

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: P883136

Luminaire Tested: **NAV-SB3B-830-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-830-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

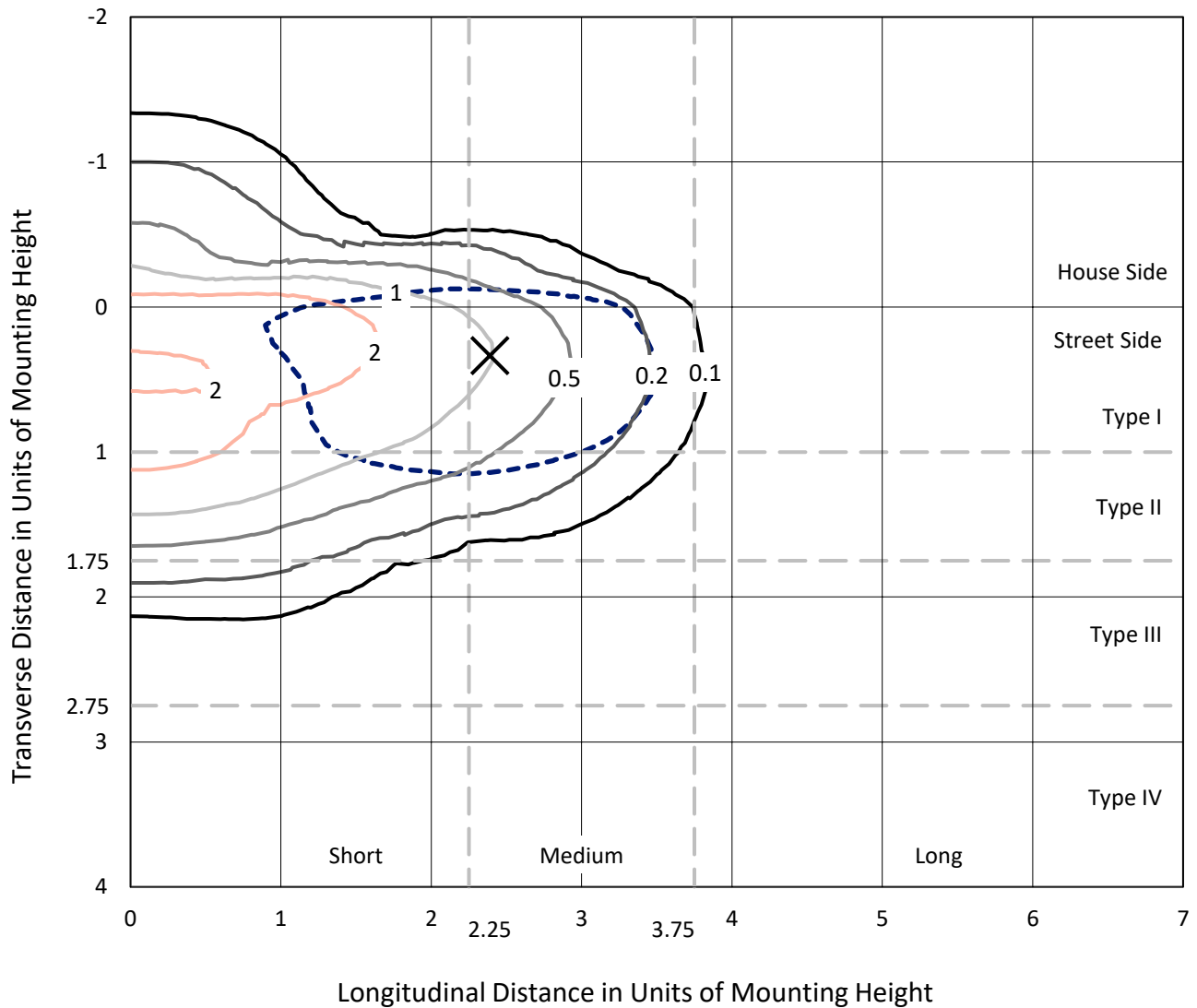
Lumens per Lamp: N/A  
Luminaire Lumens: 10792 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.919  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

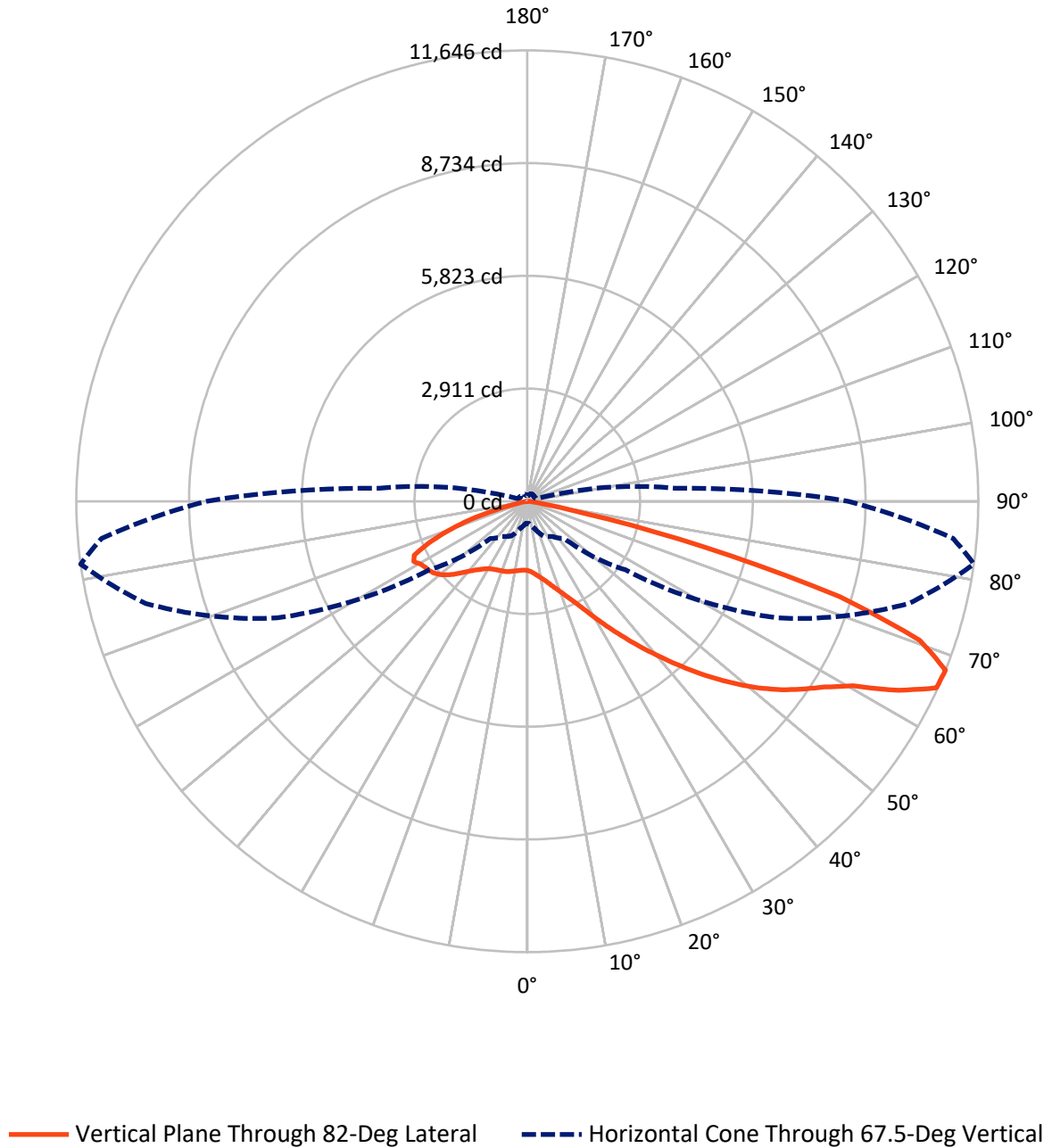
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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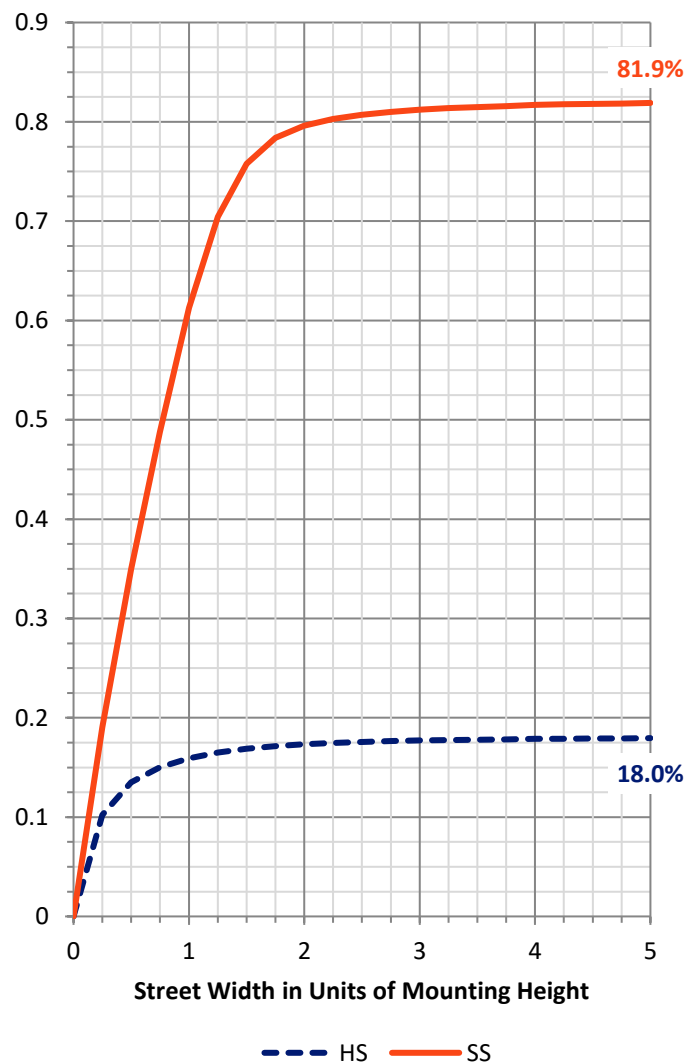
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1954.9	0.0	1954.9
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	8837.1	0.0	8837.1
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	10792.0	0.0	10792.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.3	1.5
10°-20°	413.9	3.8
20°-30°	663.0	6.1
30°-40°	1172.3	10.9
40°-50°	2054.0	19.0
50°-60°	2739.5	25.4
60°-70°	2550.3	23.6
70°-80°	978.8	9.1
80°-90°	60.8	0.6
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°	10792.0	100.0
0°-180°	10792.0	100.0

**Coefficient of Utilization**



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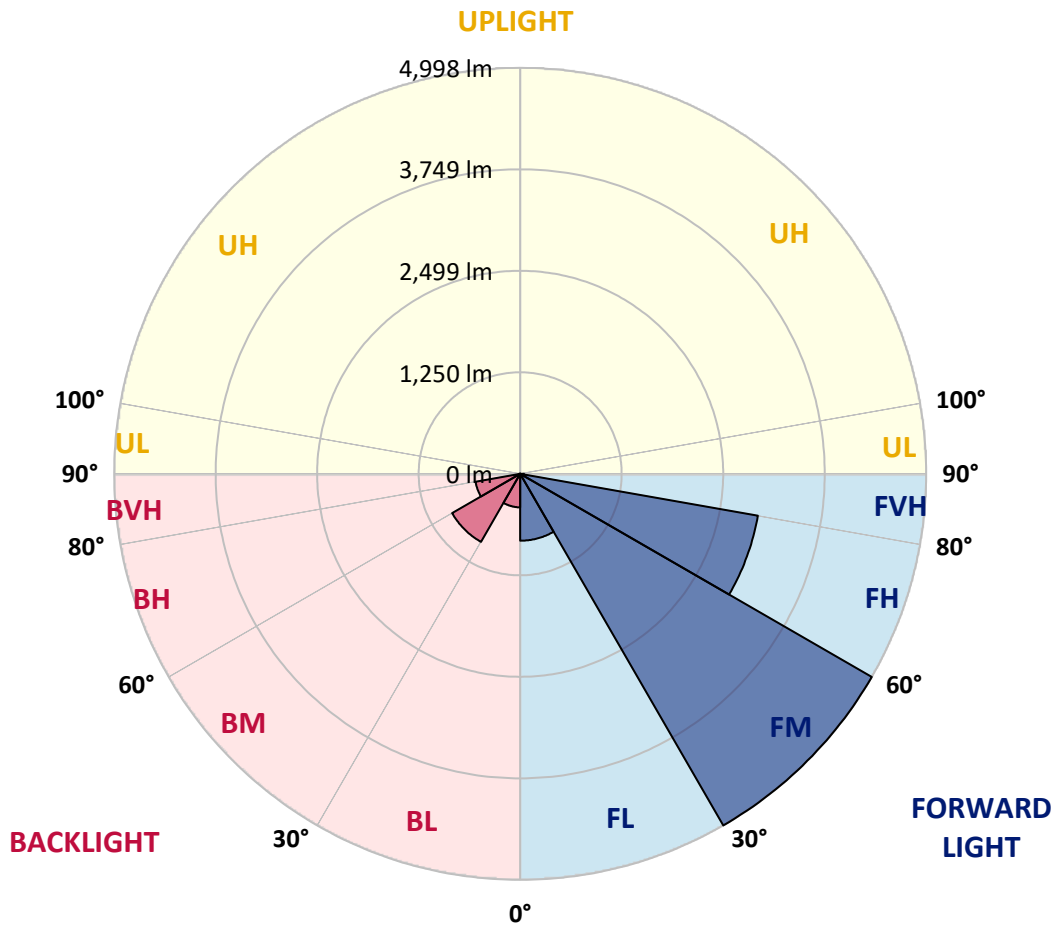
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	823.3	7.6			
FM (30°-60°)	4998.4	46.3			
FH (60°-80°)	2971.2	27.5			G2/5000
FVH (80°-90°)	44.2	0.4			G1/100
BL (0°-30°)	412.9	3.8	B1/500		
BM (30°-60°)	967.5	9.0	B1/1000		
BH (60°-80°)	558.0	5.2	B2/1000		G2/1000
BVH (80°-90°)	16.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9
2.5°	1889.7	1900.5	1894.3	1891.2	1885.8	1878.0	1871.8	1852.4	1832.2	1818.9	1814.3
5°	1927.7	1938.6	1937.8	1940.9	1944.8	1947.2	1945.6	1923.8	1895.1	1872.6	1859.4
7.5°	1895.1	1907.5	1917.6	1933.2	1960.4	1989.1	2003.1	1998.4	1968.9	1937.8	1921.5
10°	1802.6	1815.8	1839.9	1876.4	1933.9	1996.1	2048.2	2072.2	2053.6	2019.4	1996.9
12.5°	1633.2	1646.5	1693.9	1773.1	1869.5	1977.5	2076.9	2141.4	2146.1	2111.9	2085.5
15°	1442.9	1456.1	1506.6	1606.1	1752.9	1926.2	2092.5	2214.4	2255.6	2226.1	2194.2
17.5°	1324.8	1336.4	1374.5	1454.5	1607.6	1823.6	2087.0	2292.1	2386.2	2362.8	2324.8
20°	1289.0	1299.1	1317.0	1373.0	1500.4	1717.2	2051.3	2365.2	2526.8	2513.6	2470.8
22.5°	1327.1	1336.4	1341.9	1366.7	1446.8	1647.2	2006.2	2439.8	2690.0	2691.5	2639.5
25°	1414.9	1424.2	1418.0	1433.6	1468.5	1625.5	1989.1	2527.6	2895.1	2912.2	2853.1
27.5°	1559.4	1560.2	1545.4	1544.7	1550.1	1658.1	2007.0	2621.6	3153.8	3185.7	3112.6
30°	1849.3	1837.6	1780.9	1719.5	1691.5	1756.0	2056.7	2732.7	3459.2	3515.9	3424.2
32.5°	2296.0	2278.9	2174.8	2028.0	1880.3	1913.7	2146.1	2859.3	3791.7	3894.3	3782.4
35°	2780.9	2776.2	2667.4	2449.1	2191.1	2138.3	2291.4	3025.6	4154.6	4317.8	4184.9
37.5°	3231.5	3229.2	3167.0	2909.9	2595.9	2451.4	2524.5	3243.2	4543.1	4779.3	4622.4
40°	3643.3	3650.3	3588.2	3358.2	3041.9	2853.1	2841.5	3512.0	4975.1	5282.0	5095.5
42.5°	3999.2	4007.0	3944.0	3773.9	3482.5	3297.6	3230.8	3841.5	5397.0	5822.0	5601.4
45°	4240.8	4289.0	4279.7	4143.7	3934.7	3742.8	3698.5	4254.8	5878.0	6394.7	6135.9
47.5°	4309.2	4353.5	4423.4	4442.1	4314.7	4125.9	4178.7	4752.9	6364.4	6968.1	6673.6
50°	4140.6	4181.8	4327.1	4520.6	4609.1	4550.9	4645.7	5286.7	6862.4	7540.0	7201.2
52.5°	3808.1	3850.0	4033.4	4339.5	4700.8	4884.2	5114.2	5812.7	7344.9	8081.5	7700.8
55°	3327.1	3371.4	3606.8	3953.4	4526.0	5021.7	5505.0	6338.0	7787.1	8568.7	8151.5
57.5°	2672.9	2705.5	2950.3	3435.1	4086.2	4885.0	5793.3	6911.4	8203.5	9047.3	8598.2
60°	1742.0	1770.8	2055.2	2595.9	3357.4	4428.1	5850.8	7550.9	8756.8	9669.7	9200.4
62.5°	1158.5	1177.9	1346.5	1743.6	2364.4	3550.9	5514.3	8061.3	9567.9	10752.9	10233.0
65°	794.9	814.3	982.9	1259.5	1527.6	2348.9	4547.0	7993.7	10303.0	11613.0	10998.4
67.5°	567.2	583.5	726.5	987.6	1105.7	1364.4	3082.3	7129.7	10197.3	11645.6	11039.6
70°	406.4	415.7	533.8	769.2	878.8	819.7	1714.1	5453.0	8928.5	10753.6	10198.9
72.5°	284.4	287.5	370.6	585.9	707.8	598.3	815.8	3635.6	6752.9	8440.5	7906.7
75°	192.7	196.6	249.4	429.7	568.0	456.9	432.0	1949.5	3964.2	4672.1	4188.0
77.5°	118.1	119.7	160.8	293.7	425.0	348.1	278.2	825.9	1533.8	1505.8	1283.6
80°	66.8	66.8	102.6	182.6	289.8	224.6	195.0	351.2	485.6	426.6	376.1
82.5°	37.3	38.1	74.6	113.4	191.9	132.9	107.2	162.4	209.8	185.7	161.6
85°	15.5	17.1	45.8	53.6	91.7	66.0	43.5	68.4	77.7	69.2	50.5
87.5°	1.6	2.3	14.0	10.1	10.9	13.2	6.2	13.2	10.9	10.9	7.8
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9	1787.9
2.5°	1799.5	1787.9	1758.3	1724.2	1679.1	1657.3	1627.8	1607.6	1590.5	1592.1	1576.5
5°	1834.5	1805.0	1738.9	1656.6	1554.0	1481.0	1403.3	1349.6	1306.1	1296.8	1275.8
7.5°	1882.7	1836.0	1720.3	1571.9	1398.6	1267.3	1150.0	1074.6	1021.0	1003.9	986.8
10°	1944.8	1877.2	1696.2	1465.4	1216.0	1048.9	923.1	864.0	827.5	815.1	805.7
12.5°	2017.1	1924.6	1664.3	1335.7	1028.0	867.1	787.1	757.6	745.9	742.0	739.7
15°	2108.0	1983.7	1616.2	1181.8	868.7	756.0	721.8	717.9	719.5	717.9	717.2
17.5°	2216.0	2048.2	1537.7	1023.3	761.5	699.3	686.9	690.0	693.9	693.1	691.5
20°	2334.1	2111.9	1437.4	882.7	688.4	658.9	651.9	655.0	658.1	656.6	655.8
22.5°	2468.5	2180.3	1326.3	773.1	639.5	621.6	613.8	614.6	614.6	611.5	609.9
25°	2629.4	2255.6	1209.8	695.4	602.2	588.2	578.9	575.8	571.1	561.8	560.2
27.5°	2821.3	2335.7	1097.9	641.0	572.6	559.4	548.6	540.8	529.1	513.6	512.0
30°	3037.3	2432.8	1003.1	606.8	549.3	536.1	523.7	512.0	494.9	475.5	474.0
32.5°	3291.4	2536.9	933.9	584.3	528.4	514.4	499.6	485.6	467.0	447.6	448.3
35°	3594.4	2662.8	893.5	568.8	512.0	493.4	477.1	461.5	447.6	430.5	428.9
37.5°	3923.1	2796.4	881.1	561.0	501.2	472.4	453.8	442.9	441.3	431.2	430.5
40°	4282.8	2954.9	890.4	556.3	489.5	452.2	432.0	429.7	433.6	415.7	416.5
42.5°	4663.5	3143.0	906.0	550.9	473.2	432.0	412.6	412.6	409.5	384.6	384.6
45°	5075.3	3359.7	921.5	537.7	453.8	411.8	397.0	391.6	378.4	354.3	353.5
47.5°	5490.3	3580.4	933.2	513.6	430.5	394.7	381.5	369.1	349.6	327.9	327.1
50°	5884.2	3778.5	920.7	477.9	404.0	378.4	364.4	347.3	326.3	311.6	309.2
52.5°	6236.2	3950.3	867.9	435.9	376.1	361.3	348.9	331.0	313.9	298.4	296.8
55°	6542.3	4089.3	774.7	396.3	351.2	346.5	334.1	311.6	288.3	275.1	273.5
57.5°	6836.0	4195.0	658.1	363.6	328.7	330.2	311.6	291.4	269.6	255.6	254.1
60°	7226.8	4336.4	540.0	333.3	304.6	309.2	289.0	274.3	247.1	229.2	226.9
62.5°	7851.6	4556.3	428.9	296.0	276.6	278.2	269.6	251.7	219.1	198.1	196.6
65°	8347.3	4475.5	338.0	255.6	244.8	247.1	247.1	227.7	192.7	168.6	166.3
67.5°	8291.3	3832.1	269.6	216.0	214.5	216.0	221.4	205.1	170.9	151.5	148.4
70°	7637.9	3048.2	216.0	179.5	186.5	182.6	198.1	187.3	153.8	134.4	132.1
72.5°	6232.3	2195.8	164.7	148.4	143.0	149.2	178.7	168.6	128.2	106.4	104.1
75°	3641.8	1171.7	122.8	117.3	103.3	124.3	158.5	143.7	97.9	78.5	76.1
77.5°	1185.7	408.7	90.1	86.2	76.9	100.2	135.2	121.2	80.0	62.2	59.8
80°	317.8	123.5	61.4	56.7	49.7	74.6	107.2	96.3	57.5	40.4	39.6
82.5°	127.4	52.1	35.7	31.9	27.2	51.3	84.7	77.7	42.7	25.6	25.6
85°	41.2	17.1	13.2	10.1	12.4	31.9	50.5	52.8	30.3	13.2	10.1
87.5°	5.4	2.3	2.3	3.1	2.3	5.4	15.5	14.8	8.5	1.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)