

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: P965243

Luminaire Tested: **NAV-SB3D-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965243
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-SB3D-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27874.9 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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



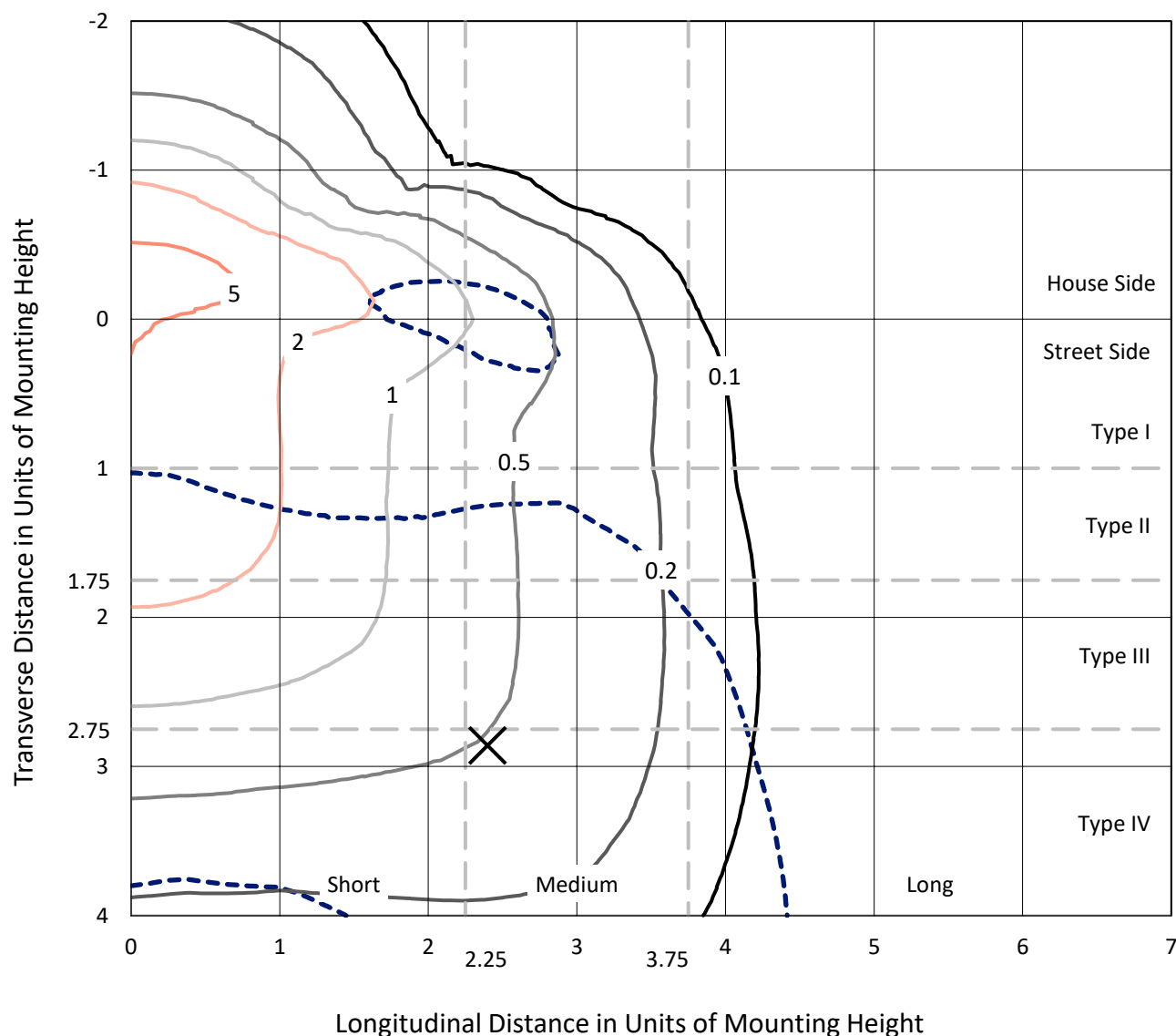
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

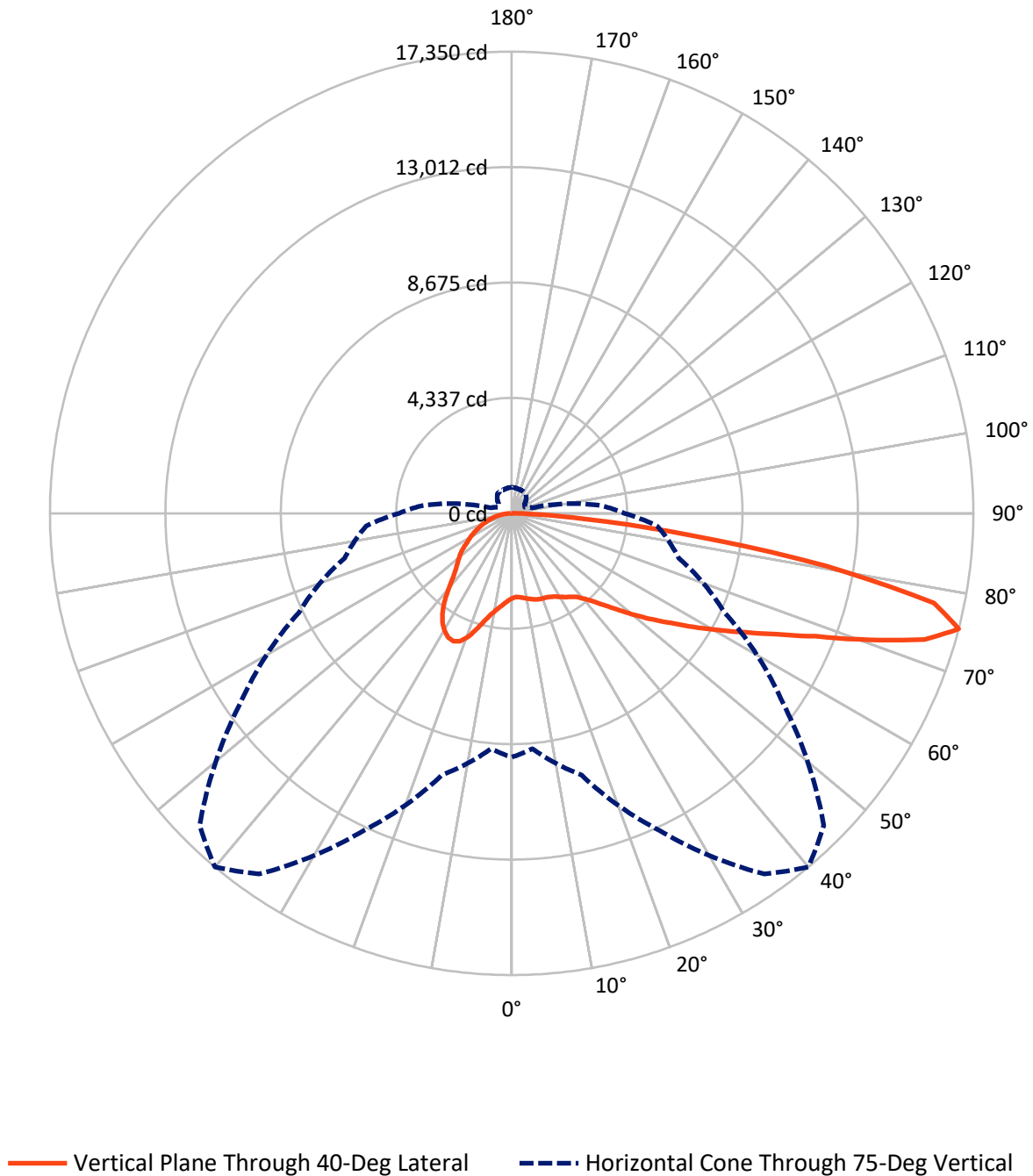
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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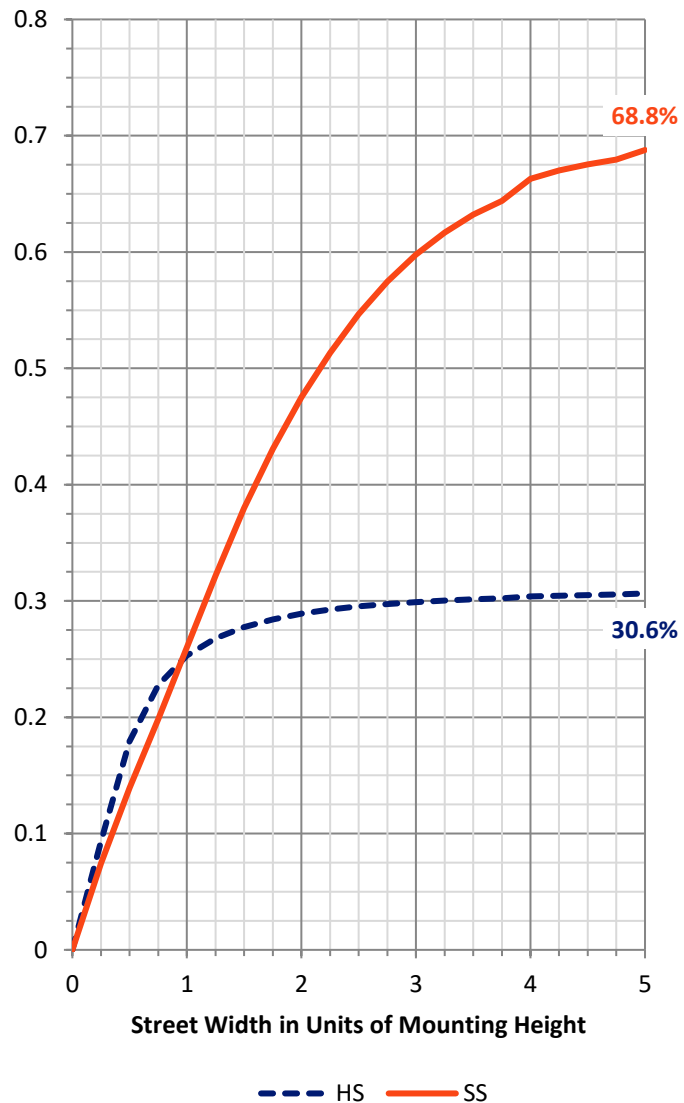
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8636.6	0.0	8636.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	19238.3	0.0	19238.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	27874.9	0.0	27874.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.2	1.1
10°-20°	1068.3	3.8
20°-30°	1950.6	7.0
30°-40°	2766.4	9.9
40°-50°	3735.5	13.4
50°-60°	5025.3	18.0
60°-70°	6378.2	22.9
70°-80°	5788.6	20.8
80°-90°	843.8	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°	27874.9	100.0
0°-180°	27874.9	100.0

Coefficient of Utilization



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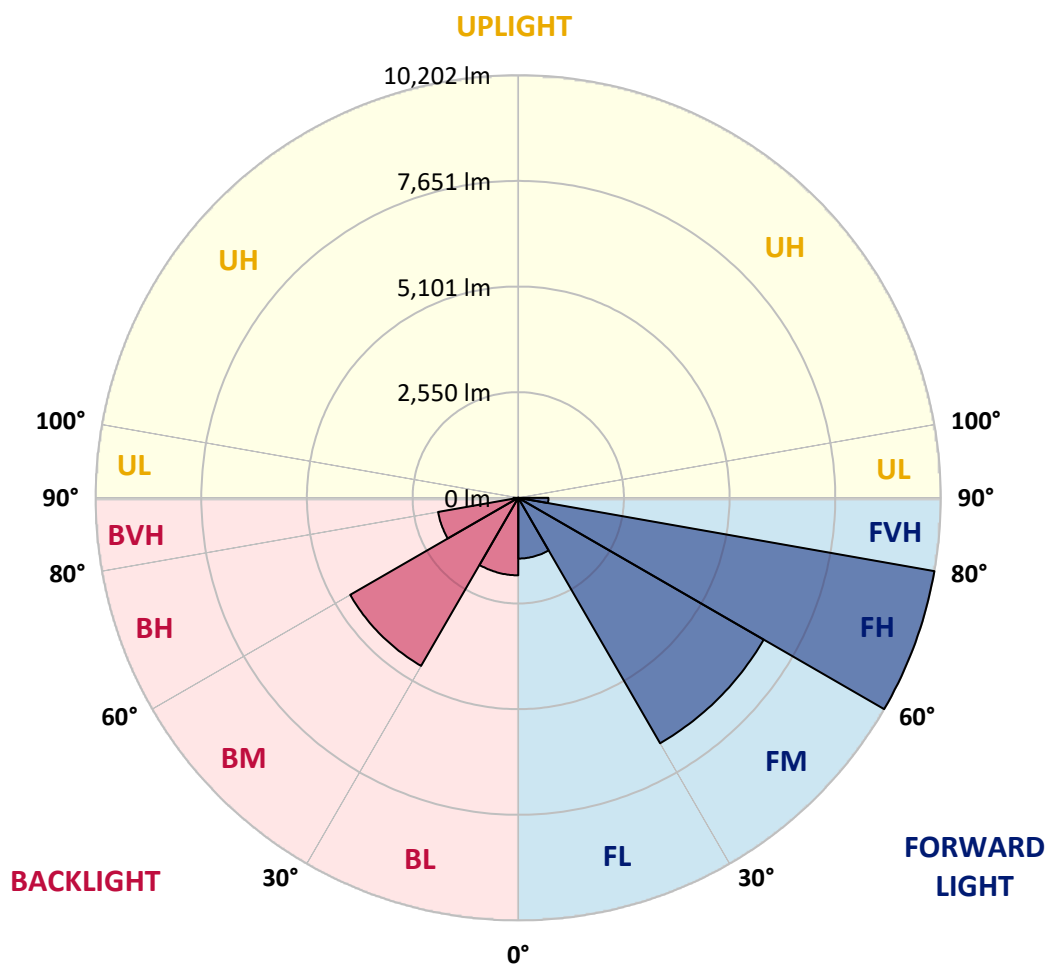
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1466.2	5.3			
FM	(30°-60°)	6842.7	24.5			
FH	(60°-80°)	10201.8	36.6			G4/12000
FVH	(80°-90°)	727.6	2.6			G4/750
BL	(0°-30°)	1870.8	6.7	B3/2500		
BM	(30°-60°)	4684.6	16.8	B3/5000		
BH	(60°-80°)	1965.1	7.0	B3/2500		G3/2500
BVH	(80°-90°)	116.2	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°	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5
2.5°	3138.8	3156.5	3152.1	3146.1	3146.1	3147.6	3146.1	3156.5	3166.8	3177.2	3193.5
5°	3171.2	3189.0	3180.2	3172.8	3166.8	3165.3	3160.9	3159.5	3165.3	3178.6	3200.9
7.5°	3234.8	3252.5	3239.3	3226.0	3214.1	3208.2	3202.3	3193.5	3189.0	3196.4	3227.4
10°	3305.8	3323.6	3307.3	3283.6	3264.4	3257.0	3251.1	3242.3	3236.3	3240.7	3274.8
12.5°	3376.8	3394.5	3372.4	3339.9	3314.6	3310.2	3302.9	3299.9	3298.4	3296.9	3330.9
15°	3443.3	3458.0	3430.0	3391.5	3365.0	3357.6	3350.1	3354.6	3362.0	3370.8	3409.3
17.5°	3495.0	3509.8	3468.4	3418.2	3393.1	3390.1	3385.7	3400.4	3421.1	3443.3	3490.6
20°	3542.4	3557.2	3504.0	3435.9	3406.4	3406.4	3407.8	3438.9	3468.4	3501.0	3566.0
22.5°	3608.9	3620.7	3555.6	3462.6	3419.6	3422.6	3434.5	3465.5	3502.4	3546.8	3637.0
25°	3707.9	3716.9	3637.0	3512.8	3464.0	3472.9	3483.3	3498.0	3533.5	3585.2	3706.5
27.5°	3867.6	3875.0	3770.1	3601.5	3527.5	3542.4	3557.2	3546.8	3563.1	3607.4	3762.7
30°	4092.3	4096.8	3963.7	3740.4	3635.5	3642.8	3645.8	3603.0	3571.9	3607.4	3802.5
32.5°	4358.5	4357.0	4198.8	3909.0	3758.2	3750.8	3725.7	3641.4	3568.9	3600.0	3838.0
35°	4771.0	4754.7	4550.7	4145.6	3897.2	3851.3	3792.2	3684.3	3583.7	3592.6	3869.1
37.5°	5454.0	5403.7	5121.3	4533.0	4104.2	3987.4	3900.1	3753.8	3616.3	3589.7	3906.1
40°	6224.2	6160.7	5850.2	5063.7	4414.7	4226.9	4086.5	3852.9	3669.5	3603.0	3960.8
42.5°	7137.9	7047.8	6713.6	5689.1	4807.9	4535.8	4324.5	3978.5	3747.8	3645.8	4034.7
45°	8260.1	8140.3	7667.2	6394.3	5303.1	4941.0	4658.6	4169.2	3867.6	3728.6	4145.6
47.5°	9394.0	9423.6	8750.9	7201.5	5897.5	5440.7	5077.0	4456.1	4042.1	3861.7	4324.5
50°	10599.0	10619.7	9828.7	8096.0	6571.7	6005.5	5547.1	4776.8	4284.5	4050.9	4592.1
52.5°	11539.2	11542.2	10807.4	9031.8	7273.9	6626.4	6054.3	5143.6	4565.5	4302.2	4948.4
55°	12127.7	12120.3	11493.4	9917.4	8081.2	7278.4	6616.1	5560.4	4908.4	4597.9	5396.3
57.5°	12554.9	12532.8	11966.6	10678.9	8941.7	8048.7	7251.8	6033.6	5313.5	4949.8	5986.2
60°	12717.6	12704.3	12287.4	11336.7	9846.5	8900.3	7985.1	6562.9	5773.3	5365.3	6744.7
62.5°	12779.7	12804.8	12602.3	11973.9	10814.9	9843.5	8790.8	7195.6	6290.8	5835.4	7544.5
65°	12998.5	13044.4	13002.9	12807.8	11908.9	10947.9	9859.8	7948.2	6855.5	6339.6	8379.8
67.5°	13431.7	13477.5	13495.3	13805.7	13245.4	12324.3	11193.3	8885.4	7516.4	6863.0	9008.2
70°	13421.4	13408.0	13721.5	14599.7	14919.0	14230.1	12991.1	10038.6	8304.4	7297.6	9088.0
72.5°	12216.4	12110.0	12850.6	14590.8	16311.6	16220.0	15186.6	11525.9	8984.5	7350.8	7886.0
75°	9164.9	8881.0	10189.4	13149.3	16543.8	17349.6	16582.2	12448.5	8823.4	6494.8	5488.0
77.5°	3919.4	3634.0	5176.0	9734.1	14806.6	16218.6	15301.9	10860.7	7043.3	4294.9	2695.2
80°	1026.0	1024.6	1564.1	4413.1	10069.7	11976.9	10507.3	7013.8	4024.4	1534.6	743.6
82.5°	424.4	414.0	575.1	1716.5	4920.3	6721.0	5485.1	3128.4	1453.3	415.4	246.9
85°	158.2	156.7	279.4	592.9	1735.7	2772.1	2006.2	799.8	362.2	202.5	110.9
87.5°	44.4	42.8	60.6	205.5	422.8	641.6	343.0	131.6	102.0	79.8	32.5
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°	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5	3187.5
2.5°	3197.9	3205.3	3218.6	3229.0	3242.3	3257.0	3277.7	3291.1	3304.3	3313.2	3307.3
5°	3211.2	3227.4	3261.4	3295.5	3335.4	3372.4	3415.2	3446.3	3471.4	3478.7	3481.7
7.5°	3240.7	3267.4	3325.0	3382.7	3446.3	3506.8	3568.9	3622.1	3665.1	3681.3	3682.8
10°	3292.5	3328.0	3409.3	3490.6	3574.9	3668.1	3747.8	3824.8	3885.4	3910.5	3912.0
12.5°	3357.6	3401.9	3508.4	3620.7	3737.6	3866.1	3969.6	4064.2	4139.7	4173.7	4173.7
15°	3441.8	3499.5	3635.5	3786.3	3957.8	4136.7	4268.3	4373.3	4457.5	4498.9	4496.0
17.5°	3533.5	3610.4	3781.8	4009.6	4255.0	4490.0	4643.8	4720.6	4807.9	4847.8	4846.3
20°	3622.1	3716.9	3962.2	4293.4	4620.2	4870.0	4994.2	5014.9	5020.8	5025.3	5037.1
22.5°	3713.9	3841.0	4188.5	4651.1	5001.6	5174.6	5192.3	5103.6	4979.4	4921.7	4938.0
25°	3814.4	3982.9	4484.2	5046.0	5329.8	5350.5	5214.5	4998.6	4763.6	4655.7	4671.8
27.5°	3912.0	4147.0	4838.9	5423.0	5566.4	5384.5	5091.8	4785.7	4501.9	4388.0	4401.3
30°	4009.6	4334.8	5230.8	5752.6	5674.3	5300.3	4898.1	4556.5	4271.3	4151.5	4164.8
32.5°	4108.6	4553.6	5681.7	5990.6	5655.0	5121.3	4657.1	4299.4	4048.0	3922.4	3938.6
35°	4221.0	4822.7	6108.9	6120.8	5526.4	4858.2	4339.2	3991.8	3773.0	3672.5	3694.6
37.5°	4367.3	5164.3	6485.9	6153.3	5301.7	4472.3	3944.5	3628.1	3447.7	3401.9	3434.5
40°	4549.2	5575.2	6774.2	6101.5	4969.1	4003.6	3512.8	3260.0	3157.9	3168.3	3203.8
42.5°	4785.7	6035.0	6976.8	5968.5	4506.3	3520.2	3134.3	3021.9	3070.7	3112.1	3150.5
45°	5093.2	6512.5	7102.4	5742.3	3982.9	3110.7	2911.1	2937.6	2974.7	2979.1	3008.7
47.5°	5486.5	6996.0	7185.2	5400.7	3449.2	2822.3	2769.1	2775.1	2767.6	2736.6	2760.2
50°	5977.4	7466.1	7259.2	4948.4	2995.4	2641.9	2571.0	2550.3	2448.3	2347.8	2361.1
52.5°	6536.2	7897.8	7290.2	4386.6	2641.9	2491.2	2375.8	2245.8	2055.0	2024.0	2034.3
55°	7157.2	8297.1	7210.4	3696.2	2344.8	2297.5	2123.1	1966.4	1945.7	1919.0	1923.4
57.5°	7899.4	8727.3	7047.8	2925.9	2040.3	2071.3	1901.3	1919.0	1882.1	1840.7	1833.3
60°	8711.0	9172.3	6762.4	2223.5	1725.4	1788.9	1843.7	1842.1	1831.8	1797.7	1786.0
62.5°	9441.4	9465.1	6200.6	1703.1	1448.8	1570.1	1719.4	1718.0	1709.1	1689.8	1682.4
65°	9876.0	9420.7	5263.3	1340.9	1221.2	1389.7	1550.9	1562.7	1564.1	1562.7	1562.7
67.5°	9799.1	8901.7	3977.0	1067.4	1033.4	1206.4	1383.9	1400.0	1411.9	1414.9	1417.8
70°	8929.8	7761.8	2593.1	851.6	866.3	1045.3	1225.6	1241.9	1252.2	1264.0	1270.0
72.5°	6960.6	5706.8	1484.4	689.0	720.0	906.3	1068.9	1088.1	1094.1	1116.2	1125.1
75°	4241.7	3356.1	801.3	542.6	591.4	774.7	913.7	935.8	946.2	972.8	975.8
77.5°	2016.6	1453.3	456.8	422.8	476.0	632.7	771.7	796.8	768.7	783.6	771.7
80°	681.5	539.7	288.3	322.3	363.7	493.8	618.0	643.1	583.9	581.1	575.1
82.5°	238.0	218.8	183.4	214.3	235.0	353.3	467.2	499.7	434.7	433.2	412.5
85°	93.2	88.7	102.0	116.7	140.4	217.3	307.5	323.8	267.6	215.9	212.9
87.5°	19.3	20.7	25.1	26.6	42.8	75.4	110.9	136.0	107.9	91.6	84.3
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)