



Prüfbericht-Nr.: <i>Test report no.:</i>	CN21A0LW(P15C-434MHz) 001	Auftrags-Nr.: <i>Order no.:</i>	238490527	Seite 1 von 22 Page 1 of 22	
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2020-08-20		
Auftraggeber: <i>Client:</i>	Whetron Electronics CO.,LTD 5F., No.959, Zhongjheng Rd., Jhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)				
Prüfgegenstand: <i>Test item:</i>	SMART KEY Remote Host				
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	S300068900T				
Auftrags-Inhalt: <i>Order content:</i>	FCC Part 15C Test report				
Prüfgrundlage: <i>Test specification:</i>	FCC CFR47 Part 15: Subpart C Section 15.231				
Wareneingangsdatum: <i>Date of sample receipt:</i>	2020-10-29				
Prüfmuster-Nr.: <i>Test sample no.:</i>	A002938915-002				
Prüfzeitraum: <i>Testing period:</i>	2020-11-26 - 2020-11-27, 2021-03-02 – 2021-05-18				
Ort der Prüfung: <i>Place of testing:</i>	EMC/RF Taipei Testing Site				
Prüflaboratorium: <i>Testing laboratory:</i>	Taipei Testing Laboratories				
Prüfergebnis*: <i>Test result*:</i>	Pass				
überprüft von: <i>reviewed by:</i>			genehmigt von: <i>authorized by:</i>		
Datum: <i>Date:</i>	2021-05-21	Ausstellungsdatum: <i>Issue date:</i>	2021-05-21		
Stellung / Position:	David Huang Project Manager	Stellung / Position:	Brenda Chen Senior Project Manager		
Sonstiges / Other:					
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>				
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar	5 = mangelhaft N/T = nicht getestet
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable	5 = poor 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. <i>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.</i>					

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 and Occupied Bandwidth	Pass
5.1.3	15.231(a)	Pulse Width / TX Gap	Pass
5.1.4	15.231(b)	Field Strength of Fundamental Emissions	Pass
5.1.5	15.231(b) & 15.205 & 15.209	Radiated Spurious Emissions	Pass
-	15.207	Mains Conducted Emission	Not Applicable

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

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APPENDIX A - TEST RESULT OF RADIATED EMISSIONS
APPENDIX SP - PHOTOGRAPHS OF TEST SETUP
APPENDIX EP - PHOTOGRAPHS OF EUT

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Test Report No.

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HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
CN21A0LW(P15C-434MHz) 001	Original Release	2021-05-21

1. General Remarks

1.1 Complementary Materials

The following attachments are integral parts of this test report:

Appendix A - Test Result of Radiated 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 47CFR Part 15: Subpart C Section 15.231
ANSI C63.10:2013

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 basis 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 SMART KEY Remote Host. It contains 433 MHz compatible module enabling the user to communicate data through a wireless interface.

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	SMART KEY Remote Host
Type Identification	S300068900T
FCC ID	2ABPM-S300068900T

Technical Specification of EUT

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

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 and receiver mode which makes it possible to transmit and receive when power on.

Test Software	None.
---------------	-------

The samples were used as follows:
A002938915-002 for conducted and radiated test

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	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 Z-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 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

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)
Tx		
-	433.92	433.92

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
20 dB Bandwidth	24.5 °C	62 %	Stanislas Charles
Pulse Width / TX Gap	21 °C	59.8 %	Stanislas Charles
Field Strength of Fundamental Emissions	21.4-22 °C	55.4-58.4 %	Simon Tsai
Radiated Spurious Emissions	21.4-22 °C	55.4-58.4 %	Simon Tsai

4.3 Special Accessories and Auxiliary Equipment

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

Accessory of EUT

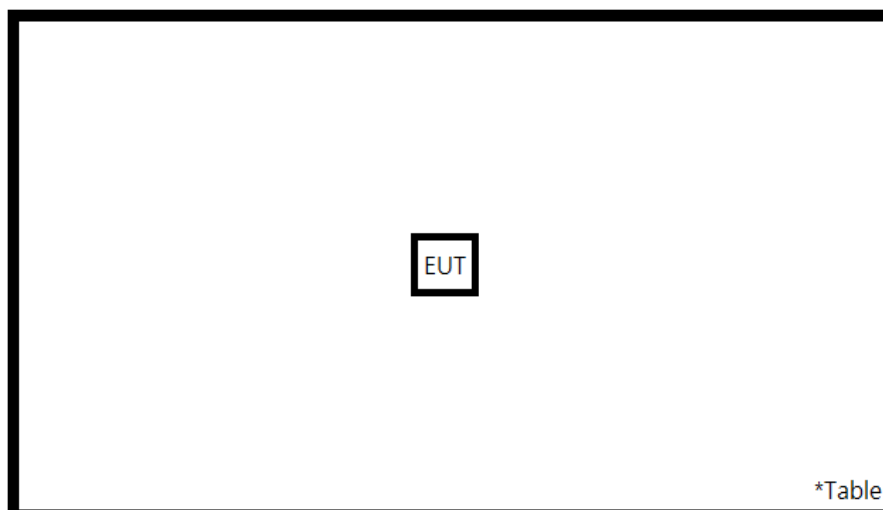
None.

Support Unit

None.

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 antenna is PCB Antenna with no possibility of replacement with a non-approved antenna by the end-user.

Therefore, the EUT is considered to comply with this provision.

Refer to EUT photo for details.

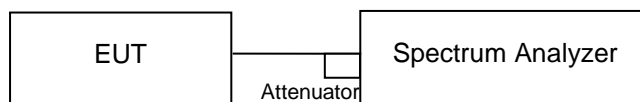
5.1.2 20 dB Bandwidth

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

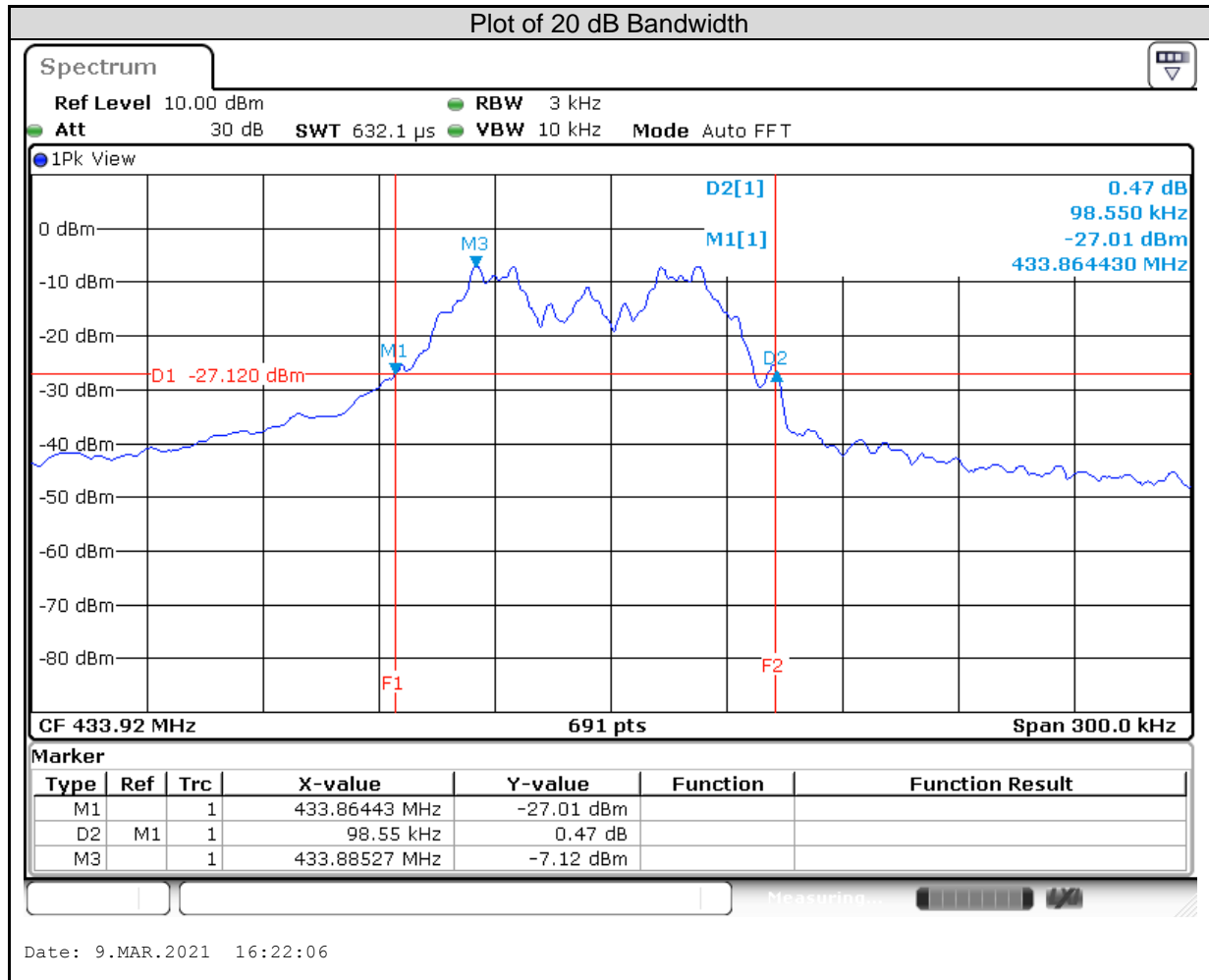
Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	Agilent	N9010A	MY53470241	2020/6/2	2021/6/1	2021/03/09	2021/03/09

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.
- e. For occupied bandwidth, 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 Sampling. 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

Channel Frequency (MHz)	20 dB Bandwidth (kHz)	Limit (kHz)
434	98.55	1085

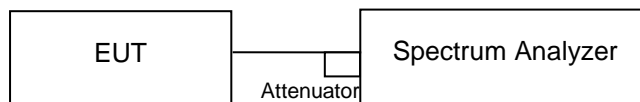


5.1.3 Pulse Width/TX Gap

Limit

A transmitter manual control shall transmit less than 5 seconds.

Kind of Test Site Shielded room

Test Setup

Test Instruments

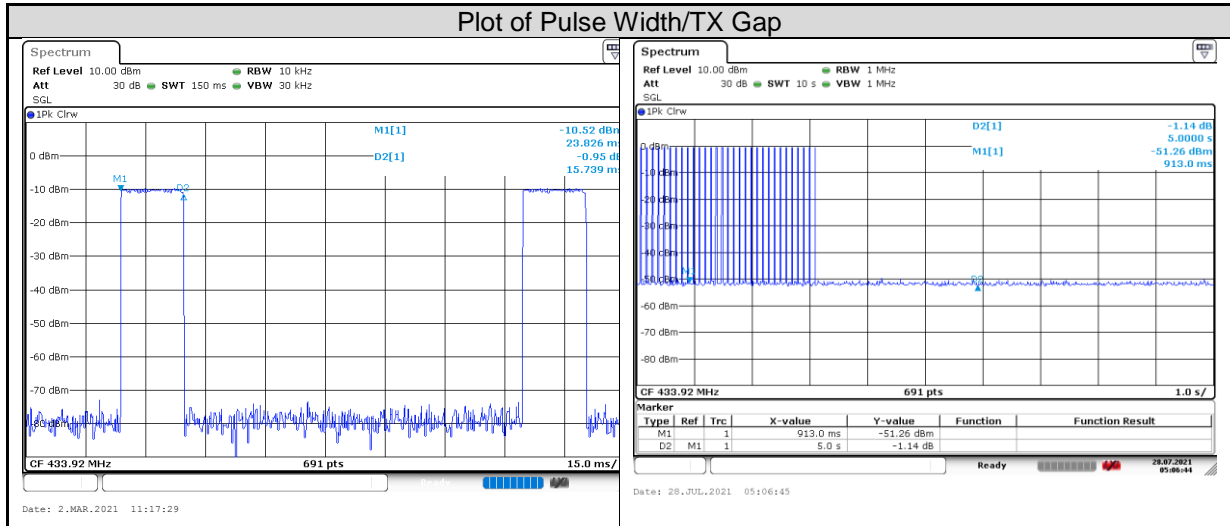
Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	Agilent	N9010A	MY53470241	2020/6/2	2021/6/1	2021/03/02	2021/05/18

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	23.826	5000	Pass



Date: 2.MAR.2021 11:17:29

5.1.4 Field Strength of Fundamental Emissions

Limit Refer to §15.231(b) for reference

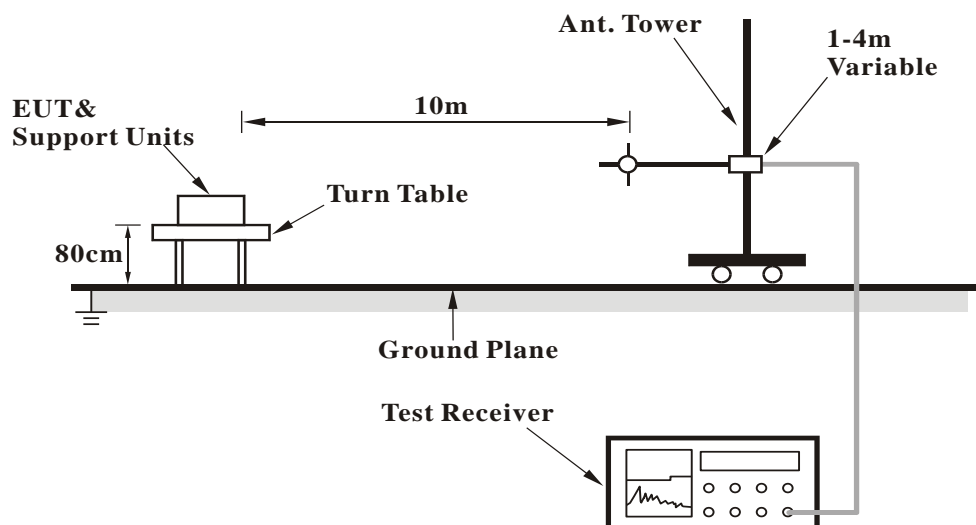
Fundamental Frequency (MHz)	Field Strength of Fundamental Emissions (microvolts/meter)	Unwanted Emissions (microvolts/meter)
$40.66 \leq f \leq 40.70$	2250	225
$70 < f \leq 130$	1250	125
$130 < f \leq 174$	1250 ~ 3750 _(Note 1, 2)	125 ~ 375 _(Note 1, 2)
$174 < f \leq 260$	3750	375
$260 < f \leq 470$	3750 ~ 12500 _(Note 1, 2)	375 ~ 1250 _(Note 1, 2)
$470 < f$	12500	1250

Note:

- With linear interpolations, the formulas for calculating the maximum permitted fundamental field strengths shall be as follows:
 - $130 \text{ MHz} \sim 174 \text{ MHz}$, $\mu\text{V/m}$ at 3 meters = $56.81818 \times (\text{frequency bands, MHz}) - 6136.3636$
 - $260 \text{ MHz} \sim 470 \text{ MHz}$, $\mu\text{V/m}$ at 3 meters = $41.6667 \times (\text{frequency bands, MHz}) - 7083.3333$
- The maximum permitted unwanted emission level shall be 20 dB below the maximum permitted fundamental level, or meets the requirement of Section 3.6, whichever is less. If the field strength is based on measurement instrumentation employing an average detector, it shall comply with the peak emissions set forth in Section 6.15.2.

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
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) 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(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.

Test Results

Please refer to Appendix A.

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Antenna Orientation	Detector or calculated value
433.92	77.18	100.83	Horizontal	Peak
433.92	56.09	80.83		Average
433.92	77.69	100.83	Vertical	Peak
433.92	61.6	80.83		Average

5.1.5 Radiated Spurious Emissions

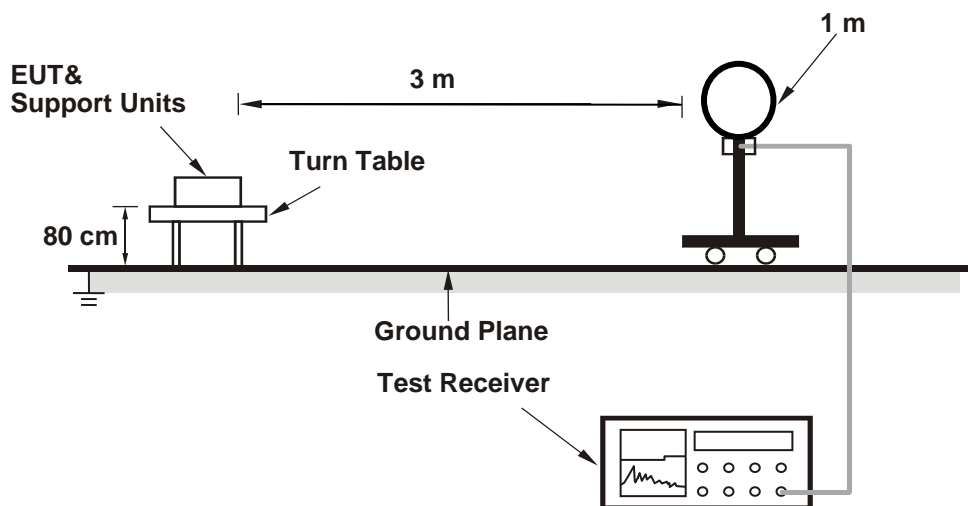
Limit

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).

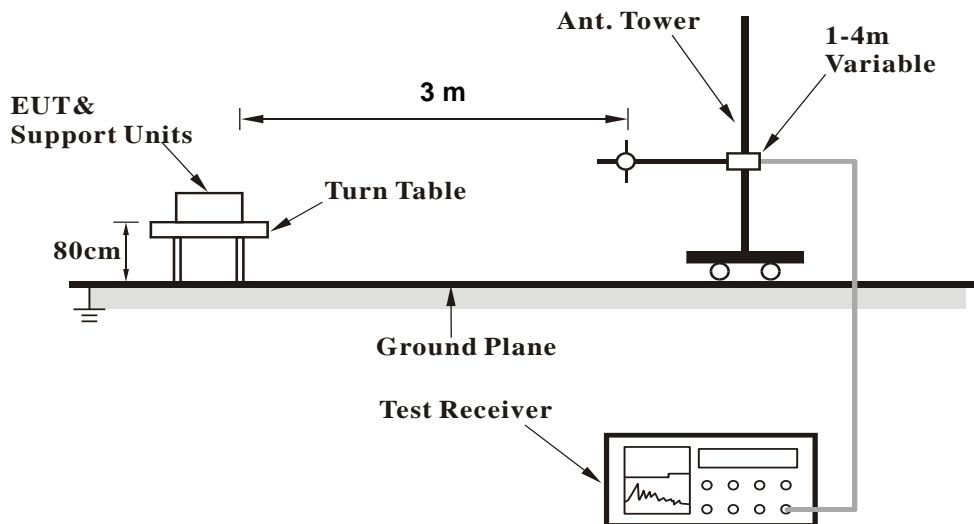
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

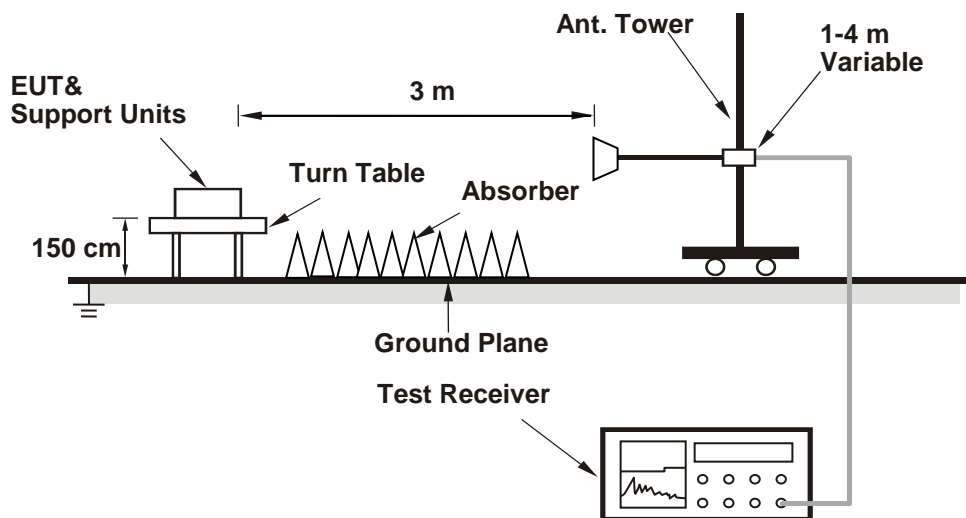
<Radiated Emissions below 30 MHz>



<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).

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 (OPEN), perpendicular (CLOSE), and ground-parallel (GROUND) 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. All modes of operation were investigated and the worst-case emissions are reported.
3. The Radiated Emissions testing was performed in the X(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.

Test Results

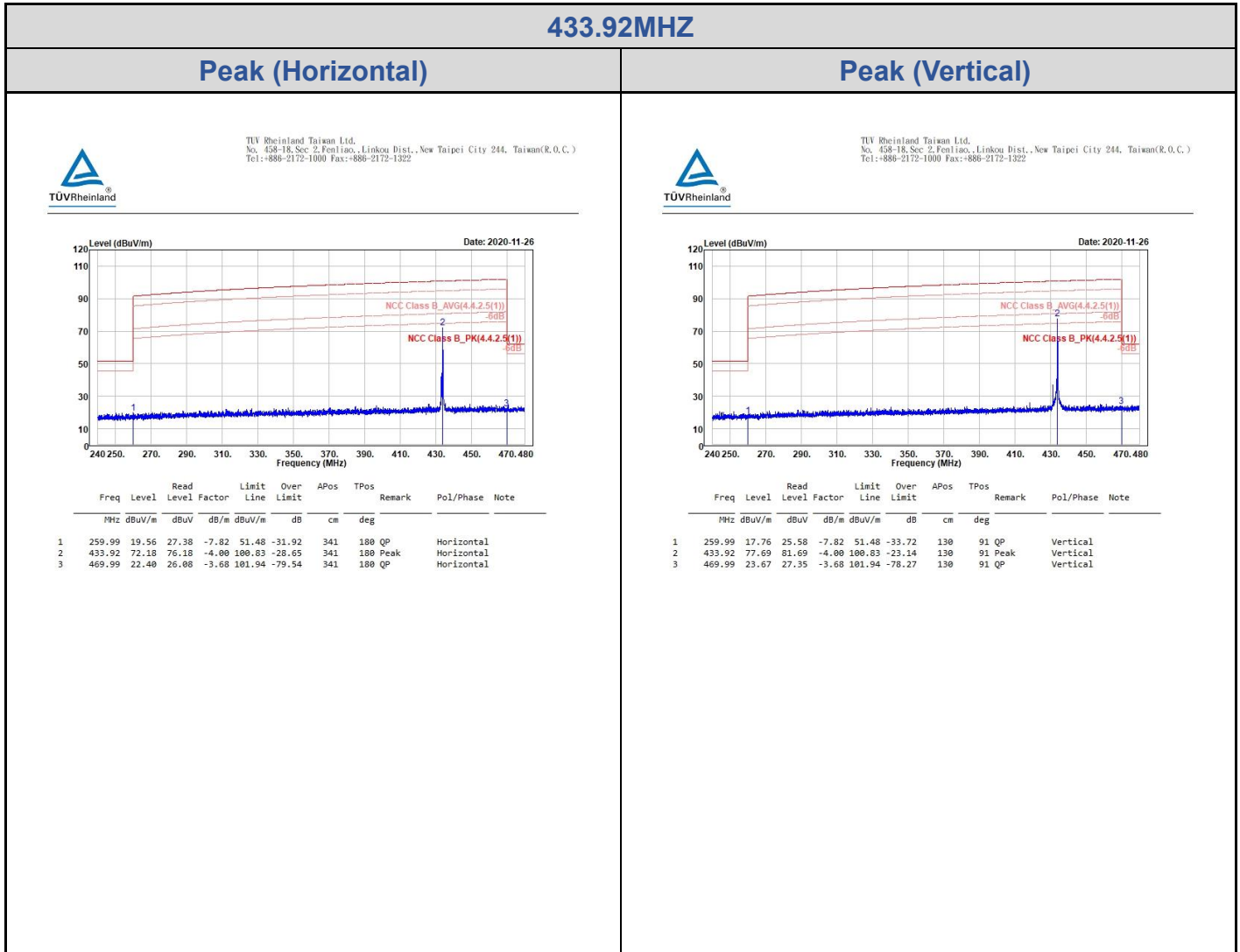
Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix A.

Appendix A: Test Results of Radiated Spurious Emissions

Fundamental



433.92MHZ

Average (Horizontal)

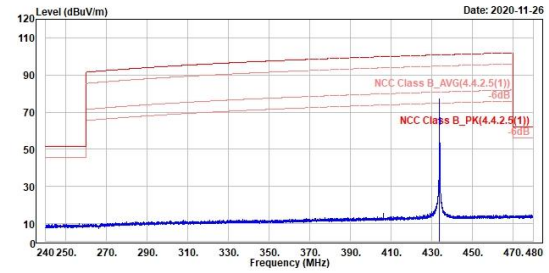
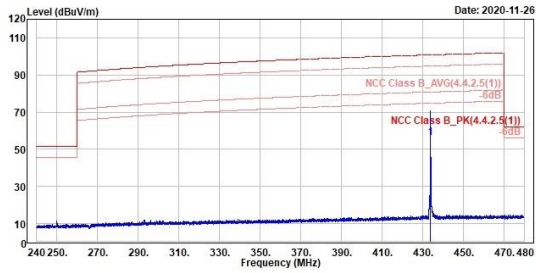
Average (Vertical)



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1	433.92	56.09	60.09	-4.00	80.83	-24.74	341	180	Average	Horizontal	CF
---	--------	-------	-------	-------	-------	--------	-----	-----	---------	------------	----

1	433.92	61.60	65.60	-4.00	80.83	-19.23	130	91	Average	Vertical	CF
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Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

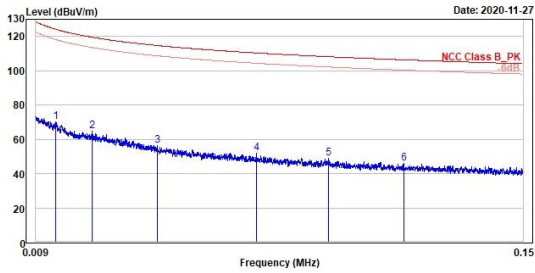
433.92MHz

(Open) 9kHz~150kHz

(Open) 150kHz~30MHz



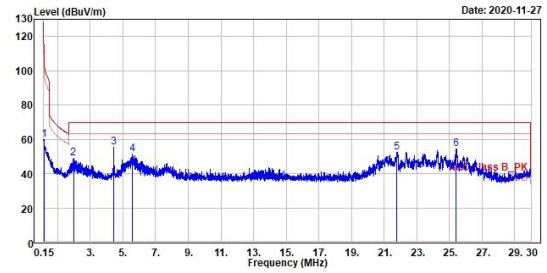
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.01	70.20	-5.57	75.77	124.14	-53.94	100	33 QP	Open
2	0.03	64.64	-6.93	71.57	119.50	-54.86	100	2 QP	Open
3	0.04	56.26	-10.25	66.51	114.69	-58.43	100	315 QP	Open
4	0.07	51.84	-10.20	62.04	110.35	-58.51	100	210 QP	Open
5	0.09	48.96	-11.04	60.00	108.16	-59.20	100	353 QP	Open
6	0.12	45.85	-12.50	58.35	106.35	-60.50	100	114 QP	Open



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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.16	59.86	-4.03	55.83	103.57	-43.71	100	309 QP	Open
2	1.97	48.97	-10.23	38.74	69.50	-20.53	100	56 QP	Open
3	4.43	55.39	-17.06	38.33	69.50	-14.11	100	126 QP	Open
4	5.56	51.37	-13.02	38.35	69.50	-18.13	100	97 QP	Open
5	21.79	52.39	-16.48	35.91	69.50	-17.11	100	90 QP	Open
6	25.42	54.48	-20.36	34.12	69.50	-15.02	100	90 QP	Open

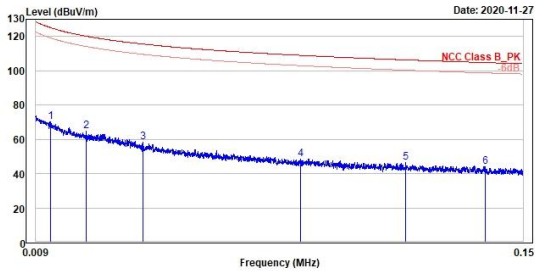
433.92MHz

(Close) 9kHz~150kHz

(Close) 150kHz~30MHz



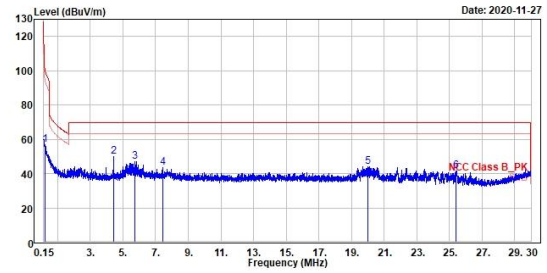
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.01	70.32	-5.40	76.72	125.06	-54.74	100	313 QP	Close
2	0.02	64.63	-7.27	71.90	120.14	-55.51	100	10 QP	Close
3	0.04	58.27	-9.30	67.57	115.56	-57.29	100	137 QP	Close
4	0.09	48.68	-12.11	60.79	108.94	-60.26	100	33 QP	Close
5	0.12	46.47	-11.85	58.32	106.31	-59.84	100	236 QP	Close
6	0.14	43.90	-13.00	56.98	104.73	-60.83	100	137 QP	Close



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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.23	56.82	4.37	52.45	100.23	-43.41	100	258 QP	Close
2	4.43	49.78	11.45	38.33	69.50	-19.72	100	274 QP	Close
3	5.72	47.06	8.71	38.35	69.50	-22.44	100	360 QP	Close
4	7.42	43.68	5.45	38.23	69.50	-25.82	100	229 QP	Close
5	20.00	44.04	7.78	36.26	69.50	-25.46	100	284 QP	Close
6	25.42	41.59	7.47	34.12	69.50	-27.91	100	64 QP	Close

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

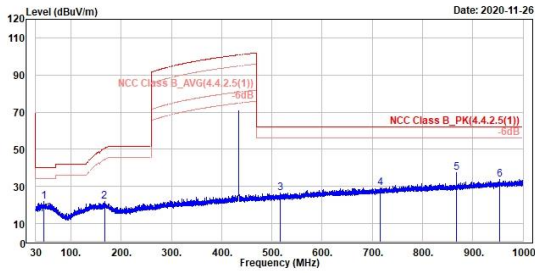
433.92MHz

(Horizontal)

(Vertical)



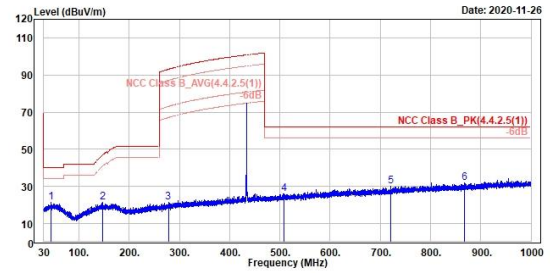
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	46.68	21.01	29.34	-7.53	40.00	-18.19	150	360 QP	Horizontal
2	166.67	21.78	29.00	-7.22	50.46	-28.68	200	170 QP	Horizontal
3	516.46	26.28	29.13	-2.85	61.94	-35.66	200	0 QP	Horizontal
4	715.21	29.09	28.69	0.40	61.94	-32.85	100	360 QP	Horizontal
5	867.79	37.28	34.62	2.66	61.94	-24.66	100	221 QP	Horizontal
6	953.15	33.88	29.61	4.27	61.94	-28.06	400	320 QP	Horizontal



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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	44.45	21.29	28.86	-7.57	40.00	-18.71	152	360 QP	Vertical
2	146.50	21.31	28.95	-7.64	46.00	-25.49	300	345 QP	Vertical
3	278.03	21.41	28.46	-7.05	93.07	-71.66	230	0 QP	Vertical
4	509.08	26.05	29.06	-3.01	61.94	-35.89	371	360 QP	Vertical
5	721.32	30.23	29.70	0.53	61.94	-31.71	300	12 QP	Vertical
6	867.90	32.07	29.40	2.67	61.94	-29.87	200	135 QP	Vertical

Spurious Emissions, Tx Mode, 1GHz ~ 5GHz

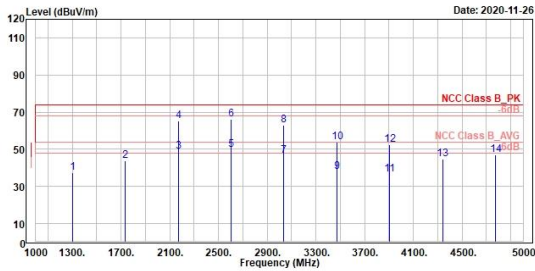
433.92MHz

(Horizontal)

(Vertical)



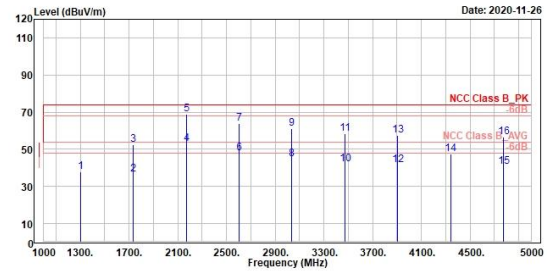
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1301.76	37.47	59.38	-21.91	74.00	-36.53	480	301 Peak	Horizontal
2	1735.68	43.82	65.73	-21.91	74.00	-30.18	480	174 Peak	Horizontal
3	2169.60	49.01	67.76	-18.75	54.00	-4.99	299	348 Average	Horizontal CF
4	2169.60	65.10	83.85	-18.75	74.00	-8.90	299	348 Peak	Horizontal
5	2693.52	49.95	68.43	-18.48	54.00	-4.05	320	354 Average	Horizontal CF
6	2693.52	66.04	84.52	-18.48	74.00	-7.96	320	354 Peak	Horizontal
7	3037.44	46.67	63.75	-17.06	54.00	-7.33	318	15 Average	Horizontal CF
8	3037.44	62.76	79.82	-17.06	74.00	-11.24	318	15 Peak	Horizontal
9	3471.36	37.74	54.33	-16.59	54.00	-16.26	121	27 Average	Horizontal CF
10	3471.36	53.83	70.42	-16.59	74.00	-20.17	121	27 Peak	Horizontal
11	3905.28	36.51	51.60	-15.09	54.00	-17.49	100	45 Average	Horizontal CF
12	3905.28	52.60	67.69	-15.09	74.00	-21.40	100	45 Peak	Horizontal
13	4339.20	44.94	59.18	-14.24	74.00	-29.06	200	331 Peak	Horizontal
14	4773.12	47.00	59.97	-12.97	74.00	-27.00	100	212 Peak	Horizontal



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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1301.76	37.83	59.74	-21.91	74.00	-36.17	394	360 Peak	Vertical
2	1735.68	36.34	58.25	-21.91	54.00	-17.66	251	255 Average	Vertical CF
3	1735.68	52.43	74.34	-21.91	74.00	-21.57	251	255 Peak	Vertical
4	2169.60	52.71	71.46	-18.75	54.00	-1.29	100	241 Average	Vertical CF
5	2169.60	68.81	87.56	-18.75	74.00	-5.19	100	241 Peak	Vertical
6	2693.52	47.93	65.41	-18.48	54.00	-6.07	206	263 Average	Vertical CF
7	2693.52	64.02	82.50	-18.48	74.00	-9.98	286	268 Peak	Vertical
8	3037.44	44.92	61.98	-17.06	54.00	-9.08	100	296 Average	Vertical CF
9	3037.44	61.01	78.07	-17.06	74.00	-12.99	100	296 Peak	Vertical
10	3471.36	42.14	58.73	-16.59	54.00	-11.86	100	242 Average	Vertical CF
11	3471.36	58.23	74.82	-16.59	74.00	-15.77	100	242 Peak	Vertical
12	3905.28	41.43	56.52	-15.09	54.00	-12.57	324	111 Average	Vertical CF
13	3905.28	57.52	72.61	-15.09	74.00	-16.48	324	111 Peak	Vertical
14	4339.20	47.60	61.84	-14.24	74.00	-26.40	100	306 Peak	Vertical
15	4773.12	40.48	53.37	-12.97	54.00	-13.60	100	244 Average	Vertical CF
16	4773.12	56.49	69.46	-12.97	74.00	-17.51	100	244 Peak	Vertical