Certificate # 2951.01

TEST REPORT

Applicant	CORSAIR MEMORY, Inc.
Address	115 North McCarthy Blvd, Milpitas, CA 95035, USA

Manufacturer or Supplier	CORSAIR MEMORY, Inc.
Address	115 North McCarthy Blvd, Milpitas, CA 95035, USA
Product	Wireless Mouse
Brand Name	or CORSAIR or CORSAIR
Model	RGP0184
Additional Model & Model Difference	N/A
Date of tests	Sep. 28, 2025 ~ Oct. 22, 2025

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart C, Section 15.247**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Dec. 17, 2025

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2509WDG0163-1	Original release	Dec. 17, 2025

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit.
15.205 15.209	Radiated Emission	PASS	Meet the requirement of limit.
15.247(d)	Out of Band Emission Measurement	PASS	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted Output power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used

2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9KHz ~ 30MHz	3.36dB
Radiated emissions	30MHz ~ 1GMHz	4.65dB
	1GHz ~ 18GHz	5.01dB
	18GHz ~ 40GHz	4.10dB
Occupied Channel Bandwidth	1GHz ~ 18GHz	$\pm 1.132 \times 10^{-4}$ %

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless Mouse
MODEL NO.	RGP0184
ADDITIONAL MODELS	N/A
FCC ID	2AAFM-RGP0184
NOMINAL VOLTAGE	DC 5V from USB host unit or DC 3.7V from Li-ion battery
MODULATION TECHNOLOGY	DTS
MODULATION TYPE	BT-LE(GFSK) (1Mbps)
OPERATING FREQUENCY	2402-2480MHz
PEAK OUTPUT POWER	1.194mW (Max. Measured)
ANTENNA TYPE	Integral Antenna, 3.51dBi Gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB A to C cable: Shielded, Detachable, 1.8m USB C to C cable: Shielded, Detachable, 1.8m

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 2509WDG0163-1) for detailed product photo.
4. There are two types of products with different outer shells. One is a magnesium alloy hollowed-out shell, and the other is a carbon fiber shell. The prototype with magnesium alloy hollow shell has undergone comprehensive testing, while the prototype with carbon fiber shell has undergone radiated emission tests. Only the worst data (magnesium alloy hollowed-out shell) is presented in the report.

3.2 DESCRIPTION OF TEST MODES

40 channels are provided for BT-LE(GFSK):

CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

Please see section 5 photographs of the test configuration for reference.

3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis, power supply voltage range and antenna ports The worst case was found when positioned on X axis for radiated emission. Following test modes were selected for the final test, and the final worst case is marked in boldface and recorded in the report:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE<1G	RE≥1G	PLC	APCM	
A	-	-	-	√	Powered by Battery
B	√	√	√	-	Powered by Adapter

Where **RE<1G:** Radiated Emission below 1GHz **RE≥1G:** Radiated Emission above 1GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

RADIATED EMISSION TEST (BELOW 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
BT-LE	0 to 39	39	DTS	GFSK	1

For the test results, only the worst case was shown in test report.

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
BT-LE	0 to 39	0,19, 39	DTS	GFSK	1

POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture), and packet types.

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	TESTED CONDITION
BT-LE	BT Link

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture), and packet types.

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
BT-LE	0 to 39	0,19, 39	DTS	GFSK	1

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	26deg. C, 58%RH	DC 5V from Adapter	Ludius
RE≥1G	26deg. C, 58%RH	DC 5V from Adapter	Ludius
PLC	22deg. C, 56%RH	DC 5V from Adapter	Summer
APCM	27deg. C, 57%RH	DC 3.7V from Battery	Reali

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C, Section 15.247
KDB558074 D01 15.247 Meas Guidance v05r02
ANSI C63.10-2020

Note: All test items have been performed and recorded as per the above standards.

3.4 DESCRIPTION OF SUPPORT UNITS

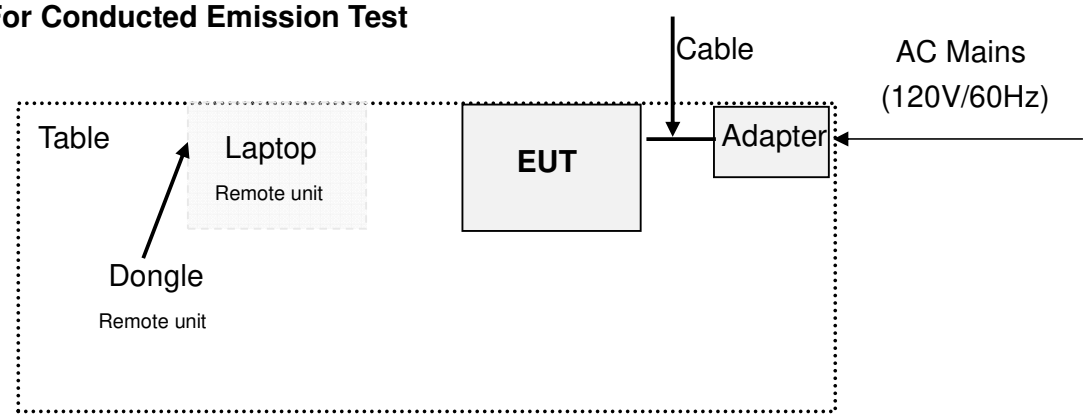
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	Provided by
1	Notebook	DELL	Latitude 5420	127710614	Lab
2	Adapter	N/A	C120A2400500PI	N/A	Lab
3	Adapter	Belkin	WCC002kr	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1.0m; DC Line: Unshielded, Detachable 1.5m.
2	N/A
3	N/A

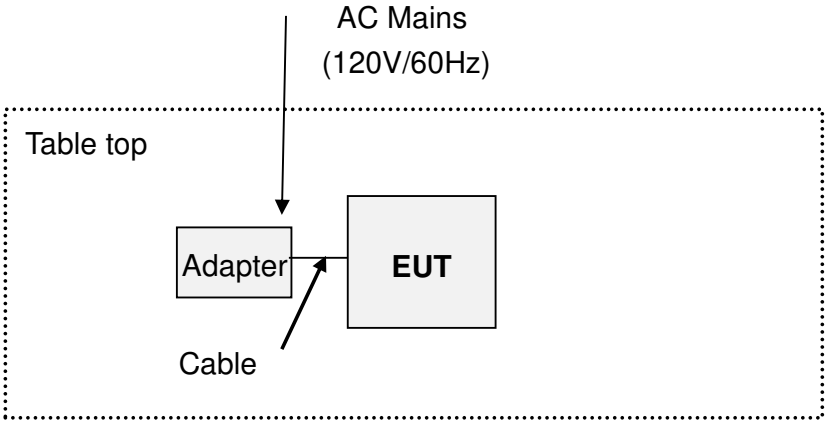
3.5 CONFIGURATION OF SYSTEM UNDER TEST

For Conducted Emission Test



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

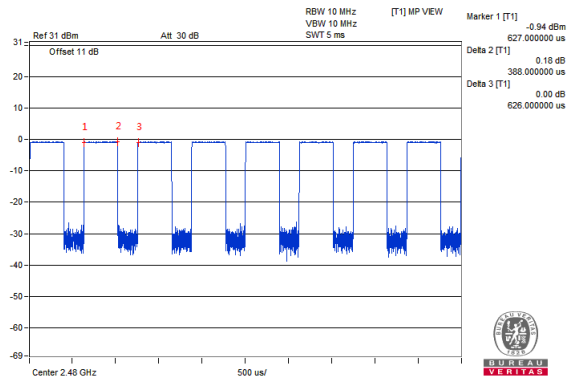
For Radiated Emission Test



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.6 DUTY CYCLE OF TESET SIGNAL

Test Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	1/T Min. VBW (KHz)	VBW Setting
BT-LE GFSK (1Mpbs)	0.388	0.627	61.88	2.577	3KHz

BT-LE GFSK (1Mpbs)	NULL
	NULL

4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1.The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Oct. 10, 26
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Oct. 10, 26
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Oct. 10, 26
Artificial Mains Network	SCHWARZBECK	NSLK 8122	8122-05001	Apr. 09, 26
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05857	Apr. 09, 26
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05858	Apr. 09, 26
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jul. 06, 26
Coaxial RF Cable	SUHNER	RG 223/U-CE	C2310066DG	Jun. 22, 26

NOTES: 1. The test was performed at Shielded Room 553.

2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.

4.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

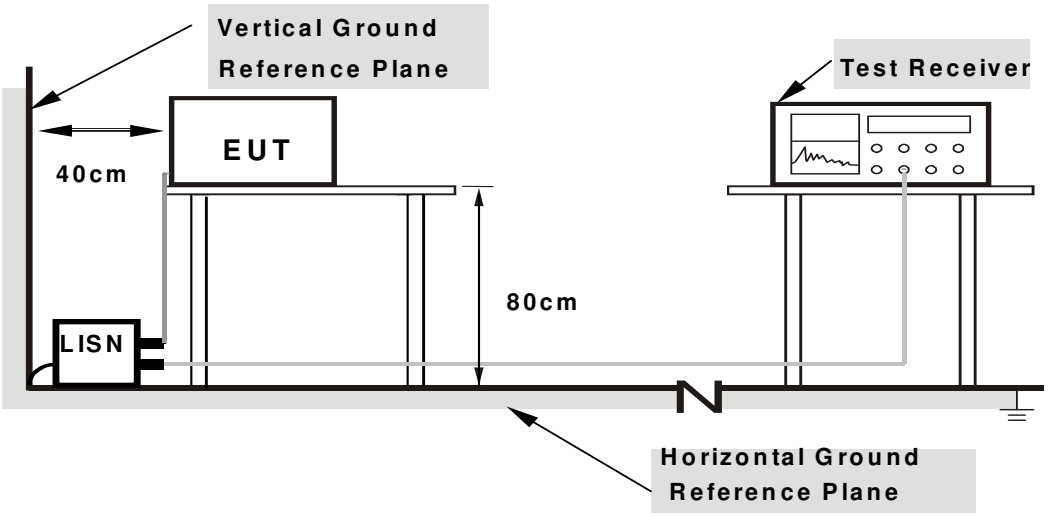
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

a. Turned on the power and connected of all equipment.
b. EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

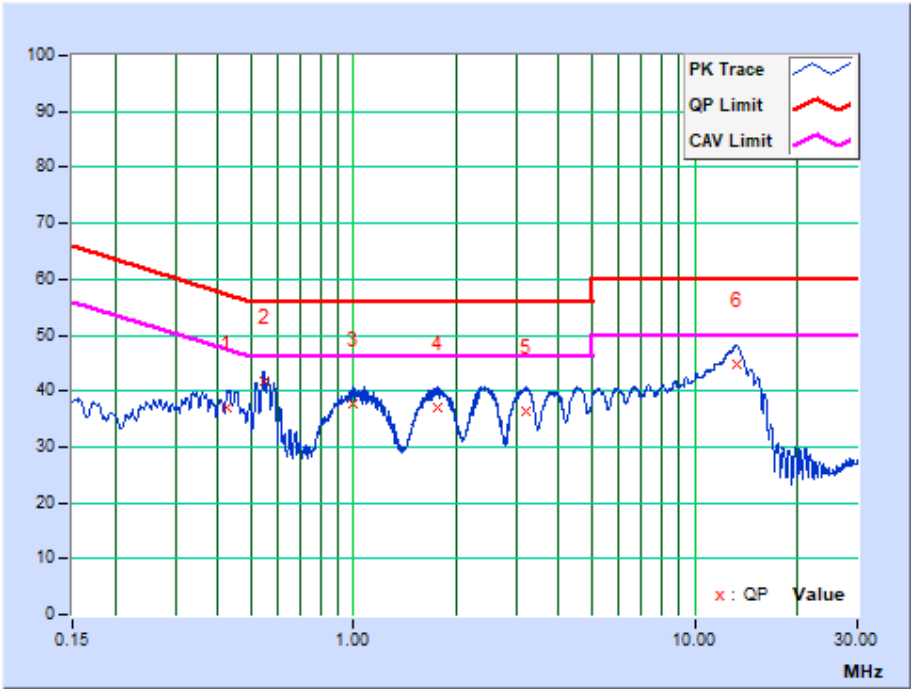
4.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA:BT Link

PHASE	Line	6dB BANDWIDTH	9kHz

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.42635	9.82	27.27	18.51	37.09	28.33	57.32	47.32	-20.23	-18.99
2	**0.54501**	**9.83**	**31.96**	**22.67**	**41.79**	**32.50**	**56.00**	**46.00**	**-14.21**	**-13.50**
3	0.99150	9.88	27.69	20.12	37.57	30.00	56.00	46.00	-18.43	-16.00
4	1.75650	9.93	27.01	19.68	36.94	29.61	56.00	46.00	-19.06	-16.39
5	3.19875	10.01	26.41	17.90	36.42	27.91	56.00	46.00	-19.58	-18.09
6	13.23109	10.59	34.32	23.84	44.91	34.43	60.00	50.00	-15.09	-15.57

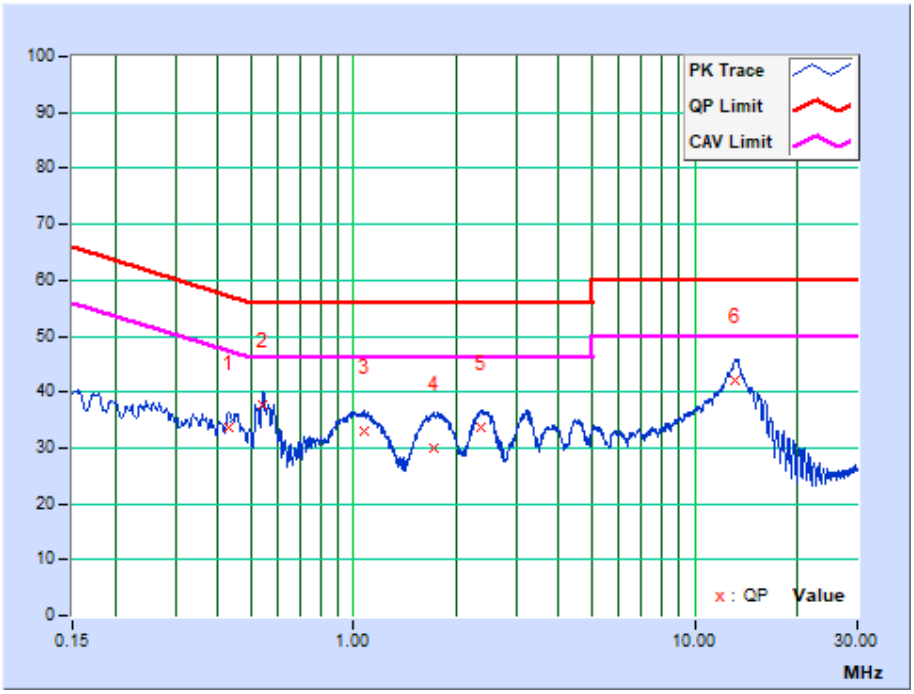
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



PHASE	Neutral	6dB BANDWIDTH	9kHz

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.42860	9.68	23.89	18.61	33.57	28.29	57.28	47.28	-23.71	-18.99
2	0.54375	9.69	28.18	21.16	37.87	30.85	56.00	46.00	-18.13	-15.15
3	1.08150	9.72	23.13	16.24	32.85	25.96	56.00	46.00	-23.15	-20.04
4	1.72050	9.77	20.30	12.92	30.07	22.69	56.00	46.00	-25.93	-23.31
5	2.36175	9.82	23.76	17.27	33.58	27.09	56.00	46.00	-22.42	-18.91
6	13.16625	10.56	31.45	19.37	42.01	29.93	60.00	50.00	-17.99	-20.07

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Oct. 09, 26
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	Apr. 07, 26
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	Apr. 13, 26
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Feb. 21, 26
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Dec. 25, 25
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	0085519	Oct. 11, 26
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	Apr. 19, 26
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 17, 26
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A

NOTE:

1. The test was performed in 966 Chamber.
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
4. The FCC Site registration No. is 749762, and the designation number is CN1174.

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. For below 1GHz was used bilog antenna, and above 1GHz was used horn antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1.3m above the ground.

g. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver is 120kHz for Quasi-peak detection at frequency below 1GHz.

2. The resolution bandwidth of spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.

3. The resolution bandwidth of spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) Average detection (AV) at frequency above 1GHz.

4.All modes of operation were investigated and the worst-case emissions are reported.

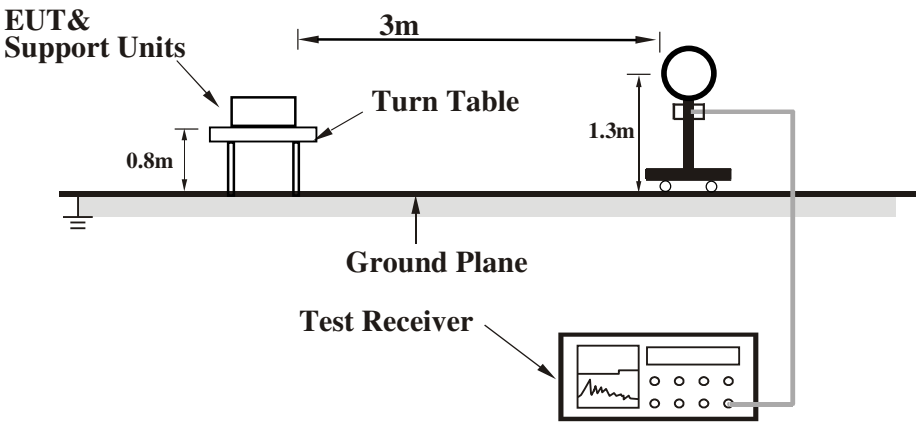
5.The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

4.2.4 DEVIATION FROM TEST STANDARD

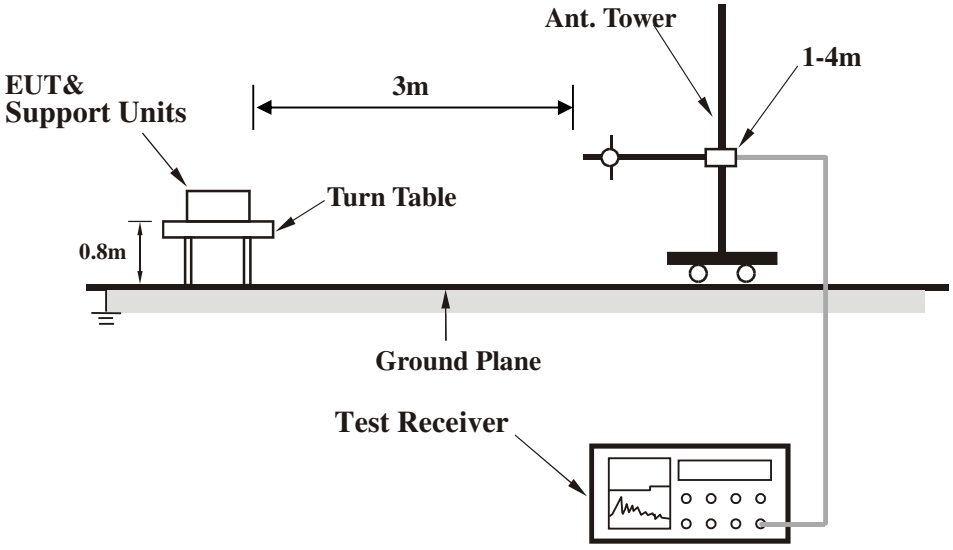
No deviation.

4.2.5 TEST SETUP

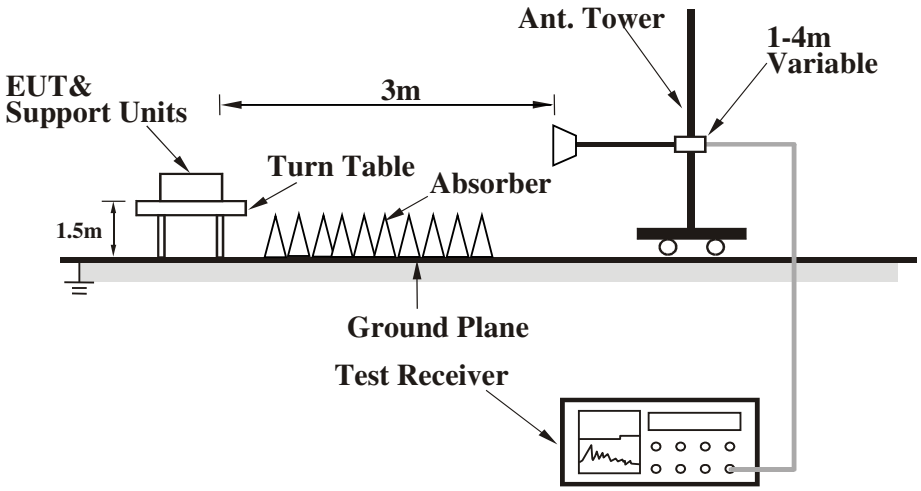
Below 30MHz test setup



Below 1GHz test setup



Above 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

a. Set the EUT under full load condition and placed them on a testing table.

b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

c. The necessary accessories enable the EUT in full functions.

4.2.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA:

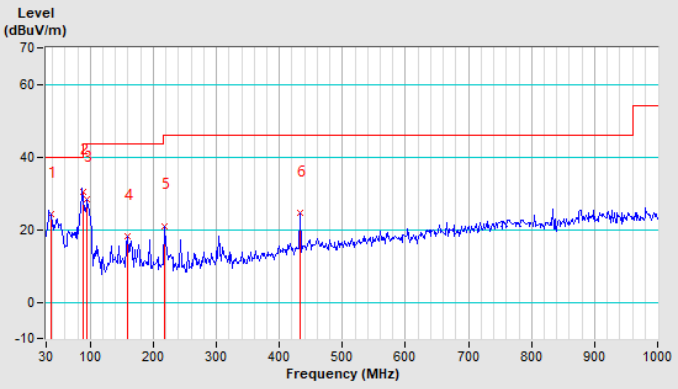
BT-LE GFSK (1 Mbps)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	37.77	24.09 QP	40.00	-15.91	1.38 H	35	42.72	-18.63
2	**88.00**	**30.31 QP**	**40.00**	**-9.69**	**1.52 H**	**49**	**53.36**	**-23.05**
3	95.29	28.36 QP	43.50	-15.14	1.77 H	73	50.58	-22.22
4	159.02	18.03 QP	43.50	-25.47	1.90 H	86	34.69	-16.66
5	218.09	20.83 QP	46.00	-25.17	2.24 H	120	39.67	-18.84
6	432.61	24.47 QP	46.00	-21.53	2.38 H	134	35.77	-11.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value

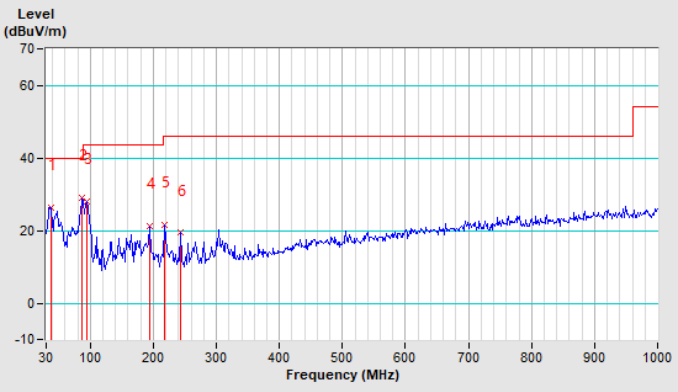


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	37.77	26.23 QP	40.00	-13.77	1.01 V	2	44.86	-18.63
2	87.52	29.08 QP	40.00	-10.92	1.49 V	296	52.11	-23.03
3	95.29	28.12 QP	43.50	-15.38	1.62 V	283	50.34	-22.22
4	194.78	21.13 QP	43.50	-22.37	1.77 V	269	40.68	-19.55
5	218.09	21.65 QP	46.00	-24.35	1.89 V	256	40.49	-18.84
6	242.96	19.33 QP	46.00	-26.67	2.03 V	242	36.90	-17.57

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value



ABOVE 1GHz TEST DATA:

BT-LE GFSK (1 Mbps)

CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	45.02 PK	74.00	-28.98	1.00 H	45	42.21	2.81
2	2390.00	32.88 AV	54.00	-21.12	1.00 H	45	30.07	2.81
3	*2402.00	90.38 PK			2.63 H	56	87.54	2.84
4	*2402.00	89.44 AV			2.63 H	56	86.60	2.84
5	4804.00	51.24 PK	74.00	-22.76	2.35 H	15	44.03	7.21
6	4804.00	43.99 AV	54.00	-10.01	2.35 H	15	36.78	7.21
7	7206.00	55.31 PK	74.00	-18.69	2.38 H	87	43.97	11.34
8	7206.00	40.57 AV	54.00	-13.43	2.38 H	87	29.23	11.34
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	49.49 PK	74.00	-24.51	1.54 V	45	46.68	2.81
2	2390.00	33.67 AV	54.00	-20.33	1.54 V	45	30.86	2.81
3	*2402.00	97.32 PK			3.21 V	15	94.48	2.84
4	*2402.00	96.18 AV			3.21 V	15	93.34	2.84
5	4804.00	50.32 PK	74.00	-23.68	2.35 V	87	43.11	7.21
6	4804.00	41.51 AV	54.00	-12.49	2.35 V	87	34.30	7.21
7	7206.00	54.24 PK	74.00	-19.76	2.38 V	87	42.90	11.34
8	7206.00	39.52 AV	54.00	-14.48	2.38 V	87	28.18	11.34

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	90.21 PK			4.00 H	48	87.27	2.94
2	*2440.00	88.14 AV			4.00 H	48	85.20	2.94
3	4880.00	52.41 PK	74.00	-21.59	2.35 H	6	44.97	7.44
4	4880.00	40.12 AV	54.00	-13.88	2.35 H	6	32.68	7.44
5	7320.00	54.31 PK	74.00	-19.69	1.54 H	78	42.56	11.75
6	7320.00	43.14 AV	54.00	-10.86	1.54 H	78	31.39	11.75
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	95.15 PK			2.35 V	15	92.21	2.94
2	*2440.00	94.31 AV			2.35 V	15	91.37	2.94
3	4880.00	51.45 PK	74.00	-22.55	1.00 V	360	44.01	7.44
4	4880.00	41.24 AV	54.00	-12.76	1.00 V	360	33.80	7.44
5	7320.00	55.61 PK	74.00	-18.39	1.54 V	78	43.86	11.75
6	7320.00	44.32 AV	54.00	-9.68	1.54 V	78	32.57	11.75

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	90.69 PK			1.56 H	360	87.65	3.04
2	*2480.00	89.96 AV			1.56 H	360	86.92	3.04
3	2483.50	56.47 PK	74.00	-17.53	1.00 H	15	53.41	3.06
4	2483.50	45.48 AV	54.00	-8.52	1.00 H	15	42.42	3.06
5	4960.00	52.41 PK	74.00	-21.59	1.54 H	45	44.74	7.67
6	4960.00	37.62 AV	54.00	-16.38	1.54 H	45	29.95	7.67
7	7440.00	56.31 PK	74.00	-17.69	2.35 H	15	44.13	12.18
8	7440.00	40.21 AV	54.00	-13.79	2.35 H	15	28.03	12.18
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	93.46 PK			1.54 V	45	90.42	3.04
2	*2480.00	92.55 AV			1.54 V	45	89.51	3.04
3	2483.50	58.17 PK	74.00	-15.83	2.35 V	56	55.11	3.06
4	**2483.50**	**47.83 AV**	**54.00**	**-6.17**	**2.35 V**	**56**	**44.77**	**3.06**
5	4960.00	51.24 PK	74.00	-22.76	1.54 V	78	43.57	7.67
6	4960.00	36.36 AV	54.00	-17.64	1.54 V	78	28.69	7.67
7	7440.00	54.32 PK	74.00	-19.68	2.38 V	78	42.14	12.18
8	7440.00	39.15 AV	54.00	-14.85	2.38 V	78	26.97	12.18

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

4.3 6DB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6DB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Power Sensor	Keysight	U2021XA	MY57320002	Apr. 07, 26
Digital Multimeter	FLUKE	15B	12151063	Jun. 03, 26
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Oct. 10, 26
Oscilloscope	Agilent	DSO9254A	MY51260160	Jul. 06, 26
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Oct. 09, 26
Signal Generator	Agilent	N5183A	MY50140980	Jul. 06, 26
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jul. 06, 26
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A
DC Source	Rohde&Schwarz	HMP2020	101295	Jun. 03, 26
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A

NOTE:

1. The test was performed in RF Oven room.
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.

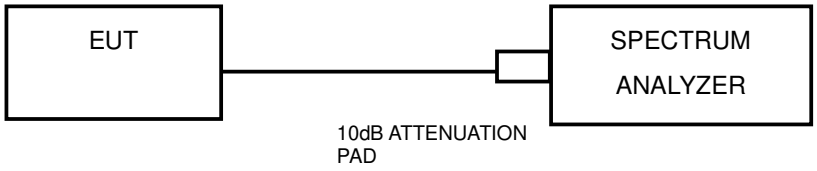
4.3.3 TEST PROCEDURE

1. Set RBW = 100K(shall be in the range of 1% to 5% of OBW, but not less than 100kHz).
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = No faster than coupled(auto) time.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation.

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

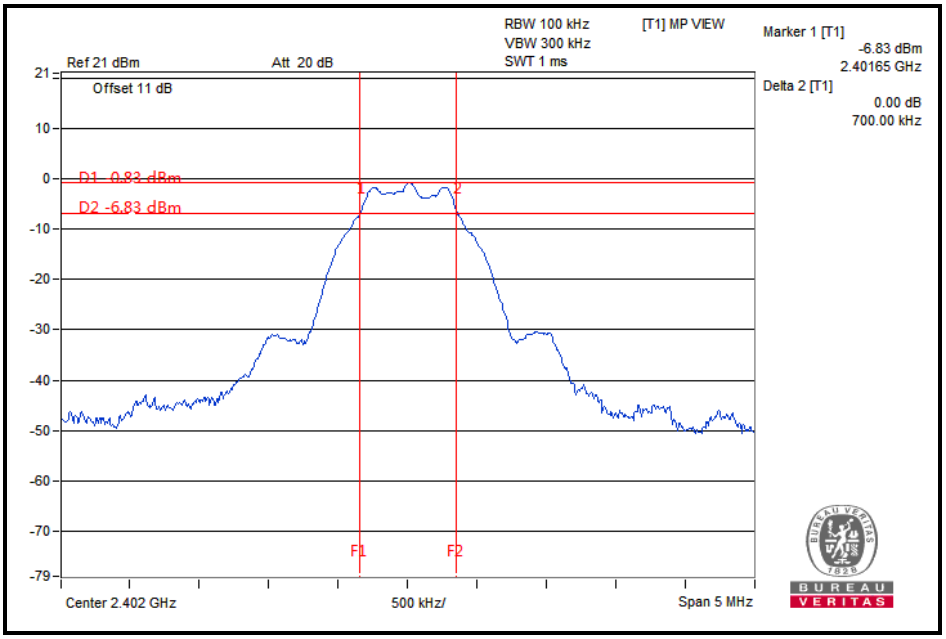
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

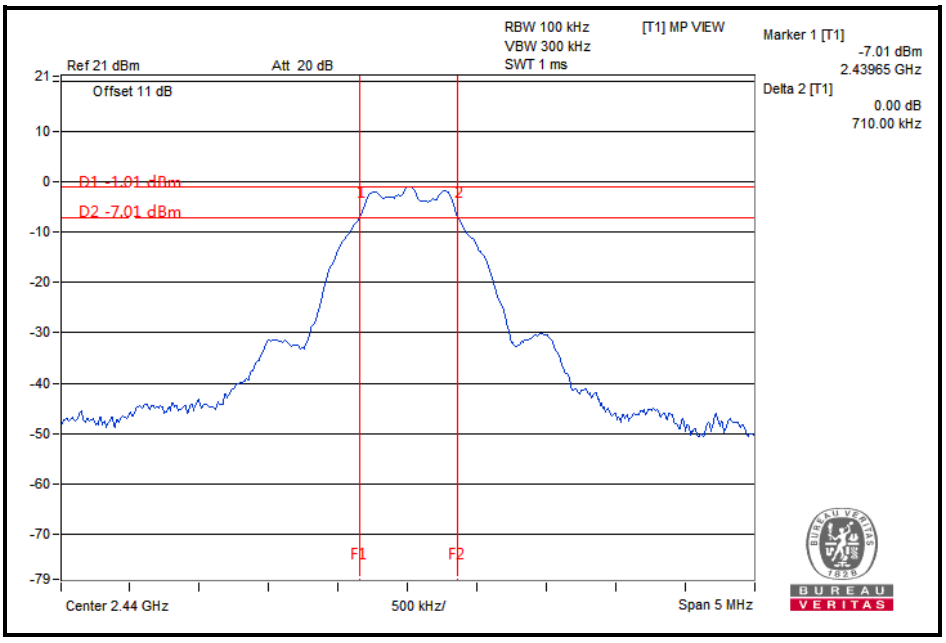
BT-LE GFSK (1 Mbps)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
0	2402	0.70	0.5	PASS
19	2440	0.71	0.5	PASS
39	2480	0.70	0.5	PASS

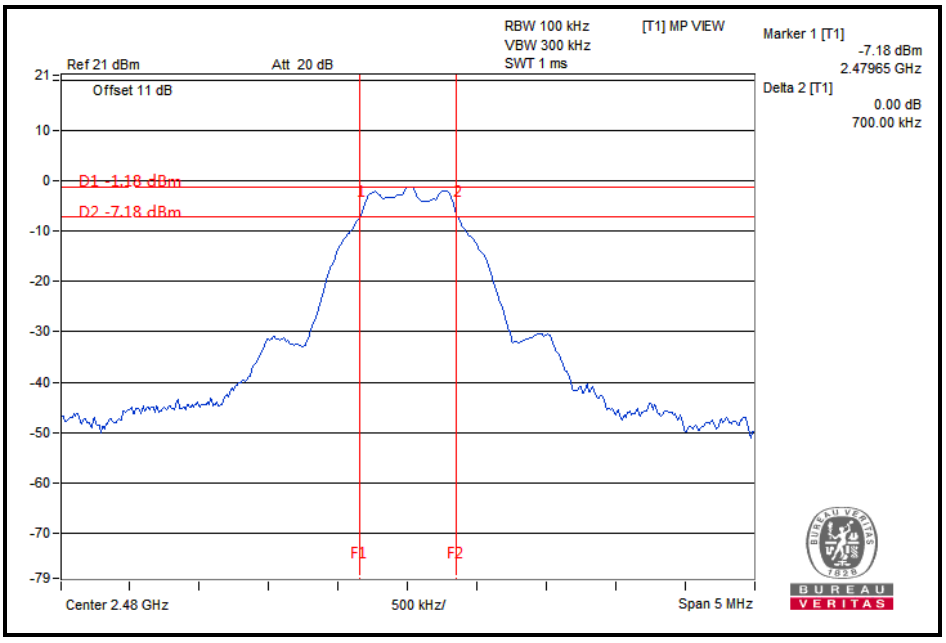
CH 0



CH 19


RBW 100 kHz
VBW 300 kHz
SWT 1 ms
[T1] MP VIEW
Marker 1 [T1]
-7.01 dBm
2.43965 GHz
Delta 2 [T1]
0.00 dB
710.00 kHz
Ref 21 dBm
Att 20 dB
Offset 11 dB
D1 -1.01 dBm
D2 -7.01 dBm
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
F1
F2
Center 2.44 GHz
500 kHz/
Span 5 MHz

CH 39

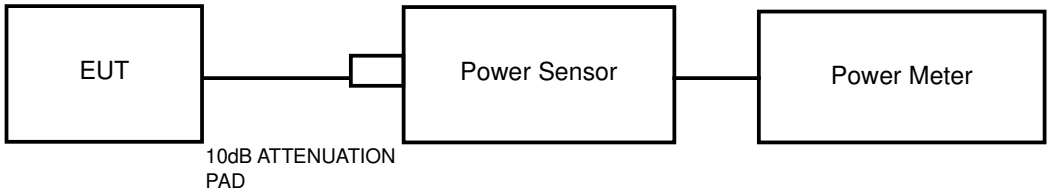

RBW 100 kHz
VBW 300 kHz
SWT 1 ms
[T1] MP VIEW
Marker 1 [T1]
-7.18 dBm
2.47965 GHz
Delta 2 [T1]
0.00 dB
700.00 kHz
Ref 21 dBm
Att 20 dB
Offset 11 dB
D1 -1.18 dBm
D2 -7.18 dBm
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
F1
F2
Center 2.48 GHz
500 kHz/
Span 5 MHz

4.4 CONDUCTED OUTPUT POWER

4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.3.2 to get information of above instrument.

4.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor and set the detector to PEAK. Record the power level.

An average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power senso and set the detector to AVERAGE. Record the power level.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.4.7 TEST RESULTS

4.4.7.1 MAXIMUM PEAK OUTPUT POWER

BT-LE GFSK (1 Mbps)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
0	**2402**	**0.77**	**1.194**	**1**	**PASS**
19	2440	0.74	1.186	1	PASS
39	2480	0.47	1.114	1	PASS

4.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

BT-LE GFSK (1 Mbps)

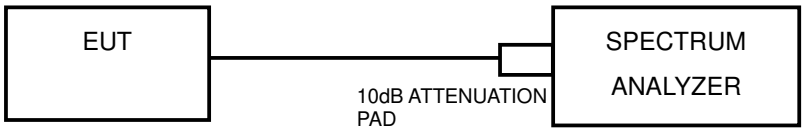
CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)
0	2402	-1.00
19	2440	-1.04
39	2480	-1.32

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.3.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

a) Set instrument center frequency to DTS channel center frequency.

b) Set span > 1.5 times the DTS bandwidth.

c) Set RBW to 3 kHz ≤ RBW ≤ 100KHz

d) Set VBW ≥3 x RBW

e) Detector = peak

f) Sweep time = No faster than coupled(auto) time,

g) Trace mode = max hold

h) allow trace to fully stabilize.

i) Use the peak marker function to determine the maximum amplitude level within the RBW.

j) If measured value exceeds requirement, then reduce RBW(but no less than 3KHz) and repeat.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

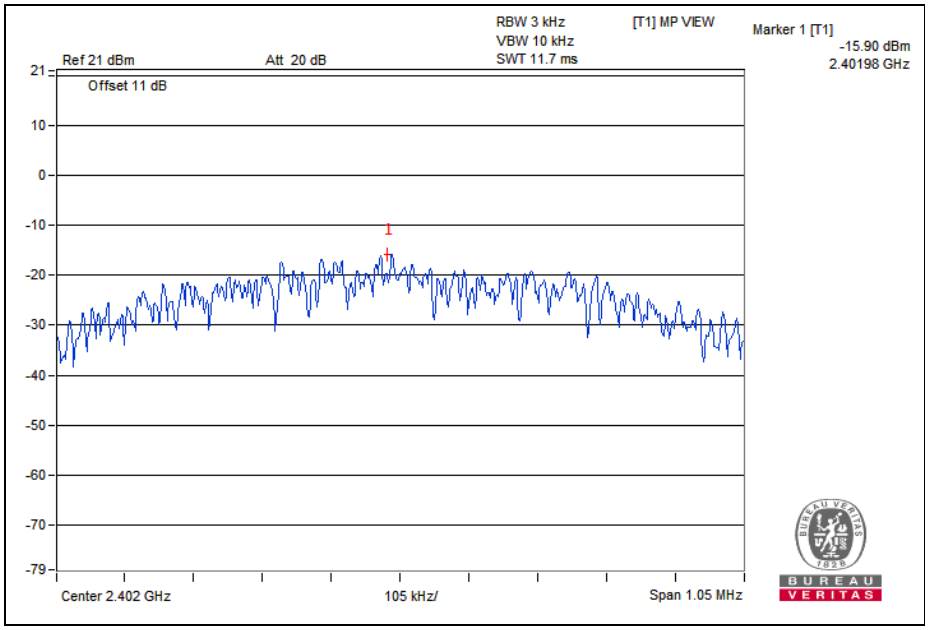
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.5.7 TEST RESULTS

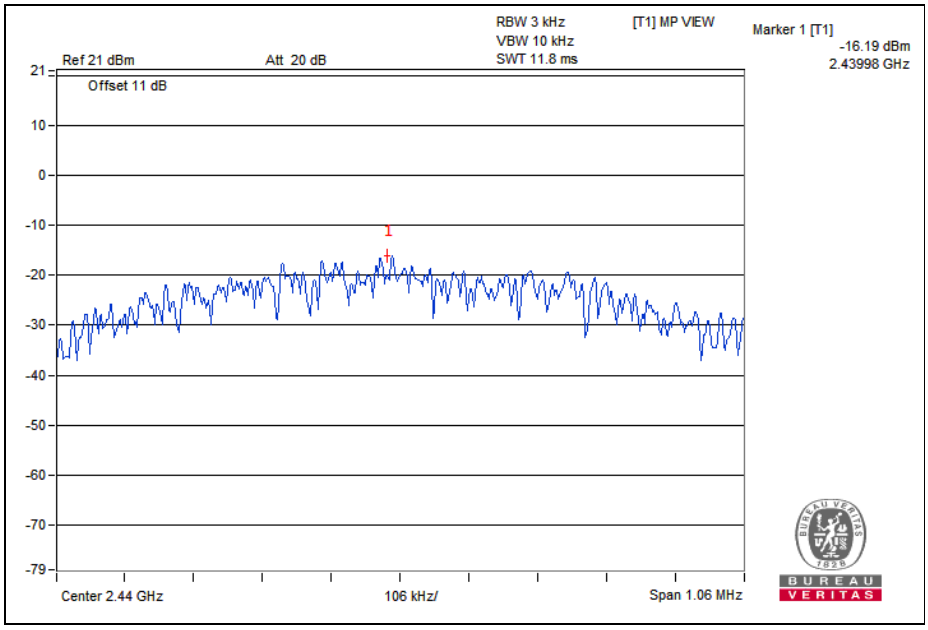
BT-LE GFSK (1 Mbps)

Channel	FREQ. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
0	2402	-15.90	8	PASS
19	2440	-16.19	8	PASS
39	2480	-16.36	8	PASS

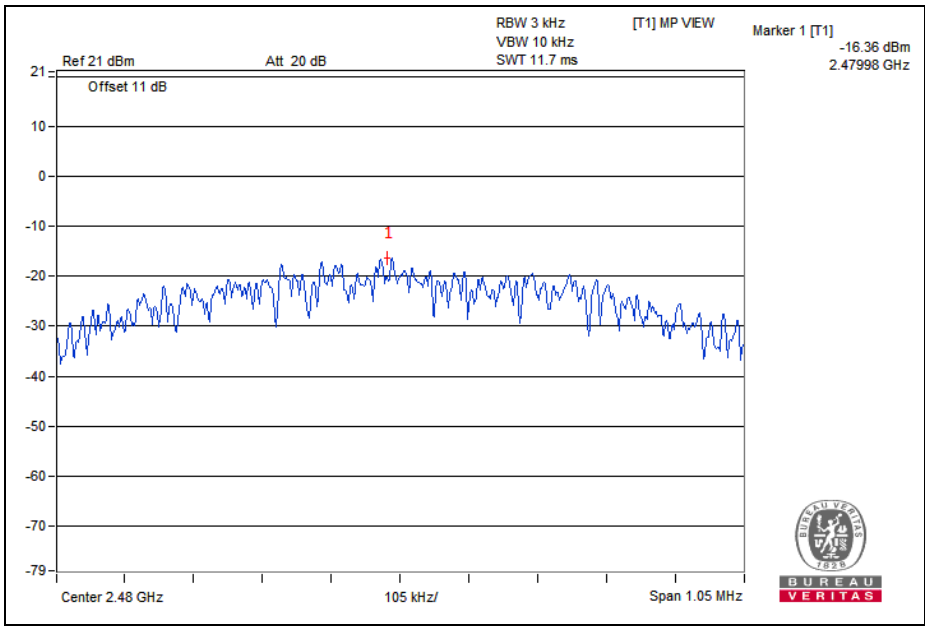
CH 0



CH 19


RBW 3 kHz
VBW 10 kHz
SWT 11.8 ms
[T1] MP VIEW
Marker 1 [T1]
-16.19 dBm
2.43998 GHz
Ref 21 dBm
Att 20 dB
Offset 11 dB
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
Center 2.44 GHz
106 kHz/
Span 1.06 MHz

CH 39

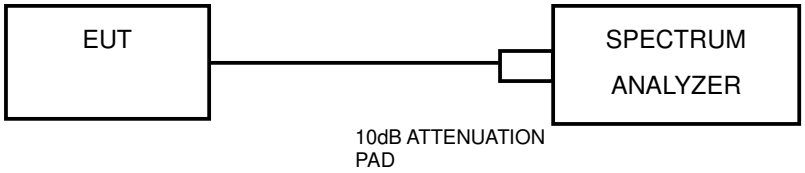

RBW 3 kHz
VBW 10 kHz
SWT 11.7 ms
[T1] MP VIEW
Marker 1 [T1]
-16.36 dBm
2.47998 GHz
Ref 21 dBm
Att 20 dB
Offset 11 dB
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
Center 2.48 GHz
105 kHz/
Span 1.05 MHz

4.6 OUT OF BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.3.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set instrument center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW = 100 kHz.
4. Set the VBW ≥ 100KHz(3x RBW).
5. Detector = peak.
6. Sweep time = No faster than coupled(auto) time.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum PSD level.

MEASUREMENT PROCEDURE OOBE

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set RBW = 100 kHz.
3. Set VBW ≥ 300 kHz.
4. Detector = peak.
5. Sweep = No faster than coupled(auto) time.
6. Trace Mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

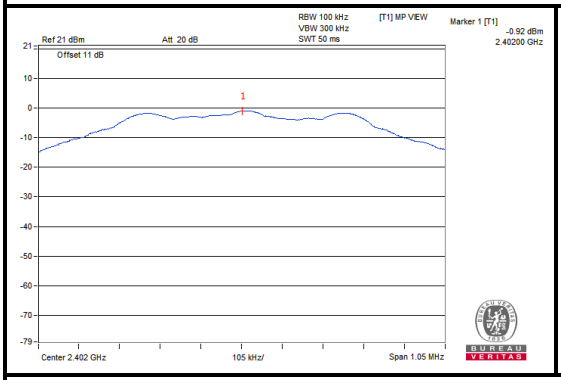
4.6.6 EUT OPERATING CONDITION

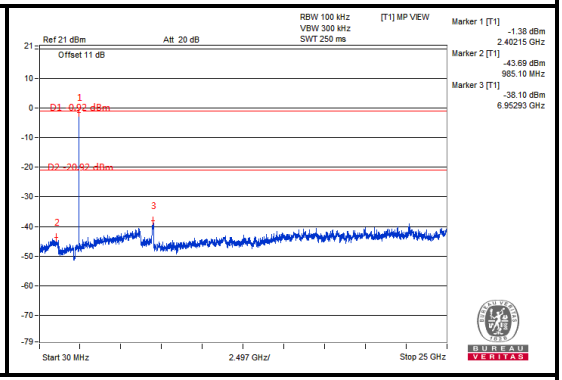
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.6.7 TEST RESULTS

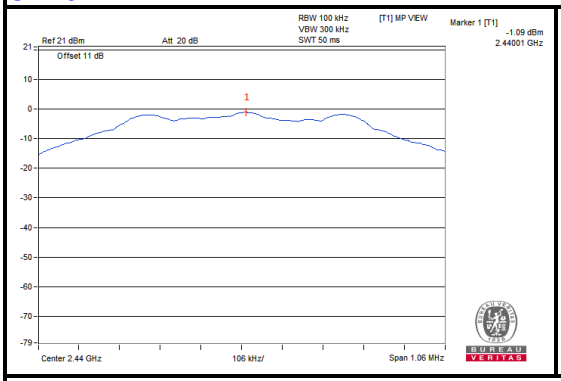
BT-LE GFSK (1 Mbps)

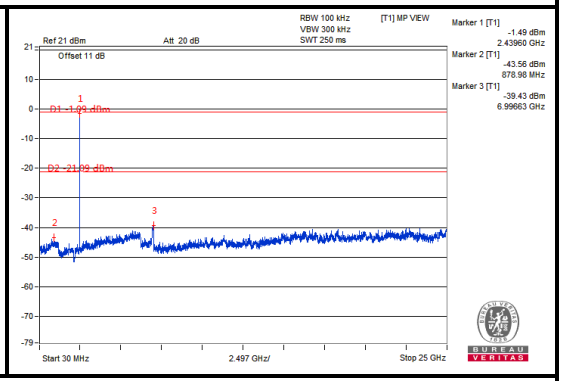
CH 0



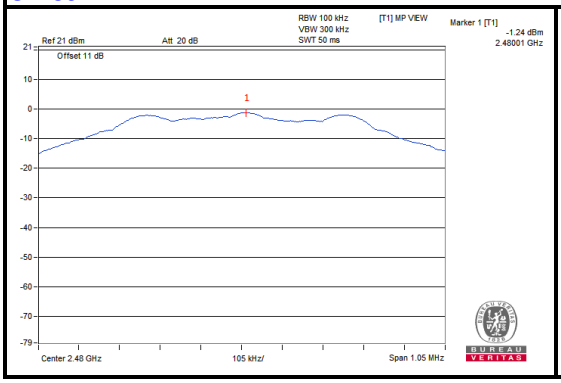


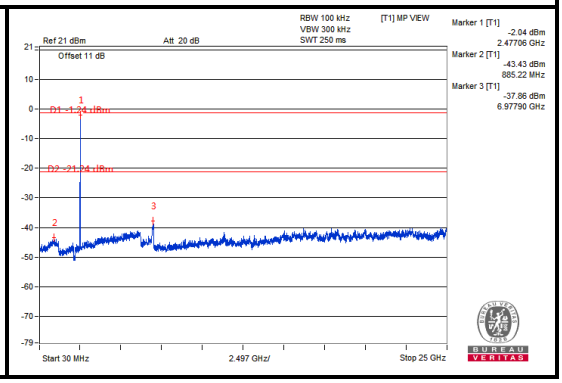
CH 19



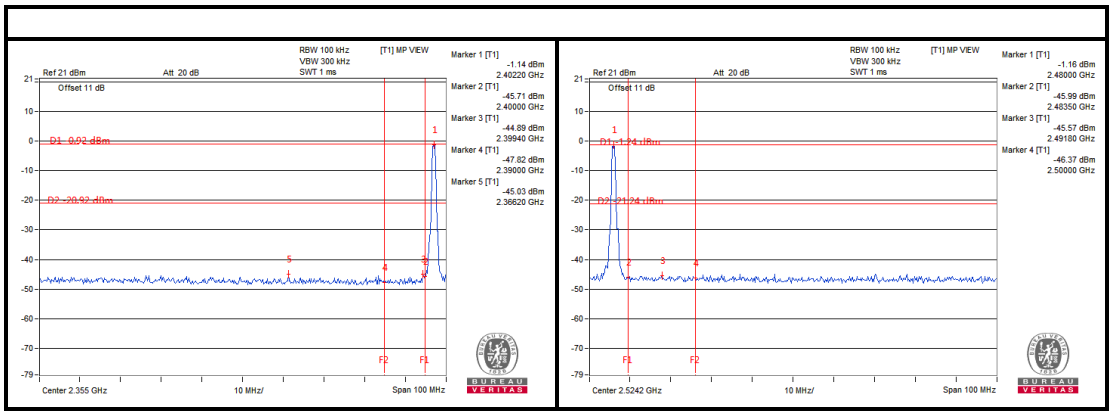


CH 39





Band Edge: BT-LE GFSK (1 Mbps)



5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6 APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications are made to the EUT by the lab during the test.

---END---