

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: P677497

Luminaire Tested: **CCW-SA-1F-840-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677497
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1F-840-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) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

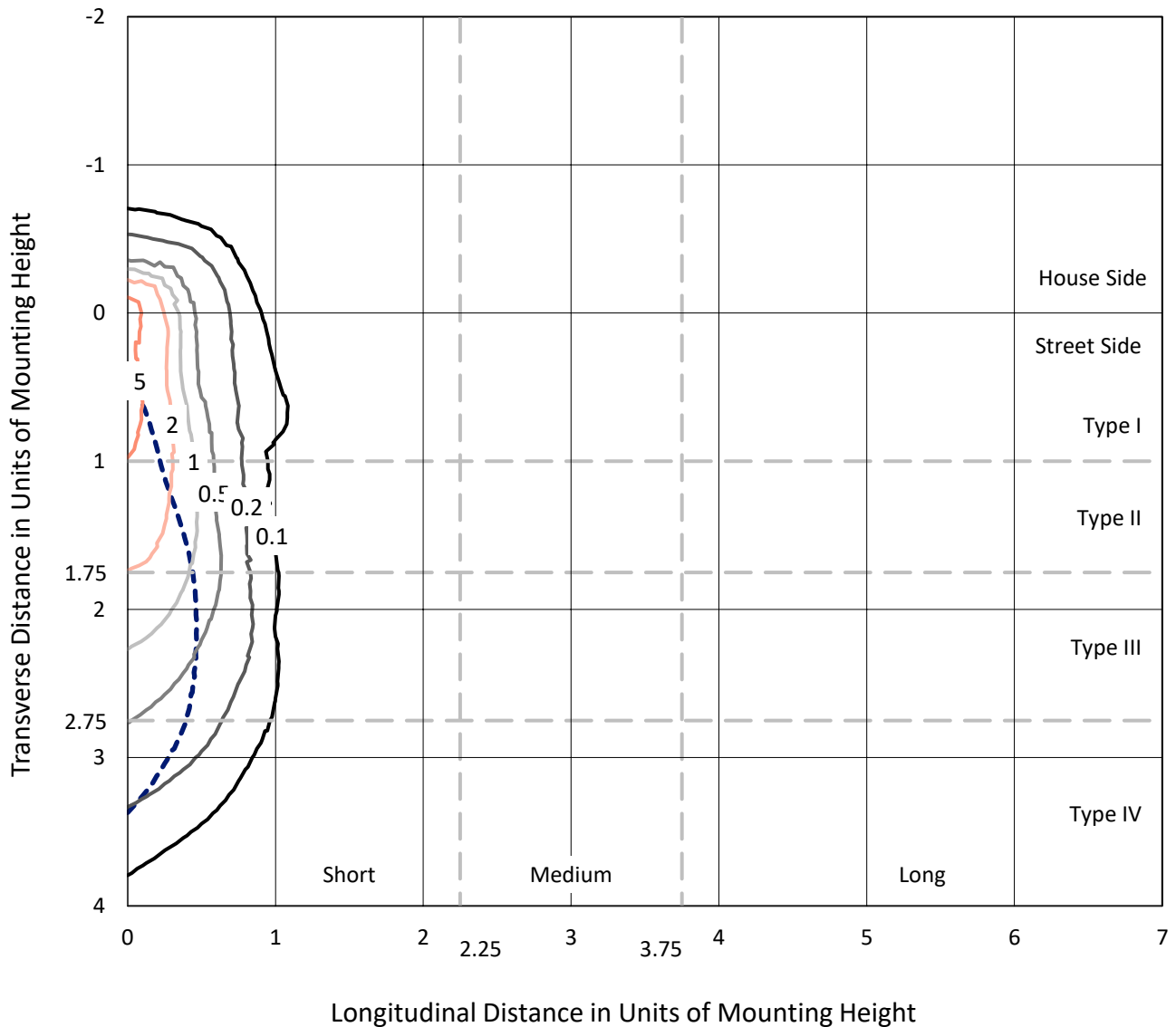
Lumens per Lamp: N/A
Luminaire Lumens: 4593.9 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

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

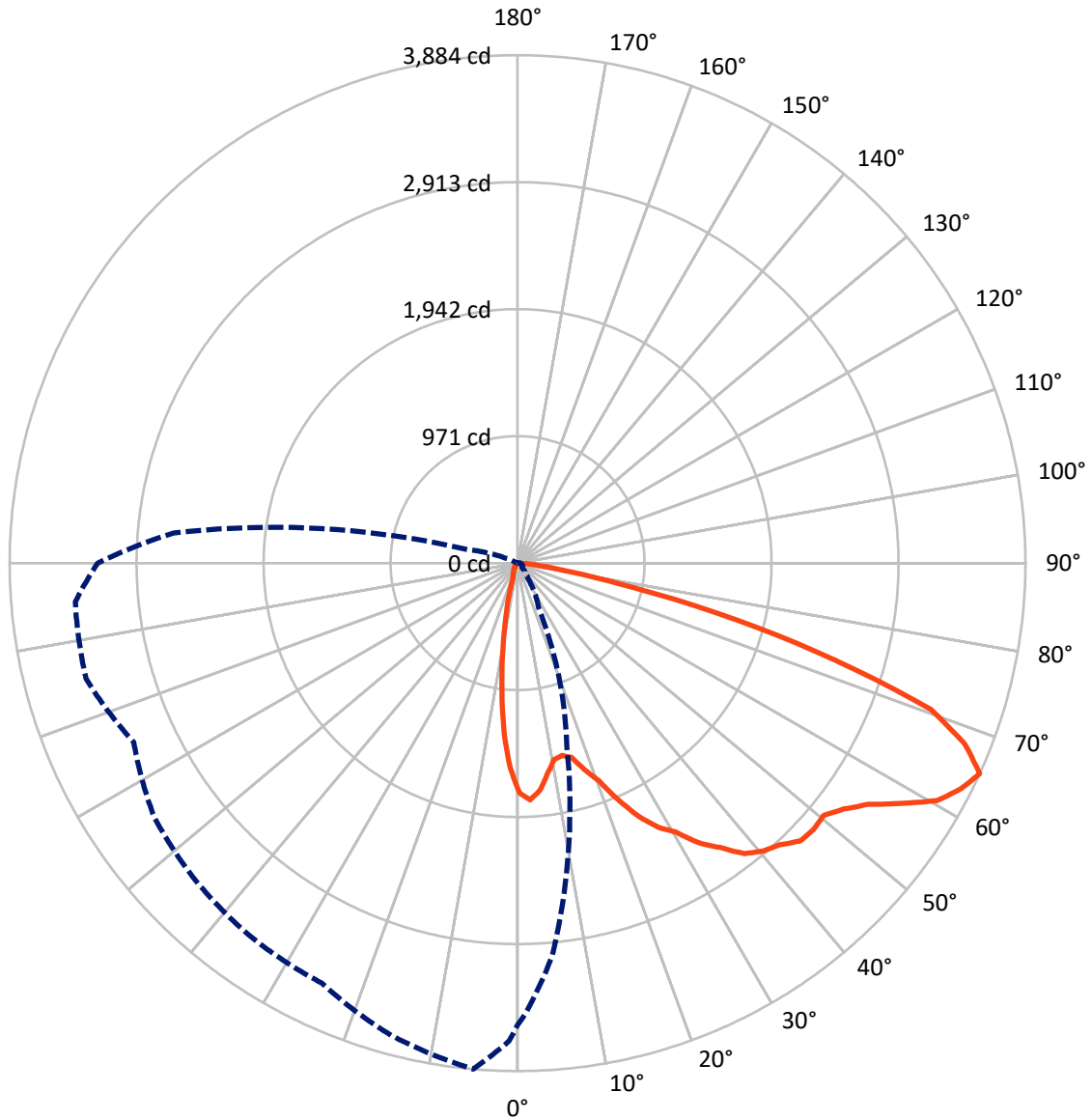
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.8 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	596.5	0.0	596.5
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	3997.4	0.0	3997.4
	% Fixture	87.0	0.0	87.0
Total	Lumens	4593.9	0.0	4593.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.0	2.9
10°-20°	257.6	5.6
20°-30°	358.8	7.8
30°-40°	509.8	11.1
40°-50°	706.9	15.4
50°-60°	963.2	21.0
60°-70°	1059.0	23.1
70°-80°	520.5	11.3
80°-90°	85.0	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°	4593.9	100.0
0°-180°	4593.9	100.0



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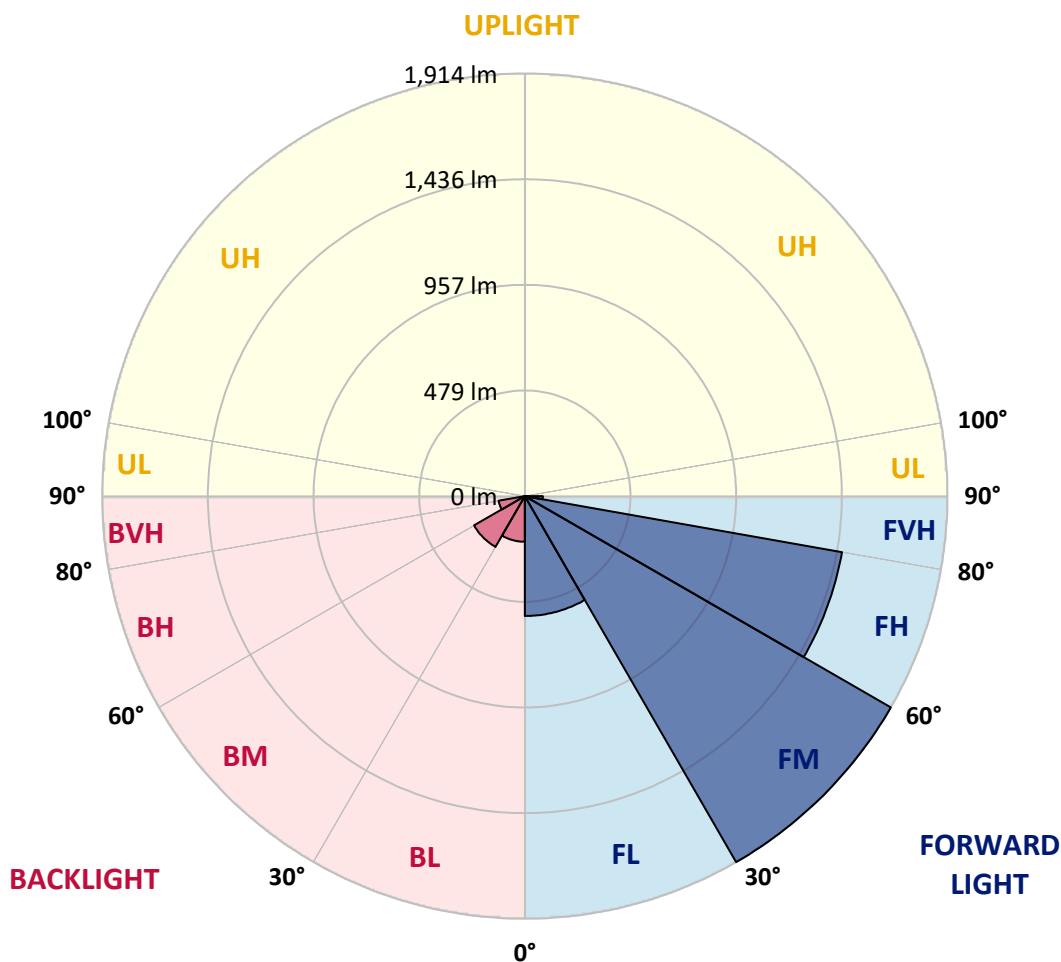
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	542.9	11.8			
FM (30°-60°)	1914.4	41.7			
FH (60°-80°)	1458.9	31.8			G1/1800
FVH (80°-90°)	81.2	1.8			G1/100
BL (0°-30°)	206.5	4.5	B1/500		
BM (30°-60°)	265.6	5.8	B1/1000		
BH (60°-80°)	120.5	2.6	B1/500		G1/500
BVH (80°-90°)	3.8	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°	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2
2.5°	1792.1	1813.2	1793.4	1724.0	1711.6	1678.2	1627.4	1623.7	1570.5	1576.6	1548.2
5°	1684.4	1705.5	1663.3	1571.7	1486.2	1418.1	1377.2	1304.2	1288.1	1252.2	1252.2
7.5°	1574.2	1572.9	1501.1	1424.3	1296.7	1171.6	1114.7	1009.4	947.5	914.0	881.8
10°	1482.5	1462.7	1418.1	1259.6	1120.9	990.8	920.2	850.9	786.5	730.7	675.0
12.5°	1418.1	1430.5	1359.9	1187.7	1008.2	917.7	842.2	769.1	692.3	629.2	567.2
15°	1451.6	1431.7	1348.8	1171.6	989.6	865.7	765.4	676.2	590.8	507.8	460.7
17.5°	1555.6	1504.8	1407.0	1171.6	951.2	786.5	665.1	559.8	468.2	393.9	335.6
20°	1695.5	1637.3	1532.1	1215.0	922.7	728.3	562.3	429.8	334.4	265.0	220.5
22.5°	1839.2	1793.4	1634.9	1232.3	889.3	650.2	443.4	310.9	222.9	178.3	156.1
25°	2011.4	1947.0	1773.6	1301.7	839.7	574.7	349.3	216.7	166.0	142.4	128.8
27.5°	2148.8	2137.7	1903.6	1343.8	802.6	512.8	276.2	172.2	137.5	120.1	111.5
30°	2322.2	2261.6	2062.1	1428.0	760.5	442.2	230.4	154.8	126.3	107.8	101.6
32.5°	2426.3	2397.8	2145.1	1475.1	713.4	383.9	198.2	136.2	115.2	101.6	95.4
35°	2577.4	2520.4	2264.0	1504.8	688.6	350.5	178.3	123.9	96.6	83.0	75.6
37.5°	2745.8	2724.8	2406.5	1503.6	652.7	330.7	164.7	115.2	91.7	76.8	68.1
40°	2918.0	2832.5	2493.2	1538.3	634.1	315.8	154.8	110.2	86.7	73.1	61.9
42.5°	3046.8	2948.9	2593.5	1525.9	611.8	289.8	151.1	102.8	83.0	66.9	57.0
45°	3081.5	3046.8	2683.9	1522.2	595.7	268.8	144.9	101.6	80.5	63.2	53.3
47.5°	3148.3	3124.8	2795.4	1528.3	583.3	252.7	130.0	104.0	76.8	59.4	50.8
50°	3178.1	3136.0	2885.8	1543.2	554.9	232.8	116.4	109.0	75.6	58.2	48.3
52.5°	3300.7	3263.5	3009.6	1585.3	531.3	206.8	102.8	104.0	78.0	54.5	45.8
55°	3420.8	3378.7	3200.4	1681.9	497.9	185.8	87.9	91.7	74.3	49.5	40.9
57.5°	3585.5	3516.2	3327.9	1721.6	468.2	157.3	78.0	75.6	69.4	44.6	35.9
60°	3610.3	3638.8	3309.3	1696.8	437.2	138.7	68.1	58.2	74.3	39.6	31.0
62.5°	3693.3	3574.4	3222.6	1639.8	414.9	127.6	60.7	48.3	64.4	34.7	26.0
65°	3533.5	3445.6	3019.5	1456.5	386.4	128.8	53.3	39.6	40.9	28.5	21.1
67.5°	3299.4	3230.1	2682.7	1257.1	357.9	126.3	47.1	34.7	31.0	24.8	18.6
70°	2895.7	2745.8	2278.9	1020.5	315.8	117.7	39.6	31.0	26.0	19.8	13.6
72.5°	2106.7	2046.0	1634.9	788.9	283.6	106.5	37.2	26.0	22.3	14.9	11.1
75°	1418.1	1317.8	1031.7	517.7	227.9	92.9	31.0	23.5	17.3	11.1	8.7
77.5°	749.3	708.4	584.6	246.5	126.3	43.3	17.3	13.6	9.9	8.7	5.0
80°	324.5	288.6	252.7	100.3	44.6	19.8	11.1	7.4	6.2	5.0	2.5
82.5°	166.0	158.5	131.3	43.3	26.0	14.9	6.2	5.0	3.7	2.5	1.2
85°	81.7	84.2	69.4	13.6	14.9	8.7	1.2	1.2	0.0	0.0	0.0
87.5°	6.2	6.2	5.0	2.5	3.7	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°	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2
2.5°	1537.0	1554.4	1524.6	1543.2	1534.5	1538.3	1542.0	1532.1	1534.5	1569.2	1570.5
5°	1231.1	1264.5	1252.2	1269.5	1299.2	1284.4	1298.0	1295.5	1298.0	1302.9	1325.2
7.5°	878.1	868.2	891.7	937.6	990.8	1023.0	1006.9	998.3	993.3	980.9	995.8
10°	662.6	657.7	651.5	665.1	699.8	735.7	755.5	722.1	703.5	680.0	671.3
12.5°	549.9	518.9	501.6	480.5	490.5	522.7	523.9	491.7	462.0	449.6	463.2
15°	433.5	412.4	381.5	351.7	336.9	361.7	340.6	309.6	271.2	266.3	265.0
17.5°	309.6	297.2	275.0	262.6	245.2	239.0	216.7	169.7	142.4	135.0	137.5
20°	210.5	200.6	199.4	188.3	180.8	175.9	140.0	109.0	100.3	101.6	102.8
22.5°	156.1	151.1	144.9	143.7	137.5	131.3	102.8	91.7	85.5	85.5	89.2
25°	127.6	125.1	118.9	116.4	113.9	105.3	86.7	78.0	75.6	73.1	76.8
27.5°	109.0	107.8	104.0	100.3	97.8	89.2	75.6	68.1	65.6	65.6	65.6
30°	97.8	97.8	92.9	85.5	85.5	75.6	64.4	59.4	57.0	57.0	55.7
32.5°	91.7	89.2	83.0	78.0	74.3	64.4	57.0	52.0	48.3	48.3	49.5
35°	74.3	74.3	73.1	69.4	64.4	54.5	48.3	43.3	40.9	39.6	40.9
37.5°	65.6	61.9	57.0	58.2	55.7	47.1	40.9	37.2	33.4	33.4	33.4
40°	59.4	55.7	50.8	47.1	45.8	42.1	35.9	29.7	26.0	24.8	24.8
42.5°	53.3	50.8	43.3	37.2	35.9	35.9	27.2	22.3	18.6	18.6	18.6
45°	49.5	45.8	39.6	32.2	26.0	27.2	22.3	16.1	13.6	12.4	12.4
47.5°	47.1	43.3	34.7	27.2	19.8	19.8	16.1	11.1	8.7	7.4	7.4
50°	43.3	39.6	31.0	22.3	14.9	12.4	9.9	6.2	3.7	2.5	2.5
52.5°	40.9	37.2	27.2	18.6	12.4	8.7	6.2	1.2	0.0	0.0	0.0
55°	37.2	32.2	23.5	14.9	9.9	5.0	1.2	0.0	0.0	0.0	0.0
57.5°	32.2	28.5	18.6	11.1	6.2	1.2	0.0	0.0	0.0	0.0	0.0
60°	27.2	23.5	14.9	8.7	2.5	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	22.3	19.8	11.1	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	18.6	14.9	8.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	16.1	12.4	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	12.4	8.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	8.7	6.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.7	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°	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2
2.5°	1575.4	1612.6	1647.2	1657.2	1684.4	1759.9	1759.9	1795.9	1860.3	1883.8	1888.8
5°	1328.9	1368.6	1376.0	1452.8	1488.7	1565.5	1616.3	1737.7	1810.7	1856.6	1885.0
7.5°	1010.6	1024.3	1052.7	1124.6	1195.2	1288.1	1384.7	1539.5	1668.3	1720.3	1816.9
10°	694.8	735.7	797.6	862.0	972.2	1075.0	1200.1	1346.3	1504.8	1569.2	1652.2
12.5°	468.2	525.1	624.2	715.9	817.4	921.5	1040.4	1236.1	1415.6	1504.8	1587.8
15°	273.7	343.1	428.5	577.2	712.2	828.6	947.5	1145.6	1363.6	1478.8	1580.4
17.5°	138.7	159.8	230.4	359.2	537.5	728.3	905.4	1158.0	1403.3	1544.4	1628.7
20°	104.0	110.2	130.0	190.7	367.8	601.9	865.7	1176.6	1513.5	1685.6	1731.5
22.5°	90.4	95.4	104.0	123.9	206.8	460.7	810.0	1222.4	1663.3	1825.6	1922.2
25°	76.8	81.7	89.2	101.6	132.5	313.3	741.9	1270.7	1797.1	2001.5	2091.9
27.5°	66.9	70.6	78.0	87.9	107.8	199.4	624.2	1335.1	2001.5	2214.5	2238.0
30°	57.0	60.7	66.9	78.0	91.7	141.2	458.3	1343.8	2114.2	2307.4	2373.0
32.5°	49.5	50.8	58.2	68.1	76.8	111.5	322.0	1352.5	2197.1	2427.5	2441.1
35°	40.9	43.3	50.8	57.0	66.9	87.9	244.0	1309.1	2304.9	2551.4	2547.7
37.5°	33.4	37.2	42.1	47.1	54.5	74.3	194.4	1228.6	2439.9	2743.3	2626.9
40°	26.0	29.7	34.7	40.9	45.8	66.9	146.1	1107.2	2581.1	2837.5	2713.6
42.5°	18.6	21.1	26.0	32.2	40.9	55.7	105.3	963.6	2636.8	2947.7	2817.7
45°	13.6	16.1	19.8	27.2	42.1	44.6	73.1	832.3	2696.3	2996.0	2794.1
47.5°	7.4	9.9	14.9	23.5	37.2	33.4	52.0	714.6	2764.4	3039.3	2812.7
50°	2.5	3.7	8.7	24.8	29.7	26.0	40.9	651.5	2831.3	3048.0	2849.9
52.5°	0.0	0.0	5.0	26.0	22.3	19.8	35.9	626.7	2813.9	3075.3	2826.3
55°	0.0	0.0	1.2	11.1	12.4	14.9	29.7	625.5	2936.5	3083.9	2955.1
57.5°	0.0	0.0	0.0	3.7	7.4	12.4	26.0	585.8	3014.6	3299.4	3128.5
60°	0.0	0.0	0.0	1.2	5.0	8.7	19.8	551.1	3093.8	3396.0	3314.3
62.5°	0.0	0.0	0.0	0.0	1.2	3.7	13.6	497.9	2934.1	3388.6	3493.9
65°	0.0	0.0	0.0	0.0	0.0	0.0	8.7	393.9	2639.3	3211.5	3394.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	5.0	272.5	2311.1	2988.6	3212.7
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	164.7	1865.2	2620.7	2724.8
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.6	1331.4	2080.7	2235.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	823.6	1520.9	1711.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	533.8	1151.8	1299.2
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	284.9	722.1	839.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.9	438.4	505.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.6	266.3	303.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9	54.5
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°	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2	1756.2
2.5°	1891.2	1927.1	1940.8	1919.7	1922.2	1878.8	1872.7	1812.0	1787.2	1792.1
5°	1977.9	2029.9	2058.4	2034.9	1981.6	1898.7	1823.1	1751.3	1706.7	1684.4
7.5°	1958.1	2016.3	2052.2	2074.5	2013.8	1880.1	1764.9	1629.9	1572.9	1574.2
10°	1849.1	1970.5	2043.6	2015.1	1986.6	1852.8	1674.5	1528.3	1477.6	1482.5
12.5°	1761.2	1896.2	1939.5	1961.8	1903.6	1797.1	1677.0	1509.8	1452.8	1418.1
15°	1706.7	1807.0	1809.5	1844.2	1820.6	1820.6	1703.0	1539.5	1489.9	1451.6
17.5°	1706.7	1729.0	1726.5	1738.9	1778.5	1825.6	1768.6	1659.6	1561.8	1555.6
20°	1745.1	1675.7	1659.6	1664.6	1698.0	1838.0	1913.5	1777.3	1715.4	1695.5
22.5°	1834.3	1681.9	1584.1	1566.7	1669.5	1836.7	2006.4	1963.1	1855.3	1839.2
25°	1956.9	1670.8	1564.3	1542.0	1620.0	1881.3	2134.0	2142.7	2044.8	2011.4
27.5°	2073.3	1720.3	1561.8	1556.8	1659.6	1871.4	2221.9	2286.3	2176.1	2148.8
30°	2112.9	1769.9	1607.6	1542.0	1674.5	1907.3	2219.4	2387.9	2316.0	2322.2
32.5°	2160.0	1819.4	1612.6	1586.6	1737.7	1965.5	2290.0	2551.4	2499.3	2426.3
35°	2229.3	1886.3	1659.6	1636.1	1782.2	2017.6	2304.9	2671.5	2662.8	2577.4
37.5°	2288.8	1951.9	1757.5	1761.2	1918.5	2101.8	2370.5	2818.9	2804.0	2745.8
40°	2330.9	2043.6	1909.8	1919.7	2037.4	2195.9	2487.0	2893.2	3003.4	2918.0
42.5°	2337.1	2125.3	2084.4	2163.7	2273.9	2342.1	2534.0	2944.0	3102.5	3046.8
45°	2360.6	2255.4	2369.3	2427.5	2517.9	2470.9	2531.6	3030.7	3109.9	3081.5
47.5°	2452.3	2491.9	2635.6	2812.7	2844.9	2690.1	2591.0	3044.3	3152.1	3148.3
50°	2547.7	2745.8	2947.7	3065.4	3106.2	2841.2	2646.7	3033.2	3207.8	3178.1
52.5°	2654.2	2966.3	3257.3	3402.2	3379.9	3008.4	2709.9	3123.6	3310.6	3300.7
55°	2721.0	3065.4	3456.7	3658.6	3641.3	3195.4	2910.5	3253.6	3445.6	3420.8
57.5°	2898.2	3226.4	3654.9	3749.0	3794.8	3440.6	3050.5	3466.6	3558.3	3585.5
60°	3044.3	3331.6	3706.9	3843.2	3859.3	3586.8	3295.7	3685.9	3702.0	3610.3
62.5°	3258.6	3372.5	3596.7	3719.3	3802.3	3669.8	3516.2	3803.5	3699.5	3693.3
65°	3415.9	3238.7	3391.1	3459.2	3512.5	3543.4	3737.9	3884.0	3653.7	3533.5
67.5°	3327.9	2986.1	2957.6	2961.3	2977.4	3164.4	3663.6	3687.1	3398.5	3299.4
70°	2929.1	2449.8	2411.4	2441.1	2360.6	2586.0	3362.6	3351.5	2998.5	2895.7
72.5°	2369.3	1786.0	1720.3	1761.2	1779.8	2018.8	2828.8	2541.5	2187.2	2106.7
75°	1882.6	1309.1	1104.8	1203.8	1267.0	1470.1	2209.5	1726.5	1527.1	1418.1
77.5°	1478.8	990.8	859.5	819.9	878.1	1068.8	1607.6	906.6	800.1	749.3
80°	937.6	728.3	790.2	733.2	758.0	762.9	837.2	412.4	328.2	324.5
82.5°	564.8	497.9	592.0	325.7	593.3	530.1	348.0	187.0	166.0	166.0
85°	400.0	308.4	204.4	132.5	263.8	291.1	135.0	96.6	84.2	81.7
87.5°	200.6	95.4	45.8	29.7	33.4	54.5	16.1	7.4	7.4	6.2
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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