

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: P676186

Luminaire Tested: **CCW-SA-1B-835-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676186
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1B-835-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @450mA w/
T1 distribution lens
Light Source: (16) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

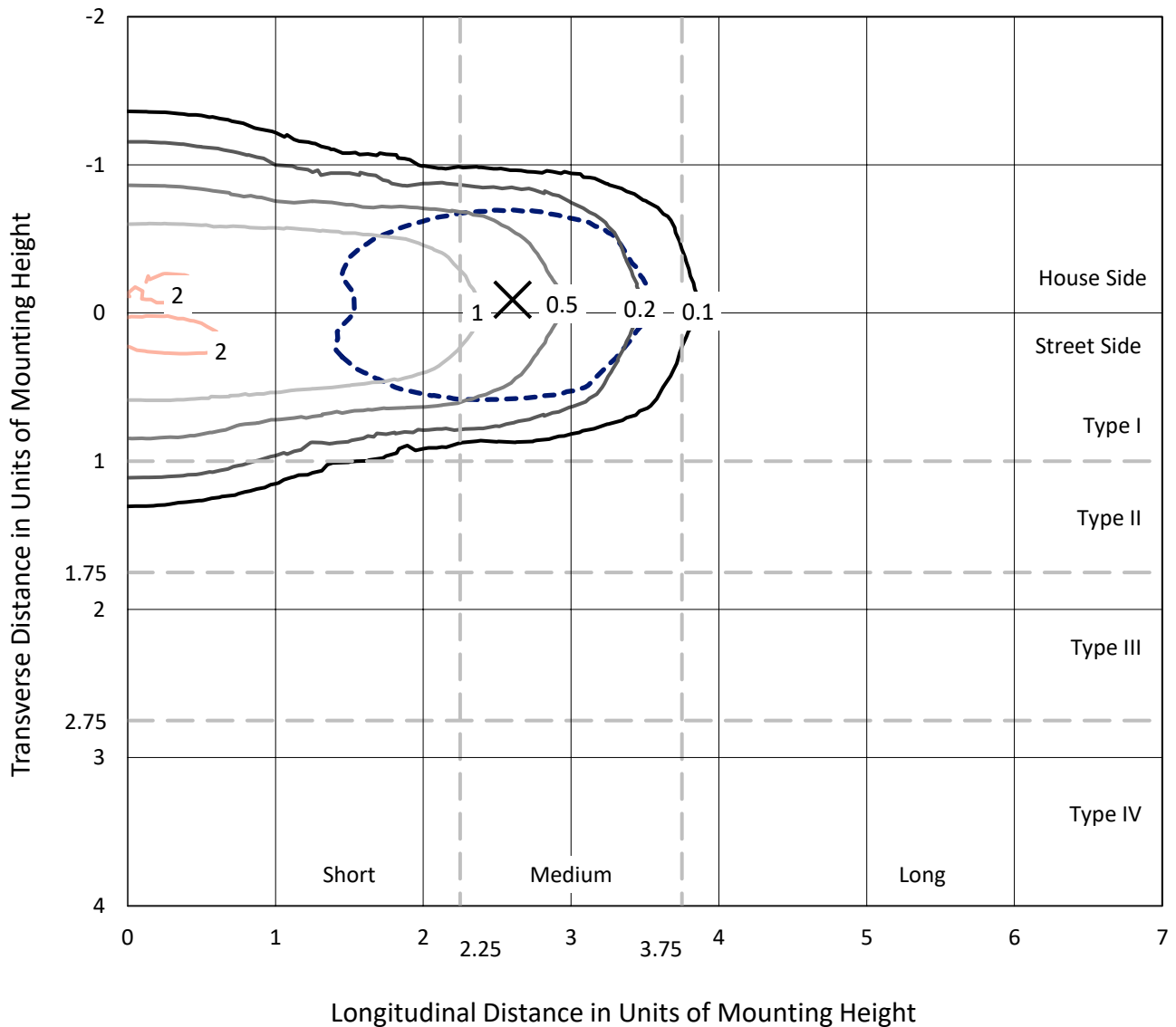
Lumens per Lamp: N/A
Luminaire Lumens: 2771.2 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 24
Input Voltage (V): 120
Input Current (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: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

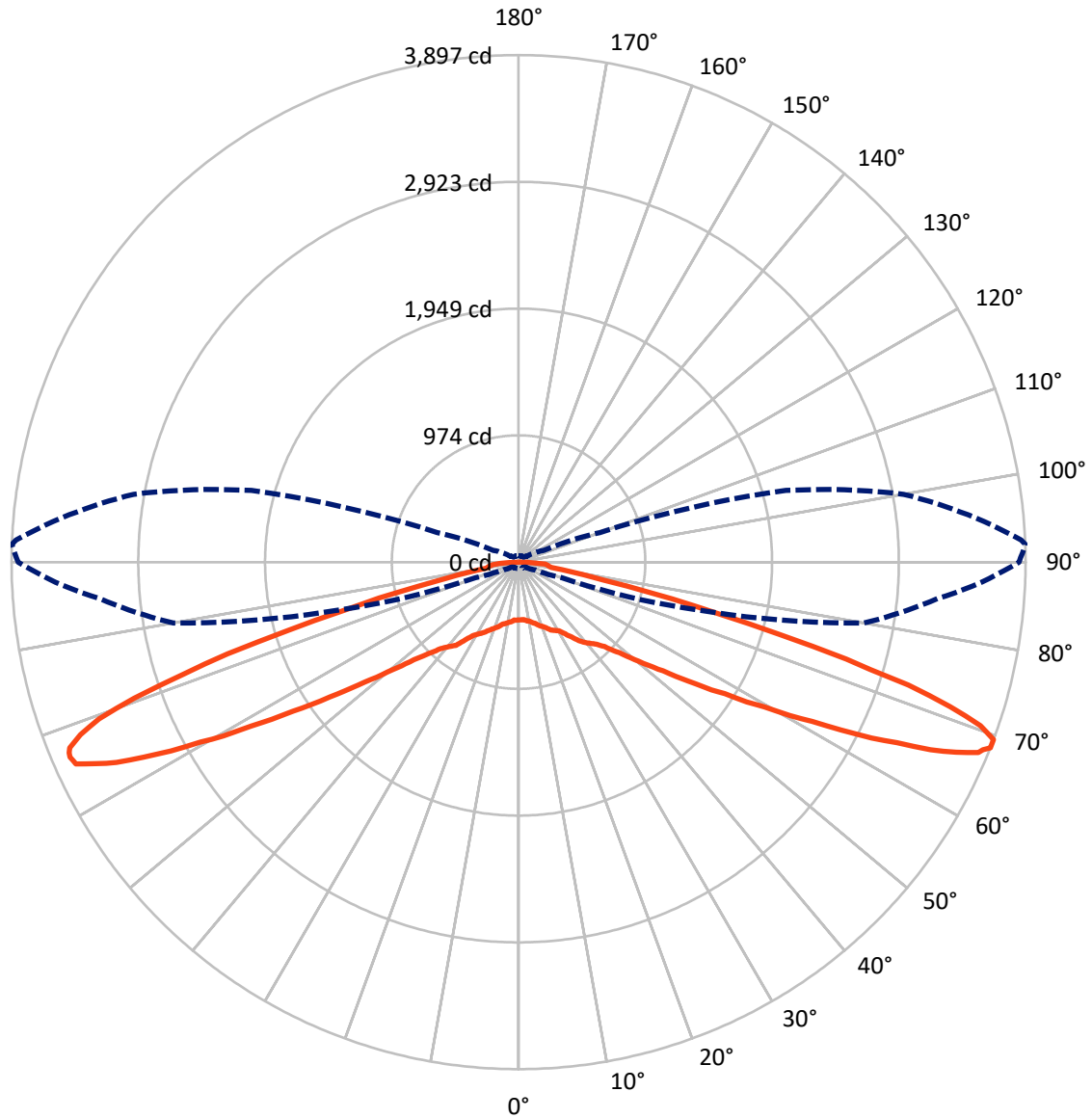
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.1 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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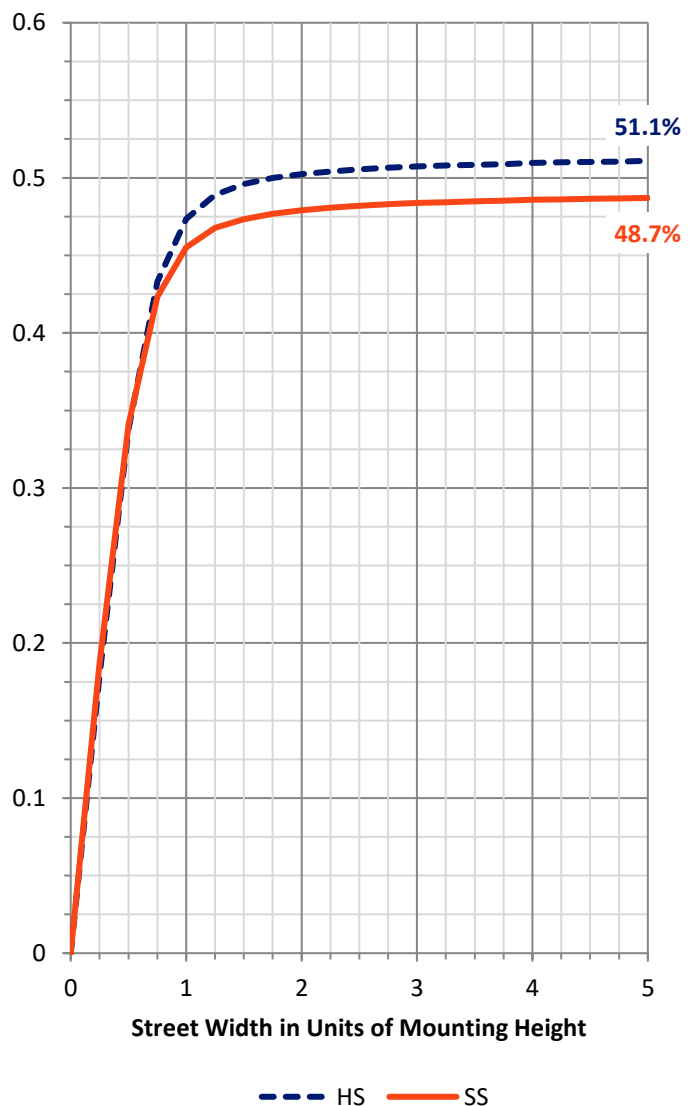
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1427.1	0.0	1427.1
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	1344.1	0.0	1344.1
	% Fixture	48.5	0.0	48.5
Total	Lumens	2771.2	0.0	2771.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	1.6
10°-20°	143.8	5.2
20°-30°	245.3	8.9
30°-40°	342.5	12.4
40°-50°	435.7	15.7
50°-60°	550.9	19.9
60°-70°	679.5	24.5
70°-80°	296.8	10.7
80°-90°	32.2	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°	2771.2	100.0
0°-180°	2771.2	100.0



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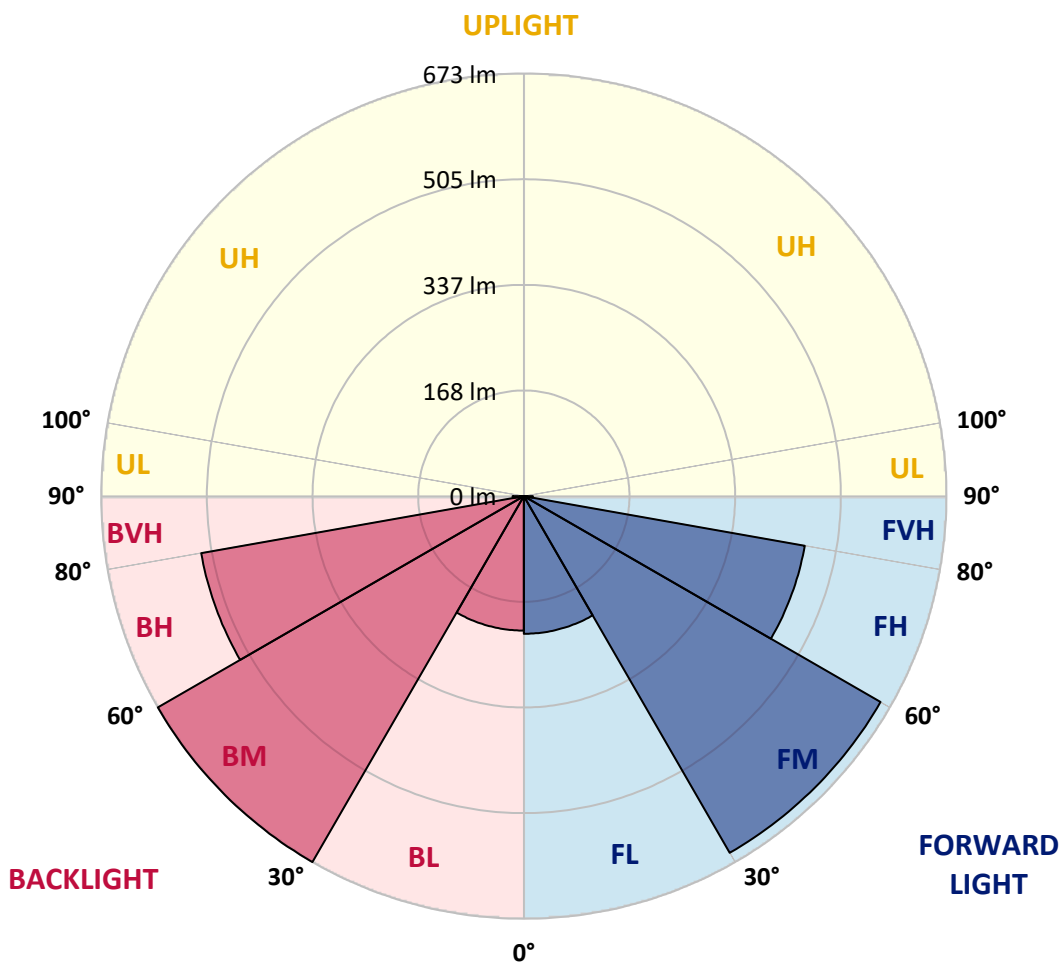
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	219.3	7.9			
FM (30°-60°)	656.1	23.7			
FH (60°-80°)	454.4	16.4			G0/660
FVH (80°-90°)	14.3	0.5			G1/100
BL (0°-30°)	214.2	7.7	B1/500		
BM (30°-60°)	673.2	24.3	B1/1000		
BH (60°-80°)	521.9	18.8	B2/1000		G2/1000
BVH (80°-90°)	17.9	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°	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1
2.5°	452.5	452.0	453.5	454.6	449.9	451.5	450.4	449.4	445.7	444.2	441.0
5°	465.0	466.5	471.7	467.1	469.1	466.5	458.2	460.8	456.1	455.1	452.0
7.5°	486.8	483.7	491.0	485.8	487.3	482.1	478.5	473.8	472.8	465.5	466.0
10°	491.5	497.7	500.9	499.8	500.9	503.5	496.7	489.4	479.5	477.5	470.2
12.5°	488.4	494.1	502.4	509.2	513.9	514.9	512.3	510.7	506.6	494.6	494.1
15°	485.3	481.1	486.3	509.7	525.3	535.7	539.3	530.5	531.5	515.9	509.7
17.5°	464.5	458.2	478.5	501.4	520.6	543.5	561.2	558.6	558.6	546.1	537.3
20°	436.9	447.3	457.7	486.8	522.2	556.5	590.3	588.8	582.5	578.9	559.6
22.5°	413.5	418.2	437.4	468.1	512.3	560.2	600.2	628.8	614.2	599.7	588.2
25°	397.4	393.2	417.6	449.4	502.9	553.9	618.9	648.6	656.4	645.5	623.6
27.5°	374.5	374.5	393.7	423.9	472.8	550.8	637.1	682.4	693.8	677.7	646.0
30°	348.5	351.6	368.2	402.6	450.4	527.9	644.4	721.4	730.7	716.7	683.9
32.5°	328.2	328.2	346.9	383.3	434.8	517.5	639.7	759.9	777.6	767.2	733.3
35°	306.3	304.8	318.3	358.4	409.8	497.2	638.2	790.6	830.1	830.6	795.2
37.5°	275.1	281.4	298.5	330.3	390.1	477.5	633.5	827.5	898.2	910.2	885.7
40°	254.3	256.9	272.5	307.4	359.4	454.1	626.7	857.7	943.5	984.6	950.8
42.5°	224.2	227.8	239.8	282.9	329.7	420.8	597.1	879.0	1008.0	1054.8	1026.2
45°	192.4	194.5	212.2	247.6	298.0	381.2	565.4	913.3	1070.4	1166.1	1149.4
47.5°	154.5	155.5	170.6	207.5	260.1	341.7	516.5	911.7	1120.8	1277.4	1324.2
50°	120.7	123.3	134.7	164.9	214.3	293.3	459.8	899.3	1184.3	1404.3	1496.3
52.5°	96.2	96.7	104.0	127.9	165.4	245.0	398.9	859.7	1244.1	1528.6	1707.5
55°	79.6	79.6	83.7	98.3	126.9	186.2	327.7	794.2	1251.4	1665.9	1937.9
56°	76.5	75.4	79.1	91.5	114.4	168.0	294.4	750.0	1261.8	1729.3	2053.4
57°	72.3	72.8	74.9	83.7	103.0	148.8	257.5	706.8	1254.5	1781.4	2138.7
58°	70.2	69.2	73.3	79.1	91.0	132.1	232.0	655.9	1243.1	1824.0	2263.0
59°	67.1	66.6	69.2	74.4	84.8	117.5	200.8	600.7	1220.7	1879.1	2355.6
60°	66.1	65.5	66.6	70.7	78.0	103.0	176.8	536.2	1160.9	1935.8	2470.5
61°	62.9	63.5	65.5	68.1	73.9	92.6	159.2	470.2	1121.9	1983.7	2597.4
62°	63.5	62.4	63.5	65.5	69.7	85.3	139.4	405.2	1052.2	2037.8	2692.6
63°	60.3	59.8	61.4	64.0	66.1	77.0	121.7	350.0	973.1	2050.3	2773.2
64°	59.3	58.8	59.3	62.9	63.5	72.3	107.7	299.1	858.7	2071.6	2876.7
65°	56.7	56.7	57.7	59.3	61.4	68.1	96.2	259.5	744.8	2015.4	2908.4
66°	54.6	55.1	55.1	57.7	59.3	63.5	88.4	220.5	635.6	1925.9	2939.1
67°	53.1	53.1	53.6	55.7	57.2	59.8	79.6	190.9	536.2	1819.3	2891.8
67.5°	52.0	52.5	52.5	54.6	56.2	59.8	75.9	181.0	479.5	1702.3	2856.4
68°	50.5	51.0	51.0	53.1	54.6	57.7	73.3	165.4	442.1	1626.4	2790.9
69°	49.4	48.9	48.9	51.0	53.1	55.1	68.1	144.6	351.6	1414.2	2695.2
70°	46.3	46.3	47.3	48.9	50.5	52.5	62.9	127.4	297.5	1170.8	2448.7
71°	44.7	44.2	44.7	46.3	47.8	50.5	57.7	112.9	243.4	972.1	2206.3
72°	41.6	42.6	42.6	44.2	45.8	47.3	54.1	98.3	204.4	777.0	1939.5
72.5°	41.1	41.1	41.6	43.2	44.2	46.8	52.0	94.1	186.7	685.0	1827.6
73°	39.5	39.5	40.0	41.6	42.6	45.2	50.5	84.8	170.1	609.6	1618.6
74°	38.0	37.4	37.4	39.5	40.0	42.6	47.3	74.9	142.5	459.3	1299.2
75°	35.4	35.4	35.9	36.9	37.4	39.5	43.7	66.6	120.1	356.3	1016.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	29.1	29.6	30.2	31.2	31.2	32.8	35.9	46.3	73.3	180.5	466.5
80°	21.3	22.4	23.9	25.5	25.0	25.0	28.1	33.3	43.7	81.1	178.9
82.5°	17.2	18.2	16.6	18.7	18.7	17.7	20.3	24.4	29.6	40.0	64.0
85°	11.4	12.0	9.9	11.4	10.9	10.9	13.5	14.6	18.2	22.4	31.7
87.5°	5.2	5.2	4.2	4.7	4.7	4.7	6.8	5.2	7.8	10.9	18.7
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°	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1	443.1
2.5°	444.2	446.3	446.3	444.2	442.6	444.2	443.1	440.5	443.1	444.2	444.7
5°	450.4	446.3	448.3	443.6	446.8	446.3	445.2	447.8	448.3	448.3	452.0
7.5°	457.2	462.4	455.6	456.1	457.7	451.5	453.5	454.6	452.5	456.7	459.8
10°	469.1	471.2	469.1	461.3	466.5	462.4	460.8	465.5	464.5	465.5	470.2
12.5°	480.1	483.7	478.0	477.5	474.9	471.2	473.3	472.8	480.1	481.1	486.8
15°	502.4	493.1	491.0	490.5	489.4	487.9	488.9	489.4	498.8	500.3	513.9
17.5°	521.7	520.1	508.7	512.8	512.8	506.6	504.0	512.8	520.1	527.9	537.3
20°	541.4	539.9	527.4	527.9	523.2	528.9	525.8	534.1	546.6	549.2	557.6
22.5°	564.8	558.1	549.2	550.3	551.8	547.7	545.6	557.0	569.5	576.8	577.3
25°	601.8	584.6	577.3	578.4	576.3	573.2	574.7	589.3	595.5	611.1	608.0
27.5°	621.5	611.6	606.4	594.5	595.0	590.3	596.6	618.4	630.9	642.8	618.9
30°	645.5	639.2	616.3	612.2	611.6	609.6	621.0	649.1	667.8	674.6	640.2
32.5°	692.3	667.3	661.6	657.9	649.6	652.2	657.9	694.9	724.5	722.9	660.0
35°	745.8	728.7	712.5	709.4	708.4	701.1	711.0	754.2	777.0	770.3	667.3
37.5°	831.6	805.6	783.8	771.8	769.8	764.6	788.0	822.3	851.9	825.4	673.0
40°	873.8	844.7	824.4	817.1	818.6	825.9	848.8	901.3	914.3	865.5	677.7
42.5°	934.1	902.4	862.3	858.7	854.0	857.7	901.9	972.6	983.5	919.5	660.0
45°	1041.3	993.4	947.1	926.3	927.3	937.2	1005.9	1083.4	1063.1	957.0	631.9
47.5°	1176.5	1106.3	1068.8	1040.7	1054.3	1043.3	1152.6	1214.4	1145.3	1004.3	597.6
50°	1379.8	1281.5	1230.6	1196.8	1202.5	1211.8	1322.6	1375.2	1236.3	1027.2	545.1
52.5°	1636.3	1509.9	1435.0	1389.7	1393.9	1414.2	1557.2	1541.1	1340.3	1046.5	474.9
55°	1943.1	1813.1	1668.0	1649.3	1644.6	1692.9	1850.5	1714.8	1433.9	1015.8	402.0
56°	2105.4	1967.0	1816.2	1777.7	1766.3	1800.1	1985.2	1801.6	1466.2	981.4	367.2
57°	2243.2	2111.1	1945.7	1880.2	1894.7	1958.2	2118.9	1883.3	1495.8	946.1	334.4
58°	2432.5	2281.7	2106.9	2057.0	2044.0	2094.5	2263.0	1965.5	1505.7	909.7	304.3
59°	2621.3	2440.3	2282.7	2191.7	2195.4	2287.4	2405.0	2063.3	1520.8	863.4	265.8
60°	2764.9	2673.9	2463.2	2395.1	2385.7	2518.9	2546.4	2128.8	1536.9	801.0	238.7
61°	2968.2	2849.7	2653.6	2565.7	2591.2	2697.8	2699.3	2211.0	1513.0	721.9	205.4
62°	3114.4	3083.2	2877.2	2793.5	2785.7	2927.2	2858.5	2283.3	1492.2	647.0	181.5
63°	3285.5	3285.5	3097.7	3032.2	3035.9	3147.7	2927.7	2355.6	1468.3	564.3	159.7
64°	3374.4	3486.3	3313.1	3221.0	3244.9	3341.7	3050.9	2402.9	1394.4	480.6	140.4
65°	3451.4	3619.4	3523.2	3480.5	3444.1	3501.3	3157.6	2447.1	1281.5	408.8	124.8
66°	3516.4	3744.8	3713.0	3667.3	3663.6	3650.6	3178.4	2445.5	1165.0	345.3	109.2
67°	3483.7	3747.4	3805.1	3824.3	3818.6	3681.3	3142.0	2389.9	1015.8	291.8	97.3
67.5°	3454.0	3726.0	3860.2	3849.3	3873.2	3707.3	3148.2	2321.7	909.7	264.2	91.5
68°	3428.0	3697.4	3882.6	3896.6	3884.7	3710.4	3113.9	2267.7	837.4	248.1	86.3
69°	3230.9	3561.7	3846.7	3897.1	3866.5	3591.3	3004.6	2126.7	665.2	211.7	79.6
70°	3033.3	3385.9	3672.5	3765.0	3727.1	3360.9	2866.8	1902.5	548.7	181.0	71.8
71°	2759.7	3059.3	3440.5	3496.1	3450.4	3098.8	2581.8	1665.9	427.0	153.4	64.0
72°	2388.3	2642.7	3006.7	3141.4	3073.8	2721.7	2293.7	1376.7	345.9	129.0	58.3
72.5°	2204.2	2464.8	2815.8	2826.8	2839.8	2557.9	2171.4	1209.2	301.7	119.6	56.7
73°	2029.4	2284.8	2588.6	2627.1	2571.9	2281.7	1988.9	1081.3	275.7	109.2	54.6
74°	1644.6	1790.2	2041.9	2079.4	2031.0	1860.4	1625.3	829.0	219.5	94.1	49.9
75°	1294.0	1374.1	1601.9	1579.0	1506.7	1446.9	1260.2	633.5	177.9	82.7	46.3



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	581.5	629.8	667.8	667.8	672.0	641.3	581.0	290.7	109.7	59.8	38.0
80°	221.6	248.1	256.4	256.9	260.6	269.9	251.2	143.0	65.0	42.6	30.7
82.5°	160.7	224.7	241.8	229.4	230.4	208.0	96.2	63.5	41.1	29.6	22.4
85°	145.6	195.6	207.0	205.4	206.0	192.4	56.7	31.2	23.9	18.7	15.6
87.5°	70.7	69.2	73.3	82.7	80.6	104.5	47.8	15.6	10.4	7.8	7.8
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):

	135°	145°	155°	165°	175°	180°
0°	443.1	443.1	443.1	443.1	443.1	443.1
2.5°	440.5	440.0	447.3	440.0	444.2	441.0
5°	445.7	447.8	449.4	452.5	445.2	452.5
7.5°	461.3	463.4	463.9	466.5	463.4	462.9
10°	473.3	478.5	481.6	471.2	477.5	476.9
12.5°	496.7	491.5	491.0	488.9	483.2	481.1
15°	513.3	505.5	500.9	492.5	485.8	483.2
17.5°	536.7	521.7	502.4	485.3	473.3	463.9
20°	551.3	524.3	485.8	465.5	447.3	451.5
22.5°	560.7	521.7	470.7	444.7	426.5	431.7
25°	563.8	508.7	460.3	428.0	410.4	406.7
27.5°	555.0	493.6	440.0	403.6	388.0	391.1
30°	550.8	471.7	421.3	385.4	364.6	367.7
32.5°	539.9	449.4	396.3	359.9	344.8	339.6
35°	524.3	430.6	372.4	338.1	319.9	315.7
37.5°	505.0	407.2	351.6	310.0	293.9	290.7
40°	476.4	379.2	321.4	285.5	266.8	266.3
42.5°	451.5	352.1	293.3	256.4	237.7	238.7
45°	419.7	315.7	261.1	229.4	210.6	211.7
47.5°	379.2	281.9	230.4	195.0	179.4	178.4
50°	331.3	243.4	193.0	162.8	149.8	147.2
52.5°	285.5	204.4	158.1	131.1	120.1	119.1
55°	227.8	159.2	123.3	103.0	94.7	95.2
56°	207.0	146.7	112.3	94.1	87.9	87.9
57°	187.2	130.0	101.9	86.9	81.1	81.1
58°	165.4	114.4	92.6	78.5	75.9	73.9
59°	150.3	104.0	83.7	74.4	70.2	69.7
60°	132.6	93.6	78.0	69.7	66.6	66.1
61°	117.5	84.3	71.8	65.0	64.0	64.0
62°	105.1	78.0	66.6	62.9	62.4	60.9
63°	94.1	71.8	64.0	59.8	58.3	59.8
64°	84.3	66.1	61.9	58.8	56.7	57.7
65°	76.5	63.5	59.3	57.2	55.1	55.7
66°	71.3	59.3	57.2	54.6	53.6	54.1
67°	64.5	57.2	55.1	52.5	52.0	52.5
67.5°	62.4	55.7	54.1	51.5	51.0	51.5
68°	60.9	54.6	53.6	51.0	50.5	49.9
69°	56.7	52.5	51.0	49.9	48.9	48.4
70°	53.1	50.5	49.4	47.8	46.8	46.3
71°	51.0	47.8	47.3	45.8	44.7	44.2
72°	48.4	46.3	45.2	43.2	42.6	43.2
72.5°	47.8	45.2	44.7	42.6	42.1	42.1
73°	46.3	43.2	43.7	41.6	40.6	41.6
74°	43.2	42.1	41.1	39.5	39.0	39.0
75°	40.6	39.5	38.5	37.4	37.4	37.4



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
77.5°	34.3	33.8	34.3	32.2	31.7	31.2
80°	27.6	27.6	28.1	26.5	25.5	25.0
82.5°	20.8	21.3	22.4	20.8	19.8	18.7
85°	13.5	14.0	14.0	12.5	14.6	13.5
87.5°	6.8	7.3	6.8	6.2	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)