

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: P191113

Luminaire Tested: **GLEON-AF-05-LED-E1-SL3-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-05-LED-E1-SL3-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17129.3 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

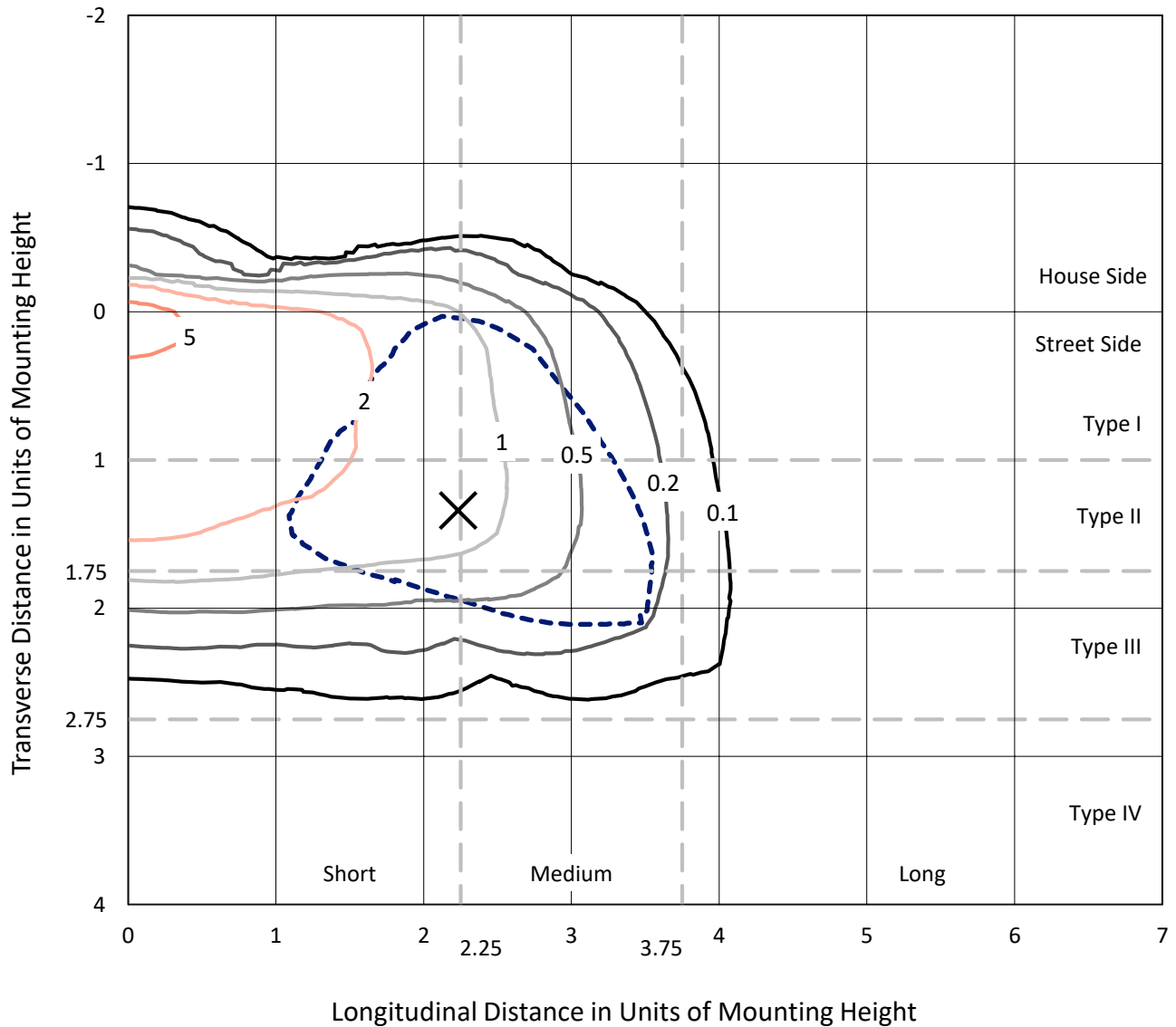
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P191113
 CATALOG NUMBER: GLEON-AF-05-LED-E1-SL3-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

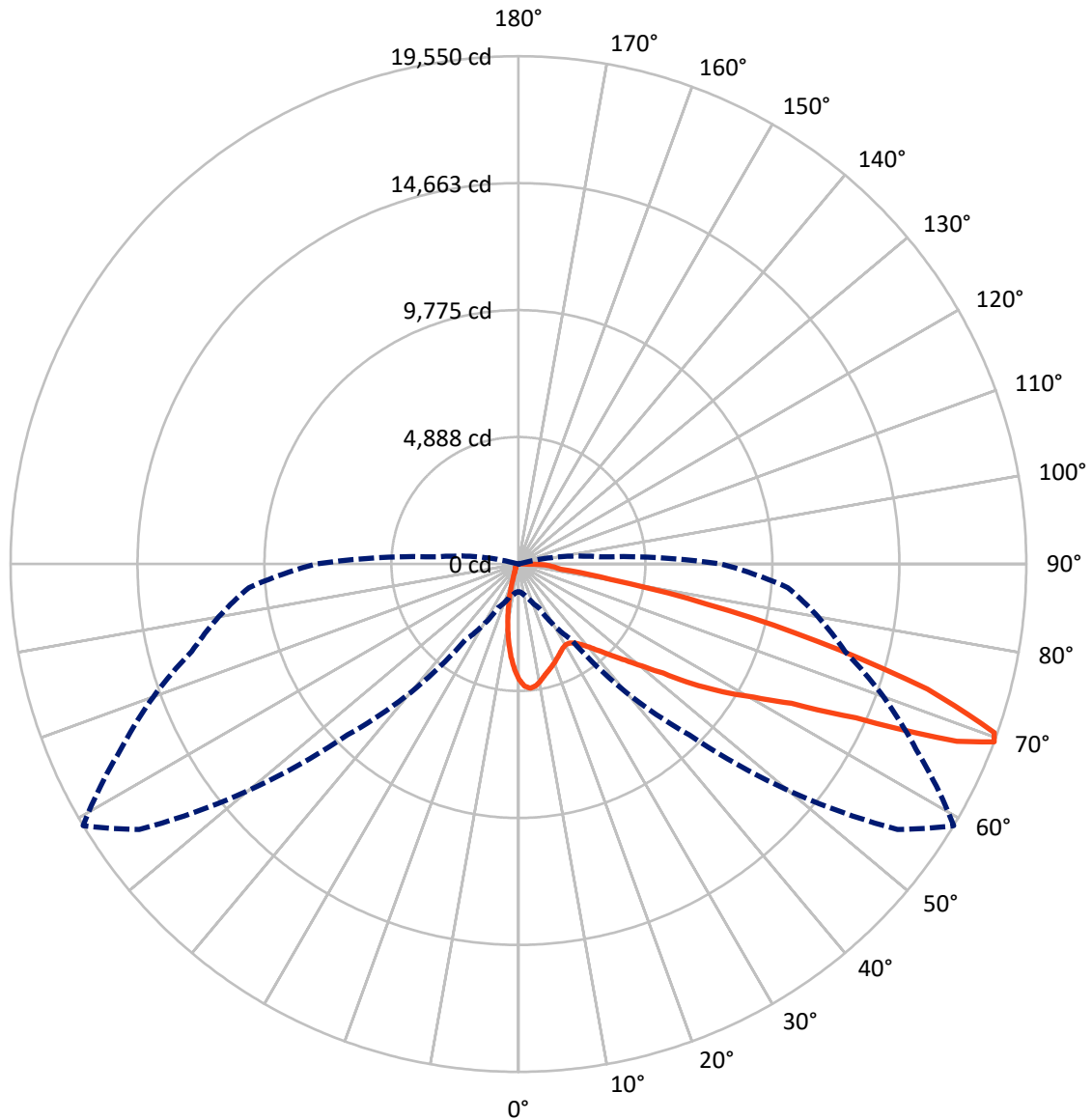
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P191113
CATALOG NUMBER: GLEON-AF-05-LED-E1-SL3-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P191113

CATALOG NUMBER: GLEON-AF-05-LED-E1-SL3-600-HSS

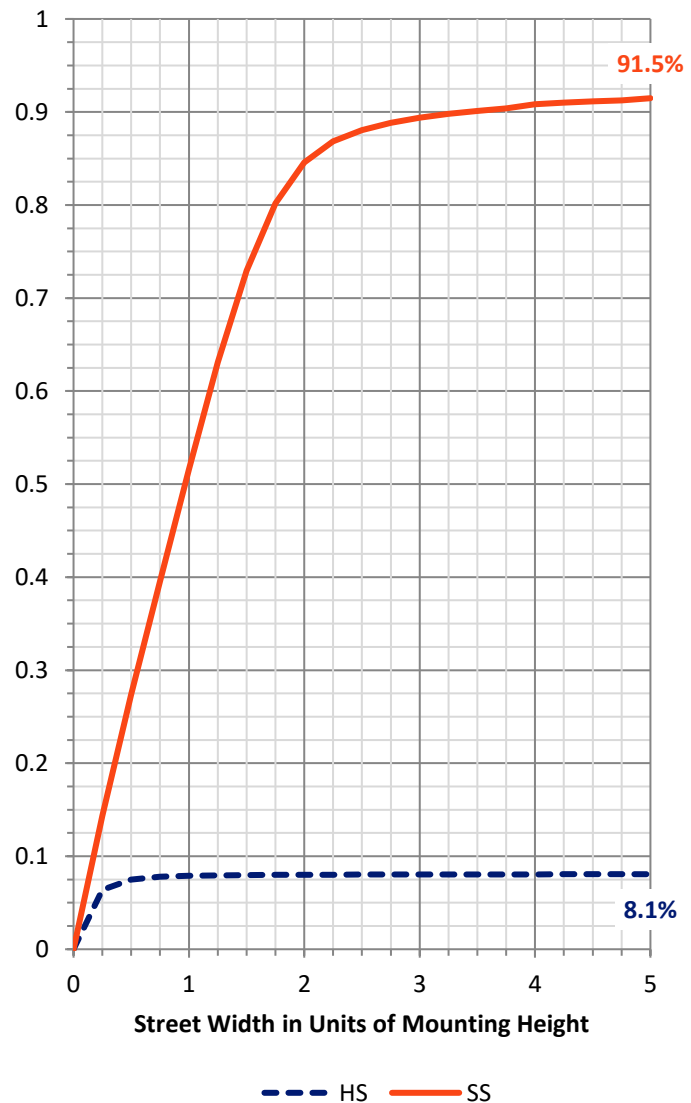
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1395.0	0.0	1395.0
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	15734.4	0.0	15734.4
	% Fixture	91.9	0.0	91.9
Total	Lumens	17129.3	0.0	17129.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	361.9	2.1
10°-20°	747.8	4.4
20°-30°	1006.2	5.9
30°-40°	1461.0	8.5
40°-50°	2432.7	14.2
50°-60°	3794.9	22.2
60°-70°	4695.9	27.4
70°-80°	2379.8	13.9
80°-90°	249.0	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°	17129.3	100.0
0°-180°	17129.3	100.0



REPORT NUMBER: P191113

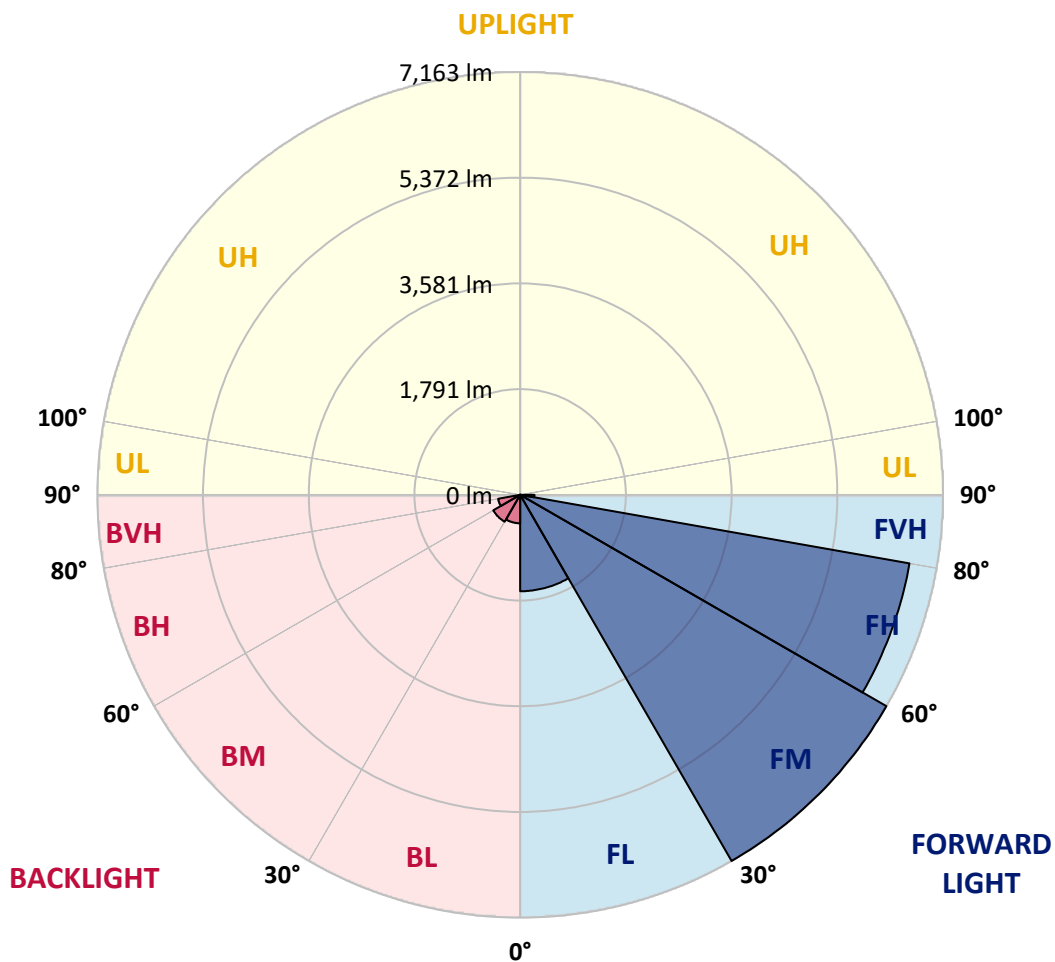
CATALOG NUMBER: GLEON-AF-05-LED-E1-SL3-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1633.1	9.5			
FM	(30°-60°)	7163.0	41.8			
FH	(60°-80°)	6696.9	39.1			G3/7500
FVH	(80°-90°)	241.4	1.4			G3/500
BL	(0°-30°)	482.8	2.8	B1/500		
BM	(30°-60°)	525.6	3.1	B1/1000		
BH	(60°-80°)	378.8	2.2	B1/500		G1/500
BVH	(80°-90°)	7.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short





REPORT NUMBER: P191113

CATALOG NUMBER: GLEON-AF-05-LED-E1-SL3-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5
2.5°	4886.6	4884.7	4863.4	4853.7	4836.3	4799.5	4742.3	4712.3	4663.8	4579.6	4466.3
5°	4842.1	4865.4	4877.9	4878.9	4891.4	4877.9	4826.6	4801.4	4734.6	4599.0	4395.5
7.5°	4539.9	4548.7	4584.5	4615.5	4675.5	4732.7	4751.0	4740.4	4700.7	4555.4	4285.1
10°	4216.4	4225.1	4267.8	4308.4	4389.8	4477.9	4570.9	4590.3	4606.8	4493.4	4178.5
12.5°	3937.4	3946.1	3989.7	4043.0	4137.9	4246.4	4390.7	4422.7	4495.4	4434.3	4093.3
15°	3697.1	3701.0	3743.7	3809.6	3922.9	4062.3	4226.0	4277.4	4388.8	4392.7	4018.8
17.5°	3492.9	3502.5	3528.7	3591.6	3715.6	3888.0	4078.8	4152.5	4283.2	4357.8	3946.1
20°	3367.9	3377.6	3376.6	3411.4	3522.8	3706.9	3931.6	4019.8	4178.5	4322.0	3881.3
22.5°	3343.6	3343.6	3318.5	3313.6	3379.5	3533.5	3778.6	3886.1	4084.6	4306.4	3835.7
25°	3429.9	3426.0	3363.1	3311.7	3314.6	3406.6	3630.4	3758.2	4005.3	4317.1	3811.5
27.5°	3611.9	3607.1	3527.6	3429.9	3351.4	3350.5	3518.0	3655.5	3942.2	4367.5	3821.1
30°	3863.8	3861.8	3775.6	3652.7	3510.3	3379.5	3479.3	3604.2	3901.5	4458.5	3843.4
32.5°	4138.9	4136.0	4071.0	3941.3	3761.1	3510.3	3520.0	3624.5	3913.2	4579.6	3897.6
35°	4430.4	4425.6	4397.5	4284.2	4085.6	3751.5	3653.6	3735.0	3986.8	4760.7	4004.2
37.5°	4746.2	4751.0	4771.3	4662.9	4454.6	4089.5	3877.4	3932.5	4135.0	5006.7	4177.6
40°	5212.1	5211.1	5217.9	5075.6	4875.1	4503.0	4190.2	4207.6	4382.9	5333.2	4441.0
42.5°	6057.7	5998.6	5819.5	5528.8	5327.3	4975.7	4584.5	4566.0	4686.1	5737.1	4810.1
45°	7193.9	7068.0	6603.0	6046.0	5788.5	5508.5	5069.7	5010.6	5087.1	6222.4	5265.3
47.5°	8171.2	8040.5	7382.7	6584.6	6277.5	6014.1	5638.3	5531.7	5557.0	6765.8	5842.7
50°	8503.5	8439.5	7865.2	7053.5	6751.3	6650.5	6297.9	6168.1	6132.3	7394.4	6512.0
52.5°	8388.2	8383.4	8000.7	7357.6	7185.2	7309.2	7128.0	6977.9	6846.2	8057.0	7192.9
55°	8203.1	8227.4	8055.9	7624.0	7618.1	7910.7	8263.2	8138.3	7756.6	8776.6	7779.8
57.5°	7692.7	7796.3	8024.9	8127.7	8365.9	8665.2	9208.6	9282.3	8830.8	9327.8	8267.1
60°	6241.7	6469.3	7217.1	8200.3	9329.7	10075.6	10349.6	10412.6	9712.3	9785.9	8924.8
62.5°	4430.4	4662.9	5611.2	7274.3	9344.2	11928.4	12049.5	11802.5	10682.8	10464.9	10059.1
65°	2351.8	2531.0	3305.9	5250.8	8101.5	12358.6	15022.2	14286.0	12395.3	11800.6	11524.6
67.5°	1203.0	1257.3	1565.3	2569.8	5569.6	10977.3	17686.8	18205.0	15346.7	13125.7	11453.9
69°	1064.5	1096.5	1300.9	1857.8	3566.4	9297.7	17816.6	19550.4	16891.7	13015.2	10408.7
70°	1030.6	1058.7	1244.6	1681.5	2787.6	7797.3	17319.8	19432.3	17286.8	12594.9	9628.0
72.5°	874.6	898.9	1108.1	1485.8	2265.6	3870.5	14069.1	16466.4	15512.3	10492.0	6969.2
75°	585.0	664.5	1063.6	1392.8	2107.7	2198.7	9275.4	11899.4	11053.8	7076.7	3630.4
77.5°	140.5	151.1	300.2	1108.1	1927.5	1935.3	4770.4	7397.3	6033.5	2522.3	858.2
80°	75.6	72.6	84.3	219.8	1794.9	1816.1	2147.4	3590.7	2154.2	418.5	282.8
82.5°	53.3	50.3	54.2	92.1	564.7	1654.4	1553.7	1625.4	893.0	160.8	126.8
85°	19.3	18.4	30.1	83.3	177.3	951.1	1596.3	1340.6	723.5	73.7	93.0
87.5°	6.8	5.8	11.7	45.5	54.2	404.9	985.1	1013.1	284.8	44.6	43.6
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: P191113

CATALOG NUMBER: GLEON-AF-05-LED-E1-SL3-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5	4458.5
2.5°	4418.8	4358.8	4248.3	4135.0	4030.4	3904.5	3841.5	3779.5	3753.4	3743.7	3698.2
5°	4291.0	4189.3	3954.8	3719.4	3502.5	3272.0	3119.9	2997.9	2926.2	2891.3	2836.1
7.5°	4127.3	3960.7	3605.2	3241.9	2903.9	2570.7	2323.7	2133.9	2003.0	1940.1	1882.9
10°	3968.4	3746.6	3241.0	2746.0	2286.9	1845.2	1504.2	1257.3	1099.4	1026.7	980.2
12.5°	3826.0	3538.4	2889.3	2262.7	1686.3	1169.1	822.4	625.7	527.8	494.0	477.5
15°	3699.1	3346.6	2557.2	1803.6	1142.0	668.3	449.5	382.6	367.1	367.1	365.2
17.5°	3579.0	3158.7	2236.5	1372.5	716.8	408.8	341.9	333.2	333.2	337.1	337.1
20°	3463.7	2979.4	1926.5	985.1	451.3	324.5	309.0	307.1	309.0	313.8	313.8
22.5°	3365.0	2816.7	1636.9	676.1	335.1	292.6	284.8	281.8	282.8	285.7	287.7
25°	3291.3	2679.2	1363.8	458.2	288.7	266.4	257.7	252.8	248.9	248.9	250.8
27.5°	3244.9	2562.9	1099.4	333.2	259.6	242.1	228.6	220.9	212.2	207.2	209.2
30°	3210.9	2452.5	851.4	272.2	232.5	215.0	197.6	185.1	172.4	166.6	168.6
32.5°	3198.4	2363.4	636.4	240.2	208.3	188.8	167.6	151.1	137.6	132.7	133.7
35°	3232.2	2292.7	465.9	217.0	188.8	164.7	140.5	122.0	111.4	108.5	109.5
37.5°	3321.4	2254.9	348.7	197.6	171.4	144.3	117.2	99.7	93.0	93.0	93.9
40°	3489.9	2254.0	279.9	184.0	155.9	124.9	96.9	84.3	80.4	82.3	83.3
42.5°	3735.9	2305.3	244.1	171.4	142.4	106.6	80.4	71.7	70.7	72.6	73.7
45°	4072.1	2399.2	224.7	160.8	127.9	89.1	67.8	62.0	62.0	64.9	65.9
47.5°	4483.7	2536.8	208.3	150.2	113.3	74.6	58.1	54.2	55.2	58.1	59.1
50°	4979.6	2710.2	191.8	138.5	102.7	62.0	50.3	47.5	48.4	52.3	53.3
52.5°	5544.3	2943.6	178.2	127.9	89.1	51.4	42.7	40.7	42.7	46.5	47.5
55°	6028.7	3152.8	161.7	119.2	71.7	42.7	34.9	34.9	36.8	41.6	42.7
57.5°	6494.5	3371.7	147.2	102.7	56.2	33.9	29.1	30.1	32.9	37.7	38.8
60°	7178.4	3742.7	129.8	86.2	42.7	27.1	24.2	25.2	29.1	33.9	34.9
62.5°	8339.7	4307.4	112.3	71.7	32.9	21.3	19.3	21.3	26.2	31.9	32.9
65°	9387.8	4537.0	92.1	60.0	25.2	16.5	16.5	19.3	25.2	31.0	31.9
67.5°	8803.7	3819.3	71.7	47.5	19.3	12.6	13.6	18.4	24.2	31.0	31.9
69°	7785.7	3122.8	61.1	37.7	16.5	11.7	12.6	18.4	24.2	30.1	31.0
70°	6992.4	2636.6	54.2	31.9	14.5	11.7	12.6	17.4	24.2	30.1	31.0
72.5°	4683.3	1423.8	43.6	23.2	13.6	10.6	10.6	17.4	23.2	29.1	30.1
75°	2012.8	393.2	34.9	16.5	11.7	9.7	9.7	16.5	22.3	28.1	30.1
77.5°	368.1	99.7	28.1	14.5	11.7	9.7	8.7	15.5	21.3	27.1	28.1
80°	146.3	49.4	22.3	12.6	10.6	8.7	7.8	14.5	20.4	26.2	27.1
82.5°	88.2	28.1	18.4	11.7	10.6	7.8	6.8	12.6	19.3	25.2	26.2
85°	71.7	19.3	14.5	11.7	9.7	7.8	5.8	11.7	17.4	24.2	25.2
87.5°	34.9	13.6	13.6	10.6	9.7	7.8	5.8	10.6	16.5	23.2	24.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)