

# Appendix B

## WCDMA Band II & IV & V





## CONTENT

<b>1. EFFECTIVE (ISOTROPIC) RADIATED POWER</b>	<b>4</b>
1.1. TEST RESULT	4
<b>2. PEAK-TO-AVERAGE RATIO(CCDF)</b>	<b>5</b>
2.1. TEST RESULT	5
2.2. TEST PLOTS	5
<b>3. MODULATION CHARACTERISTICS</b>	<b>10</b>
3.1. TEST BAND = WCDMA BAND II	10
3.1.1. TEST MODE = UMTS/TM1	10
3.1.1.1. TEST CHANNEL = MCH	10
3.2. TEST BAND = WCDMA BAND IV	11
3.2.1. TEST MODE = UMTS/TM1	11
3.2.1.1. TEST CHANNEL = MCH	11
3.3. TEST BAND = WCDMA BAND V	12
3.3.1. TEST MODE = UMTS/TM1	12
3.3.1.1. TEST CHANNEL = MCH	12
<b>4. 26DB BANDWIDTH AND OCCUPIED BANDWIDTH</b>	<b>13</b>
4.1. TEST RESULT	13
4.2. TEST PLOTS	13
<b>5. BAND EDGE COMPLIANCE</b>	<b>18</b>
5.1. TEST PLOTS	18
<b>6. SPURIOUS EMISSION AT ANTENNA TERMINAL</b>	<b>22</b>
6.1. TEST PLOTS	22
<b>7. FIELD STRENGTH OF SPURIOUS RADIATION</b>	<b>32</b>
7.1. TEST BAND = WCDMA BAND II(ANT1)	32
7.1.1. TEST MODE =WCDMA/TM1	32
7.1.1.1. TEST CHANNEL = LCH	32
7.1.1.2. TEST CHANNEL = MCH	33
7.1.1.3. TEST CHANNEL = HCH	33



Unless otherwise agreed in writing, 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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch (CSTC) Testing Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.2.	TEST BAND = WCDMA BAND IV(ANT1)	34
7.2.1.	TEST MODE =WCDMA/TM1	34
7.2.1.1.	TEST CHANNEL = LCH	34
7.2.1.2.	TEST CHANNEL = MCH	35
7.2.1.3.	TEST CHANNEL = HCH	35
7.3.	TEST BAND = WCDMA BAND V(ANT1)	36
7.3.1.	TEST MODE =WCDMA/TM1	36
7.3.1.1.	TEST CHANNEL = LCH	36
7.3.1.2.	TEST CHANNEL = MCH	37
7.3.1.3.	TEST CHANNEL = HCH	37
7.4.	TEST BAND = WCDMA BAND II(ANT2)	38
7.4.1.	TEST MODE =WCDMA/TM1	38
7.4.1.1.	TEST CHANNEL = LCH	38
7.4.1.2.	TEST CHANNEL = MCH	39
7.4.1.3.	TEST CHANNEL = HCH	39
7.5.	TEST BAND = WCDMA BAND IV(ANT2)	40
7.5.1.	TEST MODE =WCDMA/TM1	40
7.5.1.1.	TEST CHANNEL = LCH	40
7.5.1.2.	TEST CHANNEL = MCH	41
7.5.1.3.	TEST CHANNEL = HCH	41
7.6.	TEST BAND = WCDMA BAND V(ANT2)	42
7.6.1.	TEST MODE =WCDMA/TM1	42
7.6.1.1.	TEST CHANNEL = LCH	42
7.6.1.2.	TEST CHANNEL = MCH	43
7.6.1.3.	TEST CHANNEL = HCH	43
7.7.	TEST BAND = WCDMA BAND IV(ANT1)	44
7.7.1.	TEST MODE =WCDMA/TM1	44
7.7.1.1.	TEST CHANNEL = HCH	44
7.8.	TEST BAND = WCDMA BAND IV(ANT2)	45
7.8.1.	TEST MODE =WCDMA/TM1	45
7.8.1.1.	TEST CHANNEL = HCH	45
8.	FREQUENCY STABILITY	46
8.1.	FREQUENCY Vs VOLTAGE	46
8.2.	FREQUENCY Vs TEMPERATURE	47



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



## 1. Effective (Isotropic) Radiated Power

### 1.1. Test Result

#### ANT1:

Band	Channel	Conducted Power (dBm)	EIRP (dBm)	Limit(dBm)	Verdict
Band II	9262	23.66	21.79	33.00	PASS
Band II	9400	23.68	21.81	33.00	PASS
Band II	9538	23.57	21.7	33.00	PASS
Band IV	1312	23.97	23.54	30.00	PASS
Band IV	1413	24.01	23.58	30.00	PASS
Band IV	1513	23.94	23.51	30.00	PASS

Band	Channel	Conducted Power (dBm)	ERP (dBm)	Limit(dBm)	Verdict
Band V	4132	23.58	16.83	38.45	PASS
Band V	4182	23.62	16.87	38.45	PASS
Band V	4233	23.60	16.85	38.45	PASS

#### ANT2:

Band	Channel	Conducted Power (dBm)	EIRP (dBm)	Limit(dBm)	Verdict
Band II	9262	23.30	19.3	33.00	PASS
Band II	9400	23.28	19.28	33.00	PASS
Band II	9538	23.29	19.29	33.00	PASS
Band IV	1312	23.23	20.93	30.00	PASS
Band IV	1413	23.24	20.94	30.00	PASS
Band IV	1513	23.17	20.87	30.00	PASS

Band	Channel	Conducted Power (dBm)	ERP (dBm)	Limit(dBm)	Verdict
Band V	4132	23.78	16.13	38.45	PASS
Band V	4182	23.75	16.1	38.45	PASS
Band V	4233	23.74	16.09	38.45	PASS

Remark:

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

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



Unless otherwise agreed in writing, 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.  
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch (CMAA) Calibration Laboratory

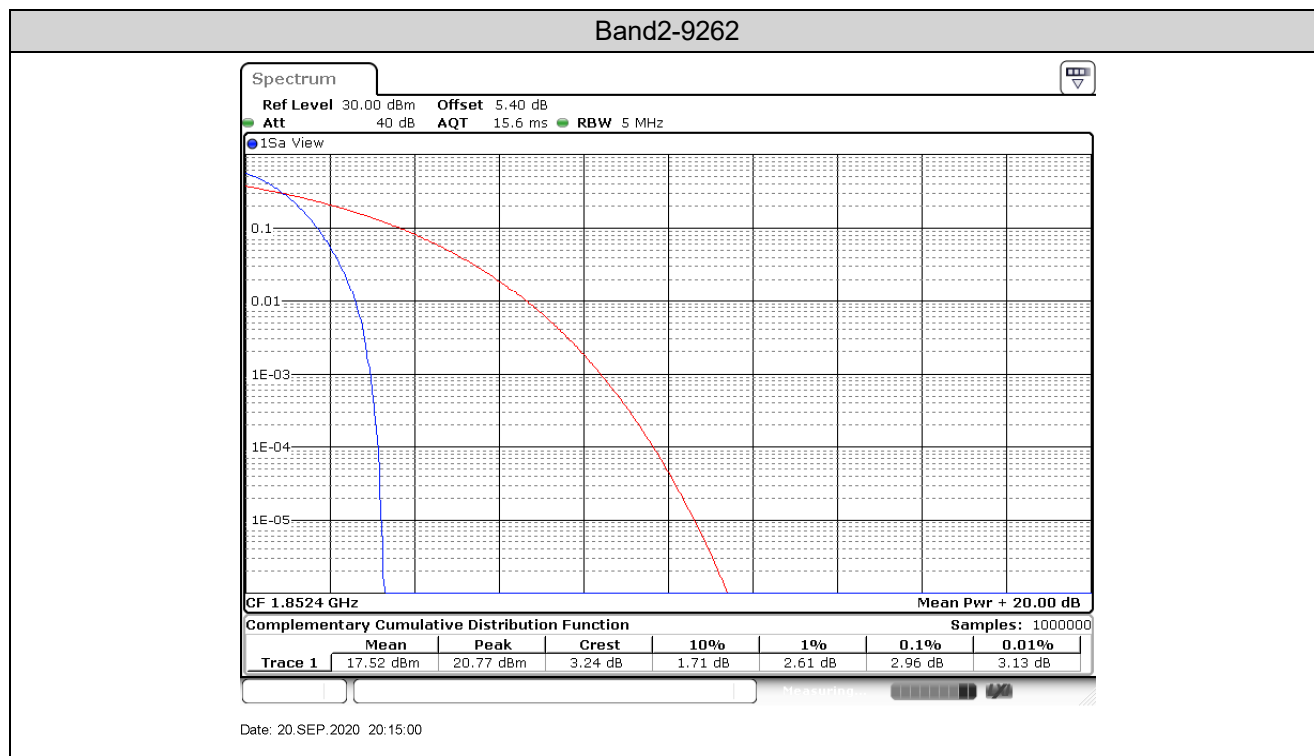
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

## 2. Peak-to-Average Ratio(CCDF)

### 2.1. Test Result

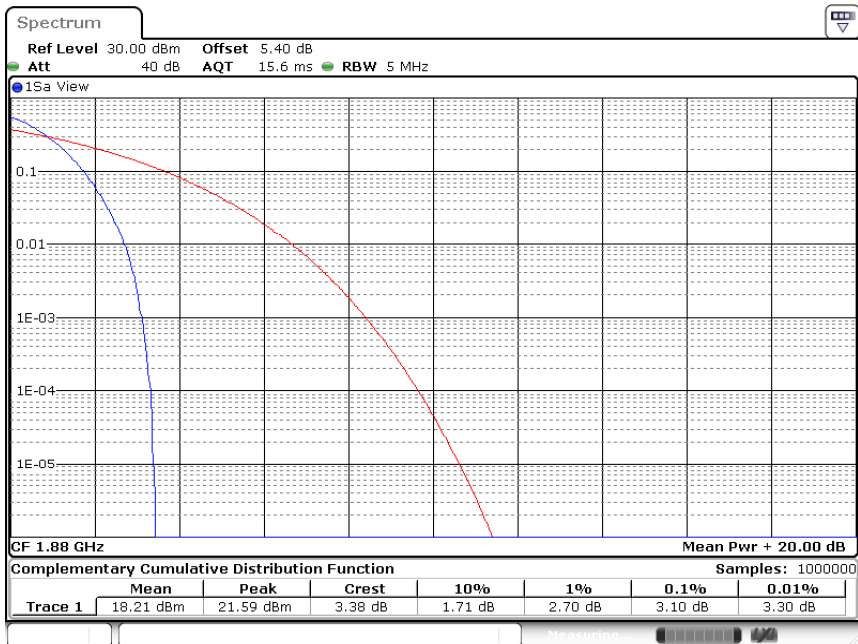
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	2.96	13	PASS
Band2	9400	3.1	13	PASS
Band2	9538	2.93	13	PASS
Band4	1312	2.87	13	PASS
Band4	1413	2.93	13	PASS
Band4	1513	3.16	13	PASS
Band5	4132	2.78	13	PASS
Band5	4182	3.36	13	PASS
Band5	4233	3.22	13	PASS

### 2.2. Test Plots



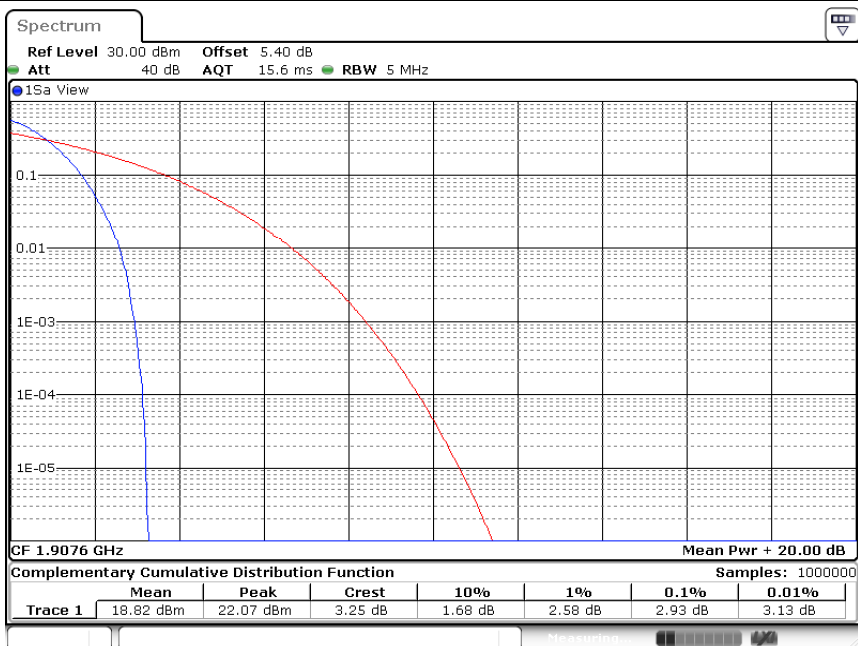


## Band2-9400



Date: 20.SEP.2020 20:15:13

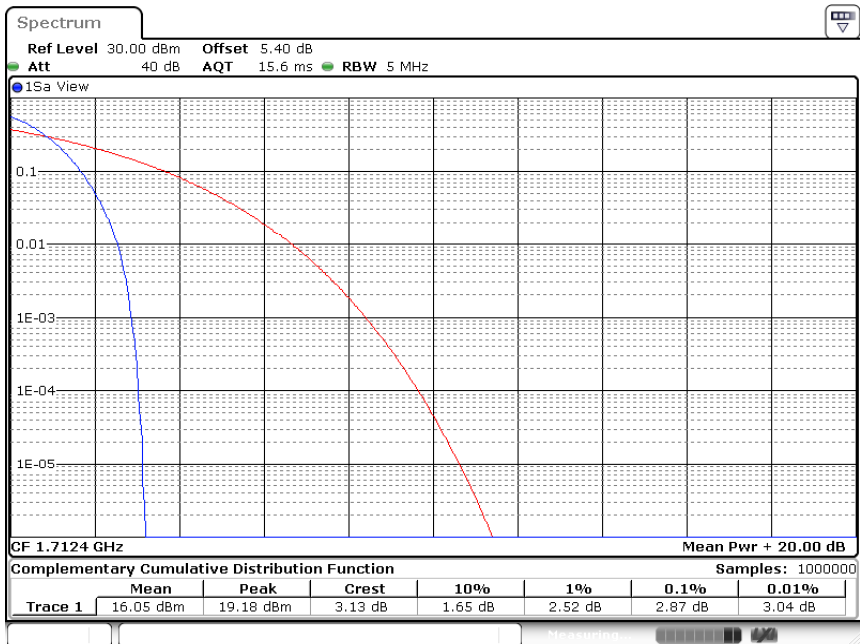
## Band2-9538



Date: 20.SEP.2020 20:15:26

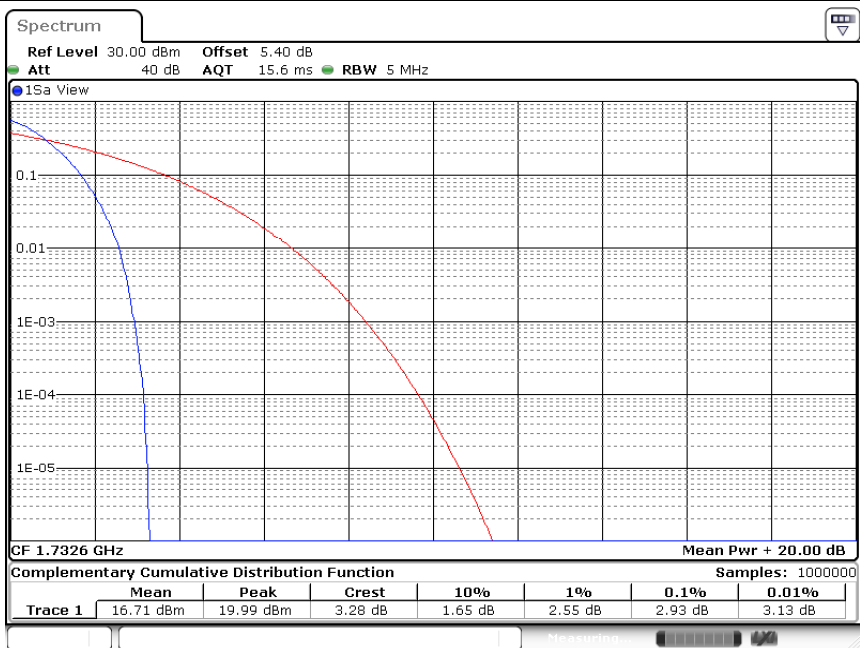


## Band4-1312



Date: 20.SEP.2020 20:35:25

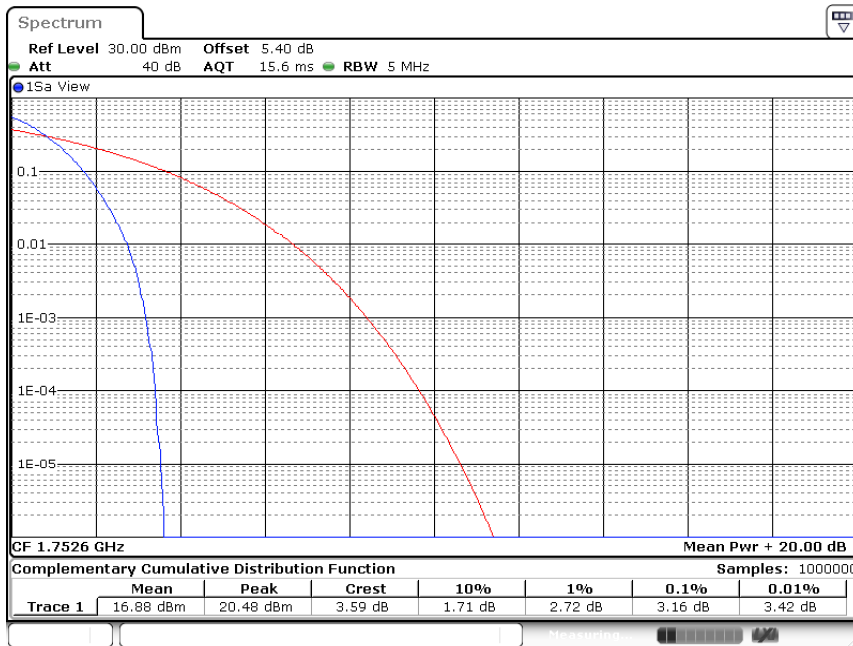
## Band4-1413



Date: 20.SEP.2020 20:35:38

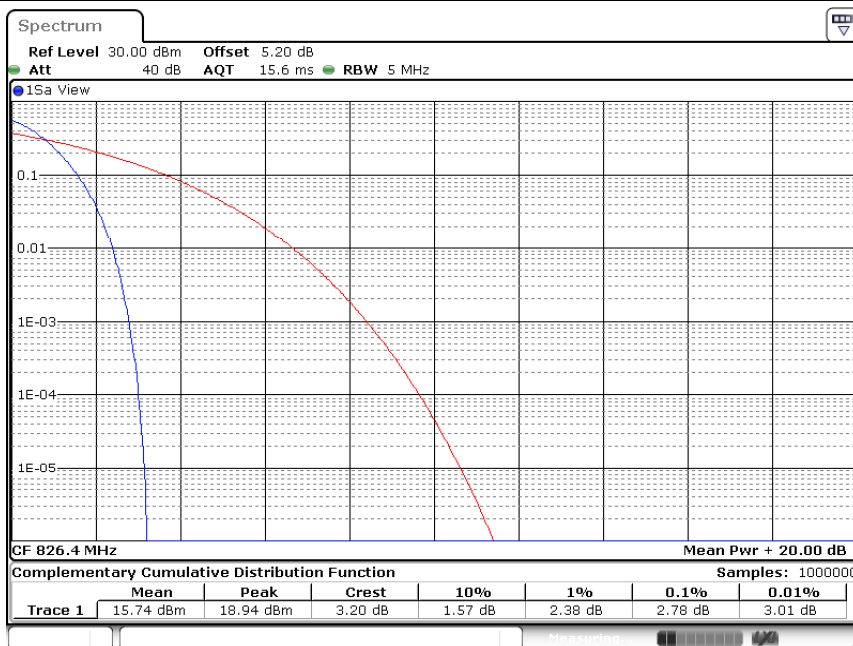


**Band4-1513**



Date: 20.SEP.2020 20:35:51

**Band5-4132**

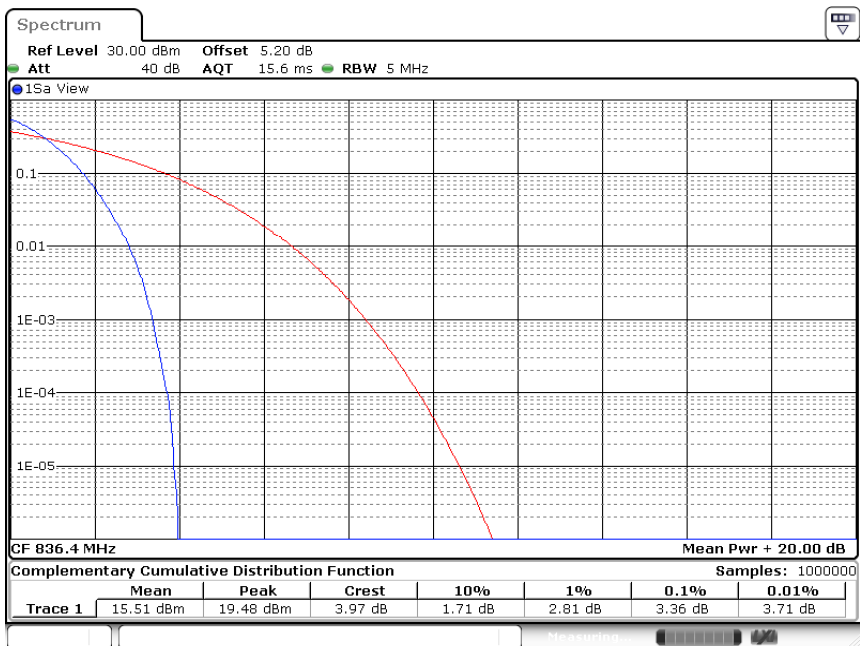


Date: 20.SEP.2020 20:54:18



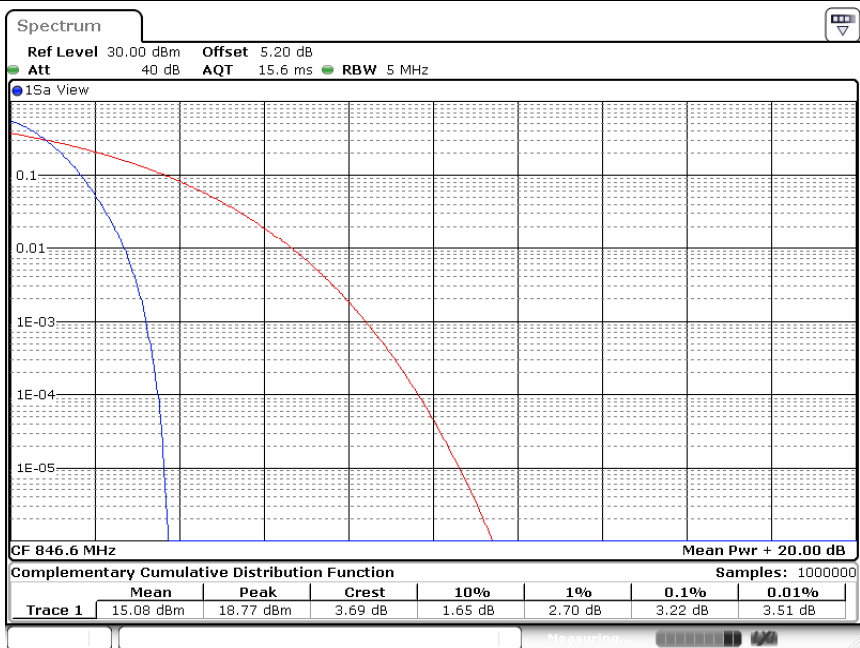


## Band5-4182



Date: 20.SEP.2020 20:54:31

## Band5-4233



Date: 20.SEP.2020 20:54:44

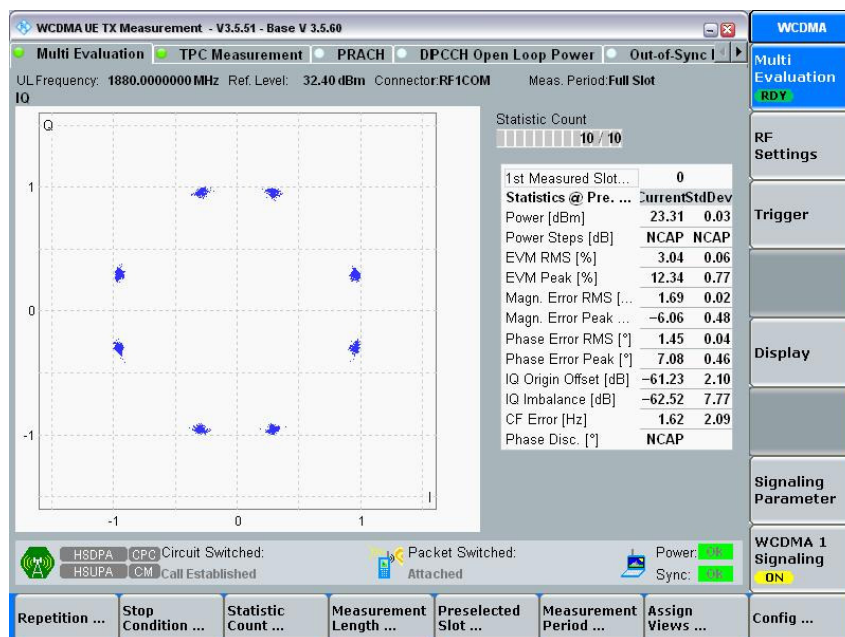


### 3. Modulation Characteristics

#### 3.1. Test Band = WCDMA Band II

##### 3.1.1. Test Mode = UMTS/TM1

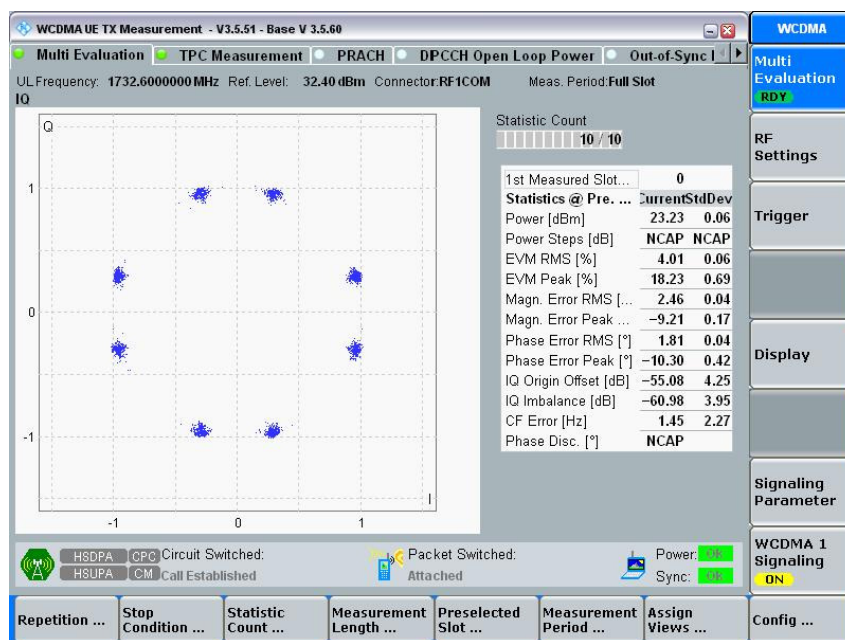
##### 3.1.1.1. Test Channel = MCH



### 3.2. Test Band = WCDMA Band IV

#### 3.2.1. Test Mode = UMTS/TM1

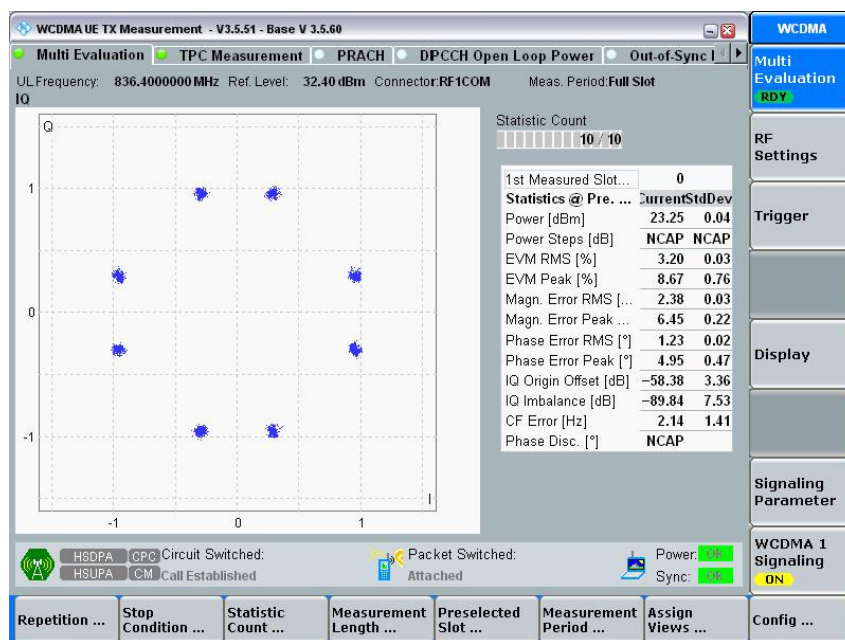
##### 3.2.1.1. Test Channel = MCH



### 3.3. Test Band = WCDMA Band V

#### 3.3.1. Test Mode = UMTS/TM1

##### 3.3.1.1. Test Channel = MCH



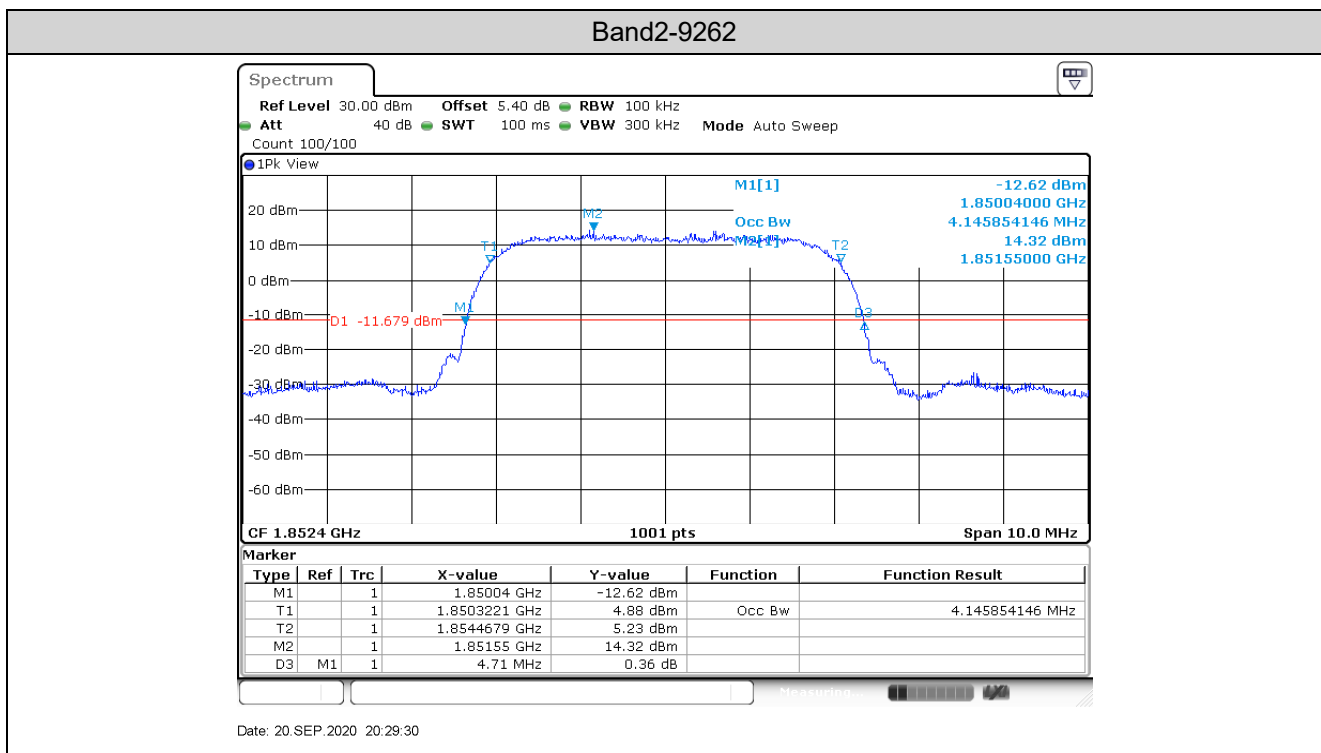


## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

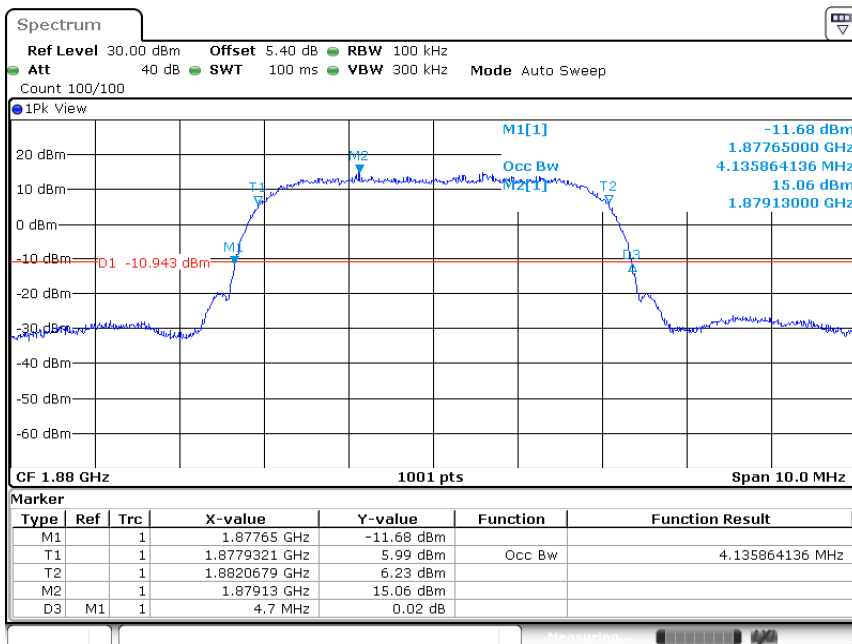
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	4.146	4.710	---	PASS
Band2	9400	4.136	4.700	---	PASS
Band2	9538	4.146	4.700	---	PASS
Band4	1312	4.136	4.710	---	PASS
Band4	1413	4.136	4.710	---	PASS
Band4	1513	4.136	4.700	---	PASS
Band5	4132	4.136	4.730	---	PASS
Band5	4182	4.146	4.700	---	PASS
Band5	4233	4.166	4.730	---	PASS

### 4.2. Test Plots



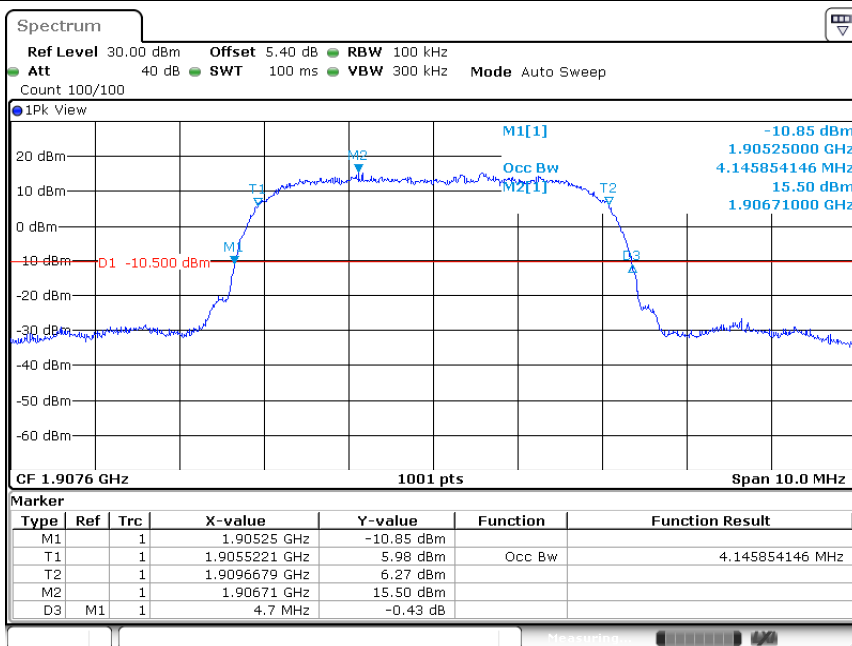


## Band2-9400



Date: 20.SEP.2020 20:29:52

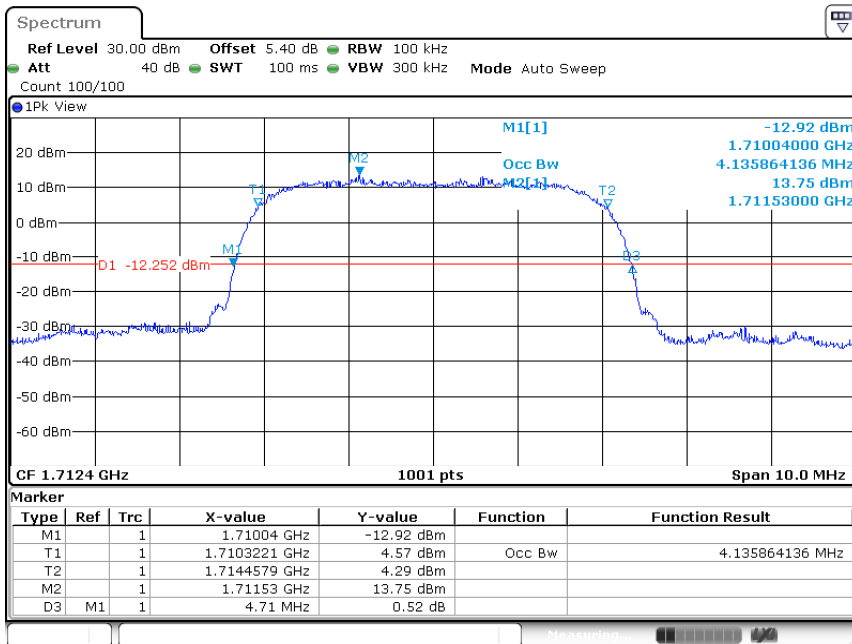
## Band2-9538



Date: 20.SEP.2020 20:30:13

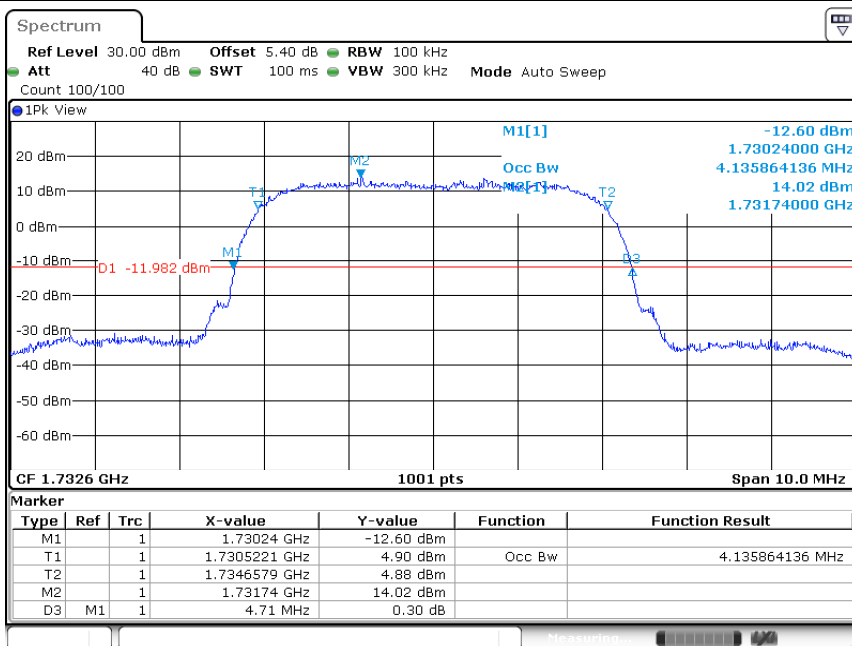


## Band4-1312



Date: 20.SEP.2020 20:48:53

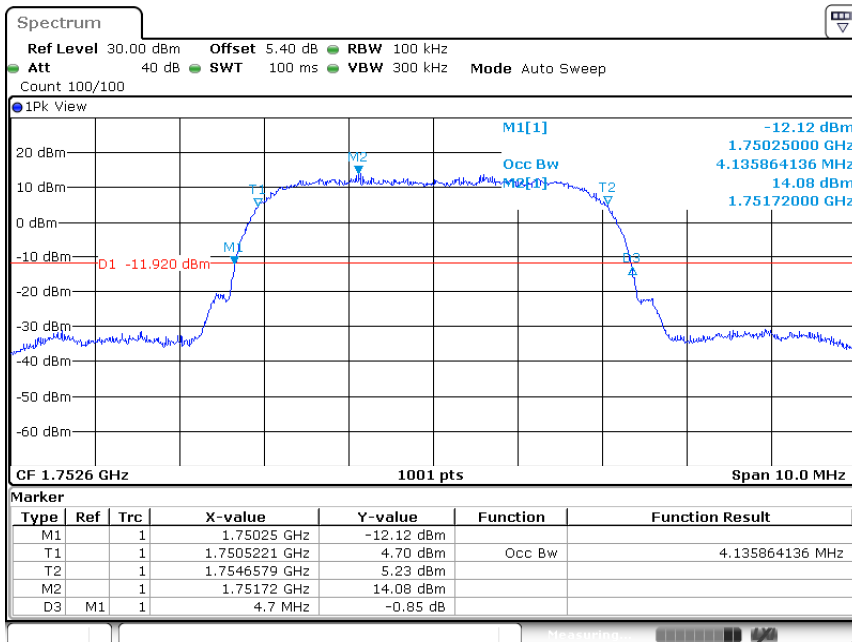
## Band4-1413



Date: 20.SEP.2020 20:49:15

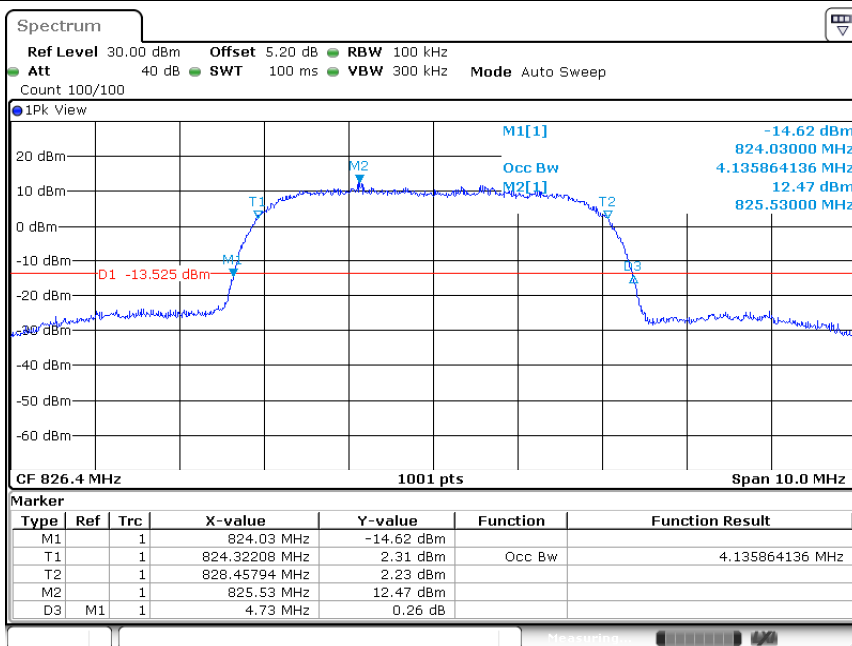


## Band4-1513



Date: 20.SEP.2020 20:49:37

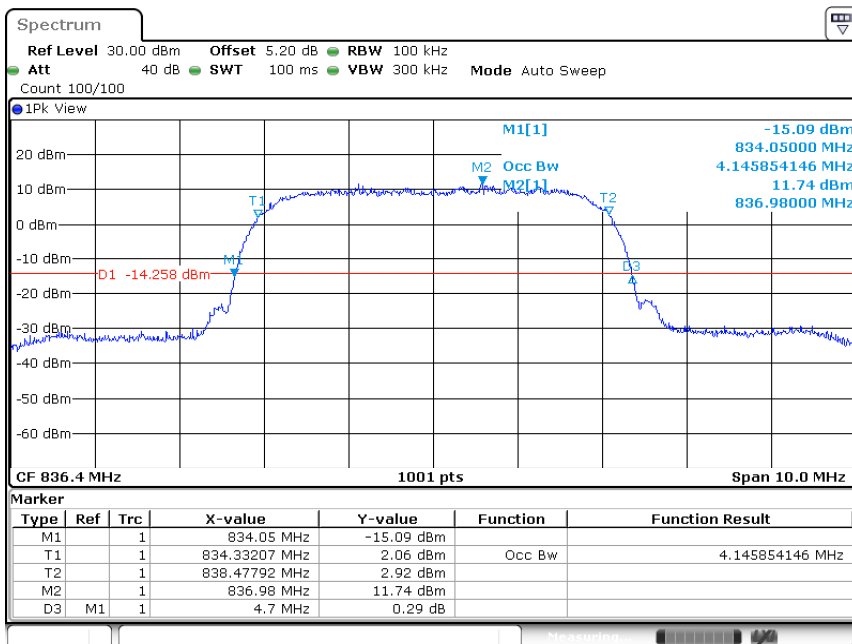
## Band5-4132



Date: 20.SEP.2020 21:07:52

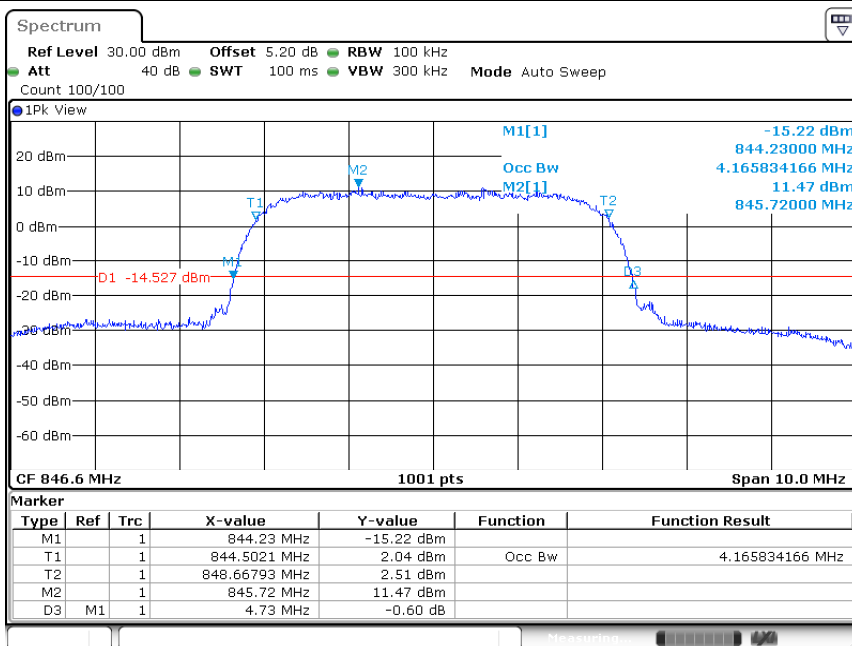


## Band5-4182



Date: 20.SEP.2020 21:08:14

## Band5-4233

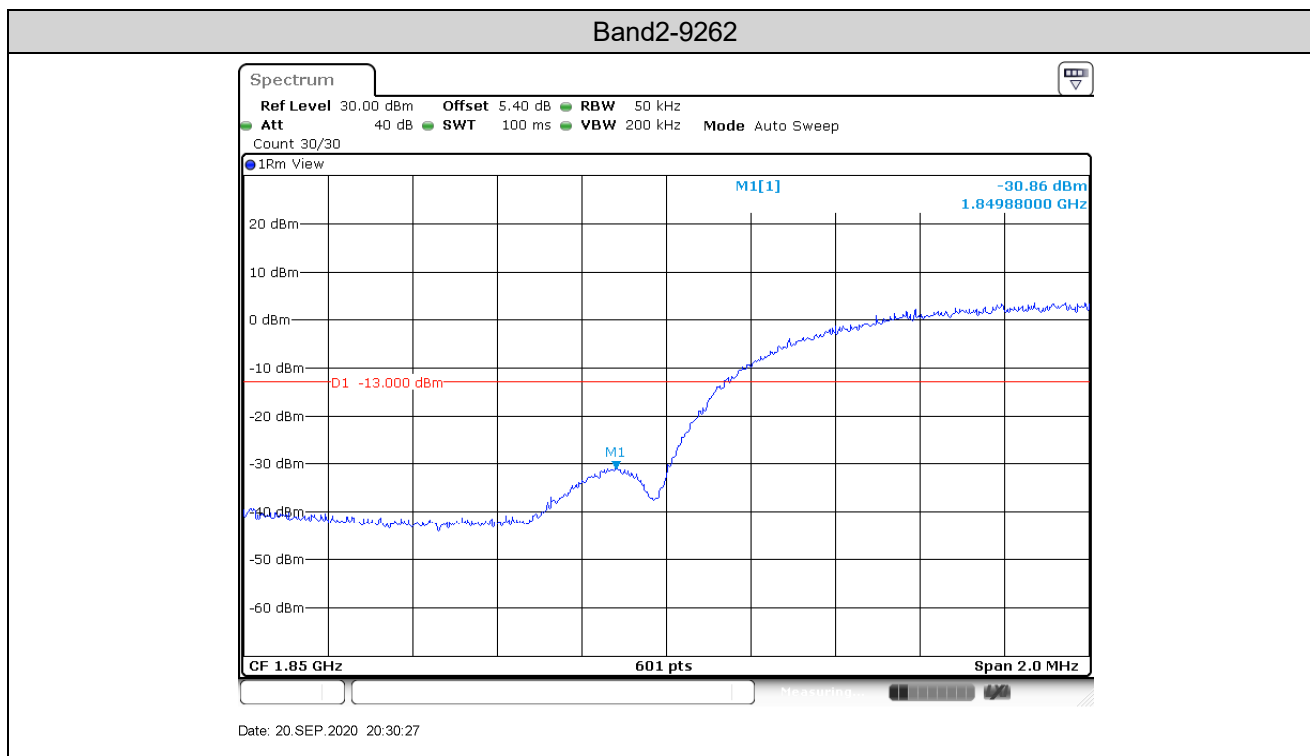


Date: 20.SEP.2020 21:08:36



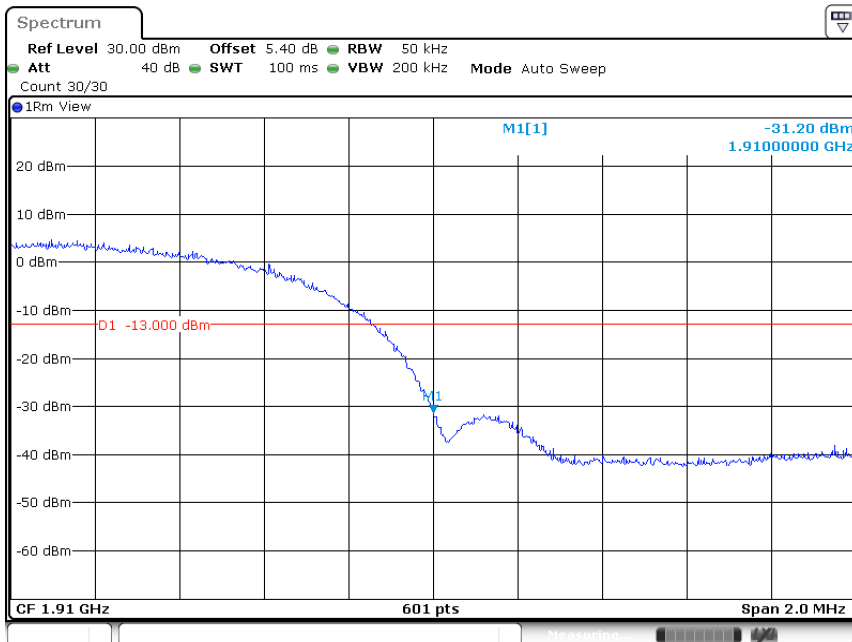
## 5. Band Edge Compliance

### 5.1. Test Plots



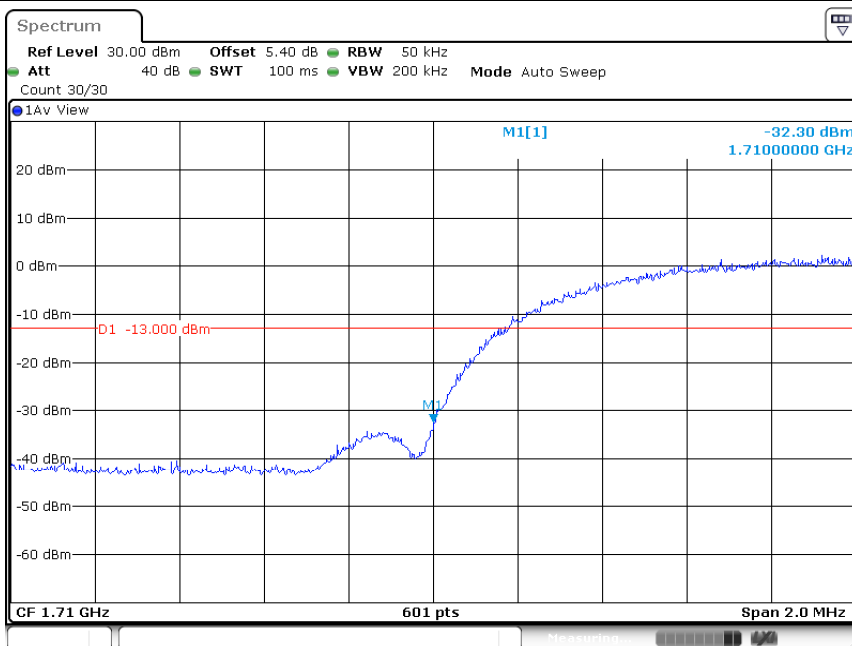


## Band2-9538



Date: 20.SEP.2020 20:30:41

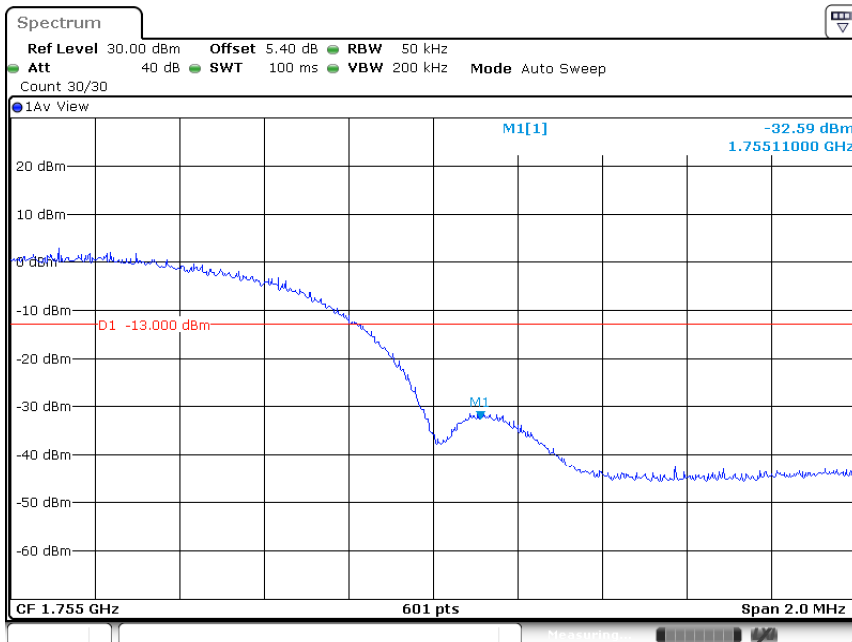
## Band4-1312



Date: 20.SEP.2020 20:49:51

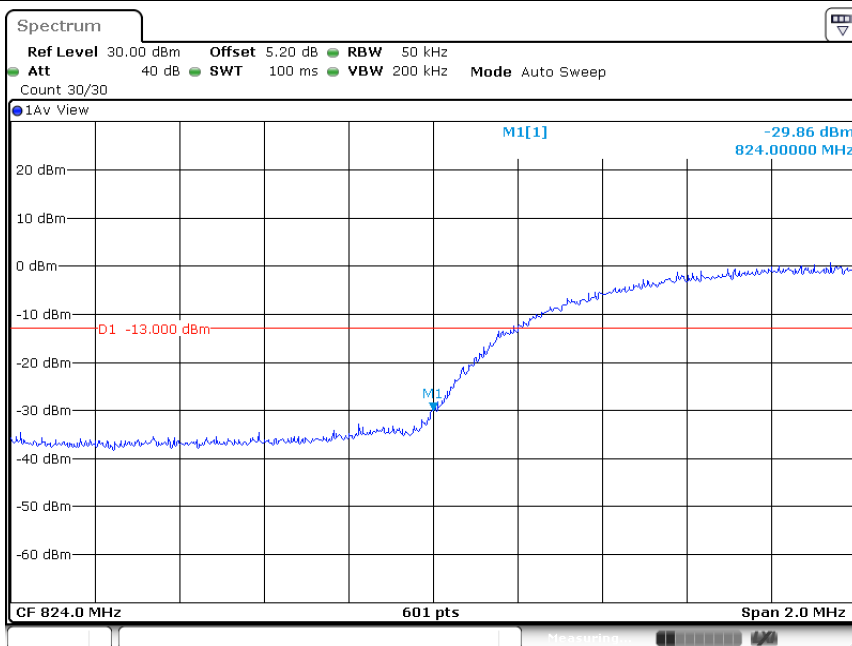


### Band4-1513



Date: 20.SEP.2020 20:50:04

### Band5-4132



Date: 20.SEP.2020 21:08:50



Unless otherwise agreed in writing, 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-Documents.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.

## Band5-4233



Date: 20.SEP.2020 21:09:04

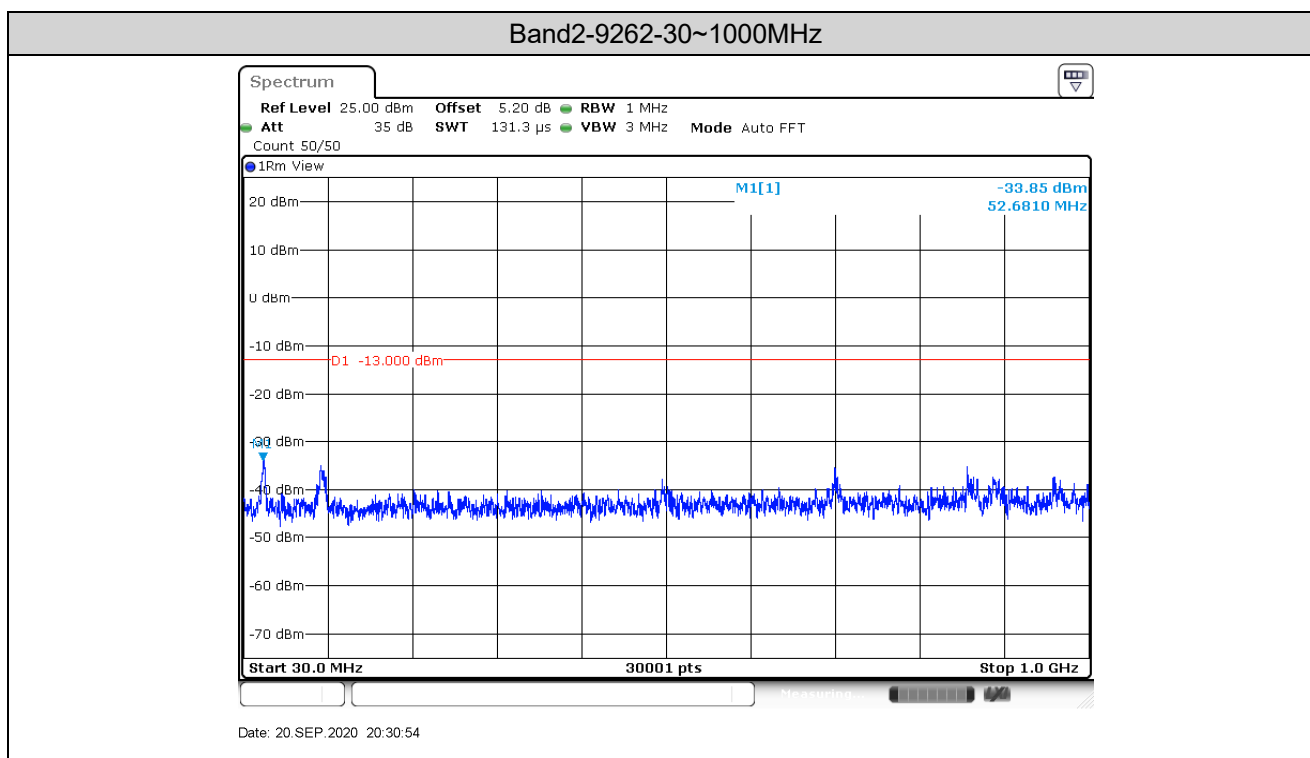


## 6. Spurious Emission at Antenna Terminal

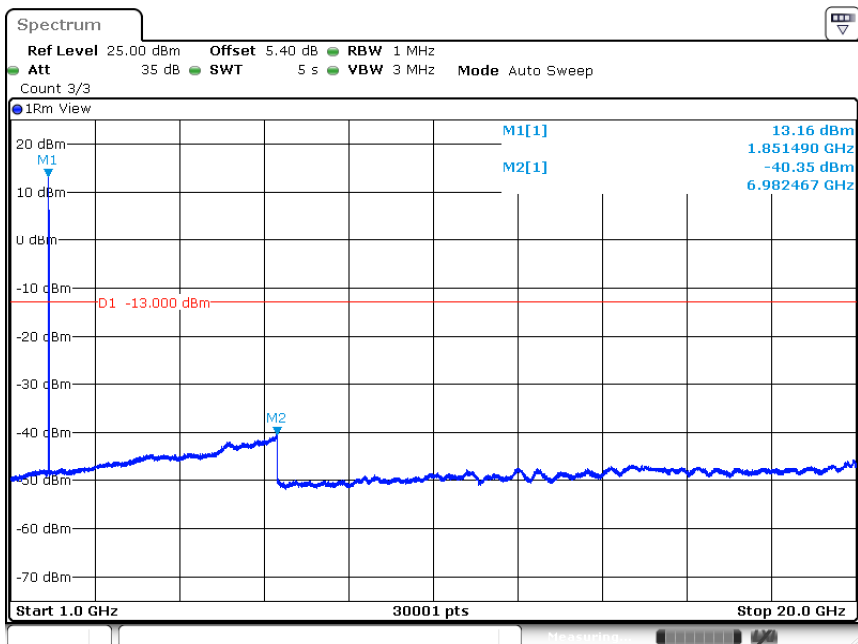
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of  $< RBW/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k * (\text{Span} / RBW)$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

### 6.1. Test Plots

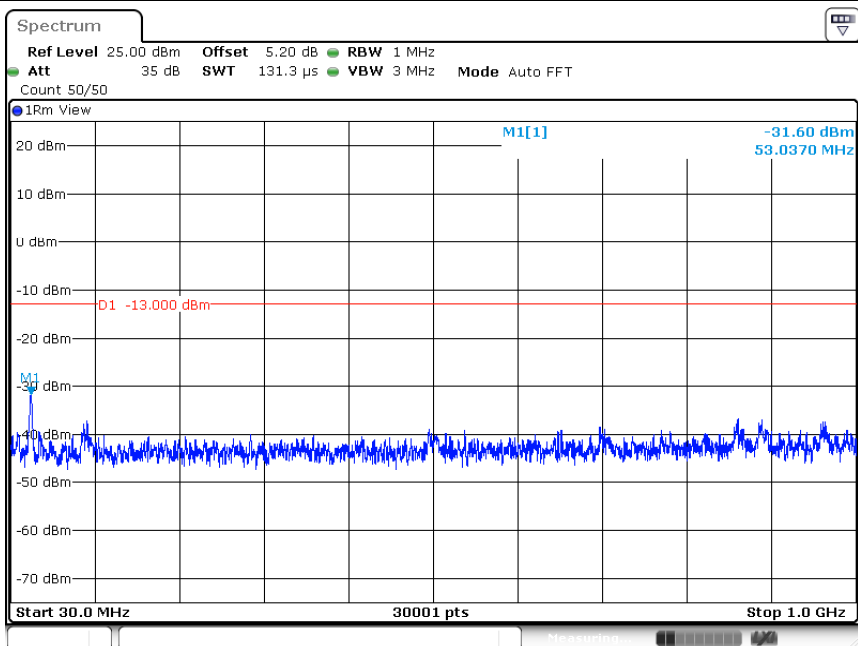


## Band2-9262-1000~20000MHz



Date: 20.SEP.2020 20:31:17

## Band2-9400-30~1000MHz

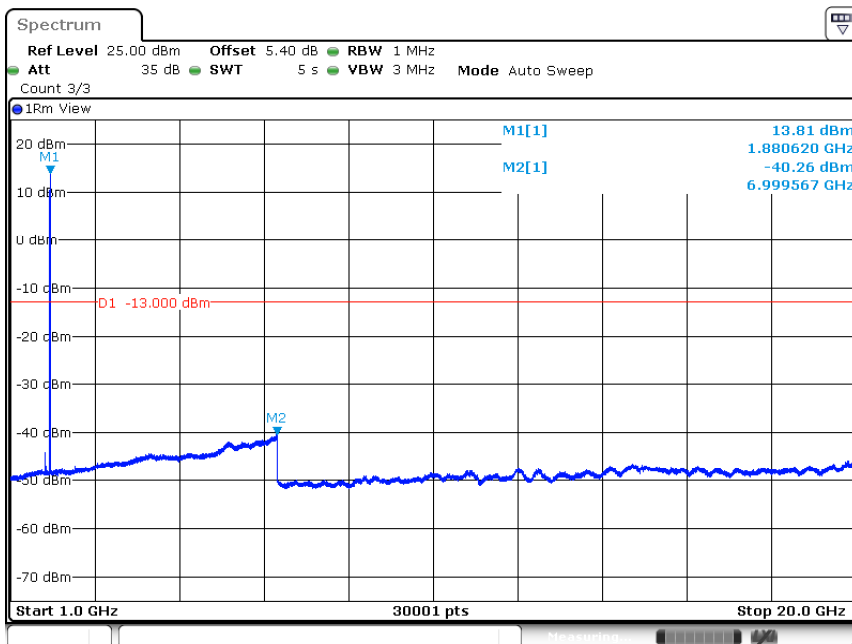


Date: 20.SEP.2020 20:31:30



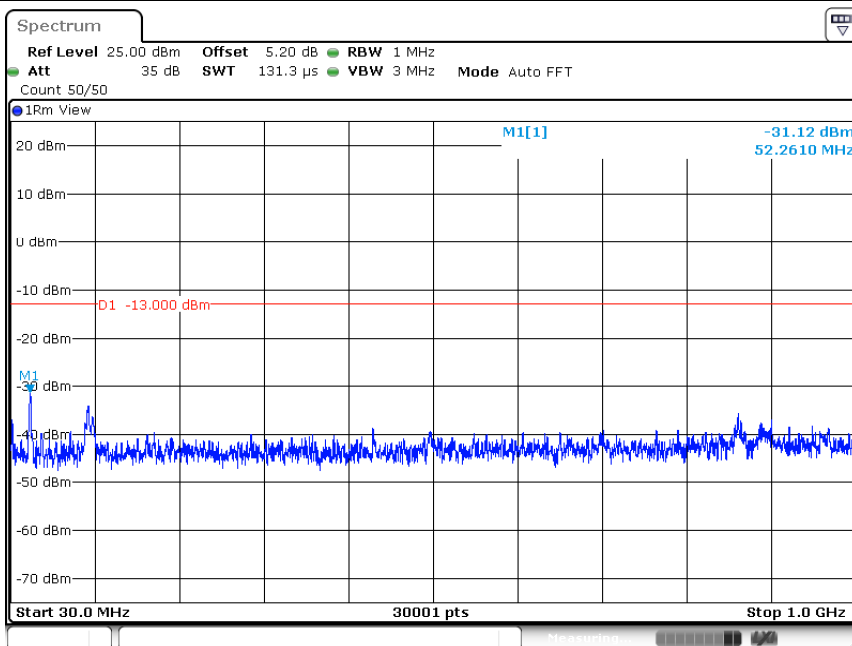


## Band2-9400-1000~20000MHz



Date: 20.SEP.2020 20:31:53

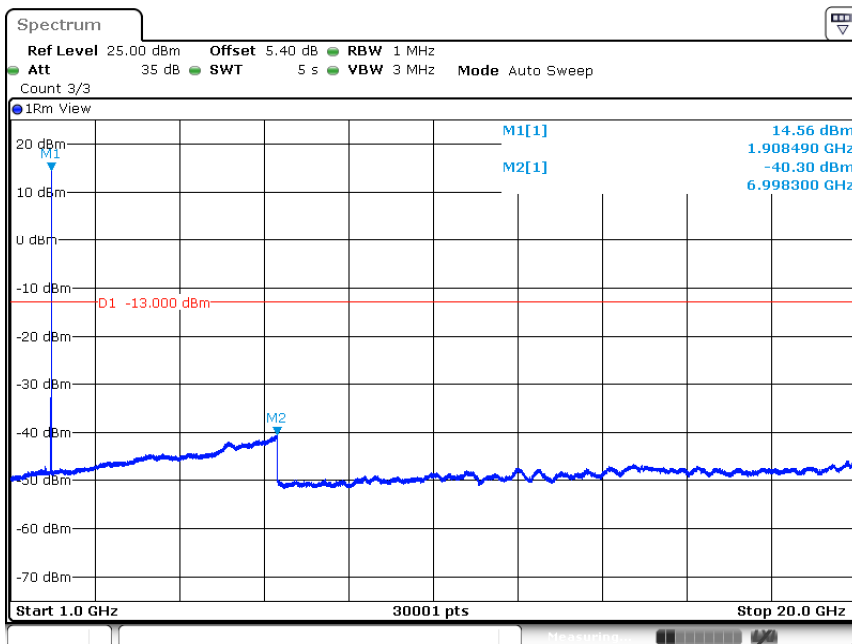
## Band2-9538-30~1000MHz



Date: 20.SEP.2020 20:32:06

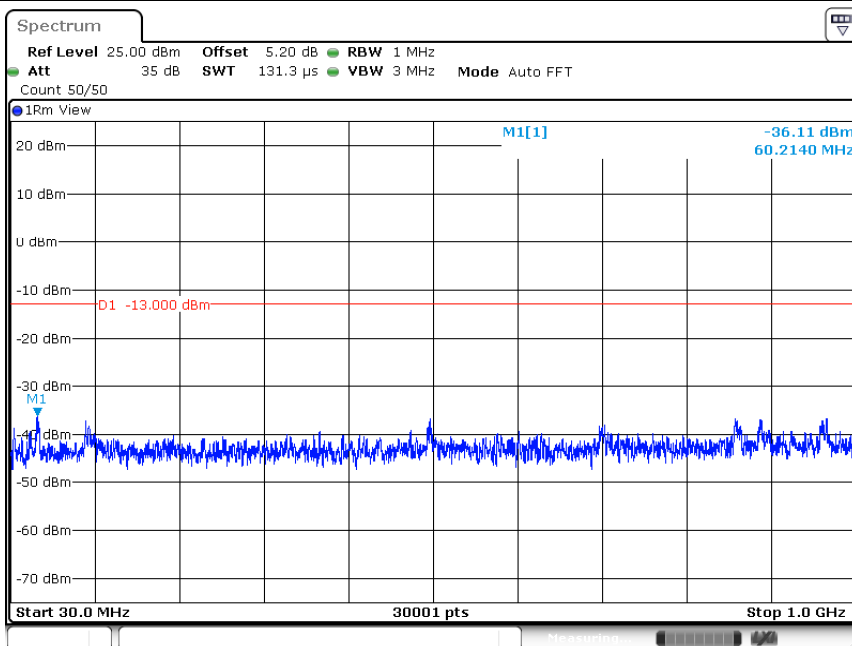


## Band2-9538-1000~20000MHz



Date: 20.SEP.2020 20:32:29

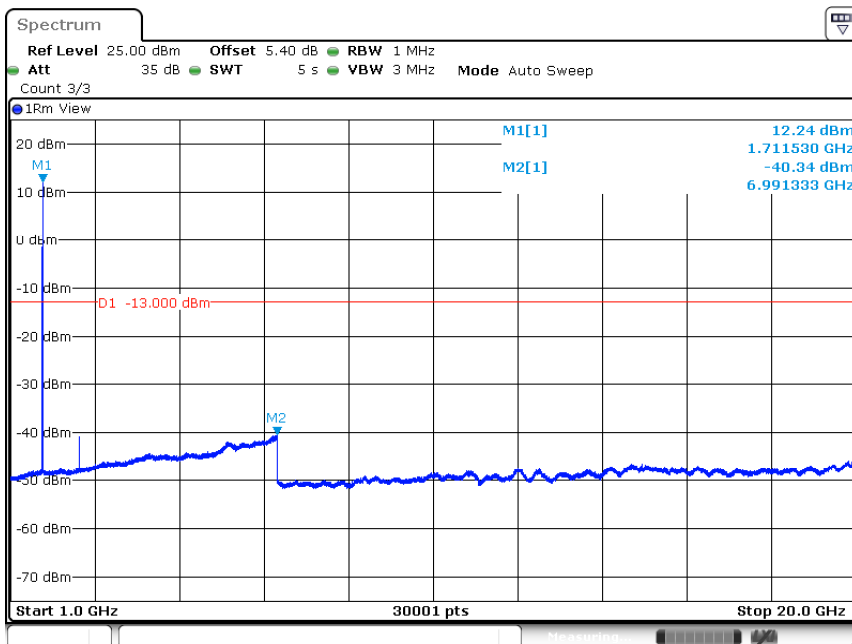
## Band4-1312-30~1000MHz



Date: 20.SEP.2020 20:50:17

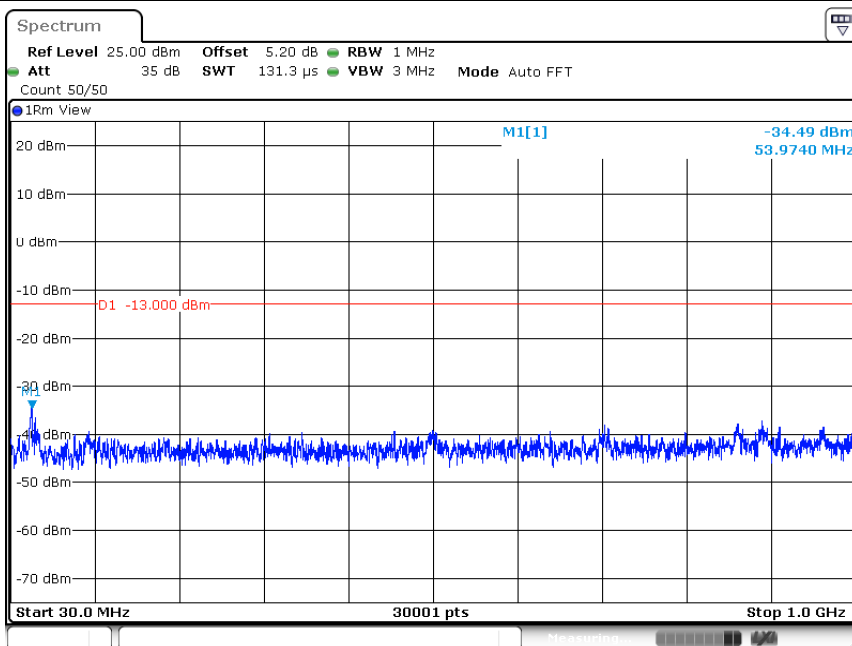


## Band4-1312-1000~20000MHz



Date: 20.SEP.2020 20:50:41

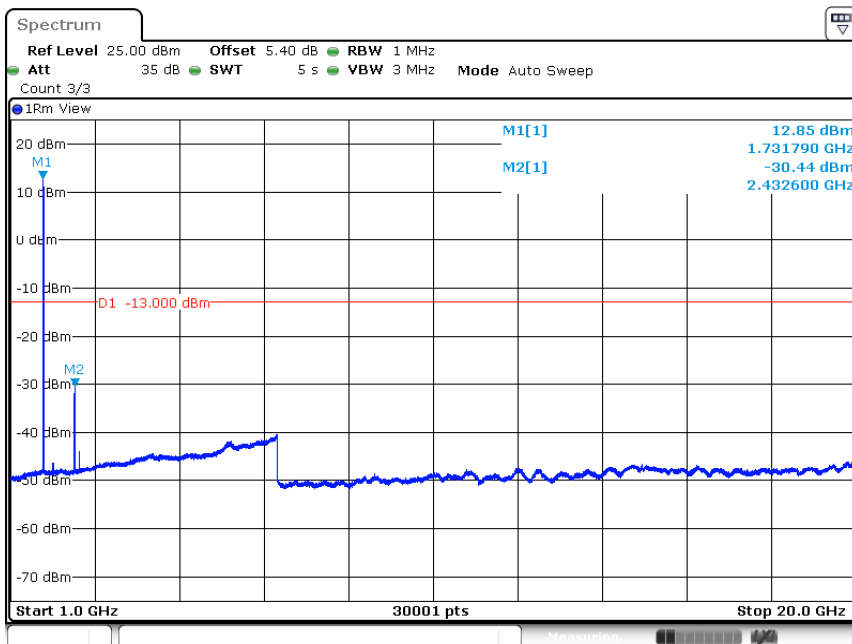
## Band4-1413-30~1000MHz



Date: 20.SEP.2020 20:50:54

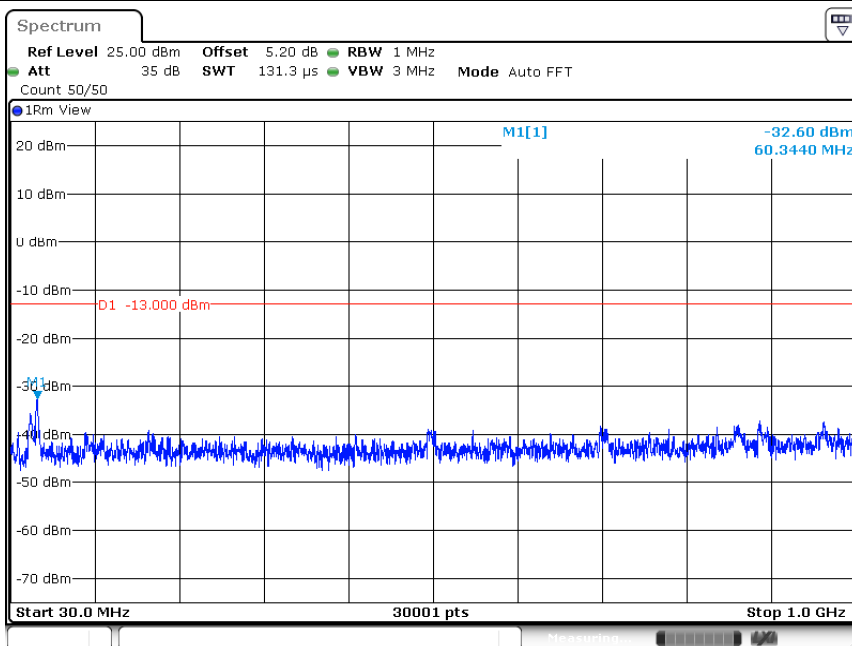


## Band4-1413-1000~20000MHz



Date: 20.SEP.2020 20:51:17

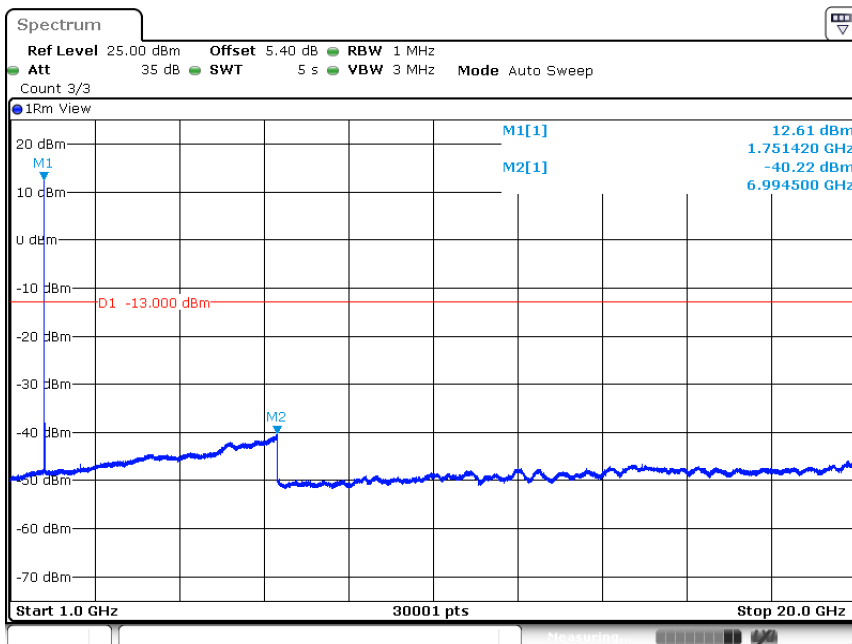
## Band4-1513-30~1000MHz



Date: 20.SEP.2020 20:51:30

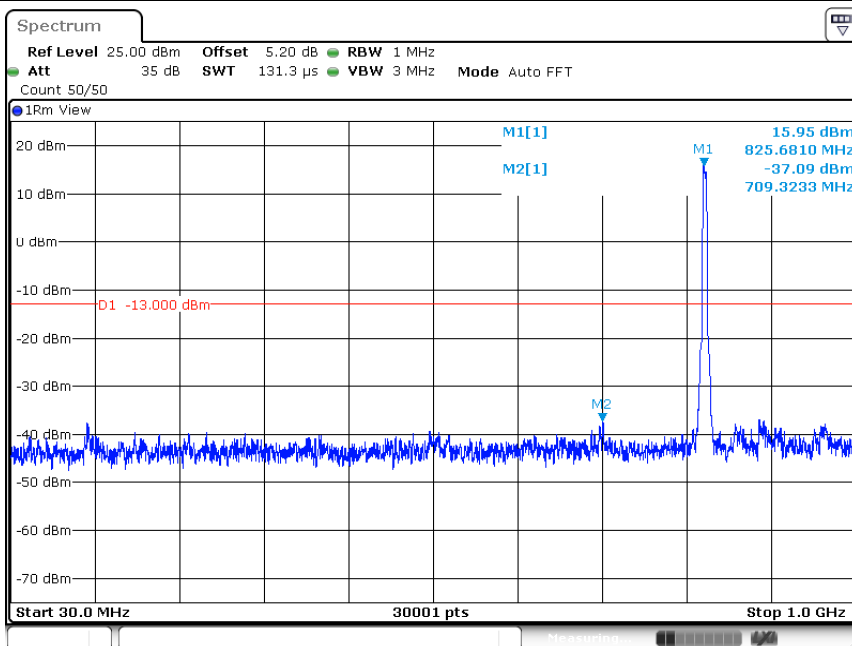


## Band4-1513-1000~20000MHz



Date: 20.SEP.2020 20:51:54

## Band5-4132-30~1000MHz

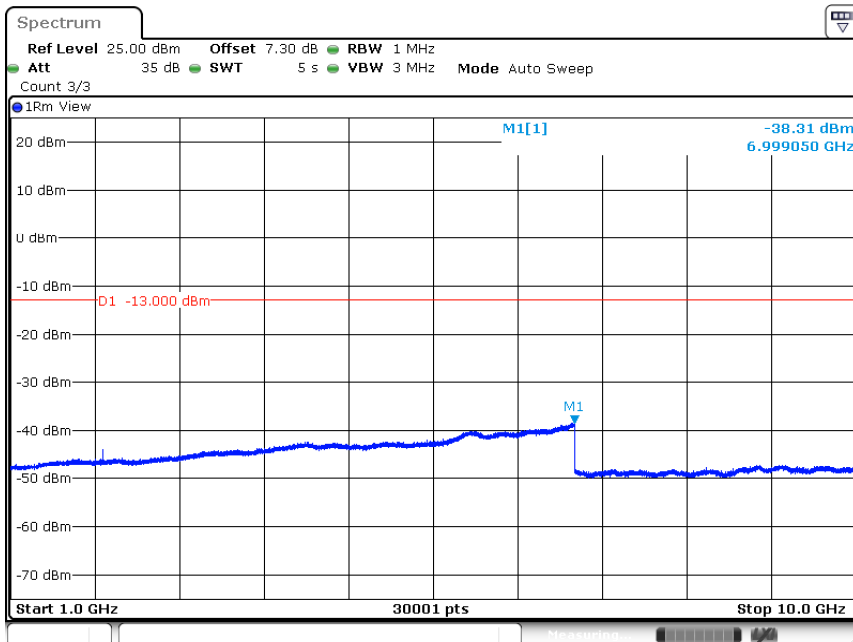


Date: 20.SEP.2020 21:09:17



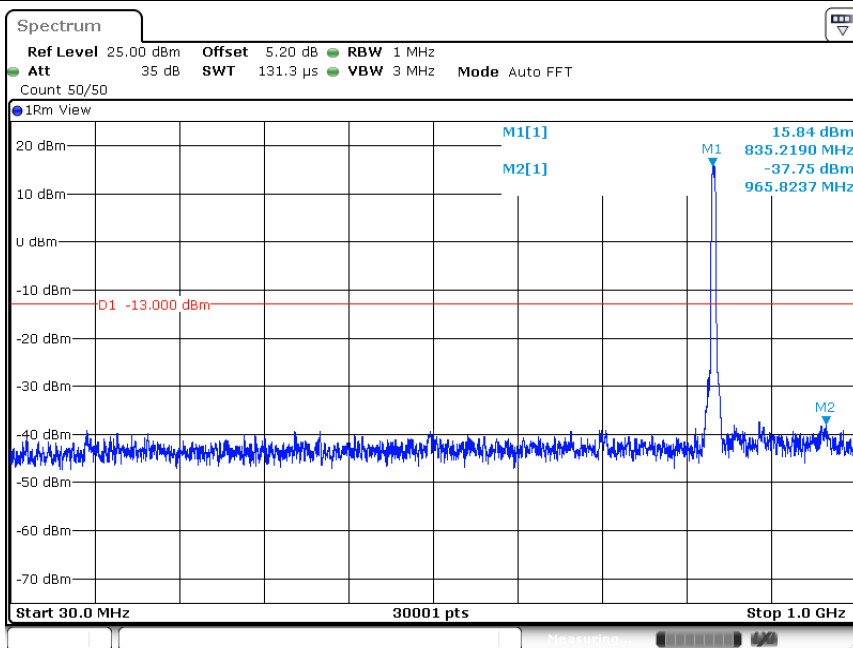


## Band5-4132-1000~10000MHz



Date: 20.SEP.2020 21:09:40

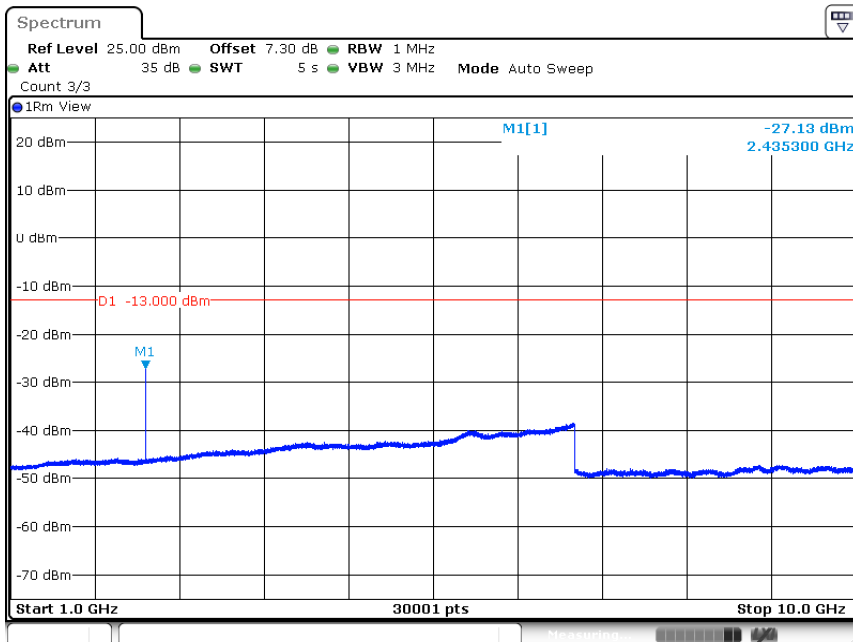
## Band5-4182-30~1000MHz



Date: 20.SEP.2020 21:09:53

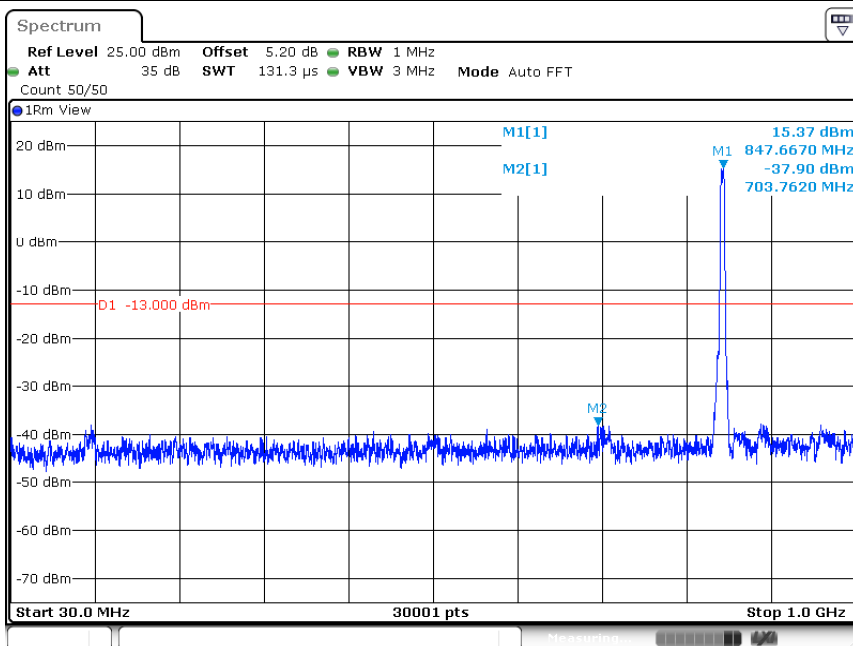


## Band5-4182-1000~10000MHz



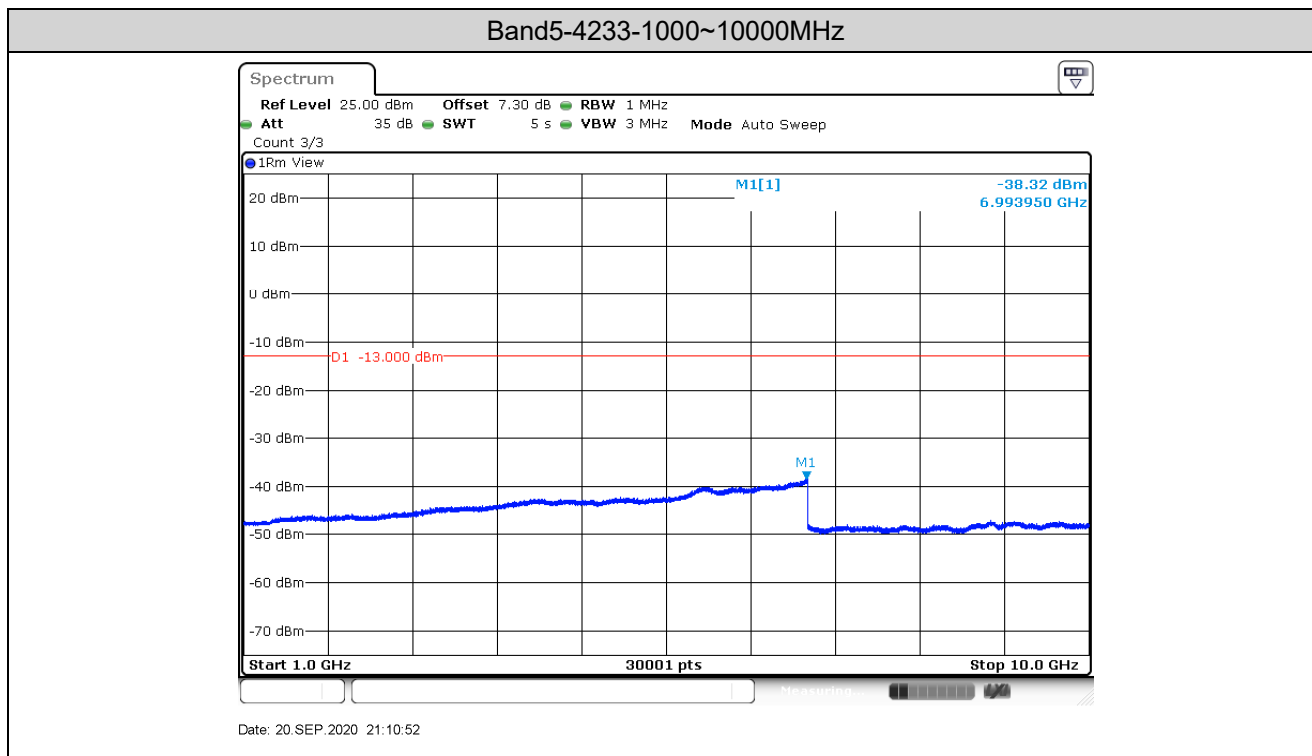
Date: 20.SEP.2020 21:10:16

## Band5-4233-30~1000MHz



Date: 20.SEP.2020 21:10:29





Unless otherwise agreed in writing, 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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



## 7. Field Strength of Spurious Radiation

### 7.1. Test Band = WCDMA Band II(Ant1)

#### 7.1.1. Test Mode = WCDMA/TM1

##### 7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.2910	-75.68	-13.00	62.68	Vertical
108.7679	-64.61	-13.00	51.61	Vertical
538.5479	-64.54	-13.00	51.54	Vertical
3706.0235	-59.97	-13.00	46.97	Vertical
7457.1486	-55.54	-13.00	42.54	Vertical
17999.5000	-39.82	-13.00	26.82	Vertical
45.5208	-63.98	-13.00	50.98	Horizontal
236.2808	-68.08	-13.00	55.08	Horizontal
573.9062	-63.59	-13.00	50.59	Horizontal
3706.5236	-58.58	-13.00	45.58	Horizontal
7944.6648	-56.04	-13.00	43.04	Horizontal
16401.4467	-43.71	-13.00	30.71	Horizontal





### 7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.4365	-75.37	-13.00	62.37	Vertical
106.3913	-64.91	-13.00	51.91	Vertical
311.8961	-68.55	-13.00	55.55	Vertical
3761.5254	-60.18	-13.00	47.18	Vertical
7352.6451	-55.89	-13.00	42.89	Vertical
17997.9999	-39.85	-13.00	26.85	Vertical
41.8346	-63.78	-13.00	50.78	Horizontal
234.7772	-67.70	-13.00	54.70	Horizontal
606.2573	-63.47	-13.00	50.47	Horizontal
3761.5254	-59.70	-13.00	46.70	Horizontal
7480.6494	-56.44	-13.00	43.44	Horizontal
16390.9464	-43.69	-13.00	30.69	Horizontal

### 7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.0671	-75.66	-13.00	62.66	Vertical
113.0847	-65.24	-13.00	52.24	Vertical
475.2038	-66.71	-13.00	53.71	Vertical
3817.0272	-61.66	-13.00	48.66	Vertical
7402.6468	-55.89	-13.00	42.89	Vertical
17998.5000	-39.99	-13.00	26.99	Vertical
42.7561	-64.47	-13.00	51.47	Horizontal
247.9699	-68.22	-13.00	55.22	Horizontal
541.1186	-64.56	-13.00	51.56	Horizontal
3814.0271	-58.21	-13.00	45.21	Horizontal
7452.6484	-56.48	-13.00	43.48	Horizontal
16392.4464	-43.22	-13.00	30.22	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com





## 7.2. Test Band = WCDMA Band IV(Ant1)

### 7.2.1. Test Mode = WCDMA/TM1

#### 7.2.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
47.9944	-71.09	-13.00	58.09	Vertical
108.3314	-62.95	-13.00	49.95	Vertical
379.2660	-65.43	-13.00	52.43	Vertical
4967.5656	-60.29	-13.00	47.29	Vertical
7453.6485	-53.20	-13.00	40.20	Vertical
17995.4999	-34.16	-13.00	21.16	Vertical
45.1813	-62.96	-13.00	49.96	Horizontal
232.5461	-65.53	-13.00	52.53	Horizontal
580.2115	-60.41	-13.00	47.41	Horizontal
3426.5142	-59.26	-13.00	46.26	Horizontal
7459.1486	-53.35	-13.00	40.35	Horizontal
16399.9467	-35.43	-13.00	22.43	Horizontal





### 7.2.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
44.0657	-72.76	-13.00	59.76	Vertical
111.8721	-62.70	-13.00	49.70	Vertical
384.8437	-65.02	-13.00	52.02	Vertical
3624.5208	-60.60	-13.00	47.60	Vertical
7458.1486	-53.02	-13.00	40.02	Vertical
17958.4986	-34.16	-13.00	21.16	Vertical
42.1741	-62.37	-13.00	49.37	Horizontal
244.4292	-65.75	-13.00	52.75	Horizontal
715.6303	-59.09	-13.00	46.09	Horizontal
3463.0154	-58.83	-13.00	45.83	Horizontal
7457.6486	-53.66	-13.00	40.66	Horizontal
16392.4464	-34.97	-13.00	21.97	Horizontal

### 7.2.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
45.7633	-71.67	-13.00	58.67	Vertical
113.7152	-62.04	-13.00	49.04	Vertical
290.5550	-66.51	-13.00	53.51	Vertical
3507.0169	-59.94	-13.00	46.94	Vertical
7362.6454	-53.20	-13.00	40.20	Vertical
17996.4999	-34.00	-13.00	21.00	Vertical
40.4765	-61.94	-13.00	48.94	Horizontal
79.8120	-73.07	-13.00	60.07	Horizontal
241.2766	-65.30	-13.00	52.30	Horizontal
3507.0169	-57.53	-13.00	44.53	Horizontal
7477.1492	-53.26	-13.00	40.26	Horizontal
16403.9468	-35.26	-13.00	22.26	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



### 7.3. Test Band = WCDMA Band V(Ant1)

#### 7.3.1. Test Mode = WCDMA/TM1

##### 7.3.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
50.8560	-72.16	-13.00	59.16	Vertical
112.1146	-65.17	-13.00	52.17	Vertical
346.3328	-67.20	-13.00	54.20	Vertical
1766.5533	-58.91	-13.00	45.91	Vertical
2706.3413	-51.84	-13.00	38.84	Vertical
7380.9794	-55.75	-13.00	42.75	Vertical
45.0843	-64.39	-13.00	51.39	Horizontal
248.4549	-67.82	-13.00	54.82	Horizontal
402.7896	-67.99	-13.00	54.99	Horizontal
1780.1560	-59.08	-13.00	46.08	Horizontal
2699.9400	-50.69	-13.00	37.69	Horizontal
7479.4493	-55.90	-13.00	42.90	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



### 7.3.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.0970	-74.99	-13.00	61.99	Vertical
112.7936	-64.75	-13.00	51.75	Vertical
337.3114	-68.49	-13.00	55.49	Vertical
1767.3535	-58.97	-13.00	45.97	Vertical
2693.5387	-52.15	-13.00	39.15	Vertical
7348.3116	-55.59	-13.00	42.59	Vertical
39.9915	-63.94	-13.00	50.94	Horizontal
109.7865	-75.46	-13.00	62.46	Horizontal
227.9869	-67.42	-13.00	54.42	Horizontal
1946.1892	-57.70	-13.00	44.70	Horizontal
2700.7401	-50.87	-13.00	37.87	Horizontal
7456.1152	-55.56	-13.00	42.56	Horizontal

### 7.3.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
47.1699	-71.81	-13.00	58.81	Vertical
109.0590	-65.10	-13.00	52.10	Vertical
371.7481	-67.33	-13.00	54.33	Vertical
1780.5561	-58.72	-13.00	45.72	Vertical
2699.5399	-51.79	-13.00	38.79	Vertical
7351.8117	-55.58	-13.00	42.58	Vertical
39.8460	-64.08	-13.00	51.08	Horizontal
105.5183	-75.18	-13.00	62.18	Horizontal
237.9784	-67.02	-13.00	54.02	Horizontal
1951.3903	-57.49	-13.00	44.49	Horizontal
2694.7389	-50.79	-13.00	37.79	Horizontal
9971.5324	-52.61	-13.00	39.61	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



## 7.4. Test Band = WCDMA Band II(Ant2)

### 7.4.1. Test Mode = WCDMA/TM1

#### 7.4.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
49.0130	-71.66	-13.00	58.66	Vertical
108.1374	-65.09	-13.00	52.09	Vertical
432.8126	-66.87	-13.00	53.87	Vertical
3749.5250	-61.72	-13.00	48.72	Vertical
7393.6465	-55.94	-13.00	42.94	Vertical
17998.5000	-39.58	-13.00	26.58	Vertical
44.7447	-64.49	-13.00	51.49	Horizontal
81.6551	-74.77	-13.00	61.77	Horizontal
231.3821	-67.90	-13.00	54.90	Horizontal
3703.0234	-60.21	-13.00	47.21	Horizontal
7457.6486	-56.02	-13.00	43.02	Horizontal
16393.4464	-43.48	-13.00	30.48	Horizontal







#### 7.4.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.4066	-74.29	-13.00	61.29	Vertical
111.2416	-64.44	-13.00	51.44	Vertical
377.2774	-67.95	-13.00	54.95	Vertical
5082.5694	-61.60	-13.00	48.60	Vertical
7340.1447	-55.96	-13.00	42.96	Vertical
17996.4999	-39.81	-13.00	26.81	Vertical
41.3496	-64.49	-13.00	51.49	Horizontal
84.6137	-75.19	-13.00	62.19	Horizontal
235.6988	-68.03	-13.00	55.03	Horizontal
3752.5251	-61.16	-13.00	48.16	Horizontal
7481.6494	-56.06	-13.00	43.06	Horizontal
16405.4468	-43.04	-13.00	30.04	Horizontal

#### 7.4.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
51.5351	-72.13	-13.00	59.13	Vertical
119.6325	-64.91	-13.00	51.91	Vertical
439.8455	-67.57	-13.00	54.57	Vertical
5725.5909	-59.30	-13.00	46.30	Vertical
10573.7525	-50.96	-13.00	37.96	Vertical
17997.9999	-39.81	-13.00	26.81	Vertical
40.2340	-64.31	-13.00	51.31	Horizontal
99.6010	-75.78	-13.00	62.78	Horizontal
233.0312	-68.02	-13.00	55.02	Horizontal
3860.0287	-60.70	-13.00	47.70	Horizontal
7456.1485	-56.27	-13.00	43.27	Horizontal
16398.9466	-43.67	-13.00	30.67	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



## 7.5. Test Band = WCDMA Band IV(Ant2)

### 7.5.1. Test Mode = WCDMA/TM1

#### 7.5.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.2910	-73.13	-13.00	60.13	Vertical
110.9020	-61.70	-13.00	48.70	Vertical
447.8484	-64.17	-13.00	51.17	Vertical
3599.5200	-60.09	-13.00	47.09	Vertical
7462.6488	-53.06	-13.00	40.06	Vertical
17999.5000	-33.58	-13.00	20.58	Vertical
39.4095	-62.14	-13.00	49.14	Horizontal
102.8021	-72.65	-13.00	59.65	Horizontal
248.4549	-65.86	-13.00	52.86	Horizontal
3569.5190	-59.46	-13.00	46.46	Horizontal
7455.6485	-53.36	-13.00	40.36	Horizontal
16397.9466	-35.67	-13.00	22.67	Horizontal





### 7.5.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.4850	-73.84	-13.00	60.84	Vertical
109.9805	-62.24	-13.00	49.24	Vertical
472.3906	-63.95	-13.00	50.95	Vertical
3597.5199	-60.61	-13.00	47.61	Vertical
7445.1482	-52.93	-13.00	39.93	Vertical
17993.9998	-33.84	-13.00	20.84	Vertical
40.3795	-62.77	-13.00	49.77	Horizontal
107.1674	-72.43	-13.00	59.43	Horizontal
238.4149	-64.86	-13.00	51.86	Horizontal
3647.0216	-59.83	-13.00	46.83	Horizontal
7458.6486	-53.50	-13.00	40.50	Horizontal
16395.4465	-35.20	-13.00	22.20	Horizontal

### 7.5.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.2425	-74.12	-13.00	61.12	Vertical
116.6253	-63.05	-13.00	50.05	Vertical
463.0782	-64.46	-13.00	51.46	Vertical
3634.0211	-60.69	-13.00	47.69	Vertical
7441.1480	-53.47	-13.00	40.47	Vertical
17999.5000	-33.68	-13.00	20.68	Vertical
45.0843	-61.48	-13.00	48.48	Horizontal
97.0304	-73.00	-13.00	60.00	Horizontal
238.6574	-65.25	-13.00	52.25	Horizontal
5139.0713	-58.93	-13.00	45.93	Horizontal
7440.6480	-53.28	-13.00	40.28	Horizontal
16398.9466	-35.21	-13.00	22.21	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



## 7.6. Test Band = WCDMA Band V(Ant2)

### 7.6.1. Test Mode = WCDMA/TM1

#### 7.6.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.7760	-74.49	-13.00	61.49	Vertical
109.1075	-64.46	-13.00	51.46	Vertical
289.8275	-68.96	-13.00	55.96	Vertical
1778.9558	-59.27	-13.00	46.27	Vertical
2694.3389	-51.91	-13.00	38.91	Vertical
7355.0785	-55.67	-13.00	42.67	Vertical
41.6891	-64.42	-13.00	51.42	Horizontal
102.0746	-75.17	-13.00	62.17	Horizontal
225.7558	-68.61	-13.00	55.61	Horizontal
1606.9214	-61.32	-13.00	48.32	Horizontal
2699.9400	-50.72	-13.00	37.72	Horizontal
7482.4827	-56.19	-13.00	43.19	Horizontal





### 7.6.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.3880	-76.28	-13.00	63.28	Vertical
117.4014	-65.29	-13.00	52.29	Vertical
294.2412	-69.29	-13.00	56.29	Vertical
1778.9558	-58.75	-13.00	45.75	Vertical
2696.7393	-51.91	-13.00	38.91	Vertical
9326.3442	-51.73	-13.00	38.73	Vertical
45.1328	-64.31	-13.00	51.31	Horizontal
83.6437	-74.61	-13.00	61.61	Horizontal
245.4963	-68.25	-13.00	55.25	Horizontal
1780.5561	-58.80	-13.00	45.80	Horizontal
2699.9400	-50.87	-13.00	37.87	Horizontal
7455.6485	-56.12	-13.00	43.12	Horizontal

### 7.6.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.2910	-76.42	-13.00	63.42	Vertical
112.6966	-64.70	-13.00	51.70	Vertical
372.0391	-68.37	-13.00	55.37	Vertical
1778.1556	-58.62	-13.00	45.62	Vertical
2699.9400	-52.05	-13.00	39.05	Vertical
7482.9494	-55.67	-13.00	42.67	Vertical
43.3382	-64.10	-13.00	51.10	Horizontal
95.4298	-75.55	-13.00	62.55	Horizontal
232.3521	-67.71	-13.00	54.71	Horizontal
1779.3559	-57.86	-13.00	44.86	Horizontal
2699.9400	-50.53	-13.00	37.53	Horizontal
7478.0493	-56.08	-13.00	43.08	Horizontal



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)





Test on the worst case:

7.7. Test Band = WCDMA Band IV(Ant1)

7.7.1. Test Mode = WCDMA/TM1

7.7.1.1. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.1940	-72.22	-13.00	59.22	Vertical
109.1560	-61.52	-13.00	48.52	Vertical
412.1506	-64.50	-13.00	51.50	Vertical
5260.0753	-57.23	-13.00	44.23	Vertical
7475.6492	-53.50	-13.00	40.50	Vertical
17984.4995	-34.58	-13.00	21.58	Vertical
42.7076	-61.46	-13.00	48.46	Horizontal
100.9590	-72.85	-13.00	59.85	Horizontal
234.3407	-64.06	-13.00	51.06	Horizontal
5261.0754	-58.16	-13.00	45.16	Horizontal
10021.7341	-49.82	-13.00	36.82	Horizontal
16398.4466	-35.83	-13.00	22.83	Horizontal





## 7.8. Test Band = WCDMA Band IV(Ant2)

### 7.8.1. Test Mode =WCDMA/TM1

#### 7.8.1.1. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
53.8632	-68.76	-13.00	55.76	Vertical
109.1560	-62.34	-13.00	49.34	Vertical
639.8695	-60.05	-13.00	47.05	Vertical
2693.1386	-31.47	-13.00	18.47	Vertical
7450.1483	-53.78	-13.00	40.78	Vertical
17999.0000	-34.81	-13.00	21.81	Vertical
44.3567	-61.54	-13.00	48.54	Horizontal
663.0537	-59.74	-13.00	46.74	Horizontal
2701.5403	-30.17	-13.00	17.17	Horizontal
3564.5188	-59.76	-13.00	46.76	Horizontal
7422.6474	-54.37	-13.00	41.37	Horizontal
16393.4464	-35.92	-13.00	22.92	Horizontal

#### Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.



## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9262	VL	NT	1.95	0.001053	±2.5	PASS
Band2	9262	VN	NT	3.43	0.001852	±2.5	PASS
Band2	9262	VH	NT	2.42	0.001306	±2.5	PASS
Band2	9400	VL	NT	2.91	0.001548	±2.5	PASS
Band2	9400	VN	NT	3.25	0.001729	±2.5	PASS
Band2	9400	VH	NT	3.25	0.001729	±2.5	PASS
Band2	9538	VL	NT	3.56	0.001866	±2.5	PASS
Band2	9538	VN	NT	3.95	0.002071	±2.5	PASS
Band2	9538	VH	NT	3.86	0.002023	±2.5	PASS
Band4	1312	VL	NT	3.35	0.001956	±2.5	PASS
Band4	1312	VN	NT	3.40	0.001986	±2.5	PASS
Band4	1312	VH	NT	3.21	0.001875	±2.5	PASS
Band4	1413	VL	NT	6.90	0.003982	±2.5	PASS
Band4	1413	VN	NT	-36.12	-0.020847	±2.5	PASS
Band4	1413	VH	NT	0.90	0.000519	±2.5	PASS
Band4	1513	VL	NT	-1.85	-0.001056	±2.5	PASS
Band4	1513	VN	NT	-1.72	-0.000981	±2.5	PASS
Band4	1513	VH	NT	-2.24	-0.001278	±2.5	PASS
Band5	4132	VL	NT	-0.70	-0.000847	±2.5	PASS
Band5	4132	VN	NT	-0.99	-0.001198	±2.5	PASS
Band5	4132	VH	NT	-0.55	-0.000666	±2.5	PASS
Band5	4182	VL	NT	-0.54	-0.000646	±2.5	PASS
Band5	4182	VN	NT	-0.30	-0.000359	±2.5	PASS
Band5	4182	VH	NT	-0.54	-0.000646	±2.5	PASS
Band5	4233	VL	NT	-0.01	-0.000012	±2.5	PASS
Band5	4233	VN	NT	-0.08	-0.000094	±2.5	PASS
Band5	4233	VH	NT	0.09	0.000106	±2.5	PASS



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



## 8.2. Frequency Vs Temperature

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9262	NV	-30	2.70	0.001458	±2.5	PASS
Band2	9262	NV	-20	2.94	0.001587	±2.5	PASS
Band2	9262	NV	-10	3.66	0.001976	±2.5	PASS
Band2	9262	NV	0	2.91	0.001571	±2.5	PASS
Band2	9262	NV	10	2.57	0.001387	±2.5	PASS
Band2	9262	NV	20	3.07	0.001657	±2.5	PASS
Band2	9262	NV	30	3.22	0.001738	±2.5	PASS
Band2	9262	NV	40	3.34	0.001803	±2.5	PASS
Band2	9262	NV	50	3.59	0.001938	±2.5	PASS
Band2	9400	NV	-30	3.31	0.001761	±2.5	PASS
Band2	9400	NV	-20	3.74	0.001989	±2.5	PASS
Band2	9400	NV	-10	3.60	0.001915	±2.5	PASS
Band2	9400	NV	0	3.70	0.001968	±2.5	PASS
Band2	9400	NV	10	3.68	0.001957	±2.5	PASS
Band2	9400	NV	20	3.90	0.002074	±2.5	PASS
Band2	9400	NV	30	3.40	0.001809	±2.5	PASS
Band2	9400	NV	40	3.73	0.001984	±2.5	PASS
Band2	9400	NV	50	3.84	0.002043	±2.5	PASS
Band2	9538	NV	-30	3.50	0.001835	±2.5	PASS
Band2	9538	NV	-20	3.68	0.001929	±2.5	PASS
Band2	9538	NV	-10	4.15	0.002176	±2.5	PASS
Band2	9538	NV	0	4.11	0.002155	±2.5	PASS
Band2	9538	NV	10	3.40	0.001782	±2.5	PASS
Band2	9538	NV	20	3.76	0.001971	±2.5	PASS
Band2	9538	NV	30	4.30	0.002254	±2.5	PASS
Band2	9538	NV	40	3.83	0.002008	±2.5	PASS
Band2	9538	NV	50	3.71	0.001945	±2.5	PASS
Band4	1312	NV	-30	3.43	0.002003	±2.5	PASS
Band4	1312	NV	-20	2.81	0.001641	±2.5	PASS
Band4	1312	NV	-10	3.44	0.002009	±2.5	PASS
Band4	1312	NV	0	3.76	0.002196	±2.5	PASS
Band4	1312	NV	10	3.46	0.002021	±2.5	PASS
Band4	1312	NV	20	3.73	0.002178	±2.5	PASS



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)  
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com





Band4	1312	NV	30	3.18	0.001857	±2.5	PASS
Band4	1312	NV	40	4.08	0.002383	±2.5	PASS
Band4	1312	NV	50	3.33	0.001945	±2.5	PASS
Band4	1413	NV	-30	1.02	0.000589	±2.5	PASS
Band4	1413	NV	-20	1.09	0.000629	±2.5	PASS
Band4	1413	NV	-10	1.24	0.000716	±2.5	PASS
Band4	1413	NV	0	1.33	0.000768	±2.5	PASS
Band4	1413	NV	10	0.44	0.000254	±2.5	PASS
Band4	1413	NV	20	0.33	0.000190	±2.5	PASS
Band4	1413	NV	30	0.99	0.000571	±2.5	PASS
Band4	1413	NV	40	0.55	0.000317	±2.5	PASS
Band4	1413	NV	50	0.62	0.000358	±2.5	PASS
Band4	1513	NV	-30	-1.56	-0.000890	±2.5	PASS
Band4	1513	NV	-20	-2.07	-0.001181	±2.5	PASS
Band4	1513	NV	-10	-1.84	-0.001050	±2.5	PASS
Band4	1513	NV	0	-1.85	-0.001056	±2.5	PASS
Band4	1513	NV	10	-2.07	-0.001181	±2.5	PASS
Band4	1513	NV	20	-2.13	-0.001215	±2.5	PASS
Band4	1513	NV	30	-1.12	-0.000639	±2.5	PASS
Band4	1513	NV	40	-1.24	-0.000708	±2.5	PASS
Band4	1513	NV	50	-1.34	-0.000765	±2.5	PASS
Band5	4132	NV	-30	-0.88	-0.001065	±2.5	PASS
Band5	4132	NV	-20	-0.39	-0.000472	±2.5	PASS
Band5	4132	NV	-10	-0.30	-0.000363	±2.5	PASS
Band5	4132	NV	0	-0.29	-0.000351	±2.5	PASS
Band5	4132	NV	10	-0.42	-0.000508	±2.5	PASS
Band5	4132	NV	20	-0.38	-0.000460	±2.5	PASS
Band5	4132	NV	30	-0.35	-0.000424	±2.5	PASS
Band5	4132	NV	40	-0.23	-0.000278	±2.5	PASS
Band5	4132	NV	50	-0.70	-0.000847	±2.5	PASS
Band5	4182	NV	-30	-0.41	-0.000490	±2.5	PASS
Band5	4182	NV	-20	-0.45	-0.000538	±2.5	PASS
Band5	4182	NV	-10	-0.41	-0.000490	±2.5	PASS
Band5	4182	NV	0	-0.51	-0.000610	±2.5	PASS
Band5	4182	NV	10	0.16	0.000191	±2.5	PASS
Band5	4182	NV	20	-0.15	-0.000179	±2.5	PASS
Band5	4182	NV	30	-0.24	-0.000287	±2.5	PASS



Unless otherwise agreed in writing, 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-Documents.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.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057  
中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com





Band5	4182	NV	40	-0.19	-0.000227	±2.5	PASS
Band5	4182	NV	50	-0.04	-0.000048	±2.5	PASS
Band5	4233	NV	-30	-0.09	-0.000106	±2.5	PASS
Band5	4233	NV	-20	0.11	0.000130	±2.5	PASS
Band5	4233	NV	-10	0.10	0.000118	±2.5	PASS
Band5	4233	NV	0	0.12	0.000142	±2.5	PASS
Band5	4233	NV	10	0.09	0.000106	±2.5	PASS
Band5	4233	NV	20	-0.09	-0.000106	±2.5	PASS
Band5	4233	NV	30	0.01	0.000012	±2.5	PASS
Band5	4233	NV	40	0.04	0.000047	±2.5	PASS
Band5	4233	NV	50	0.23	0.000272	±2.5	PASS

The End

