

PHOENIX PRODUCTS LLC

TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

CF-375-MF-120-277-WW

PROJECT NUMBER

G104357589

REPORT NUMBER

104357589CHI-044

ISSUE DATE

2/19/2021

REVISED DATE

None

TEST DATES

02/16/2021.

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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REPORT NUMBER

104357589CHI-044

MODEL NUMBER(s)

CF-375-MF-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

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SAMPLE INFORMATION

REPORT NO. 104357589CHI-044

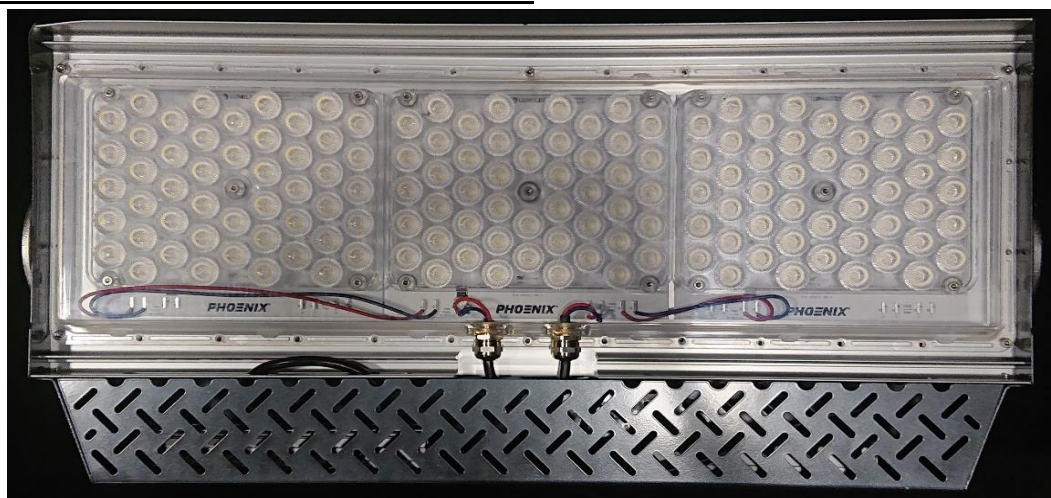
ITEMS RECEIVED

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

TESTED SAMPLE CONFIGURATIONS

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

SAMPLE PHOTOS - TESTED CONFIGURATIONS



SUMMARY

REPORT NO. 104357589CHI-044

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	CF-375-MF-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)	45174.5
Input Power (W) @ 120 (Vac)	357.81
Lumen Efficacy (lm/W)	126.3
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-044

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

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

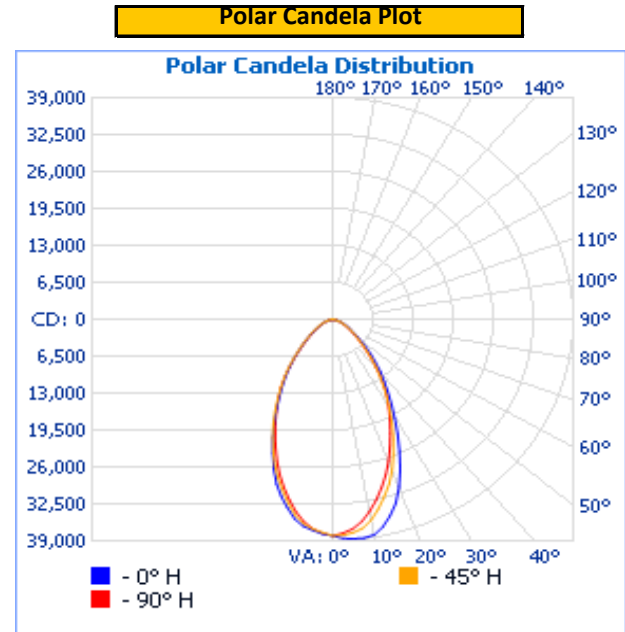
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor (I)
Up	120.1	2983.3	357.81	0.999

Light Output (lm)	Lumen Efficacy (lm/W)
45174.5	126.3

INTENSITY SUMMARY - CANDELA

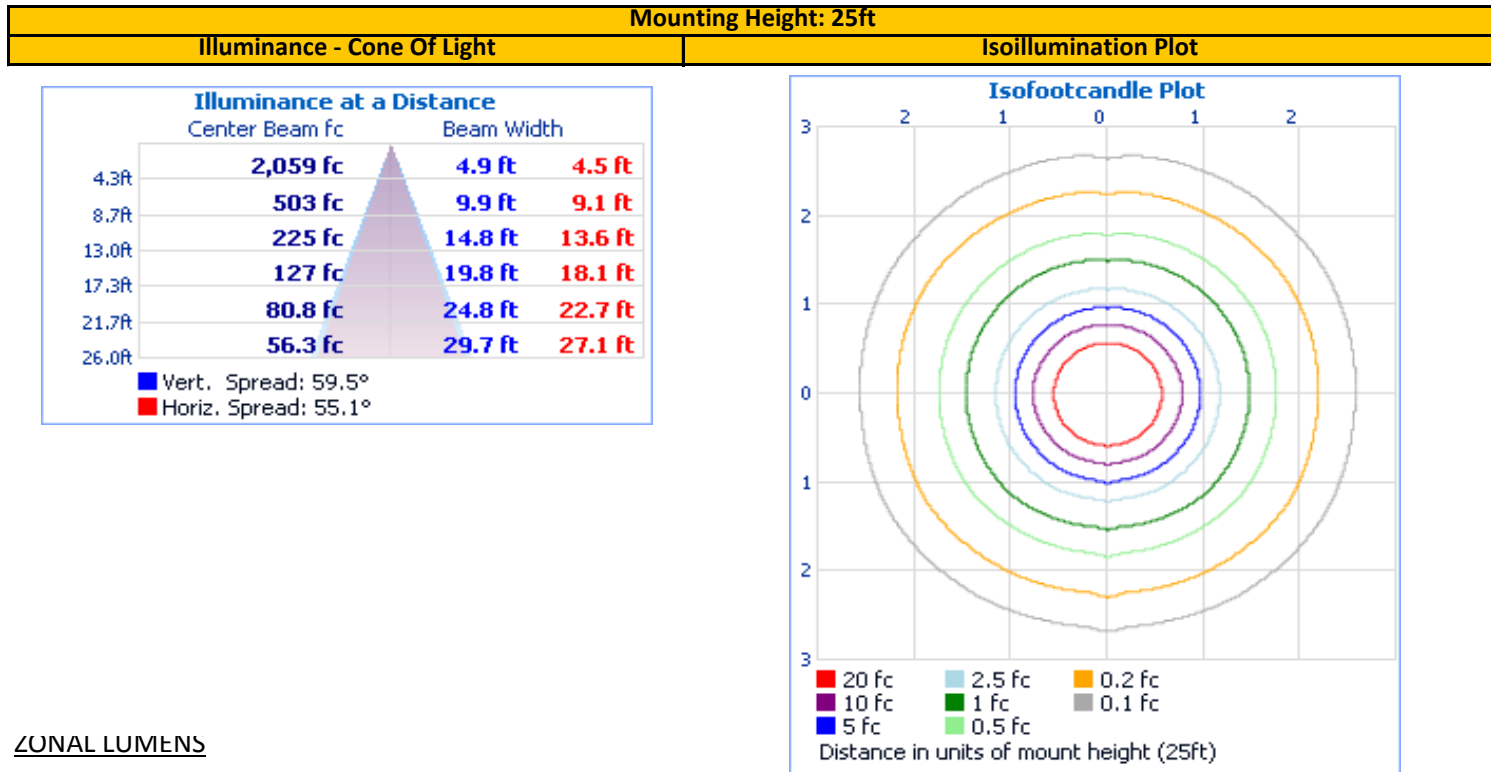
Angle	0	25	45	65	90
0	38062	38062	38062	38062	38062
5	38755	38260	37687	37314	37006
10	38519	37051	35869	34976	34354
15	35820	33759	32288	31287	30633
20	31390	29250	28148	27325	26450
25	25583	24188	23260	22646	22094
30	20079	19339	18551	18348	18182
35	15574	15050	14441	14507	14622
40	11977	11249	10904	10919	10886
45	8813	8151	7841	7728	7625
50	6241	5860	5576	5403	5318
55	4255	4043	4020	3791	3728
60	3070	2867	2889	2691	2619
65	2176	2006	1986	1895	1796
70	1388	1307	1302	1252	1173
75	857	785	785	774	700
80	430	379	386	390	344
85	113	94	107	125	105
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-044

ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary					
Zone	Lumens	Luminaire	Zone	Lumens	Total
0-30	23,071.5	51.1%	90-100	0.0	0.0%
0-40	32,279.4	71.5%	100-110	0.0	0.0%
0-60	42,147.9	93.3%	110-120	0.0	0.0%
60-90	3,026.5	6.7%	120-130	0.0	0.0%
70-100	1,036.7	2.3%	130-140	0.0	0.0%
90-120	0.0	0.0%	140-150	0.0	0.0%
0-90	45,174.5	100.0%	150-160	0.0	0.0%
90-180	0.0	0.0%	160-170	0.0	0.0%
0-180	45,174.5	100.0%	170-180	0.0	0.0%

EQUIPMENT LIST

REPORT NO. 104357589CHI-044

#	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
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