

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: P676320

Luminaire Tested: **CCW-SA-1C-830-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676320
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1C-830-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @615mA w/
T2 distribution lens and House Side Shield
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

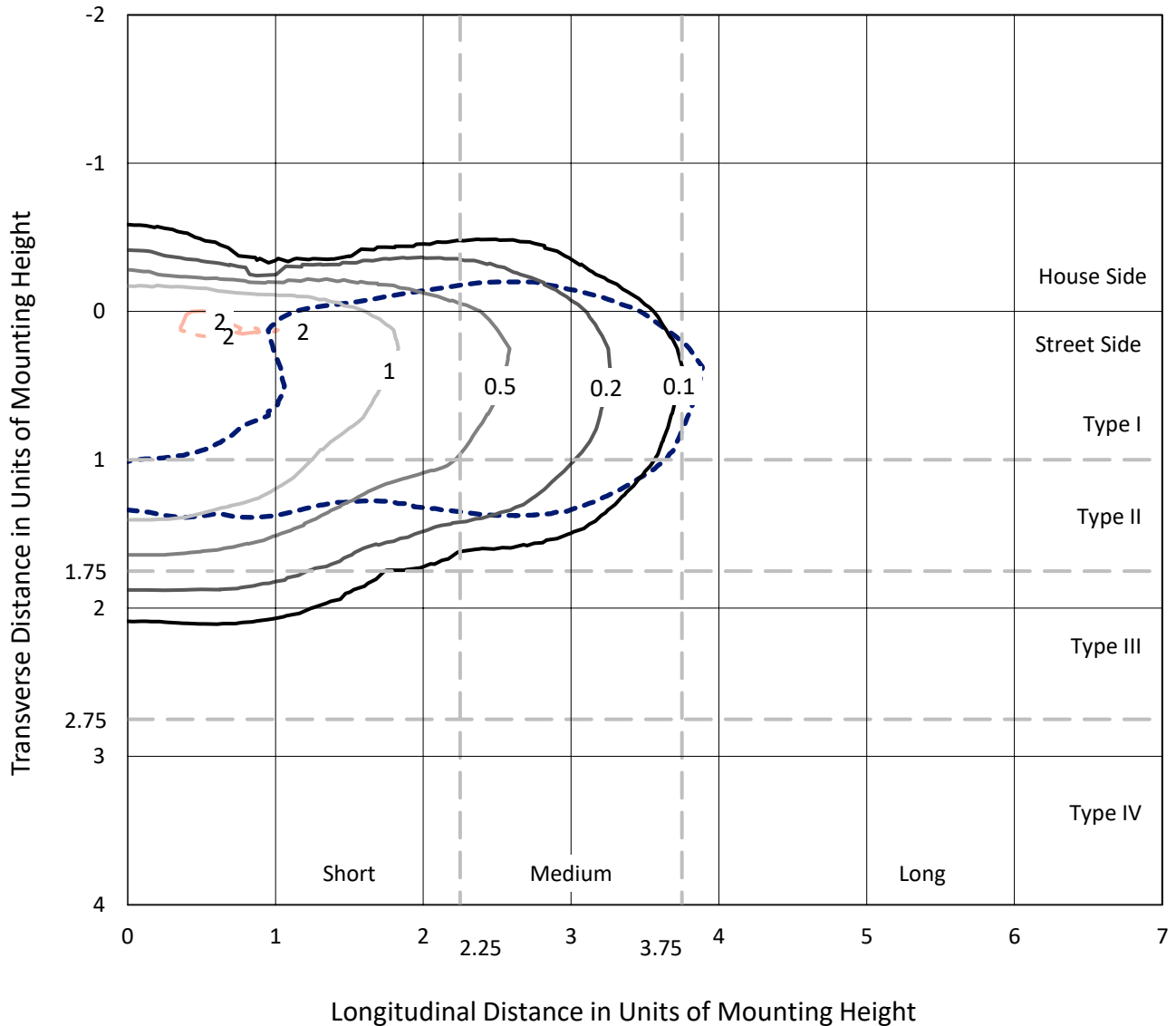
Lumens per Lamp: N/A
Luminaire Lumens: 2773.6 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 32
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

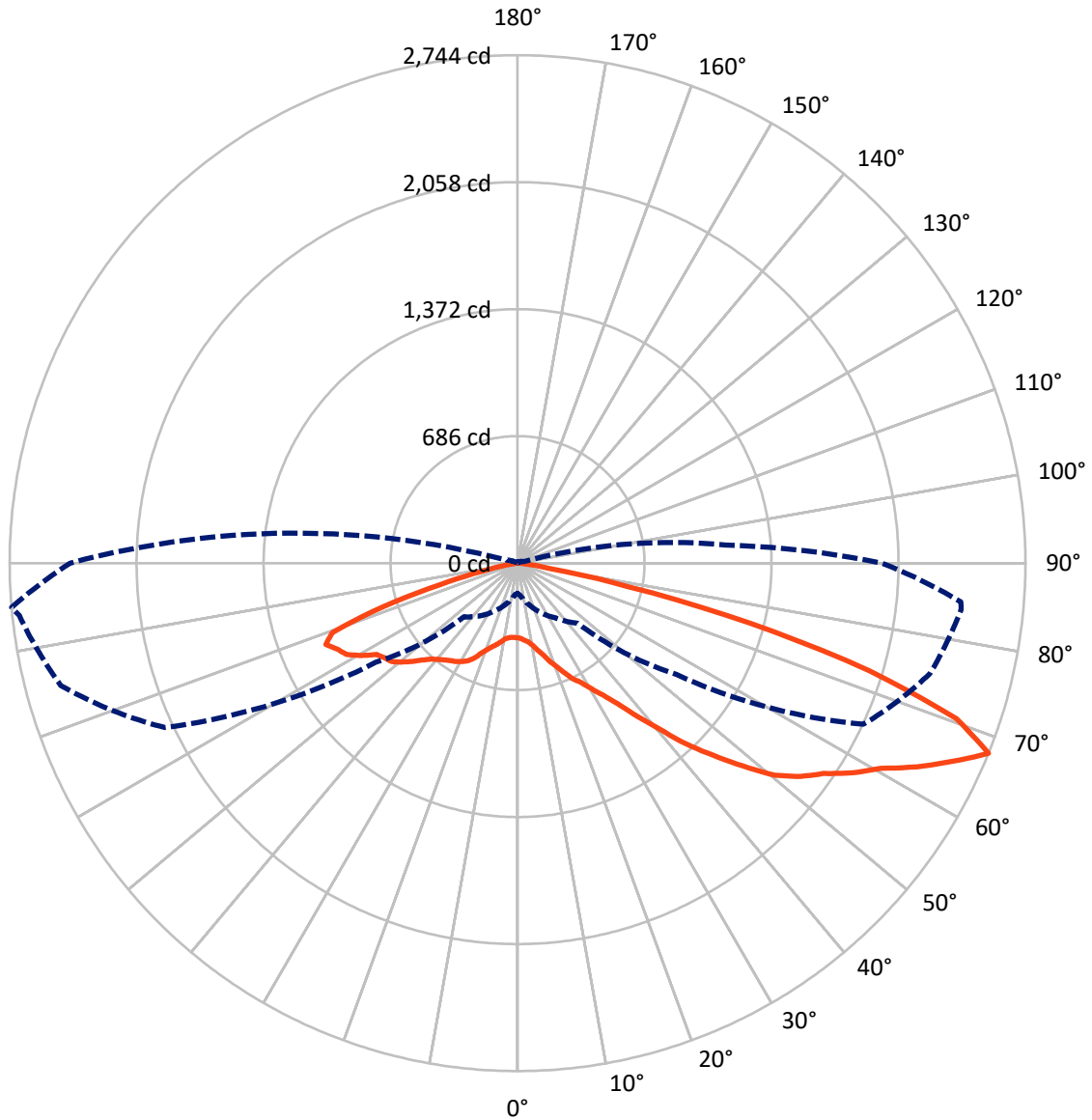
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 275-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	394.0	0.0	394.0
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	2379.6	0.0	2379.6
	% Fixture	85.8	0.0	85.8
Total	Lumens	2773.6	0.0	2773.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	1.3
10°-20°	98.9	3.6
20°-30°	164.2	5.9
30°-40°	282.6	10.2
40°-50°	507.8	18.3
50°-60°	722.9	26.1
60°-70°	659.0	23.8
70°-80°	280.6	10.1
80°-90°	20.9	0.8
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°	2773.6	100.0
0°-180°	2773.6	100.0



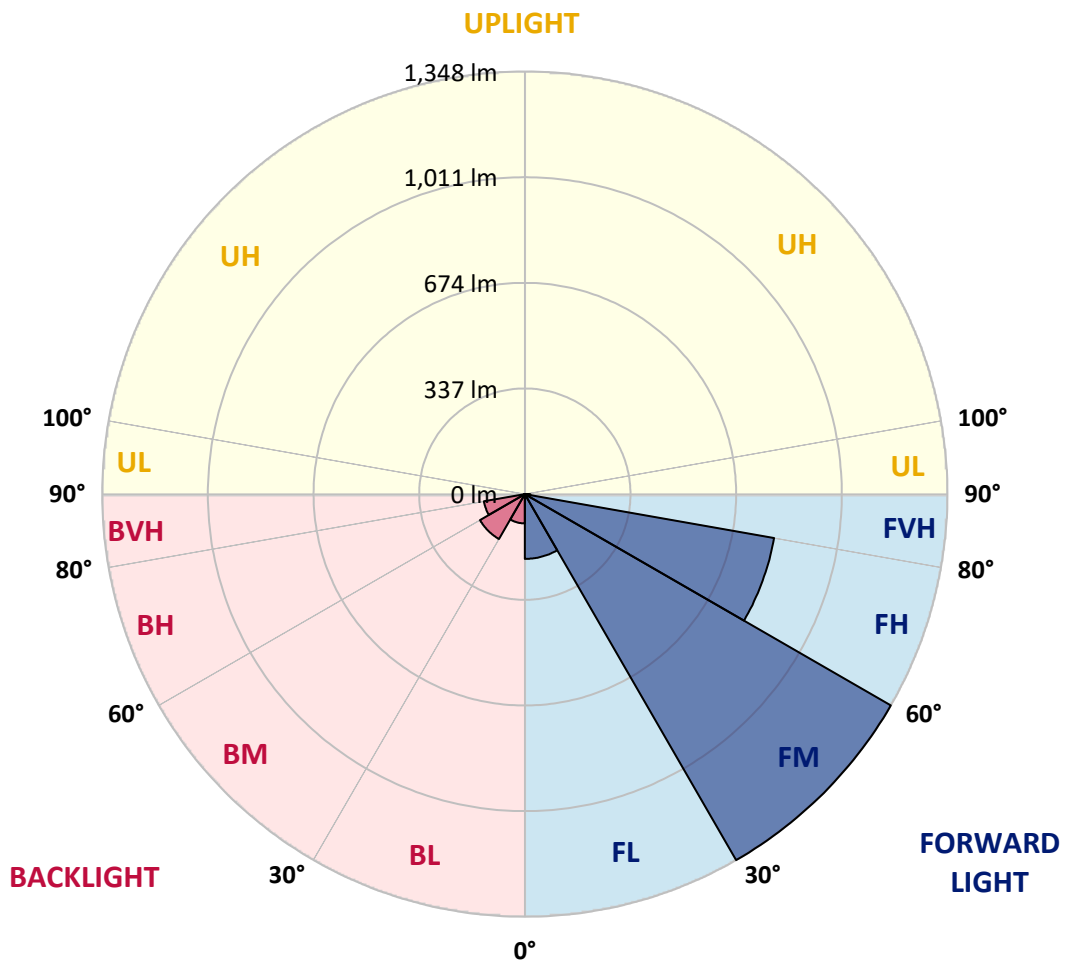
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	206.6	7.4			
FM (30°-60°)	1348.0	48.6			
FH (60°-80°)	807.2	29.1			G1/1800
FVH (80°-90°)	17.7	0.6			G1/100
BL (0°-30°)	93.3	3.4	B0/110		
BM (30°-60°)	165.2	6.0	B0/220		
BH (60°-80°)	132.4	4.8	B1/500		G1/500
BVH (80°-90°)	3.2	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3
2.5°	417.9	421.8	421.8	420.5	416.5	413.9	412.6	409.9	407.3	407.3	408.6
5°	421.8	417.9	423.2	416.5	416.5	416.5	421.8	419.2	417.9	411.3	411.3
7.5°	421.8	417.9	417.9	421.8	417.9	420.5	427.1	424.5	429.8	417.9	420.5
10°	409.9	408.6	411.3	416.5	417.9	423.2	429.8	443.0	444.3	436.4	435.1
12.5°	386.1	384.8	394.1	396.7	412.6	425.8	445.6	456.2	468.1	464.2	456.2
15°	368.9	371.6	378.2	388.8	403.3	427.1	449.6	473.4	494.6	489.3	486.6
17.5°	375.6	374.2	375.6	382.2	400.7	424.5	462.8	490.6	521.0	521.0	523.7
20°	395.4	399.4	398.0	394.1	403.3	423.2	462.8	511.8	562.0	558.0	558.0
22.5°	429.8	431.1	423.2	420.5	419.2	431.1	470.8	538.2	596.4	604.3	601.7
25°	465.5	466.8	464.2	456.2	445.6	448.3	485.3	559.4	644.0	657.2	654.6
27.5°	525.0	523.7	517.0	507.8	491.9	480.0	507.8	575.2	681.0	703.5	696.9
30°	584.5	580.5	571.3	559.4	544.8	522.3	535.6	605.6	727.3	748.5	733.9
32.5°	657.2	649.3	651.9	633.4	603.0	567.3	564.7	633.4	764.3	794.7	782.8
35°	749.8	740.5	727.3	710.1	681.0	633.4	618.9	678.4	826.5	849.0	849.0
37.5°	871.4	880.7	864.8	793.4	761.7	716.7	686.3	724.7	880.7	934.9	921.7
40°	995.8	1003.7	974.6	921.7	852.9	797.4	778.9	800.0	962.7	1027.5	1002.4
42.5°	1096.3	1106.8	1096.3	1027.5	973.3	901.9	868.8	888.6	1068.5	1146.5	1113.4
45°	1202.0	1212.6	1200.7	1155.8	1102.9	1061.9	978.6	1003.7	1179.6	1295.9	1258.9
47.5°	1281.4	1294.6	1273.4	1264.2	1221.9	1215.3	1073.8	1101.5	1295.9	1446.7	1400.4
50°	1299.9	1314.4	1333.0	1343.5	1329.0	1344.9	1202.0	1225.8	1417.6	1585.5	1540.6
52.5°	1256.3	1270.8	1311.8	1360.7	1428.2	1475.8	1331.6	1351.5	1544.5	1700.6	1676.8
55°	1128.0	1141.2	1224.5	1290.6	1452.0	1530.0	1455.9	1539.2	1635.8	1820.9	1762.7
57.5°	912.4	928.3	1038.1	1139.9	1372.6	1499.6	1530.0	1695.3	1786.5	1909.5	1842.1
60°	648.0	657.2	752.4	932.3	1153.1	1347.5	1515.4	1811.7	1905.5	2028.5	1992.8
62.5°	372.9	380.8	480.0	649.3	870.1	1125.3	1450.6	1921.4	2033.8	2159.4	2139.6
65°	247.3	249.9	317.4	409.9	566.0	829.1	1286.7	2019.3	2160.8	2263.9	2241.4
67.5°	162.7	177.2	230.1	293.6	362.3	458.9	1048.6	2060.3	2306.2	2409.4	2404.1
70°	116.4	121.7	165.3	226.1	272.4	257.9	613.6	1770.7	2299.6	2449.0	2405.4
72.5°	68.8	74.1	109.8	169.3	214.2	164.0	287.0	1252.3	1905.5	1954.5	1942.6
75°	50.3	50.3	67.4	121.7	156.0	117.7	134.9	792.1	1265.5	1374.0	1372.6
77.5°	35.7	37.0	46.3	72.7	120.3	86.0	74.1	440.4	691.6	756.4	720.7
80°	21.2	22.5	31.7	43.6	87.3	62.2	48.9	201.0	265.8	268.4	255.2
82.5°	15.9	15.9	21.2	30.4	60.8	42.3	30.4	76.7	86.0	78.0	66.1
85°	9.3	7.9	15.9	22.5	35.7	23.8	21.2	35.7	39.7	29.1	26.4
87.5°	2.6	2.6	6.6	7.9	15.9	13.2	9.3	13.2	18.5	10.6	7.9
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3
2.5°	406.0	402.0	395.4	392.7	383.5	379.5	376.9	370.3	371.6	367.6	367.6
5°	402.0	402.0	388.8	374.2	359.7	350.4	339.9	326.6	326.6	321.3	322.7
7.5°	416.5	406.0	388.8	362.3	338.5	317.4	308.1	294.9	287.0	283.0	283.0
10°	425.8	415.2	386.1	354.4	324.0	297.5	277.7	259.2	248.6	248.6	247.3
12.5°	450.9	435.1	396.7	353.1	308.1	268.4	238.0	216.9	202.3	191.7	194.4
15°	472.1	454.9	402.0	342.5	280.3	224.8	187.8	148.1	128.3	117.7	113.7
17.5°	505.1	473.4	413.9	324.0	238.0	175.9	121.7	88.6	80.7	79.3	79.3
20°	532.9	495.9	415.2	288.3	195.7	112.4	78.0	72.7	68.8	67.4	66.1
22.5°	571.3	525.0	409.9	247.3	140.2	75.4	66.1	60.8	58.2	54.2	54.2
25°	610.9	563.3	399.4	208.9	86.0	64.8	58.2	52.9	47.6	45.0	46.3
27.5°	653.3	592.4	368.9	162.7	66.1	56.9	47.6	43.6	41.0	39.7	39.7
30°	687.6	610.9	324.0	108.4	59.5	50.3	42.3	38.3	35.7	34.4	34.4
32.5°	712.8	626.8	273.7	72.7	54.2	45.0	38.3	34.4	31.7	30.4	30.4
35°	755.1	638.7	227.4	62.2	48.9	39.7	33.1	30.4	27.8	27.8	27.8
37.5°	819.9	654.6	181.2	56.9	45.0	35.7	31.7	27.8	26.4	25.1	25.1
40°	876.7	674.4	129.6	51.6	41.0	33.1	27.8	25.1	23.8	22.5	22.5
42.5°	958.7	696.9	84.6	46.3	37.0	30.4	25.1	22.5	21.2	19.8	19.8
45°	1063.2	733.9	66.1	41.0	33.1	27.8	23.8	21.2	18.5	18.5	17.2
47.5°	1174.3	778.9	59.5	38.3	30.4	25.1	21.2	18.5	17.2	15.9	15.9
50°	1277.4	822.5	55.5	35.7	27.8	23.8	19.8	17.2	14.5	13.2	13.2
52.5°	1370.0	863.5	52.9	33.1	26.4	21.2	17.2	14.5	13.2	11.9	11.9
55°	1418.9	882.0	51.6	31.7	23.8	19.8	15.9	13.2	11.9	10.6	10.6
57.5°	1495.6	905.8	50.3	30.4	22.5	17.2	14.5	11.9	10.6	9.3	9.3
60°	1619.9	983.8	48.9	29.1	21.2	17.2	13.2	10.6	7.9	6.6	6.6
62.5°	1723.1	1048.6	43.6	25.1	18.5	14.5	10.6	7.9	5.3	4.0	4.0
65°	1840.7	1079.1	38.3	22.5	15.9	11.9	7.9	5.3	4.0	1.3	1.3
67.5°	1969.0	1125.3	31.7	19.8	14.5	9.3	6.6	4.0	1.3	0.0	0.0
70°	1901.6	1067.2	26.4	17.2	13.2	7.9	5.3	2.6	0.0	0.0	0.0
72.5°	1490.3	764.3	21.2	15.9	11.9	7.9	5.3	1.3	0.0	0.0	0.0
75°	995.8	432.4	18.5	13.2	9.3	6.6	4.0	1.3	0.0	0.0	0.0
77.5°	540.9	194.4	15.9	11.9	7.9	5.3	4.0	1.3	0.0	0.0	0.0
80°	175.9	76.7	13.2	10.6	7.9	5.3	4.0	1.3	0.0	0.0	0.0
82.5°	47.6	23.8	13.2	10.6	7.9	5.3	4.0	1.3	0.0	0.0	0.0
85°	19.8	15.9	13.2	10.6	7.9	5.3	4.0	1.3	0.0	0.0	0.0
87.5°	7.9	5.3	5.3	6.6	5.3	4.0	2.6	1.3	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3
2.5°	368.9	371.6	372.9	372.9	379.5	386.1	394.1	400.7	400.7	404.6	408.6
5°	324.0	326.6	330.6	342.5	355.7	370.3	384.8	395.4	409.9	416.5	420.5
7.5°	287.0	289.6	300.2	312.1	330.6	355.7	380.8	404.6	419.2	425.8	431.1
10°	248.6	252.6	264.5	285.6	309.4	339.9	368.9	409.9	433.7	447.0	452.3
12.5°	193.1	203.6	219.5	242.0	272.4	318.7	372.9	415.2	456.2	472.1	482.7
15°	121.7	130.9	156.0	191.7	232.7	287.0	362.3	423.2	480.0	495.9	513.1
17.5°	78.0	79.3	87.3	125.6	178.5	247.3	346.5	435.1	506.5	529.0	555.4
20°	66.1	68.8	70.1	75.4	119.0	203.6	313.4	449.6	538.2	568.6	593.7
22.5°	55.5	56.9	59.5	63.5	71.4	148.1	268.4	449.6	566.0	610.9	640.0
25°	45.0	47.6	50.3	54.2	62.2	92.6	222.2	441.7	599.0	654.6	691.6
27.5°	39.7	39.7	42.3	46.3	52.9	64.8	175.9	417.9	624.2	681.0	730.0
30°	34.4	35.7	37.0	41.0	47.6	56.9	121.7	379.5	650.6	732.6	788.1
32.5°	30.4	30.4	33.1	35.7	42.3	51.6	78.0	321.3	685.0	772.3	850.3
35°	27.8	27.8	29.1	31.7	38.3	46.3	60.8	272.4	726.0	847.6	933.6
37.5°	25.1	25.1	26.4	29.1	34.4	41.0	55.5	234.1	768.3	923.0	1048.6
40°	22.5	22.5	23.8	26.4	30.4	37.0	50.3	189.1	821.2	1034.1	1174.3
42.5°	19.8	19.8	21.2	23.8	27.8	33.1	43.6	141.5	891.3	1154.4	1336.9
45°	17.2	17.2	18.5	21.2	23.8	30.4	39.7	108.4	968.0	1288.0	1479.7
47.5°	14.5	15.9	17.2	19.8	22.5	27.8	35.7	95.2	1043.4	1429.5	1638.4
50°	13.2	13.2	14.5	17.2	21.2	25.1	33.1	93.9	1120.1	1537.9	1801.1
52.5°	11.9	11.9	13.2	15.9	19.8	23.8	31.7	96.5	1183.5	1638.4	1914.8
55°	10.6	10.6	11.9	13.2	17.2	22.5	29.1	99.2	1228.5	1740.2	2006.0
57.5°	9.3	9.3	10.6	13.2	15.9	19.8	26.4	101.8	1301.2	1840.7	2138.3
60°	6.6	6.6	9.3	11.9	14.5	17.2	25.1	104.5	1417.6	1979.6	2250.7
62.5°	4.0	4.0	5.3	9.3	11.9	15.9	22.5	99.2	1526.0	2158.1	2422.6
65°	1.3	2.6	4.0	5.3	9.3	13.2	18.5	89.9	1617.3	2336.6	2581.3
67.5°	0.0	0.0	1.3	4.0	7.9	10.6	15.9	66.1	1631.8	2417.3	2743.9
70°	0.0	0.0	1.3	4.0	6.6	10.6	14.5	37.0	1389.8	2159.4	2515.2
72.5°	0.0	0.0	0.0	2.6	6.6	9.3	13.2	27.8	1024.8	1627.8	1987.5
75°	0.0	0.0	0.0	1.3	5.3	7.9	11.9	21.2	622.8	1085.7	1297.3
77.5°	0.0	0.0	0.0	1.3	4.0	7.9	11.9	18.5	219.5	517.0	609.6
80°	0.0	0.0	0.0	2.6	5.3	7.9	10.6	15.9	52.9	129.6	174.6
82.5°	0.0	0.0	0.0	1.3	4.0	6.6	9.3	13.2	21.2	38.3	60.8
85°	0.0	0.0	0.0	1.3	2.6	6.6	9.3	11.9	14.5	18.5	26.4
87.5°	0.0	0.0	0.0	0.0	1.3	2.6	4.0	5.3	5.3	5.3	9.3
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):

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3	403.3
2.5°	407.3	412.6	415.2	420.5	423.2	421.8	420.5	424.5	421.8	417.9
5°	421.8	421.8	425.8	427.1	427.1	423.2	425.8	424.5	421.8	421.8
7.5°	437.7	444.3	444.3	436.4	435.1	432.4	432.4	421.8	417.9	421.8
10°	453.6	458.9	460.2	450.9	439.0	433.7	427.1	413.9	407.3	409.9
12.5°	486.6	486.6	472.1	461.5	445.6	427.1	411.3	392.7	383.5	386.1
15°	510.4	515.7	495.9	472.1	444.3	409.9	392.7	378.2	372.9	368.9
17.5°	556.7	546.1	514.4	480.0	440.4	404.6	392.7	379.5	375.6	375.6
20°	596.4	591.1	543.5	481.3	439.0	415.2	407.3	400.7	399.4	395.4
22.5°	650.6	626.8	566.0	495.9	453.6	432.4	429.8	436.4	432.4	429.8
25°	691.6	671.8	583.2	517.0	476.1	469.4	473.4	480.0	469.4	465.5
27.5°	747.1	710.1	616.2	544.8	506.5	513.1	526.3	527.6	521.0	525.0
30°	798.7	759.0	641.4	576.6	558.0	564.7	584.5	599.0	589.8	584.5
32.5°	872.8	811.9	691.6	629.5	622.8	640.0	662.5	671.8	659.9	657.2
35°	950.8	872.8	743.2	689.0	700.9	724.7	744.5	760.4	741.9	749.8
37.5°	1072.4	970.6	830.5	782.8	788.1	797.4	834.4	878.1	887.3	871.4
40°	1199.4	1076.4	911.1	874.1	886.0	911.1	954.8	995.8	1016.9	995.8
42.5°	1346.2	1178.2	1035.4	991.8	1003.7	1039.4	1097.6	1130.6	1128.0	1096.3
45°	1527.3	1319.7	1151.8	1097.6	1141.2	1172.9	1231.1	1235.1	1210.0	1202.0
47.5°	1666.2	1438.7	1277.4	1243.0	1302.5	1303.9	1317.1	1318.4	1290.6	1281.4
50°	1819.6	1576.3	1417.6	1367.3	1467.8	1421.6	1385.9	1362.0	1319.7	1299.9
52.5°	1970.3	1674.1	1547.2	1495.6	1600.1	1477.1	1412.3	1339.6	1277.4	1256.3
55°	2051.0	1835.5	1736.3	1615.9	1629.2	1493.0	1330.3	1239.1	1133.3	1128.0
57.5°	2146.2	1943.9	1896.3	1697.9	1580.2	1381.9	1159.7	1039.4	925.7	912.4
60°	2258.6	2115.8	2065.6	1684.7	1407.0	1161.0	919.1	764.3	657.2	648.0
62.5°	2384.2	2319.4	2170.0	1555.1	1117.4	817.2	607.0	477.4	378.2	372.9
65°	2582.6	2490.0	2225.6	1309.2	739.2	523.7	403.3	309.4	249.9	247.3
67.5°	2706.9	2554.8	2101.3	933.6	409.9	346.5	283.0	224.8	173.2	162.7
70°	2531.0	2344.6	1662.2	534.2	238.0	263.2	218.2	150.8	119.0	116.4
72.5°	2021.9	1740.2	1118.7	251.3	148.1	206.3	158.7	101.8	71.4	68.8
75°	1379.2	1094.9	702.2	116.4	104.5	150.8	116.4	59.5	50.3	50.3
77.5°	616.2	558.0	359.7	71.4	78.0	115.0	67.4	41.0	37.0	35.7
80°	187.8	197.0	146.8	48.9	58.2	87.3	41.0	27.8	22.5	21.2
82.5°	63.5	74.1	66.1	29.1	39.7	62.2	27.8	18.5	15.9	15.9
85°	30.4	37.0	33.1	18.5	21.2	30.4	22.5	14.5	9.3	9.3
87.5°	11.9	17.2	11.9	7.9	11.9	15.9	9.3	6.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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