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Project 10ME03376

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REPORT

on

COMPONENT - DRIVERS FOR LIGHT-EMITTING DIODES ARRAYS, MODULES AND CONTROLLERS

Lutron Electronics Co Inc  
Coopersburg, PA

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR - Class 2 LED Driver, Cat Nos. L3D or LTE, followed by A, followed by 4, followed by U or 2, followed by 1, followed by U, followed by K or M, followed by S or N, followed by (2) where (2) may be a 2 or a single letter A-D or G-S, followed by A or C, followed by 020 through 210, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

USR, CNR - Class 2 LED Driver, Cat Nos. L3D **or** LTE, followed by A, followed by 4 or 5, followed by U, followed by 1, followed by U, followed by K or M, followed by S or N, followed by 2 or 3, followed by A, B, C, G, H, R, or S followed by BLK, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

Class 2 LED Driver, Cat Nos. L3D or LTE, followed by A, followed by 4, followed by U or 2, followed by 1, followed by U, followed by K or M, followed by S or N, followed by (2) where (2) may be a 2 or a single letter A-D or G-S, followed by V, followed by 100 through 380, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

USR, CNR - Class 2 LED Driver, Cat No. L3DA5U1UKx-NA where x is S or N, followed by 071 through 105, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

USR, CNR - Class 2 LED Driver, Cat Nos. L3D or LTE, followed by A, followed by 4, followed by U or 2, followed by 1, followed by U, followed by K or M, followed by S or N, followed by (3) where (3) may be a 3 or a single letter E, F, T or U, followed by A, followed by 020 through 100, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

## TECHNICAL CONSIDERATIONS (NOT FOR UL FIELD REPRESENTATIVE USE):

This component has been judged on the basis of the spacings required in the Standard for Light Emitting Diode (LED) Light Sources for Use In Lighting Products, UL 8750, which would cover the component itself if submitted for Listing.

USR - Indicates investigation to the United States requirements for the standard for Light Emitting Diode (LED) Light Sources for Use In Lighting Products, UL 8750, and the Standard for Class 2 Power Units, UL 1310.

\*CNR - Indicates investigation to the Canadian Standard Power Supplies with Extra-Low-Voltage Class 2 Outputs. The models indicated below have also been evaluated to CSA standard for Light emitting diode (LED) equipment for lighting applications.

Class 2 LED Driver, Cat No. L3DA5U1UKx-NA where x is S or N, followed by 071 through 105, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

Class 2 LED Driver, Cat Nos. L3D or LTE, followed by A, followed by 4, followed by U or 2, followed by 1, followed by U, followed by K or M, followed by S or N, followed by (3) where (3) may be a 3 or a single letter E, F, T or U, followed by A, followed by 020 through 100, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

## TECHNICAL CONSIDERATIONS (NOT FOR UL FIELD REPRESENTATIVE USE):

USR - Indicates investigation to the United States requirements for the standard for Light Emitting Diode (LED) Light Sources for Use In Lighting Products, UL 8750.

CNR - Indicates investigation to the Canadian Standard have also been evaluated to CSA standard for Light emitting diode (LED) equipment for lighting applications, CAN/CSA-C22.2 No. 250.13-12 dated June 2012.

These products been evaluated for the following characteristics:

Applies to all models	Input type	Output type (a), (b)	Product is rated	Type HL (c)	Type TL (d)- (Y=Yes, N=No)*
*L3DA4U1UMy-2CBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.29-0.13A: O= 200-1500mA, 8- 20Vdc	Branch Circuit (Mains)	CC- Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 86° C
*L3DA4U1UKy-2HBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.26-0.12A: O= 200-700mA, 15- 38Vdc	Branch Circuit (Mains)	CC- Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 89° C
*L3DA4U1UMy-2BBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.41-0.17A: O= 200-1500mA, 15- 38Vdc	Branch Circuit (Mains)	CC- Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 86° C
*L3DA4U1Uxy-2ABLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.31-0.14A: O= 1510-2100mA, 8- 19.9Vdc	Branch Circuit (Mains)	CC- Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 89° C
*L3DA4U1Uxy-3ABLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.39-0.17A: O= 200-1000mA, 30- 54Vdc	Branch Circuit (Mains)	CC- Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 83° C

Applies to all models	Input type	Output type (a), (b)	Product is rated	Type HL (c)	Type TL (d)- (Y=Yes, N=No)*
L3DA5U1UKy-3BBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.52-0.23A: O= 710-1050mA, 35-54Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 87° C
L3DA4U1UKy-2GBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.14-0.07A: O= 200-700mA, 8-20Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 87° C
L3DA4U1UKy-2RBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.14-0.07A: O= 710-1500mA, 8-20Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 87° C
L3DA4U1UKy-2SBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.14-0.07A: O= 710-1500mA, 15-38Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 87° C

## Note:

a- As defined in [x] UL 8750, Clause 7.12.1 and CAN/CSA-C22.2 No. 250.13-12, Clause 8.12.1

b- As defined in [x] UL 8750, Section 8.14 and CAN/CSA-C22.2 No. 250.13-12, Annex A

c- Evaluated per UL 8750 requirements for Type HL LED drivers

d- Evaluated per UL 8750 requirements for Type TL LED drivers

Models indicated above may be followed by x or y where these are S or N, followed by 2 or 3, followed by A, B, C, **G**, H, **R** or **S** followed by BLK, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

Applies to all models	Input type	Output type (a), (b)	Product is rated	Type HL (c)	Type TL (d)- (Y=Yes, N=No)*
LTEA4U1UKy-2ABLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.31-0.14A: O= 1510-2100mA, 8-19.9Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 87°C
LTEA4U1UKy-2HBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.26-0.12A: O= 200-700mA, 15-38Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 84°C
LTEA4U1UKy-2GBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.14-0.07A: O= 200-700mA, 8-20Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 86°C
LTEA4U1UKy-2SBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.14-0.07A: O= 710-1500mA, 15-38Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 82°C
LTEA4U1UKy-3ABLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.39-0.17A: O= 200-1000mA, 30-54Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 82°C

## Note:

a- As defined in [x] UL 8750, Clause 7.12.1 and CAN/CSA-C22.2 No. 250.13-12, Clause 8.12.1

b- As defined in [x] UL 8750, Section 8.14 and CAN/CSA-C22.2 No. 250.13-12, Annex A

c- Evaluated per UL 8750 requirements for Type HL LED drivers

d- Evaluated per UL 8750 requirements for Type TL LED drivers

Models indicated above may be followed by x or y where these are S or N, followed by 2 or 3, followed by A, B, C, **G**, H, **R** or **S** followed by BLK, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

Applies to all models	Input type	Output type (a), (b)	Product is rated	Type HL (c)	Type TL (d)- (Y=Yes, N=No)*
LTEA4U1UKy-2RBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.29-0.13A: O= 710-1500mA, 8-20Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 80°C
LTEA4U1UMN-2ABLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.31-0.14A: O= 1510-2100mA, 8-19.9Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 90°C
LTEA4U1UMN-2BBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.41-0.17A: O= 200-1500mA, 15-38Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 86°C
LTEA4U1UMN-2CBLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.29-0.13A: O= 200-1500mA, 8-20Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 90°C
LTEA4U1UMN-3ABLK f/b suffixes Represents series with I/O ratings: I= 120-277Vac, 0.39-0.17A: O= 200-1000mA, 30-54Vdc	Branch Circuit (Mains)	CC-Constant Current; Output is Isolated Class 2	Dry, Damp	No	(Y), Specified Tref 86°C

## Note:

a- As defined in [x] UL 8750, Clause 7.12.1 and CAN/CSA-C22.2 No. 250.13-12, Clause 8.12.1

b- As defined in [x] UL 8750, Section 8.14 and CAN/CSA-C22.2 No. 250.13-12, Annex A

c- Evaluated per UL 8750 requirements for Type HL LED drivers

d- Evaluated per UL 8750 requirements for Type TL LED drivers

Models indicated above may be followed by x or y where these are S or N, followed by 2 or 3, followed by A, B, C, **G**, H, **R** or **S** followed by BLK, may be followed by suffix CPBXXXX where X can be any number 0 to 9 for commercial reasons.

NOMENCLATURE  
BREAKDOWN:

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
L3D	A	4	U	1	U	K	S	2	C	210	CPBXXXX

- I. LED Driver, Control  
L3D - LED Driver, 3-Wire and Digital Ecosystem Dimming Control  
LTE - LED Driver, Leading Edge Control
- II. Dimming Range  
A - Architectural Dimming (1%)
- III. Maximum Wattage  
4 - 40W/44 W  
5 - 50W
- IV. Input Voltage  
U - Universal AC Input Voltage (120-277, 50/60Hz)  
2 - 220-240 AC Input Voltage (50/60 Hz)
- V. Number of Outputs  
1 - Single Channel Outputs
- VI. Standards  
U - UL/CUL Certified
- VII. Enclosure Style (may be followed by x or y for commercial reasons)  
K - Compact Enclosure  
M - Stick Enclosure
- VIII. Mechanical Options (example Ky or Kx where y or x = S or N)  
S - Enclosure provided with mounting studs  
N - No mounting studs provided
- IX. Safety Rating  
2 - Output is Class 2 (<40Vdc, for PWM and Analog dimming types) or a single letter A-D or G-M or O-S for commercial purposes only.  
3 - Output is Class 2 (<60Vdc, for Analog dimming types) or a single letter E, F, N, T, and U for commercial purposes only.



- X. Output Type (When not followed by BLK)
- C - Constant current, with Pulse Width Modulation dimming
  - A - Constant current, with analog dimming
  - V - Constant voltage, with Pulse Width Modulation dimming
- Where followed by BLK
- A - Bulk operating range A.
  - B - Bulk operating range B.
  - C - Bulk operating range C.
  - G - Bulk operating range G.
  - H - Bulk operating range H.
  - R - Bulk operating range R.
  - S - Bulk operating range S.
- XI. Output Rating
- 020-210 - Amps for Output Type 2A and 2C (from 0.20A-2.10A in 0.01A increments)
  - 100-380 - Volts for Output Type 2V (from 10-38V in 0.5V increments)
  - 020-100 - Amps for Output Type 3A (from 0.20A-1.05A in 0.01A increments)
  - BLK - Bulk LED driver
- XII. X can be any number 0 to 9 for commercial reasons.

ELECTRICAL RATINGS: TABLE I

Cat. No.	Input (AC)			Output (DC)		Max. Output Power (W)
	Voltage (V)	Current (mA)	Frequency	Max Voltage (V)	Max Current (A)	
LwwA4U1Uxy-2z-AAA	120V 277V	100-400 70-190	50/60	40	1.5	40
LwwA4U1Uxy-2z-BBB	120V 277V	200-310 100-140	50/60	20	2.10	30
LwwA4U1Uxy-2z-CCC	120V 277V	210-400 100-180	50/60	20	3.3	40
LwwA4U1Uxy-2z-DDD	120V 277V	285-400 110-180	50/60	40	2	40
LwwA4U1Uxy-3z-EEE	120V 277V	50-400 40-170	50/60	60	1	40
LTEA421UKy-2A-070	220V 240V	140 130	50/60	40	0.7	26
L3DA5U1UKy-NA-FFF	120 277	400-530 160-220	50/60	60	1.05	53
L3DA4U1UKy-LC140, -CPB1260	120 277	440 190	50/60	31.5	1.40	44
LwwA4U1UMy-2CBLK	120 277	285 130	50/60	8 - 20	.2 - 1.50	30
LwwA4U1UKy-2HBLK	120 277	260 120	50/60	15 - 38	.2 - .7	26.6
LwwA4U1UMy-2BBLK	120 277	410 180	50/60	15 - 38	.2 - 1.50	40
LwwA4U1Uxy-2ABLK	120 277	310 140	50/60	8 - 19.9	1.51 - 2.10	30
LwwA4U1Uxy-3ABLK	120 277	390 170	50/60	30 - 54	.2 - 1.0	40
LwwA5U1UKy-3BBLK	120 277	520 230	50/60	35 - 54	.71 - 1.05	53
<b>LwwA4U1UKy-2GBLK</b>	120 277	140 70	50/60	8 - 20	.2 - .7	14
<b>LwwA4U1UKy-2RBLK</b>	120 277	285 130	50/60	8 - 20	.71 - 1.50	30
<b>LwwA4U1UKy-2SBLK</b>	120 277	410 180	50/60	15 - 38	.71 - 1.50	40

Note - In the table above, ww represents 3D or TE, x represents K or M, y represents S or N, and z represents A or C or V.

Note - The LTE models are only rated for 120V input voltage except for LTEA42 models which are rated for 220/240V.

Note - In the table above, AAA represents output configuration in milliamps or volts as described in Nomenclature Breakdown above.

Note - In TABLE I, AAA can be 020 through 150, BBB can be 151 through 210, CCC can be 100 through 200, DDD can be 200 through 380, EEE can be 020 through 100, and FFF can be 071 through 105.

Note - See E322469 Appendix Section B for formulas to calculate input current for factory configured LED drivers.

## and Report

## SPACING OF ELECTRICAL PARTS:

The spacing between uninsulated live parts of opposite polarity, including magnet wire, and between those parts and exposed metal parts that can be contacted shall not be less than the clearance (through-air) and the creepage distance (over an insulating surface) as described:

Locations of live electrical parts and conditions	Minimum spacing, mm		
	Clearance	Creepage Distance for printed wiring boards (CTI < 175)	Creepage Distance for ceramic and other materials (CTI => 600)
Between parts within drivers for indoor (dry), and outdoor (damp or wet) locations (125v)	0.5	1.5	0.75
Between parts within drivers for indoor (dry), and outdoor (damp or wet) locations (300v)	1.5	3.0	1.5
Between parts on a printed wiring board that are soldered in place but can move in production prior to soldering to fixed parts; or between parts on a printed wiring board to the enclosure.	3.0 (for 125v) 3.9 (for 300v)	-	-
Components on a printed wiring board buried in potting compound	-	0.8	0.8

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE)

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

## Conditions of Acceptability -

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

1. These power supplies have maximum of one Class 2 output. The output of these power supplies has been evaluated to Class 2 output requirements for dc circuits.
2. These products are suitable for use in dry and damp locations only.
3. The fuse (F1) type MRT 3.15 has a dual rating, it can be rated 250V/3.15A or 277V/3.15A and can be used at either voltage regardless of the mark. Refer to the description in the following pages of this report for fuse description type MRT 3.15 and note that this fuse marked 250V can be used in a 277V application.
4. Certain Models indicated in model differences have an output rated at equal to or less than 60 Vdc max. This output complies with the definition of Class 2 per the Canadian Electrical Code. This output shall not be accessible based on maximum voltage restrictions for Class 2 circuits in the Canadian Electrical Code. The output terminals of the end product shall be evaluated to confirm compliance with this accessibility requirement. Refer to Test Reference No. 6 dated 2010-08-26 and ILL. 34 of the Test Reference.
5. A Temperature Test shall be conducted with the Driver installed in the end product. The maximum temperature on the case at the designated Tc location shall not exceed 90°C for Models L3DA4U1UKx-2z-020 through -070.

## Conditions of Acceptability - (continued)

6. These LED Drivers were tested in an elevated ambient oven with the maximum tc point temperatures as detailed below. These products are required to be temperature tested in the end product with maximum temperature on the enclosure not to exceed the values shown in the table below when installed in the end product and the ambient temperature as shown. These models may not be rated for TL type.

Models	Ambient, °C	Maximum "tc" Temp, °C
L3DA4U1UKx-2A020 THROUGH -070	71	88.8
L3DA4U1UKx-2A071 THROUGH -150	58	83.3
L3DA4U1UKx-2A151 THROUGH -210	60	85.9
L3DA4U1UKx-2C020 THROUGH -150	60	84.0
L3DA4U1UKx-2C151 THROUGH -210	62	85.8
L3DA4U1UKx-2V100 THROUGH -200	42	85.4
L3DA4U1UKx-2V205 THROUGH -380	57	83.9
L3DA4U1UKx-3A020 THROUGH -100	47	87.0
L3DA4U1UKx-LC140 CPB1260	57	86.2
L3DA4U1UMx-2A020 THROUGH -150	47	81.3
L3DA4U1UMx-2A151 THROUGH -210	50	85.8
L3DA4U1UMx-2C020 THROUGH -150	48	81.4
L3DA4U1UMx-2C151 THROUGH -210	50	85.1
L3DA4U1UMx-2V100 THROUGH -200	37	85.9
L3DA4U1UMx-2V205 THROUGH -380	39	78.8
L3DA4U1UMx-3A020 THROUGH -100	54	86.3
LTEA4U1UKx-2A020 THROUGH -150	44	75.2
LTEA4U1UKx-2A151 THROUGH -210	52	79.1
LTEA4U1UKx-2C020 THROUGH -150	45	74.9
LTEA4U1UKx-2C151 THROUGH -210	53	79.5
LTEA4U1UKx-2V100 THROUGH -200	33	73.9
LTEA4U1UKx-2V205 THROUGH -380	45	74.4
LTEA4U1UKx-3A020 THROUGH -100	46	81.0
LTEA4U1UMx-2A020 THROUGH -150	43	77.7
LTEA4U1UMx-2A151 THROUGH -210	49	85.7
LTEA4U1UMx-2C020 THROUGH -150	44	78.6
LTEA4U1UMx-2C151 THROUGH -210	51	85.7
LTEA4U1UMx-2V100 THROUGH -200	31	84.9
LTEA4U1UMx-2V205 THROUGH -380	38	79.2
LTEA4U1UMx-3A020 THROUGH -100	44	73.0
LTEA421UKx-2A070	66	84.4
L3DA5U1UKx-NA071 THROUGH -105	57	82.6

## Conditions of Acceptability - (continued)

7. The input/output wiring shall be enclosed in the end product in a suitable electrical enclosure.
8. Consideration for connecting the metal enclosure to a suitable grounding point shall be considered in the end product.
9. The products are to be connected to max. 20 A branch circuit.
10. The leads on these products are for factory connection only, not for Field Wiring.
11. These products have been evaluated for use with 3-wire controls, Lutron EcoSystem controls and Lutron Forward Phase Controls. Use with any other controls shall be evaluated in the end product.
12. The Leakage Current Test was performed on these units. The results showed currents greater than 0.5mA but less than 0.75mA. The suitability of this leakage level shall be determined in the end product. Adequate grounding shall be provided in the end product.
13. The following models have Maximum Output Voltages over 42.4 Vdc, and can be marked for US (FKSZ2) and Canadian (FKSZ8) use per CSA C22.2 No. 250.13-12 (refer to Test Reference No. 6 and test Record No. 11; dated 2010-08-26):
  - Cat Nos. L3DA4U1U or LTEA4U1U, followed by K or M, followed by S or N, followed by (3) where (3) may be a 3 or a single letter E, F, T or U, followed by A, followed by 020 through 100
  - Cat Nos. L3DA5U1UK, followed by S or N, followed by N, followed by A, followed by 071 through 105.
  - Cat No. **LwwA4U1U**, followed by K or M, followed by S or N, followed by 3ABLK.
  - Cat No. L3DA5U1U, followed by K, followed by S or N, followed by 3BBLK.
14. In some cases temperatures on the connectors were over 60°C when normalized to 40°C. The input output leads when wired to the LED drivers in this report should be considered in the end product and rated 90°C min. Testing may be performed in the end product in lieu of lead marking.

## Conditions of Acceptability - (continued)

15. The following LED models were evaluated for TL Type rating and tested in a 40°C, the Measured Tc point and the Tref are indicated in table in the table below:

## TL Type rated models marking:

MODEL	Tref max °C	Tref °C (Measured)
L3DA4U1UKy-2HBLK L3DA4U1UKy-Hz020-Hz070	89	61
L3DA4U1UKy-2ABLK L3DA4U1UKy-Mz151-Mz210	89	67
L3DA4U1UKy-3ABLK L3DA4U1UKy-Ez020-Ez050 L3DA4U1UKy-Fz051-Fz100	83	66
L3DA4U1UKy-2GBLK L3DA4U1UKy-Gz020-Gz070	87	55
L3DA5U1UKy-3BBLK L3DA5U1UKy-NA071-NA105	87	71
L3DA4U1UKy-2RBLK L3DA4U1UKy-Iz071-Iz105 L3DA4U1UKy-Kz106-Kz150	86	63
L3DA4U1UKy-2SBLK L3DA4U1UKy-Jz071-Jz105 L3DA4U1UKy-Lz106-Lz150	86	69
L3DA4U1UMy-2CBLK L3DA4U1UMy-Gz020-Gz070 L3DA4U1UMy-Iz071-Iz105 L3DA4U1UMy-Kz106-Kz150	89	68
L3DA4U1UMy-2BBLK L3DA4U1UMy-Hz020-Hz070 L3DA4U1UMy-Jz071-Jz105 L3DA4U1UMy-Lz106-Lz150	89	74
L3DA4U1UMy-2ABLK L3DA4U1UMy-Mz151-Mz210	89	71
L3DA4U1UMy-3ABLK L3DA4U1UMy-Ez020-Ez050 L3DA4U1UMy-Fz051-Fz100	90	72



## Conditions of Acceptability (continued)

## 15. Continued

## TL Type rated models marking:

MODEL	Tref max °C	Tref °C (Measured)
LTEA4U1UKy-2HBLK LTEA4U1UKy-Hz020-Hz070	84	62
LTEA4U1UKy-2ABLK LTEA4U1UKy-Mz151-Mz210	87	72
LTEA4U1UKy-3ABLK LTEA4U1UKy-Ez020-Ez050 LTEA4U1UKy-Fz051-Fz100	82	74
LTEA4U1UKy-2GBLK LTEA4U1UKy-Gz020-Gz070	86	57
LTEA4U1UKy-2RBLK LTEA4U1UKy-Iz071-Iz105 LTEA4U1UKy-Kz106-Kz150	80	74
LTEA4U1UKy-2SBLK LTEA4U1UKy-Jz071-Jz105 LTEA4U1UKy-Lz106-Lz150	82	68
LTEA4U1UMy-2CBLK LTEA4U1UMy-Gz020-Gz070 LTEA4U1UMy-Iz071-Iz105 LTEA4U1UMy-Kz106-Kz150	90	69
LTEA4U1UMy-2BBLK LTEA4U1UMy-Hz020-Hz070 LTEA4U1UMy-Jz071-Jz105 LTEA4U1UMy-Lz106-Lz150	86	78
LTEA4U1UMy-2ABLK LTEA4U1UMy-Mz151-Mz210	90	73
LTEA4U1UMy-3ABLK LTEA4U1UMy-Ez020-Ez050 LTEA4U1UMy-Fz051-Fz100	86	72

16. LED models carrying a suffix of "BLK" are bulk models which are capable of having their output characteristics configured by authorized parties. When the output is configured, an additional marking must be applied to the driver that denotes the newly configured output setting.