

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: P181554

Luminaire Tested: **ICM-F04-LED-E1-T4-HSS**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P181554  
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-F04-LED-E1-T4-HSS  
Description: ICON SITE MEDIUM LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ HOUSE SIDE SHIELD  
Light Source: (28) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5940.8 lumens  
Efficiency: N/A  
Efficacy: 58.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G2

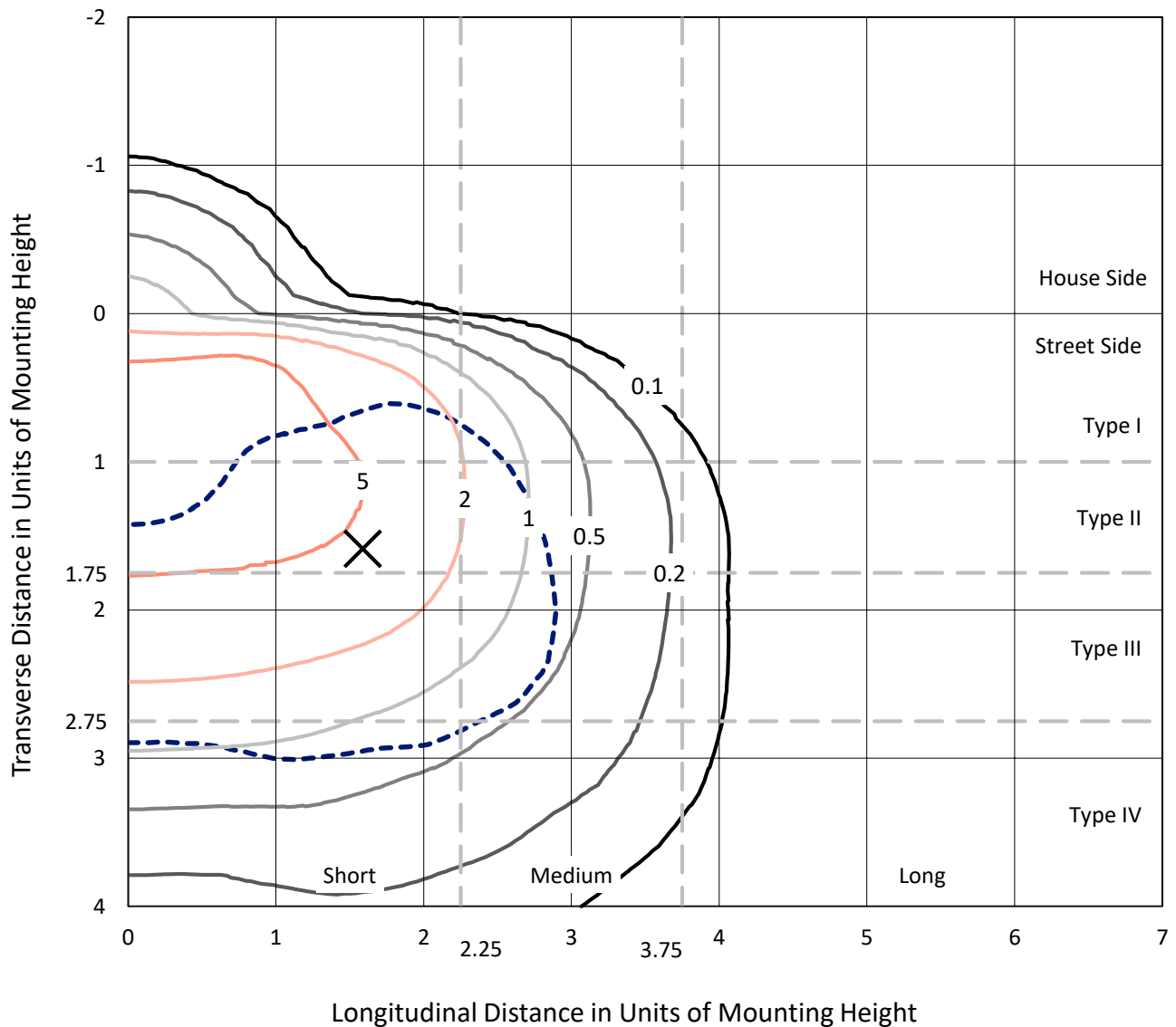
Input Watts (W): 102.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

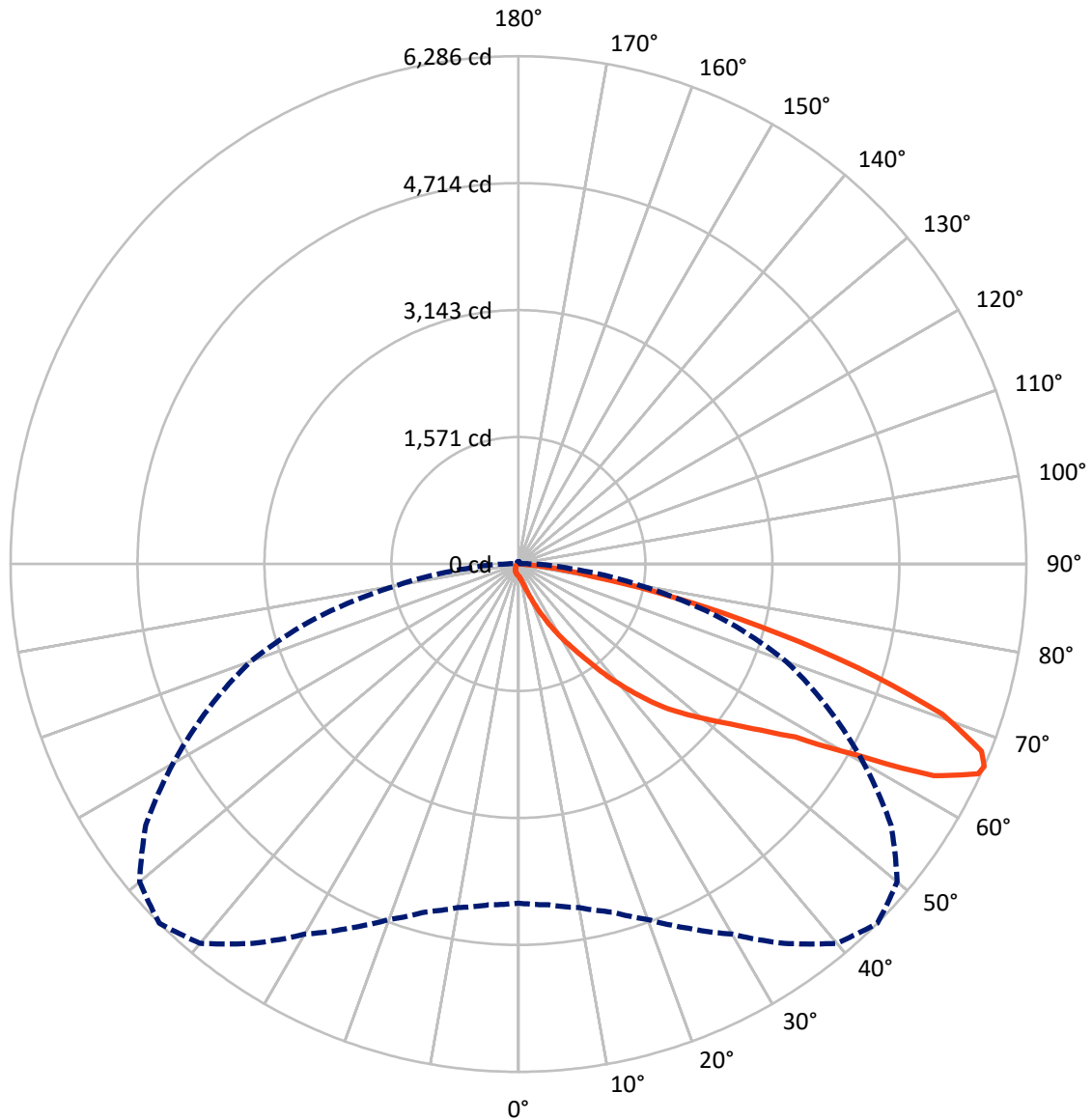


Based on 10 foot mounting height. Maximum calculated value = 9.4 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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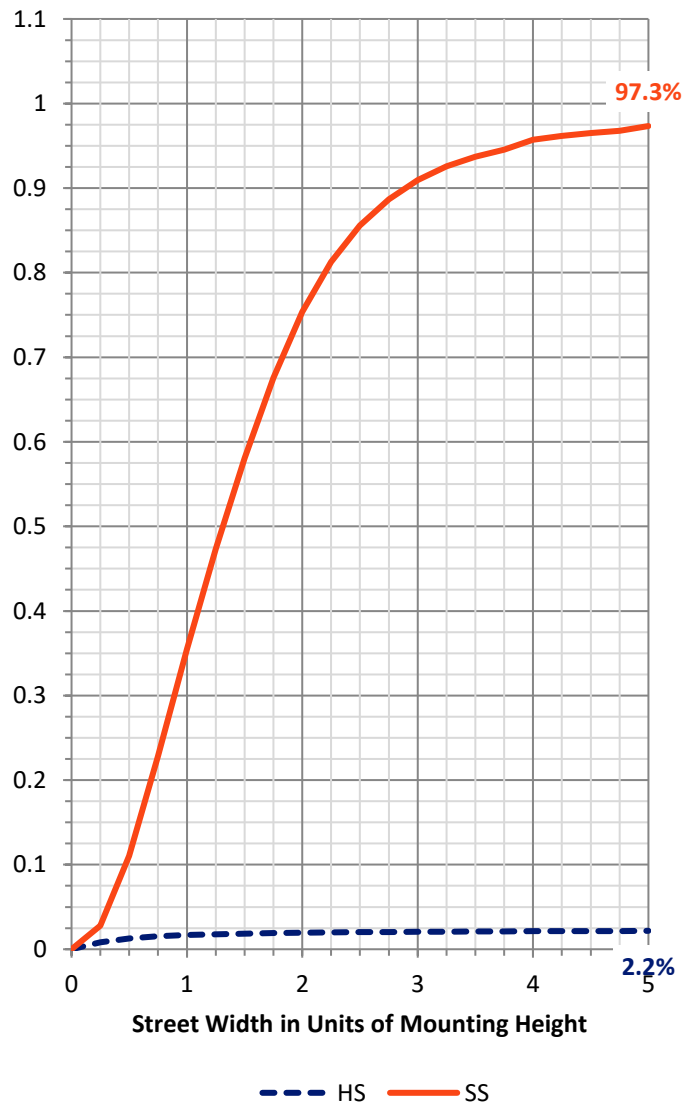
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	134.6	0.0	134.6
	% Fixture	2.3	0.0	2.3
<b>Street Side</b>	Lumens	5806.2	0.0	5806.2
	% Fixture	97.7	0.0	97.7
<b>Total</b>	Lumens	5940.8	0.0	5940.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.9	0.3
10°-20°	60.6	1.0
20°-30°	177.5	3.0
30°-40°	414.6	7.0
40°-50°	778.7	13.1
50°-60°	1290.5	21.7
60°-70°	2048.7	34.5
70°-80°	1059.5	17.8
80°-90°	95.7	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°	5940.8	100.0
0°-180°	5940.8	100.0



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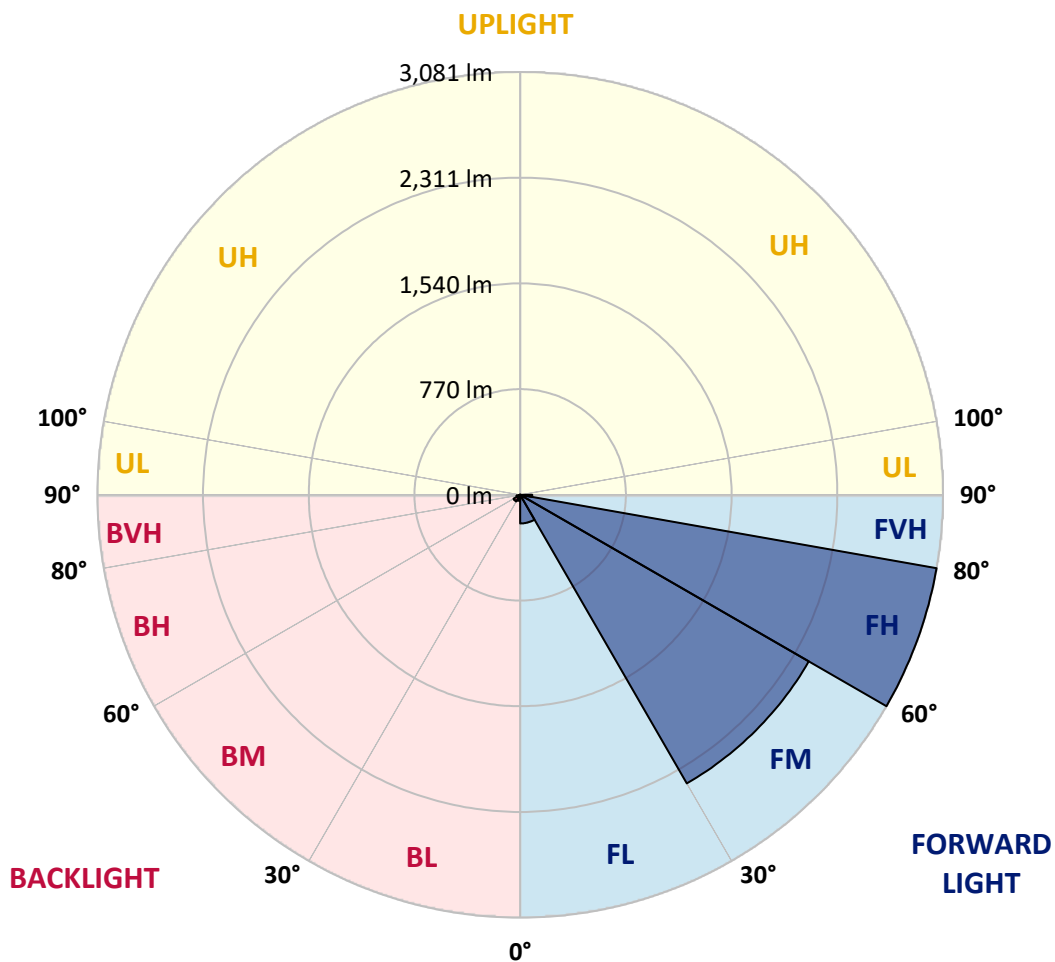
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	209.0	3.5			
FM	(30°-60°)	2428.0	40.9			
FH	(60°-80°)	3081.0	51.9			G2/5000
FVH	(80°-90°)	88.1	1.5			G1/100
BL	(0°-30°)	44.0	0.7	B0/110		
BM	(30°-60°)	55.8	0.9	B0/220		
BH	(60°-80°)	27.3	0.5	B0/110		G0/110
BVH	(80°-90°)	7.6	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°	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5
2.5°	160.7	160.7	160.7	160.7	159.7	158.7	157.7	156.7	155.6	155.6	154.6
5°	182.2	183.3	182.2	181.2	179.2	178.1	175.1	173.0	170.0	168.9	165.9
7.5°	211.9	210.9	211.9	208.8	204.7	203.7	199.6	194.5	190.4	184.3	180.2
10°	255.0	254.0	255.0	248.8	242.7	237.6	230.4	224.3	215.0	207.8	199.6
12.5°	323.5	323.5	321.5	313.3	305.1	293.9	282.6	269.3	252.9	238.6	225.3
15°	429.0	423.9	414.7	409.6	395.3	377.9	365.5	338.9	315.4	292.8	266.2
17.5°	556.0	545.8	538.6	527.4	508.8	486.3	465.9	427.0	403.4	366.6	328.7
20°	701.4	689.1	687.1	669.7	650.1	625.6	595.9	549.9	509.9	463.8	410.6
22.5°	849.9	851.9	843.7	831.4	812.0	783.3	737.2	695.3	646.1	587.7	519.2
25°	1015.7	1014.7	1007.5	993.2	978.9	943.0	906.1	866.2	807.9	733.1	651.2
27.5°	1171.4	1170.3	1152.9	1154.0	1126.3	1113.0	1077.1	1034.1	963.5	901.0	812.0
30°	1334.1	1323.9	1312.7	1304.5	1285.0	1261.5	1243.0	1191.8	1138.6	1064.8	992.2
32.5°	1499.0	1487.7	1490.8	1480.6	1465.2	1441.7	1414.1	1372.0	1314.7	1243.0	1175.4
35°	1700.8	1695.6	1687.5	1690.5	1687.5	1670.0	1646.4	1591.2	1528.7	1460.1	1390.5
37.5°	1850.2	1845.1	1850.2	1871.7	1876.8	1888.1	1870.7	1843.1	1798.0	1723.3	1650.5
40°	1988.5	1989.5	2013.0	2039.6	2058.1	2094.9	2101.0	2089.8	2054.0	1985.4	1890.2
42.5°	2112.3	2127.7	2149.2	2193.2	2233.1	2285.4	2324.3	2330.4	2303.8	2258.7	2162.5
45°	2250.5	2263.8	2297.7	2349.9	2405.1	2469.7	2532.1	2564.9	2562.9	2531.1	2427.7
47.5°	2405.1	2422.6	2459.5	2502.4	2576.2	2648.9	2729.8	2788.1	2812.7	2768.7	2668.3
50°	2592.6	2599.7	2631.5	2686.7	2754.3	2838.2	2926.3	3011.4	3059.5	3018.5	2915.1
52.5°	2814.7	2816.8	2846.4	2897.7	2951.9	3044.1	3130.1	3247.8	3310.3	3287.7	3163.9
55°	3119.8	3113.7	3134.2	3178.3	3222.3	3311.4	3397.3	3530.4	3621.6	3623.7	3491.6
57.5°	3536.6	3522.3	3535.6	3570.3	3619.6	3702.4	3811.0	3928.8	4050.6	4042.4	3933.9
60°	4117.1	4112.0	4136.6	4195.0	4278.9	4365.0	4487.8	4646.5	4754.0	4790.9	4677.2
62.5°	4503.2	4517.5	4573.8	4663.9	4825.7	5003.8	5232.2	5474.8	5679.7	5771.8	5615.1
65°	4337.3	4360.9	4448.9	4582.0	4796.0	5063.3	5366.4	5764.6	6117.9	6258.2	6095.4
66°	4197.0	4234.9	4317.9	4459.1	4682.4	4974.2	5290.5	5730.8	6128.1	6285.8	6119.9
67.5°	3954.3	3981.0	4075.2	4231.8	4471.5	4760.2	5102.2	5567.0	6015.5	6182.4	6017.5
70°	3459.8	3470.1	3546.8	3679.9	3865.2	4161.1	4471.5	4918.9	5331.5	5566.0	5385.8
72.5°	2575.2	2589.5	2716.5	2959.1	3199.7	3367.6	3550.9	3909.3	4175.6	4394.6	4359.8
75°	1238.9	1245.1	1330.1	1684.4	2153.3	2354.0	2523.9	2801.4	2902.8	3086.1	3058.4
77.5°	785.3	798.6	854.0	939.9	1206.1	1444.8	1578.9	1737.6	1767.3	1921.9	1831.8
80°	216.0	250.9	306.1	450.5	773.0	921.5	982.0	975.8	982.0	934.8	904.1
82.5°	44.0	43.0	52.2	80.9	340.9	536.6	579.5	493.5	490.4	472.0	487.4
85°	11.3	10.2	12.3	25.6	58.3	158.7	199.6	111.6	85.0	80.9	71.6
87.5°	3.1	3.1	3.1	5.1	6.1	8.2	11.3	8.2	6.1	6.1	6.1
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°	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5
2.5°	153.6	153.6	152.6	151.5	151.5	150.5	149.5	148.5	147.4	146.4	145.4
5°	162.8	160.7	157.7	155.6	153.6	150.5	148.5	146.4	144.4	143.3	141.3
7.5°	175.1	170.0	165.9	159.7	155.6	151.5	147.4	144.4	141.3	139.3	137.2
10°	190.4	182.2	174.0	165.9	158.7	152.6	146.4	141.3	138.2	135.2	133.1
12.5°	209.9	197.6	186.3	174.0	162.8	153.6	145.4	139.3	135.2	132.1	129.0
15°	241.7	222.2	202.7	184.3	170.0	155.6	144.4	137.2	132.1	129.0	126.0
17.5°	291.8	257.0	226.3	200.7	177.1	158.7	144.4	135.2	129.0	124.9	121.9
20°	364.5	307.2	258.0	221.2	190.4	163.8	144.4	132.1	126.0	120.8	117.8
22.5°	450.5	378.9	311.3	249.9	205.8	171.0	144.4	129.0	121.9	117.8	113.7
25°	576.5	481.2	389.1	303.1	231.4	182.2	147.4	127.0	118.8	113.7	109.6
27.5°	723.9	609.2	494.5	373.8	270.3	198.6	151.5	124.9	115.7	109.6	105.5
30°	891.8	764.8	624.6	467.9	321.5	220.2	158.7	123.9	111.6	105.5	100.4
32.5°	1074.1	939.9	786.3	588.7	397.3	252.9	167.9	122.9	107.5	100.4	94.2
35°	1291.2	1166.2	978.9	758.7	515.1	309.2	188.4	124.9	103.4	95.3	88.1
37.5°	1528.7	1395.6	1196.9	938.9	631.7	372.7	203.7	121.9	96.3	88.1	80.9
40°	1768.3	1615.7	1414.1	1128.4	780.2	450.5	223.3	118.8	89.1	80.9	73.8
42.5°	2001.8	1841.0	1621.9	1322.9	936.8	542.7	247.8	118.8	84.0	73.8	66.5
45°	2246.4	2052.9	1813.3	1509.2	1092.5	648.1	282.6	117.8	77.9	67.5	59.3
47.5°	2477.9	2248.5	1973.0	1673.0	1259.4	763.8	322.5	118.8	72.7	61.4	54.2
50°	2696.9	2433.9	2136.9	1819.5	1419.2	888.7	371.7	119.8	67.5	56.3	49.1
52.5°	2936.6	2644.8	2313.0	1970.0	1576.8	1014.7	429.0	121.9	62.4	51.2	45.0
55°	3233.5	2910.0	2530.1	2154.3	1743.7	1141.7	484.3	123.9	57.3	47.1	40.9
57.5°	3661.5	3293.0	2882.3	2430.8	1964.8	1286.1	541.7	129.0	53.2	44.0	37.9
60°	4357.8	3918.5	3444.5	2912.0	2295.6	1481.6	624.6	140.3	48.1	39.9	35.8
62.5°	5195.4	4667.0	4063.9	3417.8	2606.9	1613.7	679.9	152.6	44.0	36.8	33.8
65°	5617.2	4951.7	4256.4	3559.1	2646.8	1574.8	657.3	148.5	38.9	32.7	28.7
66°	5629.4	4936.3	4229.8	3528.4	2605.9	1527.6	635.8	146.4	37.9	31.7	26.6
67.5°	5512.8	4804.2	4088.5	3389.1	2485.0	1436.6	596.9	139.3	34.8	28.7	23.5
70°	4936.3	4246.2	3589.9	2943.7	2138.0	1210.2	500.7	122.9	30.7	25.6	21.5
72.5°	3934.9	3372.8	2819.8	2316.1	1661.8	908.2	395.3	100.4	26.6	22.5	18.4
75°	2748.2	2286.4	1865.6	1506.1	1044.4	543.7	256.0	70.6	22.5	18.4	15.3
77.5°	1533.8	1216.4	919.4	700.4	416.7	170.0	85.0	35.8	19.4	14.3	12.3
80°	780.2	578.5	440.3	324.6	192.5	88.1	43.0	23.5	15.3	11.3	10.2
82.5°	453.6	332.7	265.2	209.9	132.1	66.5	34.8	17.4	10.2	8.2	9.2
85°	101.4	134.1	113.7	96.3	70.6	42.0	24.6	11.3	7.2	7.2	8.2
87.5°	8.2	11.3	10.2	13.3	14.3	13.3	10.2	6.1	5.1	6.1	6.1
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°	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5	148.5
2.5°	144.4	143.3	143.3	142.3	141.3	141.3	141.3	140.3	141.3	141.3	141.3
5°	140.3	139.3	138.2	137.2	136.2	135.2	135.2	134.1	134.1	134.1	135.2
7.5°	136.2	134.1	133.1	131.1	130.0	129.0	129.0	128.0	128.0	128.0	128.0
10°	131.1	129.0	127.0	126.0	124.9	122.9	122.9	121.9	120.8	120.8	120.8
12.5°	127.0	124.9	122.9	120.8	118.8	117.8	116.7	115.7	114.7	114.7	114.7
15°	122.9	119.8	117.8	115.7	113.7	111.6	110.6	109.6	108.6	107.5	107.5
17.5°	118.8	115.7	112.7	110.6	108.6	106.5	105.5	102.4	102.4	101.4	101.4
20°	113.7	110.6	107.5	105.5	103.4	101.4	99.3	97.3	95.3	94.2	94.2
22.5°	109.6	106.5	103.4	100.4	97.3	94.2	92.2	90.1	89.1	88.1	87.1
25°	105.5	101.4	97.3	94.2	91.2	88.1	86.0	84.0	82.0	80.9	80.9
27.5°	100.4	96.3	92.2	88.1	85.0	82.0	79.9	76.8	75.8	74.8	73.8
30°	95.3	90.1	86.0	82.0	78.9	74.8	72.7	70.6	68.6	68.6	67.5
32.5°	89.1	84.0	79.9	75.8	71.6	68.6	66.5	64.5	63.4	61.4	61.4
35°	83.0	77.9	72.7	68.6	65.5	62.4	60.4	58.3	56.3	55.3	55.3
37.5°	75.8	70.6	66.5	62.4	59.3	56.3	54.2	52.2	51.2	50.1	49.1
40°	67.5	62.4	59.3	56.3	53.2	51.2	48.1	46.0	45.0	44.0	43.0
42.5°	60.4	55.3	53.2	51.2	48.1	46.0	43.0	40.9	38.9	37.9	36.8
45°	54.2	50.1	48.1	46.0	43.0	39.9	37.9	35.8	33.8	32.7	32.7
47.5°	48.1	45.0	43.0	40.9	37.9	35.8	32.7	31.7	29.7	29.7	29.7
50°	44.0	40.9	38.9	36.8	34.8	31.7	29.7	28.7	27.6	27.6	28.7
52.5°	40.9	37.9	35.8	33.8	31.7	29.7	27.6	26.6	26.6	27.6	28.7
55°	37.9	34.8	32.7	30.7	28.7	27.6	25.6	25.6	26.6	27.6	28.7
57.5°	35.8	31.7	29.7	28.7	26.6	25.6	25.6	25.6	26.6	27.6	29.7
60°	32.7	28.7	26.6	26.6	24.6	24.6	24.6	25.6	26.6	28.7	29.7
62.5°	28.7	25.6	24.6	24.6	23.5	23.5	24.6	25.6	27.6	28.7	29.7
65°	24.6	22.5	22.5	22.5	22.5	23.5	24.6	25.6	26.6	28.7	29.7
66°	22.5	21.5	21.5	22.5	22.5	23.5	24.6	25.6	26.6	27.6	28.7
67.5°	21.5	20.5	20.5	21.5	22.5	22.5	23.5	25.6	26.6	27.6	27.6
70°	18.4	18.4	18.4	20.5	21.5	22.5	23.5	24.6	25.6	26.6	27.6
72.5°	16.4	16.4	17.4	18.4	20.5	21.5	22.5	23.5	25.6	26.6	26.6
75°	14.3	14.3	16.4	17.4	19.4	20.5	22.5	23.5	24.6	25.6	25.6
77.5°	12.3	13.3	15.3	17.4	18.4	20.5	21.5	22.5	23.5	24.6	24.6
80°	11.3	13.3	15.3	16.4	17.4	18.4	19.4	21.5	22.5	23.5	24.6
82.5°	11.3	12.3	14.3	15.3	16.4	18.4	19.4	20.5	21.5	22.5	23.5
85°	9.2	11.3	12.3	14.3	15.3	17.4	18.4	18.4	19.4	20.5	21.5
87.5°	7.2	8.2	8.2	10.2	11.3	13.3	15.3	15.3	16.4	17.4	18.4
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°	148.5	148.5	148.5	148.5
2.5°	141.3	142.3	142.3	142.3
5°	135.2	135.2	135.2	135.2
7.5°	128.0	128.0	128.0	128.0
10°	120.8	120.8	121.9	120.8
12.5°	114.7	113.7	113.7	113.7
15°	107.5	107.5	106.5	107.5
17.5°	100.4	100.4	99.3	99.3
20°	93.2	93.2	93.2	93.2
22.5°	87.1	86.0	86.0	86.0
25°	79.9	79.9	79.9	79.9
27.5°	73.8	73.8	73.8	73.8
30°	67.5	67.5	66.5	66.5
32.5°	61.4	61.4	61.4	61.4
35°	55.3	55.3	54.2	54.2
37.5°	48.1	48.1	48.1	48.1
40°	42.0	42.0	42.0	42.0
42.5°	36.8	36.8	35.8	35.8
45°	31.7	31.7	31.7	31.7
47.5°	29.7	29.7	29.7	29.7
50°	28.7	29.7	29.7	29.7
52.5°	29.7	29.7	29.7	29.7
55°	29.7	30.7	30.7	30.7
57.5°	29.7	30.7	30.7	31.7
60°	30.7	31.7	31.7	31.7
62.5°	30.7	31.7	31.7	31.7
65°	29.7	30.7	30.7	30.7
66°	29.7	29.7	29.7	30.7
67.5°	28.7	29.7	29.7	29.7
70°	27.6	28.7	28.7	29.7
72.5°	27.6	28.7	28.7	28.7
75°	26.6	26.6	27.6	27.6
77.5°	25.6	25.6	26.6	26.6
80°	24.6	25.6	25.6	25.6
82.5°	23.5	24.6	24.6	24.6
85°	21.5	22.5	22.5	22.5
87.5°	18.4	18.4	19.4	19.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)