

FCC Part 22H&24E&27M Test Report

Product Name : LM960
Trade Name : 
Model No. : LM960
FCC ID : RI7LM960
IC ID : 5131A-LM960

Applicant : Telit Wireless Solutions Co. Ltd.
Address : 13th Fl., Shinyoung Securities Bld, 6, Gukjegeumyung-ro 8-gil,
Yeongdeungpo-gu, Seoul, 07330, Korea

Date of Receipt : Apr. 09, 2018
Issued Date : May 23, 2018
Report No. : 1840058R-HPUSP55V00
Report Version : V1.0



The test results relate only to the samples tested.

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Test Report Certification

Issued Date : May 23, 2018

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 Applicant : Telit Wireless Solutions Co. Ltd.
 Address : 13th Fl., Shinyoung Securities Bld, 6, Gukjegeumyung-ro 8-gil, Yeongdeungpo-gu, Seoul, 07330, Korea
 Manufacturer : Telit Wireless Solutions Co. Ltd.
 Address : 13th Fl., Shinyoung Securities Bld, 6, Gukjegeumyung-ro 8-gil, Yeongdeungpo-gu, Seoul, 07330, Korea
 Model No. : LM960
 FCC ID : RI7LM960
 IC ID : 5131A-LM960
 EUT Voltage : DC 3.3V
 Testing Voltage : DC 3.3V
 Trade Name :

Applicable Standard : FCC CFR Title 47 Part 2, ANSI/TIA-603-D
 FCC Part 22 Subpart H, FCC Part 24 Subpart E,
 FCC Part 27 Subpart M
 Industry Canada RSS-132, Issue 3
 Industry Canada RSS-133, Issue 6
 Industry Canada RSS-139, Issue 3
 ANSI/TIA-603-D-2010
 RSS Gen Issue 5

Test Lab : Hsin Chu Laboratory
 Test Result : Complied

Documented By :

 (Lyla Yang / Engineering Adm. Specialist)

Tested By :

 (Ricky Lee / Senior Engineer)

Approved By :

 (Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1840058R-HPUSP55V00	V1.0	Initial issue of report	May 23, 2018


TABLE OF CONTENTS

Description	Page
1. General Information	6
1.1. EUT Description	6
1.2. Mode of Operation	8
1.3. Tested System Details	9
1.4. Configuration of Tested System	9
1.5. EUT Exercise Software	9
2. Technical Test	10
2.1. Summary of Test Result	10
2.2. Test Environment	12
2.3. List of Test Equipment	13
2.4. Measurement Uncertainty	15
3. RF Output Power	16
3.1. Test Setup	16
3.2. Test Procedure	16
3.3. Test Method	16
3.4. Test Result	17
4. Occupied Bandwidth	23
4.1. Test Setup	23
4.2. Test Procedure	23
4.3. Test Method	23
4.4. Test Result	24
5. Peak To Average Ratio	42
5.1. Test Setup	42
5.2. Test Procedure	42
5.3. Test Method	42
5.4. Test Result	43
6. Conducted Band Edge	58
6.1. Test Setup	58
6.2. Test Procedure	58
6.3. Test Method	58
6.4. Test Result	59
7. Spurious Emission	68
7.1. Test Setup	68
7.2. Test Procedure	69
7.3. Test Method	69

7.4. Test Result.....	70
8. Frequency Stability	130
8.1. Test Setup.....	130
8.2. Test Procedure	130
8.3. Test Method	130
8.4. Test Result.....	131
Attachment 1.....	140
Test Setup Photograph	140
Attachment 2.....	144
EUT External Photograph.....	144
Attachment 3.....	147
EUT Internal Photograph	147

1. General Information

1.1. EUT Description

Product Name	LM960
Trade Name	
Model No.	LM960
Tx Frequency Range/ Channel number	WCDMA Band 2: 1852.4-1907.6 MHz WCDMA Band 4: 1712.4-1752.6 MHz WCDMA Band 5: 826.4-846.6 MHz
Rx Frequency Range/ Channel number	WCDMA Band 2: 1932.4-1987.6 MHz WCDMA Band 4: 2112.4-2152.6 MHz WCDMA Band 5: 871.4-891.6 MHz
Type of Modulation	WCDMA: QPSK (Uplink); HSDPA: QPSK (Uplink); HSUPA: QPSK (Uplink)
HW Version	1.0
SW Version	32.00.011
IMEI No.	355689009

Accessories Information	
Antenna	4 Pcs (2pcs-White / 2pcs-Black)

Antenna Information	
Product Name	HNS (HANKOOK NETWORK SOLUTION)
Model No.	Black color: WE14-S3-1 White color: WE14-LF-07
Antenna Type	Dipole Antenna
Antenna Gain	Band 2/4: 3.5dBi Band 5: 1.5dBi

Note:

- This LM960 support WCDMA Band 2/4/5 ;
LTE Band 2/4/5/7/12/13/14/17/18/25/26/29(DL only)/30/38/41/46(DL only)/66/71 and
2UL CA list: CA_2A-5A, CA_2A-12A, CA_2A-13A, CA_4A-5A, CA_4A-7A, CA_4A-12A,
CA_4A-13A, CA_5A-66A, CA_12A-66A, CA_5B, CA_7C, CA_38C, CA_41C.
LTE band 29/46 is used for downlink-only.
- Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

1.2. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

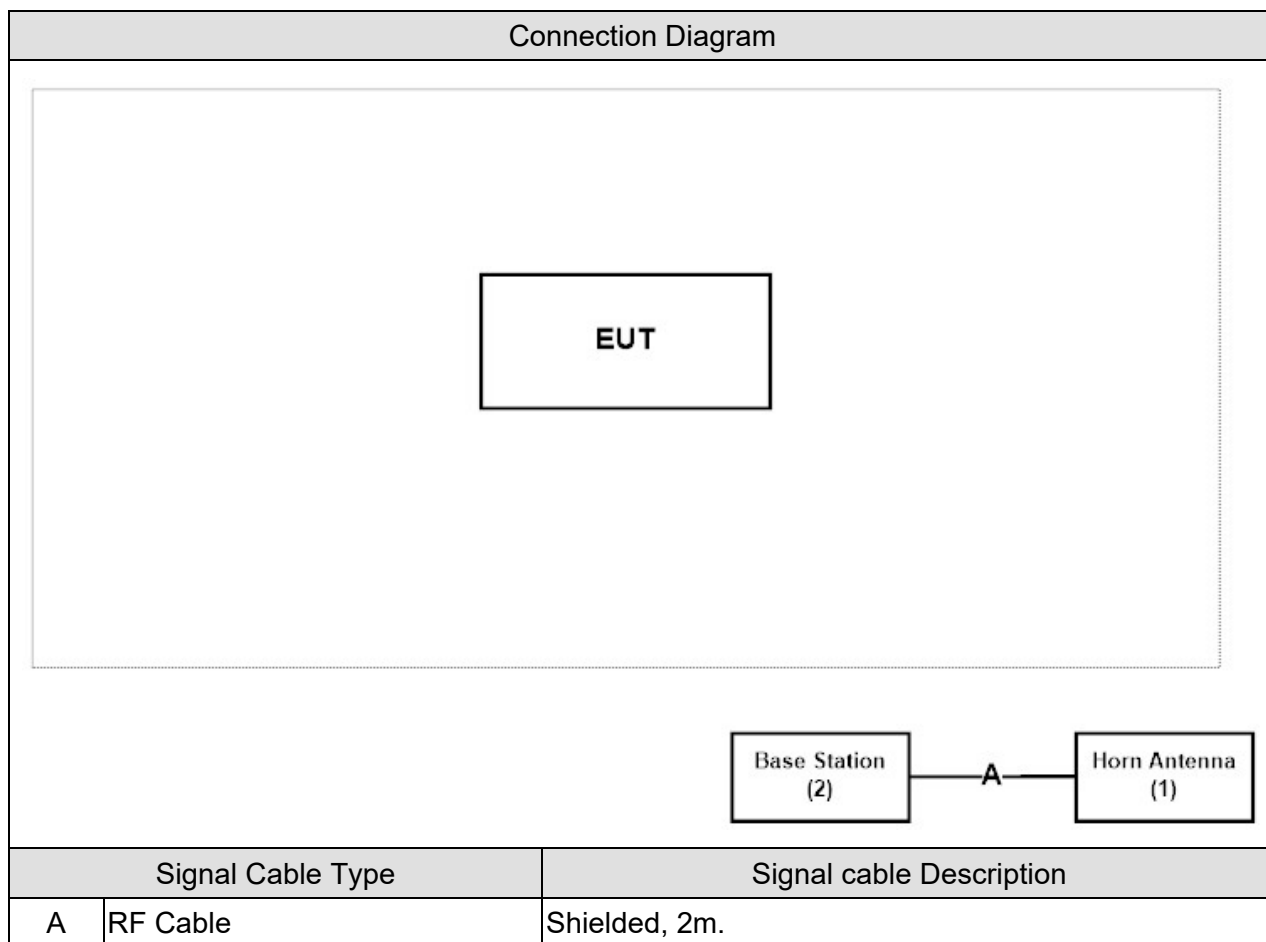
Test Mode
Mode 1: WCDMA Band 2
Mode 2: WCDMA Band 4
Mode 3: WCDMA Band 5

1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Horn Antenna	ELECTRO METRICS	EM-6961	103326	--
2 Base Station	R&S	CMW500	106071	--

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4.
2	Turn on the power of all equipment. Horn link with base station.
3	The EUT link with base station and it will continue receive the signal.
4	Repeat the above procedure.

2. Technical Test

2.1. Summary of Test Result

- No deviations from the test standards
- Deviations from the test standards as below description:

For WCDMA Band 2

(FCC Part 24 Subpart E, Industry Canada RSS-133, Issue 6, Industry Canada RSS-GEN)

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	§2.1033			
	§2.1046	§6.4	< 2 Watts	Pass
	§24.232			
Occupied Bandwidth	§2.1049	RSS-GEN §4.2	N/A	Pass
Peak To Average Ratio	§24.232(d)	§6.4	≤ 13dB	Pass
Conducted Band Edge	§27.238	§6.5	< -13dBm	Pass
Spurious Emission	§2.1053			
	§24.238	§6.5	< -13dBm	Pass
Frequency Stability	§2.1055			
	§24.235	§6.3	< 2.5 ppm	Pass

For WCDMA Band 4**(FCC Part 27 Subpart M, Industry Canada RSS-139, Issue 3, Industry Canada RSS-GEN)**

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	FCC PART 2.1046 and PART 27.50(h)(2)	RSS -139 §6.5	< 1 Watts EIRP	Pass
Occupied Bandwidth	FCC PART 2.1049 and PART 27.53(l)(6)	RSS - Gen §6.6	N/A	Pass
Peak To Average Ratio	§27.50(b)	§6.5	≤ 13dB	Pass
Conducted Band Edge	FCC PART 2.1051 and PART 27.53(l)(4)(6)	RSS - 139 §6.6	< -13 dBm	Pass
Spurious Emission	FCC PART 2.1051 and PART 27.53(l)(4)(6)	RSS - 139 §6.6	< -25 dBm	Pass
Frequency Stability	FCC PART 2.1055(a)(l) and PART 27.54	RSS - 139 §6.4	< 2.5 ppm	Pass

For WCDMA Band 5**(FCC Part 22 Subpart H, Industry Canada RSS-132, Issue 3, Industry Canada RSS-GEN)**

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	§2.1033 §2.1046 §22.913	§5.4	< 7 Watts	Pass
Occupied Bandwidth	§2.1049	RSS-GEN §4.2	N/A	Pass
Peak To Average Ratio	§22.913(d)	§5.4	≤ 13dB	Pass
Conducted Band Edge	§22.917	§5.5	< -13dBm	Pass
Spurious Emission	§2.1053 §22.917	§5.5	< -13dBm	Pass
Frequency Stability	§2.1055 §22.335	§5.3	< 2.5 ppm	Pass

2.2. Test Environment

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)	RF Output Power	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Occupied Bandwidth	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Peak To Average Ratio	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Conducted Band Edge	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Spurious Emission	15-35	23	2/3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Frequency Stability	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	

Note: Test Site information refers to Laboratory Information.

Laboratory Information

USA : FCC Registration Number: TW3024

Canada : IC Registration Number: 22397-1 / 22397-2 / 22397-3

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site :

<http://www.dekra.com.tw/english/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : http://www.dekra.com.tw/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our test sites as below:

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2.3. List of Test Equipment

RF Output Power / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2018/01/02	2019/01/01
Pulse Power Sensor	Anritsu	MA2411B	1531043	2018/01/02	2019/01/01
Pulse Power Sensor	Anritsu	MA2411B	1531044	2018/01/02	2019/01/01
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24

Peak To Average Ratio / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24

Conducted Band Edge / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24

Conducted Spurious Emissions / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24

Radiated Spurious Emissions / CB2-H, CB4-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04
Bilog Antenna	Teseq	CBL6112D	23191	2017/06/28	2018/06/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2017/06/14	2018/06/13
Horn Antenna	Schwarzbeck	BBHA 9170	202	2018/01/31	2019/01/30
Pre-Amplifier	DEKRA.	AP-025C	201801235	2018/03/12	2019/03/11
Pre-Amplifier	EMCI	EMCI 1830I	980366	2018/01/08	2019/01/07
Pre-Amplifier	Dekra	AP-400C	201801231	2017/12/13	2018/12/12

Frequency Stability / SR10-H

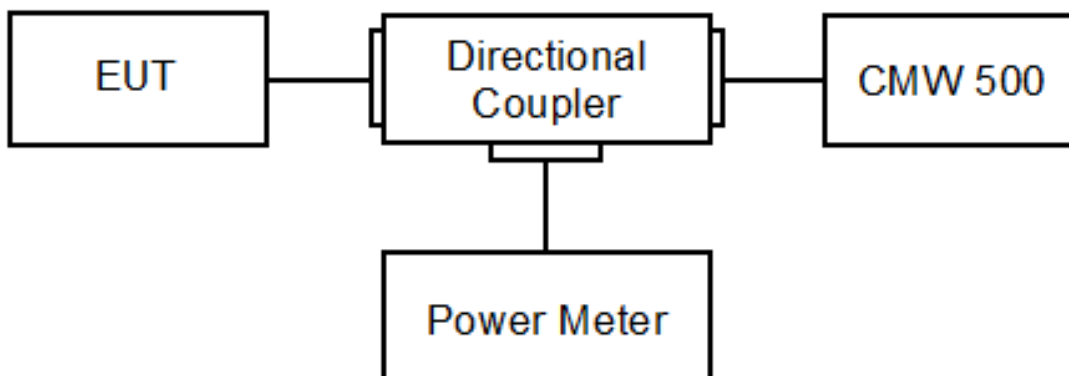
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Temperature & Humidity Chamber	WIT	TH-1S-B	1082101	2018/01/23	2019/01/22

2.4. Measurement Uncertainty

Test Item	Uncertainty
RF Output Power	$\pm 1.27\text{dB}$
Occupied Bandwidth	$\pm 10\text{ Hz}$
Peak To Average Ratio	In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13dB.
Conducted Band Edge	$\pm 1.2\text{ dB}$
Spurious Emissions	The measurement uncertainty is defined as $\pm 1.27\text{ dB}$ for Conducted Measurement. The measurement uncertainty is defined as $\pm 3.2\text{ dB}$ for Radiated Measurement.
Frequency Stability	$\pm 10\text{ Hz}$

3. RF Output Power

3.1. Test Setup



3.2. Test Procedure

- a) The RF output of the transmitter was connected to base station simulator.
- b) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- c) Set EUT at maximum average power by base station simulator.
- d) Measure lowest, middle, and highest channels for each bandwidth and different modulation.

Effective Isotropic Radiated Power = Conducted Power(dBm) + Antenna Gain(dBi)

Effective Radiated Power = Conducted Power(dBm) + Antenna Gain(dBi) - 2.15dB

3.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause5.2.4

ANSI C63.26-2015 Sub-clause 5.2.4.2

3.4. Test Result

Product	LM960		
Test Item	RF Output Power (Conducted)		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/07	Test Site	SR10-H

Band	Channel	Frequency (MHz)	Type	Average Value
2	Low	1850.2	RMC	22.34
			HSUPA Subtest 5	20.14
			HSDPA Subtest 1	19.86
	Middle	1880.0	RMC	22.52
			HSUPA Subtest 5	20.30
			HSDPA Subtest 1	20.06
	High	1909.8	RMC	22.36
			HSUPA Subtest 5	19.89
			HSDPA Subtest 1	19.31

Note 1: The Subtest 5 of HSUPA for LTE band 2 is the worst Value.

Note 2: The Subtest 1 of HSDPA for LTE band 2 is the worst Value.

Product	LM960		
Test Item	RF Output Power (Conducted)		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/07	Test Site	SR10-H

Band	Channel	Frequency (MHz)	Type	Average Value
4	Low	1712.4	RMC	22.80
			HSUPA Subtest 1	20.24
			HSDPA Subtest 1	20.28
	Middle	1732.6	RMC	22.70
			HSUPA Subtest 1	20.22
			HSDPA Subtest 1	20.25
	High	1752.6	RMC	22.25
			HSUPA Subtest 1	19.97
			HSDPA Subtest 1	19.65

Note 1: The Subtest 1 of HSUPA for LTE band 4 is the worst Value.

Note 2: The Subtest 1 of HSDPA for LTE band 4 is the worst Value.

Product	LM960		
Test Item	RF Output Power (Conducted)		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/07	Test Site	SR10-H

Band	Channel	Frequency (MHz)	Type	Average Value
5	Low	826.4	RMC	23.21
			HSUPA Subtest 1	19.98
			HSDPA Subtest 1	20.13
	Middle	836.6	RMC	23.27
			HSUPA Subtest 1	20.15
			HSDPA Subtest 1	20.22
	High	846.6	RMC	23.55
			HSUPA Subtest 1	19.89
			HSDPA Subtest 1	20.15

Note 1: The Subtest 1 of HSUPA for LTE band 5 is the worst Value.

Note 2: The Subtest 1 of HSDPA for LTE band 5 is the worst Value.

Product	LM960		
Test Item	RF Output Power (Radiated)		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 2_RMC			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
1850.2	22.34	25.84	33
1880.0	22.52	26.02	33
1909.8	22.36	25.86	33

WCDMA_Band 2_HSDPA			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
1850.2	19.86	23.36	33
1880.0	20.06	23.56	33
1909.8	19.31	22.81	33

WCDMA_Band 2_HSUPA			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
1850.2	20.14	23.64	33
1880.0	20.30	23.80	33
1909.8	19.89	23.39	33

Product	LM960		
Test Item	RF Output Power (Radiated)		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 4_RMC			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
1712.4	22.80	26.30	33
1732.6	22.70	26.20	33
1752.6	22.25	25.75	33

WCDMA_Band 4_HSDPA			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
1712.4	20.28	23.78	33
1732.6	20.25	23.75	33
1752.6	19.65	23.15	33

WCDMA_Band 4_HSUPA			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
1712.4	20.24	23.74	33
1732.6	20.22	23.72	33
1752.6	19.97	23.47	33

Product	LM960		
Test Item	RF Output Power (Radiated)		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/07	Test Site	SR10-H

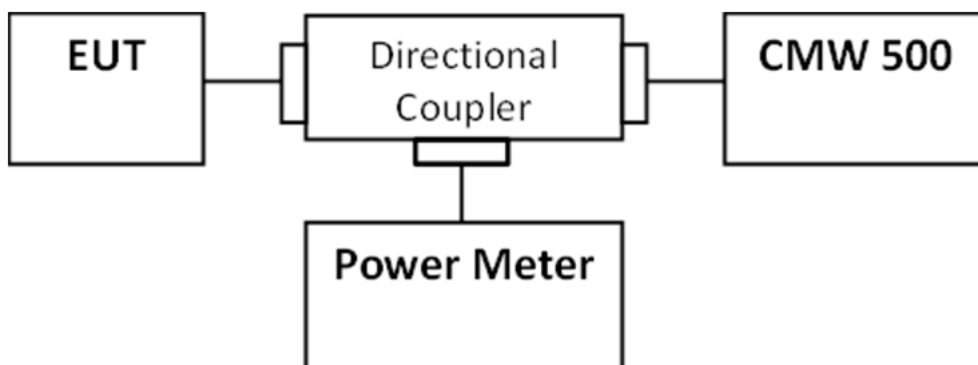
WCDMA_Band 5_RMC			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
826.4	23.21	24.71	38
836.6	23.27	24.77	38
846.6	23.55	25.05	38

WCDMA_Band 5_HSDPA			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
826.4	20.13	21.63	38
836.6	20.22	21.72	38
846.6	20.15	21.65	38

WCDMA_Band 5_HSUPA			
Frequency (MHz)	Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	
826.4	19.98	21.48	38
836.6	20.15	21.65	38
846.6	19.89	21.39	38

4. Occupied Bandwidth

4.1. Test Setup



4.2. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 26 dB bandwidth and 99% occupied bandwidth of the low & middle & high channel for the highest RF powers were measured.

4.3. Test Method

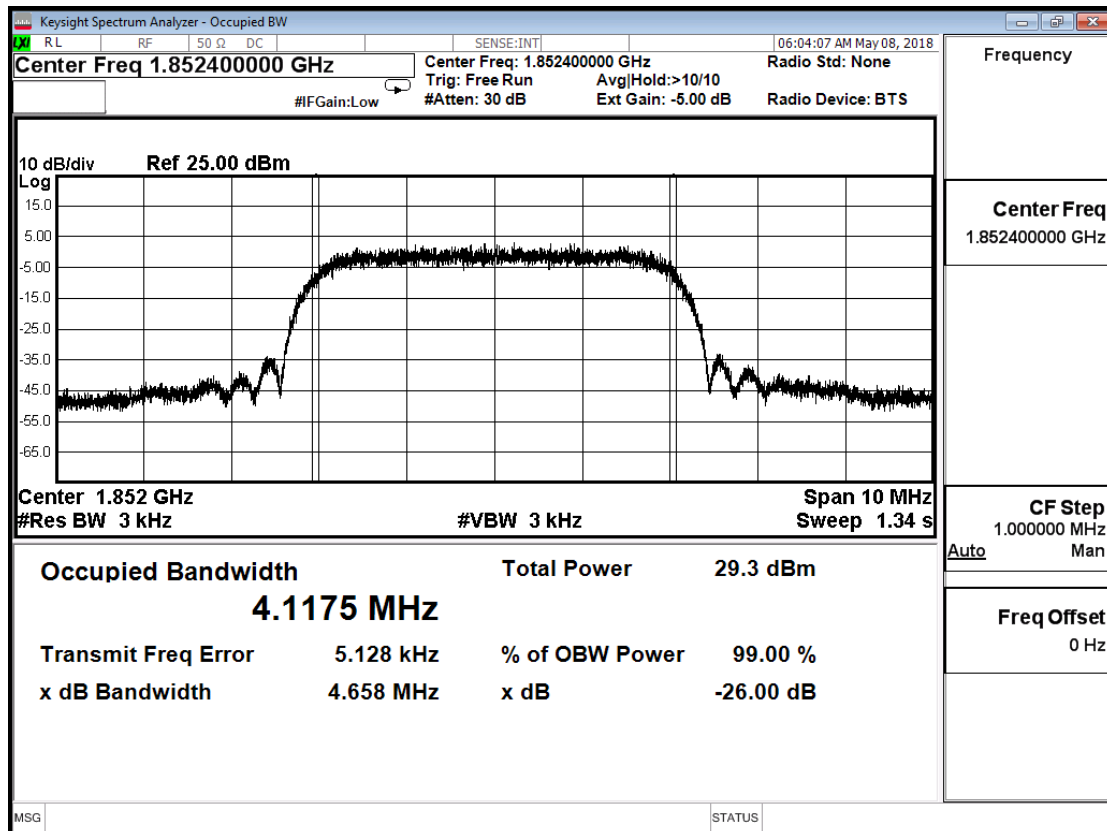
KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 4.2 & 4.3
ANSI C63.26-2015 Sub-clause 5.4.3 & 5.4.4

4.4. Test Result

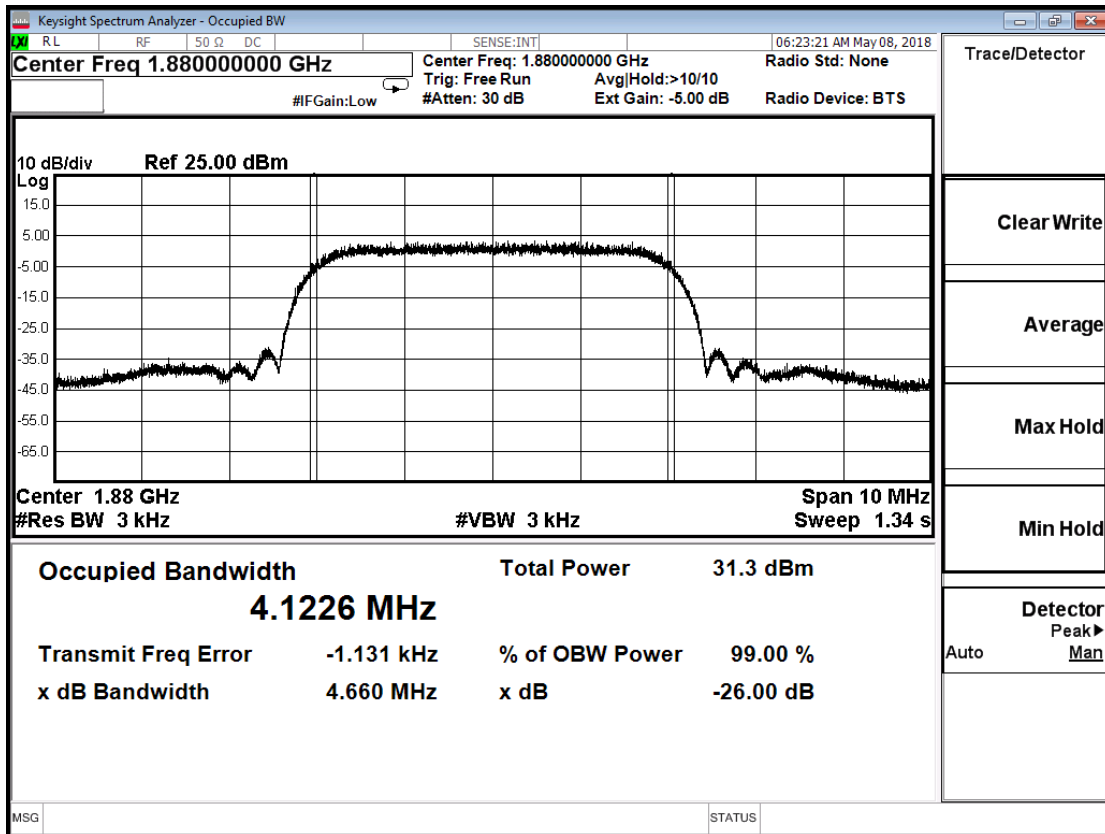
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 2_RMC		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.2	4.117	N/A
1880.0	4.122	N/A
1909.8	4.134	N/A

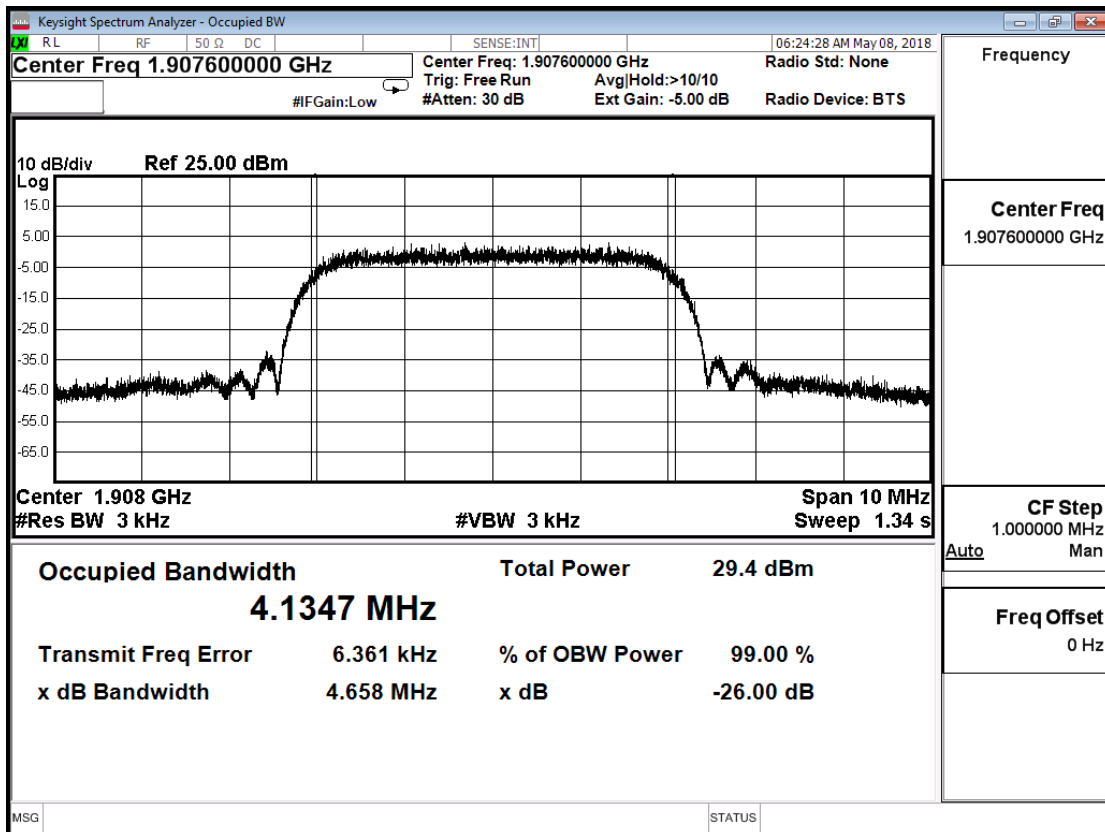
WCDMA_Band 2_RMC_1850.2MHz



WCDMA_Band 2_RMC_1880.0MHz



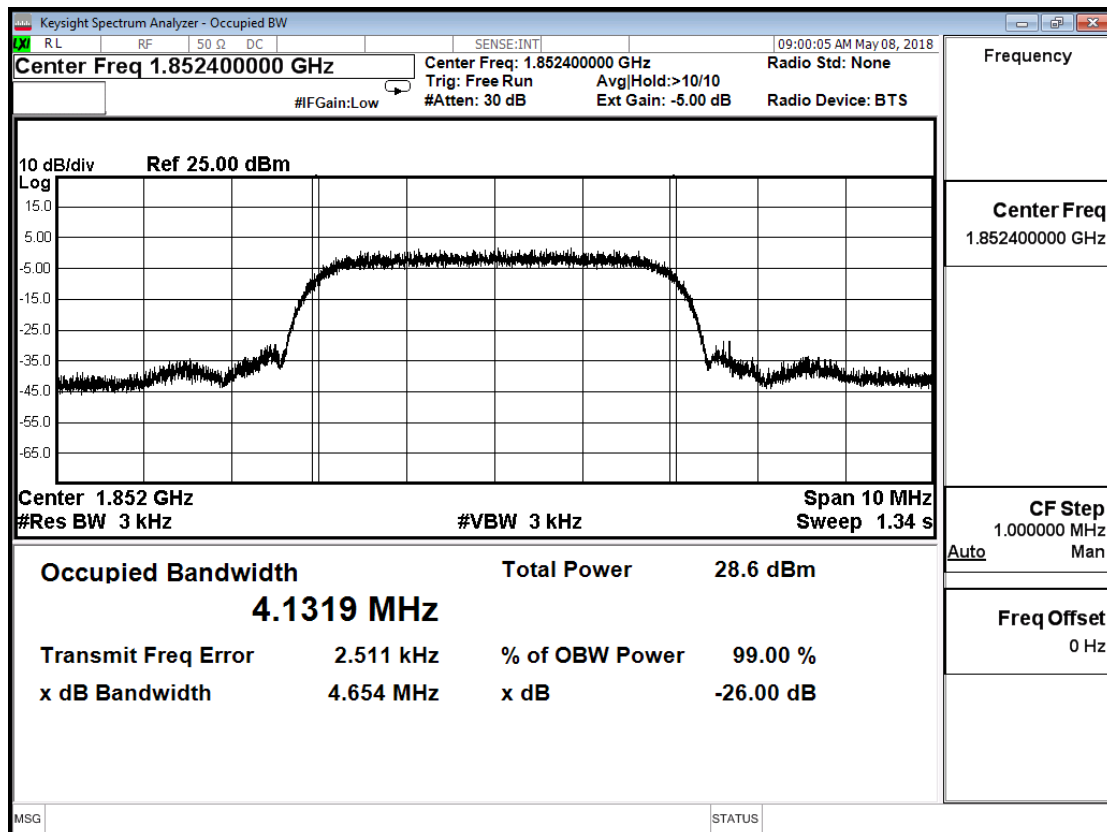
WCDMA_Band 2_RMC_1909.8MHz



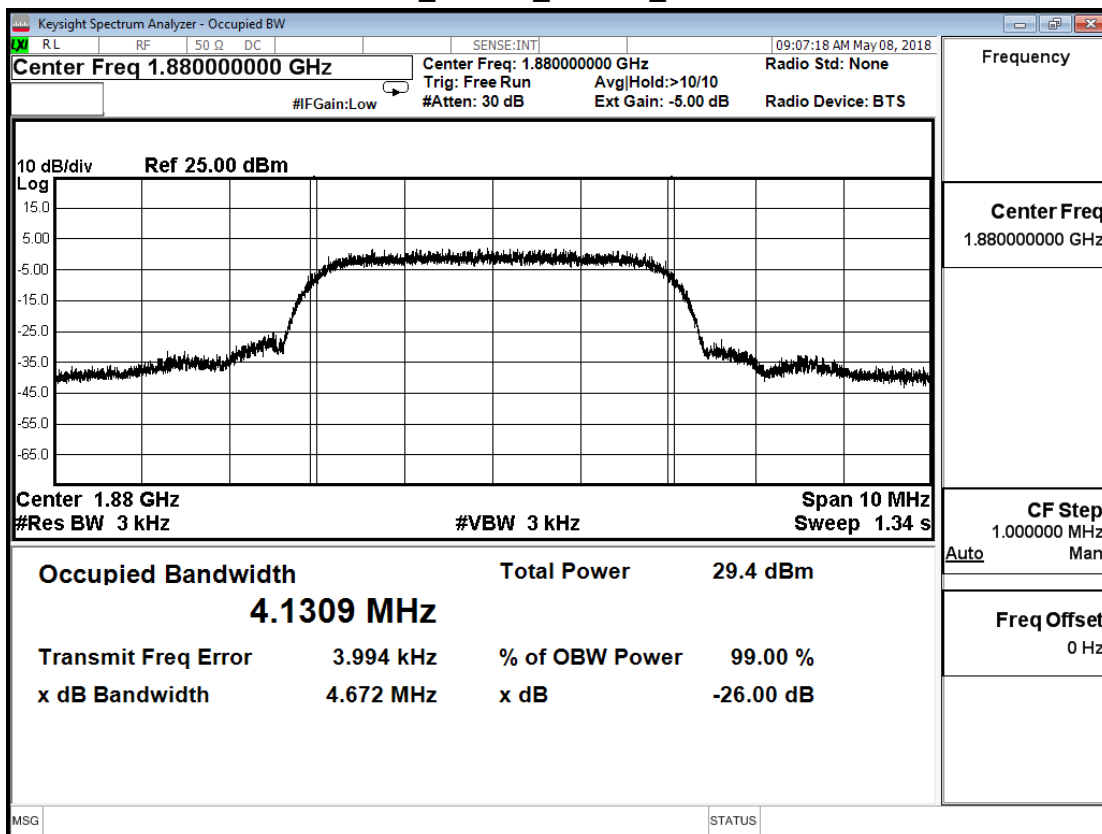
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 2_HSDPA		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.2	4.131	N/A
1880.0	4.130	N/A
1909.8	4.132	N/A

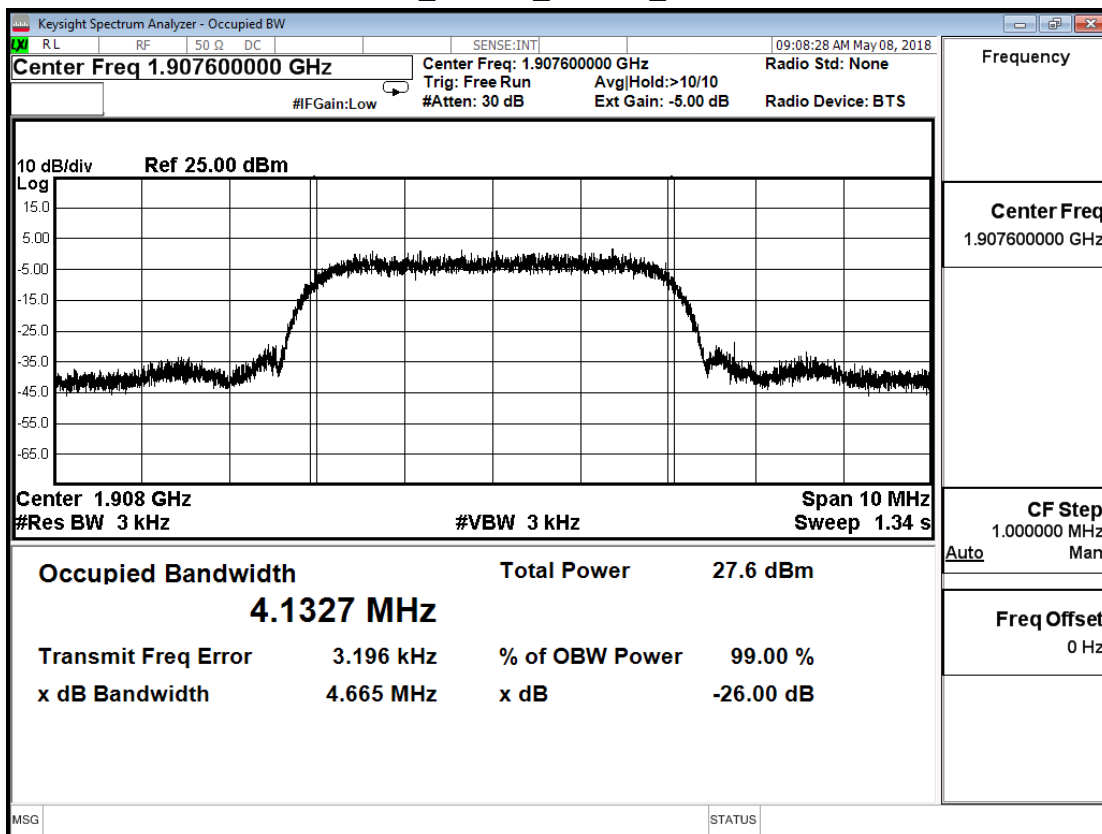
WCDMA_Band 2_HSDPA_1850.2MHz



WCDMA_Band 2_HSDPA_1880.0MHz



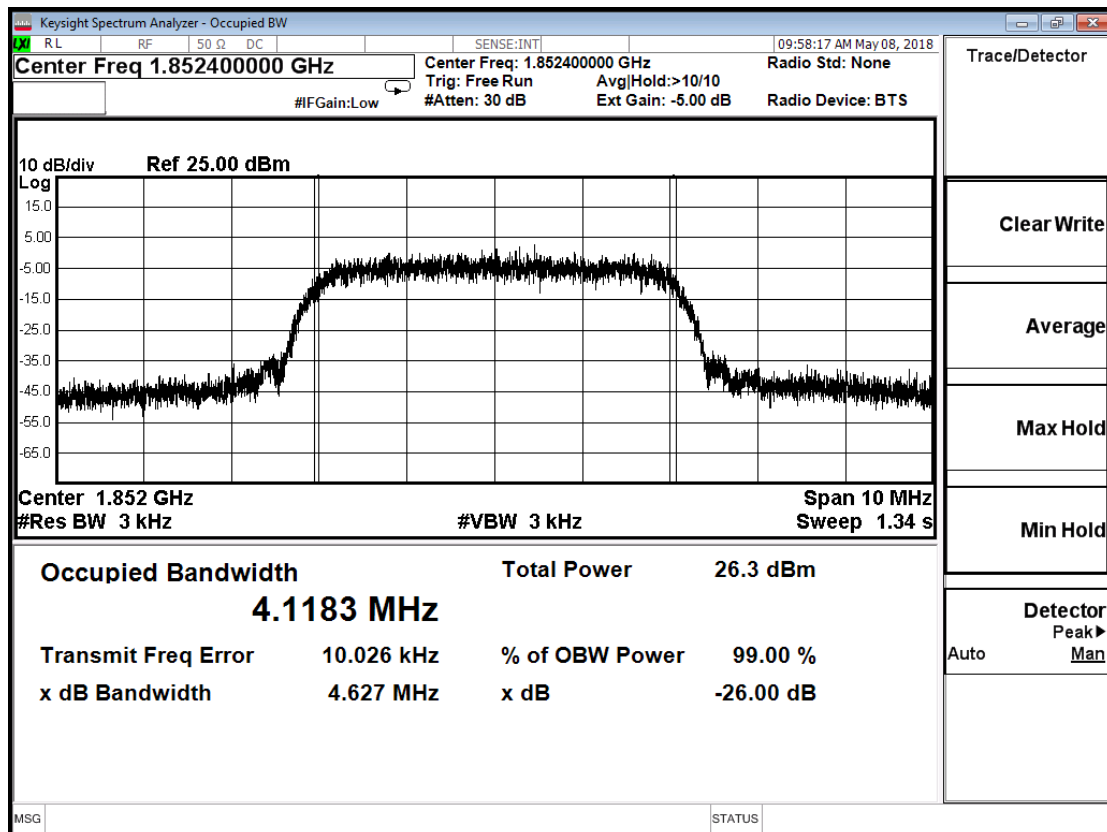
WCDMA_Band 2_HSDPA_1909.8MHz



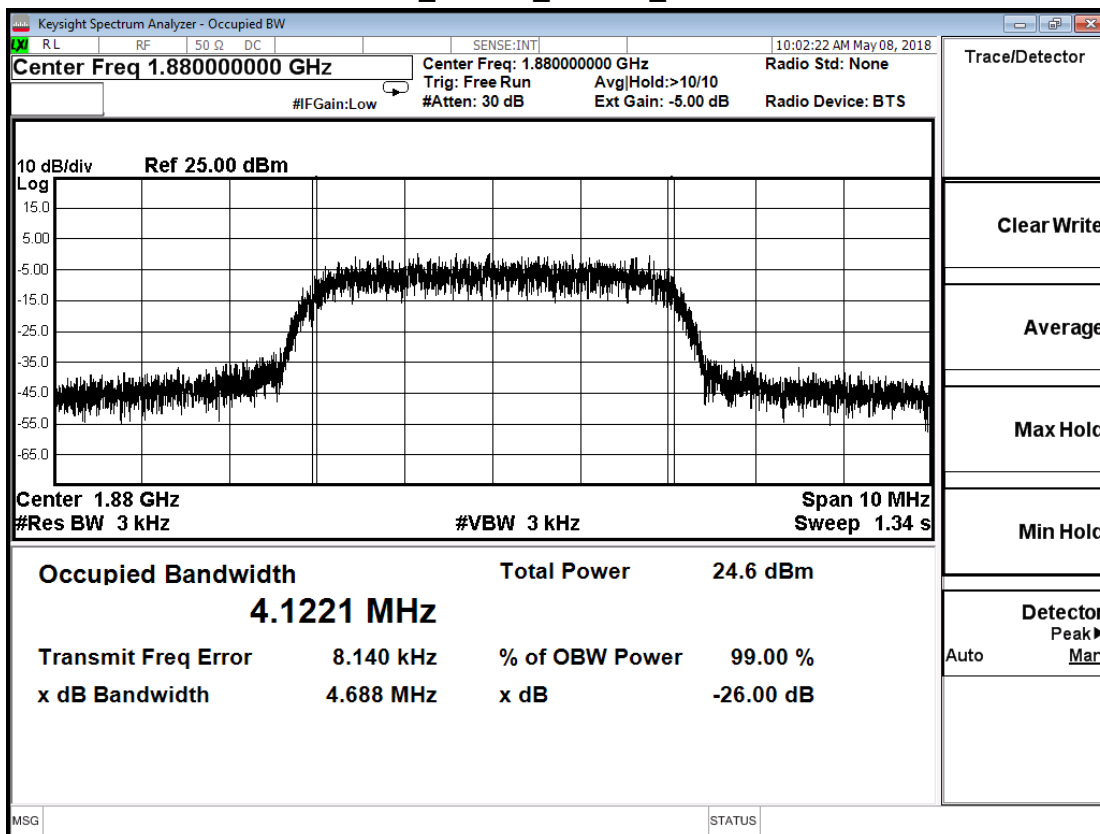
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 2_HSUPA		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.2	4.118	N/A
1880.0	4.122	N/A
1909.8	4.141	N/A

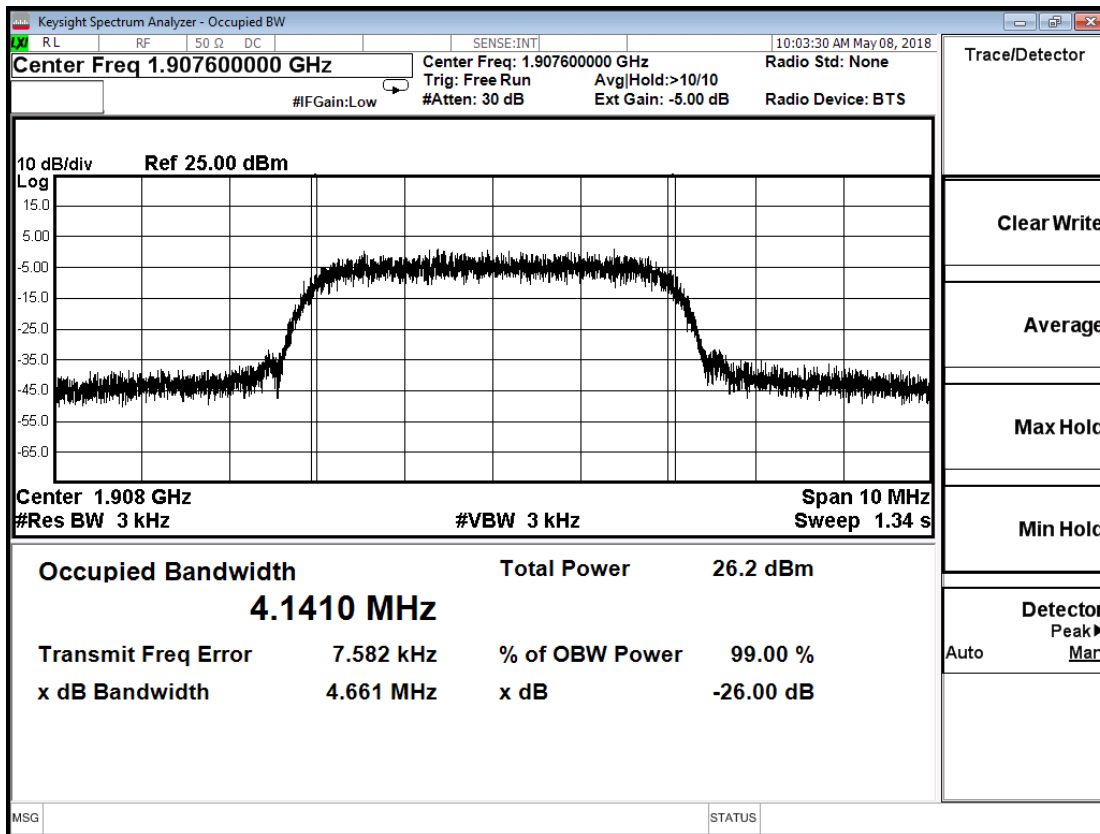
WCDMA_Band 2_HSUPA_1850.2MHz



WCDMA_Band 2_HSUPA_1880.0MHz



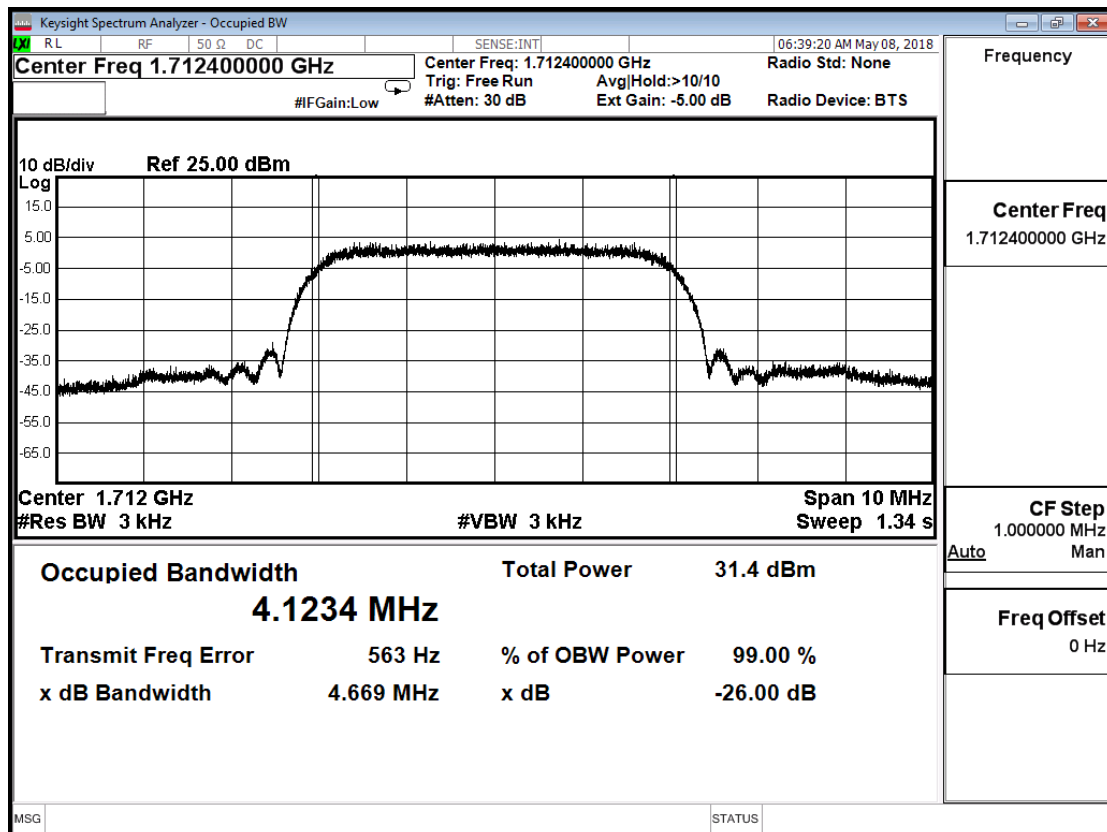
WCDMA_Band 2_HSUPA_1909.8MHz



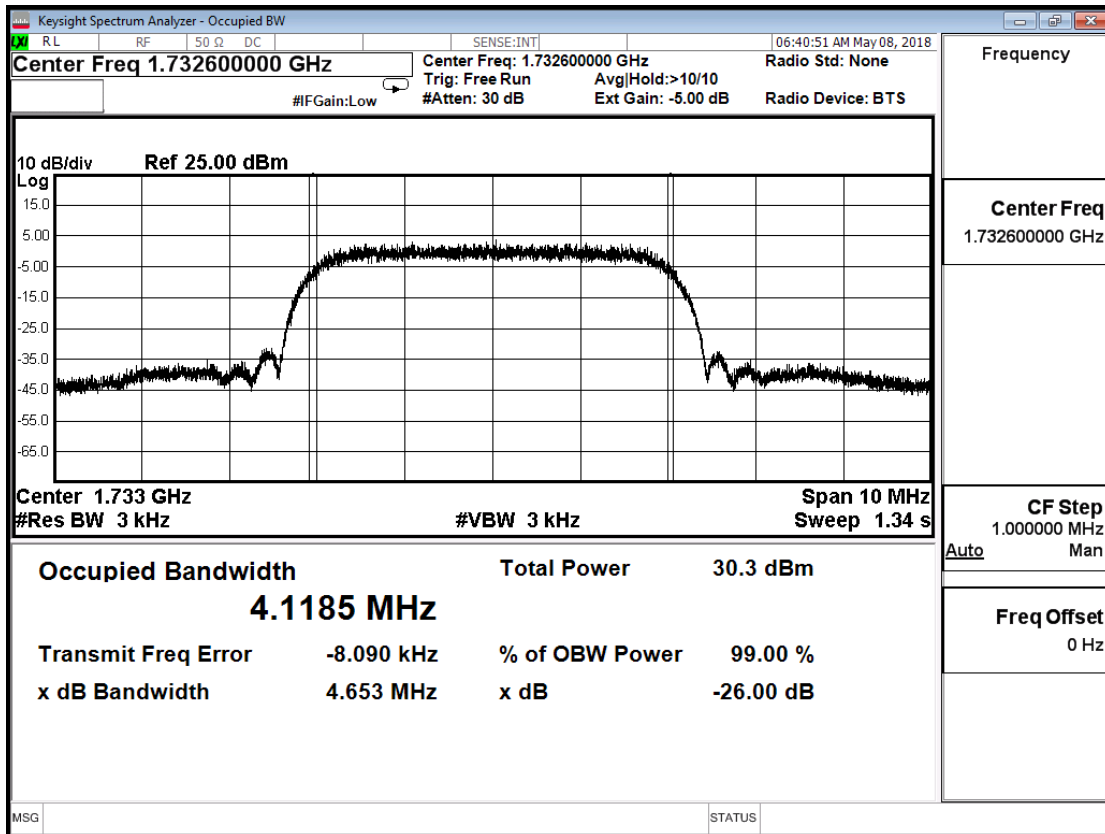
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 4_RMC		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1712.4	4.123	N/A
1732.6	4.118	N/A
1752.6	4.116	N/A

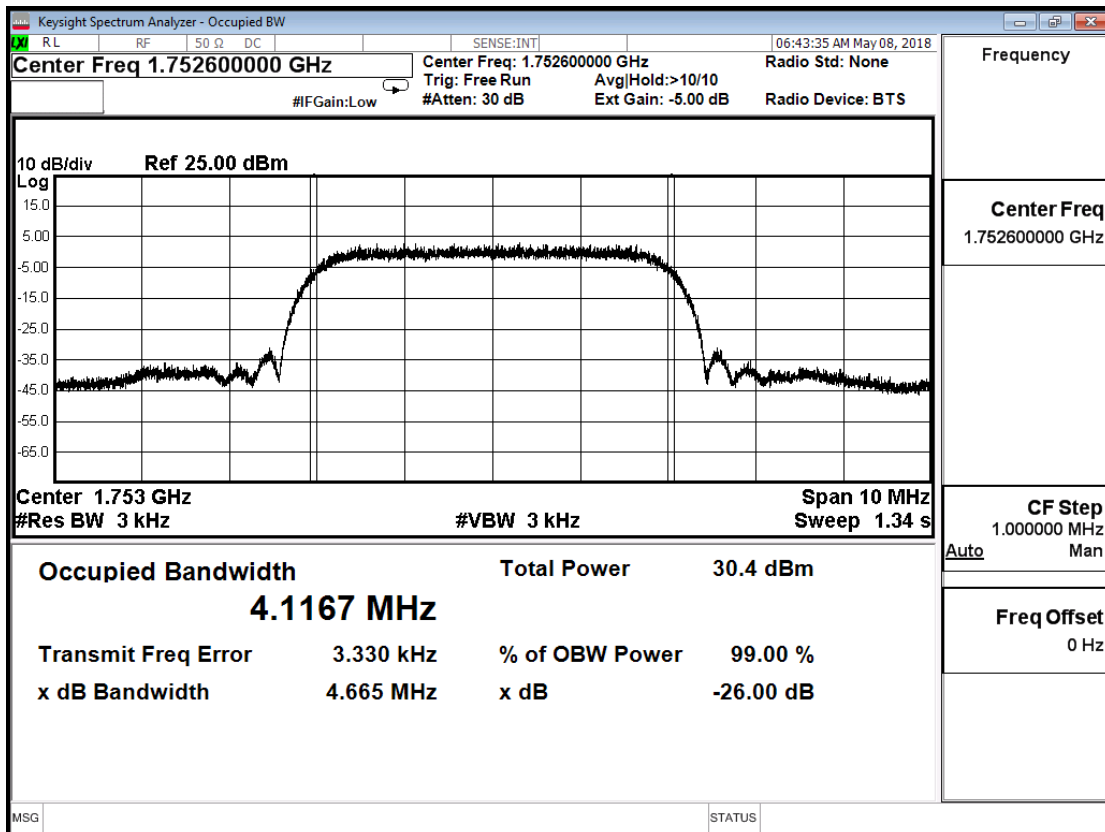
WCDMA_Band 4_RMC_1712.4MHz



WCDMA_Band 4_RMC_1732.6MHz



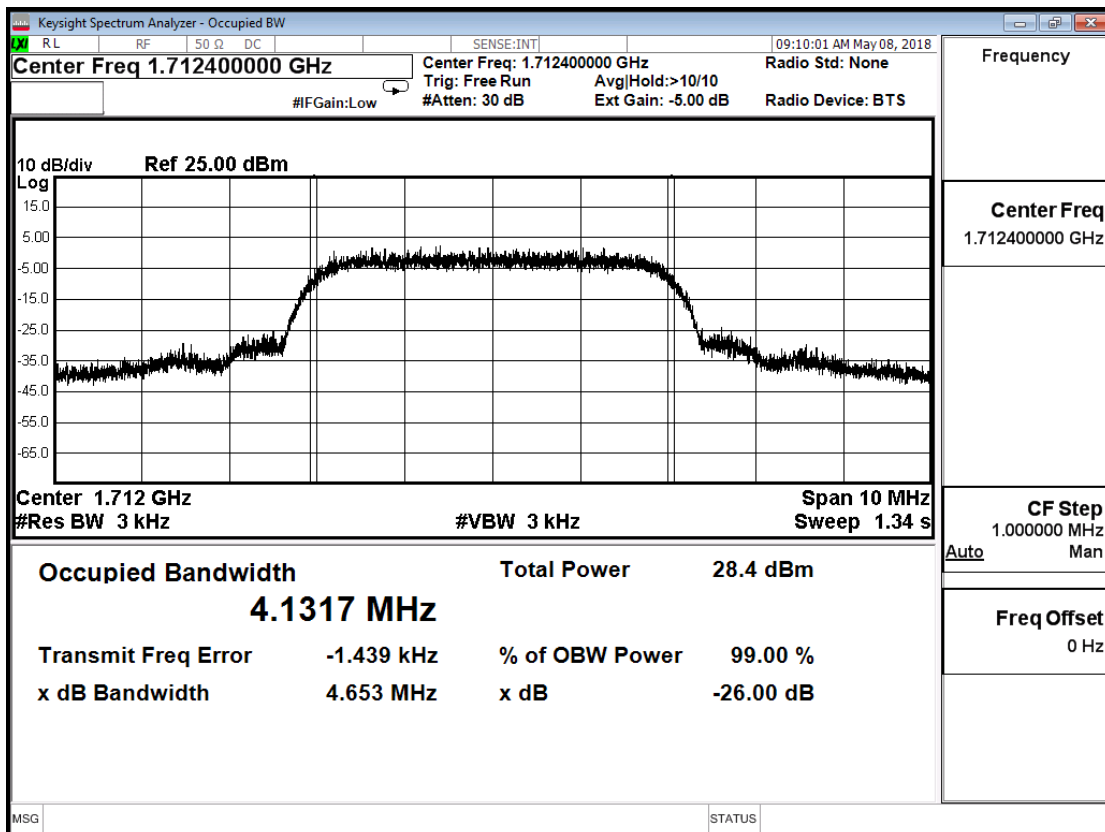
WCDMA_Band 4_RMC_1752.6MHz



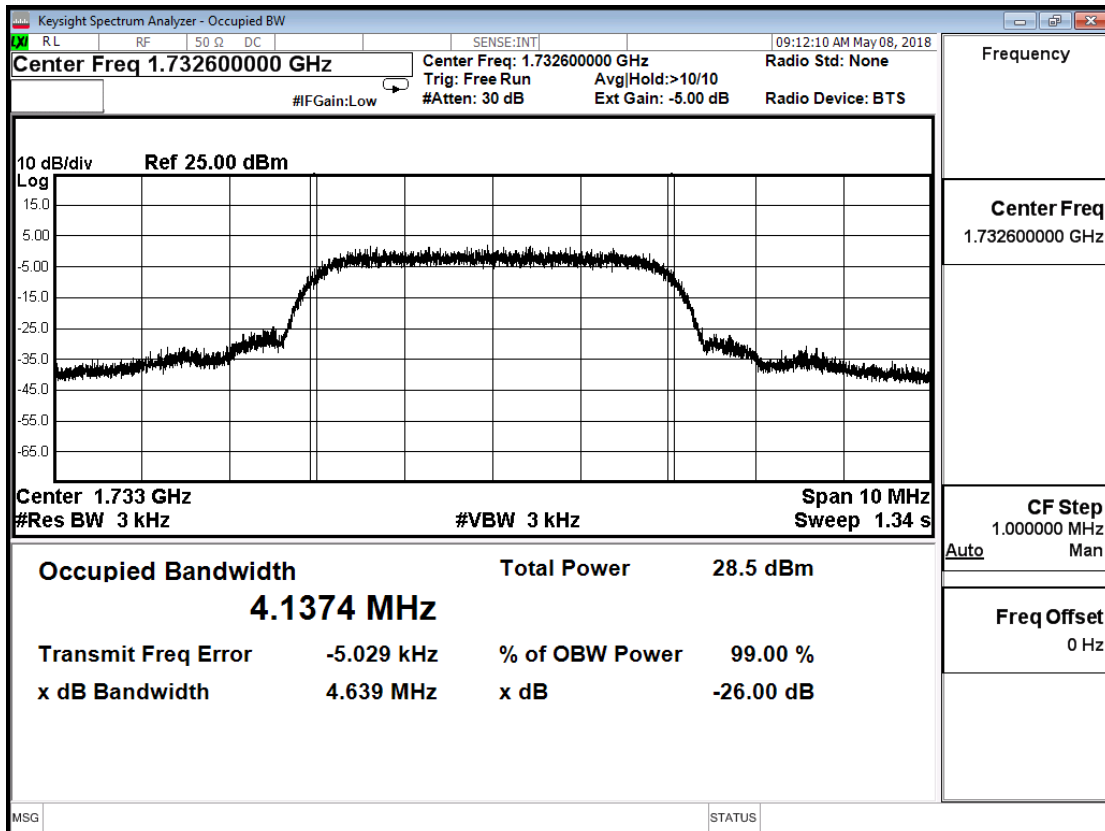
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 4_ HSDPA		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1712.4	4.131	N/A
1732.6	4.137	N/A
1752.6	4.134	N/A

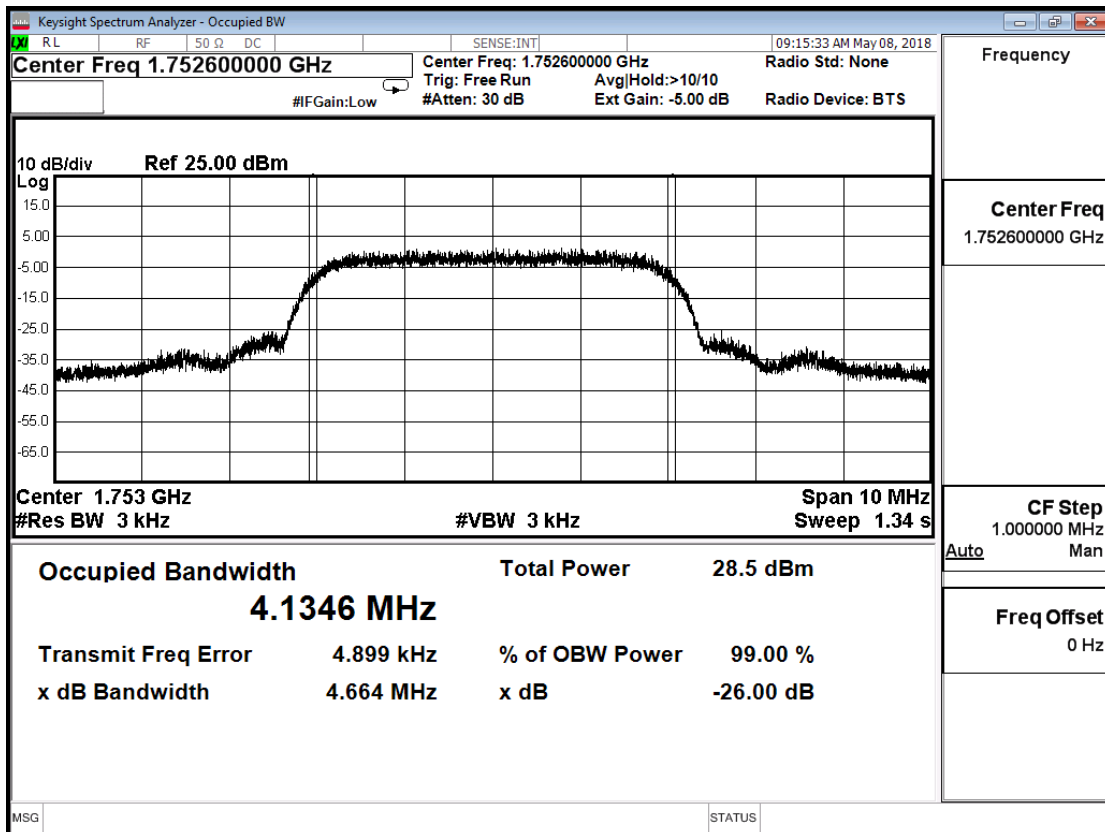
WCDMA_Band 4_ HSDPA_ 1712.4MHz



WCDMA_Band 4_HSDPA_1732.6MHz



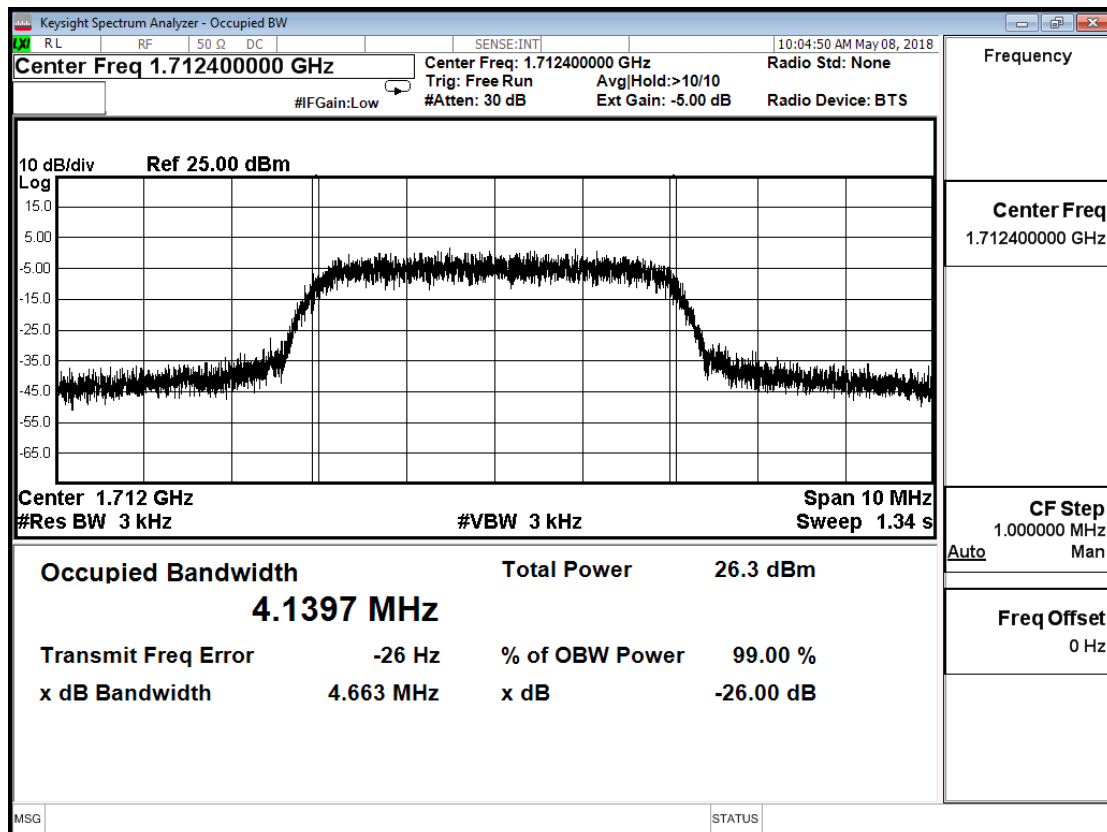
WCDMA_Band 4_HSDPA_1752.6MHz



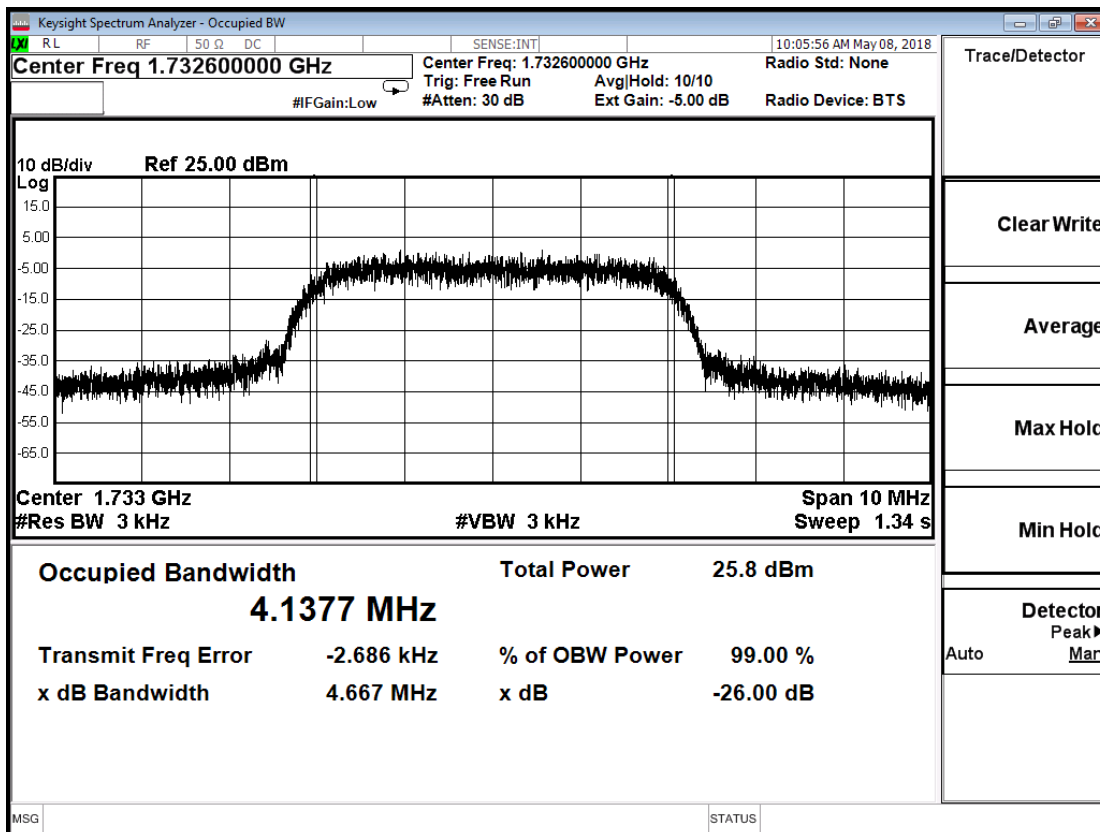
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 4_HSUPA		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1712.4	4.139	N/A
1732.6	4.137	N/A
1752.6	4.118	N/A

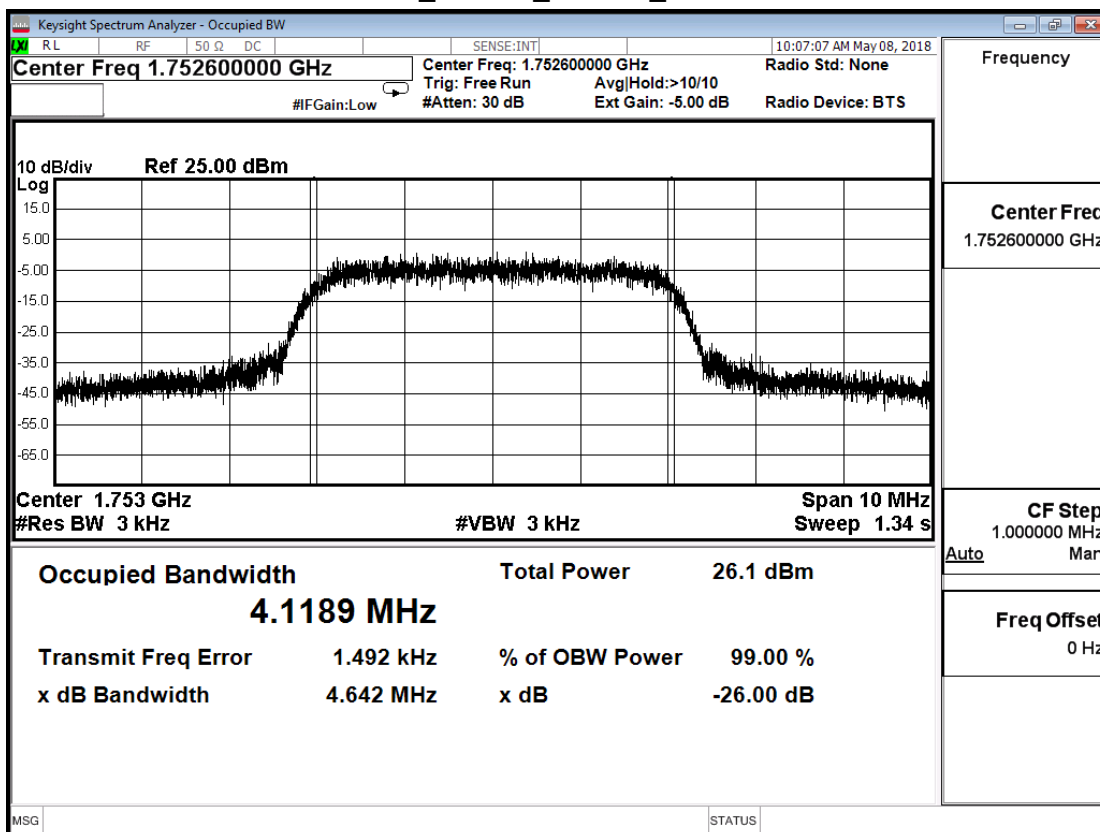
WCDMA_Band 4_HSUPA_1712.4MHz



WCDMA_Band 4_HSUPA_1732.6MHz



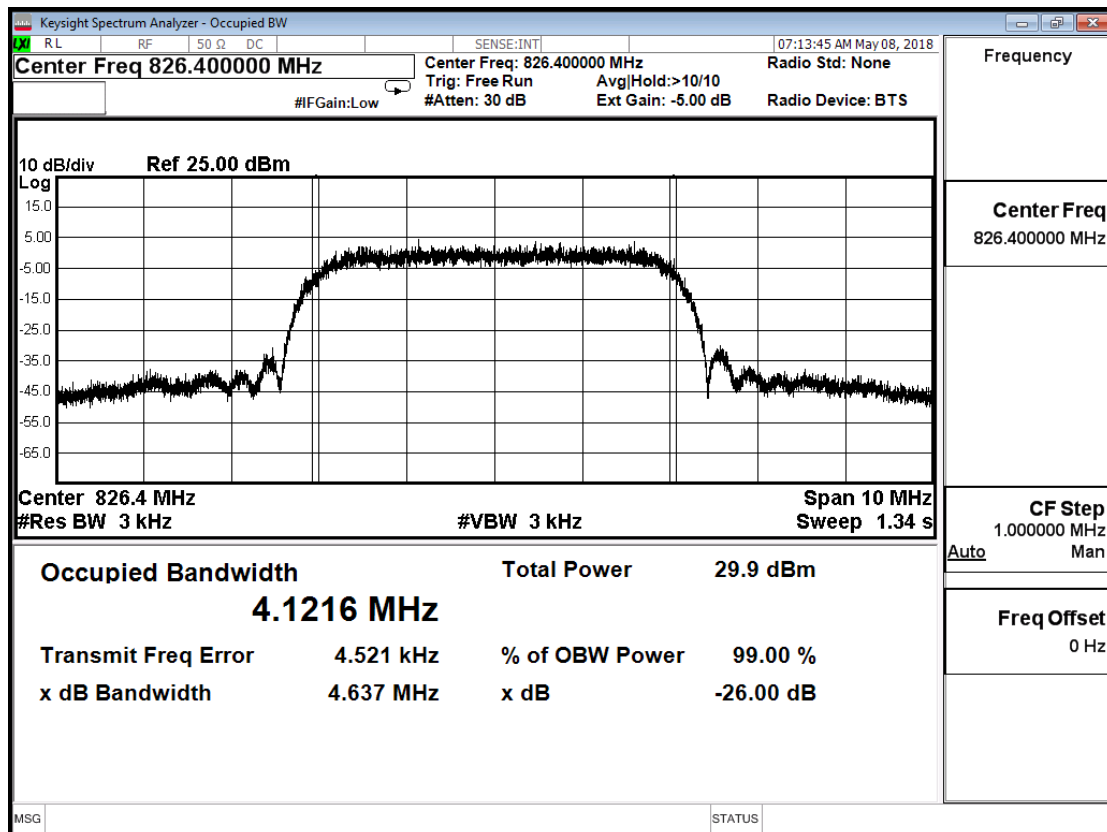
WCDMA_Band 4_HSUPA_1752.6MHz



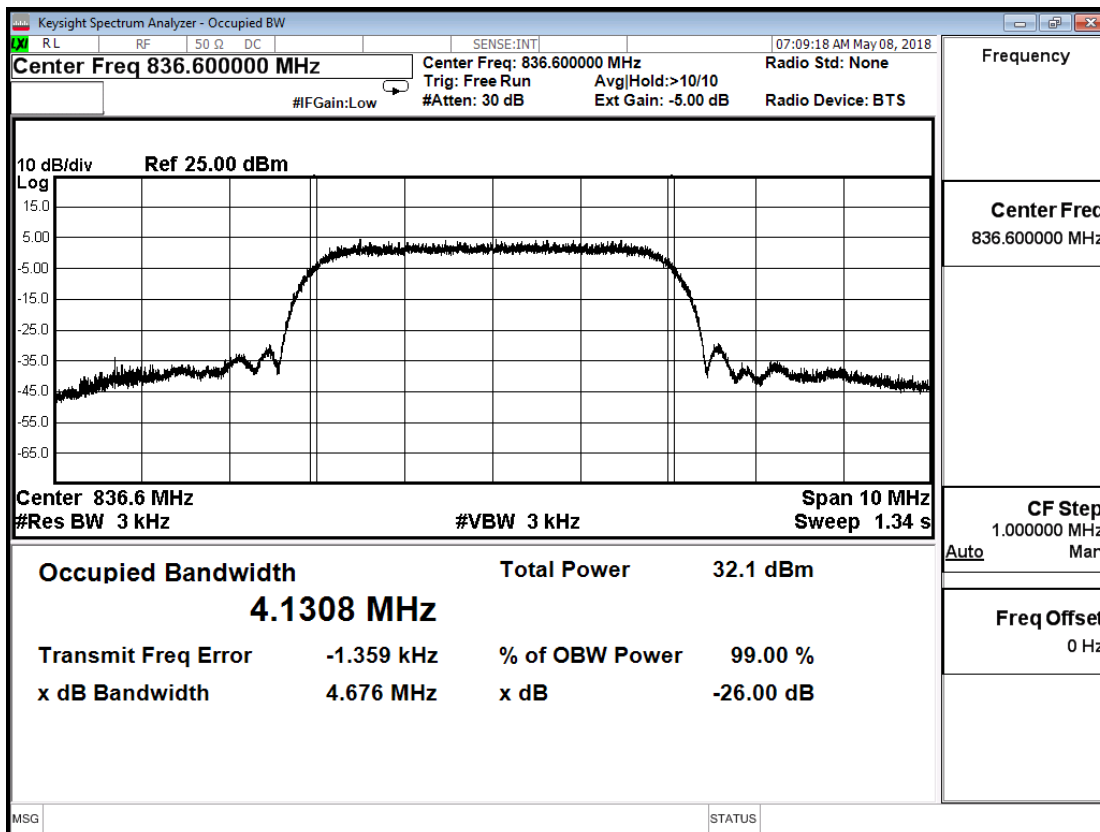
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 5_RMC		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
826.4	4.121	N/A
836.6	4.130	N/A
846.6	4.142	N/A

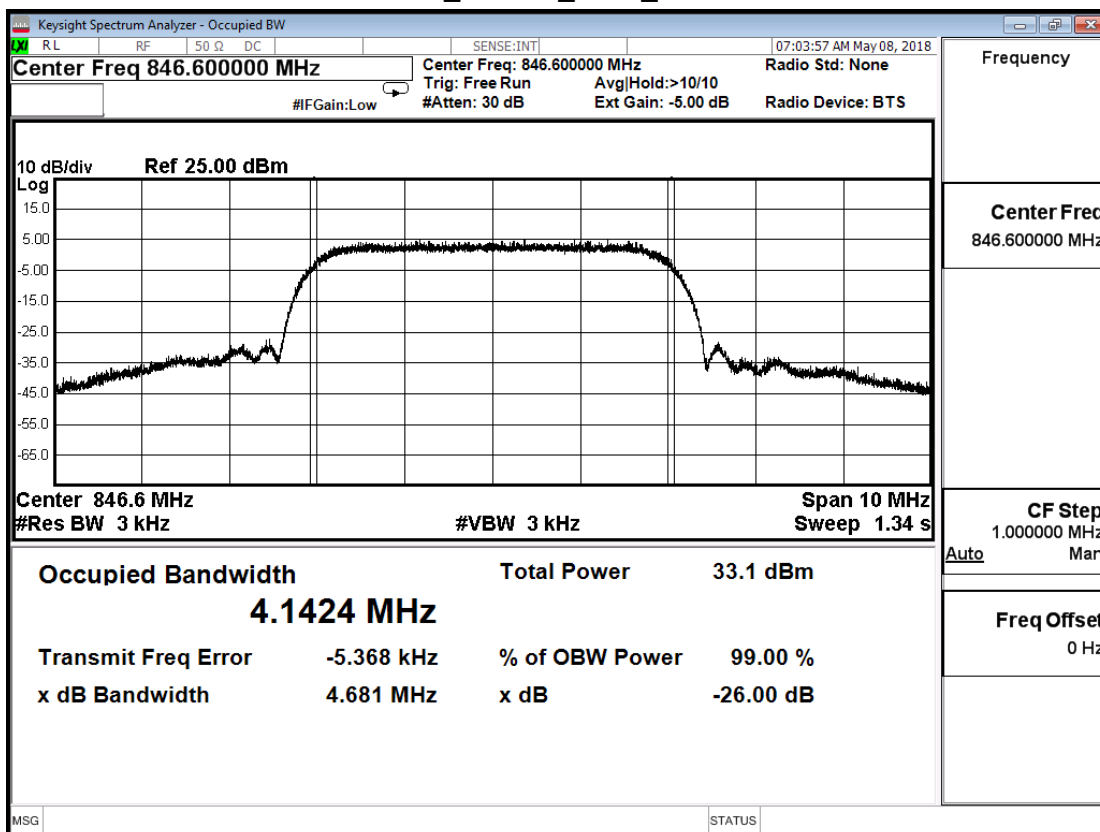
WCDMA_Band 5_RMC_826.4MHz



WCDMA_Band 5_RMC_836.6MHz



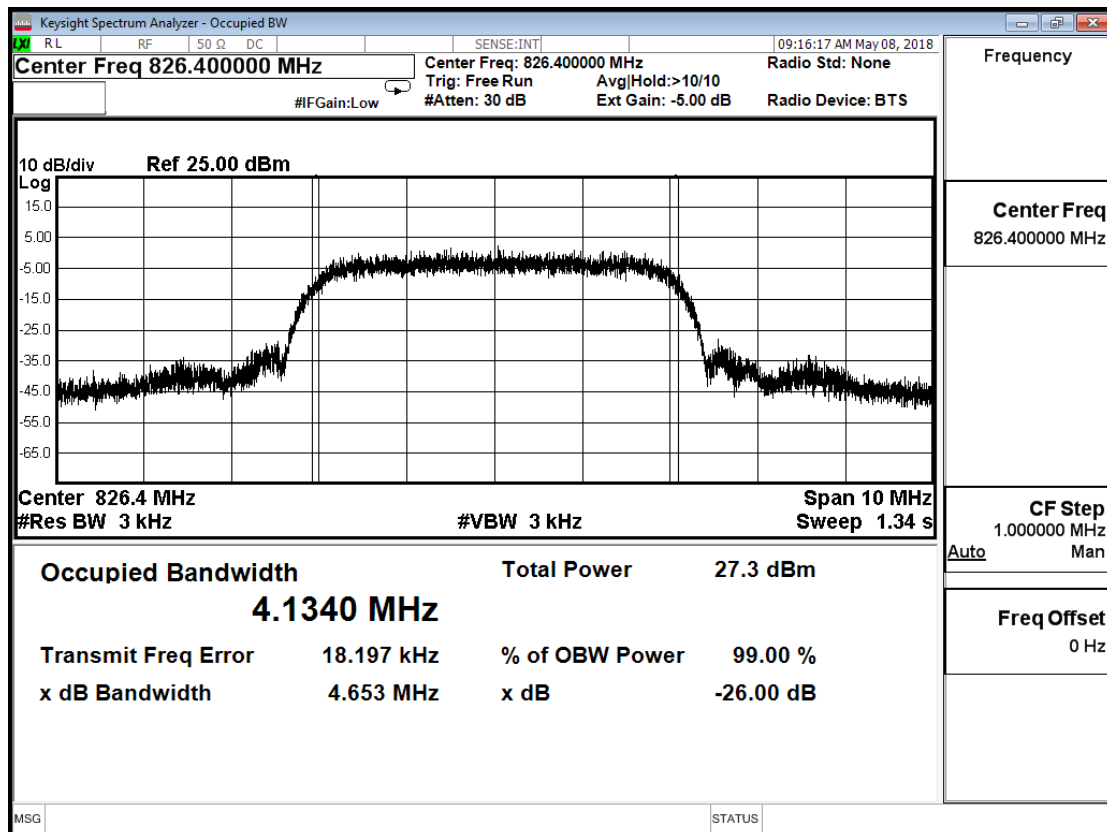
WCDMA_Band 5_RMC_846.6MHz



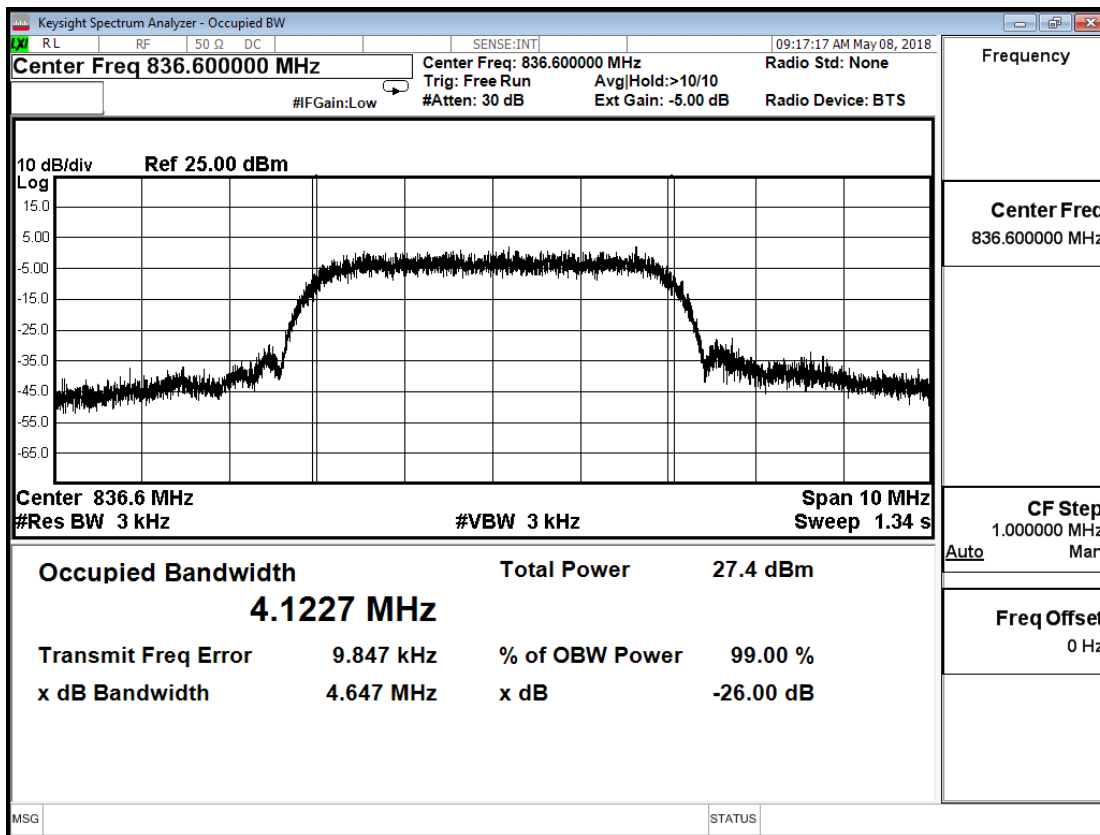
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 5_HSDPA		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
826.4	4.134	N/A
836.6	4.122	N/A
846.6	4.126	N/A

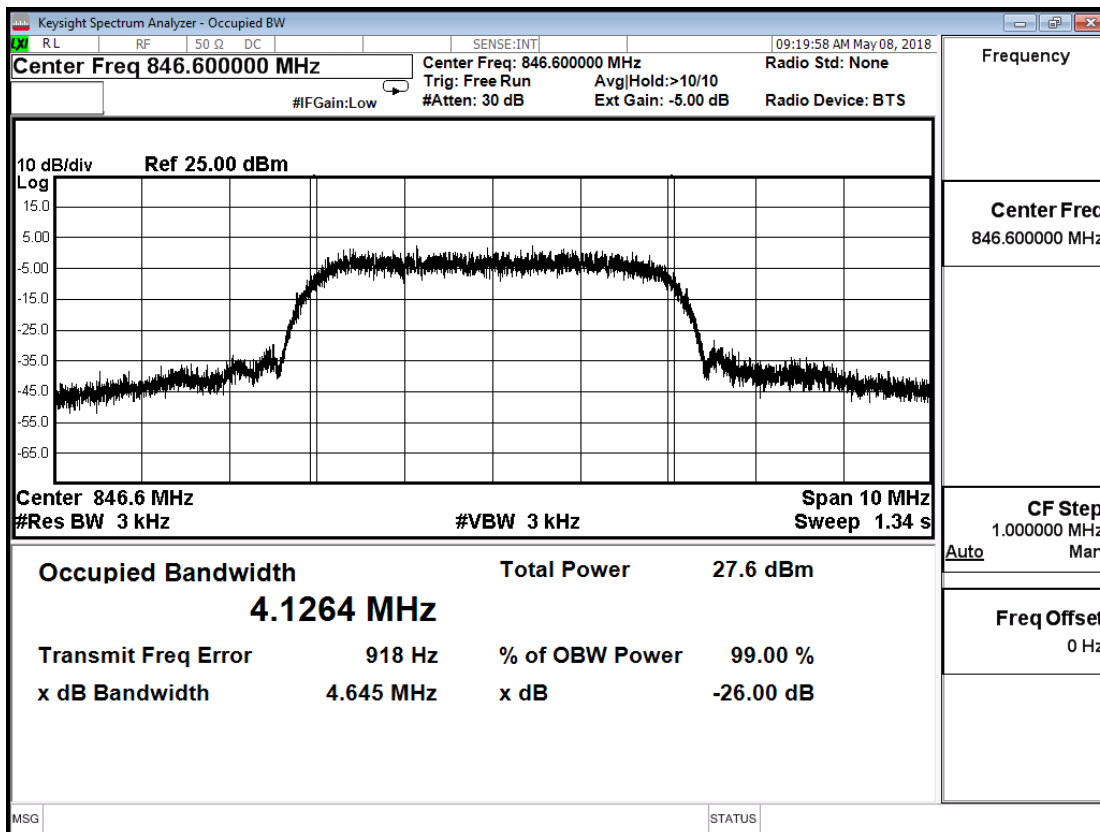
WCDMA_Band 5_HSDPA_826.4MHz



WCDMA_Band 5_HSDPA_836.6MHz



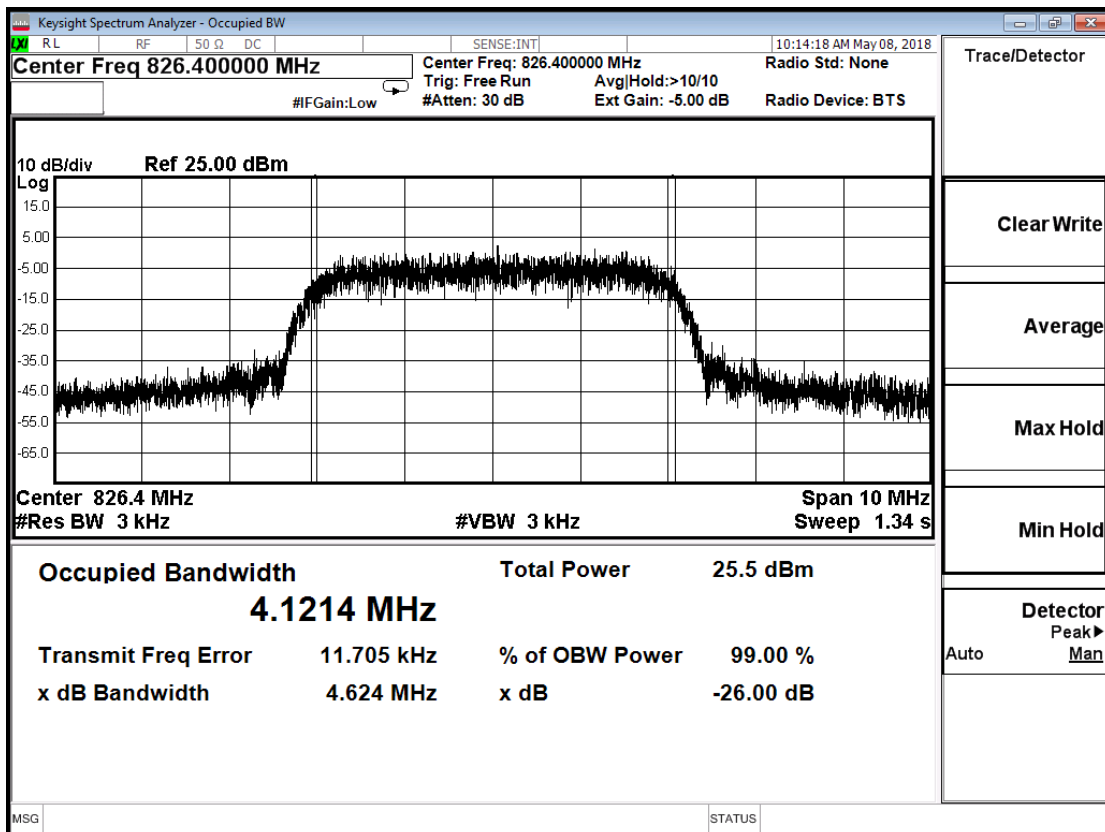
WCDMA_Band 5_HSDPA_846.6MHz



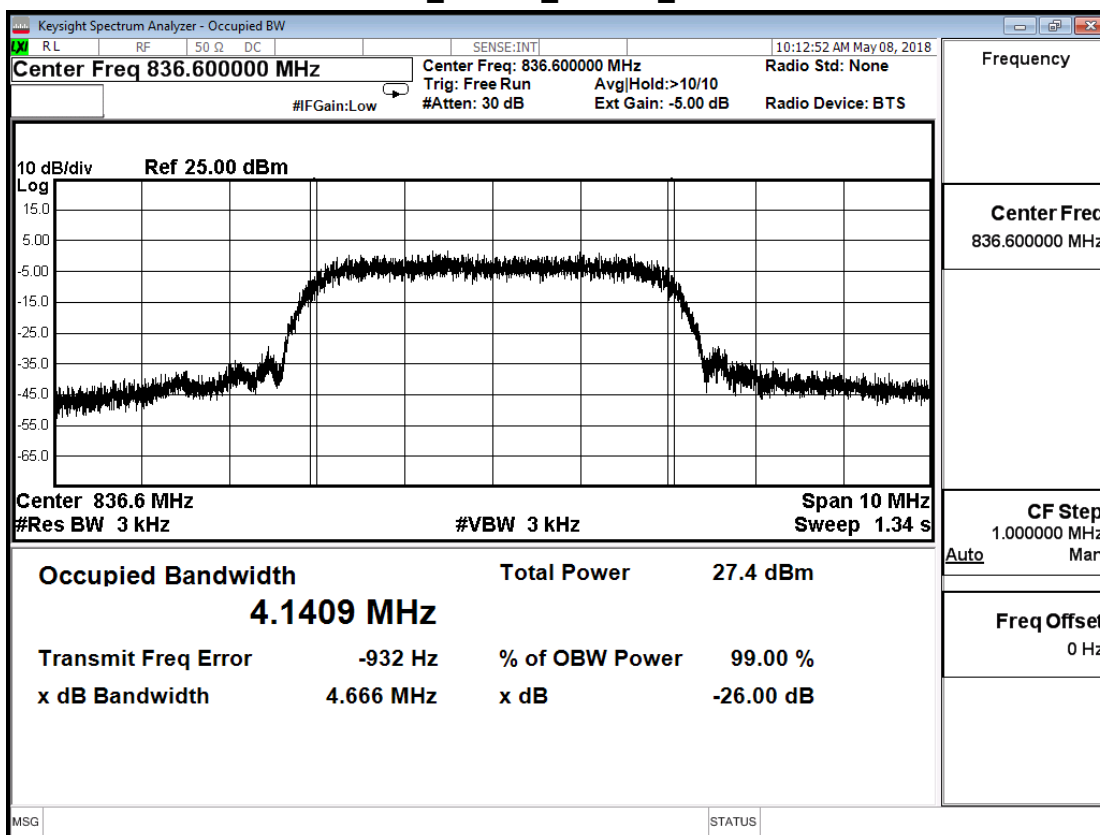
Product	LM960		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/09	Test Site	SR10-H

WCDMA_Band 5_HSUPA		
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
826.4	4.121	N/A
836.6	4.140	N/A
846.6	4.141	N/A

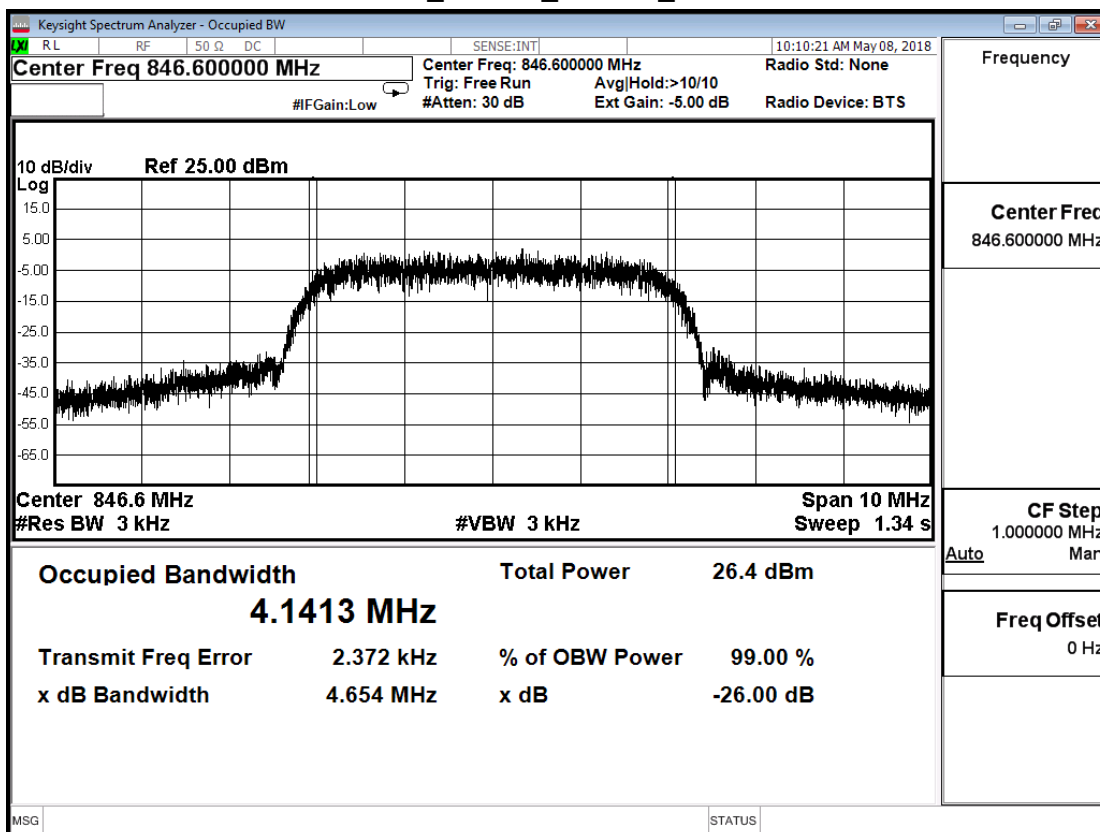
WCDMA_Band 5_HSUPA_826.4MHz



WCDMA_Band 5_HSUPA_836.6MHz

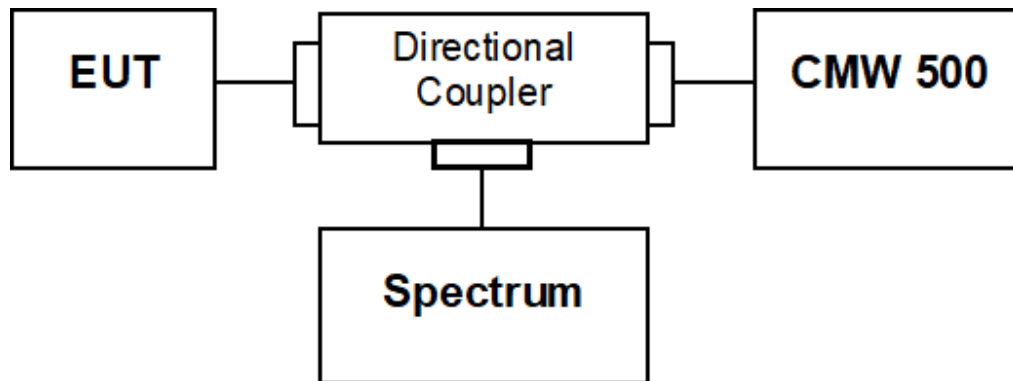


WCDMA_Band 5_HSUPA_846.6MHz



5. Peak To Average Ratio

5.1. Test Setup



5.2. Test Procedure

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Record the maximum PAPR level associated with a probability of 0.1 %.

5.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 5.7.2
ANSI C63.26-2015 Sub-clause 5.2.3.4

5.4. Test Result

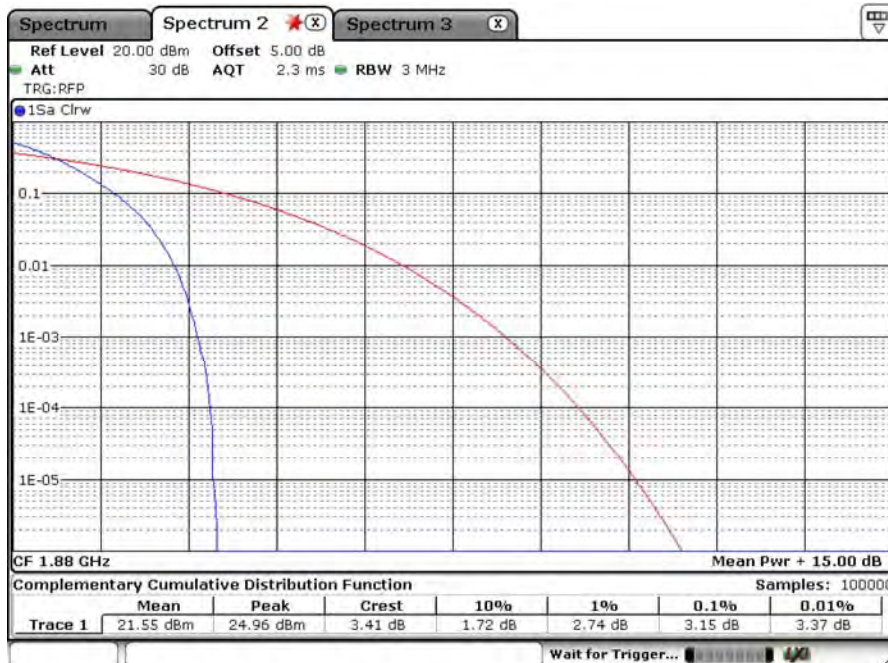
Product	LM960		
Test Item	Peak To Average Ratio		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 2_RMC_1852.4MHz



Date: 8.MAY.2018 10:24:58

WCDMA_Band 2_RMC_1880.0MHz



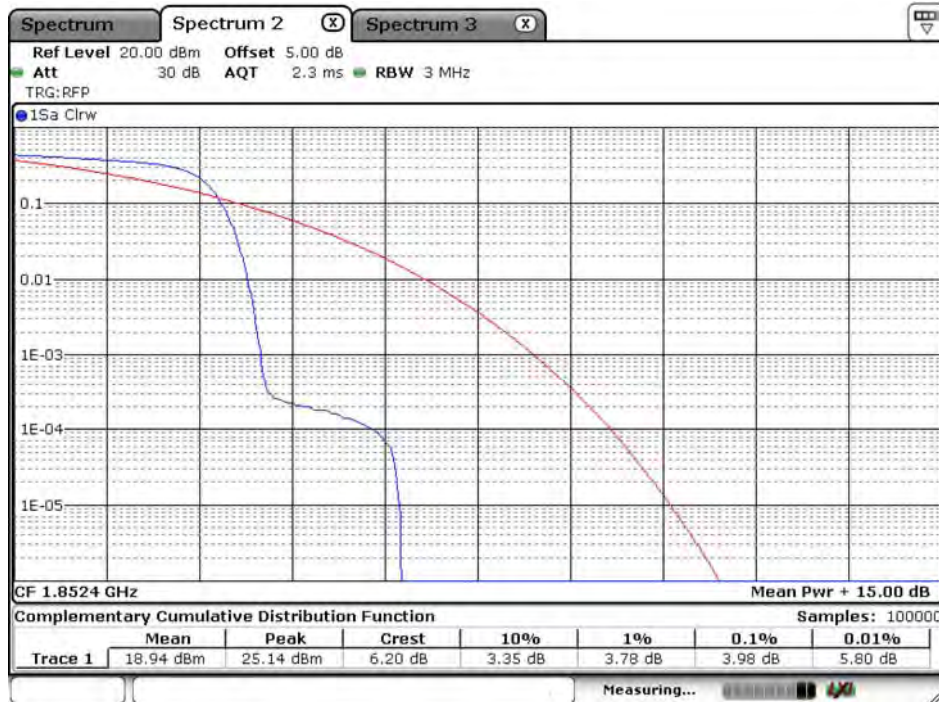
Date: 8.MAY.2018 11:20:13

WCDMA_Band 2_RMC_1907.6MHz



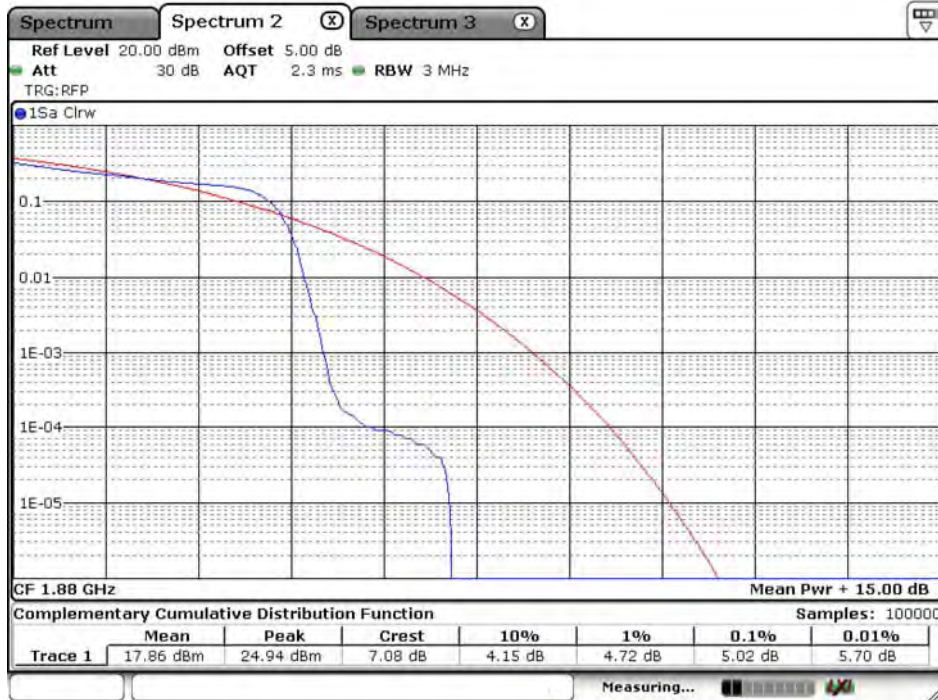
Date: 8.MAY.2018 11:34:19

WCDMA_Band 2_HSDPA_1852.4MHz



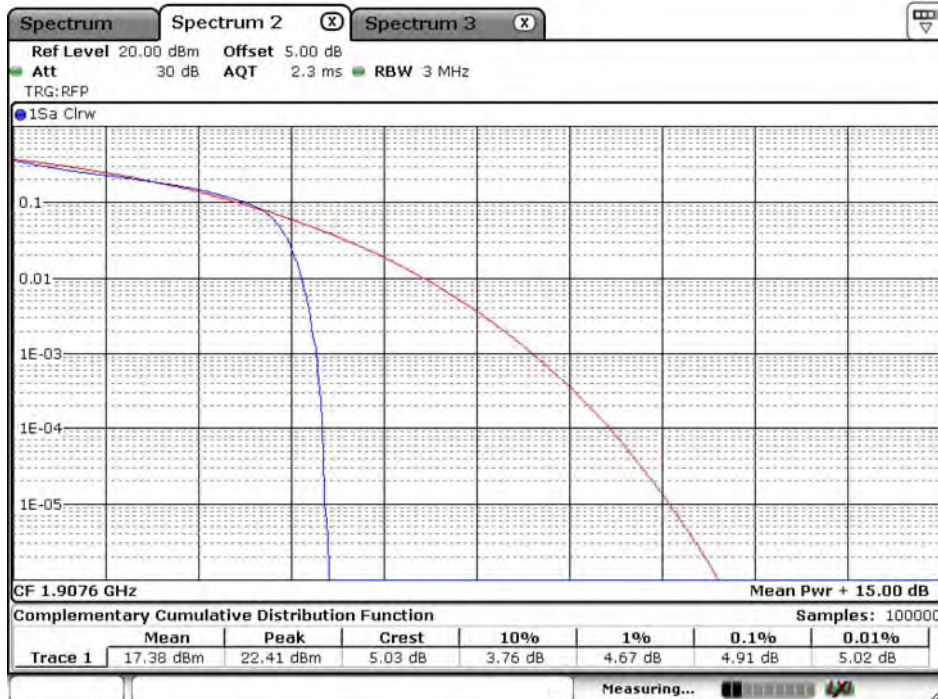
Date: 8.MAY.2018 11:10:14

WCDMA_Band 2_HSDPA_1880.0MHz



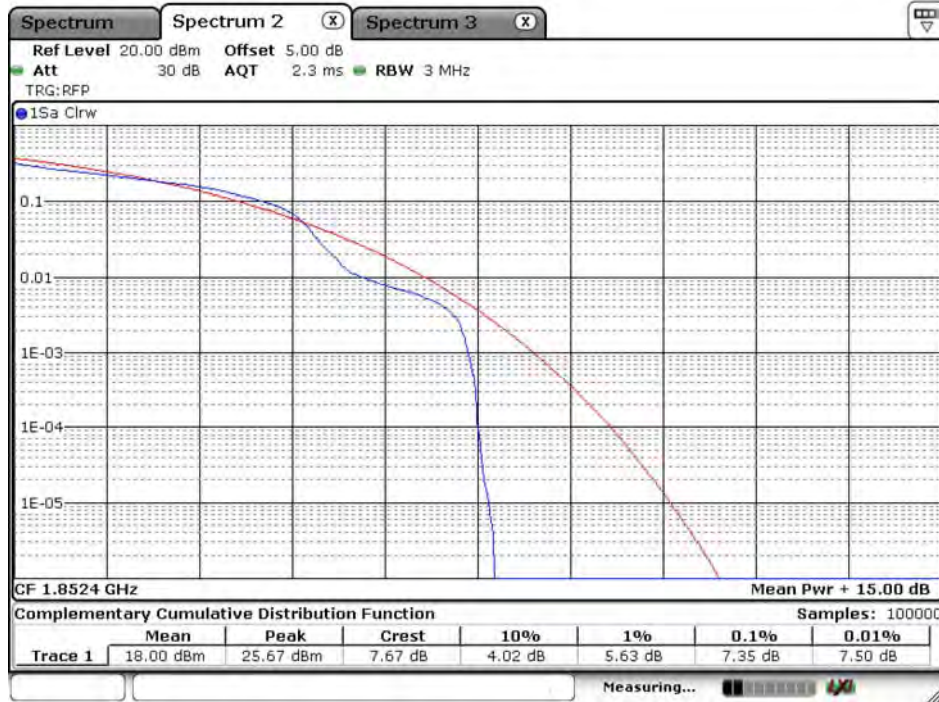
Date: 8.MAY.2018 11:25:45

WCDMA_Band 2_HSDPA_1907.6MHz



Date: 8.MAY.2018 14:12:07

WCDMA_Band 2_HSUPA_1852.4MHz



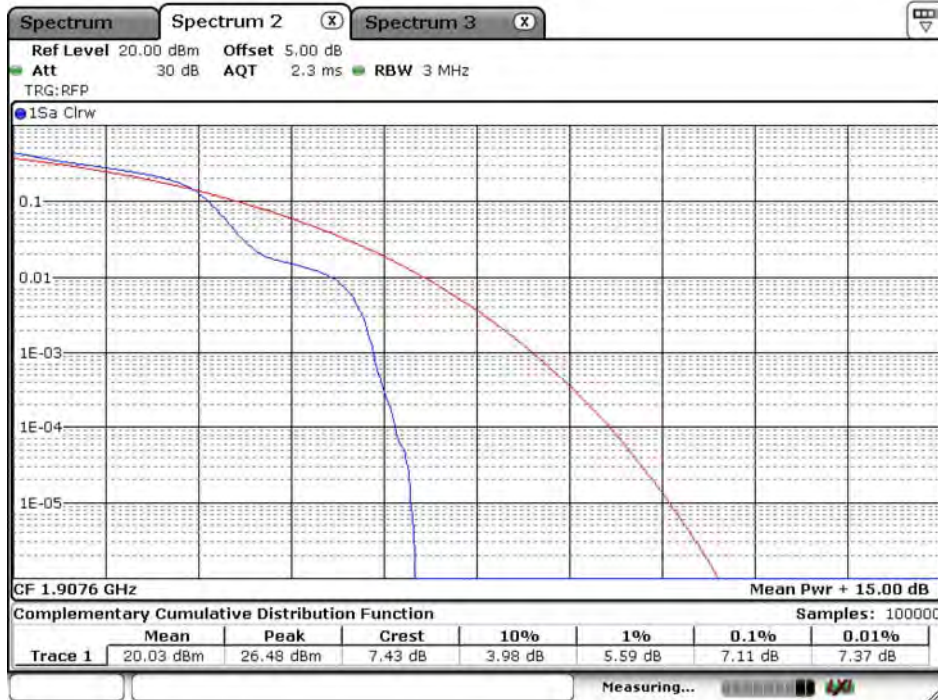
Date: 8.MAY 2018 11:04:23

WCDMA_Band 2_HSUPA_1880.0MHz



Date: 8.MAY 2018 11:22:14

WCDMA_Band 2_HSUPA_1907.6MHz



Date: 8.MAY.2018 14:09:21

Product	LM960		
Test Item	Peak To Average Ratio		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 4_RMC_1712.4MHz



Date: 8.MAY.2018 14:21:22

WCDMA_Band 4_RMC_1732.6MHz



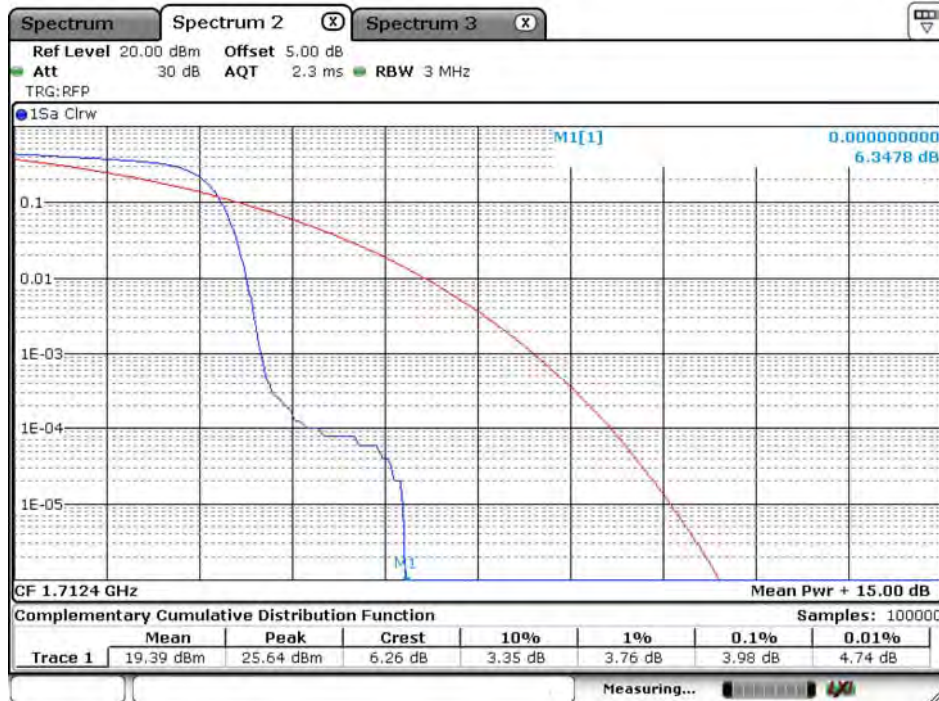
Date: 21.MAY.2018 13:11:09

WCDMA_Band 4_RMC_1752.6MHz



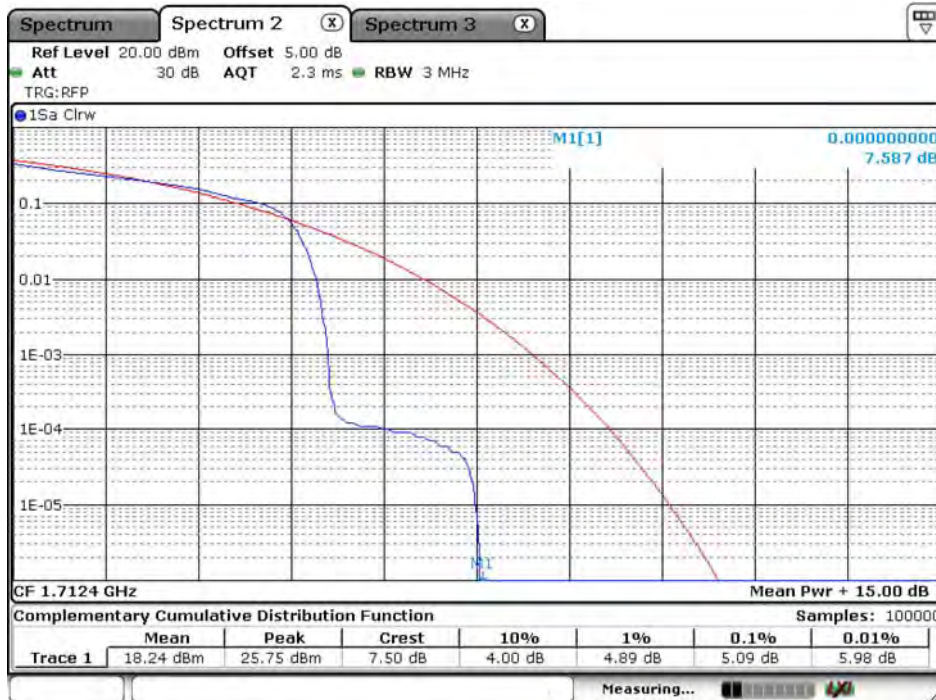
Date: 8.MAY 2018 14:42:03

WCDMA_Band 4_HSDPA_1712.4MHz



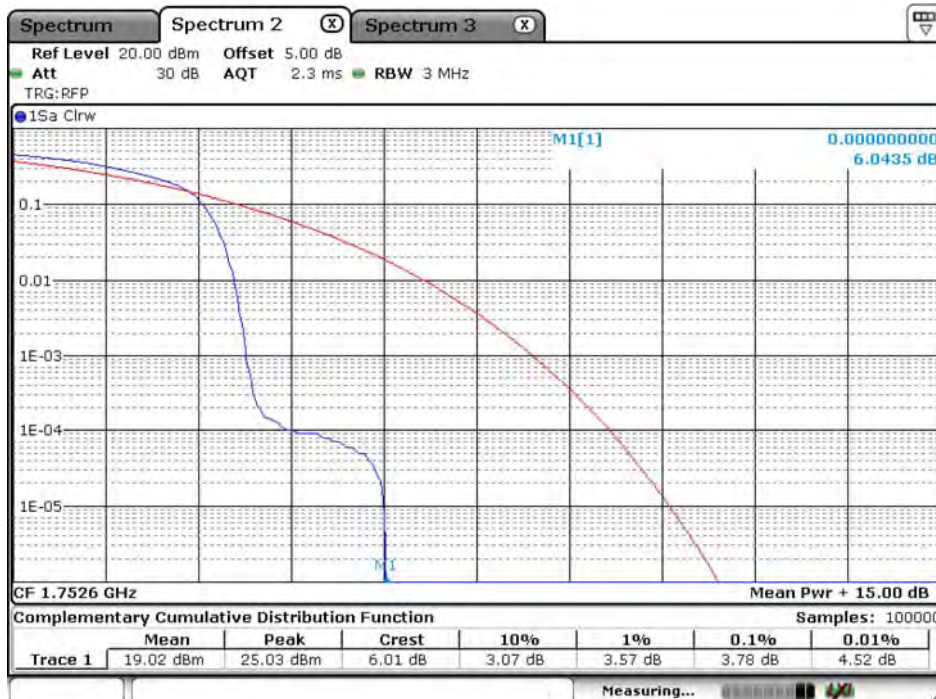
Date: 8.MAY 2018 14:27:01

WCDMA_Band 4_HSDPA_1732.6MHz



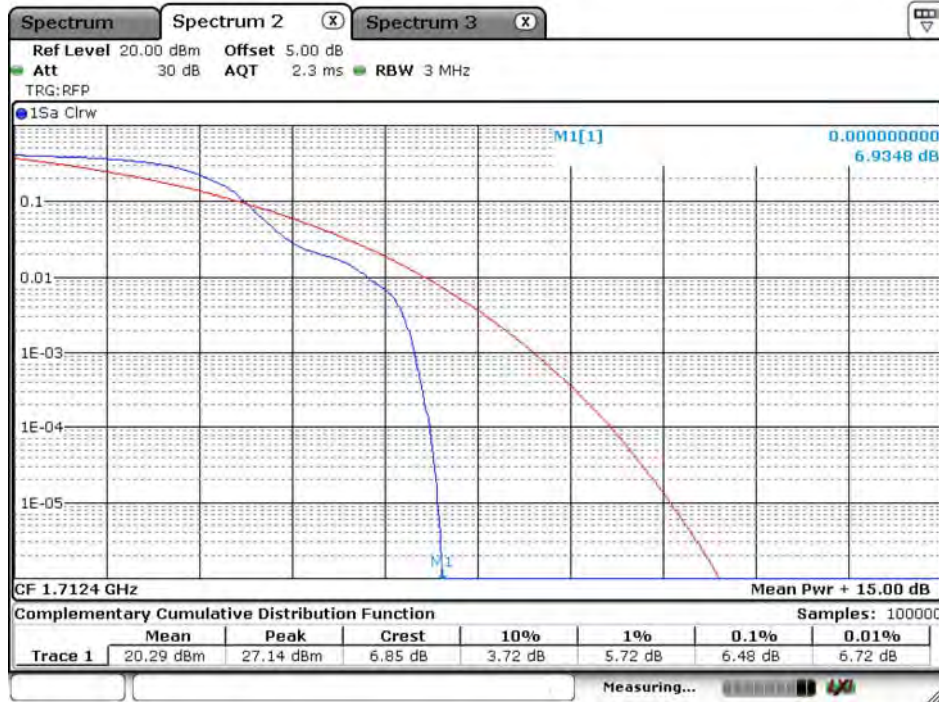
Date: 8.MAY.2018 14:38:20

WCDMA_Band 4_HSDPA_1752.6MHz



Date: 8.MAY.2018 15:01:45

WCDMA_Band 4_HSUPA_1712.4MHz



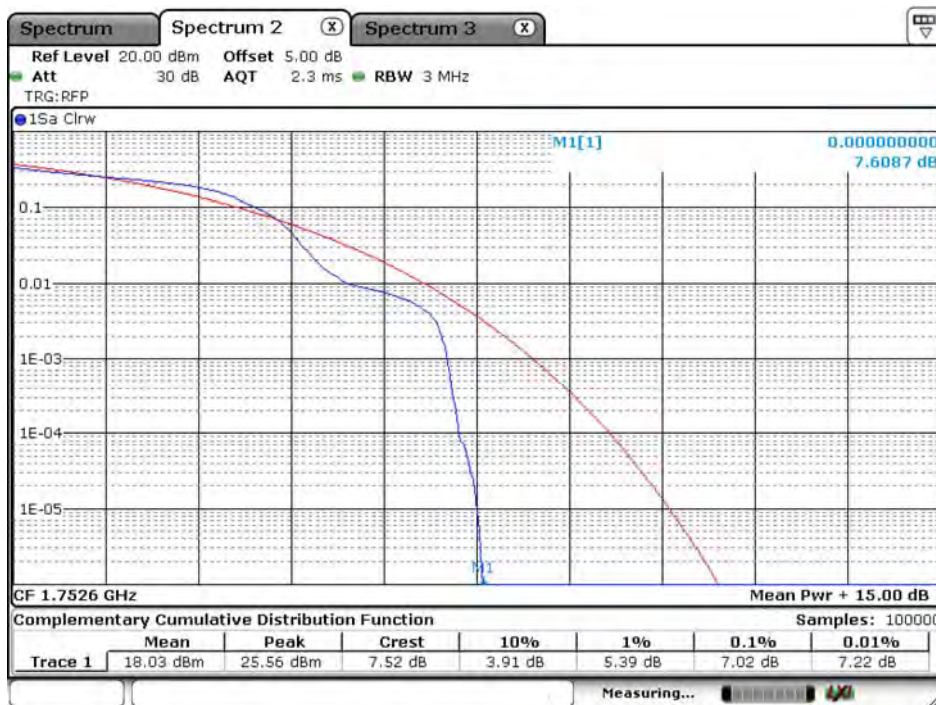
Date: 8.MAY 2018 14:24:49

WCDMA_Band 4_HSUPA_1732.6MHz



Date: 8.MAY 2018 14:35:27

WCDMA_Band 4_HSUPA_1752.6MHz



Date: 8.MAY.2018 14:56:25

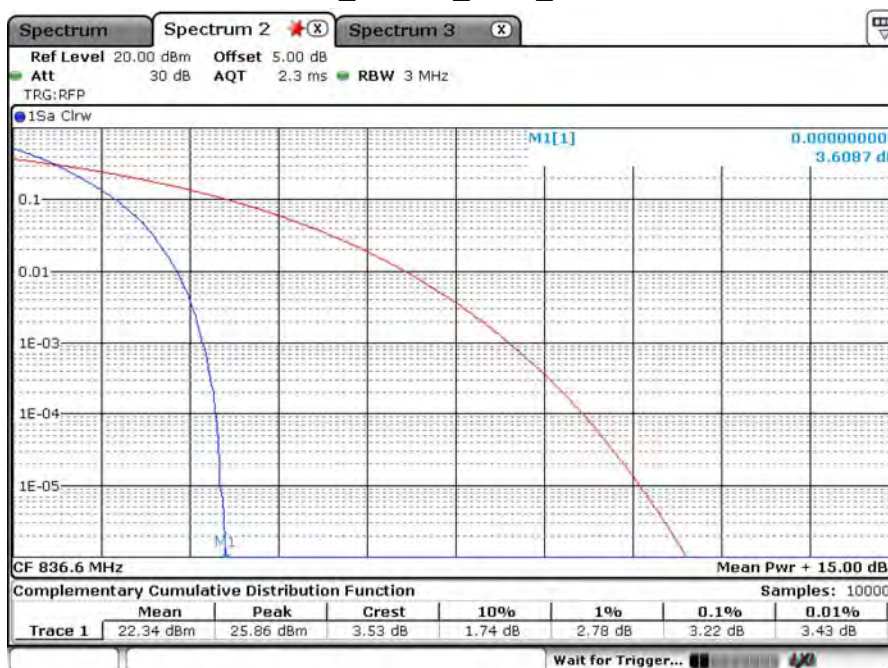
Product	LM960		
Test Item	Peak To Average Ratio		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 5_RMC_826.4MHz



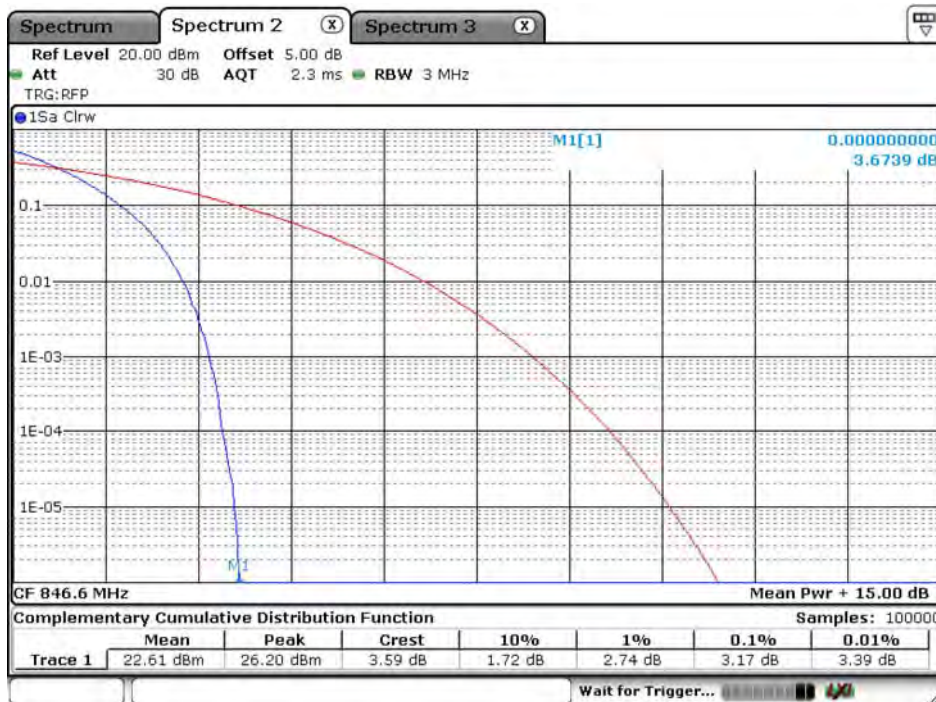
Date: 8.MAY.2018 15:11:37

WCDMA_Band 5_RMC_836.6MHz



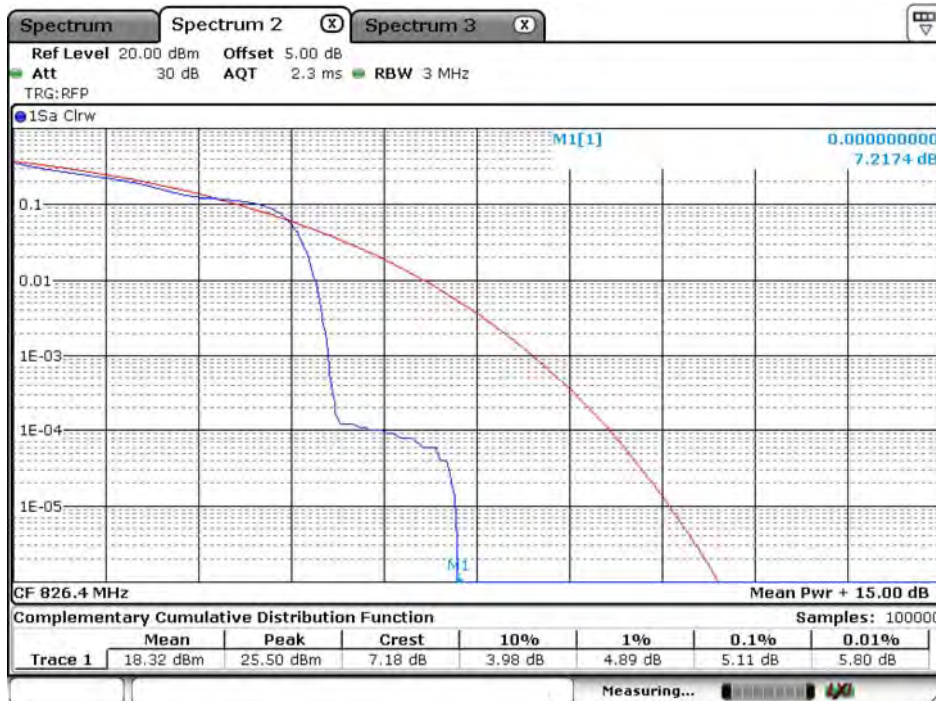
Date: 8.MAY.2018 15:23:48

WCDMA_Band 5_RMC_846.6MHz



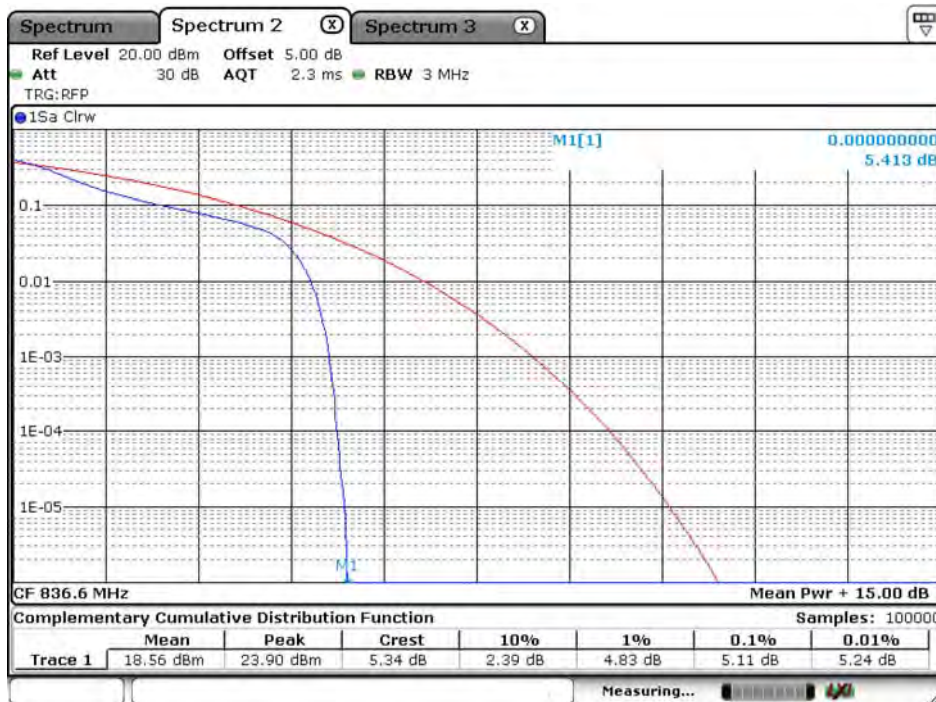
Date: 8.MAY.2018 15:32:44

WCDMA_Band 5_HSDPA_826.4MHz



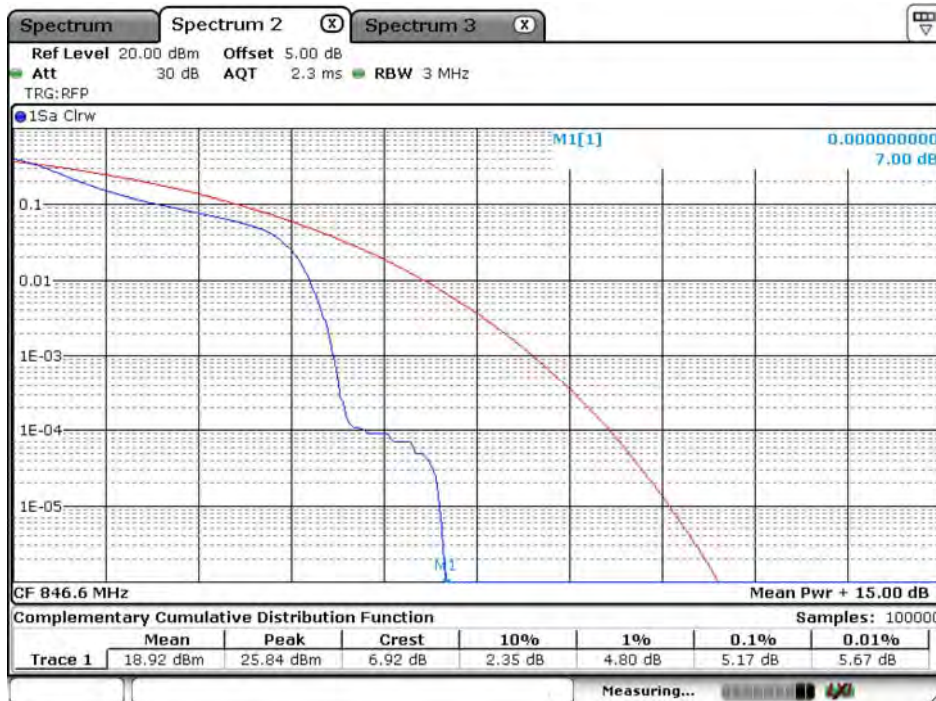
Date: 8.MAY.2018 15:18:30

WCDMA_Band 5_HSDPA_836.6MHz



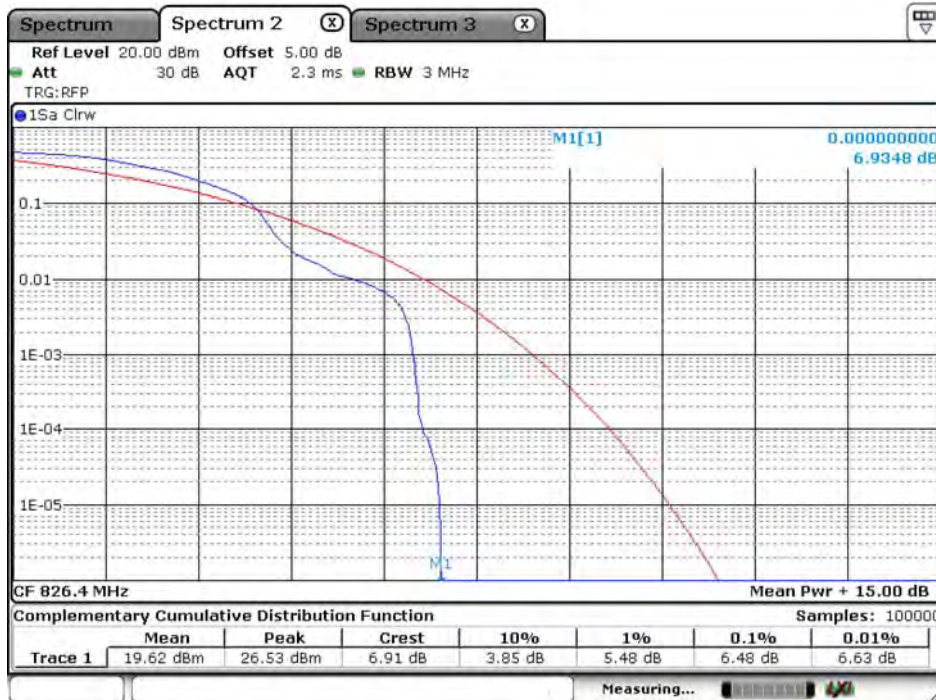
Date: 8.MAY.2018 15:28:02

WCDMA_Band 5_HSDPA_846.6MHz



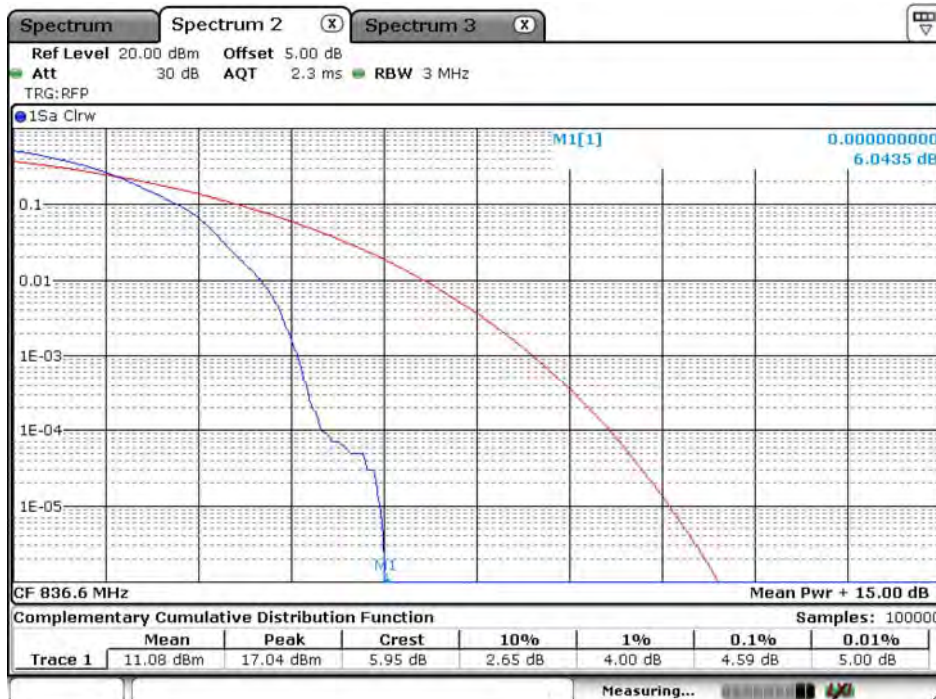
Date: 8.MAY.2018 15:39:47

WCDMA_Band 5_HSUPA_826.4MHz



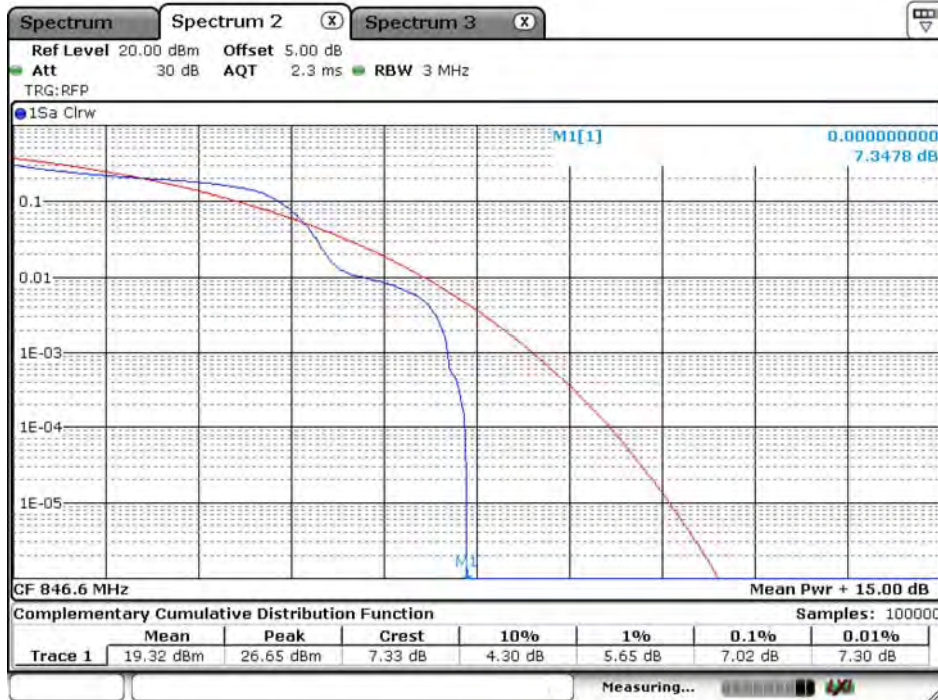
Date: 8.MAY.2018 15:14:52

WCDMA_Band 5_HSUPA_836.6MHz



Date: 8.MAY.2018 15:25:24

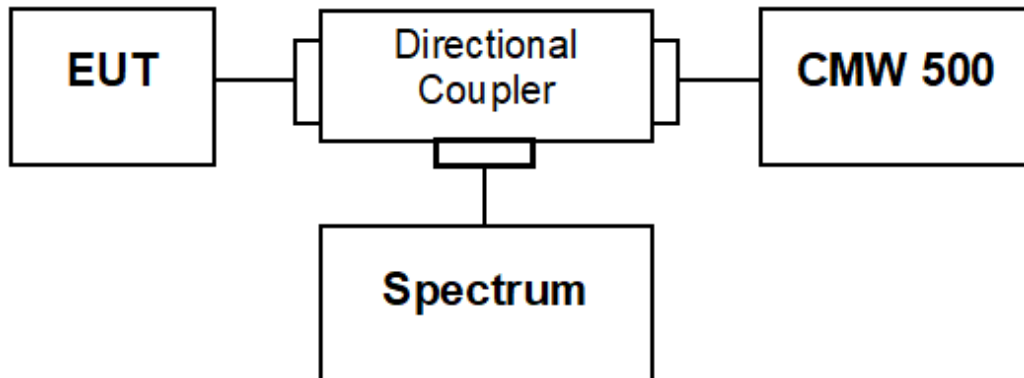
WCDMA_Band 5_HSUPA_846.6MHz



Date: 8.MAY.2018 15:37:20

6. Conducted Band Edge

6.1. Test Setup



6.2. Test Procedure

1. The EUT was connected to spectrum analyzer and System Simulator via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The conducted spurious emission for the whole frequency range was taken.
4. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.

6.3. Test Method

Conducted Spurious Measurement:

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause6.1

ANSI C63.26: 2015 Sub-clause 5.7

Radiated Spurious Measurement:

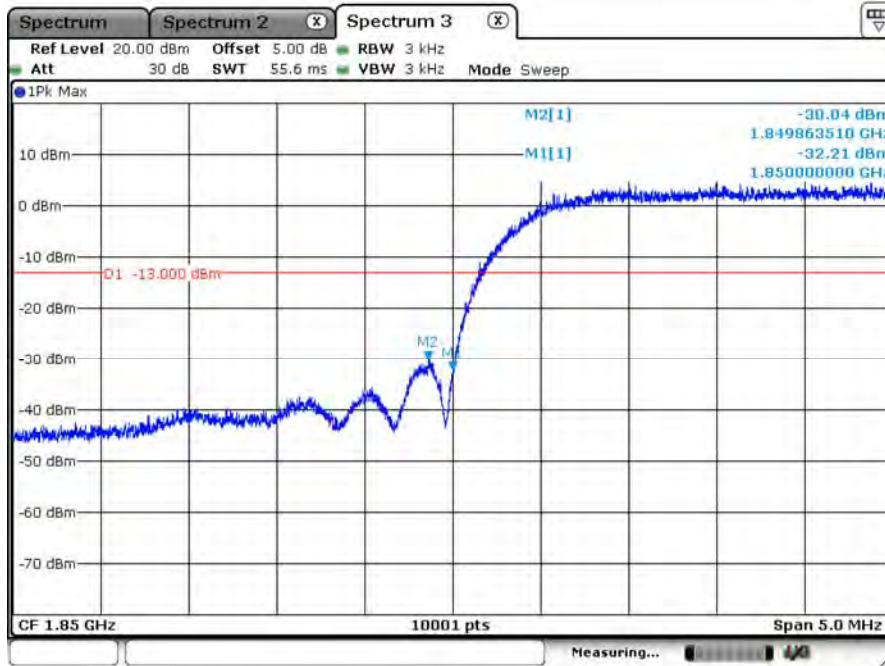
KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause5.8

ANSI C63.26: 2015 Sub-clause 5.5.3.2

6.4. Test Result

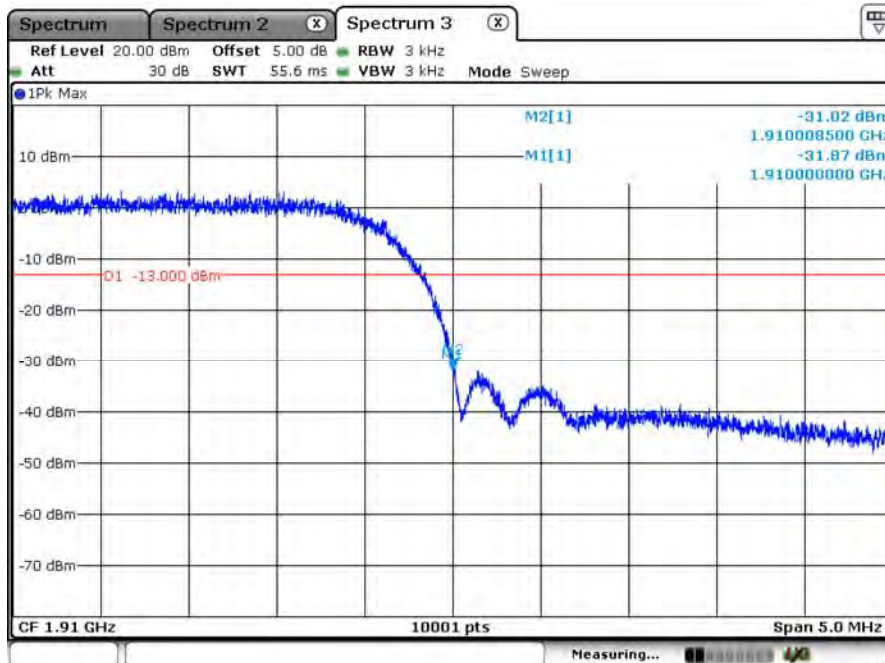
Product	LM960		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 2_RMC_1852.4MHz



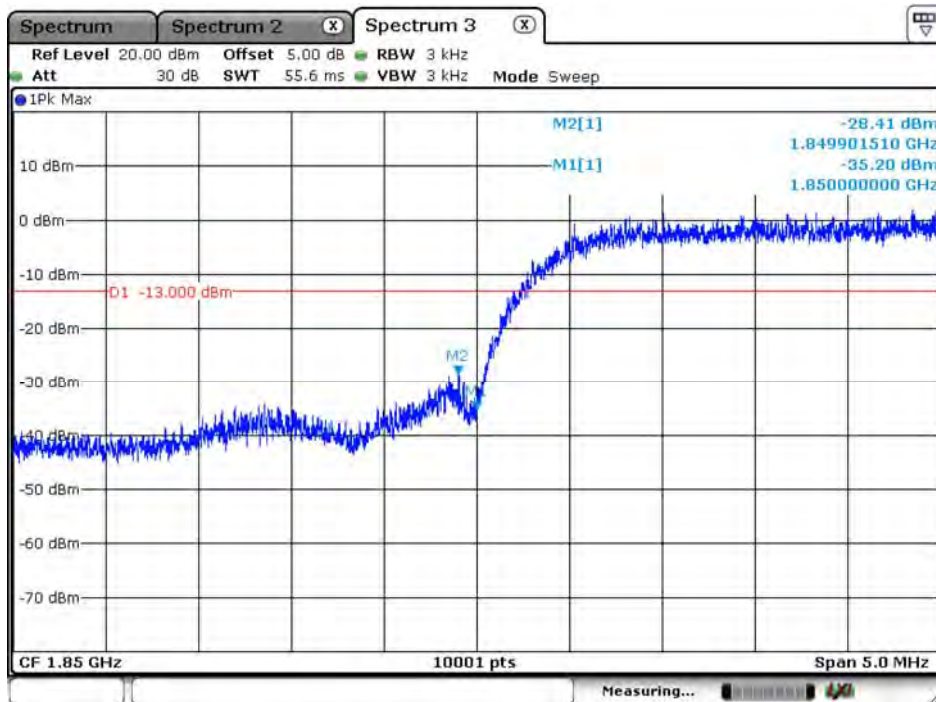
Date: 8.MAY.2018 10:59:55

WCDMA_Band 2_RMC_1907.6MHz



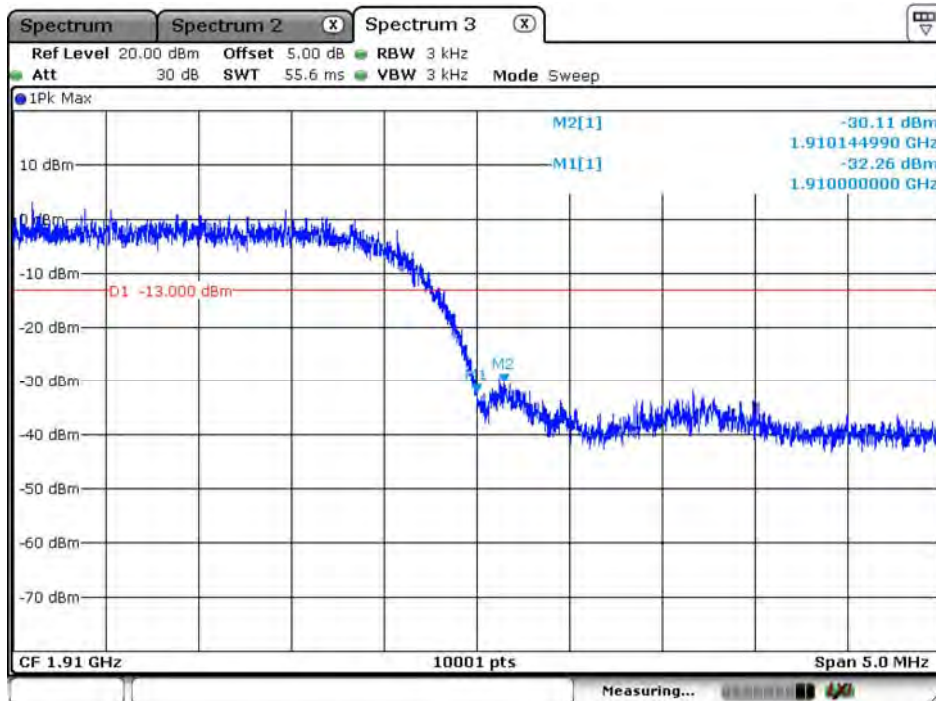
Date: 8.MAY.2018 11:35:51

WCDMA_Band 2_HSDPA_1852.4MHz



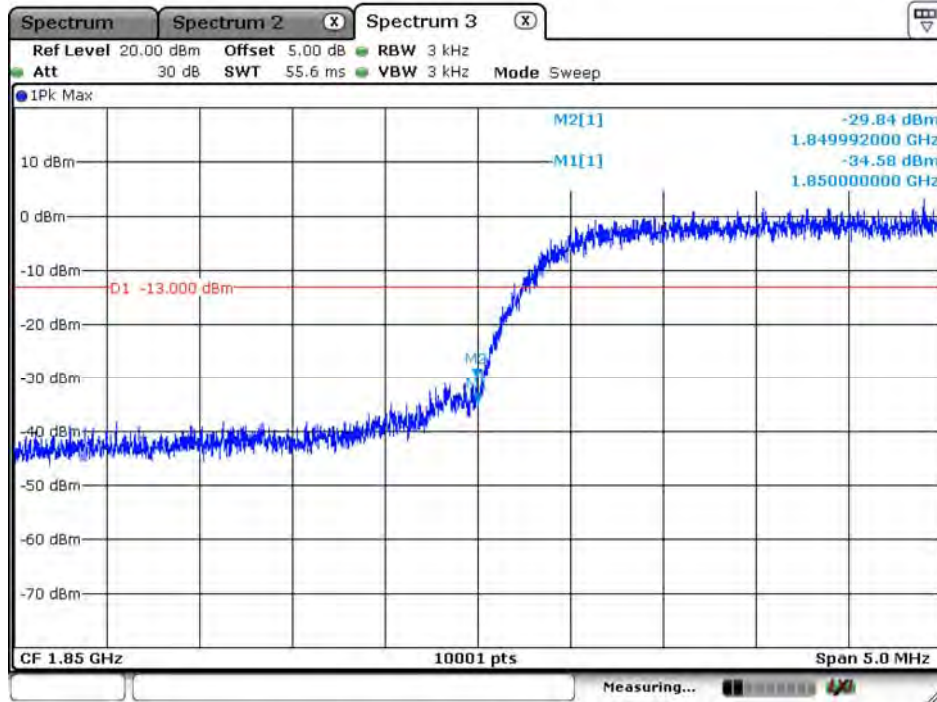
Date: 8.MAY.2018 11:13:55

WCDMA_Band 2_HSDPA_1907.6MHz



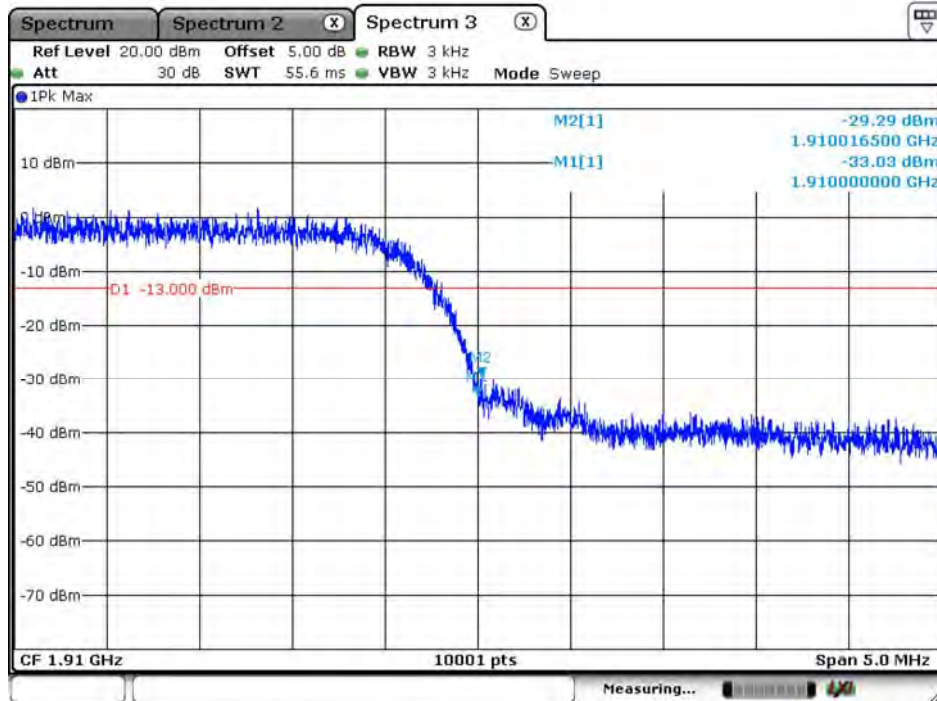
Date: 8.MAY.2018 14:12:27

WCDMA_Band 2_HSUPA_1852.4MHz



Date: 8.MAY 2018 11:06:07

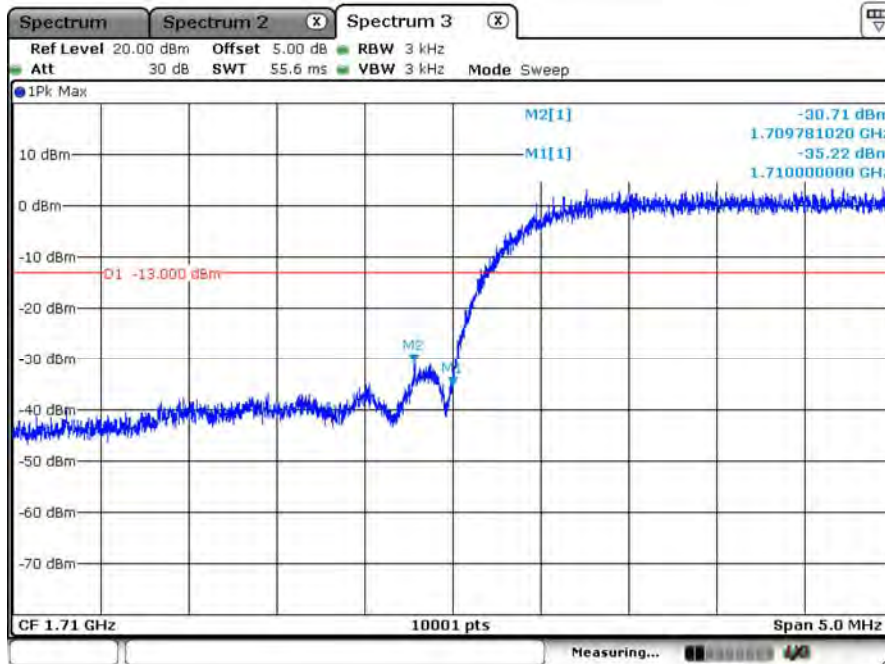
WCDMA_Band 2_HSUPA_1907.6MHz



Date: 8.MAY 2018 14:10:36

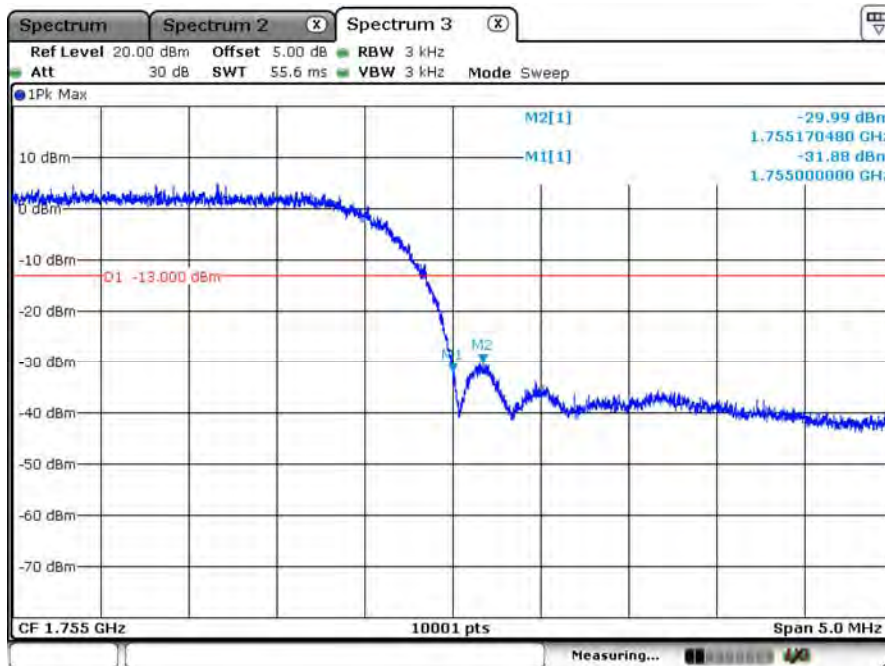
Product	LM960		
Test Item	Conducted Band Edge		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 4_RMC_1712.4MHz



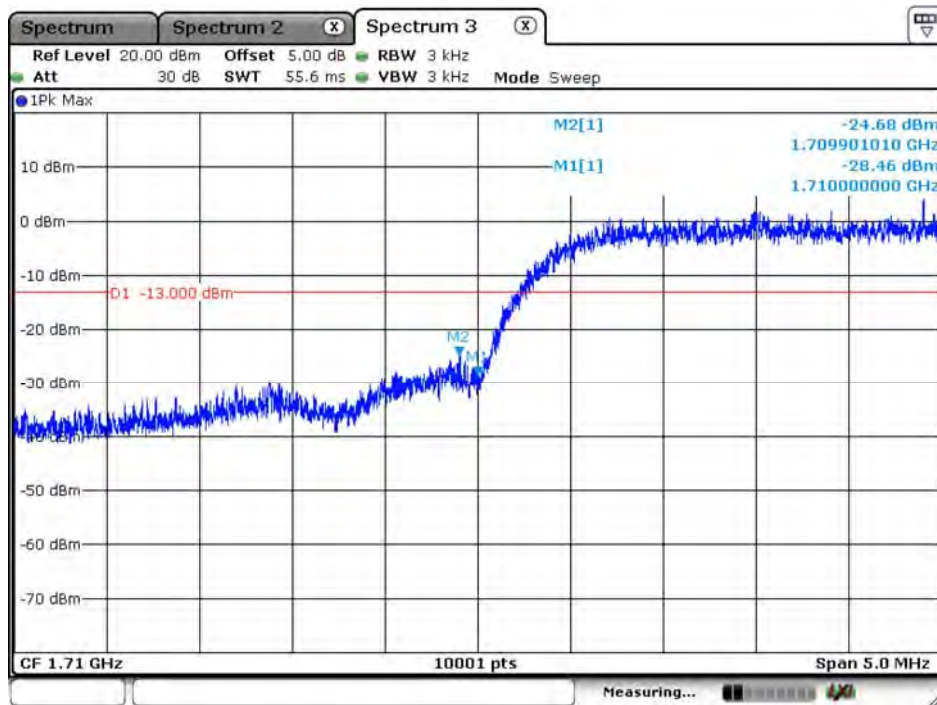
Date: 8.MAY.2018 14:22:13

WCDMA_Band 4_RMC_1752.6MHz



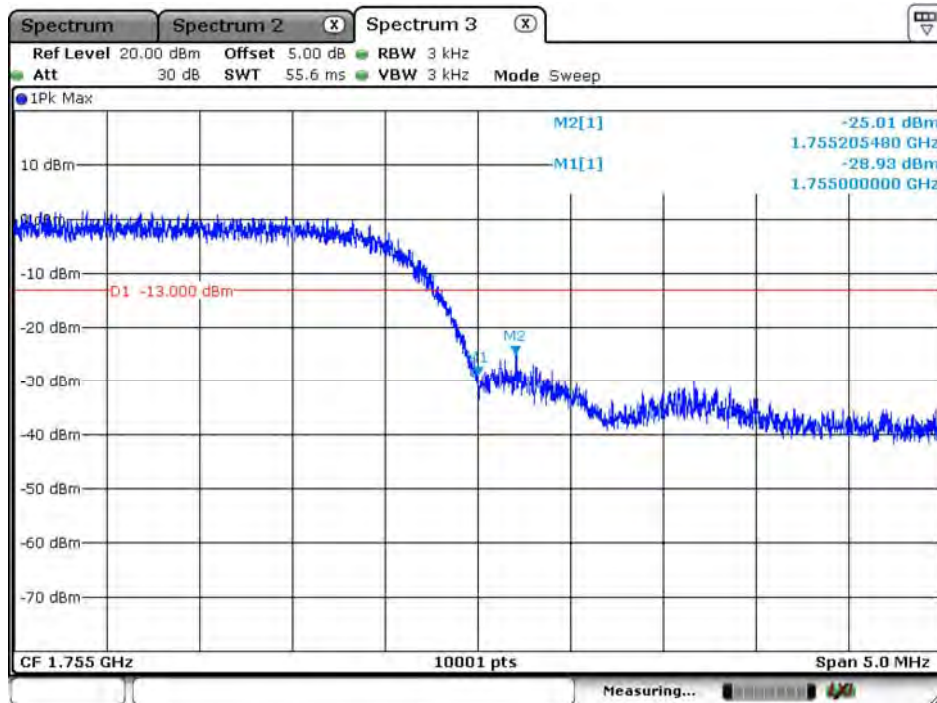
Date: 8.MAY.2018 14:49:07

WCDMA_Band 4_HSDPA_1712.4MHz



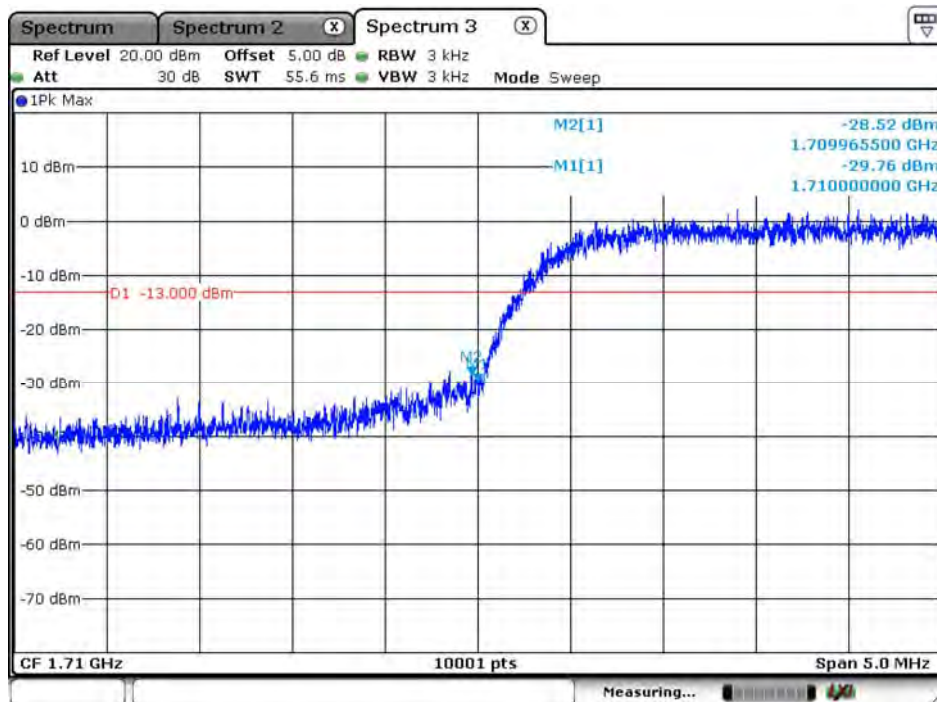
Date: 8.MAY 2018 14:27:21

WCDMA_Band 4_HSDPA_1752.6MHz



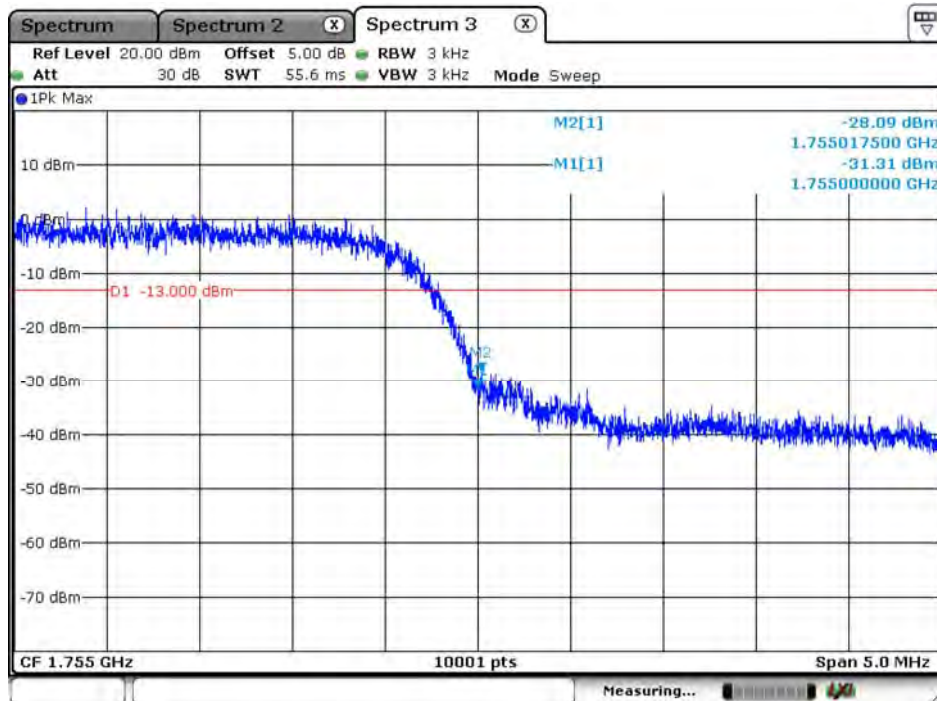
Date: 8.MAY 2018 15:03:04

WCDMA_Band 4_HSUPA_1712.4MHz



Date: 8.MAY 2018 14:25:34

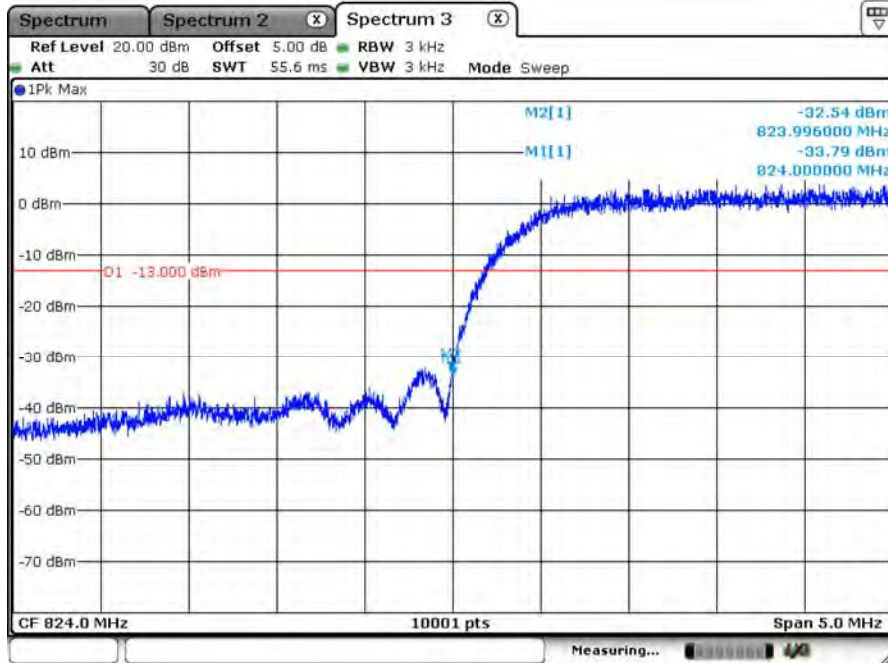
WCDMA_Band 4_HSUPA_1752.6MHz



Date: 8.MAY 2018 14:58:26

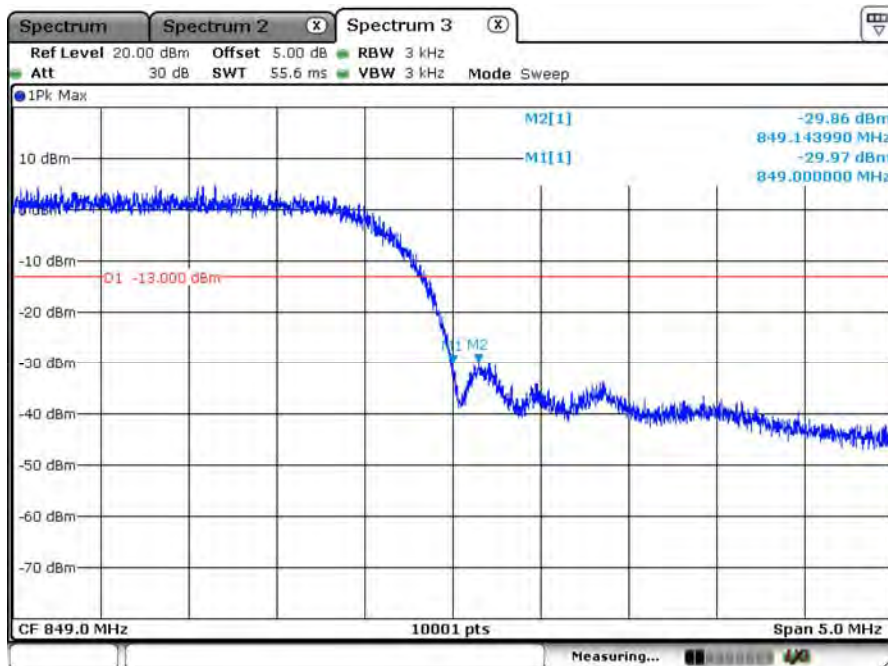
Product	LM960		
Test Item	Conducted Band Edge		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 5_RMC_826.4MHz



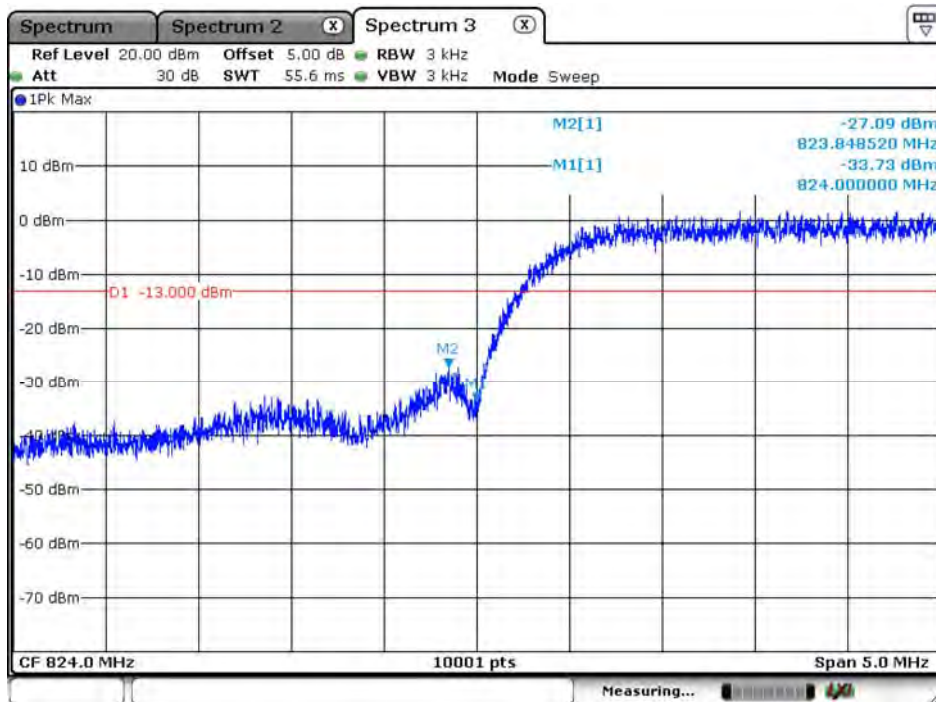
Date: 8.MAY.2018 15:12:24

WCDMA_Band 5_RMC_846.6MHz



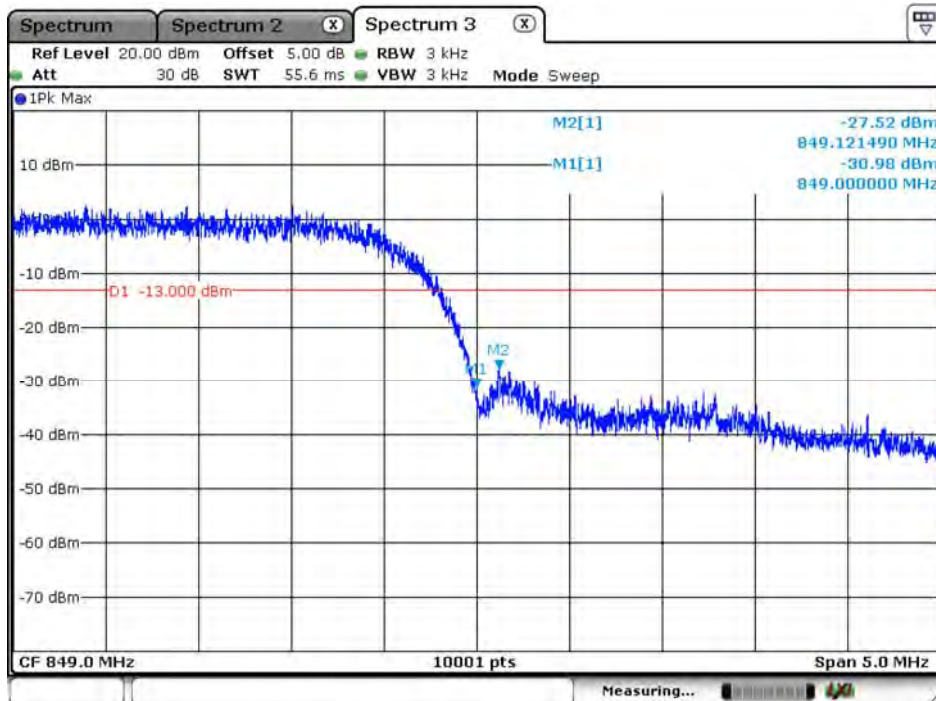
Date: 8.MAY.2018 15:33:07

WCDMA_Band 5_HSDPA_826.4MHz



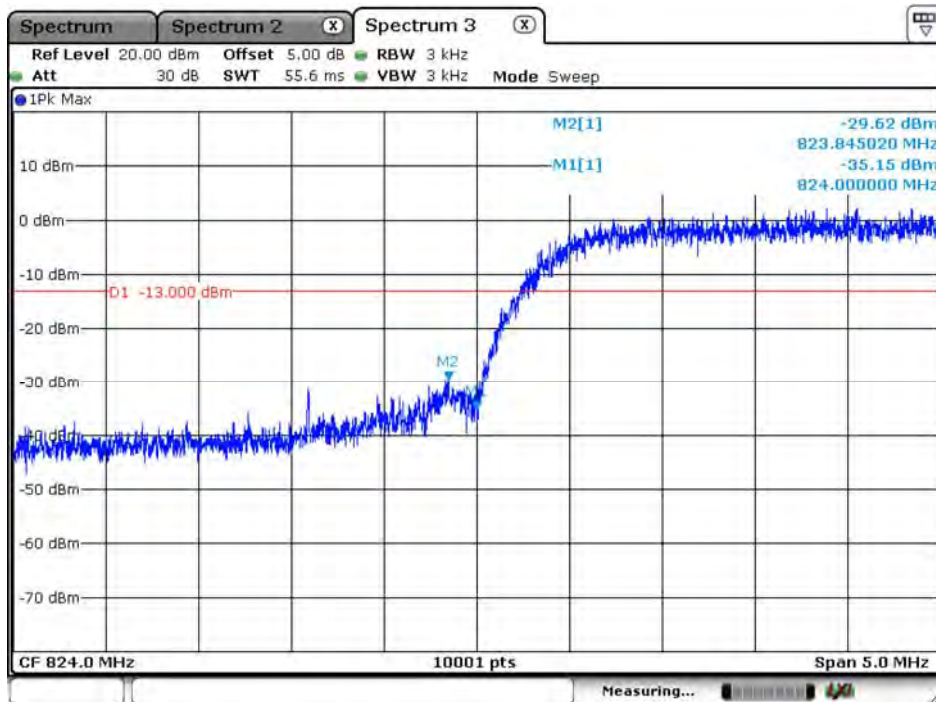
Date: 8.MAY.2018 15:18:55

WCDMA_Band 5_HSDPA_846.6MHz



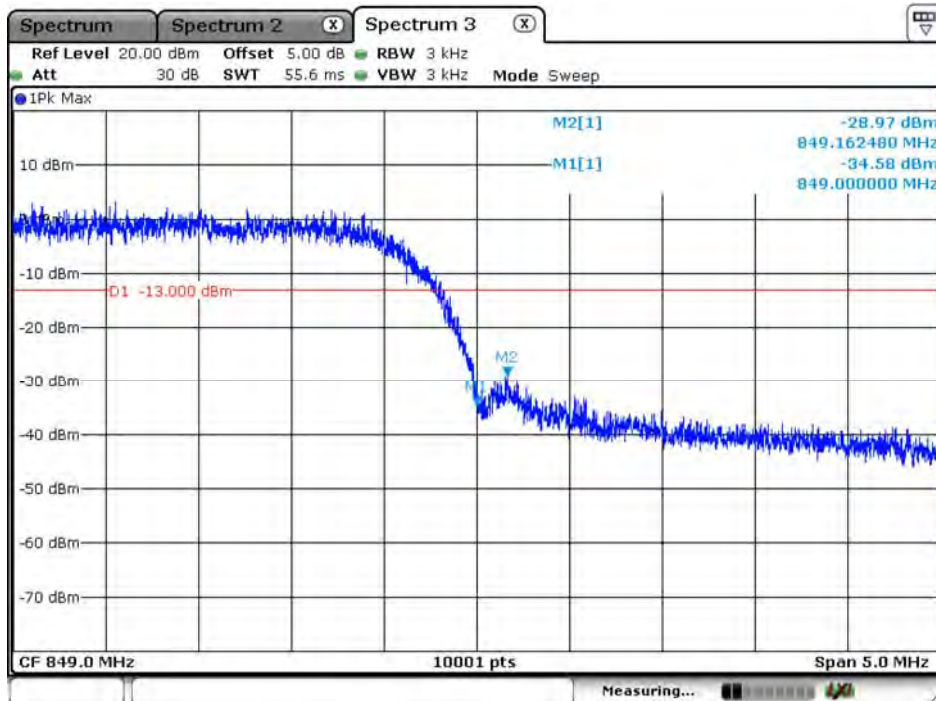
Date: 8.MAY.2018 15:40:21

WCDMA_Band 5_HSUPA_826.4MHz



Date: 8.MAY.2018 15:16:20

WCDMA_Band 5_HSUPA_846.6MHz

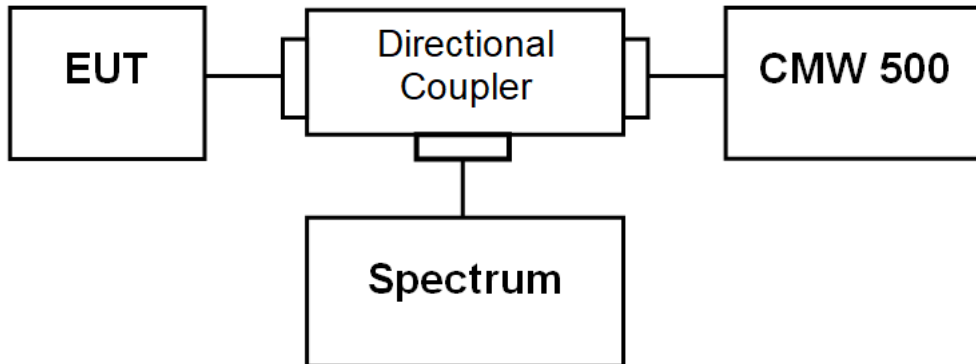


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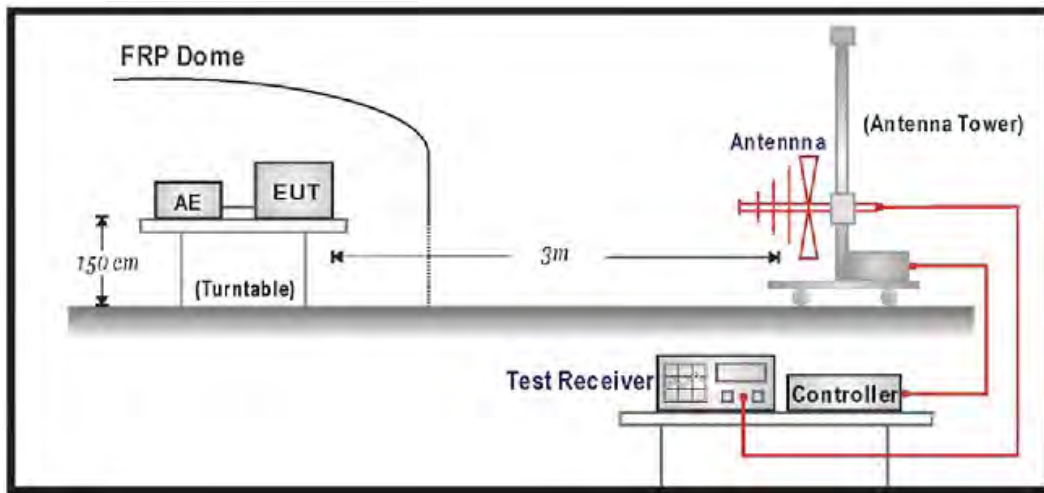
7. Spurious Emission

7.1. Test Setup

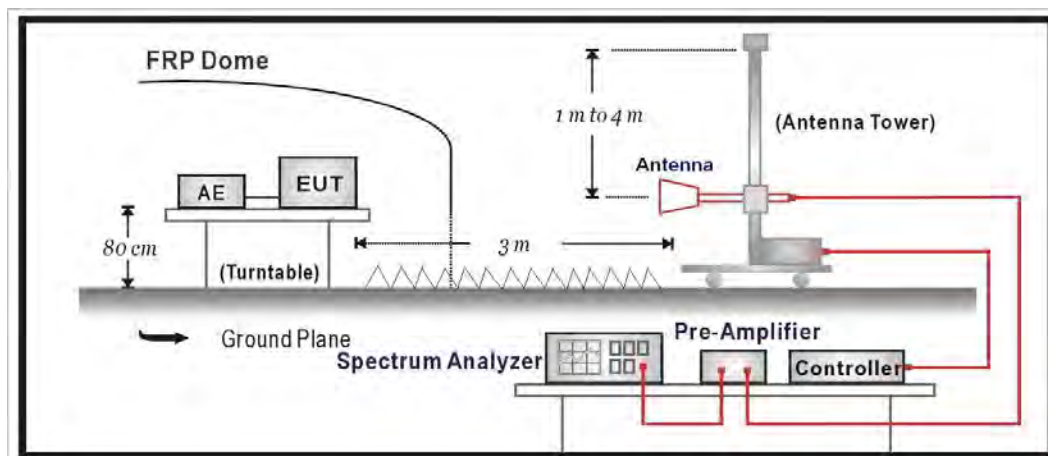
Conducted Spurious Measurement (below 1GHz)



Radiated Spurious Measurement (below 1GHz)



Radiated Spurious Measurement (above 1GHz)



7.2. Test Procedure

Conducted Spurious Measurement:

- a) Place the EUT on a bench and set it in transmitting mode.
- b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- c) EUT Communicate with CMU200, then select a channel for testing.
- d) Add a correction factor to the display of spectrum, and then test.
- e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

Radiated Spurious Measurement:

- a) The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
- b) The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- c) The table was rotated 360 degrees to determine the position of the highest spurious emission.
- d) The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- e) Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 1MHz, Sweep 500ms, Taking the record of maximum spurious emission.
- f) A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- g) Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- h) Taking the record of output power at antenna port
- i) Repeat step 7 to step 8 for another polarization.
- j) $EIRP = SG - \text{Cable loss} + \text{Antenna Gain}$

7.3. Test Method

Conducted Spurious Measurement:

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause6.1
ANSI C63.26-2015 Sub-clause 5.7

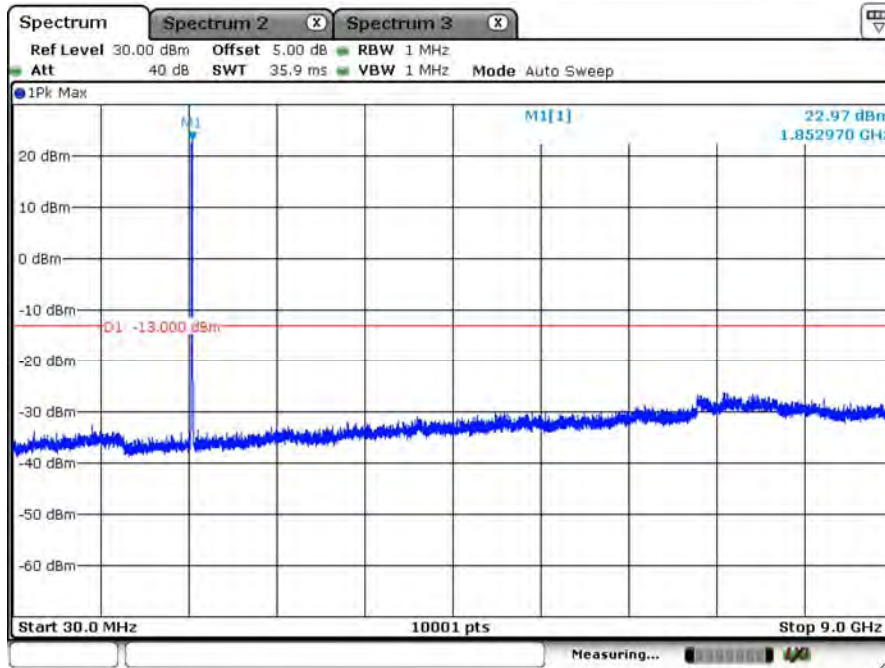
Radiated Spurious Measurement:

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause5.8
ANSI C63.26-2015 Sub-clause 5.5.3.2

7.4. Test Result

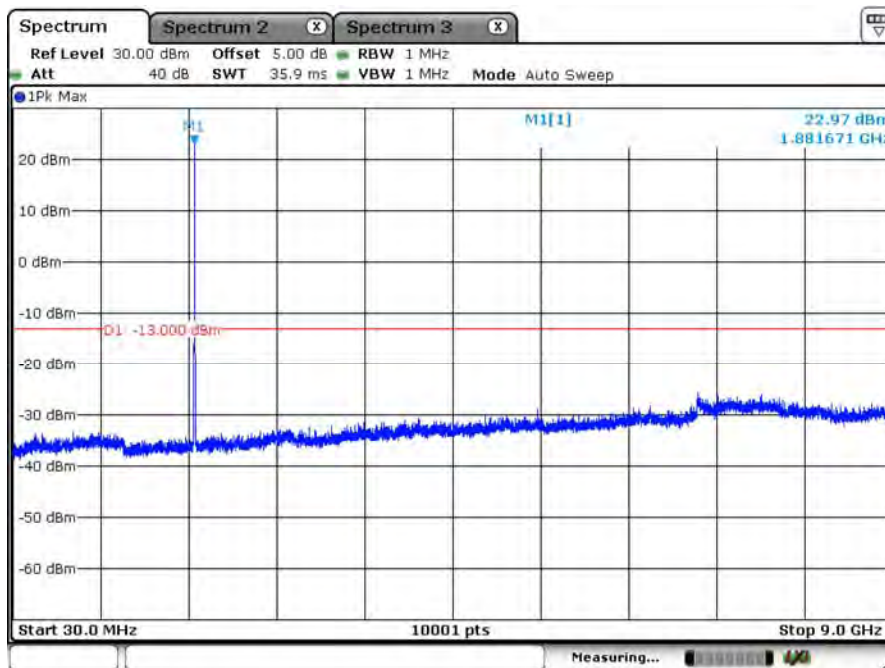
Product	LM960		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 2_RMC_1852.4MHz



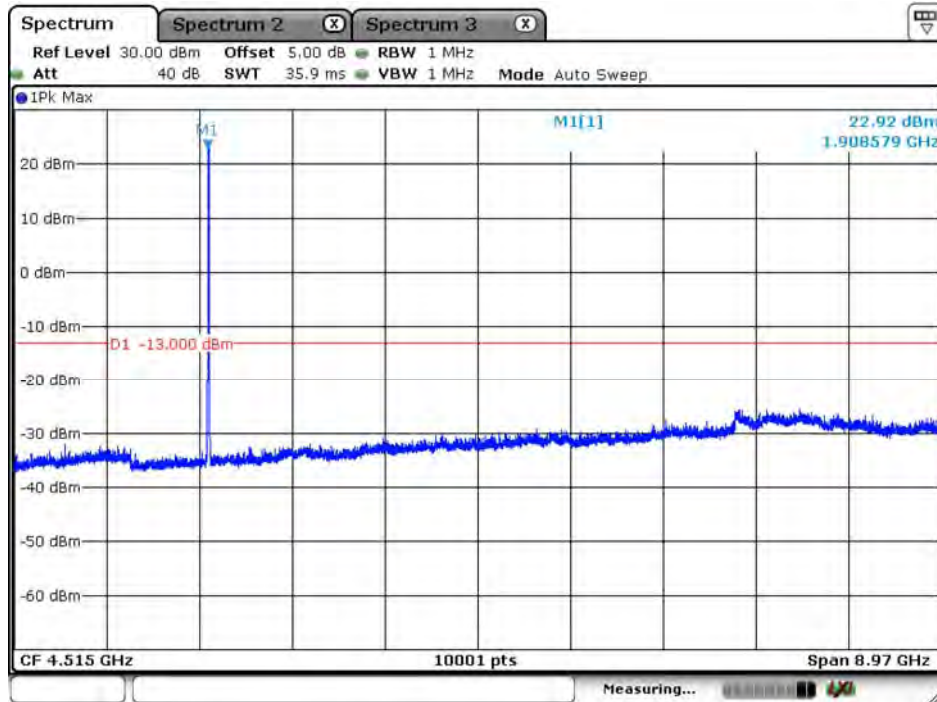
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WCDMA_Band 2_RMC_1880.0MHz



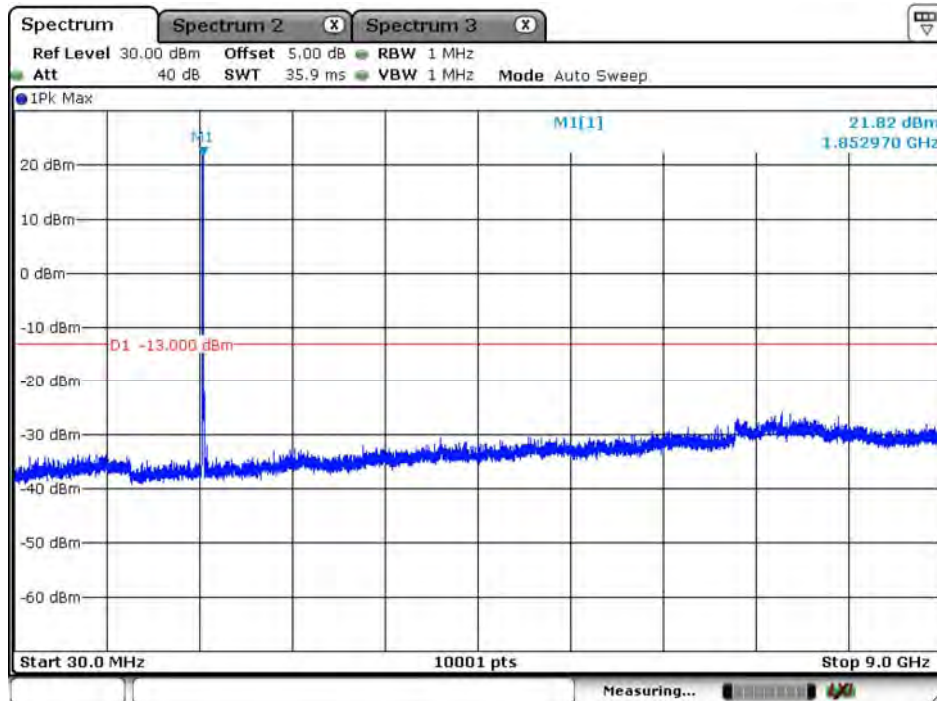
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WCDMA_Band 2_RMC_1907.6MHz



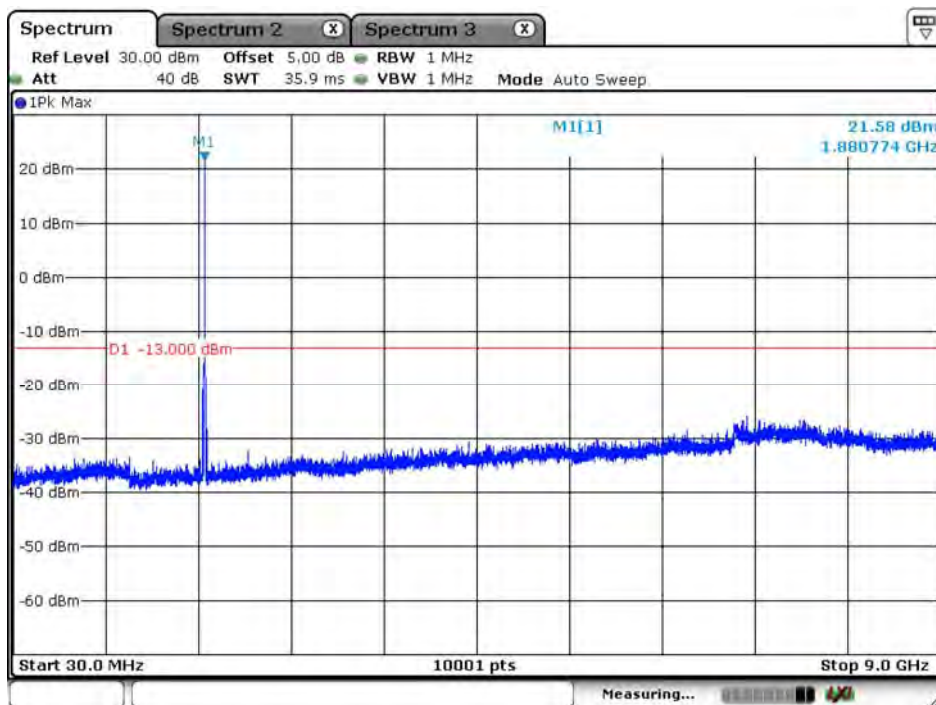
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WCDMA_Band 2_HSDPA_1852.4MHz



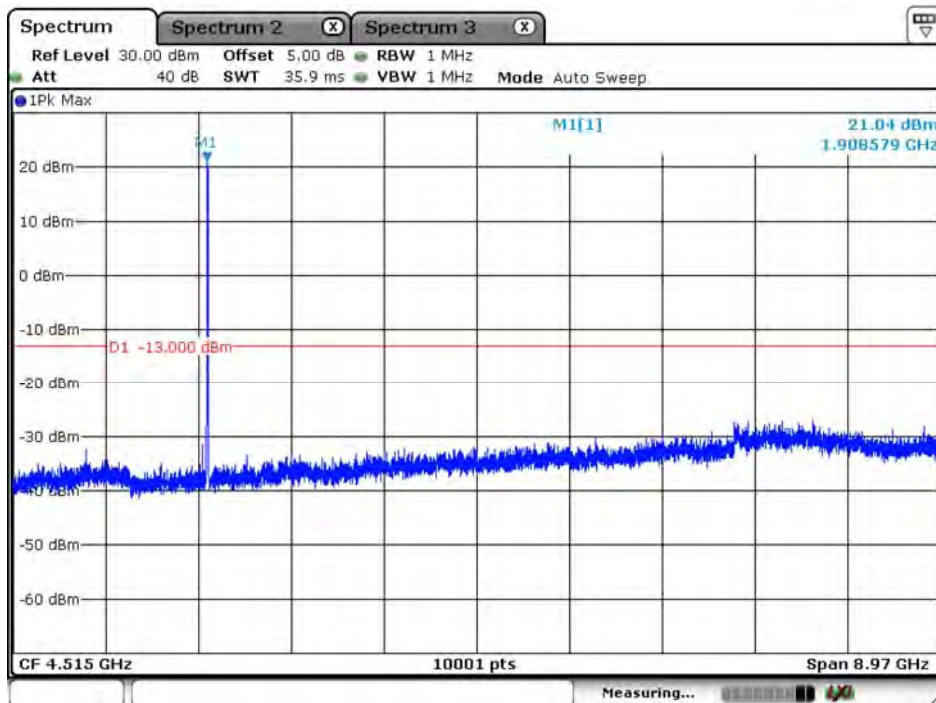
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WCDMA_Band 2_HSDPA_1880.0MHz



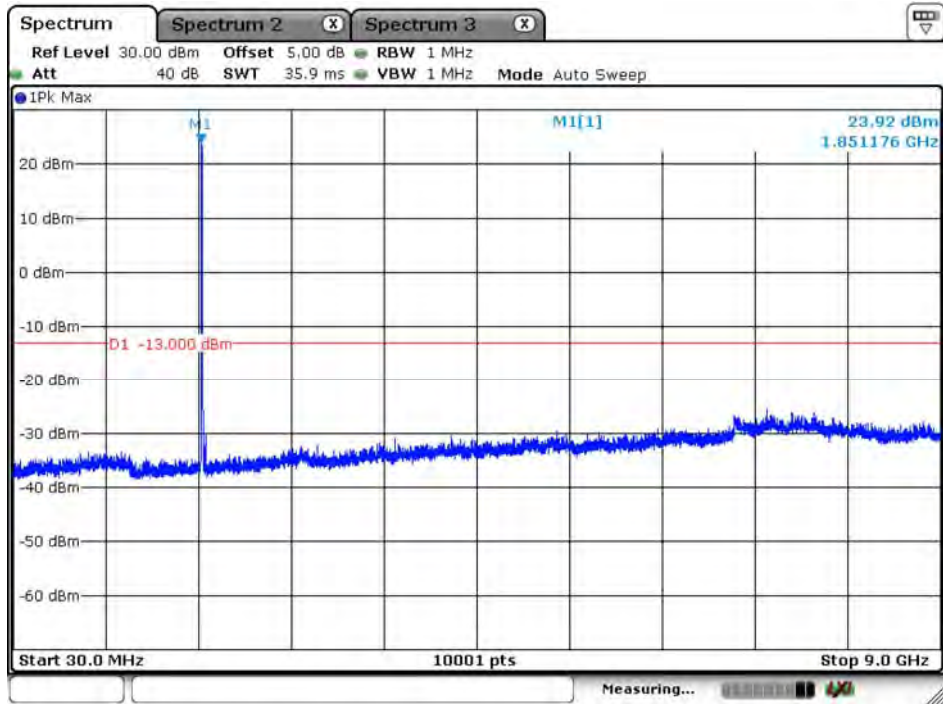
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WCDMA_Band 2_HSDPA_1907.6MHz



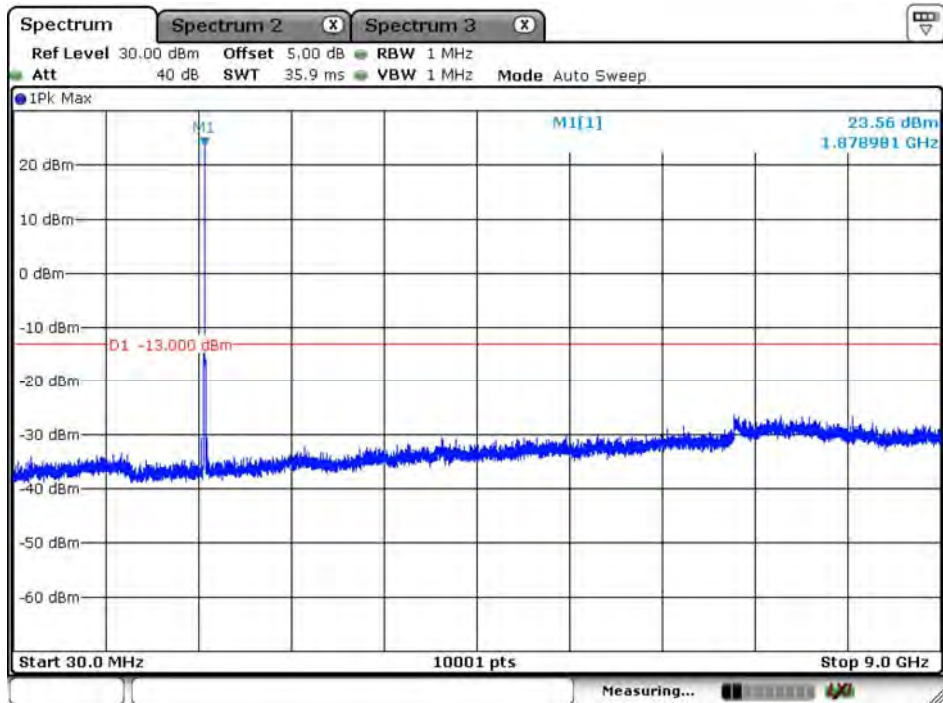
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WCDMA_Band 2_HSUPA_1852.4MHz



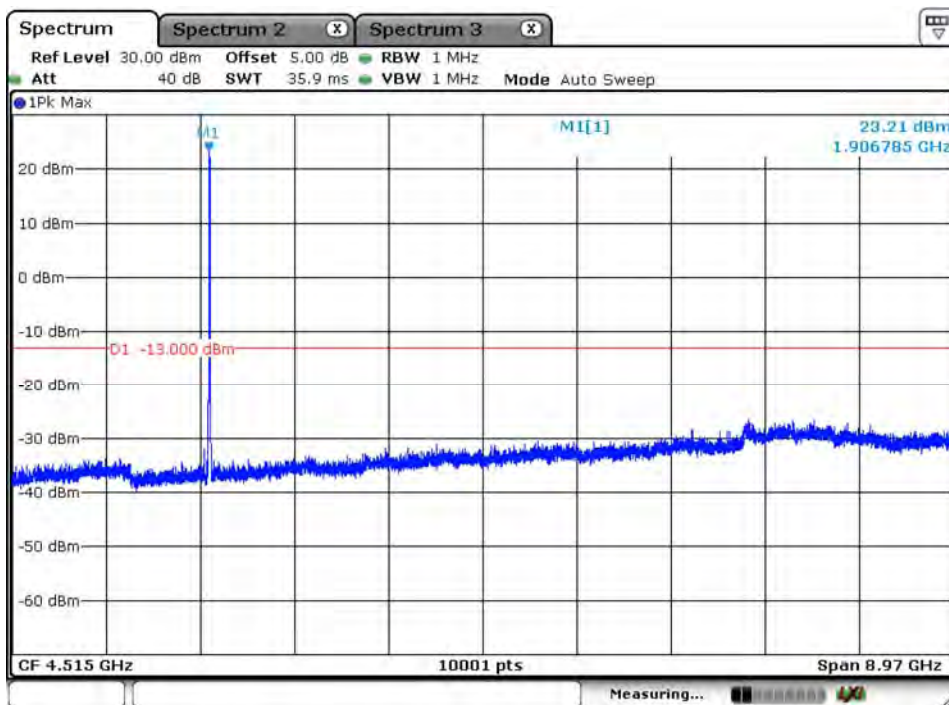
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WCDMA_Band 2_HSUPA_1880.0MHz



Date: 8.MAY 2018 11:21:32

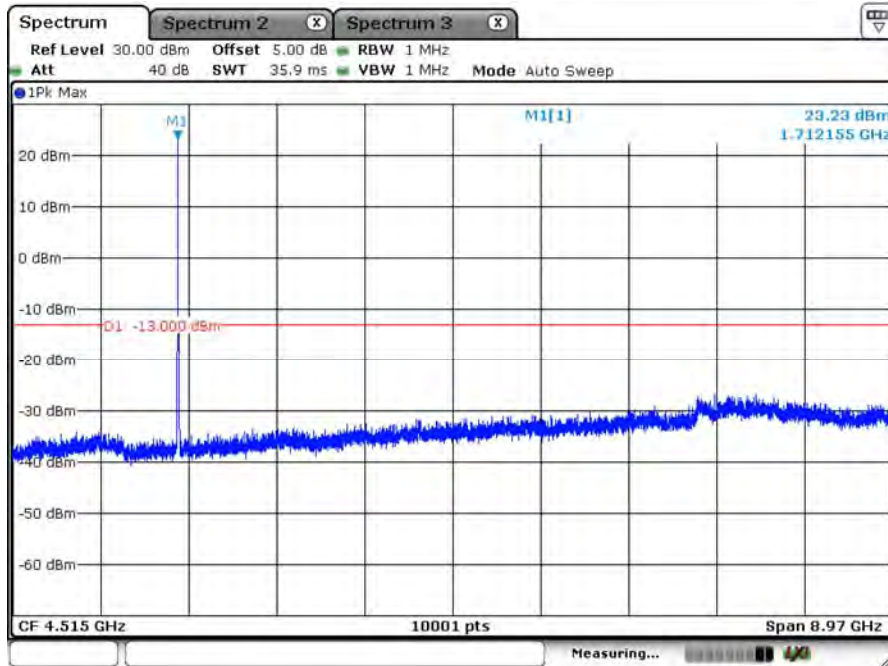
WCDMA_Band 2_HSUPA_1907.6MHz



Date: 8.MAY.2018 14:08:20

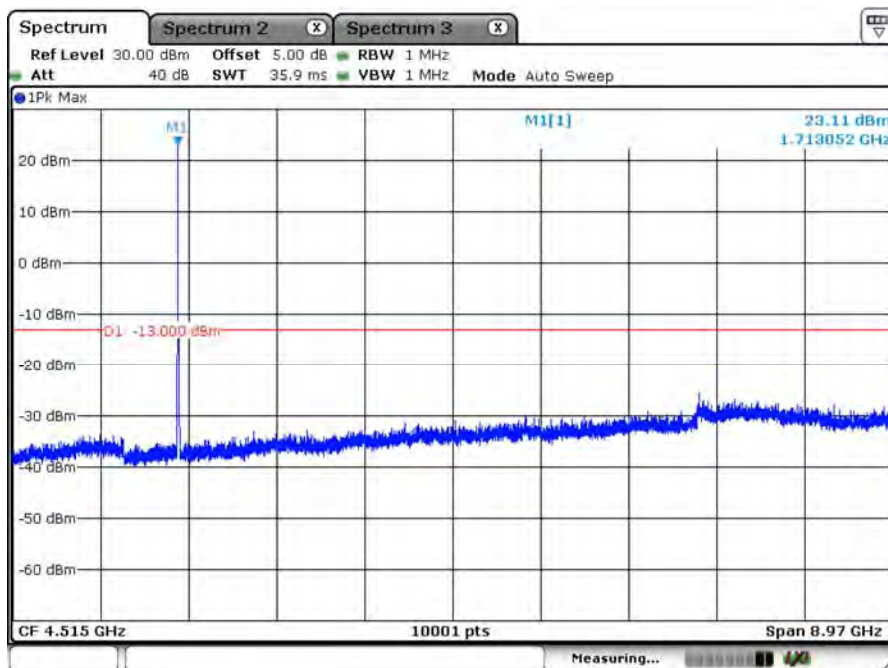
Product	LM960		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 4_RMC_1712.4MHz



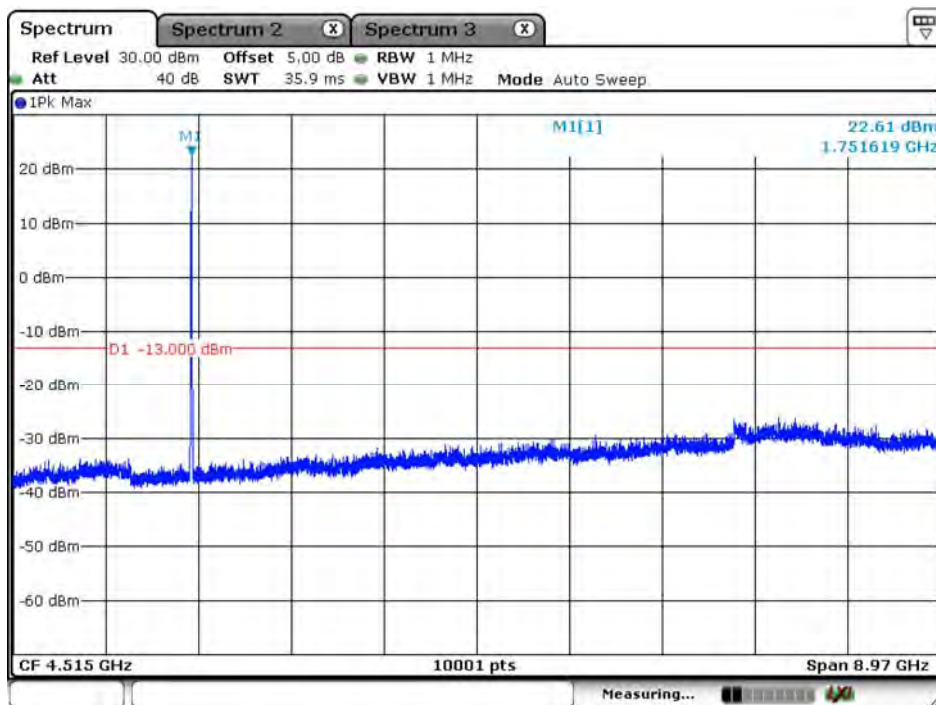
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WCDMA_Band 4_RMC_1732.6MHz



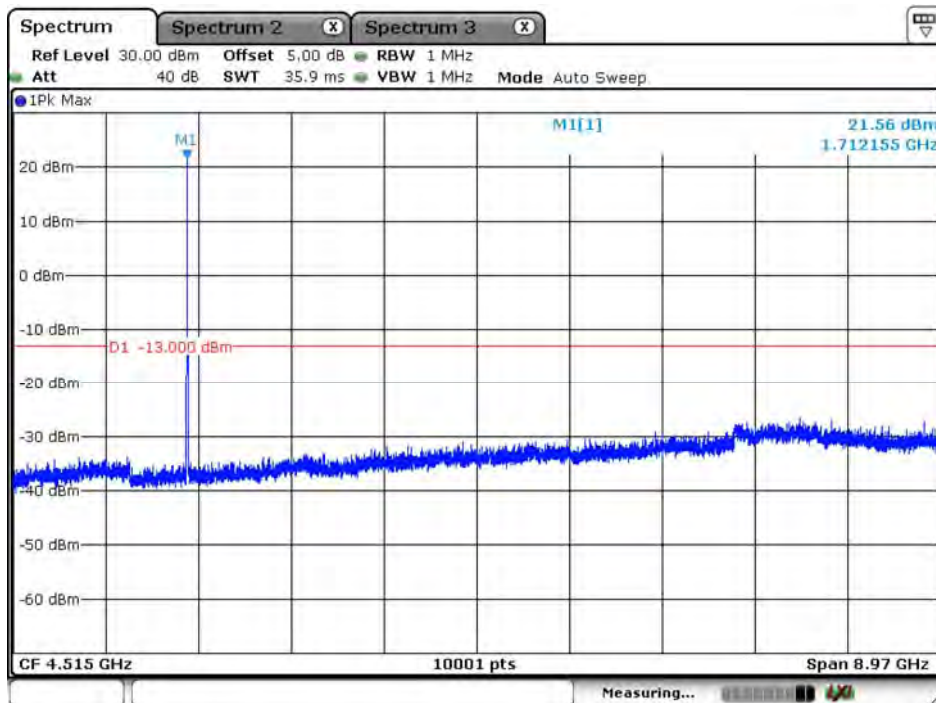
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WCDMA_Band 4_RMC_1752.6MHz



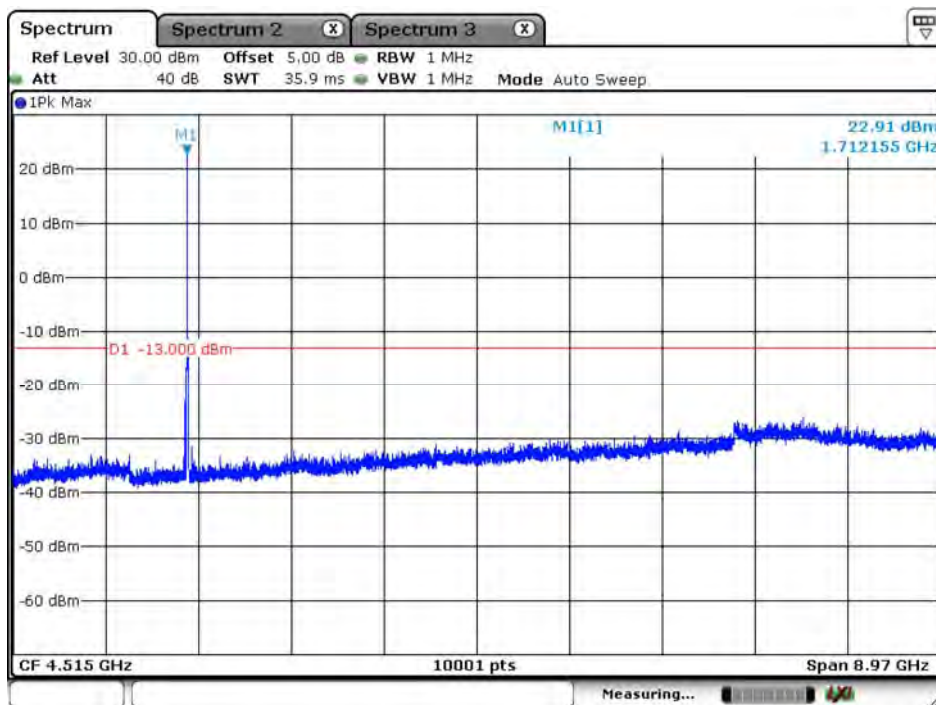
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WCDMA_Band 4_HSDPA_1712.4MHz



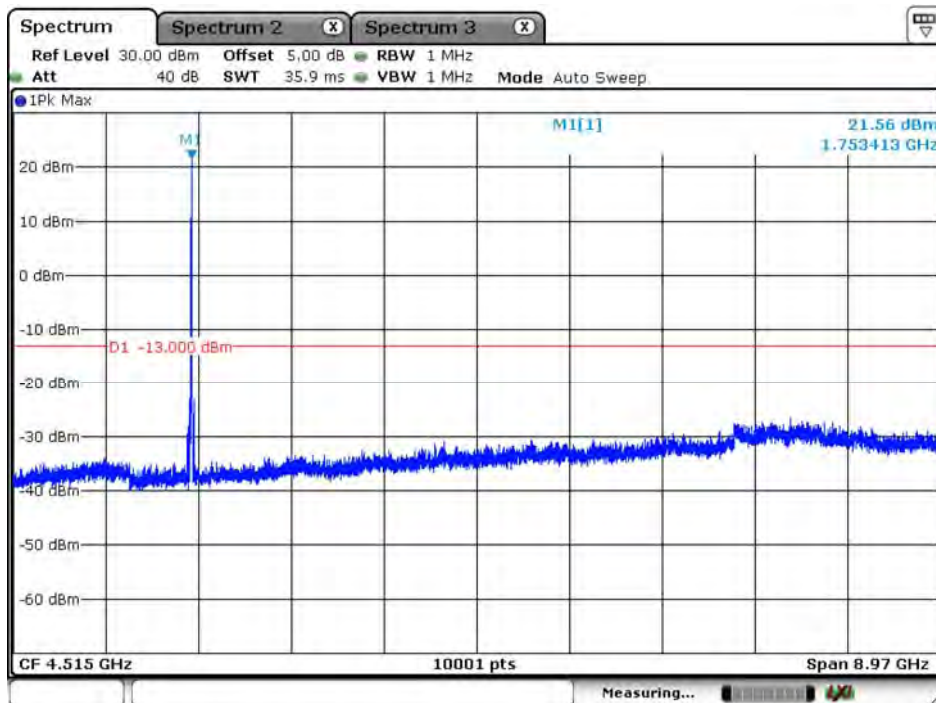
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WCDMA_Band 4_HSDPA_1732.6MHz



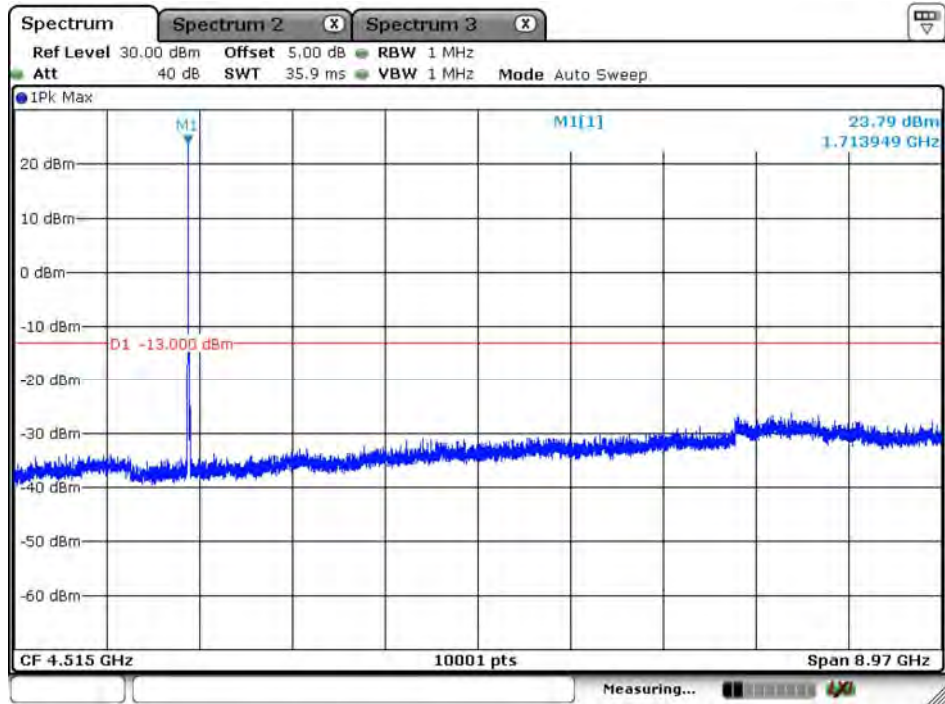
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WCDMA_Band 4_HSDPA_1752.6MHz



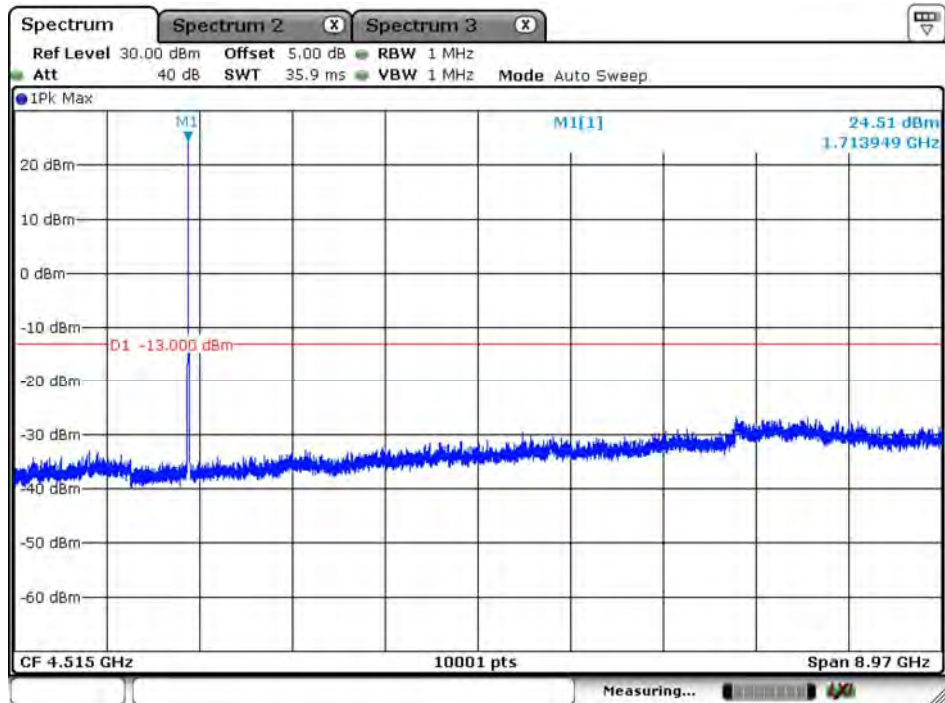
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WCDMA_Band 4_HSUPA_1712.4MHz



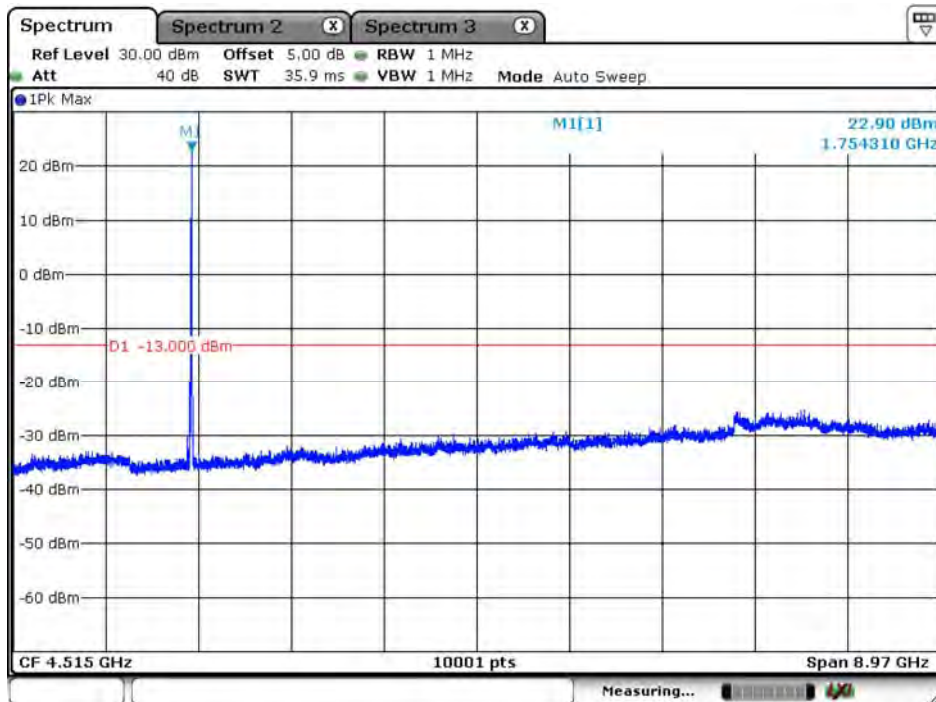
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WCDMA_Band 4_HSUPA_1732.6MHz



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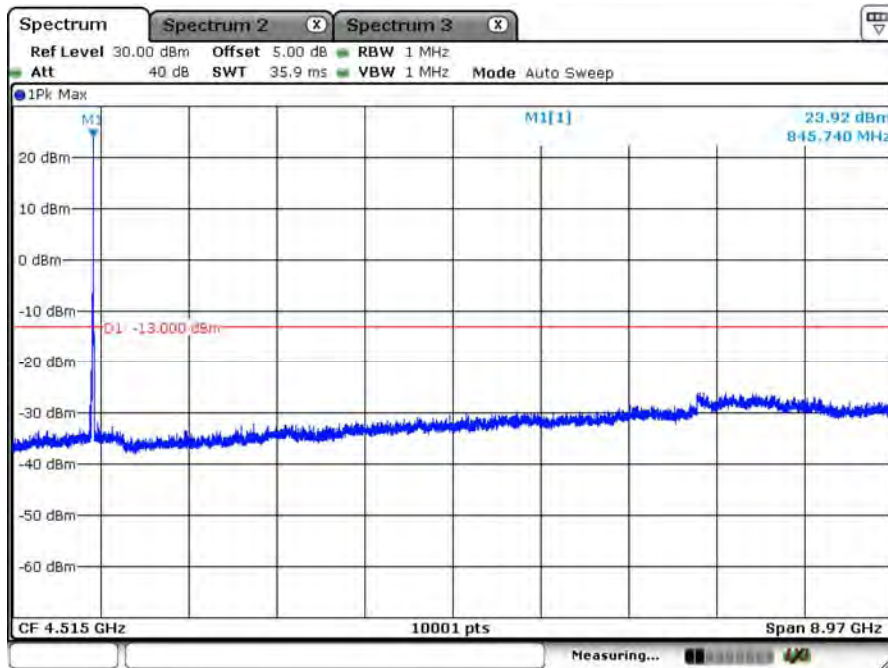
WCDMA_Band 4_HSUPA_1752.6MHz



Date: 8.MAY.2018 14:53:25

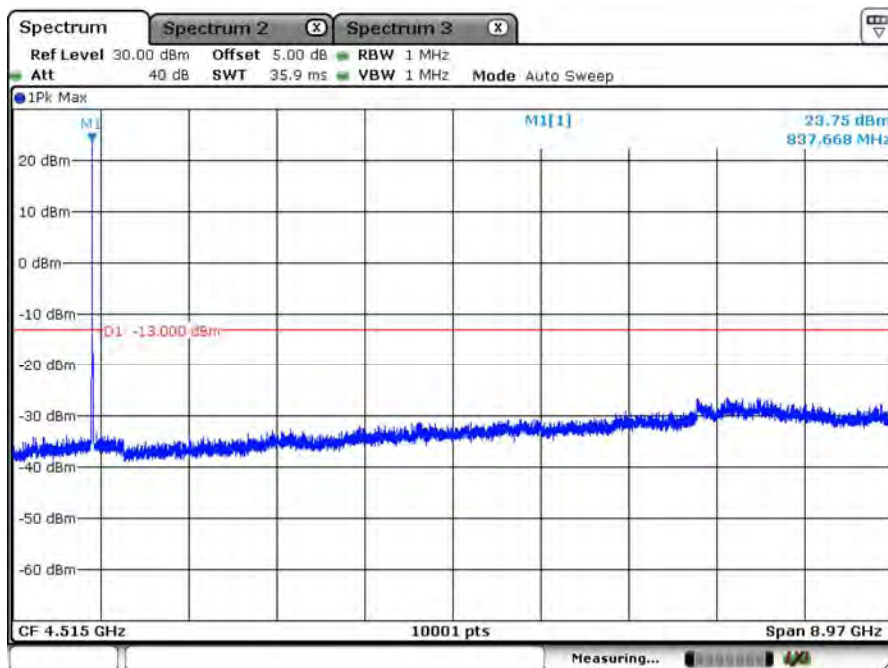
Product	LM960		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/08	Test Site	SR10-H

WCDMA_Band 5_RMC_826.4MHz



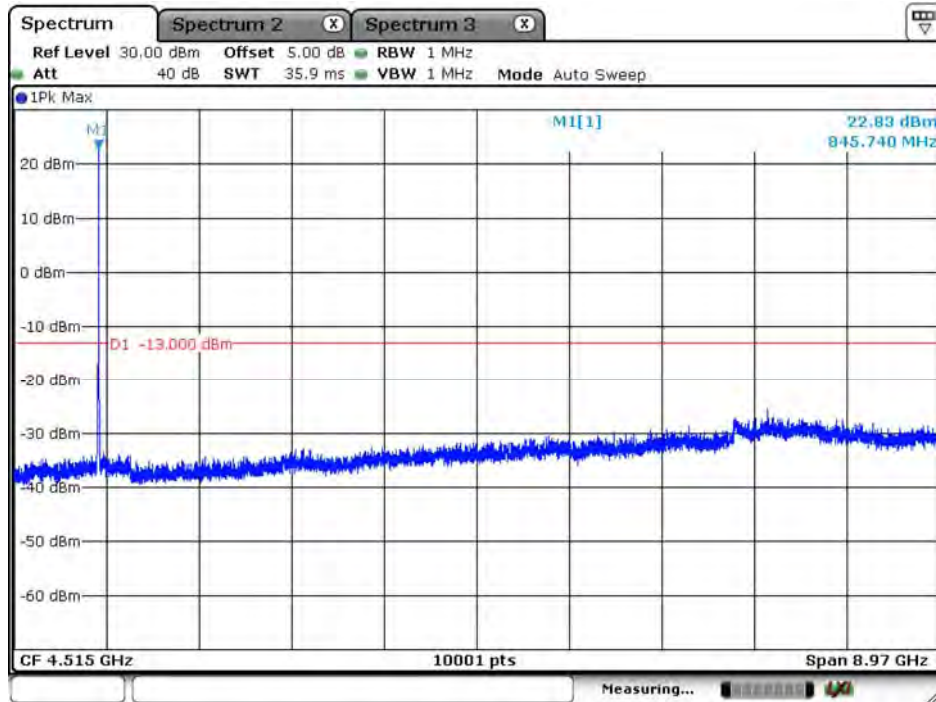
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WCDMA_Band 5_RMC_836.6MHz



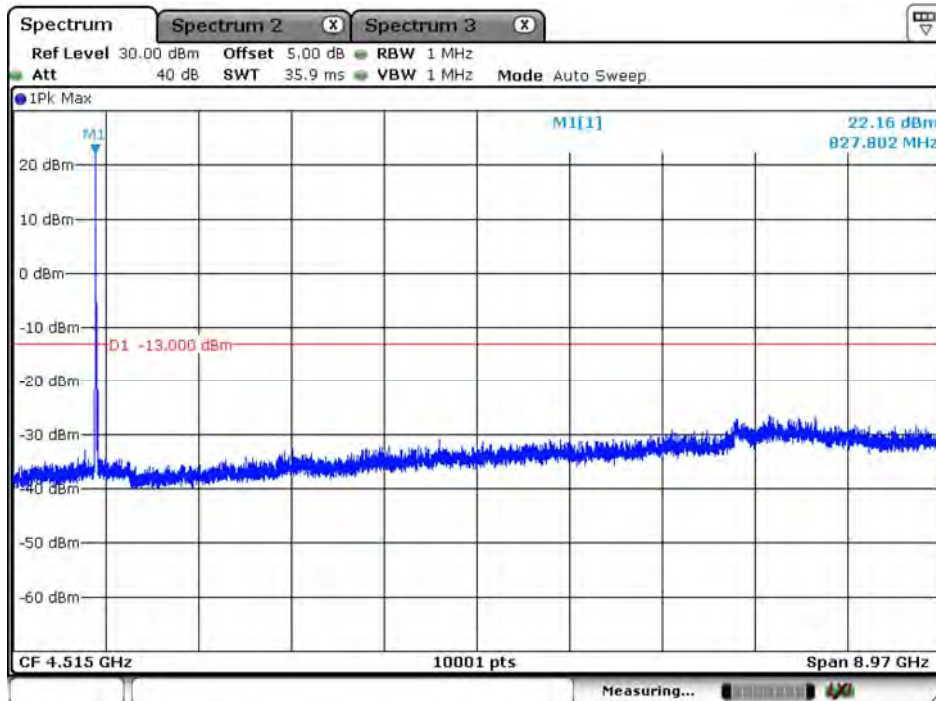
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WCDMA_Band 5_RMC_846.6MHz



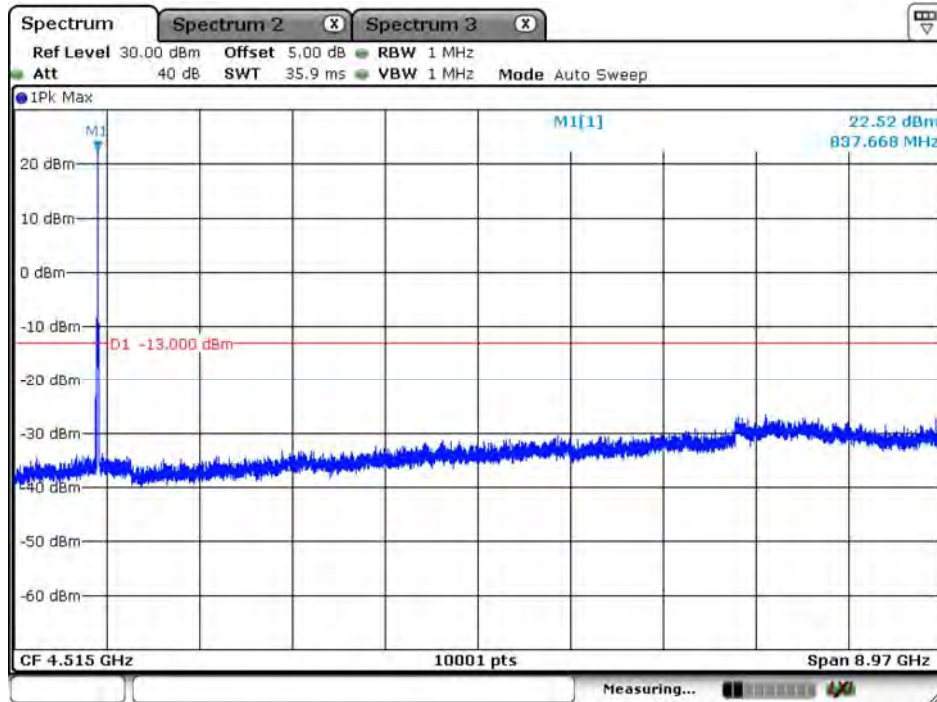
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WCDMA_Band 5_HSDPA_826.4MHz



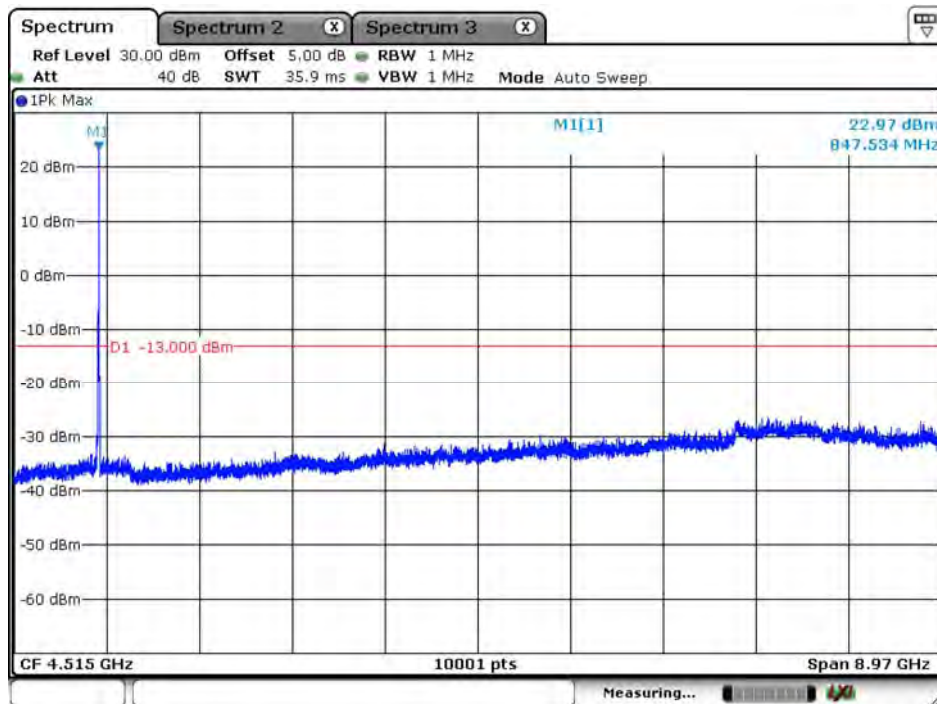
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WCDMA_Band 5_HSDPA_836.6MHz



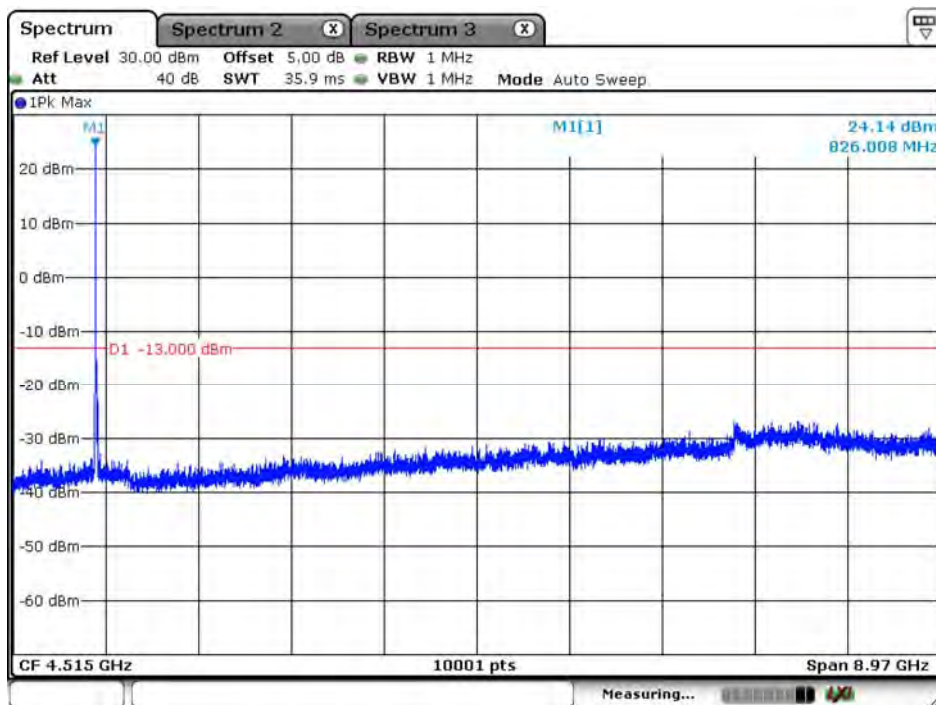
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WCDMA_Band 5_HSDPA_846.6MHz



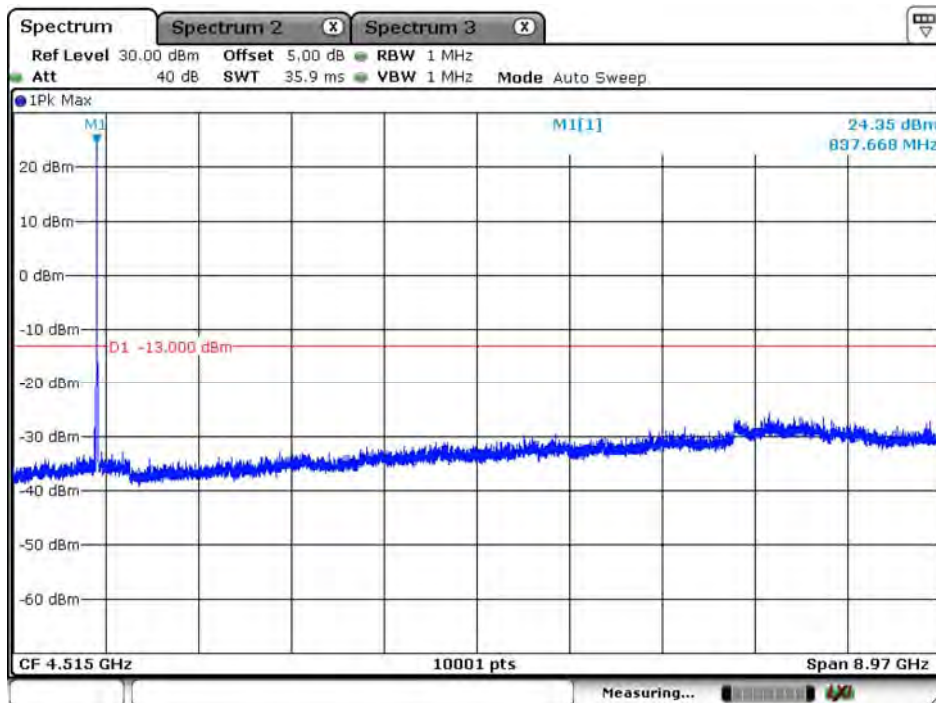
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WCDMA_Band 5_HSUPA_826.4MHz



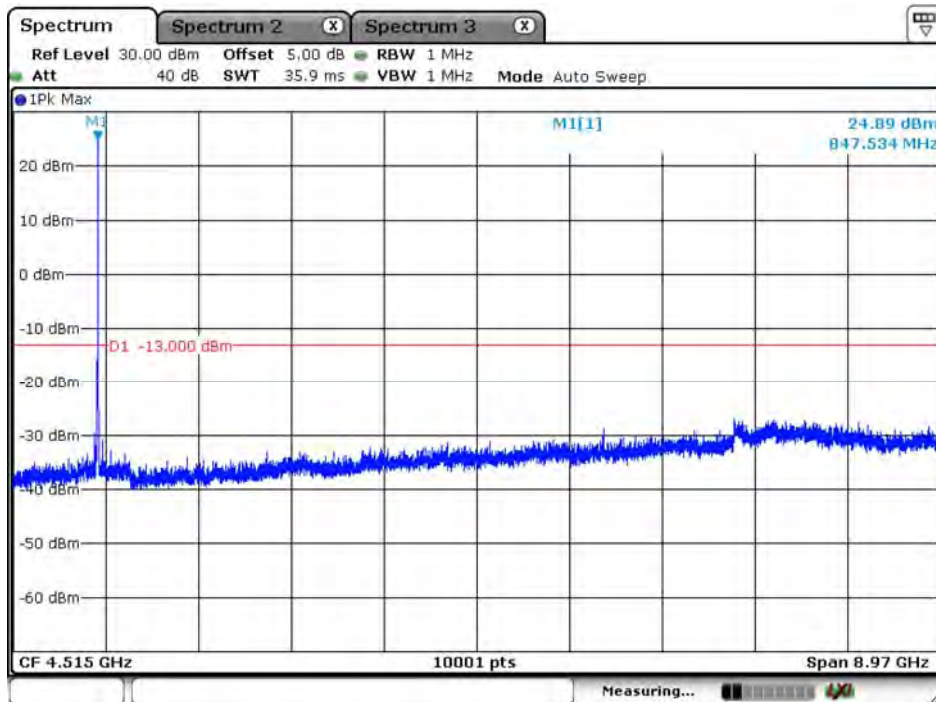
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WCDMA_Band 5_HSUPA_836.6MHz



Date: 8.MAY.2018 15:24:34

WCDMA_Band 5_HSUPA_846.6MHz



Date: 8.MAY.2018 15:36:46

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 2_RMC_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.4MHz)								
3704.80	-61.650	H	-62.760	4.287	11.931	-55.116	-13	-42.116
5557.20	-59.800	H	-55.173	5.203	12.900	-47.476	-13	-34.476
3704.80	-65.600	V	-66.599	4.287	11.931	-58.955	-13	-45.955
5557.20	-54.790	V	-49.847	5.203	12.900	-42.150	-13	-29.150
Middle Channel 9400 (1880MHz)								
3760.00	-64.080	H	-64.889	4.335	11.832	-57.392	-13	-44.392
5640.00	-64.920	H	-60.025	5.235	12.900	-52.360	-13	-39.360
3760.00	-62.790	V	-63.400	4.335	11.832	-55.903	-13	-42.903
5640.00	-60.800	V	-55.747	5.235	12.900	-48.082	-13	-35.082
High Channel 9538 (1907.6MHz)								
3815.20	-63.180	H	-63.874	4.382	11.733	-56.523	-13	-43.523
5722.80	-65.360	H	-60.197	5.267	12.900	-52.564	-13	-39.564
3815.20	-61.720	V	-62.220	4.382	11.733	-54.869	-13	-41.869
5722.80	-60.140	V	-54.976	5.267	12.900	-47.343	-13	-34.343

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 2_HSDPA_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.4MHz)								
3704.80	-63.300	H	-64.410	4.287	11.931	-56.766	-13	-43.766
5557.20	-62.670	H	-58.043	5.203	12.900	-50.346	-13	-37.346
3704.80	-64.090	V	-65.089	4.287	11.931	-57.445	-13	-44.445
5557.20	-55.040	V	-50.097	5.203	12.900	-42.400	-13	-29.400
Middle Channel 9400 (1880MHz)								
3760.00	-65.240	H	-66.049	4.335	11.832	-58.552	-13	-45.552
5640.00	-63.100	H	-58.205	5.235	12.900	-50.540	-13	-37.540
3760.00	-64.320	V	-64.930	4.335	11.832	-57.433	-13	-44.433
5640.00	-59.130	V	-54.077	5.235	12.900	-46.412	-13	-33.412
High Channel 9538 (1907.6MHz)								
3815.20	-64.260	H	-64.954	4.382	11.733	-57.603	-13	-44.603
5722.80	-65.680	H	-60.517	5.267	12.900	-52.884	-13	-39.884
3815.20	-63.570	V	-64.070	4.382	11.733	-56.719	-13	-43.719
5722.80	-58.440	V	-53.276	5.267	12.900	-45.643	-13	-32.643

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 2_HSUPA_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.4MHz)								
3704.80	-63.860	H	-64.970	4.287	11.931	-57.326	-13	-44.326
5557.20	-63.630	H	-59.003	5.203	12.900	-51.306	-13	-38.306
3704.80	-65.290	V	-66.289	4.287	11.931	-58.645	-13	-45.645
5557.20	-54.330	V	-49.387	5.203	12.900	-41.690	-13	-28.690
Middle Channel 9400 (1880MHz)								
3760.00	-60.670	H	-61.479	4.335	11.832	-53.982	-13	-40.982
5764.00	-57.010	H	-51.733	5.283	12.900	-44.116	-13	-31.116
3760.00	-62.200	V	-62.810	4.335	11.832	-55.313	-13	-42.313
5640.00	-63.050	V	-57.997	5.235	12.900	-50.332	-13	-37.332
High Channel 9538 (1907.6MHz)								
3815.20	-63.610	H	-64.304	4.382	11.733	-56.953	-13	-43.953
5722.80	-64.210	H	-59.047	5.267	12.900	-51.414	-13	-38.414
3815.20	-60.430	V	-60.930	4.382	11.733	-53.579	-13	-40.579
5722.80	-62.150	V	-56.986	5.267	12.900	-49.353	-13	-36.353

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 4_RMC_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 1312 (1712.4MHz)								
3424.80	-63.130	H	-65.506	4.066	12.104	-57.468	-13	-44.468
5137.20	-64.670	H	-60.758	5.077	12.247	-53.588	-13	-40.588
3424.80	-60.350	V	-63.015	4.066	12.104	-54.977	-13	-41.977
5137.20	-63.220	V	-59.012	5.077	12.247	-51.842	-13	-38.842
Middle Channel 1413 (1732.6MHz)								
3465.20	-62.330	H	-64.710	4.090	12.210	-56.591	-13	-43.591
5197.80	-64.890	H	-60.933	5.094	12.356	-53.671	-13	-40.671
3465.20	-58.340	V	-61.013	4.090	12.210	-52.894	-13	-39.894
5197.80	-63.500	V	-59.335	5.094	12.356	-52.073	-13	-39.073
High Channel 1513 (1752.6MHz)								
3505.20	-63.270	H	-65.620	4.115	12.291	-57.445	-13	-44.445
5257.80	-65.210	H	-61.201	5.111	12.464	-53.848	-13	-40.848
3505.20	-58.010	V	-60.644	4.115	12.291	-52.469	-13	-39.469
5257.80	-63.440	V	-59.289	5.111	12.464	-51.936	-13	-38.936

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 4_HSDPA_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 1312 (1712.4MHz)								
3424.80	-69.970	H	-72.346	4.066	12.104	-64.308	-13	-51.308
5137.20	-64.220	H	-60.308	5.077	12.247	-53.138	-13	-40.138
3424.80	-63.830	V	-66.495	4.066	12.104	-58.457	-13	-45.457
5137.20	-65.300	V	-61.092	5.077	12.247	-53.922	-13	-40.922
Middle Channel 1413 (1732.6MHz)								
3465.20	-63.210	H	-65.590	4.090	12.210	-57.471	-13	-44.471
5197.80	-64.530	H	-60.573	5.094	12.356	-53.311	-13	-40.311
3465.20	-59.930	V	-62.603	4.090	12.210	-54.484	-13	-41.484
5197.80	-62.980	V	-58.815	5.094	12.356	-51.553	-13	-38.553
High Channel 1513 (1752.6MHz)								
3505.20	-62.180	H	-64.530	4.115	12.291	-56.355	-13	-43.355
5257.80	-65.380	H	-61.371	5.111	12.464	-54.018	-13	-41.018
3505.20	-56.790	V	-59.424	4.115	12.291	-51.249	-13	-38.249
5257.80	-62.350	V	-58.199	5.111	12.464	-50.846	-13	-37.846

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 4_HSUPA_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 1312 (1712.4MHz)								
3424.80	-63.230	H	-65.606	4.066	12.104	-57.568	-13	-44.568
5137.20	-65.290	H	-61.378	5.077	12.247	-54.208	-13	-41.208
3424.80	-59.840	V	-62.505	4.066	12.104	-54.467	-13	-41.467
5137.20	-63.980	V	-59.772	5.077	12.247	-52.602	-13	-39.602
Middle Channel 1413 (1732.6MHz)								
3465.20	-62.920	H	-65.300	4.090	12.210	-57.181	-13	-44.181
5197.80	-64.590	H	-60.633	5.094	12.356	-53.371	-13	-40.371
3465.20	-57.840	V	-60.513	4.090	12.210	-52.394	-13	-39.394
5197.80	-62.910	V	-58.745	5.094	12.356	-51.483	-13	-38.483
High Channel 1513 (1752.6MHz)								
3505.20	-63.050	H	-65.400	4.115	12.291	-57.225	-13	-44.225
5257.80	-64.780	H	-60.771	5.111	12.464	-53.418	-13	-40.418
3505.20	-58.110	V	-60.744	4.115	12.291	-52.569	-13	-39.569
5257.80	-63.580	V	-59.429	5.111	12.464	-52.076	-13	-39.076

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 5_RMC_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 4132 (826.4MHz)								
1652.80	-52.400	H	-58.381	2.794	8.758	-52.417	-13	-39.417
2479.20	-28.330	H	-31.156	3.442	10.567	-24.031	-13	-11.031
1652.80	-51.410	V	-58.573	2.794	8.758	-52.609	-13	-39.609
2479.20	-22.800	V	-26.417	3.442	10.567	-19.292	-13	-6.292
Middle Channel 4183 (836.6MHz)								
1673.20	-52.930	H	-59.103	2.813	8.820	-53.096	-13	-40.096
2509.80	-29.440	H	-32.335	3.463	10.608	-25.190	-13	-12.190
1673.20	-51.970	V	-59.271	2.813	8.820	-53.264	-13	-40.264
2509.80	-19.230	V	-22.853	3.463	10.608	-15.708	-13	-2.708
High Channel 4233 (846.6MHz)								
1693.20	-55.170	H	-61.530	2.831	8.880	-55.481	-13	-42.481
2539.80	-30.130	H	-32.953	3.484	10.632	-25.806	-13	-12.806
1693.20	-52.940	V	-60.375	2.831	8.880	-54.326	-13	-41.326
2539.80	-23.770	V	-27.262	3.484	10.632	-20.115	-13	-7.115

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/10	Test Site	CB4-H

WCDMA_Band 5_HSDPA_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 4132 (826.4MHz)								
1652.80	-51.910	H	-57.891	2.794	8.758	-51.927	-13	-38.927
2479.20	-28.290	H	-31.116	3.442	10.567	-23.991	-13	-10.991
1652.80	-50.590	V	-57.753	2.794	8.758	-51.789	-13	-38.789
2479.20	-19.350	V	-22.967	3.442	10.567	-15.842	-13	-2.842
Middle Channel 4183 (836.6MHz)								
1673.20	-51.970	H	-58.143	2.813	8.820	-52.136	-13	-39.136
2509.80	-19.230	H	-22.125	3.463	10.608	-14.980	-13	-1.980
1673.20	-55.100	V	-62.401	2.813	8.820	-56.394	-13	-43.394
2509.80	-22.220	V	-25.843	3.463	10.608	-18.698	-13	-5.698
High Channel 4233 (846.6MHz)								
1693.20	-55.850	H	-62.210	2.831	8.880	-56.161	-13	-43.161
2539.80	-27.380	H	-30.203	3.484	10.632	-23.056	-13	-10.056
1693.20	-51.910	V	-59.345	2.831	8.880	-53.296	-13	-40.296
2539.80	-20.610	V	-24.102	3.484	10.632	-16.955	-13	-3.955

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

Product	LM960		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/10	Test Site	CB4-H

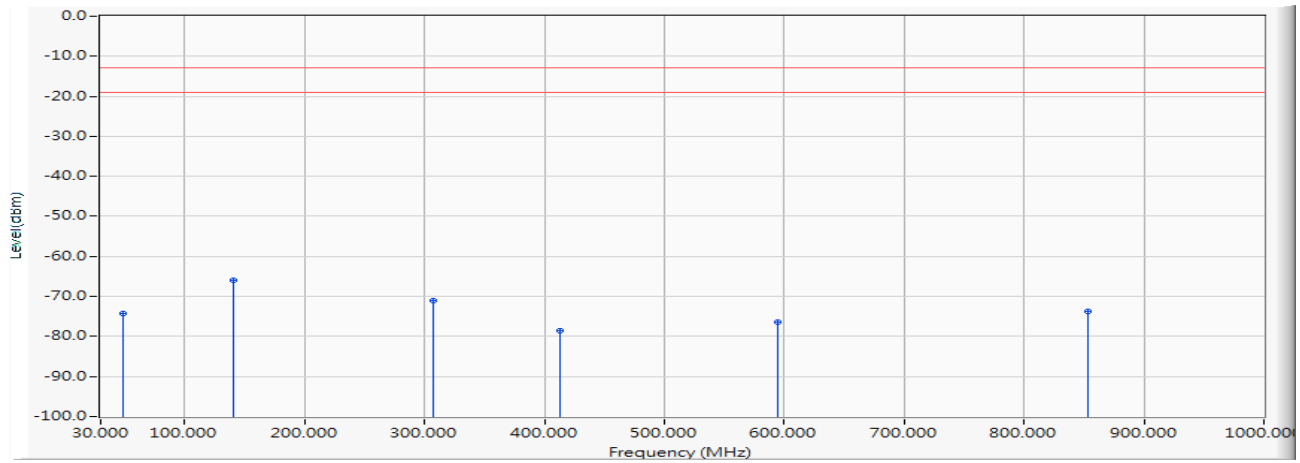
WCDMA_Band 5_HSUPA_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 4132 (826.4MHz)								
1652.80	-53.850	H	-59.831	2.794	8.758	-53.867	-13	-40.867
2479.20	-28.950	H	-31.776	3.442	10.567	-24.651	-13	-11.651
1652.80	-50.840	V	-58.003	2.794	8.758	-52.039	-13	-39.039
2479.20	-18.810	V	-22.427	3.442	10.567	-15.302	-13	-2.302
Middle Channel 4183 (836.6MHz)								
1673.20	-54.130	H	-60.303	2.813	8.820	-54.296	-13	-41.296
2509.80	-28.870	H	-31.765	3.463	10.608	-24.620	-13	-11.620
1673.20	-51.700	V	-59.001	2.813	8.820	-52.994	-13	-39.994
2509.80	-19.910	V	-23.533	3.463	10.608	-16.388	-13	-3.388
High Channel 4233 (846.6MHz)								
1693.20	-51.270	H	-57.630	2.831	8.880	-51.581	-13	-38.581
2539.80	-28.360	H	-31.183	3.484	10.632	-24.036	-13	-11.036
1693.20	-46.000	V	-53.435	2.831	8.880	-47.386	-13	-34.386
2539.80	-23.520	V	-27.012	3.484	10.632	-19.865	-13	-6.865

Test Result (EIRP) = SG Level - Cable Loss + Antenna Gain

30MHz-1GHz Spurious

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_RMC_1880MHz_Link

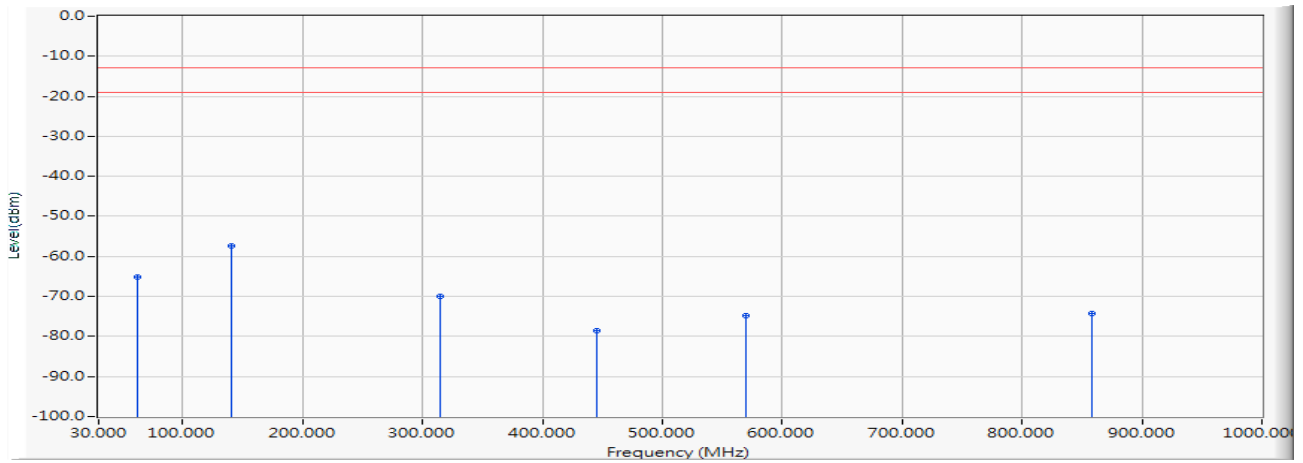


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		49.158	-23.468	-50.889	-74.358	-61.358	-13.000	PEAK
2	*	141.065	-20.805	-45.037	-65.842	-52.842	-13.000	PEAK
3		307.299	-17.906	-53.077	-70.983	-57.983	-13.000	PEAK
4		413.271	-12.841	-65.831	-78.671	-65.671	-13.000	PEAK
5		595.025	-11.159	-65.125	-76.284	-63.284	-13.000	PEAK
6		853.773	-7.499	-66.144	-73.643	-60.643	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_RMC_1880MHz_Link

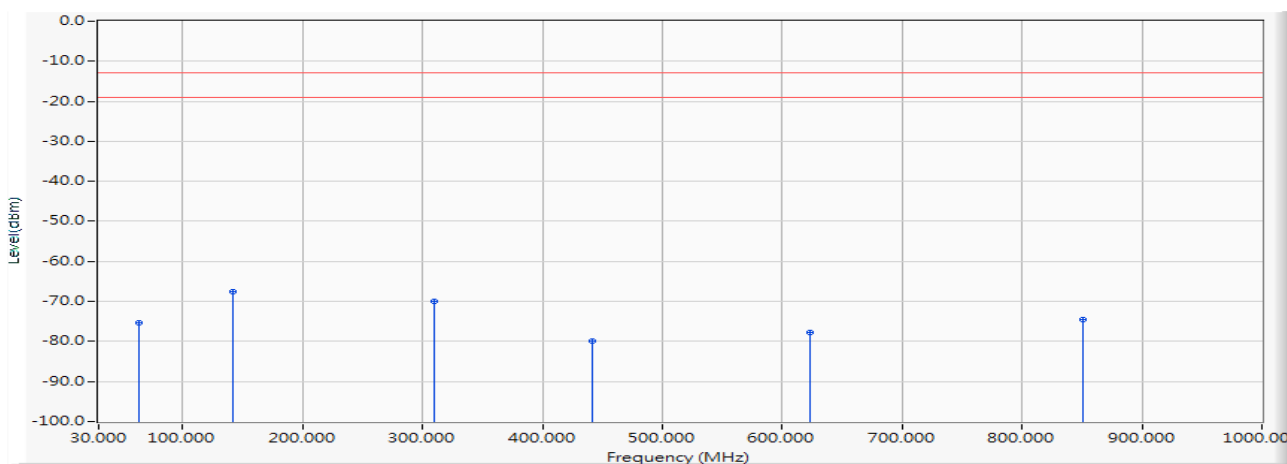


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		62.859	-23.718	-41.373	-65.090	-52.090	-13.000	PEAK
2	*	141.065	-16.628	-40.756	-57.383	-44.383	-13.000	PEAK
3		314.816	-15.775	-54.103	-69.879	-56.879	-13.000	PEAK
4		444.917	-12.738	-65.929	-78.668	-65.668	-13.000	PEAK
5		570.169	-9.903	-64.885	-74.787	-61.787	-13.000	PEAK
6		858.623	-7.642	-66.670	-74.312	-61.312	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSDPA_1880MHz_Link

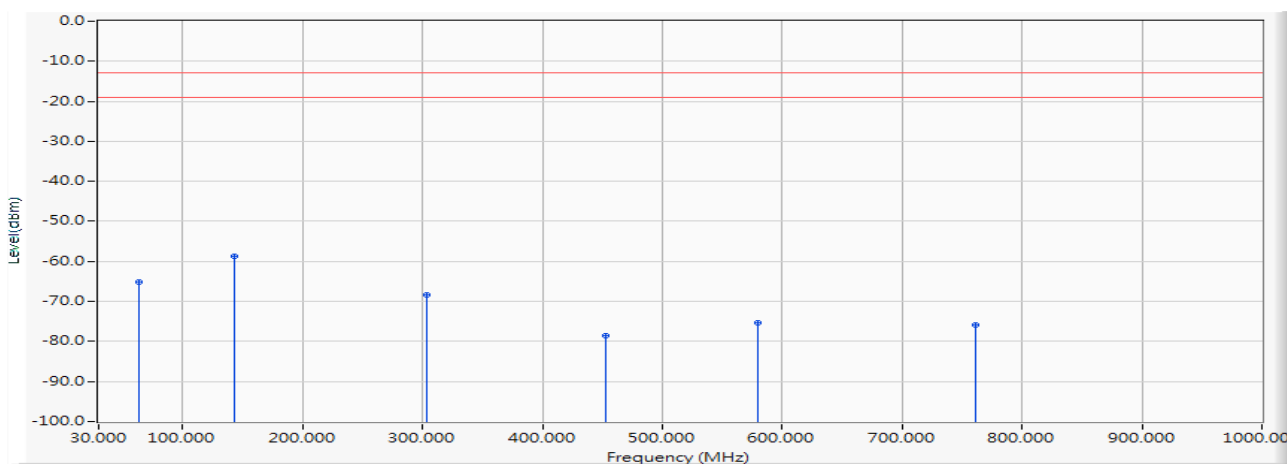


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		63.586	-25.852	-49.387	-75.239	-62.239	-13.000	PEAK
2	*	142.520	-20.733	-46.771	-67.504	-54.504	-13.000	PEAK
3		309.966	-17.932	-52.079	-70.011	-57.011	-13.000	PEAK
4		441.765	-13.096	-66.868	-79.964	-66.964	-13.000	PEAK
5		623.034	-10.495	-67.188	-77.684	-64.684	-13.000	PEAK
6		851.226	-7.584	-66.932	-74.517	-61.517	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSDPA_1880MHz_Link

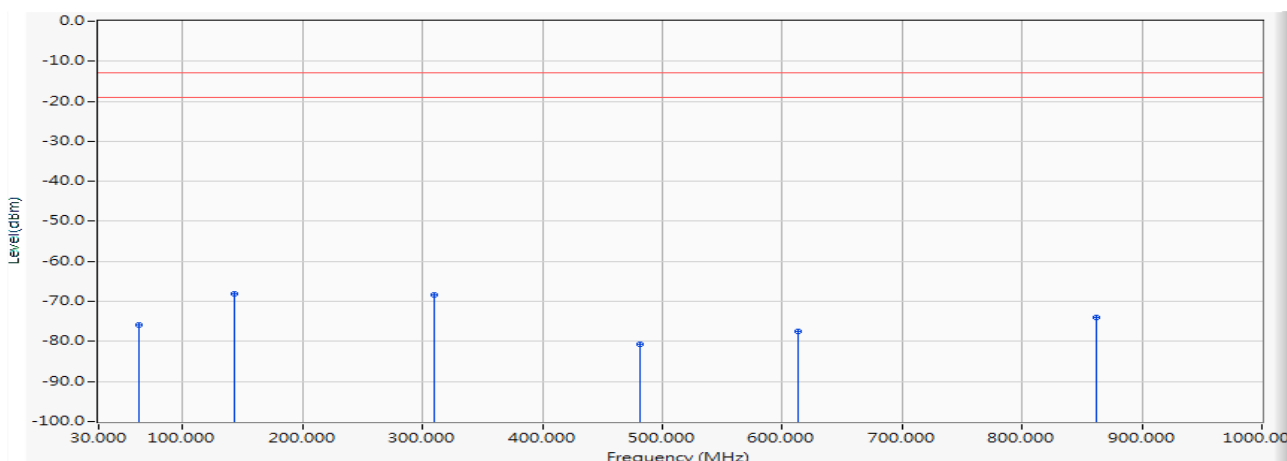


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		63.465	-23.695	-41.481	-65.175	-52.175	-13.000	PEAK
2	*	142.763	-16.755	-41.847	-58.602	-45.602	-13.000	PEAK
3		303.904	-16.282	-52.033	-68.315	-55.315	-13.000	PEAK
4		453.405	-12.269	-66.219	-78.488	-65.488	-13.000	PEAK
5		579.869	-9.624	-65.710	-75.334	-62.334	-13.000	PEAK
6		761.138	-8.361	-67.502	-75.864	-62.864	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSUPA_1880MHz_Link

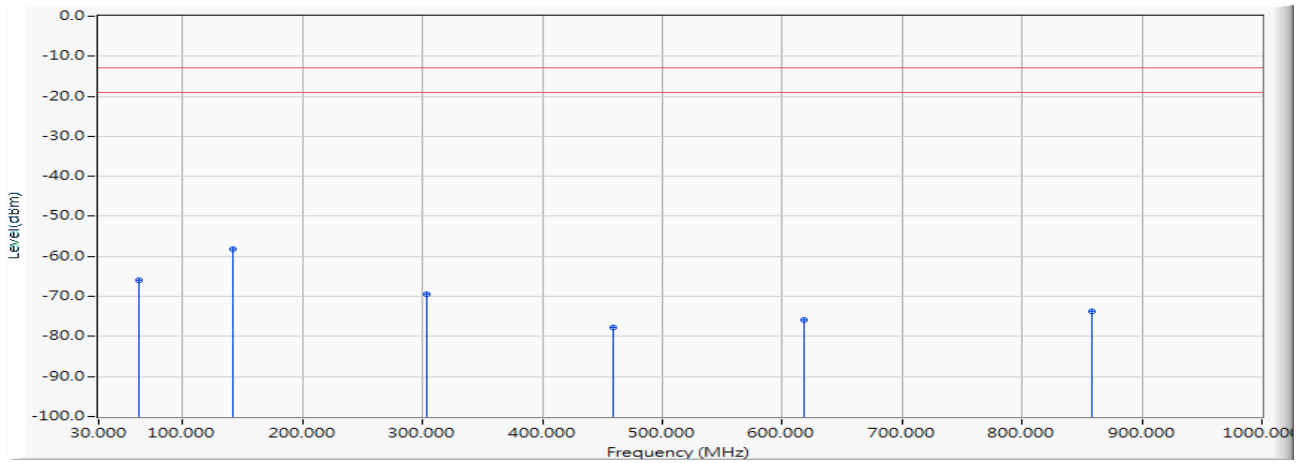


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		63.101	-25.876	-49.990	-75.866	-62.866	-13.000	PEAK
2	*	143.005	-20.709	-47.510	-68.219	-55.219	-13.000	PEAK
3		310.087	-17.930	-50.384	-68.313	-55.313	-13.000	PEAK
4		482.020	-13.740	-67.044	-80.785	-67.785	-13.000	PEAK
5		613.576	-10.584	-66.963	-77.547	-64.547	-13.000	PEAK
6		862.503	-7.397	-66.502	-73.900	-60.900	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSUPA_1880MHz_Link

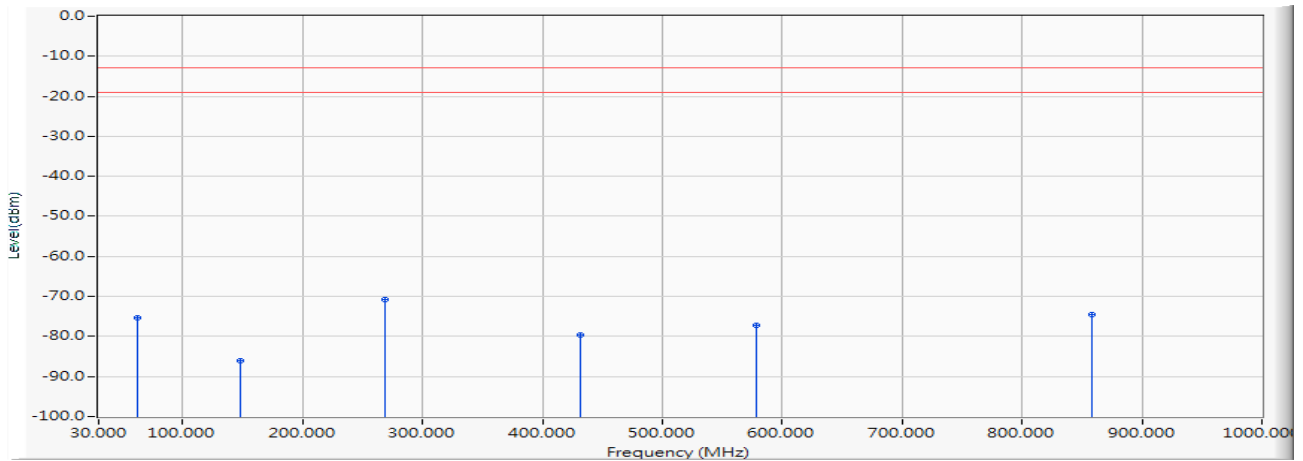


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		63.223	-23.704	-42.188	-65.891	-52.891	-13.000	PEAK
2	*	142.520	-16.736	-41.363	-58.099	-45.099	-13.000	PEAK
3		303.904	-16.282	-53.201	-69.483	-56.483	-13.000	PEAK
4		458.619	-12.073	-65.690	-77.764	-64.764	-13.000	PEAK
5		617.820	-9.306	-66.647	-75.953	-62.953	-13.000	PEAK
6		857.774	-7.661	-66.169	-73.830	-60.830	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_RMC_1880MHz_Idle

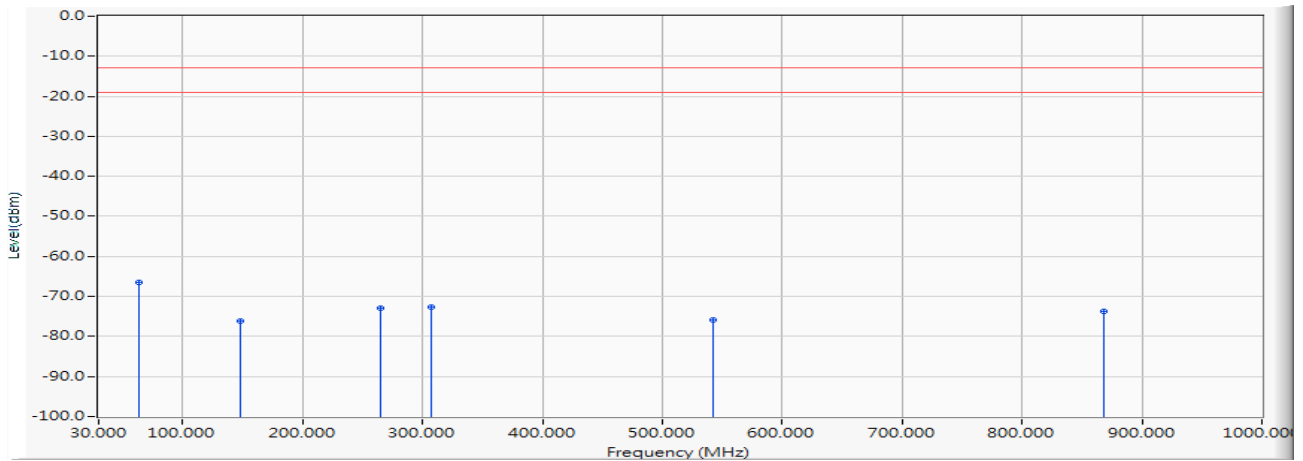


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	62.859	-25.888	-49.399	-75.287	-62.287	-13.000	PEAK
2	147.734	-20.474	-65.611	-86.085	-73.085	-13.000	PEAK
3	* 268.863	-16.168	-54.696	-70.864	-57.864	-13.000	PEAK
4	431.822	-13.094	-66.588	-79.683	-66.683	-13.000	PEAK
5	577.929	-11.105	-66.184	-77.290	-64.290	-13.000	PEAK
6	858.259	-7.347	-67.082	-74.429	-61.429	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_RMC_1880MHz_Idle

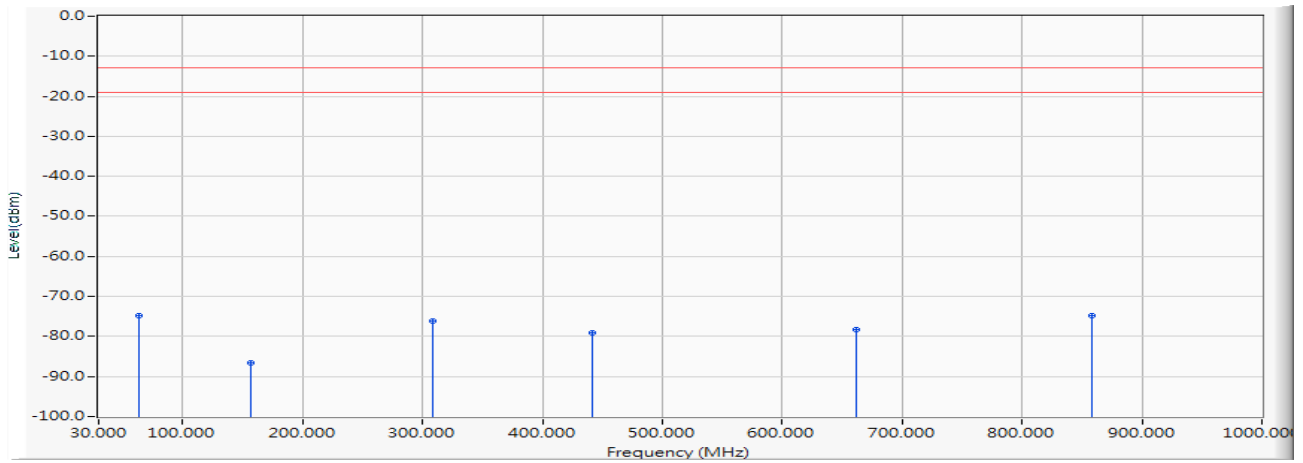


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	64.071	-23.671	-42.776	-66.447	-53.447	-13.000	PEAK
2		148.219	-17.164	-59.053	-76.217	-63.217	-13.000	PEAK
3		264.619	-15.618	-57.355	-72.973	-59.973	-13.000	PEAK
4		306.814	-16.167	-56.544	-72.711	-59.711	-13.000	PEAK
5		542.402	-9.249	-66.701	-75.949	-62.949	-13.000	PEAK
6		868.444	-7.521	-66.309	-73.830	-60.830	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSDPA_1880MHz_Idle

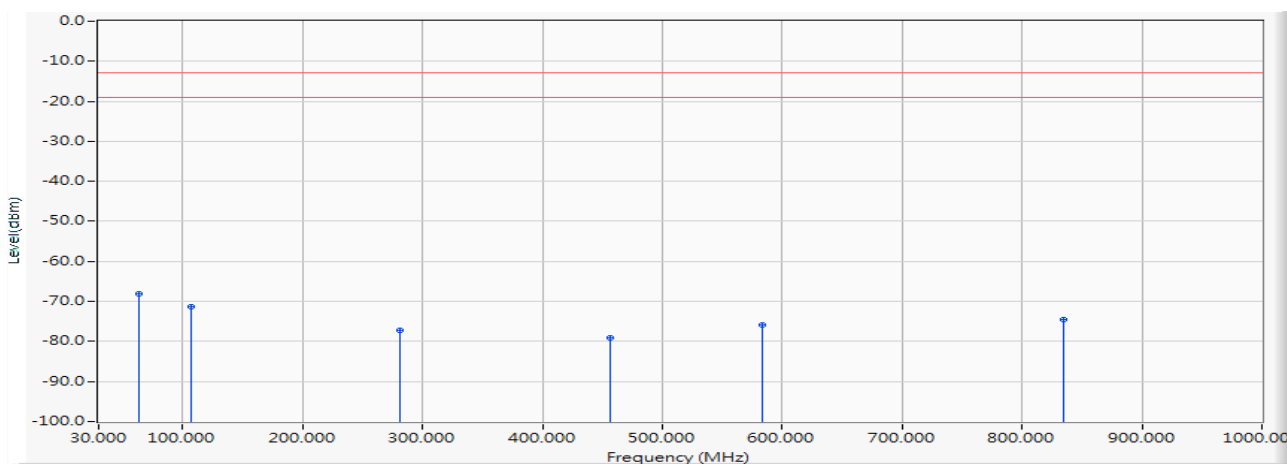


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	63.829	-25.840	-48.827	-74.667	-61.667	-13.000	PEAK
2		157.434	-20.637	-65.896	-86.532	-73.532	-13.000	PEAK
3		308.632	-17.930	-58.289	-76.219	-63.219	-13.000	PEAK
4		441.280	-13.078	-66.077	-79.154	-66.154	-13.000	PEAK
5		661.955	-10.947	-67.470	-78.417	-65.417	-13.000	PEAK
6		858.016	-7.356	-67.339	-74.694	-61.694	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSDPA_1880MHz_Idle

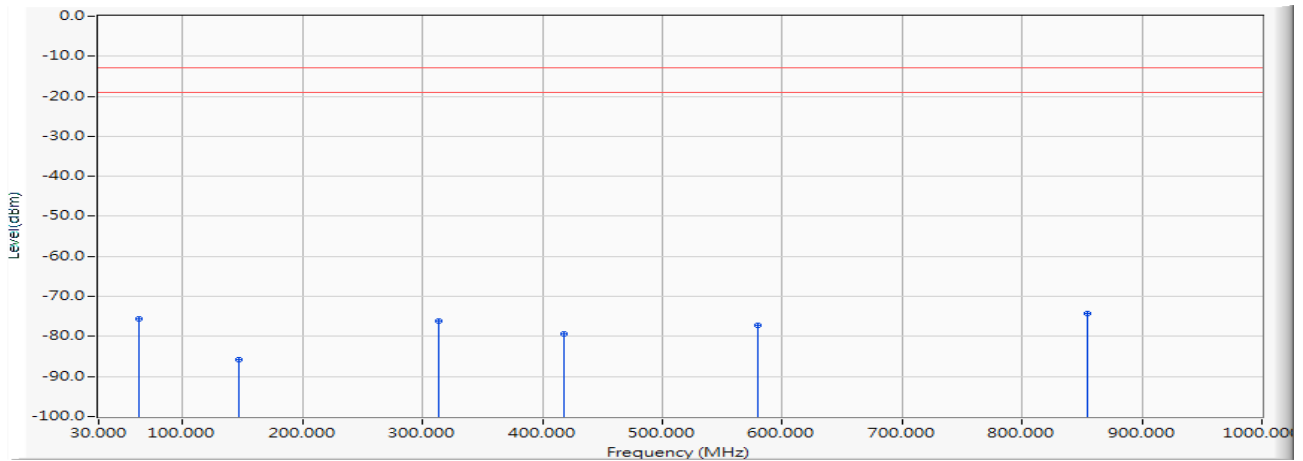


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	63.101	-23.709	-44.264	-67.972	-54.972	-13.000	PEAK
2		106.994	-13.588	-57.811	-71.399	-58.399	-13.000	PEAK
3		281.594	-17.016	-60.274	-77.290	-64.290	-13.000	PEAK
4		456.315	-12.160	-67.017	-79.177	-66.177	-13.000	PEAK
5		582.779	-9.608	-66.185	-75.793	-62.793	-13.000	PEAK
6		835.221	-7.728	-66.866	-74.595	-61.595	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSUPA_1880MHz_Idle

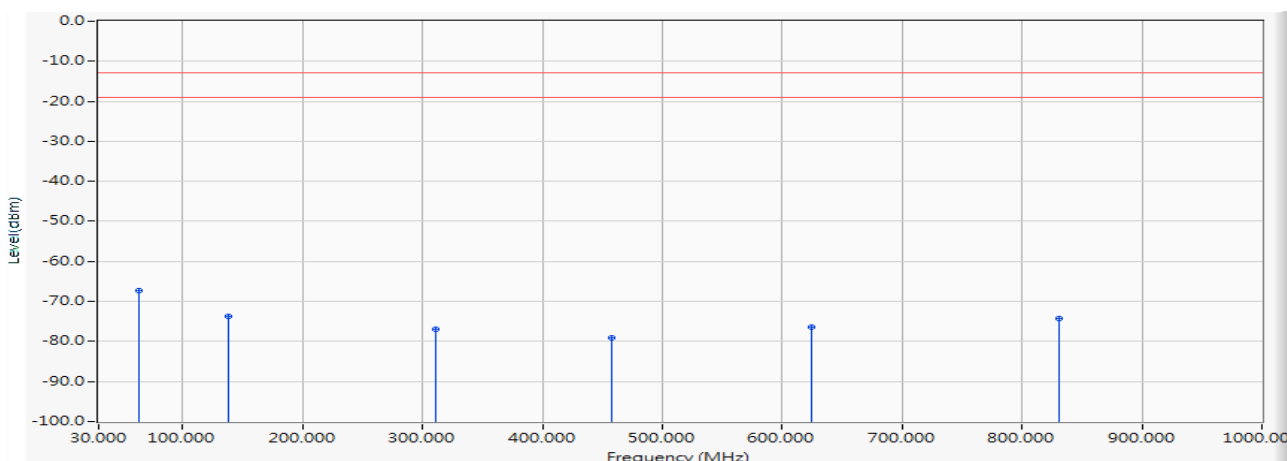


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		63.101	-25.876	-49.598	-75.474	-62.474	-13.000	PEAK
2		147.006	-20.510	-65.406	-85.916	-72.916	-13.000	PEAK
3		313.604	-17.785	-58.338	-76.123	-63.123	-13.000	PEAK
4		417.394	-12.524	-66.805	-79.329	-66.329	-13.000	PEAK
5		579.141	-11.174	-66.037	-77.210	-64.210	-13.000	PEAK
6	*	854.379	-7.479	-66.670	-74.148	-61.148	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 1: WCDMA Band 2_HSUPA_1880MHz_Idle

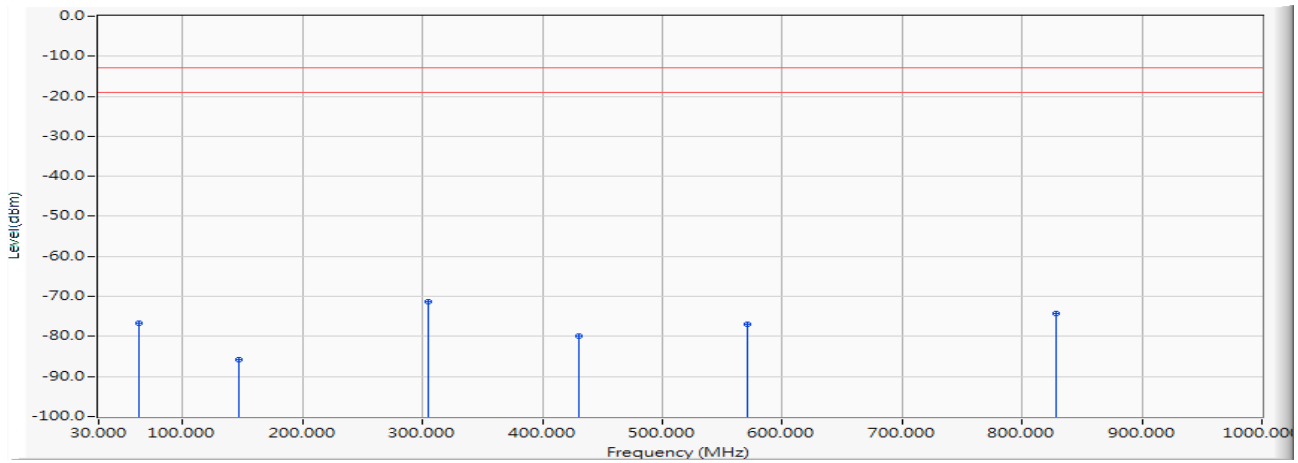


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	62.980	-23.713	-43.601	-67.314	-54.314	-13.000	PEAK
2		138.398	-16.437	-57.417	-73.853	-60.853	-13.000	PEAK
3		311.179	-15.977	-60.845	-76.822	-63.822	-13.000	PEAK
4		457.285	-12.124	-67.085	-79.209	-66.209	-13.000	PEAK
5		624.974	-9.186	-67.102	-76.288	-63.288	-13.000	PEAK
6		831.341	-7.589	-66.740	-74.329	-61.329	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_RMC_1732.6MHz_Link

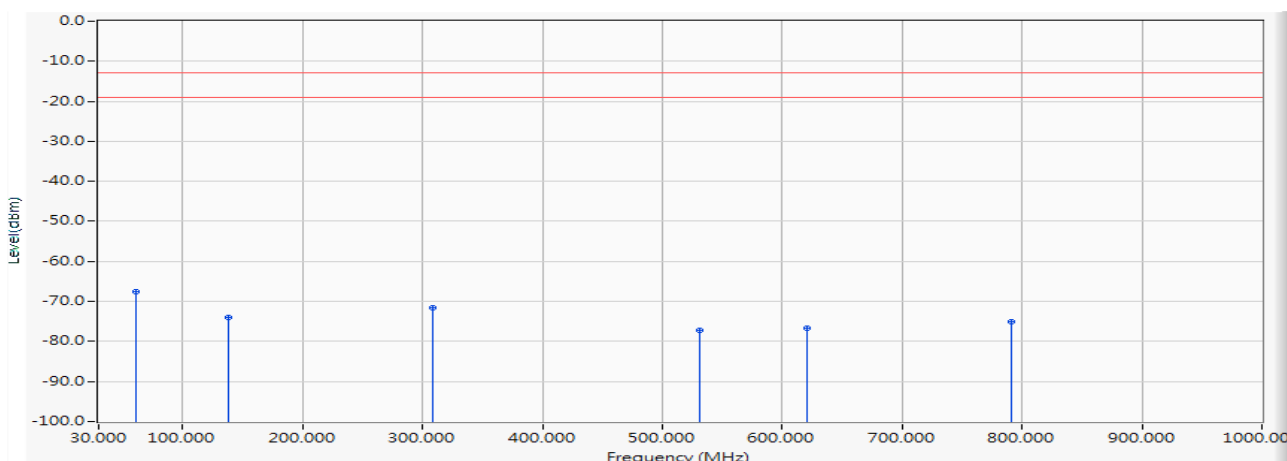


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.344	-25.864	-50.691	-76.555	-63.555	-13.000	PEAK
2	147.006	-20.510	-65.308	-85.818	-72.818	-13.000	PEAK
3	* 305.116	-17.867	-53.393	-71.259	-58.259	-13.000	PEAK
4	430.246	-13.106	-66.815	-79.921	-66.921	-13.000	PEAK
5	571.017	-10.722	-66.281	-77.003	-64.003	-13.000	PEAK
6	828.795	-8.424	-65.819	-74.242	-61.242	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_RMC_1732.6MHz_Link

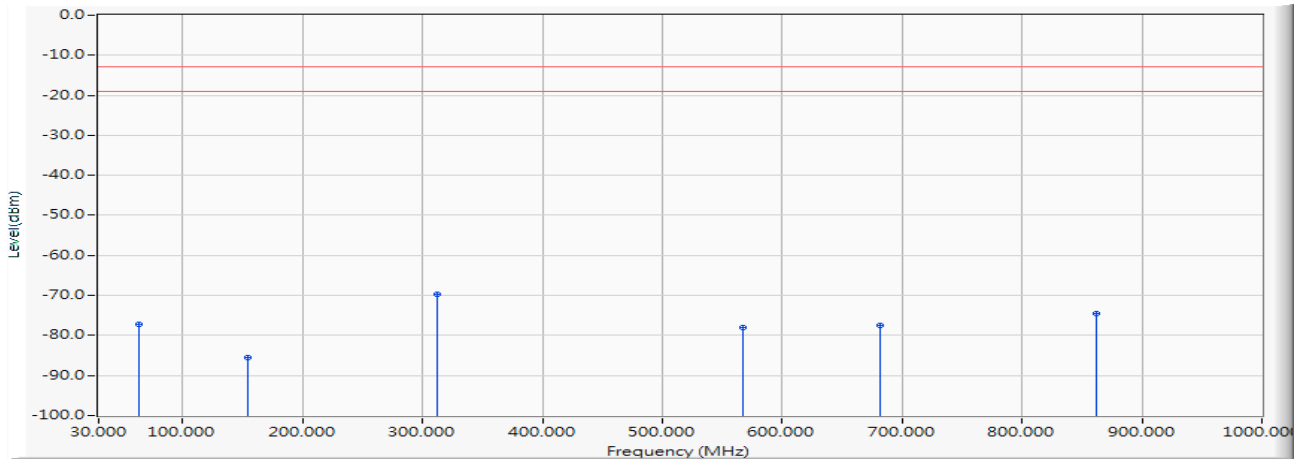


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	61.525	-23.768	-43.902	-67.670	-54.670	-13.000	PEAK
2		138.398	-16.437	-57.506	-73.942	-60.942	-13.000	PEAK
3		309.117	-16.077	-55.609	-71.685	-58.685	-13.000	PEAK
4		531.005	-10.141	-67.089	-77.230	-64.230	-13.000	PEAK
5		620.487	-9.243	-67.439	-76.682	-63.682	-13.000	PEAK
6		791.693	-8.451	-66.500	-74.950	-61.950	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSDPA_1732.6MHz_Link

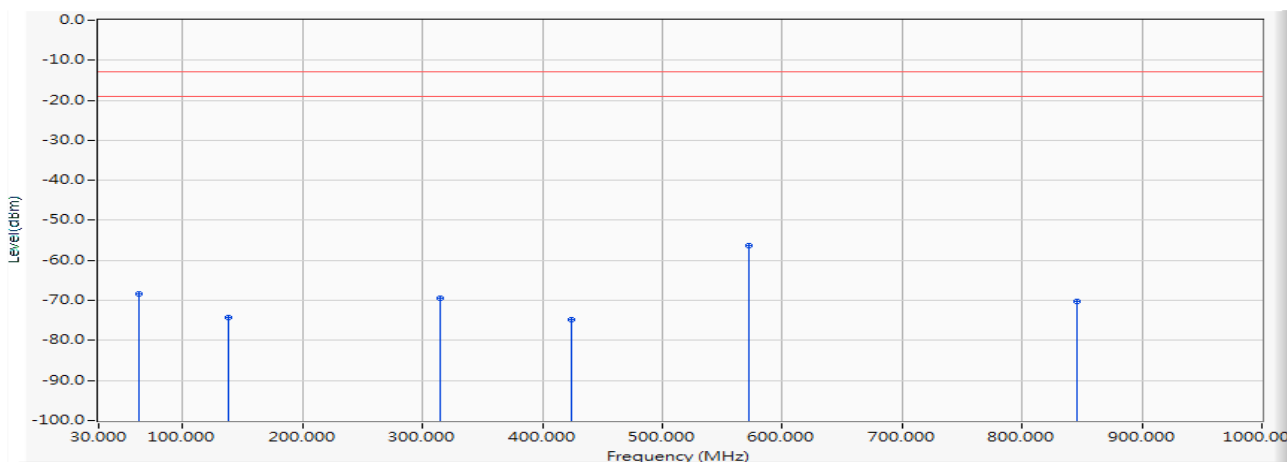


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.708	-25.846	-51.302	-77.148	-64.148	-13.000	PEAK
2	154.039	-20.528	-65.046	-85.574	-72.574	-13.000	PEAK
3	* 311.785	-17.863	-51.927	-69.790	-56.790	-13.000	PEAK
4	567.137	-10.687	-67.255	-77.942	-64.942	-13.000	PEAK
5	681.355	-9.892	-67.720	-77.613	-64.613	-13.000	PEAK
6	861.654	-7.361	-67.123	-74.483	-61.483	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSDPA_1732.6MHz_Link

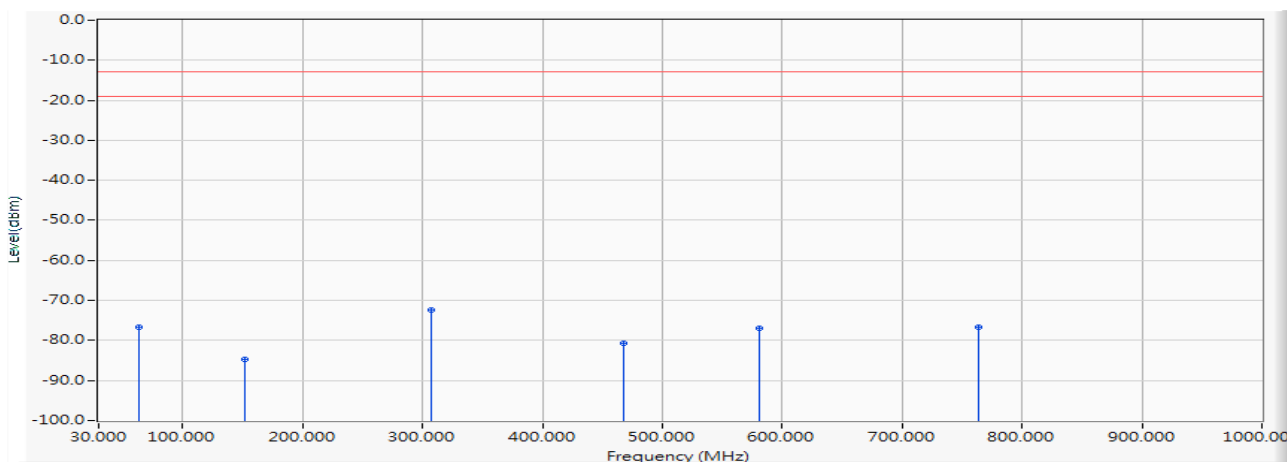


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.101	-23.709	-44.654	-68.362	-55.362	-13.000	PEAK
2	138.276	-16.428	-57.941	-74.369	-61.369	-13.000	PEAK
3	314.816	-15.775	-53.675	-69.451	-56.451	-13.000	PEAK
4	424.062	-12.973	-61.904	-74.877	-61.877	-13.000	PEAK
5	* 571.987	-9.855	-46.337	-56.192	-43.192	-13.000	PEAK
6	845.285	-7.868	-62.334	-70.203	-57.203	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSUPA_1732.6MHz_Link

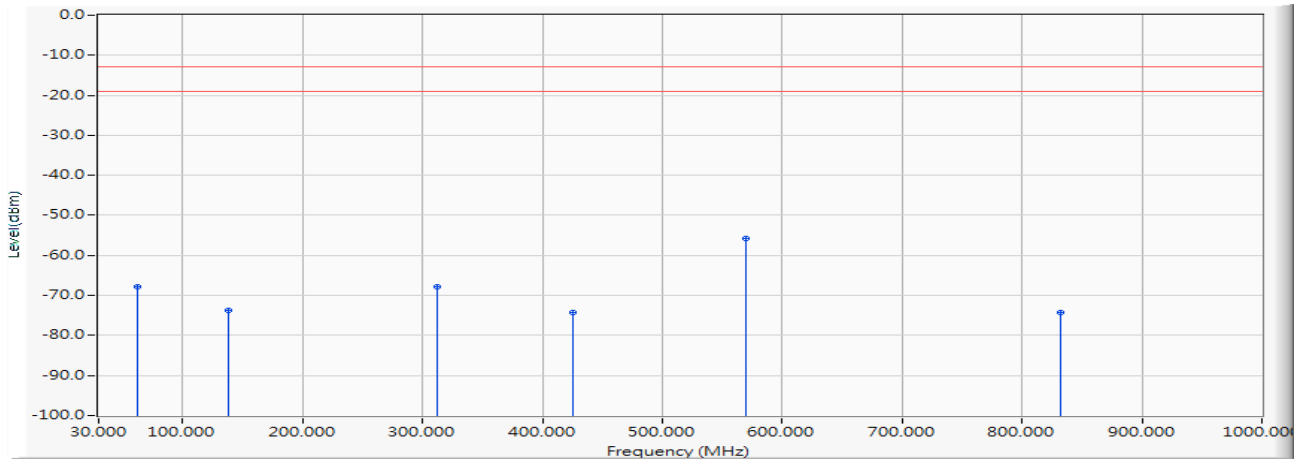


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.344	-25.864	-50.822	-76.686	-63.686	-13.000	PEAK
2	151.856	-20.458	-64.175	-84.634	-71.634	-13.000	PEAK
3	* 307.905	-17.917	-54.365	-72.282	-59.282	-13.000	PEAK
4	468.076	-13.719	-66.952	-80.672	-67.672	-13.000	PEAK
5	580.596	-11.222	-65.639	-76.862	-63.862	-13.000	PEAK
6	763.684	-9.371	-67.290	-76.661	-63.661	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSUPA_1732.6MHz_Link

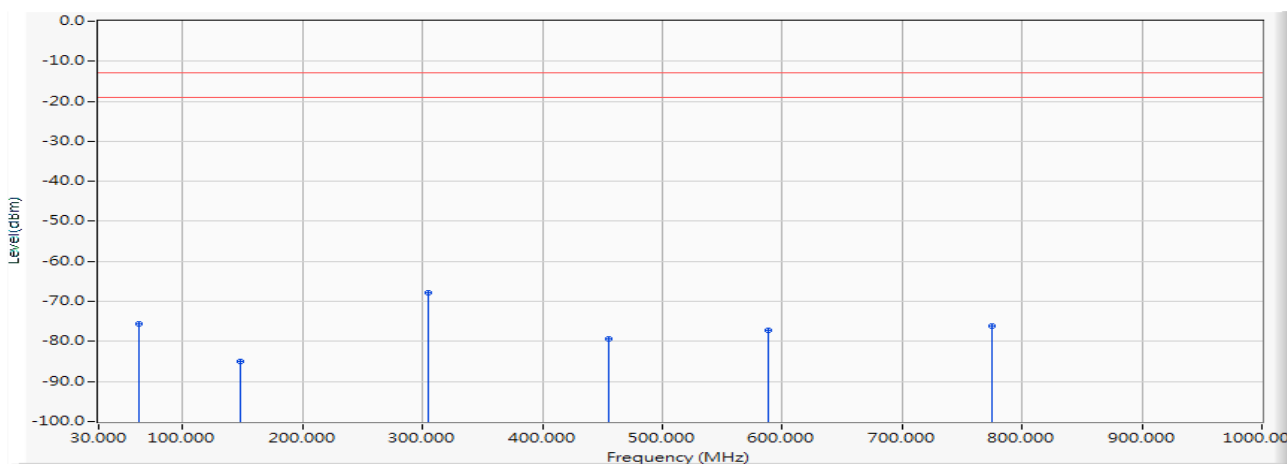


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	62.738	-23.722	-44.029	-67.751	-54.751	-13.000	PEAK
2	138.276	-16.428	-57.329	-73.757	-60.757	-13.000	PEAK
3	312.027	-15.930	-51.881	-67.811	-54.811	-13.000	PEAK
4	425.396	-13.008	-61.214	-74.222	-61.222	-13.000	PEAK
5	* 569.805	-9.896	-45.972	-55.868	-42.868	-13.000	PEAK
6	831.826	-7.607	-66.621	-74.228	-61.228	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_RMC_1732.6MHz_Idle

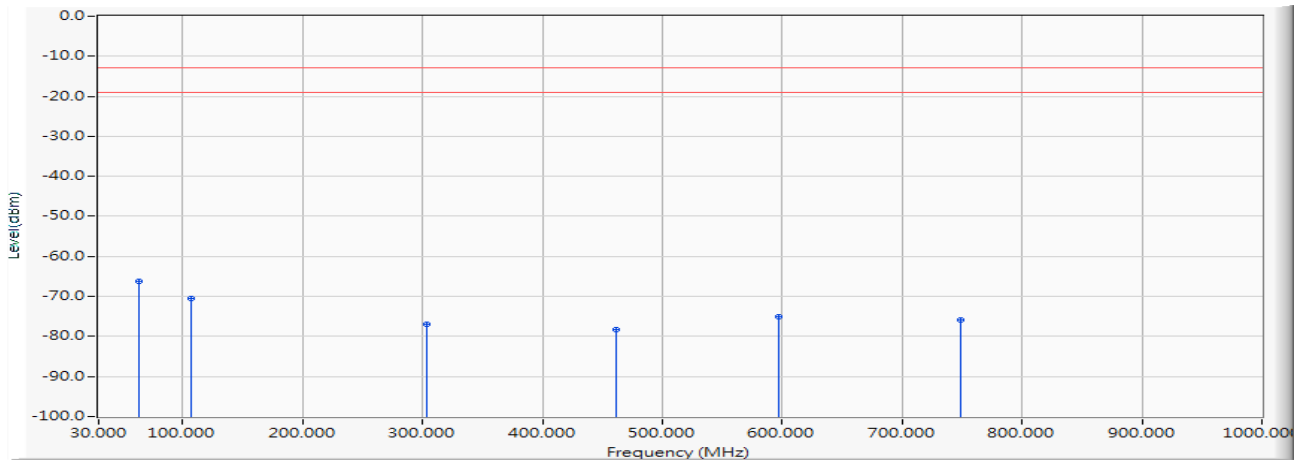


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.586	-25.852	-49.720	-75.572	-62.572	-13.000	PEAK
2	148.219	-20.451	-64.404	-84.854	-71.854	-13.000	PEAK
3	* 305.116	-17.867	-49.971	-67.837	-54.837	-13.000	PEAK
4	455.102	-13.647	-65.821	-79.468	-66.468	-13.000	PEAK
5	588.477	-11.282	-65.989	-77.270	-64.270	-13.000	PEAK
6	775.203	-9.336	-66.822	-76.158	-63.158	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_RMC_1732.6MHz_Idle

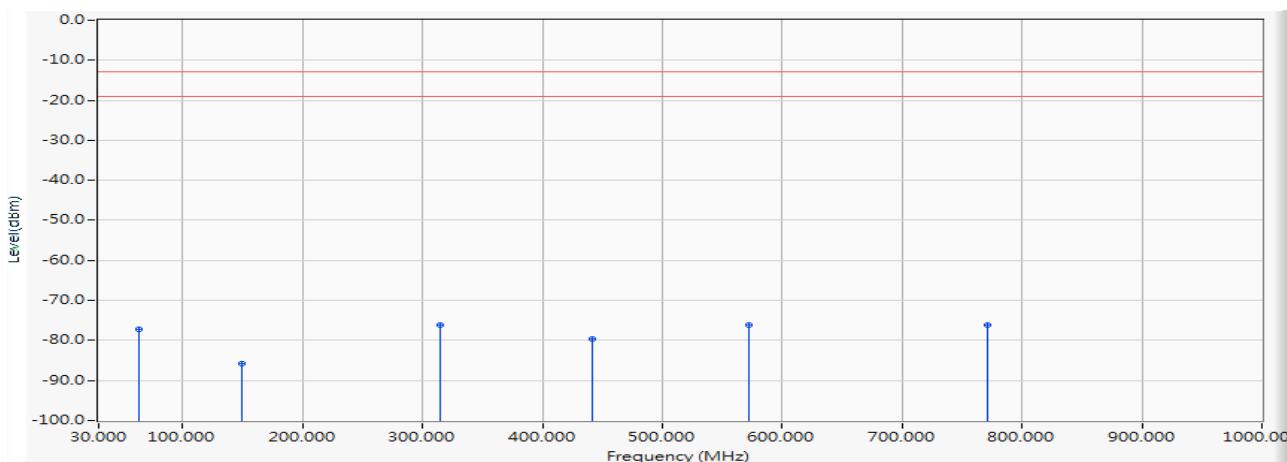


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	63.101	-23.709	-42.633	-66.341	-53.341	-13.000	PEAK
2		106.873	-13.585	-56.999	-70.584	-57.584	-13.000	PEAK
3		303.540	-16.296	-60.547	-76.844	-63.844	-13.000	PEAK
4		460.922	-12.011	-66.250	-78.262	-65.262	-13.000	PEAK
5		596.480	-9.758	-65.257	-75.014	-62.014	-13.000	PEAK
6		749.255	-8.223	-67.561	-75.784	-62.784	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSDPA_1732.6MHz_Idle

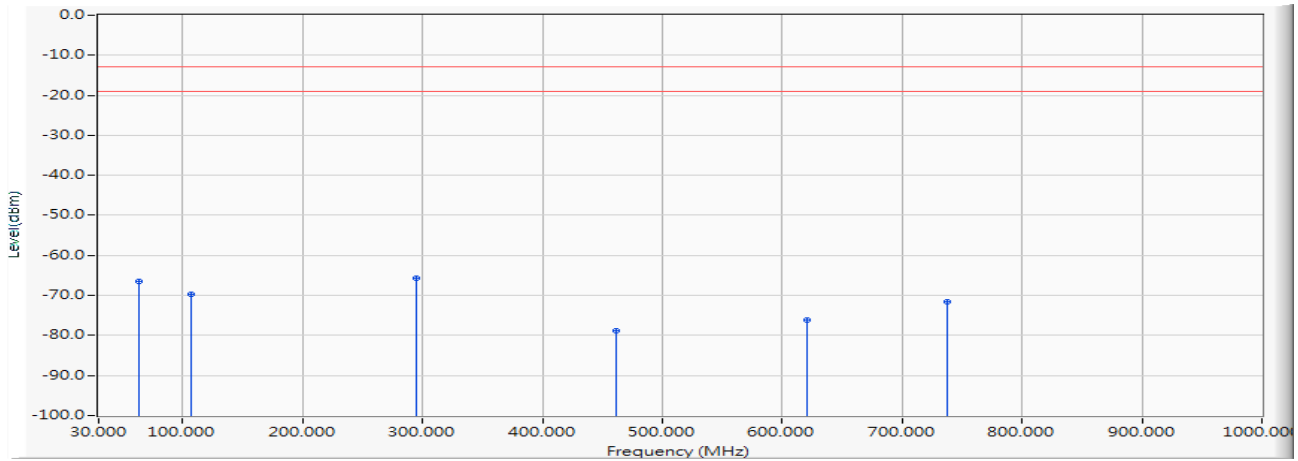


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.101	-25.876	-51.214	-77.090	-64.090	-13.000	PEAK
2	149.310	-20.397	-65.406	-85.802	-72.802	-13.000	PEAK
3	315.301	-17.713	-58.317	-76.029	-63.029	-13.000	PEAK
4	441.765	-13.096	-66.454	-79.550	-66.550	-13.000	PEAK
5	* 572.594	-10.809	-65.196	-76.006	-63.006	-13.000	PEAK
6	770.959	-9.089	-67.061	-76.150	-63.150	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSDPA_1732.6MHz_Idle

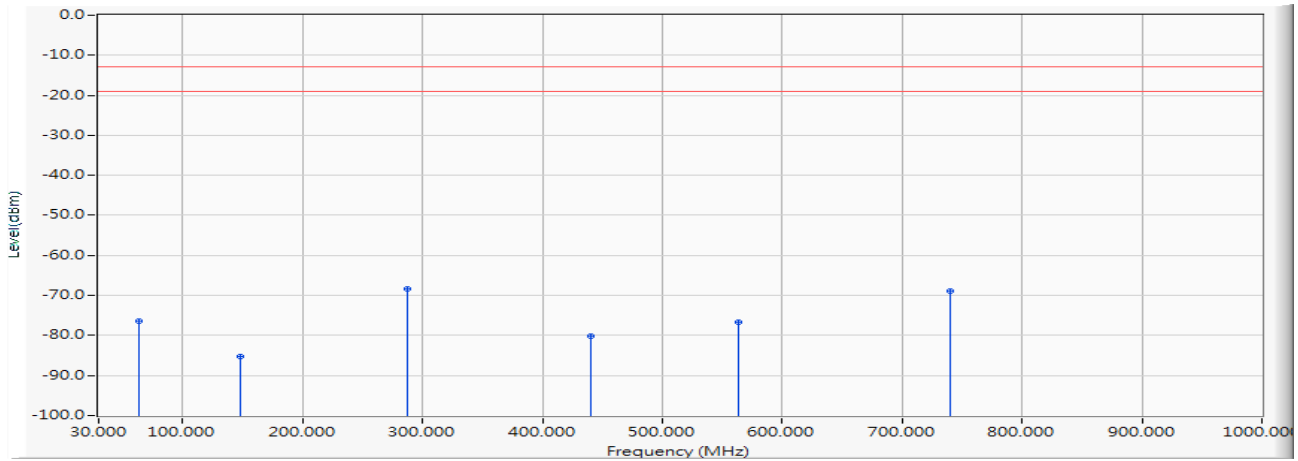


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.465	-23.695	-42.800	-66.494	-53.494	-13.000	PEAK
2	106.994	-13.588	-56.035	-69.623	-56.623	-13.000	PEAK
3	* 294.446	-16.753	-48.797	-65.550	-52.550	-13.000	PEAK
4	461.529	-12.006	-66.740	-78.746	-65.746	-13.000	PEAK
5	621.094	-9.234	-66.789	-76.023	-63.023	-13.000	PEAK
6	737.373	-8.398	-63.209	-71.608	-58.608	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSUPA_1732.6MHz_Idle

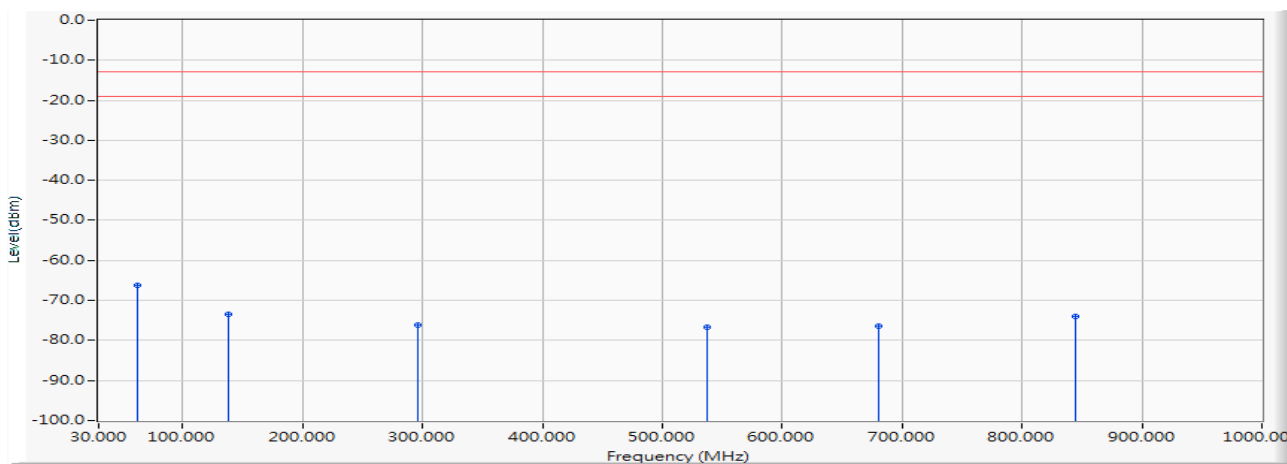


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	63.223	-25.870	-50.555	-76.425	-63.425	-13.000	PEAK
2	148.219	-20.451	-64.707	-85.157	-72.157	-13.000	PEAK
3	* 288.020	-17.726	-50.546	-68.272	-55.272	-13.000	PEAK
4	440.310	-13.040	-67.082	-80.122	-67.122	-13.000	PEAK
5	563.257	-10.720	-65.929	-76.649	-63.649	-13.000	PEAK
6	740.525	-10.066	-58.748	-68.814	-55.814	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 2: WCDMA Band 4_ HSUPA_1732.6MHz_Idle

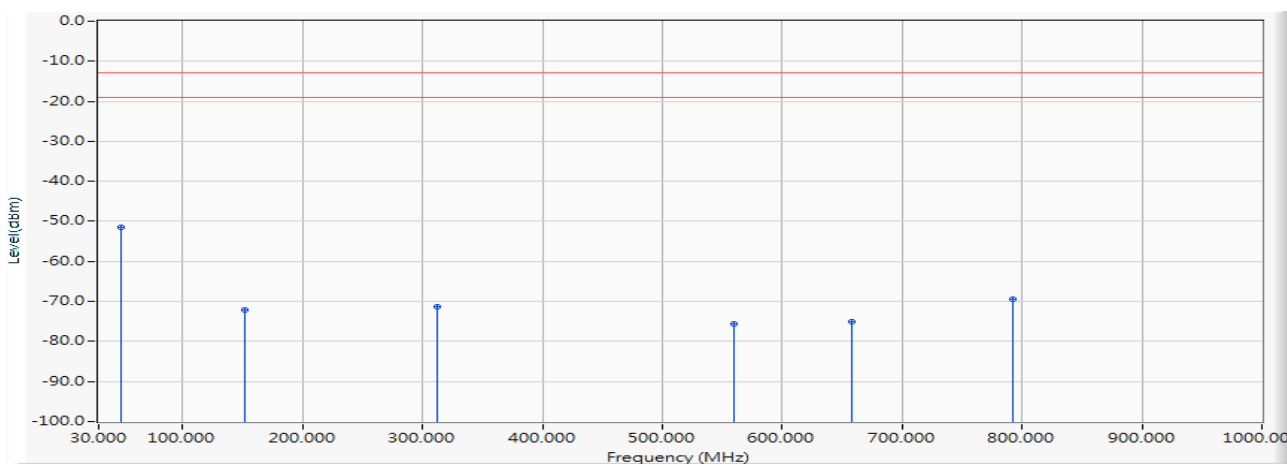


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	62.131	-23.745	-42.471	-66.216	-53.216	-13.000	PEAK
2		138.398	-16.437	-57.016	-73.452	-60.452	-13.000	PEAK
3		296.507	-16.636	-59.542	-76.178	-63.178	-13.000	PEAK
4		537.189	-9.429	-67.220	-76.650	-63.650	-13.000	PEAK
5		679.779	-9.613	-66.841	-76.455	-63.455	-13.000	PEAK
6		845.043	-7.871	-66.050	-73.920	-60.920	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_RMC_836.6MHz_Link

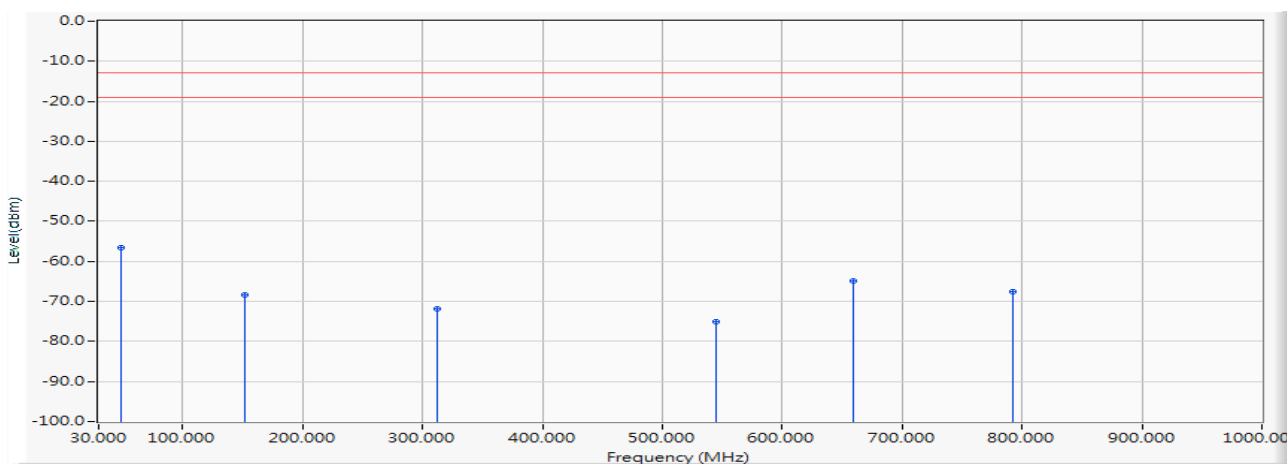


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.673	-23.285	-28.282	-51.567	-38.567	-13.000	PEAK
2		151.735	-20.455	-51.750	-72.205	-59.205	-13.000	PEAK
3		312.876	-17.816	-53.436	-71.252	-58.252	-13.000	PEAK
4		559.862	-10.750	-64.928	-75.679	-62.679	-13.000	PEAK
5		657.832	-11.036	-63.958	-74.994	-61.994	-13.000	PEAK
6		792.056	-9.607	-59.847	-69.454	-56.454	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_RMC_836.6MHz_Link

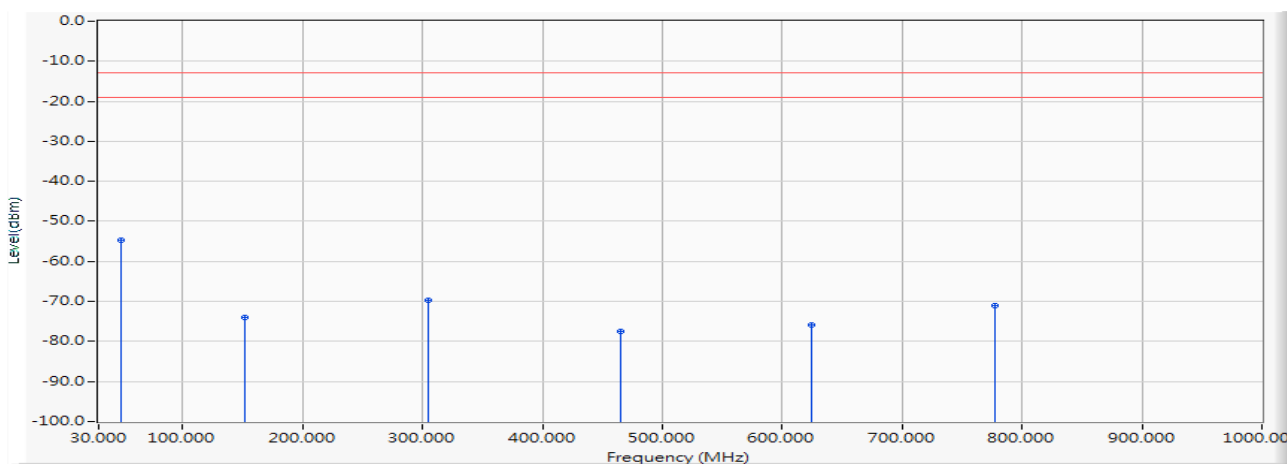


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.673	-26.882	-29.717	-56.599	-43.599	-13.000	PEAK
2		151.735	-17.478	-50.794	-68.272	-55.272	-13.000	PEAK
3		312.634	-15.896	-55.895	-71.792	-58.792	-13.000	PEAK
4		544.949	-9.418	-65.568	-74.986	-61.986	-13.000	PEAK
5		658.924	-9.565	-55.257	-64.823	-51.823	-13.000	PEAK
6		791.814	-8.453	-59.065	-67.519	-54.519	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSDPA_836.6MHz_Link

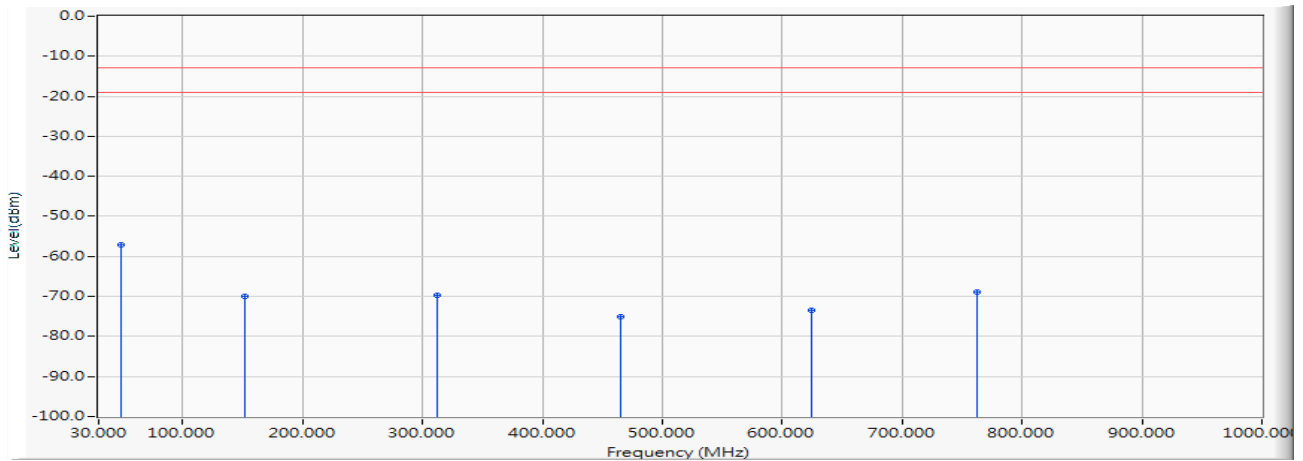


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.551	-23.239	-31.474	-54.713	-41.713	-13.000	PEAK
2		151.735	-20.455	-53.510	-73.965	-60.965	-13.000	PEAK
3		304.631	-17.857	-51.783	-69.640	-56.640	-13.000	PEAK
4		465.045	-13.774	-63.620	-77.394	-64.394	-13.000	PEAK
5		624.125	-10.495	-65.413	-75.908	-62.908	-13.000	PEAK
6		777.506	-9.470	-61.490	-70.960	-57.960	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSDPA_836.6MHz_Link

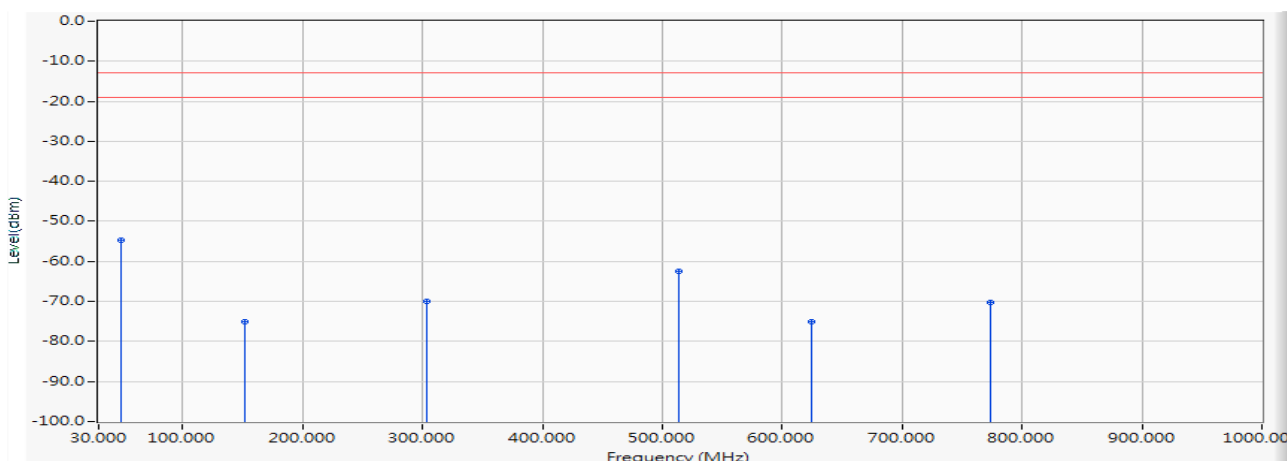


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.673	-26.882	-30.222	-57.104	-44.104	-13.000	PEAK
2		151.735	-17.478	-52.598	-70.076	-57.076	-13.000	PEAK
3		312.634	-15.896	-53.708	-69.605	-56.605	-13.000	PEAK
4		465.045	-11.973	-63.099	-75.072	-62.072	-13.000	PEAK
5		624.125	-9.197	-64.321	-73.518	-60.518	-13.000	PEAK
6		762.471	-8.370	-60.554	-68.924	-55.924	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSUPA_836.6MHz_Link

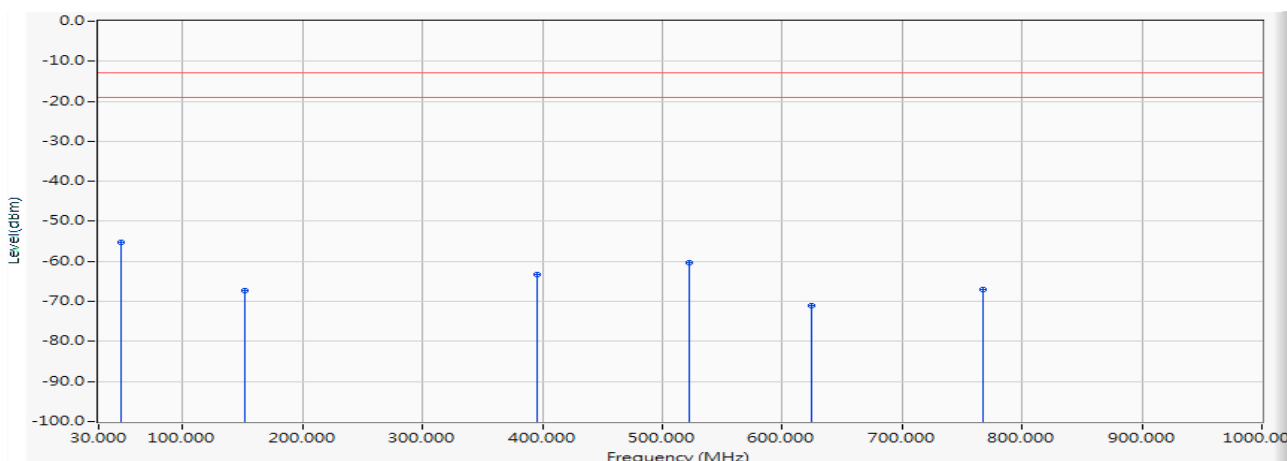


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.066	-23.055	-31.511	-54.566	-41.566	-13.000	PEAK
2		151.735	-20.455	-54.701	-75.156	-62.156	-13.000	PEAK
3		304.146	-17.849	-52.100	-69.949	-56.949	-13.000	PEAK
4		513.181	-12.200	-50.378	-62.578	-49.578	-13.000	PEAK
5		624.125	-10.495	-64.533	-75.028	-62.028	-13.000	PEAK
6		773.384	-9.230	-60.932	-70.162	-57.162	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSUPA_836.6MHz_Link

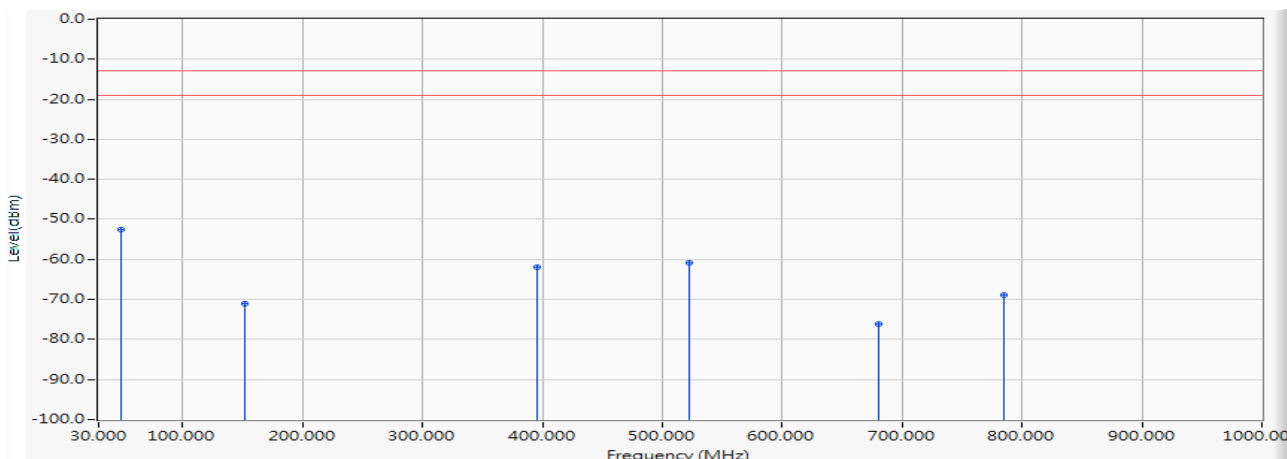


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.551	-26.943	-28.410	-55.353	-42.353	-13.000	PEAK
2		151.614	-17.465	-49.756	-67.221	-54.221	-13.000	PEAK
3		395.084	-13.618	-49.693	-63.311	-50.311	-13.000	PEAK
4		522.881	-10.792	-49.437	-60.229	-47.229	-13.000	PEAK
5		624.125	-9.197	-61.790	-70.987	-57.987	-13.000	PEAK
6		767.443	-8.403	-58.722	-67.125	-54.125	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_RMC_836.6MHz_Idle

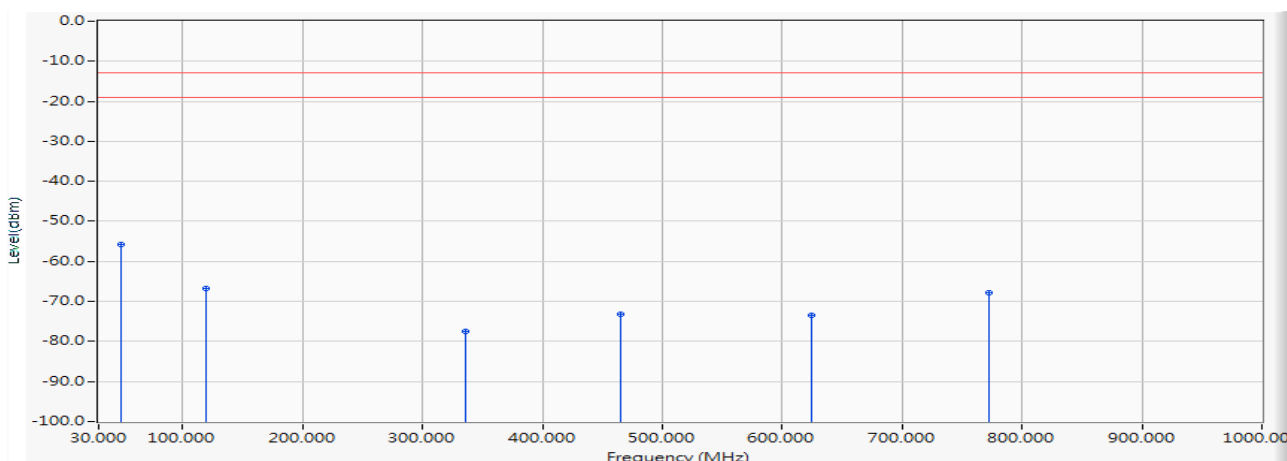


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.551	-23.239	-29.423	-52.662	-39.662	-13.000	PEAK
2		151.735	-20.455	-50.503	-70.958	-57.958	-13.000	PEAK
3		395.084	-14.747	-47.221	-61.968	-48.968	-13.000	PEAK
4		523.002	-12.066	-48.860	-60.926	-47.926	-13.000	PEAK
5		680.021	-9.900	-66.135	-76.034	-63.034	-13.000	PEAK
6		784.903	-9.583	-59.285	-68.868	-55.868	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_RMC_836.6MHz_Idle

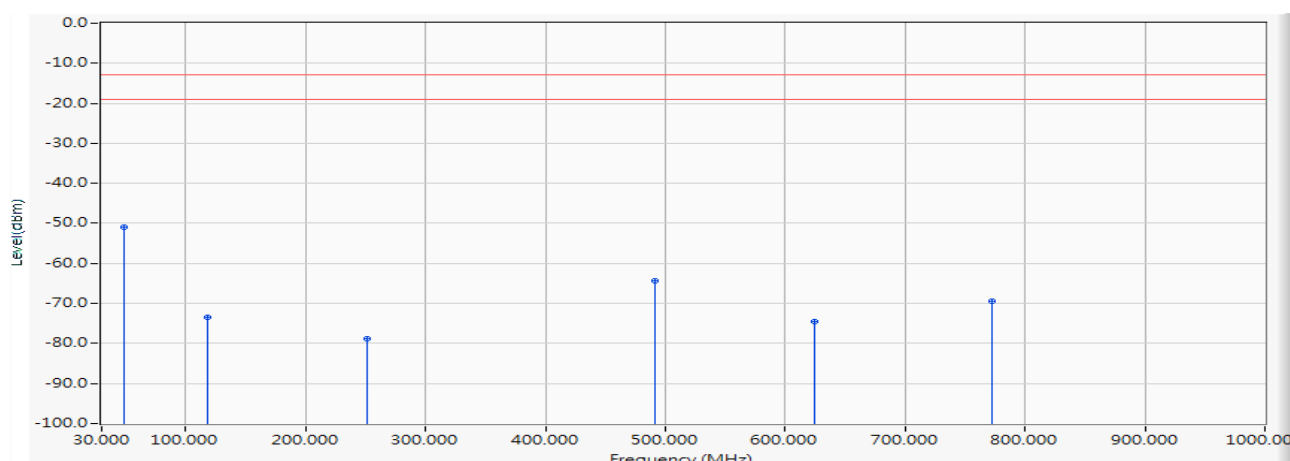


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.551	-26.943	-28.847	-55.790	-42.790	-13.000	PEAK
2		120.089	-13.572	-53.094	-66.666	-53.666	-13.000	PEAK
3		336.035	-15.411	-62.072	-77.484	-64.484	-13.000	PEAK
4		465.045	-11.973	-61.218	-73.191	-60.191	-13.000	PEAK
5		624.125	-9.197	-64.149	-73.346	-60.346	-13.000	PEAK
6		772.414	-8.472	-59.317	-67.789	-54.789	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSDPA_836.6MHz_Idle

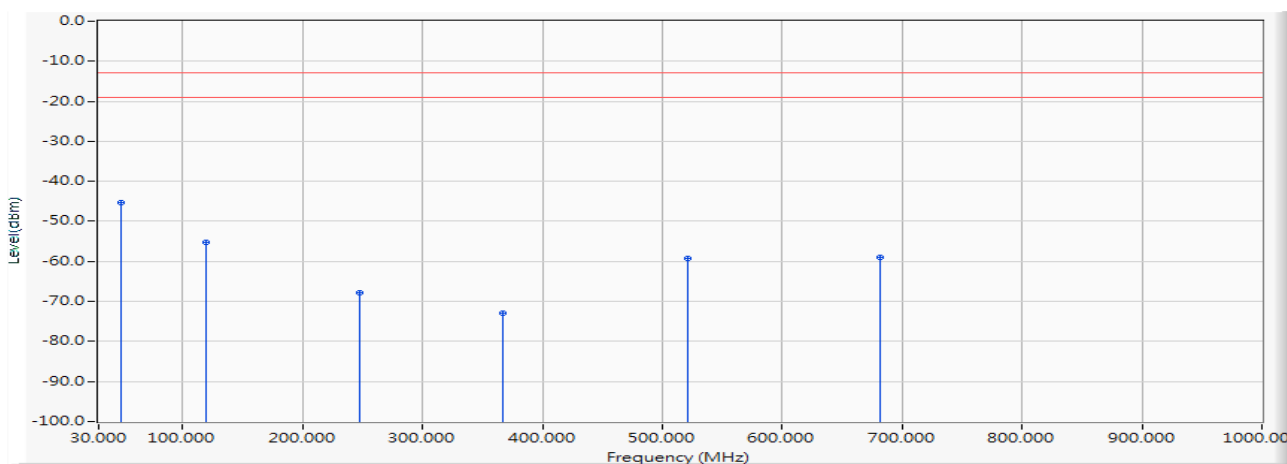


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.551	-23.239	-27.606	-50.845	-37.845	-13.000	PEAK
2		118.755	-19.659	-53.777	-73.436	-60.436	-13.000	PEAK
3		251.766	-16.793	-62.118	-78.911	-65.911	-13.000	PEAK
4		491.841	-13.035	-51.398	-64.433	-51.433	-13.000	PEAK
5		624.125	-10.495	-64.158	-74.653	-61.653	-13.000	PEAK
6		771.929	-9.146	-60.188	-69.333	-56.333	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSDPA_836.6MHz_Idle

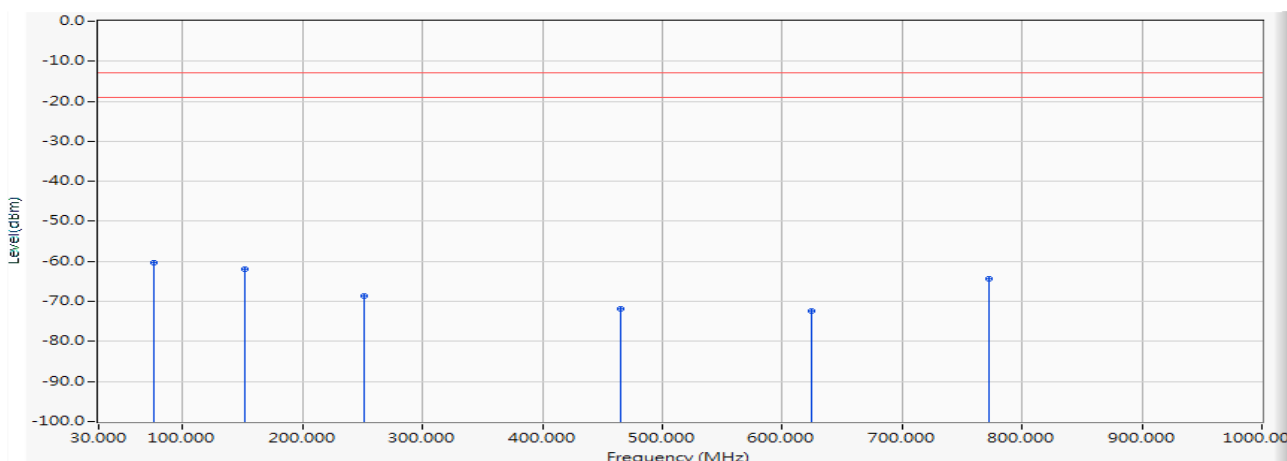


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.673	-26.882	-18.318	-45.200	-32.200	-13.000	PEAK
2		119.968	-13.565	-41.577	-55.142	-42.142	-13.000	PEAK
3		247.765	-17.261	-50.667	-67.928	-54.928	-13.000	PEAK
4		366.590	-14.663	-58.338	-73.001	-60.001	-13.000	PEAK
5		521.426	-10.902	-48.316	-59.218	-46.218	-13.000	PEAK
6		681.961	-9.589	-49.296	-58.885	-45.885	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - HORIZONTAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSUPA_836.6MHz_Idle

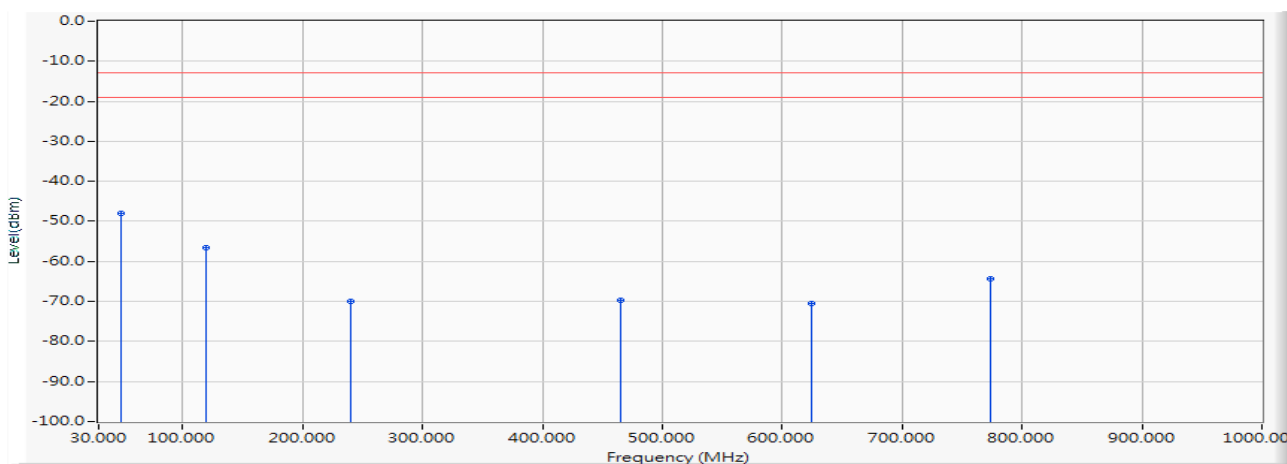


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	76.560	-23.578	-36.860	-60.439	-47.439	-13.000	PEAK
2		151.735	-20.455	-41.412	-61.867	-48.867	-13.000	PEAK
3		251.524	-16.828	-51.797	-68.626	-55.626	-13.000	PEAK
4		465.045	-13.774	-58.010	-71.784	-58.784	-13.000	PEAK
5		624.125	-10.495	-61.767	-72.262	-59.262	-13.000	PEAK
6		771.929	-9.146	-55.133	-64.278	-51.278	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site : DEKRA Taiwan CB2-H	Time : 2018/05/09
Limit : FCC_Part22/24_00M_00M_PK	Margin : 6
Probe : CB2_CE_Sub_30-1GHz_3M_0117 - VERTICAL	Power : DC 3.3V
EUT : LM960	Note : Mode 3: WCDMA Band 5_HSUPA_836.6MHz_Idle



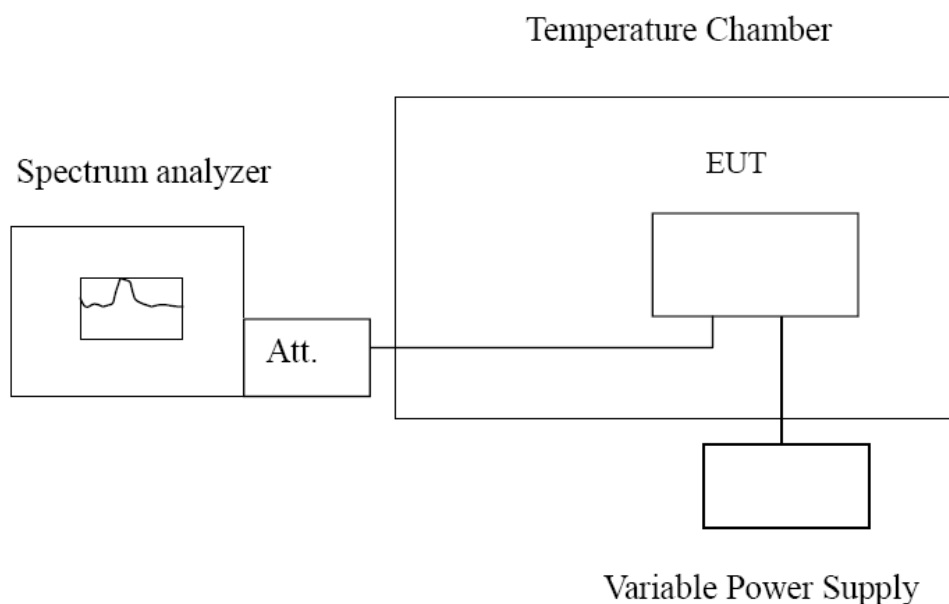
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	48.066	-27.185	-20.896	-48.081	-35.081	-13.000	PEAK
2		120.089	-13.572	-43.079	-56.651	-43.651	-13.000	PEAK
3		240.005	-18.285	-51.608	-69.893	-56.893	-13.000	PEAK
4		465.045	-11.973	-57.687	-69.660	-56.660	-13.000	PEAK
5		624.125	-9.197	-61.428	-70.625	-57.625	-13.000	PEAK
6		773.384	-8.494	-55.913	-64.407	-51.407	-13.000	PEAK

Note:

1. All Reading Levels is Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

8. Frequency Stability

8.1. Test Setup



8.2. Test Procedure

Frequency Stability under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Frequency Stability under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

8.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 9
ANSI C63.26-2015 Sub-clause 5.6

8.4. Test Result

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 2_1852.4MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	53	-0.0286
3.3	57	-0.0308
3.1	57	-0.0308

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	47	-0.0254
-20	41	-0.0222
-10	41	-0.0222
0	50	-0.0270
+10	48	-0.0259
+20	51	-0.0276
+30	56	-0.0303
+40	61	-0.0330
+50	61	-0.0330

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 2_1880MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	97	-0.0516
3.3	3	-0.0016
3.1	97	-0.0516

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	81	-0.0431
-20	82	-0.0436
-10	87	-0.0463
0	85	-0.0452
+10	82	-0.0436
+20	89	-0.0473
+30	98	-0.0521
+40	99	-0.0527
+50	96	-0.0511

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 1: WCDMA Band 2		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 2_1907.6MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	68	-0.0362
3.3	67	-0.0356
3.1	65	-0.0346

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	63	-0.0335
-20	61	-0.0324
-10	57	-0.0303
0	54	-0.0287
+10	62	-0.0330
+20	64	-0.0340
+30	68	-0.0362
+40	64	-0.0340
+50	65	-0.0346

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 4_1712.4MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	16	-0.0085
3.3	12	-0.0064
3.1	9	-0.0048

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	96	-0.0511
-20	5	-0.0027
-10	99	-0.0527
0	99	-0.0527
+10	4	-0.0021
+20	6	-0.0032
+30	6	-0.0032
+40	11	-0.0059
+50	8	-0.0043

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 4_1732.6MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	29	-0.0154
3.3	32	-0.0170
3.1	22	-0.0117

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	16	-0.0085
-20	19	-0.0101
-10	17	-0.0090
0	18	-0.0096
+10	91	-0.0484
+20	19	-0.0101
+30	26	-0.0138
+40	27	-0.0144
+50	22	-0.0117

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 2: WCDMA Band 4		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 4_1752.6MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	42	-0.0223
3.3	45	-0.0239
3.1	37	-0.0197

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	24	-0.0128
-20	24	-0.0128
-10	32	-0.0170
0	28	-0.0149
+10	32	-0.0170
+20	33	-0.0176
+30	43	-0.0229
+40	35	-0.0186
+50	43	-0.0229

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 5_826.4MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	56	-0.0298
3.3	56	-0.0298
3.1	47	-0.0250

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	42	-0.0223
-20	40	-0.0213
-10	36	-0.0191
0	36	-0.0191
+10	38	-0.0202
+20	45	-0.0239
+30	45	-0.0239
+40	51	-0.0271
+50	53	-0.0282

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 5_836.6MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	94	-0.0500
3.3	10	-0.0053
3.1	95	-0.0505

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	85	-0.0452
-20	84	-0.0447
-10	80	-0.0426
0	84	-0.0447
+10	85	-0.0452
+20	86	-0.0457
+30	96	-0.0511
+40	92	-0.0489
+50	96	-0.0511

Product	LM960		
Test Item	Frequency Stability		
Test Mode	Mode 3: WCDMA Band 5		
Date of Test	2018/05/07	Test Site	SR10-H

WCDMA_Band 5_846.6MHz

Voltage

DC Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.6	52	-0.0277
3.3	56	-0.0298
3.1	49	-0.0261

Temperature

Temperature	Frequency Error (Hz)	Frequency Error (ppm)
-30	40	-0.0213
-20	42	-0.0223
-10	45	-0.0239
0	40	-0.0213
+10	46	-0.0245
+20	46	-0.0245
+30	50	-0.0266
+40	53	-0.0282
+50	47	-0.0250