

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: P966684

Luminaire Tested: **NAV-SB4C-735-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966684
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30785.9 lumens
Efficiency: N/A
Efficacy: 153.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

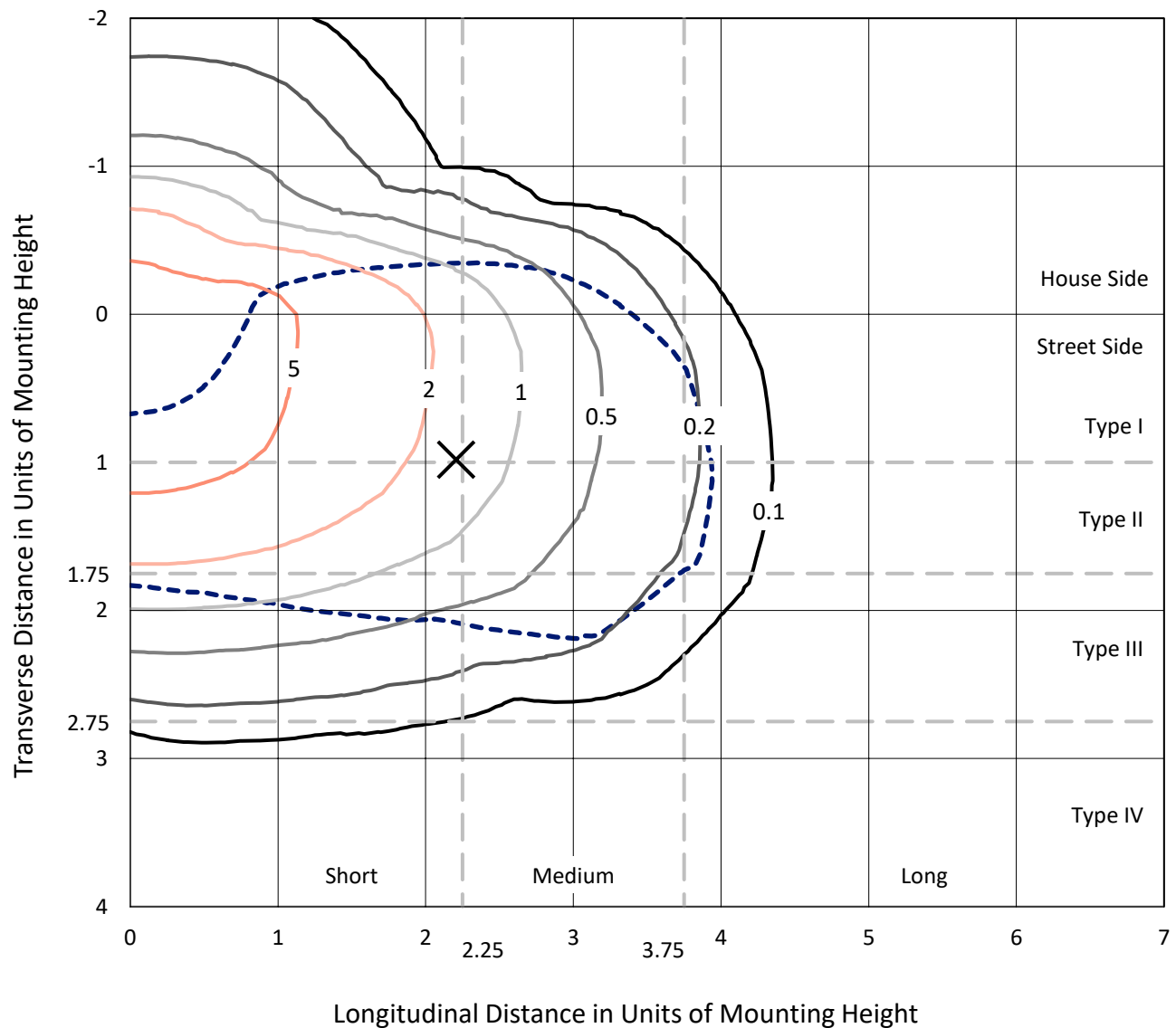
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

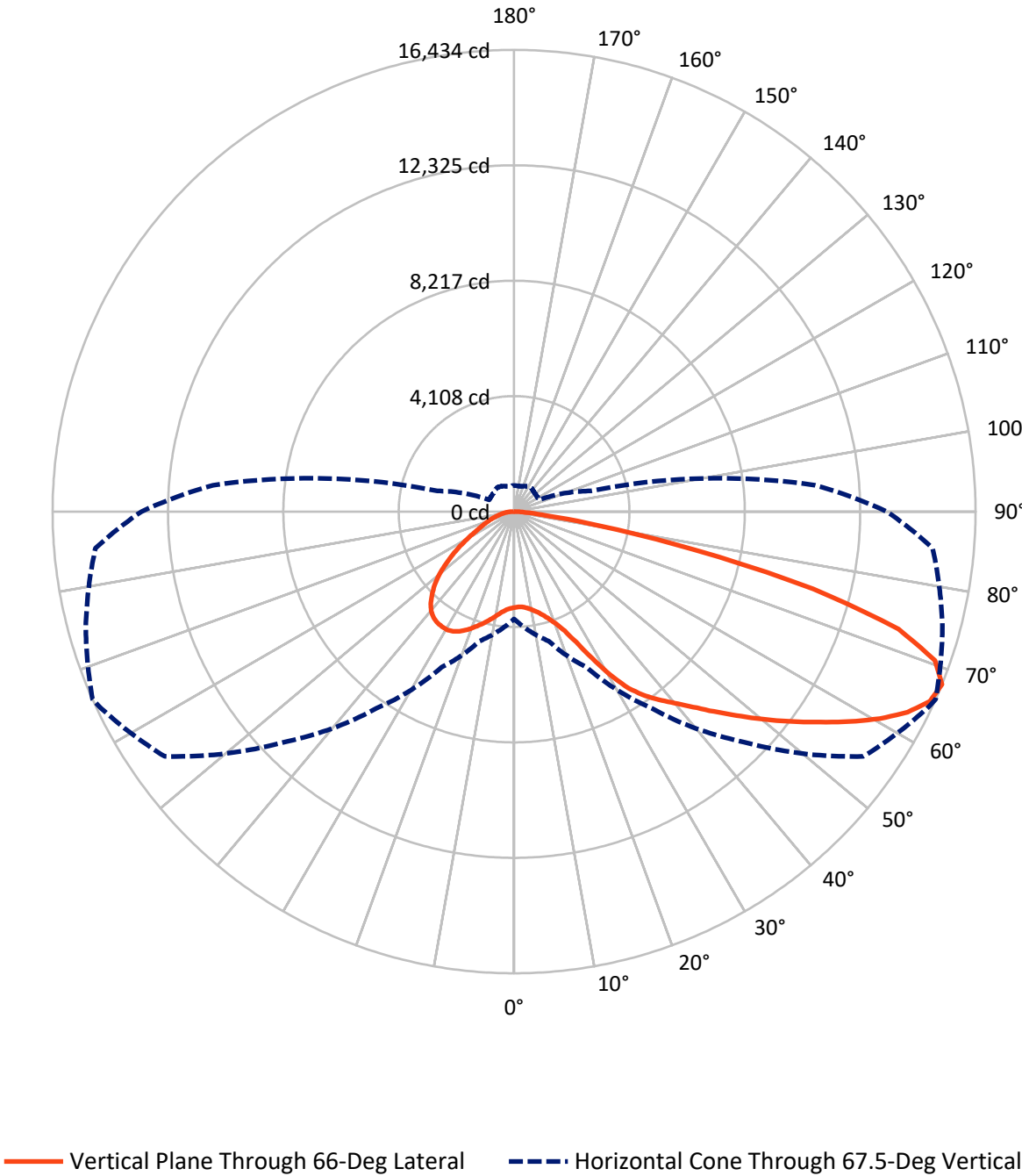
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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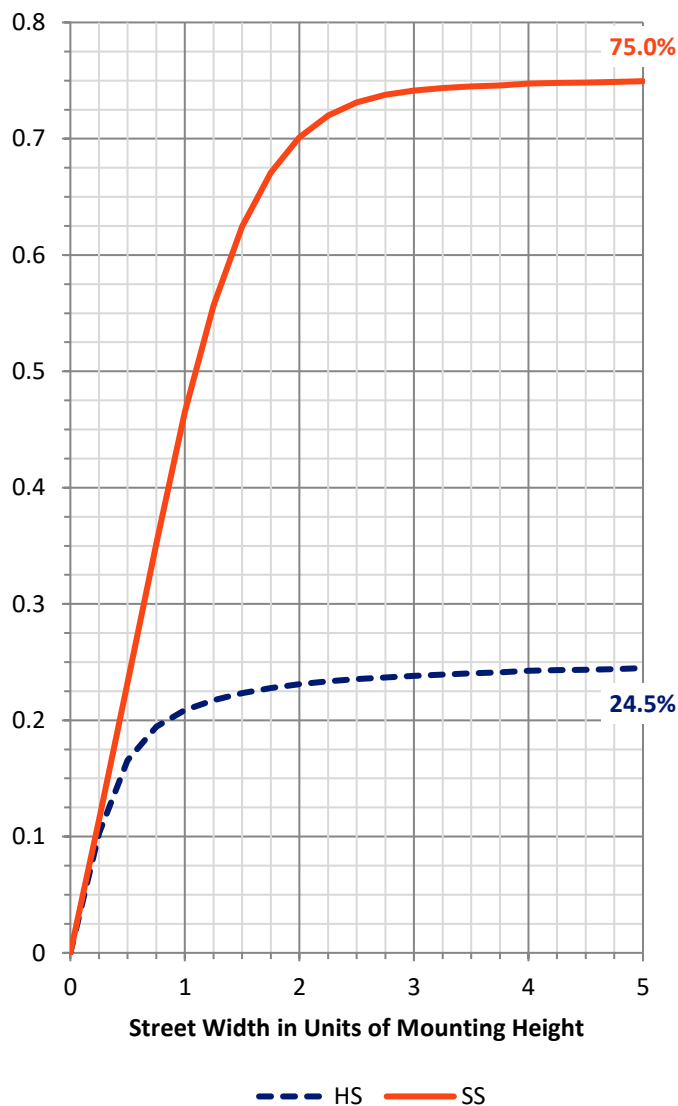
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7654.8	0.0	7654.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	23131.1	0.0	23131.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	30785.9	0.0	30785.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.5	1.1
10°-20°	1118.5	3.6
20°-30°	2155.8	7.0
30°-40°	3780.0	12.3
40°-50°	5619.6	18.3
50°-60°	7123.4	23.1
60°-70°	6970.0	22.6
70°-80°	3324.8	10.8
80°-90°	355.3	1.2
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°	30785.9	100.0
0°-180°	30785.9	100.0

Coefficient of Utilization



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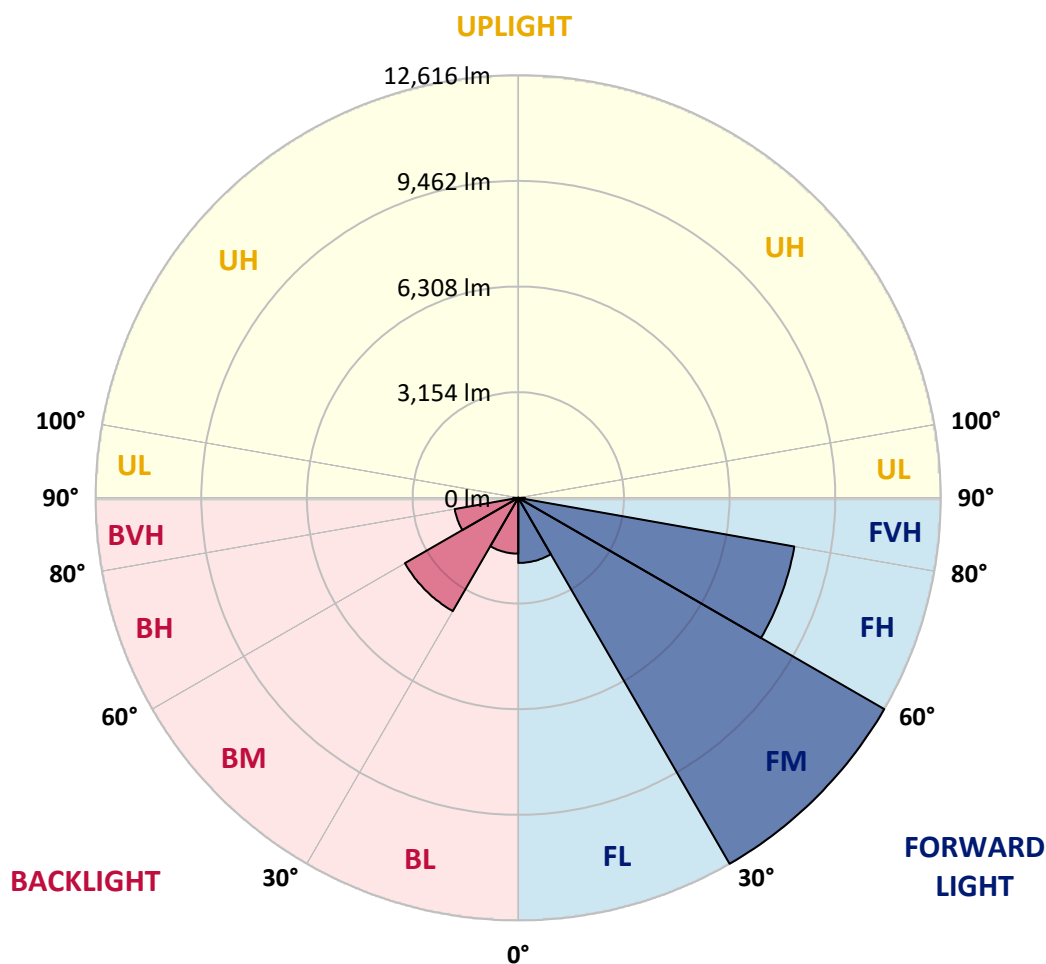
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1945.4	6.3			
FM	(30°-60°)	12615.8	41.0			
FH	(60°-80°)	8368.4	27.2			G4/12000
FVH	(80°-90°)	201.5	0.7			G2/225
BL	(0°-30°)	1667.5	5.4	B3/2500		
BM	(30°-60°)	3907.1	12.7	B3/5000		
BH	(60°-80°)	1926.3	6.3	B3/2500		G3/2500
BVH	(80°-90°)	153.9	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6
2.5°	3379.0	3398.4	3393.6	3385.5	3383.8	3387.1	3391.9	3396.7	3395.1	3403.2	3416.2
5°	3369.3	3388.6	3387.1	3387.1	3393.6	3406.5	3414.6	3422.7	3414.6	3424.2	3442.1
7.5°	3375.7	3390.3	3396.7	3403.2	3419.4	3443.7	3463.1	3480.9	3471.2	3482.5	3505.1
10°	3458.2	3469.5	3476.0	3476.0	3487.4	3514.8	3534.3	3566.6	3558.5	3576.3	3605.4
12.5°	3608.6	3620.0	3620.0	3613.5	3621.6	3639.4	3645.8	3681.5	3666.9	3696.0	3725.2
15°	3793.0	3815.7	3797.9	3786.6	3789.8	3807.6	3806.0	3833.5	3818.9	3843.2	3869.1
17.5°	3996.9	4026.0	3996.9	3995.2	3988.8	4008.2	4009.8	4034.1	4008.2	4026.0	4043.7
20°	4237.9	4278.3	4254.1	4262.2	4247.6	4255.7	4263.8	4299.4	4258.9	4271.8	4267.0
22.5°	4577.5	4626.0	4600.2	4631.0	4621.2	4614.8	4613.1	4676.3	4613.1	4618.0	4571.1
25°	5072.5	5130.7	5085.4	5127.5	5127.5	5148.6	5172.8	5253.6	5148.6	5117.8	4996.5
27.5°	5803.7	5861.9	5772.9	5798.7	5790.6	5842.4	5816.6	6017.2	5903.9	5853.8	5609.5
30°	6683.5	6787.0	6618.8	6612.4	6604.3	6686.8	6724.0	6856.6	6741.7	6691.6	6397.2
32.5°	7634.6	7743.1	7542.5	7484.2	7453.5	7503.6	7472.9	7579.7	7500.4	7422.7	7058.8
35°	8640.8	8747.5	8556.6	8443.4	8320.4	8215.4	8105.3	8132.9	8058.4	7940.4	7563.5
37.5°	9591.8	9787.5	9585.4	9464.0	9237.6	9032.2	8724.8	8597.1	8527.5	8419.1	8039.0
40°	10560.7	10672.3	10518.7	10415.1	10169.2	9847.4	9355.7	9085.5	8991.7	8886.5	8564.7
42.5°	11274.1	11380.8	11298.3	11227.1	11034.6	10661.0	10025.3	9687.3	9551.4	9433.3	9159.9
45°	11840.2	11919.4	11867.7	11893.6	11811.1	11448.7	10719.2	10332.6	10191.9	10048.0	9832.8
47.5°	12068.2	12152.3	12234.8	12388.5	12529.2	12262.4	11464.9	11031.4	10882.6	10735.4	10523.5
50°	12042.3	12128.1	12367.4	12694.2	13131.0	13042.0	12251.0	11775.5	11638.0	11469.7	11274.1
52.5°	11835.3	11932.3	12239.7	12783.2	13478.6	13625.9	13051.6	12543.7	12414.4	12213.8	12018.1
55°	11291.8	11350.0	11811.1	12581.0	13561.2	14033.5	13836.2	13362.2	13232.9	12953.0	12739.5
57.5°	10284.1	10368.2	11039.5	12035.9	13354.1	14310.1	14525.3	14222.8	14098.2	13695.4	13472.2
60°	8969.1	9103.3	9871.7	11120.3	12826.8	14308.5	15151.2	15068.7	14965.2	14426.6	14193.7
62.5°	7481.0	7636.2	8375.5	9826.4	11904.9	13902.5	15542.7	15777.2	15723.8	15101.0	14803.5
65°	5745.4	5852.1	6588.1	8152.2	10470.2	13030.6	15587.9	16260.8	16270.5	15613.8	15122.1
67.5°	3825.4	4132.7	4771.7	6117.4	8548.5	11605.7	15190.0	16340.0	16433.9	15790.1	14961.9
70°	1866.6	2271.0	2897.0	3975.9	6117.4	9420.4	14149.9	15689.9	15898.5	15275.8	14007.6
72.5°	774.8	905.8	1247.1	1962.1	3511.6	6356.8	12060.2	13926.8	14313.3	13535.3	11777.0
75°	522.4	566.1	713.3	1006.1	1599.7	3134.8	8697.3	10384.4	11007.2	10222.6	8356.0
77.5°	402.7	430.3	519.3	703.7	951.1	1185.6	4655.1	6258.1	6580.0	6091.6	4347.8
80°	317.0	338.0	388.2	512.7	674.4	634.1	1586.8	2835.5	3021.5	2534.6	1397.5
82.5°	275.0	283.1	278.2	347.8	448.0	370.4	520.8	1046.5	1154.9	837.8	456.1
85°	199.0	221.6	231.3	215.1	237.8	187.7	213.5	370.4	407.6	364.0	257.2
87.5°	80.9	119.7	147.2	139.1	87.3	53.4	66.3	108.3	124.5	135.9	84.2
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°	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6	3414.6
2.5°	3417.8	3429.1	3437.2	3446.9	3453.4	3463.1	3482.5	3493.8	3495.5	3503.6	3501.9
5°	3448.5	3464.7	3482.5	3508.4	3537.5	3561.8	3599.0	3624.8	3634.5	3642.6	3641.0
7.5°	3514.8	3537.5	3569.9	3615.2	3657.2	3689.5	3734.8	3765.5	3796.3	3807.6	3809.2
10°	3613.5	3645.8	3692.8	3754.3	3799.6	3841.6	3888.4	3914.4	3945.1	3958.0	3964.5
12.5°	3736.4	3770.5	3831.9	3917.7	3959.7	3988.8	4005.0	3998.5	4005.0	4016.3	4019.5
15°	3877.2	3914.4	3984.0	4076.1	4105.2	4079.4	4043.7	4011.4	4006.5	4009.8	4021.1
17.5°	4043.7	4071.3	4152.2	4229.8	4208.8	4102.0	4024.4	3972.6	3946.8	3938.7	3949.9
20°	4276.7	4276.7	4343.0	4391.5	4250.8	4069.7	3948.3	3864.2	3810.8	3788.2	3783.4
22.5°	4559.7	4533.9	4575.9	4542.0	4242.7	3979.0	3810.8	3665.3	3584.4	3552.0	3547.2
25°	4918.9	4888.1	4876.7	4666.5	4184.5	3835.1	3561.8	3385.5	3314.2	3296.5	3299.7
27.5°	5460.7	5383.1	5235.9	4734.5	4077.8	3608.6	3270.6	3107.2	3066.8	3068.4	3073.3
30°	6182.1	6026.8	5666.1	4745.8	3903.1	3288.4	2973.0	2856.5	2837.1	2845.2	2872.7
32.5°	6850.2	6703.0	6106.1	4694.0	3634.5	2974.5	2706.1	2628.4	2599.3	2609.0	2622.0
35°	7374.3	7333.8	6513.7	4621.2	3304.6	2680.2	2466.7	2400.3	2343.8	2330.8	2340.5
37.5°	7869.1	7853.0	6819.4	4519.3	2977.8	2471.6	2274.2	2186.8	2104.4	2059.1	2060.7
40°	8412.7	8396.5	7020.0	4362.4	2688.3	2290.4	2101.1	1986.3	1884.4	1802.0	1809.9
42.5°	9024.1	8928.7	7115.4	4137.6	2442.5	2136.7	1960.4	1805.1	1670.9	1594.9	1599.7
45°	9692.1	9476.9	7113.8	3851.3	2235.4	1996.0	1809.9	1590.0	1465.4	1394.3	1391.0
47.5°	10400.6	10001.0	7026.5	3534.3	2034.8	1840.7	1577.1	1408.9	1326.4	1282.7	1272.9
50°	11131.7	10491.2	6877.6	3170.3	1829.4	1664.4	1431.5	1316.6	1253.6	1213.1	1198.5
52.5°	11819.2	10935.9	6698.1	2757.9	1620.7	1492.9	1366.8	1277.9	1211.6	1166.2	1146.8
55°	12458.1	11319.3	6444.2	2335.7	1450.9	1378.1	1336.1	1261.7	1185.6	1132.2	1111.2
57.5°	13025.8	11568.5	6005.8	1939.4	1329.6	1298.9	1303.7	1234.2	1146.8	1101.6	1072.5
60°	13498.1	11751.2	5357.2	1572.2	1230.9	1221.2	1253.6	1182.4	1080.5	1028.7	1006.1
62.5°	13781.1	11747.9	4561.4	1287.5	1146.8	1150.0	1187.3	1117.7	1014.1	965.7	951.1
65°	13756.9	11460.0	3688.0	1101.6	1065.9	1069.2	1117.7	1046.5	959.2	930.1	928.4
67.5°	13270.1	10758.1	2829.0	980.2	976.9	991.5	1048.2	998.0	925.2	922.0	926.8
70°	11951.8	9300.6	2038.1	883.1	884.8	905.8	980.2	967.3	907.4	913.9	912.2
72.5°	9583.8	7091.2	1368.4	781.3	782.9	816.8	915.5	943.0	889.6	975.4	988.3
75°	6382.7	4422.3	880.0	672.9	674.4	718.2	858.8	896.1	841.1	972.1	980.2
77.5°	3066.8	1987.9	637.3	566.1	566.1	606.6	742.4	802.3	716.6	755.4	692.3
80°	1059.4	747.3	501.4	456.1	446.4	474.0	626.0	695.6	617.9	569.4	533.8
82.5°	417.3	388.2	402.7	354.2	321.8	339.7	486.9	574.2	454.5	410.8	409.2
85°	239.4	252.4	284.6	234.5	186.0	208.7	357.5	412.5	342.9	302.5	308.9
87.5°	64.7	89.0	131.0	121.4	84.2	89.0	169.8	228.1	197.3	152.0	156.9
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)