File E344519
Project 4788091340

August 4, 2017

REPORT

On

COMPONENT - LIGHT-EMITTING-DIODE ARRAYS, MODULES AND CONTROLLERS

SAMSUNG ELECTRONICS CO LTD
YONGIN-SI, GYEONGGI-DO, KOREA

DESCRIPTION

PRODUCT COVERED:

USR, CNR – Component, LED Module, see ELECTRICAL RATINGS table for models.

USR – United States Recognized Component
CNR – Canada Recognized Component

ELECTRICAL RATINGS:

Model No.	Input [x] CC [ ] CV [x] LED array supply feed through-ratings same as input				[ ]Output (a) [ ] CC [ ] CV			
	Voltage [ ] Vac [x] Vdc	[ ] Hz	Current (A)	Power (W)	Voltage [ ] Vac [ ] Vdc	[ ] Hz	Current (A)	Power (W)
SI-Bux201B20US	52	N/A	1.0	N/A	N/A	N/A	N/A	N/A
SI-Bux101560US	26	N/A	1.0	N/A	N/A	N/A	N/A	N/A
SI-Bux051280US	13	N/A	1.0	N/A	N/A	N/A	N/A	N/A
SI-Bux202B20$$	**50.0**	**N/A**	**1.2**	**60**	**N/A**	**N/A**	**N/A**	**N/A**
SI-Bux102560$$	**25.0**	**N/A**	**1.2**	**30**	**N/A**	**N/A**	**N/A**	**N/A**

a- Applies for LED modules with output power ratings different from input as well as LED Control Modules

MODEL NOMENCLATURE:

u - Represent any alphanumeric code to denote Color Rendering Index of LEDs which is unrelated safety.
x - Represent any alphanumeric code to denote correlated color temperature of LEDs which is unrelated safety.
$$ - Represent any alphanumeric code to denote customer information for marketing purpose only.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USR – Products designated USR have been investigated using US requirements as noted in the Test Record.

CNR – Products designated CNR have been investigated using Canadian requirements as noted in the Test Record.

These products been evaluated for the following characteristics.

Product characteristics-

Model No. [x] applies to all models	Input type [x] CC [ ] CV	[ ] Output type (a) [ ] CC [ ] CV	Product is rated	[x] Test Reference Point temperature (d) ° C
SI-Bux201B20US	**[x] Branch Circuit (Mains) [ ] Isolated Circuit [ ] Class 2 (b) [ ] LVLE (c1) [ ] LED Class 2 (c2)**	**N/A [ ] Branch Circuit (Mains) [ ] Isolated Circuit [ ] Class 2 (b) [ ] LVLE (c1) [ ] LED Class 2 (c2)**	**[ ] Dry [x] Damp [ ] Wet**	**N/A**
SI-Bux101560US				**129.5**
SI-Bux051280US				**130.0**
SI-Bux202B20$$				**N/A**
SI-Bux102560$$				**130.0**

a-applies for LED modules with output power ratings different from input as well as LED Control Modules
b- As defined in [x] UL 8750, Clause 7.12.1 [x] and CAN/CSA-C22.2 No. 250.13, Clause 8.12
c1- As defined in UL 8750, Section 8.16
c2- As defined in CAN/CSA-C22.2 No. 250.13, Annex A
d- LED arrays and modules- evaluated per UL 8750, Clause 8.3.19

Conditions of Acceptability:

Use - For use only in (or with) Applicant's complete equipment where the acceptability is determined by UL LLC.

1. The temperature test for these LED arrays were performed according to UL 8750, clause 8.3.19. During temperature test of the end product, evaluation of the LED array can be limited to the temperature at the Test Reference Point (Tc). The absolute value at this point cannot exceed specific temperature for each model is shown in the following table.

Components	Temperature, °C
SI-Bux101560US	129.5
SI-Bux051280US	**130.0**
SI-Bux102560$$	**130.0**

2. The temperature tests were performed at nominal 25 °C ambient for models SI-Bux201B20US **and SI-Bux202B20$$.** The need for other consideration should be considered in end-use product.

3. These products are intended for building in. Acceptability with respect to mounting, spacing, casualty, temperature and segregation is to be determined as part of the end device evaluation.

4. These products are provided with push-in terminals for supply. These terminals are intended for use with 18 ~ 24 AWG solid copper conductors with 7.5 ~ 8.5 mm strip length. Consideration shall be taken in the end-use application.

5. These products have been evaluated for use with a source of supply noted in the product characteristics table (input type) and minimum electrical ratings noted in the electrical ratings table. Suitability of these products with other sources of supply or electrical ratings is to be determined in the end product.

6. The LED modules shall be installed in compliance with the enclosure, mounting, accessibility and spacing requirements of the end use application.

7. The LED Module is intended only for use in dry and damp locations. The use in other environments shall be considered in the end product evaluation.

8. All Tests were conducted with an aluminum heat sink, overall 680 mm by 50 mm by 30 mm (L x W x H) with 11 fins for models SI-Bux101560US **and SI-Bux102560$$,** overall 500 mm by 50 mm by 30 mm (L x W x H) with 11 fins for models **SI-Bux051280US, overall 1200 mm by 50 mm by 10 mm (L x W x H) for models SI-Bux202B20$$.**