

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: McGRAW-EDISON

Report Number: P299511

Luminaire Tested: **GLNA-AF-10-LED-E1-SLR-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194679)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-SLR-8030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27743.8 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 323
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



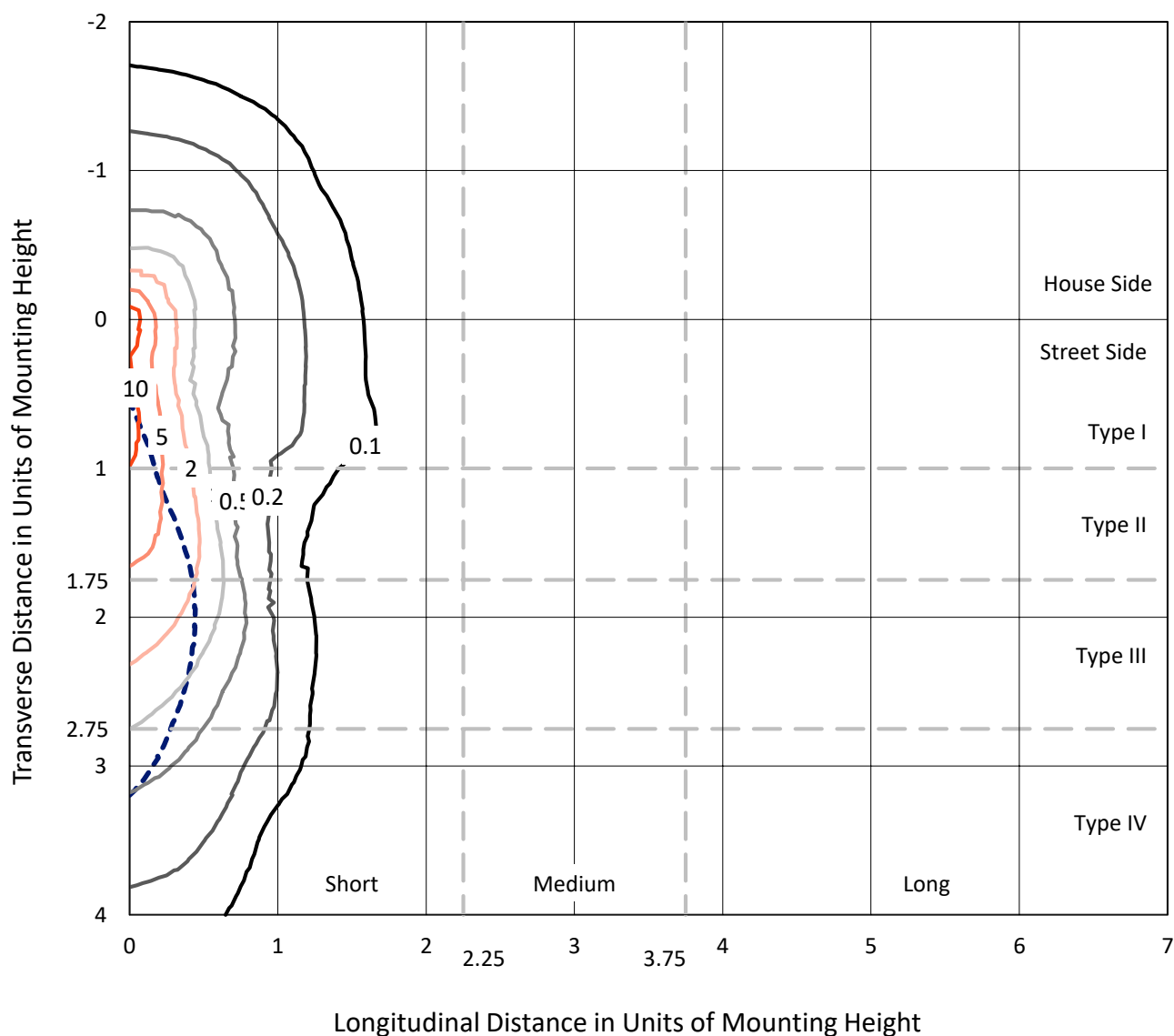
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

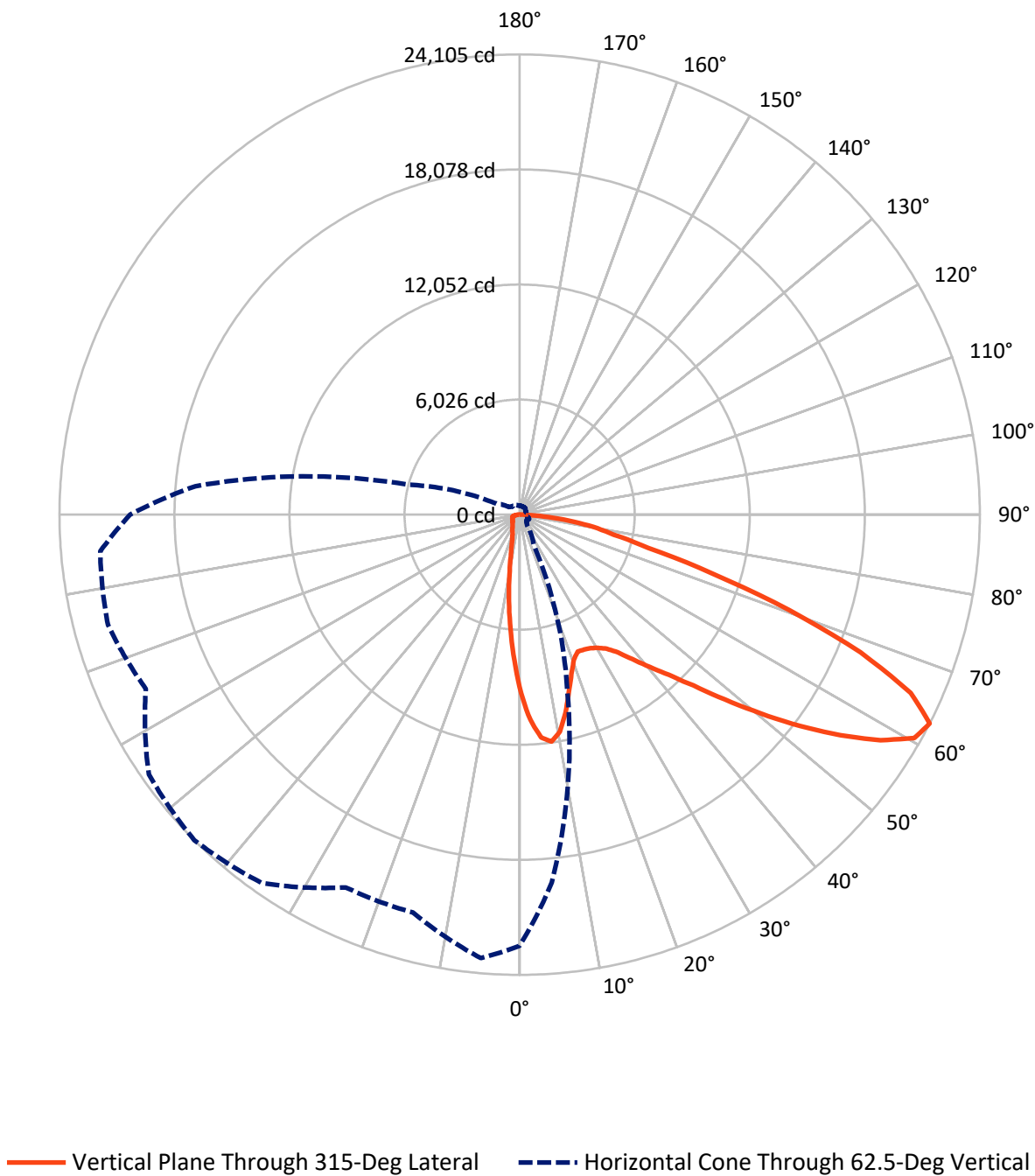


Based on 25 foot mounting height. Maximum calculated value = 15 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4591.2	0.0	4591.2
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	23152.5	0.0	23152.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	27743.8	0.0	27743.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	682.3	2.5
10°-20°	1251.2	4.5
20°-30°	1824.3	6.6
30°-40°	2809.6	10.1
40°-50°	4135.1	14.9
50°-60°	6065.3	21.9
60°-70°	6780.1	24.4
70°-80°	3319.5	12.0
80°-90°	876.4	3.2
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°	27743.8	100.0
0°-180°	27743.8	100.0

Coefficient of Utilization



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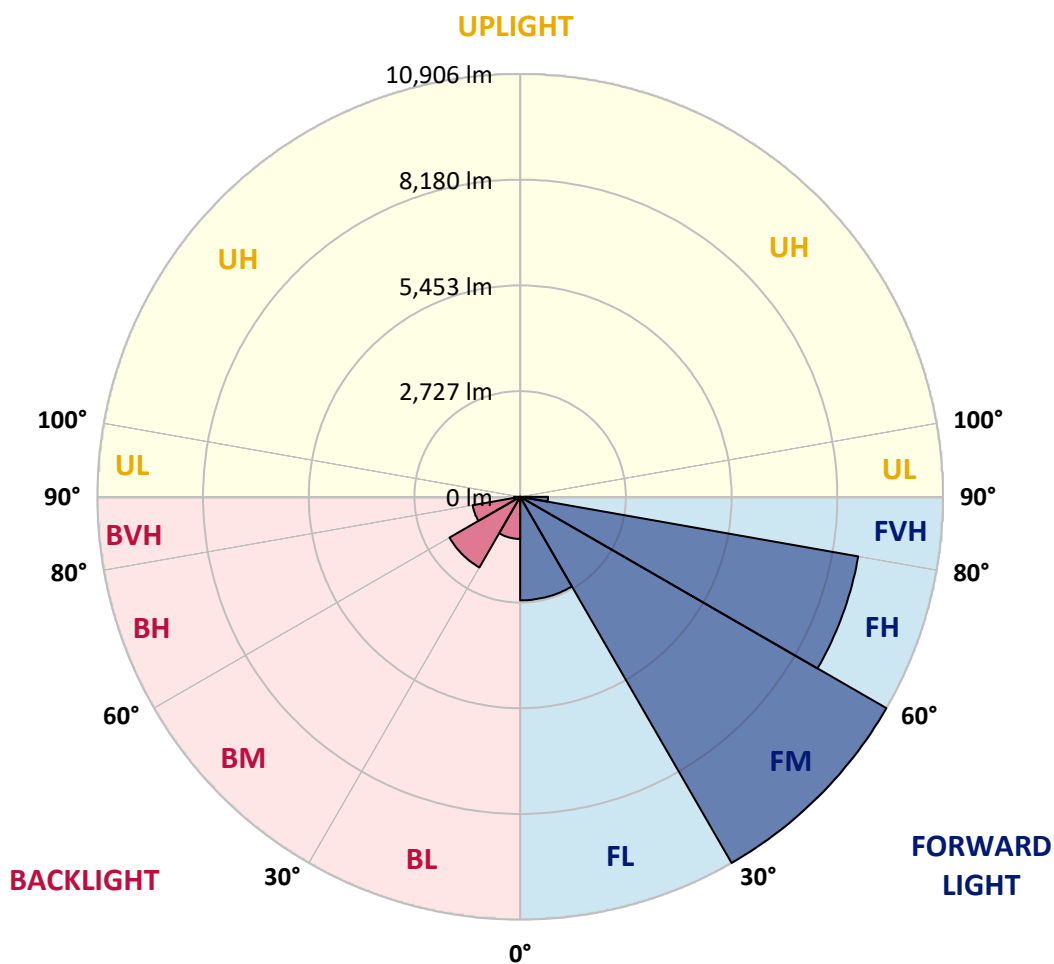
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2671.6	9.6			
FM	(30°-60°)	10906.3	39.3			
FH	(60°-80°)	8854.8	31.9			G4/12000
FVH	(80°-90°)	719.7	2.6			G4/750
BL	(0°-30°)	1086.2	3.9	B3/2500		
BM	(30°-60°)	2103.7	7.6	B2/2500		
BH	(60°-80°)	1244.7	4.5	B3/2500		G3/2500
BVH	(80°-90°)	156.7	0.6			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5
2.5°	9739.2	9541.1	9211.4	8868.4	8659.7	8415.5	8224.8	8057.2	7721.5	7656.0	7715.5
5°	9158.3	8760.4	8139.4	7514.2	7097.8	6650.8	6303.2	6024.3	5598.6	5523.8	5613.8
7.5°	8226.6	7750.6	6930.2	6132.3	5543.7	4985.5	4610.6	4311.4	3979.0	3835.8	3844.6
10°	7422.8	6885.8	5915.8	5048.3	4566.2	4189.5	3873.7	3567.1	3230.1	3008.9	2948.0
12.5°	6972.6	6355.3	5237.1	4462.4	4015.4	3619.3	3279.0	2951.2	2591.1	2365.3	2301.6
15°	6895.1	6223.8	4982.7	4087.5	3527.4	3026.0	2624.8	2258.7	1887.9	1705.1	1666.7
17.5°	7232.1	6458.8	4900.1	3753.2	3068.5	2449.3	1956.7	1548.1	1246.1	1154.7	1146.9
20°	7878.5	6910.3	4889.4	3439.2	2615.5	1889.8	1363.4	1066.1	933.6	907.2	909.1
22.5°	8786.2	7610.3	5020.6	3202.8	2199.1	1409.1	1025.0	892.0	840.3	815.8	815.8
25°	9960.3	8574.3	5322.5	3030.6	1837.6	1125.6	904.5	825.1	776.1	759.5	762.7
27.5°	11098.4	9512.0	5673.4	2894.9	1601.2	1021.7	856.9	785.4	742.9	725.8	733.6
30°	11985.8	10344.9	5966.1	2710.2	1480.7	992.7	874.0	800.6	739.6	713.8	715.2
32.5°	12720.8	11074.0	6211.8	2577.2	1374.0	850.9	753.5	721.2	713.8	683.3	668.1
35°	13660.4	11868.5	6376.6	2580.5	1323.7	759.5	670.9	614.5	573.4	538.3	538.3
37.5°	14761.6	12780.4	6552.0	2615.5	1305.7	705.9	642.2	585.4	547.6	513.9	507.9
40°	15850.3	13674.3	6712.2	2649.3	1294.6	674.1	619.1	567.4	532.3	498.6	489.4
42.5°	16776.4	14409.3	6855.4	2665.9	1258.1	670.9	602.5	555.0	521.7	484.8	476.0
45°	17461.2	15025.2	7009.6	2691.7	1221.7	683.3	602.5	553.6	512.5	477.4	468.2
47.5°	18072.4	15748.2	7267.2	2691.7	1177.3	660.2	622.4	555.0	511.1	474.2	466.8
50°	18891.5	16739.5	7755.2	2629.4	1115.0	635.8	655.6	549.0	497.3	468.2	458.9
52.5°	20019.9	18010.1	8530.0	2520.9	1019.0	588.7	651.0	546.2	483.4	452.9	442.3
55°	21354.7	19370.3	9374.9	2394.4	875.4	555.0	628.4	538.3	468.2	434.5	423.8
57.5°	22396.3	20306.6	9969.6	2199.1	750.3	537.0	556.8	531.0	449.7	414.6	405.8
60°	22810.9	20270.2	10133.0	1938.2	689.3	521.7	486.6	594.7	434.5	399.4	388.8
62.5°	22587.0	19333.8	9675.5	1755.4	675.5	501.9	456.2	550.4	422.5	388.8	373.5
65°	21551.4	17674.5	8463.0	1706.5	715.2	482.0	436.3	431.7	405.8	373.5	358.3
67.5°	19295.5	15194.7	6776.0	1711.1	765.5	462.2	416.5	395.2	382.8	356.9	343.0
70°	15716.4	12013.5	5051.0	1723.5	791.4	439.1	395.2	372.1	358.3	332.4	323.2
72.5°	11556.0	9259.0	3669.6	1644.1	796.0	413.2	366.1	346.3	332.4	305.2	297.3
75°	7906.2	7082.5	2545.4	1362.0	693.9	376.7	333.8	315.8	306.6	272.9	268.2
77.5°	5775.4	5316.5	1628.9	1011.1	535.1	331.0	294.6	280.7	274.7	237.8	231.8
80°	4635.0	4206.1	1019.0	692.6	392.0	277.5	247.0	239.6	233.2	196.7	192.1
82.5°	3214.8	2816.9	654.2	449.7	294.6	215.2	195.3	192.1	182.8	149.6	145.0
85°	1695.8	1529.6	414.6	306.6	213.3	147.7	135.7	135.7	131.1	99.3	96.0
87.5°	216.5	352.3	210.5	160.2	117.3	65.6	65.6	64.2	68.8	56.3	48.9
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°	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5
2.5°	7575.2	7648.6	7578.4	7583.0	7660.6	7892.4	7997.6	8084.4	8177.7	8238.6	8265.9
5°	5490.6	5661.4	5719.1	5841.0	6021.1	6317.0	6434.3	6519.7	6576.5	6609.7	6623.6
7.5°	3755.0	3858.5	3974.3	4171.0	4563.0	4737.1	4814.6	4794.8	4731.1	4708.0	4685.4
10°	2830.7	2789.6	2767.9	2876.4	3193.6	3369.0	3424.0	3370.4	3335.3	3343.2	3381.1
12.5°	2193.1	2121.5	2034.7	2022.3	2231.4	2388.4	2423.5	2426.3	2490.4	2546.8	2630.8
15°	1598.4	1590.6	1548.1	1522.2	1640.9	1769.2	1784.5	1811.7	1869.9	1911.0	1983.9
17.5°	1127.0	1168.1	1201.8	1218.4	1308.5	1399.9	1383.3	1369.4	1358.8	1358.8	1393.9
20°	909.1	936.3	979.3	1027.8	1119.6	1183.3	1142.3	1087.3	1047.6	1035.6	1040.2
22.5°	819.1	840.3	864.8	907.2	989.9	1034.2	989.9	950.2	910.5	896.6	892.0
25°	773.4	800.6	823.7	855.5	916.5	947.0	904.5	875.4	850.9	834.3	821.8
27.5°	747.5	771.5	778.0	793.2	844.9	872.2	850.9	838.9	823.7	808.4	793.2
30°	719.8	715.2	704.6	705.9	747.5	774.7	773.4	776.1	774.7	770.1	767.4
32.5°	657.5	648.2	639.0	648.2	686.1	710.6	712.4	718.4	718.4	717.0	729.0
35°	547.6	564.2	574.8	602.5	648.2	669.5	660.2	645.0	617.8	600.7	599.3
37.5°	506.5	509.3	527.7	565.6	616.4	635.8	622.4	587.3	568.8	565.6	570.2
40°	486.6	489.4	500.0	535.1	585.4	605.3	593.3	567.4	550.4	549.0	556.8
42.5°	472.8	476.0	482.0	506.5	547.6	572.1	573.4	555.0	535.1	537.0	544.3
45°	464.9	466.8	464.9	477.4	515.3	544.3	556.8	544.3	527.7	531.0	539.7
47.5°	463.5	458.9	452.9	456.2	495.9	524.5	539.7	535.1	527.7	531.0	538.3
50°	457.5	446.9	439.1	437.7	477.4	507.9	521.7	521.7	524.5	531.0	538.3
52.5°	439.1	427.1	427.1	422.5	464.9	494.0	503.3	504.6	509.3	519.9	531.0
55°	416.5	411.8	416.5	408.6	456.2	483.4	488.0	491.3	494.0	503.3	518.5
57.5°	396.6	390.6	401.2	398.0	448.3	472.8	472.8	478.8	478.8	491.3	503.3
60°	386.0	373.5	378.1	381.4	437.7	463.5	460.8	466.8	469.6	480.6	489.4
62.5°	372.1	361.5	361.5	368.9	425.7	449.7	448.3	452.9	464.9	468.2	477.4
65°	355.5	350.9	346.3	355.5	413.2	434.5	436.3	442.3	452.9	456.2	463.5
67.5°	338.4	340.3	331.0	340.3	402.6	419.2	419.2	431.7	436.3	442.3	449.7
70°	320.4	321.8	314.0	325.0	395.2	402.6	401.2	417.8	421.1	425.7	433.1
72.5°	297.3	297.3	294.6	309.8	382.8	386.0	382.8	396.6	398.0	402.6	405.8
75°	272.9	272.9	270.1	291.3	375.4	367.5	358.3	368.9	372.1	375.4	375.4
77.5°	241.0	244.2	244.2	270.1	349.0	360.1	329.2	335.7	340.3	341.7	337.0
80°	201.3	209.2	211.9	245.6	292.7	332.4	294.6	298.7	300.6	300.6	294.6
82.5°	154.2	167.6	175.4	211.9	224.4	278.9	256.2	260.9	256.2	247.0	244.2
85°	106.7	125.1	134.4	161.6	169.4	215.2	213.3	213.3	204.5	192.1	190.7
87.5°	58.2	68.8	74.8	96.0	115.9	145.0	157.0	152.4	145.0	137.1	139.0
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5
2.5°	8409.5	8616.8	8947.8	9200.8	9455.7	9701.3	9966.8	10169.5	10341.7	10409.1	10613.2
5°	6762.6	7021.6	7334.2	7898.4	8298.2	8738.7	9248.4	9922.5	10181.5	10540.2	11127.0
7.5°	4781.4	5015.9	5519.2	5975.4	6541.4	7165.2	7852.6	8783.0	9123.3	9698.1	10654.3
10°	3570.4	3843.2	4247.2	4631.8	5130.4	5768.1	6558.0	7598.2	8011.5	8635.2	9736.4
12.5°	2876.4	3198.2	3626.7	3988.2	4374.2	4823.9	5591.2	6731.6	7285.7	7831.4	8944.6
15°	2209.7	2546.8	2945.2	3404.1	3829.4	4314.6	5118.4	6366.0	7003.1	7572.4	8522.1
17.5°	1529.6	1817.7	2319.6	2798.4	3343.2	3963.7	4987.3	6443.5	7204.4	7860.5	8595.5
20°	1084.5	1248.9	1660.7	2216.2	2894.9	3673.8	4962.8	6852.1	7842.0	8590.9	9065.1
22.5°	911.9	972.8	1212.4	1721.7	2505.7	3457.2	5048.3	7425.6	8702.2	9658.4	9814.0
25°	831.1	868.0	992.7	1351.4	2159.4	3300.3	5336.4	8279.7	9766.9	10726.3	10698.6
27.5°	786.7	825.1	907.2	1140.9	1899.0	3202.8	5624.5	9292.7	10983.9	11885.2	11543.5
30°	773.4	825.1	911.9	1075.3	1712.9	3048.6	5860.9	10181.5	11920.3	12667.8	11928.1
32.5°	762.7	770.1	809.8	927.1	1535.6	2868.6	6021.1	10979.3	12836.7	13412.0	12481.7
35°	616.4	654.2	718.4	831.1	1432.2	2760.5	6021.1	11667.2	13739.8	14163.7	13009.4
37.5°	593.3	627.0	683.3	779.4	1374.0	2707.0	5900.6	12330.7	14662.3	15016.4	13443.9
40°	581.3	608.5	662.1	739.6	1349.6	2646.0	5725.1	12916.1	15563.6	15870.1	13849.7
42.5°	572.1	596.5	646.8	715.2	1317.7	2579.1	5583.4	13385.7	16346.1	16599.2	14237.1
45°	567.4	593.3	648.2	727.6	1253.5	2490.4	5536.3	13893.6	16989.8	17207.7	14656.3
47.5°	567.4	597.9	655.6	753.5	1177.3	2399.0	5684.0	14563.5	17598.3	17704.9	15150.3
50°	562.8	596.5	677.3	727.6	1066.1	2283.1	6031.7	15406.6	18257.1	18269.1	15775.9
52.5°	553.6	593.3	729.0	712.4	937.7	2130.8	6501.7	16489.7	19231.8	19304.7	16754.7
55°	543.0	588.7	715.2	677.3	832.9	1949.3	6885.8	17805.6	20601.2	20803.9	18194.8
57.5°	529.1	582.7	692.6	628.4	764.1	1715.7	7024.8	18769.6	21557.4	22066.6	19817.2
60°	517.1	578.1	625.1	599.3	721.2	1519.0	6756.1	18578.9	21491.8	22589.8	21255.4
62.5°	504.6	582.7	570.2	581.3	701.3	1392.5	6054.8	17052.1	20404.5	22050.0	22321.5
65°	491.3	541.6	538.3	565.6	697.2	1342.2	5019.2	14763.0	18302.8	20343.6	22573.1
67.5°	472.8	500.0	515.3	546.2	712.4	1297.8	4050.5	12177.9	15382.1	17785.7	21261.4
70°	452.9	476.0	492.6	521.7	703.2	1278.0	3369.0	9603.4	12205.6	14576.9	18673.6
72.5°	427.1	446.9	462.2	489.4	693.9	1267.4	2845.9	7734.0	9112.6	10828.3	15182.6
75°	396.6	414.6	425.7	452.9	664.9	1160.7	2237.4	6544.2	6818.9	7532.7	12092.5
77.5°	361.5	375.4	384.1	414.6	588.7	965.4	1618.3	5048.3	5295.3	5468.9	9271.0
80°	320.4	333.8	338.4	367.5	488.0	754.9	1055.5	3728.7	3960.5	4000.2	6054.8
82.5°	272.9	286.7	286.7	314.0	399.4	543.0	692.6	2554.6	2600.3	2734.7	4279.5
85°	219.8	230.4	230.4	244.2	309.8	405.8	476.0	1282.6	1268.8	1448.8	3707.5
87.5°	157.0	164.8	172.2	175.4	221.2	268.2	286.7	390.6	257.6	296.0	2380.5
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5	9373.5
2.5°	10767.4	10854.2	10765.5	10701.8	10425.7	10198.6	9894.8	9739.2
5°	11574.0	11795.1	11720.3	11452.1	10875.4	10227.2	9490.8	9158.3
7.5°	11476.6	11990.4	12002.4	11501.0	10651.5	9696.7	8699.4	8226.6
10°	10717.1	11374.1	11562.0	11075.3	10174.1	9106.6	7962.5	7422.8
12.5°	9868.9	10512.5	10656.1	10488.0	9735.0	8662.5	7502.2	6972.6
15°	9175.0	9463.5	9633.9	9780.7	9358.3	8485.6	7475.9	6895.1
17.5°	8752.5	8720.6	8769.6	9024.0	9095.6	8688.3	7872.5	7232.1
20°	8600.1	8110.7	8098.3	8449.2	8972.3	9172.2	8647.2	7878.5
22.5°	8684.2	7891.0	7790.3	8206.8	9037.8	9868.9	9663.0	8786.2
25°	8973.7	7909.4	7828.2	8231.2	9275.6	10611.8	10759.5	9960.3
27.5°	9429.8	8025.3	7918.2	8331.9	9591.4	11235.5	11839.5	11098.4
30°	9862.9	8226.6	8093.7	8530.0	9879.5	11482.6	12501.5	11985.8
32.5°	10389.2	8603.4	8369.8	8894.3	10236.4	11875.9	13091.6	12720.8
35°	10904.5	9139.9	8850.4	9457.1	10634.4	12365.8	13765.7	13660.4
37.5°	11470.6	9841.7	9602.0	10184.7	11179.2	12827.5	14625.8	14761.6
40°	12074.5	10772.0	10488.0	11246.2	12024.1	13407.4	15524.3	15850.3
42.5°	12683.0	11804.4	11465.9	12234.2	12952.6	13979.0	16292.6	16776.4
45°	13379.7	12925.4	12765.2	13596.2	13845.1	14523.8	16860.0	17461.2
47.5°	14191.4	14197.4	14455.0	14787.4	14745.0	15139.7	17430.7	18072.4
50°	15138.3	15784.7	16354.0	16574.7	15672.1	15801.8	18222.0	18891.5
52.5°	16276.0	17683.7	18388.3	18243.3	16671.2	16609.8	19475.6	20019.9
55°	17698.9	19693.9	20393.9	20290.0	17819.4	17710.9	21037.5	21354.7
57.5°	19345.8	21641.4	22285.0	21818.2	19198.1	18919.2	22329.4	22396.3
60°	20793.3	23184.9	23749.1	23232.0	20589.2	20204.6	23135.9	22810.9
62.5°	21598.5	23708.0	24104.6	23547.8	21542.1	21574.0	23312.8	22587.0
65°	21238.8	22385.7	22513.6	22467.9	21296.5	22368.6	22677.0	21551.4
67.5°	19268.3	19042.5	19257.6	19555.0	19192.1	21322.4	20915.2	19295.5
70°	15797.2	14557.0	14986.0	15185.4	15350.2	18348.5	18153.2	15716.4
72.5°	11905.0	10198.6	10537.0	10495.9	11258.2	14717.3	14118.0	11556.0
75°	8435.3	6914.9	6957.4	6940.8	7855.9	11514.4	10223.0	7906.2
77.5°	5902.0	5009.9	5033.0	5127.2	5281.4	8684.2	7303.7	5775.4
80°	4058.4	3802.1	3928.6	3936.5	3660.4	5833.6	5395.9	4635.0
82.5°	3022.8	2642.8	2612.3	2656.6	2868.6	4726.5	4146.6	3214.8
85°	2475.2	1564.7	1258.1	1577.2	2542.1	4680.7	2754.5	1695.8
87.5°	1393.9	742.9	335.7	622.4	1014.4	3099.0	796.0	216.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)