Eight Discipline Report (8D Report)

To:	8D report No.:
From:：	RMA claim No.:
CC：	Chicony Power P/N: **N025A001Q-CT01**
	Customer P/N:
Submit date: **2020/11/30**	Product description:
Receive date: **2020/11/30**	
Subject：二極體高溫漏電流導致電路異常運作, 二極體漏電流, 電路異常, 高溫. [Diode]	

D1.) 問題解決成員:Use Team Approach

主持者 (Team Leader)：

內部成員 (Internal Team Members):

外部成員 (External Team Member):

D2.)問題說明:Problem Description:

(**Note**: Use **who**, **what**, **when**, **where**, **why**, **how**, **how many** to specify the Customer's problem.)

LED output current becomes larger in high temperature environment.

D3.)內部或客戶的暫時解決辦法及實施日期:Implement and Verify Containment Action:

(Note: Internal / external containment action effectiveness and date.**)**

1. **CPT got this PSU from customer for further analysis.**
2. **CPT send 1pc PSU to customer for exchange.**

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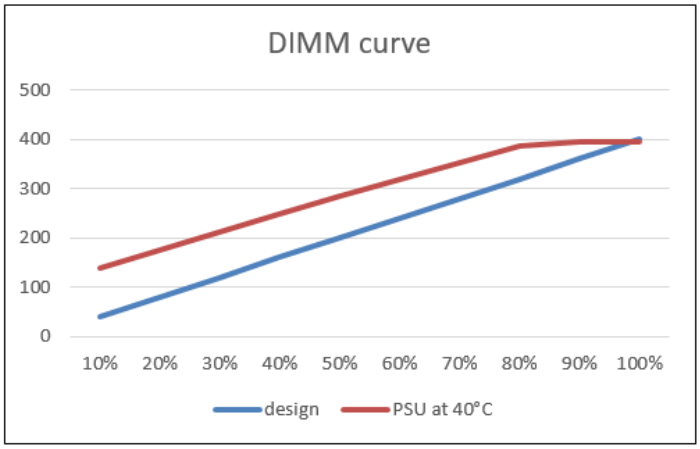
D4.)不良原因確認: Define and Verify Root Causes:

(Note: Identify and verify all suspect causes, which needs explain why the problem occurred.**)**

LED driver test condition 40℃ ambient and measure output current of dimming.

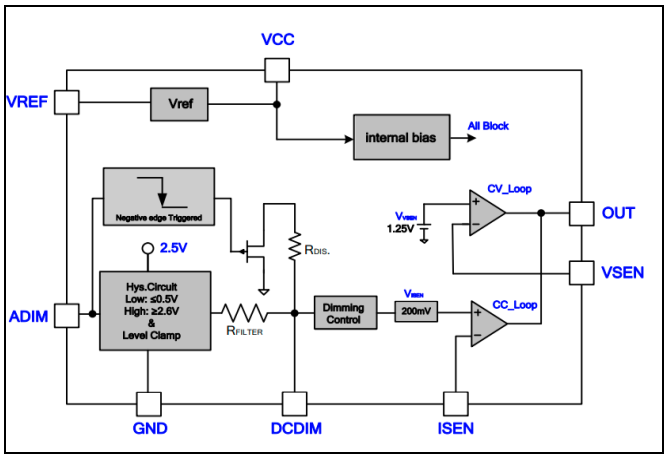
Output current becomes larger in high temperature environment.

MCU	LED output(mA)	
DIMM(%)	design	measure
10%	40	139
20%	80	176
30%	120	212
40%	160	248
50%	200	284
60%	240	319
70%	280	354
80%	320	388
90%	360	394
100%	400	394



LED dimming is provided by the MCU with a PWM signal to the IC ADIM pin.

The IC will internally rectify the ADIM signal to DCDIM.



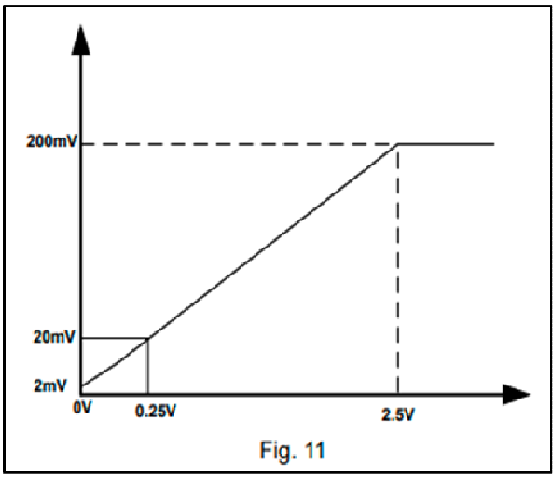
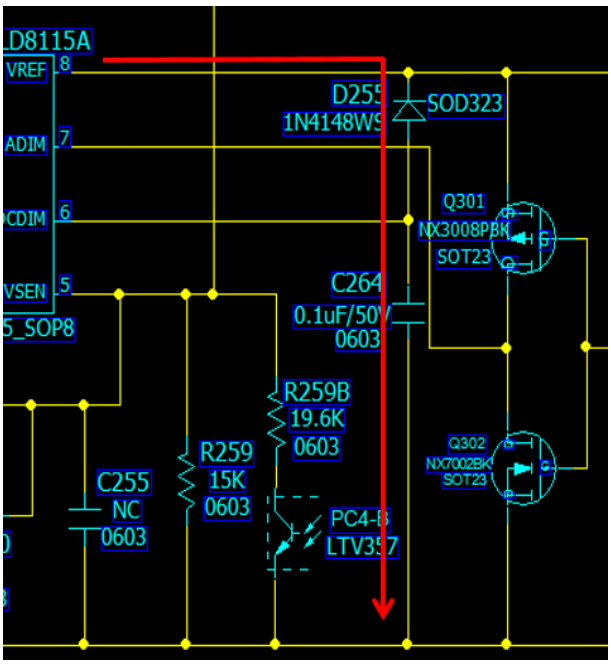
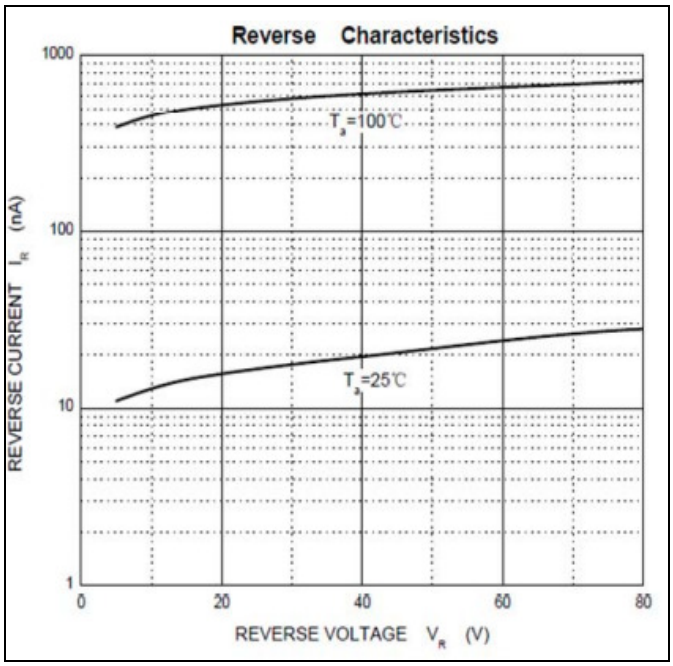


Fig. 11

At high temperatures, the diode will generate a large leakage current and from Vref to charge the DCDIM pin.



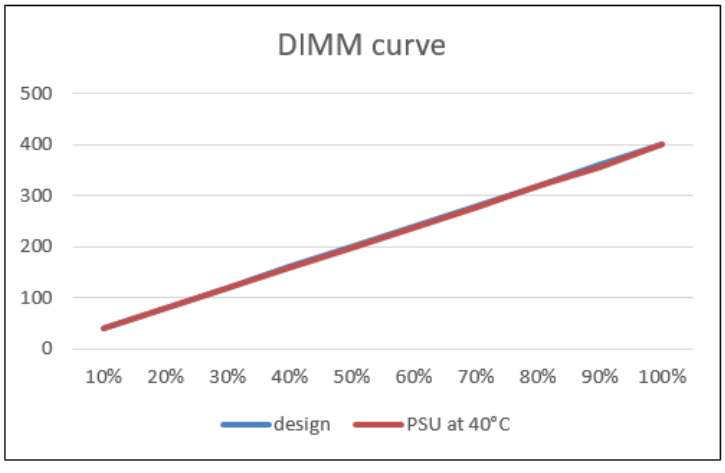


D5.)改善措施:Corrective Action Verification:

(Note: Be make sure the corrective actions is effective in process as well as able to fix the customer complaint problem**)**

Remove D255 and retest at high temperature, result pass.

MCU	LED output(mA)	
DIMM(%)	design	measure
10%	40	40.9
20%	80	80.5
30%	120	120
40%	160	158
50%	200	198
60%	240	238
70%	280	278
80%	320	318
90%	360	357
100%	400	400



D6.)改善措施實施日期:Implement Permanent Corrective Actions: **(Note**: Be provide the phase-in date or lot# of corrective actions **implementation** in process**)**
immediately
D7.)預防再發生措施:Prevent Recurrence: **(Note:** Modified the management, operating systems, practices, and procedures to prevent recurrence for the problems as well as lessons learned cases**.)**
Remove diode D255. 線路設計皆要考量 diode 漏電流造成的相關影響
D8.)確認並感謝問題解決成員:Check and Congratulate the Team: **(Note:** Recognize the collective efforts of the team.**)**
Thanks to you all！！！

Signature **Team Leader**:	
	Name – Title
Signature by Approver:	
	Name-Title