

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: P676354

Luminaire Tested: **CCW-SA-1D-850-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676354
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1D-850-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
T2 distribution lens and House Side Shield
Light Source: (16) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

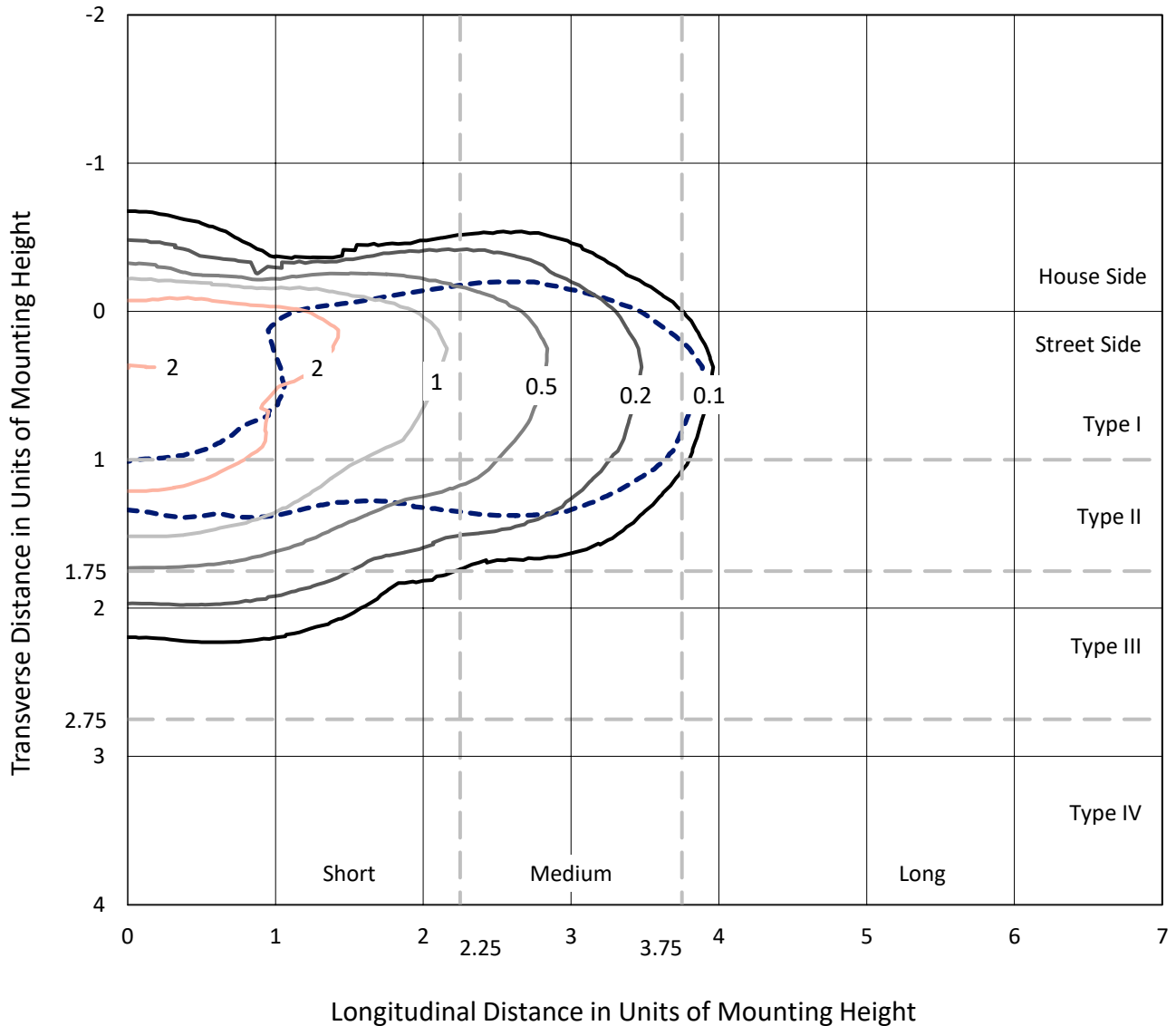
Lumens per Lamp: N/A
Luminaire Lumens: 3757.1 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 44
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

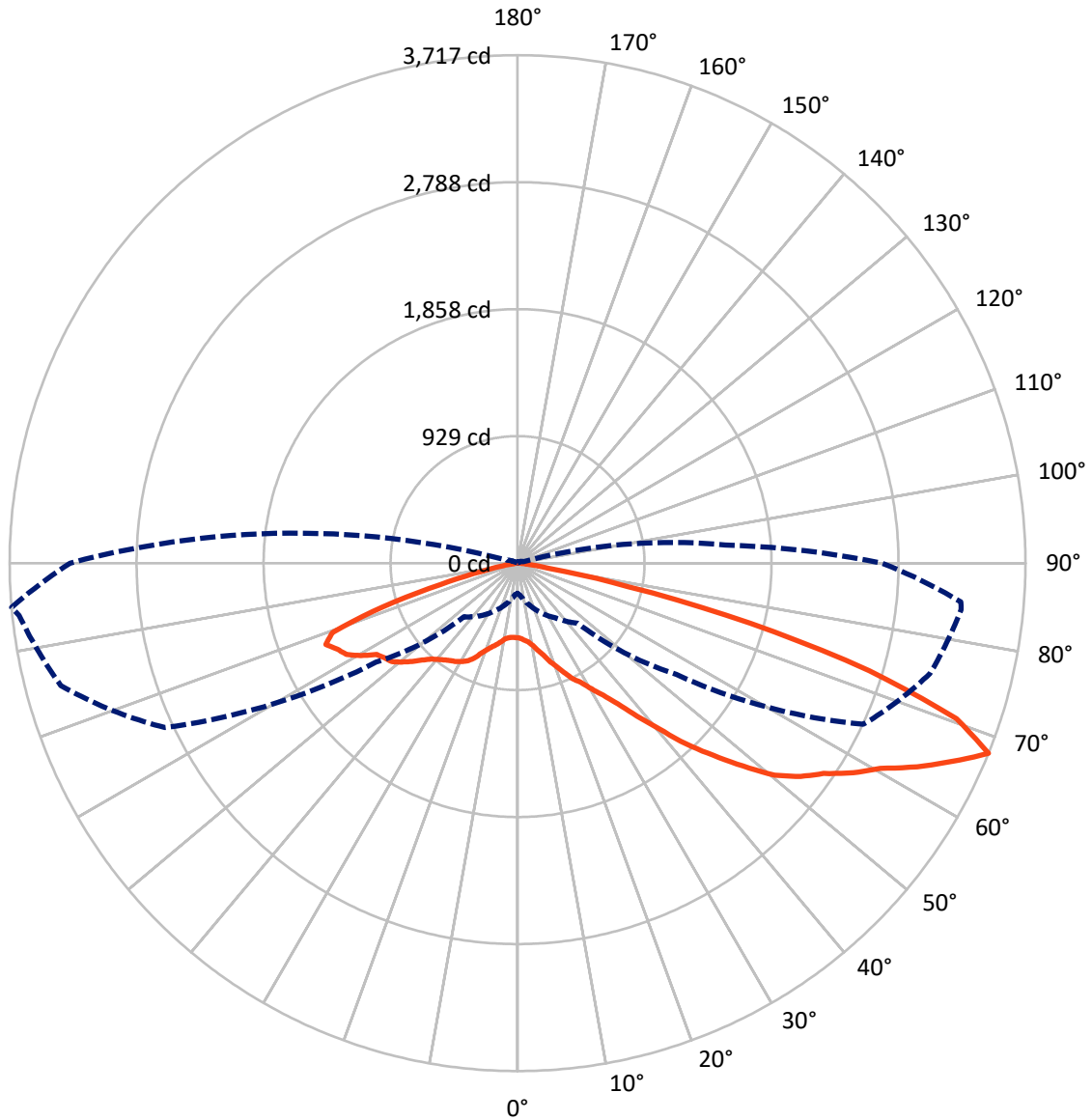
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.9 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	533.8	0.0	533.8
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	3223.3	0.0	3223.3
	% Fixture	85.8	0.0	85.8
Total	Lumens	3757.1	0.0	3757.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.8	1.3
10°-20°	134.0	3.6
20°-30°	222.5	5.9
30°-40°	382.7	10.2
40°-50°	687.8	18.3
50°-60°	979.2	26.1
60°-70°	892.7	23.8
70°-80°	380.1	10.1
80°-90°	28.3	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°	3757.1	100.0
0°-180°	3757.1	100.0



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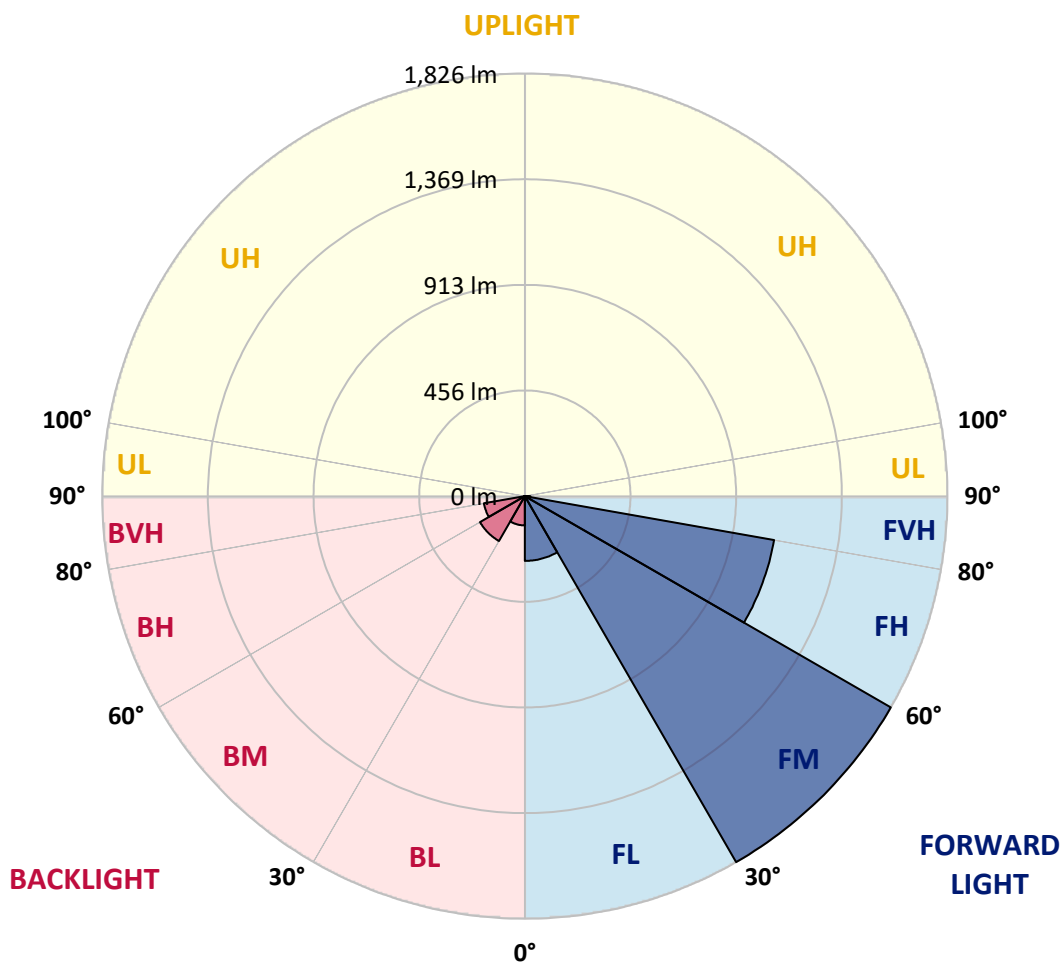
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	279.9	7.4			
FM (30°-60°)	1825.9	48.6			
FH (60°-80°)	1093.5	29.1			G1/1800
FVH (80°-90°)	24.0	0.6			G1/100
BL (0°-30°)	126.4	3.4	B1/500		
BM (30°-60°)	223.8	6.0	B1/1000		
BH (60°-80°)	179.4	4.8	B1/500		G1/500
BVH (80°-90°)	4.3	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°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	566.0	571.4	571.4	569.6	564.2	560.7	558.9	555.3	551.7	551.7	553.5
5°	571.4	566.0	573.2	564.2	564.2	564.2	571.4	567.8	566.0	557.1	557.1
7.5°	571.4	566.0	566.0	571.4	566.0	569.6	578.6	575.0	582.2	566.0	569.6
10°	555.3	553.5	557.1	564.2	566.0	573.2	582.2	600.1	601.9	591.1	589.3
12.5°	523.0	521.3	533.8	537.4	558.9	576.8	603.6	618.0	634.1	628.7	618.0
15°	499.8	503.3	512.3	526.6	546.3	578.6	609.0	641.3	669.9	662.8	659.2
17.5°	508.7	506.9	508.7	517.7	542.7	575.0	626.9	664.6	705.7	705.7	709.3
20°	535.6	541.0	539.2	533.8	546.3	573.2	626.9	693.2	761.3	755.9	755.9
22.5°	582.2	583.9	573.2	569.6	567.8	583.9	637.7	729.0	807.9	818.6	815.0
25°	630.5	632.3	628.7	618.0	603.6	607.2	657.4	757.7	872.3	890.2	886.7
27.5°	711.1	709.3	700.4	687.8	666.3	650.2	687.8	779.2	922.5	952.9	944.0
30°	791.7	786.4	773.8	757.7	738.0	707.5	725.5	820.4	985.2	1013.8	994.1
32.5°	890.2	879.5	883.1	858.0	816.8	768.4	764.9	858.0	1035.3	1076.5	1060.4
35°	1015.6	1003.1	985.2	961.9	922.5	858.0	838.3	918.9	1119.5	1150.0	1150.0
37.5°	1180.4	1193.0	1171.5	1074.7	1031.8	970.9	929.7	981.6	1193.0	1266.4	1248.5
40°	1348.8	1359.6	1320.1	1248.5	1155.4	1080.1	1055.0	1083.7	1304.0	1391.8	1357.8
42.5°	1484.9	1499.3	1484.9	1391.8	1318.4	1221.6	1176.8	1203.7	1447.3	1553.0	1508.2
45°	1628.2	1642.6	1626.4	1565.5	1493.9	1438.4	1325.5	1359.6	1597.8	1755.4	1705.3
47.5°	1735.7	1753.6	1725.0	1712.4	1655.1	1646.2	1454.5	1492.1	1755.4	1959.6	1896.9
50°	1760.8	1780.5	1805.6	1819.9	1800.2	1821.7	1628.2	1660.5	1920.2	2147.7	2086.8
52.5°	1701.7	1721.4	1776.9	1843.2	1934.5	1999.0	1803.8	1830.7	2092.2	2303.5	2271.3
55°	1527.9	1545.8	1658.7	1748.3	1966.8	2072.5	1972.2	2085.0	2215.8	2466.5	2387.7
57.5°	1236.0	1257.5	1406.1	1544.1	1859.3	2031.3	2072.5	2296.4	2420.0	2586.6	2495.2
60°	877.7	890.2	1019.2	1262.8	1562.0	1825.3	2052.8	2454.0	2581.2	2747.8	2699.4
62.5°	505.1	515.9	650.2	879.5	1178.6	1524.3	1965.0	2602.7	2754.9	2925.1	2898.2
65°	335.0	338.5	429.9	555.3	766.7	1123.1	1742.9	2735.2	2926.9	3066.6	3036.2
67.5°	220.3	240.0	311.7	397.7	490.8	621.6	1420.5	2790.8	3123.9	3263.6	3256.5
70°	157.6	164.8	223.9	306.3	369.0	349.3	831.1	2398.5	3115.0	3317.4	3258.3
72.5°	93.1	100.3	148.7	229.3	290.2	222.1	388.7	1696.3	2581.2	2647.5	2631.3
75°	68.1	68.1	91.4	164.8	211.4	159.4	182.7	1073.0	1714.2	1861.1	1859.3
77.5°	48.4	50.2	62.7	98.5	163.0	116.4	100.3	596.5	936.8	1024.6	976.2
80°	28.7	30.5	43.0	59.1	118.2	84.2	66.3	272.3	360.0	363.6	345.7
82.5°	21.5	21.5	28.7	41.2	82.4	57.3	41.2	103.9	116.4	105.7	89.6
85°	12.5	10.7	21.5	30.5	48.4	32.2	28.7	48.4	53.7	39.4	35.8
87.5°	3.6	3.6	9.0	10.7	21.5	17.9	12.5	17.9	25.1	14.3	10.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	549.9	544.5	535.6	532.0	519.5	514.1	510.5	501.5	503.3	498.0	498.0
5°	544.5	544.5	526.6	506.9	487.2	474.7	460.3	442.4	442.4	435.3	437.1
7.5°	564.2	549.9	526.6	490.8	458.6	429.9	417.4	399.4	388.7	383.3	383.3
10°	576.8	562.5	523.0	480.1	438.9	403.0	376.2	351.1	336.8	336.8	335.0
12.5°	610.8	589.3	537.4	478.3	417.4	363.6	322.4	293.8	274.1	259.7	263.3
15°	639.5	616.2	544.5	463.9	379.7	304.5	254.4	200.6	173.8	159.4	154.0
17.5°	684.3	641.3	560.7	438.9	322.4	238.2	164.8	120.0	109.3	107.5	107.5
20°	721.9	671.7	562.5	390.5	265.1	152.3	105.7	98.5	93.1	91.4	89.6
22.5°	773.8	711.1	555.3	335.0	189.9	102.1	89.6	82.4	78.8	73.4	73.4
25°	827.6	763.1	541.0	283.0	116.4	87.8	78.8	71.6	64.5	60.9	62.7
27.5°	884.9	802.5	499.8	220.3	89.6	77.0	64.5	59.1	55.5	53.7	53.7
30°	931.4	827.6	438.9	146.9	80.6	68.1	57.3	51.9	48.4	46.6	46.6
32.5°	965.5	849.0	370.8	98.5	73.4	60.9	51.9	46.6	43.0	41.2	41.2
35°	1022.8	865.2	308.1	84.2	66.3	53.7	44.8	41.2	37.6	37.6	37.6
37.5°	1110.6	886.7	245.4	77.0	60.9	48.4	43.0	37.6	35.8	34.0	34.0
40°	1187.6	913.5	175.5	69.9	55.5	44.8	37.6	34.0	32.2	30.5	30.5
42.5°	1298.7	944.0	114.6	62.7	50.2	41.2	34.0	30.5	28.7	26.9	26.9
45°	1440.2	994.1	89.6	55.5	44.8	37.6	32.2	28.7	25.1	25.1	23.3
47.5°	1590.6	1055.0	80.6	51.9	41.2	34.0	28.7	25.1	23.3	21.5	21.5
50°	1730.3	1114.2	75.2	48.4	37.6	32.2	26.9	23.3	19.7	17.9	17.9
52.5°	1855.7	1169.7	71.6	44.8	35.8	28.7	23.3	19.7	17.9	16.1	16.1
55°	1922.0	1194.8	69.9	43.0	32.2	26.9	21.5	17.9	16.1	14.3	14.3
57.5°	2025.9	1227.0	68.1	41.2	30.5	23.3	19.7	16.1	14.3	12.5	12.5
60°	2194.3	1332.7	66.3	39.4	28.7	23.3	17.9	14.3	10.7	9.0	9.0
62.5°	2334.0	1420.5	59.1	34.0	25.1	19.7	14.3	10.7	7.2	5.4	5.4
65°	2493.4	1461.7	51.9	30.5	21.5	16.1	10.7	7.2	5.4	1.8	1.8
67.5°	2667.2	1524.3	43.0	26.9	19.7	12.5	9.0	5.4	1.8	0.0	0.0
70°	2575.8	1445.5	35.8	23.3	17.9	10.7	7.2	3.6	0.0	0.0	0.0
72.5°	2018.7	1035.3	28.7	21.5	16.1	10.7	7.2	1.8	0.0	0.0	0.0
75°	1348.8	585.7	25.1	17.9	12.5	9.0	5.4	1.8	0.0	0.0	0.0
77.5°	732.6	263.3	21.5	16.1	10.7	7.2	5.4	1.8	0.0	0.0	0.0
80°	238.2	103.9	17.9	14.3	10.7	7.2	5.4	1.8	0.0	0.0	0.0
82.5°	64.5	32.2	17.9	14.3	10.7	7.2	5.4	1.8	0.0	0.0	0.0
85°	26.9	21.5	17.9	14.3	10.7	7.2	5.4	1.8	0.0	0.0	0.0
87.5°	10.7	7.2	7.2	9.0	7.2	5.4	3.6	1.8	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°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	499.8	503.3	505.1	505.1	514.1	523.0	533.8	542.7	542.7	548.1	553.5
5°	438.9	442.4	447.8	463.9	481.8	501.5	521.3	535.6	555.3	564.2	569.6
7.5°	388.7	392.3	406.6	422.7	447.8	481.8	515.9	548.1	567.8	576.8	583.9
10°	336.8	342.1	358.2	386.9	419.2	460.3	499.8	555.3	587.5	605.4	612.6
12.5°	261.5	275.9	297.3	327.8	369.0	431.7	505.1	562.5	618.0	639.5	653.8
15°	164.8	177.3	211.4	259.7	315.3	388.7	490.8	573.2	650.2	671.7	695.0
17.5°	105.7	107.5	118.2	170.2	241.8	335.0	469.3	589.3	686.0	716.5	752.3
20°	89.6	93.1	94.9	102.1	161.2	275.9	424.5	609.0	729.0	770.2	804.3
22.5°	75.2	77.0	80.6	86.0	96.7	200.6	363.6	609.0	766.7	827.6	867.0
25°	60.9	64.5	68.1	73.4	84.2	125.4	300.9	598.3	811.4	886.7	936.8
27.5°	53.7	53.7	57.3	62.7	71.6	87.8	238.2	566.0	845.5	922.5	988.8
30°	46.6	48.4	50.2	55.5	64.5	77.0	164.8	514.1	881.3	992.3	1067.6
32.5°	41.2	41.2	44.8	48.4	57.3	69.9	105.7	435.3	927.9	1046.1	1151.8
35°	37.6	37.6	39.4	43.0	51.9	62.7	82.4	369.0	983.4	1148.2	1264.6
37.5°	34.0	34.0	35.8	39.4	46.6	55.5	75.2	317.1	1040.7	1250.3	1420.5
40°	30.5	30.5	32.2	35.8	41.2	50.2	68.1	256.1	1112.4	1400.8	1590.6
42.5°	26.9	26.9	28.7	32.2	37.6	44.8	59.1	191.7	1207.3	1563.8	1810.9
45°	23.3	23.3	25.1	28.7	32.2	41.2	53.7	146.9	1311.2	1744.7	2004.4
47.5°	19.7	21.5	23.3	26.9	30.5	37.6	48.4	129.0	1413.3	1936.3	2219.4
50°	17.9	17.9	19.7	23.3	28.7	34.0	44.8	127.2	1517.2	2083.2	2439.7
52.5°	16.1	16.1	17.9	21.5	26.9	32.2	43.0	130.8	1603.2	2219.4	2593.7
55°	14.3	14.3	16.1	17.9	23.3	30.5	39.4	134.3	1664.1	2357.3	2717.3
57.5°	12.5	12.5	14.3	17.9	21.5	26.9	35.8	137.9	1762.6	2493.4	2896.4
60°	9.0	9.0	12.5	16.1	19.7	23.3	34.0	141.5	1920.2	2681.5	3048.7
62.5°	5.4	5.4	7.2	12.5	16.1	21.5	30.5	134.3	2067.1	2923.3	3281.6
65°	1.8	3.6	5.4	7.2	12.5	17.9	25.1	121.8	2190.7	3165.1	3496.5
67.5°	0.0	0.0	1.8	5.4	10.7	14.3	21.5	89.6	2210.4	3274.4	3716.8
70°	0.0	0.0	1.8	5.4	9.0	14.3	19.7	50.2	1882.6	2925.1	3406.9
72.5°	0.0	0.0	0.0	3.6	9.0	12.5	17.9	37.6	1388.2	2205.0	2692.2
75°	0.0	0.0	0.0	1.8	7.2	10.7	16.1	28.7	843.7	1470.6	1757.2
77.5°	0.0	0.0	0.0	1.8	5.4	10.7	16.1	25.1	297.3	700.4	825.8
80°	0.0	0.0	0.0	3.6	7.2	10.7	14.3	21.5	71.6	175.5	236.4
82.5°	0.0	0.0	0.0	1.8	5.4	9.0	12.5	17.9	28.7	51.9	82.4
85°	0.0	0.0	0.0	1.8	3.6	9.0	12.5	16.1	19.7	25.1	35.8
87.5°	0.0	0.0	0.0	0.0	1.8	3.6	5.4	7.2	7.2	7.2	12.5
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):

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	551.7	558.9	562.5	569.6	573.2	571.4	569.6	575.0	571.4	566.0
5°	571.4	571.4	576.8	578.6	578.6	573.2	576.8	575.0	571.4	571.4
7.5°	592.9	601.9	601.9	591.1	589.3	585.7	585.7	571.4	566.0	571.4
10°	614.4	621.6	623.4	610.8	594.7	587.5	578.6	560.7	551.7	555.3
12.5°	659.2	659.2	639.5	625.1	603.6	578.6	557.1	532.0	519.5	523.0
15°	691.4	698.6	671.7	639.5	601.9	555.3	532.0	512.3	505.1	499.8
17.5°	754.1	739.8	696.8	650.2	596.5	548.1	532.0	514.1	508.7	508.7
20°	807.9	800.7	736.2	652.0	594.7	562.5	551.7	542.7	541.0	535.6
22.5°	881.3	849.0	766.7	671.7	614.4	585.7	582.2	591.1	585.7	582.2
25°	936.8	910.0	789.9	700.4	644.8	635.9	641.3	650.2	635.9	630.5
27.5°	1012.1	961.9	834.7	738.0	686.0	695.0	712.9	714.7	705.7	711.1
30°	1081.9	1028.2	868.8	781.0	755.9	764.9	791.7	811.4	798.9	791.7
32.5°	1182.2	1099.8	936.8	852.6	843.7	867.0	897.4	910.0	893.8	890.2
35°	1287.9	1182.2	1006.7	933.2	949.4	981.6	1008.5	1030.0	1004.9	1015.6
37.5°	1452.7	1314.8	1124.9	1060.4	1067.6	1080.1	1130.3	1189.4	1201.9	1180.4
40°	1624.7	1458.1	1234.2	1184.0	1200.1	1234.2	1293.3	1348.8	1377.5	1348.8
42.5°	1823.5	1596.0	1402.5	1343.4	1359.6	1407.9	1486.7	1531.5	1527.9	1484.9
45°	2068.9	1787.7	1560.2	1486.7	1545.8	1588.8	1667.6	1673.0	1639.0	1628.2
47.5°	2257.0	1948.9	1730.3	1683.8	1764.4	1766.2	1784.1	1785.9	1748.3	1735.7
50°	2464.8	2135.2	1920.2	1852.1	1988.3	1925.6	1877.2	1845.0	1787.7	1760.8
52.5°	2669.0	2267.7	2095.8	2025.9	2167.4	2000.8	1913.0	1814.5	1730.3	1701.7
55°	2778.2	2486.2	2351.9	2188.9	2206.8	2022.3	1802.0	1678.4	1535.1	1527.9
57.5°	2907.2	2633.1	2568.6	2300.0	2140.5	1871.8	1570.9	1407.9	1253.9	1236.0
60°	3059.4	2866.0	2797.9	2282.0	1905.9	1572.7	1244.9	1035.3	890.2	877.7
62.5°	3229.6	3141.8	2939.4	2106.5	1513.6	1107.0	822.2	646.6	512.3	505.1
65°	3498.3	3372.9	3014.7	1773.3	1001.3	709.3	546.3	419.2	338.5	335.0
67.5°	3666.7	3460.7	2846.3	1264.6	555.3	469.3	383.3	304.5	234.7	220.3
70°	3428.4	3175.9	2251.6	723.7	322.4	356.5	295.6	204.2	161.2	157.6
72.5°	2738.8	2357.3	1515.4	340.3	200.6	279.4	214.9	137.9	96.7	93.1
75°	1868.3	1483.1	951.2	157.6	141.5	204.2	157.6	80.6	68.1	68.1
77.5°	834.7	755.9	487.2	96.7	105.7	155.8	91.4	55.5	50.2	48.4
80°	254.4	266.9	198.8	66.3	78.8	118.2	55.5	37.6	30.5	28.7
82.5°	86.0	100.3	89.6	39.4	53.7	84.2	37.6	25.1	21.5	21.5
85°	41.2	50.2	44.8	25.1	28.7	41.2	30.5	19.7	12.5	12.5
87.5°	16.1	23.3	16.1	10.7	16.1	21.5	12.5	9.0	3.6	3.6
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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