PCN

AO-PCN-2026-090-A

Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Published by ams-OSRAM AG
Tobelbader Strasse 30, 8141 Premstaetten, Austria
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01.10.2026

Dear Customer,

please review this **PCN** and provide your feedback in the **Customer approval form** (at the end of this PCN document) to your ams OSRAM sales partner before **07.11.2026** *). (

Your prompt reply will help ams OSRAM to assure a smooth and well executed transition. If ams OSRAM does not hear from your side by the due date, we will assume your (if you are a Distributor: and your customer's) full acceptance to this proposed change and its implementation.

ams OSRAM understands the time requirements your organization needs to approve this PCN.
However, if you can provide ams OSRAM an estimated date your organization will have finalized this PCN review, ams OSRAM can use this date to plan continued production to secure your order needs during the transition time.

Your attention and response to this matter is highly appreciated.

Please direct your inquiries to your local Sales office.

*) ams OSRAM aligns with the widely recognized JEDEC/ECIA/IPC Joint Standard No. 46, which stipulates:

- Customers should acknowledge receipt of the PCN within 30 days of delivery of the PCN.
- Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.
- After acknowledgement, lack of additional response within the 90 day period constitutes acceptance of the change. If the customer requires additional time to perform sample testing, beyond the 90 day review period, an extension must be negotiated with the supplier.

Subject of change:	Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0	
Affected products:	LZ1-00UBN0 LZ1-10UBN0	
Reason for change:	Increase in radiant flux Securing of chip supply	
Description of change:	Current status Current violet chip For details refer to document 2_cip_AO-PCN-2026-090-A	New status New violet chip
Product identification:	e.g. Date code / Laser marking on device	
Time schedule for PCN material: (after implementation of change):	Final qualification report:	01.10.2026
	Samples available:	On request
	Intended Start of delivery:	01.11.2026 *) *) or earlier if released by customer and upon mutual agreement
Assessment:	**No change in fit and form.**	
Documentation:	Customer information package 2_cip_AO-PCN-2026-090-A 3_Qual_ AO-PCN-2026-090-A	

Note:
Pre-PCN material: Products of current status, means before implementation of the changes as described in the PCN.
PCN material: Products with implementation of the changes as described in the PCN.

Customer approval form
AO-PCN-2026-090-A

Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Please list product(s) affected in your application(s):

Please check the appropriate box below:

○ **Approval:** We agree with the proposed change and accept start of the shipment upon availability of PCN material	○ **Not relevant:** Change is not relevant for products in use.

○ **Change cannot be accepted:**

- ○ **We have objections:**
- ○ **We request following Information:**
- ○ **We request following Samples:**
- ○ **Expected approval date:**
- ○ **Volume requirements for Pre-PCN material:**

○ **Remarks:**

Sender:

Company:

Address / Location:

Signature: **Date:**

Please return this approval form to your Sales partner.

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PCN
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Customer information package

Department
2026-10-01

Agenda

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Reason for change

Item	Description
Item 1	Increase in radiant flux
Item 2	Securing of chip supply

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Description of change

Item	Current status	New status
Item 1	Current violet chip	New violet chip

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Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Ordering Information	**Ordering Information** Type / Total radiant flux [1] I_F = 700 mA Φ_E / Ordering Code LZ1-00UBN0-00U4 — 1100 ... 2000 mW — Q65113A4143 LZ1-00UBN0-00U5 — 1100 ... 2000 mW — Q65113A4142 LZ1-00UBN0-00U8 — 1100 ... 2000 mW — Q65113A4141	**Ordering Information** Type / Total radiant flux [1] I_F = 700 mA Φ_E / Ordering Code LZ1-00UBN0-00U4N — 1250 ... 2400 mW — Q65115A4915 LZ1-00UBN0-00U5N — 1250 ... 2400 mW — Q65115A4914 LZ1-00UBN0-00U8N — 1100 ... 2000 mW — Q65115A4913

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Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Characteristics	**Characteristics** I_F = 700 mA; T_C = 25 °C Parameter / Symbol / Values Total radiant flux [4] — Φ_E — typ. 1450 mW Peak Wavelength [5] — λ_{peak} — min. 385 nm; typ. 395 nm; max. 410 nm I_F = 700 mA Viewing angle at 50% I_V — 2φ — typ. 70 °	**Characteristics** I_F = 700 mA; T_C = 25 °C Parameter / Symbol / Values Total radiant flux [3] — Φ_E — typ. 1600 mW Peak Wavelength [4] — λ_{peak} — min. 384 nm; typ. 394 nm; max. 409 nm I_F = 700 mA Viewing angle at 50% I_V — 2φ — typ. 75 °

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Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Brightness Groups	**Brightness Groups** Group / Total radiant flux [1] I_F = 700 mA min. Φ_E / Total radiant flux [1] I_F = 700 mA max. Φ_E M1 — 1100 mW — 1375 mW N1 — 1375 mW — 1760 mW P1 — 1760 mW — 2000 mW	**Brightness Groups for LZ1-00UBN0-00U4N and -00U5N** Group / Total radiant flux [1] I_F = 700 mA min. Φ_E / Total radiant flux [1] I_F = 700 mA max. Φ_E N — 1250 mW — 1600 mW P — 1600 mW — 2000 mW Q — 2000 mW — 2400 mW **Brightness Groups for LZ1-00UBN0-00U8N** Group / Total radiant flux [1] I_F = 700 mA min. Φ_E / Total radiant flux [1] I_F = 700 mA max. Φ_E M1 — 1100 mW — 1375 mW N1 — 1375 mW — 1760 mW P1 — 1760 mW — 2000 mW

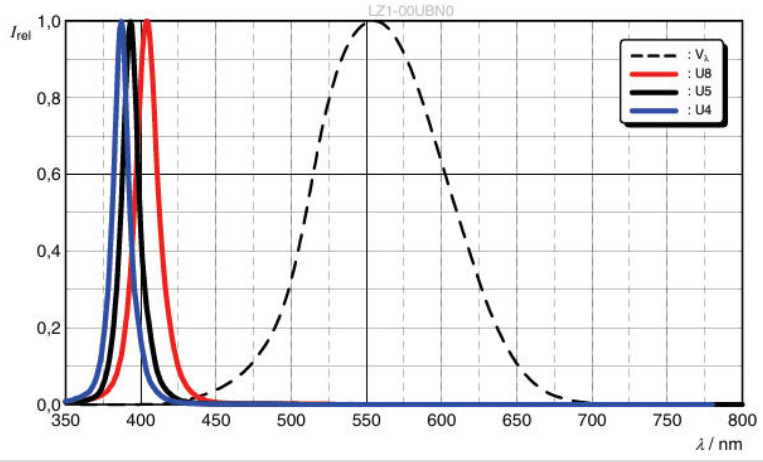
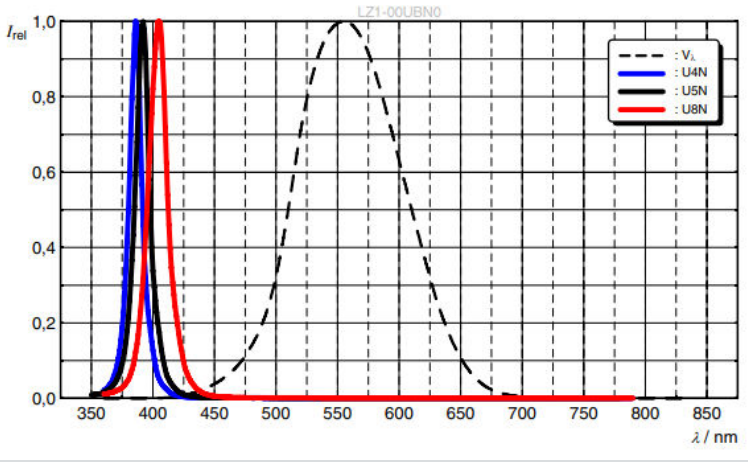
AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Wavelength Groups	**Wavelength Groups** Group / Peak Wavelength [5] I_F = 700 mA min. λ_{peak} / Peak Wavelength [5] I_F = 700 mA max. λ_{peak} U4 — 385 nm — 390 nm U5 — 390 nm — 395 nm U8 — 405 nm — 410 nm	**Wavelength Groups** Group / Peak Wavelength [5] I_F = 700 mA min. λ_{peak} / Peak Wavelength [5] I_F = 700 mA max. λ_{peak} U4N — 384 nm — 389 nm U5N — 389 nm — 394 nm U8N — 403 nm — 409 nm

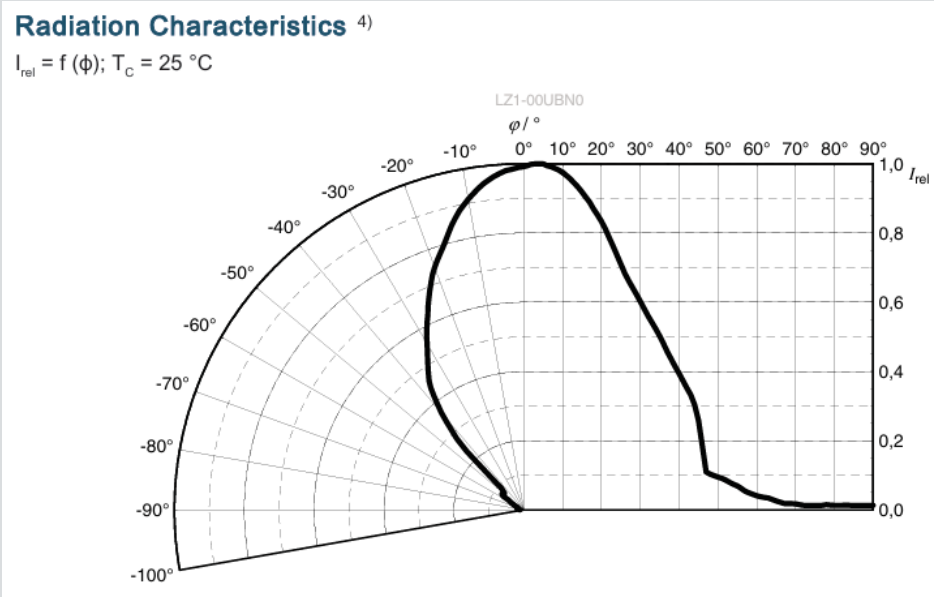
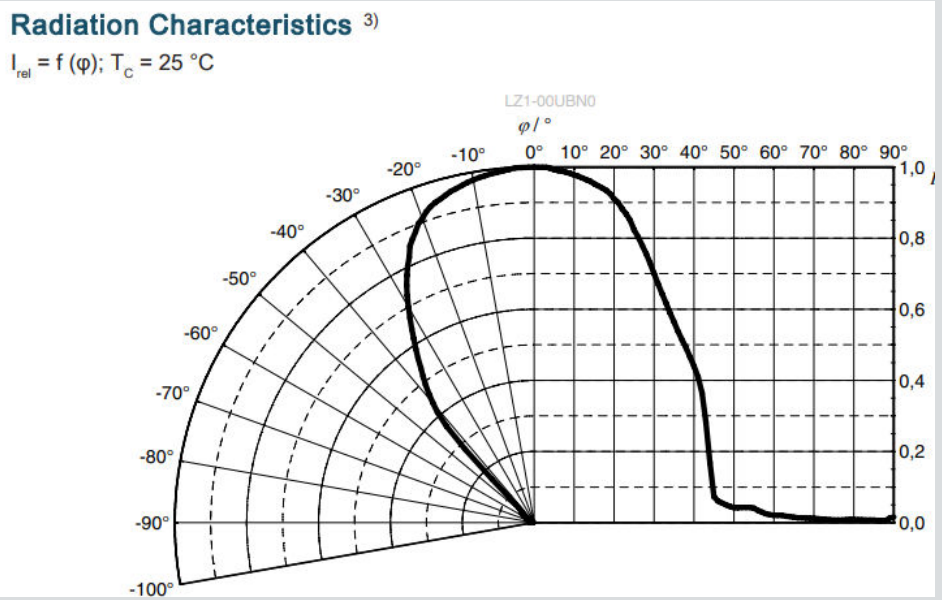
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Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Relative Spectral Emission	**Relative Spectral Emission** 4) $I_{rel} = f(\lambda)$; I_F = 700 mA; T_C = 25 °C 	**Relative Spectral Emission** 3) $I_{rel} = f(\lambda)$; I_F = 700 mA; T_C = 25 °C 

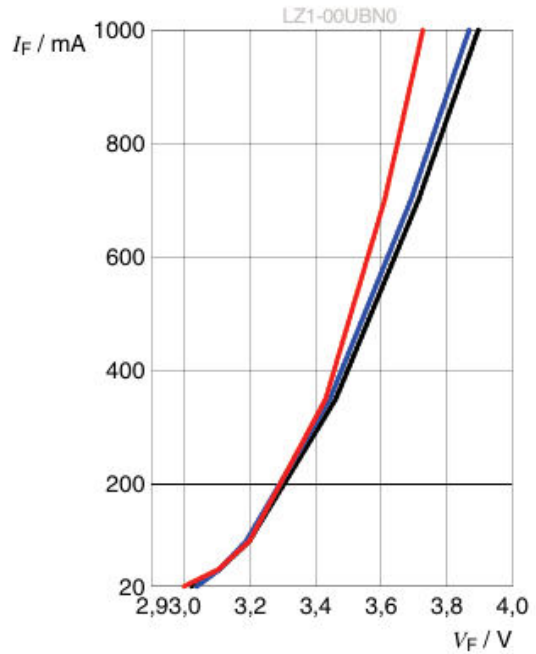
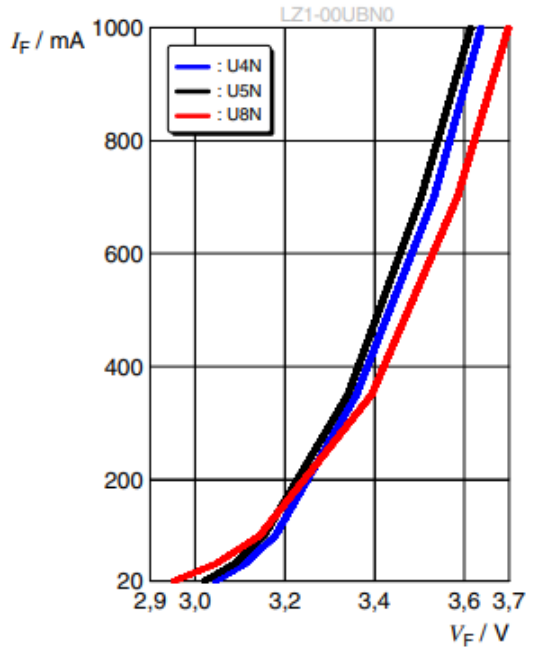
AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Radiation Characteristics		

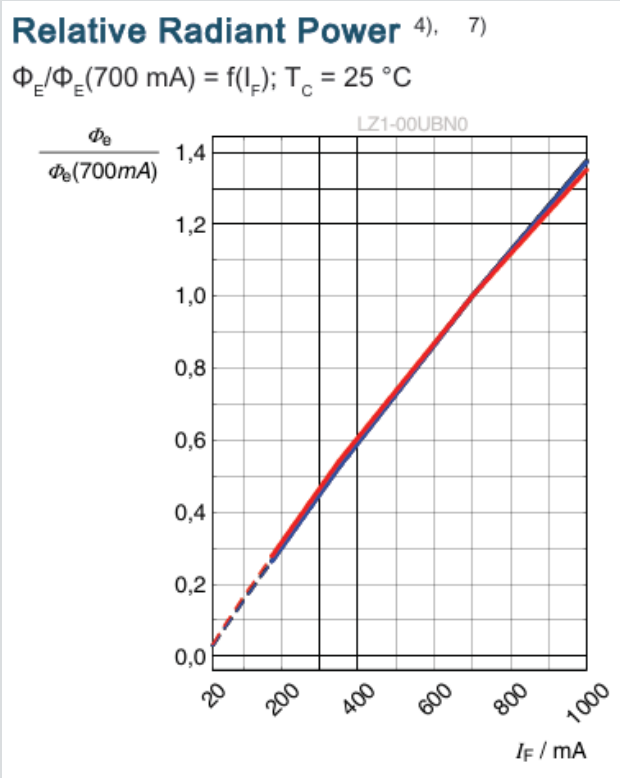
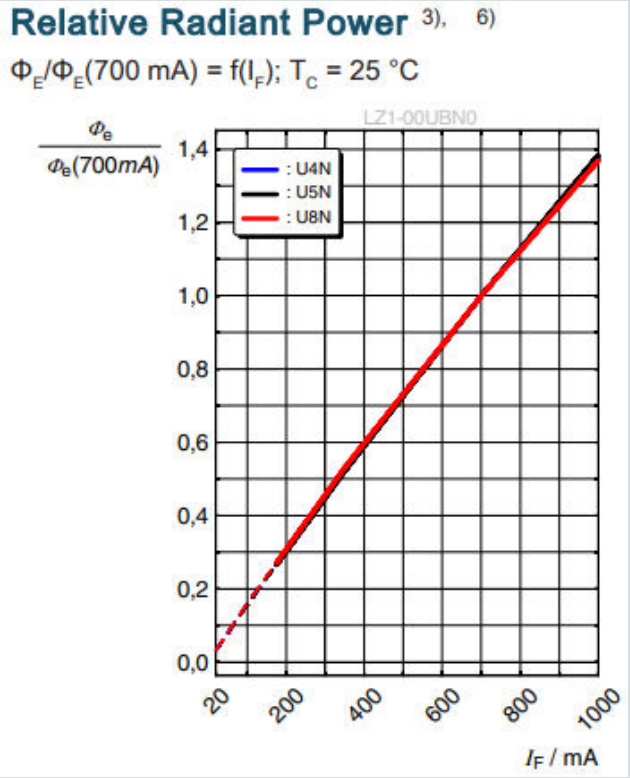
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Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Forward current	**Forward current** 4) $I_F = f(V_F)$; T_C = 25 °C 	**Forward current** 3) $I_F = f(V_F)$; T_C = 25 °C 

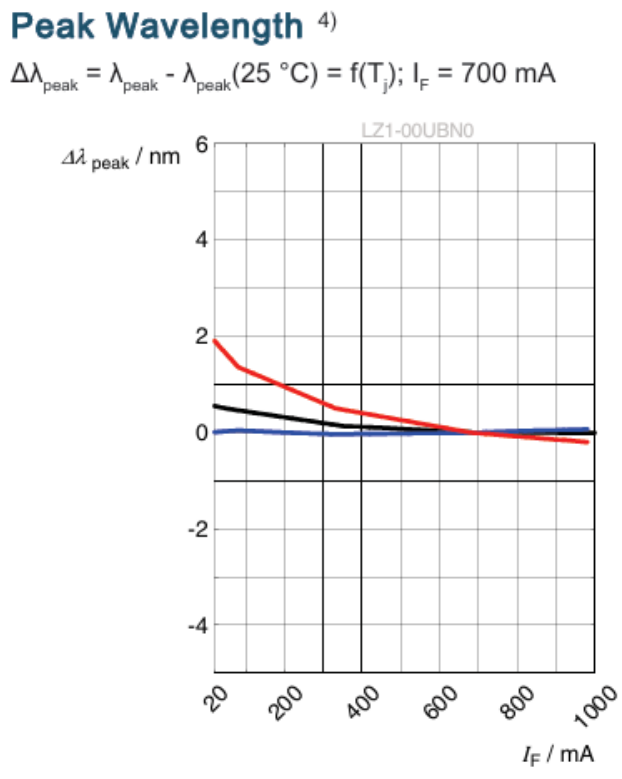
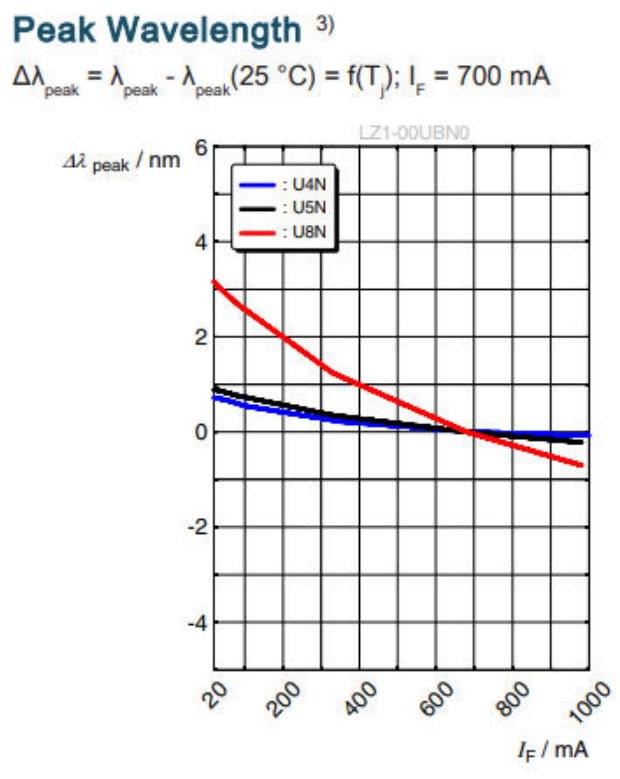
AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Relative Radiant Power		

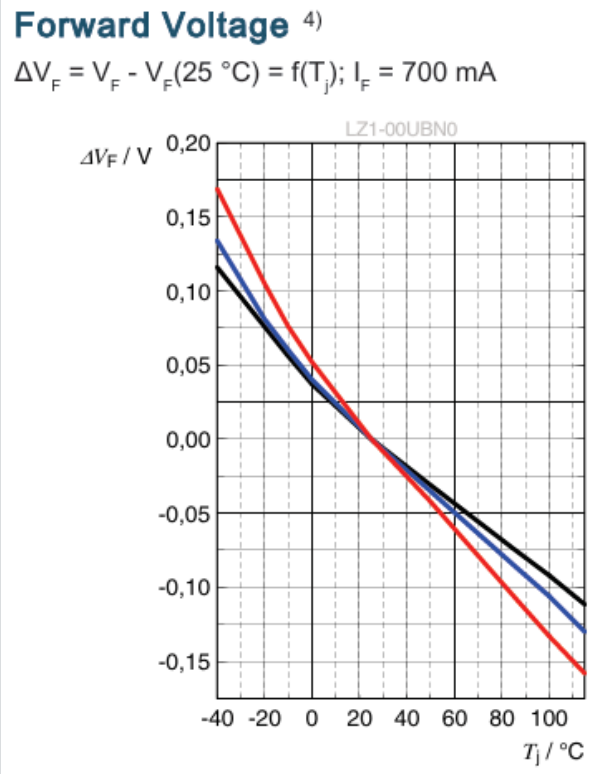
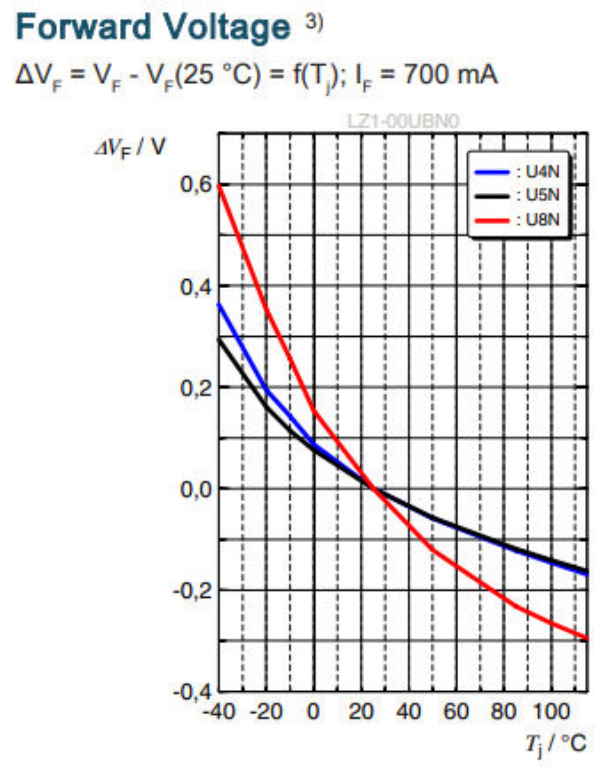
AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Peak Wavelength		

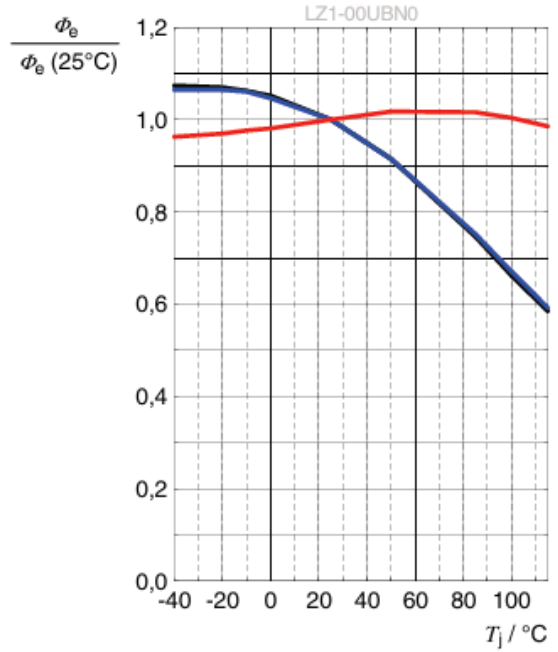
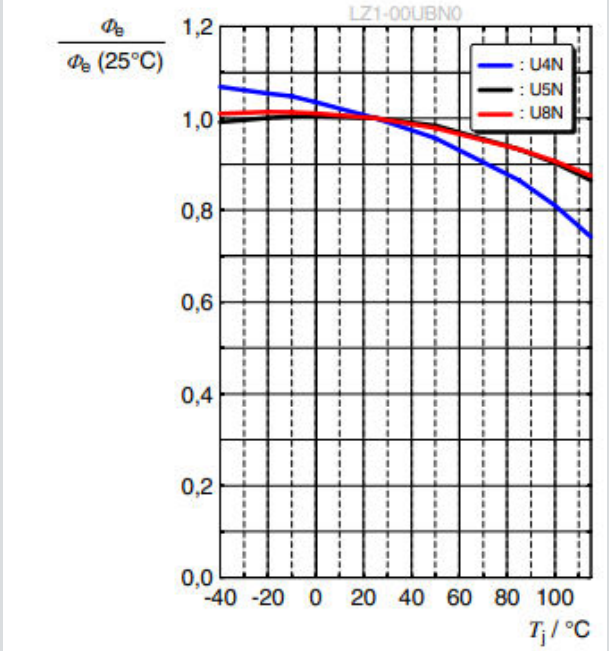
AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Forward Voltage		

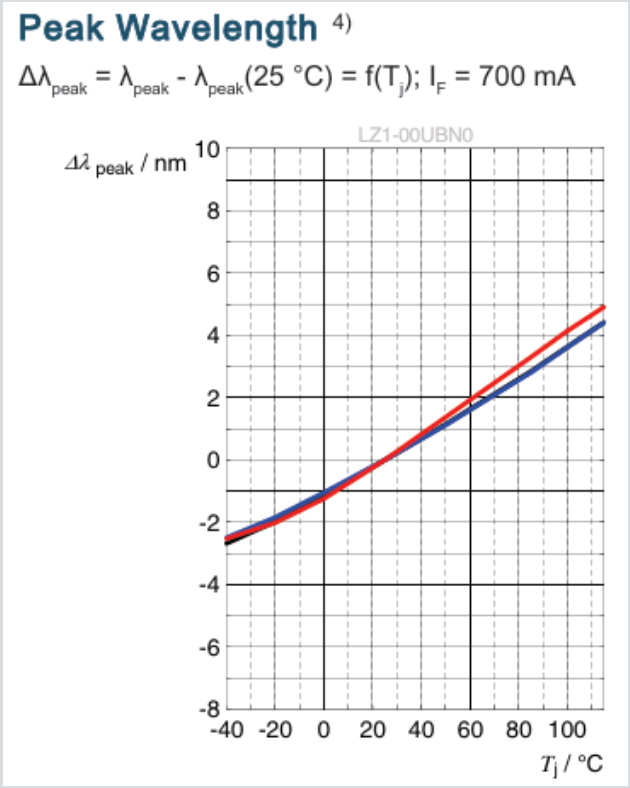
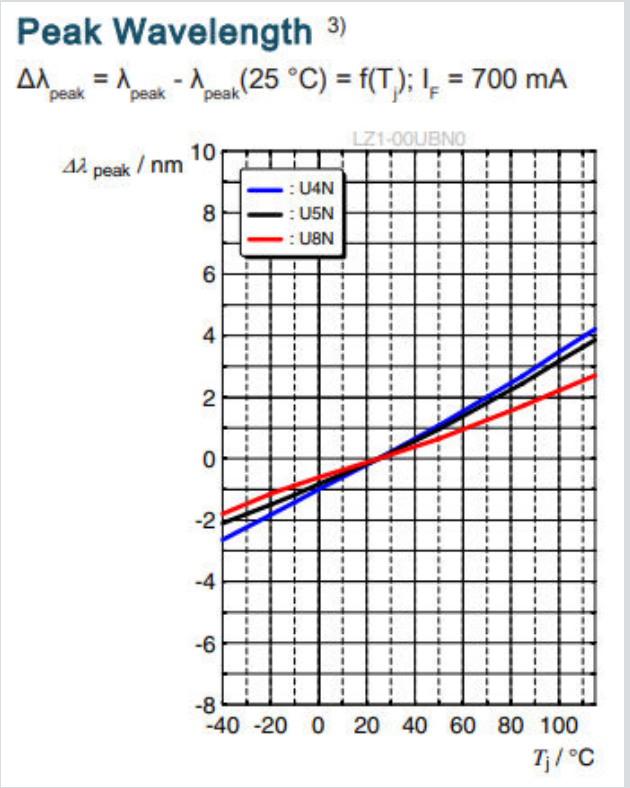
AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Relative Radiant Power	**Relative Radiant Power** 4) $\Phi_E/\Phi_E(25\ °C) = f(T_j);\ I_F = 700\ mA$ 	**Relative Radiant Power** 3) $\Phi_E/\Phi_E(25\ °C) = f(T_j);\ I_F = 700\ mA$ 

AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-00UBN0

Item	Current status	New status
Peak Wavelength		

AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: LZ1-10UBN0

Item	Current status	New status
Ordering Information	**Ordering Information** Type / Total radiant flux [1] I_F = 700 mA Φ_E / Ordering Code LZ1-10UBN0-00U4 — 1100 ... 2000 mW — Q65113A4179 LZ1-10UBN0-00U5 — 1100 ... 2000 mW — Q65113A4178 LZ1-10UBN0-00U8 — 1100 ... 2000 mW — Q65113A4177	**Ordering Information** Type / Total radiant flux [1] I_F = 700 mA Φ_E / Ordering Code LZ1-10UBN0-00U4N — 1250 ... 2400 mW — Q65115A4912 LZ1-10UBN0-00U5N — 1250 ... 2400 mW — Q65115A4911 LZ1-10UBN0-00U8N — 1100 ... 2000 mW — Q65115A4918

AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Changes in the datasheets: Updated Datasheet Version

Product type	Data sheet version before PCN	Data sheet version after PCN
LZ1-00UBN0	1.2	1.3
LZ1-10UBN0*	1.1	1.2

* LQC Emitter on Custom PCB
For emitter specification, please refer to the emitter datasheet LZ1-00UBN0.

Note: After PCN approval and shipment of new material, the new data sheet versions will be valid.
Latest version of data sheet is accessible on the ams OSRAM homepage.

AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

List of affected products

LED Engin
LZ1-00UBN0
LZ1-10UBN0

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PCN Samples

LED Engin
LZ1-00UBN0
LZ1-10UBN0

Color code: available on request

AO-PCN-2026-090-A
Introduction of new violet chip for LED Engin LZ1-00UBN0 and LZ1-10UBN0

Time schedule

for PCN material (after implementation of change):		
Final qualification report	01.10.2026	
Samples available	On request	
Intended Start of delivery	01.11.2026 *)	*) or earlier if released by customer and upon mutual agreement

Note:
Pre-PCN material: Products of current status, means before implementation of the changes as described in the PCN.
PCN material: Products with implementation of the changes as described in the PCN.

Sensing is life



Reliability Report 260192C1

Subject	Reliability Report of violet chip for LED ENGIN LZ4-00D108 according to AO-PCN-2026-090-A
Date	01.10.2026
Tested device	LZ4-00D108
Brand (including sub brands)	LED ENGIN
Applies to	LZ4-00D108; LZ1-00UBN0; LZ1-10UBN0

ams-OSRAM AG
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8141 Premstaetten, Austria
Phone +43 3136 500-0
ams-osram.com

Pre-conditioning according to Jedec Level II

Test Performed		Condition	Duration	Sample Size	Failures El.	Opt.	Vis
Wet High Temperature Operating Life WHTOL	*JESD22-A101* AEC-Q102 #A2a Test PCB:	T_A = 85°C; r.H.= 85% I_F = 500mA	1000h	4x12	0	0	0
Temperature Cycling TC	*JESD22-A104* AEC-Q102 #A4a Test PCB:	T_A = -40°C/+100°C	1000c	4x12	0	0	0
High Temperature Operating Life HTOL1	*JESD22-A108* AEC-Q102 #B1a Test PCB:	T_A = 85°C; I_F = 500mA	1000h	4x12	0	0	0
High Temperature Operating Life HTOL2	*JESD22-A108* AEC-Q102 #B1b Test PCB:	T_A = 55°C; I_F = 1000mA	1000h	4x12	0	0	0

Note:
Lot A-C: Evaluation Lot (violet chip)
Lot D: Control Lot (violet chip)

Acceptance limit:

Electrical failures:	V_f (I_f =700mA)	± 10% from initial value
Optical failures:	I_e (I_f =700mA)	± 30% from initial value
Visual failures:	acc. JEDEC JESD22-B101 and other standards as referenced in this report	

Conclusion: The tested device fulfills the reliability requirements.

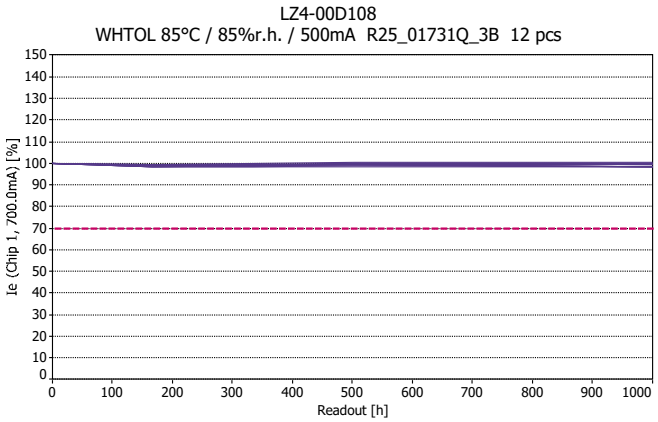
Disclaimer

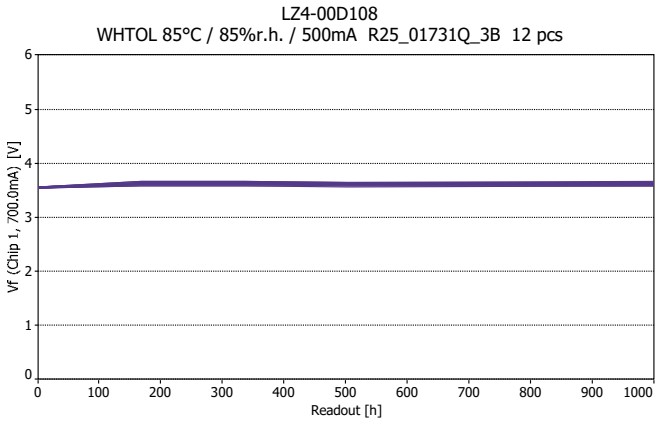
PLEASE CAREFULLY READ THE BELOW TERMS AND CONDITIONS BEFORE USING THE INFORMATION.
IF YOU DO NOT AGREE WITH ANY OF THESE TERMS AND CONDITIONS, DO NOT USE THE INFORMATION.

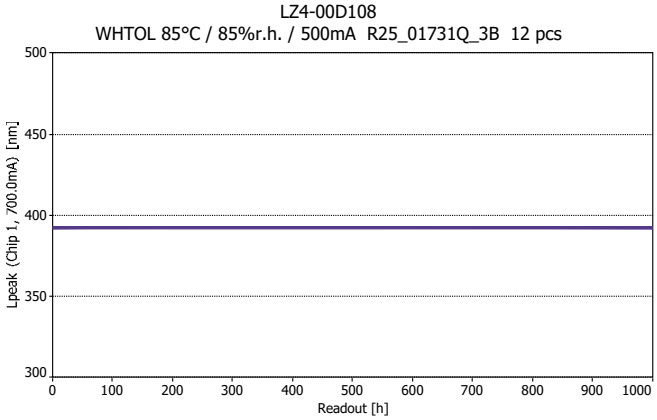
The Information contained in this Document does not constitute an independent warranty. The committed behavior is described in the Product data sheet and/or further, mutually agreed specifications.
Distribution of part or all of the contents of this Document to any 3rd party in any form without the prior permission of ams-OSRAM International GmbH is prohibited except in accordance with applicable mandatory law.

Further explanations:
Data: The Data used in this Document consider the reliability test results under the mentioned driving conditions only. For Product information on the maximum operating conditions and the OSRAM standard qualification profile please refer to the Product data sheet or contact your local sales partner.
Conditions: The conditions for the generation of the Data are as follows:
1. The Data and curves shown in this Document are based on experiments carried out under laboratory conditions on a random sample size of LED/IRED/Laser/Detector with readouts at discrete readout times (where applicable). Thus, the Data above represent a limited number of production lots only and may differ between different assembly lots over time (including chip or package changes). Thus, the behavior of the LED/IRED/Laser/Detector in the final application may differ from the Data. The behavior of the LED/IRED/Laser/Detector at conditions or readout times deviating from those stated above may not be deduced from the Data.
2. If applicable:
    a) Extended driving conditions:
    The tested driving conditions exceed the maximum limits stated in the Product data sheet. Therefore, a reduced lifetime or an accelerated degradation is expected. Failure limits noted in the Document refer to the testing condition according to the OSRAM standard Product qualification profile and not to the actual testing condition.
    b) Extended testing duration:
    The testing duration exceed the OSRAM standard qualification profile of the mentioned Product. Failure limits noted in the Document refer to the testing duration according to the OSRAM standard Product qualification profile and not to the actual testing duration.
    c) Exceeding standard qualification conditions – (Product data sheet limits not affected):
    The tested driving conditions exceed the OSRAM standard qualification profile of the mentioned Product. Therefore a reduced lifetime or an accelerated degradation is expected. Failure limits noted in the Document refer to the testing condition according to the OSRAM standard Product qualification profile and not to the actual testing condition.
3. For long term operation additional failure modes of the chip or package can occur which are not shown in this Document.
4. Possible differences in the thermal management of OSRAM and customer's setup may lead to a different aging behavior.

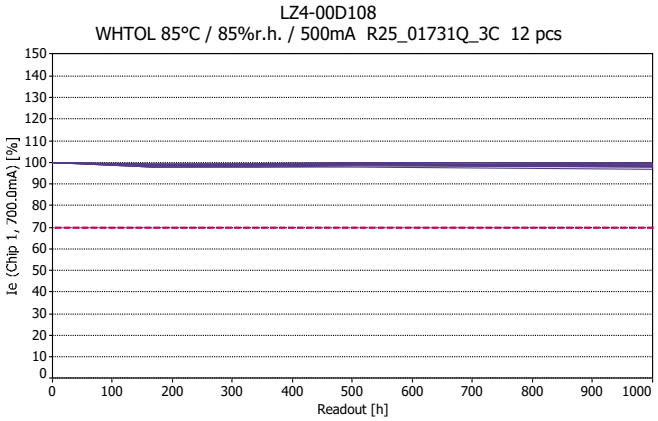
WHTOL 85°C/85%r.H.; 500mA
Lot A – Violet Chip

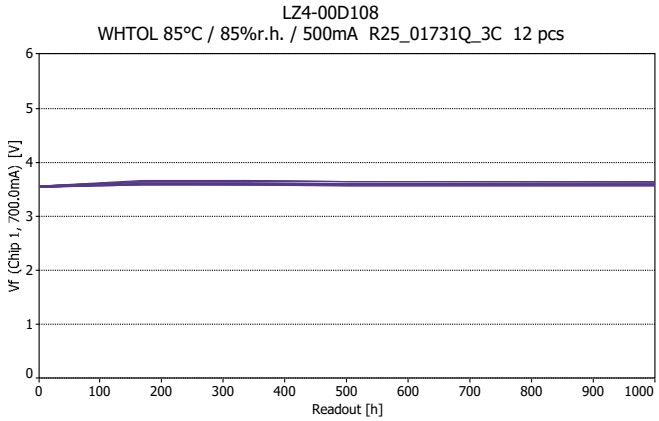


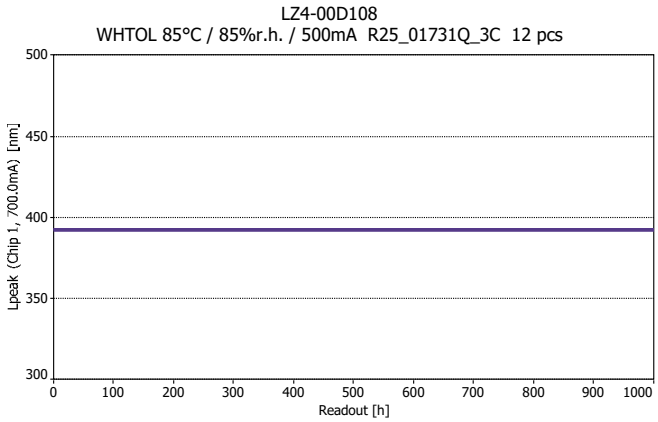




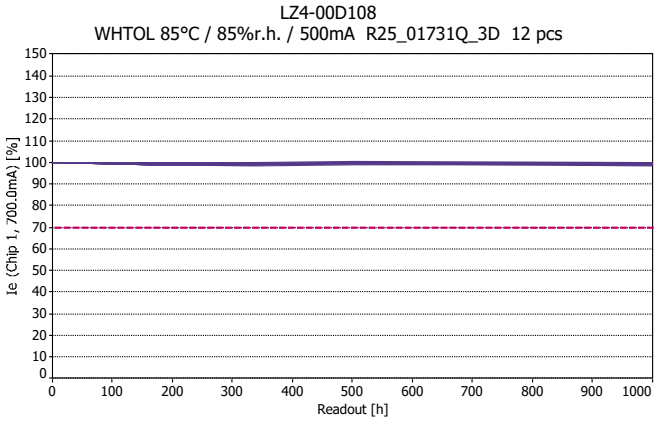
Lot B – Violet Chip

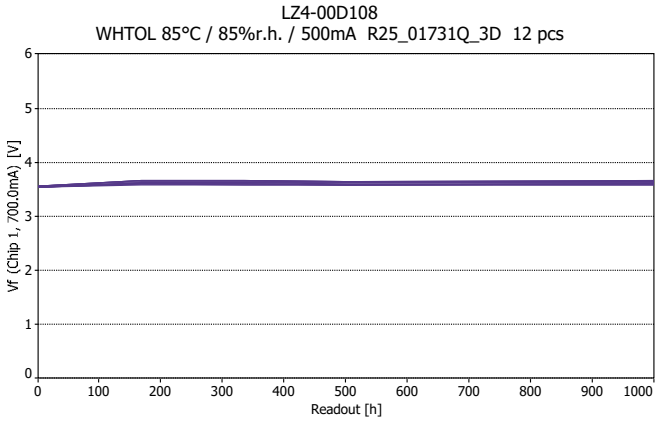


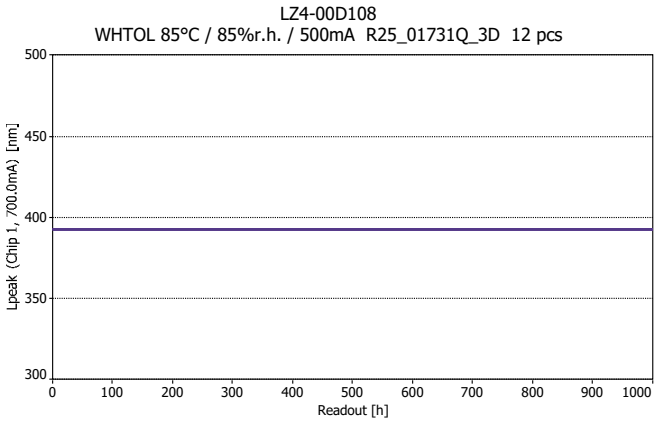




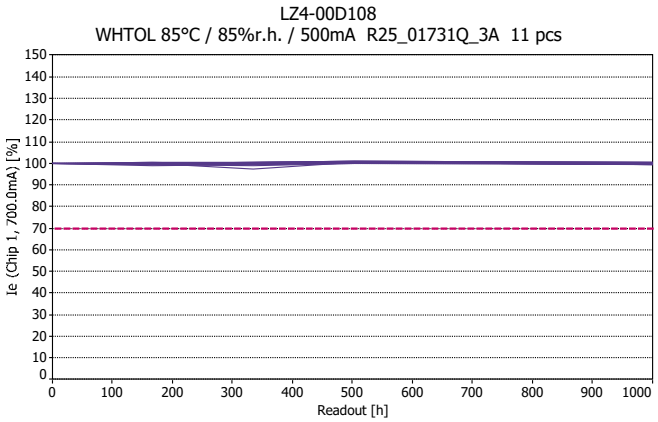
Lot C – Violet Chip

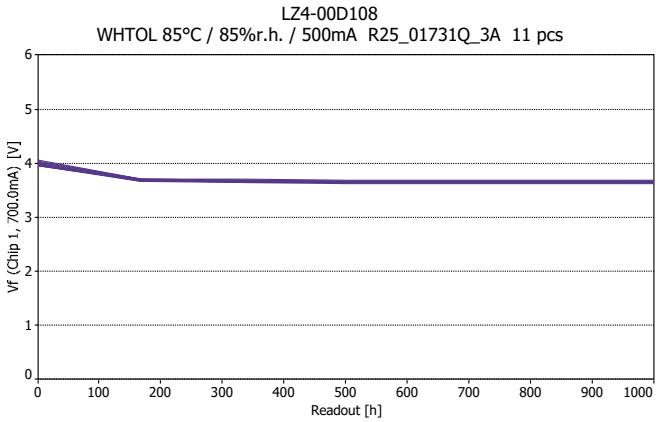


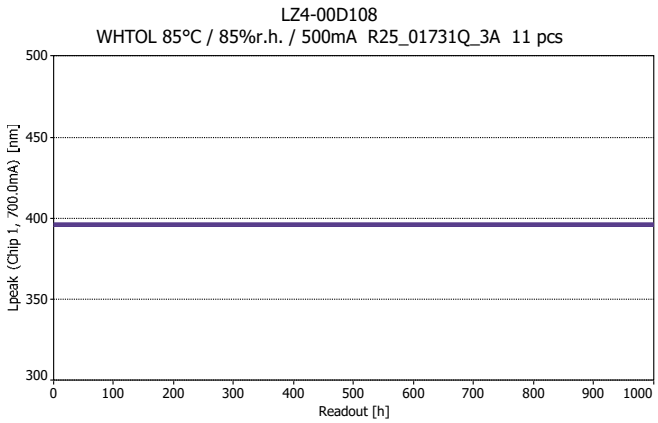




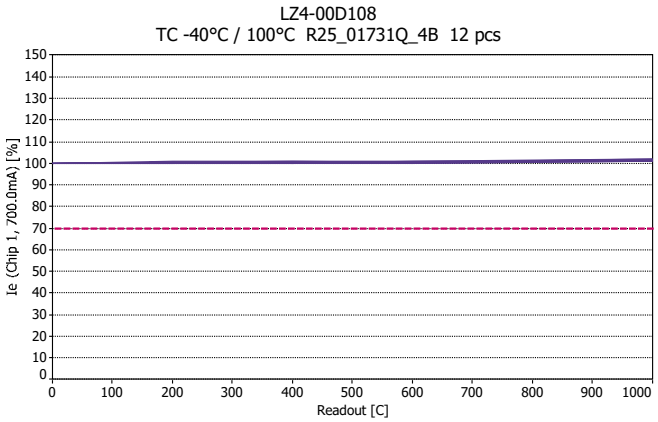
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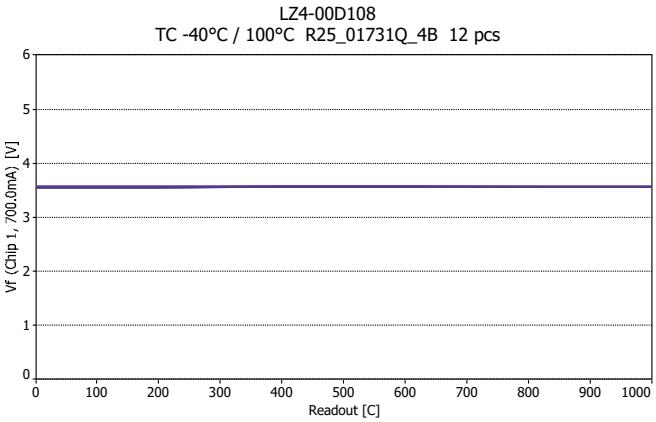


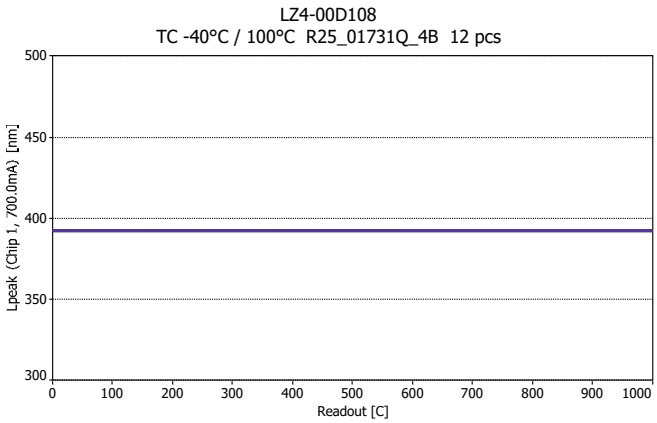




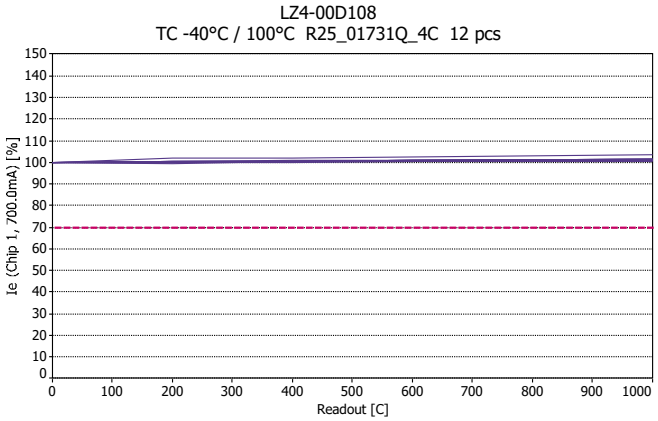
TC -40°C/100°C
Lot A – Violet Chip

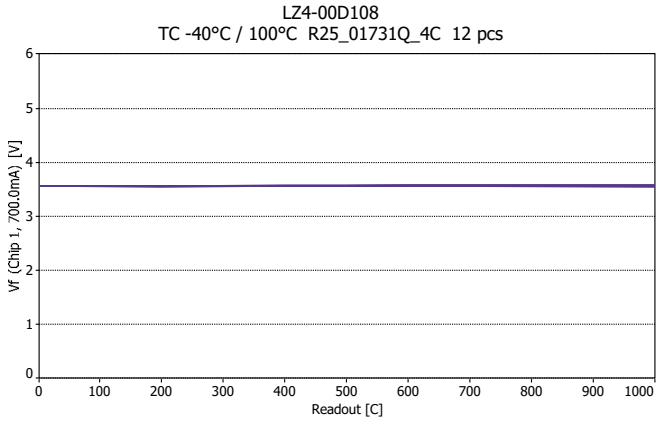


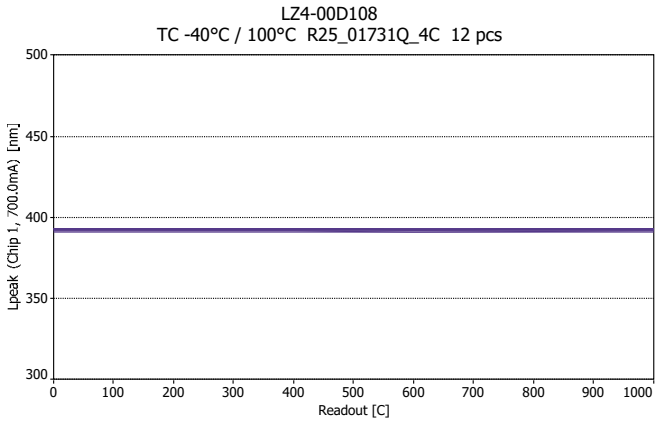




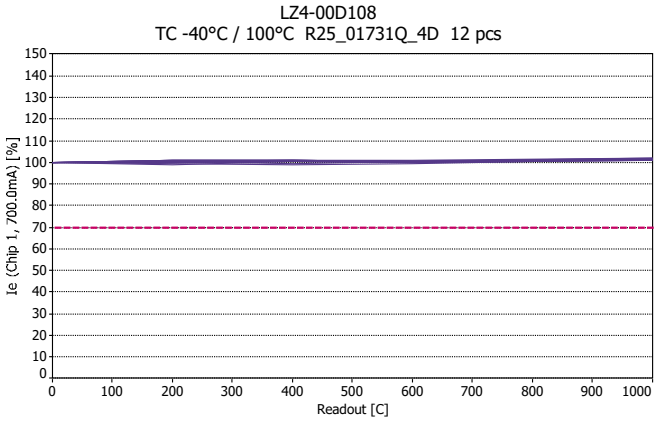
Lot B – Violet Chip

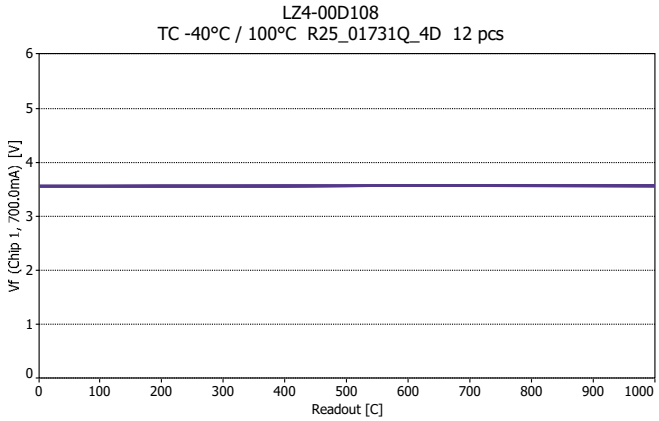


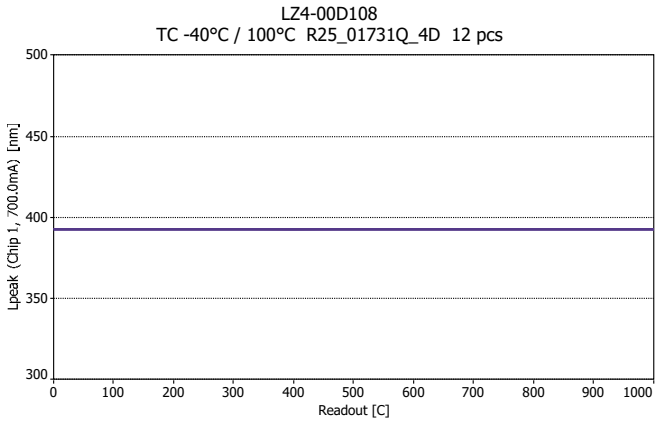




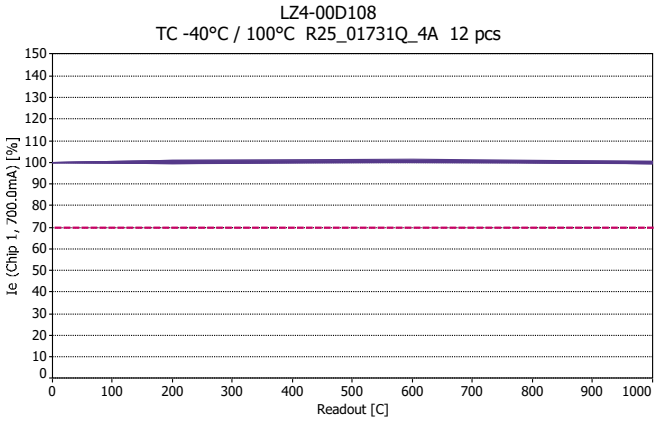
Lot C – Violet Chip

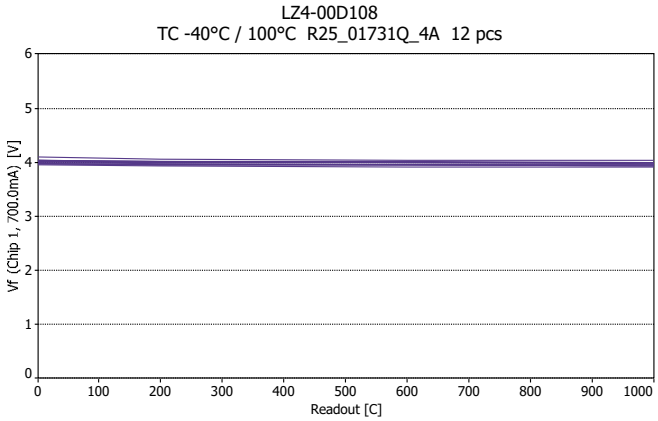


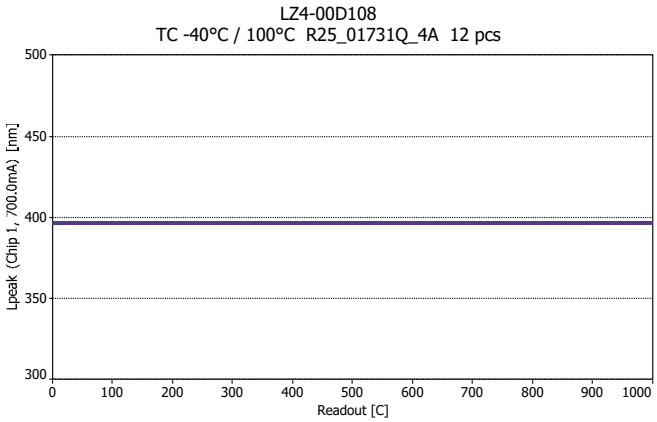




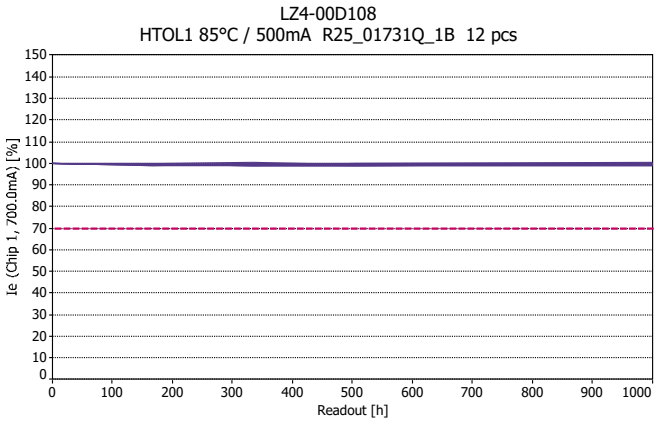
Lot D – Violet Chip (Control Lot)

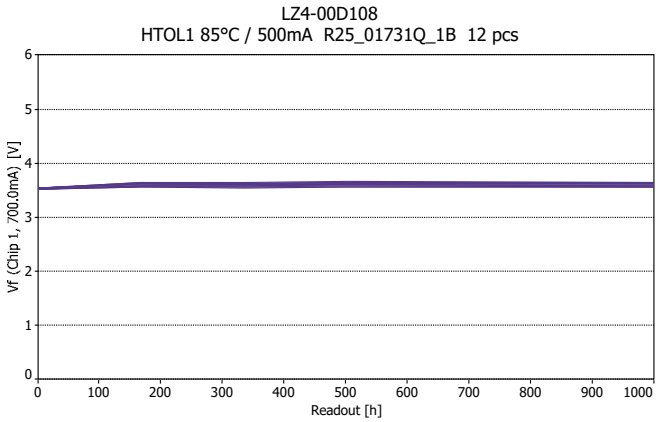


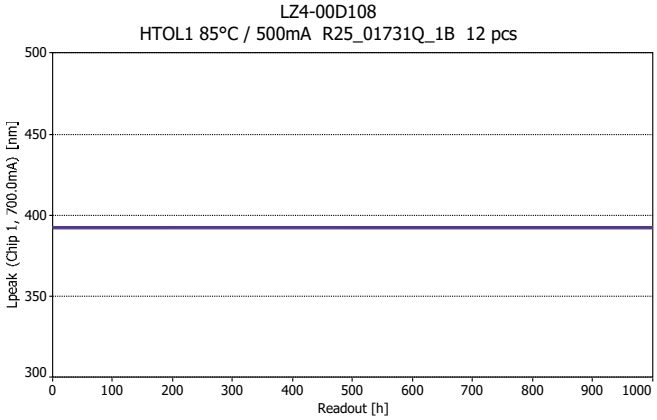




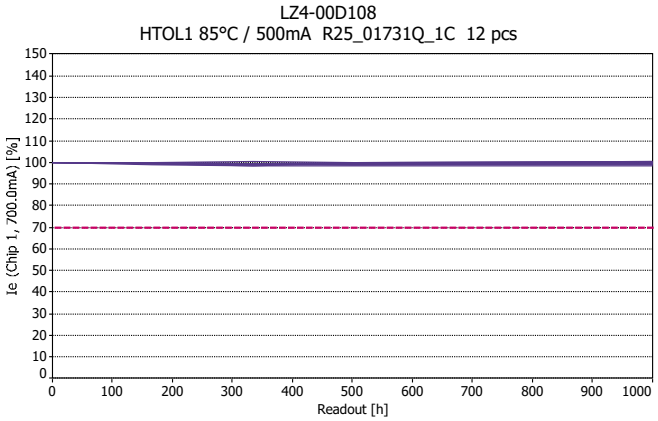
HTOL1 85°C/500mA
Lot A – Violet Chip

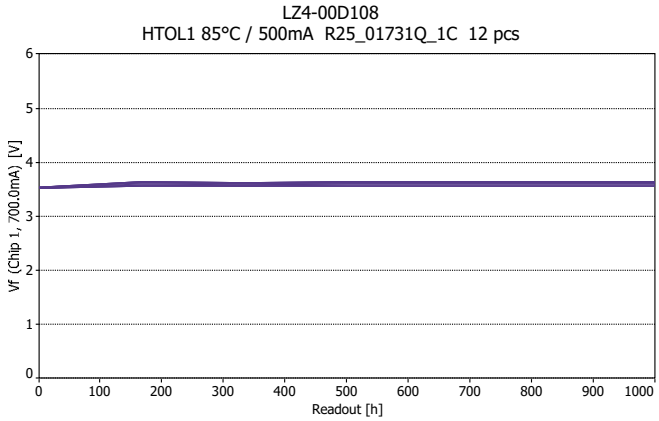


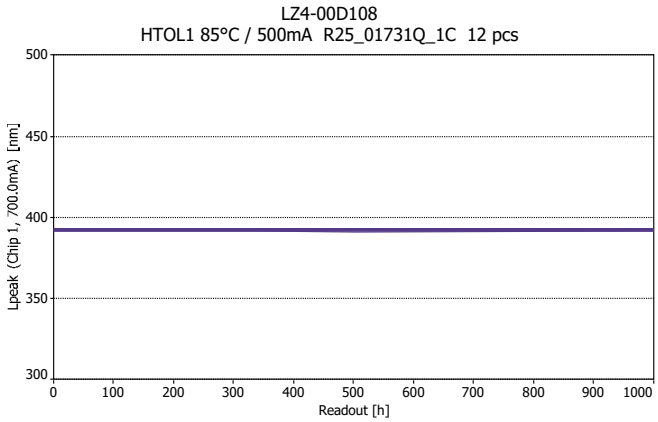




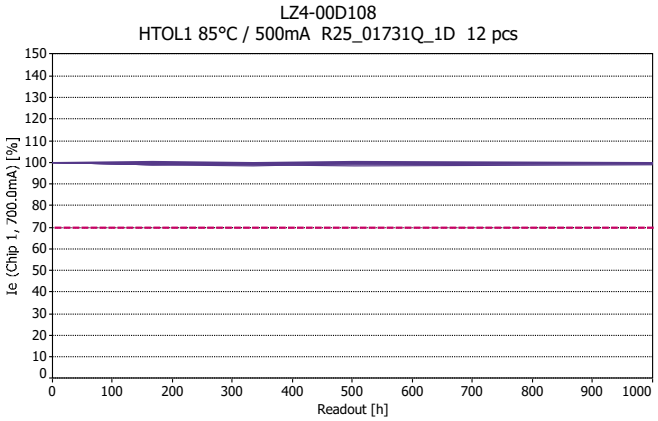
Lot B – Violet Chip

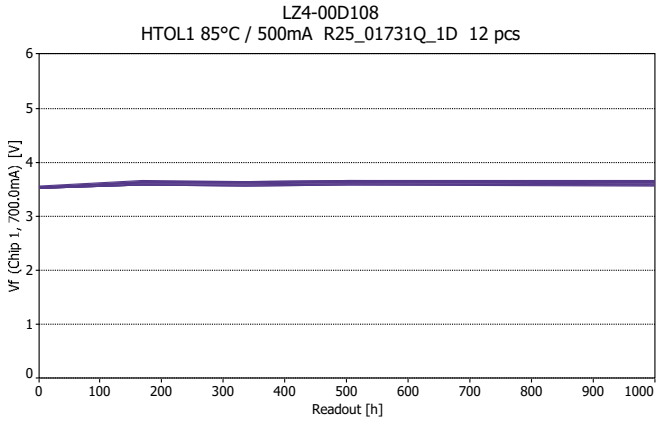


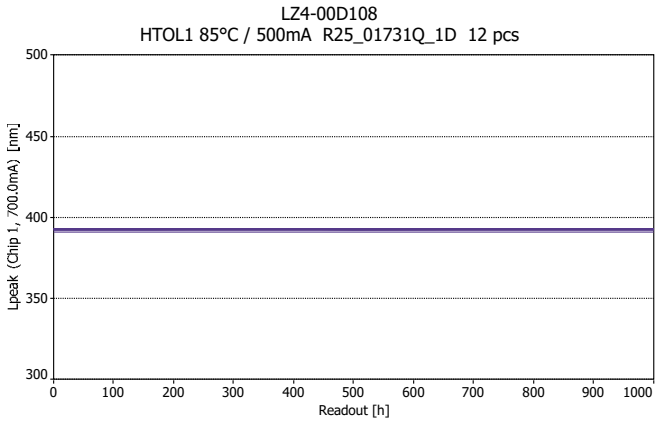




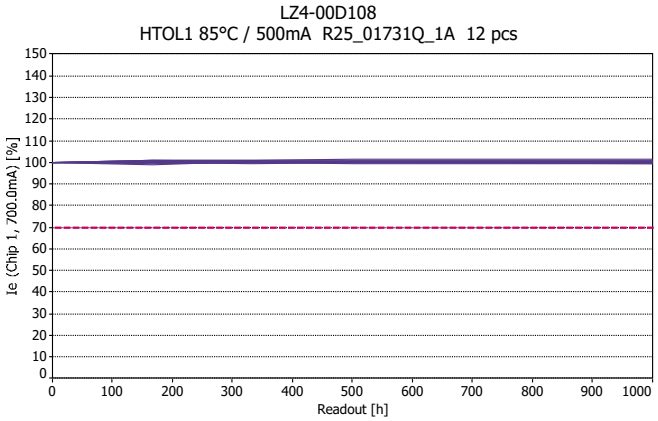
Lot C – Violet Chip

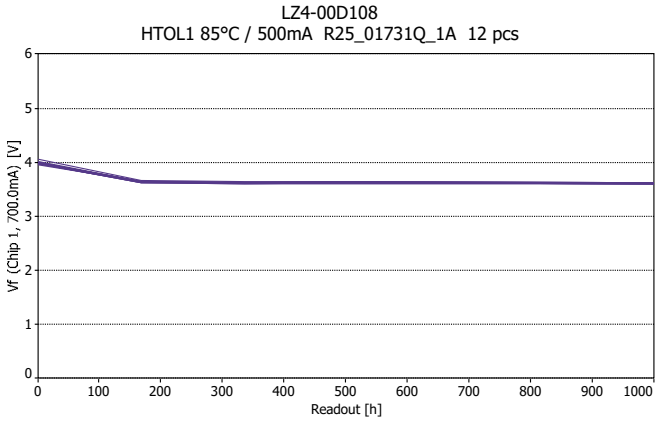


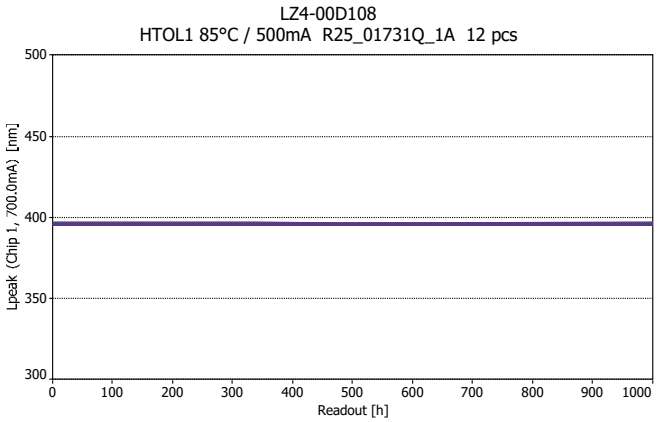




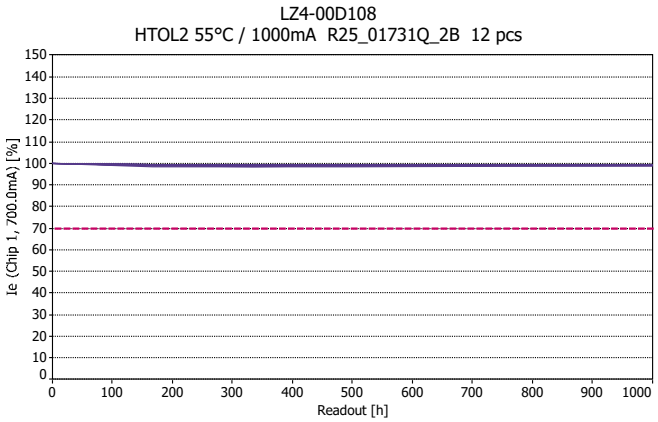
Lot D – Violet Chip (Control Lot)

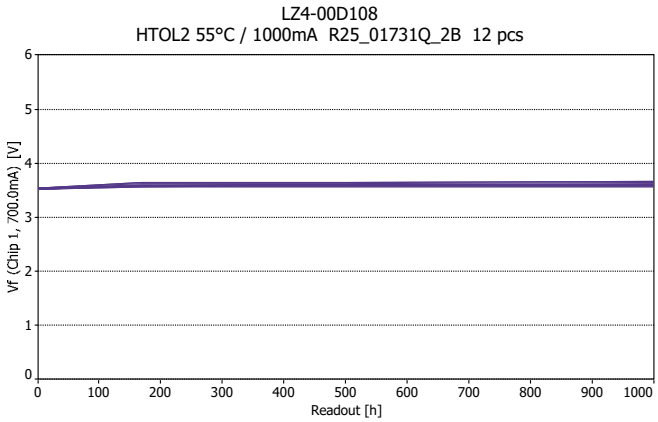


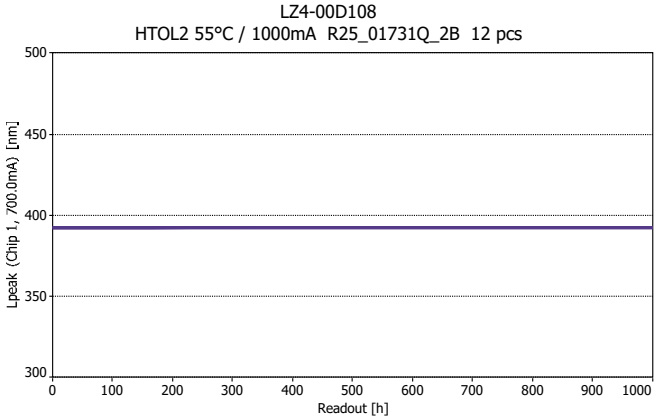




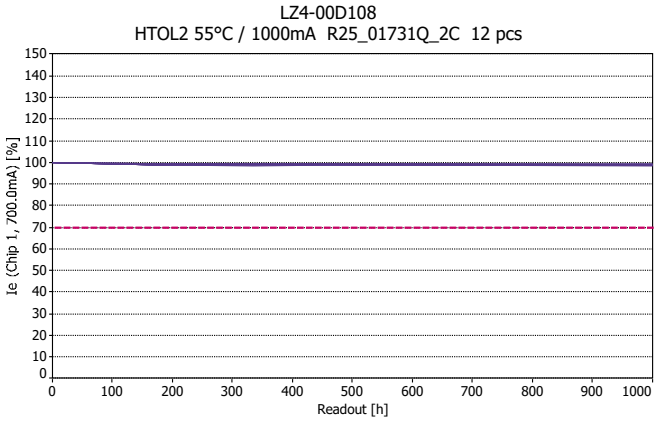
HTOL2 55°C/1000mA
Lot A – Violet Chip

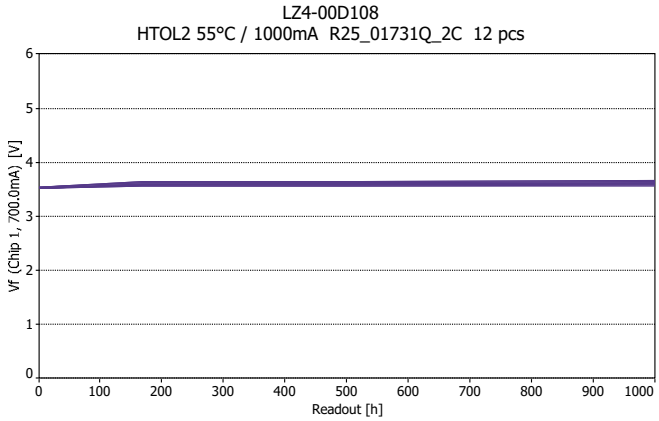


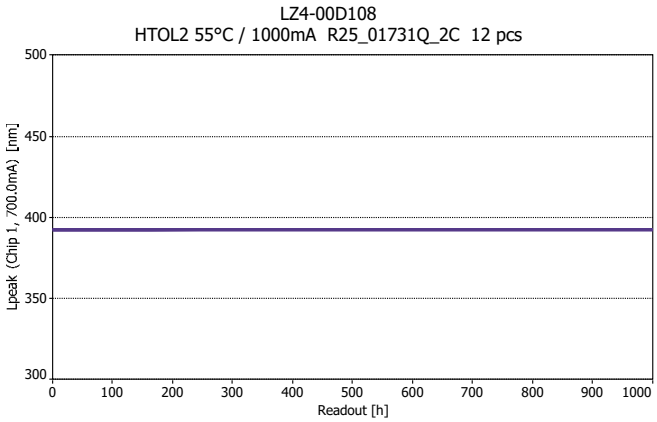




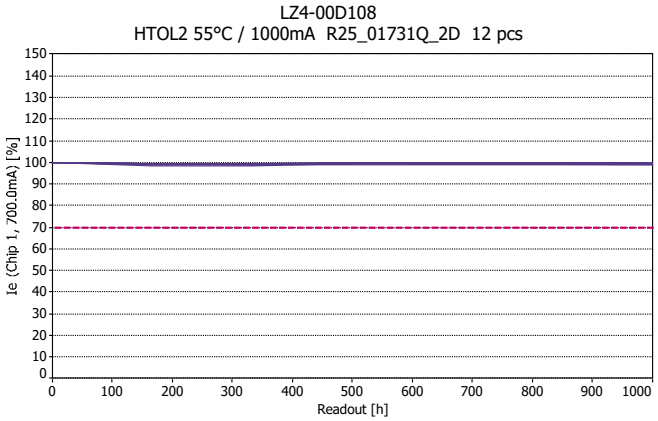
Lot B – Violet Chip

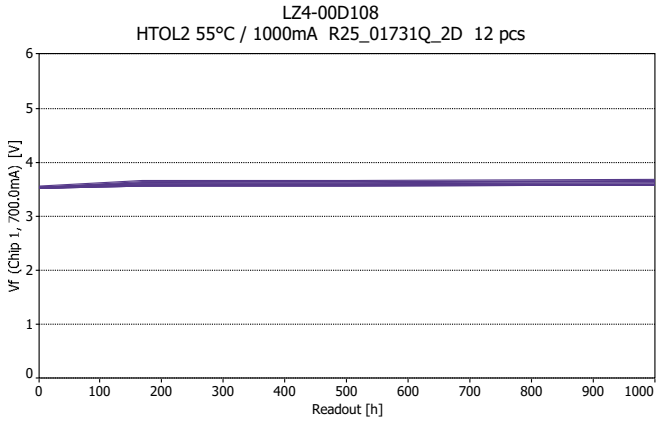


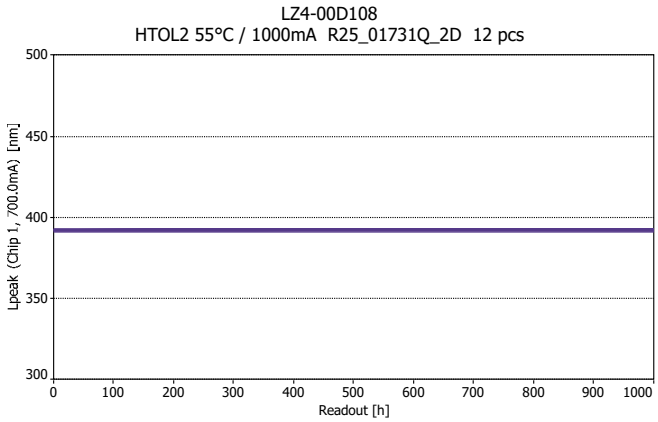




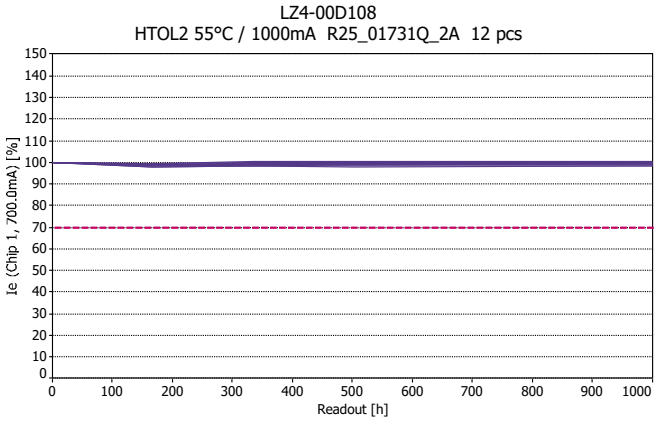
Lot C – Violet Chip

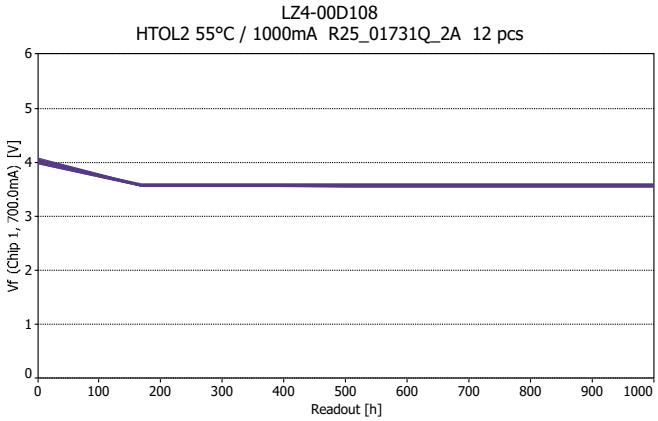


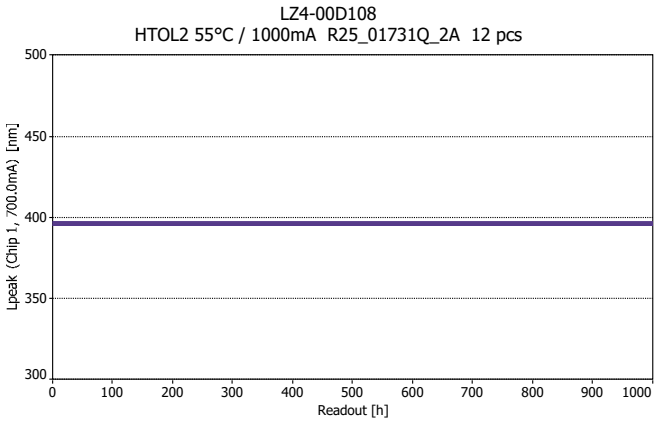




Lot D – Violet Chip (Control Lot)







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