

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: P180898

Luminaire Tested: **ICM-E05-LED-E1-SL4**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P180898  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33680)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ICM-E05-LED-E1-SL4  
Description: ICON SITE MEDIUM LED LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL  
Light Source: (105) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13740.2 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B2 - U0 - G3

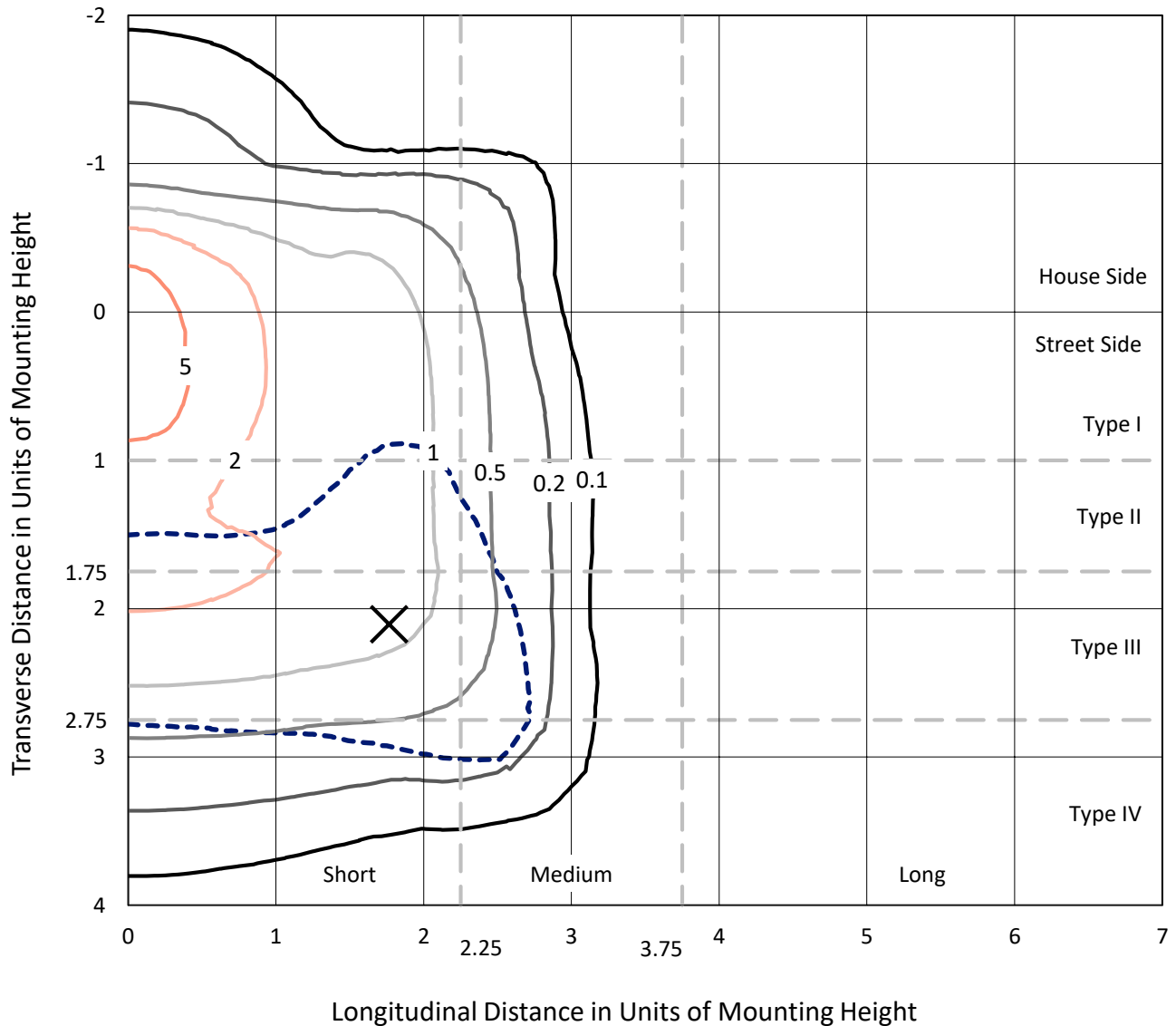
Input Watts (W): 127.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

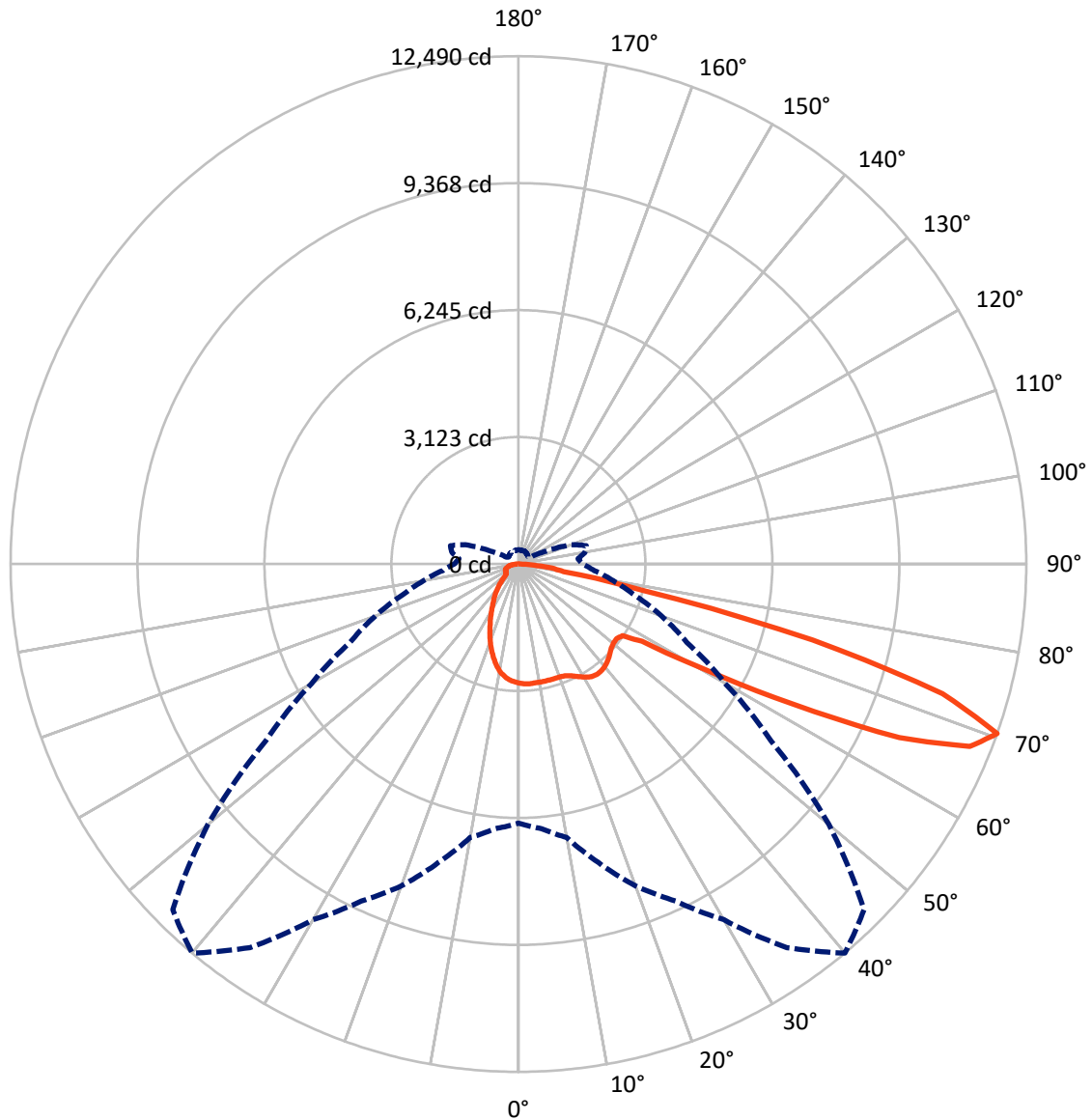
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.4 fc  
 Type IV - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2852.3	0.0	2852.3
	% Fixture	20.8	0.0	20.8
<b>Street Side</b>	Lumens	10887.8	0.0	10887.8
	% Fixture	79.2	0.0	79.2
<b>Total</b>	Lumens	13740.2	0.0	13740.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.9	2.0
10°-20°	749.8	5.5
20°-30°	1110.0	8.1
30°-40°	1402.7	10.2
40°-50°	1586.4	11.5
50°-60°	2257.5	16.4
60°-70°	4204.3	30.6
70°-80°	1926.9	14.0
80°-90°	228.7	1.7
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°	13740.2	100.0
0°-180°	13740.2	100.0



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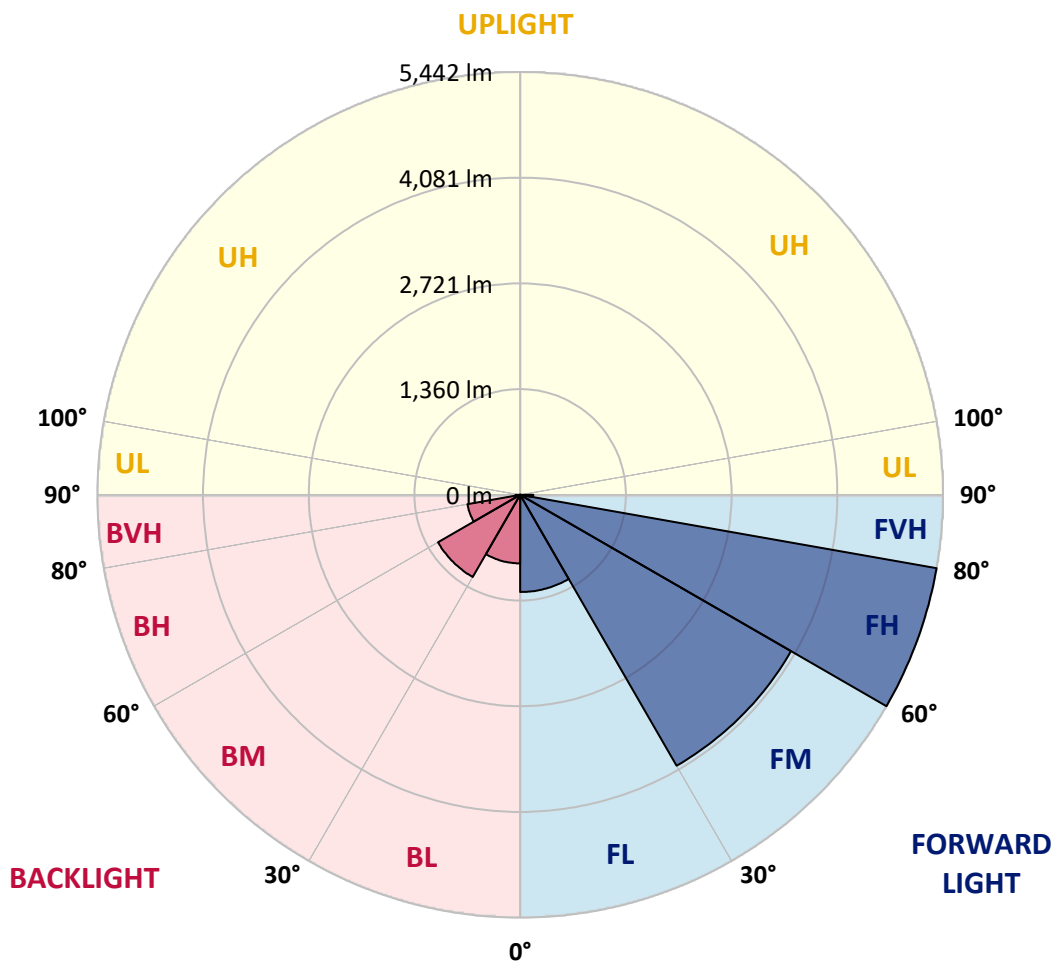
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1251.1	9.1			
FM	(30°-60°)	4025.4	29.3			
FH	(60°-80°)	5441.6	39.6			G3/7500
FVH	(80°-90°)	169.7	1.2			G2/225
BL	(0°-30°)	882.5	6.4	B2/1000		
BM	(30°-60°)	1221.2	8.9	B2/2500		
BH	(60°-80°)	689.6	5.0	B2/1000		G2/1000
BVH	(80°-90°)	59.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8
2.5°	2976.8	2984.5	2975.2	2973.7	2973.7	2972.1	2962.8	2961.2	2948.9	2950.4	2953.5
5°	2998.4	3001.6	2995.4	2993.8	2990.7	2984.5	2976.8	2967.5	2958.2	2948.9	2941.1
7.5°	3020.2	3017.0	3012.4	3012.4	3007.7	2998.4	2983.0	2970.5	2950.4	2939.6	2925.6
10°	3051.2	3046.5	3040.3	3037.2	3029.5	3015.6	2993.8	2976.8	2951.9	2930.3	2907.0
12.5°	3080.7	3079.1	3069.8	3065.1	3052.8	3038.8	3012.4	2986.1	2953.5	2919.4	2888.4
15°	3133.3	3127.2	3117.9	3108.6	3088.4	3069.8	3029.5	2998.4	2951.9	2907.0	2858.9
17.5°	3224.9	3214.0	3204.7	3184.5	3159.7	3127.2	3068.2	3015.6	2951.9	2886.8	2832.6
20°	3392.3	3369.0	3356.6	3330.3	3286.8	3227.9	3136.5	3051.2	2956.6	2872.9	2800.0
22.5°	3581.4	3565.9	3548.9	3531.8	3463.6	3378.3	3254.3	3127.2	2984.5	2866.7	2773.7
25°	3793.8	3773.7	3764.4	3734.9	3671.4	3573.7	3404.7	3227.9	3048.1	2891.5	2773.7
27.5°	3983.0	3976.8	3975.2	3941.1	3880.7	3765.9	3565.9	3353.5	3134.9	2942.6	2796.9
30°	4155.1	4148.9	4145.8	4127.2	4057.4	3921.0	3703.9	3465.1	3229.5	3014.0	2840.3
32.5°	4338.0	4317.9	4308.6	4272.9	4193.8	4034.2	3786.1	3538.0	3303.9	3083.7	2888.4
35°	4486.8	4469.8	4451.2	4400.0	4288.4	4099.3	3821.7	3562.8	3333.3	3122.5	2913.2
37.5°	4595.4	4578.4	4551.9	4486.8	4348.9	4121.0	3820.2	3555.1	3322.5	3116.3	2917.9
40°	4643.5	4626.4	4598.4	4516.3	4359.7	4108.6	3790.7	3519.4	3290.0	3083.7	2899.3
42.5°	4624.9	4612.4	4576.8	4497.7	4325.6	4052.8	3731.8	3452.8	3227.9	3031.0	2857.4
45°	4553.5	4544.2	4510.1	4426.4	4248.1	3962.8	3645.0	3369.0	3153.5	2965.9	2801.6
47.5°	4446.5	4443.5	4409.3	4327.2	4150.4	3872.9	3555.1	3286.8	3079.1	2902.3	2755.1
50°	4328.7	4313.2	4296.1	4220.2	4058.9	3795.4	3490.0	3235.6	3037.2	2879.1	2734.9
52.5°	4254.3	4249.6	4234.2	4165.9	4010.9	3750.4	3460.5	3217.0	3034.2	2874.4	2724.0
55°	4914.7	4925.6	4783.0	4486.8	4226.4	3874.4	3548.9	3311.6	3110.1	2948.9	2838.8
57.5°	7269.8	7221.7	6976.8	6389.2	5725.6	4849.6	4218.6	3835.7	3586.1	3614.0	3669.8
60°	8469.8	8460.5	8415.6	8187.7	7745.8	7079.1	6339.6	5491.5	5221.7	5251.2	5272.9
62.5°	9006.3	9020.2	9054.3	8969.1	8852.8	8658.9	8290.0	7948.9	7587.7	7452.8	7091.5
65°	9254.3	9279.1	9356.6	9404.7	9449.6	9483.8	9629.5	10029.5	10293.1	9800.1	8652.8
67.5°	8741.2	8860.5	9116.3	9365.9	9589.2	9907.0	10400.1	11328.7	11975.2	11369.1	9705.5
70°	6372.1	6534.9	6827.9	7600.0	8424.9	9145.8	10100.8	11514.8	12490.0	12021.7	9965.9
72.5°	3995.4	4040.3	4170.5	4454.3	5066.7	5992.3	7662.1	9783.0	10908.6	10534.9	8423.3
75°	2534.9	2550.4	2545.8	2610.9	2714.7	2916.3	3576.8	5778.4	7472.9	6890.0	4694.6
77.5°	1510.1	1533.3	1542.6	1562.8	1612.4	1683.7	1738.0	1965.9	3133.3	3041.9	1703.9
80°	1265.1	1283.7	1268.2	1263.5	1232.6	1210.9	1237.2	1210.9	1124.0	1082.1	996.9
82.5°	669.8	668.2	663.5	708.6	800.0	871.4	925.6	913.2	826.3	703.9	596.9
85°	367.4	379.8	379.8	395.4	381.4	383.0	395.4	417.0	386.0	322.5	263.5
87.5°	31.0	48.1	38.8	48.1	65.1	46.5	44.9	44.9	38.8	27.9	24.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8
2.5°	2945.8	2942.6	2936.5	2931.8	2931.8	2924.0	2919.4	2916.3	2914.7	2908.6	2908.6
5°	2936.5	2925.6	2914.7	2907.0	2902.3	2894.6	2882.2	2876.0	2868.2	2862.1	2858.9
7.5°	2916.3	2896.1	2879.1	2866.7	2851.2	2838.8	2823.3	2809.3	2795.4	2789.1	2786.1
10°	2885.3	2858.9	2832.6	2809.3	2787.6	2765.9	2745.8	2725.6	2708.6	2696.1	2683.7
12.5°	2855.8	2815.6	2781.4	2747.3	2713.2	2686.8	2658.9	2629.5	2604.7	2581.4	2575.2
15°	2815.6	2769.0	2725.6	2683.7	2641.9	2598.4	2564.4	2531.8	2491.5	2465.1	2444.9
17.5°	2778.3	2722.5	2669.8	2620.2	2569.0	2524.0	2472.9	2429.5	2389.1	2348.9	2319.4
20°	2738.0	2677.5	2621.7	2565.9	2510.1	2452.8	2393.8	2338.0	2288.4	2240.3	2192.3
22.5°	2702.3	2640.3	2586.1	2525.6	2463.5	2398.4	2330.2	2260.5	2203.1	2141.1	2085.3
25°	2680.7	2612.4	2556.6	2497.7	2429.5	2358.2	2280.7	2198.4	2128.7	2057.4	1990.7
27.5°	2680.7	2592.3	2534.9	2476.0	2406.2	2330.2	2244.9	2155.1	2076.0	1996.9	1914.7
30°	2703.9	2595.4	2517.9	2455.8	2384.5	2302.3	2207.7	2113.2	2026.3	1933.3	1854.2
32.5°	2725.6	2601.6	2505.4	2426.3	2344.2	2263.5	2167.5	2066.7	1970.5	1882.2	1798.4
35°	2739.6	2601.6	2482.2	2381.4	2288.4	2209.3	2114.7	2014.0	1916.3	1829.5	1751.9
37.5°	2741.1	2589.1	2444.9	2330.2	2232.6	2150.4	2060.5	1965.9	1872.8	1792.3	1727.2
40°	2725.6	2564.4	2407.7	2276.0	2173.7	2090.0	2007.7	1922.5	1838.8	1772.1	1716.3
42.5°	2697.7	2538.0	2372.1	2232.6	2125.6	2038.8	1962.8	1890.0	1817.0	1759.7	1713.2
45°	2655.8	2502.3	2339.5	2206.2	2100.8	2009.3	1934.9	1874.4	1812.4	1764.4	1717.9
47.5°	2618.6	2490.0	2350.4	2223.3	2113.2	2018.6	1942.6	1891.5	1843.5	1810.9	1747.3
50°	2610.9	2483.7	2355.1	2237.2	2125.6	2029.5	1962.8	1936.5	1922.5	1902.3	1804.7
52.5°	2589.1	2482.2	2389.1	2324.0	2252.8	2207.7	2138.0	2162.8	2147.3	2076.0	1899.3
55°	2817.0	2848.1	2934.9	3058.9	3173.7	3200.0	3192.3	3162.8	3006.3	2586.1	2127.2
57.5°	3872.9	4048.1	4212.4	4285.3	4276.0	4193.8	4134.9	4015.6	3789.1	3277.5	2576.8
60°	5339.6	5367.5	5280.7	5151.9	4934.9	4753.5	4559.7	4336.5	4007.7	3507.0	2852.8
62.5°	6690.0	6314.7	5928.7	5565.9	5235.7	4947.3	4677.5	4365.9	3938.0	3415.6	2817.0
65°	7643.5	6849.6	6240.3	5719.4	5252.8	4849.6	4513.2	4108.6	3626.3	3155.1	2610.9
67.5°	8134.9	6917.9	5983.0	5257.4	4595.4	4037.2	3589.1	3195.4	2837.2	2631.0	2285.3
70°	7586.1	5871.4	4569.1	3748.9	2956.6	2370.5	1872.8	1572.1	1468.2	1663.5	1730.2
72.5°	5652.8	3821.7	2717.9	2102.3	1610.9	1283.7	984.5	773.7	629.5	660.5	857.4
75°	2672.9	1649.6	1165.9	886.8	705.4	584.5	477.5	437.2	365.9	303.9	285.3
77.5°	1040.3	758.1	626.3	458.9	325.6	262.0	223.3	215.5	220.2	214.0	210.9
80°	792.3	536.5	336.5	246.5	212.4	187.6	165.9	159.7	162.8	170.5	178.3
82.5°	441.9	276.0	204.7	178.3	159.7	136.5	124.0	114.7	116.3	125.6	142.6
85°	170.5	133.3	122.5	117.9	110.0	88.4	76.0	77.5	88.4	105.4	105.4
87.5°	18.6	18.6	24.8	18.6	18.6	18.6	17.0	20.2	21.7	27.9	32.6
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°	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8	2931.8
2.5°	2905.4	2905.4	2905.4	2902.3	2903.9	2897.7	2897.7	2893.0	2900.8	2896.1	2894.6
5°	2860.5	2858.9	2852.8	2852.8	2852.8	2852.8	2857.4	2844.9	2854.3	2854.3	2849.6
7.5°	2784.5	2784.5	2767.5	2776.8	2773.7	2778.3	2784.5	2778.3	2787.6	2793.8	2789.1
10°	2679.1	2679.1	2665.1	2676.0	2671.4	2682.2	2693.0	2686.8	2693.0	2702.3	2705.4
12.5°	2562.8	2556.6	2544.2	2548.9	2548.9	2555.1	2559.7	2567.5	2575.2	2587.6	2593.8
15°	2427.9	2418.6	2403.1	2403.1	2393.8	2396.9	2406.2	2409.3	2424.9	2441.9	2462.1
17.5°	2290.0	2266.7	2249.6	2229.5	2214.0	2226.3	2237.2	2244.9	2257.4	2283.7	2297.7
20°	2159.7	2113.2	2080.7	2054.2	2037.2	2044.9	2058.9	2068.2	2079.1	2085.3	2090.0
22.5°	2031.0	1978.3	1933.3	1900.8	1872.8	1880.7	1874.4	1869.8	1877.5	1857.4	1855.8
25°	1919.4	1857.4	1796.9	1758.2	1724.0	1713.2	1680.7	1672.8	1651.2	1634.1	1621.7
27.5°	1838.8	1758.2	1691.5	1646.5	1592.3	1551.9	1510.1	1468.2	1444.9	1417.0	1403.1
30°	1775.2	1690.0	1610.9	1534.9	1463.5	1401.6	1345.8	1291.4	1254.2	1214.0	1187.6
32.5°	1716.3	1637.2	1541.1	1437.2	1341.1	1271.4	1198.4	1136.5	1077.5	1024.8	986.1
35°	1676.0	1587.6	1465.1	1338.0	1229.5	1147.3	1069.8	981.4	910.1	841.9	800.0
37.5°	1654.2	1545.8	1395.4	1254.2	1133.3	1040.3	944.2	841.9	755.1	691.4	627.9
40°	1637.2	1503.9	1333.3	1179.8	1052.8	941.1	829.5	708.6	612.4	545.8	496.1
42.5°	1618.6	1457.4	1279.1	1120.9	979.8	849.6	714.7	586.1	494.6	448.1	426.3
45°	1598.4	1417.0	1227.9	1065.1	908.6	750.4	595.4	476.0	421.7	406.2	406.2
47.5°	1593.8	1390.7	1190.7	1010.9	827.9	635.6	485.3	410.9	395.4	398.4	404.7
50°	1612.4	1383.0	1158.1	947.3	720.9	514.7	410.9	386.0	389.1	398.4	407.7
52.5°	1657.4	1389.1	1124.0	858.9	593.8	424.8	379.8	378.3	387.6	401.6	410.9
55°	1733.3	1389.1	1058.9	727.2	474.4	381.4	369.0	375.2	387.6	400.0	407.7
57.5°	1896.1	1375.2	944.2	581.4	396.9	365.9	365.9	373.7	384.5	396.9	403.1
60°	2090.0	1356.6	783.0	449.6	358.1	353.5	364.4	373.7	383.0	393.8	400.0
62.5°	2102.3	1308.6	620.2	372.1	338.0	345.8	362.8	375.2	378.3	386.0	393.8
65°	1931.8	1141.1	493.0	333.3	328.7	341.1	358.1	367.4	369.0	372.1	379.8
67.5°	1691.5	930.2	398.4	314.7	319.4	333.3	342.6	350.4	355.1	362.8	364.4
70°	1389.1	747.3	341.1	296.1	300.7	316.3	324.0	331.8	341.1	350.4	345.8
72.5°	984.5	581.4	299.3	276.0	282.1	296.1	305.4	311.6	319.4	328.7	322.5
75°	418.6	406.2	258.9	249.6	258.9	268.2	277.5	286.8	294.6	299.3	299.3
77.5°	214.0	238.8	223.3	223.3	229.5	238.8	246.5	255.8	260.5	265.1	271.4
80°	181.4	184.5	187.6	193.8	200.0	209.3	217.0	224.8	226.3	227.9	231.0
82.5°	150.4	156.6	159.7	169.0	173.7	176.7	181.4	181.4	184.5	184.5	179.8
85°	108.6	116.3	120.9	122.5	120.9	122.5	124.0	127.2	134.9	134.9	128.7
87.5°	31.0	29.5	37.2	38.8	41.9	48.1	54.2	65.1	68.2	71.3	71.3
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°	2931.8	2931.8	2931.8	2931.8
2.5°	2893.0	2896.1	2890.0	2891.5
5°	2849.6	2855.8	2848.1	2857.4
7.5°	2793.8	2803.1	2801.6	2800.0
10°	2713.2	2725.6	2725.6	2730.2
12.5°	2610.9	2618.6	2624.9	2627.9
15°	2472.9	2486.8	2494.6	2494.6
17.5°	2307.0	2316.3	2320.9	2314.7
20°	2096.1	2093.0	2094.6	2079.1
22.5°	1852.8	1857.4	1843.5	1846.5
25°	1614.0	1606.2	1612.4	1603.1
27.5°	1383.0	1384.5	1367.5	1375.2
30°	1162.8	1155.1	1133.3	1144.2
32.5°	950.4	930.2	907.0	893.0
35°	750.4	719.4	708.6	703.9
37.5°	589.1	555.1	544.2	531.8
40°	468.2	455.8	451.2	454.2
42.5°	420.2	420.2	423.3	424.8
45°	407.7	412.4	417.0	418.6
47.5°	409.3	414.0	420.2	421.7
50°	412.4	417.0	421.7	423.3
52.5°	414.0	414.0	417.0	418.6
55°	410.9	409.3	410.9	412.4
57.5°	404.7	401.6	403.1	407.7
60°	401.6	396.9	400.0	403.1
62.5°	393.8	392.3	395.4	396.9
65°	376.7	378.3	383.0	383.0
67.5°	361.2	362.8	364.4	365.9
70°	342.6	344.2	347.3	348.8
72.5°	320.9	327.2	331.8	338.0
75°	303.9	310.0	319.4	325.6
77.5°	274.4	279.1	290.0	297.7
80°	232.6	231.0	232.6	237.2
82.5°	178.3	178.3	176.7	175.2
85°	125.6	124.0	119.3	119.3
87.5°	68.2	66.7	65.1	62.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)