

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: P841730

Luminaire Tested: **ARCH4-220-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841730
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22511 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 221.8
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



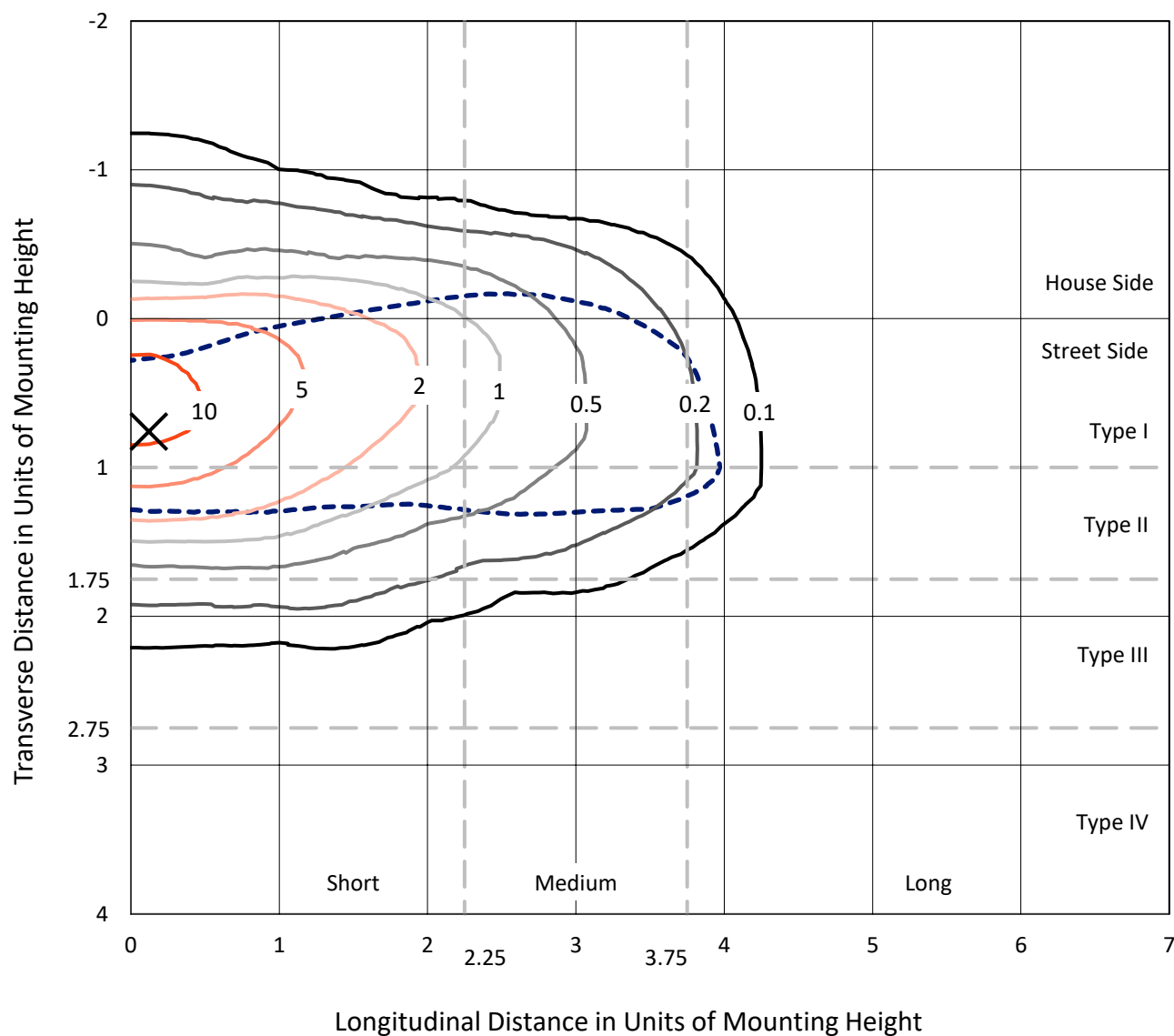
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

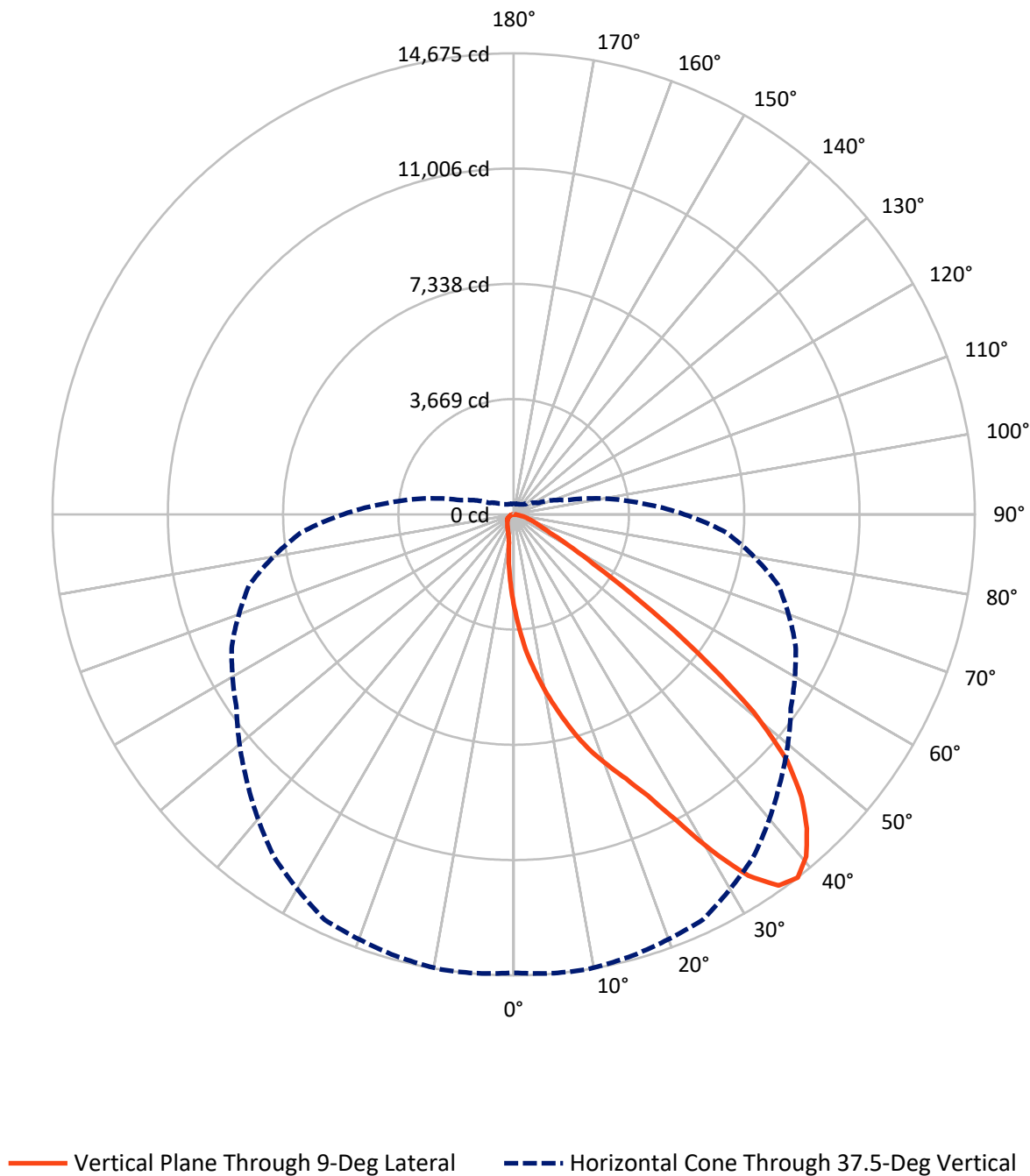


Based on 25 foot mounting height. Maximum calculated value = 13.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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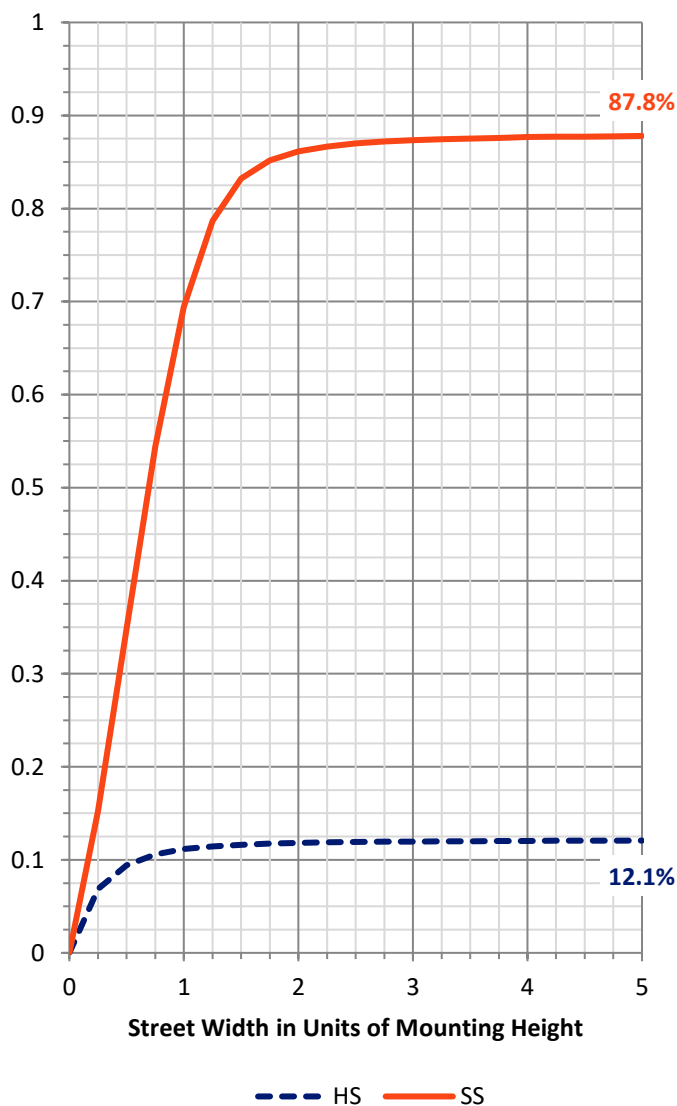
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2737.7	0.0	2737.7
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	19773.3	0.0	19773.3
	% Fixture	87.8	0.0	87.8
Total	Lumens	22511.0	0.0	22511.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.1	1.3
10°-20°	1039.6	4.6
20°-30°	2136.1	9.5
30°-40°	3775.7	16.8
40°-50°	5015.7	22.3
50°-60°	4757.1	21.1
60°-70°	3629.2	16.1
70°-80°	1759.4	7.8
80°-90°	99.0	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°	22511.0	100.0
0°-180°	22511.0	100.0

Coefficient of Utilization



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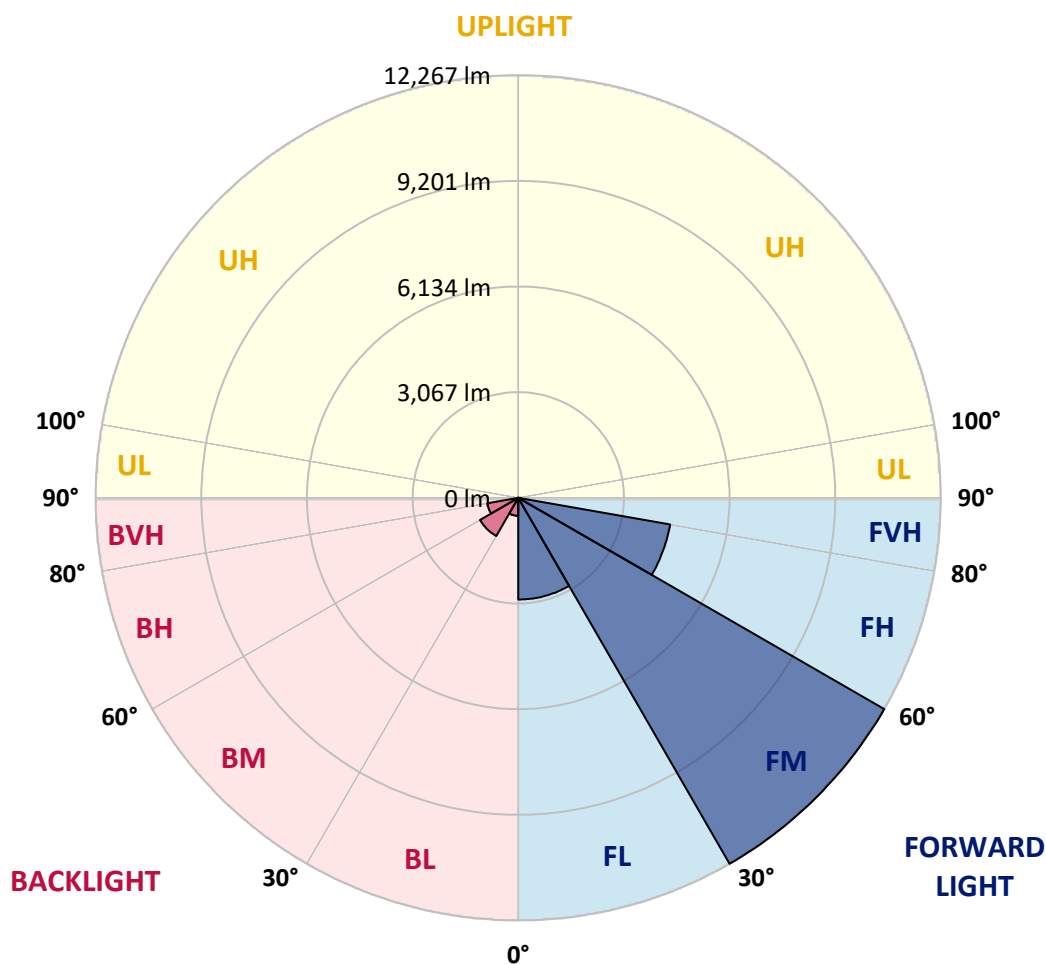
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2952.3	13.1			
FM	(30°-60°)	12267.4	54.5			
FH	(60°-80°)	4475.1	19.9			G2/5000
FVH	(80°-90°)	78.4	0.3			G1/100
BL	(0°-30°)	522.5	2.3	B2/1000		
BM	(30°-60°)	1281.1	5.7	B2/2500		
BH	(60°-80°)	913.6	4.1	B2/1000		G2/1000
BVH	(80°-90°)	20.6	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7
2.5°	3687.3	3622.6	3696.5	3687.3	3622.6	3581.0	3451.6	3410.0	3257.5	3146.6	3049.6
5°	4445.0	4380.4	4445.0	4426.6	4334.1	4232.5	4019.9	3881.3	3608.7	3368.4	3151.3
7.5°	5073.4	5073.4	5101.2	5105.8	4994.9	4837.8	4574.4	4366.5	3983.0	3613.3	3266.8
10°	5752.7	5757.3	5817.4	5775.8	5627.9	5415.4	5082.7	4819.3	4357.2	3872.1	3377.7
12.5°	6478.1	6482.7	6501.2	6482.7	6307.2	6034.5	5632.5	5286.0	4754.6	4167.8	3530.2
15°	7203.6	7208.2	7231.3	7198.9	7004.9	6686.0	6228.6	5803.5	5175.1	4500.5	3715.0
17.5°	7882.8	7892.0	7910.5	7868.9	7665.6	7286.7	6820.0	6307.2	5623.3	4856.3	3922.9
20°	8492.7	8501.9	8515.8	8460.4	8257.1	7878.2	7374.5	6838.5	6080.7	5221.3	4149.3
22.5°	9107.2	9116.5	9139.6	9065.7	8839.3	8404.9	7910.5	7356.0	6565.9	5623.3	4412.7
25°	9892.8	9902.0	9920.5	9814.2	9504.6	8996.4	8474.2	7905.9	7092.7	6076.1	4736.1
27.5°	11043.3	11034.0	11034.0	10840.0	10308.6	9647.9	9042.6	8465.0	7661.0	6561.3	5091.9
30°	12466.4	12443.3	12429.5	12166.1	11408.3	10382.5	9624.8	8987.1	8206.2	7074.2	5475.4
32.5°	13741.7	13741.7	13714.0	13436.8	12632.8	11371.4	10243.9	9495.4	8733.0	7591.7	5872.8
35°	14494.9	14527.2	14513.4	14305.5	13718.6	12434.1	11080.3	10105.3	9287.5	8132.3	6348.7
37.5°	14596.6	14661.2	14675.1	14550.3	14240.8	13302.8	12009.0	10766.1	9897.4	8714.5	6810.8
40°	14185.3	14323.9	14323.9	14305.5	14194.6	13714.0	12789.9	11533.1	10525.8	9319.8	7277.5
42.5°	13552.3	13695.5	13677.0	13746.4	13718.6	13617.0	13228.8	12249.3	11154.2	9943.6	7702.6
45°	12725.2	12873.1	12836.1	12960.9	13016.3	13127.2	13182.6	12748.3	11773.3	10622.8	8178.5
47.5°	11399.1	11648.6	11704.0	11925.8	12156.9	12503.4	12766.8	12928.5	12350.9	11352.9	8696.0
50°	9439.9	9791.1	9902.0	10368.7	11001.7	11717.9	12143.0	12706.7	12757.5	12101.4	9255.1
52.5°	6760.0	7166.6	7337.6	8104.6	9407.6	10655.2	11422.2	12216.9	12914.6	12817.6	9860.4
55°	4371.1	4717.7	4884.0	5604.8	7337.6	9296.7	10572.0	11583.9	12826.9	13473.7	10553.5
57.5°	2693.8	2892.5	3003.4	3622.6	5216.7	7554.7	9458.4	11001.7	12558.9	14042.1	11274.3
60°	1815.9	1931.4	1986.9	2278.0	3544.0	5646.4	7929.0	10391.8	12207.7	14425.6	11930.5
62.5°	1206.0	1242.9	1298.4	1478.6	2338.0	3964.5	6090.0	9301.3	11944.3	14448.7	12415.6
65°	933.4	951.8	975.0	1053.5	1441.6	2772.4	4283.3	7536.2	11551.6	13958.9	12568.1
67.5°	734.7	753.2	780.9	822.5	1044.3	1880.6	2915.6	5521.6	10747.6	13191.9	12318.6
70°	577.6	591.4	609.9	646.9	813.2	1363.1	1926.8	3668.8	9125.7	12461.8	11533.1
72.5°	457.4	471.3	489.8	526.8	660.7	998.1	1321.5	2287.2	7037.2	11570.0	10022.1
75°	360.4	369.6	383.5	420.5	531.4	776.3	896.4	1367.7	4782.3	9939.0	7808.9
77.5°	180.2	221.8	254.1	291.1	388.1	536.0	596.1	757.8	2019.2	5101.2	3724.2
80°	106.3	129.4	138.6	161.7	254.1	323.4	323.4	305.0	637.6	1959.1	1520.2
82.5°	60.1	83.2	87.8	92.4	152.5	184.8	147.9	110.9	129.4	656.1	443.6
85°	18.5	27.7	32.3	37.0	50.8	55.4	50.8	46.2	37.0	64.7	41.6
87.5°	0.0	0.0	0.0	0.0	4.6	9.2	9.2	9.2	13.9	13.9	13.9
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°	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7	2975.7
2.5°	2994.2	2934.1	2818.6	2712.3	2610.7	2536.7	2467.4	2402.7	2356.5	2319.6	2314.9
5°	3035.7	2915.6	2693.8	2485.9	2296.5	2139.3	2005.4	1899.1	1820.5	1765.1	1760.5
7.5°	3091.2	2906.4	2569.1	2259.5	1977.6	1751.2	1557.2	1413.9	1312.3	1270.7	1238.3
10°	3137.4	2897.1	2444.3	2033.1	1663.4	1376.9	1145.9	1002.7	928.7	901.0	887.2
12.5°	3216.0	2906.4	2338.0	1825.1	1390.8	1053.5	877.9	799.4	767.0	743.9	739.3
15°	3331.5	2948.0	2236.4	1621.8	1113.6	850.2	748.5	697.7	665.4	660.7	656.1
17.5°	3447.0	2984.9	2144.0	1413.9	924.1	739.3	670.0	628.4	605.3	600.7	600.7
20°	3581.0	3031.1	2042.3	1215.2	790.1	665.4	609.9	577.6	549.9	545.2	545.2
22.5°	3738.1	3095.8	1945.3	1039.6	702.3	609.9	563.7	526.8	503.6	499.0	499.0
25°	3950.6	3192.9	1866.7	910.3	642.3	563.7	522.1	489.8	471.3	462.1	462.1
27.5°	4186.3	3326.8	1811.3	831.7	600.7	526.8	485.2	457.4	439.0	429.7	429.7
30°	4449.7	3474.7	1774.3	799.4	577.6	494.4	457.4	429.7	406.6	402.0	402.0
32.5°	4740.8	3645.7	1751.2	804.0	573.0	471.3	429.7	402.0	383.5	374.3	374.3
35°	5064.2	3835.1	1737.4	831.7	582.2	452.8	406.6	378.9	360.4	351.2	351.2
37.5°	5424.6	4056.9	1737.4	859.4	605.3	448.2	383.5	355.8	341.9	332.7	332.7
40°	5761.9	4292.6	1755.8	891.8	628.4	448.2	365.0	341.9	323.4	314.2	314.2
42.5°	6025.3	4426.6	1769.7	924.1	642.3	443.6	346.5	323.4	309.6	300.3	300.3
45°	6325.6	4569.8	1742.0	938.0	642.3	434.3	332.7	309.6	295.7	286.5	286.5
47.5°	6658.3	4745.4	1737.4	947.2	628.4	415.9	318.8	295.7	286.5	277.2	277.2
50°	6995.6	4939.4	1746.6	942.6	609.9	388.1	300.3	286.5	272.6	263.4	263.4
52.5°	7379.1	5142.8	1765.1	933.4	568.3	355.8	286.5	272.6	258.8	249.5	244.9
55°	7804.2	5364.5	1802.0	914.9	512.9	323.4	272.6	258.8	240.3	231.0	226.4
57.5°	8294.0	5637.2	1843.6	877.9	452.8	295.7	258.8	240.3	212.5	198.7	194.1
60°	8760.7	5946.7	1889.8	790.1	392.8	268.0	244.9	217.2	189.4	180.2	175.6
62.5°	9199.7	6251.7	1912.9	633.0	332.7	244.9	231.0	198.7	171.0	161.7	157.1
65°	9481.5	6584.4	1862.1	429.7	272.6	226.4	212.5	184.8	157.1	143.2	143.2
67.5°	9500.0	6741.5	1686.5	281.9	221.8	203.3	194.1	166.3	138.6	129.4	124.8
70°	9033.3	6505.8	1289.2	221.8	184.8	175.6	175.6	147.9	120.1	110.9	106.3
72.5°	7961.3	5761.9	822.5	180.2	157.1	147.9	147.9	124.8	106.3	92.4	87.8
75°	6284.0	4445.0	439.0	147.9	129.4	124.8	115.5	101.7	87.8	78.6	73.9
77.5°	2887.9	1959.1	203.3	106.3	97.0	97.0	87.8	73.9	69.3	60.1	60.1
80°	1141.3	665.4	101.7	69.3	64.7	64.7	64.7	50.8	50.8	41.6	37.0
82.5°	314.2	138.6	50.8	41.6	41.6	41.6	37.0	32.3	32.3	27.7	27.7
85°	32.3	23.1	23.1	23.1	23.1	18.5	18.5	13.9	9.2	9.2	9.2
87.5°	13.9	13.9	13.9	13.9	13.9	9.2	4.6	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)