

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: P836785

Luminaire Tested: **ARCH3-70-750-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836785
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: ARCH3-70-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 580mA 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: 8562 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

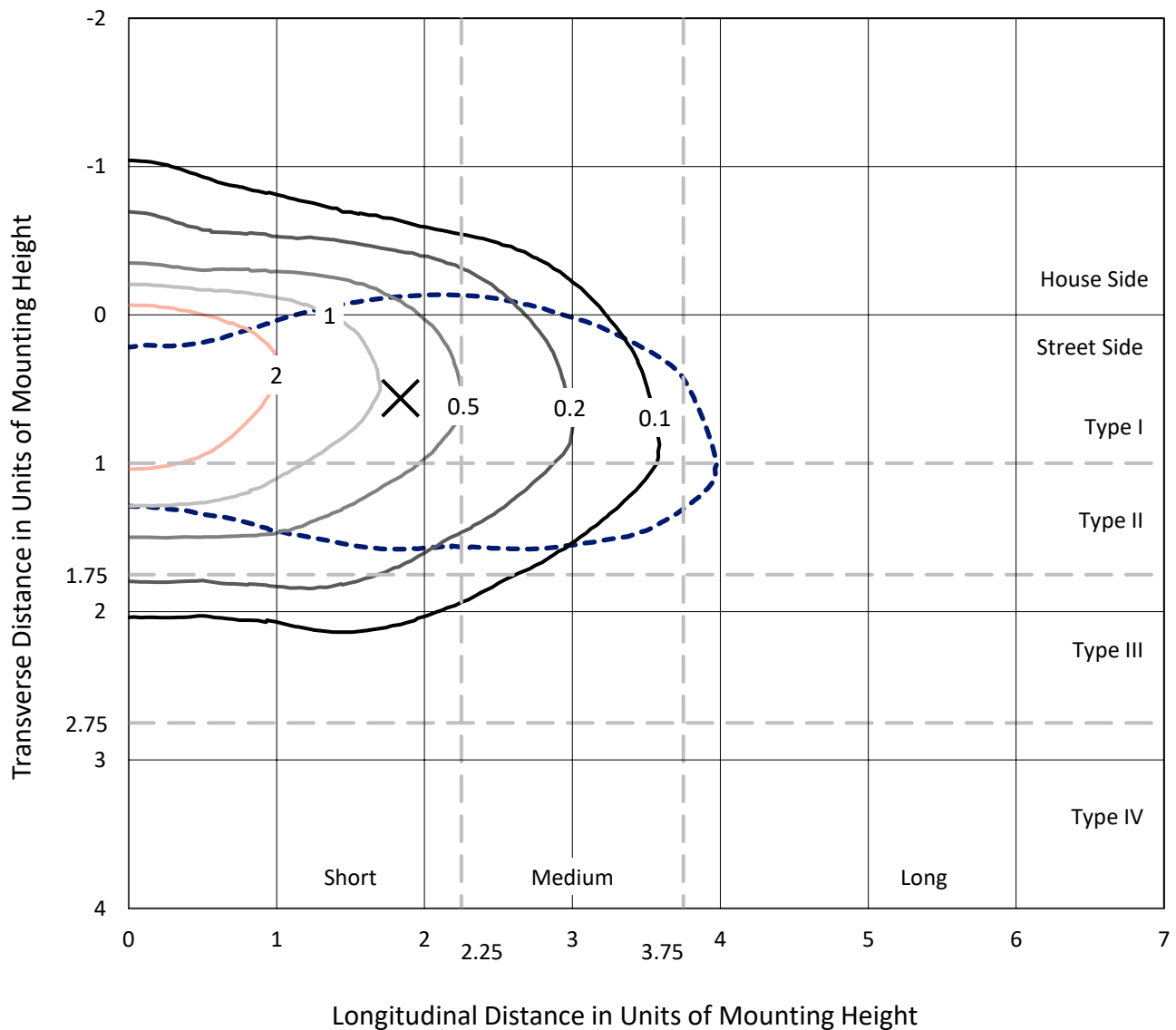
Input Watts (W): 73.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

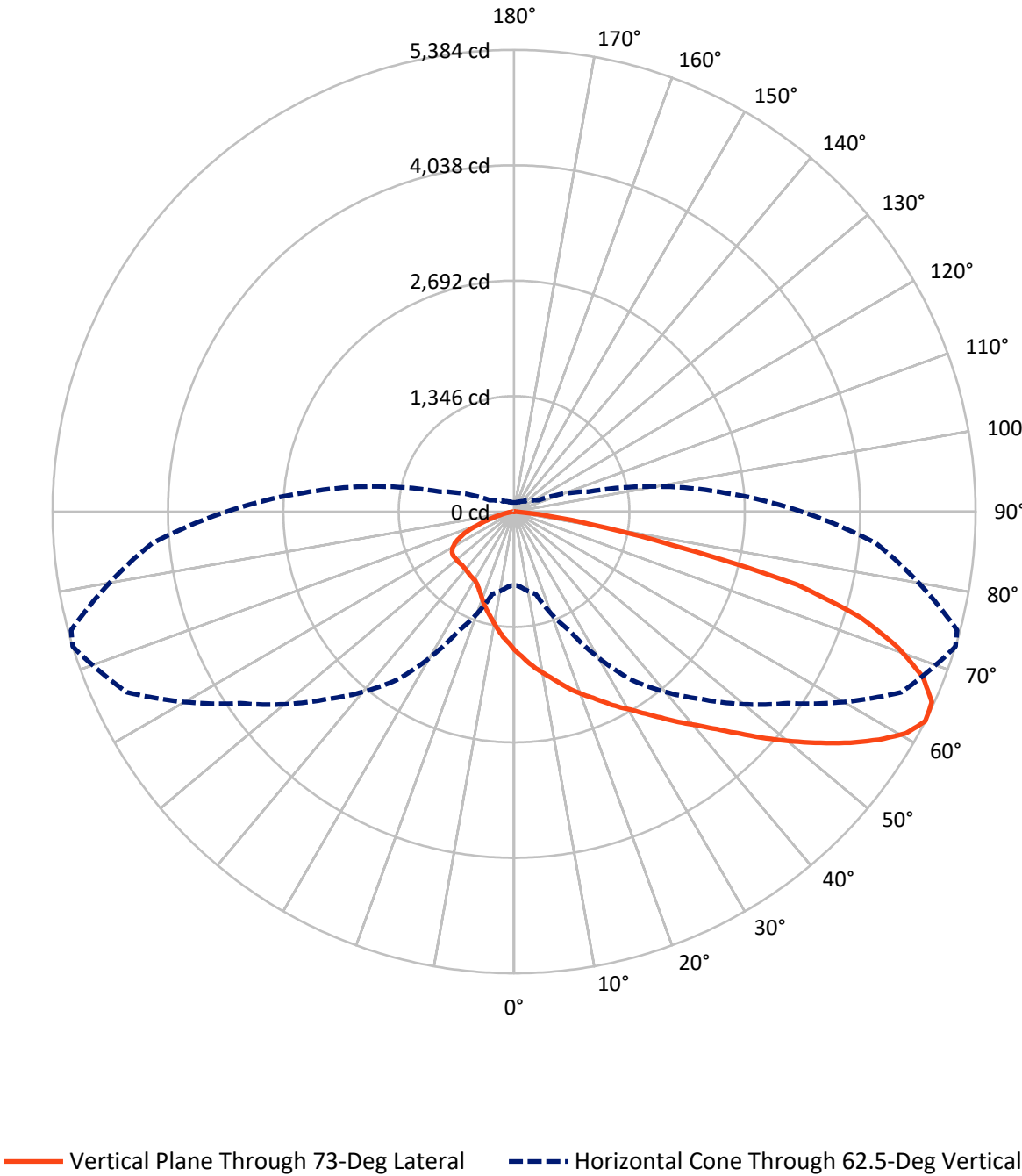
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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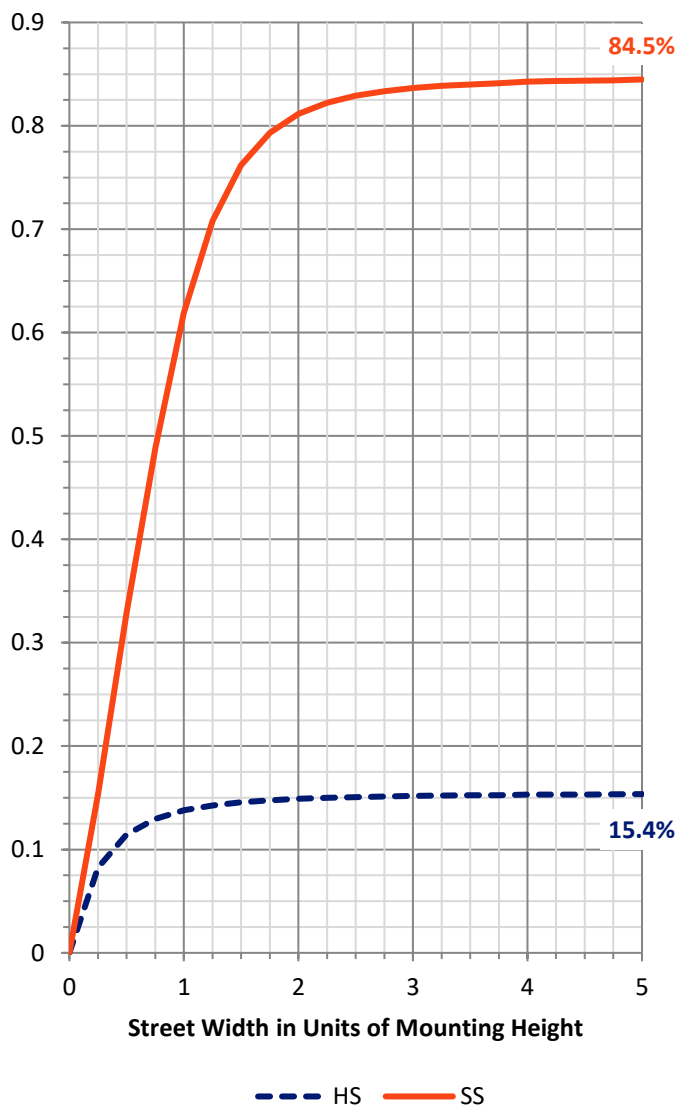
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1327.2	0.0	1327.2
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	7234.8	0.0	7234.8
	% Fixture	84.5	0.0	84.5
Total	Lumens	8562.0	0.0	8562.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	1.8
10°-20°	472.6	5.5
20°-30°	786.7	9.2
30°-40°	1187.0	13.9
40°-50°	1659.1	19.4
50°-60°	1832.5	21.4
60°-70°	1596.4	18.6
70°-80°	806.4	9.4
80°-90°	64.7	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°	8562.0	100.0
0°-180°	8562.0	100.0

Coefficient of Utilization



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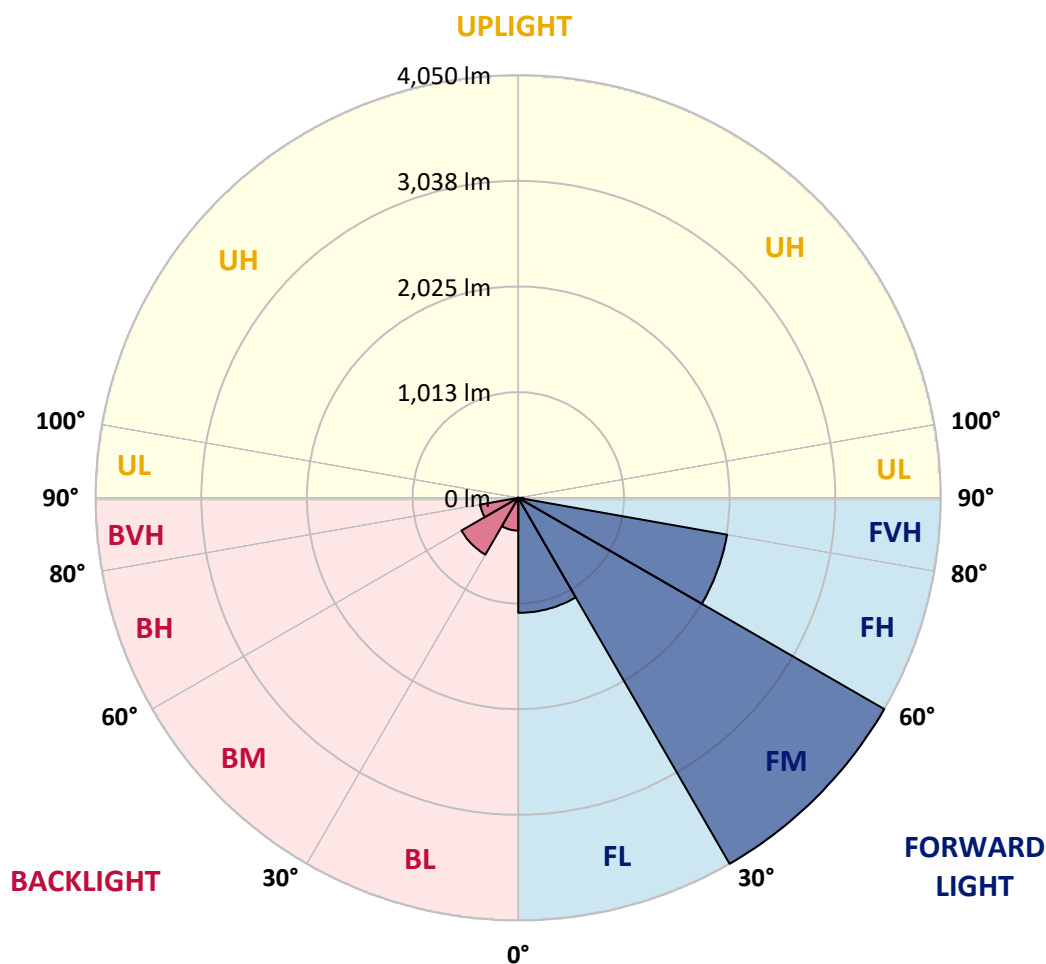
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1102.2	12.9			
FM	(30°-60°)	4050.1	47.3			
FH	(60°-80°)	2032.3	23.7			G2/5000
FVH	(80°-90°)	50.1	0.6			G1/100
BL	(0°-30°)	313.7	3.7	B1/500		
BM	(30°-60°)	628.4	7.3	B1/1000		
BH	(60°-80°)	370.5	4.3	B1/500		G1/500
BVH	(80°-90°)	14.6	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2
2.5°	1845.1	1865.6	1854.4	1861.9	1824.6	1800.3	1772.3	1718.2	1688.4	1684.7	1649.2
5°	2115.6	2138.0	2119.4	2113.8	2048.5	1992.5	1929.1	1833.9	1770.5	1759.3	1680.9
7.5°	2386.1	2406.7	2384.3	2367.5	2279.8	2180.9	2087.6	1947.7	1848.8	1830.2	1707.1
10°	2576.4	2595.1	2578.3	2561.5	2470.1	2369.4	2236.9	2054.1	1919.7	1889.9	1723.8
12.5°	2720.1	2731.3	2723.8	2708.9	2623.1	2514.9	2388.0	2173.5	2000.0	1962.6	1750.0
15°	2837.6	2856.3	2847.0	2835.8	2753.7	2645.5	2524.2	2298.5	2093.2	2046.6	1789.1
17.5°	2916.0	2929.0	2930.9	2930.9	2858.1	2751.8	2634.3	2412.3	2186.5	2126.8	1826.5
20°	2951.4	2966.4	2975.7	2990.6	2930.9	2839.5	2720.1	2509.3	2274.2	2207.0	1861.9
22.5°	2968.2	2981.3	3005.5	3039.1	2990.6	2914.1	2804.0	2598.8	2361.9	2291.0	1902.9
25°	2981.3	2998.1	3033.5	3096.9	3063.4	2998.1	2902.9	2701.4	2466.4	2393.6	1962.6
27.5°	3016.7	3037.2	3070.8	3147.3	3106.3	3074.6	3007.4	2811.5	2576.4	2501.8	2035.4
30°	3139.9	3156.6	3154.8	3203.3	3152.9	3143.6	3096.9	2917.8	2682.8	2608.2	2121.2
32.5°	3363.7	3380.5	3339.5	3320.8	3210.7	3212.6	3194.0	3031.6	2809.6	2733.1	2220.1
35°	3604.4	3623.1	3569.0	3537.2	3352.5	3298.4	3307.8	3173.4	2951.4	2874.9	2343.2
37.5°	3818.9	3841.3	3794.7	3748.1	3561.5	3436.5	3434.6	3332.0	3113.7	3035.4	2479.4
40°	3936.5	3962.6	3990.6	3964.5	3768.6	3630.5	3570.8	3494.3	3274.2	3194.0	2626.8
42.5°	3992.4	4065.2	4115.6	4098.8	3938.3	3798.4	3727.5	3664.1	3470.1	3391.7	2802.2
45°	3835.7	3837.6	3943.9	4035.4	4005.5	3912.2	3899.2	3854.4	3693.9	3619.3	2999.9
47.5°	3639.8	3624.9	3699.5	3861.9	3945.8	3970.1	4046.6	4065.2	3949.5	3874.9	3201.4
50°	3169.7	3179.0	3421.6	3654.8	3818.9	3975.7	4151.0	4281.6	4212.6	4141.7	3414.1
52.5°	2578.3	2600.7	2878.7	3391.7	3651.0	3919.7	4212.6	4498.0	4481.2	4414.1	3626.8
55°	2067.1	2102.6	2397.3	2953.3	3436.5	3794.7	4238.7	4695.8	4759.2	4697.7	3835.7
57.5°	1580.2	1617.5	1865.6	2436.5	3162.2	3591.3	4220.1	4869.3	5018.5	4979.4	4027.9
60°	1190.3	1227.6	1386.2	1975.7	2819.0	3363.7	4126.8	4983.1	5251.7	5210.7	4167.8
62.5°	852.6	882.4	1000.0	1537.3	2401.1	3093.2	3897.3	4985.0	5384.2	5350.6	4235.0
65°	613.8	613.8	708.9	1097.0	2009.3	2768.6	3550.3	4755.5	5356.2	5346.9	4188.3
67.5°	442.2	445.9	522.4	766.8	1602.6	2374.9	3100.7	4346.9	5139.8	5186.5	4020.4
70°	313.4	322.8	358.2	535.4	1210.8	1875.0	2619.3	3811.5	4749.9	4832.0	3695.8
72.5°	242.5	248.1	272.4	373.1	884.3	1393.6	2087.6	3214.5	4229.4	4322.7	3253.7
75°	186.6	192.2	210.8	274.2	634.3	977.6	1483.2	2494.3	3410.4	3576.4	2613.7
77.5°	136.2	143.7	156.7	199.6	369.4	621.3	899.2	1403.0	1882.4	1960.8	1369.4
80°	63.4	72.8	91.4	128.7	199.6	292.9	319.0	541.0	904.8	945.9	742.5
82.5°	35.4	44.8	52.2	78.4	100.7	104.5	108.2	136.2	341.4	376.9	311.6
85°	16.8	22.4	24.3	33.6	33.6	29.9	35.4	26.1	56.0	67.2	65.3
87.5°	0.0	1.9	3.7	9.3	7.5	5.6	5.6	5.6	5.6	7.5	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°	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2	1621.2
2.5°	1632.4	1608.2	1552.2	1503.7	1472.0	1444.0	1406.7	1389.9	1360.0	1365.6	1348.9
5°	1641.8	1597.0	1498.1	1406.7	1339.5	1279.8	1214.5	1177.2	1136.2	1132.4	1119.4
7.5°	1647.4	1578.3	1436.5	1307.8	1205.2	1113.8	1026.1	977.6	927.2	916.0	904.8
10°	1641.8	1550.3	1373.1	1205.2	1069.0	955.2	856.3	794.8	742.5	729.5	718.3
12.5°	1647.4	1535.4	1313.4	1110.1	947.7	819.0	707.1	643.6	595.1	582.1	574.6
15°	1660.4	1526.1	1263.0	1024.2	839.5	695.9	585.8	531.7	492.5	479.5	475.7
17.5°	1671.6	1516.8	1208.9	940.3	731.3	587.7	492.5	447.8	414.2	401.1	397.4
20°	1686.5	1503.7	1154.8	860.1	636.2	501.9	417.9	378.7	352.6	343.3	341.4
22.5°	1699.6	1494.4	1104.5	779.8	548.5	432.8	361.9	330.2	311.6	302.2	302.2
25°	1733.2	1498.1	1061.5	705.2	483.2	378.7	319.0	294.8	279.8	274.2	274.2
27.5°	1772.3	1513.0	1028.0	641.8	427.2	337.7	289.2	268.7	261.2	253.7	255.6
30°	1828.3	1542.9	1005.6	589.5	386.2	306.0	264.9	250.0	242.5	240.7	240.7
32.5°	1899.2	1591.4	1003.7	556.0	356.3	281.7	248.1	235.1	231.3	229.5	229.5
35°	1983.2	1634.3	992.5	541.0	337.7	264.9	235.1	225.7	223.9	223.9	223.9
37.5°	2083.9	1705.2	985.1	520.5	328.4	255.6	225.7	218.3	218.3	218.3	218.3
40°	2188.4	1763.0	973.9	501.9	324.6	250.0	220.1	210.8	210.8	210.8	210.8
42.5°	2313.4	1847.0	970.1	492.5	319.0	246.3	212.7	201.5	203.4	203.4	205.2
45°	2464.5	1942.1	968.3	483.2	317.2	242.5	205.2	192.2	194.0	192.2	192.2
47.5°	2617.5	2052.2	973.9	477.6	315.3	238.8	199.6	182.8	182.8	181.0	181.0
50°	2777.9	2152.9	977.6	472.0	311.6	231.3	190.3	175.4	171.6	167.9	169.8
52.5°	2929.0	2246.2	979.5	462.7	300.4	220.1	182.8	166.0	160.4	154.8	156.7
55°	3080.2	2335.8	983.2	451.5	285.4	209.0	173.5	156.7	149.3	141.8	141.8
57.5°	3216.3	2414.1	973.9	423.5	268.7	197.8	164.2	145.5	134.3	126.9	126.9
60°	3309.6	2470.1	945.9	382.5	246.3	184.7	154.8	134.3	121.3	115.7	115.7
62.5°	3354.4	2479.4	895.5	315.3	218.3	171.6	143.7	123.1	111.9	108.2	108.2
65°	3311.5	2438.4	817.1	236.9	188.4	156.7	132.5	113.8	102.6	93.3	93.3
67.5°	3162.2	2322.7	708.9	179.1	160.4	141.8	121.3	104.5	91.4	84.0	84.0
70°	2861.9	2082.0	548.5	143.7	136.2	123.1	110.1	93.3	82.1	72.8	72.8
72.5°	2468.2	1764.9	386.2	115.7	115.7	104.5	93.3	82.1	70.9	63.4	63.4
75°	1893.6	1305.9	259.3	93.3	95.1	87.7	76.5	67.2	59.7	54.1	54.1
77.5°	1033.6	645.5	158.6	69.0	70.9	67.2	59.7	54.1	50.4	44.8	44.8
80°	501.9	283.6	91.4	48.5	50.4	48.5	44.8	39.2	39.2	35.4	35.4
82.5°	210.8	106.3	48.5	33.6	33.6	29.9	28.0	28.0	28.0	26.1	26.1
85°	52.2	20.5	20.5	18.7	18.7	18.7	16.8	16.8	16.8	13.1	14.9
87.5°	7.5	7.5	7.5	7.5	7.5	7.5	5.6	1.9	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)