

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: P966810

Luminaire Tested: **NAV-SB4C-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26440.9 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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



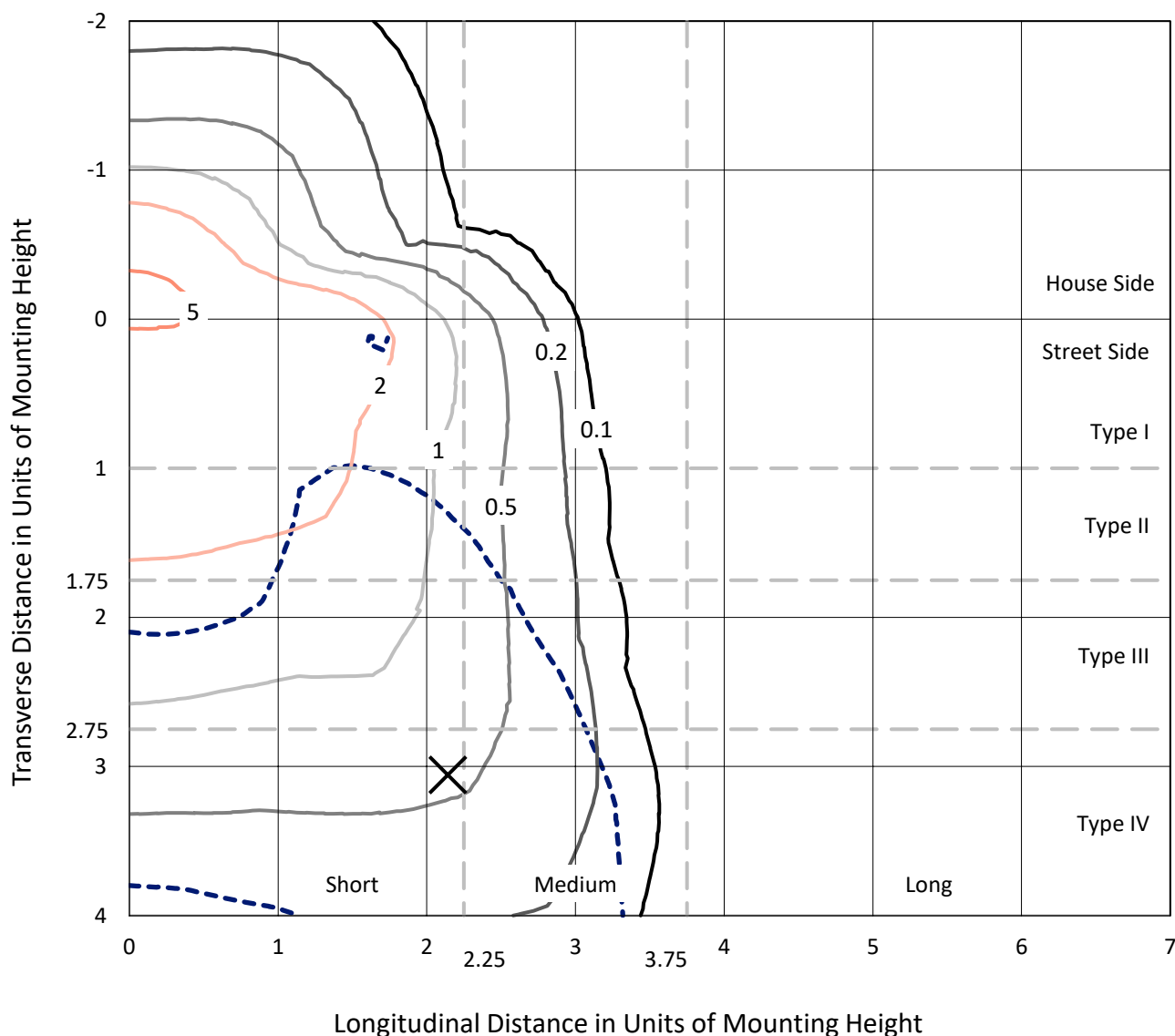
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

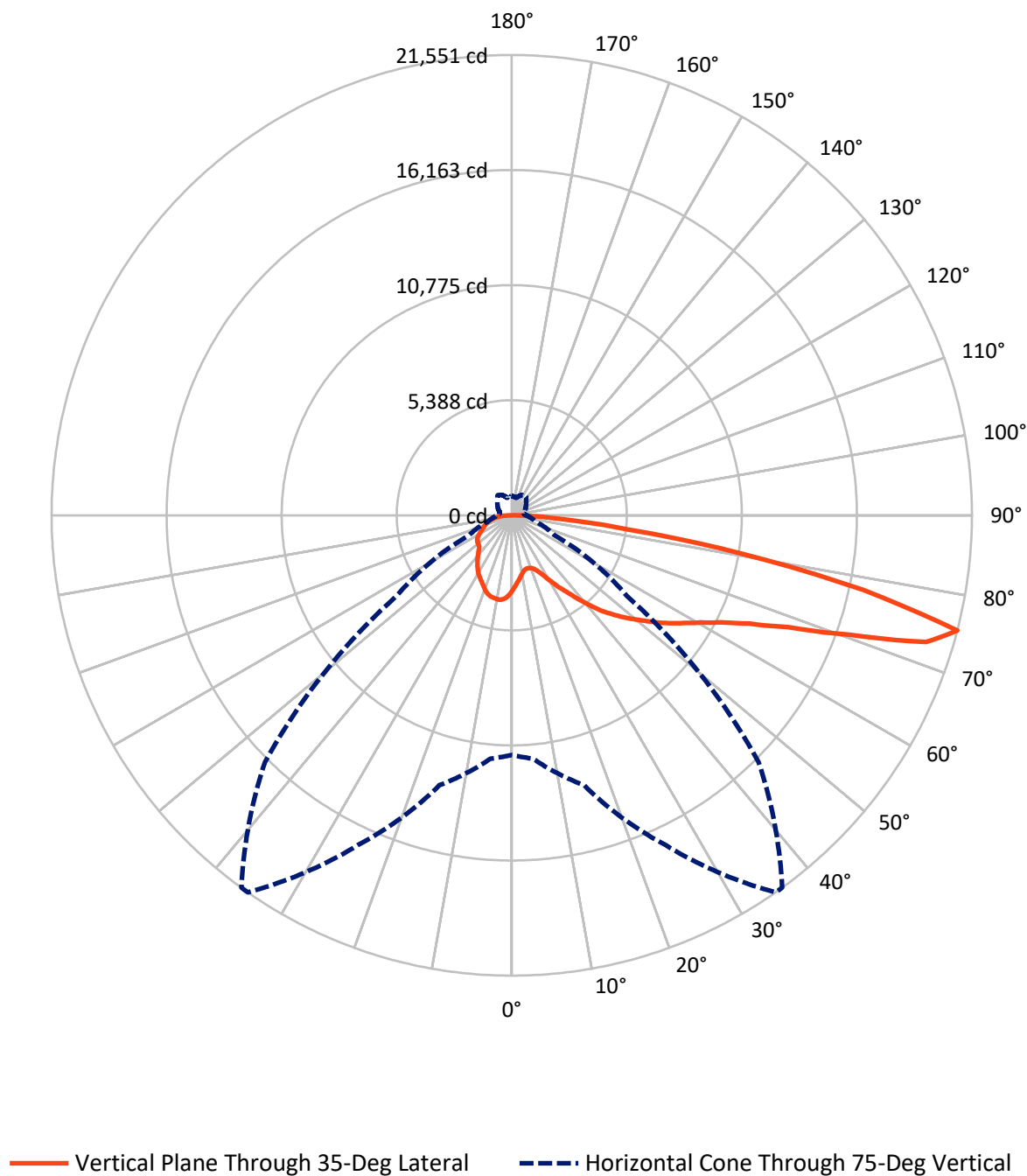


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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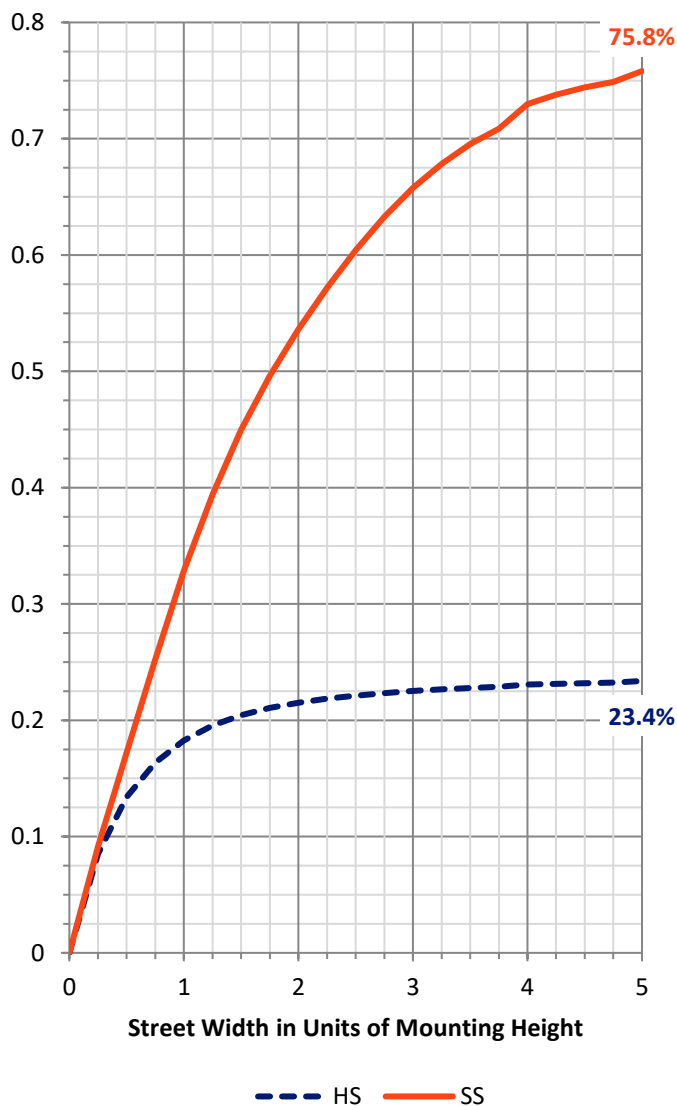
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6292.3	0.0	6292.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	20148.6	0.0	20148.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	26440.9	0.0	26440.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.6	1.3
10°-20°	962.2	3.6
20°-30°	1615.9	6.1
30°-40°	2511.3	9.5
40°-50°	3727.4	14.1
50°-60°	5145.9	19.5
60°-70°	6243.1	23.6
70°-80°	5159.5	19.5
80°-90°	742.1	2.8
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°	26440.9	100.0
0°-180°	26440.9	100.0

Coefficient of Utilization



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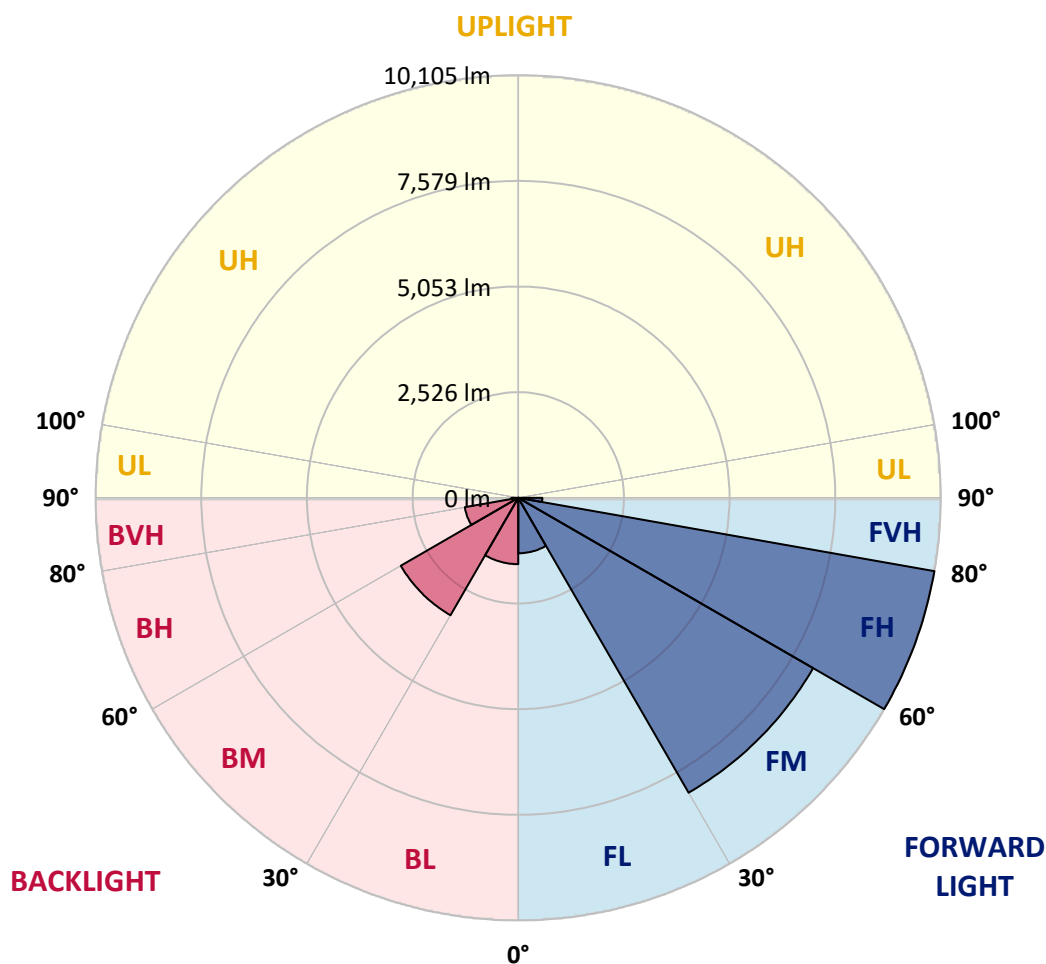
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1326.0	5.0			
FM	(30°-60°)	8142.4	30.8			
FH	(60°-80°)	10105.3	38.2			G4/12000
FVH	(80°-90°)	575.0	2.2			G4/750
BL	(0°-30°)	1585.7	6.0	B3/2500		
BM	(30°-60°)	3242.2	12.3	B3/5000		
BH	(60°-80°)	1297.3	4.9	B3/2500		G3/2500
BVH	(80°-90°)	167.1	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4
2.5°	3248.9	3269.0	3277.5	3273.3	3294.8	3291.9	3321.9	3359.0	3410.5	3460.5	3533.5
5°	2998.8	3020.3	3038.8	3056.0	3097.4	3110.4	3157.5	3229.0	3323.4	3419.1	3539.1
7.5°	2765.9	2784.4	2813.0	2844.5	2914.5	2927.4	3006.0	3117.4	3248.9	3389.1	3554.9
10°	2575.7	2594.4	2624.3	2660.1	2747.3	2763.0	2863.0	3011.8	3183.2	3360.5	3572.0
12.5°	2494.2	2500.0	2517.1	2552.9	2628.6	2638.7	2748.7	2918.8	3118.9	3339.0	3597.7
15°	2490.0	2501.4	2502.8	2521.4	2584.3	2588.6	2690.1	2858.7	3078.9	3334.7	3636.4
17.5°	2532.9	2541.5	2528.6	2540.1	2592.9	2600.0	2680.1	2830.1	3066.0	3353.3	3702.1
20°	2647.3	2654.3	2615.8	2600.0	2638.7	2644.4	2723.0	2848.8	3078.9	3391.9	3792.2
22.5°	2890.2	2894.5	2800.2	2735.8	2738.7	2741.6	2810.1	2924.5	3128.9	3461.9	3906.5
25°	3269.0	3266.2	3116.1	2991.7	2920.2	2904.5	2950.3	3047.4	3213.3	3554.9	4053.8
27.5°	3712.1	3690.7	3540.6	3354.7	3198.9	3176.1	3166.1	3207.5	3333.3	3677.8	4233.9
30°	4212.4	4192.4	4030.8	3787.9	3572.0	3534.8	3440.5	3419.1	3512.0	3845.1	4484.0
32.5°	4761.2	4748.4	4555.4	4261.0	3972.3	3929.3	3770.7	3713.6	3786.5	4098.1	4832.8
35°	5221.6	5210.1	5050.0	4747.0	4394.0	4341.1	4179.5	4115.2	4152.4	4422.5	5288.7
37.5°	5637.5	5631.8	5494.5	5255.8	4891.3	4827.0	4645.5	4624.1	4616.9	4849.9	5841.9
40°	6023.4	6009.2	5866.2	5740.4	5470.2	5411.7	5251.6	5232.9	5178.6	5375.9	6468.0
42.5°	6450.8	6413.6	6206.4	6147.7	6074.9	6026.3	5930.5	5933.4	5813.3	5969.1	7131.2
45°	6799.5	6778.1	6565.1	6530.9	6609.5	6589.4	6672.3	6693.8	6460.8	6590.9	7820.1
47.5°	7174.1	7154.1	6974.0	6949.7	7162.6	7168.3	7461.4	7468.6	7092.6	7237.0	8510.6
50°	7635.7	7607.1	7428.5	7458.5	7697.2	7718.7	8254.7	8206.0	7674.4	7893.0	9195.2
52.5°	7940.3	7957.4	7918.7	7967.4	8293.3	8313.3	9035.2	8910.7	8250.4	8540.6	9867.1
55°	8164.6	8199.0	8319.0	8430.5	8922.2	8942.2	9771.2	9581.2	8727.8	9140.9	10498.8
57.5°	8453.4	8404.8	8629.2	8846.5	9519.7	9572.6	10487.4	10227.2	9150.9	9658.4	10931.9
60°	8867.9	8833.6	9008.0	9329.6	10188.6	10273.0	11245.0	10809.0	9461.1	10068.6	11016.3
62.5°	9708.4	9622.6	9649.8	9934.2	11032.0	11143.5	12099.7	11316.4	9615.4	10228.7	10564.6
65°	10964.8	10817.5	10680.4	10877.6	12219.8	12329.8	13064.5	11715.2	9558.3	9918.5	9365.3
67.5°	12547.1	12401.4	12232.7	12418.5	13969.3	14056.5	14255.2	11939.6	9108.0	8723.6	7245.5
70°	13852.2	13797.8	13999.3	14764.1	16763.8	16766.6	15781.8	11753.8	7874.5	6185.0	4192.4
72.5°	13679.2	13646.3	14708.3	17072.5	20285.8	20210.0	17227.0	10347.3	5304.5	2790.2	1570.9
75°	11222.1	11435.1	13080.3	17031.1	21550.8	21540.8	16342.1	6578.0	2194.1	1156.4	811.9
77.5°	6017.7	6355.0	8491.9	12574.3	16823.8	17076.8	11489.4	2301.3	942.0	740.5	561.7
80°	1962.6	2256.9	3384.8	6402.3	10931.9	10884.8	4924.2	903.3	644.6	524.6	388.8
82.5°	833.3	867.7	1512.3	3023.1	5610.3	5523.1	1568.0	518.9	453.2	358.7	240.2
85°	326.0	364.5	667.5	1397.9	2430.0	2377.1	566.0	257.3	290.2	234.4	143.0
87.5°	107.2	130.1	238.7	478.9	756.1	729.0	138.7	88.7	125.8	107.2	51.5
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°	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4	3523.4
2.5°	3553.5	3576.3	3603.5	3643.5	3677.8	3706.4	3736.4	3755.0	3762.2	3783.6	3782.1
5°	3579.2	3629.2	3696.4	3762.2	3826.4	3865.1	3899.4	3916.5	3932.2	3943.7	3946.6
7.5°	3622.0	3686.4	3792.2	3877.9	3932.2	3963.7	3986.5	3980.8	3986.5	3989.4	3993.7
10°	3659.2	3749.2	3875.0	3956.5	3998.0	3999.4	3993.7	3973.7	3963.7	3965.1	3968.0
12.5°	3703.5	3803.6	3939.4	4008.0	4019.4	3988.0	3963.7	3929.3	3916.5	3910.8	3907.9
15°	3763.6	3877.9	4009.4	4035.1	4006.5	3966.5	3925.1	3869.4	3840.8	3817.9	3825.0
17.5°	3836.5	3962.2	4063.7	4045.2	3983.7	3918.0	3850.7	3766.5	3707.8	3683.5	3685.0
20°	3937.9	4050.9	4105.2	4023.7	3930.8	3830.7	3716.4	3613.4	3559.2	3534.8	3532.0
22.5°	4060.8	4169.5	4145.2	3986.5	3855.0	3694.9	3552.0	3476.3	3449.1	3431.9	3434.8
25°	4208.1	4301.0	4173.8	3932.2	3730.7	3514.8	3404.7	3380.4	3367.6	3354.7	3354.7
27.5°	4399.6	4449.6	4195.2	3852.2	3536.2	3323.4	3283.3	3287.6	3283.3	3261.9	3266.2
30°	4652.7	4642.6	4215.2	3722.1	3313.3	3150.3	3153.2	3171.8	3174.6	3160.4	3167.6
32.5°	4985.7	4884.2	4225.3	3553.5	3100.3	2998.8	3001.7	3021.7	3036.0	3011.8	3023.1
35°	5388.7	5165.8	4209.6	3341.9	2935.9	2854.5	2833.0	2838.7	2843.0	2820.2	2835.9
37.5°	5859.0	5481.7	4139.5	3107.5	2800.2	2713.0	2667.3	2628.6	2605.8	2584.3	2598.6
40°	6375.1	5826.2	4010.8	2878.8	2648.6	2562.9	2494.2	2421.4	2344.2	2315.6	2328.5
42.5°	6915.4	6180.6	3855.0	2660.1	2474.2	2404.2	2331.4	2225.6	2109.8	2051.1	2058.3
45°	7475.6	6543.7	3702.1	2444.2	2295.6	2265.6	2181.2	2054.0	1928.2	1853.9	1848.2
47.5°	8024.5	6886.8	3477.7	2227.0	2128.3	2161.2	2095.5	1978.2	1838.2	1721.0	1708.2
50°	8549.1	7208.4	3110.4	2006.8	1992.6	2129.7	2066.9	1898.2	1738.1	1588.0	1575.2
52.5°	9069.4	7468.6	2640.1	1806.8	1919.6	2121.2	2029.7	1843.9	1648.1	1490.9	1473.6
55°	9511.1	7602.9	2186.9	1635.2	1813.8	2048.3	1985.4	1779.6	1520.9	1353.6	1339.4
57.5°	9762.7	7494.3	1809.6	1466.6	1668.1	1928.2	1909.7	1642.4	1369.4	1240.7	1223.5
60°	9654.1	7054.0	1500.8	1319.3	1529.4	1798.2	1778.2	1506.5	1253.6	1132.1	1114.9
62.5°	9055.2	6215.0	1256.4	1190.6	1403.6	1665.2	1646.7	1402.2	1164.9	1047.8	1029.2
65°	7848.7	5055.7	1066.3	1083.4	1276.4	1505.1	1532.3	1315.1	1094.9	980.5	962.0
67.5°	5986.2	3662.1	917.7	990.6	1152.1	1347.9	1426.5	1252.1	1036.3	927.6	910.5
70°	3411.9	2079.7	791.9	900.5	1042.0	1202.1	1345.0	1202.1	973.4	883.3	872.0
72.5°	1293.6	954.8	684.7	810.5	936.2	1079.2	1255.0	1123.5	900.5	833.3	821.8
75°	690.4	581.8	576.0	704.7	814.8	959.1	1142.1	1046.3	846.2	880.5	909.1
77.5°	470.3	411.6	481.7	603.2	681.8	826.2	1022.0	929.1	733.3	730.4	673.2
80°	326.0	291.6	391.7	486.0	527.5	694.6	892.0	797.6	597.5	557.5	533.2
82.5°	195.8	190.1	293.0	363.1	373.1	536.0	739.0	668.9	488.8	426.0	428.9
85°	107.2	113.0	187.3	213.0	217.3	374.5	578.9	517.4	376.0	315.9	318.8
87.5°	30.0	38.6	68.6	84.4	104.3	194.4	344.5	307.3	188.7	131.5	131.5
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)