

PHOENIX PRODUCTS LLC

TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

CF-375-SP-120-277-WW

PROJECT NUMBER

G104357589

REPORT NUMBER

104357589CHI-043

ISSUE DATE

2/19/2021

REVISED DATE

None

TEST DATES

02/16/2021.

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

© 2017 INTERTEK



REPORT NUMBER

104357589CHI-043

MODEL NUMBER(s)

CF-375-SP-120-277-WW

REPORT RENDERED TO:

PHOENIX PRODUCTS LLC
8711 W PORT AVE.
MILWAUKEE, WI, 53224
USA

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-01080058-1.

TEST STANDARDS

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

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. 104357589CHI-043

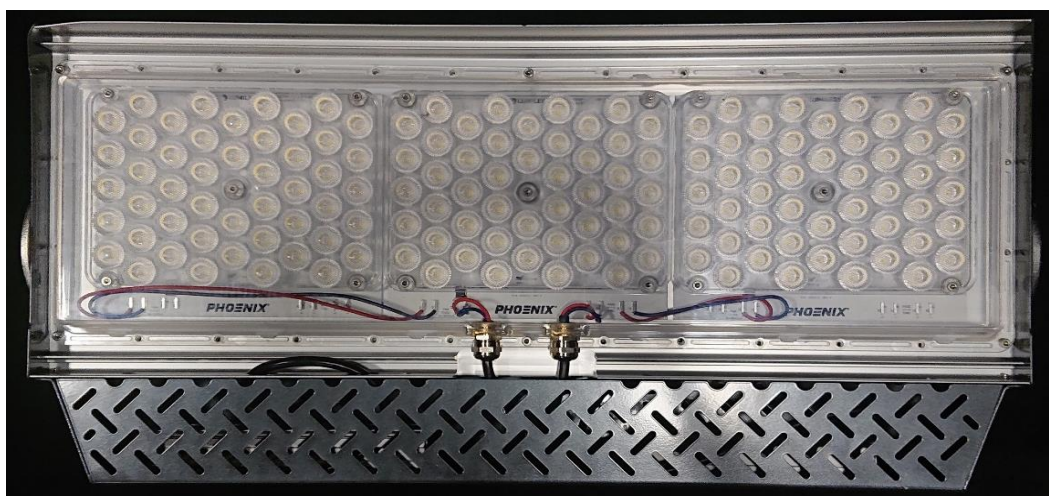
ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	AH01272021125026	CF-375-SP-120-277-WW	Command Flood 375	Production	1/27/2021

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	CF-375-SP-120-277-WW	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS



SUMMARY

REPORT NO. 104357589CHI-043

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	CF-375-SP-120-277-WW
Product Description:	Command Flood 375
LED Model No.:	Lumileds 5050
Driver Model No.:	Inventronics / EUM-240S350DT & EUM-150S210DT
Light Source:	LED

Criteria	Results
Light Output (lumens)	46742.3
Input Power (W) @ 120 (Vac)	357.55
Lumen Efficacy (lm/W)	130.7
Input Power Factor () @ 120 (Vac)	0.999

TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

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

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. 104357589CHI-043

Test Configuration	Tested Model No.	Pass/Fail/NA
1	CF-375-SP-120-277-WW	NA

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

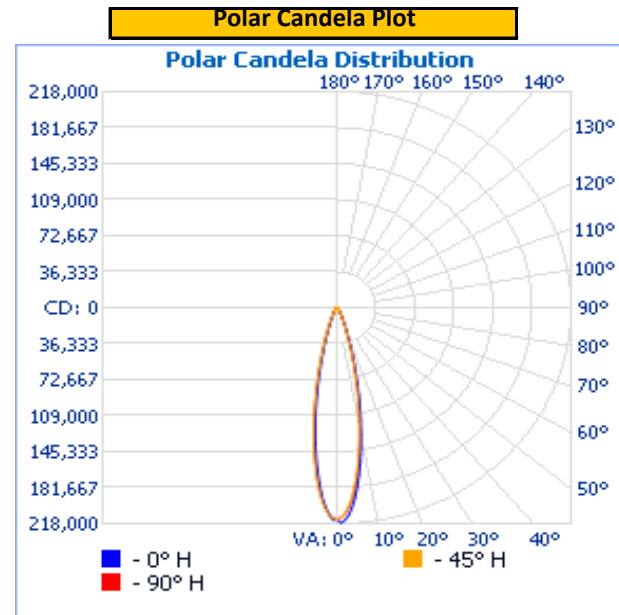
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor (I)
Up	120.1	2981.2	357.55	0.999

Light Output (lm)	Lumen Efficacy (lm/W)
46742.3	130.7

INTENSITY SUMMARY - CANDELA

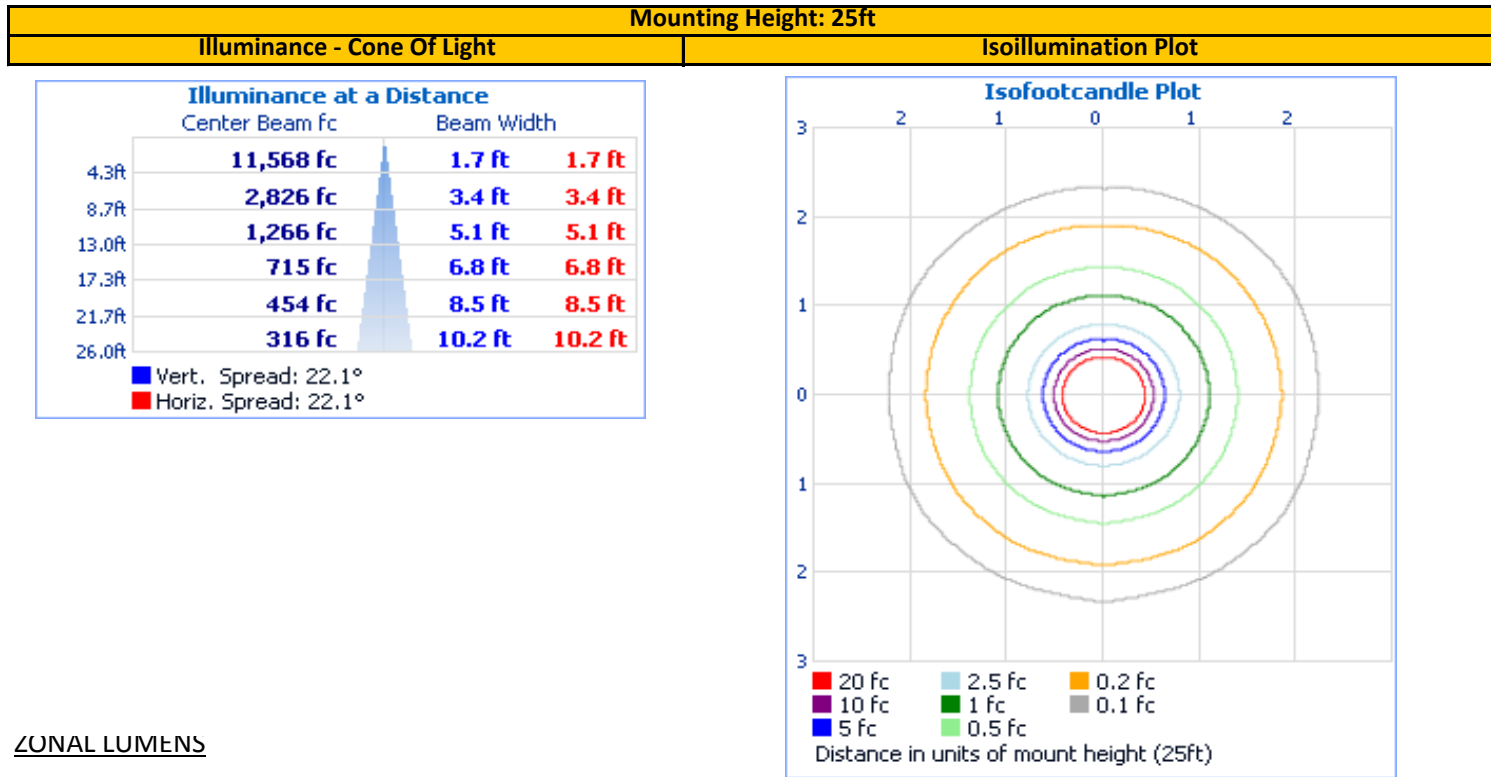
Angle	0	22.5	45	67.5	90
0	213894	213894	213894	213894	213894
5	192490	182409	182995	184169	185192
10	129340	118045	119948	121367	123324
15	67223	59547	60674	61876	63555
20	28931	25992	26500	26860	27577
25	13026	11845	11824	11973	12166
30	6976	6354	6332	6345	6411
35	4303	3989	3977	3965	4056
40	3022	2900	2860	2848	2893
45	2427	2353	2299	2249	2290
50	2050	1953	1894	1860	1869
55	1704	1634	1601	1541	1527
60	1408	1345	1317	1251	1247
65	1113	1061	1048	1001	962
70	836	767	774	758	686
75	555	501	494	505	438
80	288	247	256	258	221
85	86	68	78	90	74
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. 104357589CHI-043

ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary					
Zone	Lumens	Luminaire	Zone	Lumens	Total
0-30	39,134.8	83.7%	0-10	15552.7	33.3%
0-40	41,788.7	89.4%	10-20	17461.1	37.4%
0-60	45,048.4	96.4%	20-30	6121.0	13.1%
60-90	1,693.9	3.6%	30-40	2653.9	5.7%
70-100	656.3	1.4%	40-50	1818.6	3.9%
90-120	0.0	0.0%	50-60	1441.1	3.1%
0-90	46,742.3	100.0%	60-70	1037.6	2.2%
90-180	0.0	0.0%	70-80	543.9	1.2%
0-180	46,742.3	100.0%	80-90	112.4	0.2%
			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%

EQUIPMENT LIST

REPORT NO. 104357589CHI-043

#	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	10/1/2020	10/1/2021
3	LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
4	Newport Thermohygrometer	iServer	146958	9/30/2020	9/30/2021
5	Pacific AC Power Supply	118-ACX	CHI0153	VBU	VBU

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	---	---	---
---	---	---	---	---
---	---	---	---	---