

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: P458961

Luminaire Tested: **GALN-SA4D-735-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458961
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-SA4D-735-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 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: 24573 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

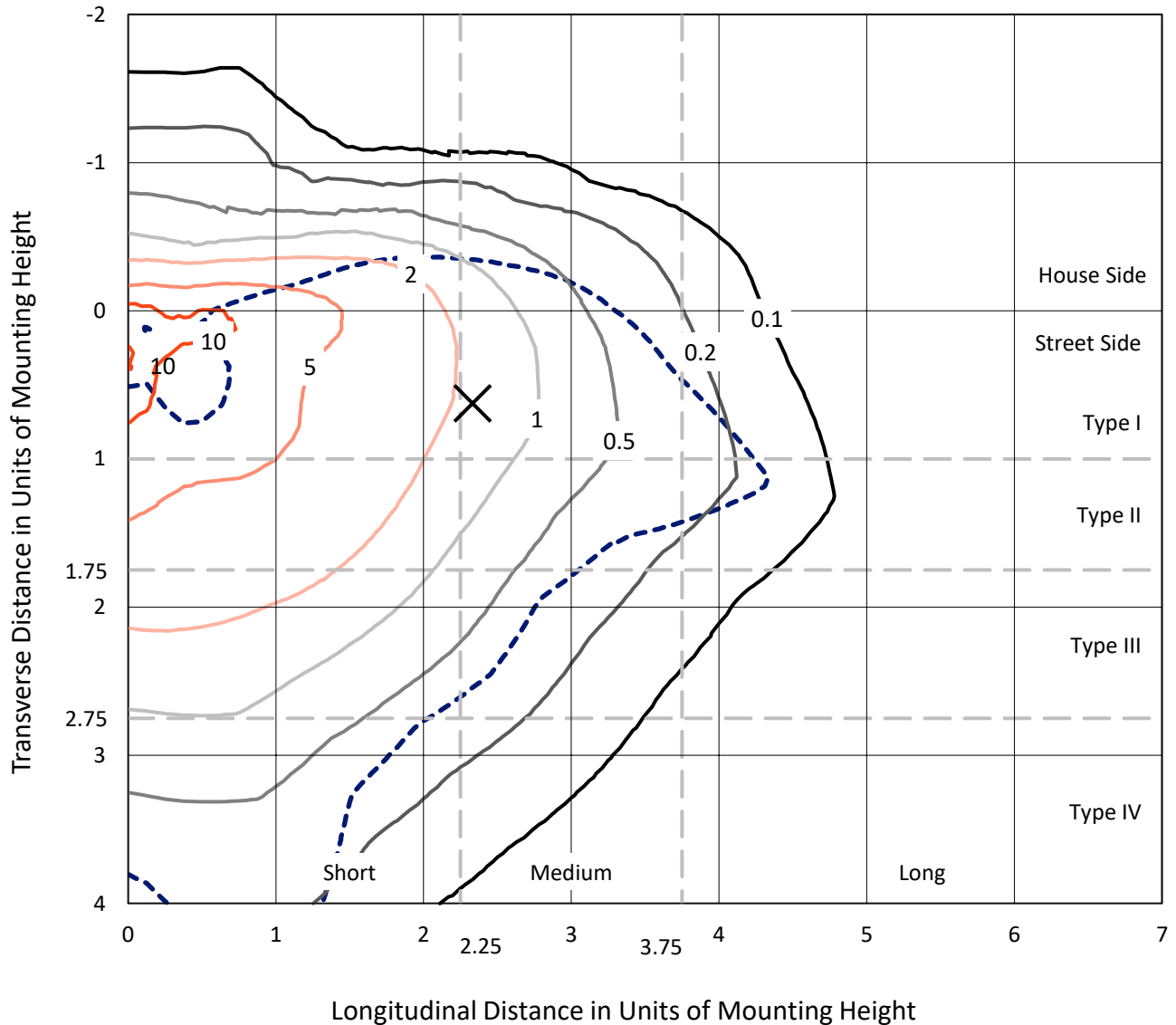
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P458961
 CATALOG NUMBER: GALN-SA4D-735-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

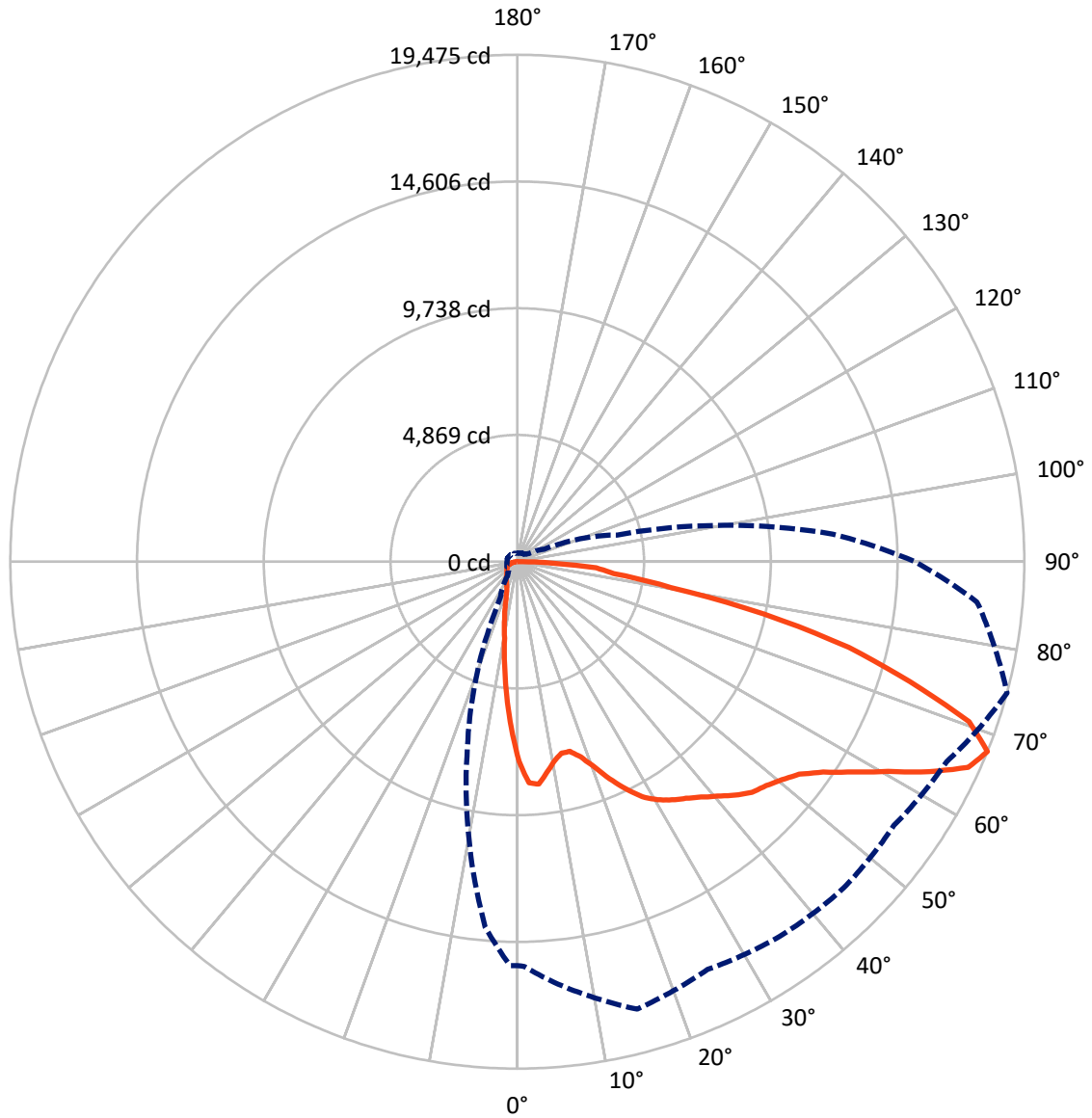
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P458961
CATALOG NUMBER: GALN-SA4D-735-U-SLL

Luminous Intensity Polar Plot



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

REPORT NUMBER: P458961

CATALOG NUMBER: GALN-SA4D-735-U-SLL

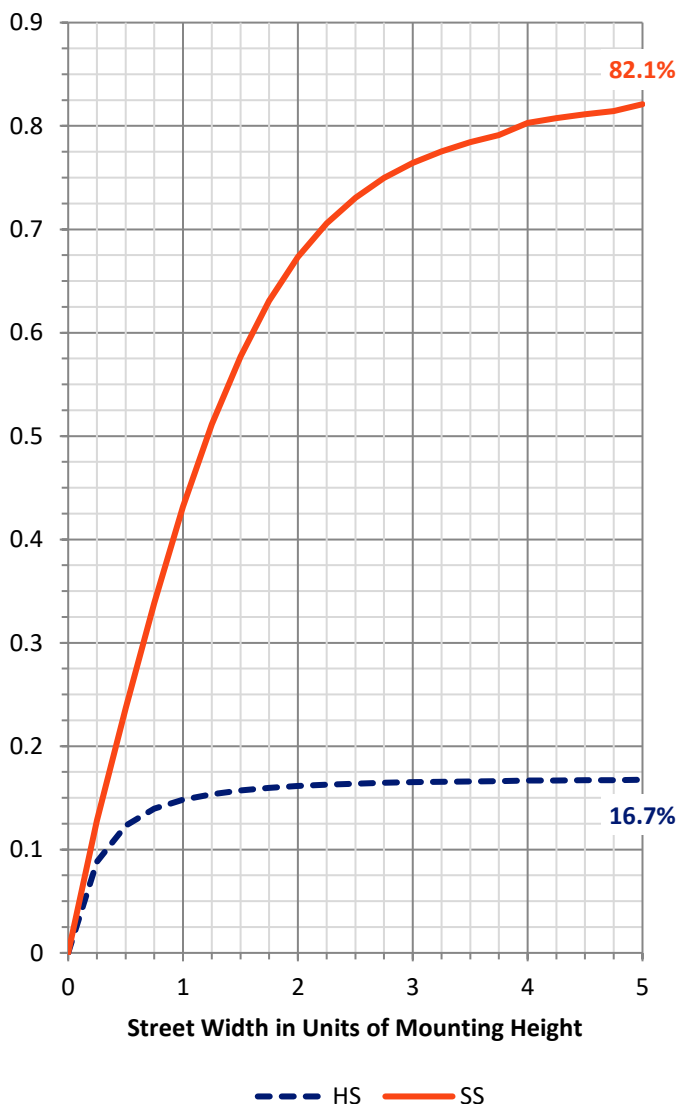
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4153.4	0.0	4153.4
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	20419.6	0.0	20419.6
	% Fixture	83.1	0.0	83.1
Total	Lumens	24573.0	0.0	24573.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	582.3	2.4
10°-20°	1214.4	4.9
20°-30°	1747.5	7.1
30°-40°	2516.9	10.2
40°-50°	3535.6	14.4
50°-60°	4930.9	20.1
60°-70°	5862.5	23.9
70°-80°	3452.7	14.1
80°-90°	730.1	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°	24573.0	100.0
0°-180°	24573.0	100.0

Coefficient of Utilization



REPORT NUMBER: P458961

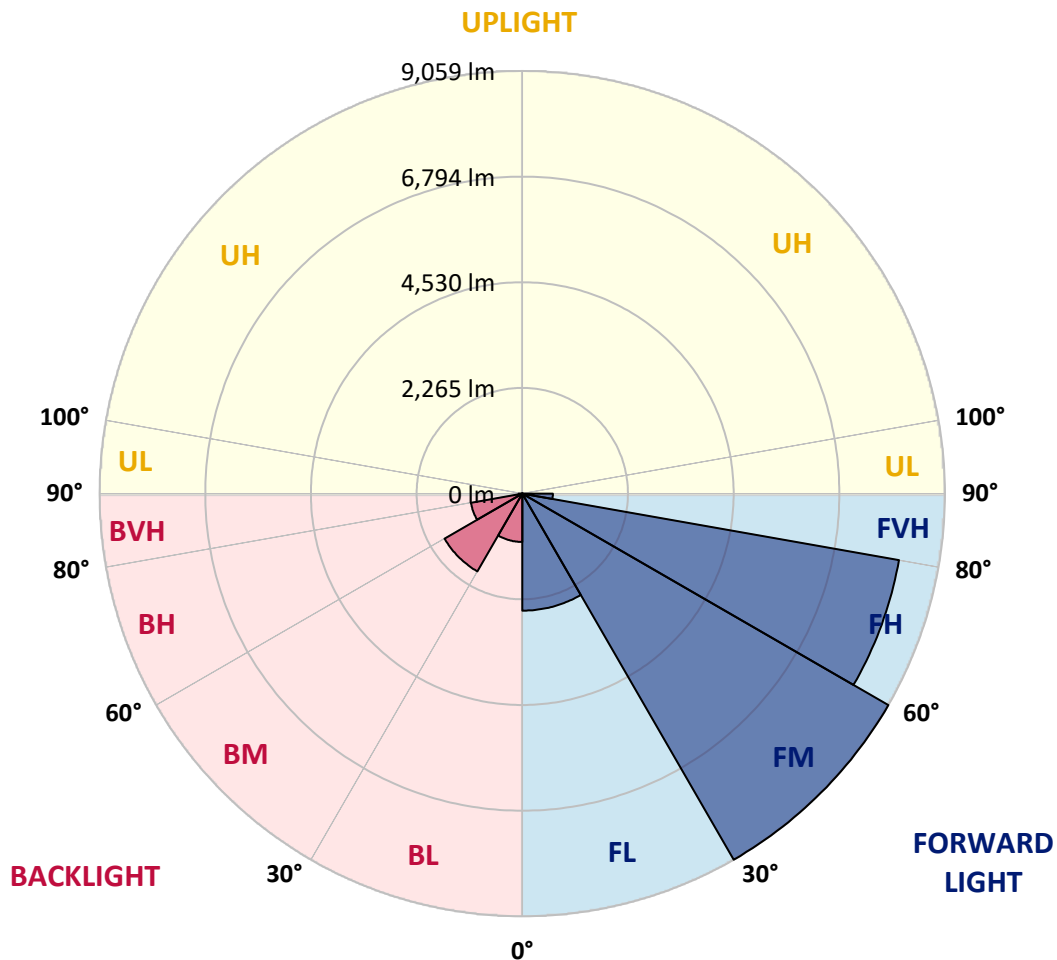
CATALOG NUMBER: GALN-SA4D-735-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2508.2	10.2			
FM	(30°-60°)	9059.2	36.9			
FH	(60°-80°)	8197.6	33.4			G4/12000
FVH	(80°-90°)	654.6	2.7			G4/750
BL	(0°-30°)	1036.0	4.2	B3/2500		
BM	(30°-60°)	1924.3	7.8	B2/2500		
BH	(60°-80°)	1117.6	4.5	B3/2500		G3/2500
BVH	(80°-90°)	75.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





REPORT NUMBER: P458961
 CATALOG NUMBER: GALN-SA4D-735-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2
2.5°	8277.6	8288.6	8359.5	8565.9	8707.7	8759.7	8796.0	8728.2	8662.0	8501.3	8258.6
5°	8252.3	8317.0	8501.3	8964.6	9330.2	9487.8	9535.0	9331.8	8996.1	8583.3	8086.9
7.5°	7770.2	7856.8	8140.5	8917.3	9561.8	9930.5	9881.7	9514.5	8909.4	8173.6	7480.2
10°	7198.2	7294.3	7636.2	8575.4	9405.8	9913.2	9913.2	9465.7	8662.0	7787.5	6988.6
12.5°	6744.3	6845.2	7236.0	8224.0	9081.2	9561.8	9642.2	9257.7	8484.0	7543.2	6665.5
15°	6594.6	6692.3	7113.1	8011.3	8737.7	9030.8	9057.6	8931.5	8397.3	7560.6	6651.4
17.5°	6780.6	6906.6	7332.1	8074.3	8422.5	8439.9	8460.3	8559.6	8406.8	7877.3	6938.1
20°	7317.9	7453.4	7897.8	8277.6	8146.8	7967.1	7978.2	8233.4	8518.7	8400.5	7623.6
22.5°	8093.2	8211.4	8666.8	8635.3	8030.2	7659.9	7582.6	7938.8	8684.1	9052.8	8353.2
25°	8929.9	9068.6	9591.8	9166.3	8063.3	7477.1	7428.2	7765.4	8855.9	9662.7	9196.2
27.5°	9888.0	10023.5	10436.4	9702.1	8236.6	7462.9	7404.6	7749.7	9010.3	10226.8	10001.5
30°	10600.3	10724.7	11005.2	10152.7	8449.3	7557.4	7484.9	7874.2	9142.7	10612.9	10786.2
32.5°	11159.7	11288.9	11441.7	10433.2	8729.8	7729.2	7595.2	8101.1	9316.0	10907.5	11367.7
35°	11742.7	11895.5	11884.5	10682.2	8991.4	7927.7	7796.9	8428.8	9588.6	11164.4	12105.1
37.5°	12481.7	12543.2	12464.4	10906.0	9305.0	8285.4	8213.0	8915.7	9976.2	11474.8	12967.1
40°	13231.8	13354.7	12949.7	11177.0	9686.3	8958.3	8950.4	9635.9	10436.4	11838.8	13802.2
42.5°	13874.7	13978.7	13403.6	11413.4	10148.0	9779.3	9839.2	10601.8	11039.9	12261.1	14473.5
45°	14358.5	14451.5	13822.7	11641.8	10756.3	10727.9	11080.9	11637.1	11801.0	12640.9	14867.5
47.5°	14769.8	14859.6	14114.2	11988.5	11507.9	11860.9	12475.4	12716.5	12451.8	12858.3	15308.7
50°	15116.4	15143.2	14314.4	12401.4	12440.8	13249.1	13844.8	14000.8	13094.7	13170.3	15691.6
52.5°	15477.3	15442.6	14659.5	12921.4	13449.3	14566.5	14999.8	15162.1	13710.8	13554.8	16249.4
55°	16285.7	16318.7	15433.2	13576.9	14468.8	15860.2	16430.6	16274.6	14393.1	14262.4	16958.5
57.5°	17262.6	17234.3	16522.0	14602.7	15507.2	17064.1	17489.6	17239.0	15303.9	15234.6	17677.1
60°	17642.4	17680.2	17432.8	15705.8	16531.5	18118.3	18553.2	18164.0	16396.0	16364.4	18219.1
62.5°	17261.1	17473.8	17640.8	16687.5	17404.5	18893.6	19325.3	18881.0	17535.2	17763.7	18598.9
65°	16501.5	16547.2	17116.1	17519.5	17825.2	19021.2	19246.5	19010.2	18487.0	19038.5	18581.6
67.5°	15515.1	15554.5	16221.1	17792.1	17283.1	17571.5	17729.1	17659.7	18192.3	19475.0	17725.9
70°	14575.9	14544.4	15248.8	17097.2	15045.5	14607.5	14738.2	14520.8	15697.9	18408.2	16047.7
72.5°	12748.0	12861.5	13617.9	15165.3	11912.9	11200.6	11485.8	10923.3	12073.6	15765.7	13025.4
75°	9985.7	10012.5	11274.7	12727.6	8986.7	7863.1	8249.2	8014.4	9248.2	13151.4	8994.5
77.5°	6914.5	6854.6	8211.4	9721.0	6408.7	5756.3	5762.6	5650.7	6457.5	9683.2	6110.9
80°	4391.7	4300.3	5140.2	6005.3	4404.3	4711.6	4557.1	4552.4	4204.2	5973.8	3695.2
82.5°	2373.1	2474.0	3247.7	3764.5	3159.4	3641.6	3337.5	3239.8	2885.2	3739.3	2363.7
85°	1081.0	1175.5	1731.8	2560.6	2399.9	2426.7	1621.5	1913.0	2387.3	3036.5	1262.2
87.5°	105.6	135.5	357.7	1208.6	819.4	646.1	241.1	464.9	600.4	1079.4	100.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P458961

CATALOG NUMBER: GALN-SA4D-735-U-SLL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2
2.5°	8159.4	8077.4	7798.5	7568.5	7324.2	7138.3	6895.6	6733.3	6621.4	6452.8	6432.3
5°	7784.3	7584.2	7098.9	6604.1	6177.0	5855.6	5529.4	5230.0	5053.5	4998.4	4927.5
7.5°	7152.5	6815.2	6191.2	5623.9	5133.9	4654.8	4286.1	4024.5	3849.6	3747.2	3624.3
10°	6632.4	6241.7	5482.1	4787.2	4383.8	4086.0	3761.4	3480.9	3265.0	3080.6	2979.8
12.5°	6282.6	5841.4	4987.3	4423.2	4111.2	3794.5	3414.7	3099.6	2781.2	2571.7	2481.8
15°	6177.0	5710.6	4834.5	4242.0	3794.5	3380.0	2954.6	2543.3	2228.1	2029.6	1963.4
17.5°	6435.5	5871.3	4832.9	4000.9	3422.6	2927.8	2382.6	1996.5	1673.5	1525.4	1478.1
20°	6917.7	6180.2	4847.1	3763.0	3019.2	2322.7	1733.4	1416.6	1262.2	1199.2	1175.5
22.5°	7590.5	6651.4	4889.6	3528.2	2578.0	1783.8	1298.4	1137.7	1082.6	1071.5	1066.8
25°	8419.4	7234.4	5033.0	3317.0	2206.1	1361.5	1085.7	1013.2	981.7	970.7	969.1
27.5°	9182.1	7987.6	5206.4	3135.8	1846.8	1174.0	981.7	920.3	888.7	887.2	890.3
30°	9870.7	8617.9	5351.3	2932.5	1574.2	1043.2	914.0	852.5	822.6	821.0	830.4
32.5°	10466.3	9136.4	5458.5	2732.4	1422.9	962.8	852.5	786.3	761.1	756.4	761.1
35°	11102.9	9653.2	5409.6	2576.4	1336.3	896.6	806.8	742.2	712.3	698.1	698.1
37.5°	11829.4	10185.8	5326.1	2447.2	1296.9	841.5	767.4	704.4	674.4	660.3	658.7
40°	12622.0	10718.4	5211.1	2332.2	1257.5	808.4	740.6	674.4	638.2	624.0	620.9
42.5°	13321.6	11173.8	5116.5	2256.5	1192.9	814.7	717.0	652.4	606.7	587.8	586.2
45°	13929.9	11632.4	5099.2	2212.4	1139.3	805.2	710.7	635.0	581.5	561.0	557.8
47.5°	14405.8	12109.8	5198.5	2187.2	1081.0	754.8	751.6	624.0	559.4	537.3	534.2
50°	14985.6	12787.4	5425.4	2135.2	1027.4	707.5	794.2	622.4	542.1	513.7	505.8
52.5°	15757.8	13669.9	5732.7	2042.2	950.2	663.4	757.9	622.4	521.6	493.2	483.8
55°	16925.4	14795.0	6033.7	1911.4	841.5	605.1	683.9	603.5	491.6	466.4	460.1
57.5°	17699.1	15617.5	6225.9	1730.2	705.9	562.6	589.3	573.6	461.7	434.9	434.9
60°	17738.5	15838.1	6134.5	1501.7	620.9	523.2	512.1	578.3	434.9	406.6	403.4
62.5°	17284.7	15297.6	5658.6	1296.9	575.2	480.6	463.3	507.4	408.1	379.8	375.0
65°	16575.6	13918.8	4832.9	1199.2	549.9	442.8	417.6	416.0	379.8	353.0	346.7
67.5°	15272.4	12163.4	3971.0	1142.4	537.3	400.2	376.6	368.7	346.7	324.6	321.5
70°	13351.6	10187.4	3184.6	1118.8	531.0	356.1	337.2	327.8	308.9	291.5	289.9
72.5°	10387.5	8263.4	2628.4	1103.0	527.9	315.2	294.7	282.1	271.0	255.3	255.3
75°	7461.3	6079.3	2006.0	994.3	488.5	271.0	249.0	241.1	225.3	212.7	215.9
77.5°	4703.7	4093.9	1320.5	731.2	378.2	217.5	198.5	193.8	181.2	163.9	174.9
80°	3176.8	2878.9	770.6	460.1	237.9	159.2	152.9	151.3	137.1	118.2	119.8
82.5°	2162.0	2121.0	400.2	261.6	137.1	93.0	89.8	93.0	77.2	63.0	63.0
85°	844.6	1153.5	189.1	102.4	44.1	14.2	20.5	22.1	12.6	6.3	7.9
87.5°	15.8	118.2	4.7	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



REPORT NUMBER: P458961
 CATALOG NUMBER: GALN-SA4D-735-U-SLL

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2
2.5°	6400.8	6386.6	6410.3	6309.4	6329.9	6367.7	6386.6	6397.7	6553.7	6517.4	6616.7
5°	4993.6	4979.5	5070.9	5083.5	5130.7	5121.3	5167.0	5178.0	5234.7	5255.2	5393.9
7.5°	3632.2	3693.6	3797.6	3851.2	3931.6	3956.8	3933.1	3991.4	3873.3	3958.4	3983.6
10°	2918.3	2844.3	2800.2	2923.1	2938.8	3055.4	3008.2	2970.3	3039.7	3042.8	3109.0
12.5°	2429.8	2270.7	2165.1	2199.8	2237.6	2288.0	2295.9	2371.5	2422.0	2469.2	2508.6
15°	1905.1	1850.0	1753.8	1706.6	1760.1	1780.6	1829.5	1892.5	1946.1	1960.3	2013.8
17.5°	1462.3	1471.8	1456.0	1427.7	1460.7	1476.5	1479.7	1481.2	1495.4	1486.0	1564.7
20°	1177.1	1210.2	1249.6	1255.9	1266.9	1274.8	1260.6	1207.0	1208.6	1241.7	1266.9
22.5°	1065.2	1071.5	1115.7	1129.8	1164.5	1150.3	1109.3	1084.1	1081.0	1088.9	1101.5
25°	977.0	986.4	1018.0	1040.0	1066.8	1041.6	1011.6	988.0	984.9	992.7	1005.3
27.5°	898.2	912.4	940.7	962.8	988.0	964.4	936.0	915.5	914.0	912.4	920.3
30°	835.2	850.9	871.4	896.6	914.0	893.5	866.7	855.6	854.1	850.9	854.1
32.5°	772.1	797.3	817.8	830.4	847.8	832.0	811.5	805.2	794.2	784.7	780.0
35°	701.2	728.0	759.5	775.3	792.6	776.9	762.7	735.9	717.0	715.4	718.6
37.5°	660.3	671.3	696.5	723.3	740.6	732.7	705.9	679.2	674.4	674.4	677.6
40°	624.0	628.7	639.8	674.4	705.9	682.3	649.2	641.3	641.3	639.8	641.3
42.5°	587.8	592.5	592.5	619.3	669.7	631.9	606.7	606.7	606.7	608.3	613.0
45°	554.7	556.2	554.7	573.6	620.9	589.3	572.0	576.7	579.9	583.0	586.2
47.5°	526.3	527.9	526.3	542.1	565.7	553.1	543.6	549.9	556.2	561.0	564.1
50°	501.1	499.5	502.7	512.1	523.2	526.3	520.0	529.5	532.6	538.9	546.8
52.5°	479.0	477.5	480.6	485.3	501.1	501.1	501.1	509.0	515.3	521.6	532.6
55°	453.8	455.4	460.1	466.4	486.9	483.8	485.3	491.6	497.9	507.4	513.7
57.5°	430.2	433.3	439.6	449.1	469.6	468.0	469.6	472.7	480.6	485.3	491.6
60°	403.4	409.7	417.6	423.9	444.4	442.8	450.7	457.0	461.7	461.7	464.9
62.5°	376.6	386.1	393.9	398.7	420.7	422.3	433.3	438.1	441.2	438.1	442.8
65°	349.8	364.0	367.2	373.5	395.5	397.1	409.7	420.7	417.6	414.4	422.3
67.5°	323.0	340.4	338.8	346.7	368.7	371.9	382.9	401.8	395.5	392.4	398.7
70°	293.1	305.7	307.3	312.0	341.9	337.2	354.5	371.9	367.2	368.7	368.7
72.5°	260.0	271.0	271.0	280.5	312.0	304.1	318.3	337.2	337.2	335.6	335.6
75°	220.6	226.9	233.2	247.4	280.5	271.0	280.5	297.8	301.0	297.8	297.8
77.5°	178.1	187.5	190.7	209.6	233.2	231.6	241.1	249.0	255.3	252.1	252.1
80°	126.1	135.5	148.1	168.6	182.8	187.5	192.2	198.5	201.7	201.7	204.9
82.5°	70.9	85.1	96.1	116.6	122.9	146.5	145.0	149.7	145.0	127.6	141.8
85°	15.8	29.9	42.5	53.6	61.5	85.1	89.8	100.8	83.5	77.2	77.2
87.5°	0.0	0.0	0.0	0.0	0.0	12.6	25.2	34.7	29.9	25.2	25.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P458961
 CATALOG NUMBER: GALN-SA4D-735-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2	7677.2
2.5°	6700.2	6837.3	7002.8	7288.0	7488.1	7704.0	7921.4	8153.1	8214.5	8277.6
5°	5431.7	5701.2	5847.7	6230.6	6632.4	7143.0	7560.6	8017.6	8208.2	8252.3
7.5°	4114.4	4297.1	4681.6	5069.3	5567.2	6103.0	6742.8	7455.0	7677.2	7770.2
10°	3261.9	3510.8	3848.0	4264.1	4700.5	5277.3	5999.0	6831.0	7146.1	7198.2
12.5°	2776.5	3053.9	3421.0	3860.7	4273.5	4708.4	5436.4	6295.2	6632.4	6744.3
15°	2220.3	2555.9	2979.8	3443.1	3892.2	4368.1	5105.5	6074.6	6463.8	6594.6
17.5°	1744.4	2015.4	2474.0	2976.6	3509.3	4111.2	5036.2	6180.2	6659.2	6780.6
20°	1334.7	1528.5	1914.6	2445.6	3069.6	3857.5	5053.5	6578.9	7152.5	7317.9
22.5°	1153.5	1252.7	1487.5	1993.4	2691.4	3636.9	5124.4	7125.7	7817.4	8093.2
25°	1044.7	1096.7	1229.1	1560.0	2330.6	3422.6	5286.7	7861.6	8747.1	8929.9
27.5°	951.8	989.6	1071.5	1309.5	2002.8	3224.0	5475.8	8677.8	9615.4	9888.0
30°	863.5	914.0	991.2	1162.9	1793.2	3042.8	5713.8	9339.6	10346.6	10600.3
32.5°	795.8	846.2	917.1	1060.5	1615.2	2852.2	5855.6	9921.1	10943.8	11159.7
35°	740.6	783.2	857.2	978.6	1479.7	2707.2	5827.2	10382.8	11522.1	11742.7
37.5°	701.2	737.5	811.5	901.3	1377.2	2555.9	5813.0	10992.6	12226.5	12481.7
40°	665.0	702.8	770.6	850.9	1274.8	2377.8	5820.9	11597.7	12976.5	13231.8
42.5°	636.6	679.2	734.3	836.7	1169.2	2234.5	5820.9	12124.0	13628.9	13874.7
45°	613.0	658.7	712.3	835.2	1085.7	2125.7	5781.5	12576.3	14148.9	14358.5
47.5°	592.5	642.9	720.1	806.8	1065.2	2046.9	5746.9	12938.7	14572.8	14769.8
50°	578.3	638.2	765.8	773.7	1071.5	2023.3	5913.9	13395.7	14946.2	15116.4
52.5°	567.3	639.8	764.3	724.9	1060.5	2039.1	6262.1	14109.5	15464.7	15477.3
55°	545.2	638.2	724.9	669.7	1014.8	2065.8	6709.7	15146.4	16276.2	16285.7
57.5°	523.2	620.9	672.9	622.4	921.8	2065.8	7248.6	16128.1	17254.8	17262.6
60°	501.1	646.1	590.9	581.5	800.5	2028.0	7817.4	16559.8	17562.0	17642.4
62.5°	479.0	650.8	527.9	545.2	712.3	1936.6	8241.3	16082.4	17146.0	17261.1
65°	453.8	524.7	486.9	507.4	666.6	1783.8	8107.4	15207.8	16364.4	16501.5
67.5°	423.9	444.4	442.8	468.0	650.8	1558.4	7401.4	14101.6	15523.0	15515.1
70°	387.6	398.7	403.4	430.2	620.9	1383.5	6167.6	12666.1	14399.5	14575.9
72.5°	349.8	359.3	364.0	387.6	590.9	1284.3	4787.2	10688.5	12472.3	12748.0
75°	308.9	315.2	321.5	341.9	559.4	1137.7	3410.0	8159.4	9552.4	9985.7
77.5°	266.3	266.3	274.2	294.7	471.2	939.2	2288.0	5723.2	6471.7	6914.5
80°	215.9	217.5	214.3	236.4	346.7	642.9	1300.0	3822.8	4306.6	4391.7
82.5°	165.5	160.7	162.3	173.3	258.4	438.1	693.3	2374.7	2420.4	2373.1
85°	104.0	104.0	100.8	113.5	165.5	228.5	378.2	1454.4	1136.1	1081.0
87.5°	42.5	34.7	39.4	45.7	78.8	93.0	148.1	299.4	115.0	105.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)