

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: P677508

Luminaire Tested: **CCW-SA-1F-850-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677508
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1F-850-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1200mA w/
SLR distribution lens and House Side Shield
Light Source: (16) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

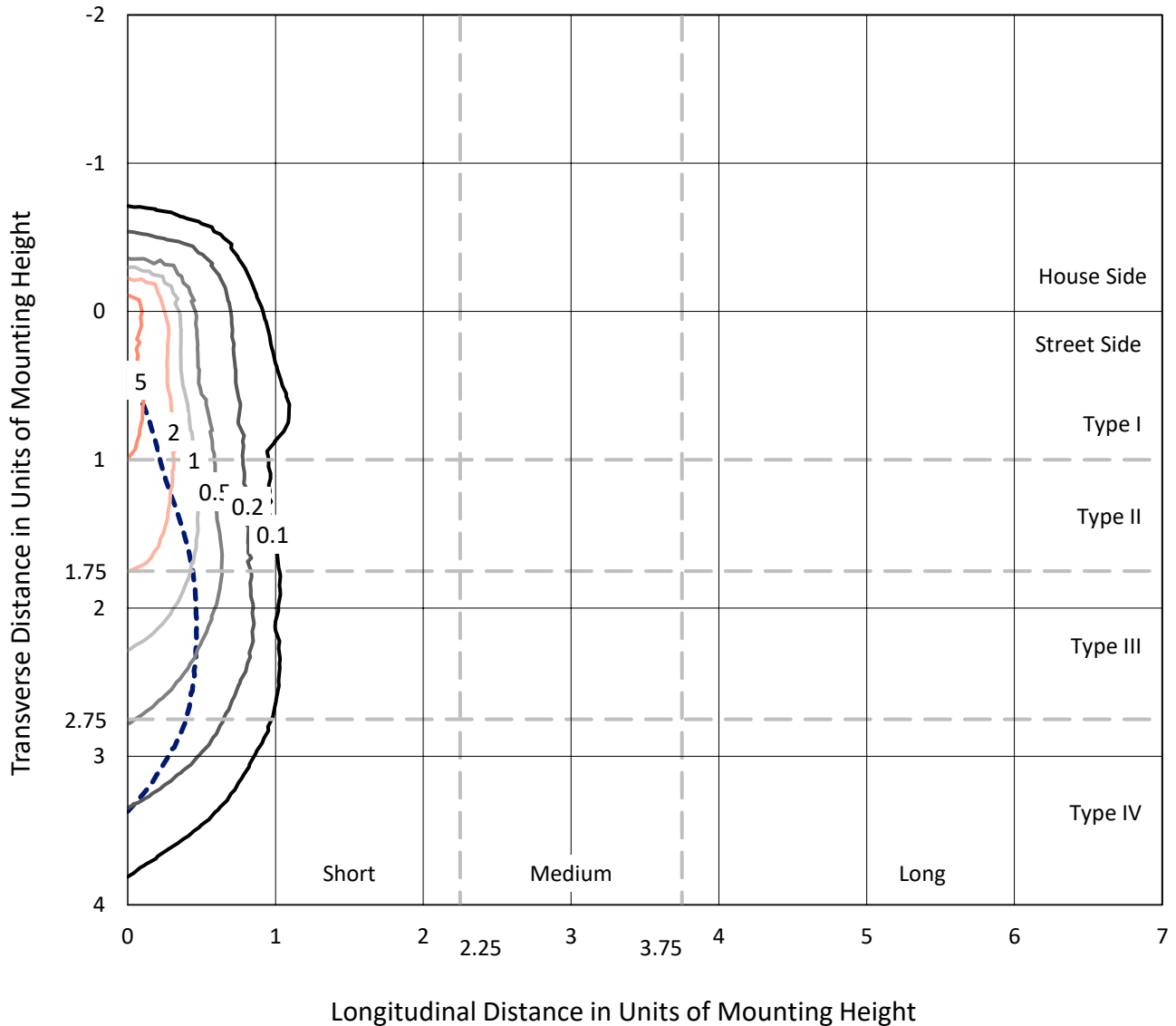
Lumens per Lamp: N/A
Luminaire Lumens: 4701.6 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

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

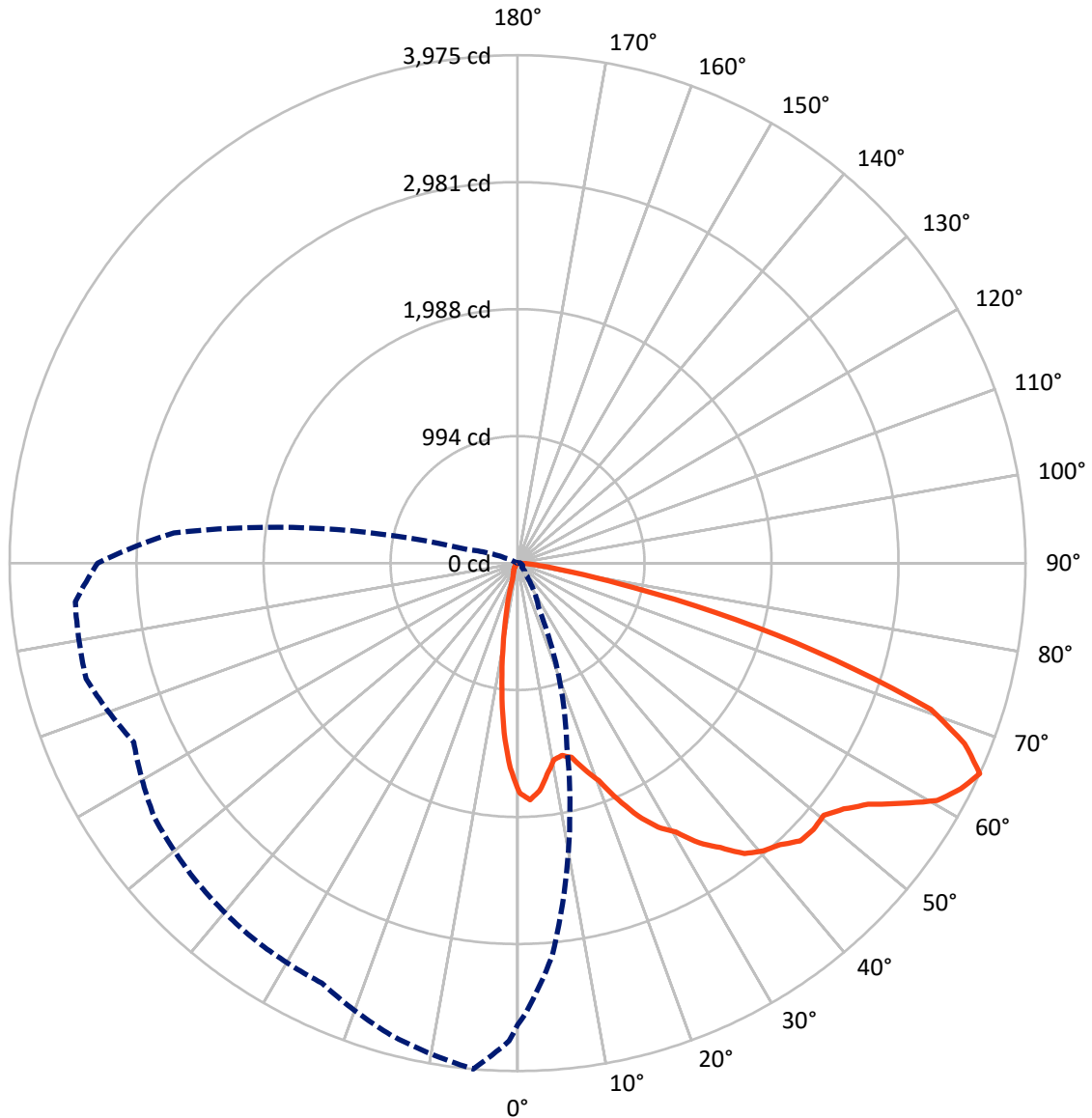
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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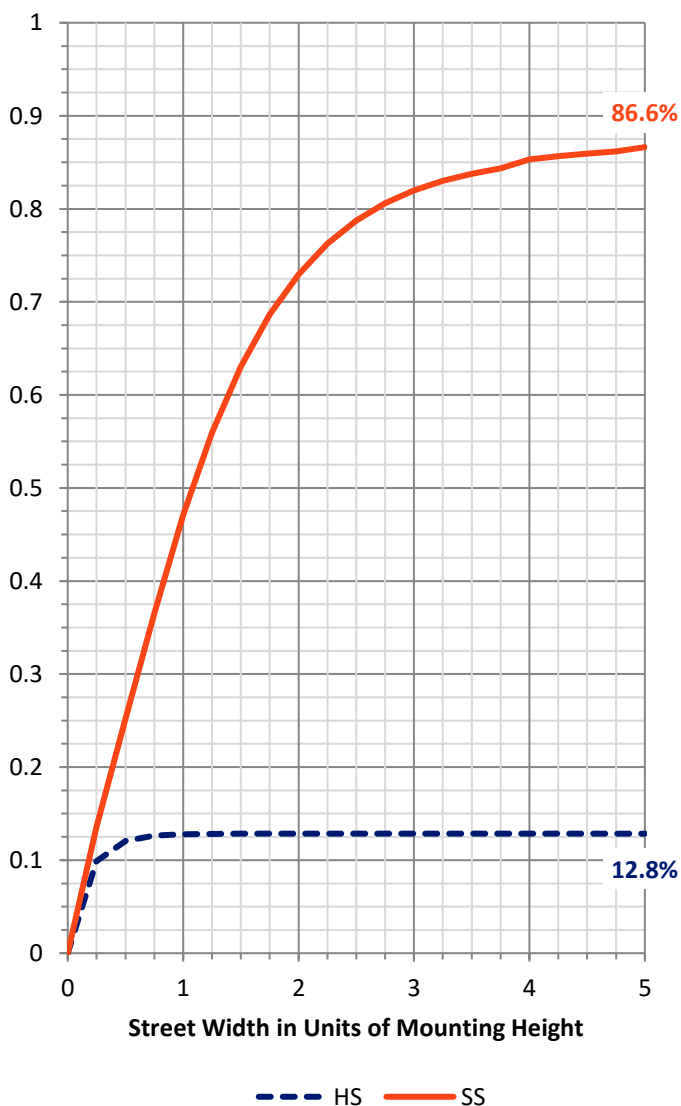
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	610.5	0.0	610.5
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	4091.2	0.0	4091.2
	% Fixture	87.0	0.0	87.0
Total	Lumens	4701.6	0.0	4701.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	2.9
10°-20°	263.6	5.6
20°-30°	367.2	7.8
30°-40°	521.7	11.1
40°-50°	723.5	15.4
50°-60°	985.8	21.0
60°-70°	1083.8	23.1
70°-80°	532.7	11.3
80°-90°	87.0	1.9
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°	4701.6	100.0
0°-180°	4701.6	100.0



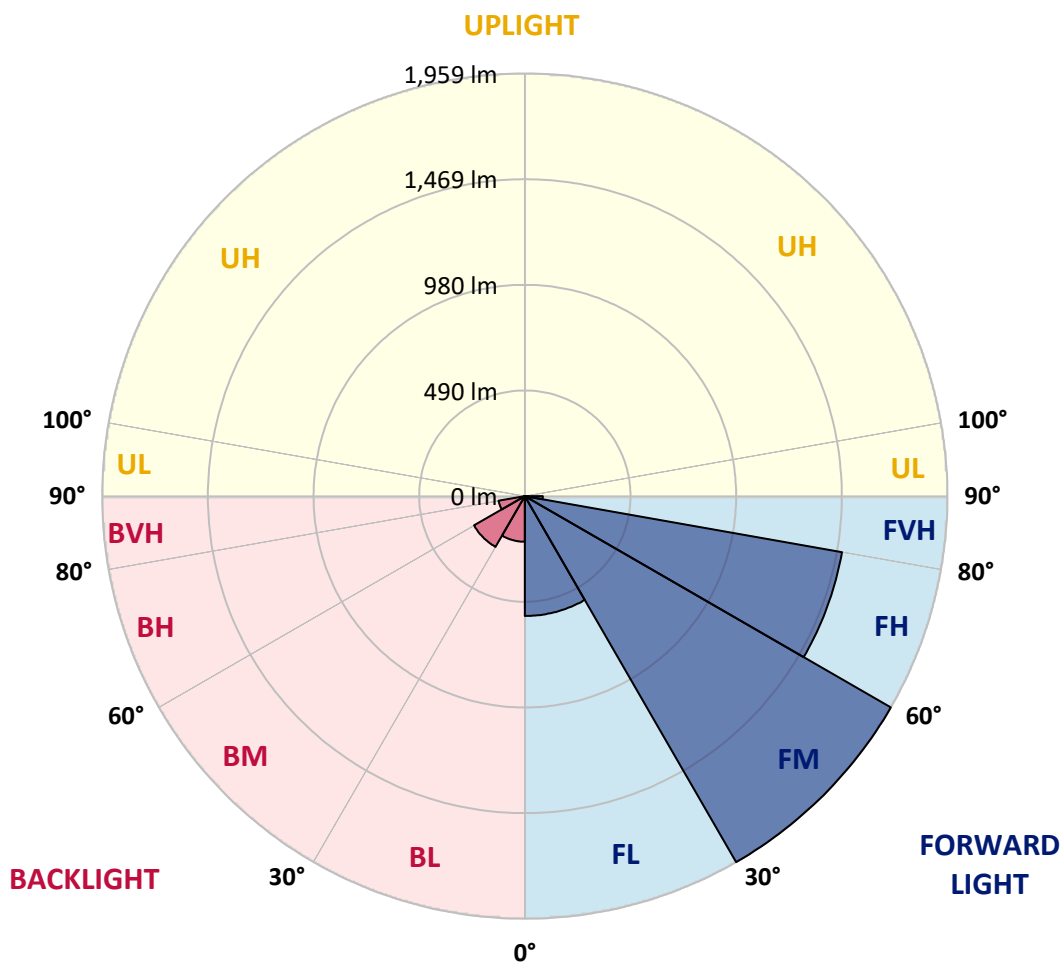
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	555.6	11.8			
FM (30°-60°)	1959.3	41.7			
FH (60°-80°)	1493.2	31.8			G1/1800
FVH (80°-90°)	83.1	1.8			G1/100
BL (0°-30°)	211.4	4.5	B1/500		
BM (30°-60°)	271.8	5.8	B1/1000		
BH (60°-80°)	123.4	2.6	B1/500		G1/500
BVH (80°-90°)	3.9	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-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4
2.5°	1834.2	1855.7	1835.5	1764.5	1751.8	1717.6	1665.6	1661.8	1607.3	1613.6	1584.5
5°	1723.9	1745.5	1702.4	1608.6	1521.1	1451.4	1409.5	1334.8	1318.3	1281.5	1281.5
7.5°	1611.1	1609.8	1536.3	1457.7	1327.2	1199.1	1140.8	1033.1	969.7	935.5	902.5
10°	1517.3	1497.0	1451.4	1289.1	1147.2	1014.1	941.8	870.8	804.9	747.9	690.8
12.5°	1451.4	1464.1	1391.8	1215.6	1031.8	939.3	862.0	787.2	708.6	643.9	580.6
15°	1485.6	1465.3	1380.4	1199.1	1012.8	886.0	783.4	692.1	604.6	519.7	471.5
17.5°	1592.1	1540.1	1440.0	1199.1	973.5	804.9	680.7	572.9	479.1	403.1	343.5
20°	1735.3	1675.7	1568.0	1243.5	944.3	745.3	575.5	439.9	342.2	271.3	225.6
22.5°	1882.4	1835.5	1673.2	1261.2	910.1	665.5	453.8	318.2	228.2	182.5	159.7
25°	2058.6	1992.6	1815.2	1332.2	859.4	588.2	357.5	221.8	169.9	145.8	131.8
27.5°	2199.3	2187.8	1948.3	1375.3	821.4	524.8	282.7	176.2	140.7	123.0	114.1
30°	2376.7	2314.6	2110.5	1461.5	778.3	452.5	235.8	158.4	129.3	110.3	103.9
32.5°	2483.2	2454.0	2195.4	1509.7	730.1	393.0	202.8	139.4	117.9	103.9	97.6
35°	2637.8	2579.5	2317.1	1540.1	704.8	358.7	182.5	126.8	98.9	84.9	77.3
37.5°	2810.2	2788.7	2462.9	1538.8	668.0	338.4	168.6	117.9	93.8	78.6	69.7
40°	2986.4	2899.0	2551.6	1574.3	649.0	323.2	158.4	112.8	88.7	74.8	63.4
42.5°	3118.2	3018.1	2654.3	1561.7	626.2	296.6	154.6	105.2	84.9	68.4	58.3
45°	3153.7	3118.2	2746.8	1557.9	609.7	275.1	148.3	103.9	82.4	64.6	54.5
47.5°	3222.2	3198.1	2860.9	1564.2	597.0	258.6	133.1	106.5	78.6	60.8	52.0
50°	3252.6	3209.5	2953.5	1579.4	567.9	238.3	119.2	111.5	77.3	59.6	49.4
52.5°	3378.1	3340.1	3080.2	1622.5	543.8	211.7	105.2	106.5	79.9	55.8	46.9
55°	3501.1	3458.0	3275.4	1721.4	509.6	190.1	90.0	93.8	76.1	50.7	41.8
57.5°	3669.6	3598.7	3406.0	1761.9	479.1	161.0	79.9	77.3	71.0	45.6	36.8
60°	3695.0	3724.2	3387.0	1736.6	447.5	142.0	69.7	59.6	76.1	40.6	31.7
62.5°	3779.9	3658.2	3298.2	1678.3	424.6	130.6	62.1	49.4	65.9	35.5	26.6
65°	3616.4	3526.4	3090.4	1490.7	395.5	131.8	54.5	40.6	41.8	29.2	21.5
67.5°	3376.8	3305.9	2745.6	1286.6	366.3	129.3	48.2	35.5	31.7	25.4	19.0
70°	2963.6	2810.2	2332.3	1044.5	323.2	120.4	40.6	31.7	26.6	20.3	13.9
72.5°	2156.2	2094.0	1673.2	807.4	290.3	109.0	38.0	26.6	22.8	15.2	11.4
75°	1451.4	1348.7	1055.9	529.8	233.2	95.1	31.7	24.1	17.7	11.4	8.9
77.5°	766.9	725.1	598.3	252.2	129.3	44.4	17.7	13.9	10.1	8.9	5.1
80°	332.1	295.3	258.6	102.7	45.6	20.3	11.4	7.6	6.3	5.1	2.5
82.5°	169.9	162.3	134.4	44.4	26.6	15.2	6.3	5.1	3.8	2.5	1.3
85°	83.7	86.2	71.0	13.9	15.2	8.9	1.3	1.3	0.0	0.0	0.0
87.5°	6.3	6.3	5.1	2.5	3.8	1.3	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4
2.5°	1573.1	1590.8	1560.4	1579.4	1570.5	1574.3	1578.1	1568.0	1570.5	1606.0	1607.3
5°	1260.0	1294.2	1281.5	1299.3	1329.7	1314.5	1328.4	1325.9	1328.4	1333.5	1356.3
7.5°	898.7	888.6	912.7	959.6	1014.1	1047.0	1030.5	1021.7	1016.6	1003.9	1019.1
10°	678.2	673.1	666.7	680.7	716.2	752.9	773.2	739.0	720.0	695.9	687.0
12.5°	562.8	531.1	513.4	491.8	502.0	534.9	536.2	503.2	472.8	460.1	474.1
15°	443.7	422.1	390.4	360.0	344.8	370.1	348.6	316.9	277.6	272.5	271.3
17.5°	316.9	304.2	281.4	268.7	251.0	244.6	221.8	173.7	145.8	138.2	140.7
20°	215.5	205.3	204.1	192.7	185.1	180.0	143.2	111.5	102.7	103.9	105.2
22.5°	159.7	154.6	148.3	147.0	140.7	134.4	105.2	93.8	87.5	87.5	91.3
25°	130.6	128.0	121.7	119.2	116.6	107.7	88.7	79.9	77.3	74.8	78.6
27.5°	111.5	110.3	106.5	102.7	100.1	91.3	77.3	69.7	67.2	67.2	67.2
30°	100.1	100.1	95.1	87.5	87.5	77.3	65.9	60.8	58.3	58.3	57.0
32.5°	93.8	91.3	84.9	79.9	76.1	65.9	58.3	53.2	49.4	49.4	50.7
35°	76.1	76.1	74.8	71.0	65.9	55.8	49.4	44.4	41.8	40.6	41.8
37.5°	67.2	63.4	58.3	59.6	57.0	48.2	41.8	38.0	34.2	34.2	34.2
40°	60.8	57.0	52.0	48.2	46.9	43.1	36.8	30.4	26.6	25.4	25.4
42.5°	54.5	52.0	44.4	38.0	36.8	36.8	27.9	22.8	19.0	19.0	19.0
45°	50.7	46.9	40.6	33.0	26.6	27.9	22.8	16.5	13.9	12.7	12.7
47.5°	48.2	44.4	35.5	27.9	20.3	20.3	16.5	11.4	8.9	7.6	7.6
50°	44.4	40.6	31.7	22.8	15.2	12.7	10.1	6.3	3.8	2.5	2.5
52.5°	41.8	38.0	27.9	19.0	12.7	8.9	6.3	1.3	0.0	0.0	0.0
55°	38.0	33.0	24.1	15.2	10.1	5.1	1.3	0.0	0.0	0.0	0.0
57.5°	33.0	29.2	19.0	11.4	6.3	1.3	0.0	0.0	0.0	0.0	0.0
60°	27.9	24.1	15.2	8.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	22.8	20.3	11.4	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	19.0	15.2	8.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	16.5	12.7	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	12.7	8.9	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	8.9	6.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4
2.5°	1612.4	1650.4	1685.9	1696.0	1723.9	1801.2	1801.2	1838.0	1903.9	1928.0	1933.1
5°	1360.1	1400.7	1408.3	1486.9	1523.6	1602.2	1654.2	1778.4	1853.2	1900.1	1929.3
7.5°	1034.3	1048.3	1077.4	1151.0	1223.2	1318.3	1417.2	1575.6	1707.4	1760.7	1859.5
10°	711.1	752.9	816.3	882.2	995.1	1100.3	1228.3	1377.9	1540.1	1606.0	1691.0
12.5°	479.1	537.5	638.9	732.7	836.6	943.1	1064.8	1265.0	1448.8	1540.1	1625.0
15°	280.1	351.1	438.6	590.7	728.9	848.0	969.7	1172.5	1395.6	1513.5	1617.4
17.5°	142.0	163.5	235.8	367.6	550.1	745.3	926.6	1185.2	1436.2	1580.7	1666.9
20°	106.5	112.8	133.1	195.2	376.5	616.0	886.0	1204.2	1549.0	1725.2	1772.1
22.5°	92.5	97.6	106.5	126.8	211.7	471.5	829.0	1251.1	1702.4	1868.4	1967.3
25°	78.6	83.7	91.3	103.9	135.6	320.7	759.3	1300.5	1839.3	2048.4	2140.9
27.5°	68.4	72.3	79.9	90.0	110.3	204.1	638.9	1366.5	2048.4	2266.4	2290.5
30°	58.3	62.1	68.4	79.9	93.8	144.5	469.0	1375.3	2163.8	2361.5	2428.7
32.5°	50.7	52.0	59.6	69.7	78.6	114.1	329.6	1384.2	2248.7	2484.5	2498.4
35°	41.8	44.4	52.0	58.3	68.4	90.0	249.7	1339.8	2359.0	2611.2	2607.4
37.5°	34.2	38.0	43.1	48.2	55.8	76.1	199.0	1257.4	2497.1	2807.7	2688.5
40°	26.6	30.4	35.5	41.8	46.9	68.4	149.6	1133.2	2641.6	2904.0	2777.3
42.5°	19.0	21.5	26.6	33.0	41.8	57.0	107.7	986.2	2698.7	3016.8	2883.7
45°	13.9	16.5	20.3	27.9	43.1	45.6	74.8	851.8	2759.5	3066.3	2859.7
47.5°	7.6	10.1	15.2	24.1	38.0	34.2	53.2	731.4	2829.2	3110.6	2878.7
50°	2.5	3.8	8.9	25.4	30.4	26.6	41.8	666.7	2897.7	3119.5	2916.7
52.5°	0.0	0.0	5.1	26.6	22.8	20.3	36.8	641.4	2879.9	3147.4	2892.6
55°	0.0	0.0	1.3	11.4	12.7	15.2	30.4	640.1	3005.4	3156.3	3024.4
57.5°	0.0	0.0	0.0	3.8	7.6	12.7	26.6	599.6	3085.3	3376.8	3201.9
60°	0.0	0.0	0.0	1.3	5.1	8.9	20.3	564.1	3166.4	3475.7	3392.0
62.5°	0.0	0.0	0.0	0.0	1.3	3.8	13.9	509.6	3002.9	3468.1	3575.8
65°	0.0	0.0	0.0	0.0	0.0	0.0	8.9	403.1	2701.2	3286.8	3474.4
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	5.1	278.9	2365.3	3058.7	3288.1
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	168.6	1909.0	2682.2	2788.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.3	1362.6	2129.5	2288.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.2	842.9	1556.6	1751.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	546.3	1178.9	1329.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	291.5	739.0	859.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	126.8	448.7	517.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	272.5	310.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.8	55.8
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4	1797.4
2.5°	1935.6	1972.4	1986.3	1964.8	1967.3	1922.9	1916.6	1854.5	1829.1	1834.2
5°	2024.3	2077.6	2106.7	2082.6	2028.1	1943.2	1865.9	1792.4	1746.7	1723.9
7.5°	2004.0	2063.6	2100.4	2123.2	2061.1	1924.2	1806.3	1668.1	1609.8	1611.1
10°	1892.5	2016.7	2091.5	2062.4	2033.2	1896.3	1713.8	1564.2	1512.2	1517.3
12.5°	1802.5	1940.7	1985.0	2007.8	1948.3	1839.3	1716.3	1545.2	1486.9	1451.4
15°	1746.7	1849.4	1851.9	1887.4	1863.3	1863.3	1742.9	1575.6	1524.9	1485.6
17.5°	1746.7	1769.5	1767.0	1779.7	1820.2	1868.4	1810.1	1698.6	1598.4	1592.1
20°	1786.0	1715.0	1698.6	1703.6	1737.9	1881.1	1958.4	1819.0	1755.6	1735.3
22.5°	1877.3	1721.4	1621.2	1603.5	1708.7	1879.8	2053.5	2009.1	1898.8	1882.4
25°	2002.8	1710.0	1601.0	1578.1	1658.0	1925.5	2184.0	2192.9	2092.8	2058.6
27.5°	2121.9	1760.7	1598.4	1593.3	1698.6	1915.3	2274.0	2340.0	2227.1	2199.3
30°	2162.5	1811.4	1645.3	1578.1	1713.8	1952.1	2271.5	2443.9	2370.4	2376.7
32.5°	2210.7	1862.1	1650.4	1623.8	1778.4	2011.7	2343.8	2611.2	2558.0	2483.2
35°	2281.6	1930.5	1698.6	1674.5	1824.0	2064.9	2359.0	2734.2	2725.3	2637.8
37.5°	2342.5	1997.7	1798.7	1802.5	1963.5	2151.1	2426.1	2885.0	2869.8	2810.2
40°	2385.6	2091.5	1954.6	1964.8	2085.2	2247.4	2545.3	2961.1	3073.9	2986.4
42.5°	2391.9	2175.2	2133.3	2214.5	2327.3	2397.0	2593.5	3013.0	3175.3	3118.2
45°	2416.0	2308.3	2424.9	2484.5	2577.0	2528.8	2590.9	3101.8	3182.9	3153.7
47.5°	2509.8	2550.4	2697.4	2878.7	2911.6	2753.2	2651.8	3115.7	3226.0	3222.2
50°	2607.4	2810.2	3016.8	3137.3	3179.1	2907.8	2708.8	3104.3	3283.0	3252.6
52.5°	2716.4	3035.9	3333.7	3482.0	3459.2	3079.0	2773.5	3196.8	3388.2	3378.1
55°	2784.9	3137.3	3537.8	3744.4	3726.7	3270.4	2978.8	3329.9	3526.4	3501.1
57.5°	2966.1	3302.0	3740.6	3837.0	3883.9	3521.3	3122.1	3548.0	3641.8	3669.6
60°	3115.7	3409.8	3793.9	3933.3	3949.8	3670.9	3373.0	3772.3	3788.8	3695.0
62.5°	3335.0	3451.6	3681.1	3806.5	3891.5	3755.8	3598.7	3892.7	3786.3	3779.9
65°	3496.0	3314.7	3470.6	3540.4	3594.9	3626.5	3825.6	3975.1	3739.4	3616.4
67.5°	3406.0	3056.1	3027.0	3030.8	3047.3	3238.7	3749.5	3773.6	3478.2	3376.8
70°	2997.8	2507.3	2468.0	2498.4	2416.0	2646.7	3441.5	3430.1	3068.8	2963.6
72.5°	2424.9	1827.9	1760.7	1802.5	1821.5	2066.2	2895.2	2601.1	2238.5	2156.2
75°	1926.7	1339.8	1130.7	1232.1	1296.7	1504.6	2261.4	1767.0	1562.9	1451.4
77.5°	1513.5	1014.1	879.7	839.1	898.7	1093.9	1645.3	927.9	818.9	766.9
80°	959.6	745.3	808.7	750.4	775.8	780.8	856.9	422.1	335.9	332.1
82.5°	578.0	509.6	605.9	333.4	607.2	542.5	356.2	191.4	169.9	169.9
85°	409.4	315.6	209.2	135.6	270.0	297.9	138.2	98.9	86.2	83.7
87.5°	205.3	97.6	46.9	30.4	34.2	55.8	16.5	7.6	7.6	6.3
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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