

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: STREETWORKS

Report Number: P193957

Luminaire Tested: **GAN-AF-09-LED-U-T2R-8030-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-T2R-8030-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45238 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

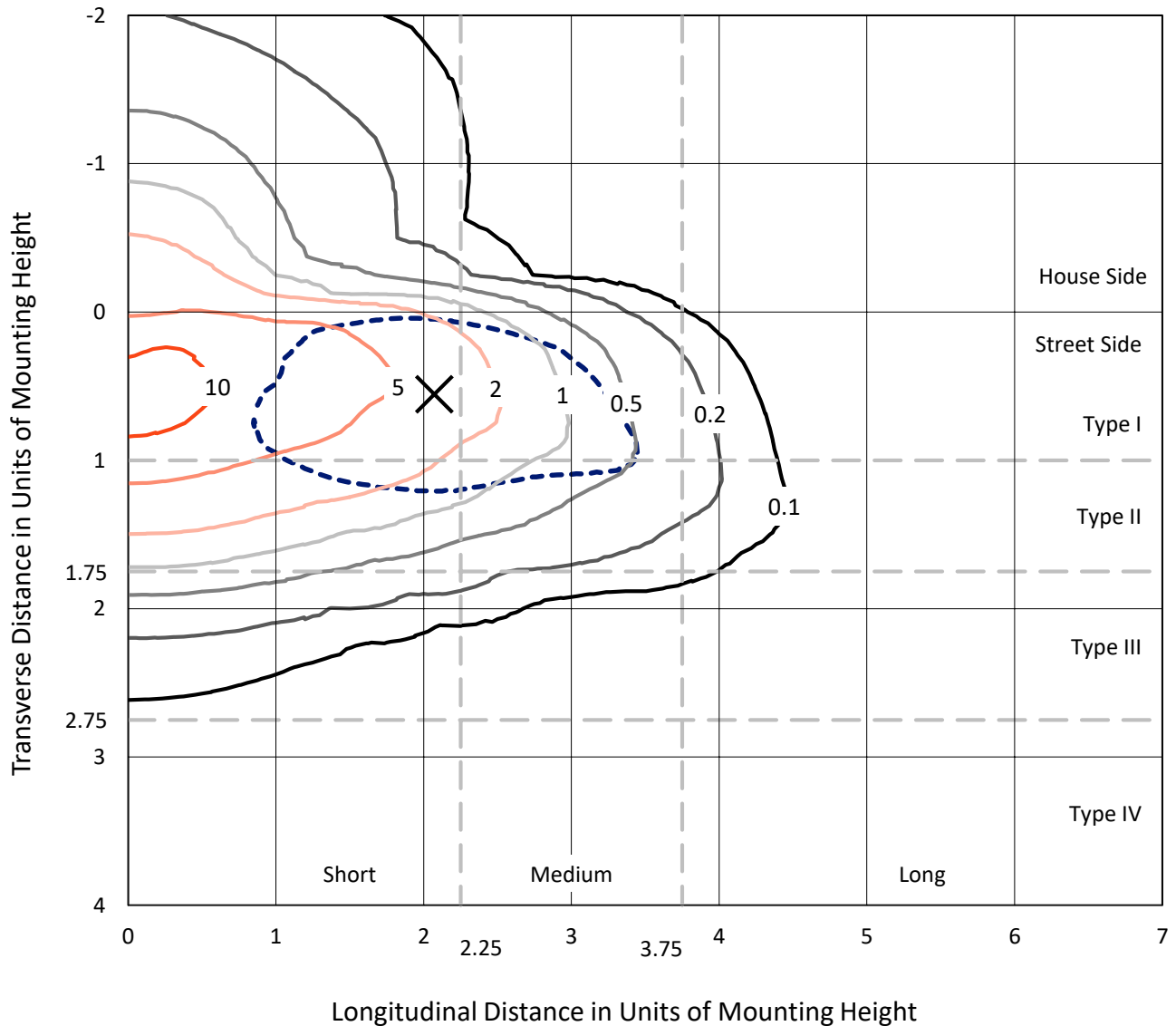
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

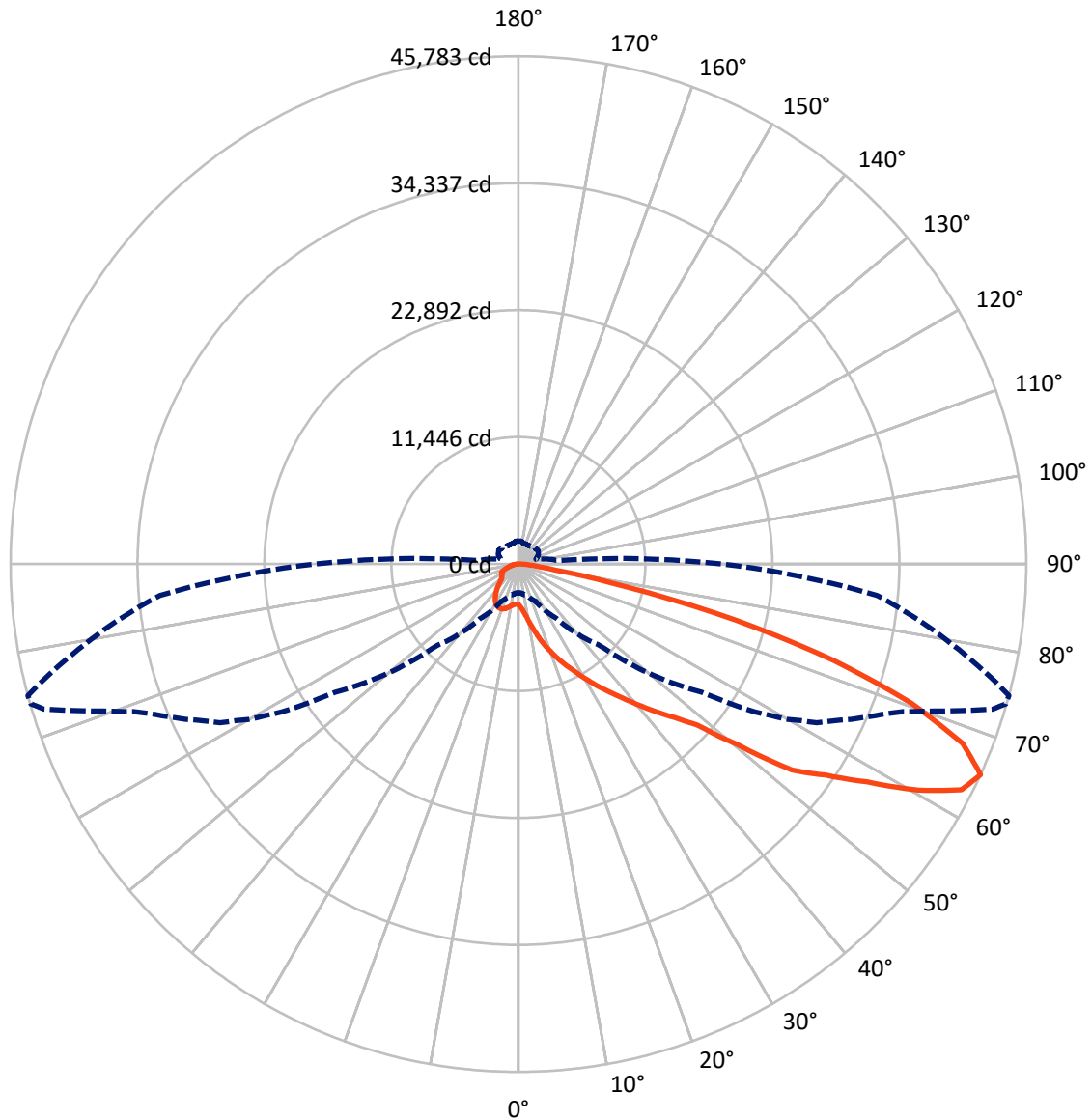
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.7 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
House Side	Lumens	6974.6	0.0	6974.6
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	38263.4	0.0	38263.4
	% Fixture	84.6	0.0	84.6
Total	Lumens	45238.0	0.0	45238.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.4	1.0
10°-20°	1775.5	3.9
20°-30°	3642.8	8.1
30°-40°	6128.8	13.5
40°-50°	8468.3	18.7
50°-60°	10571.0	23.4
60°-70°	9512.8	21.0
70°-80°	3987.7	8.8
80°-90°	696.7	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°	45238.0	100.0
0°-180°	45238.0	100.0

Coefficient of Utilization



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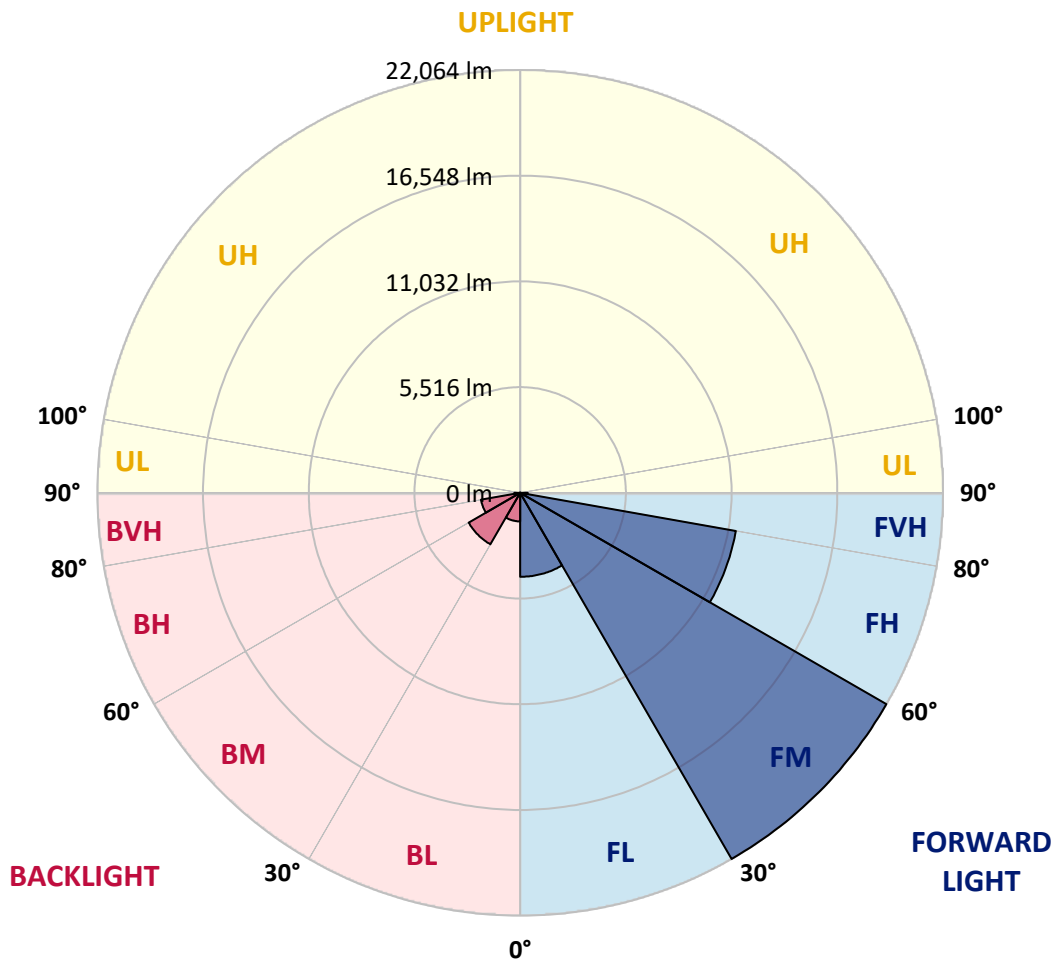
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4381.2	9.7			
FM	(30°-60°)	22063.7	48.8			
FH	(60°-80°)	11427.0	25.3			G4/12000
FVH	(80°-90°)	391.6	0.9			G3/500
BL	(0°-30°)	1491.6	3.3	B3/2500		
BM	(30°-60°)	3104.5	6.9	B3/5000		
BH	(60°-80°)	2073.5	4.6	B3/2500		G3/2500
BVH	(80°-90°)	305.1	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°	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5
2.5°	4667.8	4616.4	4629.3	4543.6	4438.7	4301.7	4149.7	4147.5	4149.7	4134.7	4079.0
5°	6472.9	6410.8	6387.2	6194.5	5911.9	5509.3	5072.5	5025.4	5006.1	4956.9	4843.4
7.5°	7789.7	7755.5	7719.1	7573.5	7316.5	6866.9	6280.2	6179.5	6083.2	6059.6	5931.1
10°	8639.8	8631.2	8554.1	8515.6	8355.0	7965.3	7393.6	7297.2	7192.3	7155.9	7021.0
12.5°	9312.1	9310.0	9273.6	9284.3	9145.1	8862.5	8370.0	8282.2	8205.1	8093.8	7997.4
15°	9776.8	9778.9	9832.4	9892.4	9871.0	9680.4	9217.9	9179.4	9113.0	9035.9	8922.4
17.5°	10157.9	10168.6	10224.3	10333.5	10451.2	10436.2	10070.1	10038.0	9980.2	9875.2	9815.3
20°	11018.7	11059.3	10952.3	10952.3	10965.1	11022.9	10847.4	10821.7	10740.3	10684.6	10637.5
22.5°	12472.5	12519.6	12277.7	12031.4	11789.5	11613.9	11438.3	11470.4	11414.8	11376.2	11348.4
25°	14361.1	14397.5	14005.6	13590.2	13097.8	12455.4	12020.7	12001.5	11971.5	11947.9	11935.1
27.5°	16138.3	16153.3	15782.8	15174.7	14603.0	13680.2	12611.7	12588.2	12551.8	12506.8	12468.2
30°	17658.5	17654.3	17273.1	16692.9	16080.5	15059.1	13508.9	13436.1	13329.0	13207.0	13112.8
32.5°	18975.4	18969.0	18551.4	17949.7	17307.4	16425.2	14737.9	14588.0	14421.0	14183.4	14039.9
35°	20011.7	20007.4	19613.5	18986.1	18249.5	17712.1	16146.8	15962.7	15750.7	15431.7	15211.1
37.5°	20403.6	20403.6	20183.0	19754.8	19103.9	18735.6	17712.1	17489.4	17262.4	16900.5	16652.2
40°	20174.5	20178.7	20225.8	20146.6	19829.7	19547.1	19172.4	19039.6	18844.8	18519.3	18260.2
42.5°	19405.8	19429.3	19741.9	20125.2	20283.7	20238.7	20467.8	20407.8	20270.8	20020.3	19814.7
45°	18431.5	18504.3	18846.9	19570.6	20410.0	20836.1	21553.4	21559.8	21534.1	21399.2	21240.8
47.5°	17093.3	17196.0	17647.8	18626.4	20114.5	21416.4	22656.1	22713.9	22767.5	22679.7	22606.9
50°	15316.1	15438.1	16114.7	17412.3	19512.8	22018.0	24739.5	25000.7	25244.8	25214.9	25264.1
52.5°	13412.5	13556.0	14384.6	15829.9	18478.6	22157.2	26071.3	26497.4	26923.5	27272.6	27643.0
55°	11695.3	11618.2	12446.8	13969.2	16778.5	21529.8	27268.3	27782.2	28257.5	28685.8	29126.8
57.5°	9367.8	9494.1	10324.9	11830.2	14528.1	19759.1	28092.6	28844.2	29527.2	30236.0	30861.2
60°	6847.6	6973.9	7875.4	9404.2	12085.0	17074.0	27463.1	28602.2	29696.4	30782.0	31629.9
62.5°	4134.7	4228.9	5023.3	6479.3	9318.5	13890.0	24658.1	26152.7	27762.9	29060.5	30360.2
65°	2573.7	2627.3	2920.6	3721.4	5984.7	10369.9	20146.6	21776.1	23510.5	25157.0	26508.1
67.5°	2106.9	2126.2	2179.7	2351.0	3286.8	6761.9	14994.9	16438.0	18003.3	19596.3	21099.5
70°	1895.0	1882.1	1882.1	1892.8	2106.9	3635.8	9817.4	10757.4	12061.4	13446.8	14821.4
72.5°	1710.8	1698.0	1674.4	1642.3	1719.4	2218.3	5074.7	5783.4	6723.4	7954.6	9271.4
75°	1537.4	1520.3	1492.4	1451.7	1505.3	1674.4	2436.7	2734.3	3192.5	3847.7	4582.2
77.5°	1357.5	1336.1	1310.4	1280.4	1349.0	1301.9	1428.2	1535.2	1710.8	1920.7	2196.9
80°	1154.1	1134.8	1126.3	1111.3	1192.7	991.4	1008.5	1074.9	1177.7	1291.1	1419.6
82.5°	903.6	903.6	937.8	944.3	1034.2	713.0	753.7	811.5	865.0	925.0	985.0
85°	595.3	599.5	715.2	760.1	815.8	479.6	565.3	584.5	627.4	661.6	687.3
87.5°	186.3	201.3	436.8	483.9	468.9	271.9	346.9	355.4	385.4	409.0	430.4
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°	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5
2.5°	4079.0	4053.3	4029.8	4027.6	4010.5	3986.9	3995.5	3959.1	3961.2	3942.0	3920.6
5°	4796.3	4779.2	4693.5	4670.0	4605.7	4565.1	4558.6	4473.0	4462.3	4413.0	4359.5
7.5°	5828.4	5772.7	5652.8	5595.0	5485.8	5404.4	5365.9	5252.4	5196.7	5068.2	5010.4
10°	6909.7	6839.0	6691.3	6609.9	6505.0	6374.4	6303.7	6138.8	6074.6	5956.8	5815.5
12.5°	7911.8	7841.1	7689.1	7627.0	7487.8	7348.6	7271.5	7085.3	7001.7	6813.3	6702.0
15°	8838.9	8768.2	8635.5	8571.3	8432.1	8318.6	8215.8	8031.7	7933.2	7757.6	7612.0
17.5°	9738.2	9663.3	9547.6	9489.8	9354.9	9239.3	9128.0	8954.5	8853.9	8678.3	8547.7
20°	10573.3	10517.6	10434.1	10357.0	10222.1	10117.2	9984.4	9834.6	9689.0	9560.5	9436.3
22.5°	11301.3	11279.9	11189.9	11155.7	11040.1	10950.1	10834.5	10686.8	10581.8	10419.1	10303.5
25°	11928.7	11922.2	11879.4	11868.7	11787.3	11701.7	11676.0	11554.0	11457.6	11314.1	11194.2
27.5°	12468.2	12474.7	12464.0	12493.9	12472.5	12434.0	12436.1	12395.4	12339.8	12219.9	12115.0
30°	13067.8	13033.5	13052.8	13095.6	13108.5	13112.8	13183.4	13207.0	13202.7	13123.5	13072.1
32.5°	13915.7	13834.3	13759.4	13753.0	13795.8	13812.9	13932.8	13994.9	14048.5	14067.7	14076.3
35°	14997.0	14834.3	14678.0	14594.5	14521.7	14540.9	14626.6	14727.2	14845.0	14926.4	15022.7
37.5°	16358.8	16159.7	15883.5	15686.5	15637.2	15530.2	15585.8	15665.1	15780.7	15907.0	16074.0
40°	18009.7	17707.8	17397.3	17136.1	16994.8	16797.8	16795.6	16780.6	16851.3	16969.1	17204.6
42.5°	19598.5	19330.8	19001.1	18727.0	18542.9	18279.5	18226.0	18086.8	18118.9	18221.7	18450.8
45°	21086.6	20866.1	20664.8	20347.9	20191.6	19906.8	19816.9	19652.0	19559.9	19607.0	19836.1
47.5°	22527.6	22386.3	22176.5	21970.9	21851.0	21596.2	21480.6	21362.8	21245.1	21240.8	21480.6
50°	25336.9	25262.0	25013.6	24799.5	24857.3	24544.7	24563.9	24247.0	24390.5	24407.6	24910.8
52.5°	27977.0	28238.2	28422.4	28647.2	28792.8	28820.6	28917.0	29060.5	29233.9	29576.5	30043.3
55°	29488.7	29816.3	30006.9	30178.2	30460.8	30520.8	30681.4	30871.9	31024.0	31409.4	31805.5
57.5°	31285.2	31893.3	32188.8	32460.7	32841.8	32987.4	33255.1	33462.8	33659.8	34115.9	34595.5
60°	32392.2	33133.0	33734.7	34165.1	34642.6	34985.2	35389.9	35715.3	36177.8	36723.8	37439.0
62.5°	31512.1	32599.9	33398.6	34137.3	34786.1	35441.3	36021.5	36629.6	37331.9	38158.5	39267.6
65°	28007.0	29114.0	30482.2	31248.8	32107.4	33118.1	34000.2	34985.2	35942.3	37145.7	38785.8
67.5°	22546.9	23833.8	25371.2	26144.1	27131.2	28259.7	29248.9	30452.2	31570.0	33028.1	35055.8
70°	16251.8	17915.5	19208.8	20016.0	21168.0	22330.7	23285.6	24686.0	25611.0	27105.5	29201.8
72.5°	10290.6	11603.2	13187.7	14204.8	15228.3	16405.9	17382.3	18590.0	19452.9	20814.7	22713.9
75°	5532.9	6500.7	7892.5	8858.2	9954.5	10960.8	12104.2	12913.6	13551.7	14628.7	16170.4
77.5°	2593.0	3181.8	3886.3	4629.3	5372.3	6147.4	6901.1	7556.3	7830.4	8447.1	9357.1
80°	1573.8	1764.4	1969.9	2199.0	2509.5	2760.0	3091.9	3331.7	3348.8	3543.7	3822.1
82.5°	1051.3	1122.0	1184.1	1241.9	1321.1	1383.2	1453.9	1537.4	1571.6	1616.6	1706.5
85°	717.3	751.6	764.4	800.8	792.2	813.7	841.5	869.3	884.3	882.2	922.9
87.5°	441.1	458.2	466.8	475.3	468.9	460.4	473.2	488.2	492.5	479.6	483.9
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5
2.5°	3924.8	3905.6	3886.3	3873.4	3869.2	3755.7	3706.4	3674.3	3605.8	3550.1	3505.2
5°	4329.5	4288.8	4256.7	4218.2	4196.8	3909.8	3804.9	3732.1	3612.2	3541.6	3477.3
7.5°	4980.4	4867.0	4800.6	4725.6	4661.4	4143.2	3969.8	3856.3	3689.3	3595.1	3522.3
10°	5719.2	5601.4	5496.5	5380.9	5280.2	4453.7	4201.0	4025.5	3804.9	3682.9	3586.5
12.5°	6543.5	6427.9	6295.1	6147.4	6018.9	4847.7	4496.5	4246.0	3944.1	3781.4	3646.5
15°	7517.8	7314.4	7153.8	6982.5	6832.6	5318.8	4841.3	4494.4	4091.8	3871.3	3691.4
17.5°	8423.5	8209.4	7991.0	7841.1	7667.7	5847.6	5188.1	4747.1	4213.9	3929.1	3700.0
20°	9307.8	9074.4	8886.0	8684.7	8502.7	6395.8	5558.6	4969.7	4293.1	3931.3	3646.5
22.5°	10087.2	9941.6	9731.8	9513.4	9329.2	6943.9	5905.4	5158.2	4323.1	3882.0	3552.3
25°	10973.7	10819.5	10562.6	10378.4	10172.9	7502.8	6245.9	5303.8	4306.0	3789.9	3406.7
27.5°	11920.1	11748.8	11485.4	11292.7	11044.3	8083.1	6558.5	5408.7	4241.7	3640.1	3211.8
30°	12907.2	12750.9	12491.8	12297.0	12046.4	8697.6	6907.5	5479.3	4113.3	3432.4	2984.8
32.5°	13967.1	13836.5	13579.5	13376.1	13108.5	9363.5	7233.0	5500.8	3918.4	3186.1	2745.0
35°	14973.5	14883.5	14667.3	14476.7	14198.3	9993.0	7577.7	5490.1	3687.2	2916.3	2526.6
37.5°	16106.2	16052.6	15945.6	15703.6	15363.2	10847.4	7991.0	5445.1	3404.5	2648.7	2359.6
40°	17313.8	17318.1	17202.5	17037.6	16720.7	11883.7	8483.5	5357.3	3096.2	2413.1	2207.6
42.5°	18592.1	18658.5	18602.8	18485.0	18181.0	12928.6	9072.3	5250.2	2796.4	2184.0	2057.7
45°	20056.7	20138.1	20223.7	20050.3	19754.8	14307.5	9847.4	5111.1	2473.1	1993.5	1954.9
47.5°	21746.1	21874.6	21951.7	21953.8	21658.3	16016.2	11106.4	5027.6	2186.2	1865.0	1905.7
50°	25311.2	25351.9	25533.9	25850.8	25623.8	19971.0	13305.5	4976.2	1991.3	1785.8	1869.3
52.5°	30448.0	30895.5	31210.2	31188.8	30880.5	22482.7	14517.4	4710.7	1875.7	1755.8	1852.1
55°	32539.9	33098.8	33681.2	33835.4	33595.5	24626.0	15662.9	4445.1	1820.0	1777.2	1858.6
57.5°	35327.8	36269.9	37068.6	37404.7	37057.9	27368.9	17170.3	4306.0	1802.9	1835.0	1899.3
60°	38584.6	39749.4	40798.6	41402.4	41402.4	30520.8	18733.4	4248.2	1779.3	1920.7	1967.8
62.5°	40676.5	42387.3	43971.8	44856.2	44830.5	32715.5	19427.2	4051.2	1725.8	1980.6	2062.0
65°	40685.1	42719.2	44738.4	45731.9	45783.3	32445.7	18281.6	3578.0	1627.3	1989.2	2156.2
67.5°	37293.4	39462.4	41815.6	42926.9	43183.9	29867.7	15825.7	2942.0	1466.7	1903.5	2190.5
70°	31497.2	33614.8	36017.2	37109.3	37565.3	25461.1	12746.6	2267.5	1261.2	1715.1	2119.8
72.5°	24814.5	26891.4	28563.7	29362.4	29717.8	19461.4	9282.1	1713.0	1034.2	1445.3	1929.2
75°	17568.6	19127.4	20016.0	20193.7	20249.4	11731.7	5639.9	1274.0	852.2	1124.1	1629.5
77.5°	9915.9	10584.0	10511.2	10590.4	9930.9	4528.7	2456.0	912.2	702.3	854.3	1263.3
80°	3871.3	3991.2	3749.3	3674.3	3370.3	1685.1	1083.5	635.9	561.0	646.6	884.3
82.5°	1706.5	1762.2	1710.8	1723.7	1648.7	869.3	648.8	460.4	428.2	473.2	586.7
85°	940.0	957.1	952.8	980.7	940.0	346.9	308.3	282.6	299.8	321.2	376.9
87.5°	458.2	462.5	447.5	471.1	456.1	175.6	152.0	160.6	175.6	179.9	179.9
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):

	135°	145°	155°	165°	175°	180°
0°	3676.5	3676.5	3676.5	3676.5	3676.5	3676.5
2.5°	3473.0	3455.9	3458.0	3453.8	3445.2	3445.2
5°	3443.1	3425.9	3425.9	3421.6	3410.9	3413.1
7.5°	3473.0	3445.2	3434.5	3419.5	3404.5	3404.5
10°	3507.3	3458.0	3428.1	3402.4	3383.1	3383.1
12.5°	3533.0	3455.9	3406.7	3372.4	3353.1	3353.1
15°	3541.6	3440.9	3372.4	3331.7	3314.6	3312.4
17.5°	3513.7	3383.1	3299.6	3252.5	3231.1	3224.7
20°	3428.1	3278.2	3177.6	3124.0	3094.0	3083.3
22.5°	3299.6	3128.3	3010.5	2954.9	2916.3	2909.9
25°	3119.7	2935.6	2820.0	2766.4	2745.0	2738.6
27.5°	2909.9	2738.6	2640.1	2605.8	2586.6	2584.4
30°	2710.8	2565.2	2492.4	2466.7	2443.1	2438.8
32.5°	2524.5	2432.4	2404.6	2368.2	2312.5	2306.1
35°	2391.7	2383.2	2363.9	2282.5	2214.0	2194.7
37.5°	2310.4	2389.6	2291.1	2130.5	2081.3	2077.0
40°	2263.3	2323.2	2154.1	2098.4	2102.7	2098.4
42.5°	2156.2	2218.3	2158.3	2132.6	2149.8	2154.1
45°	2049.1	2117.7	2190.5	2173.3	2214.0	2214.0
47.5°	1989.2	2092.0	2188.3	2188.3	2248.3	2269.7
50°	1920.7	2070.5	2154.1	2184.0	2231.1	2214.0
52.5°	1916.4	2034.1	2104.8	2158.3	2179.7	2160.5
55°	1922.8	2004.2	2055.6	2115.5	2141.2	2143.3
57.5°	1931.4	1987.0	2021.3	2049.1	2126.2	2126.2
60°	1952.8	1972.1	1991.3	2006.3	2106.9	2109.1
62.5°	1987.0	1957.1	1952.8	1967.8	2096.2	2087.7
65°	2040.6	1935.7	1903.5	1918.5	2085.5	2059.8
67.5°	2113.4	1903.5	1841.4	1852.1	2077.0	2021.3
70°	2179.7	1852.1	1764.4	1753.6	1995.6	1897.1
72.5°	2186.2	1792.2	1657.3	1625.2	1734.4	1640.2
75°	2079.1	1751.5	1539.5	1445.3	1432.5	1419.6
77.5°	1873.6	1728.0	1402.5	1254.7	1229.1	1237.6
80°	1567.4	1640.2	1237.6	1062.0	1201.2	1186.2
82.5°	1171.2	1447.5	1051.3	940.0	937.8	828.6
85°	650.9	1128.4	856.5	704.5	490.3	475.3
87.5°	182.0	627.4	599.5	398.3	271.9	282.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)