

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: P677357

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677357
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-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
SLL distribution lens and House Side Shield
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

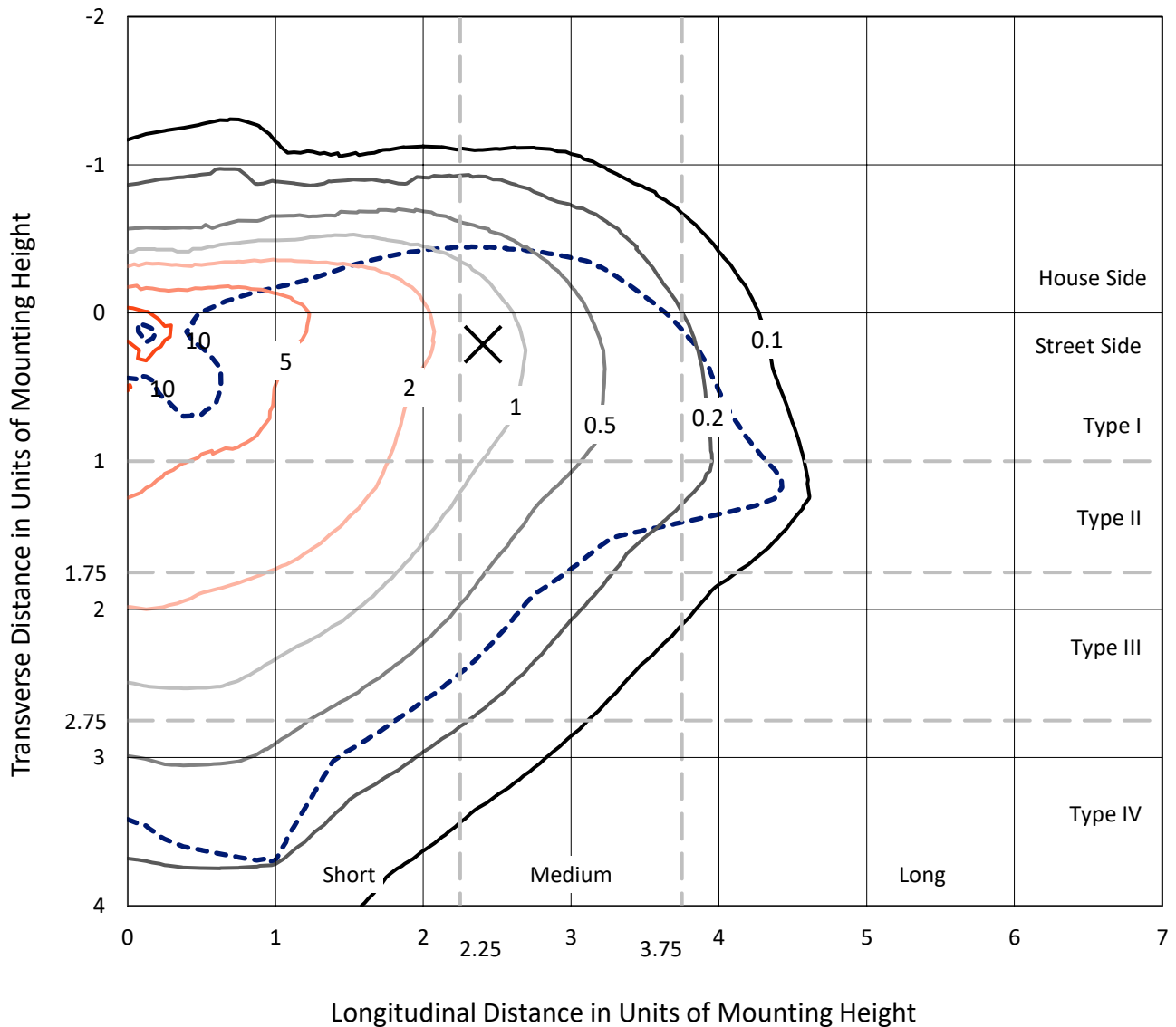
Lumens per Lamp: N/A
Luminaire Lumens: 6899.1 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
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

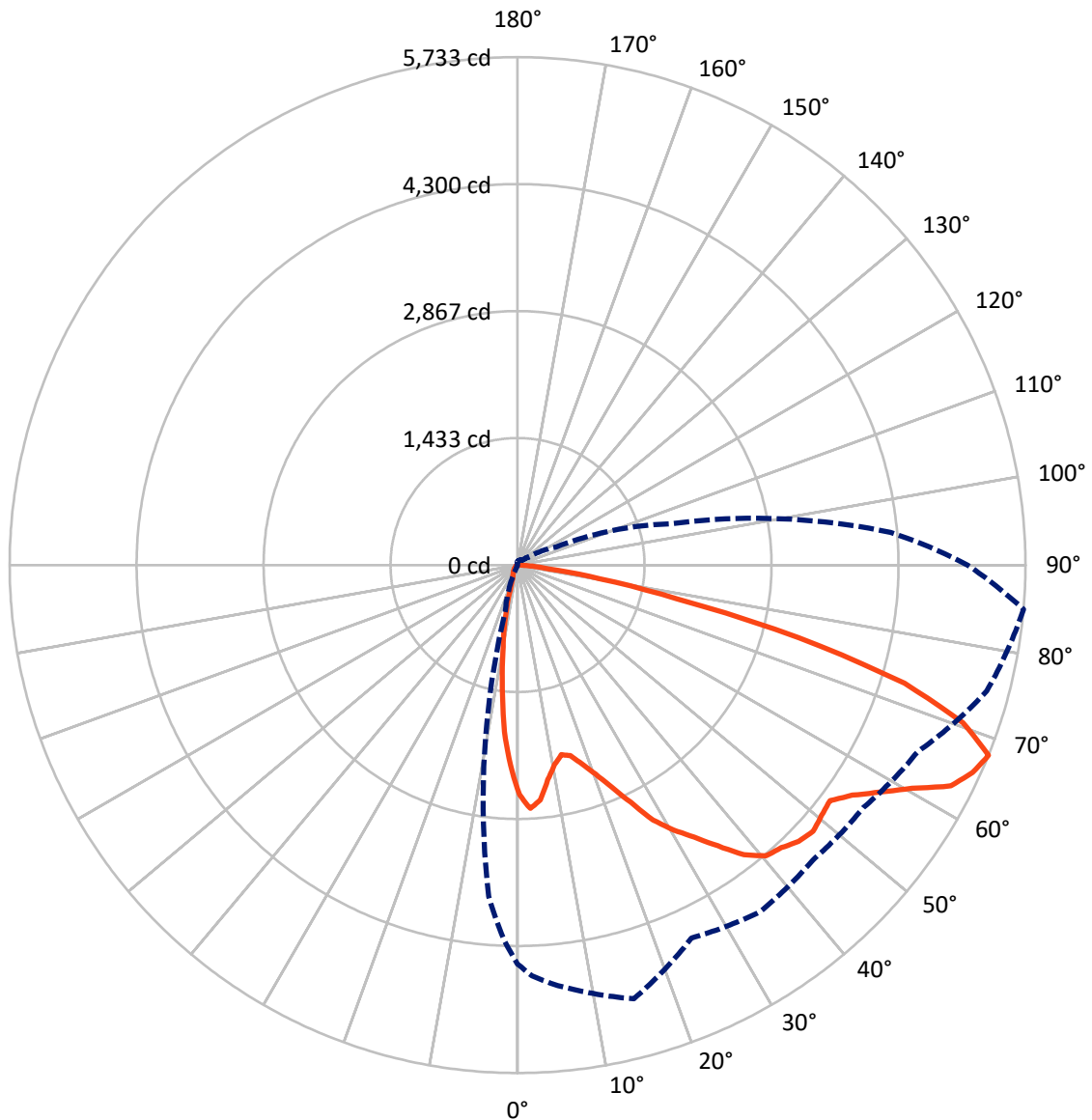
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 13 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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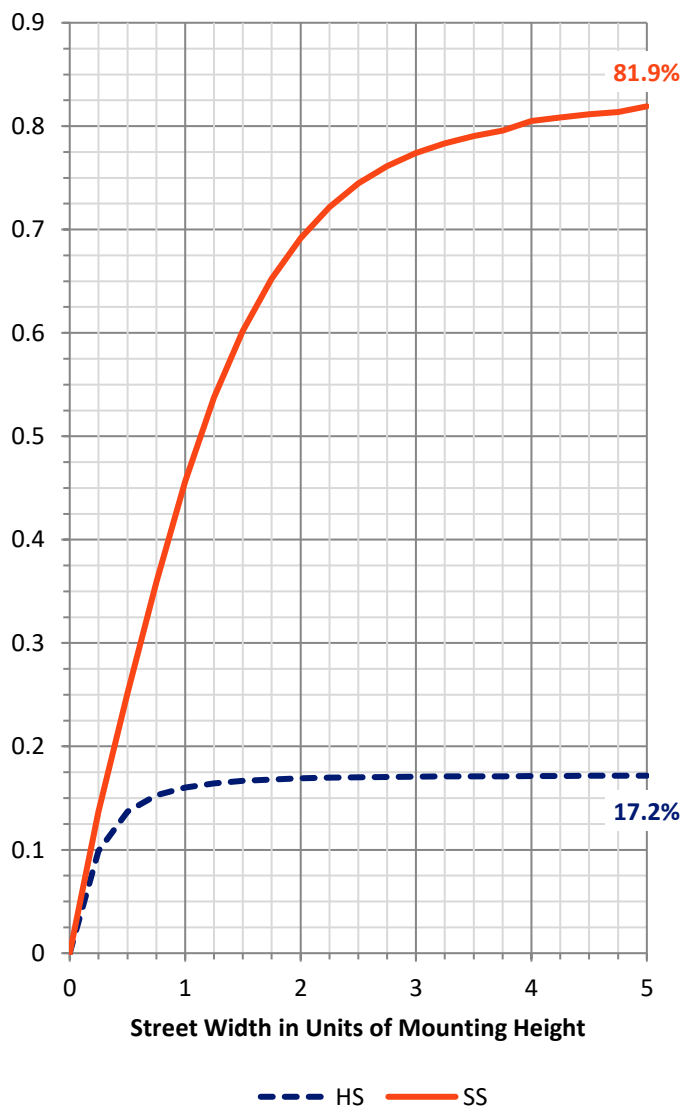
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1197.9	0.0	1197.9
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	5701.1	0.0	5701.1
	% Fixture	82.6	0.0	82.6
Total	Lumens	6899.1	0.0	6899.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.1	2.9
10°-20°	386.4	5.6
20°-30°	534.8	7.8
30°-40°	755.8	11.0
40°-50°	1029.0	14.9
50°-60°	1362.8	19.8
60°-70°	1582.3	22.9
70°-80°	896.1	13.0
80°-90°	154.8	2.2
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°	6899.1	100.0
0°-180°	6899.1	100.0



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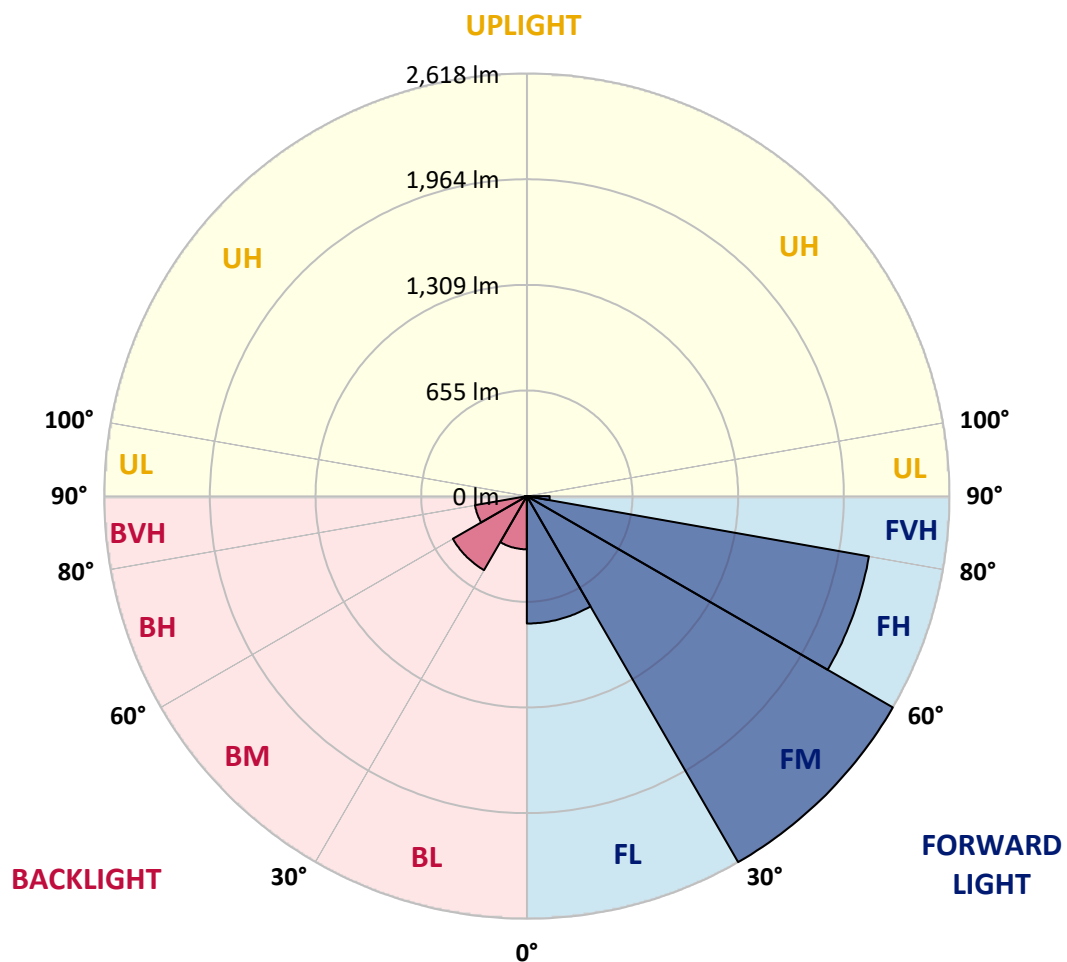
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	788.9	11.4			
FM (30°-60°)	2618.3	38.0			
FH (60°-80°)	2152.2	31.2			G2/5000
FVH (80°-90°)	141.8	2.1			G2/225
BL (0°-30°)	329.3	4.8	B1/500		
BM (30°-60°)	529.3	7.7	B1/1000		
BH (60°-80°)	326.2	4.7	B1/500		G1/500
BVH (80°-90°)	13.0	0.2			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0
2.5°	2695.3	2752.4	2754.3	2780.1	2805.9	2805.9	2866.7	2851.9	2798.5	2789.3	2750.6
5°	2715.6	2735.9	2750.6	2881.4	2991.9	2980.9	3014.0	2991.9	2888.8	2756.1	2665.8
7.5°	2540.6	2562.7	2621.6	2844.6	2993.8	3043.5	3106.2	2968.0	2859.3	2619.8	2446.6
10°	2308.4	2350.8	2459.5	2713.7	2898.0	3056.4	3056.4	2945.9	2735.9	2501.9	2290.0
12.5°	2179.5	2264.2	2323.2	2581.1	2820.6	2929.3	2925.6	2866.7	2730.3	2435.6	2196.1
15°	2201.6	2225.5	2350.8	2551.6	2710.1	2704.5	2770.9	2752.4	2656.6	2494.5	2231.1
17.5°	2302.9	2339.8	2448.5	2551.6	2627.2	2605.1	2603.2	2691.6	2697.2	2594.0	2361.9
20°	2468.7	2577.4	2629.0	2660.3	2568.2	2474.2	2463.2	2586.6	2682.4	2721.1	2518.5
22.5°	2734.0	2805.9	2910.9	2750.6	2511.1	2393.2	2371.1	2507.4	2700.9	2872.2	2721.1
25°	2993.8	3049.1	3150.4	2944.0	2575.6	2376.6	2337.9	2455.8	2770.9	3082.2	2966.1
27.5°	3268.3	3316.2	3327.2	3085.9	2610.6	2343.4	2297.4	2455.8	2829.8	3192.8	3259.1
30°	3435.9	3493.1	3504.1	3211.2	2667.7	2371.1	2349.0	2466.9	2870.3	3286.7	3469.1
32.5°	3623.9	3638.6	3629.4	3233.3	2730.3	2452.1	2360.0	2540.6	2916.4	3399.1	3660.7
35°	3848.6	3874.4	3780.5	3334.6	2870.3	2503.7	2470.6	2630.8	2995.6	3450.7	3892.8
37.5°	4020.0	4101.0	3889.2	3373.3	2898.0	2612.4	2617.9	2818.8	3050.9	3513.3	4148.9
40°	4342.4	4206.0	4073.4	3505.9	3003.0	2796.7	2767.2	3012.2	3237.0	3553.8	4316.6
42.5°	4519.2	4447.4	4145.2	3518.8	3165.1	3050.9	3058.3	3231.4	3334.6	3668.1	4362.6
45°	4563.4	4487.9	4242.9	3528.1	3325.4	3351.2	3478.3	3511.5	3478.3	3743.6	4449.2
47.5°	4675.8	4511.9	4231.8	3651.5	3585.2	3684.7	3846.8	3918.6	3673.6	3716.0	4489.8
50°	4653.7	4559.8	4207.9	3703.1	3902.0	4165.5	4274.2	4244.7	3891.0	3658.9	4445.5
52.5°	4561.6	4460.3	4281.6	3843.1	4198.7	4517.4	4668.5	4594.8	4084.4	3787.8	4416.1
55°	4696.1	4618.7	4377.4	4032.9	4421.6	4826.9	4933.8	4878.5	4322.1	3907.6	4583.7
57.5°	4841.6	4825.1	4637.1	4255.8	4685.0	5145.6	5145.6	5077.5	4528.4	4080.8	4832.4
60°	5051.7	5088.5	4828.7	4403.2	4775.3	5127.2	5394.3	5315.1	4736.6	4384.7	5114.3
62.5°	4983.5	5101.4	5075.6	4720.0	4878.5	5217.5	5363.0	5422.0	4994.5	4755.0	5490.1
65°	4764.3	4889.5	5073.8	4928.2	4801.1	4998.2	5071.9	5250.6	5123.5	5103.2	5644.9
67.5°	4502.6	4639.0	4753.2	5068.2	4644.5	4775.3	4710.8	4767.9	4983.5	5484.6	5733.3
70°	3931.5	4062.3	4242.9	4756.9	4230.0	4112.1	4095.5	4067.9	4403.2	5348.3	5331.7
72.5°	3233.3	3294.1	3592.5	3867.0	3130.1	3108.0	3133.8	3102.5	3491.2	4841.6	4567.1
75°	2420.8	2481.6	2651.1	2969.8	2131.6	2004.5	2151.8	2297.4	2665.8	3758.3	3281.2
77.5°	1820.2	1897.6	2004.5	2221.8	1564.1	1365.2	1385.4	1523.6	1927.1	3010.4	1838.6
80°	1180.9	1171.7	1378.1	1529.1	1177.2	1214.1	1162.5	1263.8	1396.5	1610.2	939.6
82.5°	681.7	690.9	777.5	876.9	819.8	937.7	676.1	1129.3	996.7	655.9	350.0
85°	383.2	399.8	479.0	608.0	514.0	344.5	281.9	560.1	626.4	269.0	169.5
87.5°	38.7	33.2	64.5	230.3	140.0	57.1	84.7	134.5	151.1	101.3	49.7
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°	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0
2.5°	2695.3	2695.3	2649.3	2571.9	2540.6	2485.3	2409.8	2433.7	2407.9	2314.0	2290.0
5°	2584.8	2496.4	2400.6	2282.6	2214.5	2074.5	2030.2	1951.0	1963.9	1884.7	1888.4
7.5°	2354.5	2284.5	2122.4	1967.6	1833.1	1711.5	1540.2	1475.7	1413.1	1381.7	1418.6
10°	2220.0	2089.2	1868.1	1665.5	1486.8	1378.1	1263.8	1175.4	1094.3	1033.5	1020.6
12.5°	2122.4	2006.3	1739.2	1492.3	1352.3	1263.8	1158.8	1037.2	958.0	853.0	821.7
15°	2092.9	1951.0	1669.1	1424.1	1287.8	1142.2	1022.5	902.7	799.6	689.0	650.3
17.5°	2194.2	2030.2	1667.3	1368.8	1177.2	1020.6	854.8	720.4	615.3	514.0	490.1
20°	2365.5	2115.0	1720.7	1335.7	1072.2	862.2	674.3	539.8	421.9	355.6	339.0
22.5°	2560.8	2258.7	1726.3	1247.3	967.2	703.8	491.9	355.6	289.2	257.9	248.7
25°	2800.3	2489.0	1792.6	1175.4	843.8	534.3	350.0	272.7	234.0	215.6	211.9
27.5°	2997.5	2649.3	1864.4	1099.9	722.2	396.1	274.5	222.9	202.7	184.2	182.4
30°	3202.0	2833.5	1884.7	1053.8	617.2	326.1	235.8	197.1	175.0	165.8	164.0
32.5°	3380.7	3034.3	1949.2	978.3	517.7	287.4	213.7	176.9	162.1	147.4	145.5
35°	3611.0	3150.4	1980.5	937.7	480.8	259.8	195.3	162.1	140.0	130.8	127.1
37.5°	3857.8	3262.8	2000.8	906.4	449.5	243.2	184.2	152.9	132.6	119.8	116.1
40°	4088.1	3421.2	1971.3	867.7	425.6	222.9	176.9	141.9	123.4	110.5	105.0
42.5°	4265.0	3576.0	1962.1	830.9	399.8	215.6	167.7	136.3	116.1	101.3	99.5
45°	4364.5	3681.0	1897.6	801.4	379.5	219.2	164.0	129.0	110.5	97.6	90.3
47.5°	4340.5	3762.0	1914.2	792.2	351.9	204.5	162.1	123.4	101.3	90.3	84.7
50°	4473.2	3926.0	1886.5	762.7	331.6	184.2	176.9	123.4	99.5	86.6	81.1
52.5°	4495.3	4075.2	1945.5	709.3	300.3	169.5	175.0	121.6	95.8	82.9	75.5
55°	4679.5	4248.4	2059.7	679.8	274.5	147.4	160.3	117.9	86.6	75.5	71.9
57.5°	4930.1	4607.7	2133.4	652.2	239.5	129.0	134.5	116.1	79.2	70.0	64.5
60°	5171.4	4751.4	2138.9	602.4	206.3	116.1	105.0	116.1	73.7	62.6	57.1
62.5°	5352.0	4751.4	2102.1	560.1	180.5	103.2	92.1	110.5	66.3	55.3	51.6
65°	5254.3	4624.2	2006.3	525.1	164.0	90.3	79.2	84.7	59.0	47.9	44.2
67.5°	5079.3	4228.1	1794.4	482.7	162.1	79.2	68.2	62.6	51.6	42.4	38.7
70°	4799.3	3693.9	1494.1	434.8	158.4	71.9	60.8	53.4	46.1	36.8	33.2
72.5°	3867.0	3050.9	1227.0	407.2	154.8	62.6	51.6	46.1	38.7	31.3	27.6
75°	2678.7	1949.2	945.1	348.2	151.1	57.1	47.9	40.5	33.2	25.8	24.0
77.5°	1606.5	1302.5	609.8	261.6	99.5	46.1	40.5	31.3	27.6	22.1	20.3
80°	751.7	615.3	246.9	101.3	47.9	33.2	27.6	24.0	22.1	18.4	16.6
82.5°	294.8	259.8	119.8	59.0	38.7	25.8	22.1	20.3	18.4	14.7	12.9
85°	158.4	140.0	57.1	40.5	27.6	18.4	18.4	16.6	14.7	12.9	11.1
87.5°	35.0	25.8	24.0	24.0	20.3	14.7	14.7	12.9	11.1	9.2	7.4
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0
2.5°	2277.1	2304.8	2260.5	2288.2	2249.5	2279.0	2282.6	2255.0	2262.4	2299.2	2315.8
5°	1940.0	1921.5	1881.0	1868.1	1870.0	1846.0	1855.2	1868.1	1888.4	1899.4	1932.6
7.5°	1398.3	1440.7	1438.9	1470.2	1472.0	1468.3	1442.5	1387.3	1405.7	1391.0	1409.4
10°	1000.4	1018.8	1053.8	1074.1	1110.9	1090.7	1031.7	1009.6	998.5	996.7	1015.1
12.5°	799.6	755.4	751.7	759.0	777.5	753.5	724.0	698.2	711.1	736.9	757.2
15°	619.0	582.2	534.3	526.9	530.6	519.5	488.2	455.1	464.3	490.1	504.8
17.5°	475.3	432.9	399.8	377.7	370.3	331.6	285.6	257.9	250.6	248.7	261.6
20°	320.6	313.2	307.7	280.0	280.0	224.8	186.1	165.8	165.8	169.5	171.3
22.5°	239.5	230.3	232.1	226.6	211.9	167.7	147.4	141.9	141.9	145.5	145.5
25°	208.2	195.3	191.6	189.8	175.0	143.7	129.0	123.4	123.4	127.1	127.1
27.5°	176.9	173.2	167.7	160.3	147.4	123.4	114.2	108.7	110.5	112.4	110.5
30°	162.1	152.9	145.5	145.5	130.8	110.5	103.2	99.5	95.8	99.5	101.3
32.5°	143.7	138.2	134.5	129.0	112.4	97.6	90.3	86.6	84.7	84.7	86.6
35°	123.4	123.4	119.8	112.4	97.6	88.4	79.2	75.5	73.7	75.5	75.5
37.5°	110.5	105.0	106.9	99.5	86.6	77.4	68.2	64.5	64.5	62.6	64.5
40°	103.2	94.0	88.4	84.7	77.4	66.3	59.0	55.3	53.4	53.4	53.4
42.5°	92.1	84.7	73.7	71.9	70.0	57.1	47.9	46.1	44.2	42.4	42.4
45°	86.6	75.5	66.3	57.1	57.1	47.9	40.5	36.8	35.0	33.2	35.0
47.5°	79.2	68.2	57.1	47.9	46.1	38.7	31.3	27.6	25.8	25.8	25.8
50°	75.5	60.8	49.7	40.5	35.0	31.3	24.0	20.3	18.4	18.4	18.4
52.5°	70.0	57.1	44.2	35.0	27.6	24.0	18.4	14.7	12.9	12.9	12.9
55°	62.6	51.6	38.7	29.5	24.0	18.4	12.9	9.2	7.4	7.4	7.4
57.5°	59.0	46.1	33.2	25.8	18.4	12.9	7.4	5.5	5.5	3.7	5.5
60°	53.4	40.5	27.6	20.3	14.7	9.2	5.5	1.8	1.8	1.8	1.8
62.5°	46.1	35.0	24.0	16.6	11.1	5.5	1.8	0.0	0.0	0.0	0.0
65°	38.7	27.6	18.4	12.9	7.4	1.8	0.0	0.0	0.0	0.0	0.0
67.5°	33.2	24.0	14.7	9.2	5.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	29.5	20.3	11.1	7.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	24.0	16.6	9.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	20.3	12.9	5.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	16.6	9.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	12.9	7.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	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):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0
2.5°	2339.8	2328.7	2384.0	2474.2	2520.3	2610.6	2632.7	2689.8	2675.1	2695.3
5°	1936.3	1958.4	2039.5	2172.1	2220.0	2350.8	2474.2	2597.7	2676.9	2715.6
7.5°	1437.0	1510.7	1610.2	1731.8	1855.2	2026.6	2236.6	2380.3	2457.7	2540.6
10°	1070.4	1149.6	1263.8	1383.6	1584.4	1776.0	1986.0	2164.7	2231.1	2308.4
12.5°	841.9	965.4	1098.0	1227.0	1346.7	1529.1	1788.9	2048.7	2120.5	2179.5
15°	585.9	736.9	926.7	1094.3	1262.0	1420.4	1689.4	2004.5	2102.1	2201.6
17.5°	324.2	444.0	661.4	897.2	1144.1	1387.3	1722.6	2085.5	2232.9	2302.9
20°	187.9	235.8	390.6	670.6	996.7	1315.4	1739.2	2238.4	2433.7	2468.7
22.5°	154.8	171.3	221.1	420.1	816.2	1269.4	1823.9	2452.1	2651.1	2734.0
25°	132.6	145.5	171.3	252.4	617.2	1171.7	1877.3	2719.3	2903.5	2993.8
27.5°	117.9	130.8	151.1	186.1	420.1	1037.2	1965.8	2960.6	3144.9	3268.3
30°	103.2	114.2	134.5	158.4	291.1	886.2	2041.3	3137.5	3397.3	3435.9
32.5°	92.1	101.3	116.1	136.3	215.6	672.4	2102.1	3319.9	3539.1	3623.9
35°	79.2	90.3	99.5	116.1	164.0	506.6	2065.2	3461.7	3747.3	3848.6
37.5°	70.0	77.4	86.6	97.6	138.2	396.1	1989.7	3631.2	3926.0	4020.0
40°	59.0	64.5	75.5	86.6	125.3	305.8	1903.1	3835.7	4176.6	4342.4
42.5°	49.7	55.3	62.6	81.1	103.2	226.6	1728.1	3994.2	4379.2	4519.2
45°	38.7	46.1	57.1	81.1	82.9	167.7	1547.6	4112.1	4493.4	4563.4
47.5°	29.5	36.8	55.3	70.0	66.3	116.1	1333.8	4246.6	4611.3	4675.8
50°	22.1	29.5	62.6	60.8	55.3	88.4	1199.4	4340.5	4618.7	4653.7
52.5°	14.7	22.1	51.6	46.1	46.1	77.4	1162.5	4336.8	4637.1	4561.6
55°	11.1	16.6	29.5	33.2	40.5	68.2	1129.3	4475.0	4642.7	4696.1
57.5°	7.4	12.9	20.3	25.8	35.0	59.0	1061.2	4640.8	4814.0	4841.6
60°	3.7	9.2	14.7	20.3	29.5	51.6	965.4	4762.4	5022.2	5051.7
62.5°	1.8	5.5	11.1	16.6	24.0	40.5	865.9	4569.0	4931.9	4983.5
65°	0.0	3.7	7.4	11.1	14.7	29.5	703.8	4125.0	4574.5	4764.3
67.5°	0.0	0.0	3.7	7.4	9.2	22.1	530.6	3752.8	4244.7	4502.6
70°	0.0	0.0	1.8	1.8	5.5	16.6	339.0	3108.0	3789.7	3931.5
72.5°	0.0	0.0	0.0	0.0	1.8	11.1	197.1	2308.4	2969.8	3233.3
75°	0.0	0.0	0.0	0.0	0.0	9.2	99.5	1484.9	2067.1	2420.8
77.5°	0.0	0.0	0.0	0.0	0.0	7.4	53.4	958.0	1523.6	1820.2
80°	0.0	0.0	0.0	0.0	0.0	1.8	31.3	556.4	974.6	1180.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	12.9	272.7	582.2	681.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	3.7	145.5	291.1	383.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	20.3	38.7
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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