

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: P842481

Luminaire Tested: **ARCH4-50-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842481
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: ARCH4-50-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 435mA 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: 6646 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 53.2
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

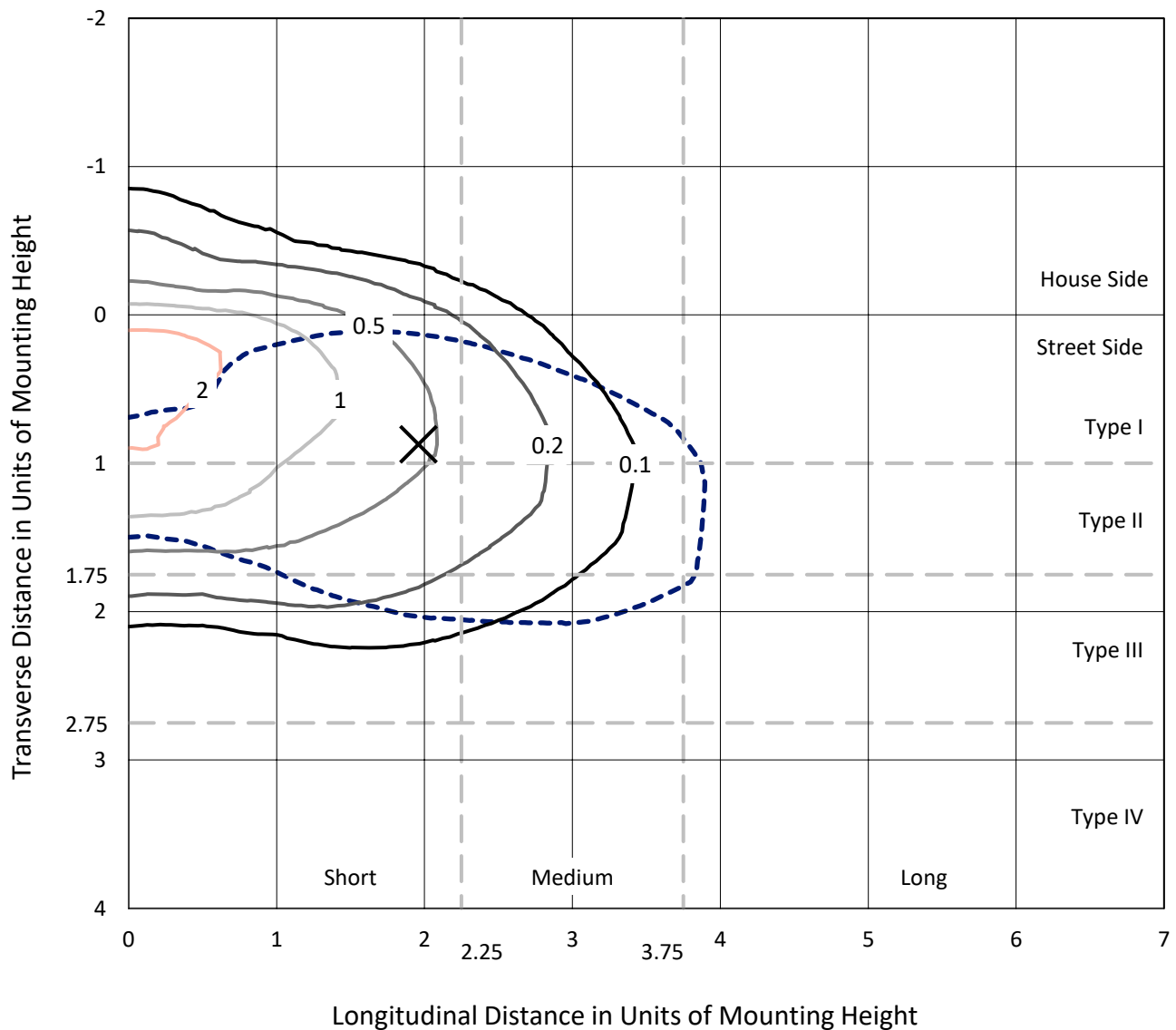


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

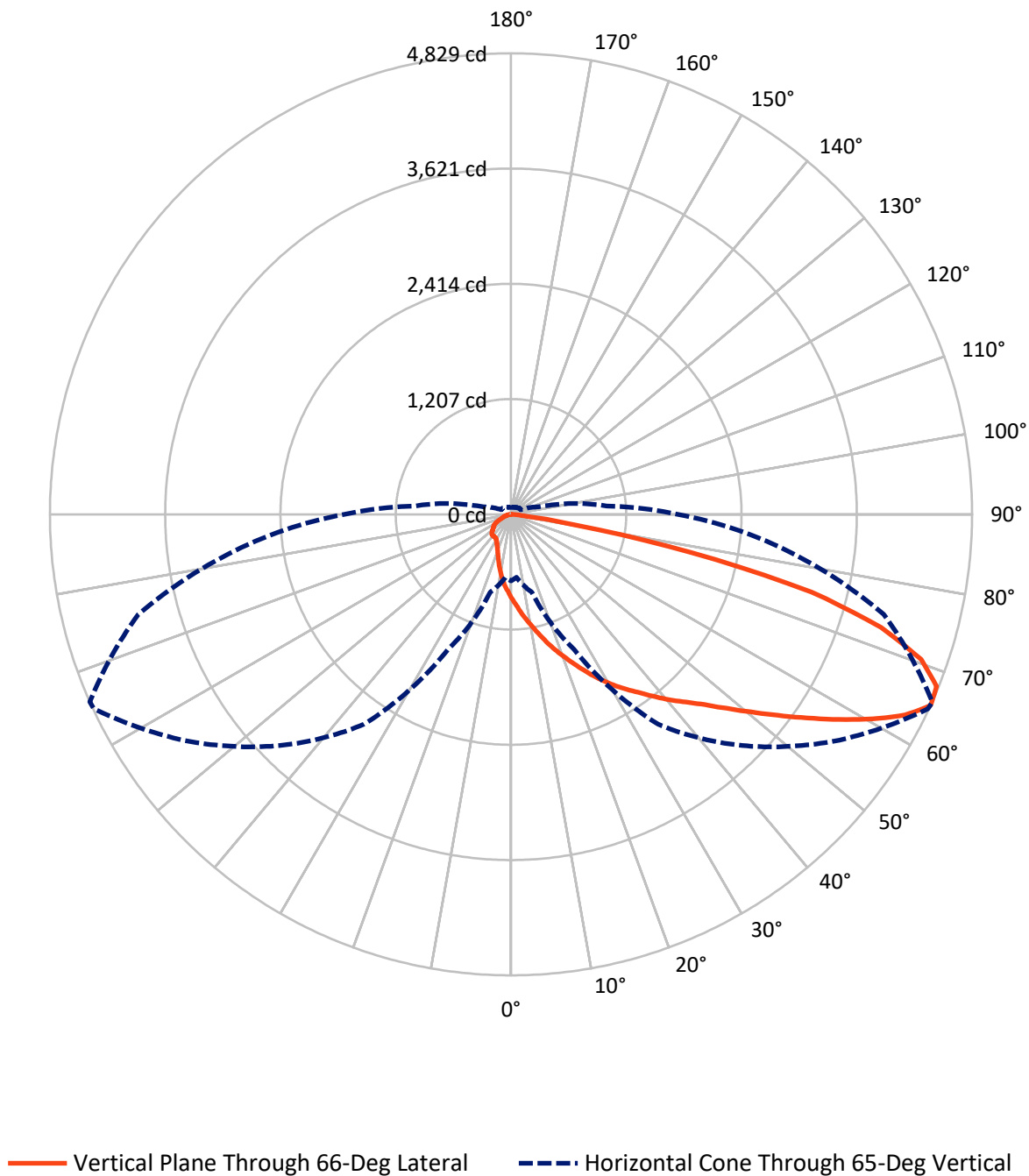


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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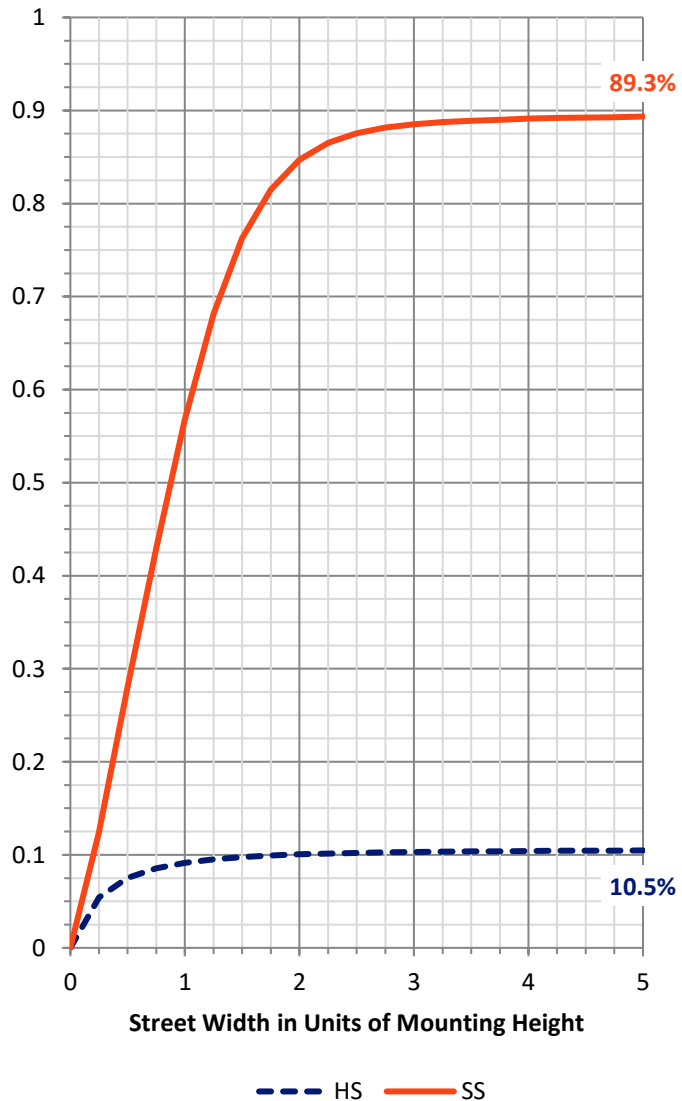
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	703.0	0.0	703.0
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	5943.0	0.0	5943.0
	% Fixture	89.4	0.0	89.4
Total	Lumens	6646.0	0.0	6646.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	1.3
10°-20°	282.9	4.3
20°-30°	511.9	7.7
30°-40°	800.5	12.0
40°-50°	1214.4	18.3
50°-60°	1543.0	23.2
60°-70°	1441.7	21.7
70°-80°	716.5	10.8
80°-90°	48.1	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°	6646.0	100.0
0°-180°	6646.0	100.0

Coefficient of Utilization



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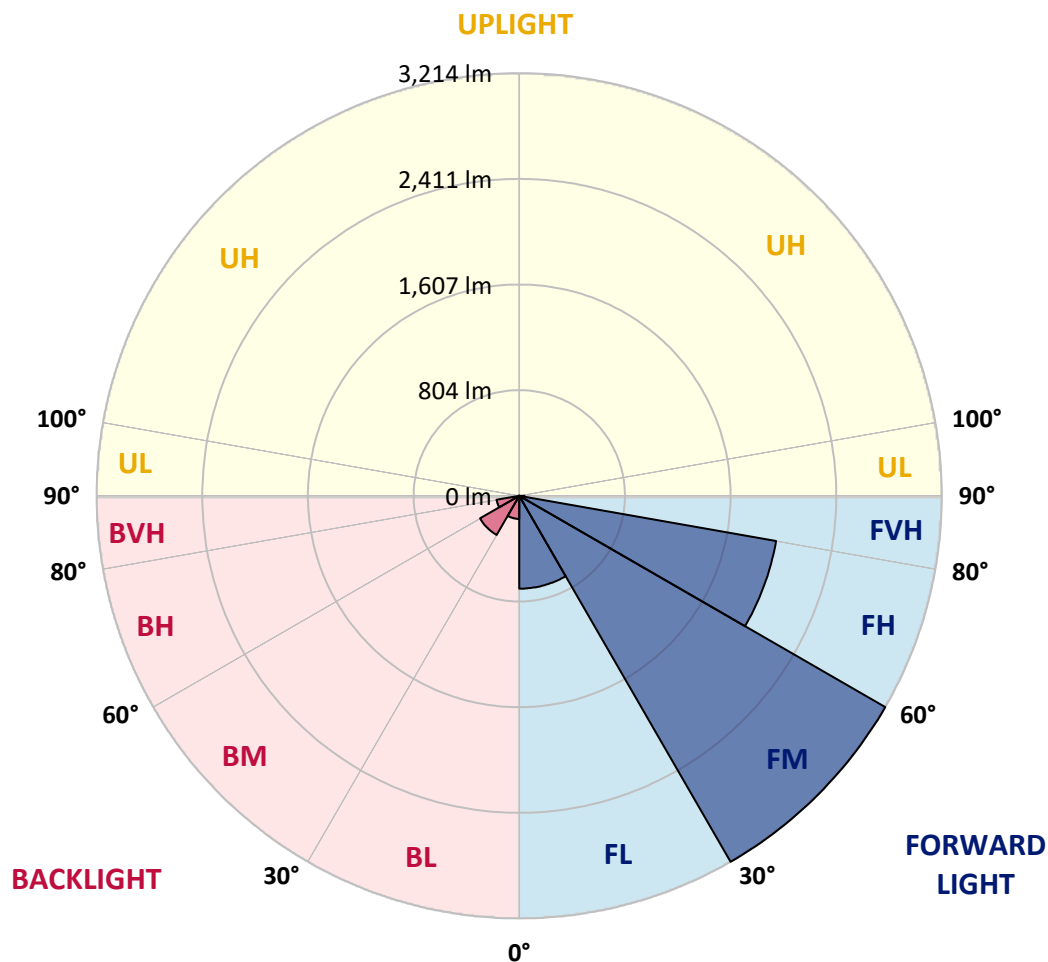
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	706.1	10.6			
FM	(30°-60°)	3214.1	48.4			
FH	(60°-80°)	1983.2	29.8			G2/5000
FVH	(80°-90°)	39.6	0.6			G1/100
BL	(0°-30°)	175.6	2.6	B1/500		
BM	(30°-60°)	343.8	5.2	B1/1000		
BH	(60°-80°)	175.1	2.6	B1/500		G1/500
BVH	(80°-90°)	8.5	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6
2.5°	1027.3	1035.7	1039.9	1041.3	1009.2	995.3	981.3	949.3	942.3	924.2	900.5
5°	1208.5	1219.7	1216.9	1211.3	1172.3	1127.7	1091.4	1031.5	1021.7	978.5	925.6
7.5°	1386.9	1396.7	1393.9	1373.0	1329.8	1267.1	1207.1	1119.3	1105.4	1035.7	950.7
10°	1536.1	1544.5	1543.1	1522.2	1470.6	1393.9	1321.4	1204.3	1187.6	1088.6	971.6
12.5°	1658.8	1669.9	1668.5	1654.6	1608.6	1524.9	1442.7	1301.9	1281.0	1152.8	1000.8
15°	1754.9	1768.9	1768.9	1763.3	1731.2	1661.5	1568.2	1409.3	1384.2	1226.6	1037.1
17.5°	1813.5	1824.6	1834.4	1844.2	1821.8	1768.9	1683.9	1516.6	1490.1	1299.1	1074.7
20°	1844.2	1855.3	1862.3	1883.2	1887.4	1860.9	1794.0	1622.5	1594.6	1381.4	1117.9
22.5°	1894.3	1904.1	1905.5	1923.6	1932.0	1938.9	1897.1	1727.1	1704.8	1472.0	1166.7
25°	1978.0	1989.1	1984.9	1993.3	1994.7	2003.1	1998.9	1846.9	1824.6	1575.1	1225.3
27.5°	2085.3	2099.2	2096.5	2088.1	2075.5	2068.6	2086.7	1968.2	1947.3	1678.3	1285.2
30°	2201.0	2217.7	2213.5	2196.8	2163.4	2134.1	2159.2	2082.5	2063.0	1784.2	1352.1
32.5°	2318.1	2337.6	2336.2	2308.3	2251.2	2201.0	2238.6	2189.8	2175.9	1898.5	1424.6
35°	2394.7	2419.8	2417.1	2400.3	2326.4	2283.2	2329.2	2300.0	2290.2	2037.9	1529.1
37.5°	2518.8	2545.3	2521.6	2479.8	2394.7	2372.4	2428.2	2424.0	2417.1	2185.7	1639.2
40°	2819.9	2858.9	2796.2	2624.7	2485.4	2465.8	2545.3	2562.0	2555.0	2332.0	1738.2
42.5°	3134.9	3193.5	3095.9	2858.9	2649.8	2578.7	2673.5	2697.2	2688.9	2457.5	1827.4
45°	3325.9	3351.0	3253.4	3069.4	2941.2	2715.4	2810.1	2849.2	2842.2	2608.0	1941.7
47.5°	3482.0	3472.2	3360.7	3236.7	3260.4	2907.7	2964.9	3041.5	3036.0	2773.9	2067.2
50°	3515.5	3493.2	3448.6	3370.5	3433.2	3102.9	3127.9	3260.4	3254.8	2957.9	2194.0
52.5°	3279.9	3250.6	3371.9	3437.4	3416.5	3245.0	3307.8	3500.1	3497.3	3157.2	2315.3
55°	2691.7	2668.0	2994.1	3332.9	3398.4	3345.4	3507.1	3749.6	3765.0	3369.1	2425.4
57.5°	2117.4	2092.3	2412.9	3070.8	3331.5	3437.4	3739.9	4035.4	4054.9	3599.1	2530.0
60°	1688.0	1650.4	1895.7	2658.2	3206.0	3508.5	3964.3	4349.0	4351.8	3809.6	2594.1
62.5°	1147.2	1105.4	1377.2	2135.5	2995.5	3519.6	4137.1	4619.4	4630.6	3967.1	2605.2
65°	697.0	662.1	846.1	1559.8	2684.7	3424.9	4139.9	4818.8	4828.5	4039.6	2538.3
67.5°	404.2	390.3	483.7	971.6	2168.9	3169.8	3965.7	4788.1	4806.2	4008.9	2386.4
70°	235.6	234.2	269.0	480.9	1530.5	2663.8	3576.8	4530.2	4556.7	3848.6	2153.6
72.5°	172.8	175.6	189.6	257.9	886.5	1918.0	3029.0	4011.7	4052.1	3535.0	1821.8
75°	136.6	138.0	150.5	175.6	465.6	1084.5	2269.3	3219.9	3252.0	2976.0	1423.2
77.5°	101.8	104.5	114.3	124.1	216.1	497.6	1276.8	1983.5	1930.6	1633.7	687.2
80°	73.9	80.8	85.0	89.2	114.3	192.4	383.3	691.4	685.8	713.7	324.8
82.5°	47.4	53.0	57.2	59.9	68.3	92.0	114.3	154.7	167.3	277.4	129.6
85°	20.9	23.7	26.5	32.1	29.3	32.1	47.4	30.7	26.5	41.8	23.7
87.5°	0.0	0.0	4.2	7.0	5.6	2.8	8.4	5.6	4.2	4.2	4.2
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°	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6	879.6
2.5°	887.9	872.6	840.5	809.9	791.7	768.0	747.1	727.6	726.2	720.7	710.9
5°	899.1	869.8	809.9	752.7	709.5	663.5	624.5	593.8	582.7	574.3	563.1
7.5°	910.2	864.2	775.0	691.4	623.1	559.0	513.0	471.1	458.6	447.4	440.5
10°	914.4	854.5	734.6	623.1	533.9	465.6	416.8	386.1	375.0	369.4	365.2
12.5°	927.0	848.9	697.0	559.0	455.8	393.1	358.2	340.1	335.9	331.8	327.6
15°	943.7	848.9	659.3	496.2	394.5	344.3	323.4	310.8	308.1	306.7	303.9
17.5°	961.8	848.9	623.1	443.3	349.9	312.2	296.9	289.9	288.5	287.1	285.8
20°	986.9	850.3	584.1	397.3	317.8	288.5	276.0	267.6	266.2	264.8	264.8
22.5°	1012.0	853.1	546.4	362.4	296.9	270.4	255.1	246.7	243.9	243.9	243.9
25°	1044.0	861.4	511.6	333.1	278.8	253.7	234.2	227.2	225.8	225.8	224.4
27.5°	1081.7	871.2	480.9	310.8	260.7	234.2	214.7	207.7	204.9	204.9	203.5
30°	1122.1	881.0	455.8	294.1	242.5	214.7	196.5	188.2	185.4	186.8	185.4
32.5°	1166.7	894.9	436.3	283.0	225.8	197.9	181.2	171.5	170.1	170.1	168.7
35°	1242.0	933.9	433.5	277.4	211.9	185.4	168.7	158.9	157.5	157.5	156.1
37.5°	1322.8	978.5	446.1	274.6	200.7	174.2	158.9	149.1	147.8	147.8	147.8
40°	1391.1	1012.0	460.0	274.6	193.8	164.5	150.5	142.2	142.2	142.2	142.2
42.5°	1437.1	1014.8	457.2	274.6	188.2	157.5	145.0	136.6	136.6	138.0	136.6
45°	1505.4	1028.7	446.1	270.4	184.0	151.9	139.4	132.4	131.0	132.4	132.4
47.5°	1586.3	1053.8	434.9	253.7	182.6	146.4	135.2	126.8	125.5	126.8	125.5
50°	1662.9	1076.1	429.3	231.4	179.8	140.8	129.6	121.3	119.9	121.3	119.9
52.5°	1727.1	1085.9	419.6	216.1	172.8	135.2	124.1	115.7	112.9	114.3	114.3
55°	1778.6	1083.1	405.6	203.5	160.3	129.6	117.1	110.1	105.9	105.9	104.5
57.5°	1826.0	1084.5	393.1	191.0	146.4	121.3	111.5	103.1	97.6	96.2	94.8
60°	1844.2	1077.5	370.8	174.2	132.4	114.3	104.5	94.8	89.2	87.8	86.4
62.5°	1819.1	1052.4	341.5	145.0	119.9	105.9	97.6	87.8	82.2	80.8	79.5
65°	1748.0	1005.0	296.9	114.3	108.7	96.2	89.2	82.2	75.3	72.5	71.1
67.5°	1626.7	936.7	241.1	92.0	96.2	87.8	83.6	75.3	66.9	64.1	62.7
70°	1453.9	846.1	181.2	78.1	85.0	78.1	75.3	66.9	59.9	57.2	55.8
72.5°	1211.3	699.7	126.8	66.9	73.9	68.3	65.5	59.9	53.0	48.8	48.8
75°	915.8	501.8	83.6	57.2	61.3	58.5	54.4	50.2	46.0	43.2	41.8
77.5°	394.5	195.1	51.6	43.2	50.2	48.8	43.2	40.4	39.0	36.2	36.2
80°	170.1	79.5	32.1	32.1	36.2	34.8	33.5	30.7	30.7	29.3	27.9
82.5°	62.7	32.1	19.5	23.7	26.5	23.7	23.7	23.7	23.7	22.3	22.3
85°	15.3	9.8	9.8	13.9	15.3	13.9	15.3	13.9	13.9	13.9	12.5
87.5°	4.2	4.2	5.6	5.6	5.6	5.6	5.6	4.2	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)