

FCC PART 15E TEST REPORT FOR CERTIFICATION
On Behalf of

Planet Computers Limited

Gemini

Gemini 4G

FCC ID: 2AO7Q-X600M1

Prepared for : Planet Computers Limited

Suite #9, 56 Sloane Square, London, SW1W 8AX, United
Kingdom

Prepared By : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Kefeng Road, Science & Technology Park,
Nanshan District , Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F18055

Date of Test : Jan.18~31, 2018

Date of Report : Apr.12, 2018

TABLE OF CONTENTS

Description	Page
1. SUMMARY OF STANDARDS AND RESULTS	1-1
1.1. Description of Standards and Results	1-1
2. GENERAL INFORMATION	2-1
2.1. Description of Device (EUT)	2-1
2.2. Test Information	2-2
2.3. Tested Supporting System Details	2-3
2.4. Block diagram of connection between the EUT and simulators	2-3
2.5. Test Facility	2-3
2.6. Measurement Uncertainty (95% confidence levels, k=2)	2-4
3. POWER LINE CONDUCTED EMISSION TEST	3-1
3.1. Test Equipments	3-1
3.2. Block Diagram of Test Setup	3-1
3.3. Power Line Conducted Emission Test Limits	3-1
3.4. Configuration of EUT on Test	3-2
3.5. Operating Condition of EUT	3-2
3.6. Test Procedure	3-2
3.7. Power Line Conducted Emission Test Results	3-2
4. RADIATED EMISSION TEST	4-1
4.1. Test Equipment	4-1
4.2. Block Diagram of Test Setup	4-2
4.3. Radiated Emission Limit	4-3
4.4. EUT Configuration on Test	4-4
4.5. Operating Condition of EUT	4-4
4.6. Test Procedure	4-4
4.7. Radiated Emission Test Results	4-6
5. BAND EDGE COMPLIANCE TEST	5-1
5.1. Test Equipment	5-1
5.2. Limit	5-1
5.3. Test Procedure	5-1
5.4. Test Results	5-1
6. 6dB & 26dB Bandwidth Test	6-1
6.1. Test Equipment	6-1
6.2. Limit	6-1
6.3. Test Procedure	6-1
6.4. Test Results	6-1
7. OUTPUT POWER TEST	7-1
7.1. Test Equipment	7-1
7.2. Limit	7-1
7.3. Test Procedure	7-1
7.4. Test Results	7-2
8. SPECTRAL DENSITY TEST	8-1
8.1. Test Equipment	8-1
8.2. Limit	8-1
8.3. Test Procedure	8-1
8.4. Test Results	8-2
9. FREQUENCY STABILITY MEASUREMENT	9-1
9.1. Test Equipment	9-1
9.2. Limit	9-1
9.3. Test Procedure	9-1

9.4.	Test Result.....	9-1
10.	ANTENNA REQUIREMENT	10-1
10.1.	Standard Applicable	10-1
10.2.	Antenna Connected Construction.....	10-1
11.	DEVIATION TO TEST SPECIFICATIONS	11-1
12.	PHOTOGRAPH OF TEST.....	12-1
12.1.	Photos of Power Line Conducted Emission Test	12-1
12.2.	Photos of Radiated Emission Test.....	12-2
13.	PHOTOS OF EUT	13-1

TEST REPORT CERTIFICATION

Applicant : Planet Computers Limited

Manufacturer : Planet Computers Limited

Product : Gemini

FCC ID : 2A07Q-X600M1

(A) Model No. : Gemini 4G

(B) Serial No. : N/A

(C) Test Voltage : DC 5V From Adapter Input AC 120V/60Hz

Tested for comply with:
FCC CFR47 Part 15 Subpart E

Test procedure used:
ANSI C63.10: 2013
KDB 789033 D02v02r01

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart E requirements. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

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

Date of Test : Jan.18~31, 2018 Report of date: Apr.12, 2018

Prepared by : Monica Liu Reviewed by : Sunny Lu
Monica Liu / Assistant Sunny Lu / Deputy Manager



Approved & Authorized Signer :

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Power Line Conducted Emission	FCC Part 15: 15.207 FCC Part 15: 15.407(b)(6)	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.205 FCC Part 15.407(b)	PASS
Band Edge Compliance	FCC Part 15: 15.407(b) FCC Part 15.205	PASS
6dB Bandwidth Test	FCC Part 15: 15.407(e)	PASS
26dB Bandwidth Test	FCC Part 15: 15.407(a)(5)	PASS
Output Power Test	FCC Part 15: 15.407(a)	PASS
Power Spectral Density Test	FCC Part 15: 15.407(a)	PASS
Frequency Stability	FCC Part 15: 15.407(g)	PASS
Antenna requirement	FCC Part 15: 15.203	PASS
N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product	: Gemini
Model No.	: Gemini 4G
FCC ID	: 2AO7Q-X600M1
Radio	: IEEE802.11 a/b/g/n/ac; Bluetooth V3.0+EDR; Bluetooth V4.0
Operation Frequency	: IEEE 802.11a: 5180MHz—5240MHz; 5745MHz—5825MHz IEEE 802.11ac VHT20: 5180MHz—5240MHz; 5745MHz—5825MHz IEEE 802.11ac VHT40: 5190MHz—5230MHz; 5755MHz—5795MHz IEEE 802.11ac VHT80: 5210MHz; 5775MHz IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE802.11n HT20: 2412MHz—2462MHz; 5180MHz—5240MHz; 5745MHz—5825MHz IEEE802.11n HT40: 2422MHz—2452MHz; 5190MHz—5230MHz; 5755MHz—5795MHz Bluetooth : 2402-2480MHz
Modulation Technology	: IEEE 802.11b: DSSS(CCK,DBPSK) IEEE 802.11a/g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT20, VHT40, VHT80: OFDM(16QAM, 64QAM, 256QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,QPSK,BPSK) Bluetooth V3.0+EDR: GFSK, $\pi/4$ DQPSK,8-DPSK Bluetooth V4.0:GFSK
Antenna Assembly Gain	: Antenna Type: PIFA Bluetooth: 2.0dBi WIFI 2.4GHz: 2.0dBi WIFI 5GHz: 0.42dBi
Applicant	: Planet Computers Limited Suite #9, 56 Sloane Square, London, SW1W 8AX, United Kingdom
Manufacturer	: Planet Computers Limited Suite #9, 56 Sloane Square, London, SW1W 8AX, United Kingdom
Factory	: SHENZHEN YIXU ELECTRONICS CO., LTD. Building B, Area E, Yuwei, Qingxiang Rd, Longhua, Shenzhen
Power Adapter	: Manufacturer: Planet, M/N: TPA-10120125UUA-MTK; Cable: Unshielded, Detachable, 1.0m
USB Cable	: Shielded, Detachable, 0.8m
Date of Test	: Jan.18~31, 2018
Date of Receipt	: Dec.26, 2017
Sample Type	: Prototype production

2.2. Test Information

A special test software was used to control EUT work in Continuous TX mode (The duty cycle of the test signal is 100%), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11a	6	Low :CH36	5180
	6	Middle: CH40	5200
	6	High: CH48	5240
	6	Low :CH149	5745
	6	Middle: CH157	5785
	6	High: CH165	5825
IEEE 802.11nHT20	MCS0	Low :CH36	5180
	MCS0	Middle: CH40	5200
	MCS0	High: CH48	5240
	MCS0	Low :CH149	5745
	MCS0	Middle: CH157	5785
	MCS0	High: CH165	5825
IEEE 802.11nHT40	MCS0	Low :CH38	5190
	MCS0	High: CH46	5230
	MCS0	Low :CH151	5755
	MCS0	High: CH159	5795
IEEE 802.11acVHT20	MCS0	Low :CH36	5180
	MCS0	Middle: CH40	5200
	MCS0	High: CH48	5240
	MCS0	Low :CH149	5745
	MCS0	Middle: CH157	5785
	MCS0	High: CH165	5825
IEEE 802.11acVHT40	MCS0	Low :CH38	5190
	MCS0	High: CH46	5230
	MCS0	Low :CH151	5755
	MCS0	High: CH159	5795
IEEE 802.11acVHT80	MCS0	CH42	5210
	MCS0	CH155	5775
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			

99% Emission Bandwidth.

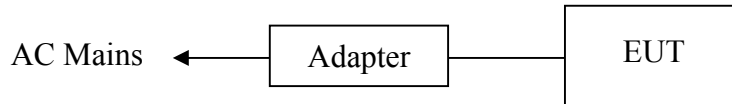
Mode	Frequency(MHz)	99%Bandwidth(MHz)	F _L (MHz)	F _H (MHz)
11a	5240	16.522	5231.658	5248.752
11n HT20	5240	17.636	5231.056	5248.986
11n HT40	5230	35.955	5213.254	5248.025
11ac VHT20	5240	17.640	5231.069	5248.995
11ac VHT40	5230	35.952	5213.365	5248.029
11ac VHT80	5210	75.018	5171.068	5247.682

Note: The F_H do not fall into the frequency band 5250-5350MHz, So the DFS test can be exempted for this device.

2.3. Tested Supporting System Details

[None]

2.4. Block diagram of connection between the EUT and simulators



(EUT: Gemini)

2.5. Test Facility

Site Description

Name of Firm

Audix Technology (Shenzhen) Co., Ltd.
No. 6, Kefeng Road, Science & Technology
Park, Nanshan District, Shenzhen, Guangdong,
China

EMC Lab.

Certificated by Industry Canada
: Registration Number: IC 5183A-1
Valid Date: May.07, 2020

Certificated by DAkkS, Germany
: Registration No: D-PL-12151-01-00
Valid Date: Dec.07, 2021

Accredited by NVLAP, USA
: NVLAP Code: 200372-0
Valid Date: Mar.31, 2018

Certificated by FCC, USA
Designation Number: CN5022
Valid Date: Mar.31, 2018

2.6. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.6dB (150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	2.8dB (30~200MHz, Polarization: H)
	2.8dB (30~200MHz, Polarization: V)
	3.0dB (200M~1GHz, Polarization: H)
	3.0dB (200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in 3m chamber	5.6dB (1~6GHz, Distance: 3m)
	5.8dB (6~18GHz, Distance: 3m)
	5.8dB (Above 18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.7dB(30MHz~1000MHz)
	3.3dB(1GHz~26.5GHz)
Uncertainty for Conduction Spurious emission test	2.0dB
Uncertainty for Output power test	0.8dB
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.1 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

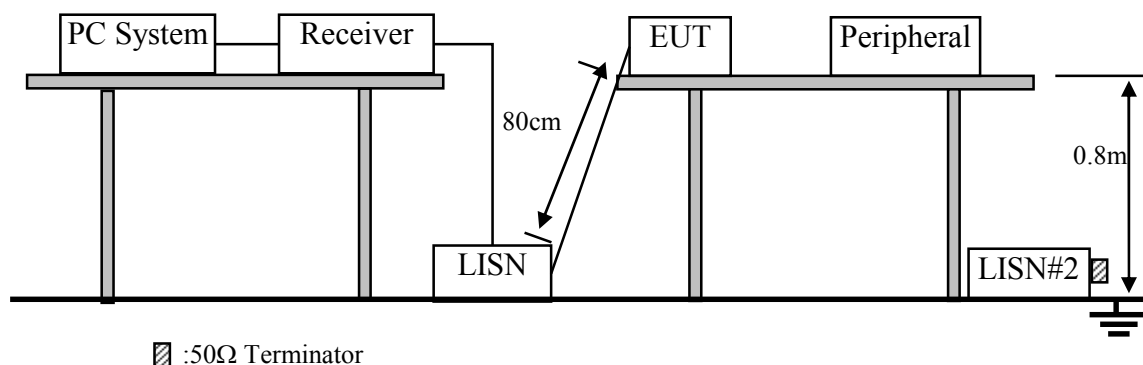
3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	1# Shielding Room	AUDIX	N/A	N/A	Apr.17,17	1 Year
2.	Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.22,17	1 Year
3.	L.I.S.N.	Rohde & Schwarz	ENV216	102160	Mar.06.17	1 Year
4.	L.I.S.N.#2	Kyoritsu	K NW-403D	8-1750-2	Apr.22,17	1 Year
5.	I.S.N.	TESEQ	S751	24559	Mar.06.17	1.year
6.	Terminator	Hubersuhner	50Ω	No.1	Apr.23,17	1 Year
7.	Terminator	Hubersuhner	50Ω	No.2	Apr.23,17	1 Year
8.	RF Cable	Fujikura	RG55/U	NO.2	Apr.22,17	1Year
9.	Coaxial Switch	Anritsu	MP59B	6201397223	Apr.22,17	1 Year
10.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

3.2. Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Gemini (EUT)

Model No. : Gemini 4G

Serial No. : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

3.5.Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turn on the power of all equipments.

3.5.3. PC run test software to control EUT work in Tx mode.

3.6.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

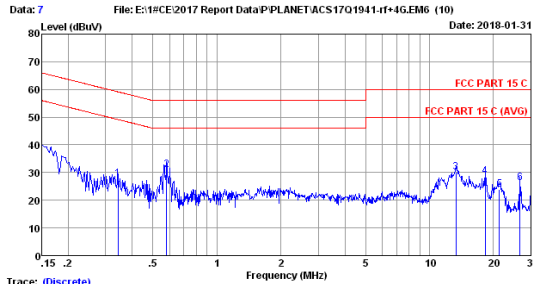
The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7.Power Line Conducted Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

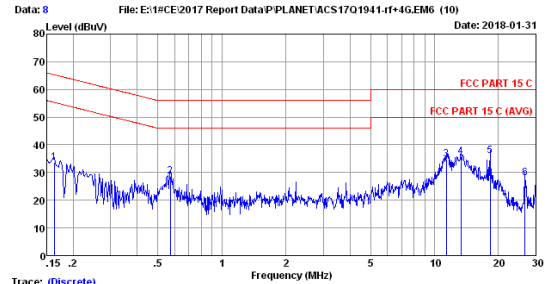
5180-5240MHz Band:



Trace: (Discrete)
Site no :1# CE
Dis./Lism :2017 LISN ENV216-L
Limit :FCC PART 15 C
Env./Ins. :21.5°C/53%
EUT :Gemini M/N:Gemini 4G
Power Rating :DC 5V From Adapter Input AC 120V/60Hz
Test Mode :WIFI 5G band1 TX
Data No :7
LISN phase:
Engineer :Garry

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.343	9.22	0.03	18.40	27.65	59.13	31.48	QP
2	0.579	9.50	0.03	21.54	31.07	56.00	24.93	QP
3	13.337	9.58	0.12	20.54	30.24	60.00	29.76	QP
4	18.232	9.69	0.12	18.80	28.61	60.00	31.39	QP
5	21.260	9.75	0.13	14.07	23.95	60.00	36.05	QP
6	26.699	9.80	0.13	16.44	26.37	60.00	33.63	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

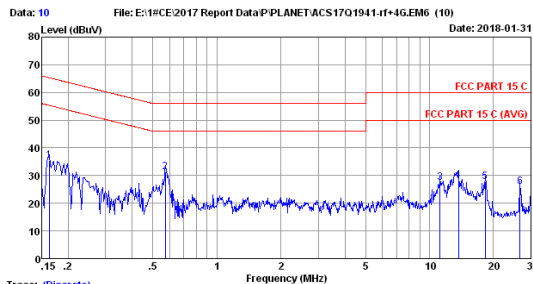


Trace: (Discrete)
Site no :1# CE
Dis./Lism :2017 LISN ENV216-N
Limit :FCC PART 15 C
Env./Ins. :21.5°C/53%
EUT :Gemini M/N:Gemini 4G
Power Rating :DC 5V From Adapter Input AC 120V/60Hz
Test Mode :WIFI 5G band1 TX
Data No :8
LISN phase:
Engineer :Garry

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	9.48	0.02	24.03	33.53	65.34	31.81	QP
2	0.573	9.31	0.03	19.34	28.68	56.00	27.32	QP
3	11.377	9.47	0.11	25.32	34.90	60.00	25.10	QP
4	13.337	9.49	0.12	26.22	35.83	60.00	24.17	QP
5	18.232	9.61	0.12	26.38	36.11	60.00	23.89	QP
6	26.699	9.79	0.13	18.06	27.98	60.00	32.02	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

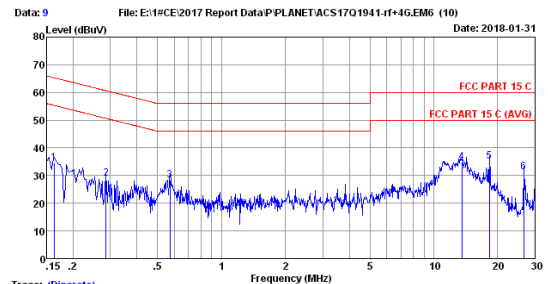
5745-5825MHz Band:



Trace: (Discrete)
Site no :1# CE
Dis./Lism :2017 LISN ENV216-L
Limit :FCC PART 15 C
Env./Ins. :21.5°C/53%
EUT :Gemini M/N:Gemini 4G
Power Rating :DC 5V From Adapter Input AC 120V/60Hz
Test Mode :WIFI 5G band4 TX
Data No :10
LISN phase:
Engineer :Garry

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	9.52	0.02	25.85	35.39	65.34	29.95	QP
2	0.573	9.50	0.03	21.71	31.24	56.00	24.76	QP
3	11.198	9.57	0.11	17.72	27.40	60.00	32.60	QP
4	13.695	9.58	0.12	18.59	28.29	60.00	31.71	QP
5	18.232	9.69	0.12	17.91	27.72	60.00	32.28	QP
6	26.699	9.80	0.13	16.17	26.10	60.00	33.90	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Trace: (Discrete)
Site no :1# CE
Dis./Lism :2017 LISN ENV216-N
Limit :FCC PART 15 C
Env./Ins. :21.5°C/53%
EUT :Gemini M/N:Gemini 4G
Power Rating :DC 5V From Adapter Input AC 120V/60Hz
Test Mode :WIFI 5G band4 TX
Data No :9
LISN phase:
Engineer :Garry

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	9.48	0.02	24.98	34.48	65.34	30.86	QP
2	0.286	9.42	0.03	19.60	29.05	60.63	31.58	QP
3	0.573	9.31	0.03	19.02	28.36	56.00	27.64	QP
4	13.551	9.49	0.12	25.14	34.75	60.00	25.25	QP
5	18.232	9.61	0.12	25.48	35.21	60.00	24.79	QP
6	26.558	9.78	0.13	21.44	31.35	60.00	28.65	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1. Test Equipment

4.1.1. For frequency range 30 MHz ~1000MHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Mar.28,17	1 Year
2.	Signal Analyzer	R&S	FSV30	103669	Oct.15,17	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESR7	101547	Apr.22,17	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.22,17	1 Year
5.	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	493	Jun.27.17	1 Year
6.	Loop Antenna	Chase	HLA6120	1062	Oct.15,17	1 Year
7.	RF Cable	MIYAZAKI	CFD400NL-LW	No.3	Sep.02.17	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.22,17	1 Year
9.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A

Note: N/A means Not applicable.

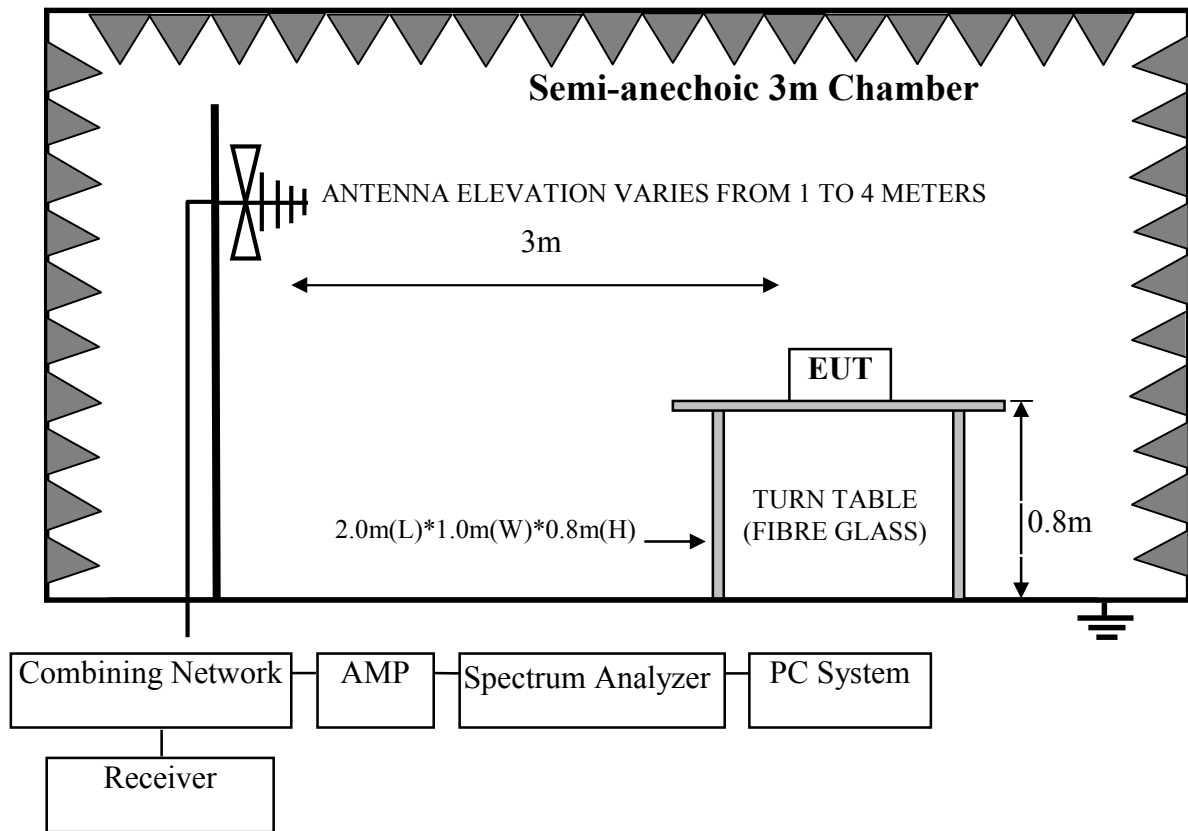
4.1.2. For frequency range 1GHz~40GHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	Apr.22,17	1 Year
2.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	May.15,17	1 Year
3.	Amplifier	Agilent	8449B	3008A02495	Apr.22,17	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX104	274094/4	Apr.22,17	1 Year
5.	Horn Antenna	EMCO	3116	0062643	Oct.10,17	1 Year
6.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A

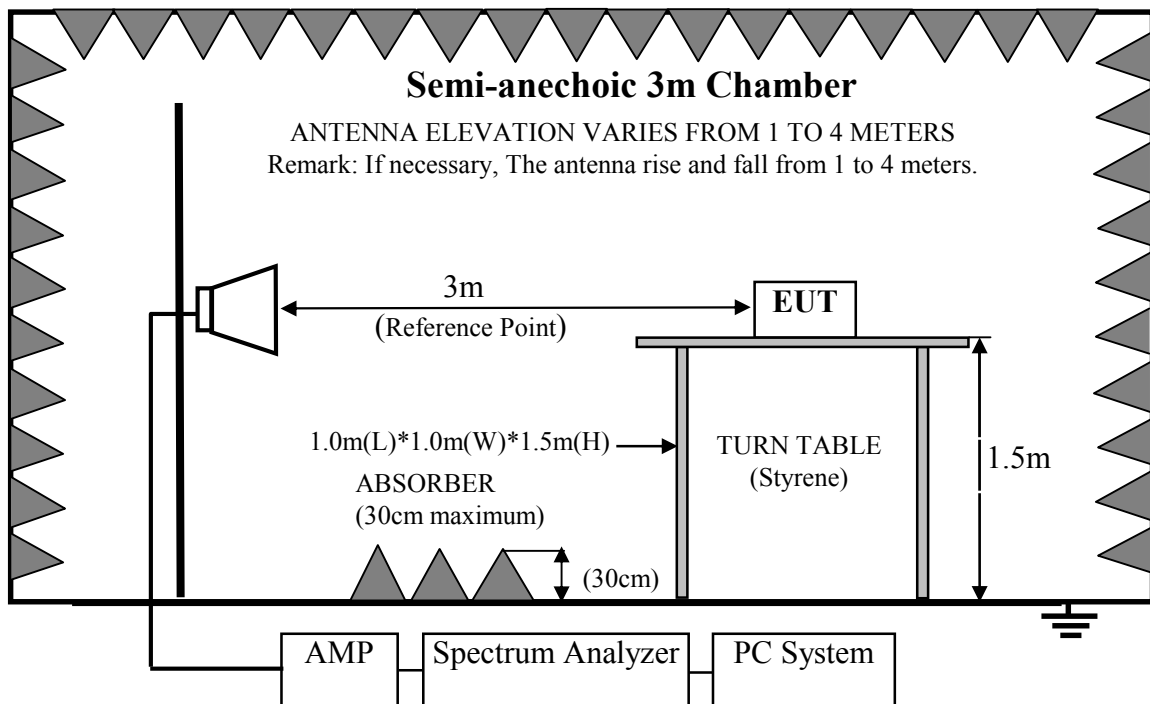
Note: N/A means Not applicable.

4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-40GHz



4.3.Radiated Emission Limit

For transmitters operating in the 5.15-5.25 GHz; 5.25-5.35GHz; 5.47-5.725GHz, 5.725-5.850GHz band: all emissions outside of those band shall not exceed an EIRP of -27 dBm/MHz. Unwanted emissions below 1 GHz and those emissions appearing within 15.205 restricted frequency bands must comply with the general field strength limits set forth in Section 15.209

4.3.1. 15.209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Remarks : (1) Emission level $\text{dB}\mu\text{V} = 20 \log$ Emission level $\mu\text{V/m}$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.
- (4) Unwanted Emissions that fall Outside of the Restricted Bands should meet the limit Peak $68.2\text{dB}(\mu\text{V})/\text{m}$ (-27dBm). Unwanted Emissions in the Restricted Bands should meet the limit 15.209.

4.3.2. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

4.4.EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

4.4.1. Gemini (EUT)

Model No. : Gemini 4G

Serial No. : N/A

4.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.5.Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turn on the power of all equipments.

4.5.3. Let EUT work in Tx mode.

4.6.Test Procedure

Frequency below 30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground . The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horn antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2013 on radiated emission Test.

For emissions below 1GHz and those emissions appearing within 15.205 restricted frequency bands use below procedure:

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

Maximum Peak emission levels are measured by setting the analyzer as follows:

- (a) RBW = 1 MHz.
- (b) VBW $\geq$ 3 MHz.
- (c) Detector = Peak.
- (d) Sweep time = auto.
- (e) Trace mode = max hold.
- (f) Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately $1/x$, where x is the duty cycle. For example, at 50% duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

Maximum Average emission levels are measured by setting the analyzer as follows:

- (a) RBW = 1 MHz.
- (b) VBW $\geq$ 3 MHz.
- (c) Detector = power averaging (rms), if $\text{span}/(\# \text{ of points in sweep}) \leq \text{RBW}/2$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, the detector mode shall be set to peak.
- (d) Averaging type = power averaging (rms)
As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
- (e) Sweep time = auto.
- (f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, the number of traces shall be increased by a factor of $1/x$, where x is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—rather than turning on and off with the transmit cycle, at least 100 traces shall be averaged.)
- (g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, a correction factor shall be added to the measurement results prior to comparing to the emission limit to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
 - If power averaging (rms) mode was used in step (iv) above, the correction factor is $10 \log (1/x)$, where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels.
 - If linear voltage averaging mode was used in step (iv) above, the correction factor is $20 \log (1/x)$, where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels.
 - If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning on and off with the transmit cycle, no duty cycle correction is required for that emission.

For the emissions above 1GHz and not appearing within 15.205 restricted frequency bands use below procedure:

- (1).The maximum emission at 3m distance was measured and recorded with receive antenna in both vertical and horizontal by rotating the turntable and by lowering the receive antenna.
- (2).The EUT was then removed and replaced with a substitution antenna in the same position and the substitution antenna must have the same polarization with the receive antenna.
- (3). A signal which have the same frequency obtained in step 2 was fed to the substitution, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver, the level of the signal generator was adjusted until the measured field strength level in step 2 was obtained, recorded the level of the signal generator.
- (4).Repeated step 4 with both antenna polarizations
- (5).The spurious emissions is equal to the power supplied by the signal generator and corrections due to the gain of the substitution antenna and the cable loss between the signal generator and the substitution antenna. or use procedure (6).
- (6). Per KDB789033 clause H 2)d).if the test distance is 3m,the $EIRP(dBm) = E(dBuV/m) - 95.2$
Get the result of all unwanted emission outside the restricted band is less than the -27dBm/MHz.

We had checked frequency range that is 30MHz to 10th harmonic (40GHz) and no any emissions were found from 18GHz to 40GHz, so the radiated emission from 18GHz to 40GHz were not record.

4.7.Radiated Emission Test Results

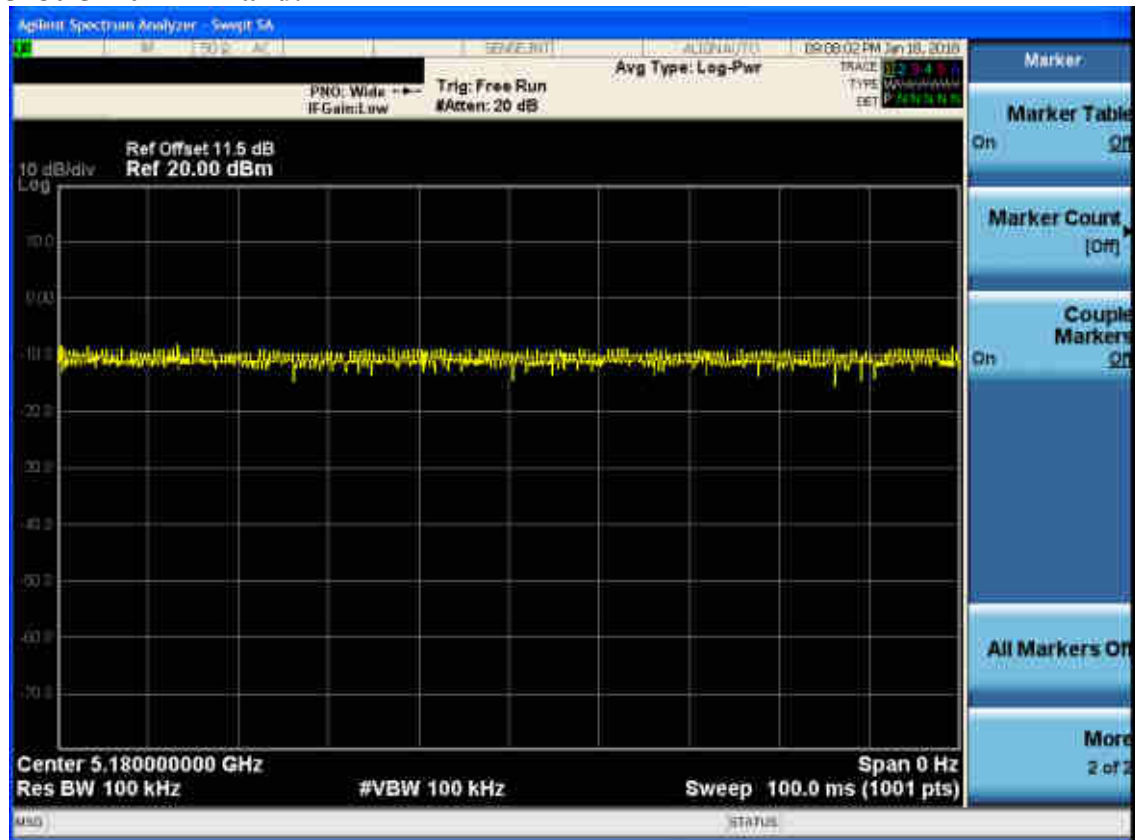
PASS.

All the emissions from 30MHz to 1 GHz were comply with 15.209 limits.

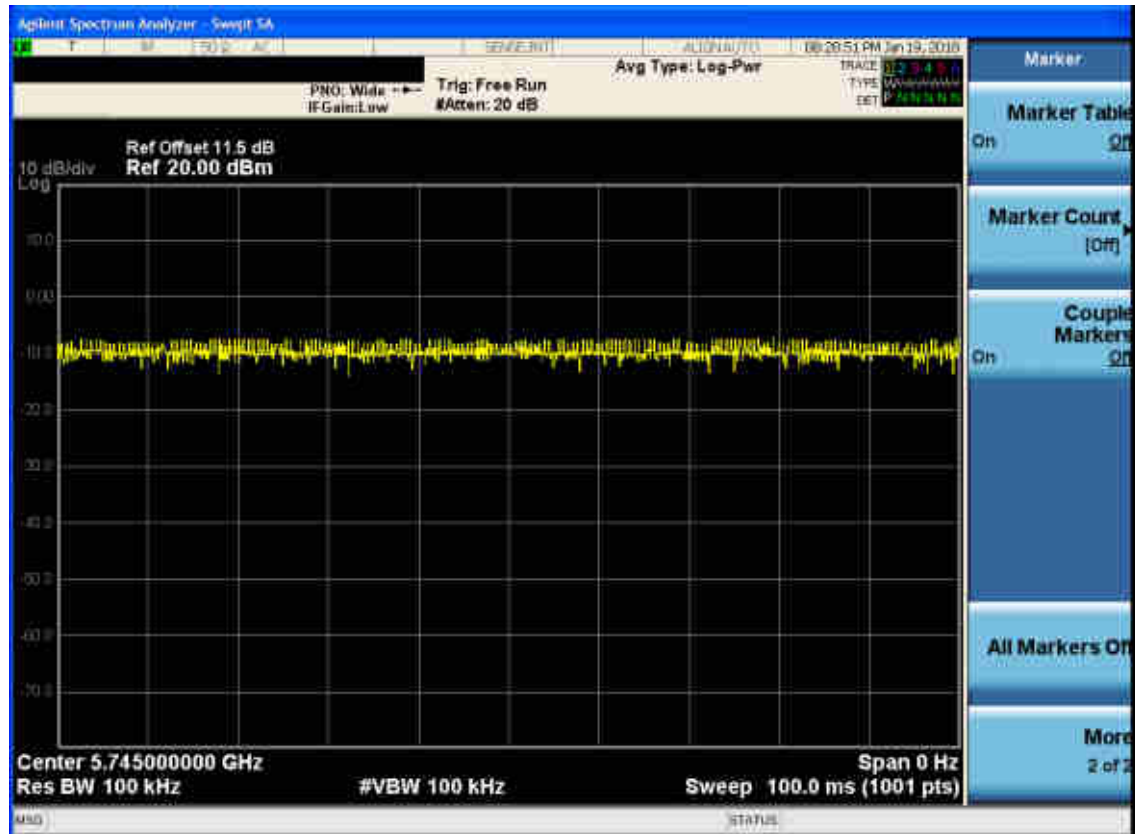
All other emission comply with 15.407 (b)(1) requirements.

Note: The emissions (9kHz~30MHz) not reported for there is no emission be found.

Duty cycle
5180-5240MHz Band:

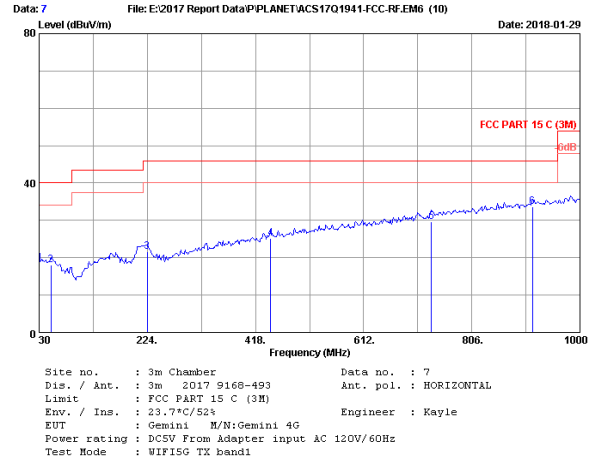
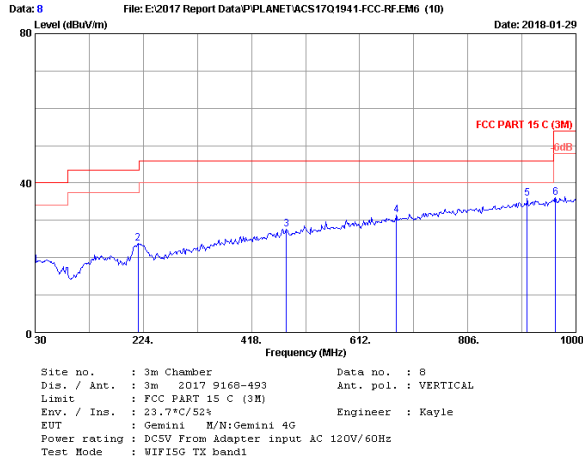


5745-5825MHz Band:

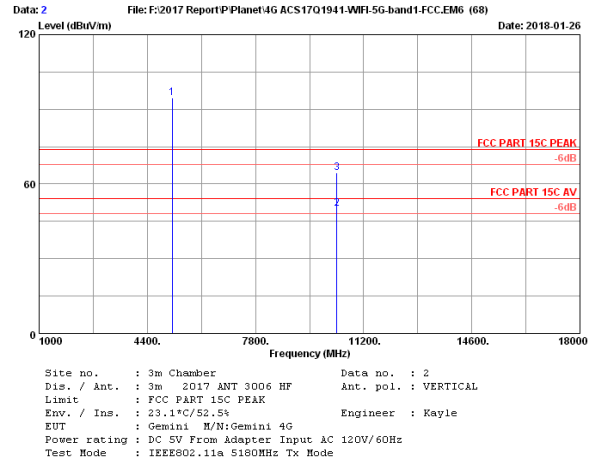
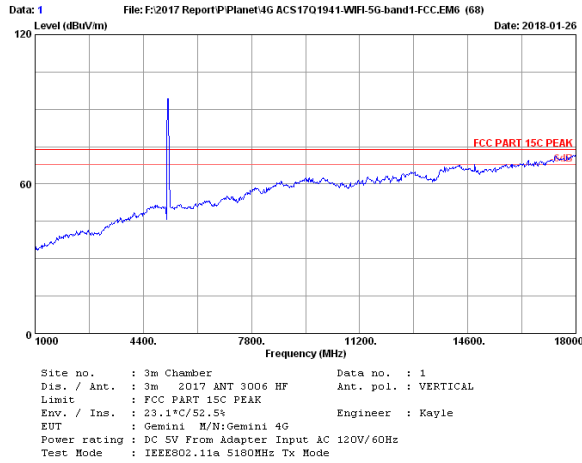


Note: The duty cycle of the test signal is 100%.

5180-5240MHz Band: Frequency: 30MHz~1GHz

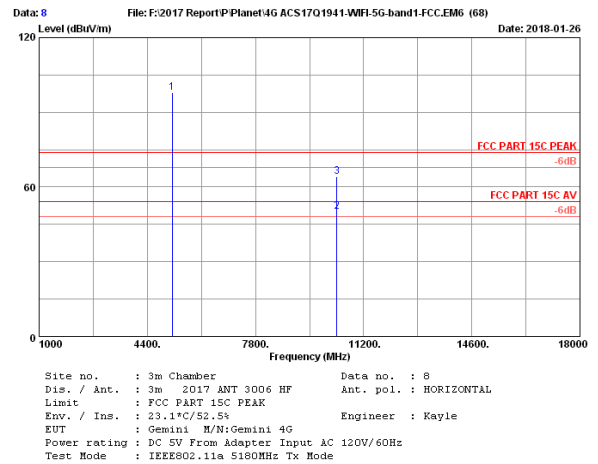
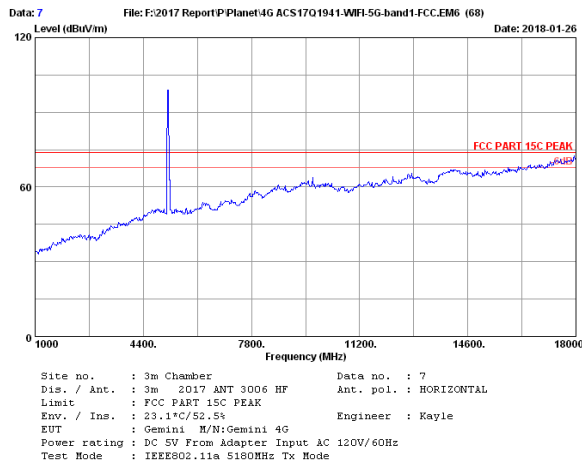


Frequency: 1GHz~18GHz



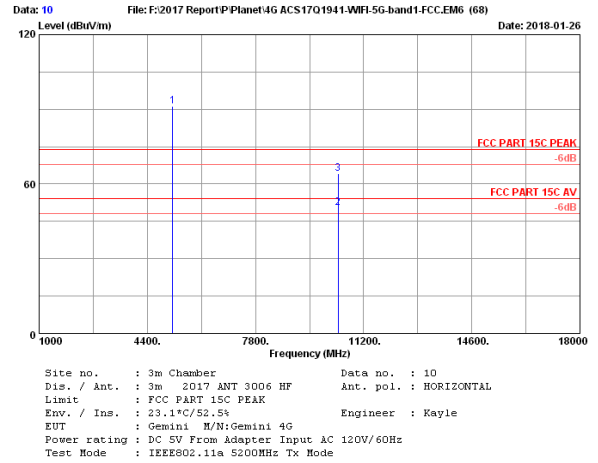
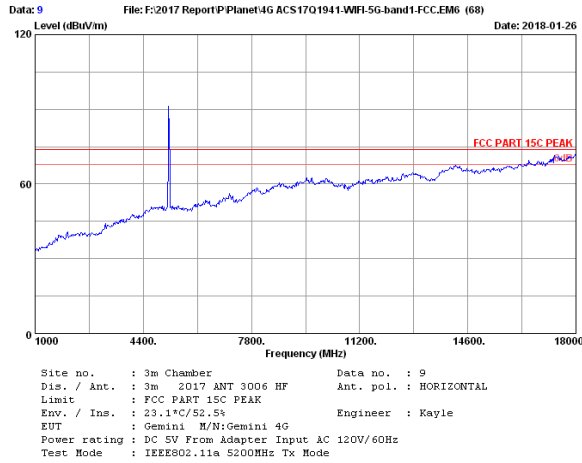
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5180.00	33.47	15.18	79.97	33.91	94.71	74.00	-20.71	Peak
2	10360.00	38.29	20.23	27.24	35.58	50.18	54.00	3.82	Average
3	10360.00	38.29	20.23	41.55	35.58	64.49	74.00	9.51	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



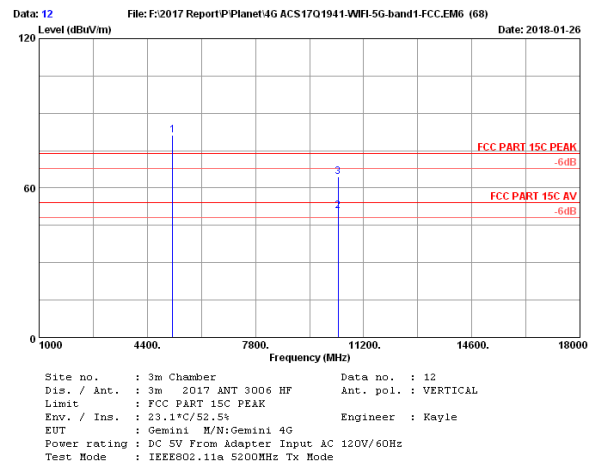
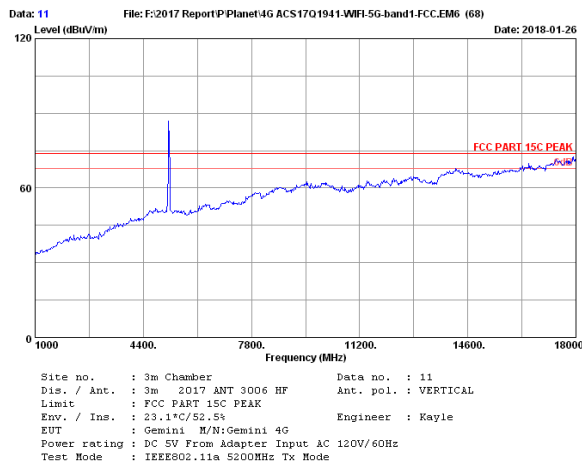
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5180.00	33.47	15.18	83.25	33.91	97.99	74.00	-23.99	Peak
2	10360.00	38.29	20.23	27.33	35.58	50.27	54.00	3.73	Average
3	10360.00	38.29	20.23	41.23	35.58	64.17	74.00	9.83	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



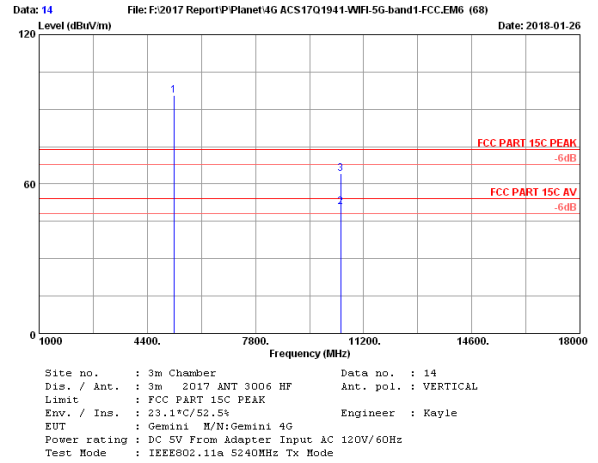
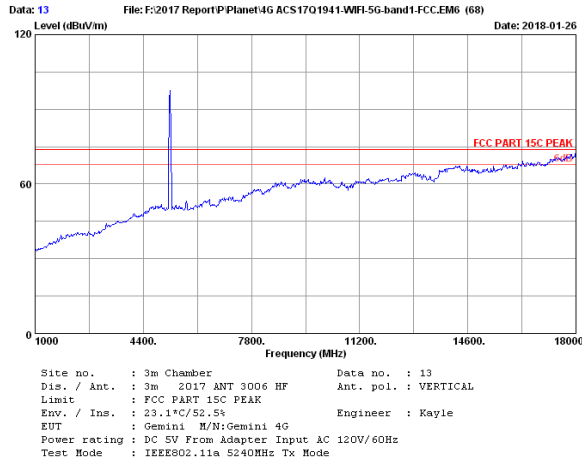
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5200.00	33.44	15.22	76.55	33.95	91.26	74.00	-17.26	Peak
2	10400.00	38.34	20.22	27.87	35.80	50.63	54.00	3.37	Average
3	10400.00	38.34	20.22	41.37	35.80	64.13	74.00	9.87	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



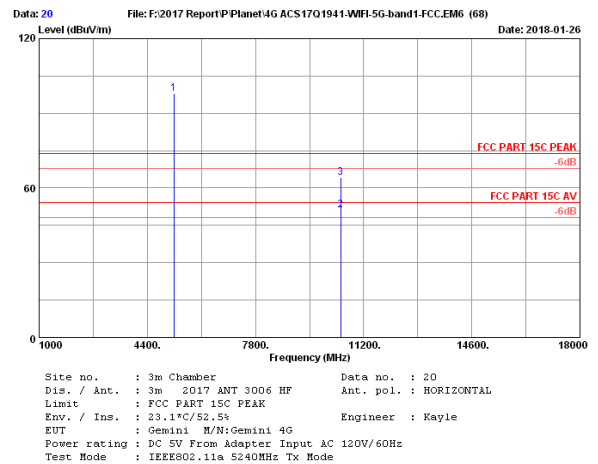
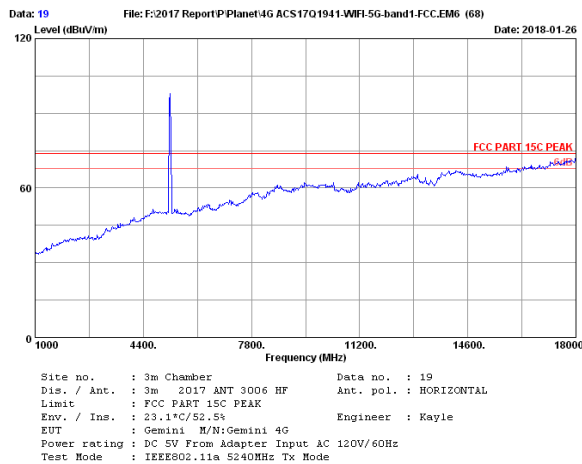
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5200.00	33.44	15.22	66.57	33.95	81.28	74.00	-7.28	Peak
2	10400.00	38.34	20.22	27.94	35.80	50.70	54.00	3.30	Average
3	10400.00	38.34	20.22	41.65	35.80	64.41	74.00	9.59	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



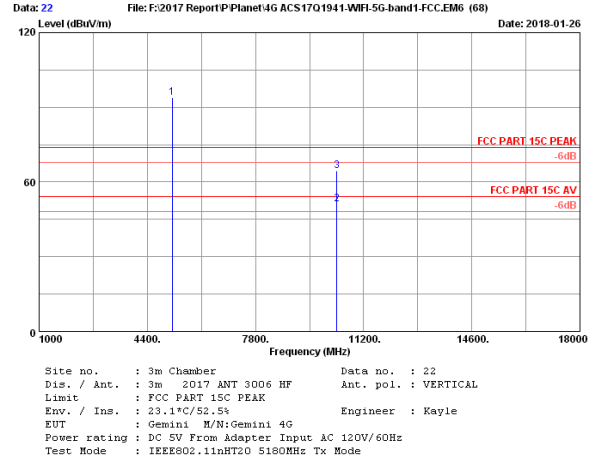
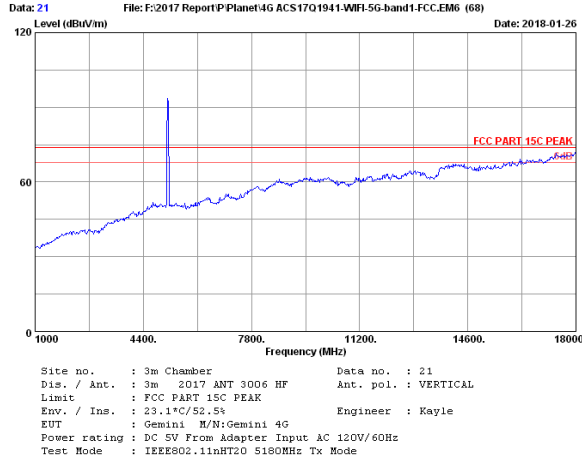
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5240.00	33.38	15.30	80.77	33.99	95.46	74.00	-21.46	Peak
2	10480.00	38.47	20.20	28.42	36.13	50.96	54.00	3.04	Average
3	10480.00	38.47	20.20	41.58	36.13	64.12	74.00	9.88	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



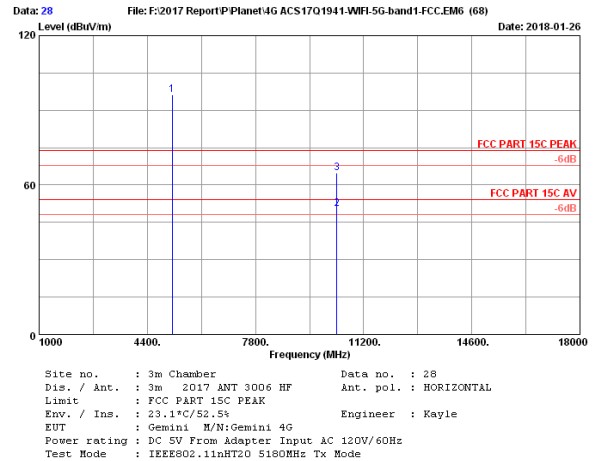
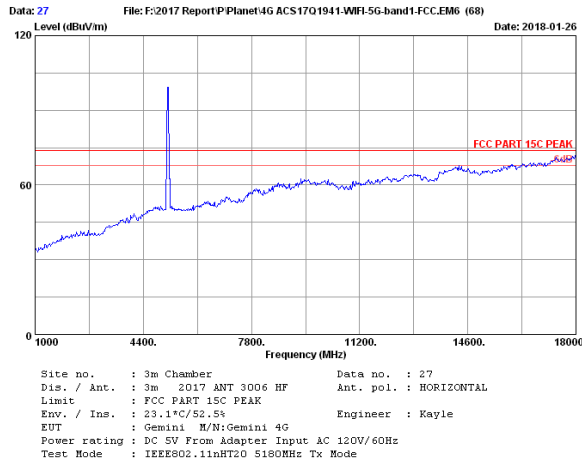
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5240.00	33.38	15.30	83.38	33.99	98.07	74.00	-24.07	Peak
2	10480.00	38.47	20.20	28.65	36.13	51.19	54.00	2.81	Average
3	10480.00	38.47	20.20	41.69	36.13	64.23	74.00	9.77	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



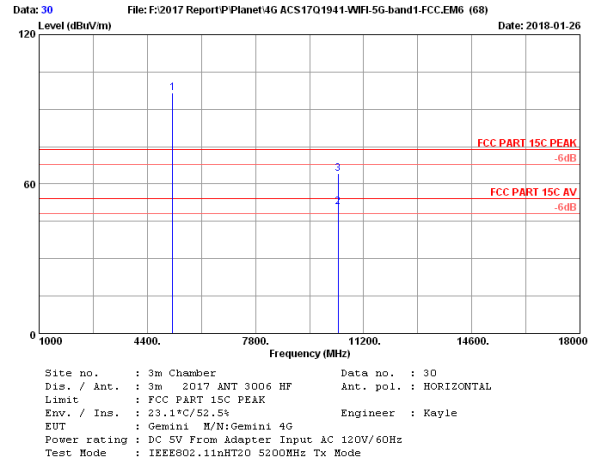
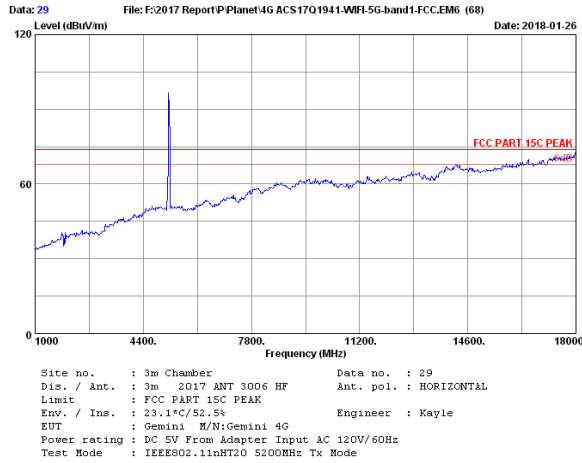
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5180.00	33.47	15.18	79.29	33.91	94.03	74.00	-20.03	Peak
2	10360.00	38.29	20.23	28.12	35.58	51.06	54.00	2.94	Average
3	10360.00	38.29	20.23	41.53	35.58	64.47	74.00	9.53	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



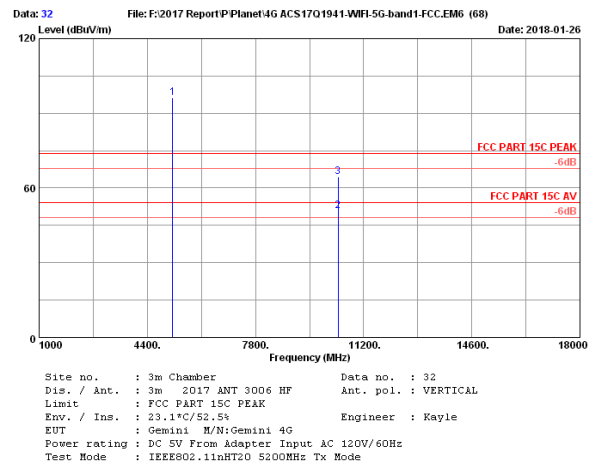
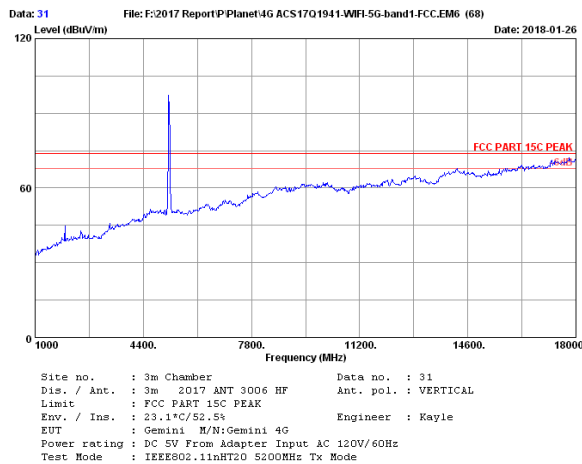
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5180.00	33.47	15.18	81.44	33.91	96.16	74.00	-22.16	Peak
2	10360.00	38.29	20.23	27.63	35.58	50.57	54.00	3.43	Average
3	10360.00	38.29	20.23	41.86	35.58	64.80	74.00	9.20	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



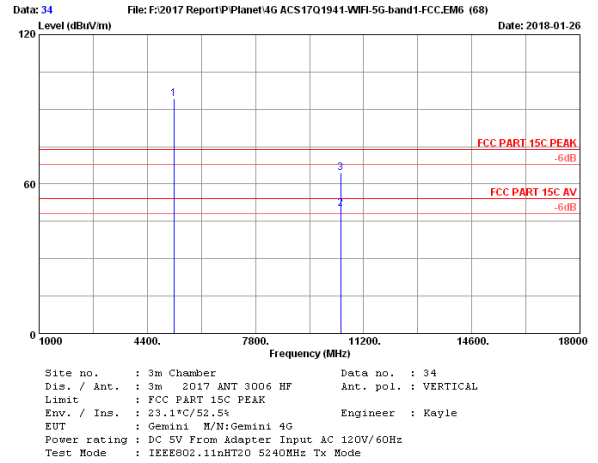
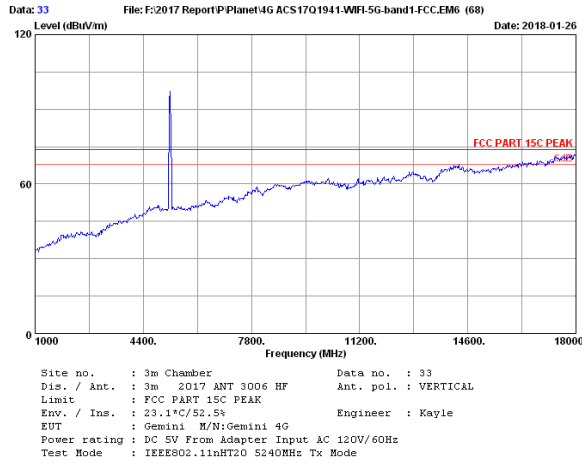
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5200.00	33.44	15.22	82.06	33.95	96.77	74.00	-22.77	Peak
2	10400.00	38.34	20.22	28.21	35.80	50.97	54.00	3.03	Average
3	10400.00	38.34	20.22	41.58	35.80	64.34	74.00	9.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



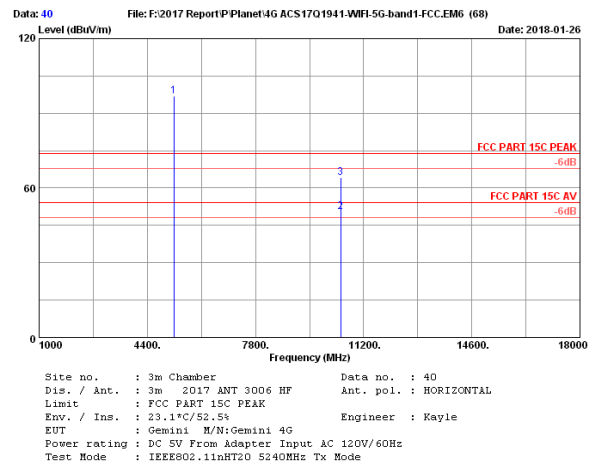
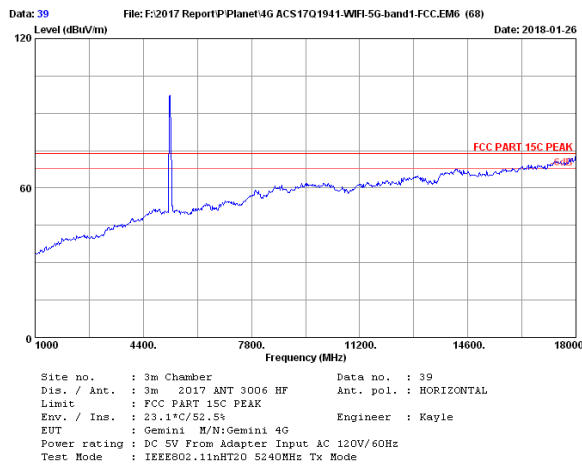
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5200.00	33.44	15.22	81.49	33.95	96.20	74.00	-22.20	Peak
2	10400.00	38.34	20.22	27.94	35.80	50.70	54.00	3.30	Average
3	10400.00	38.34	20.22	41.84	35.80	64.60	74.00	9.40	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



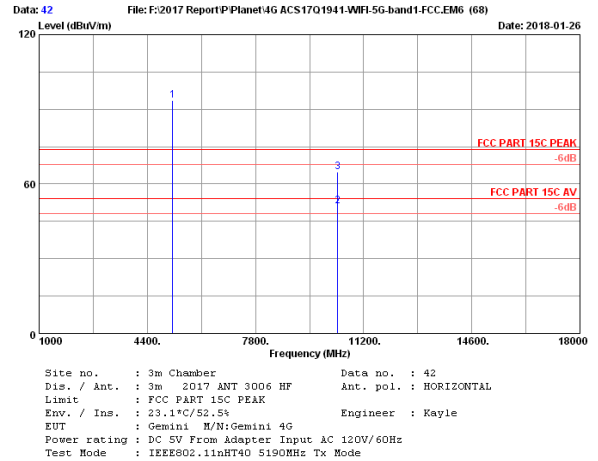
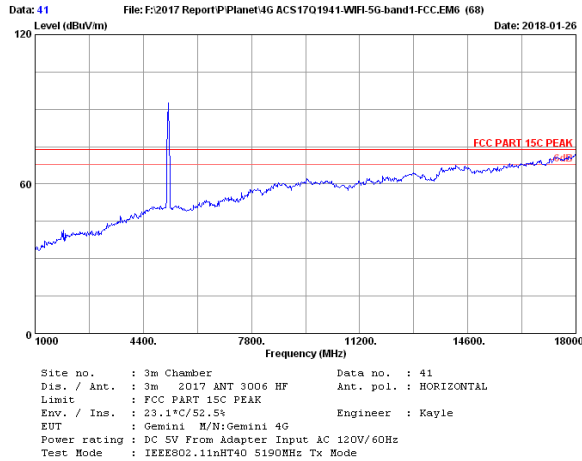
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5240.00	33.38	15.30	79.46	33.99	94.15	74.00	-20.15	Peak
2	10480.00	38.47	20.20	27.55	36.13	50.09	54.00	3.91	Average
3	10480.00	38.47	20.20	41.87	36.13	64.41	74.00	9.59	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



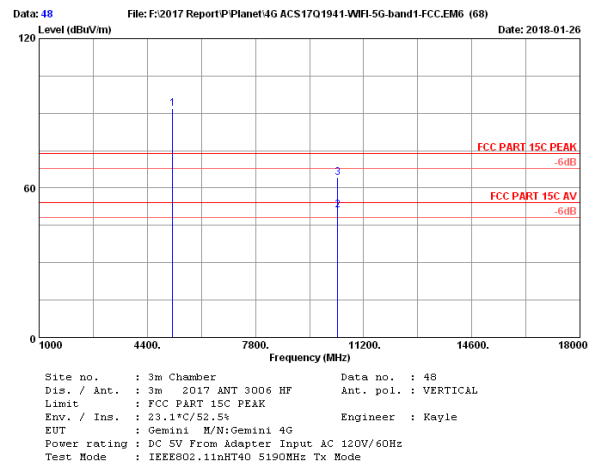
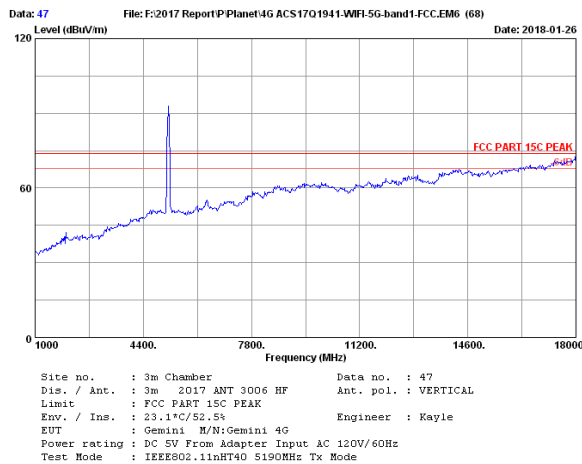
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5240.00	33.38	15.30	82.31	33.99	97.00	74.00	-23.00	Peak
2	10480.00	38.47	20.20	27.98	36.13	50.52	54.00	3.48	Average
3	10480.00	38.47	20.20	41.55	36.13	64.09	74.00	9.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



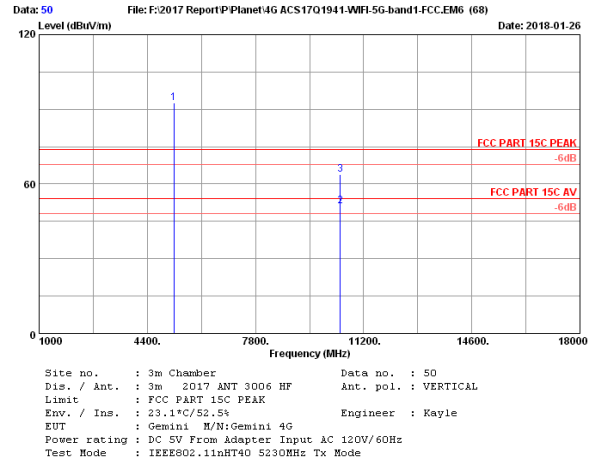
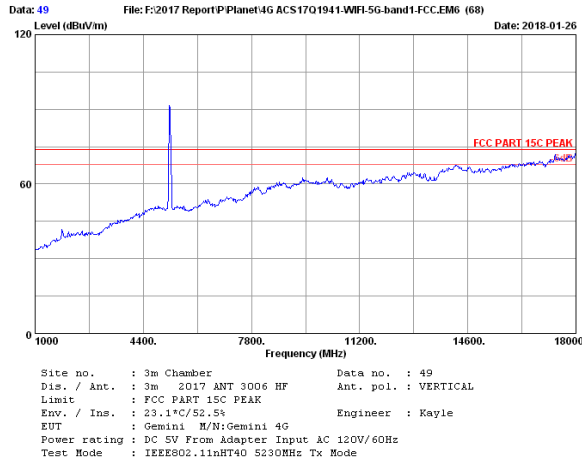
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5190.00	33.47	15.18	78.91	33.91	93.65	74.00	-19.65	Peak
2	10380.00	38.31	20.22	28.17	35.69	51.01	54.00	2.99	Average
3	10380.00	38.31	20.22	41.68	35.69	64.72	74.00	9.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



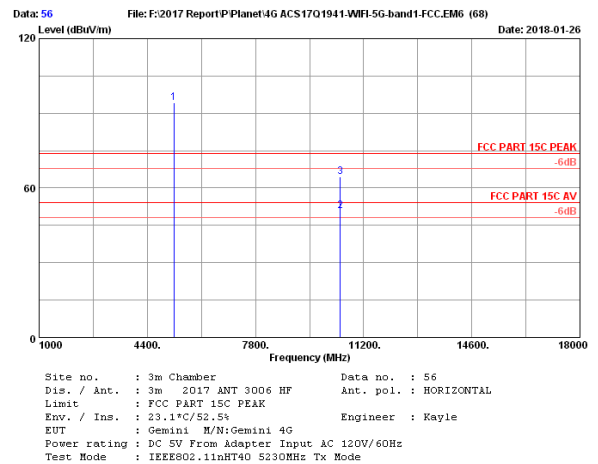
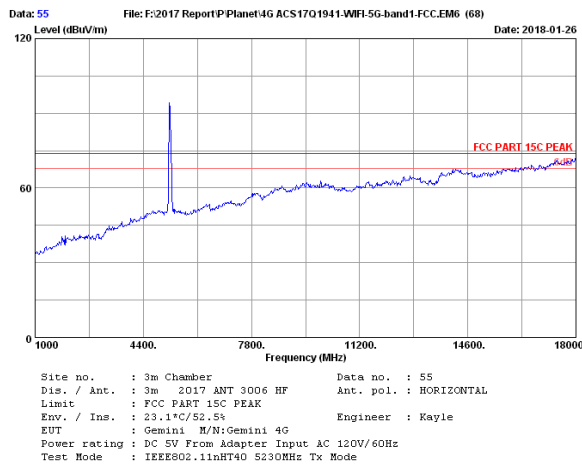
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5190.00	33.47	15.18	77.30	33.91	92.04	74.00	-18.04	Peak
2	10380.00	38.31	20.22	28.15	35.69	50.99	54.00	3.01	Average
3	10380.00	38.31	20.22	41.36	35.69	64.20	74.00	9.80	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



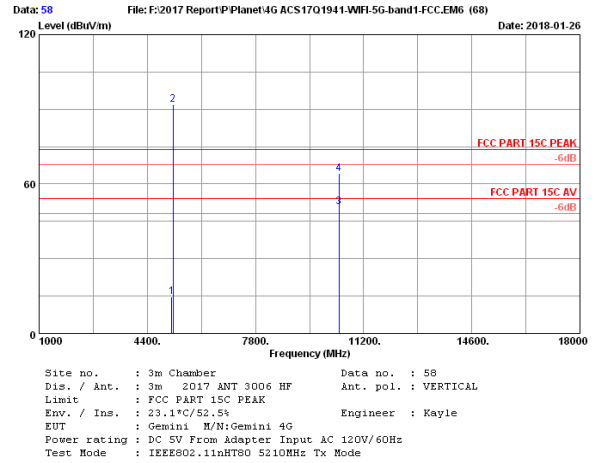
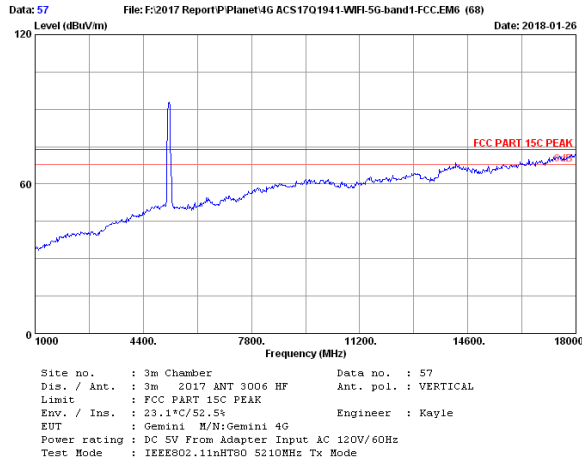
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5230.00	33.38	15.26	78.07	33.99	92.72	74.00	-18.72	Peak
2	10460.00	38.42	20.21	28.64	36.02	51.25	54.00	2.75	Average
3	10460.00	38.42	20.21	41.23	36.02	63.84	74.00	10.16	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



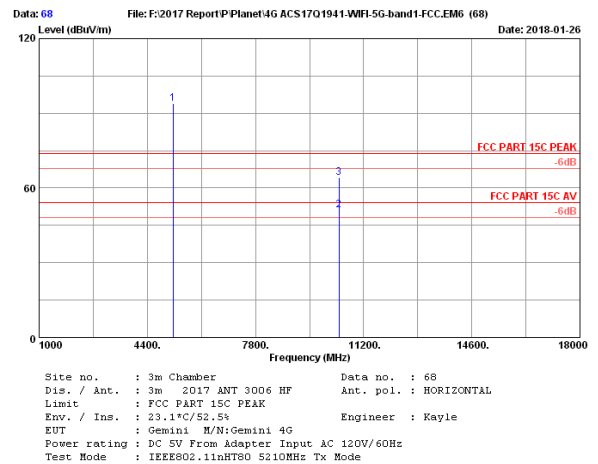
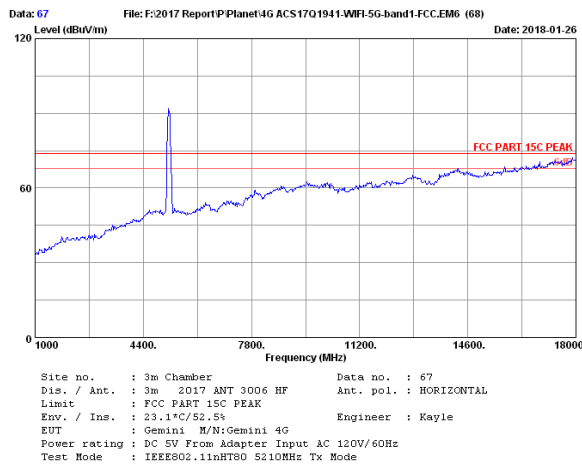
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5230.00	33.38	15.26	79.55	33.99	94.20	74.00	-20.20	Peak
2	10460.00	38.42	20.21	28.16	36.02	50.77	54.00	3.23	Average
3	10460.00	38.42	20.21	41.84	36.02	64.45	74.00	9.55	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5165.00	33.50	15.14	0.00	33.87	14.77	74.00	59.23	Peak
2	5210.00	33.41	15.22	77.39	33.95	92.07	74.00	-18.07	Peak
3	10420.00	38.37	20.22	28.16	35.80	50.95	54.00	3.05	Average
4	10420.00	38.37	20.22	41.38	35.80	64.17	74.00	9.83	Peak

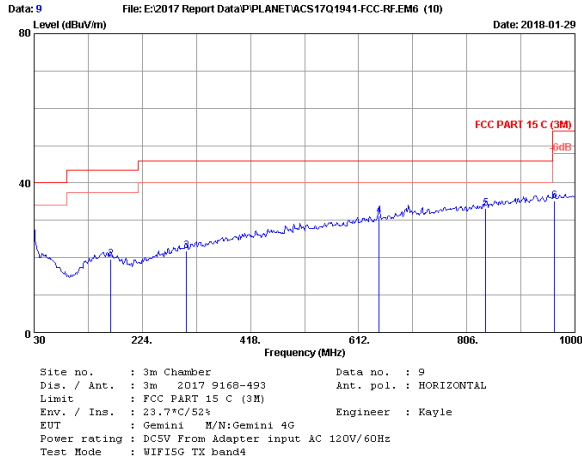
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5210.00	33.41	15.22	79.35	33.95	94.03	74.00	-20.03	Peak
2	10420.00	38.37	20.22	28.38	35.80	51.17	54.00	2.83	Average
3	10420.00	38.37	20.22	41.36	35.80	64.15	74.00	9.85	Peak

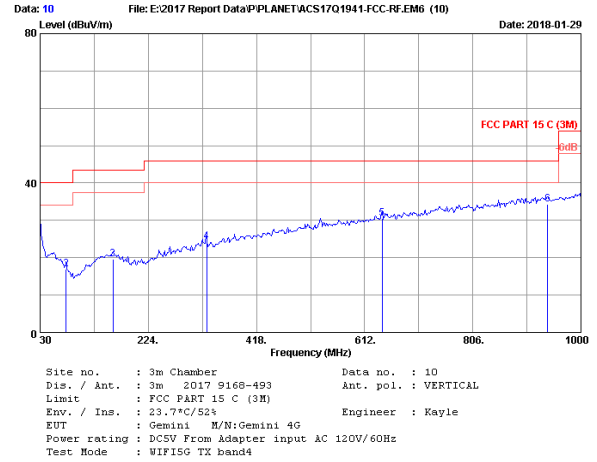
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

5745-5825MHz Band: Frequency: 30MHz~1GHz



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	19.40	0.63	6.71	26.74	40.00	13.26	QP
2	167.740	19.09	1.47	-1.00	19.56	43.50	23.94	QP
3	303.540	19.99	2.27	-0.45	21.81	46.00	24.19	QP
4	648.660	26.53	3.90	0.84	31.27	46.00	14.73	QP
5	839.950	28.84	4.74	-0.35	33.23	46.00	12.77	QP
6	963.140	30.07	5.36	-0.30	35.13	54.00	18.87	QP

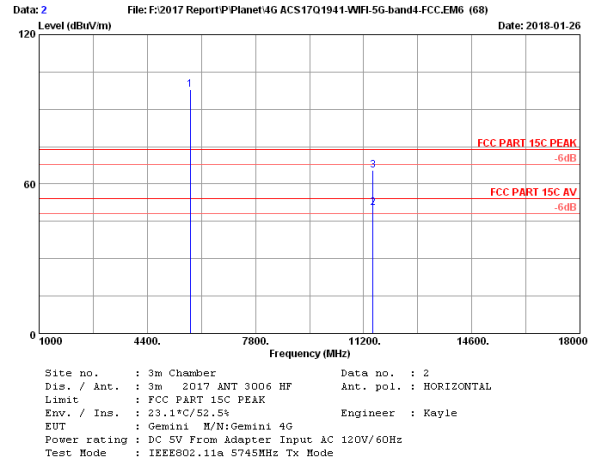
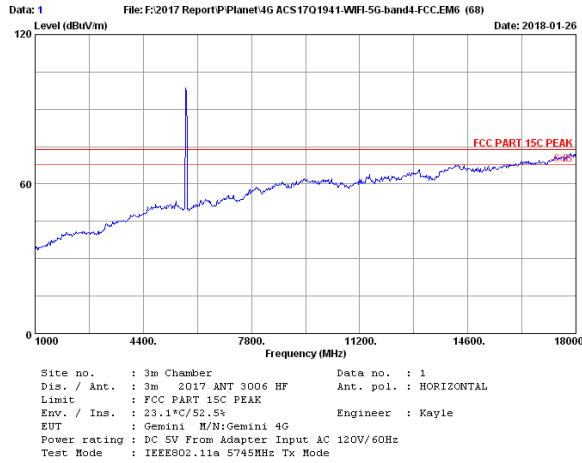
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	19.40	0.63	8.10	28.13	40.00	11.87	QP
2	76.560	16.07	0.96	-0.13	16.90	40.00	23.10	QP
3	160.950	19.62	1.43	-1.35	19.70	43.50	23.80	QP
4	328.760	20.57	2.43	1.21	24.21	46.00	21.79	QP
5	643.040	26.46	3.87	-0.15	30.48	46.00	15.52	QP
6	939.860	29.86	5.26	-0.84	34.28	46.00	11.72	QP

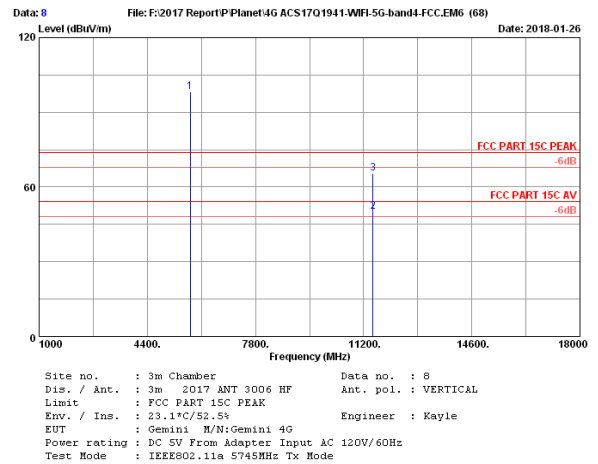
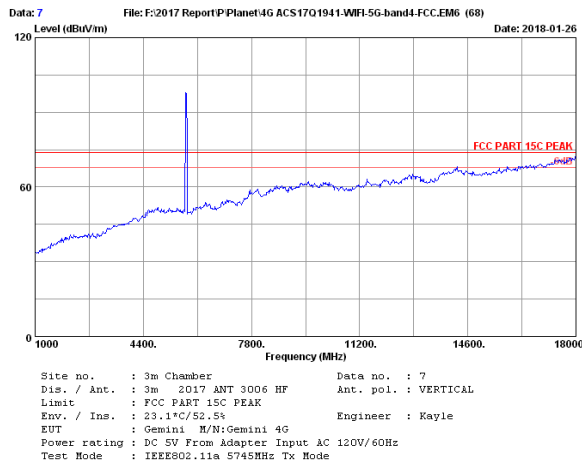
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz



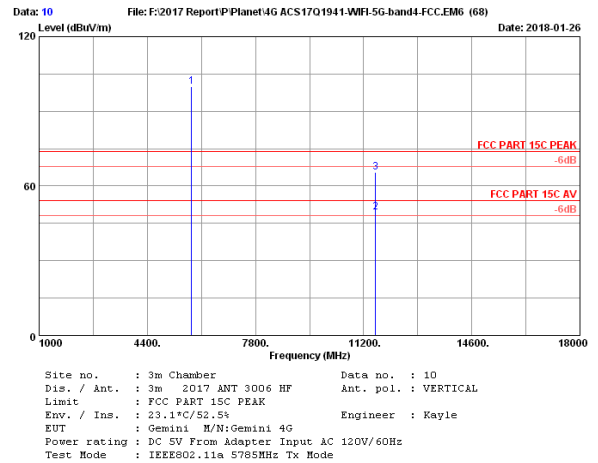
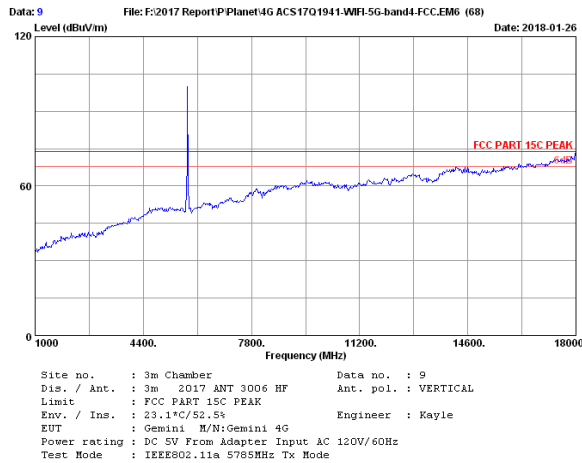
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5745.00	33.19	16.37	83.64	35.12	98.08	74.00	-24.08	Peak
2	11490.00	38.22	21.20	25.67	34.56	50.53	54.00	3.47	Average
3	11490.00	38.22	21.20	40.54	34.56	65.40	74.00	8.60	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



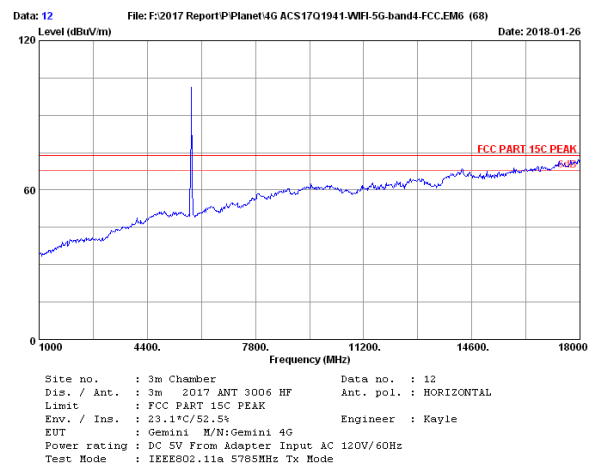
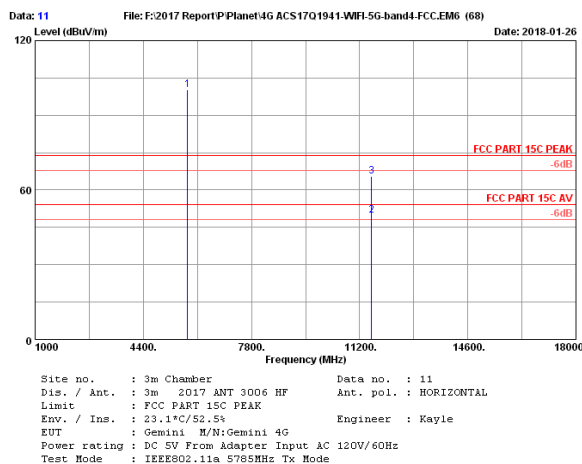
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5745.00	33.19	16.37	83.71	35.12	98.15	74.00	-24.15	Peak
2	11490.00	38.22	21.20	25.12	34.56	49.98	54.00	4.02	Average
3	11490.00	38.22	21.20	40.67	34.56	65.53	74.00	8.47	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



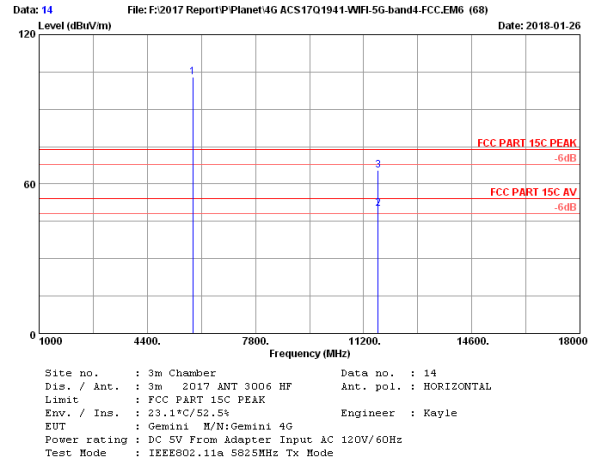
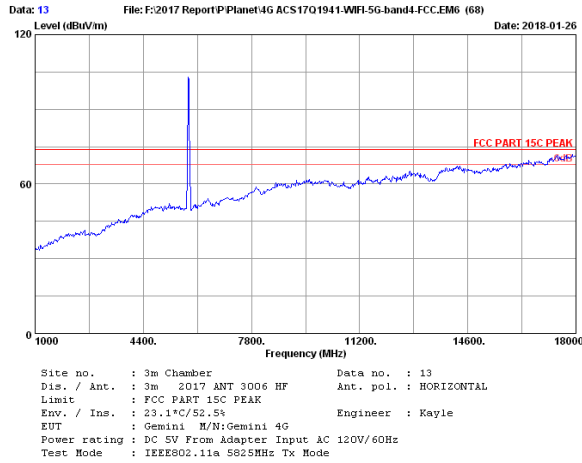
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5785.00	33.23	16.44	85.63	35.28	100.02	74.00	-26.02	Peak
2	11570.00	38.19	21.36	24.66	34.74	49.47	54.00	4.53	Average
3	11570.00	38.19	21.36	40.86	34.74	65.67	74.00	8.33	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



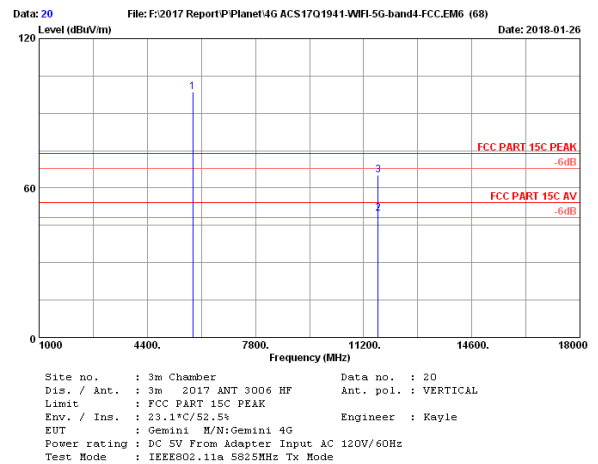
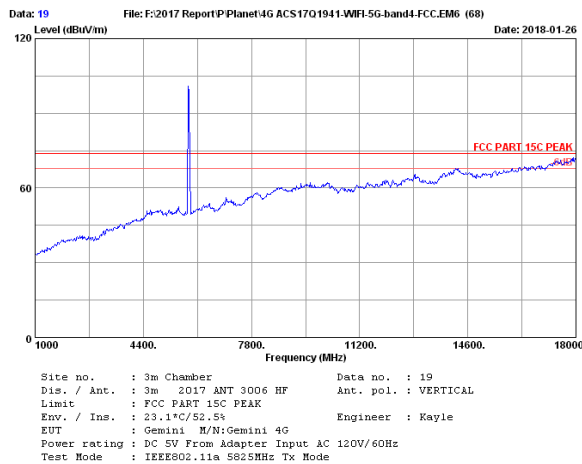
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5785.00	33.23	16.44	85.78	35.28	100.17	74.00	-26.17	Peak
2	11570.00	38.19	21.36	24.97	34.74	49.78	54.00	4.22	Average
3	11570.00	38.19	21.36	40.67	34.74	65.48	74.00	8.52	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



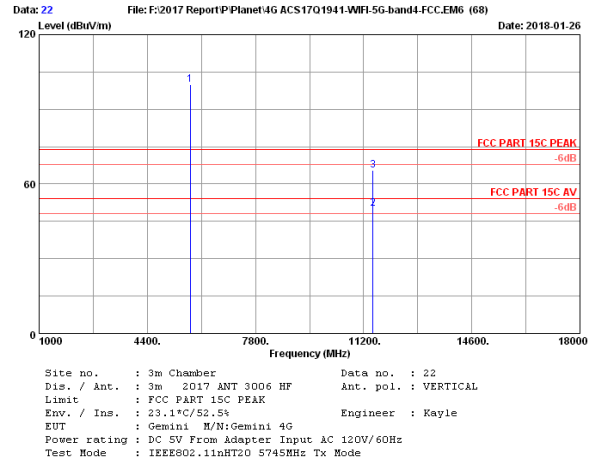
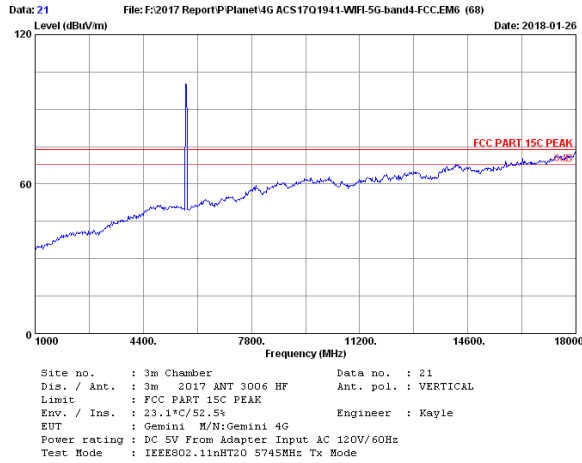
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5825.00	33.29	16.52	88.34	35.35	102.80	74.00	-28.80	Peak
2	11650.00	38.17	21.55	25.48	35.02	50.18	54.00	3.82	Average
3	11650.00	38.17	21.55	40.69	35.02	65.39	74.00	8.61	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



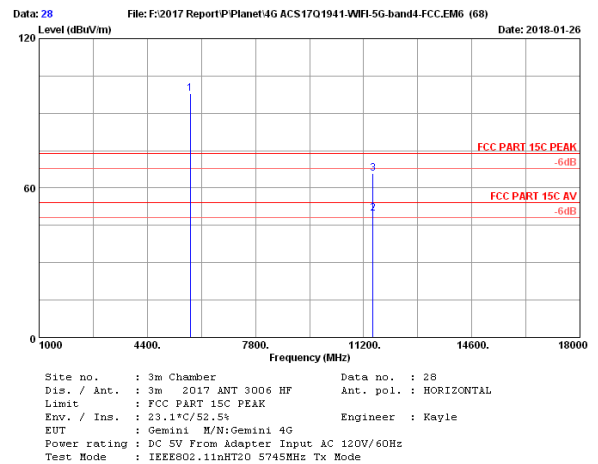
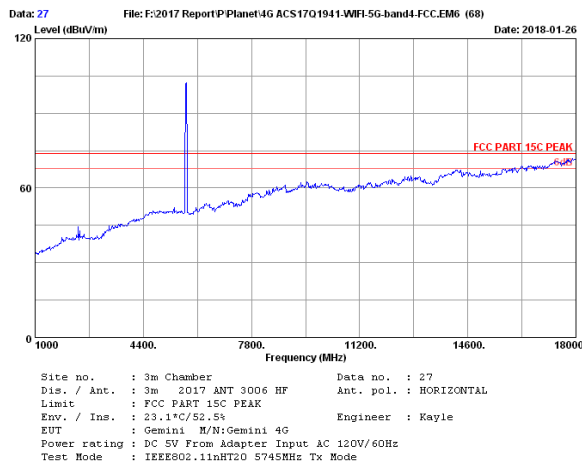
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5825.00	33.29	16.52	84.12	35.35	95.98	74.00	-24.58	Peak
2	11650.00	38.17	21.55	25.20	35.02	49.90	54.00	4.10	Average
3	11650.00	38.17	21.55	40.60	35.02	65.30	74.00	8.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



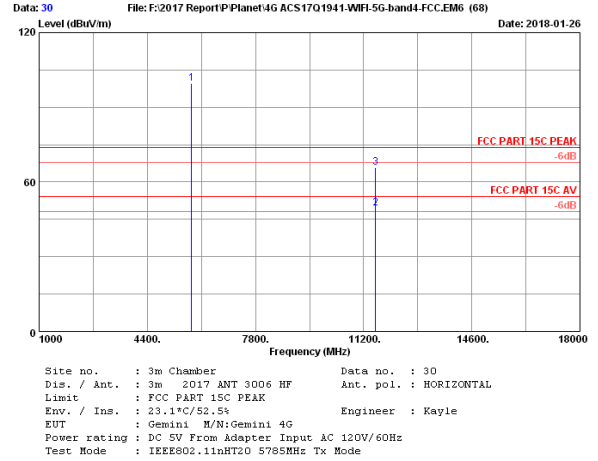
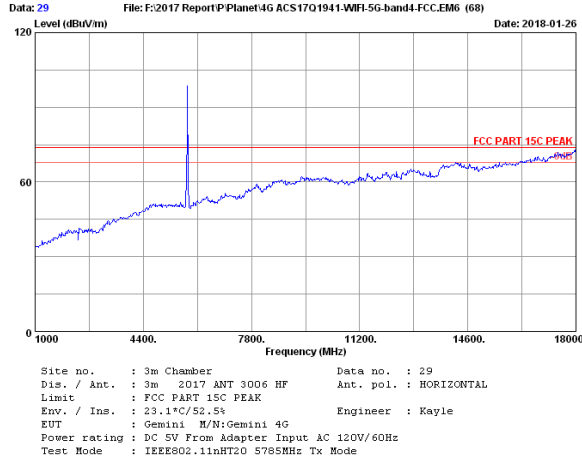
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5745.00	33.19	16.37	85.35	35.12	99.79	74.00	-25.79	Peak
2	11490.00	38.22	21.20	25.12	34.56	49.98	54.00	4.02	Average
3	11490.00	38.22	21.20	40.58	34.56	65.44	74.00	8.56	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



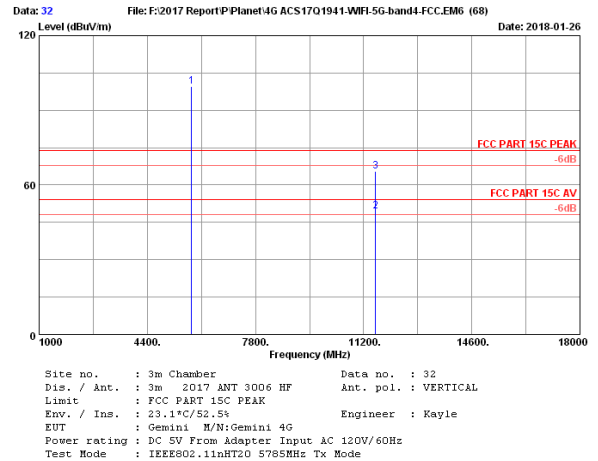
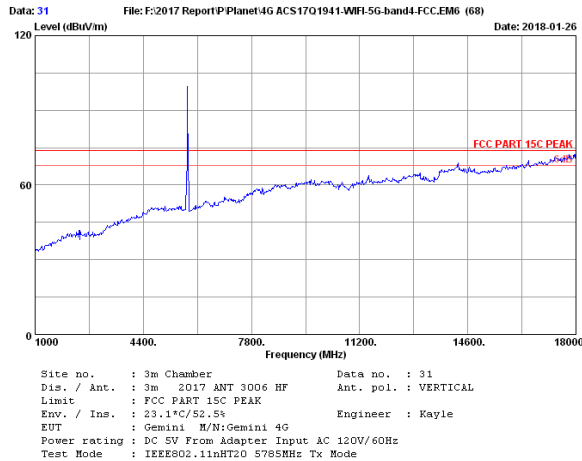
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5745.00	33.19	16.37	83.42	35.12	97.86	74.00	-23.86	Peak
2	11490.00	38.22	21.20	24.97	34.56	49.83	54.00	4.17	Average
3	11490.00	38.22	21.20	40.86	34.56	65.72	74.00	8.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



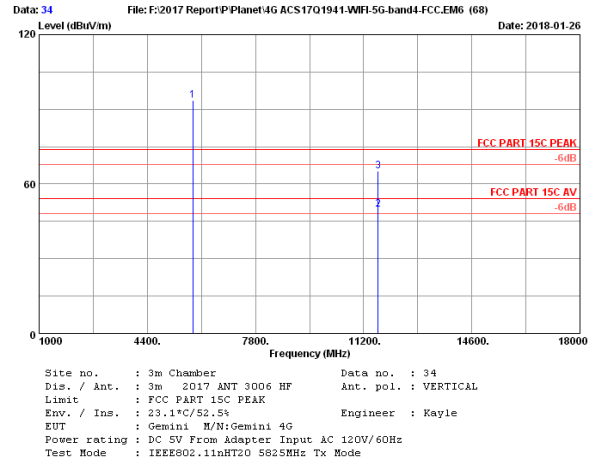
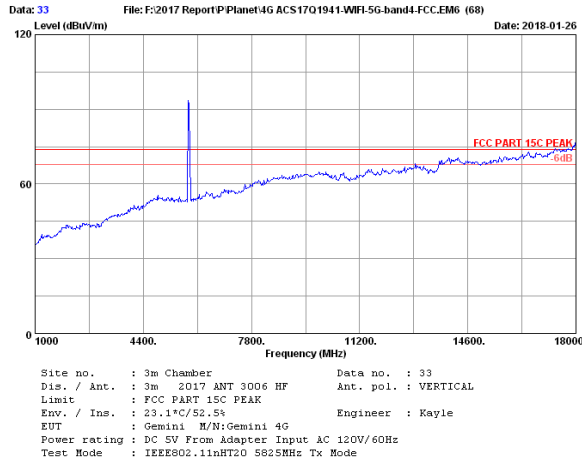
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5785.00	33.23	16.44	85.16	35.28	99.55	74.00	-25.55	Peak
2	11570.00	38.19	21.36	24.67	34.74	49.48	54.00	4.52	Average
3	11570.00	38.19	21.36	40.96	34.74	65.77	74.00	8.23	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



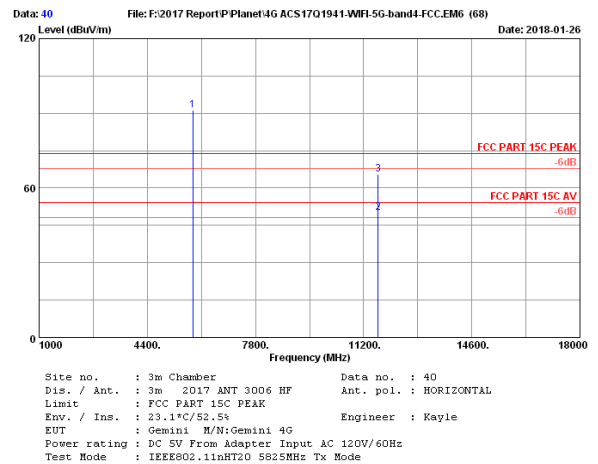
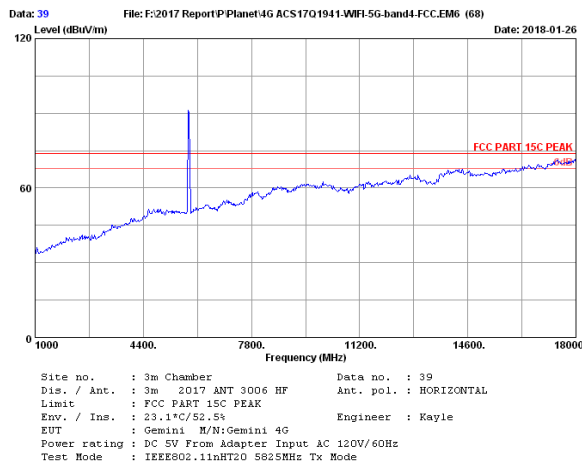
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5785.00	33.23	16.44	85.19	35.28	99.58	74.00	-25.58	Peak
2	11570.00	38.19	21.36	24.66	34.74	49.47	54.00	4.53	Average
3	11570.00	38.19	21.36	40.57	34.74	65.38	74.00	8.62	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



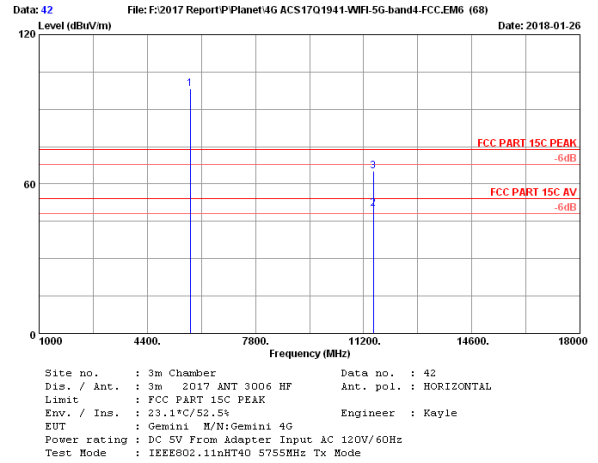
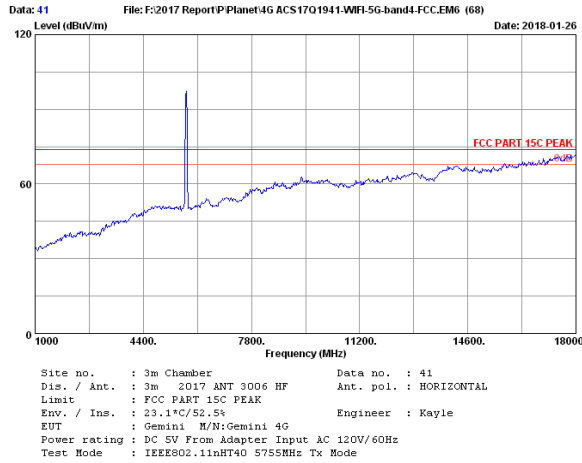
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5825.00	33.29	16.52	78.99	35.35	93.45	74.00	-19.45	Peak
2	11650.00	38.17	21.55	24.98	35.02	49.68	54.00	4.32	Average
3	11650.00	38.17	21.55	40.59	35.02	65.29	74.00	8.71	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



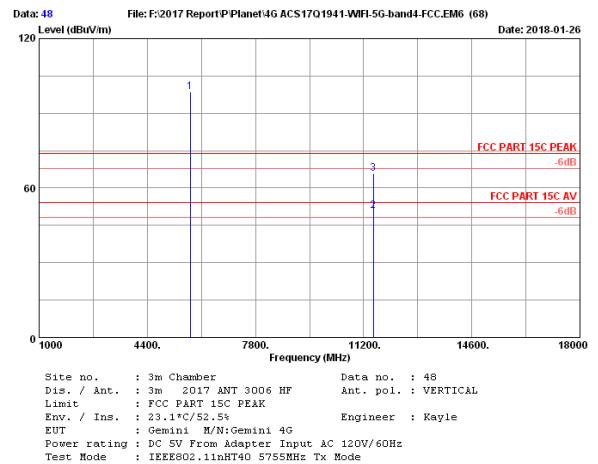
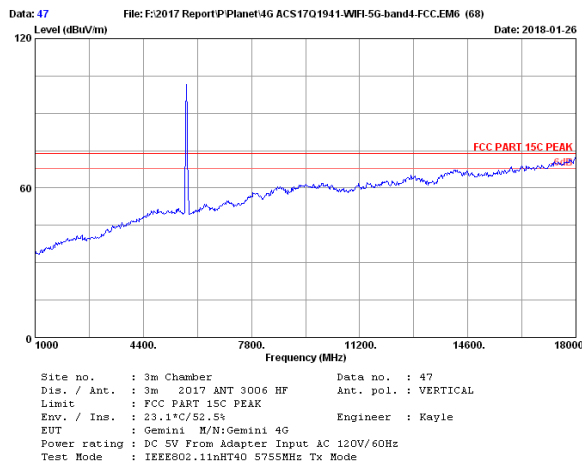
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5825.00	33.29	16.52	76.65	35.35	91.11	74.00	-17.11	Peak
2	11650.00	38.17	21.55	25.58	35.02	50.28	54.00	3.72	Average
3	11650.00	38.17	21.55	40.88	35.02	65.58	74.00	8.42	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



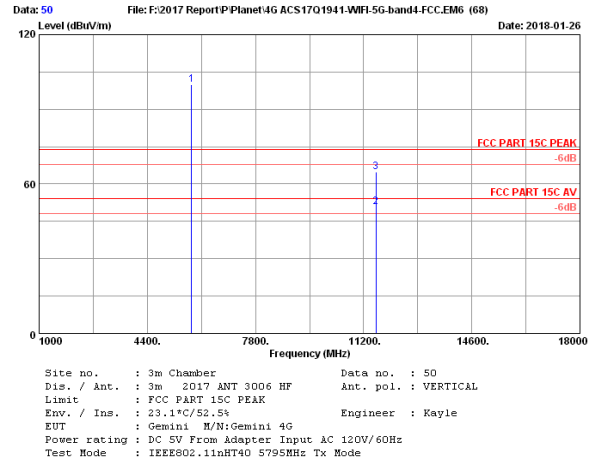
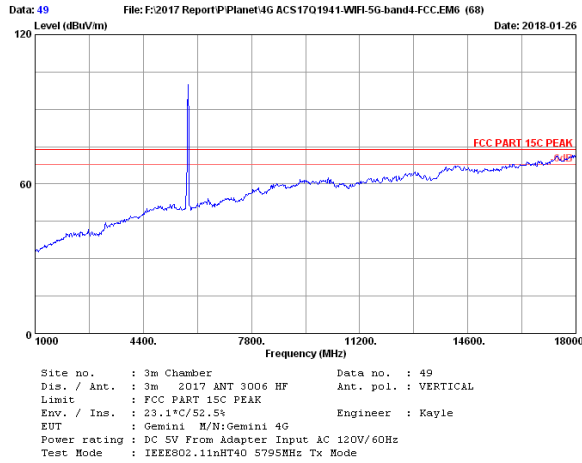
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5755.00	33.21	16.40	83.64	35.12	98.13	74.00	-24.13	Peak
2	11510.00	38.20	21.24	25.14	34.47	50.11	54.00	3.89	Average
3	11510.00	38.20	21.24	40.35	34.47	65.32	74.00	8.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



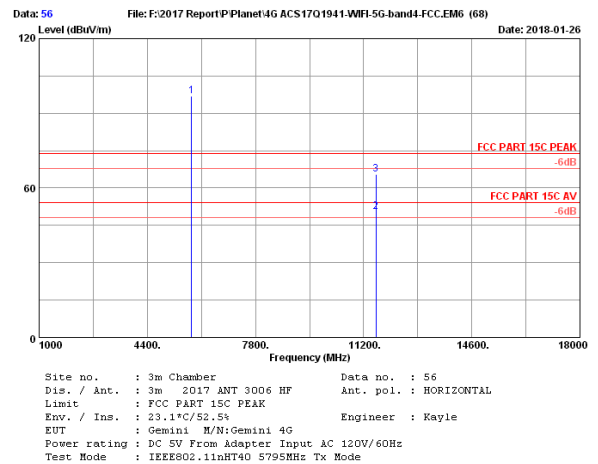
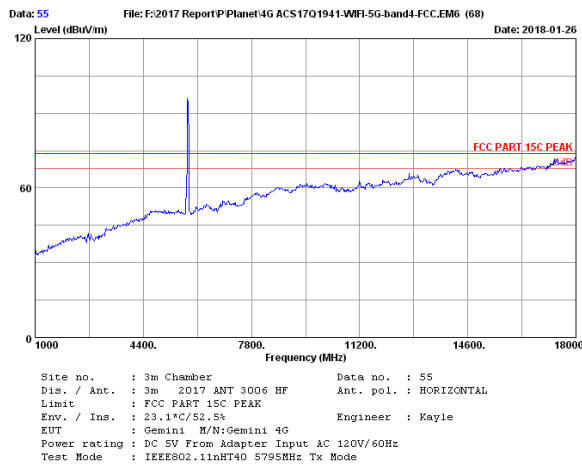
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5755.00	33.21	16.40	84.08	35.12	98.57	74.00	-24.57	Peak
2	11510.00	38.20	21.24	25.68	34.47	50.65	54.00	3.35	Average
3	11510.00	38.20	21.24	41.03	34.47	66.00	74.00	8.00	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



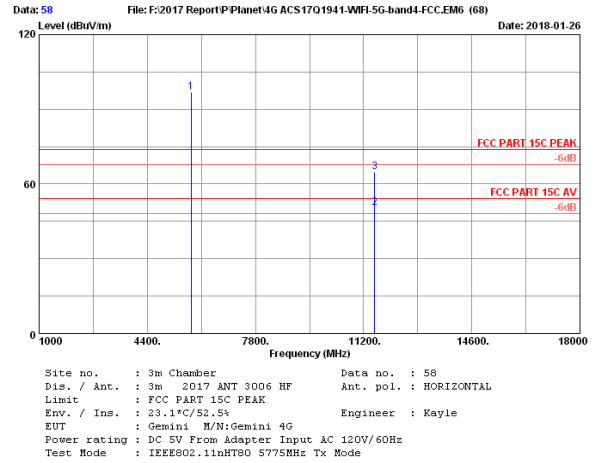
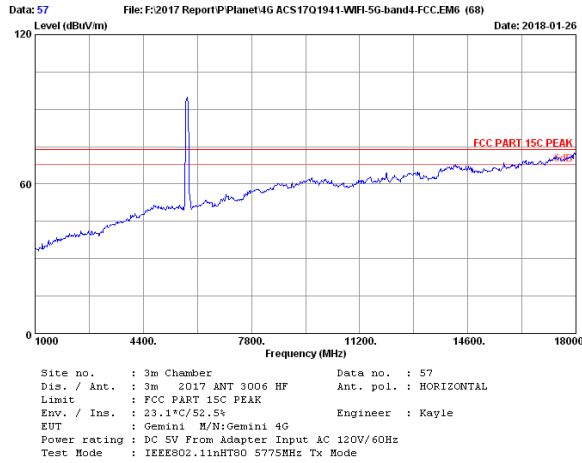
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5795.00	33.25	16.48	85.34	35.28	99.79	74.00	-25.79	Peak
2	11590.00	38.18	21.40	25.80	34.74	50.64	54.00	3.36	Average
3	11590.00	38.18	21.40	39.68	34.74	64.72	74.00	9.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



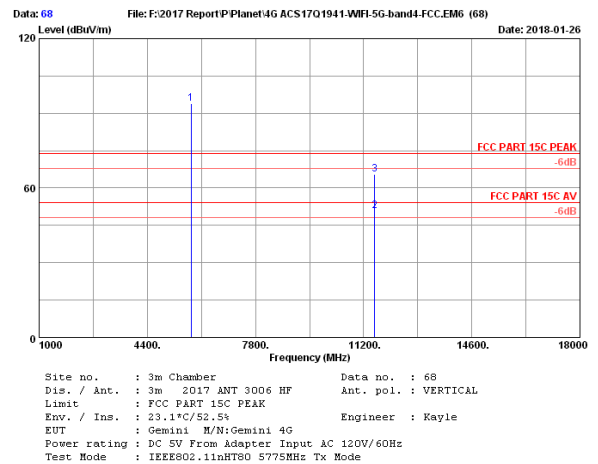
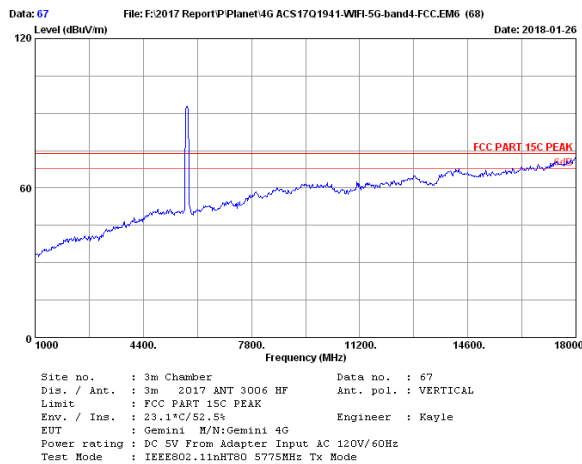
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5794.00	33.25	16.48	82.59	35.28	97.04	74.00	-23.04	Peak
2	11590.00	38.18	21.40	25.67	34.74	50.51	54.00	3.49	Average
3	11590.00	38.18	21.40	40.55	34.74	65.39	74.00	8.61	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5775.00	33.23	16.44	82.57	35.20	97.04	74.00	-23.04	Peak
2	11550.00	38.19	21.32	25.46	34.65	50.32	54.00	3.68	Average
3	11550.00	38.19	21.32	39.86	34.65	64.72	74.00	9.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5775.00	33.23	16.44	79.56	35.20	94.03	74.00	-20.03	Peak
2	11550.00	38.19	21.32	25.93	34.65	50.79	54.00	3.21	Average
3	11550.00	38.19	21.32	40.56	34.65	65.42	74.00	8.58	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

5. BAND EDGE COMPLIANCE TEST

5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr.22,17	1 Year
2.	Amp	HP	8449B	3008A02495	Apr.22,17	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	May.15,17	1 Year
4.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr.22,17	1 Year

5.2. Limit

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.

For devices with both operating frequencies and channel bandwidths contained within the band 5250-5350 MHz,

All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.

For transmitters operating in the band 5470-5725MHz, Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

For the band 5725-5850 MHz, emissions at frequencies from the band edges to 10 MHz above or below the band edges shall not exceed -17 dBm/MHz e.i.r.p.

For emissions at frequencies more than 10 MHz above or below the band edges, the emissions power shall not exceed -27 dBm/MHz.

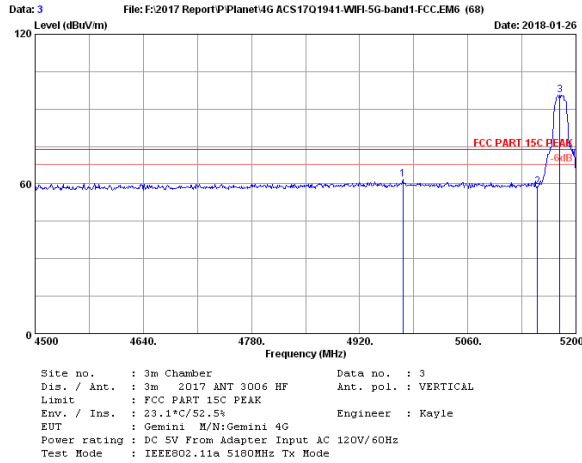
5.3. Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO
5. Per KDB789033 clause H 2)d).if the test distance is 3m,the EIRP(dBm)=E(dBuv/m)-95.2
Get the final compare with limit.

5.4. Test Results

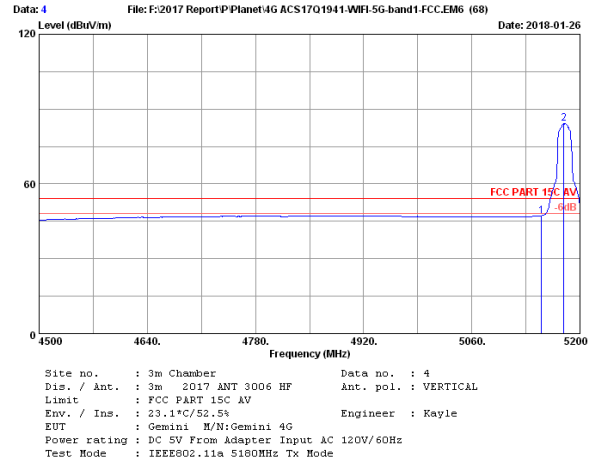
Pass (The testing data was attached in the next pages.)

5180-5240MHz Band:



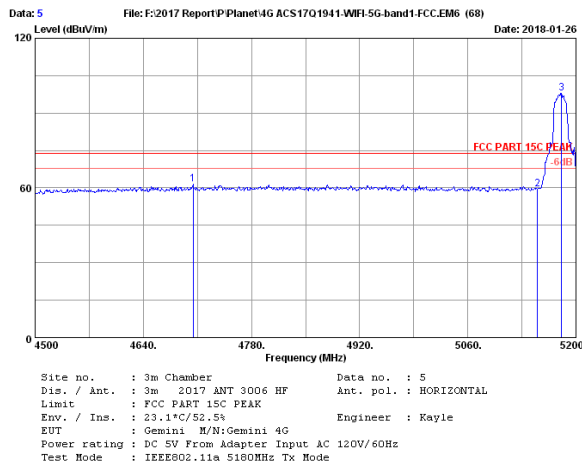
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4976.00	33.77	14.75	47.01	33.66	61.87	74.00	12.13	Peak
2	5150.00	33.53	15.11	44.04	33.87	58.81	74.00	15.19	Peak
3	5179.00	33.47	15.18	80.90	33.91	95.64	74.00	-21.64	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



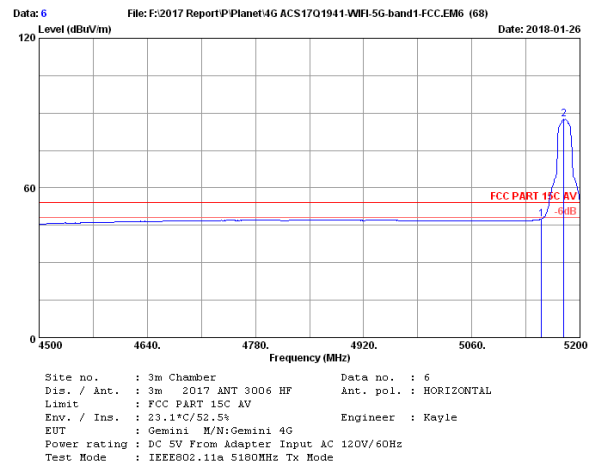
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	32.52	33.87	47.29	54.00	6.71	Average
2	5179.00	33.47	15.18	69.41	33.91	84.15	54.00	-30.15	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



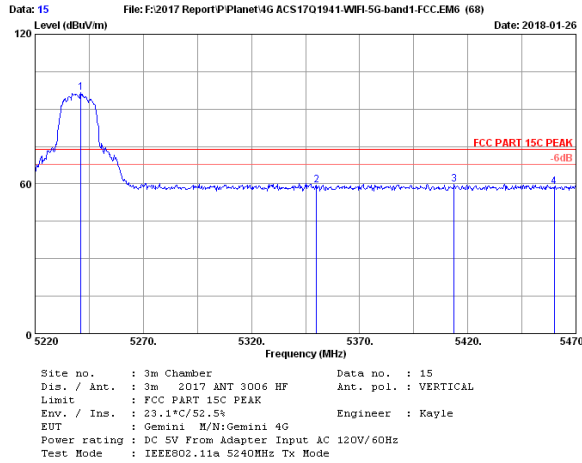
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4704.40	33.21	14.38	47.76	33.92	61.43	74.00	12.57	Peak
2	5150.00	33.53	15.11	44.89	33.87	59.66	74.00	14.34	Peak
3	5181.10	33.47	15.18	83.34	33.91	98.08	74.00	-24.08	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



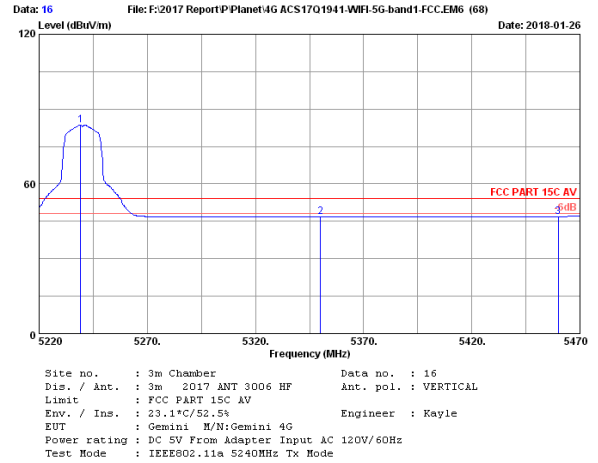
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	32.83	33.87	47.60	54.00	6.40	Average
2	5179.00	33.47	15.18	72.73	33.91	87.47	54.00	-33.47	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



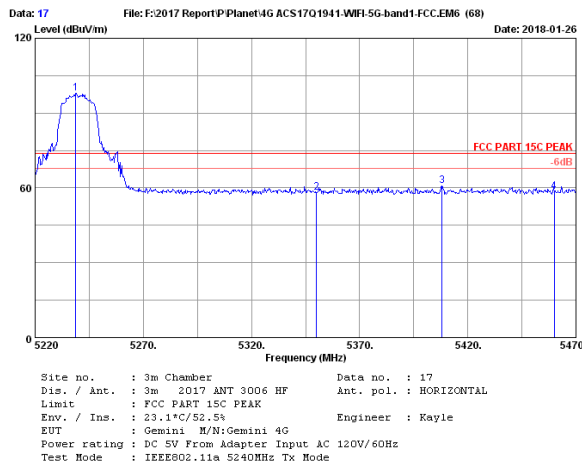
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5241.25	33.38	15.30	81.76	33.99	96.45	74.00	-22.45	Peak
2	5350.00	33.17	15.53	45.03	34.18	59.55	74.00	14.45	Peak
3	5413.75	33.05	15.68	45.50	34.25	59.98	74.00	14.02	Peak
4	5460.00	32.99	15.75	44.27	34.33	58.68	74.00	15.32	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



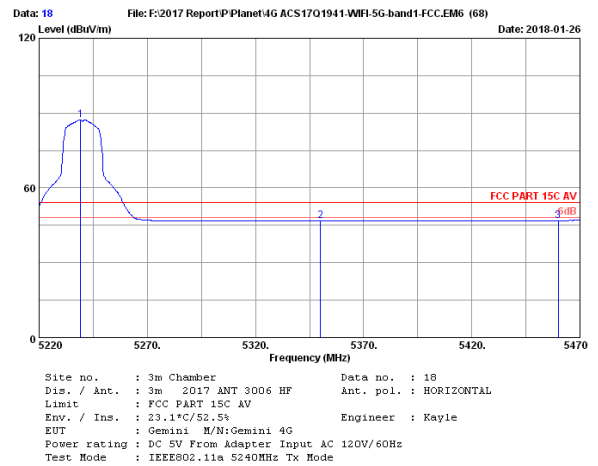
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5239.25	33.38	15.30	68.92	33.99	83.61	54.00	-29.61	Average
2	5350.00	33.17	15.53	32.27	34.18	46.79	54.00	7.21	Average
3	5460.00	32.99	15.75	32.51	34.33	46.92	54.00	7.08	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



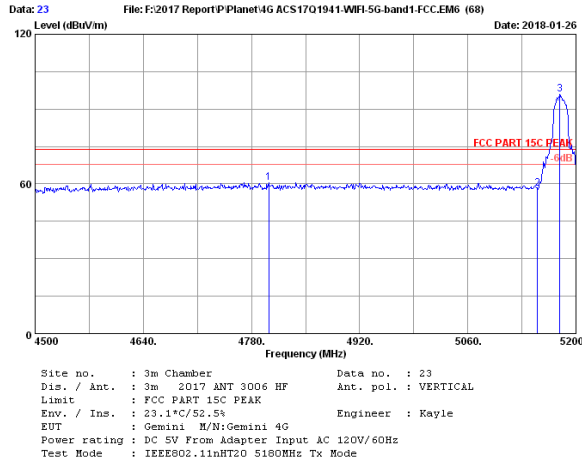
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5238.75	33.38	15.30	83.40	33.99	98.09	74.00	-24.09	Peak
2	5350.00	33.17	15.53	43.49	34.18	58.01	74.00	15.99	Peak
3	5408.00	33.08	15.64	46.26	34.25	60.73	74.00	13.27	Peak
4	5460.00	32.99	15.75	44.07	34.33	58.48	74.00	15.52	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



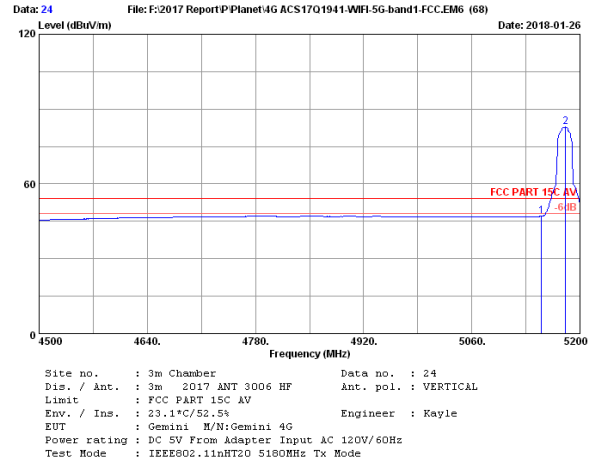
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5239.25	33.38	15.30	72.68	33.99	87.37	54.00	-33.37	Average
2	5350.00	33.17	15.53	32.26	34.18	46.78	54.00	7.22	Average
3	5460.00	32.99	15.75	32.53	34.33	46.94	54.00	7.06	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



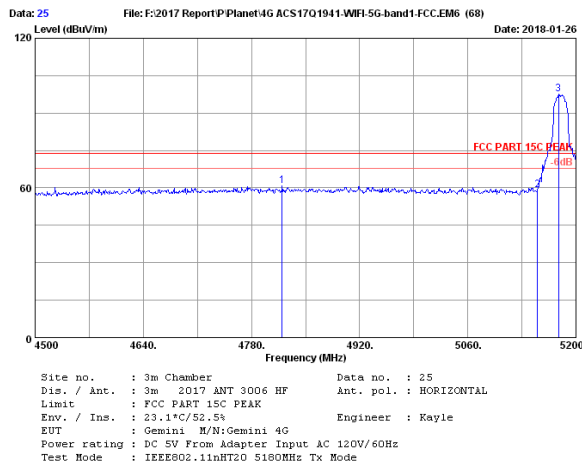
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4802.40	33.42	14.52	46.49	33.82	60.61	74.00	13.39	Peak
2	5150.00	33.53	15.11	43.26	33.87	58.05	74.00	15.95	Peak
3	5179.00	33.47	15.18	81.08	33.91	95.82	74.00	-21.82	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



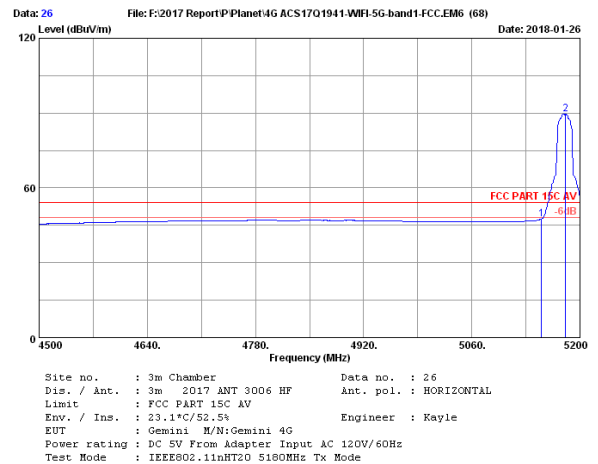
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	32.31	33.87	47.08	54.00	6.92	Average
2	5181.10	33.47	15.18	68.00	33.91	82.74	54.00	-28.74	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



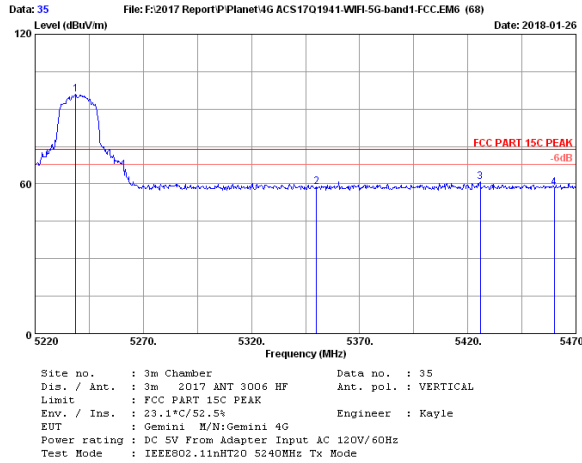
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4819.90	33.46	14.55	46.56	33.80	60.77	74.00	13.23	Peak
2	5150.00	33.53	15.11	44.28	33.87	59.05	74.00	14.95	Peak
3	5177.60	33.47	15.14	82.96	33.91	97.66	74.00	-23.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



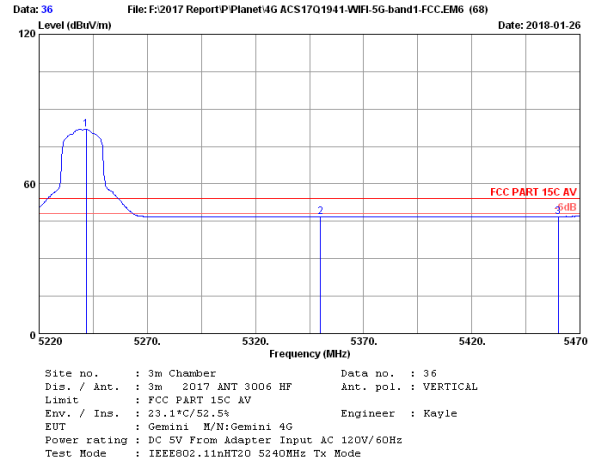
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	32.85	33.87	47.62	54.00	6.38	Average
2	5181.10	33.47	15.18	74.82	33.91	89.56	54.00	-35.56	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



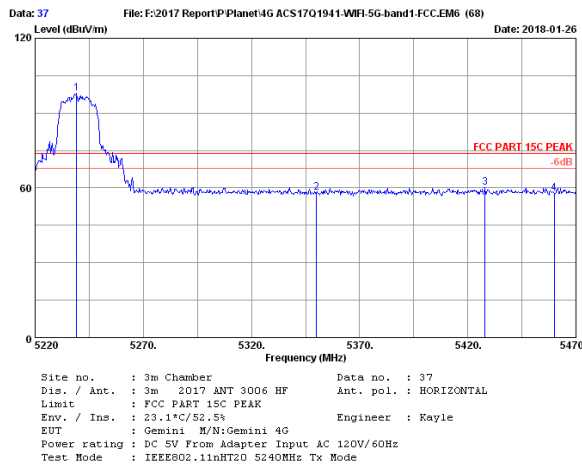
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5238.75	33.38	15.30	81.15	33.99	95.84	74.00	-21.84	Peak
2	5350.00	33.17	15.53	44.15	34.18	58.67	74.00	15.33	Peak
3	5425.75	33.05	15.68	46.50	34.29	60.94	74.00	13.06	Peak
4	5460.00	32.99	15.75	44.19	34.33	58.60	74.00	15.40	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



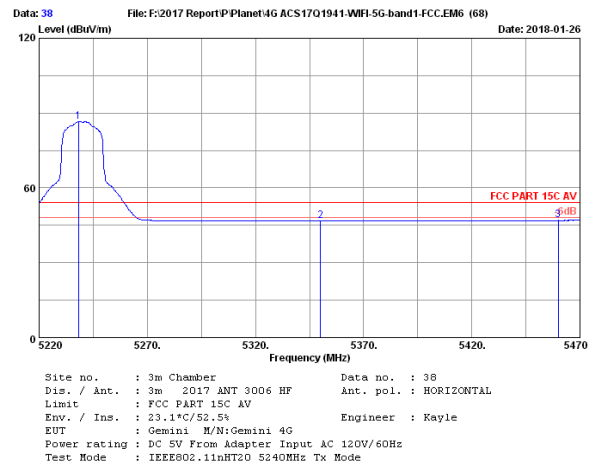
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5241.75	33.35	15.30	67.30	33.99	81.96	54.00	-27.96	Average
2	5350.00	33.17	15.53	32.26	34.18	46.78	54.00	7.22	Average
3	5460.00	32.99	15.75	32.53	34.33	46.94	54.00	7.06	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



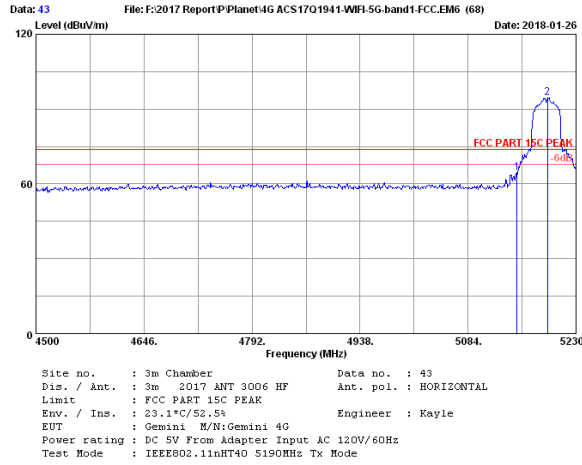
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5239.25	33.38	15.30	83.26	33.99	97.95	74.00	-23.95	Peak
2	5350.00	33.17	15.53	43.71	34.18	58.23	74.00	15.77	Peak
3	5428.00	33.05	15.68	45.81	34.29	60.25	74.00	13.75	Peak
4	5460.00	32.99	15.75	43.45	34.33	57.86	74.00	16.14	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



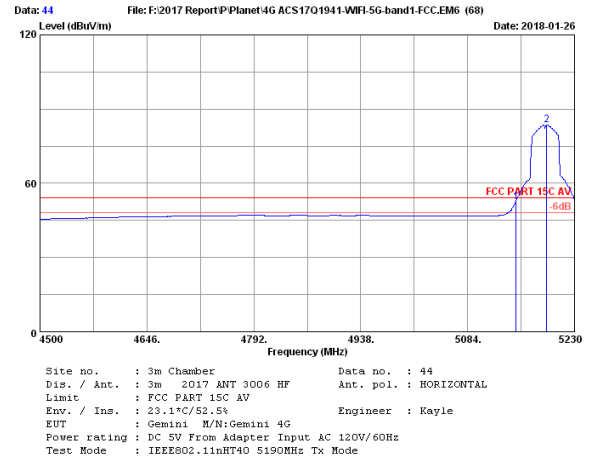
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5239.25	33.38	15.30	72.02	33.99	86.71	54.00	-32.71	Average
2	5350.00	33.17	15.53	32.32	34.18	46.84	54.00	7.16	Average
3	5460.00	32.99	15.75	32.56	34.33	46.97	54.00	7.03	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



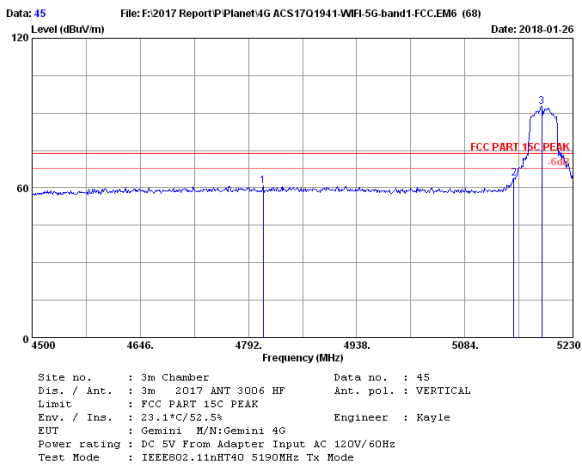
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	49.79	33.87	64.56	74.00	9.44	Peak
2	5191.31	33.44	15.18	79.86	33.91	94.57	74.00	-20.57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



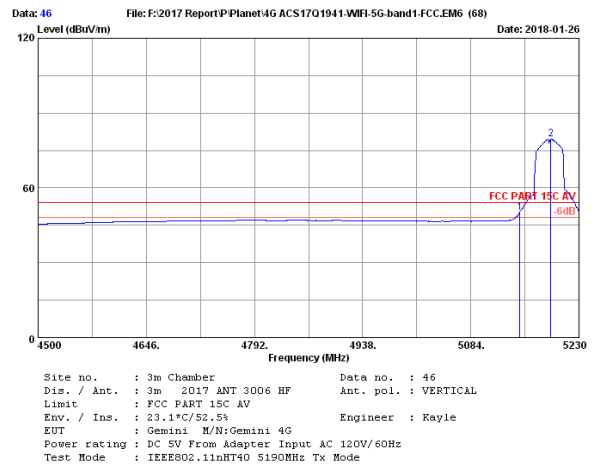
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	37.86	33.87	52.63	54.00	1.37	Average
2	5192.04	33.44	15.18	69.01	33.91	83.72	54.00	-29.72	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



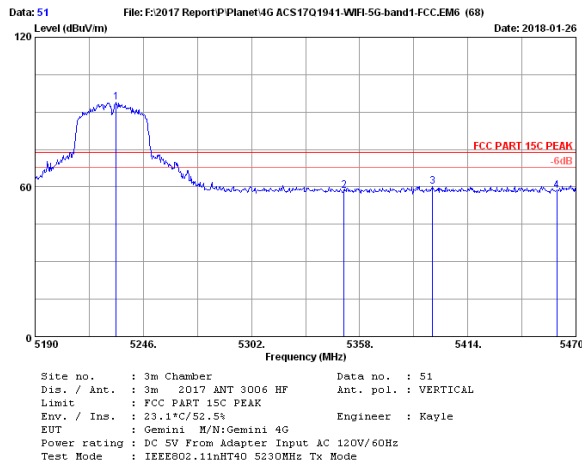
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4811.71	33.42	14.52	46.63	33.82	60.75	74.00	13.25	Peak
2	5150.00	33.53	15.11	49.18	33.87	63.95	74.00	10.05	Peak
3	5187.66	33.47	15.18	77.97	33.91	92.71	74.00	-18.71	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



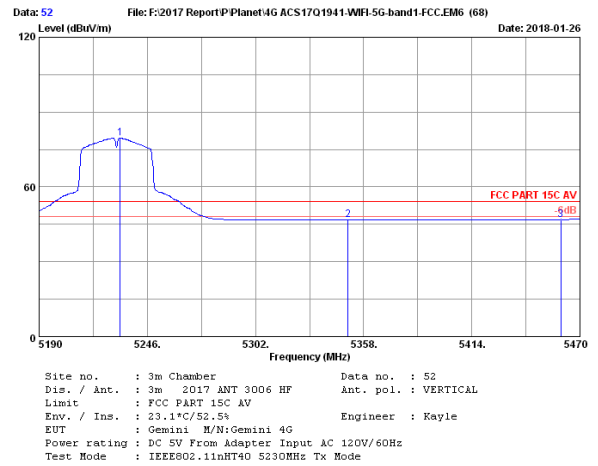
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	35.29	33.87	50.06	54.00	3.94	Average
2	5192.04	33.44	15.18	64.94	33.91	79.65	54.00	-25.65	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



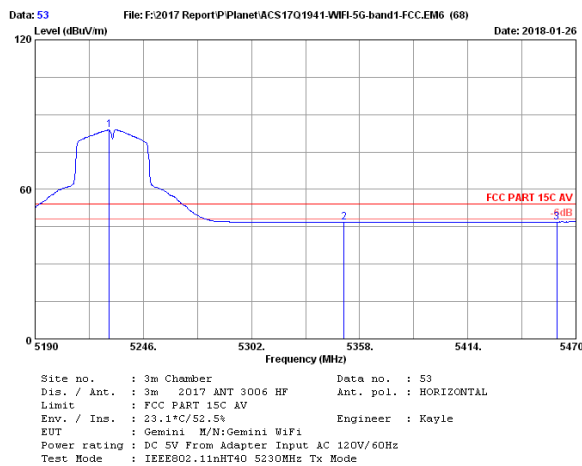
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5232.00	33.38	15.26	79.22	33.99	93.87	74.00	-19.87	Peak
2	5350.00	33.17	15.53	44.12	34.18	58.64	74.00	15.36	Peak
3	5395.80	33.08	15.64	45.80	34.22	60.30	74.00	13.70	Peak
4	5460.00	32.99	15.75	44.16	34.33	58.57	74.00	15.43	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



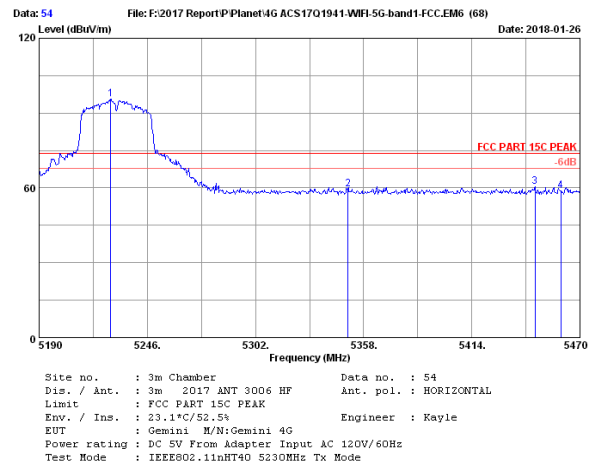
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5232.00	33.38	15.26	64.94	33.99	75.59	54.00	-25.59	Average
2	5350.00	33.17	15.53	32.28	34.18	46.60	54.00	7.20	Average
3	5460.00	32.99	15.75	32.54	34.33	46.95	54.00	7.05	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



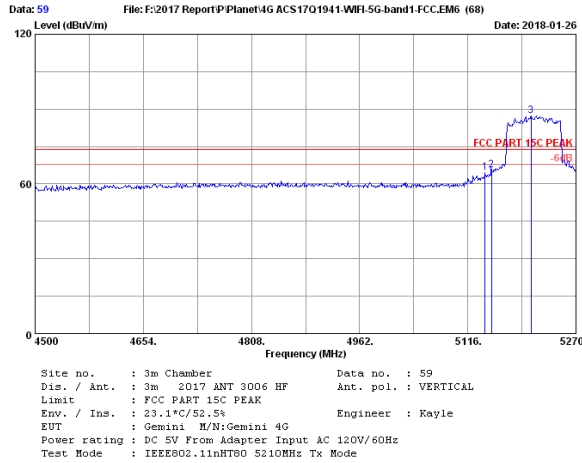
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5228.36	33.38	15.26	69.42	34.25	83.81	54.00	-29.81	Average
2	5350.00	33.17	15.53	32.38	34.27	46.81	54.00	7.19	Average
3	5460.00	32.99	15.75	32.49	34.29	46.94	54.00	7.06	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



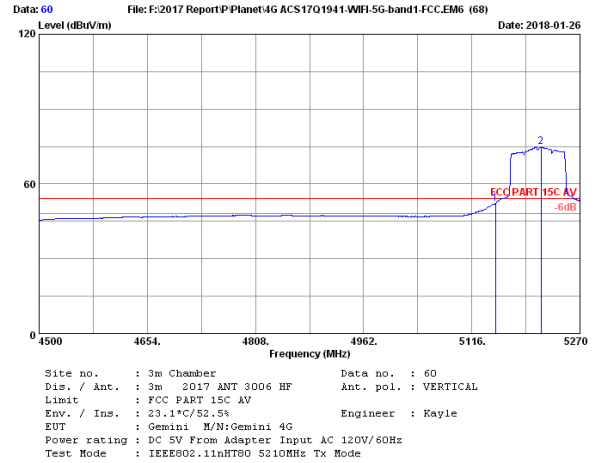
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5228.96	33.38	15.26	80.95	33.99	95.60	74.00	-21.60	Peak
2	5350.00	33.17	15.53	45.13	34.18	59.65	74.00	14.35	Peak
3	5446.76	32.99	15.72	46.11	34.29	60.53	74.00	13.47	Peak
4	5460.00	32.99	15.75	44.44	34.33	58.85	74.00	15.15	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



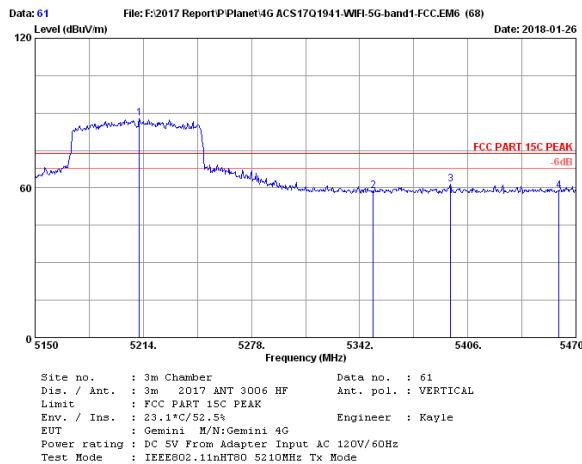
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5140.64	33.53	15.07	49.84	33.83	64.61	74.00	9.39	Peak
2	5150.00	33.53	15.11	50.85	33.87	65.62	74.00	8.38	Peak
3	5206.09	33.44	15.22	72.65	33.95	87.36	74.00	-13.36	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



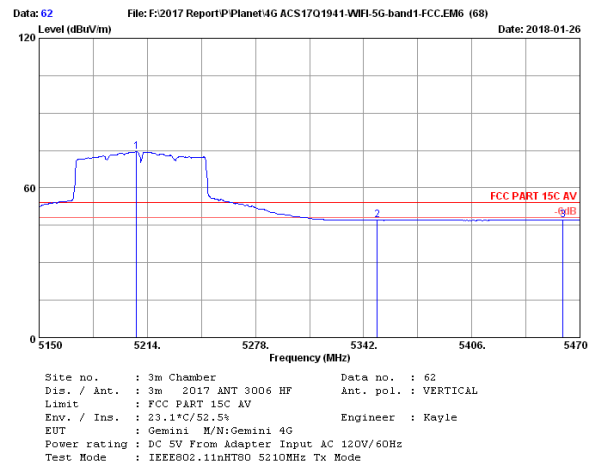
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	37.39	33.87	52.16	54.00	1.84	Average
2	5214.56	33.41	15.26	60.05	33.95	74.77	54.00	-20.77	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



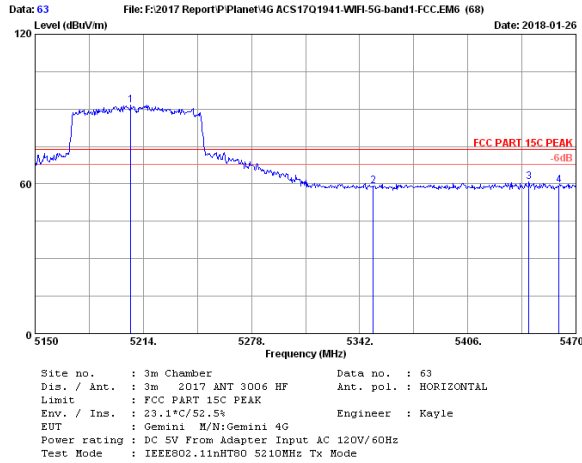
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5211.76	33.41	15.22	73.08	33.95	87.76	74.00	-13.76	Peak
2	5350.00	33.17	15.53	44.29	34.18	58.81	74.00	15.19	Peak
3	5395.76	33.08	15.64	46.84	34.22	61.34	74.00	12.66	Peak
4	5460.00	32.99	15.75	44.45	34.33	58.86	74.00	15.14	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



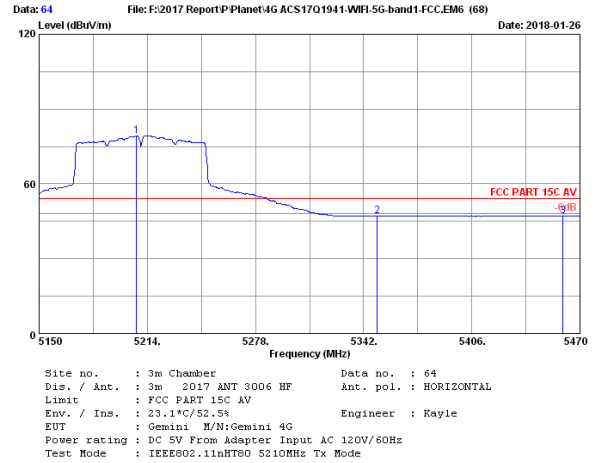
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5207.60	33.41	15.22	59.88	33.95	74.56	54.00	-20.56	Average
2	5350.00	33.17	15.53	32.49	34.18	47.01	54.00	6.99	Average
3	5460.00	32.99	15.75	32.74	34.33	47.15	54.00	6.85	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



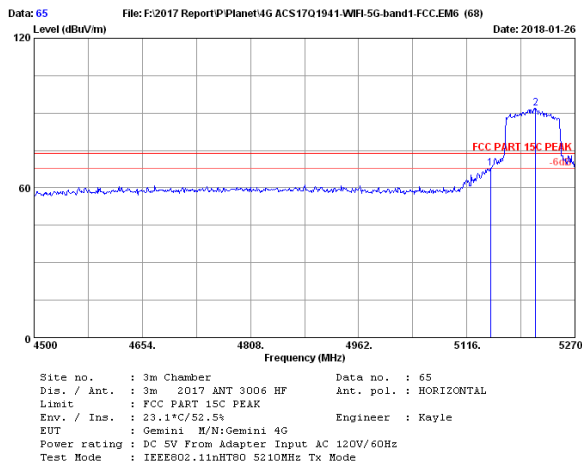
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5206.64	33.44	15.22	76.87	33.95	91.58	74.00	-17.58	Peak
2	5350.00	33.17	15.53	44.61	34.18	59.13	74.00	14.87	Peak
3	5442.16	33.02	15.72	46.29	34.29	60.74	74.00	13.26	Peak
4	5460.00	32.99	15.75	45.14	34.33	59.55	74.00	14.45	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



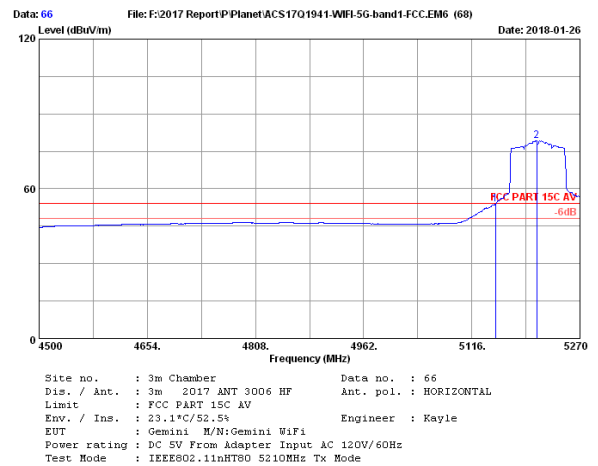
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5207.60	33.41	15.22	64.57	33.95	75.25	54.00	-25.25	Average
2	5350.00	33.17	15.53	32.54	34.18	47.06	54.00	6.94	Average
3	5460.00	32.99	15.75	32.73	34.33	47.14	54.00	6.86	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	52.95	33.87	67.72	74.00	6.28	Peak
2	5213.79	33.41	15.22	77.33	33.95	92.01	74.00	-18.01	Peak

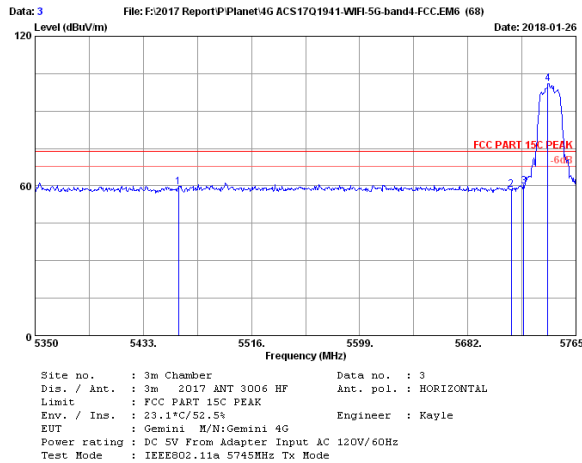
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5150.00	33.53	15.11	39.10	33.87	53.87	54.00	0.13	Average
2	5209.40	33.41	15.22	64.57	33.95	79.25	54.00	-25.25	Average

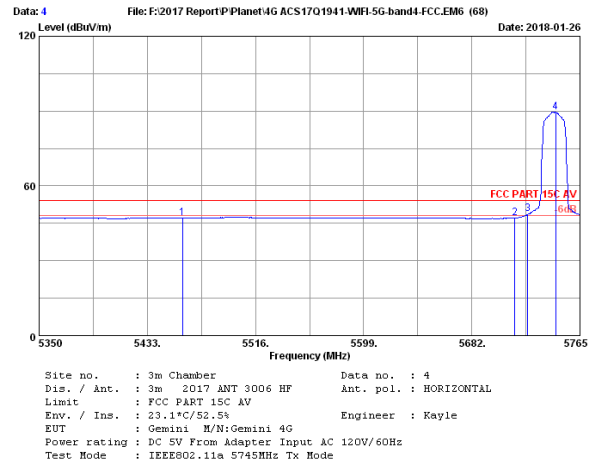
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

5745-5825MHz Band:



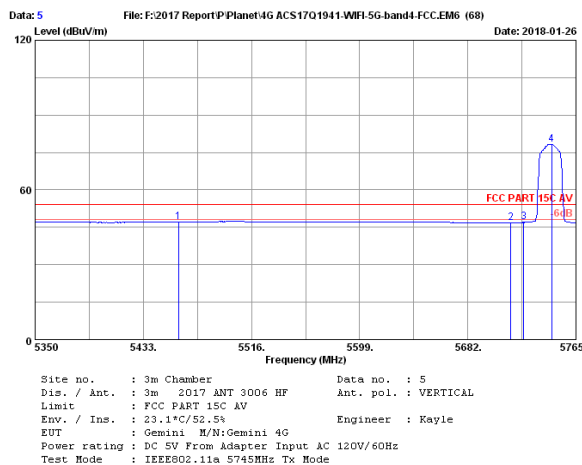
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	45.00	34.33	59.41	74.00	14.59	Peak
2	5715.20	33.15	16.29	44.15	35.05	58.54	74.00	15.46	Peak
3	5725.00	33.17	16.33	45.31	35.05	59.76	74.00	14.24	Peak
4	5743.42	33.19	16.37	86.47	35.12	100.91	74.00	-26.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



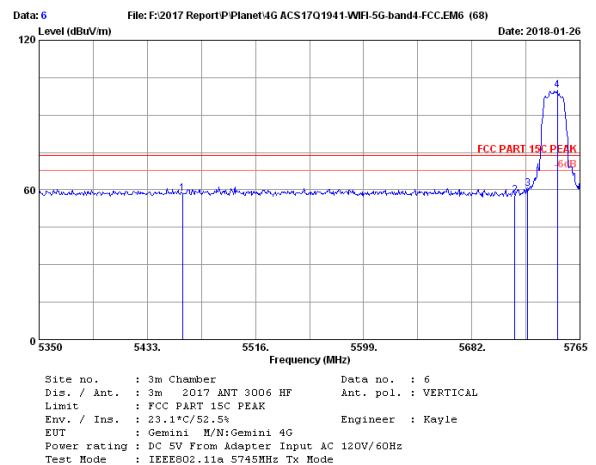
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.68	34.33	47.09	54.00	6.91	Average
2	5715.00	33.15	16.29	32.73	35.05	47.12	54.00	6.88	Average
3	5725.00	33.17	16.33	34.20	35.05	48.65	54.00	5.35	Average
4	5746.33	33.19	16.37	75.11	35.12	89.55	54.00	-35.55	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



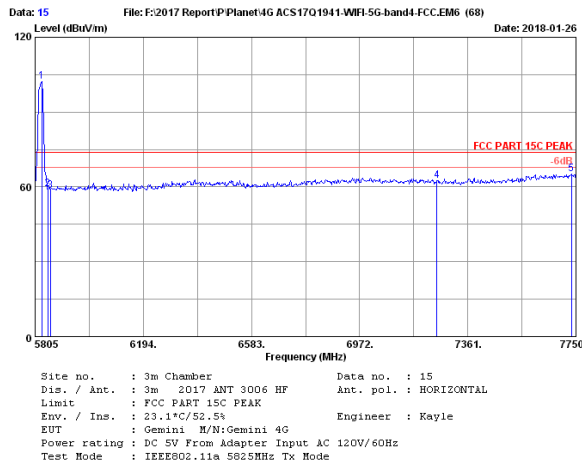
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.69	34.33	47.10	54.00	6.90	Average
2	5715.00	33.15	16.29	32.44	35.05	46.83	54.00	7.17	Average
3	5725.00	33.17	16.33	32.52	35.05	46.97	54.00	7.03	Average
4	5746.33	33.19	16.37	63.90	35.12	78.34	54.00	-24.34	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



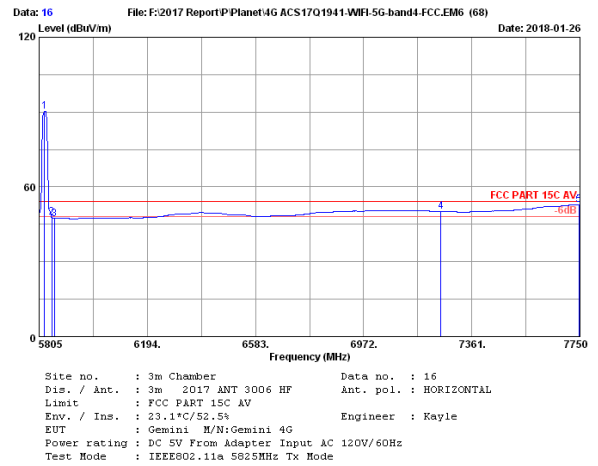
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	44.23	34.33	58.64	74.00	15.36	Peak
2	5715.00	33.15	16.29	43.46	35.05	57.85	74.00	16.15	Peak
3	5725.00	33.17	16.33	45.91	35.05	60.36	74.00	13.64	Peak
4	5747.57	33.19	16.37	85.48	35.12	99.92	74.00	-25.92	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



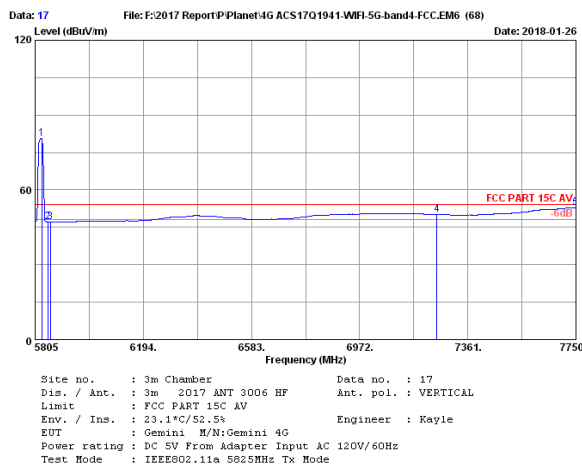
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5828.34	33.29	16.56	87.81	35.35	102.31	74.00	-28.31	Peak
2	5850.00	33.31	16.59	44.57	35.43	59.04	74.00	14.96	Peak
3	5860.00	33.33	16.59	44.00	35.50	58.42	74.00	15.58	Peak
4	7250.00	35.96	18.70	45.10	37.26	62.50	74.00	11.50	Peak
5	7734.44	36.57	19.09	45.81	36.40	65.07	74.00	8.93	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.
2. The emission levels that are 20dB below the official
limit are not reported.



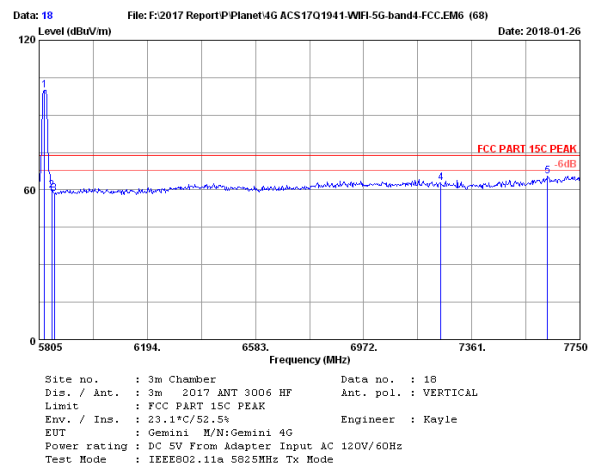
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5824.45	33.29	16.52	75.82	35.35	90.28	54.00	-36.28	Average
2	5850.00	33.31	16.59	33.39	35.43	47.66	54.00	6.14	Average
3	5860.00	33.33	16.59	32.88	35.50	47.30	54.00	6.70	Average
4	7250.00	35.96	18.70	32.69	37.26	50.09	54.00	3.91	Average
5	7746.11	36.60	19.09	33.52	36.33	52.08	54.00	1.12	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.
2. The emission levels that are 20dB below the official
limit are not reported.



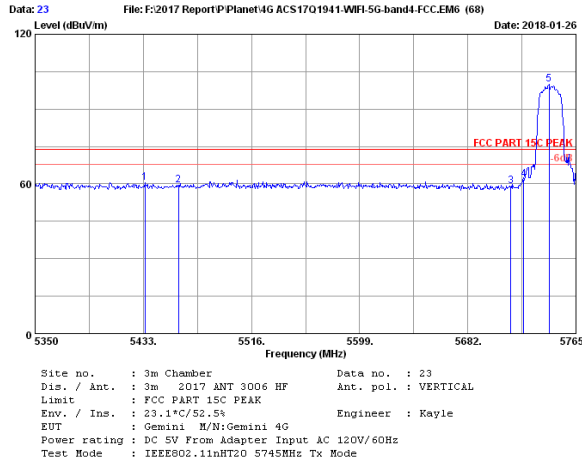
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5828.34	33.29	16.56	66.16	35.35	80.66	54.00	-26.66	Average
2	5850.00	33.31	16.59	32.57	35.43	47.04	54.00	6.96	Average
3	5860.00	33.33	16.59	32.63	35.50	47.05	54.00	6.95	Average
4	7250.00	35.96	18.70	32.68	37.26	50.08	54.00	3.92	Average
5	7750.00	36.60	19.10	33.57	36.33	52.94	54.00	1.06	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.
2. The emission levels that are 20dB below the official
limit are not reported.



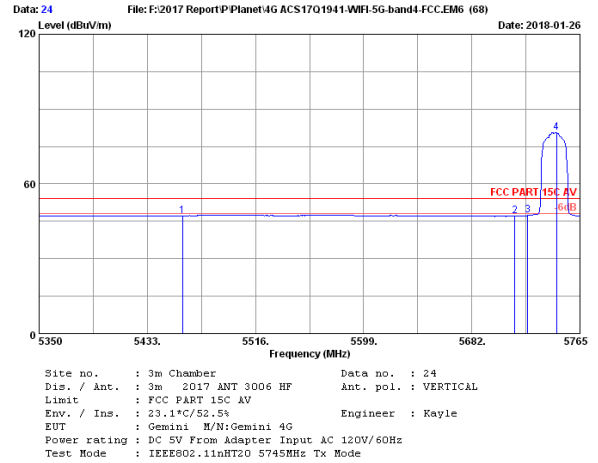
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5824.45	33.29	16.52	85.49	35.35	99.95	74.00	-25.95	Peak
2	5850.00	33.31	16.59	45.22	35.43	59.69	74.00	14.31	Peak
3	5860.00	33.33	16.59	43.98	35.50	58.40	74.00	15.60	Peak
4	7250.00	35.96	18.70	45.36	37.26	62.76	74.00	11.24	Peak
5	7633.30	36.37	19.00	46.81	36.67	65.51	74.00	8.49	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.
2. The emission levels that are 20dB below the official
limit are not reported.



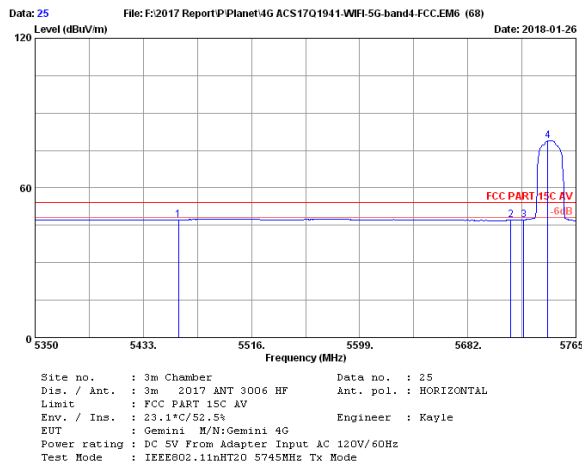
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5434.25	33.02	15.72	46.19	34.29	60.64	74.00	13.36	Peak
2	5460.00	32.99	15.75	44.93	34.33	59.34	74.00	14.66	Peak
3	5715.00	33.15	16.29	44.66	35.05	59.05	74.00	14.95	Peak
4	5725.00	33.17	16.33	47.51	35.05	61.96	74.00	12.04	Peak
5	5744.25	33.19	16.37	85.43	35.12	99.87	74.00	-25.87	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



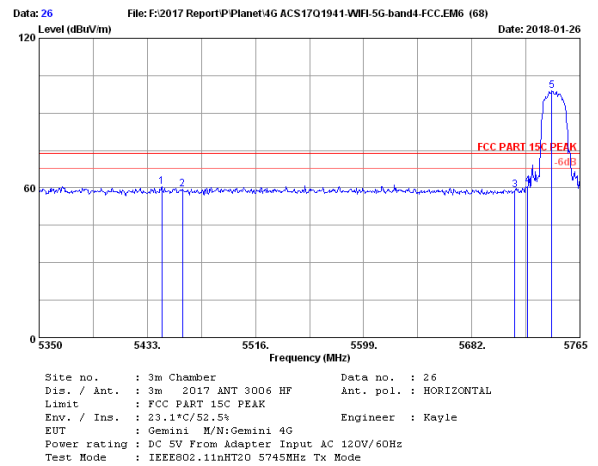
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.86	34.33	47.27	54.00	6.73	Average
2	5715.00	33.15	16.29	32.63	35.05	47.02	54.00	6.98	Average
3	5725.00	33.17	16.33	32.89	35.05	47.34	54.00	6.66	Average
4	5747.16	33.19	16.37	66.07	35.12	80.51	54.00	-26.51	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



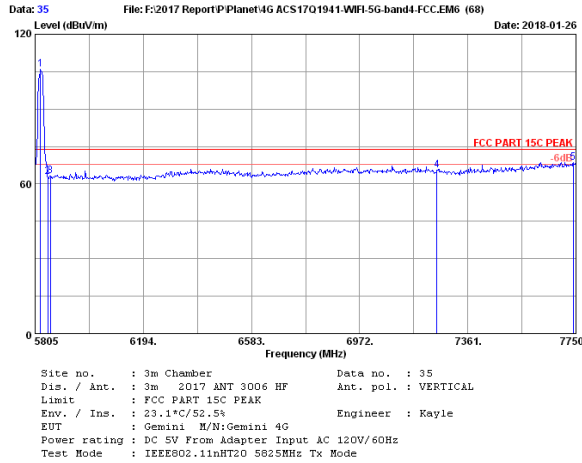
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.62	34.33	47.23	54.00	6.77	Average
2	5715.00	33.15	16.29	32.62	35.05	47.01	54.00	6.99	Average
3	5725.00	33.17	16.33	32.78	35.05	47.23	54.00	6.77	Average
4	5743.42	33.19	16.37	64.58	35.12	79.02	54.00	-25.02	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



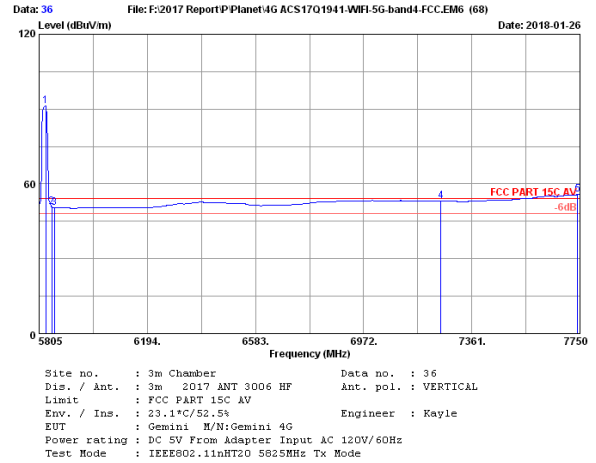
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5444.21	33.02	15.72	46.07	34.29	60.52	74.00	13.48	Peak
2	5460.00	32.99	15.75	45.19	34.33	59.60	74.00	14.40	Peak
3	5715.00	33.15	16.29	44.65	35.05	59.04	74.00	14.96	Peak
4	5725.00	33.17	16.33	46.32	35.05	60.77	74.00	13.23	Peak
5	5743.42	33.19	16.37	84.47	35.12	98.91	74.00	-24.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



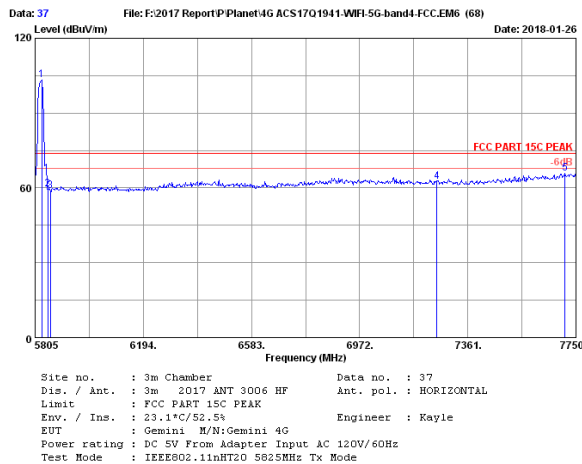
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5824.45	33.29	16.52	91.55	35.35	106.01	74.00	-32.01	Peak
2	5850.00	33.31	16.59	48.52	35.43	62.99	74.00	11.01	Peak
3	5860.00	33.33	16.59	48.70	35.50	63.12	74.00	10.88	Peak
4	7250.14	35.96	18.70	48.02	37.26	65.42	74.00	8.58	Peak
5	7740.28	36.57	19.09	49.34	36.40	68.60	74.00	5.40	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



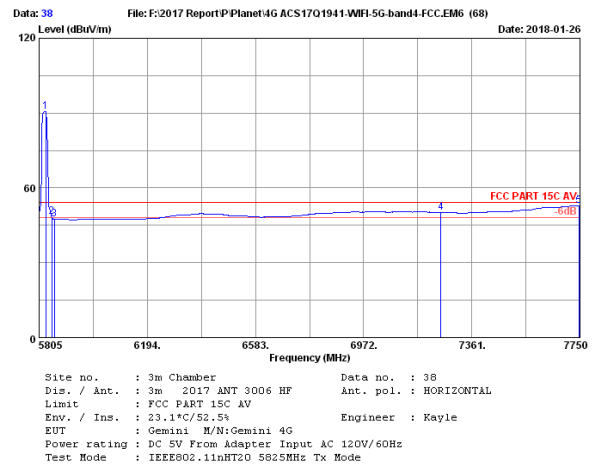
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5828.34	33.29	16.56	76.76	35.35	91.26	54.00	-37.26	Average
2	5850.00	33.31	16.59	36.42	35.43	50.89	54.00	3.11	Average
3	5860.00	33.33	16.59	36.05	35.50	50.47	54.00	3.53	Average
4	7250.00	35.96	18.70	35.61	37.26	53.01	54.00	0.99	Average
5	7742.22	36.60	19.09	36.38	36.40	55.67	54.00	-1.67	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



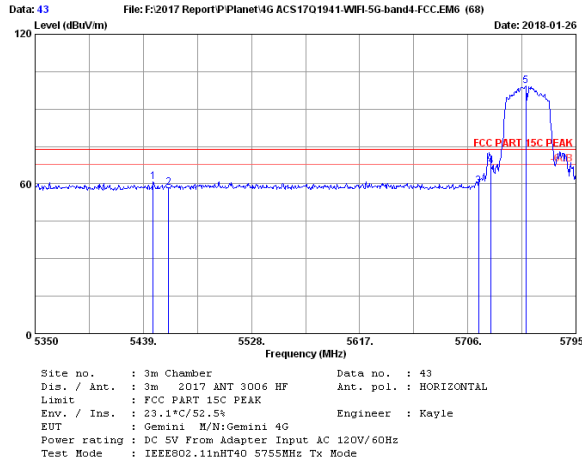
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5828.34	33.29	16.56	88.72	35.35	103.22	74.00	-29.22	Peak
2	5850.00	33.31	16.59	45.06	35.43	59.53	74.00	14.47	Peak
3	5860.00	33.33	16.59	44.57	35.50	58.99	74.00	15.01	Peak
4	7250.00	35.96	18.70	45.11	37.26	62.51	74.00	11.49	Peak
5	7711.10	36.53	19.06	46.85	36.47	65.97	74.00	8.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



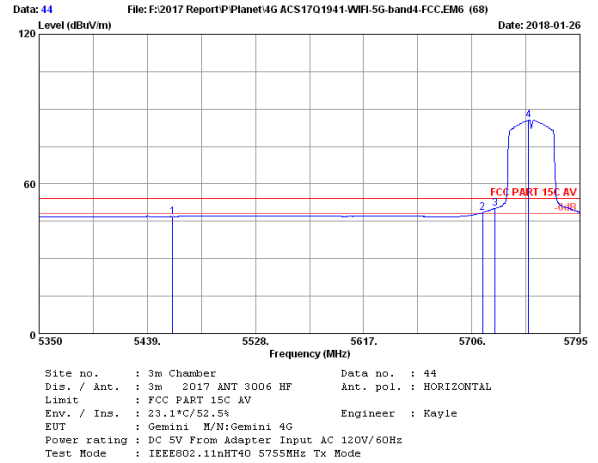
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5828.34	33.29	16.56	76.24	35.35	90.74	54.00	-36.74	Average
2	5850.00	33.31	16.59	33.84	35.43	45.31	54.00	5.69	Average
3	5860.00	33.33	16.59	32.95	35.50	47.37	54.00	6.63	Average
4	7250.00	35.96	18.70	32.70	37.26	50.10	54.00	3.90	Average
5	7746.11	36.60	19.09	33.47	36.33	52.83	54.00	1.17	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



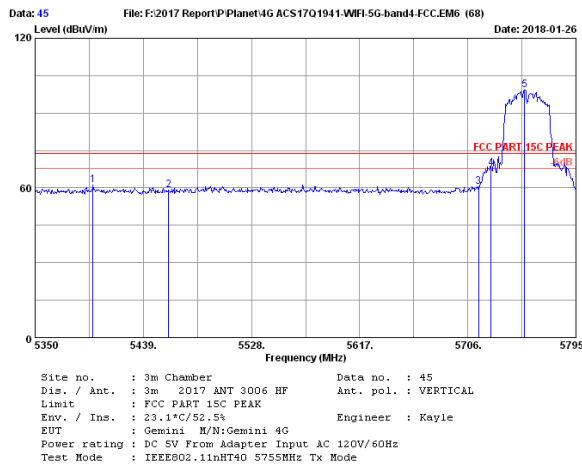
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5447.01	32.99	15.72	46.49	34.29	60.91	74.00	13.09	Peak
2	5460.00	32.99	15.75	44.25	34.33	58.66	74.00	15.34	Peak
3	5715.00	33.15	16.29	44.83	35.05	59.22	74.00	14.78	Peak
4	5725.00	33.17	16.33	52.83	35.05	67.28	74.00	6.72	Peak
5	5753.62	33.21	16.40	84.95	35.12	99.44	74.00	-25.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



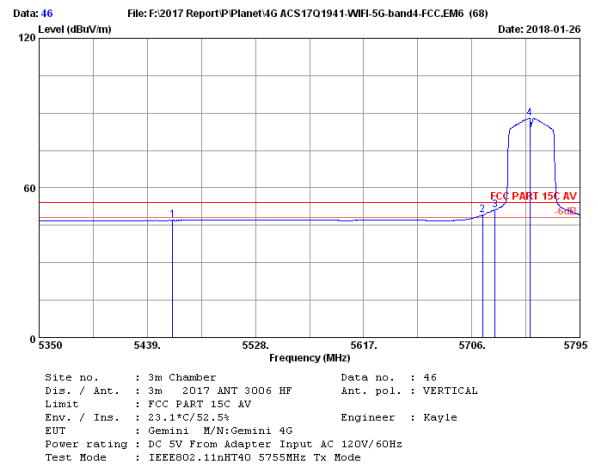
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.54	34.33	46.95	54.00	7.05	Average
2	5715.00	33.15	16.29	34.04	35.05	48.43	54.00	5.57	Average
3	5725.00	33.17	16.33	35.74	35.05	50.19	54.00	3.81	Average
4	5752.73	33.21	16.37	71.07	35.12	85.53	54.00	-31.53	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



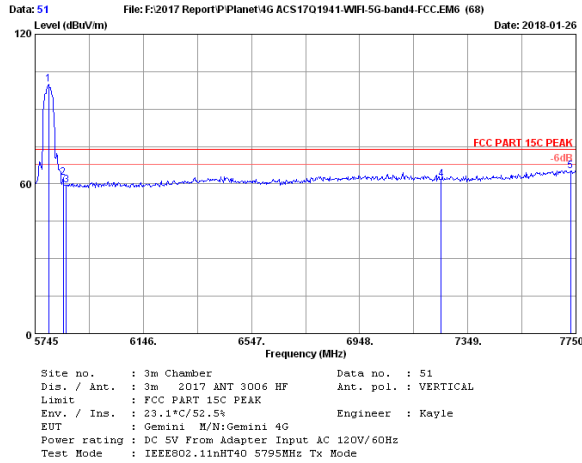
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5397.62	33.08	15.64	46.72	34.22	61.22	74.00	12.78	Peak
2	5460.00	32.99	15.75	44.76	34.33	59.17	74.00	14.83	Peak
3	5715.00	33.15	16.29	46.21	35.05	60.60	74.00	13.40	Peak
4	5725.14	33.17	16.33	53.31	35.05	67.76	74.00	6.24	Peak
5	5752.73	33.21	16.37	84.83	35.12	99.29	74.00	-25.29	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



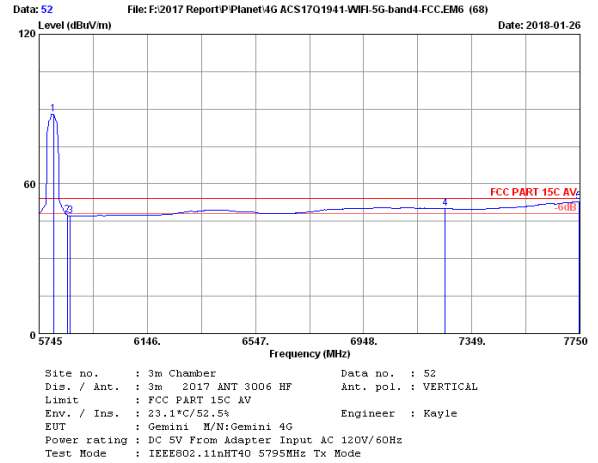
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.57	34.33	46.98	54.00	7.02	Average
2	5715.00	33.15	16.29	34.69	35.05	49.08	54.00	4.92	Average
3	5725.00	33.17	16.33	36.79	35.05	51.24	54.00	2.76	Average
4	5753.62	33.21	16.40	73.39	35.12	87.88	54.00	-33.88	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



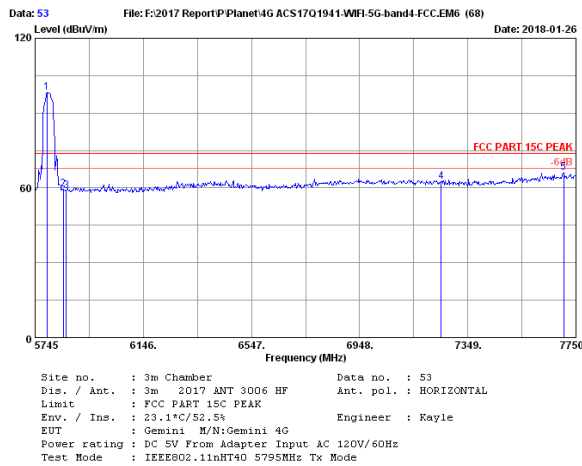
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5795.13	33.25	16.48	85.59	35.28	100.04	74.00	-26.04	Peak
2	5850.00	33.31	16.59	45.11	35.43	62.58	74.00	11.42	Peak
3	5860.00	33.33	16.59	44.92	35.50	59.34	74.00	14.66	Peak
4	7250.00	35.96	18.70	44.60	37.26	62.00	74.00	12.00	Peak
5	7729.95	36.57	19.07	46.03	36.40	65.27	74.00	8.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



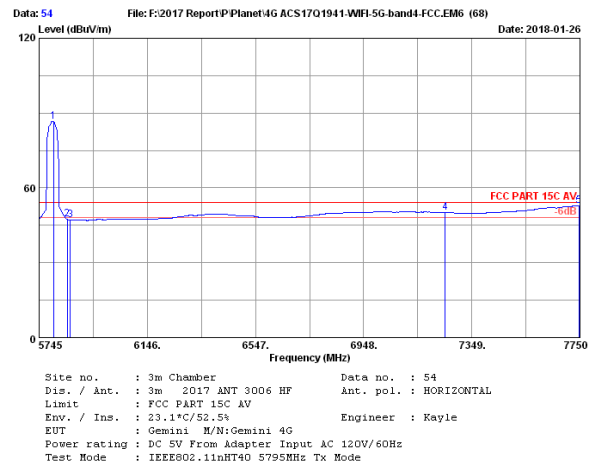
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5799.14	33.25	16.48	73.43	35.28	87.88	54.00	-33.88	Average
2	5850.00	33.31	16.59	33.00	35.43	47.47	54.00	6.53	Average
3	5860.00	33.33	16.59	32.80	35.50	47.22	54.00	6.78	Average
4	7250.00	35.96	18.70	32.64	37.26	50.04	54.00	3.96	Average
5	7745.99	36.60	19.09	33.43	36.33	52.79	54.00	1.21	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



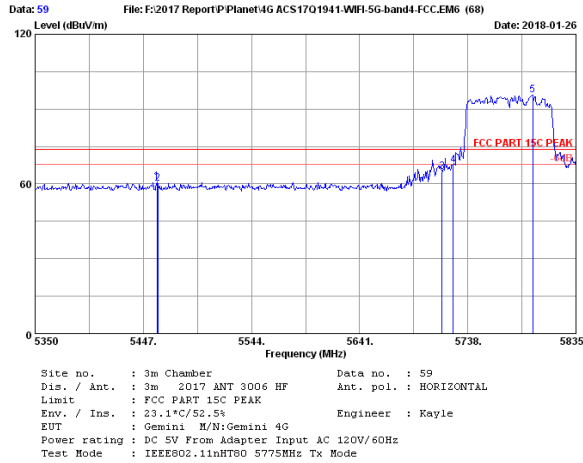
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5789.11	33.25	16.44	83.71	35.28	98.12	74.00	-24.12	Peak
2	5850.00	33.31	16.59	45.11	35.43	59.58	74.00	14.42	Peak
3	5860.00	33.33	16.59	44.60	35.50	58.92	74.00	15.08	Peak
4	7250.00	35.96	18.70	45.19	37.26	62.59	74.00	11.41	Peak
5	7703.89	36.50	19.06	47.18	36.47	66.27	74.00	7.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



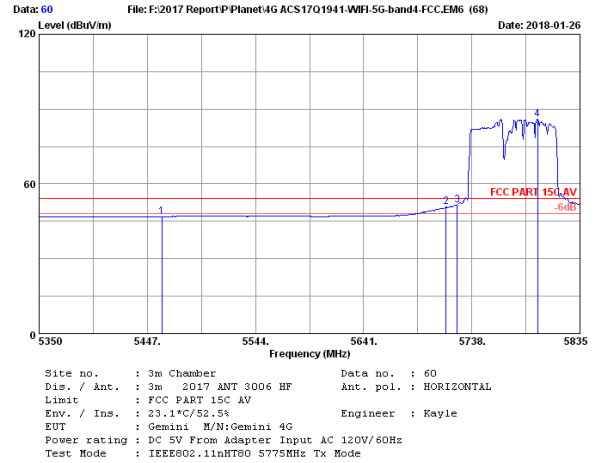
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5799.14	33.25	16.48	72.25	35.28	86.70	54.00	-32.70	Average
2	5850.00	33.31	16.59	32.93	35.43	47.40	54.00	6.60	Average
3	5860.00	33.33	16.59	32.72	35.50	47.14	54.00	6.86	Average
4	7250.00	35.96	18.70	32.61	37.26	50.01	54.00	3.99	Average
5	7745.99	36.60	19.09	33.44	36.33	52.80	54.00	1.20	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



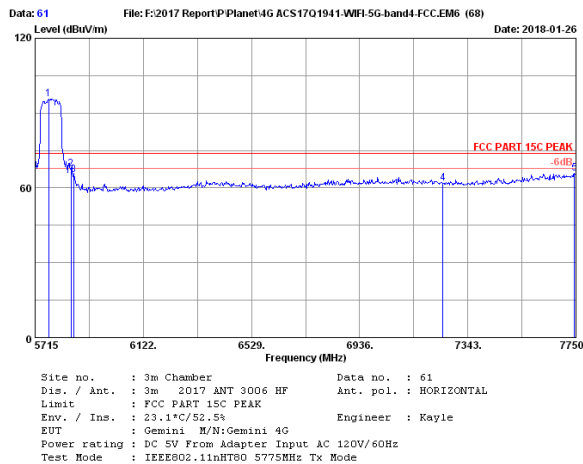
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5459.13	32.99	15.75	46.46	34.33	60.87	74.00	13.13	Peak
2	5460.00	32.99	15.75	45.71	34.33	60.12	74.00	13.88	Peak
3	5715.00	33.15	16.29	50.49	35.05	64.88	74.00	9.12	Peak
4	5725.00	33.17	16.33	53.08	35.05	67.53	74.00	6.47	Peak
5	5796.20	33.25	16.48	81.29	35.28	95.74	74.00	-21.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



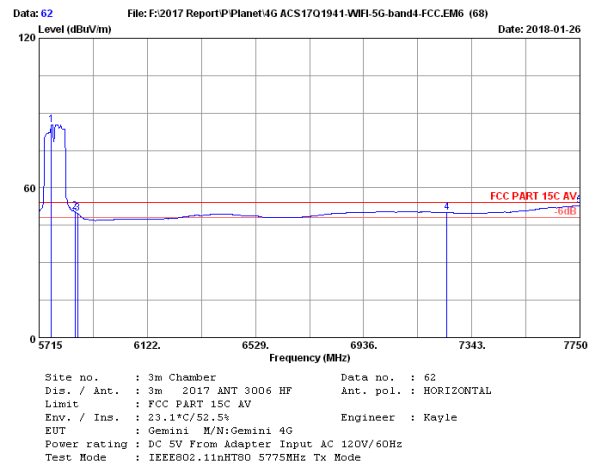
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.47	34.33	46.88	54.00	7.12	Average
2	5715.00	33.15	16.29	36.31	35.05	50.70	54.00	3.30	Average
3	5725.00	33.17	16.33	37.16	35.05	51.61	54.00	2.39	Average
4	5797.17	33.25	16.48	71.41	35.28	85.86	54.00	-31.86	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



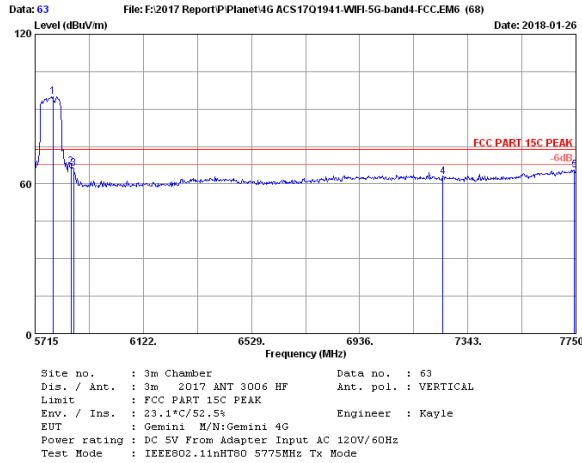
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5765.88	33.21	16.40	81.29	35.20	95.70	74.00	-21.70	Peak
2	5850.00	33.31	16.59	53.13	35.43	67.60	74.00	6.40	Peak
3	5860.00	33.33	16.59	50.66	35.50	65.08	74.00	8.92	Peak
4	7250.00	35.96	18.70	44.50	37.26	61.90	74.00	12.10	Peak
5	7743.90	36.60	19.09	46.50	36.40	65.79	74.00	8.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



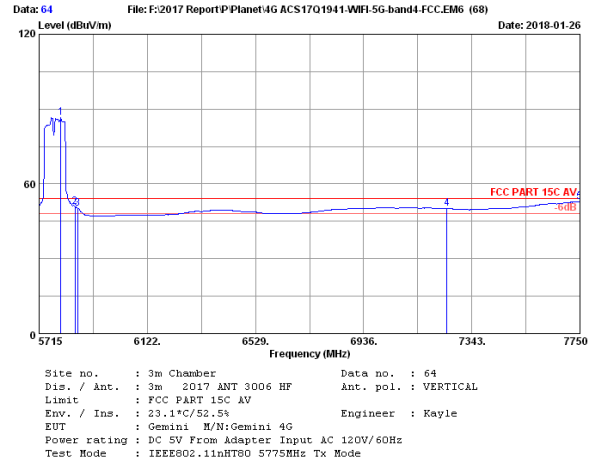
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5761.81	33.21	16.40	70.93	35.20	85.34	54.00	-31.34	Average
2	5850.00	33.31	16.59	35.93	35.43	50.40	54.00	3.60	Average
3	5860.00	33.33	16.59	35.29	35.50	49.71	54.00	4.29	Average
4	7250.00	35.96	18.70	32.63	37.26	50.03	54.00	3.97	Average
5	7750.00	36.60	19.10	33.43	36.33	52.80	54.00	1.20	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



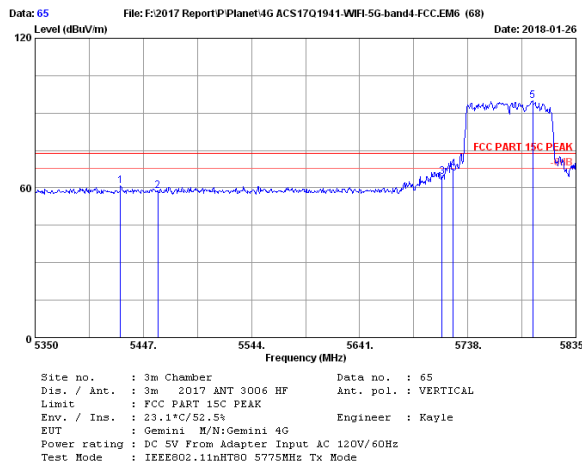
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5782.16	33.23	16.44	80.55	35.28	94.94	74.00	-20.94	Peak
2	5850.00	33.31	16.59	52.55	35.43	67.02	74.00	6.98	Peak
3	5860.00	33.33	16.59	51.68	35.50	66.10	74.00	7.90	Peak
4	7250.00	35.96	18.70	45.48	37.26	62.88	74.00	11.12	Peak
5	7743.90	36.60	19.09	46.38	36.40	65.67	74.00	8.33	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



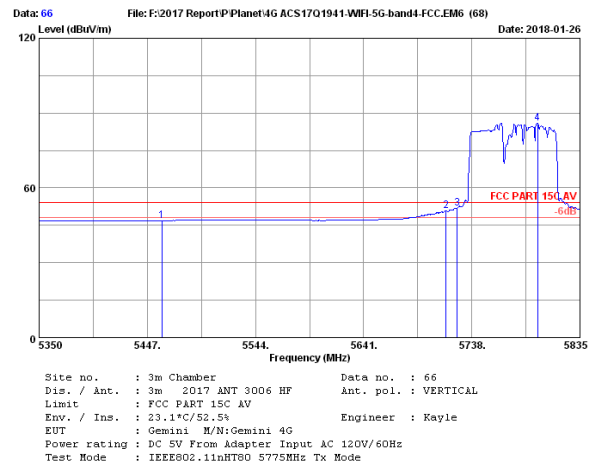
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5796.40	33.25	16.48	72.13	35.28	86.58	54.00	-32.58	Average
2	5850.00	33.31	16.59	36.46	35.43	50.93	54.00	3.07	Average
3	5860.00	33.33	16.59	35.75	35.50	50.17	54.00	3.83	Average
4	7250.00	35.96	18.70	32.60	37.26	50.00	54.00	4.00	Average
5	7750.00	36.60	19.10	33.43	36.33	52.80	54.00	1.20	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5426.63	33.05	15.68	46.36	34.29	60.80	74.00	13.20	Peak
2	5460.00	32.99	15.75	44.45	34.33	58.86	74.00	15.14	Peak
3	5715.00	33.15	16.29	50.10	35.05	64.49	74.00	9.51	Peak
4	5725.00	33.17	16.33	53.03	35.05	67.48	74.00	6.52	Peak
5	5796.20	33.25	16.48	80.45	35.28	94.90	74.00	-20.90	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.00	32.99	15.75	32.50	34.33	46.91	54.00	7.09	Average
2	5715.00	33.15	16.29	36.50	35.05	50.89	54.00	3.11	Average
3	5725.00	33.17	16.33	37.46	35.05	51.91	54.00	2.09	Average
4	5797.17	33.25	16.48	71.58	35.28	86.03	54.00	-32.03	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

6. 6dB &26dB Bandwidth Test

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY53311015	Oct.15,17	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.27,17	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,17	1 Year

6.2.Limit

6dB Bandwidth should be not less than 500kHz

6.3.Test Procedure

6dB Bandwidth:

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 KHz VBW for signal width below 20MHz and 300KHz RBW ,1MHz VBW for Above 20MHz signal Bandwidth.

26dB Bandwidth:

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6.4.Test Results

**5180-5240MHz Band:
26dB bandwidth**

EUT: Gemini		
M/N: Gemini 4G		
Test date: 2018-07-26	Pressure: 101.8±1.0 kpa	Humidity: 51.8±3.0%
Tested by: Lynn	Test site: RF site	Temperature:21.6±0.6 °C

Test Mode	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (KHz)
11a	5180	19.41	N/A
	5200	18.92	N/A
	5240	19.29	N/A
11n HT20	5180	20.13	N/A
	5200	20.00	N/A
	5240	21.26	N/A
11n HT40	5190	39.30	N/A
	5230	39.34	N/A
11ac VHT20	5180	20.46	N/A
	5200	21.77	N/A
	5240	19.82	N/A
11ac VHT40	5190	39.38	N/A
	5230	39.29	N/A
11ac VHT80	5210	80.23	N/A

Conclusion: PASS

5745-5825MHz Band:
6dB bandwidth

EUT: Gemini		
M/N: Gemini 4G		
Test date: 2018-01-19	Pressure: 102.4±1.0 kpa	Humidity:52.6±3.0%
Tested by: Kayle	Test site: RF site	Temperature:23.2±0.6 °C

Test Mode	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (KHz)
11a	5745	16.38	≥ 500
	5785	16.41	≥ 500
	5825	16.40	≥ 500
11n HT20	5745	17.62	≥ 500
	5785	17.64	≥ 500
	5825	17.63	≥ 500
11n HT40	5755	35.69	≥ 500
	5795	36.30	≥ 500
11ac VHT20	5745	17.59	≥ 500
	5785	17.61	≥ 500
	5825	17.62	≥ 500
11ac VHT40	5755	36.00	≥ 500
	5795	36.30	≥ 500
11ac VHT80	5775	76.43	≥ 500

Conclusion: PASS

26dB bandwidth

EUT: Gemini		
M/N: Gemini 4G		
Test date: 2018-07-26	Pressure: 101.8±1.0 kpa	Humidity: 51.8±3.0%
Tested by: Lynn	Test site: RF site	Temperature:21.6±0.6 °C

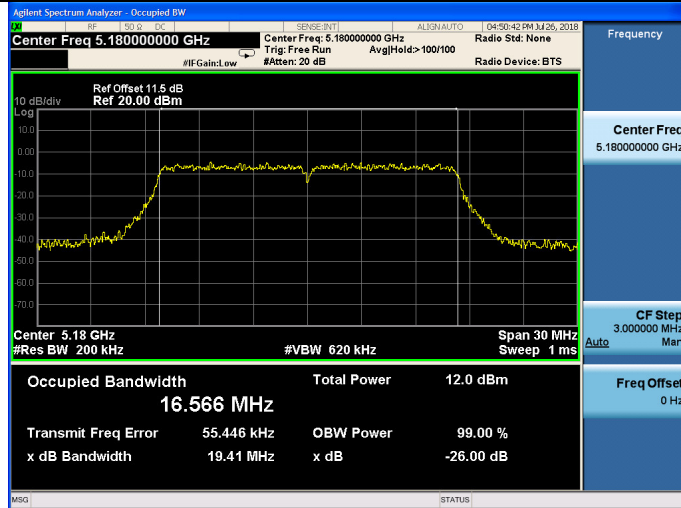
Test Mode	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (KHz)
11a	5745	19.51	N/A
	5785	19.83	N/A
	5825	19.44	N/A
11n HT20	5745	19.96	N/A
	5785	21.55	N/A
	5825	20.08	N/A
11n HT40	5755	39.97	N/A
	5795	39.08	N/A
11ac VHT20	5745	20.14	N/A
	5785	19.99	N/A
	5825	20.13	N/A
11ac VHT40	5755	39.21	N/A
	5795	39.26	N/A
11ac VHT80	5775	80.39	N/A
Conclusion: PASS			

5180-5240MHz Band:

26dB bandwidth

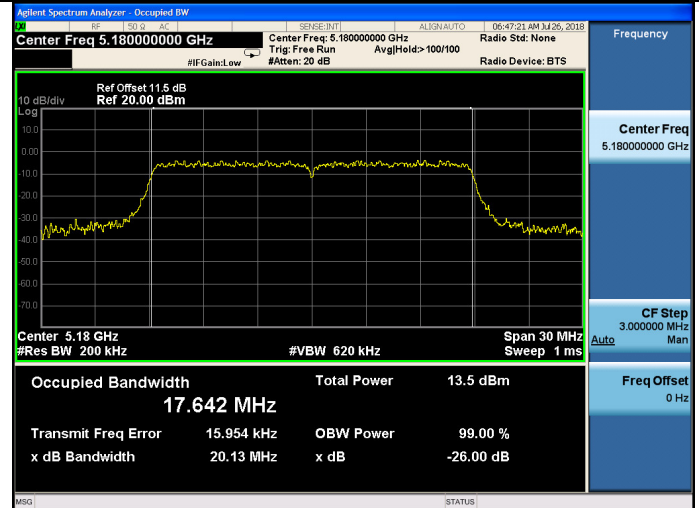
11a

5180MHz

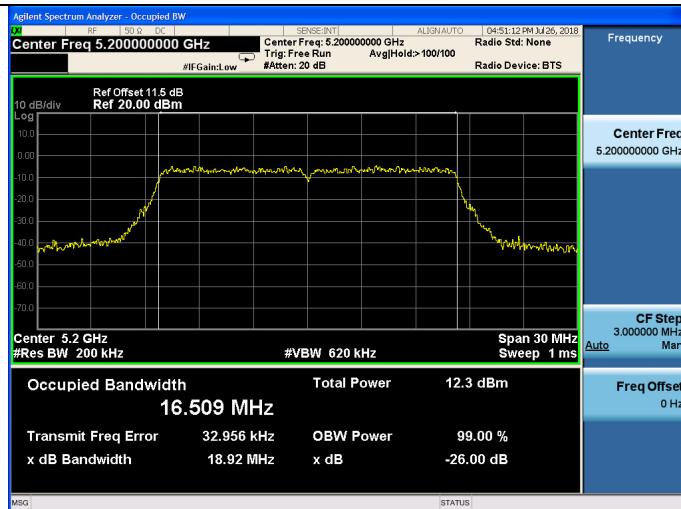


11n HT20

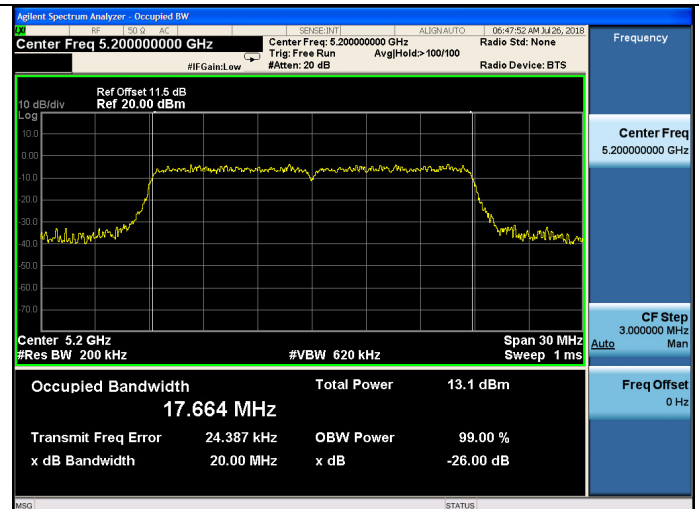
5180MHz



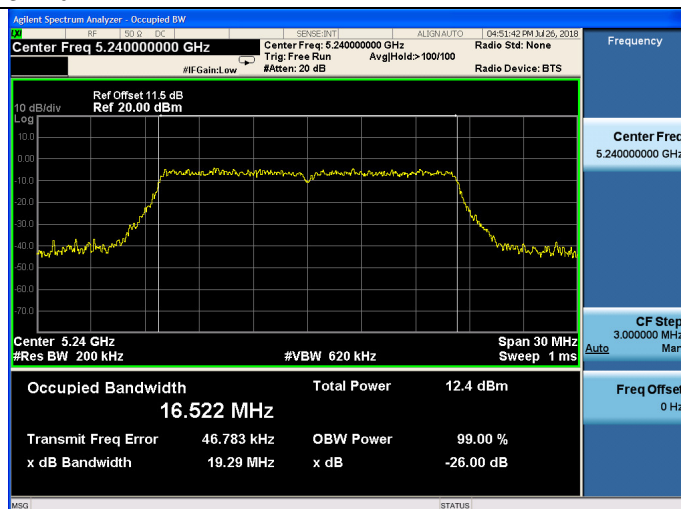
5200MHz



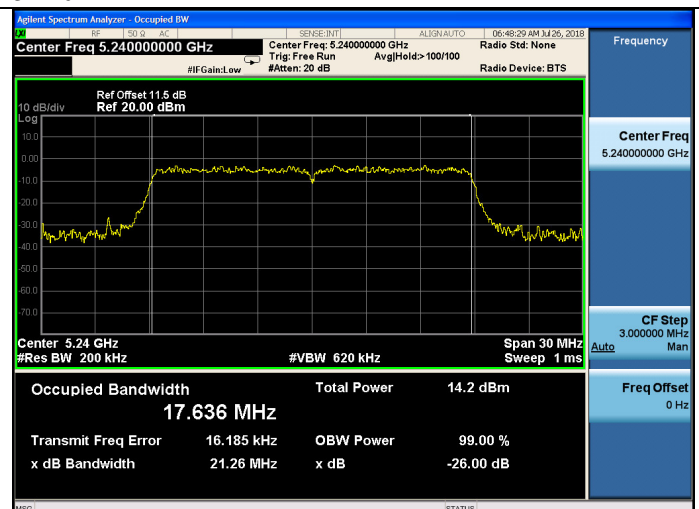
5200MHz



5240MHz

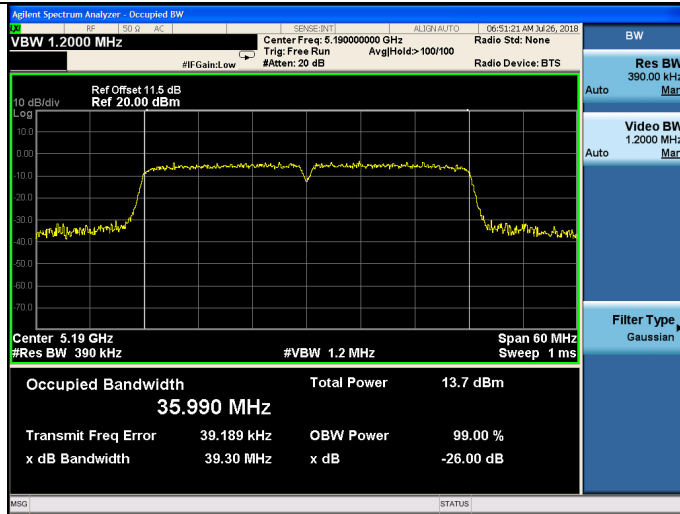


5240MHz

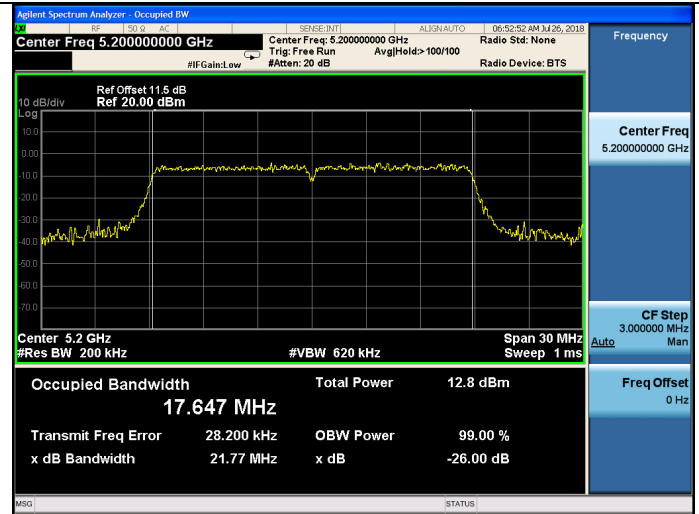


11n HT40

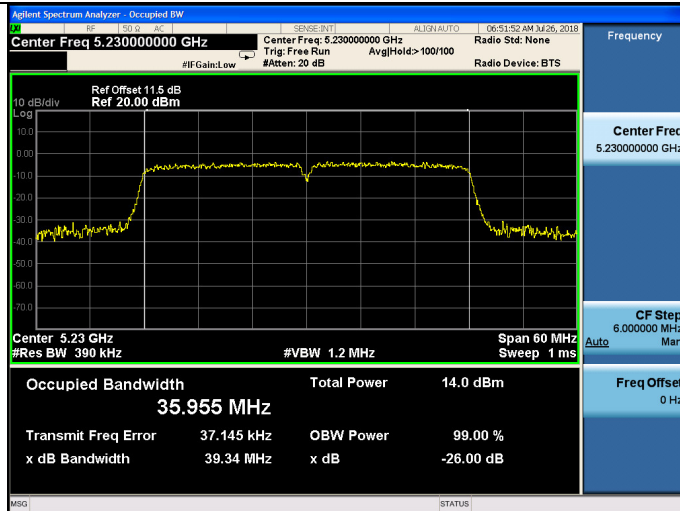
5190MHz



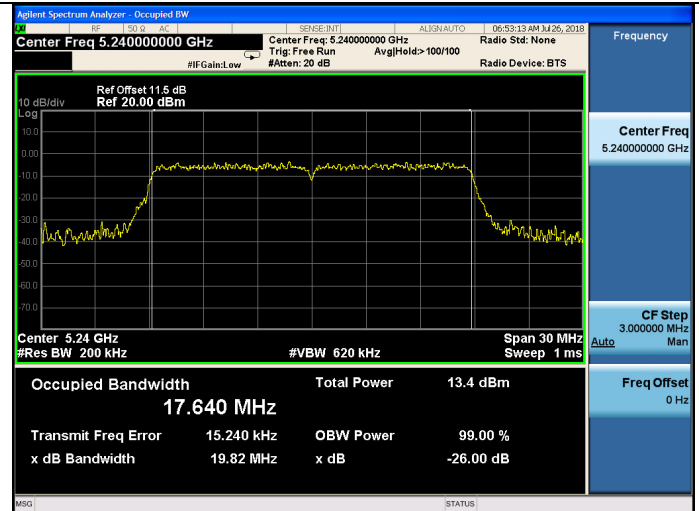
5200MHz



5230MHz

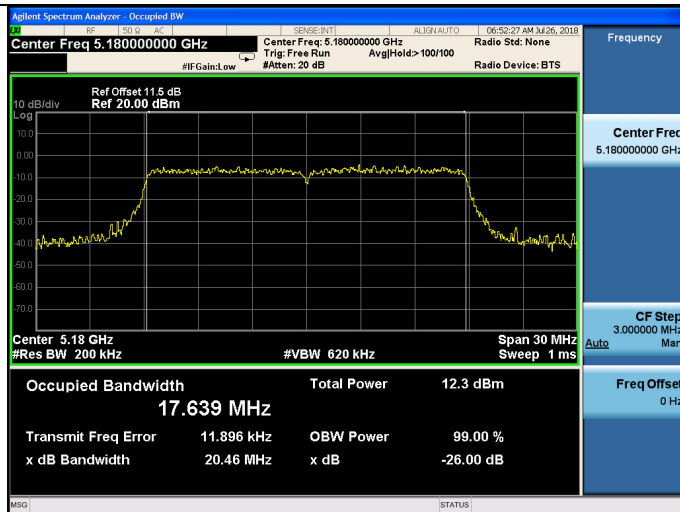


5240MHz



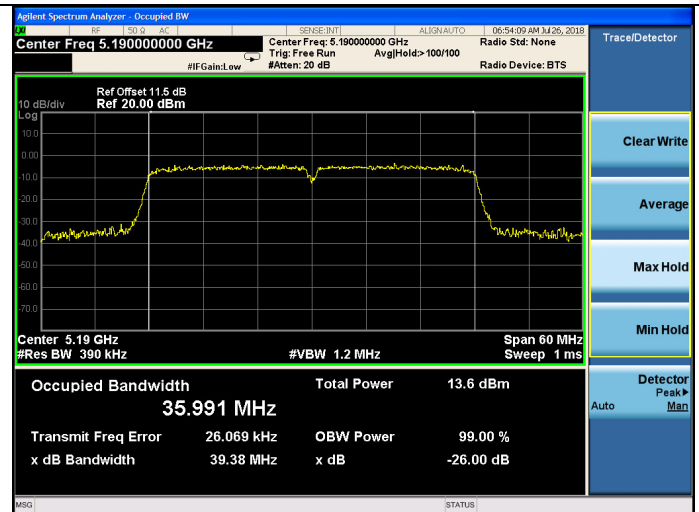
11ac VHT20

5180MHz

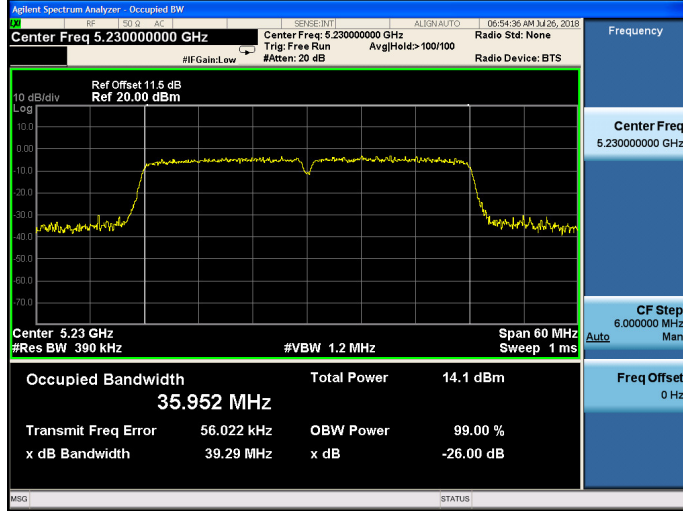


11ac VHT40

5190MHz



5230MHz



11ac VHT80

5210MHz

