Report No.: 10250007

Test Date: 2025/10/25 16:31:09

SI Test Report

Customer Name	
Product Model NO.	8654 8i-MCIO 8X
Model Description	16P 30AWG 85Ohm 1m Slim line _8X
Test Condition	Equipment: E5071C Keysight 300kHz-20GHz RF Switch: HFMS-72,Matrix Switch DC - 40GHz,72CH Summery: Sweep 0.01GHz - 20GHz,Step 10MHz,BWID 50KHz,Rise Time 40Ps Text Fixture:MCIO_2X_0709 Environment: 23.7℃,51.8%RH
Test Specification	PCIE4.0_85ohm_AQ_F
Test Result	**PASS**
Test Engineer	LG

Test Item:		Parameter	Specification	Test Result
1).	SDD21	Insertion Loss	0.01 to 8.00 GHz: -8 dB; 8.00 to 12.00 GHz: -12 dB;	OK
2).	SDD11	Differential mode Return Loss	0.01 to 2.00 GHz: -10 dB; 2.00 to 8.00 GHz: -12+[F] dB; 8.00 to 12.00 GHz: -4 dB;	OK
3).	SDD22	Differential mode Return Loss	0.01 to 2.00 GHz: -10 dB; 2.00 to 8.00 GHz: -12+[F] dB; 8.00 to 12.00 GHz: -4 dB;	OK
4).	SCD21	Differential to common-mode conversion loss	0.01 to 12.00 GHz: -20+0.667*[F] dB;	OK
5).	SCC22	Common mode return loss	0.01 to 12.00 GHz: -2 dB;	OK
6).	SCD21-SDD21	Frequency Domain Jitter	0.01 to 12.00 GHz: -10 dB;	OK
7).	TDD11	Differential Impedance	1.00 to 1.40 ns: 97.75 Ohm; 1.40 to 3.00 ns: 93.5 Ohm; 1.00 to 1.40 ns: 72.25 Ohm; 1.40 to 3.00 ns: 76.5 Ohm;	OK
8).	TDD22	Differential Impedance	1.00 to 1.40 ns: 97.75 Ohm; 1.40 to 3.00 ns: 93.5 Ohm; 1.00 to 1.40 ns: 72.25 Ohm; 1.40 to 3.00 ns: 76.5 Ohm;	OK
9).	NEXT	Near end crosstalk	0.01 to 0.12 GHz: -55 dB; 0.12 to 12.00 GHz: -36.5+12.5*Log10([F]/4) dB;	OK
10).	FEXT	Far end crosstalk	0.01 to 0.15 GHz: -57 dB; 0.15 to 12.00 GHz: -36+15*Log10([F]/4) dB;	OK

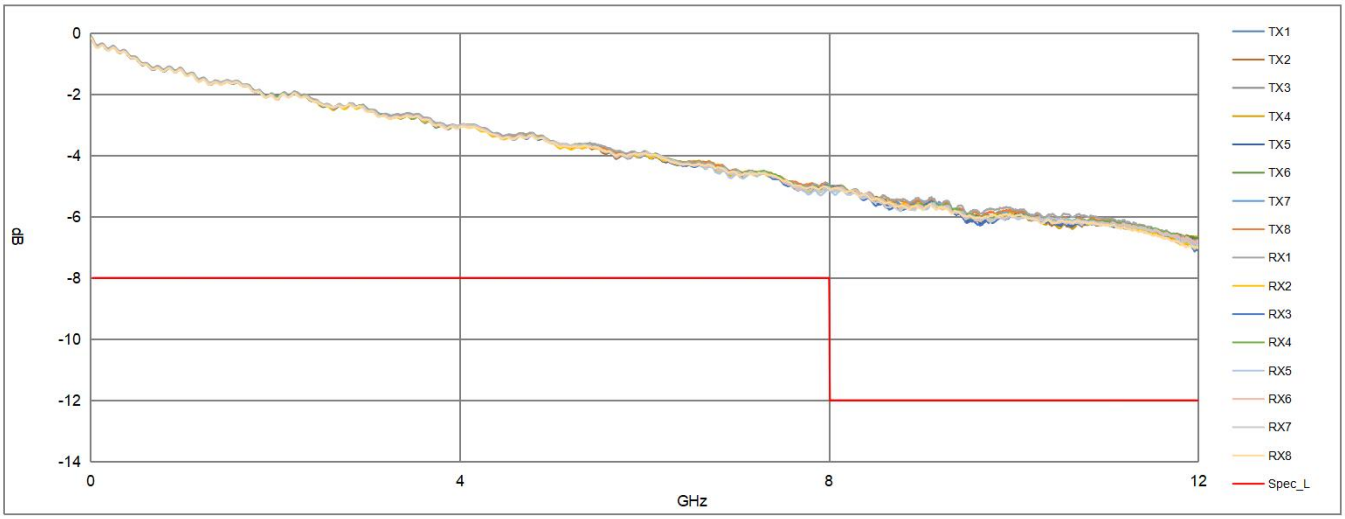
Notes：

Approved By: 颜家帮

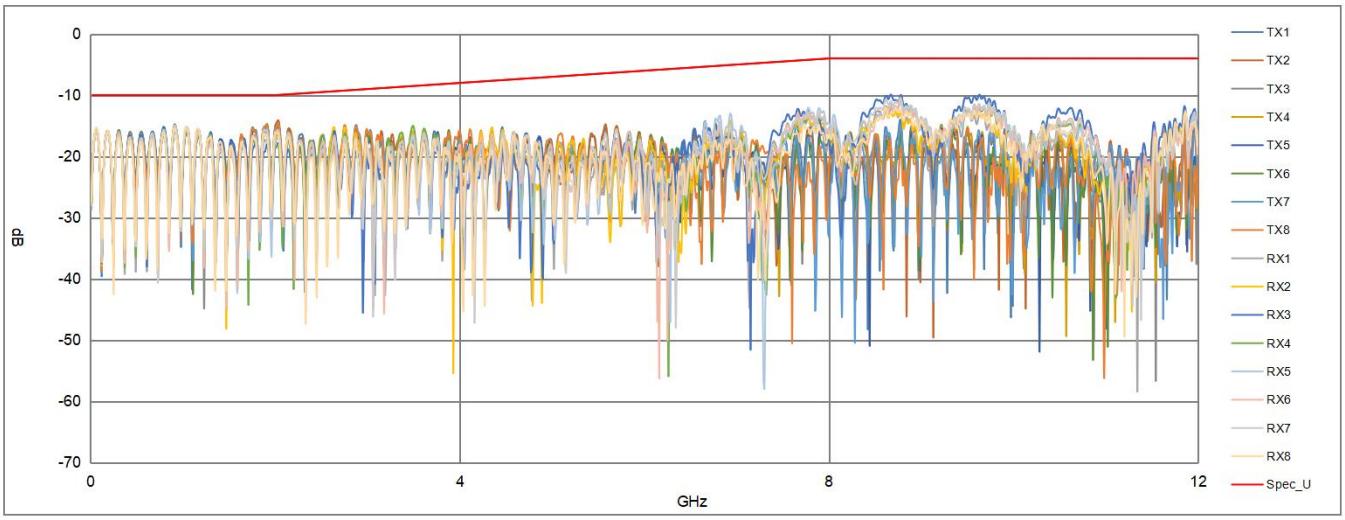
Pair NO.	SDD21 Unit:(dB)																Result
	4G	6G	8G	10G	12G												
TX1	-3.12	-4.11	-5.18	-6.04	-7.13												OK
TX2	-3.08	-4.10	-5.14	-6.18	-6.94												OK
TX3	-3.14	-4.01	-5.12	-6.17	-6.69												OK
TX4	-3.09	-3.97	-5.09	-6.22	-6.71												OK
TX5	-3.11	-4.07	-5.17	-6.24	-6.77												OK
TX6	-3.13	-4.03	-5.03	-6.12	-6.72												OK
TX7	-3.09	-4.00	-5.04	-6.06	-6.90												OK
TX8	-3.10	-4.03	-5.00	-6.02	-6.85												OK
RX1	-3.03	-3.94	-5.04	-5.90	-6.80												OK
RX2	-3.12	-4.06	-5.20	-6.05	-7.06												OK
RX3	-3.10	-4.07	-5.14	-6.29	-6.92												OK
RX4	-3.11	-4.03	-5.14	-6.07	-6.91												OK
RX5	-3.09	-4.05	-5.30	-6.10	-6.91												OK
RX6	-3.10	-4.04	-5.15	-6.15	-6.86												OK
RX7	-3.09	-4.07	-5.19	-6.18	-7.04												OK
RX8	-3.14	-4.01	-5.10	-6.05	-7.03												OK
Spec	-8.00	-8.00	-8.00	-12.00	-12.00												N/A
Worst	-3.14	-4.11	-5.30	-6.29	-7.13												OK

Pair NO.	Mating Area-L		Cable Area-L		Mating Area-R		Cable Area-R		Result
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
TX1	85.69	83.99	86.44	85.52	87.27	81.93	86.55	84.25	OK
TX2	86.19	84.97	86.16	85.46	87.79	82.28	86.51	84.79	OK
TX3	86.57	85.46	86.06	85.57	88.12	82.24	86.23	84.51	OK
TX4	87.01	85.56	86.16	85.55	87.58	82.26	86.42	84.86	OK
TX5	86.62	84.68	85.82	85.33	87.45	82.63	86.16	84.65	OK
TX6	86.60	85.19	86.02	85.28	87.64	81.77	86.26	84.62	OK
TX7	86.43	85.19	86.19	85.34	87.35	81.60	86.30	84.77	OK
TX8	87.94	85.43	86.22	85.61	86.69	82.23	86.66	84.45	OK
RX1	85.88	84.32	85.11	84.27	86.53	81.64	86.22	84.03	OK
RX2	85.51	84.74	85.79	85.19	86.26	81.46	86.00	84.22	OK
RX3	85.67	84.46	85.89	85.35	88.05	83.65	86.07	84.48	OK
RX4	85.58	84.58	85.87	85.02	86.76	82.70	85.93	84.27	OK
RX5	85.64	84.61	86.24	85.64	87.57	83.13	86.43	84.57	OK
RX6	86.02	85.26	86.14	85.33	87.26	82.97	86.25	84.67	OK
RX7	86.67	85.29	85.93	85.17	88.93	83.01	85.99	84.66	OK
RX8	85.95	84.48	84.83	84.47	86.93	82.75	85.05	83.96	OK
Spec	97.75	72.25	93.50	76.50	97.75	72.25	93.50	76.50	N/A
Worst	87.94	83.99	86.44	84.27	88.93	81.46	86.66	83.96	OK

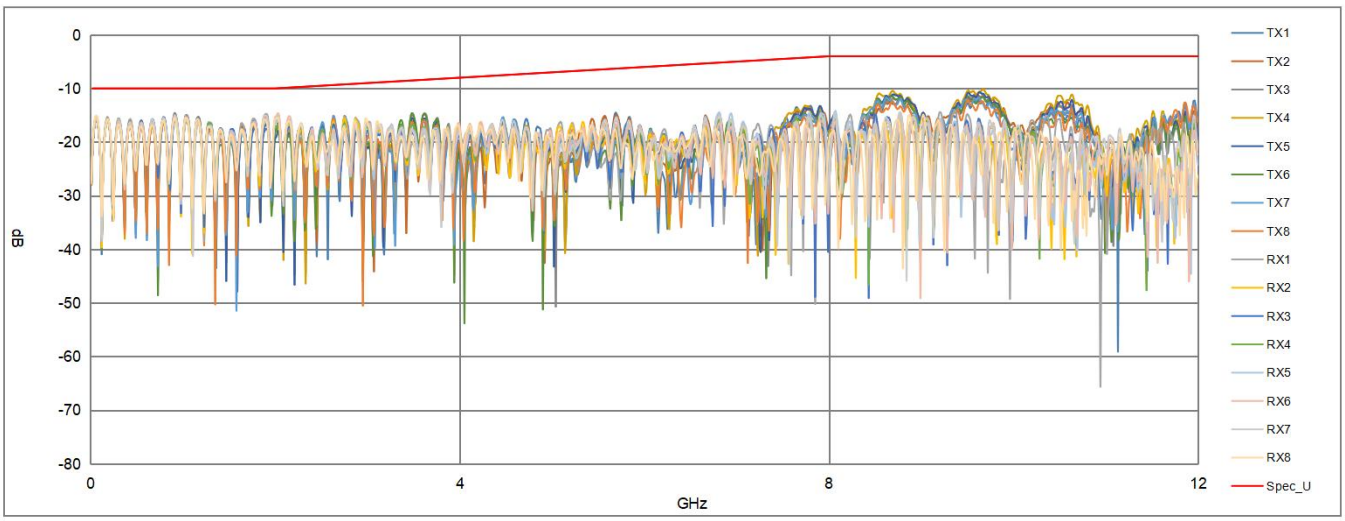
1). SDD21



2). SDD11



3). SDD22



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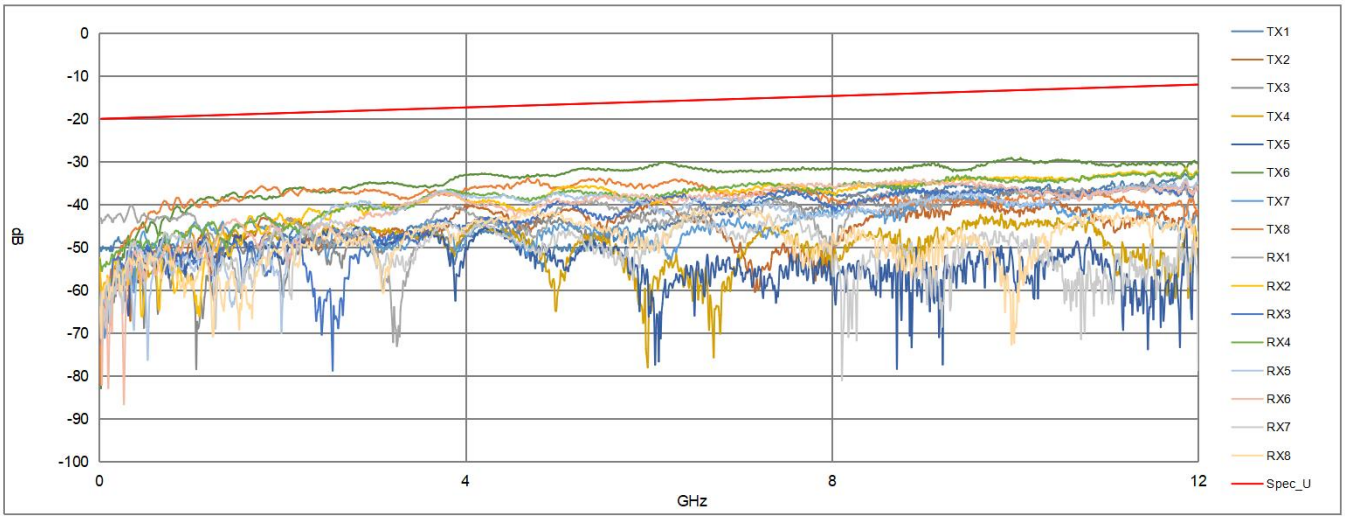
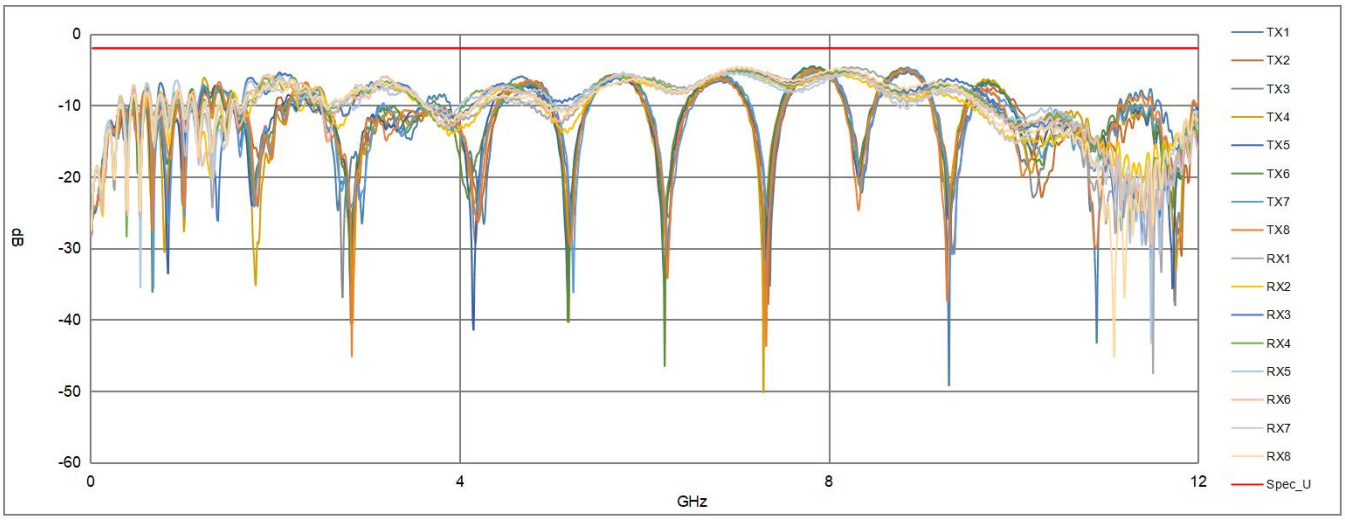
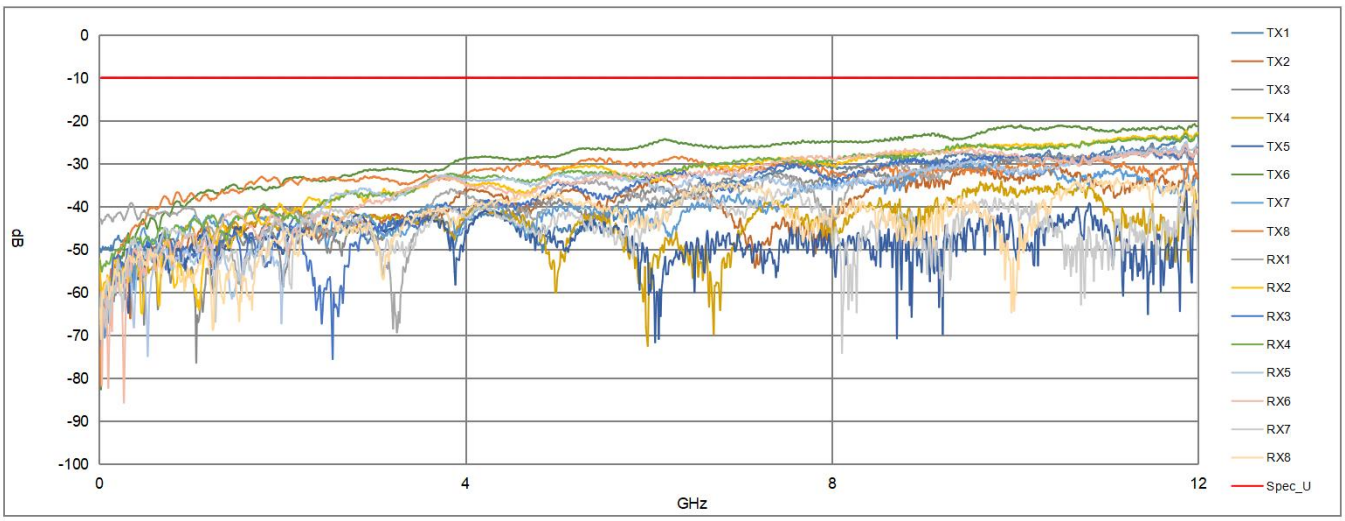


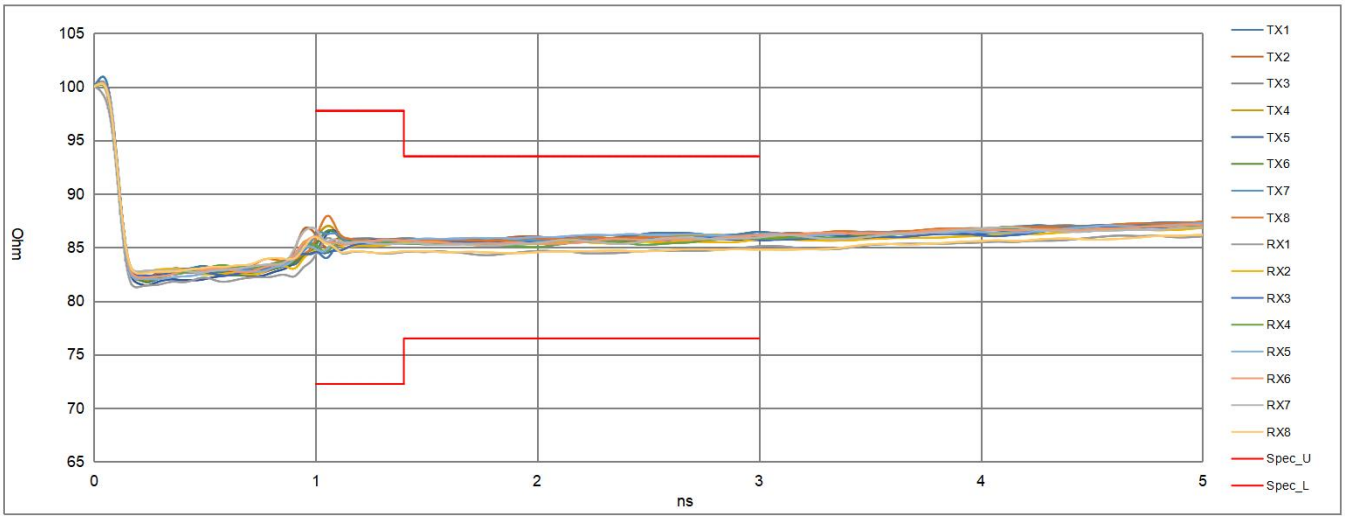
5). SCC22



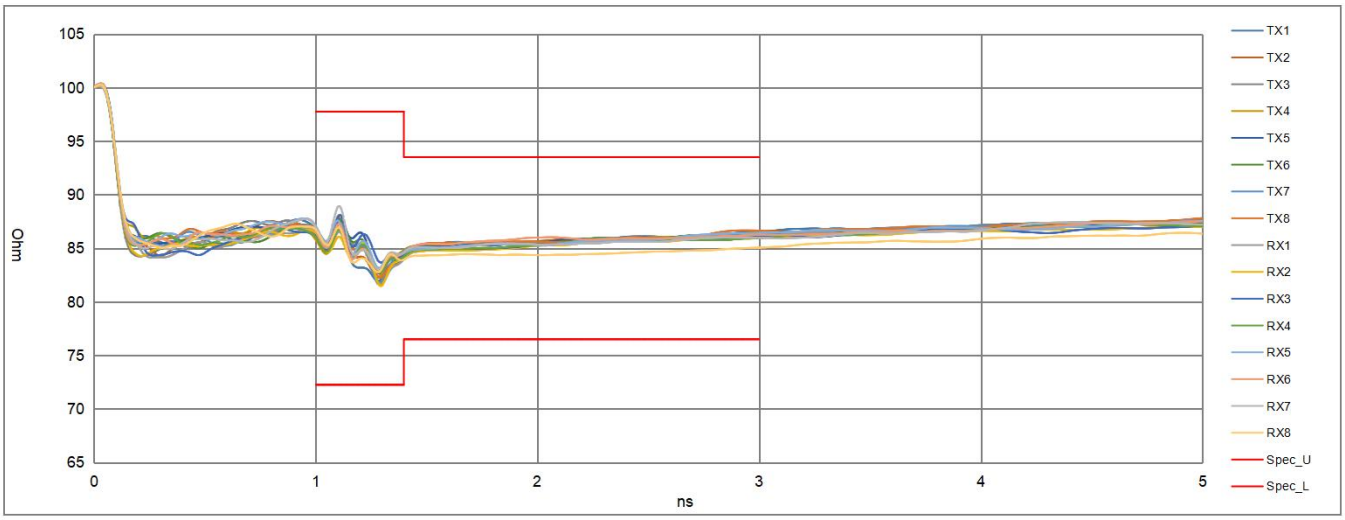
6). SCD21-SDD21



7). TDD11



8). TDD22



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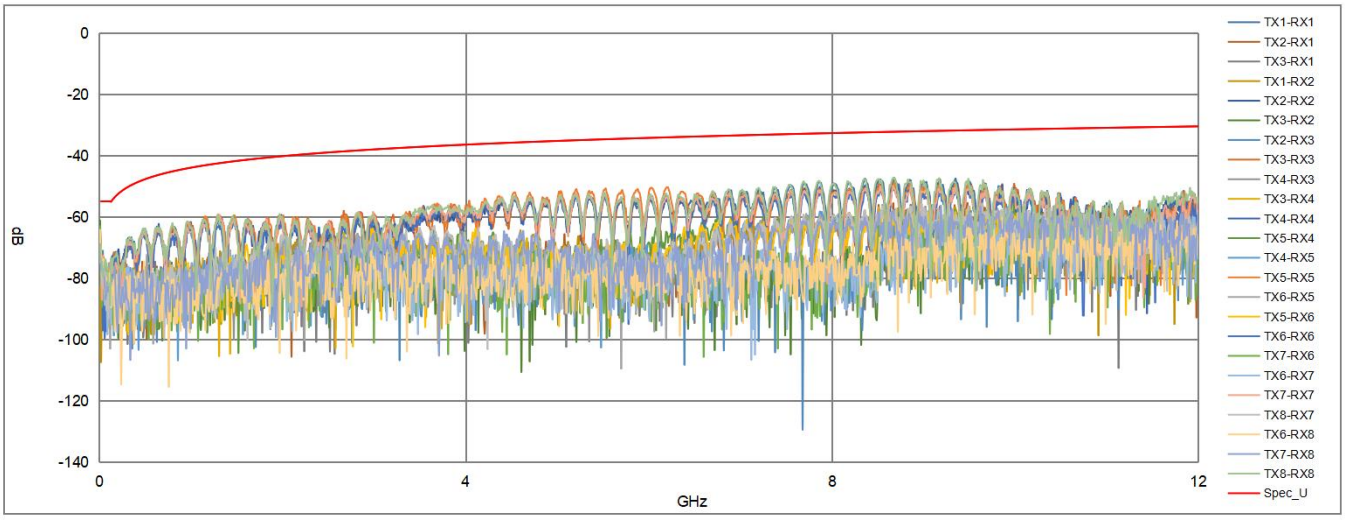
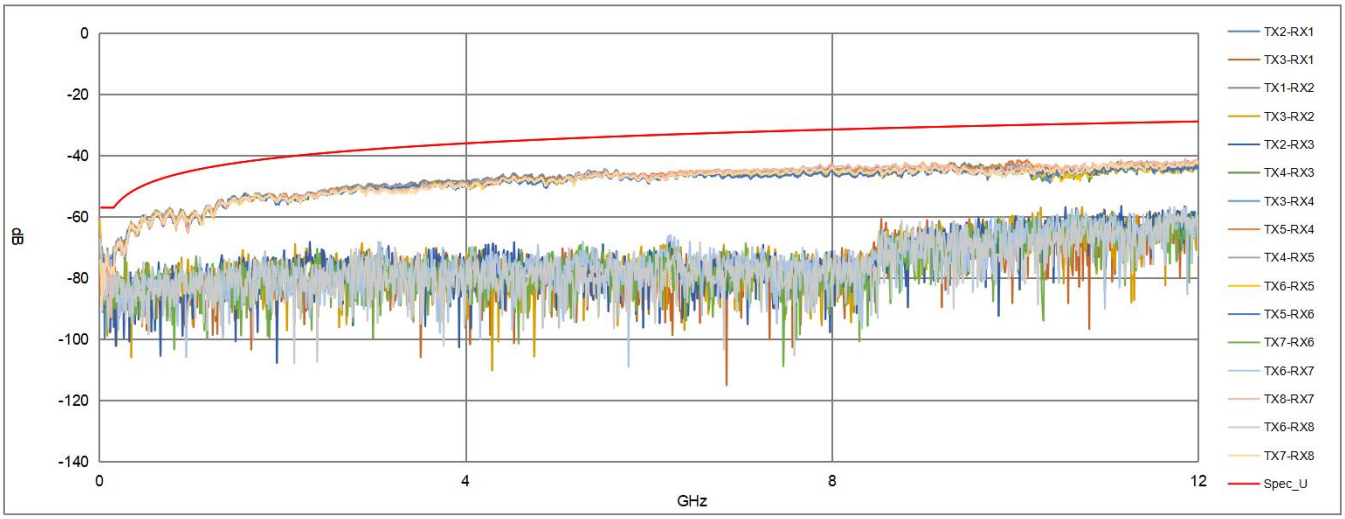


10). FEXT


0
-20
-40
-60
-80
-100
-120
-140
dB
0
4
8
12
GHz
TX2-RX1
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TX1-RX2
TX3-RX2
TX2-RX3
TX4-RX3
TX3-RX4
TX5-RX4
TX4-RX5
TX6-RX5
TX5-RX6
TX7-RX6
TX6-RX7
TX8-RX7
TX6-RX8
TX7-RX8
Spec_U