

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: P964723

Luminaire Tested: **NAV-SB3C-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964723
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-SB3C-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 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: 17522.4 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 149.1
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

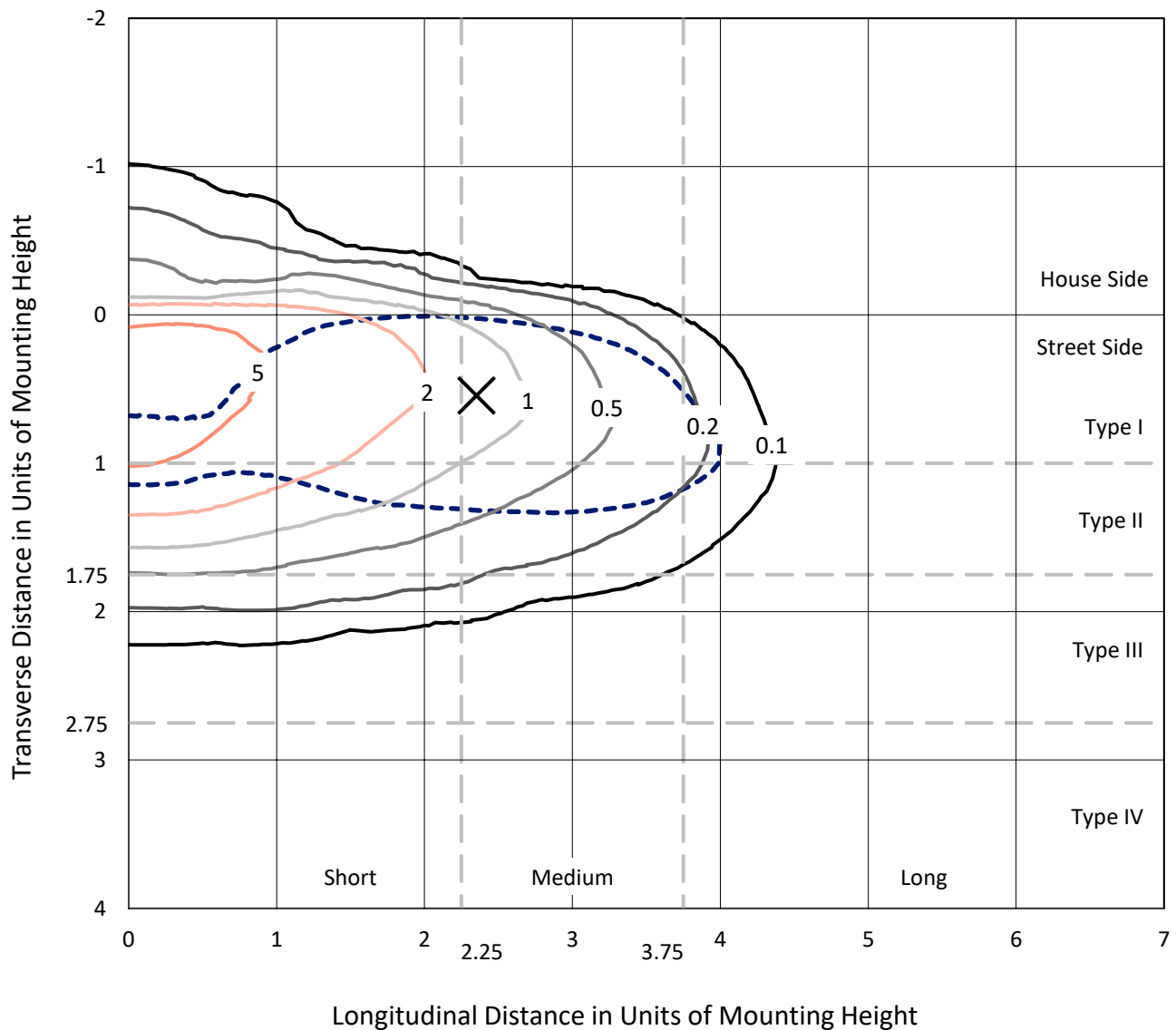


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Iso-Footcandle Lines of Horizontal Illumination

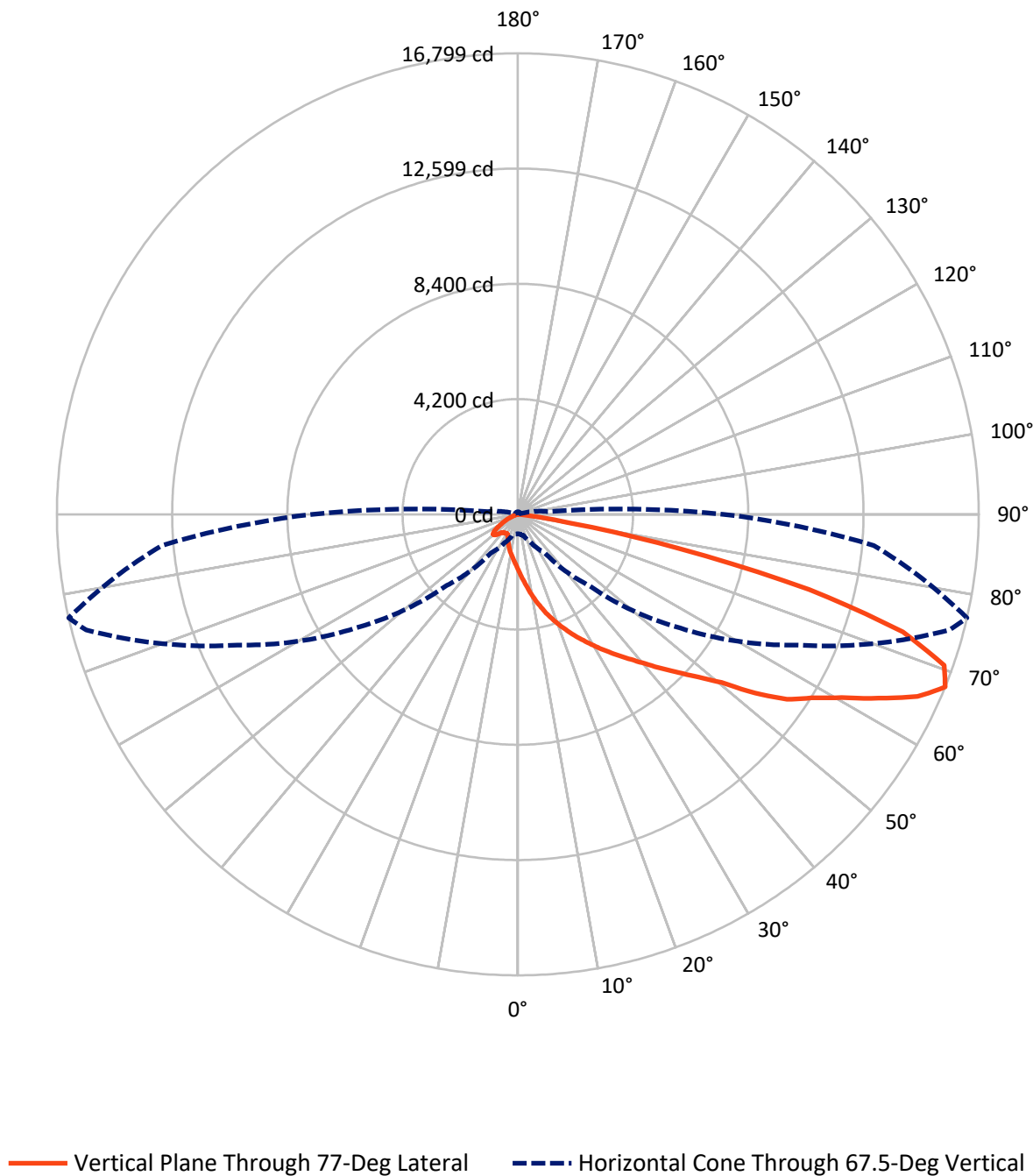
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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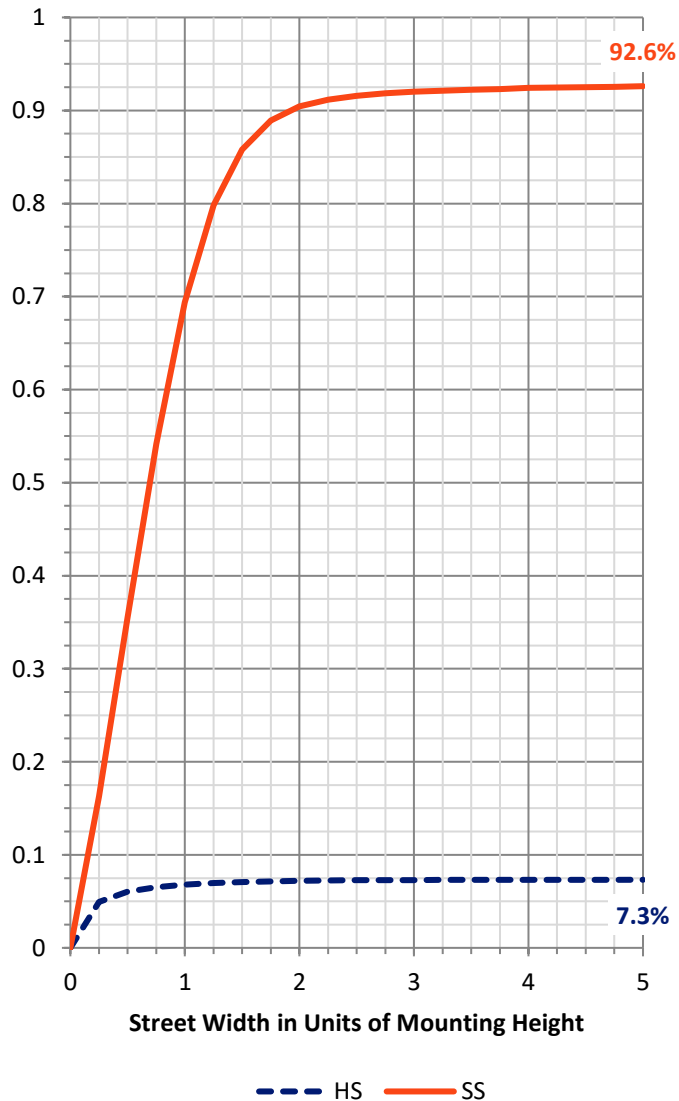
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1289.1	0.0	1289.1
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	16233.2	0.0	16233.2
	% Fixture	92.6	0.0	92.6
Total	Lumens	17522.4	0.0	17522.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.2	1.2
10°-20°	722.2	4.1
20°-30°	1393.7	8.0
30°-40°	2419.5	13.8
40°-50°	3512.9	20.0
50°-60°	4034.2	23.0
60°-70°	3502.4	20.0
70°-80°	1649.7	9.4
80°-90°	81.6	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°	17522.4	100.0
0°-180°	17522.4	100.0

Coefficient of Utilization



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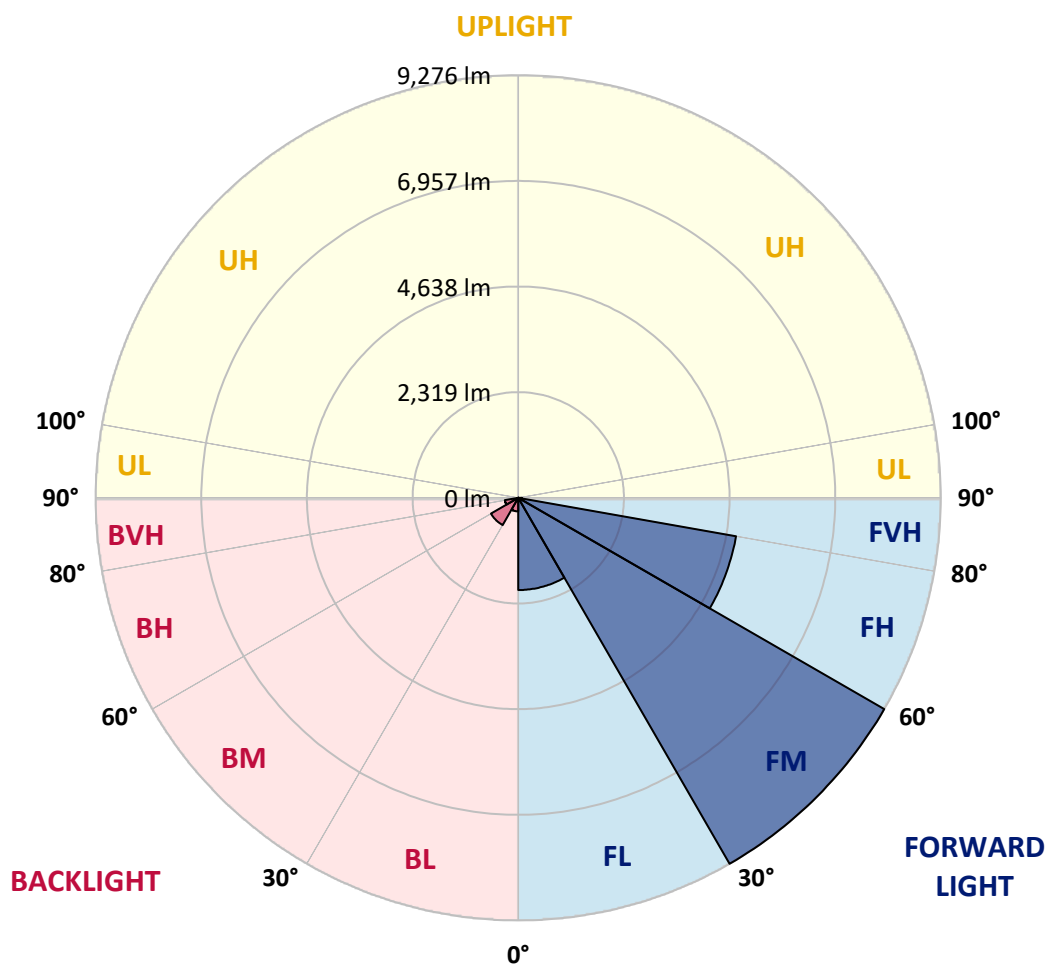
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2023.6	11.5			
FM	(30°-60°)	9275.9	52.9			
FH	(60°-80°)	4853.6	27.7			G2/5000
FVH	(80°-90°)	80.1	0.5			G1/100
BL	(0°-30°)	298.5	1.7	B1/500		
BM	(30°-60°)	690.7	3.9	B1/1000		
BH	(60°-80°)	298.4	1.7	B1/500		G1/500
BVH	(80°-90°)	1.5	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°	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6
2.5°	2797.5	2814.9	2789.8	2742.0	2670.2	2623.4	2509.1	2401.4	2281.8	2243.6	2124.0
5°	3410.1	3425.3	3397.1	3344.8	3249.0	3157.6	3007.5	2782.3	2548.4	2473.2	2261.0
7.5°	3863.8	3872.6	3861.7	3813.7	3722.4	3619.0	3451.4	3184.9	2837.7	2755.1	2429.7
10°	4190.2	4218.5	4215.3	4196.8	4135.9	4052.0	3873.6	3570.1	3162.0	3055.3	2620.1
12.5°	4406.8	4438.4	4456.8	4498.2	4494.9	4441.6	4284.9	3963.9	3485.2	3360.1	2834.4
15°	4469.9	4503.6	4574.4	4670.1	4755.0	4782.1	4672.3	4350.2	3841.0	3681.0	3054.3
17.5°	4433.9	4486.2	4571.1	4722.3	4908.4	5031.3	5019.3	4723.4	4164.2	3981.3	3269.7
20°	4513.4	4563.5	4629.8	4757.1	4973.7	5196.8	5285.9	5080.3	4485.1	4293.6	3496.1
22.5°	4953.0	4944.3	4950.9	4971.5	5101.0	5321.9	5505.8	5404.5	4802.8	4607.0	3735.4
25°	5649.4	5610.2	5543.8	5431.8	5399.1	5505.8	5697.3	5691.8	5138.0	4928.0	3980.3
27.5°	6448.1	6441.5	6285.9	6016.0	5863.7	5822.4	5913.7	5971.4	5469.8	5245.6	4226.2
30°	7212.9	7230.4	7020.3	6720.1	6440.4	6278.3	6195.6	6236.9	5807.1	5588.4	4479.7
32.5°	7878.9	7897.4	7668.8	7317.4	6971.4	6775.6	6601.4	6499.2	6174.9	5936.6	4758.3
35°	8441.4	8459.9	8197.6	7809.3	7440.4	7263.0	7066.0	6786.4	6544.8	6322.9	5068.3
37.5°	8944.2	8938.7	8587.2	8195.5	7833.2	7692.8	7589.4	7140.0	6925.7	6711.4	5412.2
40°	9241.2	9264.1	8963.7	8531.7	8180.3	8078.0	8071.5	7578.5	7365.3	7157.5	5788.7
42.5°	9328.2	9368.5	9150.9	8796.1	8477.4	8366.4	8537.1	8053.0	7876.7	7674.3	6214.1
45°	9171.5	9210.8	9111.6	8865.7	8679.7	8607.8	8937.6	8544.8	8422.9	8222.8	6694.0
47.5°	8714.6	8763.5	8787.4	8735.3	8733.0	8806.0	9296.6	9062.7	9071.5	8866.9	7249.9
50°	7829.9	7912.6	8132.5	8317.4	8603.5	8962.6	9646.0	9624.1	9802.6	9626.4	7974.6
52.5°	6221.7	6339.2	7096.6	7602.5	8245.6	8933.3	10030.0	10525.1	11085.5	10827.6	8996.3
55°	4999.7	4999.7	5615.7	6562.3	7547.0	8739.6	10197.6	11110.5	11959.2	11898.3	9715.6
57.5°	4076.0	4124.9	4517.8	5354.5	6536.2	8278.2	10300.9	11478.3	12663.3	12618.6	10418.5
60°	2515.7	2621.2	3363.3	4189.2	5386.1	7456.7	10235.6	11850.4	13517.4	13553.3	11265.1
62.5°	1416.7	1455.9	1786.7	3014.0	4188.0	6352.2	9736.3	12058.2	14609.8	14762.2	12137.6
65°	978.2	997.7	1125.0	1875.9	2903.0	5057.5	8760.3	11928.7	15704.4	16012.3	12877.6
67.5°	710.5	720.3	799.7	1145.7	1722.4	3666.8	7230.4	11275.9	16284.4	16799.0	13019.0
70°	546.2	552.8	610.4	753.0	1017.4	2263.2	5251.2	9977.8	15864.3	16479.1	12294.4
72.5°	443.9	450.5	495.1	557.1	674.7	1338.3	3182.6	8103.0	14010.3	14674.0	10466.4
75°	374.3	383.0	423.2	463.5	528.8	859.6	1492.9	5642.8	10536.0	10971.2	7278.2
77.5°	207.9	191.5	343.9	384.1	446.1	544.1	698.5	3320.9	5900.7	6021.5	3229.5
80°	129.5	133.9	273.1	309.0	342.8	274.2	319.9	1278.5	2045.6	1943.3	625.7
82.5°	7.6	17.4	210.0	223.0	235.0	117.5	120.7	434.2	492.9	452.6	111.0
85°	0.0	0.0	95.7	77.3	81.6	33.7	34.8	101.2	66.4	71.9	21.7
87.5°	0.0	0.0	0.0	2.2	0.0	3.3	6.6	8.7	3.3	4.3	7.6
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°	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6	2020.6
2.5°	2047.7	1971.6	1817.1	1665.8	1542.9	1428.6	1347.1	1269.8	1230.6	1228.5	1226.3
5°	2109.9	1949.9	1640.8	1367.8	1147.9	971.7	857.4	775.8	734.4	720.3	718.1
7.5°	2196.9	1956.4	1486.4	1106.6	847.7	696.4	631.1	605.0	596.2	586.5	584.4
10°	2306.8	1971.6	1348.2	891.1	668.1	591.9	565.8	554.9	548.4	541.9	539.7
12.5°	2429.7	1985.7	1211.0	739.9	587.5	548.4	529.9	516.8	508.1	500.5	498.4
15°	2549.4	1994.4	1068.5	634.4	546.2	514.7	495.1	480.9	468.9	460.2	459.2
17.5°	2668.0	2006.4	934.7	571.2	512.5	480.9	461.4	443.9	434.2	424.4	423.2
20°	2799.7	2004.3	808.4	526.6	478.8	447.2	426.5	410.2	400.5	389.5	388.5
22.5°	2921.6	1993.4	697.5	488.5	443.9	413.5	390.6	374.3	364.5	355.8	354.8
25°	3061.9	1984.7	605.0	453.8	411.3	380.8	355.8	340.6	329.7	322.1	321.0
27.5°	3196.8	1971.6	537.5	422.2	379.8	350.3	326.5	309.0	299.2	293.8	293.8
30°	3329.6	1968.4	512.5	391.8	351.5	322.1	298.2	281.8	274.2	272.0	270.9
32.5°	3489.5	1977.0	523.4	380.8	325.3	295.9	273.1	261.2	253.5	253.5	253.5
35°	3660.4	1974.9	539.7	390.6	307.9	269.9	252.5	244.8	237.2	237.2	237.2
37.5°	3874.7	1978.1	552.8	406.9	301.5	248.0	238.3	228.5	224.2	224.2	224.2
40°	4194.6	2085.9	546.2	421.1	299.2	232.9	213.3	210.0	206.7	206.7	206.7
42.5°	4586.3	2319.8	554.9	422.2	298.2	222.0	195.9	202.3	194.7	193.7	192.6
45°	5015.0	2575.5	610.4	399.3	297.0	216.5	187.2	194.7	182.8	182.8	182.8
47.5°	5440.5	2829.0	667.0	366.6	293.8	215.5	179.6	175.2	171.9	173.0	173.0
50°	6026.9	3035.7	688.8	322.1	286.2	213.3	165.4	166.5	164.3	166.5	166.5
52.5°	6665.7	3079.3	662.7	272.0	264.4	206.7	155.6	159.9	158.9	161.0	161.0
55°	7063.9	3032.5	547.3	226.3	230.6	180.6	145.8	154.5	154.5	154.5	154.5
57.5°	7475.2	2833.4	388.5	183.9	191.5	148.0	137.1	149.0	148.0	146.9	146.9
60°	7771.1	2511.4	255.7	151.3	152.3	121.9	127.3	140.3	139.3	133.9	133.9
62.5°	7992.0	2155.5	164.3	128.4	116.4	109.9	116.4	127.3	123.0	111.0	108.9
65°	7967.0	1662.7	126.2	109.9	95.7	95.7	101.2	111.0	97.9	78.3	76.2
67.5°	7502.4	1125.0	104.4	92.5	80.6	79.4	83.7	92.5	83.7	66.4	64.2
70°	6672.1	735.5	83.7	71.9	64.2	58.7	67.4	79.4	70.7	53.3	51.1
72.5°	5415.5	448.3	63.1	52.3	46.7	38.1	53.3	65.3	56.6	39.2	37.0
75°	3503.7	228.5	43.6	33.7	25.0	22.9	39.2	49.0	39.2	24.0	20.7
77.5°	1340.5	95.7	24.0	15.3	13.0	10.9	21.7	29.4	16.3	5.4	4.3
80°	257.9	40.3	12.0	7.6	6.6	4.3	3.3	2.2	0.0	0.0	0.0
82.5°	44.6	13.0	4.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	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)