

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: P676350

Luminaire Tested: **CCW-SA-2E-840-U-T2-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676350  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2E-840-U-T2-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/  
T2 distribution lens and House Side Shield  
Light Source: (32) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

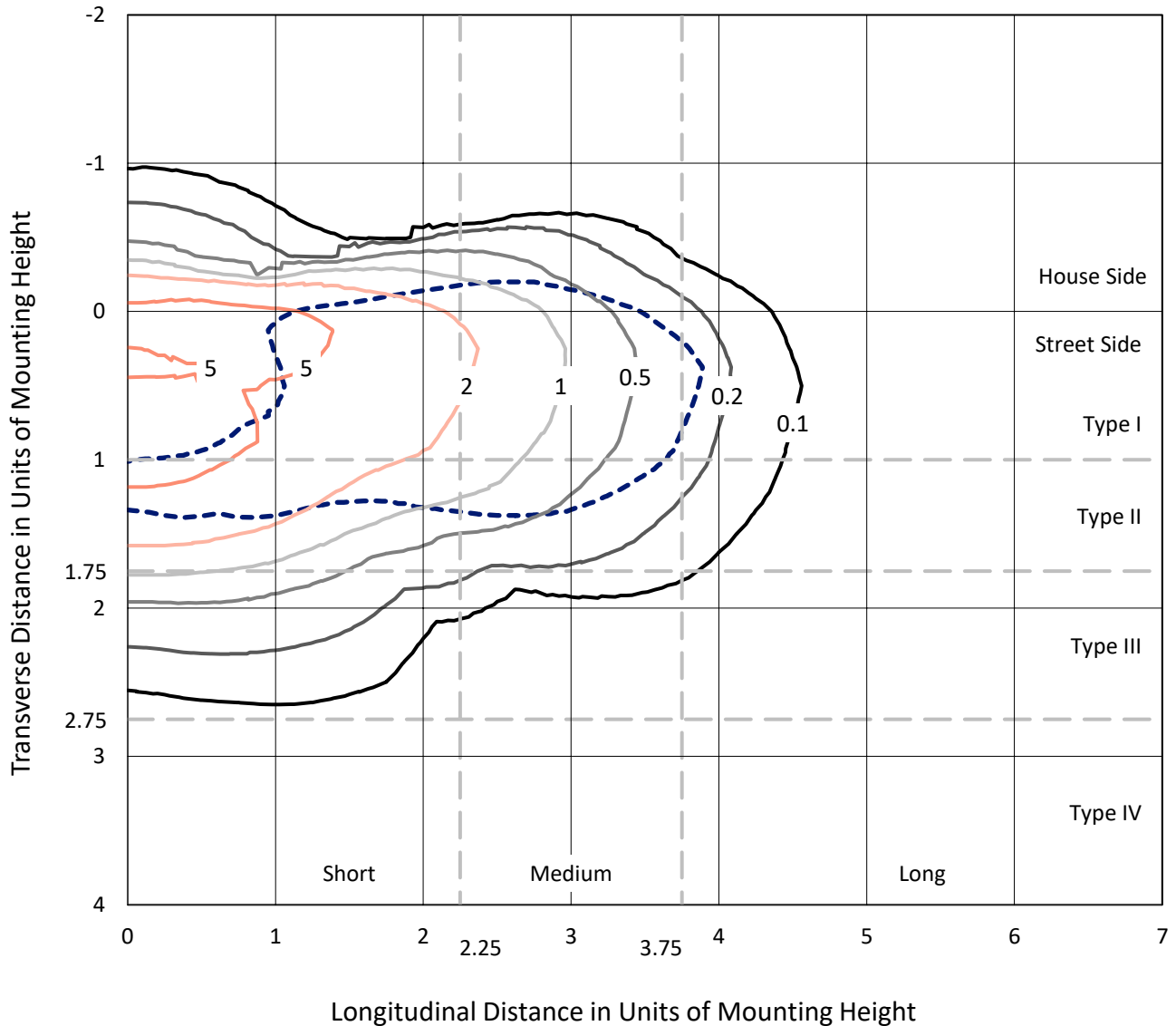
Lumens per Lamp: N/A  
Luminaire Lumens: 9000.2 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 106.6  
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

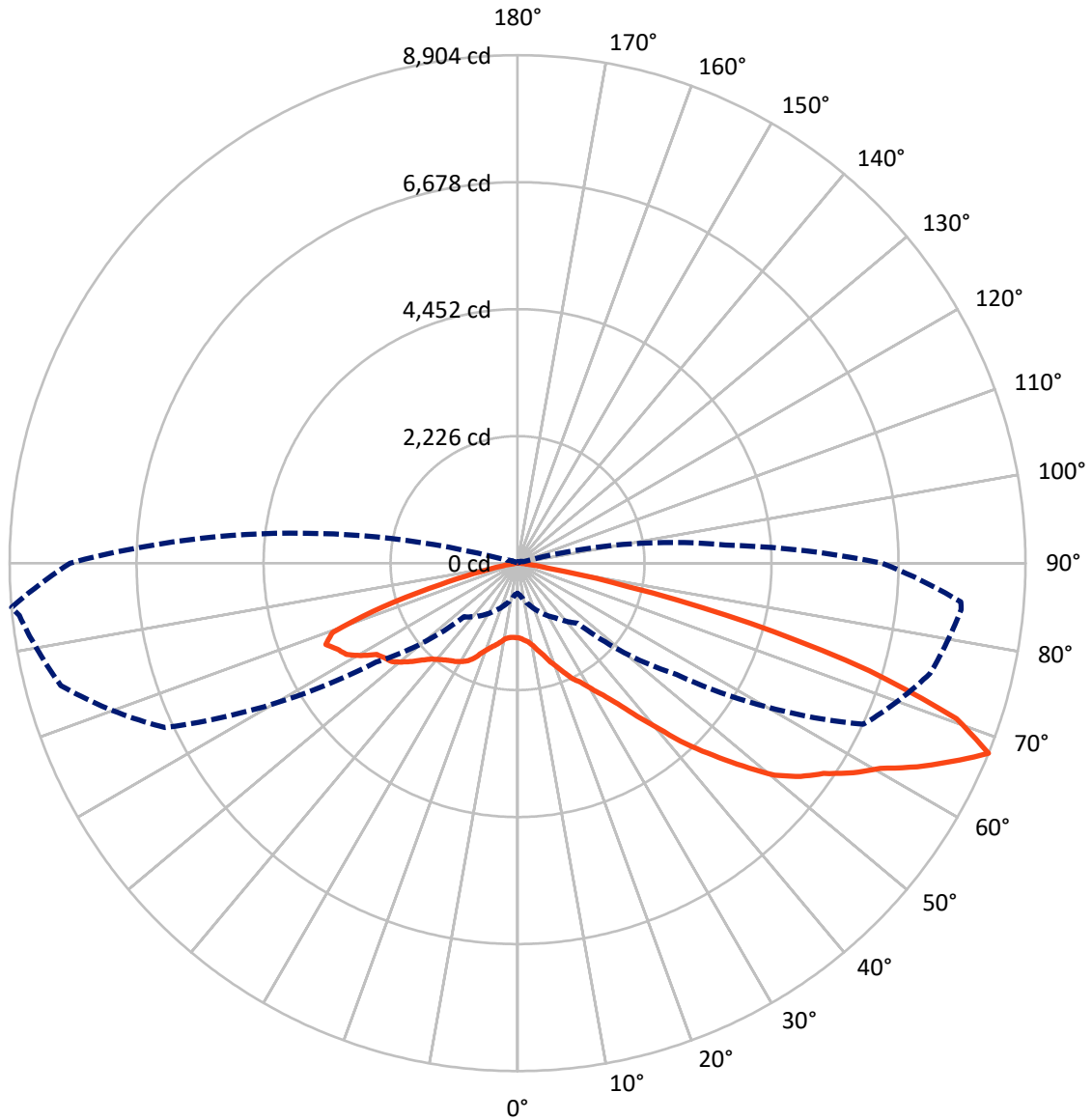
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 275-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1278.6	0.0	1278.6
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	7721.5	0.0	7721.5
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	9000.2	0.0	9000.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.3	1.3
10°-20°	320.9	3.6
20°-30°	532.9	5.9
30°-40°	916.9	10.2
40°-50°	1647.7	18.3
50°-60°	2345.6	26.1
60°-70°	2138.5	23.8
70°-80°	910.6	10.1
80°-90°	67.8	0.8
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°	9000.2	100.0
0°-180°	9000.2	100.0



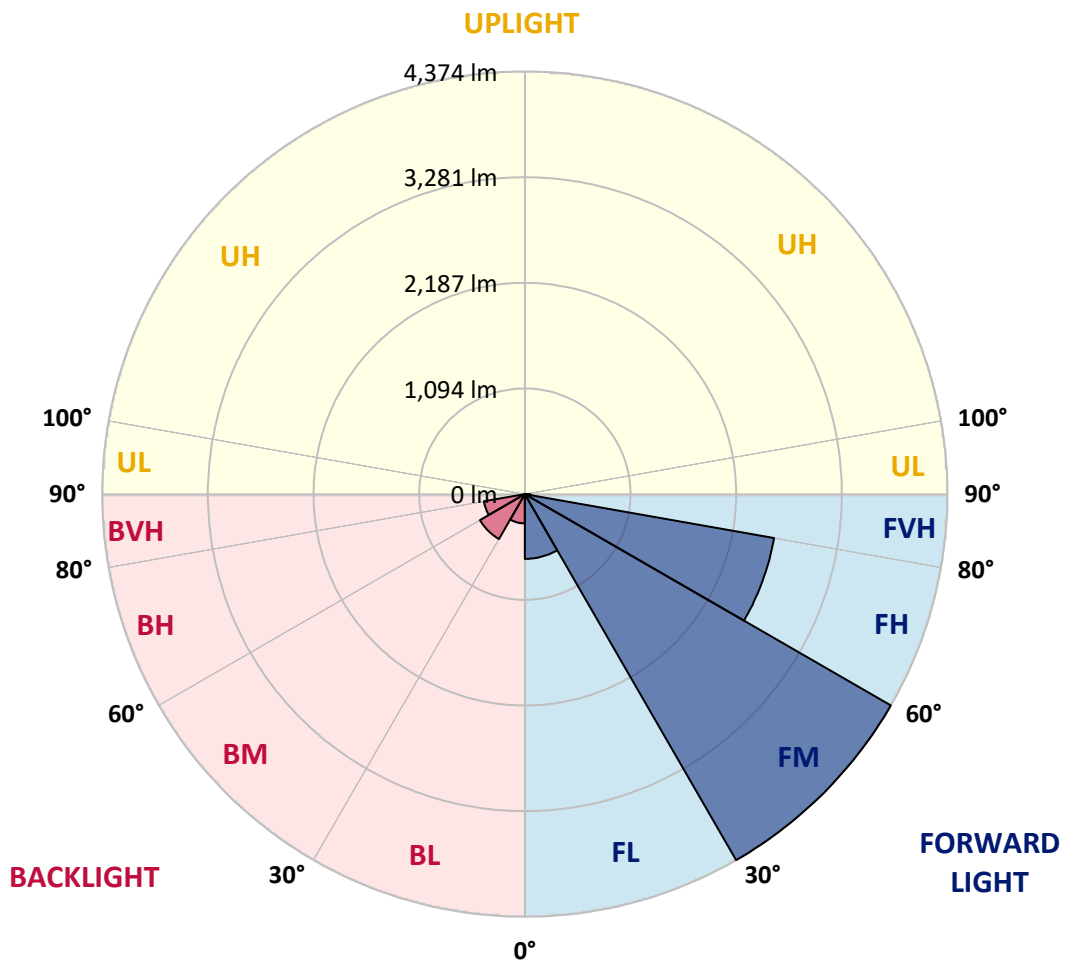
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	670.5	7.4			
FM (30°-60°)	4374.1	48.6			
FH (60°-80°)	2619.4	29.1			G2/5000
FVH (80°-90°)	57.6	0.6			G1/100
BL (0°-30°)	302.7	3.4	B1/500		
BM (30°-60°)	536.1	6.0	B1/1000		
BH (60°-80°)	429.6	4.8	B1/500		G1/500
BVH (80°-90°)	10.2	0.1			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1356.0	1368.8	1368.8	1364.5	1351.7	1343.1	1338.8	1330.2	1321.6	1321.6	1325.9
5°	1368.8	1356.0	1373.1	1351.7	1351.7	1351.7	1368.8	1360.2	1356.0	1334.5	1334.5
7.5°	1368.8	1356.0	1356.0	1368.8	1356.0	1364.5	1386.0	1377.4	1394.6	1356.0	1364.5
10°	1330.2	1325.9	1334.5	1351.7	1356.0	1373.1	1394.6	1437.5	1441.8	1416.0	1411.7
12.5°	1253.0	1248.7	1278.7	1287.3	1338.8	1381.7	1446.1	1480.4	1519.0	1506.1	1480.4
15°	1197.2	1205.8	1227.2	1261.6	1308.8	1386.0	1458.9	1536.2	1604.8	1587.7	1579.1
17.5°	1218.6	1214.4	1218.6	1240.1	1300.2	1377.4	1501.8	1592.0	1690.7	1690.7	1699.2
20°	1283.0	1295.9	1291.6	1278.7	1308.8	1373.1	1501.8	1660.6	1823.7	1810.8	1810.8
22.5°	1394.6	1398.9	1373.1	1364.5	1360.2	1398.9	1527.6	1746.4	1935.2	1961.0	1952.4
25°	1510.4	1514.7	1506.1	1480.4	1446.1	1454.6	1574.8	1815.1	2089.7	2132.6	2124.0
27.5°	1703.5	1699.2	1677.8	1647.7	1596.3	1557.6	1647.7	1866.6	2209.9	2282.8	2261.4
30°	1896.6	1883.7	1853.7	1815.1	1767.9	1694.9	1737.9	1965.3	2360.0	2428.7	2381.5
32.5°	2132.6	2106.9	2115.5	2055.4	1956.7	1840.8	1832.3	2055.4	2480.2	2578.9	2540.3
35°	2433.0	2403.0	2360.0	2304.3	2209.9	2055.4	2008.2	2201.3	2681.9	2754.8	2754.8
37.5°	2827.8	2857.8	2806.3	2574.6	2471.6	2325.7	2227.0	2351.5	2857.8	3033.7	2990.8
40°	3231.1	3256.9	3162.5	2990.8	2767.7	2587.5	2527.4	2596.1	3123.8	3334.1	3252.6
42.5°	3557.2	3591.6	3557.2	3334.1	3158.2	2926.5	2819.2	2883.5	3467.1	3720.3	3613.0
45°	3900.5	3934.8	3896.2	3750.3	3578.7	3445.7	3175.3	3256.9	3827.6	4205.2	4085.0
47.5°	4158.0	4200.9	4132.2	4102.2	3964.9	3943.4	3484.3	3574.4	4205.2	4694.4	4544.2
50°	4218.0	4265.3	4325.3	4359.7	4312.5	4363.9	3900.5	3977.8	4599.9	5144.9	4999.0
52.5°	4076.4	4123.6	4256.7	4415.4	4634.3	4788.8	4321.0	4385.4	5011.9	5518.2	5441.0
55°	3660.2	3703.1	3973.5	4188.0	4711.5	4964.7	4724.4	4994.7	5308.0	5908.7	5719.9
57.5°	2960.8	3012.3	3368.4	3698.8	4454.1	4866.0	4964.7	5501.1	5797.1	6196.2	5977.4
60°	2102.6	2132.6	2441.6	3025.2	3741.7	4372.5	4917.5	5878.7	6183.3	6582.4	6466.5
62.5°	1210.1	1235.8	1557.6	2106.9	2823.5	3651.6	4707.2	6234.8	6599.6	7007.2	6942.8
65°	802.4	811.0	1029.8	1330.2	1836.5	2690.5	4175.1	6552.4	7011.5	7346.2	7273.2
67.5°	527.8	575.0	746.6	952.6	1175.7	1489.0	3402.8	6685.4	7483.5	7818.2	7801.0
70°	377.6	394.8	536.4	733.8	883.9	836.7	1991.0	5745.6	7462.0	7946.9	7805.3
72.5°	223.1	240.3	356.2	549.2	695.1	532.1	931.1	4063.6	6183.3	6342.1	6303.5
75°	163.1	163.1	218.8	394.8	506.3	381.9	437.7	2570.3	4106.5	4458.3	4454.1
77.5°	115.9	120.1	150.2	236.0	390.5	278.9	240.3	1428.9	2244.2	2454.4	2338.6
80°	68.7	72.9	103.0	141.6	283.2	201.7	158.8	652.2	862.5	871.1	828.2
82.5°	51.5	51.5	68.7	98.7	197.4	137.3	98.7	248.9	278.9	253.2	214.5
85°	30.0	25.7	51.5	72.9	115.9	77.2	68.7	115.9	128.7	94.4	85.8
87.5°	8.6	8.6	21.5	25.7	51.5	42.9	30.0	42.9	60.1	34.3	25.7
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1317.3	1304.5	1283.0	1274.4	1244.4	1231.5	1222.9	1201.5	1205.8	1192.9	1192.9
5°	1304.5	1304.5	1261.6	1214.4	1167.2	1137.1	1102.8	1059.9	1059.9	1042.7	1047.0
7.5°	1351.7	1317.3	1261.6	1175.7	1098.5	1029.8	999.8	956.9	931.1	918.3	918.3
10°	1381.7	1347.4	1253.0	1150.0	1051.3	965.5	901.1	841.0	806.7	806.7	802.4
12.5°	1463.2	1411.7	1287.3	1145.7	999.8	871.1	772.4	703.7	656.5	622.2	630.8
15°	1531.9	1476.1	1304.5	1111.4	909.7	729.5	609.3	480.6	416.2	381.9	369.0
17.5°	1639.2	1536.2	1343.1	1051.3	772.4	570.7	394.8	287.5	261.8	257.5	257.5
20°	1729.3	1609.1	1347.4	935.4	635.1	364.7	253.2	236.0	223.1	218.8	214.5
22.5°	1853.7	1703.5	1330.2	802.4	454.8	244.6	214.5	197.4	188.8	175.9	175.9
25°	1982.4	1828.0	1295.9	678.0	278.9	210.3	188.8	171.6	154.5	145.9	150.2
27.5°	2119.8	1922.4	1197.2	527.8	214.5	184.5	154.5	141.6	133.0	128.7	128.7
30°	2231.3	1982.4	1051.3	351.9	193.1	163.1	137.3	124.4	115.9	111.6	111.6
32.5°	2312.8	2033.9	888.2	236.0	175.9	145.9	124.4	111.6	103.0	98.7	98.7
35°	2450.2	2072.6	738.1	201.7	158.8	128.7	107.3	98.7	90.1	90.1	90.1
37.5°	2660.4	2124.0	587.9	184.5	145.9	115.9	103.0	90.1	85.8	81.5	81.5
40°	2844.9	2188.4	420.5	167.3	133.0	107.3	90.1	81.5	77.2	72.9	72.9
42.5°	3111.0	2261.4	274.6	150.2	120.1	98.7	81.5	72.9	68.7	64.4	64.4
45°	3450.0	2381.5	214.5	133.0	107.3	90.1	77.2	68.7	60.1	60.1	55.8
47.5°	3810.4	2527.4	193.1	124.4	98.7	81.5	68.7	60.1	55.8	51.5	51.5
50°	4145.1	2669.0	180.2	115.9	90.1	77.2	64.4	55.8	47.2	42.9	42.9
52.5°	4445.5	2802.0	171.6	107.3	85.8	68.7	55.8	47.2	42.9	38.6	38.6
55°	4604.2	2862.1	167.3	103.0	77.2	64.4	51.5	42.9	38.6	34.3	34.3
57.5°	4853.1	2939.3	163.1	98.7	72.9	55.8	47.2	38.6	34.3	30.0	30.0
60°	5256.5	3192.5	158.8	94.4	68.7	55.8	42.9	34.3	25.7	21.5	21.5
62.5°	5591.2	3402.8	141.6	81.5	60.1	47.2	34.3	25.7	17.2	12.9	12.9
65°	5973.1	3501.5	124.4	72.9	51.5	38.6	25.7	17.2	12.9	4.3	4.3
67.5°	6389.3	3651.6	103.0	64.4	47.2	30.0	21.5	12.9	4.3	0.0	0.0
70°	6170.5	3462.8	85.8	55.8	42.9	25.7	17.2	8.6	0.0	0.0	0.0
72.5°	4836.0	2480.2	68.7	51.5	38.6	25.7	17.2	4.3	0.0	0.0	0.0
75°	3231.1	1403.2	60.1	42.9	30.0	21.5	12.9	4.3	0.0	0.0	0.0
77.5°	1755.0	630.8	51.5	38.6	25.7	17.2	12.9	4.3	0.0	0.0	0.0
80°	570.7	248.9	42.9	34.3	25.7	17.2	12.9	4.3	0.0	0.0	0.0
82.5°	154.5	77.2	42.9	34.3	25.7	17.2	12.9	4.3	0.0	0.0	0.0
85°	64.4	51.5	42.9	34.3	25.7	17.2	12.9	4.3	0.0	0.0	0.0
87.5°	25.7	17.2	17.2	21.5	17.2	12.9	8.6	4.3	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°	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1197.2	1205.8	1210.1	1210.1	1231.5	1253.0	1278.7	1300.2	1300.2	1313.0	1325.9
5°	1051.3	1059.9	1072.7	1111.4	1154.3	1201.5	1248.7	1283.0	1330.2	1351.7	1364.5
7.5°	931.1	939.7	974.1	1012.7	1072.7	1154.3	1235.8	1313.0	1360.2	1381.7	1398.9
10°	806.7	819.6	858.2	926.9	1004.1	1102.8	1197.2	1330.2	1407.4	1450.4	1467.5
12.5°	626.5	660.8	712.3	785.3	883.9	1034.1	1210.1	1347.4	1480.4	1531.9	1566.2
15°	394.8	424.8	506.3	622.2	755.2	931.1	1175.7	1373.1	1557.6	1609.1	1664.9
17.5°	253.2	257.5	283.2	407.6	579.3	802.4	1124.2	1411.7	1643.5	1716.4	1802.2
20°	214.5	223.1	227.4	244.6	386.2	660.8	1017.0	1458.9	1746.4	1845.1	1926.7
22.5°	180.2	184.5	193.1	206.0	231.7	480.6	871.1	1458.9	1836.5	1982.4	2076.8
25°	145.9	154.5	163.1	175.9	201.7	300.4	720.9	1433.2	1943.8	2124.0	2244.2
27.5°	128.7	128.7	137.3	150.2	171.6	210.3	570.7	1356.0	2025.4	2209.9	2368.6
30°	111.6	115.9	120.1	133.0	154.5	184.5	394.8	1231.5	2111.2	2377.2	2557.4
32.5°	98.7	98.7	107.3	115.9	137.3	167.3	253.2	1042.7	2222.7	2505.9	2759.1
35°	90.1	90.1	94.4	103.0	124.4	150.2	197.4	883.9	2355.8	2750.5	3029.4
37.5°	81.5	81.5	85.8	94.4	111.6	133.0	180.2	759.5	2493.1	2995.1	3402.8
40°	72.9	72.9	77.2	85.8	98.7	120.1	163.1	613.6	2664.7	3355.6	3810.4
42.5°	64.4	64.4	68.7	77.2	90.1	107.3	141.6	459.1	2892.1	3746.0	4338.2
45°	55.8	55.8	60.1	68.7	77.2	98.7	128.7	351.9	3141.0	4179.4	4801.6
47.5°	47.2	51.5	55.8	64.4	72.9	90.1	115.9	309.0	3385.6	4638.6	5316.5
50°	42.9	42.9	47.2	55.8	68.7	81.5	107.3	304.7	3634.5	4990.4	5844.3
52.5°	38.6	38.6	42.9	51.5	64.4	77.2	103.0	313.2	3840.4	5316.5	6213.4
55°	34.3	34.3	38.6	42.9	55.8	72.9	94.4	321.8	3986.3	5647.0	6509.4
57.5°	30.0	30.0	34.3	42.9	51.5	64.4	85.8	330.4	4222.3	5973.1	6938.5
60°	21.5	21.5	30.0	38.6	47.2	55.8	81.5	339.0	4599.9	6423.6	7303.3
62.5°	12.9	12.9	17.2	30.0	38.6	51.5	72.9	321.8	4951.8	7002.9	7861.1
65°	4.3	8.6	12.9	17.2	30.0	42.9	60.1	291.8	5247.9	7582.2	8376.0
67.5°	0.0	0.0	4.3	12.9	25.7	34.3	51.5	214.5	5295.1	7843.9	8903.8
70°	0.0	0.0	4.3	12.9	21.5	34.3	47.2	120.1	4509.8	7007.2	8161.5
72.5°	0.0	0.0	0.0	8.6	21.5	30.0	42.9	90.1	3325.5	5282.2	6449.4
75°	0.0	0.0	0.0	4.3	17.2	25.7	38.6	68.7	2021.1	3522.9	4209.5
77.5°	0.0	0.0	0.0	4.3	12.9	25.7	38.6	60.1	712.3	1677.8	1978.1
80°	0.0	0.0	0.0	8.6	17.2	25.7	34.3	51.5	171.6	420.5	566.4
82.5°	0.0	0.0	0.0	4.3	12.9	21.5	30.0	42.9	68.7	124.4	197.4
85°	0.0	0.0	0.0	4.3	8.6	21.5	30.0	38.6	47.2	60.1	85.8
87.5°	0.0	0.0	0.0	0.0	4.3	8.6	12.9	17.2	17.2	17.2	30.0
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):**

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1321.6	1338.8	1347.4	1364.5	1373.1	1368.8	1364.5	1377.4	1368.8	1356.0
5°	1368.8	1368.8	1381.7	1386.0	1386.0	1373.1	1381.7	1377.4	1368.8	1368.8
7.5°	1420.3	1441.8	1441.8	1416.0	1411.7	1403.2	1403.2	1368.8	1356.0	1368.8
10°	1471.8	1489.0	1493.3	1463.2	1424.6	1407.4	1386.0	1343.1	1321.6	1330.2
12.5°	1579.1	1579.1	1531.9	1497.6	1446.1	1386.0	1334.5	1274.4	1244.4	1253.0
15°	1656.3	1673.5	1609.1	1531.9	1441.8	1330.2	1274.4	1227.2	1210.1	1197.2
17.5°	1806.5	1772.2	1669.2	1557.6	1428.9	1313.0	1274.4	1231.5	1218.6	1218.6
20°	1935.2	1918.1	1763.6	1561.9	1424.6	1347.4	1321.6	1300.2	1295.9	1283.0
22.5°	2111.2	2033.9	1836.5	1609.1	1471.8	1403.2	1394.6	1416.0	1403.2	1394.6
25°	2244.2	2179.8	1892.3	1677.8	1544.8	1523.3	1536.2	1557.6	1523.3	1510.4
27.5°	2424.4	2304.3	1999.6	1767.9	1643.5	1664.9	1707.8	1712.1	1690.7	1703.5
30°	2591.8	2463.0	2081.1	1870.9	1810.8	1832.3	1896.6	1943.8	1913.8	1896.6
32.5°	2832.1	2634.7	2244.2	2042.5	2021.1	2076.8	2149.8	2179.8	2141.2	2132.6
35°	3085.2	2832.1	2411.5	2235.6	2274.2	2351.5	2415.8	2467.3	2407.2	2433.0
37.5°	3480.0	3149.6	2694.7	2540.3	2557.4	2587.5	2707.6	2849.2	2879.3	2827.8
40°	3891.9	3492.9	2956.5	2836.3	2875.0	2956.5	3098.1	3231.1	3299.8	3231.1
42.5°	4368.2	3823.3	3359.9	3218.2	3256.9	3372.7	3561.5	3668.8	3660.2	3557.2
45°	4956.1	4282.4	3737.5	3561.5	3703.1	3806.1	3994.9	4007.8	3926.3	3900.5
47.5°	5406.7	4668.6	4145.1	4033.5	4226.6	4230.9	4273.8	4278.1	4188.0	4158.0
50°	5904.4	5114.9	4599.9	4436.9	4763.0	4612.8	4497.0	4419.7	4282.4	4218.0
52.5°	6393.6	5432.4	5020.5	4853.1	5192.1	4793.0	4582.8	4346.8	4145.1	4076.4
55°	6655.3	5955.9	5634.1	5243.6	5286.5	4844.5	4316.7	4020.7	3677.4	3660.2
57.5°	6964.3	6307.8	6153.3	5509.6	5127.7	4484.1	3763.2	3372.7	3003.7	2960.8
60°	7329.0	6865.6	6702.5	5466.7	4565.6	3767.5	2982.2	2480.2	2132.6	2102.6
62.5°	7736.7	7526.4	7041.5	5046.2	3625.9	2651.8	1969.6	1549.0	1227.2	1210.1
65°	8380.3	8079.9	7221.7	4248.1	2398.7	1699.2	1308.8	1004.1	811.0	802.4
67.5°	8783.7	8290.2	6818.4	3029.4	1330.2	1124.2	918.3	729.5	562.1	527.8
70°	8213.0	7607.9	5393.8	1733.6	772.4	853.9	708.0	489.2	386.2	377.6
72.5°	6560.9	5647.0	3630.2	815.3	480.6	669.4	514.9	330.4	231.7	223.1
75°	4475.5	3552.9	2278.5	377.6	339.0	489.2	377.6	193.1	163.1	163.1
77.5°	1999.6	1810.8	1167.2	231.7	253.2	373.3	218.8	133.0	120.1	115.9
80°	609.3	639.4	476.3	158.8	188.8	283.2	133.0	90.1	72.9	68.7
82.5°	206.0	240.3	214.5	94.4	128.7	201.7	90.1	60.1	51.5	51.5
85°	98.7	120.1	107.3	60.1	68.7	98.7	72.9	47.2	30.0	30.0
87.5°	38.6	55.8	38.6	25.7	38.6	51.5	30.0	21.5	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)