

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: P181529

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P181529  
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: ICM-E02-LED-E1-T4-HSS  
Description: ICON SITE MEDIUM 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: 3598.2 lumens  
Efficiency: N/A  
Efficacy: 69.1 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

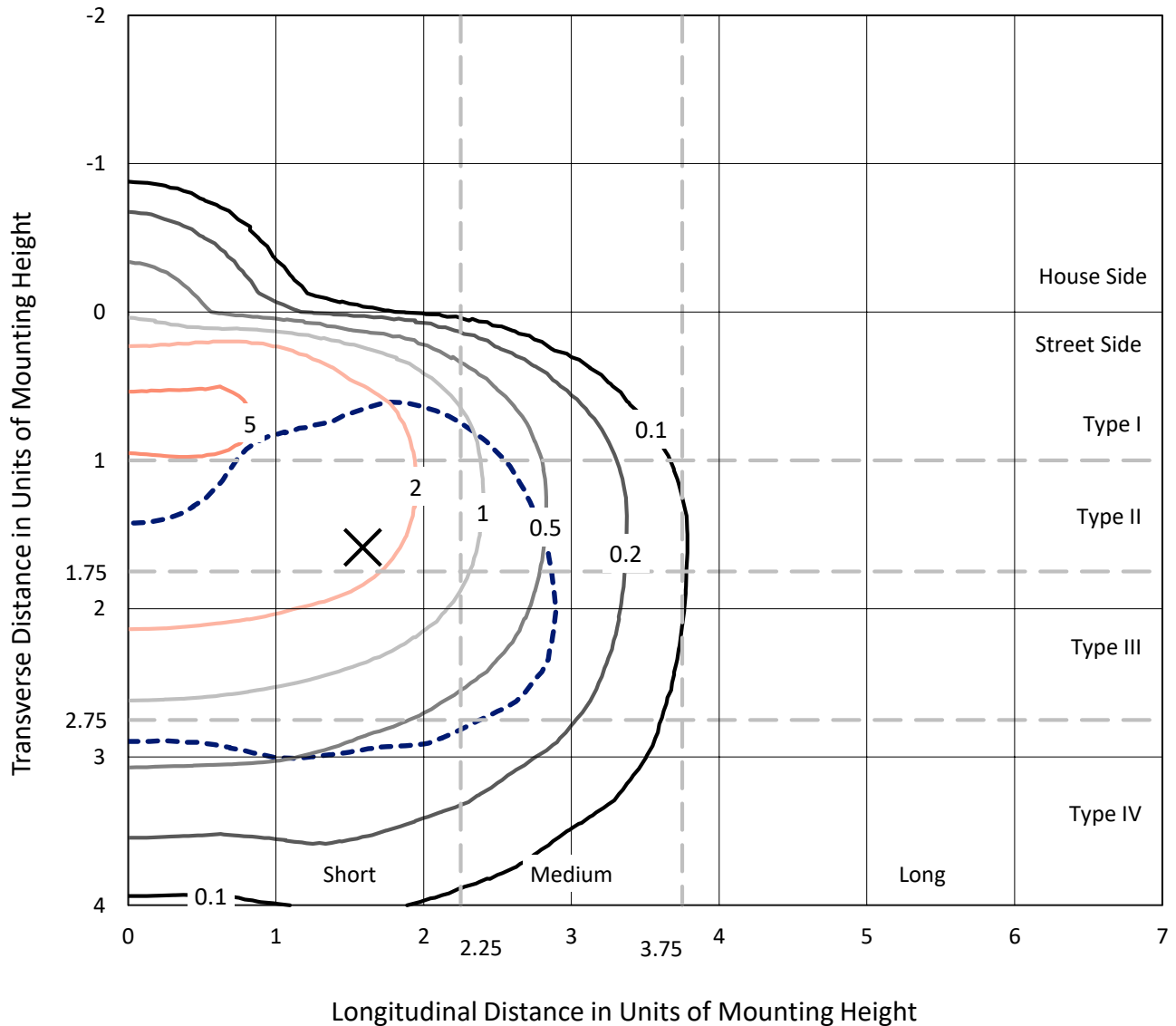


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

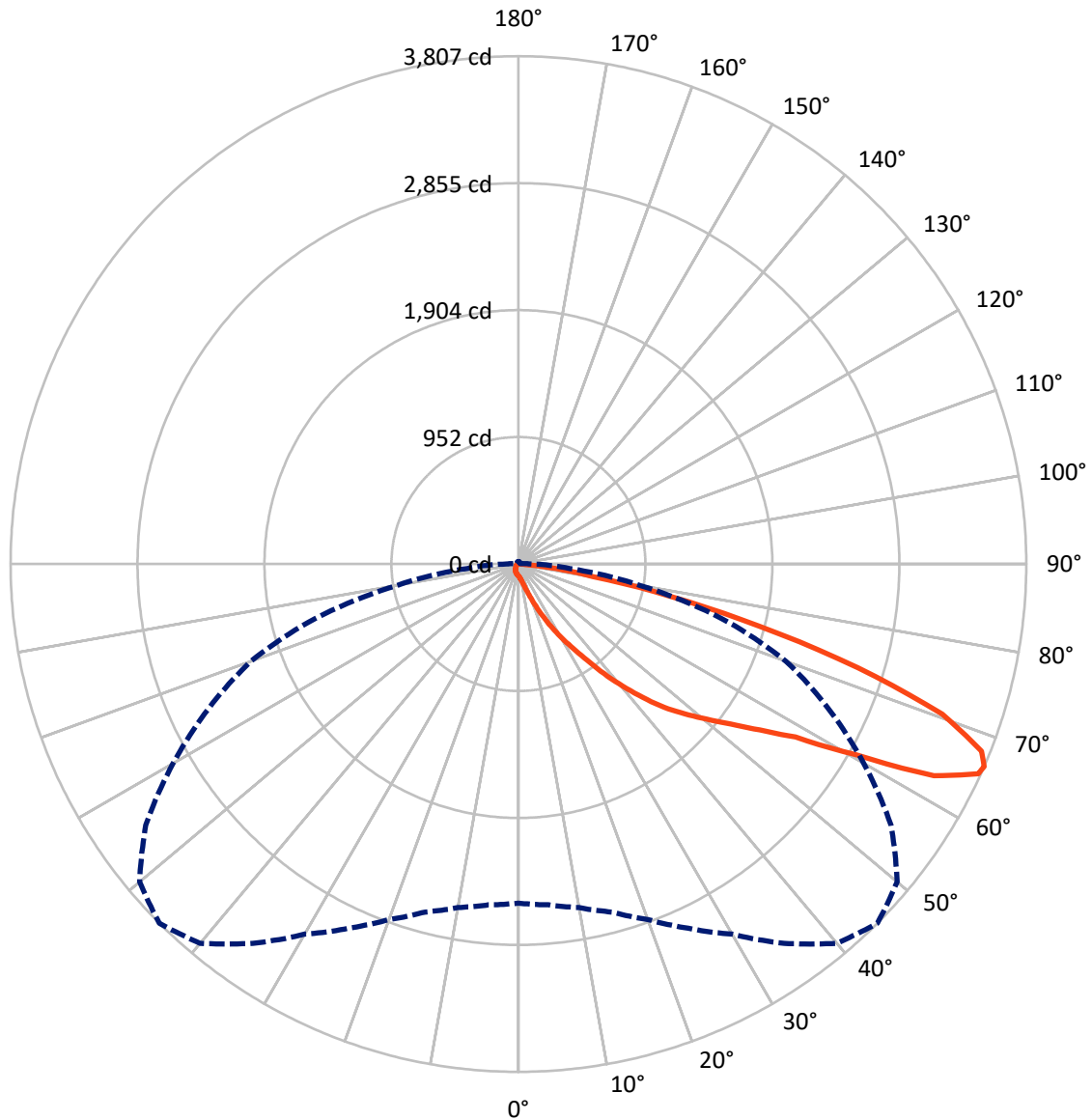


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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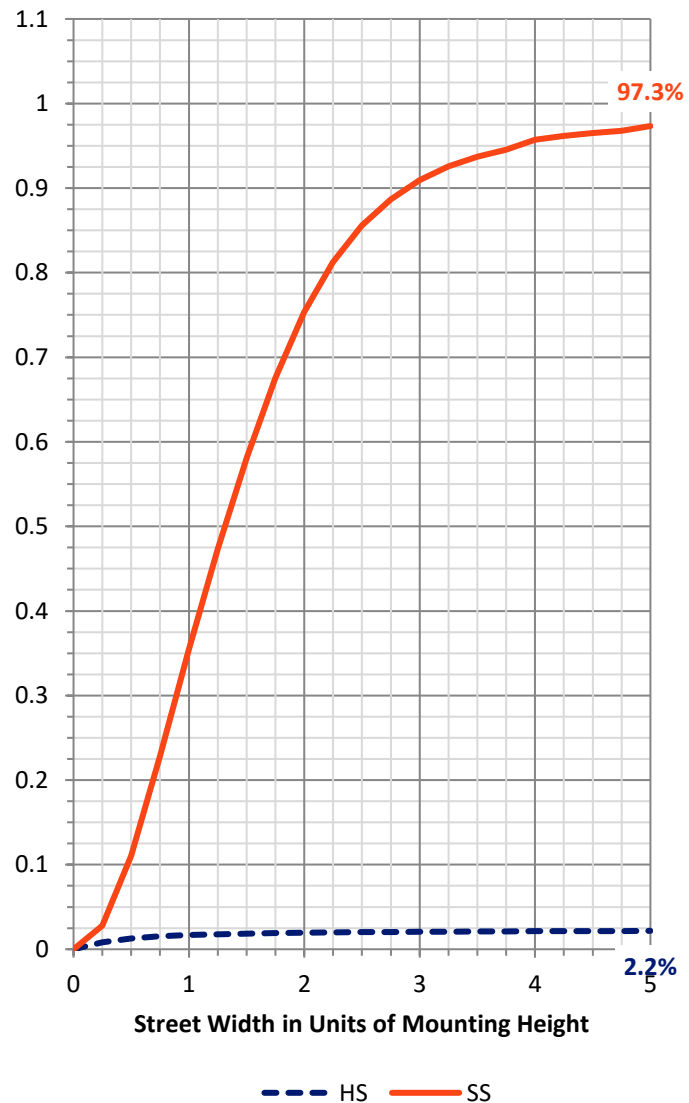
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	81.6	0.0	81.6
	% Fixture	2.3	0.0	2.3
<b>Street Side</b>	Lumens	3516.7	0.0	3516.7
	% Fixture	97.7	0.0	97.7
<b>Total</b>	Lumens	3598.2	0.0	3598.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	9.1	0.3
10°-20°	36.7	1.0
20°-30°	107.5	3.0
30°-40°	251.1	7.0
40°-50°	471.7	13.1
50°-60°	781.7	21.7
60°-70°	1240.9	34.5
70°-80°	641.7	17.8
80°-90°	58.0	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°	3598.2	100.0
0°-180°	3598.2	100.0



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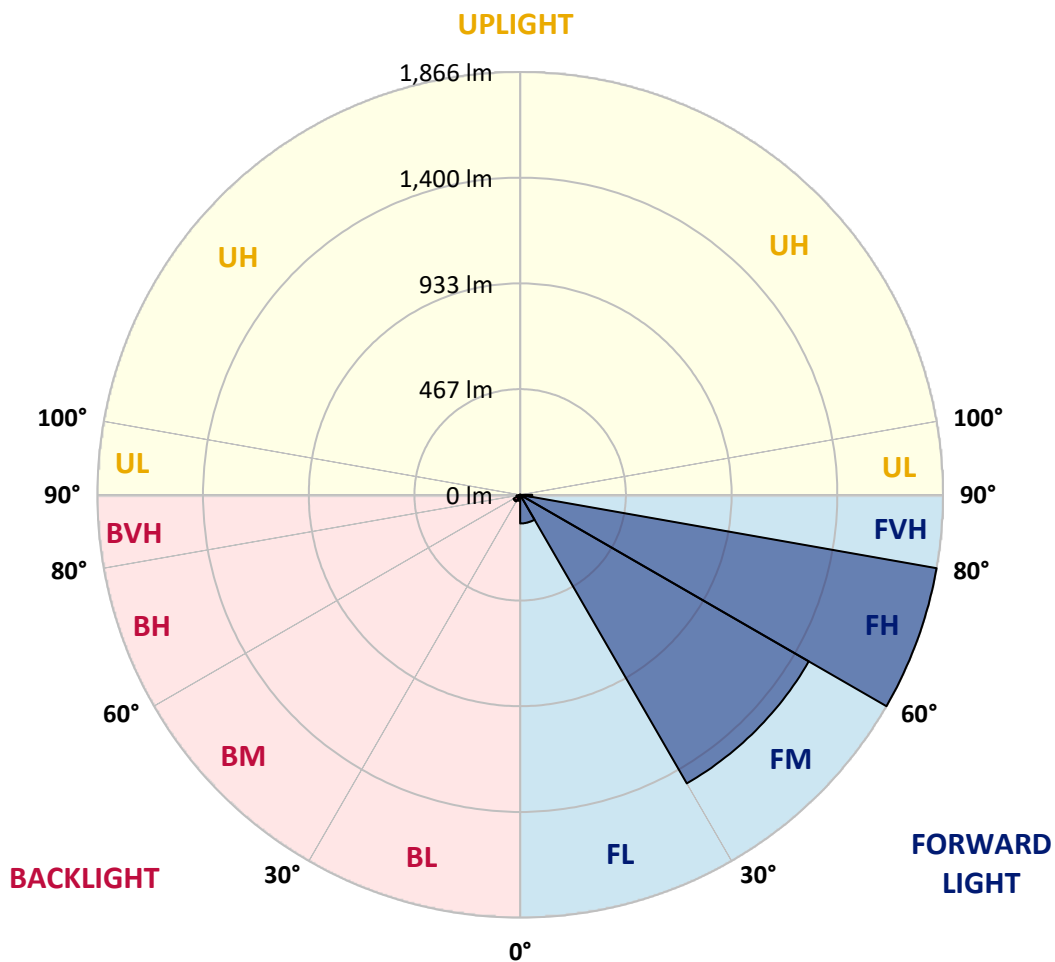
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	126.6	3.5			
FM	(30°-60°)	1470.6	40.9			
FH	(60°-80°)	1866.1	51.9			G2/5000
FVH	(80°-90°)	53.4	1.5			G1/100
BL	(0°-30°)	26.6	0.7	B0/110		
BM	(30°-60°)	33.8	0.9	B0/220		
BH	(60°-80°)	16.5	0.5	B0/110		G0/110
BVH	(80°-90°)	4.6	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°	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
2.5°	97.4	97.4	97.4	97.4	96.7	96.1	95.5	94.9	94.2	94.2	93.7
5°	110.4	111.0	110.4	109.8	108.6	107.9	106.0	104.8	103.0	102.3	100.5
7.5°	128.4	127.7	128.4	126.5	124.0	123.4	120.9	117.9	115.3	111.6	109.1
10°	154.4	153.8	154.4	150.7	147.0	143.9	139.5	135.8	130.2	125.9	120.9
12.5°	196.0	196.0	194.7	189.8	184.8	178.0	171.2	163.1	153.2	144.5	136.5
15°	259.8	256.7	251.2	248.1	239.4	228.8	221.4	205.3	191.0	177.4	161.2
17.5°	336.7	330.5	326.2	319.4	308.2	294.6	282.1	258.6	244.4	222.0	199.1
20°	424.8	417.4	416.1	405.6	393.8	378.9	360.9	333.0	308.8	280.9	248.7
22.5°	514.7	516.0	511.0	503.5	491.8	474.4	446.5	421.1	391.4	356.0	314.4
25°	615.2	614.6	610.2	601.6	592.8	571.2	548.8	524.7	489.3	444.0	394.4
27.5°	709.5	708.8	698.3	698.9	682.1	674.1	652.4	626.3	583.5	545.8	491.8
30°	808.1	801.9	795.1	790.1	778.3	764.0	752.8	721.9	689.6	644.9	600.9
32.5°	907.9	901.1	903.0	896.7	887.4	873.2	856.5	831.0	796.3	752.8	711.9
35°	1030.1	1027.0	1022.1	1023.9	1022.1	1011.4	997.2	963.7	925.9	884.4	842.1
37.5°	1120.7	1117.5	1120.7	1133.7	1136.8	1143.5	1133.0	1116.3	1089.0	1043.7	999.7
40°	1204.4	1204.9	1219.3	1235.4	1246.5	1268.8	1272.6	1265.8	1244.0	1202.5	1144.8
42.5°	1279.4	1288.7	1301.7	1328.4	1352.6	1384.2	1407.7	1411.5	1395.4	1368.1	1309.8
45°	1363.1	1371.2	1391.6	1423.3	1456.8	1495.8	1533.7	1553.5	1552.3	1533.0	1470.4
47.5°	1456.8	1467.3	1489.6	1515.6	1560.3	1604.4	1653.3	1688.7	1703.5	1676.9	1616.1
50°	1570.2	1574.6	1593.8	1627.3	1668.2	1719.1	1772.4	1823.9	1853.0	1828.2	1765.6
52.5°	1704.8	1706.1	1724.0	1755.1	1787.9	1843.7	1895.8	1967.2	2004.9	1991.4	1916.3
55°	1889.6	1885.9	1898.3	1924.9	1951.6	2005.6	2057.7	2138.3	2193.5	2194.7	2114.7
57.5°	2142.1	2133.3	2141.4	2162.5	2192.3	2242.5	2308.2	2379.5	2453.3	2448.4	2382.6
60°	2493.7	2490.5	2505.4	2540.8	2591.6	2643.7	2718.2	2814.2	2879.4	2901.7	2832.9
62.5°	2727.5	2736.1	2770.2	2824.9	2922.8	3030.7	3169.0	3316.0	3440.0	3495.8	3401.0
65°	2627.0	2641.2	2694.6	2775.2	2904.9	3066.7	3250.3	3491.5	3705.4	3790.4	3691.8
66°	2542.1	2564.9	2615.2	2700.8	2836.0	3012.8	3204.4	3471.0	3711.7	3807.2	3706.7
67.5°	2395.1	2411.2	2468.2	2563.1	2708.2	2883.1	3090.3	3371.8	3643.5	3744.5	3644.7
70°	2095.5	2101.7	2148.2	2228.9	2341.1	2520.3	2708.2	2979.3	3229.1	3371.2	3262.1
72.5°	1559.7	1568.4	1645.3	1792.3	1938.0	2039.7	2150.7	2367.7	2529.0	2661.7	2640.7
75°	750.4	754.1	805.6	1020.2	1304.2	1425.8	1528.7	1696.8	1758.2	1869.1	1852.4
77.5°	475.6	483.7	517.2	569.3	730.5	875.1	956.3	1052.4	1070.4	1164.0	1109.5
80°	130.9	151.9	185.4	272.8	468.2	558.1	594.7	591.0	594.7	566.2	547.6
82.5°	26.7	26.0	31.6	49.0	206.5	324.9	351.0	298.9	297.0	285.9	295.2
85°	6.8	6.2	7.4	15.5	35.3	96.1	120.9	67.6	51.4	49.0	43.4
87.5°	1.9	1.9	1.9	3.1	3.7	4.9	6.8	4.9	3.7	3.7	3.7
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
2.5°	93.0	93.0	92.4	91.8	91.8	91.2	90.5	90.0	89.3	88.7	88.1
5°	98.6	97.4	95.5	94.2	93.0	91.2	90.0	88.7	87.4	86.8	85.6
7.5°	106.0	103.0	100.5	96.7	94.2	91.8	89.3	87.4	85.6	84.4	83.1
10°	115.3	110.4	105.4	100.5	96.1	92.4	88.7	85.6	83.7	81.9	80.7
12.5°	127.2	119.7	112.8	105.4	98.6	93.0	88.1	84.4	81.9	80.0	78.1
15°	146.3	134.6	122.8	111.6	103.0	94.2	87.4	83.1	80.0	78.1	76.3
17.5°	176.7	155.6	137.0	121.6	107.3	96.1	87.4	81.9	78.1	75.6	73.8
20°	220.7	186.0	156.3	134.0	115.3	99.3	87.4	80.0	76.3	73.2	71.3
22.5°	272.8	229.5	188.6	151.3	124.7	103.5	87.4	78.1	73.8	71.3	68.8
25°	349.1	291.4	235.6	183.5	140.2	110.4	89.3	76.9	71.9	68.8	66.3
27.5°	438.4	369.0	299.5	226.3	163.7	120.3	91.8	75.6	70.0	66.3	63.9
30°	540.2	463.3	378.3	283.4	194.7	133.3	96.1	75.1	67.6	63.9	60.7
32.5°	650.5	569.3	476.3	356.6	240.7	153.2	101.7	74.4	65.1	60.7	57.0
35°	782.1	706.3	592.8	459.5	311.9	187.3	114.1	75.6	62.6	57.7	53.3
37.5°	925.9	845.3	724.9	568.7	382.6	225.8	123.4	73.8	58.3	53.3	49.0
40°	1071.0	978.6	856.5	683.4	472.6	272.8	135.2	71.9	54.0	49.0	44.7
42.5°	1212.4	1115.1	982.3	801.2	567.4	328.7	150.0	71.9	50.9	44.7	40.3
45°	1360.7	1243.4	1098.3	914.1	661.7	392.6	171.2	71.3	47.2	40.9	36.0
47.5°	1500.8	1361.9	1195.1	1013.3	762.8	462.6	195.4	71.9	44.0	37.2	32.8
50°	1633.5	1474.1	1294.2	1102.1	859.5	538.3	225.1	72.6	40.9	34.1	29.8
52.5°	1778.6	1601.9	1400.9	1193.2	955.1	614.6	259.8	73.8	37.9	31.0	27.3
55°	1958.4	1762.5	1532.4	1304.8	1056.1	691.4	293.3	75.1	34.7	28.6	24.8
57.5°	2217.7	1994.4	1745.8	1472.3	1190.1	778.9	328.1	78.1	32.3	26.7	23.0
60°	2639.4	2373.3	2086.2	1763.7	1390.4	897.4	378.3	84.9	29.1	24.2	21.7
62.5°	3146.7	2826.7	2461.4	2070.1	1578.9	977.4	411.8	92.4	26.7	22.3	20.5
65°	3402.2	2999.1	2578.0	2155.6	1603.1	953.8	398.1	90.0	23.5	19.8	17.4
66°	3409.6	2989.8	2561.9	2137.0	1578.3	925.3	385.1	88.7	23.0	19.3	16.1
67.5°	3338.9	2909.8	2476.3	2052.8	1505.1	870.1	361.6	84.4	21.1	17.4	14.2
70°	2989.8	2571.8	2174.2	1783.0	1294.9	733.0	303.3	74.4	18.6	15.5	13.0
72.5°	2383.3	2042.8	1707.9	1402.8	1006.5	550.0	239.4	60.7	16.1	13.7	11.2
75°	1664.5	1384.8	1130.0	912.3	632.6	329.3	155.1	42.8	13.7	11.2	9.3
77.5°	929.0	736.7	556.9	424.2	252.4	103.0	51.4	21.7	11.8	8.7	7.4
80°	472.6	350.4	266.7	196.6	116.6	53.3	26.0	14.2	9.3	6.8	6.2
82.5°	274.7	201.6	160.7	127.2	80.0	40.3	21.1	10.5	6.2	4.9	5.6
85°	61.4	81.2	68.8	58.3	42.8	25.4	14.9	6.8	4.4	4.4	4.9
87.5°	4.9	6.8	6.2	8.1	8.7	8.1	6.2	3.7	3.1	3.7	3.7
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
2.5°	87.4	86.8	86.8	86.2	85.6	85.6	85.6	84.9	85.6	85.6	85.6
5°	84.9	84.4	83.7	83.1	82.5	81.9	81.9	81.2	81.2	81.2	81.9
7.5°	82.5	81.2	80.7	79.3	78.8	78.1	78.1	77.5	77.5	77.5	77.5
10°	79.3	78.1	76.9	76.3	75.6	74.4	74.4	73.8	73.2	73.2	73.2
12.5°	76.9	75.6	74.4	73.2	71.9	71.3	70.7	70.0	69.5	69.5	69.5
15°	74.4	72.6	71.3	70.0	68.8	67.6	67.0	66.3	65.8	65.1	65.1
17.5°	71.9	70.0	68.2	67.0	65.8	64.5	63.9	62.0	62.0	61.4	61.4
20°	68.8	67.0	65.1	63.9	62.6	61.4	60.2	58.9	57.7	57.0	57.0
22.5°	66.3	64.5	62.6	60.7	58.9	57.0	55.8	54.6	54.0	53.3	52.7
25°	63.9	61.4	58.9	57.0	55.2	53.3	52.1	50.9	49.6	49.0	49.0
27.5°	60.7	58.3	55.8	53.3	51.4	49.6	48.4	46.5	45.9	45.3	44.7
30°	57.7	54.6	52.1	49.6	47.7	45.3	44.0	42.8	41.6	41.6	40.9
32.5°	54.0	50.9	48.4	45.9	43.4	41.6	40.3	39.1	38.4	37.2	37.2
35°	50.2	47.2	44.0	41.6	39.7	37.9	36.6	35.3	34.1	33.5	33.5
37.5°	45.9	42.8	40.3	37.9	36.0	34.1	32.8	31.6	31.0	30.4	29.8
40°	40.9	37.9	36.0	34.1	32.3	31.0	29.1	27.9	27.3	26.7	26.0
42.5°	36.6	33.5	32.3	31.0	29.1	27.9	26.0	24.8	23.5	23.0	22.3
45°	32.8	30.4	29.1	27.9	26.0	24.2	23.0	21.7	20.5	19.8	19.8
47.5°	29.1	27.3	26.0	24.8	23.0	21.7	19.8	19.3	18.0	18.0	18.0
50°	26.7	24.8	23.5	22.3	21.1	19.3	18.0	17.4	16.7	16.7	17.4
52.5°	24.8	23.0	21.7	20.5	19.3	18.0	16.7	16.1	16.1	16.7	17.4
55°	23.0	21.1	19.8	18.6	17.4	16.7	15.5	15.5	16.1	16.7	17.4
57.5°	21.7	19.3	18.0	17.4	16.1	15.5	15.5	15.5	16.1	16.7	18.0
60°	19.8	17.4	16.1	16.1	14.9	14.9	14.9	15.5	16.1	17.4	18.0
62.5°	17.4	15.5	14.9	14.9	14.2	14.2	14.9	15.5	16.7	17.4	18.0
65°	14.9	13.7	13.7	13.7	13.7	14.2	14.9	15.5	16.1	17.4	18.0
66°	13.7	13.0	13.0	13.7	13.7	14.2	14.9	15.5	16.1	16.7	17.4
67.5°	13.0	12.4	12.4	13.0	13.7	13.7	14.2	15.5	16.1	16.7	16.7
70°	11.2	11.2	11.2	12.4	13.0	13.7	14.2	14.9	15.5	16.1	16.7
72.5°	10.0	10.0	10.5	11.2	12.4	13.0	13.7	14.2	15.5	16.1	16.1
75°	8.7	8.7	10.0	10.5	11.8	12.4	13.7	14.2	14.9	15.5	15.5
77.5°	7.4	8.1	9.3	10.5	11.2	12.4	13.0	13.7	14.2	14.9	14.9
80°	6.8	8.1	9.3	10.0	10.5	11.2	11.8	13.0	13.7	14.2	14.9
82.5°	6.8	7.4	8.7	9.3	10.0	11.2	11.8	12.4	13.0	13.7	14.2
85°	5.6	6.8	7.4	8.7	9.3	10.5	11.2	11.2	11.8	12.4	13.0
87.5°	4.4	4.9	4.9	6.2	6.8	8.1	9.3	9.3	10.0	10.5	11.2
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°	90.0	90.0	90.0	90.0
2.5°	85.6	86.2	86.2	86.2
5°	81.9	81.9	81.9	81.9
7.5°	77.5	77.5	77.5	77.5
10°	73.2	73.2	73.8	73.2
12.5°	69.5	68.8	68.8	68.8
15°	65.1	65.1	64.5	65.1
17.5°	60.7	60.7	60.2	60.2
20°	56.5	56.5	56.5	56.5
22.5°	52.7	52.1	52.1	52.1
25°	48.4	48.4	48.4	48.4
27.5°	44.7	44.7	44.7	44.7
30°	40.9	40.9	40.3	40.3
32.5°	37.2	37.2	37.2	37.2
35°	33.5	33.5	32.8	32.8
37.5°	29.1	29.1	29.1	29.1
40°	25.4	25.4	25.4	25.4
42.5°	22.3	22.3	21.7	21.7
45°	19.3	19.3	19.3	19.3
47.5°	18.0	18.0	18.0	18.0
50°	17.4	18.0	18.0	18.0
52.5°	18.0	18.0	18.0	18.0
55°	18.0	18.6	18.6	18.6
57.5°	18.0	18.6	18.6	19.3
60°	18.6	19.3	19.3	19.3
62.5°	18.6	19.3	19.3	19.3
65°	18.0	18.6	18.6	18.6
66°	18.0	18.0	18.0	18.6
67.5°	17.4	18.0	18.0	18.0
70°	16.7	17.4	17.4	18.0
72.5°	16.7	17.4	17.4	17.4
75°	16.1	16.1	16.7	16.7
77.5°	15.5	15.5	16.1	16.1
80°	14.9	15.5	15.5	15.5
82.5°	14.2	14.9	14.9	14.9
85°	13.0	13.7	13.7	13.7
87.5°	11.2	11.2	11.8	11.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)