

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: P301597

Luminaire Tested: **GLNA-AF-07-LED-E1-T2R-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301597  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194759)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-T2R-7030  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42276.7 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 391  
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

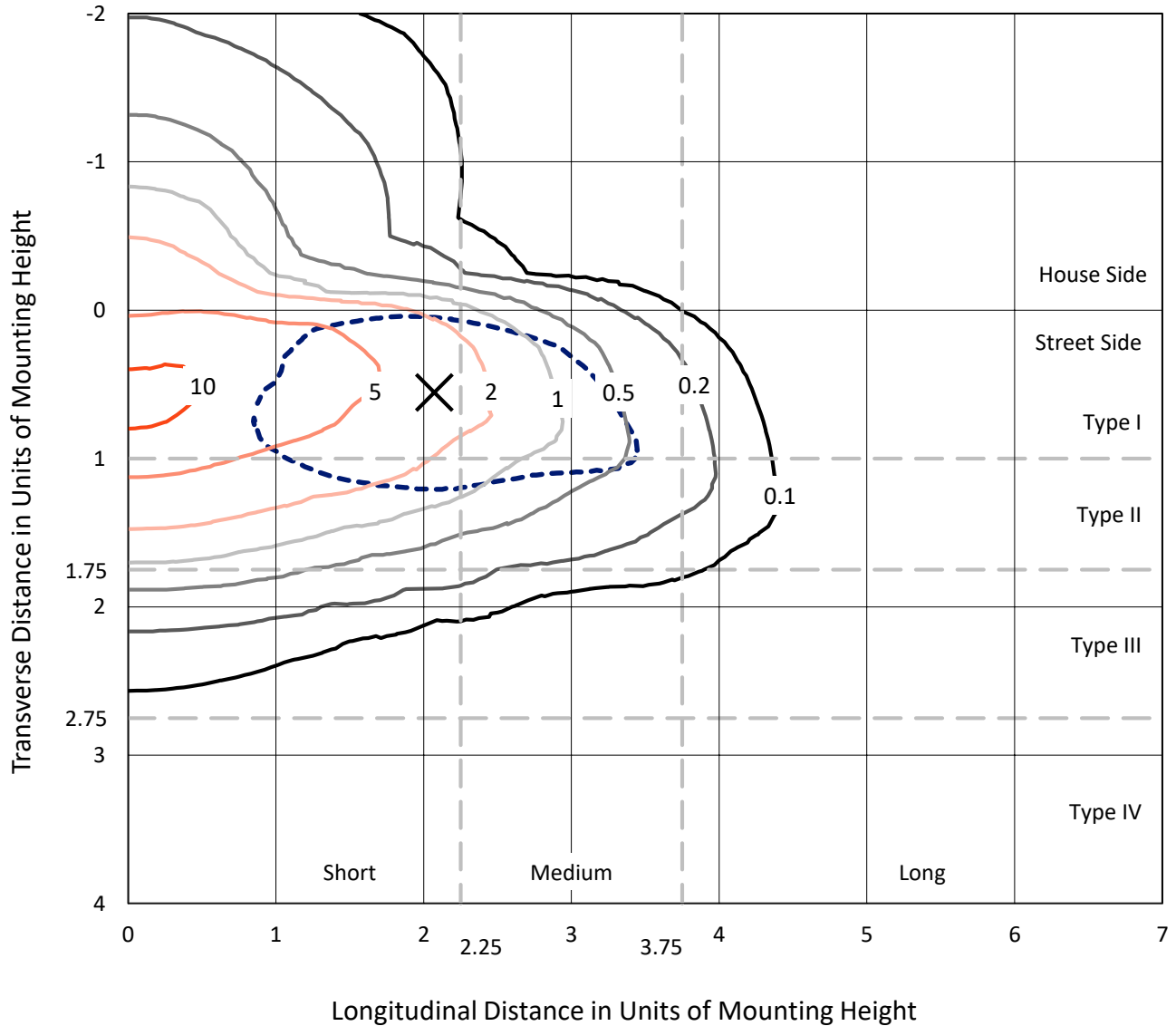


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### Iso-Footcandle Lines of Horizontal Illumination

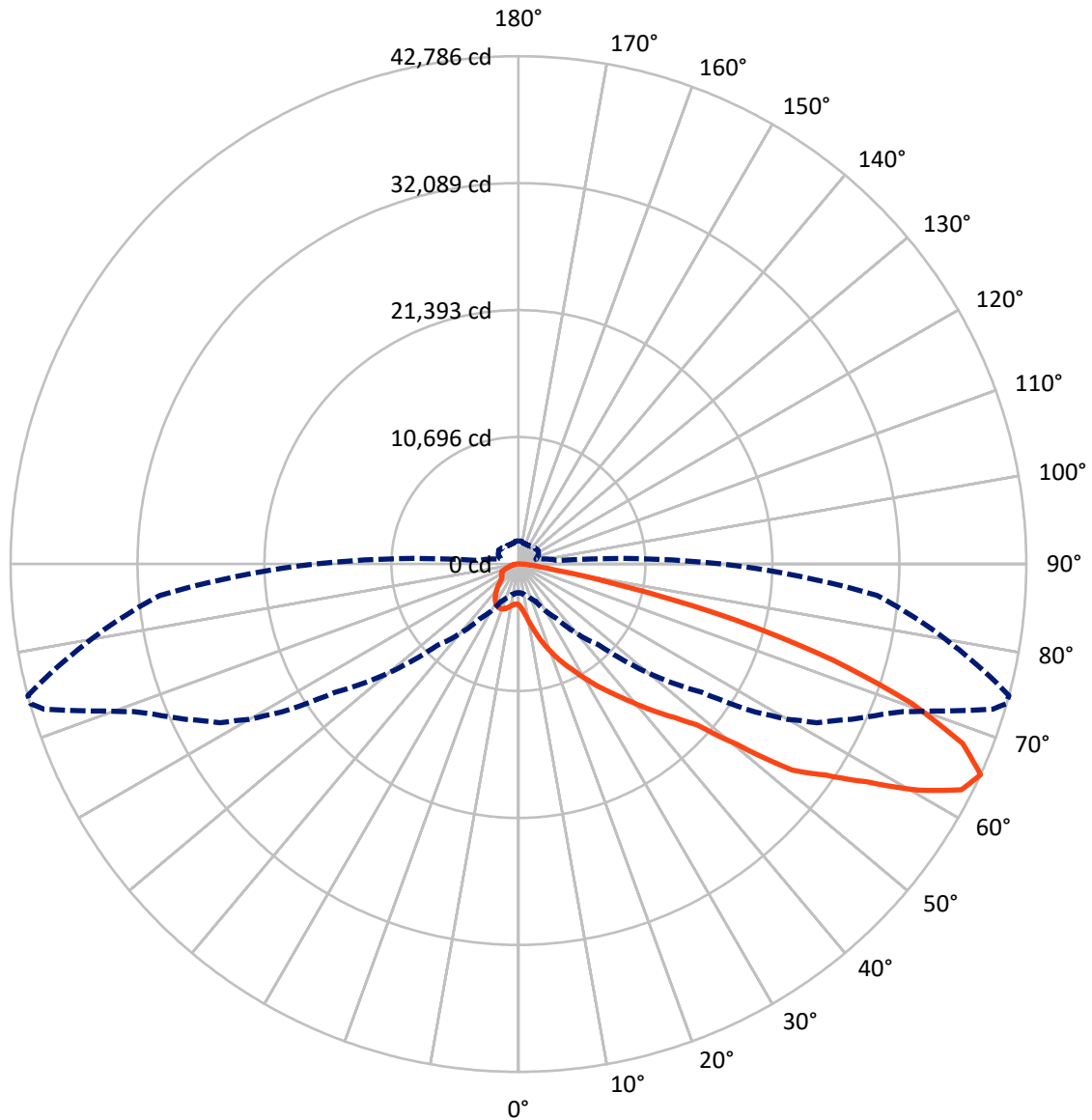
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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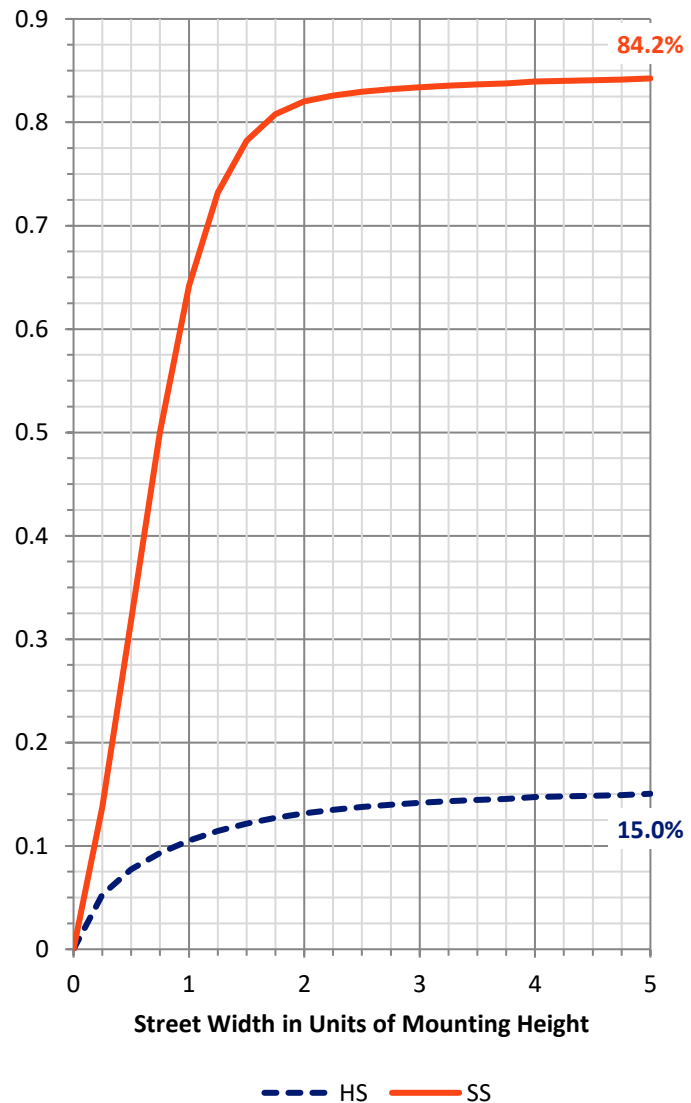
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6518.1	0.0	6518.1
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	35758.6	0.0	35758.6
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	42276.7	0.0	42276.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	424.7	1.0
10°-20°	1659.3	3.9
20°-30°	3404.3	8.1
30°-40°	5727.6	13.5
40°-50°	7914.0	18.7
50°-60°	9879.0	23.4
60°-70°	8890.0	21.0
70°-80°	3726.6	8.8
80°-90°	651.1	1.5
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°	42276.7	100.0
0°-180°	42276.7	100.0

**Coefficient of Utilization**



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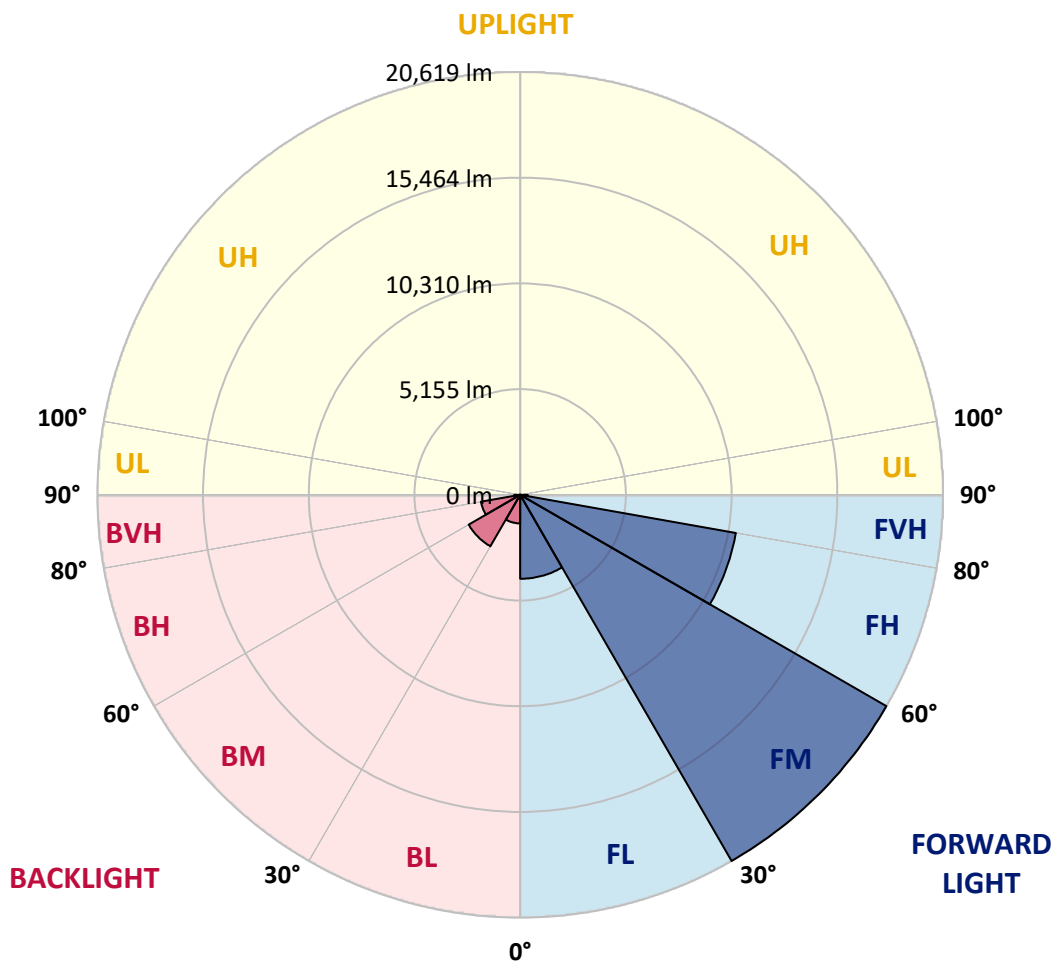
CATALOG NUMBER: GLNA-AF-07-LED-E1-T2R-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4094.4	9.7			
FM	(30°-60°)	20619.3	48.8			
FH	(60°-80°)	10678.9	25.3			G4/12000
FVH	(80°-90°)	366.0	0.9			G3/500
BL	(0°-30°)	1393.9	3.3	B3/2500		
BM	(30°-60°)	2901.3	6.9	B3/5000		
BH	(60°-80°)	1937.7	4.6	B3/2500		G3/2500
BVH	(80°-90°)	285.1	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8
2.5°	4362.4	4314.3	4326.2	4246.1	4148.1	4019.9	3878.0	3876.2	3878.0	3863.8	3812.1
5°	6048.8	5991.3	5969.3	5788.8	5524.7	5148.9	4740.5	4696.6	4678.2	4632.5	4526.2
7.5°	7280.0	7247.9	7213.5	7077.6	6837.7	6417.5	5869.0	5775.2	5685.0	5663.0	5543.1
10°	8074.2	8065.9	7994.1	7957.9	7808.3	7443.8	6909.6	6819.3	6721.4	6687.6	6561.1
12.5°	8702.3	8700.5	8666.6	8676.7	8546.1	8282.6	7821.9	7740.0	7668.2	7563.7	7474.1
15°	9136.8	9138.6	9189.0	9244.8	9224.6	9046.6	8614.4	8578.2	8516.5	8444.6	8338.4
17.5°	9492.9	9503.0	9554.7	9656.8	9767.2	9752.9	9411.0	9380.8	9326.7	9228.8	9173.0
20°	10297.3	10335.3	10235.5	10235.5	10247.4	10301.4	10137.0	10113.3	10037.3	9985.0	9941.1
22.5°	11656.0	11700.0	11473.8	11244.1	11017.9	10853.5	10689.7	10719.3	10667.7	10631.5	10605.4
25°	13420.8	13455.3	13089.0	12700.8	12240.2	11640.0	11234.0	11215.6	11187.7	11165.7	11153.9
27.5°	15081.7	15096.0	14749.9	14181.2	13647.0	12784.5	11786.0	11764.1	11730.2	11688.1	11651.9
30°	16502.8	16498.7	16142.5	15600.0	15027.7	14073.2	12624.8	12556.5	12456.2	12342.3	12254.4
32.5°	17733.4	17727.4	17336.9	16774.7	16174.6	15350.1	13773.4	13633.3	13477.2	13254.6	13121.1
35°	18701.6	18698.0	18329.4	17743.5	17054.9	16552.7	15090.1	14917.9	14719.6	14421.7	14215.7
37.5°	19067.8	19067.8	18861.8	18461.7	17853.3	17509.0	16552.7	16344.3	16132.4	15794.1	15562.0
40°	18853.5	18857.7	18901.6	18828.0	18531.8	18267.6	17917.4	17793.3	17611.1	17307.2	17065.0
42.5°	18135.3	18157.2	18449.9	18807.8	18955.6	18914.1	19127.8	19072.0	18943.7	18709.9	18517.5
45°	17224.7	17292.9	17612.9	18289.6	19073.7	19472.1	20142.2	20148.2	20124.4	19998.6	19850.2
47.5°	15974.5	16070.1	16492.7	17406.9	18797.7	20014.6	21172.7	21226.8	21277.2	21195.3	21127.0
50°	14313.6	14427.6	15059.8	16272.5	18235.6	20576.8	23119.8	23364.3	23592.3	23564.4	23610.1
52.5°	12534.6	12668.7	13442.8	14793.8	17269.2	20706.8	24364.6	24762.9	25161.2	25487.1	25833.1
55°	10929.5	10857.6	11632.3	13054.6	15680.1	20120.3	25483.5	25963.7	26407.7	26807.8	27220.4
57.5°	8754.5	8872.6	9649.1	11055.9	13577.0	18465.3	26253.4	26956.2	27594.4	28256.8	28840.9
60°	6399.1	6517.2	7359.5	8788.3	11293.9	15956.1	25665.1	26730.1	27752.3	28766.7	29559.2
62.5°	3863.8	3952.2	4694.2	6055.4	8708.8	12981.0	23043.8	24440.5	25945.3	27158.1	28372.6
65°	2405.3	2455.2	2729.4	3477.9	5593.0	9691.2	18828.0	20350.6	21971.1	23510.4	24773.0
67.5°	1969.0	1986.8	2037.3	2196.9	3071.3	6319.5	14013.3	15361.9	16824.6	18313.3	19718.4
70°	1770.7	1758.9	1758.9	1768.9	1969.0	3397.8	9174.8	10053.3	11272.0	12566.6	13851.2
72.5°	1598.6	1586.7	1564.7	1535.1	1606.9	2072.9	4742.3	5404.8	6283.3	7433.7	8664.3
75°	1436.5	1420.5	1395.0	1357.0	1406.8	1564.7	2277.1	2555.5	2983.5	3596.1	4282.3
77.5°	1268.5	1248.4	1224.6	1196.7	1260.8	1216.9	1334.4	1434.7	1598.6	1795.1	2053.3
80°	1078.6	1060.8	1052.5	1038.8	1114.8	926.6	942.6	1004.4	1100.5	1206.8	1326.7
82.5°	844.7	844.7	876.2	882.7	966.4	666.6	704.6	758.6	808.5	864.3	920.7
85°	556.2	560.4	668.4	710.5	762.2	448.2	528.3	546.1	586.5	618.5	642.3
87.5°	173.9	188.2	408.4	452.3	438.1	254.1	324.1	332.4	360.3	382.3	402.5
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):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8
2.5°	3812.1	3787.8	3765.8	3764.1	3748.0	3726.1	3733.8	3699.9	3701.7	3683.9	3663.7
5°	4482.3	4466.3	4386.2	4364.2	4304.2	4266.2	4260.3	4180.2	4170.1	4124.4	4073.9
7.5°	5446.9	5394.7	5282.5	5228.5	5126.4	5050.4	5014.8	4908.5	4856.3	4736.4	4682.4
10°	6457.2	6391.4	6253.0	6177.1	6079.1	5956.8	5890.9	5737.2	5676.7	5566.8	5435.1
12.5°	7394.0	7328.1	7185.6	7127.4	6997.4	6867.4	6795.6	6621.7	6543.3	6367.0	6263.1
15°	8260.0	8194.1	8070.1	8010.1	7880.1	7773.9	7677.7	7506.1	7414.1	7249.7	7113.8
17.5°	9100.6	9030.5	8922.5	8868.5	8742.6	8634.6	8530.7	8368.1	8274.3	8110.4	7988.2
20°	9881.2	9828.9	9751.2	9678.7	9552.9	9455.0	9330.9	9190.8	9054.9	8934.4	8818.6
22.5°	10561.4	10541.3	10457.6	10425.5	10317.5	10233.2	10125.1	9987.4	9888.9	9736.9	9628.9
25°	11147.9	11142.0	11101.6	11091.5	11015.5	10935.4	10911.7	10797.7	10707.5	10573.3	10461.7
27.5°	11651.9	11657.8	11648.3	11676.2	11656.0	11619.8	11622.2	11584.2	11532.0	11419.8	11321.8
30°	12212.3	12180.2	12198.6	12238.4	12250.2	12254.4	12320.3	12342.3	12338.7	12264.5	12216.4
32.5°	13004.7	12928.7	12858.7	12852.8	12892.5	12908.6	13020.7	13078.9	13128.8	13146.6	13154.9
35°	14015.0	13863.1	13717.0	13639.3	13571.0	13588.8	13669.0	13763.3	13873.2	13949.1	14039.4
37.5°	15287.7	15101.9	14843.7	14659.7	14613.4	14513.7	14565.3	14639.5	14747.5	14865.7	15021.8
40°	16830.5	16548.5	16258.3	16014.3	15882.5	15697.9	15696.1	15681.9	15748.4	15858.2	16078.4
42.5°	18315.7	18065.2	17757.1	17501.3	17329.1	17082.8	17032.9	16902.9	16932.6	17028.8	17243.1
45°	19705.9	19500.0	19311.8	19016.2	18869.5	18603.6	18519.3	18365.6	18279.5	18323.4	18537.7
47.5°	21052.8	20921.0	20724.6	20532.8	20420.6	20182.6	20074.6	19964.2	19854.3	19850.2	20074.6
50°	23678.3	23608.3	23376.2	23176.2	23230.2	22938.1	22955.9	22659.7	22793.9	22809.9	23280.0
52.5°	26145.4	26389.9	26562.1	26771.6	26908.2	26934.3	27023.9	27158.1	27320.1	27640.1	28076.4
55°	27558.2	27864.5	28042.5	28202.8	28467.0	28522.8	28672.9	28851.0	28992.9	29353.2	29723.6
57.5°	29237.5	29805.5	30081.6	30335.6	30691.8	30827.7	31078.2	31272.3	31456.4	31882.6	32330.7
60°	30271.5	30964.3	31526.4	31928.3	32374.7	32695.2	33073.3	33377.3	33809.4	34319.9	34988.3
62.5°	29449.4	30465.6	31212.4	31902.8	32508.8	33121.4	33663.4	34232.1	34888.0	35660.3	36697.3
65°	26173.9	27207.9	28486.6	29203.0	30005.6	30950.0	31774.5	32695.2	33589.2	34714.1	36246.8
67.5°	21071.2	22273.3	23710.4	24432.8	25355.3	26409.5	27334.4	28458.7	29503.4	30865.7	32761.1
70°	15188.0	16742.7	17951.2	18705.7	19782.5	20868.8	21761.6	23069.9	23934.2	25330.9	27290.4
72.5°	9617.0	10843.4	12324.4	13274.8	14231.1	15332.2	16244.6	17373.1	18179.2	19451.9	21226.8
75°	5170.9	6075.0	7375.6	8278.4	9303.0	10243.3	11311.8	12068.0	12664.6	13671.3	15112.0
77.5°	2423.1	2973.4	3631.7	4326.2	5020.7	5744.9	6449.5	7061.5	7318.0	7894.4	8744.4
80°	1471.0	1649.0	1840.8	2055.1	2345.3	2579.2	2889.7	3113.5	3129.5	3311.7	3571.7
82.5°	982.4	1048.3	1106.5	1160.5	1234.7	1292.9	1358.8	1436.5	1468.6	1510.7	1595.0
85°	670.2	702.2	714.1	748.5	740.2	760.4	786.5	812.6	826.3	824.5	862.5
87.5°	412.0	428.0	436.3	444.0	438.1	430.4	442.2	456.5	460.0	448.2	452.3
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):**

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8
2.5°	3667.9	3650.1	3631.7	3619.8	3615.7	3510.0	3463.7	3434.0	3369.9	3317.7	3275.5
5°	4046.0	4008.0	3978.3	3942.1	3922.0	3653.6	3555.7	3488.0	3375.8	3309.9	3249.4
7.5°	4654.5	4548.2	4486.5	4416.4	4356.5	3872.1	3710.0	3603.8	3447.7	3359.8	3291.5
10°	5344.8	5235.0	5136.5	5028.4	4934.6	4162.4	3926.1	3761.7	3555.7	3441.7	3351.5
12.5°	6115.3	6007.3	5883.2	5744.9	5625.0	4530.4	4202.1	3968.3	3685.7	3533.7	3407.9
15°	7025.9	6835.4	6685.2	6525.5	6385.4	4970.9	4524.5	4200.4	3824.0	3618.0	3450.0
17.5°	7871.8	7671.8	7468.2	7328.1	7166.0	5464.7	4848.6	4436.0	3938.0	3672.0	3457.8
20°	8698.7	8480.3	8304.5	8116.4	7946.0	5977.0	5194.6	4644.4	4012.2	3673.8	3407.9
22.5°	9427.1	9290.5	9094.6	8890.4	8718.3	6489.3	5518.8	4820.7	4040.1	3628.1	3319.4
25°	10255.1	10111.5	9871.1	9698.9	9507.2	7011.7	5836.9	4956.6	4024.1	3542.0	3183.5
27.5°	11139.6	10979.9	10733.6	10553.7	10321.6	7553.6	6129.0	5054.6	3964.1	3402.0	3001.3
30°	12062.1	11916.0	11673.9	11492.2	11257.7	8128.2	6455.5	5120.4	3844.2	3207.8	2789.4
32.5°	13052.8	12930.5	12690.7	12500.7	12250.2	8750.3	6759.4	5140.6	3662.0	2977.5	2565.6
35°	13993.1	13909.4	13707.0	13528.9	13268.9	9338.6	7081.7	5130.5	3445.9	2725.2	2361.4
37.5°	15052.1	15001.6	14901.9	14675.7	14357.5	10137.0	7468.2	5088.4	3181.7	2475.3	2205.2
40°	16180.5	16184.7	16076.6	15922.3	15626.1	11105.8	7928.2	5006.5	2893.2	2255.1	2062.8
42.5°	17374.8	17437.2	17384.9	17275.1	16990.8	12082.3	8478.5	4906.7	2613.6	2040.8	1923.3
45°	18743.7	18819.7	18899.8	18737.8	18461.7	13371.0	9202.7	4776.7	2310.9	1862.7	1827.1
47.5°	20322.7	20442.6	20514.4	20516.8	20240.8	14967.8	10379.2	4698.4	2043.2	1742.8	1780.8
50°	23654.0	23692.6	23862.4	24158.6	23946.7	18663.6	12434.3	4650.3	1861.0	1668.6	1747.0
52.5°	28454.5	28873.0	29167.4	29147.2	28858.7	21010.7	13566.9	4402.2	1752.9	1640.7	1731.0
55°	30409.8	30932.2	31476.5	31620.2	31396.4	23014.1	14637.7	4154.1	1700.7	1660.9	1736.9
57.5°	33015.2	33895.5	34642.2	34956.3	34632.2	25577.3	16046.4	4024.1	1684.7	1714.9	1774.9
60°	36058.6	37147.3	38127.9	38691.8	38691.8	28522.8	17507.2	3970.0	1662.7	1795.1	1839.0
62.5°	38013.9	39612.5	41093.6	41919.9	41895.5	30573.7	18155.4	3786.0	1612.8	1850.9	1926.8
65°	38021.6	39923.0	41809.4	42738.4	42785.9	30322.0	17085.2	3343.8	1520.8	1859.2	2015.3
67.5°	34852.4	36879.0	39078.3	40117.1	40356.9	27912.5	14789.7	2749.6	1370.6	1779.0	2047.3
70°	29435.1	31414.2	33659.2	34680.2	35106.4	23794.1	11911.9	2119.2	1178.9	1602.7	1980.9
72.5°	23189.8	25130.9	26693.9	27440.0	27772.4	18187.5	8674.4	1601.0	966.4	1350.5	1802.8
75°	16418.5	17875.3	18705.7	18871.9	18923.6	10963.9	5270.6	1190.8	796.6	1050.7	1522.6
77.5°	9266.8	9891.3	9823.0	9897.2	9281.0	4232.4	2295.5	852.4	656.5	798.4	1180.7
80°	3618.0	3730.2	3504.1	3434.0	3149.7	1574.8	1012.7	594.2	524.2	604.3	826.3
82.5°	1595.0	1646.7	1598.6	1611.0	1541.0	812.6	606.1	430.4	400.1	442.2	548.5
85°	878.5	894.6	890.4	916.5	878.5	324.1	287.9	264.2	280.2	300.4	352.0
87.5°	428.0	432.1	418.5	440.5	426.2	163.8	141.9	150.2	163.8	168.0	168.0
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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	135°	145°	155°	165°	175°	180°
0°	3435.8	3435.8	3435.8	3435.8	3435.8	3435.8
2.5°	3245.8	3229.8	3231.6	3227.4	3219.7	3219.7
5°	3217.9	3201.9	3201.9	3197.8	3187.7	3189.4
7.5°	3245.8	3219.7	3209.6	3195.4	3181.7	3181.7
10°	3277.9	3231.6	3203.7	3179.9	3161.5	3161.5
12.5°	3301.6	3229.8	3183.5	3151.5	3133.6	3133.6
15°	3309.9	3215.6	3151.5	3113.5	3097.4	3095.7
17.5°	3283.8	3161.5	3083.8	3039.9	3019.7	3013.7
20°	3203.7	3063.6	2969.8	2919.4	2891.5	2881.4
22.5°	3083.8	2923.5	2813.7	2761.5	2725.2	2719.3
25°	2915.8	2743.6	2635.6	2585.2	2565.6	2559.0
27.5°	2719.3	2559.0	2467.0	2435.0	2417.2	2415.4
30°	2533.5	2397.0	2329.3	2305.0	2283.0	2279.4
32.5°	2359.0	2272.9	2247.4	2213.0	2161.3	2155.4
35°	2234.9	2227.2	2209.4	2132.8	2069.3	2050.9
37.5°	2158.9	2233.1	2141.1	1991.0	1945.2	1941.1
40°	2115.0	2171.4	2012.9	1961.3	1964.8	1961.3
42.5°	2015.3	2072.9	2017.1	1993.3	2008.8	2012.9
45°	1915.0	1979.1	2047.3	2031.3	2069.3	2069.3
47.5°	1859.2	1954.7	2045.0	2045.0	2101.4	2121.0
50°	1795.1	1935.2	2012.9	2040.8	2085.3	2069.3
52.5°	1790.9	1900.7	1967.2	2017.1	2037.3	2018.9
55°	1796.8	1872.8	1920.9	1977.3	2001.0	2002.8
57.5°	1805.2	1856.8	1888.9	1915.0	1986.8	1986.8
60°	1824.7	1843.1	1861.0	1875.2	1969.0	1970.8
62.5°	1856.8	1828.9	1824.7	1839.0	1958.9	1951.2
65°	1907.3	1808.7	1779.0	1792.7	1948.8	1925.1
67.5°	1974.9	1779.0	1720.9	1731.0	1941.1	1888.9
70°	2037.3	1731.0	1649.0	1638.9	1865.1	1773.1
72.5°	2043.2	1675.2	1548.7	1519.0	1621.1	1532.7
75°	1942.9	1636.6	1438.9	1350.5	1338.6	1326.7
77.5°	1751.1	1614.6	1310.7	1172.4	1148.6	1156.3
80°	1465.0	1532.7	1156.3	992.5	1122.5	1108.9
82.5°	1094.6	1352.8	982.4	878.5	876.2	774.7
85°	608.4	1054.8	800.2	658.3	458.3	444.0
87.5°	170.4	586.5	560.4	372.2	254.1	264.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)