

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: P968298

Luminaire Tested: **NAV-SB5B-740-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968298
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-SB5B-740-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30487.6 lumens
Efficiency: N/A
Efficacy: 166.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

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



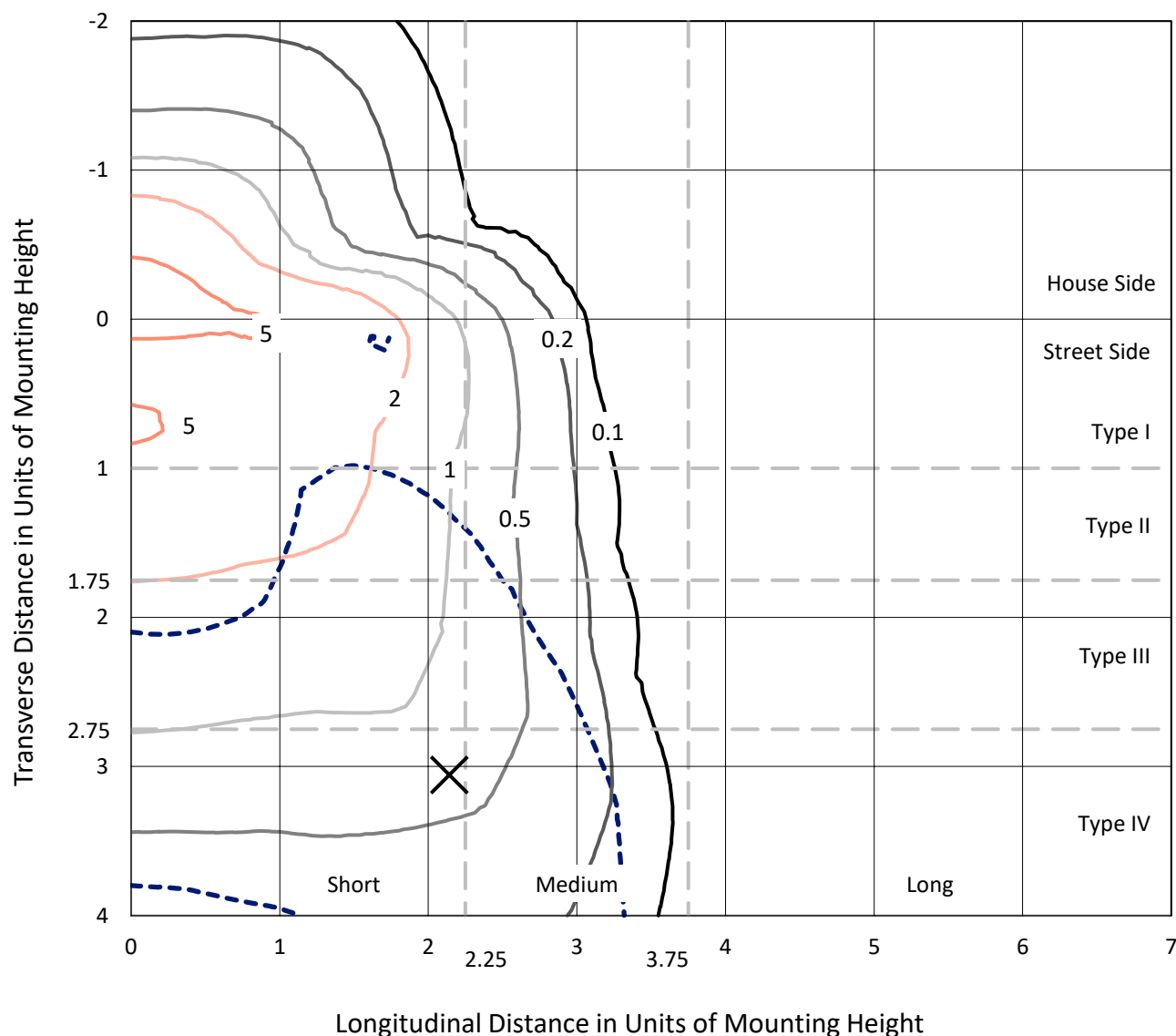
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

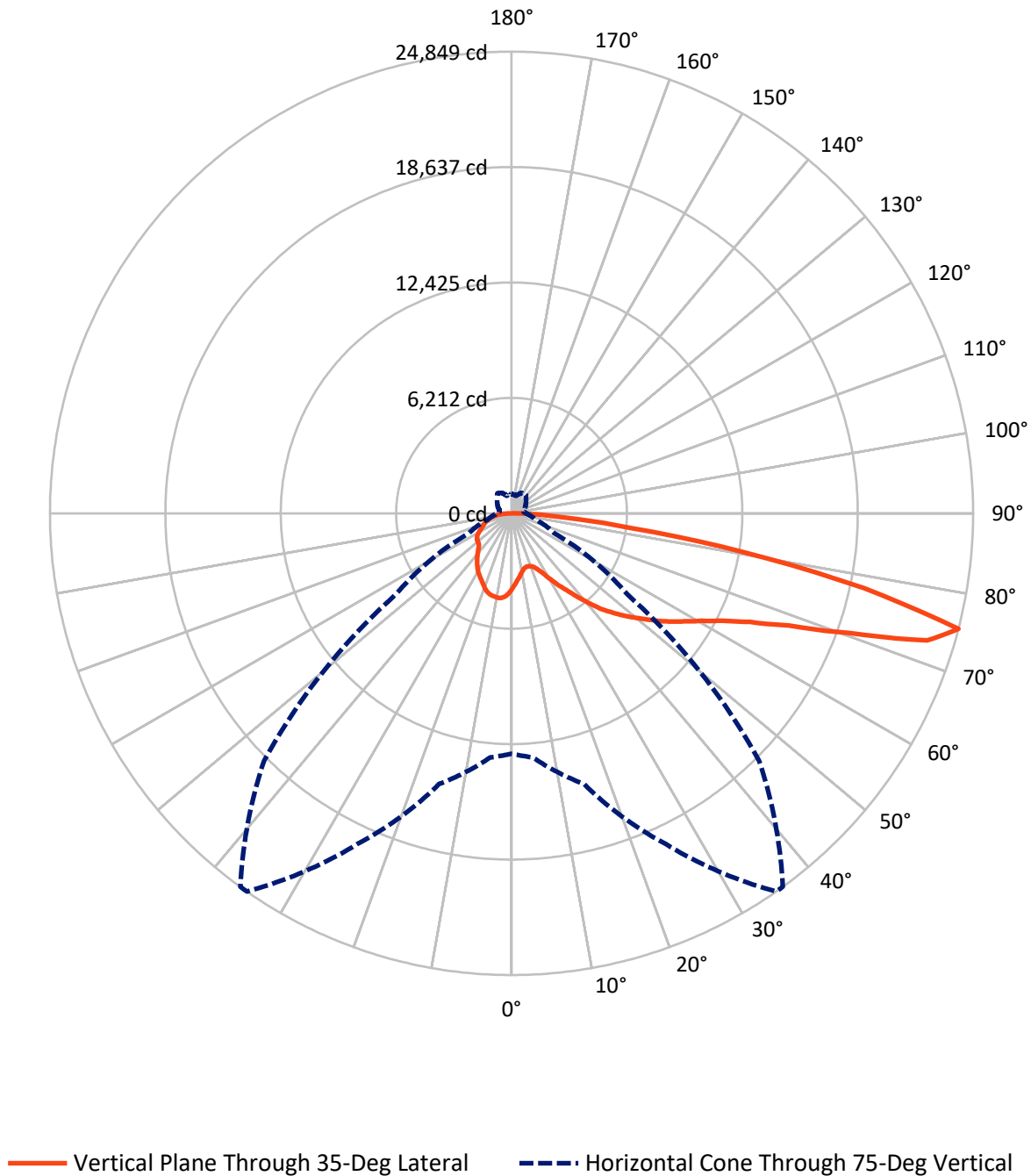


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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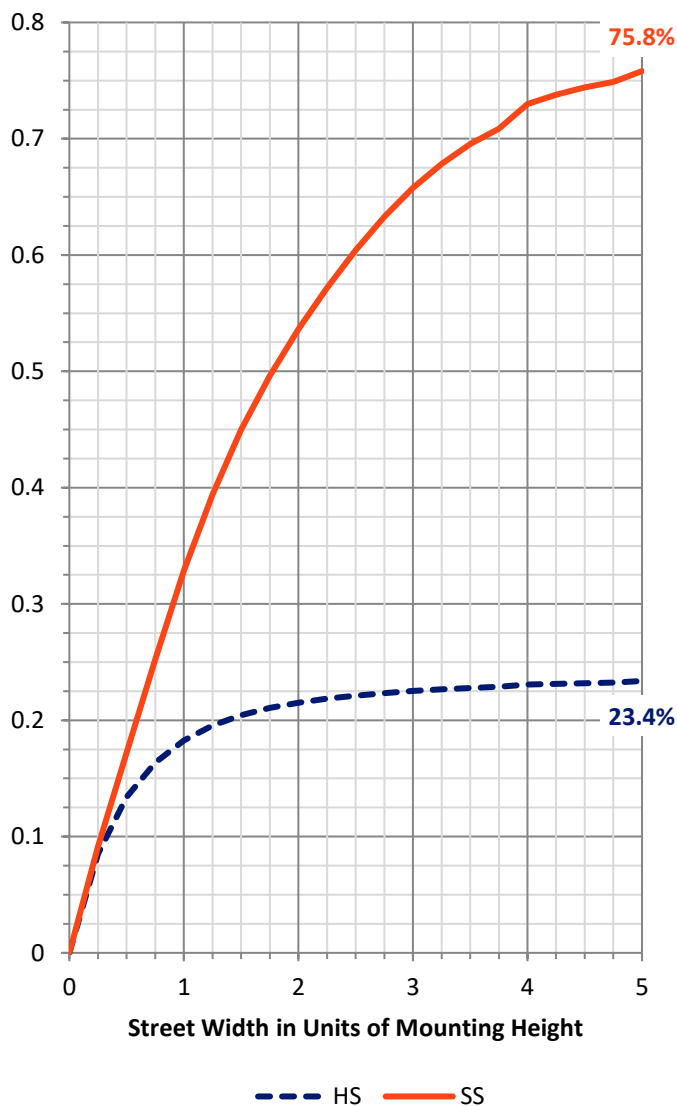
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7255.3	0.0	7255.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	23232.3	0.0	23232.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	30487.6	0.0	30487.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.7	1.3
10°-20°	1109.5	3.6
20°-30°	1863.2	6.1
30°-40°	2895.6	9.5
40°-50°	4297.8	14.1
50°-60°	5933.4	19.5
60°-70°	7198.6	23.6
70°-80°	5949.1	19.5
80°-90°	855.7	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°	30487.6	100.0
0°-180°	30487.6	100.0

Coefficient of Utilization



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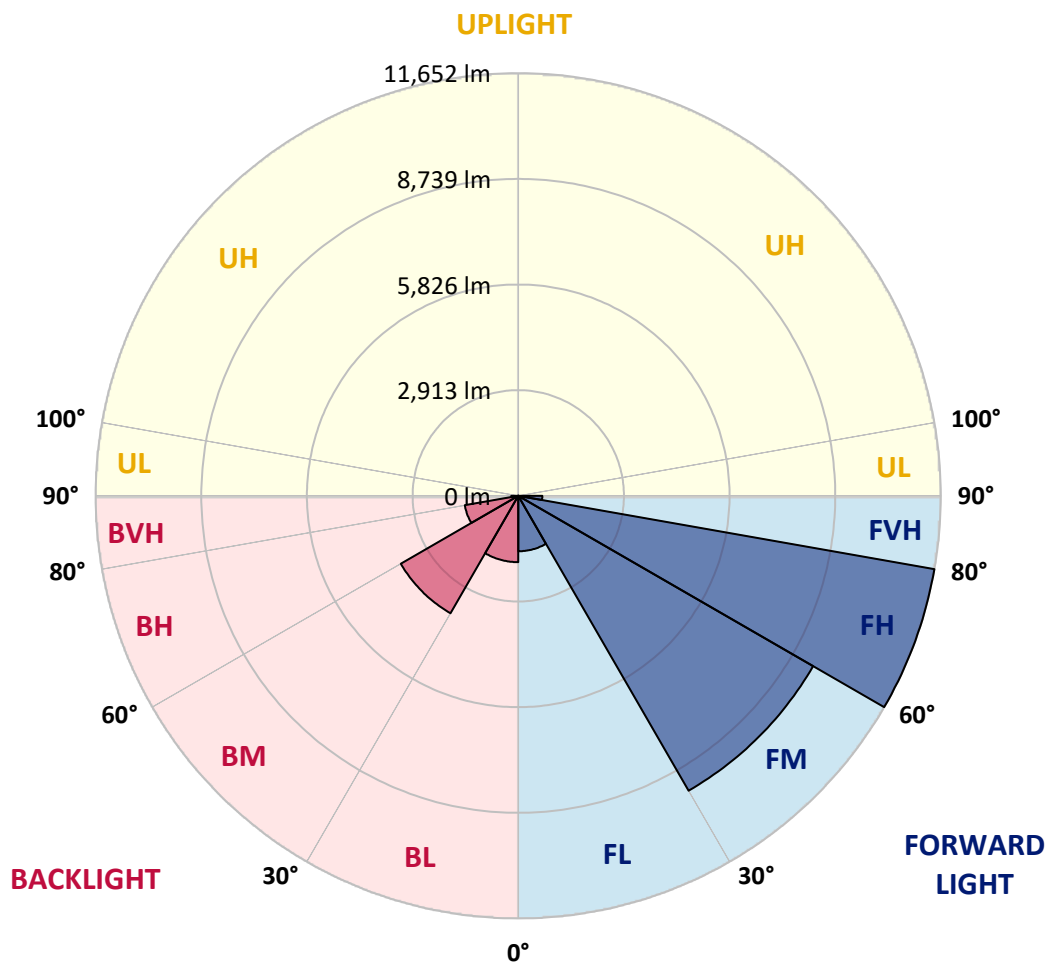
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1528.9	5.0			
FM	(30°-60°)	9388.5	30.8			
FH	(60°-80°)	11651.9	38.2			G4/12000
FVH	(80°-90°)	663.0	2.2			G4/750
BL	(0°-30°)	1828.4	6.0	B3/2500		
BM	(30°-60°)	3738.4	12.3	B3/5000		
BH	(60°-80°)	1495.8	4.9	B3/2500		G3/2500
BVH	(80°-90°)	192.7	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°	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7
2.5°	3746.3	3769.3	3779.2	3774.3	3799.0	3795.7	3830.3	3873.2	3932.5	3990.1	4074.2
5°	3457.8	3482.5	3504.0	3523.7	3571.5	3586.4	3640.8	3723.2	3832.0	3942.4	4080.8
7.5°	3189.2	3210.6	3243.5	3279.8	3360.6	3375.4	3466.0	3594.6	3746.3	3907.7	4099.0
10°	2969.9	2991.4	3026.0	3067.2	3167.8	3185.9	3301.2	3472.6	3670.4	3874.8	4118.8
12.5°	2876.0	2882.6	2902.4	2943.6	3030.9	3042.5	3169.4	3365.5	3596.2	3850.1	4148.4
15°	2871.0	2884.2	2885.9	2907.3	2979.9	2984.8	3101.9	3296.3	3550.1	3845.1	4192.9
17.5°	2920.5	2930.4	2915.6	2928.7	2989.7	2998.0	3090.3	3263.3	3535.2	3866.5	4268.7
20°	3052.3	3060.6	3016.1	2998.0	3042.5	3049.1	3139.7	3284.7	3550.1	3911.1	4372.5
22.5°	3332.6	3337.5	3228.7	3154.5	3157.8	3161.1	3240.2	3372.1	3607.8	3991.8	4504.4
25°	3769.3	3766.1	3592.9	3449.5	3367.1	3349.0	3401.8	3513.8	3705.1	4099.0	4674.1
27.5°	4280.2	4255.5	4082.5	3868.2	3688.6	3662.2	3650.6	3698.4	3843.4	4240.6	4881.8
30°	4857.1	4834.0	4647.8	4367.6	4118.8	4075.9	3967.1	3942.4	4049.5	4433.5	5170.2
32.5°	5490.0	5475.1	5252.6	4913.1	4580.2	4530.7	4347.8	4281.8	4366.0	4725.2	5572.4
35°	6020.6	6007.5	5822.9	5473.5	5066.4	5005.4	4819.1	4745.0	4787.9	5099.4	6098.1
37.5°	6500.2	6493.7	6335.4	6060.2	5640.0	5565.7	5356.4	5331.7	5323.5	5592.2	6736.0
40°	6945.3	6928.8	6764.0	6618.9	6307.4	6239.9	6055.3	6033.9	5971.2	6198.7	7457.9
42.5°	7438.1	7395.3	7156.2	7088.7	7004.6	6948.6	6838.2	6841.5	6703.0	6882.7	8222.6
45°	7840.2	7815.5	7569.9	7530.4	7621.0	7597.9	7693.5	7718.2	7449.6	7599.6	9017.0
47.5°	8272.1	8249.0	8041.3	8013.2	8258.8	8265.5	8603.3	8611.5	8178.1	8344.5	9813.0
50°	8804.4	8771.4	8565.4	8600.1	8875.3	8900.0	9518.0	9462.0	8848.9	9101.1	10602.5
52.5°	9155.4	9175.2	9130.7	9186.8	9562.5	9585.6	10417.9	10274.5	9513.1	9847.7	11377.2
55°	9414.2	9453.8	9592.3	9720.8	10287.7	10310.8	11266.7	11047.6	10063.6	10539.9	12105.7
57.5°	9747.1	9691.1	9949.9	10200.4	10976.6	11037.6	12092.4	11792.5	10551.5	11136.5	12605.0
60°	10225.1	10185.5	10386.6	10757.5	11747.9	11845.2	12965.9	12463.3	10909.1	11609.6	12702.2
62.5°	11194.2	11095.3	11126.6	11454.6	12720.4	12849.0	13951.6	13048.4	11087.1	11794.2	12181.4
65°	12643.0	12473.1	12315.0	12542.4	14090.0	14217.0	15064.0	13508.2	11021.1	11436.4	10798.7
67.5°	14467.5	14299.3	14104.8	14319.0	16107.4	16207.9	16437.0	13767.0	10501.9	10058.6	8354.5
70°	15972.2	15909.5	16141.9	17023.7	19329.4	19332.7	18197.1	13552.7	9079.7	7131.5	4834.0
72.5°	15772.8	15734.9	16959.4	19685.4	23390.5	23303.2	19863.5	11930.9	6116.3	3217.2	1811.3
75°	12939.6	13185.2	15082.2	19637.7	24849.1	24837.6	18843.3	7584.8	2529.9	1333.3	936.1
77.5°	6938.7	7327.6	9791.6	14498.7	19398.6	19690.4	13247.8	2653.5	1086.1	853.7	647.7
80°	2262.9	2602.4	3902.8	7382.0	12605.0	12550.6	5677.9	1041.6	743.3	604.9	448.3
82.5°	960.8	1000.4	1743.7	3485.8	6469.0	6368.4	1808.0	598.3	522.4	413.7	276.9
85°	375.8	420.2	769.7	1611.9	2801.8	2740.8	652.6	296.6	334.6	270.3	164.8
87.5°	123.6	150.0	275.2	552.2	871.9	840.6	159.9	102.2	145.0	123.6	59.3
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°	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7	4062.7
2.5°	4097.3	4123.7	4154.9	4201.2	4240.6	4273.6	4308.3	4329.7	4337.9	4362.6	4361.0
5°	4127.0	4184.7	4262.2	4337.9	4412.1	4456.6	4496.2	4515.9	4534.1	4547.2	4550.5
7.5°	4176.4	4250.6	4372.5	4471.5	4534.1	4570.3	4596.7	4590.1	4596.7	4600.0	4604.9
10°	4219.2	4323.0	4468.1	4562.1	4609.8	4611.5	4604.9	4581.9	4570.3	4571.9	4575.3
12.5°	4270.4	4385.7	4542.3	4621.4	4634.5	4598.4	4570.3	4530.7	4515.9	4509.3	4506.0
15°	4339.5	4471.5	4623.1	4652.7	4619.8	4573.7	4525.8	4461.5	4428.6	4402.2	4410.5
17.5°	4423.6	4568.6	4685.7	4664.3	4593.3	4517.6	4440.1	4342.8	4275.3	4247.3	4248.9
20°	4540.6	4670.8	4733.4	4639.6	4532.4	4417.0	4285.2	4166.5	4103.9	4075.9	4072.5
22.5°	4682.4	4807.7	4779.6	4596.7	4445.0	4260.4	4095.6	4008.3	3977.0	3957.2	3960.5
25°	4852.1	4959.3	4812.6	4534.1	4301.6	4052.7	3925.9	3897.9	3883.0	3868.2	3868.2
27.5°	5073.0	5130.6	4837.3	4441.7	4077.6	3832.0	3785.8	3790.8	3785.8	3761.0	3766.1
30°	5364.7	5353.2	4860.3	4291.8	3820.4	3632.5	3635.8	3657.2	3660.6	3644.1	3652.3
32.5°	5748.7	5631.8	4871.9	4097.3	3574.8	3457.8	3461.1	3484.2	3500.7	3472.6	3485.8
35°	6213.5	5956.4	4853.8	3853.4	3385.3	3291.4	3266.7	3273.2	3278.2	3251.8	3270.0
37.5°	6755.8	6320.7	4773.0	3583.1	3228.7	3128.2	3075.4	3030.9	3004.6	2979.9	2996.3
40°	7350.7	6717.8	4624.7	3319.4	3054.0	2955.1	2876.0	2792.0	2702.9	2670.0	2684.8
42.5°	7973.7	7126.6	4445.0	3067.2	2853.0	2772.2	2688.2	2566.2	2432.6	2365.1	2373.3
45°	8619.8	7545.2	4268.7	2818.3	2647.0	2612.3	2515.0	2368.4	2223.3	2137.6	2131.1
47.5°	9252.7	7940.8	4009.9	2567.8	2454.1	2492.0	2416.2	2281.0	2119.5	1984.4	1969.5
50°	9857.5	8311.6	3586.4	2314.0	2297.5	2455.7	2383.2	2188.8	2004.2	1831.1	1816.3
52.5°	10457.5	8611.5	3044.1	2083.2	2213.5	2445.9	2340.4	2126.2	1900.4	1719.0	1699.2
55°	10966.8	8766.5	2521.7	1885.5	2091.5	2361.8	2289.2	2051.9	1753.7	1560.8	1544.3
57.5°	11256.9	8641.3	2086.6	1691.0	1923.4	2223.3	2201.9	1893.7	1578.9	1430.6	1410.8
60°	11131.6	8133.6	1730.5	1521.2	1763.5	2073.4	2050.3	1737.2	1445.5	1305.3	1285.6
62.5°	10441.0	7166.2	1448.7	1372.9	1618.5	1920.1	1898.7	1616.8	1343.3	1208.1	1186.6
65°	9049.9	5829.5	1229.5	1249.3	1471.8	1735.5	1766.8	1516.3	1262.5	1130.7	1109.2
67.5°	6902.5	4222.6	1058.1	1142.2	1328.4	1554.2	1644.8	1443.8	1194.9	1069.7	1049.9
70°	3934.2	2398.1	913.1	1038.3	1201.5	1386.1	1550.9	1386.1	1122.4	1018.5	1005.3
72.5°	1491.6	1101.0	789.5	934.5	1079.5	1244.4	1447.1	1295.4	1038.3	960.8	947.7
75°	796.0	670.8	664.2	812.5	939.4	1105.9	1316.8	1206.4	975.7	1015.3	1048.3
77.5°	542.2	474.7	555.4	695.6	786.2	952.6	1178.4	1071.3	845.5	842.2	776.2
80°	375.8	336.2	451.6	560.4	608.1	801.0	1028.5	919.6	688.9	642.8	614.8
82.5°	225.8	219.2	337.8	418.6	430.2	618.1	852.1	771.3	563.6	491.2	494.5
85°	123.6	130.2	215.9	245.6	250.5	431.8	667.5	596.7	433.5	364.3	367.6
87.5°	34.6	44.5	79.1	97.3	120.3	224.2	397.2	354.3	217.5	151.6	151.6
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)