

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: P676180

Luminaire Tested: **CCW-SA-2A-830-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676180
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2A-830-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @350mA w/
T1 distribution lens
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

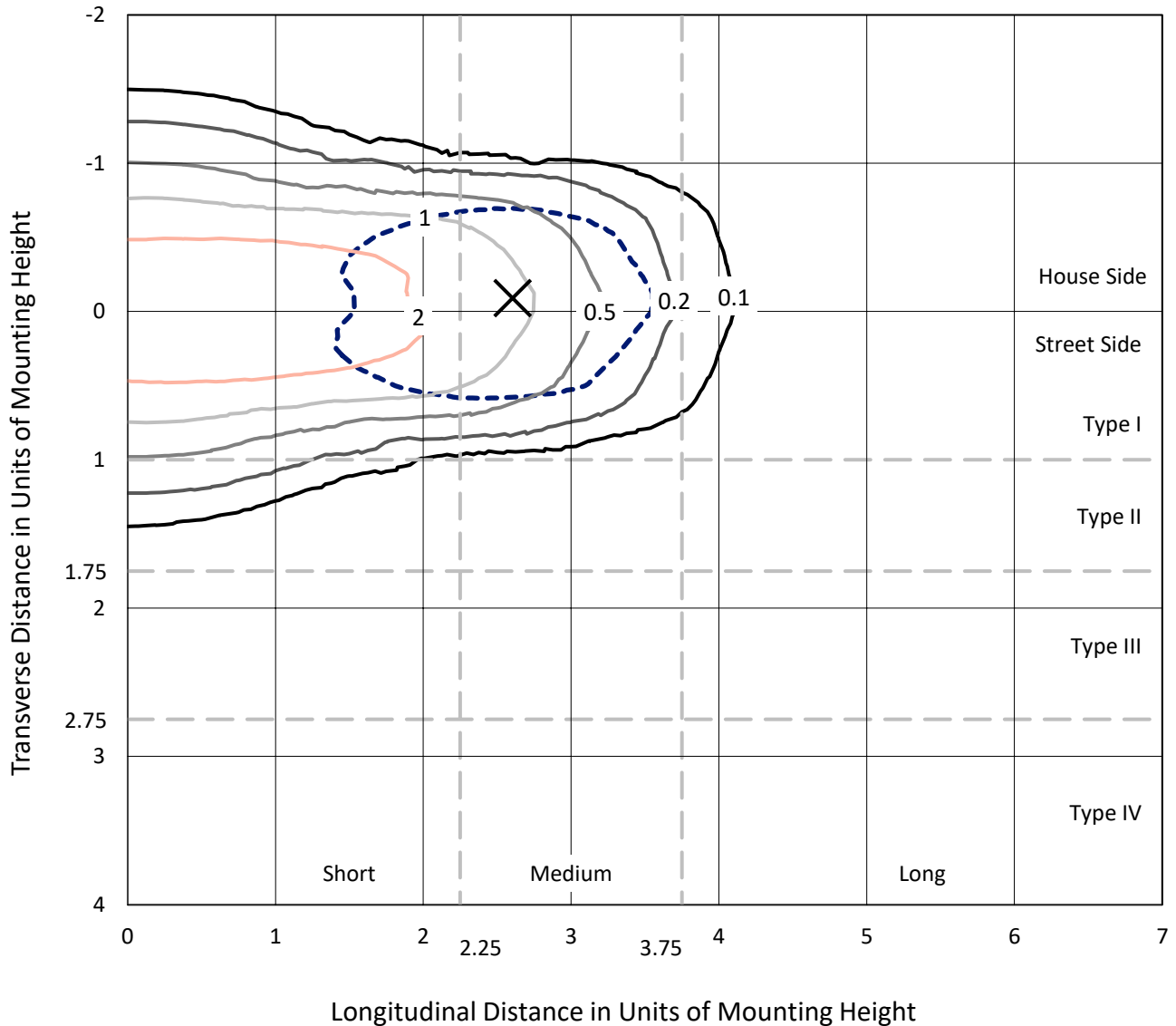
Lumens per Lamp: N/A
Luminaire Lumens: 4233.8 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 36.2
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

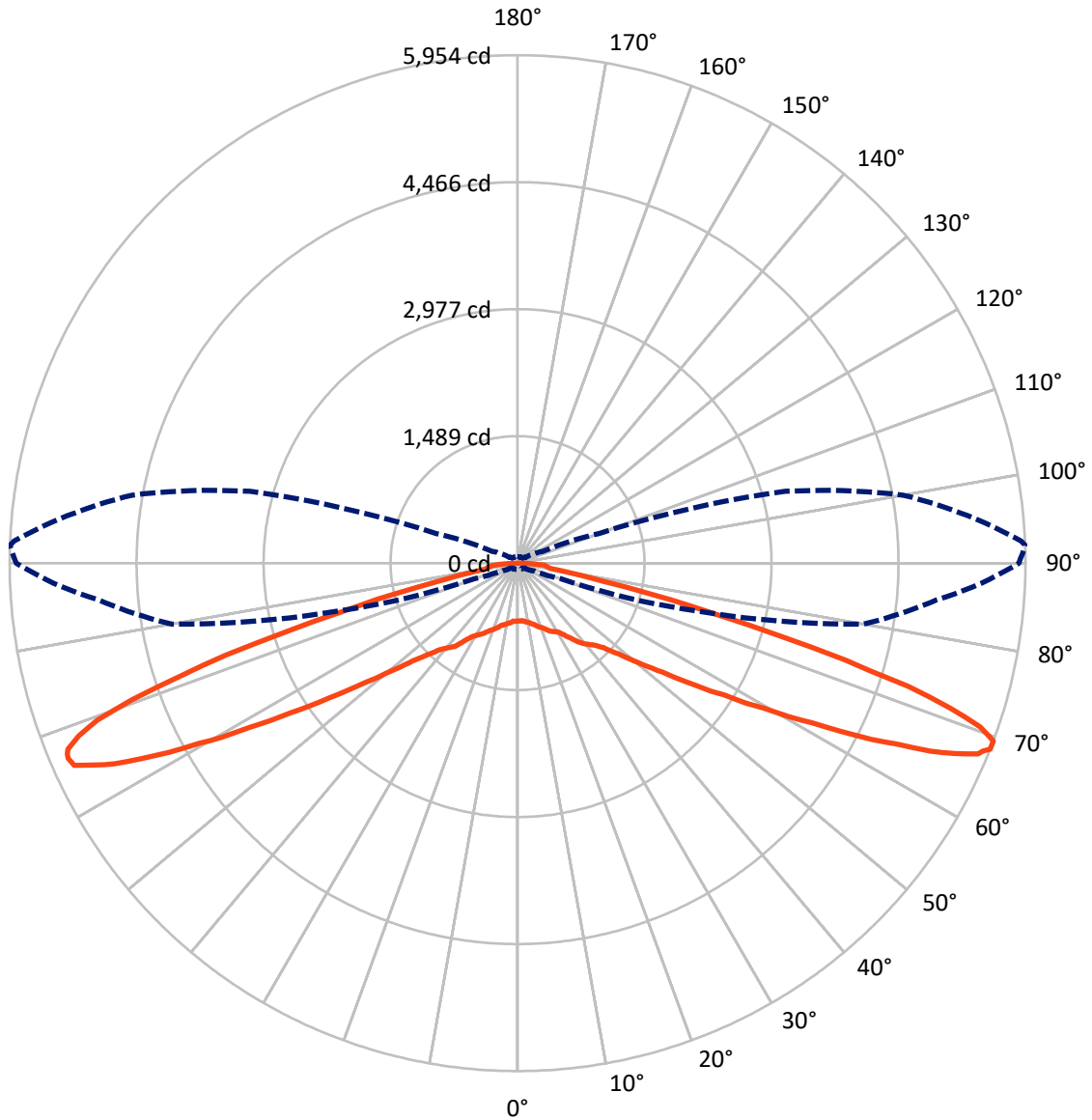
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.3 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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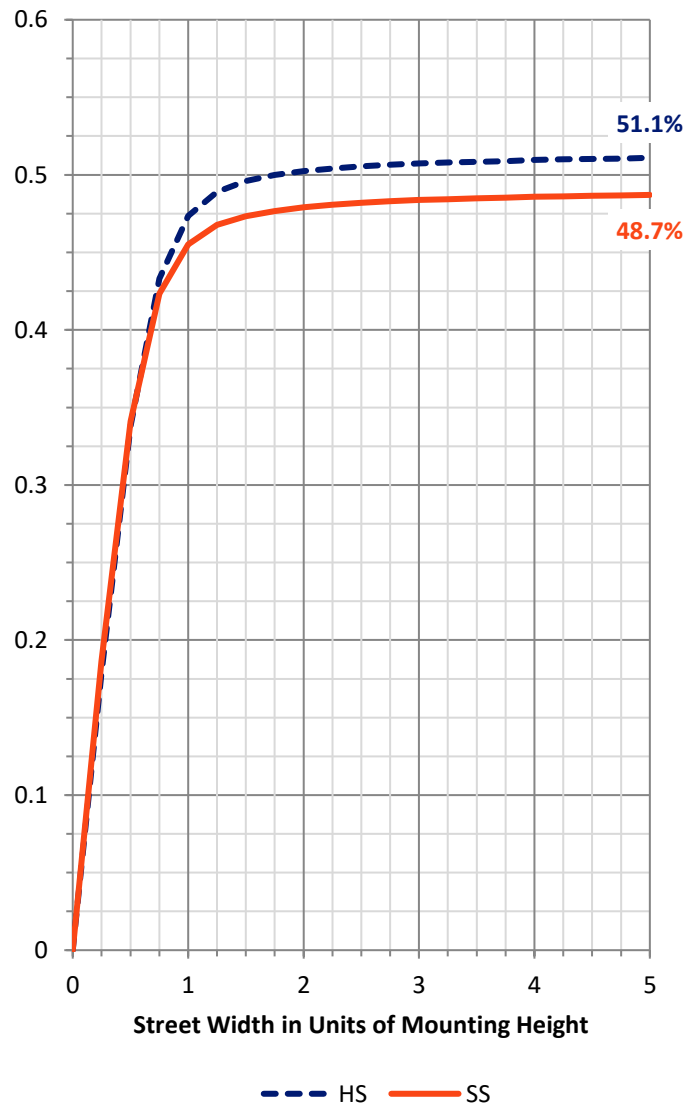
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2180.3	0.0	2180.3
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	2053.4	0.0	2053.4
	% Fixture	48.5	0.0	48.5
Total	Lumens	4233.8	0.0	4233.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	1.6
10°-20°	219.6	5.2
20°-30°	374.8	8.9
30°-40°	523.3	12.4
40°-50°	665.7	15.7
50°-60°	841.7	19.9
60°-70°	1038.1	24.5
70°-80°	453.5	10.7
80°-90°	49.2	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°	4233.8	100.0
0°-180°	4233.8	100.0



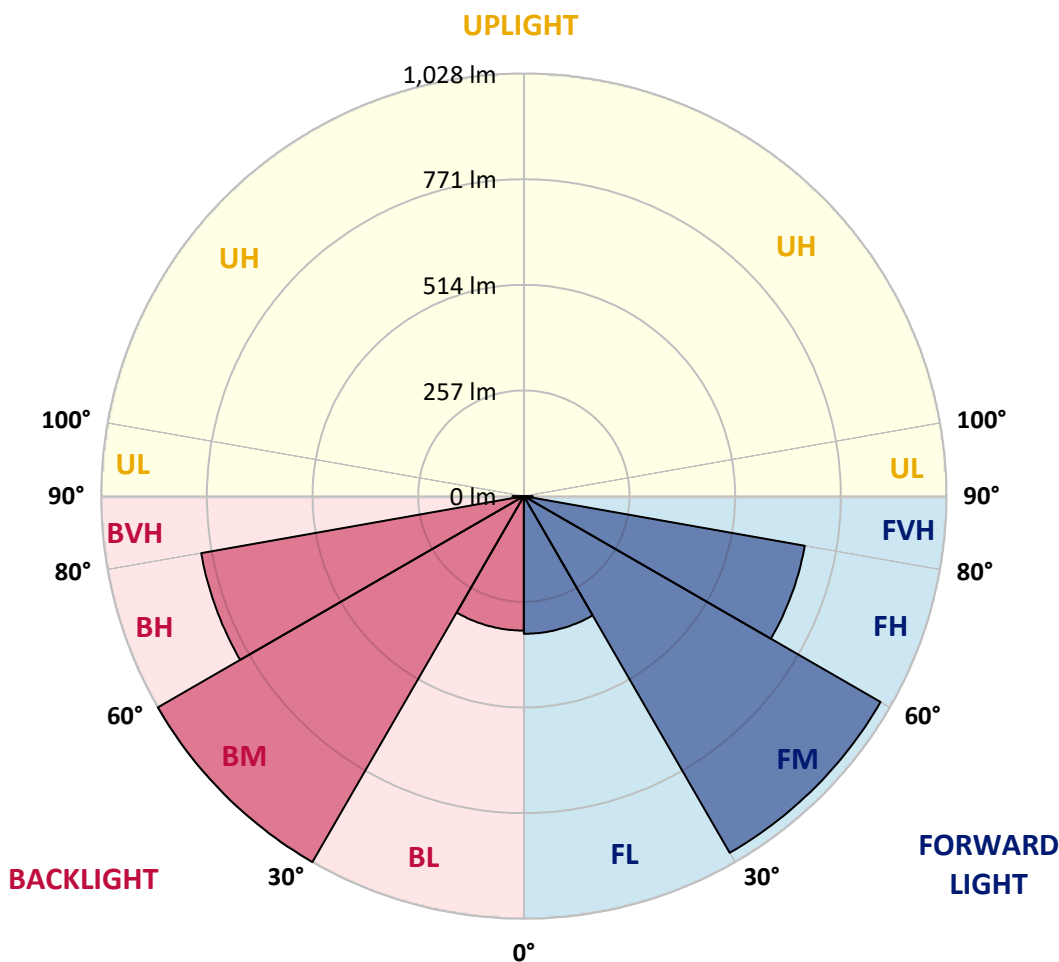
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	335.1	7.9			
FM (30°-60°)	1002.3	23.7			
FH (60°-80°)	694.3	16.4			G1/1800
FVH (80°-90°)	21.8	0.5			G1/100
BL (0°-30°)	327.2	7.7	B1/500		
BM (30°-60°)	1028.5	24.3	B2/2500		
BH (60°-80°)	797.3	18.8	B2/1000		G2/1000
BVH (80°-90°)	27.4	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°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	691.3	690.5	692.9	694.5	687.3	689.7	688.1	686.5	681.0	678.6	673.8
5°	710.4	712.8	720.7	713.6	716.7	712.8	700.1	704.0	696.9	695.3	690.5
7.5°	743.8	739.0	750.1	742.2	744.6	736.6	731.0	723.9	722.3	711.2	712.0
10°	750.9	760.4	765.2	763.6	765.2	769.2	758.9	747.7	732.6	729.5	718.3
12.5°	746.1	754.9	767.6	777.9	785.1	786.7	782.7	780.3	774.0	755.7	754.9
15°	741.4	735.0	743.0	778.7	802.6	818.5	824.0	810.5	812.1	788.3	778.7
17.5°	709.6	700.1	731.0	766.0	795.4	830.4	857.4	853.4	853.4	834.3	820.8
20°	667.5	683.4	699.3	743.8	797.8	850.2	901.9	899.5	890.0	884.4	855.0
22.5°	631.7	638.9	668.3	715.2	782.7	855.8	917.0	960.7	938.4	916.2	898.7
25°	607.1	600.7	638.1	686.5	768.4	846.3	945.6	990.9	1002.8	986.1	952.7
27.5°	572.1	572.1	601.5	647.6	722.3	841.5	973.4	1042.5	1060.0	1035.4	986.9
30°	532.4	537.2	562.6	615.0	688.1	806.5	984.5	1102.1	1116.4	1095.0	1044.9
32.5°	501.4	501.4	530.0	585.6	664.3	790.6	977.4	1160.9	1187.9	1172.1	1120.4
35°	468.0	465.6	486.3	547.5	626.2	759.7	975.0	1207.8	1268.2	1269.0	1215.0
37.5°	420.4	429.9	456.1	504.6	596.0	729.5	967.8	1264.2	1372.3	1390.6	1353.2
40°	388.6	392.5	416.4	469.6	549.1	693.7	957.5	1310.3	1441.4	1504.2	1452.6
42.5°	342.5	348.0	366.3	432.3	503.8	642.8	912.2	1342.9	1540.0	1611.5	1567.8
45°	294.0	297.2	324.2	378.2	455.3	582.5	863.7	1395.3	1635.3	1781.5	1756.1
47.5°	236.0	237.6	260.6	317.1	397.3	522.1	789.1	1393.0	1712.4	1951.6	2023.1
50°	184.4	188.3	205.8	251.9	327.4	448.2	702.4	1373.9	1809.3	2145.5	2286.1
52.5°	147.0	147.8	158.9	195.5	252.7	374.3	609.5	1313.5	1900.7	2335.4	2608.7
55°	121.6	121.6	127.9	150.2	193.9	284.5	500.6	1213.4	1911.8	2545.2	2960.7
56°	116.8	115.2	120.8	139.9	174.8	256.7	449.8	1145.8	1927.7	2642.1	3137.1
57°	110.5	111.2	114.4	127.9	157.3	227.3	393.3	1079.9	1916.6	2721.6	3267.5
58°	107.3	105.7	112.0	120.8	139.1	201.8	354.4	1002.0	1899.1	2786.7	3457.4
59°	102.5	101.7	105.7	113.6	129.5	179.6	306.7	917.8	1865.0	2870.9	3598.8
60°	100.9	100.1	101.7	108.1	119.2	157.3	270.2	819.2	1773.6	2957.6	3774.4
61°	96.1	96.9	100.1	104.1	112.8	141.4	243.2	718.3	1714.0	3030.7	3968.3
62°	96.9	95.4	96.9	100.1	106.5	130.3	213.0	619.0	1607.5	3113.3	4113.7
63°	92.2	91.4	93.8	97.7	100.9	117.6	185.9	534.8	1486.7	3132.4	4236.9
64°	90.6	89.8	90.6	96.1	96.9	110.5	164.5	456.9	1311.9	3165.0	4395.0
65°	86.6	86.6	88.2	90.6	93.8	104.1	147.0	396.5	1137.9	3079.1	4443.5
66°	83.4	84.2	84.2	88.2	90.6	96.9	135.1	336.9	971.0	2942.5	4490.4
67°	81.1	81.1	81.8	85.0	87.4	91.4	121.6	291.6	819.2	2779.6	4418.1
67.5°	79.5	80.3	80.3	83.4	85.8	91.4	116.0	276.5	732.6	2600.8	4364.0
68°	77.1	77.9	77.9	81.1	83.4	88.2	112.0	252.7	675.4	2484.8	4263.9
69°	75.5	74.7	74.7	77.9	81.1	84.2	104.1	220.9	537.2	2160.6	4117.7
70°	70.7	70.7	72.3	74.7	77.1	80.3	96.1	194.7	454.5	1788.7	3741.0
71°	68.3	67.5	68.3	70.7	73.1	77.1	88.2	172.4	371.9	1485.1	3370.8
72°	63.6	65.2	65.2	67.5	69.9	72.3	82.6	150.2	312.3	1187.2	2963.1
72.5°	62.8	62.8	63.6	66.0	67.5	71.5	79.5	143.8	285.3	1046.5	2792.3
73°	60.4	60.4	61.2	63.6	65.2	69.1	77.1	129.5	259.8	931.3	2472.8
74°	58.0	57.2	57.2	60.4	61.2	65.2	72.3	114.4	217.7	701.6	1984.9
75°	54.0	54.0	54.8	56.4	57.2	60.4	66.7	101.7	183.6	544.3	1552.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	44.5	45.3	46.1	47.7	47.7	50.1	54.8	70.7	112.0	275.7	712.8
80°	32.6	34.2	36.6	38.9	38.1	38.1	42.9	50.9	66.7	124.0	273.3
82.5°	26.2	27.8	25.4	28.6	28.6	27.0	31.0	37.3	45.3	61.2	97.7
85°	17.5	18.3	15.1	17.5	16.7	16.7	20.7	22.2	27.8	34.2	48.5
87.5°	7.9	7.9	6.4	7.2	7.2	7.2	10.3	7.9	11.9	16.7	28.6
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°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	678.6	681.8	681.8	678.6	676.2	678.6	677.0	673.0	677.0	678.6	679.4
5°	688.1	681.8	685.0	677.8	682.6	681.8	680.2	684.2	685.0	685.0	690.5
7.5°	698.5	706.4	696.1	696.9	699.3	689.7	692.9	694.5	691.3	697.7	702.4
10°	716.7	719.9	716.7	704.8	712.8	706.4	704.0	711.2	709.6	711.2	718.3
12.5°	733.4	739.0	730.3	729.5	725.5	719.9	723.1	722.3	733.4	735.0	743.8
15°	767.6	753.3	750.1	749.3	747.7	745.3	746.9	747.7	762.0	764.4	785.1
17.5°	797.0	794.6	777.1	783.5	783.5	774.0	770.0	783.5	794.6	806.5	820.8
20°	827.2	824.8	805.7	806.5	799.4	808.1	803.4	816.1	835.1	839.1	851.8
22.5°	863.0	852.6	839.1	840.7	843.1	836.7	833.6	851.0	870.1	881.2	882.0
25°	919.4	893.1	882.0	883.6	880.4	875.7	878.0	900.3	909.8	933.7	928.9
27.5°	949.6	934.5	926.5	908.2	909.0	901.9	911.4	944.8	963.9	982.1	945.6
30°	986.1	976.6	941.6	935.3	934.5	931.3	948.8	991.7	1020.3	1030.6	978.2
32.5°	1057.6	1019.5	1010.8	1005.2	992.5	996.4	1005.2	1061.6	1106.9	1104.5	1008.4
35°	1139.5	1113.3	1088.6	1083.9	1082.3	1071.1	1086.2	1152.2	1187.2	1176.8	1019.5
37.5°	1270.6	1230.9	1197.5	1179.2	1176.0	1168.1	1203.8	1256.3	1301.6	1261.1	1028.2
40°	1335.0	1290.5	1259.5	1248.3	1250.7	1261.8	1296.8	1377.1	1396.9	1322.2	1035.4
42.5°	1427.1	1378.7	1317.5	1311.9	1304.8	1310.3	1377.9	1485.9	1502.6	1404.9	1008.4
45°	1590.8	1517.7	1447.0	1415.2	1416.8	1431.9	1536.8	1655.2	1624.2	1462.1	965.5
47.5°	1797.4	1690.1	1632.9	1590.0	1610.7	1594.0	1760.9	1855.4	1749.7	1534.4	913.0
50°	2108.1	1957.9	1880.1	1828.4	1837.1	1851.5	2020.7	2101.0	1888.8	1569.4	832.8
52.5°	2499.9	2306.8	2192.3	2123.2	2129.6	2160.6	2379.1	2354.4	2047.7	1598.8	725.5
55°	2968.7	2770.0	2548.3	2519.7	2512.6	2586.5	2827.2	2619.8	2190.8	1551.9	614.2
56°	3216.6	3005.2	2774.8	2716.0	2698.5	2750.2	3033.0	2752.5	2240.0	1499.4	561.0
57°	3427.2	3225.3	2972.7	2872.5	2894.8	2991.7	3237.3	2877.3	2285.3	1445.4	510.9
58°	3716.4	3486.0	3219.0	3142.7	3122.8	3199.9	3457.4	3002.8	2300.4	1389.8	464.8
59°	4004.9	3728.3	3487.6	3348.5	3354.1	3494.7	3674.3	3152.2	2323.5	1319.1	406.0
60°	4224.2	4085.1	3763.3	3659.2	3644.9	3848.3	3890.4	3252.4	2348.1	1223.7	364.7
61°	4534.9	4353.7	4054.1	3919.8	3958.8	4121.7	4124.1	3377.9	2311.5	1102.9	313.9
62°	4758.2	4710.5	4395.8	4267.9	4256.0	4472.1	4367.2	3488.4	2279.8	988.5	277.3
63°	5019.6	5019.6	4732.7	4632.6	4638.2	4809.0	4472.9	3598.8	2243.2	862.2	243.9
64°	5155.5	5326.3	5061.7	4921.0	4957.6	5105.4	4661.2	3671.1	2130.4	734.2	214.5
65°	5273.1	5529.7	5382.7	5317.6	5261.9	5349.3	4824.1	3738.7	1957.9	624.6	190.7
66°	5372.4	5721.2	5672.8	5602.8	5597.3	5577.4	4855.9	3736.3	1779.9	527.6	166.9
67°	5322.3	5725.2	5813.4	5842.8	5834.1	5624.3	4800.3	3651.3	1551.9	445.8	148.6
67.5°	5277.0	5692.6	5897.6	5880.9	5917.5	5664.0	4809.8	3547.2	1389.8	403.7	139.9
68°	5237.3	5648.9	5931.8	5953.3	5935.0	5668.8	4757.4	3464.5	1279.3	379.0	131.9
69°	4936.1	5441.5	5877.0	5954.0	5907.2	5486.8	4590.5	3249.2	1016.3	323.4	121.6
70°	4634.2	5172.9	5610.8	5752.2	5694.2	5134.8	4379.9	2906.7	838.3	276.5	109.7
71°	4216.2	4673.9	5256.4	5341.4	5271.5	4734.3	3944.5	2545.2	652.4	234.4	97.7
72°	3648.9	4037.4	4593.7	4799.5	4696.2	4158.2	3504.3	2103.3	528.4	197.1	89.0
72.5°	3367.6	3765.7	4302.0	4318.7	4338.6	3907.9	3317.5	1847.5	460.9	182.8	86.6
73°	3100.6	3490.7	3954.8	4013.6	3929.4	3486.0	3038.6	1652.0	421.1	166.9	83.4
74°	2512.6	2735.1	3119.7	3176.9	3103.0	2842.3	2483.2	1266.6	335.3	143.8	76.3
75°	1977.0	2099.4	2447.4	2412.5	2302.0	2210.6	1925.4	967.8	271.8	126.3	70.7



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	888.4	962.3	1020.3	1020.3	1026.6	979.8	887.6	444.2	167.7	91.4	58.0
80°	338.5	379.0	391.7	392.5	398.1	412.4	383.8	218.5	99.3	65.2	46.9
82.5°	245.5	343.3	369.5	350.4	352.0	317.8	147.0	96.9	62.8	45.3	34.2
85°	222.5	298.8	316.3	313.9	314.7	294.0	86.6	47.7	36.6	28.6	23.8
87.5°	108.1	105.7	112.0	126.3	123.2	159.7	73.1	23.8	15.9	11.9	11.9
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°	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	673.0	672.2	683.4	672.2	678.6	673.8
5°	681.0	684.2	686.5	691.3	680.2	691.3
7.5°	704.8	708.0	708.8	712.8	708.0	707.2
10°	723.1	731.0	735.8	719.9	729.5	728.7
12.5°	758.9	750.9	750.1	746.9	738.2	735.0
15°	784.3	772.4	765.2	752.5	742.2	738.2
17.5°	820.0	797.0	767.6	741.4	723.1	708.8
20°	842.3	801.0	742.2	711.2	683.4	689.7
22.5°	856.6	797.0	719.1	679.4	651.6	659.5
25°	861.4	777.1	703.2	654.0	627.0	621.4
27.5°	847.9	754.1	672.2	616.6	592.8	597.6
30°	841.5	720.7	643.6	588.8	557.0	561.8
32.5°	824.8	686.5	605.5	549.9	526.8	518.9
35°	801.0	657.9	568.9	516.5	488.7	482.3
37.5°	771.6	622.2	537.2	473.6	449.0	444.2
40°	727.9	579.3	491.1	436.2	407.6	406.8
42.5°	689.7	538.0	448.2	391.7	363.1	364.7
45°	641.3	482.3	398.9	350.4	321.8	323.4
47.5°	579.3	430.7	352.0	298.0	274.1	272.6
50°	506.2	371.9	294.8	248.7	228.8	224.9
52.5°	436.2	312.3	241.6	200.2	183.6	182.0
55°	348.0	243.2	188.3	157.3	144.6	145.4
56°	316.3	224.1	171.6	143.8	134.3	134.3
57°	286.1	198.7	155.7	132.7	124.0	124.0
58°	252.7	174.8	141.4	120.0	116.0	112.8
59°	229.6	158.9	127.9	113.6	107.3	106.5
60°	202.6	143.0	119.2	106.5	101.7	100.9
61°	179.6	128.7	109.7	99.3	97.7	97.7
62°	160.5	119.2	101.7	96.1	95.4	93.0
63°	143.8	109.7	97.7	91.4	89.0	91.4
64°	128.7	100.9	94.6	89.8	86.6	88.2
65°	116.8	96.9	90.6	87.4	84.2	85.0
66°	108.9	90.6	87.4	83.4	81.8	82.6
67°	98.5	87.4	84.2	80.3	79.5	80.3
67.5°	95.4	85.0	82.6	78.7	77.9	78.7
68°	93.0	83.4	81.8	77.9	77.1	76.3
69°	86.6	80.3	77.9	76.3	74.7	73.9
70°	81.1	77.1	75.5	73.1	71.5	70.7
71°	77.9	73.1	72.3	69.9	68.3	67.5
72°	73.9	70.7	69.1	66.0	65.2	66.0
72.5°	73.1	69.1	68.3	65.2	64.4	64.4
73°	70.7	66.0	66.7	63.6	62.0	63.6
74°	66.0	64.4	62.8	60.4	59.6	59.6
75°	62.0	60.4	58.8	57.2	57.2	57.2



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
77.5°	52.4	51.6	52.4	49.3	48.5	47.7
80°	42.1	42.1	42.9	40.5	38.9	38.1
82.5°	31.8	32.6	34.2	31.8	30.2	28.6
85°	20.7	21.5	21.5	19.1	22.2	20.7
87.5°	10.3	11.1	10.3	9.5	11.1	11.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)