

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: P968919

Luminaire Tested: **NAV-SB5C-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968919
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25973.5 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

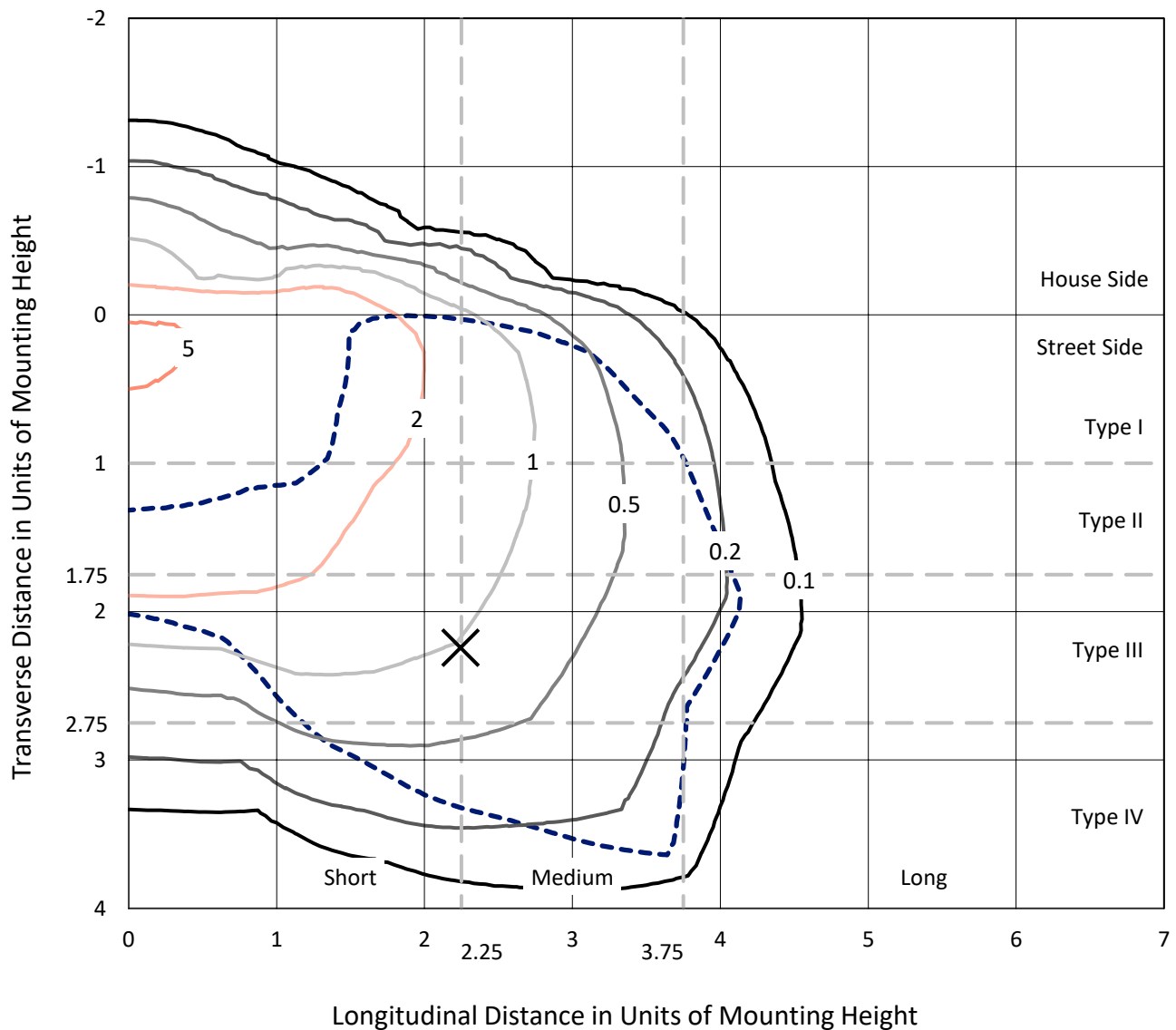
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

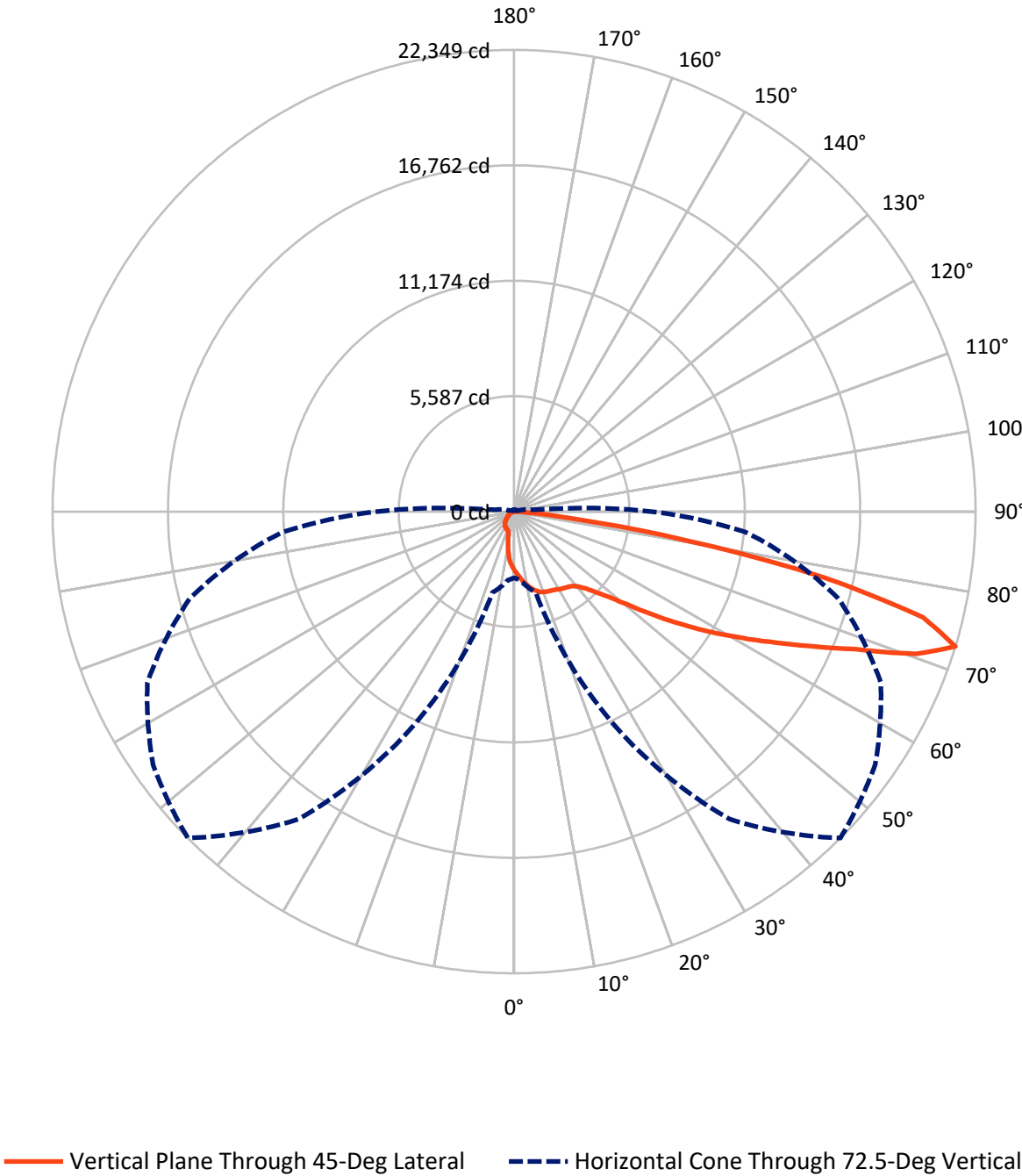
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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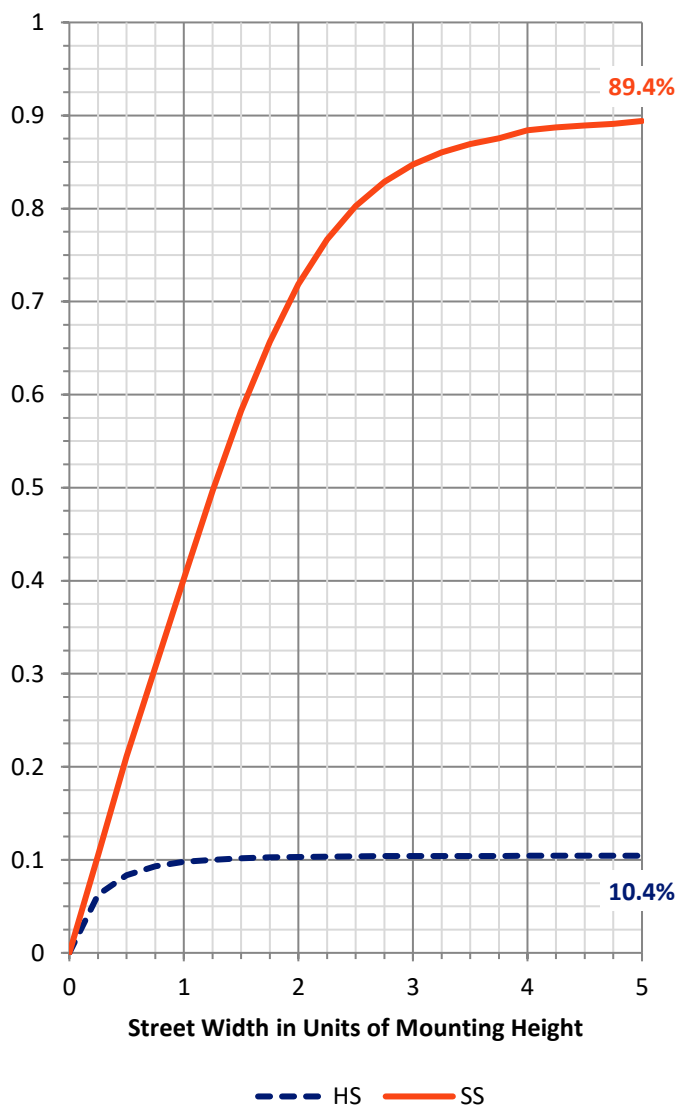
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2729.1	0.0	2729.1
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	23244.4	0.0	23244.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	25973.5	0.0	25973.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.1	1.0
10°-20°	783.5	3.0
20°-30°	1286.7	5.0
30°-40°	1824.8	7.0
40°-50°	3016.3	11.6
50°-60°	5418.4	20.9
60°-70°	7523.7	29.0
70°-80°	5457.5	21.0
80°-90°	394.6	1.5
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°	25973.5	100.0
0°-180°	25973.5	100.0

Coefficient of Utilization



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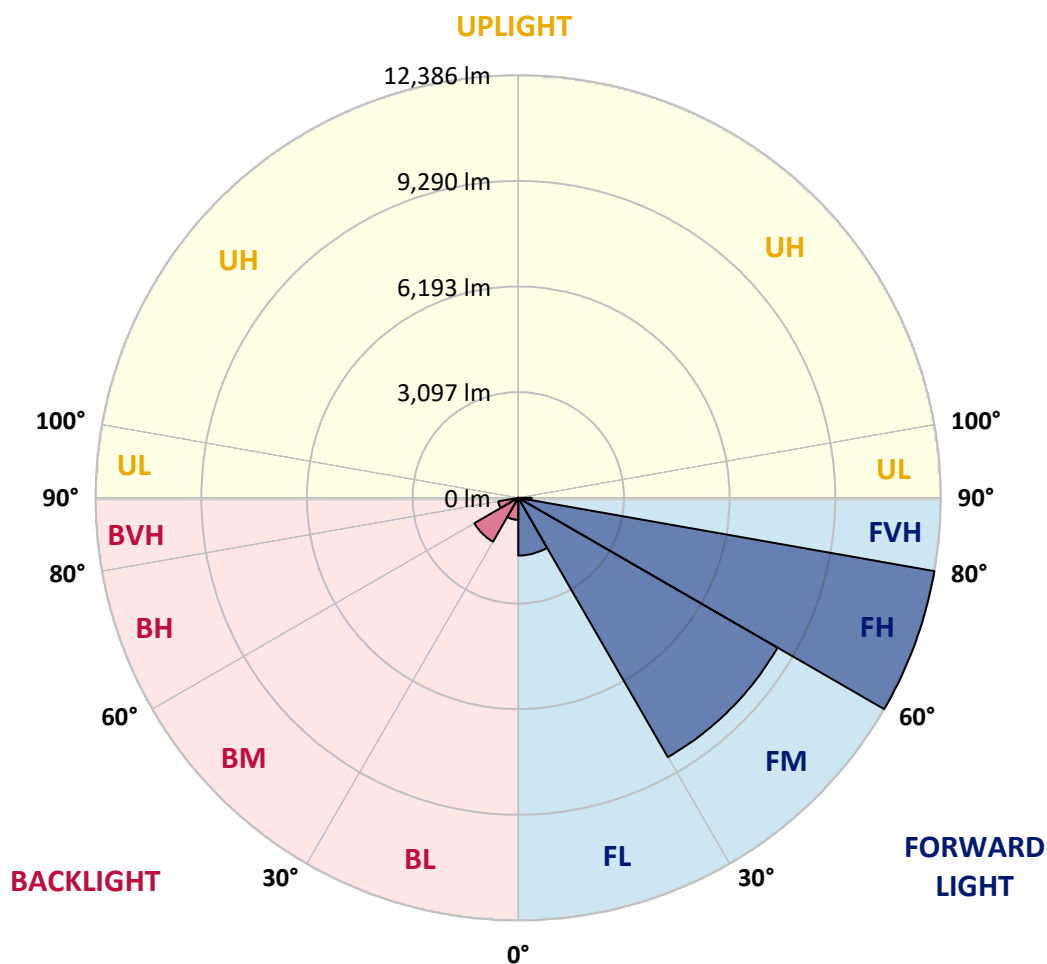
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1691.9	6.5			
FM	(30°-60°)	8775.2	33.8			
FH	(60°-80°)	12386.0	47.7			G5
FVH	(80°-90°)	391.2	1.5			G3/500
BL	(0°-30°)	646.4	2.5	B2/1000		
BM	(30°-60°)	1484.2	5.7	B2/2500		
BH	(60°-80°)	595.1	2.3	B2/1000		G2/1000
BVH	(80°-90°)	3.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5
2.5°	3107.8	3113.1	3109.6	3088.3	3052.9	3033.4	3022.7	2987.3	2964.2	2923.5	2880.9
5°	3393.3	3414.6	3402.2	3359.5	3292.2	3244.3	3230.2	3157.5	3091.9	3015.7	2927.0
7.5°	3696.5	3707.0	3684.1	3629.0	3538.6	3457.1	3444.7	3343.7	3239.0	3122.0	3001.5
10°	3958.9	3971.3	3935.8	3855.9	3753.1	3652.1	3634.3	3522.7	3398.6	3255.0	3100.7
12.5°	4178.6	4191.0	4145.0	4049.3	3935.8	3831.1	3813.4	3696.5	3559.9	3400.3	3208.9
15°	4345.3	4368.3	4306.3	4203.4	4081.1	3976.6	3967.7	3852.5	3719.5	3542.2	3338.3
17.5°	4442.8	4465.8	4407.4	4283.3	4178.6	4090.0	4079.4	3983.7	3859.5	3689.4	3464.2
20°	4458.8	4480.1	4418.0	4309.8	4223.0	4152.1	4146.7	4077.6	3987.1	3824.1	3600.7
22.5°	4410.9	4437.5	4380.7	4293.9	4233.6	4196.3	4189.3	4150.3	4098.9	3960.6	3728.3
25°	4361.3	4382.5	4340.0	4263.8	4231.8	4228.3	4233.6	4226.5	4215.9	4098.9	3877.3
27.5°	4357.7	4380.7	4332.9	4260.2	4242.5	4279.7	4285.0	4318.7	4327.5	4224.7	4020.9
30°	4387.8	4403.8	4357.7	4281.4	4272.6	4357.7	4359.5	4419.8	4433.9	4331.1	4162.7
32.5°	4453.4	4471.2	4425.0	4313.4	4301.0	4419.8	4425.0	4504.9	4527.9	4444.6	4311.7
35°	4607.7	4629.0	4575.8	4402.1	4357.7	4478.2	4494.2	4588.2	4634.2	4565.1	4465.8
37.5°	4992.4	4930.4	4857.7	4581.1	4487.1	4570.5	4597.0	4707.0	4788.5	4708.7	4650.2
40°	5948.0	5752.9	5526.0	4886.1	4714.1	4767.3	4788.5	4898.5	5010.1	4932.1	4903.7
42.5°	7382.3	7151.7	6786.5	5588.1	5056.2	5082.8	5098.8	5194.5	5352.2	5290.2	5297.3
45°	8660.4	8577.1	8204.8	6786.5	5696.2	5565.0	5584.5	5634.2	5866.4	5843.3	5889.4
47.5°	9642.6	9594.7	9307.5	8162.3	6777.7	6155.4	6210.4	6233.4	6568.5	6650.0	6774.1
50°	10397.9	10380.2	10123.1	9385.5	8190.7	7025.9	7045.3	6995.7	7497.5	7699.6	7935.3
52.5°	11110.6	11170.9	10981.1	10521.9	9699.4	8165.9	8162.3	7928.3	8605.5	8910.4	9312.8
55°	11754.1	11775.4	11794.9	11681.4	11216.9	9463.5	9429.9	9047.0	9890.8	10206.4	10642.5
57.5°	12358.6	12367.5	12541.3	12773.6	12796.5	10857.0	10795.0	10335.8	11295.0	11520.1	11787.8
60°	12764.6	12805.4	13172.4	13817.7	14099.6	12294.9	12261.2	11793.1	12723.8	12828.5	12778.8
62.5°	12179.6	12427.8	13353.2	14633.2	15330.0	13888.6	13872.7	13433.0	14227.3	14142.1	13716.7
65°	9859.0	10279.1	11906.6	15184.7	16537.4	15668.6	15691.6	15223.6	15771.5	15494.8	14479.0
67.5°	6896.4	7339.7	9265.0	15228.9	17886.5	17758.8	17891.8	17157.8	17411.4	16790.8	14659.9
70°	4769.0	4997.7	6251.2	14275.2	18937.8	20638.0	20634.4	19533.4	19042.3	17381.2	13738.0
72.5°	3207.1	3325.9	4059.8	11325.1	18164.8	22348.8	22246.0	21348.9	19592.0	16255.4	11224.1
75°	1352.7	1439.6	1879.2	6364.6	14370.9	20446.5	20168.1	18866.9	17407.8	12800.1	7002.8
77.5°	429.1	466.3	741.1	2278.2	7915.9	15369.0	15074.7	11782.5	11667.3	6421.3	2560.0
80°	203.9	237.6	416.7	914.8	3115.0	8359.1	8318.3	5345.2	5019.0	1733.9	514.1
82.5°	88.7	104.6	230.5	489.3	1393.5	2981.9	3042.2	1819.0	1505.2	657.7	157.7
85°	28.4	37.2	106.4	225.2	588.6	741.1	732.2	432.6	606.3	358.1	54.9
87.5°	0.0	0.0	35.5	51.5	60.3	42.5	47.9	37.2	168.4	99.3	19.5
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°	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5
2.5°	2859.6	2831.3	2781.6	2735.5	2694.7	2654.0	2629.1	2593.7	2590.2	2590.2	2599.0
5°	2879.1	2833.0	2744.4	2650.4	2542.3	2439.5	2336.6	2237.4	2205.5	2182.4	2193.0
7.5°	2935.9	2863.1	2723.1	2544.0	2338.4	2113.2	1955.5	1785.2	1719.6	1684.2	1689.5
10°	3017.4	2918.2	2705.4	2391.6	2058.3	1751.6	1526.4	1342.0	1271.1	1241.0	1241.0
12.5°	3107.8	2985.5	2673.5	2201.9	1751.6	1384.6	1164.8	1079.6	1069.1	1069.1	1069.1
15°	3215.9	3067.1	2618.6	1978.6	1430.7	1095.6	1017.6	1021.2	1031.8	1038.9	1038.9
17.5°	3327.7	3153.9	2531.6	1728.6	1147.1	985.7	987.5	992.8	1001.6	1008.8	1008.8
20°	3448.2	3240.8	2416.4	1462.6	983.9	953.8	959.1	964.4	971.5	975.1	976.8
22.5°	3577.7	3322.3	2279.9	1202.0	929.0	927.2	929.0	934.3	943.2	943.2	946.7
25°	3715.9	3412.7	2123.9	1012.3	900.7	900.7	904.2	907.7	914.8	914.8	916.6
27.5°	3857.8	3496.1	1959.0	913.1	875.8	874.0	874.0	879.3	882.9	884.7	886.4
30°	4013.8	3593.6	1794.2	891.7	856.3	847.5	842.1	845.6	849.2	851.0	854.5
32.5°	4173.3	3687.5	1647.0	900.7	836.8	820.8	803.1	799.6	799.6	806.7	812.0
35°	4350.6	3790.3	1533.5	930.8	826.2	781.9	753.5	737.5	739.3	749.9	755.2
37.5°	4563.4	3914.5	1450.2	957.4	819.1	737.5	691.5	671.9	659.5	671.9	668.4
40°	4841.7	4097.1	1389.9	978.7	810.2	686.1	624.0	592.1	569.1	576.2	572.7
42.5°	5251.3	4384.3	1366.8	980.4	790.7	625.9	554.9	512.4	478.7	480.4	473.3
45°	5825.7	4838.2	1485.6	957.4	748.1	560.3	482.3	425.5	404.3	398.9	391.8
47.5°	6612.8	5499.4	1760.4	909.5	686.1	496.4	411.3	363.5	347.5	338.7	333.3
50°	7667.6	6348.6	2065.4	856.3	624.0	436.1	352.8	322.7	312.0	303.2	301.3
52.5°	8891.0	7210.3	2315.4	803.1	562.0	382.9	315.6	297.9	288.9	281.9	280.1
55°	10013.1	7804.1	2301.2	746.4	501.7	340.4	288.9	278.4	267.7	260.7	257.1
57.5°	10711.7	7887.5	1897.0	684.3	432.6	306.7	264.1	257.1	244.7	235.7	234.0
60°	11032.6	7412.4	1329.6	602.8	363.5	274.8	237.6	234.0	218.0	205.6	202.1
62.5°	11091.0	6529.5	886.4	501.7	303.2	244.7	210.9	205.6	184.4	163.1	152.4
65°	10853.5	5267.2	613.5	391.8	258.8	212.8	180.8	170.1	147.2	125.9	118.8
67.5°	10101.8	3698.2	427.2	281.9	219.9	168.4	143.6	140.0	122.3	104.6	99.3
70°	8724.3	2107.9	285.5	210.9	173.7	115.2	113.5	117.1	99.3	85.1	78.0
72.5°	6689.0	964.4	177.3	154.3	118.8	78.0	90.4	92.1	76.3	63.9	56.7
75°	3937.5	413.1	111.7	99.3	60.3	51.5	65.6	67.3	51.5	40.8	35.5
77.5°	1340.3	156.0	70.9	58.5	30.1	28.4	42.5	42.5	28.4	16.0	12.4
80°	304.9	58.5	35.5	23.1	14.1	12.4	14.1	12.4	7.1	1.7	0.0
82.5°	86.9	23.1	14.1	8.8	5.3	5.3	1.7	0.0	0.0	0.0	0.0
85°	24.8	10.7	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.7	1.7	0.0	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)