

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: P181589

Luminaire Tested: **ICS-E02-LED-E1-T4-HSS**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P181589  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33725)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ICS-E02-LED-E1-T4-HSS  
Description: ICON SITE SMALL LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ HOUSE SIDE SHIELD  
Light Source: (42) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3481.4 lumens  
Efficiency: N/A  
Efficacy: 66.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G2

Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

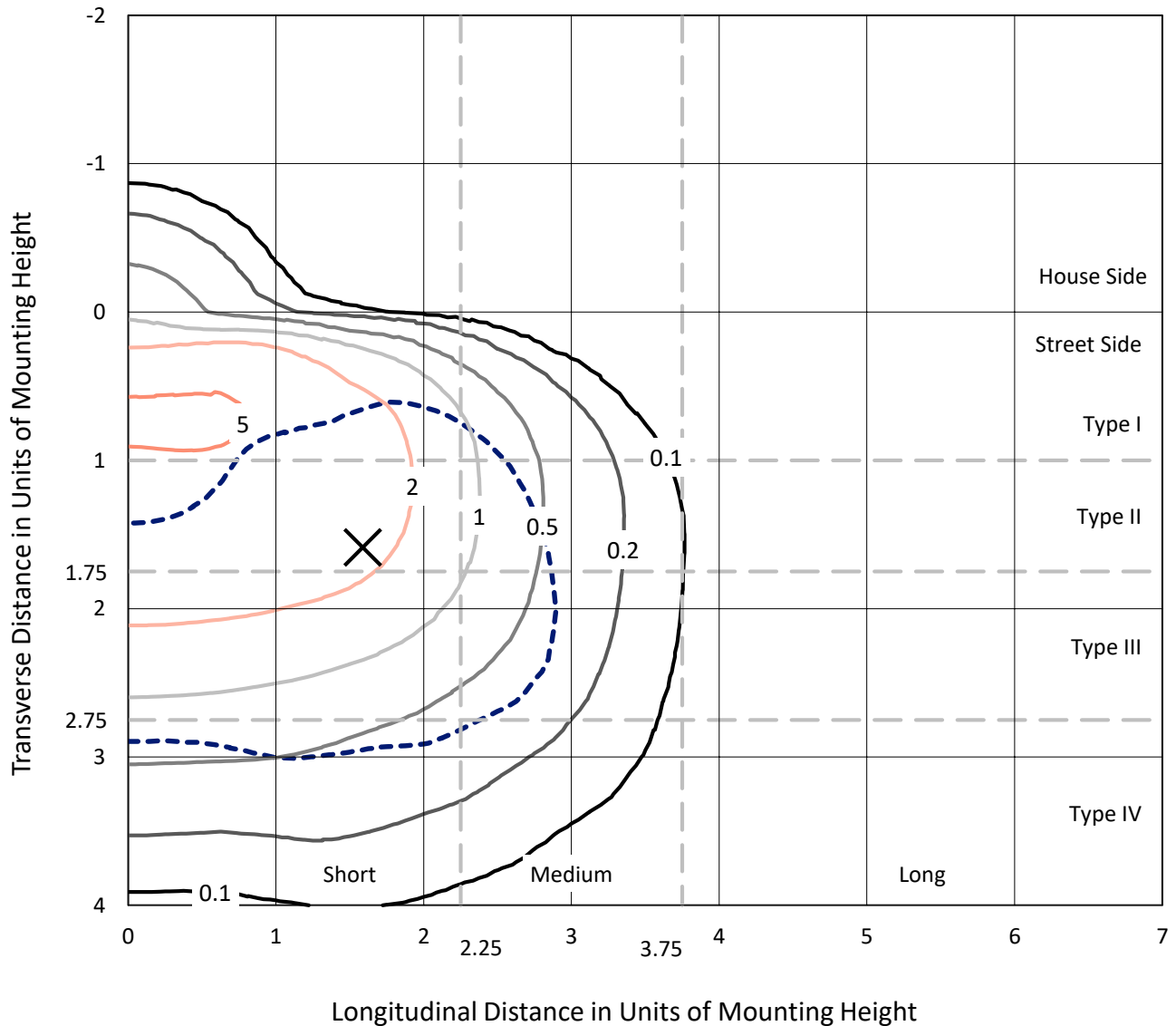


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

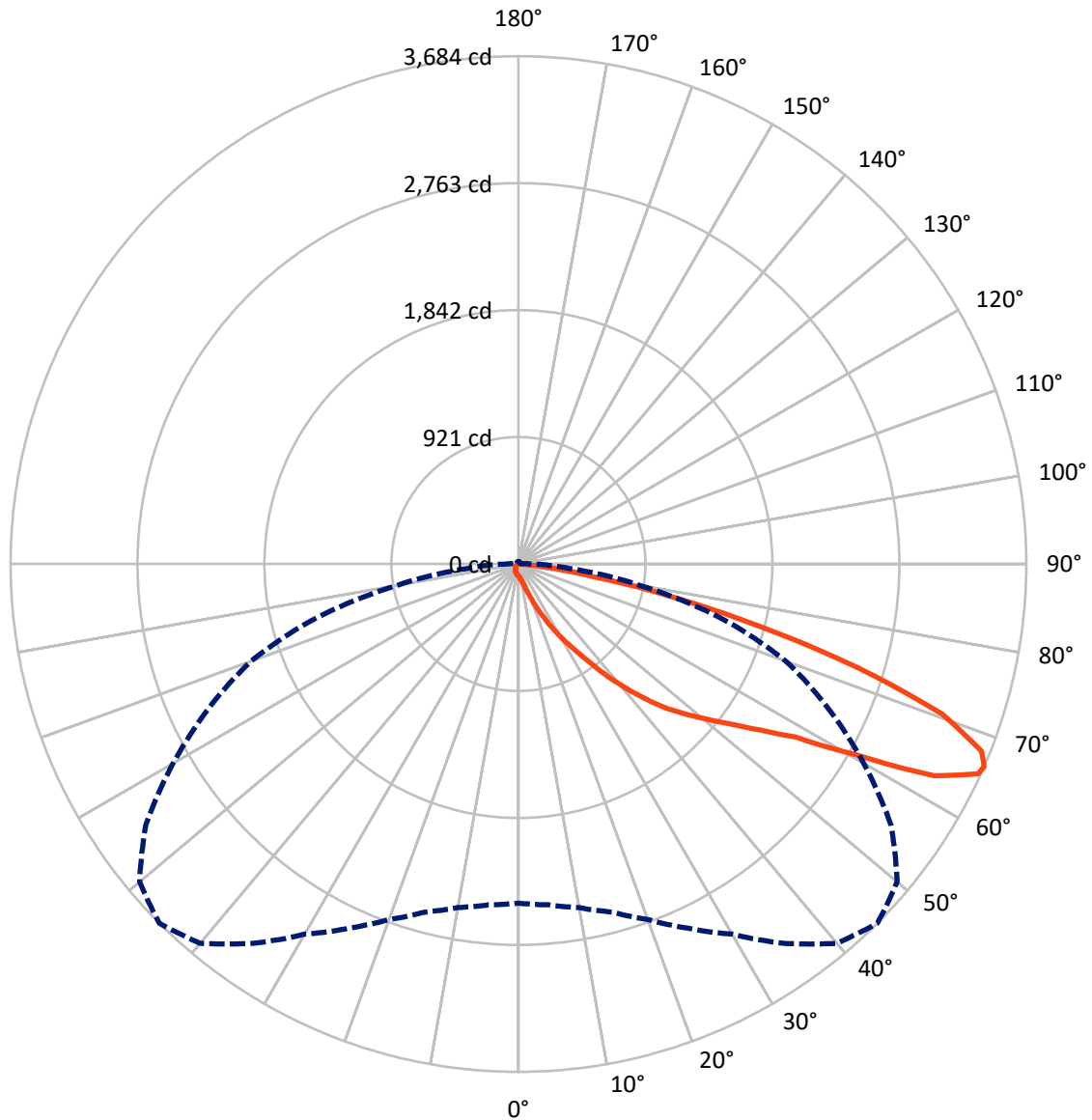


Based on 10 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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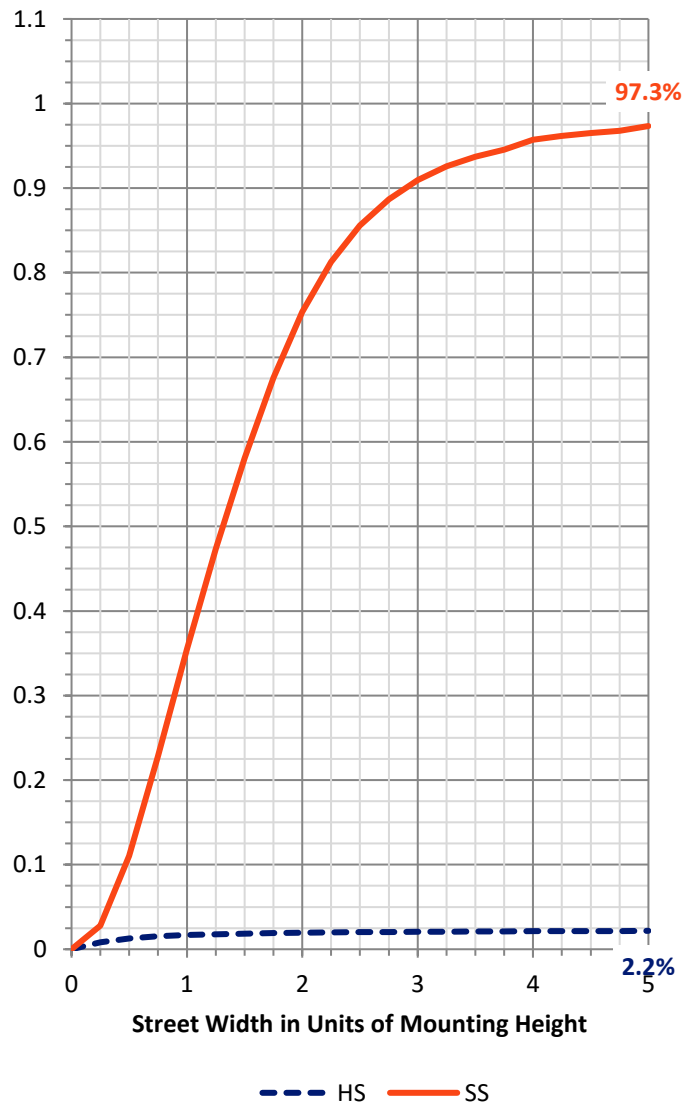
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	78.9	0.0	78.9
	% Fixture	2.3	0.0	2.3
<b>Street Side</b>	Lumens	3402.5	0.0	3402.5
	% Fixture	97.7	0.0	97.7
<b>Total</b>	Lumens	3481.4	0.0	3481.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.8	0.3
10°-20°	35.5	1.0
20°-30°	104.0	3.0
30°-40°	243.0	7.0
40°-50°	456.4	13.1
50°-60°	756.3	21.7
60°-70°	1200.6	34.5
70°-80°	620.9	17.8
80°-90°	56.1	1.6
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°	3481.4	100.0
0°-180°	3481.4	100.0



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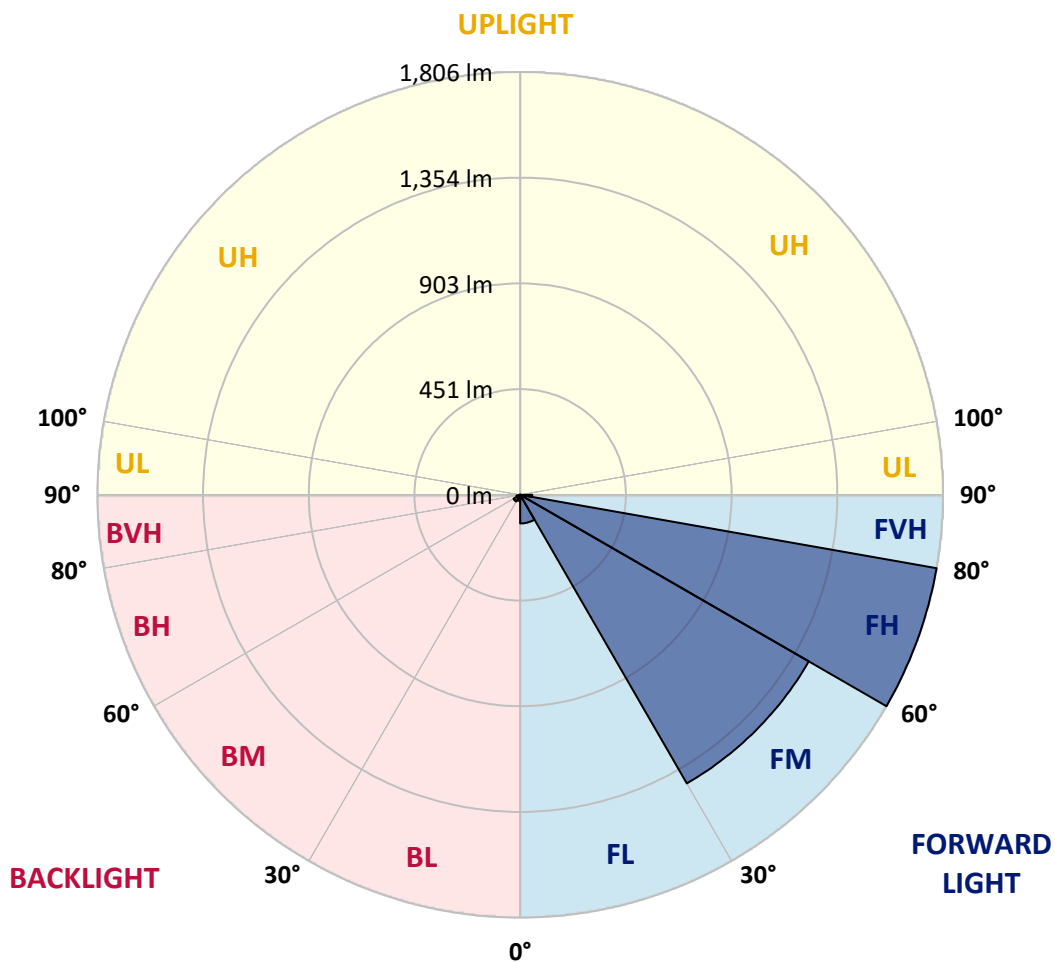
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	122.5	3.5			
FM (30°-60°)	1422.9	40.9			
FH (60°-80°)	1805.5	51.9			G2/5000
FVH (80°-90°)	51.6	1.5			G1/100
BL (0°-30°)	25.8	0.7	B0/110		
BM (30°-60°)	32.7	0.9	B0/220		
BH (60°-80°)	16.0	0.5	B0/110		G0/110
BVH (80°-90°)	4.4	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
2.5°	94.2	94.2	94.2	94.2	93.6	93.0	92.4	91.8	91.2	91.2	90.6
5°	106.8	107.4	106.8	106.2	105.0	104.4	102.6	101.4	99.6	99.0	97.2
7.5°	124.2	123.6	124.2	122.4	120.0	119.4	117.0	114.0	111.6	108.0	105.6
10°	149.4	148.8	149.4	145.8	142.2	139.2	135.0	131.4	126.0	121.8	117.0
12.5°	189.6	189.6	188.4	183.6	178.8	172.2	165.6	157.8	148.2	139.8	132.0
15°	251.4	248.4	243.0	240.0	231.6	221.4	214.2	198.6	184.8	171.6	156.0
17.5°	325.8	319.8	315.6	309.0	298.2	285.0	273.0	250.2	236.4	214.8	192.6
20°	411.0	403.8	402.6	392.4	381.0	366.6	349.2	322.2	298.8	271.8	240.6
22.5°	498.0	499.2	494.4	487.2	475.8	459.0	432.0	407.4	378.6	344.4	304.2
25°	595.2	594.6	590.4	582.0	573.6	552.6	531.0	507.6	473.4	429.6	381.6
27.5°	686.4	685.8	675.6	676.2	660.0	652.2	631.2	606.0	564.6	528.0	475.8
30°	781.8	775.8	769.2	764.4	753.0	739.2	728.4	698.4	667.2	624.0	581.4
32.5°	878.4	871.8	873.6	867.6	858.6	844.8	828.6	804.0	770.4	728.4	688.8
35°	996.7	993.7	988.9	990.7	988.9	978.7	964.9	932.5	895.8	855.6	814.8
37.5°	1084.3	1081.3	1084.3	1096.9	1099.9	1106.5	1096.3	1080.1	1053.7	1009.9	967.3
40°	1165.3	1165.9	1179.7	1195.3	1206.1	1227.7	1231.3	1224.7	1203.7	1163.5	1107.7
42.5°	1237.9	1246.9	1259.5	1285.3	1308.7	1339.3	1362.1	1365.7	1350.1	1323.7	1267.3
45°	1318.9	1326.7	1346.5	1377.1	1409.5	1447.3	1483.9	1503.1	1501.9	1483.3	1422.7
47.5°	1409.5	1419.7	1441.3	1466.5	1509.7	1552.3	1599.7	1633.9	1648.3	1622.5	1563.7
50°	1519.3	1523.5	1542.1	1574.5	1614.1	1663.3	1714.9	1764.7	1792.9	1768.9	1708.3
52.5°	1649.5	1650.7	1668.1	1698.1	1729.9	1783.9	1834.3	1903.3	1939.9	1926.7	1854.1
55°	1828.3	1824.7	1836.7	1862.5	1888.3	1940.5	1990.9	2068.9	2122.3	2123.5	2046.1
57.5°	2072.5	2064.1	2071.9	2092.3	2121.1	2169.7	2233.3	2302.3	2373.7	2368.9	2305.3
60°	2412.7	2409.7	2424.1	2458.3	2507.5	2557.9	2629.9	2722.9	2786.0	2807.6	2740.9
62.5°	2638.9	2647.3	2680.3	2733.1	2828.0	2932.4	3066.2	3208.4	3328.4	3382.4	3290.6
65°	2541.7	2555.5	2607.1	2685.1	2810.6	2967.2	3144.8	3378.2	3585.2	3667.4	3572.0
66°	2459.5	2481.7	2530.3	2613.1	2743.9	2915.0	3100.4	3358.4	3591.2	3683.6	3586.4
67.5°	2317.3	2332.9	2388.1	2479.9	2620.3	2789.6	2990.0	3262.4	3525.2	3623.0	3526.4
70°	2027.5	2033.5	2078.5	2156.5	2265.1	2438.5	2620.3	2882.6	3124.4	3261.8	3156.2
72.5°	1509.1	1517.5	1591.9	1734.1	1875.1	1973.5	2080.9	2290.9	2446.9	2575.3	2554.9
75°	726.0	729.6	779.4	987.1	1261.9	1379.5	1479.1	1641.7	1701.1	1808.5	1792.3
77.5°	460.2	468.0	500.4	550.8	706.8	846.6	925.3	1018.3	1035.7	1126.3	1073.5
80°	126.6	147.0	179.4	264.0	453.0	540.0	575.4	571.8	575.4	547.8	529.8
82.5°	25.8	25.2	30.6	47.4	199.8	314.4	339.6	289.2	287.4	276.6	285.6
85°	6.6	6.0	7.2	15.0	34.2	93.0	117.0	65.4	49.8	47.4	42.0
87.5°	1.8	1.8	1.8	3.0	3.6	4.8	6.6	4.8	3.6	3.6	3.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
2.5°	90.0	90.0	89.4	88.8	88.8	88.2	87.6	87.0	86.4	85.8	85.2
5°	95.4	94.2	92.4	91.2	90.0	88.2	87.0	85.8	84.6	84.0	82.8
7.5°	102.6	99.6	97.2	93.6	91.2	88.8	86.4	84.6	82.8	81.6	80.4
10°	111.6	106.8	102.0	97.2	93.0	89.4	85.8	82.8	81.0	79.2	78.0
12.5°	123.0	115.8	109.2	102.0	95.4	90.0	85.2	81.6	79.2	77.4	75.6
15°	141.6	130.2	118.8	108.0	99.6	91.2	84.6	80.4	77.4	75.6	73.8
17.5°	171.0	150.6	132.6	117.6	103.8	93.0	84.6	79.2	75.6	73.2	71.4
20°	213.6	180.0	151.2	129.6	111.6	96.0	84.6	77.4	73.8	70.8	69.0
22.5°	264.0	222.0	182.4	146.4	120.6	100.2	84.6	75.6	71.4	69.0	66.6
25°	337.8	282.0	228.0	177.6	135.6	106.8	86.4	74.4	69.6	66.6	64.2
27.5°	424.2	357.0	289.8	219.0	158.4	116.4	88.8	73.2	67.8	64.2	61.8
30°	522.6	448.2	366.0	274.2	188.4	129.0	93.0	72.6	65.4	61.8	58.8
32.5°	629.4	550.8	460.8	345.0	232.8	148.2	98.4	72.0	63.0	58.8	55.2
35°	756.6	683.4	573.6	444.6	301.8	181.2	110.4	73.2	60.6	55.8	51.6
37.5°	895.8	817.8	701.4	550.2	370.2	218.4	119.4	71.4	56.4	51.6	47.4
40°	1036.3	946.9	828.6	661.2	457.2	264.0	130.8	69.6	52.2	47.4	43.2
42.5°	1173.1	1078.9	950.5	775.2	549.0	318.0	145.2	69.6	49.2	43.2	39.0
45°	1316.5	1203.1	1062.7	884.4	640.2	379.8	165.6	69.0	45.6	39.6	34.8
47.5°	1452.1	1317.7	1156.3	980.5	738.0	447.6	189.0	69.6	42.6	36.0	31.8
50°	1580.5	1426.3	1252.3	1066.3	831.6	520.8	217.8	70.2	39.6	33.0	28.8
52.5°	1720.9	1549.9	1355.5	1154.5	924.1	594.6	251.4	71.4	36.6	30.0	26.4
55°	1894.9	1705.3	1482.7	1262.5	1021.9	669.0	283.8	72.6	33.6	27.6	24.0
57.5°	2145.7	1929.7	1689.1	1424.5	1151.5	753.6	317.4	75.6	31.2	25.8	22.2
60°	2553.7	2296.3	2018.5	1706.5	1345.3	868.2	366.0	82.2	28.2	23.4	21.0
62.5°	3044.6	2734.9	2381.5	2002.9	1527.7	945.7	398.4	89.4	25.8	21.6	19.8
65°	3291.8	2901.8	2494.3	2085.7	1551.1	922.9	385.2	87.0	22.8	19.2	16.8
66°	3299.0	2892.8	2478.7	2067.7	1527.1	895.2	372.6	85.8	22.2	18.6	15.6
67.5°	3230.6	2815.4	2395.9	1986.1	1456.3	841.8	349.8	81.6	20.4	16.8	13.8
70°	2892.8	2488.3	2103.7	1725.1	1252.9	709.2	293.4	72.0	18.0	15.0	12.6
72.5°	2305.9	1976.5	1652.5	1357.3	973.9	532.2	231.6	58.8	15.6	13.2	10.8
75°	1610.5	1339.9	1093.3	882.6	612.0	318.6	150.0	41.4	13.2	10.8	9.0
77.5°	898.8	712.8	538.8	410.4	244.2	99.6	49.8	21.0	11.4	8.4	7.2
80°	457.2	339.0	258.0	190.2	112.8	51.6	25.2	13.8	9.0	6.6	6.0
82.5°	265.8	195.0	155.4	123.0	77.4	39.0	20.4	10.2	6.0	4.8	5.4
85°	59.4	78.6	66.6	56.4	41.4	24.6	14.4	6.6	4.2	4.2	4.8
87.5°	4.8	6.6	6.0	7.8	8.4	7.8	6.0	3.6	3.0	3.6	3.6
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
2.5°	84.6	84.0	84.0	83.4	82.8	82.8	82.8	82.2	82.8	82.8	82.8
5°	82.2	81.6	81.0	80.4	79.8	79.2	79.2	78.6	78.6	78.6	79.2
7.5°	79.8	78.6	78.0	76.8	76.2	75.6	75.6	75.0	75.0	75.0	75.0
10°	76.8	75.6	74.4	73.8	73.2	72.0	72.0	71.4	70.8	70.8	70.8
12.5°	74.4	73.2	72.0	70.8	69.6	69.0	68.4	67.8	67.2	67.2	67.2
15°	72.0	70.2	69.0	67.8	66.6	65.4	64.8	64.2	63.6	63.0	63.0
17.5°	69.6	67.8	66.0	64.8	63.6	62.4	61.8	60.0	60.0	59.4	59.4
20°	66.6	64.8	63.0	61.8	60.6	59.4	58.2	57.0	55.8	55.2	55.2
22.5°	64.2	62.4	60.6	58.8	57.0	55.2	54.0	52.8	52.2	51.6	51.0
25°	61.8	59.4	57.0	55.2	53.4	51.6	50.4	49.2	48.0	47.4	47.4
27.5°	58.8	56.4	54.0	51.6	49.8	48.0	46.8	45.0	44.4	43.8	43.2
30°	55.8	52.8	50.4	48.0	46.2	43.8	42.6	41.4	40.2	40.2	39.6
32.5°	52.2	49.2	46.8	44.4	42.0	40.2	39.0	37.8	37.2	36.0	36.0
35°	48.6	45.6	42.6	40.2	38.4	36.6	35.4	34.2	33.0	32.4	32.4
37.5°	44.4	41.4	39.0	36.6	34.8	33.0	31.8	30.6	30.0	29.4	28.8
40°	39.6	36.6	34.8	33.0	31.2	30.0	28.2	27.0	26.4	25.8	25.2
42.5°	35.4	32.4	31.2	30.0	28.2	27.0	25.2	24.0	22.8	22.2	21.6
45°	31.8	29.4	28.2	27.0	25.2	23.4	22.2	21.0	19.8	19.2	19.2
47.5°	28.2	26.4	25.2	24.0	22.2	21.0	19.2	18.6	17.4	17.4	17.4
50°	25.8	24.0	22.8	21.6	20.4	18.6	17.4	16.8	16.2	16.2	16.8
52.5°	24.0	22.2	21.0	19.8	18.6	17.4	16.2	15.6	15.6	16.2	16.8
55°	22.2	20.4	19.2	18.0	16.8	16.2	15.0	15.0	15.6	16.2	16.8
57.5°	21.0	18.6	17.4	16.8	15.6	15.0	15.0	15.0	15.6	16.2	17.4
60°	19.2	16.8	15.6	15.6	14.4	14.4	14.4	15.0	15.6	16.8	17.4
62.5°	16.8	15.0	14.4	14.4	13.8	13.8	14.4	15.0	16.2	16.8	17.4
65°	14.4	13.2	13.2	13.2	13.2	13.8	14.4	15.0	15.6	16.8	17.4
66°	13.2	12.6	12.6	13.2	13.2	13.8	14.4	15.0	15.6	16.2	16.8
67.5°	12.6	12.0	12.0	12.6	13.2	13.2	13.8	15.0	15.6	16.2	16.2
70°	10.8	10.8	10.8	12.0	12.6	13.2	13.8	14.4	15.0	15.6	16.2
72.5°	9.6	9.6	10.2	10.8	12.0	12.6	13.2	13.8	15.0	15.6	15.6
75°	8.4	8.4	9.6	10.2	11.4	12.0	13.2	13.8	14.4	15.0	15.0
77.5°	7.2	7.8	9.0	10.2	10.8	12.0	12.6	13.2	13.8	14.4	14.4
80°	6.6	7.8	9.0	9.6	10.2	10.8	11.4	12.6	13.2	13.8	14.4
82.5°	6.6	7.2	8.4	9.0	9.6	10.8	11.4	12.0	12.6	13.2	13.8
85°	5.4	6.6	7.2	8.4	9.0	10.2	10.8	10.8	11.4	12.0	12.6
87.5°	4.2	4.8	4.8	6.0	6.6	7.8	9.0	9.0	9.6	10.2	10.8
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):**

	165°	170°	175°	180°
0°	87.0	87.0	87.0	87.0
2.5°	82.8	83.4	83.4	83.4
5°	79.2	79.2	79.2	79.2
7.5°	75.0	75.0	75.0	75.0
10°	70.8	70.8	71.4	70.8
12.5°	67.2	66.6	66.6	66.6
15°	63.0	63.0	62.4	63.0
17.5°	58.8	58.8	58.2	58.2
20°	54.6	54.6	54.6	54.6
22.5°	51.0	50.4	50.4	50.4
25°	46.8	46.8	46.8	46.8
27.5°	43.2	43.2	43.2	43.2
30°	39.6	39.6	39.0	39.0
32.5°	36.0	36.0	36.0	36.0
35°	32.4	32.4	31.8	31.8
37.5°	28.2	28.2	28.2	28.2
40°	24.6	24.6	24.6	24.6
42.5°	21.6	21.6	21.0	21.0
45°	18.6	18.6	18.6	18.6
47.5°	17.4	17.4	17.4	17.4
50°	16.8	17.4	17.4	17.4
52.5°	17.4	17.4	17.4	17.4
55°	17.4	18.0	18.0	18.0
57.5°	17.4	18.0	18.0	18.6
60°	18.0	18.6	18.6	18.6
62.5°	18.0	18.6	18.6	18.6
65°	17.4	18.0	18.0	18.0
66°	17.4	17.4	17.4	18.0
67.5°	16.8	17.4	17.4	17.4
70°	16.2	16.8	16.8	17.4
72.5°	16.2	16.8	16.8	16.8
75°	15.6	15.6	16.2	16.2
77.5°	15.0	15.0	15.6	15.6
80°	14.4	15.0	15.0	15.0
82.5°	13.8	14.4	14.4	14.4
85°	12.6	13.2	13.2	13.2
87.5°	10.8	10.8	11.4	11.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)