

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: P968917

Luminaire Tested: **NAV-SB5C-827-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968917
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25529.7 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - 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



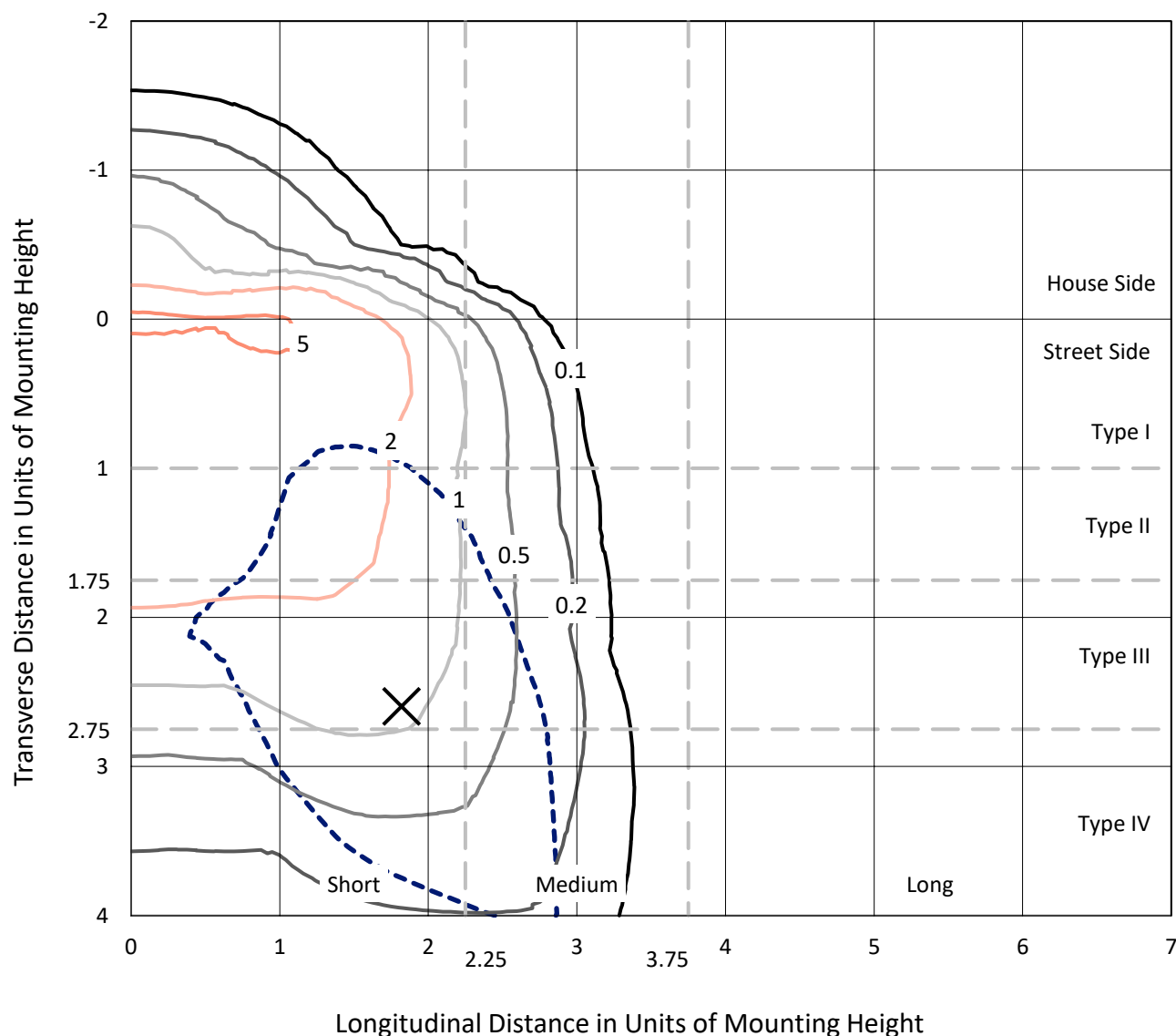
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

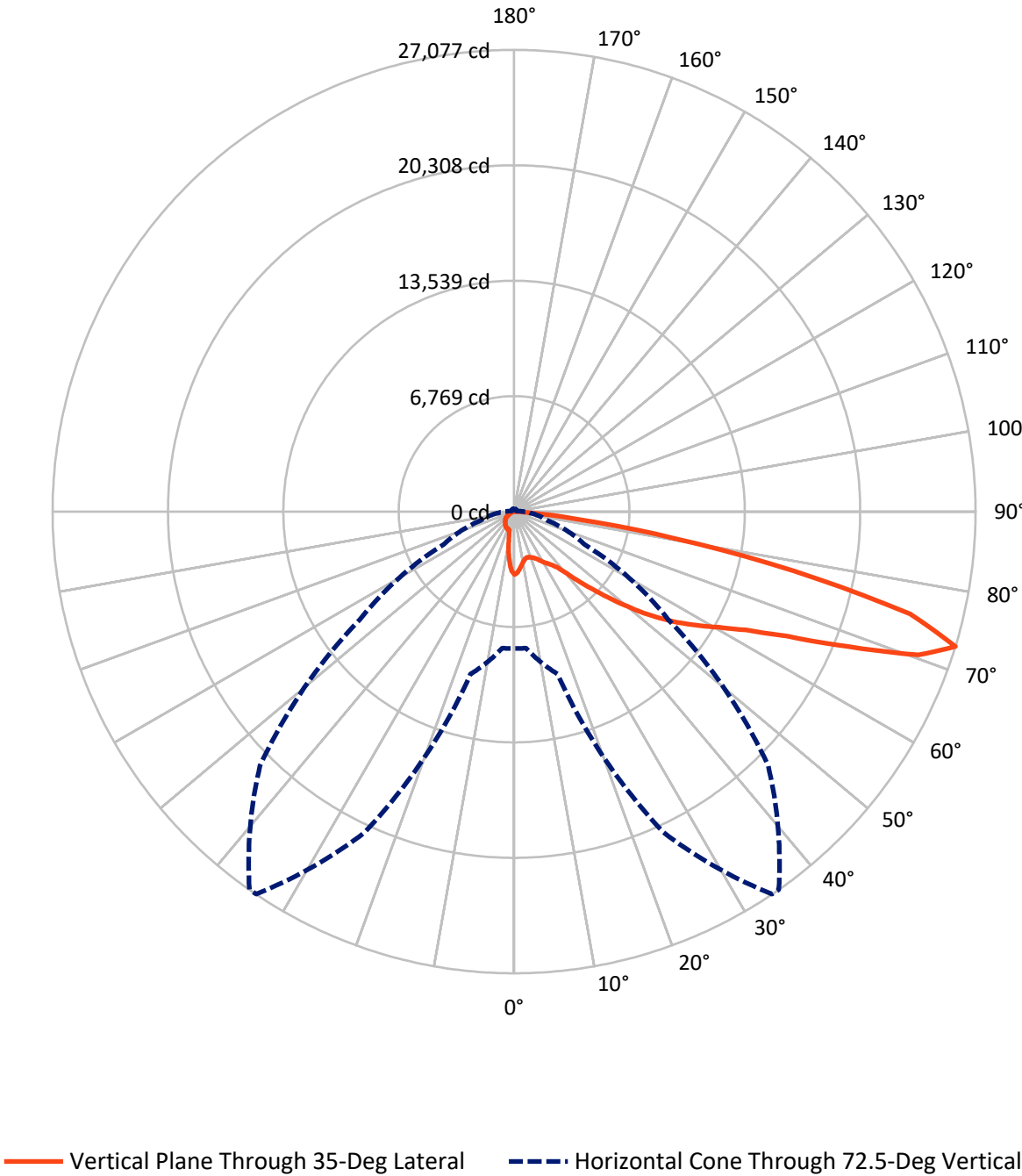


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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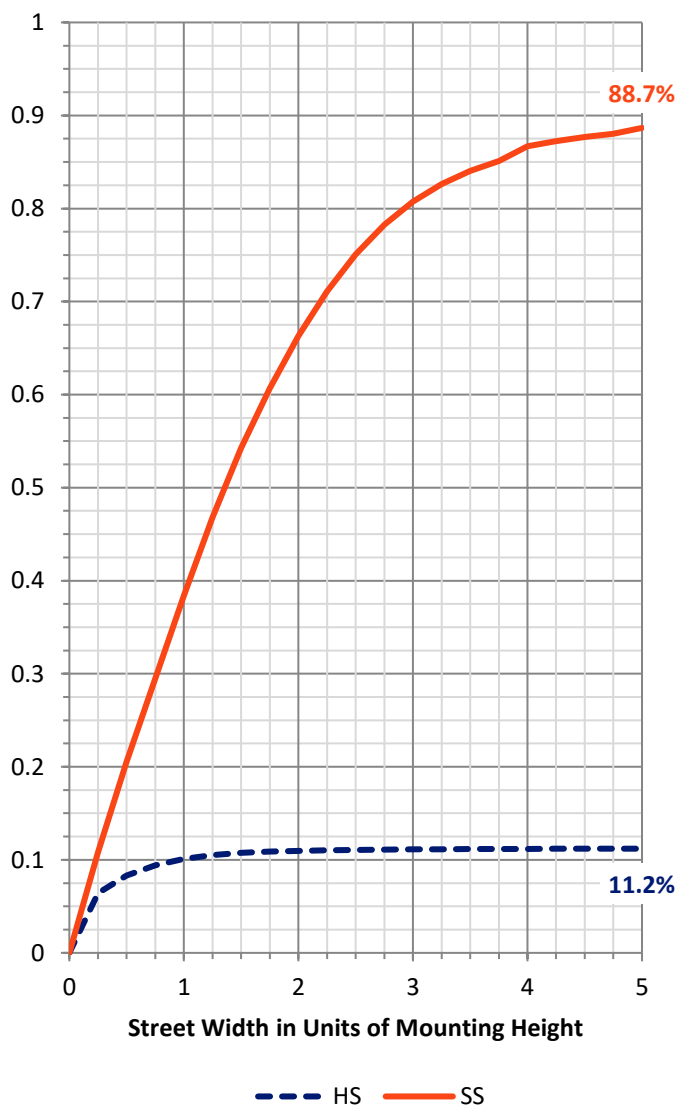
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2873.3	0.0	2873.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	22656.4	0.0	22656.4
	% Fixture	88.7	0.0	88.7
Total	Lumens	25529.7	0.0	25529.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.1	1.2
10°-20°	711.3	2.8
20°-30°	1155.5	4.5
30°-40°	1927.9	7.6
40°-50°	3647.6	14.3
50°-60°	5796.1	22.7
60°-70°	7170.1	28.1
70°-80°	4457.0	17.5
80°-90°	360.2	1.4
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°	25529.7	100.0
0°-180°	25529.7	100.0

Coefficient of Utilization



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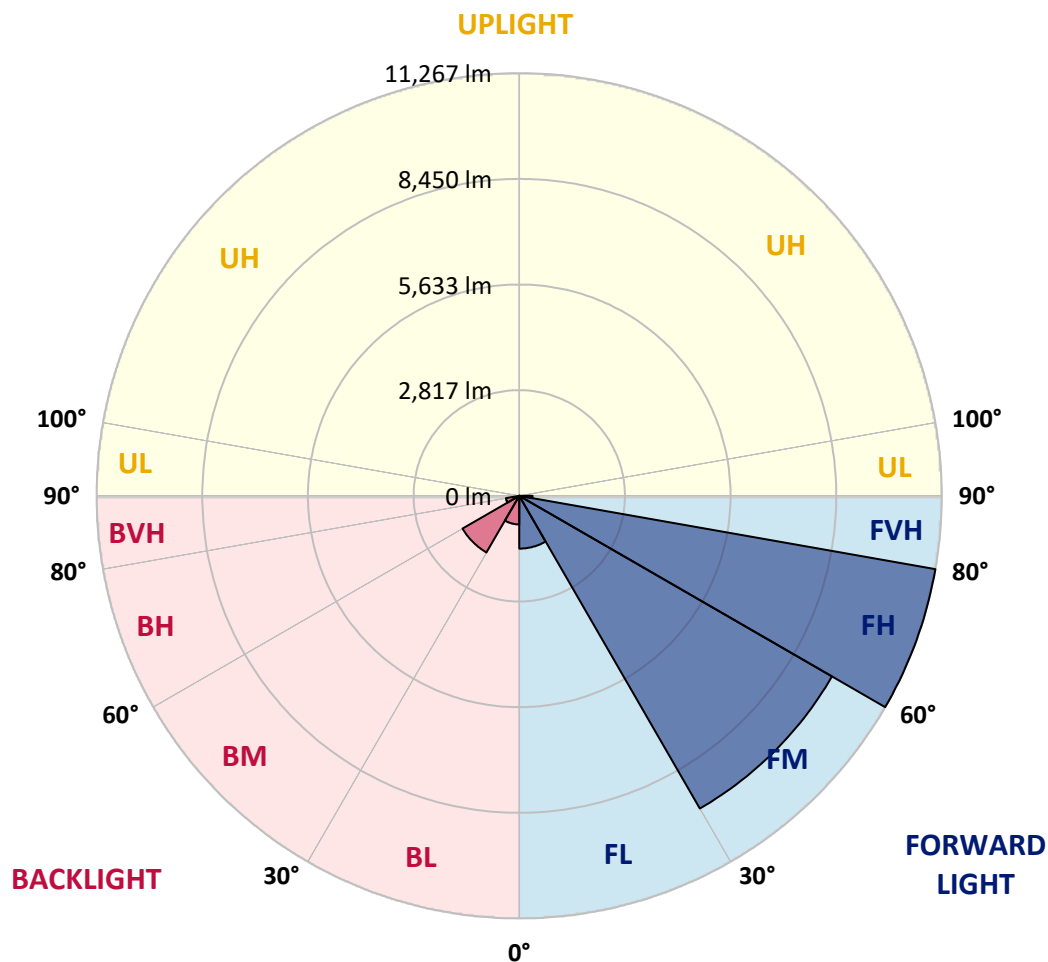
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1407.3	5.5			
FM	(30°-60°)	9627.2	37.7			
FH	(60°-80°)	11266.6	44.1			G4/12000
FVH	(80°-90°)	355.3	1.4			G3/500
BL	(0°-30°)	763.5	3.0	B2/1000		
BM	(30°-60°)	1744.3	6.8	B2/2500		
BH	(60°-80°)	360.6	1.4	B1/500		G1/500
BVH	(80°-90°)	4.9	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1
2.5°	3535.5	3565.5	3571.0	3580.4	3580.4	3591.6	3610.4	3636.5	3679.5	3702.0	3717.0
5°	3258.7	3281.1	3309.1	3331.6	3374.6	3380.2	3453.2	3524.3	3623.4	3698.2	3750.6
7.5°	2979.9	3006.1	3043.5	3097.8	3153.9	3170.7	3281.1	3400.8	3558.0	3698.2	3786.1
10°	2783.5	2785.3	2819.1	2873.3	2963.1	2983.7	3118.4	3288.6	3485.0	3675.8	3819.9
12.5°	2673.1	2686.2	2701.2	2742.4	2828.4	2841.5	2985.5	3185.7	3412.0	3662.7	3859.1
15°	2673.1	2682.5	2691.9	2712.5	2781.6	2792.8	2920.0	3120.2	3374.6	3668.3	3922.7
17.5°	2701.2	2716.1	2708.7	2733.0	2805.9	2813.4	2925.7	3101.5	3372.8	3703.8	4019.9
20°	2768.5	2779.8	2764.8	2779.8	2852.7	2867.6	2983.7	3137.0	3404.5	3765.5	4141.6
22.5°	2875.1	2880.8	2845.2	2856.5	2931.3	2950.0	3084.6	3238.1	3481.2	3864.8	4304.3
25°	3009.8	3021.1	2966.9	2979.9	3051.0	3073.5	3228.7	3389.6	3602.9	4001.3	4511.9
27.5°	3165.1	3170.7	3124.0	3122.0	3213.8	3245.6	3402.7	3576.6	3765.5	4173.4	4773.8
30°	3342.8	3359.6	3314.7	3307.3	3423.3	3449.4	3604.7	3806.7	4005.0	4431.5	5146.1
32.5°	3483.2	3496.2	3470.0	3488.7	3606.6	3627.2	3849.8	4132.2	4381.1	4798.1	5653.1
35°	3685.2	3692.7	3632.8	3666.4	3801.1	3853.5	4184.6	4588.6	4854.3	5258.4	6315.2
37.5°	4416.5	4416.5	4162.1	3995.7	4124.7	4171.5	4642.9	5162.9	5437.9	5875.6	7149.6
40°	5428.6	5411.7	5039.5	4699.0	4682.2	4773.8	5295.8	5886.9	6191.8	6616.4	8088.6
42.5°	6507.9	6481.7	5974.8	5638.1	5581.9	5613.7	6049.7	6779.1	7089.7	7519.9	9098.7
45°	7465.7	7458.2	6994.3	6541.5	6440.6	6541.5	6990.5	7823.0	8045.5	8498.3	10107.0
47.5°	8268.2	8268.2	7929.6	7634.0	7581.6	7641.5	8264.5	8980.8	8960.3	9540.2	11089.1
50°	9192.3	9184.8	8863.1	8735.9	8790.1	8874.2	9731.0	10200.6	9906.8	10563.4	11966.5
52.5°	9839.5	9884.4	9774.0	9753.5	10030.3	10176.2	11220.1	11394.0	10754.3	11534.3	12623.0
55°	10352.1	10404.5	10531.7	10675.7	11208.8	11399.6	12662.3	12525.7	11463.2	12376.1	13000.9
57.5°	11077.9	11003.1	11199.5	11483.8	12346.1	12576.2	14059.6	13593.9	12033.8	13058.9	13042.0
60°	11959.0	11970.2	12003.9	12363.0	13481.6	13777.2	15436.4	14604.0	12400.4	13477.9	12585.6
62.5°	13017.7	13034.5	13103.8	13655.6	15006.2	15284.9	16903.0	15430.9	12568.8	13360.1	11407.1
65°	12944.7	13015.9	13788.4	15675.8	17323.9	17598.8	18614.6	16010.7	12314.3	12282.6	9287.6
67.5°	11792.4	11908.4	13201.1	18089.0	20818.3	21125.0	20683.6	16124.8	11216.3	9551.5	6059.0
70°	10281.0	10322.2	11876.7	20258.9	24864.4	25174.9	22535.4	14869.7	8511.4	5327.5	2714.3
72.5°	8028.7	8038.0	9861.9	20762.1	27060.5	27077.3	21082.0	11038.6	4577.4	2046.5	942.8
75°	5735.4	5679.2	6605.2	16837.6	23807.5	23998.3	15805.0	5177.9	1749.1	967.1	469.6
77.5°	3075.3	3137.0	3737.6	9985.4	16446.5	16772.1	8623.6	1492.8	890.4	658.5	310.6
80°	950.3	1002.7	1532.1	4571.8	9315.7	9512.1	3196.9	664.1	621.0	469.6	203.9
82.5°	299.3	310.6	714.6	1921.2	3866.6	3956.4	926.0	376.0	424.7	310.6	119.7
85°	86.1	87.9	318.1	716.5	955.9	974.6	260.0	146.0	243.2	192.7	61.7
87.5°	9.3	29.9	119.7	119.7	84.2	82.3	28.1	31.8	69.2	24.3	11.3
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°	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1	3700.1
2.5°	3707.6	3709.5	3685.2	3644.0	3599.1	3561.7	3514.9	3477.5	3451.3	3443.8	3456.9
5°	3733.8	3720.6	3651.5	3526.1	3376.5	3247.4	3103.4	2989.3	2914.5	2882.6	2893.9
7.5°	3773.0	3735.6	3584.1	3337.2	3051.0	2796.6	2538.4	2338.3	2211.1	2147.5	2156.8
10°	3806.7	3731.9	3471.9	3064.1	2626.4	2241.1	1893.1	1651.8	1517.1	1453.4	1455.4
12.5°	3838.5	3730.1	3326.0	2740.4	2147.5	1676.1	1352.5	1232.8	1195.4	1182.2	1178.5
15°	3898.4	3735.6	3142.6	2370.1	1670.4	1266.4	1148.6	1146.7	1154.1	1150.5	1148.6
17.5°	3980.7	3741.2	2935.0	1977.2	1288.8	1116.7	1111.2	1128.0	1139.2	1133.6	1131.7
20°	4087.3	3763.7	2714.3	1588.1	1107.4	1079.3	1092.4	1107.4	1116.7	1107.4	1105.6
22.5°	4236.9	3803.0	2473.0	1275.8	1049.4	1056.9	1068.2	1085.0	1094.3	1081.3	1079.3
25°	4420.3	3864.8	2235.4	1109.3	1021.4	1030.7	1047.6	1066.3	1077.5	1064.4	1062.5
27.5°	4657.9	3963.9	2016.6	1071.8	993.3	999.0	1023.3	1051.3	1066.3	1049.4	1049.4
30°	5002.1	4126.6	1827.6	1088.8	976.5	963.4	997.0	1036.4	1053.2	1038.2	1036.4
32.5°	5458.5	4356.7	1711.6	1114.9	969.0	922.2	954.1	1004.5	1032.6	1023.3	1023.3
35°	6057.1	4706.5	1666.8	1144.8	963.4	879.2	901.7	955.9	1004.5	1013.9	1013.9
37.5°	6782.9	5192.9	1679.9	1157.9	946.6	843.7	854.8	901.7	965.2	995.2	1002.7
40°	7607.9	5759.7	1754.7	1144.8	927.8	813.7	815.6	851.2	907.2	952.1	967.1
42.5°	8459.0	6421.8	1893.1	1096.2	911.0	787.5	782.0	806.3	843.7	875.5	888.6
45°	9269.0	7102.7	2029.6	1028.9	890.4	761.4	748.2	757.6	765.1	778.2	785.7
47.5°	9976.1	7581.6	1990.3	967.1	862.3	731.4	709.0	705.2	682.8	680.9	679.1
50°	10464.3	7686.4	1767.7	905.4	821.2	697.7	662.3	639.8	600.4	581.8	583.6
52.5°	10619.6	7273.0	1444.1	843.7	753.9	652.8	602.4	566.8	518.1	501.3	499.5
55°	10413.8	6463.0	1154.1	768.9	660.3	593.0	536.9	490.2	450.8	430.3	430.3
57.5°	9910.6	5432.3	912.9	680.9	561.2	525.6	469.6	422.8	389.1	368.5	364.8
60°	9076.3	4313.7	722.1	576.2	478.9	452.7	394.7	364.8	334.9	310.6	304.9
62.5°	7809.9	3079.1	566.8	456.4	400.4	370.4	336.7	314.3	278.7	245.1	239.4
65°	6094.5	1883.7	437.8	334.9	321.7	306.8	286.2	265.7	222.6	188.9	183.4
67.5°	3844.2	892.3	312.4	252.6	254.4	246.9	237.6	220.8	188.9	159.0	155.3
70°	1692.9	432.1	205.8	192.7	188.9	188.9	196.4	190.9	160.9	132.8	127.2
72.5°	576.2	232.0	153.4	146.0	136.5	134.7	164.6	159.0	129.0	102.9	97.3
75°	301.1	155.3	112.2	104.8	82.3	99.1	131.0	123.5	91.6	67.3	61.7
77.5°	196.4	110.4	76.7	67.3	46.7	65.5	97.3	86.1	54.2	33.7	29.9
80°	123.5	73.0	44.9	31.8	22.4	35.6	52.4	37.4	20.6	7.5	5.6
82.5°	65.5	37.4	16.8	11.3	9.3	11.3	13.1	9.3	3.8	0.0	0.0
85°	26.2	13.1	5.6	3.8	1.8	0.0	3.8	1.8	0.0	0.0	0.0
87.5°	9.3	1.8	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)