

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: P453045

Luminaire Tested: **GALN-SA4A-740-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453045
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-740-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA 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: 15594 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

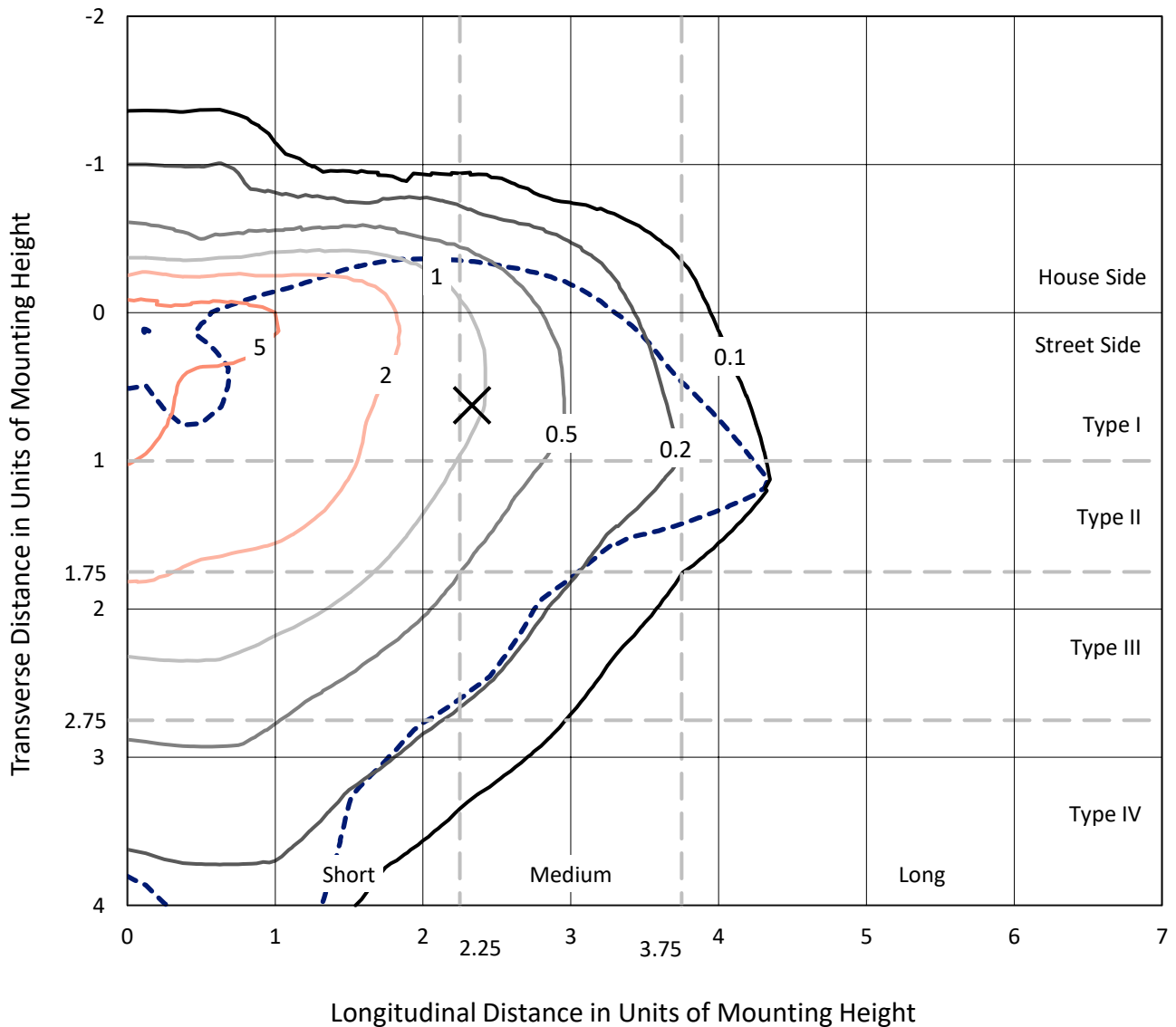
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

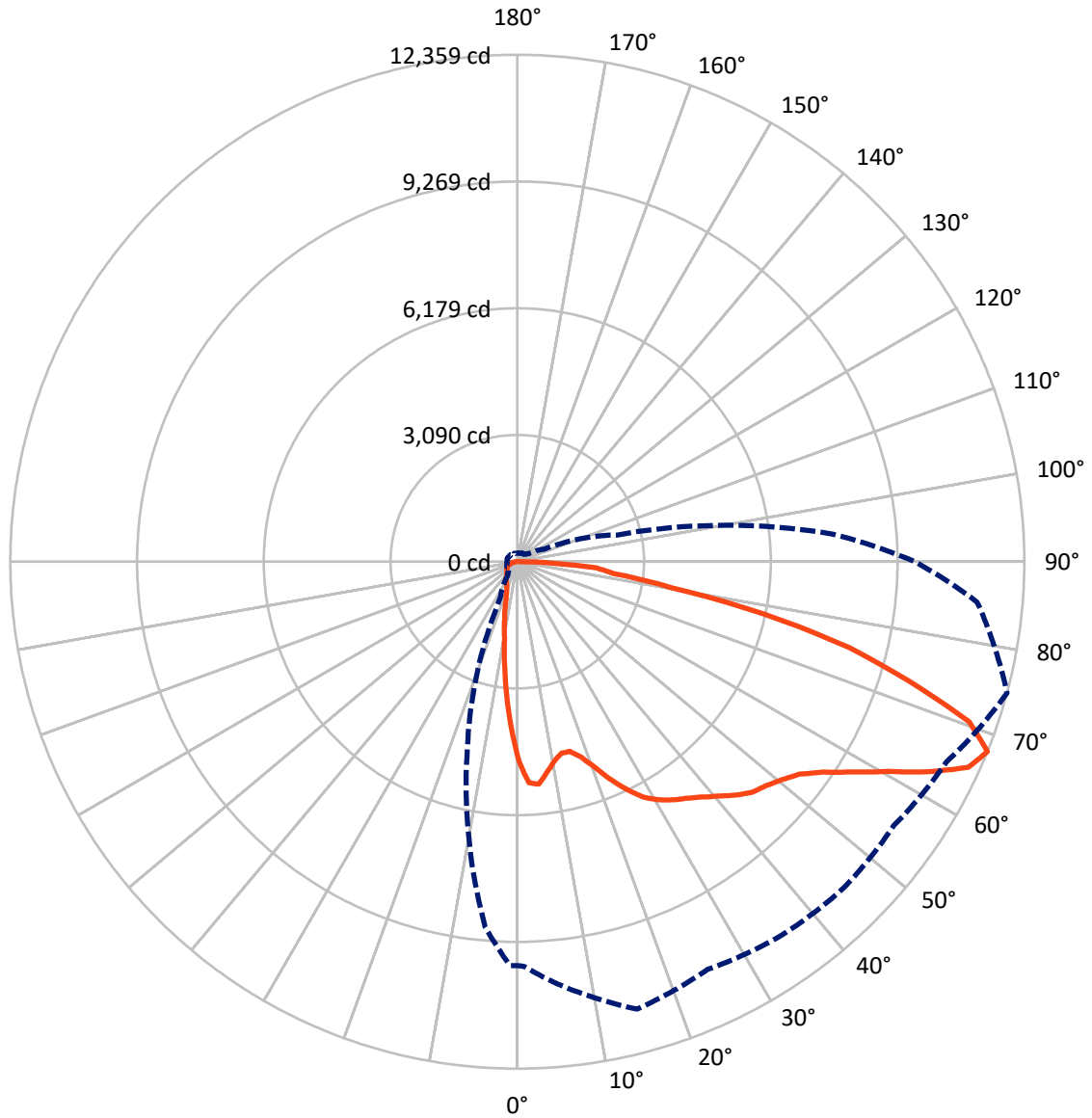
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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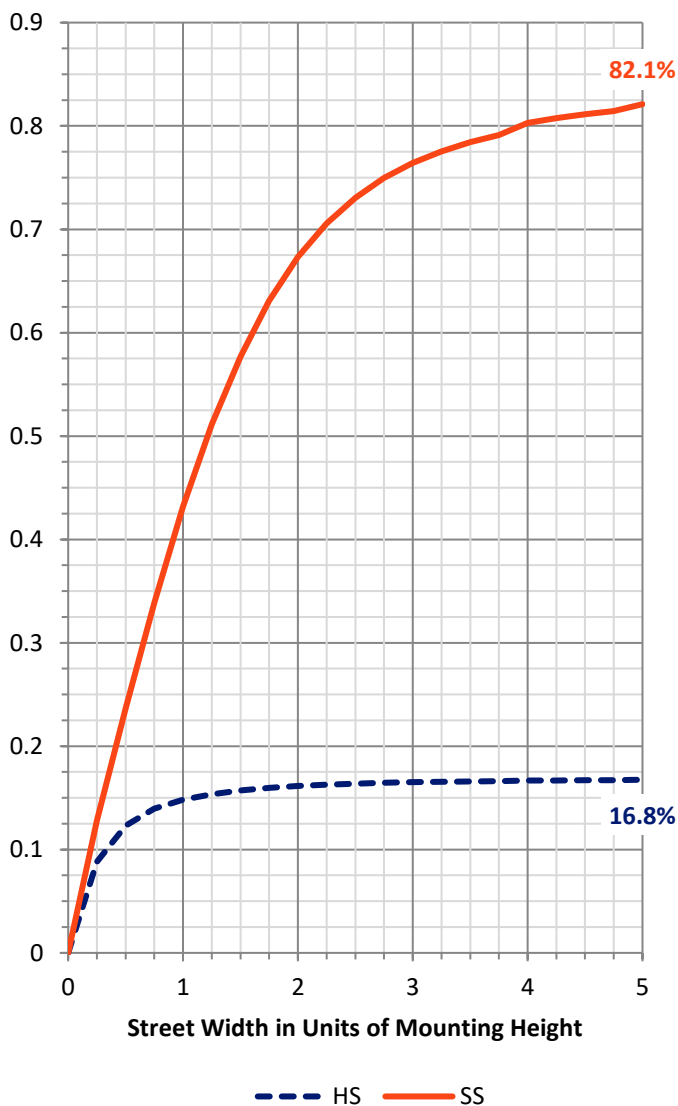
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2635.7	0.0	2635.7
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	12958.3	0.0	12958.3
	% Fixture	83.1	0.0	83.1
Total	Lumens	15594.0	0.0	15594.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.5	2.4
10°-20°	770.7	4.9
20°-30°	1109.0	7.1
30°-40°	1597.2	10.2
40°-50°	2243.7	14.4
50°-60°	3129.2	20.1
60°-70°	3720.4	23.9
70°-80°	2191.1	14.1
80°-90°	463.3	3.0
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°	15594.0	100.0
0°-180°	15594.0	100.0

Coefficient of Utilization



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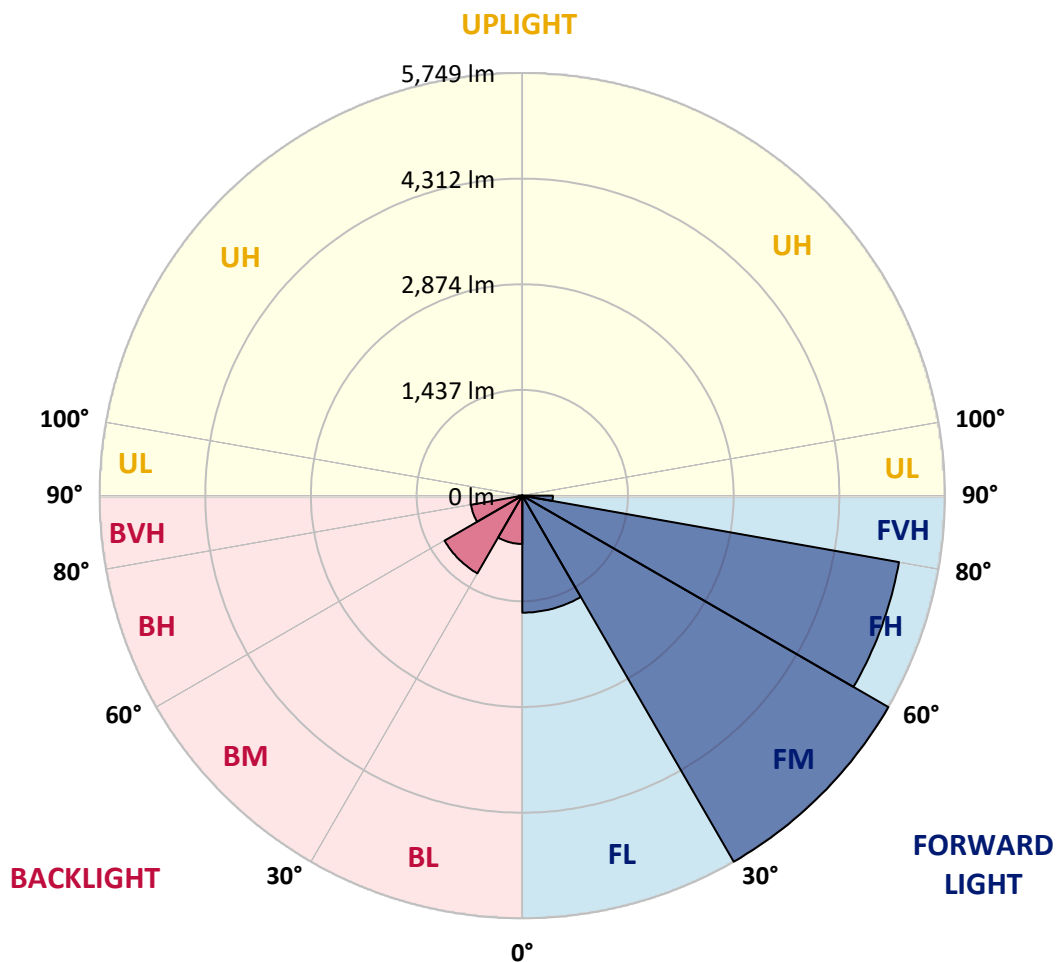
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1591.7	10.2			
FM	(30°-60°)	5748.9	36.9			
FH	(60°-80°)	5202.2	33.4			G3/7500
FVH	(80°-90°)	415.4	2.7			G3/500
BL	(0°-30°)	657.4	4.2	B2/1000		
BM	(30°-60°)	1221.1	7.8	B2/2500		
BH	(60°-80°)	709.2	4.5	B2/1000		G2/1000
BVH	(80°-90°)	47.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9
2.5°	5252.9	5259.9	5304.9	5435.9	5525.9	5558.9	5581.9	5538.9	5496.9	5394.9	5240.9
5°	5236.9	5277.9	5394.9	5688.9	5920.9	6020.9	6050.9	5921.9	5708.9	5446.9	5131.9
7.5°	4930.9	4985.9	5165.9	5658.9	6067.9	6301.9	6270.9	6037.9	5653.9	5186.9	4746.9
10°	4567.9	4628.9	4845.9	5441.9	5968.9	6290.9	6290.9	6006.9	5496.9	4941.9	4434.9
12.5°	4279.9	4343.9	4591.9	5218.9	5762.9	6067.9	6118.9	5874.9	5383.9	4786.9	4229.9
15°	4184.9	4246.9	4513.9	5083.9	5544.9	5730.9	5747.9	5667.9	5328.9	4797.9	4220.9
17.5°	4302.9	4382.9	4652.9	5123.9	5344.9	5355.9	5368.9	5431.9	5334.9	4998.9	4402.9
20°	4643.9	4729.9	5011.9	5252.9	5169.9	5055.9	5062.9	5224.9	5405.9	5330.9	4837.9
22.5°	5135.9	5210.9	5499.9	5479.9	5095.9	4860.9	4811.9	5037.9	5510.9	5744.9	5300.9
25°	5666.9	5754.9	6086.9	5816.9	5116.9	4744.9	4713.9	4927.9	5619.9	6131.9	5835.9
27.5°	6274.9	6360.9	6622.9	6156.9	5226.9	4735.9	4698.9	4917.9	5717.9	6489.9	6346.9
30°	6726.9	6805.9	6983.9	6442.9	5361.9	4795.9	4749.9	4996.9	5801.9	6734.9	6844.9
32.5°	7081.9	7163.9	7260.9	6620.9	5539.9	4904.9	4819.9	5140.9	5911.9	6921.9	7213.9
35°	7451.9	7548.9	7541.9	6778.9	5705.9	5030.9	4947.9	5348.9	6084.9	7084.9	7681.9
37.5°	7920.9	7959.9	7909.9	6920.9	5904.9	5257.9	5211.9	5657.9	6330.9	7281.9	8228.9
40°	8396.9	8474.9	8217.9	7092.9	6146.9	5684.9	5679.9	6114.9	6622.9	7512.9	8758.9
42.5°	8804.9	8870.9	8505.9	7242.9	6439.9	6205.9	6243.9	6727.9	7005.9	7780.9	9184.9
45°	9111.9	9170.9	8771.9	7387.9	6825.9	6807.9	7031.9	7384.9	7488.9	8021.9	9434.9
47.5°	9372.9	9429.9	8956.9	7607.9	7302.9	7526.9	7916.9	8069.9	7901.9	8159.9	9714.9
50°	9592.9	9609.9	9083.9	7869.9	7894.9	8407.9	8785.9	8884.9	8309.9	8357.9	9957.9
52.5°	9821.9	9799.9	9302.9	8199.9	8534.9	9243.9	9518.9	9621.9	8700.9	8601.9	10311.9
55°	10334.9	10355.9	9793.9	8615.9	9181.9	10064.9	10426.9	10327.9	9133.9	9050.9	10761.9
57.5°	10954.9	10936.9	10484.9	9266.9	9840.9	10828.9	11098.9	10939.9	9711.9	9667.9	11217.8
60°	11195.8	11219.8	11062.9	9966.9	10490.9	11497.8	11773.8	11526.8	10404.9	10384.9	11561.8
62.5°	10953.9	11088.9	11194.8	10589.9	11044.9	11989.8	12263.8	11981.8	11127.9	11272.8	11802.8
65°	10471.9	10500.9	10861.9	11117.9	11311.8	12070.8	12213.8	12063.8	11731.8	12081.8	11791.8
67.5°	9845.9	9870.9	10293.9	11290.8	10967.9	11150.9	11250.8	11206.8	11544.8	12358.8	11248.8
70°	9249.9	9229.9	9676.9	10849.9	9547.9	9269.9	9352.9	9214.9	9961.9	11681.8	10183.9
72.5°	8089.9	8161.9	8641.9	9623.9	7559.9	7107.9	7288.9	6931.9	7661.9	10004.9	8265.9
75°	6336.9	6353.9	7154.9	8076.9	5702.9	4989.9	5234.9	5085.9	5868.9	8345.9	5707.9
77.5°	4387.9	4349.9	5210.9	6168.9	4066.9	3653.0	3657.0	3586.0	4097.9	6144.9	3877.9
80°	2787.0	2729.0	3262.0	3810.9	2795.0	2990.0	2892.0	2889.0	2668.0	3790.9	2345.0
82.5°	1506.0	1570.0	2061.0	2389.0	2005.0	2311.0	2118.0	2056.0	1831.0	2373.0	1500.0
85°	686.0	746.0	1099.0	1625.0	1523.0	1540.0	1029.0	1214.0	1515.0	1927.0	801.0
87.5°	67.0	86.0	227.0	767.0	520.0	410.0	153.0	295.0	381.0	685.0	64.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9
2.5°	5177.9	5125.9	4948.9	4802.9	4647.9	4529.9	4375.9	4272.9	4201.9	4094.9	4081.9
5°	4939.9	4812.9	4504.9	4190.9	3919.9	3716.0	3509.0	3319.0	3207.0	3172.0	3127.0
7.5°	4538.9	4324.9	3928.9	3569.0	3258.0	2954.0	2720.0	2554.0	2443.0	2378.0	2300.0
10°	4208.9	3960.9	3479.0	3038.0	2782.0	2593.0	2387.0	2209.0	2072.0	1955.0	1891.0
12.5°	3986.9	3707.0	3165.0	2807.0	2609.0	2408.0	2167.0	1967.0	1765.0	1632.0	1575.0
15°	3919.9	3624.0	3068.0	2692.0	2408.0	2145.0	1875.0	1614.0	1414.0	1288.0	1246.0
17.5°	4083.9	3726.0	3067.0	2539.0	2172.0	1858.0	1512.0	1267.0	1062.0	968.0	938.0
20°	4389.9	3921.9	3076.0	2388.0	1916.0	1474.0	1100.0	899.0	801.0	761.0	746.0
22.5°	4816.9	4220.9	3103.0	2239.0	1636.0	1132.0	824.0	722.0	687.0	680.0	677.0
25°	5342.9	4590.9	3194.0	2105.0	1400.0	864.0	689.0	643.0	623.0	616.0	615.0
27.5°	5826.9	5068.9	3304.0	1990.0	1172.0	745.0	623.0	584.0	564.0	563.0	565.0
30°	6263.9	5468.9	3396.0	1861.0	999.0	662.0	580.0	541.0	522.0	521.0	527.0
32.5°	6641.9	5797.9	3464.0	1734.0	903.0	611.0	541.0	499.0	483.0	480.0	483.0
35°	7045.9	6125.9	3433.0	1635.0	848.0	569.0	512.0	471.0	452.0	443.0	443.0
37.5°	7506.9	6463.9	3380.0	1553.0	823.0	534.0	487.0	447.0	428.0	419.0	418.0
40°	8009.9	6801.9	3307.0	1480.0	798.0	513.0	470.0	428.0	405.0	396.0	394.0
42.5°	8453.9	7090.9	3247.0	1432.0	757.0	517.0	455.0	414.0	385.0	373.0	372.0
45°	8839.9	7381.9	3236.0	1404.0	723.0	511.0	451.0	403.0	369.0	356.0	354.0
47.5°	9141.9	7684.9	3299.0	1388.0	686.0	479.0	477.0	396.0	355.0	341.0	339.0
50°	9509.9	8114.9	3443.0	1355.0	652.0	449.0	504.0	395.0	344.0	326.0	321.0
52.5°	9999.9	8674.9	3638.0	1296.0	603.0	421.0	481.0	395.0	331.0	313.0	307.0
55°	10740.9	9388.9	3828.9	1213.0	534.0	384.0	434.0	383.0	312.0	296.0	292.0
57.5°	11231.8	9910.9	3950.9	1098.0	448.0	357.0	374.0	364.0	293.0	276.0	276.0
60°	11256.8	10050.9	3892.9	953.0	394.0	332.0	325.0	367.0	276.0	258.0	256.0
62.5°	10968.9	9707.9	3591.0	823.0	365.0	305.0	294.0	322.0	259.0	241.0	238.0
65°	10518.9	8832.9	3067.0	761.0	349.0	281.0	265.0	264.0	241.0	224.0	220.0
67.5°	9691.9	7718.9	2520.0	725.0	341.0	254.0	239.0	234.0	220.0	206.0	204.0
70°	8472.9	6464.9	2021.0	710.0	337.0	226.0	214.0	208.0	196.0	185.0	184.0
72.5°	6591.9	5243.9	1668.0	700.0	335.0	200.0	187.0	179.0	172.0	162.0	162.0
75°	4734.9	3857.9	1273.0	631.0	310.0	172.0	158.0	153.0	143.0	135.0	137.0
77.5°	2985.0	2598.0	838.0	464.0	240.0	138.0	126.0	123.0	115.0	104.0	111.0
80°	2016.0	1827.0	489.0	292.0	151.0	101.0	97.0	96.0	87.0	75.0	76.0
82.5°	1372.0	1346.0	254.0	166.0	87.0	59.0	57.0	59.0	49.0	40.0	40.0
85°	536.0	732.0	120.0	65.0	28.0	9.0	13.0	14.0	8.0	4.0	5.0
87.5°	10.0	75.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9
2.5°	4061.9	4052.9	4067.9	4003.9	4016.9	4040.9	4052.9	4059.9	4158.9	4135.9	4198.9
5°	3169.0	3160.0	3218.0	3226.0	3256.0	3250.0	3279.0	3286.0	3322.0	3335.0	3423.0
7.5°	2305.0	2344.0	2410.0	2444.0	2495.0	2511.0	2496.0	2533.0	2458.0	2512.0	2528.0
10°	1852.0	1805.0	1777.0	1855.0	1865.0	1939.0	1909.0	1885.0	1929.0	1931.0	1973.0
12.5°	1542.0	1441.0	1374.0	1396.0	1420.0	1452.0	1457.0	1505.0	1537.0	1567.0	1592.0
15°	1209.0	1174.0	1113.0	1083.0	1117.0	1130.0	1161.0	1201.0	1235.0	1244.0	1278.0
17.5°	928.0	934.0	924.0	906.0	927.0	937.0	939.0	940.0	949.0	943.0	993.0
20°	747.0	768.0	793.0	797.0	804.0	809.0	800.0	766.0	767.0	788.0	804.0
22.5°	676.0	680.0	708.0	717.0	739.0	730.0	704.0	688.0	686.0	691.0	699.0
25°	620.0	626.0	646.0	660.0	677.0	661.0	642.0	627.0	625.0	630.0	638.0
27.5°	570.0	579.0	597.0	611.0	627.0	612.0	594.0	581.0	580.0	579.0	584.0
30°	530.0	540.0	553.0	569.0	580.0	567.0	550.0	543.0	542.0	540.0	542.0
32.5°	490.0	506.0	519.0	527.0	538.0	528.0	515.0	511.0	504.0	498.0	495.0
35°	445.0	462.0	482.0	492.0	503.0	493.0	484.0	467.0	455.0	454.0	456.0
37.5°	419.0	426.0	442.0	459.0	470.0	465.0	448.0	431.0	428.0	428.0	430.0
40°	396.0	399.0	406.0	428.0	448.0	433.0	412.0	407.0	407.0	406.0	407.0
42.5°	373.0	376.0	376.0	393.0	425.0	401.0	385.0	385.0	385.0	386.0	389.0
45°	352.0	353.0	352.0	364.0	394.0	374.0	363.0	366.0	368.0	370.0	372.0
47.5°	334.0	335.0	334.0	344.0	359.0	351.0	345.0	349.0	353.0	356.0	358.0
50°	318.0	317.0	319.0	325.0	332.0	334.0	330.0	336.0	338.0	342.0	347.0
52.5°	304.0	303.0	305.0	308.0	318.0	318.0	318.0	323.0	327.0	331.0	338.0
55°	288.0	289.0	292.0	296.0	309.0	307.0	308.0	312.0	316.0	322.0	326.0
57.5°	273.0	275.0	279.0	285.0	298.0	297.0	298.0	300.0	305.0	308.0	312.0
60°	256.0	260.0	265.0	269.0	282.0	281.0	286.0	290.0	293.0	293.0	295.0
62.5°	239.0	245.0	250.0	253.0	267.0	268.0	275.0	278.0	280.0	278.0	281.0
65°	222.0	231.0	233.0	237.0	251.0	252.0	260.0	267.0	265.0	263.0	268.0
67.5°	205.0	216.0	215.0	220.0	234.0	236.0	243.0	255.0	251.0	249.0	253.0
70°	186.0	194.0	195.0	198.0	217.0	214.0	225.0	236.0	233.0	234.0	234.0
72.5°	165.0	172.0	172.0	178.0	198.0	193.0	202.0	214.0	214.0	213.0	213.0
75°	140.0	144.0	148.0	157.0	178.0	172.0	178.0	189.0	191.0	189.0	189.0
77.5°	113.0	119.0	121.0	133.0	148.0	147.0	153.0	158.0	162.0	160.0	160.0
80°	80.0	86.0	94.0	107.0	116.0	119.0	122.0	126.0	128.0	128.0	130.0
82.5°	45.0	54.0	61.0	74.0	78.0	93.0	92.0	95.0	92.0	81.0	90.0
85°	10.0	19.0	27.0	34.0	39.0	54.0	57.0	64.0	53.0	49.0	49.0
87.5°	0.0	0.0	0.0	0.0	0.0	8.0	16.0	22.0	19.0	16.0	16.0
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9	4871.9
2.5°	4251.9	4338.9	4443.9	4624.9	4751.9	4888.9	5026.9	5173.9	5212.9	5252.9
5°	3447.0	3618.0	3711.0	3953.9	4208.9	4532.9	4797.9	5087.9	5208.9	5236.9
7.5°	2611.0	2727.0	2971.0	3217.0	3533.0	3872.9	4278.9	4730.9	4871.9	4930.9
10°	2070.0	2228.0	2442.0	2706.0	2983.0	3349.0	3806.9	4334.9	4534.9	4567.9
12.5°	1762.0	1938.0	2171.0	2450.0	2712.0	2988.0	3450.0	3994.9	4208.9	4279.9
15°	1409.0	1622.0	1891.0	2185.0	2470.0	2772.0	3240.0	3854.9	4101.9	4184.9
17.5°	1107.0	1279.0	1570.0	1889.0	2227.0	2609.0	3196.0	3921.9	4225.9	4302.9
20°	847.0	970.0	1215.0	1552.0	1948.0	2448.0	3207.0	4174.9	4538.9	4643.9
22.5°	732.0	795.0	944.0	1265.0	1708.0	2308.0	3252.0	4521.9	4960.9	5135.9
25°	663.0	696.0	780.0	990.0	1479.0	2172.0	3355.0	4988.9	5550.9	5666.9
27.5°	604.0	628.0	680.0	831.0	1271.0	2046.0	3475.0	5506.9	6101.9	6274.9
30°	548.0	580.0	629.0	738.0	1138.0	1931.0	3626.0	5926.9	6565.9	6726.9
32.5°	505.0	537.0	582.0	673.0	1025.0	1810.0	3716.0	6295.9	6944.9	7081.9
35°	470.0	497.0	544.0	621.0	939.0	1718.0	3698.0	6588.9	7311.9	7451.9
37.5°	445.0	468.0	515.0	572.0	874.0	1622.0	3689.0	6975.9	7758.9	7920.9
40°	422.0	446.0	489.0	540.0	809.0	1509.0	3694.0	7359.9	8234.9	8396.9
42.5°	404.0	431.0	466.0	531.0	742.0	1418.0	3694.0	7693.9	8648.9	8804.9
45°	389.0	418.0	452.0	530.0	689.0	1349.0	3669.0	7980.9	8978.9	9111.9
47.5°	376.0	408.0	457.0	512.0	676.0	1299.0	3647.0	8210.9	9247.9	9372.9
50°	367.0	405.0	486.0	491.0	680.0	1284.0	3752.9	8500.9	9484.9	9592.9
52.5°	360.0	406.0	485.0	460.0	673.0	1294.0	3973.9	8953.9	9813.9	9821.9
55°	346.0	405.0	460.0	425.0	644.0	1311.0	4257.9	9611.9	10328.9	10334.9
57.5°	332.0	394.0	427.0	395.0	585.0	1311.0	4599.9	10234.9	10949.9	10954.9
60°	318.0	410.0	375.0	369.0	508.0	1287.0	4960.9	10508.9	11144.9	11195.8
62.5°	304.0	413.0	335.0	346.0	452.0	1229.0	5229.9	10205.9	10880.9	10953.9
65°	288.0	333.0	309.0	322.0	423.0	1132.0	5144.9	9650.9	10384.9	10471.9
67.5°	269.0	282.0	281.0	297.0	413.0	989.0	4696.9	8948.9	9850.9	9845.9
70°	246.0	253.0	256.0	273.0	394.0	878.0	3913.9	8037.9	9137.9	9249.9
72.5°	222.0	228.0	231.0	246.0	375.0	815.0	3038.0	6782.9	7914.9	8089.9
75°	196.0	200.0	204.0	217.0	355.0	722.0	2164.0	5177.9	6061.9	6336.9
77.5°	169.0	169.0	174.0	187.0	299.0	596.0	1452.0	3632.0	4106.9	4387.9
80°	137.0	138.0	136.0	150.0	220.0	408.0	825.0	2426.0	2733.0	2787.0
82.5°	105.0	102.0	103.0	110.0	164.0	278.0	440.0	1507.0	1536.0	1506.0
85°	66.0	66.0	64.0	72.0	105.0	145.0	240.0	923.0	721.0	686.0
87.5°	27.0	22.0	25.0	29.0	50.0	59.0	94.0	190.0	73.0	67.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)