

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: P677335

Luminaire Tested: **CCW-SA-2D-830-U-SLL-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677335
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-830-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) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

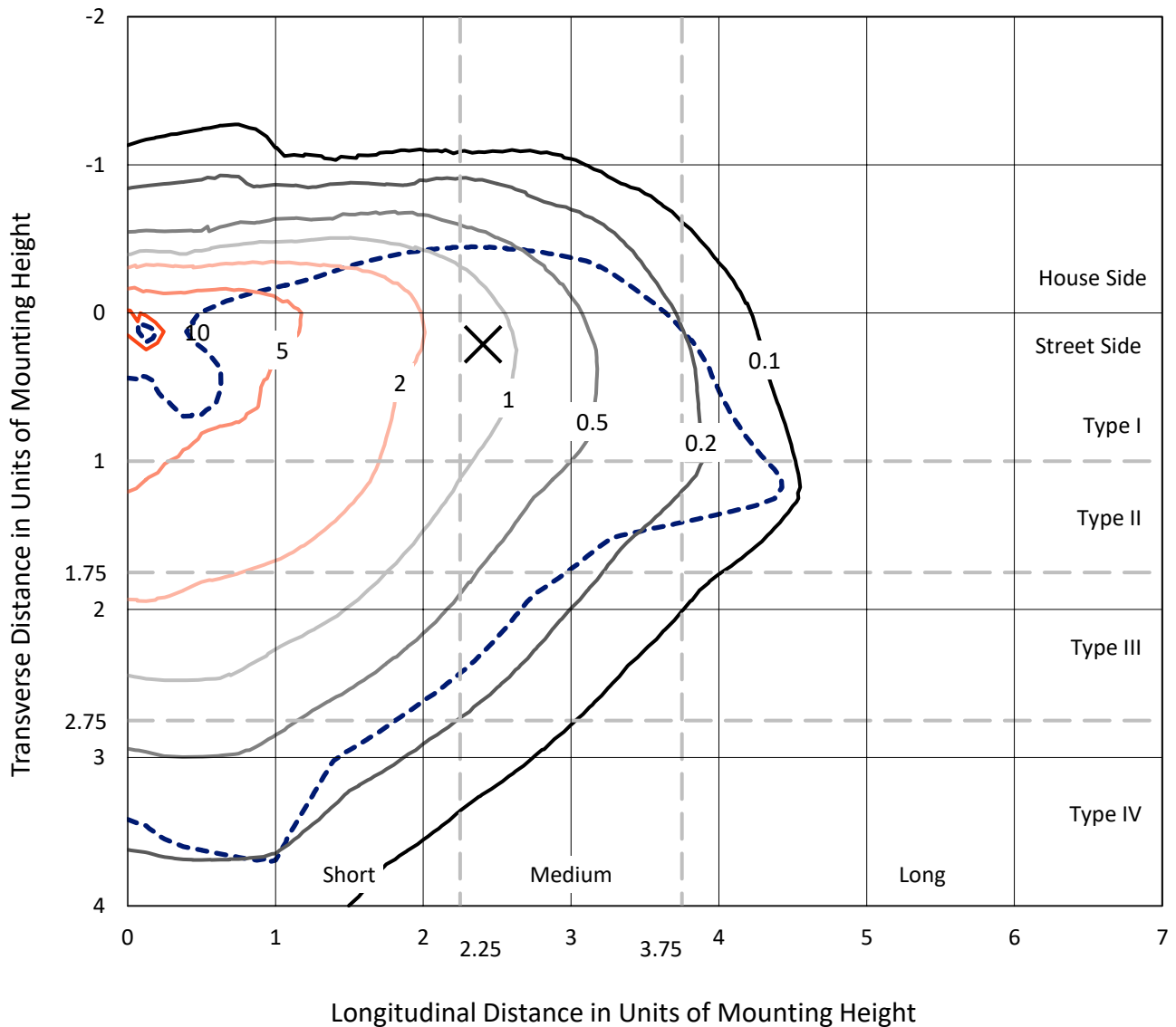
Lumens per Lamp: N/A
Luminaire Lumens: 6429.7 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
Input Voltage (V): 120
Input Current (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

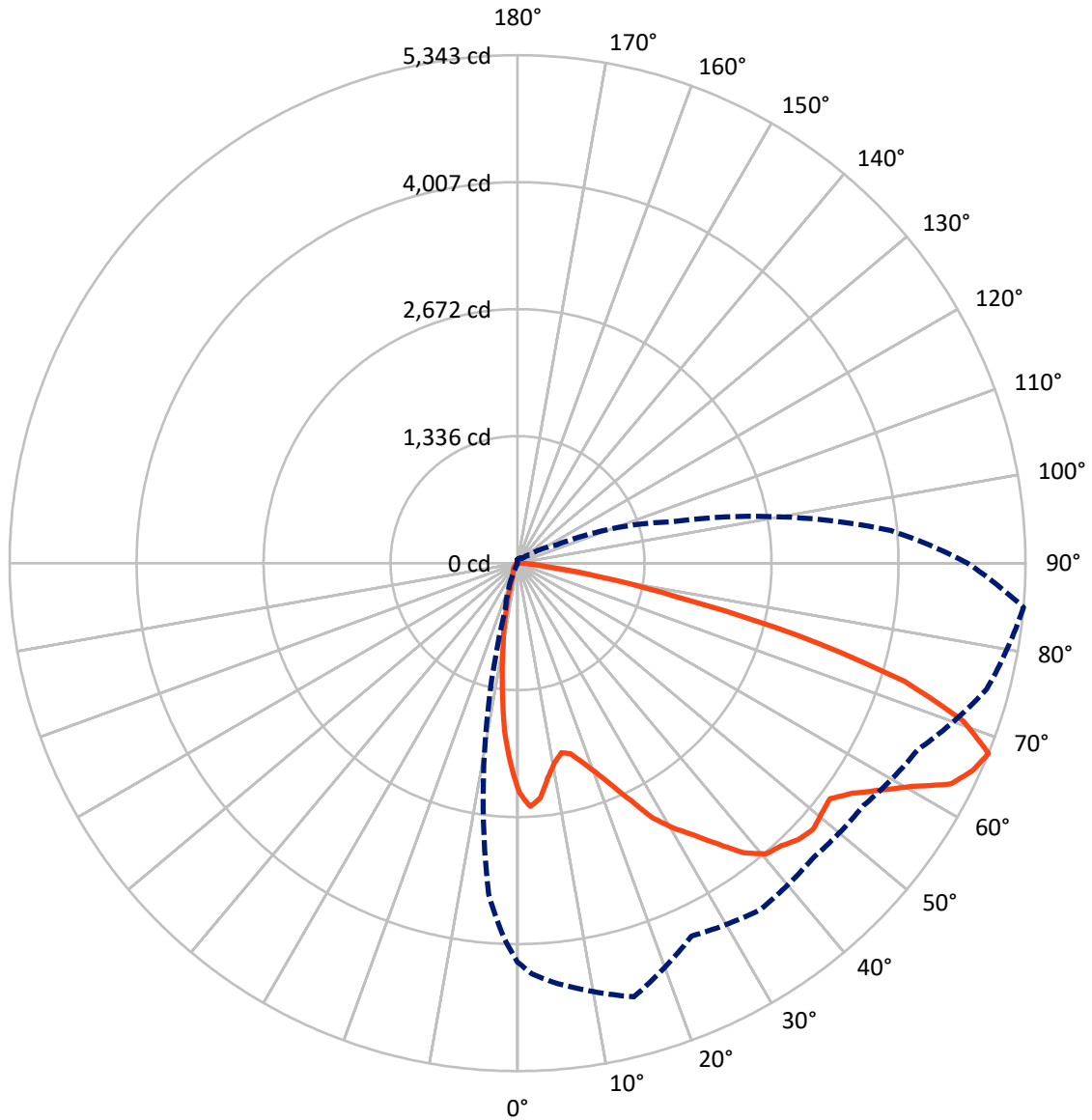
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 12.1 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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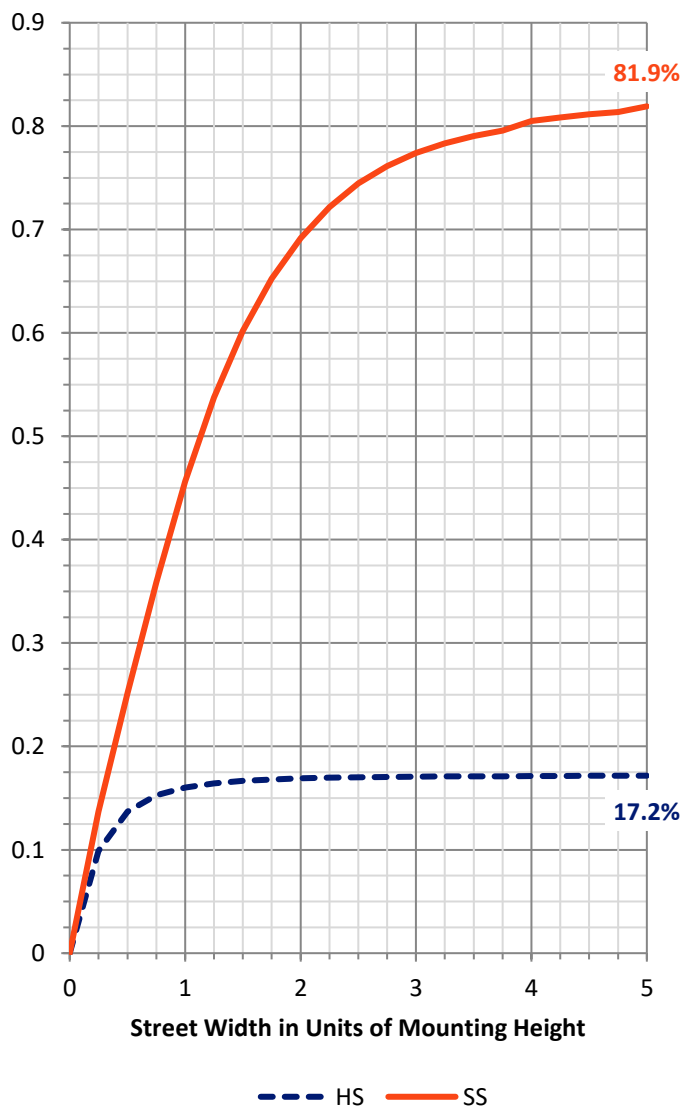
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1116.4	0.0	1116.4
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	5313.3	0.0	5313.3
	% Fixture	82.6	0.0	82.6
Total	Lumens	6429.7	0.0	6429.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.7	2.9
10°-20°	360.1	5.6
20°-30°	498.4	7.8
30°-40°	704.3	11.0
40°-50°	959.0	14.9
50°-60°	1270.1	19.8
60°-70°	1474.7	22.9
70°-80°	835.1	13.0
80°-90°	144.3	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°	6429.7	100.0
0°-180°	6429.7	100.0

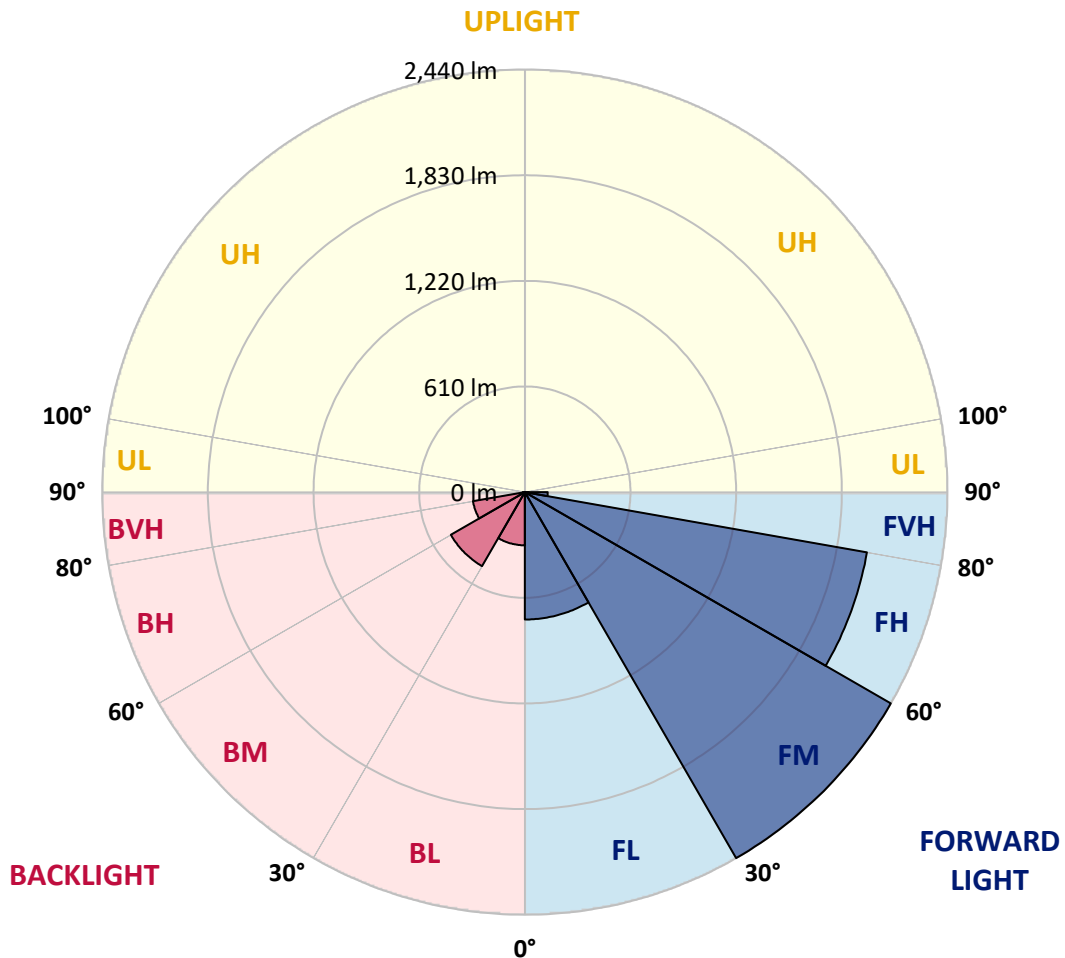


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	735.3	11.4			
FM (30°-60°)	2440.1	38.0			
FH (60°-80°)	2005.8	31.2			G2/5000
FVH (80°-90°)	132.1	2.1			G2/225
BL (0°-30°)	306.9	4.8	B1/500		
BM (30°-60°)	493.3	7.7	B1/1000		
BH (60°-80°)	304.0	4.7	B1/500		G1/500
BVH (80°-90°)	12.2	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°	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5
2.5°	2512.0	2565.2	2566.9	2591.0	2615.0	2615.0	2671.7	2657.9	2608.1	2599.5	2563.5
5°	2530.9	2549.7	2563.5	2685.4	2788.4	2778.1	2809.0	2788.4	2692.3	2568.6	2484.5
7.5°	2367.7	2388.3	2443.3	2651.0	2790.1	2836.5	2894.9	2766.1	2664.8	2441.6	2280.2
10°	2151.4	2190.9	2292.2	2529.1	2700.8	2848.5	2848.5	2745.5	2549.7	2331.7	2134.2
12.5°	2031.2	2110.2	2165.1	2405.5	2628.7	2730.0	2726.6	2671.7	2544.6	2269.9	2046.7
15°	2051.8	2074.1	2190.9	2378.0	2525.7	2520.6	2582.4	2565.2	2475.9	2324.8	2079.3
17.5°	2146.2	2180.6	2281.9	2378.0	2448.4	2427.8	2426.1	2508.5	2513.7	2417.5	2201.2
20°	2300.8	2402.1	2450.2	2479.3	2393.5	2305.9	2295.6	2410.7	2500.0	2536.0	2347.1
22.5°	2548.0	2615.0	2712.9	2563.5	2340.3	2230.4	2209.8	2336.8	2517.1	2676.8	2536.0
25°	2790.1	2841.6	2936.1	2743.8	2400.4	2214.9	2178.9	2288.8	2582.4	2872.5	2764.4
27.5°	3046.0	3090.6	3100.9	2876.0	2433.0	2184.0	2141.1	2288.8	2637.3	2975.6	3037.4
30°	3202.2	3255.4	3265.7	2992.7	2486.2	2209.8	2189.2	2299.1	2675.1	3063.1	3233.1
32.5°	3377.3	3391.1	3382.5	3013.3	2544.6	2285.3	2199.5	2367.7	2718.0	3167.9	3411.7
35°	3586.8	3610.8	3523.3	3107.8	2675.1	2333.4	2302.5	2451.9	2791.8	3215.9	3628.0
37.5°	3746.5	3822.0	3624.6	3143.8	2700.8	2434.7	2439.9	2627.0	2843.4	3274.3	3866.7
40°	4047.0	3919.9	3796.3	3267.4	2798.7	2606.4	2578.9	2807.3	3016.8	3312.1	4022.9
42.5°	4211.8	4144.8	3863.2	3279.5	2949.8	2843.4	2850.2	3011.6	3107.8	3418.5	4065.9
45°	4253.0	4182.6	3954.2	3288.1	3099.2	3123.2	3241.7	3272.6	3241.7	3488.9	4146.6
47.5°	4357.7	4204.9	3943.9	3403.1	3341.3	3434.0	3585.1	3652.1	3423.7	3463.2	4184.3
50°	4337.1	4249.6	3921.6	3451.2	3636.6	3882.1	3983.4	3956.0	3626.3	3410.0	4143.1
52.5°	4251.3	4156.9	3990.3	3581.7	3913.0	4210.1	4350.9	4282.2	3806.6	3530.2	4115.6
55°	4376.6	4304.5	4079.6	3758.5	4120.8	4498.5	4598.1	4546.6	4028.1	3641.8	4271.9
57.5°	4512.3	4496.8	4321.7	3966.3	4366.3	4795.6	4795.6	4732.0	4220.4	3803.2	4503.7
60°	4708.0	4742.4	4500.3	4103.6	4450.5	4778.4	5027.4	4953.5	4414.4	4086.5	4766.4
62.5°	4644.5	4754.4	4730.3	4399.0	4546.6	4862.5	4998.2	5053.1	4654.8	4431.6	5116.7
65°	4440.2	4556.9	4728.6	4593.0	4474.5	4658.2	4726.9	4893.4	4775.0	4756.1	5260.9
67.5°	4196.3	4323.4	4429.9	4723.5	4328.6	4450.5	4390.4	4443.6	4644.5	5111.5	5343.3
70°	3664.1	3786.0	3954.2	4433.3	3942.2	3832.3	3816.9	3791.1	4103.6	4984.4	4969.0
72.5°	3013.3	3070.0	3348.1	3604.0	2917.2	2896.6	2920.6	2891.4	3253.7	4512.3	4256.4
75°	2256.1	2312.8	2470.8	2767.8	1986.6	1868.1	2005.5	2141.1	2484.5	3502.7	3058.0
77.5°	1696.4	1768.5	1868.1	2070.7	1457.7	1272.3	1291.2	1420.0	1796.0	2805.6	1713.6
80°	1100.6	1092.0	1284.3	1425.1	1097.2	1131.5	1083.4	1177.9	1301.5	1500.7	875.7
82.5°	635.3	643.9	724.6	817.3	764.1	874.0	630.1	1052.5	928.9	611.3	326.2
85°	357.1	372.6	446.4	566.6	479.0	321.1	262.7	522.0	583.8	250.7	158.0
87.5°	36.1	30.9	60.1	214.6	130.5	53.2	79.0	125.3	140.8	94.4	46.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5
2.5°	2512.0	2512.0	2469.0	2396.9	2367.7	2316.2	2245.8	2268.2	2244.1	2156.6	2134.2
5°	2408.9	2326.5	2237.2	2127.4	2063.8	1933.3	1892.1	1818.3	1830.3	1756.5	1759.9
7.5°	2194.3	2129.1	1978.0	1833.8	1708.4	1595.1	1435.4	1375.3	1316.9	1287.7	1322.1
10°	2069.0	1947.1	1741.0	1552.2	1385.6	1284.3	1177.9	1095.4	1019.9	963.2	951.2
12.5°	1978.0	1869.8	1620.8	1390.8	1260.3	1177.9	1080.0	966.7	892.8	795.0	765.8
15°	1950.5	1818.3	1555.6	1327.2	1200.2	1064.5	952.9	841.3	745.2	642.2	606.1
17.5°	2044.9	1892.1	1553.9	1275.7	1097.2	951.2	796.7	671.3	573.5	479.0	456.7
20°	2204.6	1971.1	1603.7	1244.8	999.3	803.6	628.4	503.1	393.2	331.4	315.9
22.5°	2386.6	2105.0	1608.8	1162.4	901.4	655.9	458.4	331.4	269.6	240.4	231.8
25°	2609.8	2319.7	1670.6	1095.4	786.4	497.9	326.2	254.1	218.1	200.9	197.5
27.5°	2793.6	2469.0	1737.6	1025.0	673.1	369.2	255.8	207.8	188.9	171.7	170.0
30°	2984.1	2640.7	1756.5	982.1	575.2	303.9	219.8	183.7	163.1	154.5	152.8
32.5°	3150.7	2827.9	1816.6	911.7	482.5	267.9	199.2	164.8	151.1	137.4	135.6
35°	3365.3	2936.1	1845.8	874.0	448.1	242.1	182.0	151.1	130.5	121.9	118.5
37.5°	3595.4	3040.8	1864.7	844.8	418.9	226.6	171.7	142.5	123.6	111.6	108.2
40°	3810.0	3188.5	1837.2	808.7	396.6	207.8	164.8	132.2	115.0	103.0	97.9
42.5°	3974.9	3332.7	1828.6	774.4	372.6	200.9	156.2	127.1	108.2	94.4	92.7
45°	4067.6	3430.6	1768.5	746.9	353.7	204.3	152.8	120.2	103.0	91.0	84.1
47.5°	4045.2	3506.1	1784.0	738.3	327.9	190.6	151.1	115.0	94.4	84.1	79.0
50°	4168.9	3658.9	1758.2	710.8	309.1	171.7	164.8	115.0	92.7	80.7	75.5
52.5°	4189.5	3798.0	1813.2	661.0	279.9	158.0	163.1	113.3	89.3	77.3	70.4
55°	4361.2	3959.4	1919.6	633.6	255.8	137.4	149.4	109.9	80.7	70.4	67.0
57.5°	4594.7	4294.2	1988.3	607.8	223.2	120.2	125.3	108.2	73.8	65.2	60.1
60°	4819.6	4428.1	1993.4	561.5	192.3	108.2	97.9	108.2	68.7	58.4	53.2
62.5°	4987.9	4428.1	1959.1	522.0	168.3	96.2	85.8	103.0	61.8	51.5	48.1
65°	4896.9	4309.7	1869.8	489.3	152.8	84.1	73.8	79.0	54.9	44.6	41.2
67.5°	4733.8	3940.5	1672.4	449.9	151.1	73.8	63.5	58.4	48.1	39.5	36.1
70°	4472.8	3442.6	1392.5	405.2	147.7	67.0	56.7	49.8	42.9	34.3	30.9
72.5°	3604.0	2843.4	1143.5	379.5	144.2	58.4	48.1	42.9	36.1	29.2	25.8
75°	2496.5	1816.6	880.8	324.5	140.8	53.2	44.6	37.8	30.9	24.0	22.3
77.5°	1497.2	1213.9	568.3	243.8	92.7	42.9	37.8	29.2	25.8	20.6	18.9
80°	700.5	573.5	230.1	94.4	44.6	30.9	25.8	22.3	20.6	17.2	15.5
82.5°	274.7	242.1	111.6	54.9	36.1	24.0	20.6	18.9	17.2	13.7	12.0
85°	147.7	130.5	53.2	37.8	25.8	17.2	17.2	15.5	13.7	12.0	10.3
87.5°	32.6	24.0	22.3	22.3	18.9	13.7	13.7	12.0	10.3	8.6	6.9
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5
2.5°	2122.2	2148.0	2106.8	2132.5	2096.5	2123.9	2127.4	2101.6	2108.5	2142.8	2158.3
5°	1808.0	1790.8	1753.1	1741.0	1742.8	1720.4	1729.0	1741.0	1759.9	1770.2	1801.1
7.5°	1303.2	1342.7	1341.0	1370.2	1371.9	1368.4	1344.4	1292.9	1310.1	1296.3	1313.5
10°	932.3	949.5	982.1	1001.0	1035.4	1016.5	961.5	940.9	930.6	928.9	946.1
12.5°	745.2	704.0	700.5	707.4	724.6	702.3	674.8	650.7	662.8	686.8	705.7
15°	576.9	542.6	497.9	491.1	494.5	484.2	455.0	424.1	432.7	456.7	470.5
17.5°	443.0	403.5	372.6	352.0	345.1	309.1	266.1	240.4	233.5	231.8	243.8
20°	298.8	291.9	286.7	261.0	261.0	209.5	173.4	154.5	154.5	158.0	159.7
22.5°	223.2	214.6	216.3	211.2	197.5	156.2	137.4	132.2	132.2	135.6	135.6
25°	194.0	182.0	178.6	176.9	163.1	133.9	120.2	115.0	115.0	118.5	118.5
27.5°	164.8	161.4	156.2	149.4	137.4	115.0	106.5	101.3	103.0	104.7	103.0
30°	151.1	142.5	135.6	135.6	121.9	103.0	96.2	92.7	89.3	92.7	94.4
32.5°	133.9	128.8	125.3	120.2	104.7	91.0	84.1	80.7	79.0	79.0	80.7
35°	115.0	115.0	111.6	104.7	91.0	82.4	73.8	70.4	68.7	70.4	70.4
37.5°	103.0	97.9	99.6	92.7	80.7	72.1	63.5	60.1	60.1	58.4	60.1
40°	96.2	87.6	82.4	79.0	72.1	61.8	54.9	51.5	49.8	49.8	49.8
42.5°	85.8	79.0	68.7	67.0	65.2	53.2	44.6	42.9	41.2	39.5	39.5
45°	80.7	70.4	61.8	53.2	53.2	44.6	37.8	34.3	32.6	30.9	32.6
47.5°	73.8	63.5	53.2	44.6	42.9	36.1	29.2	25.8	24.0	24.0	24.0
50°	70.4	56.7	46.4	37.8	32.6	29.2	22.3	18.9	17.2	17.2	17.2
52.5°	65.2	53.2	41.2	32.6	25.8	22.3	17.2	13.7	12.0	12.0	12.0
55°	58.4	48.1	36.1	27.5	22.3	17.2	12.0	8.6	6.9	6.9	6.9
57.5°	54.9	42.9	30.9	24.0	17.2	12.0	6.9	5.2	5.2	3.4	5.2
60°	49.8	37.8	25.8	18.9	13.7	8.6	5.2	1.7	1.7	1.7	1.7
62.5°	42.9	32.6	22.3	15.5	10.3	5.2	1.7	0.0	0.0	0.0	0.0
65°	36.1	25.8	17.2	12.0	6.9	1.7	0.0	0.0	0.0	0.0	0.0
67.5°	30.9	22.3	13.7	8.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0
70°	27.5	18.9	10.3	6.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	22.3	15.5	8.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	18.9	12.0	5.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	15.5	8.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	12.0	6.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.3	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	1.7	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°	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5	2417.5
2.5°	2180.6	2170.3	2221.8	2305.9	2348.9	2433.0	2453.6	2506.8	2493.1	2512.0
5°	1804.6	1825.2	1900.7	2024.3	2069.0	2190.9	2305.9	2421.0	2494.8	2530.9
7.5°	1339.3	1407.9	1500.7	1614.0	1729.0	1888.7	2084.4	2218.4	2290.5	2367.7
10°	997.6	1071.4	1177.9	1289.5	1476.6	1655.2	1850.9	2017.5	2079.3	2151.4
12.5°	784.7	899.7	1023.3	1143.5	1255.1	1425.1	1667.2	1909.3	1976.3	2031.2
15°	546.0	686.8	863.7	1019.9	1176.1	1323.8	1574.5	1868.1	1959.1	2051.8
17.5°	302.2	413.8	616.4	836.2	1066.3	1292.9	1605.4	1943.6	2081.0	2146.2
20°	175.1	219.8	364.0	625.0	928.9	1225.9	1620.8	2086.2	2268.2	2300.8
22.5°	144.2	159.7	206.0	391.5	760.6	1183.0	1699.8	2285.3	2470.8	2548.0
25°	123.6	135.6	159.7	235.2	575.2	1092.0	1749.6	2534.3	2706.0	2790.1
27.5°	109.9	121.9	140.8	173.4	391.5	966.7	1832.0	2759.2	2930.9	3046.0
30°	96.2	106.5	125.3	147.7	271.3	825.9	1902.4	2924.0	3166.1	3202.2
32.5°	85.8	94.4	108.2	127.1	200.9	626.7	1959.1	3094.0	3298.4	3377.3
35°	73.8	84.1	92.7	108.2	152.8	472.2	1924.8	3226.2	3492.4	3586.8
37.5°	65.2	72.1	80.7	91.0	128.8	369.2	1854.4	3384.2	3658.9	3746.5
40°	54.9	60.1	70.4	80.7	116.8	285.0	1773.7	3574.8	3892.4	4047.0
42.5°	46.4	51.5	58.4	75.5	96.2	211.2	1610.5	3722.5	4081.3	4211.8
45°	36.1	42.9	53.2	75.5	77.3	156.2	1442.3	3832.3	4187.8	4253.0
47.5°	27.5	34.3	51.5	65.2	61.8	108.2	1243.1	3957.7	4297.6	4357.7
50°	20.6	27.5	58.4	56.7	51.5	82.4	1117.8	4045.2	4304.5	4337.1
52.5°	13.7	20.6	48.1	42.9	42.9	72.1	1083.4	4041.8	4321.7	4251.3
55°	10.3	15.5	27.5	30.9	37.8	63.5	1052.5	4170.6	4326.8	4376.6
57.5°	6.9	12.0	18.9	24.0	32.6	54.9	989.0	4325.1	4486.5	4512.3
60°	3.4	8.6	13.7	18.9	27.5	48.1	899.7	4438.4	4680.5	4708.0
62.5°	1.7	5.2	10.3	15.5	22.3	37.8	807.0	4258.2	4596.4	4644.5
65°	0.0	3.4	6.9	10.3	13.7	27.5	655.9	3844.4	4263.3	4440.2
67.5°	0.0	0.0	3.4	6.9	8.6	20.6	494.5	3497.5	3956.0	4196.3
70°	0.0	0.0	1.7	1.7	5.2	15.5	315.9	2896.6	3531.9	3664.1
72.5°	0.0	0.0	0.0	0.0	1.7	10.3	183.7	2151.4	2767.8	3013.3
75°	0.0	0.0	0.0	0.0	0.0	8.6	92.7	1383.9	1926.5	2256.1
77.5°	0.0	0.0	0.0	0.0	0.0	6.9	49.8	892.8	1420.0	1696.4
80°	0.0	0.0	0.0	0.0	0.0	1.7	29.2	518.5	908.3	1100.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	12.0	254.1	542.6	635.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	135.6	271.3	357.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	18.9	36.1
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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