

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: P968948

Luminaire Tested: **NAV-SB5C-830-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968948
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-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 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: 26380.4 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

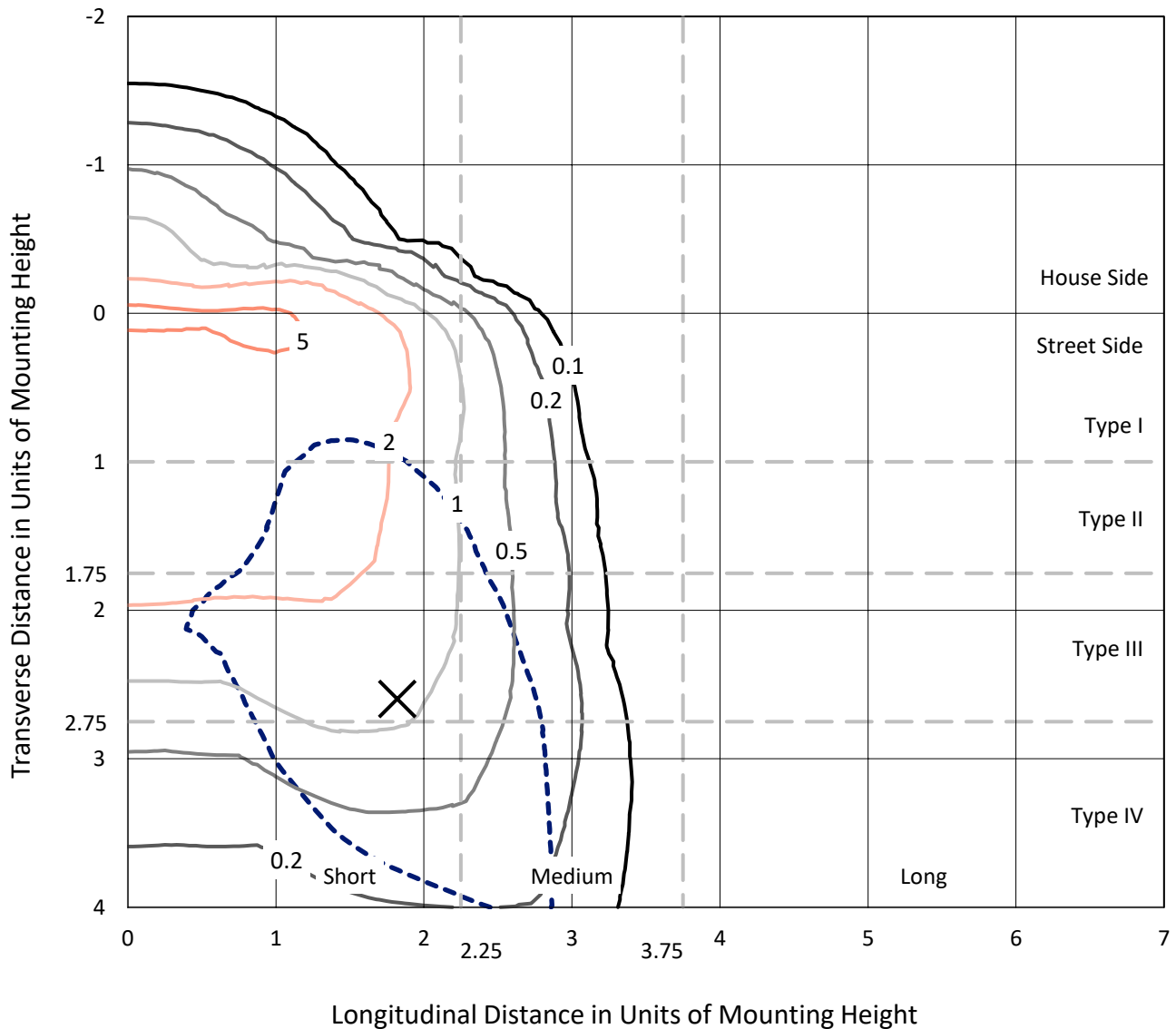
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

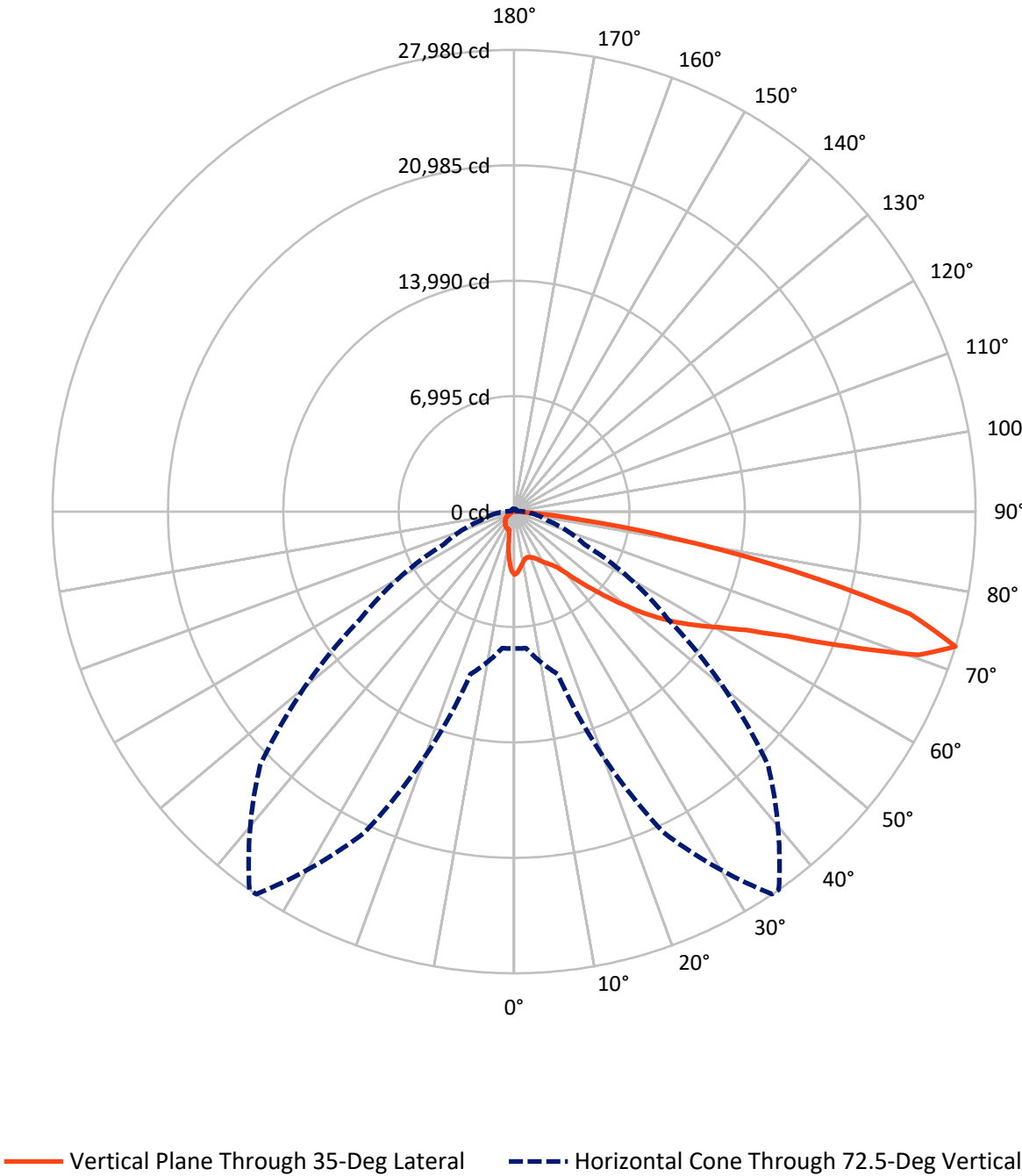
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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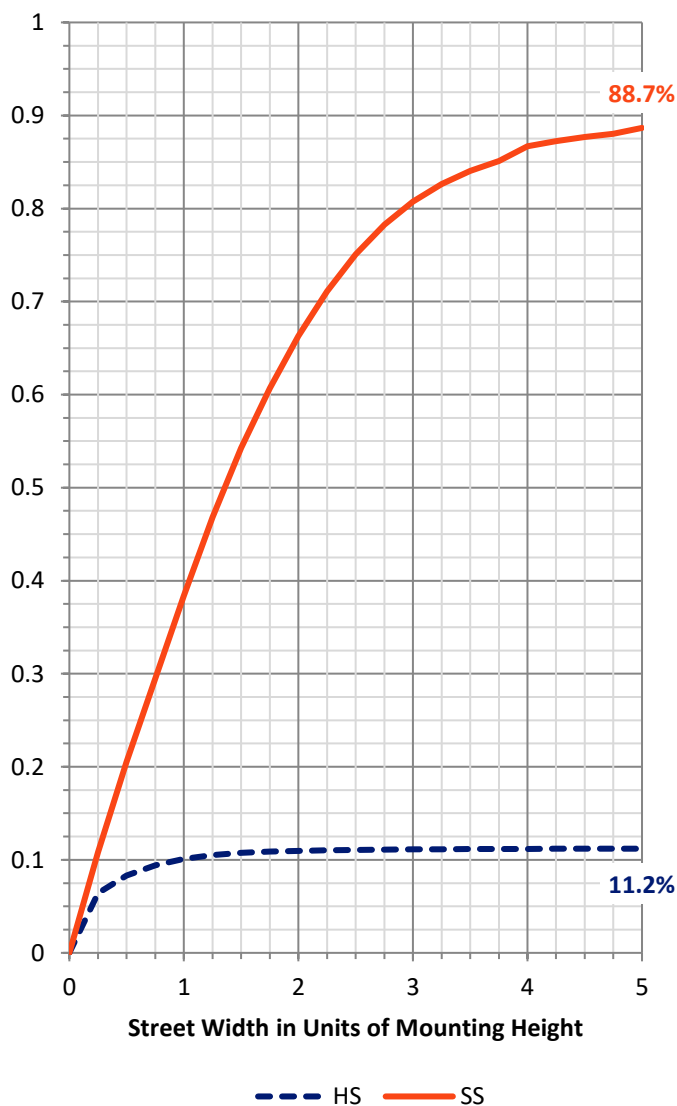
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2969.0	0.0	2969.0
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	23411.4	0.0	23411.4
	% Fixture	88.7	0.0	88.7
Total	Lumens	26380.4	0.0	26380.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.2	1.2
10°-20°	735.0	2.8
20°-30°	1194.0	4.5
30°-40°	1992.1	7.6
40°-50°	3769.2	14.3
50°-60°	5989.2	22.7
60°-70°	7409.1	28.1
70°-80°	4605.5	17.5
80°-90°	372.2	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°	26380.4	100.0
0°-180°	26380.4	100.0

Coefficient of Utilization



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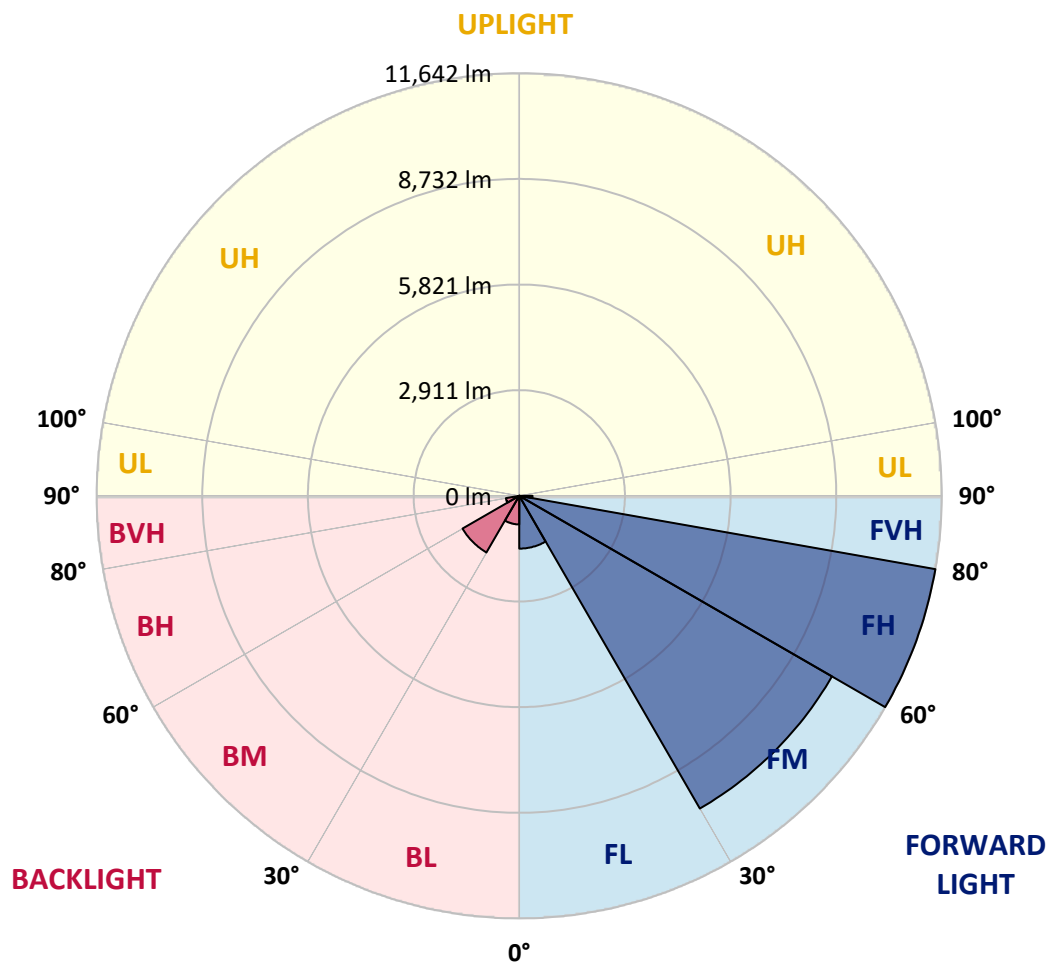
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1454.2	5.5			
FM	(30°-60°)	9948.1	37.7			
FH	(60°-80°)	11642.0	44.1			G4/12000
FVH	(80°-90°)	367.1	1.4			G3/500
BL	(0°-30°)	788.9	3.0	B2/1000		
BM	(30°-60°)	1802.4	6.8	B2/2500		
BH	(60°-80°)	372.6	1.4	B1/500		G1/500
BVH	(80°-90°)	5.1	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5
2.5°	3653.3	3684.3	3690.0	3699.7	3699.7	3711.3	3730.6	3757.6	3802.1	3825.3	3840.8
5°	3367.2	3390.4	3419.4	3442.6	3487.0	3492.9	3568.2	3641.7	3744.1	3821.5	3875.6
7.5°	3079.2	3106.3	3144.9	3201.0	3259.0	3276.4	3390.4	3514.1	3676.5	3821.5	3912.3
10°	2876.3	2878.2	2912.9	2969.0	3061.8	3083.1	3222.3	3398.2	3601.1	3798.2	3947.1
12.5°	2762.2	2775.7	2791.2	2833.7	2922.7	2936.2	3085.0	3291.9	3525.7	3784.7	3987.7
15°	2762.2	2771.9	2781.5	2802.8	2874.3	2885.9	3017.4	3224.1	3487.0	3790.6	4053.5
17.5°	2791.2	2806.7	2799.0	2824.1	2899.4	2907.2	3023.1	3204.9	3485.1	3827.2	4153.9
20°	2860.8	2872.4	2856.9	2872.4	2947.8	2963.3	3083.1	3241.6	3518.0	3891.1	4279.6
22.5°	2971.0	2976.8	2940.0	2951.6	3029.0	3048.2	3187.4	3346.0	3597.2	3993.5	4447.8
25°	3110.2	3121.7	3065.7	3079.2	3152.7	3175.9	3336.3	3502.5	3722.9	4134.6	4662.3
27.5°	3270.6	3276.4	3228.0	3226.1	3320.8	3353.7	3516.1	3695.8	3891.1	4312.5	4932.9
30°	3454.2	3471.6	3425.2	3417.5	3537.4	3564.4	3724.8	3933.5	4138.4	4579.2	5317.6
32.5°	3599.2	3612.7	3585.7	3605.0	3726.8	3748.0	3978.0	4269.9	4527.0	4958.0	5841.5
35°	3808.0	3815.7	3753.9	3788.6	3927.8	3981.9	4324.1	4741.5	5016.0	5433.5	6525.7
37.5°	4563.7	4563.7	4300.9	4128.8	4262.2	4310.5	4797.6	5335.0	5619.2	6071.5	7387.8
40°	5609.5	5592.1	5207.4	4855.6	4838.2	4932.9	5472.3	6083.1	6398.2	6836.9	8358.2
42.5°	6724.8	6697.8	6173.9	5826.0	5768.0	5800.8	6251.2	7005.1	7326.0	7770.5	9401.9
45°	7714.5	7706.8	7227.4	6759.6	6655.2	6759.6	7223.5	8083.7	8313.7	8781.5	10443.8
47.5°	8543.7	8543.7	8193.8	7888.4	7834.3	7896.2	8539.9	9280.1	9258.9	9858.1	11458.6
50°	9498.6	9490.9	9158.4	9027.0	9083.0	9170.0	10055.2	10540.5	10237.0	10915.4	12365.2
52.5°	10167.4	10213.8	10099.7	10078.5	10364.6	10515.4	11594.0	11773.7	11112.6	11918.7	13043.6
55°	10697.0	10751.1	10882.6	11031.5	11582.3	11779.5	13084.2	12943.2	11845.2	12788.5	13434.2
57.5°	11447.0	11369.7	11572.7	11866.5	12757.6	12995.4	14528.1	14046.9	12434.8	13494.0	13476.6
60°	12357.5	12369.1	12403.8	12775.0	13930.9	14236.3	15950.8	15090.7	12813.6	13927.0	13005.0
62.5°	13451.5	13468.9	13540.5	14110.7	15506.3	15794.2	17466.3	15945.0	12987.6	13805.2	11787.2
65°	13376.1	13449.5	14247.9	16198.3	17901.2	18185.3	19234.9	16544.2	12724.8	12691.9	9597.2
67.5°	12185.4	12305.2	13640.9	18691.8	21512.0	21829.0	21372.8	16662.2	11590.1	9869.7	6260.9
70°	10623.6	10666.2	12272.4	20934.0	25693.0	26013.9	23286.5	15365.2	8795.0	5505.1	2804.7
72.5°	8296.2	8306.0	10190.6	21454.0	27962.3	27979.7	21784.5	11406.4	4730.0	2114.7	974.3
75°	5926.4	5868.5	6825.3	17398.7	24600.8	24798.0	16331.6	5350.5	1807.3	999.4	485.1
77.5°	3177.8	3241.6	3862.1	10318.2	16994.6	17331.0	8910.9	1542.5	920.1	680.4	320.8
80°	982.0	1036.1	1583.1	4724.1	9626.2	9829.1	3303.5	686.2	641.8	485.1	210.7
82.5°	309.2	320.8	738.4	1985.1	3995.4	4088.2	956.8	388.6	438.8	320.8	123.7
85°	88.9	90.8	328.6	740.4	987.8	1007.1	268.7	150.8	251.3	199.1	63.8
87.5°	9.6	31.0	123.7	123.7	87.0	85.1	29.0	32.9	71.5	25.1	11.6
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°	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5	3823.5
2.5°	3831.1	3833.1	3808.0	3765.4	3719.0	3680.4	3632.1	3593.3	3566.3	3558.6	3572.1
5°	3858.2	3844.7	3773.1	3643.7	3489.0	3355.6	3206.8	3088.8	3011.6	2978.8	2990.3
7.5°	3898.8	3860.2	3703.5	3448.4	3152.7	2889.8	2623.1	2416.2	2284.7	2219.0	2228.8
10°	3933.5	3856.3	3587.6	3166.2	2713.9	2315.7	1956.2	1706.8	1567.6	1501.9	1503.9
12.5°	3966.4	3854.3	3436.8	2831.8	2219.0	1731.9	1397.5	1273.9	1235.1	1221.6	1217.8
15°	4028.4	3860.2	3247.4	2449.0	1726.1	1308.6	1186.8	1184.9	1192.7	1188.8	1186.8
17.5°	4113.3	3865.9	3032.9	2043.1	1331.8	1153.9	1148.2	1165.6	1177.2	1171.4	1169.4
20°	4223.5	3889.2	2804.7	1641.1	1144.3	1115.3	1128.8	1144.3	1153.9	1144.3	1142.4
22.5°	4378.2	3929.7	2555.4	1318.3	1084.3	1092.1	1103.7	1121.1	1130.8	1117.2	1115.3
25°	4567.6	3993.5	2309.9	1146.3	1055.4	1065.1	1082.5	1101.8	1113.4	1099.8	1097.9
27.5°	4813.1	4096.0	2083.7	1107.6	1026.4	1032.2	1057.3	1086.3	1101.8	1084.3	1084.3
30°	5168.8	4264.1	1888.5	1124.9	1009.0	995.5	1030.2	1070.8	1088.2	1072.8	1070.8
32.5°	5640.4	4501.9	1768.6	1152.0	1001.3	952.9	985.8	1038.0	1067.0	1057.3	1057.3
35°	6259.0	4863.3	1722.3	1183.0	995.5	908.5	931.7	987.8	1038.0	1047.7	1047.7
37.5°	7009.0	5365.9	1735.8	1196.5	978.1	871.8	883.3	931.7	997.4	1028.4	1036.1
40°	7861.3	5951.6	1813.1	1183.0	958.8	840.8	842.8	879.4	937.5	983.9	999.4
42.5°	8740.9	6635.8	1956.2	1132.7	941.4	813.7	808.0	833.1	871.8	904.7	918.2
45°	9577.8	7339.5	2097.3	1063.1	920.1	786.7	773.2	782.9	790.6	804.1	811.8
47.5°	10308.5	7834.3	2056.7	999.4	891.1	755.8	732.6	728.8	705.5	703.6	701.7
50°	10813.0	7942.5	1826.7	935.5	848.6	721.0	684.3	661.1	620.4	601.2	603.1
52.5°	10973.4	7515.4	1492.3	871.8	779.0	674.7	622.4	585.7	535.5	518.0	516.1
55°	10760.9	6678.4	1192.7	794.5	682.3	612.7	554.7	506.5	465.9	444.5	444.5
57.5°	10240.9	5613.3	943.3	703.6	579.8	543.1	485.1	436.9	402.1	380.8	376.9
60°	9378.8	4457.4	746.1	595.3	494.9	467.8	407.8	376.9	346.0	320.8	315.1
62.5°	8070.1	3181.7	585.7	471.6	413.7	382.7	347.9	324.7	288.0	253.2	247.4
65°	6297.6	1946.5	452.3	346.0	332.5	317.0	295.7	274.5	230.0	195.3	189.4
67.5°	3972.3	922.0	322.8	261.0	262.9	255.1	245.5	228.1	195.3	164.3	160.4
70°	1749.4	446.5	212.6	199.1	195.3	195.3	203.0	197.2	166.3	137.2	131.4
72.5°	595.3	239.6	158.5	150.8	141.1	139.2	170.1	164.3	133.4	106.3	100.6
75°	311.2	160.4	115.9	108.2	85.1	102.4	135.3	127.6	94.7	69.6	63.8
77.5°	203.0	114.1	79.2	69.6	48.3	67.6	100.6	88.9	56.1	34.7	31.0
80°	127.6	75.3	46.4	32.9	23.2	36.7	54.1	38.6	21.2	7.7	5.8
82.5°	67.6	38.6	17.4	11.6	9.6	11.6	13.5	9.6	3.9	0.0	0.0
85°	27.1	13.5	5.8	3.9	1.9	0.0	3.9	1.9	0.0	0.0	0.0
87.5°	9.6	1.9	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)