Prüfbericht-Nr.: *Test report no.:*	NN203RMG(P15C-915MHz) 001	**Auftrags-Nr.:** *Order no.:*	238489605	
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2020-07-30	
Auftraggeber: *Client:*	HELITE 1 RUE DE LA PETITE FIN, 21121, FONTAINE-LES-DIJON, France			
Prüfgegenstand: *Test item:*	SHOCK DETECTOR			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	SDU_Motorcycle: 1A-0221 SDU_Bicycle: 1A-0233			
Auftrags-Inhalt: *Order content:*	FCC Part 15C Test report(915MHz)			
Prüfgrundlage: *Test specification:*	FCC 47CFR Part 15: Subpart C Section 15.249			
Wareneingangsdatum: *Date of sample receipt:*	2020-08-09			
Prüfmuster-Nr.: *Test sample no:*	A002905184-001 A002905184-003			
Prüfzeitraum: *Testing period:*	2020-09-10 - 2021-01-27			
Ort der Prüfung: *Place of testing:*	EMC/RF Taipei Testing Site			
Prüflaboratorium: *Testing laboratory:*	Taipei Testing Laboratories			
Prüfergebnis*: *Test result*:*	Pass			

überprüft von: *reviewed by:*		**genehmigt von:** authorized by:	
Datum: *Date:* 2021-01-28		**Ausstellungsdatum:** *Issue date:* 2021-01-28	
Stellung / *Position:*	Ryan Chen Senior Project Manager	**Stellung** / *Position:*	Brenda Chen Senior Project Manager

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.
V05

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.203	Antenna Requirement	Pass
5.1.2	15.215	20 dB bandwidth	Pass
5.1.3	15.249 (a)	Field Strength of Fundamental Emissions	Pass
5.1.4	15.249 (d)	Radiated Spurious Emissions	Pass
-	15.207	Mains Conducted Emission	Not Applicable
-	FCC KDB 447498 D01 v06	RF Exposure Compliance	Refer to report no. NN203RMG(RFEXPOSURE) 001

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Contents

HISTORY OF THIS TEST REPORT **5**

1. GENERAL REMARKS **6**
1.1 COMPLEMENTARY MATERIALS **6**
1.2 DECISION RULE OF CONFORMITY **6**

2. TEST SITES **7**
2.1 TEST LABORATORY **7**
2.2 TEST FACILITY **7**
2.3 TRACEABILITY **8**
2.4 CALIBRATION **8**
2.5 MEASUREMENT UNCERTAINTY **8**

3. GENERAL PRODUCT INFORMATION **9**
3.1 PRODUCT FUNCTION AND INTENDED USE **9**
3.2 NOISE GENERATING AND NOISE SUPPRESSING PARTS **10**
3.3 SUBMITTED DOCUMENTS **10**

4. TEST SET-UP AND OPERATION MODES **11**
4.1 PRINCIPLE OF CONFIGURATION SELECTION **11**
4.2 TEST OPERATION AND TEST SOFTWARE **11**
4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT **12**
4.4 TEST SETUP DIAGRAM **12**

5. TEST RESULTS **13**
5.1 TRANSMITTER REQUIREMENT & TEST SUITES **13**
5.1.1 Antenna Requirement *13*
5.1.2 20 dB Bandwidth *14*
5.1.3 Field Strength of Fundamental Emissions *16*
5.1.4 Radiated Spurious Emissions *19*

APPENDIX A - TEST RESULT OF RADIATED SPURIOUS EMISSIONS

APPENDIX SP - PHOTOGRAPHS OF TEST SETUP

APPENDIX EP - PHOTOGRAPHS OF EUT

HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
NN203RMG(P15C-915MHz) 001	Original Release	2021-01-28

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix A - Test Result of Radiated Spurious Emissions
Appendix SP - Photographs of Test Setup
Appendix EP - Photographs of EUT

Applied Standard and Test Levels

Radio
FCC 47CFR Part 15: Subpart C Section 15.249 ANSI C63.10:2013 KDB 447498 D01 General RF Exposure Guidance v06

1.2 Decision Rule of Conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

2. Test Sites

2.1 Test Laboratory

Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 Test Facility

Taipei Testing Laboratories

No.458-18, Sec. 2, Fenliao Rd., Linkou Dist.,
New Taipei City 244
Taiwan (R.O.C.)
FCC Registration No.: 226631
ISED Registration No.: 25563

2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

All measurement uncertainty values are shown with a coverage factor of k=2 to indicate a 95% level of confidence.

Emission Measurement Uncertainty

Parameter	Uncertainty
Radiated Emission (9 kHz ~ 30 MHz)	± 1.15 dB
Radiated Emission (30 MHz ~ 200 MHz)	± 1.30 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.30 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.54 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.52 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a SHOCK DETECTOR. Its function is to send a radio frame with a unique identifier as soon as a measured acceleration enters in its algorithm criteria. It works only in emission, it is not able to receive any radio frame.

Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	SHOCK DETECTOR
Type Identification	SDU_Motorcycle: 1A-0221 SDU_Bicycle: 1A-0233
FCC ID	2AXTY-1A022133

Technical Specification of EUT

Item	EUT information
Operating Frequency	915 MHz
Operation Voltage	3.6Vdc
Modulation	FSK
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 0

1. All models are listed as below.

Type Identification	Installation location	Difference
SDU_Motorcycle: 1A-0221	Motorcycle	All models are electrically identical. The difference between the two models is that they are installed in different vehicles.
SDU_Bicycle: 1A-0233	Bicycle	

3.2 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.3 Submitted Documents

- Circuit Diagram
- Instruction Manual
- Rating Label
- Technical Description

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

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

4.2 Test Operation and Test Software

Setup for testing: The EUT has a modified firmware, which makes it possible to continuous transmit when active by magnet.

The samples were used as follows:
A002905184-001 for radiated
A002905184-003 for conducted
Full test was applied on all test modes, but only worst case was shown.

EUT Configure Mode	Applicable To			Description
	Field Strength of Fundamental Emissions	Radiated Spurious Emissions	Mains Conducted Emission	
-	√	√	-	-

Note:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on X-plane.
2. "-" means no effect.

Field Strength of Fundamental Emissions

☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Frequency (MHz)	Tested Frequency (MHz)
-	915	915

Radiated Spurious Emission

☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Frequency (MHz)	Tested Frequency (MHz)
-	915	915

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Radiated Spurious Emissions	24 °C	55.4 %	Simon Tsai
Field Strength of Fundamental Emissions	24 °C	55.4 %	Stanislas Charles

4.3 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Accessory of EUT

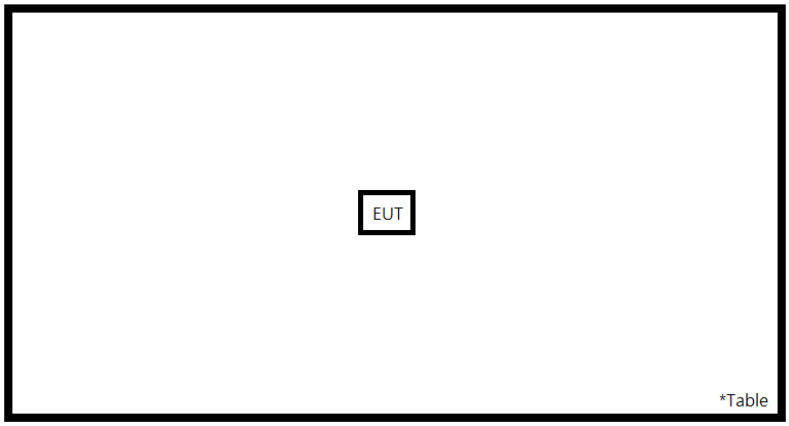
No.	Product	Brand	Model	Description
-	Lithium Battery	EVE	-	3.6 Vdc

Support Unit

Radiated Test					
No.	Description	Brand	Model	S/N	Remark
-	Magnet Key	HELITE	-	-	-

4.4 Test Setup Diagram

<Radiated Spurious Emissions mode>



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

Requirement Use of approved antennas only

According to the manufacturer declaration, the EUT has an antenna with a directional gain of 2 dBi. The antenna is monopole antenna with no possibility of replacement with a non-approved antenna by the en d-user. Therefore, the EUT is considered to comply with this provision.
Refer to EUT photo for details.

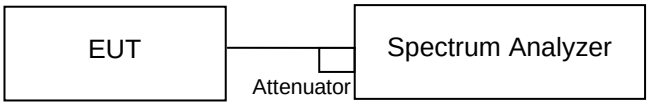
5.1.2 20 dB Bandwidth

Limit

According to 15.215, for the intentional radiators have to ensure that the 20dB bandwidth of the emission is contained within the frequency band designated in the rule section under which the equipment is operated.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	Agilent	N9010A	MY53470241	2020/6/2	2021/6/1	2020/9/16	2021/01/27

Test Procedure

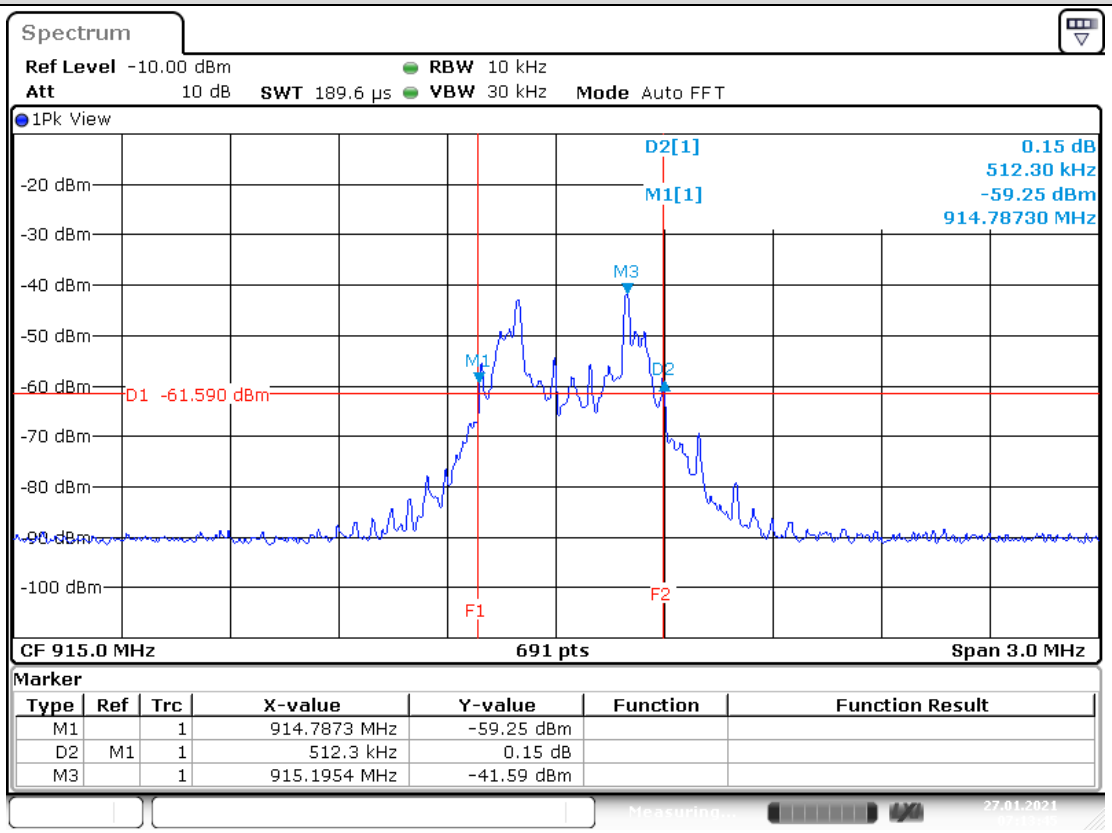
a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
c. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
d. Repeat above procedures until all frequencies measured were complete.
e. The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1 % to 5 % of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to PEAK. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

Test Results

<20 dB Bandwidth>

Channel Frequency (MHz)	20 dB Bandwidth (kHz)	Result
915	512.3	Pass

915MHz



Date: 27.JAN.2021 07:13:45

5.1.3 Field Strength of Fundamental Emissions

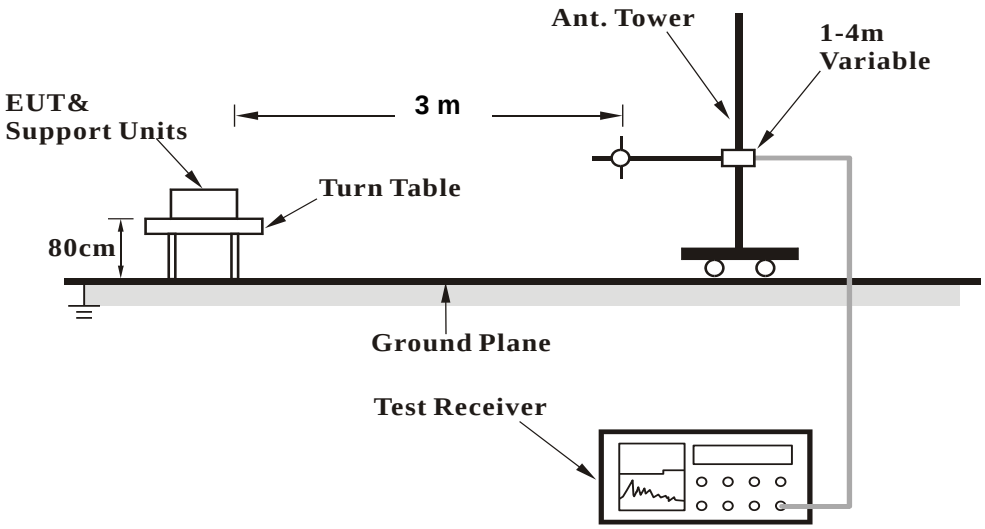
Limit

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of Fundamental (microvolts/meter)	Field Strength of Harmonics (microvolts/meters)
902 ~ 928 MHz	50	500
2400 ~ 2483.5 MHz	50	500
5725 ~ 5875 MHz	50	500
24 ~ 24.25 GHz	250	2500

Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup



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

Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101508	2020/3/16	2021/3/15
Receiver	R&S	ESR7	102108	2020/4/22	2021/4/21
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2020/2/14	2021/2/12
Horn Antenna	ETS-Lindgren	3117	00218930	2019/12/6	2020/12/4
LF-AMP	Agilent	8447D	2944A10772	2020/2/11	2021/2/9
HF-AMP + AC source	EMCI	EMC051845SE	980633	2020/2/17	2021/2/15
HF-AMP + AC source	EMCI	EMC184045SE	980657	2020/2/17	2021/2/15
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2020/4/10	2021/4/9
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800056/4EA	2020/3/25	2021/3/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	804680/4	2020/3/25	2021/3/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37202/4	2020/3/25	2021/3/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800898/2EA	2020/4/22	2021/4/21
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800901/2EA	2020/4/22	2021/4/21
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801027/2EA	2020/4/22	2021/4/21
Loop Antenna	Chance Most	EMCILPA600 +calibration	287	2020/1/9	2021/1/7

Test Procedures

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) or 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. 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. The height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.
4. The Radiated Emissions testing was performed in the X, Y and Z axis orientation. The worst-case Axis orientation is recorded in this test report.

Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix A.

5.1.4 Radiated Spurious Emissions

Limit

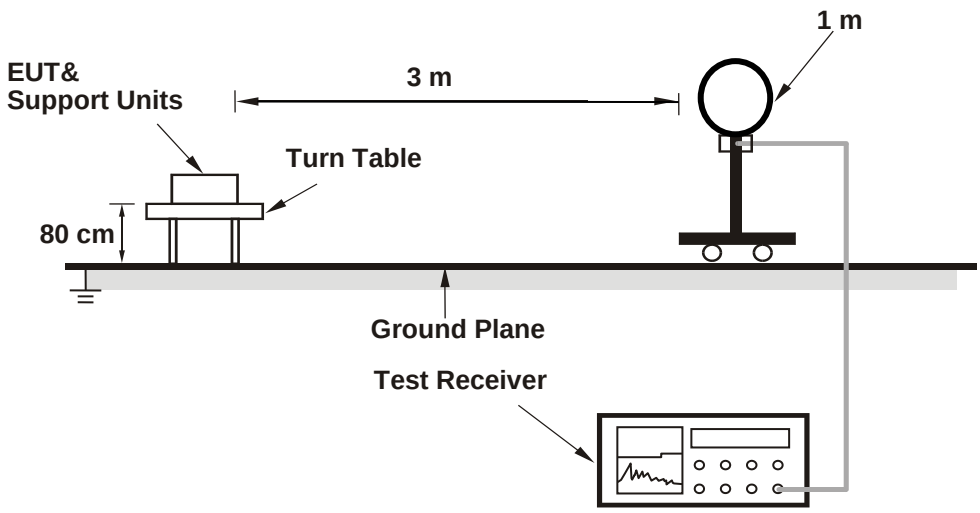
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits as below table, whichever is the lesser attenuation.

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

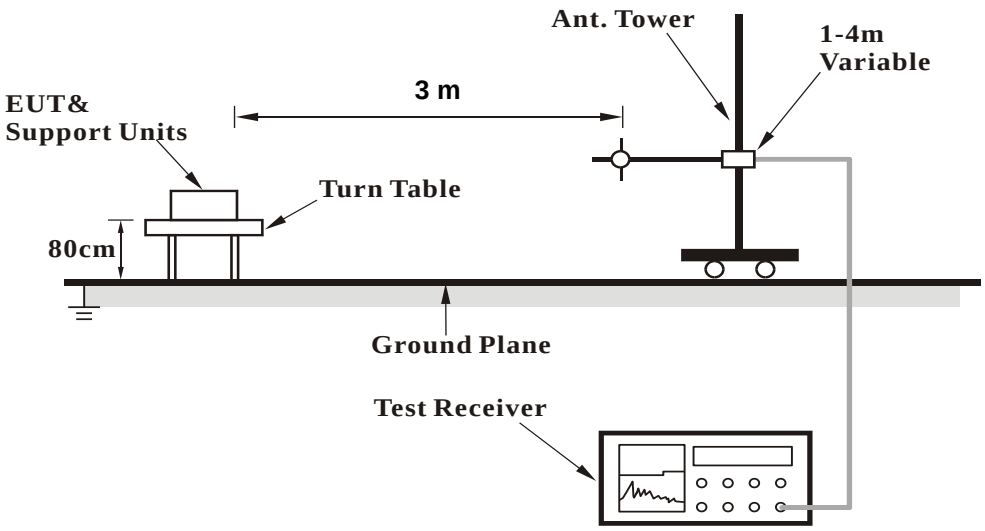
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

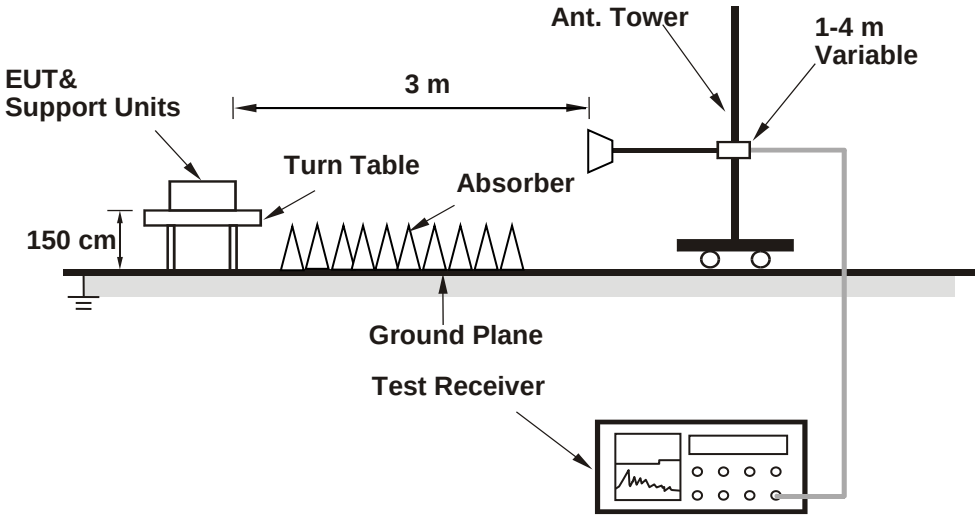
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emission above 1 GHz>



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

Test Instruments

Please refer to 5.1.3 Instruments

Test Procedures

For Radiated Emissions below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case 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 Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated Emissions above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. 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. The height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.
4. The Radiated Emissions testing was performed in the X, Y and Z axis orientation. The worst-case Axis orientation is recorded in this test report.

Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

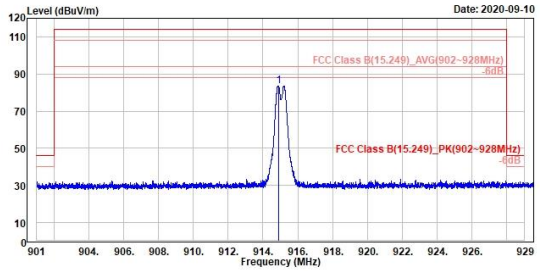
Please refer to Appendix A.

Appendix A: Test Results of Radiated Spurious Emissions

Fundamental, 915MHz

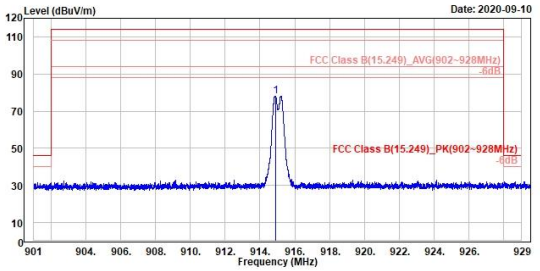
SRD 915MHz	
(Horizontal) Peak	(Vertical) Peak

TÜV Rheinland Taiwan Ltd.
No. 458-18,Sec 2,Fenliao.,Linkou Dist.,New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	914.89	83.69	80.08	3.61	114.00	-30.31	100	323	Peak	Horizontal	

TÜV Rheinland Taiwan Ltd.
No. 458-18,Sec 2,Fenliao.,Linkou Dist.,New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322

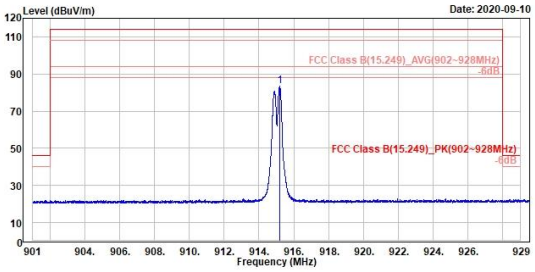


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	914.89	78.15	74.54	3.61	114.00	-35.85	117	246	Peak	Vertical	

SRD 915MHz

(Horizontal) Average

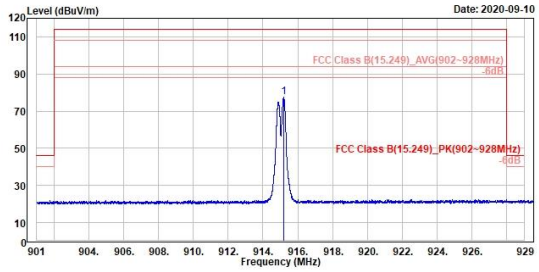
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	915.19	83.34	79.73	3.61	94.00	-10.66	100	323	Average	Horizontal	

(Vertical) Average

TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	915.19	77.75	74.14	3.61	94.00	-16.25	117	246	Average	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

SRD 915MHz

(Open) 9kHz~150kHz

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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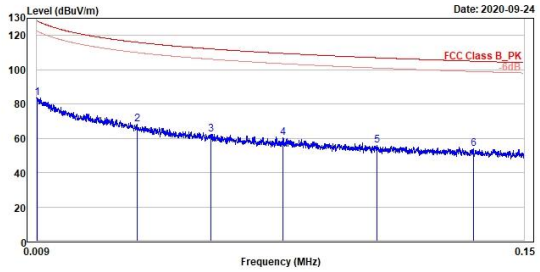

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.01	83.60	3.68	79.92	128.49	-44.89	100	84	QP	Open	
2	0.04	68.02	-0.18	68.20	116.00	-47.98	100	0	QP	Open	
3	0.06	62.46	-1.27	63.73	112.11	-49.65	100	203	QP	Open	
4	0.08	60.30	-0.92	61.22	109.50	-49.20	100	128	QP	Open	
5	0.11	55.92	-2.89	58.81	106.97	-51.05	100	265	QP	Open	
6	0.14	53.69	-3.51	57.20	104.97	-51.28	100	336	QP	Open	

(Open) 150kHz~30MHz

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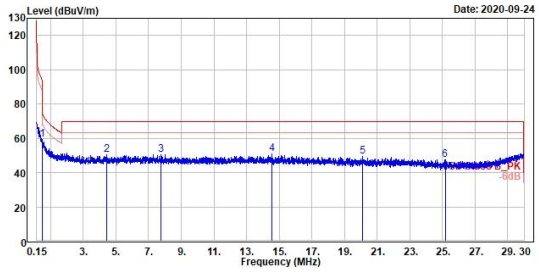

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.51	59.18	12.49	46.69	73.53	-14.35	100	208	QP	Open	
2	4.43	50.29	11.96	38.33	69.50	-19.21	100	169	QP	Open	
3	7.77	50.28	12.14	38.14	69.50	-19.22	100	41	QP	Open	
4	14.56	50.90	13.22	37.68	69.50	-18.60	100	282	QP	Open	
5	20.13	49.49	13.26	36.23	69.50	-20.01	100	360	QP	Open	
6	25.17	47.47	13.43	34.04	69.50	-22.03	100	171	QP	Open	

SRD 915MHz

(Close) 9kHz~150kHz

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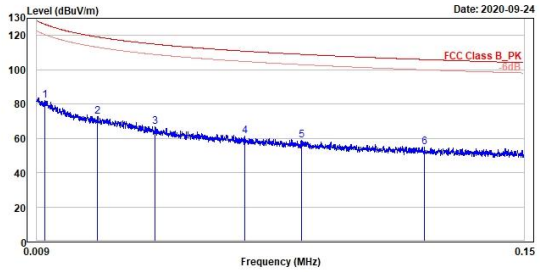

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.01	82.13	4.15	77.98	126.47	-44.34	100	102	QP	Close	
2	0.03	72.87	1.50	71.37	119.13	-46.26	100	106	QP	Close	
3	0.04	66.66	-0.07	66.73	114.86	-48.20	100	128	QP	Close	
4	0.07	61.36	-1.10	62.46	110.80	-49.44	100	267	QP	Close	
5	0.09	58.65	-2.14	60.79	108.93	-50.28	100	88	QP	Close	
6	0.12	54.69	-3.33	58.02	105.93	-51.24	100	267	QP	Close	

(Close)150kHz~30MHz

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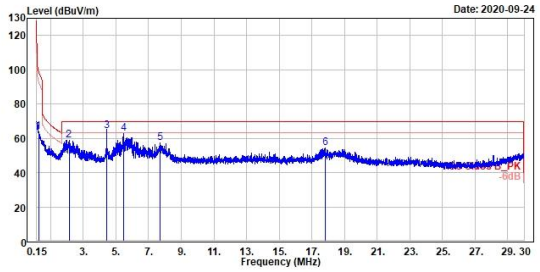

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.25	63.71	11.88	51.83	99.49	-35.78	100	360	QP	Close	
2	2.12	58.92	20.28	38.64	69.50	-10.58	100	235	QP	Close	
3 !	4.43	64.33	26.00	38.33	69.50	-5.17	100	144	QP	Close	
4	5.45	62.97	24.63	38.34	69.50	-6.53	100	6	QP	Close	
5	7.71	57.42	19.26	38.16	69.50	-12.08	100	350	QP	Close	
6	17.82	54.52	17.63	36.89	69.50	-14.98	100	73	QP	Close	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

SRD 915MHz

(Horizontal)

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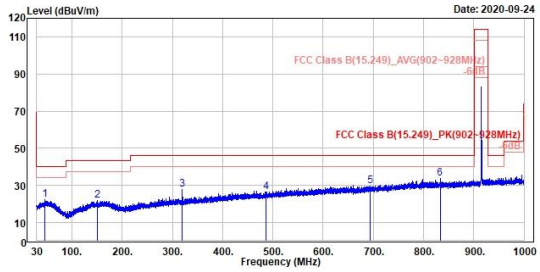

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	45.91	22.33	29.85	-7.52	40.00	-17.67	174	360	QP	horizontal	
2	150.96	21.69	29.37	-7.68	43.50	-21.81	100	1	QP	horizontal	
3	320.03	27.82	33.93	-6.11	46.00	-18.18	100	98	QP	horizontal	
4	486.58	26.39	29.82	-3.43	46.00	-19.61	300	191	QP	horizontal	
5	694.55	29.47	29.38	0.09	46.00	-16.53	200	299	QP	horizontal	
6	833.06	33.96	31.68	2.28	46.00	-12.04	100	280	QP	horizontal	

(Vertical)

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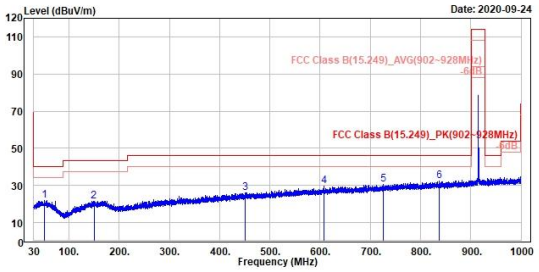

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	51.63	21.84	29.28	-7.44	40.00	-18.16	400	308	QP	Vertical	
2	149.80	21.65	29.33	-7.68	43.50	-21.85	396	360	QP	Vertical	
3	451.47	26.15	29.87	-3.72	46.00	-19.85	100	200	QP	Vertical	
4	607.93	29.45	30.50	-1.05	46.00	-16.55	300	155	QP	Vertical	
5	726.36	30.39	29.77	0.62	46.00	-15.61	400	301	QP	Vertical	
6	836.94	32.29	29.99	2.30	46.00	-13.71	400	59	QP	Vertical	

Spurious Emissions, Tx Mode, 1GHz ~ 10GHz

SRD 915MHz

(Horizontal)

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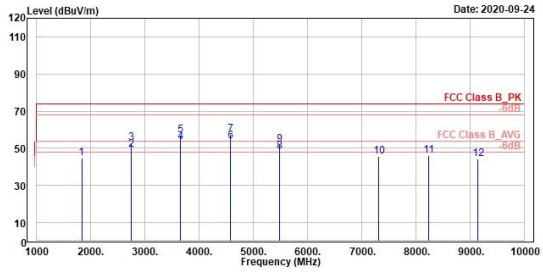

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	1830.00	44.77	61.53	-16.76	74.00	-29.23	265	0	Peak	Horizontal	
2 !	2745.00	49.22	63.07	-13.85	54.00	-4.78	301	333	Average	Horizontal	CF
3	2745.00	53.07	66.92	-13.85	74.00	-20.93	301	333	Peak	Horizontal	
4 !	3660.00	53.56	65.30	-11.74	54.00	-0.44	400	318	Average	Horizontal	CF
5	3660.00	57.14	68.88	-11.74	74.00	-16.86	400	318	Peak	Horizontal	
6 !	4575.00	53.86	64.38	-10.52	54.00	-0.14	248	193	Average	Horizontal	CF
7	4575.00	57.71	68.23	-10.52	74.00	-16.29	248	193	Peak	Horizontal	
8 !	5490.00	48.56	57.43	-8.87	54.00	-5.44	355	313	Average	Horizontal	CF
9	5490.00	52.23	61.10	-8.87	74.00	-21.77	355	313	Peak	Horizontal	
10	7320.00	45.78	53.56	-7.78	74.00	-28.22	300	281	Peak	Horizontal	
11	8235.00	46.07	53.24	-7.17	74.00	-27.93	100	334	Peak	Horizontal	
12	9150.00	44.43	50.30	-5.87	74.00	-29.57	359	360	Peak	Horizontal	

(Vertical)

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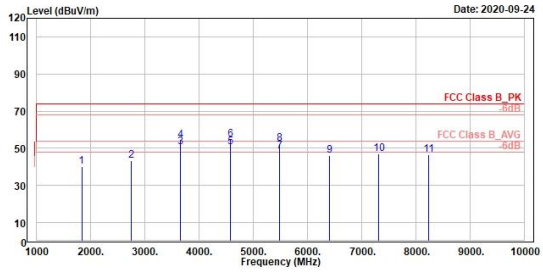

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	1830.00	40.09	56.85	-16.76	74.00	-33.91	400	254	Peak	Vertical	
2	2745.00	43.12	56.97	-13.85	74.00	-30.88	400	254	Peak	Vertical	
3 !	3660.00	50.49	62.23	-11.74	54.00	-3.51	394	223	Average	Vertical	CF
4	3660.00	54.34	66.08	-11.74	74.00	-19.66	394	223	Peak	Vertical	
5 !	4575.00	50.84	61.36	-10.52	54.00	-3.16	300	12	Average	Vertical	CF
6	4575.00	54.69	65.21	-10.52	74.00	-19.31	300	12	Peak	Vertical	
7 !	5490.00	48.48	57.35	-8.87	54.00	-5.52	119	186	Average	Vertical	CF
8	5490.00	52.32	61.19	-8.87	74.00	-21.68	119	186	Peak	Vertical	
9	6405.00	46.02	54.15	-8.13	74.00	-27.98	300	158	Peak	Vertical	
10	7320.00	46.97	54.75	-7.78	74.00	-27.03	324	360	Peak	Vertical	
11	8235.00	46.66	53.83	-7.17	74.00	-27.34	100	5	Peak	Vertical	