FCC Test Report

Equipment	:	**RV340W Dual WAN Wireless-AC VPN Router**
Brand Name	:	**CISCO**
Model No.	:	**RV340W**
FCC ID	:	**VUI-RV340W**
Standard	:	**47 CFR FCC Part 15.247**
Frequency	:	**2400 MHz – 2483.5 MHz**
Equipment Class	:	**DTS**
Applicant	:	**PEGATRON CORPORATION** 5F., NO. 76, LIGONG ST., BEITOU DISTRICT, TAIPEI CITY 11259 Taiwan
Manufacturer	:	**MAINTEK COMPUTER (SUZHOU) CO., LTD** Bldg. 6 NB, 233 Jin Feng Rd, Suzhou District Jiangsu China

The product sample received on Jun. 06, 2016 and completely tested on Jun. 29, 2016. We, SPORTON, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Kevin Liang / Assistant Manager

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
1.1.2	15.203	Antenna Requirement	Antenna connector mechanism complied	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	[dBuV]: 0.4788180MHz 39.49 (Margin 16.87dB) - QP 32.96 (Margin 13.40dB) - AV	FCC 15.207	Complied
3.2	15.247(a)	6dB Bandwidth	6dB Bandwidth Unit [MHz] 20M:7.41 40M: 35.68	≥500kHz	Complied
3.3	15.247(b)	RF Output Power (Maximum Peak Conducted Output Power)	Power [dBm]: 27.951	Power [dBm]:30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]: -0.56	PSD [dBm/3kHz]:8	Complied
3.5	15.247(d)	Transmitter Radiated Bandedge Emissions	Non-Restricted Bands: 2399.60 MHz: 38.64 dB Restricted Bands [dBuV/m at 3m]: 2484.00 MHz 72.94 (Margin 1.06 dB) - PK 52.71 (Margin 1.29 dB) - AV	Non-Restricted Bands: > 20 dBc Restricted Bands: FCC 15.209	Complied
3.6	15.247(d)	Radiated Unwanted Emissions	Restricted Bands [dBuV/m at 3m]: 31.940 MHz 34.41 (Margin 5.59 dB) - QP	Non-Restricted Bands: > 20 dBc Restricted Bands: FCC 15.209	Complied

Revision History

Report No.	Version	Description	Issued Date
FR660601AC	Rev. 01	Initial issue of report	Aug. 15, 2016

1 General Description

1.1 Information

This product supports CDD mode for b、g mode and non beamforming for n mode.

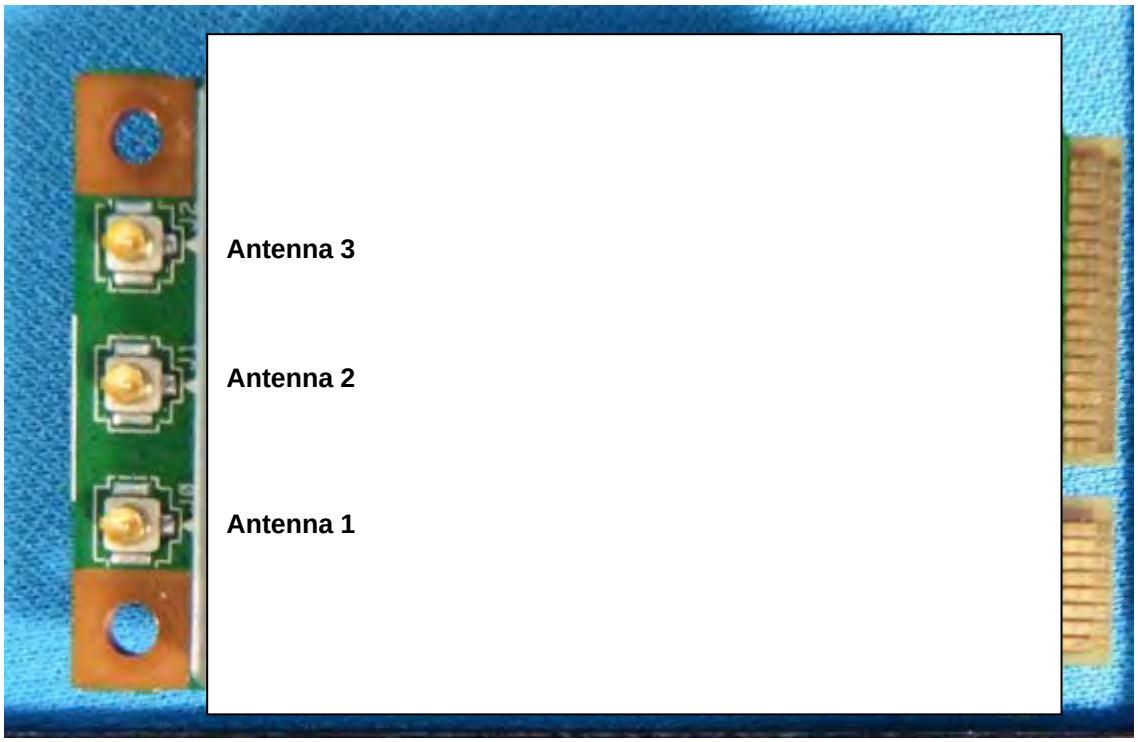
1.1.1 RF General Information

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**RF Output Power (dBm)**
2400-2483.5	b	2412-2462	1-11 [11]	3	26.08
2400-2483.5	g	2412-2462	1-11 [11]	3	27.89
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	3	27.95
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	3	25.06
Note 1: RF output power specifies that Maximum Peak Conducted Output Power. Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation. Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.					

1.1.2 Antenna Information

Antenna Category	
☐	Integral antenna (antenna permanently attached)
	☐ Temporary RF connector provided
	☐ No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☒	External antenna (dedicated antennas)
	☒ Single power level with corresponding antenna(s).
	☐ Multiple power level and corresponding antenna(s).

Antenna General Information				
No.	Ant. Cat.	Ant. Type	Ant. Connect	Gain (dBi)
1	External	Dipole	I-pex	3.26
2	External	Dipole	I-pex	3.27
3	External	Dipole	I-pex	3.31



1.1.3 Type of EUT

Identify EUT	
EUT Serial Number	N/A
Presentation of Equipment	☒ Production ; ☐ Pre-Production ; ☐ 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 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle	
☐ Operated normally mode for worst duty cycle	
☒ Operated test mode for worst duty cycle	
Test Signal Duty Cycle (x)	**Power Duty Factor [dB] – (10 log 1/x)**
☒ 100.00% - IEEE 802.11b	0.00
☒ 99.17%- IEEE 802.11g	0.04
☒ 99.11%- IEEE 802.11n (HT20)	0.04
☒ 97.94%- IEEE 802.11n (HT40)	0.09

1.1.5 EUT Operational Condition

Supply Voltage	☒ AC mains	☐ DC	
Type of DC Source	☐ Transformer	☐ From System	☒ External AC adapter

1.2 Accessories and Support Equipment

Accessories Information				
AC Adapter	Brand Name	APD	Model Name	DA-36A12
	Power Rating	I/P: 100-240V ~50/60Hz 1.0A MAX; O/P: 12V⎓3.0A		
	Power Cord	1.8 meter, non-shielded cable, with w/o ferrite core		
RJ45 Cable	Category	-	In/Out door	Indoor
	Ethernet Cable	1.87 meter, shield or non-shielded cable		
RJ45-RS-232 Cable	Category	-	In/Out door	Indoor
	Cable DB9F/RJ-45	1.9 meter, shield or non-shielded cable		

Reminder: Regarding to more detail and other information, please refer to user manual.

Support Equipment - RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E6400	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC

Support Equipment - AC Conduction and Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	-	-	-	-

1.3 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
- FCC KDB 558074 D01 v03r05
- FCC KDB 662911 D01 v02r01

1.4 Testing Location Information

Testing Location						
☒	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.				
		TEL : 886-3-327-3456		FAX : 886-3-327-0973		
Test Site Registration Number: 553509						
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**		
AC Conduction	CO04-HY	Ryan	23°C / 55%	07/06/2016		
RF Conducted	TH01-HY	Howard	23°C / 63%	29/06/2016		
Radiated Emission	03CH03-HY	Terry	23.7°C / 52%	05/06/2016		

1.5 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)

Measurement Uncertainty		
Test Item		**Uncertainty**
AC power-line conducted emissions		±2.3 dB
Emission bandwidth, 6dB bandwidth		±0.6 %
RF output power, conducted		±0.1 dB
Power density, conducted		±0.6 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB
	0.15 – 30 MHz	±0.4 dB
	30 – 1000 MHz	±0.6 dB
	1 – 18 GHz	±0.5 dB
	18 – 40 GHz	±0.5 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.5 dB
	0.15 – 30 MHz	±2.3 dB
	30 – 1000 MHz	±2.6 dB
	1 – 18 GHz	±3.6 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±5 %
DC and low frequency voltages		±0.9%
Time		±1.4 %
Duty Cycle		±0.6 %

2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing			
Modulation Mode	**Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**
11b	3	1-11 Mbps	1 Mbps
11g	3	6-54 Mbps	6 Mbps
HT20	3	MCS 0-23	MCS 0
HT40	3	MCS 0-23	MCS 0
Note 1: Modulation modes consist below configuration: 11b: IEEE 802.11b, 11g: IEEE 802.11g, HT20/HT40: IEEE 802.11n Note 2: RF output power specifies that Maximum Peak Conducted Output Power.			

2.2 Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel	Chain
AC Power Line Conducted Emissions	Normal Link	-	-	-
Maximum Conducted Output Power	11b/CCK	1 Mbps	1/6/11	1+2+3
	11g/BPSK	6 Mbps	1/6/11	1+2+3
	11n HT20	MCS 0	1/6/11	1+2+3
	11n HT40	MCS 0	3/6/9	1+2+3
Power Spectral Density	11b/CCK	1 Mbps	1/6/11	1+2+3
	11g/BPSK	6 Mbps	1/6/11	1+2+3
	11n HT20	MCS 0	1/6/11	1+2+3
	11n HT40	MCS 0	3/6/9	1+2+3
6dB Spectrum Bandwidth	11b/CCK	1 Mbps	1/6/11	1+2+3
	11g/BPSK	6 Mbps	1/6/11	1+2+3
	11n HT20	MCS 0	1/6/11	1+2+3
	11n HT40	MCS 0	3/6/9	1+2+3
Radiated Emissions 9kHz~1GHz	Normal Link	-	-	-
Radiated Emissions 1GHz~10th Harmonic	11b/CCK	1 Mbps	1/6/11	1+2+3
	11g/BPSK	6 Mbps	1/6/11	1+2+3
	11n HT20	MCS 0	1/6/11	1+2+3
	11n HT40	MCS 0	3/6/9	1+2+3
Band Edge Emissions	11b/CCK	1 Mbps	1/6/11	1+2+3
	11g/BPSK	6 Mbps	1/6/11	1+2+3
	11n HT20	MCS 0	1/6/11	1+2+3
	11n HT40	MCS 0	3/6/9	1+2+3

2.3 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (2400-2483.5MHz band)							
Test Software	DOS						
Modulation Mode	**N_{TX}**	**Test Frequency (MHz)**					
		NCB: 20MHz			**NCB: 40MHz**		
		2412	**2437**	**2462**	**2422**	**2437**	**2452**
11b	3	62	76	56	-	-	-
11g	3	62	76	62	-	-	-
HT20	3	58	76	56	-	-	-
HT40	3	-	-	-	52	62	46

2.4 The Worst Case Measurement Configuration

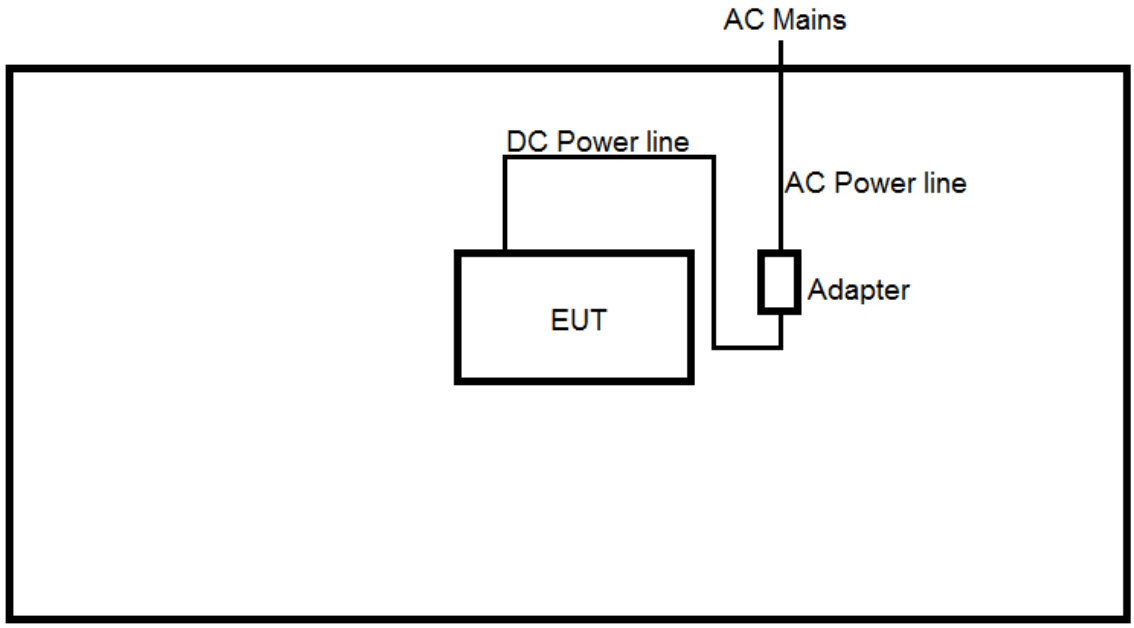
The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Operating Mode Description
1	Adapter Mode
The operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	RF Output Power, Power Spectral Density, 6 dB Bandwidth
Test Condition	Conducted measurement at transmit chains
Modulation Mode	11b, 11g, HT20, HT40

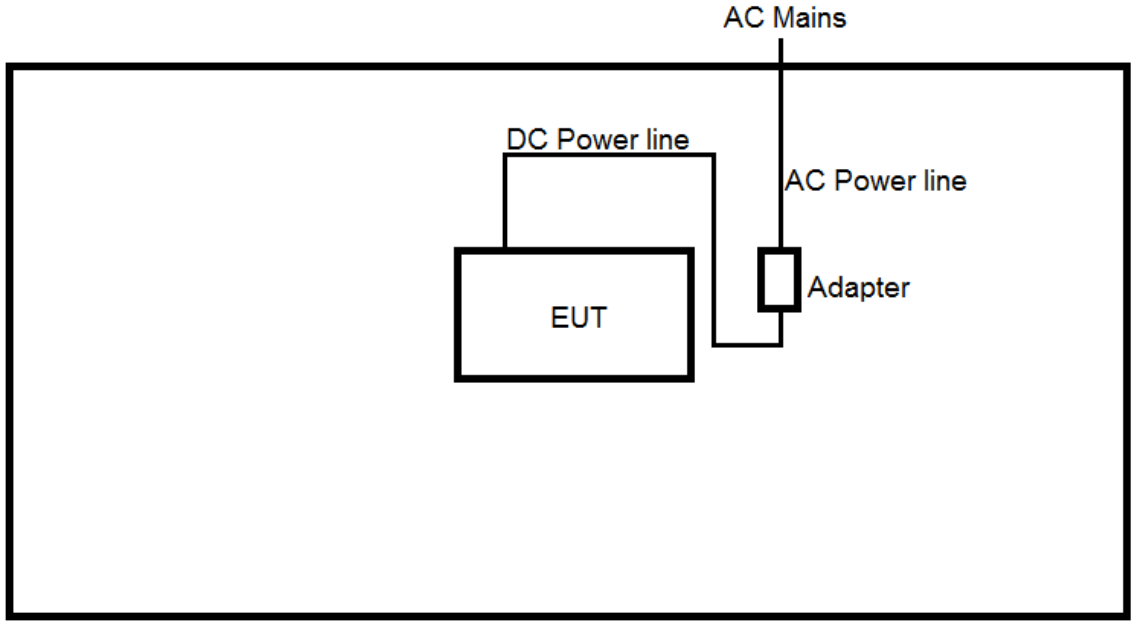
The Worst Case Mode for Following Conformance Tests			
Tests Item	Transmitter Radiated Unwanted Emissions Transmitter Radiated Bandedge Emissions		
Test Condition	Radiated measurement		
User Position	☐ EUT will be placed in fixed position.		
	☒ EUT will be placed in mobile position and operating multiple positions. EUT shall be performed three orthogonal planes.		
	☐ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.		
Operating Mode	Operating Mode Description		
Radiated Emissions (Below 1GHz)	1. Adapter Mode		
Modulation Mode	11b, 11g, HT20, HT40		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	
Worst Planes of Antenna			V

2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



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

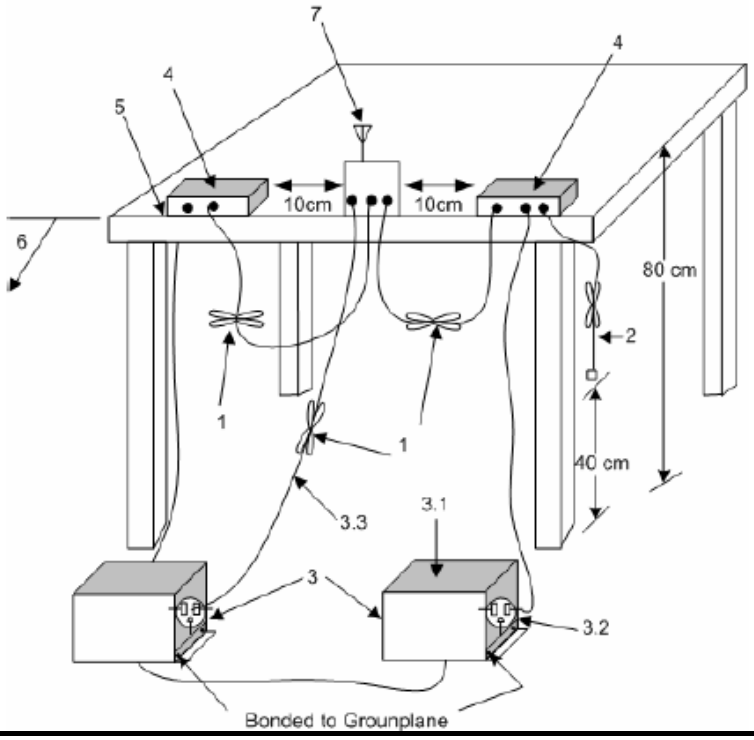
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

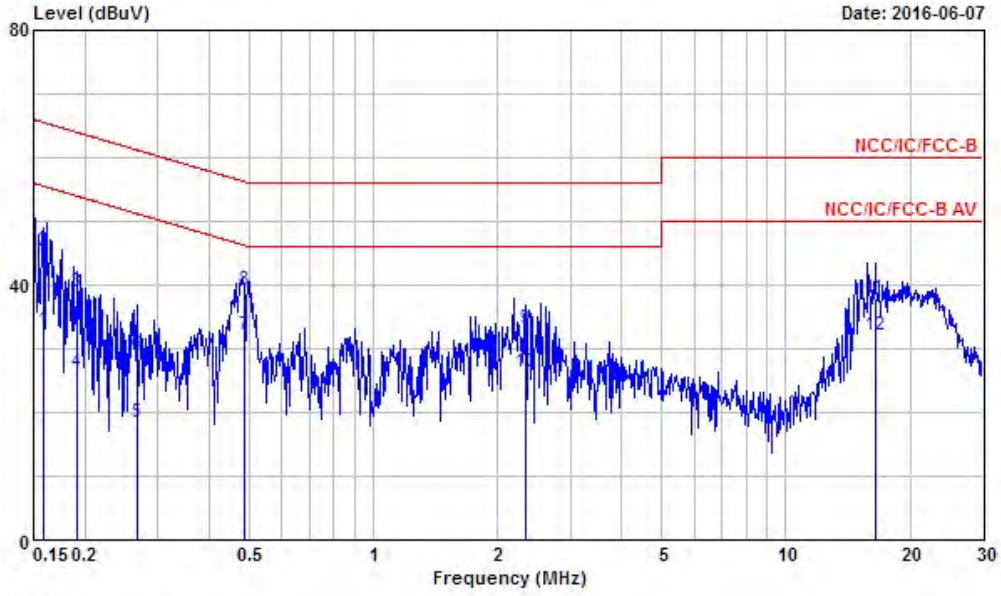
3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

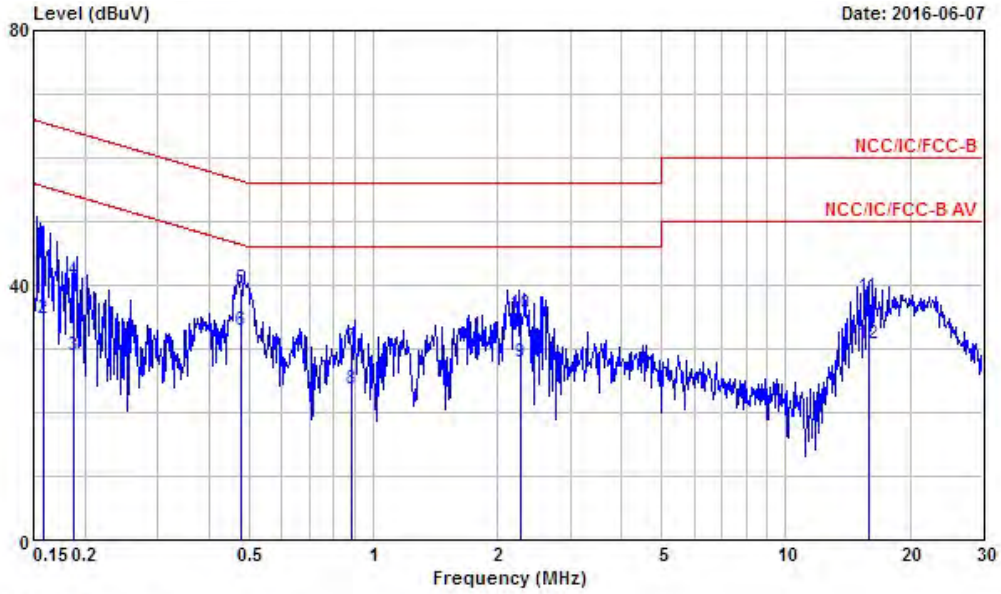
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	@0.1585500	32.98	-22.56	55.54	32.65	0.10	0.23	Average
2	@0.1585500	45.24	-20.30	65.54	44.91	0.10	0.23	QP
3	@0.1913990	39.03	-24.95	63.98	38.63	0.11	0.29	QP
4	@0.1913990	26.20	-27.78	53.98	25.80	0.11	0.29	Average
5	@0.2672410	18.48	-32.72	51.20	18.15	0.11	0.22	Average
6	@0.2672410	29.20	-32.00	61.20	28.87	0.11	0.22	QP
7	@0.4874410	32.05	-14.16	46.21	31.83	0.12	0.10	Average
8	@0.4874410	39.09	-17.12	56.21	38.87	0.12	0.10	QP
9	@ 2.350	33.18	-22.82	56.00	32.77	0.16	0.25	QP
10	@ 2.350	26.23	-19.77	46.00	25.82	0.16	0.25	Average
11	@ 16.490	37.92	-22.08	60.00	37.37	0.35	0.20	QP
12	@ 16.490	32.12	-17.88	50.00	31.57	0.35	0.20	Average

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	@0.1582130	46.11	-19.45	65.56	45.77	0.11	0.23	QP
2	@0.1582130	34.61	-20.95	55.56	34.27	0.11	0.23	Average
3	@0.1879870	29.04	-25.09	54.13	28.65	0.11	0.28	Average
4	@0.1879870	40.90	-23.23	64.13	40.51	0.11	0.28	QP
5	@0.4788180	39.49	-16.87	56.36	39.27	0.12	0.10	QP
6	@0.4788180	32.96	-13.40	46.36	32.74	0.12	0.10	Average
7	@0.8854150	30.33	-25.67	56.00	30.10	0.13	0.10	QP
8	@0.8854150	23.61	-22.39	46.00	23.38	0.13	0.10	Average
9	@ 2.275	27.82	-18.18	46.00	27.41	0.15	0.26	Average
10	@ 2.275	35.41	-20.59	56.00	35.00	0.15	0.26	QP
11	@ 15.890	38.29	-21.71	60.00	37.77	0.32	0.20	QP
12	@ 15.890	30.89	-19.11	50.00	30.37	0.32	0.20	Average

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

3.2 6dB Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
☒ 6 dB bandwidth ≥ 500 kHz.

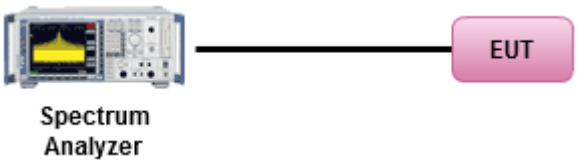
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method		
☒	For the emission bandwidth shall be measured using one of the options below:	
	☒	Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
	☐	Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
	☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☒	For conducted measurement.	
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain 1.
	☐	The EUT supports diversity transmitting and the results on transmit chain port 2 is the worst case.
	☒	The EUT supports multiple transmit chains using options given below:
		☐ Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 1.
		☒ Option 2: Multiple transmit chains measurements need to be performed on each transmit chains individually (antenna outputs). All measurement had be performed on all transmit chains.

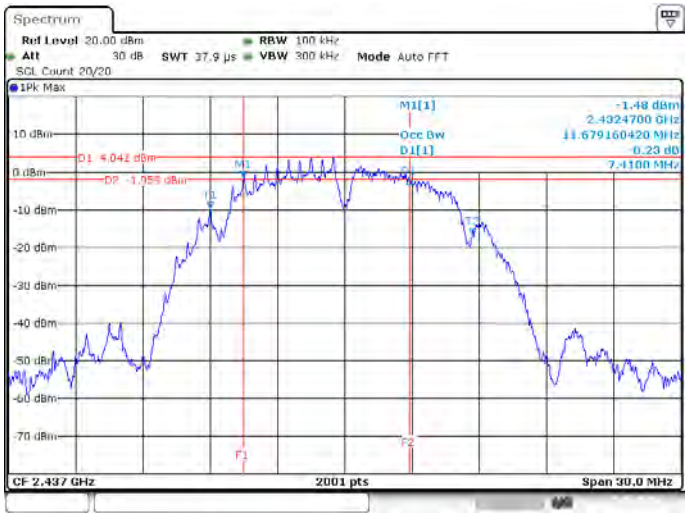
3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Emission Bandwidth Result								
Condition			Emission Bandwidth (MHz)					
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth			6dB Bandwidth		
			Chain- Port 1	Chain- Port 2	Chain- Port 3	Chain- Port 1	Chain- Port 2	Chain- Port 3
11b	3	2412	11.33	13.33	11.30	8.08	8.52	8.07
11b	3	2437	11.67	11.66	11.79	7.41	8.59	8.20
11b	3	2462	11.79	11.76	11.63	8.44	8.08	8.32
11g	3	2412	16.43	16.46	16.38	16.45	16.48	16.42
11g	3	2437	16.47	16.38	16.50	16.45	16.32	16.54
11g	3	2462	16.47	16.43	16.49	16.54	16.51	16.48
HT20	3	2412	17.66	17.60	17.60	17.70	17.34	17.62
HT20	3	2437	17.67	17.60	17.63	17.70	17.64	17.70
HT20	3	2462	17.63	17.66	17.61	17.56	17.73	17.71
HT40	3	2422	35.98	36.10	35.94	35.72	36.36	35.68
HT40	3	2437	36.14	36.02	36.06	36.40	36.00	36.32
HT40	3	2452	36.26	36.22	36.22	36.44	36.48	35.92
Limit			N/A			≥500 kHz		
Result			Complied					
Note 1: N_{TX} = Number of Transmit Chains								

Minimum Emission Bandwidth Plots (6dB)



3.3 RF Output Power

3.3.1 RF Output Power Limit

RF Output Power Limit			
Maximum Peak Conducted Output Power or Maximum Conducted Output Power Limit			
☒	2400-2483.5 MHz Band:		
	☒	If G_{TX} ≤ 6 dBi, then P_{Out} ≤ 30 dBm (1 W)	
	☒	Point-to-multipoint systems (P2M): If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6) dBm	
	☐	Point-to-point systems (P2P): If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm	
	☐	Smart antenna system (SAS):	
		☐	Single beam: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm
		☐	Overlap beam: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm
		☐	Aggregate power on all beams: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 + 8dB dBm
e.i.r.p. Power Limit:			
☒	2400-2483.5 MHz Band		
	☒	Point-to-multipoint systems (P2M): P_{eirp} ≤ 36 dBm (4 W)	
	☐	Point-to-point systems (P2P): P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX}]) dBm	
	☐	Smart antenna system (SAS)	
		☐	Single beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		☐	Overlap beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		☐	Aggregate power on all beams: P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX} + 8]) dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi. **P_{eirp}** = e.i.r.p. Power in dBm.			

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
☒	Maximum Peak Conducted Output Power
	☐ Refer as FCC KDB 558074, clause 9.1.1 (RBW ≥ EBW method).
	☒ Refer as FCC KDB 558074, clause 9.1.2 (peak power meter for VBW ≥ DTS BW).
☒	Maximum Conducted Output Power
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
	RF power meter and average over on/off periods with duty factor or gated trigger
	☒ Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM (using an RF average power meter).
☒	For conducted measurement.
	☐ The EUT supports single transmit chain and measurements performed on this transmit chain 1.
	☐ The EUT supports diversity transmitting and the results on transmit chain port 2 is the worst case.
	☒ The EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	☒ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)

3.3.5 Test Result of Maximum Peak Conducted Output Power

Maximum Peak Conducted Output Power Result										
Condition			RF Output Power (dBm)							
Modulation Mode	N_{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 3	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11b	3	2412	17.84	17.08	17.65	22.31	30	3.28	25.59	36
11b	3	2437	21.28	20.98	21.64	26.08	30	3.28	29.36	36
11b	3	2462	16.60	15.53	16.07	20.86	30	3.28	24.14	36
11g	3	2412	19.84	19.18	19.67	24.34	30	3.28	27.62	36
11g	3	2437	23.21	22.72	23.39	27.89	30	3.28	31.17	36
11g	3	2462	20.01	19.21	19.92	24.50	30	3.28	27.78	36
HT20	3	2412	18.88	17.96	18.36	23.19	30	3.28	26.47	36
HT20	3	2437	23.25	22.71	23.54	27.95	30	3.28	31.23	36
HT20	3	2462	18.79	18.00	18.05	23.07	30	3.28	26.35	36
HT40	3	2422	18.50	17.20	17.78	22.63	30	3.28	25.91	36
HT40	3	2437	20.47	19.94	20.43	25.06	30	3.28	28.34	36
HT40	3	2452	17.07	14.96	15.90	20.83	30	3.28	24.11	36
Result			Complied							

3.3.6 Test Result of Maximum Average Conducted Output Power

Maximum Conducted Output Power										
Condition			RF Output Power (dBm)							
Modulation Mode	N_{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 3	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11b	3	2412	14.92	14.16	14.75	19.39	30	3.28	22.67	36
11b	3	2437	18.57	18.06	18.66	23.21	30	3.28	26.49	36
11b	3	2462	13.65	12.57	13.14	17.91	30	3.28	21.19	36
11g	3	2412	14.83	14.12	14.61	19.30	30	3.28	22.58	36
11g	3	2437	18.32	17.83	18.40	22.96	30	3.28	26.24	36
11g	3	2462	15.01	14.25	14.77	19.46	30	3.28	22.74	36
HT20	3	2412	13.99	12.92	13.35	18.21	30	3.28	21.49	36
HT20	3	2437	18.18	17.65	18.50	22.90	30	3.28	26.18	36
HT20	3	2462	13.64	12.82	13.05	17.96	30	3.28	21.24	36
HT40	3	2422	13.35	12.01	12.71	17.50	30	3.28	20.78	36
HT40	3	2437	15.39	14.77	15.27	19.92	30	3.28	23.20	36
HT40	3	2452	12.00	9.77	10.72	15.70	30	3.28	18.98	36
Result			Complied							

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
☒ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

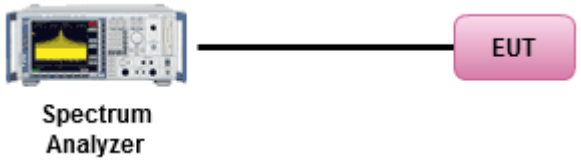
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

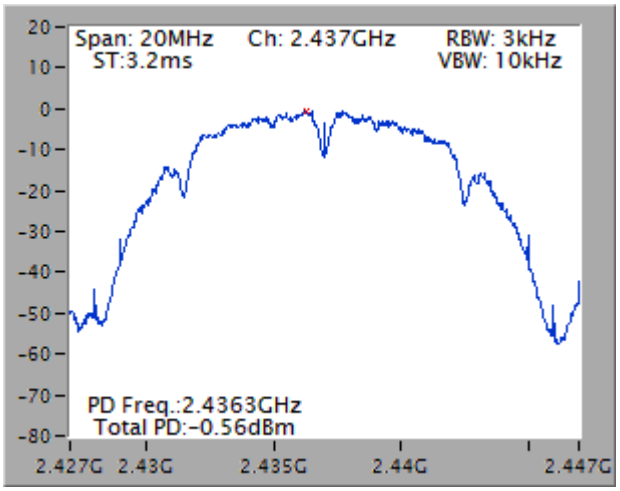
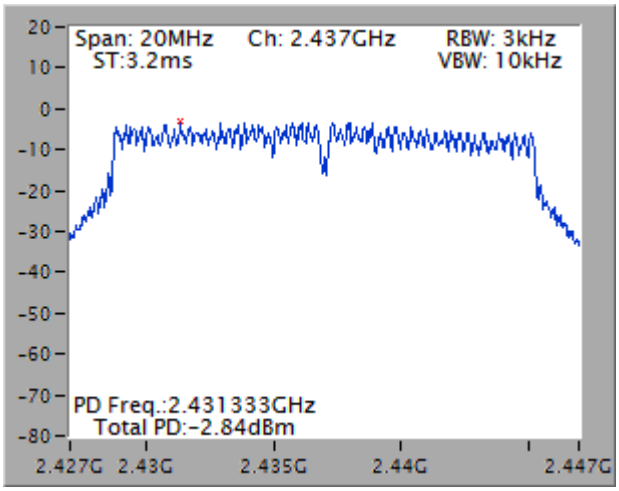
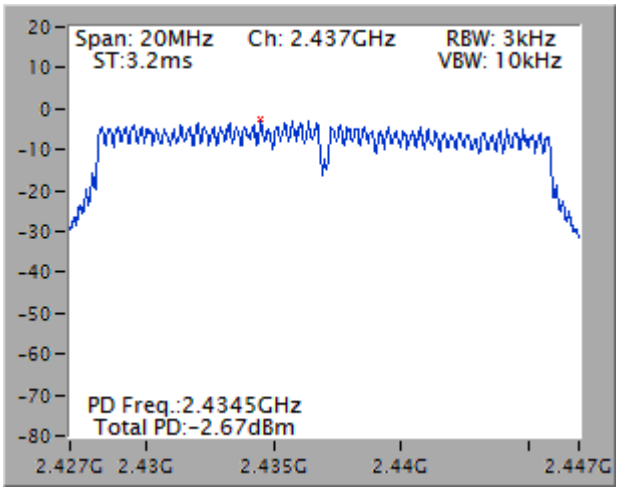
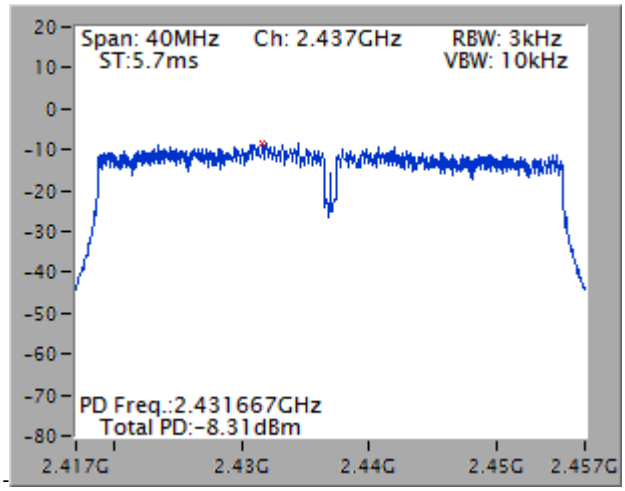
Test Method			
☒	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).		
	☒	Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz;detector=peak).	
	[duty cycle ≥ 98% or external video / power trigger]		
	☐	Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).	
	☐	Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-1 Alt. (slow sweep speed)	
	duty cycle < 98% and average over on/off periods with duty factor		
	☐	Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-2 (spectral trace averaging).	
	☐	Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)	
☒	For conducted measurement.		
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain 1.	
	☐	The EUT supports diversity transmitting and the results on transmit chain port 2 is the worst case.	
	☒	The EUT supports multiple transmit chains using options given below:	
		☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N_{TX} output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		☐	Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

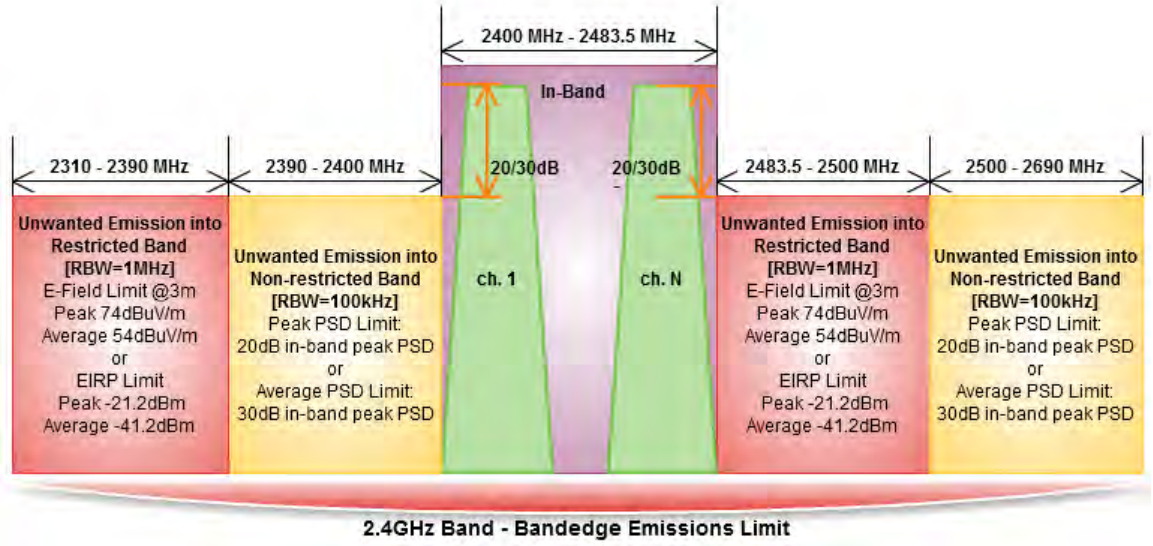
Power Spectral Density Result				
Condition			Power Spectral Density (dBm/3kHz)	
Modulation Mode	N_{TX}	Freq. (MHz)	Sum Chain	Power Limit
11b	3	2412	-4.04	8
11b	3	2437	-0.56	8
11b	3	2462	-5.86	8
11g	3	2412	-6.15	8
11g	3	2437	-2.84	8
11g	3	2462	-6.19	8
HT20	3	2412	-8.15	8
HT20	3	2437	-2.67	8
HT20	3	2462	-8.19	8
HT40	3	2422	-10.56	8
HT40	3	2437	-8.31	8
HT40	3	2452	-12.57	8
Result			Complied	
Note 1: PSD = sum each transmit chains by bin-to-bin PSD				

Worst Power Spectral Density Plots	
11b [Sum All Chains]	**11g [Sum All Chains]**
	
HT20 [Sum All Chains]	**HT40 [Sum All Chains]**
	

3.5 Transmitter Radiated Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit

Transmitter Radiated Bandedge Emissions Limit



3.5.2 Measuring Instruments

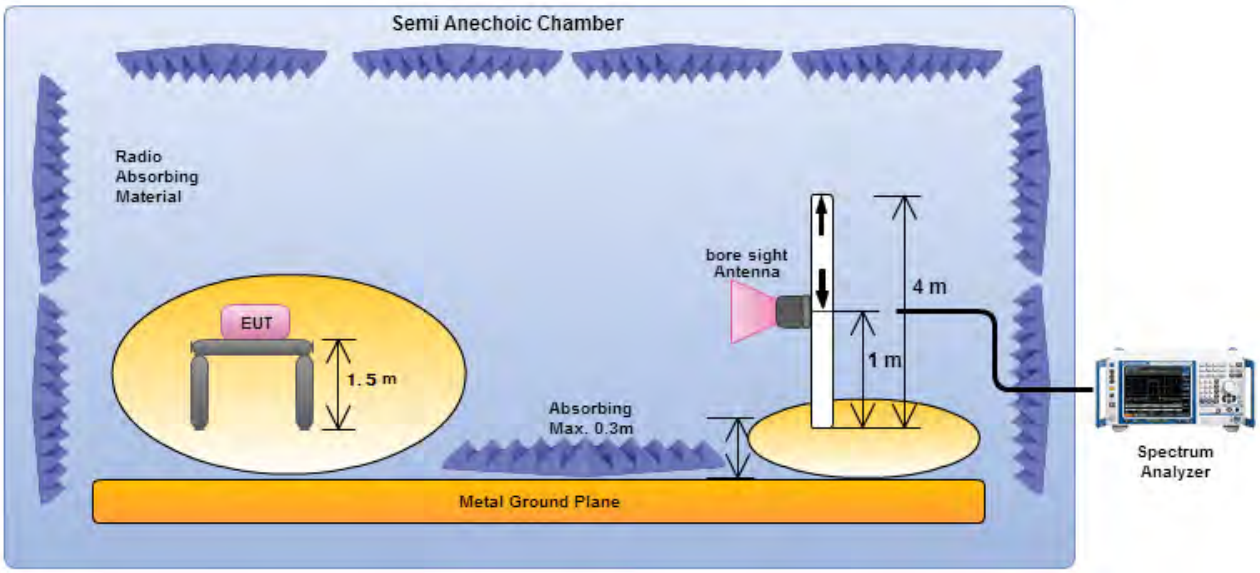
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method			
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
☒	Refer as ANSI C63.10, clause 6.10 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 FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.	
	☒	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.	
		☐	Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐	Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 11.3 and 12.2.4 measurement procedure peak limit.
☒	For the transmitter bandedge emissions shall be measured using following options below:		
	☐	Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).	
	☒	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 FCC KDB 558074, clause 12.2.7 and ANSI C63.10, clause 6.6. Test distance is 3m.		

3.5.4 Test Setup

Transmitter Radiated Bandedge Emissions



Electric field tests shall be performed in transmitter bandedge emissions using a calibrated horn antenna.

3.5.5 Test Result of Transmitter Radiated Bandedge Emissions

2400-2483.5MHz Transmitter Radiated Bandedge Emissions (Non-restricted Band)								
Modulation	**N_{TX}**	**Test Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Pol.**
11b	3	2412	110.14	2400.000	54.38	55.76	20	V
11b	3	2462	105.79	2527.800	51.29	54.50	20	V
11g	3	2412	106.91	2399.600	68.27	38.64	20	V
11g	3	2462	106.92	2507.800	53.05	53.87	20	V
HT20	3	2412	106.17	2389.860	59.80	46.37	20	V
HT20	3	2462	104.88	2501.664	53.57	51.31	20	V
HT40	3	2422	102.47	2394.480	63.66	38.81	20	V
HT40	3	2452	100.23	2533.520	54.11	46.12	20	V
Note 1: Measurement worst emissions of receive antenna polarization								

2400-2483.5MHz Transmitter Radiated Bandedge Emissions (Restricted Band)										
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Measure Distance (m)**	**Freq. (MHz) PK**	**Level (dBuV/m) PK**	**Limit (dBuV/m) PK**	**Freq. (MHz) AV**	**Level (dBuV/m) AV**	**Limit (dBuV/m) AV**	**Pol.**
11b	3	2412	3	2489.564	63.96	74	2490.048	52.82	54	V
11b	3	2462	3	2379.696	63.54	74	2390.180	52.60	54	V
11g	3	2412	3	2389.968	71.27	74	2389.968	52.32	54	V
11g	3	2462	3	2484.000	72.94	74	2483.500	52.71	54	V
HT20	3	2412	3	2389.860	65.98	74	2389.860	52.84	54	V
HT20	3	2462	3	2483.514	70.72	74	2483.514	52.40	54	V
HT40	3	2422	3	2385.240	68.63	74	2388.936	52.24	54	V
HT40	3	2452	3	2484.320	69.02	74	2483.600	52.51	54	V
Note 1: Measurement worst emissions of receive antenna polarization.										

3.6 Radiated Unwanted Emissions

3.6.1 Radiated Unwanted Emissions Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.6.2 Measuring Instruments

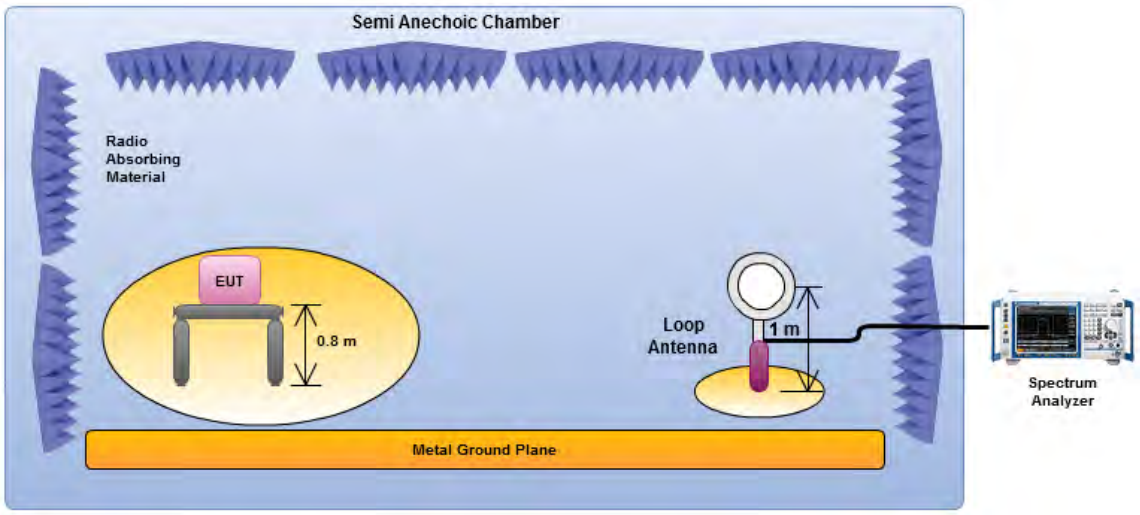
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method			
☒	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
☒	For the transmitter unwanted emissions shall be measured using following options below:		
	☒	Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.	
	☒	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.	
		☐	Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐	Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 11.3 and 12.2.4 measurement procedure peak limit.
		☒	Refer as FCC KDB 558074, clause 12.2.3 measurement procedure Quasi-Peak limit.
☒	For radiated measurement, refer as FCC KDB 558074, clause 12.2.7.		
	☒	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.		

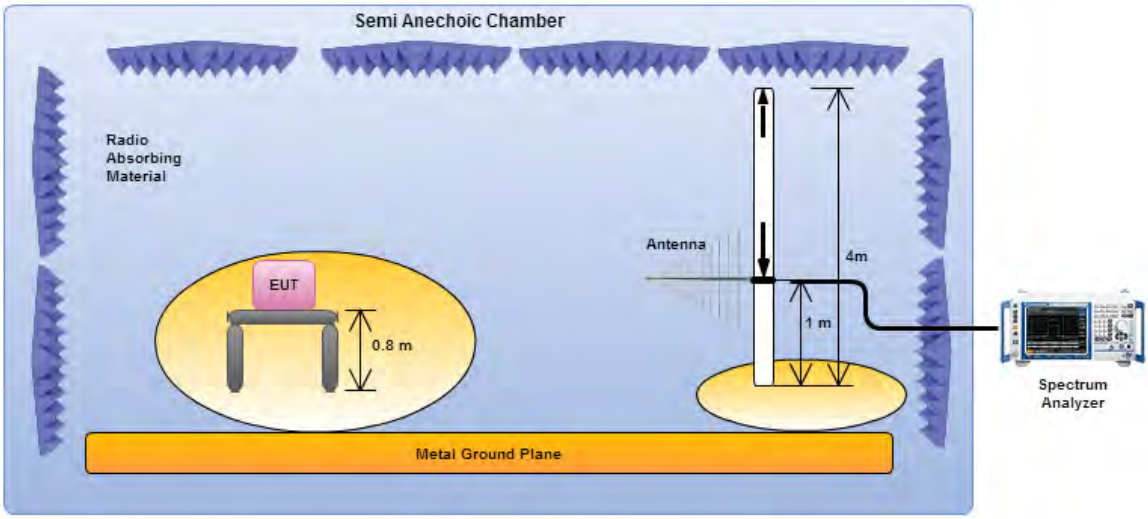
3.6.4 Test Setup

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



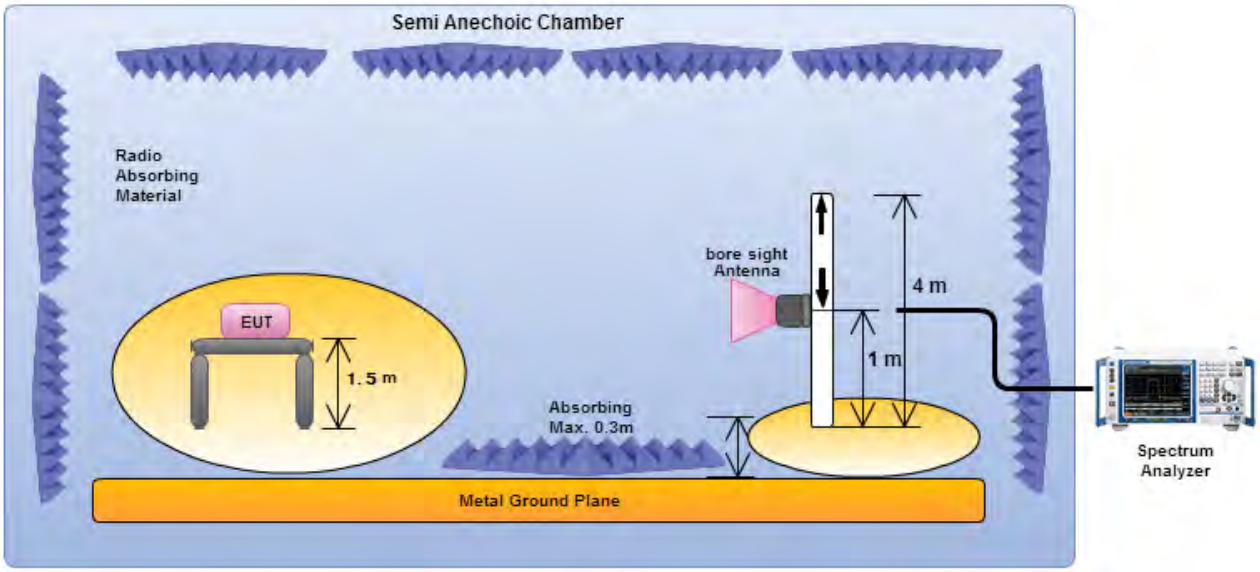
Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna.

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)



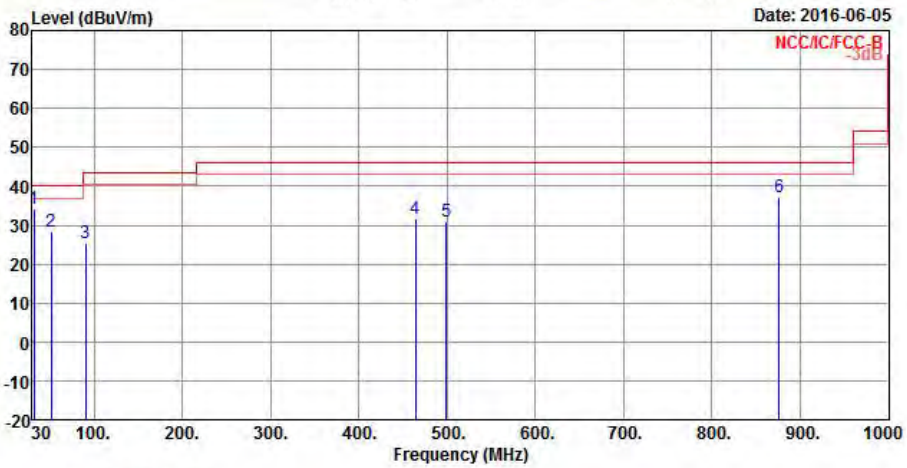
Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.6.5 Radiated Unwanted Emissions (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. Any spurious which has more than 20 dB of margin compared to the applicable limit is not necessarily reported.

3.6.6 Radiated Unwanted Emissions (Below 1GHz)

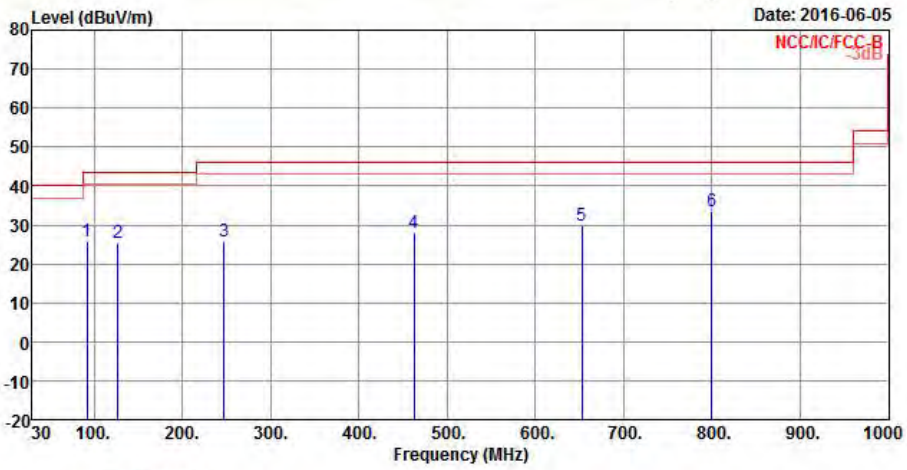
Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	1	**Polarization**	V
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	31.940	34.41	-5.59	40.00	36.75	24.41	0.80	27.55	QP
2	51.340	28.41	-11.59	40.00	40.42	14.45	1.04	27.50	Peak
3	90.140	25.36	-18.14	43.50	36.04	15.28	1.45	27.41	Peak
4	464.560	31.54	-14.46	46.00	32.33	23.18	3.44	27.41	Peak
5	499.480	31.05	-14.95	46.00	31.48	23.80	3.56	27.79	Peak
6	875.840	37.35	-8.65	46.00	32.76	27.35	4.82	27.58	Peak

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)

Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	1	**Polarization**	H
Operating Function	Adapter Mode		

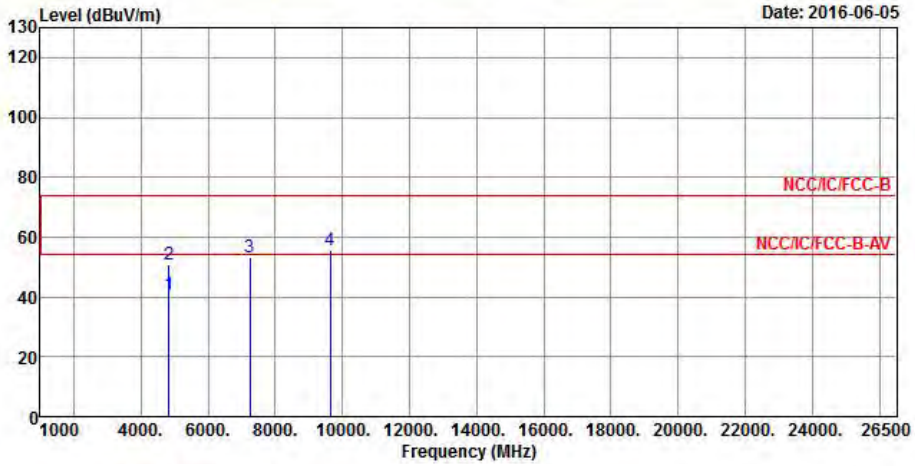


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	92.080	25.67	-17.83	43.50	35.93	15.68	1.47	27.41	Peak
2	127.000	25.21	-18.29	43.50	32.04	18.69	1.74	27.26	Peak
3	247.280	25.79	-20.21	46.00	31.52	18.64	2.45	26.82	Peak
4	462.620	28.15	-17.85	46.00	28.97	23.14	3.43	27.39	Peak
5	652.740	29.82	-16.18	46.00	28.17	25.36	4.26	27.97	Peak
6	800.180	33.36	-12.64	46.00	29.99	26.59	4.56	27.78	Peak

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)

3.6.7 Transmitter Radiated Unwanted Emissions (Above 1GHz)

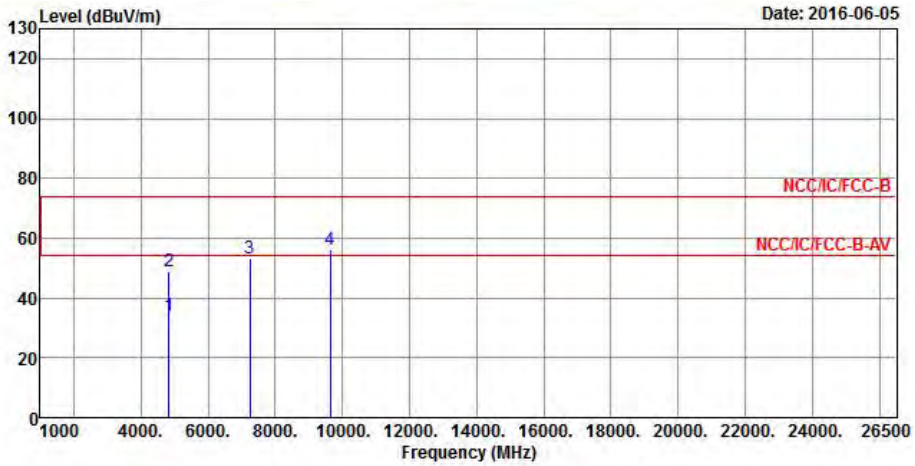
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2412
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	40.91	-13.09	54.00	35.95	33.06	4.44	32.54	Average
2	4824.000	50.86	-23.14	74.00	45.90	33.06	4.44	32.54	Peak
3	7236.000	53.22			44.66	35.83	5.51	32.78	Peak
4	9648.000	55.67			43.94	38.21	6.74	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (112.69 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

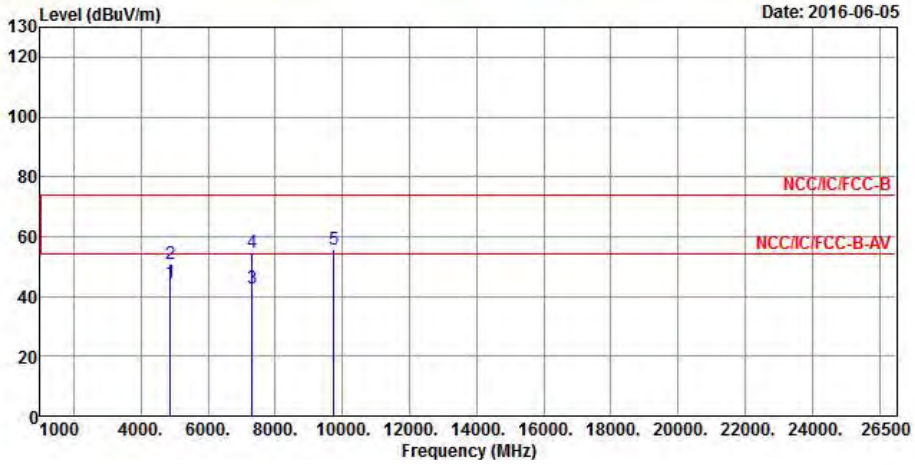
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2412
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	34.10	-19.90	54.00	29.14	33.06	4.44	32.54	Average
2	4824.000	48.80	-25.20	74.00	43.84	33.06	4.44	32.54	Peak
3	7236.000	53.06			44.50	35.83	5.51	32.78	Peak
4	9648.000	56.22			44.49	38.21	6.74	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (112.69 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

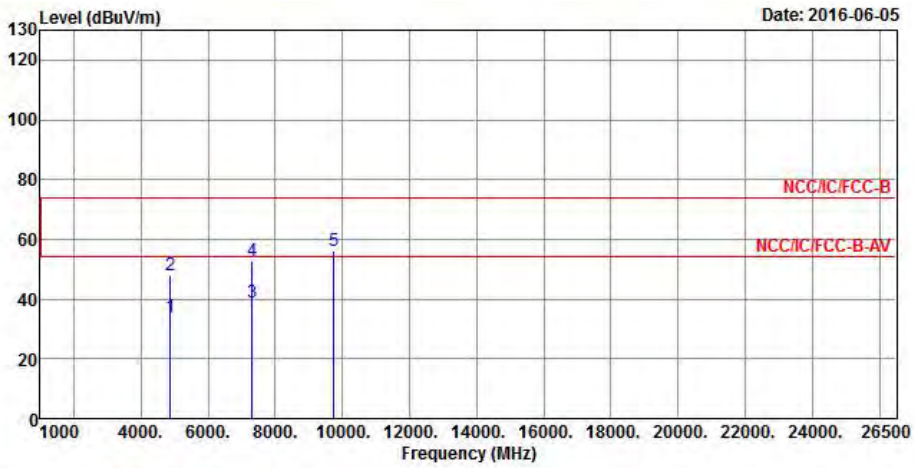
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	44.37	-9.63	54.00	39.27	33.16	4.47	32.53	Average
2	4874.000	50.92	-23.08	74.00	45.82	33.16	4.47	32.53	Peak
3	7311.000	42.48	-11.52	54.00	33.71	36.01	5.56	32.80	Average
4	7311.000	54.58	-19.42	74.00	45.81	36.01	5.56	32.80	Peak
5	9748.000	55.61			43.61	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (115.13 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

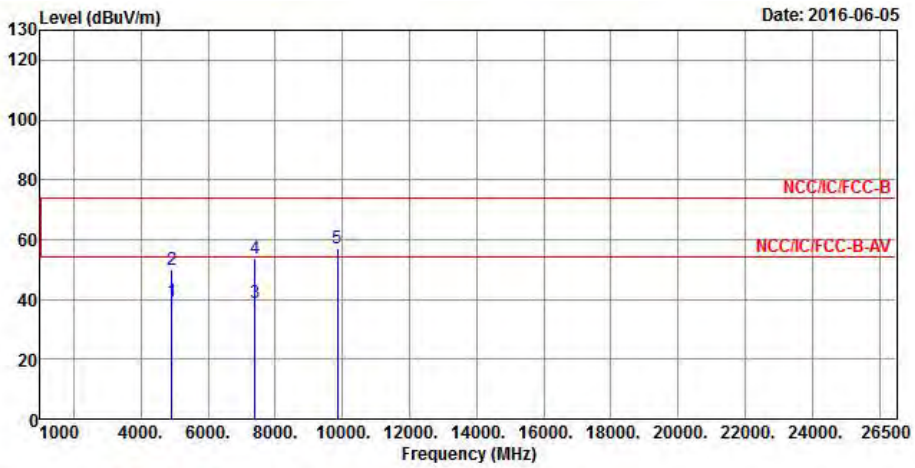
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	33.89	-20.11	54.00	28.79	33.16	4.47	32.53	Average
2	4874.000	47.74	-26.26	74.00	42.64	33.16	4.47	32.53	Peak
3	7311.000	38.74	-15.26	54.00	29.97	36.01	5.56	32.80	Average
4	7311.000	52.71	-21.29	74.00	43.94	36.01	5.56	32.80	Peak
5	9748.000	56.01			44.01	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (115.13 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

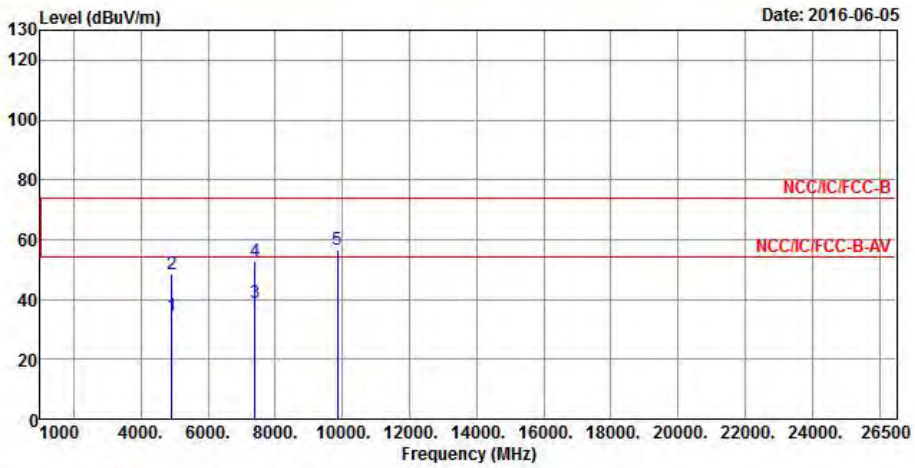
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2462
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	39.43	-14.57	54.00	34.17	33.26	4.52	32.52	Average
2	4924.000	49.70	-24.30	74.00	44.44	33.26	4.52	32.52	Peak
3	7386.000	38.76	-15.24	54.00	29.73	36.23	5.62	32.82	Average
4	7386.000	53.57	-20.43	74.00	44.54	36.23	5.62	32.82	Peak
5	9848.000	57.02			44.74	38.59	6.90	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (108.18 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

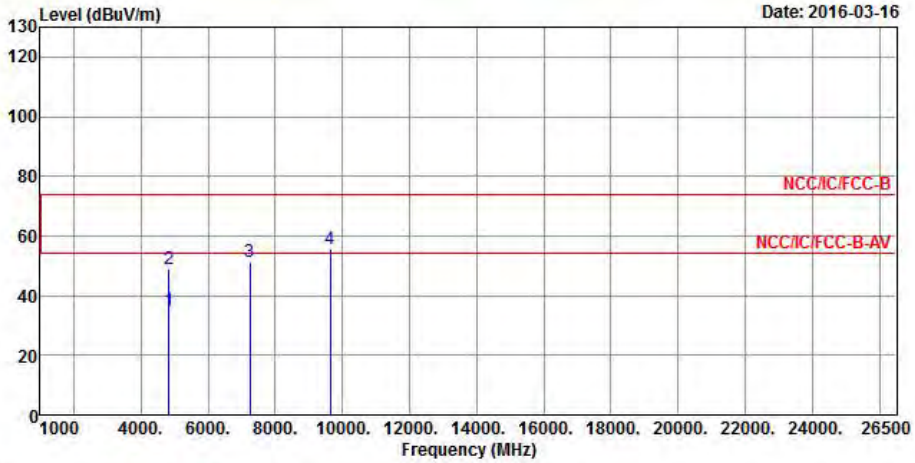
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2462
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	34.48	-19.52	54.00	29.22	33.26	4.52	32.52	Average
2	4924.000	48.49	-25.51	74.00	43.23	33.26	4.52	32.52	Peak
3	7386.000	38.64	-15.36	54.00	29.61	36.23	5.62	32.82	Average
4	7386.000	52.71	-21.29	74.00	43.68	36.23	5.62	32.82	Peak
5	9848.000	56.59			44.31	38.59	6.90	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (108.18 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

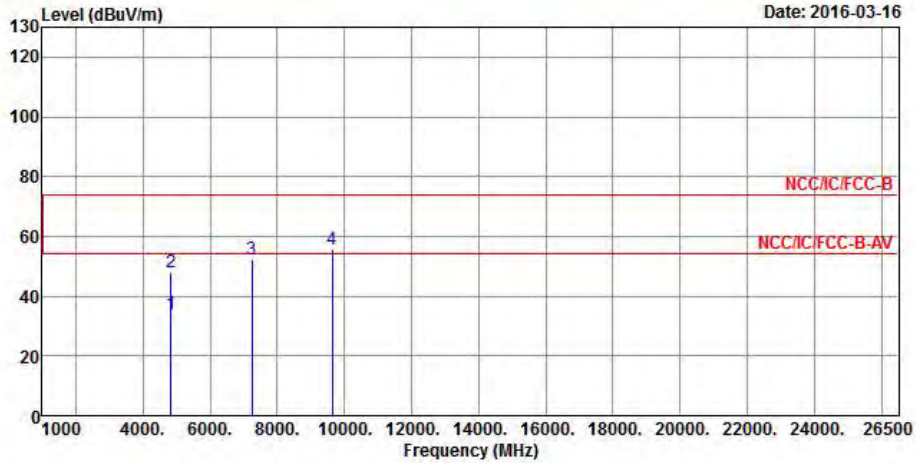
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2412
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	35.26	-18.74	54.00	30.30	33.06	4.44	32.54	Average
2	4824.000	48.99	-25.01	74.00	44.03	33.06	4.44	32.54	Peak
3	7236.000	51.47			42.91	35.83	5.51	32.78	Peak
4	9648.000	55.58			43.85	38.21	6.74	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (114.02 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

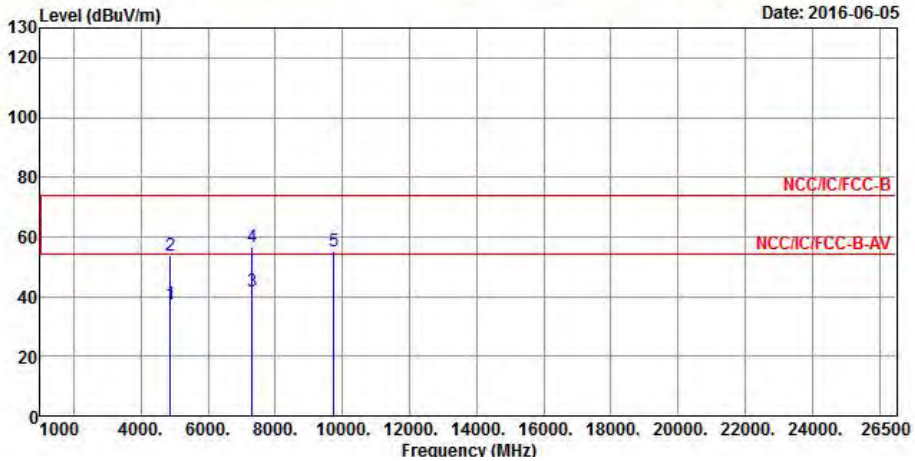
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2412
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	33.95	-20.05	54.00	28.99	33.06	4.44	32.54	Average
2	4824.000	48.01	-25.99	74.00	43.05	33.06	4.44	32.54	Peak
3	7236.000	52.06			43.50	35.83	5.51	32.78	Peak
4	9648.000	55.49			43.76	38.21	6.74	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (114.02 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

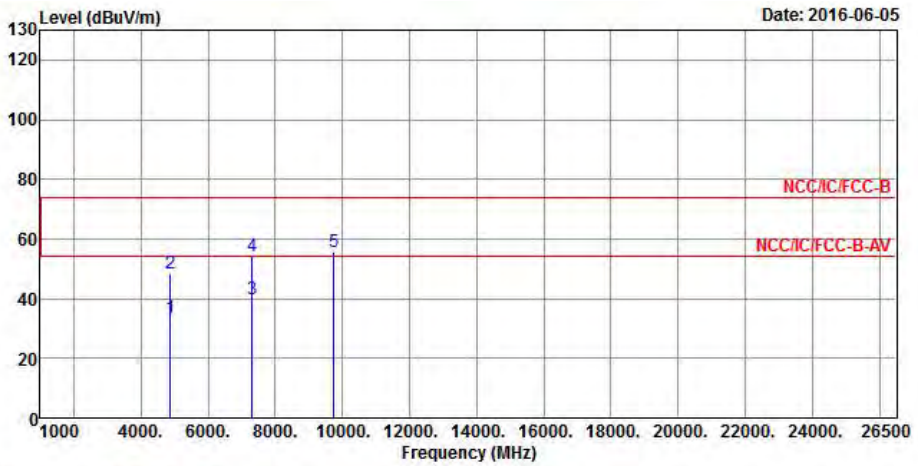
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	37.42	-16.58	54.00	32.32	33.16	4.47	32.53	Average
2	4874.000	53.57	-20.43	74.00	48.47	33.16	4.47	32.53	Peak
3	7311.000	41.51	-12.49	54.00	32.74	36.01	5.56	32.80	Average
4	7311.000	56.43	-17.57	74.00	47.66	36.01	5.56	32.80	Peak
5	9748.000	55.34			43.34	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (117.53 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

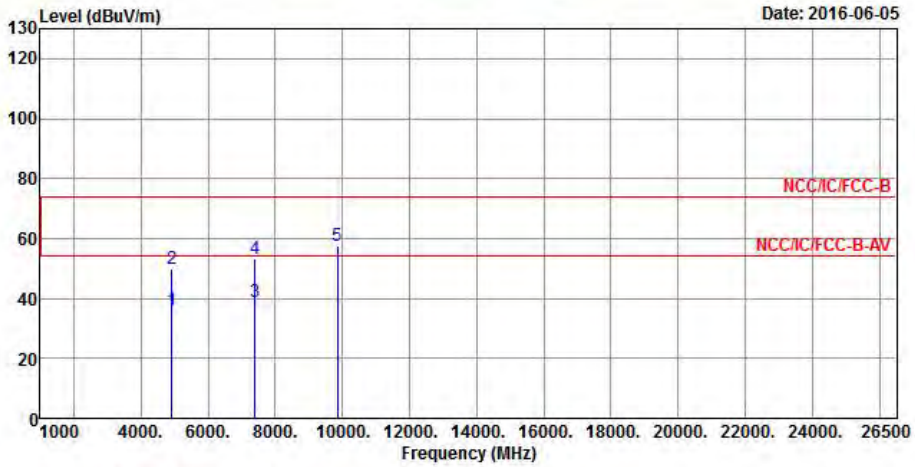
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	33.58	-20.42	54.00	28.48	33.16	4.47	32.53	Average
2	4874.000	48.26	-25.74	74.00	43.16	33.16	4.47	32.53	Peak
3	7311.000	39.96	-14.04	54.00	31.19	36.01	5.56	32.80	Average
4	7311.000	54.13	-19.87	74.00	45.36	36.01	5.56	32.80	Peak
5	9748.000	55.76			43.76	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (117.53 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

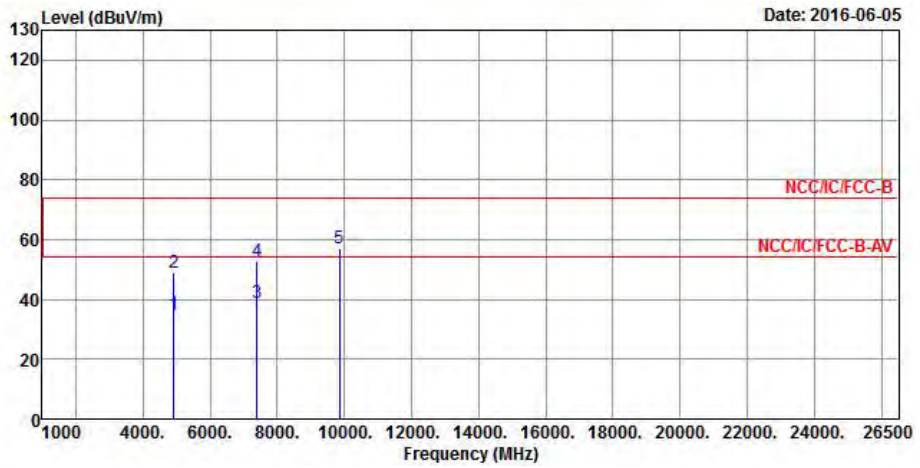
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2462
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	35.85	-18.15	54.00	30.59	33.26	4.52	32.52	Average
2	4924.000	49.76	-24.24	74.00	44.50	33.26	4.52	32.52	Peak
3	7386.000	38.80	-15.20	54.00	29.77	36.23	5.62	32.82	Average
4	7386.000	53.47	-20.53	74.00	44.44	36.23	5.62	32.82	Peak
5	9848.000	57.42			45.14	38.59	6.90	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (113.63 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

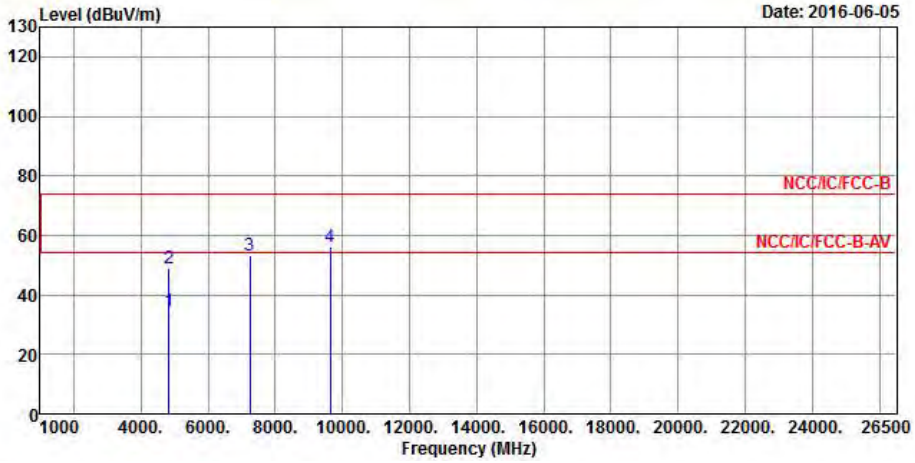
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2462
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	35.18	-18.82	54.00	29.92	33.26	4.52	32.52	Average
2	4924.000	48.97	-25.03	74.00	43.71	33.26	4.52	32.52	Peak
3	7386.000	38.70	-15.30	54.00	29.67	36.23	5.62	32.82	Average
4	7386.000	52.71	-21.29	74.00	43.68	36.23	5.62	32.82	Peak
5	9848.000	57.18			44.90	38.59	6.90	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (113.63 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

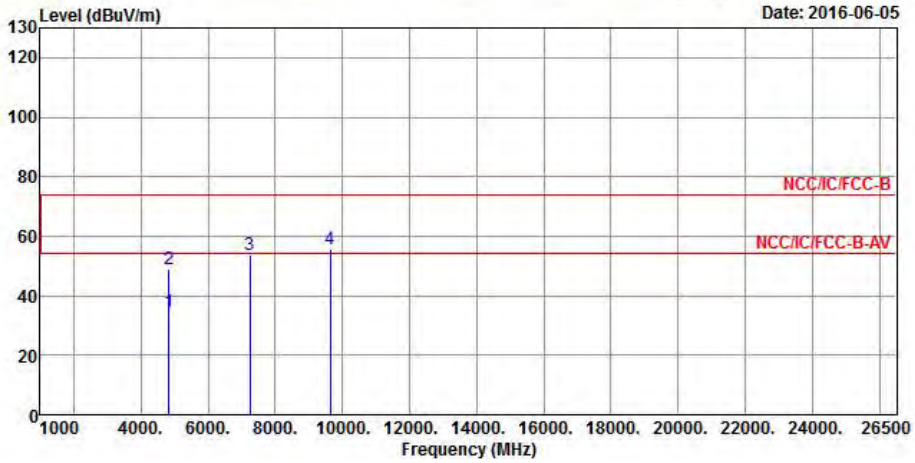
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2412
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	34.73	-19.27	54.00	29.77	33.06	4.44	32.54	Average
2	4824.000	48.91	-25.09	74.00	43.95	33.06	4.44	32.54	Peak
3	7236.000	53.14			44.58	35.83	5.51	32.78	Peak
4	9648.000	56.31			44.58	38.21	6.74	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (113.32 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

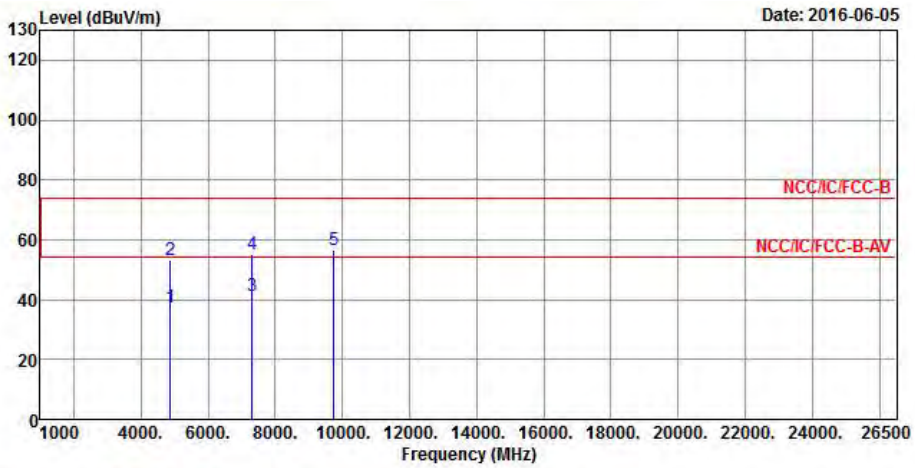
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2412
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	34.62	-19.38	54.00	29.66	33.06	4.44	32.54	Average
2	4824.000	48.83	-25.17	74.00	43.87	33.06	4.44	32.54	Peak
3	7236.000	53.80			45.24	35.83	5.51	32.78	Peak
4	9648.000	55.41			43.68	38.21	6.74	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (113.32 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

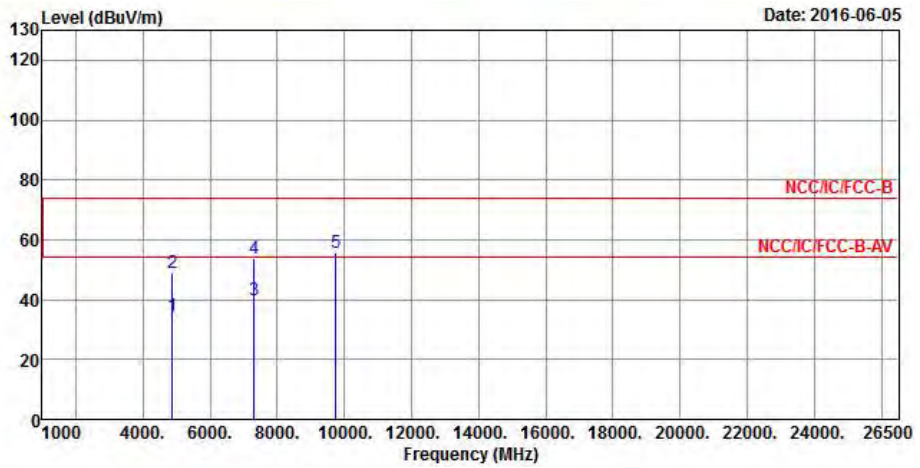
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	37.39	-16.61	54.00	32.29	33.16	4.47	32.53	Average
2	4874.000	53.21	-20.79	74.00	48.11	33.16	4.47	32.53	Peak
3	7311.000	41.28	-12.72	54.00	32.51	36.01	5.56	32.80	Average
4	7311.000	55.13	-18.87	74.00	46.36	36.01	5.56	32.80	Peak
5	9748.000	56.61			44.61	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (118.18 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

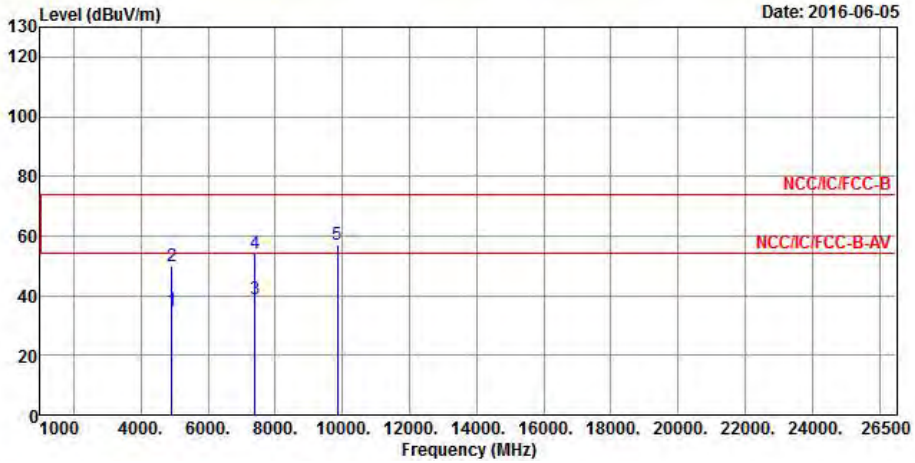
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	34.38	-19.62	54.00	29.28	33.16	4.47	32.53	Average
2	4874.000	48.69	-25.31	74.00	43.59	33.16	4.47	32.53	Peak
3	7311.000	39.75	-14.25	54.00	30.98	36.01	5.56	32.80	Average
4	7311.000	53.65	-20.35	74.00	44.88	36.01	5.56	32.80	Peak
5	9748.000	55.74			43.74	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (118.18 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

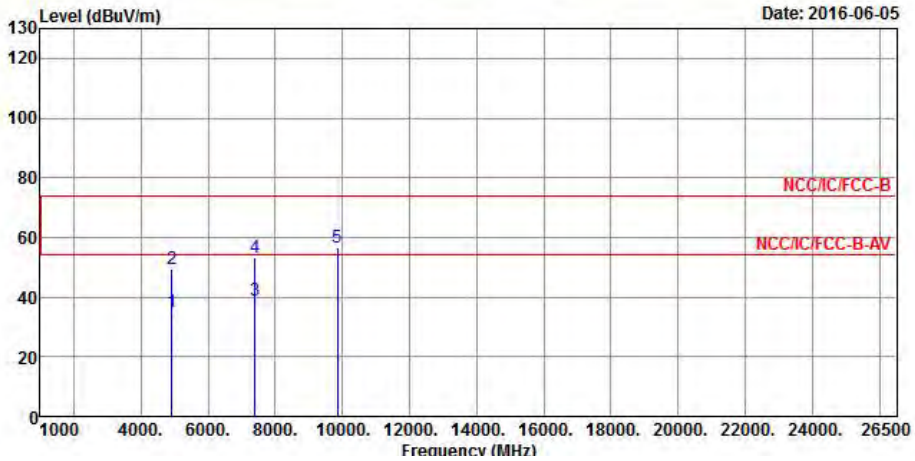
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2462
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	35.13	-18.87	54.00	29.87	33.26	4.52	32.52	Average
2	4924.000	49.94	-24.06	74.00	44.68	33.26	4.52	32.52	Peak
3	7386.000	38.89	-15.11	54.00	29.86	36.23	5.62	32.82	Average
4	7386.000	54.04	-19.96	74.00	45.01	36.23	5.62	32.82	Peak
5	9848.000	57.03			44.75	38.59	6.90	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (112.34 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

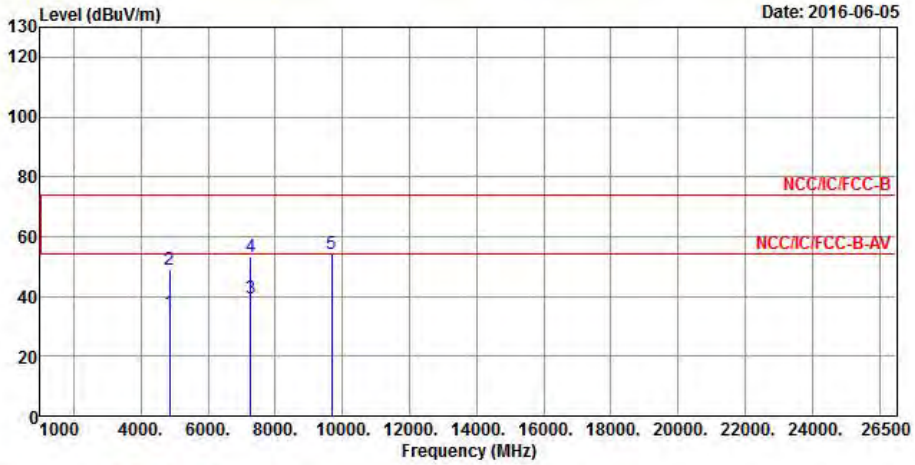
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2462
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	35.03	-18.97	54.00	29.77	33.26	4.52	32.52	Average
2	4924.000	49.61	-24.39	74.00	44.35	33.26	4.52	32.52	Peak
3	7386.000	38.95	-15.05	54.00	29.92	36.23	5.62	32.82	Average
4	7386.000	53.12	-20.88	74.00	44.09	36.23	5.62	32.82	Peak
5	9848.000	56.61			44.33	38.59	6.90	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (112.34 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

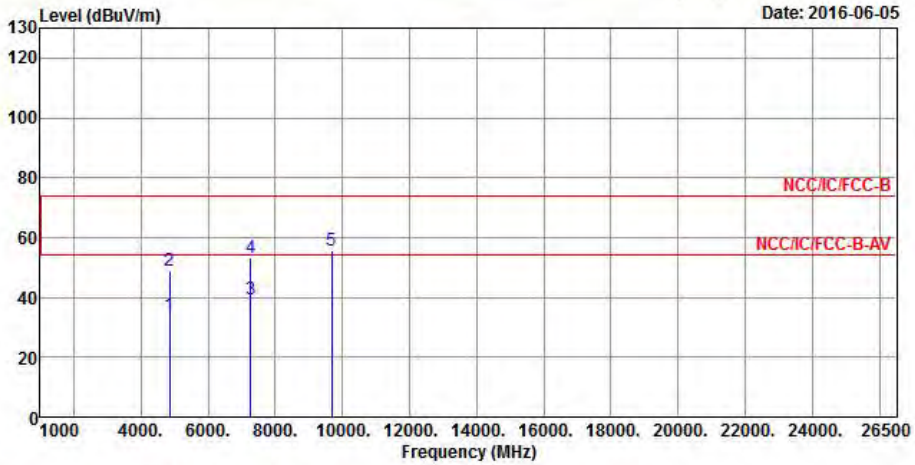
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2422
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4844.000	34.31	-19.69	54.00	29.29	33.09	4.47	32.54	Average
2	4844.000	49.09	-24.91	74.00	44.07	33.09	4.47	32.54	Peak
3	7266.000	39.25	-14.75	54.00	30.59	35.92	5.53	32.79	Average
4	7266.000	53.38	-20.62	74.00	44.72	35.92	5.53	32.79	Peak
5	9688.000	54.32			42.49	38.28	6.77	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (110.52 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

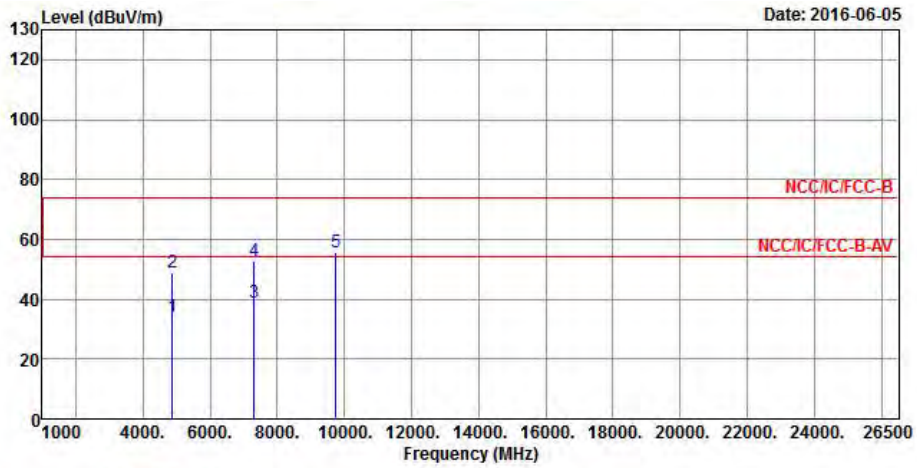
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2422
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4844.000	34.13	-19.87	54.00	29.11	33.09	4.47	32.54	Average
2	4844.000	48.82	-25.18	74.00	43.80	33.09	4.47	32.54	Peak
3	7266.000	39.26	-14.74	54.00	30.60	35.92	5.53	32.79	Average
4	7266.000	53.40	-20.60	74.00	44.74	35.92	5.53	32.79	Peak
5	9688.000	55.81			43.98	38.28	6.77	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (110.52 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

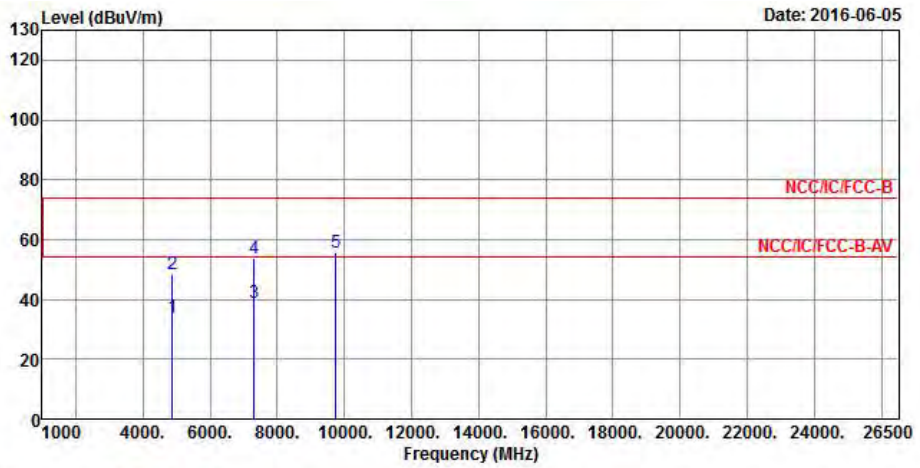
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	34.27	-19.73	54.00	29.17	33.16	4.47	32.53	Average
2	4874.000	48.72	-25.28	74.00	43.62	33.16	4.47	32.53	Peak
3	7311.000	39.00	-15.00	54.00	30.23	36.01	5.56	32.80	Average
4	7311.000	52.97	-21.03	74.00	44.20	36.01	5.56	32.80	Peak
5	9748.000	55.57			43.57	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (112.38 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

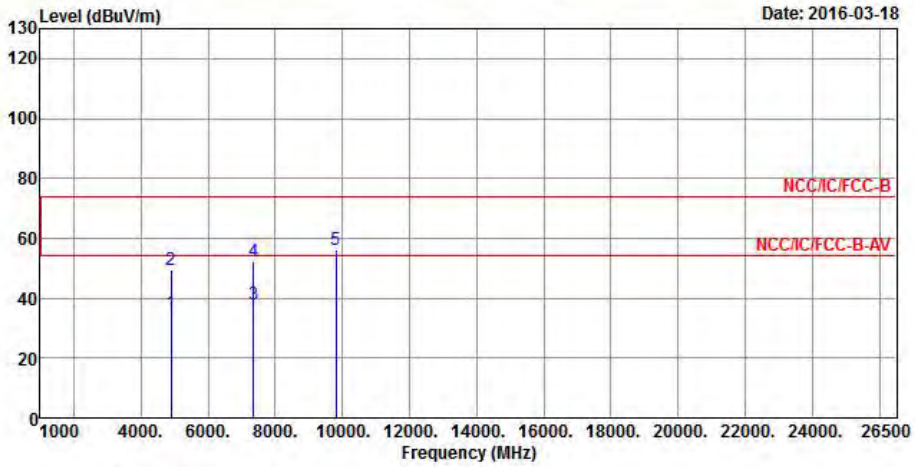
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2437
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	33.99	-20.01	54.00	28.89	33.16	4.47	32.53	Average
2	4874.000	48.26	-25.74	74.00	43.16	33.16	4.47	32.53	Peak
3	7311.000	38.96	-15.04	54.00	30.19	36.01	5.56	32.80	Average
4	7311.000	53.52	-20.48	74.00	44.75	36.01	5.56	32.80	Peak
5	9748.000	55.73			43.73	38.42	6.80	33.22	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (112.38 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

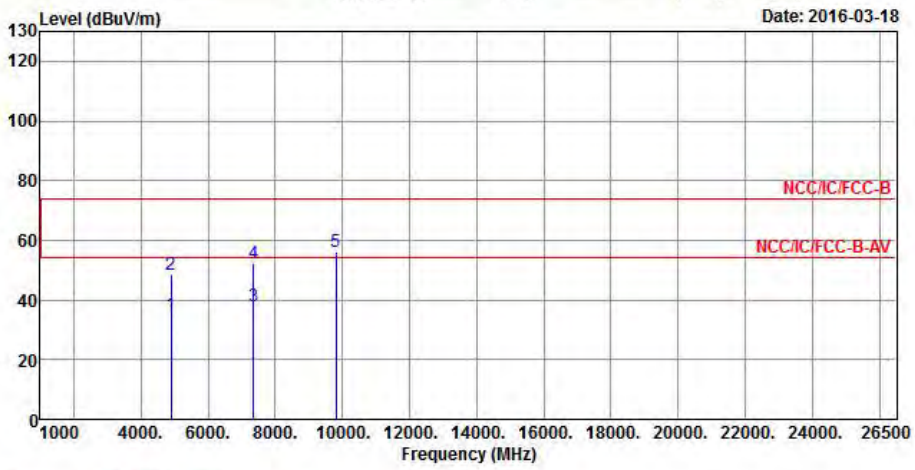
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2452
N_{TX}	3	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4904.000	34.98	-19.02	54.00	29.79	33.23	4.49	32.53	Average
2	4904.000	49.18	-24.82	74.00	43.99	33.23	4.49	32.53	Peak
3	7356.000	37.80	-16.20	54.00	28.88	36.14	5.59	32.81	Average
4	7356.000	52.38	-21.62	74.00	43.46	36.14	5.59	32.81	Peak
5	9808.000	56.03			43.85	38.52	6.87	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (109.30 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2452
N_{TX}	3	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4904.000	34.96	-19.04	54.00	29.77	33.23	4.49	32.53	Average
2	4904.000	48.44	-25.56	74.00	43.25	33.23	4.49	32.53	Peak
3	7356.000	37.89	-16.11	54.00	28.97	36.14	5.59	32.81	Average
4	7356.000	52.22	-21.78	74.00	43.30	36.14	5.59	32.81	Peak
5	9808.000	56.17			43.99	38.52	6.87	33.21	Peak

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: For restricted bands, 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 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level (109.30 dBuV/m).
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

4 Test Equipment and Calibration Data

< AC Conduction >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
EMC Receiver	KEYSIGHT	N9038A	MY54130031	20 Hz ~ 8.4 GHz	Apr. 14, 2016	Apr. 13, 2017
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9 kHz ~ 30 MHz	Jan. 26, 2016	Jan. 25, 2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9 kHz ~ 30 MHz	Oct. 30, 2015	Oct. 29, 2016
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	NCR	NCR

< RF Conducted >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9KHz~40GHz	Feb 16, 2016	Feb 15, 2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 28, 2015	Jul. 27, 2016
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	Feb. 04 ,2016	Feb. 03 ,2017
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	Feb. 04, 2016	Feb. 03, 2017

< Radiated Emission >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 28, 2015	Nov. 27, 2016
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	Dec. 16, 2015	Dec. 15, 2016
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 10, 2016	May 09, 2017
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 02, 2015	Sep. 01, 2016
Spectrum	R&S	FSV40	101513	9kHz ~ 40GHz	Feb. 16, 2016	Feb. 15, 2017
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 18, 2015	Sep. 17, 2016
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	Apr. 22, 2016	Apr. 21, 2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	Jan. 29, 2016	Jan. 28, 2017
Horn Antenna	ETS・LINDGREN	3115	6741	1GHz ~ 18GHz	Jul. 15, 2015	Jul. 14, 2016

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
Amplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	Jun. 02, 2015	Jun. 01, 2017
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Feb. 02.2015	Feb.01.2017