

Prüfbericht-Nr.: Test Report No.:	15076069 001	Auftrags-Nr.: Order No.:	154050305	Seite 1 von 54 Page 1 of 54
Kunden-Referenz-Nr.: Client Reference No.:	405064	Auftragsdatum: Order date:	05.05.2014	
Auftraggeber: Client:	Shanghai Huace Navigation Technology LTD. Building C, 599 Gaojing Road, Qingpu District, Shanghai, China			
Prüfgegenstand: Test item:	Handheld GNSS Data Collector			
Bezeichnung / Typ-Nr.: Identification / Type No.:	LT500XYZ FCC ID:SY4-B01004			
Auftrags-Inhalt: Order content:	Complete test			
Prüfgrundlage: Test specification:	FCC CFR47 Part 15, Subpart C ANSI C63.4-2009 KDB 558074 D01 DTS Meas Guidance v03r02 Public Notice DA 00-705: Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems (March 30, 2000)			
Wareneingangsdatum: Date of receipt:	05.05.2014			
Prüfmuster-Nr.: Test sample No.:	A02 and B02			
Prüfzeitraum: Testing period:	06.06.2014 – 20.09.2014			
Ort der Prüfung: Place of testing:	Bay Area Compliance Laboratories Corp.(Dongguan)			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von / tested by: 20.10.2014 Adrian Shi / PE Datum Name / Stellung Unterschrift Date Name / Position Signature		kontrolliert von / reviewed by: 15.12.2014 Sam Lin / TC Datum Name / Stellung Unterschrift Date Name / Position Signature		
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				



TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT*RESULT: Pass***5.1.2 PEAK OUTPUT POWER***RESULT: Pass***5.1.3 20dB BANDWIDTH AND 99% BANDWIDTH***RESULT: Pass***5.1.4 6dB BANDWIDTH AND 99% BANDWIDTH***RESULT: Pass***5.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHz BANDWIDTH***RESULT: Pass***5.1.6 POWER SPECTRAL DENSITY***RESULT: Pass***5.1.7 SPURIOUS EMISSION***RESULT: Pass***5.1.8 FREQUENCY SEPARATION***RESULT: Pass***5.1.9 NUMBER OF HOPPING FREQUENCY***RESULT: Pass***5.1.10 TIME OF OCCUPANCY***RESULT: Pass***5.1.11 CONDUCTED EMISSIONS***RESULT: Pass*

Contents

1.	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS	4
2.	TEST SITES	4
2.1	TEST FACILITIES	4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3	TRACEABILITY	6
2.4	CALIBRATION	6
2.5	MEASUREMENT UNCERTAINTY.....	6
3.	GENERAL PRODUCT INFORMATION	7
3.1	PRODUCT FUNCTION AND INTENDED USE.....	7
3.2	RATINGS AND SYSTEM DETAILS	7
3.3	INDEPENDENT OPERATION MODES	9
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	9
3.5	SUBMITTED DOCUMENTS	9
4.	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	10
4.5	TEST SETUP DIAGRAM	11
5.	TEST RESULTS	13
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	13
5.1.1	<i>Antenna Requirement</i>	<i>13</i>
5.1.2	<i>Peak Output Power</i>	<i>14</i>
5.1.3	<i>20dB Bandwidth and 99% Bandwidth.....</i>	<i>16</i>
5.1.4	<i>6dB Bandwidth and 99% Bandwidth.....</i>	<i>17</i>
5.1.5	<i>Conducted Spurious Emissions measured in 100kHz Bandwidth</i>	<i>18</i>
5.1.6	<i>Power spectral density</i>	<i>34</i>
5.1.7	<i>Spurious Emission</i>	<i>35</i>
5.1.8	<i>Frequency Separation.....</i>	<i>42</i>
5.1.9	<i>Number of hopping frequency.....</i>	<i>45</i>
5.1.10	<i>Time of Occupancy.....</i>	<i>47</i>
5.1.11	<i>Conducted emissions</i>	<i>48</i>
6.	PHOTOGRAPHS OF THE TEST SET-UP	52
7.	LIST OF TABLES	54
8.	LIST OF PHOTOGRAPHS	54

1. General Remarks

1.1 Complementary Materials

Nall

2. Test Sites

2.1 Test Facilities

Bay Area Compliance Laboratories Corp.(Dongguan)

No69, Pulongcun, Puxinhu Industrisl Zone, Tangxia, Dongguan, Guangdong, China

The used test equipment is in accordance with CISPR 16 for measurement of radio interference.

The Federal Communications Commission has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance with the requirements of section 2.948 of the FCC rules. The description of the test facility is listed under FCC registration number 273710.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Spurious Emissions					
R&S	EMI Test Receiver	ESCI	100224	2014-05-09	2015-05-09
Sunol Sciences	Antenna	JB3	A060611-3	2014-07-28	2017-07-27
HP	Amplifier	8447E	2434A02181	2014-09-01	2015-09-01
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09
ETS LINDGREN	Horn Antenna	3115	000 527 35	2012-09-06	2015-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2014-02-19	2015-02-19
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2014-06-16	2017-06-15
Quinstar	Amplifier	QLW-1840553 6-JO	15964001001	2014-09-06	2015-09-06
Radio Spectrum Test					
Agilent	Wideband Power Sensor	N1921A	MY54210016	2013-12-12	2014-12-12
Agilent	Wideband Power Sensor	N1921A	MY54170013	2013-12-12	2014-12-12
Agilent	P-Series Power Meter	N1912A	MY5000448	2013-12-12	2014-12-12
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09
Conducted Emission					
R&S	EMI Test Receiver	ESCS 30	830245/006	2013-11-20	2014-11-20
R&S	L.I.S.N	ESH3-Z5	843331/015	N/A	N/A
R&S	Two-line V-network	ENV 216	3560.6550.12	2014-01-22	2015-01-22
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61dB
Unwanted Emissions, conducted	±2.47dB
All emissions, radiated	30-1GHz: ±5.0dB
	Above 1GHz: ±5.23dB
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±0.4%
Time	1%

3. General Product Information

3.1 Product Function and Intended Use

The EUT is Handheld GNSS Data Collector with Wi-Fi & Bluetooth function.

The Applicant declares that the model LT500XYZ. X is variable, it indicated A-Z or 0-9, Y is variable, it indicated A-Z, 0-9 or blank, Z is variable, it indicated A-Z, 0-9 or blank. Due to sales purpose in different countries or regions. The internal PCB design are no difference, but only distinct in colours and model names. The test model name is LT500H.

For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of Bluetooth (BDR & EDR mode)

Technical Specification	Value
Kind of Equipment	Handheld GNSS Data Collector
Type Designation	LT500XYZ
Extreme Temperature Range	-30~+70°C
Operation Voltage	DC 15V
Operating Frequency band	2402 – 2480MHz
Channel separation	1MHz
Modulation	GFSK, 8DPSK, $\pi/4$ DQPSK
Bluetooth version	2.1+EDR
Antenna Gain	1dBi

Table 4: RF channel and frequency of Bluetooth (BDR & EDR mode)

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	2402.00	21	2423.00	42	2444.00	63	2465.00
1	2403.00	22	2424.00	43	2445.00	64	2466.00
2	2404.00	23	2425.00	44	2446.00	65	2467.00
3	2405.00	24	2426.00	45	2447.00	66	2468.00
4	2406.00	25	2427.00	46	2448.00	67	2469.00
5	2407.00	26	2428.00	47	2449.00	68	2470.00
6	2408.00	27	2429.00	48	2450.00	69	2471.00
7	2409.00	28	2430.00	49	2451.00	70	2472.00
8	2410.00	29	2431.00	50	2452.00	71	2473.00

9	2411.00	30	2432.00	51	2453.00	72	2474.00
10	2412.00	31	2433.00	52	2454.00	73	2475.00
11	2413.00	32	2434.00	53	2455.00	74	2476.00
12	2414.00	33	2435.00	54	2456.00	75	2477.00
13	2415.00	34	2436.00	55	2457.00	76	2478.00
14	2416.00	35	2437.00	56	2458.00	77	2479.00
15	2417.00	36	2438.00	57	2459.00	78	2480.00
16	2418.00	37	2439.00	58	2460.00		
17	2419.00	38	2440.00	59	2461.00		
18	2420.00	39	2441.00	60	2462.00		
19	2421.00	40	2442.00	61	2463.00		
20	2422.00	41	2443.00	62	2464.00		

Table 5: Technical Specification of Wi-Fi

Item	Description		
	IEEE 802.11b	IEEE 802.11g	IEEE 802.11n (HT20)
Operating Frequency band (MHz)	2412 ~ 2462	2412 ~ 2462	2412 ~ 2462
Channel Number	11	11	11
Modulation	DSSS, CCK	OFDM	OFDM
Data Rate (Mbps)	1, 2, 5, 11	6, 9, 12, 18, 24, 36, 48, 54	6.5, 13.0, 19.5, 26.0, 39.0, 52.0, 58.5, 65.0 (MCS0 ~ MCS7)
Antenna Gain	2dBi		
Media Access Protocol	CSMA/CA with ACK	CSMA/CA with ACK	CSMA/CA with ACK

Table 6: Carrier Frequency of Wi-Fi

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400 – 2483.5 MHz	1	2412 MHz	8	2447 MHz
	2	2417 MHz	9	2452 MHz
	3	2422 MHz	10	2457 MHz
	4	2427 MHz	11	2462 MHz
	5	2432 MHz		
	6	2437 MHz		
	7	2442 MHz		

3.3 Independent Operation Modes

The basic operation modes are:

- A. On
 - 1. Bluetooth mode (BDR & EDR mode)
 - a. Transmitting
 - i. Low Channel
 - ii. Middle Channel
 - iii. High Channel
 - b. Receiving
 - 2. Wi-Fi mode
 - a. Transmitting
 - i. Low Channel
 - ii. Middle Channel
 - iii. High Channel
 - b. Receiving
- B. Standby
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- | | |
|--------------------|----------------------|
| - Bill of Material | - Circuit Diagram |
| - PCB Layout | - Instruction Manual |
| - Photo Document | - Rating Label |

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4:2009.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	S/N
Laptop	DELL	PP11L	QDS-BRCM1017
Printer	HP	C3941A	JPTVOB2337
Keyboard	DELL	L100	CNORH656658907BL05DC
Modem	SAST	AEM-2100	0293

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

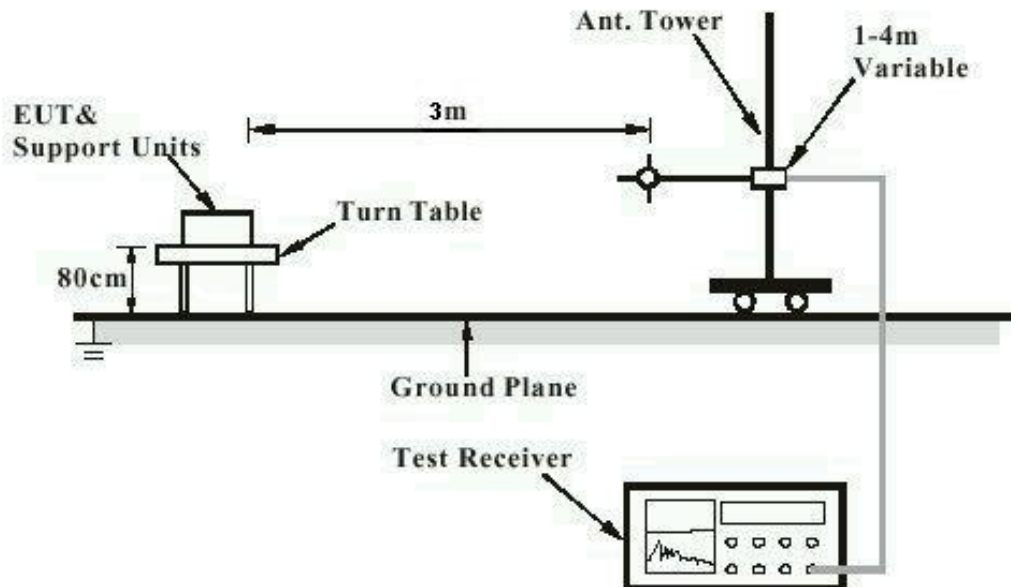


Diagram of Measurement Equipment Configuration for Conduction Measurement

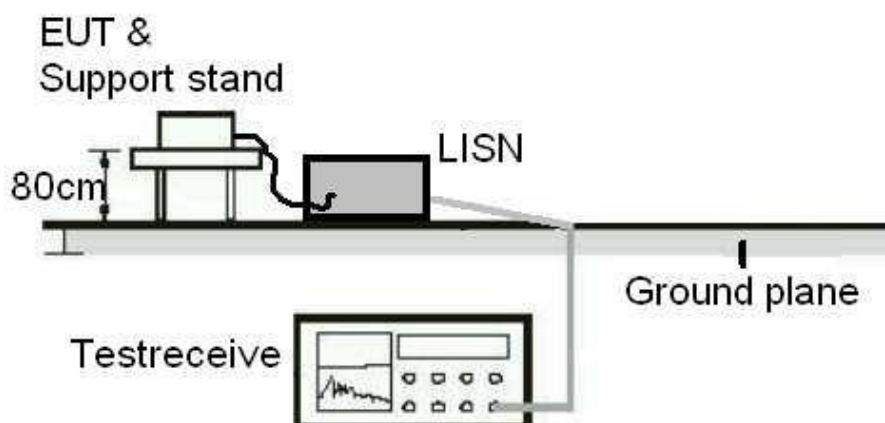
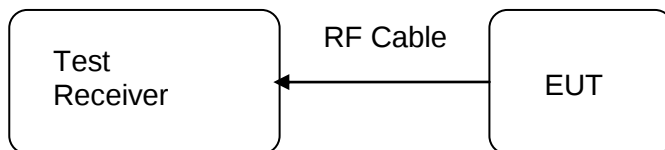


Diagram of Measurement Equipment Configuration for Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Pass**

Test standard : FCC Part 15.247(b)(4) and Part 15.203
Limit The use of antennas with directional gains that do not exceed 6dBi

According to the manufacturer declared, the EUT has two chip antennas, the directional gain of antennas is 1dBi for Bluetooth and 2dBi for WIFI, and the antenna connectors are designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

5.1.2 Peak Output Power

RESULT:
Pass

Test date : 2014-06-09
 Test standard : FCC Part 15.247(b)(1)
 FCC Part 15.247(b)(3)
 Basic standard : ANSI C63.4: 2009
 Clause 9.1 of KDB 558074 v03r02
 Limit : 125mW, 1W
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A.1.a, A.2.a
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 7: Test result of Peak Output Power of Buletooth (BDR mode)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2402	-1.10	30
Middle Channel	2441	-0.81	30
High Channel	2480	-0.20	30

Table 8: Test result of Peak Output Power of Bluetooth (EDR mode)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2402	-3.24	21
Middle Channel	2441	-2.91	21
High Channel	2480	-2.36	21

Table 9: Test result of Peak Output Power of Wi-F (802.11b)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2412	13.54	30
Middle Channel	2437	12.88	30
High Channel	2462	12.60	30

Prüfbericht - Nr.: 15076069 001

Test Report No.

Seite 15 von 54

Page 15 of 54

Table 10: Test result of Peak Output Power of Wi-Fi (802.11g)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2412	13.02	30
Middle Channel	2437	12.28	30
High Channel	2462	12.17	30

Table 11: Test result of Peak Output Power of Wi-Fi (802.11n)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2412	13.18	30
Middle Channel	2437	12.35	30
High Channel	2462	12.02	30

5.1.3 20dB Bandwidth and 99% Bandwidth

RESULT:
Pass

Date of testing : 2014-06-09
 Test standard : FCC Part 15.247(a)(1)
 Basic standard : ANSI C63.4: 2009
 Public Notice DA 00-705
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A.1.a
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 12: Test result of 20dB & 99% Bandwidth of BDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	0.939	0.872
Mid Channel	2441	0.939	0.874
High Channel	2480	0.945	0.874

Table 13: Test result of 20dB & 99% Bandwidth of EDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	1.201	1.138
Mid Channel	2441	1.203	1.136
High Channel	2480	1.201	1.142

5.1.4 6dB Bandwidth and 99% Bandwidth

RESULT:
Pass

Date of testing : 2014-07-22
 Test standard : FCC Part 15.247(a)(2)
 Basic standard : ANSI C63.4: 2009
 Clause 8 of KDB 558074 v03r02
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A.2.a
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 14: Test result of 6dB & 99% Bandwidth of 802.11b

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2412	9.53	13.71
Mid Channel	2437	9.06	13.79
High Channel	2462	9.54	13.71

Table 15: Test result of 6dB & 99% Bandwidth of 802.11g

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2412	15.31	16.43
Mid Channel	2437	15.39	16.43
High Channel	2462	15.31	16.43

Table 16: Test result of 6dB & 99% Bandwidth of 802.11n

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2412	15.39	17.64
Mid Channel	2437	15.87	17.64
High Channel	2462	15.39	17.55

Prüfbericht - Nr.: 15076069 001

Test Report No.

Seite 18 von 54

Page 18 of 54

5.1.5 Conducted Spurious Emissions measured in 100kHz Bandwidth**RESULT:****Pass**

Date of testing	:	2014-06-09 & 2014-07-23
Test standard	:	FCC part 15.247(d) RSS-210 A8.5
Basic standard	:	ANSI C63.4: 2009
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);
Kind of test site	:	Shield room

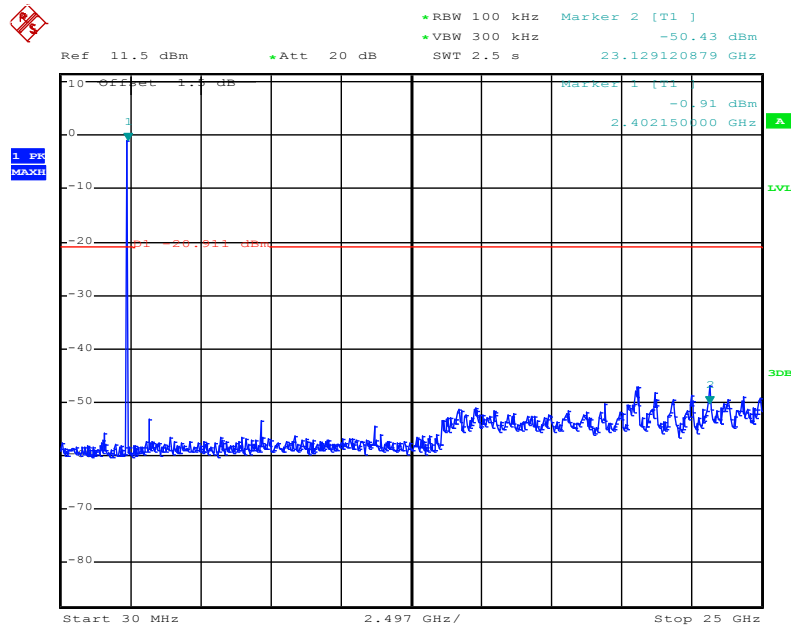
Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A.1.a, A.2.a
Ambient temperature	:	25°C
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

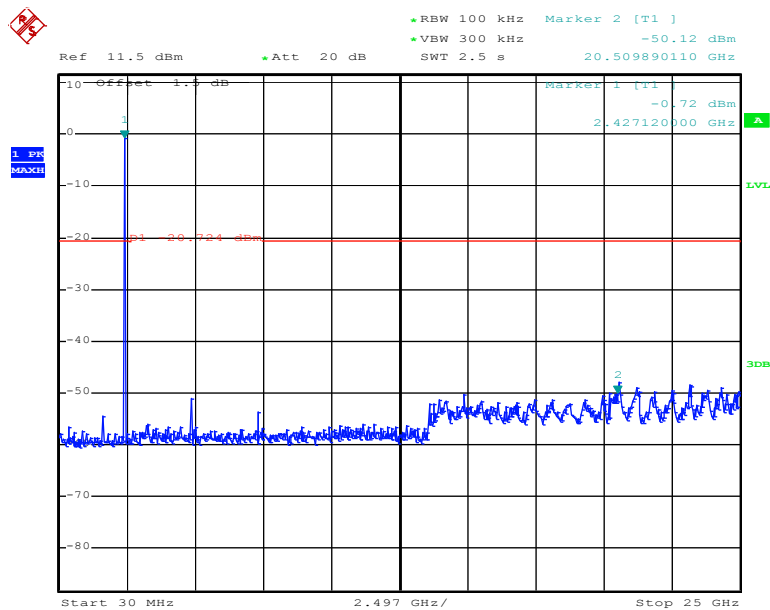
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of BDR mode

Low Channel



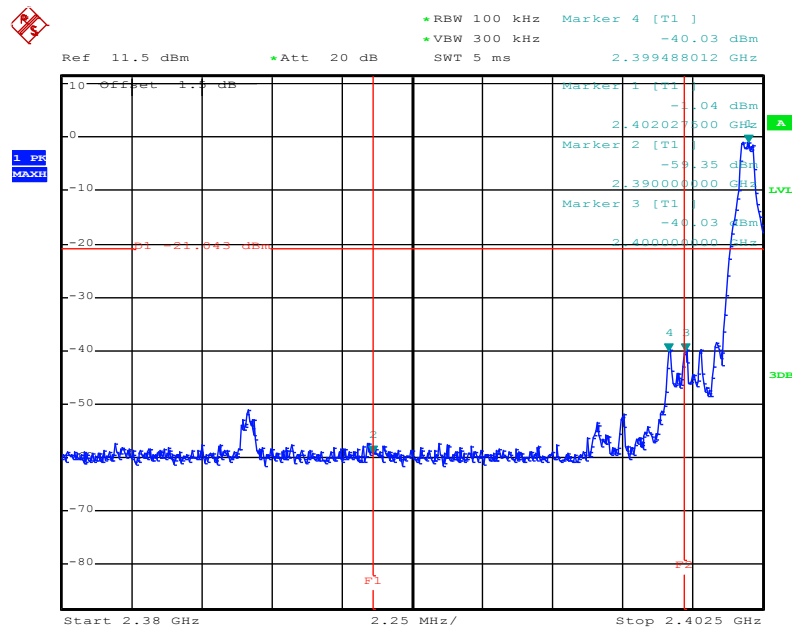
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Middle Channel

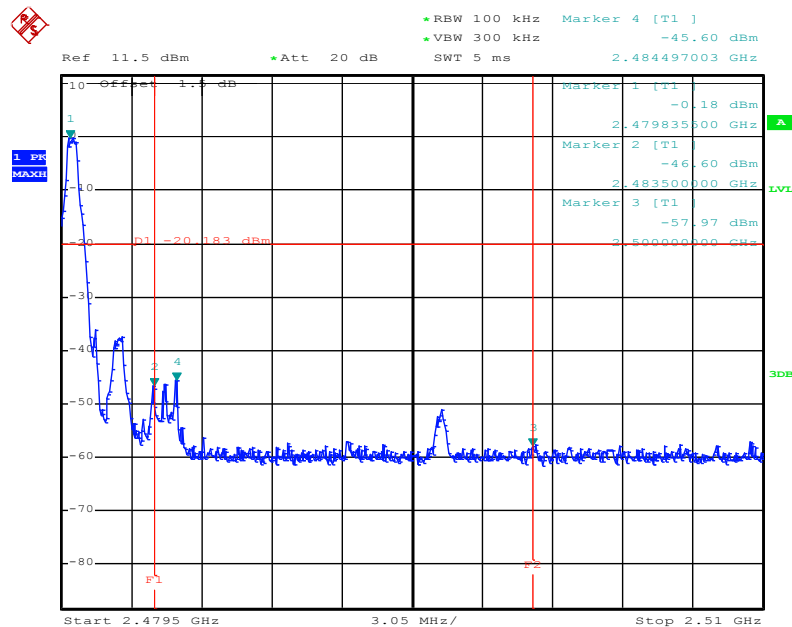


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Band Edge


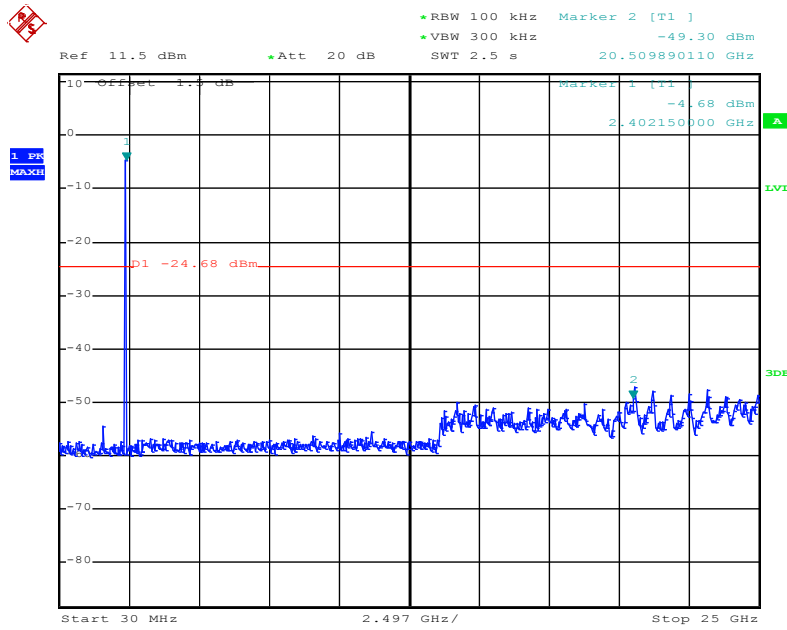
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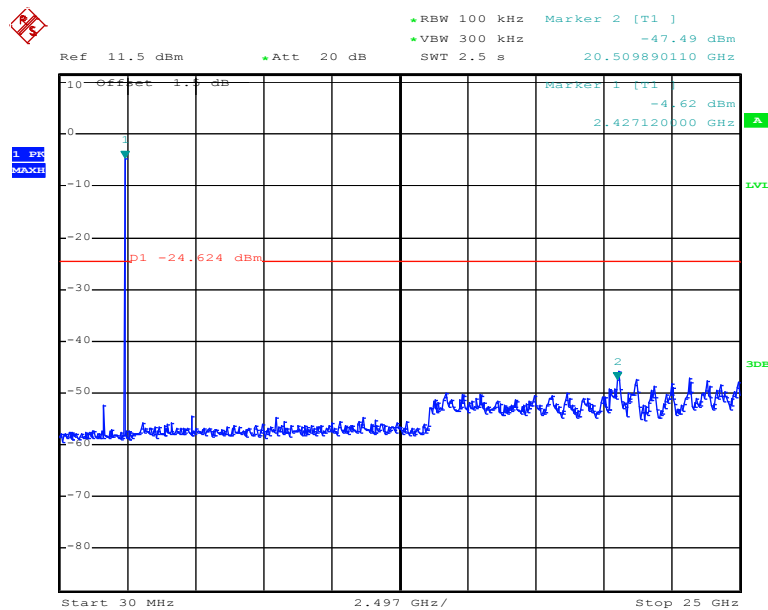
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of EDR mode

Low Channel

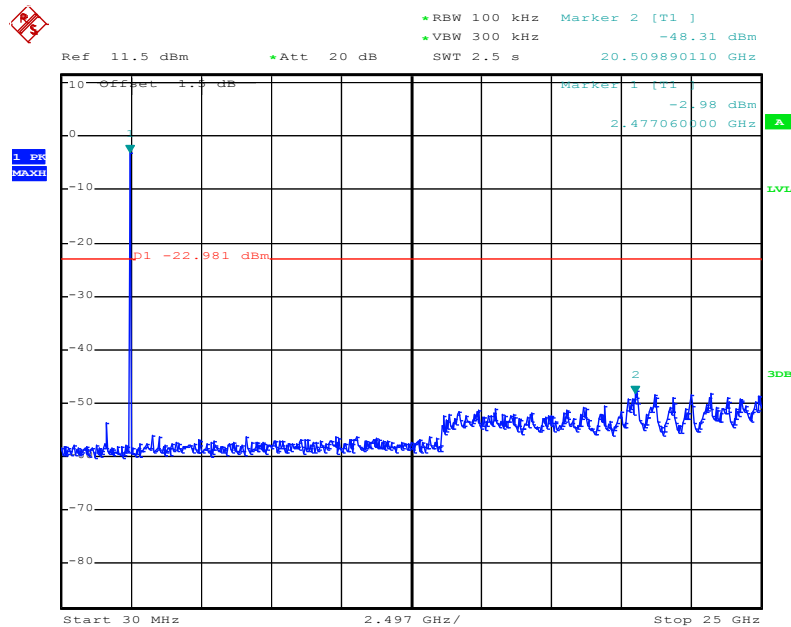


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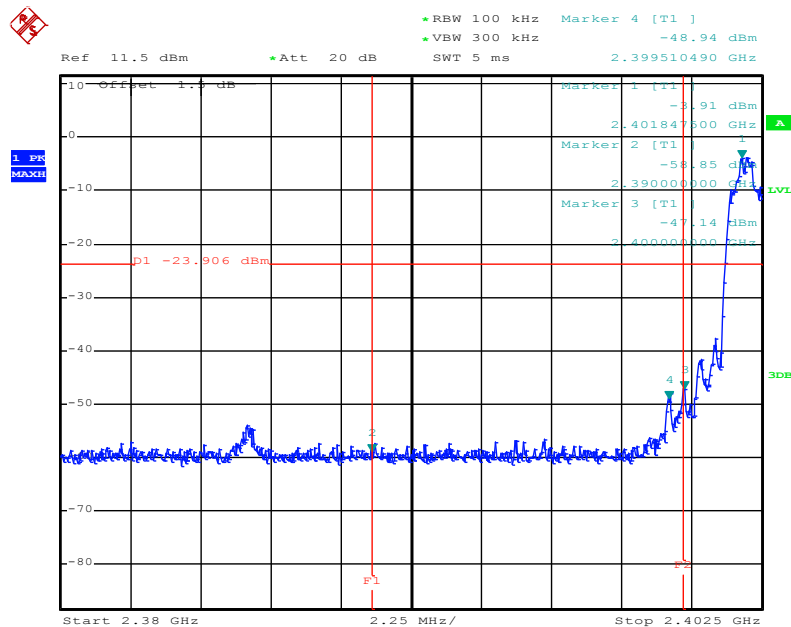
Middle Channel



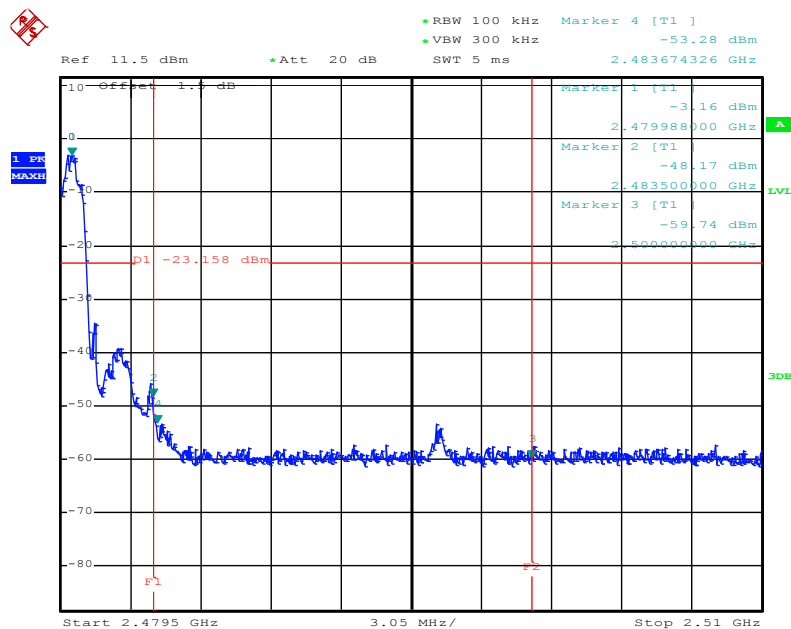
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High Channel


Date: 9.JUN.2014 14:35:59

Band Edge


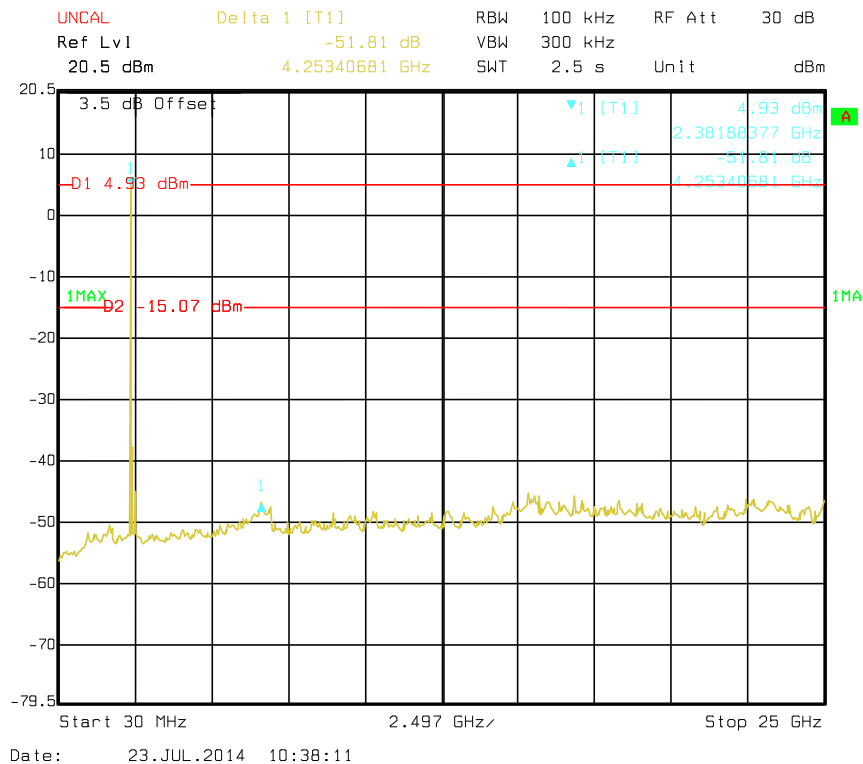
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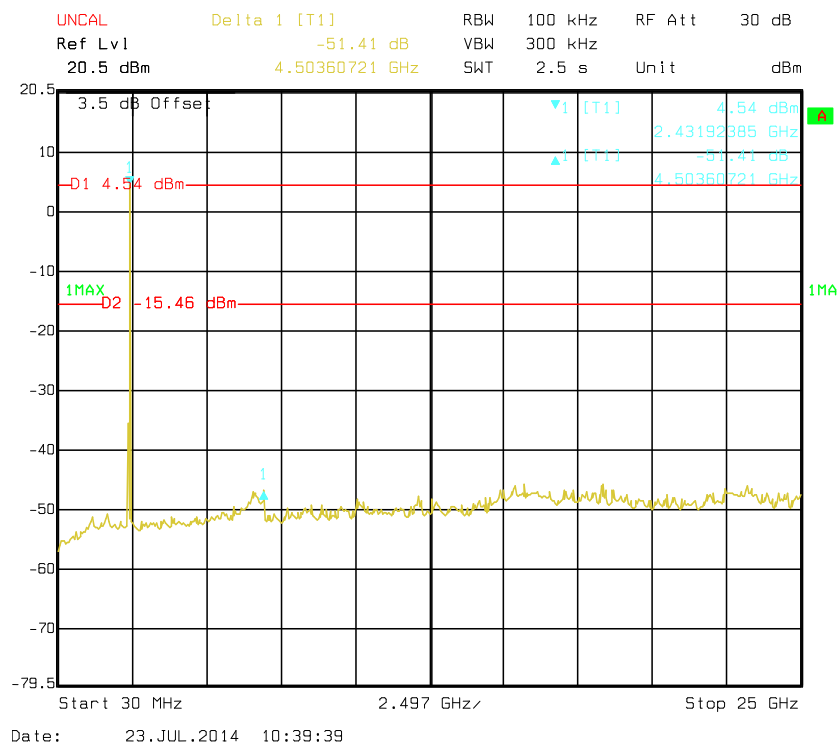
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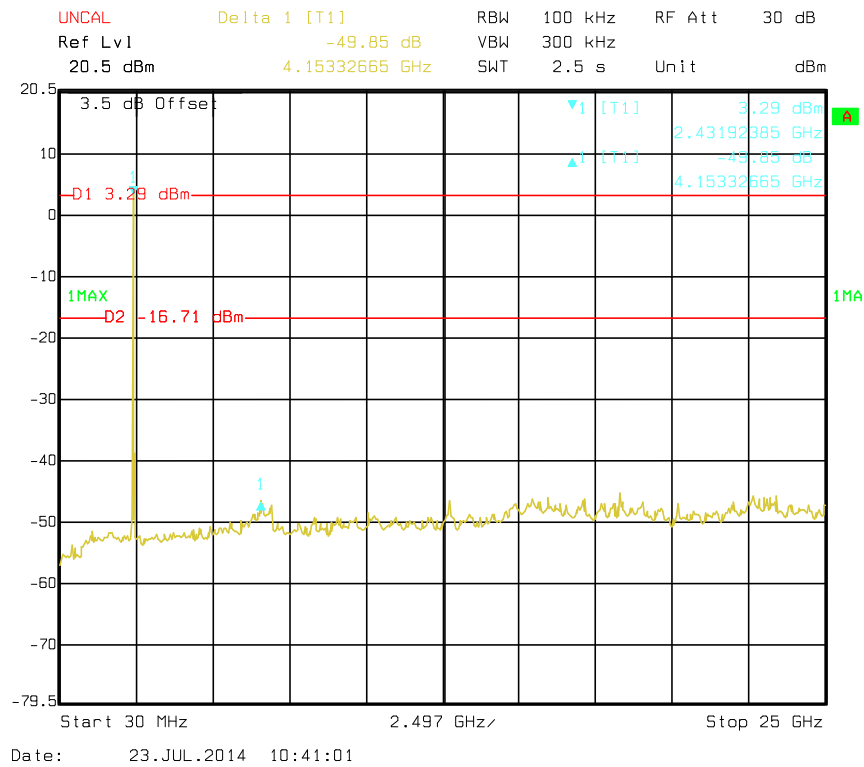
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of 802.11b

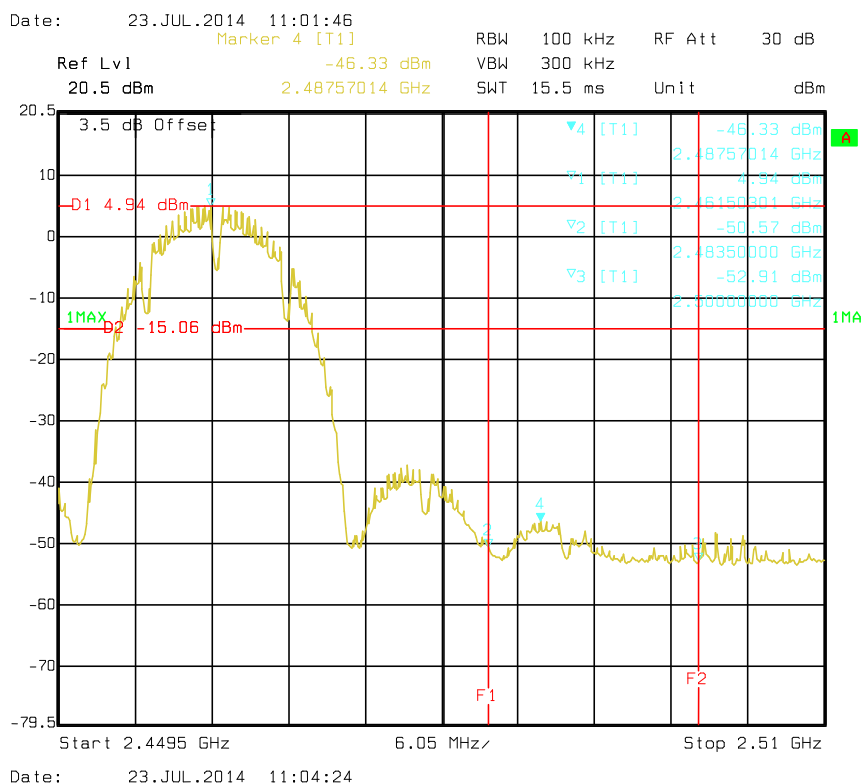
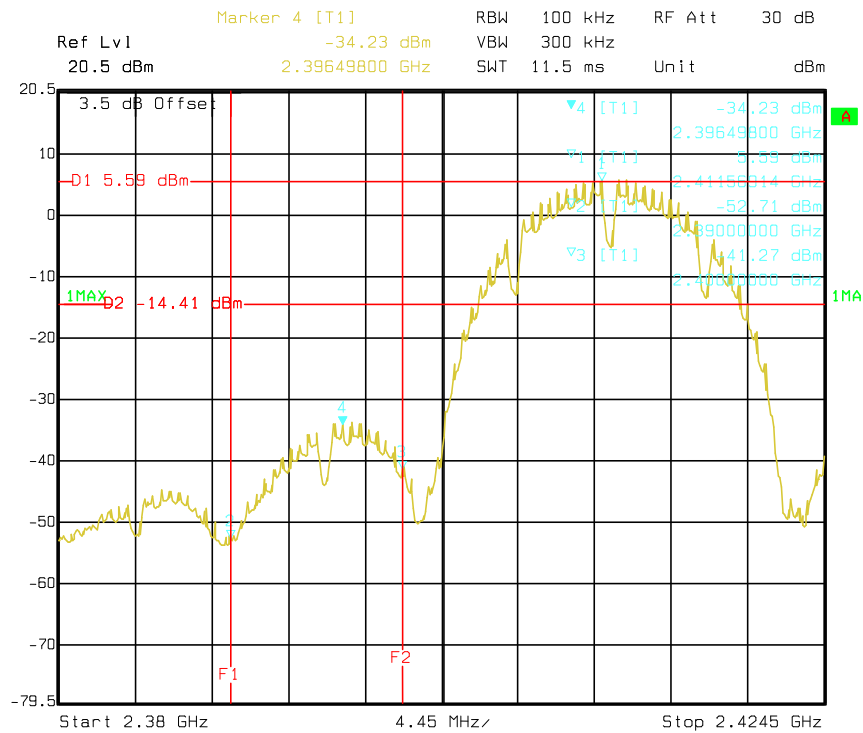
Low Channel



Middle Channel

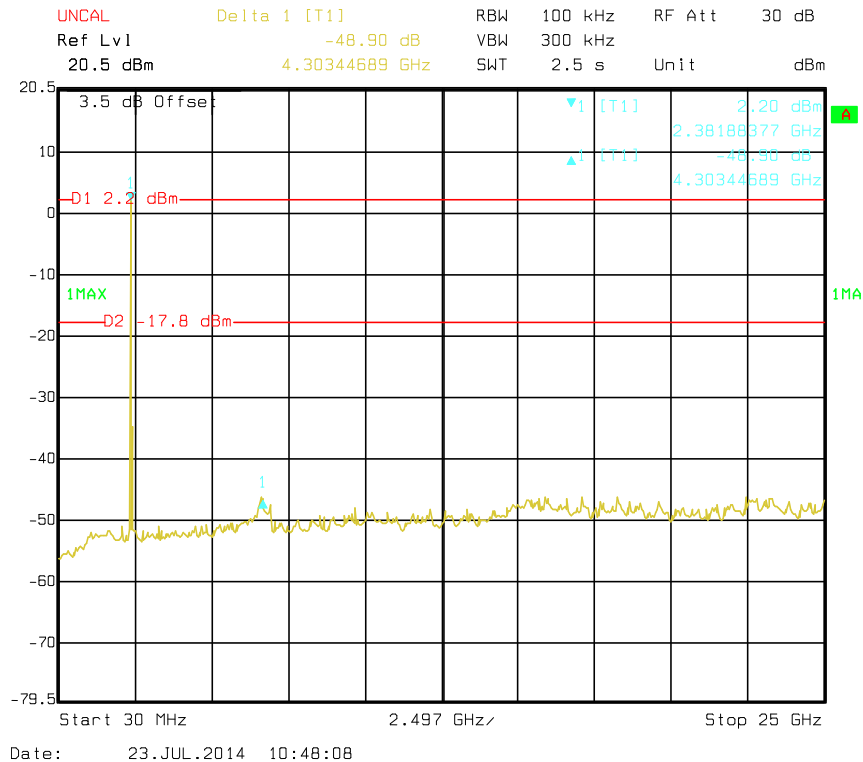


High Channel


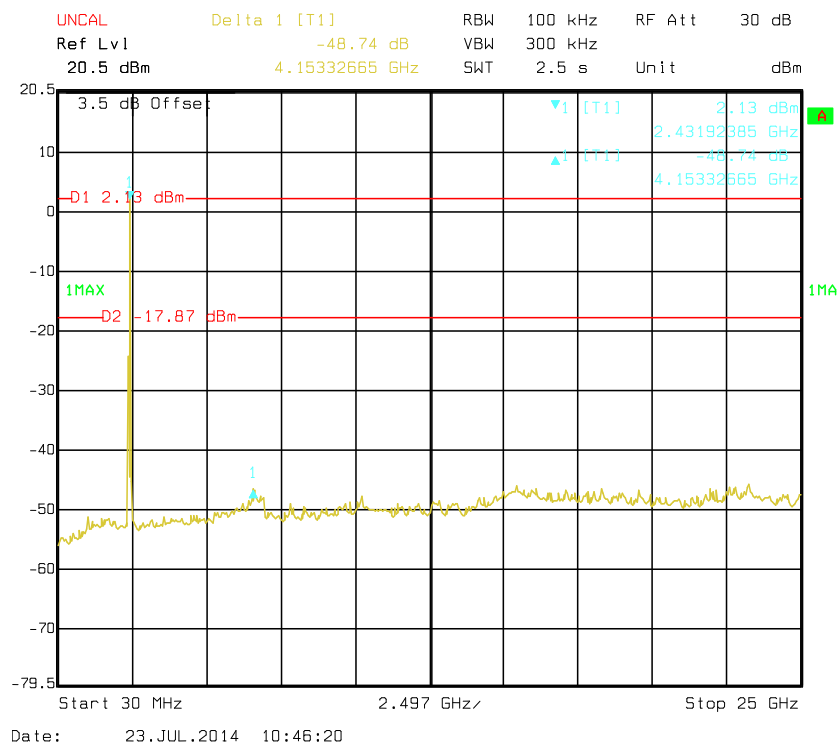
Band Edge


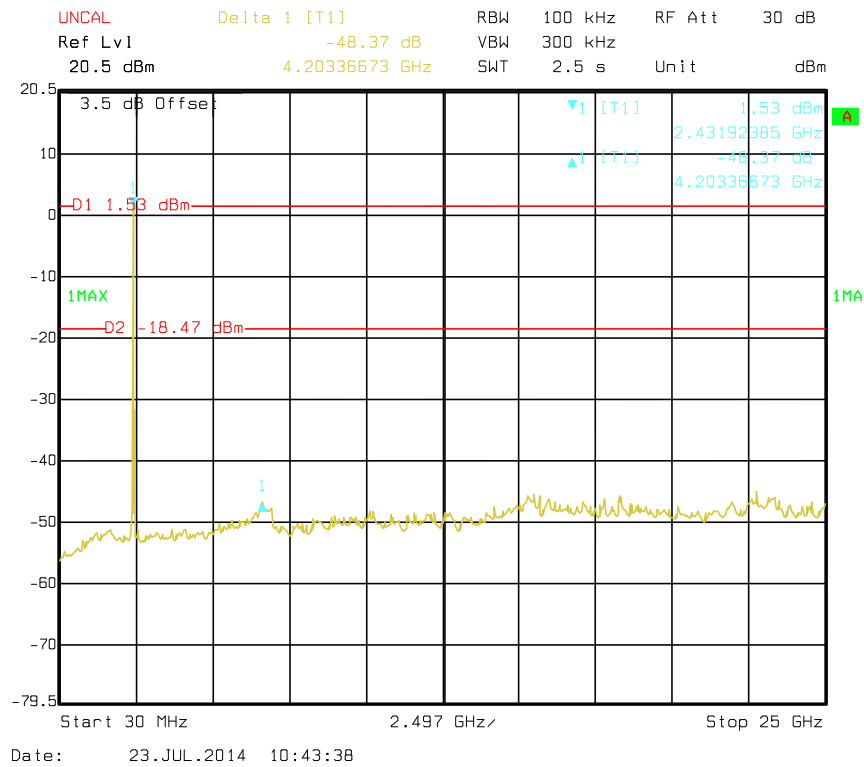
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of 802.11g

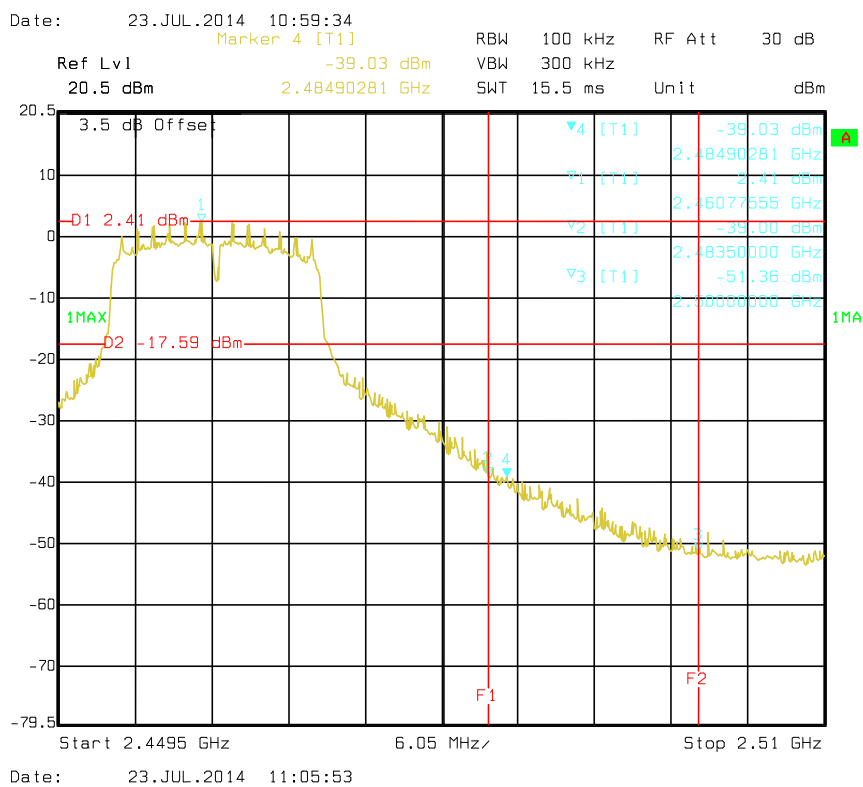
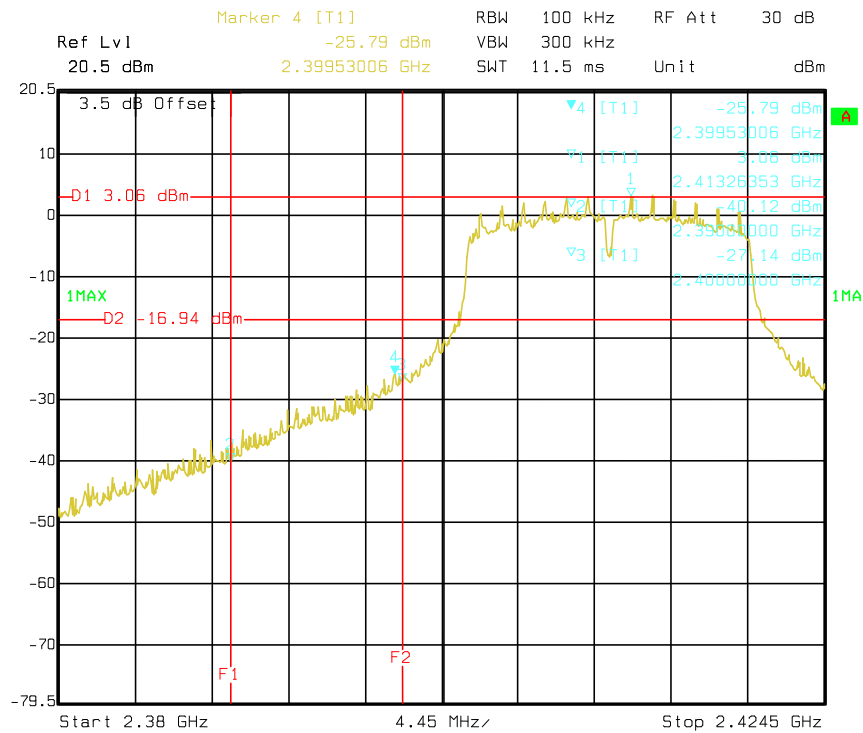
Low Channel



Middle Channel

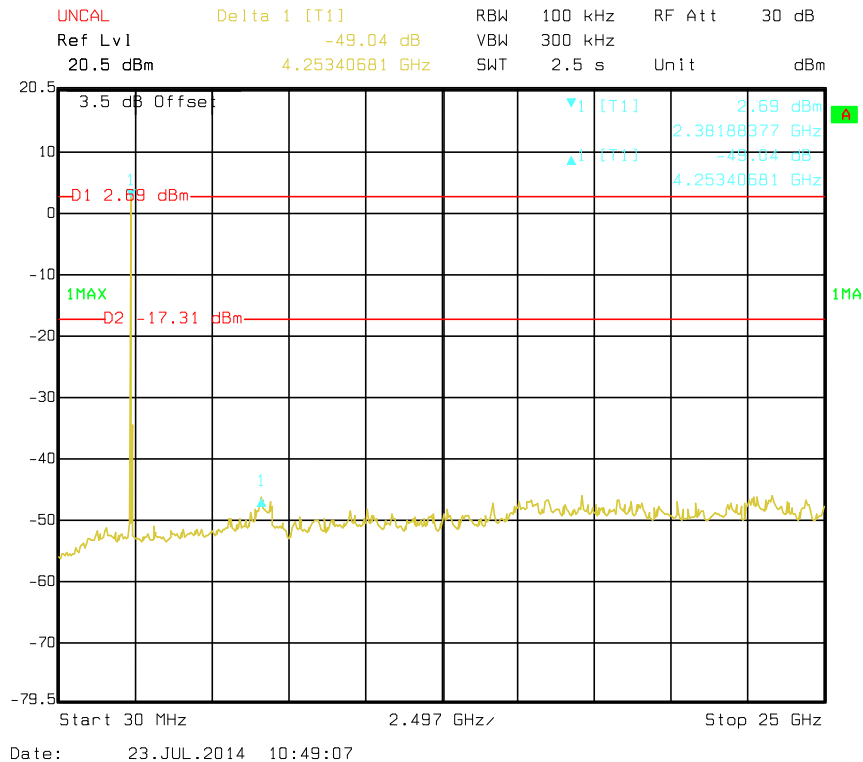


High Channel


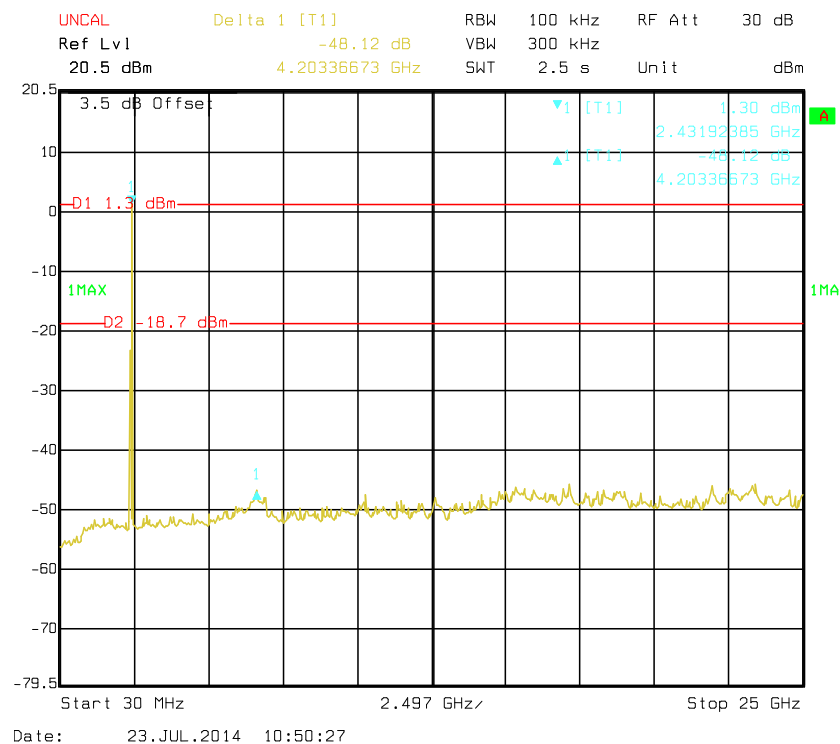
Band Edge


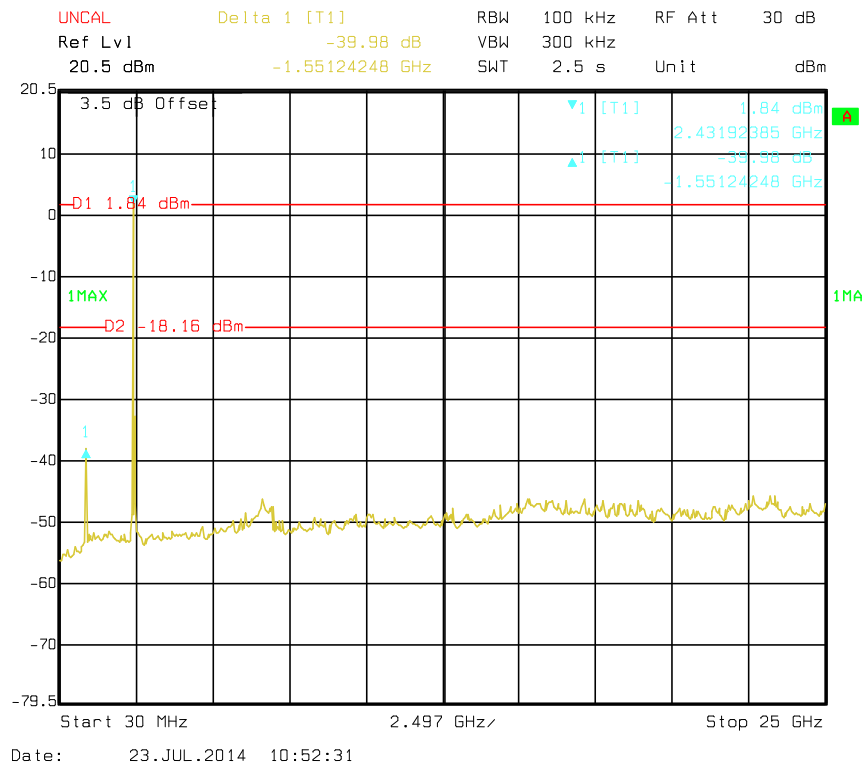
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of 802.11n

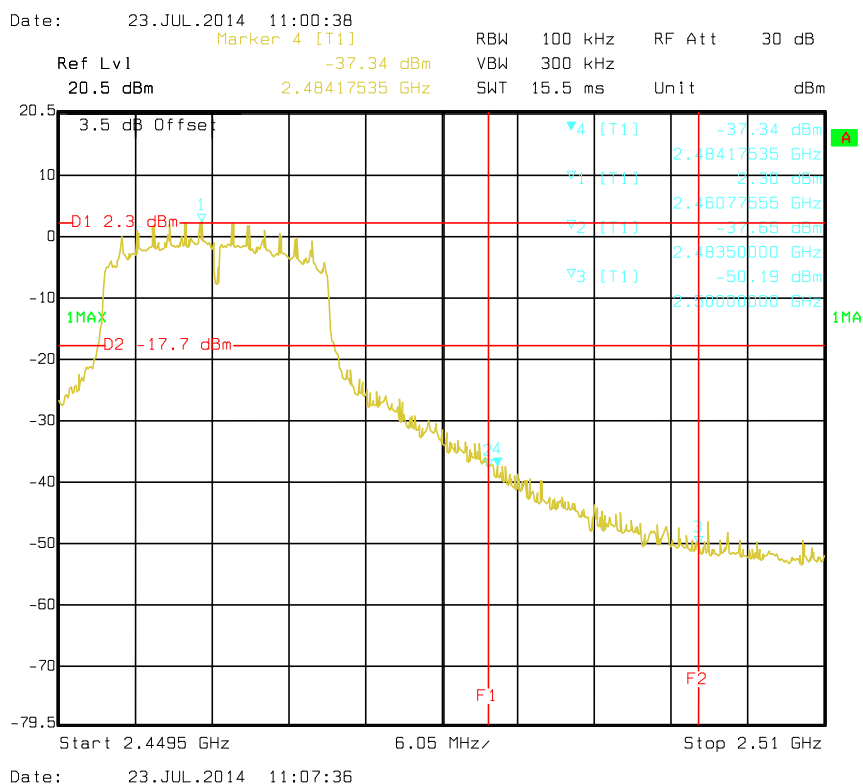
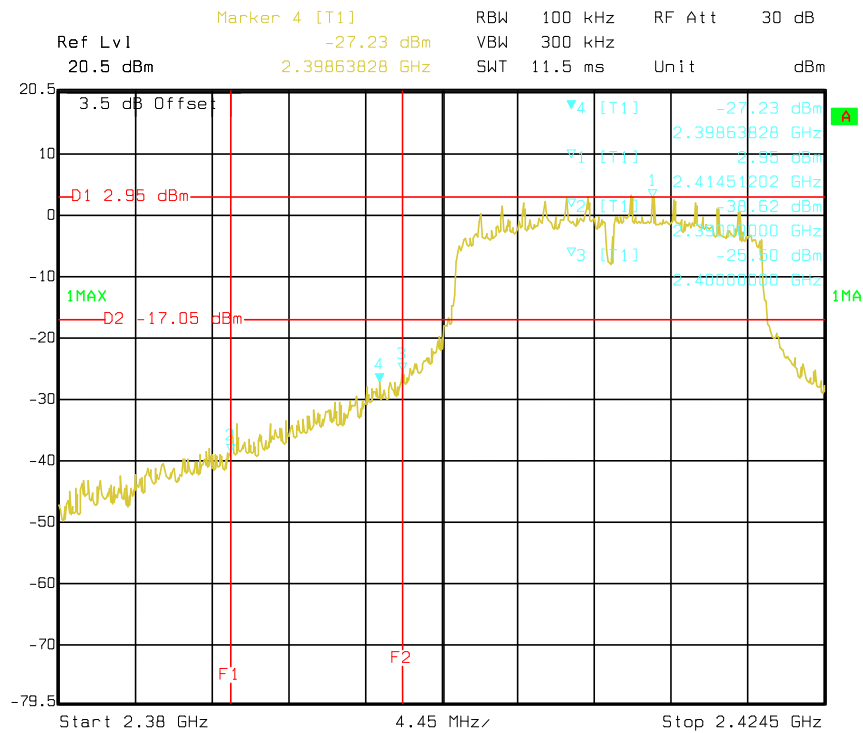
Low Channel



Middle Channel



High Channel


Band Edge


Prüfbericht - Nr.: 15076069 001

Test Report No.

Seite 34 von 54

Page 34 of 54

5.1.6 Power spectral density

RESULT:**Pass**

Date of testing : 2014-07-23
Test standard : FCC part 15.247(e)
Basic standard : ANSI C63.4: 2009
Clause 10 of KDB 558074 v03r02
Limit : 8dBm/3kHz
Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High
Operation mode : A.2.a
Ambient temperature : 25°C
Relative humidity : 52%
Atmospheric pressure : 101kPa

Table 17: Test result of power spectral density:

Mode	Channel (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)	Conclusion
802.11b	2412	-9.35	8	Pass
	2437	-9.34	8	Pass
	2462	-9.07	8	Pass
802.11g	2412	-12.05	8	Pass
	2437	-11.65	8	Pass
	2462	-12.16	8	Pass
802.11n	2412	-10.29	8	Pass
	2437	-11.65	8	Pass
	2462	-12.89	8	Pass

5.1.7 Spurious Emission

RESULT:
Pass

Date of testing : 2014-06-06 & 2014-07-18
 Test standard : FCC part 15.247(d)
 Basic standard : ANSI C63.4: 2009
 Clause 11 of KDB 558074 v03r02
 Limits : FCC part 15.209(a)
 Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/ Middle/ High
 Operation mode : A.1, A.2
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 18: Test result of Spurious Emission of Buletooth (BDR mode)

Low

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2402	90.23	PK	H	25.65	4.42	27.32	92.98	N/A	N/A
2402	80.33	AV	H	25.65	4.42	27.32	83.08	N/A	N/A
2402	91.20	PK	V	25.65	4.42	27.32	93.95	N/A	N/A
2402	81.11	AV	V	25.65	4.42	27.32	83.86	N/A	N/A
2386	41.79	PK	V	25.60	4.38	27.32	44.45	74.00	29.55
2386	31.43	AV	V	25.60	4.38	27.32	34.09	54.00	19.91
4804	37.77	PK	V	30.59	5.98	27.41	46.93	74.00	27.07
4804	25.36	AV	V	30.59	5.98	27.41	34.52	54.00	19.48
7206	43.98	PK	V	34.09	7.45	25.91	59.61	74.00	14.39
7206	32.15	AV	V	34.09	7.45	25.91	47.78	54.00	6.22
9608	30.16	PK	V	35.96	8.80	27.55	47.37	74.00	26.63
9608	18.86	AV	V	35.96	8.80	27.55	36.07	54.00	17.93
7285	31.20	PK	V	34.28	7.49	25.89	47.08	74.00	26.92
7285	19.59	AV	V	34.28	7.49	25.89	35.47	54.00	18.53
275	28.30	QP	V	13.75	2.01	21.51	22.55	46.00	23.45

Middle

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2402	90.23	PK	H	25.65	4.42	27.32	92.98	N/A	N/A
2402	80.33	AV	H	25.65	4.42	27.32	83.08	N/A	N/A
2402	91.20	PK	V	25.65	4.42	27.32	93.95	N/A	N/A
2402	81.11	AV	V	25.65	4.42	27.32	83.86	N/A	N/A

2386	41.79	PK	V	25.60	4.38	27.32	44.45	74.00	29.55
2386	31.43	AV	V	25.60	4.38	27.32	34.09	54.00	19.91
4804	37.77	PK	V	30.59	5.98	27.41	46.93	74.00	27.07
4804	25.36	AV	V	30.59	5.98	27.41	34.52	54.00	19.48
7206	43.98	PK	V	34.09	7.45	25.91	59.61	74.00	14.39
7206	32.15	AV	V	34.09	7.45	25.91	47.78	54.00	6.22
9608	30.16	PK	V	35.96	8.80	27.55	47.37	74.00	26.63
9608	18.86	AV	V	35.96	8.80	27.55	36.07	54.00	17.93
7285	31.20	PK	V	34.28	7.49	25.89	47.08	74.00	26.92
7285	19.59	AV	V	34.28	7.49	25.89	35.47	54.00	18.53
275	28.30	QP	V	13.75	2.01	21.51	22.55	46.00	23.45

High

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2480	87.91	PK	H	25.85	4.48	27.36	90.88	N/A	N/A
2480	77.09	AV	H	25.85	4.48	27.36	80.06	N/A	N/A
2480	89.45	PK	V	25.85	4.48	27.36	92.42	N/A	N/A
2480	78.79	AV	V	25.85	4.48	27.36	81.76	N/A	N/A
2483.5	42.82	PK	V	25.86	4.49	27.36	45.81	74.00	28.19
2483.5	31.07	AV	V	25.86	4.49	27.36	34.06	54.00	19.94
4960	36.80	PK	V	31.00	5.90	27.43	46.27	74.00	27.73
4960	24.79	AV	V	31.00	5.90	27.43	34.26	54.00	19.74
7440	42.98	PK	V	34.66	7.58	25.97	59.25	74.00	14.75
7440	31.35	AV	V	34.66	7.58	25.97	47.62	54.00	6.38
9920	30.69	PK	V	36.71	8.87	26.66	49.61	74.00	24.39
9920	18.99	AV	V	36.71	8.87	26.66	37.91	54.00	16.09
7285	32.58	PK	V	34.28	7.49	25.89	48.46	74.00	25.54
7285	20.84	AV	V	34.28	7.49	25.89	36.72	54.00	17.28
275	29.00	QP	V	13.75	2.01	21.51	23.25	46.00	22.75

Table 19: Test result of Spurious Emission of Buletooth (EDR mode)

Low

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2402	87.29	PK	H	25.65	4.42	27.32	90.04	N/A	N/A
2402	77.06	AV	H	25.65	4.42	27.32	79.81	N/A	N/A
2402	88.19	PK	V	25.65	4.42	27.32	90.94	N/A	N/A
2402	77.91	AV	V	25.65	4.42	27.32	80.66	N/A	N/A
2386	39.81	PK	V	25.60	4.38	27.32	42.47	74.00	31.53
2386	28.74	AV	V	25.60	4.38	27.32	31.40	54.00	22.60
4804	38.60	PK	V	30.59	5.98	27.41	47.76	74.00	26.24
4804	23.21	AV	V	30.59	5.98	27.41	32.37	54.00	21.63
7206	39.67	PK	V	34.09	7.45	25.91	55.30	74.00	18.70
7206	28.26	AV	V	34.09	7.45	25.91	43.89	54.00	10.11
9608	31.78	PK	V	35.96	8.80	27.55	48.99	74.00	25.01

Prüfbericht - Nr.: 15076069 001
Test Report No.
Seite 37 von 54
Page 37 of 54

9608	19.27	AV	V	35.96	8.80	27.55	36.48	54.00	17.52
7285	31.87	PK	V	34.28	7.49	25.89	47.75	74.00	26.25
7285	19.75	AV	V	34.28	7.49	25.89	35.63	54.00	18.37
275	28.60	QP	V	13.75	2.01	21.51	22.85	46.00	23.15

Middle

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2441	88.69	PK	H	25.75	4.40	27.34	91.50	N/A	N/A
2441	78.37	AV	H	25.75	4.40	27.34	81.18	N/A	N/A
2441	90.31	PK	V	25.75	4.40	27.34	93.12	N/A	N/A
2441	80.21	AV	V	25.75	4.40	27.34	83.02	N/A	N/A
4882	38.11	PK	V	30.79	6.08	27.42	47.56	74.00	26.44
4882	20.95	AV	V	30.79	6.08	27.42	30.40	54.00	23.60
7323	39.44	PK	V	34.38	7.51	25.88	55.45	74.00	18.55
7323	28.17	AV	V	34.38	7.51	25.88	44.18	54.00	9.82
9764	31.72	PK	V	36.33	8.83	27.20	49.68	74.00	24.32
9764	19.98	AV	V	36.33	8.83	27.20	37.94	54.00	16.06
7285	32.76	PK	V	34.28	7.49	25.89	48.64	74.00	25.36
7285	21.72	AV	V	34.28	7.49	25.89	37.60	54.00	16.40
2694	30.83	PK	V	26.40	4.79	27.49	34.53	74.00	39.47
2694	16.27	AV	V	26.40	4.79	27.49	19.97	54.00	34.03
275	28.50	QP	V	13.75	2.01	21.51	22.75	46.00	23.25

High

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2480	87.91	PK	H	25.85	4.48	27.36	90.88	N/A	N/A
2480	77.09	AV	H	25.85	4.48	27.36	80.06	N/A	N/A
2480	89.45	PK	V	25.85	4.48	27.36	92.42	N/A	N/A
2480	78.79	AV	V	25.85	4.48	27.36	81.76	N/A	N/A
2483.5	46.17	PK	V	25.86	4.49	27.36	49.16	74.00	24.84
2483.5	32.59	AV	V	25.86	4.49	27.36	35.58	54.00	18.42
4960	37.77	PK	V	31.00	5.90	27.43	47.24	74.00	26.76
4960	21.36	AV	V	31.00	5.90	27.43	30.83	54.00	23.17
7440	43.98	PK	V	34.66	7.58	25.97	60.25	74.00	13.75
7440	32.35	AV	V	34.66	7.58	25.97	48.62	54.00	5.38
9920	30.16	PK	V	36.71	8.87	26.66	49.08	74.00	24.92
9920	18.86	AV	V	36.71	8.87	26.66	37.78	54.00	16.22
7285	31.20	PK	V	34.28	7.49	25.89	47.08	74.00	26.92
7285	19.59	AV	V	34.28	7.49	25.89	35.47	54.00	18.53
275	28.90	QP	V	13.75	2.01	21.51	23.15	46.00	22.85

Table 20: Test result of Spurious Emission of Wi-F (802.11b)
Low

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2412	68.86	PK	H	25.67	4.42	0.00	98.95	N/A	N/A
2412	61.17	AV	H	25.67	4.42	0.00	91.26	N/A	N/A
2412	61.80	PK	V	25.67	4.42	0.00	91.89	N/A	N/A
2412	54.16	AV	V	25.67	4.42	0.00	84.25	N/A	N/A
2390	27.78	PK	H	25.61	4.39	0.00	57.78	74.00	16.22
2390	17.18	AV	H	25.61	4.39	0.00	47.18	54.00	6.82
4824	31.58	PK	H	30.64	6.03	27.41	40.84	74.00	33.16
4824	19.31	AV	H	30.64	6.03	27.41	28.57	54.00	25.43
7236	31.03	PK	H	34.17	7.47	25.90	46.77	74.00	27.23
7236	18.64	AV	H	34.17	7.47	25.90	34.38	54.00	19.62
9648	28.88	PK	H	36.06	8.81	27.46	46.29	74.00	27.71
9648	17.32	AV	H	36.06	8.81	27.46	34.73	54.00	19.27
7486	30.60	PK	H	34.77	7.60	26.10	46.87	74.00	27.13
7486	19.77	AV	H	34.77	7.60	26.10	36.04	54.00	17.96
263	29.50	QP	H	13.18	1.95	21.50	23.13	46.00	22.87

Middle

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2437	67.21	PK	H	25.74	4.41	27.34	70.02	N/A	N/A
2437	59.23	AV	H	25.74	4.41	27.34	62.04	N/A	N/A
2437	60.51	PK	V	25.74	4.41	27.34	63.32	N/A	N/A
2437	53.04	AV	V	25.74	4.41	27.34	55.85	N/A	N/A
4874	31.76	PK	H	30.77	6.09	27.42	41.20	74.00	32.80
4874	21.64	AV	H	30.77	6.09	27.42	31.08	54.00	22.92
7311	30.61	PK	H	34.35	7.51	25.88	46.59	74.00	27.41
7311	19.10	AV	H	34.35	7.51	25.88	35.08	54.00	18.92
9748	29.06	PK	H	36.30	8.83	27.24	46.95	74.00	27.05
9748	19.42	AV	H	36.30	8.83	27.24	37.31	54.00	16.69
1810	35.26	PK	H	24.22	3.55	27.53	35.50	74.00	38.50
1810	23.59	AV	H	24.22	3.55	27.53	23.83	54.00	30.17
7486	29.78	PK	H	34.77	7.60	26.10	46.05	74.00	27.95
7486	18.57	AV	H	34.77	7.60	26.10	34.84	54.00	19.16
263	28.70	QP	H	13.18	1.95	21.50	22.33	46.00	23.67

High

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2462	67.28	PK	H	25.80	4.43	27.35	70.16	N/A	N/A
2462	59.77	AV	H	25.80	4.43	0.00	90.00	N/A	N/A
2462	60.79	PK	V	25.80	4.43	0.00	91.02	N/A	N/A

2462	53.10	AV	V	25.80	4.43	0.00	83.33	N/A	N/A
2483.5	27.00	PK	H	25.86	4.49	0.00	57.35	74.00	16.65
2483.5	15.19	AV	H	25.86	4.49	0.00	45.54	54.00	8.46
4924	31.15	PK	H	30.90	5.97	27.43	40.59	74.00	33.41
4924	18.93	AV	H	30.90	5.97	27.43	28.37	54.00	25.63
7386	30.04	PK	H	34.53	7.55	25.86	46.26	74.00	27.74
7386	18.86	AV	H	34.53	7.55	25.86	35.08	54.00	18.92
9848	28.63	PK	H	36.54	8.85	26.94	47.08	74.00	26.92
9848	18.03	AV	H	36.54	8.85	26.94	36.48	54.00	17.52
7486	30.70	PK	H	34.77	7.60	26.10	46.97	74.00	27.03
7486	20.59	AV	H	34.77	7.60	26.10	36.86	54.00	17.14
263	29.10	QP	H	13.18	1.95	21.50	22.73	46.00	23.27

Table 21: Test result of Spurious Emission of Wi-F (802.11g)
Low

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2412	69.98	PK	H	25.67	4.42	0.00	100.07	N/A	N/A
2412	57.23	AV	H	25.67	4.42	0.00	87.32	N/A	N/A
2412	61.93	PK	V	25.67	4.42	0.00	92.02	N/A	N/A
2412	49.67	AV	V	25.67	4.42	0.00	79.76	N/A	N/A
2390	36.40	PK	H	25.61	4.39	0.00	66.40	74.00	7.60
2390	15.23	AV	H	25.61	4.39	0.00	45.23	54.00	8.77
4824	30.67	PK	H	30.64	6.03	27.41	39.93	74.00	34.07
4824	18.98	AV	H	30.64	6.03	27.41	28.24	54.00	25.76
7236	31.90	PK	H	34.17	7.47	25.90	47.64	74.00	26.36
7236	19.02	AV	H	34.17	7.47	25.90	34.76	54.00	19.24
9648	27.98	PK	H	36.06	8.81	27.46	45.39	74.00	28.61
9648	17.19	AV	H	36.06	8.81	27.46	34.60	54.00	19.40
7486	31.25	PK	H	34.77	7.60	26.10	47.52	74.00	26.48
7486	19.80	AV	H	34.77	7.60	26.10	36.07	54.00	17.93
263	29.20	QP	H	13.18	1.95	21.50	22.83	46.00	23.17

Middle

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2437	69.15	PK	H	25.74	4.41	0.00	99.30	N/A	N/A
2437	56.98	AV	H	25.74	4.41	0.00	87.13	N/A	N/A
2437	61.03	PK	V	25.74	4.41	0.00	91.18	N/A	N/A
2437	49.81	AV	V	25.74	4.41	0.00	79.96	N/A	N/A
4874	31.35	PK	H	30.77	6.09	27.42	40.79	74.00	33.21
4874	19.14	AV	H	30.77	6.09	27.42	28.58	54.00	25.42
7311	31.60	PK	H	34.35	7.51	25.88	47.58	74.00	26.42
7311	18.93	AV	H	34.35	7.51	25.88	34.91	54.00	19.09
9748	28.67	PK	H	36.30	8.83	27.24	46.56	74.00	27.44

9748	17.13	AV	H	36.30	8.83	27.24	35.02	54.00	18.98
1810	35.60	PK	H	24.22	3.55	27.53	35.84	74.00	38.16
1810	23.64	AV	H	24.22	3.55	27.53	23.88	54.00	30.12
7486	30.63	PK	H	34.77	7.60	26.10	46.90	74.00	27.10
7486	18.40	AV	H	34.77	7.60	26.10	34.67	54.00	19.33
263	29.40	QP	H	13.18	1.95	21.50	23.03	46.00	22.97

High

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2462	69.12	PK	H	25.80	4.43	0.00	99.35	N/A	N/A
2462	56.03	AV	H	25.80	4.43	0.00	86.26	N/A	N/A
2462	62.54	PK	V	25.80	4.43	0.00	92.77	N/A	N/A
2462	50.16	AV	V	25.80	4.43	0.00	80.39	N/A	N/A
2483.5	34.33	PK	H	25.86	4.49	0.00	64.68	74.00	9.32
2483.5	14.77	AV	H	25.86	4.49	0.00	45.12	54.00	8.88
4924	31.40	PK	H	30.90	5.97	27.43	40.84	74.00	33.16
4924	18.93	AV	H	30.90	5.97	27.43	28.37	54.00	25.63
7386	30.42	PK	H	34.53	7.55	25.86	46.64	74.00	27.36
7386	18.69	AV	H	34.53	7.55	25.86	34.91	54.00	19.09
9848	28.36	PK	H	36.54	8.85	26.94	46.81	74.00	27.19
9848	17.49	AV	H	36.54	8.85	26.94	35.94	54.00	18.06
7486	30.29	PK	H	34.77	7.60	26.10	46.56	74.00	27.44
7486	19.81	AV	H	34.77	7.60	26.10	36.08	54.00	17.92
263	29.40	QP	H	13.18	1.95	21.50	23.03	46.00	22.97

Table 22: Test result of Spurious Emission of Wi-F (802.11n)

Low

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2412	69.81	PK	H	25.67	4.42	27.33	72.57	N/A	N/A
2412	57.69	AV	H	25.67	4.42	27.33	60.45	N/A	N/A
2412	63.36	PK	V	25.67	4.42	27.33	66.12	N/A	N/A
2412	49.56	AV	V	25.67	4.42	27.33	52.32	N/A	N/A
2390	36.74	PK	H	25.61	4.39	27.32	39.42	74.00	34.58
2390	15.61	AV	H	25.61	4.39	27.32	18.29	54.00	35.71
4824	30.86	PK	H	30.64	6.03	27.41	40.12	74.00	33.88
4824	19.1	AV	H	30.64	6.03	27.41	28.36	54.00	25.64
7236	31.15	PK	H	34.17	7.47	25.90	46.89	74.00	27.11
7236	19.3	AV	H	34.17	7.47	25.90	35.04	54.00	18.96
9648	28.93	PK	H	36.06	8.81	27.46	46.34	74.00	27.66
9648	17.17	AV	H	36.06	8.81	27.46	34.58	54.00	19.42
7486	30.55	PK	H	34.77	7.60	26.10	46.82	74.00	27.18
7486	19.93	AV	H	34.77	7.60	26.10	36.20	54.00	17.80
263	29.10	QP	H	13.18	1.95	21.50	22.73	46.00	23.27

Middle

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2437	69.62	PK	H	25.74	4.41	27.34	72.43	N/A	N/A
2437	58.36	AV	H	25.74	4.41	27.34	61.17	N/A	N/A
2437	62.45	PK	V	25.74	4.41	27.34	65.26	N/A	N/A
2437	48.97	AV	V	25.74	4.41	27.34	51.78	N/A	N/A
4874	31.68	PK	H	30.77	6.09	27.42	41.12	74.00	32.88
4874	19.36	AV	H	30.77	6.09	27.42	28.80	54.00	25.20
7311	32.36	PK	H	34.35	7.51	25.88	48.34	74.00	25.66
7311	20.31	AV	H	34.35	7.51	25.88	36.29	54.00	17.71
9748	28.96	PK	H	36.30	8.83	27.24	46.85	74.00	27.15
9748	17.16	AV	H	36.30	8.83	27.24	35.05	54.00	18.95
1810	35.26	PK	H	24.22	3.55	27.53	35.50	74.00	38.50
1810	23.54	AV	H	24.22	3.55	27.53	23.78	54.00	30.22
7486	30.5	PK	H	34.77	7.60	26.10	46.77	74.00	27.23
7486	18.45	AV	H	34.77	7.60	26.10	34.72	54.00	19.28
263	29.60	QP	H	13.18	1.95	21.50	23.23	46.00	22.77

High

Frequency (MHz)	Reading (dB μ V)	Detector	Polar	Factor	Cable (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
2462	69.67	PK	H	25.80	4.43	27.35	72.55	N/A	N/A
2462	55.94	AV	H	25.80	4.43	27.35	58.82	N/A	N/A
2462	61.77	PK	V	25.80	4.43	27.35	64.65	N/A	N/A
2462	48.96	AV	V	25.80	4.43	27.35	51.84	N/A	N/A
2483.5	34.39	PK	H	25.86	4.49	27.36	37.38	74.00	36.62
2483.5	14.87	AV	H	25.86	4.49	27.36	17.86	54.00	36.14
4924	31.68	PK	H	30.90	5.97	27.43	41.12	74.00	32.88
4924	19.36	AV	H	30.90	5.97	27.43	28.80	54.00	25.20
7386	32.36	PK	H	34.53	7.55	25.86	48.58	74.00	25.42
7386	20.31	AV	H	34.53	7.55	25.86	36.53	54.00	17.47
9848	28.96	PK	H	36.54	8.85	26.94	47.41	74.00	26.59
9848	17.16	AV	H	36.54	8.85	26.94	35.61	54.00	18.39
7486	30.62	PK	H	34.77	7.60	26.10	46.89	74.00	27.11
7486	20.17	AV	H	34.77	7.60	26.10	36.44	54.00	17.56
263	29.40	QP	H	13.18	1.95	21.50	23.03	46.00	22.97

5.1.8 Frequency Separation

RESULT:
Pass

Date of testing : 2014-06-09
 Test standard : FCC part 15.247(a)(1)
 Basic standard : ANSI C63.4: 2009
 Limit : $\geq 25\text{kHz}$ or two-thirds of 20dB bandwidth,
 whichever is greater
 Kind of test site : Shield room

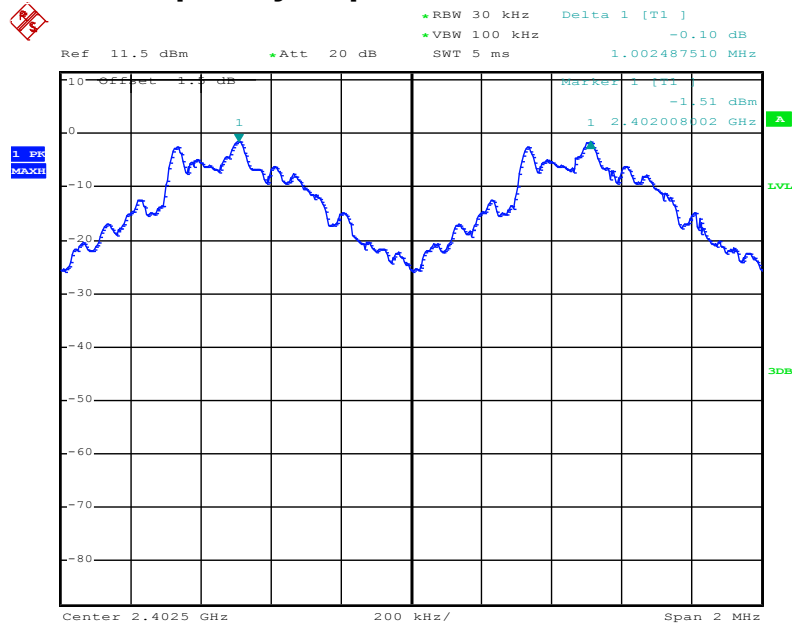
Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A.1.a
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

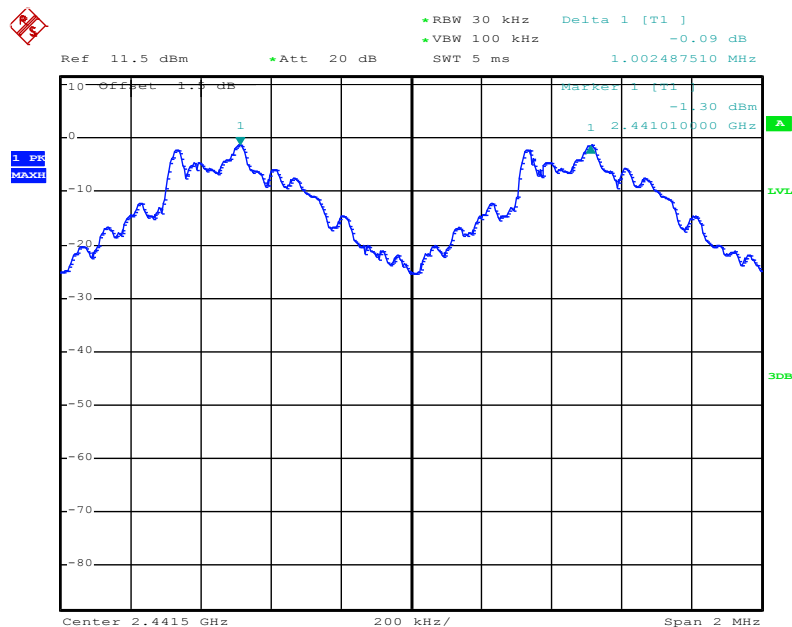
Table 23: Test result of Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1.002	$\geq 25\text{kHz}$ or two-thirds of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1.002	$\geq 25\text{kHz}$ or two-thirds of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2479	1.001	$\geq 25\text{kHz}$ or two-thirds of 20dB bandwidth	Pass
Adjacency Channel	2480			

Test Plot of Frequency Separation



Date: 9.JUN.2014 14:17:01



Date: 9.JUN.2014 14:19:47

Date: 9.JUN.2014 14:21:46

Prüfbericht - Nr.: 15076069 001

Test Report No.

Seite 45 von 54

Page 45 of 54

5.1.9 Number of hopping frequency**RESULT:****Pass**

Date of testing : 2014-06-09
Test standard : FCC part 15.247(a)(1)(iii)
Basic standard : ANSI C63.4: 2009
Limits : ≥ 15 non-overlapping channels
Kind of test site : Shield room

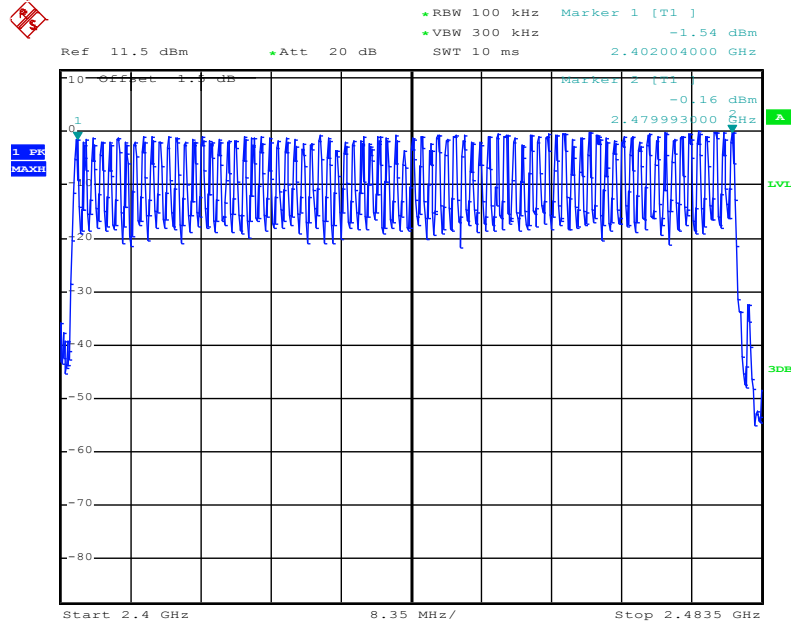
Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A.1.a
Ambient temperature : 25°C
Relative humidity : 52%
Atmospheric pressure : 101kPa

Table 24: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2402 to 2480MHz	79	≥ 15	Pass

Test Plot of Number of hopping frequency



Date: 9.JUN.2014 14:55:26

5.1.10 Time of Occupancy

RESULT:
Pass

Date of testing : 2014-06-09
 Test standard : FCC part 15.247(a)(1)(iii)
 Basic standard : ANSI C63.4: 2009
 Limits : 0.4s
 Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A.1.a
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 25: Test result of Time of Occupancy

Mode	Packet Type	Channel Frequency (MHz)	Packet Duration [ms]	Number of Hops per Channel	Dwell Time (ms)	Limit [ms]
BDR	DH1	2402	0.433	319.10	139	400
		2441	0.433	319.10	139	400
		2480	0.433	319.10	139	400
	DH3	2402	1.700	159.10	272	400
		2441	1.700	159.10	272	400
		2480	1.700	159.10	272	400
	DH5	2402	2.948	106.67	314	400
		2441	2.948	106.67	314	400
		2480	2.948	106.67	314	400
EDR	DH1	2402	0.445	319.10	142	400
		2441	0.445	319.10	142	400
		2480	0.445	319.10	142	400
	DH3	2402	1.700	159.10	272	400
		2441	1.700	159.10	272	400
		2480	1.700	159.10	272	400
	DH5	2402	2.948	106.67	314	400
		2441	2.948	106.67	314	400
		2480	2.948	106.67	314	400

5.1.11 Conducted emissions

RESULT:
Pass

Date of testing : 2014-06-12
 Test standard : FCC Part 15.207
 Basic standard : ANSI C63.4: 2009
 Frequency range : 0.15 – 30MHz
 Limits : FCC Part 15.207
 Kind of test site : Shield room

Test setup

Input Voltage : AC 120V, 60Hz
 Operation Mode : A.1, A.2
 Earthing : Not Connected
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 26: Test result of Conducted Emission of Buletooth

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.604902	48.7	150.000	9.000	N	10.5	7.3	56.0	PASS
0.619536	48.0	150.000	9.000	N	10.5	8.0	56.0	PASS
0.738241	45.0	150.000	9.000	N	10.6	11.0	56.0	PASS
1.082190	43.4	150.000	9.000	N	10.5	12.6	56.0	PASS
1.171949	43.2	150.000	9.000	N	10.5	12.8	56.0	PASS
1.548915	43.1	150.000	9.000	N	10.5	12.9	56.0	PASS
0.590613	35.1	150.000	9.000	L	10.5	20.9	56.0	PASS
0.614619	43.3	150.000	9.000	L	10.5	12.7	56.0	PASS
1.249088	39.3	150.000	9.000	L	10.4	16.7	56.0	PASS
1.512328	40.1	150.000	9.000	L	10.5	15.9	56.0	PASS
1.731709	40.7	150.000	9.000	L	10.5	15.3	56.0	PASS
2.538519	38.7	150.000	9.000	L	10.5	17.3	56.0	PASS

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.245835	32.7	150.000	9.000	N	11.2	19.2	51.9	PASS
0.495646	25.7	150.000	9.000	N	10.4	20.3	46.1	PASS
0.619536	32.5	150.000	9.000	N	10.5	13.5	46.0	PASS
0.681699	26.1	150.000	9.000	N	10.6	19.9	46.0	PASS
1.082190	22.1	150.000	9.000	N	10.5	23.9	46.0	PASS
1.512328	26.6	150.000	9.000	N	10.5	19.4	46.0	PASS
0.604902	26.5	150.000	9.000	L	10.5	19.5	46.0	PASS
0.732382	20.2	150.000	9.000	L	10.6	25.8	46.0	PASS
1.690804	23.5	150.000	9.000	L	10.5	22.5	46.0	PASS
2.518372	26.6	150.000	9.000	L	10.5	19.4	46.0	PASS

Prüfbericht - Nr.: 15076069 001
Test Report No.
Seite 49 von 54
Page 49 of 54

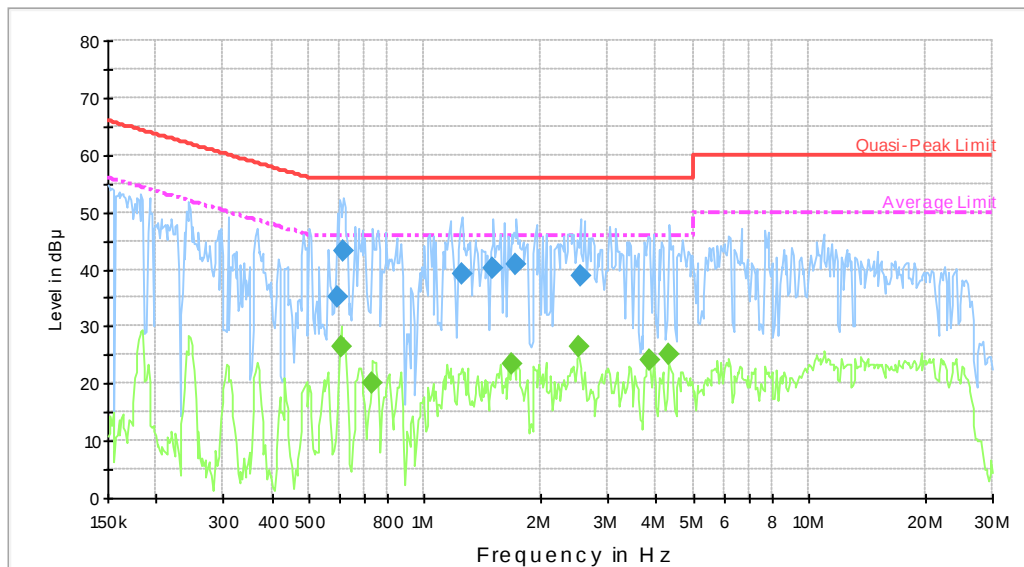
3.841741	24.0	150.000	9.000	L	10.7	22.0	46.0	PASS
4.295123	25.0	150.000	9.000	L	10.7	21.0	46.0	PASS

Table 27: Test result of Conducted Emission of Wi-Fi

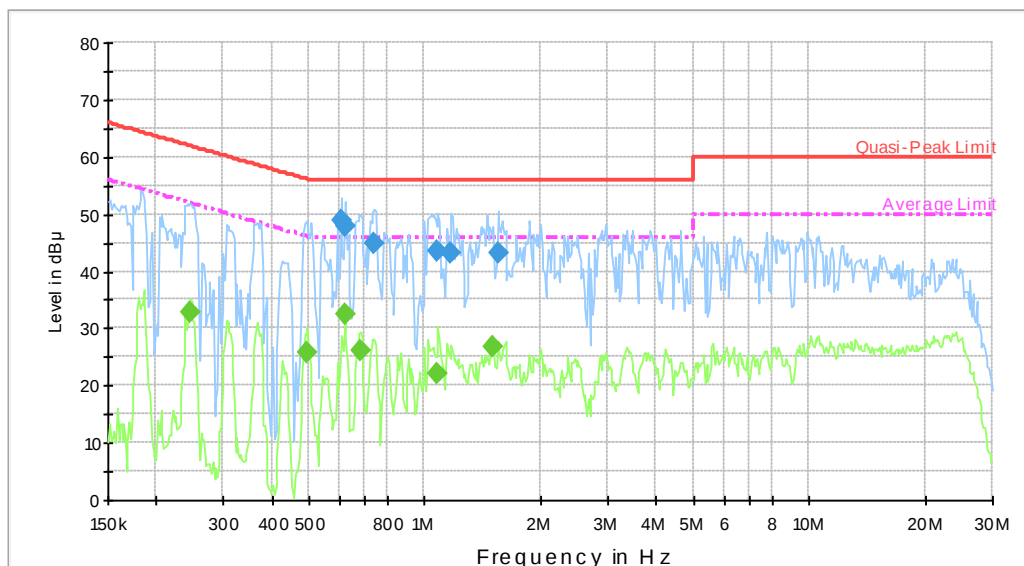
Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.532496	44.4	150.000	9.000	N	10.4	11.6	56.0	PASS
0.545378	42.5	150.000	9.000	N	10.4	13.5	56.0	PASS
0.634524	44.4	150.000	9.000	N	10.6	11.6	56.0	PASS
0.726569	41.5	150.000	9.000	N	10.6	14.5	56.0	PASS
0.991374	41.4	150.000	9.000	N	10.5	14.6	56.0	PASS
1.586387	40.7	150.000	9.000	N	10.5	15.3	56.0	PASS
0.507637	37.2	150.000	9.000	L	10.4	18.8	56.0	PASS
0.536756	36.8	150.000	9.000	L	10.4	19.2	56.0	PASS
0.600101	39.0	150.000	9.000	L	10.5	17.0	56.0	PASS
0.639600	35.1	150.000	9.000	L	10.6	20.9	56.0	PASS
2.063510	38.4	150.000	9.000	L	10.5	17.6	56.0	PASS
2.130339	38.5	150.000	9.000	L	10.5	17.5	56.0	PASS

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.393383	31.0	150.000	9.000	N	10.8	17.0	48.0	PASS
0.519918	27.6	150.000	9.000	N	10.4	18.4	46.0	PASS
0.649874	30.3	150.000	9.000	N	10.6	15.7	46.0	PASS
0.952654	24.2	150.000	9.000	N	10.5	21.8	46.0	PASS
1.599078	28.4	150.000	9.000	N	10.5	17.6	46.0	PASS
2.096658	23.2	150.000	9.000	N	10.5	22.8	46.0	PASS
0.595338	22.0	150.000	9.000	L	10.5	24.0	46.0	PASS
1.599078	23.3	150.000	9.000	L	10.5	22.7	46.0	PASS
1.787792	21.3	150.000	9.000	L	10.5	24.7	46.0	PASS
1.920710	18.3	150.000	9.000	L	10.5	27.7	46.0	PASS
2.130339	21.7	150.000	9.000	L	10.5	24.3	46.0	PASS
3.997889	21.8	150.000	9.000	L	10.7	24.2	46.0	PASS

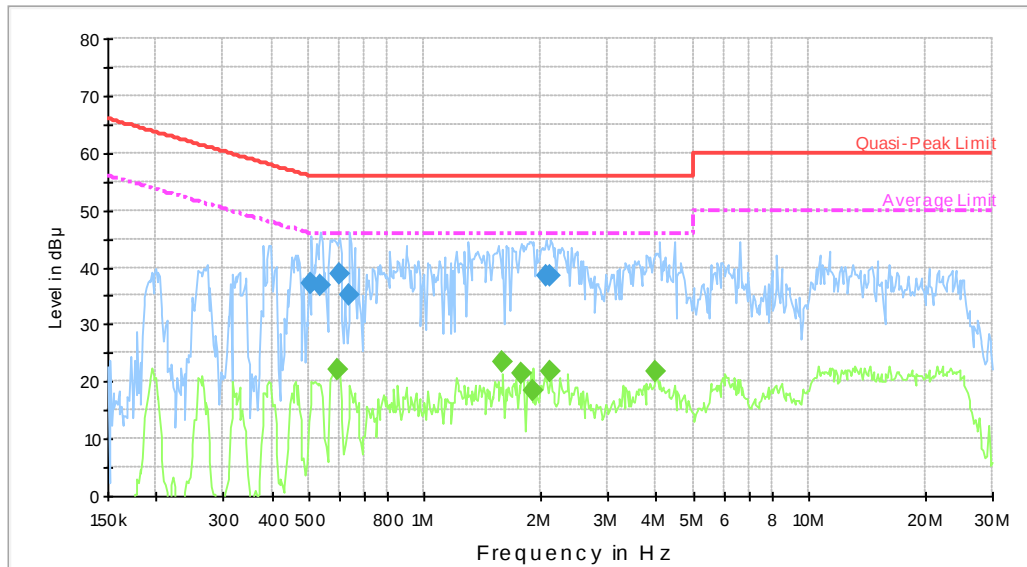
Test Plot of Conducted Emission of Bluetooth L Phase



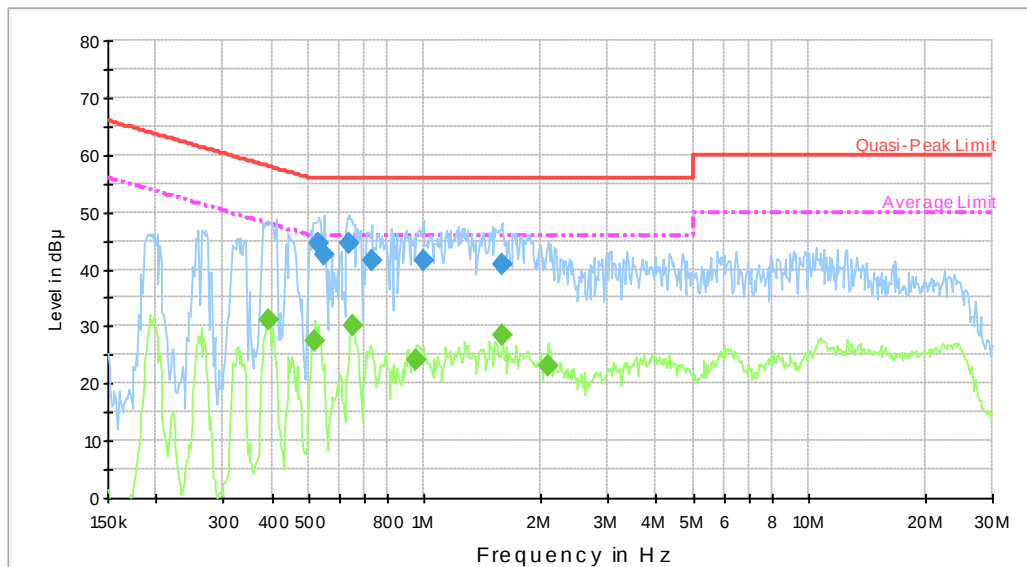
N Phase



Test Plot of Conducted Emission of Wi-Fi L Phase



N Phase

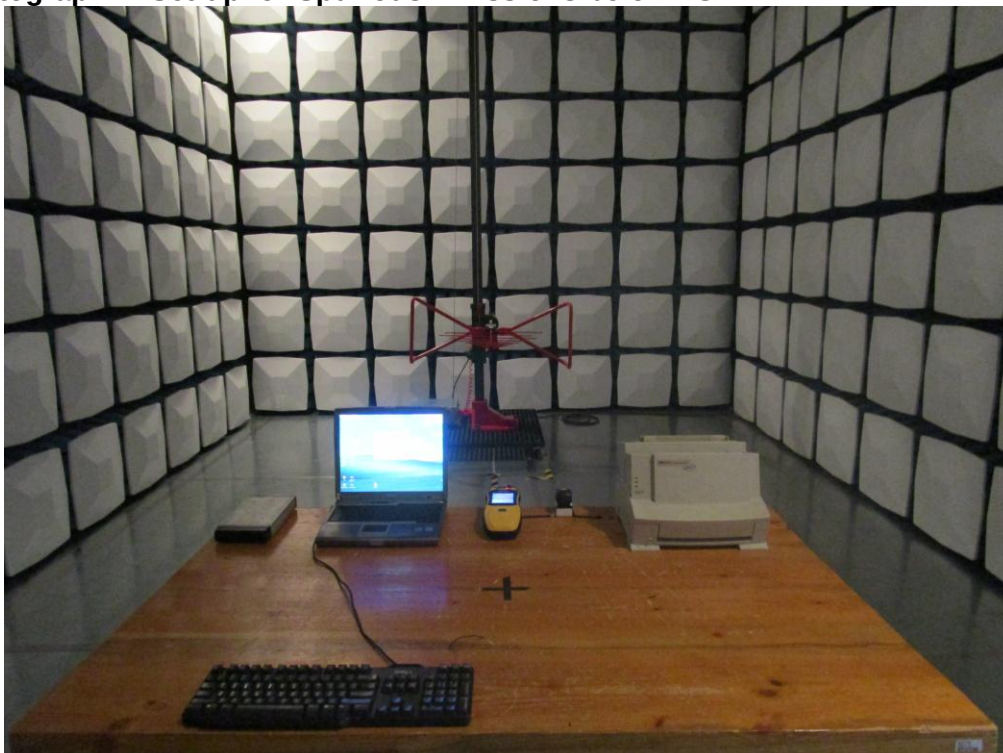


6. Photographs of the Test Set-Up

Photograph 1: Set-up for Conducted Emissions



Photograph 2: Set-up for Spurious Emissions below 1GHz



Photograph 3: Set-up for Spurious Emissions above 1GHz



7. List of Tables

Table 1: List of Test and Measurement Equipment	5
Table 2: Measurement Uncertainty	6
Table 3: Technical Specification of Bluetooth (BDR & EDR mode)	7
Table 4: RF channel and frequency of Bluetooth (BDR & EDR mode).....	7
Table 5: Technical Specification of Wi-Fi	8
Table 6: Carrier Frequency of Wi-Fi	8
Table 7: Test result of Peak Output Power of Bluetooth (BDR mode)	14
Table 8: Test result of Peak Output Power of Bluetooth (EDR mode)	14
Table 9: Test result of Peak Output Power of Wi-F (802.11b)	14
Table 10: Test result of Peak Output Power of Wi-Fi (802.11g)	15
Table 11: Test result of Peak Output Power of Wi-Fi (802.11n)	15
Table 12: Test result of 20dB & 99% Bandwidth of BDR mode	16
Table 13: Test result of 20dB & 99% Bandwidth of EDR mode	16
Table 14: Test result of 6dB & 99% Bandwidth of 802.11b.....	17
Table 15: Test result of 6dB & 99% Bandwidth of 802.11g.....	17
Table 16: Test result of 6dB & 99% Bandwidth of 802.11n.....	17
Table 17: Test result of power spectral density:	34
Table 18: Test result of Spurious Emission of Bluetooth (BDR mode)	35
Table 19: Test result of Spurious Emission of Bluetooth (EDR mode)	36
Table 20: Test result of Spurious Emission of Wi-F (802.11b).....	38
Table 21: Test result of Spurious Emission of Wi-F (802.11g).....	39
Table 22: Test result of Spurious Emission of Wi-F (802.11n).....	40
Table 23: Test result of Frequency Separation	42
Table 24: Test result of Number of hopping frequency	45
Table 25: Test result of Time of Occupancy.....	47
Table 26: Test result of Conducted Emission of Bluetooth	48
Table 27: Test result of Conducted Emission of Wi-Fi	49

8. List of Photographs

Photograph 1: Set-up for Conducted Emissions	52
Photograph 2: Set-up for Spurious Emissions below 1GHz.....	52
Photograph 3: Set-up for Spurious Emissions above 1GHz	53