



FCC Radio Test Report

FCC ID: KR5-BSRFV1RW0

This report concerns: Original Grant

Project No. : 2106C224

Equipment: Intelligent Antenna Module

Brand Name : Continental

Test Model : BSRF-V1RWHIGH.0

Series Model : N/A

Applicant : Continental Automotive GmbH

Address : Siemensstrasse 12 SV C TS RBG EMC-Laboratory Regensburg Germany

93055

Manufacturer : Continental Automotive GmbH

Address : Siemensstrasse 12, 93055 Regensburg, Germany

Factory : Continental Automotive Systems S.R.L.

Address : Strada Salzburg 8, 550018 Sibiu, Romania

Date of Receipt : Jul. 19, 2021

Date of Test : Jul. 20, 2021 ~ Aug. 18, 2021

Issued Date : Sep. 30, 2021

Report Version : R00

Test Sample : SN: 2133100014S

Standard(s) : 47 CFR FCC Part 22 Subpart H

47 CFR FCC Part 24 Subpart E 47 CFR FCC Part 27 Subpart L 47 CFR FCC Part 27 Subpart M

47 CFR FCC Part 2 ANSI/TIA/EIA-603-E-2016

FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Prepared by: Treey Chen

Approved by : Steven Lu

ACCREDITED
TESTING CERT #5123.02

Add: No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's

Republic of China

Tel: +86-769-8318-3000 Web: www.newbtl.com





Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

The report must not be used by the client to claim product certification, approval, or endorsement by NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

determining the Pass/Fail results.

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective. Please note that the measurement uncertainty is provided for informational purpose only and is not use in





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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Sep. 30, 2021



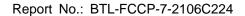
1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Standard(s) Section		Test Item	Judgment	Remark
FCC Part 22 Subpart H & Part 2	2.1053 22.917(a)			
47 CFR FCC Part 24 Subpart E	2.1053 24.238(a)	Radiated Spurious Emissions	PASS	
47 CFR FCC Part 27 Subpart L 47 CFR FCC Part 27 Subpart M	2.1053 27.53(h) 27.53(m)(4)	Radiated Spurious Effilssions	ragg.	

Note:

(1) "N/A" denotes test is not applicable in this test report.





1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
		9kHz ~ 30MHz	•	3.02
		30MHz ~ 200MHz	V	4.26
		30MHz ~ 200MHz	Ι	3.38
	CISPR	200MHz ~ 1,000MHz	V	3.98
DG-CB03		200MHz ~ 1,000MHz	Ι	3.94
		1GHz ~ 6GHz	•	3.96
		6GHz ~ 18GHz	•	5.24
		18GHz ~ 26.5GHz	•	3.62
		26.5GHz ~ 40GHz	-	4.00

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
Radiated Spurious Emissions	25°C	60%	DC 12V	Kwok Guo



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Intelligent Antenna Module			
Brand Name	Continental			
Test Model	BSRF-V1RWHIGH.0			
Series Model	N/A			
Model Difference(s)	N/A			
Hardware Version	D5			
Software Version	V15_1.15.1.21.10.30			
Power Source	Supplied from battery.	Supplied from battery.		
Power Rating	DC 12V			
	EDGE/GPRS	GMSK, 8PSK		
Modulation Type	WCDMA/HSDPA/HSUPA	QPSK		
	LTE	QPSK,16QAM		

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.



2.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	GSM850_CH190+TX_2.4G WIFI_B Mode 2462 MHz
Mode 2	GSM850_CH190+TX_5G WIFI_A Mode 5745 MHz
Mode 3	PCS1900_CH661+TX_2.4G WIFI_B Mode 2462 MHz
Mode 4	WCDMA Band II_CH9800+TX_2.4G WIFI_B Mode 2462 MHz
Mode 5	WCDMA Band IV_CH1638+TX_2.4G WIFI_B Mode 2462 MHz
Mode 6	WCDMA Band V_CH4407+TX_2.4G WIFI_B Mode 2462 MHz
Mode 7	LTE Band 2_CH18900+TX_2.4G WIFI_B Mode 2462 MHz
Mode 8	LTE Band 4_CH20175+TX_2.4G WIFI_B Mode 2462 MHz
Mode 9	LTE Band 5_CH20525+TX_2.4G WIFI_B Mode 2462 MHz
Mode 10	LTE Band 7_CH21100+TX_2.4G WIFI_B Mode 2462 MHz

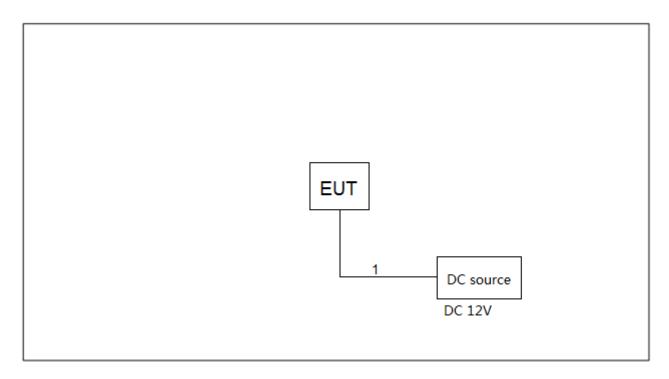
Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

Radiated emissions test - Below 1GHz			
Final Test Mode Description			
Mode 2	GSM850_CH190+TX_5G WIFI_A Mode 5745 MHz		

Radiated emissions test- Above 1GHz			
Final Test Mode	Description		
Mode 1	GSM850_CH190+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 2	GSM850_CH190+TX_5G WIFI_A Mode 5745 MHz		
Mode 3	PCS1900_CH661+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 4	WCDMA Band II_CH9800+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 5	WCDMA Band IV_CH1638+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 6	WCDMA Band V_CH4407+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 7	LTE Band 2_CH18900+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 8	LTE Band 4_CH20175+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 9	LTE Band 5_CH20525+TX_2.4G WIFI_B Mode 2462 MHz		
Mode 10	LTE Band 7_CH21100+TX_2.4G WIFI_B Mode 2462 MHz		



2.3 BLOCK DIGRAM SHOWING THE CONFIGURATIONOFSYSTEMTESTED



2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
Α	DC Source	TRUE-POWER	GPC30300N	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.5m



3. TEST RESULT

3.1 RADIATED SPURIOUS EMISSIONS MEASUREMENT

3.1.1 LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

3.1.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 6.2.

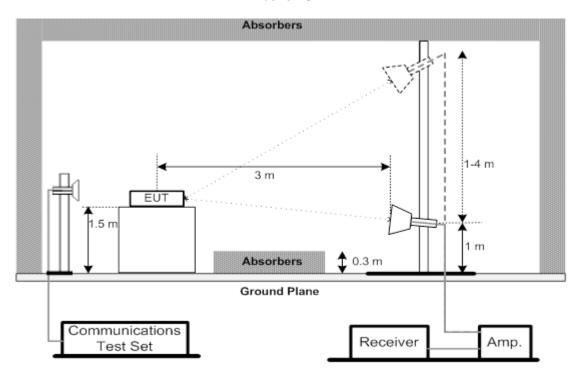
- Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 2. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- 3. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- 4. ERP can be calculated form EIRP by subtracting the gain of dipole, ERP = EIPR 2.15dBi.
- 5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

3.1.3 TEST SETUP LAYOUT

Absorbers Absorbers Ground Plane Receiver Amp.



Above 1GHz



3.1.4 TEST DEVIATION

No deviation

3.1.5 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the APPENDIX A.

3.1.6 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the APPENDIX B.



4. LIST OF MEASUREMENT EQUIPMENTS

	Radiated Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Antenna	Schwarzbeck	VULB9160	9160-3231	Apr. 14, 2022	
2	Amplifier	Agilent	8449B	3008A02334	Feb. 27, 2022	
3	High Pass Filter	Wairrwright Instruments Gmbh	WHK 1.5/15G-10ST	11	Feb. 27, 2022	
4	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 1710/1785-1690/1805-60/ 12SS	38	Feb. 27, 2022	
5	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 824/849-810/863-60/9SS	7	Feb. 27, 2022	
6	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 880/915-860/935-60/9SS	14	Feb. 27, 2022	
7	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 1850/1910-1830/1930-60/ 10SS	17	Feb. 27, 2022	
8	High Pass Filter	Wairrwright Instruments Gmbh	WHK3.1/18G-10SS	24	Feb. 27, 2022	
9	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Feb. 28, 2022	
10	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 28, 2022	
11	Receiver	Agilent	N9038A	MY52130039	Mar. 19, 2022	
12	wideband radio communication tester	R&S	CMW500	152372	Feb. 27, 2022	
13	High pass filter	KANGMAIWEI	ZHPF-M3-12.75G-3869	B2015073763	Feb. 07, 2022	
14	High pass filter	KANGMAIWEI	ZHPF-M1000-4000-1	B2015073762	Feb. 07, 2022	
15	High pass filter	KANGMAIWEI	ZHPF-M6-186-1727	B2015073764	Feb. 07, 2022	
16	Cable	emci	LMR-400(30MHz-1GHz) (8m+5m)	N/A	May 20, 2022	
17	Cable	mitron	B10-01-01-12M	18072744	Oct. 16, 2021	
18	Controller	ETS-Lindgren	2090	N/A	N/A	
19	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
20	Loop Antenna	EM	EM-6876-1	230	Oct. 16, 2021	
21	Double Ridged Guide Antenna	ETS	3115	75846	Mar. 17, 2022	
22	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 30, 2022	

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.



5. EUT TEST PHOTO

Radiated Emissions Test Photos

30 MHz to 1 GHz







Radiated Emissions Test Photos

Above 1 GHz







APPENDIX A - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1000MHZ)



30.000

127.00

224.00

321.00

418.00

Test Mode GSM850_CH190+TX_5G WIFI_A Mode 5745 MHz

Vertical 20.0 dBm 10 0 -10 -20 -30 -40 -50 -60 -70 -90 -100,0

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		50.370	-69.92	-3.97	-73.89	-13.00	-60.89	peak	
2		165.315	-72.90	-1.83	-74.73	-13.00	-61.73	peak	
3		291.415	-72.91	-1.82	-74.73	-13.00	-61.73	peak	
4		473.775	-71.64	2.14	-69.50	-13.00	-56.50	peak	
5		641.100	-71.42	5.13	-66.29	-13.00	-53.29	peak	
6	*	812.305	-70.27	7.25	-63.02	-13.00	-50.02	peak	

515.00

612.00

709.00

806.00



Horizontal 20.0 dBm 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100.0 127.00 224.00 321.00 1000.00 MHz 30.000 418.00 515.00 612.0**0** 709.00806.00

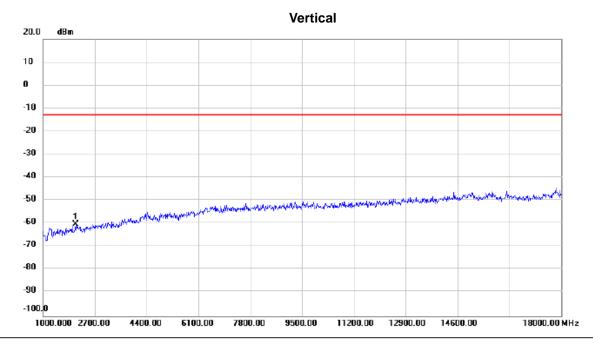
No. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	33.395	-71.12	-5.11	-76.23	-13.00	-63.23	peak	
2	144.460	-73.07	-2.70	-75.77	-13.00	-62.77	peak	
3	337.975	-73.00	-0.80	-73.80	-13.00	-60.80	peak	
4	507.240	-71.41	2.39	-69.02	-13.00	-56.02	peak	
5	785.630	-70.64	6.87	-63.77	-13.00	-50.77	peak	
6 *	882.145	-70.48	8.22	-62.26	-13.00	-49.26	peak	



APPENDIX B - RADIATED SPURIOUS EMISSIONS (ABOVE 1000MHZ)



Test Mode | GSM850_CH190+TX_2.4G WIFI_B Mode 2462 MHz



No. Mk	. Freq.	Reading Level		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	2079.500	-58.11	-2.08	-60.19	-13.00	-47.19	peak	



Test Mode GSM850_CH190+TX_2.4G WIFI_B Mode 2462 MHz

Vertical 20.0 dBm 10 0 -10 -20 -30 -40 -50 -70 -80 -90 -100,0

No. MI	c. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	25807.250	-71 38	22.85	-48.53	-13 00	-35 53	neak	

18000.00018850.00 19700.00 20550.00 21400.00 22250.00 23100.00 23950.00 24800.00



-100.0

1000.000 2700.00

4400.00

6100.00

7800.00

Test Mode GSM850_CH190+TX_2.4G WIFI_B Mode 2462 MHz

No. Mk	. Freq.	_		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	2946.500	-58.35	-0.01	-58.36	-13.00	-45.36	peak	

9500.00

11200.00 12900.00 14600.00

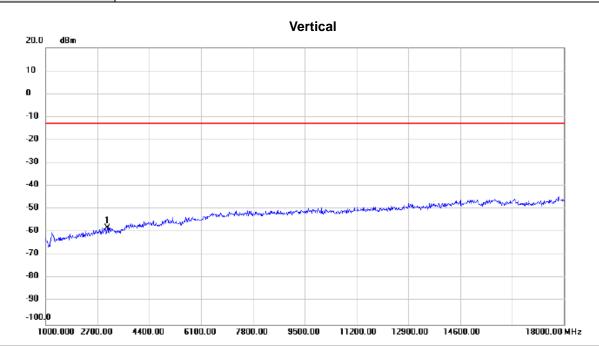


Test Mode GSM850_CH190+TX_2.4G WIFI_B Mode 2462 MHz

No. M	k. Freq	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
		dbiii	uD.	ubili	dDill	QD.	Detector	Comment

18000.00018850.00 19700.00 20550.00 21400.00 22250.00 23100.00 23950.00 24800.00





No. Mk	Freq.	_		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	3031.500	-58.28	0.25	-58.03	-13.00	-45.03	peak	



Vertical 20.0 dBm 10 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100.0 18000.000 20200.00 22400.00 24600.00 26800.00 29000.00 31200.00 33400.00 35600.00 40000.00 MHz

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 * 3	9318.000	-68.61	29.31	-39.30	-13.00	-26.30	peak	



Horizontal 20.0 dBm 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100.0 1000.000 2700.00 9500.00 18000.00 MHz 4400.00 6100.00 12900.00

No. Mk	. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	3830.500	-59.33	2.51	-56.82	-13.00	-43.82	peak	

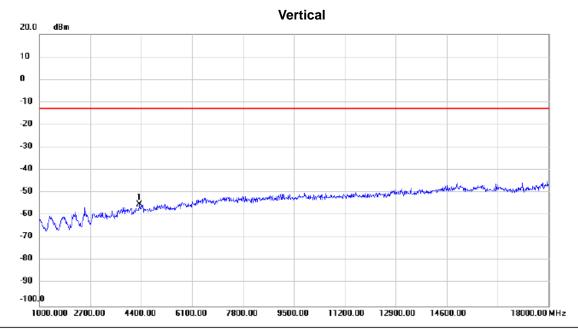


Test Mode GSM850_CH190+TX_5G WIFI_A Mode 5745 MHz

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 * 3	39197.000	-68.09	29.10	-38.99	-13.00	-25.99	peak	

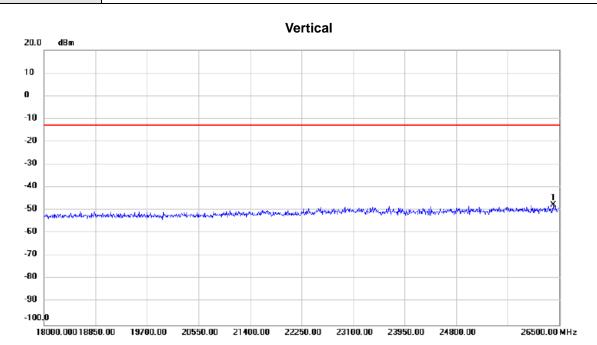
18000.00020200.00 22400.00 24600.00 26800.00 29000.00 31200.00 33400.00 35600.00





No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4349.000	-58.52	3.41	-55.11	-13.00	-42.11	peak	





No. M	lk. Freq.	Reading Level		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	26402 250	-70.64	22.84	-47 80	-13.00	-34.80	neak	

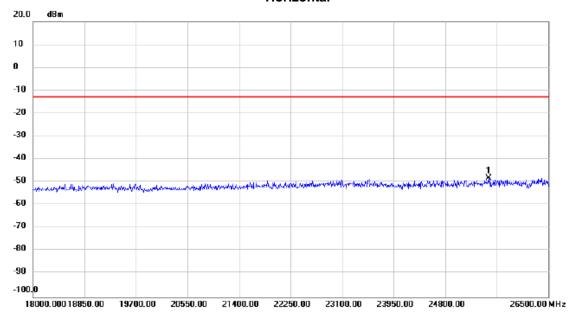


Horizontal 20.0 dBm 10 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100.0 1000.000 2700.00 4400.00 6100.00 7800.00 9500.00 11200.00 12900.00 14600.00 18000.00 MHz

No. Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
				-55.34			-	



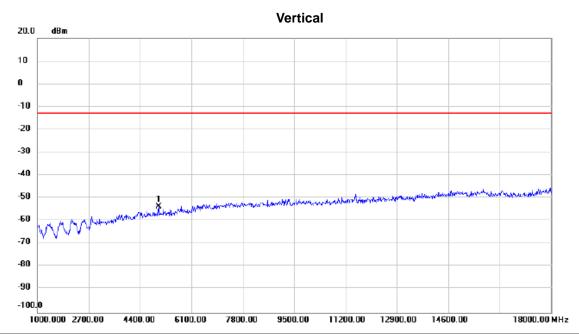
Horizontal



No. MI	ι. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	25522.500	-71.00	22.64	-48.36	-13.00	-35.36	peak	



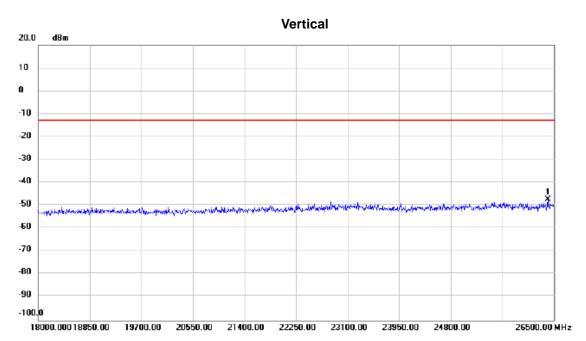
Test Mode WCDMA Band II_CH9800+TX_2.4G WIFI_B Mode 2462 MHz



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	5012.000	-59.88	6.14	-53.74	-13.00	-40.74	peak	



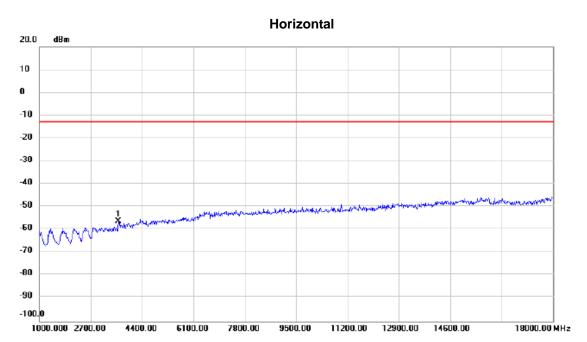
Test Mode WCDMA Band II_CH9800+TX_2.4G WIFI_B Mode 2462 MHz



No. M	k. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	26402.250	-70.12	22.84	-47.28	-13.00	-34.28	peak	



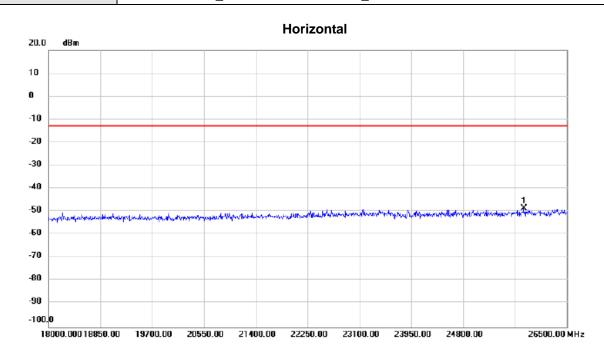
Test Mode WCDMA Band II_CH9800+TX_2.4G WIFI_B Mode 2462 MHz



No. Mk	. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	3618.000	-58.36	1.88	-56.48	-13.00	-43.48	peak	



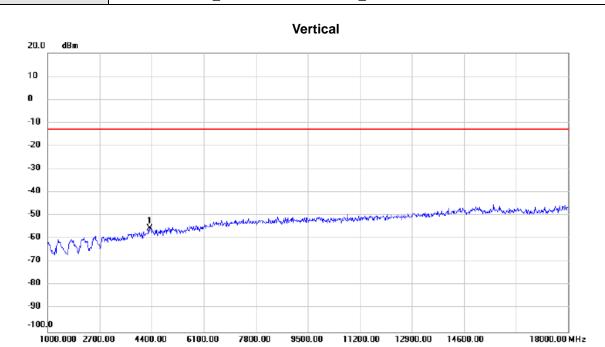
Test Mode WCDMA Band II_CH9800+TX 2.4G WIFI_B Mode 2462 MHz



No. M	k. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	25798.750	-71.39	22.85	-48.54	-13.00	-35.54	peak	



Test Mode WCDMA Band IV_CH1638+TX 2.4G WIFI_B Mode 2462 MHz



No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4340.500	-58.82	3.40	-55.42	-13.00	-42.42	peak	



18000.00018850.00 19700.00

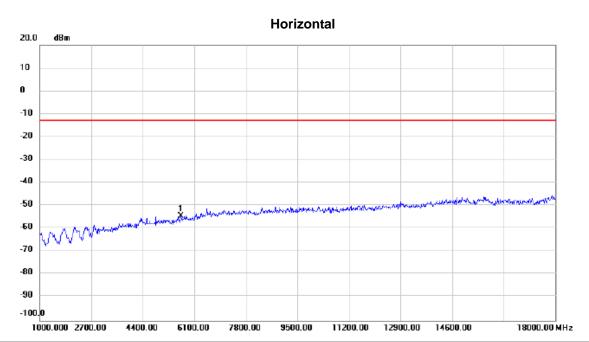
Test Mode WCDMA Band IV_CH1638+TX_2.4G WIFI_B Mode 2462 MHz

No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
4 *	26300.250	-70.61	22.00	47.72	12.00	24.72	I-	

20550.00 21400.00 22250.00 23100.00 23950.00 24800.00



Test Mode WCDMA Band IV_CH1638+TX_2.4G WIFI_B Mode 2462 MHz

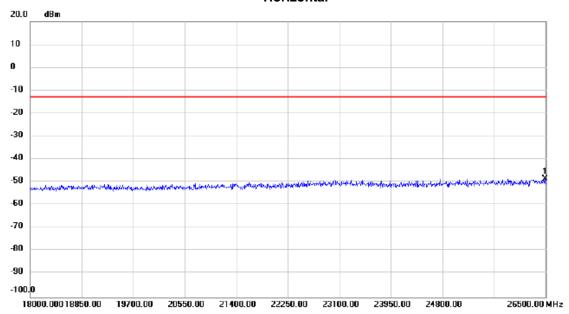


No. Mk	Freq.	Reading Level		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	5658.000	-61.25	6.76	-54.49	-13.00	-41.49	peak	



Test Mode WCDMA Band IV_CH1638+TX_2.4G WIFI_B Mode 2462 MHz

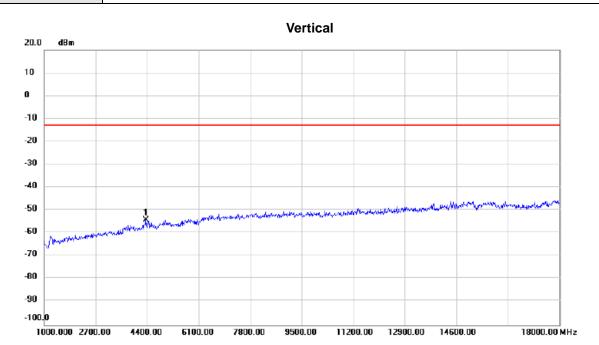
Horizontal



No. Mk.	Freq.	Reading Level		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 * 26	495.750	-71.35	22.82	-48.53	-13.00	-35.53	peak	



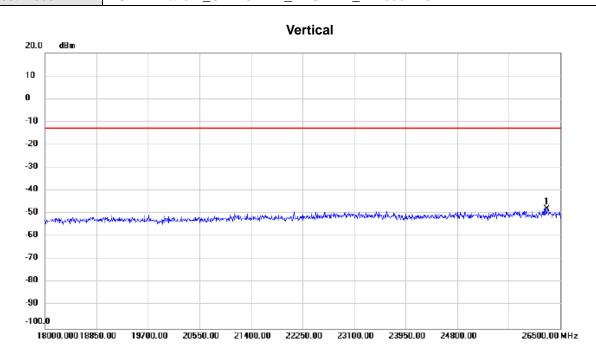
Test Mode WCDMA Band V_CH4407+TX_2.4G WIFI_B Mode 2462 MHz



No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	-ID	dD	-ID	-ID	Detector	S
	IVII IZ	ubiii	dB	dBm	dBm	dB	Detector	Comment



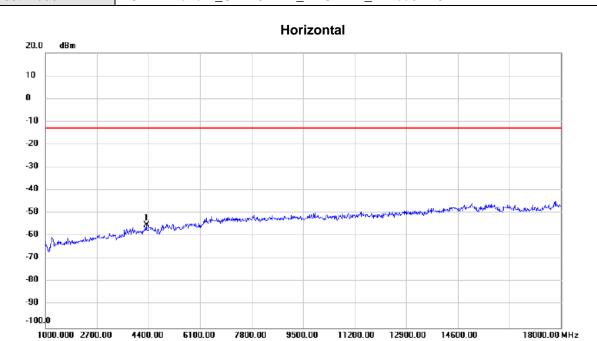
Test Mode WCDMA Band V_CH4407+TX_2.4G WIFI_B Mode 2462 MHz



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
				-47.91				



Test Mode WCDMA Band V_CH4407+TX_2.4G WIFI_B Mode 2462 MHz



No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4340.500	E8 48	3.40	-55.08	13.00	42.08	noak	



Test Mode WCDMA Band V_CH4407+TX_2.4G WIFI_B Mode 2462 MHz

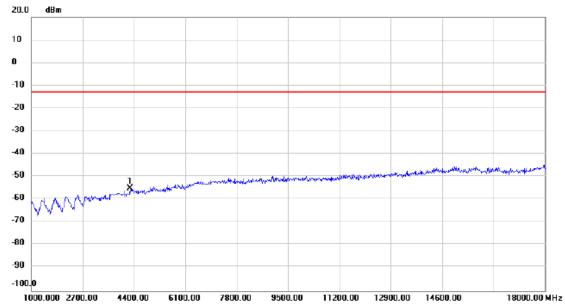
No. MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	ı	
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	26491.500	-70 62	22 81	-47 81	-13 00	-34 81	peak	

18000.00018850.00 19700.00 20550.00 21400.00 22250.00 23100.00 23950.00 24800.00



Test Mode LTE Band 2_CH18900+TX_2.4G WIFI_B Mode 2462 MHz

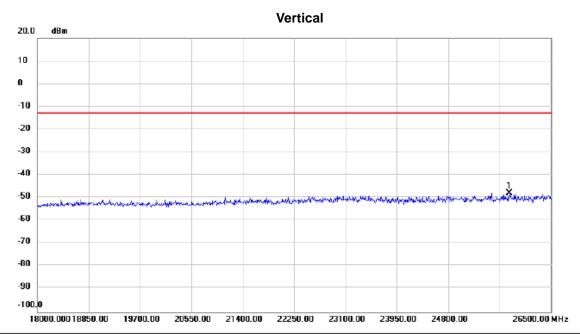
Vertical



No. MI	c. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4272.500	-58.39	3.33	-55.06	-13.00	-42.06	peak	



Test Mode LTE Band 2_CH18900+TX_2.4G WIFI_B Mode 2462 MHz

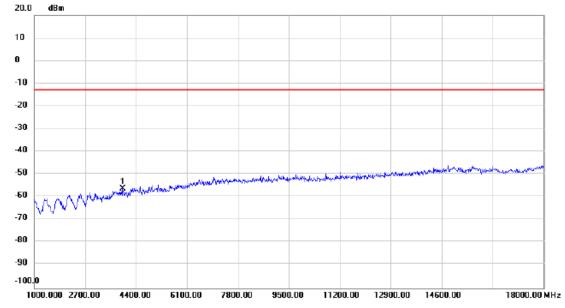


No. Mk	. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 * 2	25811.500	-70.66	22.85	-47.81	-13.00	-34.81	peak	



LTE Band 2_CH18900+TX_2.4G WIFI_B Mode 2462 MHz Test Mode

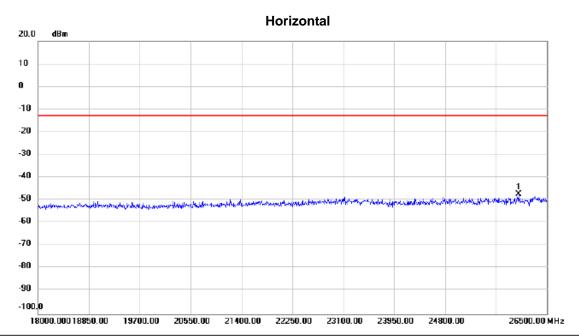
Horizontal



No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	3949.500	-59.30	2.87	-56.43	-13.00	-43.43	peak	



Test Mode LTE Band 2_CH18900+TX_2.4G WIFI_B Mode 2462 MHz



No	. M	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2602	28.250	-70.38	22.99	-47.39	-13.00	-34.39	peak	



Test Mode LTE Band 4_CH20175+TX_2.4G WIFI_B Mode 2462 MHz

Vertical 20.0 dBm 10 0 -10 -20 -30 -40 -50 -60 -80 -90 -100,0 1000.000 2700.00 4400.00 6100.00 7800.00 9500.00 11200.00 12900.00 14600.00 18000.00 MHz

No. Mk	c. Freq.	_		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4689.000	-58 94	4 55	-54.39	-13 00	-41 39	peak	



18000.000 18850.00

19700.00

Test Mode LTE Band 4_CH20175+TX_2.4G WIFI_B Mode 2462 MHz

20550.00 21400.00

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
4 * 20	381.000	70.40	22.05	-47.63	12.00	24.02		

22250.00

23100.00

23950.00

24800.00



1000.000 2700.00

4400.00

6100.00

7800.00

Test Mode LTE Band 4_CH20175+TX_2.4G WIFI_B Mode 2462 MHz

Horizontal 20.0 dBm 10 0 -10 -20 -30 -40 -70 -80 -90 -100,0

No. Mk	. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4961.000	-60.45	5.92	-54.53	-13.00	-41.53	peak	

9500.00

11200.00



Test Mode LTE Band 4_CH20175+TX_2.4G WIFI_B Mode 2462 MHz

18000.00018850.00 19700.00 20550.00

Horizontal 20.0 dBm 10 0 -10 -20 -30 -40 -50 -70 -80 -90 -100,0

No. Mk.	Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
	786.000			-47.78				

22250.00 23100.00

23950.00

24800.00

21400.00



Test Mode LTE Band 5_CH20525+TX_2.4G WIFI_B Mode 2462 MHz

Vertical 20.0 dBm 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100.0 1000.000 2700.00 4400.00 6100.00 7800.00 9500.00 11200.00 12900.00 14600.00 18000.00 MHz

No. Mk	. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment



Test Mode LTE Band 5_CH20525+TX_2.4G WIFI_B Mode 2462 MHz

Vertical 20.0 dBm 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100.0 18000.00018850.00 19700.00 20550.00 21400.00 22250.00 23100.00 23950.00 24800.00 26500.00 MHz

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 * 2	25616.000	-70.43	22.70	-47.73	-13.00	-34.73	peak	



1000.000 2700.00

4400.00

6100.00

7800.00

Test Mode LTE Band 5_CH20525+TX_2.4G WIFI_B Mode 2462 MHz

No. Mk	. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	5080.000	-60.29	6.21	-54.08	-13.00	-41.08	peak	

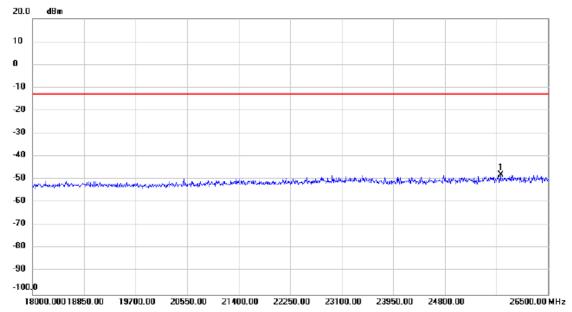
9500.00

11200.00 12900.00 14600.00



Test Mode LTE Band 5_CH20525+TX_2.4G WIFI_B Mode 2462 MHz

Horizontal



No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	25718.000	-70.84	22.79	-48.05	-13.00	-35.05	peak	



1000.000 2700.00

4400.00

6100.00

7800.00

Test Mode LTE Band 7_CH21100+TX_2.4G WIFI_B Mode 2462 MHz

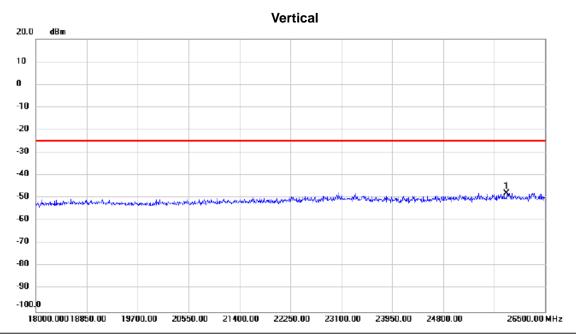
No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4400.000	-58.24	3.47	-54.77	-25.00	-29.77	peak	

9500.00

11200.00 12900.00 14600.00



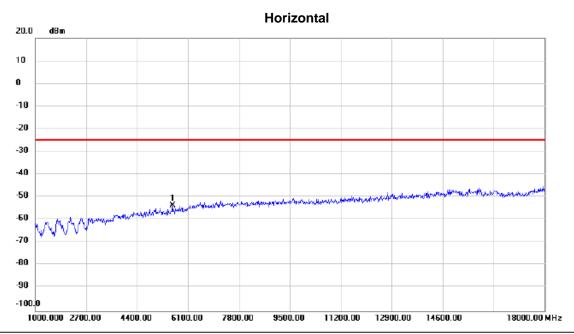
Test Mode LTE Band 7_CH21100+TX_2.4G WIFI_B Mode 2462 MHz



No. M	1k. Fred	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	25862.50	0 -70.75	22.89	-47.86	-25.00	-22.86	peak	



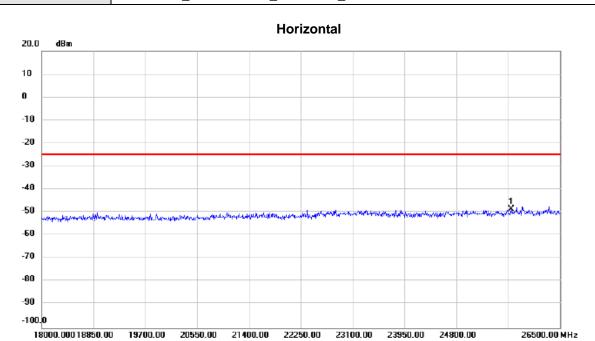
Test Mode LTE Band 7_CH21100+TX_2.4G WIFI_B Mode 2462 MHz



	No. Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
Ī	1 *	5581.500	-60.26	6.71	-53.55	-25.00	-28.55	peak	







No. Mk	. Freq.	Reading Level		Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 * 2	25705.250	-71.26	22.77	-48.49	-25.00	-23.49	peak	

End of Test Report