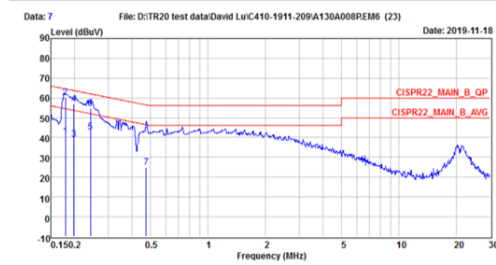


Eight Discipline Report (8D Report)

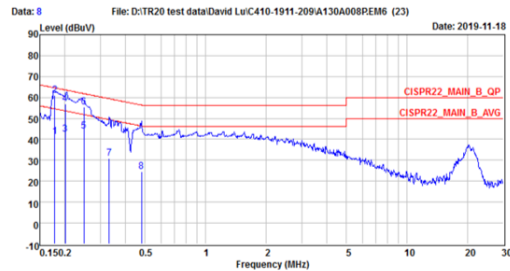
To: Dell	8D report No.: N/A
From: : Chicony Power Technology	RMA claim No.: N/A
CC : CPT DQA	Chicony Power P/N: N/A
	Customer P/N: N/A
Submit date: 2019/11/19	Product description: Dell E4 130W
Receive date: 2019/11/08	
Subject : EMI – Conduction Issue of E4 130W	
D1.) 問題解決成員:Use Team Approach	
主持者 (Team Leader) : Benson_Chen 內部成員 (Internal Team Members): CQS: Candy_Zhu PM: Ivy_Tsai Sales: Steve_Kuo RD: Dean_Pan 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.)	
Time: 2019/11/08 Location: CPT DQA Work Orders: T1946021 The fail condition is 230Vac input and full load condition and the test result -3.63dB at 170kHz. (Dell spec is <-6dB for development stage)	



Site : TR20
Condition : CISPR22 MAIN_B_QP ESH2-25 LINE
Power : 230V/50Hz
Operator : David Lu T25 H65 P1020
EUTModel : A130A008P
Test_Mode :
Exerciser_Program:
Memo :

	Freq	Level	Factor	Read	Limit	Over	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.179	40.62	10.29	30.33	54.55	-13.93	LINE	Average
2	0.179	60.39	10.29	50.10	64.55	-4.16	LINE	QP
3	0.198	39.15	10.29	28.86	53.71	-14.56	LINE	Average
4	0.198	57.04	10.29	46.75	63.71	-6.67	LINE	QP
5	0.242	42.63	10.29	32.34	52.03	-9.40	LINE	Average
6	0.242	54.74	10.29	44.45	62.03	-7.29	LINE	QP
7	0.474	24.92	10.30	14.62	46.45	-21.53	LINE	Average

Line



Site : TR20
Condition : CISPR22 MAIN_B_QP ESH2-25 NEUTRAL
Power : 230V/50Hz
Operator : David Lu T25 H65 P1020
EUTModel : A130A008P
Test_Mode :
Exerciser_Program:
Memo :

	Freq	Level	Factor	Read	Limit	Over	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.178	51.24	10.28	30.96	54.57	-13.33	NEUTRAL	Average
2	0.178	60.34	10.28	50.66	64.57	-8.63	NEUTRAL	QP
3	0.200	42.45	10.28	32.17	53.59	-11.14	NEUTRAL	Average
4	0.200	57.09	10.28	46.81	63.59	-6.50	NEUTRAL	QP
5	0.248	43.89	10.28	33.61	51.83	-7.94	NEUTRAL	Average
6	0.248	55.42	10.28	45.14	61.83	-6.41	NEUTRAL	QP
7	0.332	31.01	10.28	20.73	49.40	-18.39	NEUTRAL	Average
8	0.479	24.69	10.29	14.40	46.36	-21.67	NEUTRAL	Average

Neutral

D3.)内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 informed this issue to Dell and Wistron

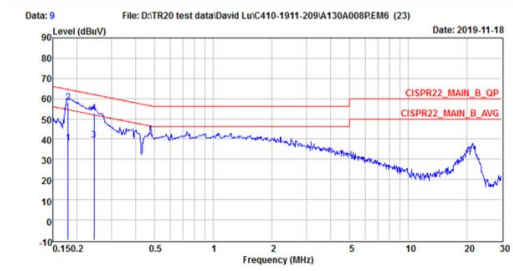
2. Sorting samples for ODM to verify function.

Date:2019/11/09

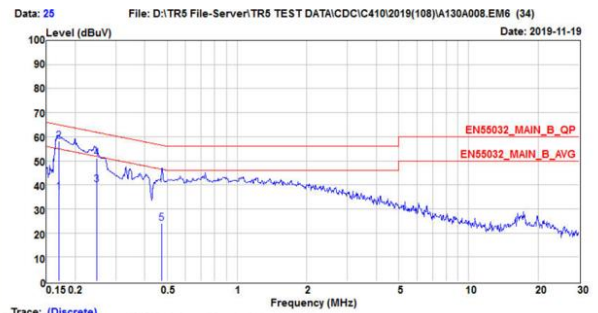
D4.)不良原因確認: Define and Verify Root Causes:

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

- Reconfirm this adapter, it's fail of CE test as same as factory feedback.
- After removed the glue as below picture, the EMI could be improved to -6.36dB. The glue had contact Pi choke (L101) & PFC choke (L2) and PFC bead (B101). It cause EMI noise can bypass L101 to make EMI margin issue.



- Change glue location as below picture to avoid glue contact PFC choke and PFC bead.



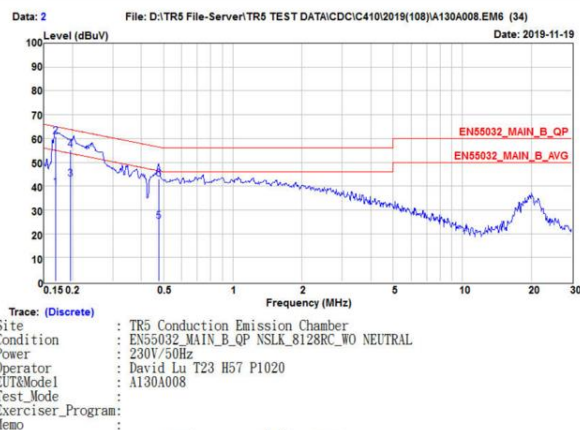
➤ Conclusion:

Proven effectiveness through repeated verification and replicable experiments

Before



After



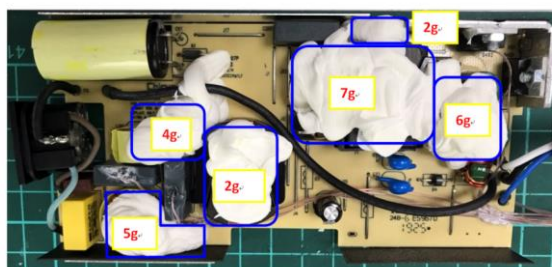
D5.)改善措施:Corrective Action Verification:

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

Correct WI to prevent the occurrence of problematic products again.

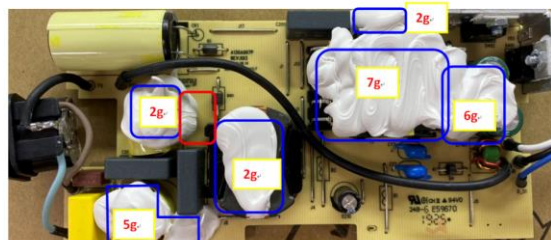
b、點膠後重量與位置：

藍色實線：標示為需從底部元件點滿膠至接觸上 Shielding 的點膠範圍。
 紅色虛線：禁止點膠區域或禁只碰至上 Shielding 區域。



b、點膠後重量與位置：

藍色實線：標示為需從底部元件點滿膠至接觸上 Shielding 的點膠範圍。
 紅色實線：禁止點膠區域。



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)

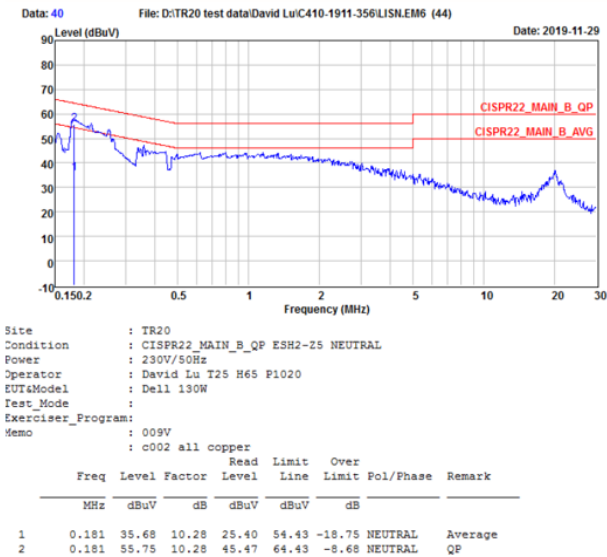
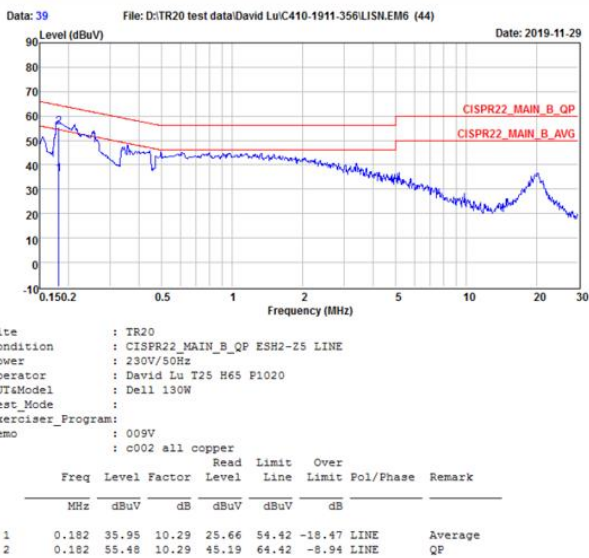
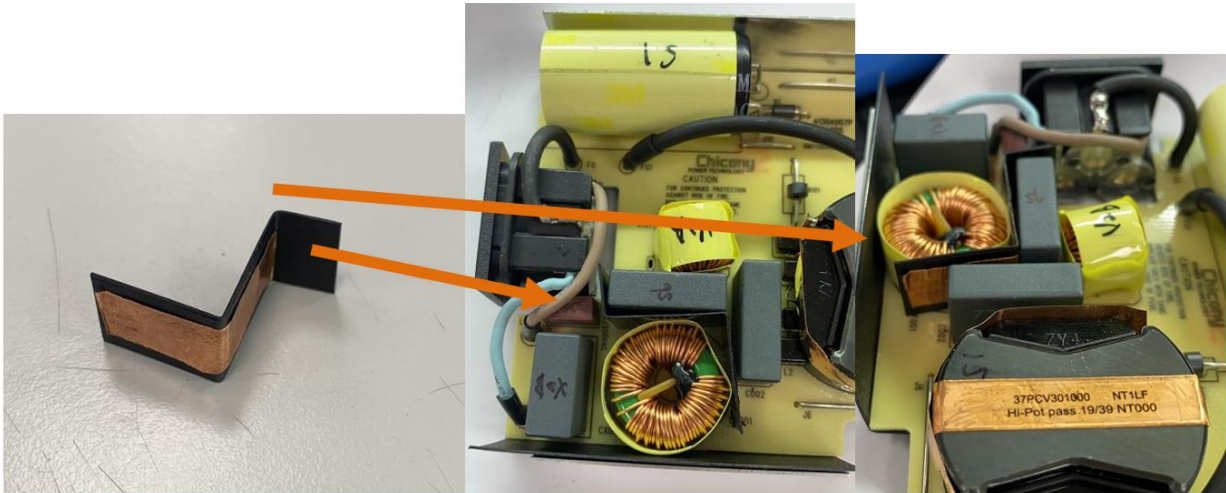
immediately

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.)

In order to strengthen the avoidance of EMI, there is also the issue of coupling.

We create a mylar shielding component and place between components to avoid coupling.



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 ! ! !

CQS: Candy_Zhu Sales: Steve_Kuo RD: Dean_Pan PM: Ivy_Tsai

Signature	Benson_Chen
Team Leader:	
Signature by Approver:	Hunter_Peng