

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: P966682

Luminaire Tested: **NAV-SB4C-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966682
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25612.7 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - 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

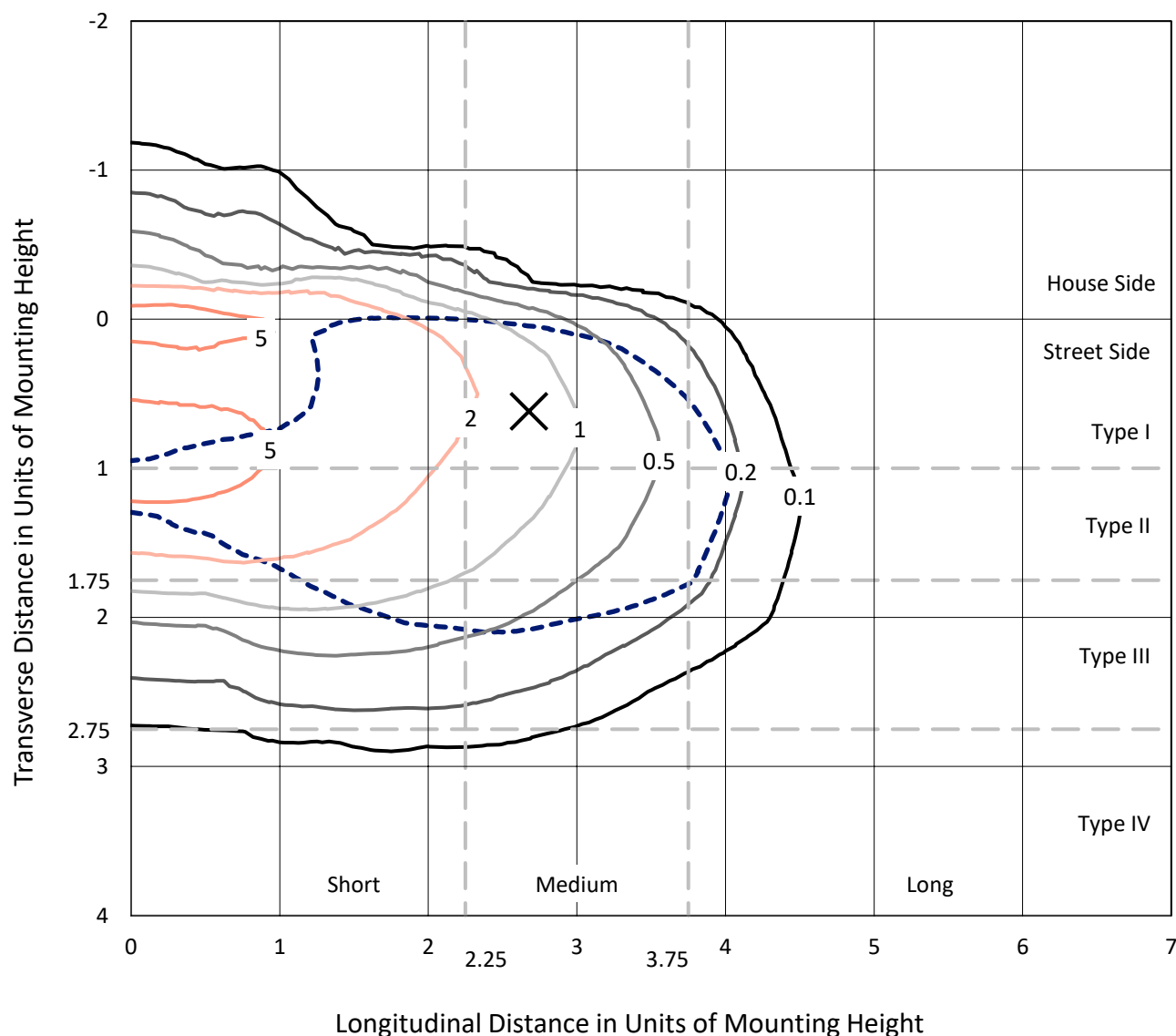


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Iso-Footcandle Lines of Horizontal Illumination

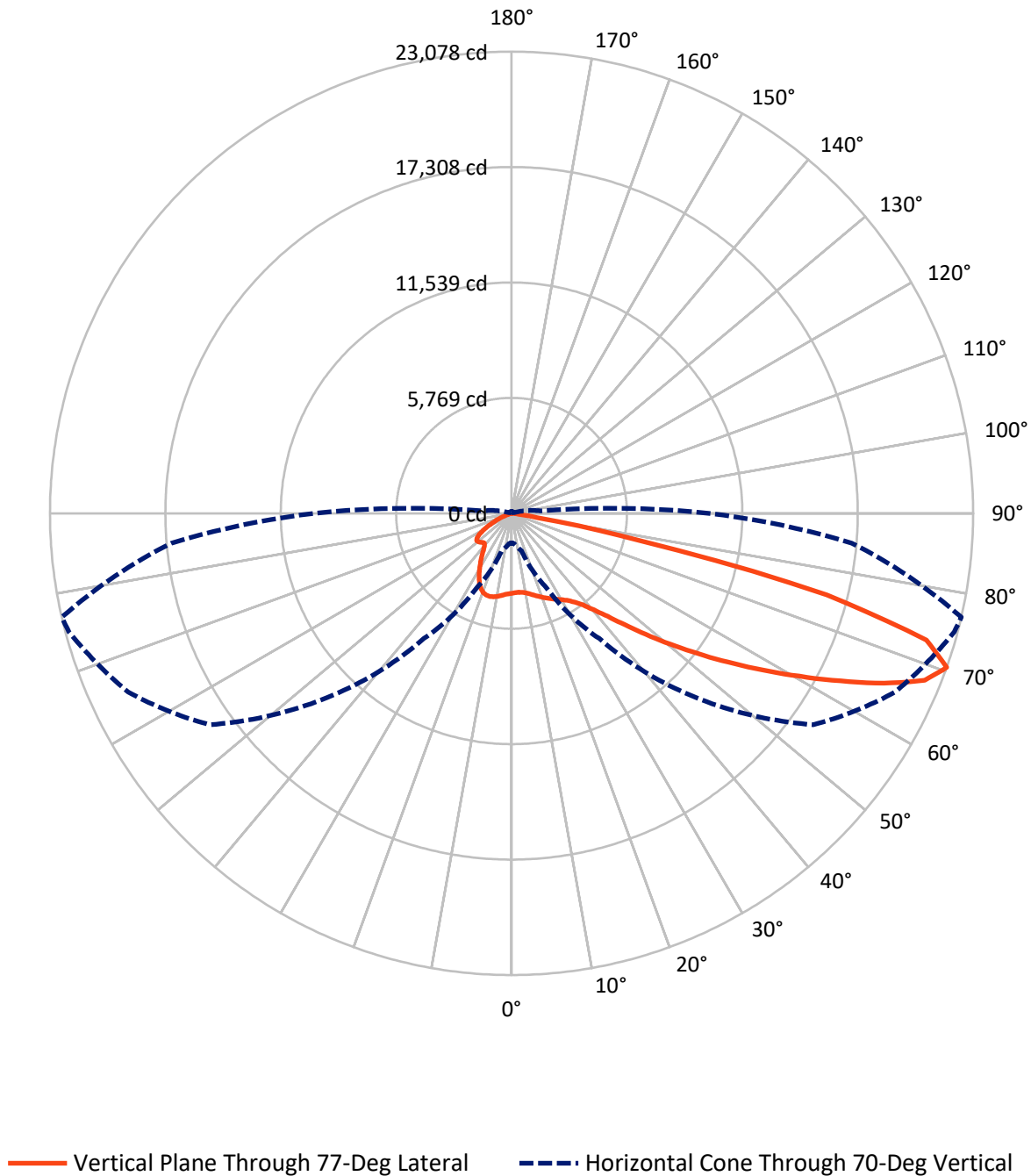
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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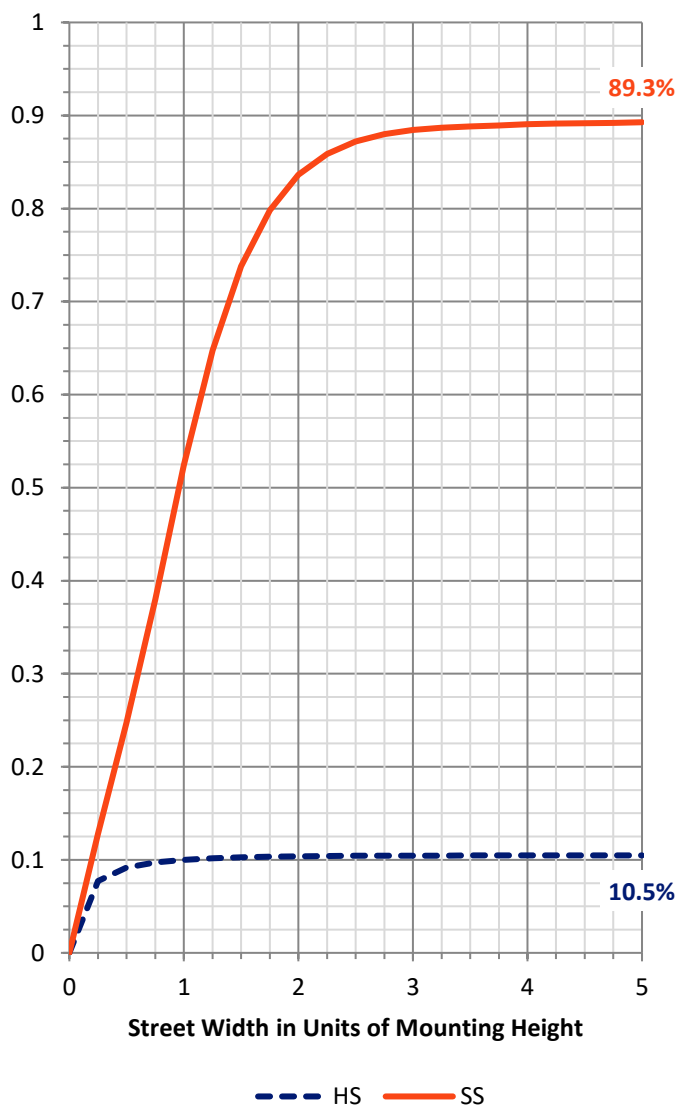
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2699.9	0.0	2699.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	22912.8	0.0	22912.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	25612.7	0.0	25612.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.3	1.3
10°-20°	817.4	3.2
20°-30°	1264.2	4.9
30°-40°	2294.0	9.0
40°-50°	4330.3	16.9
50°-60°	6256.9	24.4
60°-70°	6660.3	26.0
70°-80°	3529.5	13.8
80°-90°	115.9	0.5
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°	25612.7	100.0
0°-180°	25612.7	100.0

Coefficient of Utilization



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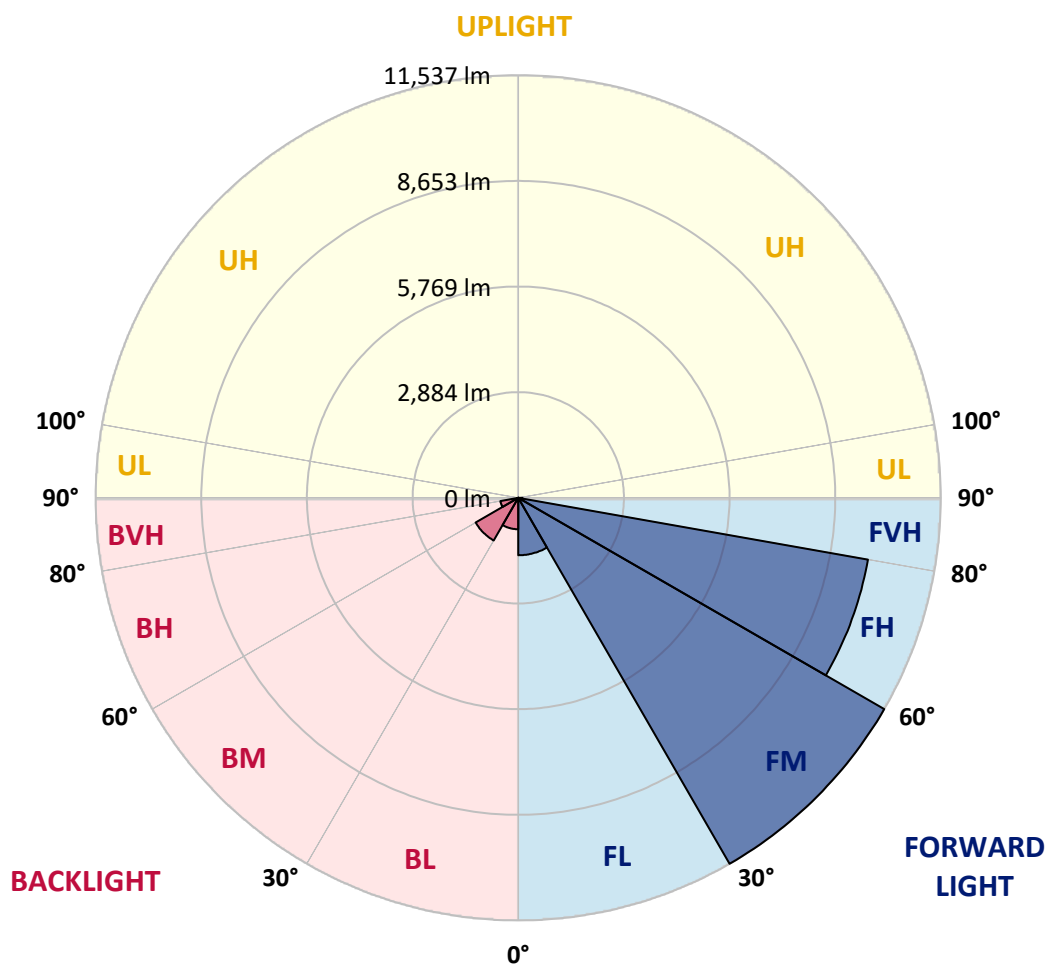
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1568.1	6.1			
FM	(30°-60°)	11537.1	45.0			
FH	(60°-80°)	9694.8	37.9			G4/12000
FVH	(80°-90°)	112.8	0.4			G2/225
BL	(0°-30°)	857.8	3.3	B2/1000		
BM	(30°-60°)	1344.0	5.2	B2/2500		
BH	(60°-80°)	495.0	1.9	B1/500		G1/500
BVH	(80°-90°)	3.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1
2.5°	3750.9	3784.8	3780.0	3802.6	3810.7	3843.0	3875.4	3919.1	3967.7	3966.0	3998.3
5°	3539.0	3572.9	3581.0	3611.8	3650.6	3700.8	3767.1	3854.4	3945.0	3959.6	4024.3
7.5°	3288.3	3323.9	3344.9	3406.4	3477.5	3581.0	3689.4	3817.2	3967.7	3988.7	4113.2
10°	3037.6	3070.0	3097.4	3184.8	3298.0	3451.7	3628.0	3812.4	4014.5	4045.3	4221.6
12.5°	2882.3	2913.0	2943.8	3019.8	3160.5	3348.2	3587.5	3835.0	4092.2	4135.9	4368.8
15°	2827.4	2854.8	2879.1	2947.0	3078.0	3291.5	3579.4	3881.9	4190.8	4249.0	4546.7
17.5°	2835.4	2849.9	2866.1	2917.9	3045.7	3265.6	3594.0	3962.8	4307.3	4359.0	4724.6
20°	2882.3	2890.4	2892.0	2927.6	3040.9	3262.4	3623.1	4040.4	4417.2	4486.8	4900.9
22.5°	2942.2	2945.4	2942.2	2966.5	3071.5	3286.7	3661.9	4134.2	4540.2	4604.9	5078.8
25°	3222.0	3160.5	3082.9	3035.9	3123.3	3333.6	3720.1	4260.4	4674.4	4737.5	5251.9
27.5°	4090.6	3914.3	3636.1	3323.9	3230.1	3401.5	3801.0	4388.1	4810.3	4866.9	5437.9
30°	5501.0	5269.6	4797.4	4093.7	3572.9	3543.8	3906.2	4515.9	4954.2	5015.7	5636.9
32.5°	6914.6	6858.0	6313.0	5339.2	4344.5	3860.9	4080.8	4689.0	5145.1	5193.7	5905.3
35°	8344.4	8229.6	7783.2	6820.9	5533.4	4506.2	4372.0	4915.5	5395.8	5450.8	6296.8
37.5°	9439.4	9369.9	9093.4	8300.8	6943.8	5502.6	4870.2	5266.4	5759.8	5821.2	6798.2
40°	10406.7	10374.3	10280.5	9758.1	8520.7	6806.3	5644.9	5809.9	6264.4	6337.2	7412.8
42.5°	11167.0	11242.9	11296.3	11150.8	10146.3	8294.3	6686.6	6573.3	6968.1	7042.4	8195.7
45°	11944.9	11970.8	12185.9	12396.1	11760.5	9850.4	7860.8	7467.8	7843.1	7935.2	9133.8
47.5°	12444.7	12548.3	12926.7	13297.1	13117.5	11393.4	9122.5	8524.0	8857.2	9030.2	10185.1
50°	12481.9	12677.6	13198.4	13843.9	14105.8	12862.0	10494.1	9727.4	10081.6	10272.4	11307.6
52.5°	11862.4	12166.5	12973.6	13918.2	14639.6	14105.8	11912.6	10930.8	11385.3	11634.4	12472.2
55°	9094.9	9492.8	12127.7	13513.8	14660.7	15048.8	13293.8	12184.3	12837.7	13119.2	13730.6
57.5°	7924.0	8124.5	9534.9	12811.9	14270.9	15428.9	14542.6	13378.0	14418.1	14767.4	14919.4
60°	6592.8	6856.4	7996.7	11663.5	13741.9	15466.1	15645.7	14917.8	16130.9	16523.9	16009.6
62.5°	4480.4	4766.7	5900.5	9690.1	13018.9	15448.3	16549.9	16502.9	18034.7	18456.8	16933.2
65°	2775.6	2955.1	3702.4	7912.6	12008.0	15467.8	17496.0	18427.7	20043.6	20472.1	17648.0
67.5°	2193.3	2275.8	2665.6	6075.2	10266.0	15031.0	18440.7	20237.6	21934.3	22274.0	17866.5
70°	1473.5	1523.7	1939.3	4072.7	7637.6	13015.7	18422.8	21146.7	22908.0	23077.9	17070.7
72.5°	776.3	815.2	1133.9	1886.0	4613.0	9251.9	15529.2	20059.7	21939.2	21683.7	14591.1
75°	388.2	452.8	763.4	957.6	1970.0	5159.6	9643.3	15815.5	17268.0	16278.1	9361.8
77.5°	294.4	355.9	630.8	630.8	685.8	1737.2	4084.1	8625.9	7956.3	6625.1	2748.0
80°	187.6	242.6	551.6	477.1	286.3	441.6	1064.3	2416.4	1690.2	1285.9	499.8
82.5°	110.0	158.5	459.4	315.4	160.1	163.4	300.8	514.3	438.3	341.3	153.6
85°	43.7	103.5	315.4	124.5	63.0	40.5	90.6	110.0	90.6	68.0	38.8
87.5°	0.0	24.3	55.0	0.0	4.8	3.3	6.5	8.1	8.1	6.5	12.9
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°	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1	3995.1
2.5°	4012.9	4016.2	4025.9	4027.4	4004.8	3975.7	3964.4	3959.6	3940.1	3938.5	3941.7
5°	4061.5	4076.0	4061.5	4019.3	3919.1	3778.4	3671.7	3584.3	3505.0	3480.8	3466.2
7.5°	4158.5	4173.1	4129.4	3964.4	3712.0	3432.2	3180.0	3002.0	2841.9	2782.1	2757.8
10°	4297.6	4317.0	4179.5	3846.3	3399.9	2950.3	2523.2	2222.4	1987.9	1892.5	1852.0
12.5°	4472.3	4480.4	4207.0	3666.7	2993.9	2351.8	1746.8	1425.0	1216.4	1138.7	1114.4
15°	4664.8	4653.4	4210.3	3422.6	2440.7	1662.8	1140.3	936.5	852.4	826.6	826.6
17.5°	4866.9	4820.1	4145.5	3070.0	1834.2	1137.0	845.9	797.4	782.9	776.3	774.8
20°	5065.9	4960.7	4027.4	2608.9	1316.6	849.2	768.3	753.8	745.7	742.4	739.1
22.5°	5247.1	5067.5	3825.3	2073.6	955.9	750.5	726.2	713.3	698.7	692.3	690.6
25°	5423.4	5129.0	3540.7	1573.8	765.1	702.0	682.5	658.3	638.9	630.8	627.6
27.5°	5594.8	5167.7	3184.8	1164.6	682.5	656.7	621.2	587.1	572.6	569.4	566.1
30°	5777.5	5180.8	2780.4	868.6	632.4	600.0	548.3	509.5	501.4	503.1	503.1
32.5°	6000.8	5200.1	2372.8	711.7	590.4	532.2	470.7	430.2	423.7	430.2	428.7
35°	6267.7	5239.0	1979.8	655.1	553.2	462.6	396.3	362.3	355.9	360.7	359.1
37.5°	6629.9	5302.0	1612.6	643.7	522.4	404.4	333.2	305.7	305.7	307.3	305.7
40°	7112.0	5470.2	1284.2	635.7	506.2	360.7	281.5	270.1	275.0	278.2	278.2
42.5°	7699.1	5827.7	1062.7	626.0	488.5	341.3	255.5	250.7	258.8	262.0	262.0
45°	8357.4	6280.6	985.0	609.8	472.3	354.2	244.3	237.8	247.4	249.1	250.7
47.5°	9038.3	6723.8	975.3	592.0	456.1	373.6	241.0	226.4	237.8	239.3	241.0
50°	9727.4	7013.3	985.0	564.5	430.2	373.6	242.6	215.1	224.8	229.7	231.3
52.5°	10421.3	7145.9	978.6	504.6	385.0	351.0	242.6	205.4	215.1	218.3	218.3
55°	11094.1	7120.1	879.9	415.6	326.8	310.6	236.2	197.3	203.8	205.4	205.4
57.5°	11626.3	6759.4	697.1	323.5	265.3	258.8	215.1	187.6	192.5	190.9	190.9
60°	11904.5	5966.8	498.2	249.1	208.7	203.8	189.2	174.7	177.9	169.8	168.2
62.5°	11907.7	4918.7	333.2	197.3	166.6	161.7	161.7	156.9	153.6	137.5	132.6
65°	11653.7	3755.7	221.6	156.9	134.3	126.2	135.9	134.3	122.9	100.2	97.1
67.5°	11078.0	2461.7	168.2	122.9	103.5	98.7	108.3	113.3	105.2	84.2	82.5
70°	9894.0	1433.1	139.1	95.4	77.6	72.8	87.3	97.1	87.3	68.0	64.7
72.5°	8218.3	773.2	113.3	71.1	53.4	48.5	69.6	79.2	69.6	50.1	48.5
75°	5332.8	414.1	87.3	46.9	27.5	30.7	51.8	58.2	48.5	32.4	29.1
77.5°	1790.6	182.8	55.0	22.7	12.9	12.9	30.7	35.6	22.7	11.3	9.7
80°	399.5	76.1	22.7	9.7	4.8	4.8	6.5	6.5	3.3	0.0	0.0
82.5°	131.0	30.7	9.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	50.1	11.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)