

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: P964226

Luminaire Tested: **NAV-SB3B-835-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964226
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11729.1 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 109.2
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: 24 FT



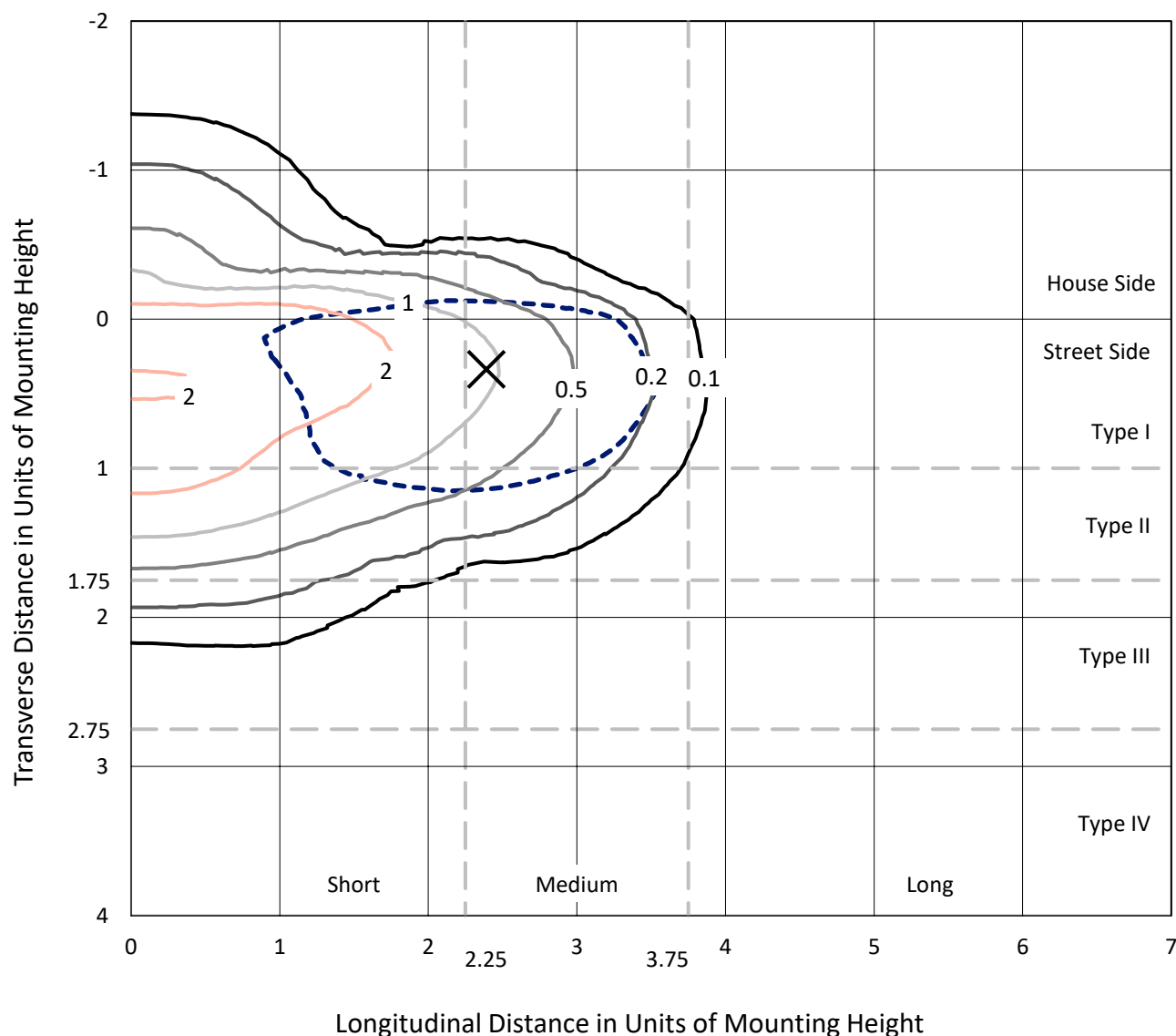
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

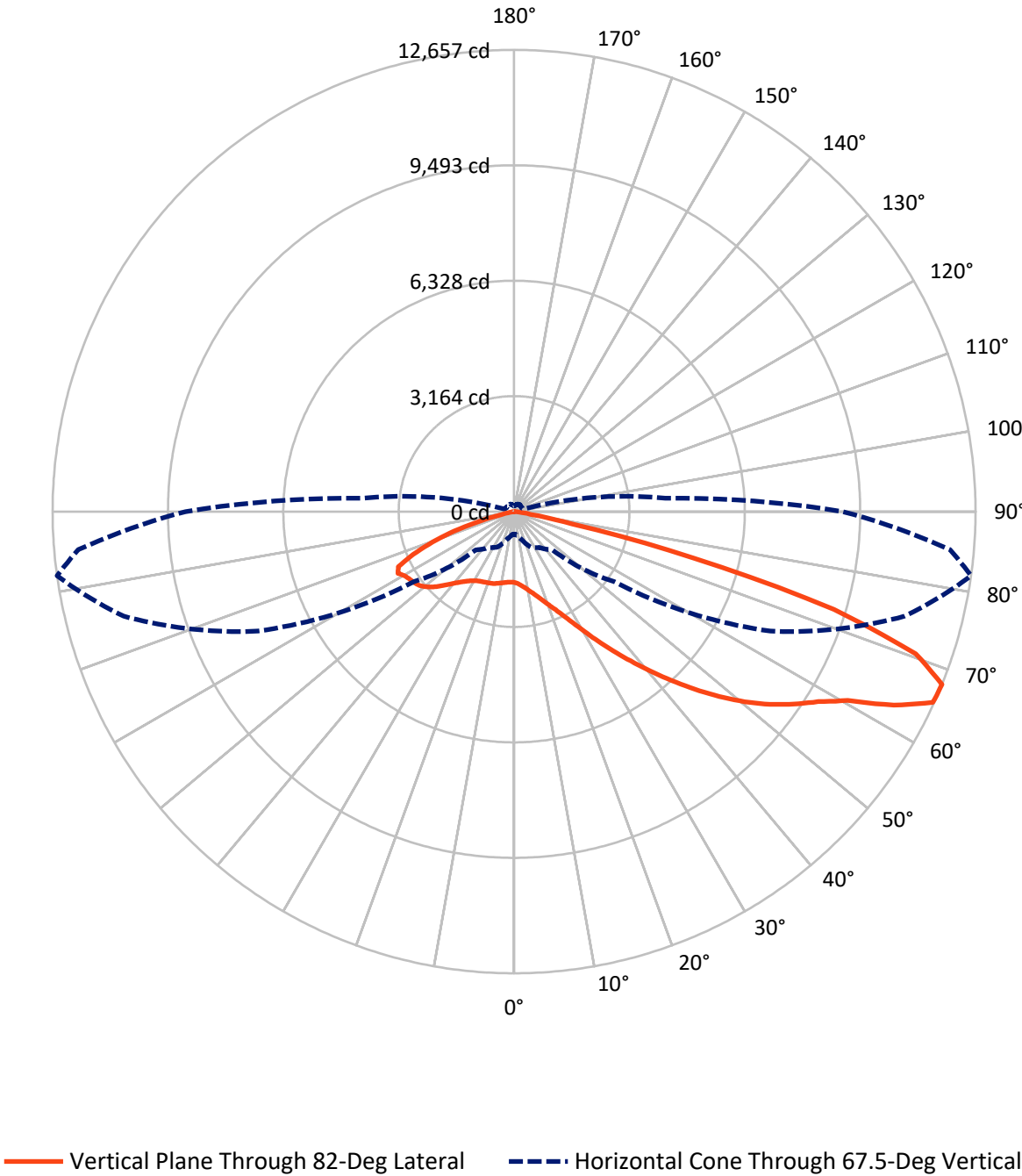
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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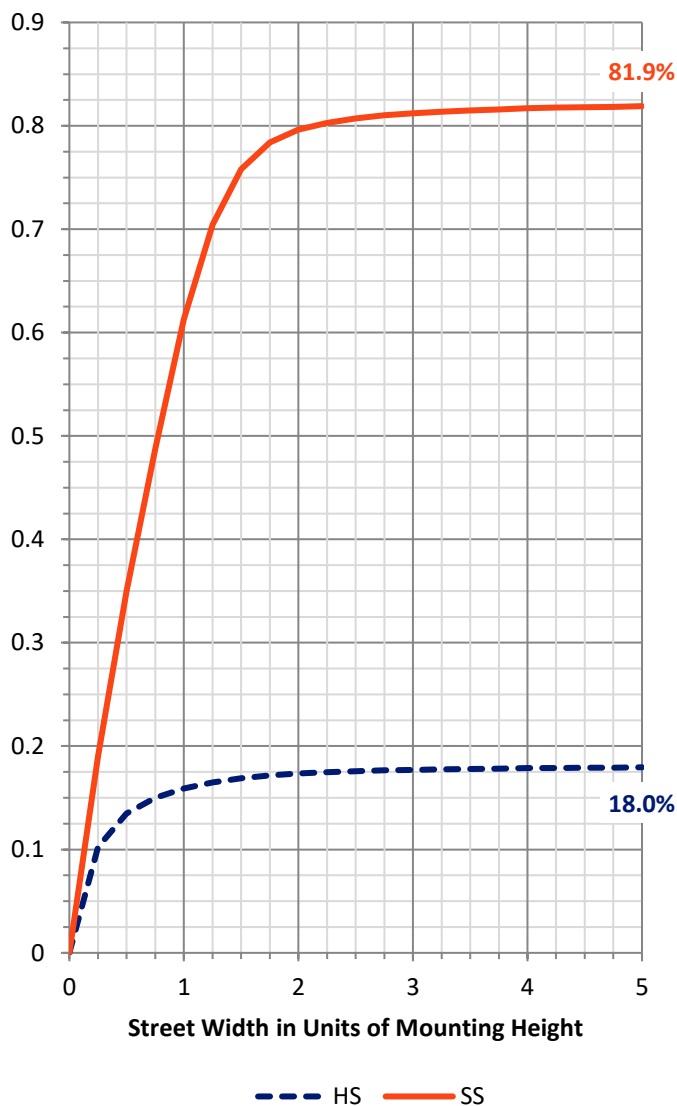
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2124.6	0.0	2124.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	9604.5	0.0	9604.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	11729.1	0.0	11729.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.1	1.5
10°-20°	449.9	3.8
20°-30°	720.5	6.1
30°-40°	1274.1	10.9
40°-50°	2232.4	19.0
50°-60°	2977.4	25.4
60°-70°	2771.8	23.6
70°-80°	1063.8	9.1
80°-90°	66.1	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°	11729.1	100.0
0°-180°	11729.1	100.0

Coefficient of Utilization



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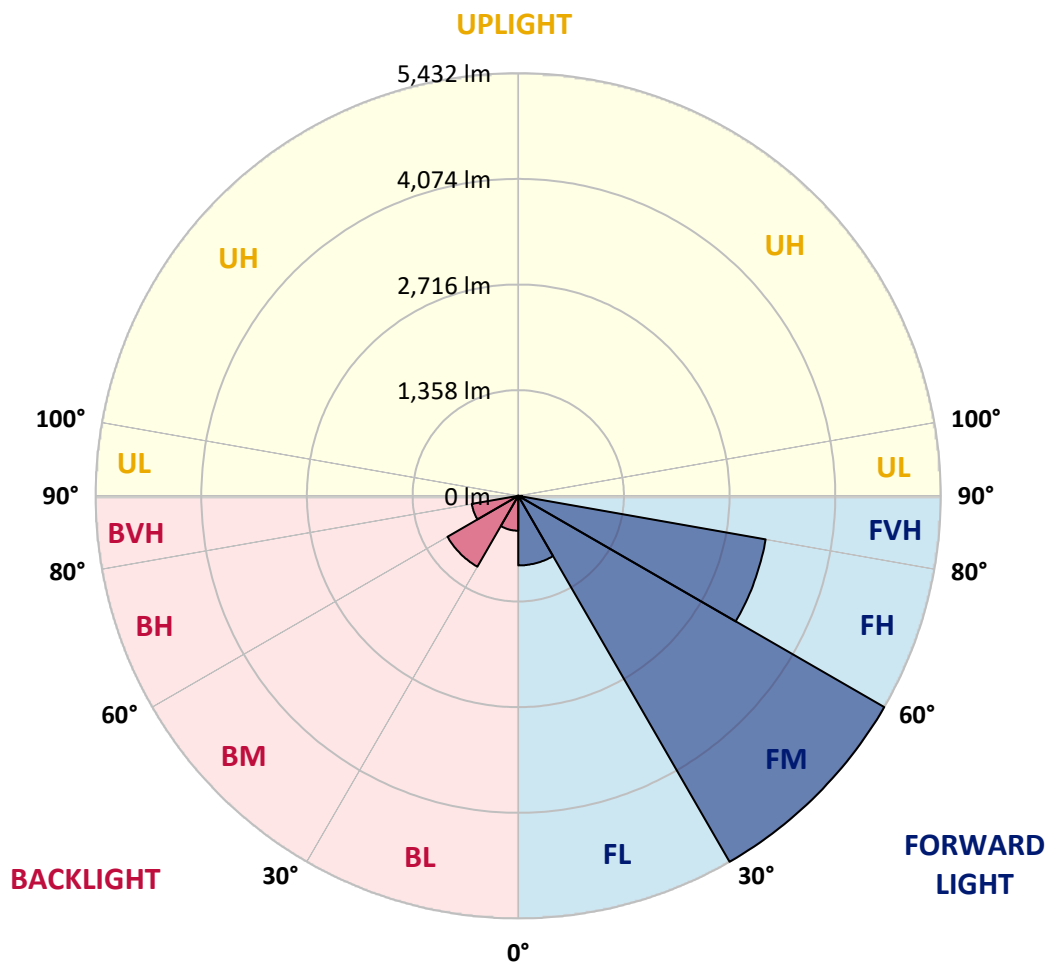
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	894.8	7.6			
FM	(30°-60°)	5432.4	46.3			
FH	(60°-80°)	3229.2	27.5			G2/5000
FVH	(80°-90°)	48.0	0.4			G1/100
BL	(0°-30°)	448.7	3.8	B1/500		
BM	(30°-60°)	1051.5	9.0	B2/2500		
BH	(60°-80°)	606.4	5.2	B2/1000		G2/1000
BVH	(80°-90°)	18.0	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°	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1
2.5°	2053.7	2065.6	2058.8	2055.4	2049.5	2041.1	2034.3	2013.2	1991.3	1976.9	1971.8
5°	2095.1	2106.9	2106.1	2109.4	2113.7	2116.2	2114.6	2090.9	2059.6	2035.1	2020.8
7.5°	2059.6	2073.2	2084.1	2101.0	2130.6	2161.8	2177.0	2172.0	2139.9	2106.1	2088.3
10°	1959.2	1973.5	1999.7	2039.3	2101.9	2169.4	2226.0	2252.2	2231.9	2194.7	2170.2
12.5°	1775.1	1789.4	1840.9	1927.1	2031.8	2149.1	2257.3	2327.4	2332.4	2295.3	2266.6
15°	1568.1	1582.5	1637.4	1745.5	1905.1	2093.5	2274.2	2406.7	2451.5	2419.4	2384.8
17.5°	1439.8	1452.5	1493.8	1580.9	1747.2	1981.9	2268.2	2491.2	2593.4	2568.0	2526.6
20°	1401.0	1411.9	1431.4	1492.2	1630.7	1866.2	2229.4	2570.6	2746.2	2731.8	2685.4
22.5°	1442.4	1452.5	1458.4	1485.4	1572.4	1790.3	2180.4	2651.6	2923.5	2925.2	2868.7
25°	1537.8	1547.9	1541.2	1558.0	1596.0	1766.6	2161.8	2747.0	3146.4	3165.1	3100.8
27.5°	1694.8	1695.7	1679.7	1678.7	1684.7	1802.1	2181.2	2849.2	3427.7	3462.3	3382.9
30°	2009.8	1997.1	1935.5	1868.8	1838.4	1908.4	2235.3	2969.9	3759.6	3821.2	3721.6
32.5°	2495.4	2476.8	2363.6	2204.1	2043.6	2079.9	2332.4	3107.6	4121.0	4232.4	4110.9
35°	3022.3	3017.3	2899.0	2661.7	2381.4	2324.0	2490.3	3288.3	4515.3	4692.7	4548.2
37.5°	3512.2	3509.6	3442.1	3162.5	2821.3	2664.3	2743.6	3524.8	4937.6	5194.3	5023.7
40°	3959.7	3967.3	3899.7	3649.8	3306.0	3100.8	3088.2	3817.0	5407.1	5740.6	5538.0
42.5°	4346.4	4354.9	4286.4	4101.5	3784.9	3583.9	3511.2	4175.0	5865.7	6327.5	6087.8
45°	4609.1	4661.4	4651.3	4503.5	4276.4	4067.8	4019.6	4624.3	6388.4	6949.9	6668.8
47.5°	4683.4	4731.5	4807.6	4827.8	4689.3	4484.1	4541.6	5165.6	6917.0	7573.1	7253.1
50°	4500.2	4545.0	4702.8	4913.1	5009.4	4946.0	5049.0	5745.7	7458.3	8194.7	7826.5
52.5°	4138.7	4184.4	4383.6	4716.3	5109.0	5308.3	5558.3	6317.4	7982.7	8783.2	8369.4
55°	3616.0	3664.2	3920.0	4296.6	4919.0	5457.8	5983.0	6888.3	8463.2	9312.7	8859.3
57.5°	2905.0	2940.4	3206.4	3733.4	4441.0	5309.2	6296.4	7511.5	8915.9	9832.9	9344.8
60°	1893.3	1924.5	2233.6	2821.3	3648.9	4812.6	6358.8	8206.5	9517.1	10509.3	9999.3
62.5°	1259.1	1280.2	1463.5	1895.0	2569.7	3859.2	5993.2	8761.3	10398.7	11686.5	11121.6
65°	863.9	885.0	1068.3	1368.9	1660.2	2552.8	4941.8	8687.8	11197.6	12621.3	11953.3
67.5°	616.4	634.2	789.6	1073.3	1201.7	1482.9	3350.0	7748.8	11082.7	12656.8	11998.1
70°	441.7	451.8	580.2	836.0	955.1	890.9	1862.9	5926.4	9703.8	11687.4	11084.5
72.5°	309.0	312.4	402.8	636.7	769.3	650.3	886.7	3951.3	7339.2	9173.4	8593.3
75°	209.4	213.6	271.1	467.0	617.3	496.5	469.6	2118.8	4308.5	5077.7	4551.6
77.5°	128.3	130.1	174.8	319.2	462.0	378.3	302.3	897.7	1667.0	1636.6	1395.0
80°	72.7	72.7	111.5	198.4	315.0	244.1	212.0	381.7	527.8	463.6	408.8
82.5°	40.5	41.4	81.1	123.3	208.6	144.4	116.5	176.5	228.0	201.8	175.7
85°	16.9	18.6	49.8	58.2	99.6	71.8	47.3	74.3	84.5	75.1	54.9
87.5°	1.6	2.6	15.2	11.0	11.8	14.3	6.8	14.3	11.8	11.8	8.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1	1943.1
2.5°	1955.8	1943.1	1911.0	1873.9	1824.9	1801.2	1769.2	1747.2	1728.7	1730.3	1713.4
5°	1993.7	1961.6	1889.9	1800.4	1688.9	1609.6	1525.1	1466.9	1419.5	1409.4	1386.6
7.5°	2046.1	1995.5	1869.6	1708.4	1520.1	1377.3	1249.8	1167.9	1109.7	1091.0	1072.5
10°	2113.7	2040.3	1843.5	1592.6	1321.6	1140.0	1003.3	939.0	899.3	885.8	875.8
12.5°	2192.3	2091.7	1808.8	1451.6	1117.2	942.4	855.5	823.4	810.7	806.5	803.9
15°	2291.1	2155.9	1756.4	1284.4	944.1	821.6	784.5	780.3	782.0	780.3	779.4
17.5°	2408.4	2226.0	1671.2	1112.1	827.6	760.0	746.5	749.9	754.1	753.3	751.5
20°	2536.8	2295.3	1562.3	959.3	748.1	716.1	708.5	711.9	715.2	713.6	712.7
22.5°	2682.8	2369.6	1441.5	840.2	694.9	675.6	667.2	668.0	668.0	664.6	662.9
25°	2857.7	2451.5	1314.9	755.8	654.5	639.3	629.1	625.8	620.6	610.6	608.8
27.5°	3066.3	2538.4	1193.2	696.7	622.4	608.0	596.2	587.7	575.1	558.2	556.5
30°	3301.0	2644.0	1090.2	659.5	597.1	582.7	569.2	556.5	537.9	516.8	515.2
32.5°	3577.1	2757.1	1015.1	635.0	574.2	559.0	542.9	527.8	507.5	486.4	487.3
35°	3906.5	2894.0	971.1	618.2	556.5	536.3	518.5	501.6	486.4	467.8	466.2
37.5°	4263.7	3039.2	957.7	609.7	544.7	513.4	493.1	481.3	479.7	468.6	467.8
40°	4654.7	3211.5	967.8	604.6	532.0	491.5	469.6	467.0	471.2	451.8	452.6
42.5°	5068.4	3415.8	984.6	598.7	514.2	469.6	448.4	448.4	445.1	418.0	418.0
45°	5516.0	3651.5	1001.5	584.4	493.1	447.5	431.5	425.6	411.2	385.1	384.3
47.5°	5966.9	3891.3	1014.2	558.2	467.8	429.0	414.6	401.1	380.0	356.4	355.5
50°	6395.1	4106.7	1000.7	519.4	439.1	411.2	396.1	377.5	354.6	338.7	336.1
52.5°	6777.7	4293.2	943.3	473.8	408.8	392.7	379.1	359.8	341.1	324.3	322.6
55°	7110.4	4444.4	841.9	430.7	381.7	376.6	363.2	338.7	313.3	298.9	297.2
57.5°	7429.6	4559.3	715.2	395.2	357.2	358.9	338.7	316.7	293.0	277.9	276.1
60°	7854.4	4713.0	586.9	362.2	331.1	336.1	314.2	298.1	268.5	249.1	246.6
62.5°	8533.3	4952.0	466.2	321.7	300.6	302.3	293.0	273.6	238.1	215.4	213.6
65°	9072.1	4864.1	367.4	277.9	266.0	268.5	268.5	247.4	209.4	183.3	180.7
67.5°	9011.3	4164.9	293.0	234.7	233.1	234.7	240.7	222.9	185.8	164.7	161.3
70°	8301.1	3312.8	234.7	195.1	202.6	198.4	215.4	203.6	167.2	146.1	143.6
72.5°	6773.4	2386.4	179.1	161.3	155.4	162.2	194.2	183.3	139.3	115.7	113.2
75°	3958.0	1273.5	133.5	127.5	112.3	135.1	172.3	156.2	106.4	85.3	82.7
77.5°	1288.6	444.2	98.0	93.7	83.6	109.0	147.0	131.7	87.0	67.5	65.0
80°	345.4	134.3	66.7	61.6	54.0	81.1	116.5	104.8	62.5	43.9	43.0
82.5°	138.5	56.6	38.8	34.6	29.5	55.8	92.0	84.5	46.4	27.9	27.9
85°	44.8	18.6	14.3	11.0	13.5	34.6	54.9	57.4	32.9	14.3	11.0
87.5°	5.9	2.6	2.6	3.4	2.6	5.9	16.9	16.1	9.3	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)