

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: P965138

Luminaire Tested: **NAV-SB3D-740-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33045 lumens
Efficiency: N/A
Efficacy: 151.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

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

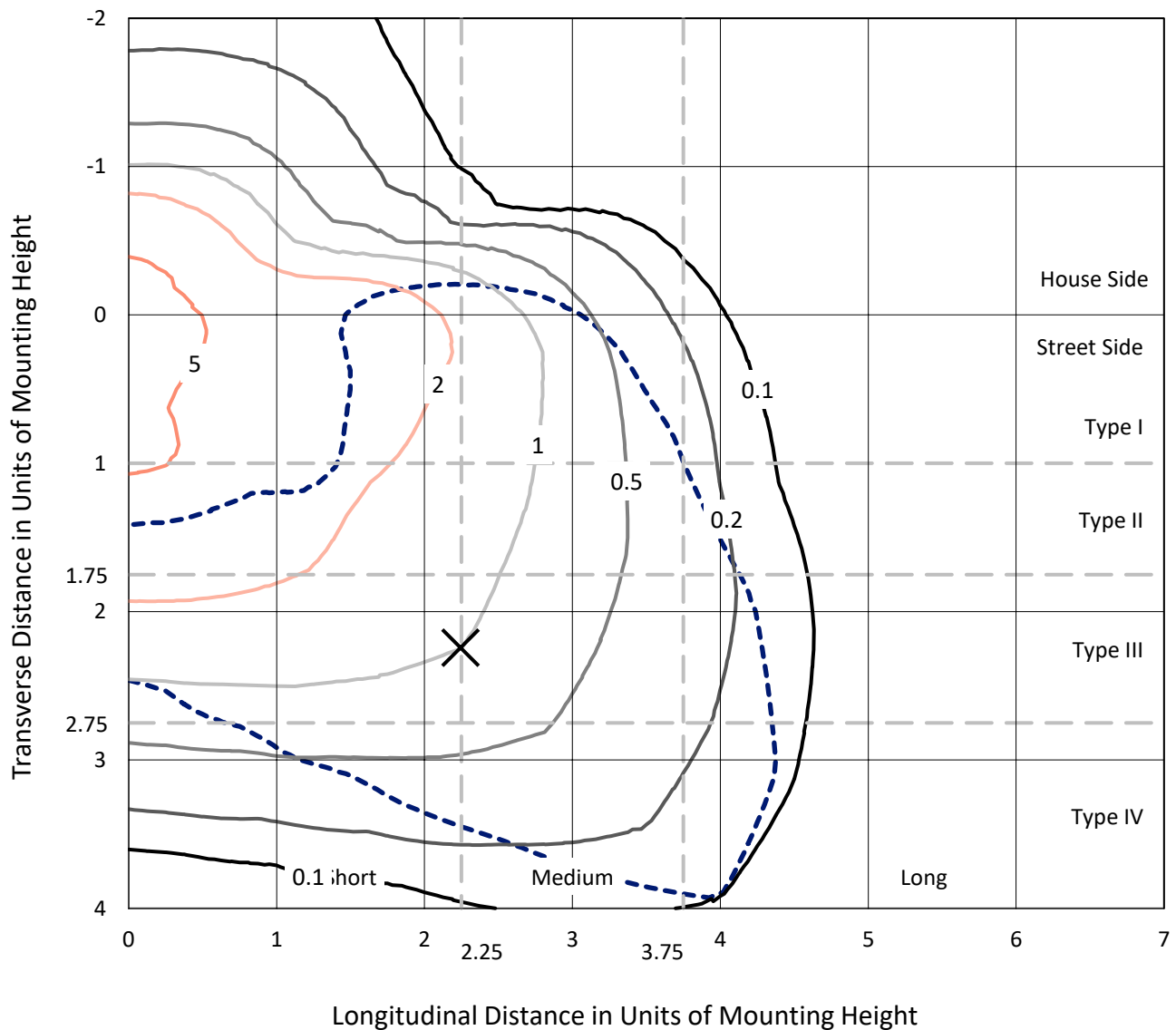


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Iso-Footcandle Lines of Horizontal Illumination

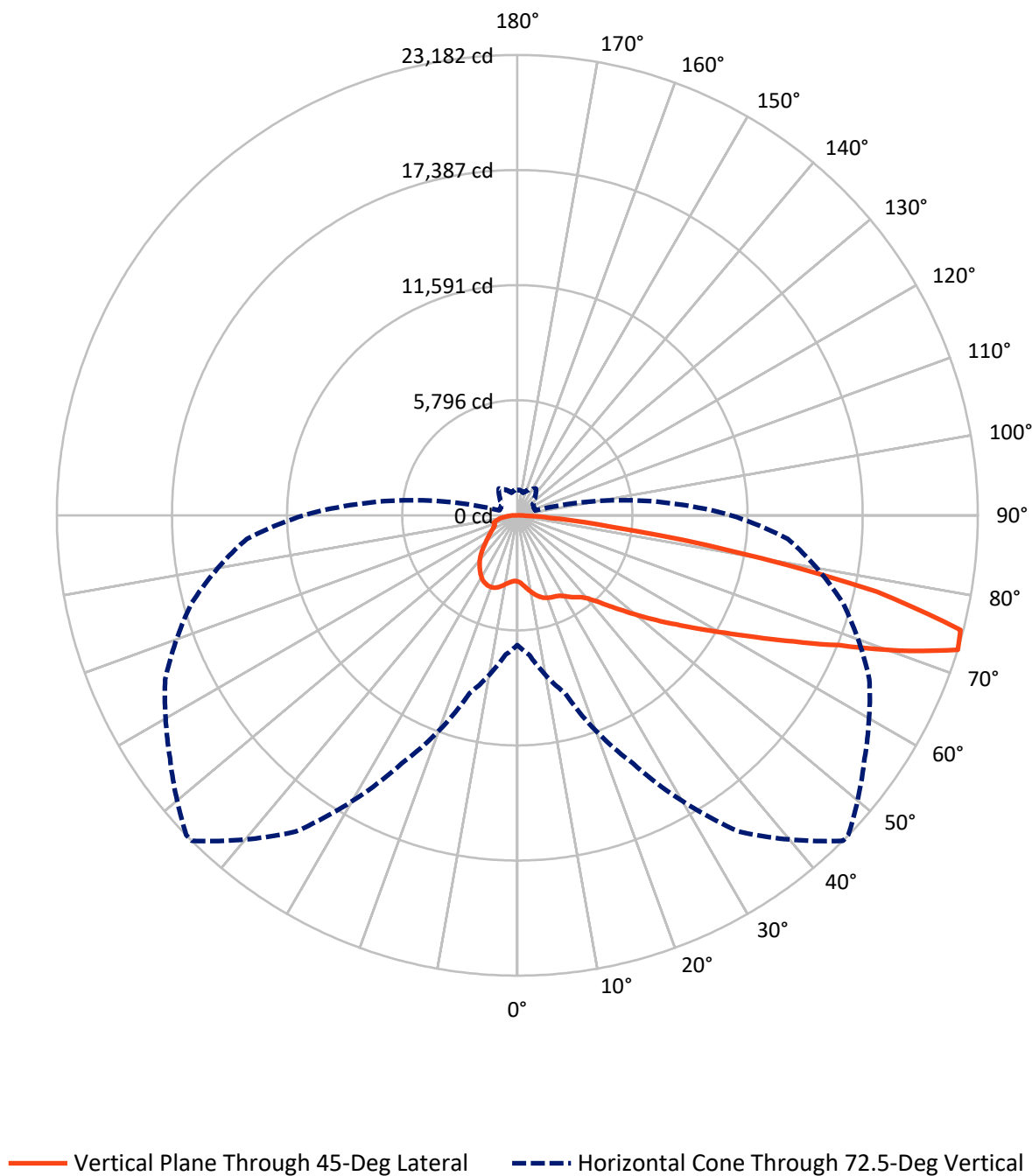
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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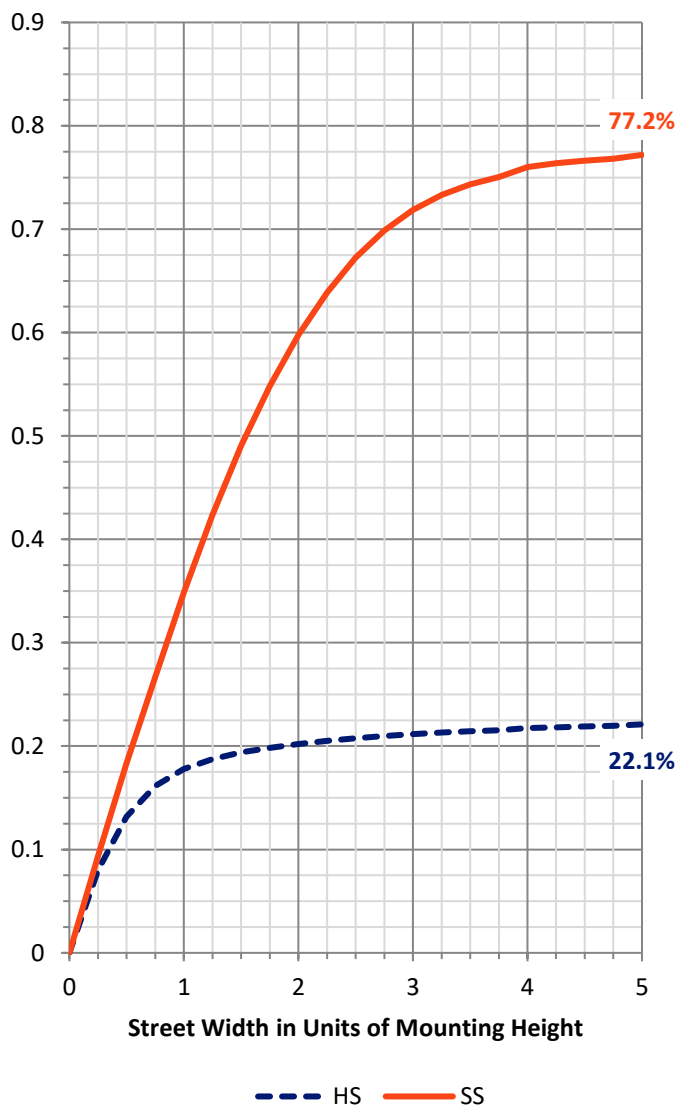
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7470.3	0.0	7470.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	25574.6	0.0	25574.6
	% Fixture	77.4	0.0	77.4
Total	Lumens	33045.0	0.0	33045.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.3	1.0
10°-20°	1131.3	3.4
20°-30°	1967.9	6.0
30°-40°	2821.1	8.5
40°-50°	3972.2	12.0
50°-60°	6084.3	18.4
60°-70°	8814.0	26.7
70°-80°	7038.5	21.3
80°-90°	876.6	2.7
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°	33045.0	100.0
0°-180°	33045.0	100.0

Coefficient of Utilization



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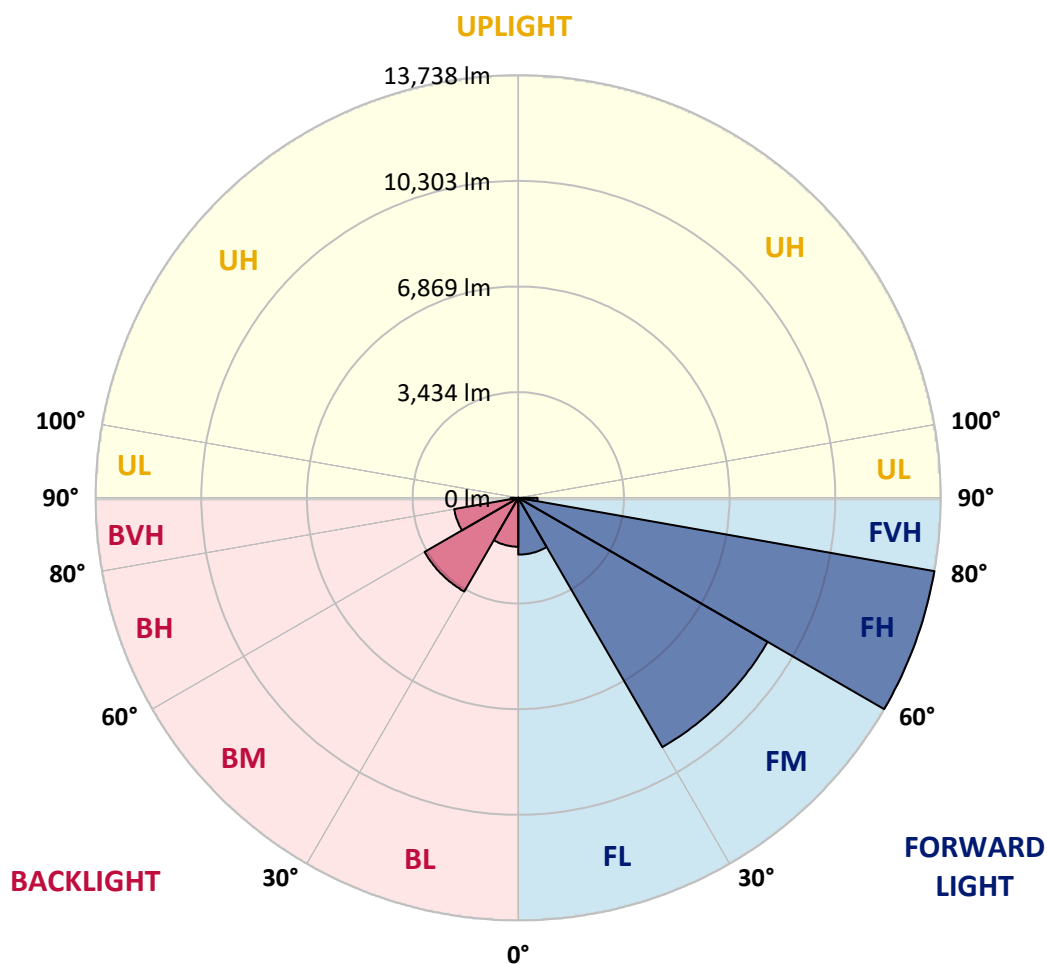
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1847.9	5.6			
FM	(30°-60°)	9360.1	28.3			
FH	(60°-80°)	13737.8	41.6			G5
FVH	(80°-90°)	628.9	1.9			G4/750
BL	(0°-30°)	1590.5	4.8	B3/2500		
BM	(30°-60°)	3517.5	10.6	B3/5000		
BH	(60°-80°)	2114.7	6.4	B3/2500		G3/2500
BVH	(80°-90°)	247.7	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6
2.5°	3464.2	3486.7	3465.9	3446.8	3438.1	3415.4	3413.7	3399.7	3391.0	3366.7	3359.7
5°	3706.1	3735.7	3700.9	3662.6	3627.8	3572.1	3565.2	3525.1	3479.8	3427.6	3398.0
7.5°	3979.5	4005.5	3965.5	3908.0	3847.1	3754.9	3753.1	3680.1	3608.6	3519.8	3469.4
10°	4217.9	4252.7	4198.8	4120.4	4043.8	3939.4	3927.2	3843.6	3753.1	3638.2	3561.7
12.5°	4428.5	4452.9	4400.7	4305.0	4216.1	4111.7	4096.1	4003.8	3902.8	3772.3	3674.8
15°	4595.7	4627.0	4557.4	4454.6	4360.7	4258.0	4244.0	4160.5	4059.5	3922.0	3796.6
17.5°	4705.4	4731.4	4660.1	4545.2	4454.6	4369.4	4358.9	4289.3	4200.6	4061.3	3927.2
20°	4747.1	4775.0	4700.1	4583.5	4500.0	4433.7	4428.5	4378.1	4317.1	4190.1	4054.3
22.5°	4788.9	4815.0	4717.6	4595.7	4522.5	4480.8	4479.0	4445.9	4421.5	4317.1	4184.9
25°	4957.7	4964.7	4834.1	4658.3	4553.9	4517.3	4515.5	4513.9	4524.2	4442.5	4325.8
27.5°	5104.0	5102.2	4990.8	4825.5	4663.5	4587.0	4585.2	4602.7	4635.7	4567.8	4472.1
30°	5318.1	5298.9	5166.6	4994.3	4846.3	4727.9	4717.6	4701.9	4727.9	4674.0	4618.2
32.5°	5772.4	5711.5	5497.4	5191.0	4997.8	4907.3	4893.3	4795.9	4806.3	4773.2	4745.3
35°	6423.5	6343.4	6058.0	5563.5	5185.8	5056.9	5050.0	4926.5	4905.5	4875.9	4886.4
37.5°	7198.2	7098.9	6766.4	6103.2	5509.6	5231.1	5220.6	5109.2	5023.9	4992.6	5051.7
40°	7976.2	7850.9	7575.9	6761.2	5986.5	5521.8	5488.7	5319.9	5222.4	5170.1	5295.5
42.5°	8731.8	8627.3	8392.3	7499.3	6575.0	5946.5	5873.4	5584.4	5511.3	5462.5	5688.9
45°	9400.2	9306.2	9133.9	8287.8	7264.3	6524.4	6453.1	5981.3	5958.7	5958.7	6285.9
47.5°	9943.3	9922.4	9739.7	9092.1	8077.2	7182.5	7058.9	6533.1	6594.0	6688.1	7133.7
50°	10545.6	10488.2	10293.3	9884.2	9032.9	7936.3	7835.2	7210.4	7438.3	7696.0	8359.2
52.5°	11099.2	11130.6	10913.0	10709.3	10112.2	8777.0	8599.4	8009.4	8502.0	8928.5	9795.4
55°	11668.5	11670.2	11609.3	11581.4	11243.7	9706.5	9511.6	8970.3	9753.6	10282.8	11470.0
57.5°	12202.8	12206.3	12296.9	12542.3	12556.2	10778.9	10557.8	10150.5	11144.5	11684.1	13196.9
60°	12679.9	12704.3	12951.4	13525.9	13710.4	12007.9	11799.0	11544.9	12582.4	13125.5	15012.5
62.5°	12840.0	12928.7	13478.9	14295.3	14850.6	13515.4	13310.0	13158.5	14093.3	14598.2	16530.5
65°	12568.4	12772.1	13835.8	14930.7	16023.9	15306.6	15103.0	14937.6	15663.5	16138.7	17776.9
67.5°	11901.7	12164.6	13814.8	15597.4	17447.9	17461.8	17272.1	16883.8	17346.9	17529.7	18182.5
70°	10145.2	10538.6	12598.1	15846.3	19082.4	20408.9	20226.1	19226.9	19026.8	18142.4	17040.5
72.5°	6536.6	7065.8	9276.7	13797.4	19446.3	23182.0	23171.6	21341.9	19557.7	16951.8	13666.8
75°	2384.9	2708.7	4310.1	8660.4	16323.3	23041.0	23108.8	20979.9	17853.4	13094.2	8514.2
77.5°	868.7	950.5	1406.5	3328.4	10039.1	18487.1	18628.0	16772.4	12707.7	6571.5	3373.6
80°	456.1	501.3	720.7	1291.7	4301.5	10979.1	11200.2	9967.7	5972.6	1979.3	1011.4
82.5°	252.5	273.3	403.8	701.5	1937.5	4694.9	4827.1	3937.6	2101.1	839.1	417.8
85°	135.8	144.5	189.7	382.9	947.0	1627.6	1664.2	1176.8	837.3	492.6	201.9
87.5°	40.1	48.8	62.6	121.9	370.7	365.5	374.2	233.3	330.8	249.0	66.1
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°	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6	3333.6
2.5°	3349.3	3344.1	3324.9	3316.2	3305.7	3304.0	3312.7	3314.4	3316.2	3317.9	3324.9
5°	3380.6	3363.2	3345.8	3335.4	3338.8	3340.6	3358.0	3370.2	3378.8	3385.8	3389.3
7.5°	3441.5	3427.6	3398.0	3396.2	3401.5	3417.1	3439.8	3467.7	3483.3	3495.5	3498.9
10°	3532.0	3505.9	3471.2	3476.4	3486.7	3509.4	3556.4	3579.1	3605.1	3627.8	3622.6
12.5°	3624.3	3601.6	3561.7	3565.2	3582.5	3622.6	3667.9	3695.6	3713.1	3730.5	3737.5
15°	3744.4	3704.3	3660.9	3660.9	3692.2	3735.7	3756.6	3779.3	3789.6	3808.8	3815.8
17.5°	3868.0	3815.8	3758.4	3754.9	3793.1	3814.0	3826.2	3829.7	3833.2	3854.1	3861.1
20°	3991.7	3934.2	3852.4	3845.4	3854.1	3850.6	3848.9	3845.4	3850.6	3876.8	3887.2
22.5°	4113.4	4047.3	3934.2	3902.8	3878.5	3845.4	3843.6	3841.9	3845.4	3871.5	3889.0
25°	4256.2	4176.2	4024.7	3930.7	3848.9	3803.6	3808.8	3810.5	3814.0	3834.9	3862.8
27.5°	4411.1	4322.3	4108.2	3922.0	3774.0	3742.7	3734.0	3739.2	3751.4	3784.5	3817.5
30°	4566.1	4461.6	4184.9	3887.2	3680.1	3636.5	3608.6	3620.8	3659.1	3692.2	3728.7
32.5°	4707.1	4602.7	4245.8	3810.5	3559.9	3492.0	3455.5	3471.2	3509.4	3521.6	3565.2
35°	4872.4	4754.1	4271.9	3688.7	3429.3	3324.9	3276.1	3253.6	3272.6	3260.5	3298.8
37.5°	5056.9	4933.3	4268.4	3528.6	3276.1	3156.1	3088.1	3002.8	2962.8	2921.0	2947.2
40°	5330.3	5152.7	4226.6	3335.4	3086.4	2976.7	2854.8	2710.4	2619.9	2538.1	2543.2
42.5°	5702.8	5457.3	4150.0	3123.0	2872.3	2769.5	2604.2	2435.4	2292.6	2156.8	2144.6
45°	6258.1	5856.0	4054.3	2896.6	2640.8	2539.8	2360.5	2170.7	2008.9	1834.7	1813.9
47.5°	7058.9	6392.1	3963.8	2639.1	2397.1	2304.8	2142.9	1967.1	1775.6	1606.8	1587.6
50°	8159.0	7161.6	3880.2	2388.4	2156.8	2087.2	1958.4	1779.1	1585.9	1450.1	1441.4
52.5°	9558.6	8207.8	3845.4	2146.4	1932.2	1906.2	1803.5	1636.3	1453.6	1338.6	1329.9
55°	11165.3	9459.4	3845.4	1914.9	1735.5	1744.2	1672.9	1517.9	1359.6	1256.9	1246.4
57.5°	12805.2	10726.7	3775.8	1700.8	1568.5	1605.0	1559.7	1423.9	1281.2	1175.1	1157.6
60°	14316.2	11788.5	3493.7	1505.7	1420.4	1477.9	1448.3	1331.7	1157.6	1068.9	1054.9
62.5°	15477.3	12387.4	2950.7	1350.8	1298.6	1364.8	1349.1	1209.8	1135.0	1098.4	1086.3
65°	16058.7	12290.0	2256.0	1213.3	1195.9	1298.6	1265.6	1260.3	1201.1	1159.4	1145.4
67.5°	15701.9	11450.9	1636.3	1112.3	1136.7	1237.7	1364.8	1385.7	1276.0	1194.1	1180.3
70°	14136.9	9932.9	1218.5	1016.6	1061.9	1239.4	1556.3	1450.1	1251.6	1155.9	1140.2
72.5°	10754.5	7407.1	945.3	915.6	964.4	1248.1	1641.5	1420.4	1182.0	1277.8	1267.3
75°	6150.2	4066.5	759.0	792.0	842.6	1166.3	1598.1	1343.9	1128.0	1173.3	1173.3
77.5°	2344.8	1563.2	626.7	670.2	677.1	1018.3	1528.4	1338.6	1074.1	1048.0	955.7
80°	812.9	611.0	518.8	532.7	524.0	905.2	1465.7	1164.6	879.1	786.8	760.8
82.5°	332.5	304.6	410.8	393.4	372.5	703.3	1183.8	952.2	718.9	635.4	628.4
85°	144.5	193.2	271.5	238.5	215.9	487.4	948.7	806.0	607.5	524.0	522.2
87.5°	29.6	73.1	114.9	107.9	111.4	325.5	673.7	572.7	430.0	322.1	252.5
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)