

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: P192208

Luminaire Tested: **GLEON-AF-10-LED-E1-T2R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192208
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: MCGRAW-EDISON
Catalog Number: GLEON-AF-10-LED-E1-T2R-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49592 lumens
Efficiency: N/A
Efficacy: 118.4 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 - G5

Input Watts (W): 419
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

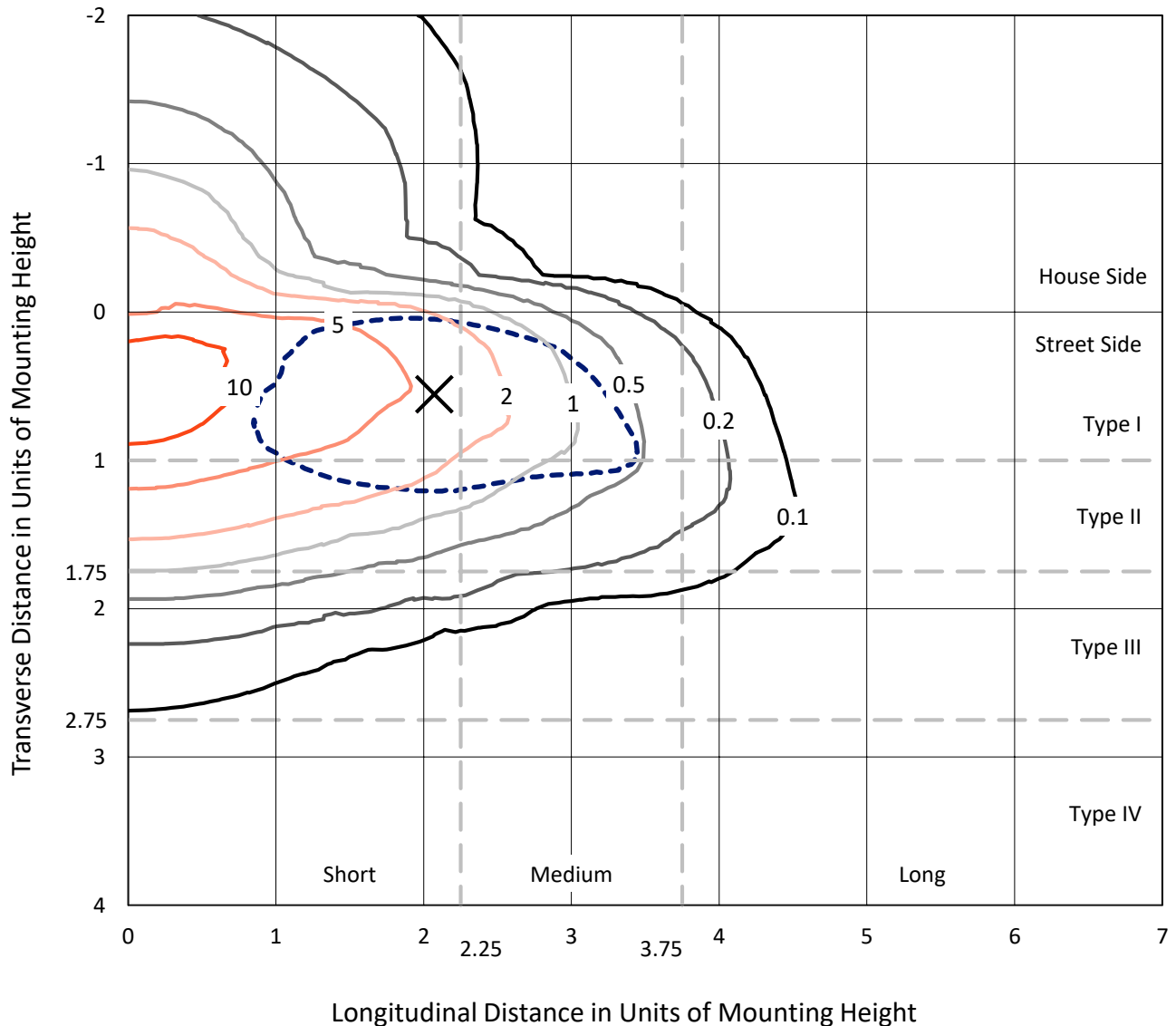


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Iso-Footcandle Lines of Horizontal Illumination

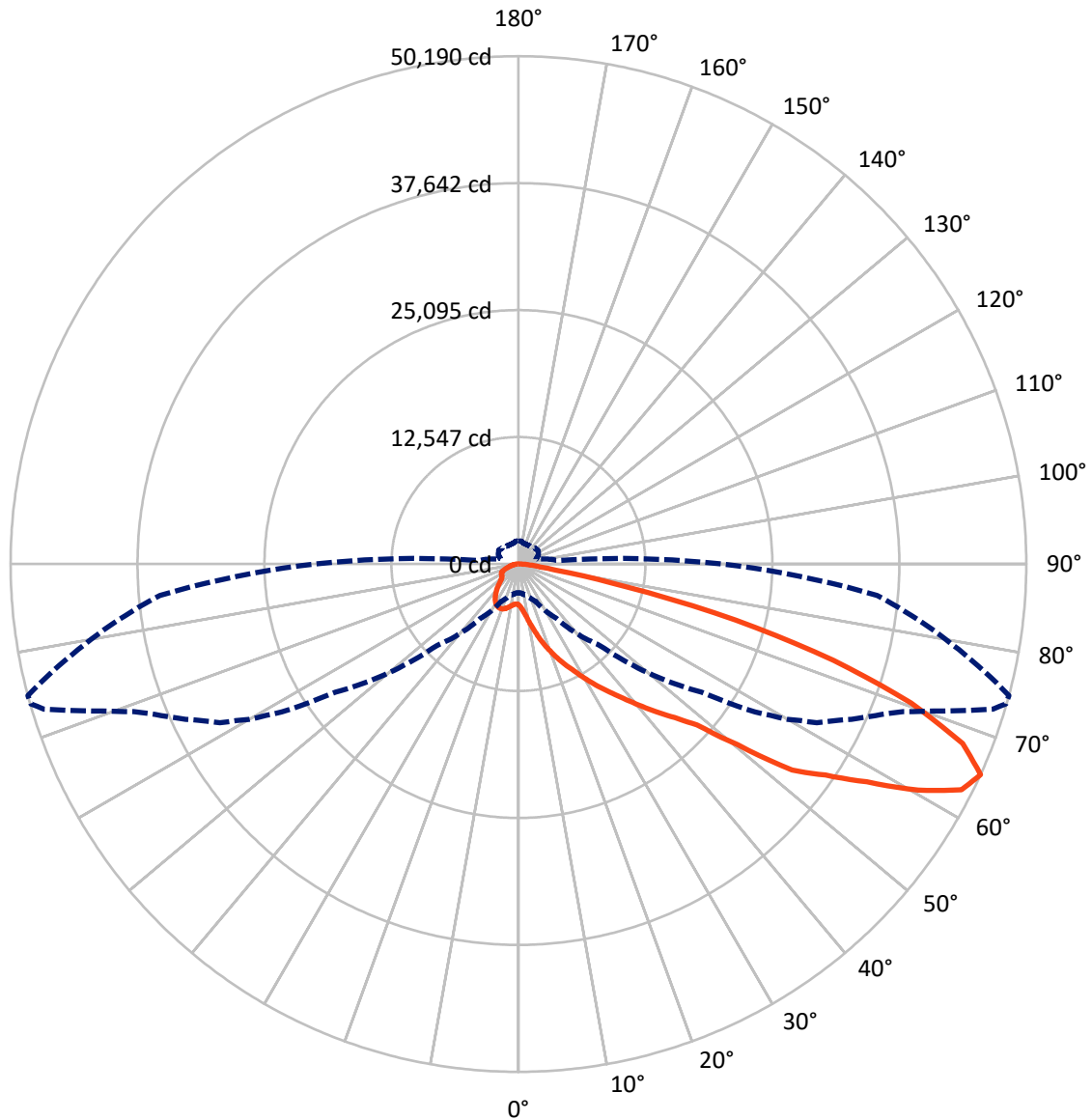
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.9 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
House Side	Lumens	7645.9	0.0	7645.9
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	41946.1	0.0	41946.1
	% Fixture	84.6	0.0	84.6
Total	Lumens	49592.0	0.0	49592.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	498.2	1.0
10°-20°	1946.4	3.9
20°-30°	3993.4	8.1
30°-40°	6718.7	13.5
40°-50°	9283.4	18.7
50°-60°	11588.4	23.4
60°-70°	10428.3	21.0
70°-80°	4371.5	8.8
80°-90°	763.7	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°	49592.0	100.0
0°-180°	49592.0	100.0



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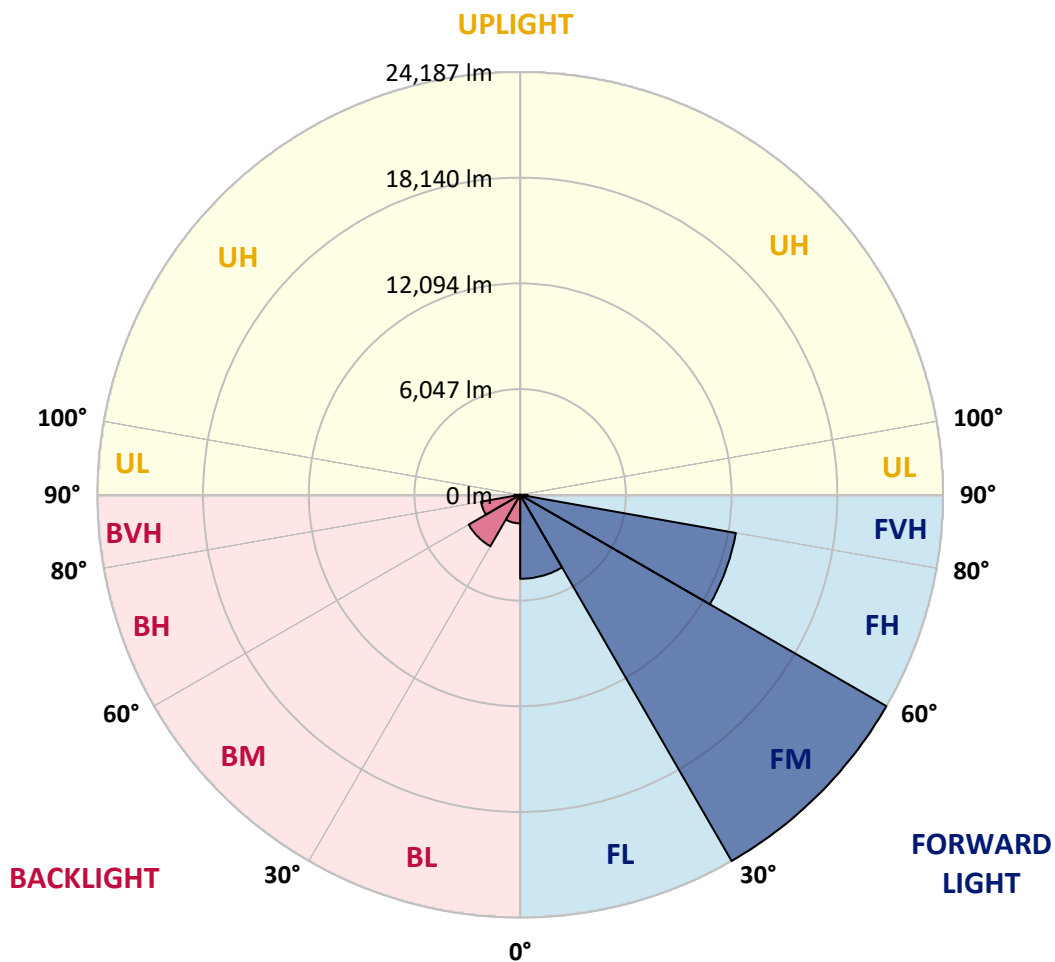
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4802.8	9.7			
FM (30°-60°)	24187.2	48.8			
FH (60°-80°)	12526.8	25.3			G5
FVH (80°-90°)	429.3	0.9			G3/500
BL (0°-30°)	1635.1	3.3	B3/2500		
BM (30°-60°)	3403.3	6.9	B3/5000		
BH (60°-80°)	2273.0	4.6	B3/2500		G3/2500
BVH (80°-90°)	334.4	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-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3
2.5°	5117.1	5060.8	5074.8	4981.0	4865.9	4715.7	4549.0	4546.7	4549.0	4532.6	4471.6
5°	7095.9	7027.8	7002.0	6790.7	6480.9	6039.6	5560.7	5509.1	5488.0	5434.0	5309.6
7.5°	8539.4	8501.9	8462.0	8302.4	8020.7	7527.8	6884.6	6774.3	6668.7	6642.8	6502.0
10°	9471.3	9461.9	9377.4	9335.2	9159.1	8731.9	8105.2	7999.6	7884.6	7844.6	7696.8
12.5°	10208.4	10206.0	10166.1	10177.9	10025.3	9715.4	9175.6	9079.3	8994.8	8872.8	8767.1
15°	10717.7	10720.1	10778.8	10844.5	10821.0	10612.1	10105.1	10062.8	9990.1	9905.6	9781.2
17.5°	11135.5	11147.3	11208.3	11328.0	11457.1	11440.7	11039.3	11004.1	10940.7	10825.7	10760.0
20°	12079.2	12123.8	12006.4	12006.4	12020.5	12083.9	11891.4	11863.2	11774.0	11713.0	11661.3
22.5°	13673.0	13724.6	13459.4	13189.4	12924.2	12731.7	12539.2	12574.4	12513.4	12471.2	12440.6
25°	15743.3	15783.2	15353.6	14898.3	14358.4	13654.2	13177.7	13156.6	13123.7	13097.9	13083.8
27.5°	17691.5	17708.0	17301.9	16635.3	16008.5	14996.8	13825.5	13799.7	13759.8	13710.5	13668.3
30°	19358.1	19353.4	18935.6	18299.5	17628.2	16508.5	14809.1	14729.3	14611.9	14478.1	14374.8
32.5°	20801.7	20794.7	20336.9	19677.3	18973.2	18006.1	16156.4	15992.1	15809.0	15548.5	15391.2
35°	21937.8	21933.1	21501.2	20813.4	20006.0	19416.8	17700.9	17499.1	17266.7	16916.9	16675.2
37.5°	22367.3	22367.3	22125.6	21656.1	20942.5	20538.8	19416.8	19172.7	18923.9	18527.2	18254.9
40°	22116.2	22120.9	22172.5	22085.7	21738.3	21428.4	21017.6	20872.1	20658.5	20301.7	20017.7
42.5°	21273.5	21299.3	21642.0	22062.2	22235.9	22186.6	22437.8	22372.0	22221.8	21947.2	21721.8
45°	20205.5	20285.3	20660.9	21454.2	22374.4	22841.5	23627.8	23634.9	23606.7	23458.8	23285.1
47.5°	18738.4	18851.1	19346.4	20419.1	22050.5	23477.6	24836.7	24900.1	24958.7	24862.5	24782.7
50°	16790.2	16924.0	17665.7	19088.2	21390.9	24137.2	27120.6	27407.0	27674.6	27641.7	27695.7
52.5°	14703.4	14860.7	15769.1	17353.5	20257.1	24289.8	28580.6	29047.7	29514.8	29897.4	30303.5
55°	12820.9	12736.4	13644.8	15313.7	18393.4	23602.0	29892.8	30456.1	30977.2	31446.7	31930.2
57.5°	10269.4	10407.9	11318.6	12968.8	15926.4	21660.8	30796.5	31620.4	32369.1	33146.1	33831.5
60°	7506.6	7645.1	8633.3	10309.3	13248.1	18717.3	30106.4	31355.1	32554.6	33744.7	34674.2
62.5°	4532.6	4635.9	5506.7	7102.9	10215.4	15226.9	27031.4	28669.8	30435.0	31857.4	33282.2
65°	2821.4	2880.1	3201.7	4079.6	6560.7	11367.9	22085.7	23871.9	25773.3	27578.3	29059.5
67.5°	2309.7	2330.9	2389.5	2577.3	3603.1	7412.7	16438.1	18020.2	19736.0	21482.4	23130.2
70°	2077.4	2063.3	2063.3	2075.0	2309.7	3985.7	10762.3	11792.8	13222.3	14741.0	16247.9
72.5°	1875.5	1861.4	1835.6	1800.4	1884.9	2431.8	5563.1	6340.0	7370.5	8720.2	10163.8
75°	1685.4	1666.6	1636.1	1591.5	1650.1	1835.6	2671.2	2997.5	3499.8	4218.1	5023.2
77.5°	1488.2	1464.7	1436.5	1403.7	1478.8	1427.2	1565.6	1683.0	1875.5	2105.5	2408.3
80°	1265.2	1244.1	1234.7	1218.2	1307.4	1086.8	1105.6	1178.3	1291.0	1415.4	1556.3
82.5°	990.6	990.6	1028.1	1035.2	1133.7	781.6	826.2	889.6	948.3	1014.0	1079.8
85°	652.5	657.2	784.0	833.3	894.3	525.8	619.7	640.8	687.8	725.3	753.5
87.5°	204.2	220.6	478.8	530.5	514.1	298.1	380.3	389.7	422.5	448.3	471.8
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3
2.5°	4471.6	4443.4	4417.6	4415.3	4396.5	4370.7	4380.0	4340.1	4342.5	4321.4	4297.9
5°	5257.9	5239.2	5145.3	5119.4	5049.0	5004.4	4997.4	4903.5	4891.8	4837.8	4779.1
7.5°	6389.3	6328.3	6196.8	6133.5	6013.8	5924.6	5882.3	5757.9	5696.9	5556.0	5492.7
10°	7574.7	7497.2	7335.3	7246.1	7131.1	6987.9	6910.4	6729.7	6659.3	6530.2	6375.2
12.5°	8673.2	8595.8	8429.1	8361.1	8208.5	8055.9	7971.4	7767.2	7675.6	7469.1	7347.0
15°	9689.6	9612.2	9466.6	9396.2	9243.6	9119.2	9006.6	8804.7	8696.7	8504.2	8344.6
17.5°	10675.5	10593.3	10466.6	10403.2	10255.3	10128.6	10006.5	9816.4	9706.0	9513.6	9370.4
20°	11590.9	11529.9	11438.3	11353.8	11206.0	11090.9	10945.4	10781.1	10621.5	10480.7	10344.5
22.5°	12389.0	12365.5	12266.9	12229.4	12102.6	12004.0	11877.3	11715.3	11600.3	11421.9	11295.2
25°	13076.8	13069.7	13022.8	13011.0	12921.8	12827.9	12799.8	12666.0	12560.4	12403.1	12271.6
27.5°	13668.3	13675.3	13663.6	13696.4	13673.0	13630.7	13633.1	13588.5	13527.4	13396.0	13281.0
30°	14325.5	14288.0	14309.1	14356.0	14370.1	14374.8	14452.3	14478.1	14473.4	14386.5	14330.2
32.5°	15255.0	15165.8	15083.7	15076.6	15123.6	15142.4	15273.8	15341.9	15400.6	15421.7	15431.1
35°	16440.4	16262.0	16090.7	15999.1	15919.3	15940.5	16034.3	16144.7	16273.8	16363.0	16468.6
37.5°	17933.3	17715.0	17412.2	17196.3	17142.3	17024.9	17085.9	17172.8	17299.5	17438.0	17621.1
40°	19743.1	19412.1	19071.7	18785.4	18630.4	18414.5	18412.2	18395.7	18473.2	18602.3	18860.5
42.5°	21484.8	21191.3	20829.9	20529.4	20327.5	20038.8	19980.1	19827.6	19862.8	19975.4	20226.6
45°	23116.1	22874.4	22653.7	22306.3	22135.0	21822.8	21724.2	21543.4	21442.5	21494.1	21745.3
47.5°	24695.8	24540.9	24310.9	24085.6	23954.1	23674.8	23548.0	23418.9	23289.8	23285.1	23548.0
50°	27775.5	27693.3	27421.1	27186.3	27249.7	26907.0	26928.1	26580.7	26738.0	26756.8	27308.4
52.5°	30669.7	30956.1	31157.9	31404.4	31564.0	31594.5	31700.2	31857.4	32047.6	32423.1	32934.8
55°	32326.9	32686.0	32894.9	33082.7	33392.6	33458.3	33634.3	33843.2	34009.9	34432.4	34866.7
57.5°	34296.3	34962.9	35286.8	35584.9	36002.7	36162.4	36455.8	36683.5	36899.4	37399.4	37925.2
60°	35509.8	36322.0	36981.6	37453.4	37976.8	38352.4	38796.0	39152.8	39659.8	40258.4	41042.4
62.5°	34545.1	35737.5	36613.0	37422.9	38134.1	38852.4	39488.5	40155.1	40925.0	41831.1	43047.0
65°	30702.6	31916.1	33416.0	34256.4	35197.6	36305.5	37272.6	38352.4	39401.6	40720.8	42518.8
67.5°	24717.0	26127.7	27813.1	28660.4	29742.5	30979.5	32064.0	33383.2	34608.5	36207.0	38429.8
70°	17815.9	19639.8	21057.5	21942.5	23205.3	24479.9	25526.8	27061.9	28075.9	29714.4	32012.4
72.5°	11281.1	12720.0	14457.0	15571.9	16693.9	17984.9	19055.3	20379.2	21325.1	22818.0	24900.1
75°	6065.4	7126.4	8652.1	9710.7	10912.6	12015.8	13269.2	14156.5	14856.0	16036.7	17726.7
77.5°	2842.6	3488.1	4260.3	5074.8	5889.4	6739.1	7565.3	8283.6	8584.0	9260.1	10257.7
80°	1725.3	1934.2	2159.5	2410.7	2751.0	3025.7	3389.5	3652.4	3671.2	3884.8	4189.9
82.5°	1152.5	1230.0	1298.1	1361.4	1448.3	1516.3	1593.8	1685.4	1722.9	1772.2	1870.8
85°	786.3	823.9	838.0	877.9	868.5	892.0	922.5	953.0	969.4	967.1	1011.7
87.5°	483.5	502.3	511.7	521.1	514.1	504.7	518.8	535.2	539.9	525.8	530.5
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3
2.5°	4302.6	4281.5	4260.3	4246.2	4241.6	4117.1	4063.2	4028.0	3952.8	3891.8	3842.5
5°	4746.2	4701.6	4666.4	4624.2	4600.7	4286.2	4171.1	4091.3	3959.9	3882.4	3812.0
7.5°	5459.8	5335.4	5262.6	5180.5	5110.1	4542.0	4351.9	4227.5	4044.4	3941.1	3861.3
10°	6269.6	6140.5	6025.5	5898.7	5788.4	4882.4	4605.4	4412.9	4171.1	4037.3	3931.7
12.5°	7173.3	7046.6	6901.0	6739.1	6598.2	5314.3	4929.3	4654.7	4323.7	4145.3	3997.4
15°	8241.3	8018.3	7842.3	7654.5	7490.2	5830.7	5307.2	4927.0	4485.7	4243.9	4046.7
17.5°	9234.2	8999.5	8760.1	8595.8	8405.6	6410.5	5687.5	5203.9	4619.5	4307.3	4056.1
20°	10203.7	9947.8	9741.3	9520.6	9321.1	7011.4	6093.6	5448.1	4706.3	4309.6	3997.4
22.5°	11058.1	10898.5	10668.4	10429.0	10227.1	7612.3	6473.8	5654.6	4739.2	4255.6	3894.2
25°	12029.9	11860.9	11579.2	11377.3	11152.0	8224.9	6847.0	5814.2	4720.4	4154.7	3734.5
27.5°	13067.4	12879.6	12590.9	12379.6	12107.3	8861.0	7189.8	5929.3	4650.0	3990.4	3520.9
30°	14149.5	13978.1	13694.1	13480.5	13205.9	9534.7	7572.4	6006.7	4509.1	3762.7	3272.1
32.5°	15311.4	15168.2	14886.5	14663.5	14370.1	10264.7	7929.1	6030.2	4295.5	3492.8	3009.2
35°	16414.6	16316.0	16078.9	15870.0	15564.9	10954.8	8307.1	6018.5	4042.0	3197.0	2769.8
37.5°	17656.3	17597.6	17480.3	17215.0	16841.8	11891.4	8760.1	5969.2	3732.2	2903.6	2586.7
40°	18980.2	18984.9	18858.1	18677.4	18330.0	13027.5	9300.0	5872.9	3394.2	2645.4	2420.1
42.5°	20381.5	20454.3	20393.3	20264.2	19930.8	14172.9	9945.5	5755.6	3065.6	2394.2	2255.7
45°	21987.1	22076.3	22170.2	21980.0	21656.1	15684.6	10795.2	5603.0	2711.1	2185.3	2143.1
47.5°	23839.1	23979.9	24064.4	24066.8	23742.8	17557.7	12175.4	5511.4	2396.6	2044.5	2089.1
50°	27747.3	27791.9	27991.4	28338.8	28090.0	21893.2	14586.1	5455.1	2183.0	1957.6	2049.2
52.5°	33378.5	33869.1	34214.1	34190.6	33852.6	24646.6	15914.6	5164.0	2056.2	1924.8	2030.4
55°	35671.8	36284.4	36922.9	37091.9	36829.0	26996.2	17170.4	4873.0	1995.2	1948.3	2037.4
57.5°	38728.0	39760.8	40636.3	41004.8	40624.6	30003.1	18822.9	4720.4	1976.4	2011.6	2082.0
60°	42298.2	43575.1	44725.3	45387.2	45387.2	33458.3	20536.4	4657.0	1950.6	2105.5	2157.2
62.5°	44591.5	46467.0	48204.0	49173.4	49145.2	35864.3	21297.0	4441.1	1891.9	2171.2	2260.4
65°	44600.9	46830.8	49044.3	50133.4	50189.8	35568.5	20041.2	3922.3	1783.9	2180.6	2363.7
67.5°	40882.8	43260.6	45840.2	47058.5	47340.2	32742.4	17348.8	3225.2	1607.9	2086.7	2401.3
70°	34528.7	36850.1	39483.8	40680.9	41180.9	27911.6	13973.4	2485.8	1382.6	1880.2	2323.8
72.5°	27202.8	29479.6	31312.9	32188.4	32578.1	21334.5	10175.5	1877.8	1133.7	1584.4	2114.9
75°	19259.5	20968.4	21942.5	22137.3	22198.3	12860.8	6182.8	1396.6	934.2	1232.3	1786.3
77.5°	10870.3	11602.7	11522.9	11609.7	10886.7	4964.5	2692.3	999.9	769.9	936.6	1384.9
80°	4243.9	4375.4	4110.1	4028.0	3694.6	1847.3	1187.7	697.1	615.0	708.9	969.4
82.5°	1870.8	1931.8	1875.5	1889.6	1807.4	953.0	711.2	504.7	469.5	518.8	643.2
85°	1030.5	1049.2	1044.5	1075.1	1030.5	380.3	338.0	309.8	328.6	352.1	413.1
87.5°	502.3	507.0	490.6	516.4	500.0	192.5	166.7	176.0	192.5	197.2	197.2
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°	4030.3	4030.3	4030.3	4030.3	4030.3	4030.3
2.5°	3807.3	3788.5	3790.9	3786.2	3776.8	3776.8
5°	3774.4	3755.7	3755.7	3751.0	3739.2	3741.6
7.5°	3807.3	3776.8	3765.1	3748.6	3732.2	3732.2
10°	3844.9	3790.9	3758.0	3729.8	3708.7	3708.7
12.5°	3873.0	3788.5	3734.5	3697.0	3675.9	3675.9
15°	3882.4	3772.1	3697.0	3652.4	3633.6	3631.3
17.5°	3851.9	3708.7	3617.2	3565.5	3542.1	3535.0
20°	3758.0	3593.7	3483.4	3424.7	3391.8	3380.1
22.5°	3617.2	3429.4	3300.3	3239.3	3197.0	3190.0
25°	3420.0	3218.1	3091.4	3032.7	3009.2	3002.2
27.5°	3190.0	3002.2	2894.2	2856.7	2835.5	2833.2
30°	2971.7	2812.1	2732.2	2704.1	2678.3	2673.6
32.5°	2767.5	2666.5	2636.0	2596.1	2535.1	2528.0
35°	2621.9	2612.5	2591.4	2502.2	2427.1	2406.0
37.5°	2532.7	2619.6	2511.6	2335.6	2281.6	2276.9
40°	2481.1	2546.8	2361.4	2300.3	2305.0	2300.3
42.5°	2363.7	2431.8	2366.1	2337.9	2356.7	2361.4
45°	2246.4	2321.5	2401.3	2382.5	2427.1	2427.1
47.5°	2180.6	2293.3	2398.9	2398.9	2464.7	2488.1
50°	2105.5	2269.8	2361.4	2394.2	2445.9	2427.1
52.5°	2100.8	2229.9	2307.4	2366.1	2389.5	2368.4
55°	2107.9	2197.1	2253.4	2319.1	2347.3	2349.6
57.5°	2117.3	2178.3	2215.8	2246.4	2330.9	2330.9
60°	2140.7	2161.9	2183.0	2199.4	2309.7	2312.1
62.5°	2178.3	2145.4	2140.7	2157.2	2298.0	2288.6
65°	2237.0	2122.0	2086.7	2103.2	2286.3	2258.1
67.5°	2316.8	2086.7	2018.7	2030.4	2276.9	2215.8
70°	2389.5	2030.4	1934.2	1922.4	2187.7	2079.7
72.5°	2396.6	1964.7	1816.8	1781.6	1901.3	1798.0
75°	2279.2	1920.1	1687.7	1584.4	1570.3	1556.3
77.5°	2053.9	1894.3	1537.5	1375.5	1347.3	1356.7
80°	1718.2	1798.0	1356.7	1164.3	1316.8	1300.4
82.5°	1284.0	1586.8	1152.5	1030.5	1028.1	908.4
85°	713.6	1237.0	938.9	772.3	537.5	521.1
87.5°	199.5	687.8	657.2	436.6	298.1	309.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)