

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: P841770

Luminaire Tested: **ARCH4-220-750-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841770
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: ARCH4-220-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 870mA 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: 23870 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

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



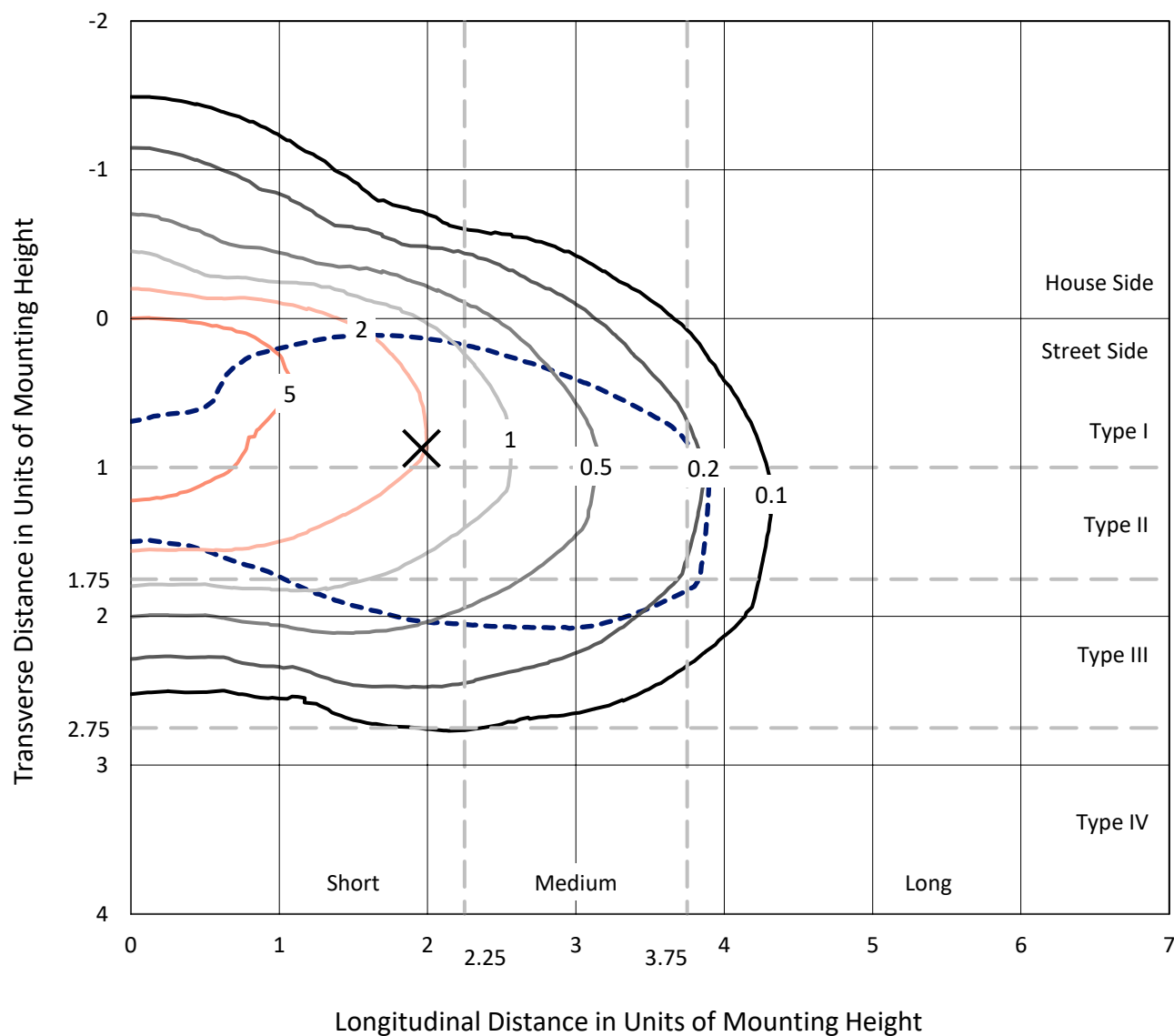
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

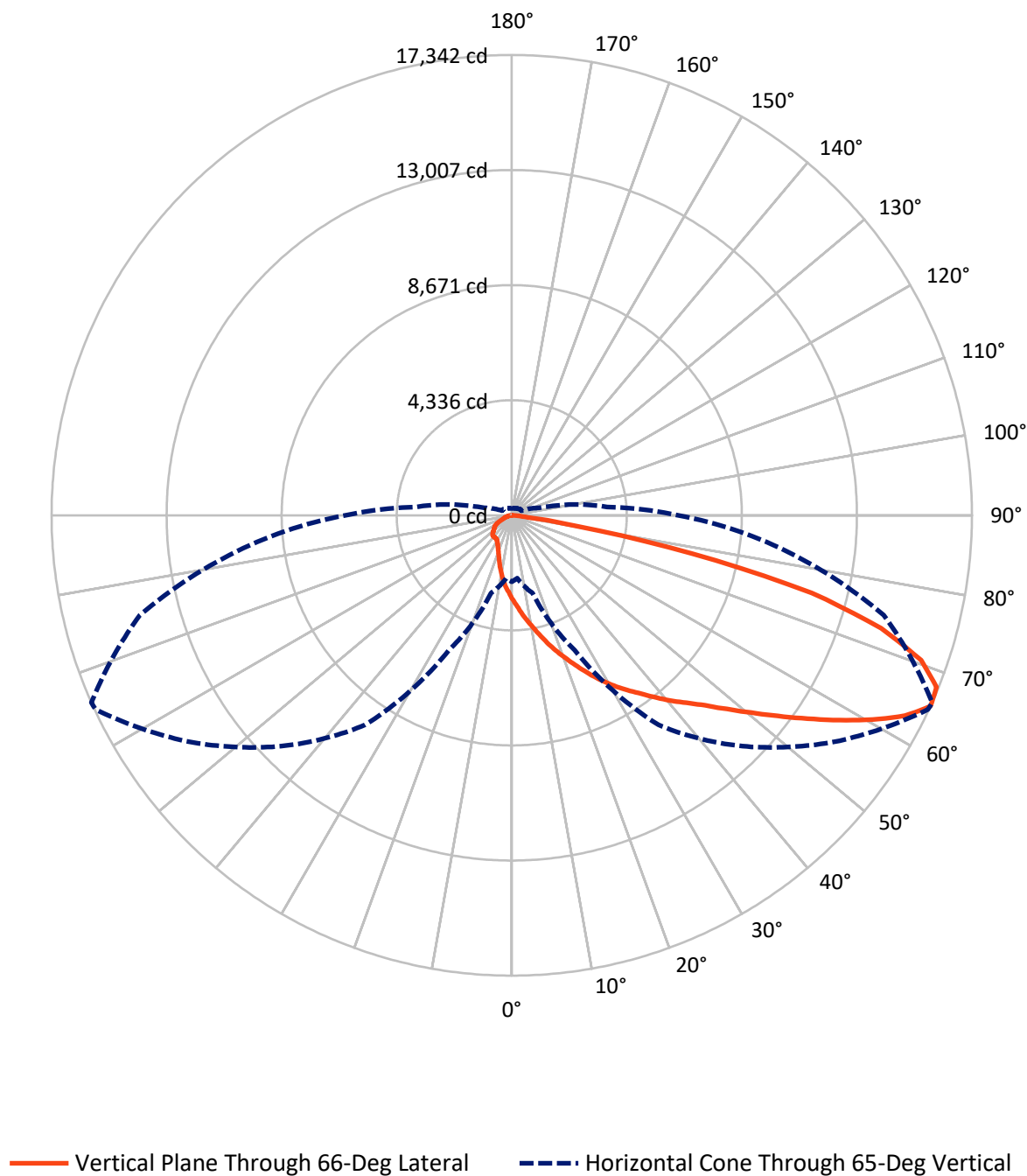


Based on 25 foot mounting height. Maximum calculated value = 9.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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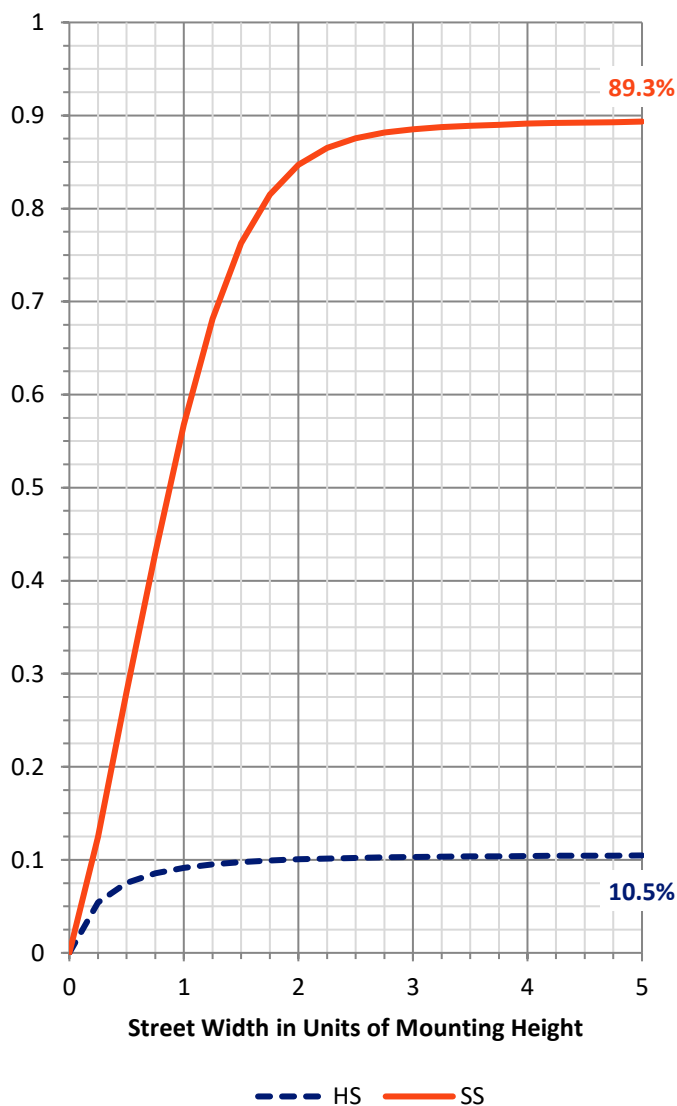
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2524.8	0.0	2524.8
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	21345.2	0.0	21345.2
	% Fixture	89.4	0.0	89.4
Total	Lumens	23870.0	0.0	23870.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.8	1.3
10°-20°	1016.2	4.3
20°-30°	1838.7	7.7
30°-40°	2875.2	12.0
40°-50°	4361.7	18.3
50°-60°	5541.7	23.2
60°-70°	5178.2	21.7
70°-80°	2573.5	10.8
80°-90°	172.9	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°	23870.0	100.0
0°-180°	23870.0	100.0

Coefficient of Utilization



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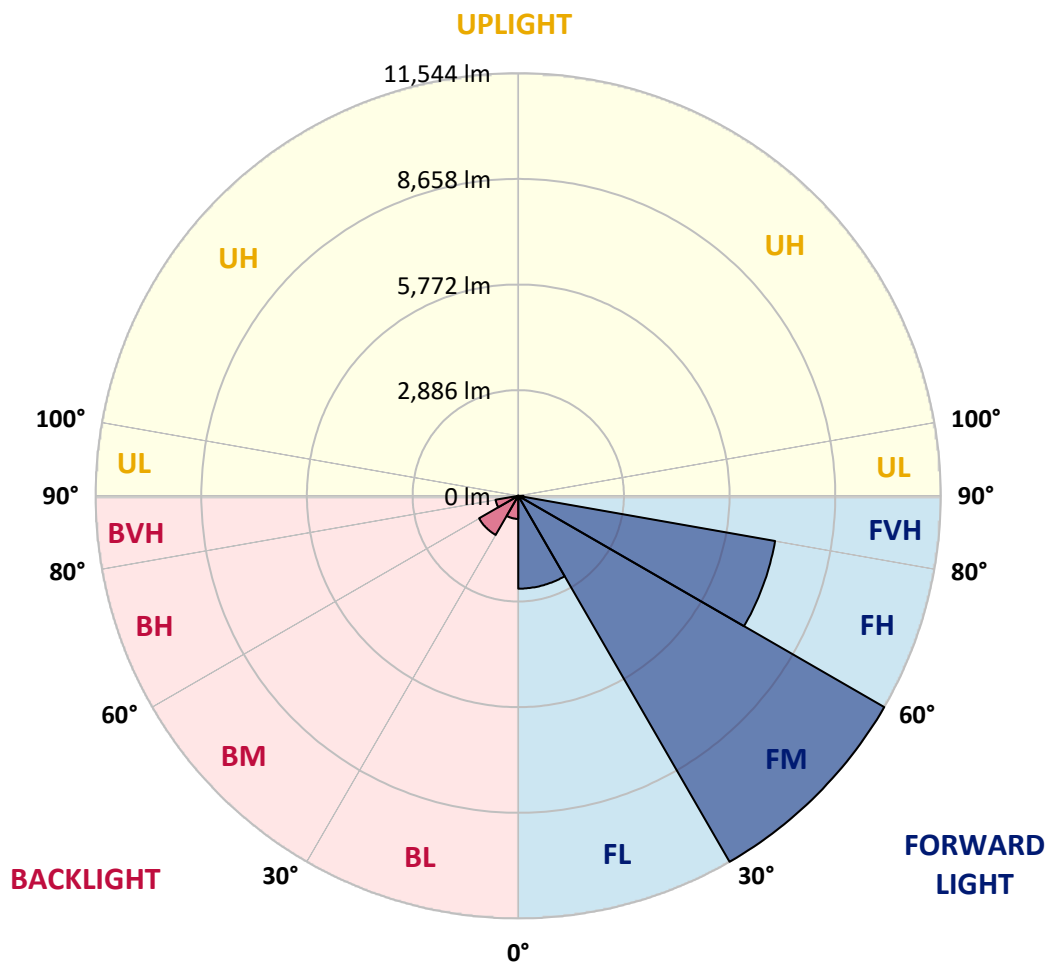
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2536.2	10.6			
FM	(30°-60°)	11543.8	48.4			
FH	(60°-80°)	7122.9	29.8			G3/7500
FVH	(80°-90°)	142.3	0.6			G2/225
BL	(0°-30°)	630.6	2.6	B2/1000		
BM	(30°-60°)	1234.9	5.2	B2/2500		
BH	(60°-80°)	628.8	2.6	B2/1000		G2/1000
BVH	(80°-90°)	30.6	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1
2.5°	3689.7	3719.8	3734.8	3739.8	3624.7	3574.6	3524.5	3409.4	3384.4	3319.3	3234.2
5°	4340.6	4380.6	4370.6	4350.6	4210.4	4050.2	3920.0	3704.8	3669.7	3514.5	3324.3
7.5°	4981.4	5016.5	5006.4	4931.3	4776.1	4550.9	4335.6	4020.2	3970.1	3719.8	3414.4
10°	5517.1	5547.1	5542.1	5467.0	5281.8	5006.4	4746.1	4325.6	4265.5	3910.0	3489.5
12.5°	5957.7	5997.7	5992.7	5942.6	5777.4	5477.0	5181.7	4676.0	4600.9	4140.3	3594.6
15°	6303.1	6353.2	6353.2	6333.1	6218.0	5967.7	5632.2	5061.5	4971.4	4405.7	3724.8
17.5°	6513.4	6553.4	6588.5	6623.5	6543.4	6353.2	6047.8	5447.0	5351.9	4666.0	3860.0
20°	6623.5	6663.6	6688.6	6763.7	6778.7	6683.6	6443.3	5827.5	5727.4	4961.4	4015.2
22.5°	6803.8	6838.8	6843.8	6908.9	6938.9	6964.0	6813.8	6203.0	6122.9	5286.8	4190.4
25°	7104.1	7144.2	7129.2	7159.2	7164.2	7194.3	7179.2	6633.5	6553.4	5657.3	4400.7
27.5°	7489.6	7539.7	7529.7	7499.6	7454.6	7429.6	7494.6	7069.1	6994.0	6027.8	4615.9
30°	7905.2	7965.2	7950.2	7890.1	7770.0	7664.9	7755.0	7479.6	7409.5	6408.2	4856.2
32.5°	8325.7	8395.8	8390.8	8290.7	8085.4	7905.2	8040.3	7865.1	7815.1	6818.8	5116.6
35°	8601.1	8691.2	8681.2	8621.1	8355.7	8200.5	8365.8	8260.6	8225.6	7319.4	5492.1
37.5°	9046.6	9141.8	9056.6	8906.5	8601.1	8521.0	8721.2	8706.2	8681.2	7850.1	5887.6
40°	10128.0	10268.2	10042.9	9427.1	8926.5	8856.4	9141.8	9201.8	9176.8	8375.8	6243.0
42.5°	11259.5	11469.8	11119.3	10268.2	9517.2	9261.9	9602.4	9687.5	9657.4	8826.4	6563.4
45°	11945.4	12035.5	11685.0	11024.2	10563.6	9752.5	10093.0	10233.2	10208.1	9367.0	6974.0
47.5°	12506.1	12471.0	12070.5	11625.0	11710.1	10443.4	10648.7	10924.1	10904.0	9962.8	7424.6
50°	12626.2	12546.1	12385.9	12105.6	12330.9	11144.3	11234.5	11710.1	11690.0	10623.7	7880.1
52.5°	11780.2	11675.0	12110.6	12345.9	12270.8	11655.0	11880.3	12571.2	12561.2	11339.6	8315.7
55°	9667.4	9582.3	10753.8	11970.4	12205.7	12015.5	12596.2	13467.3	13522.4	12100.6	8711.2
57.5°	7604.8	7514.7	8666.1	11029.2	11965.4	12345.9	13432.3	14493.6	14563.7	12926.6	9086.7
60°	6062.8	5927.6	6808.8	9547.3	11514.8	12601.2	14238.3	15620.1	15630.1	13682.6	9317.0
62.5°	4120.3	3970.1	4946.4	7669.9	10758.8	12641.3	14859.1	16591.3	16631.4	14248.3	9357.0
65°	2503.2	2378.1	3038.9	5602.2	9642.4	12300.8	14869.1	17307.3	17342.3	14508.7	9116.7
67.5°	1451.9	1401.8	1737.2	3489.5	7790.0	11384.6	14243.3	17197.1	17262.2	14398.5	8571.0
70°	846.1	841.1	966.2	1727.2	5497.1	9567.3	12846.5	16270.9	16366.1	13822.8	7734.9
72.5°	620.8	630.8	680.9	926.2	3184.1	6888.9	10879.0	14408.5	14553.7	12696.3	6543.4
75°	490.6	495.6	540.7	630.8	1672.2	3895.0	8150.5	11564.9	11680.0	10688.7	5111.6
77.5°	365.5	375.5	410.5	445.6	776.0	1787.3	4585.9	7124.2	6933.9	5867.5	2468.2
80°	265.3	290.4	305.4	320.4	410.5	690.9	1376.8	2483.2	2463.2	2563.3	1166.5
82.5°	170.2	190.2	205.3	215.3	245.3	330.4	410.5	555.7	600.8	996.3	465.6
85°	75.1	85.1	95.1	115.1	105.1	115.1	170.2	110.1	95.1	150.2	85.1
87.5°	0.0	0.0	15.0	25.0	20.0	10.0	30.0	20.0	15.0	15.0	15.0
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°	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1	3159.1
2.5°	3189.1	3134.0	3018.9	2908.7	2843.7	2758.5	2683.5	2613.4	2608.4	2588.3	2553.3
5°	3229.2	3124.0	2908.7	2703.5	2548.3	2383.1	2242.9	2132.7	2092.7	2062.7	2022.6
7.5°	3269.2	3104.0	2783.6	2483.2	2237.9	2007.6	1842.4	1692.2	1647.1	1607.1	1582.0
10°	3284.2	3068.9	2638.4	2237.9	1917.5	1672.2	1496.9	1386.8	1346.7	1326.7	1311.7
12.5°	3329.3	3048.9	2503.2	2007.6	1637.1	1411.8	1286.7	1221.6	1206.6	1191.5	1176.5
15°	3389.4	3048.9	2368.0	1782.3	1416.8	1236.6	1161.5	1116.4	1106.4	1101.4	1091.4
17.5°	3454.4	3048.9	2237.9	1592.0	1256.6	1121.4	1066.4	1041.3	1036.3	1031.3	1026.3
20°	3544.6	3053.9	2097.7	1426.8	1141.5	1036.3	991.3	961.2	956.2	951.2	951.2
22.5°	3634.7	3063.9	1962.5	1301.7	1066.4	971.2	916.2	886.1	876.1	876.1	876.1
25°	3749.8	3094.0	1837.4	1196.5	1001.3	911.2	841.1	816.0	811.0	811.0	806.0
27.5°	3885.0	3129.0	1727.2	1116.4	936.2	841.1	771.0	746.0	735.9	735.9	730.9
30°	4030.2	3164.1	1637.1	1056.4	871.1	771.0	705.9	675.9	665.9	670.9	665.9
32.5°	4190.4	3214.1	1567.0	1016.3	811.0	710.9	650.8	615.8	610.8	610.8	605.8
35°	4460.7	3354.3	1557.0	996.3	761.0	665.9	605.8	570.7	565.7	565.7	560.7
37.5°	4751.1	3514.5	1602.1	986.3	720.9	625.8	570.7	535.7	530.7	530.7	530.7
40°	4996.4	3634.7	1652.1	986.3	695.9	590.8	540.7	510.7	510.7	510.7	510.7
42.5°	5161.6	3644.7	1642.1	986.3	675.9	565.7	520.7	490.6	490.6	495.6	490.6
45°	5407.0	3694.8	1602.1	971.2	660.9	545.7	500.6	475.6	470.6	475.6	475.6
47.5°	5697.3	3784.9	1562.0	911.2	655.8	525.7	485.6	455.6	450.6	455.6	450.6
50°	5972.7	3865.0	1542.0	831.1	645.8	505.7	465.6	435.6	430.6	435.6	430.6
52.5°	6203.0	3900.0	1506.9	776.0	620.8	485.6	445.6	415.5	405.5	410.5	410.5
55°	6388.2	3890.0	1456.9	730.9	575.7	465.6	420.5	395.5	380.5	380.5	375.5
57.5°	6558.4	3895.0	1411.8	685.9	525.7	435.6	400.5	370.5	350.5	345.4	340.4
60°	6623.5	3870.0	1331.7	625.8	475.6	410.5	375.5	340.4	320.4	315.4	310.4
62.5°	6533.4	3779.9	1226.6	520.7	430.6	380.5	350.5	315.4	295.4	290.4	285.4
65°	6278.1	3609.6	1066.4	410.5	390.5	345.4	320.4	295.4	270.3	260.3	255.3
67.5°	5842.5	3364.3	866.1	330.4	345.4	315.4	300.4	270.3	240.3	230.3	225.3
70°	5221.7	3038.9	650.8	280.4	305.4	280.4	270.3	240.3	215.3	205.3	200.3
72.5°	4350.6	2513.2	455.6	240.3	265.3	245.3	235.3	215.3	190.2	175.2	175.2
75°	3289.2	1802.3	300.4	205.3	220.3	210.3	195.3	180.2	165.2	155.2	150.2
77.5°	1416.8	700.9	185.2	155.2	180.2	175.2	155.2	145.2	140.2	130.2	130.2
80°	610.8	285.4	115.1	115.1	130.2	125.2	120.2	110.1	110.1	105.1	100.1
82.5°	225.3	115.1	70.1	85.1	95.1	85.1	85.1	85.1	85.1	80.1	80.1
85°	55.1	35.0	35.0	50.1	55.1	50.1	55.1	50.1	50.1	50.1	45.1
87.5°	15.0	15.0	20.0	20.0	20.0	20.0	20.0	15.0	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)