



















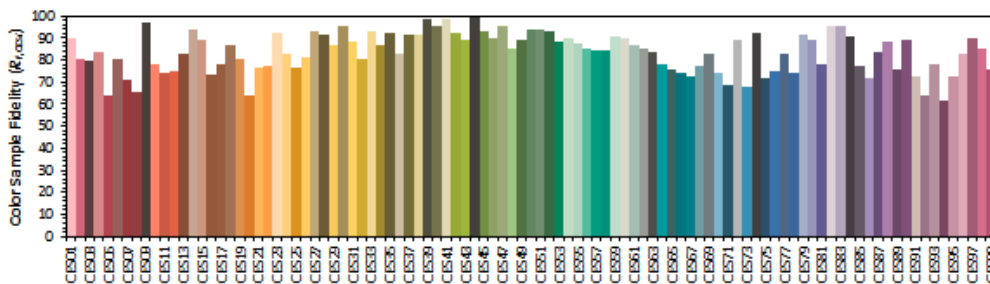
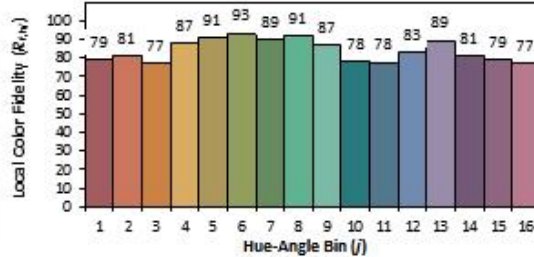
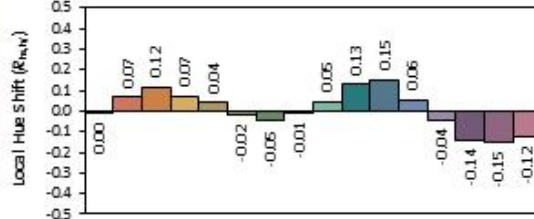
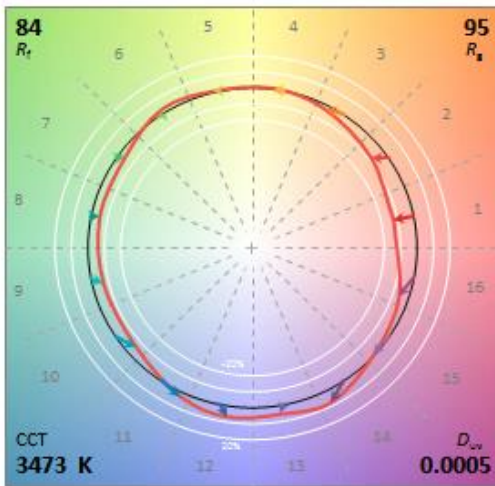
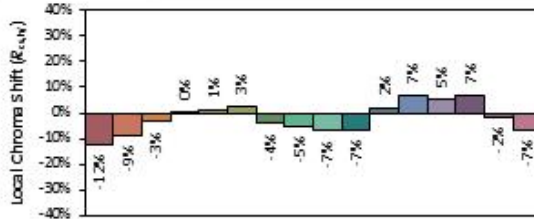
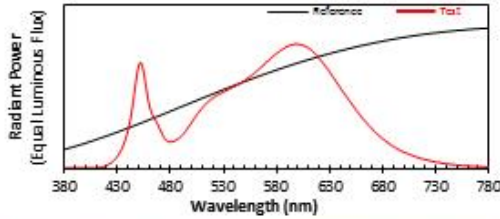




TM30

ANSI/IES TM-30-18 Color Rendition Report

Source:	01. JT. CC2835W80P03	Manufacturer:	34/F
Date:	2020/7/14	Model:	49MZX48_35K



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

$x$  0.4074  
 $y$  0.3928  
 $u'$  0.2362  
 $v'$  0.5125

CIE 13.3-1995 (CRI)  
 $R_a$  82  
 $R_s$  4

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



**2.4 Electrical, Photometric and Chromaticity Measurements**

<b>Test date</b>	2020-07-14	<b>Test Ambient:</b>	25 ± 1 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	45
<b>Model Number</b>	93811	<b>Total Operating Time(min)</b>	46

**Electrical Measurement in Lithonia 2GT8 lensed 2x4:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
STD200730	120.0	60	0.3946	46.78	0.9880	12.30
NB-K2	277.0	60	0.1667	45.15	0.9777	15.43

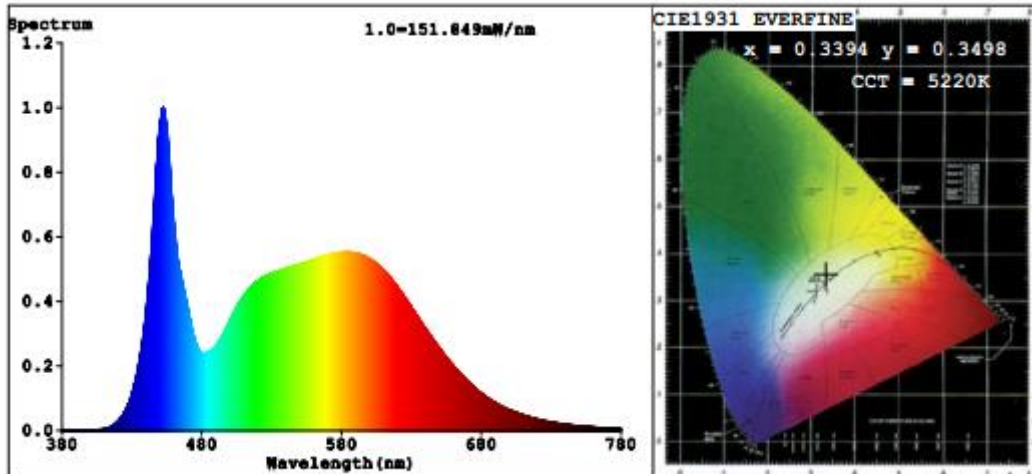
**Chromaticity Measurement - Sphere-Spectroradiometer Method in Lithonia 2GT8 lensed 2x4 (Self-absorption:1.4212)(4π geometry):**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	83	R9	12
Frequency (Hz)	60	R2	90	R10	75
CCT (K)	5220	R3	93	R11	83
Duv	0.0014	R4	84	R12	62
Chromaticity (x, y)	x=0.3394 y=0.3498	R5	84	R13	85
Chromaticity (u', v')	u'=-0.2082 v'=-0.4829	R6	85	R14	96
Color Rendering Index (CRI)	84.3	R7	87	R15	78
R9	12	R8	69	--	--
Rg	96				
Rf	84				
Rcs,h1	-12%				

**Photometric Measurement – Sphere-Spectroradiometer Method in Lithonia 2GT8 lensed 2x4:**

Parameter	Result	
Test Voltage (V)	120	277
Frequency (Hz)	60	60
Total Luminous (lm)	5350	5282
Luminous Efficacy (lm/W)	114.37	116.99

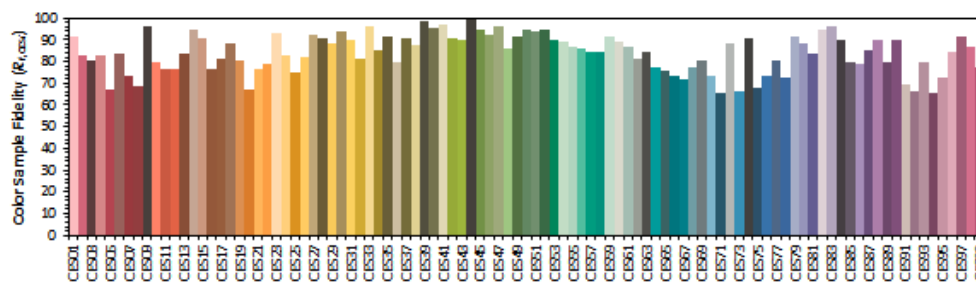
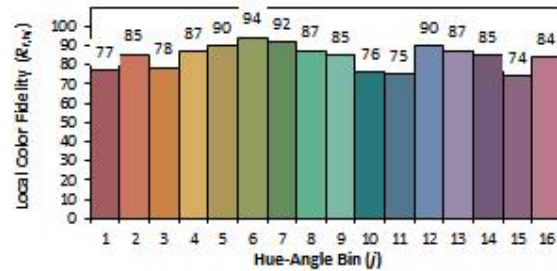
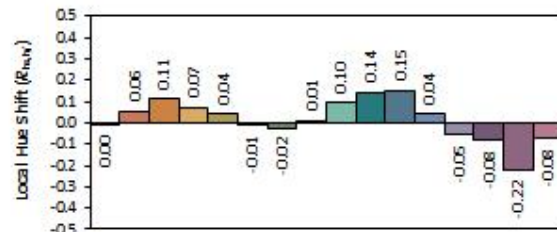
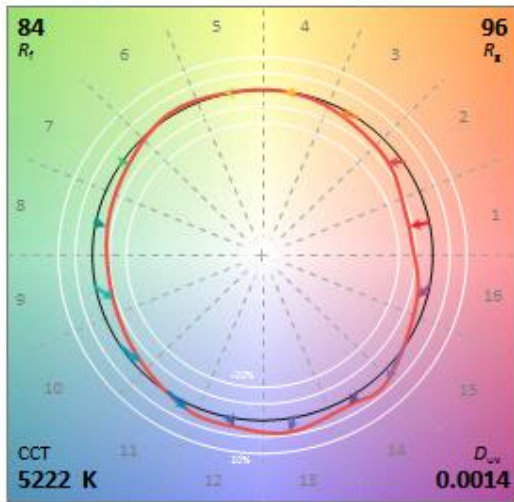
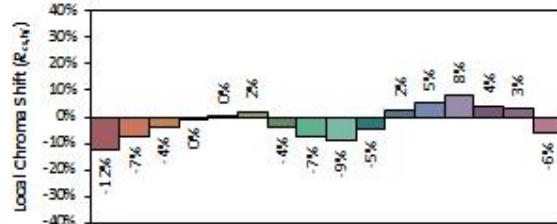
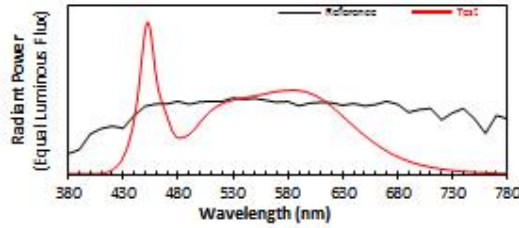
**Spectral Power Distribution & Chromaticity Diagram**



**TM30**

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

Source: 01. JT. CC2835W80P03      Manufacturer: P. Q. L., Inc.  
Date: 2020/7/14      Model: 93811



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

$x$     **0.3393**  
 $y$     **0.3496**  
 $u'$    **0.2083**  
 $v'$    **0.4828**

CIE 13.3-1995 (CRI)	
$R_a$	84
$R_s$	13

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



**2.5 Performance Assessment:**

Model name	CCT(K)	Total Luminous (lm)	Power (W)	Luminous Efficacy (lm/W)
49W2X48_35K	3500K	5276.1	46.73	112.90
93810	4000K	5301 <sup>*1</sup>	46.76 <sup>*2</sup>	113.37 <sup>*3</sup>
49W2X48_45K	4500K	5325 <sup>*1</sup>	46.76 <sup>*2</sup>	113.88 <sup>*3</sup>
93811	5000K	5350	46.78	114.37

\*1: This value is calculated and the calculation formula is as below:

$$5301 = (5350 - 5276.1) / 3 * 1 + 5276.1$$

$$5325 = (5350 - 5276.1) / 3 * 2 + 5276.1$$

\*2: This value is calculated and the calculation formula is as below:

$$46.76 = (46.73 + 46.78) / 2$$

\*3: This value is calculated and the calculation formula is as below:

$$113.37 = 5301 / 46.76$$

$$113.88 = 5325 / 46.76$$



### 3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-702	2 meter Integrating Sphere	Verified by D204 standard lamp	
ST-R-701	Spectral analysis system HAAS-1200	Verified by D204 standard lamp	
ST-R-703	Standard Lamp D204	2020-02-22	2021-02-21
ST-R-704	Power Meter for Integrating Sphere	2020-01-05	2021-01-04
ST-R-714	Goniophotometer system	Verified by D908S standard lamp	
ST-R-710	Standard Lamp D908S	2020-02-22	2021-02-21
ST-R-711	Power Meter for Goniophotometer	2020-01-05	2021-01-04
Uncertainty(K=2): Photometric Measurement (Sphere):3.94% Chromaticity Measurement(Sphere):48.2K Photometric Measurement(Goniophotometer):3.96%			



#### 4. Product Photo



\*\*\*\*\* END OF REPORT \*\*\*\*\*