

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: P676163

Luminaire Tested: **CCW-SA-1A-827-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676163
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1A-827-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @350mA w/
T1 distribution lens
Light Source: (16) 2700K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

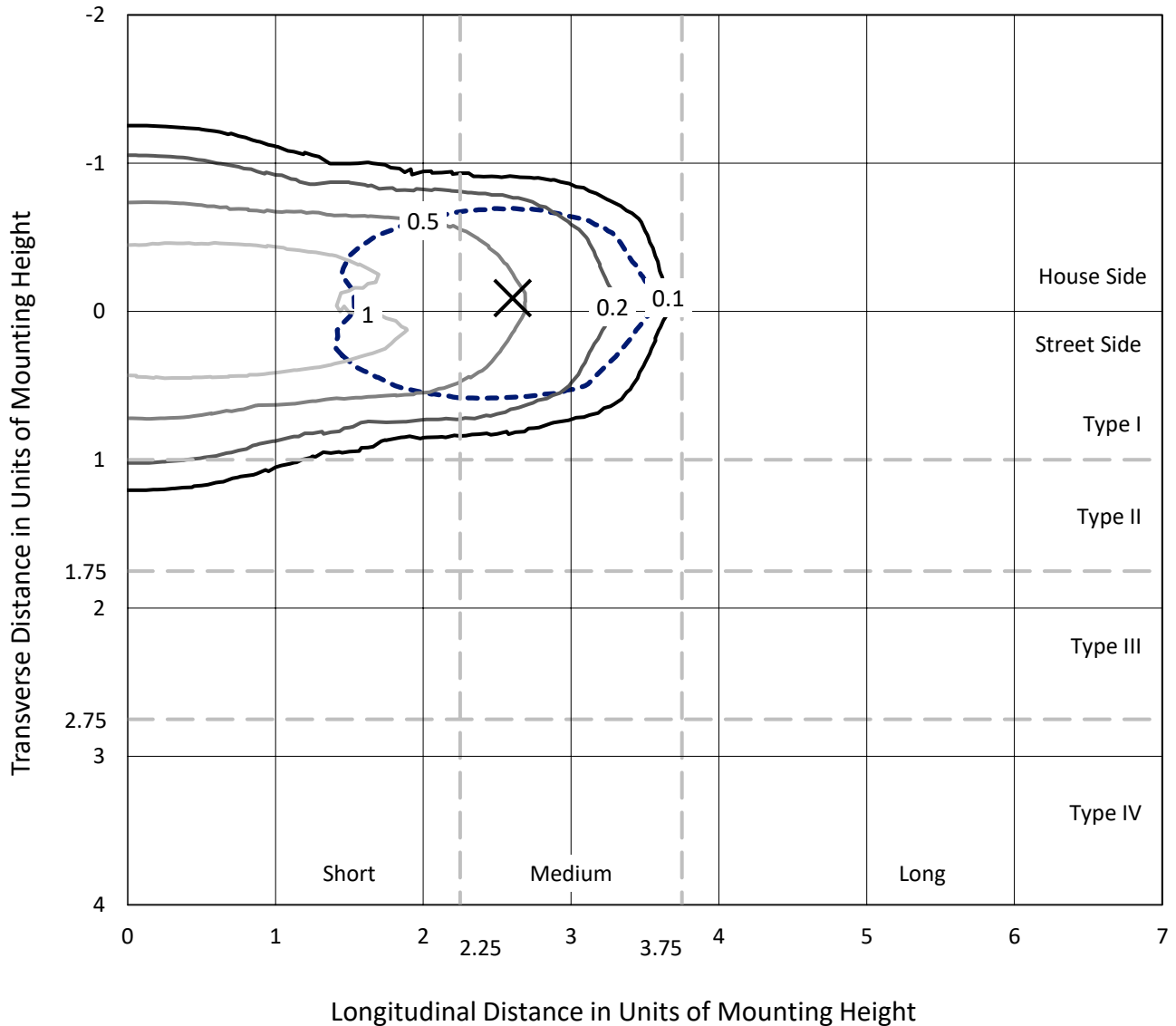
Lumens per Lamp: N/A
Luminaire Lumens: 1958.4 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 18
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

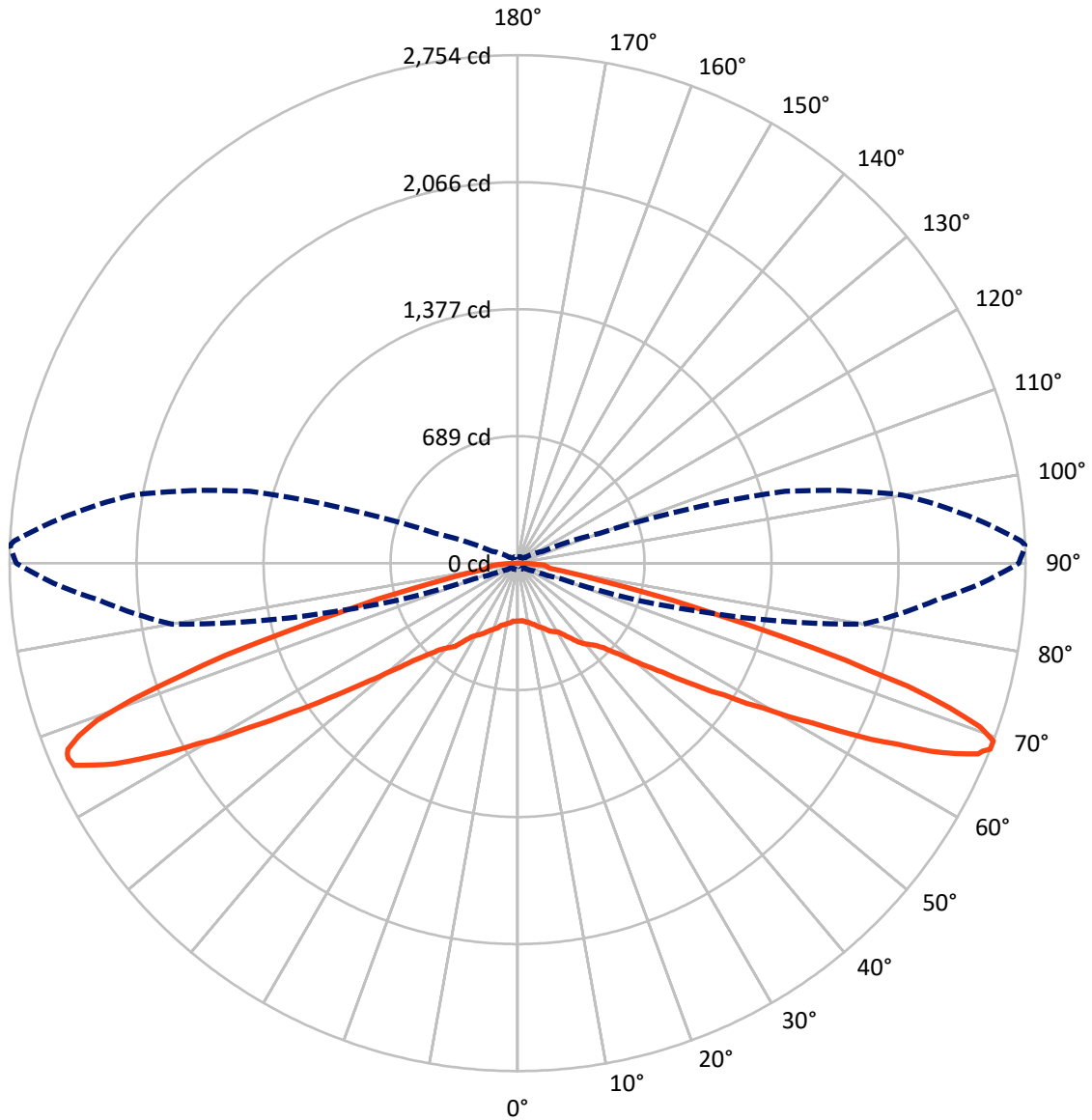
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.5 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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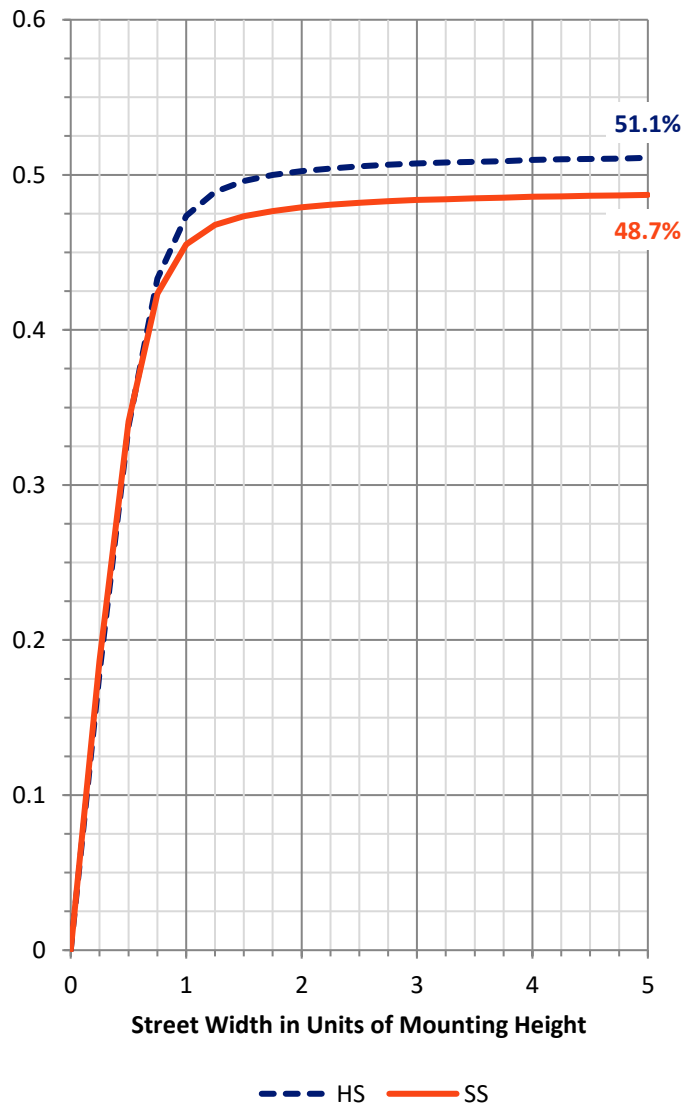
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1008.5	0.0	1008.5
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	949.8	0.0	949.8
	% Fixture	48.5	0.0	48.5
Total	Lumens	1958.4	0.0	1958.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.4	1.6
10°-20°	101.6	5.2
20°-30°	173.4	8.9
30°-40°	242.1	12.4
40°-50°	307.9	15.7
50°-60°	389.3	19.9
60°-70°	480.2	24.5
70°-80°	209.8	10.7
80°-90°	22.7	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°	1958.4	100.0
0°-180°	1958.4	100.0



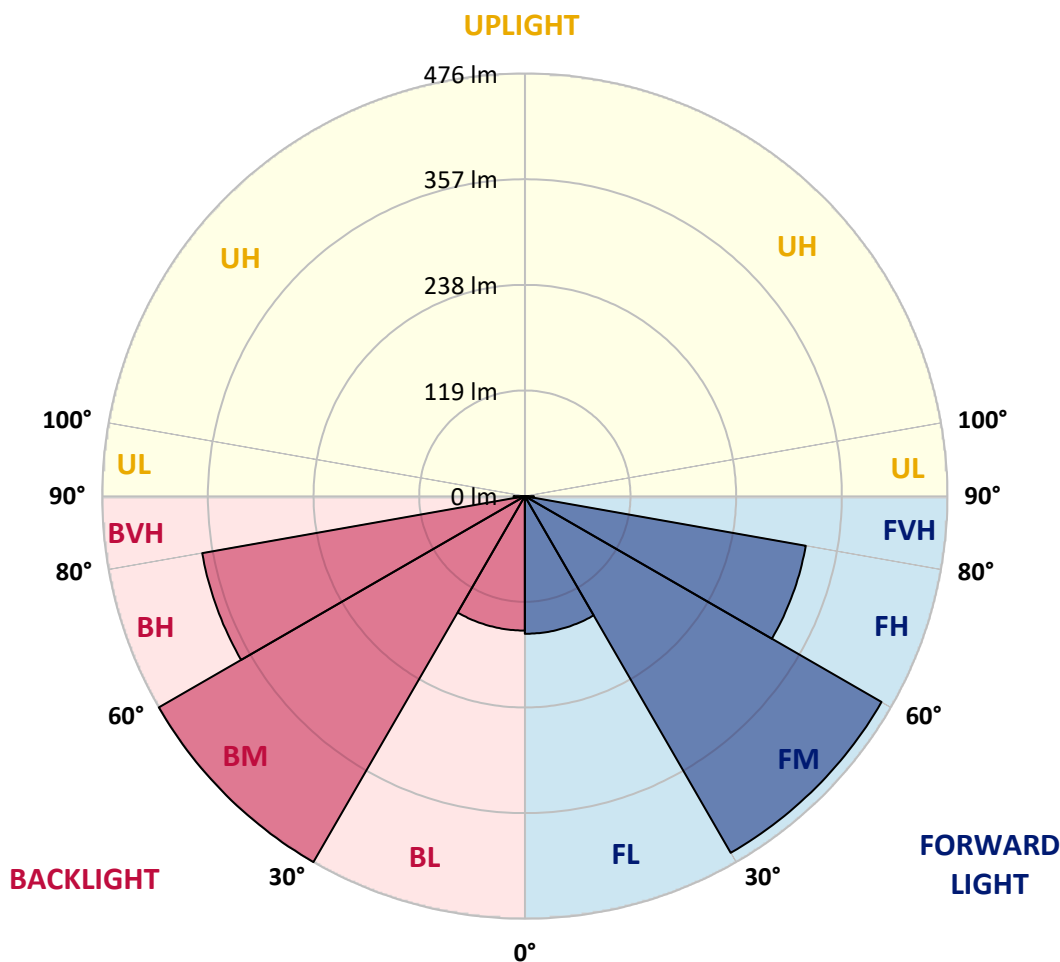
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	155.0	7.9			
FM (30°-60°)	463.6	23.7			
FH (60°-80°)	321.1	16.4			G0/660
FVH (80°-90°)	10.1	0.5			G1/100
BL (0°-30°)	151.3	7.7	B1/500		
BM (30°-60°)	475.7	24.3	B1/1000		
BH (60°-80°)	368.8	18.8	B1/500		G1/500
BVH (80°-90°)	12.7	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2
2.5°	319.8	319.4	320.5	321.2	317.9	319.0	318.3	317.6	315.0	313.9	311.7
5°	328.6	329.7	333.4	330.1	331.5	329.7	323.8	325.7	322.3	321.6	319.4
7.5°	344.0	341.8	347.0	343.3	344.4	340.7	338.2	334.8	334.1	329.0	329.3
10°	347.3	351.8	354.0	353.2	354.0	355.8	351.0	345.9	338.9	337.4	332.3
12.5°	345.1	349.2	355.1	359.8	363.1	363.9	362.0	360.9	358.0	349.5	349.2
15°	342.9	340.0	343.7	360.2	371.2	378.6	381.2	374.9	375.6	364.6	360.2
17.5°	328.2	323.8	338.2	354.3	367.9	384.1	396.6	394.8	394.8	385.9	379.7
20°	308.7	316.1	323.5	344.0	369.0	393.3	417.2	416.1	411.7	409.1	395.5
22.5°	292.2	295.5	309.1	330.8	362.0	395.9	424.2	444.4	434.1	423.8	415.7
25°	280.8	277.9	295.1	317.6	355.4	391.4	437.4	458.3	463.9	456.1	440.7
27.5°	264.6	264.6	278.2	299.6	334.1	389.2	450.3	482.2	490.3	478.9	456.5
30°	246.3	248.5	260.2	284.5	318.3	373.1	455.4	509.8	516.4	506.5	483.3
32.5°	231.9	231.9	245.2	270.9	307.3	365.7	452.1	537.0	549.5	542.1	518.3
35°	216.5	215.4	224.9	253.2	289.6	351.4	451.0	558.7	586.6	587.0	562.0
37.5°	194.4	198.8	211.0	233.4	275.7	337.4	447.7	584.8	634.8	643.2	625.9
40°	179.7	181.6	192.6	217.2	254.0	320.9	442.9	606.1	666.7	695.8	671.9
42.5°	158.4	161.0	169.4	200.0	233.0	297.4	422.0	621.2	712.3	745.4	725.2
45°	136.0	137.5	150.0	175.0	210.6	269.4	399.5	645.4	756.4	824.1	812.3
47.5°	109.2	109.9	120.6	146.7	183.8	241.5	365.0	644.3	792.1	902.7	935.8
50°	85.3	87.1	95.2	116.5	151.4	207.3	324.9	635.5	836.9	992.4	1057.5
52.5°	68.0	68.4	73.5	90.4	116.9	173.1	281.9	607.6	879.2	1080.2	1206.7
55°	56.2	56.2	59.2	69.5	89.7	131.6	231.6	561.3	884.3	1177.3	1369.5
56°	54.0	53.3	55.9	64.7	80.9	118.7	208.0	530.0	891.7	1222.1	1451.1
57°	51.1	51.5	52.9	59.2	72.8	105.1	181.9	499.5	886.5	1258.9	1511.4
58°	49.6	48.9	51.8	55.9	64.3	93.4	163.9	463.5	878.5	1289.0	1599.2
59°	47.4	47.0	48.9	52.6	59.9	83.1	141.9	424.5	862.7	1328.0	1664.7
60°	46.7	46.3	47.0	50.0	55.1	72.8	125.0	379.0	820.4	1368.0	1745.9
61°	44.5	44.8	46.3	48.1	52.2	65.4	112.5	332.3	792.8	1401.9	1835.6
62°	44.8	44.1	44.8	46.3	49.3	60.3	98.5	286.3	743.6	1440.1	1902.8
63°	42.6	42.3	43.4	45.2	46.7	54.4	86.0	247.4	687.7	1448.9	1959.8
64°	41.9	41.5	41.9	44.5	44.8	51.1	76.1	211.3	606.8	1464.0	2033.0
65°	40.1	40.1	40.8	41.9	43.4	48.1	68.0	183.4	526.3	1424.3	2055.4
66°	38.6	39.0	39.0	40.8	41.9	44.8	62.5	155.8	449.2	1361.1	2077.1
67°	37.5	37.5	37.9	39.3	40.4	42.3	56.2	134.9	379.0	1285.7	2043.6
67.5°	36.8	37.1	37.1	38.6	39.7	42.3	53.7	127.9	338.9	1203.0	2018.6
68°	35.7	36.0	36.0	37.5	38.6	40.8	51.8	116.9	312.4	1149.4	1972.3
69°	34.9	34.6	34.6	36.0	37.5	39.0	48.1	102.2	248.5	999.4	1904.7
70°	32.7	32.7	33.4	34.6	35.7	37.1	44.5	90.1	210.2	827.4	1730.5
71°	31.6	31.2	31.6	32.7	33.8	35.7	40.8	79.8	172.0	687.0	1559.2
72°	29.4	30.1	30.1	31.2	32.3	33.4	38.2	69.5	144.4	549.1	1370.6
72.5°	29.0	29.0	29.4	30.5	31.2	33.1	36.8	66.5	132.0	484.1	1291.6
73°	27.9	27.9	28.3	29.4	30.1	32.0	35.7	59.9	120.2	430.8	1143.8
74°	26.8	26.5	26.5	27.9	28.3	30.1	33.4	52.9	100.7	324.6	918.2
75°	25.0	25.0	25.4	26.1	26.5	27.9	30.9	47.0	84.9	251.8	718.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	20.6	21.0	21.3	22.1	22.1	23.2	25.4	32.7	51.8	127.5	329.7
80°	15.1	15.8	16.9	18.0	17.6	17.6	19.8	23.5	30.9	57.3	126.4
82.5°	12.1	12.9	11.8	13.2	13.2	12.5	14.3	17.3	21.0	28.3	45.2
85°	8.1	8.5	7.0	8.1	7.7	7.7	9.6	10.3	12.9	15.8	22.4
87.5°	3.7	3.7	2.9	3.3	3.3	3.3	4.8	3.7	5.5	7.7	13.2
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):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2	313.2
2.5°	313.9	315.4	315.4	313.9	312.8	313.9	313.2	311.3	313.2	313.9	314.3
5°	318.3	315.4	316.8	313.5	315.7	315.4	314.6	316.5	316.8	316.8	319.4
7.5°	323.1	326.8	322.0	322.3	323.5	319.0	320.5	321.2	319.8	322.7	324.9
10°	331.5	333.0	331.5	326.0	329.7	326.8	325.7	329.0	328.2	329.0	332.3
12.5°	339.3	341.8	337.8	337.4	335.6	333.0	334.5	334.1	339.3	340.0	344.0
15°	355.1	348.4	347.0	346.6	345.9	344.8	345.5	345.9	352.5	353.6	363.1
17.5°	368.7	367.6	359.5	362.4	362.4	358.0	356.2	362.4	367.6	373.1	379.7
20°	382.6	381.5	372.7	373.1	369.8	373.8	371.6	377.5	386.3	388.1	394.0
22.5°	399.2	394.4	388.1	388.9	390.0	387.0	385.6	393.7	402.5	407.6	408.0
25°	425.3	413.1	408.0	408.7	407.3	405.0	406.2	416.4	420.9	431.9	429.7
27.5°	439.2	432.2	428.6	420.1	420.5	417.2	421.6	437.0	445.8	454.3	437.4
30°	456.1	451.7	435.6	432.6	432.2	430.8	438.9	458.7	471.9	476.7	452.5
32.5°	489.2	471.6	467.5	465.0	459.1	460.9	465.0	491.1	512.0	510.9	466.4
35°	527.1	514.9	503.6	501.3	500.6	495.5	502.5	533.0	549.1	544.4	471.6
37.5°	587.7	569.3	553.9	545.5	544.0	540.3	556.8	581.1	602.1	583.3	475.6
40°	617.5	596.9	582.6	577.4	578.5	583.7	599.9	637.0	646.2	611.6	478.9
42.5°	660.1	637.7	609.4	606.8	603.5	606.1	637.3	687.3	695.1	649.8	466.4
45°	735.8	702.0	669.3	654.6	655.4	662.3	710.9	765.6	751.3	676.3	446.6
47.5°	831.4	781.8	755.3	735.5	745.0	737.3	814.5	858.2	809.4	709.8	422.3
50°	975.1	905.7	869.6	845.7	849.8	856.4	934.7	971.8	873.7	725.9	385.2
52.5°	1156.3	1067.0	1014.1	982.1	985.1	999.4	1100.5	1089.1	947.2	739.5	335.6
55°	1373.2	1281.3	1178.8	1165.5	1162.2	1196.4	1307.8	1211.8	1013.4	717.8	284.1
56°	1487.9	1390.1	1283.5	1256.3	1248.2	1272.1	1403.0	1273.2	1036.1	693.6	259.5
57°	1585.3	1491.9	1375.0	1328.7	1339.0	1383.9	1497.4	1330.9	1057.1	668.6	236.3
58°	1719.1	1612.5	1489.0	1453.7	1444.5	1480.2	1599.2	1389.0	1064.1	642.9	215.0
59°	1852.5	1724.6	1613.2	1548.9	1551.5	1616.5	1699.6	1458.1	1074.7	610.1	187.8
60°	1953.9	1889.6	1740.7	1692.6	1686.0	1780.1	1799.6	1504.4	1086.1	566.0	168.7
61°	2097.6	2013.8	1875.3	1813.2	1831.2	1906.5	1907.6	1562.5	1069.2	510.2	145.2
62°	2200.9	2178.9	2033.3	1974.1	1968.6	2068.6	2020.1	1613.6	1054.5	457.2	128.3
63°	2321.9	2321.9	2189.2	2142.9	2145.4	2224.5	2069.0	1664.7	1037.6	398.8	112.8
64°	2384.7	2463.7	2341.3	2276.3	2293.2	2361.6	2156.1	1698.1	985.4	339.6	99.2
65°	2439.1	2557.8	2489.8	2459.7	2434.0	2474.4	2231.4	1729.4	905.7	288.9	88.2
66°	2485.1	2646.4	2624.0	2591.6	2589.1	2579.9	2246.1	1728.3	823.3	244.1	77.2
67°	2461.9	2648.2	2689.0	2702.6	2698.6	2601.6	2220.4	1688.9	717.8	206.2	68.7
67.5°	2440.9	2633.2	2728.0	2720.3	2737.2	2619.9	2224.8	1640.8	642.9	186.7	64.7
68°	2422.6	2613.0	2743.8	2753.7	2745.3	2622.2	2200.6	1602.5	591.8	175.3	61.0
69°	2283.3	2517.0	2718.5	2754.1	2732.4	2538.0	2123.4	1502.9	470.1	149.6	56.2
70°	2143.6	2392.8	2595.3	2660.7	2633.9	2375.2	2026.0	1344.5	387.8	127.9	50.7
71°	1950.3	2162.0	2431.4	2470.7	2438.4	2189.9	1824.6	1177.3	301.8	108.4	45.2
72°	1687.8	1867.6	2124.8	2220.0	2172.3	1923.4	1620.9	972.9	244.4	91.2	41.2
72.5°	1557.7	1741.9	1990.0	1997.7	2006.9	1807.6	1534.5	854.6	213.2	84.5	40.1
73°	1434.2	1614.7	1829.3	1856.5	1817.6	1612.5	1405.5	764.2	194.8	77.2	38.6
74°	1162.2	1265.1	1443.0	1469.5	1435.3	1314.8	1148.6	585.9	155.1	66.5	35.3
75°	914.5	971.1	1132.1	1115.9	1064.8	1022.5	890.6	447.7	125.7	58.4	32.7



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	410.9	445.1	471.9	471.9	474.9	453.2	410.6	205.5	77.6	42.3	26.8
80°	156.6	175.3	181.2	181.6	184.1	190.8	177.5	101.1	45.9	30.1	21.7
82.5°	113.6	158.8	170.9	162.1	162.8	147.0	68.0	44.8	29.0	21.0	15.8
85°	102.9	138.2	146.3	145.2	145.6	136.0	40.1	22.1	16.9	13.2	11.0
87.5°	50.0	48.9	51.8	58.4	57.0	73.9	33.8	11.0	7.4	5.5	5.5
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°	313.2	313.2	313.2	313.2	313.2	313.2
2.5°	311.3	311.0	316.1	311.0	313.9	311.7
5°	315.0	316.5	317.6	319.8	314.6	319.8
7.5°	326.0	327.5	327.9	329.7	327.5	327.1
10°	334.5	338.2	340.4	333.0	337.4	337.0
12.5°	351.0	347.3	347.0	345.5	341.5	340.0
15°	362.8	357.3	354.0	348.1	343.3	341.5
17.5°	379.3	368.7	355.1	342.9	334.5	327.9
20°	389.6	370.5	343.3	329.0	316.1	319.0
22.5°	396.2	368.7	332.6	314.3	301.4	305.1
25°	398.4	359.5	325.3	302.5	290.0	287.4
27.5°	392.2	348.8	311.0	285.2	274.2	276.4
30°	389.2	333.4	297.7	272.4	257.7	259.9
32.5°	381.5	317.6	280.1	254.3	243.7	240.0
35°	370.5	304.3	263.2	238.9	226.0	223.1
37.5°	356.9	287.8	248.5	219.1	207.7	205.5
40°	336.7	267.9	227.2	201.8	188.6	188.2
42.5°	319.0	248.8	207.3	181.2	168.0	168.7
45°	296.6	223.1	184.5	162.1	148.9	149.6
47.5°	267.9	199.2	162.8	137.8	126.8	126.1
50°	234.1	172.0	136.4	115.0	105.9	104.0
52.5°	201.8	144.4	111.7	92.6	84.9	84.2
55°	161.0	112.5	87.1	72.8	66.9	67.3
56°	146.3	103.7	79.4	66.5	62.1	62.1
57°	132.3	91.9	72.0	61.4	57.3	57.3
58°	116.9	80.9	65.4	55.5	53.7	52.2
59°	106.2	73.5	59.2	52.6	49.6	49.3
60°	93.7	66.2	55.1	49.3	47.0	46.7
61°	83.1	59.5	50.7	45.9	45.2	45.2
62°	74.2	55.1	47.0	44.5	44.1	43.0
63°	66.5	50.7	45.2	42.3	41.2	42.3
64°	59.5	46.7	43.7	41.5	40.1	40.8
65°	54.0	44.8	41.9	40.4	39.0	39.3
66°	50.4	41.9	40.4	38.6	37.9	38.2
67°	45.6	40.4	39.0	37.1	36.8	37.1
67.5°	44.1	39.3	38.2	36.4	36.0	36.4
68°	43.0	38.6	37.9	36.0	35.7	35.3
69°	40.1	37.1	36.0	35.3	34.6	34.2
70°	37.5	35.7	34.9	33.8	33.1	32.7
71°	36.0	33.8	33.4	32.3	31.6	31.2
72°	34.2	32.7	32.0	30.5	30.1	30.5
72.5°	33.8	32.0	31.6	30.1	29.8	29.8
73°	32.7	30.5	30.9	29.4	28.7	29.4
74°	30.5	29.8	29.0	27.9	27.6	27.6
75°	28.7	27.9	27.2	26.5	26.5	26.5



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
77.5°	24.3	23.9	24.3	22.8	22.4	22.1
80°	19.5	19.5	19.8	18.7	18.0	17.6
82.5°	14.7	15.1	15.8	14.7	14.0	13.2
85°	9.6	9.9	9.9	8.8	10.3	9.6
87.5°	4.8	5.1	4.8	4.4	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)