.9	1497.4	1499.2	1488.6	1478.1	1472.8	1479.8	1506.2	1518.6	1620.8	1775.8
12.5°	1578.5	1583.8	1585.5	1566.1	1552.1	1529.1	1516.8	1527.4	1536.2	1638.4	1830.4
15°	1693.0	1696.5	1684.2	1671.8	1636.6	1608.4	1578.5	1569.7	1573.2	1675.4	1892.1
17.5°	1826.9	1821.6	1821.6	1791.6	1745.8	1701.8	1652.5	1645.4	1645.4	1735.3	1980.1
20°	1973.1	1978.4	1962.5	1922.0	1876.2	1807.5	1758.2	1726.5	1730.0	1804.0	2087.6
22.5°	2184.5	2193.3	2151.0	2092.9	2022.4	1943.1	1872.7	1821.6	1823.4	1893.8	2198.6
25°	2411.8	2415.3	2388.9	2311.3	2216.2	2103.5	2010.1	1944.9	1943.1	1994.2	2341.3
27.5°	2644.3	2660.2	2607.3	2533.3	2445.2	2304.3	2181.0	2092.9	2078.8	2147.5	2519.2
30°	2883.9	2903.3	2852.2	2780.0	2670.7	2550.9	2404.7	2302.5	2293.7	2385.3	2757.0
32.5°	3125.2	3130.5	3090.0	3030.1	2931.5	2818.7	2700.7	2587.9	2579.1	2728.9	3065.3
35°	3322.6	3338.4	3310.2	3296.1	3223.9	3120.0	3005.4	2940.3	2963.2	3155.2	3465.2
37.5°	3560.4	3576.2	3544.5	3541.0	3518.1	3428.3	3349.0	3354.3	3377.2	3637.9	3886.3
40°	3903.9	3921.5	3840.5	3805.3	3805.3	3717.2	3690.7	3815.8	3845.8	4113.6	4325.0
42.5°	4194.6	4222.8	4175.2	4152.3	4083.6	4021.9	4053.7	4229.8	4280.9	4568.1	4707.2
45°	4335.5	4356.7	4413.0	4480.0	4413.0	4305.6	4425.4	4624.4	4696.7	4987.4	5089.5
47.5°	4411.3	4430.7	4495.8	4675.5	4721.3	4631.5	4800.6	5049.0	5098.3	5403.1	5454.2
50°	4421.8	4483.5	4568.1	4747.8	4957.4	4969.7	5177.6	5480.6	5538.8	5811.8	5774.8
52.5°	4335.5	4360.2	4534.6	4837.6	5070.2	5281.6	5588.1	5894.6	5936.9	6195.9	6058.5
55°	4194.6	4229.8	4404.2	4816.5	5179.4	5577.5	6005.6	6301.6	6349.1	6569.4	6321.0
57.5°	4067.7	4085.4	4272.1	4754.8	5288.6	5873.5	6377.3	6726.1	6757.9	6897.0	6514.7
60°	3926.8	3946.2	4132.9	4622.7	5369.6	6097.2	6764.9	7154.2	7182.4	7242.3	6740.2
62.5°	3562.1	3613.2	3847.5	4404.2	5348.5	6352.7	7178.9	7577.0	7612.3	7547.1	6918.2
65°	2892.7	2964.9	3252.1	3909.2	5151.2	6518.3	7517.1	7966.4	8026.3	7776.1	6965.7
67.5°	2246.2	2297.2	2528.0	3102.3	4458.8	6435.5	7735.6	8234.2	8251.8	7739.1	6701.5
68°	2129.9	2181.0	2401.2	2933.2	4266.8	6336.8	7730.3	8241.2	8280.0	7698.6	6599.3
70°	1629.6	1687.7	1897.3	2323.7	3438.8	5709.6	7407.9	8072.1	8066.8	7208.8	5965.1
72.5°	1018.3	1051.7	1196.2	1465.7	2274.3	4344.3	6287.5	7119.0	7133.1	5877.0	4575.1
75°	646.5	646.5	639.5	710.0	1166.2	2475.2	4673.8	5480.6	5491.2	4115.3	2883.9
77.5°	562.0	546.1	470.4	398.1	465.1	961.9	2765.9	3539.2	3481.1	2216.2	1368.8
80°	473.9	447.5	385.8	320.6	299.5	301.2	1062.3	1796.9	1719.4	798.0	454.5
82.5°	341.8	318.9	290.7	251.9	230.8	179.7	222.0	519.7	507.4	230.8	148.0
85°	185.0	167.4	163.8	165.6	139.2	111.0	93.4	114.5	114.5	100.4	84.6
87.5°	65.2	47.6	56.4	63.4	54.6	45.8	37.0	44.0	45.8	44.0	40.5
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°	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8	1745.8
2.5°	1752.9	1770.5	1812.8	1849.8	1876.2	1899.1	1911.4	1916.7	1929.1	1930.8	1927.3
5°	1767.0	1812.8	1876.2	1930.8	1960.8	1973.1	1976.6	1978.4	1973.1	1976.6	1973.1
7.5°	1804.0	1862.1	1952.0	1999.5	2004.8	1985.4	1987.2	1980.1	1987.2	1994.2	1994.2
10°	1860.3	1934.3	2018.9	2036.5	2013.6	2003.0	2024.2	2066.5	2080.6	2099.9	2099.9
12.5°	1934.3	2022.4	2082.3	2066.5	2045.3	2080.6	2142.2	2184.5	2198.6	2205.6	2200.4
15°	2018.9	2114.0	2144.0	2091.1	2129.9	2205.6	2226.8	2202.1	2166.9	2151.0	2159.8
17.5°	2126.4	2205.6	2188.0	2152.8	2240.9	2251.4	2182.7	2103.5	2047.1	2025.9	2040.0
20°	2239.1	2307.8	2226.8	2242.6	2297.2	2184.5	2054.1	1952.0	1902.6	1893.8	1907.9
22.5°	2358.9	2402.9	2265.5	2346.6	2265.5	2036.5	1879.7	1826.9	1814.5	1828.6	1841.0
25°	2494.6	2489.3	2332.5	2378.3	2147.5	1855.1	1761.7	1758.2	1758.2	1767.0	1784.6
27.5°	2647.8	2565.0	2399.4	2336.0	1943.1	1705.3	1687.7	1689.5	1684.2	1685.9	1694.7
30°	2825.8	2667.2	2473.4	2196.8	1714.1	1592.6	1585.5	1580.2	1567.9	1564.4	1567.9
32.5°	3049.5	2774.7	2549.2	1967.8	1513.3	1476.3	1472.8	1444.6	1414.6	1411.1	1423.4
35°	3333.1	2970.2	2587.9	1680.7	1347.7	1345.9	1333.6	1289.6	1250.8	1250.8	1242.0
37.5°	3657.3	3222.1	2603.8	1400.5	1210.3	1219.1	1183.9	1127.5	1097.5	1079.9	1085.2
40°	3988.5	3509.3	2602.0	1155.7	1090.5	1092.2	1065.8	997.1	923.1	879.1	889.7
42.5°	4307.3	3770.0	2556.2	1025.3	993.6	988.3	967.2	873.8	812.1	776.9	778.7
45°	4562.8	4039.6	2485.7	947.8	905.5	914.3	866.8	810.4	754.0	722.3	720.5
47.5°	4818.2	4243.9	2373.0	900.2	840.3	824.5	805.1	766.3	724.1	688.8	690.6
50°	5050.8	4418.3	2267.3	868.5	780.4	739.9	743.4	720.5	683.5	651.8	650.1
52.5°	5214.6	4532.8	2209.2	850.9	708.2	664.2	676.5	664.2	628.9	606.0	604.3
55°	5378.4	4620.9	2228.5	828.0	628.9	593.7	614.8	611.3	591.9	584.9	586.6
57.5°	5510.6	4687.9	2297.2	785.7	553.2	532.0	567.3	556.7	542.6	544.4	544.4
60°	5639.2	4774.2	2378.3	688.8	488.0	489.8	523.2	503.8	495.0	510.9	512.7
62.5°	5773.1	4867.6	2311.3	547.9	431.6	443.9	482.7	466.8	470.4	493.3	500.3
65°	5757.2	4858.7	1883.2	449.2	382.3	407.0	465.1	459.8	461.6	470.4	473.9
67.5°	5433.1	4548.7	1294.8	382.3	347.1	377.0	451.0	429.9	431.6	426.3	428.1
68°	5323.8	4439.5	1141.6	371.7	340.0	370.0	443.9	424.6	426.3	421.0	419.3
70°	4728.4	3801.7	722.3	327.7	315.3	350.6	408.7	401.7	399.9	396.4	396.4
72.5°	3604.4	2806.4	380.5	283.6	287.2	320.6	364.7	378.8	370.0	371.7	382.3
75°	2387.1	1687.7	264.3	243.1	251.9	274.8	324.2	352.3	343.5	348.8	343.5
77.5°	1263.1	909.0	211.4	206.1	206.1	222.0	267.8	311.8	311.8	308.3	303.0
80°	414.0	320.6	169.1	162.1	165.6	174.4	214.9	255.4	260.7	253.7	250.2
82.5°	139.2	148.0	126.8	118.0	121.6	128.6	162.1	195.5	197.3	183.2	179.7
85°	86.3	98.7	79.3	77.5	77.5	79.3	98.7	107.5	98.7	88.1	91.6
87.5°	40.5	49.3	37.0	31.7	26.4	22.9	17.6	7.0	7.0	3.5	3.5
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)