OSRAM Infonote

AO-IN-2022-040-I

Optimization of doping level for KY DMLNS31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Published by ams-OSRAM AG
Tobelbader Strasse 30, 8141 Premstaetten, Austria
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ams-osram.com

15.03.2023

Dear Customer,

please find attached the **OSRAM Infonote**:

AO-IN-2022-040-I

Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Please take note, that this customer notification is for info only and does not require customer approval.

Objective:	Optimization of Phosphor doping level
Affected products:	KY DMLN31.FY and KY DMLS31.FY
Reason for change:	Doping level of volume converter material is optimized to achieve higher brightness and improved color over temperature behavior
Description of change:	New status Optimized Phosphor doping level based on the same Phosphor system
Time schedule:	Updated datasheets are available
Assessment:	No change in fit, form, function and reliability of the affected products
Documentation:	Customer information package: 2_cip_AO-IN-2022-040-I

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Customer information package

OSR OS Q CQM AM
15.03.2023

Agenda

AO-IN-2022-040-I
Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Reason for change

Item	Description
Optimization of doping level	Doping level of volume converter material is optimized to achieve higher brightness and improved color over temperature behavior.

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Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Description of change: KY DMLN31.FY

Item	Current status	New status
Ordering information		
Brightness Groups		

Current status – Ordering information

Type	Luminous Flux [1] I_F = 150 mA Φ_V	Ordering Code
KY DMLN31.FY-7G7H-5F-8E8G	22.4 ... 40.0 lm	Q65111A6199

New status – Ordering information

Type	Luminous Flux [1] I_F = 150 mA Φ_V	Ordering Code
KY DMLN31.FY-5H8H-5F-8E8G	28.0 ... 45.0 lm	Q65113A6149

Current status – Brightness Groups

Group	Luminous Flux [1] I_F = 150 mA min. Φ_V	Luminous Flux [1] I_F = 150 mA max. Φ_V	Luminous Intensity [6] I_F = 150 mA typ. I_v
7G	22.4 lm	25.0 lm	7.8 cd
8G	25.0 lm	28.0 lm	8.7 cd
5H	28.0 lm	31.5 lm	9.8 cd
6H	31.5 lm	35.5 lm	11.1 cd
7H	35.5 lm	40.0 lm	12.5 cd

New status – Brightness Groups

Group	Luminous Flux [1] I_F = 150 mA min. Φ_V	Luminous Flux [1] I_F = 150 mA max. Φ_V	Luminous Intensity [6] I_F = 150 mA typ. I_v
5H	28.0 lm	31.5 lm	9.8 cd
6H	31.5 lm	35.5 lm	11.1 cd
7H	35.5 lm	40.0 lm	12.5 cd
8H	40.0 lm	45.0 lm	14.0 cd

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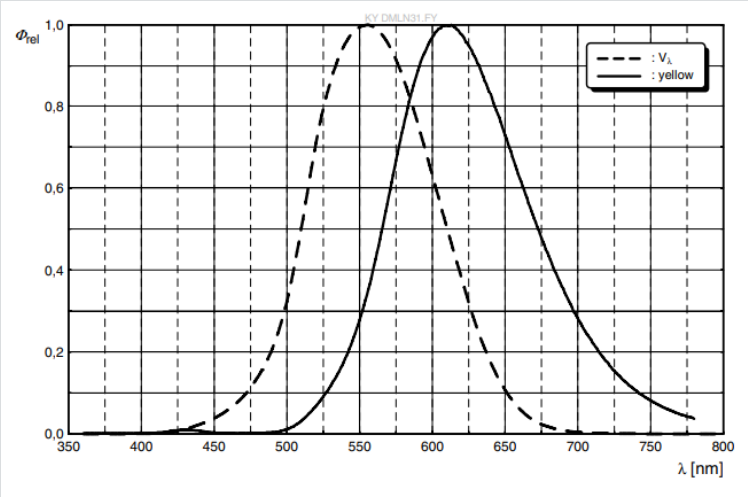
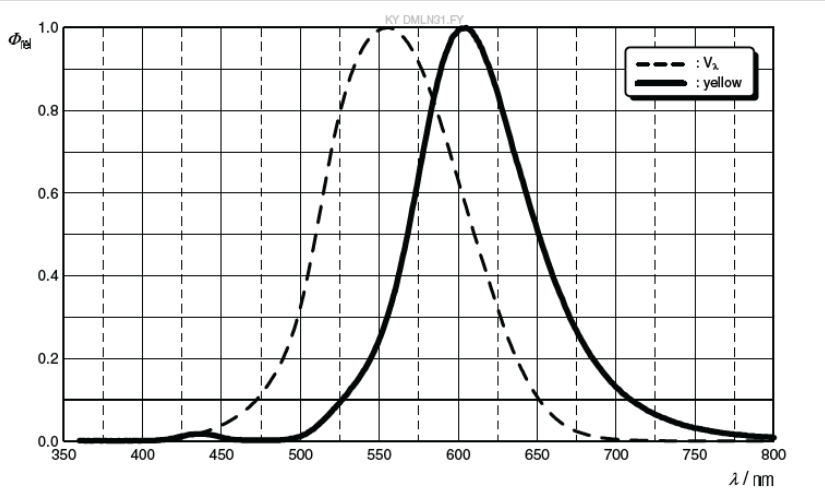
Description of change: KY DMLN31.FY

Item	Current status	New status
Radiation Characteristics		

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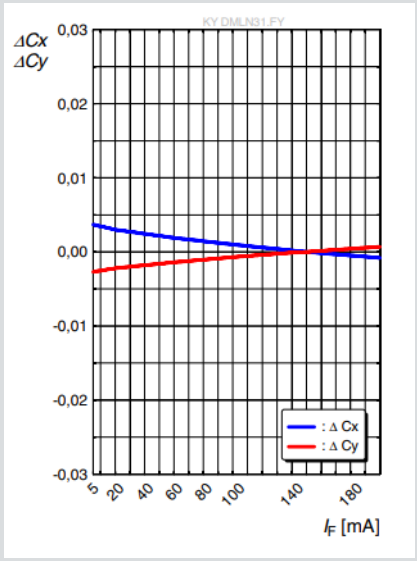
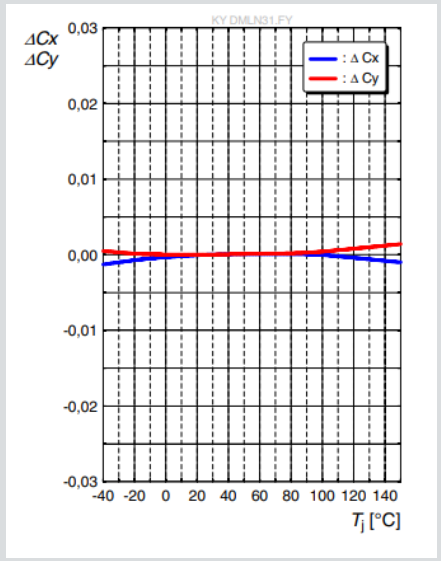
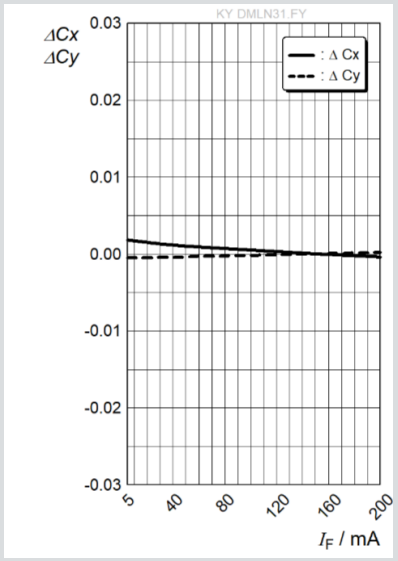
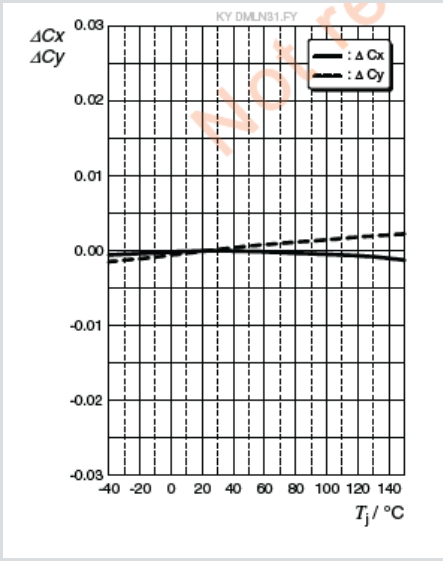
Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Description of change: KY DMLN31.FY

Item	Current status	New status
Chromaticity Coordinate Shift	 	 

AO-IN-2022-040-I
Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Description of change: KY DMLS31.FY

Item	Current status	New status
Ordering information		
Brightness Groups		

Current status – Ordering information

Type	Luminous Flux [1] I_F = 600 mA Φ_V	Ordering Code
KY DMLS31.FY-Z8KF8-5F-8E8G	106 ... 180 lm	Q65112A9478

New status – Ordering information

Type	Luminous Flux [1] I_F = 600 mA Φ_V	Ordering Code
KY DMLS31.FY-Z6L6-5F-8E8G	125 ... 190 lm	Q65113A6148

Current status – Brightness Groups

Group	Luminous Flux [1] I_F = 600 mA min. Φ_V	Luminous Flux [1] I_F = 600 mA max. Φ_V	Luminous Intensity [6] I_F = 600 mA typ. I_v
8KF	106 lm	118 lm	37 cd
5L	112 lm	125 lm	39 cd
5LF	118 lm	132 lm	41 cd
6L	125 lm	140 lm	44 cd
6LF	132 lm	149 lm	46 cd
7L	140 lm	159 lm	49 cd
7LF	149 lm	169 lm	53 cd
8L	159 lm	180 lm	56 cd

New status – Brightness Groups

Group	Luminous Flux [1] I_F = 600 mA min. Φ_V	Luminous Flux [1] I_F = 600 mA max. Φ_V	Luminous Intensity [6] I_F = 600 mA typ. I_v
6L	125 lm	140 lm	44 cd
6LF	132 lm	149 lm	46 cd
7L	140 lm	159 lm	49 cd
7LF	149 lm	169 lm	53 cd
8L	159 lm	180 lm	56 cd
8LF	169 lm	190 lm	59 cd

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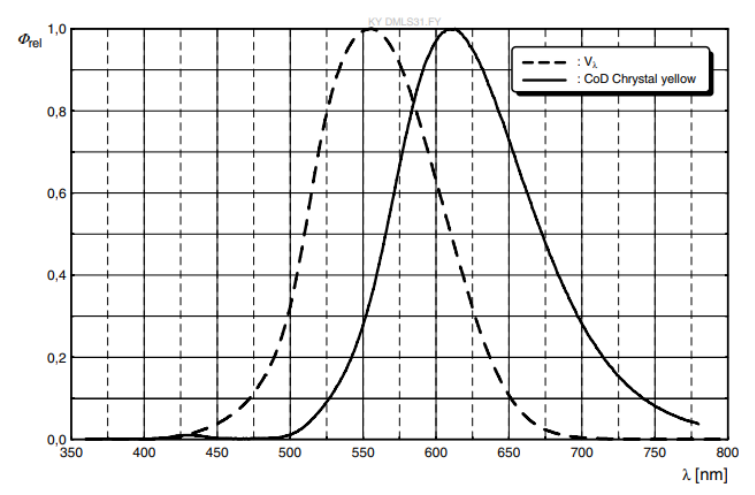
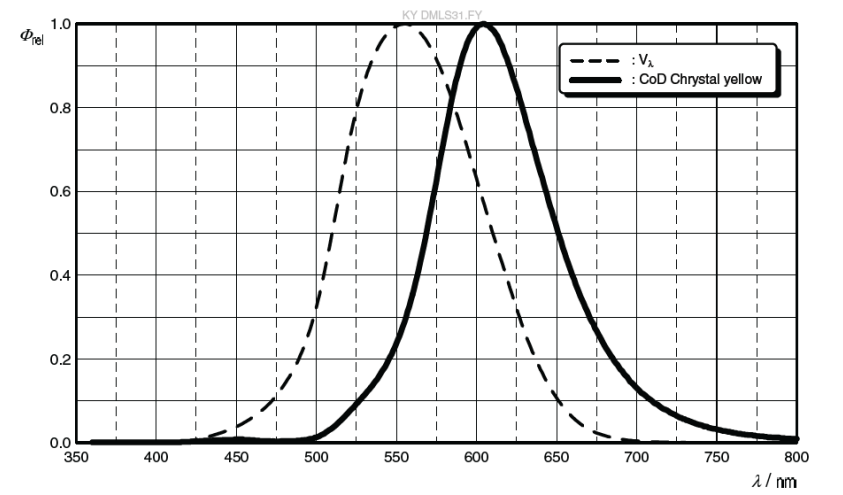
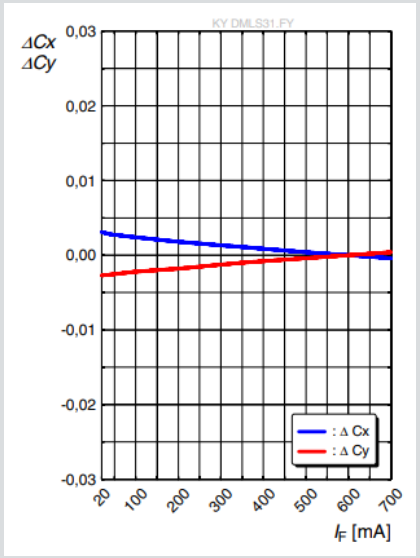
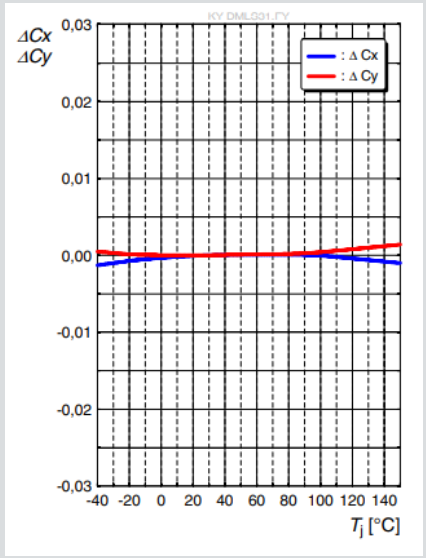
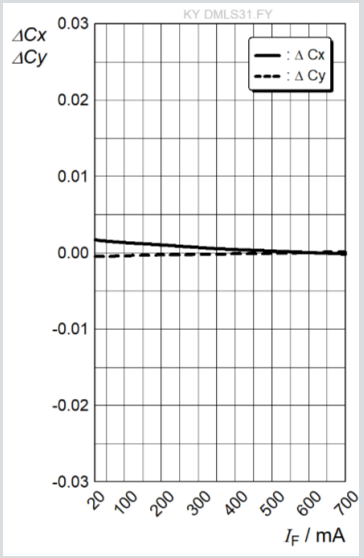
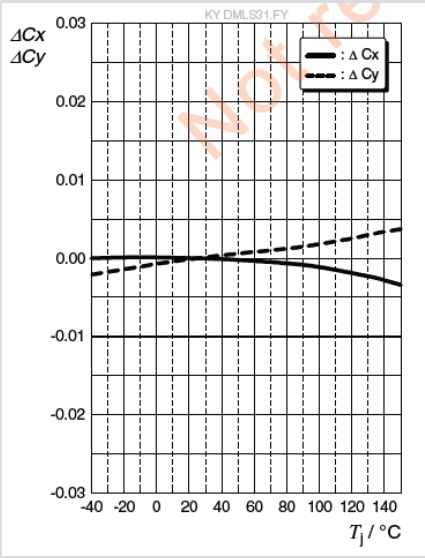
Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Description of change: KY DMLS31.FY

Item	Current status	New status
Radiation Characteristics		

AO-IN-2022-040-I
Optimization of doping level for KY DMLN31.FY and KY DMLS31.FY (SYNIOS P2720) Phosphor

Description of change: KY DMLS31.FY

Item	Current status	New status
Chromaticity Coordinate Shift	 	 

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Time schedule

Time schedule	
Intended Start of Introduction	Updated datasheets are available (new version: 1.8)

Sensing is life

Material (Q-no.)	Q Description	Device Family	Brand	Sub Brand	P1 Product line	P2 Sub product line	Status
Q65112A6242	KY DMLN31.FY-5H6H-5F-8E8G-150-R18-HAN	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A8887	KY DMLN31.FY-5H6H-5F-8E8G-150-R18-VAR	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A8381	KY DMLN31.FY-5H6H-5F-8E8G-150-R18-Z-XX	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A3968	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-AL	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A2722	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-GW	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A7597	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-HE	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A5769	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-HV	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A5290	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-LM	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A5927	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-MAG	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A1949	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-SMR	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A0004	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-TAY	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3144	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-VAR	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3452	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-VEN	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A8798	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-XIN	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A4161	KY DMLN31.FY-5H7H-5F-8E8G-150-R18-Z	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A0385	KY DMLN31.FY-6H7H-5F-8E8G-150-R18-HAN	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A6341	KY DMLN31.FY-6H7H-5F-8E8G-150-R18-Z-HE	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A8104	KY DMLN31.FY-6H7H-5F-8E8G-150-R18-Z-XX	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A0592	KY DMLN31.FY-7G5H-5F-8E8G-150-R18-HE	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2431	KY DMLN31.FY-7G5H-5F-8E8G-150-R18-HV	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65111A6199	KY DMLN31.FY-7G7H-5F-8E8G-150-R18	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A7558	KY DMLN31.FY-7G7H-5F-8E8G-150-R18-Z-OL	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65111A9731	KY DMLN31.FY-8G5H-5F-1-150-R18-Z	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3772	KY DMLN31.FY-8G6H-5F-8E8F-150-R18	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2710	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-HE	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2570	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-HV	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2123	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-LM	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3143	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-VAR	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3957	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-VEN	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2394	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-VL	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65111A9343	KY DMLN31.FY-8G6H-5F-8E8G-150-R18-XX	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A1018	KY DMLN31.FY-8G7H-5F-8E8F-150-R18-XX	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A7052	KY DMLN31.FY-8G7H-5F-8E8G-150-R18-SMR	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A7171	KY DMLS31.FY-5L3-5F-8E8G-600-R18-HV	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A4706	KY DMLS31.FY-5L3-5F-8E8G-600-R18-VL	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3375	KY DMLS31.FY-5L7L-5F-8E8G-600-R18	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A0690	KY DMLS31.FY-6L2-5F-8E8G-600-R18-XX	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A9797	KY DMLS31.FY-6L3-5F-8E8G-600-R18	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A5299	KY DMLS31.FY-6L3-5F-8E8G-600-R18-LM	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A8496	KY DMLS31.FY-6L3-5F-8E8G-600-R18-XIN	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A9516	KY DMLS31.FY-6L3-5F-8E8G-600-R18-Z-ZKW	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A7820	KY DMLS31.FY-6L8L-5F-8E8G-600-R18-Z-AL	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3771	KY DMLS31.FY-6LF2-5F-8E8G-600-R18-HAN	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A1605	KY DMLS31.FY-6LF2-5F-8E8G-600-S-XX	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A4881	KY DMLS31.FY-6LF7LF-5F-8E8G-600-R18-VL	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2450	KY DMLS31.FY-7KF5LF-5F-8E8G-600-R18-VAR	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65111A6197	KY DMLS31.FY-7KF7L-5F-8E8G-600-R18	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2117	KY DMLS31.FY-8KF3-5F-8E8G-600-R18-HV	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A2430	KY DMLS31.FY-8KF6LF-5F-8E8G-600-R18	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A3911	KY DMLS31.FY-Z6L5-5F-8E8G-600-R18-VL	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65113A3936	KY DMLS31.FY-Z6L5-5F-8E8G-600-R18-XX	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A4952	KY DMLS31.FY-Z8KF5-5F-8E8G-600-R18-VAR	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A4431	KY DMLS31.FY-Z8KF5-5F-8E8G-600-R18-VL	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A3956	KY DMLS31.FY-Z8KF6-5F-8E8G-600-S	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A9478	KY DMLS31.FY-Z8KF8-5F-8E8G-600-R18	KY DMLS31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	10
Q65112A7910	KY DMLN31.FY-8G5H-5F-8E8G-150-R18-XIN	KY DMLN31_Fx	SYNIOS	P2720	Automotive	Automotive exterior	1