

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: P841383

Luminaire Tested: **ARCH4-170-730-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841383
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: ARCH4-170-730-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1380mA 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: 18480 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 169.8
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

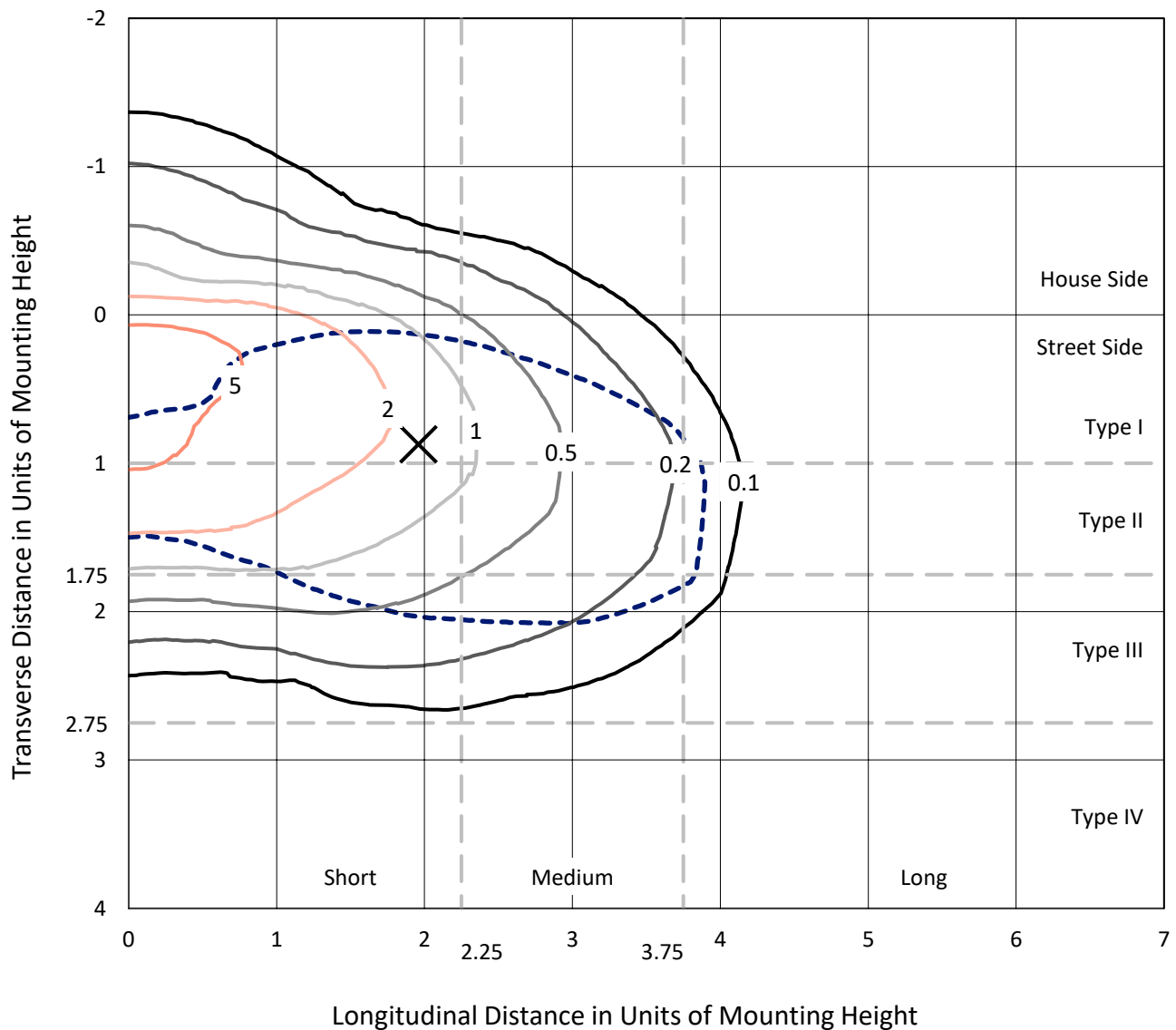


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Iso-Footcandle Lines of Horizontal Illumination

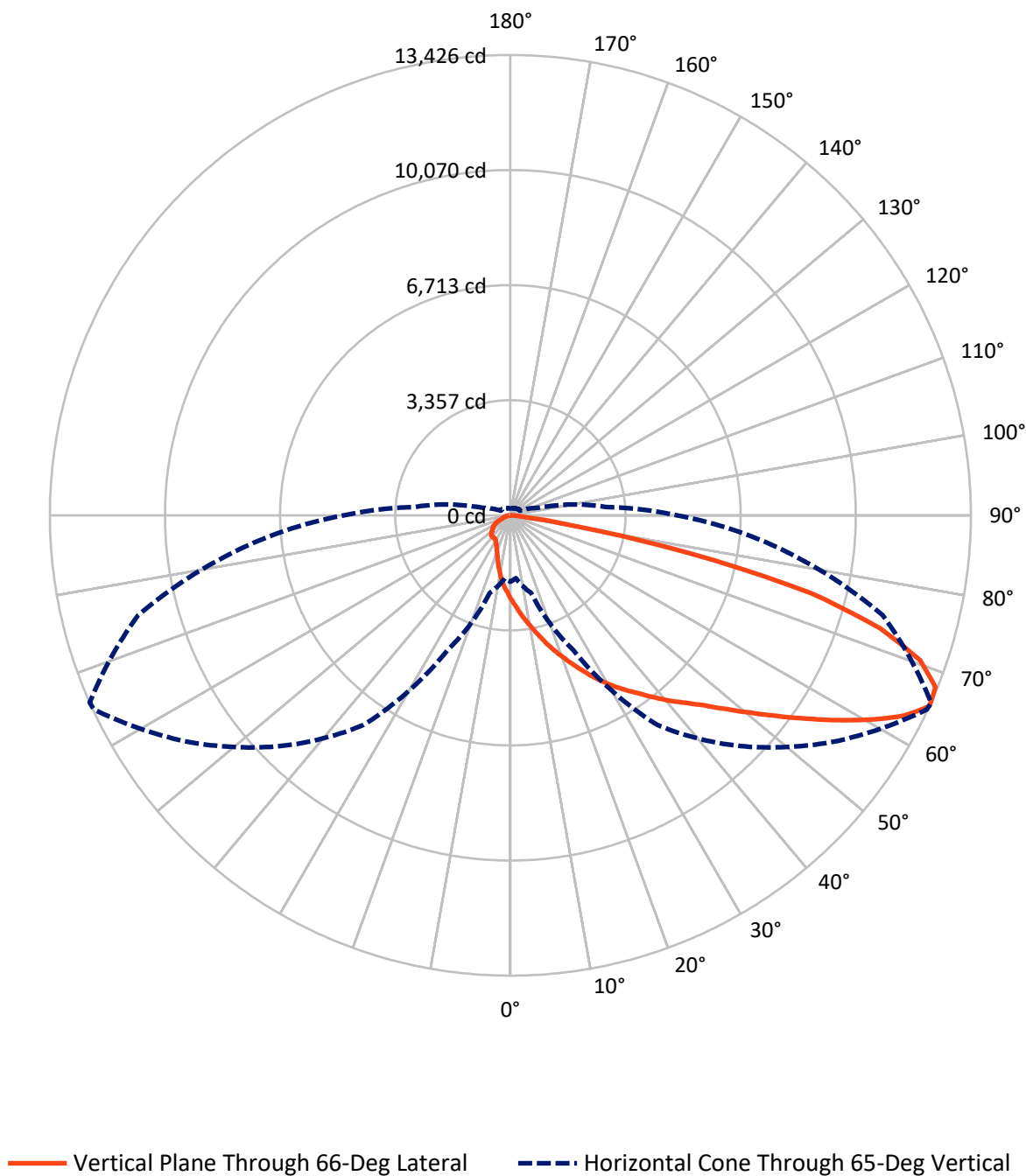
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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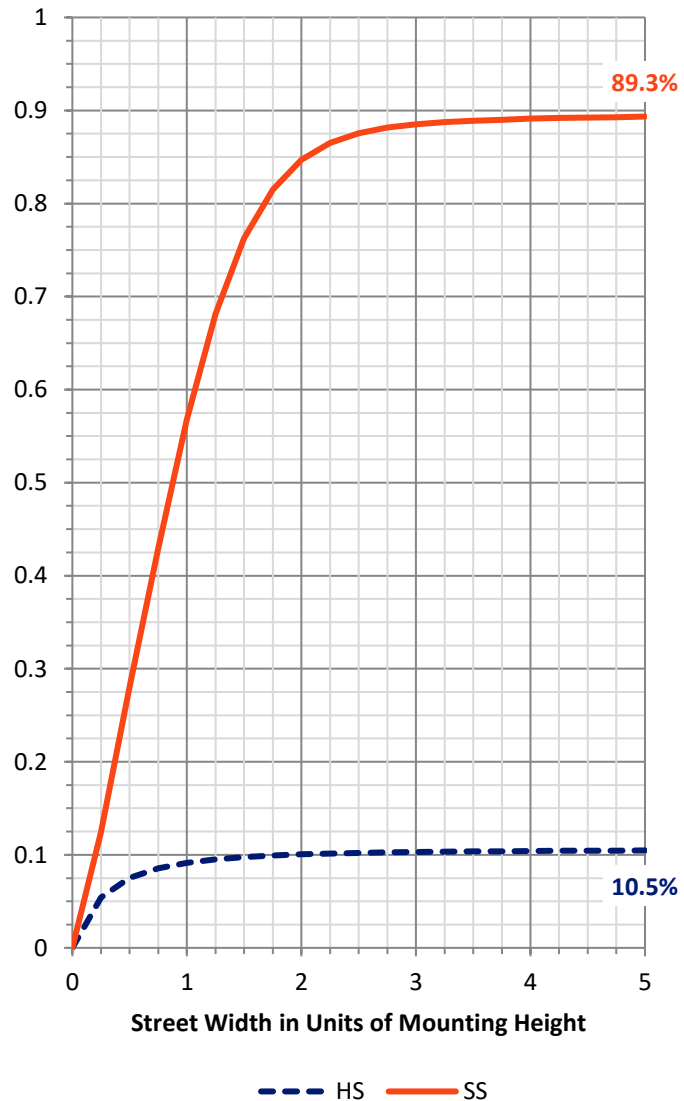
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1954.7	0.0	1954.7
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	16525.3	0.0	16525.3
	% Fixture	89.4	0.0	89.4
Total	Lumens	18480.0	0.0	18480.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.4	1.3
10°-20°	786.8	4.3
20°-30°	1423.5	7.7
30°-40°	2226.0	12.0
40°-50°	3376.8	18.3
50°-60°	4290.4	23.2
60°-70°	4008.9	21.7
70°-80°	1992.4	10.8
80°-90°	133.9	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°	18480.0	100.0
0°-180°	18480.0	100.0

Coefficient of Utilization



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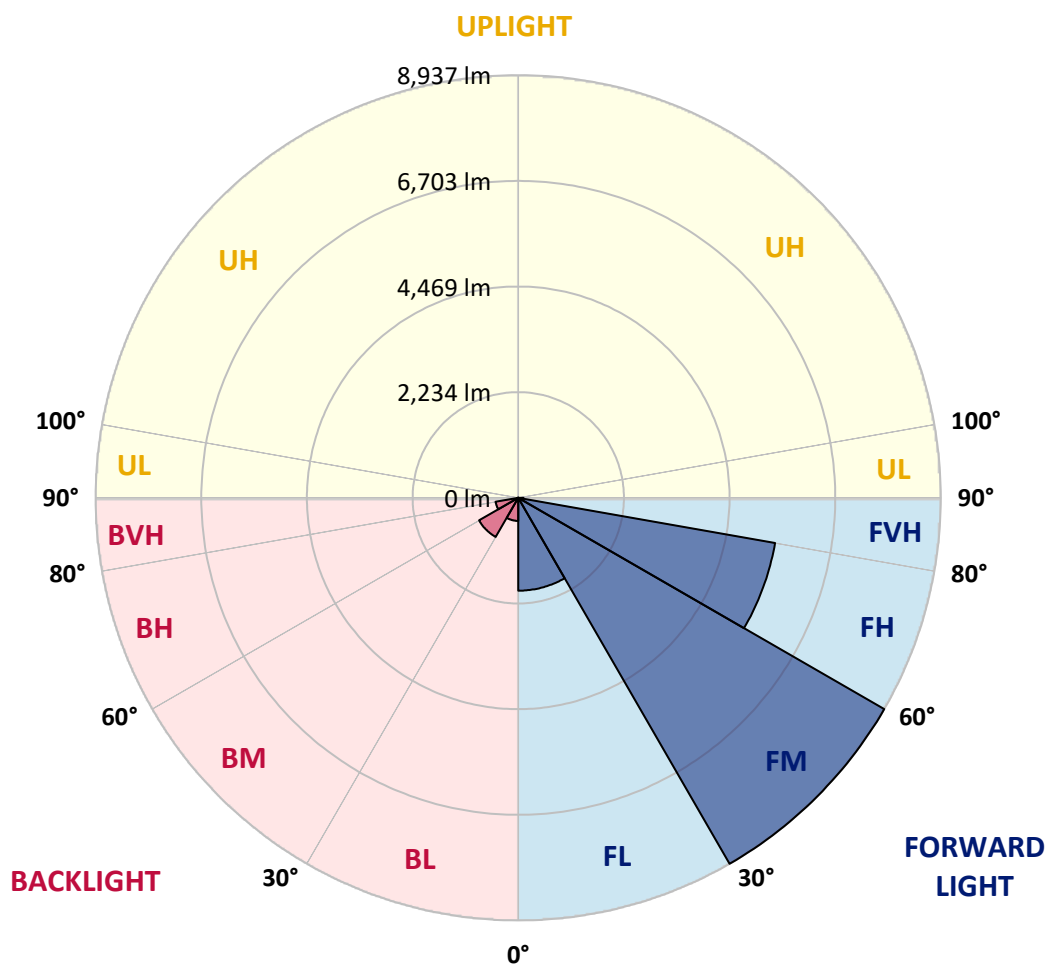
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1963.5	10.6			
FM	(30°-60°)	8937.1	48.4			
FH	(60°-80°)	5514.5	29.8			G3/7500
FVH	(80°-90°)	110.2	0.6			G2/225
BL	(0°-30°)	488.2	2.6	B1/500		
BM	(30°-60°)	956.0	5.2	B1/1000		
BH	(60°-80°)	486.8	2.6	B1/500		G1/500
BVH	(80°-90°)	23.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7
2.5°	2856.6	2879.8	2891.5	2895.3	2806.2	2767.4	2728.7	2639.5	2620.1	2569.8	2503.9
5°	3360.5	3391.5	3383.7	3368.2	3259.7	3135.6	3034.9	2868.2	2841.1	2720.9	2573.6
7.5°	3856.6	3883.7	3876.0	3817.8	3697.7	3523.2	3356.6	3112.4	3073.6	2879.8	2643.4
10°	4271.3	4294.6	4290.7	4232.5	4089.1	3876.0	3674.4	3348.8	3302.3	3027.1	2701.5
12.5°	4612.4	4643.4	4639.5	4600.8	4472.9	4240.3	4011.6	3620.1	3562.0	3205.4	2782.9
15°	4879.8	4918.6	4918.6	4903.1	4813.9	4620.1	4360.4	3918.6	3848.8	3410.8	2883.7
17.5°	5042.6	5073.6	5100.8	5127.9	5065.9	4918.6	4682.2	4217.0	4143.4	3612.4	2988.4
20°	5127.9	5158.9	5178.3	5236.4	5248.0	5174.4	4988.4	4511.6	4434.1	3841.1	3108.5
22.5°	5267.4	5294.6	5298.4	5348.8	5372.1	5391.5	5275.2	4802.3	4740.3	4093.0	3244.2
25°	5500.0	5531.0	5519.4	5542.6	5546.5	5569.7	5558.1	5135.6	5073.6	4379.8	3407.0
27.5°	5798.4	5837.2	5829.4	5806.2	5771.3	5751.9	5802.3	5472.8	5414.7	4666.6	3573.6
30°	6120.1	6166.6	6155.0	6108.5	6015.5	5934.1	6003.9	5790.7	5736.4	4961.2	3759.7
32.5°	6445.7	6500.0	6496.1	6418.6	6259.7	6120.1	6224.8	6089.1	6050.4	5279.0	3961.2
35°	6658.9	6728.7	6720.9	6674.4	6469.0	6348.8	6476.7	6395.3	6368.2	5666.6	4251.9
37.5°	7003.8	7077.5	7011.6	6895.3	6658.9	6596.9	6751.9	6740.3	6720.9	6077.5	4558.1
40°	7841.1	7949.6	7775.2	7298.4	6910.8	6856.6	7077.5	7124.0	7104.6	6484.5	4833.3
42.5°	8717.0	8879.8	8608.5	7949.6	7368.2	7170.5	7434.1	7500.0	7476.7	6833.3	5081.4
45°	9248.0	9317.8	9046.5	8534.8	8178.3	7550.4	7813.9	7922.4	7903.1	7251.9	5399.2
47.5°	9682.1	9655.0	9344.9	9000.0	9065.9	8085.2	8244.2	8457.3	8441.8	7713.1	5748.0
50°	9775.2	9713.1	9589.1	9372.1	9546.5	8627.9	8697.6	9065.9	9050.4	8224.8	6100.8
52.5°	9120.1	9038.7	9375.9	9558.1	9500.0	9023.2	9197.6	9732.5	9724.8	8779.0	6438.0
55°	7484.5	7418.6	8325.5	9267.4	9449.6	9302.3	9751.9	10426.3	10469.0	9368.2	6744.2
57.5°	5887.6	5817.8	6709.3	8538.7	9263.5	9558.1	10399.2	11220.9	11275.1	10007.7	7034.9
60°	4693.8	4589.1	5271.3	7391.4	8914.7	9755.8	11023.2	12093.0	12100.7	10593.0	7213.1
62.5°	3189.9	3073.6	3829.4	5938.0	8329.4	9786.8	11503.8	12844.9	12875.9	11031.0	7244.2
65°	1938.0	1841.1	2352.7	4337.2	7465.1	9523.2	11511.6	13399.2	13426.3	11232.5	7058.1
67.5°	1124.0	1085.3	1345.0	2701.5	6031.0	8813.9	11027.1	13313.9	13364.3	11147.2	6635.6
70°	655.0	651.2	748.1	1337.2	4255.8	7406.9	9945.7	12596.8	12670.5	10701.5	5988.3
72.5°	480.6	488.4	527.1	717.1	2465.1	5333.3	8422.4	11155.0	11267.4	9829.4	5065.9
75°	379.8	383.7	418.6	488.4	1294.6	3015.5	6310.1	8953.5	9042.6	8275.2	3957.3
77.5°	282.9	290.7	317.8	345.0	600.8	1383.7	3550.4	5515.5	5368.2	4542.6	1910.8
80°	205.4	224.8	236.4	248.1	317.8	534.9	1065.9	1922.5	1907.0	1984.5	903.1
82.5°	131.8	147.3	158.9	166.7	189.9	255.8	317.8	430.2	465.1	771.3	360.5
85°	58.1	65.9	73.6	89.1	81.4	89.1	131.8	85.3	73.6	116.3	65.9
87.5°	0.0	0.0	11.6	19.4	15.5	7.8	23.3	15.5	11.6	11.6	11.6
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°	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7	2445.7
2.5°	2469.0	2426.3	2337.2	2251.9	2201.5	2135.7	2077.5	2023.2	2019.4	2003.9	1976.7
5°	2500.0	2418.6	2251.9	2093.0	1972.9	1845.0	1736.4	1651.2	1620.1	1596.9	1565.9
7.5°	2531.0	2403.1	2155.0	1922.5	1732.6	1554.3	1426.4	1310.1	1275.2	1244.2	1224.8
10°	2542.6	2376.0	2042.6	1732.6	1484.5	1294.6	1158.9	1073.6	1042.6	1027.1	1015.5
12.5°	2577.5	2360.5	1938.0	1554.3	1267.4	1093.0	996.1	945.7	934.1	922.5	910.8
15°	2624.0	2360.5	1833.3	1379.8	1096.9	957.4	899.2	864.3	856.6	852.7	845.0
17.5°	2674.4	2360.5	1732.6	1232.6	972.9	868.2	825.6	806.2	802.3	798.4	794.6
20°	2744.2	2364.3	1624.0	1104.6	883.7	802.3	767.4	744.2	740.3	736.4	736.4
22.5°	2813.9	2372.1	1519.4	1007.7	825.6	751.9	709.3	686.0	678.3	678.3	678.3
25°	2903.1	2395.3	1422.5	926.4	775.2	705.4	651.2	631.8	627.9	627.9	624.0
27.5°	3007.7	2422.5	1337.2	864.3	724.8	651.2	596.9	577.5	569.8	569.8	565.9
30°	3120.1	2449.6	1267.4	817.8	674.4	596.9	546.5	523.3	515.5	519.4	515.5
32.5°	3244.2	2488.4	1213.2	786.8	627.9	550.4	503.9	476.7	472.9	472.9	469.0
35°	3453.5	2596.9	1205.4	771.3	589.1	515.5	469.0	441.9	438.0	438.0	434.1
37.5°	3678.3	2720.9	1240.3	763.6	558.1	484.5	441.9	414.7	410.9	410.9	410.9
40°	3868.2	2813.9	1279.1	763.6	538.8	457.4	418.6	395.3	395.3	395.3	395.3
42.5°	3996.1	2821.7	1271.3	763.6	523.3	438.0	403.1	379.8	379.8	383.7	379.8
45°	4186.0	2860.5	1240.3	751.9	511.6	422.5	387.6	368.2	364.3	368.2	368.2
47.5°	4410.8	2930.2	1209.3	705.4	507.7	407.0	376.0	352.7	348.8	352.7	348.8
50°	4624.0	2992.2	1193.8	643.4	500.0	391.5	360.5	337.2	333.3	337.2	333.3
52.5°	4802.3	3019.4	1166.7	600.8	480.6	376.0	345.0	321.7	314.0	317.8	317.8
55°	4945.7	3011.6	1127.9	565.9	445.7	360.5	325.6	306.2	294.6	294.6	290.7
57.5°	5077.5	3015.5	1093.0	531.0	407.0	337.2	310.1	286.8	271.3	267.4	263.6
60°	5127.9	2996.1	1031.0	484.5	368.2	317.8	290.7	263.6	248.1	244.2	240.3
62.5°	5058.1	2926.3	949.6	403.1	333.3	294.6	271.3	244.2	228.7	224.8	220.9
65°	4860.4	2794.6	825.6	317.8	302.3	267.4	248.1	228.7	209.3	201.5	197.7
67.5°	4523.2	2604.6	670.5	255.8	267.4	244.2	232.6	209.3	186.0	178.3	174.4
70°	4042.6	2352.7	503.9	217.1	236.4	217.1	209.3	186.0	166.7	158.9	155.0
72.5°	3368.2	1945.7	352.7	186.0	205.4	189.9	182.2	166.7	147.3	135.7	135.7
75°	2546.5	1395.3	232.6	158.9	170.5	162.8	151.2	139.5	127.9	120.2	116.3
77.5°	1096.9	542.6	143.4	120.2	139.5	135.7	120.2	112.4	108.5	100.8	100.8
80°	472.9	220.9	89.1	89.1	100.8	96.9	93.0	85.3	85.3	81.4	77.5
82.5°	174.4	89.1	54.3	65.9	73.6	65.9	65.9	65.9	65.9	62.0	62.0
85°	42.6	27.1	27.1	38.8	42.6	38.8	42.6	38.8	38.8	38.8	34.9
87.5°	11.6	11.6	15.5	15.5	15.5	15.5	15.5	11.6	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)