Prüfbericht-Nr.: *Test report no.:*	NN20E1WP(P15C-SRD)	**Auftrags-Nr.:** *Order no.*:	238489083	Seite 1 von 26 *Page 1 of 26*
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date*:	16-Jul-2020	
Auftraggeber: *Client:*	CUB ELECPARTS INC No.6 Lane 546, Sec. 6, Changlu Road, FuhsIn Township, Changhua County, Taiwan 506			
Prüfgegenstand: *Test item:*	433 MHz Ball Sensor			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	TPM101, TPM101821, TPM101XXX, TPM101-XXX, B121-XXXXXX, B121-XXXXXX-XXX, B121-033XXX-XXX, B121-033NA1-XXX			
Auftrags-Inhalt: *Order content:*	FCC Part 15C Test Report (433.92MHz)			
Prüfgrundlage: *Test specification:*	FCC CFR47 Part 15: Subpart C Section 15.231			

Wareneingangsdatum: *Date of sample receipt:*	04-Aug-2020
Prüfmuster-Nr.: *Test sample no:*	A002881230-002
Prüfzeitraum: *Testing period:*	10-Aug-2020– 13-Aug-2020
Ort der Prüfung: *Place of testing:*	EMC/RF Laboratory Taipei
Prüflaboratorium: *Testing laboratory:*	Taipei Testing Laboratories
Prüfergebnis*: *Test result*:*	Pass

überprüft von: *reviewed by:*		**genehmigt von** *authorized by:*	
Datum: 15-Sep-2020 *Date:*	Mars Y.J. Lin	**Datum:** 15-Sep-2020 *Date:*	Brenda S.H. Chen
Stellung / *Position:*	Project Engineer	**Stellung** / *Position:*	Project Manager

Sonstiges / *Other:*

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

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.203	Antenna Requirement	Pass
5.1.2	15.231(c)	20 dB Bandwidth	Pass
5.1.3	15.231(a)	Pulse Width / TX Gap	Pass
5.1.4	15.231(e)	Field Strength of Fundamental Emissions	Pass
5.1.5	15.231(e) & 15.205 & 15.209	Radiated Spurious Emissions	Pass
6.1	FCC KDB 447498 D01 v06	RF Exposure Compliance	Pass

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

Contents

HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
NN20E1WP(P15C-SRD)	Original Release	15-Sep-2020

1. General Remarks

1.1 Complementary Materials

The following attachments are integral parts of this test report:

Appendix A - Test Result of Radiated Spurious Emissions
Appendix SP - Photographs of Test Setup
Appendix EP - Photographs of EUT

Test Specifications
The following standards were applied.

Applied Standard and Test Levels

Radio
FCC CFR47 Part 15: Subpart C Section 15.231 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.)
(Conducted Test & Radiated Emission)
FCC Registration No.: 226631
ISED Registration No.: 25563

Testing Laboratory
3567

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)	± 1.32 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.31 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.53 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.50 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a tire pressure detector working at 433.92MHz.
For details refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 System Details and Ratings

Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	433 MHz Ball Sensor
Type Identification	TPM101, TPM101821, TPM101XXX, TPM101-XXX, B121-XXXXXX, B121-XXXXXX-XXX, B121-033XXX-XXX, B121-033NA1-XXX
FCC ID	ZPNTPM101

Technical Specification of EUT

Item	EUT information
Operating Frequency	433.92 MHz
Operation Voltage	3 Vdc
Modulation	FSK
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.3

Note:

1. All models are listed as below.
2. Where X may be any alpha character “a”-“z”, ”A”-“Z”, or numeric character “0”- “9”,or -, (,) , or blank or combination of alpha and numeric characters.

Type Identification		Difference
TPM101	B121-XXXXXX	All models are electrically identical, different model names are for marketing purpose.
TPM101821	B121-XXXXXX-XXX	
TPM101XXX	B121-033XXX-XXX	
TPM101-XXX	B121-033NA1-XXX	

3.3 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.4 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: Test samples are modified to continuous transmitter mode which makes it possible to transmit when power on.

Test Software	N/A

The samples were used as follows:
A002881230-002

Full test was applied on all test modes, but only worst case was shown.

EUT Configure Mode	Applicable To				Description
	20 dB Bandwidth	Pulse Width / TX Gap	Field Strength of Fundamental Emissions	Radiated Spurious Emissions	
-	√	√	√	√	-

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.

20 dB Bandwidth

☒ 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)
-	433.92	433.92

Pulse Width / TX Gap

☒ 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)
-	433.92	433.92

Field Strength of Fundamental

☒ 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)
-	433.92	433.92

Radiated Spurious 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)
-	433.92	433.92

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
20 dB Bandwidth	22-26 °C	50-65 %	Stanislas.Charles
Pulse Width / TX Gap	22-26 °C	50-65 %	Stanislas.Charles
Field Strength of Fundamental	22-26 °C	50-65 %	Eagle Tasi
Radiated Spurious Emissions	22-26 °C	50-65 %	Eagle Tasi

4.3 Special Accessories and Auxiliary Equipment

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

Accessory of EUT

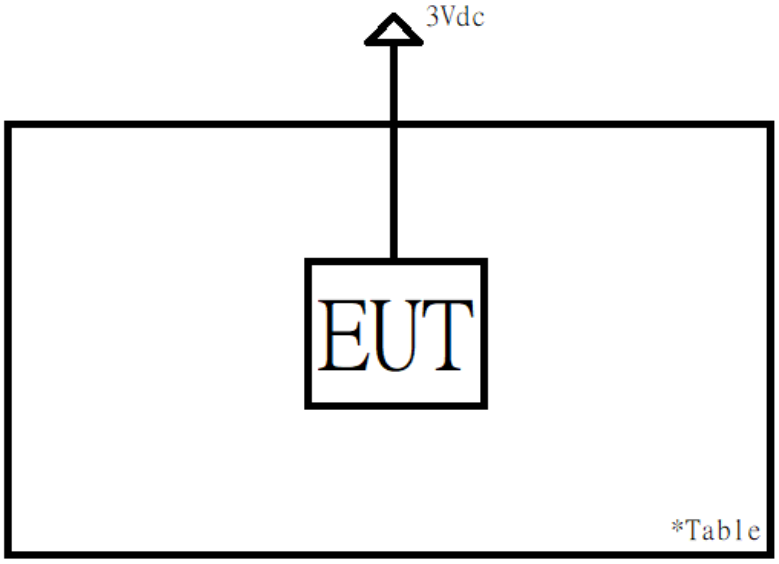
N/A

Support Unit

Interface Cable					
No.	Description	Shielded Type	Ferrite Core (Qty)	Length (cm)	Remark
A	Power Cable	YES	0	150	-

4.4 Test Setup Diagram

<Radiated Spurious Emissions>



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

Requirement Use of approved antennas only

EUT which is equipped with an antenna permanently attached to the intentional radiator will be considered sufficient to comply with the provisions of this section.

Refer to EUT photo for details.

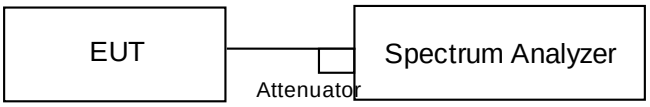
5.1.2 20 dB Bandwidth

Limit

The bandwidth of the emission shall be no wider than 0.25 % of the center frequency for devices operating above 70 MHz and below 900 MHz.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV40	101512	2020/2/18	2021/2/16

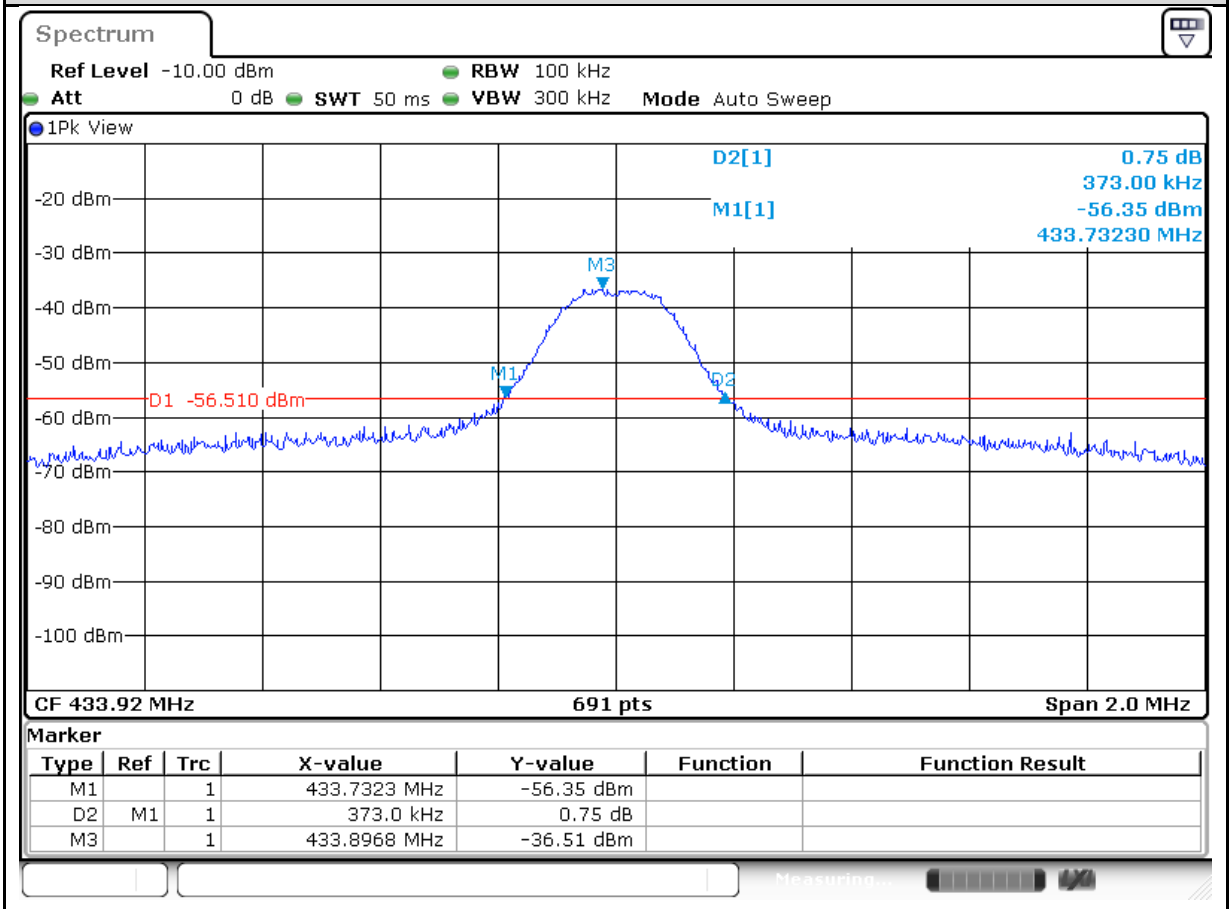
Test Procedures

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.

Test Results

Channel Frequency (MHz)	20 dB Bandwidth (kHz)	Limit (kHz)
433.92	373.0	1085

Plot of 20 dB Bandwidth



Date: 11.AUG.2020 08:53:35

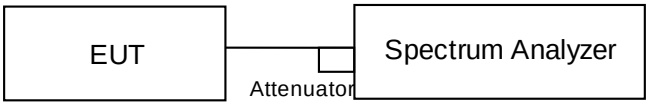
5.1.3 Pulse Width/TX Gap

Limit

Devices operated under the provisions of this paragraph shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV40	101512	2020/2/18	2021/2/16

Test Procedures

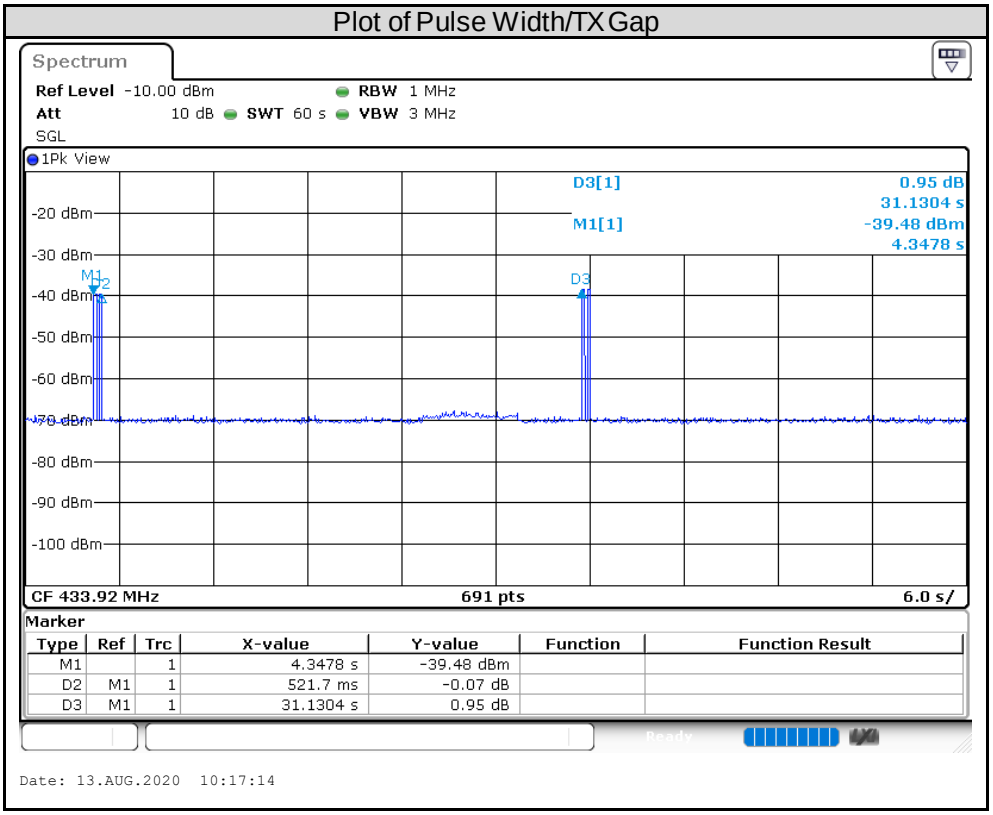
a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
c. Measure the transmission time (Pulse width) and stop duration of a transmission period (TX gap).
d. Repeat above procedures until all frequencies measured were complete.

Test Results

Channel Frequency (MHz)	Pulse Width (ms)	Limit (ms)	Result
433.92	521.7	1000	Pass

Channel Frequency (MHz)	TX Gap (s)	Limit (s)	Result
433.92	30.6087	15.651	Pass

Plot of Pulse Width/TX Gap

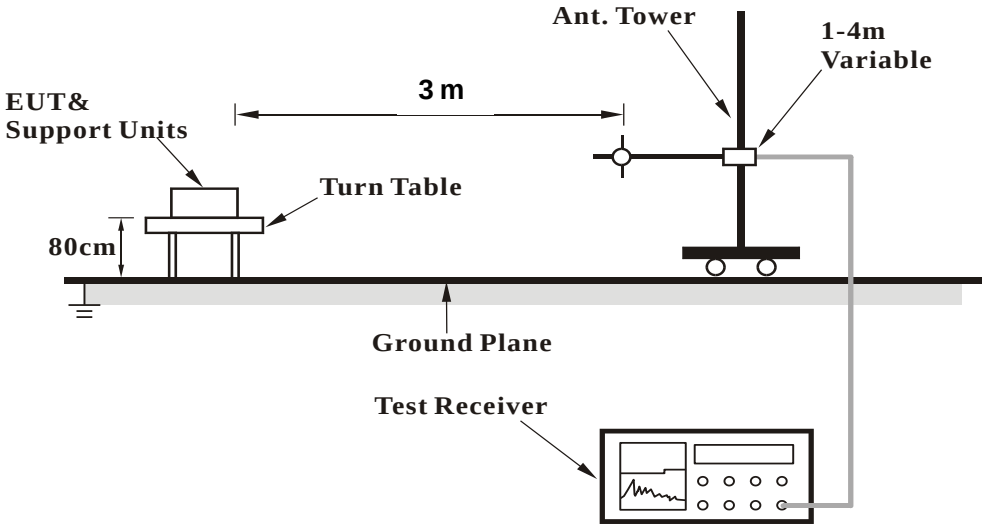


5.1.4 Field Strength of Fundamental Emissions

Limit Refer to §15.231(e) for reference

Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).
The shell of the EUT must be removed from the testing because it is a plastic sphere, but retained the interior parts so that it can test on the positioned of each 3 axis.

Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101509	2020/5/5	2021/5/4
Receiver	R&S	ESR7	102109	2020/3/30	2021/3/29
Bilog Antenna	SCHWARZBECK	VULB-9168	00950	2020/1/20	2021/1/18
Horn Antenna	ETS-Lindgren	3117	00218929	2019/11/27	2020/11/25
LF-AMP	Agilent	8447D	2727A05146	2020/2/17	2021/2/15
HF-AMP + AC source	EMCI	EMC051845SE	980635	2020/2/11	2021/2/9
HF-AMP + AC source	EMCI	EMC184045SE	980656	2020/2/11	2021/2/9
Horn Antenna	SCHWARZBECK	BBHA 9170	00890	2020/4/13	2021/4/12
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800057/4EA	2020/4/22	2021/4/21
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	802244/4	2020/4/22	2021/4/21
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37203/4	2020/4/22	2021/4/21
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800897/2EA	2020/3/25	2021/3/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800902/2EA	2020/3/25	2021/3/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801026/2EA	2020/3/25	2021/3/24
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) 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 peak and average detect function and specified bandwidth with maximum hold mode.

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. All modes of operation were investigated and the worst-case emissions are reported.
3. 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
The EUT employs pulsed operation.

Please refer to Appendix A.

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Antenna Orientation	Detector or calculated value
433.92	84.68	92.87	Horizontal	Peak
433.92	70.90	72.87		Average
433.92	81.13	92.87	Vertical	Peak
433.92	67.35	72.87		Average

5.1.5 Radiated Spurious Emissions

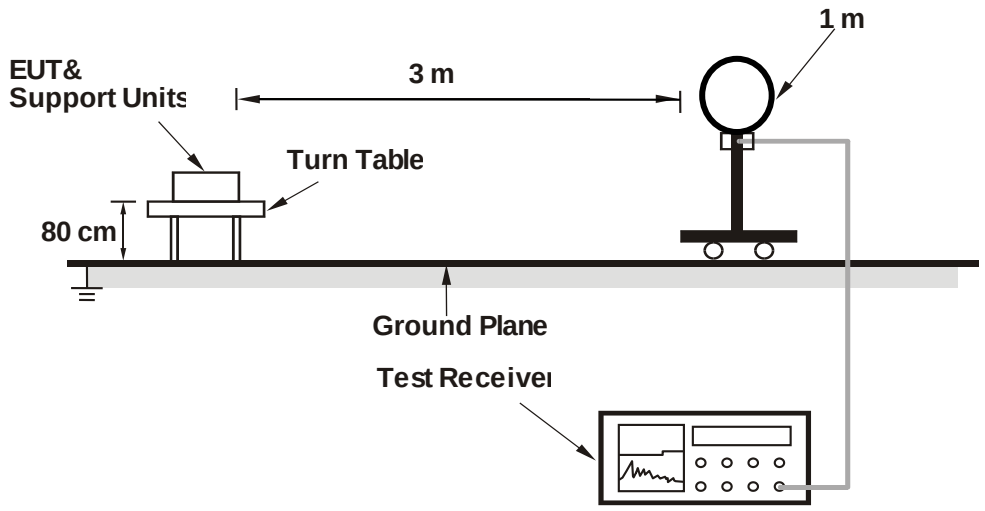
Limit

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

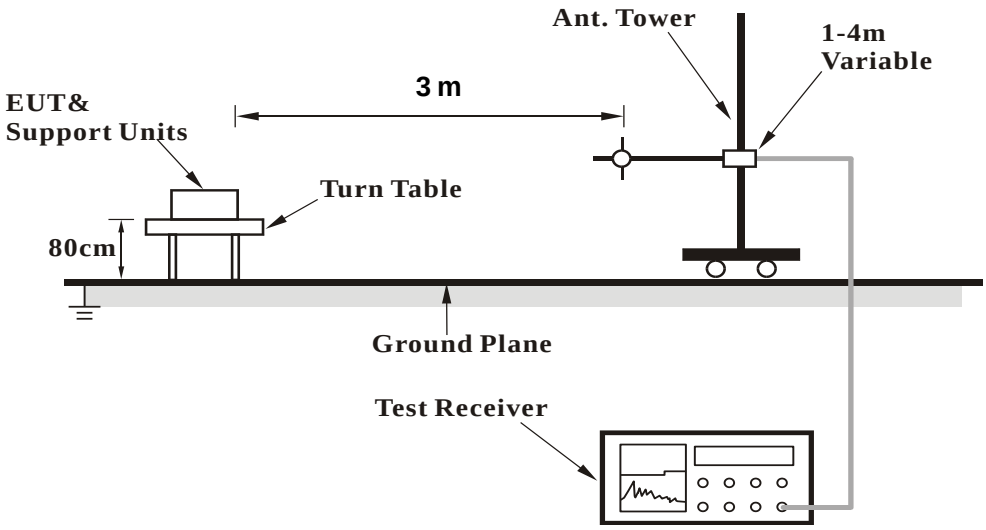
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

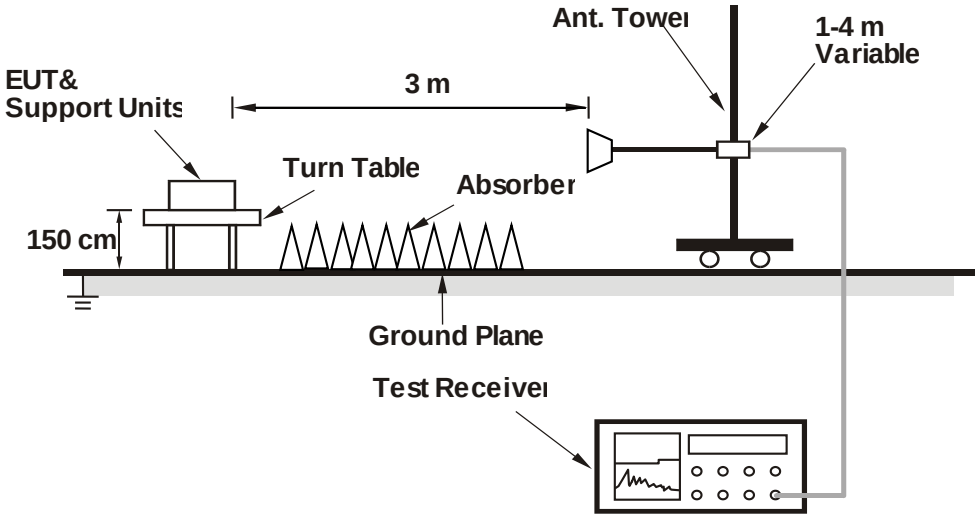
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emissions above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).
The shell of the EUT must be removed from the testing because it is a plastic sphere, but retained the interior parts so that it can test on the positioned of each 3 axis.

Test Instruments

Please refer to 5.1.4 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: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.

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. All modes of operation were investigated and the worst-case emissions are reported.
3. 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.

6. Safety Human Exposure

6.1 RF Exposure Compliance

6.1.1 SAR Test Exclusion Thresholds

Results

Since the maximum output power of the transmitter is 0.09 mW < 22 mW, hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile Portable RF Exposure.

$EIRP = E_{Meas} + 20\log(d_{Meas}) - 104.7$
$EIRP = 84.68 + 20\log(3) - 104.7 = 0.09mW$

Where

EIRP is the equivalent isotropically radiated power, in dBm
E_{meas} is the field strength of the emission at the measurement distance, in dBuV/m
d_{Meas} is the measurement distance, in m

Test Report No.NN20E1WP(P15C-SRD)

Appendix A: Radiated Spurious Emission Data

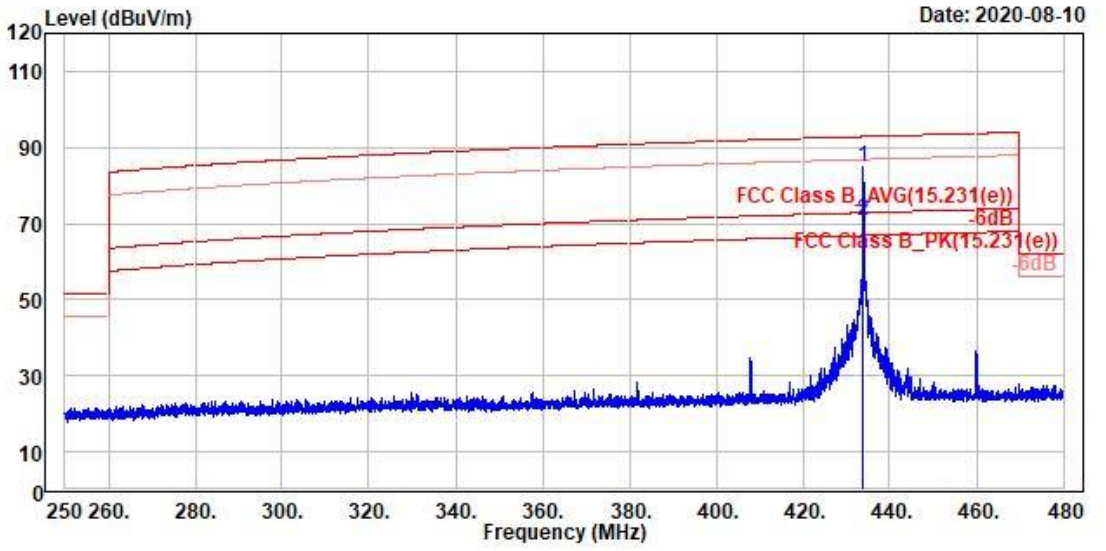
(File: NN20E1WP(P15C-SRD) Appendix A)

Contents

Spurious Emissions, Fundamental

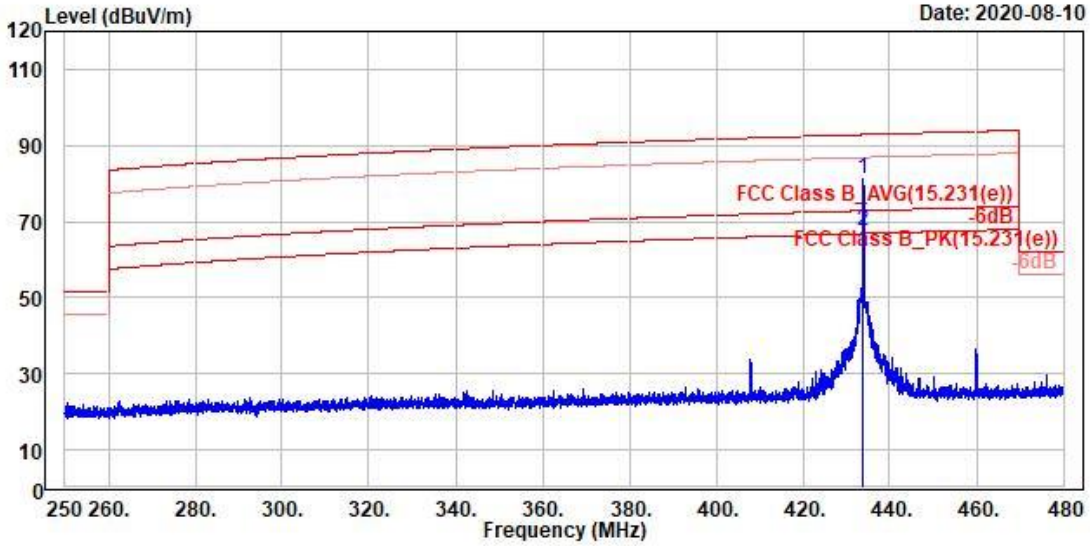
433.92MHz

TUV 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	433.92	84.68	87.15	-2.47	92.87	-8.19	100	142	Peak	horizontal	
2 !	433.92	70.90	73.37	-2.47	72.87	-1.97	100	142	Average	horizontal	

TUV 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

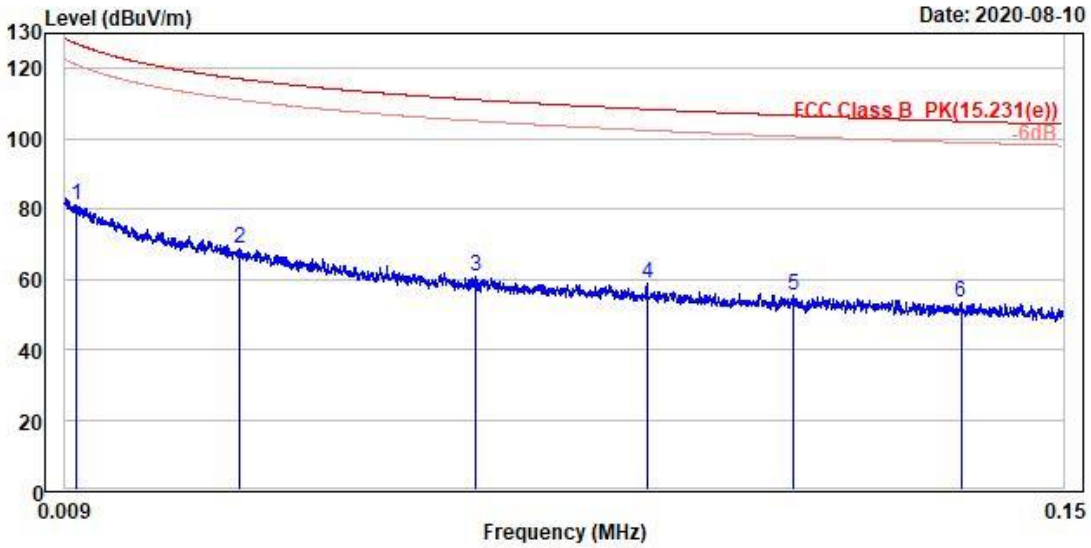


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	433.92	81.13	83.60	-2.47	92.87	-11.74	100	141	Peak	vertical	
2 !	433.92	67.35	69.82	-2.47	72.87	-5.52	100	141	Average	vertical	

Spurious Emissions, TX Mode, 9kHz-30MHz

433.92MHz

TUV 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	0.01	81.21	2.73	78.48	127.10	-45.89	100	105	QP	vertical	
2	0.03	68.55	-1.00	69.55	117.02	-48.47	100	7	QP	vertical	
3	0.07	60.69	-2.04	62.73	111.06	-50.37	100	169	QP	vertical	
4	0.09	58.99	-1.31	60.30	108.39	-49.40	100	216	QP	vertical	
5	0.11	55.44	-3.12	58.56	106.62	-51.18	100	227	QP	vertical	
6	0.14	53.38	-3.81	57.19	104.96	-51.58	100	94	QP	vertical	

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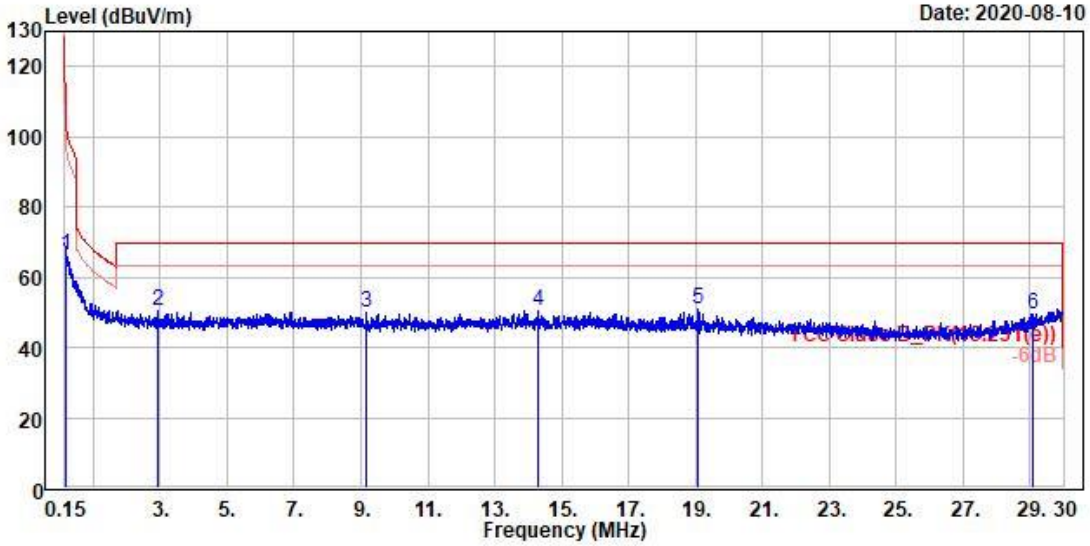

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.19	66.12	12.19	53.93	101.94	-35.82	100	163	QP	vertical	
2	2.91	50.19	11.94	38.25	69.50	-19.31	100	360	QP	vertical	
3	9.16	50.04	12.29	37.75	69.50	-19.46	100	176	QP	vertical	
4	14.29	50.42	12.77	37.65	69.50	-19.08	100	271	QP	vertical	
5	19.09	50.98	14.55	36.43	69.50	-18.52	100	16	QP	vertical	
6	29.07	49.43	12.03	37.40	69.50	-20.07	100	39	QP	vertical	

Spurious Emissions, TX Mode, 30MHz-1GHz

433.92MHz

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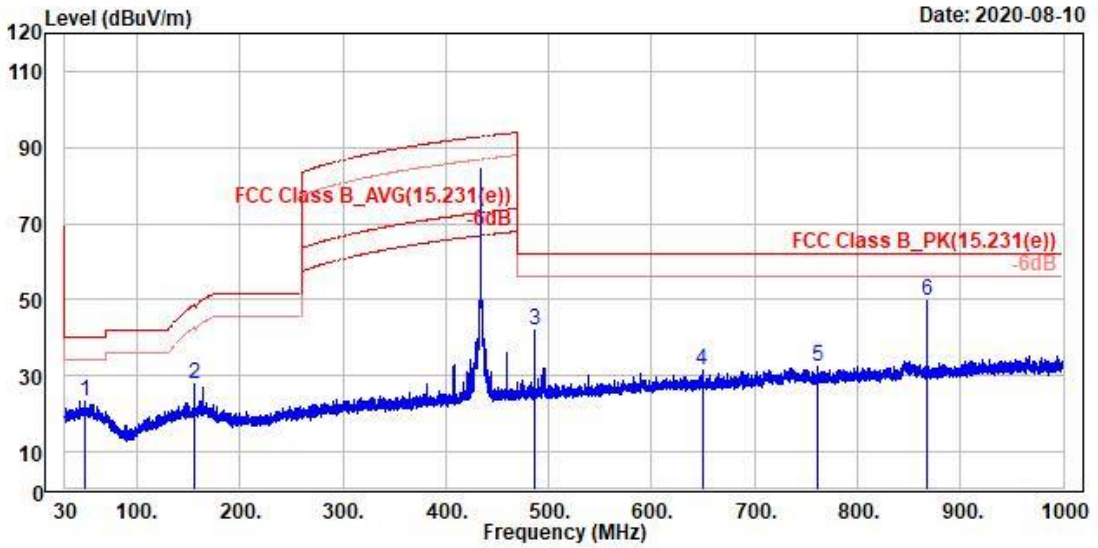

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	49.40	23.42	29.46	-6.04	40.00	-16.58	400	267	QP	horizontal	
2	156.00	27.99	34.14	-6.15	48.71	-20.72	300	264	QP	horizontal	
3	485.90	42.17	44.23	-2.06	61.94	-19.77	200	131	QP	horizontal	
4	649.15	31.54	30.90	0.64	61.94	-30.40	400	215	QP	horizontal	
5	761.77	32.22	29.80	2.42	61.94	-29.72	400	316	QP	horizontal	
6	867.84	49.52	45.89	3.63	61.94	-12.42	100	156	QP	horizontal	

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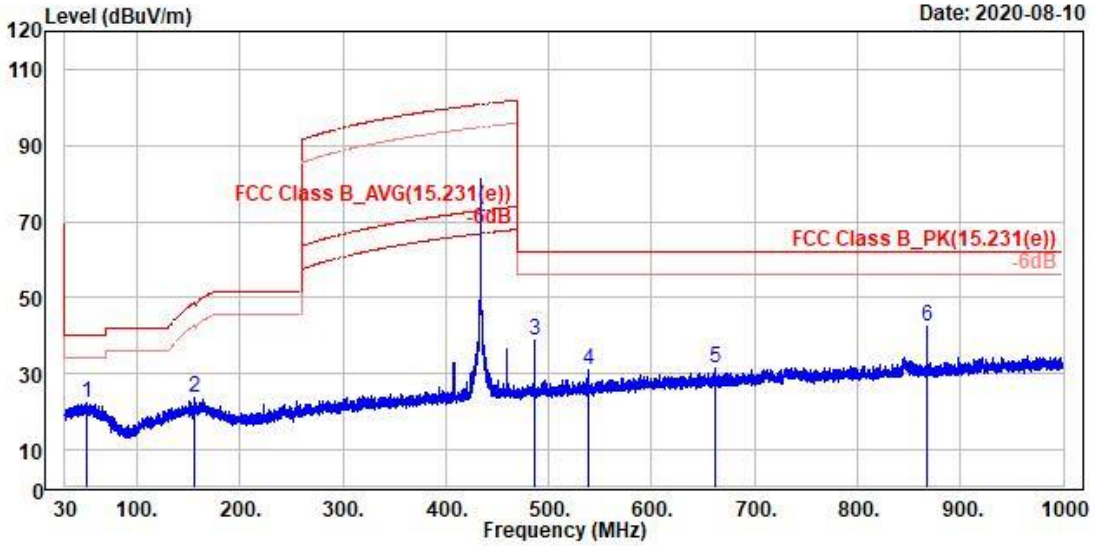

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	50.56	22.25	28.29	-6.04	40.00	-17.75	300	322	QP	vertical	
2	155.91	23.88	30.03	-6.15	48.70	-24.82	100	58	QP	vertical	
3	485.90	38.56	40.62	-2.06	61.94	-23.38	100	9	QP	vertical	
4	537.89	30.93	32.10	-1.17	61.94	-31.01	100	183	QP	vertical	
5	661.18	31.31	30.52	0.79	61.94	-30.63	200	292	QP	vertical	
6	867.84	42.53	38.90	3.63	61.94	-19.41	100	153	QP	vertical	

Spurious Emissions, TX Mode, 1GHz-6GHz

433.92MHz

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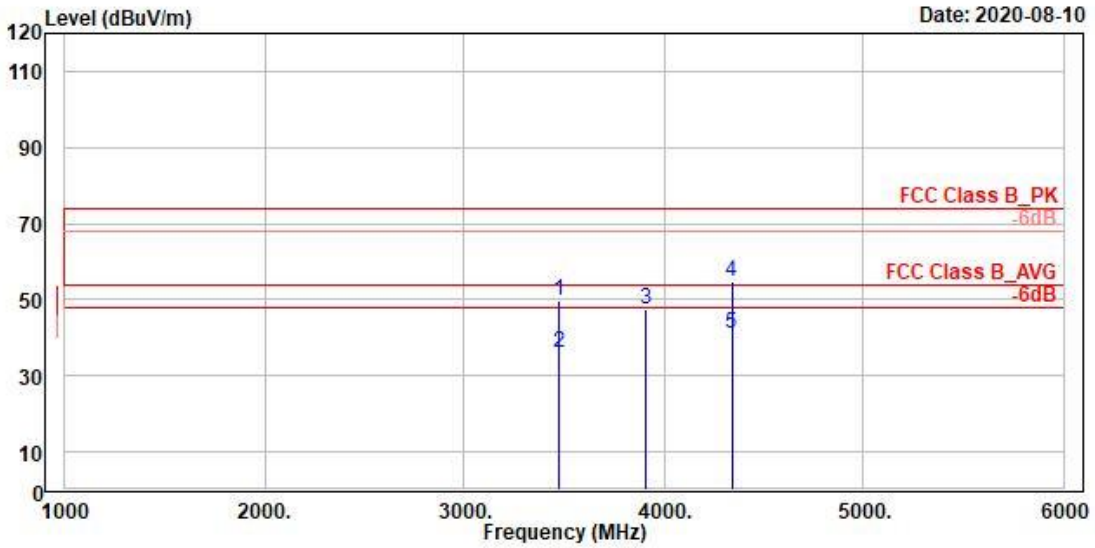

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	3471.36	49.90	61.84	-11.94	74.00	-24.10	200	327	Peak	horizontal	
2	3471.36	36.12	48.06	-11.94	54.00	-17.88	200	327	Average	horizontal	
3	3905.28	47.64	58.27	-10.63	74.00	-26.36	100	294	Peak	horizontal	
4	4339.20	54.75	64.86	-10.11	74.00	-19.25	285	295	Peak	horizontal	
5	4339.20	40.97	51.08	-10.11	54.00	-13.03	285	295	Average	horizontal	

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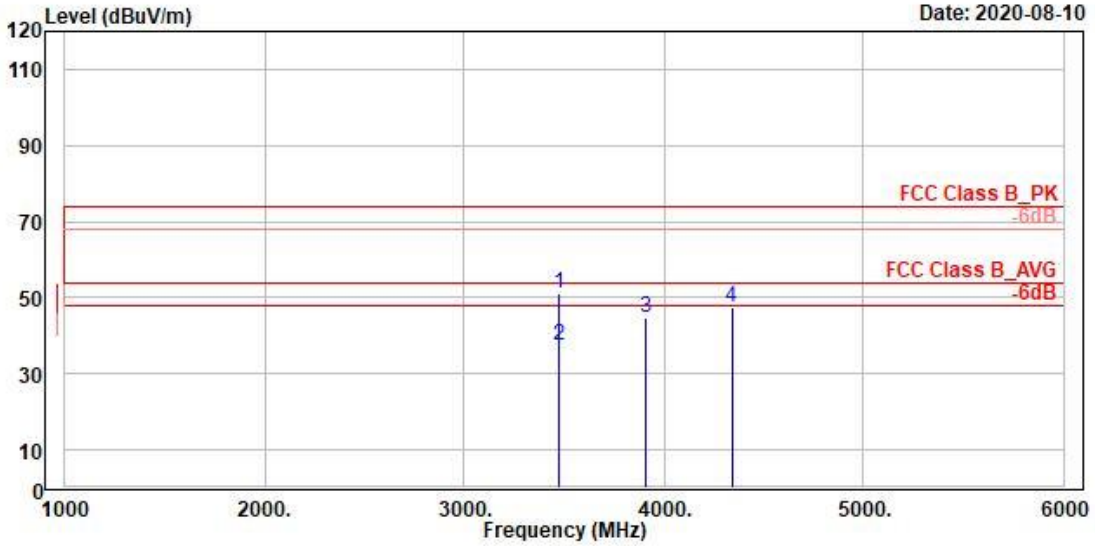

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	3471.36	51.24	63.18	-11.94	74.00	-22.76	100	134	Peak	vertical	
2	3471.36	37.46	49.40	-11.94	54.00	-16.54	100	134	Average	vertical	
3	3905.28	44.91	55.54	-10.63	74.00	-29.09	400	257	Peak	vertical	
4	4339.20	47.57	57.68	-10.11	74.00	-26.43	400	46	Peak	vertical	