

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: P968385

Luminaire Tested: **NAV-SB5B-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25120.7 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

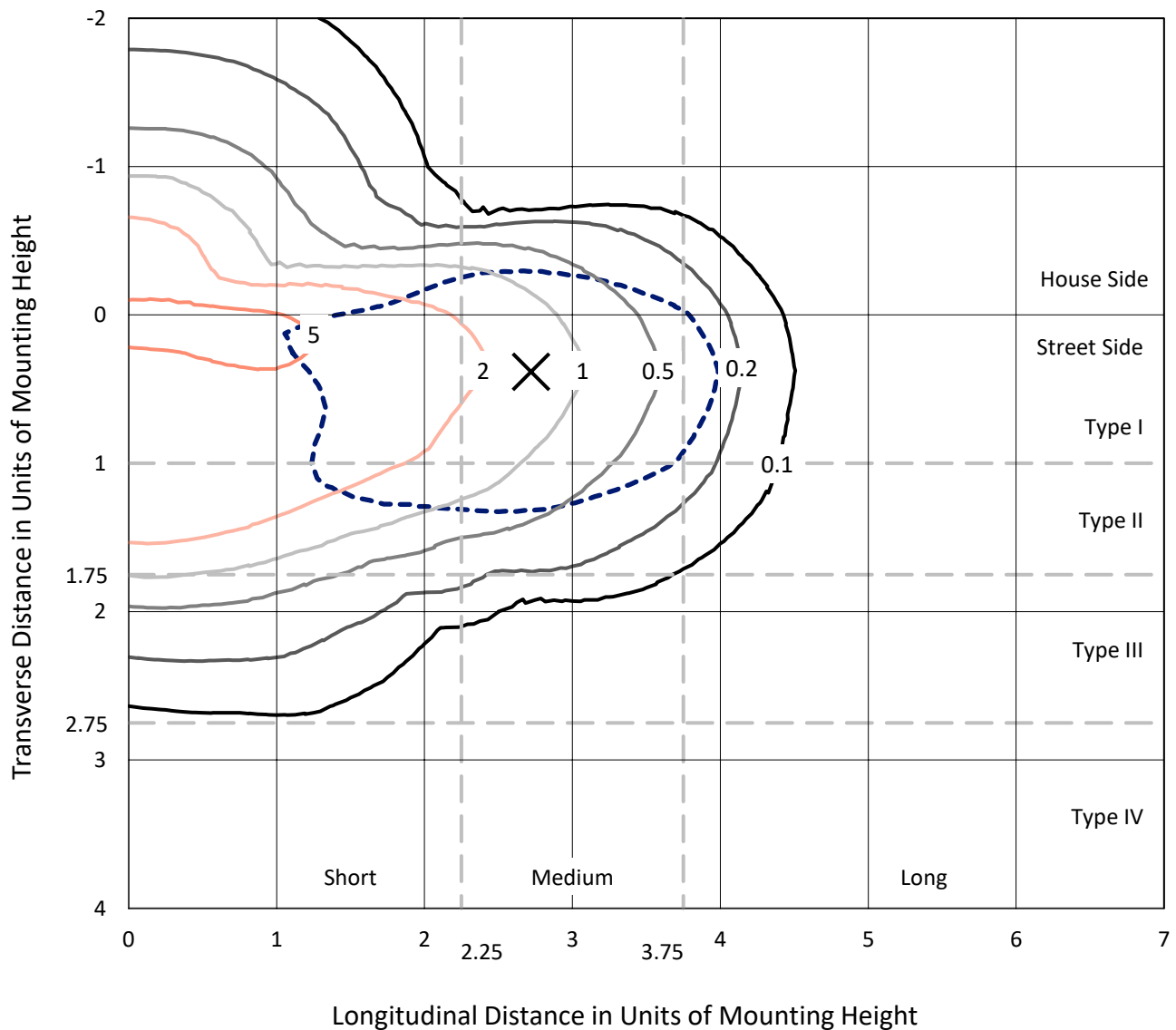
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

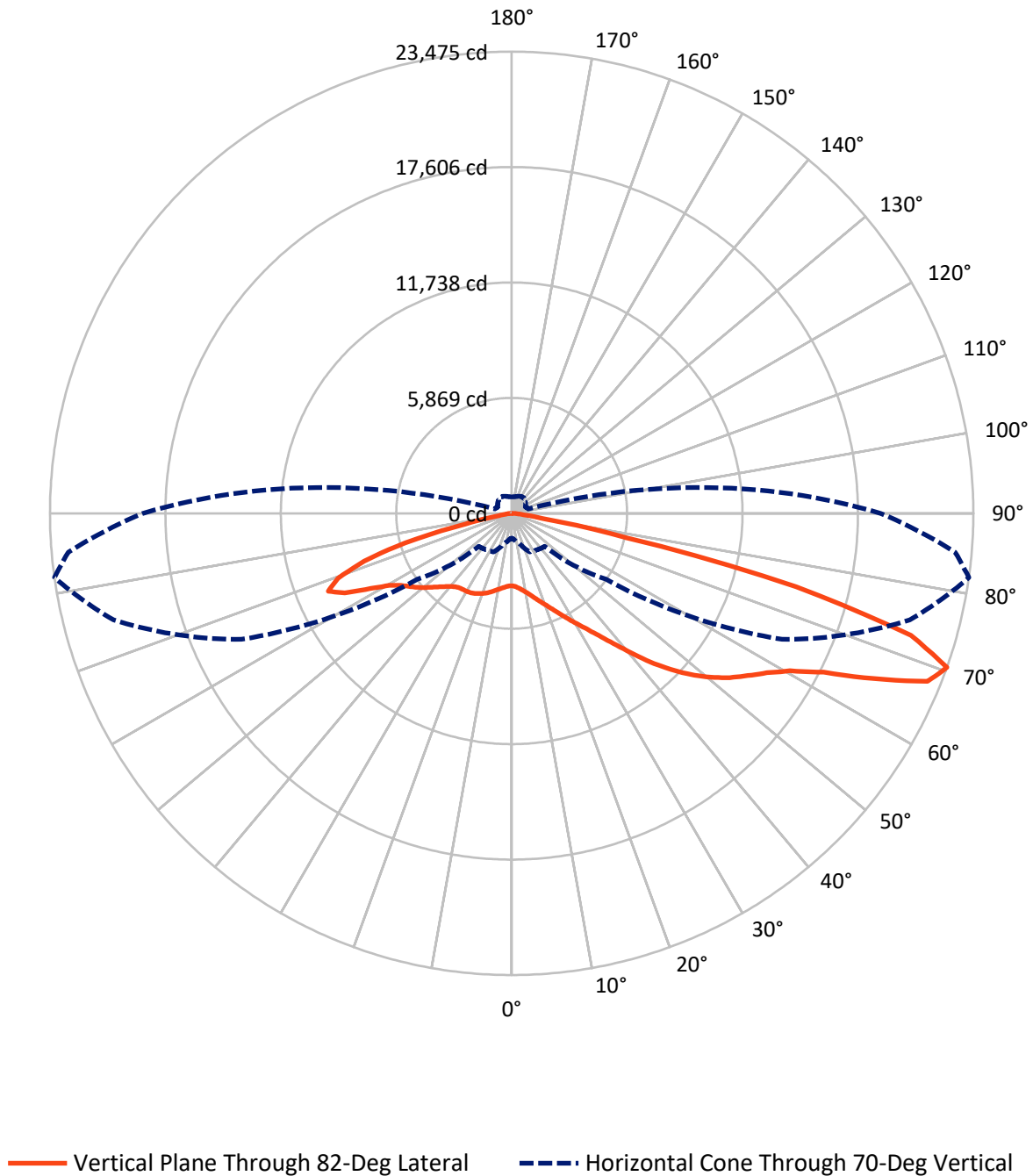
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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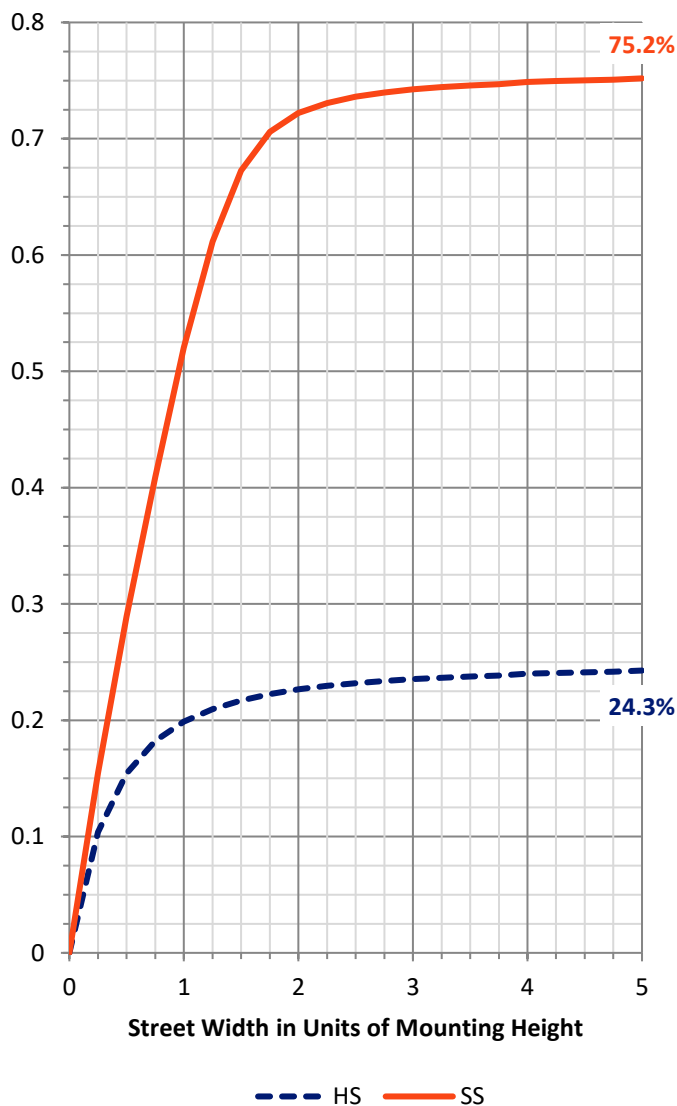
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6192.9	0.0	6192.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	18927.8	0.0	18927.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	25120.7	0.0	25120.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.7	1.4
10°-20°	999.1	4.0
20°-30°	1671.4	6.7
30°-40°	2611.1	10.4
40°-50°	4158.5	16.6
50°-60°	5787.0	23.0
60°-70°	6053.5	24.1
70°-80°	3163.9	12.6
80°-90°	328.5	1.3
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°	25120.7	100.0
0°-180°	25120.7	100.0

Coefficient of Utilization



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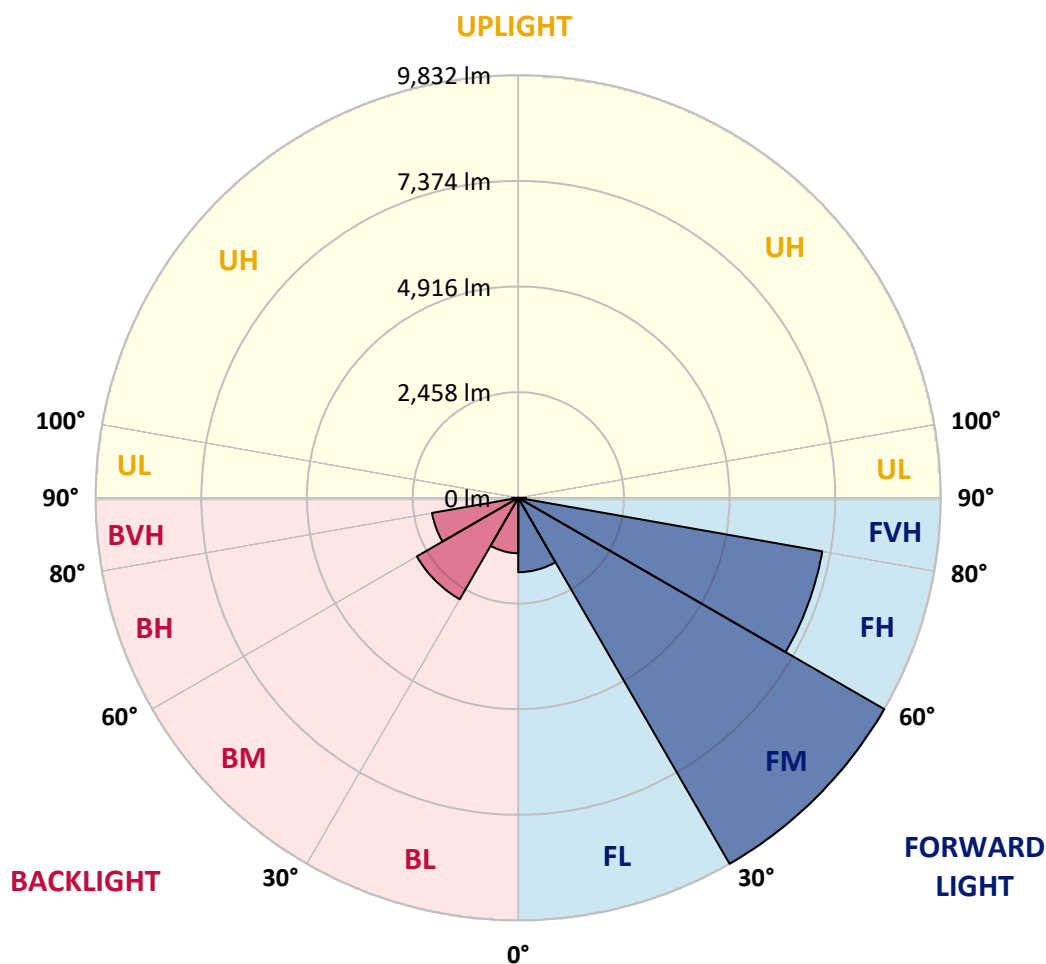
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1729.8	6.9			
FM	(30°-60°)	9832.0	39.1			
FH	(60°-80°)	7182.1	28.6			G3/7500
FVH	(80°-90°)	183.9	0.7			G2/225
BL	(0°-30°)	1288.3	5.1	B3/2500		
BM	(30°-60°)	2724.6	10.8	B3/5000		
BH	(60°-80°)	2035.3	8.1	B3/2500		G3/2500
BVH	(80°-90°)	144.6	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0
2.5°	3771.0	3792.3	3785.6	3779.0	3779.0	3769.6	3768.3	3755.0	3744.3	3727.0	3723.0
5°	3818.9	3841.6	3838.9	3844.3	3861.6	3865.6	3869.6	3861.6	3840.3	3818.9	3809.6
7.5°	3776.3	3801.6	3809.6	3841.6	3895.0	3943.0	3978.9	3993.6	3973.6	3943.0	3928.3
10°	3632.4	3660.4	3688.4	3764.3	3858.9	3972.3	4068.2	4125.5	4121.5	4092.2	4066.9
12.5°	3340.5	3369.8	3429.8	3577.7	3751.0	3951.0	4129.5	4249.5	4290.9	4269.5	4225.6
15°	3107.2	3132.5	3177.8	3329.8	3555.0	3858.9	4152.2	4385.5	4490.8	4478.8	4425.4
17.5°	3100.5	3111.2	3139.2	3211.1	3384.4	3715.0	4128.2	4518.8	4720.0	4718.7	4652.1
20°	3217.8	3221.8	3237.8	3252.4	3351.1	3605.7	4066.9	4629.4	4977.3	4977.3	4905.3
22.5°	3380.4	3377.8	3393.8	3380.4	3428.4	3596.3	4028.2	4726.7	5263.9	5285.2	5194.6
25°	3624.4	3611.1	3607.1	3576.3	3585.7	3683.0	4070.9	4837.4	5603.8	5647.9	5534.5
27.5°	3949.6	3928.3	3913.7	3842.9	3818.9	3861.6	4201.6	4970.6	5982.4	6058.4	5914.5
30°	4373.5	4334.8	4313.5	4190.9	4104.2	4110.9	4398.8	5148.0	6378.3	6501.0	6318.3
32.5°	4952.0	4892.0	4834.7	4633.4	4474.8	4422.8	4653.4	5393.2	6807.5	7003.4	6768.9
35°	5599.8	5551.8	5490.5	5179.9	4936.0	4816.1	4997.3	5735.8	7310.0	7620.6	7315.3
37.5°	6223.7	6182.3	6211.7	5793.1	5478.5	5303.9	5447.9	6195.7	7929.9	8388.4	8000.5
40°	6868.8	6836.9	6840.8	6440.9	6074.4	5878.4	5994.4	6772.9	8640.3	9301.5	8824.3
42.5°	7569.9	7545.9	7466.0	7111.4	6699.5	6517.0	6623.6	7439.3	9402.8	10341.2	9728.1
45°	8355.1	8340.4	8265.8	7859.2	7387.4	7182.1	7326.0	8175.1	10169.2	11319.6	10635.8
47.5°	9033.5	9045.5	9036.2	8693.6	8204.4	7903.2	8075.2	8942.9	10882.4	12239.4	11506.2
50°	9360.2	9422.8	9514.8	9408.2	9104.3	8797.7	8831.0	9684.1	11562.2	13101.9	12340.7
52.5°	9189.5	9308.1	9558.7	9729.4	9846.7	9782.7	9693.4	10419.8	12202.0	13880.2	13129.8
55°	8553.7	8720.3	9136.2	9548.1	10146.6	10611.8	10729.1	11235.6	12825.9	14565.5	13876.2
57.5°	7395.4	7666.0	8039.2	8872.3	9880.0	11013.0	11936.7	12367.3	13487.1	15297.2	14657.4
60°	5409.2	5771.8	6235.7	7475.3	8946.9	10798.5	12964.5	14105.5	14426.8	16244.9	15674.4
62.5°	3461.7	3685.7	4112.2	5279.9	6971.4	9698.8	13279.1	16278.3	16019.7	17799.2	17199.4
65°	2370.0	2514.0	2904.5	3560.3	4506.8	7219.4	12436.6	17907.2	18549.6	20262.5	19806.7
67.5°	1722.2	1831.5	2164.8	2739.3	2936.5	4272.2	9650.8	17832.5	21009.0	22800.5	22091.4
70°	1255.6	1333.0	1612.9	2164.8	2259.4	2376.7	5846.4	15158.6	20955.7	23475.1	22626.0
72.5°	930.4	983.7	1171.7	1679.6	1828.8	1604.9	2893.9	11017.0	18007.2	21233.0	20551.8
75°	673.1	713.1	851.8	1284.9	1463.6	1222.3	1443.6	6438.2	12560.7	14936.0	15055.9
77.5°	514.6	545.2	635.8	941.1	1171.7	917.1	895.7	2961.8	5955.8	5985.1	6321.0
80°	413.2	433.3	482.6	662.5	898.4	686.4	583.8	1195.7	1882.2	1593.0	1671.6
82.5°	303.9	337.2	407.8	465.2	642.5	473.2	355.9	603.8	715.8	615.8	621.2
85°	173.3	196.0	246.6	333.2	410.5	289.3	204.0	267.9	333.2	273.3	244.0
87.5°	61.3	79.9	86.6	130.6	178.7	119.9	78.6	77.3	109.3	81.3	68.0
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°	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0	3683.0
2.5°	3709.7	3703.0	3676.4	3640.4	3603.1	3567.0	3555.0	3529.7	3512.4	3503.0	3513.7
5°	3784.3	3763.0	3700.4	3620.4	3536.4	3445.7	3381.8	3323.2	3280.4	3240.4	3256.4
7.5°	3891.0	3853.6	3745.7	3605.7	3456.4	3305.7	3193.8	3108.5	3051.2	3013.8	3021.8
10°	4014.9	3957.6	3792.3	3583.0	3352.5	3136.5	3004.5	2931.2	2895.2	2875.2	2880.6
12.5°	4157.5	4076.2	3840.3	3531.0	3193.8	2947.2	2856.6	2835.3	2836.6	2837.9	2840.6
15°	4333.5	4220.2	3878.9	3417.8	2987.2	2801.9	2786.0	2820.6	2856.6	2873.9	2872.6
17.5°	4532.1	4372.1	3885.6	3231.1	2784.6	2708.6	2759.3	2833.9	2888.6	2912.5	2917.9
20°	4745.3	4526.8	3837.6	2967.2	2618.0	2632.6	2723.2	2819.3	2879.2	2909.9	2917.9
22.5°	4989.3	4692.0	3723.0	2689.9	2482.0	2550.0	2656.6	2750.0	2812.6	2843.2	2851.2
25°	5267.9	4877.4	3543.0	2456.7	2364.7	2456.7	2563.3	2640.6	2691.2	2719.2	2727.2
27.5°	5577.1	5070.7	3303.1	2271.4	2262.1	2360.7	2448.7	2508.7	2535.3	2556.7	2564.7
30°	5887.7	5246.6	3012.5	2131.4	2172.8	2266.1	2328.7	2355.3	2363.3	2367.3	2376.7
32.5°	6223.7	5398.6	2707.2	2015.5	2087.4	2174.1	2211.4	2223.4	2186.1	2160.8	2168.8
35°	6630.2	5561.1	2408.6	1923.5	2003.5	2078.1	2090.1	2079.4	2035.4	1983.5	1986.1
37.5°	7132.8	5763.8	2170.1	1858.1	1924.8	1974.2	1959.5	1956.8	1960.8	1899.5	1903.5
40°	7748.6	6027.7	1995.5	1807.5	1860.8	1871.5	1830.1	1852.8	1872.9	1779.5	1782.2
42.5°	8432.4	6346.3	1884.9	1772.8	1807.5	1782.2	1718.2	1743.5	1740.9	1618.3	1616.9
45°	9129.6	6692.8	1846.1	1747.5	1758.2	1707.5	1636.9	1643.6	1587.6	1476.9	1480.9
47.5°	9822.7	7064.8	1870.1	1726.2	1696.9	1639.6	1585.0	1555.5	1472.9	1390.3	1390.3
50°	10502.5	7455.3	1958.2	1683.6	1612.9	1579.5	1539.6	1487.6	1399.6	1329.0	1323.7
52.5°	11133.0	7848.5	2056.8	1612.9	1507.6	1527.6	1502.2	1442.3	1355.7	1283.6	1284.9
55°	11730.2	8241.8	2095.4	1515.6	1409.0	1482.3	1467.6	1357.0	1253.0	1194.3	1189.0
57.5°	12380.7	8715.0	2052.8	1391.6	1329.0	1430.3	1374.3	1251.6	1191.7	1147.7	1143.7
60°	13281.7	9457.5	1960.8	1238.3	1253.0	1353.0	1257.0	1206.3	1141.0	1091.7	1089.1
62.5°	14778.7	10842.4	1812.8	1086.4	1163.7	1238.3	1201.0	1150.4	1083.7	1035.8	1035.8
65°	16991.4	12767.2	1534.2	967.7	1063.7	1126.4	1141.0	1090.4	1021.1	970.4	973.0
67.5°	18857.6	13975.0	1161.0	869.1	961.0	1035.8	1077.1	1027.8	954.4	905.1	906.4
70°	18754.9	13097.8	886.4	771.8	870.4	946.4	999.7	961.0	882.4	835.8	839.8
72.5°	16658.2	10957.0	717.1	673.1	778.5	853.1	917.1	887.8	807.8	762.5	762.5
75°	12238.1	7777.9	573.2	573.2	663.8	755.8	826.5	807.8	734.5	702.4	693.1
77.5°	5158.6	3263.1	449.3	475.9	551.9	649.1	737.2	743.8	679.8	719.9	653.1
80°	1371.7	899.7	342.6	374.5	433.3	535.9	641.1	638.5	569.2	531.9	494.6
82.5°	522.5	354.5	244.0	263.9	313.2	410.5	507.9	523.9	454.6	393.2	393.2
85°	201.3	152.0	150.7	158.7	182.7	271.9	383.9	397.2	342.6	290.6	299.9
87.5°	52.0	45.3	56.0	53.3	83.9	145.3	220.0	228.0	209.3	121.3	173.3
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)