

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: LUMARK

Report Number: P395097

Luminaire Tested: **LAS45S-T4-Switch-3**

Issue Date: 5/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P395097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2004-740-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LAS45S-T4-Switch-3  
Description: AREA SITE SMALL HOUSING, TYPE IV, WATTAGE SWITCH ON POSTION 3  
Light Source: (168) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14249 lumens  
Efficiency: N/A  
Efficacy: 143.6 lumens/watt  
Luminous Opening: Rectangular (W 0.71' x L: 0.6' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G3

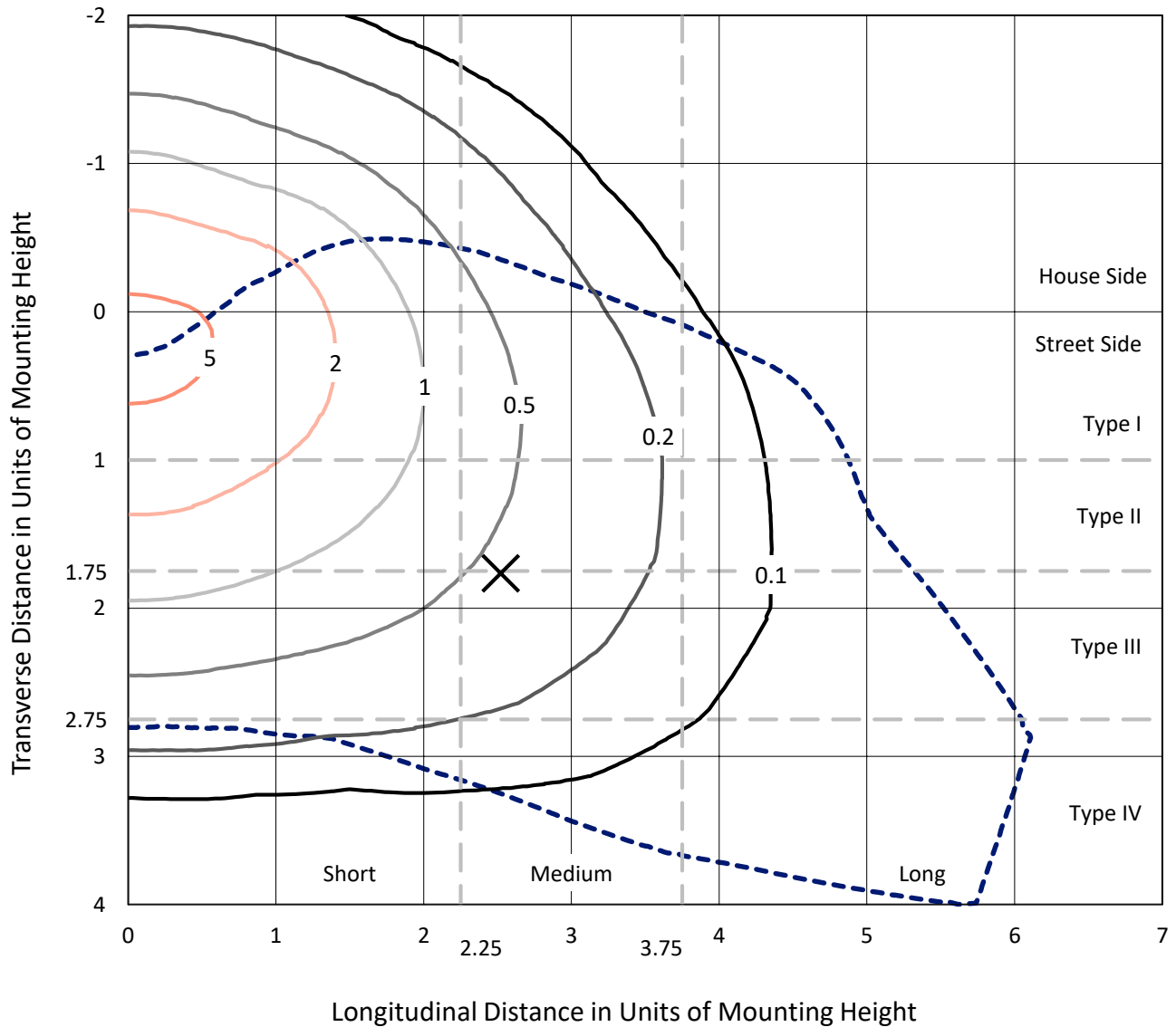
Input Watts (W): 99.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

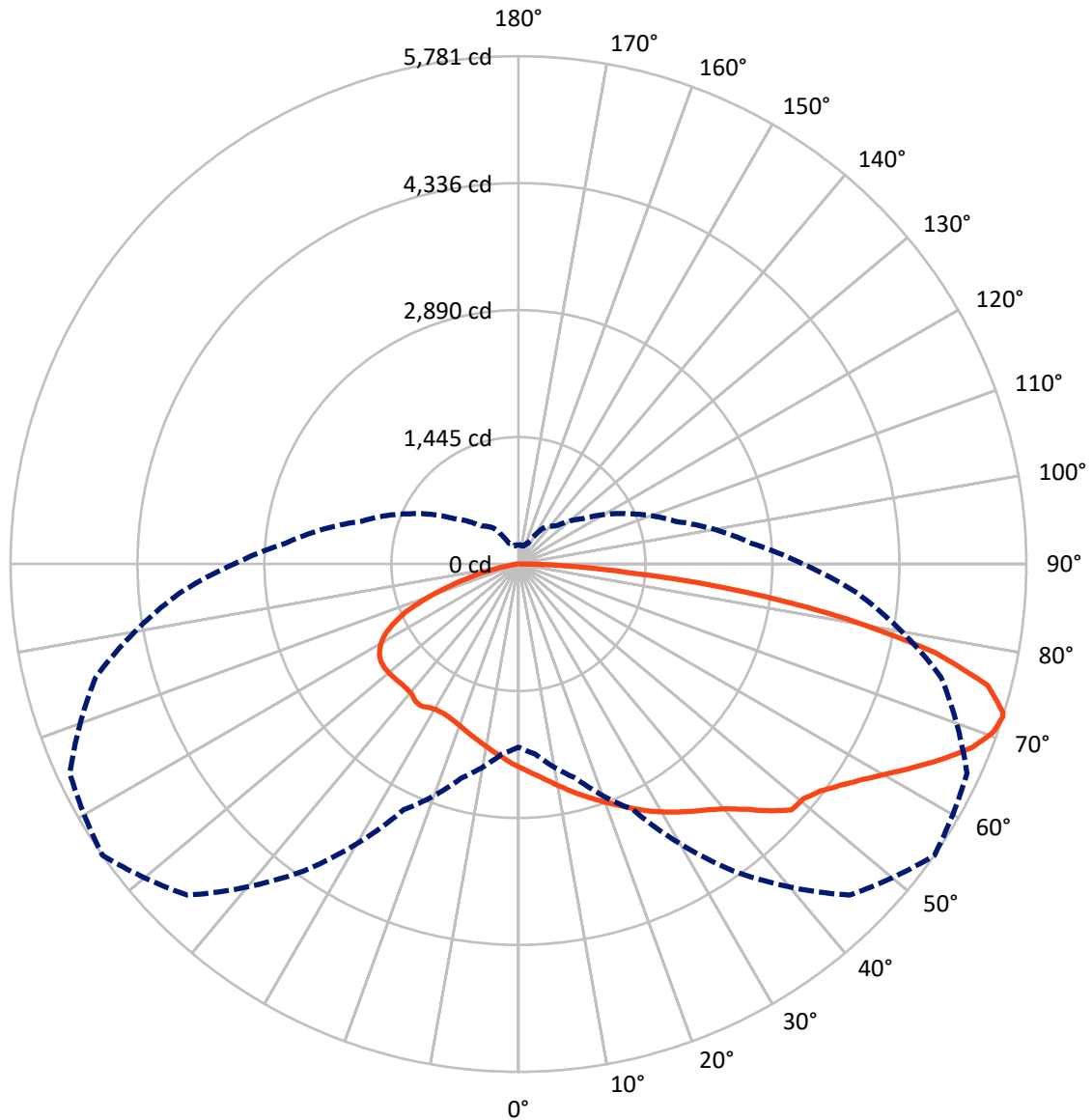
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

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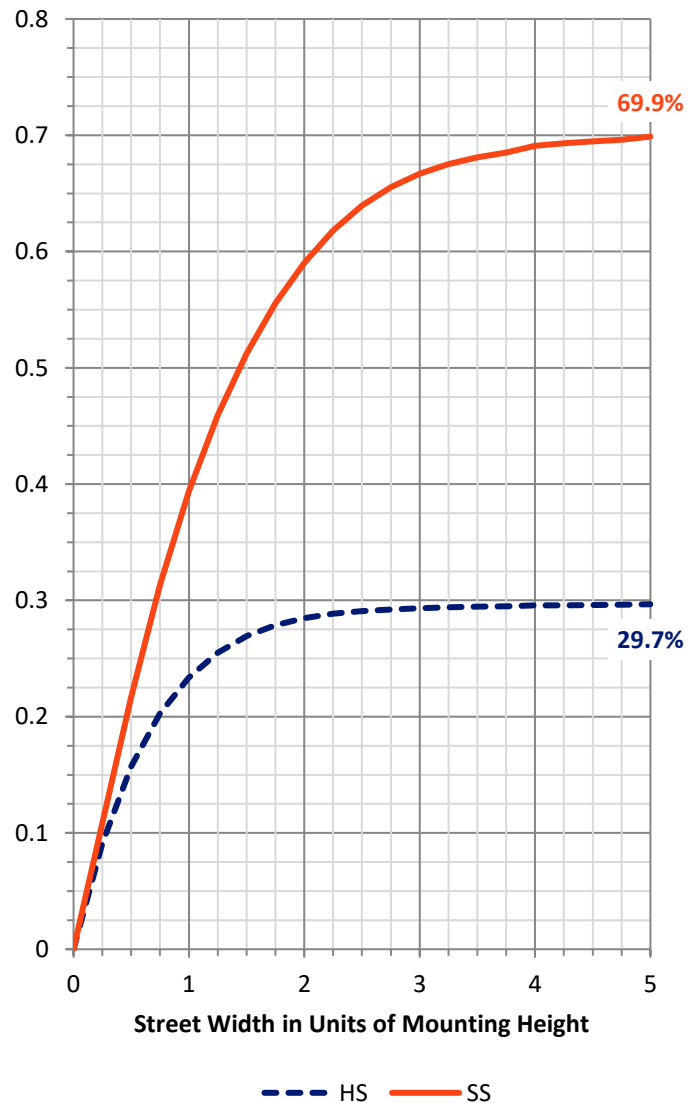
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4253.8	0.0	4253.8
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	9995.2	0.0	9995.2
	% Fixture	70.1	0.0	70.1
<b>Total</b>	Lumens	14249.0	0.0	14249.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.8	1.6
10°-20°	673.8	4.7
20°-30°	1152.1	8.1
30°-40°	1669.9	11.7
40°-50°	2240.2	15.7
50°-60°	2745.8	19.3
60°-70°	3069.9	21.5
70°-80°	2103.8	14.8
80°-90°	371.7	2.6
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°	14249.0	100.0
0°-180°	14249.0	100.0



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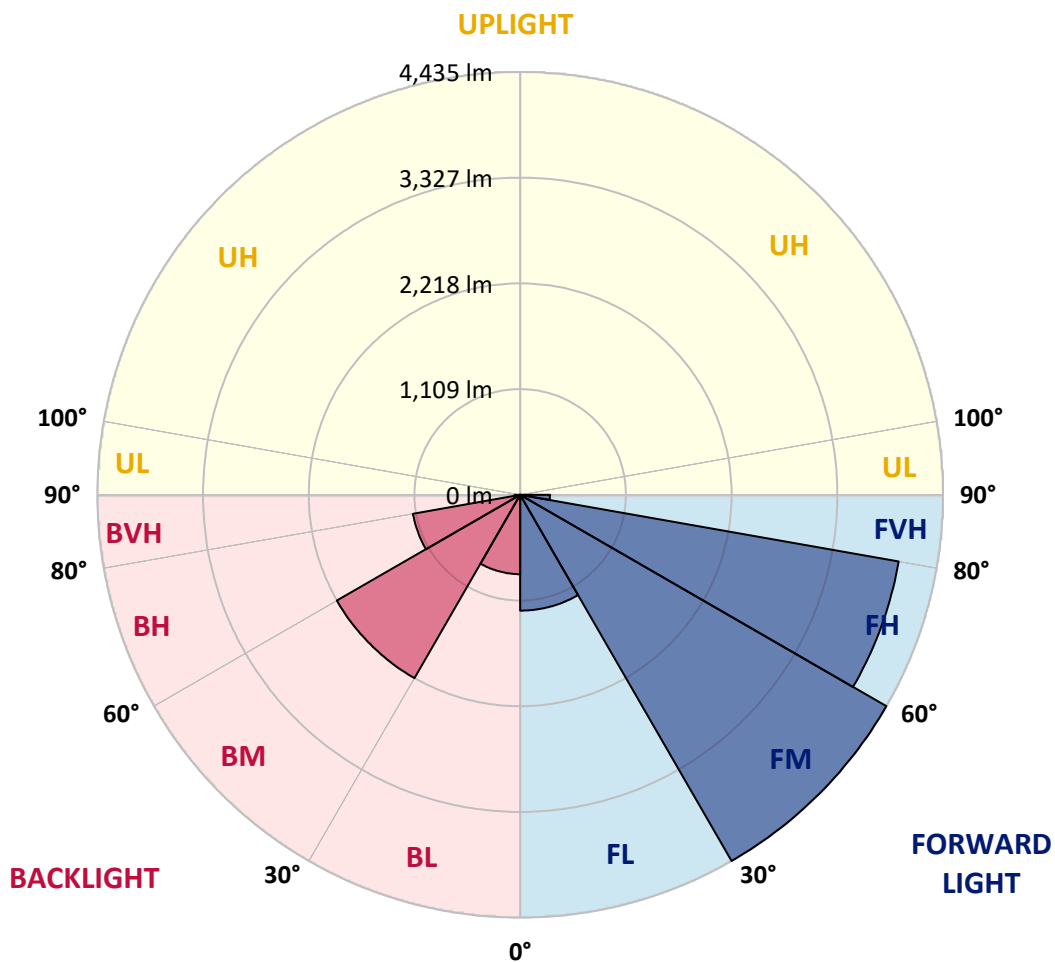
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1215.0	8.5			
FM	(30°-60°)	4435.5	31.1			
FH	(60°-80°)	4031.7	28.3			G2/5000
FVH	(80°-90°)	313.1	2.2			G3/500
BL	(0°-30°)	832.7	5.8	B2/1000		
BM	(30°-60°)	2220.4	15.6	B2/2500		
BH	(60°-80°)	1142.0	8.0	B3/2500		G3/2500
BVH	(80°-90°)	58.6	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9
2.5°	2403.5	2394.3	2394.7	2391.4	2382.2	2373.8	2368.0	2352.6	2340.9	2328.0	2319.2
5°	2499.0	2489.8	2482.7	2475.2	2464.4	2448.1	2427.6	2402.2	2374.7	2346.3	2329.2
7.5°	2592.0	2583.7	2575.3	2564.0	2548.6	2524.4	2494.4	2457.7	2416.0	2372.2	2347.6
10°	2679.6	2675.4	2668.3	2652.9	2633.7	2606.6	2570.7	2524.4	2468.1	2409.3	2373.8
12.5°	2761.3	2763.8	2758.0	2745.1	2723.8	2690.4	2650.8	2594.9	2529.4	2449.3	2407.2
15°	2848.1	2840.6	2838.1	2828.1	2812.2	2778.9	2733.4	2668.3	2596.6	2503.6	2449.3
17.5°	2927.8	2919.0	2916.5	2906.5	2884.4	2859.0	2815.6	2747.2	2666.7	2559.0	2501.5
20°	2996.2	2994.5	2988.7	2984.1	2964.5	2936.5	2900.2	2836.8	2747.6	2632.9	2560.3
22.5°	3071.7	3062.5	3065.0	3052.1	3039.6	3023.3	2992.0	2931.9	2834.3	2706.3	2627.9
25°	3133.0	3128.0	3126.3	3120.5	3116.3	3111.3	3087.5	3033.7	2926.5	2792.6	2702.9
27.5°	3179.3	3176.0	3187.2	3186.4	3201.8	3202.2	3186.0	3128.4	3027.9	2877.7	2781.8
30°	3226.0	3225.2	3245.2	3258.1	3274.8	3289.4	3275.7	3226.9	3120.9	2972.0	2871.0
32.5°	3281.9	3279.4	3302.4	3323.2	3348.2	3373.3	3365.3	3321.1	3223.5	3068.3	2960.3
35°	3338.2	3339.9	3364.9	3387.0	3423.3	3455.9	3455.4	3423.3	3330.7	3176.8	3060.8
37.5°	3403.7	3407.0	3424.2	3455.0	3498.8	3532.2	3546.8	3522.6	3440.8	3296.9	3183.5
40°	3562.2	3553.5	3593.5	3606.9	3628.5	3642.7	3660.7	3643.1	3575.6	3431.2	3325.7
42.5°	3723.2	3740.7	3788.7	3789.6	3809.6	3816.2	3817.1	3790.4	3721.6	3586.4	3458.8
45°	3707.8	3726.1	3798.3	3845.4	3943.9	4003.1	4007.3	3969.7	3895.1	3692.8	3512.2
47.5°	3709.5	3730.7	3792.1	3811.2	3936.0	4092.0	4185.0	4170.0	4049.8	3764.1	3583.1
50°	3760.4	3785.8	3844.2	3820.4	3906.8	4059.8	4201.2	4242.5	4099.9	3849.2	3673.6
52.5°	3844.2	3865.9	3930.1	3893.0	3953.5	4113.7	4296.4	4351.4	4223.4	3959.7	3766.2
55°	3934.7	3962.2	4019.4	4004.4	4065.7	4245.9	4447.4	4511.2	4376.0	4068.2	3845.9
57.5°	4043.2	4056.1	4132.0	4142.0	4217.5	4412.3	4625.5	4682.2	4522.8	4157.5	3906.8
60°	4107.0	4120.3	4217.5	4276.3	4409.8	4630.5	4841.5	4886.2	4675.1	4227.5	3944.7
62.5°	4194.6	4206.3	4277.2	4388.1	4619.6	4874.9	5081.0	5096.4	4825.3	4282.2	3943.5
65°	4225.4	4225.9	4302.6	4481.6	4789.4	5129.3	5332.5	5299.9	4963.3	4283.8	3880.5
67.5°	3818.3	3865.0	4004.8	4411.5	4899.9	5350.4	5570.7	5487.2	5049.3	4218.8	3735.3
70°	3072.5	3057.5	3268.1	3873.8	4745.6	5443.0	5734.2	5604.9	5048.8	4067.8	3486.7
72°	2084.8	2171.1	2524.4	3085.4	4265.1	5329.6	5780.9	5634.1	4982.1	3882.2	3235.6
72.5°	1879.1	1945.0	2226.2	2872.3	4143.3	5268.7	5765.9	5628.6	4953.7	3811.7	3156.4
75°	617.8	699.1	995.7	1652.2	3078.8	4628.0	5516.0	5508.5	4666.8	3419.6	2718.0
77.5°	243.6	247.8	276.6	632.8	1841.2	3656.1	4849.0	5007.5	3851.3	2818.9	2146.1
80°	176.9	172.7	178.5	229.8	730.0	2411.8	3791.2	3930.5	2292.1	1895.8	1500.8
82.5°	121.8	120.1	122.6	146.0	303.2	1323.9	2583.2	2271.2	820.9	847.2	855.5
85°	68.0	69.2	68.4	82.6	160.6	581.9	1273.5	903.9	127.2	152.7	355.0
87.5°	25.4	25.9	26.7	30.0	55.9	161.8	460.1	147.2	21.7	21.7	56.3
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9	2315.9
2.5°	2313.4	2297.5	2279.6	2267.9	2252.0	2244.1	2233.7	2233.7	2229.1	2225.3
5°	2314.2	2278.7	2243.3	2212.0	2187.4	2163.6	2144.0	2129.8	2127.7	2123.1
7.5°	2321.3	2268.3	2212.8	2164.4	2122.3	2084.4	2053.1	2035.6	2024.3	2016.4
10°	2336.7	2264.1	2188.2	2116.5	2055.2	2006.4	1966.3	1945.5	1932.9	1930.0
12.5°	2361.3	2263.7	2164.9	2074.3	1995.9	1937.5	1895.8	1868.3	1858.7	1851.6
15°	2390.5	2269.6	2146.9	2034.3	1941.7	1872.9	1829.9	1801.5	1787.4	1784.4
17.5°	2430.6	2284.2	2132.7	1996.8	1890.4	1814.1	1768.6	1739.8	1726.9	1724.8
20°	2480.2	2304.2	2123.6	1963.4	1845.8	1764.8	1711.5	1681.0	1670.2	1670.2
22.5°	2537.4	2332.1	2119.8	1934.2	1804.1	1717.7	1662.2	1634.3	1627.6	1625.1
25°	2599.1	2371.3	2126.1	1913.3	1766.1	1676.0	1620.9	1591.7	1580.1	1578.4
27.5°	2670.8	2418.1	2142.3	1901.7	1738.1	1636.4	1582.6	1547.5	1537.1	1532.1
30°	2750.1	2474.4	2171.1	1904.2	1723.1	1607.2	1538.8	1507.9	1492.5	1486.6
32.5°	2838.9	2544.4	2218.3	1924.6	1721.5	1584.6	1503.7	1461.6	1444.9	1443.7
35°	2937.0	2632.5	2289.2	1959.6	1720.6	1556.3	1462.8	1419.0	1409.0	1409.5
37.5°	3064.2	2747.2	2353.4	1953.0	1666.4	1500.8	1416.5	1387.8	1379.0	1377.8
40°	3194.7	2814.7	2335.5	1912.1	1621.4	1454.9	1381.9	1359.4	1355.2	1352.7
42.5°	3269.8	2818.1	2345.1	1904.6	1595.1	1428.6	1356.1	1334.8	1328.1	1326.0
45°	3309.4	2868.5	2388.4	1907.5	1578.0	1407.8	1331.0	1308.5	1296.8	1294.3
47.5°	3387.4	2933.6	2433.5	1915.8	1567.5	1379.8	1303.9	1278.5	1266.4	1266.8
50°	3469.6	2994.1	2469.4	1924.6	1555.4	1355.2	1275.1	1245.5	1236.8	1233.4
52.5°	3542.2	3041.2	2486.0	1927.1	1540.4	1329.8	1240.5	1207.2	1196.3	1193.8
55°	3596.8	3063.8	2477.7	1920.4	1519.2	1296.4	1200.1	1160.0	1146.7	1144.2
57.5°	3629.4	3052.5	2433.5	1887.5	1484.5	1255.1	1147.5	1096.2	1078.7	1076.2
60°	3624.8	2988.7	2340.9	1821.6	1429.1	1188.4	1060.3	1001.5	978.6	974.8
62.5°	3571.4	2869.0	2216.6	1727.3	1340.6	1077.0	947.3	876.0	840.1	828.8
65°	3457.5	2692.1	2060.6	1573.0	1186.3	929.3	798.0	713.3	616.9	594.4
67.5°	3263.1	2449.3	1847.0	1390.7	996.5	778.3	655.3	450.1	352.1	329.9
70°	2954.1	2119.4	1583.8	1124.6	772.5	618.6	443.8	249.4	243.2	244.0
72°	2668.3	1864.5	1353.6	902.2	616.1	502.6	266.1	211.1	218.2	215.2
72.5°	2584.1	1792.8	1304.8	841.8	577.7	475.9	236.9	204.4	208.6	211.9
75°	2176.5	1400.3	938.9	576.9	428.4	318.3	176.0	173.9	179.4	180.6
77.5°	1648.9	998.2	602.7	365.8	285.3	181.4	141.0	141.0	146.4	147.2
80°	1084.1	615.7	251.1	144.7	179.4	119.7	104.3	106.8	113.0	115.5
82.5°	685.7	332.0	75.1	75.9	91.3	78.4	70.5	73.4	78.8	79.3
85°	334.1	68.0	40.5	41.3	42.1	42.5	36.7	39.2	40.5	39.2
87.5°	82.2	17.1	15.4	16.7	13.3	11.3	11.3	9.6	6.7	7.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)