

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: INVUE

Report Number: P676208

Luminaire Tested: **CCW-SA-1B-850-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676208
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1B-850-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @450mA w/
T1 distribution lens
Light Source: (16) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

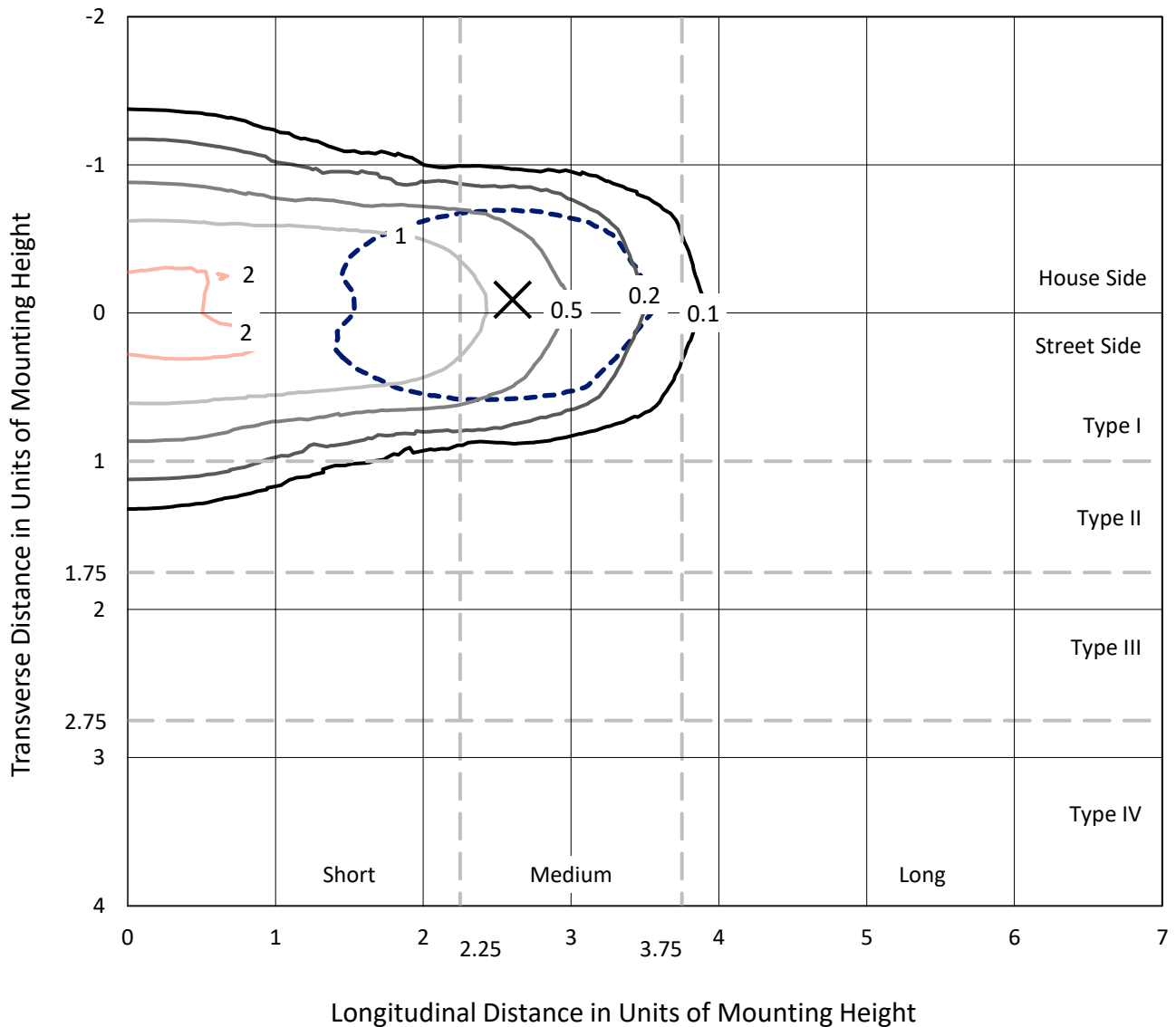
Lumens per Lamp: N/A
Luminaire Lumens: 2934.6 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 24
Input Voltage (V): 120
Input Current (A_{in}): 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: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

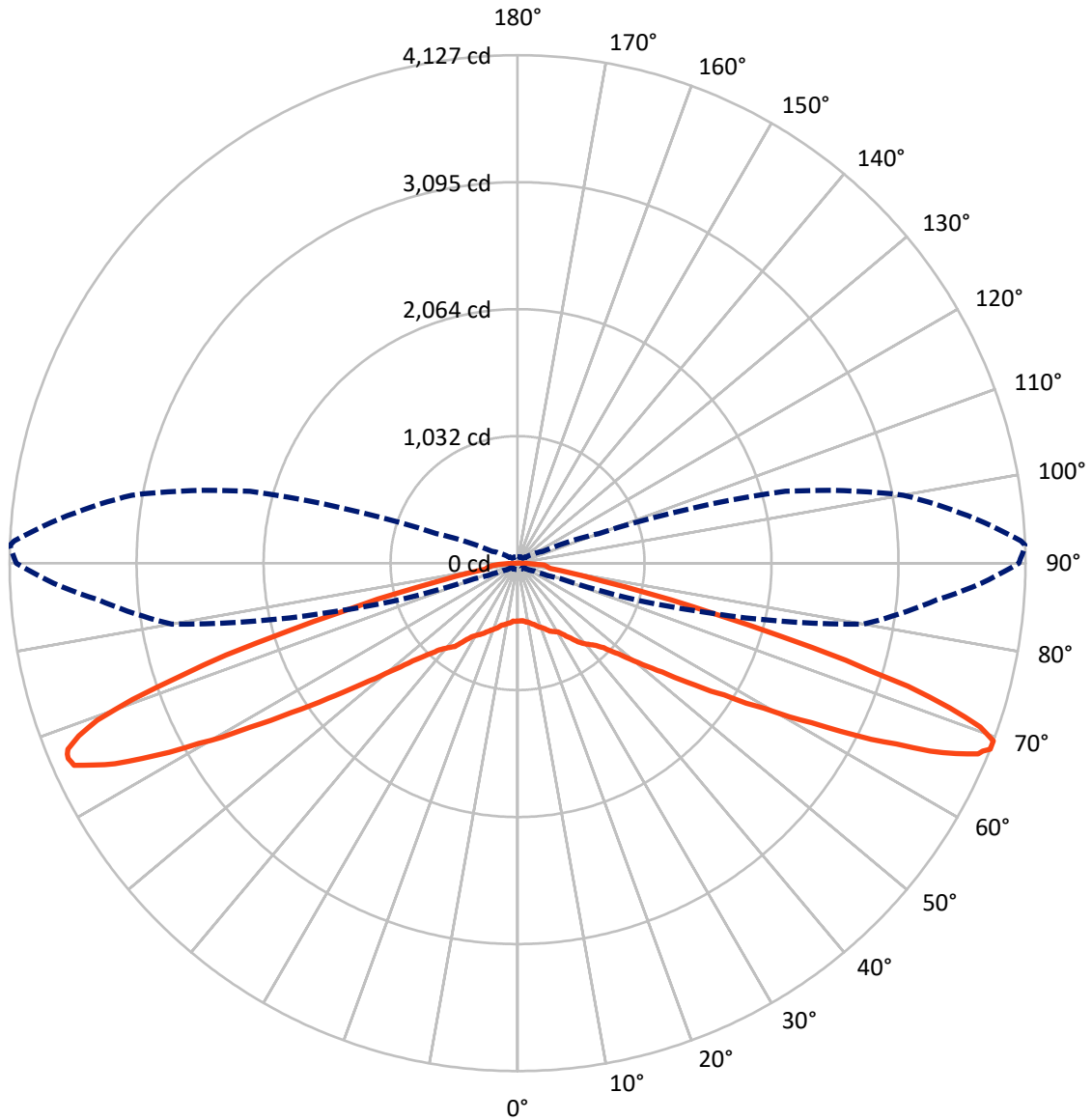
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.3 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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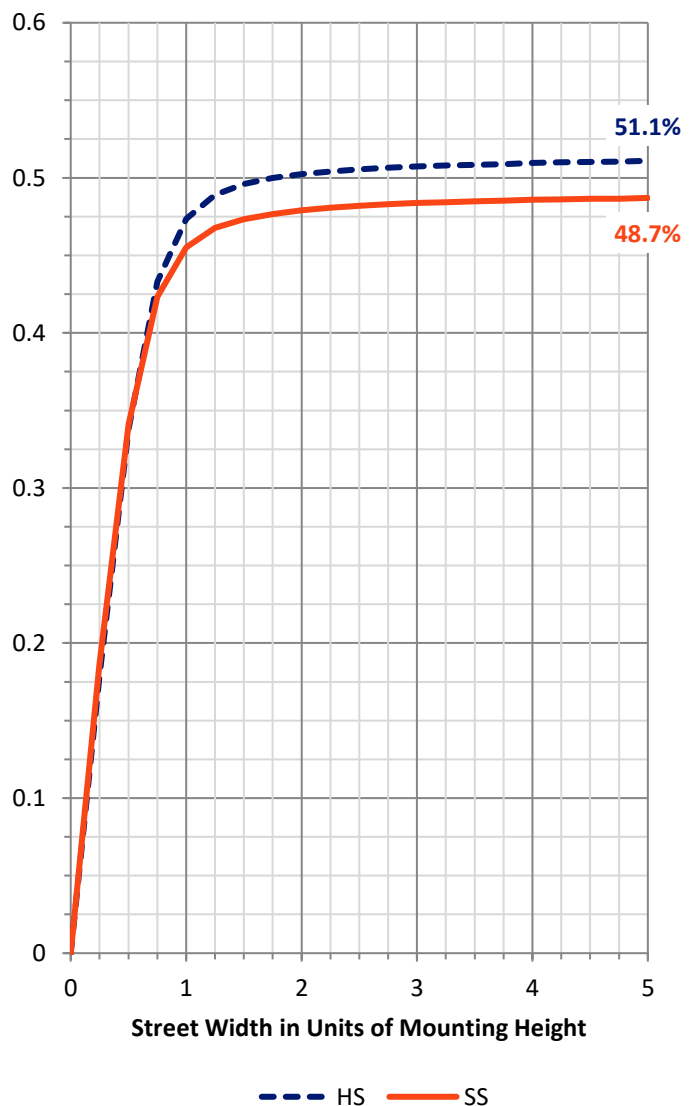
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1511.3	0.0	1511.3
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	1423.3	0.0	1423.3
	% Fixture	48.5	0.0	48.5
Total	Lumens	2934.6	0.0	2934.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	1.6
10°-20°	152.2	5.2
20°-30°	259.8	8.9
30°-40°	362.8	12.4
40°-50°	461.4	15.7
50°-60°	583.4	19.9
60°-70°	719.5	24.5
70°-80°	314.3	10.7
80°-90°	34.1	1.2
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°	2934.6	100.0
0°-180°	2934.6	100.0



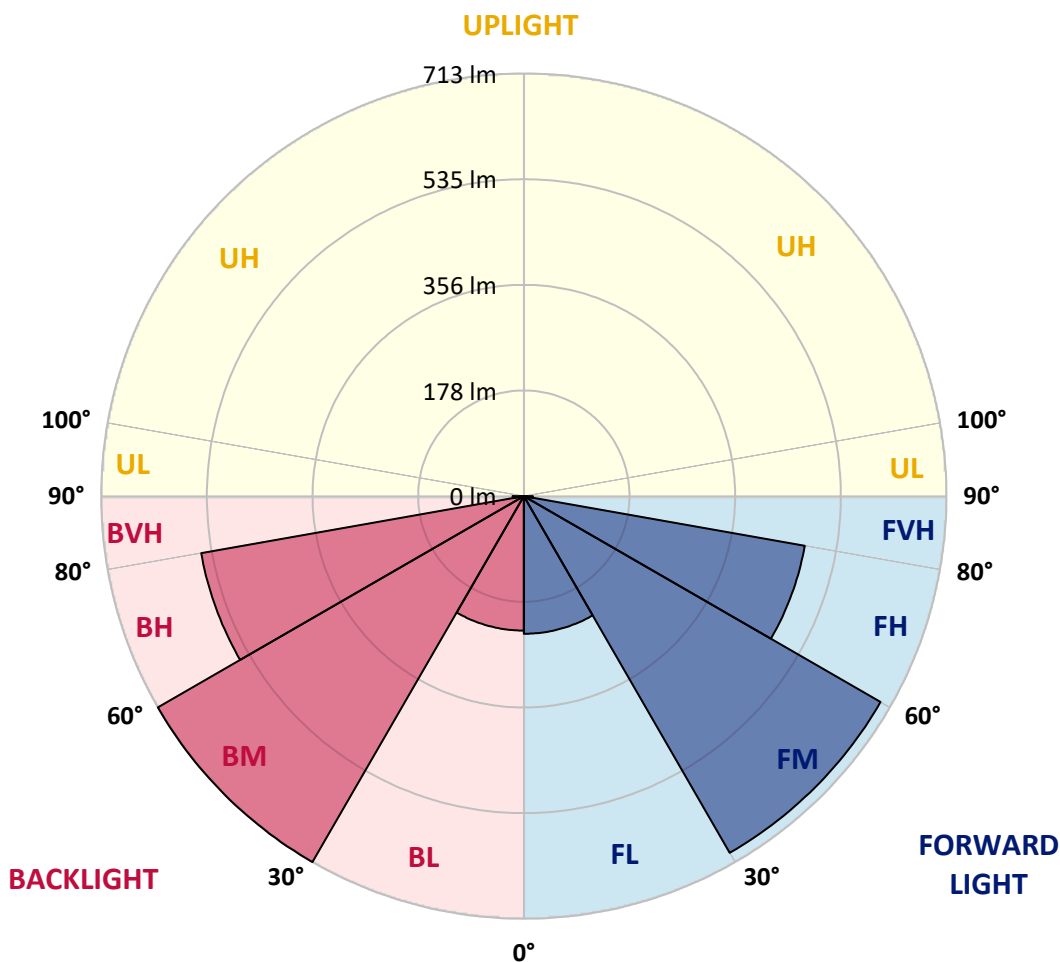
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	232.2	7.9			
FM (30°-60°)	694.7	23.7			
FH (60°-80°)	481.2	16.4			G0/660
FVH (80°-90°)	15.1	0.5			G1/100
BL (0°-30°)	226.8	7.7	B1/500		
BM (30°-60°)	712.9	24.3	B1/1000		
BH (60°-80°)	552.6	18.8	B2/1000		G2/1000
BVH (80°-90°)	19.0	0.6			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 I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3
2.5°	479.2	478.6	480.3	481.4	476.4	478.1	477.0	475.9	472.0	470.4	467.1
5°	492.4	494.1	499.6	494.6	496.8	494.1	485.2	488.0	483.0	481.9	478.6
7.5°	515.5	512.2	519.9	514.4	516.1	510.6	506.7	501.8	500.7	492.9	493.5
10°	520.5	527.1	530.4	529.3	530.4	533.2	526.0	518.3	507.8	505.6	497.9
12.5°	517.2	523.2	532.1	539.2	544.2	545.3	542.5	540.9	536.5	523.8	523.2
15°	513.9	509.5	515.0	539.8	556.3	567.3	571.2	561.8	562.9	546.4	539.8
17.5°	491.8	485.2	506.7	531.0	551.3	575.6	594.3	591.5	591.5	578.3	569.0
20°	462.7	473.7	484.7	515.5	553.0	589.3	625.1	623.5	616.9	613.0	592.6
22.5°	437.9	442.8	463.2	495.7	542.5	593.2	635.6	665.9	650.5	635.1	622.9
25°	420.8	416.4	442.3	475.9	532.6	586.6	655.4	686.8	695.1	683.5	660.4
27.5°	396.6	396.6	416.9	448.9	500.7	583.3	674.7	722.6	734.7	717.7	684.1
30°	369.0	372.3	390.0	426.3	477.0	559.0	682.4	763.9	773.8	759.0	724.3
32.5°	347.5	347.5	367.4	405.9	460.5	548.0	677.5	804.7	823.4	812.4	776.6
35°	324.4	322.8	337.1	379.5	434.0	526.5	675.8	837.2	879.0	879.6	842.1
37.5°	291.4	298.0	316.1	349.7	413.1	505.6	670.9	876.3	951.2	963.9	938.0
40°	269.3	272.1	288.6	325.5	380.6	480.8	663.7	908.2	999.1	1042.6	1006.8
42.5°	237.4	241.2	253.9	299.6	349.2	445.6	632.3	930.8	1067.4	1117.0	1086.7
45°	203.8	206.0	224.7	262.2	315.6	403.7	598.7	967.2	1133.5	1234.9	1217.2
47.5°	163.6	164.7	180.7	219.8	275.4	361.9	546.9	965.5	1186.9	1352.7	1402.3
50°	127.8	130.5	142.7	174.6	226.9	310.6	486.9	952.3	1254.1	1487.1	1584.6
52.5°	101.9	102.4	110.2	135.5	175.1	259.4	422.4	910.4	1317.5	1618.7	1808.2
55°	84.3	84.3	88.7	104.1	134.4	197.2	347.0	841.0	1325.2	1764.2	2052.2
56°	81.0	79.9	83.7	96.9	121.2	177.9	311.7	794.2	1336.2	1831.3	2174.5
57°	76.6	77.1	79.3	88.7	109.1	157.5	272.6	748.5	1328.5	1886.4	2264.8
58°	74.4	73.3	77.7	83.7	96.4	139.9	245.6	694.5	1316.4	1931.6	2396.4
59°	71.1	70.5	73.3	78.8	89.8	124.5	212.6	636.2	1292.7	1990.0	2494.5
60°	69.9	69.4	70.5	74.9	82.6	109.1	187.3	567.9	1229.3	2050.0	2616.2
61°	66.6	67.2	69.4	72.2	78.2	98.0	168.5	497.9	1188.0	2100.7	2750.6
62°	67.2	66.1	67.2	69.4	73.8	90.3	147.6	429.1	1114.2	2158.0	2851.4
63°	63.9	63.3	65.0	67.7	69.9	81.5	128.9	370.7	1030.5	2171.2	2936.8
64°	62.8	62.2	62.8	66.6	67.2	76.6	114.0	316.7	909.3	2193.8	3046.4
65°	60.0	60.0	61.1	62.8	65.0	72.2	101.9	274.8	788.7	2134.3	3080.0
66°	57.8	58.4	58.4	61.1	62.8	67.2	93.6	233.5	673.1	2039.5	3112.5
67°	56.2	56.2	56.7	58.9	60.6	63.3	84.3	202.1	567.9	1926.6	3062.3
67.5°	55.1	55.6	55.6	57.8	59.5	63.3	80.4	191.7	507.8	1802.7	3024.9
68°	53.4	54.0	54.0	56.2	57.8	61.1	77.7	175.1	468.2	1722.3	2955.5
69°	52.3	51.8	51.8	54.0	56.2	58.4	72.2	153.1	372.3	1497.6	2854.1
70°	49.0	49.0	50.1	51.8	53.4	55.6	66.6	134.9	315.0	1239.8	2593.1
71°	47.4	46.8	47.4	49.0	50.7	53.4	61.1	119.5	257.8	1029.4	2336.4
72°	44.1	45.2	45.2	46.8	48.5	50.1	57.3	104.1	216.5	822.9	2053.9
72.5°	43.5	43.5	44.1	45.7	46.8	49.6	55.1	99.7	197.7	725.4	1935.4
73°	41.9	41.9	42.4	44.1	45.2	47.9	53.4	89.8	180.1	645.5	1714.0
74°	40.2	39.7	39.7	41.9	42.4	45.2	50.1	79.3	150.9	486.3	1375.9
75°	37.5	37.5	38.0	39.1	39.7	41.9	46.3	70.5	127.2	377.3	1076.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	30.8	31.4	31.9	33.0	33.0	34.7	38.0	49.0	77.7	191.1	494.1
80°	22.6	23.7	25.3	27.0	26.4	26.4	29.7	35.2	46.3	85.9	189.5
82.5°	18.2	19.3	17.6	19.8	19.8	18.7	21.5	25.9	31.4	42.4	67.7
85°	12.1	12.7	10.5	12.1	11.6	11.6	14.3	15.4	19.3	23.7	33.6
87.5°	5.5	5.5	4.4	5.0	5.0	5.0	7.2	5.5	8.3	11.6	19.8
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):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3	469.3
2.5°	470.4	472.6	472.6	470.4	468.7	470.4	469.3	466.5	469.3	470.4	470.9
5°	477.0	472.6	474.8	469.8	473.1	472.6	471.5	474.2	474.8	474.8	478.6
7.5°	484.1	489.6	482.5	483.0	484.7	478.1	480.3	481.4	479.2	483.6	486.9
10°	496.8	499.0	496.8	488.5	494.1	489.6	488.0	492.9	491.8	492.9	497.9
12.5°	508.4	512.2	506.2	505.6	502.9	499.0	501.2	500.7	508.4	509.5	515.5
15°	532.1	522.1	519.9	519.4	518.3	516.6	517.7	518.3	528.2	529.9	544.2
17.5°	552.4	550.8	538.7	543.1	543.1	536.5	533.7	543.1	550.8	559.0	569.0
20°	573.4	571.7	558.5	559.0	554.1	560.1	556.8	565.7	578.9	581.6	590.4
22.5°	598.1	591.0	581.6	582.7	584.4	580.0	577.8	589.9	603.1	610.8	611.4
25°	637.3	619.1	611.4	612.5	610.3	607.0	608.6	624.0	630.6	647.2	643.9
27.5°	658.2	647.7	642.2	629.5	630.1	625.1	631.7	654.9	668.1	680.8	655.4
30°	683.5	676.9	652.7	648.3	647.7	645.5	657.6	687.4	707.2	714.4	678.0
32.5°	733.1	706.7	700.6	696.7	687.9	690.7	696.7	735.8	767.2	765.6	698.9
35°	789.8	771.6	754.6	751.3	750.2	742.5	752.9	798.6	822.9	815.7	706.7
37.5°	880.7	853.2	830.0	817.4	815.2	809.6	834.4	870.8	902.2	874.1	712.7
40°	925.3	894.5	873.0	865.3	866.9	874.6	898.9	954.5	968.3	916.5	717.7
42.5°	989.2	955.6	913.2	909.3	904.4	908.2	955.1	1030.0	1041.5	973.8	698.9
45°	1102.7	1052.0	1003.0	980.9	982.0	992.5	1065.2	1147.3	1125.8	1013.4	669.2
47.5°	1245.9	1171.5	1131.9	1102.1	1116.4	1104.9	1220.5	1286.1	1212.8	1063.6	632.8
50°	1461.2	1357.1	1303.1	1267.3	1273.4	1283.3	1400.6	1456.3	1309.2	1087.8	577.2
52.5°	1732.8	1598.9	1519.6	1471.7	1476.1	1497.6	1649.0	1632.0	1419.4	1108.2	502.9
55°	2057.7	1920.0	1766.4	1746.5	1741.6	1792.8	1959.7	1815.9	1518.5	1075.7	425.8
56°	2229.6	2083.1	1923.3	1882.6	1870.5	1906.3	2102.3	1907.9	1552.7	1039.3	388.9
57°	2375.5	2235.6	2060.5	1991.1	2006.5	2073.7	2243.9	1994.4	1584.0	1001.9	354.2
58°	2576.0	2416.3	2231.2	2178.3	2164.6	2218.0	2396.4	2081.4	1594.5	963.3	322.2
59°	2775.9	2584.3	2417.4	2321.0	2324.8	2422.3	2546.8	2184.9	1610.5	914.3	281.4
60°	2928.0	2831.6	2608.5	2536.3	2526.4	2667.4	2696.6	2254.3	1627.6	848.2	252.8
61°	3143.3	3017.7	2810.1	2717.0	2744.0	2856.9	2858.6	2341.4	1602.2	764.5	217.6
62°	3298.1	3265.0	3046.9	2958.2	2950.0	3099.8	3027.1	2417.9	1580.2	685.2	192.2
63°	3479.3	3479.3	3280.5	3211.1	3214.9	3333.3	3100.3	2494.5	1554.9	597.6	169.1
64°	3573.5	3691.9	3508.5	3411.0	3436.3	3538.8	3230.9	2544.6	1476.6	508.9	148.7
65°	3655.0	3832.9	3731.0	3685.8	3647.3	3707.9	3343.8	2591.4	1357.1	432.9	132.2
66°	3723.8	3965.6	3932.0	3883.6	3879.7	3865.9	3365.8	2589.8	1233.7	365.7	115.7
67°	3689.1	3968.4	4029.5	4049.9	4043.8	3898.4	3327.3	2530.8	1075.7	309.0	103.0
67.5°	3657.7	3945.8	4087.9	4076.3	4101.7	3926.0	3333.9	2458.7	963.3	279.8	96.9
68°	3630.2	3915.5	4111.6	4126.5	4113.8	3929.3	3297.5	2401.4	886.8	262.7	91.4
69°	3421.5	3771.7	4073.6	4127.0	4094.5	3803.1	3181.9	2252.1	704.4	224.2	84.3
70°	3212.2	3585.6	3889.1	3987.1	3946.9	3559.1	3035.9	2014.8	581.1	191.7	76.0
71°	2922.4	3239.7	3643.4	3702.4	3653.9	3281.6	2734.1	1764.2	452.2	162.5	67.7
72°	2529.2	2798.5	3184.1	3326.7	3255.1	2882.2	2428.9	1457.9	366.3	136.6	61.7
72.5°	2334.2	2610.2	2981.9	2993.5	3007.3	2708.7	2299.5	1280.6	319.5	126.7	60.0
73°	2149.1	2419.6	2741.2	2782.0	2723.6	2416.3	2106.2	1145.1	291.9	115.7	57.8
74°	1741.6	1895.8	2162.4	2202.0	2150.8	1970.1	1721.2	877.9	232.4	99.7	52.9
75°	1370.3	1455.2	1696.4	1672.2	1595.6	1532.3	1334.5	670.9	188.4	87.6	49.0



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	615.8	667.0	707.2	707.2	711.6	679.1	615.2	307.9	116.2	63.3	40.2
80°	234.6	262.7	271.5	272.1	275.9	285.9	266.0	151.5	68.8	45.2	32.5
82.5°	170.2	237.9	256.1	242.9	244.0	220.3	101.9	67.2	43.5	31.4	23.7
85°	154.2	207.1	219.2	217.6	218.1	203.8	60.0	33.0	25.3	19.8	16.5
87.5°	74.9	73.3	77.7	87.6	85.4	110.7	50.7	16.5	11.0	8.3	8.3
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):

	135°	145°	155°	165°	175°	180°
0°	469.3	469.3	469.3	469.3	469.3	469.3
2.5°	466.5	466.0	473.7	466.0	470.4	467.1
5°	472.0	474.2	475.9	479.2	471.5	479.2
7.5°	488.5	490.7	491.3	494.1	490.7	490.2
10°	501.2	506.7	510.0	499.0	505.6	505.1
12.5°	526.0	520.5	519.9	517.7	511.7	509.5
15°	543.6	535.4	530.4	521.6	514.4	511.7
17.5°	568.4	552.4	532.1	513.9	501.2	491.3
20°	583.8	555.2	514.4	492.9	473.7	478.1
22.5°	593.7	552.4	498.5	470.9	451.6	457.1
25°	597.0	538.7	487.4	453.3	434.6	430.7
27.5°	587.7	522.7	466.0	427.4	410.9	414.2
30°	583.3	499.6	446.1	408.1	386.1	389.4
32.5°	571.7	475.9	419.7	381.1	365.2	359.7
35°	555.2	456.0	394.4	358.0	338.7	334.3
37.5°	534.8	431.3	372.3	328.3	311.2	307.9
40°	504.5	401.5	340.4	302.4	282.6	282.0
42.5°	478.1	372.9	310.6	271.5	251.7	252.8
45°	444.5	334.3	276.5	242.9	223.1	224.2
47.5°	401.5	298.5	244.0	206.5	190.0	188.9
50°	350.8	257.8	204.3	172.4	158.6	155.9
52.5°	302.4	216.5	167.4	138.8	127.2	126.1
55°	241.2	168.5	130.5	109.1	100.2	100.8
56°	219.2	155.3	119.0	99.7	93.1	93.1
57°	198.3	137.7	108.0	92.0	85.9	85.9
58°	175.1	121.2	98.0	83.2	80.4	78.2
59°	159.2	110.2	88.7	78.8	74.4	73.8
60°	140.4	99.1	82.6	73.8	70.5	69.9
61°	124.5	89.2	76.0	68.8	67.7	67.7
62°	111.3	82.6	70.5	66.6	66.1	64.4
63°	99.7	76.0	67.7	63.3	61.7	63.3
64°	89.2	69.9	65.5	62.2	60.0	61.1
65°	81.0	67.2	62.8	60.6	58.4	58.9
66°	75.5	62.8	60.6	57.8	56.7	57.3
67°	68.3	60.6	58.4	55.6	55.1	55.6
67.5°	66.1	58.9	57.3	54.5	54.0	54.5
68°	64.4	57.8	56.7	54.0	53.4	52.9
69°	60.0	55.6	54.0	52.9	51.8	51.2
70°	56.2	53.4	52.3	50.7	49.6	49.0
71°	54.0	50.7	50.1	48.5	47.4	46.8
72°	51.2	49.0	47.9	45.7	45.2	45.7
72.5°	50.7	47.9	47.4	45.2	44.6	44.6
73°	49.0	45.7	46.3	44.1	43.0	44.1
74°	45.7	44.6	43.5	41.9	41.3	41.3
75°	43.0	41.9	40.8	39.7	39.7	39.7



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
77.5°	36.4	35.8	36.4	34.1	33.6	33.0
80°	29.2	29.2	29.7	28.1	27.0	26.4
82.5°	22.0	22.6	23.7	22.0	20.9	19.8
85°	14.3	14.9	14.9	13.2	15.4	14.3
87.5°	7.2	7.7	7.2	6.6	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)