

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: P677486

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677486
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-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1200mA w/
SLR 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: 4439.8 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

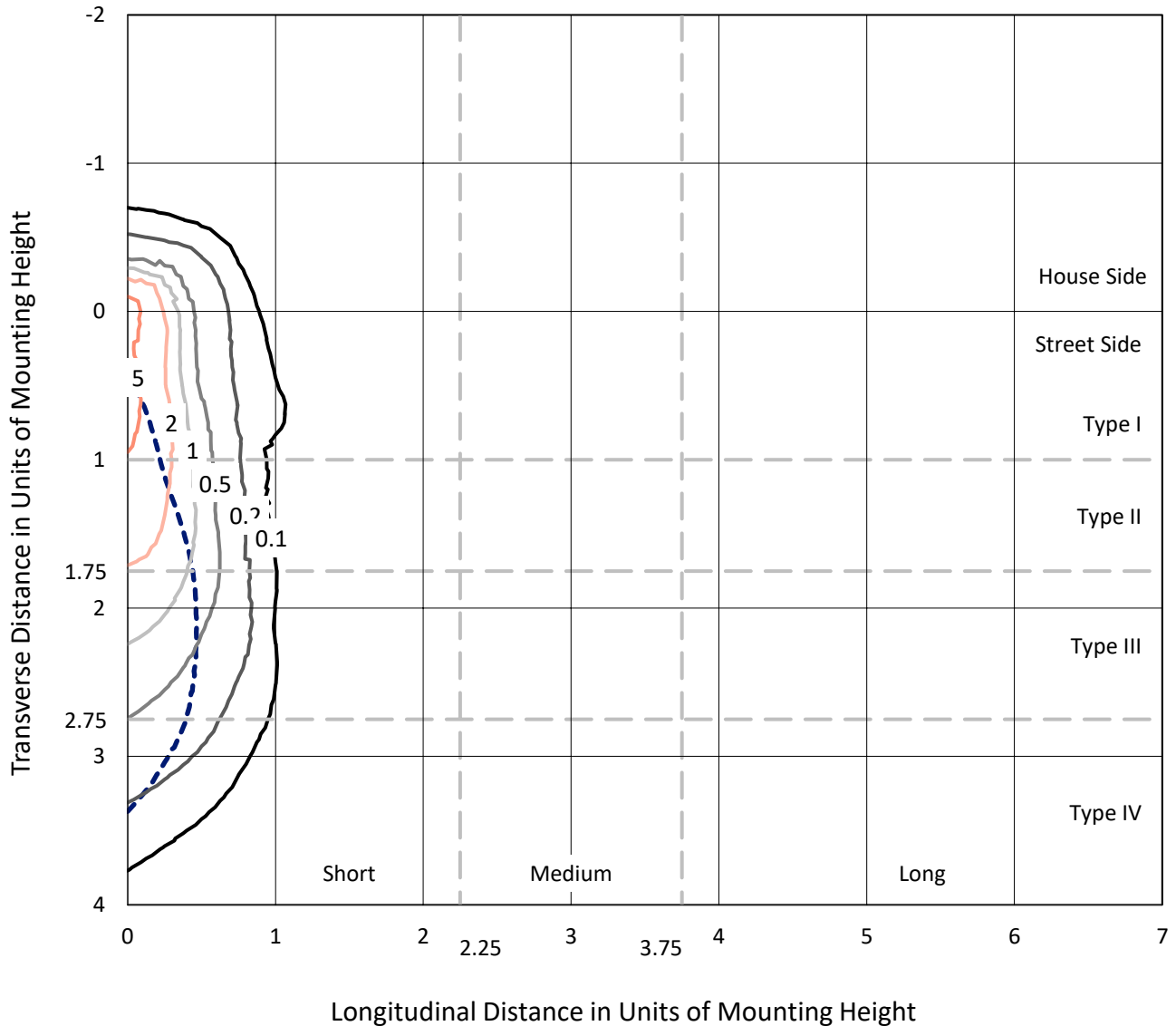
Input Watts (W): 67
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

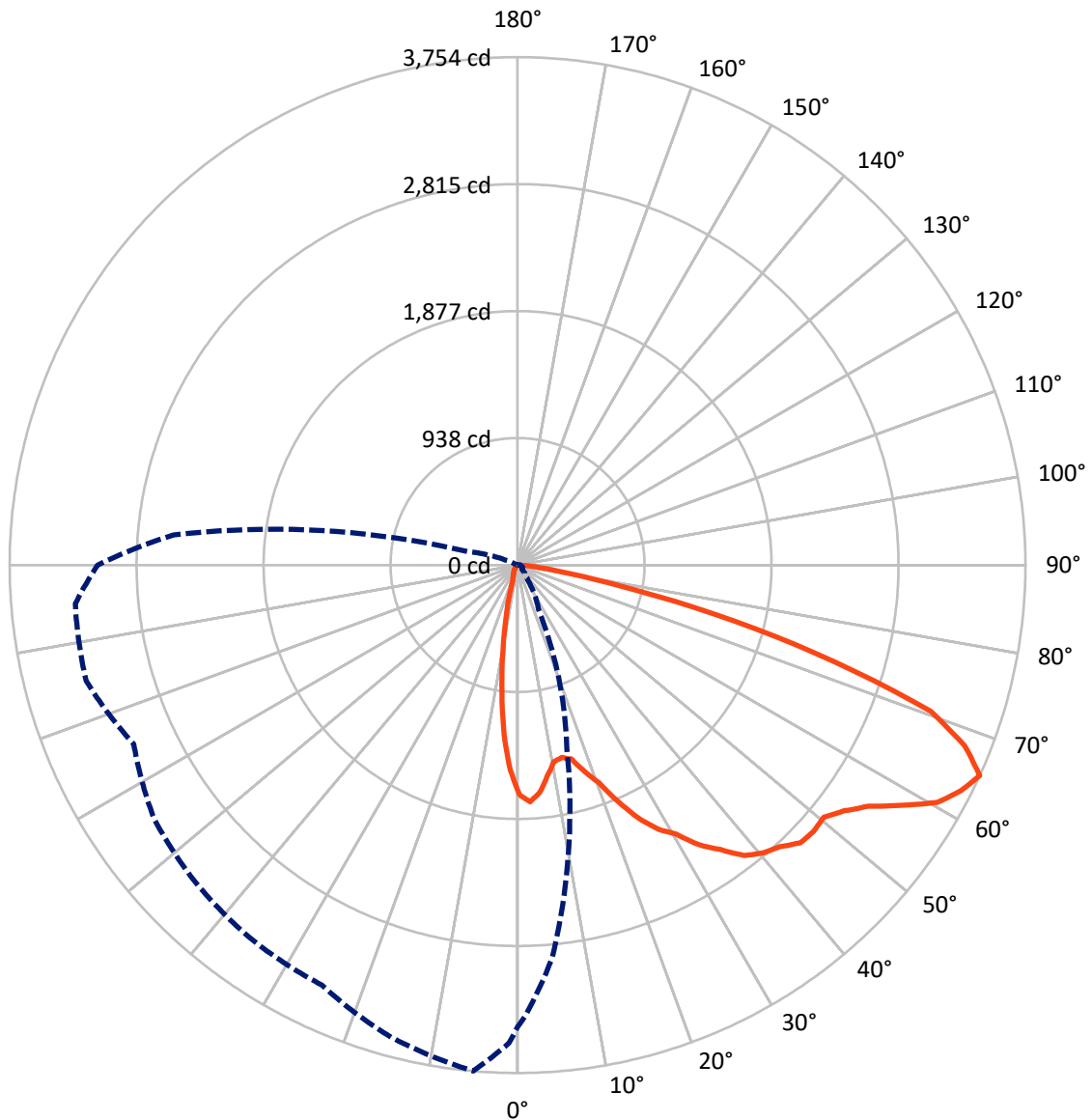
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.5 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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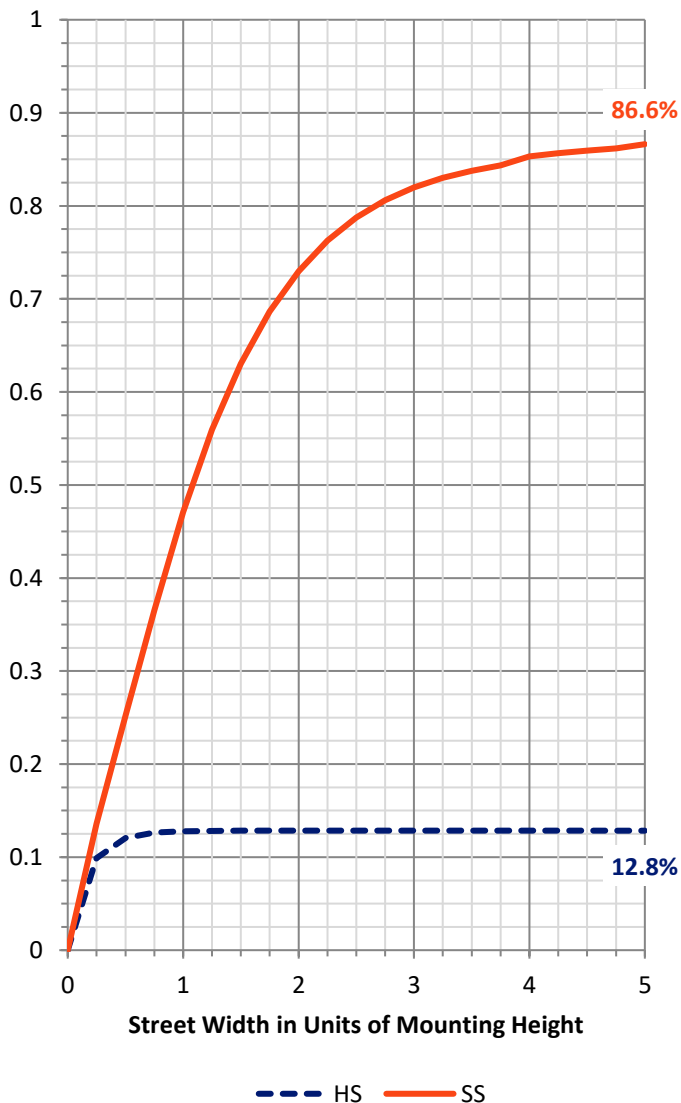
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	576.5	0.0	576.5
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	3863.3	0.0	3863.3
	% Fixture	87.0	0.0	87.0
Total	Lumens	4439.8	0.0	4439.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	2.9
10°-20°	249.0	5.6
20°-30°	346.7	7.8
30°-40°	492.7	11.1
40°-50°	683.2	15.4
50°-60°	930.9	21.0
60°-70°	1023.5	23.1
70°-80°	503.0	11.3
80°-90°	82.1	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°	4439.8	100.0
0°-180°	4439.8	100.0



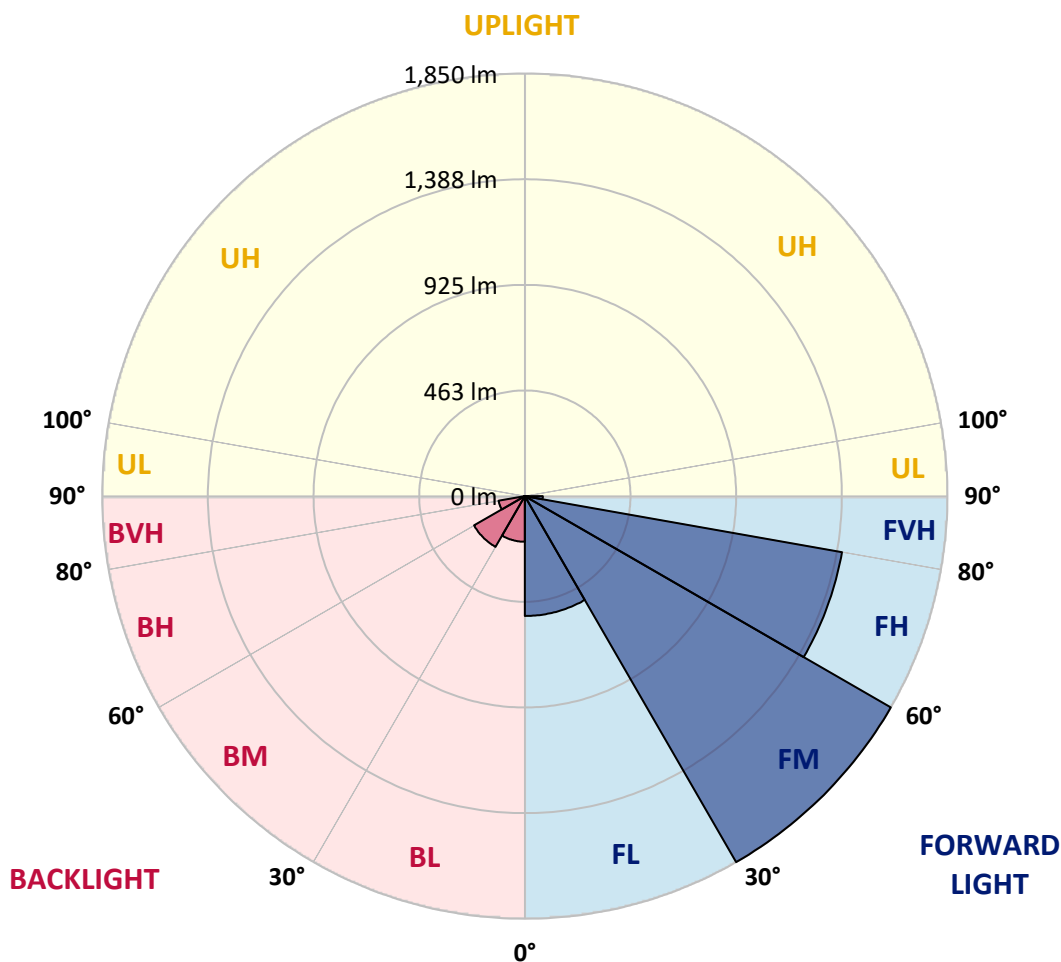
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	524.7	11.8			
FM (30°-60°)	1850.2	41.7			
FH (60°-80°)	1410.0	31.8			G1/1800
FVH (80°-90°)	78.4	1.8			G1/100
BL (0°-30°)	199.6	4.5	B1/500		
BM (30°-60°)	256.7	5.8	B1/1000		
BH (60°-80°)	116.5	2.6	B1/500		G1/500
BVH (80°-90°)	3.7	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°	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3
2.5°	1732.0	1752.4	1733.2	1666.2	1654.2	1621.9	1572.8	1569.2	1517.8	1523.8	1496.2
5°	1627.9	1648.2	1607.5	1519.0	1436.4	1370.5	1331.0	1260.4	1244.9	1210.1	1210.1
7.5°	1521.4	1520.2	1450.7	1376.5	1253.2	1132.3	1077.3	975.5	915.7	883.4	852.3
10°	1432.8	1413.6	1370.5	1217.3	1083.3	957.6	889.4	822.3	760.1	706.2	652.4
12.5°	1370.5	1382.5	1314.3	1147.9	974.3	887.0	813.9	743.3	669.1	608.1	548.2
15°	1402.9	1383.7	1303.5	1132.3	956.4	836.7	739.7	653.6	571.0	490.8	445.3
17.5°	1503.4	1454.3	1359.8	1132.3	919.3	760.1	642.8	541.0	452.5	380.6	324.4
20°	1638.7	1582.4	1480.7	1174.2	891.8	703.8	543.4	415.4	323.2	256.2	213.1
22.5°	1777.5	1733.2	1580.0	1191.0	859.4	628.4	428.5	300.4	215.5	172.4	150.8
25°	1943.9	1881.7	1714.1	1258.0	811.6	555.4	337.5	209.5	160.4	137.7	124.5
27.5°	2076.8	2066.0	1839.8	1298.7	775.6	495.6	266.9	166.4	132.9	116.1	107.7
30°	2244.3	2185.7	1993.0	1380.1	734.9	427.3	222.6	149.6	122.1	104.1	98.2
32.5°	2344.9	2317.4	2073.2	1425.6	689.5	371.1	191.5	131.7	111.3	98.2	92.2
35°	2490.9	2435.9	2188.1	1454.3	665.5	338.7	172.4	119.7	93.4	80.2	73.0
37.5°	2653.7	2633.4	2325.7	1453.1	630.8	319.6	159.2	111.3	88.6	74.2	65.8
40°	2820.1	2737.5	2409.5	1486.7	612.9	305.2	149.6	106.5	83.8	70.6	59.8
42.5°	2944.6	2850.0	2506.5	1474.7	591.3	280.1	146.0	99.3	80.2	64.6	55.1
45°	2978.1	2944.6	2593.9	1471.1	575.7	259.7	140.0	98.2	77.8	61.0	51.5
47.5°	3042.7	3020.0	2701.6	1477.1	563.8	244.2	125.7	100.5	74.2	57.5	49.1
50°	3071.5	3030.8	2789.0	1491.4	536.2	225.0	112.5	105.3	73.0	56.3	46.7
52.5°	3190.0	3154.0	2908.7	1532.1	513.5	199.9	99.3	100.5	75.4	52.7	44.3
55°	3306.1	3265.4	3093.0	1625.5	481.2	179.5	85.0	88.6	71.8	47.9	39.5
57.5°	3465.3	3398.2	3216.3	1663.8	452.5	152.0	75.4	73.0	67.0	43.1	34.7
60°	3489.2	3516.7	3198.3	1639.9	422.5	134.1	65.8	56.3	71.8	38.3	29.9
62.5°	3569.4	3454.5	3114.5	1584.8	401.0	123.3	58.7	46.7	62.2	33.5	25.1
65°	3415.0	3330.0	2918.2	1407.7	373.5	124.5	51.5	38.3	39.5	27.5	20.3
67.5°	3188.8	3121.7	2592.7	1214.9	345.9	122.1	45.5	33.5	29.9	23.9	18.0
70°	2798.5	2653.7	2202.4	986.3	305.2	113.7	38.3	29.9	25.1	19.2	13.2
72.5°	2036.1	1977.4	1580.0	762.5	274.1	102.9	35.9	25.1	21.5	14.4	10.8
75°	1370.5	1273.6	997.1	500.3	220.2	89.8	29.9	22.7	16.8	10.8	8.4
77.5°	724.2	684.7	565.0	238.2	122.1	41.9	16.8	13.2	9.6	8.4	4.8
80°	313.6	278.9	244.2	97.0	43.1	19.2	10.8	7.2	6.0	4.8	2.4
82.5°	160.4	153.2	126.9	41.9	25.1	14.4	6.0	4.8	3.6	2.4	1.2
85°	79.0	81.4	67.0	13.2	14.4	8.4	1.2	1.2	0.0	0.0	0.0
87.5°	6.0	6.0	4.8	2.4	3.6	1.2	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°	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3
2.5°	1485.5	1502.2	1473.5	1491.4	1483.1	1486.7	1490.2	1480.7	1483.1	1516.6	1517.8
5°	1189.8	1222.1	1210.1	1226.9	1255.6	1241.3	1254.4	1252.0	1254.4	1259.2	1280.8
7.5°	848.7	839.1	861.8	906.1	957.6	988.7	973.1	964.8	960.0	948.0	962.4
10°	640.4	635.6	629.6	642.8	676.3	711.0	730.2	697.8	679.9	657.1	648.8
12.5°	531.5	501.5	484.8	464.4	474.0	505.1	506.3	475.2	446.5	434.5	447.7
15°	418.9	398.6	368.7	339.9	325.6	349.5	329.2	299.2	262.1	257.4	256.2
17.5°	299.2	287.3	265.7	253.8	237.0	231.0	209.5	164.0	137.7	130.5	132.9
20°	203.5	193.9	192.7	181.9	174.8	170.0	135.3	105.3	97.0	98.2	99.3
22.5°	150.8	146.0	140.0	138.8	132.9	126.9	99.3	88.6	82.6	82.6	86.2
25°	123.3	120.9	114.9	112.5	110.1	101.7	83.8	75.4	73.0	70.6	74.2
27.5°	105.3	104.1	100.5	97.0	94.6	86.2	73.0	65.8	63.4	63.4	63.4
30°	94.6	94.6	89.8	82.6	82.6	73.0	62.2	57.5	55.1	55.1	53.9
32.5°	88.6	86.2	80.2	75.4	71.8	62.2	55.1	50.3	46.7	46.7	47.9
35°	71.8	71.8	70.6	67.0	62.2	52.7	46.7	41.9	39.5	38.3	39.5
37.5°	63.4	59.8	55.1	56.3	53.9	45.5	39.5	35.9	32.3	32.3	32.3
40°	57.5	53.9	49.1	45.5	44.3	40.7	34.7	28.7	25.1	23.9	23.9
42.5°	51.5	49.1	41.9	35.9	34.7	34.7	26.3	21.5	18.0	18.0	18.0
45°	47.9	44.3	38.3	31.1	25.1	26.3	21.5	15.6	13.2	12.0	12.0
47.5°	45.5	41.9	33.5	26.3	19.2	19.2	15.6	10.8	8.4	7.2	7.2
50°	41.9	38.3	29.9	21.5	14.4	12.0	9.6	6.0	3.6	2.4	2.4
52.5°	39.5	35.9	26.3	18.0	12.0	8.4	6.0	1.2	0.0	0.0	0.0
55°	35.9	31.1	22.7	14.4	9.6	4.8	1.2	0.0	0.0	0.0	0.0
57.5°	31.1	27.5	18.0	10.8	6.0	1.2	0.0	0.0	0.0	0.0	0.0
60°	26.3	22.7	14.4	8.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	21.5	19.2	10.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	18.0	14.4	8.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	15.6	12.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	12.0	8.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	8.4	6.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.2	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°	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3
2.5°	1522.6	1558.5	1592.0	1601.6	1627.9	1700.9	1700.9	1735.6	1797.9	1820.6	1825.4
5°	1284.4	1322.7	1329.8	1404.1	1438.8	1513.0	1562.1	1679.4	1750.0	1794.3	1821.8
7.5°	976.7	989.9	1017.4	1086.9	1155.1	1244.9	1338.2	1487.8	1612.3	1662.6	1756.0
10°	671.5	711.0	770.9	833.1	939.6	1039.0	1159.9	1301.1	1454.3	1516.6	1596.8
12.5°	452.5	507.5	603.3	691.9	790.0	890.6	1005.5	1194.6	1368.2	1454.3	1534.5
15°	264.5	331.6	414.2	557.8	688.3	800.8	915.7	1107.2	1317.9	1429.2	1527.3
17.5°	134.1	154.4	222.6	347.1	519.5	703.8	875.0	1119.2	1356.2	1492.6	1574.0
20°	100.5	106.5	125.7	184.3	355.5	581.7	836.7	1137.1	1462.7	1629.1	1673.4
22.5°	87.4	92.2	100.5	119.7	199.9	445.3	782.8	1181.4	1607.5	1764.4	1857.7
25°	74.2	79.0	86.2	98.2	128.1	302.8	717.0	1228.1	1736.8	1934.3	2021.7
27.5°	64.6	68.2	75.4	85.0	104.1	192.7	603.3	1290.3	1934.3	2140.2	2162.9
30°	55.1	58.7	64.6	75.4	88.6	136.5	442.9	1298.7	2043.2	2230.0	2293.4
32.5°	47.9	49.1	56.3	65.8	74.2	107.7	311.2	1307.1	2123.4	2346.1	2359.3
35°	39.5	41.9	49.1	55.1	64.6	85.0	235.8	1265.2	2227.6	2465.8	2462.2
37.5°	32.3	35.9	40.7	45.5	52.7	71.8	187.9	1187.4	2358.1	2651.3	2538.8
40°	25.1	28.7	33.5	39.5	44.3	64.6	141.2	1070.1	2494.5	2742.3	2622.6
42.5°	18.0	20.3	25.1	31.1	39.5	53.9	101.7	931.3	2548.4	2848.8	2723.1
45°	13.2	15.6	19.2	26.3	40.7	43.1	70.6	804.4	2605.8	2895.5	2700.4
47.5°	7.2	9.6	14.4	22.7	35.9	32.3	50.3	690.7	2671.7	2937.4	2718.3
50°	2.4	3.6	8.4	23.9	28.7	25.1	39.5	629.6	2736.3	2945.8	2754.3
52.5°	0.0	0.0	4.8	25.1	21.5	19.2	34.7	605.7	2719.5	2972.1	2731.5
55°	0.0	0.0	1.2	10.8	12.0	14.4	28.7	604.5	2838.0	2980.5	2856.0
57.5°	0.0	0.0	0.0	3.6	7.2	12.0	25.1	566.2	2913.5	3188.8	3023.6
60°	0.0	0.0	0.0	1.2	4.8	8.4	19.2	532.7	2990.1	3282.1	3203.1
62.5°	0.0	0.0	0.0	0.0	1.2	3.6	13.2	481.2	2835.7	3274.9	3376.7
65°	0.0	0.0	0.0	0.0	0.0	0.0	8.4	380.6	2550.8	3103.8	3280.9
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.8	263.3	2233.6	2888.3	3105.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	159.2	1802.7	2532.8	2633.4
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.2	1286.8	2010.9	2160.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5	796.0	1469.9	1654.2
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	515.9	1113.2	1255.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	275.3	697.8	811.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.7	423.7	488.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.3	257.4	293.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.5	52.7
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3	1697.3
2.5°	1827.8	1862.5	1875.7	1855.3	1857.7	1815.8	1809.8	1751.2	1727.2	1732.0
5°	1911.6	1961.9	1989.4	1966.6	1915.2	1835.0	1762.0	1692.5	1649.4	1627.9
7.5°	1892.4	1948.7	1983.4	2004.9	1946.3	1817.0	1705.7	1575.2	1520.2	1521.4
10°	1787.1	1904.4	1975.0	1947.5	1920.0	1790.7	1618.3	1477.1	1428.0	1432.8
12.5°	1702.1	1832.6	1874.5	1896.0	1839.8	1736.8	1620.7	1459.1	1404.1	1370.5
15°	1649.4	1746.4	1748.8	1782.3	1759.6	1759.6	1645.9	1487.8	1440.0	1402.9
17.5°	1649.4	1671.0	1668.6	1680.6	1718.9	1764.4	1709.3	1604.0	1509.4	1503.4
20°	1686.5	1619.5	1604.0	1608.7	1641.1	1776.3	1849.3	1717.7	1657.8	1638.7
22.5°	1772.7	1625.5	1530.9	1514.2	1613.5	1775.1	1939.1	1897.2	1793.1	1777.5
25°	1891.2	1614.7	1511.8	1490.2	1565.7	1818.2	2062.4	2070.8	1976.2	1943.9
27.5°	2003.7	1662.6	1509.4	1504.6	1604.0	1808.6	2147.4	2209.6	2103.1	2076.8
30°	2042.1	1710.5	1553.7	1490.2	1618.3	1843.4	2145.0	2307.8	2238.4	2244.3
32.5°	2087.5	1758.4	1558.5	1533.3	1679.4	1899.6	2213.2	2465.8	2415.5	2344.9
35°	2154.6	1823.0	1604.0	1581.2	1722.5	1949.9	2227.6	2581.9	2573.5	2490.9
37.5°	2212.0	1886.4	1698.5	1702.1	1854.1	2031.3	2291.0	2724.3	2710.0	2653.7
40°	2252.7	1975.0	1845.7	1855.3	1969.0	2122.2	2403.5	2796.1	2902.7	2820.1
42.5°	2258.7	2054.0	2014.5	2091.1	2197.7	2263.5	2449.0	2845.2	2998.4	2944.6
45°	2281.4	2179.7	2289.8	2346.1	2433.5	2388.0	2446.6	2929.0	3005.6	2978.1
47.5°	2370.0	2408.3	2547.2	2718.3	2749.5	2599.8	2504.1	2942.2	3046.3	3042.7
50°	2462.2	2653.7	2848.8	2962.5	3002.0	2745.9	2558.0	2931.4	3100.2	3071.5
52.5°	2565.1	2866.8	3148.1	3288.1	3266.6	2907.5	2619.0	3018.8	3199.5	3190.0
55°	2629.8	2962.5	3340.8	3535.9	3519.1	3088.2	2812.9	3144.5	3330.0	3306.1
57.5°	2800.9	3118.1	3532.3	3623.3	3667.6	3325.2	2948.2	3350.4	3438.9	3465.3
60°	2942.2	3219.9	3582.6	3714.2	3729.8	3466.5	3185.2	3562.2	3577.8	3489.2
62.5°	3149.3	3259.4	3476.0	3594.5	3674.7	3546.7	3398.2	3675.9	3575.4	3569.4
65°	3301.3	3130.1	3277.3	3343.2	3394.6	3424.6	3612.5	3753.7	3531.1	3415.0
67.5°	3216.3	2885.9	2858.4	2862.0	2877.5	3058.3	3540.7	3563.4	3284.5	3188.8
70°	2830.9	2367.6	2330.5	2359.3	2281.4	2499.3	3249.8	3239.0	2897.9	2798.5
72.5°	2289.8	1726.0	1662.6	1702.1	1720.1	1951.1	2733.9	2456.2	2113.9	2036.1
75°	1819.4	1265.2	1067.7	1163.5	1224.5	1420.8	2135.4	1668.6	1475.9	1370.5
77.5°	1429.2	957.6	830.7	792.4	848.7	1033.0	1553.7	876.2	773.3	724.2
80°	906.1	703.8	763.7	708.6	732.6	737.3	809.2	398.6	317.2	313.6
82.5°	545.8	481.2	572.2	314.8	573.4	512.3	336.4	180.7	160.4	160.4
85°	386.6	298.0	197.5	128.1	255.0	281.3	130.5	93.4	81.4	79.0
87.5°	193.9	92.2	44.3	28.7	32.3	52.7	15.6	7.2	7.2	6.0
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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