TEST REPORT

ETSI EN 300 086 V2.1.2(2016-08)

Report Reference No.....:	**SZE2607150575ET06**
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Supervised by (position+printed name+signature)..:	Project Reviewer Scott Liang
Approved by (position+printed name+signature)..:	Technical Director Andrea Hu
Date of issue.....:	2026/10/19
Testing Laboratory Name.....:	EUSACERT (Shenzhen) Testing Co., Ltd.
Address.....:	103, 2F, Building A2 and 106, Building A3, No. 2082, Jincheng Road, Haoxiang Community, Shajing Street, Bao'an District, Shenzhen, People's Republic of China
Applicant's name.....:	NiceRF Wireless Technology CO.,LTD
Address.....:	309-314, 3/F, Hongdu Business Building Zone 43, Bao'an District, Shenzhen, Guangdong, 518101 China
Test specification ..... **:**	
Standard .....:	**ETSI EN 300 086 V2.1.2(2016-08)**
TRF Originator.....:	EUSACERT (Shenzhen) Testing Co., Ltd.
Master TRF.....:	Dated 2017-12

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Product Name .....:	Wireless walkie-talkie module
Trade Mark .....:	G-NiceRF
Product Model .....:	DMR818S-U
Serial Model.....:	N/A
Hardware Version.....:	V1.0
Software Version .....:	V1.7
Modulation Type .....:	FM
Ratings.....:	DC 4.2V
Result.....:	**PASS**

TEST REPORT

Test Report No. :	SZE2607150575ET06	2026/10/19 Date of issue

Product Name	:	Wireless walkie-talkie module
Product Model	:	DMR818S-U
Serial Model	:	N/A
Applicant	:	NiceRF Wireless Technology CO.,LTD
Address	:	309-314, 3/F, Hongdu Business Building Zone 43, Bao'an District, Shenzhen, Guangdong, 518101 China
Manufacturer	:	NiceRF Wireless Technology CO.,LTD
Address	:	309-314, 3/F, Hongdu Business Building Zone 43, Bao'an District, Shenzhen, Guangdong, 518101 China

Test Result:	**PASS**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

** Issued History **

Revision	Description	Issued Date	Remark
Revision 1.0	Initial Test Report Release	2026/10/19	Andrea Hu

Contents

1. TEST STANDARDS 5
2. SUMMARY 6
2.1. General Remarks 6
2.2. Product Description 6
2.3. Equipment Under Test 6
3. TEST ENVIRONMENT 7
3.1. Address of the test laboratory 7
3.2. Environmental conditions 7
3.3. Test Description 7
3.4. Statement of the measurement uncertainty 9
3.5. Equipment Used during the Test 10
4. TEST CONDITIONS AND RESULTS 11
4.1. Frequency Error 11
4.2. Transmitter power (conducted) 14
4.3. Transmitter frequency deviation 19
4.4. Adjacent and alternate channel power 24
4.5. Transmitter unwanted emissions in the spurious 27
4.6. Intermodulation attenuation 49
4.7. Receiver maximum useable sensitivity 50
4.8. Receiver co-channel rejection 51
4.9. Receiver adjacent channel selectivity 52
4.10. Receiver spurious response rejection 53
4.11. Receiver inter-modulation response rejection 54
4.12. Receiver blocking or desensitization 55
4.13. Receiver spurious radiations 56
5. TEST SETUP PHOTOS OF THE EUT 74
6. EXTERNAL AND INTERNAL PHOTOS OF THE EUT 75

1. TEST STANDARDS

The tests were performed according to following standards:

ETSI EN 300 086 V2.1.2(2016-08)

Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	2026/07/15
Testing commenced on	:	2026/07/15
Testing concluded on	:	2026/10/19

2.2. Product Description

Name of EUT	Wireless walkie-talkie module
Model(s) Number	DMR818S-U
List Models	N/A
Difference descrption	N/A
Hardware version	V1.0
Software version	V1.7
Antenna Type	External antenna

2.3. Equipment Under Test

Power supply system utilised

Power supply voltage	:	○	230V/ 50 Hz	○	120V/60Hz
		○	12 V DC	○	24 V DC
		●	Other (specified in blank below)		

DC 4.2V

Description of the test mode

Channel list		
Channel Separation for 12.5kHz	Channel	Ferquecny (MHz)
	1	406.1125
	2	418.0625
	3	429.9875
	4	450.0125
	5	460.0000
	6	469.9875

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

EUSACERT (Shenzhen) Testing Co., Ltd.
103, 2F, Building A2 and 106, Building A3, No. 2082, Jincheng Road, Haoxiang Community, Shajing Street, Bao'an District, Shenzhen, People's Republic of China

3.2. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature: 15°C~35°C
High Temperature: 45℃
Low Temperature: -20℃
Normal Voltage: DC 4.2V
High Voltage: DC 4.5V
Low Voltage:DC 3.4V
Relative Humidity: 55 %
Air Pressure: 989 hPa

3.3. Test Description

3.3.1 Main Terms

Verdict	Verdict of each test cases.
Test Case	Test cases identification number and description in ETSI specification.

3.3.2 Terms used in Condition column

NTC Normal voltage, Normal Temperature
HTHV High voltage, High Temperature
LTHV High voltage, Low Temperature
HTLV Low voltage, High Temperature
LTLV Low voltage, Low Temperature

3.3.3 Terms used in Verdict column

Pass	This test cases has been tested, and EUT is conformant to the applied standards in the given frequency band.
Fail	This test cases has been tested, but EUT is not conformant to the applied standards in the given frequency band.
N/A	This test case is either not required/not applicable in the specified band or is not applicable according to the specific PICS/PIXIT for the EUT.
Inc	Test case result is ambiguous in the given frequency band.
Decl	Declaration is received from the client to demonstrate the conformity to the relevant specification in the given frequency band.
BR	This test cases is not tested in the given frequency band, but this testcases was tested with pass result for the initial model in the given frequency band.

3.3.4 Sumarry of measurement results

Test items and the results are as bellow:

Technical characteristics of the transmitter			
№	**Section**	**Test Item**	**Result**
1	EN 300 086 Sub-clause 7.1	Transmitter frequency error	PASS
2	EN 300 086 Sub-clause 7.2	Transmitter power (conducted)	PASS
3	EN 300 086 Sub-clause 7.3	Transmitter maximum effective radiated power	N/A note 1
4	EN 300 086 Sub-clause 7.4	Transmitter frequency deviation	PASS
5	EN 300 086 Sub-clause 7.5	Transmitter adjacent and alternate channel power	PASS
6	EN 300 086 Sub-clause 7.6	Transmitter unwanted emissions in the spurious domain	PASS
7	EN 300 086 Sub-clause 7.7	Transmitter intermodulation attenuation	N/A note 2
Technical characteristics of the receiver			
№	**Section**	**Test Item**	Result
1	EN 300 086 Sub-clause 8.1	Receiver maximum useable sensitivity	PASS
2	EN 300 086 Sub-clause 8.2	Receiver maximum useable sensitivity (field strength)	N/A
3	EN 300 086 Sub-clause 8.3	Receiver co-channel rejection	PASS
4	EN 300 086 Sub-clause 8.4	Receiver adjacent channel selectivity	PASS
5	EN 300 086 Sub-clause 8.5	Receiver spurious response rejection	PASS
6	EN 300 086 Sub-clause 8.6	Receiver inter-modulation response rejection	PASS
7	EN 300 086 Sub-clause 8.7	Receiver blocking or desensitization	PASS
8	EN 300 086 Sub-clause 8.8	Receiver spurious radiations	PASS
9	EN 300 086 Sub-clause 9.1	Receiver desensitization (with simultaneous transmission and reception)	N/A note 3
10	EN 300 086 Sub-clause 9.2	Receiver spurious response rejection (with simultaneous transmission and reception)	N/A note 3

NOTE:
1. EUT is with the external port device;
2. Applies only to transmitters to be used in base stations
3. Applies only to equipment using duplex equipment.

3.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities.The measurement uncertainty was calculated for all measurements listed in this test report acc. to ETSI TR 100 028-1 [1], ETSI TS 103 051 [2] and ETSI TS 103 052 [3] and shall correspond to anexpansion factor (coverage factor) k = 1,96 or k = 2 (which provide confidence levels of respectively 95 % and 95,45 %in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).and is documented in the EUSACERT (Shenzhen) Testing Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device

Hereafter the best measurement capability for EUSACERT (Shenzhen) Testing Co., Ltd.is reported:

No.	Item	Uncertainty
1	Occupied Channel Bandwidth	±3.6dB
2	RF power,conducted	±0.16dB
3	Power Spectral Density, conducted	±1.3dB
4	Unwanted Emissions, conducted	±1.3dB
5	All emissions, radiated	±4.7dB
6	Temperature	±0.5°C
7	Humidity	±2%
8	DC and low frequency voltages	±1.5%
9	Time	±1.0%
10	Duty Cycle	±3.0%

3.5. Equipment Used during the Test

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	Spectrum analyzer	Agilent	N9020A	EUSA-028	2026/07/13	2027/07/12
2	Signal generator	Agilent	E4421B	EUSA-018	2026/07/13	2027/07/12
3	Signal generator	Agilent	N5181A	EUSA-019	2026/07/13	2027/07/12
4	Temperature and humidity meter	Boyang	HTC-1	EUSA-043	2026/07/13	2027/07/12
5	Wireless Communication Test Set	R&S	CMW500	EUSA-029	2026/07/13	2027/07/12
6	Audio Analyzer	Hp	8921A	EUSA-099	2026/07/13	2027/07/12
7	RF test software	Tonscend	V3.6.21	EUSA-060	/	/
8	Broadband antenna	Schwarzbeck	VULB 9163	EUSA-012	2025/07/14	2027/07/13
9	Horn antenna	Schwarzbeck	9120D	EUSA-013	2025/07/14	2027/07/13
10	EMI Test Receiver	R&S	ESR-7	EUSA-009	2026/07/13	2027/07/12
11	Amplifier	Schwarzbeck	BBV9743	EUSA-010	2026/07/13	2027/07/12
12	Amplifier	COM-POWER	PAM-118A	EUSA-011	2026/07/13	2027/07/12
13	High pass filter unit	Tonscend	JS0806-F	EUSA-034	2026/07/13	2027/07/12
14	Wireless Communication Test Set	R&S	CMW500	EUSA-029	2026/07/13	2027/07/12
15	Temperature control box	Weiss Technik	VT4002 EMC	EUSA-104	2026/07/13	2027/07/12
16	RSE Test Software	Tonscend	JS35-RSE 5.0.0	EUSA-061	/	/

4. TEST CONDITIONS AND RESULTS

4.1. Frequency Error

TEST LIMIT

ETSI EN 300 086 (V.2.1.2) Sub-clause 7.1.3

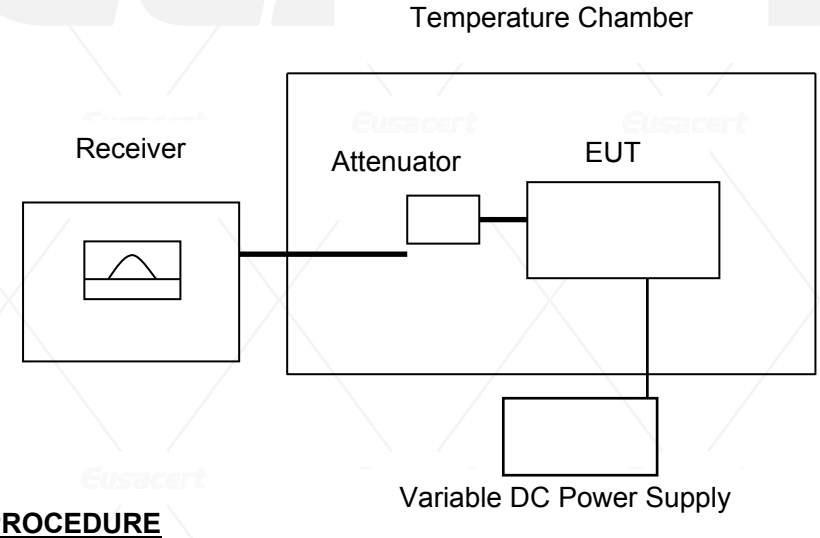
The frequency error, as defined in EN 300 086 sub-clause 7.1.1, shall not exceed the limits in EN 300 086 sub-clause 7.1.3 table 2 under normal, extreme or any intermediate set of conditions.

Table 2

Channel separation (kHz)	Frequency error limit (kHz)				
	below 47 MHz	47 MHz to 137 MHz	above 137 MHz to 300 MHz	above 300 MHz to 500 MHz	above 500 MHz to 1 000 MHz
20 and 25	±0,60	±1,35	±2,00	±2,00	±2,50 (a)
12,5	±0,60	±1,00	±1,00 (B) ±1,50 (M)	±1,00 (B) ±1,50 (a) (M)	±1,5 (B) ±2,5 (a) (M)

NOTE: (B) = base station.
(M) = mobile or hand portable station.
(a) = for hand portable stations having integral power supplies, the frequency error shall not be exceeded over a temperature range of 0 °C to + 40 °C.
Under extreme temperature conditions (clause 5.4.1), the frequency error shall not exceed ±2,50 kHz for a channel separation of 12,5 kHz between 300 MHz and 500 MHz, and ±3,00 kHz for channel separations of 20 kHz and 25 kHz between 500 MHz and 1 000 MHz.

TEST CONFIGURATION



TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 5.3 and Sub-clause 5.4 for the test conditions.
2. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 7.1.2 for the measurement method

TEST RESULTS

406.1125MHZ of 12.5 kHz Channel Separation

Test Condition		Frequency Measured (MHz)	Frequency Error (kHz)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	406.1124	-0.10
T_{min} (0)	DC 4.5	406.1121	-0.40
	DC 3.4	406.1123	-0.20
T_{max} (+50)	DC 4.5	406.1125	0.00
	DC 3.4	406.1122	-0.30
Limit		Normal=±2.00 kHz, Extreme=±3.00 kHz @ 406.1125MHz	
Result		Pass	

418.0625MHZ of 12.5 kHz Channel Separation

Test Condition		Frequency Measured (MHz)	Frequency Error (kHz)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	418.0624	-0.10
T_{min} (0)	DC 4.5	418.0620	-0.50
	DC 3.4	418.0636	1.10
T_{max} (+50)	DC 4.5	418.0625	0.00
	DC 3.4	418.0621	-0.40
Limit		Normal=±2.00 kHz, Extreme=±3.00 kHz @ 418.0625MHz	
Result		Pass	

429.9875MHZ of 12.5 kHz Channel Separation

Test Condition		Frequency Measured (MHz)	Frequency Error (kHz)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	429.9873	-0.20
T_{min} (0)	DC 4.5	429.9868	-0.70
	DC 3.4	429.9814	-6.10
T_{max} (+50)	DC 4.5	429.9843	-3.20
	DC 3.4	429.9808	-6.70
Limit		Normal=±2.00 kHz, Extreme=±3.00 kHz @ 429.9875MHz	
Result		Pass	

450.0125MHZ of 12.5kHz Channel Separation

Test Condition		Frequency Measured (MHz)	Frequency Error (kHz)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	450.0124	-0.10
T_{min} (0)	DC 4.5	450.0130	0.50
	DC 3.4	450.0134	0.90
T_{max} (+50)	DC 4.5	450.0125	0.00
	DC 3.4	450.0128	0.30
Limit		Normal=±1.5kHz, Extreme=±2.50kHz@ 450.0125MHz	
Result		Pass	

460.0000MHZ of 12.5kHz Channel Separation

Test Condition		Frequency Measured (MHz)	Frequency Error (kHz)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	459.9998	-0.20
T_{min} (0)	DC 4.5	459.9999	-0.10
	DC 3.4	460.0003	0.30
T_{max} (+50)	DC 4.5	460.0007	0.70
	DC 3.4	459.9993	-0.70
Limit		Normal=±1.5kHz, Extreme=±2.50kHz@ 460.0000MHz	
Result		Pass	

469.9875MHZ of 12.5kHz Channel Separation

Test Condition		Frequency Measured (MHz)	Frequency Error (kHz)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	469.9874	-0.10
T_{min} (0)	DC 4.5	469.9878	0.30
	DC 3.4	469.9879	0.40
T_{max} (+50)	DC 4.5	469.9877	0.20
	DC 3.4	469.9877	0.20
Limit		Normal=±1.5kHz, Extreme=±2.50kHz@ 469.9875MHz	
Result		Pass	

Note:

1. The Measurement uncertainty value is ±1 x 10^{-7}.

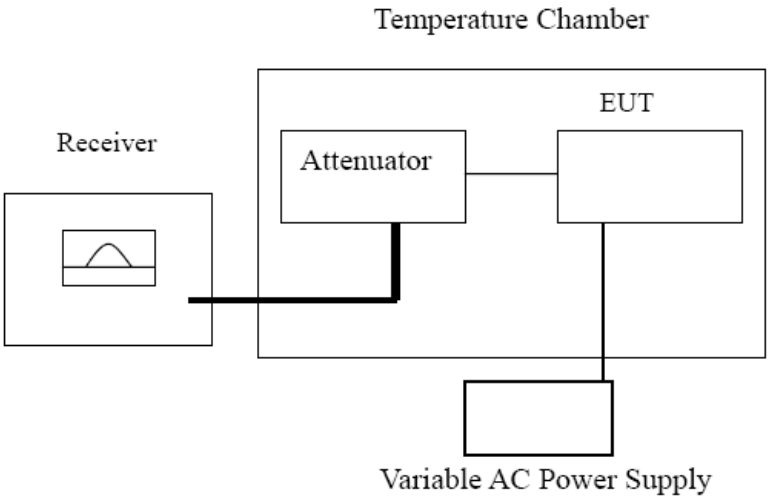
4.2. Transmitter power (conducted)

TEST LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 7.2.3

For the definition and the measuring method see clause 7.2.2. The transmitter output power (conducted) under normal test conditions shall be within ±1.50 dB of the rated output power. The transmitter power (conducted) under extreme test conditions shall be within +2.0 dB and -3.0 dB of the rated output power.

TEST CONFIGURATION



TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 5.3 and 5.4 for the test conditions.
2. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 7.2.2 for the measurement method.

TEST RESULTS

High power

406.1125Mhz of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	30.61	0.61
T_{min} (0)	DC 4.5	30.41	0.41
	DC 3.4	29.77	-0.23
T_{max} (+50)	DC 4.5	29.74	-0.26
	DC 3.4	30.52	0.52
Nominal Power= 30dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

418.0625MHZ of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	30.85	0.85
T_{min} (0)	DC 4.5	30.63	0.63
	DC 3.4	29.48	-0.52
T_{max} (+50)	DC 4.5	29.83	-0.17
	DC 3.4	30.75	0.75
Nominal Power= 30dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

429.9875Mhz of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	30.96	0.96
T_{min} (0)	DC 4.5	30.91	0.91
	DC 3.4	29.87	-0.13
T_{max} (+50)	DC 4.5	29.84	-0.16
	DC 3.4	30.82	0.82
Nominal Power= 30dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

450.0125MHZ of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	30.34	0.34
T_{min} (0)	DC 4.5	29.63	-0.37
	DC 3.4	29.48	-0.52
T_{max} (+50)	DC 4.5	28.83	-1.17
	DC 3.4	28.75	-1.25
Nominal Power= 30dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

460.0000Mhz of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	31.18	1.18
T_{min} (0)	DC 4.5	30.41	0.41
	DC 3.4	29.77	-0.23
T_{max} (+50)	DC 4.5	29.74	-0.26
	DC 3.4	29.52	-0.48
Nominal Power= 30dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

469.9875MHZ of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	30.08	0.08
T_{min} (0)	DC 4.5	29.63	-0.37
	DC 3.4	29.48	-0.52
T_{max} (+50)	DC 4.5	28.83	-1.17
	DC 3.4	28.75	-1.25
Nominal Power= 30dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

Low power

406.1125Mhz of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	27.41	0.41
T_{min} (0)	DC 4.5	26.41	-0.59
	DC 3.4	25.77	-1.23
T_{max} (+50)	DC 4.5	27.74	0.74
	DC 3.4	27.52	0.52
Nominal Power= 27dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

418.0625MHZ of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	27.75	0.75
T_{min} (0)	DC 4.5	26.63	-0.37
	DC 3.4	26.48	-0.52
T_{max} (+50)	DC 4.5	27.83	0.83
	DC 3.4	27.75	0.75
Nominal Power= 27dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

429.9875Mhz of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	27.37	0.37
T_{min} (0)	DC 4.5	26.41	-0.59
	DC 3.4	26.77	-0.23
T_{max} (+50)	DC 4.5	27.74	0.74
	DC 3.4	27.52	0.52
Nominal Power= 27dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

450.0125MHZ of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	27.49	0.49
T_{min} (0)	DC 4.5	26.63	-0.37
	DC 3.4	26.48	-0.52
T_{max} (+50)	DC 4.5	27.83	0.83
	DC 3.4	27.75	0.75
Nominal Power= 27dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

460.0000Mhz of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	27.75	0.75
T_{min} (0)	DC 4.5	26.41	-0.59
	DC 3.4	26.77	-0.23
T_{max} (+50)	DC 4.5	27.74	0.74
	DC 3.4	27.52	0.52
Nominal Power= 27dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

469.9875MHZ of 12.5 kHz Channel Separation

Test Condition		Conducted Power (dBm)	Power Error (dB)
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	27.16	0.16
T_{min} (0)	DC 4.5	26.59	-0.41
	DC 3.4	26.45	-0.55
T_{max} (+50)	DC 4.5	27.55	0.55
	DC 3.4	27.71	0.71
Nominal Power= 27dBm; Limit n=±1.5 dB and Limit e=+2.0 dB & -3.0 dB			
Result		Pass	

4.3. Transmitter frequency deviation

TEST LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 7.4.3.1

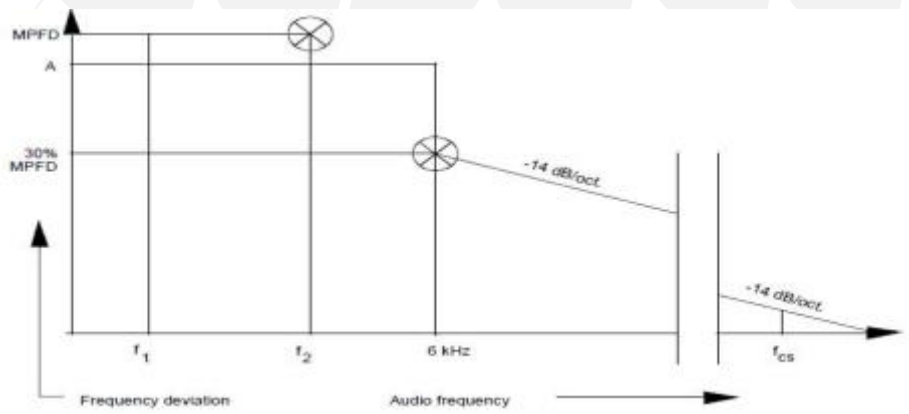
For the definition and the measuring method see clause 7.4.2. The maximum permissible frequency deviation for modulation frequencies from the lowest frequency transmitted (f1) by the equipment (as declared by the manufacturer) up to (f2) shall be as given in table 3.

Channel separation(kHz)	Maximum permissible frequency deviation(kHz)
12,5	±2,5
20	±4,0
25	±5,0

ETSI EN 300 086 (V2.1.2) Sub-clause 7.4.3.2

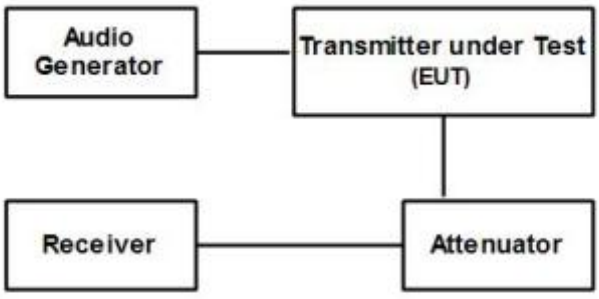
For the definition and the measuring method see clause 7.4.2. The frequency deviation at modulation frequencies between 3,0 kHz (for equipment operating with 20 kHz or 25 kHz channel separations) and 2,55 kHz (for equipment operating with 12,5 kHz channel separation) and 6,0 kHz shall not exceed the frequency deviation at a modulation frequency of 3,0 kHz/2,55 kHz. At 6,0 kHz the deviation shall be not more than 30,0 % of the maximum permissible frequency deviation.

The frequency deviation at modulation frequencies between 6,0 kHz and a frequency equal to the channel separation for which the equipment is intended shall not exceed that given by a linear representation of the frequency deviation (dB) relative to the modulation frequency, starting at the 6,0 kHz limit and having a slope
of -14,0 dB per octave. These limits are illustrated in following figure



.

TEST CONFIGURATION



TEST PROCEDURE

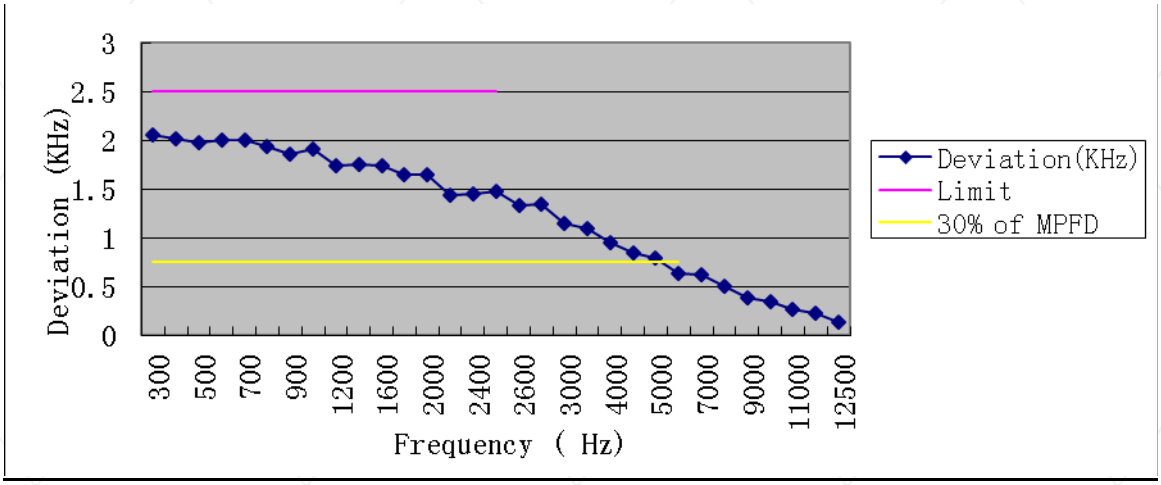
Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 5.3 for the test conditions.
Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 7.4.2 for the measurement method.

TEST RESULTS

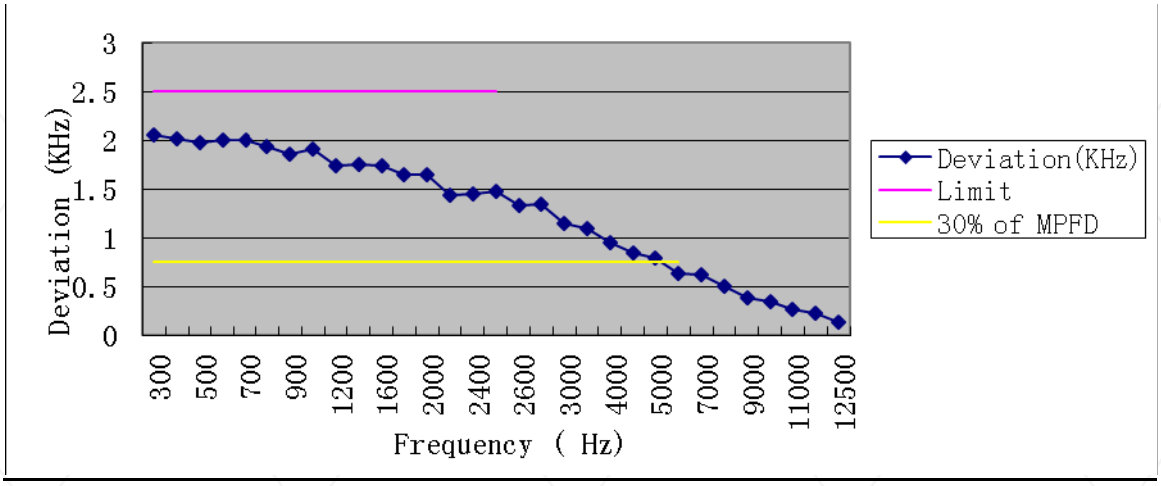
Sub-clause 7.4.3.1

12.5 kHz Channel Separation

Frequency (Hz)	Frequency deviation(kHz)
	429.9875
300	2.33
400	2.31
500	2.26
600	2.22
700	2.25
800	2.13
900	2.22
1000	1.97
1200	1.78
1400	1.90
1600	1.98
1800	1.75
2000	1.87
2200	1.73
2400	1.48
2600	1.88
2800	1.67
3000	1.67
3500	1.32
4000	1.43
4500	1.37
5000	0.89
6000	0.80
7000	0.71
8000	0.87
9000	0.80
10000	0.64
11000	0.59
12000	0.51
12500	0.42
Limit：± 2.5 kHz Test Result： PASS	


Deviation (KHz)
3
2.5
2
1.5
1
0.5
0
300
500
700
900
1200
1600
2000
2400
2600
3000
4000
5000
7000
9000
11000
12500
Frequency (Hz)
Deviation(KHz)
Limit
30% of MPFD

Frequency (Hz)	Frequency deviation(kHz)
	469.9875
300	2.34
400	2.23
500	2.20
600	2.23
700	2.31
800	2.17
900	2.18
1000	2.01
1200	1.78
1400	1.94
1600	1.98
1800	1.75
2000	1.83
2200	1.76
2400	1.51
2600	1.82
2800	1.65
3000	1.62
3500	1.35
4000	1.43
4500	1.36
5000	0.89
6000	0.80
7000	0.72
8000	0.89
9000	0.81
10000	0.71
11000	0.62
12000	0.58
12500	0.40
Limit：± 2.5 kHz Test Result： PASS	

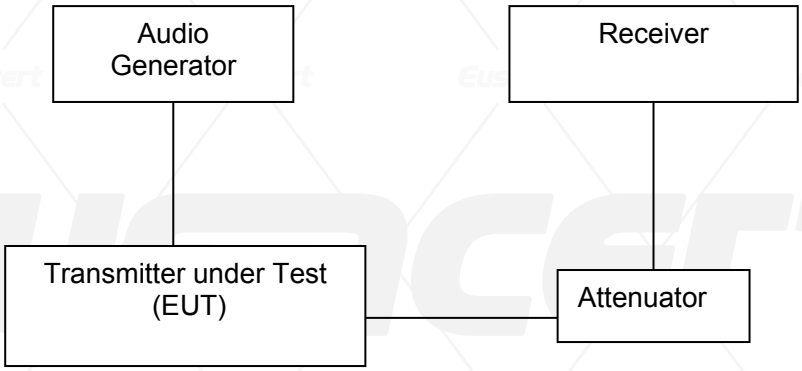

Deviation (KHz)
3
2.5
2
1.5
1
0.5
0
300
500
700
900
1200
1600
2000
2400
2600
3000
4000
5000
7000
9000
11000
12500
Frequency (Hz)
Deviation(KHz)
Limit
30% of MPFD

4.4. Adjacent and alternate channel power

LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 7.5.3
The adjacent and alternate channel power as defined in ETSI EN 300 086 Sub-clause 7.5.3. For a channel separation of 12,5 kHz, 20 kHz and 25 kHz, the adjacent channel power shall not exceed a value of 60,0 dB below the transmitter power (conducted) without the need to be below 0,2 µW (-37 dBm).
For a channel separation of 12,5 kHz, 20 kHz and 25 kHz, the alternate channel power shall not exceed a value of 70,0 dB below the transmitter power (conducted) without the need to be below 0,2 µW (-37 dBm).

TEST CONFIGURATION



TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 5.3 for the test conditions.
2. Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 7.5.2 for the measurement method.

TEST RESULTS

406.1125MHZ of 12.5 kHz Channel Separation

Test Condition		channel	Measurement Offset	Reading (dBc)	limit (dB)
Temperature (℃)	Voltage (V)				
T_{nor} (+25)	DC 4.2	Adjacent	+8.25kHz	-69.21	≤-60
			+8.25kHz	-68.34	≤-60
		Alternate	+20.75kHz	-74.26	≤-70
			+20.75kHz	-73.97	≤-70
Result		Pass			

418.0625MHZ of 12.5 kHz Channel Separation

Test Condition		channel	Measurement Offset	Reading (dBc)	limit (dB)
Temperature (℃)	Voltage (V)				
T_{nor} (+25)	DC 4.2	Adjacent	+8.25kHz	-69.28	≤-60
			+8.25kHz	-68.33	≤-60
		Alternate	+20.75kHz	-74.23	≤-70
			+20.75kHz	-73.93	≤-70
Result		Pass			

429.9875MHZ of 12.5 kHz Channel Separation

Test Condition		channel	Measurement Offset	Reading (dBc)	limit (dB)
Temperature (℃)	Voltage (V)				
T_{nor} (+25)	DC 4.2	Adjacent	+8.25kHz	-69.24	≤-60
			+8.25kHz	-68.42	≤-60
		Alternate	+20.75kHz	-74.20	≤-70
			+20.75kHz	-73.94	≤-70
Result		Pass			

450.0125MHZ of 12.5 kHz Channel Separation

Test Condition		channel	Measurement Offset	Reading (dBc)	limit (dB)
Temperature (℃)	Voltage (V)				
T_{nor} (+25)	DC 4.2	Adjacent	+8.25kHz	-69.31	≤-60
			+8.25kHz	-68.40	≤-60
		Alternate	+20.75kHz	-74.25	≤-70
			+20.75kHz	-73.97	≤-70
Result		Pass			

460.0000MHZ of 12.5 kHz Channel Separation

Test Condition		channel	Measurement Offset	Reading (dBc)	limit (dB)
Temperature (℃)	Voltage (V)				
T_{nor} (+25)	DC 4.2	Adjacent	+8.25kHz	-69.25	≤-60
			+8.25kHz	-68.46	≤-60
		Alternate	+20.75kHz	-74.27	≤-70
			+20.75kHz	-74.01	≤-70
Result		Pass			

469.9875MHZ of 12.5 kHz Channel Separation

Test Condition		channel	Measurement Offset	Reading (dBc)	limit (dB)
Temperature (℃)	Voltage (V)				
T_{nor} (+25)	DC 4.2	Adjacent	+8.25kHz	-68.54	≤-60
			+8.25kHz	-66.56	≤-60
		Alternate	+20.75kHz	-74.20	≤-70
			+20.75kHz	-73.34	≤-70
Result		Pass			

4.5. Transmitter unwanted emissions in the spurious

TEST LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 7.6
Radiated Spurious emission as defined in ETSI EN 300 086 Sub-clause 7.6.4, the power of any spurious emission shall not exceed the values given in table 5a and table 5b

Table 5a: Conducted emissions

Frequency range	Tx operating	Tx standby
9 kHz to 1 GHz	0,25 µW (-36 dBm)	2,0 nW (-57 dBm)
above 1 GHz to 4 GHz, or above 1 GHz to 12,75 GHz	1,00 µW (-30 dBm)	20 nW (-47 dBm)

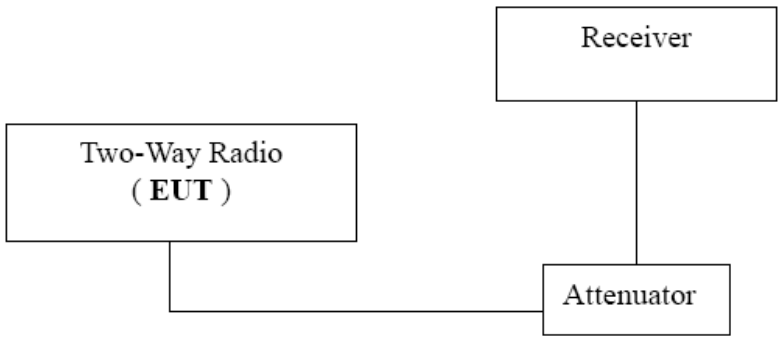
Table 5b: Radiated emissions

Frequency range	Tx operating	Tx standby
30 MHz to 1 GHz	0,25 µW (-36 dBm)	2,0 nW (-57 dBm)
above 1 GHz to 4 GHz, or above 1 GHz to 12,75 GHz	1,00 µW (-30 dBm)	20 nW (-47 dBm)

In the case of radiated measurements for hand portable stations the following conditions apply:
- for equipment with an internal integral antenna, the normal antenna shall remain connected;
- for equipment with an external antenna connector, an artificial antenna (see clause 6.3) shall be connected to the connector for the test.

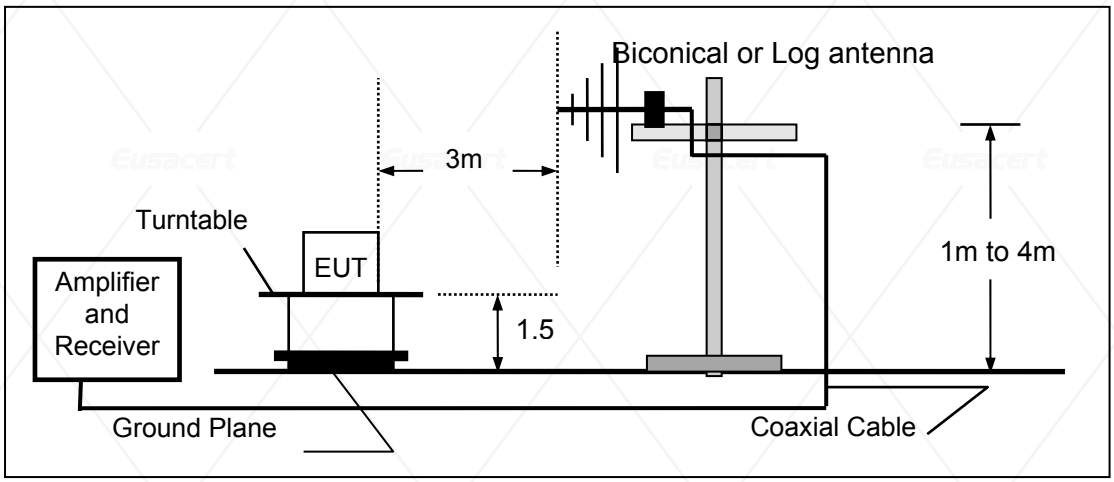
TEST CONFIGURATION

Conducted measurement:

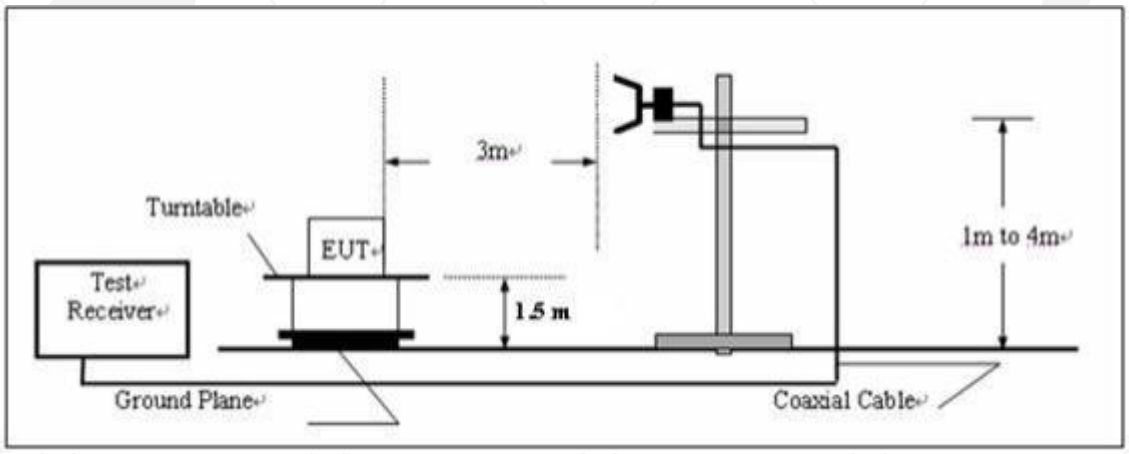


Radiated measurement:

Below 1GHz



Above 1GHz



TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 5.3 for the test conditions.
2. Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 7.6.2 and 7.6.3 for the measurement method.

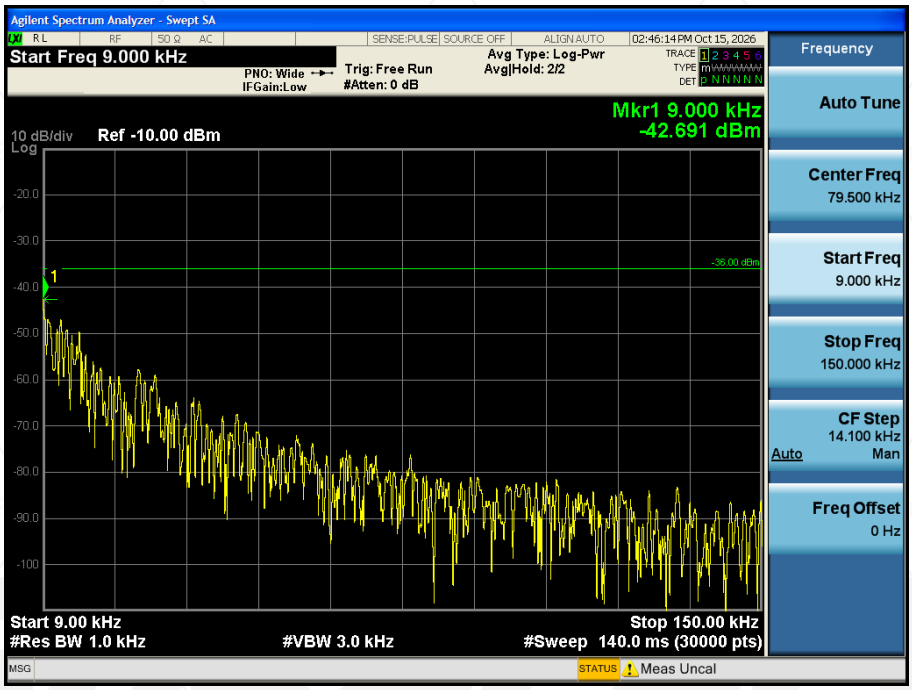
Remark

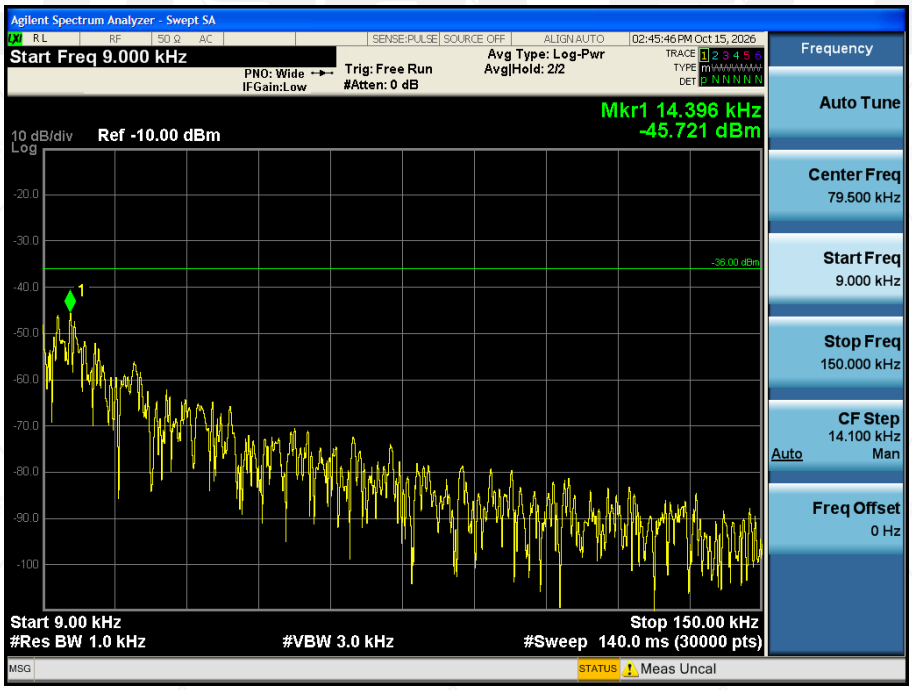
1. During the test, pre-scan all the test modes, and found the worse case and its worse test data was showed as the follow

TEST RESULTS

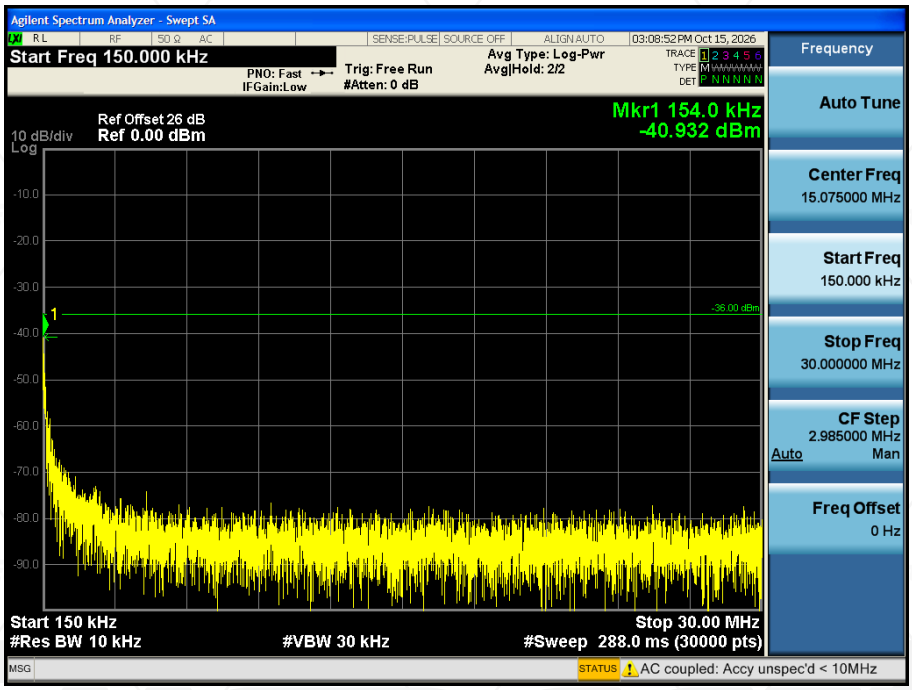
Conducted measurement (9 kHz to 4 GHz) ---PASS

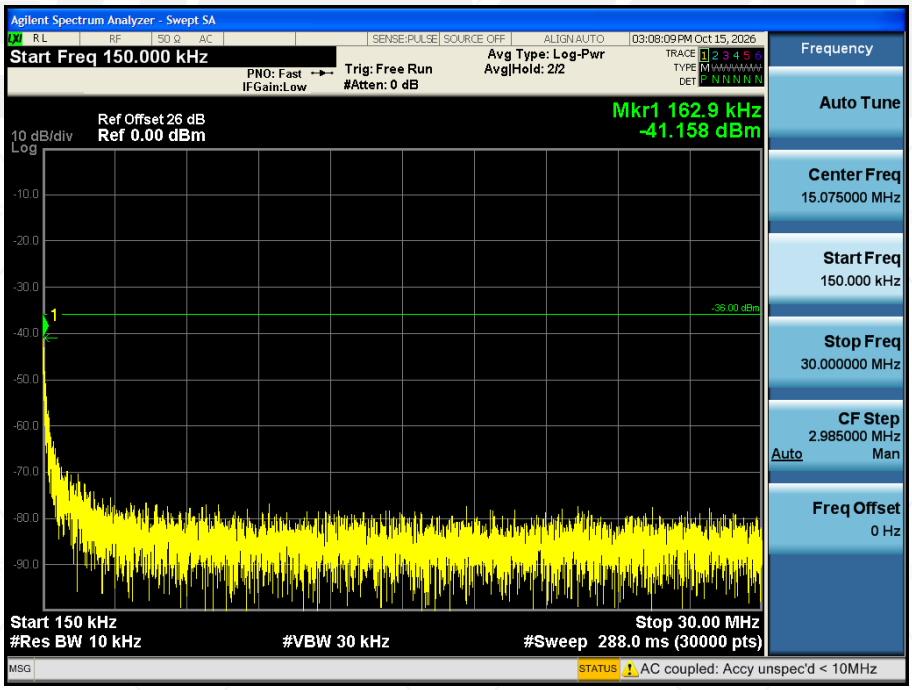
The Low Channel @ 12.5 kHz Channel Separation---9k-150k



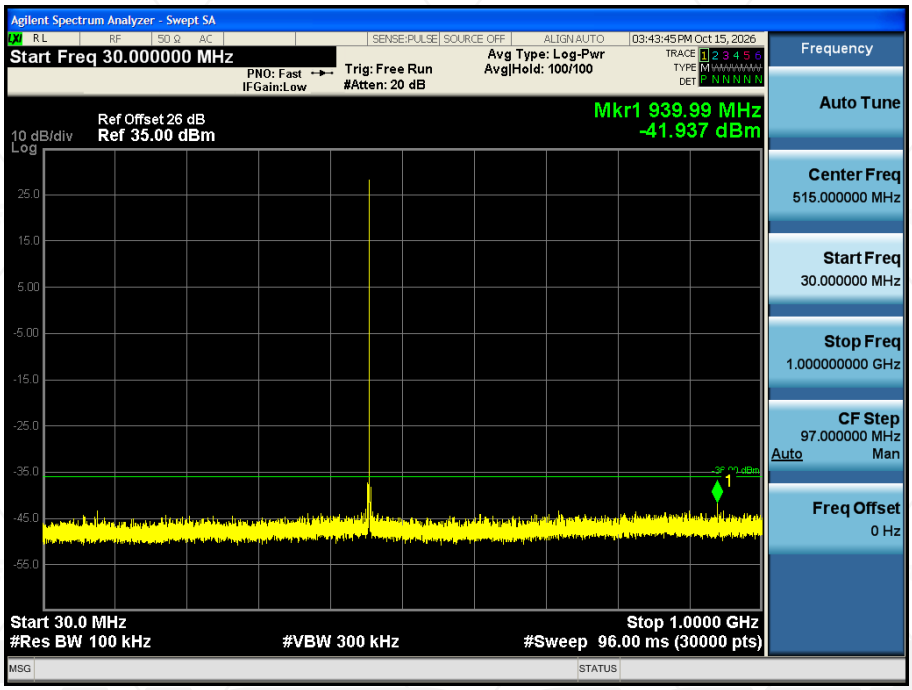


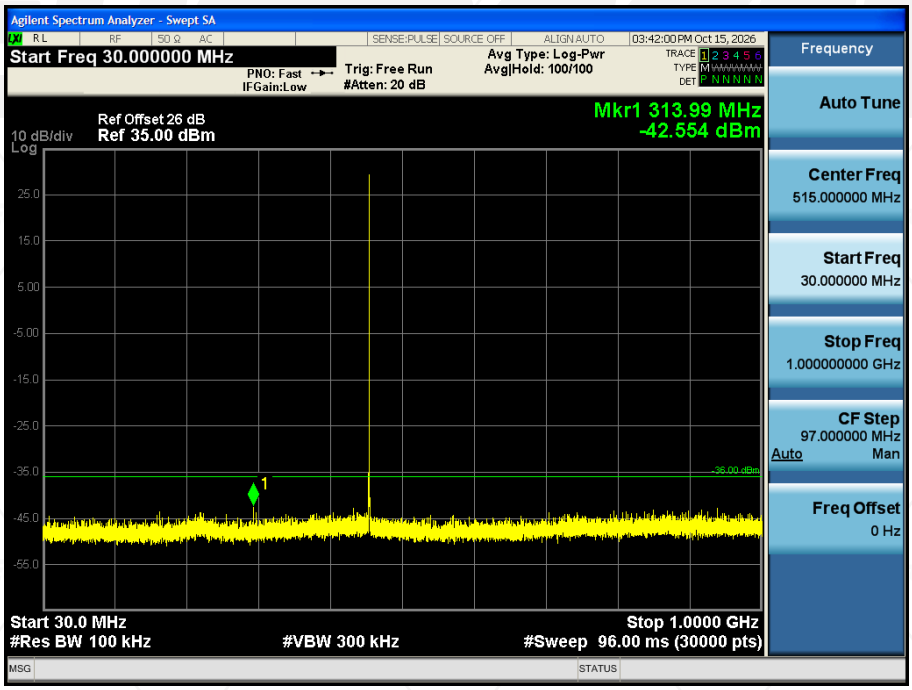
The Low Channel @ 12.5 kHz Channel Separation---150k-300k



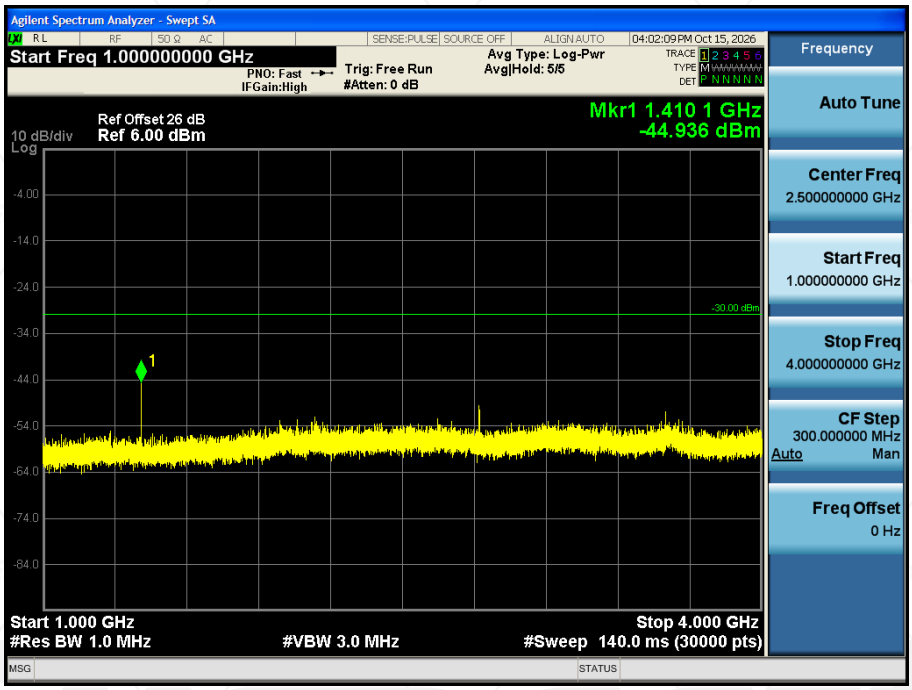


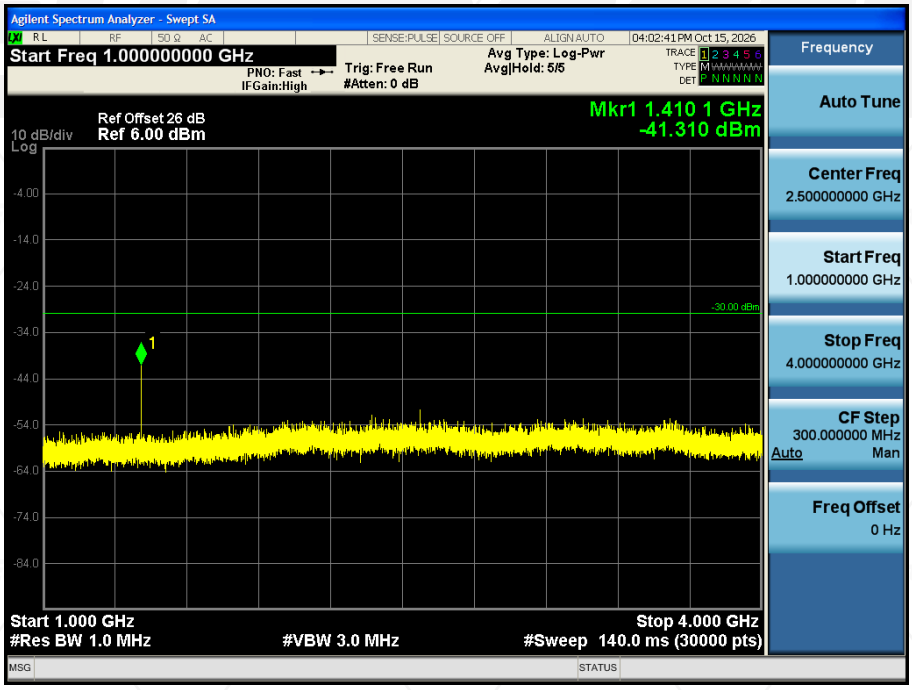
The Middle Channel @ 12.5 kHz Channel Separation---30M-1G





The High Channel @ 12.5 kHz Channel Separation---1G-4G

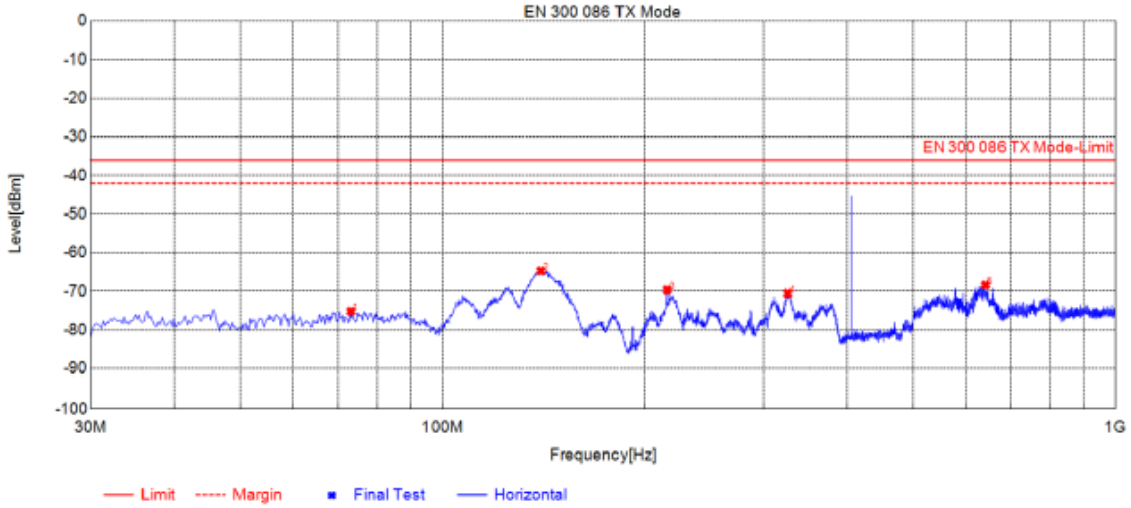




Notes:
"\" in the table above means that the emissions are too small to be measured and are at least 20 dB below the limit

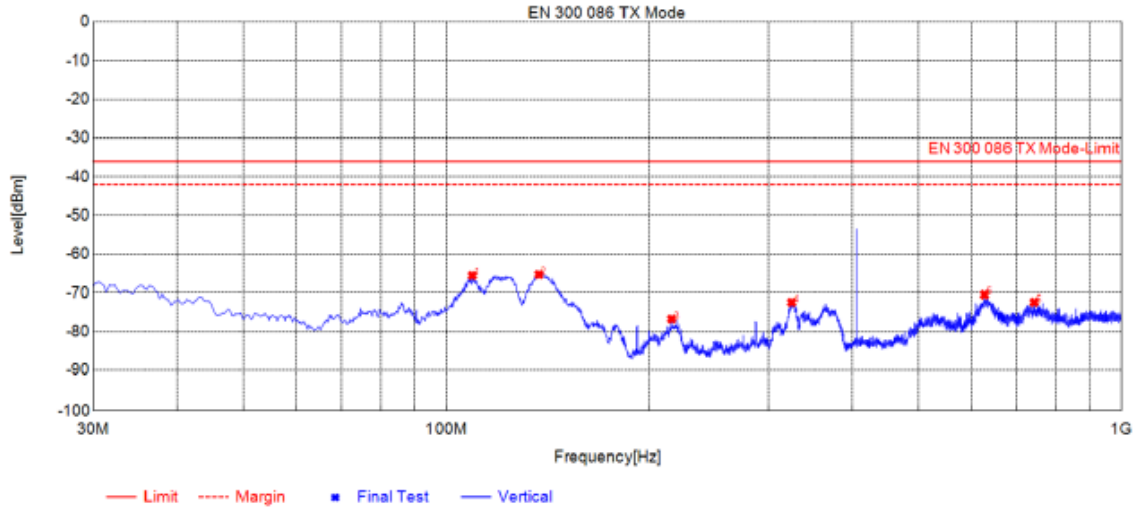
Radiated measurement (30 MHz to 4 GHz) ---PASS

Low Channel



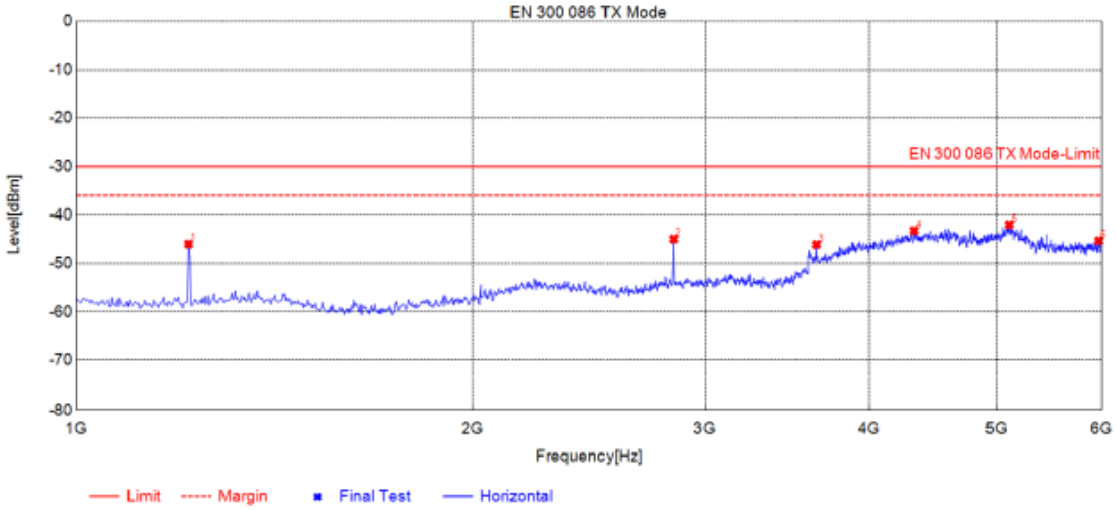
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	73.0766	-78.89	-75.12	-36.00	39.12	3.77	Horizontal
2	140.02	-64.87	-64.76	-36.00	28.76	0.11	Horizontal
3	215.889	-72.93	-69.67	-36.00	33.67	3.26	Horizontal
4	326.491	-71.96	-70.57	-36.00	34.57	1.39	Horizontal
5	642.386	-76.08	-68.44	-36.00	32.44	7.64	Horizontal



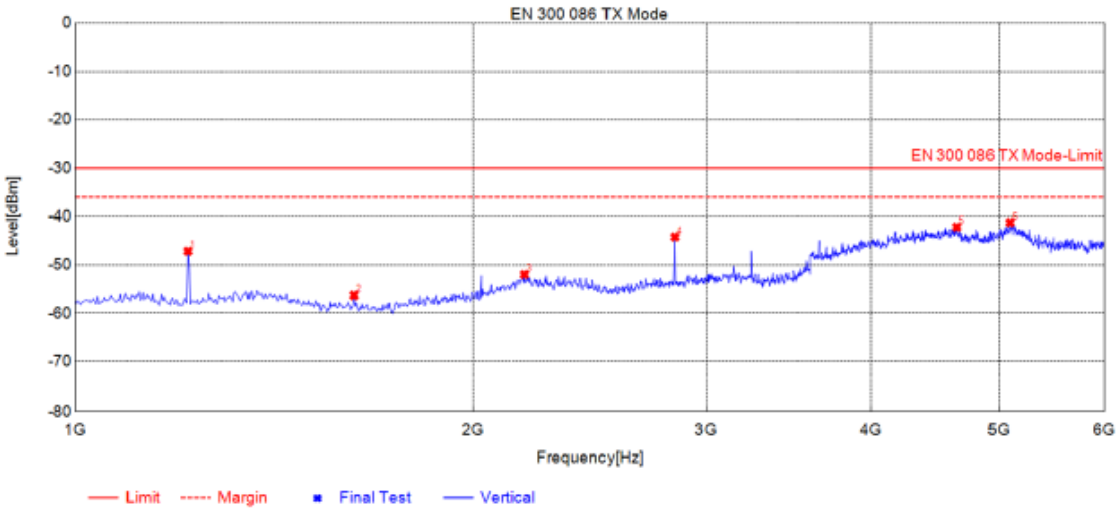
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	109.361	-77.79	-65.56	-36.00	29.56	12.23	Vertical
2	137.109	-64.78	-65.31	-36.00	29.31	-0.53	Vertical
3	215.889	-75.79	-76.72	-36.00	40.72	-0.93	Vertical
4	325.327	-73.78	-72.39	-36.00	36.39	1.39	Vertical
5	628.027	-76.68	-70.49	-36.00	34.49	6.19	Vertical
6	742.898	-79.91	-72.38	-36.00	36.38	7.53	Vertical



Suspected List

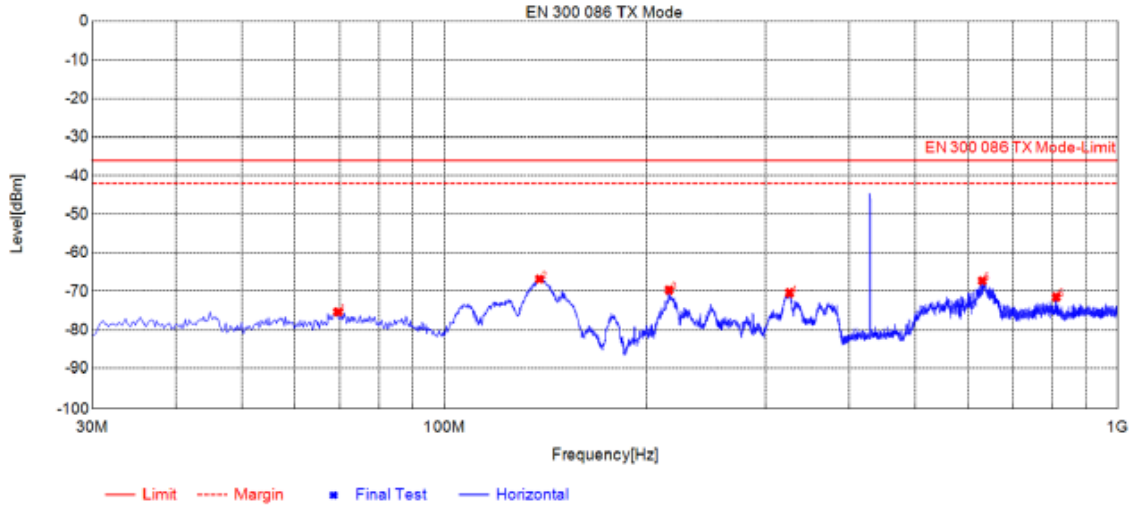
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1217.60	-42.07	-46.00	-30.00	16.00	-3.93	Horizontal
2	2843.42	-45.34	-44.97	-30.00	14.97	0.37	Horizontal
3	3646.32	-49.29	-46.11	-30.00	16.11	3.18	Horizontal
4	4324.16	-48.75	-43.23	-30.00	13.23	5.52	Horizontal
5	5107.05	-51.94	-41.97	-30.00	11.97	9.97	Horizontal
6	5969.98	-52.67	-45.31	-30.00	15.31	7.36	Horizontal



Suspected List

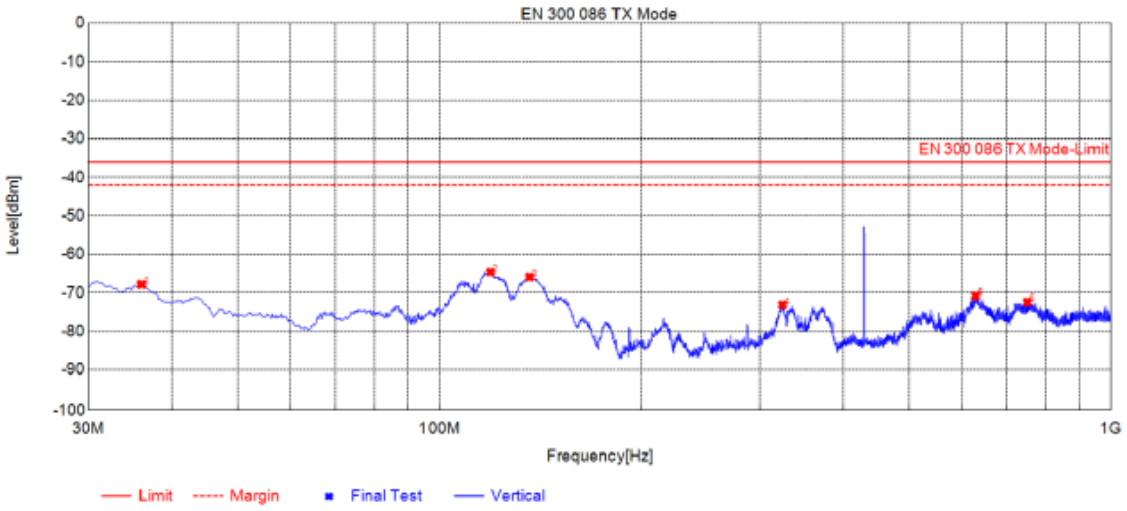
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1217.60	-42.54	-47.16	-30.00	17.16	-4.62	Vertical
2	1625.31	-51.17	-56.32	-30.00	26.32	-5.15	Vertical
3	2185.59	-51.84	-52.03	-30.00	22.03	-0.19	Vertical
4	2843.42	-43.94	-44.20	-30.00	14.20	-0.26	Vertical
5	4644.32	-48.91	-42.16	-30.00	12.16	6.75	Vertical
6	5092.04	-50.97	-41.22	-30.00	11.22	9.75	Vertical

Middle Channel



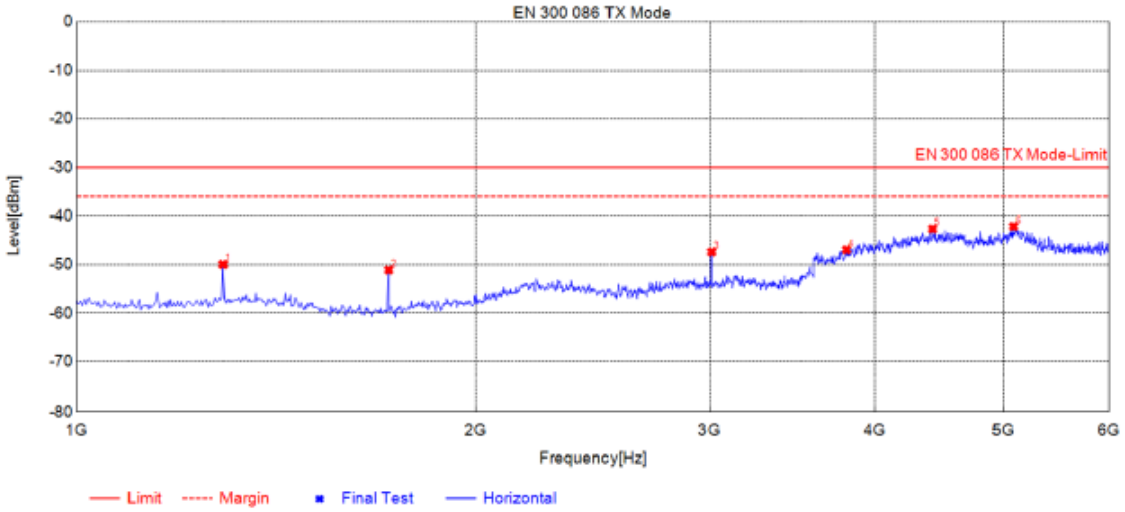
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	69.5839	-79.91	-75.28	-36.00	39.28	4.63	Horizontal
2	138.467	-66.60	-66.88	-36.00	30.88	-0.28	Horizontal
3	215.889	-72.96	-69.70	-36.00	33.70	3.26	Horizontal
4	326.297	-71.81	-70.42	-36.00	34.42	1.39	Horizontal
5	630.744	-75.28	-67.33	-36.00	31.33	7.95	Horizontal
6	811.782	-80.34	-71.46	-36.00	35.46	8.88	Horizontal



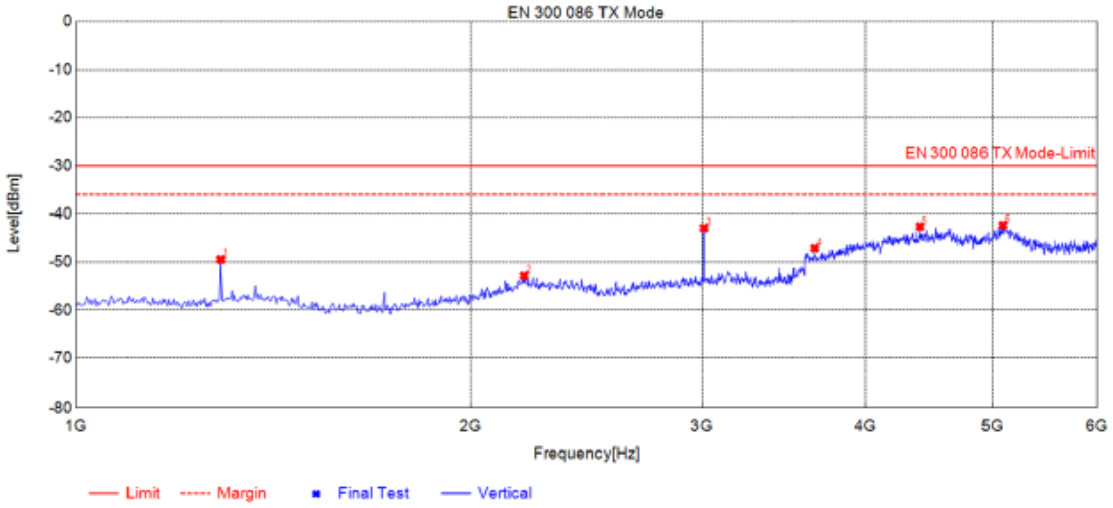
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.0152	-68.73	-67.86	-36.00	31.86	0.87	Vertical
2	119.257	-71.41	-64.67	-36.00	28.67	6.74	Vertical
3	136.139	-65.47	-65.97	-36.00	29.97	-0.50	Vertical
4	324.744	-74.40	-73.05	-36.00	37.05	1.35	Vertical
5	629.968	-77.08	-70.81	-36.00	34.81	6.27	Vertical
6	751.048	-79.99	-72.32	-36.00	36.32	7.67	Vertical



Suspected List

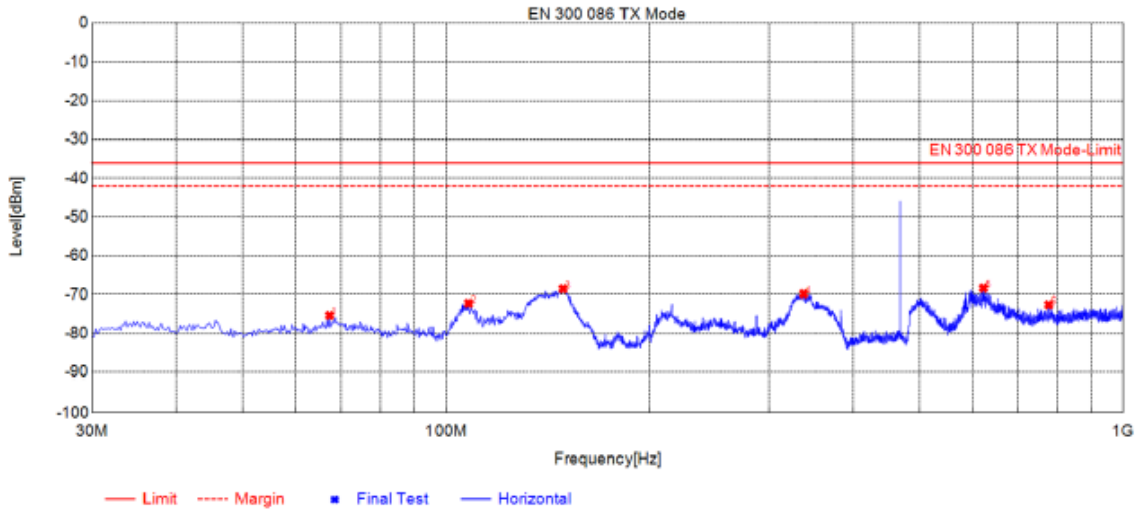
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1290.14	-46.57	-49.98	-30.00	19.98	-3.41	Horizontal
2	1720.36	-46.15	-51.16	-30.00	21.16	-5.01	Horizontal
3	3011.00	-48.12	-47.40	-30.00	17.40	0.72	Horizontal
4	3806.40	-50.71	-46.94	-30.00	16.94	3.77	Horizontal
5	4419.20	-48.56	-42.59	-30.00	12.59	5.97	Horizontal
6	5084.54	-51.95	-42.11	-30.00	12.11	9.84	Horizontal



Suspected List

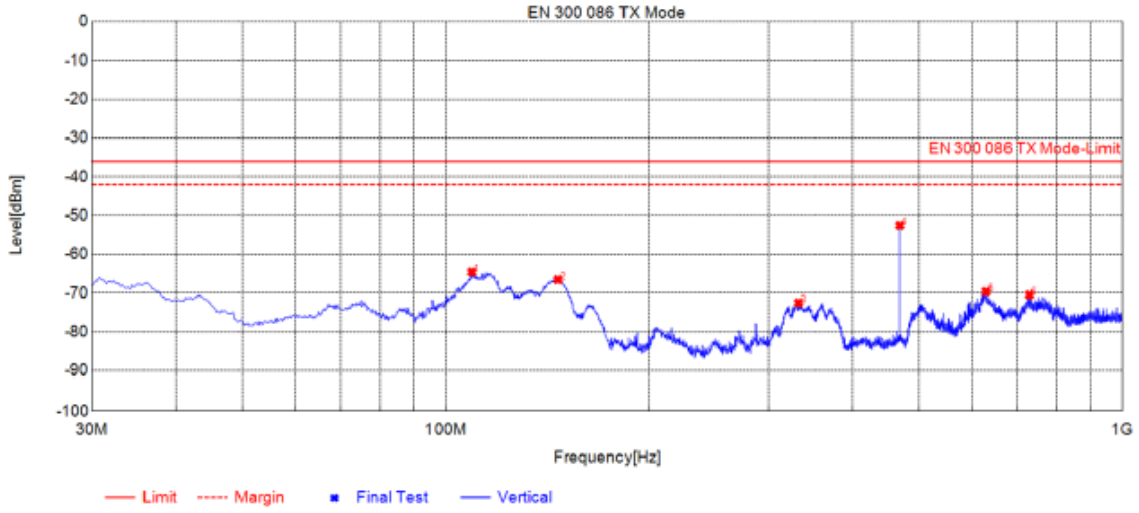
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1290.14	-45.64	-49.50	-30.00	19.50	-3.86	Vertical
2	2195.59	-52.91	-52.93	-30.00	22.93	-0.02	Vertical
3	3011.00	-43.71	-42.92	-30.00	12.92	0.79	Vertical
4	3656.32	-50.17	-47.14	-30.00	17.14	3.03	Vertical
5	4399.19	-48.05	-42.61	-30.00	12.61	5.44	Vertical
6	5087.04	-52.00	-42.31	-30.00	12.31	9.69	Vertical

High Channel



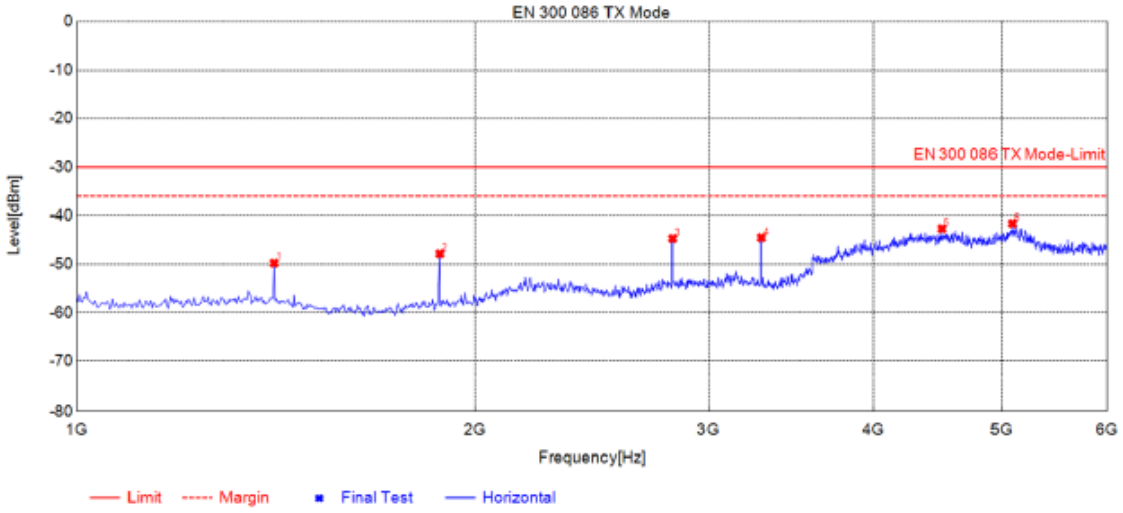
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	67.4495	-79.74	-75.33	-36.00	39.33	4.41	Horizontal
2	108.003	-75.05	-72.19	-36.00	36.19	2.86	Horizontal
3	148.945	-70.85	-68.60	-36.00	32.60	2.25	Horizontal
4	338.133	-71.32	-69.82	-36.00	33.82	1.50	Horizontal
5	622.982	-76.09	-68.40	-36.00	32.40	7.69	Horizontal
6	777.437	-80.71	-72.57	-36.00	36.57	8.14	Horizontal



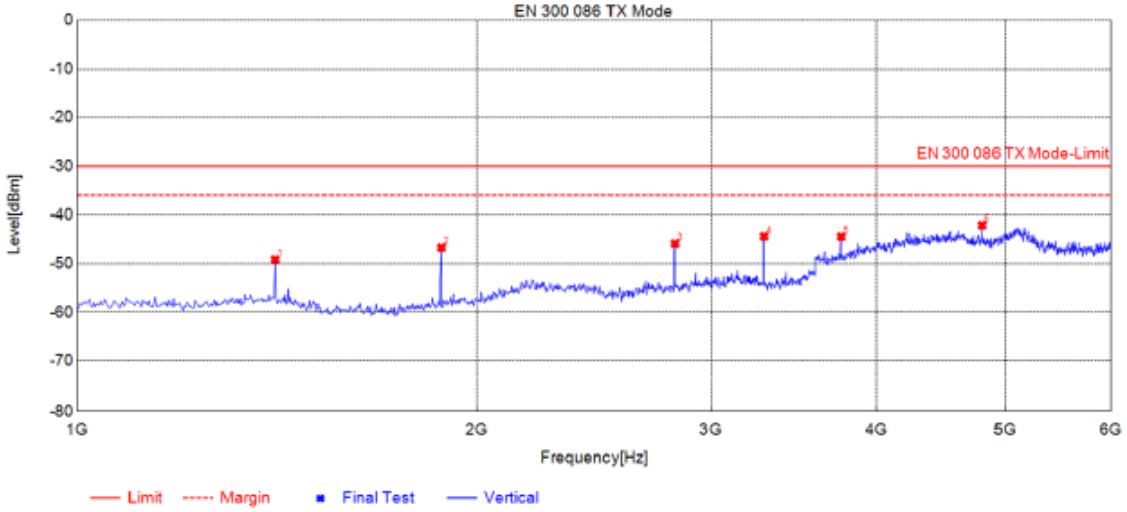
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	109.361	-76.82	-64.59	-36.00	28.59	12.23	Vertical
2	146.617	-65.65	-66.58	-36.00	30.58	-0.93	Vertical
3	332.894	-74.26	-72.50	-36.00	36.50	1.76	Vertical
4	470.08	-55.73	-52.46	-36.00	16.46	3.27	Vertical
5	629.968	-75.93	-69.66	-36.00	33.66	6.27	Vertical
6	729.121	-77.52	-70.47	-36.00	34.47	7.05	Vertical



Suspected List

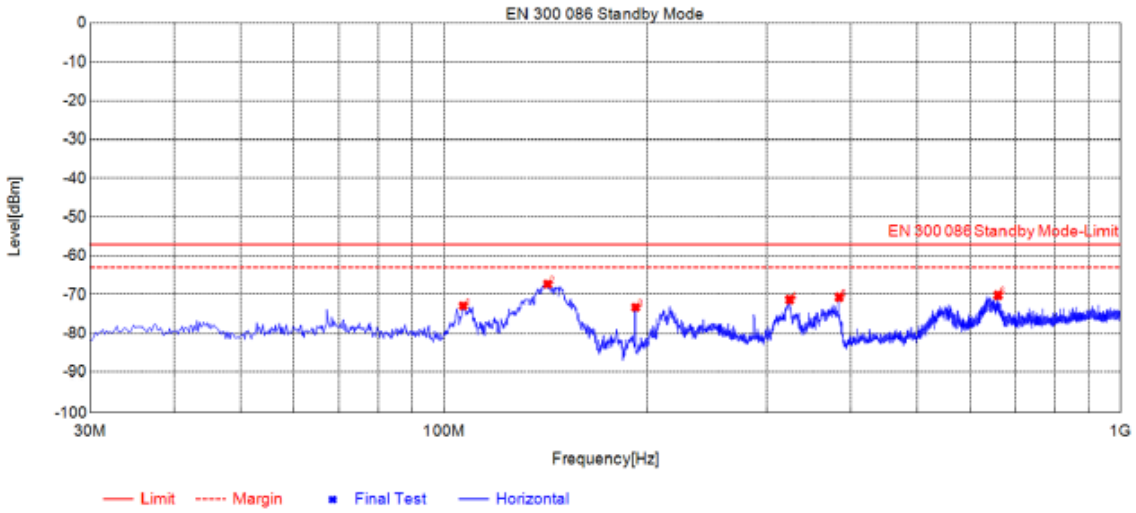
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1410.20	-46.50	-49.80	-30.00	19.80	-3.30	Horizontal
2	1880.44	-44.20	-47.85	-30.00	17.85	-3.65	Horizontal
3	2820.91	-45.04	-44.68	-30.00	14.68	0.36	Horizontal
4	3291.14	-45.07	-44.50	-30.00	14.50	0.57	Horizontal
5	4504.25	-48.95	-42.63	-30.00	12.63	6.32	Horizontal
6	5089.54	-51.47	-41.57	-30.00	11.57	9.90	Horizontal



Suspected List

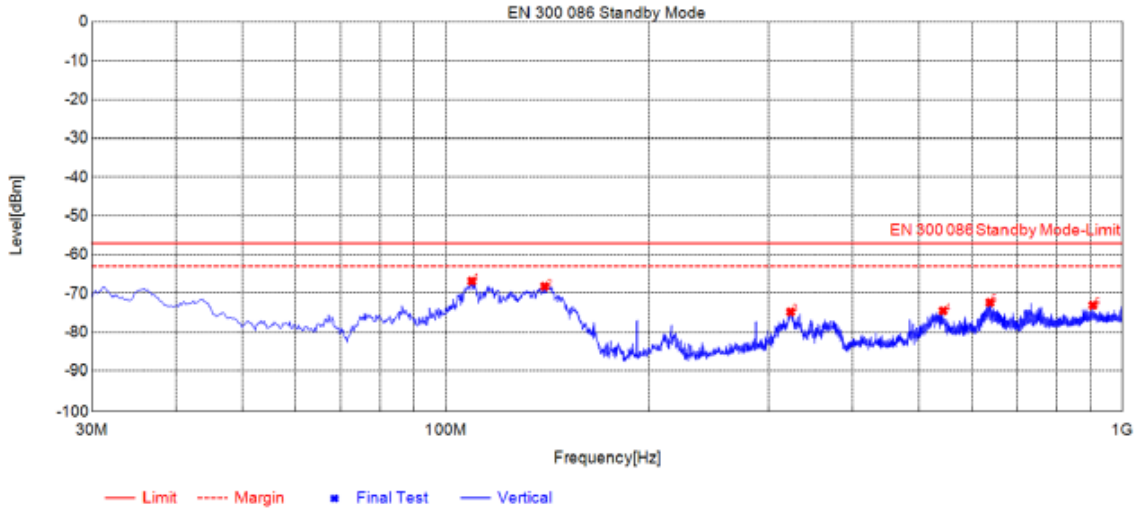
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1410.20	-45.87	-49.20	-30.00	19.20	-3.33	Vertical
2	1880.44	-43.00	-46.70	-30.00	16.70	-3.70	Vertical
3	2820.91	-45.51	-45.87	-30.00	15.87	-0.36	Vertical
4	3291.14	-44.73	-44.35	-30.00	14.35	0.38	Vertical
5	3761.38	-47.59	-44.41	-30.00	14.41	3.18	Vertical
6	4804.40	-49.65	-42.07	-30.00	12.07	7.58	Vertical

Standby Mode



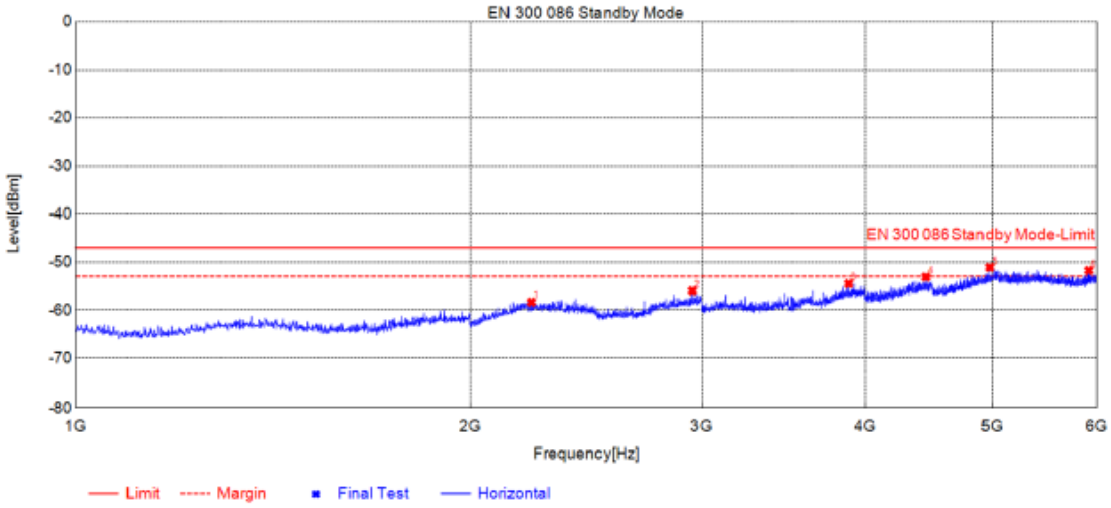
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	106.839	-75.39	-72.80	-57.00	15.80	2.59	Horizontal
2	142.348	-68.02	-67.35	-57.00	10.35	0.67	Horizontal
3	192.022	-72.37	-73.20	-57.00	16.20	-0.83	Horizontal
4	324.939	-72.70	-71.29	-57.00	14.29	1.41	Horizontal
5	383.926	-72.82	-70.68	-57.00	13.68	2.14	Horizontal
6	660.820	-77.48	-70.19	-57.00	13.19	7.29	Horizontal



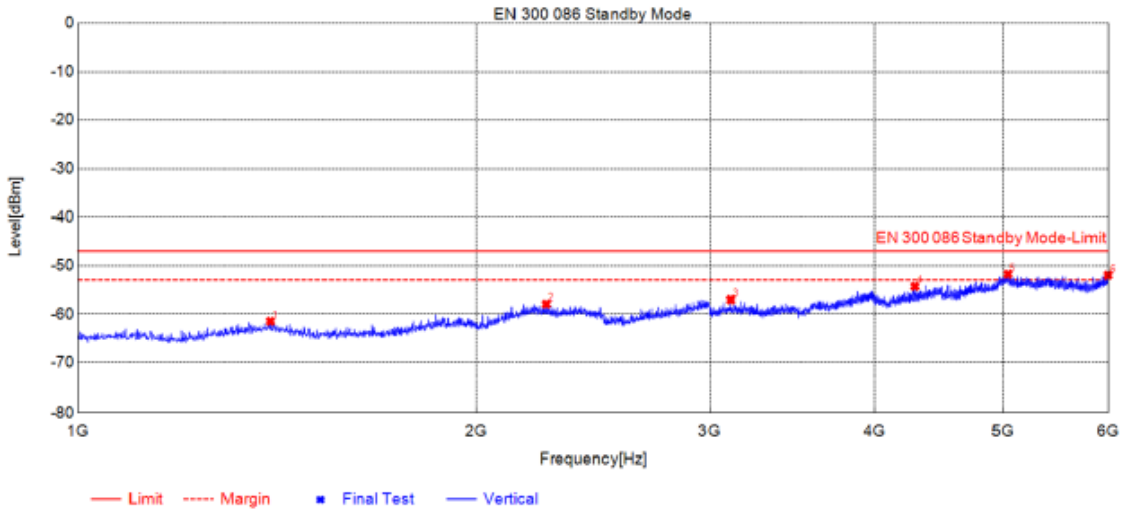
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	109.361	-79.10	-66.87	-57.00	9.87	12.23	Vertical
2	140.02	-67.63	-68.27	-57.00	11.27	-0.64	Vertical
3	323.968	-75.98	-74.68	-57.00	17.68	1.30	Vertical
4	543.620	-78.80	-74.41	-57.00	17.41	4.39	Vertical
5	638.699	-78.12	-72.24	-57.00	15.24	5.88	Vertical
6	907.055	-82.35	-72.97	-57.00	15.97	9.38	Vertical



Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	2225.24	-58.25	-58.30	-47.00	11.30	-0.05	Horizontal
2	2954.39	-56.49	-55.97	-47.00	8.97	0.52	Horizontal
3	3885.57	-58.53	-54.51	-47.00	7.51	4.02	Horizontal
4	4446.68	-59.20	-53.11	-47.00	6.11	6.09	Horizontal
5	4972.79	-59.74	-51.13	-47.00	4.13	8.61	Horizontal
6	5916.98	-59.01	-51.77	-47.00	4.77	7.24	Horizontal



Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1398.07	-58.30	-61.45	-47.00	14.45	-3.15	Vertical
2	2258.25	-57.52	-57.88	-47.00	10.88	-0.36	Vertical
3	3112.42	-58.21	-57.03	-47.00	10.03	1.18	Vertical
4	4286.65	-59.12	-54.33	-47.00	7.33	4.79	Vertical
5	5038.80	-60.96	-51.79	-47.00	4.79	9.17	Vertical
6	5997.99	-59.57	-52.00	-47.00	5.00	7.57	Vertical

4.6. Intermodulation attenuation

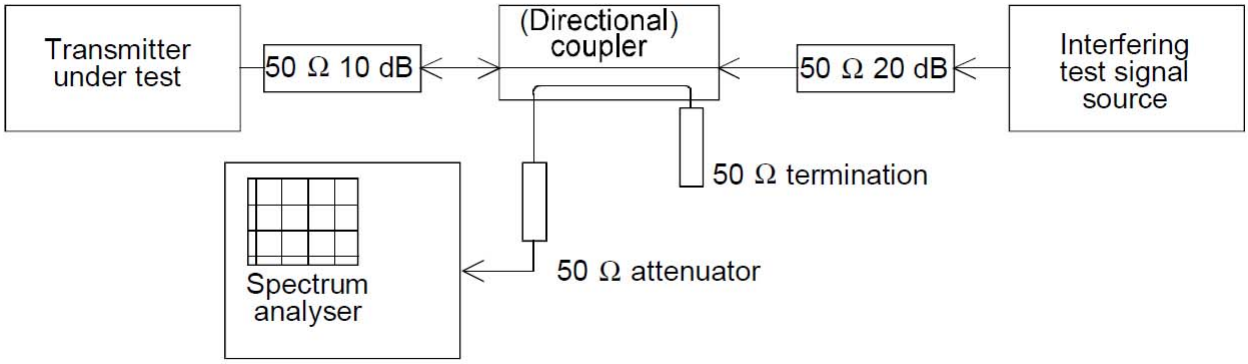
LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 7.7.3
Two classes of transmitter intermodulation attenuation are defined, the equipment shall fulfil one of the requirements:

• in general the intermodulation attenuation ratio shall be at least 40,0 dB for any intermodulation component;

• for base station equipment to be used in special service conditions (e.g. at sites where more than one transmitter will be in service) or when the regulatory authority makes it a condition of the licence, the intermodulation attenuation ratio shall be at least 70,0 dB for any intermodulation component. In the case where the performance is achieved by additional internal or external isolating devices (such as circulators) these are expected be available at the time the measurements are made and shall be used for the measurements

TEST CONFIGURATION



TEST PROCEDURE

3. Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 5.3 for the test conditions.
4. Please refer to ETSI EN 300 086 (V.2.1.2) Sub-clause 7.7.2 for the measurement method.

TEST RESULTS

This requirement applies only to transmitters to be used in base stations (fixed).

4.7. Receiver maximum useable sensitivity

LIMIT

ETSI EN 300 086(V 2.1.2) Sub-clause 8.1
The spurious radiation of the receiver as defined in ETSI EN 300 086 Sub-clause 8.1.3 . The maximum usable sensitivity shall not exceed an electromotive force (emf) of +6,0 dBµV under normal test conditions, and an emf of +12,0 dBuV under extreme test conditions.

TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.1.2 for the measurement method.

TEST RESULTS

12.5kHz Channel Separation

Test Condition		Reading(dBc)	Result
Temperature (℃)	Voltage (V)	429.9875MHz	
T_{nor} (+25)	DC 4.2	4.61	PASS
T_{min} (0)	DC 4.5	4.41	
	DC 3.4	4.92	
T_{max} (+50)	DC 4.5	3.58	
	DC 3.4	4.50	
Limit		Normal=+6dBuV, Extreme=+12dBuV	

12.5kHz Channel Separation

Test Condition		Reading(dBc)	Result
Temperature (℃)	Voltage (V)	469.9875MHz	
T_{nor} (+25)	DC 4.2	4.57	PASS
T_{min} (0)	DC 4.5	4.35	
	DC 3.4	4.93	
T_{max} (+50)	DC 4.5	3.58	
	DC 3.4	4.50	
Limit		Normal=+6dBuV, Extreme=+12dBuV	

4.8. Receiver co-channel rejection

TEST LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 8.3
Radiated Spurious emission as defined in ETSI EN 300 086 Sub-clause 8.3.3, The value of the co-channel rejection ratio, expressed in dB, at the signal displacements given in the method of measurement, shall be:

- between -8,0 dB and 0 dB, for channel separations of 20 kHz and 25 kHz;
- between -12,0 dB and 0 dB, for channel separations of 12,5 kHz.

TEST PROCEDURE
1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.3.2 for the measurement method

TEST RESULTS

12.5kHz Channel Separation

Test Condition		Reading(dBc)	Result
Temperature (℃)	Voltage (V)	429.9875MHz	
T_{nor} (+25)	DC 4.2	-6.84	PASS
Limit		-8dB<Reading<0dB	

12.5kHz Channel Separation

Test Condition		Reading(dBc)	Result
Temperature (℃)	Voltage (V)	469.9875MHz	
T_{nor} (+25)	DC 4.2	-6.49	PASS
Limit		-8dB<Reading<0dB	

4.9. Receiver adjacent channel selectivity

TEST LIMIT

ETSI EN 300 086 (V2.1.2) Sub-clause 8.4
Radiated Spurious emission as defined in ETSI EN 300 086 Sub-clause 8.4.3, The adjacent channel selectivity for different channel separations shall not be less than the values given in table 8.

Table 8: Adjacent channel selectivity

	Channel separation	
	12,5 kHz	20/25 kHz
Normal test conditions	60,0 dB	70,0 dB
Extreme test conditions	50,0 dB	60,0 dB

TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.4.2 for the measurement method.

TEST RESULTS

12.5 kHz Channel Separation

Test Condition		Reading (dBc)	Result
Temperature (℃)	Voltage (V)	429.9875MHz	
T_{nor} (+25)	DC 4.2	62.04	PASS
T_{min} (0)	DC 4.5	64.08	
	DC 3.4	66.08	
T_{max} (+50)	DC 4.5	65.04	
	DC 3.4	64.08	
Limit		Normal=60 dB, Extreme=50dB	

12.5 kHz Channel Separation

Test Condition		Reading (dBc)	Result
Temperature (℃)	Voltage (V)	469.9875MHz	
T_{nor} (+25)	DC 4.2	63.05	PASS
T_{min} (0)	DC 4.5	66.09	
	DC 3.4	65.08	
T_{max} (+50)	DC 4.5	67.00	
	DC 3.4	68.07	
Limit		Normal=60 dB, Extreme=50dB	

4.10. Receiver spurious response rejection

LIMIT

ETSI EN 300 086(V 2.1.2) Sub-clause 8.5
The spurious radiation of the receiver as defined in ETSI EN 300 086 Sub-clause 8.5.4. At any frequency separated from the nominal frequency of the receiver by two channels or more, the spurious response rejection shall not be less than 70,0 dB.

TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.5.3 for the measurement method.

TEST RESULTS

12.5 kHz Channel Separation

Test Condition		Reading (dBc)	Result
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	74.35	PASS
Limit		Reading≥65dB	

4.11. Receiver inter-modulation response rejection

LIMIT

ETSI EN 300 086(V 2.1.2) Sub-clause 8.6
The spurious radiation of the receiver as defined in ETSI EN 300 086 Sub-clause 8.6.3. The intermodulation response rejection ratio shall not be less than 70,0 dB for base station equipment and 65,0 dB for mobile
and hand portable equipment.

TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.6.2 for the measurement method.

TEST RESULTS

12.5 kHz Channel Separation

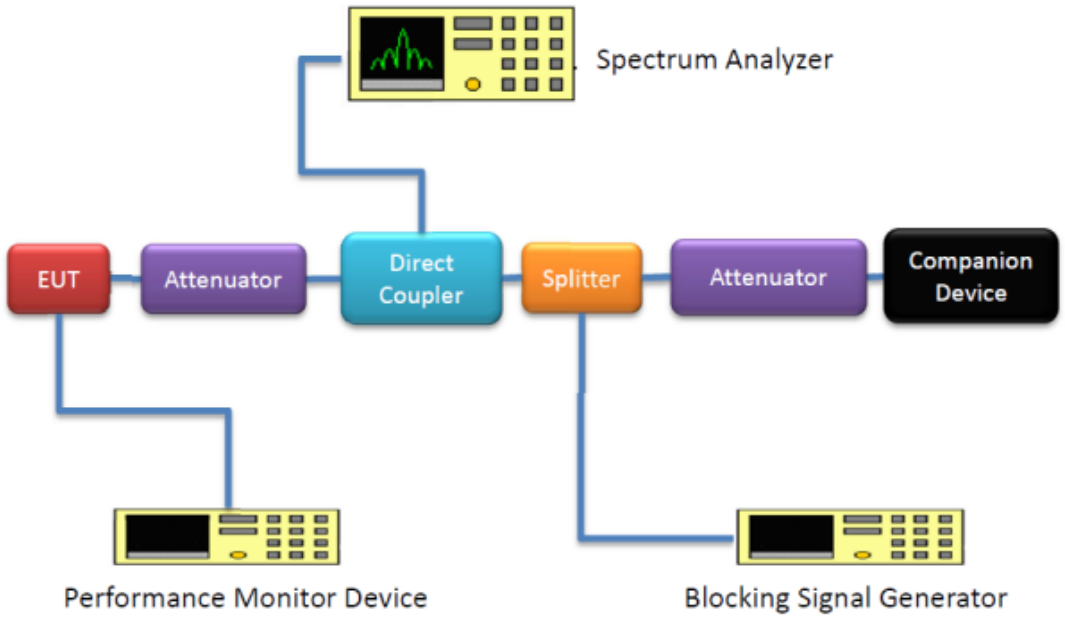
Test Condition		Reading (dBc)	Result
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	75.78	PASS
Limit		Reading≥70dB	

4.12. Receiver blocking or desensitization

LIMIT

ETSI EN 300 086(V 2.1.2) Sub-clause 8.7
The spurious radiation of the receiver as defined in ETSI EN 300 086 Sub-clause 8.7.3. The blocking ratio for any frequency within the specified ranges shall not be less than 84,0 dB, except at frequencies on
which spurious responses are found.

TEST CONFIGURATION



TEST PROCEDURE

1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.7.2 for the measurement method.

TEST RESULTS

12.5 kHz Channel Separation

Test Condition		Reading (dBc)	Result
Temperature (℃)	Voltage (V)		
T_{nor} (+25)	DC 4.2	90.12	PASS
Limit		Reading≥84dB	

4.13. Receiver spurious radiations

LIMIT

ETSI EN 300 086(V 2.1.2) Sub-clause 8.8

The spurious radiation of the receiver as defined in ETSI EN 300 086 Sub-clause 8.8.4 the power of any spurious radiation shall not exceed the values given in tables 9 and 10.

Table 9: Conducted components

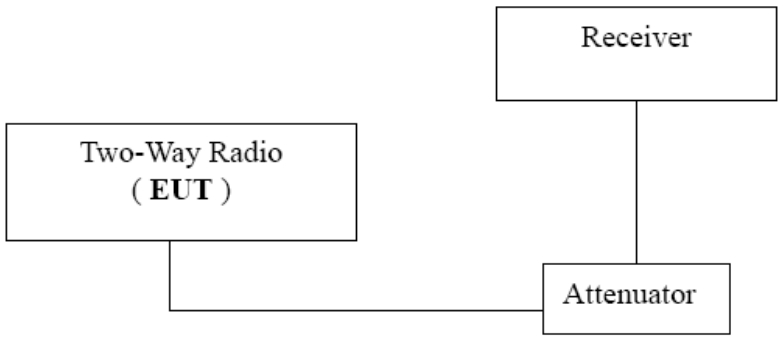
Frequency range	Limit
9 kHz to 1 GHz	2,0 nW (-57 dBm)
above 1 GHz to 4 GHz, or above 1 GHz to 12,75 GHz	20,0 nW (-47 dBm)

Table 10: Radiated components

Frequency range	Limit
30 MHz to 1 GHz	2,0 nW (-57 dBm)
above 1 GHz to 4 GHz	20,0 nW (-47 dBm)

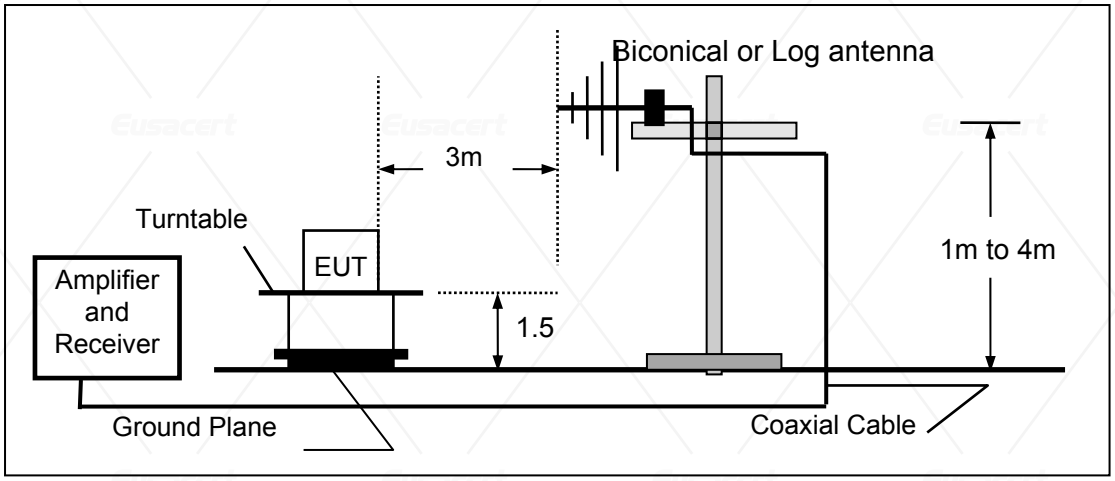
TEST CONFIGURATION

Conducted measurement:

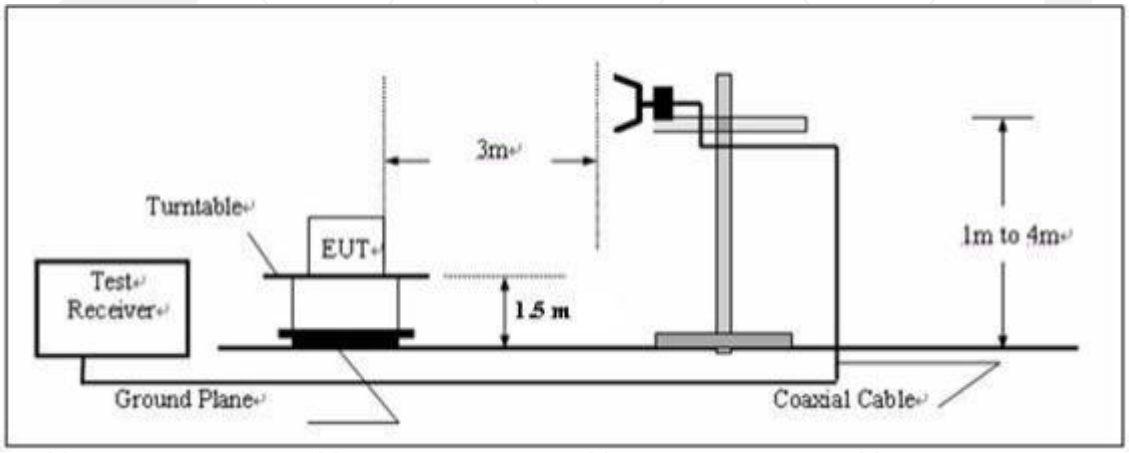


Radiated measurement:

Below 1GHz



Above 1GHz



TEST PROCEDURE

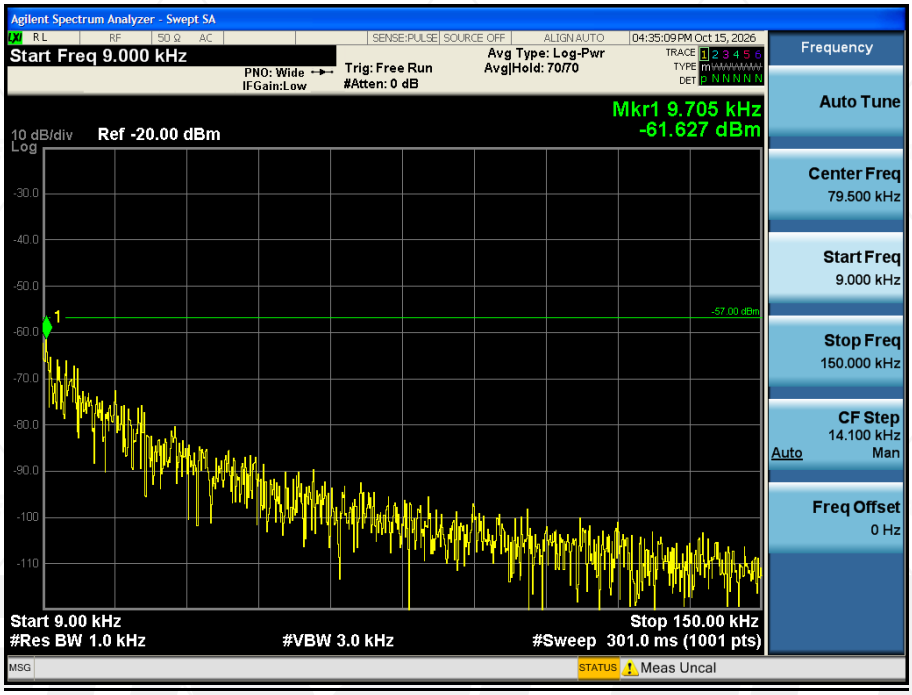
1. Please refer to ETSI EN 300 086 (V2.1.2) Sub-clause 8.8.3 for the measurement method.

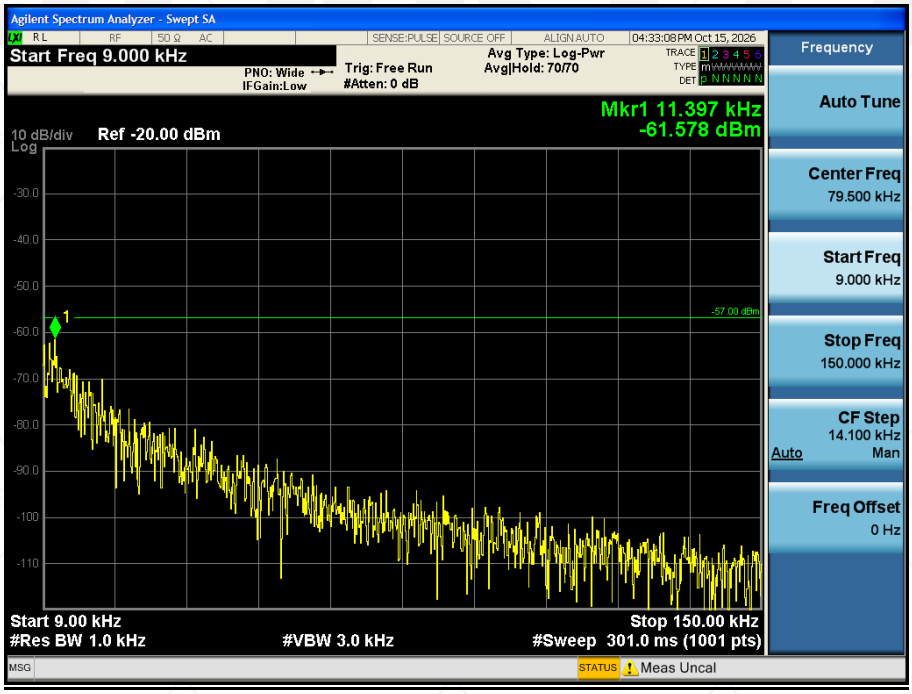
TEST RESULTS

PASS

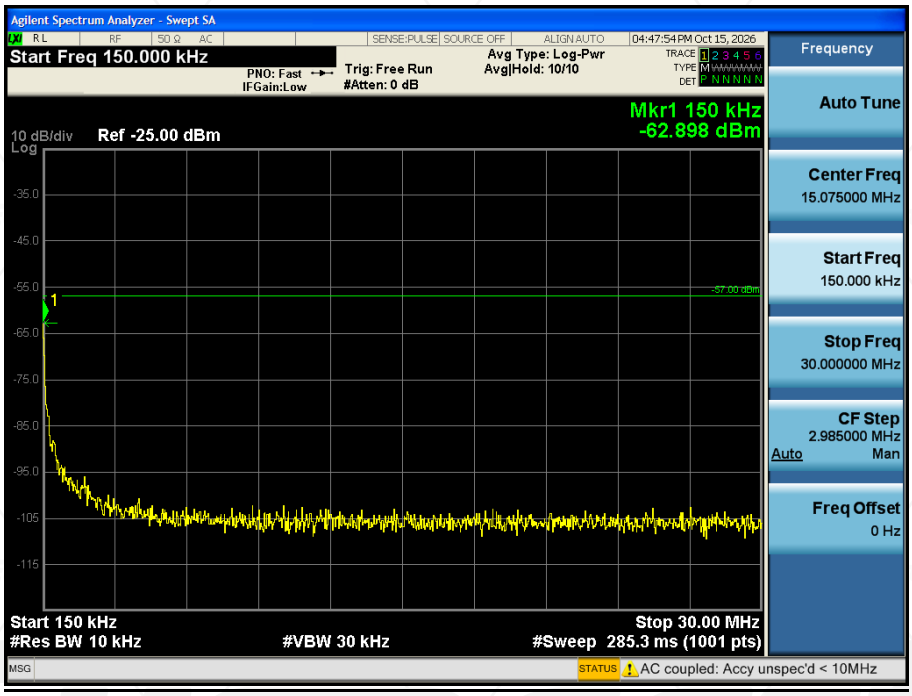
measurement (9 kHz to 4 GHz) ---PASS

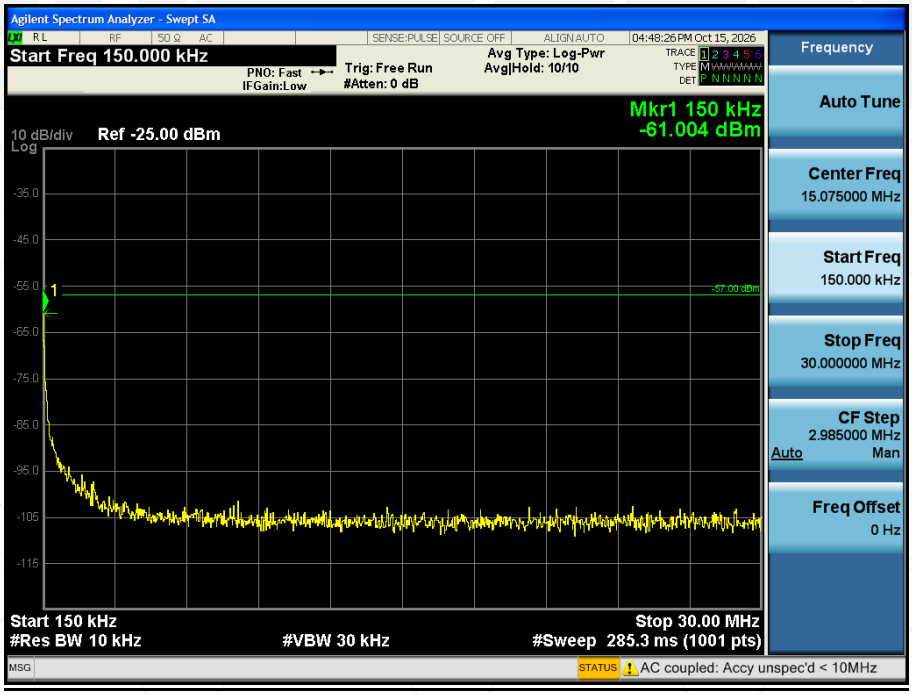
The Low Channel @ 12.5kHz Channel Separation---9k-150k



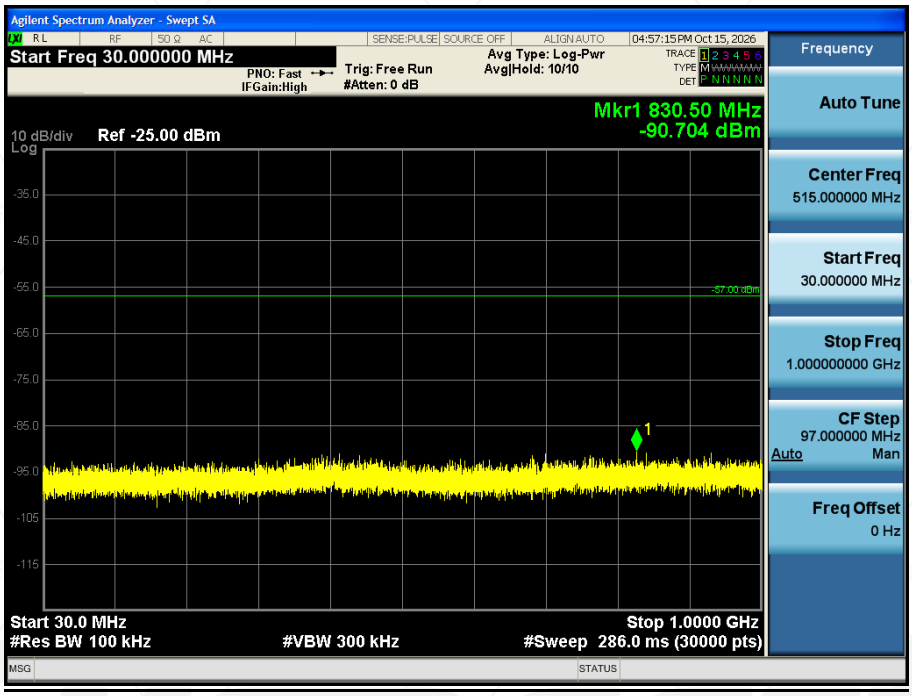


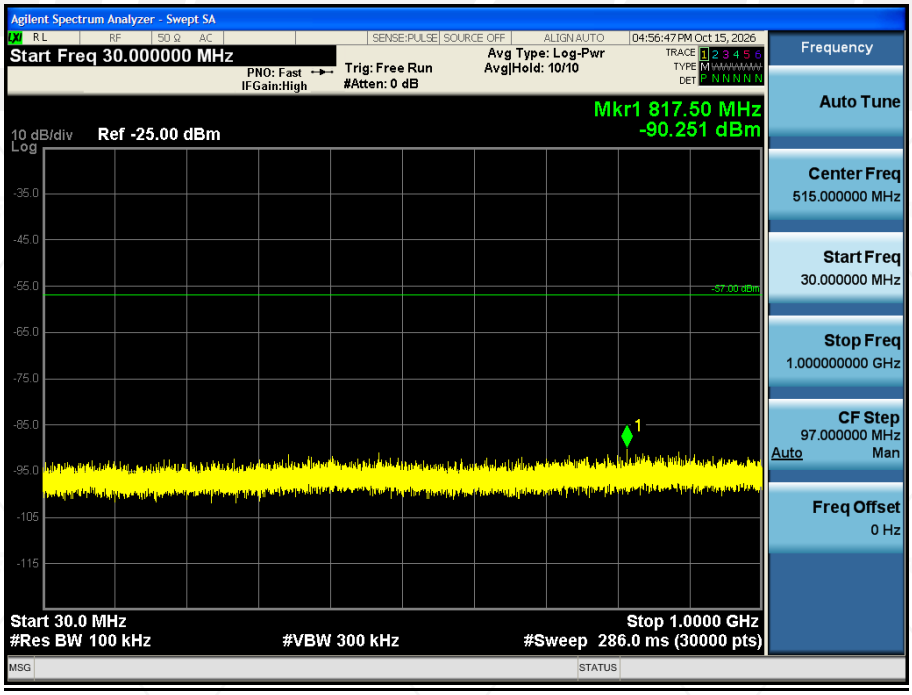
The Low Channel @ 12.5kHz Channel Separation---150k-30M



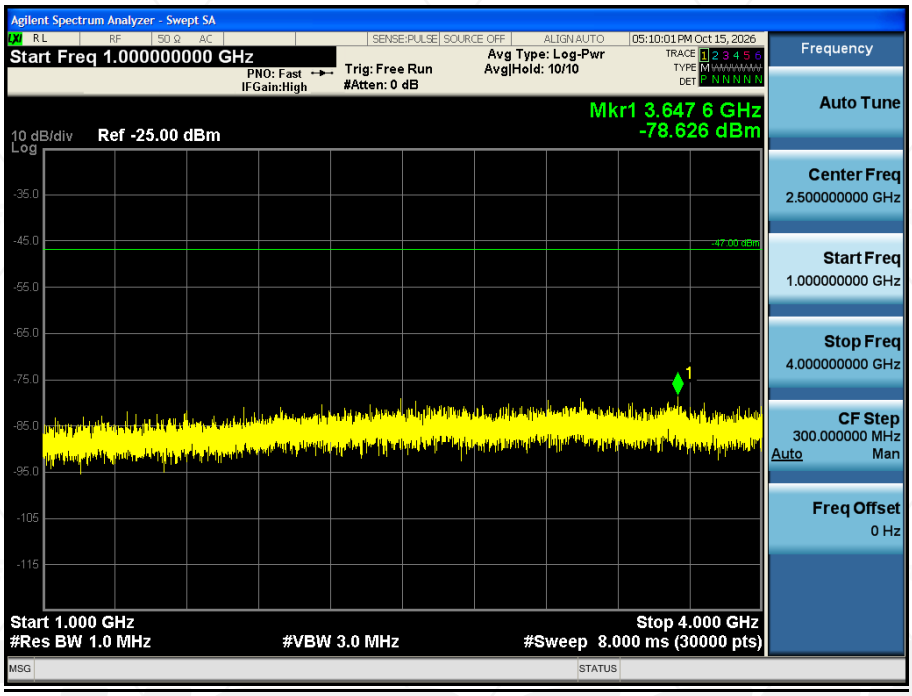


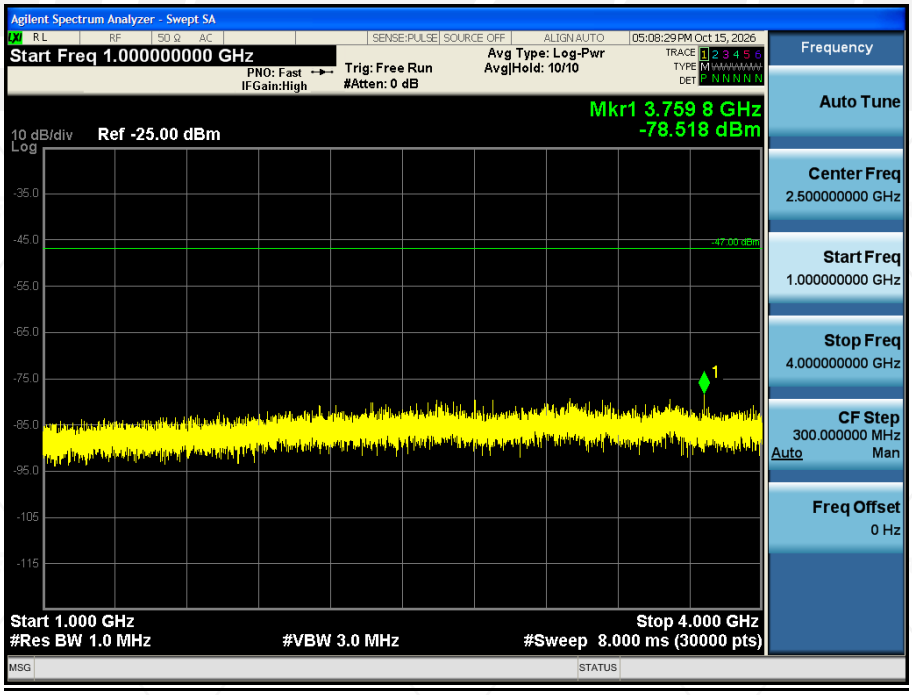
The Middle Channel @ 12.5kHz Channel Separation---30M-1G





The High Channel @ 12.5kHz Channel Separation---1G-4G

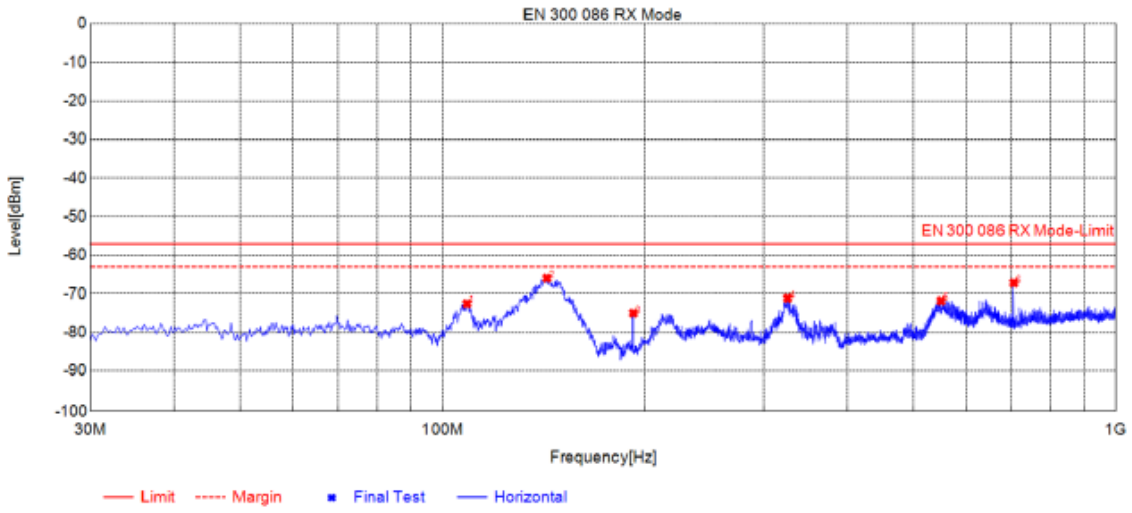




Effective Radiated Power measurement (30 MHz to 4GHz) --- PASS

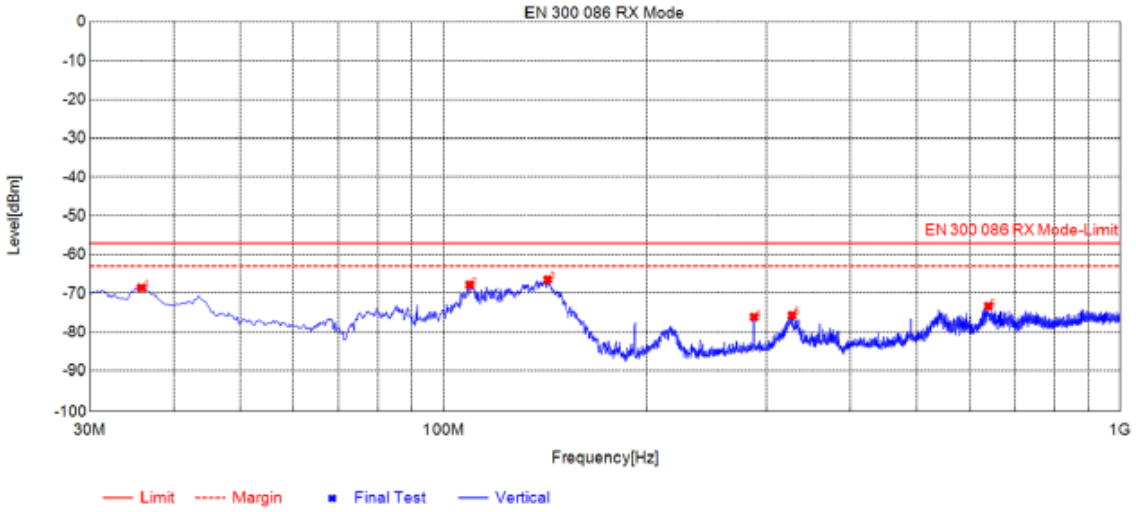
Note:
1. The Measurement uncertainty value is ±3.5dB.

Low Channel



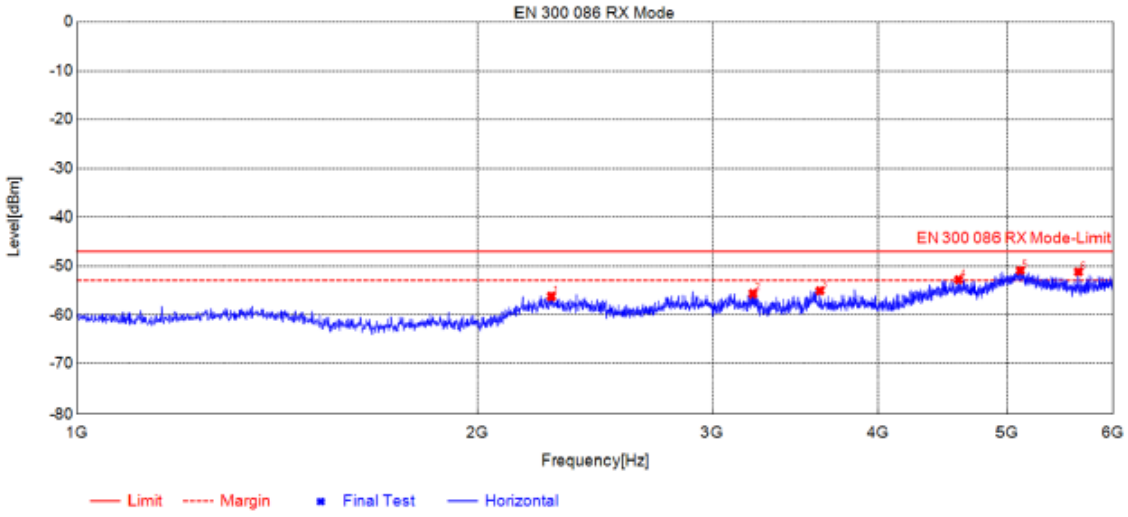
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	108.779	-75.52	-72.50	-57.00	15.50	3.02	Horizontal
2	142.930	-66.80	-65.99	-57.00	8.99	0.81	Horizontal
3	192.022	-74.13	-74.96	-57.00	17.96	-0.83	Horizontal
4	326.103	-72.53	-71.14	-57.00	14.14	1.39	Horizontal
5	550.412	-77.10	-71.78	-57.00	14.78	5.32	Horizontal
6	705.449	-73.82	-67.23	-57.00	10.23	6.59	Horizontal



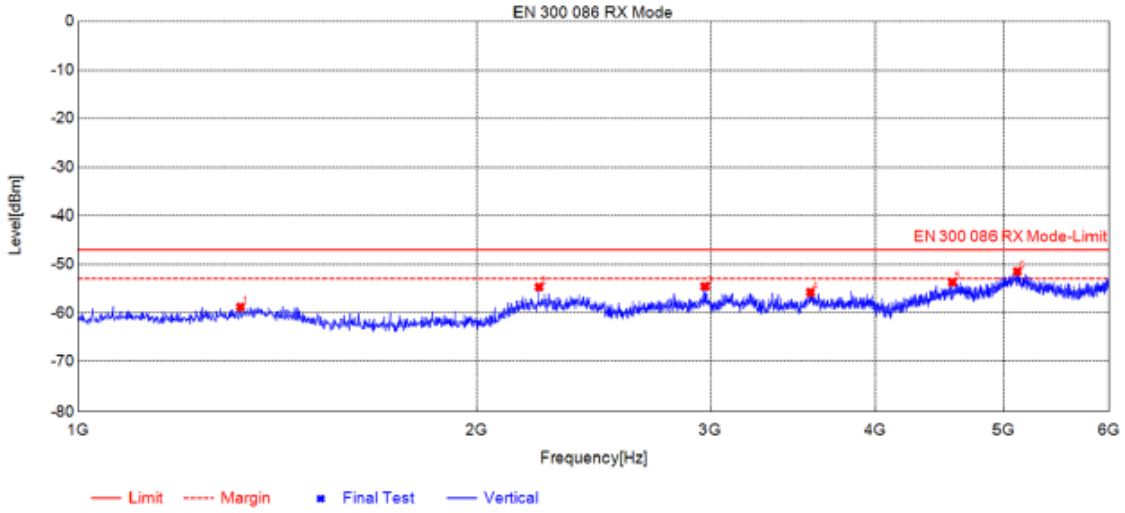
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.8212	-69.59	-68.65	-57.00	11.65	0.94	Vertical
2	109.361	-80.08	-67.85	-57.00	10.85	12.23	Vertical
3	142.542	-65.77	-66.52	-57.00	9.52	-0.75	Vertical
4	287.877	-76.55	-76.03	-57.00	19.03	0.52	Vertical
5	328.043	-77.18	-75.59	-57.00	18.59	1.59	Vertical
6	639.864	-79.06	-73.22	-57.00	16.22	5.84	Vertical



Suspected List

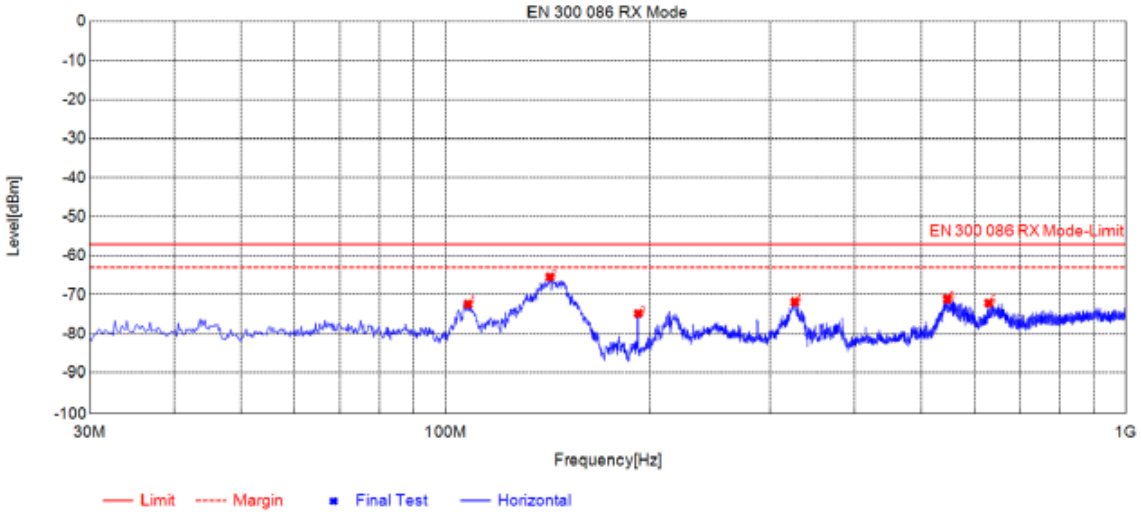
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	2272.25	-56.10	-56.24	-47.00	9.24	-0.14	Horizontal
2	3220.44	-56.76	-55.72	-47.00	8.72	1.04	Horizontal
3	3614.52	-58.53	-55.16	-47.00	8.16	3.37	Horizontal
4	4597.71	-59.21	-52.85	-47.00	5.85	6.36	Horizontal
5	5111.82	-60.85	-50.93	-47.00	3.93	9.92	Horizontal
6	5657.93	-58.16	-51.23	-47.00	4.23	6.93	Horizontal



Suspected List

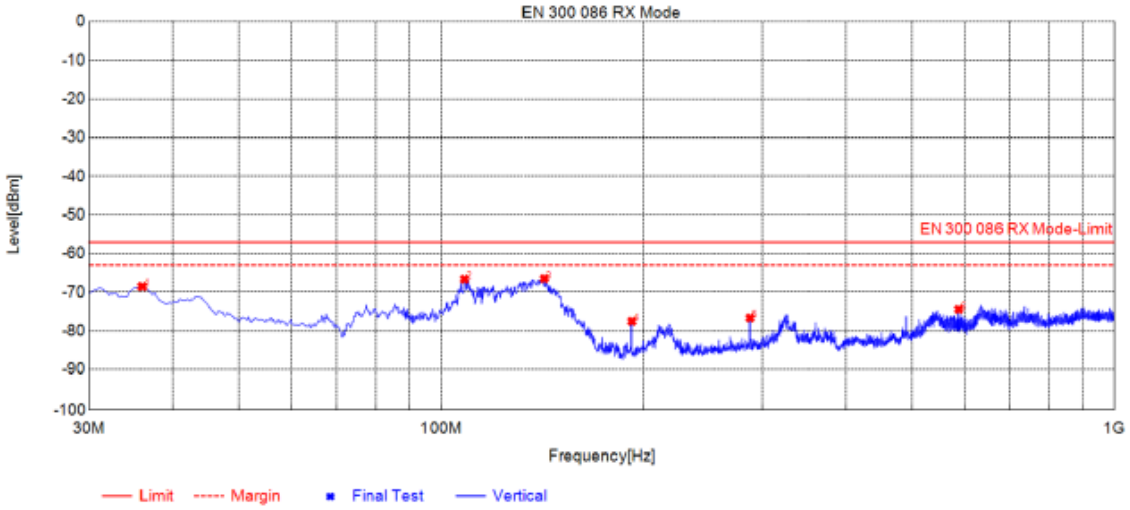
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1326.06	-55.13	-58.73	-47.00	11.73	-3.60	Vertical
2	2228.24	-54.64	-54.78	-47.00	7.78	-0.14	Vertical
3	2974.39	-55.18	-54.63	-47.00	7.63	0.55	Vertical
4	3570.51	-58.48	-55.82	-47.00	8.82	2.66	Vertical
5	4572.71	-60.11	-53.76	-47.00	6.76	6.35	Vertical
6	5116.82	-61.24	-51.52	-47.00	4.52	9.72	Vertical

Middle Channel



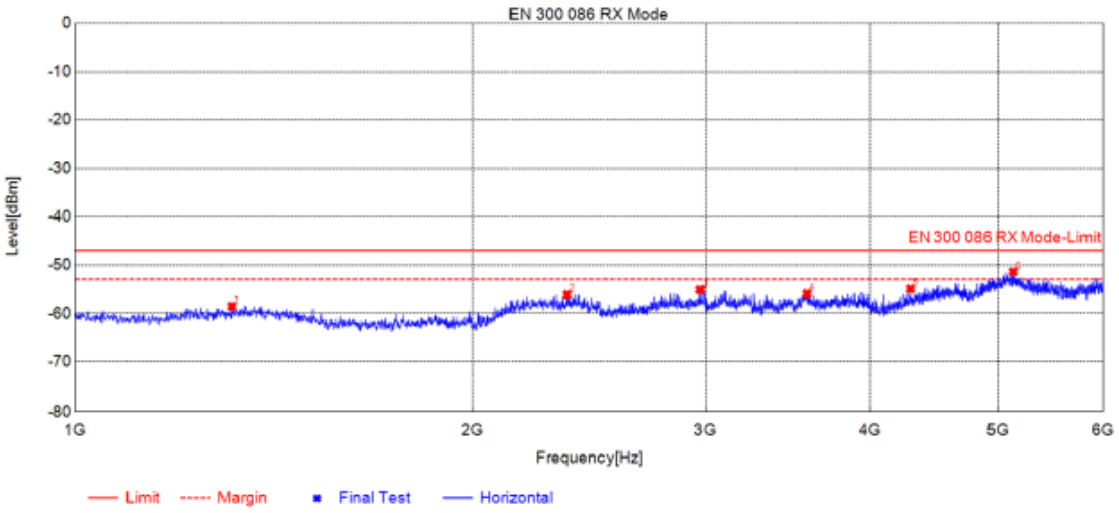
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	108.003	-75.14	-72.28	-57.00	15.28	2.86	Horizontal
2	142.348	-66.16	-65.49	-57.00	8.49	0.67	Horizontal
3	192.022	-73.91	-74.74	-57.00	17.74	-0.83	Horizontal
4	326.879	-73.16	-71.78	-57.00	14.78	1.38	Horizontal
5	546.919	-76.27	-71.09	-57.00	14.09	5.18	Horizontal
6	629.968	-80.01	-72.04	-57.00	15.04	7.97	Horizontal



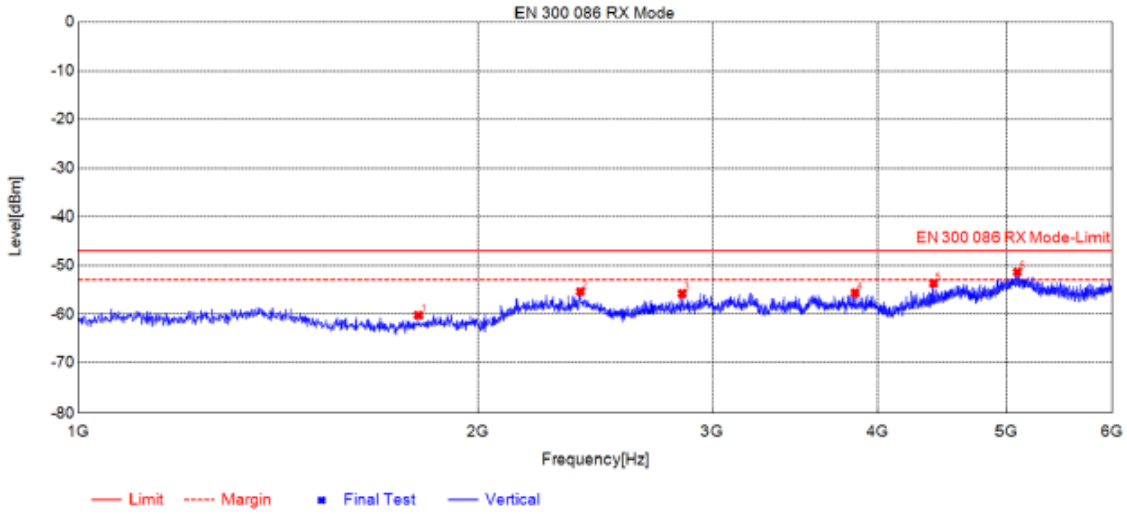
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.0152	-69.48	-68.61	-57.00	11.61	0.87	Vertical
2	108.391	-78.39	-66.71	-57.00	9.71	11.68	Vertical
3	142.348	-65.81	-66.55	-57.00	9.55	-0.74	Vertical
4	192.022	-75.72	-77.48	-57.00	20.48	-1.76	Vertical
5	287.877	-77.13	-76.61	-57.00	19.61	0.52	Vertical
6	588.055	-79.49	-74.36	-57.00	17.36	5.13	Vertical



Suspected List

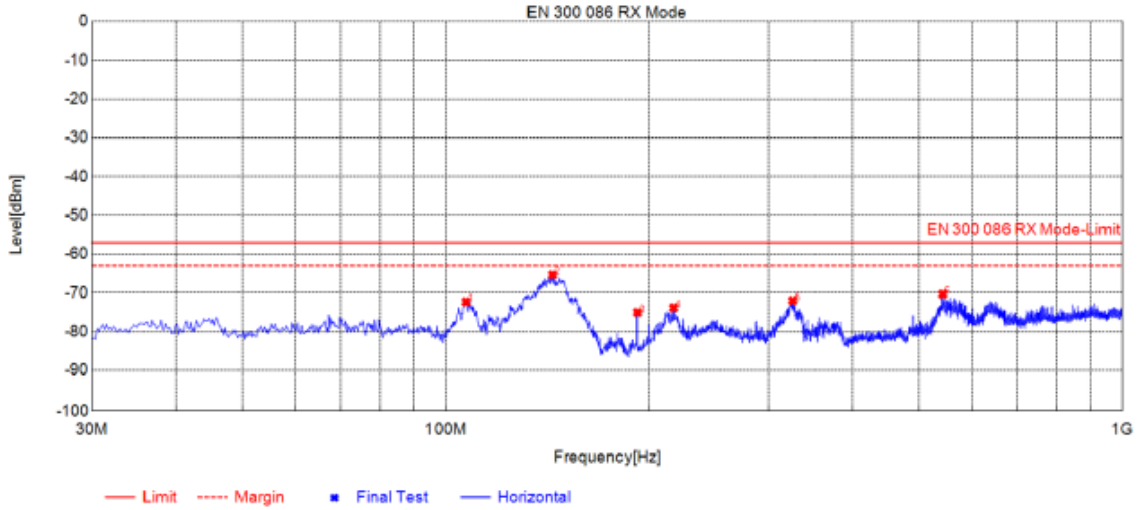
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1314.06	-55.19	-58.50	-47.00	11.50	-3.31	Horizontal
2	2358.27	-55.74	-56.15	-47.00	9.15	-0.41	Horizontal
3	2974.39	-55.71	-55.14	-47.00	8.14	0.57	Horizontal
4	3580.51	-59.09	-55.95	-47.00	8.95	3.14	Horizontal
5	4288.65	-60.27	-54.97	-47.00	7.97	5.30	Horizontal
6	5129.82	-61.20	-51.43	-47.00	4.43	9.77	Horizontal



Suspected List

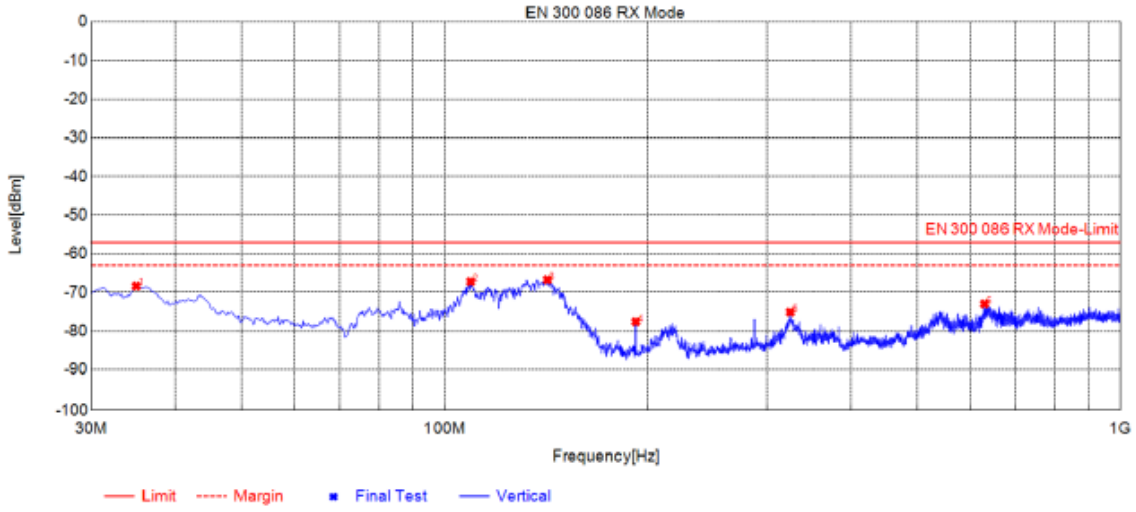
Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1804.16	-55.71	-60.20	-47.00	13.20	-4.49	Vertical
2	2389.27	-55.12	-55.47	-47.00	8.47	-0.35	Vertical
3	2850.37	-55.63	-55.85	-47.00	8.85	-0.22	Vertical
4	3845.56	-59.18	-55.71	-47.00	8.71	3.47	Vertical
5	4403.68	-59.22	-53.76	-47.00	6.76	5.46	Vertical
6	5091.81	-61.15	-51.40	-47.00	4.40	9.75	Vertical

High Channel



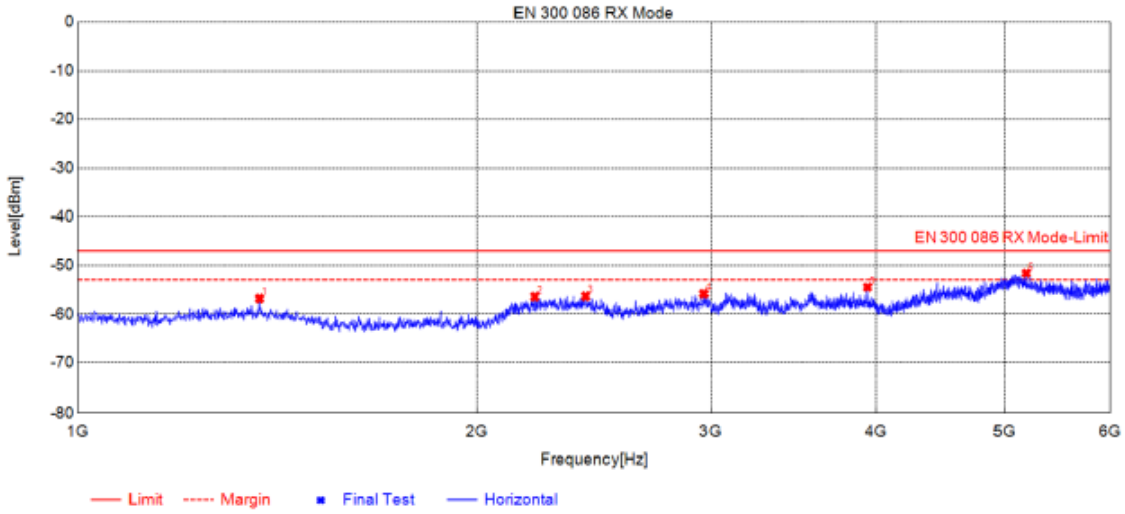
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	107.227	-74.95	-72.27	-57.00	15.27	2.68	Horizontal
2	143.900	-66.44	-65.40	-57.00	8.40	1.04	Horizontal
3	192.022	-74.16	-74.99	-57.00	17.99	-0.83	Horizontal
4	217.441	-77.01	-73.79	-57.00	16.79	3.22	Horizontal
5	326.297	-73.37	-71.98	-57.00	14.98	1.39	Horizontal
6	543.038	-75.37	-70.34	-57.00	13.34	5.03	Horizontal



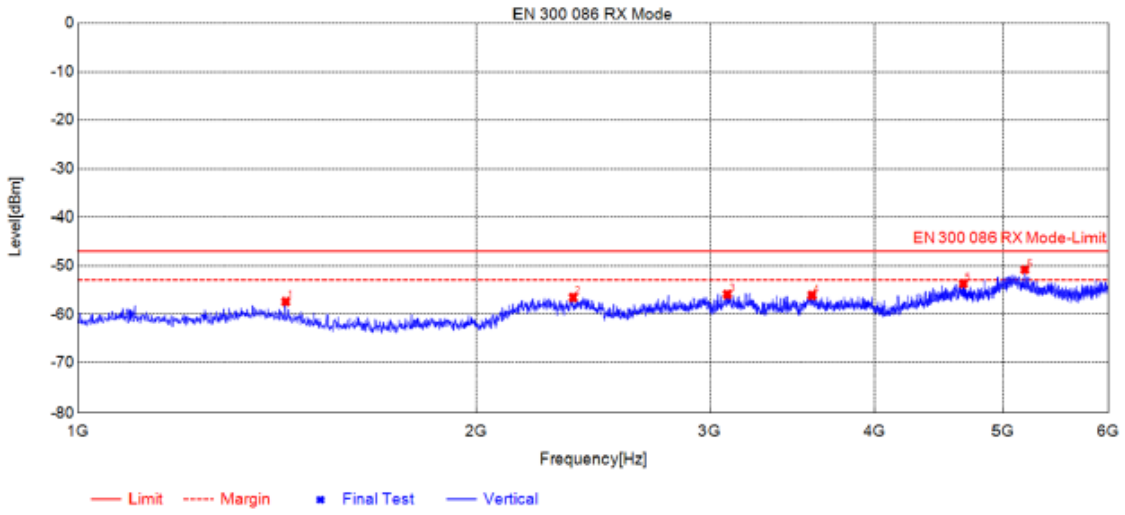
Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.045	-69.68	-68.45	-57.00	11.45	1.23	Vertical
2	109.361	-79.50	-67.27	-57.00	10.27	12.23	Vertical
3	141.960	-66.08	-66.80	-57.00	9.80	-0.72	Vertical
4	191.828	-75.75	-77.54	-57.00	20.54	-1.79	Vertical
5	325.327	-76.43	-75.04	-57.00	18.04	1.39	Vertical
6	630.550	-79.13	-72.88	-57.00	15.88	6.25	Vertical



Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1371.07	-53.60	-56.82	-47.00	9.82	-3.22	Horizontal
2	2210.24	-56.43	-56.45	-47.00	9.45	-0.02	Horizontal
3	2416.28	-55.65	-56.36	-47.00	9.36	-0.71	Horizontal
4	2966.39	-56.41	-55.86	-47.00	8.86	0.55	Horizontal
5	3940.58	-58.58	-54.56	-47.00	7.56	4.02	Horizontal
6	5187.83	-60.89	-51.65	-47.00	4.65	9.24	Horizontal

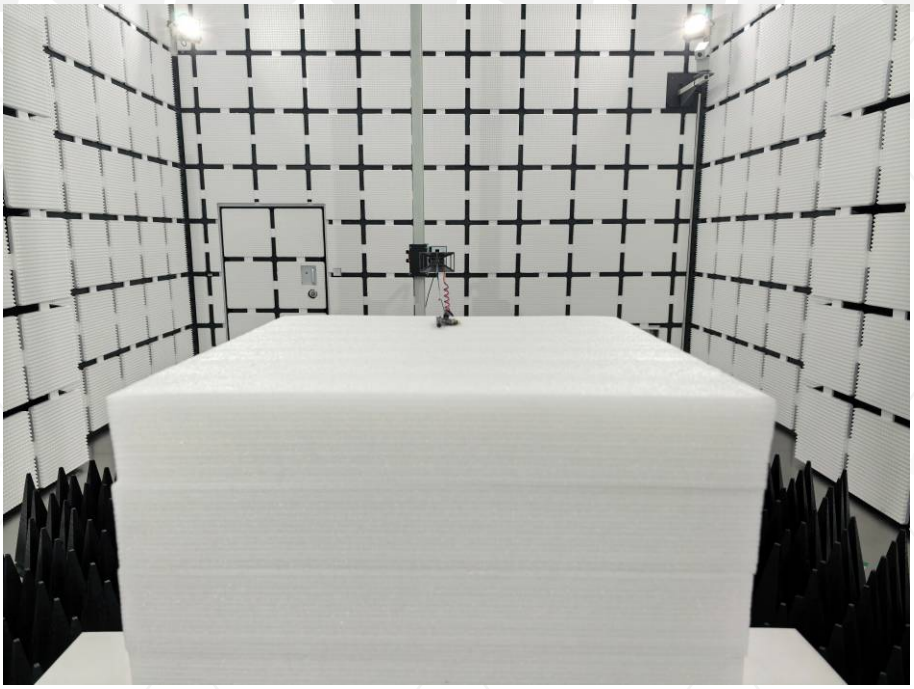


Suspected List

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	1436.08	-53.57	-57.38	-47.00	10.38	-3.81	Vertical
2	2367.27	-56.13	-56.56	-47.00	9.56	-0.43	Vertical
3	3093.41	-57.09	-55.94	-47.00	8.94	1.15	Vertical
4	3583.51	-59.04	-56.12	-47.00	9.12	2.92	Vertical
5	4666.73	-60.71	-53.82	-47.00	6.82	6.89	Vertical
6	5190.83	-60.12	-50.85	-47.00	3.85	9.27	Vertical

5. Test Setup Photos of the EUT





6. External and Internal Photos of the EUT

Reference to the test report No. SZE2607150575ET03.

.....End of Report.....