

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: P962584

Luminaire Tested: **NAV-SB2C-827-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962584
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-827-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11302.7 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 100.9
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

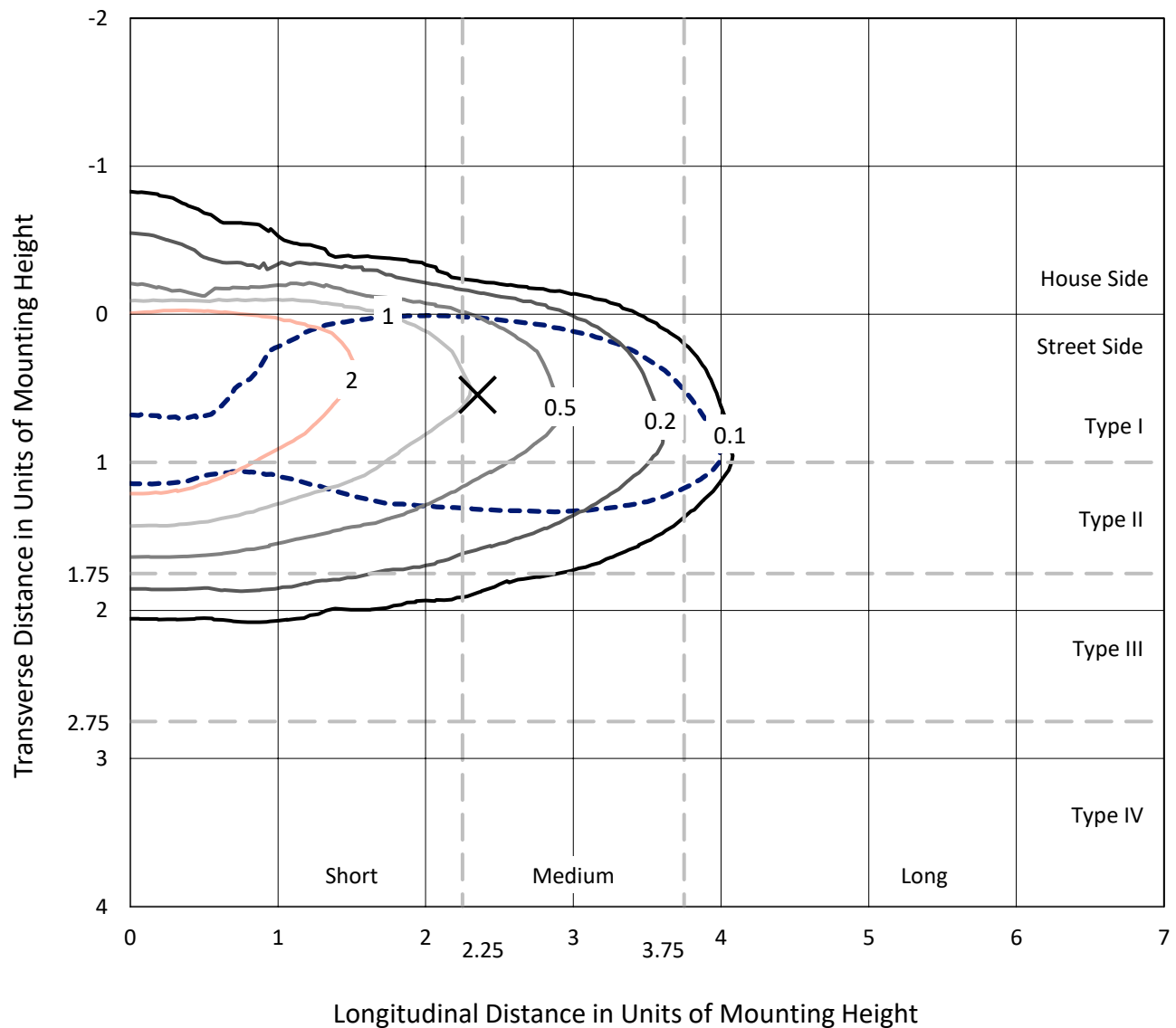


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Iso-Footcandle Lines of Horizontal Illumination

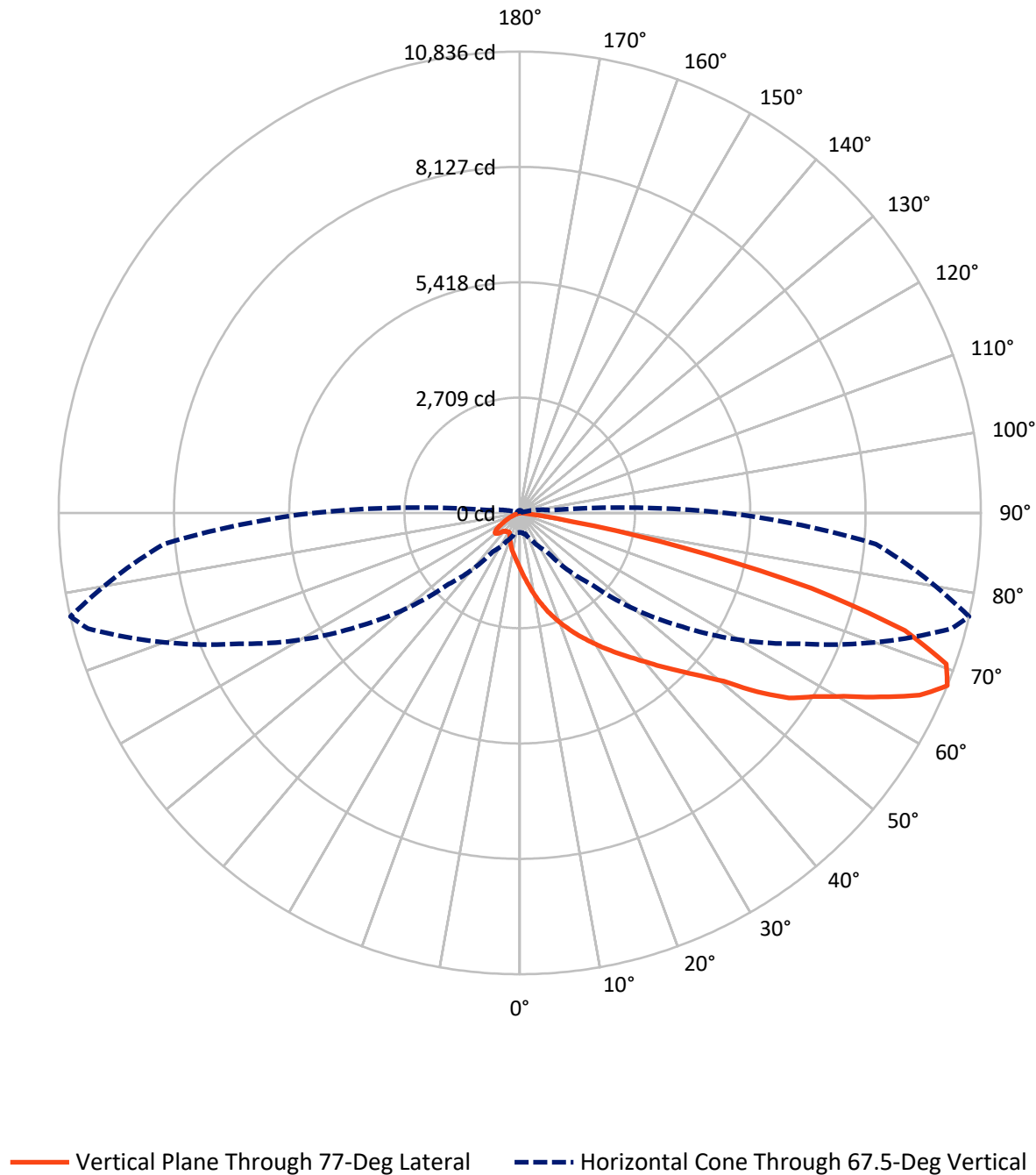
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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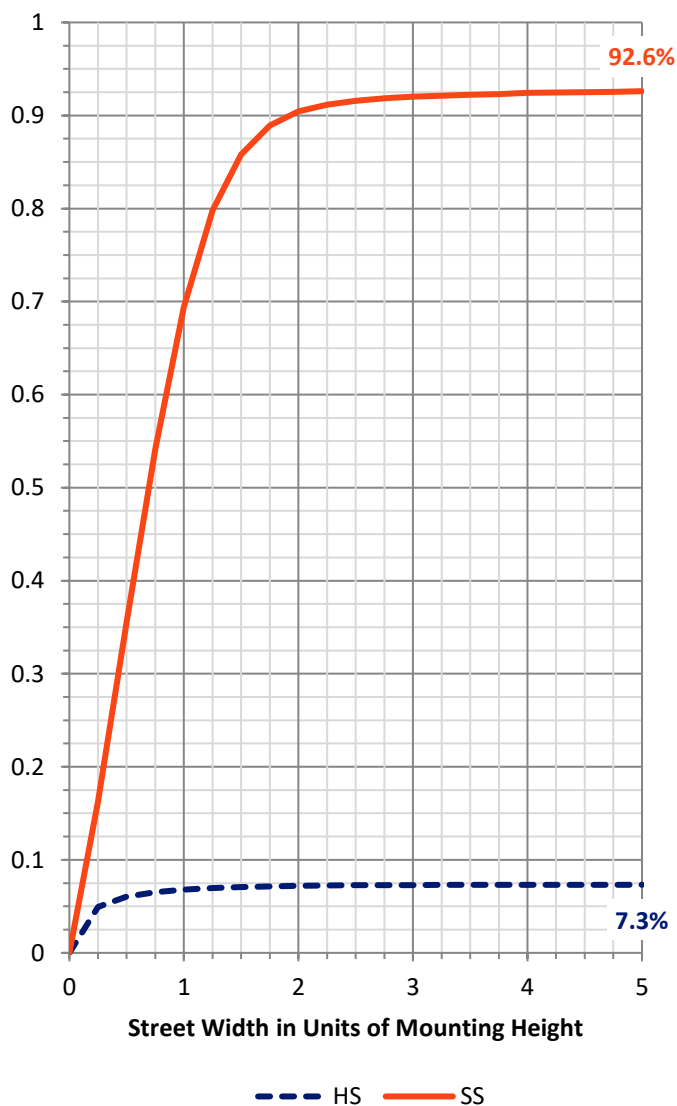
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	831.5	0.0	831.5
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	10471.1	0.0	10471.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	11302.7	0.0	11302.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.0	1.2
10°-20°	465.9	4.1
20°-30°	899.0	8.0
30°-40°	1560.7	13.8
40°-50°	2266.0	20.0
50°-60°	2602.2	23.0
60°-70°	2259.2	20.0
70°-80°	1064.1	9.4
80°-90°	52.6	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°	11302.7	100.0
0°-180°	11302.7	100.0

Coefficient of Utilization



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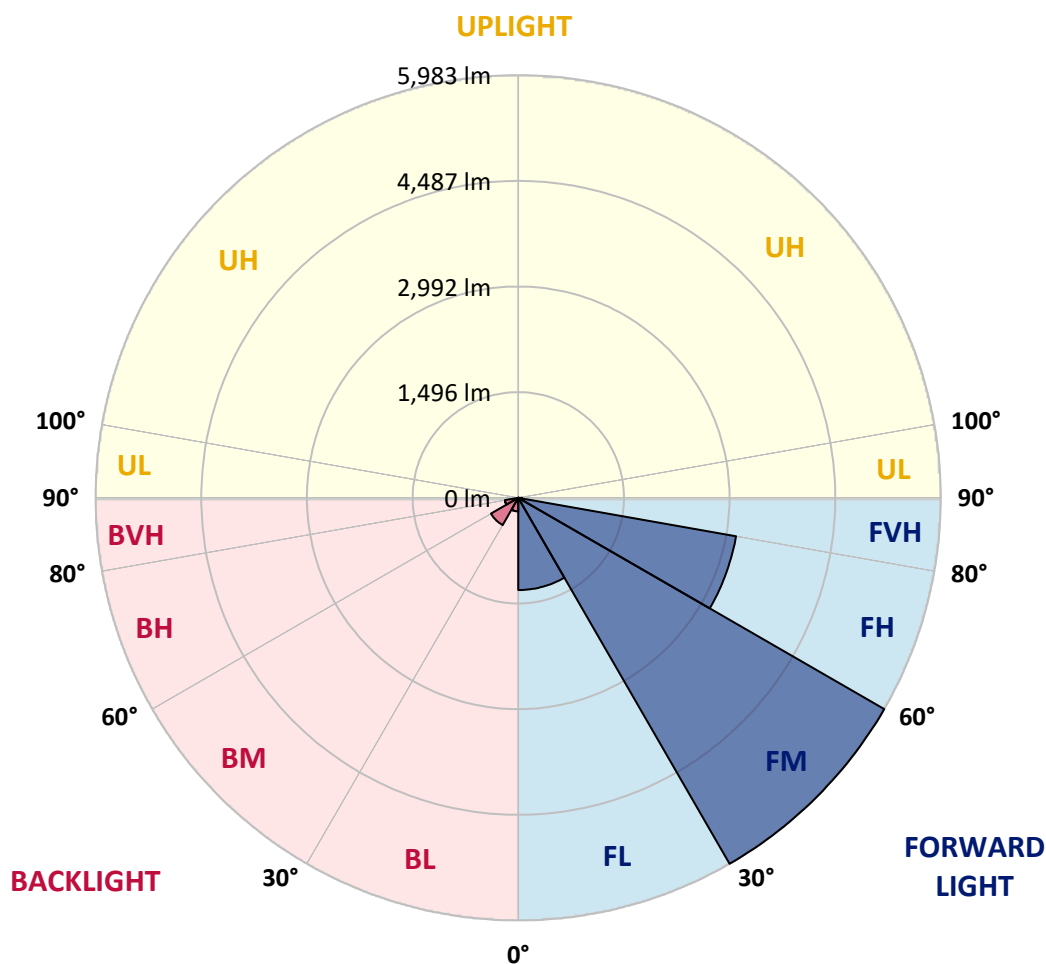
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1305.3	11.5			
FM	(30°-60°)	5983.3	52.9			
FH	(60°-80°)	3130.8	27.7			G2/5000
FVH	(80°-90°)	51.7	0.5			G1/100
BL	(0°-30°)	192.5	1.7	B1/500		
BM	(30°-60°)	445.6	3.9	B1/1000		
BH	(60°-80°)	192.5	1.7	B1/500		G1/500
BVH	(80°-90°)	1.0	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4
2.5°	1804.5	1815.7	1799.6	1768.7	1722.4	1692.2	1618.5	1549.0	1471.8	1447.2	1370.0
5°	2199.6	2209.5	2191.2	2157.5	2095.8	2036.8	1939.9	1794.7	1643.8	1595.3	1458.5
7.5°	2492.3	2497.9	2491.0	2460.0	2401.1	2334.4	2226.3	2054.4	1830.4	1777.1	1567.2
10°	2702.9	2721.2	2719.0	2707.1	2667.8	2613.8	2498.6	2302.9	2039.6	1970.9	1690.1
12.5°	2842.5	2862.9	2874.8	2901.5	2899.4	2865.0	2763.9	2556.9	2248.0	2167.4	1828.4
15°	2883.2	2905.1	2950.7	3012.4	3067.1	3084.7	3013.8	2806.0	2477.6	2374.4	1970.2
17.5°	2860.1	2893.8	2948.5	3046.1	3166.1	3245.5	3237.7	3046.8	2686.0	2568.1	2109.1
20°	2911.3	2943.6	2986.4	3068.5	3208.2	3352.2	3409.7	3277.0	2893.1	2769.5	2255.1
22.5°	3194.9	3189.3	3193.5	3206.8	3290.4	3432.8	3551.4	3486.1	3098.1	2971.7	2409.5
25°	3644.1	3618.9	3576.0	3503.8	3482.6	3551.4	3674.9	3671.4	3314.2	3178.7	2567.4
27.5°	4159.2	4155.0	4054.7	3880.6	3782.4	3755.7	3814.6	3851.8	3528.3	3383.7	2726.1
30°	4652.7	4663.9	4528.4	4334.7	4154.3	4049.8	3996.4	4023.1	3745.9	3604.8	2889.6
32.5°	5082.3	5094.1	4946.8	4720.0	4496.9	4370.5	4258.3	4192.2	3983.0	3829.4	3069.3
35°	5445.1	5457.0	5287.9	5037.3	4799.4	4685.0	4557.9	4377.6	4221.8	4078.6	3269.3
37.5°	5769.3	5765.8	5539.1	5286.4	5052.7	4962.2	4895.5	4605.6	4467.4	4329.1	3491.0
40°	5961.0	5975.6	5781.9	5503.3	5276.6	5210.7	5206.5	4888.5	4751.0	4616.9	3734.0
42.5°	6017.1	6043.1	5902.7	5673.9	5468.3	5396.6	5506.8	5194.5	5080.8	4950.2	4008.4
45°	5916.0	5941.3	5877.5	5718.8	5598.8	5552.4	5765.1	5511.7	5433.1	5304.0	4317.9
47.5°	5621.2	5652.9	5668.2	5634.5	5633.2	5680.2	5996.8	5845.9	5851.4	5719.5	4676.6
50°	5050.6	5104.0	5245.7	5365.1	5549.7	5781.3	6222.1	6208.0	6323.1	6209.4	5144.0
52.5°	4013.3	4089.0	4577.5	4903.9	5318.7	5762.3	6469.8	6789.2	7150.6	6984.2	5803.0
55°	3225.1	3225.1	3622.4	4232.9	4868.1	5637.4	6577.8	7166.8	7714.3	7674.9	6267.0
57.5°	2629.2	2660.8	2914.2	3453.8	4216.1	5339.8	6644.6	7404.0	8168.3	8139.5	6720.4
60°	1622.7	1690.8	2169.5	2702.2	3474.2	4809.9	6602.4	7644.0	8719.3	8742.4	7266.4
62.5°	913.8	939.1	1152.5	1944.1	2701.5	4097.5	6280.3	7778.1	9424.0	9522.2	7829.4
65°	631.0	643.6	725.7	1210.0	1872.6	3262.3	5650.7	7694.6	10130.1	10328.6	8306.6
67.5°	458.3	464.6	515.9	739.0	1111.1	2365.3	4663.9	7273.4	10504.1	10836.1	8397.8
70°	352.3	356.6	393.7	485.6	656.2	1459.9	3387.2	6436.1	10233.2	10629.8	7930.4
72.5°	286.4	290.6	319.4	359.4	435.1	863.3	2053.0	5226.8	9037.2	9465.4	6751.3
75°	241.5	247.0	273.1	299.0	341.1	554.5	963.0	3639.9	6796.2	7076.9	4694.8
77.5°	134.1	123.5	221.8	247.7	287.7	351.0	450.6	2142.0	3806.2	3884.1	2083.1
80°	83.5	86.3	176.2	199.4	221.1	176.9	206.3	824.7	1319.5	1253.6	403.5
82.5°	4.9	11.3	135.5	143.9	151.6	75.8	77.9	280.0	318.0	292.0	71.5
85°	0.0	0.0	61.8	49.8	52.7	21.7	22.4	65.3	42.8	46.3	14.0
87.5°	0.0	0.0	0.0	1.4	0.0	2.2	4.2	5.6	2.2	2.8	4.9
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°	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4
2.5°	1320.9	1271.8	1172.1	1074.5	995.3	921.6	868.9	819.1	793.8	792.4	791.0
5°	1360.9	1257.8	1058.4	882.2	740.5	626.8	553.1	500.4	473.8	464.6	463.2
7.5°	1417.1	1262.0	958.8	713.8	546.7	449.2	407.1	390.2	384.6	378.3	376.9
10°	1488.0	1271.8	869.6	574.8	430.9	381.8	365.0	357.9	353.7	349.5	348.1
12.5°	1567.2	1280.9	781.2	477.2	379.0	353.7	341.8	333.4	327.8	322.9	321.4
15°	1644.5	1286.5	689.2	409.2	352.3	332.0	319.4	310.3	302.5	296.8	296.2
17.5°	1721.0	1294.3	602.9	368.5	330.6	310.3	297.6	286.4	280.0	273.8	273.1
20°	1805.9	1292.8	521.5	339.7	308.8	288.4	275.1	264.6	258.3	251.2	250.6
22.5°	1884.5	1285.9	449.9	315.2	286.4	266.7	251.9	241.5	235.1	229.5	228.8
25°	1975.1	1280.2	390.2	292.6	265.3	245.7	229.5	219.7	212.7	207.8	207.0
27.5°	2062.1	1271.8	346.8	272.3	245.0	226.0	210.5	199.4	193.0	189.5	189.5
30°	2147.7	1269.7	330.6	252.7	226.7	207.8	192.3	181.7	176.9	175.5	174.8
32.5°	2250.9	1275.3	337.6	245.7	209.8	191.0	176.2	168.4	163.5	163.5	163.5
35°	2361.1	1273.9	348.1	251.9	198.6	174.0	162.9	158.0	153.0	153.0	153.0
37.5°	2499.4	1276.0	356.6	262.5	194.4	160.0	153.8	147.4	144.6	144.6	144.6
40°	2705.7	1345.5	352.3	271.6	193.0	150.2	137.6	135.5	133.4	133.4	133.4
42.5°	2958.4	1496.4	357.9	272.3	192.3	143.2	126.4	130.6	125.7	124.9	124.2
45°	3234.9	1661.3	393.7	257.6	191.6	139.7	120.7	125.7	117.9	117.9	117.9
47.5°	3509.3	1824.8	430.2	236.6	189.5	139.0	115.8	113.0	110.9	111.6	111.6
50°	3887.6	1958.2	444.2	207.8	184.6	137.6	106.7	107.4	106.0	107.4	107.4
52.5°	4299.7	1986.2	427.4	175.5	170.6	133.4	100.3	103.2	102.5	103.8	103.8
55°	4556.5	1956.1	353.0	146.0	148.8	116.5	94.1	99.6	99.6	99.6	99.6
57.5°	4821.8	1827.7	250.6	118.6	123.5	95.4	88.5	96.1	95.4	94.7	94.7
60°	5012.8	1619.9	164.9	97.6	98.3	78.6	82.1	90.5	89.8	86.3	86.3
62.5°	5155.2	1390.4	106.0	82.8	75.1	70.9	75.1	82.1	79.3	71.5	70.2
65°	5139.0	1072.5	81.4	70.9	61.8	61.8	65.3	71.5	63.1	50.5	49.1
67.5°	4839.3	725.7	67.3	59.7	52.0	51.2	54.0	59.7	54.0	42.8	41.4
70°	4303.9	474.5	54.0	46.3	41.4	37.9	43.6	51.2	45.6	34.4	33.0
72.5°	3493.2	289.2	40.7	33.7	30.1	24.6	34.4	42.1	36.5	25.3	23.9
75°	2260.0	147.4	28.1	21.7	16.1	14.8	25.3	31.6	25.3	15.5	13.3
77.5°	864.7	61.8	15.5	9.8	8.4	7.0	14.0	19.0	10.6	3.5	2.8
80°	166.4	25.9	7.7	4.9	4.2	2.8	2.2	1.4	0.0	0.0	0.0
82.5°	28.8	8.4	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	0.0	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)