

AFX, INC.

TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER

VIP PENDANT

REPORT NUMBER

103792309CHI-011

ISSUE DATE

August 1, 2019

REVISION DATE

None

DOCUMENT CONTROL NUMBER

TBD

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REPORT DATE: August 1, 2019

TEST REPORT

TEST OF ONE VIP1000L30D2SNWH

MODEL NO. VIP PENDANT
LED MODEL NO. SEOUL SEMICONDUCTOR STW9A12D
DRIVER MODEL NO. KEYSTONE KTLD16-UV-500 VDIM-AQ1

RENDERED TO:

AFX, INC.
2345 N. ERNIE KREUGER CIRCLE
WAUKEGAN, IL 60087-3225

AUTHORIZATION

The testing performed was authorized by signed quote number Qu-00943315-1 .

STANDARDS USED

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

DESCRIPTION OF SAMPLE

The client submitted one prototype sample of model number VIP PENDANT. The sample was received by Intertek on July 18, 2019 in undamaged condition and one sample was tested as received. The sample designation was AH07182019033836-011.

DATE OF TESTS

July 29, 2019.

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SUMMARY

MODEL NO:	VIP PENDANT
DESCRIPTION:	VIP1000L30D2SNWH

CRITERIA	RESULTS
Lumen Output (lumens)	946.1
Input Power (W) @ 120 (VAC)	11.87
Lumen Efficacy (lm/W)	79.7
Input Power Factor @ 120 (VAC)	0.987

EQUIPMENT LIST

EQUIPMENT USED	MODEL NO.	CONTROL NO.	LAST CAL DATE	CAL DUE DATE
Yokogawa Power Meter	WT210	146919	7/1/2019	7/1/2020
Omega 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

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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 - 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.

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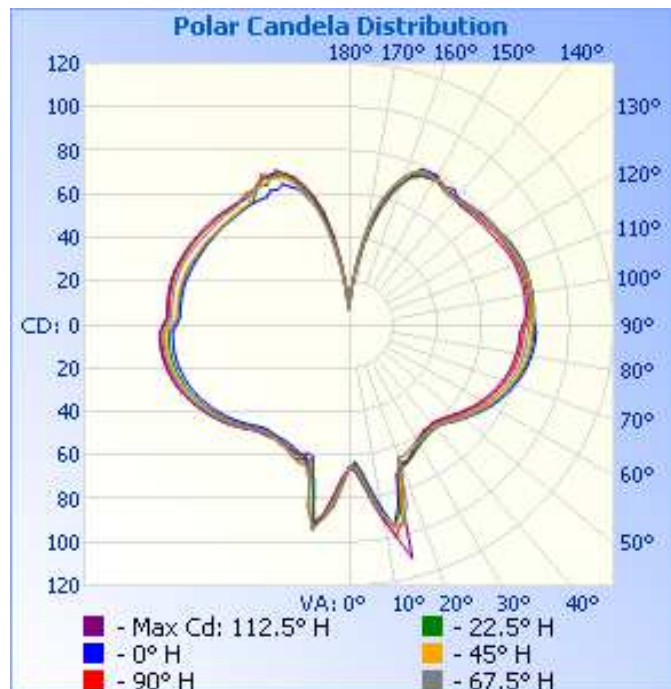
RESULTS OF TESTS

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)
AH07182019033836-011	Base Up	120.1	100.1	11.87	0.987	946.1	79.7

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	66	66	66	66	66
5	69	70	72	73	74
10	86	88	89	90	91
15	86	90	96	95	94
20	67	68	66	65	69
25	67	67	65	64	66
30	64	64	63	62	62
35	62	62	61	61	60
40	62	62	61	61	60
45	64	64	63	63	61
50	67	67	67	66	64
55	71	70	70	69	68
60	75	74	73	72	71
65	78	77	76	75	73
70	80	79	79	77	76
75	82	82	81	79	77
80	84	83	82	80	78
85	85	84	83	81	79
90	84	84	83	82	80
95	84	84	84	83	82
100	84	84	84	83	82
105	84	84	84	83	82
110	84	84	83	82	82
115	83	82	82	81	80
120	81	81	81	80	79
125	80	80	80	79	78
130	79	78	78	78	77
135	78	77	77	76	76
140	77	76	76	75	75
145	77	76	76	75	76
150	79	76	77	78	80
155	79	75	78	77	78
160	72	69	71	72	72
165	60	58	60	61	59
170	41	38	41	42	40
175	21	19	20	20	19
180	8	8	8	8	8



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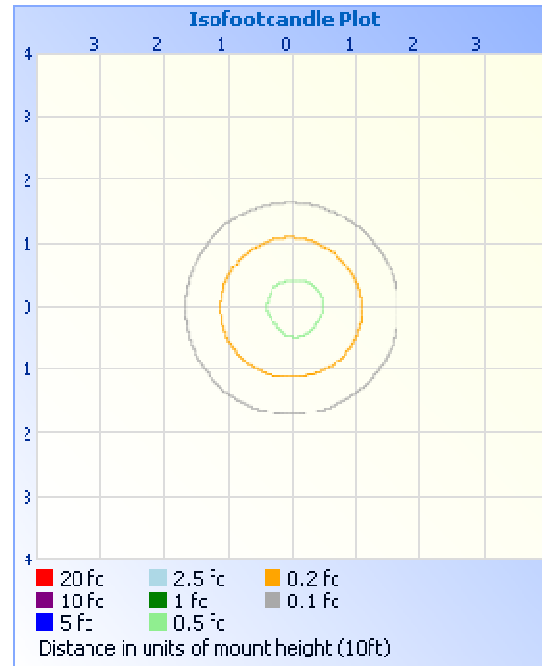
RESULTS OF TESTS

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

MOUNTING HEIGHT: 10ft

ILLUMINANCE - CONE OF LIGHT	ISOILLUMINATION PLOT
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Illuminance at a Distance		
	Center Beam fc	Beam Width
1.7ft	22.8 fc	
3.3ft	6.06 fc	
5.0ft	2.64 fc	
6.7ft	1.47 fc	
8.3ft	0.96 fc	
10.0ft	0.66 fc	



ZONAL LUMEN SUMMARY AND PERCENTAGES

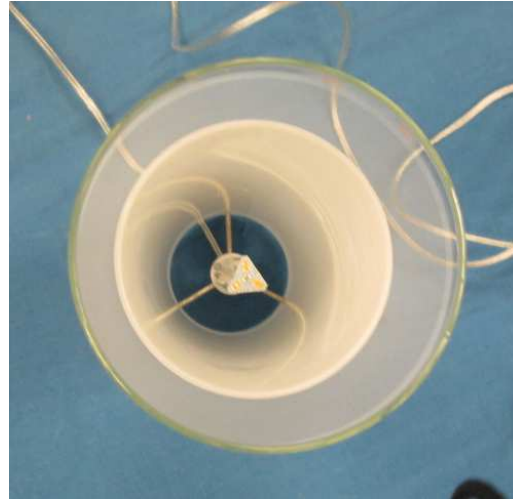
ZONE	LUMENS	% LUMINAIRE
0-30	59.8	6.3
0-40	98.5	10.4
0-60	212.4	22.4
60-90	251.7	26.6
70-100	264.1	27.9
90-120	253.8	26.8
0-90	464.1	49.1
90-180	482.0	50.9
0-180	946.1	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	7.9	0.8
10-20	22.1	2.3
20-30	29.8	3.1
30-40	38.7	4.1
40-50	50.0	5.3
50-60	63.8	6.7
60-70	76.3	8.1
70-80	85.6	9.0
80-90	89.8	9.5
90-100	88.7	9.4
100-110	86.0	9.1
110-120	79.0	8.4
120-130	69.2	7.3
130-140	58.1	6.1
140-150	47.3	5.0
150-160	34.8	3.7
160-170	16.5	1.7
170-180	2.5	0.3

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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				