

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: P836927

Luminaire Tested: **ARCH3-90-750-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836927
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10790 lumens
Efficiency: N/A
Efficacy: 115.9 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

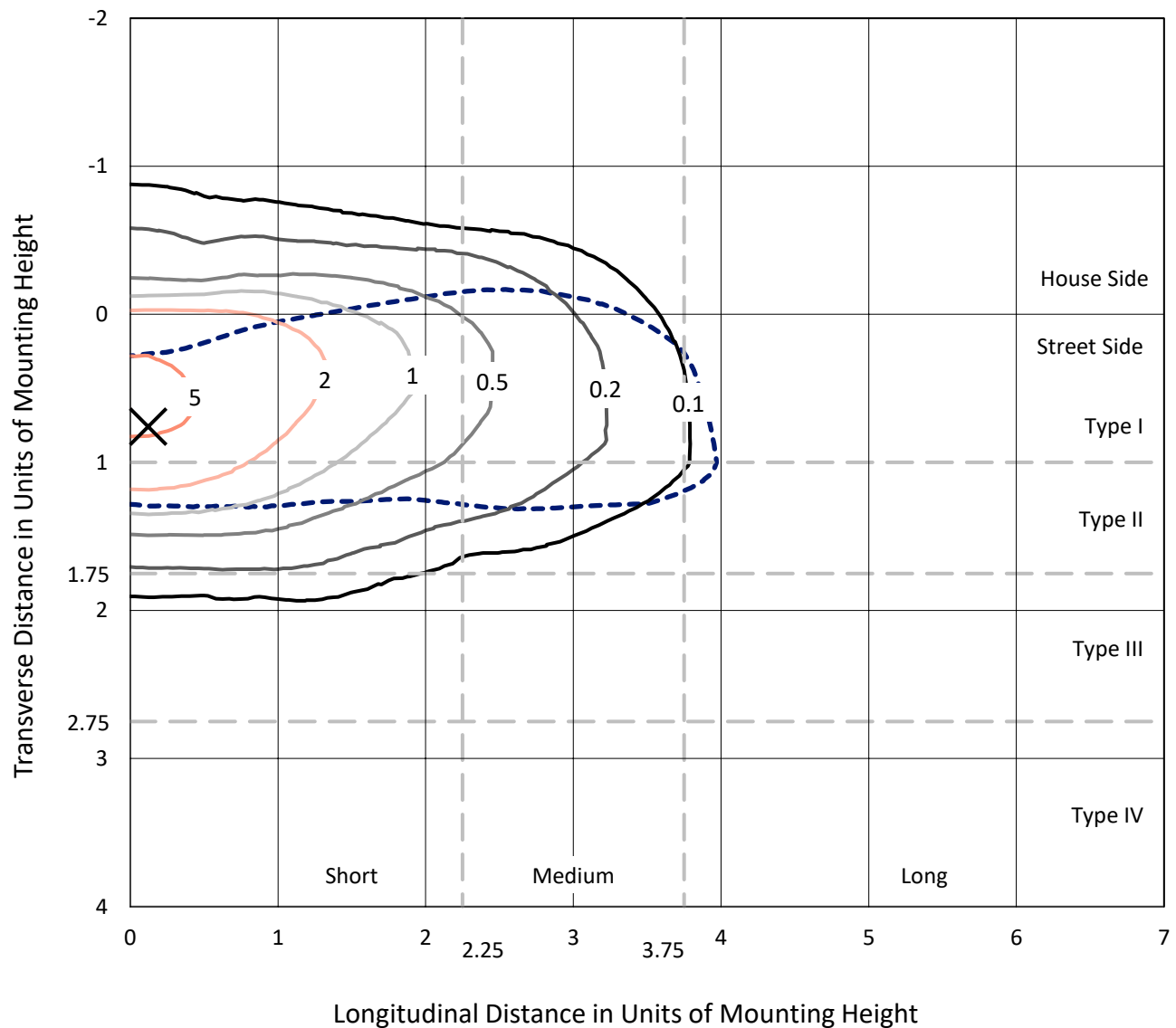
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

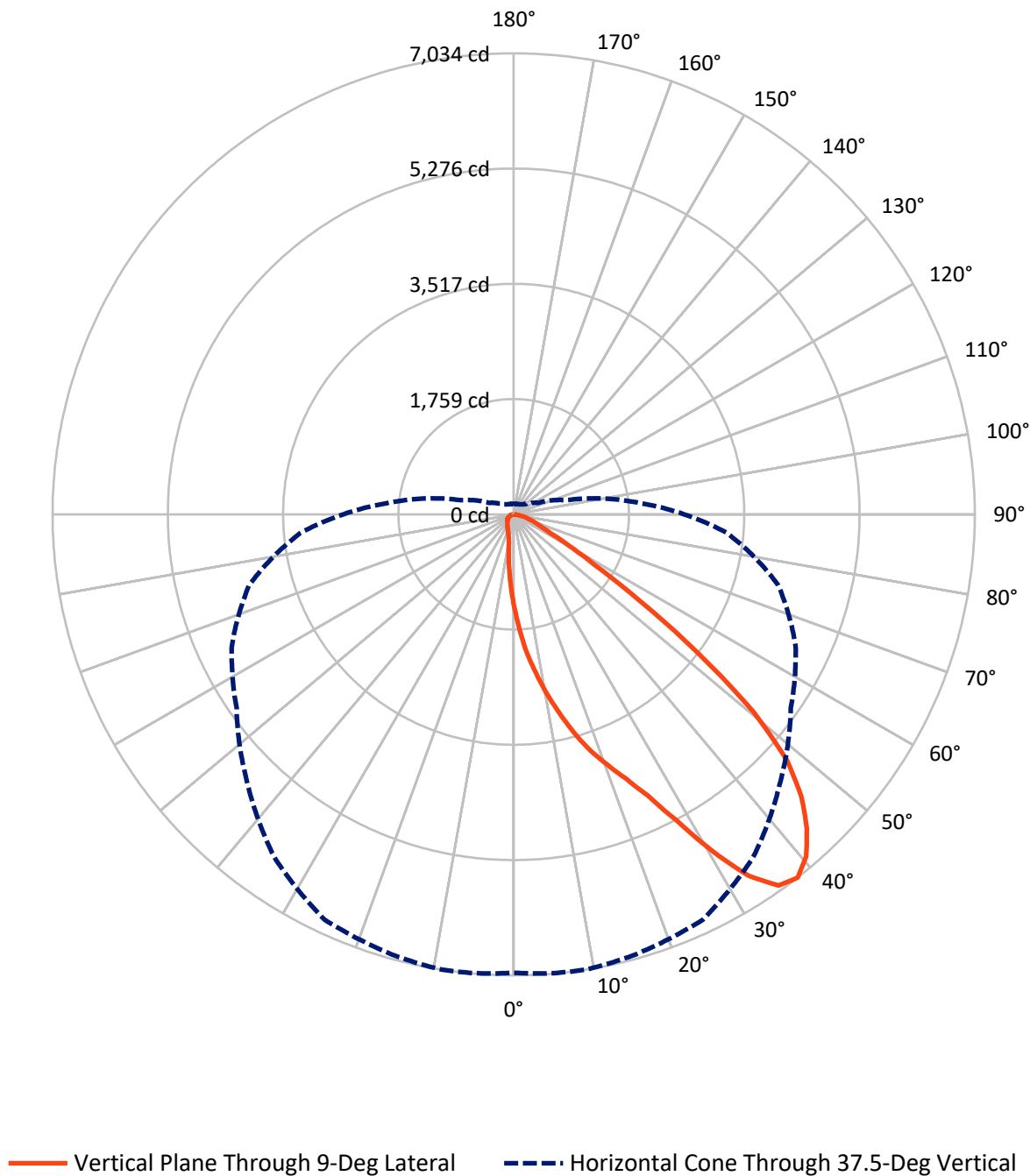
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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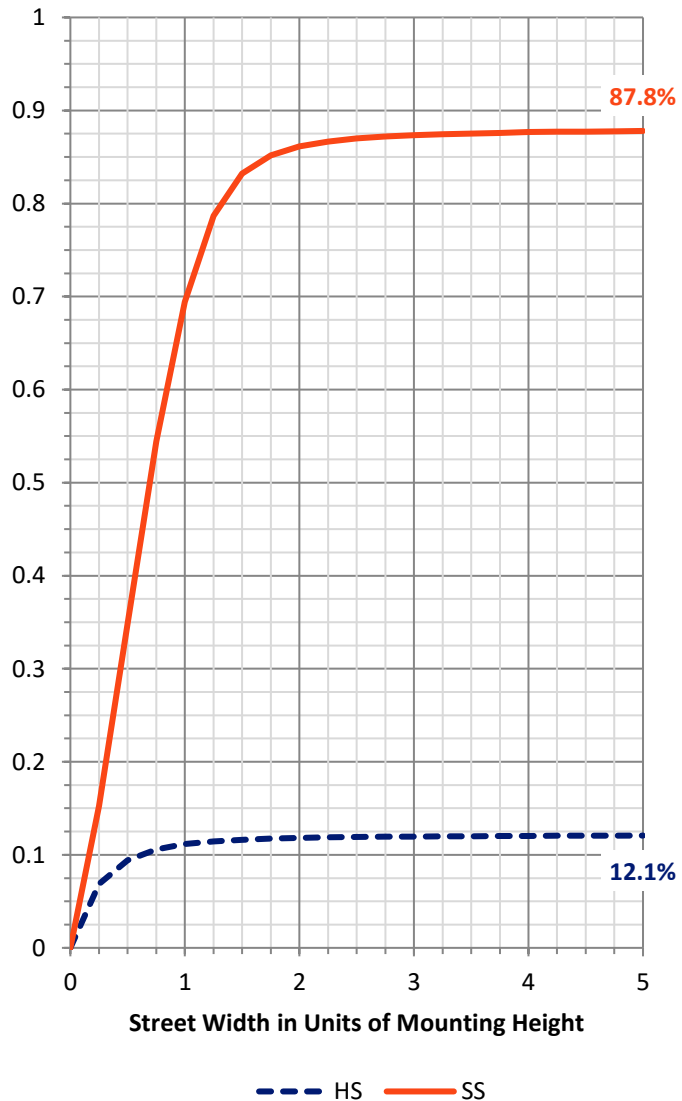
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1312.3	0.0	1312.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	9477.7	0.0	9477.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	10790.0	0.0	10790.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	1.3
10°-20°	498.3	4.6
20°-30°	1023.9	9.5
30°-40°	1809.8	16.8
40°-50°	2404.1	22.3
50°-60°	2280.2	21.1
60°-70°	1739.6	16.1
70°-80°	843.3	7.8
80°-90°	47.5	0.4
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°	10790.0	100.0
0°-180°	10790.0	100.0

Coefficient of Utilization



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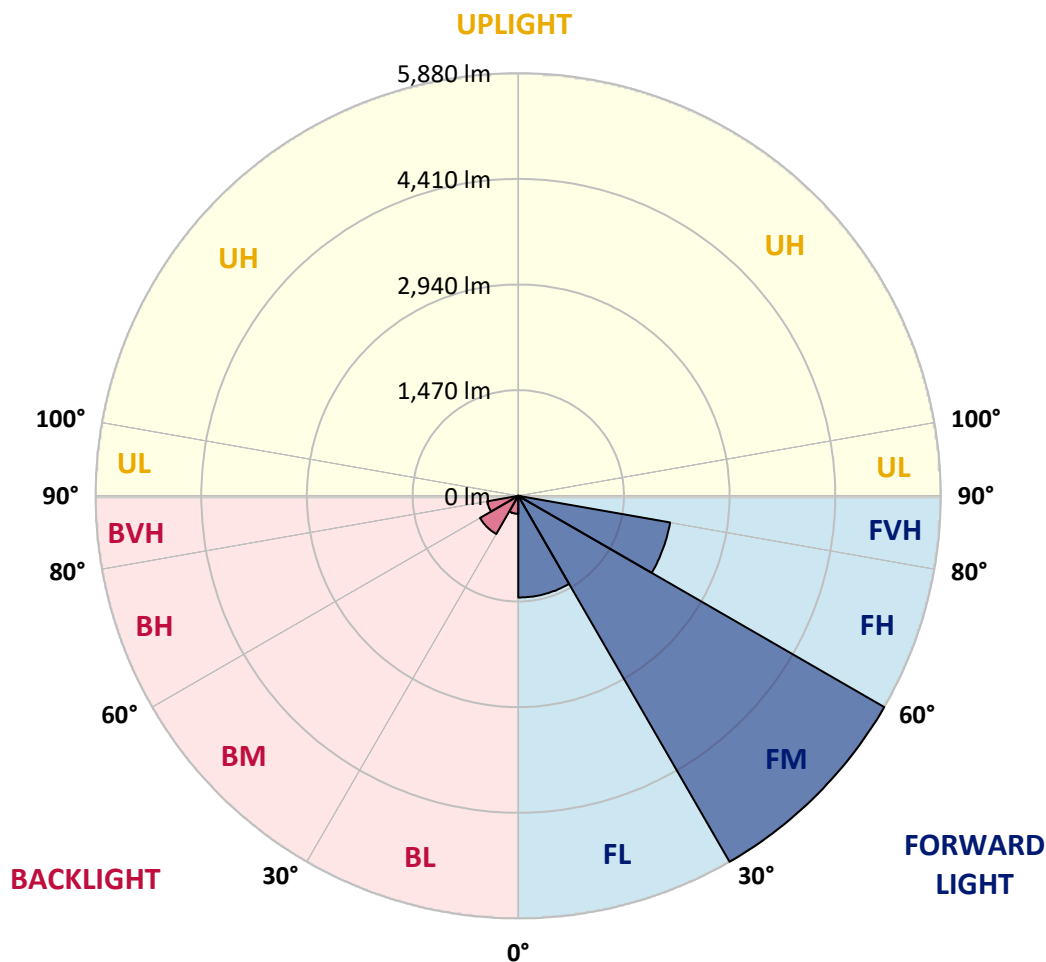
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1415.1	13.1			
FM	(30°-60°)	5880.0	54.5			
FH	(60°-80°)	2145.0	19.9			G2/5000
FVH	(80°-90°)	37.6	0.3			G1/100
BL	(0°-30°)	250.4	2.3	B1/500		
BM	(30°-60°)	614.1	5.7	B1/1000		
BH	(60°-80°)	437.9	4.1	B1/500		G1/500
BVH	(80°-90°)	9.9	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3
2.5°	1767.4	1736.4	1771.8	1767.4	1736.4	1716.4	1654.4	1634.5	1561.4	1508.3	1461.7
5°	2130.6	2099.6	2130.6	2121.7	2077.4	2028.7	1926.8	1860.4	1729.7	1614.6	1510.5
7.5°	2431.8	2431.8	2445.1	2447.3	2394.2	2318.9	2192.6	2093.0	1909.1	1731.9	1565.8
10°	2757.4	2759.6	2788.4	2768.5	2697.6	2595.7	2436.2	2310.0	2088.5	1856.0	1619.0
12.5°	3105.1	3107.3	3116.2	3107.3	3023.2	2892.5	2699.8	2533.7	2279.0	1997.7	1692.1
15°	3452.8	3455.0	3466.1	3450.6	3357.6	3204.8	2985.5	2781.7	2480.5	2157.2	1780.7
17.5°	3778.4	3782.8	3791.7	3771.7	3674.3	3492.7	3269.0	3023.2	2695.4	2327.7	1880.3
20°	4070.7	4075.2	4081.8	4055.2	3957.8	3776.2	3534.8	3277.8	2914.6	2502.7	1988.9
22.5°	4365.3	4369.7	4380.8	4345.4	4236.8	4028.7	3791.7	3525.9	3147.2	2695.4	2115.1
25°	4741.8	4746.2	4755.1	4704.2	4555.8	4312.1	4061.9	3789.5	3399.7	2912.4	2270.1
27.5°	5293.3	5288.9	5288.9	5195.8	4941.1	4624.4	4334.3	4057.4	3672.1	3145.0	2440.7
30°	5975.4	5964.4	5957.7	5831.5	5468.3	4976.6	4613.4	4307.7	3933.4	3390.8	2624.5
32.5°	6586.7	6586.7	6573.4	6440.5	6055.2	5450.5	4910.1	4551.3	4185.9	3638.9	2815.0
35°	6947.7	6963.2	6956.6	6856.9	6575.6	5959.9	5311.0	4843.7	4451.7	3898.0	3043.1
37.5°	6996.4	7027.4	7034.1	6974.3	6825.9	6376.3	5756.2	5160.4	4744.0	4177.0	3264.6
40°	6799.3	6865.8	6865.8	6856.9	6803.8	6573.4	6130.5	5528.0	5045.2	4467.2	3488.3
42.5°	6495.9	6564.6	6555.7	6588.9	6575.6	6526.9	6340.9	5871.3	5346.4	4766.2	3692.0
45°	6099.5	6170.3	6152.6	6212.4	6239.0	6292.1	6318.7	6110.5	5643.2	5091.7	3920.1
47.5°	5463.8	5583.4	5610.0	5716.3	5827.0	5993.1	6119.4	6196.9	5920.1	5441.7	4168.2
50°	4524.8	4693.1	4746.2	4969.9	5273.4	5616.6	5820.4	6090.6	6115.0	5800.5	4436.2
52.5°	3240.2	3435.1	3517.0	3884.7	4509.3	5107.2	5474.9	5855.8	6190.3	6143.8	4726.3
55°	2095.2	2261.3	2341.0	2686.5	3517.0	4456.1	5067.4	5552.4	6148.2	6458.2	5058.5
57.5°	1291.2	1386.4	1439.6	1736.4	2500.5	3621.1	4533.6	5273.4	6019.7	6730.7	5404.0
60°	870.4	925.8	952.3	1091.9	1698.7	2706.4	3800.5	4981.0	5851.4	6914.5	5718.5
62.5°	578.1	595.8	622.3	708.7	1120.7	1900.3	2919.1	4458.3	5725.2	6925.6	5951.1
65°	447.4	456.2	467.3	505.0	691.0	1328.9	2053.1	3612.3	5536.9	6690.8	6024.2
67.5°	352.1	361.0	374.3	394.2	500.5	901.4	1397.5	2646.6	5151.5	6323.1	5904.6
70°	276.8	283.5	292.3	310.1	389.8	653.4	923.6	1758.5	4374.2	5973.2	5528.0
72.5°	219.3	225.9	234.8	252.5	316.7	478.4	633.4	1096.3	3373.1	5545.8	4803.8
75°	172.8	177.2	183.8	201.5	254.7	372.1	429.7	655.6	2292.3	4764.0	3742.9
77.5°	86.4	106.3	121.8	139.5	186.0	256.9	285.7	363.2	967.9	2445.1	1785.1
80°	50.9	62.0	66.4	77.5	121.8	155.0	155.0	146.2	305.6	939.1	728.7
82.5°	28.8	39.9	42.1	44.3	73.1	88.6	70.9	53.2	62.0	314.5	212.6
85°	8.9	13.3	15.5	17.7	24.4	26.6	24.4	22.1	17.7	31.0	19.9
87.5°	0.0	0.0	0.0	0.0	2.2	4.4	4.4	4.4	6.6	6.6	6.6
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°	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3
2.5°	1435.2	1406.4	1351.0	1300.1	1251.3	1215.9	1182.7	1151.7	1129.5	1111.8	1109.6
5°	1455.1	1397.5	1291.2	1191.5	1100.7	1025.4	961.2	910.3	872.6	846.0	843.8
7.5°	1481.7	1393.1	1231.4	1083.0	947.9	839.4	746.4	677.7	629.0	609.1	593.6
10°	1503.8	1388.7	1171.6	974.5	797.3	660.0	549.3	480.6	445.2	431.9	425.2
12.5°	1541.5	1393.1	1120.7	874.8	666.6	505.0	420.8	383.2	367.7	356.6	354.4
15°	1596.8	1413.0	1071.9	777.4	533.8	407.5	358.8	334.4	318.9	316.7	314.5
17.5°	1652.2	1430.7	1027.7	677.7	443.0	354.4	321.1	301.2	290.1	287.9	287.9
20°	1716.4	1452.9	978.9	582.5	378.7	318.9	292.3	276.8	263.6	261.3	261.3
22.5°	1791.7	1483.9	932.4	498.3	336.6	292.3	270.2	252.5	241.4	239.2	239.2
25°	1893.6	1530.4	894.8	436.3	307.9	270.2	250.3	234.8	225.9	221.5	221.5
27.5°	2006.6	1594.6	868.2	398.7	287.9	252.5	232.6	219.3	210.4	206.0	206.0
30°	2132.8	1665.5	850.5	383.2	276.8	237.0	219.3	206.0	194.9	192.7	192.7
32.5°	2272.3	1747.4	839.4	385.4	274.6	225.9	206.0	192.7	183.8	179.4	179.4
35°	2427.4	1838.3	832.8	398.7	279.1	217.0	194.9	181.6	172.8	168.3	168.3
37.5°	2600.1	1944.6	832.8	411.9	290.1	214.8	183.8	170.5	163.9	159.5	159.5
40°	2761.8	2057.5	841.6	427.4	301.2	214.8	175.0	163.9	155.0	150.6	150.6
42.5°	2888.1	2121.7	848.3	443.0	307.9	212.6	166.1	155.0	148.4	144.0	144.0
45°	3032.0	2190.4	835.0	449.6	307.9	208.2	159.5	148.4	141.7	137.3	137.3
47.5°	3191.5	2274.6	832.8	454.0	301.2	199.3	152.8	141.7	137.3	132.9	132.9
50°	3353.2	2367.6	837.2	451.8	292.3	186.0	144.0	137.3	130.7	126.2	126.2
52.5°	3537.0	2465.0	846.0	447.4	272.4	170.5	137.3	130.7	124.0	119.6	117.4
55°	3740.7	2571.3	863.8	438.5	245.8	155.0	130.7	124.0	115.2	110.7	108.5
57.5°	3975.5	2702.0	883.7	420.8	217.0	141.7	124.0	115.2	101.9	95.2	93.0
60°	4199.2	2850.4	905.8	378.7	188.3	128.5	117.4	104.1	90.8	86.4	84.2
62.5°	4409.6	2996.6	916.9	303.4	159.5	117.4	110.7	95.2	81.9	77.5	75.3
65°	4544.7	3156.0	892.5	206.0	130.7	108.5	101.9	88.6	75.3	68.7	68.7
67.5°	4553.6	3231.3	808.4	135.1	106.3	97.4	93.0	79.7	66.4	62.0	59.8
70°	4329.9	3118.4	617.9	106.3	88.6	84.2	84.2	70.9	57.6	53.2	50.9
72.5°	3816.0	2761.8	394.2	86.4	75.3	70.9	70.9	59.8	50.9	44.3	42.1
75°	3012.1	2130.6	210.4	70.9	62.0	59.8	55.4	48.7	42.1	37.7	35.4
77.5°	1384.2	939.1	97.4	50.9	46.5	46.5	42.1	35.4	33.2	28.8	28.8
80°	547.0	318.9	48.7	33.2	31.0	31.0	31.0	24.4	24.4	19.9	17.7
82.5°	150.6	66.4	24.4	19.9	19.9	19.9	17.7	15.5	15.5	13.3	13.3
85°	15.5	11.1	11.1	11.1	11.1	8.9	8.9	6.6	4.4	4.4	4.4
87.5°	6.6	6.6	6.6	6.6	6.6	4.4	2.2	0.0	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)