

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: P970519

Luminaire Tested: **NAV-SB6B-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22965.1 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 220.4
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

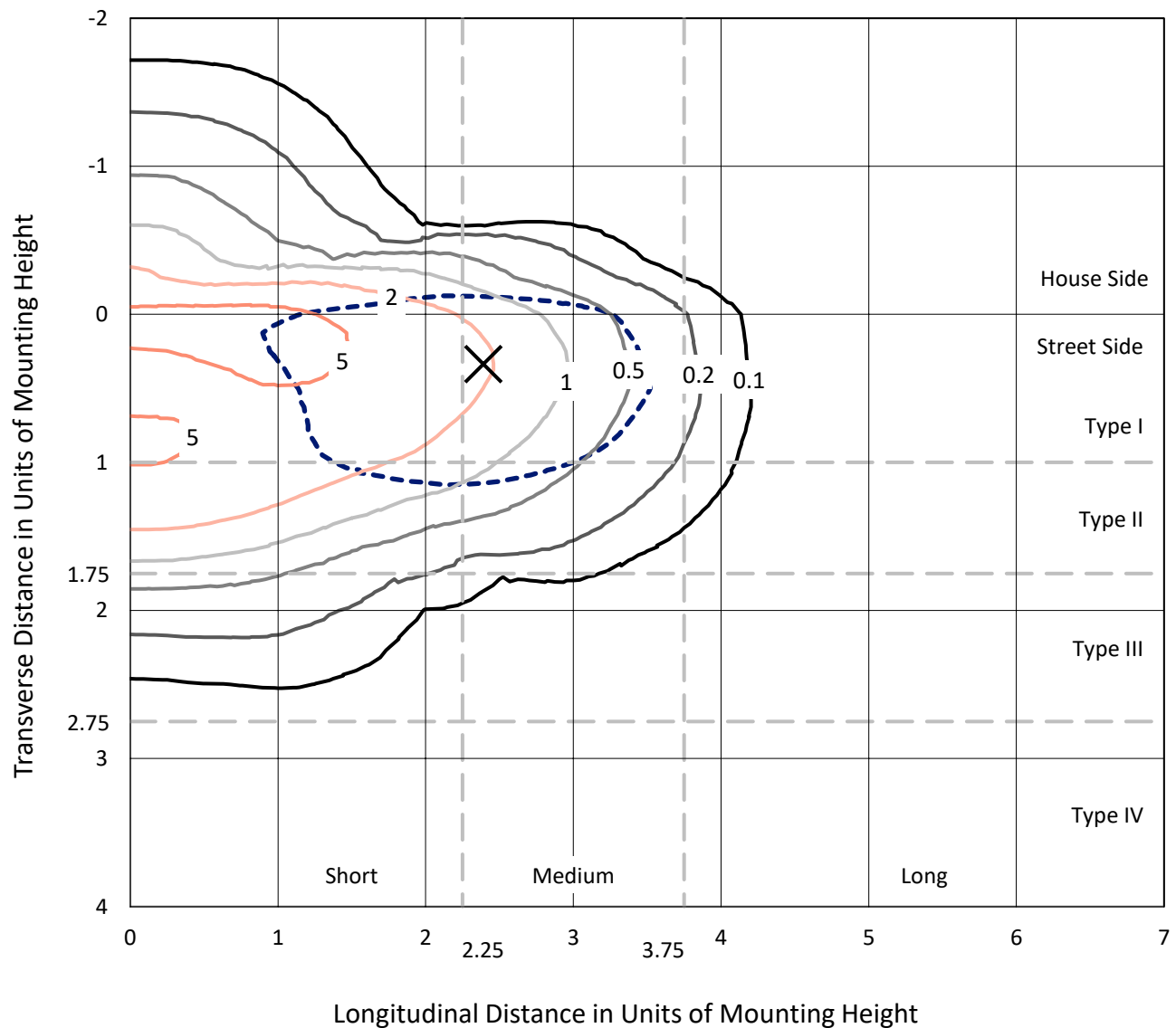


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Iso-Footcandle Lines of Horizontal Illumination

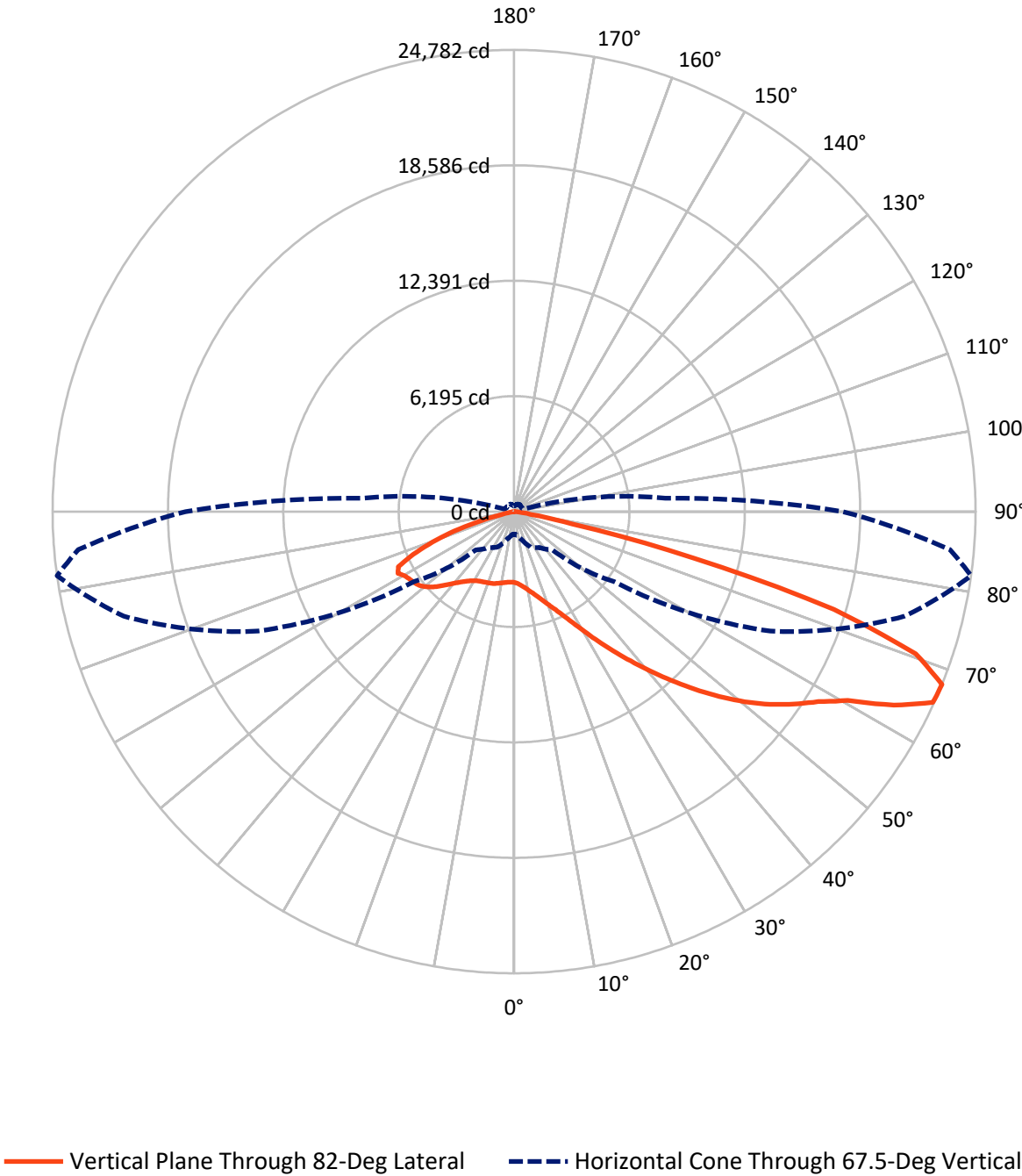
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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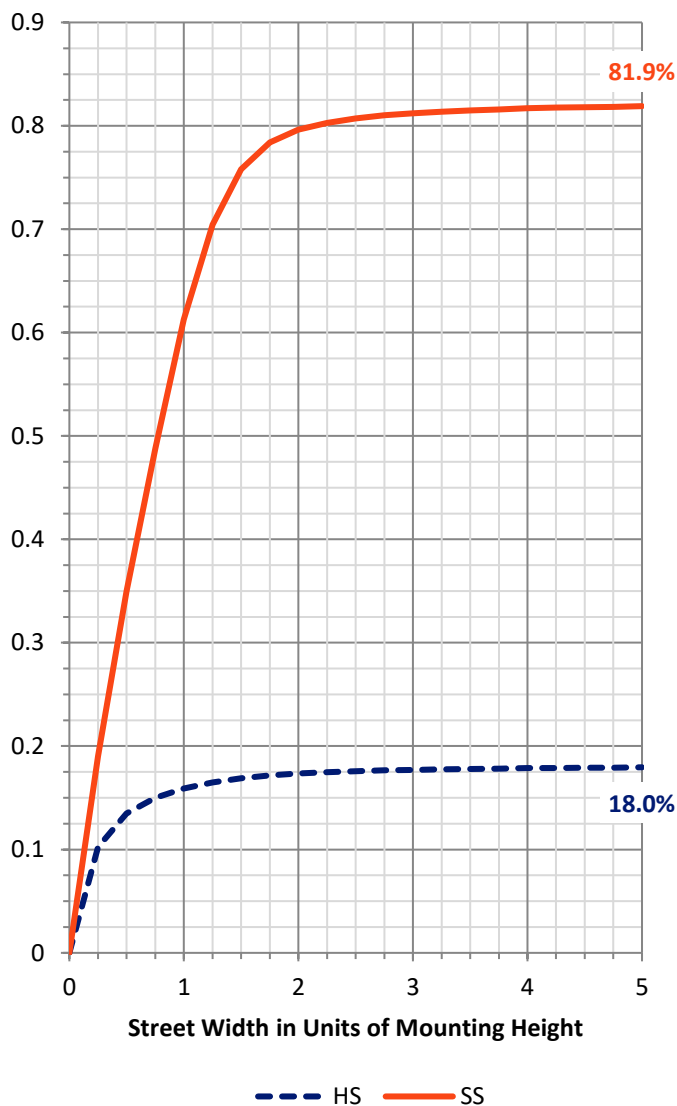
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4159.9	0.0	4159.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18805.2	0.0	18805.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	22965.1	0.0	22965.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.0	1.5
10°-20°	880.8	3.8
20°-30°	1410.8	6.1
30°-40°	2494.7	10.9
40°-50°	4370.9	19.0
50°-60°	5829.6	25.4
60°-70°	5427.1	23.6
70°-80°	2082.9	9.1
80°-90°	129.4	0.6
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°	22965.1	100.0
0°-180°	22965.1	100.0

Coefficient of Utilization



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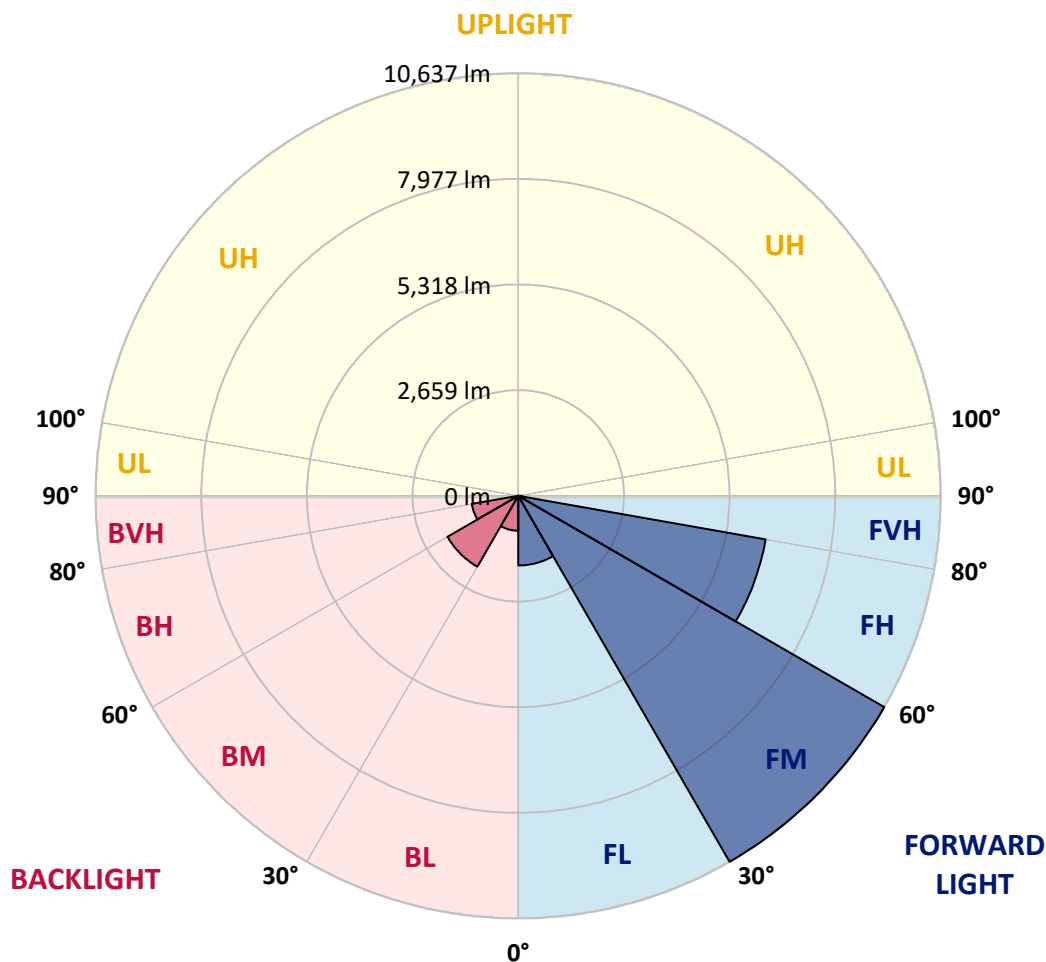
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1752.0	7.6			
FM	(30°-60°)	10636.5	46.3			
FH	(60°-80°)	6322.6	27.5			G3/7500
FVH	(80°-90°)	94.1	0.4			G1/100
BL	(0°-30°)	878.6	3.8	B2/1000		
BM	(30°-60°)	2058.7	9.0	B2/2500		
BH	(60°-80°)	1187.3	5.2	B3/2500		G3/2500
BVH	(80°-90°)	35.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6
2.5°	4021.2	4044.3	4031.0	4024.5	4012.9	3996.4	3983.2	3941.7	3898.8	3870.7	3860.8
5°	4102.2	4125.3	4123.7	4130.2	4138.5	4143.5	4140.2	4093.8	4032.8	3984.8	3956.7
7.5°	4032.8	4059.2	4080.6	4113.7	4171.6	4232.7	4262.6	4252.6	4189.8	4123.7	4088.9
10°	3836.0	3864.0	3915.3	3993.0	4115.4	4247.7	4358.4	4409.7	4370.0	4297.3	4249.3
12.5°	3475.5	3503.7	3604.5	3773.1	3978.1	4207.9	4419.6	4556.8	4566.8	4494.0	4437.8
15°	3070.4	3098.6	3206.0	3417.7	3730.2	4098.9	4452.7	4712.2	4799.9	4737.0	4669.3
17.5°	2819.1	2843.9	2924.9	3095.2	3420.9	3880.6	4441.1	4877.7	5077.6	5028.0	4947.1
20°	2743.0	2764.5	2802.6	2921.7	3192.8	3654.1	4365.1	5033.1	5376.9	5348.9	5257.9
22.5°	2824.1	2843.9	2855.4	2908.3	3078.7	3505.3	4269.1	5191.7	5724.2	5727.5	5616.7
25°	3010.9	3030.7	3017.5	3050.6	3125.0	3459.0	4232.7	5378.6	6160.7	6197.0	6071.4
27.5°	3318.4	3320.1	3288.7	3287.0	3298.6	3528.5	4270.8	5578.7	6711.3	6779.0	6623.7
30°	3935.2	3910.4	3789.6	3659.0	3599.5	3736.7	4376.6	5815.1	7361.0	7481.8	7286.6
32.5°	4885.9	4849.5	4628.0	4315.5	4001.3	4072.4	4566.8	6084.6	8068.7	8287.0	8048.9
35°	5917.6	5907.7	5676.2	5211.6	4662.7	4550.3	4875.9	6438.4	8840.9	9188.1	8905.4
37.5°	6876.6	6871.7	6739.4	6192.1	5524.1	5216.5	5372.0	6901.4	9667.6	10170.3	9836.3
40°	7752.9	7767.9	7635.5	7146.1	6473.2	6071.4	6046.6	7473.5	10586.9	11240.0	10843.2
42.5°	8510.2	8526.8	8392.8	8030.7	7410.6	7017.2	6875.0	8174.6	11484.7	12389.2	11919.6
45°	9024.4	9126.9	9107.1	8817.8	8373.0	7964.6	7870.4	9054.2	12508.2	13607.7	13057.2
47.5°	9170.0	9264.2	9413.0	9452.7	9181.5	8779.7	8892.2	10114.1	13543.2	14828.0	14201.3
50°	8811.1	8898.7	9208.0	9619.6	9808.1	9684.1	9885.8	11250.0	14603.1	16044.9	15324.0
52.5°	8103.4	8192.7	8582.9	9234.4	10003.3	10393.5	10882.8	12369.3	15629.9	17197.3	16387.2
55°	7080.0	7174.3	7675.2	8412.7	9631.2	10686.1	11714.5	13487.1	16570.7	18234.0	17346.2
57.5°	5687.8	5757.2	6278.1	7309.8	8695.4	10395.1	12328.0	14707.3	17456.9	19252.6	18296.9
60°	3707.0	3768.2	4373.4	5524.1	7144.5	9422.9	12450.4	16068.0	18634.2	20577.0	19578.3
62.5°	2465.2	2506.6	2865.4	3710.3	5031.4	7556.2	11734.4	17154.3	20360.4	22881.8	21775.7
65°	1691.5	1732.8	2091.6	2680.2	3250.7	4998.3	9675.9	17010.5	21924.4	24712.1	23404.3
67.5°	1207.0	1241.7	1546.0	2101.6	2352.8	2903.4	6559.2	15171.8	21699.7	24781.6	23492.0
70°	864.8	884.6	1135.9	1636.9	1870.0	1744.3	3647.5	11603.8	18999.6	22883.4	21702.9
72.5°	605.2	611.7	788.7	1246.7	1506.2	1273.2	1736.1	7736.4	14370.0	17961.2	16825.3
75°	410.0	418.3	530.7	914.3	1208.7	972.2	919.3	4148.5	8435.9	9942.1	8912.0
77.5°	251.3	254.6	342.2	625.0	904.5	740.8	591.9	1757.6	3263.9	3204.4	2731.4
80°	142.2	142.2	218.2	388.6	616.7	477.9	415.0	747.3	1033.4	907.7	800.2
82.5°	79.3	81.0	158.8	241.4	408.4	282.7	228.2	345.5	446.4	395.1	343.9
85°	33.1	36.4	97.6	114.1	195.1	140.5	92.6	145.5	165.3	147.2	107.5
87.5°	3.3	4.9	29.7	21.5	23.2	28.1	13.2	28.1	23.2	23.2	16.5
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°	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6	3804.6
2.5°	3829.3	3804.6	3741.8	3669.0	3573.0	3526.7	3464.0	3420.9	3384.6	3387.8	3354.8
5°	3903.7	3840.9	3700.4	3525.1	3306.9	3151.5	2986.1	2872.0	2779.4	2759.6	2714.9
7.5°	4006.2	3907.1	3660.7	3344.9	2976.2	2696.8	2447.1	2286.7	2172.6	2136.2	2099.8
10°	4138.5	3994.7	3609.4	3118.4	2587.6	2232.1	1964.3	1838.6	1761.0	1734.4	1714.6
12.5°	4292.3	4095.6	3541.7	2842.2	2187.5	1845.2	1675.0	1612.1	1587.3	1579.0	1574.1
15°	4485.7	4221.3	3439.2	2514.8	1848.5	1608.7	1536.1	1527.8	1531.0	1527.8	1526.1
17.5°	4715.6	4358.4	3272.1	2177.6	1620.3	1488.1	1461.6	1468.2	1476.5	1474.9	1471.6
20°	4966.9	4494.0	3058.8	1878.3	1464.9	1402.1	1387.2	1393.8	1400.5	1397.2	1395.5
22.5°	5252.9	4639.6	2822.4	1645.1	1360.8	1322.8	1306.3	1307.9	1307.9	1301.2	1298.0
25°	5595.2	4799.9	2574.4	1479.8	1281.5	1251.6	1231.8	1225.2	1215.2	1195.5	1192.1
27.5°	6003.6	4970.2	2336.3	1364.1	1218.6	1190.4	1167.4	1150.8	1126.0	1093.0	1089.6
30°	6463.2	5176.9	2134.6	1291.3	1169.0	1140.8	1114.4	1089.6	1053.2	1011.9	1008.6
32.5°	7003.9	5398.5	1987.4	1243.4	1124.3	1094.6	1063.1	1033.4	993.7	952.3	954.1
35°	7648.8	5666.3	1901.5	1210.3	1089.6	1049.9	1015.2	982.2	952.3	916.0	912.7
37.5°	8348.2	5950.7	1875.0	1193.8	1066.5	1005.3	965.7	942.5	939.1	917.7	916.0
40°	9113.7	6288.0	1894.8	1183.9	1041.7	962.3	919.3	914.3	922.6	884.6	886.2
42.5°	9923.8	6688.1	1927.9	1172.3	1007.0	919.3	878.0	878.0	871.4	818.5	818.5
45°	10800.2	7149.5	1960.9	1144.2	965.7	876.3	844.9	833.3	805.2	754.0	752.3
47.5°	11683.2	7619.0	1985.7	1093.0	916.0	840.0	811.8	785.4	744.0	697.7	696.1
50°	12521.4	8040.6	1959.3	1016.9	859.8	805.2	775.4	739.1	694.4	663.1	658.0
52.5°	13270.5	8406.0	1846.8	927.6	800.2	768.9	742.4	704.4	668.0	634.9	631.6
55°	13921.9	8702.0	1648.5	843.3	747.3	737.4	710.9	663.1	613.5	585.3	582.0
57.5°	14546.9	8926.8	1400.5	773.8	699.4	702.7	663.1	620.0	573.7	544.0	540.7
60°	15378.6	9227.8	1149.1	709.3	648.1	658.0	615.1	583.6	525.8	487.8	482.8
62.5°	16707.9	9695.7	912.7	630.0	588.7	591.9	573.7	535.7	466.3	421.6	418.3
65°	17762.8	9523.8	719.2	544.0	520.8	525.8	525.8	484.4	410.0	358.7	353.8
67.5°	17643.7	8154.7	573.7	459.6	456.3	459.6	471.2	436.5	363.8	322.5	315.8
70°	16253.2	6486.4	459.6	381.9	396.8	388.6	421.6	398.5	327.4	286.1	281.1
72.5°	13262.2	4672.6	350.5	315.8	304.2	317.4	380.3	358.7	272.9	226.5	221.6
75°	7749.6	2493.4	261.3	249.7	219.9	264.6	337.3	305.9	208.4	167.0	162.1
77.5°	2523.1	869.7	191.8	183.6	163.7	213.3	287.7	257.9	170.3	132.2	127.3
80°	676.3	262.9	130.6	120.7	105.8	158.8	228.2	205.0	122.4	86.0	84.4
82.5°	271.1	110.8	76.1	67.8	57.9	109.2	180.2	165.3	90.9	54.5	54.5
85°	87.6	36.4	28.1	21.5	26.4	67.8	107.5	112.4	64.5	28.1	21.5
87.5°	11.6	4.9	4.9	6.7	4.9	11.6	33.1	31.4	18.1	3.3	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)