

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: P961535

Luminaire Tested: **NAV-SB2A-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961535
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6271 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3
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

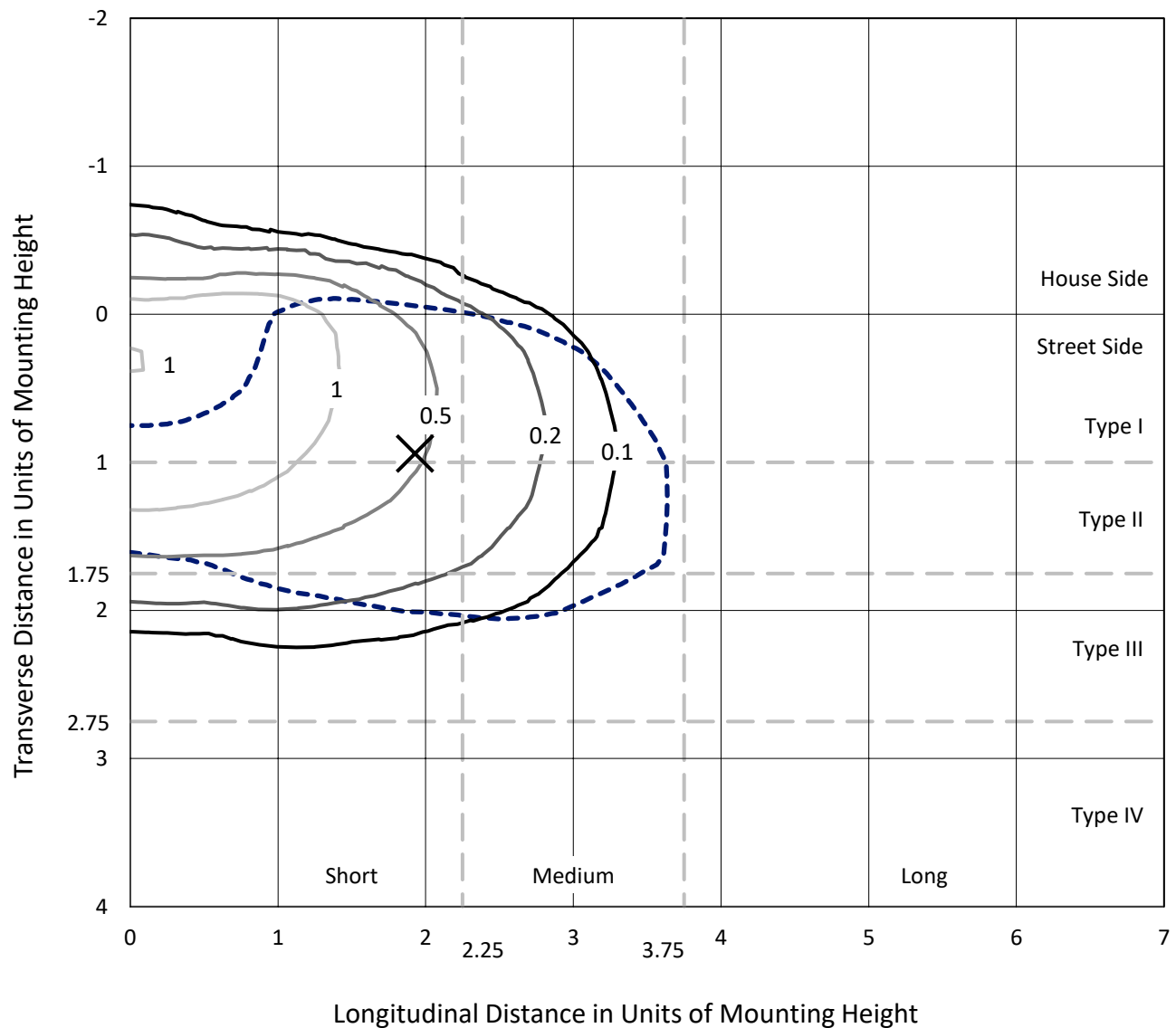


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

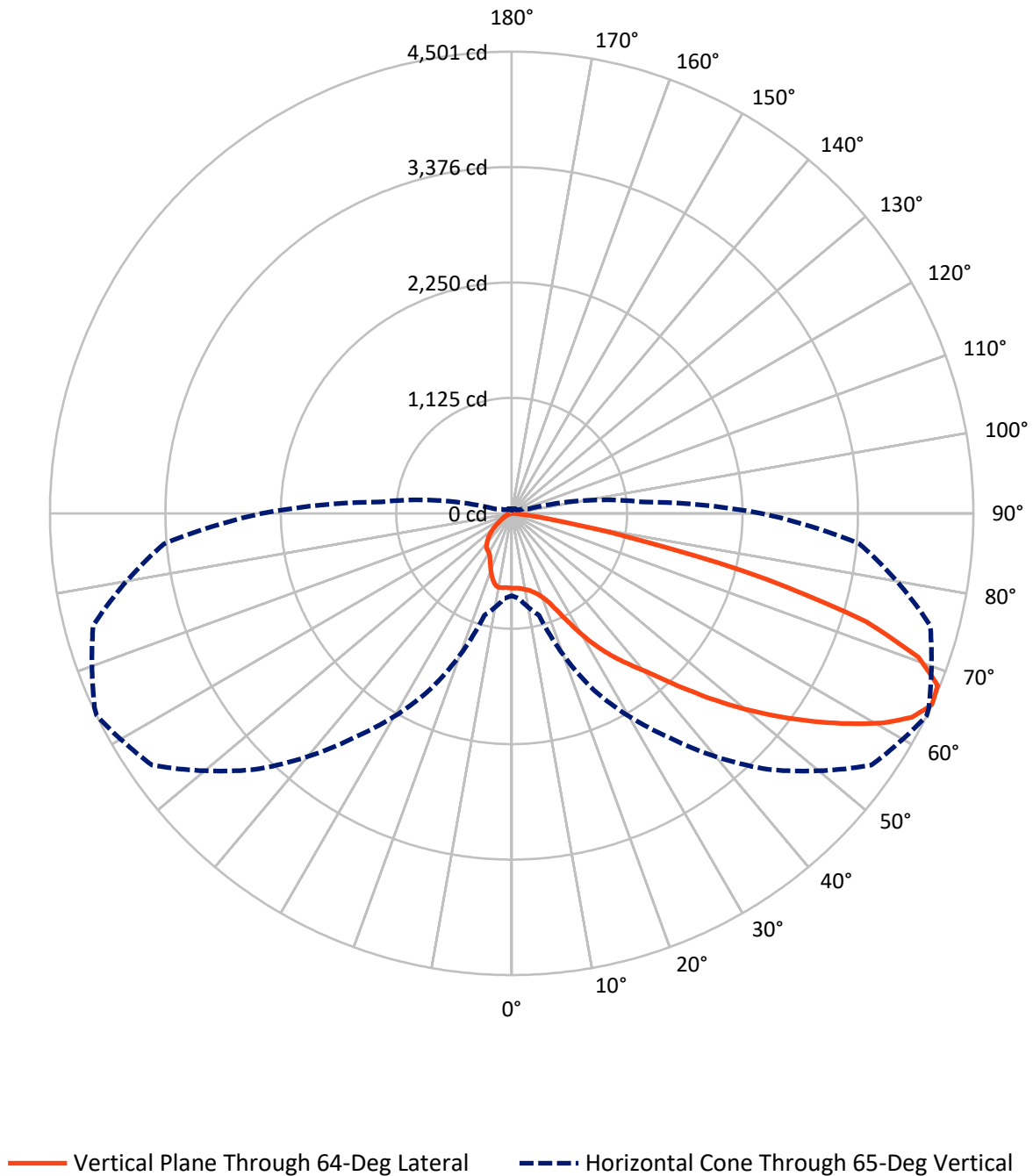


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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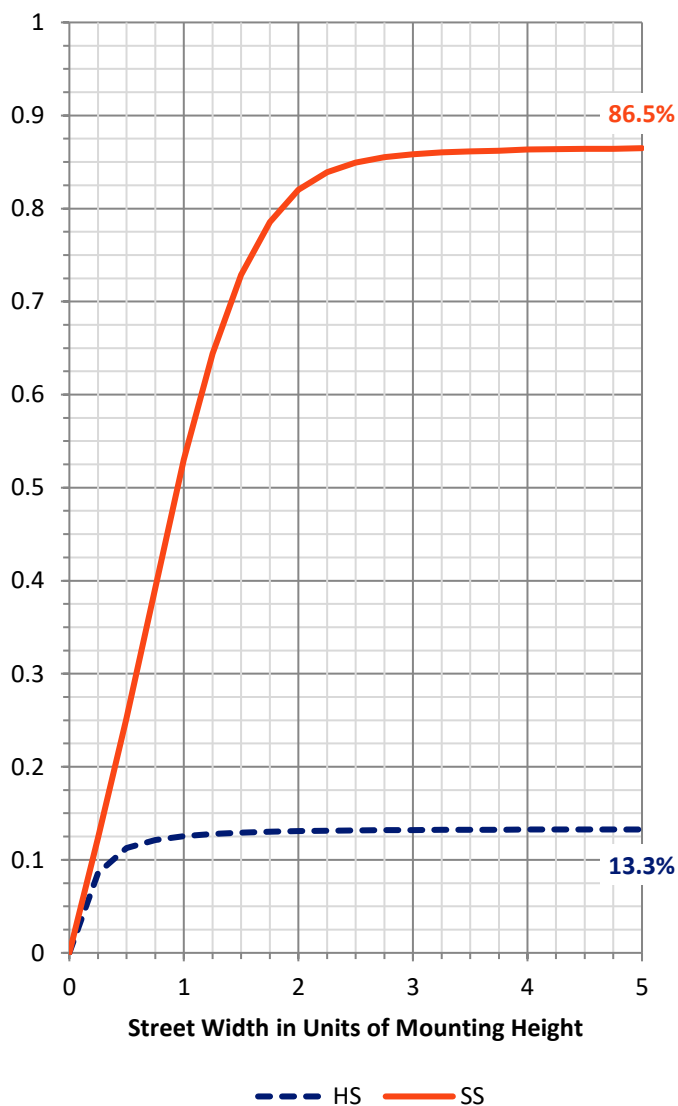
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	838.6	0.0	838.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	5432.3	0.0	5432.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	6271.0	0.0	6271.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	1.1
10°-20°	182.5	2.9
20°-30°	345.9	5.5
30°-40°	699.8	11.2
40°-50°	1192.2	19.0
50°-60°	1621.3	25.9
60°-70°	1522.5	24.3
70°-80°	610.0	9.7
80°-90°	29.5	0.5
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°	6271.0	100.0
0°-180°	6271.0	100.0

Coefficient of Utilization



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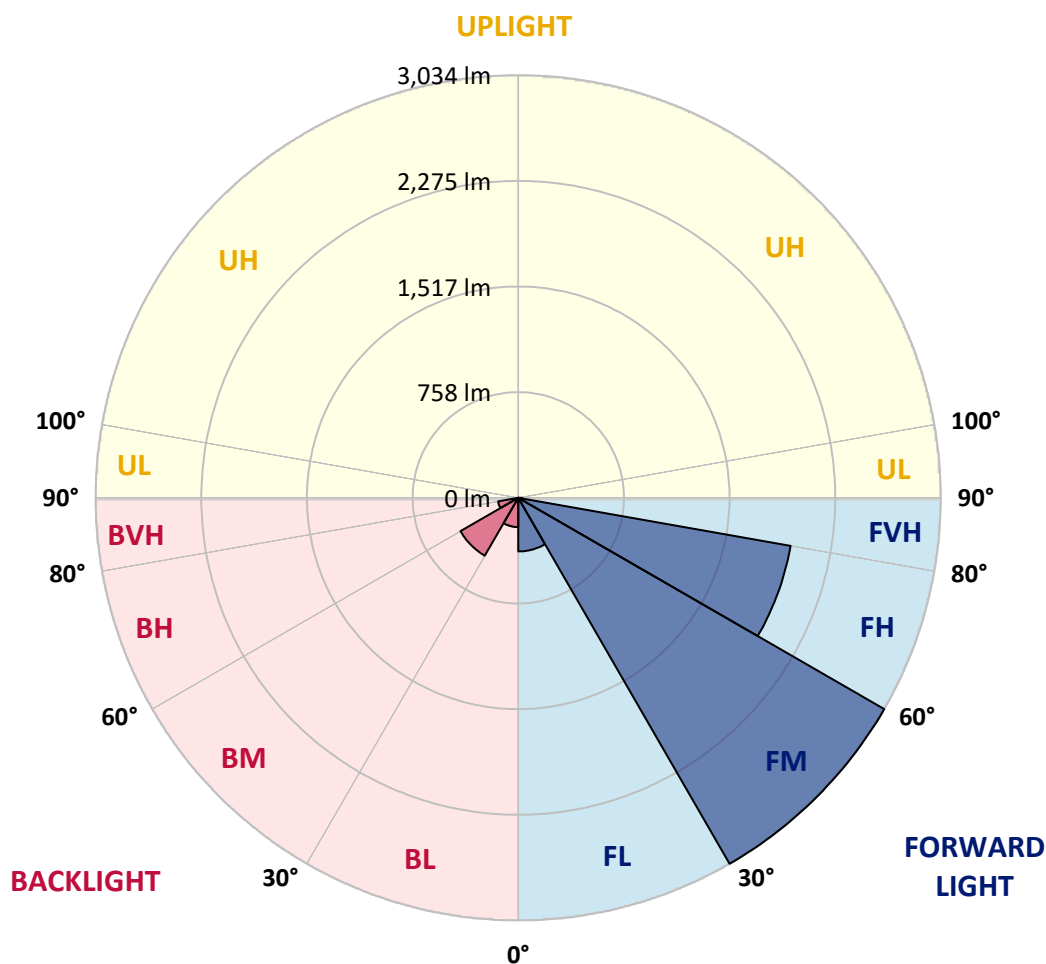
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	385.1	6.1			
FM	(30°-60°)	3033.9	48.4			
FH	(60°-80°)	1985.2	31.7			G2/5000
FVH	(80°-90°)	28.1	0.4			G1/100
BL	(0°-30°)	210.6	3.4	B1/500		
BM	(30°-60°)	479.4	7.6	B1/1000		
BH	(60°-80°)	147.2	2.3	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4
2.5°	726.8	731.8	730.6	729.4	729.0	729.8	730.2	729.8	729.8	729.8	730.2
5°	713.0	717.2	717.2	720.2	724.4	729.4	733.2	734.0	734.8	736.1	735.6
7.5°	686.5	689.8	692.4	702.0	712.6	726.0	737.4	743.2	744.0	748.8	750.4
10°	668.4	672.6	676.8	687.0	702.0	722.2	741.6	755.8	758.0	768.9	774.0
12.5°	667.6	671.8	677.2	688.2	705.8	727.2	750.8	771.4	775.2	791.2	801.7
15°	676.4	681.4	686.5	700.0	718.8	745.0	770.2	795.8	799.6	822.3	833.6
17.5°	694.4	701.2	705.0	718.4	738.6	767.6	800.8	830.2	833.6	860.1	874.4
20°	730.2	738.2	739.4	750.4	770.2	801.2	840.8	877.4	881.6	911.8	927.8
22.5°	804.2	815.6	805.4	811.0	828.6	859.7	902.6	948.8	954.7	989.2	1003.5
25°	934.5	950.5	924.4	915.2	922.7	955.1	1008.9	1067.3	1074.1	1101.9	1108.9
27.5°	1190.5	1169.9	1130.5	1091.7	1069.1	1087.5	1148.1	1220.4	1228.8	1255.7	1247.3
30°	1471.8	1453.8	1400.4	1314.6	1260.8	1257.8	1313.7	1394.4	1404.1	1429.8	1404.1
32.5°	1753.5	1736.2	1678.2	1572.7	1479.4	1433.2	1471.8	1561.3	1566.4	1582.8	1545.0
35°	2030.5	2012.8	1954.8	1846.7	1732.0	1626.9	1619.3	1720.3	1721.9	1739.1	1682.8
37.5°	2309.2	2294.5	2232.7	2126.8	2013.7	1868.7	1798.5	1870.7	1872.9	1889.7	1831.3
40°	2508.1	2514.3	2471.9	2389.9	2292.8	2134.4	1999.4	2030.9	2018.3	2046.4	2011.6
42.5°	2678.7	2691.3	2654.3	2613.1	2556.9	2417.3	2248.2	2242.8	2222.6	2237.8	2201.6
45°	2826.2	2836.8	2803.6	2793.9	2792.6	2694.7	2520.3	2487.5	2459.3	2456.3	2413.1
47.5°	2880.6	2900.6	2915.0	2947.4	3010.4	2969.2	2801.5	2750.6	2719.1	2696.0	2627.5
50°	2901.2	2922.6	2971.3	3065.5	3214.7	3232.3	3081.5	3024.3	2985.6	2943.6	2842.6
52.5°	2873.4	2911.6	2977.2	3135.7	3352.2	3443.4	3350.1	3300.1	3255.9	3187.4	3037.7
55°	2709.8	2748.1	2882.2	3134.9	3420.7	3591.4	3604.0	3581.8	3532.2	3424.1	3195.3
57.5°	2365.1	2421.9	2634.1	3028.1	3419.5	3718.8	3852.9	3868.9	3813.3	3658.6	3319.4
60°	1887.5	1964.5	2223.4	2791.4	3313.9	3787.7	4071.1	4150.9	4092.1	3889.9	3419.9
62.5°	1317.1	1406.2	1651.3	2420.6	3072.6	3738.1	4230.4	4378.0	4333.4	4096.7	3458.6
65°	803.4	832.0	1029.5	1904.8	2662.3	3530.4	4279.6	4500.7	4486.0	4223.2	3401.4
67.5°	535.2	559.1	615.9	1306.2	2066.6	3115.5	4161.9	4479.2	4483.5	4202.6	3192.1
70°	322.5	343.1	380.1	759.6	1339.4	2466.0	3797.4	4206.0	4230.4	3927.3	2795.2
72.5°	132.8	146.7	180.3	344.3	693.6	1565.1	3023.9	3611.2	3667.9	3302.1	2145.2
75°	75.2	82.4	106.0	172.8	301.0	729.4	1831.7	2563.5	2647.2	2276.0	1290.6
77.5°	50.0	53.4	68.6	111.8	169.4	248.9	782.8	1335.6	1495.4	1243.1	558.7
80°	33.6	36.6	47.0	74.8	110.2	106.8	249.3	494.8	608.7	427.1	136.2
82.5°	22.7	23.2	33.6	49.2	69.8	51.7	73.6	153.9	193.4	123.6	51.7
85°	13.0	12.6	24.8	28.6	31.2	21.4	22.2	46.2	60.6	52.2	29.4
87.5°	1.6	2.6	9.6	7.6	4.2	4.6	4.6	8.0	11.8	12.6	6.4
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°	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4	729.4
2.5°	730.2	729.8	728.6	727.2	724.4	722.6	723.4	722.6	722.2	722.6	724.4
5°	735.6	734.4	731.0	726.8	721.0	713.8	709.2	702.4	696.2	692.4	693.2
7.5°	750.4	749.2	744.6	732.8	713.8	684.0	656.6	632.7	614.6	604.1	604.5
10°	774.0	771.8	764.6	738.6	689.0	623.8	569.6	524.7	495.2	481.3	480.1
12.5°	801.7	799.2	786.6	733.2	642.0	540.2	465.4	415.3	388.1	375.9	374.5
15°	834.5	831.1	806.3	707.0	573.4	447.7	379.1	341.7	324.1	313.2	313.6
17.5°	875.2	869.4	821.0	668.0	499.0	377.1	326.3	298.1	282.5	272.0	271.1
20°	928.2	918.5	832.8	621.4	430.5	332.5	290.5	266.9	255.2	245.9	244.3
22.5°	1002.2	988.3	847.1	570.9	382.1	301.9	264.0	246.8	237.1	226.6	224.9
25°	1093.9	1077.5	864.8	524.2	348.9	275.3	244.7	230.4	219.0	206.8	205.6
27.5°	1222.1	1192.7	885.8	486.0	320.3	252.7	227.0	211.0	198.0	187.9	185.8
30°	1365.0	1316.6	904.3	462.9	294.3	231.6	203.9	187.9	175.7	168.6	167.3
32.5°	1500.4	1434.8	916.5	452.7	270.7	207.7	178.7	161.4	152.2	150.1	151.3
35°	1628.2	1541.6	915.2	443.1	249.7	183.7	153.9	136.2	129.0	130.3	130.3
37.5°	1775.3	1655.5	906.4	427.9	232.5	161.8	132.4	116.8	110.6	111.0	112.6
40°	1946.4	1787.1	900.9	399.3	213.5	141.7	114.8	102.2	97.6	95.8	95.4
42.5°	2128.8	1914.5	901.7	367.0	190.0	123.6	102.6	92.0	87.8	86.6	86.2
45°	2312.2	2036.0	903.0	333.3	165.2	109.7	93.8	84.9	82.4	80.7	80.7
47.5°	2484.5	2139.4	879.4	297.2	140.8	99.2	86.6	80.7	78.6	76.5	76.5
50°	2645.1	2208.3	822.7	255.2	121.5	90.8	81.2	77.0	74.8	72.8	72.8
52.5°	2770.0	2219.2	729.0	211.9	108.0	84.5	77.8	74.0	71.4	69.4	69.0
55°	2825.4	2150.8	595.7	171.5	97.6	79.0	74.4	70.6	67.6	65.6	65.2
57.5°	2811.2	2006.5	464.5	137.9	87.4	73.6	70.2	67.6	64.4	61.0	60.6
60°	2741.0	1813.5	350.1	114.8	78.2	67.6	65.6	63.4	58.8	53.8	53.0
62.5°	2619.5	1571.0	249.7	95.0	68.1	61.0	60.1	58.4	51.7	42.4	41.6
65°	2433.7	1276.3	168.2	79.0	58.4	53.4	53.8	50.8	42.0	31.6	30.6
67.5°	2162.0	933.3	107.6	64.8	48.8	44.6	45.0	43.3	35.8	26.9	25.6
70°	1816.1	618.0	70.2	49.2	39.1	34.4	37.0	37.4	30.2	21.8	21.0
72.5°	1331.4	364.9	49.2	36.6	28.6	24.0	30.2	31.2	24.4	16.4	15.6
75°	758.8	173.2	37.0	26.4	17.6	16.8	23.6	23.6	16.8	11.0	10.0
77.5°	318.7	72.3	26.0	17.2	10.0	9.6	16.0	14.8	8.4	5.0	5.0
80°	92.0	32.4	13.8	8.4	4.2	3.8	6.4	4.6	2.2	0.8	0.8
82.5°	36.2	14.2	5.4	3.4	1.6	1.6	0.8	0.0	0.0	0.0	0.0
85°	21.4	5.8	2.6	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	1.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)