

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: P883086

Luminaire Tested: **NAV-SB3B-735-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883086  
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-735-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

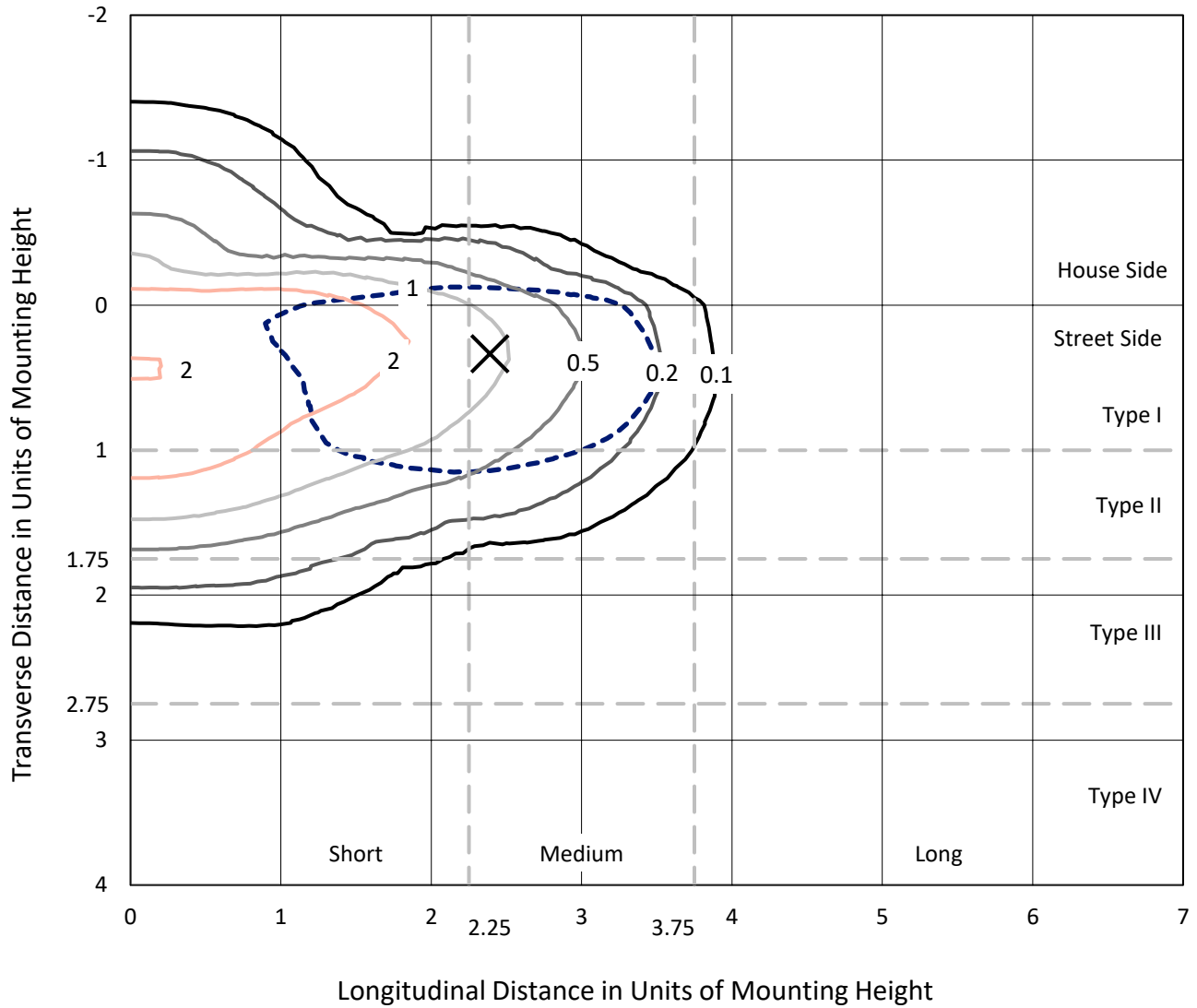
Lumens per Lamp: N/A  
Luminaire Lumens: 12334 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 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

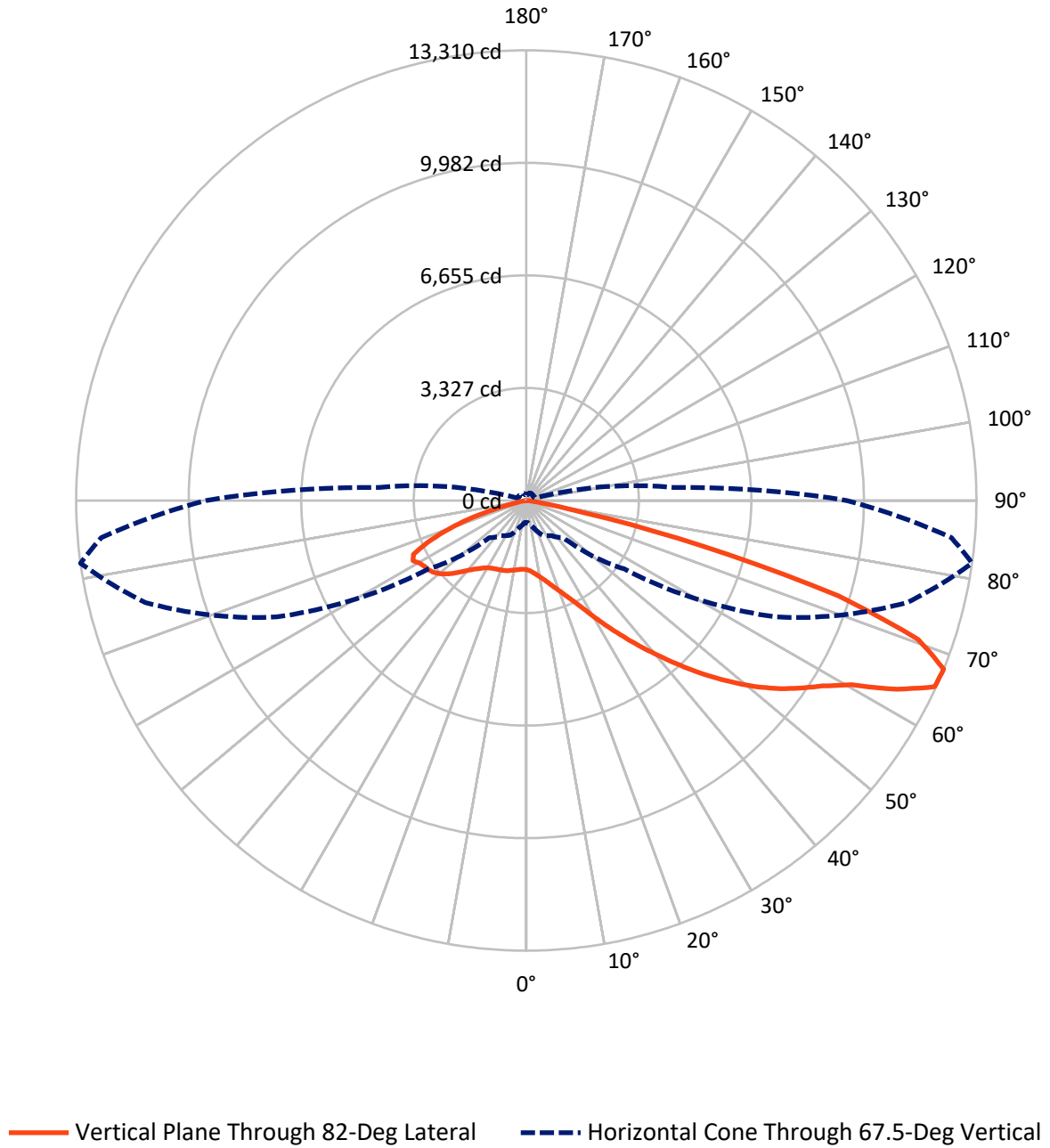
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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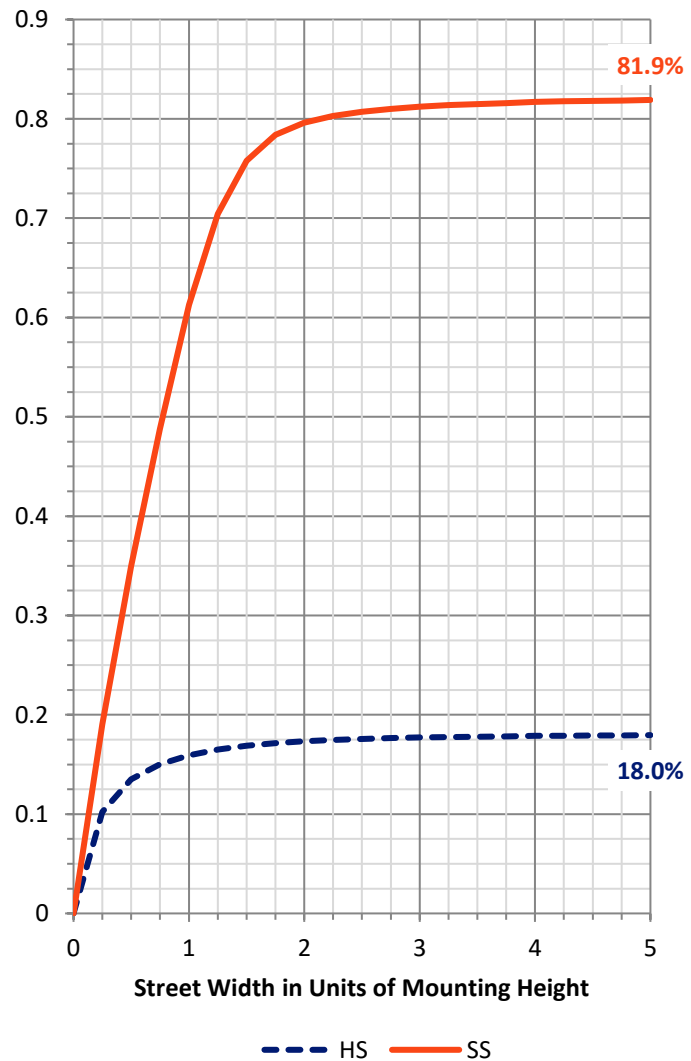
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2234.2	0.0	2234.2
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	10099.8	0.0	10099.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	12334.0	0.0	12334.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.0	1.5
10°-20°	473.1	3.8
20°-30°	757.7	6.1
30°-40°	1339.8	10.9
40°-50°	2347.5	19.0
50°-60°	3130.9	25.4
60°-70°	2914.7	23.6
70°-80°	1118.7	9.1
80°-90°	69.5	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°	12334.0	100.0
0°-180°	12334.0	100.0

**Coefficient of Utilization**



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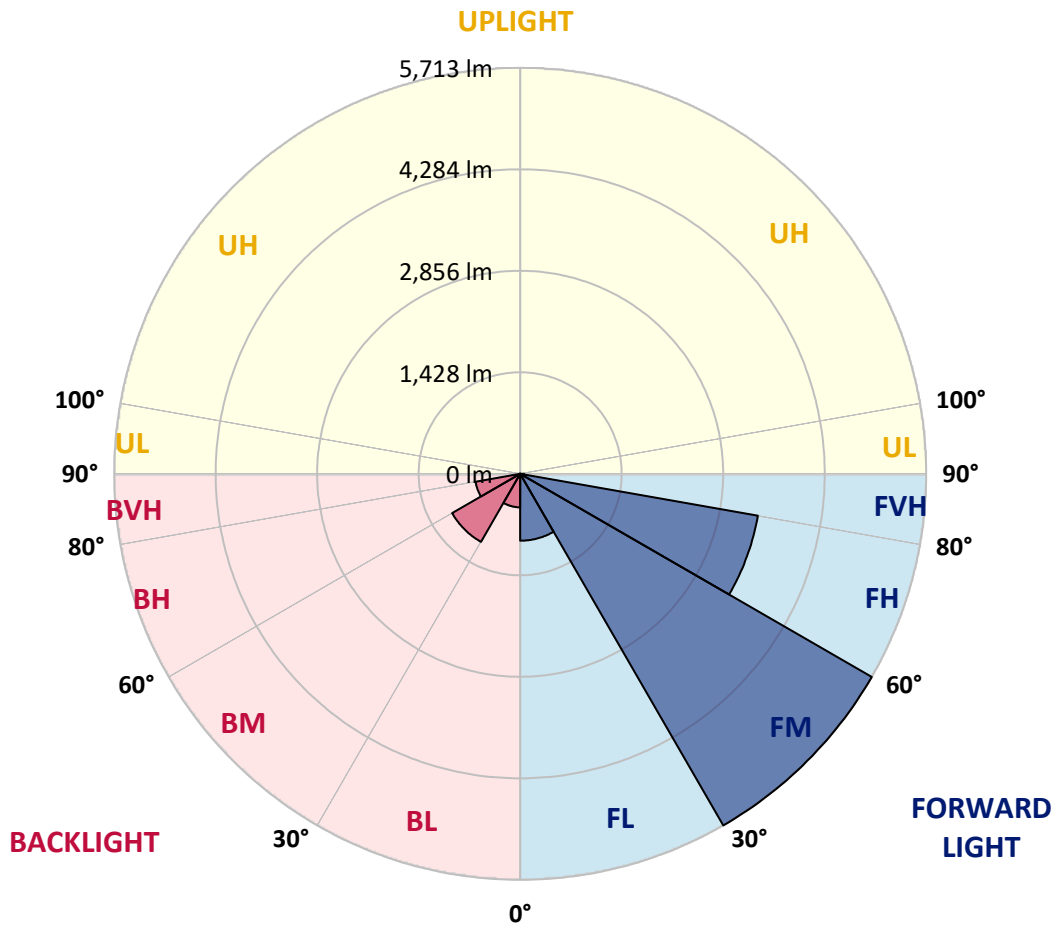
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	940.9	7.6			
FM (30°-60°)	5712.6	46.3			
FH (60°-80°)	3395.7	27.5			G2/5000
FVH (80°-90°)	50.5	0.4			G1/100
BL (0°-30°)	471.9	3.8	B1/500		
BM (30°-60°)	1105.7	9.0	B2/2500		
BH (60°-80°)	637.7	5.2	B2/1000		G2/1000
BVH (80°-90°)	19.0	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°	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3
2.5°	2159.7	2172.1	2165.0	2161.4	2155.2	2146.3	2139.2	2117.0	2093.9	2078.8	2073.5
5°	2203.2	2215.6	2214.7	2218.3	2222.7	2225.4	2223.6	2198.7	2165.9	2140.1	2125.0
7.5°	2165.9	2180.1	2191.6	2209.4	2240.5	2273.3	2289.3	2284.0	2250.2	2214.7	2196.1
10°	2060.2	2075.3	2102.8	2144.6	2210.3	2281.3	2340.8	2368.3	2347.0	2308.0	2282.2
12.5°	1866.6	1881.7	1935.9	2026.5	2136.6	2260.0	2373.7	2447.4	2452.7	2413.6	2383.4
15°	1649.0	1664.1	1721.9	1835.5	2003.4	2201.4	2391.4	2530.8	2577.9	2544.2	2507.8
17.5°	1514.1	1527.4	1570.9	1662.4	1837.3	2084.2	2385.2	2619.6	2727.1	2700.5	2656.9
20°	1473.2	1484.8	1505.2	1569.1	1714.8	1962.5	2344.4	2703.1	2887.8	2872.7	2823.9
22.5°	1516.7	1527.4	1533.6	1562.0	1653.5	1882.6	2292.9	2788.4	3074.3	3076.1	3016.6
25°	1617.1	1627.7	1620.6	1638.4	1678.4	1857.7	2273.3	2888.7	3308.8	3328.3	3260.8
27.5°	1782.2	1783.1	1766.3	1765.4	1771.6	1895.0	2293.7	2996.2	3604.5	3640.9	3557.4
30°	2113.5	2100.2	2035.3	1965.2	1933.2	2006.9	2350.6	3123.2	3953.5	4018.3	3913.5
32.5°	2624.1	2604.6	2485.6	2317.7	2149.0	2187.2	2452.7	3267.9	4333.5	4450.7	4322.9
35°	3178.2	3172.9	3048.6	2799.0	2504.2	2443.8	2618.8	3457.9	4748.2	4934.7	4782.9
37.5°	3693.3	3690.6	3619.6	3325.6	2966.9	2801.7	2885.2	3706.6	5192.2	5462.2	5282.8
40°	4163.9	4171.9	4100.9	3838.0	3476.6	3260.8	3247.5	4013.8	5686.0	6036.7	5823.6
42.5°	4570.6	4579.5	4507.6	4313.1	3980.1	3768.7	3692.4	4390.4	6168.2	6653.9	6401.7
45°	4846.8	4901.9	4891.2	4735.8	4496.9	4277.6	4227.0	4862.8	6717.8	7308.4	7012.7
47.5°	4924.9	4975.6	5055.5	5076.8	4931.2	4715.4	4775.8	5432.0	7273.7	7963.7	7627.2
50°	4732.2	4779.3	4945.4	5166.5	5267.7	5201.1	5309.5	6042.1	7843.0	8617.3	8230.1
52.5°	4352.2	4400.1	4609.7	4959.6	5372.5	5582.1	5844.9	6643.3	8394.4	9236.3	8801.1
55°	3802.5	3853.1	4122.2	4518.2	5172.7	5739.3	6291.6	7243.6	8899.7	9793.0	9316.2
57.5°	3054.8	3092.1	3371.8	3925.9	4670.1	5583.0	6621.1	7898.9	9375.7	10340.1	9826.8
60°	1990.9	2023.8	2348.8	2966.9	3837.1	5060.8	6686.8	8629.7	10007.9	11051.4	10515.0
62.5°	1324.0	1346.2	1538.9	1992.7	2702.2	4058.2	6302.3	9213.2	10935.0	12289.3	11695.2
65°	908.4	930.6	1123.3	1439.5	1745.8	2684.5	5196.7	9135.9	11775.1	13272.3	12569.9
67.5°	648.3	666.9	830.3	1128.7	1263.6	1559.4	3522.8	8148.4	11654.3	13309.6	12616.9
70°	464.4	475.1	610.1	879.1	1004.3	936.9	1959.0	6232.1	10204.2	12290.2	11656.1
72.5°	325.0	328.6	423.6	669.6	809.0	683.8	932.4	4155.0	7717.8	9646.5	9036.5
75°	220.2	224.7	285.1	491.1	649.1	522.2	493.7	2228.0	4530.7	5339.6	4786.4
77.5°	135.0	136.8	183.8	335.7	485.7	397.8	317.9	944.0	1752.9	1721.0	1467.0
80°	76.4	76.4	117.2	208.7	331.2	256.6	222.9	401.4	555.0	487.5	429.8
82.5°	42.6	43.5	85.2	129.7	219.3	151.9	122.5	185.6	239.8	212.2	184.7
85°	17.8	19.5	52.4	61.3	104.8	75.5	49.7	78.1	88.8	79.0	57.7
87.5°	1.8	2.7	16.0	11.5	12.4	15.1	7.1	15.1	12.4	12.4	8.9
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°	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3	2043.3
2.5°	2056.6	2043.3	2009.6	1970.5	1919.0	1894.1	1860.4	1837.3	1817.8	1819.5	1801.8
5°	2096.6	2062.9	1987.4	1893.3	1776.0	1692.6	1603.8	1542.5	1492.8	1482.1	1458.1
7.5°	2151.7	2098.4	1966.1	1796.5	1598.4	1448.4	1314.3	1228.1	1166.9	1147.3	1127.8
10°	2222.7	2145.4	1938.5	1674.8	1389.7	1198.8	1055.0	987.5	945.7	931.5	920.9
12.5°	2305.3	2199.6	1902.1	1526.5	1174.8	991.0	899.6	865.8	852.5	848.1	845.4
15°	2409.2	2267.1	1847.1	1350.7	992.8	864.0	825.0	820.5	822.3	820.5	819.6
17.5°	2532.6	2340.8	1757.4	1169.5	870.3	799.2	785.0	788.6	793.0	792.1	790.3
20°	2667.6	2413.6	1642.8	1008.8	786.8	753.0	745.0	748.6	752.2	750.4	749.5
22.5°	2821.2	2491.8	1515.8	883.6	730.8	710.4	701.5	702.4	702.4	698.9	697.1
25°	3005.0	2577.9	1382.6	794.8	688.2	672.2	661.6	658.0	652.7	642.0	640.3
27.5°	3224.4	2669.4	1254.8	732.6	654.5	639.4	626.9	618.1	604.7	587.0	585.2
30°	3471.3	2780.4	1146.4	693.5	627.8	612.7	598.5	585.2	565.7	543.5	541.7
32.5°	3761.6	2899.4	1067.4	667.8	603.9	587.9	571.0	555.0	533.7	511.5	512.4
35°	4108.0	3043.2	1021.2	650.0	585.2	563.9	545.2	527.5	511.5	492.0	490.2
37.5°	4483.6	3196.0	1007.0	641.1	572.8	539.9	518.6	506.2	504.4	492.8	492.0
40°	4894.7	3377.1	1017.7	635.8	559.5	516.8	493.7	491.1	495.5	475.1	476.0
42.5°	5329.9	3592.0	1035.4	629.6	540.8	493.7	471.5	471.5	468.0	439.6	439.6
45°	5800.5	3839.8	1053.2	614.5	518.6	470.6	453.8	447.6	432.5	404.9	404.0
47.5°	6274.7	4092.0	1066.5	587.0	492.0	451.1	436.0	421.8	399.6	374.7	373.9
50°	6725.0	4318.4	1052.3	546.1	461.8	432.5	416.5	396.9	373.0	356.1	353.4
52.5°	7127.2	4514.7	991.9	498.2	429.8	412.9	398.7	378.3	358.8	341.0	339.2
55°	7477.1	4673.6	885.4	452.9	401.4	396.1	381.8	356.1	329.5	314.4	312.6
57.5°	7812.8	4794.4	752.2	415.6	375.6	377.4	356.1	333.0	308.1	292.2	290.4
60°	8259.4	4956.0	617.2	381.0	348.1	353.4	330.3	313.5	282.4	262.0	259.3
62.5°	8973.4	5207.3	490.2	338.3	316.1	317.9	308.1	287.7	250.4	226.4	224.7
65°	9540.0	5115.0	386.3	292.2	279.7	282.4	282.4	260.2	220.2	192.7	190.0
67.5°	9476.0	4379.7	308.1	246.9	245.1	246.9	253.1	234.4	195.4	173.2	169.6
70°	8729.2	3483.7	246.9	205.1	213.1	208.7	226.4	214.0	175.8	153.6	151.0
72.5°	7122.8	2509.5	188.3	169.6	163.4	170.5	204.2	192.7	146.5	121.7	119.0
75°	4162.1	1339.1	140.3	134.1	118.1	142.1	181.2	164.3	111.9	89.7	87.0
77.5°	1355.1	467.1	103.0	98.6	87.9	114.6	154.5	138.5	91.5	71.0	68.4
80°	363.2	141.2	70.2	64.8	56.8	85.2	122.5	110.1	65.7	46.2	45.3
82.5°	145.6	59.5	40.8	36.4	31.1	58.6	96.8	88.8	48.8	29.3	29.3
85°	47.1	19.5	15.1	11.5	14.2	36.4	57.7	60.4	34.6	15.1	11.5
87.5°	6.2	2.7	2.7	3.6	2.7	6.2	17.8	16.9	9.8	1.8	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)