

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: P676349

Luminaire Tested: **CCW-SA-2D-840-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676349
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-840-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
T2 distribution lens and House Side Shield
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

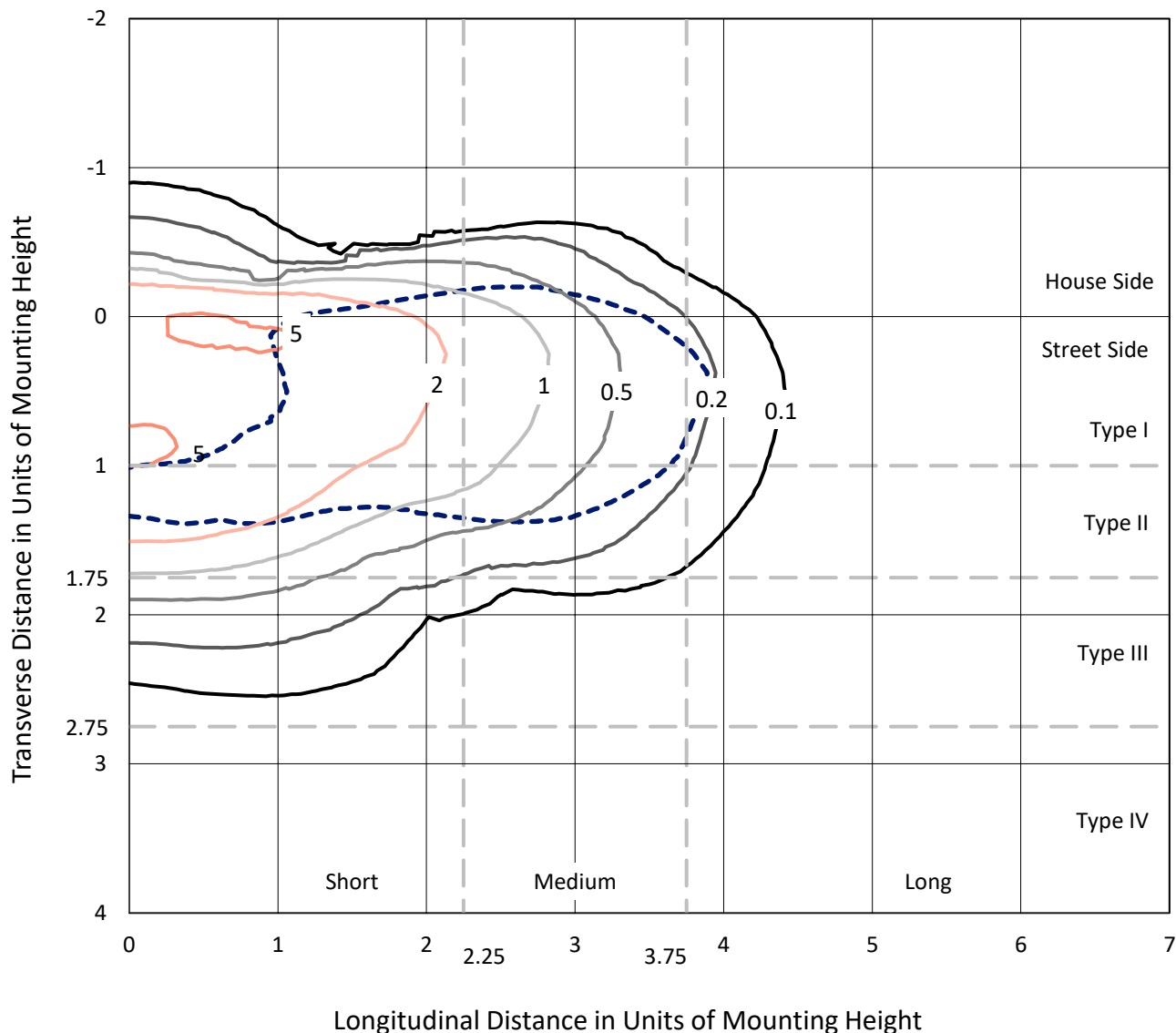
Lumens per Lamp: N/A
Luminaire Lumens: 7341.2 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
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

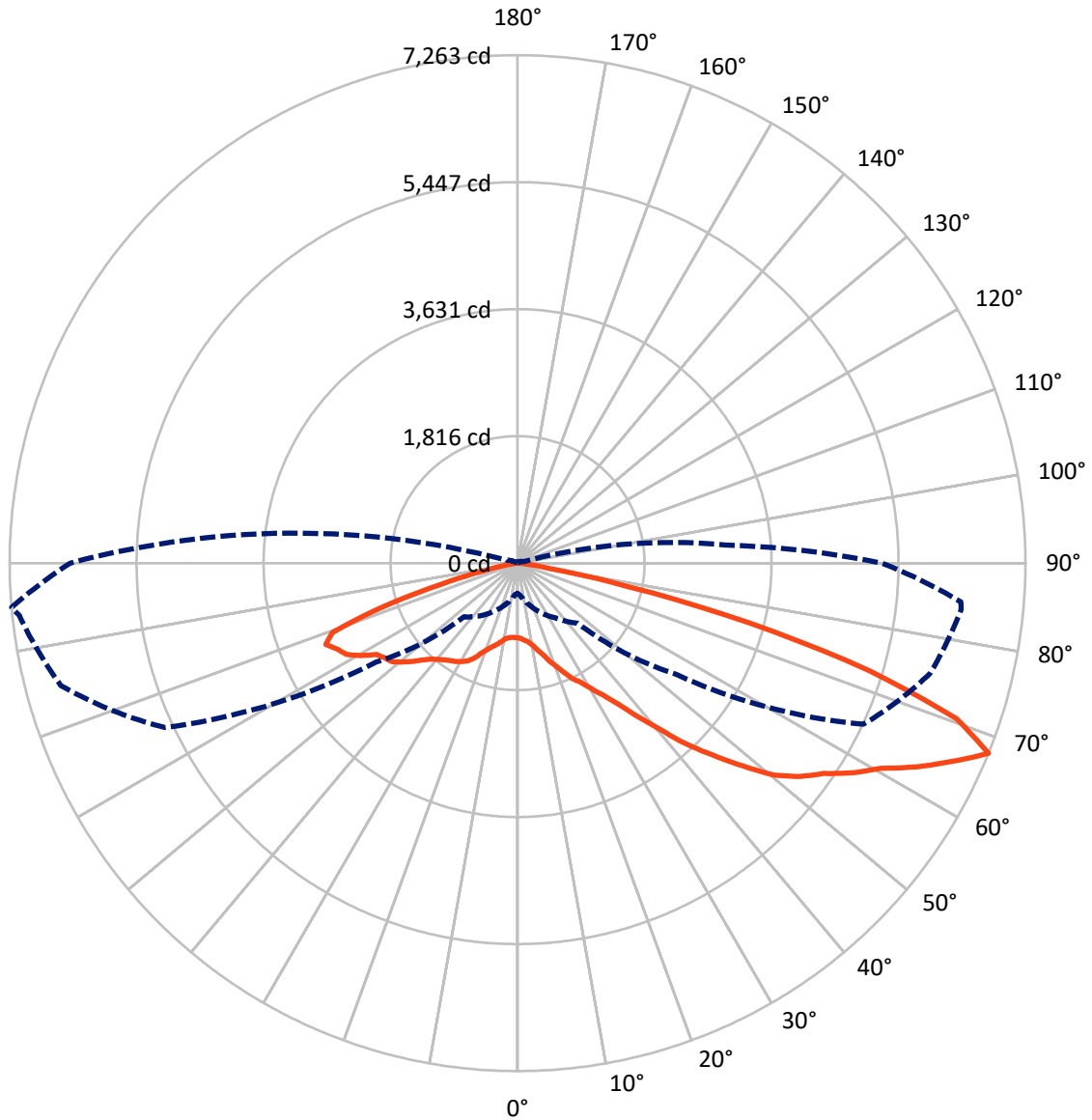
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.6 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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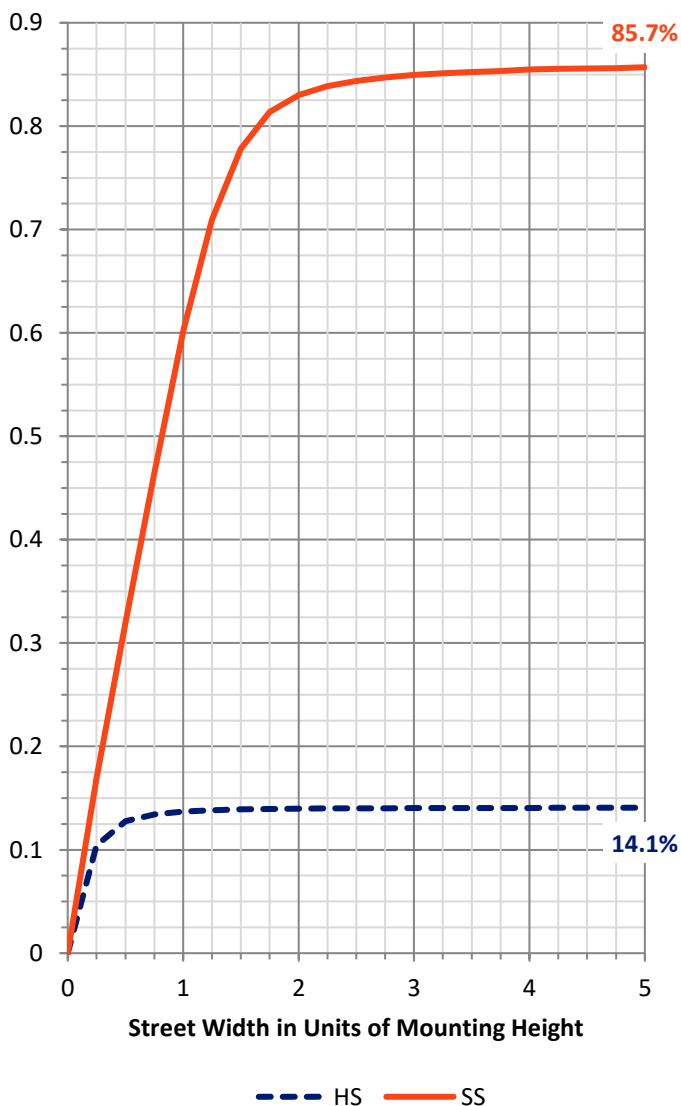
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1042.9	0.0	1042.9
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	6298.3	0.0	6298.3
	% Fixture	85.8	0.0	85.8
Total	Lumens	7341.2	0.0	7341.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	1.3
10°-20°	261.8	3.6
20°-30°	434.7	5.9
30°-40°	747.9	10.2
40°-50°	1344.0	18.3
50°-60°	1913.3	26.1
60°-70°	1744.3	23.8
70°-80°	742.7	10.1
80°-90°	55.3	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°	7341.2	100.0
0°-180°	7341.2	100.0



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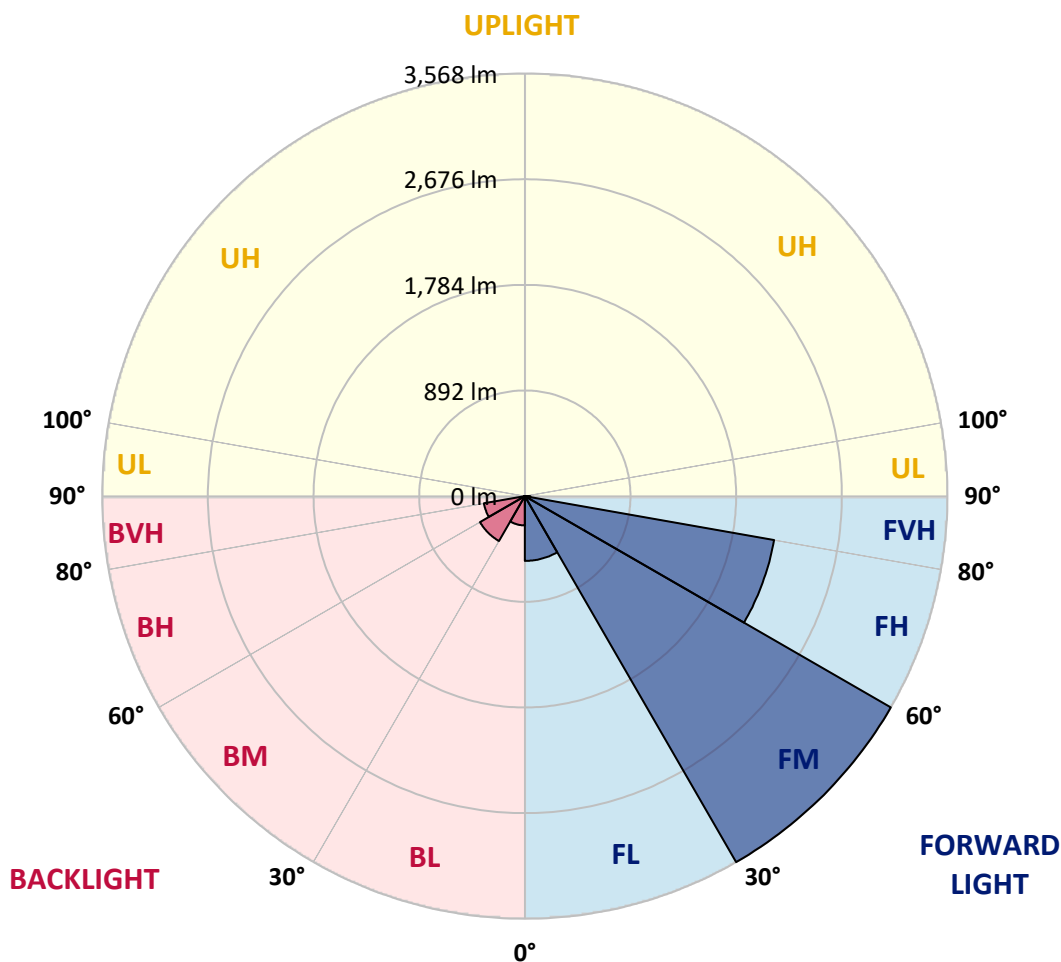
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	546.9	7.4			
FM (30°-60°)	3567.8	48.6			
FH (60°-80°)	2136.6	29.1			G2/5000
FVH (80°-90°)	47.0	0.6			G1/100
BL (0°-30°)	246.9	3.4	B1/500		
BM (30°-60°)	437.3	6.0	B1/1000		
BH (60°-80°)	350.4	4.8	B1/500		G1/500
BVH (80°-90°)	8.3	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	1106.0	1116.5	1116.5	1113.0	1102.5	1095.5	1092.0	1085.0	1078.0	1078.0	1081.5
5°	1116.5	1106.0	1120.0	1102.5	1102.5	1102.5	1116.5	1109.5	1106.0	1088.5	1088.5
7.5°	1116.5	1106.0	1106.0	1116.5	1106.0	1113.0	1130.5	1123.5	1137.5	1106.0	1113.0
10°	1085.0	1081.5	1088.5	1102.5	1106.0	1120.0	1137.5	1172.5	1176.0	1155.0	1151.5
12.5°	1022.0	1018.5	1043.0	1050.0	1092.0	1127.0	1179.5	1207.5	1239.0	1228.5	1207.5
15°	976.5	983.5	1001.0	1029.0	1067.5	1130.5	1190.0	1253.0	1309.0	1295.0	1288.0
17.5°	994.0	990.5	994.0	1011.5	1060.5	1123.5	1225.0	1298.5	1379.0	1379.0	1386.0
20°	1046.5	1057.0	1053.5	1043.0	1067.5	1120.0	1225.0	1354.5	1487.5	1477.0	1477.0
22.5°	1137.5	1141.0	1120.0	1113.0	1109.5	1141.0	1246.0	1424.5	1578.5	1599.5	1592.5
25°	1232.0	1235.5	1228.5	1207.5	1179.5	1186.5	1284.5	1480.5	1704.5	1739.5	1732.5
27.5°	1389.5	1386.0	1368.5	1344.0	1302.0	1270.5	1344.0	1522.5	1802.5	1862.0	1844.5
30°	1547.0	1536.5	1512.0	1480.5	1442.0	1382.5	1417.5	1603.0	1925.0	1981.0	1942.5
32.5°	1739.5	1718.5	1725.5	1676.5	1596.0	1501.5	1494.5	1676.5	2023.0	2103.5	2072.0
35°	1984.5	1960.0	1925.0	1879.5	1802.5	1676.5	1638.0	1795.5	2187.5	2247.0	2247.0
37.5°	2306.5	2331.0	2289.0	2100.0	2016.0	1897.0	1816.5	1918.0	2331.0	2474.5	2439.5
40°	2635.5	2656.5	2579.5	2439.5	2257.5	2110.5	2061.5	2117.5	2548.0	2719.5	2653.0
42.5°	2901.6	2929.6	2901.6	2719.5	2576.0	2387.0	2299.5	2352.0	2828.0	3034.6	2947.1
45°	3181.6	3209.6	3178.1	3059.1	2919.1	2810.5	2590.0	2656.5	3122.1	3430.1	3332.1
47.5°	3391.6	3426.6	3370.6	3346.1	3234.1	3216.6	2842.0	2915.6	3430.1	3829.1	3706.6
50°	3440.6	3479.1	3528.1	3556.1	3517.6	3559.6	3181.6	3244.6	3752.1	4196.6	4077.6
52.5°	3325.1	3363.6	3472.1	3601.6	3780.1	3906.1	3524.6	3577.1	4088.1	4501.1	4438.1
55°	2985.6	3020.6	3241.1	3416.1	3843.1	4049.6	3853.6	4074.1	4329.6	4819.6	4665.6
57.5°	2415.0	2457.0	2747.5	3017.1	3633.1	3969.1	4049.6	4487.1	4728.6	5054.1	4875.6
60°	1715.0	1739.5	1991.5	2467.5	3052.1	3566.6	4011.1	4795.1	5043.6	5369.1	5274.6
62.5°	987.0	1008.0	1270.5	1718.5	2303.0	2978.6	3839.6	5085.6	5383.1	5715.6	5663.1
65°	654.5	661.5	840.0	1085.0	1498.0	2194.5	3405.6	5344.6	5719.1	5992.1	5932.6
67.5°	430.5	469.0	609.0	777.0	959.0	1214.5	2775.5	5453.1	6104.1	6377.1	6363.1
70°	308.0	322.0	437.5	598.5	721.0	682.5	1624.0	4686.6	6086.6	6482.1	6366.6
72.5°	182.0	196.0	290.5	448.0	567.0	434.0	759.5	3314.6	5043.6	5173.1	5141.6
75°	133.0	133.0	178.5	322.0	413.0	311.5	357.0	2096.5	3349.6	3636.6	3633.1
77.5°	94.5	98.0	122.5	192.5	318.5	227.5	196.0	1165.5	1830.5	2002.0	1907.5
80°	56.0	59.5	84.0	115.5	231.0	164.5	129.5	532.0	703.5	710.5	675.5
82.5°	42.0	42.0	56.0	80.5	161.0	112.0	80.5	203.0	227.5	206.5	175.0
85°	24.5	21.0	42.0	59.5	94.5	63.0	56.0	94.5	105.0	77.0	70.0
87.5°	7.0	7.0	17.5	21.0	42.0	35.0	24.5	35.0	49.0	28.0	21.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	1074.5	1064.0	1046.5	1039.5	1015.0	1004.5	997.5	980.0	983.5	973.0	973.0
5°	1064.0	1064.0	1029.0	990.5	952.0	927.5	899.5	864.5	864.5	850.5	854.0
7.5°	1102.5	1074.5	1029.0	959.0	896.0	840.0	815.5	780.5	759.5	749.0	749.0
10°	1127.0	1099.0	1022.0	938.0	857.5	787.5	735.0	686.0	658.0	658.0	654.5
12.5°	1193.5	1151.5	1050.0	934.5	815.5	710.5	630.0	574.0	535.5	507.5	514.5
15°	1249.5	1204.0	1064.0	906.5	742.0	595.0	497.0	392.0	339.5	311.5	301.0
17.5°	1337.0	1253.0	1095.5	857.5	630.0	465.5	322.0	234.5	213.5	210.0	210.0
20°	1410.5	1312.5	1099.0	763.0	518.0	297.5	206.5	192.5	182.0	178.5	175.0
22.5°	1512.0	1389.5	1085.0	654.5	371.0	199.5	175.0	161.0	154.0	143.5	143.5
25°	1617.0	1491.0	1057.0	553.0	227.5	171.5	154.0	140.0	126.0	119.0	122.5
27.5°	1729.0	1568.0	976.5	430.5	175.0	150.5	126.0	115.5	108.5	105.0	105.0
30°	1820.0	1617.0	857.5	287.0	157.5	133.0	112.0	101.5	94.5	91.0	91.0
32.5°	1886.5	1659.0	724.5	192.5	143.5	119.0	101.5	91.0	84.0	80.5	80.5
35°	1998.5	1690.5	602.0	164.5	129.5	105.0	87.5	80.5	73.5	73.5	73.5
37.5°	2170.0	1732.5	479.5	150.5	119.0	94.5	84.0	73.5	70.0	66.5	66.5
40°	2320.5	1785.0	343.0	136.5	108.5	87.5	73.5	66.5	63.0	59.5	59.5
42.5°	2537.5	1844.5	224.0	122.5	98.0	80.5	66.5	59.5	56.0	52.5	52.5
45°	2814.0	1942.5	175.0	108.5	87.5	73.5	63.0	56.0	49.0	49.0	45.5
47.5°	3108.1	2061.5	157.5	101.5	80.5	66.5	56.0	49.0	45.5	42.0	42.0
50°	3381.1	2177.0	147.0	94.5	73.5	63.0	52.5	45.5	38.5	35.0	35.0
52.5°	3626.1	2285.5	140.0	87.5	70.0	56.0	45.5	38.5	35.0	31.5	31.5
55°	3755.6	2334.5	136.5	84.0	63.0	52.5	42.0	35.0	31.5	28.0	28.0
57.5°	3958.6	2397.5	133.0	80.5	59.5	45.5	38.5	31.5	28.0	24.5	24.5
60°	4287.6	2604.0	129.5	77.0	56.0	45.5	35.0	28.0	21.0	17.5	17.5
62.5°	4560.6	2775.5	115.5	66.5	49.0	38.5	28.0	21.0	14.0	10.5	10.5
65°	4872.1	2856.0	101.5	59.5	42.0	31.5	21.0	14.0	10.5	3.5	3.5
67.5°	5211.6	2978.6	84.0	52.5	38.5	24.5	17.5	10.5	3.5	0.0	0.0
70°	5033.1	2824.5	70.0	45.5	35.0	21.0	14.0	7.0	0.0	0.0	0.0
72.5°	3944.6	2023.0	56.0	42.0	31.5	21.0	14.0	3.5	0.0	0.0	0.0
75°	2635.5	1144.5	49.0	35.0	24.5	17.5	10.5	3.5	0.0	0.0	0.0
77.5°	1431.5	514.5	42.0	31.5	21.0	14.0	10.5	3.5	0.0	0.0	0.0
80°	465.5	203.0	35.0	28.0	21.0	14.0	10.5	3.5	0.0	0.0	0.0
82.5°	126.0	63.0	35.0	28.0	21.0	14.0	10.5	3.5	0.0	0.0	0.0
85°	52.5	42.0	35.0	28.0	21.0	14.0	10.5	3.5	0.0	0.0	0.0
87.5°	21.0	14.0	14.0	17.5	14.0	10.5	7.0	3.5	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°	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	976.5	983.5	987.0	987.0	1004.5	1022.0	1043.0	1060.5	1060.5	1071.0	1081.5
5°	857.5	864.5	875.0	906.5	941.5	980.0	1018.5	1046.5	1085.0	1102.5	1113.0
7.5°	759.5	766.5	794.5	826.0	875.0	941.5	1008.0	1071.0	1109.5	1127.0	1141.0
10°	658.0	668.5	700.0	756.0	819.0	899.5	976.5	1085.0	1148.0	1183.0	1197.0
12.5°	511.0	539.0	581.0	640.5	721.0	843.5	987.0	1099.0	1207.5	1249.5	1277.5
15°	322.0	346.5	413.0	507.5	616.0	759.5	959.0	1120.0	1270.5	1312.5	1358.0
17.5°	206.5	210.0	231.0	332.5	472.5	654.5	917.0	1151.5	1340.5	1400.0	1470.0
20°	175.0	182.0	185.5	199.5	315.0	539.0	829.5	1190.0	1424.5	1505.0	1571.5
22.5°	147.0	150.5	157.5	168.0	189.0	392.0	710.5	1190.0	1498.0	1617.0	1694.0
25°	119.0	126.0	133.0	143.5	164.5	245.0	588.0	1169.0	1585.5	1732.5	1830.5
27.5°	105.0	105.0	112.0	122.5	140.0	171.5	465.5	1106.0	1652.0	1802.5	1932.0
30°	91.0	94.5	98.0	108.5	126.0	150.5	322.0	1004.5	1722.0	1939.0	2086.0
32.5°	80.5	80.5	87.5	94.5	112.0	136.5	206.5	850.5	1813.0	2044.0	2250.5
35°	73.5	73.5	77.0	84.0	101.5	122.5	161.0	721.0	1921.5	2243.5	2471.0
37.5°	66.5	66.5	70.0	77.0	91.0	108.5	147.0	619.5	2033.5	2443.0	2775.5
40°	59.5	59.5	63.0	70.0	80.5	98.0	133.0	500.5	2173.5	2737.0	3108.1
42.5°	52.5	52.5	56.0	63.0	73.5	87.5	115.5	374.5	2359.0	3055.6	3538.6
45°	45.5	45.5	49.0	56.0	63.0	80.5	105.0	287.0	2562.0	3409.1	3916.6
47.5°	38.5	42.0	45.5	52.5	59.5	73.5	94.5	252.0	2761.5	3783.6	4336.6
50°	35.0	35.0	38.5	45.5	56.0	66.5	87.5	248.5	2964.6	4070.6	4767.1
52.5°	31.5	31.5	35.0	42.0	52.5	63.0	84.0	255.5	3132.6	4336.6	5068.1
55°	28.0	28.0	31.5	35.0	45.5	59.5	77.0	262.5	3251.6	4606.1	5309.6
57.5°	24.5	24.5	28.0	35.0	42.0	52.5	70.0	269.5	3444.1	4872.1	5659.6
60°	17.5	17.5	24.5	31.5	38.5	45.5	66.5	276.5	3752.1	5239.6	5957.1
62.5°	10.5	10.5	14.0	24.5	31.5	42.0	59.5	262.5	4039.1	5712.1	6412.1
65°	3.5	7.0	10.5	14.0	24.5	35.0	49.0	238.0	4280.6	6184.6	6832.1
67.5°	0.0	0.0	3.5	10.5	21.0	28.0	42.0	175.0	4319.1	6398.1	7262.6
70°	0.0	0.0	3.5	10.5	17.5	28.0	38.5	98.0	3678.6	5715.6	6657.1
72.5°	0.0	0.0	0.0	7.0	17.5	24.5	35.0	73.5	2712.5	4308.6	5260.6
75°	0.0	0.0	0.0	3.5	14.0	21.0	31.5	56.0	1648.5	2873.6	3433.6
77.5°	0.0	0.0	0.0	3.5	10.5	21.0	31.5	49.0	581.0	1368.5	1613.5
80°	0.0	0.0	0.0	7.0	14.0	21.0	28.0	42.0	140.0	343.0	462.0
82.5°	0.0	0.0	0.0	3.5	10.5	17.5	24.5	35.0	56.0	101.5	161.0
85°	0.0	0.0	0.0	3.5	7.0	17.5	24.5	31.5	38.5	49.0	70.0
87.5°	0.0	0.0	0.0	0.0	3.5	7.0	10.5	14.0	14.0	14.0	24.5
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°	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	1078.0	1092.0	1099.0	1113.0	1120.0	1116.5	1113.0	1123.5	1116.5	1106.0
5°	1116.5	1116.5	1127.0	1130.5	1130.5	1120.0	1127.0	1123.5	1116.5	1116.5
7.5°	1158.5	1176.0	1176.0	1155.0	1151.5	1144.5	1144.5	1116.5	1106.0	1116.5
10°	1200.5	1214.5	1218.0	1193.5	1162.0	1148.0	1130.5	1095.5	1078.0	1085.0
12.5°	1288.0	1288.0	1249.5	1221.5	1179.5	1130.5	1088.5	1039.5	1015.0	1022.0
15°	1351.0	1365.0	1312.5	1249.5	1176.0	1085.0	1039.5	1001.0	987.0	976.5
17.5°	1473.5	1445.5	1361.5	1270.5	1165.5	1071.0	1039.5	1004.5	994.0	994.0
20°	1578.5	1564.5	1438.5	1274.0	1162.0	1099.0	1078.0	1060.5	1057.0	1046.5
22.5°	1722.0	1659.0	1498.0	1312.5	1200.5	1144.5	1137.5	1155.0	1144.5	1137.5
25°	1830.5	1778.0	1543.5	1368.5	1260.0	1242.5	1253.0	1270.5	1242.5	1232.0
27.5°	1977.5	1879.5	1631.0	1442.0	1340.5	1358.0	1393.0	1396.5	1379.0	1389.5
30°	2114.0	2009.0	1697.5	1526.0	1477.0	1494.5	1547.0	1585.5	1561.0	1547.0
32.5°	2310.0	2149.0	1830.5	1666.0	1648.5	1694.0	1753.5	1778.0	1746.5	1739.5
35°	2516.5	2310.0	1967.0	1823.5	1855.0	1918.0	1970.5	2012.5	1963.5	1984.5
37.5°	2838.5	2569.0	2198.0	2072.0	2086.0	2110.5	2208.5	2324.0	2348.5	2306.5
40°	3174.6	2849.0	2411.5	2313.5	2345.0	2411.5	2527.0	2635.5	2691.5	2635.5
42.5°	3563.1	3118.6	2740.5	2625.0	2656.5	2751.0	2905.1	2992.6	2985.6	2901.6
45°	4042.6	3493.1	3048.6	2905.1	3020.6	3104.6	3258.6	3269.1	3202.6	3181.6
47.5°	4410.1	3808.1	3381.1	3290.1	3447.6	3451.1	3486.1	3489.6	3416.1	3391.6
50°	4816.1	4172.1	3752.1	3619.1	3885.1	3762.6	3668.1	3605.1	3493.1	3440.6
52.5°	5215.1	4431.1	4095.1	3958.6	4235.1	3909.6	3738.1	3545.6	3381.1	3325.1
55°	5428.6	4858.1	4595.6	4277.1	4312.1	3951.6	3521.1	3279.6	2999.6	2985.6
57.5°	5680.6	5145.1	5019.1	4494.1	4182.6	3657.6	3069.6	2751.0	2450.0	2415.0
60°	5978.1	5600.1	5467.1	4459.1	3724.1	3073.1	2432.5	2023.0	1739.5	1715.0
62.5°	6310.6	6139.1	5743.6	4116.1	2957.6	2163.0	1606.5	1263.5	1001.0	987.0
65°	6835.6	6590.6	5890.6	3465.1	1956.5	1386.0	1067.5	819.0	661.5	654.5
67.5°	7164.6	6762.1	5561.6	2471.0	1085.0	917.0	749.0	595.0	458.5	430.5
70°	6699.1	6205.6	4399.6	1414.0	630.0	696.5	577.5	399.0	315.0	308.0
72.5°	5351.6	4606.1	2961.1	665.0	392.0	546.0	420.0	269.5	189.0	182.0
75°	3650.6	2898.1	1858.5	308.0	276.5	399.0	308.0	157.5	133.0	133.0
77.5°	1631.0	1477.0	952.0	189.0	206.5	304.5	178.5	108.5	98.0	94.5
80°	497.0	521.5	388.5	129.5	154.0	231.0	108.5	73.5	59.5	56.0
82.5°	168.0	196.0	175.0	77.0	105.0	164.5	73.5	49.0	42.0	42.0
85°	80.5	98.0	87.5	49.0	56.0	80.5	59.5	38.5	24.5	24.5
87.5°	31.5	45.5	31.5	21.0	31.5	42.0	24.5	17.5	7.0	7.0
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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