

PURE EDGE LIGHTING

TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

SS5C-24V-3-2K4K

PROJECT NUMBER

G104373788

REPORT NUMBER

104373788CHI-022

ISSUE DATE

8/31/2020

REVISED DATE

None

TEST DATES

08/20/2020 through 08/24/2020.

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

© 2017 INTERTEK



REPORT NUMBER

104373788CHI-022

MODEL NUMBER(s)

SS5C-24V-3-2K4K

REPORT RENDERED TO:

PURE EDGE LIGHTING
1718 W. FULLERTON AVE.
CHICAGO, IL 60614

STATEMENT OF LIMITATION

NVLAP Lab Code 600186-0. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

AUTHORIZATION

The testing performed was authorized by signed quote number Qu-01087644-1.

TEST STANDARDS

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

ANSI NEMA ANSLG C78.377: 2017: Specifications for the Chromaticity of Solid State Lighting (SSL) Products

In Charge of Testing:



Ian Smith
Engineer
Lighting Division

Reviewer:



Jeff Davis
NA Technical Lead
Lighting Division

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

SAMPLE INFORMATION

REPORT NO. 104373788CHI-022

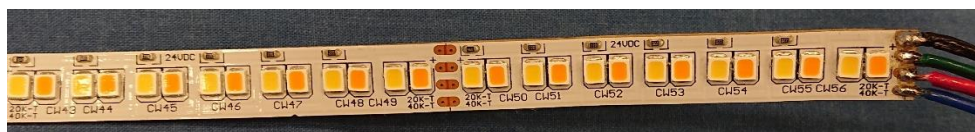
ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	AH08112020115319	SS5C-24V-3-2K4K	Led strip only 4K lead connected.	Production	8/11/2020

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	SS5C-24V-3-2K4K	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS



SUMMARY

REPORT NO. 104373788CHI-022

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	SS5C-24V-3-2K4K
Product Description:	Led strip only 4K lead connected.
LED Model No.:	LIANGAN/ LA-D2835P927M-3E2-00301
Driver Model No.:	HUARUI/DR-24V-2000-60D
Light Source:	LED

Criteria	Results	
	Goniophotometer	Integrating Sphere
Light Output (lumens)	1536.9	1590.8
Input Power (W) @ 120VAC (Vac)	14.53	14.58
Lumen Efficacy (lm/W)	105.8	109.1
Input Power Factor (I) @ 120VAC (Vac)	0.968	0.971

Criteria	Results
Input ATHD (%) @ 120VAC (Vac)	15.98
Correlated Color Temperature (K)	4083
Color Rendering Index - Ra (I)	91.4
Color Rendering Index - R9 (I)	60.8
Duv (I)	-0.0006
Chromaticity Coordinate (x)	0.376
Chromaticity Coordinate (y)	0.373
Chromaticity Coordinate (u')	0.224
Chromaticity Coordinate (v')	0.499

TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

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

INTEGRATING SPHERE TESTING

A spectroradiometer and integrating sphere were used to measure the spectral distribution for each EUT resulting in photometric and colorimetric data. Electrical measurements of the unit were measured using a power analyzer. Each EUT was operated at the rated input voltage of the system in its designated orientation. The ambient temperature was measured at a position inside the sphere and stabilization procedures to LM-79 were followed.

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

A Type C Mirror Goniophotometer system was used to measure the luminous intensity (candela) at each angle of distribution for the EUT. Electrical measurements of the unit were measured using a power analyzer. Each EUT was operated at the rated input voltage of the system in its designated orientation. The ambient temperature was measured at a position near the EUT at equal height and stabilization procedures to LM-79 were followed.

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

REPORT NO. 104373788CHI-022

Test Configuration	Tested Model No.	Pass/Fail/NA
1	SS5C-24V-3-2K4K	NA

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

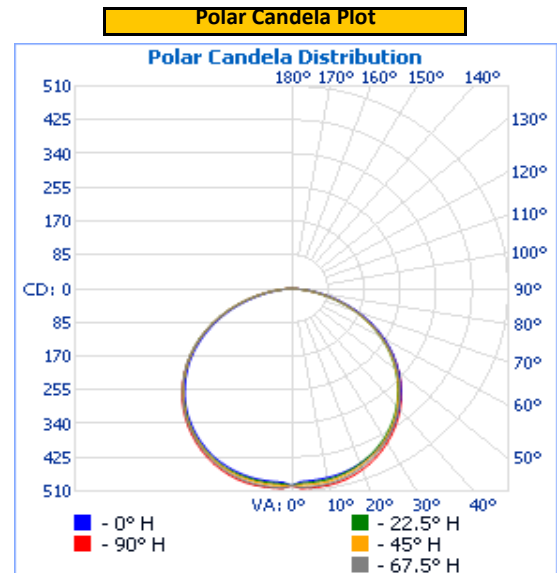
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.1	125.0	14.53	0.968

Light Output (lm)	Lumen Efficacy (lm/W)
1536.9	105.8

INTENSITY SUMMARY - CANDELA

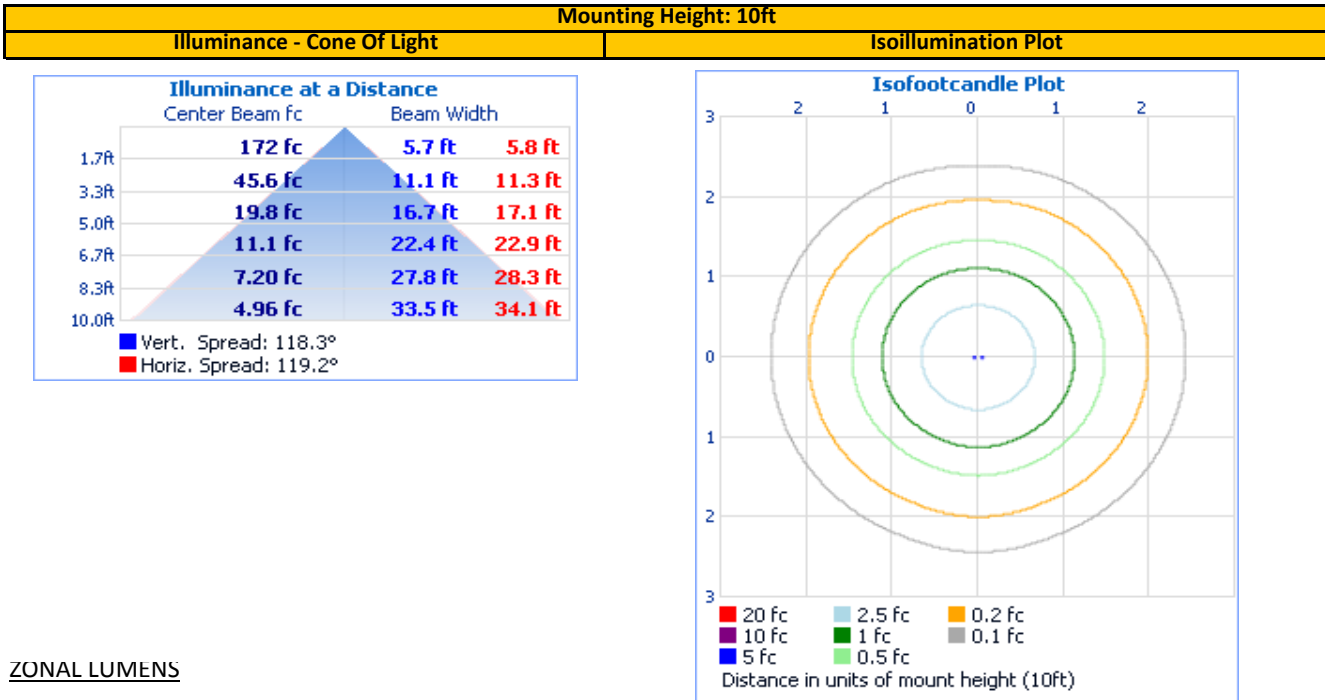
Angle	0	22.5	45	67.5	90
0	496	496	496	496	496
5	486	490	495	501	503
10	483	488	493	499	502
15	478	481	486	491	497
20	469	469	474	479	485
25	457	454	458	463	469
30	440	435	439	443	449
35	419	412	416	420	424
40	393	385	388	392	396
45	363	354	356	360	364
50	329	320	322	325	329
55	291	283	284	287	290
60	251	241	243	245	248
65	207	198	199	202	204
70	161	152	152	155	157
75	114	104	105	107	109
80	69	60	60	63	64
85	29	23	24	25	25
90	0	0	0	0	0
95	0	0	0	0	0
100	0	0	0	0	0
105	0	0	0	0	0
110	0	0	0	0	0
115	0	0	0	0	0
120	0	0	0	0	0
125	0	0	0	0	0
130	0	0	0	0	0
135	0	0	0	0	0
140	0	0	0	0	0
145	0	0	0	0	0
150	0	0	0	0	0
155	0	0	0	0	0
160	0	0	0	0	0
165	0	0	0	0	0
170	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Entire luminous intensity matrix found in .IES file



REPORT NO. 104373788CHI-022

ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary					
Zone	Lumens	Luminaire	Zone	Lumens	Total
0-30	397.4	25.9%	90-100	0.0	0.0%
0-40	659.2	42.9%	100-110	0.0	0.0%
0-60	1,193.5	77.7%	110-120	0.0	0.0%
60-90	343.4	22.3%	120-130	0.0	0.0%
70-100	143.9	9.4%	130-140	0.0	0.0%
90-120	0.0	0.0%	140-150	0.0	0.0%
0-90	1,536.9	100.0%	150-160	0.0	0.0%
90-180	0.0	0.0%	160-170	0.0	0.0%
0-180	1,536.9	100.0%	170-180	0.0	0.0%

INTEGRATING SPHERE TESTING

REPORT NO. 104373788CHI-022

Test Configuration	Tested Model No.	Pass/Fail/NA
1	SS5C-24V-3-2K4K	NA

PHOTOMETRIC, COLORIMETRIC, AND ELECTRICAL MEASUREMENTS (25°C +/- 1°C)

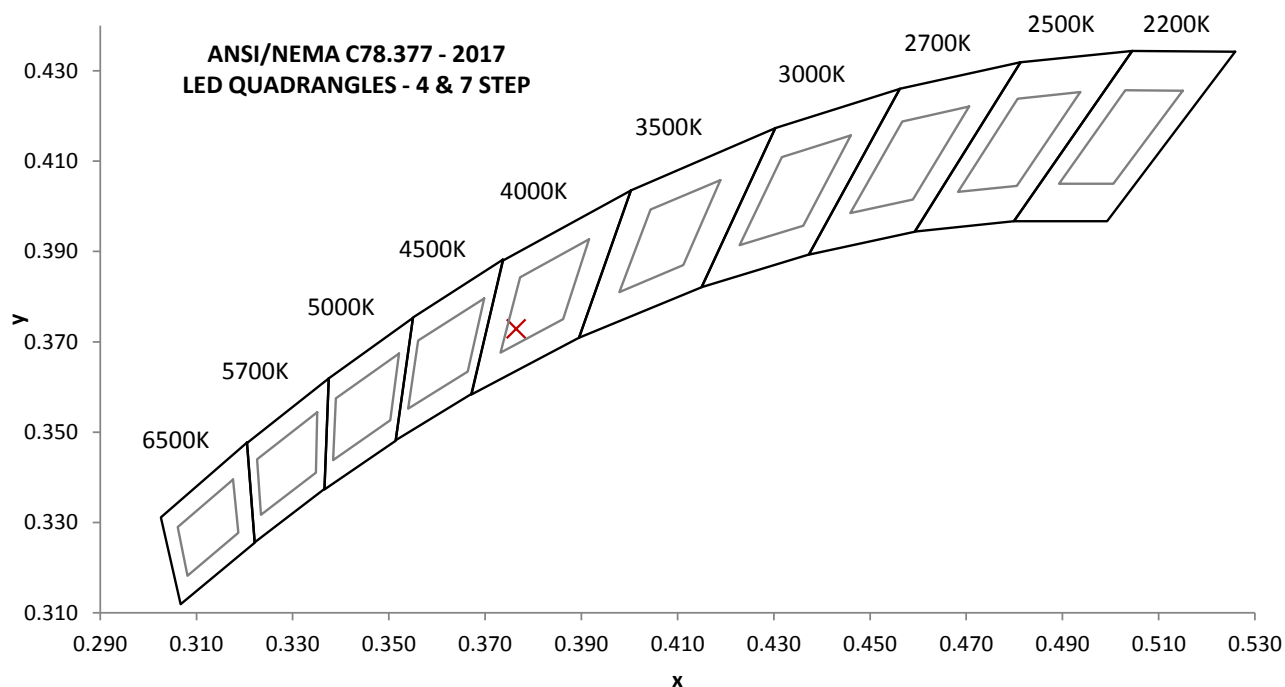
Base Orientation
Up

Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()	Input ATHD (%)
119.95	125.2	14.58	0.971	15.98

Measured at 119.95(Vac)

Light Output (lm)	Lumen Efficacy (lm/W)	CCT (K)	CRI - Ra ()	CRI - R9 ()
1590.8	109.1	4083	91.4	60.8

Duv ()	1931 Chrom (x)	1931 Chrom (y)	1976 Chrom (u')	1976 Chrom (v')
-0.0006	0.376	0.373	0.224	0.499

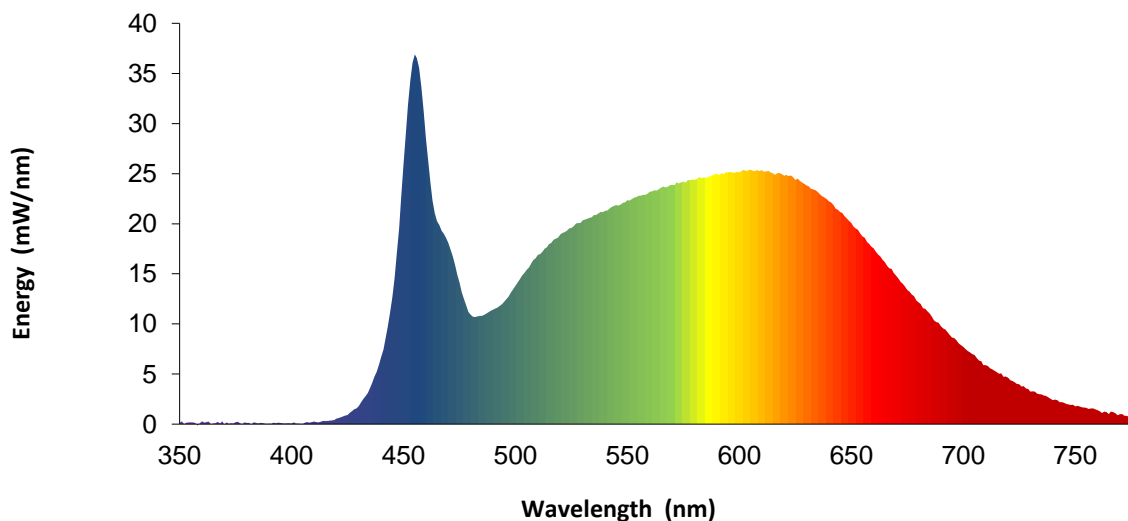


REPORT NO. 104373788CHI-022

SPECTRAL DISTRIBUTION OVER WAVELENGTHS

nm	mW/nm		nm	mW/nm		nm	mW/nm		nm	mW/nm
350	0.1		460	28.5		570	23.9		680	12.2
355	0.2		465	20.2		575	24.2		685	11.0
360	0.3		470	18.1		580	24.4		690	9.8
365	0.1		475	14.1		585	24.6		695	8.6
370	-0.1		480	10.9		590	25.0		700	7.7
375	0.2		485	10.8		595	25.1		705	6.9
380	0.1		490	11.4		600	25.1		710	5.9
385	0.1		495	12.2		605	25.4		715	5.2
390	0.1		500	13.8		610	25.4		720	4.6
395	0.1		505	15.4		615	25.1		725	4.0
400	0.1		510	16.9		620	24.8		730	3.2
405	0.0		515	18.0		625	24.4		735	3.0
410	0.3		520	18.9		630	23.8		740	2.4
415	0.3		525	19.6		635	23.2		745	2.1
420	0.5		530	20.3		640	22.2		750	1.8
425	0.9		535	20.9		645	21.2		755	1.6
430	1.8		540	21.3		650	20.1		760	1.4
435	3.6		545	21.9		655	18.7		765	1.0
440	6.7		550	22.3		660	17.5		770	1.0
445	12.7		555	22.8		665	16.2		775	0.8
450	25.8		560	23.2		670	14.8		780	0.7
455	36.9		565	23.6		675	13.4		---	---

Without correction of sample absorption.



Portrayed color in graphic is estimated by wavelength (nm) and may not be exact - it is a visual representation only

EQUIPMENT LIST

REPORT NO. 104373788CHI-022

#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	Yokogawa Power Meter	WT210	146919	7/1/2020	7/1/2021
2	Omega Thermometer	DPI8-C24	146920	10/3/2019	10/3/2020
3	LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
4	Newport Thermohygrometer	iServer	146957	12/2/2019	12/2/2020
5	Pacific AC Power Supply	118-ACX	CHI0153	VBU	VBU
6	Newport Humidity Recorder	iServer	CHI0456	10/11/2019	10/11/2020
7	Labsphere Spectroradiometer	CDS-600	146923	VBU	VBU
8	2M Rotating Sphere	7660-ROT	146923	VBU	VBU
9	Omega thermometer	USB TC08	EQAH002615	4/7/2020	4/7/2021
10	Ametek DC Power Supply	XFR150-8	1468464	VBU	VBU
11	Yokogawa Power Meter	WT210	146880	10/2/2019	10/2/2020
12	Chroma Power Supply	61604	CHI0371	VBU	VBU
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Note: Standard sources listed above are traceable to NIST: National Institute of Standards and Technology

REVISION HISTORY

#	Revision Date	Updated By	Reviewed By	Description of Change
---	None	---	---	---
---	---	---	---	---
---	---	---	---	---