

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: P836788

Luminaire Tested: **ARCH3-70-750-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-70-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 580mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12454 lumens
Efficiency: N/A
Efficacy: 170.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

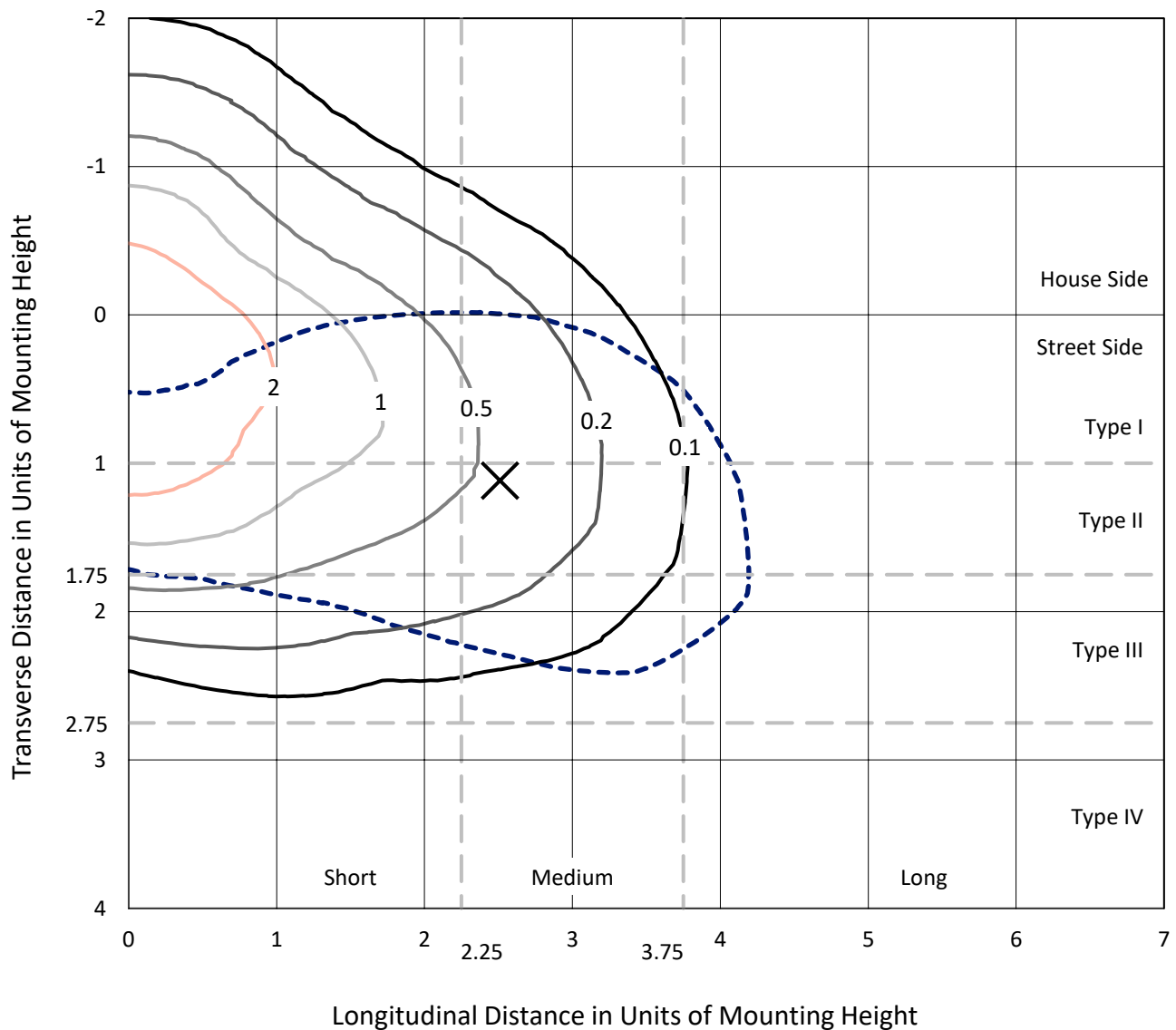
Input Watts (W): 73.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

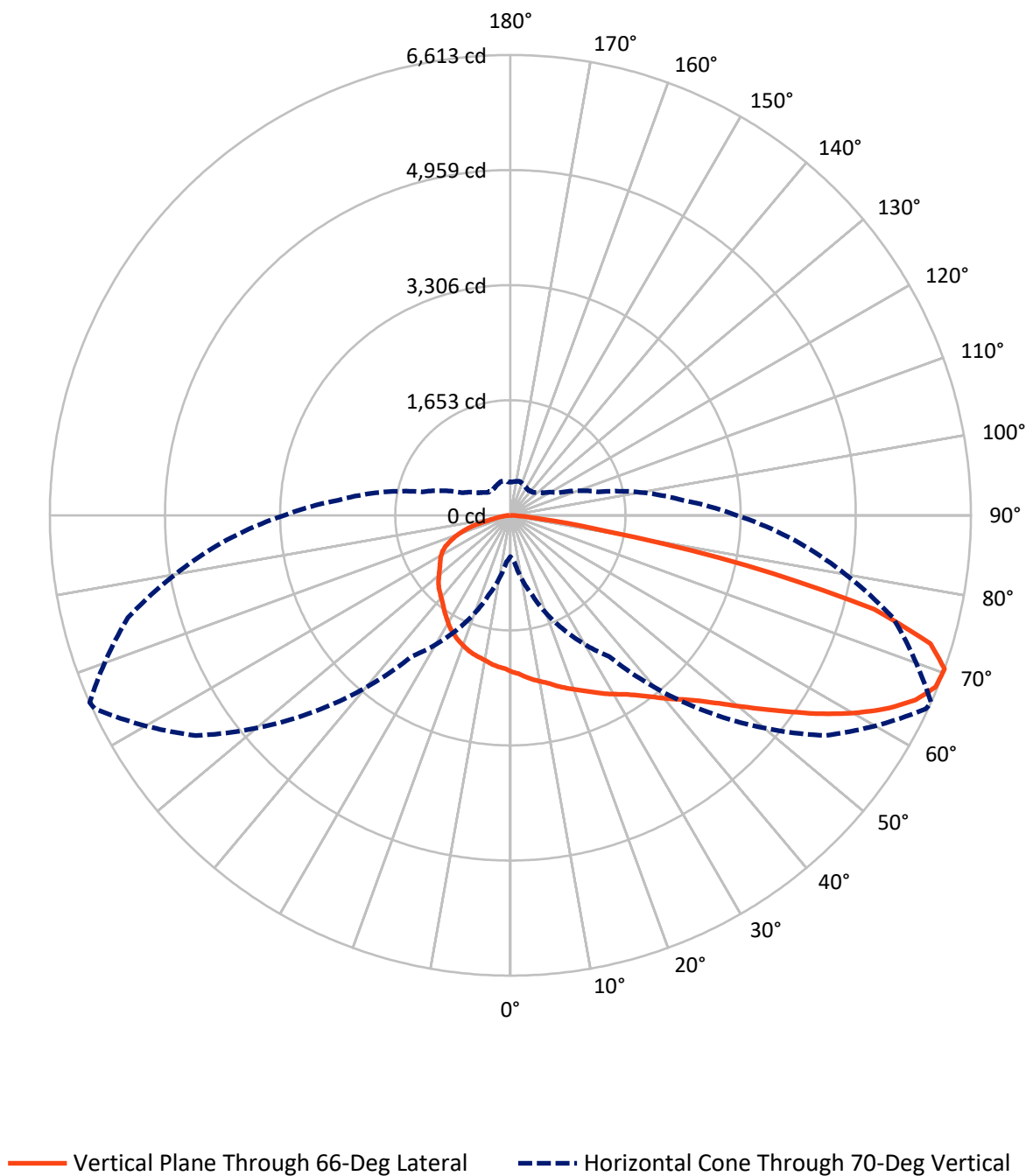
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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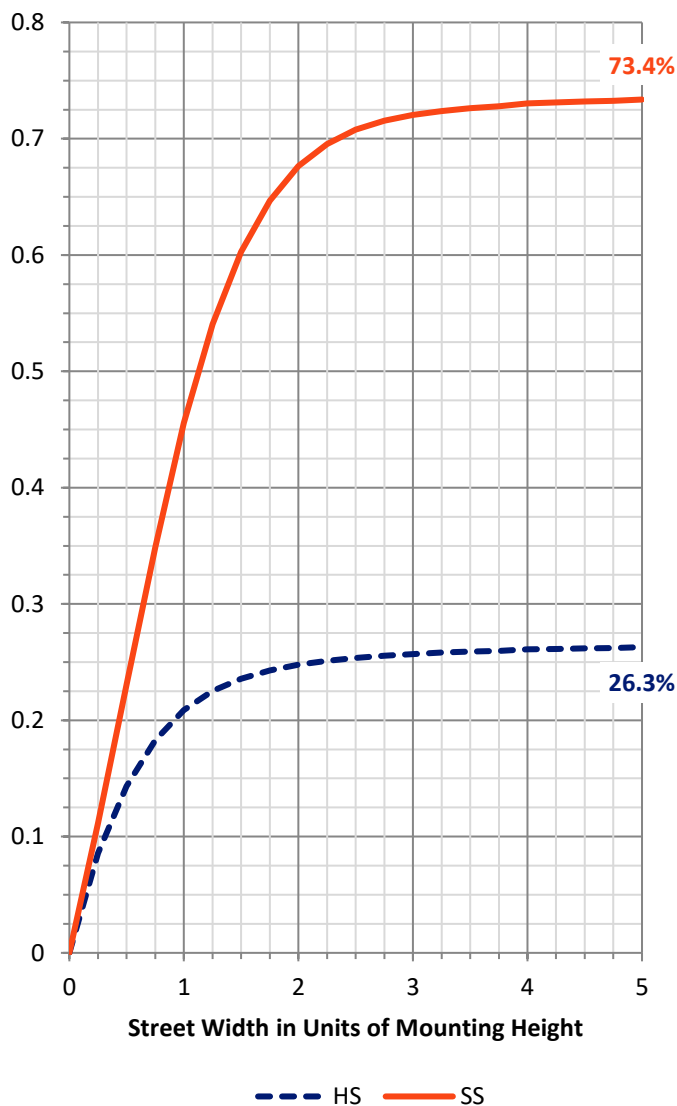
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3300.0	0.0	3300.0
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	9154.0	0.0	9154.0
	% Fixture	73.5	0.0	73.5
Total	Lumens	12454.0	0.0	12454.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	1.7
10°-20°	647.9	5.2
20°-30°	1086.0	8.7
30°-40°	1626.1	13.1
40°-50°	2174.1	17.5
50°-60°	2538.4	20.4
60°-70°	2524.0	20.3
70°-80°	1494.3	12.0
80°-90°	147.3	1.2
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°	12454.0	100.0
0°-180°	12454.0	100.0

Coefficient of Utilization



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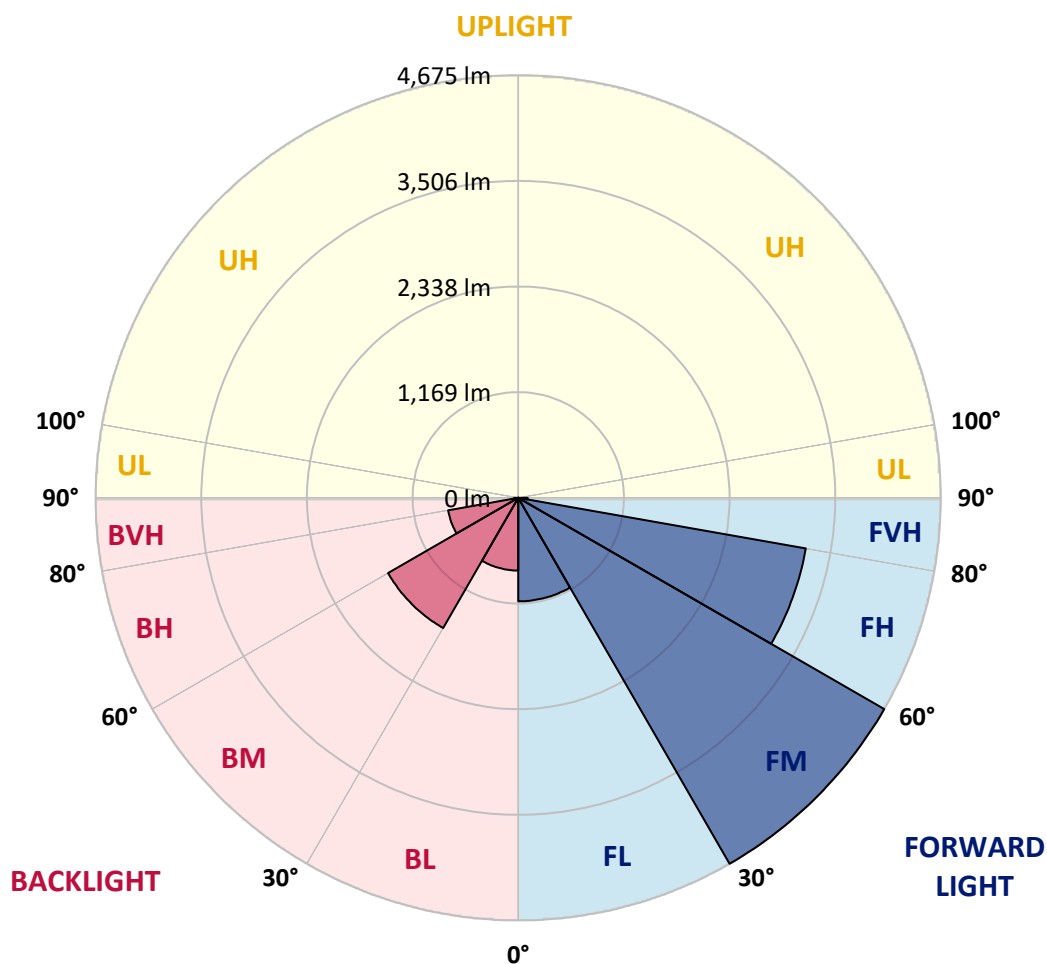
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1145.4	9.2			
FM	(30°-60°)	4675.1	37.5			
FH	(60°-80°)	3230.0	25.9			G2/5000
FVH	(80°-90°)	103.5	0.8			G2/225
BL	(0°-30°)	804.4	6.5	B2/1000		
BM	(30°-60°)	1663.6	13.4	B2/2500		
BH	(60°-80°)	788.3	6.3	B2/1000		G2/1000
BVH	(80°-90°)	43.8	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7
2.5°	2330.3	2326.6	2324.8	2317.4	2300.9	2308.3	2291.7	2280.7	2278.9	2253.2	2238.5
5°	2425.8	2424.0	2420.3	2409.3	2383.6	2387.2	2359.7	2339.5	2334.0	2293.6	2262.4
7.5°	2506.6	2502.9	2501.1	2486.4	2458.8	2457.0	2424.0	2394.6	2385.4	2330.3	2282.6
10°	2569.0	2563.5	2567.2	2552.5	2523.1	2517.6	2475.4	2436.8	2427.6	2357.8	2291.7
12.5°	2622.3	2618.6	2624.1	2611.3	2587.4	2581.9	2539.6	2490.1	2479.0	2398.2	2311.9
15°	2681.0	2668.2	2679.2	2673.7	2657.2	2655.3	2616.8	2561.7	2547.0	2449.7	2343.2
17.5°	2712.3	2704.9	2717.8	2719.6	2712.3	2725.1	2688.4	2622.3	2609.4	2497.4	2370.7
20°	2734.3	2723.3	2738.0	2749.0	2754.5	2780.2	2750.8	2686.5	2671.9	2543.3	2396.4
22.5°	2809.6	2785.7	2787.5	2794.9	2798.6	2835.3	2816.9	2754.5	2739.8	2600.2	2427.6
25°	2998.7	2951.0	2919.8	2897.7	2872.0	2903.2	2892.2	2831.6	2818.8	2668.2	2466.2
27.5°	3292.5	3231.9	3169.5	3105.2	3004.2	2991.4	2973.0	2917.9	2903.2	2736.1	2504.7
30°	3626.7	3566.1	3492.7	3389.9	3200.7	3101.6	3059.3	2998.7	2982.2	2796.7	2541.5
32.5°	3959.1	3905.9	3832.4	3707.5	3437.6	3235.6	3145.6	3083.2	3066.7	2862.8	2585.5
35°	4218.0	4185.0	4137.2	3981.2	3672.7	3393.5	3270.5	3195.2	3176.8	2967.5	2666.3
37.5°	4427.4	4403.5	4363.1	4199.7	3843.4	3551.5	3413.7	3327.4	3307.2	3081.4	2752.7
40°	4735.9	4673.5	4640.4	4403.5	3992.2	3694.7	3575.3	3485.3	3463.3	3202.6	2822.4
42.5°	4998.5	4952.6	4912.2	4585.3	4133.6	3817.7	3727.7	3645.1	3615.7	3321.9	2897.7
45°	5042.6	5060.9	5040.7	4675.3	4357.6	3938.9	3882.0	3828.7	3801.2	3483.5	3011.6
47.5°	5044.4	5044.4	4925.0	4726.7	4634.9	4074.8	4047.3	4065.6	4036.2	3689.2	3147.5
50°	4912.2	4936.0	4873.6	4739.6	4708.3	4210.7	4249.3	4348.4	4319.0	3907.7	3294.4
52.5°	4638.6	4717.5	4715.7	4719.4	4601.8	4326.4	4462.3	4688.1	4638.6	4153.8	3450.5
55°	4155.6	4313.5	4454.9	4576.1	4510.0	4396.2	4723.0	5049.9	4998.5	4429.2	3608.4
57.5°	3742.4	3843.4	4019.7	4363.1	4401.7	4456.8	4967.3	5428.2	5382.3	4734.0	3773.7
60°	3270.5	3410.1	3586.3	4074.8	4269.5	4535.7	5235.4	5797.3	5753.2	5042.6	3933.4
62.5°	2545.1	2725.1	3077.7	3632.3	4076.6	4585.3	5446.5	6122.3	6102.1	5334.5	4076.6
65°	1773.9	1933.7	2427.6	3088.7	3770.0	4563.3	5615.5	6412.5	6394.1	5573.3	4177.6
67.5°	1035.7	1221.2	1779.4	2486.4	3228.3	4410.9	5670.6	6583.2	6583.2	5718.3	4205.2
70°	591.3	677.6	1173.4	1812.5	2475.4	3990.3	5516.3	6581.4	6612.6	5685.3	4091.3
72.5°	413.2	451.7	789.6	1219.3	1678.4	3228.3	5112.3	6263.7	6305.9	5373.1	3702.0
75°	321.4	348.9	556.4	831.9	1057.7	2192.6	4229.1	5281.3	5393.3	4579.8	2993.2
77.5°	244.2	264.4	325.0	519.7	677.6	1259.7	2791.2	3463.3	3470.7	2804.1	1604.9
80°	178.1	198.3	216.7	317.7	359.9	589.5	1054.1	1447.0	1406.6	1357.0	868.6
82.5°	106.5	126.7	132.2	172.6	176.3	251.6	369.1	466.4	448.1	596.8	407.7
85°	45.9	64.3	67.9	79.0	75.3	102.8	146.9	123.0	110.2	126.7	88.1
87.5°	11.0	18.4	18.4	20.2	16.5	25.7	27.5	20.2	18.4	22.0	22.0
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°	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7	2247.7
2.5°	2234.8	2229.3	2231.1	2199.9	2190.7	2181.6	2176.0	2172.4	2168.7	2174.2	2179.7
5°	2251.3	2238.5	2223.8	2177.9	2159.5	2139.3	2124.6	2111.8	2106.3	2106.3	2111.8
7.5°	2264.2	2242.2	2210.9	2150.3	2117.3	2089.7	2065.9	2049.3	2040.2	2040.2	2045.7
10°	2266.0	2234.8	2185.2	2111.8	2067.7	2027.3	1999.8	1981.4	1968.5	1968.5	1972.2
12.5°	2277.0	2234.8	2170.5	2082.4	2027.3	1977.7	1944.7	1917.1	1911.6	1911.6	1915.3
15°	2295.4	2244.0	2161.4	2056.7	1990.6	1933.7	1896.9	1867.5	1856.5	1863.9	1865.7
17.5°	2311.9	2249.5	2144.8	2023.6	1944.7	1882.2	1841.8	1816.1	1801.4	1818.0	1818.0
20°	2323.0	2249.5	2121.0	1981.4	1895.1	1825.3	1786.7	1755.5	1744.5	1764.7	1766.5
22.5°	2339.5	2247.7	2095.2	1939.2	1841.8	1768.4	1729.8	1705.9	1700.4	1722.5	1729.8
25°	2357.8	2251.3	2067.7	1891.4	1783.1	1711.5	1682.1	1671.1	1674.7	1702.3	1711.5
27.5°	2378.0	2258.7	2040.2	1838.2	1718.8	1654.5	1638.0	1643.5	1658.2	1693.1	1704.1
30°	2396.4	2260.5	2001.6	1775.7	1645.3	1584.7	1592.1	1616.0	1638.0	1672.9	1685.7
32.5°	2420.3	2262.4	1961.2	1707.8	1566.4	1522.3	1555.4	1593.9	1616.0	1649.0	1663.7
35°	2479.0	2293.6	1930.0	1641.7	1492.9	1469.1	1524.2	1573.7	1586.6	1616.0	1628.8
37.5°	2547.0	2345.0	1913.5	1573.7	1421.3	1415.8	1485.6	1535.2	1538.8	1557.2	1570.1
40°	2589.2	2367.0	1895.1	1516.8	1357.0	1360.7	1432.3	1470.9	1463.6	1476.4	1485.6
42.5°	2631.5	2374.4	1856.5	1469.1	1296.4	1300.1	1355.2	1382.8	1386.4	1414.0	1426.8
45°	2703.1	2394.6	1814.3	1425.0	1241.4	1228.5	1261.6	1298.3	1346.0	1399.3	1414.0
47.5°	2798.6	2436.8	1770.2	1371.7	1188.1	1145.9	1158.7	1223.0	1272.6	1322.2	1331.3
50°	2895.9	2479.0	1729.8	1307.5	1134.8	1057.7	1063.2	1122.0	1162.4	1201.0	1206.5
52.5°	2991.4	2515.8	1694.9	1246.9	1074.3	953.1	975.1	1035.7	1063.2	1081.6	1087.1
55°	3086.9	2547.0	1663.7	1195.4	1004.5	870.4	890.6	947.5	975.1	984.3	987.9
57.5°	3186.0	2583.7	1639.8	1151.4	925.5	797.0	809.8	850.2	875.9	886.9	883.3
60°	3268.7	2614.9	1627.0	1105.5	846.5	729.0	725.3	762.1	798.8	809.8	806.1
62.5°	3332.9	2635.1	1606.8	1046.7	776.8	661.1	642.7	690.5	729.0	736.4	741.9
65°	3367.8	2637.0	1557.2	971.4	705.1	587.6	574.8	622.5	646.4	653.7	653.7
67.5°	3362.3	2607.6	1459.9	870.4	639.0	521.5	510.5	539.9	574.8	580.3	574.8
70°	3248.5	2486.4	1303.8	763.9	560.1	462.8	442.6	471.9	505.0	484.8	475.6
72.5°	2925.3	2172.4	1074.3	646.4	471.9	389.3	380.1	409.5	411.3	415.0	405.8
75°	2308.3	1617.8	804.3	503.2	382.0	326.9	325.0	319.5	326.9	341.6	330.5
77.5°	1212.0	808.0	435.2	308.5	277.3	262.6	249.7	247.9	269.9	279.1	268.1
80°	657.4	453.6	249.7	185.5	168.9	170.8	187.3	183.6	207.5	213.0	203.8
82.5°	286.5	214.9	123.0	112.0	112.0	110.2	115.7	128.5	154.3	154.3	123.0
85°	62.4	53.3	47.7	55.1	62.4	62.4	62.4	62.4	44.1	23.9	16.5
87.5°	20.2	20.2	20.2	22.0	23.9	23.9	20.2	14.7	9.2	1.8	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)