



8165 E Kaiser Blvd. Anaheim, CA 92808  
www.lightlaboratory.com

Report No: L022212412



**Report No:** L022212412

**Issue Date:** 4/25/2022

**Report Prepared For:** Gantom Lighting & Controls  
25060 Avenue Stanford, Suite 115Valencia, CA 91355USA

**Model Number:** GT51 - Gantom One - CW (1 notch diffuser)

**Test:** Photometric/Electrical Test

**Standards Used:** Appropriate part or all test guidelines were used for test performed:

*IESNA LM79: 2019* Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products

*ANSI NEMA ANSLG C78.377: 2017* Specification of the Chromaticity of Solid State Lighting Products

*ANSI C82.77-10:2014:* Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

**Description of Sample:** Client submitted the sample. Received in working and undamaged condition. No modifications were necessary.

**Special Test Condition:** Fixture is tested with no special conditions.

**Date of Tests:** 4/18/22

**Seasoning of Sample:** No seasoning was performed in accordance with IESNA LM-79.

#### Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S4	4/7/23
HP Power Supply	6032A	PS-DC05-S2	--
Fluke Digital Thermometer	52K/J	MT-TP05	3/17/23
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

### General Information

<b>Manufacturer:</b>	Gantom Lighting & Controls
<b>Model Number:</b>	GT51 - Gantom One - CW (1 notch diffuser)
<b>Driver Model Number:</b>	N/A

### Photometric & Electrical Test Results

<b>Total Lumens:</b>	205.00
<b>Efficacy:</b>	45.15
<b>Input Voltage (VDC):</b>	12.00
<b>Input Current (Amp):</b>	0.3780
<b>Input Power (W):</b>	4.54
<b>Input Power Factor:</b>	1.0000
<b>Current ATHD (%):</b>	N/A

### Test Condition

<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	0:30
<b>Total Operating Time (Hours):</b>	1:00

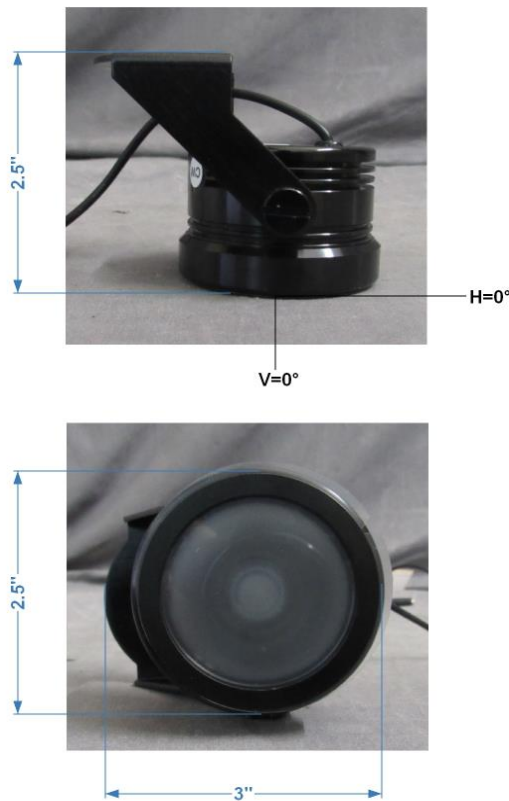


FIG. 1 LUMINAIRE

## Test Methods

### Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

### Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

### Disclaimers:

The results related only to the samples as received and tested. This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

Report Prepared by : Kunjan Modi

Test Report Reviewed by:



Steve Kang  
Quality Assurance

*\*Attached are photometric data reports.*



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## Photometric Test Report

### IES INDOOR REPORT

PHOTOMETRIC FILENAME : L022212412.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L022212412  
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)  
[ISSUEDATE] 4/22/2022  
[MANUFAC] Gantom Lighting & Controls  
[LUMCAT] GT51 - Gantom One - CW (1 notch diffuser)  
[LUMINAIRE] GT51 - Gantom One - Cool White - 1 notch diffuser  
[BALLASTCAT] N/A  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[INPUT] 12VDC  
[TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	205
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	45
Total Luminaire Watts	4.54
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.14
Spacing Criterion (90-270)	0.14
Spacing Criterion (Diagonal)	0.14
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.15 ft (Diameter)
Luminous Width (90-270)	0.15 ft (Diameter)
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4303	4303	4303
55	2122	2122	2122
65	1440	1440	1440
75	2351	2351	2351
85	6982	6982	6982

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L022212412.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	178.35	N.A.	87.10
0-30	189.69	N.A.	92.70
0-40	195.75	N.A.	95.60
0-60	201.60	N.A.	98.50
0-80	203.89	N.A.	99.60
0-90	204.71	N.A.	100.00
10-90	48.88	N.A.	23.90
20-40	17.40	N.A.	8.50
20-50	21.23	N.A.	10.40
40-70	7.09	N.A.	3.50
60-80	2.29	N.A.	1.10
70-80	1.06	N.A.	0.50
80-90	0.82	N.A.	0.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	204.71	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	155.83
10-20	22.52
20-30	11.34
30-40	6.06
40-50	3.84
50-60	2.01
60-70	1.24
70-80	1.06
80-90	0.82
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

**IES INDOOR REPORT**  
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	114	112	110	113	111	110	109	107	106	105	104	103	102	100	100	99	98
2	112	109	107	105	110	108	105	103	105	103	101	102	100	99	99	98	97	96
3	110	106	103	100	108	105	102	100	102	100	98	100	98	97	98	97	95	94
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93
5	105	101	97	95	104	100	97	95	98	96	94	97	95	93	96	94	92	91
6	104	99	96	93	103	98	95	93	97	94	92	96	94	92	95	93	91	90
7	102	97	94	92	101	97	94	91	96	93	91	95	92	91	94	92	90	89
8	100	96	93	90	100	95	92	90	94	92	90	94	91	90	93	91	89	89
9	99	94	91	89	98	94	91	89	93	91	89	93	90	89	92	90	88	88
10	98	93	90	88	97	93	90	88	92	90	88	92	89	88	91	89	88	87

**IES INDOOR REPORT**  
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**UGR TABLE - CORRECTED**

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size      UGR Viewed Crosswise

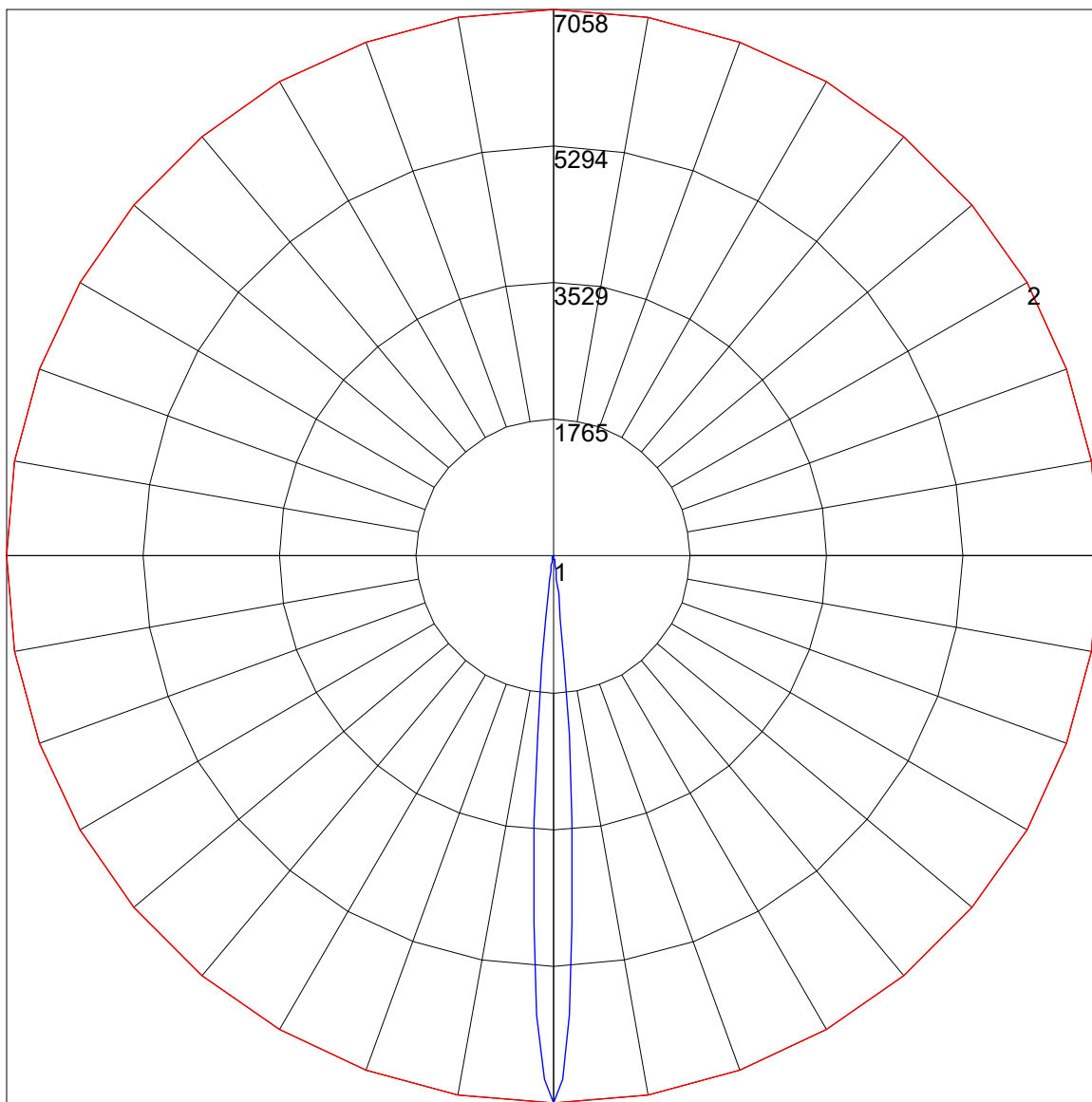
X=2H	Y=2H	5.2	6.2	5.6	6.5	6.8	5.2	6.2	5.6	6.5	6.8
	3H	6.3	7.2	6.7	7.5	7.9	6.3	7.2	6.7	7.5	7.9
	4H	7.4	8.1	7.8	8.5	8.9	7.4	8.1	7.8	8.5	8.9
	6H	8.8	9.5	9.2	9.9	10.3	8.8	9.5	9.2	9.9	10.3
	8H	9.7	10.4	10.1	10.8	11.2	9.7	10.4	10.1	10.8	11.2
	12H	10.8	11.4	11.2	11.8	12.2	10.8	11.4	11.2	11.8	12.2

UGR Viewed Endwise

4H	2H	5.3	6.1	5.7	6.4	6.8	5.3	6.1	5.7	6.4	6.8
	3H	6.9	7.5	7.3	7.9	8.4	6.9	7.5	7.3	7.9	8.4
	4H	8.2	8.8	8.6	9.2	9.7	8.2	8.8	8.6	9.2	9.7
	6H	10.0	10.5	10.4	10.9	11.4	10.0	10.5	10.4	10.9	11.4
	8H	11.0	11.5	11.5	11.9	12.4	11.0	11.5	11.5	11.9	12.4
	12H	12.3	12.7	12.8	13.2	13.7	12.3	12.7	12.8	13.2	13.7
8H	4H	8.8	9.2	9.2	9.7	10.1	8.8	9.2	9.2	9.7	10.1
	6H	10.9	11.2	11.4	11.7	12.2	10.9	11.2	11.4	11.7	12.2
	8H	12.1	12.4	12.6	13.0	13.5	12.1	12.4	12.6	13.0	13.5
	12H	13.6	13.9	14.1	14.4	15.0	13.6	13.9	14.1	14.4	15.0
12H	4H	8.9	9.3	9.4	9.8	10.3	8.9	9.3	9.4	9.8	10.3
	6H	11.1	11.5	11.6	11.9	12.5	11.1	11.5	11.6	11.9	12.5
	8H	12.5	12.8	13.0	13.3	13.9	12.5	12.8	13.0	13.3	13.9

Maximum UGR = 15.0

POLAR GRAPH



Maximum Candela = 7058 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)