

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: P194647

Luminaire Tested: **GLEON-AF-09-LED-E1-SLL-7060-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194647
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24296)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-SLL-7060-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51301 lumens
Efficiency: N/A
Efficacy: 89.2 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 - G5

Input Watts (W): 575
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



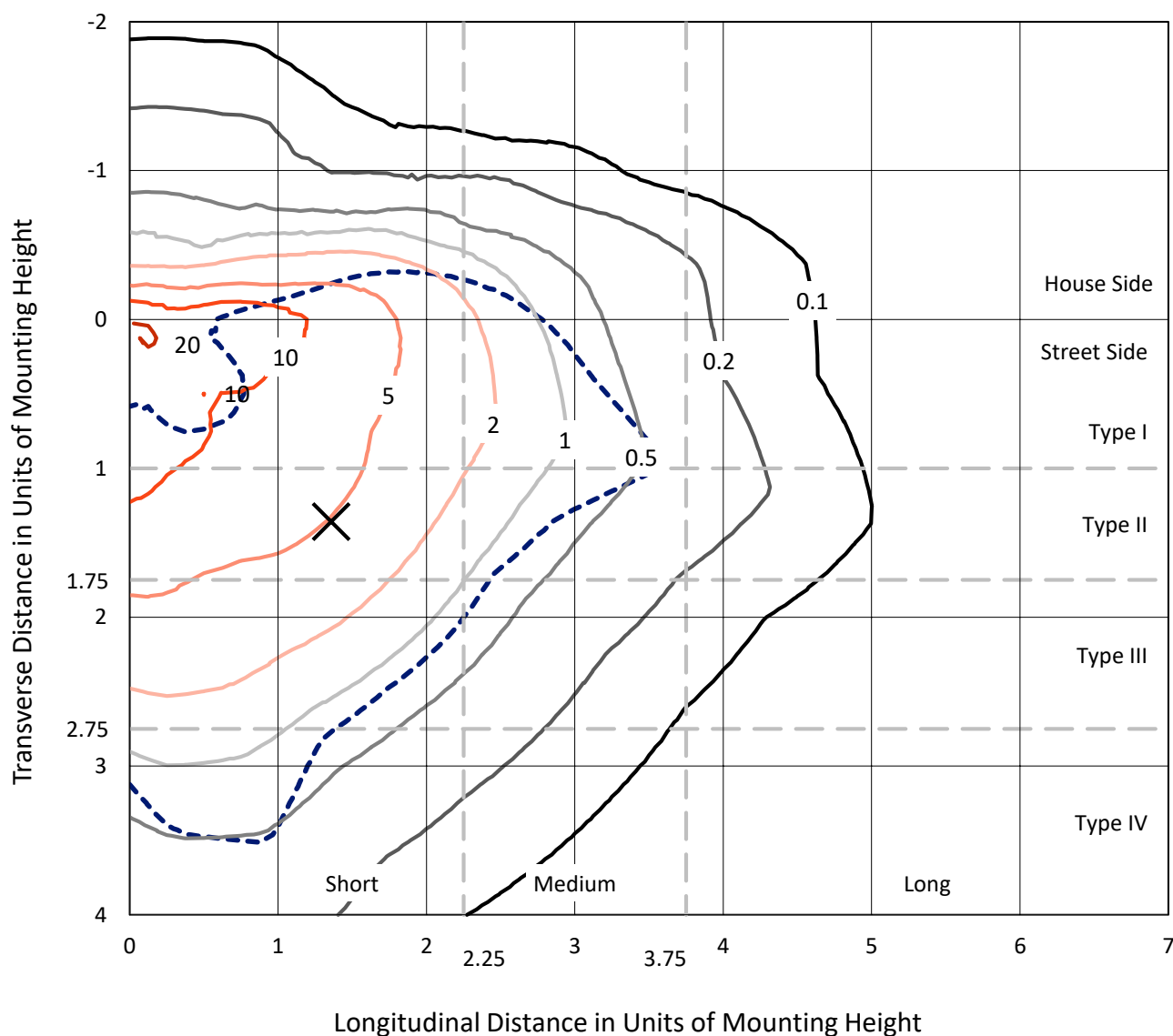
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

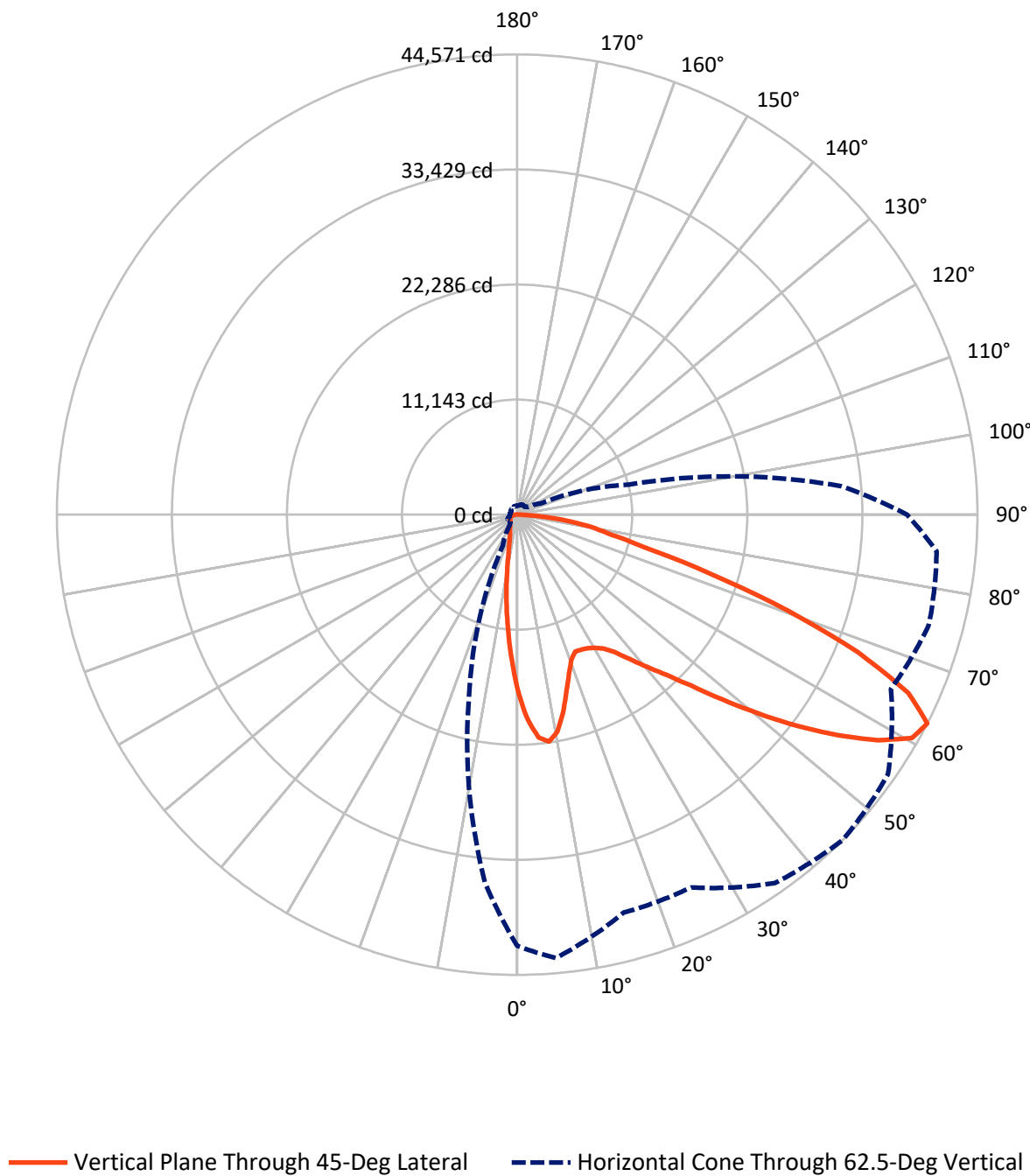


Based on 30 foot mounting height. Maximum calculated value = 22.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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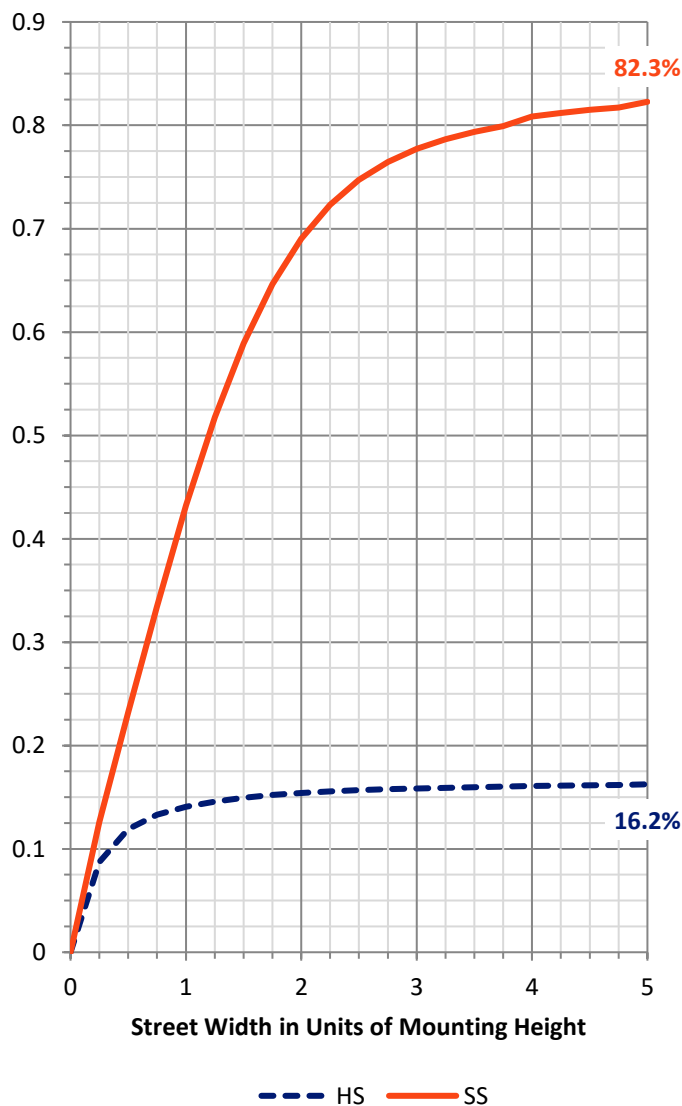
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8489.6	0.0	8489.6
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	42811.4	0.0	42811.4
	% Fixture	83.5	0.0	83.5
Total	Lumens	51301.0	0.0	51301.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1261.7	2.5
10°-20°	2313.6	4.5
20°-30°	3373.3	6.6
30°-40°	5195.3	10.1
40°-50°	7646.2	14.9
50°-60°	11215.3	21.9
60°-70°	12537.1	24.4
70°-80°	6138.0	12.0
80°-90°	1620.6	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°	51301.0	100.0
0°-180°	51301.0	100.0

Coefficient of Utilization



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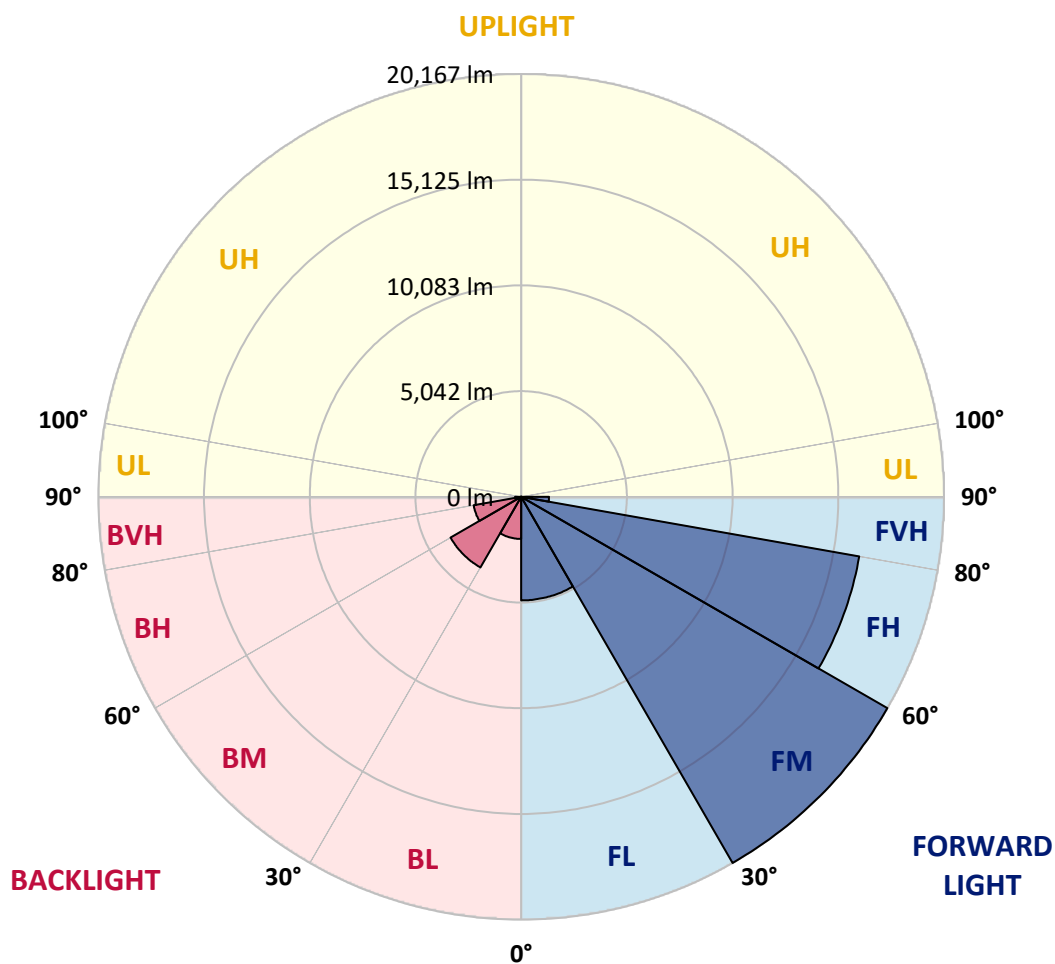
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4940.1	9.6			
FM	(30°-60°)	20166.9	39.3			
FH	(60°-80°)	16373.5	31.9			G5
FVH	(80°-90°)	1330.9	2.6			G5
BL	(0°-30°)	2008.5	3.9	B3/2500		
BM	(30°-60°)	3889.9	7.6	B3/5000		
BH	(60°-80°)	2301.5	4.5	B3/2500		G3/2500
BVH	(80°-90°)	289.7	0.6			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2
2.5°	18009.1	18296.7	18857.9	19278.1	19788.5	19907.0	20070.5	19909.8	19625.0	19247.1	19123.0
5°	16934.6	17549.4	18911.5	20110.0	21176.0	21672.4	21810.5	21401.6	20575.3	19489.6	18826.9
7.5°	15211.5	16085.8	17930.1	19695.5	21266.3	22194.1	22171.5	21221.1	19701.1	17932.9	16869.7
10°	13725.4	14723.7	16838.7	18812.8	20479.5	21379.1	21032.2	19816.7	18003.4	15967.3	14813.9
12.5°	12893.4	13872.0	16018.1	18000.6	19393.7	19703.9	19438.8	18248.8	16539.8	14481.1	13471.5
15°	12749.6	13824.1	15691.0	17304.0	18085.2	17814.5	17498.6	16965.6	15758.6	14001.7	12949.8
17.5°	13372.8	14557.3	16066.0	16819.0	16686.4	16215.5	16125.2	16184.5	15894.0	14534.7	13322.1
20°	14568.6	15989.9	16960.0	16590.6	15623.3	14974.7	14997.2	15902.5	16762.6	15885.5	14500.9
22.5°	16246.5	17868.1	18248.8	16711.8	15174.9	14405.0	14591.1	16057.6	18147.2	17859.6	16091.4
25°	18418.0	19895.7	19622.2	17151.8	15220.0	14475.5	14625.0	16593.4	19782.9	19833.7	18059.8
27.5°	20521.8	21892.3	20775.6	17735.5	15406.1	14641.9	14839.3	17436.6	21345.2	21976.9	20310.3
30°	22163.0	23116.2	21232.4	18268.5	15772.7	14966.2	15211.5	18237.5	22055.9	23423.6	22041.8
32.5°	23522.3	24207.6	21960.0	18928.4	16446.7	15476.6	15908.1	19210.4	23079.6	24799.8	23736.7
35°	25259.5	25454.1	22865.2	19664.5	17487.3	16365.0	16900.8	20163.6	24055.3	26190.1	25406.1
37.5°	27295.6	27044.6	23719.7	20671.2	18832.5	17755.3	18198.0	21209.9	24859.0	27766.6	27112.3
40°	29309.1	28705.6	24791.4	22233.5	20795.3	19393.7	19918.3	22326.6	25609.2	29345.8	28779.0
42.5°	31020.9	30127.0	25848.9	23951.0	22622.7	21201.4	21827.5	23451.8	26325.5	30693.8	30225.7
45°	32287.2	31176.0	26855.7	25600.7	25141.1	23604.1	23900.2	24740.6	27101.0	31819.0	31415.7
47.5°	33418.0	32230.7	27995.0	27264.6	27343.5	26728.8	26252.2	26240.9	28014.7	32738.4	32541.0
50°	34932.4	33694.4	29218.9	28979.2	30648.7	30239.8	29187.9	27992.2	29171.0	33781.8	33759.2
52.5°	37019.3	36012.5	30713.5	30826.3	33733.9	34001.8	32698.9	30095.9	30981.5	35696.6	35561.3
55°	39486.8	38900.2	32749.6	32949.9	37518.4	37710.2	36415.8	32727.1	33643.6	38468.8	38093.7
57.5°	41412.9	41288.9	34983.2	35499.2	40344.1	41207.1	40017.0	35772.8	36644.2	40803.8	39861.9
60°	42180.0	42780.7	37360.5	38071.1	42958.4	43914.4	42870.9	38449.0	39303.5	41771.1	39740.6
62.5°	41765.5	43107.8	39892.9	39833.7	43542.1	44571.4	43838.2	39938.0	41274.8	40772.8	37729.9
65°	39850.6	41931.8	41362.2	39379.7	41545.5	41630.1	41393.2	39272.5	41740.1	37617.1	33843.8
67.5°	35679.7	38674.6	39427.6	35487.9	36159.1	35609.2	35211.6	35629.0	39314.8	32887.8	28443.4
70°	29061.0	33567.5	33928.4	28384.2	28079.6	27710.2	26917.7	29210.4	34529.1	26954.4	22569.1
72.5°	21367.8	26105.5	27213.8	20817.9	19407.8	19484.0	18857.9	22013.6	28073.9	20022.6	16850.0
75°	14619.3	18903.0	21291.6	14526.3	12834.2	12865.2	12786.3	15597.9	22360.5	13928.4	12608.6
77.5°	10679.7	13505.4	16057.6	9766.0	9481.1	9306.3	9264.0	10913.7	17143.3	10112.8	9791.3
80°	8570.2	9977.5	10786.8	6768.2	7278.6	7264.5	7030.5	7504.2	11195.7	7397.1	7323.8
82.5°	5944.7	7667.8	8739.4	5304.6	4912.6	4830.8	4887.2	5589.4	7913.2	5056.4	4808.2
85°	3135.9	5093.1	8654.8	4701.1	2916.0	2326.6	2893.4	4577.0	6855.6	2679.1	2346.3
87.5°	400.5	1472.1	5730.4	1875.4	1150.6	620.4	1373.4	2577.6	4402.2	547.1	476.6
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°	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2
2.5°	18804.3	18429.3	17938.6	17484.5	17013.6	16545.4	15933.5	15549.9	15284.9	15234.1	15121.3
5°	18347.5	17101.0	16159.1	15344.1	14605.2	13561.8	12983.7	12504.3	12247.6	12222.2	12160.2
7.5°	16240.9	14520.6	13248.8	12095.3	11049.1	10205.9	9275.3	8841.0	8663.3	8705.6	8747.9
10°	14049.7	12126.4	10665.6	9486.8	8564.6	7853.9	7106.6	6601.8	6252.1	6181.6	6167.5
12.5°	12447.9	10338.4	8919.9	8088.0	7374.5	6706.2	5913.7	5318.7	4864.6	4709.5	4605.2
15°	11771.0	9464.2	7978.0	7081.2	6294.4	5445.6	4709.5	4086.3	3668.9	3533.6	3457.4
17.5°	11914.9	9221.7	7329.4	6181.6	5174.9	4289.3	3361.5	2828.5	2577.6	2512.7	2512.7
20°	12670.6	9176.6	6793.6	5352.5	4097.6	3071.1	2309.6	2005.1	1923.3	1914.8	1937.4
22.5°	13731.0	9334.5	6393.1	4633.4	3183.9	2242.0	1799.2	1686.4	1649.7	1658.2	1683.6
25°	15310.2	9867.5	6102.7	3993.2	2498.6	1835.9	1604.6	1536.9	1520.0	1542.6	1573.6
27.5°	17182.8	10400.5	5922.2	3511.0	2109.4	1678.0	1525.7	1455.2	1466.4	1494.6	1522.8
30°	18826.9	10837.6	5637.3	3167.0	1988.2	1686.4	1525.7	1429.8	1418.5	1424.1	1432.6
32.5°	20301.8	11133.7	5304.6	2839.8	1714.6	1497.5	1424.1	1410.0	1348.0	1325.4	1328.3
35°	21573.6	11133.7	5104.4	2648.1	1536.9	1328.3	1209.8	1139.3	1108.3	1111.1	1142.1
37.5°	22800.4	10910.9	5005.7	2540.9	1441.1	1263.4	1159.1	1097.0	1054.7	1046.3	1051.9
40°	23883.3	10586.6	4892.8	2495.8	1367.7	1223.9	1125.2	1074.5	1029.3	1015.2	1018.1
42.5°	24751.9	10324.3	4768.8	2436.6	1322.6	1195.7	1102.7	1057.5	1006.8	992.7	989.8
45°	25691.0	10236.9	4605.2	2318.1	1345.2	1198.5	1097.0	1049.1	998.3	981.4	975.7
47.5°	26929.0	10510.5	4436.0	2177.1	1393.1	1212.6	1105.5	1049.1	995.5	981.4	975.7
50°	28488.5	11153.4	4221.7	1971.2	1345.2	1252.1	1102.7	1040.6	995.5	981.4	970.1
52.5°	30490.8	12022.0	3939.7	1734.4	1317.0	1348.0	1097.0	1023.7	981.4	961.6	941.9
55°	32924.5	12732.7	3604.1	1539.8	1252.1	1322.6	1088.6	1004.0	958.8	930.6	913.7
57.5°	34706.8	12989.3	3172.6	1412.9	1161.9	1280.3	1077.3	978.6	930.6	908.1	885.5
60°	34354.3	12493.0	2808.8	1333.9	1108.3	1156.2	1068.8	956.0	905.2	888.3	868.6
62.5°	31531.4	11195.7	2574.7	1297.2	1074.5	1054.7	1077.3	933.4	882.7	865.8	860.1
65°	27298.4	9280.9	2481.7	1288.8	1046.3	995.5	1001.1	908.1	857.3	843.2	837.6
67.5°	22518.4	7490.1	2399.9	1317.0	1009.6	953.2	925.0	874.2	831.9	817.8	806.5
70°	17758.1	6229.6	2363.2	1300.1	964.5	910.9	879.9	837.6	800.9	786.8	778.3
72.5°	14300.7	5262.3	2343.5	1283.1	905.2	854.5	826.3	789.6	750.1	744.5	736.0
75°	12101.0	4137.1	2146.1	1229.6	837.6	786.8	767.1	733.2	693.7	693.7	688.1
77.5°	9334.5	2992.1	1785.1	1088.6	767.1	710.7	693.7	668.4	623.2	631.7	628.9
80°	6895.1	1951.5	1395.9	902.4	679.6	626.1	617.6	592.2	544.3	555.6	555.6
82.5°	4723.6	1280.3	1004.0	738.9	580.9	530.2	530.2	504.8	451.2	456.9	473.8
85°	2371.7	879.9	750.1	572.5	451.2	425.8	425.8	406.1	352.5	355.3	377.9
87.5°	721.9	530.2	496.3	408.9	324.3	318.7	304.6	290.5	256.6	253.8	267.9
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2
2.5°	14949.3	14788.5	14593.9	14165.3	14021.5	14013.0	14142.7	14007.4	14266.8	14156.8	14278.1
5°	12055.9	11897.9	11680.8	11133.7	10800.9	10575.3	10468.2	10152.3	10380.7	10214.3	10352.5
7.5°	8866.3	8903.0	8759.2	8437.7	7712.9	7349.1	7134.8	6943.0	7109.4	7092.5	7357.6
10°	6232.4	6331.1	6229.6	5905.3	5318.7	5118.5	5157.9	5234.1	5451.2	5564.0	5972.9
12.5°	4486.8	4481.1	4416.3	4125.8	3739.4	3762.0	3922.7	4055.3	4255.5	4374.0	4791.3
15°	3350.3	3299.5	3271.3	3034.4	2814.4	2862.4	2941.3	2955.4	3082.4	3152.9	3491.3
17.5°	2532.4	2557.8	2588.8	2419.6	2253.2	2222.2	2160.2	2084.0	2120.7	2134.8	2304.0
20°	2010.7	2112.2	2188.4	2069.9	1900.7	1810.5	1731.5	1680.8	1680.8	1678.0	1725.9
22.5°	1756.9	1830.2	1912.0	1830.2	1678.0	1599.0	1553.9	1514.4	1508.7	1508.7	1553.9
25°	1618.7	1672.3	1751.3	1694.9	1582.1	1522.8	1480.5	1429.8	1410.0	1404.4	1435.4
27.5°	1551.0	1573.6	1613.1	1562.3	1466.4	1438.2	1427.0	1381.8	1356.5	1342.4	1373.4
30°	1435.4	1429.8	1432.6	1381.8	1305.7	1302.9	1322.6	1331.1	1322.6	1319.8	1367.7
32.5°	1328.3	1317.0	1314.2	1269.0	1198.5	1181.6	1198.5	1215.5	1235.2	1263.4	1319.8
35°	1192.9	1221.1	1238.0	1198.5	1113.9	1063.2	1043.4	1012.4	995.5	995.5	1060.4
37.5°	1085.7	1150.6	1176.0	1139.3	1046.3	975.7	941.9	936.3	939.1	950.4	1012.4
40°	1049.1	1097.0	1119.6	1082.9	989.8	925.0	905.2	899.6	905.2	922.2	984.2
42.5°	1026.5	1060.4	1057.5	1012.4	936.3	891.1	879.9	874.2	879.9	896.8	964.5
45°	1006.8	1029.3	1006.8	953.2	882.7	860.1	862.9	860.1	865.8	882.7	947.5
47.5°	989.8	998.3	970.1	916.5	843.2	837.6	848.8	857.3	862.9	877.0	944.7
50°	964.5	964.5	939.1	882.7	809.4	812.2	826.3	846.0	848.8	865.8	919.3
52.5°	933.4	930.6	913.7	860.1	781.2	789.6	789.6	812.2	817.8	837.6	894.0
55°	908.1	902.4	894.0	843.2	755.8	769.9	761.4	769.9	784.0	803.7	865.8
57.5°	885.5	874.2	874.2	829.1	736.0	741.7	721.9	733.2	750.1	767.1	831.9
60°	862.9	851.7	857.3	809.4	705.0	699.4	690.9	713.5	719.1	738.9	803.7
62.5°	837.6	829.1	831.9	786.8	682.5	668.4	668.4	688.1	690.9	719.1	781.2
65°	817.8	806.5	803.7	764.2	657.1	640.2	648.6	657.1	662.7	690.9	750.1
67.5°	798.1	775.5	775.5	744.5	628.9	612.0	628.9	626.1	634.5	659.9	707.8
70°	772.7	741.7	744.5	730.4	600.7	580.9	595.0	592.2	597.9	614.8	662.7
72.5°	733.2	707.8	713.5	707.8	572.5	544.3	549.9	549.9	549.9	564.0	614.8
75°	682.5	662.7	679.6	693.7	538.6	499.2	504.8	504.8	496.3	504.8	566.8
77.5°	620.4	609.1	665.5	645.8	499.2	451.2	451.2	445.6	428.7	439.9	507.6
80°	552.7	544.3	614.8	541.5	454.0	392.0	386.4	372.3	355.3	363.8	431.5
82.5°	482.2	473.8	516.1	414.6	392.0	324.3	310.2	284.8	267.9	276.4	338.4
85°	394.8	394.8	397.6	313.0	298.9	248.2	231.2	197.4	177.7	183.3	242.5
87.5°	282.0	290.5	267.9	214.3	177.7	138.2	126.9	107.2	90.2	104.3	126.9
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2	17332.2
2.5°	14898.5	15208.7	15561.2	16012.4	16398.8	17033.3	17642.5	18009.1
5°	11139.3	11655.4	12298.4	13124.7	13894.6	15050.8	16198.6	16934.6
7.5°	7972.4	8525.1	9218.9	10251.0	11339.6	12814.5	14331.7	15211.5
10°	6596.2	7163.0	7746.8	8443.3	9334.5	10939.1	12732.7	13725.4
12.5°	5456.9	6063.2	6692.1	7425.3	8251.6	9684.2	11751.3	12893.4
15°	4176.5	4853.4	5595.0	6522.9	7557.8	9213.2	11508.8	12749.6
17.5°	2862.4	3618.2	4529.1	5674.0	6940.2	9060.9	11943.1	13372.8
20°	1971.2	2521.2	3494.1	4836.4	6359.3	9041.2	12777.8	14568.6
22.5°	1649.7	1895.1	2605.8	4066.6	5922.2	9283.7	14072.2	16246.5
25°	1525.7	1672.3	2081.2	3398.2	5603.5	9842.1	15854.5	18418.0
27.5°	1452.3	1584.9	1889.5	2961.1	5352.5	10490.7	17588.9	20521.8
30°	1480.5	1615.9	1835.9	2738.3	5011.3	11032.2	19128.6	22163.0
32.5°	1333.9	1393.1	1573.6	2540.9	4765.9	11486.2	20476.6	23522.3
35°	1136.5	1240.8	1404.4	2447.8	4771.6	11790.8	21945.9	25259.5
37.5°	1082.9	1187.3	1305.7	2414.0	4836.4	12115.1	23632.3	27295.6
40°	1049.1	1145.0	1246.5	2394.3	4898.5	12411.2	25284.9	29309.1
42.5°	1026.5	1113.9	1240.8	2326.6	4929.5	12676.3	26644.2	31020.9
45°	1023.7	1113.9	1263.4	2258.9	4977.4	12961.1	27783.5	32287.2
47.5°	1026.5	1150.6	1221.1	2177.1	4977.4	13437.7	29120.2	33418.0
50°	1015.2	1212.6	1176.0	2061.5	4861.8	14340.1	30953.3	34932.4
52.5°	1009.6	1204.2	1088.6	1883.8	4661.6	15772.7	33302.4	37019.3
55°	995.5	1161.9	1026.5	1618.7	4427.5	17335.1	35817.9	39486.8
57.5°	981.4	1029.3	992.7	1387.5	4066.6	18434.9	37549.4	41412.9
60°	1099.8	899.6	964.5	1274.7	3584.3	18736.6	37481.7	42180.0
62.5°	1018.1	843.2	927.8	1249.3	3245.9	17890.6	35750.2	41765.5
65°	798.1	806.5	891.1	1322.6	3155.7	15648.7	32682.0	39850.6
67.5°	730.4	769.9	854.5	1415.7	3164.1	12529.6	28096.5	35679.7
70°	688.1	730.4	812.2	1463.6	3186.7	9340.1	22213.8	29061.0
72.5°	640.2	676.8	764.2	1472.1	3040.1	6785.1	17120.7	21367.8
75°	583.8	617.6	696.6	1283.1	2518.3	4706.7	13096.5	14619.3
77.5°	518.9	544.3	612.0	989.8	1869.7	3011.9	9830.8	10679.7
80°	442.8	456.9	513.3	724.8	1280.3	1883.8	7777.8	8570.2
82.5°	355.3	361.0	397.6	544.3	831.9	1209.8	5208.7	5944.7
85°	251.0	251.0	273.5	394.8	566.8	767.1	2828.5	3135.9
87.5°	118.4	121.3	121.3	217.1	296.1	389.2	651.4	400.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)