



Appendix B

E-UTRA BAND 13



CONTENT

1.	EFFECTIVE (ISOTROPIC) RADIATED POWER	3
1.1.	Test Result	3
2.	PEAK-TO-AVERAGE RATIO(CCDF)	6
2.1.	Test Result	6
2.2.	Test Plots.....	6
3.	MODULATION CHARACTERISTICS	8
3.1.	Test BAND = LTE BAND13	8
3.1.1.	Test Mode = LTE /TM1 10MHz	8
3.1.1.1.	Test Channel = MCH.....	8
3.1.2.	Test Mode = LTE /TM2 10MHz	9
3.1.2.1.	Test Channel = MCH.....	9
3.1.1.	Test Mode = LTE /TM3 10MHz	10
3.1.1.1.	Test Channel = MCH.....	10
4.	26dB BANDWIDTH AND OCCUPIED BANDWIDTH.....	11
4.1.	Test Result	11
4.2.	Test Plots.....	11
5.	BAND EDGE COMPLIANCE	16
5.1.	Test Plots.....	16
6.	SPURIOUS EMISSION AT ANTENNA TERMINAL	24
6.1.	Test Plots.....	24
7.	FIELD STRENGTH OF SPURIOUS RADIATION	26
7.1.	Test BAND = LTE BAND 13	26
7.1.1.	Test Mode =LTE/TM1 10MHz	26
7.1.1.1.	Test Channel = MCH.....	26
8.	FREQUENCY STABILITY	27
8.1.	Frequency Vs Voltage	27
8.2.	Frequency Vs Temperature	27



1. Effective (Isotropic) Radiated Power

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
BAND13	5MHz	QPSK	23205	1RB#0	23.75	23.60	34.77	PASS
BAND13	5MHz	QPSK	23205	1RB#12	23.96	23.81	34.77	PASS
BAND13	5MHz	QPSK	23205	1RB#24	23.89	23.74	34.77	PASS
BAND13	5MHz	QPSK	23205	12RB#0	22.82	22.67	34.77	PASS
BAND13	5MHz	QPSK	23205	12RB#13	22.95	22.80	34.77	PASS
BAND13	5MHz	QPSK	23205	12RB#6	22.92	22.77	34.77	PASS
BAND13	5MHz	QPSK	23205	25RB#0	22.96	22.81	34.77	PASS
BAND13	5MHz	QPSK	23230	1RB#0	23.85	23.70	34.77	PASS
BAND13	5MHz	QPSK	23230	1RB#12	23.78	23.63	34.77	PASS
BAND13	5MHz	QPSK	23230	1RB#24	23.79	23.64	34.77	PASS
BAND13	5MHz	QPSK	23230	12RB#0	22.98	22.83	34.77	PASS
BAND13	5MHz	QPSK	23230	12RB#13	22.89	22.74	34.77	PASS
BAND13	5MHz	QPSK	23230	12RB#6	22.94	22.79	34.77	PASS
BAND13	5MHz	QPSK	23230	25RB#0	22.89	22.74	34.77	PASS
BAND13	5MHz	QPSK	23255	1RB#0	23.67	23.52	34.77	PASS
BAND13	5MHz	QPSK	23255	1RB#12	23.73	23.58	34.77	PASS
BAND13	5MHz	QPSK	23255	1RB#24	23.55	23.40	34.77	PASS
BAND13	5MHz	QPSK	23255	12RB#0	22.87	22.72	34.77	PASS
BAND13	5MHz	QPSK	23255	12RB#13	22.89	22.74	34.77	PASS
BAND13	5MHz	QPSK	23255	12RB#6	22.79	22.64	34.77	PASS
BAND13	5MHz	QPSK	23255	25RB#0	22.86	22.71	34.77	PASS
BAND13	5MHz	16QAM	23205	1RB#0	22.72	22.64	34.77	PASS
BAND13	5MHz	16QAM	23205	1RB#12	22.73	22.70	34.77	PASS
BAND13	5MHz	16QAM	23205	1RB#24	22.68	22.65	34.77	PASS
BAND13	5MHz	16QAM	23205	12RB#0	21.57	21.39	34.77	PASS
BAND13	5MHz	16QAM	23205	12RB#13	21.72	21.75	34.77	PASS
BAND13	5MHz	16QAM	23205	12RB#6	21.89	21.50	34.77	PASS
BAND13	5MHz	16QAM	23205	25RB#0	21.81	21.87	34.77	PASS
BAND13	5MHz	16QAM	23230	1RB#0	22.76	22.66	34.77	PASS
BAND13	5MHz	16QAM	23230	1RB#12	22.49	22.41	34.77	PASS
BAND13	5MHz	16QAM	23230	1RB#24	22.87	22.52	34.77	PASS
BAND13	5MHz	16QAM	23230	12RB#0	21.85	21.62	34.77	PASS
BAND13	5MHz	16QAM	23230	12RB#13	21.86	21.83	34.77	PASS
BAND13	5MHz	16QAM	23230	12RB#6	21.89	21.51	34.77	PASS



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM180500437001

Page: 4 of 27

BAND13	5MHz	16QAM	23230	25RB#0	21.97	21.77	34.77	PASS
BAND13	5MHz	16QAM	23255	1RB#0	22.49	22.46	34.77	PASS
BAND13	5MHz	16QAM	23255	1RB#12	22.74	22.32	34.77	PASS
BAND13	5MHz	16QAM	23255	1RB#24	22.60	22.23	34.77	PASS
BAND13	5MHz	16QAM	23255	12RB#0	21.90	21.73	34.77	PASS
BAND13	5MHz	16QAM	23255	12RB#13	21.99	21.73	34.77	PASS
BAND13	5MHz	16QAM	23255	12RB#6	21.77	21.54	34.77	PASS
BAND13	5MHz	16QAM	23255	25RB#0	21.65	21.52	34.77	PASS
BAND13	5MHz	64QAM	23205	1RB#0	21.64	21.49	34.77	PASS
BAND13	5MHz	64QAM	23205	1RB#12	21.90	21.75	34.77	PASS
BAND13	5MHz	64QAM	23205	1RB#24	21.81	21.66	34.77	PASS
BAND13	5MHz	64QAM	23205	12RB#0	20.88	20.73	34.77	PASS
BAND13	5MHz	64QAM	23205	12RB#13	20.72	20.57	34.77	PASS
BAND13	5MHz	64QAM	23205	12RB#6	20.81	20.66	34.77	PASS
BAND13	5MHz	64QAM	23205	25RB#0	20.99	20.84	34.77	PASS
BAND13	5MHz	64QAM	23230	1RB#0	21.96	21.81	34.77	PASS
BAND13	5MHz	64QAM	23230	1RB#12	21.85	21.70	34.77	PASS
BAND13	5MHz	64QAM	23230	1RB#24	21.70	21.55	34.77	PASS
BAND13	5MHz	64QAM	23230	12RB#0	20.91	20.76	34.77	PASS
BAND13	5MHz	64QAM	23230	12RB#13	20.70	20.55	34.77	PASS
BAND13	5MHz	64QAM	23230	12RB#6	20.81	20.66	34.77	PASS
BAND13	5MHz	64QAM	23230	25RB#0	20.95	20.80	34.77	PASS
BAND13	5MHz	64QAM	23255	1RB#0	21.49	21.34	34.77	PASS
BAND13	5MHz	64QAM	23255	1RB#12	21.65	21.50	34.77	PASS
BAND13	5MHz	64QAM	23255	1RB#24	21.37	21.22	34.77	PASS
BAND13	5MHz	64QAM	23255	12RB#0	20.96	20.81	34.77	PASS
BAND13	5MHz	64QAM	23255	12RB#13	20.74	20.59	34.77	PASS
BAND13	5MHz	64QAM	23255	12RB#6	20.54	20.39	34.77	PASS
BAND13	5MHz	64QAM	23255	25RB#0	20.72	20.57	34.77	PASS
BAND13	10MHz	QPSK	23230	1RB#0	23.81	23.66	34.77	PASS
BAND13	10MHz	QPSK	23230	1RB#24	23.82	23.67	34.77	PASS
BAND13	10MHz	QPSK	23230	1RB#49	23.57	23.42	34.77	PASS
BAND13	10MHz	QPSK	23230	25RB#0	22.86	22.71	34.77	PASS
BAND13	10MHz	QPSK	23230	25RB#12	22.78	22.63	34.77	PASS
BAND13	10MHz	QPSK	23230	25RB#25	22.72	22.57	34.77	PASS
BAND13	10MHz	QPSK	23230	50RB#0	22.79	22.64	34.77	PASS
BAND13	10MHz	16QAM	23230	1RB#0	22.62	22.75	34.77	PASS
BAND13	10MHz	16QAM	23230	1RB#24	22.89	22.57	34.77	PASS
BAND13	10MHz	16QAM	23230	1RB#49	22.54	22.12	34.77	PASS
BAND13	10MHz	16QAM	23230	25RB#0	21.72	21.42	34.77	PASS
BAND13	10MHz	16QAM	23230	25RB#12	21.82	21.68	34.77	PASS

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM180500437001

Page: 5 of 27

BAND13	10MHz	16QAM	23230	25RB#25	21.61	21.49	34.77	PASS
BAND13	10MHz	16QAM	23230	50RB#0	21.78	21.40	34.77	PASS
BAND13	10MHz	64QAM	23230	1RB#0	21.80	21.65	34.77	PASS
BAND13	10MHz	64QAM	23230	1RB#24	21.70	21.55	34.77	PASS
BAND13	10MHz	64QAM	23230	1RB#49	21.28	21.13	34.77	PASS
BAND13	10MHz	64QAM	23230	25RB#0	20.77	20.62	34.77	PASS
BAND13	10MHz	64QAM	23230	25RB#12	20.61	20.46	34.77	PASS
BAND13	10MHz	64QAM	23230	25RB#25	20.65	20.50	34.77	PASS
BAND13	10MHz	64QAM	23230	50RB#0	20.64	20.49	34.77	PASS

Note:

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

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level

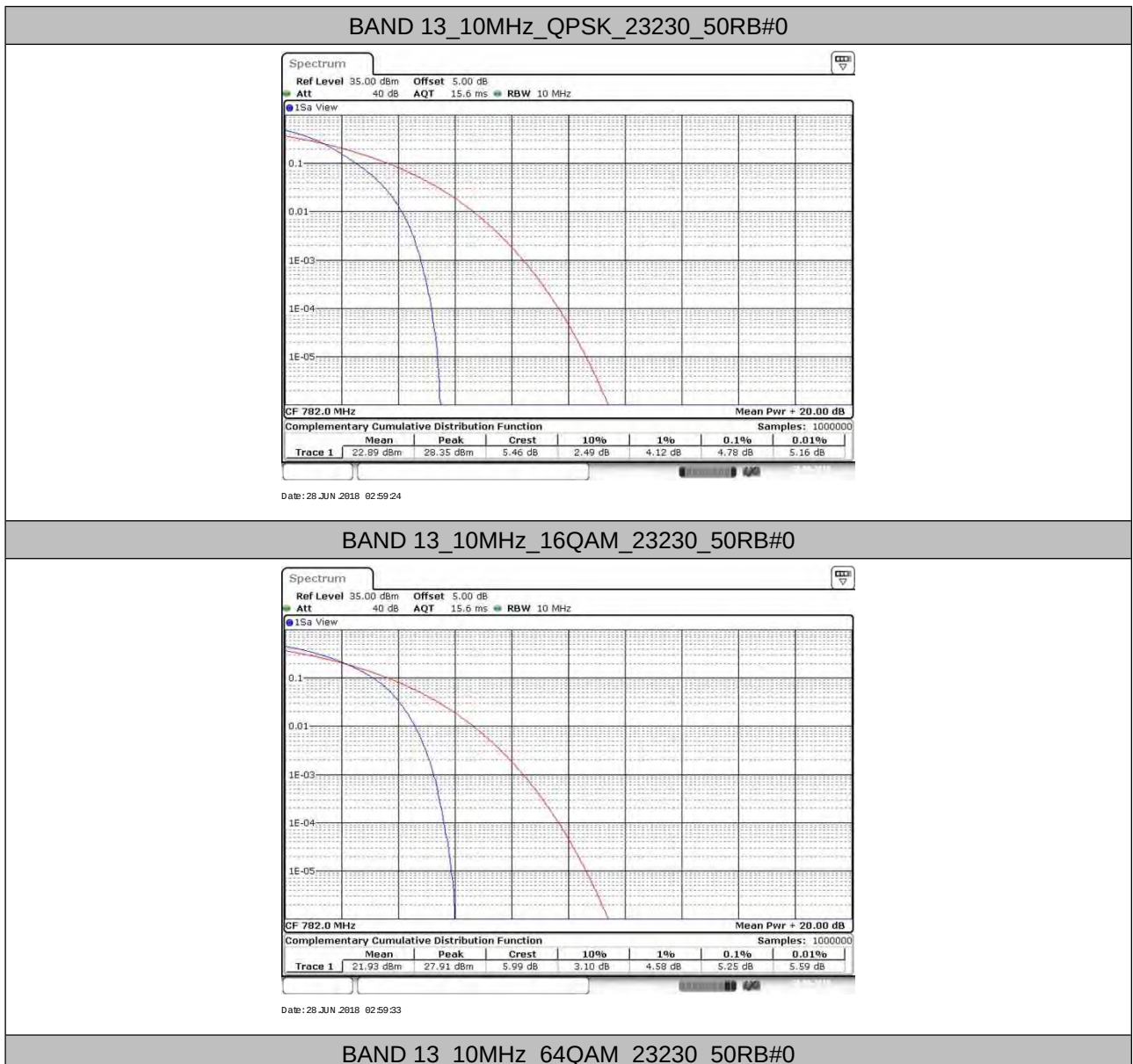


2. Peak-to-Average Ratio(CCDF)

2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
BAND 13	10MHz	QPSK	23230	50RB#0	4.78	13	PASS
		16QAM	23230	50RB#0	5.25	13	PASS
		64QAM	23230	50RB#0	5.22	13	PASS

2.2. Test Plots

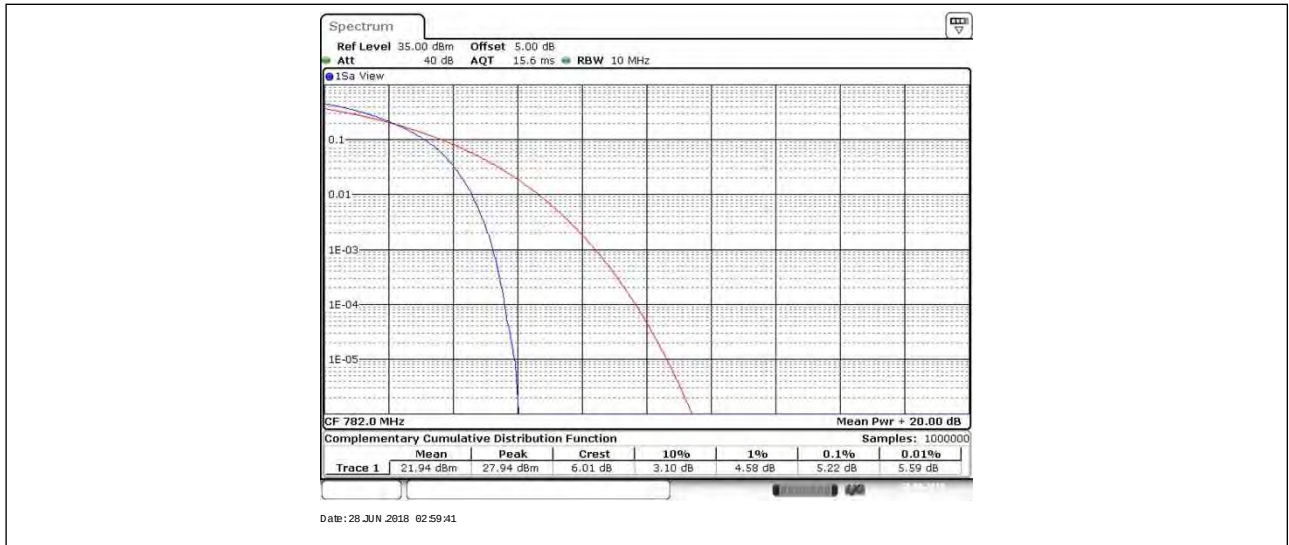




SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM180500437001

Page: 7 of 27



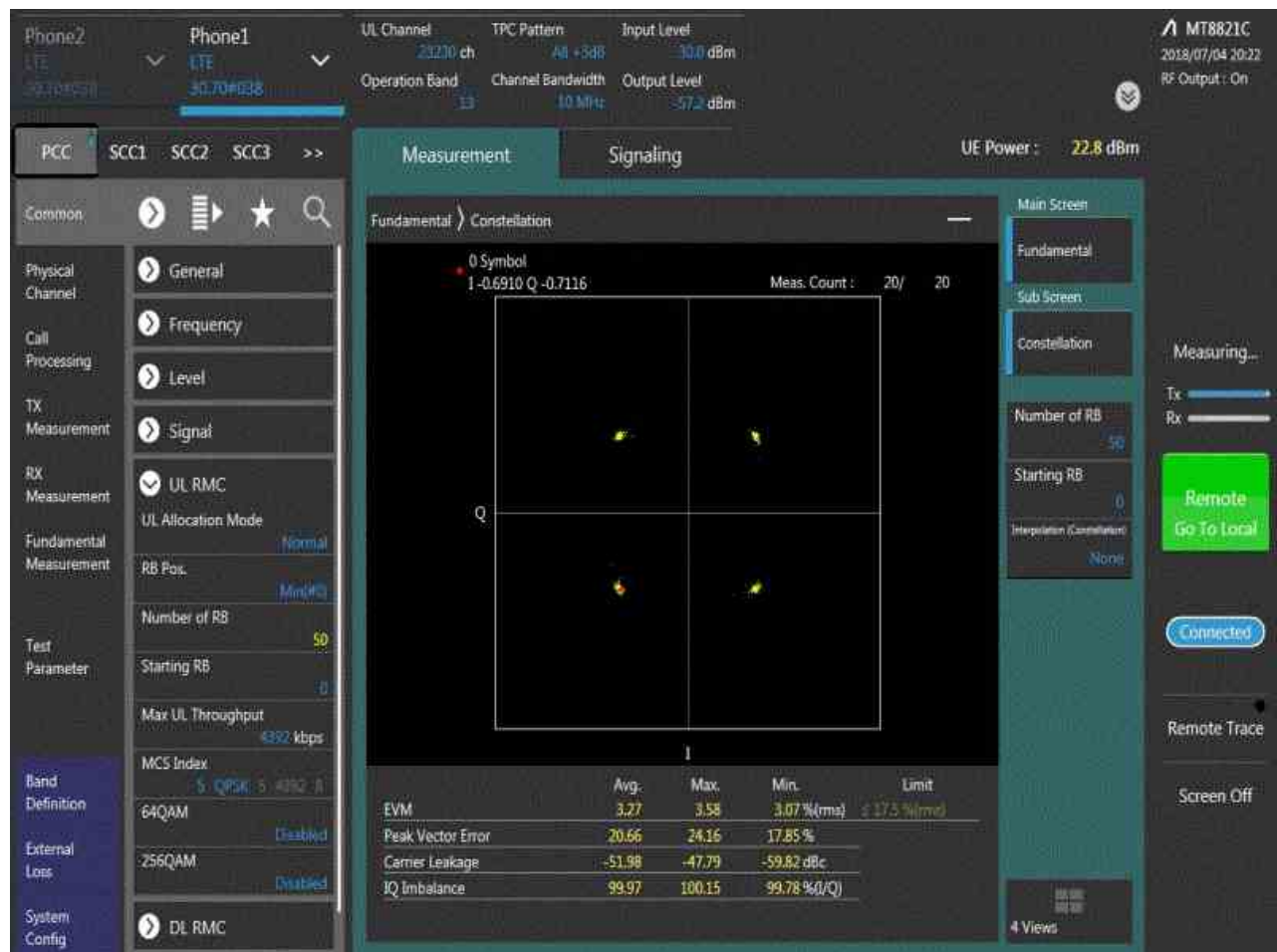


3. Modulation Characteristics

3.1. Test BAND = LTE BAND13

3.1.1. Test Mode = LTE /TM1 10MHz

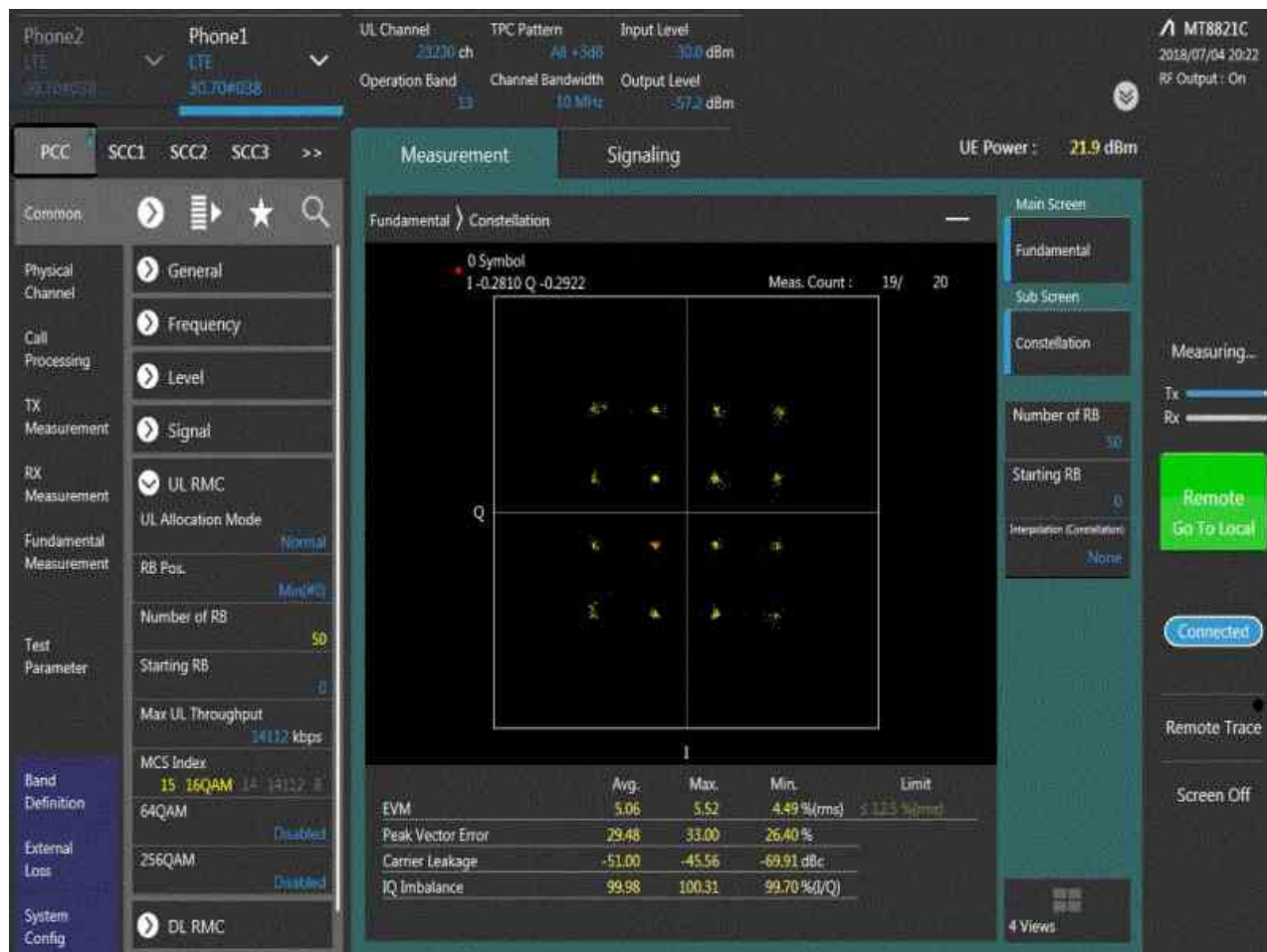
3.1.1.1. Test Channel = MCH





3.1.2. Test Mode = LTE /TM2 10MHz

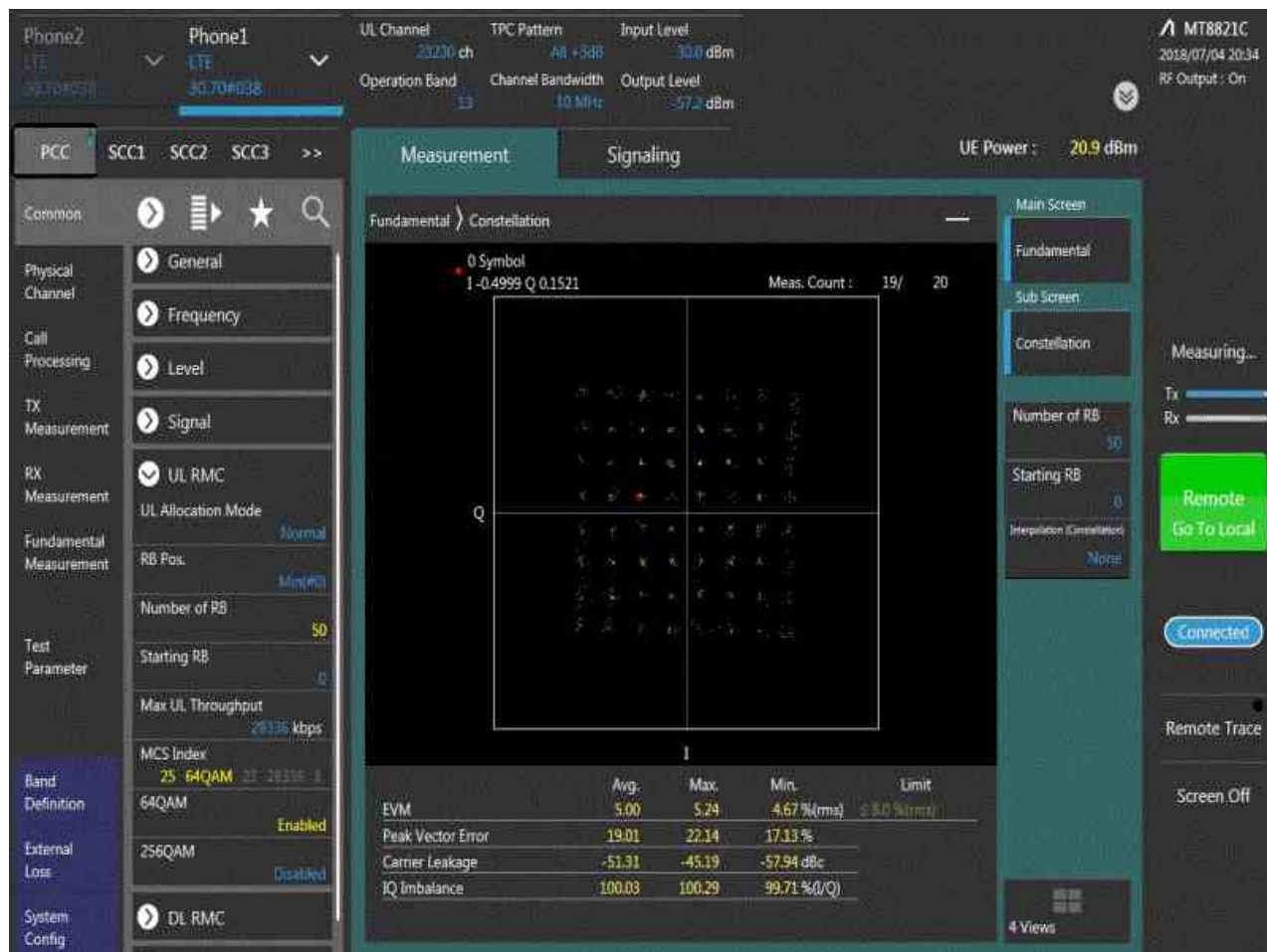
3.1.2.1. Test Channel = MCH





3.1.1. Test Mode = LTE /TM3 10MHz

3.1.1.1. Test Channel = MCH



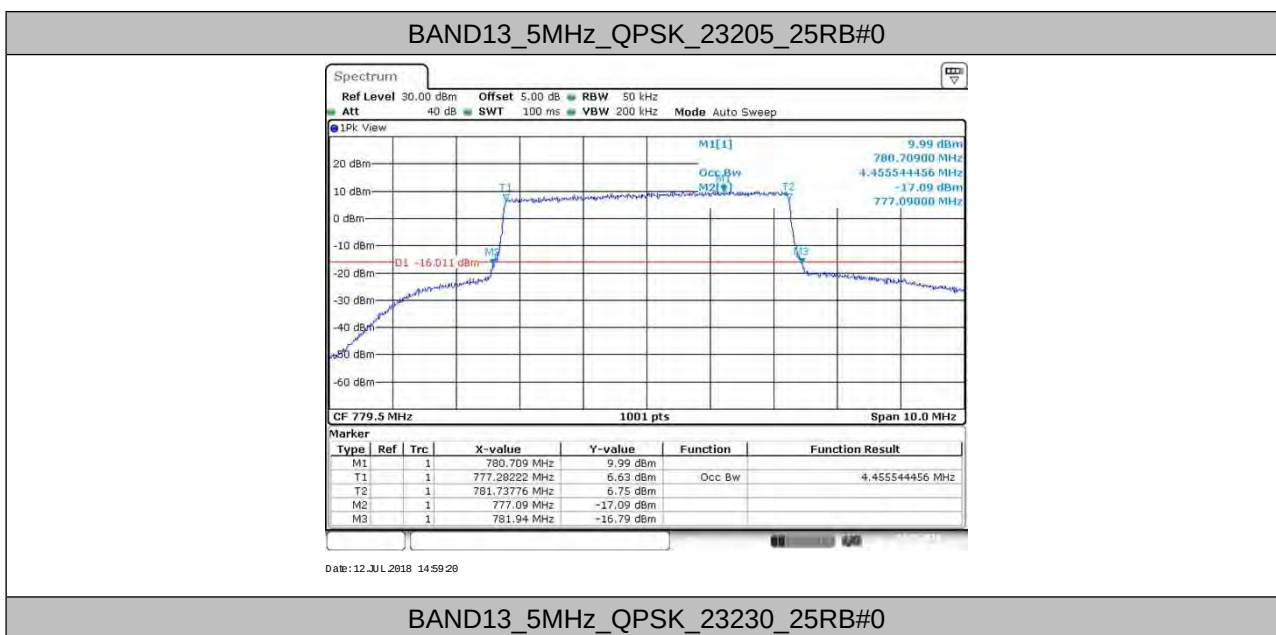


4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
BAND13	5MHz	QPSK	23205	25RB#0	4.456	4.850	PASS
			23230	25RB#0	4.456	4.860	PASS
			23255	25RB#0	4.466	4.870	PASS
		64QAM	23205	25RB#0	4.456	4.960	PASS
			23230	25RB#0	4.466	5.310	PASS
			23255	25RB#0	4.476	4.880	PASS
		16QAM	23205	25RB#0	4.456	4.900	PASS
			23230	25RB#0	4.456	4.950	PASS
			23255	25RB#0	4.466	4.870	PASS
	10MHz	QPSK	23230	50RB#0	8.891	10.040	PASS
		64QAM	23230	50RB#0	8.891	10.160	PASS
		16QAM	23230	50RB#0	8.891	10.120	PASS

4.2. Test Plots

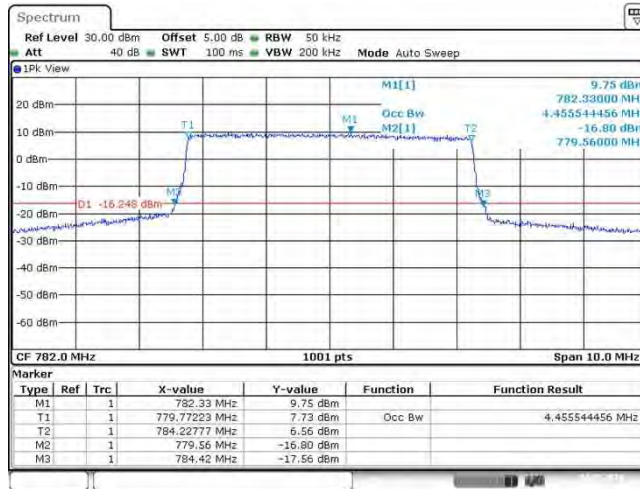




SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

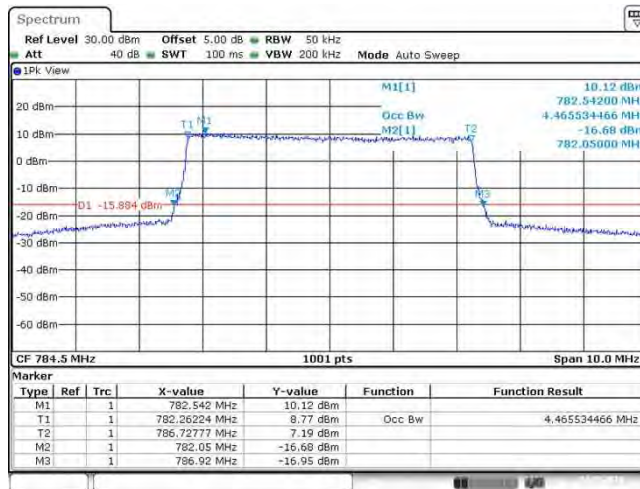
Report No.: SZEM180500437001

Page: 12 of 27



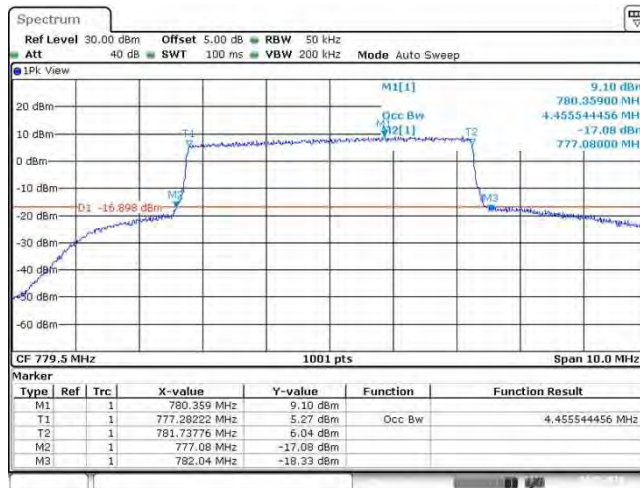
Date: 12 JUL 2018 15:09:18

BAND13_5MHz_QPSK_23255_25RB#0



Date: 12 JUL 2018 15:01:17

BAND13_5MHz_64QAM_23205_25RB#0



Date: 12 JUL 2018 14:59:59

BAND13_5MHz_64QAM_23230_25RB#0

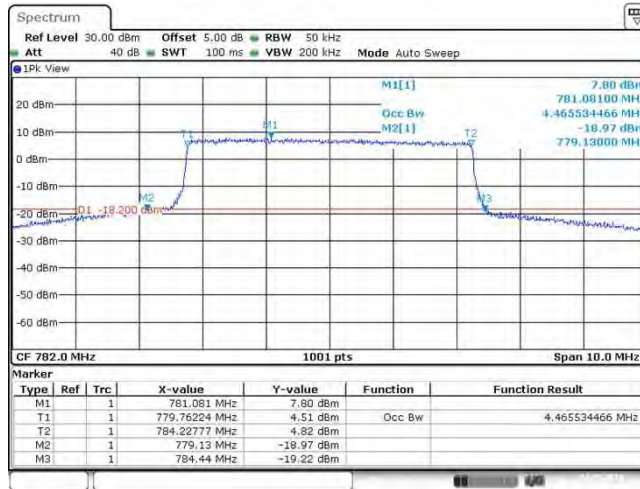
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

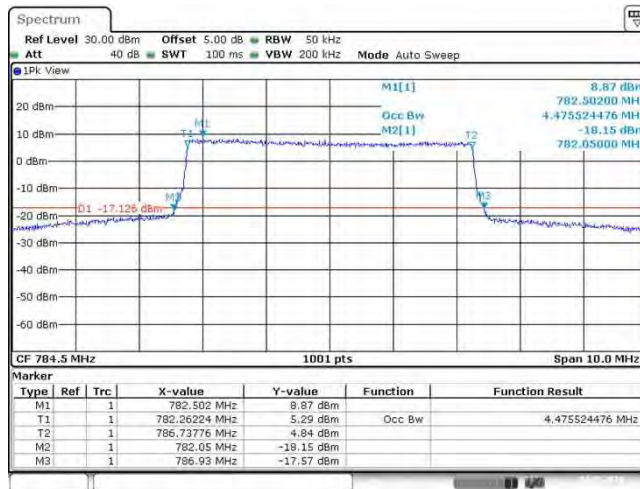
Report No.: SZEM180500437001

Page: 13 of 27



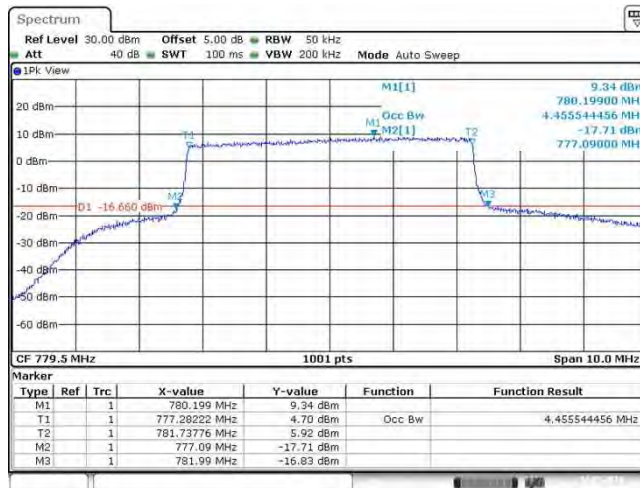
Date: 12 JUL 2018 15:09:58

BAND13_5MHz_64QAM_23255_25RB#0



Date: 12 JUL 2018 15:01:57

BAND13_5MHz_16QAM_23205_25RB#0



Date: 12 JUL 2018 14:59:39

BAND13_5MHz_16QAM_23230_25RB#0

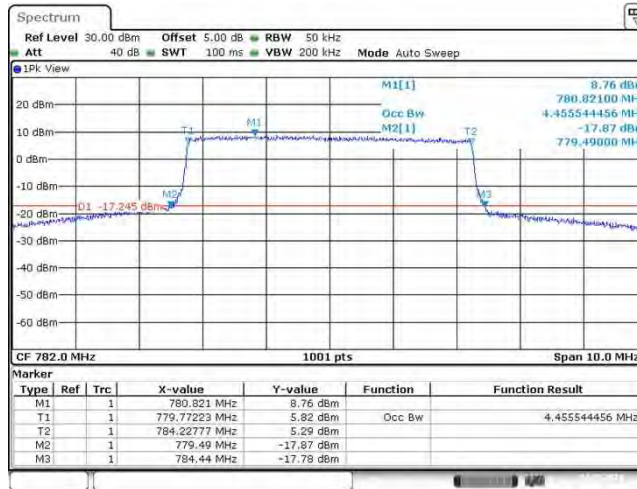
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

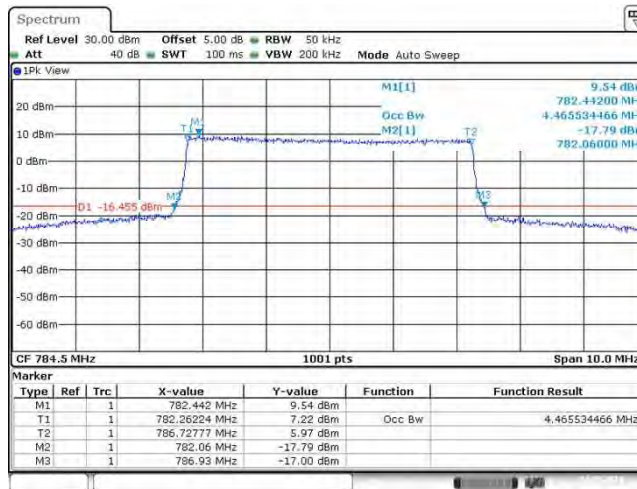
Report No.: SZEM180500437001

Page: 14 of 27



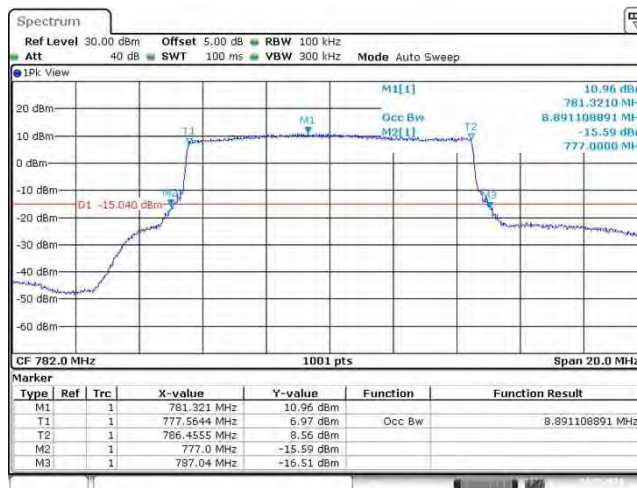
Date: 12 JUL 2018 15:59:38

BAND13_5MHz_16QAM_23255_25RB#0



Date: 12 JUL 2018 15:01:37

BAND13_10MHz_QPSK_23230_50RB#0



Date: 12 JUL 2018 15:02:14

BAND13_10MHz_64QAM_23230_50RB#0

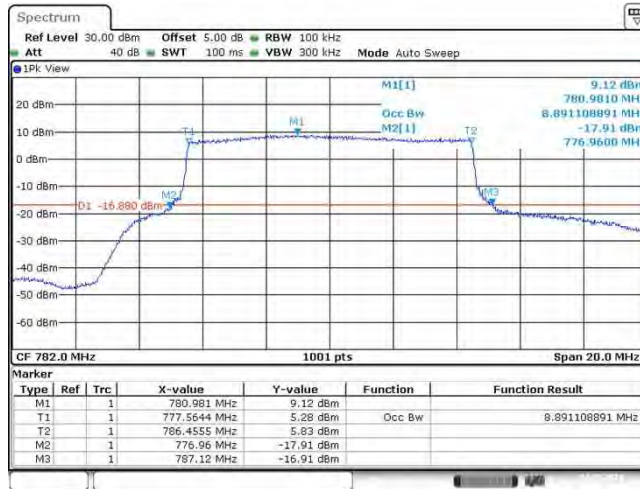
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

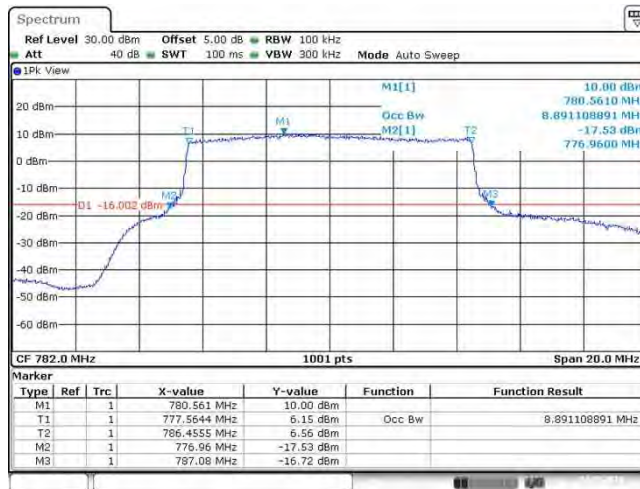
Report No.: SZEM180500437001

Page: 15 of 27



Date: 12 JUL 2018 15:02:39

BAND13_10MHz_16QAM_23230_50RB#0



Date: 12 JUL 2018 15:02:27



5. Band Edge Compliance

5.1. Test Plots

BAND13_5MHz_QPSK_23205_1RB#0



BAND13_5MHz_QPSK_23205_25RB#0



BAND13_5MHz_QPSK_23255_1RB#24



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

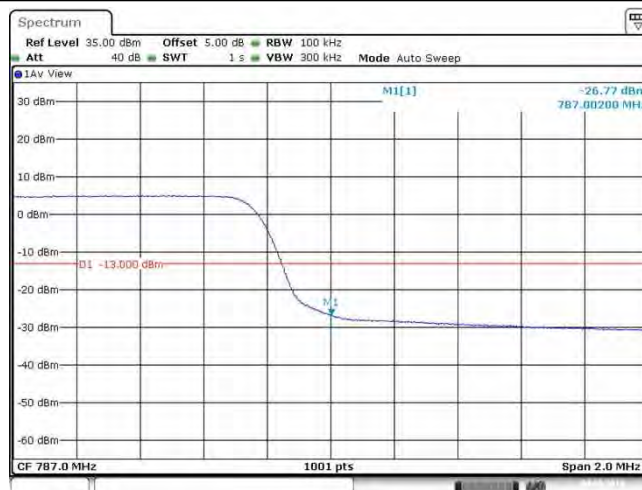
Report No.: SZEM180500437001

Page: 17 of 27



Date: 4 AUG 2018 13:38:15

BAND13_5MHz_QPSK_23255_25RB#0



Date: 4 AUG 2018 13:35:51

BAND13_5MHz_64QAM_23205_1RB#0



Date: 4 AUG 2018 13:28:47

BAND13_5MHz_64QAM_23205_25RB#0



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

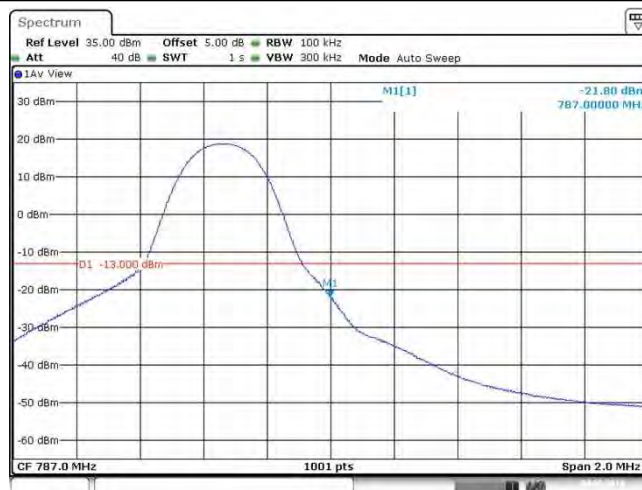
Report No.: SZEM180500437001

Page: 18 of 27



Date: 4 AUG 2018 13:34:15

BAND13_5MHz_64QAM_23255_1RB#24



Date: 4 AUG 2018 13:31:47

BAND13_5MHz_64QAM_23255_25RB#0



Date: 4 AUG 2018 13:36:33

BAND13_5MHz_16QAM_23205_1RB#0

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM180500437001

Page: 19 of 27



Date: 4 AUG 2018 13:27:52

BAND13_5MHz_16QAM_23205_25RB#0



Date: 4 AUG 2018 13:33:29

BAND13_5MHz_16QAM_23255_1RB#24



Date: 4 AUG 2018 13:31:01

BAND13_5MHz_16QAM_23255_25RB#0



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

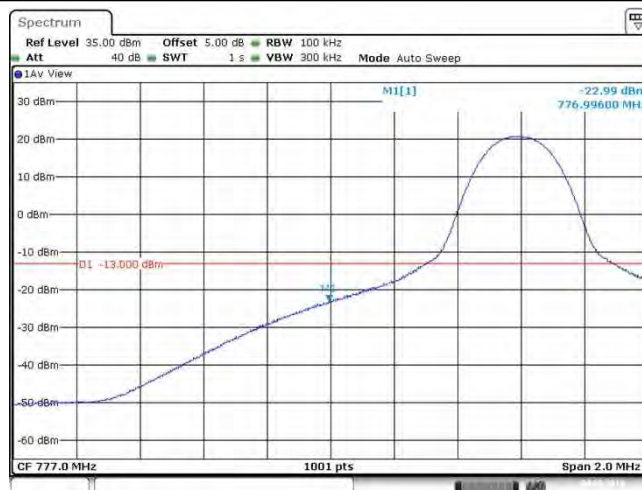
Report No.: SZEM180500437001

Page: 20 of 27



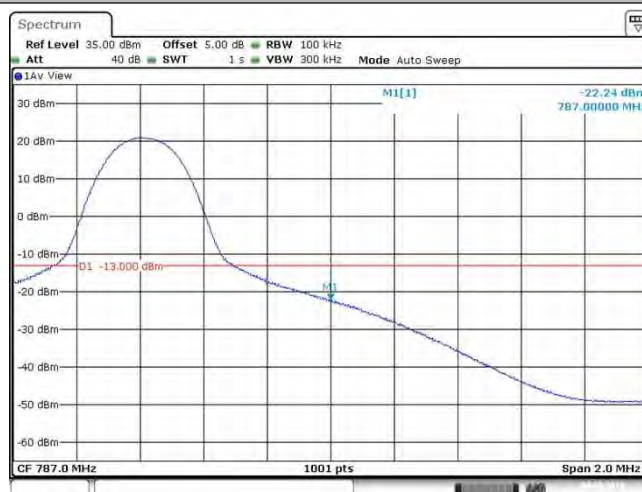
Date: 4 AUG 2018 13:35:47

BAND13_10MHz_QPSK_23230_1RB#0



Date: 4 AUG 2018 13:37:26

BAND13_10MHz_QPSK_23230_1RB#49



Date: 4 AUG 2018 13:39:48

BAND13_10MHz_QPSK_23230_50RB#0



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

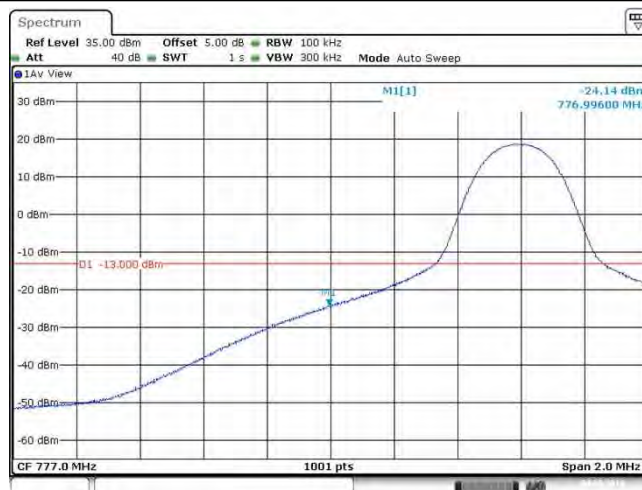
Report No.: SZEM180500437001

Page: 21 of 27



Date: 4 AUG 2018 13:42:11

BAND13_10MHz_64QAM_23230_1RB#0



Date: 4 AUG 2018 13:38:57

BAND13_10MHz_64QAM_23230_1RB#49



Date: 4 AUG 2018 13:41:20

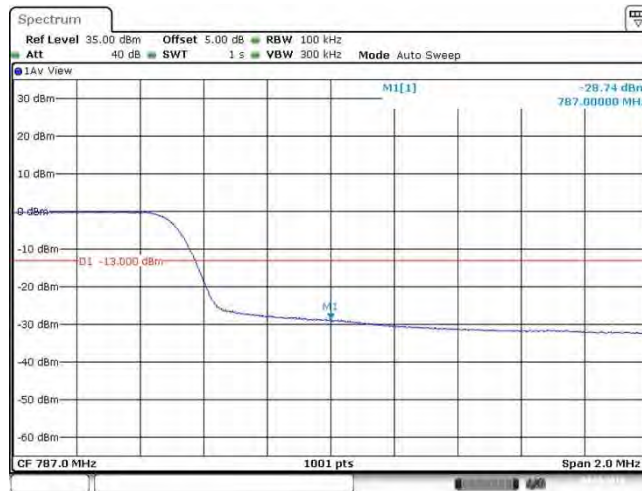
BAND13_10MHz_64QAM_23230_50RB#0



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

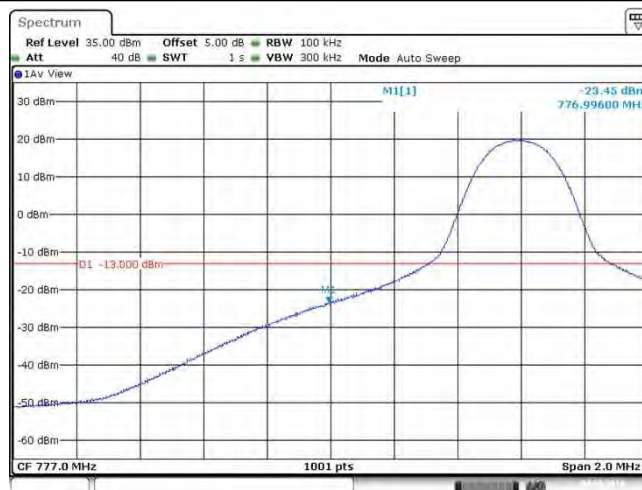
Report No.: SZEM180500437001

Page: 22 of 27



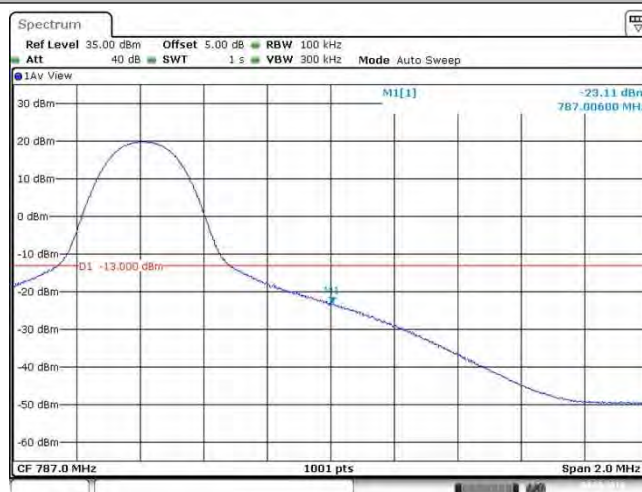
Date: 4 AUG 2018 13:43:43

BAND13_10MHz_16QAM_23230_1RB#0



Date: 4 AUG 2018 13:38:11

BAND13_10MHz_16QAM_23230_1RB#49



Date: 4 AUG 2018 13:46:34

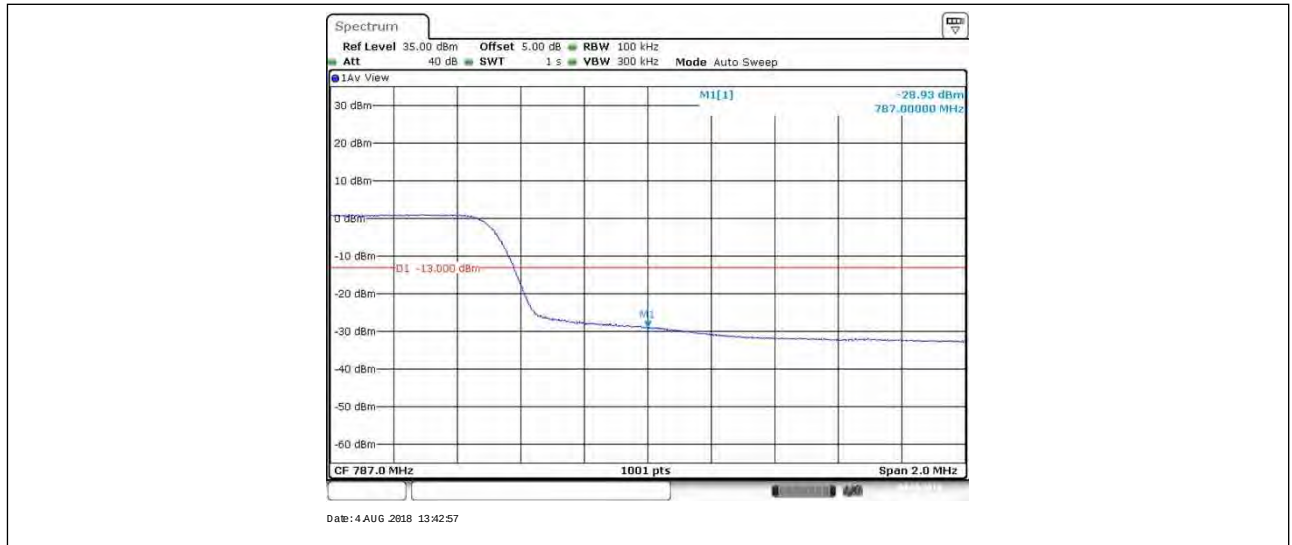
BAND13_10MHz_16QAM_23230_50RB#0



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM180500437001

Page: 23 of 27





6. Spurious Emission at Antenna Terminal

NOTE1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

NOTE2: only the worst case data displayed in this report.

6.1. Test Plots

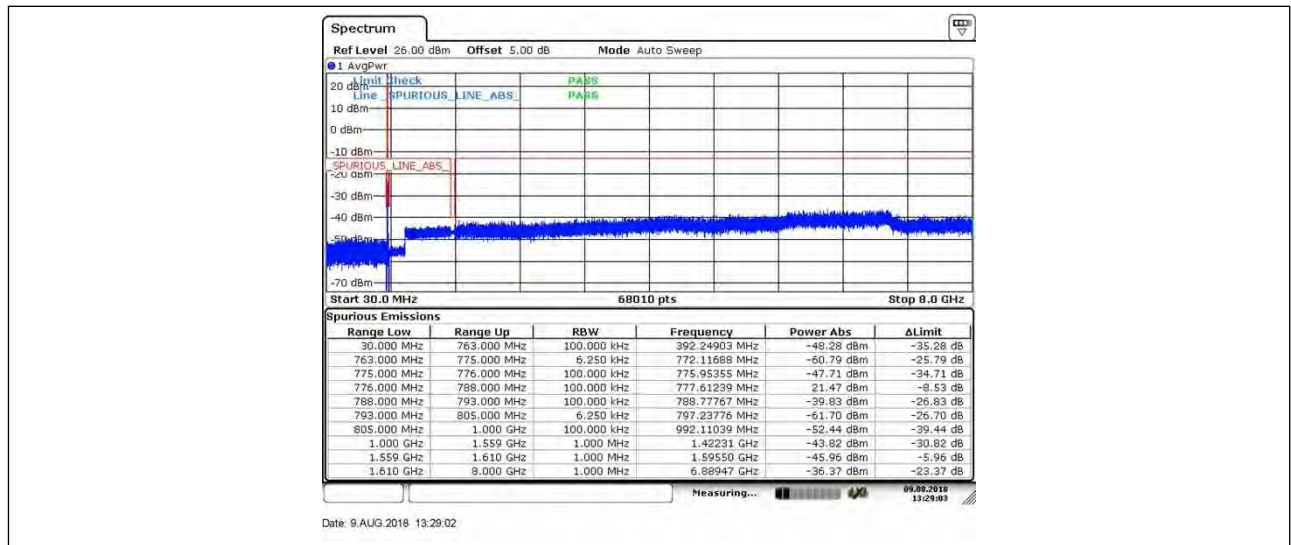




SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM180500437001

Page: 25 of 27





7. Field Strength of Spurious Radiation

7.1. Test BAND = LTE BAND 13

7.1.1. Test Mode =LTE/TM1 10MHz

7.1.1.1. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
63.646667	-81.80	-13.00	68.80	Vertical
104.293333	-84.88	-13.00	71.88	Vertical
300.713333	-87.34	-13.00	74.34	Vertical
1559.500000	-66.09	-40.00	26.09	Vertical
2291.000000	-59.60	-13.00	46.60	Vertical
3116.025000	-69.31	-13.00	56.31	Vertical
62.340000	-77.91	-13.00	64.91	Horizontal
104.293333	-89.79	-13.00	76.79	Horizontal
262.213333	-87.92	-13.00	74.92	Horizontal
1605.000000	-59.75	-40.00	19.75	Horizontal
2332.500000	-58.10	-13.00	45.10	Horizontal
3286.650000	-69.28	-13.00	56.28	Horizontal

NOTE:

- 1) All modes are tested, but the data presented above is the worst case. the disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.



8. Frequency Stability

8.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BAND13	10MHz	QPSK	23230	50RB#0	VH	NT	4.70	0.006010	±2.5	PASS
				50RB#0	VL	NT	1.50	0.001918	±2.5	PASS
				50RB#0	VN	NT	1.70	0.002174	±2.5	PASS
		16QAM	23230	50RB#0	VH	NT	3.90	0.004987	±2.5	PASS
				50RB#0	VL	NT	3.90	0.004987	±2.5	PASS
				50RB#0	VN	NT	3.90	0.004987	±2.5	PASS
		64QAM	23230	50RB#0	VH	NT	3.90	0.004987	±2.5	PASS
				50RB#0	VL	NT	3.90	0.004987	±2.5	PASS
				50RB#0	VN	NT	3.90	0.004987	±2.5	PASS

8.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BAND13	10MHz	QPSK	23230	50RB#0	NV	0	2.10	0.002685	±2.5	PASS
				50RB#0	NV	10	2.20	0.002813	±2.5	PASS
				50RB#0	NV	20	3.90	0.004987	±2.5	PASS
				50RB#0	NV	-20	1.80	0.002302	±2.5	PASS
				50RB#0	NV	-30	3.10	0.003964	±2.5	PASS
		16QAM	23230	50RB#0	NV	0	3.90	0.004987	±2.5	PASS
				50RB#0	NV	10	3.90	0.004987	±2.5	PASS
				50RB#0	NV	20	3.90	0.004987	±2.5	PASS
				50RB#0	NV	-20	3.90	0.004987	±2.5	PASS
				50RB#0	NV	-30	3.90	0.004987	±2.5	PASS
		64QAM	23230	50RB#0	NV	0	3.90	0.004987	±2.5	PASS
				50RB#0	NV	10	3.90	0.004987	±2.5	PASS
				50RB#0	NV	20	3.90	0.004987	±2.5	PASS
				50RB#0	NV	-20	3.90	0.004987	±2.5	PASS
				50RB#0	NV	-30	3.90	0.004987	±2.5	PASS

The End