

# GENERATION BRANDS, LLC

## TEST REPORT

### SCOPE OF WORK

Electrical and Photometric tests as required to the IESNA test standard.

**MODEL NUMBER**  
700WSGMBSCS-LED927

**REPORT NUMBER**  
103643585CHI-110

**ISSUE DATE**  
May 29, 2019

**REVISION DATE**  
None

**DOCUMENT CONTROL NUMBER**  
TBD  
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**REPORT NO.: 103643585CHI-110**

**REPORT DATE: May 29, 2019**

**TEST REPORT**

TEST OF ONE LED WALL SCONCE

MODEL NO. 700WSGMBSCS-LED927

RENDERED TO:

GENERATION BRANDS, LLC  
7400 LINDER AVE.  
SKOKIE, IL 60077

**AUTHORIZATION**

The testing performed was authorized by signed quote number Qu-00912313-2 .

**STANDARDS USED**

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting  
ANSI NEMA ANSLG C78.377: 2015: Specifications of the Chromaticity of Solid State Lighting Products

**DESCRIPTION OF SAMPLE**

The client submitted one production sample of model number 700WSGMBSCS-LED927. The sample was received by Intertek on May 15, 2019 in undamaged condition and one sample was tested as received. The sample designation was AH05152019114818-110.

**DATE OF TESTS**

May 17, 2019 through May 20, 2019.

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**SUMMARY**

<b>MODEL NO:</b>	700WSGMBSCS-LED927
<b>DESCRIPTION:</b>	LED Wall Sconce

CRITERIA	RESULTS	
	INTEGRATING SPHERE	GONIOPHOTOMETER
Lumen Output (lumens)	152.3	149.5
Input Power (W) @ 120 (VAC)	2.04	2.04
Lumen Efficacy (lm/W)	74.5	73.3
Input Power Factor @ 120 (VAC)	0.941	0.941

CRITERIA	RESULTS
Input Current ATHD (%) @ 120 (VAC)	35.87
Correlated Color Temperature (K)	2755
Color Rendering Index - Ra	92.2
Color Rendering - R9	55.5
DUV	0.0005
Chromaticity Coordinate (x)	0.456
Chromaticity Coordinate (y)	0.412
Chromaticity Coordinate (u')	0.260
Chromaticity Coordinate (v')	0.527

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**EQUIPMENT LIST**

<b>EQUIPMENT USED</b>	<b>MODEL NO.</b>	<b>CONTROL NO.</b>	<b>LAST CAL DATE</b>	<b>CAL DUE DATE</b>
Yokogawa Power Meter	WT210	146919	7/9/2018	7/9/2019
Omega Newport Thermometer	DPI8-C24	146920	10/4/2018	10/4/2019
LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
Newport Thermohygrometer	iServer	146957	12/11/2018	12/11/2019
Pacific, AC power supply	118-ACX	CHI0358	VBU	VBU
Labsphere 2M Sphere & Spectroradiometer	CDS1100	146137	VBU	VBU
Elgar AC Power Supply	CW1251M	146113	VBU	VBU
Sorenson DC Power Supply	XFR150-8	146847	VBU	VBU
Yokogawa Power Analyzer	WT1600	146767	4/3/2019	4/3/2020
Omega Temperature	MDSi8	146873	7/10/2018	7/10/2019
Newport Thermohygrometer	iTHX-M	146961	7/23/2018	7/23/2019

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**TEST METHODS**

**SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS**

No seasoning was performed in accordance with IESNA LM-79.

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - INTEGRATING SPHERE METHOD**

A Spectroradiometer and integrating sphere was used to measure correlated color temperature, chromaticity coordinates, and the color rendering index for each SSL unit.

Ambient temperature was measured at a position inside the sphere. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation. Each SSL unit was allowed to stabilize for at least thirty minutes before measurements were made. Stabilization procedures to LM-79 were followed. Electrical measurements including voltage, current, and power were measured using a power analyzer.

The calibration of the sphere photometer-spectroradiometer system is traceable to the National Institute of Standards and Technology.

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD**

A Type C Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for the SSL sample.

Ambient temperature was measured equal to the height of the sample mounted on the goniometer equipment. The SSL sample was operated on the client provided driver at rated input volts in its designated orientation. The SSL sample was allowed to stabilize for at least thirty minutes before measurements were made. Stabilization procedures to LM-79 were followed. Electrical measurements including voltage, current, and power were measured using a power analyzer.

**TEST REPORT**

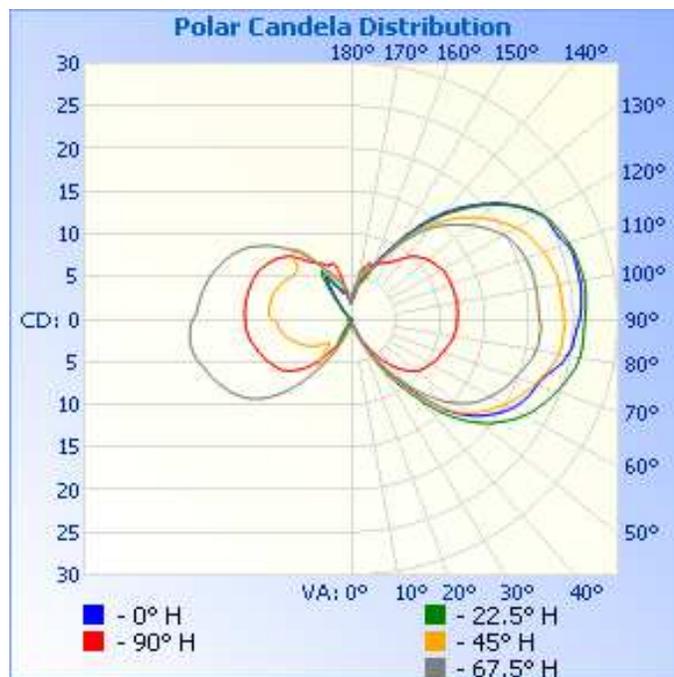
**RESULTS OF TESTS**

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)**

INTERTEK CONTROL NO.	BASE POSITION	INPUT VOLTAGE (VAC)	INPUT CURRENT (mA)	INPUT POWER (W)	INPUT POWER FACTOR ( )	LIGHT OUTPUT (lm)	LUMEN EFFICACY (lm/W)
AH05152019114818-110	Base Up	119.9	18.1	2.04	0.941	149.5	73.3

**INTENSITY SUMMARY - CANDELAS**

Angle	0	22.5	45	67.5	90
0	0	0	0	0	0
5	0	0	0	0	0
10	0	0	0	0	0
15	1	1	1	1	1
20	1	2	2	2	2
25	3	3	3	3	3
30	6	6	6	5	4
35	8	9	9	8	6
40	11	13	12	10	7
45	15	16	15	13	8
50	18	19	17	15	9
55	19	21	19	17	10
60	21	22	20	18	10
65	22	24	21	19	11
70	22	25	22	20	11
75	23	26	23	20	11
80	25	26	24	21	12
85	25	26	24	21	12
90	26	26	24	21	12
95	26	26	24	21	12
100	26	27	24	21	12
105	26	26	24	21	12
110	26	26	23	21	12
115	25	26	22	20	12
120	25	25	22	20	12
125	23	23	20	19	11
130	21	21	18	17	11
135	19	18	17	16	10
140	16	16	15	14	9
145	13	13	12	12	8
150	10	10	10	10	8
155	8	8	8	8	7
160	6	6	6	6	7
165	5	5	6	6	6
170	4	4	4	6	4
175	3	3	3	3	2
180	2	2	2	2	2



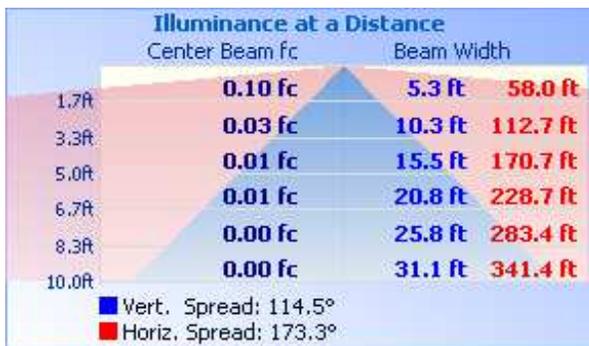
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**RESULTS OF TESTS**

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)**

**MOUNTING HEIGHT: 10ft**

**ILLUMINANCE - CONE OF LIGHT**



**ZONAL LUMEN SUMMARY AND PERCENTAGES**

ZONE	LUMENS	% LUMINAIRE
0-30	1.7	1.2
0-40	5.7	3.8
0-60	24.0	16.1
60-90	45.9	30.7
70-100	49.1	32.9
90-120	47.6	31.9
0-90	69.9	46.8
90-180	79.6	53.2
0-180	149.5	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	0.0	0.0
10-20	0.3	0.2
20-30	1.4	1.0
30-40	3.9	2.6
40-50	7.4	5.0
50-60	10.9	7.3
60-70	13.5	9.1
70-80	15.6	10.4
80-90	16.7	11.2
90-100	16.8	11.2
100-110	16.2	10.8
110-120	14.6	9.8
120-130	12.1	8.1
130-140	9.0	6.0
140-150	6.0	4.0
150-160	3.2	2.1
160-170	1.4	0.9
170-180	0.3	0.2

**TEST REPORT**

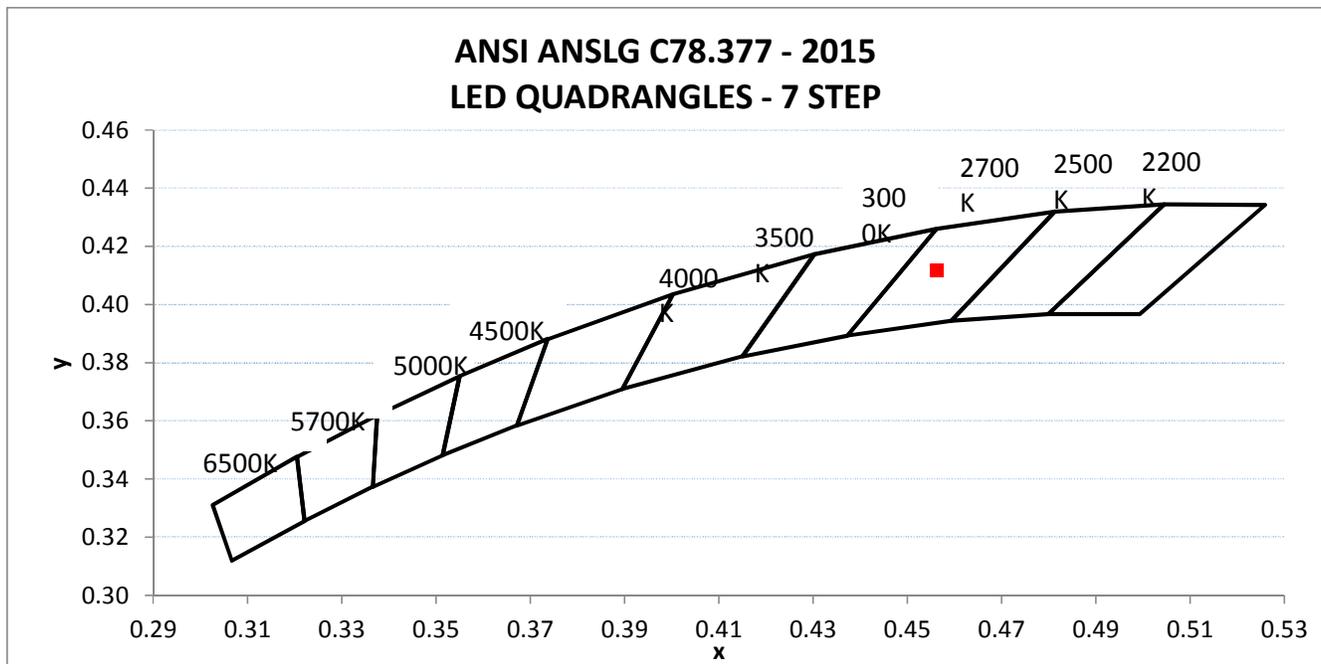
**RESULTS OF TESTS**

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - INTEGRATING SPHERE METHOD (25°C +/- 1°C)**

INTERTEK CONTROL NO.	BASE POSITION	INPUT VOLTAGE (VAC)	INPUT CURRENT (mA)	INPUT POWER (W)	INPUT POWER FACTOR	INPUT CURRENT ATHD (%)
AH05152019114818-110	Base Up	120.00	18.11	2.04	0.941	35.87

LIGHT OUTPUT (lm)	LUMEN EFFICACY (lm/W)	CORRELATED COLOR TEMPERATURE - CCT (K)	CRI - Ra	CRI - R9	DUV
152.3	74.5	2755	92.2	55.5	0.0005

CIE 1931 CHROMATICITY COORDINATE (x)	CIE 1931 CHROMATICITY COORDINATE (y)	CIE 1976 CHROMATICITY COORDINATE (u')	CIE 1976 CHROMATICITY COORDINATE (v')
0.456	0.412	0.260	0.527



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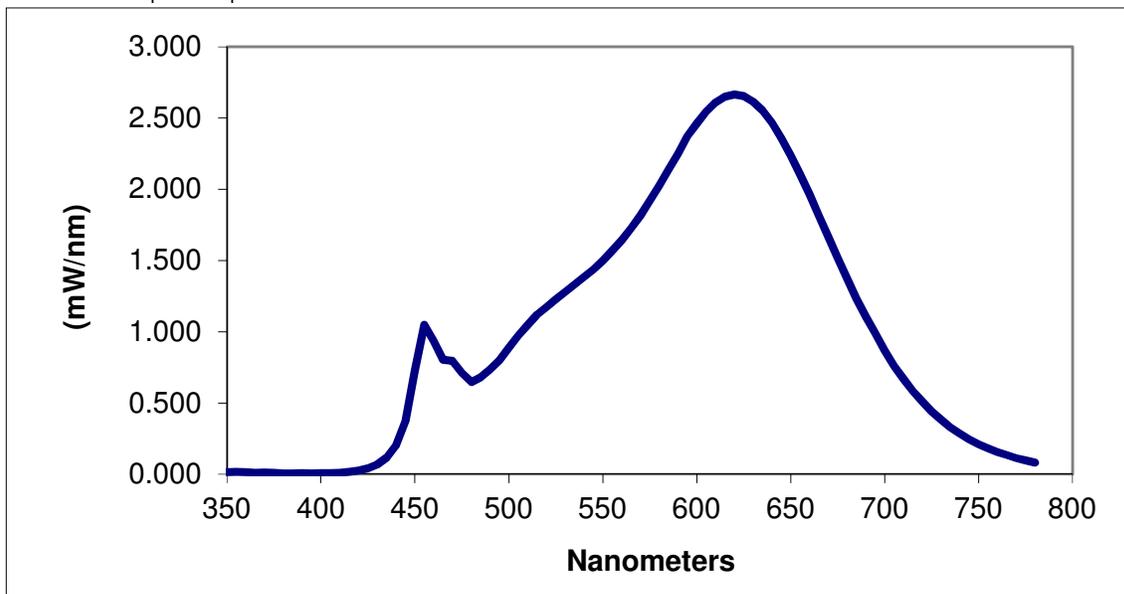
TEST REPORT

RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - INTEGRATING SPHERE METHOD (25°C +/- 1°C)

SPECTRAL DISTRIBUTION OVER VISIBLE WAVELENGTHS*							
nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
350	0.014	460	0.938	570	1.816	680	1.372
355	0.016	465	0.803	575	1.920	685	1.232
360	0.014	470	0.797	580	2.027	690	1.104
365	0.011	475	0.713	585	2.138	695	0.991
370	0.013	480	0.647	590	2.251	700	0.868
375	0.010	485	0.681	595	2.370	705	0.761
380	0.007	490	0.737	600	2.462	710	0.670
385	0.007	495	0.799	605	2.545	715	0.585
390	0.008	500	0.888	610	2.609	720	0.511
395	0.007	505	0.973	615	2.649	725	0.441
400	0.008	510	1.050	620	2.665	730	0.384
405	0.009	515	1.120	625	2.654	735	0.331
410	0.011	520	1.173	630	2.613	740	0.285
415	0.017	525	1.227	635	2.553	745	0.245
420	0.026	530	1.281	640	2.466	750	0.210
425	0.041	535	1.332	645	2.360	755	0.182
430	0.069	540	1.387	650	2.236	760	0.157
435	0.117	545	1.437	655	2.104	765	0.135
440	0.204	550	1.499	660	1.964	770	0.114
445	0.376	555	1.570	665	1.815	775	0.098
450	0.726	560	1.643	670	1.665	780	0.083
455	1.049	565	1.725	675	1.518		

\*Without correction of sample absorption.



**End Of Test Results**

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**PICTURES**



**CONCLUSION**

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

*Tess Gallagher*

Tess Gallagher  
Engineer  
Lighting Division

Report Reviewed By:

*Tim Quigley*

Timothy Quigley  
Project Engineer  
Lighting Division

Attachments: IES File

**REVISION HISTORY**

JOB NUMBER	DATE OF REVISION	PROJECT HANDLER	REVIEWED BY	REVISION NOTE
None				