

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: P968436

Luminaire Tested: **NAV-SB5B-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26806.8 lumens
Efficiency: N/A
Efficacy: 146.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
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

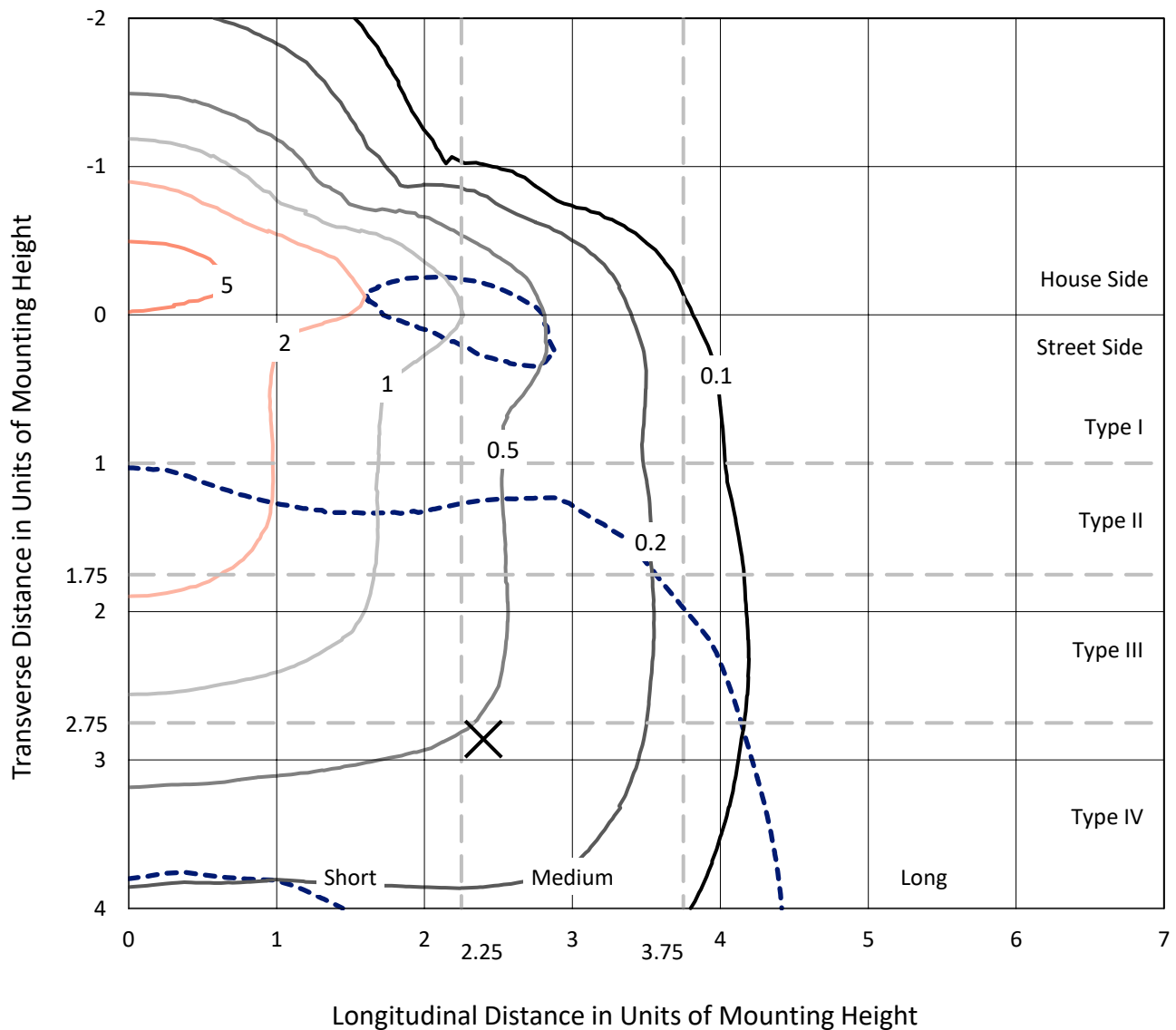


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Iso-Footcandle Lines of Horizontal Illumination

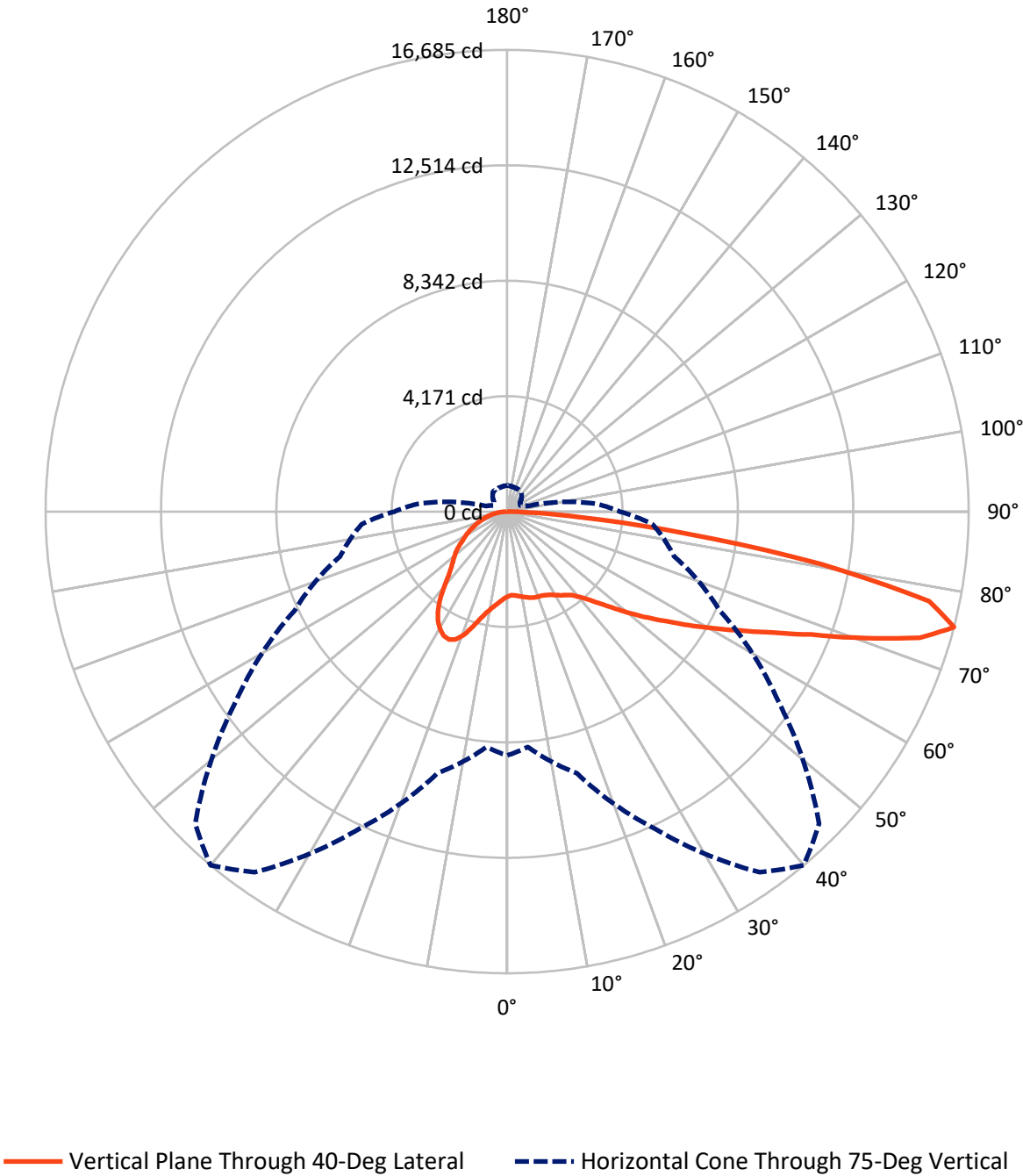
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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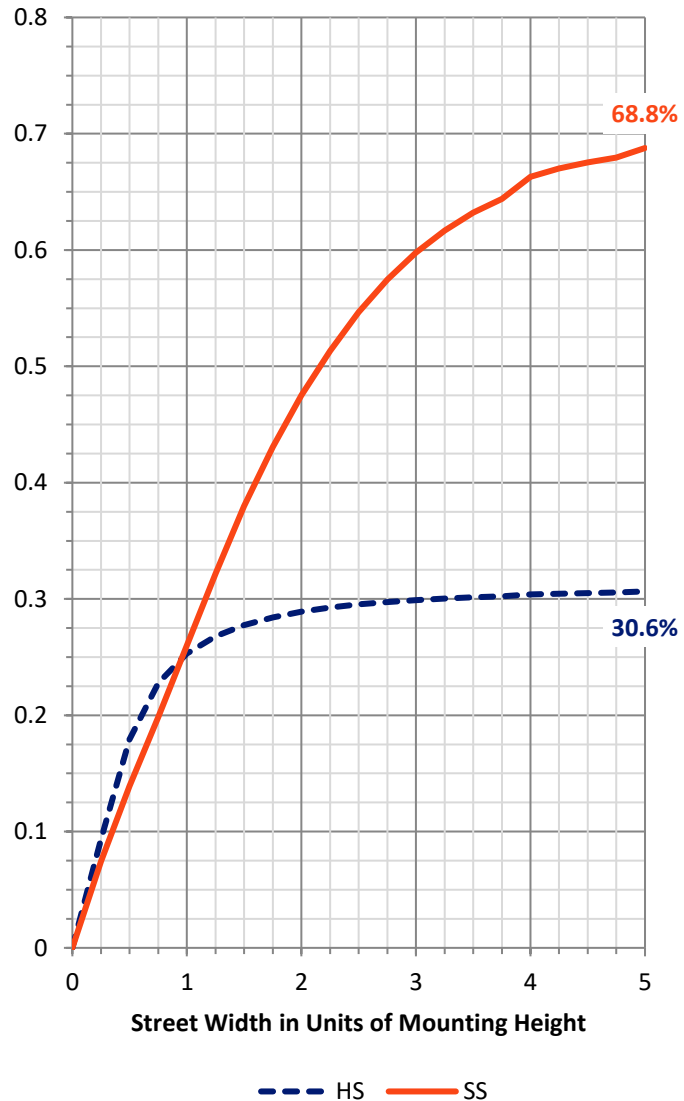
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8305.7	0.0	8305.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	18501.2	0.0	18501.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	26806.8	0.0	26806.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.0	1.1
10°-20°	1027.3	3.8
20°-30°	1875.8	7.0
30°-40°	2660.4	9.9
40°-50°	3592.4	13.4
50°-60°	4832.7	18.0
60°-70°	6133.8	22.9
70°-80°	5566.8	20.8
80°-90°	811.5	3.0
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°	26806.8	100.0
0°-180°	26806.8	100.0

Coefficient of Utilization



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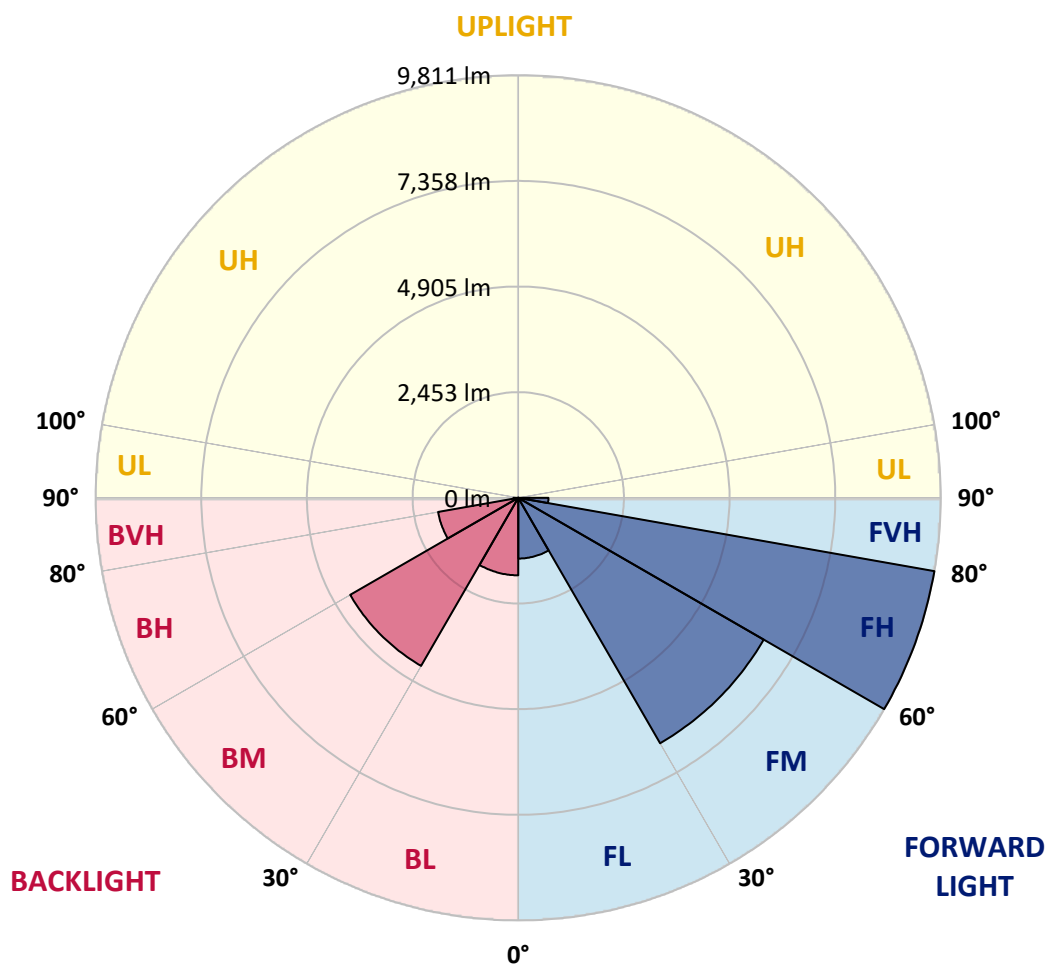
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1410.1	5.3			
FM	(30°-60°)	6580.5	24.5			
FH	(60°-80°)	9810.9	36.6			G4/12000
FVH	(80°-90°)	699.7	2.6			G4/750
BL	(0°-30°)	1799.1	6.7	B3/2500		
BM	(30°-60°)	4505.1	16.8	B3/5000		
BH	(60°-80°)	1889.8	7.0	B3/2500		G3/2500
BVH	(80°-90°)	111.7	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4
2.5°	3018.5	3035.5	3031.2	3025.6	3025.6	3027.0	3025.6	3035.5	3045.5	3055.4	3071.1
5°	3049.8	3066.8	3058.3	3051.2	3045.5	3044.0	3039.8	3038.4	3044.0	3056.9	3078.2
7.5°	3110.9	3128.0	3115.2	3102.4	3091.0	3085.4	3079.6	3071.1	3066.8	3074.0	3103.8
10°	3179.1	3196.2	3180.6	3157.8	3139.4	3132.2	3126.6	3118.0	3112.3	3116.6	3149.3
12.5°	3247.4	3264.4	3243.1	3211.8	3187.6	3183.4	3176.3	3173.5	3172.1	3170.6	3203.3
15°	3311.4	3325.6	3298.6	3261.7	3236.0	3228.9	3221.8	3226.1	3233.2	3241.7	3278.7
17.5°	3361.2	3375.3	3335.6	3287.2	3263.0	3260.2	3255.9	3270.2	3290.0	3311.4	3356.9
20°	3406.6	3420.8	3369.7	3304.3	3275.8	3275.8	3277.2	3307.1	3335.6	3366.8	3429.3
22.5°	3470.6	3482.0	3419.4	3329.8	3288.6	3291.5	3302.9	3332.7	3368.3	3410.9	3497.6
25°	3565.9	3574.4	3497.6	3378.2	3331.2	3339.8	3349.8	3363.9	3398.1	3447.9	3564.4
27.5°	3719.4	3726.5	3625.6	3463.5	3392.4	3406.6	3420.8	3410.9	3426.6	3469.2	3618.5
30°	3935.5	3939.8	3811.9	3597.1	3496.2	3503.3	3506.1	3464.9	3435.1	3469.2	3656.9
32.5°	4191.4	4190.0	4037.9	3759.2	3614.3	3607.1	3582.9	3501.9	3432.2	3462.0	3691.0
35°	4588.1	4572.5	4376.3	3986.7	3747.8	3703.7	3647.0	3543.1	3446.5	3455.0	3720.9
37.5°	5245.0	5196.6	4925.1	4359.2	3946.9	3834.6	3750.7	3609.9	3477.7	3452.1	3756.4
40°	5985.8	5924.6	5626.0	4869.7	4245.4	4064.9	3929.8	3705.2	3528.9	3464.9	3809.0
42.5°	6864.4	6777.7	6456.4	5471.0	4623.7	4362.1	4158.7	3826.0	3604.2	3506.1	3880.1
45°	7943.5	7828.4	7373.4	6149.3	5100.0	4751.7	4480.1	4009.5	3719.4	3585.8	3986.7
47.5°	9034.1	9062.5	8415.7	6925.6	5671.5	5232.2	4882.5	4285.3	3887.2	3713.8	4158.7
50°	10192.9	10212.8	9452.1	7785.8	6319.8	5775.4	5334.6	4593.8	4120.4	3895.7	4416.1
52.5°	11097.2	11099.9	10393.3	8685.7	6995.2	6372.5	5822.3	4946.4	4390.5	4137.4	4758.8
55°	11663.0	11655.9	11053.1	9537.4	7771.6	6999.5	6362.6	5347.4	4720.3	4421.7	5189.6
57.5°	12073.9	12052.6	11508.0	10269.7	8599.0	7740.3	6973.9	5802.3	5109.9	4760.2	5756.8
60°	12230.3	12217.5	11816.6	10902.3	9469.2	8559.3	7679.1	6311.3	5552.1	5159.7	6486.2
62.5°	12290.1	12314.1	12119.4	11515.2	10400.5	9466.3	8454.0	6919.9	6049.8	5611.9	7255.5
65°	12500.5	12544.6	12504.7	12317.0	11452.6	10528.4	9482.0	7643.6	6592.9	6096.7	8058.8
67.5°	12917.0	12961.1	12978.1	13276.7	12737.9	11852.1	10764.4	8545.0	7228.4	6600.0	8663.0
70°	12907.1	12894.3	13195.7	14040.2	14347.3	13684.8	12493.3	9654.0	7986.3	7018.0	8739.8
72.5°	11748.3	11645.9	12358.2	14031.7	15686.7	15598.6	14604.7	11084.3	8640.2	7069.2	7583.9
75°	8813.8	8540.7	9799.0	12645.4	15909.9	16684.8	15946.8	11971.5	8485.3	6245.9	5277.7
77.5°	3769.2	3494.7	4977.7	9361.1	14239.3	15597.1	14715.6	10444.5	6773.4	4130.3	2591.9
80°	986.8	985.3	1504.3	4244.1	9683.9	11518.0	10104.8	6745.0	3870.1	1475.8	715.1
82.5°	408.1	398.1	553.1	1650.7	4731.7	6463.4	5274.9	3008.5	1397.6	399.5	237.4
85°	152.1	150.7	268.8	570.1	1669.2	2665.8	1929.4	769.2	348.3	194.7	106.6
87.5°	42.6	41.2	58.3	197.6	406.6	617.0	329.8	126.6	98.1	76.8	31.3
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°	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4	3065.4
2.5°	3075.3	3082.5	3095.3	3105.2	3118.0	3132.2	3152.1	3164.9	3177.7	3186.2	3180.6
5°	3088.1	3103.8	3136.5	3169.2	3207.5	3243.1	3284.3	3314.2	3338.4	3345.5	3348.4
7.5°	3116.6	3142.1	3197.6	3253.0	3314.2	3372.5	3432.2	3483.4	3524.7	3540.2	3541.7
10°	3166.3	3200.5	3278.7	3356.9	3438.0	3527.4	3604.2	3678.2	3736.5	3760.6	3762.1
12.5°	3228.9	3271.6	3373.9	3482.0	3594.3	3718.0	3817.5	3908.5	3981.0	4013.7	4013.7
15°	3309.9	3365.4	3496.2	3641.2	3806.1	3978.2	4104.7	4205.7	4286.8	4326.5	4323.7
17.5°	3398.1	3472.0	3637.0	3855.9	4091.9	4318.0	4465.8	4539.8	4623.7	4662.1	4660.7
20°	3483.4	3574.4	3810.4	4128.9	4443.1	4683.4	4802.8	4822.7	4828.5	4832.7	4844.0
22.5°	3571.5	3693.8	4027.9	4473.0	4809.9	4976.3	4993.4	4908.0	4788.6	4733.1	4748.8
25°	3668.3	3830.3	4312.3	4852.6	5125.6	5145.5	5014.7	4807.1	4581.0	4477.2	4492.9
27.5°	3762.1	3988.2	4653.5	5215.2	5353.1	5178.2	4896.6	4602.4	4329.4	4219.9	4232.7
30°	3855.9	4168.7	5030.3	5532.2	5456.9	5097.1	4710.4	4382.0	4107.6	3992.4	4005.2
32.5°	3951.2	4379.1	5464.0	5761.1	5438.3	4925.1	4478.6	4134.5	3892.8	3772.0	3787.7
35°	4059.2	4637.9	5874.9	5886.3	5314.7	4672.1	4173.0	3838.8	3628.4	3531.7	3553.1
37.5°	4200.0	4966.3	6237.4	5917.5	5098.6	4300.9	3793.3	3489.1	3315.7	3271.6	3302.9
40°	4374.9	5361.6	6514.7	5867.7	4778.7	3850.2	3378.2	3135.1	3037.0	3046.9	3081.0
42.5°	4602.4	5803.8	6709.4	5739.8	4333.6	3385.3	3014.2	2906.2	2953.0	2992.9	3029.9
45°	4898.1	6263.1	6830.3	5522.3	3830.3	2991.5	2799.5	2825.1	2860.7	2864.9	2893.4
47.5°	5276.3	6728.0	6909.9	5193.8	3317.1	2714.2	2663.1	2668.7	2661.6	2631.8	2654.5
50°	5748.3	7180.1	6981.1	4758.8	2880.6	2540.8	2472.5	2452.6	2354.5	2257.8	2270.6
52.5°	6285.8	7595.2	7010.9	4218.5	2540.8	2395.7	2284.8	2159.7	1976.3	1946.5	1956.4
55°	6882.9	7979.1	6934.1	3554.5	2255.0	2209.5	2041.7	1891.0	1871.0	1845.5	1849.7
57.5°	7596.7	8392.9	6777.7	2813.7	1962.1	1992.0	1828.4	1845.5	1809.9	1770.2	1763.0
60°	8377.2	8820.8	6503.3	2138.4	1659.3	1720.4	1772.9	1771.6	1761.6	1728.9	1717.5
62.5°	9079.6	9102.3	5963.0	1637.9	1393.4	1509.9	1653.5	1652.1	1643.6	1625.1	1618.0
65°	9497.6	9059.7	5061.6	1289.6	1174.4	1336.5	1491.5	1502.9	1504.3	1502.9	1502.9
67.5°	9423.6	8560.6	3824.7	1026.5	993.8	1160.2	1330.8	1346.4	1357.8	1360.7	1363.5
70°	8587.7	7464.5	2493.8	819.0	833.2	1005.2	1178.6	1194.3	1204.3	1215.6	1221.3
72.5°	6693.9	5488.2	1427.5	662.6	692.4	871.6	1028.0	1046.4	1052.2	1073.5	1082.0
75°	4079.1	3227.5	770.6	521.8	568.7	745.1	878.6	900.0	910.0	935.5	938.4
77.5°	1939.3	1397.6	439.3	406.6	457.9	608.5	742.2	766.4	739.3	753.6	742.2
80°	655.5	519.0	277.3	310.0	349.7	474.9	594.3	618.5	561.6	558.7	553.1
82.5°	228.9	210.4	176.3	206.1	226.1	339.8	449.3	480.5	418.0	416.6	396.7
85°	89.6	85.3	98.1	112.3	135.1	209.0	295.7	311.4	257.4	207.6	204.7
87.5°	18.4	19.9	24.2	25.6	41.2	72.5	106.6	130.8	103.8	88.1	81.1
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)