

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: P842609

Luminaire Tested: **ARCH4-70-730-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842609
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8877 lumens
Efficiency: N/A
Efficacy: 120.3 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

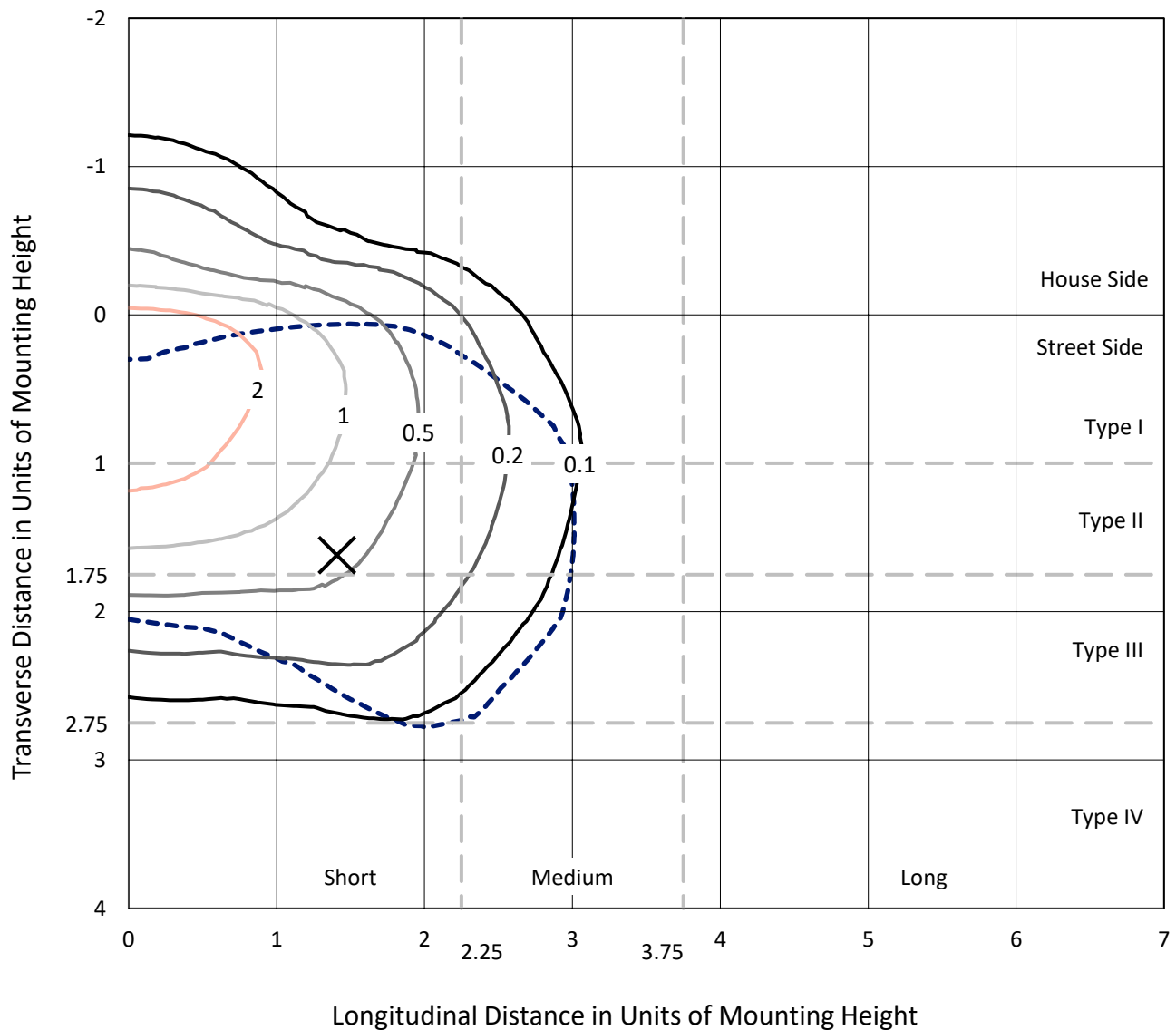
Input Watts (W): 73.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

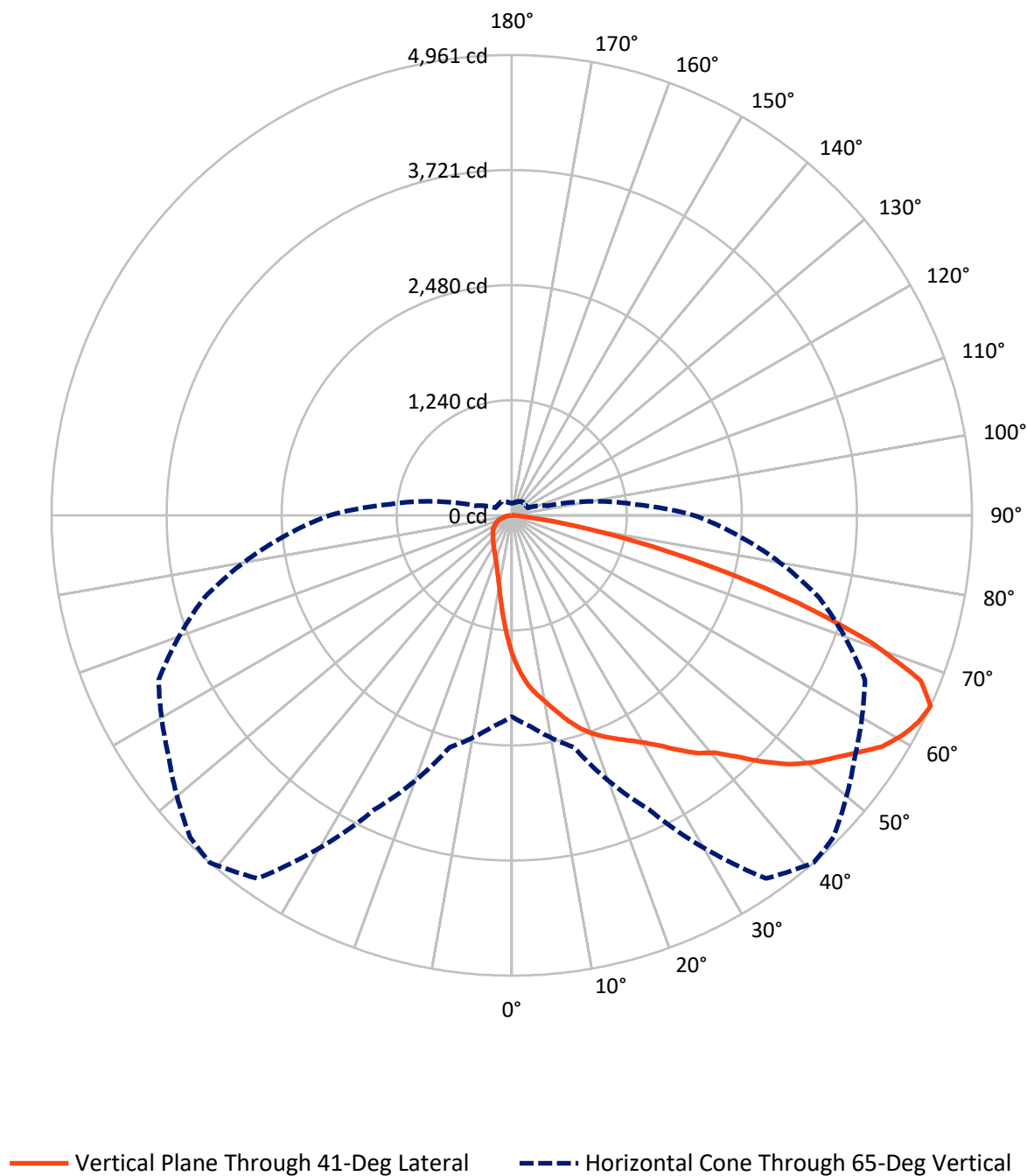
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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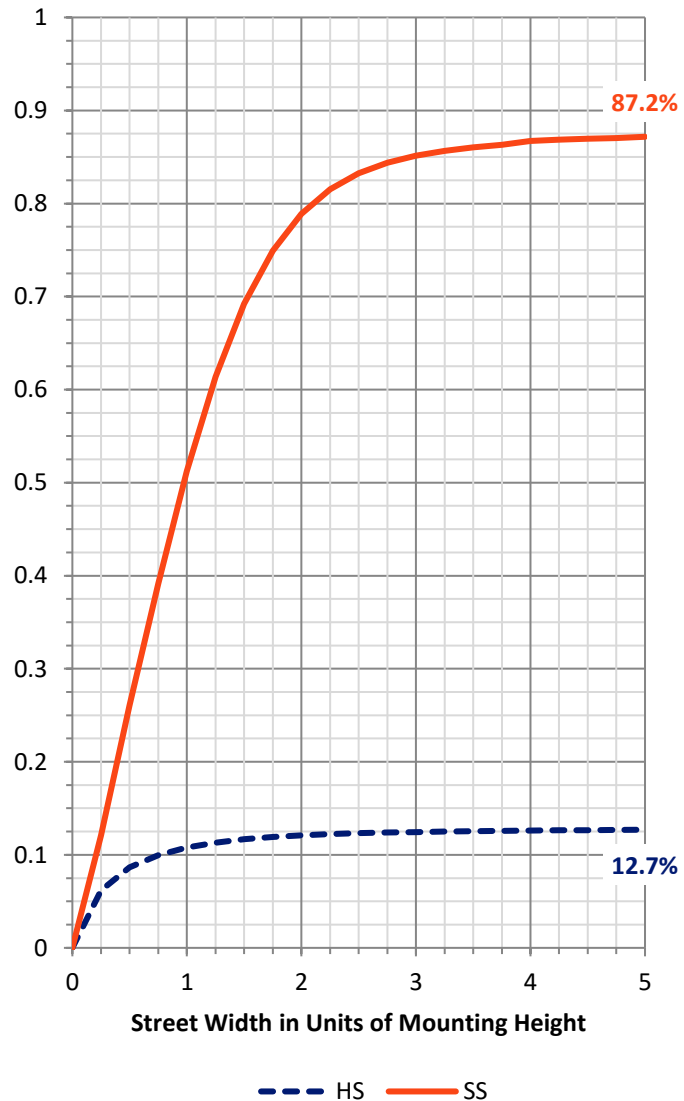
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1139.7	0.0	1139.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7737.3	0.0	7737.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	8877.0	0.0	8877.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.9	1.6
10°-20°	422.6	4.8
20°-30°	727.0	8.2
30°-40°	1102.6	12.4
40°-50°	1615.4	18.2
50°-60°	2039.9	23.0
60°-70°	1912.8	21.5
70°-80°	852.5	9.6
80°-90°	63.2	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°	8877.0	100.0
0°-180°	8877.0	100.0

Coefficient of Utilization



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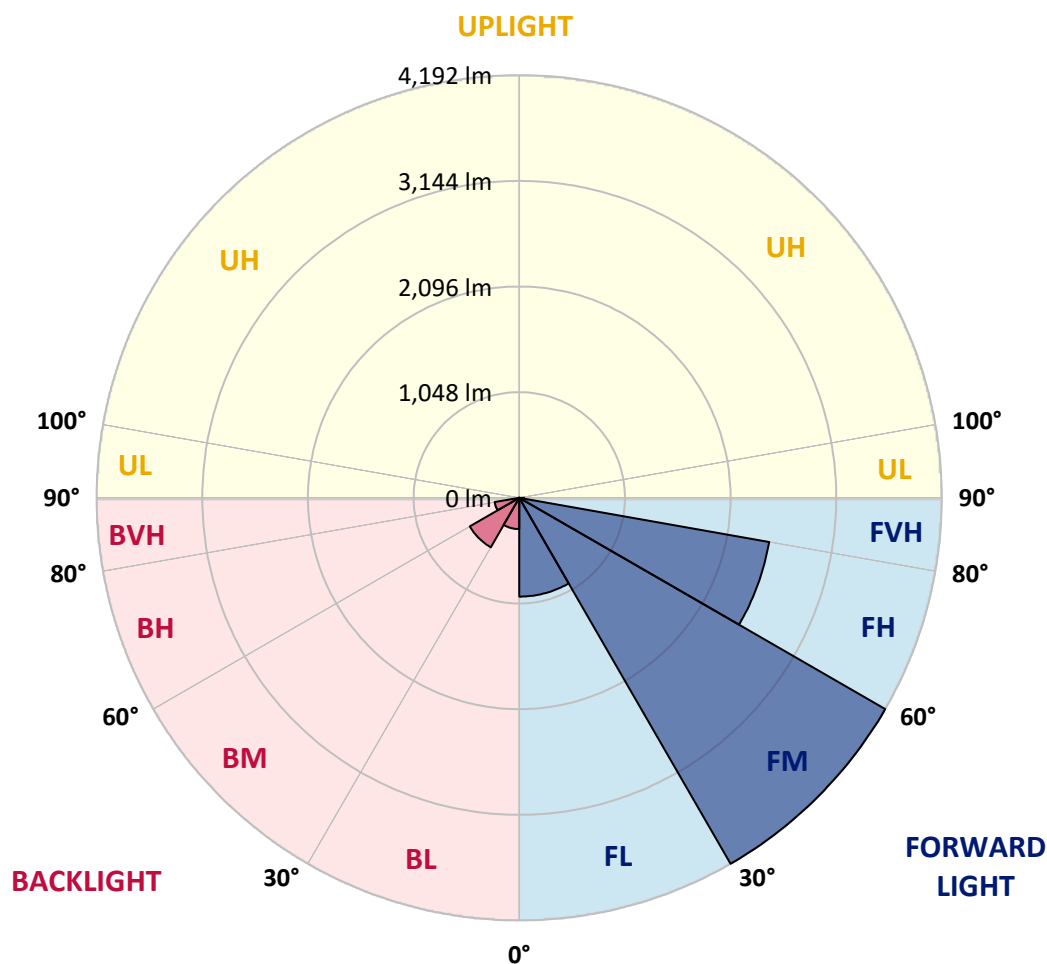
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	980.4	11.0			
FM	(30°-60°)	4192.1	47.2			
FH	(60°-80°)	2517.7	28.4			G2/5000
FVH	(80°-90°)	47.2	0.5			G1/100
BL	(0°-30°)	310.2	3.5	B1/500		
BM	(30°-60°)	565.9	6.4	B1/1000		
BH	(60°-80°)	247.6	2.8	B1/500		G1/500
BVH	(80°-90°)	16.0	0.2			G1/100
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°	41°	45°	55°	65°	75°	85°
0°	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6
2.5°	1744.7	1739.1	1735.4	1714.8	1714.8	1686.7	1688.6	1662.4	1630.5	1580.0	1525.7
5°	1909.5	1902.0	1892.6	1872.0	1864.5	1836.5	1832.7	1795.3	1741.0	1653.0	1555.7
7.5°	2053.6	2046.1	2033.0	2003.1	1982.5	1948.8	1939.4	1890.7	1830.8	1722.3	1585.6
10°	2184.7	2179.0	2162.2	2124.7	2096.7	2055.5	2038.6	1973.1	1898.2	1778.4	1609.9
12.5°	2317.6	2310.1	2287.6	2255.8	2222.1	2173.4	2152.8	2068.6	1973.1	1840.2	1645.5
15°	2441.1	2429.9	2413.0	2379.3	2349.4	2302.6	2280.1	2180.9	2064.8	1909.5	1692.3
17.5°	2521.6	2512.3	2497.3	2478.6	2454.2	2418.7	2396.2	2298.8	2156.6	1976.9	1741.0
20°	2570.3	2566.5	2560.9	2549.7	2538.5	2514.1	2497.3	2405.5	2255.8	2042.4	1787.8
22.5°	2607.7	2604.0	2602.1	2602.1	2604.0	2594.6	2583.4	2504.8	2351.3	2111.6	1830.8
25°	2665.8	2663.9	2660.1	2656.4	2669.5	2671.4	2667.6	2613.3	2471.1	2203.4	1885.1
27.5°	2746.3	2740.6	2733.2	2729.4	2742.5	2751.9	2759.4	2721.9	2598.4	2297.0	1946.9
30°	2869.8	2853.0	2834.2	2821.1	2830.5	2845.5	2862.3	2839.9	2729.4	2413.0	2010.6
32.5°	3015.8	2995.2	2952.2	2927.8	2952.2	2963.4	2976.5	2965.3	2866.1	2538.5	2074.2
35°	3193.7	3169.3	3124.4	3088.8	3131.9	3107.6	3101.9	3090.7	2995.2	2662.0	2145.3
37.5°	3489.5	3453.9	3382.7	3304.1	3304.1	3251.7	3231.1	3197.4	3111.3	2772.5	2214.6
40°	3832.0	3785.2	3693.5	3577.4	3470.7	3362.2	3349.0	3324.7	3248.0	2899.8	2293.2
42.5°	4208.3	4118.5	3991.2	3850.8	3678.5	3555.0	3525.0	3455.8	3380.9	3028.9	2371.9
45°	4625.8	4438.6	4253.2	4182.1	3897.6	3785.2	3729.1	3603.6	3519.4	3163.7	2454.2
47.5°	4693.2	4547.1	4423.6	4412.4	4101.6	4008.0	3944.4	3764.6	3669.2	3307.9	2540.3
50°	4655.7	4567.7	4580.8	4535.9	4251.4	4189.6	4140.9	3936.9	3817.1	3446.4	2619.0
52.5°	4498.5	4547.1	4622.0	4539.7	4393.6	4343.1	4318.8	4122.2	3955.6	3573.7	2690.1
55°	4311.3	4345.0	4506.0	4607.0	4558.4	4513.4	4491.0	4337.5	4092.2	3680.4	2755.6
57.5°	4038.0	4023.0	4200.8	4595.8	4730.6	4704.4	4680.1	4549.0	4219.5	3757.1	2796.8
60°	3628.0	3596.2	3820.8	4371.2	4786.8	4827.9	4816.7	4689.4	4316.9	3755.3	2780.0
62.5°	2918.5	2997.1	3307.9	4004.3	4811.1	4915.9	4895.3	4700.6	4348.7	3646.7	2673.2
65°	2169.7	2282.0	2587.1	3498.8	4777.4	4960.9	4904.7	4517.2	4200.8	3431.4	2439.2
67.5°	1563.1	1662.4	1885.1	2879.2	4453.5	4754.9	4689.4	4217.7	3860.1	3126.3	2115.4
70°	1068.9	1140.1	1291.7	2096.7	3802.1	4111.0	4069.8	3770.3	3322.8	2763.1	1718.5
72.5°	754.4	784.4	881.7	1383.4	2888.5	3225.5	3176.8	3101.9	2669.5	2297.0	1336.6
75°	565.4	584.1	636.5	894.8	1948.8	2235.2	2190.3	2233.3	1993.7	1739.1	973.5
77.5°	213.4	232.1	361.3	571.0	1153.2	1372.2	1327.3	1353.5	1108.2	878.0	484.9
80°	58.0	61.8	119.8	271.4	524.2	683.3	621.5	533.5	411.8	404.4	256.5
82.5°	24.3	28.1	54.3	146.0	187.2	187.2	157.2	194.7	157.2	189.1	123.6
85°	9.4	11.2	13.1	37.4	24.3	26.2	28.1	37.4	31.8	39.3	28.1
87.5°	0.0	0.0	0.0	1.9	1.9	3.7	1.9	3.7	5.6	5.6	5.6
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°	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6	1512.6
2.5°	1503.2	1482.6	1452.7	1404.0	1353.5	1325.4	1289.8	1284.2	1246.8	1243.0	1228.0
5°	1512.6	1469.5	1392.8	1299.2	1207.5	1136.3	1083.9	1055.8	1001.5	1001.5	986.6
7.5°	1520.1	1452.7	1329.1	1190.6	1065.2	969.7	898.6	868.6	819.9	816.2	805.0
10°	1522.0	1432.1	1259.9	1080.2	926.7	829.3	760.0	726.3	683.3	679.5	672.1
12.5°	1536.9	1420.9	1198.1	984.7	827.4	722.6	655.2	627.1	593.4	589.7	582.2
15°	1561.3	1420.9	1145.7	904.2	739.4	642.1	584.1	557.9	533.5	529.8	526.0
17.5°	1585.6	1417.1	1093.3	829.3	666.4	578.5	527.9	507.3	488.6	486.7	483.0
20°	1608.1	1415.2	1040.8	765.7	610.3	526.0	486.7	468.0	453.0	453.0	451.2
22.5°	1630.5	1411.5	990.3	705.8	561.6	486.7	453.0	432.4	421.2	421.2	419.3
25°	1664.2	1411.5	943.5	655.2	522.3	456.8	423.1	408.1	398.7	396.9	396.9
27.5°	1703.5	1422.7	902.3	610.3	488.6	426.8	400.6	385.6	374.4	370.7	372.5
30°	1746.6	1432.1	864.9	571.0	456.8	404.4	376.3	361.3	350.1	346.3	348.2
32.5°	1789.7	1443.3	831.2	535.4	424.9	383.8	355.7	338.8	327.6	325.7	325.7
35°	1836.5	1454.6	797.5	505.4	398.7	363.2	337.0	318.2	310.8	307.0	308.9
37.5°	1883.3	1473.3	765.7	477.4	380.0	344.5	320.1	301.4	295.8	293.9	293.9
40°	1939.4	1501.4	752.6	458.6	363.2	327.6	307.0	288.3	282.7	282.7	282.7
42.5°	1986.2	1523.8	741.3	438.1	350.1	312.6	293.9	278.9	275.2	273.3	275.2
45°	2033.0	1544.4	726.3	419.3	333.2	297.7	282.7	267.7	264.0	264.0	264.0
47.5°	2079.8	1555.7	705.8	400.6	318.2	284.5	271.4	258.3	254.6	254.6	254.6
50°	2117.3	1565.0	675.8	380.0	301.4	273.3	260.2	247.1	243.4	243.4	243.4
52.5°	2154.7	1566.9	644.0	355.7	284.5	260.2	249.0	235.9	232.1	230.3	230.3
55°	2188.4	1565.0	606.5	327.6	265.8	245.2	235.9	224.6	217.2	209.7	213.4
57.5°	2212.7	1563.1	563.5	299.5	247.1	230.3	226.5	211.5	196.6	177.8	181.6
60°	2203.4	1542.5	516.7	264.0	226.5	215.3	215.3	194.7	168.5	159.1	161.0
62.5°	2143.5	1484.5	468.0	226.5	205.9	200.3	198.4	176.0	155.4	146.0	147.9
65°	1963.8	1338.5	396.9	192.8	185.3	183.5	183.5	162.9	144.1	132.9	134.8
67.5°	1690.4	1123.2	323.9	162.9	164.7	168.5	168.5	149.8	131.0	119.8	121.7
70°	1355.3	878.0	258.3	140.4	142.3	147.9	151.6	134.8	117.9	106.7	106.7
72.5°	1020.3	666.4	207.8	117.9	127.3	127.3	132.9	119.8	103.0	91.7	93.6
75°	739.4	477.4	164.7	99.2	110.4	108.6	108.6	101.1	88.0	80.5	80.5
77.5°	350.1	250.9	131.0	71.1	86.1	84.2	86.1	80.5	74.9	67.4	69.3
80°	172.2	123.6	84.2	50.5	59.9	61.8	67.4	63.6	61.8	56.2	56.2
82.5°	82.4	48.7	39.3	35.6	41.2	43.1	46.8	46.8	48.7	44.9	44.9
85°	22.5	13.1	16.8	22.5	26.2	28.1	31.8	33.7	33.7	31.8	33.7
87.5°	5.6	5.6	7.5	11.2	13.1	15.0	16.8	16.8	7.5	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)