

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: P968446

Luminaire Tested: **NAV-SB5B-835-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27405.4 lumens
Efficiency: N/A
Efficacy: 150.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - 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

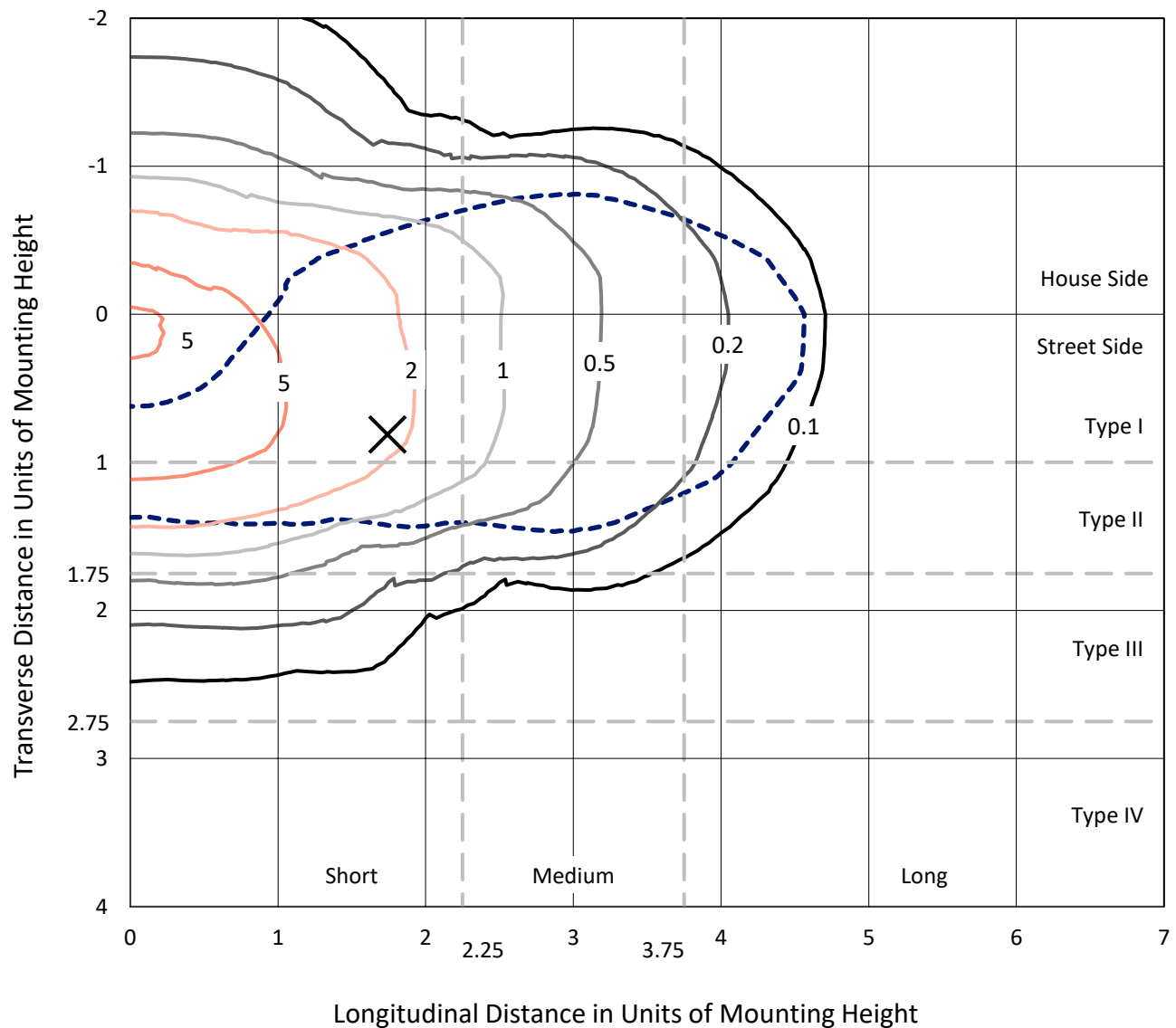


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Iso-Footcandle Lines of Horizontal Illumination

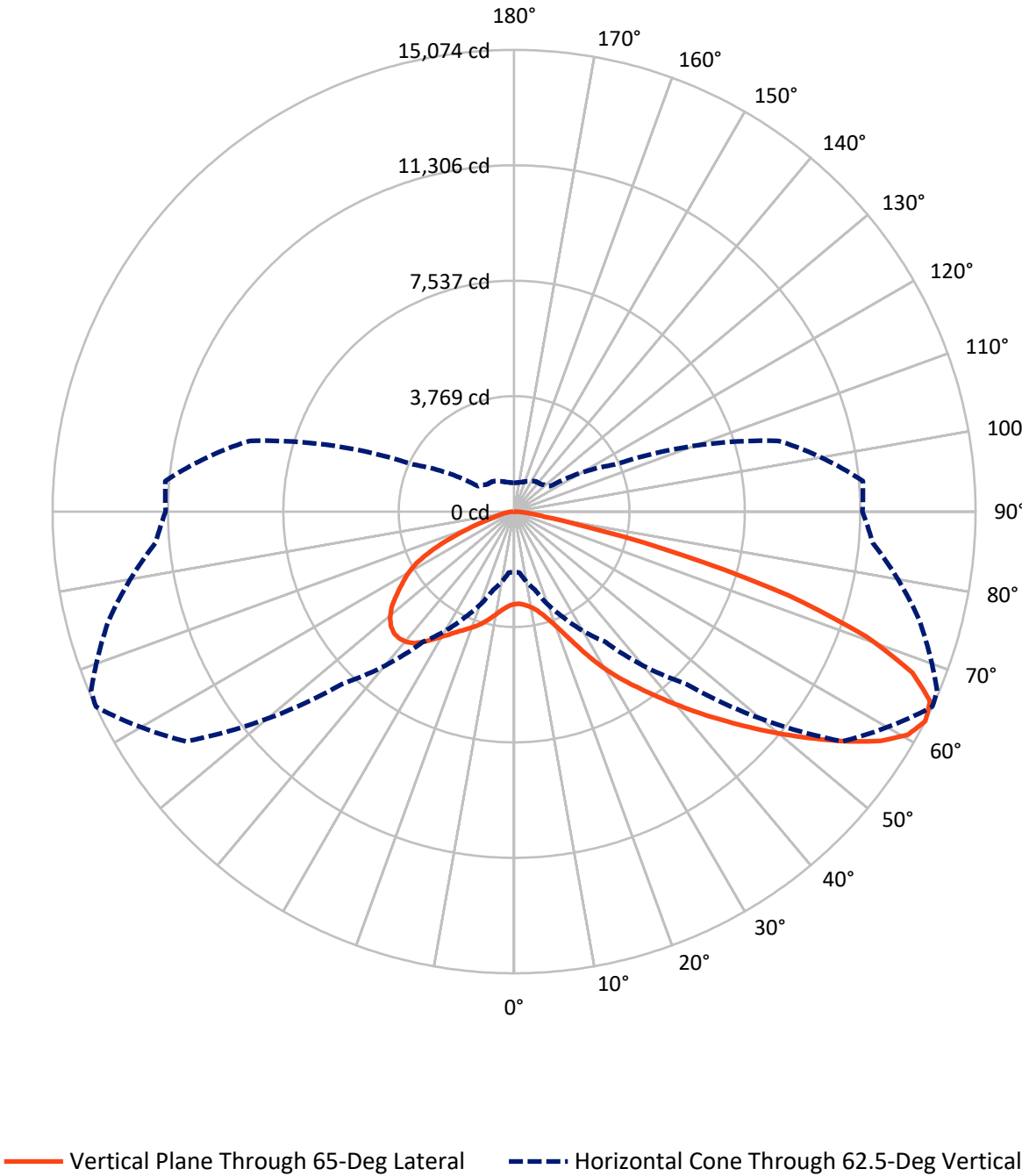
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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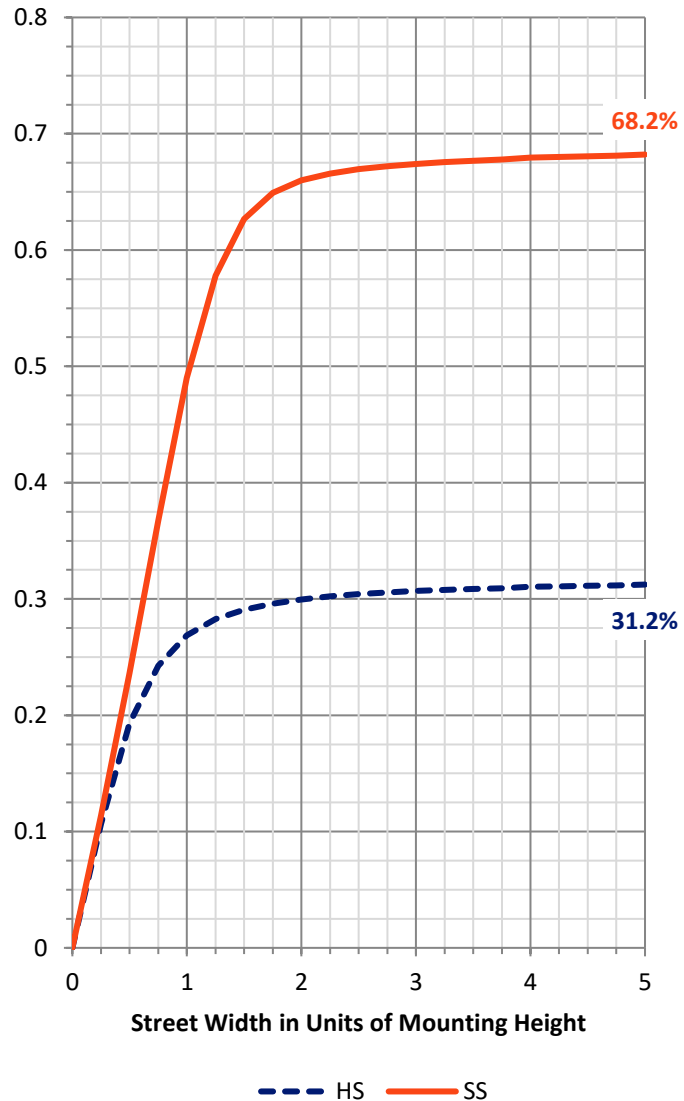
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8647.9	0.0	8647.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	18757.5	0.0	18757.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	27405.4	0.0	27405.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.1	1.1
10°-20°	1021.0	3.7
20°-30°	2070.2	7.6
30°-40°	3582.5	13.1
40°-50°	5421.4	19.8
50°-60°	6356.2	23.2
60°-70°	5328.9	19.4
70°-80°	2942.0	10.7
80°-90°	382.2	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°	27405.4	100.0
0°-180°	27405.4	100.0

Coefficient of Utilization



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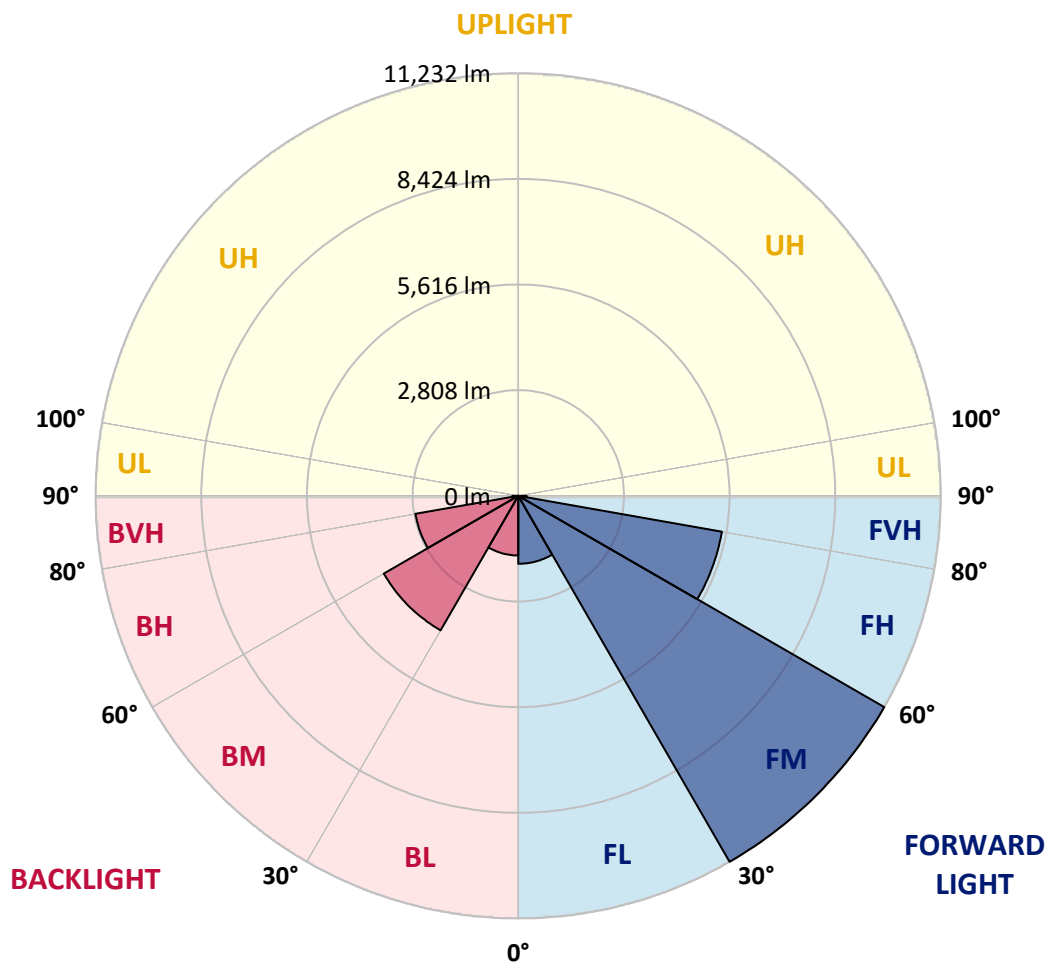
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1806.4	6.6			
FM	(30°-60°)	11231.6	41.0			
FH	(60°-80°)	5496.7	20.1			G3/7500
FVH	(80°-90°)	222.7	0.8			G2/225
BL	(0°-30°)	1585.9	5.8	B3/2500		
BM	(30°-60°)	4128.4	15.1	B3/5000		
BH	(60°-80°)	2774.2	10.1	B4/5000		G4/5000
BVH	(80°-90°)	159.4	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0
2.5°	3000.1	2991.6	2998.6	2998.6	3001.5	3000.1	3010.0	3012.9	3017.1	3025.7	3025.7
5°	2970.2	2968.8	2981.5	2992.9	3004.3	3014.3	3027.0	3045.6	3048.4	3058.4	3071.1
7.5°	2960.2	2951.7	2971.6	2985.8	3012.9	3037.0	3071.1	3102.5	3115.2	3119.5	3143.7
10°	3037.0	3022.8	3041.3	3049.8	3072.5	3096.7	3136.5	3186.3	3200.6	3217.6	3244.6
12.5°	3167.9	3152.2	3179.2	3192.0	3213.4	3234.7	3261.7	3310.0	3317.1	3348.4	3374.0
15°	3346.9	3328.5	3345.6	3361.2	3396.7	3416.6	3443.7	3490.5	3490.5	3514.7	3533.3
17.5°	3590.1	3566.0	3578.8	3584.4	3607.2	3637.0	3682.5	3723.7	3745.0	3736.5	3711.0
20°	3952.7	3922.8	3922.8	3894.4	3885.9	3910.1	3969.7	4026.6	4049.4	4005.3	3942.8
22.5°	4497.2	4454.5	4430.5	4333.7	4295.4	4298.1	4357.9	4427.6	4446.0	4367.8	4227.1
25°	5189.7	5122.8	5090.2	4948.0	4861.3	4785.8	4832.8	4922.4	4948.0	4851.2	4623.8
27.5°	5882.1	5886.4	5855.1	5684.4	5540.8	5403.0	5378.8	5472.6	5499.6	5390.2	5108.6
30°	6853.3	6752.3	6692.5	6487.8	6283.0	6089.7	5990.2	6028.5	6035.6	5904.8	5577.8
32.5°	7690.7	7665.1	7537.1	7358.0	7094.9	6792.1	6625.7	6564.6	6553.2	6366.9	5978.8
35°	8644.7	8630.5	8495.4	8282.1	7997.8	7576.9	7276.9	7102.0	7087.8	6826.2	6375.5
37.5°	9614.4	9614.4	9482.2	9249.0	8954.7	8428.6	7972.1	7694.9	7649.5	7308.1	6779.2
40°	10387.9	10340.9	10365.1	10267.0	9930.0	9371.3	8744.3	8341.9	8280.7	7871.2	7208.6
42.5°	10827.2	10811.6	10956.6	11066.1	10928.1	10481.8	9594.5	9042.9	8957.5	8491.1	7703.5
45°	10925.3	10908.3	11167.1	11567.9	11761.4	11577.9	10518.7	9780.8	9676.9	9139.5	8233.8
47.5°	10699.3	10665.1	11044.8	11677.4	12297.3	12620.1	11519.7	10581.3	10430.5	9770.8	8778.3
50°	10019.6	9986.9	10561.3	11401.6	12477.9	13328.2	12606.0	11430.1	11199.8	10447.6	9328.6
52.5°	8542.3	8557.9	9458.0	10612.5	12240.6	13768.9	13541.5	12324.4	12047.1	11140.0	9844.7
55°	6654.2	6688.2	7794.4	9065.6	11290.7	13702.1	14179.8	13245.8	12969.9	11791.2	10377.9
57.5°	4764.5	4915.3	5951.8	7210.1	9466.5	12642.9	14319.2	14121.5	13854.3	12502.1	10899.7
60°	3088.2	3115.2	4181.6	5449.8	7208.6	10760.3	14036.2	14785.5	14576.5	13227.2	11336.2
62.5°	1979.2	1997.6	2647.5	3811.9	5188.2	7960.8	13083.6	15074.2	15010.2	13706.4	11755.6
65°	1454.6	1440.3	1778.7	2519.4	3494.8	4909.5	11233.9	14934.9	15061.5	14006.4	12102.6
67.5°	1214.2	1194.3	1360.7	1744.6	2574.9	2788.2	8312.0	14029.2	14492.7	13972.3	12357.1
70°	1106.2	1089.2	1190.0	1295.3	2009.0	1866.8	4190.1	12196.5	12910.2	13584.1	12315.9
72.5°	937.0	907.1	1045.1	1150.3	1562.6	1431.8	1731.7	9368.4	10238.5	12340.1	11735.7
75°	726.5	706.6	824.6	1012.3	1174.4	1117.6	1094.8	5688.7	6638.5	9543.3	10267.0
77.5°	575.8	548.8	656.9	789.1	1056.5	843.2	797.7	2449.9	3391.0	6092.5	7682.2
80°	433.7	409.5	499.1	624.2	811.9	635.6	516.1	999.6	1278.2	3086.8	3863.1
82.5°	308.5	287.2	348.4	457.9	546.0	570.1	317.0	560.2	629.9	1190.0	863.0
85°	197.6	184.8	233.2	287.2	347.0	366.8	193.4	292.9	321.3	490.6	359.7
87.5°	108.0	88.1	125.2	133.7	160.6	146.5	92.5	106.6	115.2	177.7	152.1
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°	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0	3020.0
2.5°	3031.3	3035.6	3049.8	3054.1	3064.0	3076.8	3085.4	3093.9	3093.9	3102.5	3102.5
5°	3072.5	3082.5	3112.4	3128.0	3153.6	3179.2	3194.8	3213.4	3224.8	3230.4	3233.3
7.5°	3152.2	3167.9	3210.5	3237.5	3281.5	3317.1	3341.3	3366.9	3372.6	3388.2	3382.5
10°	3260.2	3278.8	3327.0	3378.3	3430.9	3475.0	3497.7	3516.2	3523.3	3526.1	3519.0
12.5°	3383.9	3411.0	3473.5	3536.0	3591.5	3629.9	3635.6	3631.4	3611.5	3594.4	3594.4
15°	3536.0	3560.2	3629.9	3698.2	3752.2	3759.3	3723.7	3701.0	3676.9	3672.6	3672.6
17.5°	3718.1	3730.9	3794.9	3861.7	3866.0	3841.8	3789.1	3767.8	3745.0	3729.5	3730.9
20°	3930.0	3925.6	3971.2	3999.6	3969.7	3895.8	3816.2	3780.6	3757.9	3739.4	3740.8
22.5°	4183.0	4150.3	4144.6	4137.5	4057.9	3902.9	3794.9	3749.3	3713.8	3688.3	3696.8
25°	4551.3	4426.2	4339.4	4291.1	4111.9	3864.6	3726.6	3625.6	3558.8	3514.7	3531.8
27.5°	5011.9	4801.5	4582.6	4464.5	4111.9	3786.3	3561.7	3398.2	3288.7	3243.2	3266.0
30°	5451.3	5230.9	4908.1	4673.6	4101.9	3658.3	3295.8	3068.3	2940.3	2894.8	2921.9
32.5°	5826.6	5586.4	5253.6	4902.5	4077.8	3450.8	2965.9	2714.3	2590.6	2536.6	2563.5
35°	6175.0	5919.1	5600.6	5154.1	4013.8	3146.5	2603.4	2411.4	2273.4	2186.7	2215.2
37.5°	6531.9	6227.6	5929.0	5381.7	3898.7	2791.1	2324.7	2161.2	1999.1	1882.5	1913.8
40°	6920.0	6556.0	6280.2	5516.7	3709.6	2452.6	2108.5	1959.3	1787.2	1663.6	1687.7
42.5°	7373.5	6949.9	6671.2	5586.4	3450.8	2212.4	1967.8	1821.3	1659.3	1558.3	1578.2
45°	7847.1	7383.6	7028.1	5584.9	3162.1	2100.0	1922.3	1777.2	1598.2	1492.9	1510.0
47.5°	8343.3	7837.2	7336.6	5493.9	2911.9	2115.7	1896.8	1682.0	1484.4	1382.0	1396.3
50°	8840.9	8333.4	7635.2	5323.3	2805.2	2081.6	1801.4	1548.4	1315.2	1222.7	1228.5
52.5°	9334.3	8860.8	7892.6	5080.2	2697.2	1955.0	1679.2	1374.9	1245.5	1181.5	1181.5
55°	9830.5	9382.6	8172.6	4726.2	2427.1	1807.2	1474.5	1309.5	1190.0	1131.8	1126.1
57.5°	10328.1	9985.4	8438.5	4372.1	2087.2	1625.1	1362.1	1229.9	1134.6	1084.9	1076.4
60°	10845.7	10675.1	8712.9	4046.5	1751.7	1391.9	1279.6	1165.9	1069.2	1013.7	1009.5
62.5°	11378.8	11434.3	8927.6	3627.1	1443.2	1249.8	1205.7	1089.2	995.3	942.7	941.3
65°	11916.3	12166.5	9068.4	3045.6	1170.1	1114.7	1126.1	1005.2	910.0	864.5	863.0
67.5°	12321.5	12694.1	9028.6	2304.8	959.7	986.8	1026.5	917.1	827.5	791.9	793.3
70°	12367.0	12631.5	8636.1	1578.2	803.3	861.6	915.6	830.4	737.9	712.4	713.7
72.5°	11761.4	11778.4	7542.8	1030.8	679.7	756.4	799.1	742.2	652.6	627.0	625.6
75°	10173.1	9740.9	5538.0	679.7	568.8	649.7	689.6	649.7	563.0	568.8	548.8
77.5°	7707.7	6898.7	3362.6	483.4	474.9	546.0	600.0	571.5	497.6	558.7	492.0
80°	3971.2	3732.3	1500.0	361.1	375.4	436.5	493.3	456.4	393.8	375.4	342.7
82.5°	910.0	1057.8	591.5	258.8	271.5	314.3	376.8	342.7	282.9	238.8	236.1
85°	318.5	348.4	261.6	162.1	159.3	196.2	255.9	228.9	192.0	153.5	162.1
87.5°	101.0	132.2	98.1	65.4	68.3	88.1	118.0	108.0	89.6	58.3	61.1
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)