Appendix B

E-UTRA Band CA_7C

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1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE Band CA_7C

Band	PCC-SCC	PCC Channel-SCC Channel	PCC RB -SCC RB	PCC Modu-SCC Modu	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
7-7	75RB+75RB	20825-20975	1RB#0-0RB#0	QPSK-QPSK	22.87	23.88	33.00	PASS
7-7	75RB+75RB	20825-20975	16RB#0-0RB#0	QPSK-QPSK	23.05	24.06	33.00	PASS
7-7	75RB+75RB	21025-21175	1RB#0-0RB#0	QPSK-QPSK	22.78	23.79	33.00	PASS
7-7	75RB+75RB	21025-21175	16RB#0-0RB#0	QPSK-QPSK	23	24.01	33.00	PASS
7-7	75RB+75RB	21225-21375	1RB#0-0RB#0	QPSK-QPSK	22.76	23.77	33.00	PASS
7-7	75RB+75RB	21225-21375	16RB#0-0RB#0	QPSK-QPSK	23.05	24.06	33.00	PASS
7-7	75RB+75RB	20975-20825	1RB#0-0RB#0	QPSK-QPSK	22.43	23.44	33.00	PASS
7-7	75RB+75RB	20975-20825	16RB#0-0RB#0	QPSK-QPSK	22.72	23.73	33.00	PASS
7-7	75RB+75RB	21175-21025	1RB#0-0RB#0	QPSK-QPSK	22.42	23.43	33.00	PASS
7-7	75RB+75RB	21175-21025	16RB#0-0RB#0	QPSK-QPSK	22.64	23.65	33.00	PASS
7-7	75RB+75RB	21375-21225	1RB#0-0RB#0	QPSK-QPSK	22.46	23.47	33.00	PASS
7-7	75RB+75RB	21375-21225	16RB#0-0RB#0	QPSK-QPSK	22.6	23.61	33.00	PASS
7-7	75RB+75RB	20825-20975	1RB#0-0RB#0	16QAM-16QAM	22.04	23.05	33.00	PASS
7-7	75RB+75RB	20825-20975	16RB#0-0RB#0	16QAM-16QAM	22.08	23.09	33.00	PASS
7-7	75RB+75RB	21025-21175	1RB#0-0RB#0	16QAM-16QAM	22.09	23.1	33.00	PASS
7-7	75RB+75RB	21025-21175	16RB#0-0RB#0	16QAM-16QAM	21.95	22.96	33.00	PASS
7-7	75RB+75RB	21225-21375	1RB#0-0RB#0	16QAM-16QAM	22.17	23.18	33.00	PASS
7-7	75RB+75RB	21225-21375	16RB#0-0RB#0	16QAM-16QAM	21.96	22.97	33.00	PASS
7-7	75RB+75RB	20975-20825	1RB#0-0RB#0	16QAM-16QAM	21.63	22.64	33.00	PASS
7-7	75RB+75RB	20975-20825	16RB#0-0RB#0	16QAM-16QAM	21.7	22.71	33.00	PASS
7-7	75RB+75RB	21175-21025	1RB#0-0RB#0	16QAM-16QAM	21.6	22.61	33.00	PASS
7-7	75RB+75RB	21175-21025	16RB#0-0RB#0	16QAM-16QAM	21.64	22.65	33.00	PASS
7-7	75RB+75RB	21375-21225	1RB#0-0RB#0	16QAM-16QAM	21.86	22.87	33.00	PASS
7-7	75RB+75RB	21375-21225	16RB#0-0RB#0	16QAM-16QAM	21.6	22.61	33.00	PASS
7-7	75RB+75RB	20825-20975	1RB#0-0RB#0	64QAM-64QAM	21.05	22.06	33.00	PASS
7-7	75RB+75RB	20825-20975	16RB#0-0RB#0	64QAM-64QAM	20.9	21.91	33.00	PASS
7-7	75RB+75RB	21025-21175	1RB#0-0RB#0	64QAM-64QAM	20.97	21.98	33.00	PASS
7-7	75RB+75RB	21025-21175	16RB#0-0RB#0	64QAM-64QAM	20.87	21.88	33.00	PASS
7-7	75RB+75RB	21225-21375	1RB#0-0RB#0	64QAM-64QAM	20.94	21.95	33.00	PASS
7-7	75RB+75RB	21225-21375	16RB#0-0RB#0	64QAM-64QAM	20.89	21.9	33.00	PASS
7-7	75RB+75RB	20975-20825	1RB#0-0RB#0	64QAM-64QAM	20.7	21.71	33.00	PASS

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7-7	75RB+75RB	20975-20825	16RB#0-0RB#0	64QAM-64QAM	20.55	21.56	33.00	PASS
7-7	75RB+75RB	21175-21025	1RB#0-0RB#0	64QAM-64QAM	20.54	21.55	33.00	PASS
7-7	75RB+75RB	21175-21025	16RB#0-0RB#0	64QAM-64QAM	20.55	21.56	33.00	PASS
7-7	75RB+75RB	21375-21225	1RB#0-0RB#0	64QAM-64QAM	20.57	21.58	33.00	PASS
7-7	75RB+75RB	21375-21225	16RB#0-0RB#0	64QAM-64QAM	20.67	21.68	33.00	PASS
7-7	100RB+100RB	20850-21048	1RB#0-0RB#0	QPSK-QPSK	23.03	24.04	33.00	PASS
7-7	100RB+100RB	20850-21048	18RB#0-0RB#0	QPSK-QPSK	23.26	24.27	33.00	PASS
7-7	100RB+100RB	21001-21199	1RB#0-0RB#0	QPSK-QPSK	23.04	24.05	33.00	PASS
7-7	100RB+100RB	21001-21199	18RB#0-0RB#0	QPSK-QPSK	23.29	24.3	33.00	PASS
7-7	100RB+100RB	21152-21350	1RB#0-0RB#0	QPSK-QPSK	22.96	23.97	33.00	PASS
7-7	100RB+100RB	21152-21350	18RB#0-0RB#0	QPSK-QPSK	23.19	24.2	33.00	PASS
7-7	100RB+100RB	21048-20850	1RB#0-0RB#0	QPSK-QPSK	22.51	23.52	33.00	PASS
7-7	100RB+100RB	21048-20850	18RB#0-0RB#0	QPSK-QPSK	22.66	23.67	33.00	PASS
7-7	100RB+100RB	21199-21001	1RB#0-0RB#0	QPSK-QPSK	22.53	23.54	33.00	PASS
7-7	100RB+100RB	21199-21001	18RB#0-0RB#0	QPSK-QPSK	22.78	23.79	33.00	PASS
7-7	100RB+100RB	21350-21152	1RB#0-0RB#0	QPSK-QPSK	22.5	23.51	33.00	PASS
7-7	100RB+100RB	21350-21152	18RB#0-0RB#0	QPSK-QPSK	22.62	23.63	33.00	PASS
7-7	100RB+100RB	20850-21048	1RB#0-0RB#0	16QAM-16QAM	22.23	23.24	33.00	PASS
7-7	100RB+100RB	20850-21048	18RB#0-0RB#0	16QAM-16QAM	22.2	23.21	33.00	PASS
7-7	100RB+100RB	21001-21199	1RB#0-0RB#0	16QAM-16QAM	22.26	23.27	33.00	PASS
7-7	100RB+100RB	21001-21199	18RB#0-0RB#0	16QAM-16QAM	22.18	23.19	33.00	PASS
7-7	100RB+100RB	21152-21350	1RB#0-0RB#0	16QAM-16QAM	22.09	23.1	33.00	PASS
7-7	100RB+100RB	21152-21350	18RB#0-0RB#0	16QAM-16QAM	22.12	23.13	33.00	PASS
7-7	100RB+100RB	21048-20850	1RB#0-0RB#0	16QAM-16QAM	21.74	22.75	33.00	PASS
7-7	100RB+100RB	21048-20850	18RB#0-0RB#0	16QAM-16QAM	21.65	22.66	33.00	PASS
7-7	100RB+100RB	21199-21001	1RB#0-0RB#0	16QAM-16QAM	21.82	22.83	33.00	PASS
7-7	100RB+100RB	21199-21001	18RB#0-0RB#0	16QAM-16QAM	21.63	22.64	33.00	PASS
7-7	100RB+100RB	21350-21152	1RB#0-0RB#0	16QAM-16QAM	21.87	22.88	33.00	PASS
7-7	100RB+100RB	21350-21152	18RB#0-0RB#0	16QAM-16QAM	21.65	22.66	33.00	PASS
7-7	100RB+100RB	20850-21048	1RB#0-0RB#0	64QAM-64QAM	21.52	22.53	33.00	PASS
7-7	100RB+100RB	20850-21048	18RB#0-0RB#0	64QAM-64QAM	21.16	22.17	33.00	PASS
7-7	100RB+100RB	21001-21199	1RB#0-0RB#0	64QAM-64QAM	21.27	22.28	33.00	PASS
7-7	100RB+100RB	21001-21199	18RB#0-0RB#0	64QAM-64QAM	21.14	22.15	33.00	PASS
7-7	100RB+100RB	21152-21350	1RB#0-0RB#0	64QAM-64QAM	21.27	22.28	33.00	PASS
7-7	100RB+100RB	21152-21350	18RB#0-0RB#0	64QAM-64QAM	21.11	22.12	33.00	PASS
7-7	100RB+100RB	21048-20850	1RB#0-0RB#0	64QAM-64QAM	20.69	21.7	33.00	PASS

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7-7	100RB+100RB	21048-20850	18RB#0-0RB#0	64QAM-64QAM	20.67	21.68	33.00	PASS
7-7	100RB+100RB	21199-21001	1RB#0-0RB#0	64QAM-64QAM	20.72	21.73	33.00	PASS
7-7	100RB+100RB	21199-21001	18RB#0-0RB#0	64QAM-64QAM	20.63	21.64	33.00	PASS
7-7	100RB+100RB	21350-21152	1RB#0-0RB#0	64QAM-64QAM	20.76	21.77	33.00	PASS
7-7	100RB+100RB	21350-21152	18RB#0-0RB#0	64QAM-64QAM	20.69	21.7	33.00	PASS

Note:

a: For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

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2 Peak-to-Average Ratio

Part I - Test Results

Test Band	PCC RB	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
CA_7C	75RB+75RB	TM1	20825-20975	6.12	13	PASS
			21025-21175	6.17	13	PASS
			21225-21375	6.23	13	PASS
			20975-20825	6.29	13	PASS
			21175-21025	6.32	13	PASS
			21375-21225	6.35	13	PASS
		TM2	20825-20975	6.61	13	PASS
			21025-21175	6.87	13	PASS
			21225-21375	6.67	13	PASS
			20975-20825	6.67	13	PASS
			21175-21025	6.75	13	PASS
			21375-21225	6.55	13	PASS
		TM3	20825-20975	6.52	13	PASS
			21025-21175	7.01	13	PASS
			21225-21375	6.67	13	PASS
			20975-20825	6.67	13	PASS
			21175-21025	6.75	13	PASS
			21375-21225	6.64	13	PASS
	100RB+100RB	TM1	20850-21048	6.09	13	PASS
			21001-21199	6.29	13	PASS
			21152-21350	6.17	13	PASS
			21048-20850	6.23	13	PASS
			21199-21001	6.23	13	PASS
			21350-21152	6.17	13	PASS
		TM2	20850-21048	6.70	13	PASS
			21001-21199	6.70	13	PASS
			21152-21350	6.67	13	PASS
			21048-20850	6.70	13	PASS
			21199-21001	6.72	13	PASS
			21350-21152	6.72	13	PASS
		TM3	20850-21048	6.70	13	PASS
			21001-21199	6.70	13	PASS
			21152-21350	6.70	13	PASS

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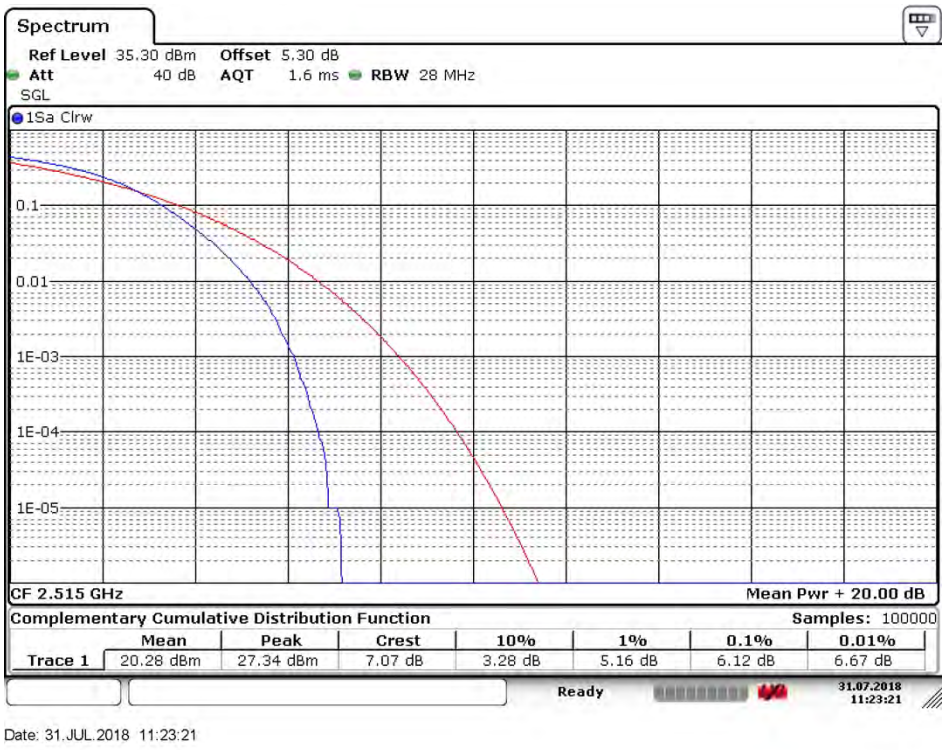
Test Band	PCC RB	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
			21048-20850	6.87	13	PASS
			21199-21001	6.81	13	PASS
			21350-21152	6.81	13	PASS

2.1 For LTE_CA_7C

2.1.1 Test Band = Bandwidth=75RB+75RB

2.1.1.1 Test Mode = LTE/TM1

2.1.1.1.1 Test Channel = 20825-20975



Date: 31.JUL.2018 11:23:21

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2.1.1.1.2 Test Channel = 21025-21175

Date: 31.JUL.2018 04:52:04

2.1.1.1.3 Test Channel = 21225-21375

Date: 31.JUL.2018 11:24:43

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2.1.1.1.4 Test Channel = 20975-20825

Date: 31.JUL.2018 14:20:13

2.1.1.1.5 Test Channel = 21175-21025

Date: 31.JUL.2018 14:21:22

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2.1.1.1.6 Test Channel = 21375-21225

Date: 31.JUL.2018 14:28:25

2.1.1.2 Test Mode = LTE/TM2

2.1.1.2.1 Test Channel = 20825-20975

Date: 31.JUL.2018 11:22:51

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2.1.1.2.2 Test Channel = 21025-21175

Date: 31.JUL.2018 04:52:21

2.1.1.2.3 Test Channel = 21225-21375

Date: 31.JUL.2018 11:25:36

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2.1.1.2.4 Test Channel = 20975-20825

Date: 31.JUL.2018 14:19:59

2.1.1.2.5 Test Channel = 21175-21025

Date: 31.JUL.2018 14:21:38

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2.1.1.2.6 Test Channel = 21375-21225

Date: 31.JUL.2018 14:28:12

2.1.1.3 Test Mode = LTE/TM3

2.1.1.3.1 Test Channel = 20825-20975

Date: 31.JUL.2018 11:22:26

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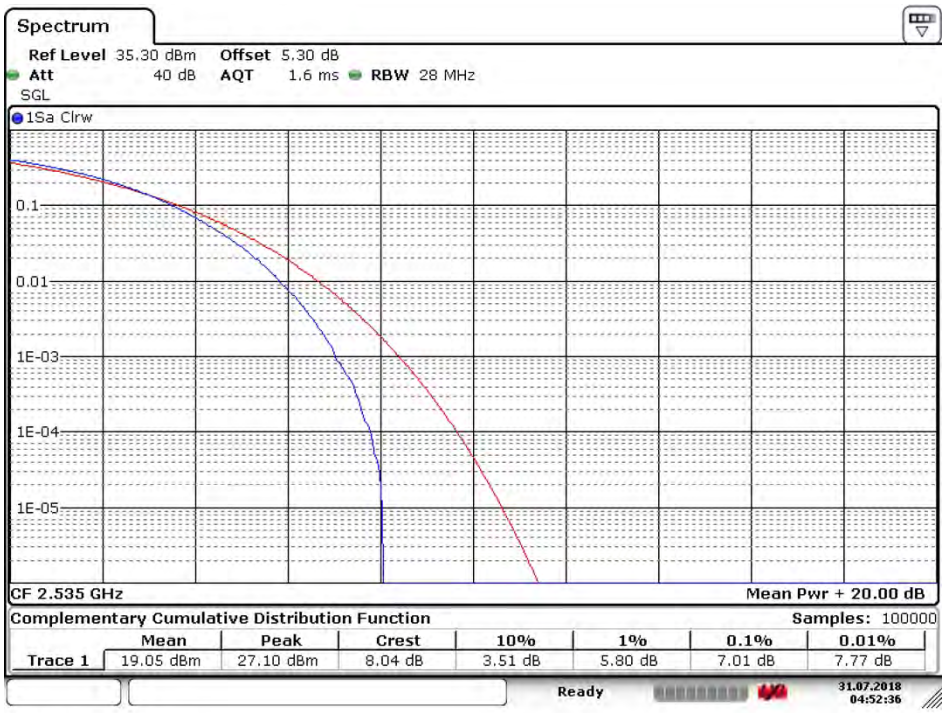
2.1.1.3.2 Test Channel = 21025-21175



Date: 31.JUL.2018 04:52:37

2.1.1.3.3 Test Channel = 21225-21375

Date: 31.JUL.2018 11:25:50

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2.1.1.3.4 Test Channel = 20975-20825

Date: 31.JUL.2018 14:19:40

2.1.1.3.5 Test Channel = 21175-21025

Date: 31.JUL.2018 14:21:53

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2.1.1.3.6 Test Channel = 21375-21225

Date: 31.JUL.2018 14:27:55

2.1.2 Test Band = Bandwidth=100RB+100RB

2.1.2.1 Test Mode = LTE/TM1

2.1.2.1.1 Test Channel = 20850-21048

Date: 31.JUL.2018 12:18:39

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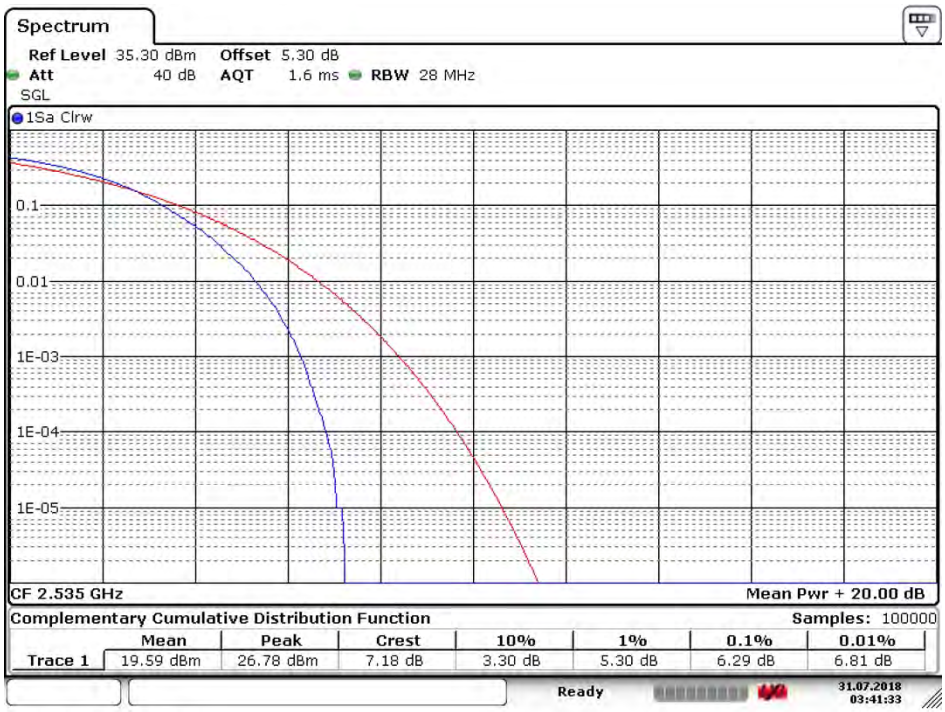
2.1.2.1.2 Test Channel = 21001-21199



Date: 31.JUL.2018 03:41:34

2.1.2.1.3 Test Channel = 21152-21350

Date: 31.JUL.2018 12:20:36

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2.1.2.1.4 Test Channel = 21048-20850

Date: 31.JUL.2018 14:29:34

2.1.2.1.5 Test Channel = 21199-21001

Date: 31.JUL.2018 14:40:04

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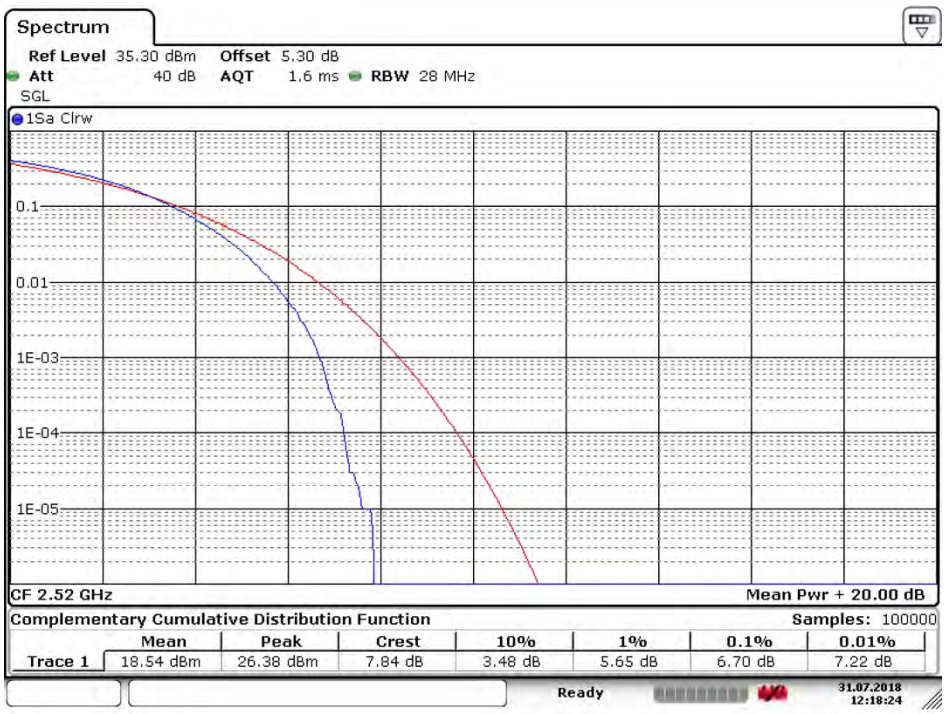
2.1.2.1.6 Test Channel = 21350-21152

Date: 31.JUL.2018 14:38:16

2.1.2.2 Test Mode = LTE/TM2

2.1.2.2.1 Test Channel = 20850-21048



Date: 31.JUL.2018 12:18:25

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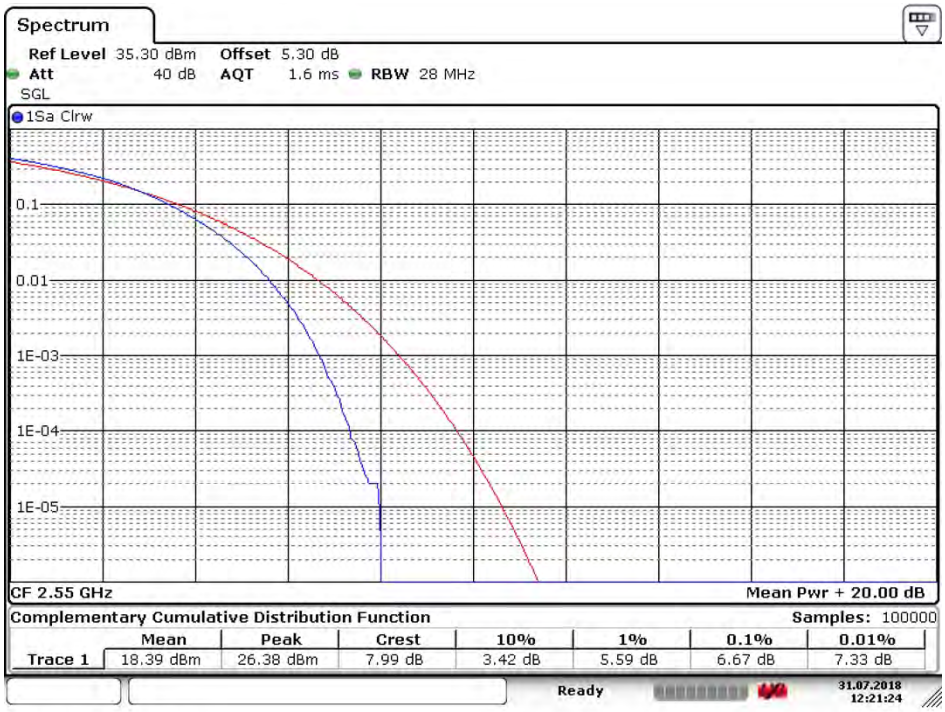
2.1.2.2.2 Test Channel = 21001-21199

Date: 31.JUL.2018 03:41:13

2.1.2.2.3 Test Channel = 21152-21350



Date: 31.JUL.2018 12:21:25

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2.1.2.2.4 Test Channel = 21048-20850

Date: 31.JUL.2018 14:29:59

2.1.2.2.5 Test Channel = 21199-21001

Date: 31.JUL.2018 14:39:54

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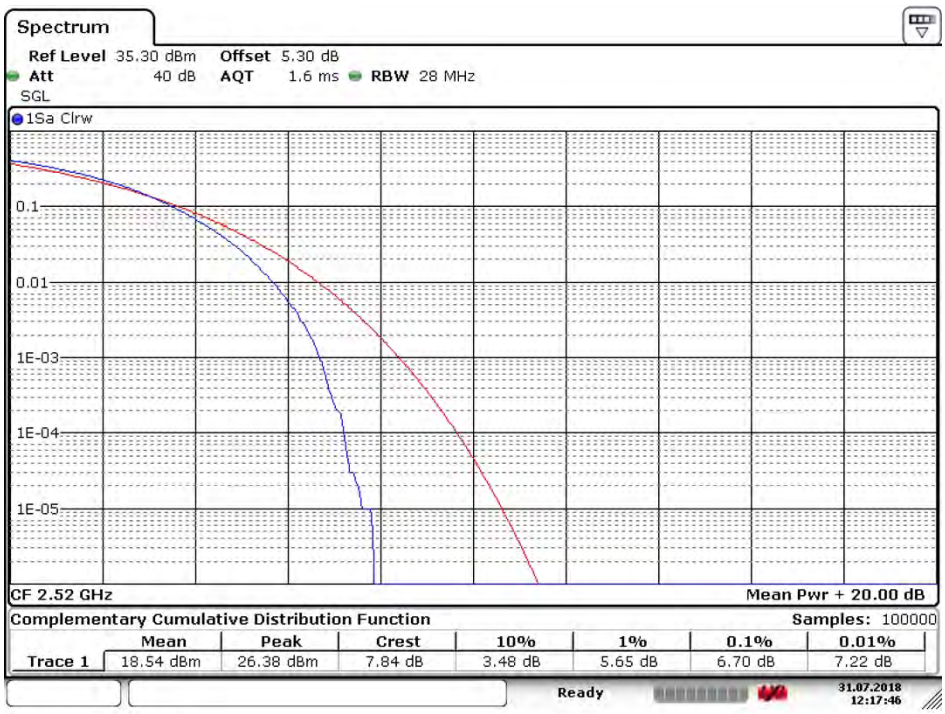
2.1.2.2.6 Test Channel = 21350-21152

Date: 31.JUL.2018 14:38:41

2.1.2.3 Test Mode = LTE/TM3

2.1.2.3.1 Test Channel = 20850-21048



Date: 31.JUL.2018 12:17:46

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2.1.2.3.2 Test Channel = 21001-21199

Date: 31.JUL.2018 03:40:50

2.1.2.3.3 Test Channel = 21152-21350

Date: 31.JUL.2018 12:21:41

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2.1.2.3.4 Test Channel = 21048-20850

Date: 31.JUL.2018 14:30:06

2.1.2.3.5 Test Channel = 21199-21001

Date: 31.JUL.2018 14:39:33

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2.1.2.3.6 Test Channel = 21350-21152

Date: 31.JUL.2018 14:38:50

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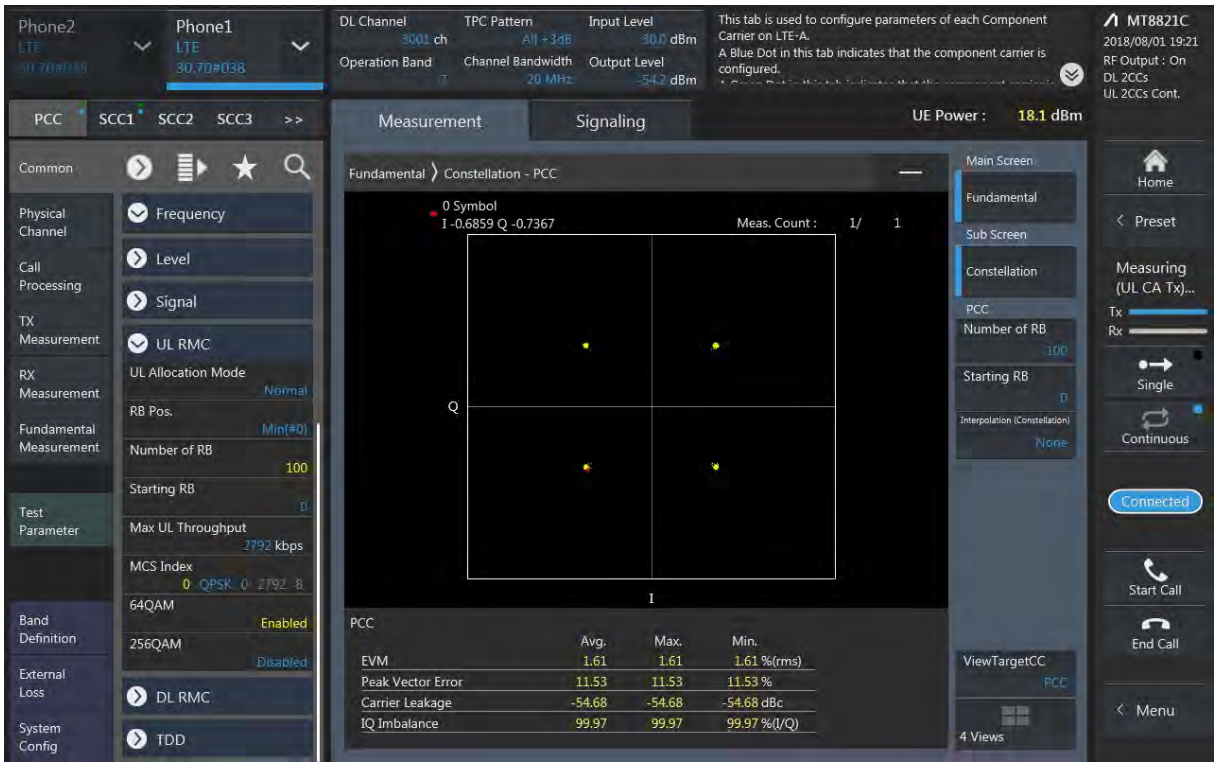
3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE Band CA_7C

3.1.1.1 Test Mode = LTE /TM1 100RB+100RB

3.1.1.1.1 Test Channel = MCH



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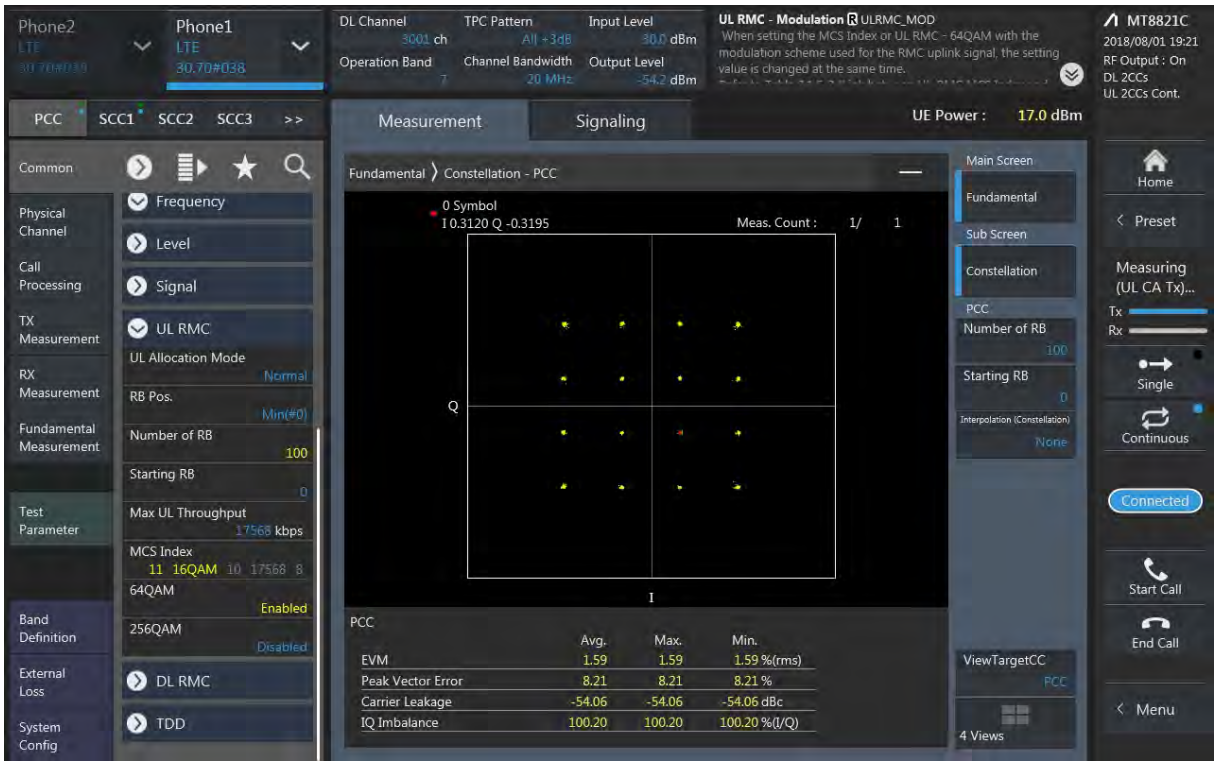
3.1.1.2 Test Mode = LTE /TM2 100RB+100RB

3.1.1.2.1 Test Channel = MCH



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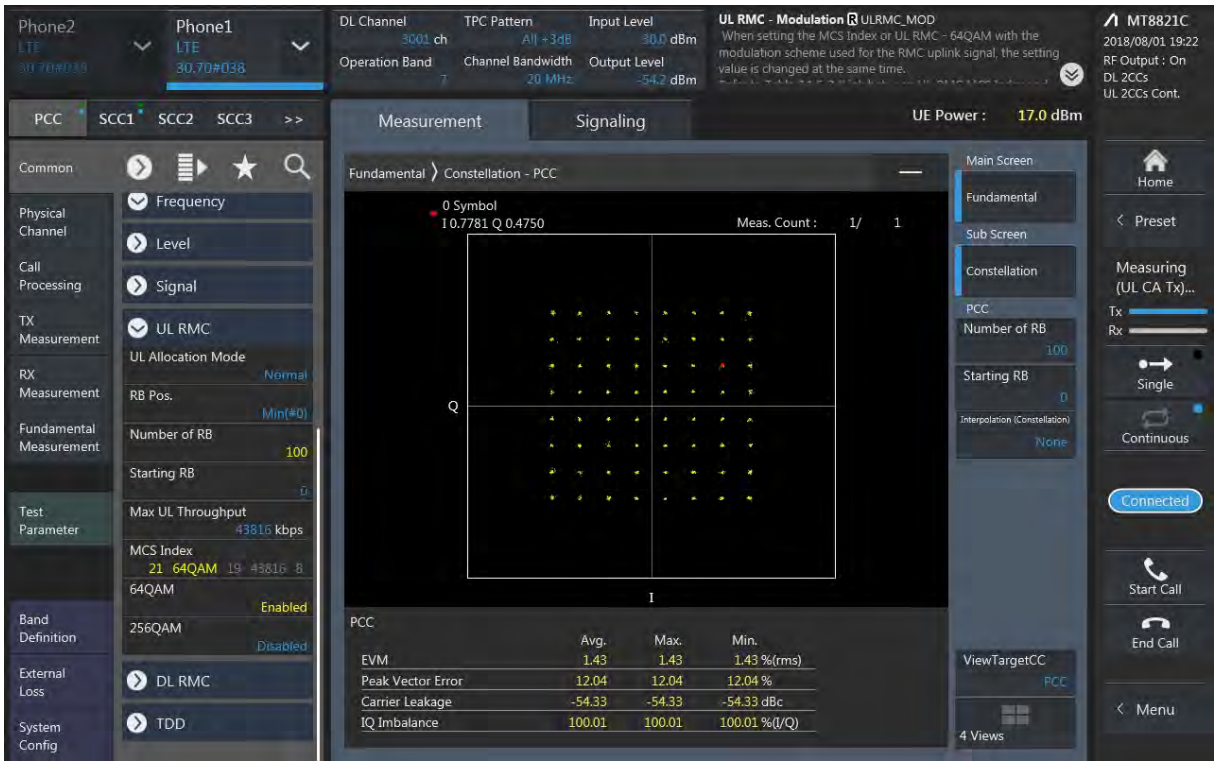
3.1.1.3 Test Mode = LTE /TM3 100RB+100RB

3.1.1.3.1 Test Channel = MCH



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4 Bandwidth

Part I - Test Results

Test Band	PCC RB	Test Mode	Test Channel	OBW	EBW
CA_7C	75RB+75RB	TM1	20825-20975	28.29	29.79
			21025-21175	28.29	29.85
			21225-21375	28.29	29.91
			20975-20825	28.29	29.85
			21175-21025	28.23	29.79
			21375-21225	28.35	29.97
		TM2	20825-20975	28.29	29.85
			21025-21175	28.23	29.79
			21225-21375	28.29	29.85
			20975-20825	28.29	29.97
			21175-21025	28.29	29.91
			21375-21225	28.35	29.97
		TM3	20825-20975	28.29	29.91
			21025-21175	28.23	29.85
			21225-21375	28.29	29.97
			20975-20825	28.29	29.91
			21175-21025	28.29	29.73
			21375-21225	28.35	30.03
	100RB+100RB	TM1	20850-21048	37.56	39.64
			21001-21199	37.48	39.72
			21152-21350	37.48	39.64
			21048-20850	37.56	39.72
			21199-21001	37.56	39.80
			21350-21152	37.64	39.88
		TM2	20850-21048	37.48	39.64
			21001-21199	37.40	39.72
			21152-21350	37.48	39.56
			21048-20850	37.56	39.72
			21199-21001	37.48	39.72
			21350-21152	37.64	39.72
		TM3	20850-21048	37.48	39.72
			21001-21199	37.48	39.64
			21152-21350	37.48	39.64
			21048-20850	37.56	39.72

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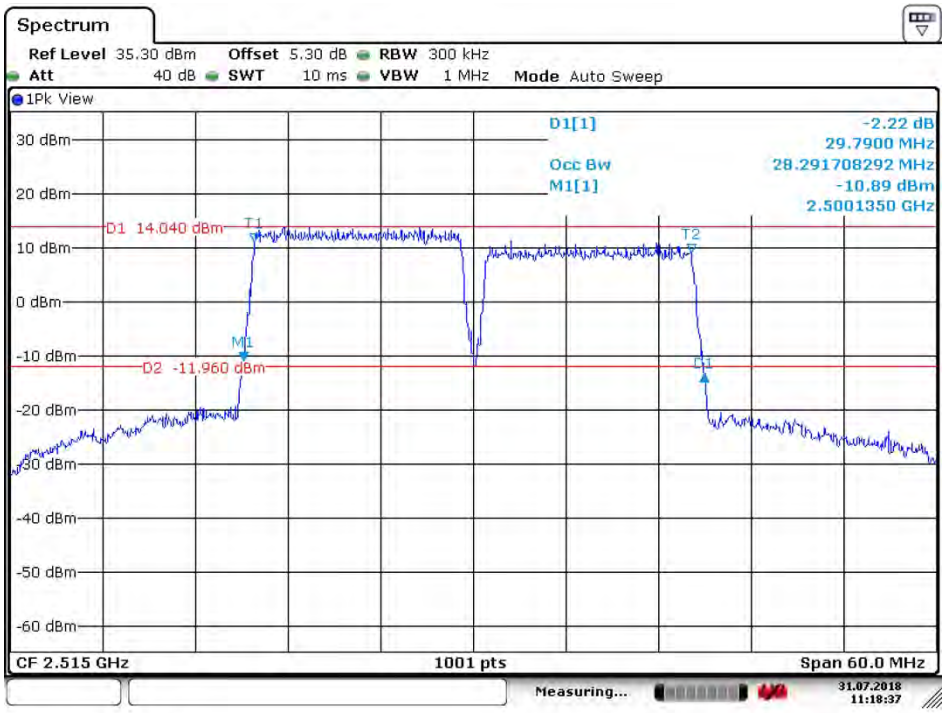
Test Band	PCC RB	Test Mode	Test Channel	OBW	EBW
			21199-21001	37.48	39.72
			21350-21152	37.56	39.72

4.1 For LTE_CA_7C

4.1.1 Test Band = Bandwidth=75RB+75RB

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Channel = 20825-20975



Date: 31.JUL.2018 11:18:38

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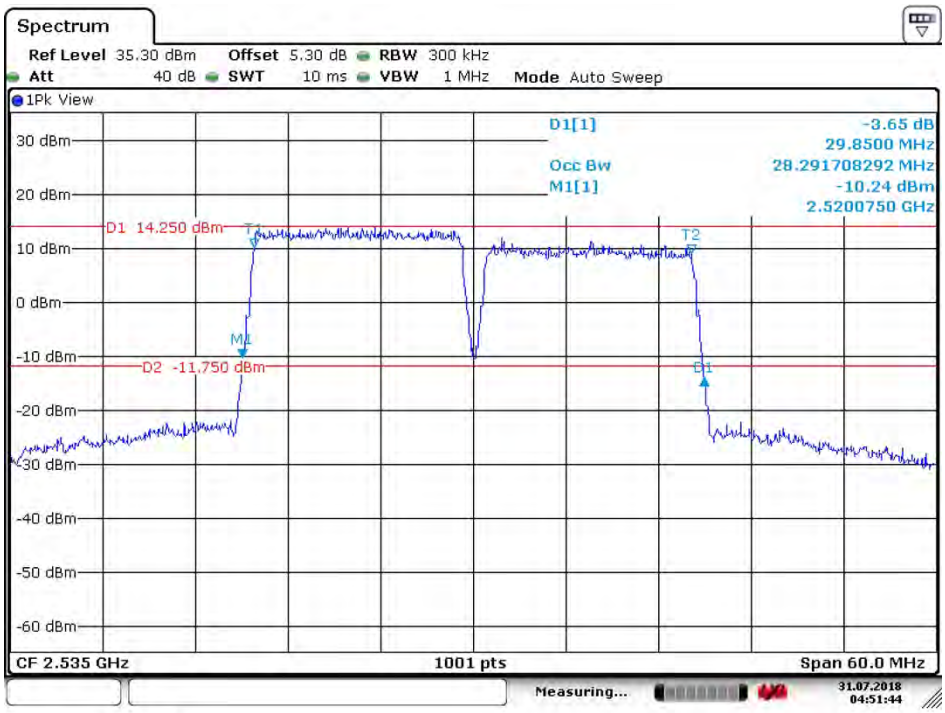
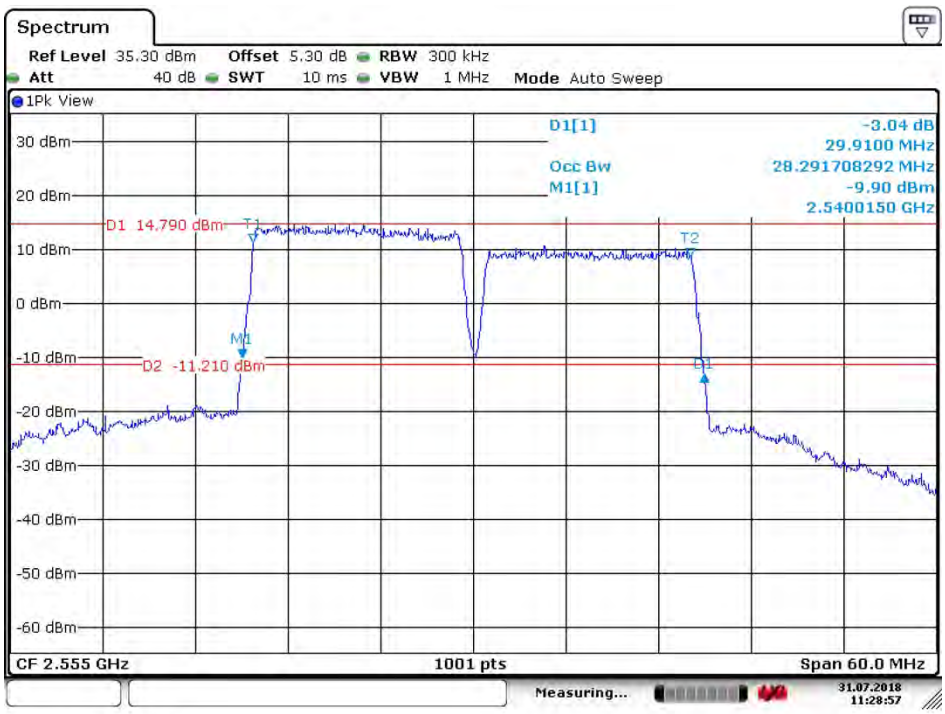
4.1.1.1.2 Test Channel = 21025-21175



Date: 31.JUL.2018 04:51:45

4.1.1.1.3 Test Channel = 21225-21375



Date: 31.JUL.2018 11:28:57

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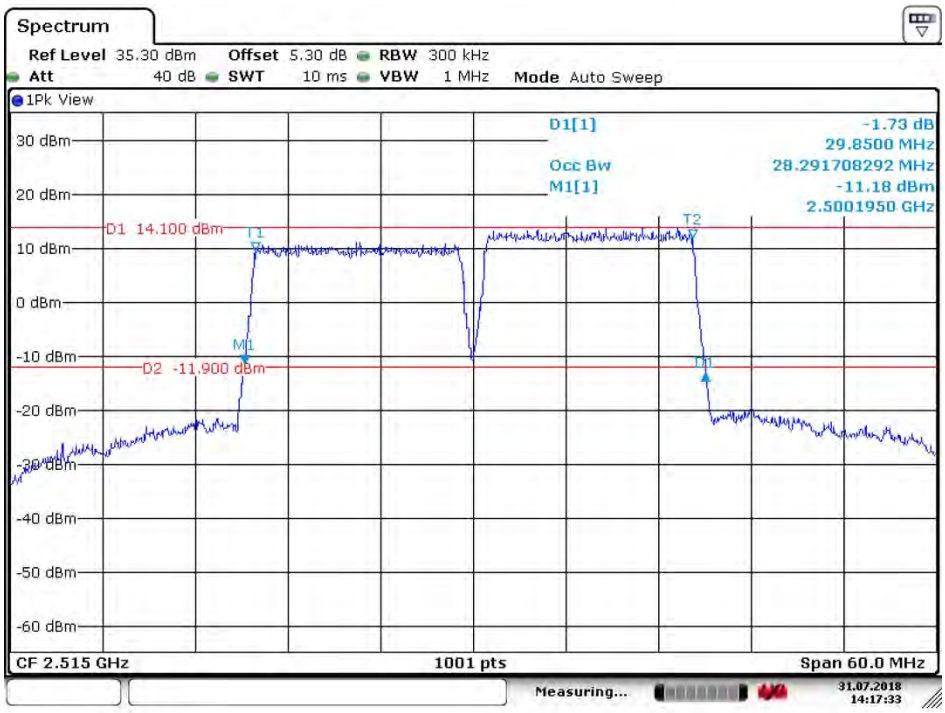
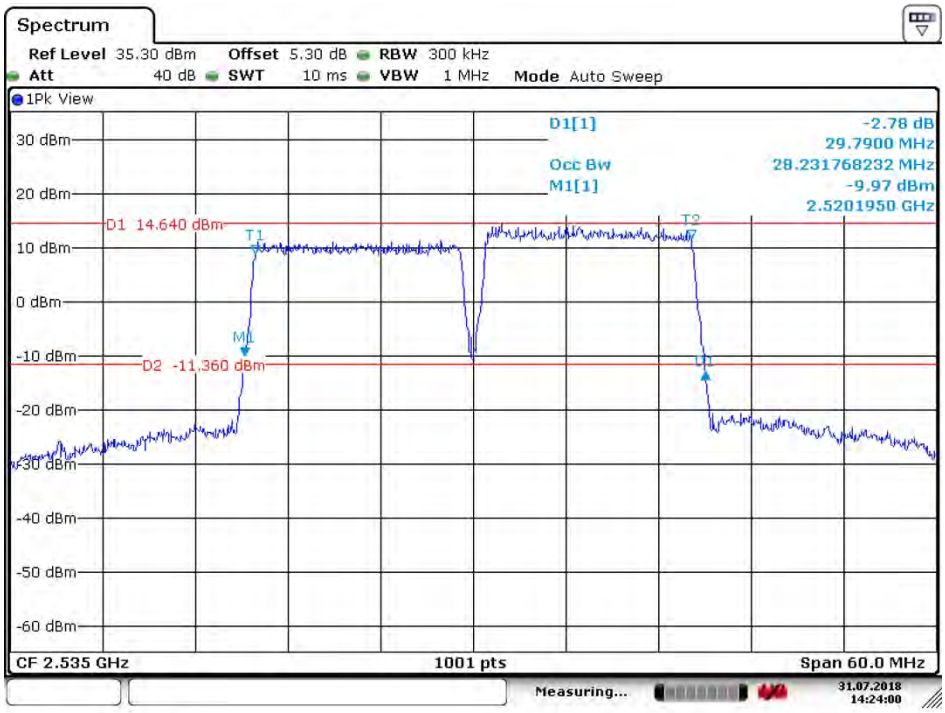
4.1.1.1.4 Test Channel = 20975-20825



Date: 31.JUL.2018 14:17:33

4.1.1.1.5 Test Channel = 21175-21025



Date: 31.JUL.2018 14:24:01

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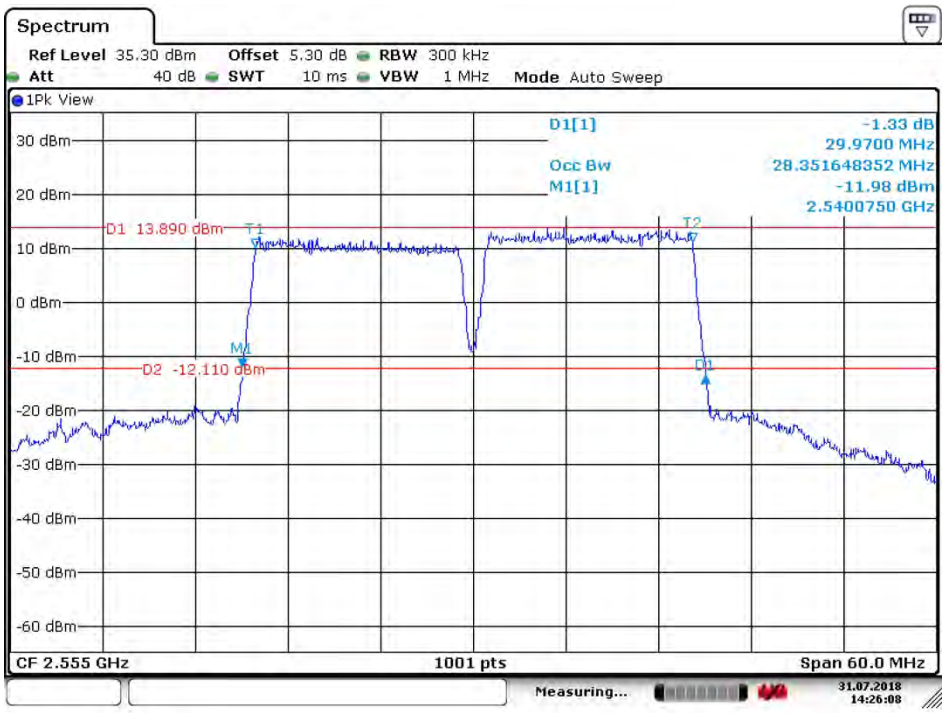
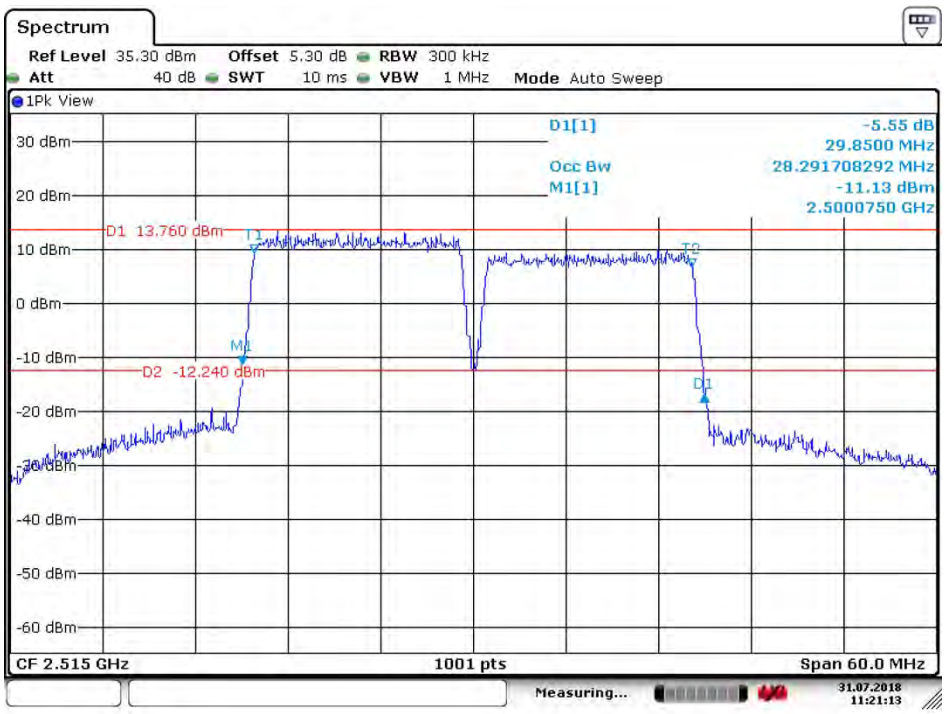
4.1.1.1.6 Test Channel = 21375-21225



Date: 31.JUL.2018 14:26:08

4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Channel = 20825-20975



Date: 31.JUL.2018 11:21:14

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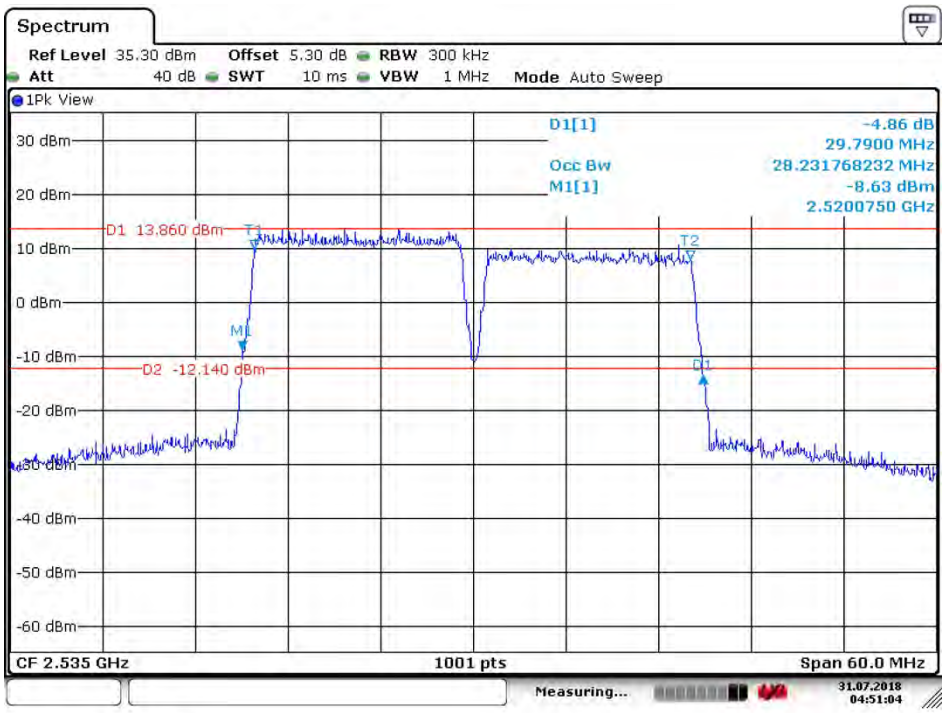
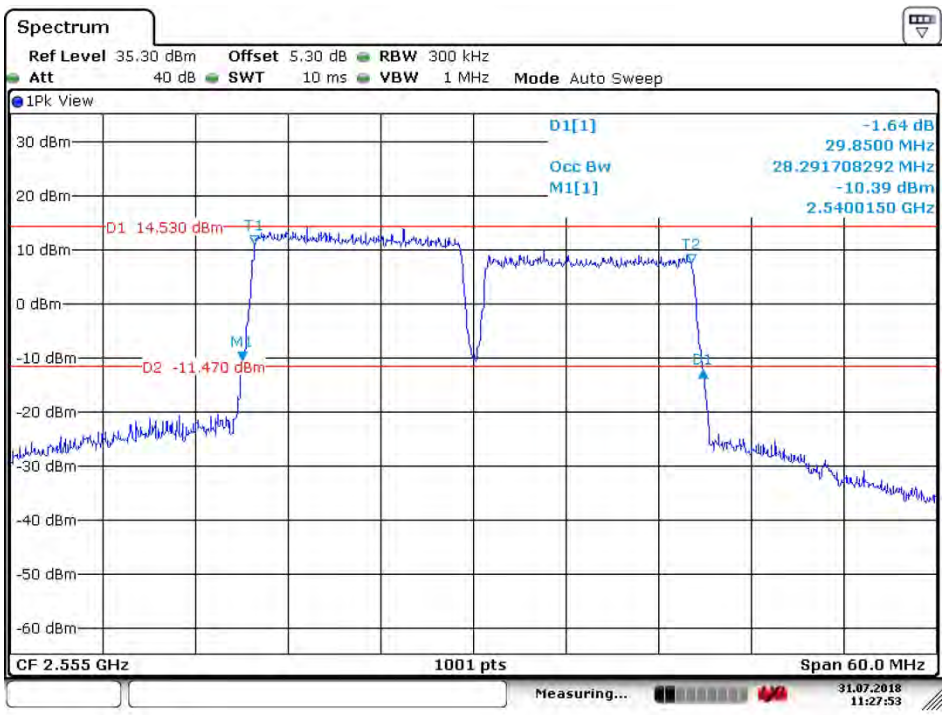
4.1.1.2.2 Test Channel = 21025-21175



Date: 31.JUL.2018 04:51:04

4.1.1.2.3 Test Channel = 21225-21375



Date: 31.JUL.2018 11:27:53

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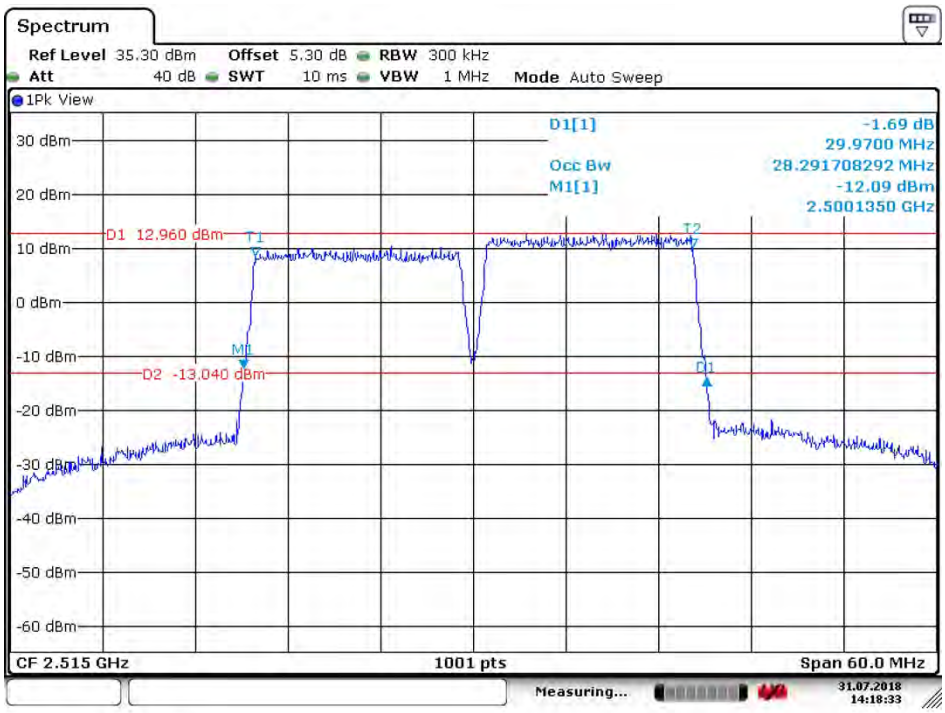
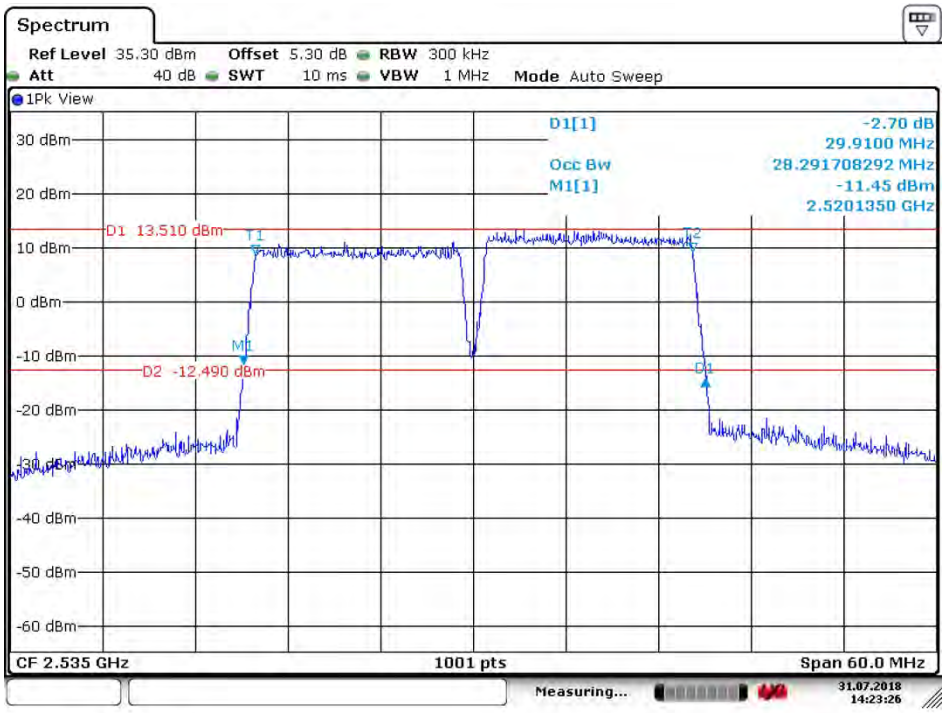
4.1.1.2.4 Test Channel = 20975-20825



Date: 31.JUL.2018 14:18:34

4.1.1.2.5 Test Channel = 21175-21025



Date: 31.JUL.2018 14:23:27

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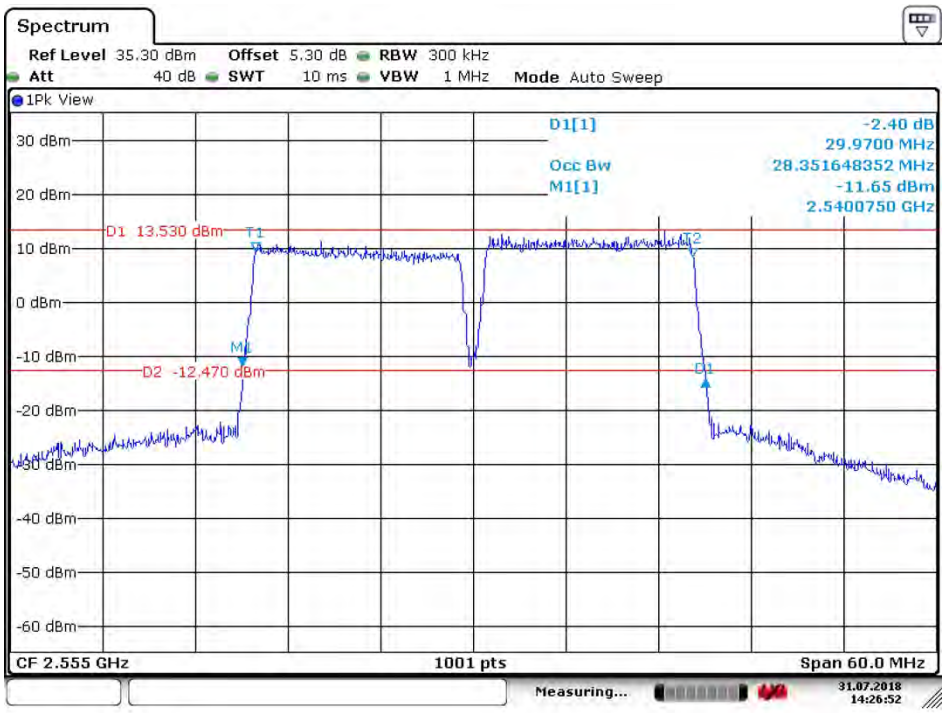
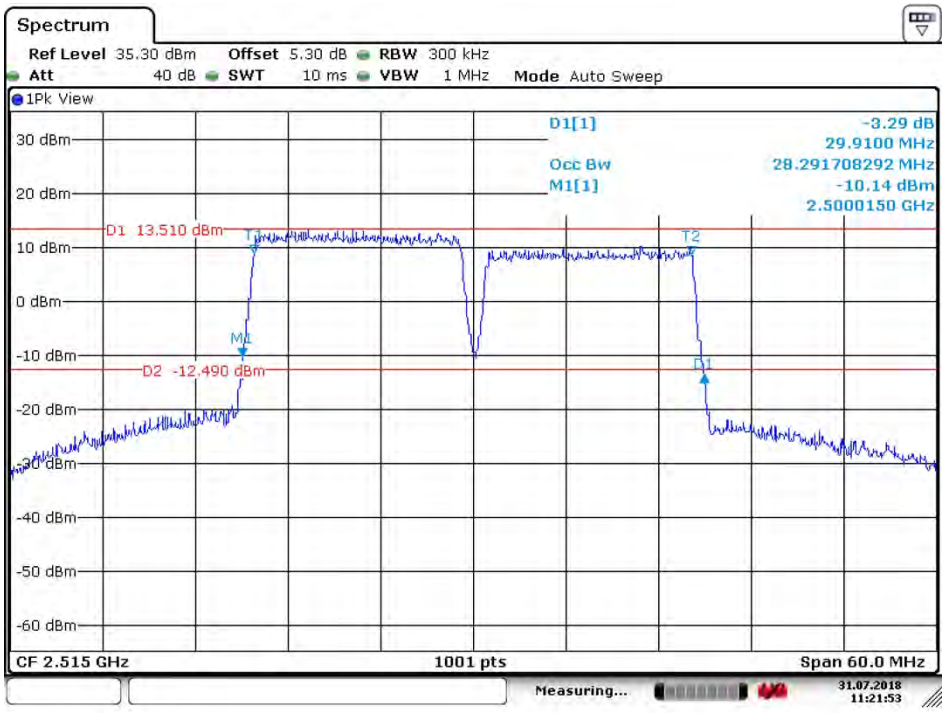
4.1.1.2.6 Test Channel = 21375-21225



Date: 31.JUL.2018 14:26:53

4.1.1.3 Test Mode = LTE/TM3

4.1.1.3.1 Test Channel = 20825-20975



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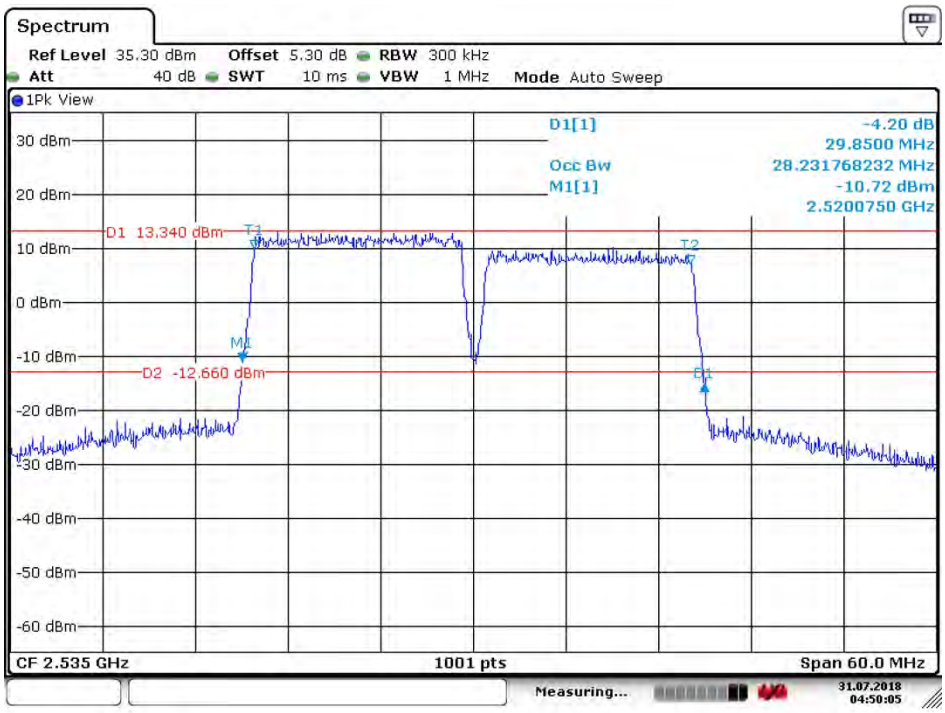
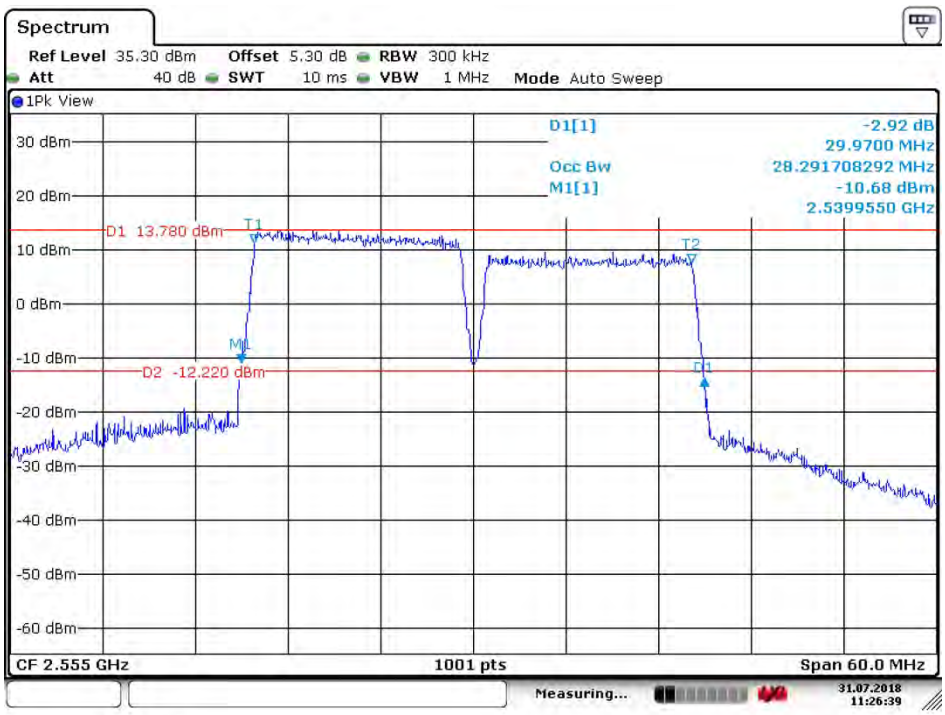
4.1.1.3.2 Test Channel = 21025-21175



Date: 31.JUL.2018 04:50:05

4.1.1.3.3 Test Channel = 21225-21375



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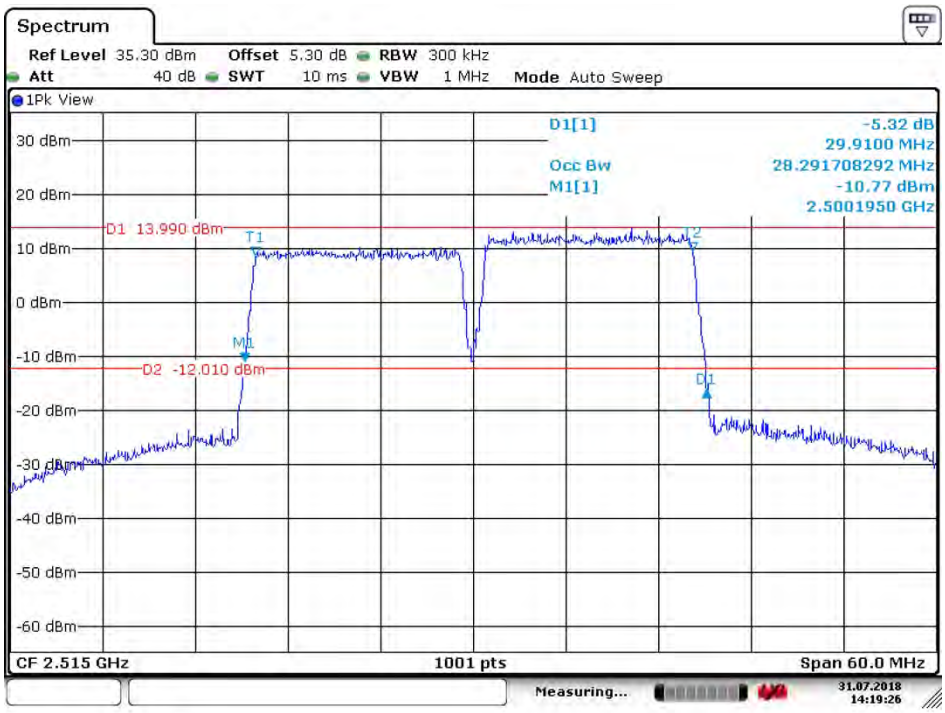
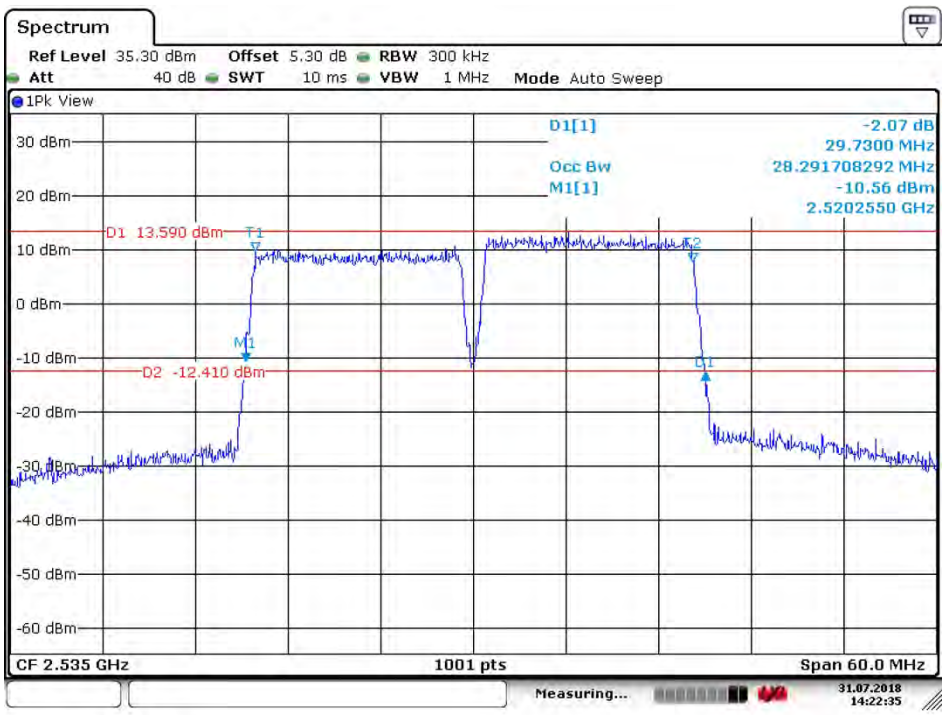
4.1.1.3.4 Test Channel = 20975-20825



Date: 31.JUL.2018 14:19:26

4.1.1.3.5 Test Channel = 21175-21025



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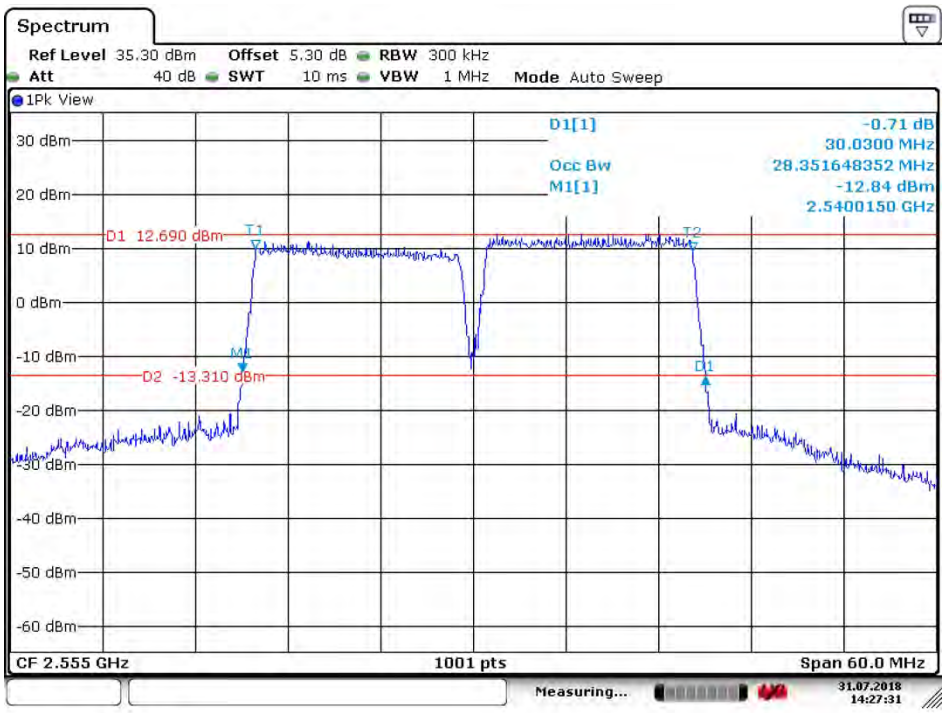
4.1.1.3.6 Test Channel = 21375-21225

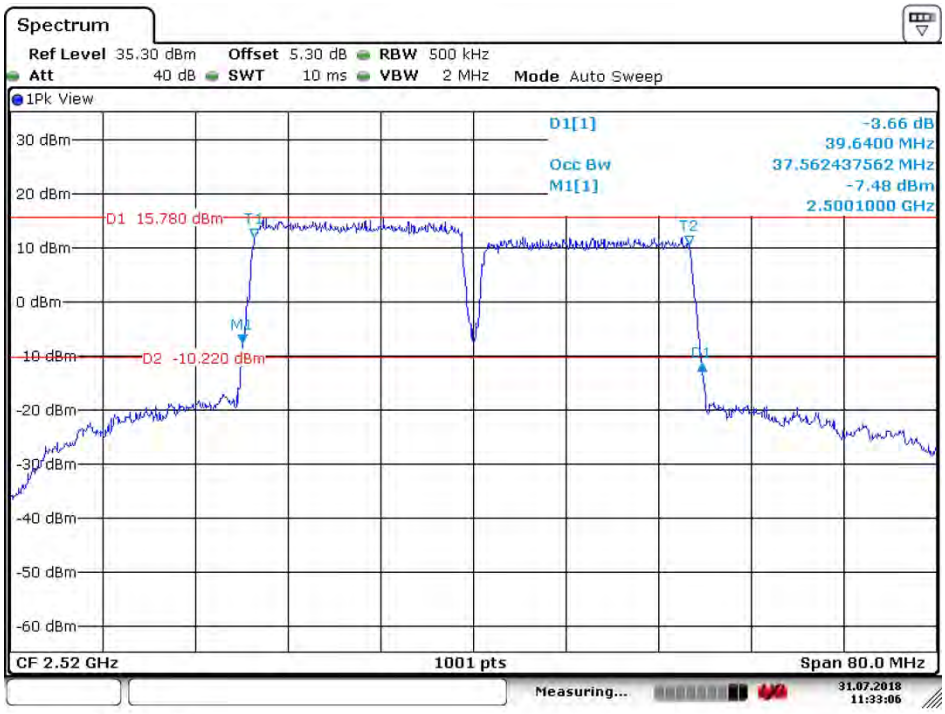


Date: 31.JUL.2018 14:27:31

4.1.2 Test Band = Bandwidth=100RB+100RB

4.1.2.1 Test Mode = LTE/TM1

4.1.2.1.1 Test Channel = 20850-21048



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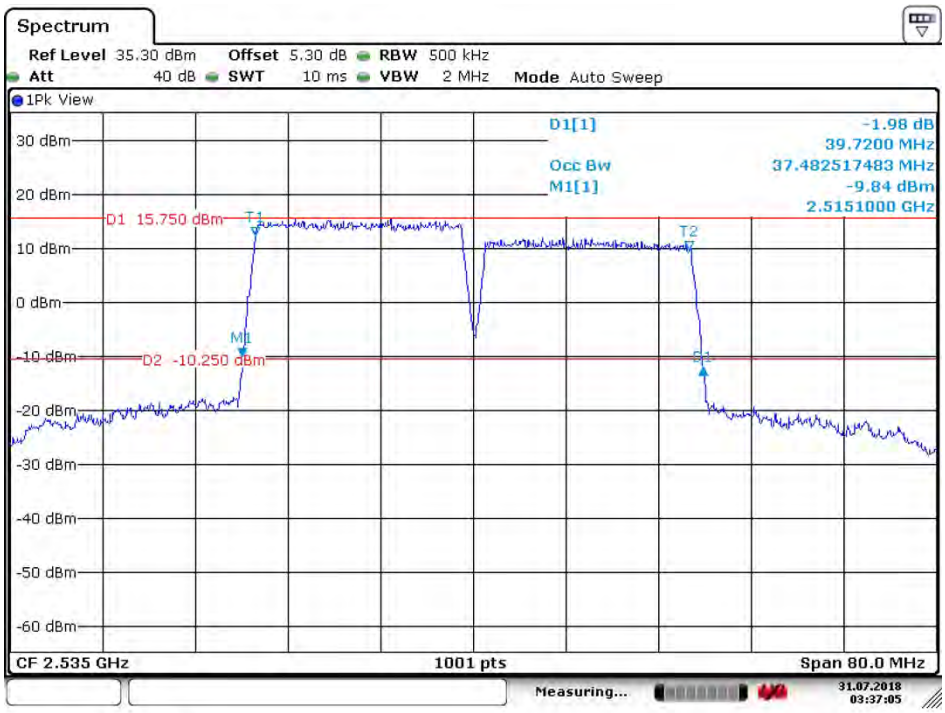
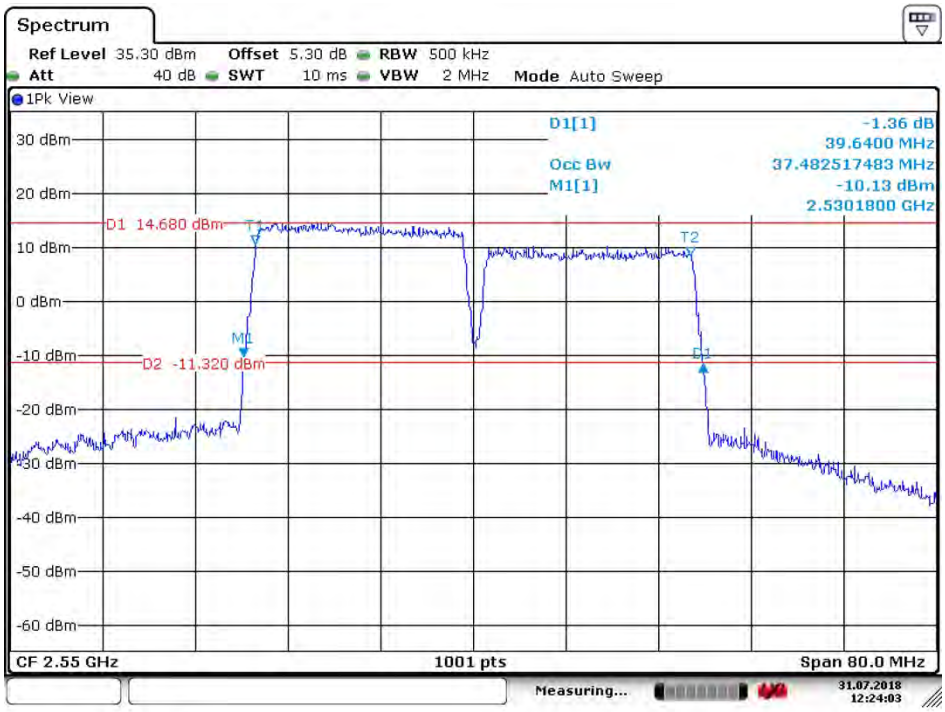
4.1.2.1.2 Test Channel = 21001-21199



Date: 31.JUL.2018 03:37:05

4.1.2.1.3 Test Channel = 21152-21350



Date: 31.JUL.2018 12:24:02

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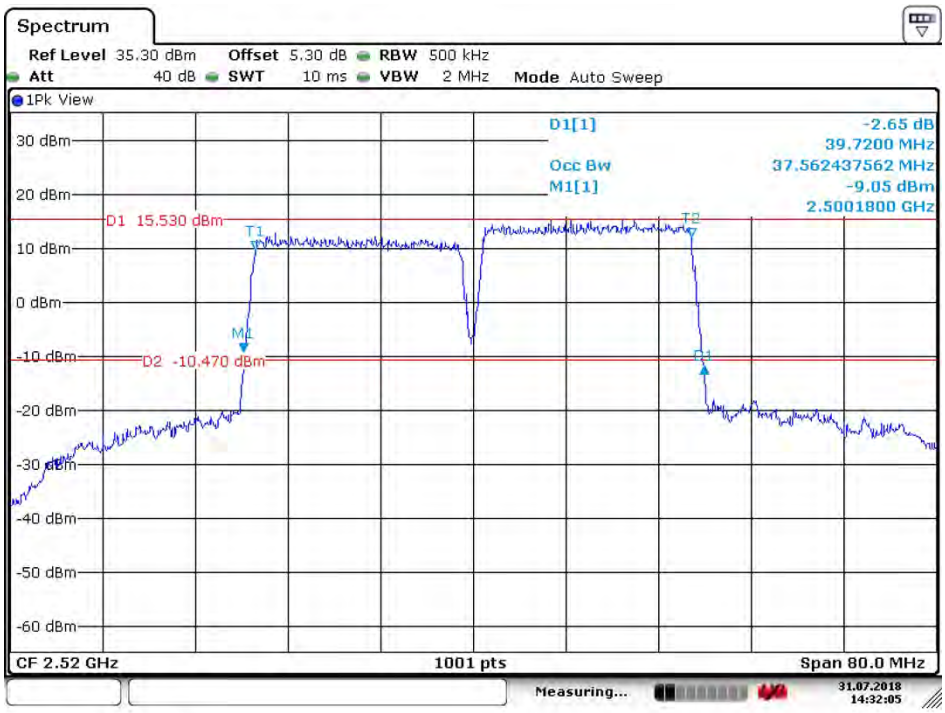
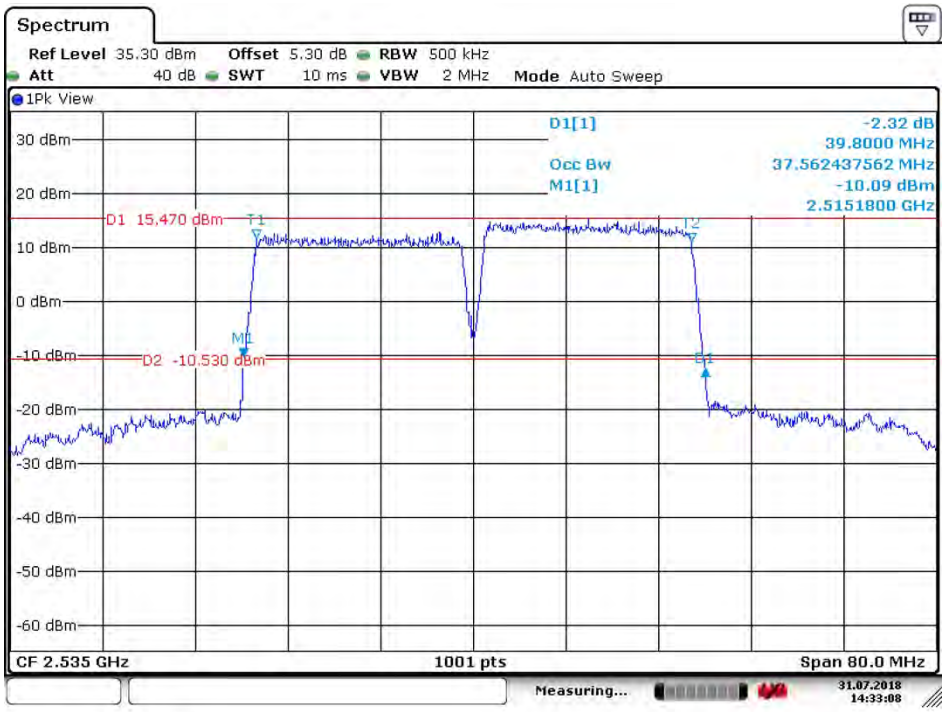
4.1.2.1.4 Test Channel = 21048-20850



Date: 31.JUL.2018 14:32:05

4.1.2.1.5 Test Channel = 21199-21001



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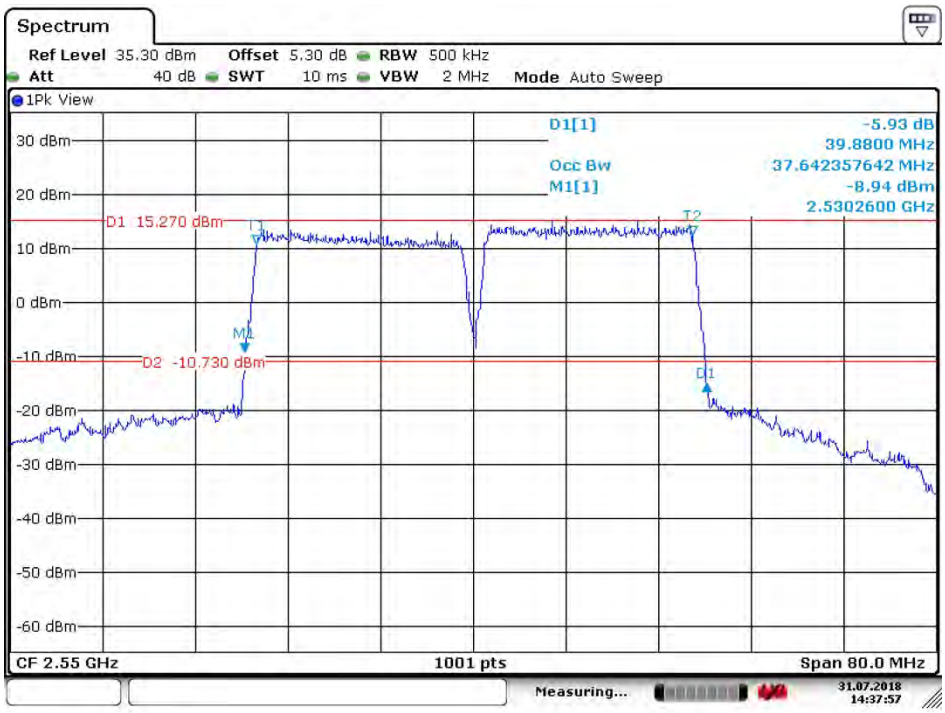
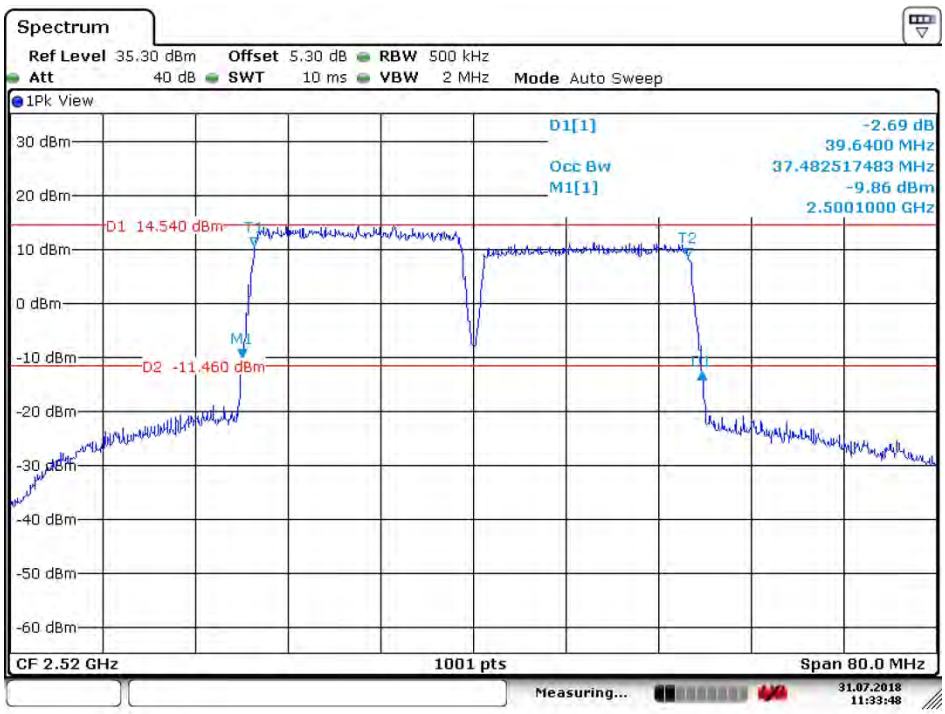
4.1.2.1.6 Test Channel = 21350-21152



Date: 31.JUL.2018 14:37:57

4.1.2.2 Test Mode = LTE/TM2

4.1.2.2.1 Test Channel = 20850-21048



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