

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: P968263

Luminaire Tested: **NAV-SB5B-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968263
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-SB5B-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA 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: 24273 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - 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



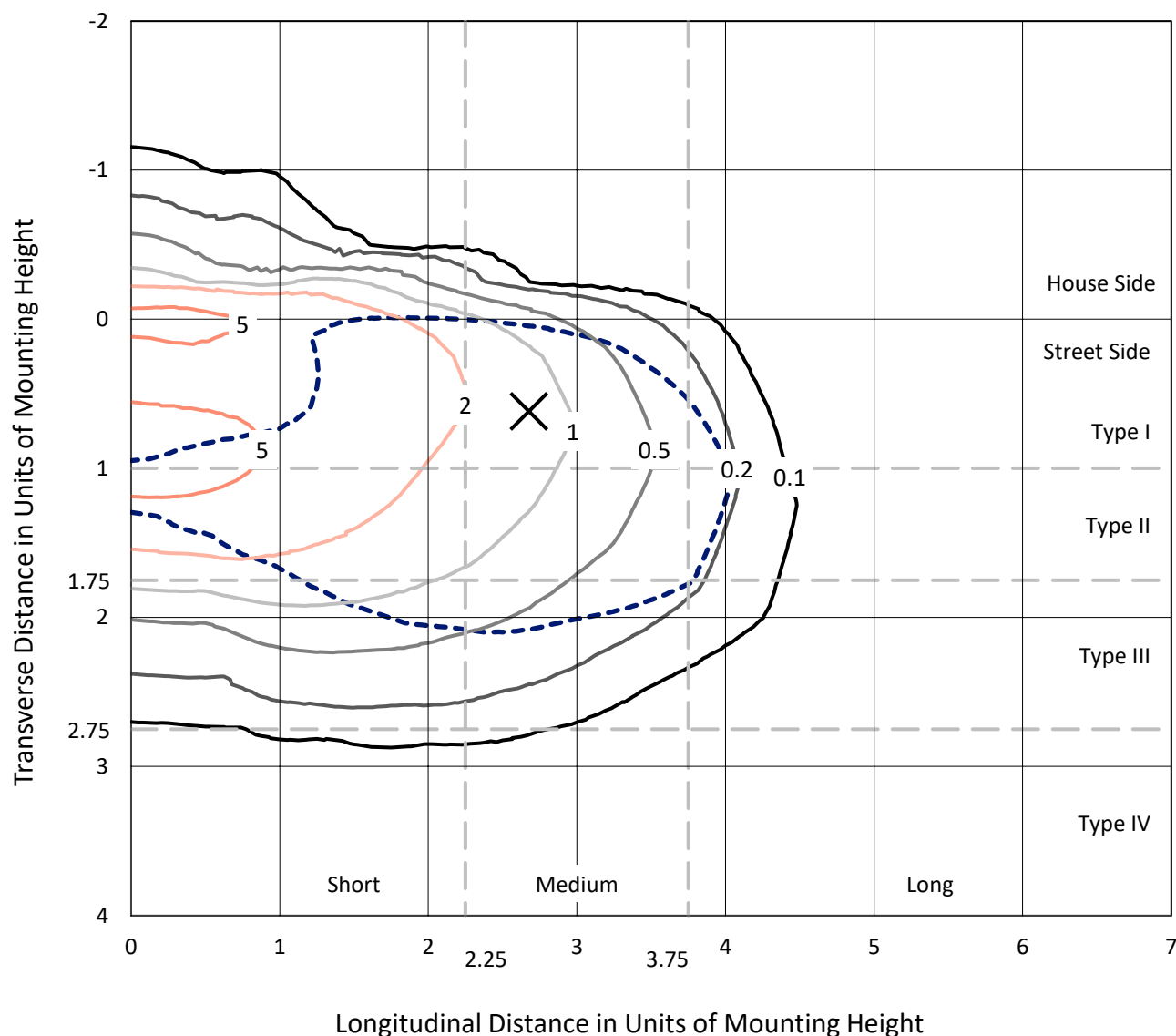
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

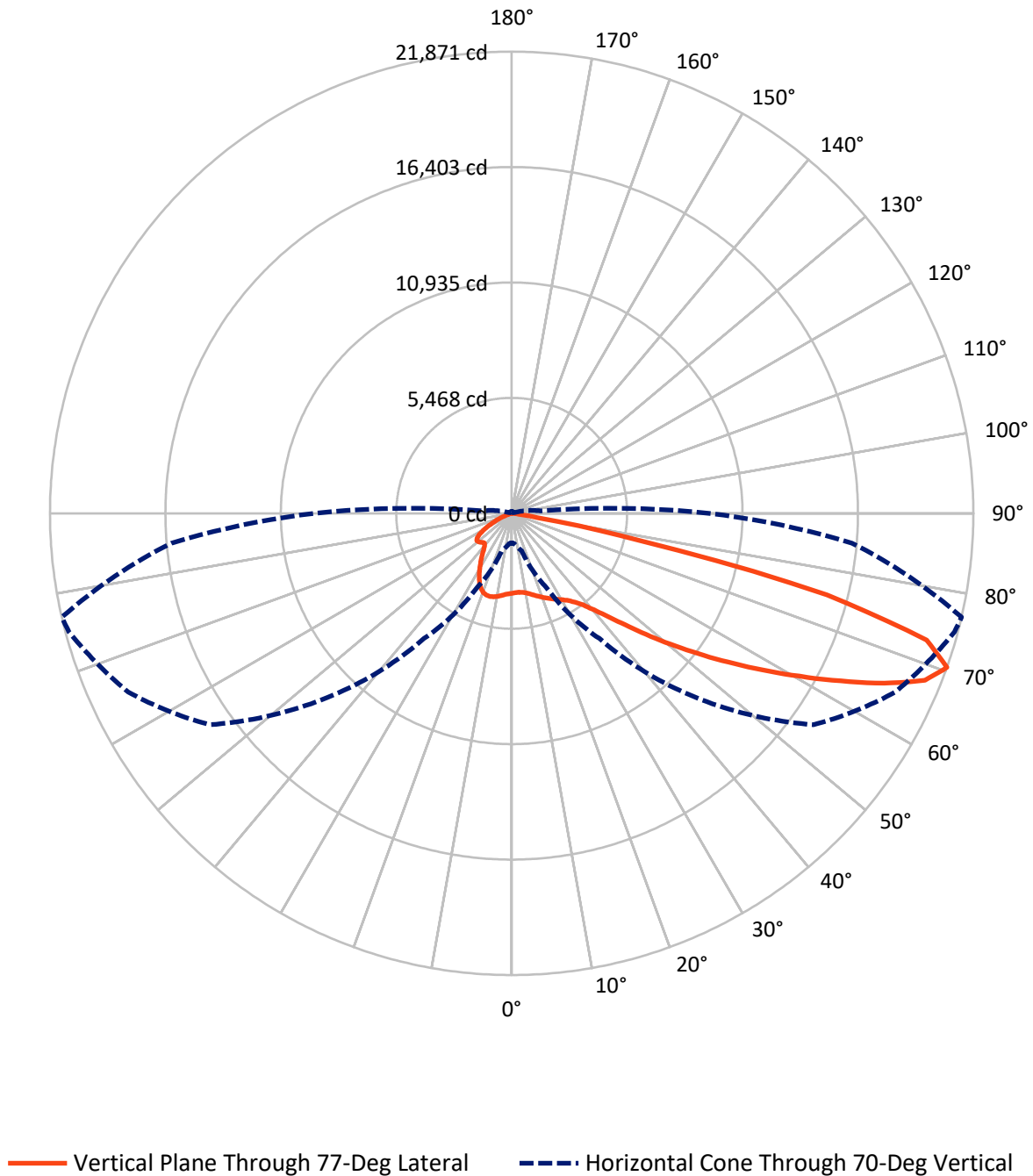
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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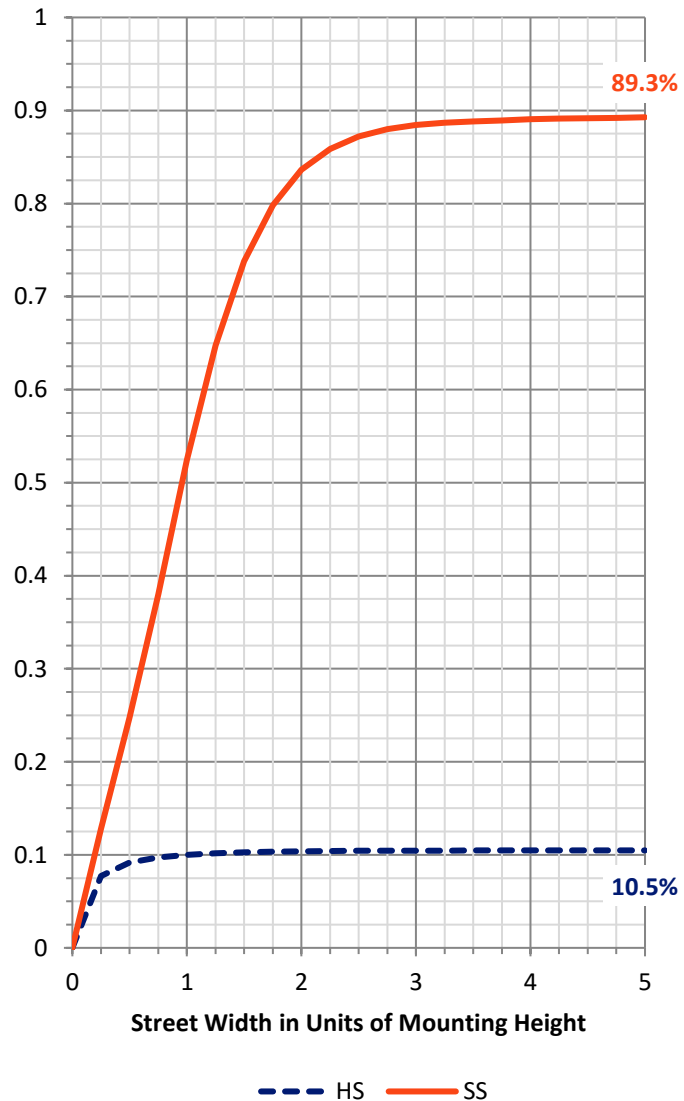
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2558.7	0.0	2558.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	21714.3	0.0	21714.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	24273.0	0.0	24273.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.3	1.3
10°-20°	774.6	3.2
20°-30°	1198.1	4.9
30°-40°	2174.0	9.0
40°-50°	4103.8	16.9
50°-60°	5929.6	24.4
60°-70°	6311.9	26.0
70°-80°	3344.9	13.8
80°-90°	109.8	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°	24273.0	100.0
0°-180°	24273.0	100.0

Coefficient of Utilization



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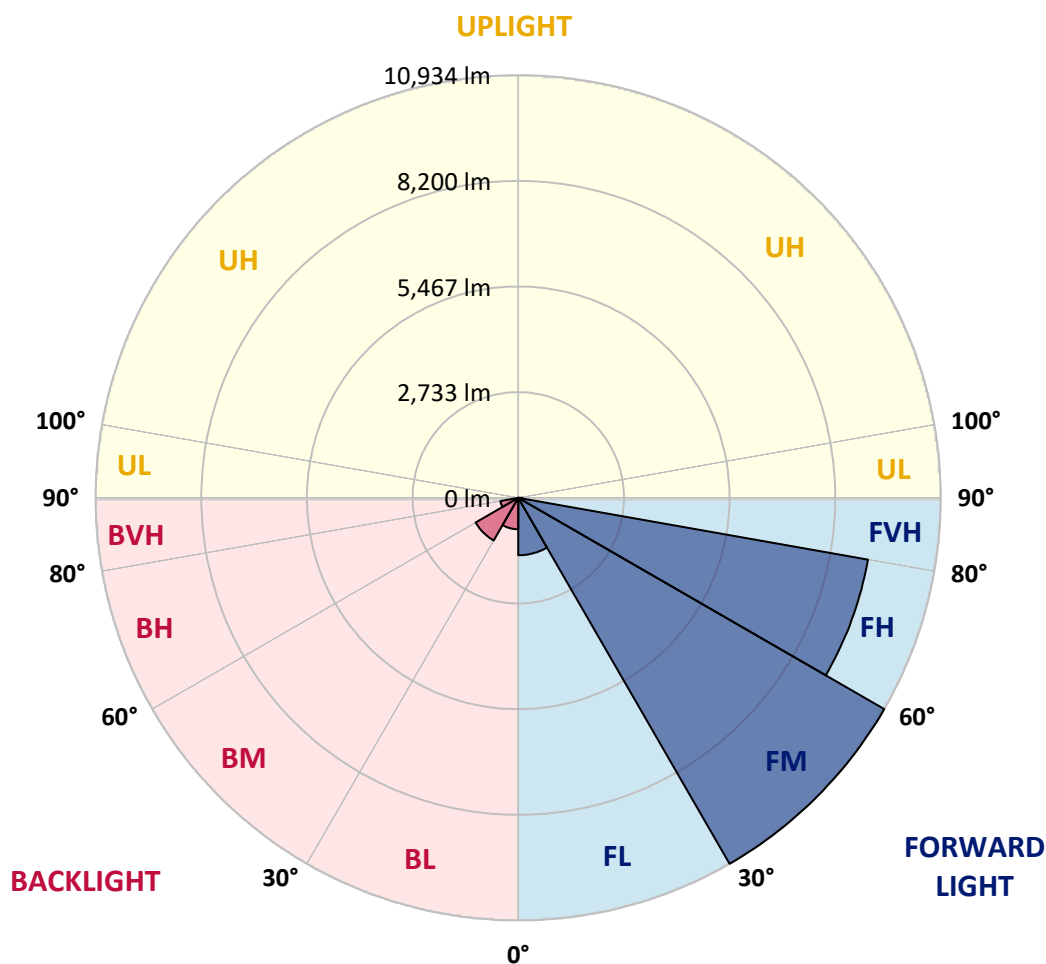
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1486.1	6.1			
FM	(30°-60°)	10933.7	45.0			
FH	(60°-80°)	9187.7	37.9			G4/12000
FVH	(80°-90°)	106.9	0.4			G2/225
BL	(0°-30°)	813.0	3.3	B2/1000		
BM	(30°-60°)	1273.7	5.2	B2/2500		
BH	(60°-80°)	469.1	1.9	B1/500		G1/500
BVH	(80°-90°)	3.0	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°	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1
2.5°	3554.7	3586.9	3582.3	3603.7	3611.4	3642.0	3672.7	3714.1	3760.1	3758.6	3789.2
5°	3353.9	3386.1	3393.8	3422.9	3459.7	3507.1	3570.0	3652.8	3738.6	3752.4	3813.7
7.5°	3116.3	3150.0	3169.9	3228.2	3295.7	3393.8	3496.5	3617.5	3760.1	3780.0	3898.1
10°	2878.7	2909.4	2935.4	3018.2	3125.5	3271.1	3438.2	3612.9	3804.6	3833.7	4000.8
12.5°	2731.5	2760.6	2789.8	2861.8	2995.2	3173.0	3399.9	3634.4	3878.1	3919.5	4140.3
15°	2679.5	2705.5	2728.4	2792.8	2917.0	3119.4	3392.2	3678.8	3971.7	4026.8	4308.9
17.5°	2687.1	2700.9	2716.2	2765.2	2886.4	3094.9	3406.0	3755.5	4082.0	4131.1	4477.5
20°	2731.5	2739.2	2740.7	2774.5	2881.8	3091.8	3433.6	3829.1	4186.2	4252.1	4644.6
22.5°	2788.3	2791.3	2788.3	2811.3	2910.9	3114.8	3470.3	3918.0	4302.7	4364.0	4813.2
25°	3053.5	2995.2	2921.7	2877.2	2960.0	3159.3	3525.6	4037.6	4429.9	4489.7	4977.2
27.5°	3876.6	3709.5	3445.8	3150.0	3061.2	3223.6	3602.3	4158.6	4558.7	4612.4	5153.5
30°	5213.3	4994.0	4546.5	3879.6	3386.1	3358.5	3701.9	4279.7	4695.1	4753.3	5342.0
32.5°	6552.9	6499.3	5982.7	5059.9	4117.2	3658.9	3867.4	4443.8	4876.0	4922.0	5596.5
35°	7908.0	7799.1	7376.1	6464.1	5243.9	4270.6	4143.4	4658.3	5113.6	5165.7	5967.4
37.5°	8945.8	8879.9	8617.7	7866.6	6580.5	5214.8	4615.5	4990.9	5458.5	5516.8	6442.6
40°	9862.3	9831.7	9742.8	9247.8	8075.1	6450.2	5349.7	5506.0	5936.8	6005.7	7025.0
42.5°	10582.8	10654.9	10705.5	10567.5	9615.6	7860.5	6336.9	6229.5	6603.6	6674.1	7766.9
45°	11320.1	11344.7	11548.6	11747.8	11145.4	9335.1	7449.7	7077.2	7432.8	7520.2	8656.0
47.5°	11793.8	11891.8	12250.6	12601.7	12431.5	10797.5	8645.3	8078.1	8393.9	8557.9	9652.4
50°	11829.0	12014.5	12508.1	13119.7	13368.0	12189.3	9945.2	9218.6	9554.3	9735.1	10716.2
52.5°	11242.0	11530.1	12295.1	13190.2	13873.9	13368.0	11289.5	10359.1	10789.8	11025.8	11819.9
55°	8619.2	8996.3	11493.3	12807.0	13893.8	14261.6	12598.6	11547.0	12166.2	12432.9	13012.4
57.5°	7509.5	7699.5	9036.2	12141.7	13524.4	14621.9	13781.9	12678.2	13663.9	13994.9	14139.1
60°	6247.9	6497.8	7578.4	11053.4	13023.1	14657.2	14827.3	14137.5	15287.2	15659.6	15172.3
62.5°	4246.0	4517.3	5591.9	9183.4	12337.9	14640.3	15684.1	15639.8	17091.4	17491.4	16047.5
65°	2630.4	2800.5	3508.7	7498.7	11380.0	14658.7	16580.9	17463.8	18995.2	19401.4	16725.0
67.5°	2078.6	2156.7	2526.1	5757.4	9729.0	14244.8	17476.0	19179.1	20787.1	21109.0	16932.0
70°	1396.5	1443.9	1837.9	3859.7	7238.1	12334.8	17459.2	20040.6	21709.8	21870.8	16177.8
72.5°	735.7	772.5	1074.5	1787.3	4371.7	8768.0	14717.0	19010.5	20791.6	20549.5	13827.9
75°	367.9	429.2	723.5	907.4	1867.0	4889.8	9138.9	14988.3	16364.7	15426.7	8872.2
77.5°	279.0	337.2	597.8	597.8	650.0	1646.3	3870.5	8174.7	7540.1	6278.5	2604.3
80°	177.8	229.9	522.8	452.2	271.3	418.5	1008.6	2290.1	1601.9	1218.6	473.7
82.5°	104.2	150.3	435.3	298.9	151.8	154.8	285.2	487.5	415.4	323.4	145.7
85°	41.4	98.1	298.9	118.1	59.8	38.3	85.8	104.2	85.8	64.4	36.8
87.5°	0.0	23.0	52.1	0.0	4.6	3.1	6.1	7.7	7.7	6.1	12.3
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°	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1	3786.1
2.5°	3803.1	3806.0	3815.3	3816.8	3795.4	3767.8	3757.0	3752.4	3734.1	3732.5	3735.6
5°	3849.0	3862.8	3849.0	3809.1	3714.1	3580.7	3479.6	3396.8	3321.7	3298.7	3284.9
7.5°	3941.0	3954.8	3913.3	3757.0	3517.9	3252.7	3013.6	2845.0	2693.2	2636.5	2613.5
10°	4072.8	4091.2	3960.9	3645.1	3222.1	2795.9	2391.2	2106.2	1883.8	1793.4	1755.1
12.5°	4238.4	4246.0	3986.9	3475.0	2837.3	2228.8	1655.5	1350.4	1152.7	1079.1	1056.2
15°	4420.7	4410.1	3990.0	3243.5	2313.1	1575.7	1080.7	887.5	807.8	783.3	783.3
17.5°	4612.4	4567.9	3928.7	2909.4	1738.3	1077.6	801.7	755.7	741.9	735.7	734.2
20°	4800.9	4701.3	3816.8	2472.5	1247.7	804.7	728.1	714.3	706.6	703.6	700.5
22.5°	4972.6	4802.4	3625.2	1965.1	905.9	711.2	688.3	676.0	662.2	656.1	654.6
25°	5139.7	4860.7	3355.4	1491.5	725.1	665.2	646.9	623.9	605.5	597.8	594.7
27.5°	5302.1	4897.4	3018.2	1103.6	646.9	622.4	588.7	556.5	542.6	539.6	536.5
30°	5475.3	4909.8	2635.0	823.2	599.3	568.7	519.7	482.9	475.2	476.7	476.7
32.5°	5686.9	4928.1	2248.7	674.4	559.4	504.3	446.1	407.7	401.6	407.7	406.2
35°	5939.8	4964.9	1876.3	620.8	524.3	438.4	375.6	343.4	337.2	341.8	340.3
37.5°	6283.1	5024.7	1528.3	610.1	495.1	383.2	315.8	289.7	289.7	291.2	289.7
40°	6740.0	5184.1	1217.1	602.4	479.8	341.8	266.7	255.9	260.6	263.6	263.6
42.5°	7296.4	5522.9	1007.1	593.2	462.9	323.4	242.2	237.6	245.3	248.4	248.4
45°	7920.3	5952.1	933.5	577.9	447.6	335.7	231.4	225.3	234.5	236.1	237.6
47.5°	8565.6	6372.1	924.3	561.0	432.2	354.1	228.4	214.6	225.3	226.8	228.4
50°	9218.6	6646.5	933.5	534.9	407.7	354.1	229.9	203.9	213.1	217.7	219.2
52.5°	9876.2	6772.2	927.4	478.3	364.8	332.6	229.9	194.6	203.9	206.9	206.9
55°	10513.8	6747.7	833.8	393.9	309.7	294.3	223.8	187.0	193.1	194.6	194.6
57.5°	11018.1	6405.8	660.6	306.6	251.4	245.3	203.9	177.8	182.4	180.9	180.9
60°	11281.9	5654.7	472.1	236.1	197.7	193.1	179.4	165.5	168.6	160.9	159.4
62.5°	11284.8	4661.4	315.8	187.0	157.8	153.2	153.2	148.7	145.7	130.3	125.7
65°	11044.3	3559.3	210.0	148.7	127.2	119.5	128.7	127.2	116.5	95.0	91.9
67.5°	10498.6	2333.0	159.4	116.5	98.1	93.5	102.7	107.3	99.6	79.7	78.2
70°	9376.5	1358.1	131.8	90.4	73.6	69.0	82.8	91.9	82.8	64.4	61.3
72.5°	7788.5	732.7	107.3	67.4	50.6	46.0	65.9	75.1	65.9	47.6	46.0
75°	5053.9	392.4	82.8	44.5	26.0	29.1	49.1	55.1	46.0	30.6	27.6
77.5°	1696.9	173.2	52.1	21.4	12.3	12.3	29.1	33.7	21.4	10.8	9.2
80°	378.6	72.1	21.4	9.2	4.6	4.6	6.1	6.1	3.1	0.0	0.0
82.5°	124.1	29.1	9.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	47.6	10.8	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.3	1.5	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)