

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: P197190

Luminaire Tested: **NAV-AF-06-D-UNV-SLR-8030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197190  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24264)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-06-D-UNV-SLR-8030-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17105 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 193  
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: 25 FT

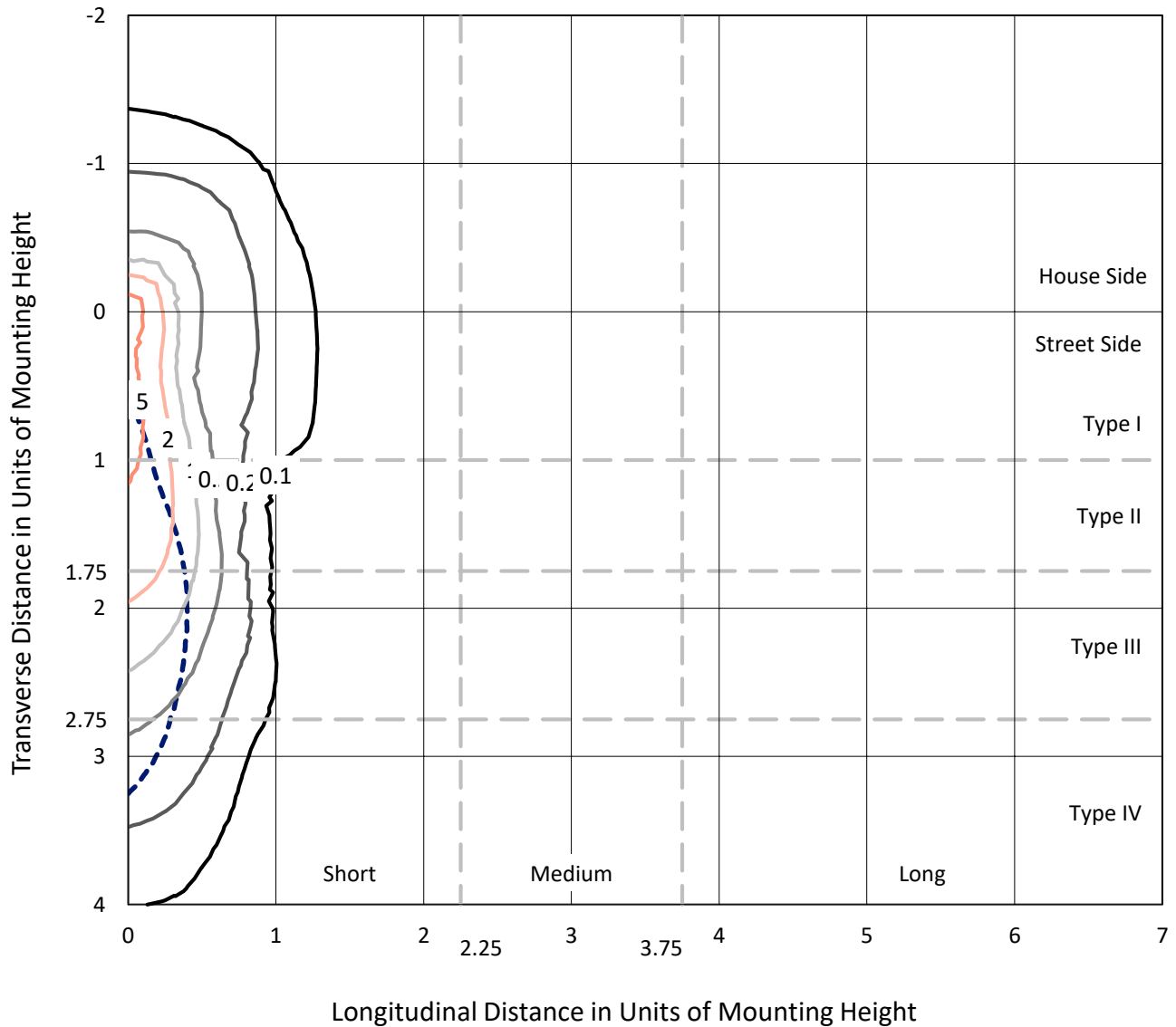


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### Iso-Footcandle Lines of Horizontal Illumination

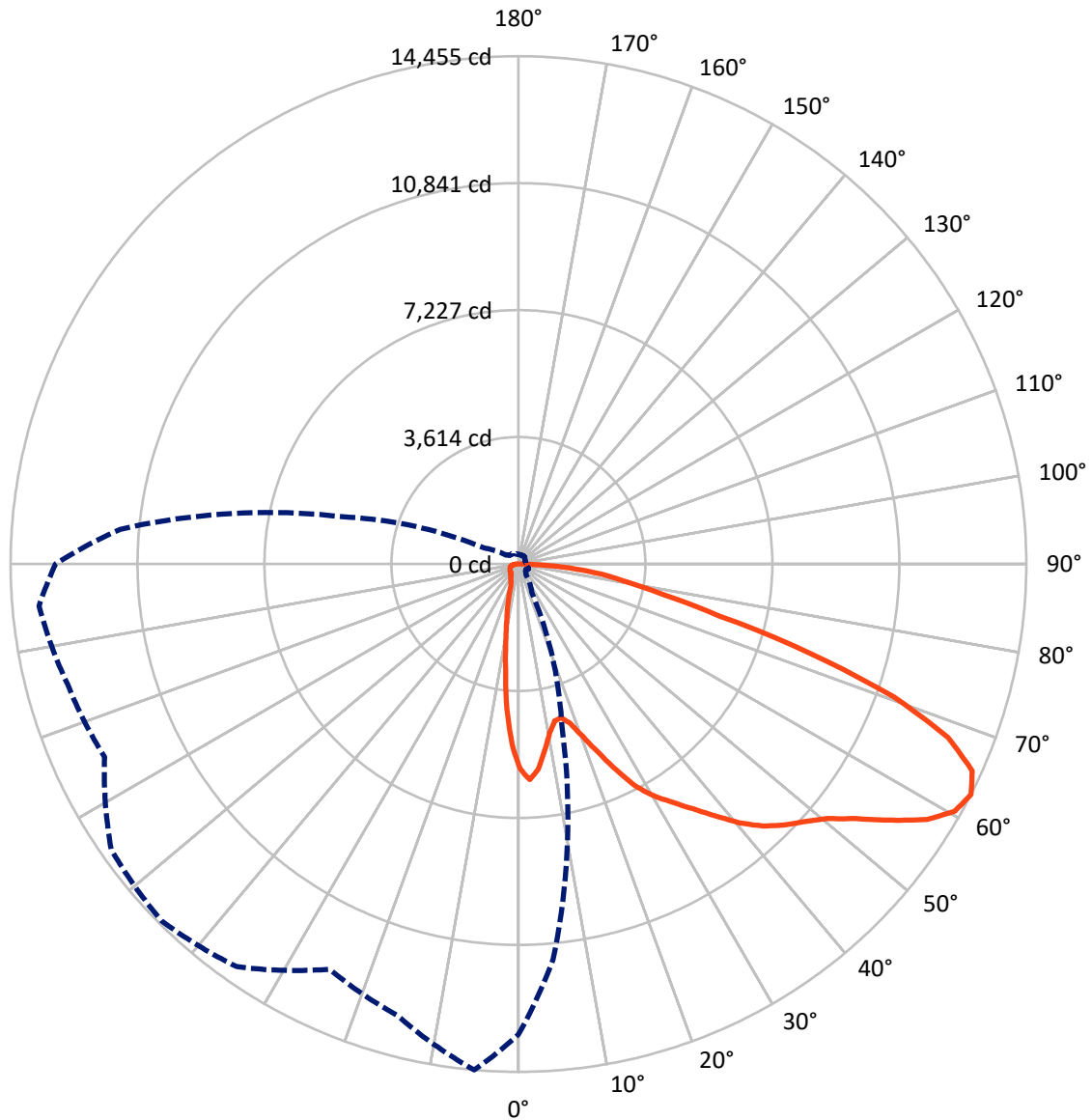
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3030.2	0.0	3030.2
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	14074.8	0.0	14074.8
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	17105.0	0.0	17105.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	424.1	2.5
10°-20°	774.6	4.5
20°-30°	1114.1	6.5
30°-40°	1706.3	10.0
40°-50°	2494.7	14.6
50°-60°	3629.8	21.2
60°-70°	4205.6	24.6
70°-80°	2192.3	12.8
80°-90°	563.5	3.3
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°	17105.0	100.0
0°-180°	17105.0	100.0



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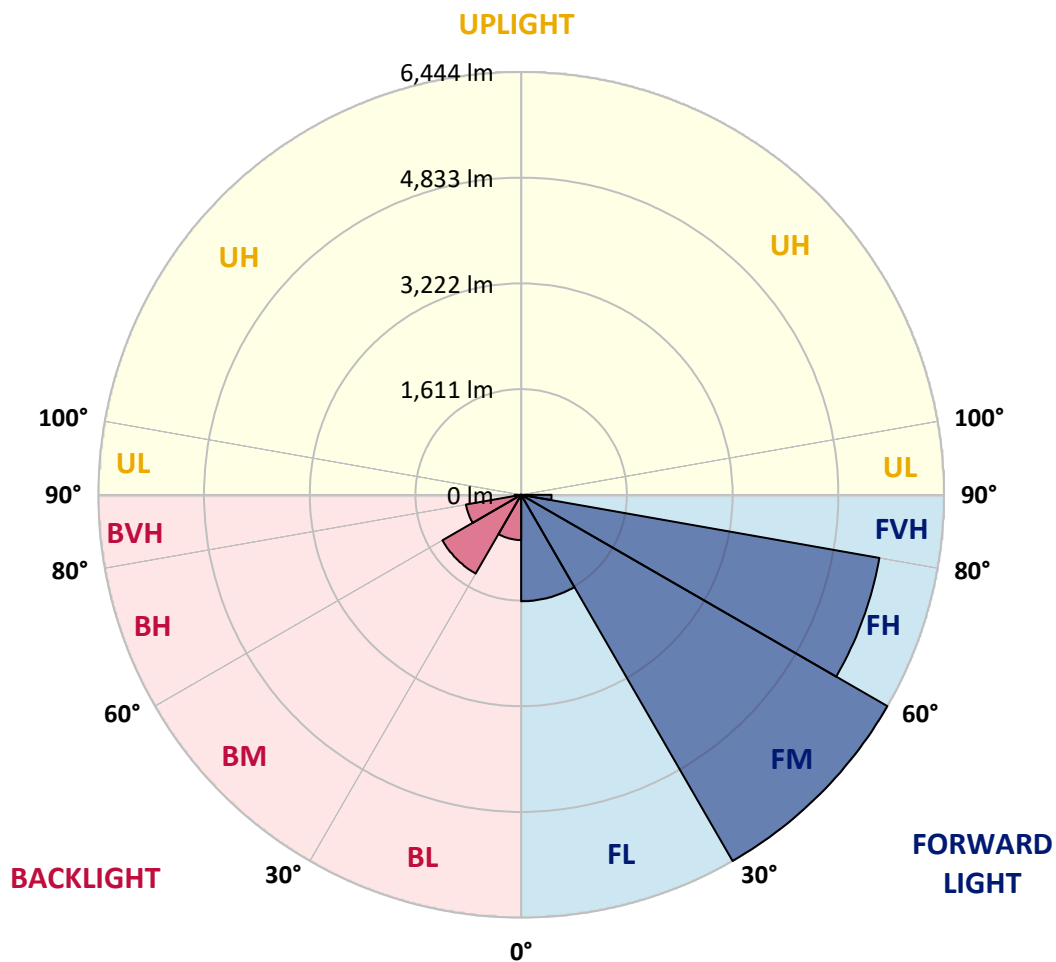
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1623.3	9.5			
FM	(30°-60°)	6444.4	37.7			
FH	(60°-80°)	5543.5	32.4			G3/7500
FVH	(80°-90°)	463.6	2.7			G3/500
BL	(0°-30°)	689.4	4.0	B2/1000		
BM	(30°-60°)	1386.4	8.1	B2/2500		
BH	(60°-80°)	854.4	5.0	B2/1000		G2/1000
BVH	(80°-90°)	99.9	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4
2.5°	6019.9	5935.6	5740.9	5569.8	5356.4	5196.5	5001.7	4898.8	4823.2	4772.3	4731.4
5°	5623.1	5419.7	5047.6	4721.5	4369.2	4115.0	3817.3	3654.9	3554.4	3499.9	3475.0
7.5°	5034.0	4764.9	4283.7	3845.9	3405.6	3088.1	2862.4	2621.8	2494.0	2411.0	2383.7
10°	4519.3	4215.5	3641.2	3148.9	2809.1	2583.3	2389.9	2169.1	2005.4	1862.8	1809.5
12.5°	4220.4	3867.0	3212.1	2766.9	2481.6	2239.8	2035.2	1797.1	1624.7	1475.8	1418.8
15°	4157.2	3762.8	3032.3	2523.8	2174.1	1882.6	1637.1	1377.9	1209.2	1086.4	1046.7
17.5°	4348.2	3862.0	2956.6	2301.8	1880.1	1524.2	1221.6	943.8	803.7	736.7	720.6
20°	4741.3	4080.3	2920.7	2102.1	1594.9	1173.2	844.6	641.2	571.7	551.9	550.7
22.5°	5258.5	4435.0	2960.4	1938.4	1327.0	865.7	618.9	527.1	498.6	487.4	487.4
25°	5842.6	4914.9	3065.8	1813.2	1091.4	673.4	533.3	483.7	460.1	449.0	450.2
27.5°	6557.0	5499.1	3209.6	1697.8	922.7	590.3	498.6	456.4	432.8	421.7	422.9
30°	7095.2	6001.3	3333.7	1592.4	835.9	556.9	480.0	440.3	414.2	398.1	396.9
32.5°	7598.7	6444.1	3434.1	1516.8	786.3	497.3	434.1	404.3	382.0	363.4	359.7
35°	8155.6	6860.8	3481.3	1514.3	754.0	449.0	396.9	360.9	338.6	317.5	313.8
37.5°	8786.8	7370.5	3520.9	1529.2	736.7	417.9	379.5	344.8	326.2	305.1	300.1
40°	9444.1	7869.1	3551.9	1541.6	734.2	396.9	365.9	334.9	316.3	293.9	289.0
42.5°	10008.4	8310.6	3594.1	1536.6	716.8	393.1	357.2	326.2	308.8	286.5	280.3
45°	10459.9	8661.6	3659.8	1535.4	690.8	401.8	354.7	323.7	302.6	279.0	274.1
47.5°	10880.3	9057.2	3798.7	1530.4	662.3	399.3	368.3	321.2	300.1	276.6	272.8
50°	11361.5	9589.3	4035.6	1493.2	622.6	382.0	393.1	318.7	293.9	272.8	269.1
52.5°	12031.2	10368.1	4386.6	1426.2	568.0	363.4	396.9	317.5	284.0	265.4	260.4
55°	12818.7	11202.8	4764.9	1329.5	496.1	331.1	377.0	312.5	274.1	254.2	246.8
57.5°	13427.7	11819.1	5029.0	1190.6	425.4	312.5	336.1	301.4	261.7	241.8	235.6
60°	13598.8	11846.4	5076.2	1024.4	389.4	300.1	289.0	328.7	251.8	230.7	224.5
62.5°	13394.2	11304.5	4768.6	907.8	377.0	287.7	262.9	313.8	241.8	220.8	214.6
65°	12787.7	10389.2	4080.3	890.5	389.4	276.6	249.3	250.5	231.9	210.8	204.6
67.5°	11371.4	9042.3	3214.6	901.6	404.3	265.4	239.4	228.2	220.8	202.2	194.7
70°	9248.2	7280.0	2532.5	921.5	417.9	250.5	227.0	213.3	207.1	187.3	183.6
72.5°	7123.7	5826.5	1998.0	907.8	431.6	235.6	209.6	198.4	191.0	172.4	168.7
75°	5058.8	4629.7	1468.4	778.8	395.6	214.6	189.8	179.8	173.6	153.8	152.5
77.5°	3646.2	3467.6	1021.9	585.4	312.5	188.5	167.4	158.7	155.0	132.7	132.7
80°	2908.3	2639.2	611.4	382.0	228.2	156.3	140.1	136.4	132.7	110.4	111.6
82.5°	2089.7	1830.5	390.7	238.1	167.4	119.1	109.1	107.9	101.7	81.9	81.9
85°	1071.5	935.1	250.5	160.0	117.8	76.9	71.9	69.5	65.7	50.8	50.8
87.5°	208.4	286.5	138.9	78.1	57.0	27.3	27.3	23.6	27.3	18.6	19.8
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4
2.5°	4809.5	4784.7	4767.3	4758.7	4883.9	4936.0	4995.5	5081.1	5139.4	5114.6	5194.0
5°	3591.6	3609.0	3648.7	3710.7	3885.6	3968.7	4022.0	4092.7	4143.5	4092.7	4177.0
7.5°	2455.6	2481.6	2566.0	2693.7	2904.6	2997.6	3016.2	3017.4	3006.3	2923.2	2980.2
10°	1808.2	1756.1	1774.7	1866.5	2055.0	2138.1	2146.8	2124.5	2120.7	2087.3	2151.8
12.5°	1401.4	1329.5	1287.3	1302.2	1443.6	1511.8	1523.0	1535.4	1586.2	1602.3	1681.7
15°	1045.5	1008.3	977.3	963.6	1056.7	1110.0	1116.2	1145.9	1199.3	1214.2	1282.4
17.5°	735.4	745.4	761.5	767.7	834.7	869.4	859.5	859.5	868.1	864.4	902.9
20°	561.8	581.7	612.7	642.4	703.2	723.0	698.2	667.2	647.4	637.5	646.1
22.5°	496.1	509.7	529.6	568.0	618.9	628.8	596.5	571.7	553.1	543.2	544.4
25°	460.1	473.8	489.9	520.9	564.3	569.3	539.5	523.4	508.5	498.6	496.1
27.5°	429.1	437.8	447.7	467.6	512.2	514.7	494.8	484.9	475.0	467.6	465.1
30°	400.6	404.3	408.0	427.9	461.4	465.1	455.2	450.2	446.5	441.5	441.5
32.5°	363.4	368.3	374.5	391.9	424.1	429.1	422.9	419.2	413.0	410.5	406.8
35°	318.7	331.1	344.8	365.9	400.6	403.1	395.6	384.5	369.6	365.9	363.4
37.5°	300.1	302.6	320.0	344.8	380.7	383.2	373.3	354.7	343.5	344.8	347.3
40°	287.7	291.4	301.4	326.2	362.1	365.9	357.2	343.5	332.4	333.6	337.3
42.5°	277.8	282.8	289.0	305.1	341.1	348.5	346.0	333.6	322.5	324.9	329.9
45°	272.8	276.6	276.6	287.7	322.5	333.6	334.9	324.9	316.3	318.7	324.9
47.5°	270.4	270.4	266.6	275.3	310.1	321.2	323.7	318.7	313.8	316.3	322.5
50°	266.6	261.7	258.0	265.4	300.1	310.1	312.5	308.8	311.3	316.3	320.0
52.5°	255.5	250.5	250.5	255.5	290.2	300.1	301.4	298.9	303.8	310.1	316.3
55°	241.8	241.8	243.1	248.0	285.2	292.7	291.4	289.0	293.9	301.4	307.6
57.5°	229.4	228.2	234.4	240.6	279.0	284.0	281.5	281.5	285.2	291.4	297.6
60°	222.0	215.8	220.8	230.7	272.8	277.8	274.1	272.8	279.0	284.0	289.0
62.5°	214.6	208.4	212.1	222.0	264.2	267.9	265.4	265.4	271.6	275.3	280.3
65°	203.4	200.9	203.4	213.3	256.7	258.0	258.0	259.2	264.2	266.6	271.6
67.5°	193.5	193.5	194.7	204.6	250.5	248.0	248.0	254.2	255.5	258.0	262.9
70°	181.1	183.6	183.6	196.0	245.6	236.9	238.1	243.1	245.6	248.0	249.3
72.5°	167.4	168.7	171.1	187.3	238.1	225.7	227.0	230.7	231.9	235.6	236.9
75°	152.5	153.8	157.5	178.6	233.2	214.6	212.1	214.6	217.0	219.5	218.3
77.5°	135.2	137.7	141.4	173.6	217.0	212.1	193.5	196.0	198.4	198.4	197.2
80°	114.1	117.8	124.0	166.2	183.6	204.6	172.4	173.6	174.9	174.9	172.4
82.5°	85.6	93.0	101.7	137.7	143.9	174.9	148.8	151.3	147.6	145.1	143.9
85°	55.8	62.0	74.4	95.5	105.4	137.7	122.8	124.0	116.6	115.3	115.3
87.5°	22.3	23.6	33.5	48.4	63.3	85.6	88.1	90.5	84.3	84.3	86.8
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4
2.5°	5314.3	5438.3	5580.9	5726.0	5845.1	5998.9	6147.7	6306.4	6387.0	6434.2	6566.9
5°	4308.5	4478.4	4680.5	4907.5	5096.0	5418.4	5765.7	6152.6	6338.7	6522.2	6869.5
7.5°	3081.9	3248.1	3483.7	3777.7	4045.5	4470.9	4928.6	5451.9	5709.9	6007.5	6576.8
10°	2288.2	2464.3	2677.6	2926.9	3191.0	3633.8	4147.2	4735.1	5019.1	5355.2	6002.6
12.5°	1855.3	2061.2	2282.0	2505.2	2732.2	3029.8	3568.1	4221.7	4526.7	4865.3	5513.9
15°	1447.3	1668.1	1906.2	2149.3	2375.0	2707.4	3256.8	4029.4	4377.9	4705.3	5236.1
17.5°	1024.4	1232.8	1500.6	1795.8	2123.2	2516.4	3189.8	4113.8	4536.7	4879.0	5234.9
20°	698.2	842.1	1110.0	1459.7	1864.0	2362.6	3214.6	4410.2	4938.5	5314.3	5449.5
22.5°	558.1	626.3	807.4	1163.3	1640.8	2251.0	3316.3	4816.9	5515.2	5972.8	5840.1
25°	507.2	545.7	639.9	919.0	1442.4	2176.6	3514.7	5354.0	6161.3	6625.2	6310.2
27.5°	476.2	509.7	570.5	755.3	1271.2	2128.2	3766.5	5986.5	6889.3	7270.1	6800.0
30°	456.4	489.9	545.7	678.4	1142.2	2056.3	3987.3	6564.4	7471.0	7717.8	7064.2
32.5°	417.9	444.0	489.9	607.7	1045.5	1971.9	4178.2	7081.6	8020.4	8102.2	7381.7
35°	378.3	405.5	451.4	550.7	988.4	1906.2	4278.7	7540.4	8564.8	8486.7	7696.7
37.5°	363.4	385.7	427.9	509.7	957.4	1862.8	4317.1	7991.9	9149.0	8912.1	7916.2
40°	353.5	373.3	410.5	482.4	948.8	1821.9	4308.5	8421.0	9715.8	9352.4	8088.6
42.5°	346.0	363.4	398.1	463.8	925.2	1783.4	4279.9	8791.8	10169.7	9731.9	8253.6
45°	339.8	358.4	393.1	473.8	881.8	1741.2	4262.6	9130.4	10518.2	10051.8	8474.3
47.5°	337.3	358.4	394.4	471.3	834.7	1694.1	4324.6	9506.2	10822.0	10321.0	8768.2
50°	333.6	357.2	421.7	449.0	770.2	1635.8	4534.2	9953.9	11140.7	10623.6	9149.0
52.5°	327.4	355.9	450.2	431.6	687.1	1555.2	4874.0	10586.4	11691.4	11212.7	9712.0
55°	320.0	358.4	430.4	404.3	599.0	1451.0	5213.8	11453.3	12584.3	12162.7	10520.6
57.5°	311.3	354.7	406.8	379.5	525.8	1319.6	5471.8	12163.9	13321.0	13142.4	11514.0
60°	305.1	363.4	365.9	364.6	478.7	1194.3	5496.6	12118.0	13533.1	13778.7	12486.4
62.5°	297.6	370.8	333.6	353.5	455.2	1077.7	5190.3	11367.7	13174.7	13696.8	13278.9
65°	287.7	323.7	316.3	343.5	455.2	1015.7	4477.1	10118.8	12183.8	12922.9	13709.2
67.5°	277.8	293.9	303.8	329.9	465.1	957.4	3597.8	8535.1	10621.1	11674.0	13225.5
70°	264.2	277.8	290.2	317.5	460.1	916.5	2831.4	6841.0	8741.0	9946.4	11887.3
72.5°	251.8	261.7	274.1	298.9	460.1	897.9	2274.5	5366.4	6673.5	7689.3	9847.2
75°	233.2	241.8	253.0	280.3	451.4	821.0	1707.8	4299.8	4882.7	5518.9	7769.9
77.5°	214.6	220.8	229.4	256.7	406.8	685.8	1208.0	3329.9	3617.7	3969.9	6057.2
80°	191.0	196.0	202.2	229.4	337.3	532.0	786.3	2604.4	2704.9	2874.8	3984.8
82.5°	163.7	171.1	172.4	197.2	271.6	385.7	467.6	1784.7	1783.4	2032.7	2811.5
85°	133.9	137.7	140.1	155.0	200.9	256.7	307.6	974.8	869.4	1217.9	2442.0
87.5°	100.5	96.7	100.5	104.2	132.7	151.3	164.9	179.8	107.9	220.8	1420.0
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):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4	5831.4
2.5°	6637.6	6710.7	6667.3	6615.2	6485.0	6294.0	6147.7	6019.9
5°	7110.1	7245.3	7185.7	6992.3	6654.9	6271.7	5868.6	5623.1
7.5°	7050.6	7318.4	7294.9	6972.4	6488.7	5924.5	5357.7	5034.0
10°	6574.3	6950.1	7014.6	6684.7	6172.5	5541.2	4885.2	4519.3
12.5°	6055.9	6372.2	6503.6	6378.4	5895.9	5254.7	4586.3	4220.4
15°	5621.8	5781.8	5912.0	5992.7	5693.8	5153.0	4534.2	4157.2
17.5°	5300.6	5269.6	5378.8	5572.2	5584.6	5288.2	4769.8	4348.2
20°	5145.6	4902.5	4965.8	5237.4	5554.9	5631.8	5239.9	4741.3
22.5°	5136.9	4757.4	4769.8	5062.5	5640.4	6100.6	5826.5	5258.5
25°	5270.9	4741.3	4752.5	5043.9	5791.7	6573.1	6504.9	5842.6
27.5°	5499.1	4810.7	4803.3	5125.8	5993.9	6967.5	7189.5	6557.0
30°	5745.9	4911.2	4892.6	5257.2	6192.3	7210.5	7675.6	7095.2
32.5°	6053.4	5089.8	5025.3	5449.5	6388.3	7443.7	8091.1	7598.7
35°	6346.1	5351.5	5258.5	5724.8	6597.9	7702.9	8556.2	8155.6
37.5°	6645.0	5742.1	5690.1	6121.6	6894.3	7984.4	9088.2	8786.8
40°	7028.2	6297.8	6272.9	6698.3	7289.9	8292.0	9684.7	9444.1
42.5°	7441.2	6888.1	6867.0	7360.6	7781.0	8600.8	10195.7	10008.4
45°	7861.6	7603.7	7608.6	8067.5	8298.2	8892.3	10597.5	10459.9
47.5°	8357.7	8386.3	8563.6	8800.5	8801.7	9217.2	10953.5	10880.3
50°	8987.8	9331.3	9658.7	9695.9	9310.2	9646.3	11388.8	11361.5
52.5°	9700.9	10421.4	10802.2	10684.4	9806.3	10178.3	12032.5	12031.2
55°	10547.9	11561.2	11919.6	11718.7	10400.3	10871.6	12873.3	12818.7
57.5°	11426.0	12657.5	12946.5	12684.8	11143.2	11679.0	13716.6	13427.7
60°	12374.7	13601.3	13895.2	13502.1	11976.6	12483.9	14274.7	13598.8
62.5°	12996.1	14153.2	14364.0	13987.0	12723.2	13303.7	14454.6	13394.2
65°	13028.3	13786.1	13841.9	13708.0	13040.7	14015.5	14194.1	12787.7
67.5°	12142.8	12187.5	12260.6	12404.5	12362.3	13698.0	13189.6	11371.4
70°	10249.0	9653.7	9894.3	10033.2	10345.8	12183.8	11333.0	9248.2
72.5°	7836.8	6967.5	7240.3	7193.2	7843.0	9993.6	8670.3	7123.7
75°	5640.4	4751.2	4772.3	4774.8	5635.5	7977.0	5912.0	5058.8
77.5°	3833.5	3362.2	3431.6	3388.2	3771.5	6249.4	4256.4	3646.2
80°	2621.8	2609.4	2624.3	2522.6	2515.1	4039.3	3151.4	2908.3
82.5°	1944.6	1797.1	1776.0	1668.1	1927.3	3088.1	2392.4	2089.7
85°	1534.1	994.6	864.4	1043.0	1669.3	2841.3	1458.5	1071.5
87.5°	649.9	390.7	236.9	468.8	927.7	2082.3	404.3	208.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)