



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300



## Photometric Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995  
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For  
**Express Imaging Systems LLC dba Evluma**  
3600 Lind Ave SW Suite 140  
Renton, WA 98057

Catalog Number  
**RX2-140E3T3G0-S3HGL6-A0B0**

Order Number  
**14703860**  
Test Number  
**14703860.08A**

Revision of Test Number 14703860.08 on:

2023-03-24  
Test Date

2023-03-22

Prepared By

Derek Smarr, Senior Technician

Approved By

Yilmaz Yucelidag, Engineering Project Handler

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.  
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.



## Table of Contents

<b>Summary of Results</b>	Page 3
<b>Integrating Sphere Results</b>	Page 4
<b>Distribution Results</b>	
Test Conditions / Summary of Results / ISOPlot	Page 5
Maximum Plane and Cone Plot / Zonal Lumen Summary	Page 6
IES BUG Rating	Page 7
<b>Full TM-30 Report</b>	Page 8

Laboratory results may not be representative of field performance  
Ballast factors have not been applied

Absorption correction was employed for Sphere measurement

**Luminaire Description:** Gray aluminum housing, no lens  
**Lamp:** 2 LEDS  
**Mounting:** Pole/Arm  
**Ballast/Driver:** Inventronics EUM-150S210LT

### Luminaire



### Luminaire Characteristics

Luminous Length: 12.75 in.  
 Luminous Width: 15.75 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 18210 Lumens  
 Efficacy: 129.82 lm/w  
 CCT: 2998 K  
 CRI (Ra): 70.4

#### Distribution

Roadway Classification: Type III, Short  
 Cutoff Classification: Noncutoff  
 BUG Rating: B3 U0 G3

#### Electrical Data at 120 VAC

Test Temperature: 24.2 °C  
 Voltage: 120.0 VAC  
 Current: 1.169 A  
 Power: 140.3 W  
 Power Factor: 1.000  
 Frequency: 60 Hz  
 Current THD: 2.77 %

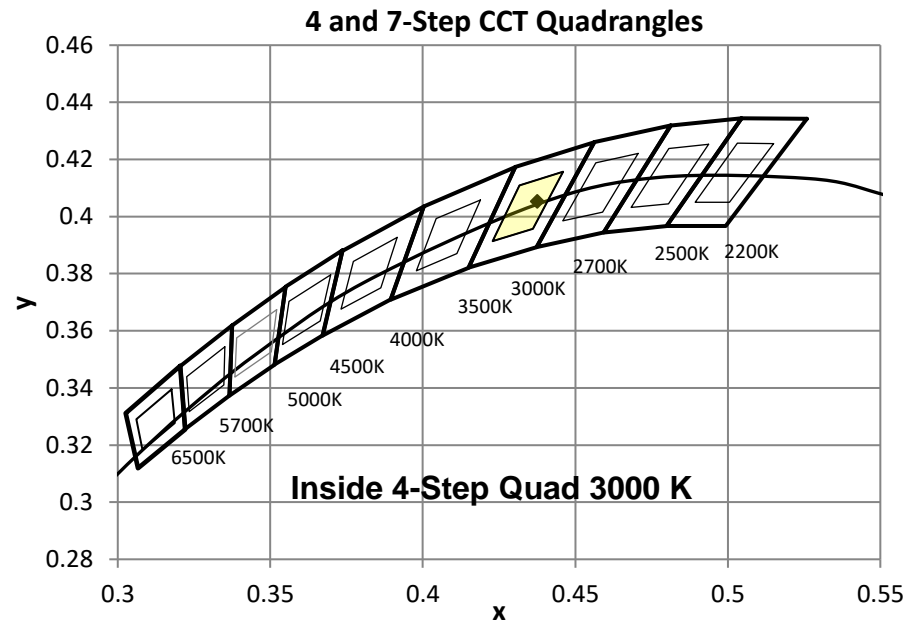
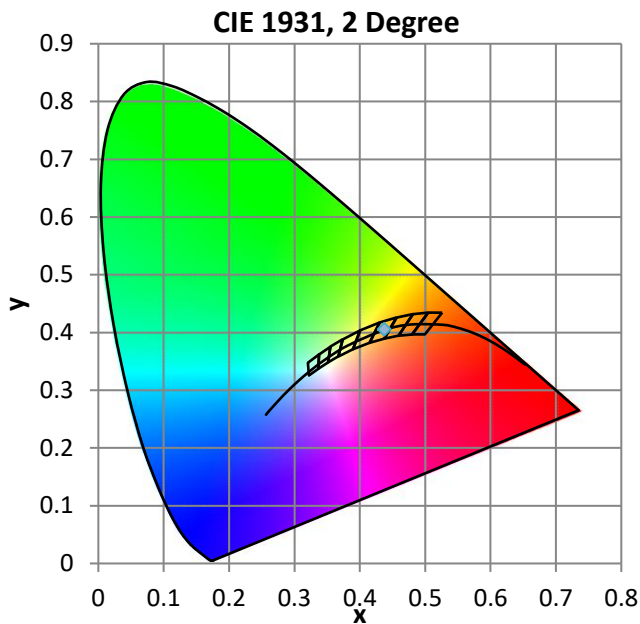
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.2 °C	120.0 VAC	1.169 A	140.3 W	1.000	60 Hz	2.77 %

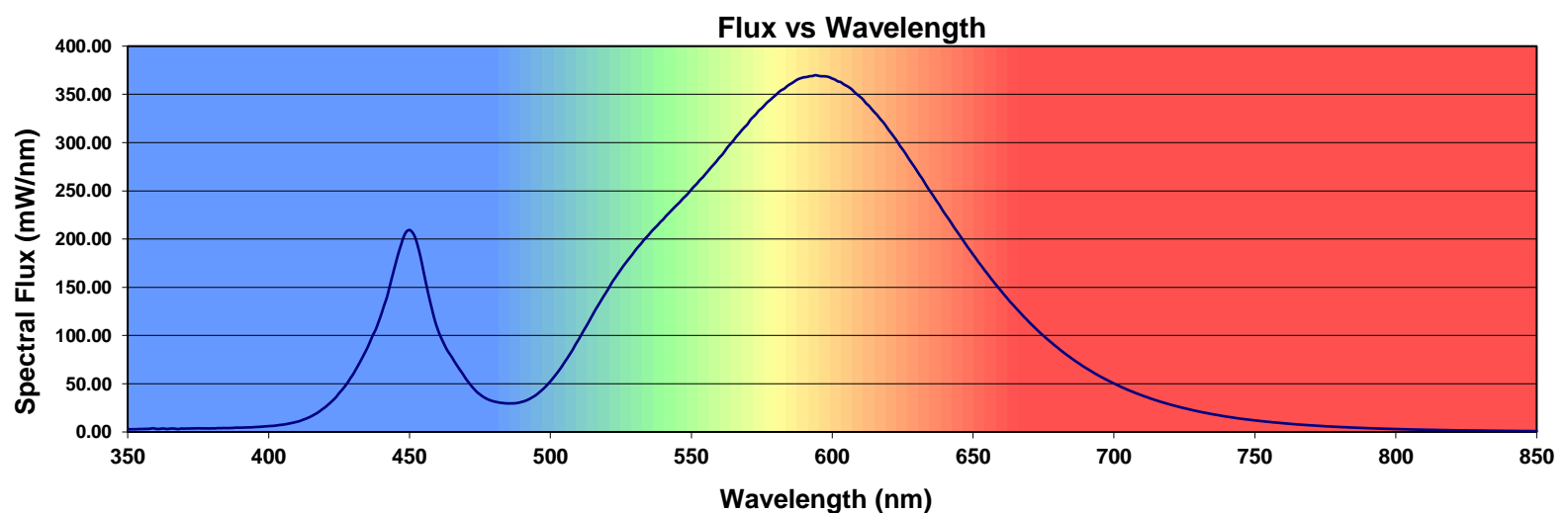
### Summary of Results

<b>Total Output:</b>	18210 Lumens	<b>Chromaticity (x):</b>	0.4375
<b>Efficacy:</b>	129.8 lm/w	<b>Chromaticity (y):</b>	0.4053
<b>CCT:</b>	2998 K	<b>Chromaticity (u'):</b>	0.2504
<b>CRI (Ra):</b>	70.4	<b>Chromaticity (v'):</b>	0.5220
<b>CRI (R9):</b>	-29.7	<b>TM-30 Rf:</b>	73
<b>Peak Wavelength:</b>	594 nm	<b>TM-30 Rg:</b>	95
<b>Dominant Wavelength:</b>	555 nm	<b>TM-30 Rcs,h1:</b>	-16%
<b>S/P Ratio:</b>	1.17	<b>Duv:</b>	0.0004
<b>M/P Ratio:</b>	0.41	WELL Building Standard v2	



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
70.4	67.1	79.8	90.1	66.5	65.0	70.5	78.8	45.7	-29.7	52.2	59.2	41.7	69.1	94.0	60.6



Distribution - Goniophotometer

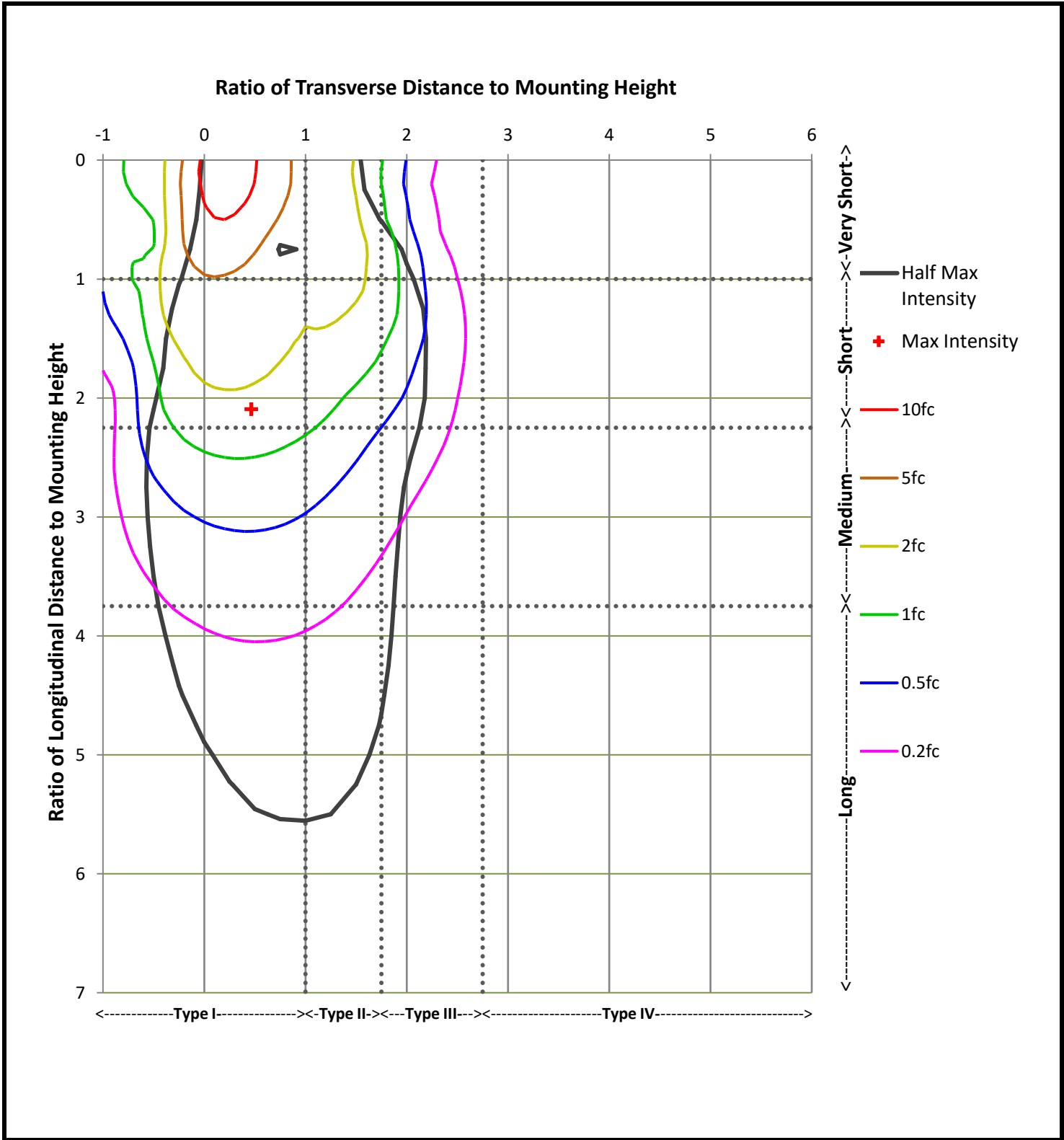
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	1.170 A	140.1 W	1.000	60 Hz	2.72 %

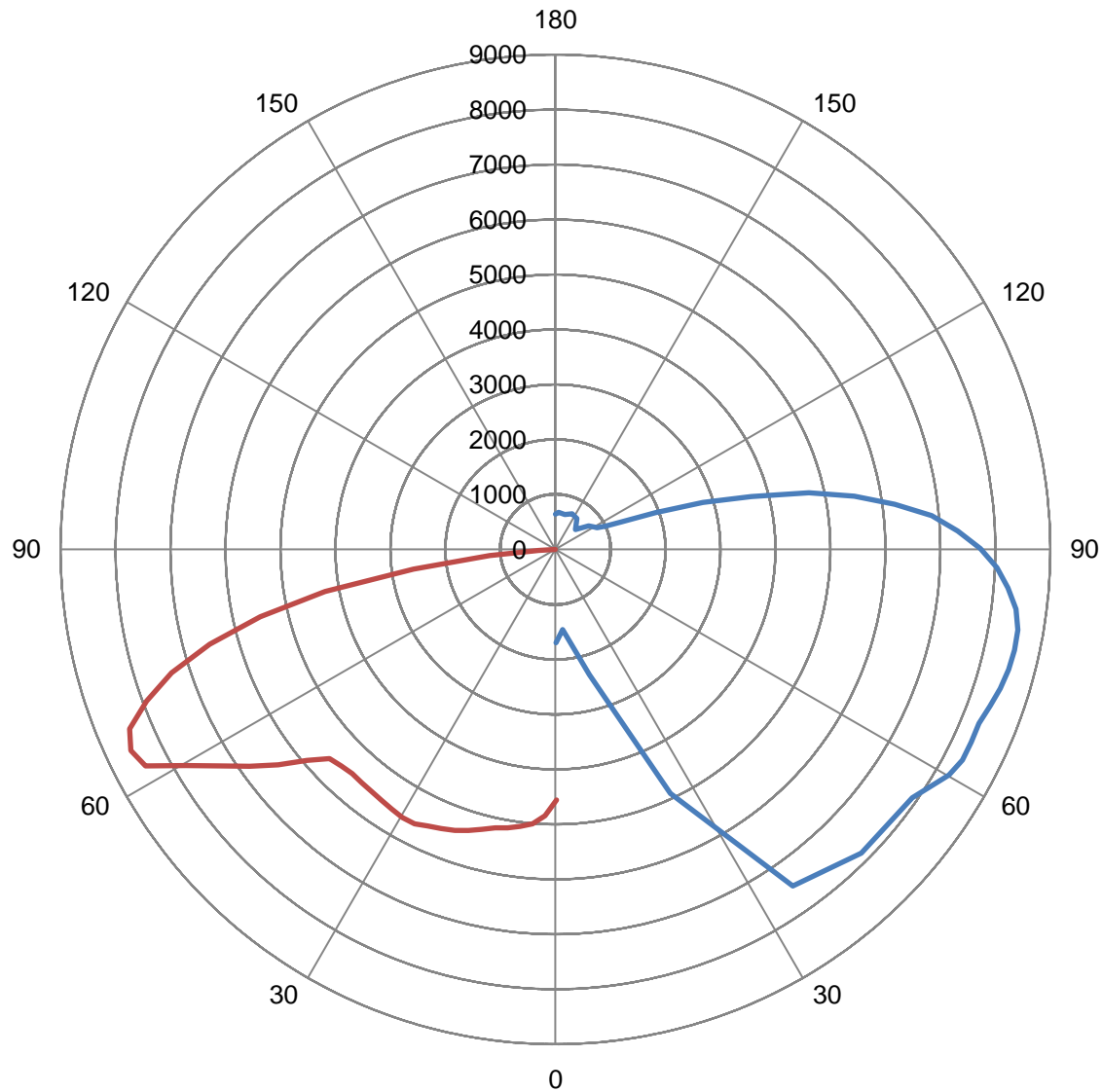
Summary of Results

IES Roadway Classification:	Type III, Short	Total Lumen Output:	18347 Lumens
Cutoff Classification	Noncutoff	Luminaire Efficacy:	131.0 lm/w
BUG Rating:	B3 U0 G3	Maximum Candela:	8547 Candela

ISO FootCandle Plot at 20 Feet



### Maximum Plane and Cone Plots of Candela



Vertical Plane Through

77.5 ° Lateral

Lateral Cone Through

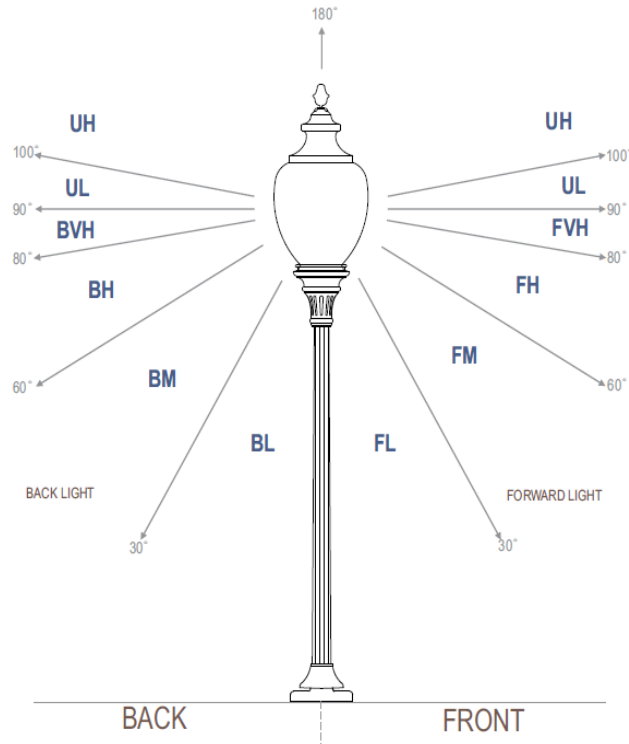
65 ° Vertical

**Maximum Intensity (Candlepower):** 8547 Candela

### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	117.1	0.6%	60-65	2038.3	11.1%	120-125	0.0	0.0%
5-10	328.3	1.8%	65-70	1809.6	9.9%	125-130	0.0	0.0%
10-15	529.1	2.9%	70-75	1338.0	7.3%	130-135	0.0	0.0%
15-20	706.0	3.8%	75-80	880.3	4.8%	135-140	0.0	0.0%
20-25	854.4	4.7%	80-85	406.0	2.2%	140-145	0.0	0.0%
25-30	984.8	5.4%	85-90	67.4	0.4%	145-150	0.0	0.0%
30-35	1090.3	5.9%	90-95	0.0	0.0%	150-155	0.0	0.0%
35-40	1168.4	6.4%	95-100	0.0	0.0%	155-160	0.0	0.0%
40-45	1241.3	6.8%	100-105	0.0	0.0%	160-165	0.0	0.0%
45-50	1349.4	7.4%	105-110	0.0	0.0%	165-170	0.0	0.0%
50-55	1570.3	8.6%	110-115	0.0	0.0%	170-175	0.0	0.0%
55-60	1867.8	10.2%	115-120	0.0	0.0%	175-180	0.0	0.0%

**IES "BUG" Rating**  
(Back Light, Uplight, Glare)  
Per IES TM-15-11



**Luminaire Classification System (LCS)**

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	2456.2	13.4%
FM	(30-60)	6085.7	33.2%
FH	(60-80)	4628.5	25.2%
FVH	(80-90)	338.9	1.8%
BL	(0-30)	1063.6	5.8%
BM	(30-60)	2201.8	12.0%
BH	(60-80)	1437.6	7.8%
BVH	(80-90)	134.5	0.7%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		18346.8	100.0%
<b>BUG Rating</b>	<b>B3 U0 G3</b>		

# ANSI/IES TM-30-18 Color Rendition Report

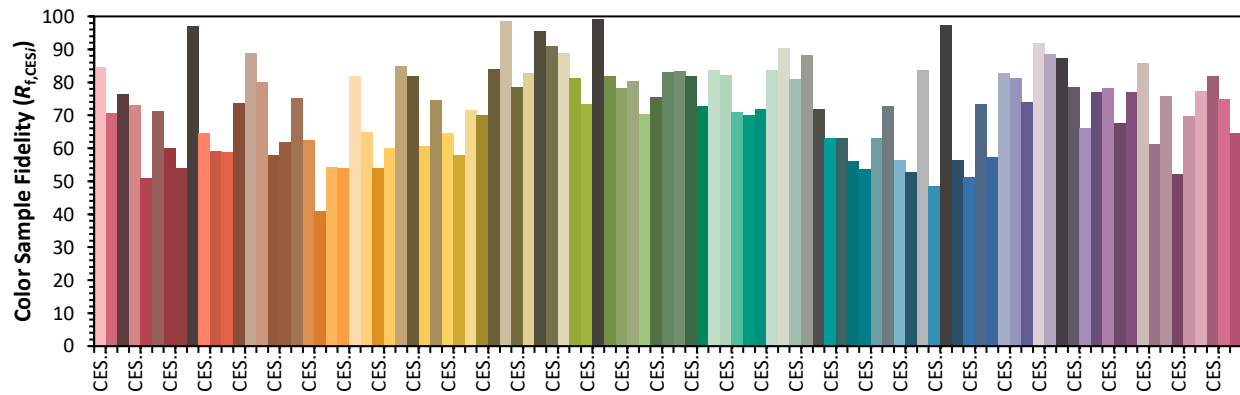
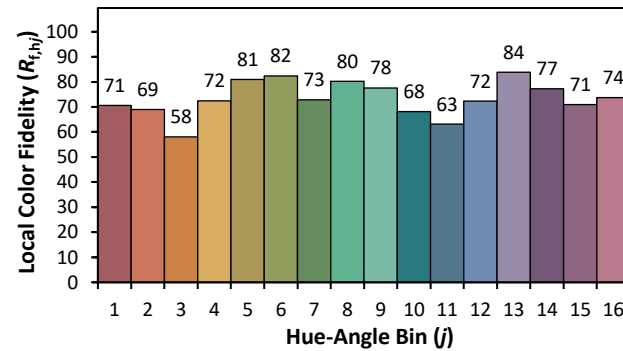
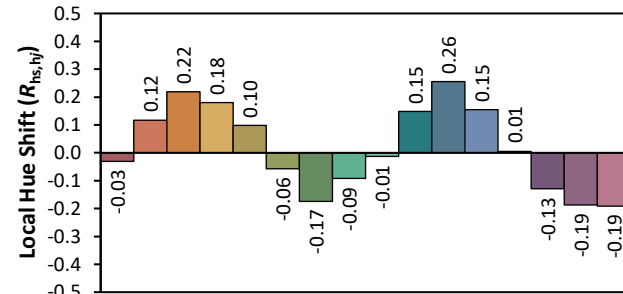
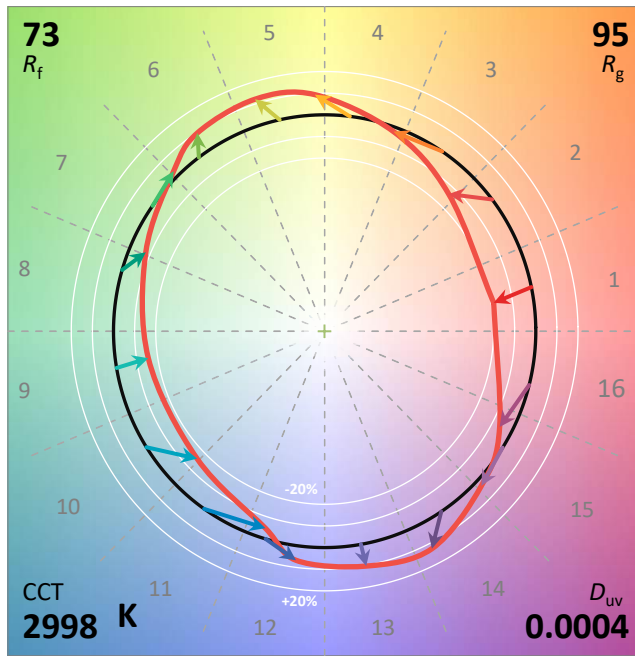
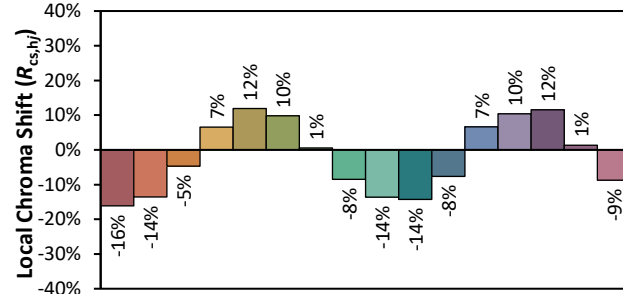
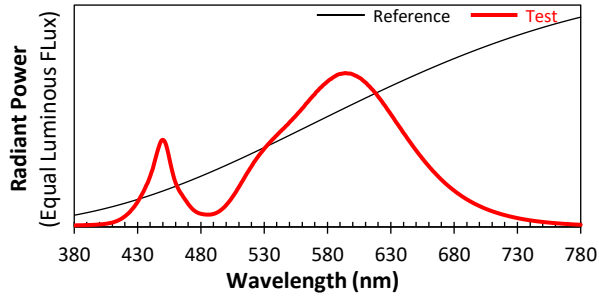
Date: 2023-03-22

Manufacturer:

Express Imaging Systems LLC dba Evluma

Model:

RX2-140E3T3G0-S3HGL6-A0B0



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4375

y 0.4053

u' 0.2504

v' 0.5220

CIE 13.3-1995  
(CRI)

$R_a$  70

$R_g$  -30

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.





## Attachment A

## Amended Report Documentation

[illegible]