

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: P968786

Luminaire Tested: **NAV-SB5C-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968786
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29634.8 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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

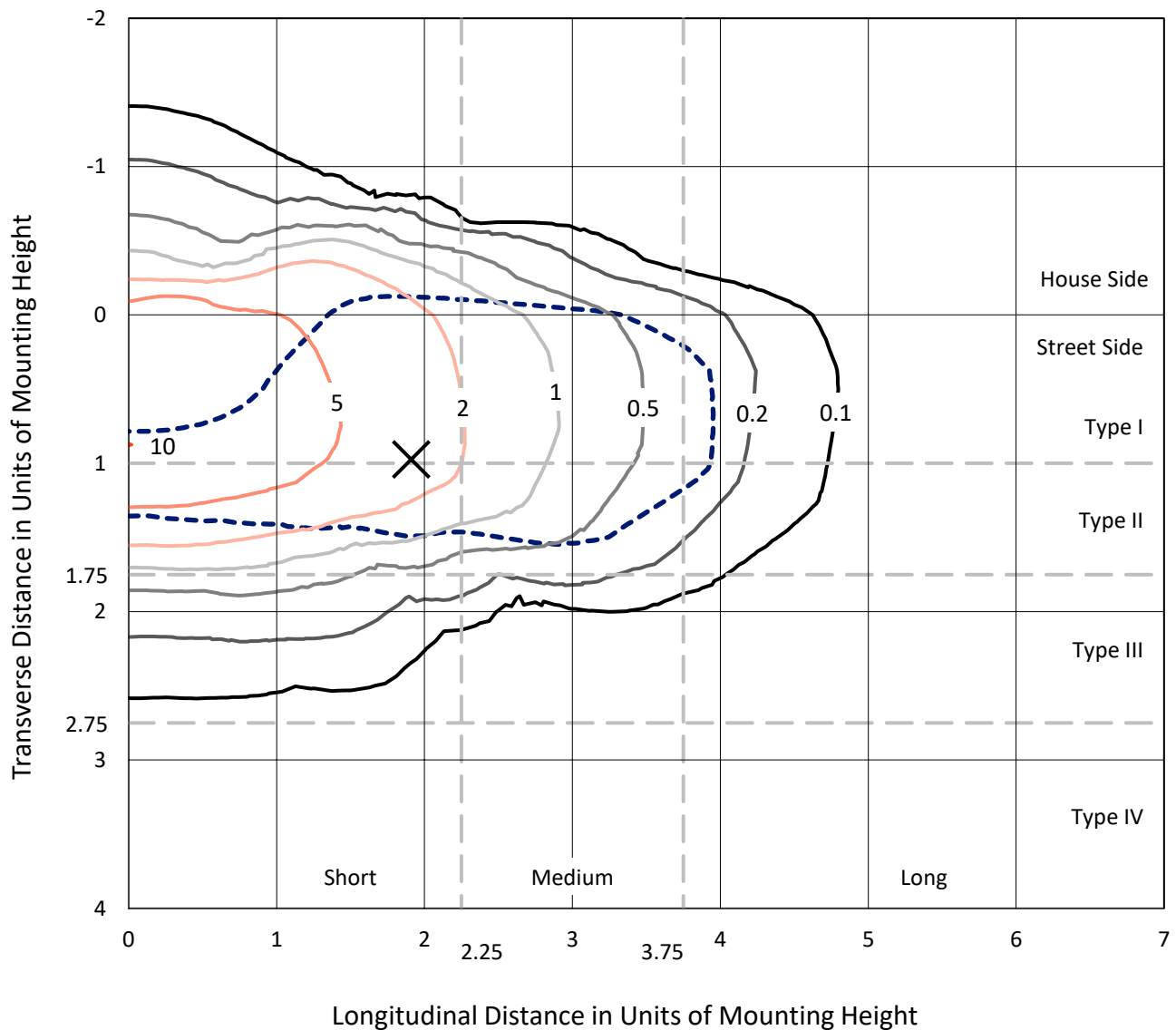


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Iso-Footcandle Lines of Horizontal Illumination

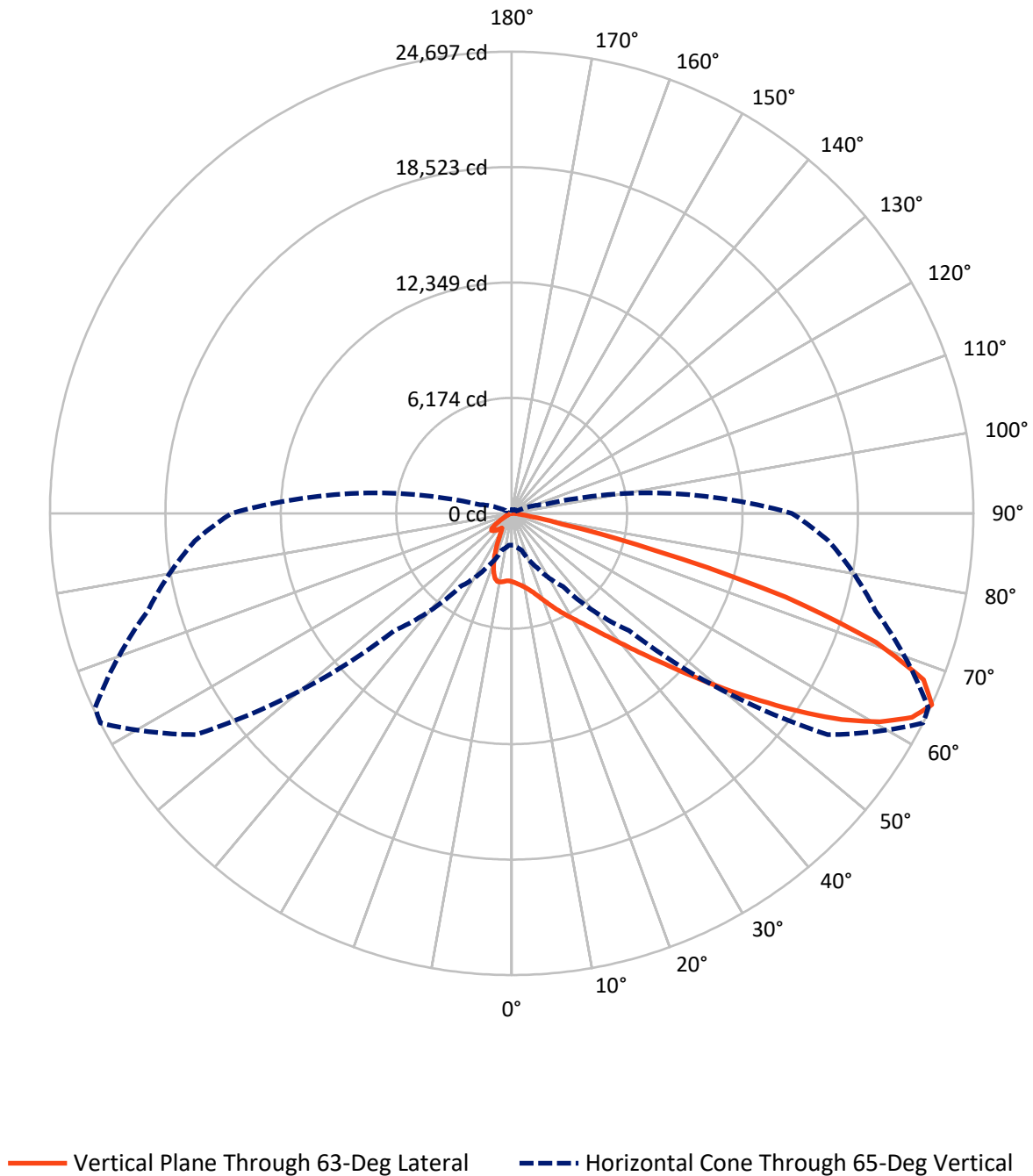
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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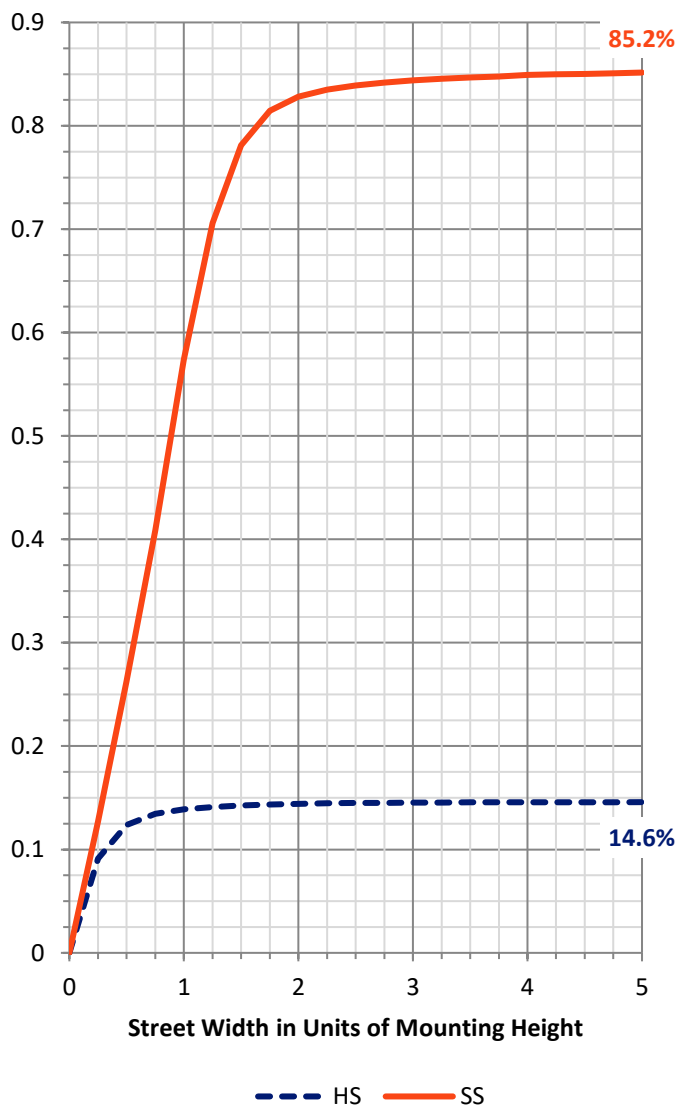
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4356.1	0.0	4356.1
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	25278.7	0.0	25278.7
	% Fixture	85.3	0.0	85.3
Total	Lumens	29634.8	0.0	29634.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.6	1.2
10°-20°	956.2	3.2
20°-30°	1664.9	5.6
30°-40°	3000.8	10.1
40°-50°	5951.6	20.1
50°-60°	8107.0	27.4
60°-70°	6471.0	21.8
70°-80°	2928.2	9.9
80°-90°	210.5	0.7
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°	29634.8	100.0
0°-180°	29634.8	100.0

Coefficient of Utilization



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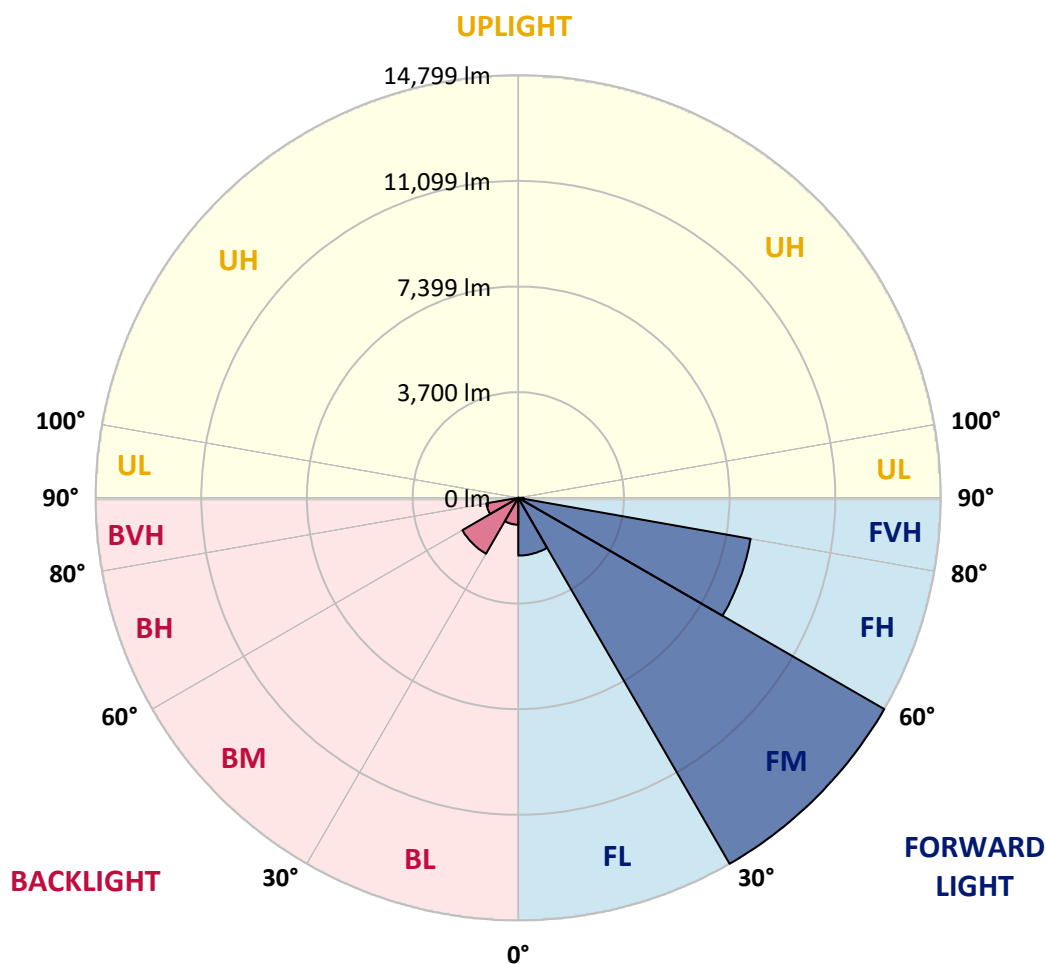
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2022.9	6.8			
FM	(30°-60°)	14798.9	49.9			
FH	(60°-80°)	8262.0	27.9			G4/12000
FVH	(80°-90°)	194.9	0.7			G2/225
BL	(0°-30°)	942.7	3.2	B2/1000		
BM	(30°-60°)	2260.5	7.6	B2/2500		
BH	(60°-80°)	1137.2	3.8	B3/2500		G3/2500
BVH	(80°-90°)	15.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5
2.5°	3743.1	3732.9	3747.2	3741.0	3737.0	3728.8	3724.7	3720.6	3712.6	3706.4	3682.0
5°	3753.3	3747.2	3761.4	3773.7	3785.9	3798.1	3804.3	3812.5	3804.3	3788.0	3763.5
7.5°	3667.7	3663.7	3694.2	3730.9	3785.9	3832.8	3883.8	3912.3	3914.4	3908.2	3881.8
10°	3661.6	3651.4	3682.0	3726.8	3798.1	3881.8	3971.5	4032.7	4040.8	4067.3	4038.7
12.5°	3757.3	3747.2	3790.0	3838.9	3912.3	4000.0	4110.0	4195.7	4207.9	4244.6	4224.2
15°	3918.5	3904.2	3953.1	4016.4	4110.0	4210.0	4326.2	4403.7	4413.9	4458.8	4422.1
17.5°	4106.0	4091.7	4148.8	4216.1	4318.0	4454.6	4589.2	4674.8	4687.0	4715.6	4648.3
20°	4346.6	4328.3	4373.1	4434.3	4542.3	4705.4	4866.5	4988.8	4986.7	4986.7	4876.6
22.5°	4625.9	4597.3	4636.1	4685.0	4787.0	4984.7	5198.8	5343.5	5343.5	5286.4	5105.0
25°	4925.6	4897.0	4939.9	4984.7	5074.5	5298.6	5549.5	5728.8	5737.0	5639.1	5349.7
27.5°	5300.7	5264.0	5296.7	5349.7	5402.7	5631.0	5928.6	6136.6	6140.7	5989.8	5582.0
30°	6022.4	5918.5	5816.6	5759.5	5783.9	6010.2	6328.2	6558.7	6579.0	6371.1	5834.9
32.5°	7343.5	7323.1	6964.4	6495.4	6250.8	6417.9	6774.7	7052.0	7064.2	6797.2	6163.1
35°	9396.6	9372.1	8795.1	7902.1	7105.0	6964.4	7317.1	7645.3	7637.1	7335.4	6589.2
37.5°	11847.1	11824.7	11064.3	9869.5	8579.0	7790.0	8016.3	8360.8	8411.9	8016.3	7139.6
40°	13940.9	13857.3	13376.1	12224.3	10536.2	9160.0	9011.2	9239.6	9292.5	8823.6	7839.0
42.5°	15527.0	15455.7	15211.0	14491.3	12905.2	11186.5	10183.5	10271.1	10330.3	9767.6	8642.2
45°	16348.6	16332.4	16430.1	16362.9	15319.0	13673.8	11859.4	11494.3	11516.8	10813.4	9553.5
47.5°	16464.9	16456.7	16903.2	17535.2	17394.5	16479.1	14010.2	13019.3	12939.9	11993.9	10544.4
50°	15779.9	15763.5	16619.8	17804.2	18780.9	18835.9	16452.6	14738.1	14562.7	13215.1	11578.0
52.5°	13592.2	13588.2	14994.9	16966.4	19268.2	20899.1	18866.5	16625.9	16332.4	14507.6	12670.7
55°	10458.7	10534.1	12146.8	14477.1	18379.2	21891.9	21033.6	18721.7	18271.1	15808.4	13677.9
57.5°	7408.8	7518.9	9113.2	11188.6	15622.8	21304.8	22499.5	20821.6	20336.4	17105.0	14699.3
60°	3979.7	4077.4	5673.8	8150.9	11622.9	19115.2	23272.2	22644.3	22185.5	18336.4	15620.8
62.5°	2371.0	2403.6	3064.2	5261.9	7861.3	14603.5	22943.9	24032.7	23655.5	19370.0	16422.0
65°	1702.3	1708.5	2040.8	3213.1	4772.7	8872.6	20642.2	24697.3	24581.0	20148.8	17015.3
67.5°	1433.3	1429.2	1567.8	2134.6	3251.8	4444.4	15820.6	23757.4	24250.8	20642.2	17351.7
70°	1229.4	1235.4	1398.6	1563.7	2444.4	2515.8	7865.4	20685.0	21737.0	20772.6	17331.3
72.5°	915.4	935.8	1086.6	1425.1	1845.1	1730.9	2715.6	15337.4	17239.6	19571.9	16432.2
75°	646.3	656.5	764.5	1198.7	1376.2	1259.9	1386.3	7928.7	10367.0	15005.1	13449.5
77.5°	497.4	515.8	579.0	837.9	1355.8	884.8	848.1	2744.1	4216.1	9064.2	9221.2
80°	269.1	301.8	417.9	605.5	952.1	625.9	419.9	1092.8	1429.2	4238.6	3555.5
82.5°	138.7	155.0	291.5	436.2	542.3	546.4	208.0	454.6	589.2	1308.8	487.3
85°	55.0	67.2	195.7	240.6	279.3	269.1	93.8	183.5	212.1	362.8	148.8
87.5°	12.2	20.4	71.3	55.0	53.0	57.1	22.4	42.8	40.8	42.8	26.5
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°	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5	3657.5
2.5°	3680.0	3671.8	3649.3	3624.9	3596.3	3580.0	3569.9	3567.8	3553.5	3543.3	3553.5
5°	3741.0	3732.9	3690.1	3639.2	3584.1	3541.3	3500.5	3463.8	3410.8	3400.6	3396.5
7.5°	3863.4	3841.0	3771.7	3702.3	3598.4	3474.0	3323.2	3149.8	2994.9	2948.0	2925.6
10°	4014.3	3983.7	3896.0	3773.7	3543.3	3204.9	2840.0	2501.5	2232.4	2157.0	2128.4
12.5°	4185.5	4159.0	4042.8	3816.5	3312.9	2699.3	2140.7	1720.7	1459.7	1394.5	1376.2
15°	4389.4	4350.7	4189.6	3751.3	2901.2	2050.9	1470.0	1221.2	1127.4	1115.2	1103.0
17.5°	4605.5	4542.3	4320.1	3516.8	2346.6	1457.7	1135.6	1064.3	1023.5	1011.2	1005.1
20°	4803.3	4721.8	4397.6	3162.1	1753.4	1135.6	1017.3	970.5	933.8	919.4	911.3
22.5°	5001.0	4884.8	4397.6	2678.9	1315.0	1007.2	933.8	890.9	848.1	829.7	819.6
25°	5206.9	5052.0	4320.1	2140.7	1058.1	923.5	854.2	807.3	770.6	748.2	740.0
27.5°	5406.8	5192.6	4142.7	1631.0	941.9	850.1	780.8	735.9	701.3	685.0	685.0
30°	5596.3	5331.3	3894.0	1237.5	866.4	778.8	713.6	674.9	640.1	623.8	625.9
32.5°	5853.3	5506.6	3628.9	1015.3	801.2	711.6	652.4	615.7	585.1	572.9	572.9
35°	6210.0	5765.5	3400.6	996.9	746.2	656.5	597.4	562.7	532.1	521.9	521.9
37.5°	6715.6	6183.5	3280.3	1119.3	701.3	607.5	552.5	515.8	487.3	479.1	477.0
40°	7339.4	6750.2	3345.6	1241.6	670.8	564.8	511.7	475.0	450.6	440.3	438.3
42.5°	8079.6	7449.5	3706.4	1335.4	650.4	528.1	473.0	432.2	415.9	411.8	411.8
45°	8929.7	8218.1	4258.9	1435.3	617.8	493.3	434.3	403.6	391.4	389.4	387.3
47.5°	9896.1	9062.2	4899.1	1559.6	585.1	460.7	403.6	383.2	373.1	369.0	369.0
50°	10854.2	9912.4	5557.5	1628.9	558.6	430.2	379.2	362.8	354.8	352.7	352.7
52.5°	11857.3	10787.0	6089.7	1563.7	536.2	405.7	358.9	346.6	338.5	336.4	336.4
55°	12813.4	11494.3	6181.5	1327.2	491.4	381.2	336.4	330.3	320.1	320.1	318.1
57.5°	13637.1	11849.1	5533.2	974.5	446.5	344.5	314.0	307.8	299.7	297.7	295.6
60°	14393.5	11747.2	4271.2	656.5	397.6	307.8	285.5	281.4	273.2	263.0	261.0
62.5°	14819.6	11298.7	2921.6	428.1	348.6	269.1	252.8	250.7	232.4	212.1	208.0
65°	14980.7	10377.2	1822.7	311.9	291.5	230.4	218.1	214.0	187.6	165.1	163.1
67.5°	14840.0	8860.3	919.4	246.7	230.4	191.7	179.4	179.4	161.0	140.6	138.7
70°	14277.2	6642.2	387.3	197.7	177.3	146.8	146.8	155.0	136.6	114.2	112.1
72.5°	13056.0	4468.9	205.9	150.9	132.5	103.9	120.3	126.4	108.0	85.6	85.6
75°	10379.3	2725.8	142.7	112.1	83.5	73.4	91.7	95.8	73.4	57.1	55.0
77.5°	7098.8	1565.8	95.8	71.3	53.0	42.8	63.2	59.1	38.7	26.5	28.5
80°	3117.2	652.4	55.0	32.6	20.4	16.3	22.4	16.3	12.2	8.2	8.2
82.5°	364.9	152.9	20.4	12.2	8.2	4.1	2.0	0.0	0.0	0.0	0.0
85°	75.4	18.3	10.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.2	4.1	2.0	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)