

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: P677342

Luminaire Tested: **CCW-SA-1F-835-U-SLL-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677342
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1F-835-U-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1200mA w/
SLL distribution lens and House Side Shield
Light Source: (16) 3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

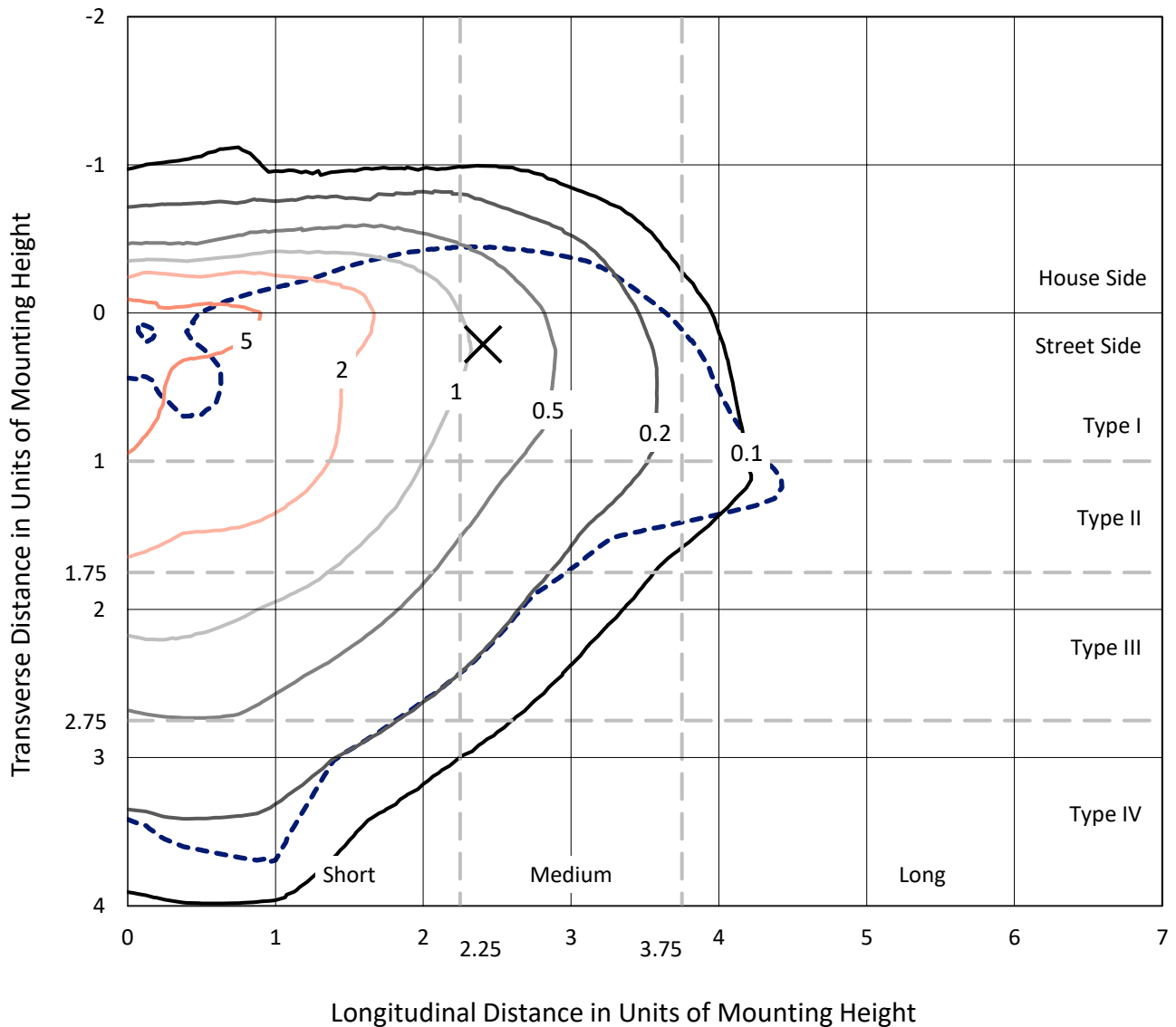
Lumens per Lamp: N/A
Luminaire Lumens: 4482.5 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 67
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

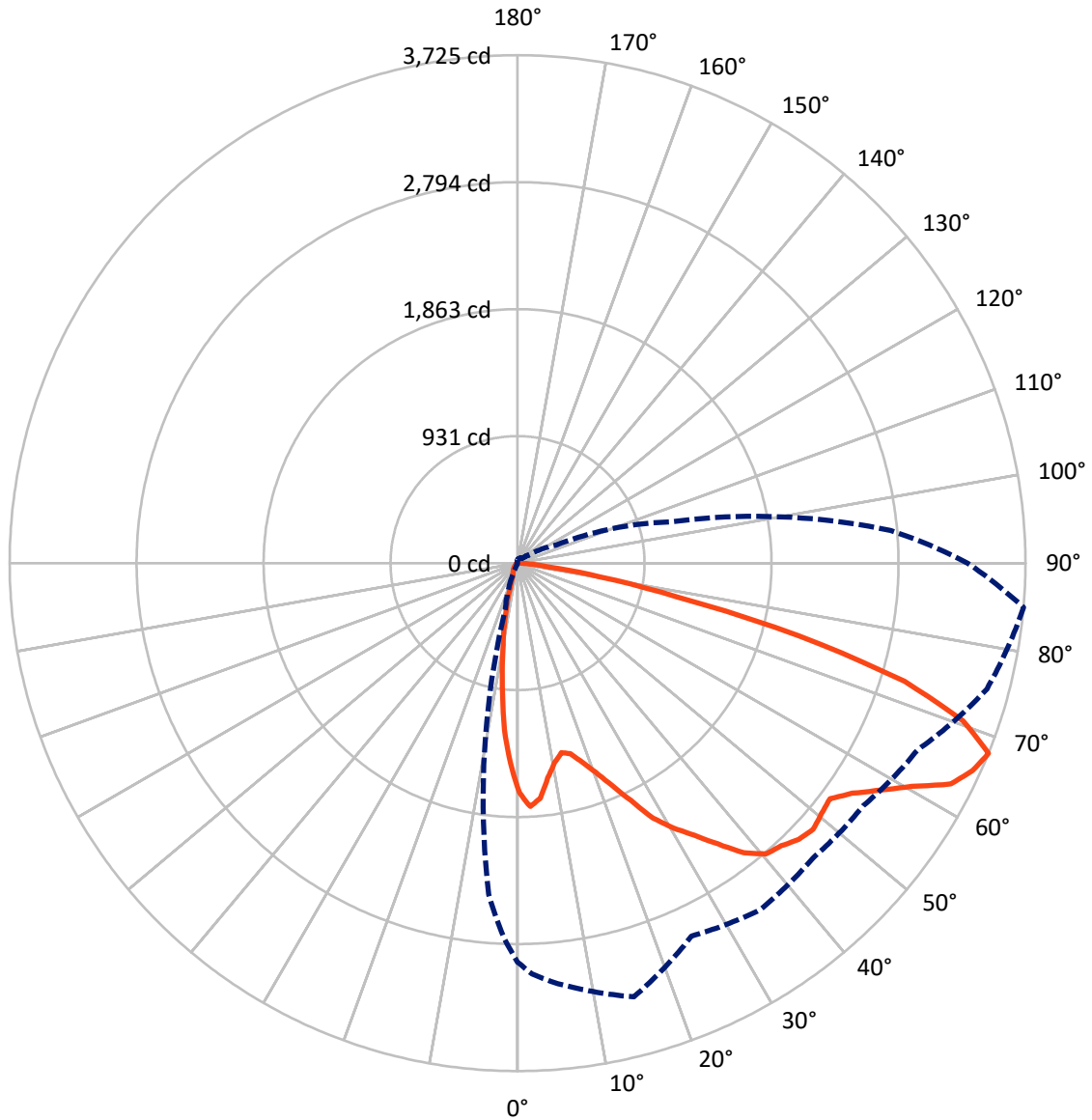
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.4 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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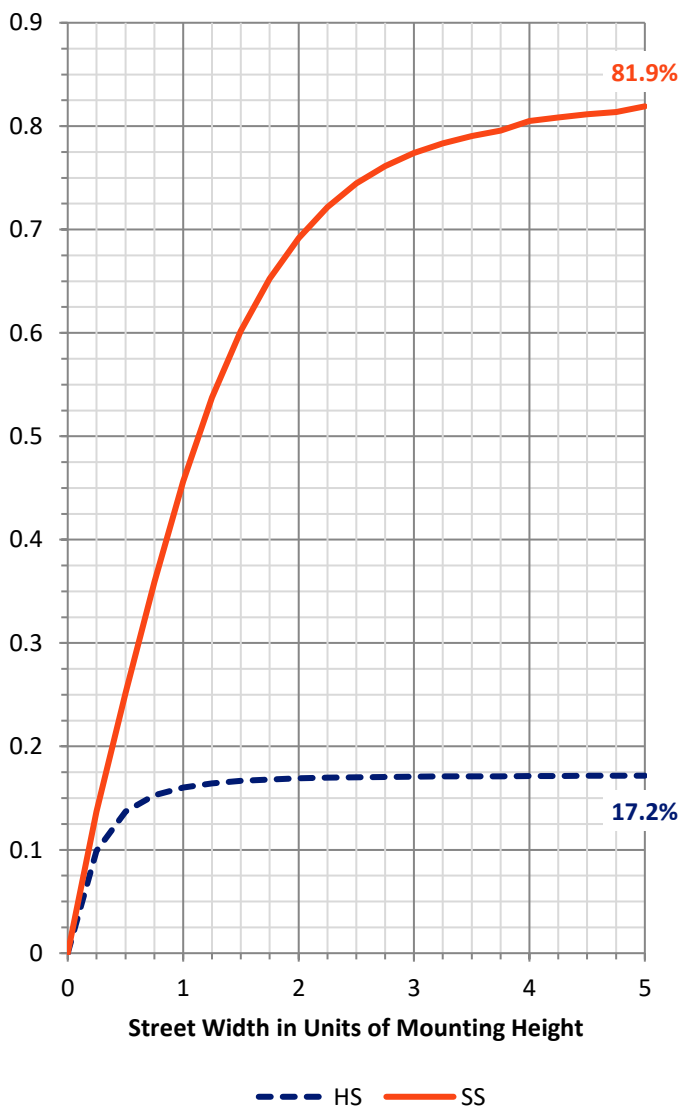
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	778.3	0.0	778.3
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	3704.1	0.0	3704.1
	% Fixture	82.6	0.0	82.6
Total	Lumens	4482.5	0.0	4482.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.0	2.9
10°-20°	251.1	5.6
20°-30°	347.4	7.8
30°-40°	491.0	11.0
40°-50°	668.5	14.9
50°-60°	885.4	19.8
60°-70°	1028.1	22.9
70°-80°	582.2	13.0
80°-90°	100.6	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°	4482.5	100.0
0°-180°	4482.5	100.0



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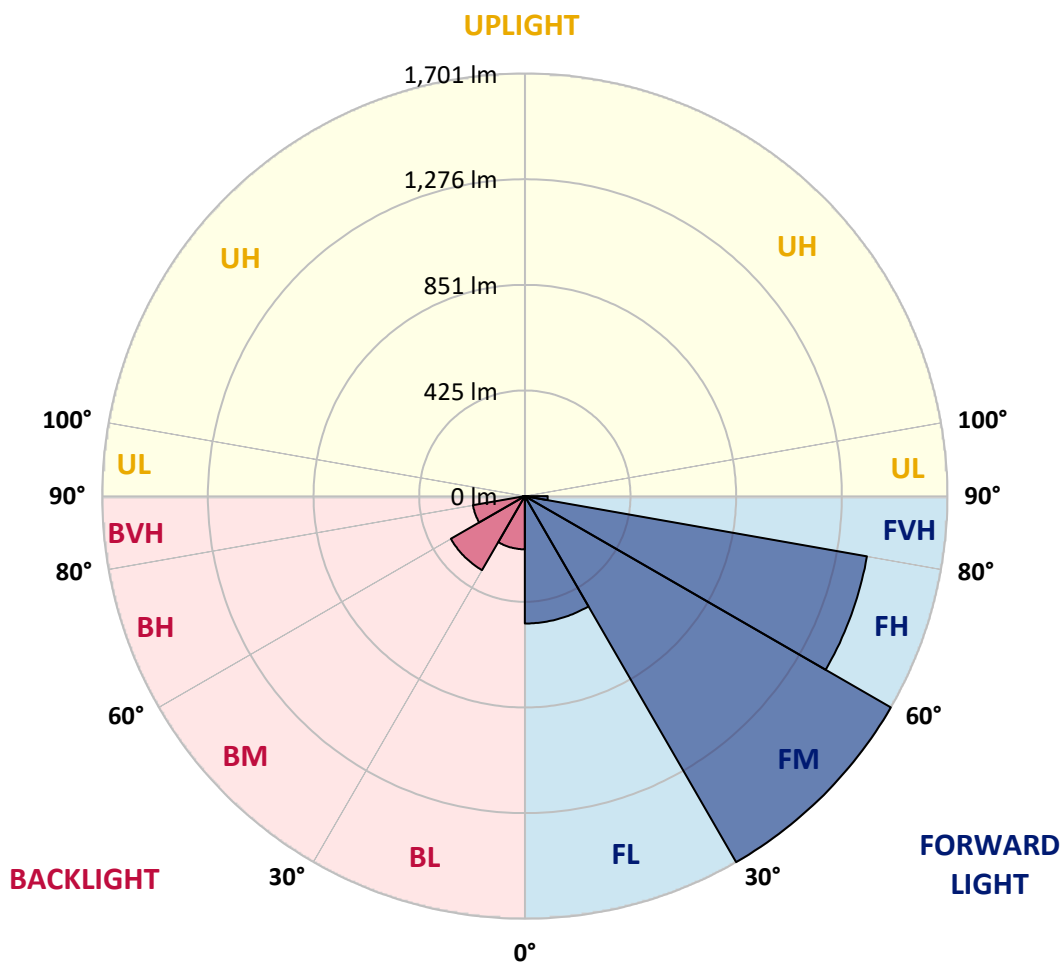
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	512.6	11.4			
FM (30°-60°)	1701.1	38.0			
FH (60°-80°)	1398.3	31.2			G1/1800
FVH (80°-90°)	92.1	2.1			G1/100
BL (0°-30°)	214.0	4.8	B1/500		
BM (30°-60°)	343.9	7.7	B1/1000		
BH (60°-80°)	212.0	4.7	B1/500		G1/500
BVH (80°-90°)	8.5	0.2			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4
2.5°	1751.2	1788.3	1789.5	1806.3	1823.0	1823.0	1862.5	1852.9	1818.2	1812.2	1787.1
5°	1764.4	1777.5	1787.1	1872.1	1943.9	1936.7	1958.3	1943.9	1876.9	1790.7	1732.1
7.5°	1650.7	1665.0	1703.3	1848.2	1945.1	1977.4	2018.1	1928.4	1857.7	1702.1	1589.6
10°	1499.8	1527.4	1598.0	1763.2	1882.9	1985.8	1985.8	1914.0	1777.5	1625.5	1487.9
12.5°	1416.0	1471.1	1509.4	1677.0	1832.6	1903.2	1900.8	1862.5	1773.9	1582.4	1426.8
15°	1430.4	1446.0	1527.4	1657.8	1760.8	1757.2	1800.3	1788.3	1726.1	1620.7	1449.6
17.5°	1496.2	1520.2	1590.8	1657.8	1706.9	1692.6	1691.4	1748.8	1752.4	1685.4	1534.5
20°	1604.0	1674.6	1708.1	1728.5	1668.6	1607.6	1600.4	1680.6	1742.8	1768.0	1636.3
22.5°	1776.3	1823.0	1891.3	1787.1	1631.5	1554.9	1540.5	1629.1	1754.8	1866.1	1768.0
25°	1945.1	1981.0	2046.9	1912.8	1673.4	1544.1	1519.0	1595.6	1800.3	2002.6	1927.2
27.5°	2123.5	2154.6	2161.8	2005.0	1696.1	1522.6	1492.7	1595.6	1838.6	2074.4	2117.5
30°	2232.4	2269.5	2276.7	2086.4	1733.2	1540.5	1526.2	1602.8	1864.9	2135.4	2253.9
32.5°	2354.5	2364.1	2358.1	2100.7	1773.9	1593.2	1533.4	1650.7	1894.8	2208.5	2378.4
35°	2500.5	2517.3	2456.2	2166.6	1864.9	1626.7	1605.2	1709.3	1946.3	2242.0	2529.2
37.5°	2611.8	2664.5	2526.9	2191.7	1882.9	1697.3	1700.9	1831.4	1982.2	2282.7	2695.6
40°	2821.3	2732.7	2646.6	2277.9	1951.1	1817.0	1797.9	1957.1	2103.1	2309.0	2804.6
42.5°	2936.2	2889.5	2693.2	2286.3	2056.4	1982.2	1987.0	2099.5	2166.6	2383.2	2834.5
45°	2965.0	2915.9	2756.7	2292.2	2160.6	2177.3	2259.9	2281.5	2259.9	2432.3	2890.7
47.5°	3038.0	2931.4	2749.5	2372.4	2329.4	2394.0	2499.3	2546.0	2386.8	2414.3	2917.1
50°	3023.6	2962.6	2733.9	2406.0	2535.2	2706.4	2777.0	2757.9	2528.1	2377.2	2888.3
52.5°	2963.8	2897.9	2781.8	2496.9	2728.0	2935.0	3033.2	2985.3	2653.7	2461.0	2869.2
55°	3051.1	3000.9	2844.1	2620.2	2872.8	3136.1	3205.6	3169.6	2808.1	2538.8	2978.1
57.5°	3145.7	3134.9	3012.8	2765.1	3044.0	3343.2	3343.2	3298.9	2942.2	2651.3	3139.7
60°	3282.2	3306.1	3137.3	2860.8	3102.6	3331.2	3504.8	3453.3	3077.5	2848.8	3322.9
62.5°	3237.9	3314.5	3297.7	3066.7	3169.6	3389.9	3484.5	3522.8	3245.1	3089.4	3567.0
65°	3095.4	3176.8	3296.5	3202.0	3119.4	3247.4	3295.3	3411.4	3328.8	3315.7	3667.6
67.5°	2925.5	3014.0	3088.2	3292.9	3017.6	3102.6	3060.7	3097.8	3237.9	3563.5	3725.0
70°	2554.4	2639.4	2756.7	3090.6	2748.3	2671.7	2660.9	2643.0	2860.8	3474.9	3464.1
72.5°	2100.7	2140.2	2334.1	2512.5	2033.7	2019.3	2036.1	2015.7	2268.3	3145.7	2967.3
75°	1572.9	1612.4	1722.5	1929.6	1384.9	1302.3	1398.1	1492.7	1732.1	2441.9	2131.8
77.5°	1182.6	1232.9	1302.3	1443.6	1016.2	887.0	900.1	989.9	1252.1	1955.9	1194.6
80°	767.3	761.3	895.4	993.5	764.9	788.8	755.3	821.1	907.3	1046.2	610.5
82.5°	442.9	448.9	505.1	569.8	532.7	609.3	439.3	733.8	647.6	426.1	227.4
85°	249.0	259.7	311.2	395.0	334.0	223.8	183.1	363.9	407.0	174.8	110.1
87.5°	25.1	21.5	41.9	149.6	91.0	37.1	55.1	87.4	98.2	65.8	32.3
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°	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4
2.5°	1751.2	1751.2	1721.3	1671.0	1650.7	1614.7	1565.7	1581.2	1564.5	1503.4	1487.9
5°	1679.4	1621.9	1559.7	1483.1	1438.8	1347.8	1319.1	1267.6	1276.0	1224.5	1226.9
7.5°	1529.8	1484.3	1378.9	1278.4	1191.0	1112.0	1000.7	958.8	918.1	897.7	921.7
10°	1442.4	1357.4	1213.8	1082.1	966.0	895.4	821.1	763.7	711.0	671.5	663.1
12.5°	1378.9	1303.5	1130.0	969.6	878.6	821.1	752.9	673.9	622.4	554.2	533.9
15°	1359.8	1267.6	1084.5	925.3	836.7	742.1	664.3	586.5	519.5	447.7	422.5
17.5°	1425.6	1319.1	1083.3	889.4	764.9	663.1	555.4	468.0	399.8	334.0	318.4
20°	1536.9	1374.1	1118.0	867.8	696.7	560.2	438.1	350.7	274.1	231.0	220.2
22.5°	1663.8	1467.5	1121.6	810.4	628.4	457.3	319.6	231.0	187.9	167.6	161.6
25°	1819.4	1617.1	1164.7	763.7	548.2	347.1	227.4	177.2	152.0	140.0	137.7
27.5°	1947.5	1721.3	1211.4	714.6	469.2	257.4	178.4	144.8	131.7	119.7	118.5
30°	2080.4	1841.0	1224.5	684.7	401.0	211.9	153.2	128.1	113.7	107.7	106.5
32.5°	2196.5	1971.5	1266.4	635.6	336.4	186.7	138.9	114.9	105.3	95.8	94.6
35°	2346.1	2046.9	1286.8	609.3	312.4	168.8	126.9	105.3	91.0	85.0	82.6
37.5°	2506.5	2119.9	1299.9	588.9	292.1	158.0	119.7	99.4	86.2	77.8	75.4
40°	2656.1	2222.8	1280.8	563.8	276.5	144.8	114.9	92.2	80.2	71.8	68.2
42.5°	2771.0	2323.4	1274.8	539.8	259.7	140.0	108.9	88.6	75.4	65.8	64.6
45°	2835.7	2391.6	1232.9	520.7	246.6	142.4	106.5	83.8	71.8	63.4	58.7
47.5°	2820.1	2444.3	1243.7	514.7	228.6	132.9	105.3	80.2	65.8	58.7	55.1
50°	2906.3	2550.8	1225.7	495.6	215.5	119.7	114.9	80.2	64.6	56.3	52.7
52.5°	2920.7	2647.8	1264.0	460.8	195.1	110.1	113.7	79.0	62.2	53.9	49.1
55°	3040.4	2760.3	1338.2	441.7	178.4	95.8	104.1	76.6	56.3	49.1	46.7
57.5°	3203.2	2993.7	1386.1	423.7	155.6	83.8	87.4	75.4	51.5	45.5	41.9
60°	3360.0	3087.0	1389.7	391.4	134.1	75.4	68.2	75.4	47.9	40.7	37.1
62.5°	3477.3	3087.0	1365.8	363.9	117.3	67.0	59.8	71.8	43.1	35.9	33.5
65°	3413.8	3004.5	1303.5	341.1	106.5	58.7	51.5	55.1	38.3	31.1	28.7
67.5°	3300.1	2747.1	1165.9	313.6	105.3	51.5	44.3	40.7	33.5	27.5	25.1
70°	3118.2	2400.0	970.8	282.5	102.9	46.7	39.5	34.7	29.9	23.9	21.5
72.5°	2512.5	1982.2	797.2	264.5	100.5	40.7	33.5	29.9	25.1	20.3	18.0
75°	1740.4	1266.4	614.1	226.2	98.2	37.1	31.1	26.3	21.5	16.8	15.6
77.5°	1043.8	846.3	396.2	170.0	64.6	29.9	26.3	20.3	18.0	14.4	13.2
80°	488.4	399.8	160.4	65.8	31.1	21.5	18.0	15.6	14.4	12.0	10.8
82.5°	191.5	168.8	77.8	38.3	25.1	16.8	14.4	13.2	12.0	9.6	8.4
85°	102.9	91.0	37.1	26.3	18.0	12.0	12.0	10.8	9.6	8.4	7.2
87.5°	22.7	16.8	15.6	15.6	13.2	9.6	9.6	8.4	7.2	6.0	4.8
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4
2.5°	1479.5	1497.4	1468.7	1486.7	1461.5	1480.7	1483.1	1465.1	1469.9	1493.8	1504.6
5°	1260.4	1248.5	1222.1	1213.8	1214.9	1199.4	1205.4	1213.8	1226.9	1234.1	1255.6
7.5°	908.5	936.0	934.9	955.2	956.4	954.0	937.2	901.3	913.3	903.7	915.7
10°	650.0	661.9	684.7	697.8	721.8	708.6	670.3	656.0	648.8	647.6	659.5
12.5°	519.5	490.8	488.4	493.2	505.1	489.6	470.4	453.7	462.0	478.8	492.0
15°	402.2	378.3	347.1	342.3	344.7	337.6	317.2	295.7	301.6	318.4	328.0
17.5°	308.8	281.3	259.7	245.4	240.6	215.5	185.5	167.6	162.8	161.6	170.0
20°	208.3	203.5	199.9	181.9	181.9	146.0	120.9	107.7	107.7	110.1	111.3
22.5°	155.6	149.6	150.8	147.2	137.7	108.9	95.8	92.2	92.2	94.6	94.6
25°	135.3	126.9	124.5	123.3	113.7	93.4	83.8	80.2	80.2	82.6	82.6
27.5°	114.9	112.5	108.9	104.1	95.8	80.2	74.2	70.6	71.8	73.0	71.8
30°	105.3	99.4	94.6	94.6	85.0	71.8	67.0	64.6	62.2	64.6	65.8
32.5°	93.4	89.8	87.4	83.8	73.0	63.4	58.7	56.3	55.1	55.1	56.3
35°	80.2	80.2	77.8	73.0	63.4	57.5	51.5	49.1	47.9	49.1	49.1
37.5°	71.8	68.2	69.4	64.6	56.3	50.3	44.3	41.9	41.9	40.7	41.9
40°	67.0	61.0	57.5	55.1	50.3	43.1	38.3	35.9	34.7	34.7	34.7
42.5°	59.8	55.1	47.9	46.7	45.5	37.1	31.1	29.9	28.7	27.5	27.5
45°	56.3	49.1	43.1	37.1	37.1	31.1	26.3	23.9	22.7	21.5	22.7
47.5°	51.5	44.3	37.1	31.1	29.9	25.1	20.3	18.0	16.8	16.8	16.8
50°	49.1	39.5	32.3	26.3	22.7	20.3	15.6	13.2	12.0	12.0	12.0
52.5°	45.5	37.1	28.7	22.7	18.0	15.6	12.0	9.6	8.4	8.4	8.4
55°	40.7	33.5	25.1	19.2	15.6	12.0	8.4	6.0	4.8	4.8	4.8
57.5°	38.3	29.9	21.5	16.8	12.0	8.4	4.8	3.6	3.6	2.4	3.6
60°	34.7	26.3	18.0	13.2	9.6	6.0	3.6	1.2	1.2	1.2	1.2
62.5°	29.9	22.7	15.6	10.8	7.2	3.6	1.2	0.0	0.0	0.0	0.0
65°	25.1	18.0	12.0	8.4	4.8	1.2	0.0	0.0	0.0	0.0	0.0
67.5°	21.5	15.6	9.6	6.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
70°	19.2	13.2	7.2	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	15.6	10.8	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	13.2	8.4	3.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	10.8	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	8.4	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	1.2	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°	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4
2.5°	1520.2	1513.0	1548.9	1607.6	1637.5	1696.1	1710.5	1747.6	1738.0	1751.2
5°	1258.0	1272.4	1325.1	1411.3	1442.4	1527.4	1607.6	1687.8	1739.2	1764.4
7.5°	933.7	981.5	1046.2	1125.2	1205.4	1316.7	1453.2	1546.5	1596.8	1650.7
10°	695.5	746.9	821.1	898.9	1029.4	1153.9	1290.4	1406.5	1449.6	1499.8
12.5°	547.0	627.2	713.4	797.2	875.0	993.5	1162.3	1331.1	1377.7	1416.0
15°	380.6	478.8	602.1	711.0	819.9	922.9	1097.6	1302.3	1365.8	1430.4
17.5°	210.7	288.5	429.7	582.9	743.3	901.3	1119.2	1355.0	1450.8	1496.2
20°	122.1	153.2	253.8	435.7	647.6	854.7	1130.0	1454.3	1581.2	1604.0
22.5°	100.5	111.3	143.6	272.9	530.3	824.7	1185.0	1593.2	1722.5	1776.3
25°	86.2	94.6	111.3	164.0	401.0	761.3	1219.7	1766.8	1886.5	1945.1
27.5°	76.6	85.0	98.2	120.9	272.9	673.9	1277.2	1923.6	2043.3	2123.5
30°	67.0	74.2	87.4	102.9	189.1	575.8	1326.3	2038.5	2207.3	2232.4
32.5°	59.8	65.8	75.4	88.6	140.0	436.9	1365.8	2157.0	2299.4	2354.5
35°	51.5	58.7	64.6	75.4	106.5	329.2	1341.8	2249.2	2434.7	2500.5
37.5°	45.5	50.3	56.3	63.4	89.8	257.4	1292.8	2359.3	2550.8	2611.8
40°	38.3	41.9	49.1	56.3	81.4	198.7	1236.5	2492.1	2713.6	2821.3
42.5°	32.3	35.9	40.7	52.7	67.0	147.2	1122.8	2595.1	2845.3	2936.2
45°	25.1	29.9	37.1	52.7	53.9	108.9	1005.5	2671.7	2919.5	2965.0
47.5°	19.2	23.9	35.9	45.5	43.1	75.4	866.6	2759.1	2996.1	3038.0
50°	14.4	19.2	40.7	39.5	35.9	57.5	779.2	2820.1	3000.9	3023.6
52.5°	9.6	14.4	33.5	29.9	29.9	50.3	755.3	2817.7	3012.8	2963.8
55°	7.2	10.8	19.2	21.5	26.3	44.3	733.8	2907.5	3016.4	3051.1
57.5°	4.8	8.4	13.2	16.8	22.7	38.3	689.5	3015.2	3127.7	3145.7
60°	2.4	6.0	9.6	13.2	19.2	33.5	627.2	3094.2	3263.0	3282.2
62.5°	1.2	3.6	7.2	10.8	15.6	26.3	562.6	2968.5	3204.4	3237.9
65°	0.0	2.4	4.8	7.2	9.6	19.2	457.3	2680.1	2972.1	3095.4
67.5°	0.0	0.0	2.4	4.8	6.0	14.4	344.7	2438.3	2757.9	2925.5
70°	0.0	0.0	1.2	1.2	3.6	10.8	220.2	2019.3	2462.2	2554.4
72.5°	0.0	0.0	0.0	0.0	1.2	7.2	128.1	1499.8	1929.6	2100.7
75°	0.0	0.0	0.0	0.0	0.0	6.0	64.6	964.8	1343.0	1572.9
77.5°	0.0	0.0	0.0	0.0	0.0	4.8	34.7	622.4	989.9	1182.6
80°	0.0	0.0	0.0	0.0	0.0	1.2	20.3	361.5	633.2	767.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	8.4	177.2	378.3	442.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	94.6	189.1	249.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	13.2	25.1
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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