FCC RADIO TEST REPORT

FCC ID	:	**H79131230A**
Equipment	:	**REMOTE CONTROL**
Brand Name	:	**DELTA**
Model Name	:	**131230A0001, 131230A0003**
Applicant	:	**Delta Electronics Incorporated** **3 Tungyuan Road Chungli Industrial Zone ,** **Taoyuan County, 32063,Taiwan**
Manufacturer	:	**Delta Electronics Incorporated** **3 Tungyuan Road Chungli Industrial Zone ,** **Taoyuan County, 32063,Taiwan**
Standard	:	**47 CFR FCC Part 15.231**

The product was received on May 09, 2018, and testing was started from May 22, 2017 and completed on Jun. 04, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR850927AF	01	Initial issue of report	Jun. 22, 2018

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	Not Required	-
3.2	15.231(c)	Emission Bandwidth	PASS	-
3.3	15.231(b)/(e)	Fundamental Emissions	PASS	-
3.4	15.231(b)/(e)	Transmitter Radiated Unwanted Emissions	PASS	-
3.5	15.231(a)/(e)	Operation Restriction	PASS	-

Reviewed by: Sam Tsai

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information				
Frequency Range (MHz)	**Modulation**	**Ch. Frequency (MHz)**	**Channel Number**	**Fundamental Field Strength (dBuV/m)**
433.92	ASK	433.92	1	80.00
Note 1: Field strength performed average level at 3m.				

1.1.2 Antenna Information

Antenna Category	
☒	Internal antenna (antenna permanently attached)
☐	External antenna (dedicated antennas) ; Unique antenna connector

Antenna General Information				
No.	**Brand**	**Model**	**Ant. Type**	**Gain (dBi)**
1	Delta	RF230B	PCB	-1.5

1.1.3 Type of EUT

Identify EUT	
Presentation of Equipment	☐ Production ; ☒ Pre-Production ; ☐ Identical Prototype
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: …
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: …
☐	Other:

1.1.4 EUT Operational Condition

Supply Voltage	☐ AC mains	☒ DC	
Type of DC Source	☐ Internal DC supply	☐ External adapter	☒ Battery

1.1.5 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle	
☒ Operated normally mode for worst duty cycle	
Test Signal Duty Cycle (x)	**Duty Cycle Correction Factor [dB] – (20 log x)**
☒ 100%	0

1.1.6 Table for Multiple Listing

The brand/model names in the following table are all refer to the identical product.

Brand Name	Model Name	Description
DELTA	131230A0001	All the models are identical, the difference model for difference brand served as marketing strategy.
DELTA	131230A0003	

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Tim	22.9°C / 64.2%	22/May/2018
Radiated Emission	03CH02-HY	Streak	24.9°C / 63%	04/Jun/2018

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 ℃	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Modulation Used for Conformance Testing	
Test Mode	**Field Strength (dBuV/m at 3 m)**
ASK	80.00

2.2 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration	
Test Mode	**Test Channel Frequencies (MHz)**
ASK	433.92

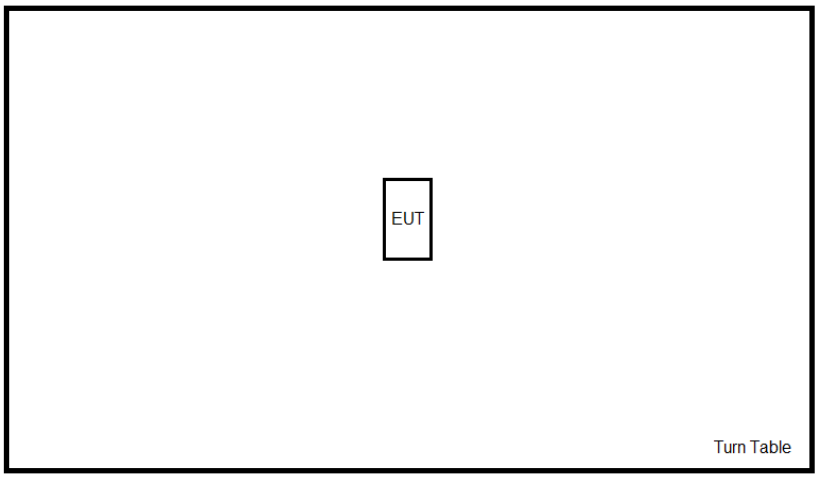
2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emission Bandwidth, Fundamental Emissions, Radiated Unwanted Emissions		
Test Condition	Radiated measurement		
User Position	☐ EUT will be placed in fixed position.		
	☐ EUT will be placed in mobile position and operating multiple positions.		
	☒ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.		
Operating Mode	☒ 1. Battery Mode		
Test Mode	ASK		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Operation Restriction (silent time and operated time)
Test Condition	Conducted measurement
Test Mode	Operated normally mode for worst duty cycle condition.

2.4 Test Setup Diagram

Test Setup Diagram - Radiated Test



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

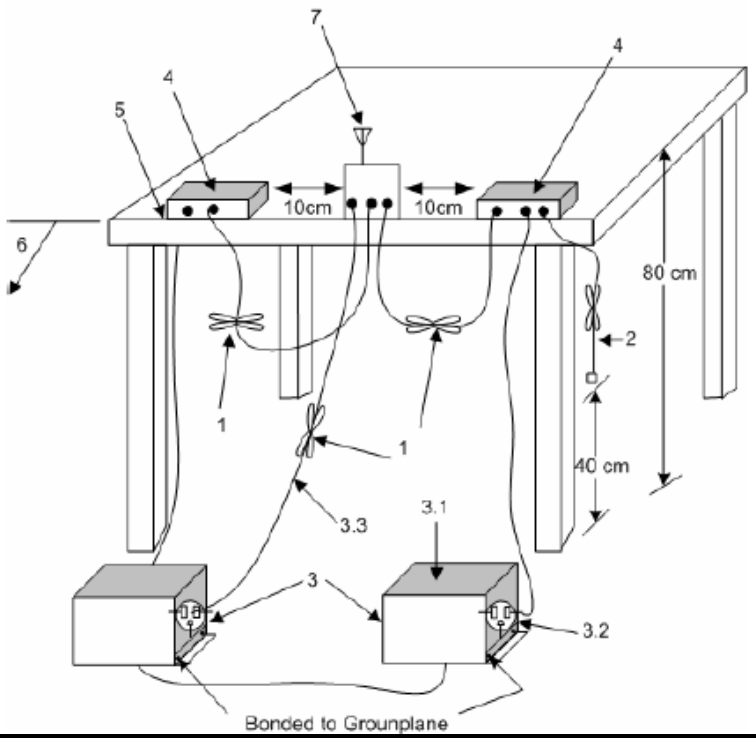
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Please refer to Part 15.207(c) which states, “Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines”. Therefore, for this device, AC Power Line Conducted Emissions investigation is not required.

Therefore, for this device, AC Power Line Conducted Emissions investigation is not required.

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
☒	Emission bandwidth falls completely within authorized band.
☒	Fc(70~900MHz): BW ≤ fc x 0.25%
☐	Fc(>900MHz): BW ≤ fc x 0.5%

3.2.2 Measuring Instruments

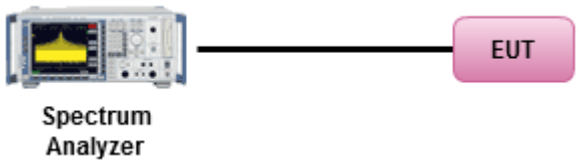
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
☒	Refer as ANSI C63.10, clause 6.9.3 for 20 dB emission bandwidth and 99% occupied bandwidth measurement.

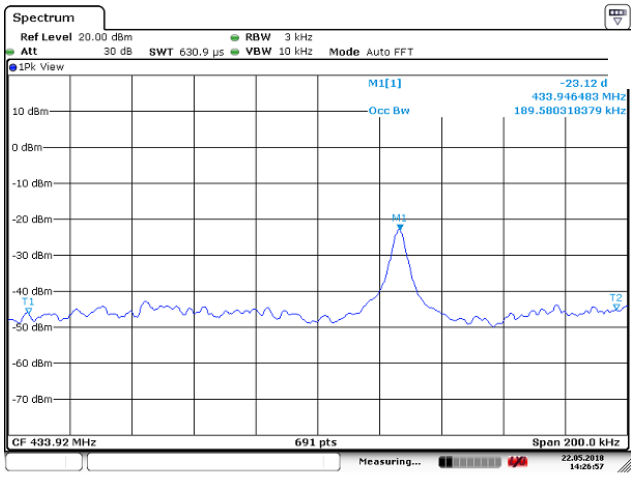
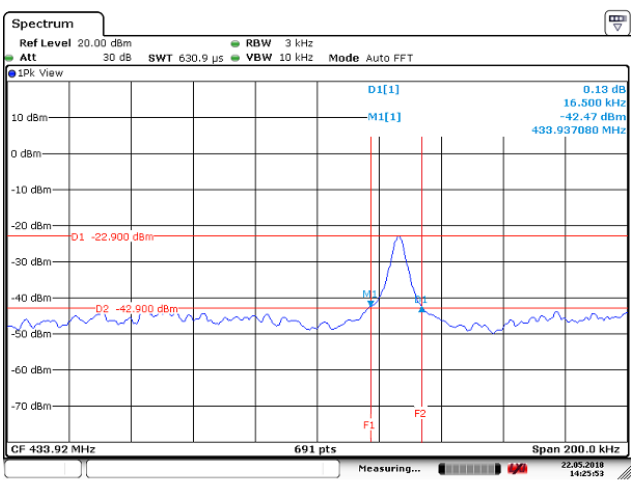
3.2.4 Test Setup

Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

Emission Bandwidth Result			
Modulation Mode	**Frequency (MHz)**	**99% Bandwidth (kHz)**	**20dB BW (kHz)**
ASK	433.92	189.58	16.50
Limit		**N/A**	**1084.8**
Result		**Complied**	

99% Bandwidth Plots	20dB Bandwidth Plots
	

3.3 Fundamental Emissions

3.3.1 Fundamental Emissions Limit

For manually operated within 5 sec, activated automatically within 5 sec, periodic transmissions		
Frequency Band (MHz)	**Fundamental Limit (uV/m) at 3m**	**Fundamental Limit (dBuV/m) at 3m**
40.66-40.70	2250	67
70-130	1250	61.9
130-174	1250-3750(**)	61.9-71.5
174-260	3750	71.5
260-470	3750-12500(**)	71.5-81.9
Above 470	12500	81.9
**1. Linear interpolations. Based on the average value of the measured emissions.		

For periodic transmissions (lower field strength)		
Frequency Band (MHz)	**Fundamental Limit (uV/m) at 3m**	**Fundamental Limit (dBuV/m) at 3m**
40.66-40.70	1000	60
70-130	500	54
130-174	500-1500(**)	54-63.5
174-260	1500	63.5
260-470	1500-5000(**)	63.5-74
Above 470	5000	74
** 1. Linear interpolations. Based on the average value of the measured emissions.		

3.3.2 Measuring Instruments

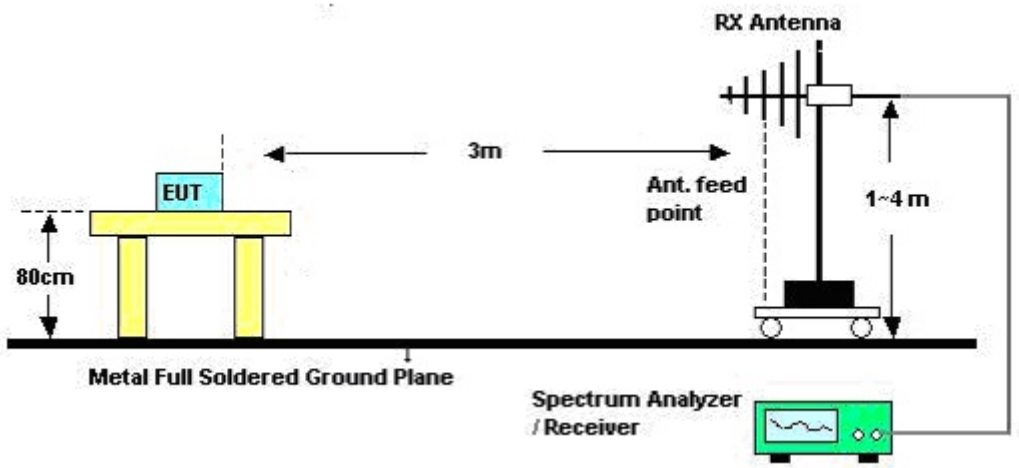
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

☒	For the transmitter emissions shall be measured using following options below:	
	☐	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW) – Duty cycle ≥ 100%.
	☒	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions. Adjusted by a “duty cycle correction factor”, derived from 20log (dwell time/100 ms). Average emission = peak emission + 20 log (duty cycle).
	☒	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
☒	For radiated measurement, refer as ANSI C63.10, clause 6.5 for radiated emissions	

3.3.4 Test Setup

Fundamental Emissions



3.3.5 Test Result of Fundamental Emissions

Field Strength of Fundamental Emissions Result					
Modulation Mode	**Frequency (MHz)**	**Fundamental (dBuV/m)@3m**	**Margin (dB)**	**Limit (dBuV/m)@3m**	**Type**
ASK	433.947	80.00	0.83	80.83	Average
ASK	433.947	90.15	10.68	100.83	Peak
Result		**Complied**			

Note 1: Measurement worst emissions of receive antenna polarization: Vertical
Note 2: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).

3.4 Transmitter Radiated Unwanted Emissions

3.4.1 Transmitter Radiated Unwanted Emissions Limit

For manually operated within 5 sec, activated automatically within 5 sec, periodic transmissions		
Unwanted emissions limit follow this table or the general limits FCC 15.209, whichever limit permits higher field strength.		
Frequency Band (MHz)	**Spurious Limit (uV/m) at 3m**	**Spurious Limit (dBuV/m) at 3m**
40.66-40.70	225	47
70-130	125	41.9
130-174	125-375(**)	41.9-51.5
174-260	375	51.5
260-470	375-1250(**)	51.5-61.9
Above 470	1250	61.9
**1. Linear interpolations. Based on the average value of the measured emissions.		

For periodic transmissions (lower field strength)		
Unwanted emissions limit follow this table or the general limits FCC 15.209, whichever limit permits higher field strength.		
Frequency Band (MHz)	**Spurious Limit (uV/m) at 3m**	**Spurious Limit (dBuV/m) at 3m**
40.66-40.70	100	40
70-130	50	34
130-174	50-150(**)	34-43.5
174-260	150	43.5
260-470	150-500(**)	43.5-54
Above 470	500	54
** 1. Linear interpolations Based on the average value of the measured emissions.		

3.4.2 Measuring Instruments

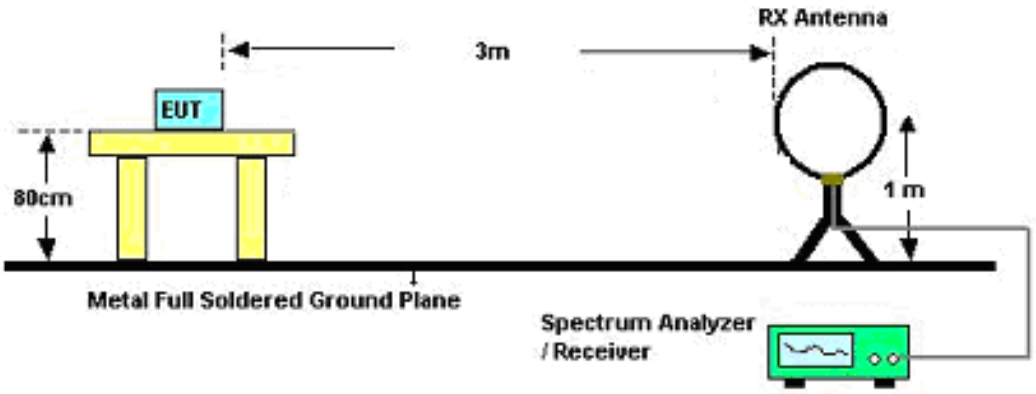
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method – General Information	
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
☐	Refer as ANSI C63.10, clause 6.10.3 bandedge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
☒	For the transmitter unwanted emissions shall be measured using following options below:
☐	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW) – Duty cycle ≥ 100%.
☒	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions. Adjusted by a “duty cycle correction factor”, derived from 20log (dwell time/100 ms). Average emission = peak emission + 20 log (duty cycle).
☒	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
☒	For the transmitter bandedge emissions shall be measured using following options below:
☒	Refer as ANSI C63.10, clause 6.10 for band-edge testing.
☐	Refer as ANSI C63.10, clause 6.10.6.2 for marker-delta method for band-edge measurements.
☒	For radiated measurement.
☒	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
☒	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
☒	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1 GHz and test distance is 3m.
☒	The any unwanted emissions level shall not exceed the fundamental emission level.
☒	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

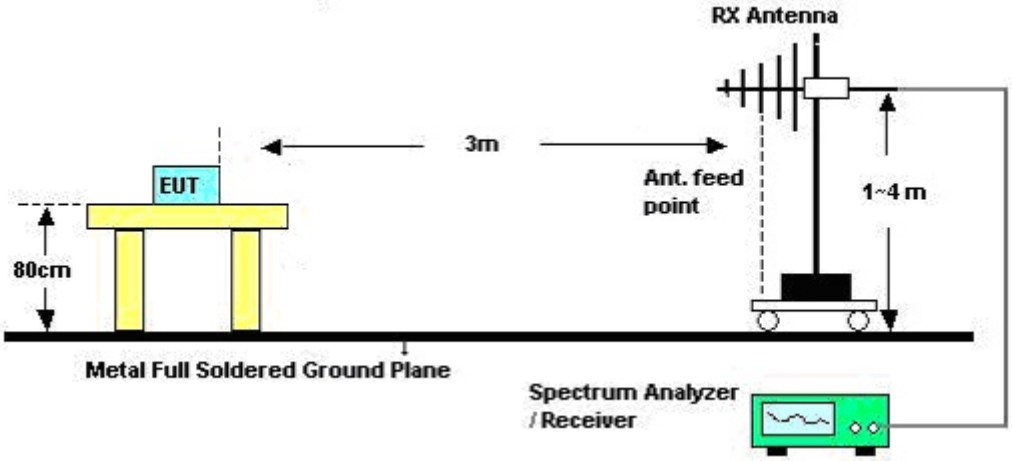
3.4.4 Test Setup

Transmitter Spurious and Out of Band Emissions (9 kHz - 30 MHz)



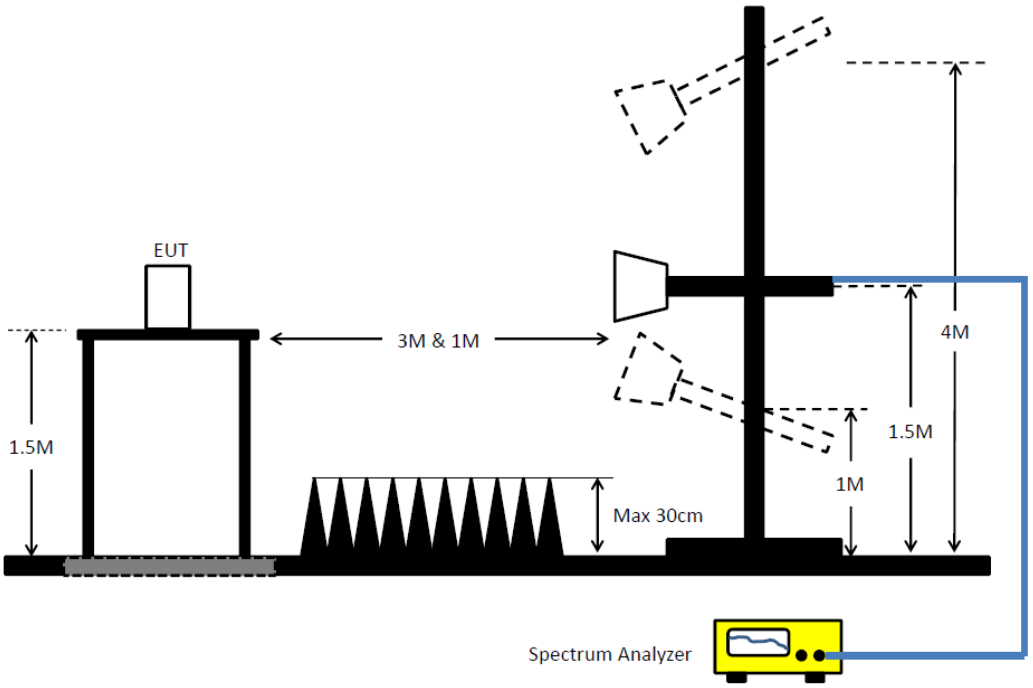
Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna.

Transmitter Radiated Unwanted Emissions (below 1GHz)



Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna.

Transmitter Radiated Unwanted Emissions (Above 1GHz)



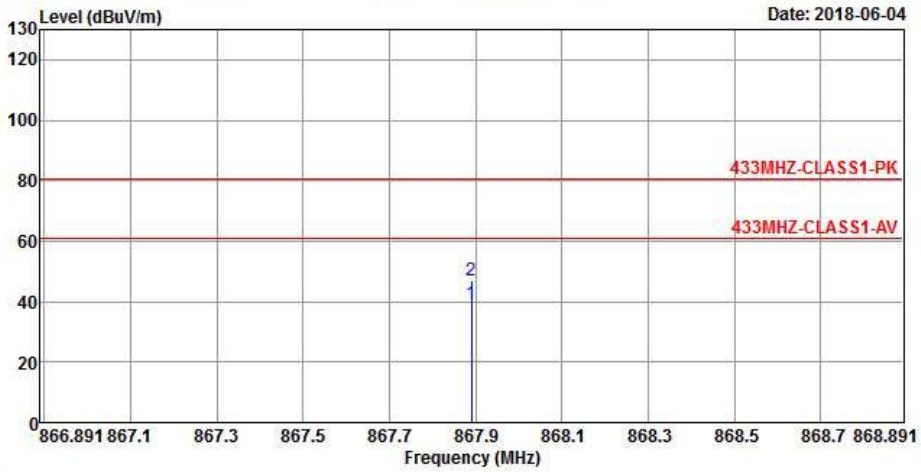
Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.4.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.4.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)

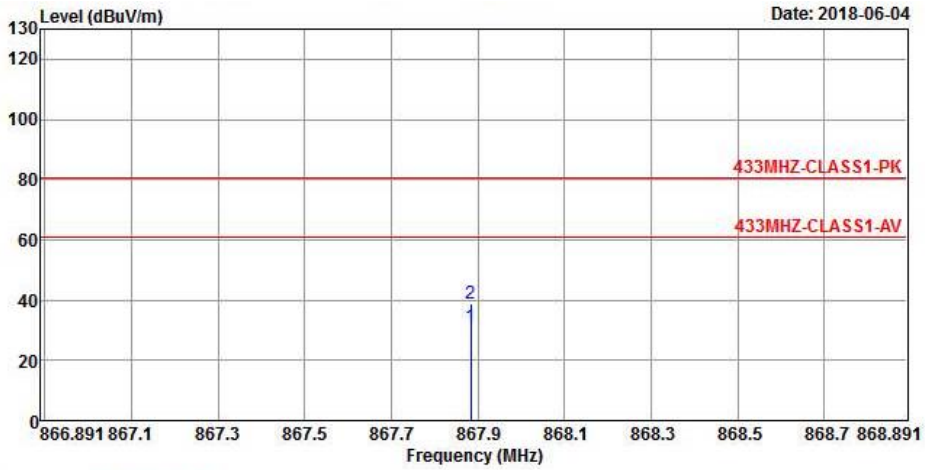
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	1	**Test Freq. (MHz)**	433.92
Operating Function	ASK	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	867.89100	39.11	-21.72	60.83	36.92	25.70	4.28	27.79	Average	100	0
2	867.89100	47.07	-33.76	80.83	44.88	25.70	4.28	27.79	Peak	100	0

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 3: For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 4: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).
Note 5: No level of unwanted emissions exceeds the level of the fundamental emission.

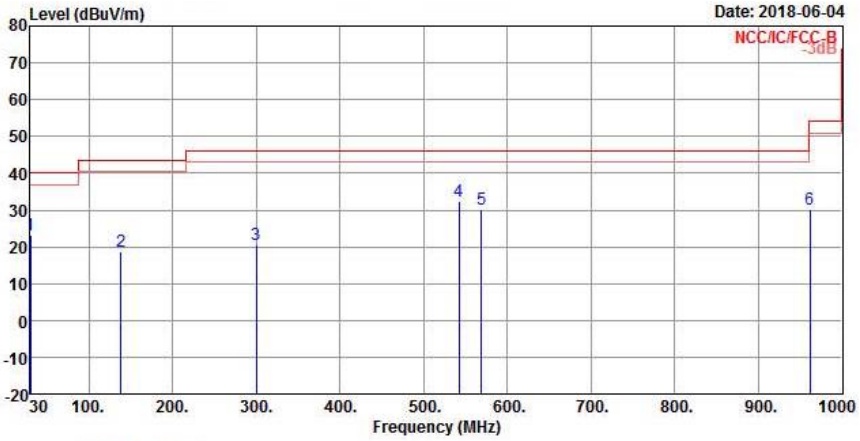
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	1	**Test Freq. (MHz)**	433.92
Operating Function	ASK	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	867.88300	30.99	-29.84	60.83	28.80	25.70	4.28	27.79	Average	100	360
2	867.88300	38.95	-41.88	80.83	36.76	25.70	4.28	27.79	Peak	100	360

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 3: For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 4: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).
Note 5: No level of unwanted emissions exceeds the level of the fundamental emission.

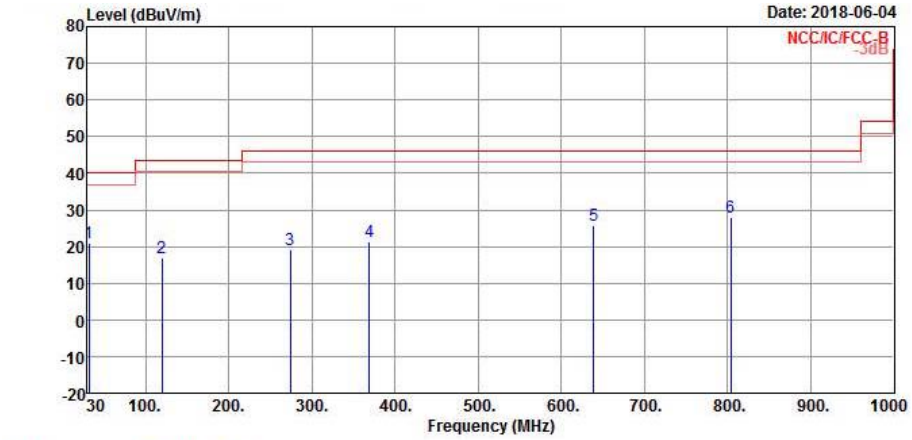
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	1	**Test Freq. (MHz)**	433.92
Operating Function	ASK	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	30.000000	23.09	-16.91	40.00	27.54	23.11	0.29	27.85	Peak	100	0
2	138.64000	18.76	-24.74	43.50	28.32	16.34	1.77	27.67	Peak	100	0
3	299.66000	20.56	-25.44	46.00	26.34	18.42	3.00	27.20	Peak	100	0
4	542.16000	32.26	-13.74	46.00	33.52	23.71	3.55	28.52	Peak	100	0
5	569.32000	30.03	-15.97	46.00	31.05	23.90	3.62	28.54	Peak	100	0
6	961.20000	30.31	-23.69	54.00	26.41	26.39	4.91	27.40	Peak	100	0

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).
Note 5: No level of unwanted emissions exceeds the level of the fundamental emission.

Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	1	**Test Freq. (MHz)**	433.92
Operating Function	ASK	**Polarization**	H

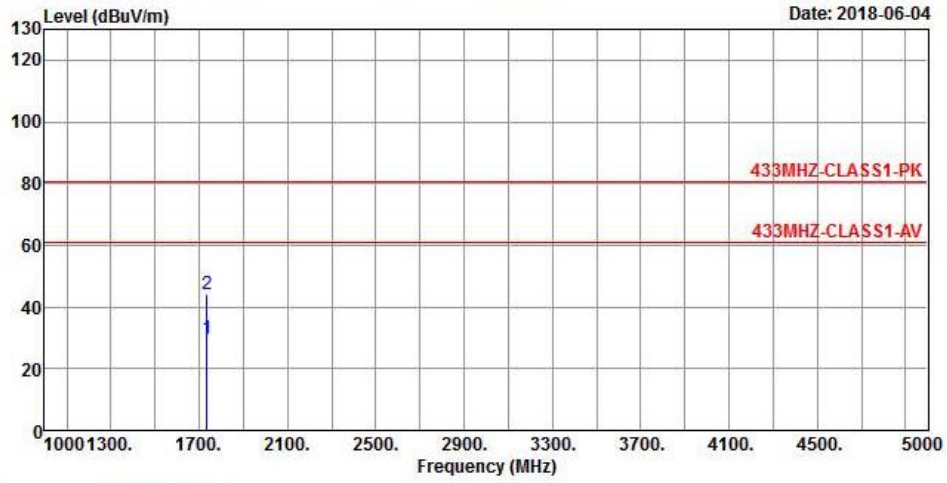


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	31.940000	20.80	-19.20	40.00	26.16	22.11	0.36	27.83	Peak	100	360
2	119.24000	16.95	-26.55	43.50	25.72	17.32	1.65	27.74	Peak	100	360
3	274.44000	19.06	-26.94	46.00	25.39	18.09	2.84	27.26	Peak	100	360
4	369.50000	21.25	-24.75	46.00	25.77	20.07	3.14	27.73	Peak	100	360
5	639.16000	25.94	-20.06	46.00	26.30	24.36	3.77	28.49	Peak	100	360
6	804.06000	28.07	-17.93	46.00	26.77	25.17	4.18	28.05	Peak	100	360

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).
Note 5: No level of unwanted emissions exceeds the level of the fundamental emission.

3.4.7 Transmitter Radiated Unwanted Emissions (Above 1GHz)

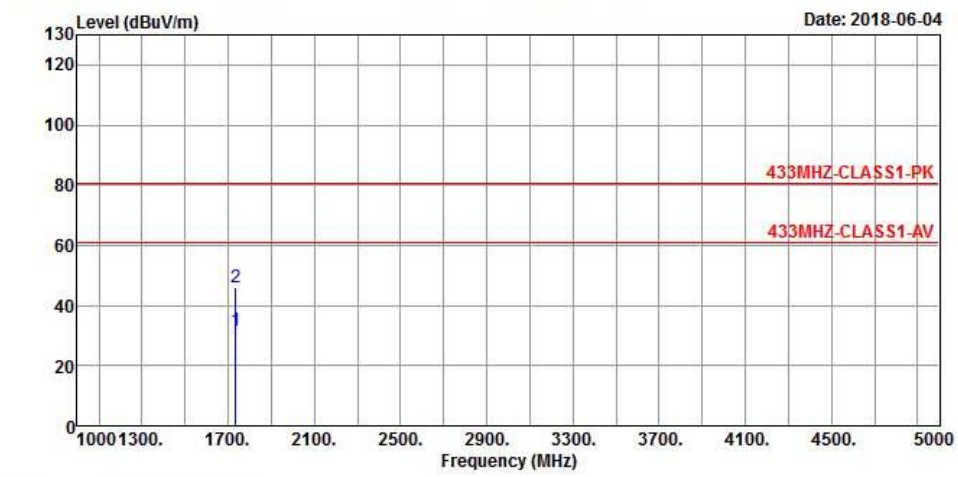
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Operating Mode	1	**Test Freq. (MHz)**	433.92
Operating Function	ASK	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	1736.0000	29.82	-31.01	60.83	33.92	25.94	4.43	34.47	Average	100	0
2	1736.0000	44.08	-36.75	80.83	48.18	25.94	4.43	34.47	Peak	100	0

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 3: For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 4: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).
Note 5: No level of unwanted emissions exceeds the level of the fundamental emission.

Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Operating Mode	1	**Test Freq. (MHz)**	433.92
Operating Function	ASK	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	1736.0000	31.73	-29.10	60.83	35.83	25.94	4.43	34.47	Average	100	360
2	1736.0000	45.99	-34.84	80.83	50.09	25.94	4.43	34.47	Peak	100	360

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 3: For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 4: If duty cycle < 100%, average emission = peak emission + 20 log (duty cycle).
Note 5: No level of unwanted emissions exceeds the level of the fundamental emission.

3.5 Operation Restriction

3.5.1 Operation Restriction Limit

Operation Restriction Limit	
☒	Manually operated: manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 sec of being released.
☐	Activated automatically: transmitter activated automatically shall cease transmission within 5 sec after activation.
☐	Periodic transmissions: permitted with total transmission time of 2 sec per hour or less.
☐	Periodic transmissions (lower field strength): each transmission is not greater than 1 sec and the silent period between transmissions is at least 30 times the duration of the transmission but in no case less than 10 sec.

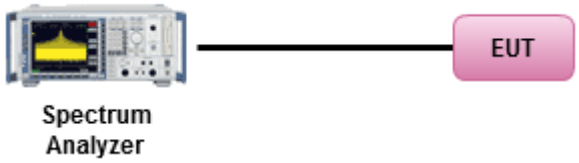
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.
Periodic transmissions (lower field strength)

3.5.3 Test Procedures

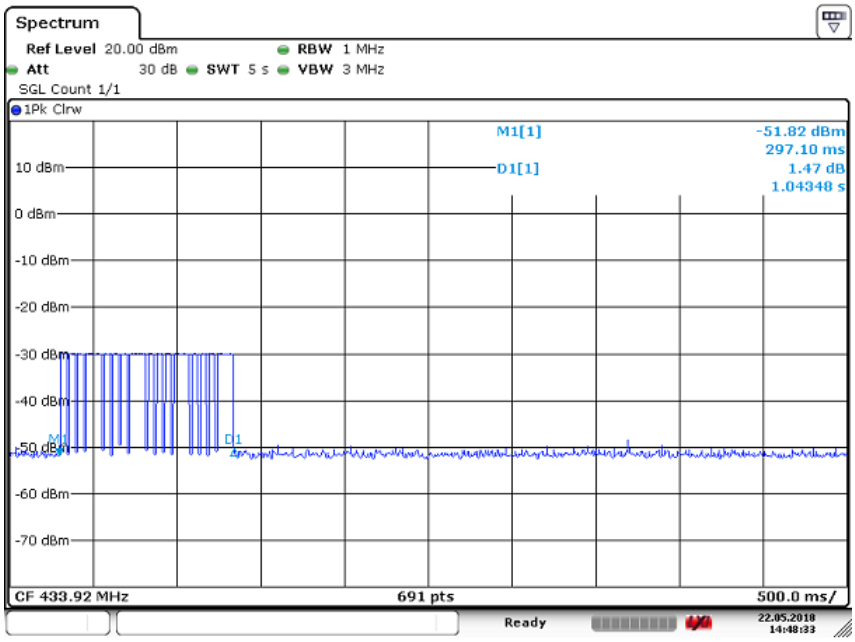
Test Method	
☒	Refer as ANSI C63.10, clause 7.4 for periodic operation measurement.

3.5.4 Test Setup

Operation Restriction


3.5.5 Test Result of Operation Restriction

Operation Condition	Pulse Duration (s)	Limits (s)
Transmission time (TX-on)	1.044	5.00

Period_5 sec


4 Test Equipment and Calibration Data

< Conducted Test >

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	29/Dec/2017	28/Dec/2018

< Radiated Test >

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	20/Oct/2017	19/Oct/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	27/Oct/2017	26/Oct/2018
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	29Jun/2017	28/Jun/2018
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	28/Sep/2017	27/Sep/2018
Spectrum Analyzer	Rohde & Schwarz	FSP40	100593	9KHz - 40GHz	12/Dec/2017	11/Dec/2018
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100354	9kHz ~ 2.75GHz	08/Dec/2017	07/Dec/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	19/Jan/2018	18/Jan/2019
RF Cable-high	SUHNER	SUCOFLEX10	MY34918/4	1GHz ~ 40GHz	19/Jan/2018	18/Jan/2019
Bilog Antenna	SCHAFFNER	CBL 6112B	2723	30MHz ~ 1GHz	09/Sep/2017	08/Sep/2018
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA 9120 D 1543	1GHz ~ 18GHz	11/May/ 2018	10/May/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019