International Certification Corp.
No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.
Tel: 886-3-271-8666 Fax: 886-3-318-0155

FCC Test Report

FCC ID	:	**ACQ-VIP2502W**
Equipment	:	**VIP Matrix**
Model No.	:	**VIP2502W**
Brand Name	:	**ARRIS**
Applicant	:	**ARRIS Group, Inc.**
Address	:	**101 Tournament Drive, Horsham, Pennsylvania, United States, 19044, U.S.A.**
Manufacturer	:	**AMPAK TECHNOLOGY (SUZHOU) INC.**
Address	:	**NO.1, Zheng Wen Road. New & High Tech Industrial Park, Changshu Economic Development Zone , JiangSuProvince, 215500, P.R.C**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Jul. 23, 2013**
Tested Date	:	**Jul. 24 ~ Aug. 08, 2013**

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

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Release Record

Report No.	Version	Description	Issued Date
FR372301AN	Rev. 01	Initial issue	Sep. 13, 2013

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.172MHz 50.51 (Margin -4.35dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5350MHz ,5725MHz 53.00 (Margin -1.00dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Power [dBm]: 5150~5250 MHz: 16.62 5250~5350 MHz: 23.44 5470~5725 MHz: 23.56	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(a)	Peak Excursion	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725	a	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [8]	4	6-54 Mbps
5150-5250 5250-5350 5470-5725	n (HT20)	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [8]	4	MCS 0-31
5150-5250 5250-5350 5470-5725	n (HT40)	5190-5230 5270-5310 5510-5670	38-46 [2] 54-62 [2] 102-134 [3]	4	MCS 0-31
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. Note 3: HW version: V02, SW version: V01.03.09.					

1.1.2 Antenna Details

Ant. No.	Type	Operating Frequency (MHz) / Gain (dBi)				Connector
		5150~5250	5250~5350	5470~5725	5725~5850	
1	PCB	0.4	0.4	0.5	0.4	---
2	PCB	0.4	0.4	0.5	0.4	---
3	PCB	0.4	0.4	0.5	0.4	---
4	PCB	0.4	0.4	0.5	0.4	---

Note : Above antenna gain value is for single TX antenna. Correlated antenna gain is 6.42 dBi for 5150~5350 and 5725~5850 MHz and 6.52dBi for 5470~5725 MHz

1.1.3 EUT Operational Condition

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

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	Adapter 1	Brand Name: LITEON Model Name: PB-1180-1M01 Power Rating: I/P: 100-132Vac, 60Hz, 0.6A O/P: 12Vdc, 1.5A Power Line: 1.5m non-shielded cable w/o core
2	Adapter 2	Brand Name: APD Model Name: WB-18F12FU Power Rating: I/P: 120Vac, 60Hz, 0.6A O/P: 12Vdc, 1.5A Power Line: 1.5m non-shielded cable w/o core
3	Adapter 3	Brand Name: LEI Model Name: ML18-V120150-A1 Power Rating: I/P: 120Vac, 60Hz, 0.5A O/P: 12Vdc, 1.5A Power Line: 1.5m non-shielded cable w/o core
4	Adapter 4	Brand Name: DELTA Model Name: ADP-18AR-AA Power Rating: I/P: 110-120Vac, 57-63Hz, 0.8A O/P: 12Vdc, 1.5A Power Line: 1.5m non-shielded cable w/o core
5	Remote control 1	Brand: UEI, Model: 6250BC0-0001-R
6	Remote control 2	Brand: Ruwido, Model: 16685506
7	HDMI cable 1	Brand: Webb Wells, Model: HF1213, 1.8m shielded cable w/o core
8	HDMI cable 2	Brand: Webb Wells, Model: HF1257, 1.8m shielded cable w/o core
9	HDMI cable 3	Brand: Wieson, Model: G9856HT490-094, 1.8m shielded cable with 2 cores
10	HDMI cable 4	Brand: Interconnect, Model: 18-94H1CS-054, 1.8m shielded cable w/o core
11	Ethernet	Model: 2CB-3703P043L, 3m non-shielded cable w/o core

NOTE: HDMI cable 1 & HDMI cable 2 are the same, different model names are for marketing purpose.

1.1.5 Channel List

Frequency band (MHz)		5150~5725	
802.11 a / n HT20		802.11n HT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	134	5670
64	5320	---	---
100	5500	---	---
104	5520	---	---
108	5540	---	---
112	5560	---	---
116	5580	---	---
132	5660	---	---
136	5680	---	---
140	5700	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	Hyperterminal V5.1
Duty Cycle Of Test Signal (%)	99.20% - IEEE 802.11a 99.14% - IEEE 802.11n (HT20) 98.59% - IEEE 802.11n (HT40)
Duty Factor	0.03 - IEEE 802.11a 0.04 - IEEE 802.11n (HT20) 0.06 - IEEE 802.11n (HT40)

1.1.7 Power Setting

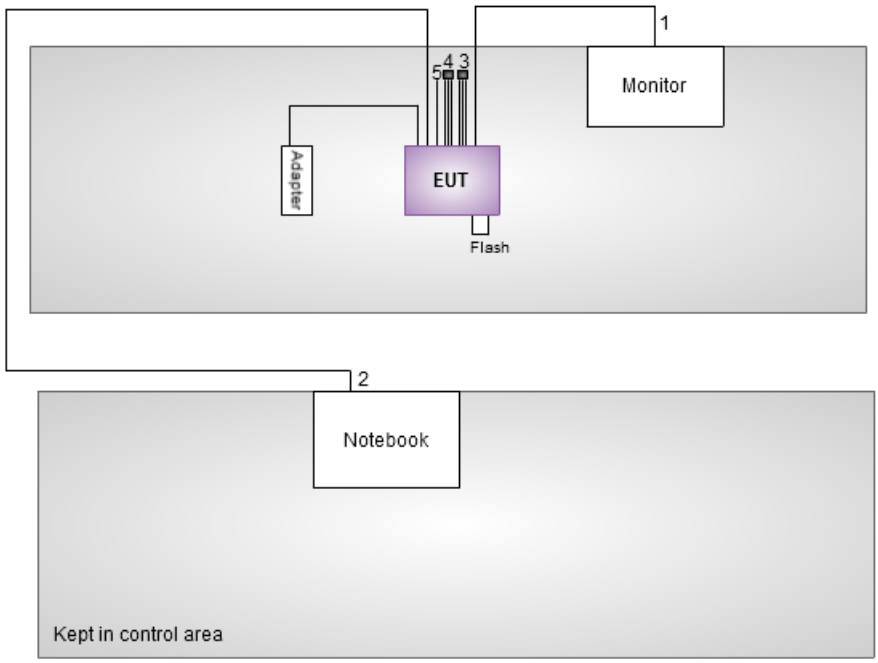
Channel	Frequency(MHz)	Modulation Mode		
		11a	HT20	HT40
CH 36	5180	10	10	---
CH 40	5200	10	10	---
CH 48	5240	10	10	---
CH 52	5260	17	17	---
CH 60	5300	17	17	---
CH 64	5320	16	16	---
CH 100	5500	16	16	---
CH 116	5580	17	17	---
CH 140	5700	16	16	---
CH 38	5190	---	---	11
CH 46	5230	---	---	10
CH 54	5270	---	---	17
CH 62	5310	---	---	14
CH 102	5510	---	---	11
CH 110	5550	---	---	17
CH 134	5670	---	---	17

1.2 Local Support Equipment List

Support Equipment List						
No.	Equipment	Brand	Model	S/N	FCC ID	Signal cable / Length (m)
1	Notebook	DELL	E6430	---	DoC	HDMI, 1.8m shielded
2	Monitor	DELL	U2410f	---	DoC	RJ45, 10m non-shielded
3	Dongle	Transcend	JetFlash V85	---	---	---

1.3 Test Setup Chart

Test Setup Diagram



1. HDMI, 1.8m shielded
2. RJ45, 10m non-shielded
3. RCA, 1m non-shielded with load
4. YPbPr, 1m non-shielded with load
5. Fiber, 1.5m non-shielded

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC Receiver	R&S	ESCS 30	100169	Oct. 02, 2012	Oct. 01, 2013
LISN	SCHWARZBECK MESS-ELEKTRONIK	Schwarzbeck 8127	8127-667	Dec. 04, 2012	Dec. 03, 2013
LISN (Support Unit)	SCHWARZBECK MESS-ELEKTRONIK	Schwarzbeck 8127	8127-666	Dec. 04, 2012	Dec. 03, 2013
ISN	TESEQ	ISN T800	34406	Apr. 08, 2013	Apr. 07, 2014
ISN	TESEQ	ISN T200A	30494	Apr. 09, 2013	Apr. 08, 2014
ISN	TESEQ	ISN T8-Cat6	27262	Sep. 17, 2012	Sep. 16, 2013
ISN	TESEQ	ISN ST08	22589	Jan. 24, 2013	Jan. 23, 2014
RF Current Probe	FCC	F-33-4	121630	Dec. 04, 2012	Dec. 03, 2013
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Dec. 25, 2012	Dec. 24, 2013
ESH3-Z6 V-Network(+)	R&S	ESH3-Z6	100920	Nov. 21, 2012	Nov. 20, 2013
ESH3-Z6 V-Network(-)	R&S	ESH3-Z6	100951	Jan. 30, 2013	Jan. 29, 2014
Two-Line V-Network	R&S	ENV216	101579	Jan. 07, 2013	Jan. 06, 2014
50 ohm terminal	NA	50	01	Apr. 22, 2013	Apr. 21, 2014
50 ohm terminal	NA	50	02	Apr. 22, 2013	Apr. 21, 2014
50 ohm terminal	NA	50	03	Apr. 22, 2013	Apr. 21, 2014
50 ohm terminal (Support Unit)	NA	50	04	Apr. 22, 2013	Apr. 21, 2014
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
3m semi-anechoic chamber	CHAMPRO	SAC-03	03CH01-WS	Jan. 04, 2013	Jan. 03, 2014
Spectrum Analyzer	R&S	FSV40	101498	Jan. 24, 2013	Jan. 23, 2014
Receiver	ROHDE&SCHWARZ	ESR3	101658	Jan. 28, 2013	Jan. 27, 2014
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jan. 11, 2013	Jan. 10, 2014
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Feb. 18, 2013	Feb. 17, 2014
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Jan. 14, 2013	Jan. 13, 2014
Amplifier	Burgeon	BPA-530	100219	Nov. 28, 2012	Nov. 27, 2013
Amplifier	Agilent	83017A	MY39501308	Dec. 18, 2012	Dec. 17, 2013
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 25, 2012	Dec. 24, 2013
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 25, 2012	Dec. 24, 2013
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 25, 2012	Dec. 24, 2013

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
RF Cable-R03m	Woken	CFD400NL-LW	CFD400NL-001	Dec. 25, 2012	Dec. 24, 2013
RF Cable-R10m	Woken	CFD400NL-LW	CFD400NL-002	Dec. 25, 2012	Dec. 24, 2013
control	EM Electronics	EM1000	60612	N/A	N/A
Note: Calibration Interval of instruments listed above is one year.					

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Amplifier	MITEQ	AMF-6F-260400	9121372	Apr. 19, 2013	Apr. 18, 2015
Note: Calibration Interval of instruments listed above is two year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV 40	101063	Feb. 18, 2013	Feb. 17, 2014
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 29, 2012	Nov. 28, 2013
Power Meter	Anritsu	ML2495A	1241002	Oct. 15, 2012	Oct. 14, 2013
Power Sensor	Anritsu	MA2411B	1027366	Oct. 24, 2012	Oct. 23, 2013
Signal Generator	R&S	SMB100A	175727	Jan. 14, 2013	Jan. 13, 2014
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.407
ANSI C63.10-2009
FCC KDB 412172
FCC KDB 789033 D01 General UNII Test procedures v01r03
FCC KDB 662911 D01 Multiple Transmitter Output v02

Note: The EUT has been tested and complied with FCC part 15B requirement. FCC Part 15B test results are issued to another report.

1.6 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	
Parameters	**Uncertainty**
Bandwidth	±74.147 Hz
Conducted power	±0.717 dB
Power density	±2.687 dB
Frequency error	±74.147 Hz
Temperature	±0.3 °C
AC conducted emission	±2.43 dB
Radiated emission	±2.49 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 69%	Skys Huang
Radiated Emissions	03CH01-WS	24°C / 66%	Haru Yang Aska Huang
RF Conducted	TH01-WS	22°C / 65%	Felix Sung

- FCC site registration No.: 657002
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data rate (Mbps)	Test Configuration
Conducted Emissions	HT20	5580	MCS 0	---
Radiated Emissions (below 1GHz)	HT20	5580	MCS 0	---
Radiated Emissions >1GHz RF Output Power Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6	---
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	---
	HT40	5190 / 5230/ 5270 / 5310 / 5510 5550 / 5670	MCS 0	---
Peak Excursion	11a	5240 / 5300 / 5580	6	---
	HT20	5180 / 5260 / 5580	MCS 0	---
	HT40	5190 / 5270 / 5550	MCS 0	---
Frequency Stability	Un-modulation	5320	---	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.
2. Adapter 1, 2, 3, 4 and HDMI cable 1, 3, 4 had been covered during the pretest. The worst cases were found at adapter 4 and HDMI cable 1. Therefore, only the data was recorded in this report.

3 Transmitter Test Results

3.1 Conducted Emissions

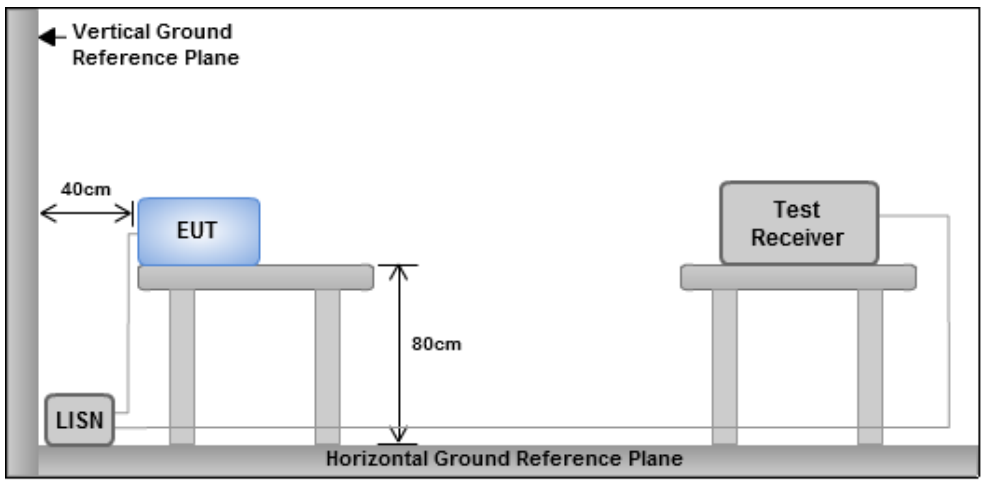
3.1.1 Limit of Conducted Emissions

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 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

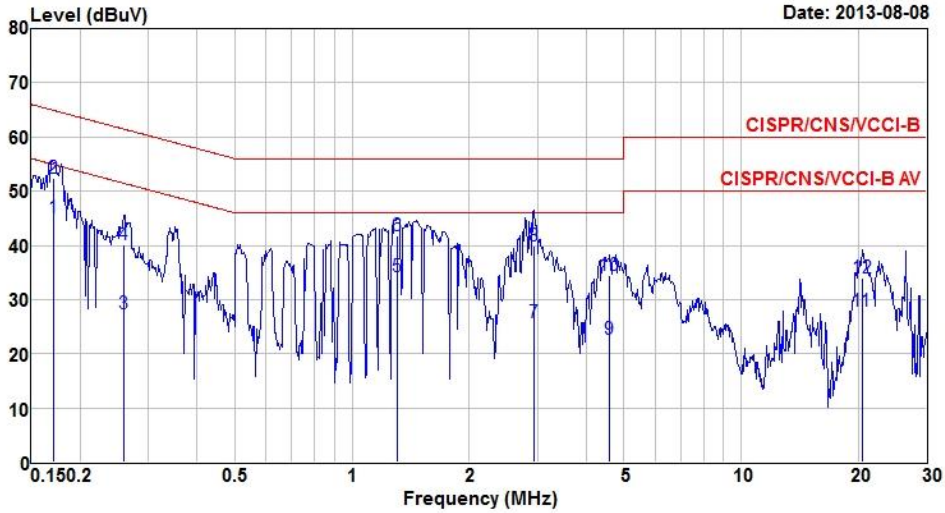
3.1.3 Test Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

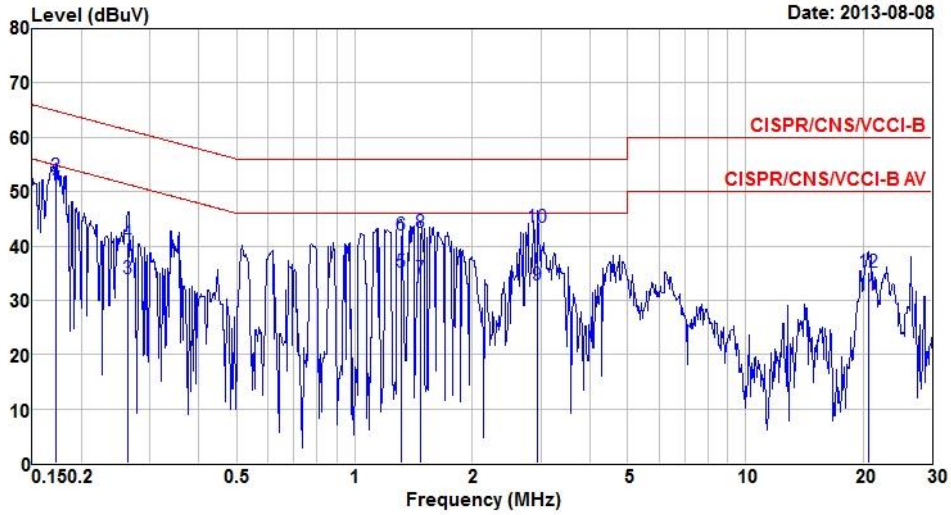
Power Phase	Line	Test Freq. (MHz)	5580



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.170	45.15	54.94	-9.79	44.99	0.05	0.11	Average
2	0.170	52.38	64.94	-12.56	52.22	0.05	0.11	QP
3	0.259	27.47	51.47	-24.00	27.29	0.05	0.13	Average
4	0.259	40.10	61.47	-21.37	39.92	0.05	0.13	QP
5	1.303	34.11	46.00	-11.89	33.85	0.17	0.09	Average
6	1.303	41.67	56.00	-14.33	41.41	0.17	0.09	QP
7	2.946	25.82	46.00	-20.18	25.43	0.19	0.20	Average
8	2.946	39.83	56.00	-16.17	39.44	0.19	0.20	QP
9	4.598	22.62	46.00	-23.38	22.21	0.19	0.22	Average
10	4.598	34.37	56.00	-21.63	33.96	0.19	0.22	QP
11	20.486	27.89	50.00	-22.11	26.06	1.61	0.22	Average
12	20.486	34.03	60.00	-25.97	32.20	1.61	0.22	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dBuV) = Limit Line (dBuV) – Level (dBuV).

Power Phase	Neutral	Test Freq. (MHz)	5580



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.172	50.51	54.86	-4.35	50.35	0.04	0.12	Average
2	0.172	52.96	64.86	-11.90	52.80	0.04	0.12	QP
3	0.263	34.07	51.34	-17.27	33.89	0.05	0.13	Average
4	0.263	40.54	61.34	-20.80	40.36	0.05	0.13	QP
5	1.317	35.14	46.00	-10.86	34.89	0.16	0.09	Average
6	1.317	41.97	56.00	-14.03	41.72	0.16	0.09	QP
7	1.472	34.05	46.00	-11.95	33.77	0.17	0.11	Average
8	1.472	42.46	56.00	-13.54	42.18	0.17	0.11	QP
9	2.946	32.74	46.00	-13.26	32.37	0.17	0.20	Average
10	2.946	43.53	56.00	-12.47	43.16	0.17	0.20	QP
11	20.594	30.93	50.00	-19.07	29.05	1.65	0.23	Average
12	20.594	35.22	60.00	-24.78	33.34	1.65	0.23	QP

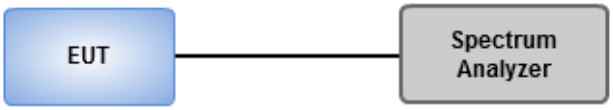
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dBuV) = Limit Line (dBuV) – Level (dBuV).

3.2 Emission Bandwidth

3.2.1 Test Procedures

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW, Detector = Peak.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

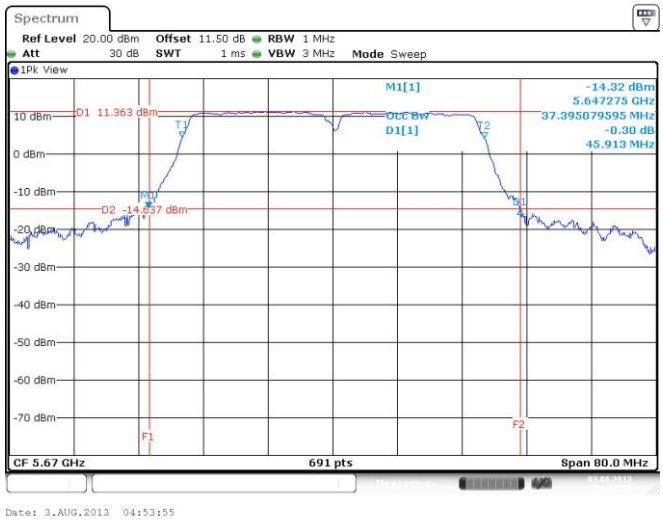
3.2.2 Test Setup



3.2.3 Test Result of Emission Bandwidth

Modulation Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	26dB BW	99% BW
11a	4	5180	26.49	25.04	25.68	24.99	17.42	17.25	17.37	17.13	17.00	16.34
11a	4	5200	27.13	24.70	26.61	25.45	17.60	17.19	17.48	17.19	17.00	16.35
11a	4	5240	26.32	24.99	26.09	25.86	17.42	17.25	17.42	17.19	17.00	16.35
11a	4	5260	26.32	25.45	25.91	25.39	17.37	17.25	17.42	17.19	24.00	23.35
11a	4	5300	26.38	25.39	26.09	25.51	17.37	17.25	17.37	17.19	24.00	23.35
11a	4	5320	26.49	25.57	25.91	25.28	17.31	17.19	17.37	17.19	24.00	23.35
11a	4	5500	26.09	24.87	26.67	25.57	17.31	17.25	17.37	17.19	24.00	23.35
11a	4	5580	26.03	25.16	25.39	25.28	17.31	17.19	17.25	17.19	24.00	23.35
11a	4	5700	25.45	24.64	25.86	25.57	17.31	17.02	17.37	17.19	24.00	23.31
HT20	4	5180	26.96	27.83	26.14	26.32	18.41	18.64	18.29	18.18	17.00	16.60
HT20	4	5200	27.48	28.06	25.86	26.38	18.29	18.52	18.29	18.18	17.00	16.60
HT20	4	5240	27.13	28.00	25.86	26.14	18.29	18.58	18.35	18.18	17.00	16.60
HT20	4	5260	27.54	28.64	25.80	26.38	18.29	18.58	18.23	18.18	24.00	23.60
HT20	4	5300	27.19	28.81	25.74	25.68	18.35	18.58	18.12	18.18	24.00	23.58
HT20	4	5320	27.30	28.00	25.22	26.49	18.23	18.58	18.18	18.18	24.00	23.60
HT20	4	5500	26.61	27.19	25.57	26.32	18.23	18.58	18.18	18.23	24.00	23.60
HT20	4	5580	26.90	27.30	25.57	26.09	18.23	18.58	18.12	18.18	24.00	23.58
HT20	4	5700	26.90	27.07	25.80	26.26	18.23	18.41	18.18	18.18	24.00	23.60
HT40	4	5190	44.06	44.29	43.83	43.83	36.93	37.28	36.93	36.70	17.00	17.00
HT40	4	5230	43.83	44.29	43.71	44.06	36.93	37.28	36.82	36.70	17.00	17.00
HT40	4	5270	44.64	44.87	43.71	44.64	36.82	37.16	37.28	36.58	24.00	24.00
HT40	4	5310	43.94	44.17	43.83	44.06	36.82	37.16	37.28	36.58	24.00	24.00
HT40	4	5510	43.94	44.41	43.94	44.06	36.82	37.28	37.16	36.70	24.00	24.00
HT40	4	5550	44.87	44.99	44.87	44.87	36.93	37.40	37.16	36.82	24.00	24.00
HT40	4	5670	45.57	45.91	44.64	45.33	37.05	37.40	37.28	36.82	24.00	24.00

Worst Plots


Spectrum
Ref Level 20.00 dBm Offset 11.50 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Sweep
1Pk View
M1[1] -14.32 dBm
5.647275 GHz
OLC BW 37.395079595 MHz
D1[1] -0.30 dB
45.913 MHz
D1 11.363 dBm
D2 -14.637 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 5.67 GHz
691 pts
Span 80.0 MHz
Date: 3.AUG.2013 04:53:55

3.3 RF Output Power

3.3.1 Limit of RF Output Power

	Frequency Band (GHz)	Limit
☒	5.15~5.25	50mW or 4dBm+10 log B
☒	5.25~5.35	250mW or 11dBm+10 log B
☒	5.47~5.725	250mW or 11dBm+10 log B
Note: "B" is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

☒ **Method PM-G (Measurement using a gated RF average power meter)**

☒ Measurements may is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

Modulation Mode	N_{TX}	Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	4	5180	10.24	10.68	9.58	9.93	41.181	16.15	17
11a	4	5200	10.38	10.79	9.49	10.09	42.011	16.23	17
11a	4	5240	10.62	10.91	9.29	10.02	42.404	16.27	17
11a	4	5260	17.39	17.56	16.74	17.44	214.513	23.31	24
11a	4	5300	17.36	17.54	17.09	17.66	220.717	23.44	24
11a	4	5320	16.15	16.94	16.04	16.32	173.675	22.40	24
11a	4	5500	16.16	16.79	16.36	16.76	179.733	22.55	24
11a	4	5580	17.35	17.93	17.01	17.71	225.666	23.53	24
11a	4	5700	16.12	16.82	16.51	16.44	177.837	22.50	24
HT20	4	5180	10.18	10.97	9.55	10.12	42.222	16.26	17
HT20	4	5200	10.29	10.95	9.51	10.18	42.492	16.28	17
HT20	4	5240	10.68	10.93	9.74	10.28	44.168	16.45	17
HT20	4	5260	17.02	17.82	16.78	17.34	212.727	23.28	24
HT20	4	5300	16.89	17.62	17.02	17.45	212.615	23.28	24
HT20	4	5320	16.48	17.11	16.01	16.28	178.232	22.51	24
HT20	4	5500	16.18	16.81	16.24	16.53	176.519	22.47	24
HT20	4	5580	17.36	17.86	17.15	17.75	226.991	23.56	24
HT20	4	5700	15.95	16.73	16.34	16.51	174.277	22.41	24
HT40	4	5190	10.71	10.99	10.12	10.52	45.888	16.62	17
HT40	4	5230	10.35	10.98	9.13	10.04	41.648	16.20	17
HT40	4	5270	17.09	17.61	16.57	17.10	205.525	23.13	24
HT40	4	5310	13.86	14.18	13.22	14.23	97.978	19.91	24
HT40	4	5510	10.86	11.66	10.96	11.11	52.231	17.18	24
HT40	4	5550	17.01	17.39	17.04	17.22	208.367	23.19	24
HT40	4	5670	16.94	17.38	17.06	17.26	208.159	23.18	24

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

	Frequency Band (GHz)	Limit (dBm)
☒	5.15~5.25	4
☒	5.25~5.35	11
☒	5.47~5.725	11

3.4.2 Test Procedures

☒ Method SA-1

1. Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

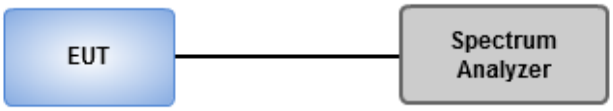
☐ Method SA-2

1. Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average at 100 traces
3. Use the peak marker function to determine the maximum amplitude level.
4. Add 10 log(1/x), where x is the duty cycle

☐ Method SA-2 Alternative

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

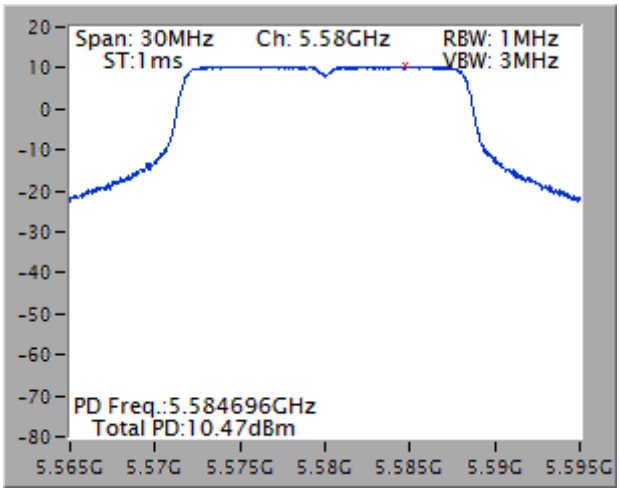
3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Modulation Mode	N_{TX}	Freq. (MHz)	PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)
11a	4	5180	3.18	0	3.18	3.58
11a	4	5200	3.31	0	3.31	3.58
11a	4	5240	3.37	0	3.37	3.58
11a	4	5260	10.08	0	10.08	10.58
11a	4	5300	10.38	0	10.38	10.58
11a	4	5320	9.59	0	9.59	10.58
11a	4	5500	9.67	0	9.67	10.48
11a	4	5580	10.47	0	10.47	10.48
11a	4	5700	9.58	0	9.58	10.48
HT20	4	5180	3.08	0	3.08	3.58
HT20	4	5200	3.16	0	3.16	3.58
HT20	4	5240	3.20	0	3.20	3.58
HT20	4	5260	9.96	0	9.96	10.58
HT20	4	5300	10.29	0	10.29	10.58
HT20	4	5320	9.38	0	9.38	10.58
HT20	4	5500	9.27	0	9.27	10.48
HT20	4	5580	10.40	0	10.40	10.48
HT20	4	5700	9.31	0	9.31	10.48
HT40	4	5190	0.43	0	0.43	3.58
HT40	4	5230	-0.45	0	-0.45	3.58
HT40	4	5270	6.62	0	6.62	10.58
HT40	4	5310	3.68	0	3.68	10.58
HT40	4	5510	0.83	0	0.83	10.48
HT40	4	5550	6.99	0	6.99	10.48
HT40	4	5670	7.33	0	7.33	10.48

Note:
1. Test result is bin-by-bin summing measured value of each TX port.
2. Directional gain of 5150~5250 MHz band is 0.4dBi + 10*log(4/1) dB =6.42dBi > 6dBi
   Limit shall be reduced to 4dBm - (6.42-6) dB = 3.58dBm
3. Directional gain of 5250~5350 MHz band is 0.4dBi + 10*log(4/1) dB =6.42dBi > 6dBi
   Limit shall be reduced to 11dBm - (6.42-6) dB = 10.58dBm
4. Directional gain of 5470~5725 MHz band is 0.5dBi + 10*log(4/1) dB =6.52dBi > 6dBi
   Limit shall be reduced to 11dBm - (6.52-6) dB = 10.48 dBm

Worst Plots


Span: 30MHz
ST:1ms
Ch: 5.58GHz
RBW: 1MHz
VBW: 3MHz
PD Freq.:5.584696GHz
Total PD:10.47dBm
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
5.565G
5.57G
5.575G
5.58G
5.585G
5.59G
5.595G

3.5 Peak Excursion

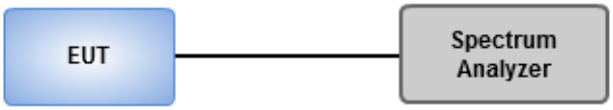
3.5.1 Peak Excursion Limit

Peak excursion of the modulation envelope shall not exceed 13 dB across any 1 MHz bandwidth.

3.5.2 Test Procedures

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = peak.
2. Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak search function to find the peak of the spectrum.
4. Use the procedure of section 3.4.2 to measure the PPSD.
5. Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD

3.5.3 Test Setup



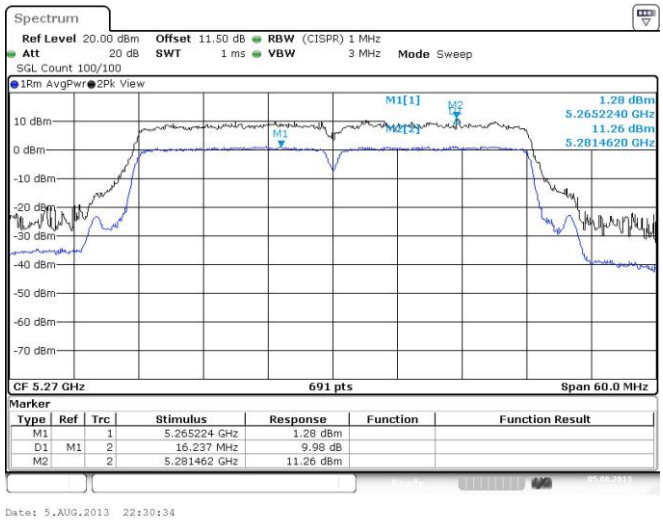
3.5.4 Test Result of Peak Excursion

Mode	Modulation Mode	N_{TX}	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	4	5240	7.43	0.00	7.43	13
11a	QPSK	4	5240	8.63	0.00	8.63	13
11a	16QAM	4	5240	7.39	0.12	7.27	13
11a	64QAM	4	5240	8.8	0.22	8.58	13
HT20	BPSK	4	5180	7.7	0.00	7.70	13
HT20	QPSK	4	5180	7.98	0.00	7.98	13
HT20	16QAM	4	5180	7.85	0.18	7.67	13
HT20	64QAM	4	5180	9.78	0.34	9.44	13
HT40	BPSK	4	5190	7.26	0.00	7.26	13
HT40	QPSK	4	5190	7.59	0.14	7.45	13
HT40	16QAM	4	5190	8.4	0.34	8.06	13
HT40	64QAM	4	5190	9.65	0.47	9.18	13
11a	BPSK	4	5300	7.28	0.00	7.28	13
11a	QPSK	4	5300	8.77	0.00	8.77	13
11a	16QAM	4	5300	7.69	0.12	7.57	13
11a	64QAM	4	5300	8.27	0.22	8.05	13
HT20	BPSK	4	5260	6.84	0.00	6.84	13
HT20	QPSK	4	5260	7.84	0.00	7.84	13
HT20	16QAM	4	5260	7.86	0.18	7.68	13
HT20	64QAM	4	5260	9.26	0.34	8.92	13
HT40	BPSK	4	5270	7.08	0.00	7.08	13
HT40	QPSK	4	5270	7.77	0.14	7.63	13
HT40	16QAM	4	5270	8.52	0.34	8.18	13
HT40	64QAM	4	5270	9.98	0.47	9.51	13

Mode	Modulation Mode	N_{TX}	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	4	5580	6.23	0.00	6.23	13
11a	QPSK	4	5580	8.71	0.00	8.71	13
11a	16QAM	4	5580	7.86	0.12	7.74	13
11a	64QAM	4	5580	8.53	0.22	8.31	13
HT20	BPSK	4	5580	8.18	0.00	8.18	13
HT20	QPSK	4	5580	8.28	0.00	8.28	13
HT20	16QAM	4	5580	8.24	0.18	8.06	13
HT20	64QAM	4	5580	9.16	0.34	8.82	13
HT40	BPSK	4	5550	7	0.00	7.00	13
HT40	QPSK	4	5550	8.09	0.14	7.95	13
HT40	16QAM	4	5550	8.37	0.34	8.03	13
HT40	64QAM	4	5550	9.83	0.47	9.36	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak exclusion = Measured value – duty factor

Worst Plots



Note1: Measured value = Peak value –PPSD = Value of M2 – Value of M1

3.6 Transmitter Radiated and Band Edge Emissions

3.6.1 Limit of Transmitter Radiated and Band Edge Emissions

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:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.825 GHz	5.715 5.725 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] 5.825 5.835 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: 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).

3.6.2 Test Procedures

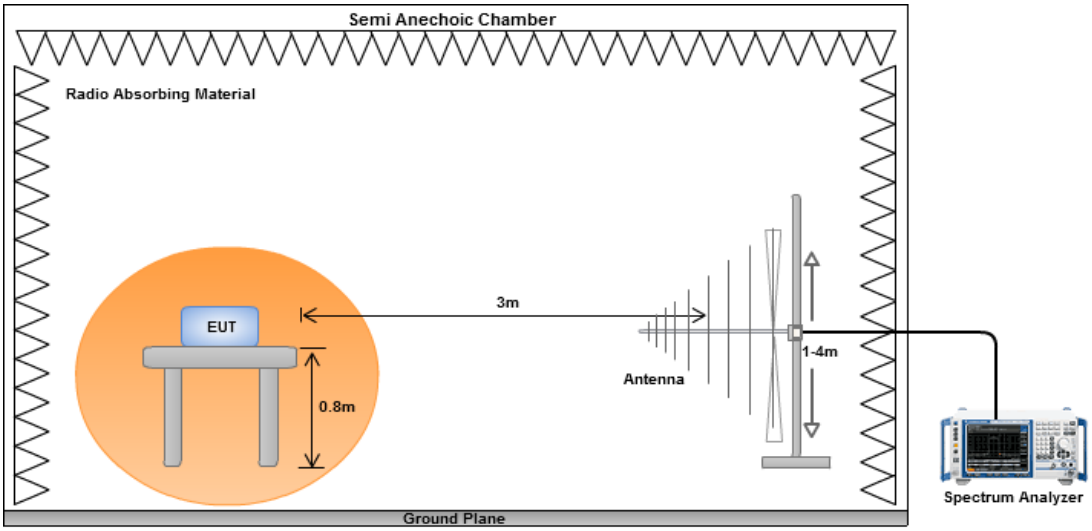
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

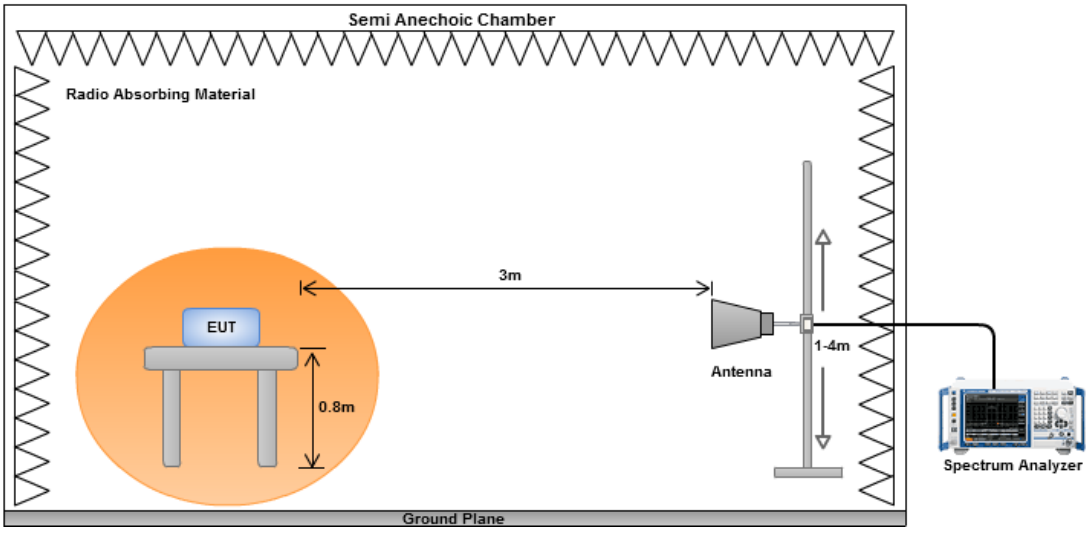
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.6.3 Test Setup

Radiated Emissions below 1 GHz

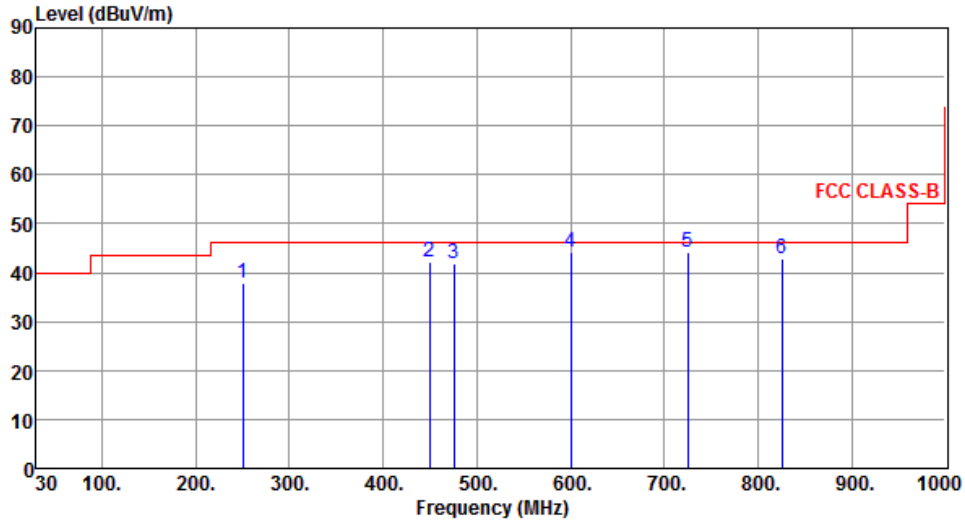


Radiated Emissions above 1 GHz



3.6.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

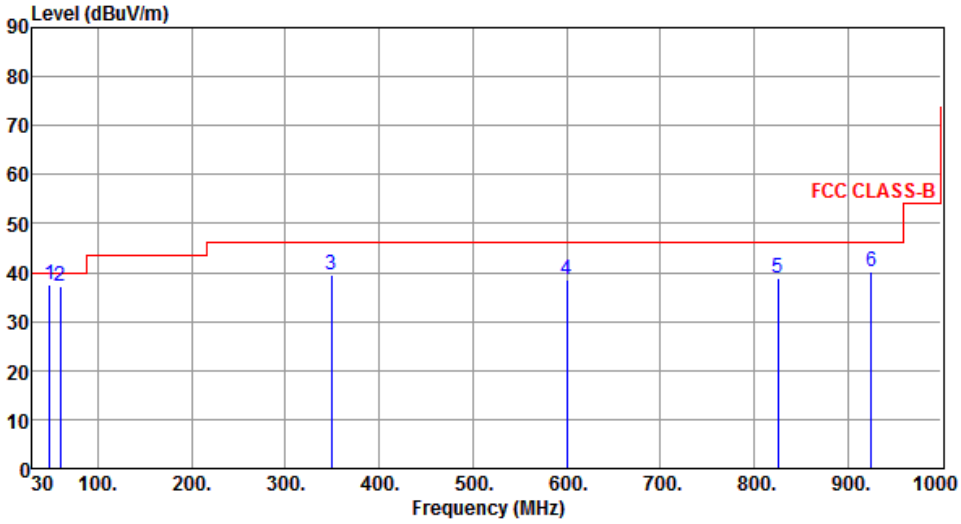
Polarization	Horizontal	Test Freq. (MHz)	5580



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	250.19	37.82	46.00	-8.18	55.69	-17.87	Peak	---	---
2	450.01	42.23	46.00	-3.77	54.67	-12.44	Peak	---	---
3	475.23	41.97	46.00	-4.03	54.03	-12.06	Peak	---	---
4	600.00	44.28	46.00	-1.72	54.02	-9.74	QP	---	---
5	725.49	44.03	46.00	-1.97	51.75	-7.72	QP	---	---
6	825.40	42.78	46.00	-3.22	49.23	-6.45	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor, cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Polarization	Vertical	Test Freq. (MHz)	5580

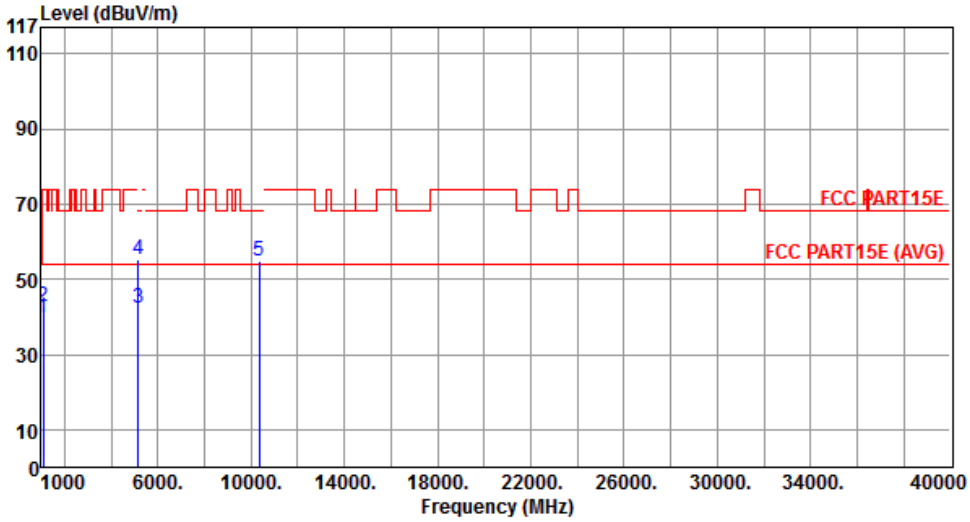


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	48.43	37.42	40.00	-2.58	54.02	-16.60	Peak	---	---
2	60.07	37.06	40.00	-2.94	54.37	-17.31	QP	---	---
3	349.13	39.46	46.00	-6.54	54.38	-14.92	Peak	---	---
4	600.36	38.38	46.00	-7.62	48.12	-9.74	Peak	---	---
5	825.40	38.76	46.00	-7.24	45.21	-6.45	Peak	---	---
6	925.31	40.31	46.00	-5.69	45.48	-5.17	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor, cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.6.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

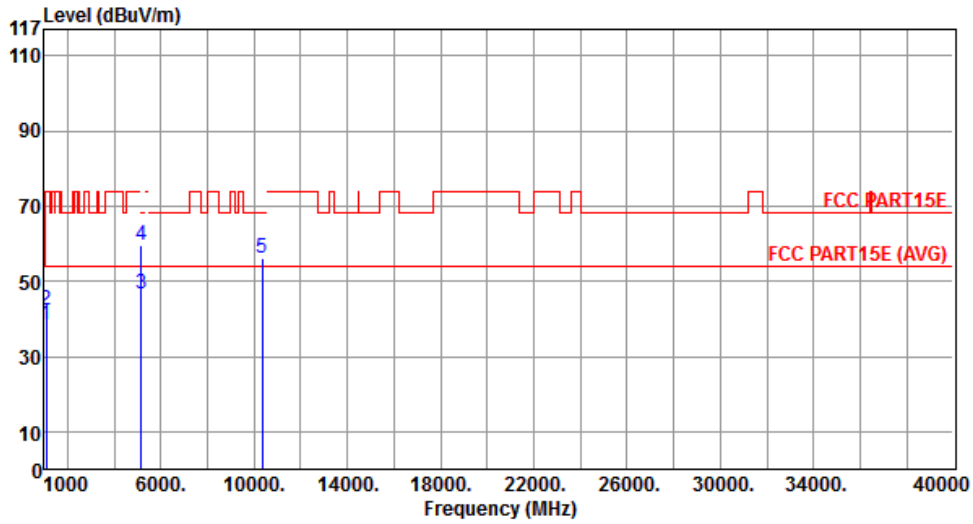
Polarization	Horizontal	Test Freq. (MHz)	5180



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.56	54.00	-14.44	48.67	-9.11	Average	---	---
2	1066.00	42.74	74.00	-31.26	51.85	-9.11	Peak	---	---
3	5150.00	42.43	54.00	-11.57	37.49	4.94	Average	---	---
4	5150.00	55.40	74.00	-18.60	50.46	4.94	Peak	---	---
5	10360.00	54.96	68.30	-13.34	40.25	14.71	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

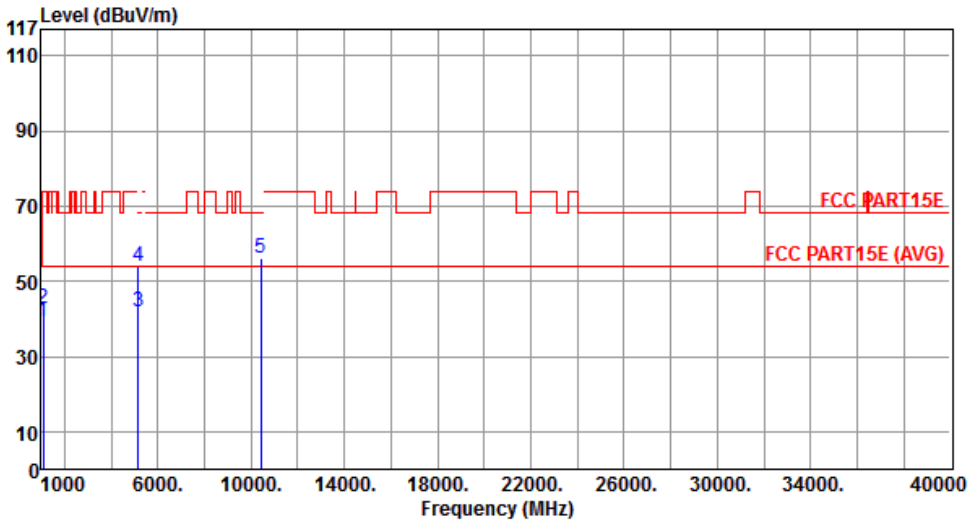
Polarization	Vertical	Test Freq. (MHz)	5180



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.61	54.00	-15.39	47.72	-9.11	Average	---	---
2	1066.00	42.42	74.00	-31.58	51.53	-9.11	Peak	---	---
3	5150.00	46.47	54.00	-7.53	41.53	4.94	Average	---	---
4	5150.00	59.45	74.00	-14.55	54.51	4.94	Peak	---	---
5	10360.00	55.93	68.30	-12.37	41.22	14.71	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

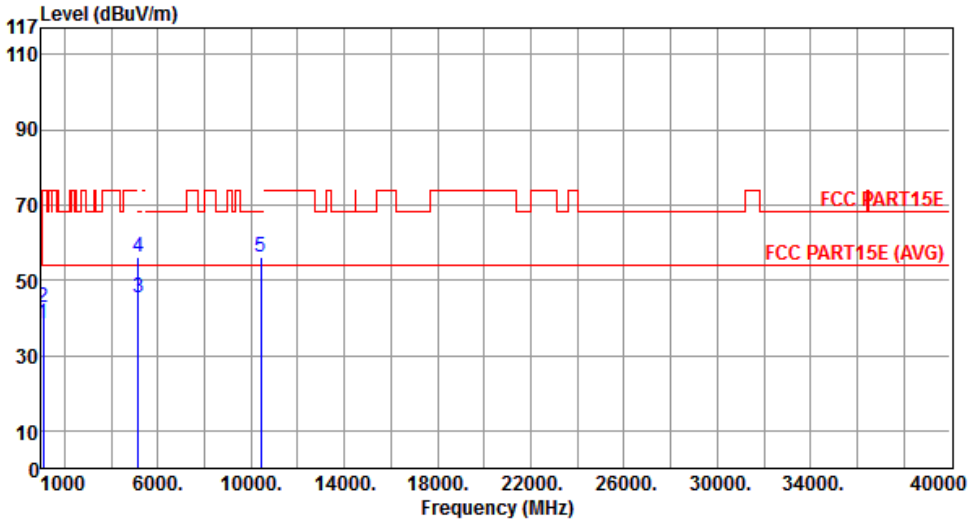
Polarization	Horizontal	Test Freq. (MHz)	5200



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.38	54.00	-14.62	48.49	-9.11	Average	---	---
2	1066.00	42.95	74.00	-31.05	52.06	-9.11	Peak	---	---
3	5150.00	41.77	54.00	-12.23	36.83	4.94	Average	---	---
4	5150.00	54.17	74.00	-19.83	49.23	4.94	Peak	---	---
5	10400.00	55.97	68.30	-12.33	41.22	14.75	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

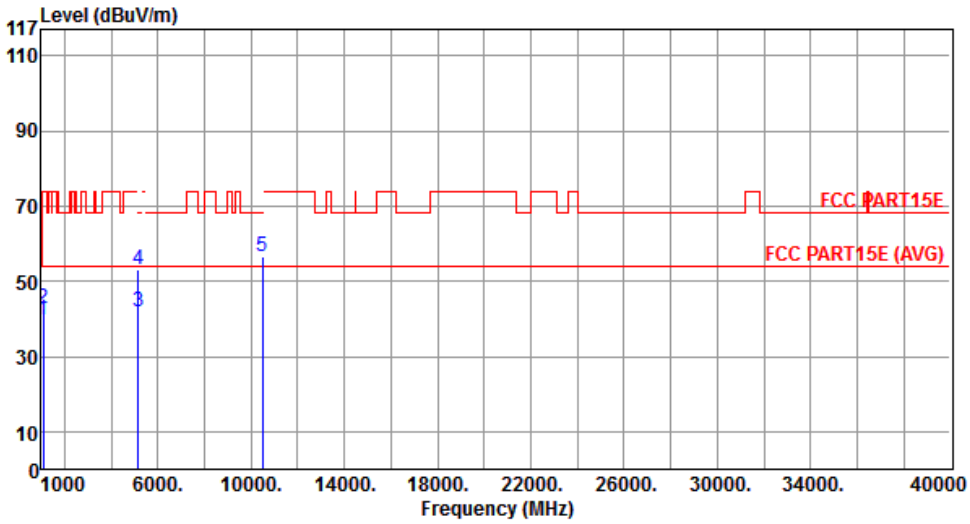
Polarization	Vertical	Test Freq. (MHz)	5200



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.43	54.00	-15.57	47.54	-9.11	Average	---	---
2	1066.00	42.58	74.00	-31.42	51.69	-9.11	Peak	---	---
3	5150.00	45.15	54.00	-8.85	40.21	4.94	Average	---	---
4	5150.00	56.10	74.00	-17.90	51.16	4.94	Peak	---	---
5	10400.00	56.10	68.30	-12.20	41.35	14.75	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

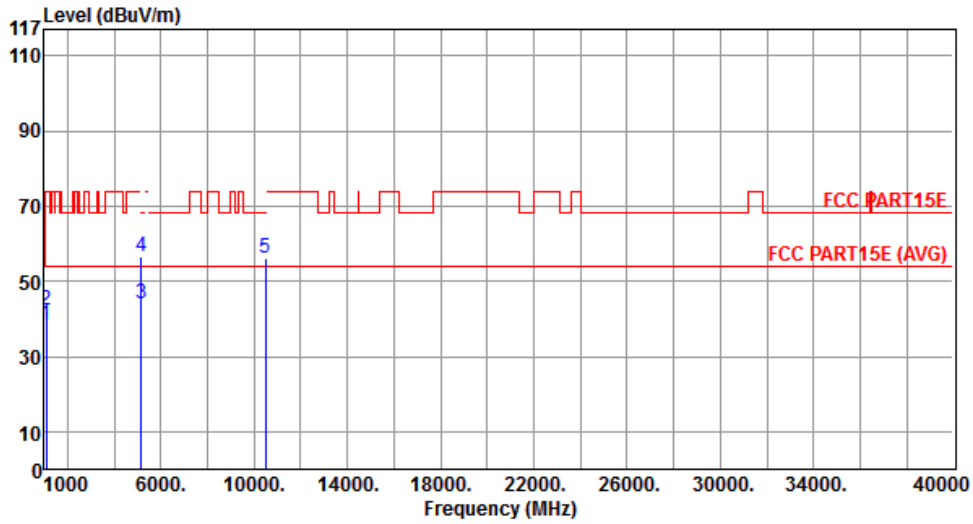
Polarization	Horizontal	Test Freq. (MHz)	5240



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.61	54.00	-14.39	48.72	-9.11	Average	---	---
2	1066.00	42.69	74.00	-31.31	51.80	-9.11	Peak	---	---
3	5150.00	41.90	54.00	-12.10	36.96	4.94	Average	---	---
4	5150.00	53.22	74.00	-20.78	48.28	4.94	Peak	---	---
5	10480.00	56.42	68.30	-11.88	41.58	14.84	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

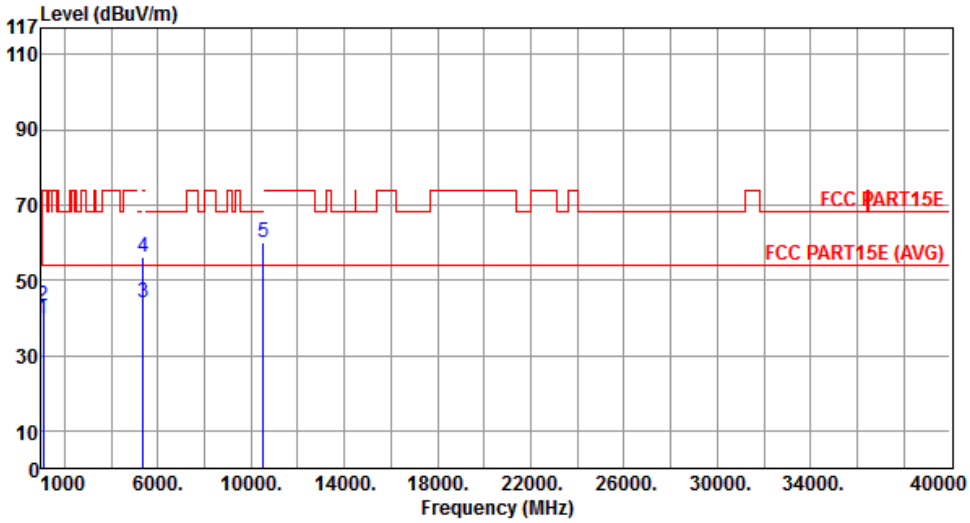
Polarization	Vertical	Test Freq. (MHz)	5240



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.44	54.00	-15.56	47.55	-9.11	Average	---	---
2	1066.00	42.35	74.00	-31.65	51.46	-9.11	Peak	---	---
3	5150.00	43.91	54.00	-10.09	38.97	4.94	Average	---	---
4	5150.00	56.50	74.00	-17.50	51.56	4.94	Peak	---	---
5	10480.00	56.21	68.30	-12.09	41.37	14.84	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

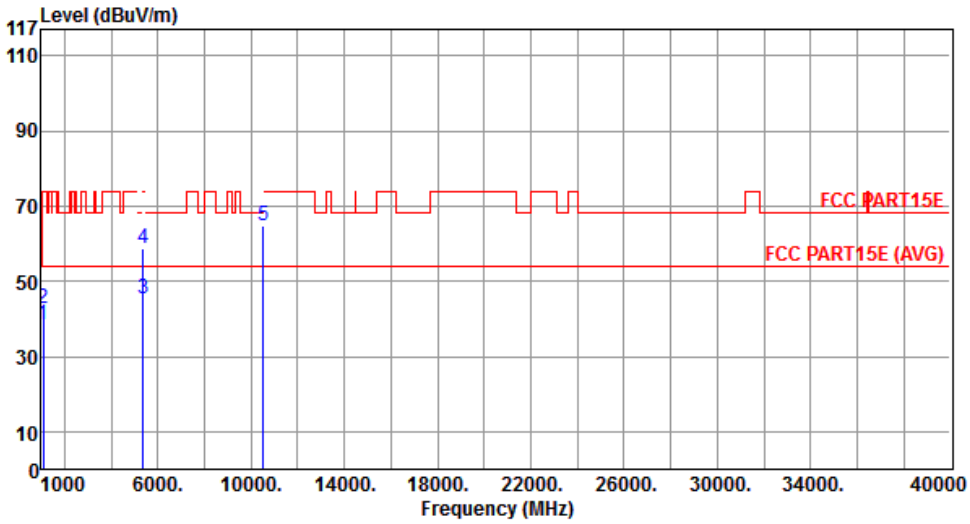
Polarization	Horizontal	Test Freq. (MHz)	5260



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.55	54.00	-14.45	48.66	-9.11	Average	---	---
2	1066.00	43.21	74.00	-30.79	52.32	-9.11	Peak	---	---
3	5350.00	43.86	54.00	-10.14	38.77	5.09	Average	---	---
4	5350.00	56.12	74.00	-17.88	51.03	5.09	Peak	---	---
5	10520.00	60.20	68.30	-8.10	45.33	14.87	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

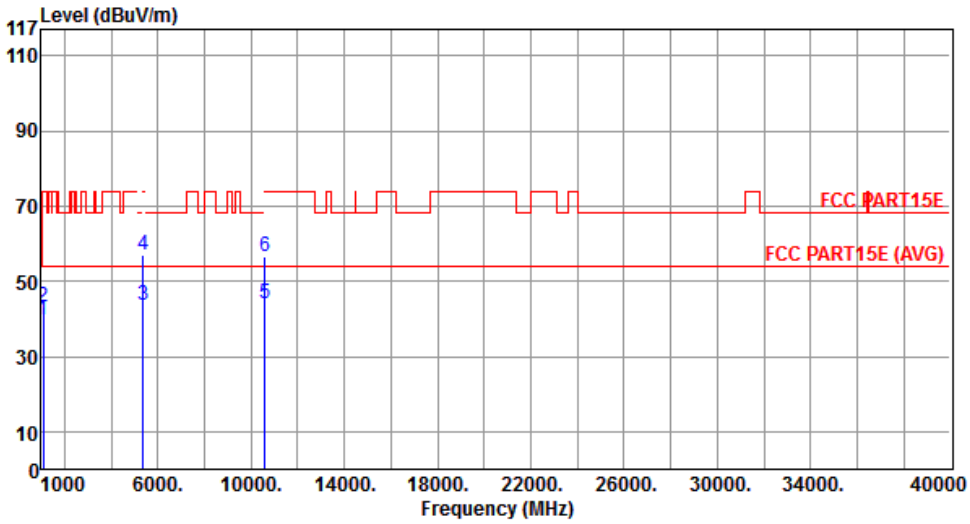
Polarization	Vertical	Test Freq. (MHz)	5260



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.48	54.00	-15.52	47.59	-9.11	Average	---	---
2	1066.00	42.66	74.00	-31.34	51.77	-9.11	Peak	---	---
3	5350.00	45.48	54.00	-8.52	40.39	5.09	Average	---	---
4	5350.00	58.83	74.00	-15.17	53.74	5.09	Peak	---	---
5	10520.00	64.81	68.30	-3.49	49.94	14.87	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

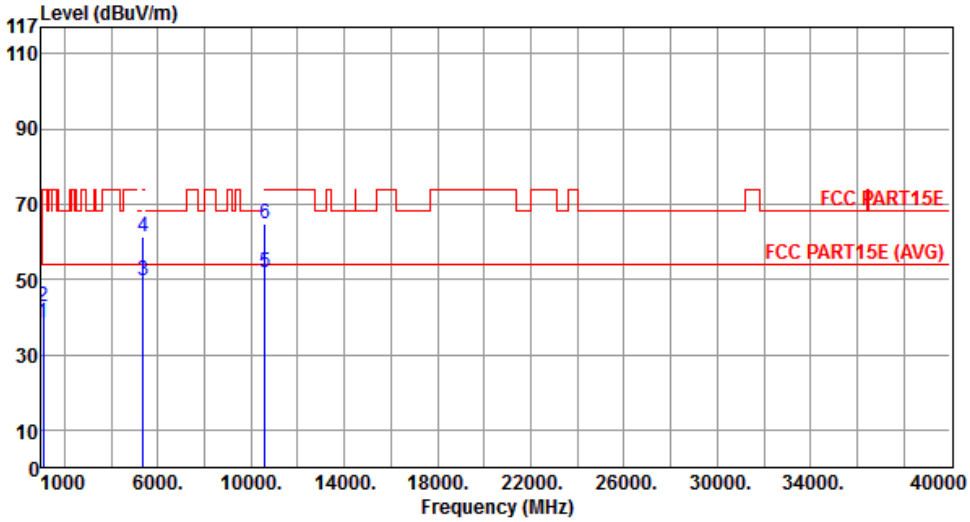
Polarization	Horizontal	Test Freq. (MHz)	5300



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.61	54.00	-14.39	48.72	-9.11	Average	---	---
2	1066.00	43.22	74.00	-30.78	52.33	-9.11	Peak	---	---
3	5350.00	43.48	54.00	-10.52	38.39	5.09	Average	---	---
4	5350.00	57.04	74.00	-16.96	51.95	5.09	Peak	---	---
5	10600.00	44.17	54.00	-9.83	29.23	14.94	Average	---	---
6	10600.00	56.34	74.00	-17.66	41.40	14.94	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

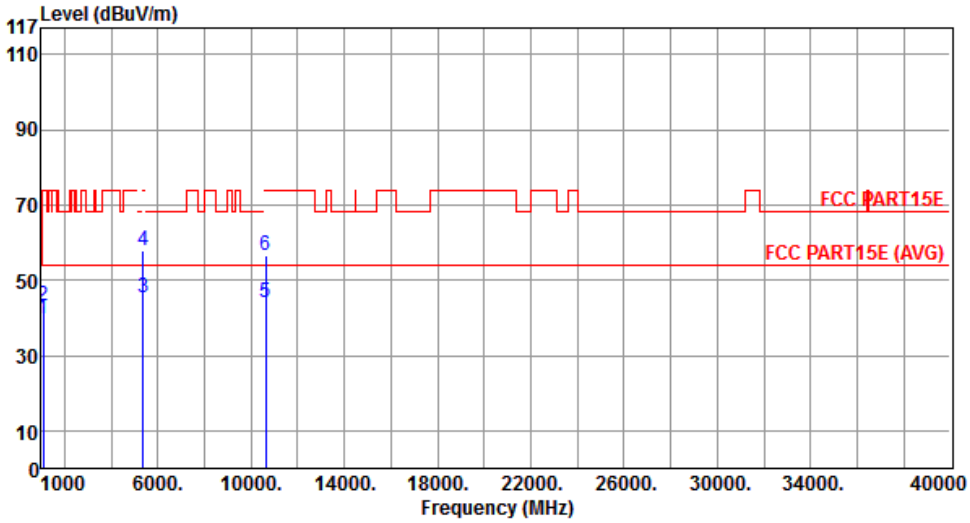
Polarization	Vertical	Test Freq. (MHz)	5300



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.35	54.00	-15.65	47.46	-9.11	Average	---	---
2	1066.00	42.58	74.00	-31.42	51.69	-9.11	Peak	---	---
3	5350.00	49.62	54.00	-4.38	44.53	5.09	Average	---	---
4	5350.00	61.50	74.00	-12.50	56.41	5.09	Peak	---	---
5	10600.00	51.93	54.00	-2.07	36.99	14.94	Average	---	---
6	10600.00	64.84	74.00	-9.16	49.90	14.94	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

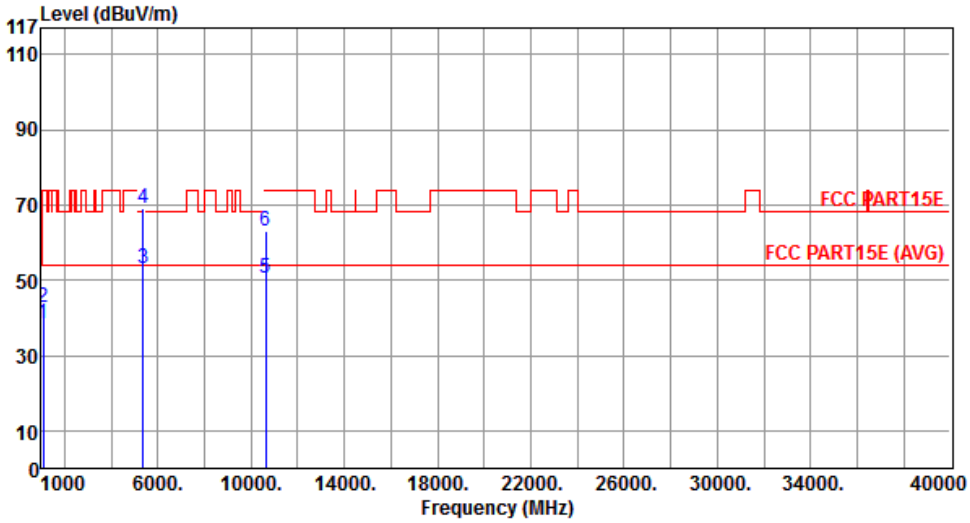
Polarization	Horizontal	Test Freq. (MHz)	5320



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.56	54.00	-14.44	48.67	-9.11	Average	---	---
2	1066.00	43.31	74.00	-30.69	52.42	-9.11	Peak	---	---
3	5350.00	45.37	54.00	-8.63	40.28	5.09	Average	---	---
4	5350.00	57.98	74.00	-16.02	52.89	5.09	Peak	---	---
5	10640.00	44.09	54.00	-9.91	29.11	14.98	Average	---	---
6	10640.00	56.56	74.00	-17.44	41.58	14.98	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

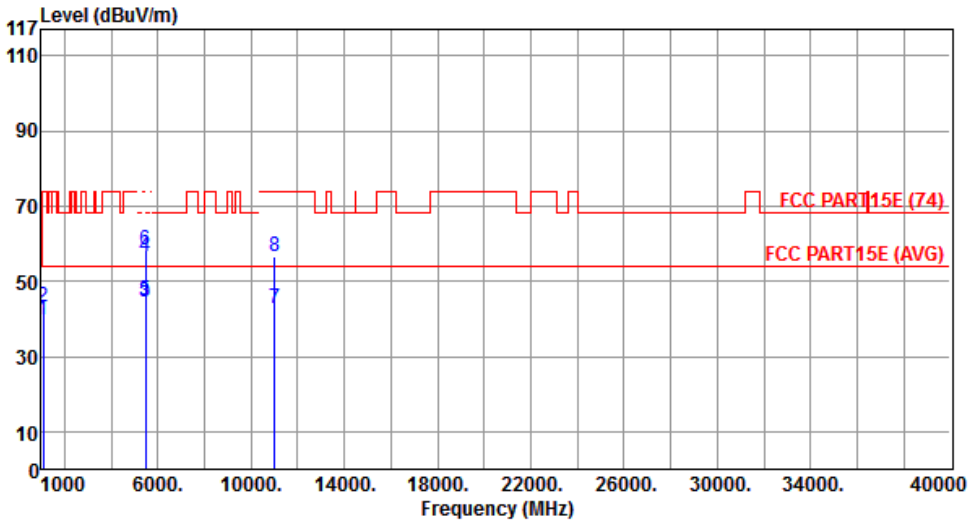
Polarization	Vertical	Test Freq. (MHz)	5320



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.51	54.00	-15.49	47.62	-9.11	Average	---	---
2	1066.00	42.64	74.00	-31.36	51.75	-9.11	Peak	---	---
3	5350.00	53.00	54.00	-1.00	47.91	5.09	Average	---	---
4	5350.00	69.04	74.00	-4.96	63.95	5.09	Peak	---	---
5	10640.00	50.48	54.00	-3.52	35.50	14.98	Average	---	---
6	10640.00	63.12	74.00	-10.88	48.14	14.98	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

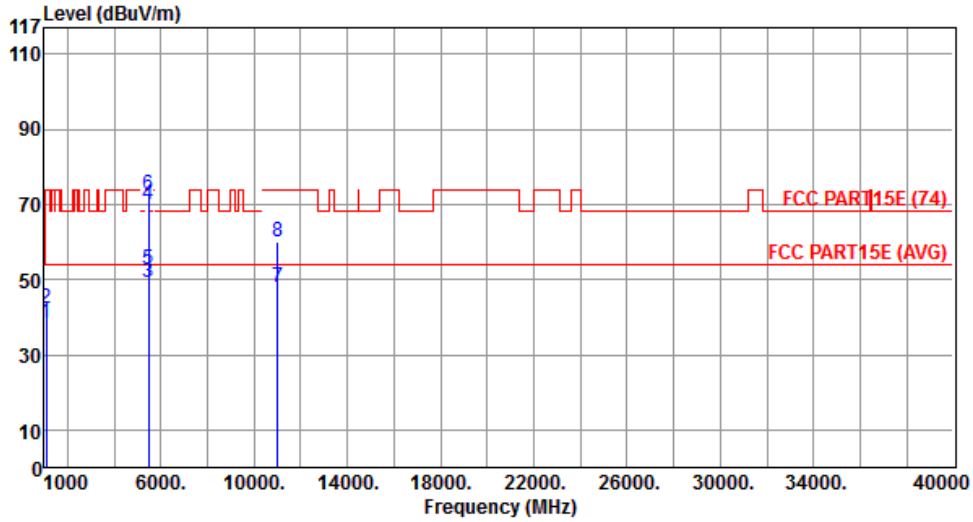
Polarization	Horizontal	Test Freq. (MHz)	5500



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.53	54.00	-14.47	48.64	-9.11	Average	---	---
2	1066.00	43.15	74.00	-30.85	52.26	-9.11	Peak	---	---
3	5460.00	44.53	54.00	-9.47	39.35	5.18	Average	---	---
4	5460.00	56.64	74.00	-17.36	51.46	5.18	Peak	---	---
5	5470.00	45.11	54.00	-8.89	39.92	5.19	Average	---	---
6	5470.00	58.37	74.00	-15.63	53.18	5.19	Peak	---	---
7	11000.00	42.84	54.00	-11.16	27.56	15.28	Average	---	---
8	11000.00	56.61	74.00	-17.39	41.33	15.28	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

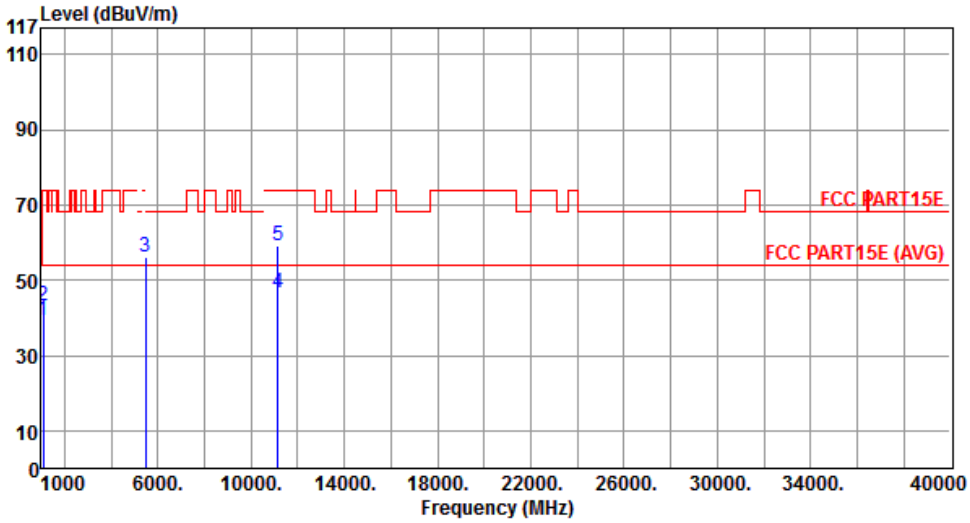
Polarization	Vertical	Test Freq. (MHz)	5500



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.42	54.00	-15.58	47.53	-9.11	Average	---	---
2	1066.00	42.35	74.00	-31.65	51.46	-9.11	Peak	---	---
3	5460.00	49.38	54.00	-4.62	44.20	5.18	Average	---	---
4	5460.00	69.94	74.00	-4.06	64.76	5.18	Peak	---	---
5	5470.00	52.74	54.00	-1.26	47.55	5.19	Average	---	---
6	5470.00	72.46	74.00	-1.54	67.27	5.19	Peak	---	---
7	11000.00	47.85	54.00	-6.15	32.57	15.28	Average	---	---
8	11000.00	60.13	74.00	-13.87	44.85	15.28	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

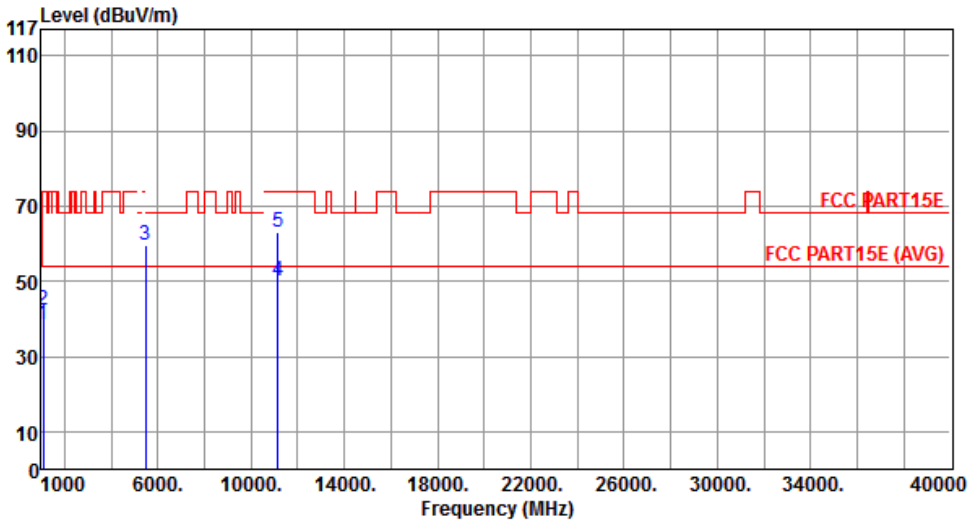
Polarization	Horizontal	Test Freq. (MHz)	5580



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.41	54.00	-14.59	48.52	-9.11	Average	---	---
2	1066.00	43.25	74.00	-30.75	52.36	-9.11	Peak	---	---
3	5470.00	55.97	68.30	-12.33	50.78	5.19	Peak	---	---
4	11160.00	46.72	54.00	-7.28	31.54	15.18	Average	---	---
5	11160.00	58.95	74.00	-15.05	43.77	15.18	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

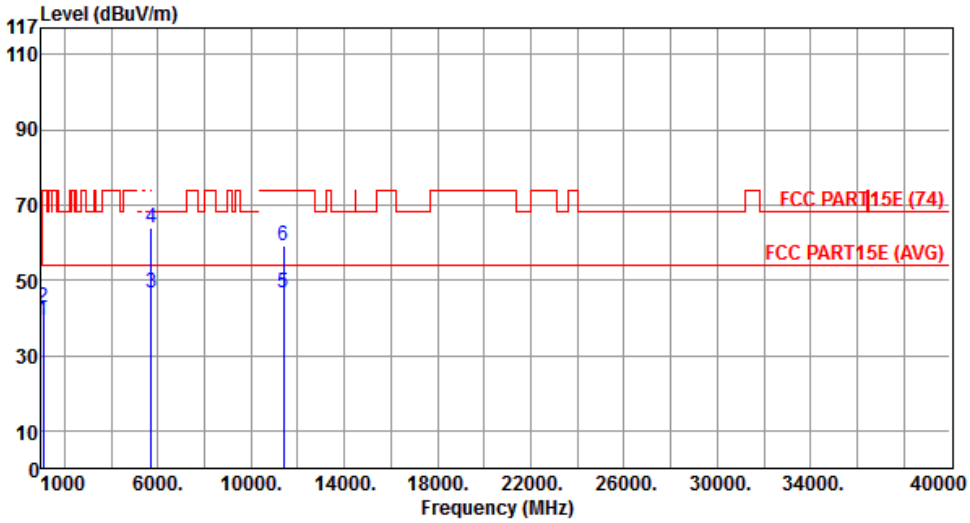
Polarization	Vertical	Test Freq. (MHz)	5580



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.55	54.00	-15.45	47.66	-9.11	Average	---	---
2	1066.00	42.38	74.00	-31.62	51.49	-9.11	Peak	---	---
3	5470.00	59.61	68.30	-8.69	54.42	5.19	Peak	---	---
4	11160.00	50.01	54.00	-3.99	34.83	15.18	Average	---	---
5	11160.00	62.84	74.00	-11.16	47.66	15.18	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

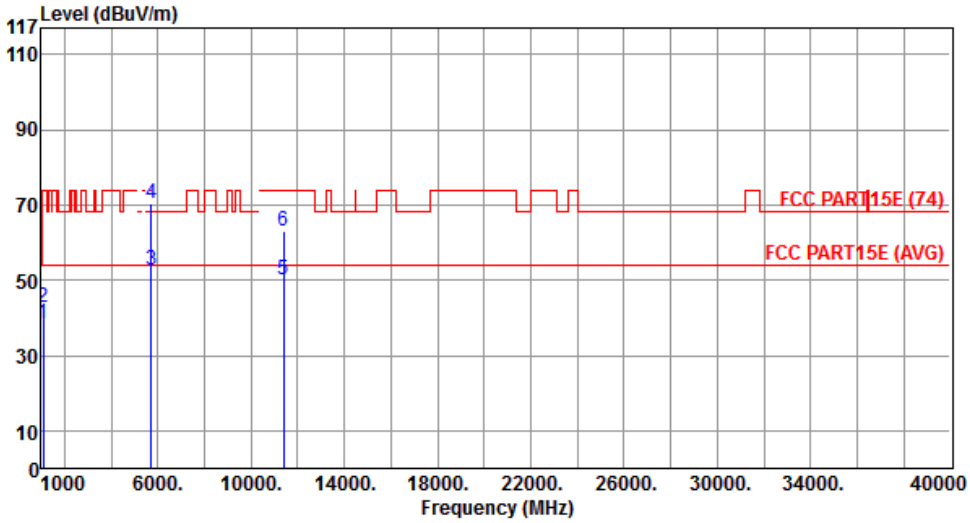
Polarization	Horizontal	Test Freq. (MHz)	5700



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.29	54.00	-14.71	48.40	-9.11	Average	---	---
2	1066.00	42.81	74.00	-31.19	51.92	-9.11	Peak	---	---
3	5725.00	46.73	54.00	-7.27	41.17	5.56	Average	---	---
4	5725.00	63.93	74.00	-10.07	58.37	5.56	Peak	---	---
5	11400.00	46.64	54.00	-7.36	31.61	15.03	Average	---	---
6	11400.00	59.04	74.00	-14.96	44.01	15.03	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

Polarization	Vertical	Test Freq. (MHz)	5700

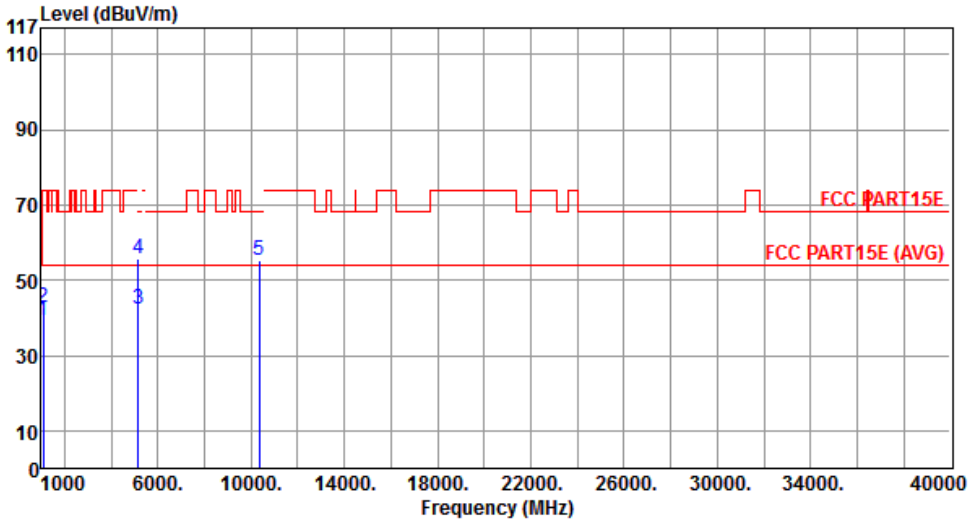


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.44	54.00	-15.56	47.55	-9.11	Average	---	---
2	1066.00	42.58	74.00	-31.42	51.69	-9.11	Peak	---	---
3	5725.00	52.71	54.00	-1.29	47.15	5.56	Average	---	---
4	5725.00	70.39	74.00	-3.61	64.83	5.56	Peak	---	---
5	11400.00	50.09	54.00	-3.91	35.06	15.03	Average	---	---
6	11400.00	63.01	74.00	-10.99	47.98	15.03	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

3.6.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

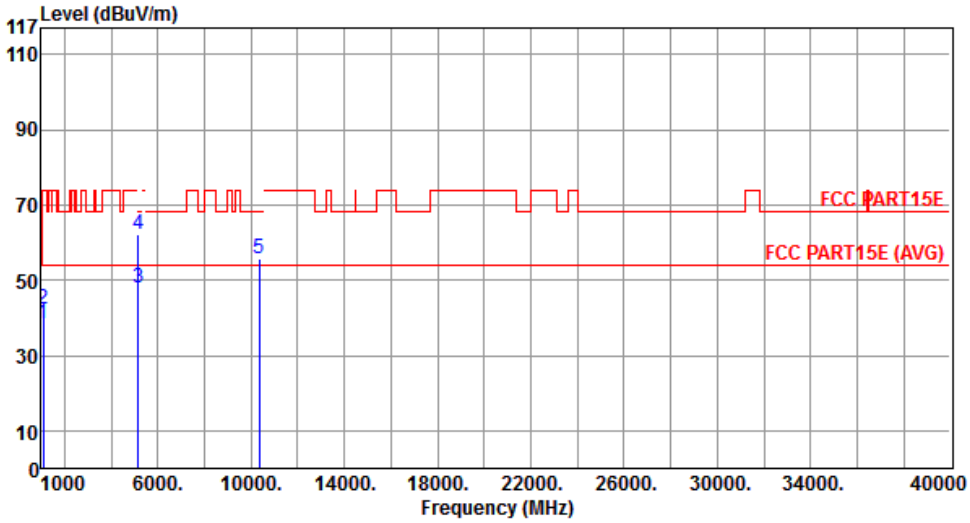
Polarization	Horizontal	Test Freq. (MHz)	5180



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.43	54.00	-14.57	48.54	-9.11	Average	---	---
2	1066.00	42.67	74.00	-31.33	51.78	-9.11	Peak	---	---
3	5150.00	42.45	54.00	-11.55	37.51	4.94	Average	---	---
4	5150.00	55.62	74.00	-18.38	50.68	4.94	Peak	---	---
5	10360.00	55.26	68.30	-13.04	40.55	14.71	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

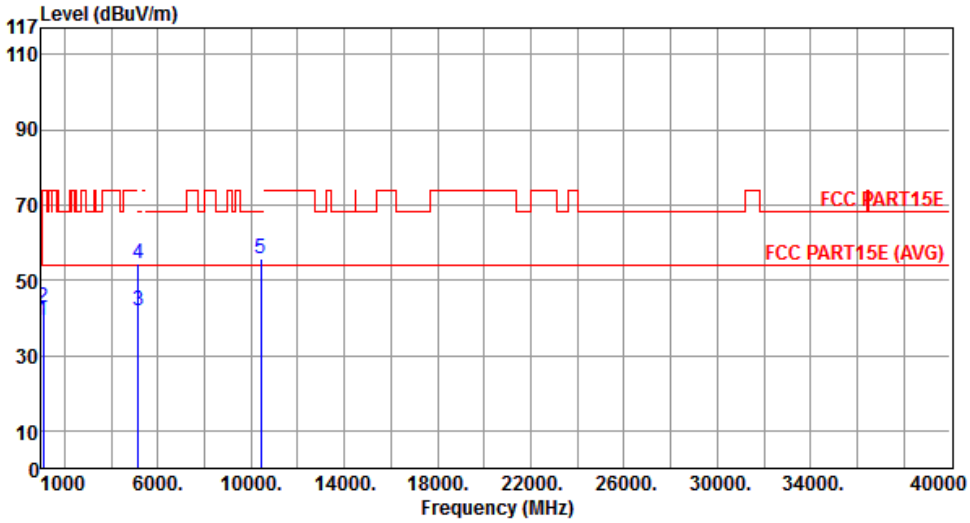
Polarization	Vertical	Test Freq. (MHz)	5180



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.42	54.00	-15.58	47.53	-9.11	Average	---	---
2	1066.00	42.37	74.00	-31.63	51.48	-9.11	Peak	---	---
3	5150.00	47.90	54.00	-6.10	42.96	4.94	Average	---	---
4	5150.00	61.98	74.00	-12.02	57.04	4.94	Peak	---	---
5	10360.00	55.82	68.30	-12.48	41.11	14.71	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

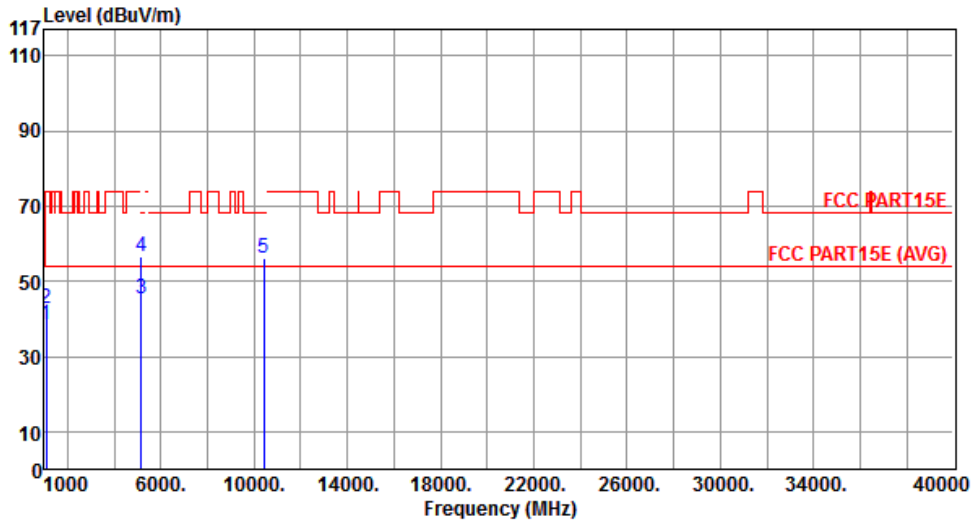
Polarization	Horizontal	Test Freq. (MHz)	5200



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.31	54.00	-14.69	48.42	-9.11	Average	---	---
2	1066.00	42.76	74.00	-31.24	51.87	-9.11	Peak	---	---
3	5150.00	41.69	54.00	-12.31	36.75	4.94	Average	---	---
4	5150.00	54.45	74.00	-19.55	49.51	4.94	Peak	---	---
5	10400.00	55.73	68.30	-12.57	40.98	14.75	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

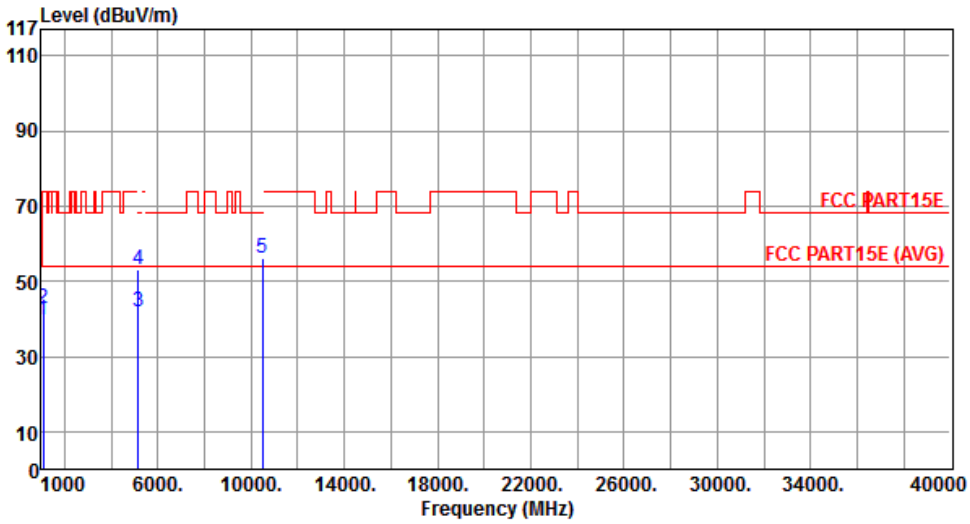
Polarization	Vertical	Test Freq. (MHz)	5200



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.62	54.00	-15.38	47.73	-9.11	Average	---	---
2	1066.00	42.55	74.00	-31.45	51.66	-9.11	Peak	---	---
3	5150.00	45.15	54.00	-8.85	40.21	4.94	Average	---	---
4	5150.00	56.47	74.00	-17.53	51.53	4.94	Peak	---	---
5	10400.00	56.03	68.30	-12.27	41.28	14.75	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

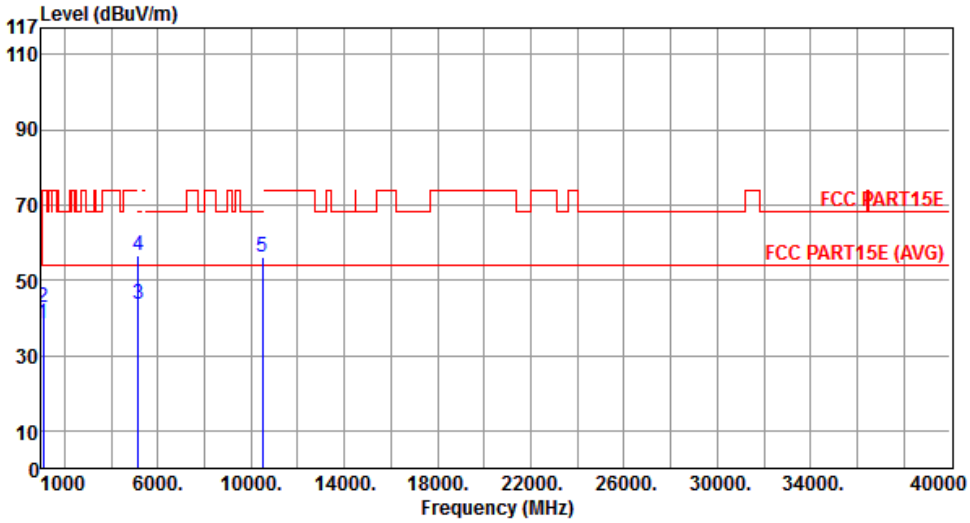
Polarization	Horizontal	Test Freq. (MHz)	5240



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.54	54.00	-14.46	48.65	-9.11	Average	---	---
2	1066.00	42.63	74.00	-31.37	51.74	-9.11	Peak	---	---
3	5150.00	41.82	54.00	-12.18	36.88	4.94	Average	---	---
4	5150.00	53.06	74.00	-20.94	48.12	4.94	Peak	---	---
5	10480.00	56.27	68.30	-12.03	41.43	14.84	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

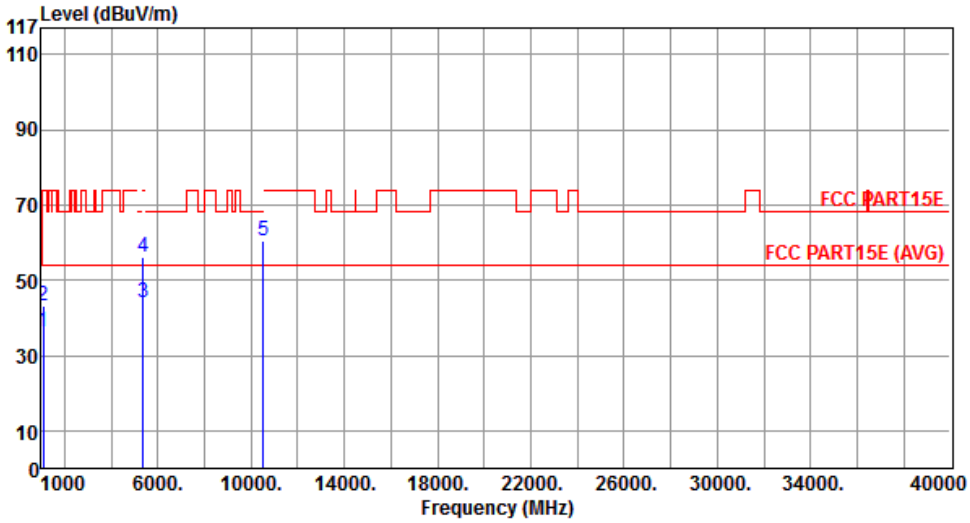
Polarization	Vertical	Test Freq. (MHz)	5240



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.57	54.00	-15.43	47.68	-9.11	Average	---	---
2	1066.00	42.65	74.00	-31.35	51.76	-9.11	Peak	---	---
3	5150.00	43.82	54.00	-10.18	38.88	4.94	Average	---	---
4	5150.00	56.37	74.00	-17.63	51.43	4.94	Peak	---	---
5	10480.00	56.10	68.30	-12.20	41.26	14.84	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

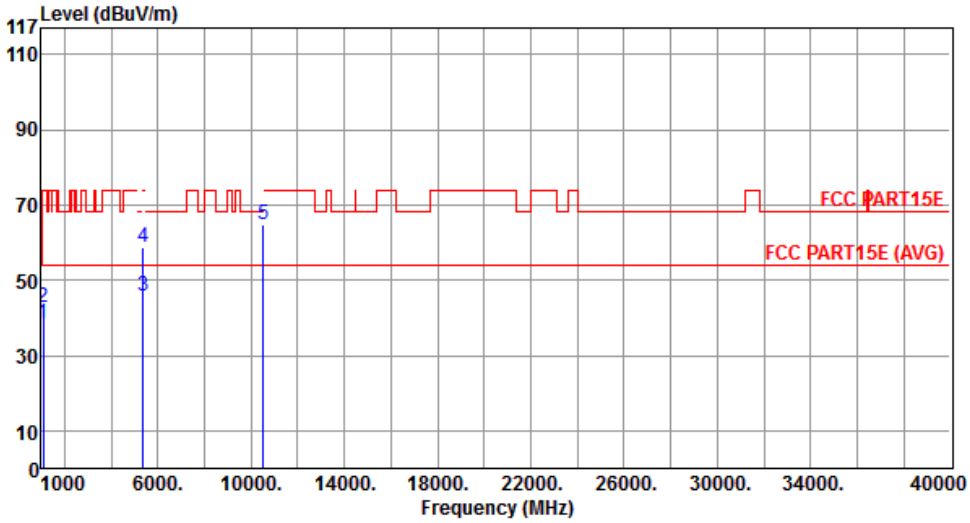
Polarization	Horizontal	Test Freq. (MHz)	5260



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	36.47	54.00	-17.53	45.58	-9.11	Average	---	---
2	1066.00	43.06	74.00	-30.94	52.17	-9.11	Peak	---	---
3	5350.00	44.04	54.00	-9.96	38.95	5.09	Average	---	---
4	5350.00	56.23	74.00	-17.77	51.14	5.09	Peak	---	---
5	10520.00	60.43	68.30	-7.87	45.56	14.87	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

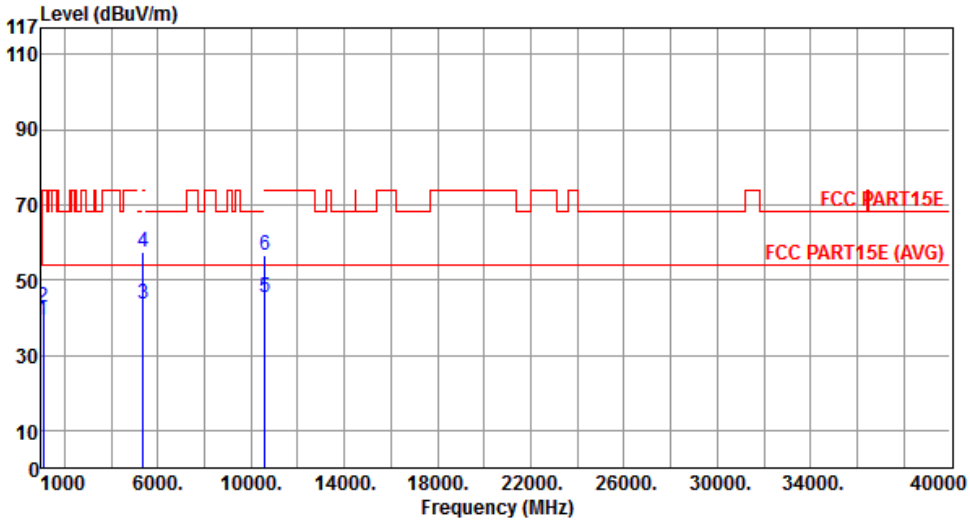
Polarization	Vertical	Test Freq. (MHz)	5260



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.61	54.00	-15.39	47.72	-9.11	Average	---	---
2	1066.00	42.83	74.00	-31.17	51.94	-9.11	Peak	---	---
3	5350.00	45.60	54.00	-8.40	40.51	5.09	Average	---	---
4	5350.00	58.91	74.00	-15.09	53.82	5.09	Peak	---	---
5	10520.00	64.70	68.30	-3.60	49.83	14.87	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

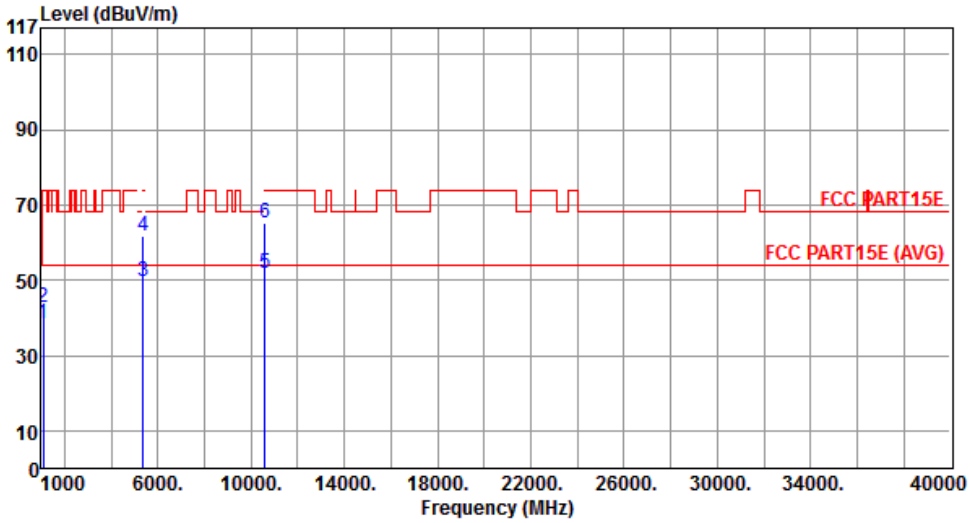
Polarization	Horizontal	Test Freq. (MHz)	5300



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.48	54.00	-14.52	48.59	-9.11	Average	---	---
2	1066.00	42.89	74.00	-31.11	52.00	-9.11	Peak	---	---
3	5350.00	43.60	54.00	-10.40	38.51	5.09	Average	---	---
4	5350.00	57.35	74.00	-16.65	52.26	5.09	Peak	---	---
5	10600.00	45.46	54.00	-8.54	30.52	14.94	Average	---	---
6	10600.00	56.76	74.00	-17.24	41.82	14.94	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

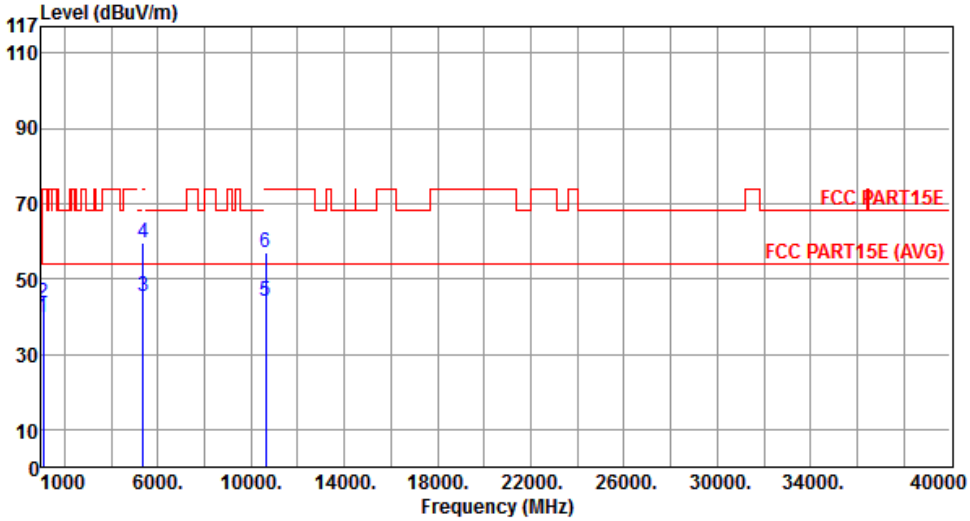
Polarization	Vertical	Test Freq. (MHz)	5300



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.46	54.00	-15.54	47.57	-9.11	Average	---	---
2	1066.00	42.64	74.00	-31.36	51.75	-9.11	Peak	---	---
3	5350.00	49.67	54.00	-4.33	44.58	5.09	Average	---	---
4	5350.00	61.92	74.00	-12.08	56.83	5.09	Peak	---	---
5	10600.00	51.84	54.00	-2.16	36.90	14.94	Average	---	---
6	10600.00	65.16	74.00	-8.84	50.22	14.94	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

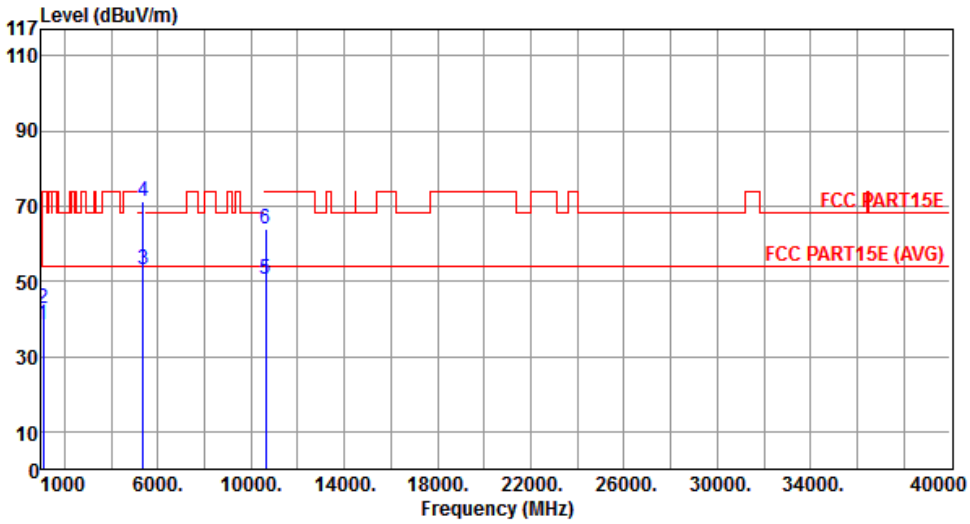
Polarization	Horizontal	Test Freq. (MHz)	5320



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.81	54.00	-14.19	48.92	-9.11	Average	---	---
2	1066.00	43.56	74.00	-30.44	52.67	-9.11	Peak	---	---
3	5350.00	45.44	54.00	-8.56	40.35	5.09	Average	---	---
4	5350.00	59.40	74.00	-14.60	54.31	5.09	Peak	---	---
5	10640.00	44.20	54.00	-9.80	29.22	14.98	Average	---	---
6	10640.00	56.93	74.00	-17.07	41.95	14.98	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

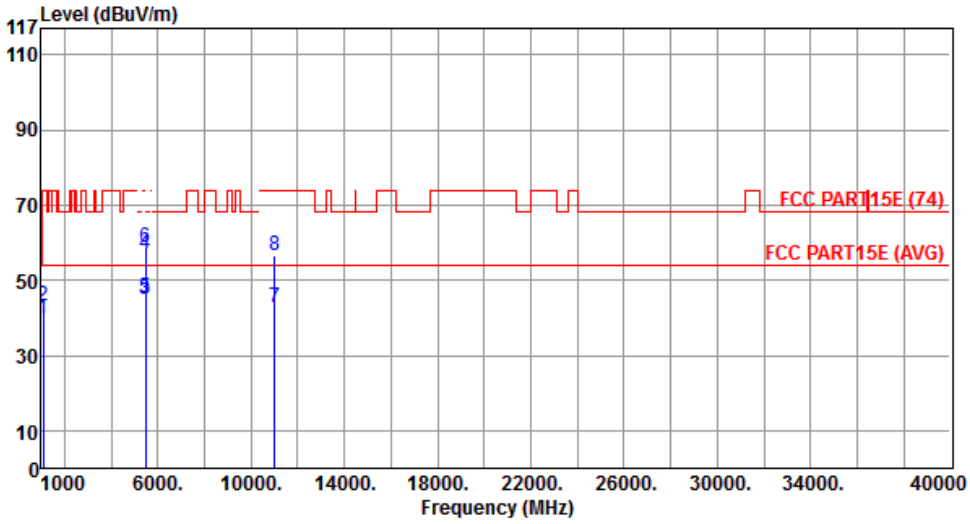
Polarization	Vertical	Test Freq. (MHz)	5320



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.44	54.00	-15.56	47.55	-9.11	Average	---	---
2	1066.00	42.56	74.00	-31.44	51.67	-9.11	Peak	---	---
3	5350.00	52.99	54.00	-1.01	47.90	5.09	Average	---	---
4	5350.00	71.25	74.00	-2.75	66.16	5.09	Peak	---	---
5	10640.00	50.42	54.00	-3.58	35.44	14.98	Average	---	---
6	10640.00	63.89	74.00	-10.11	48.91	14.98	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

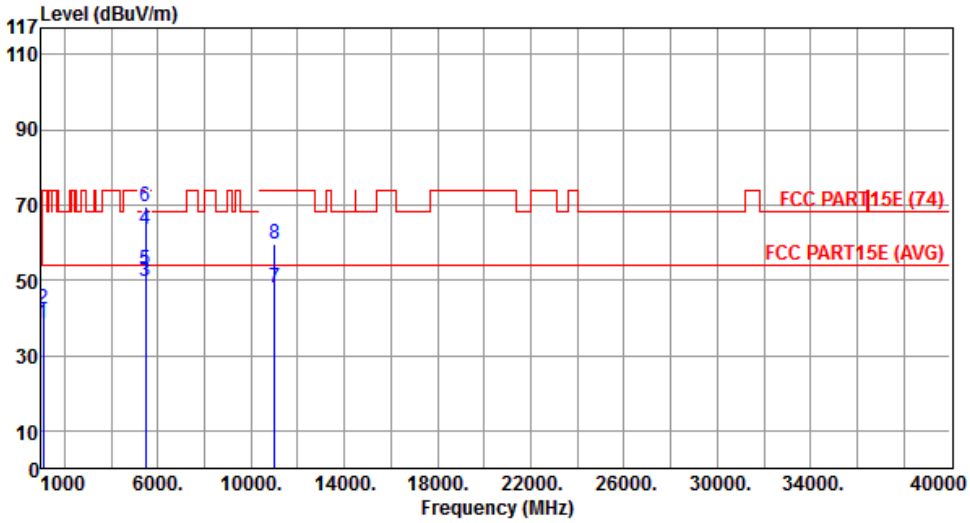
Polarization	Horizontal	Test Freq. (MHz)	5500



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.62	54.00	-14.38	48.73	-9.11	Average	---	---
2	1066.00	43.28	74.00	-30.72	52.39	-9.11	Peak	---	---
3	5460.00	44.69	54.00	-9.31	39.51	5.18	Average	---	---
4	5460.00	56.82	74.00	-17.18	51.64	5.18	Peak	---	---
5	5470.00	45.37	54.00	-8.63	40.18	5.19	Average	---	---
6	5470.00	58.64	74.00	-15.36	53.45	5.19	Peak	---	---
7	11000.00	42.94	54.00	-11.06	27.66	15.28	Average	---	---
8	11000.00	56.68	74.00	-17.32	41.40	15.28	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

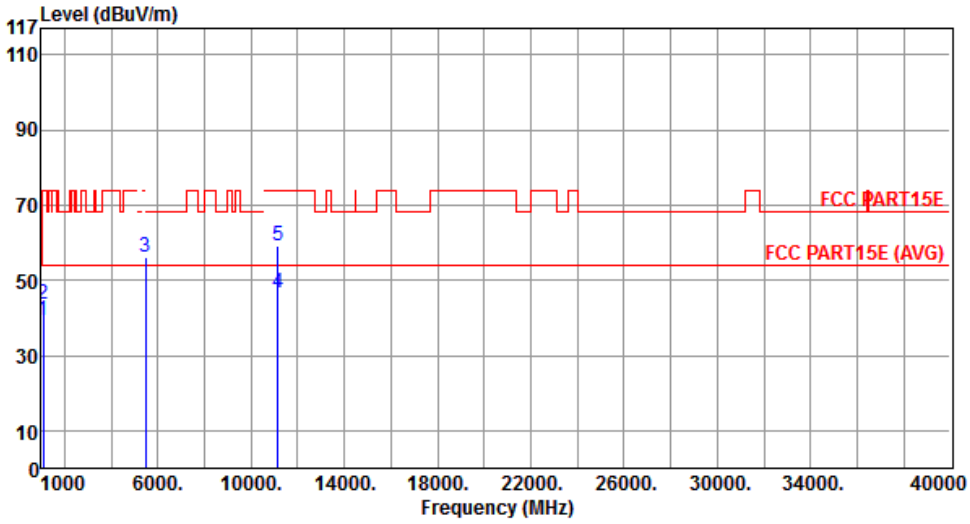
Polarization	Vertical	Test Freq. (MHz)	5500



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.37	54.00	-15.63	47.48	-9.11	Average	---	---
2	1066.00	42.26	74.00	-31.74	51.37	-9.11	Peak	---	---
3	5460.00	49.62	54.00	-4.38	44.44	5.18	Average	---	---
4	5460.00	63.35	74.00	-10.65	58.17	5.18	Peak	---	---
5	5470.00	52.79	54.00	-1.21	47.60	5.19	Average	---	---
6	5470.00	69.32	74.00	-4.68	64.13	5.19	Peak	---	---
7	11000.00	47.79	54.00	-6.21	32.51	15.28	Average	---	---
8	11000.00	59.67	74.00	-14.33	44.39	15.28	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

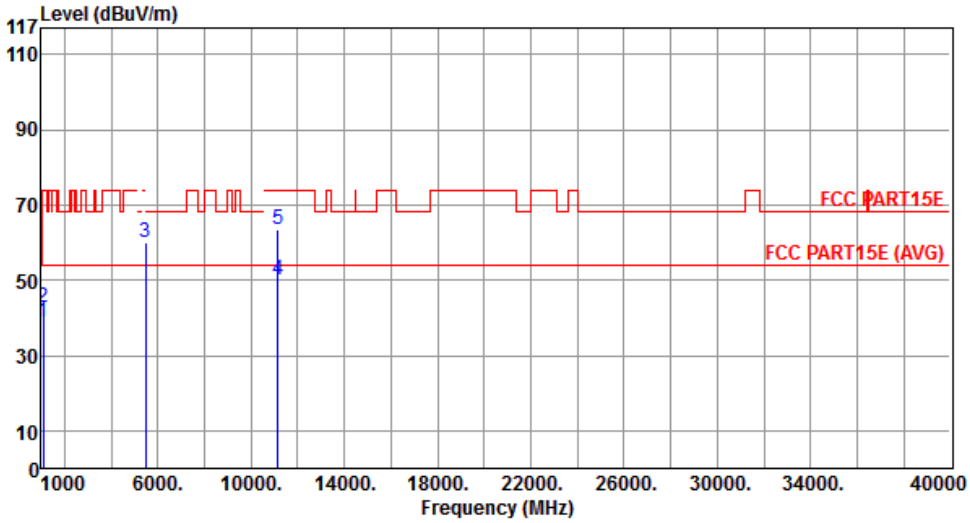
Polarization	Horizontal	Test Freq. (MHz)	5580



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.48	54.00	-14.52	48.59	-9.11	Average	---	---
2	1066.00	43.52	74.00	-30.48	52.63	-9.11	Peak	---	---
3	5470.00	56.14	68.30	-12.16	50.95	5.19	Peak	---	---
4	11160.00	46.80	54.00	-7.20	31.62	15.18	Average	---	---
5	11160.00	59.12	74.00	-14.88	43.94	15.18	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

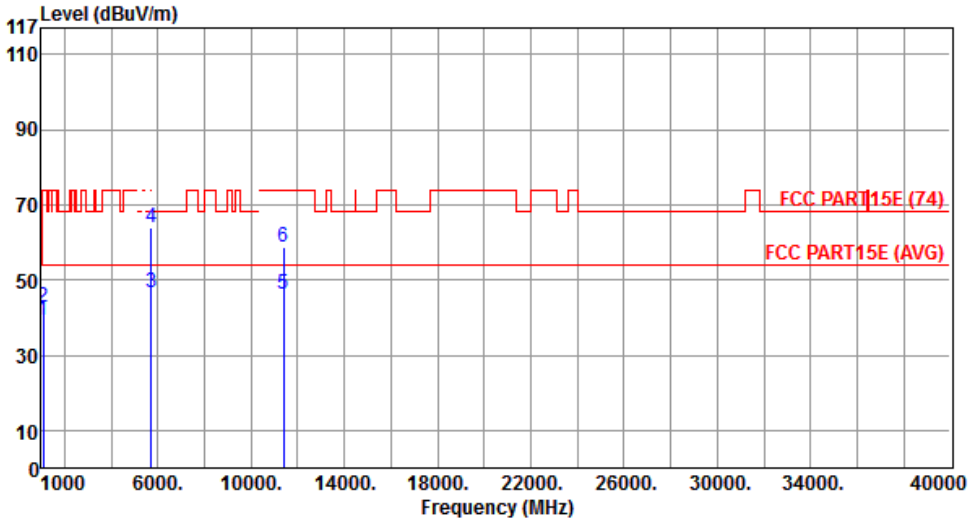
Polarization	Vertical	Test Freq. (MHz)	5580



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.69	54.00	-15.31	47.80	-9.11	Average	---	---
2	1066.00	42.57	74.00	-31.43	51.68	-9.11	Peak	---	---
3	5470.00	59.99	68.30	-8.31	54.80	5.19	Peak	---	---
4	11160.00	50.14	54.00	-3.86	34.96	15.18	Average	---	---
5	11160.00	63.39	74.00	-10.61	48.21	15.18	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

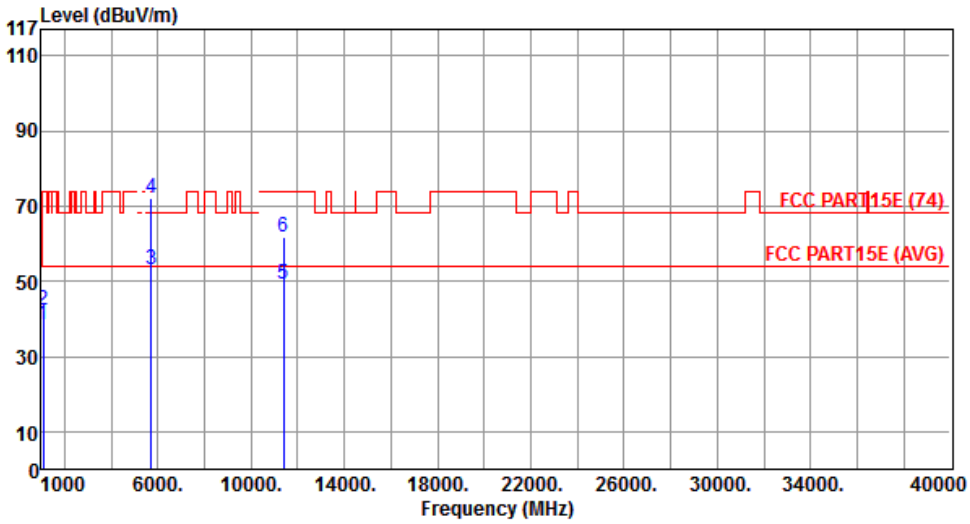
Polarization	Horizontal	Test Freq. (MHz)	5700



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.33	54.00	-14.67	48.44	-9.11	Average	---	---
2	1066.00	42.79	74.00	-31.21	51.90	-9.11	Peak	---	---
3	5725.00	46.66	54.00	-7.34	41.10	5.56	Average	---	---
4	5725.00	63.85	74.00	-10.15	58.29	5.56	Peak	---	---
5	11400.00	46.19	54.00	-7.81	31.16	15.03	Average	---	---
6	11400.00	58.55	74.00	-15.45	43.52	15.03	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

Polarization	Vertical	Test Freq. (MHz)	5700

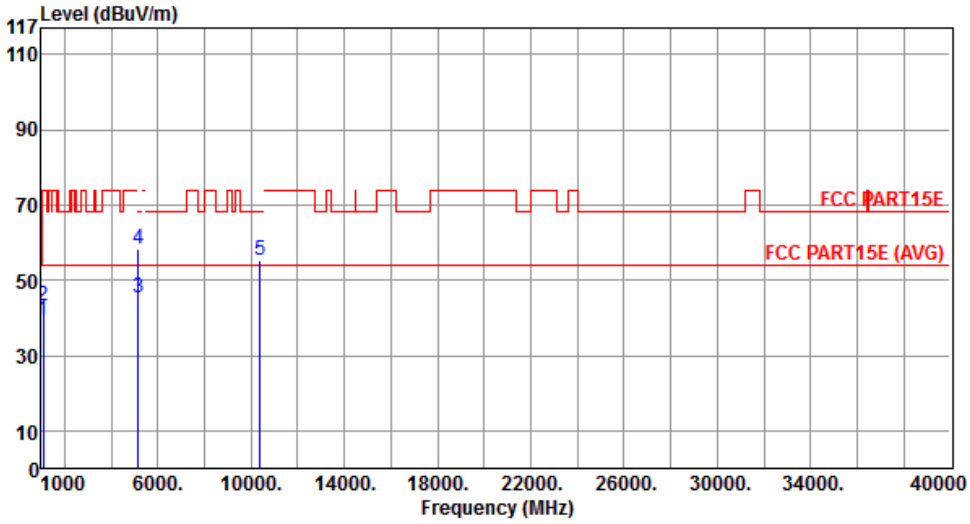


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.24	54.00	-15.76	47.35	-9.11	Average	---	---
2	1066.00	42.38	74.00	-31.62	51.49	-9.11	Peak	---	---
3	5725.00	53.00	54.00	-1.00	47.44	5.56	Average	---	---
4	5725.00	72.28	74.00	-1.72	66.72	5.56	Peak	---	---
5	11400.00	49.29	54.00	-4.71	34.26	15.03	Average	---	---
6	11400.00	61.86	74.00	-12.14	46.83	15.03	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

3.6.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40

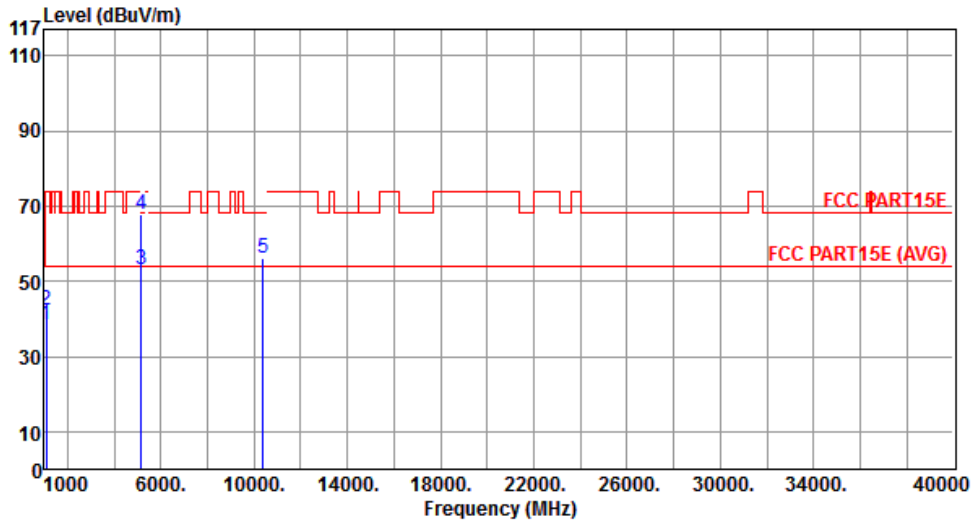
Polarization	Horizontal	Test Freq. (MHz)	5190



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.41	54.00	-14.59	48.52	-9.11	Average	---	---
2	1066.00	43.29	74.00	-30.71	52.40	-9.11	Peak	---	---
3	5150.00	45.36	54.00	-8.64	40.42	4.94	Average	---	---
4	5150.00	58.16	74.00	-15.84	53.22	4.94	Peak	---	---
5	10380.00	55.36	68.30	-12.94	40.63	14.73	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

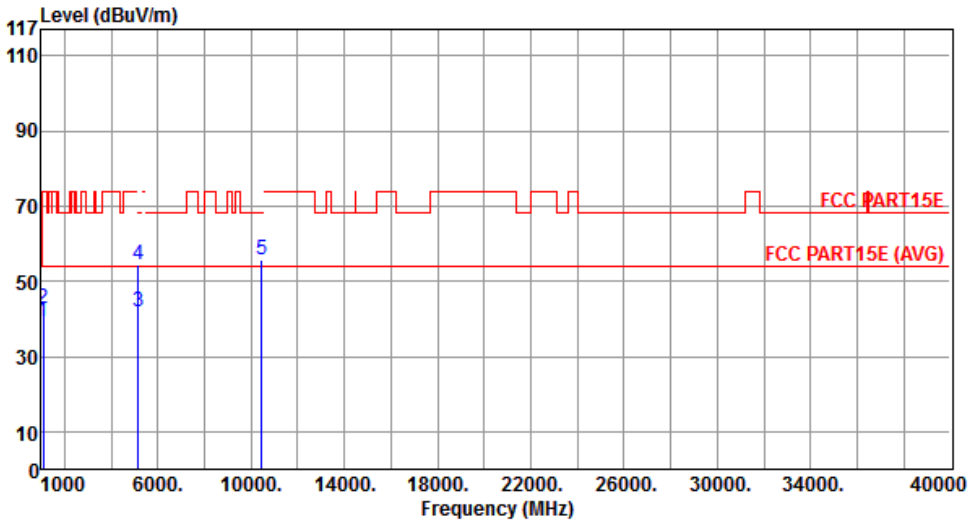
Polarization	Vertical	Test Freq. (MHz)	5190



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.33	54.00	-15.67	47.44	-9.11	Average	---	---
2	1066.00	42.42	74.00	-31.58	51.53	-9.11	Peak	---	---
3	5150.00	52.94	54.00	-1.06	48.00	4.94	Average	---	---
4	5150.00	67.98	74.00	-6.02	63.04	4.94	Peak	---	---
5	10380.00	56.28	68.30	-12.02	41.55	14.73	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

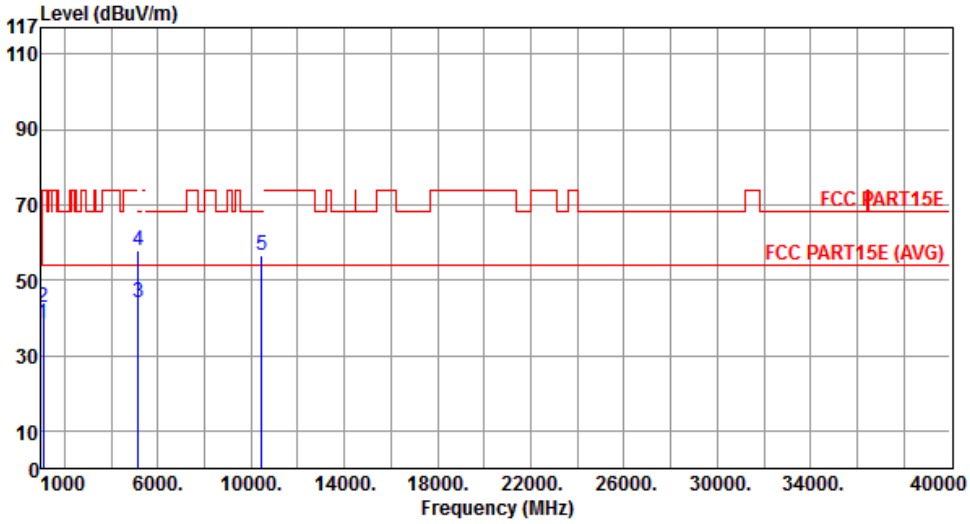
Polarization	Horizontal	Test Freq. (MHz)	5230



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.21	54.00	-14.79	48.32	-9.11	Average	---	---
2	1066.00	42.85	74.00	-31.15	51.96	-9.11	Peak	---	---
3	5150.00	42.07	54.00	-11.93	37.13	4.94	Average	---	---
4	5150.00	54.42	74.00	-19.58	49.48	4.94	Peak	---	---
5	10460.00	55.64	68.30	-12.66	40.82	14.82	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

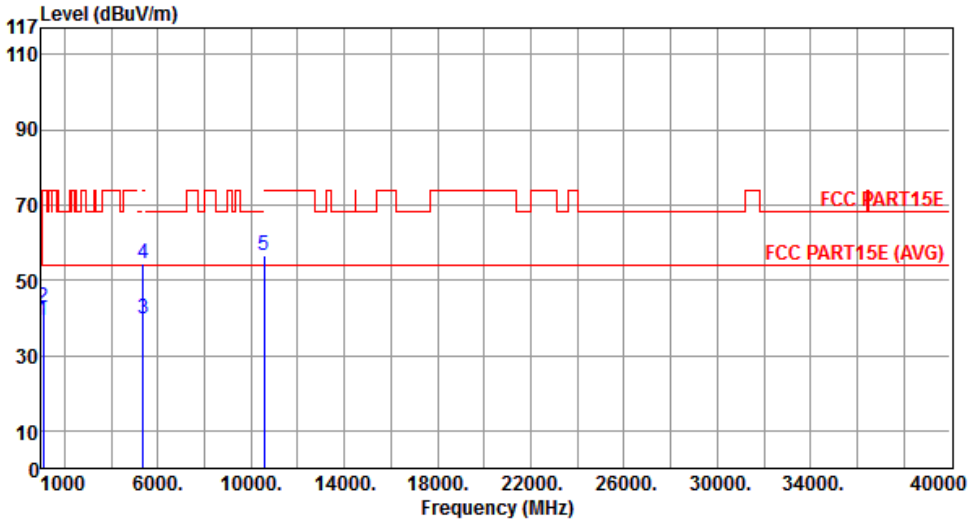
Polarization	Vertical	Test Freq. (MHz)	5230



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.61	54.00	-15.39	47.72	-9.11	Average	---	---
2	1066.00	42.53	74.00	-31.47	51.64	-9.11	Peak	---	---
3	5150.00	43.98	54.00	-10.02	39.04	4.94	Average	---	---
4	5150.00	57.69	74.00	-16.31	52.75	4.94	Peak	---	---
5	10460.00	56.77	68.30	-11.53	41.95	14.82	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

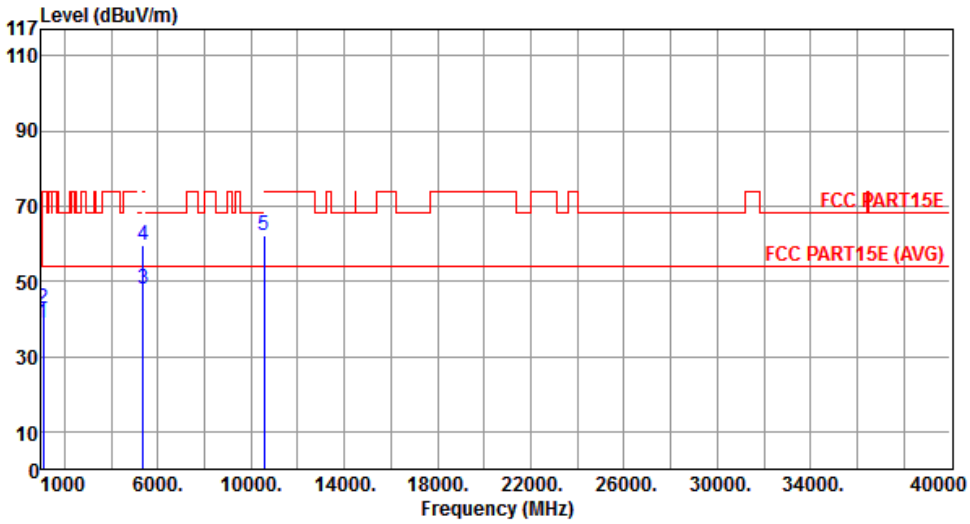
Polarization	Horizontal	Test Freq. (MHz)	5270



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.12	54.00	-14.88	48.23	-9.11	Average	---	---
2	1066.00	42.73	74.00	-31.27	51.84	-9.11	Peak	---	---
3	5350.00	39.89	54.00	-14.11	34.80	5.09	Average	---	---
4	5350.00	54.21	74.00	-19.79	49.12	5.09	Peak	---	---
5	10540.00	56.69	68.30	-11.61	41.79	14.90	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

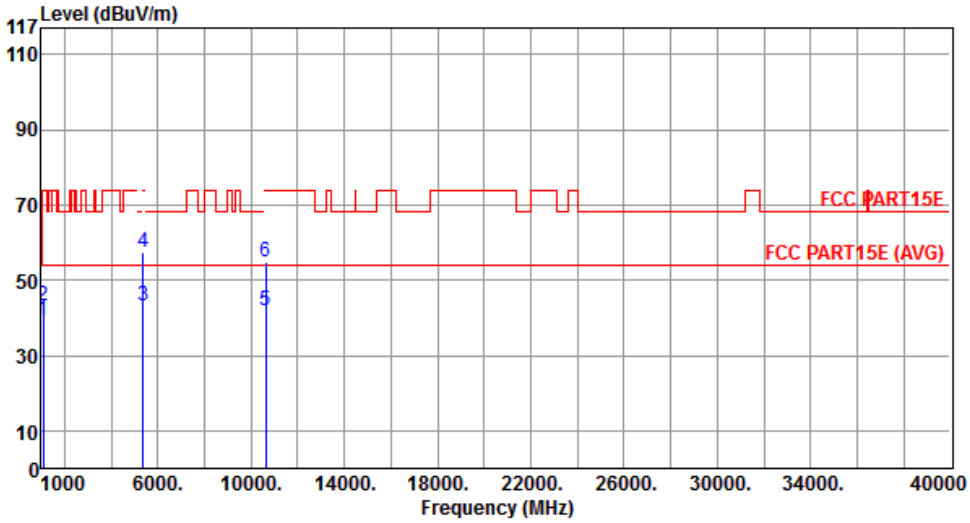
Polarization	Vertical	Test Freq. (MHz)	5270



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.87	54.00	-15.13	47.98	-9.11	Average	---	---
2	1066.00	42.72	74.00	-31.28	51.83	-9.11	Peak	---	---
3	5350.00	47.97	54.00	-6.03	42.88	5.09	Average	---	---
4	5350.00	59.67	74.00	-14.33	54.58	5.09	Peak	---	---
5	10540.00	62.32	68.30	-5.98	47.42	14.90	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

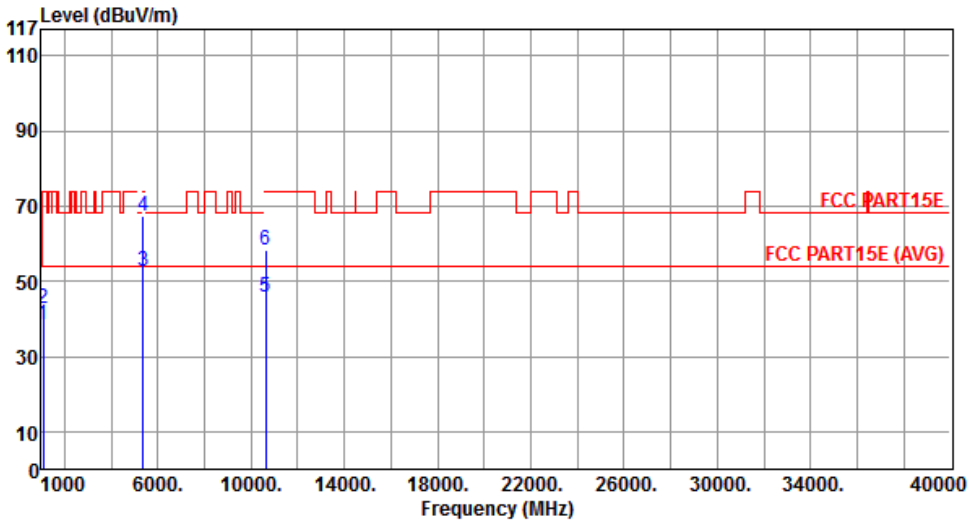
Polarization	Horizontal	Test Freq. (MHz)	5310



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.46	54.00	-14.54	48.57	-9.11	Average	---	---
2	1066.00	43.23	74.00	-30.77	52.34	-9.11	Peak	---	---
3	5350.00	43.32	54.00	-10.68	38.23	5.09	Average	---	---
4	5350.00	57.40	74.00	-16.60	52.31	5.09	Peak	---	---
5	10620.00	41.91	54.00	-12.09	26.95	14.96	Average	---	---
6	10620.00	55.00	74.00	-19.00	40.04	14.96	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

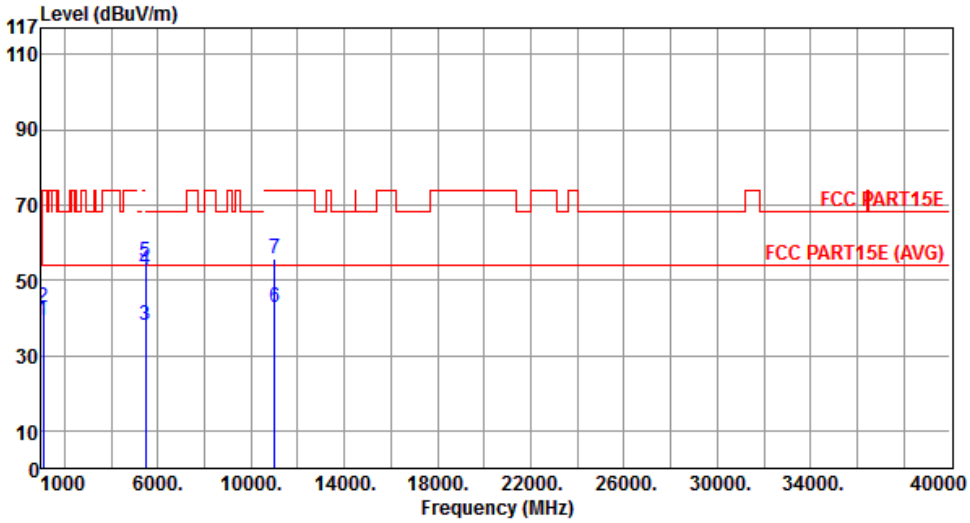
Polarization	Vertical	Test Freq. (MHz)	5310



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.57	54.00	-15.43	47.68	-9.11	Average	---	---
2	1066.00	42.96	74.00	-31.04	52.07	-9.11	Peak	---	---
3	5350.00	52.86	54.00	-1.14	47.77	5.09	Average	---	---
4	5350.00	67.33	74.00	-6.67	62.24	5.09	Peak	---	---
5	10620.00	45.61	54.00	-8.39	30.65	14.96	Average	---	---
6	10620.00	58.44	74.00	-15.56	43.48	14.96	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

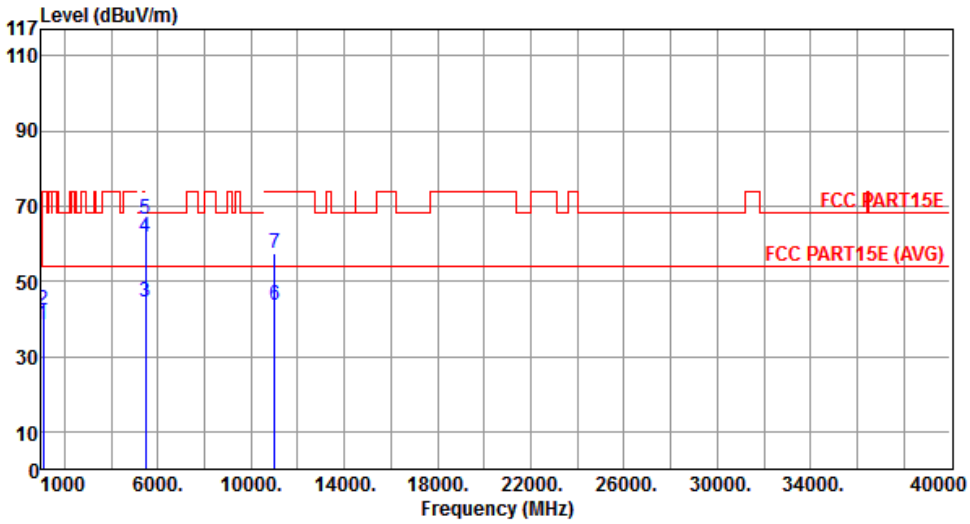
Polarization	Horizontal	Test Freq. (MHz)	5510



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.10	54.00	-14.90	48.21	-9.11	Average	---	---
2	1066.00	42.57	74.00	-31.43	51.68	-9.11	Peak	---	---
3	5460.00	38.05	54.00	-15.95	32.87	5.18	Average	---	---
4	5460.00	52.85	74.00	-21.15	47.67	5.18	Peak	---	---
5	5470.00	55.01	68.30	-13.29	49.82	5.19	Peak	---	---
6	11020.00	42.58	54.00	-11.42	27.31	15.27	Average	---	---
7	11020.00	55.80	74.00	-18.20	40.53	15.27	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

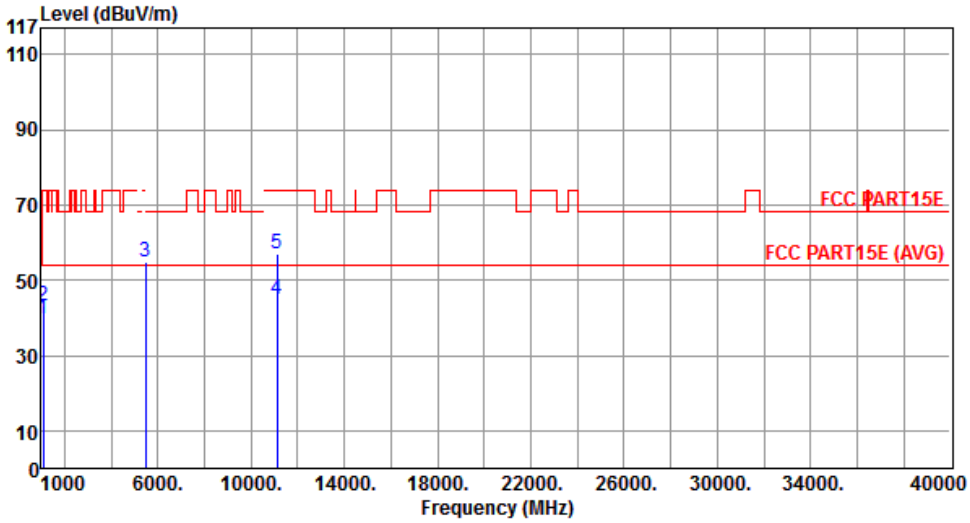
Polarization	Vertical	Test Freq. (MHz)	5510



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.48	54.00	-15.52	47.59	-9.11	Average	---	---
2	1066.00	42.26	74.00	-31.74	51.37	-9.11	Peak	---	---
3	5460.00	44.42	54.00	-9.58	39.24	5.18	Average	---	---
4	5460.00	61.79	74.00	-12.21	56.61	5.18	Peak	---	---
5	5470.00	66.39	68.30	-1.91	61.20	5.19	Peak	---	---
6	11020.00	43.74	54.00	-10.26	28.47	15.27	Average	---	---
7	11020.00	57.21	74.00	-16.79	41.94	15.27	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

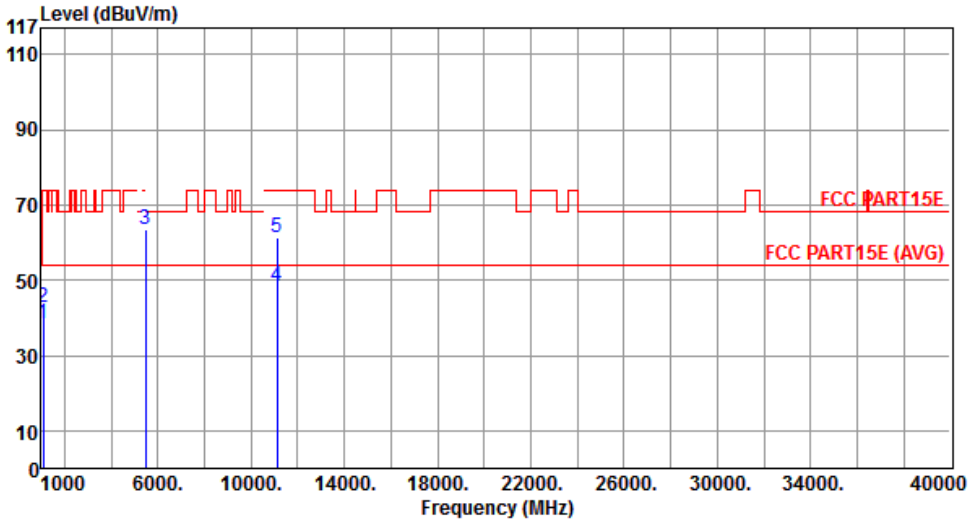
Polarization	Horizontal	Test Freq. (MHz)	5550



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.68	54.00	-14.32	48.79	-9.11	Average	---	---
2	1066.00	43.03	74.00	-30.97	52.14	-9.11	Peak	---	---
3	5470.00	54.84	68.30	-13.46	49.65	5.19	Peak	---	---
4	11100.00	44.82	54.00	-9.18	29.60	15.22	Average	---	---
5	11100.00	56.97	74.00	-17.03	41.75	15.22	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

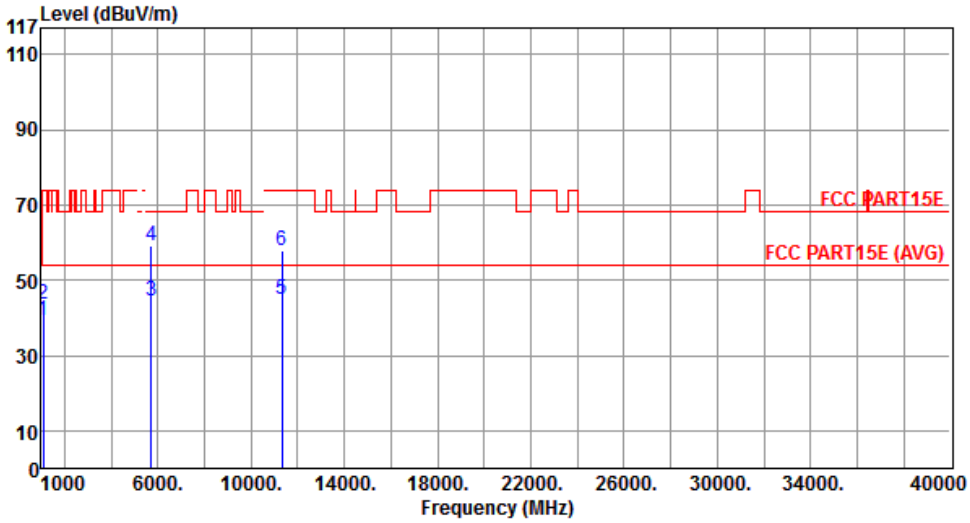
Polarization	Vertical	Test Freq. (MHz)	5550



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.44	54.00	-15.56	47.55	-9.11	Average	---	---
2	1066.00	42.87	74.00	-31.13	51.98	-9.11	Peak	---	---
3	5470.00	63.65	68.30	-4.65	58.46	5.19	Peak	---	---
4	11100.00	48.39	54.00	-5.61	33.17	15.22	Average	---	---
5	11100.00	61.49	74.00	-12.51	46.27	15.22	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

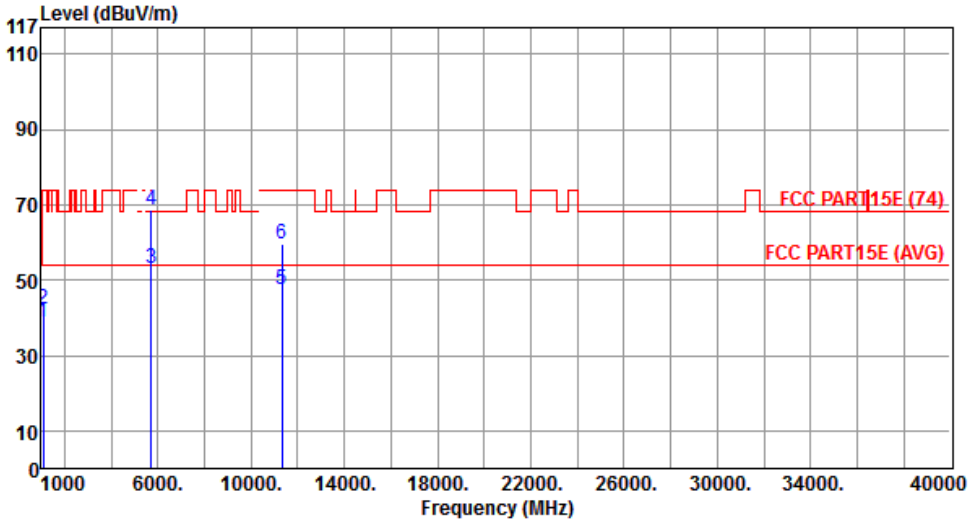
Polarization	Horizontal	Test Freq. (MHz)	5670



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	39.38	54.00	-14.62	48.49	-9.11	Average	---	---
2	1066.00	43.40	74.00	-30.60	52.51	-9.11	Peak	---	---
3	5725.00	44.52	54.00	-9.48	38.96	5.56	Average	---	---
4	5725.00	59.23	68.30	-9.07	53.67	5.56	Peak	---	---
5	11340.00	44.95	54.00	-9.05	29.88	15.07	Average	---	---
6	11340.00	57.67	74.00	-16.33	42.60	15.07	Peak	---	---

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

Polarization	Vertical	Test Freq. (MHz)	5670



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1066.00	38.82	54.00	-15.18	47.93	-9.11	Average	---	---
2	1066.00	42.25	74.00	-31.75	51.36	-9.11	Peak	---	---
3	5725.00	52.94	54.00	-1.06	47.38	5.56	Average	---	---
4	5725.00	68.68	74.00	-5.32	63.12	5.56	Peak	---	---
5	11340.00	47.33	54.00	-6.67	32.26	15.07	Average	---	---
6	11340.00	59.73	74.00	-14.27	44.66	15.07	Peak	---	---

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: 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.

3.7 Frequency Stability

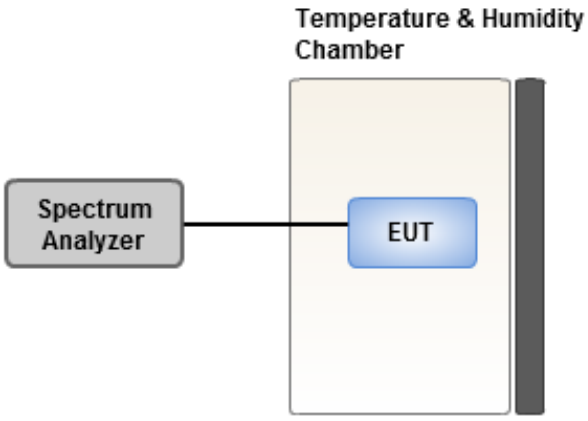
3.7.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.7.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source .
2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.7.3 Test Setup



3.7.4 Test Result of Frequency Stability

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	1.96	1.76	1.92	2.37
T20°CVmin	-0.52	0.24	0.16	0.06
T55°CVnom	0.29	0.30	0.69	0.87
T50°CVnom	-0.06	-0.25	0.27	-0.02
T40°CVnom	2.02	1.78	2.18	2.28
T30°CVnom	0.56	0.07	0.79	0.66
T20°CVnom	0.17	0.49	0.35	0.24
T10°CVnom	0.74	0.66	0.50	1.27
T0°CVnom	0.80	0.37	1.53	0.38
T-10°CVnom	0.30	-0.10	-0.06	0.25
T-20°CVnom	0.44	-0.17	0.43	0.47
T-30°CVnom	0.22	0.47	0.82	0.22
Vnom [V]: 110		Vmax [V]: 126.5		Vmin [V]: 93.5
Tnom [°C]: 20		Tmax [°C]: 55		Tmin [°C]: -30

==END==