

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: P675889

Luminaire Tested: **CCW-SA-1D-830-U-SLL**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P675889
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1D-830-U-SLL
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @800mA w/
SLL distribution lens
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

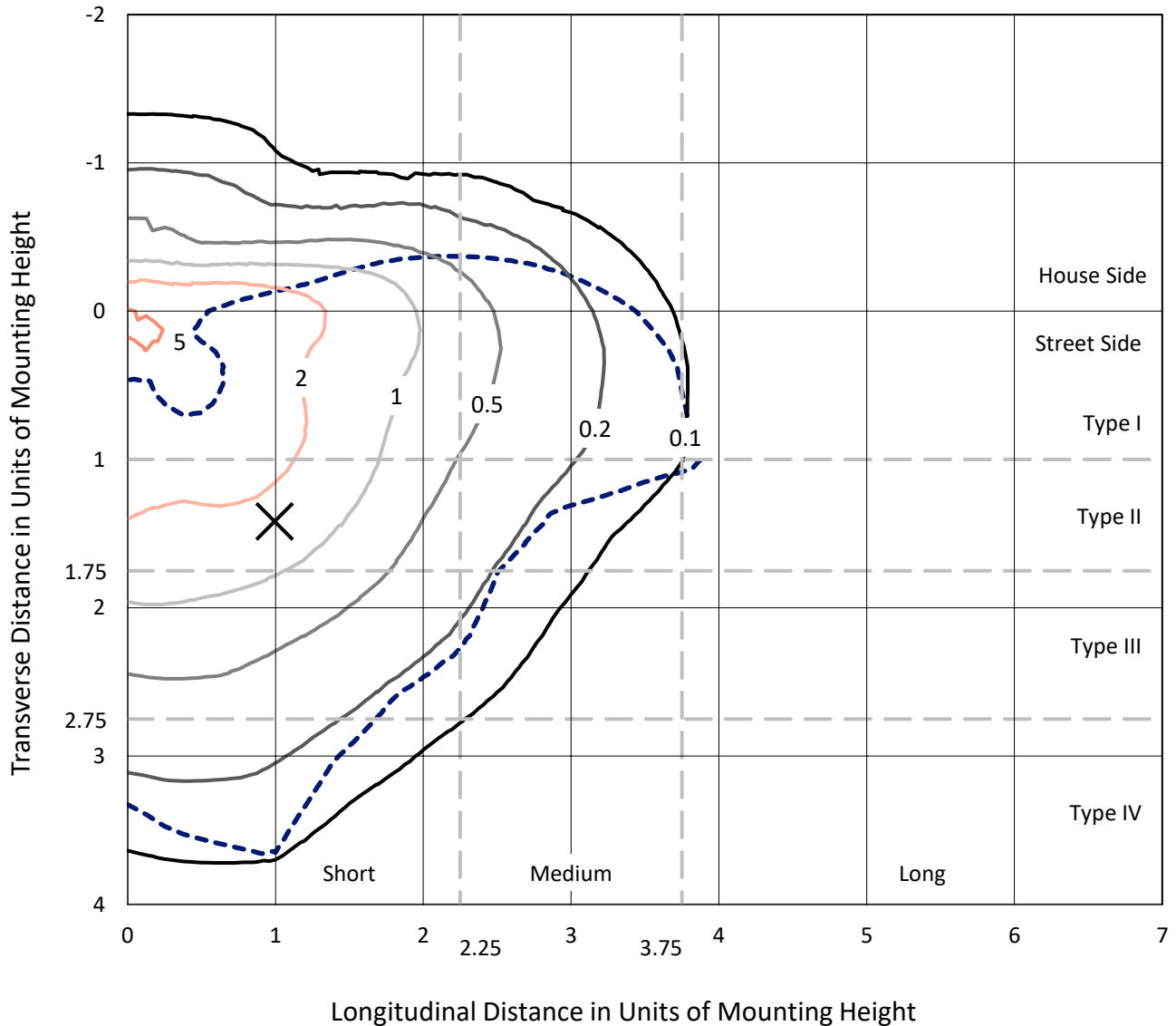
Lumens per Lamp: N/A
Luminaire Lumens: 3676.9 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 44
Input Voltage (V): 120
Input Current (A_{in}): 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

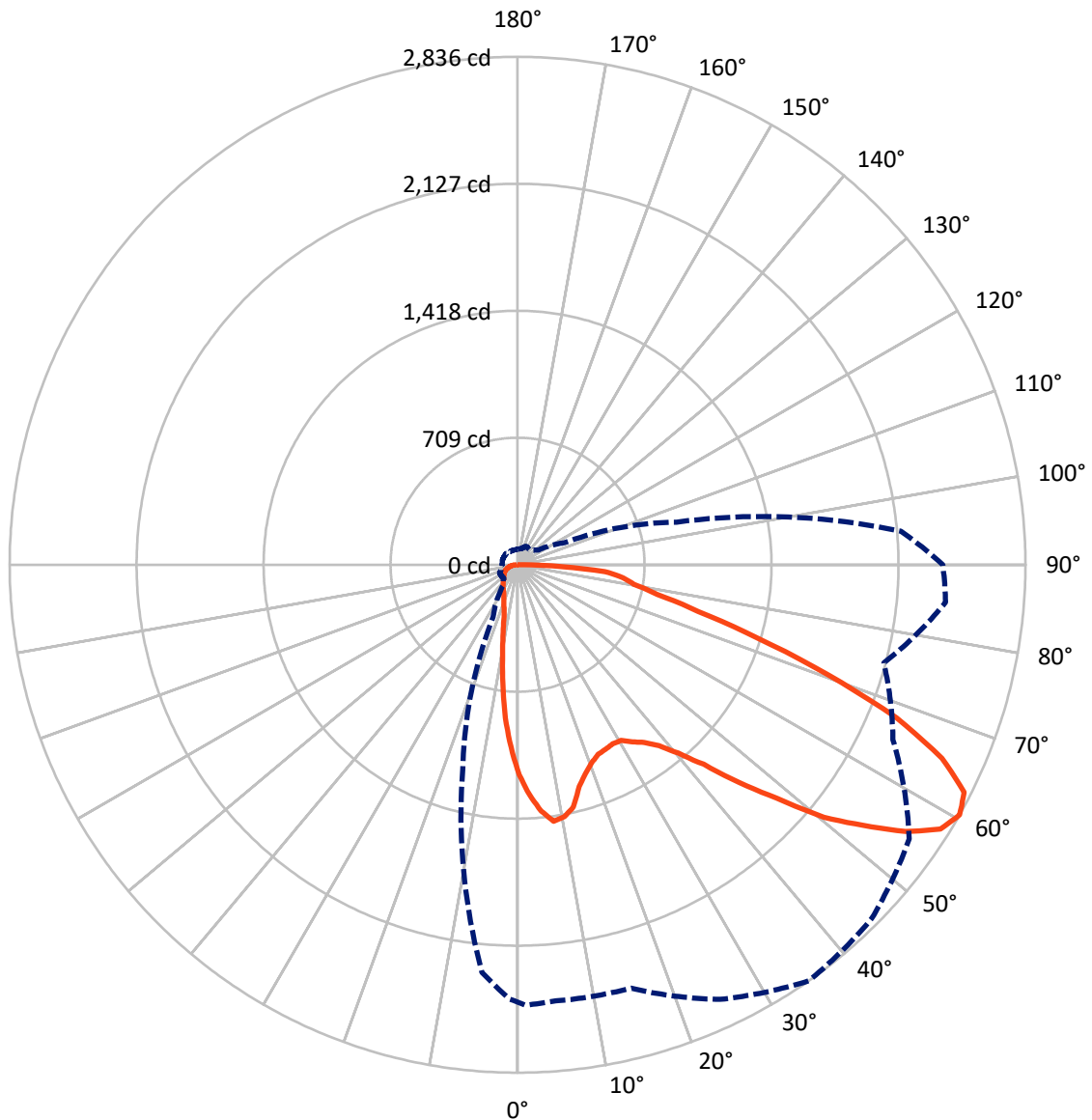
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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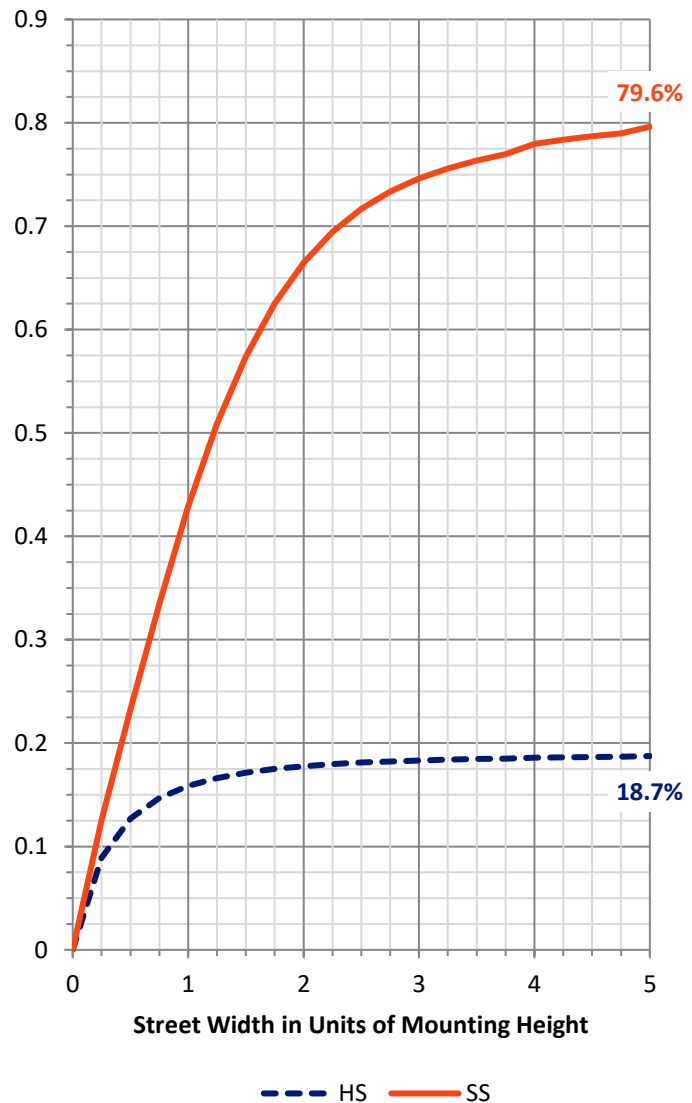
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	699.8	0.0	699.8
	% Fixture	19.0	0.0	19.0
Street Side	Lumens	2977.1	0.0	2977.1
	% Fixture	81.0	0.0	81.0
Total	Lumens	3676.9	0.0	3676.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	2.5
10°-20°	192.6	5.2
20°-30°	281.8	7.7
30°-40°	397.1	10.8
40°-50°	545.7	14.8
50°-60°	743.7	20.2
60°-70°	814.0	22.1
70°-80°	469.9	12.8
80°-90°	140.7	3.8
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°	3676.9	100.0
0°-180°	3676.9	100.0

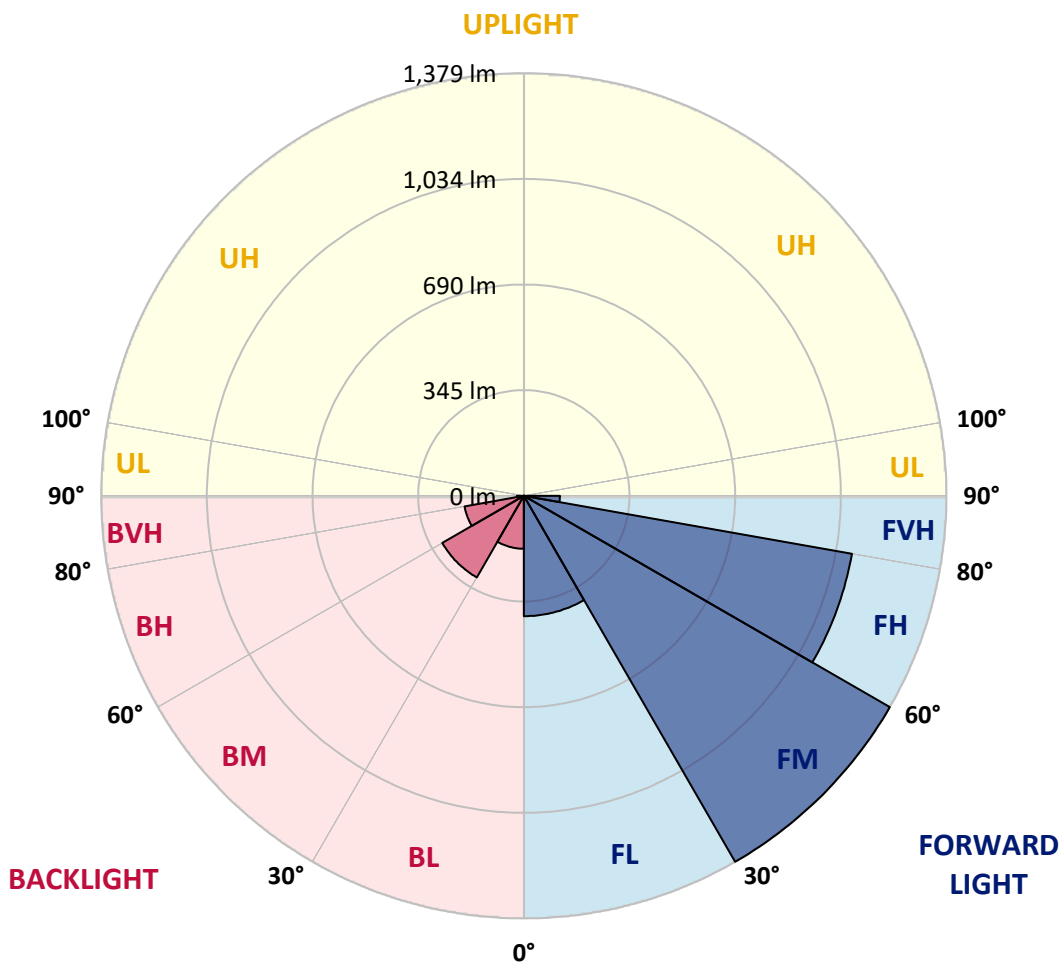


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	392.8	10.7			
FM (30°-60°)	1379.1	37.5			
FH (60°-80°)	1087.4	29.6			G1/1800
FVH (80°-90°)	117.8	3.2			G2/225
BL (0°-30°)	172.9	4.7	B1/500		
BM (30°-60°)	307.4	8.4	B1/1000		
BH (60°-80°)	196.5	5.3	B1/500		G1/500
BVH (80°-90°)	22.9	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4
2.5°	1257.5	1252.7	1257.5	1275.5	1280.4	1288.5	1288.5	1277.1	1255.9	1246.1	1229.8
5°	1285.3	1277.1	1317.9	1355.4	1384.8	1381.5	1353.8	1330.9	1288.5	1224.9	1164.6
7.5°	1229.8	1238.0	1267.3	1365.2	1433.7	1446.8	1402.7	1357.0	1265.7	1177.6	1096.1
10°	1125.4	1136.9	1200.5	1301.6	1409.2	1430.4	1402.7	1347.3	1238.0	1128.7	1034.1
12.5°	1074.9	1101.0	1138.5	1260.8	1337.5	1388.0	1375.0	1339.1	1216.8	1087.9	996.6
15°	1074.9	1081.4	1136.9	1239.6	1283.6	1285.3	1290.2	1296.7	1223.3	1105.9	983.5
17.5°	1109.1	1127.1	1174.4	1238.0	1246.1	1226.6	1226.6	1254.3	1236.3	1156.4	1030.8
20°	1192.3	1185.8	1247.8	1273.9	1229.8	1180.9	1176.0	1223.3	1251.0	1210.2	1117.3
22.5°	1275.5	1304.8	1355.4	1296.7	1215.1	1149.9	1143.4	1202.1	1295.1	1303.2	1216.8
25°	1401.1	1430.4	1456.5	1384.8	1213.5	1141.7	1146.6	1192.3	1348.9	1435.3	1383.1
27.5°	1536.5	1554.4	1591.9	1481.0	1252.7	1132.0	1136.9	1205.4	1399.5	1521.8	1513.6
30°	1613.1	1632.7	1624.5	1498.9	1278.8	1138.5	1125.4	1223.3	1371.7	1521.8	1598.4
32.5°	1688.1	1676.7	1671.8	1528.3	1311.4	1179.3	1146.6	1260.8	1388.0	1546.2	1707.7
35°	1779.5	1763.2	1750.1	1585.4	1365.2	1218.4	1203.7	1309.7	1423.9	1596.8	1795.8
37.5°	1880.6	1880.6	1817.0	1627.8	1428.8	1282.0	1265.7	1379.9	1481.0	1627.8	1916.5
40°	1999.7	2004.6	1892.0	1684.9	1500.6	1383.1	1378.2	1471.2	1536.5	1673.5	2032.3
42.5°	2087.8	2091.0	1957.3	1706.1	1583.8	1523.4	1544.6	1618.0	1600.1	1714.2	2040.5
45°	2148.1	2131.8	2002.9	1766.4	1675.1	1733.8	1740.3	1761.5	1683.3	1738.7	2073.1
47.5°	2177.5	2174.2	2022.5	1836.6	1867.6	1947.5	1985.0	1955.6	1759.9	1712.6	2073.1
50°	2206.8	2179.1	2040.5	1932.8	2055.1	2216.6	2208.5	2154.6	1865.9	1745.2	2042.1
52.5°	2226.4	2201.9	2076.3	2019.3	2234.6	2417.2	2449.9	2350.4	1989.9	1805.6	2056.8
55°	2296.5	2277.0	2184.0	2136.7	2441.7	2629.3	2634.2	2495.5	2120.4	1905.1	2153.0
57.5°	2381.4	2392.8	2332.4	2303.1	2599.9	2784.2	2766.3	2603.2	2231.3	2025.8	2263.9
60°	2441.7	2459.6	2445.0	2448.2	2678.2	2836.4	2795.6	2670.0	2312.8	2117.1	2399.3
62.5°	2409.1	2445.0	2505.3	2492.3	2681.5	2798.9	2741.8	2582.0	2322.6	2236.2	2502.0
65°	2319.4	2322.6	2440.1	2511.8	2534.7	2604.8	2529.8	2397.7	2221.5	2309.6	2487.4
67.5°	2089.4	2115.5	2221.5	2361.8	2265.5	2281.9	2275.3	2084.5	2068.2	2259.0	2374.8
70°	1844.7	1862.7	1978.5	2143.2	1913.2	1836.6	1851.3	1709.4	1776.2	2102.4	2148.1
72.5°	1525.0	1536.5	1668.6	1813.7	1534.8	1397.8	1432.1	1316.3	1410.9	1839.8	1812.1
75°	1151.5	1172.7	1275.5	1446.8	1130.3	1042.2	1076.5	1029.2	1117.3	1515.3	1406.0
77.5°	818.8	802.5	929.7	1132.0	849.8	797.6	800.9	809.0	903.6	1277.1	1009.6
80°	557.8	562.7	676.9	830.2	667.1	658.9	650.8	716.0	758.4	1011.3	734.0
82.5°	331.1	331.1	456.7	590.4	526.8	593.7	556.2	614.9	593.7	743.8	481.2
85°	155.0	155.0	234.9	425.7	407.8	489.3	415.9	464.9	438.8	518.7	216.9
87.5°	26.1	22.8	47.3	208.8	168.0	190.8	75.0	247.9	275.6	362.1	53.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4
2.5°	1211.9	1200.5	1177.6	1148.3	1123.8	1092.8	1083.0	1061.8	1032.5	1029.2	1016.2
5°	1141.7	1102.6	1053.7	993.3	952.5	910.1	874.2	853.0	828.6	825.3	818.8
7.5°	1065.1	1016.2	934.6	862.8	792.7	725.8	693.2	652.4	624.7	603.5	593.7
10°	993.3	947.6	846.5	748.7	686.7	642.6	603.5	561.1	526.8	500.7	490.9
12.5°	946.0	892.2	782.9	689.9	644.3	593.7	549.7	504.0	460.0	425.7	407.8
15°	924.8	874.2	763.3	660.6	593.7	523.6	473.0	427.3	373.5	349.0	340.9
17.5°	975.4	900.3	756.8	626.3	531.7	451.8	389.8	340.9	301.7	277.3	267.5
20°	1040.6	947.6	768.2	585.6	473.0	383.3	314.8	262.6	236.5	218.6	216.9
22.5°	1123.8	1017.8	786.2	556.2	407.8	308.3	246.3	215.3	197.4	195.7	192.5
25°	1272.2	1145.0	815.5	517.0	355.6	254.4	210.4	192.5	184.3	179.4	182.7
27.5°	1399.5	1228.2	836.7	492.6	334.4	239.8	203.9	184.3	176.2	174.5	176.2
30°	1474.5	1304.8	830.2	446.9	292.0	228.3	216.9	210.4	194.1	181.0	181.0
32.5°	1543.0	1353.8	828.6	406.1	249.6	190.8	181.0	176.2	185.9	192.5	187.6
35°	1637.6	1430.4	823.7	383.3	231.6	176.2	159.8	146.8	140.3	137.0	141.9
37.5°	1738.7	1482.6	810.6	380.0	221.8	168.0	155.0	141.9	135.4	132.1	130.5
40°	1849.6	1538.1	796.0	363.7	216.9	163.1	150.1	138.6	130.5	125.6	124.0
42.5°	1921.4	1582.1	781.3	355.6	207.1	159.8	145.2	135.4	127.2	120.7	120.7
45°	1962.2	1634.3	766.6	347.4	195.7	161.5	145.2	132.1	122.3	119.1	115.8
47.5°	1980.1	1673.5	761.7	334.4	185.9	155.0	141.9	128.9	119.1	112.5	110.9
50°	2027.4	1756.7	779.6	324.6	174.5	148.4	150.1	127.2	117.4	109.3	107.7
52.5°	2055.1	1823.5	818.8	309.9	166.4	140.3	146.8	124.0	112.5	104.4	104.4
55°	2156.3	1934.4	861.2	298.5	156.6	128.9	135.4	117.4	104.4	99.5	99.5
57.5°	2285.1	2051.9	897.1	293.6	150.1	120.7	120.7	114.2	99.5	93.0	91.3
60°	2374.8	2148.1	918.3	290.3	143.5	112.5	107.7	114.2	94.6	88.1	86.4
62.5°	2384.6	2092.7	897.1	288.7	141.9	104.4	97.9	109.3	89.7	83.2	79.9
65°	2322.6	1980.1	838.4	282.2	140.3	96.2	91.3	94.6	83.2	78.3	75.0
67.5°	2198.7	1797.4	753.6	278.9	138.6	89.7	83.2	81.6	76.7	71.8	68.5
70°	1910.0	1559.3	654.1	264.2	135.4	84.8	75.0	73.4	68.5	65.2	63.6
72.5°	1603.3	1275.5	539.9	244.7	128.9	76.7	68.5	65.2	63.6	58.7	57.1
75°	1228.2	981.9	432.2	216.9	112.5	68.5	60.3	57.1	55.5	52.2	50.6
77.5°	862.8	730.7	319.7	176.2	94.6	62.0	53.8	50.6	48.9	44.0	44.0
80°	585.6	512.2	216.9	122.3	73.4	50.6	47.3	44.0	40.8	37.5	37.5
82.5°	363.7	358.8	156.6	79.9	53.8	40.8	37.5	37.5	32.6	29.4	29.4
85°	166.4	220.2	109.3	55.5	40.8	31.0	31.0	29.4	26.1	21.2	21.2
87.5°	52.2	73.4	57.1	24.5	22.8	17.9	17.9	16.3	16.3	13.0	13.0
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°	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4
2.5°	1029.2	1027.6	1027.6	1021.0	1037.4	1037.4	1047.1	1039.0	1043.9	1045.5	1058.6
5°	817.2	830.2	840.0	859.6	871.0	875.9	875.9	888.9	884.0	893.8	913.4
7.5°	598.6	614.9	644.3	668.7	688.3	694.8	693.2	696.5	701.4	689.9	693.2
10°	484.4	473.0	482.8	505.6	523.6	544.8	528.5	526.8	531.7	526.8	536.6
12.5°	404.5	391.5	383.3	383.3	396.3	406.1	401.2	409.4	427.3	432.2	443.6
15°	327.8	316.4	309.9	301.7	314.8	318.1	323.0	334.4	347.4	353.9	367.0
17.5°	262.6	262.6	262.6	256.1	261.0	265.9	267.5	282.2	283.8	290.3	295.2
20°	215.3	220.2	228.3	231.6	236.5	236.5	233.2	241.4	234.9	239.8	243.0
22.5°	194.1	200.6	203.9	205.5	212.0	213.7	205.5	207.1	208.8	203.9	205.5
25°	182.7	185.9	182.7	184.3	185.9	182.7	184.3	187.6	185.9	189.2	187.6
27.5°	177.8	174.5	172.9	171.3	171.3	168.0	169.6	169.6	172.9	174.5	174.5
30°	177.8	172.9	166.4	161.5	161.5	156.6	159.8	163.1	164.7	168.0	168.0
32.5°	182.7	172.9	161.5	156.6	151.7	148.4	151.7	156.6	163.1	164.7	166.4
35°	145.2	150.1	148.4	141.9	140.3	140.3	138.6	138.6	133.7	133.7	132.1
37.5°	130.5	128.9	132.1	133.7	135.4	130.5	130.5	124.0	122.3	124.0	124.0
40°	122.3	122.3	122.3	127.2	128.9	125.6	120.7	117.4	117.4	117.4	119.1
42.5°	119.1	115.8	114.2	117.4	122.3	119.1	114.2	112.5	112.5	114.2	114.2
45°	114.2	112.5	110.9	109.3	115.8	110.9	109.3	107.7	107.7	107.7	109.3
47.5°	109.3	107.7	104.4	104.4	106.0	104.4	102.8	102.8	102.8	106.0	106.0
50°	106.0	104.4	101.1	101.1	101.1	101.1	99.5	99.5	99.5	101.1	102.8
52.5°	101.1	99.5	97.9	96.2	96.2	96.2	96.2	96.2	96.2	97.9	99.5
55°	96.2	94.6	93.0	93.0	94.6	94.6	93.0	94.6	93.0	94.6	96.2
57.5°	91.3	89.7	88.1	89.7	91.3	89.7	89.7	89.7	89.7	89.7	91.3
60°	84.8	84.8	84.8	84.8	88.1	88.1	88.1	88.1	84.8	86.4	88.1
62.5°	81.6	79.9	79.9	81.6	83.2	83.2	84.8	83.2	81.6	83.2	83.2
65°	75.0	75.0	75.0	76.7	76.7	78.3	78.3	78.3	76.7	78.3	78.3
67.5°	70.1	70.1	70.1	70.1	73.4	73.4	73.4	73.4	71.8	71.8	73.4
70°	62.0	63.6	62.0	65.2	68.5	66.9	68.5	68.5	66.9	65.2	68.5
72.5°	57.1	57.1	57.1	57.1	62.0	62.0	62.0	63.6	62.0	60.3	62.0
75°	50.6	50.6	50.6	52.2	55.5	55.5	55.5	55.5	55.5	53.8	53.8
77.5°	44.0	45.7	44.0	45.7	48.9	47.3	48.9	50.6	48.9	47.3	47.3
80°	37.5	37.5	37.5	39.1	40.8	40.8	40.8	42.4	40.8	39.1	39.1
82.5°	29.4	29.4	31.0	31.0	32.6	32.6	32.6	34.3	32.6	31.0	31.0
85°	22.8	22.8	22.8	24.5	24.5	26.1	26.1	27.7	27.7	26.1	26.1
87.5°	14.7	13.0	14.7	14.7	16.3	16.3	14.7	13.0	14.7	13.0	11.4
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4	1174.4
2.5°	1071.6	1101.0	1122.2	1136.9	1158.1	1198.8	1215.1	1244.5	1252.7	1257.5
5°	921.5	952.5	998.2	1030.8	1068.3	1145.0	1203.7	1247.8	1267.3	1285.3
7.5°	722.6	763.3	810.6	853.0	915.0	1009.6	1086.3	1177.6	1211.9	1229.8
10°	564.3	601.9	654.1	706.2	792.7	872.6	981.9	1065.1	1112.4	1125.4
12.5°	476.3	520.3	582.3	645.9	699.7	791.1	902.0	1022.7	1066.7	1074.9
15°	404.5	464.9	528.5	593.7	655.7	735.6	854.7	1001.5	1066.7	1074.9
17.5°	334.4	388.2	463.2	533.4	605.1	714.4	862.8	1019.4	1084.7	1109.1
20°	265.9	318.1	376.8	464.9	562.7	678.5	880.8	1079.8	1166.2	1192.3
22.5°	220.2	243.0	300.1	384.9	500.7	654.1	898.7	1174.4	1265.7	1275.5
25°	192.5	208.8	244.7	324.6	451.8	637.7	941.1	1283.6	1401.1	1401.1
27.5°	179.4	185.9	210.4	282.2	417.6	623.1	983.5	1404.3	1513.6	1536.5
30°	176.2	192.5	205.5	251.2	380.0	582.3	1022.7	1498.9	1611.5	1613.1
32.5°	172.9	169.6	179.4	218.6	334.4	539.9	1055.3	1595.2	1683.3	1688.1
35°	135.4	141.9	158.2	192.5	300.1	508.9	1071.6	1647.4	1774.6	1779.5
37.5°	127.2	135.4	148.4	177.8	277.3	482.8	1076.5	1748.5	1870.8	1880.6
40°	124.0	130.5	140.3	164.7	259.3	450.2	1086.3	1852.9	2012.7	1999.7
42.5°	117.4	125.6	135.4	158.2	244.7	425.7	1087.9	1910.0	2087.8	2087.8
45°	115.8	120.7	132.1	158.2	228.3	404.5	1061.8	1967.1	2174.2	2148.1
47.5°	109.3	119.1	128.9	153.3	208.8	383.3	1030.8	1996.4	2185.6	2177.5
50°	107.7	117.4	133.7	145.2	197.4	373.5	1024.3	2069.8	2208.5	2206.8
52.5°	104.4	114.2	138.6	138.6	182.7	360.5	1055.3	2102.4	2213.4	2226.4
55°	99.5	114.2	128.9	127.2	169.6	344.2	1089.5	2187.3	2299.8	2296.5
57.5°	96.2	110.9	122.3	115.8	155.0	332.7	1140.1	2268.8	2404.2	2381.4
60°	91.3	110.9	109.3	107.7	143.5	323.0	1182.5	2285.1	2427.0	2441.7
62.5°	88.1	115.8	96.2	99.5	133.7	318.1	1164.6	2162.8	2396.0	2409.1
65°	84.8	99.5	88.1	91.3	130.5	308.3	1094.4	2016.0	2262.3	2319.4
67.5°	78.3	81.6	81.6	84.8	127.2	285.4	950.9	1751.8	2058.4	2089.4
70°	71.8	73.4	73.4	78.3	124.0	259.3	784.5	1515.3	1786.0	1844.7
72.5°	65.2	65.2	65.2	71.8	114.2	238.1	645.9	1164.6	1484.3	1525.0
75°	57.1	57.1	57.1	63.6	102.8	216.9	508.9	866.1	1092.8	1151.5
77.5°	50.6	50.6	48.9	57.1	89.7	176.2	367.0	611.6	769.9	818.8
80°	42.4	40.8	40.8	45.7	70.1	127.2	236.5	432.2	536.6	557.8
82.5°	34.3	32.6	31.0	34.3	50.6	79.9	146.8	301.7	344.2	331.1
85°	32.6	34.3	27.7	26.1	35.9	52.2	93.0	185.9	155.0	155.0
87.5°	13.0	11.4	11.4	9.8	17.9	19.6	40.8	34.3	26.1	26.1
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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