

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: P841169

Luminaire Tested: **ARCH4-140-730-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841169
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: ARCH4-140-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1155mA 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: 16142 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

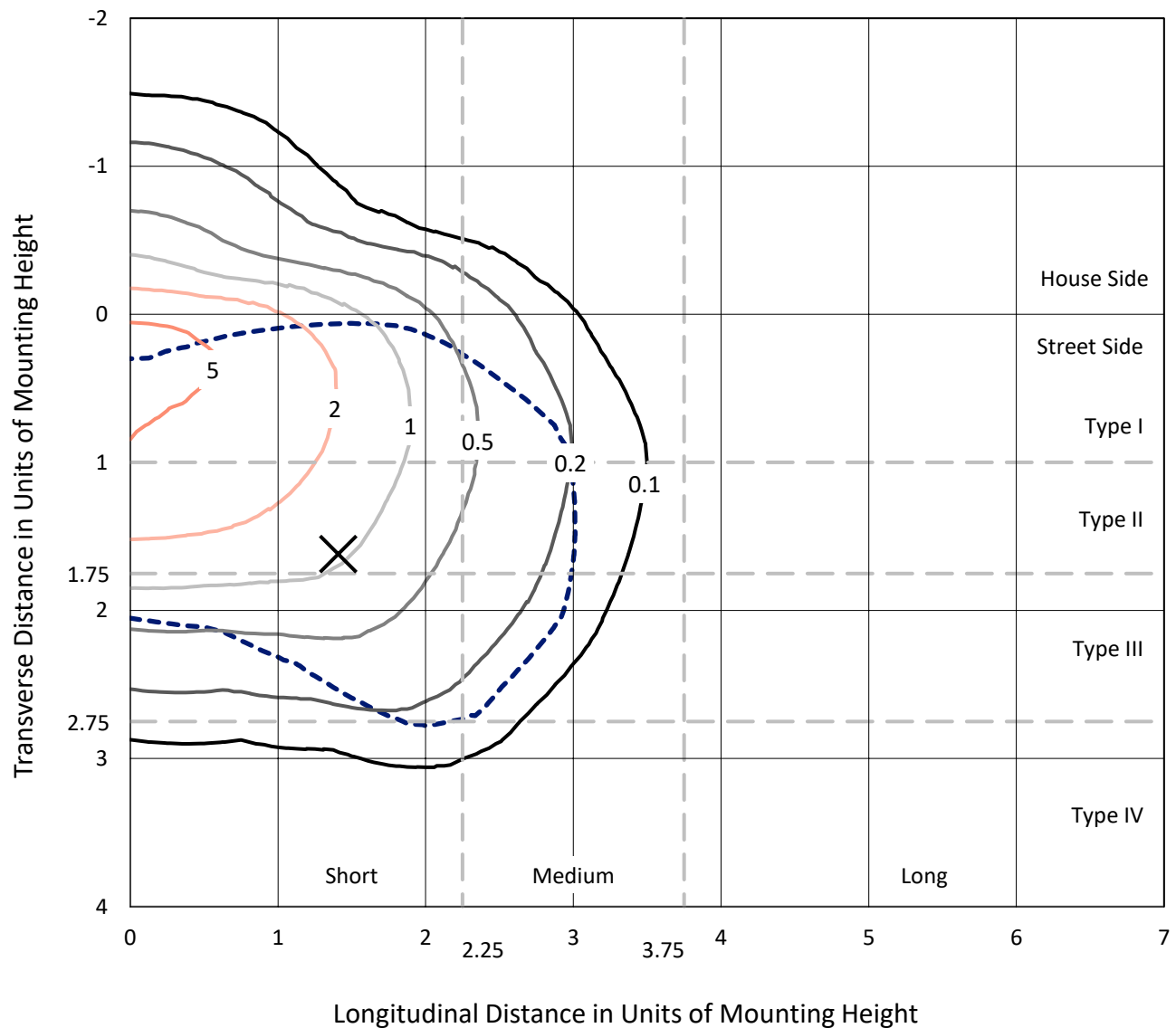
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

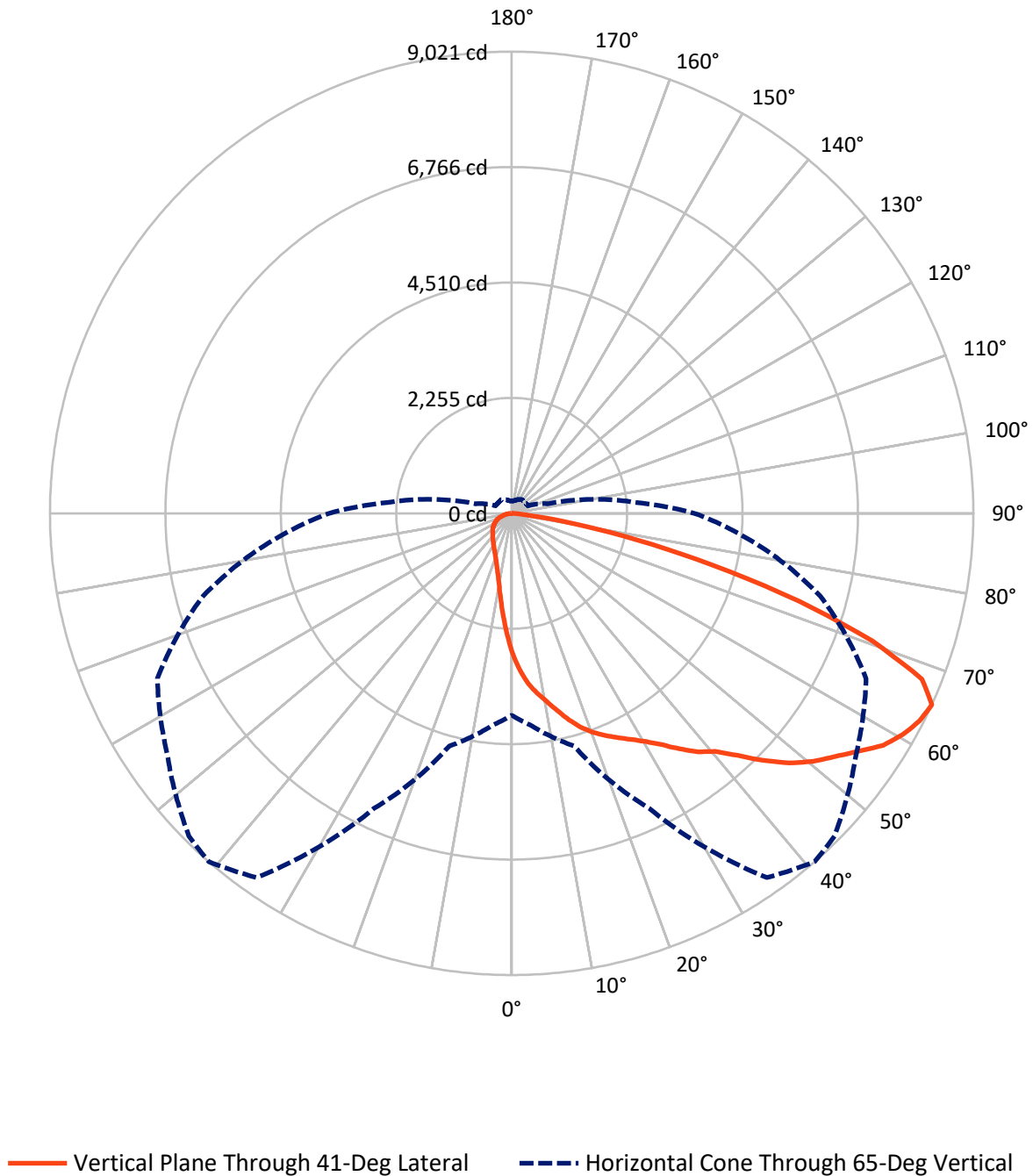
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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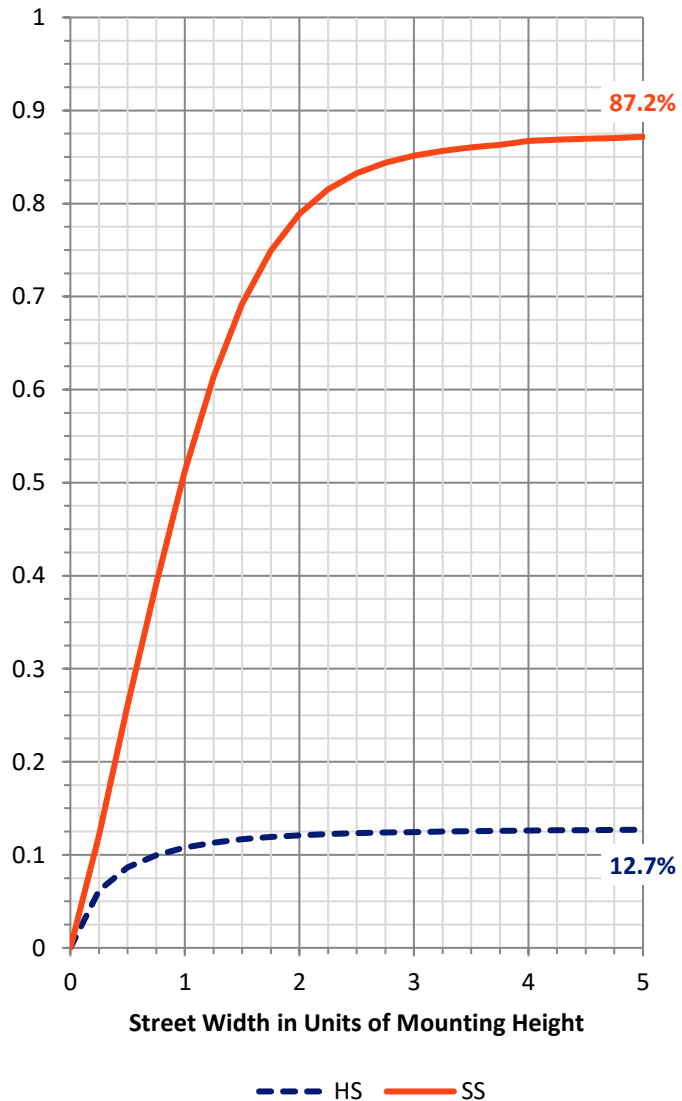
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2072.4	0.0	2072.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	14069.6	0.0	14069.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	16142.0	0.0	16142.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.3	1.6
10°-20°	768.5	4.8
20°-30°	1322.0	8.2
30°-40°	2005.1	12.4
40°-50°	2937.5	18.2
50°-60°	3709.4	23.0
60°-70°	3478.2	21.5
70°-80°	1550.2	9.6
80°-90°	114.8	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°	16142.0	100.0
0°-180°	16142.0	100.0

Coefficient of Utilization



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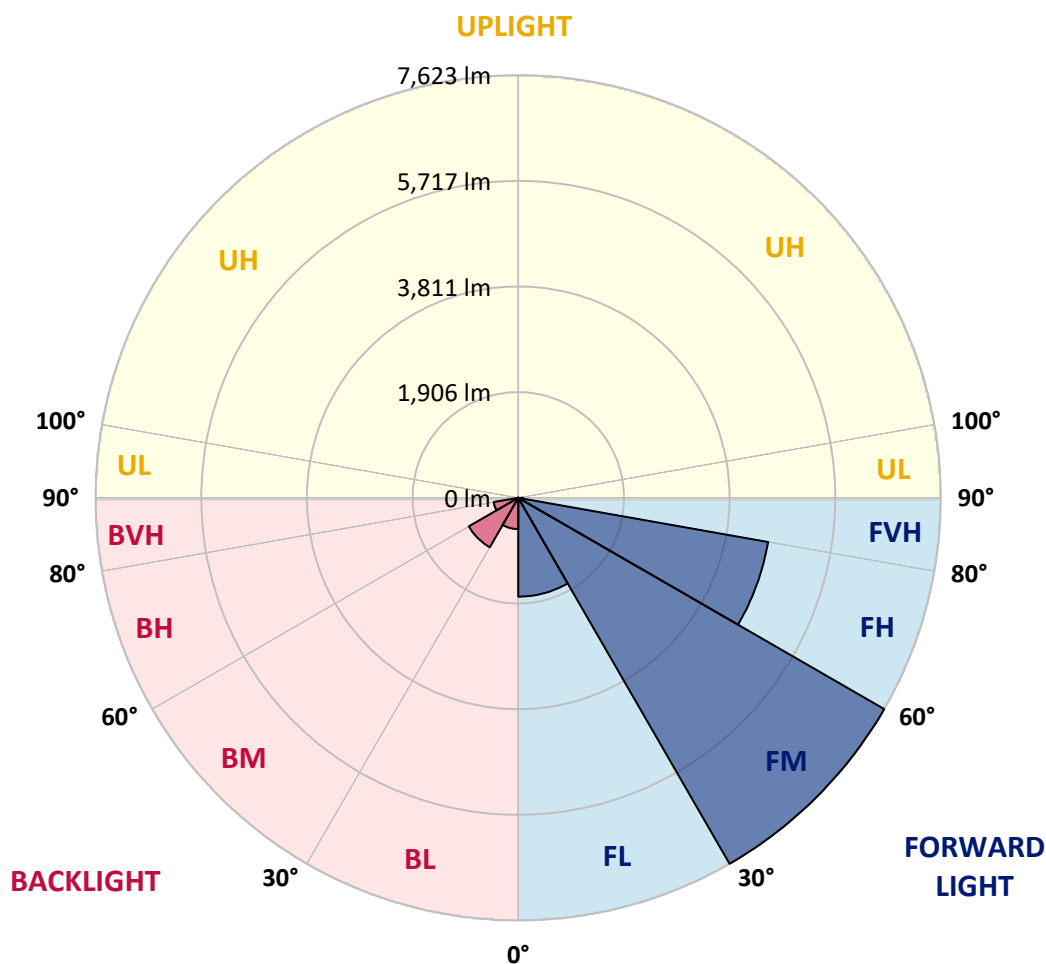
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1782.7	11.0			
FM	(30°-60°)	7622.9	47.2			
FH	(60°-80°)	4578.3	28.4			G2/5000
FVH	(80°-90°)	85.8	0.5			G1/100
BL	(0°-30°)	564.1	3.5	B2/1000		
BM	(30°-60°)	1029.0	6.4	B2/2500		
BH	(60°-80°)	450.2	2.8	B1/500		G1/500
BVH	(80°-90°)	29.1	0.2			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5
2.5°	3172.6	3162.4	3155.6	3118.2	3118.2	3067.1	3070.5	3022.8	2965.0	2873.1	2774.3
5°	3472.2	3458.6	3441.5	3404.1	3390.5	3339.4	3332.6	3264.5	3165.8	3005.8	2828.8
7.5°	3734.3	3720.7	3696.9	3642.4	3604.9	3543.7	3526.6	3438.1	3329.2	3131.8	2883.3
10°	3972.6	3962.4	3931.7	3863.7	3812.6	3737.7	3707.1	3587.9	3451.8	3233.9	2927.5
12.5°	4214.3	4200.7	4159.8	4101.9	4040.7	3952.2	3914.7	3761.5	3587.9	3346.2	2992.2
15°	4438.9	4418.5	4387.9	4326.6	4272.1	4187.0	4146.2	3965.8	3754.7	3472.2	3077.3
17.5°	4585.3	4568.3	4541.1	4507.0	4462.8	4398.1	4357.2	4180.2	3921.5	3594.7	3165.8
20°	4673.8	4667.0	4656.8	4636.4	4616.0	4571.7	4541.1	4374.3	4101.9	3713.9	3250.9
22.5°	4741.9	4735.1	4731.7	4731.7	4735.1	4718.1	4697.7	4554.7	4275.5	3839.8	3329.2
25°	4847.4	4844.0	4837.2	4830.4	4854.2	4857.7	4850.8	4752.1	4493.4	4006.6	3427.9
27.5°	4993.8	4983.6	4970.0	4963.2	4987.0	5004.0	5017.6	4949.6	4724.9	4176.8	3540.3
30°	5218.5	5187.8	5153.8	5130.0	5147.0	5174.2	5204.9	5164.0	4963.2	4387.9	3656.0
32.5°	5484.0	5446.6	5368.3	5324.0	5368.3	5388.7	5412.5	5392.1	5211.7	4616.0	3771.7
35°	5807.4	5763.1	5681.4	5616.8	5695.1	5650.8	5640.6	5620.2	5446.6	4840.6	3901.1
37.5°	6345.2	6280.6	6151.2	6008.2	6008.2	5912.9	5875.5	5814.2	5657.6	5041.5	4027.0
40°	6968.2	6883.1	6716.3	6505.2	6311.2	6113.8	6089.9	6045.7	5906.1	5273.0	4170.0
42.5°	7652.4	7489.0	7257.5	7002.2	6689.1	6464.4	6409.9	6284.0	6147.8	5507.8	4313.0
45°	8411.5	8071.1	7734.1	7604.8	7087.3	6883.1	6781.0	6552.9	6399.7	5752.9	4462.8
47.5°	8534.1	8268.6	8043.9	8023.5	7458.4	7288.2	7172.4	6845.6	6672.0	6015.0	4619.4
50°	8466.0	8306.0	8329.8	8248.1	7730.7	7618.4	7529.9	7158.8	6941.0	6266.9	4762.3
52.5°	8180.1	8268.6	8404.7	8254.9	7989.4	7897.5	7853.3	7495.8	7192.9	6498.4	4891.7
55°	7839.6	7900.9	8193.7	8377.5	8289.0	8207.3	8166.4	7887.3	7441.4	6692.5	5010.8
57.5°	7342.6	7315.4	7638.8	8357.1	8602.2	8554.5	8510.2	8272.0	7672.8	6832.0	5085.7
60°	6597.1	6539.3	6947.8	7948.6	8704.3	8779.2	8758.7	8527.3	7849.9	6828.6	5055.1
62.5°	5307.0	5450.0	6015.0	7281.4	8748.5	8939.2	8901.7	8547.7	7907.7	6631.2	4861.1
65°	3945.4	4149.6	4704.5	6362.3	8687.3	9020.9	8918.7	8214.1	7638.8	6239.7	4435.5
67.5°	2842.4	3022.8	3427.9	5235.5	8098.4	8646.4	8527.3	7669.4	7019.3	5684.8	3846.6
70°	1943.7	2073.1	2348.8	3812.6	6913.7	7475.4	7400.5	6855.9	6042.3	5024.5	3125.0
72.5°	1371.9	1426.3	1603.3	2515.6	5252.5	5865.3	5776.8	5640.6	4854.2	4176.8	2430.5
75°	1028.0	1062.1	1157.4	1627.2	3543.7	4064.5	3982.8	4061.1	3625.4	3162.4	1770.1
77.5°	388.1	422.1	657.0	1038.3	2096.9	2495.2	2413.5	2461.2	2015.2	1596.5	881.7
80°	105.5	112.3	217.9	493.6	953.1	1242.5	1130.2	970.2	748.9	735.3	466.4
82.5°	44.3	51.1	98.7	265.5	340.4	340.4	285.9	354.0	285.9	343.8	224.7
85°	17.0	20.4	23.8	68.1	44.3	47.7	51.1	68.1	57.9	71.5	51.1
87.5°	0.0	0.0	0.0	3.4	3.4	6.8	3.4	6.8	10.2	10.2	10.2
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°	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5	2750.5
2.5°	2733.5	2696.0	2641.6	2553.1	2461.2	2410.1	2345.4	2335.2	2267.1	2260.3	2233.1
5°	2750.5	2672.2	2532.7	2362.4	2195.6	2066.3	1971.0	1919.9	1821.2	1821.2	1794.0
7.5°	2764.1	2641.6	2416.9	2165.0	1936.9	1763.3	1634.0	1579.5	1491.0	1484.2	1463.8
10°	2767.5	2604.1	2291.0	1964.2	1685.0	1508.0	1382.1	1320.8	1242.5	1235.7	1222.1
12.5°	2794.8	2583.7	2178.6	1790.6	1504.6	1314.0	1191.4	1140.4	1079.1	1072.3	1058.7
15°	2839.0	2583.7	2083.3	1644.2	1344.6	1167.6	1062.1	1014.4	970.2	963.4	956.6
17.5°	2883.3	2576.9	1988.0	1508.0	1211.9	1051.9	960.0	922.5	888.5	885.1	878.3
20°	2924.1	2573.5	1892.7	1392.3	1109.7	956.6	885.1	851.0	823.8	823.8	820.4
22.5°	2965.0	2566.7	1800.8	1283.3	1021.2	885.1	823.8	786.3	765.9	765.9	762.5
25°	3026.2	2566.7	1715.7	1191.4	949.7	830.6	769.3	742.1	725.1	721.7	721.7
27.5°	3097.7	2587.1	1640.8	1109.7	888.5	776.1	728.5	701.2	680.8	674.0	677.4
30°	3176.0	2604.1	1572.7	1038.3	830.6	735.3	684.2	657.0	636.6	629.8	633.2
32.5°	3254.3	2624.6	1511.4	973.6	772.7	697.8	646.8	616.1	595.7	592.3	592.3
35°	3339.4	2645.0	1450.1	919.1	725.1	660.4	612.7	578.7	565.1	558.3	561.7
37.5°	3424.5	2679.0	1392.3	868.0	691.0	626.4	582.1	548.1	537.8	534.4	534.4
40°	3526.6	2730.1	1368.4	834.0	660.4	595.7	558.3	524.2	514.0	514.0	514.0
42.5°	3611.7	2770.9	1348.0	796.6	636.6	568.5	534.4	507.2	500.4	497.0	500.4
45°	3696.9	2808.4	1320.8	762.5	605.9	541.3	514.0	486.8	480.0	480.0	480.0
47.5°	3782.0	2828.8	1283.3	728.5	578.7	517.4	493.6	469.8	463.0	463.0	463.0
50°	3850.0	2845.8	1228.9	691.0	548.1	497.0	473.2	449.3	442.5	442.5	442.5
52.5°	3918.1	2849.2	1171.0	646.8	517.4	473.2	452.7	428.9	422.1	418.7	418.7
55°	3979.4	2845.8	1102.9	595.7	483.4	445.9	428.9	408.5	394.9	381.3	388.1
57.5°	4023.6	2842.4	1024.6	544.7	449.3	418.7	411.9	384.7	357.4	323.4	330.2
60°	4006.6	2805.0	939.5	480.0	411.9	391.5	391.5	354.0	306.4	289.3	292.8
62.5°	3897.7	2699.5	851.0	411.9	374.5	364.2	360.8	320.0	282.5	265.5	268.9
65°	3570.9	2433.9	721.7	350.6	337.0	333.6	333.6	296.2	262.1	241.7	245.1
67.5°	3073.9	2042.5	588.9	296.2	299.6	306.4	306.4	272.3	238.3	217.9	221.3
70°	2464.6	1596.5	469.8	255.3	258.7	268.9	275.7	245.1	214.5	194.0	194.0
72.5°	1855.2	1211.9	377.9	214.5	231.5	231.5	241.7	217.9	187.2	166.8	170.2
75°	1344.6	868.0	299.6	180.4	200.8	197.4	197.4	183.8	160.0	146.4	146.4
77.5°	636.6	456.1	238.3	129.4	156.6	153.2	156.6	146.4	136.2	122.5	126.0
80°	313.2	224.7	153.2	91.9	108.9	112.3	122.5	115.7	112.3	102.1	102.1
82.5°	149.8	88.5	71.5	64.7	74.9	78.3	85.1	85.1	88.5	81.7	81.7
85°	40.8	23.8	30.6	40.8	47.7	51.1	57.9	61.3	61.3	57.9	61.3
87.5°	10.2	10.2	13.6	20.4	23.8	27.2	30.6	30.6	13.6	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)