TEST REPORT

Client Information:

Applicant: DOKE COMMUNICATION (HK) LIMITED

Applicant add.: 19H MAXGRAND PLAZA NO 3 TAI YAU STREET SAN PO KONG KL

Manufacturer: Shenzhen DOKE Electronic Co., Ltd

Manufacturer add.: 801, Building3, 7th Industrial Zone, Yulv Community, Yutang Road, Guangming District, Shenzhen, China.

Product Information:

Product Name: Mini PC

Model No.: MP100 Pro

Brand Name: Blackview

FCC ID: 2A7DX-MP100PRO

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Prepared By:

Dongguan Yaxu (AiT) Technology Limited

No.22, Jinqianling 3rd Street, Jitigang, Huangjiang,Dongguan, Guangdong, China

Tel.: +86-769-8202 0499 Fax.: +86-769-8202 0495

Date of Receipt: Apr. 27, 2025 Date of Test: Apr. 27, 2025~June 10, 2025

Date of Issue: June 11, 2025 Test Result: Pass

This device described above has been tested by Dongguan Yaxu (AiT) Technology Limited and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Note: This report shall not be reproduced except in full, without the written approval of Dongguan Yaxu (AiT) Technology Limited, this document may be altered or revised by Dongguan Yaxu (AiT) Technology Limited, personal only, and shall be noted in the revision of the document. This test report must not be used by the client to claim product endorsement.

Reviewed by: Emiya Lin
Emiya Lin

Approved by: Simba Huang
Simba Huang

1 Contents

Page

COVER PAGE

1 CONTENTS 2

2 TEST SUMMARY 4

2.1 Statement of the Measurement Uncertainty 4
2.2 Measurement Uncertainty 4

3 TEST FACILITY 5

3.1 Deviation from standard 5
3.2 Abnormalities from standard conditions 5
3.3 Test Location 5

4 GENERAL INFORMATION 6

4.1 Test frequencies 8
4.2 EUT Peripheral List 9
4.3 Test Peripheral List 9
4.4 TEST METHODOLOGY 10
4.5 Description of Test Modes 11

5 EQUIPMENT USED DURING TEST 12

6 TEST RESULTS AND MEASUREMENT DATA 14

6.1 Antenna requirement 14
6.2 Peak Power Measurement 15
6.3 Frequency Separation and 20 dB Bandwidth 17
6.4 Number of Hopping Frequency 19
6.5 Time of Occupancy (Dwell Time) 20
6.6 Conducted Spurious Emissions and Band Edges Test 22
6.7 Restrict-band Band-edge Measurements 24
6.8 Radiated Emissions Measurement 26
6.9 Conducted Emissions 46
6.10 Pseudorandom frequency hopping sequence 59

7 TEST SETUP PHOTOGRAPHS OF EUT 60

8 EXTERNAL PHOTOGRAPHS OF EUT 60

9 INTERNAL PHOTOGRAPHS OF EUT 60

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	June 11, 2025	Valid	Initial release

2 Test Summary

Test Item	Section in CFR 47	Result
Maximum Conducted Output Power	§15.247(b)	Pass
20dB Bandwidth	§15.247(a)	Pass
Frequency Separation	§15.247(a)	Pass
Number Of Hopping Frequency	§15.247(a)	Pass
Time Of Occupancy (Dwell Time)	§15.247(a)	Pass
Conducted Spurious Emissions and Band Edges Emissions	§15.205, §15.247(d)	Pass
Radiated Spurious Emissions	§15.209, §15.247(d)	Pass
Emissions at Restricted Band	§15.205	Pass
AC Mains Conducted Emissions	§15.207(a)	Pass
Antenna Requirements	§15.203	Pass

Note

1. Test according to ANSI C63.10:2013 and RSS-Gen.
2. The measurement uncertainty is not included in the test result.
3. Test results in other test report (RF Exposure Evaluation Report)

2.1 Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the AiT quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

2.2 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	0.009MHz-30MHz	3.10dB	(1)
Radiated Emission	30MHz-1GHz	3.75dB	(1)
Radiated Emission	1GHz-18GHz	3.88dB	(1)
Radiated Emission	18GHz-40GHz	3.88dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	1.20dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

3 Test Facility

The test facility is recognized, certified or accredited by the following organizations:

CNAS- Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2017 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on April 18, 2022

FCC-Registration No.: 703111 Designation Number: CN1313

Dongguan Yaxu (AiT) technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 6819A CAB identifier: CN0122

The 3m Semi-anechoic chamber of Dongguan Yaxu (AiT) technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6819A

A2LA-Lab Cert. No.: 6317.01

Dongguan Yaxu (AiT) technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

3.1 Deviation from standard

None

3.2 Abnormalities from standard conditions

None

3.3 Test Location

Dongguan Yaxu (AiT) Technology Limited

Address: No.22, Jinqianling 3rd Street, Jitigang, Huangjiang,Dongguan, Guangdong, China

Tel.: +86-769-8202 0499

Fax.: +86-769-8202 0495

4 General Information

EUT Name:	Mini PC
Model No:	MP100 Pro
Serial Model:	N/A
Brand Name:	Blackview
Test sample(s) ID:	AiTDG-250427006-1 AiTDG-250427006-2 AiTDG-250427006-3
Sample(s) Status:	Engineer sample
Serial No.:	N/A
Operation frequency:	2402MHz-2480MHz
Channel Number:	79 Channels
Channel separation:	1MHz
Modulation Technology:	GFSK, π/4-DQPSK, 8-DPSK
Antenna Type:	PCB Antenna
Antenna gain:	ANT1(AUX):3.28dBi
Hardware version.:	P3AD10_V11
Software version.:	24H2
Power supply:	DC 19.0V from adapter
Adapter:	Adapter 1: MODEL: BSY065T1903423 D INPUT: 100-240V~ 50/60Hz, 1.5A OUTPUT: 19.0V3.42A 64.98W Adapter 2: MODEL: AD0651-1903420F INPUT: 100-240V~ 50/60Hz 1.5A Max OUTPUT: 19.0V3.42A 64.98W Adapter 3: MODEL: DSA-120PFG-19 3 190632 INPUT: 100-240V~ 50/60Hz 2.0A OUTPUT: 19.0V6.32A, 120.08W Adapter 4: MODEL: KA120C-1906300H INPUT: 100-240V~ 50/60Hz 2.0A Max

	OUTPUT: 19.0V6.3A, 119.7W
Configuration:	Match with 3 CUP: Intel®Alder Lake i3-1215U Intel®Alder Lake i5-12450H Intel®Alder Lake i9-12900HK Intel®Alder Lake i3-1215U match witch: BSY065T1903423 D adapter and AD0651-1903420F adapter Intel®Alder Lake i5-12450H and Intel®Alder Lake i9-12900HK match witch: DSA-120PFG-19 3 190632 adapter and KA120C-1906300H adapter
Model different:	N/A
Note:	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

4.1 Test frequencies

EUT channels and frequencies list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454	--	--
26	2428	53	2455	--	--

4.2 EUT Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	Remark
1	Adapter	SHENZHEN BSY TECHNOLOGY CO.,LTD.	BSY065T1903 423 D	N/A	N/A	N/A
2	Adapter	Shenzhen ABP Technology Co.,Ltd.	AD0651-1903 420F	N/A	N/A	N/A
3	Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-120PFG-19 3 190632	N/A	N/A	N/A
4	Adapter	SHENZHEN KEYU POWER SUPPLY TECHNOLOGY CO., LTD.	KA120C-1906 300H	N/A	N/A	N/A

4.3 Test Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	Remark
1	N/A	N/A	N/A	N/A	N/A	N/A

4.4 TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR PART 15C 15.207, 15.209, 15.247 and DA 00-705.

EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

EUT Exercise

The EUT was operated in the normal operating mode for Hopping Numbers and Dwell Time test and a continuous transmits mode for other tests.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209, 15.247, ANSI C63.10-2013 under the FCC Rules Part 15 Subpart C

General Test Procedures

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.3 of ANSI C63.10-2013.

4.5 Description of Test Modes

The EUT has been tested under operating condition.

AC main conducted emission pre-test voltage at both AC 120V/60Hz and AC 240V/50Hz, recorded worst case;

AC main conducted emission pre-test at charge from power adapter modes, recorded worst case;

Worst-case mode and channel used for 150 KHz-30 MHz power line conducted emissions was the mode and channel with the highest output power that was determined to be TX (1Mbps).

Worst-case mode and channel used for 9 KHz-1000 MHz radiated emissions was the mode and channel with the highest output power, that was determined to be TX(1Mbps-Low Channel).

This test was performed with EUT in X, Y, Z position and the worst case was found when EUT in X position.

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Transmitting mode	Keep the EUT in continuously transmitting mode.		
Test software:	RTLBTAPP		
Frequency	2402 MHz	2441 MHz	2480 MHz
Parameters(1Mbps)	0X49	0X49	0X49
Parameters(2Mbps)	0X49	0X49	0X49
Parameters(3Mbps)	0X49	0X49	0X49

5 Equipment Used during Test

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	Spectrum Analyzer	R&S	FSV40	101470	2024.09.23	2025.09.22
2	EMI Measuring Receiver	R&S	ESR	101660	2024.09.23	2025.09.22
3	Low Noise Pre Amplifier	HP	HP8447E	1937A01855	2024.09.23	2025.09.22
4	Low Noise Pre Amplifier	Tsj	MLA-0120-A02-34	2648A04738	2024.09.23	2025.09.22
5	Passive Loop	ETS	6512	00165355	2024.09.04	2026.09.03
6	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9160	9160-3206	2024.08.29	2026.08.28
7	Broadband Horn Antenna	SCHWARZBECK	BBHA9120D	452	2024.08.29	2026.08.28
8	SHF-EHF Horn Antenna 15-40GHz	SCHWARZBECK	BBHA9170	BBHA9170367d	2023.09.12	2026.09.11
9	EMI Test Receiver	R&S	ESCI	100124	2024.09.23	2025.09.22
10	LISN	R&S	ESH3-Z5	892785/016	2024.09.23	2025.09.22
11	Pro.Temp&Humi.chamber	MENTEK	MHP-150-1C	MAA08112501	2024.09.23	2025.09.22
12	RF Automatic Test system	MW	MW100-RFCB	21033016	2024.09.23	2025.09.22
13	Signal Generator	Agilent	N5182A	MY50143009	2024.09.23	2025.09.22
14	Wideband Radio communication tester	R&S	CMW500	1201.0002K50	2024.09.23	2025.09.22
15	RF Automatic Test system	MW	MW100-RFCB	21033016	2024.09.23	2025.09.22
16	Pulse Limiter	R&S	ESH3-Z2	03578810.54	2024.09.23	2025.09.22
17	Switch	MFJ Rhinos	MFJ-2702	CZ3457	2024.09.23	2025.09.22
18	DC power supply	ZHAOXIN	RXN-305D-2	28070002559	N/A	N/A
19	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A	N/A	N/A
20	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A	N/A	N/A
21	RF Software	MW	MTS 8310	2.0.0.0	N/A	N/A
22	temporary antenna connector(Note)	NTS	R001	N/A	N/A	N/A

Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

6 Test results and Measurement Data

6.1 Antenna requirement

6.1.1 Standard requirement:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be re-placed by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded. And according to §15.247(4)(1), system operating in the 2400-2483.5MHz bands that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.
6.1.2 EUT Antenna:
Refer to Section 4(General Information)

6.2 Peak Power Measurement

6.2.1 Standard requirement:

According to §15.247(b)(1), For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

6.2.2 Measuring Instruments:

Please refer to equipment's list in this report.

6.2.3 Test Procedures:

The transmitter output (antenna port) was connected to the spectrum analyzer. According to ANSI C63.10:2013 Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices; this is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. The hopping shall be disabled for this test:

a) Use the following spectrum analyzer settings:

1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.

2) RBW > 20 dB bandwidth of the emission being measured.

3) VBW ≥ RBW.

4) Sweep: Auto.

5) Detector function: Peak.

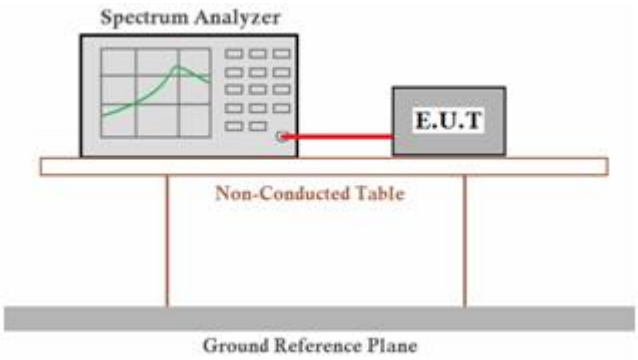
6) Trace: Max hold.

b) Allow trace to stabilize.

c) Use the marker-to-peak function to set the marker to the peak of the emission.

d) The indicated level is the peak output power, after any corrections for external attenuators and cables.

6.2.4 Test Setup Layout



6.2.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.2.6 Test result

Please refer to Appendix A.2

Remark:

1. Test results including cable loss;

2. Measured output power at difference Packet Type for each mode and recorded worst case for each mode.

6.3 Frequency Separation and 20 dB Bandwidth

6.3.1 Standard requirement:

According to §15.247(a) (1), Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

6.3.2 Measuring Instruments:

Please refer to equipment's list in this report.

6.3.3 Test Procedures

Frequency separation test procedure：

1). Place the EUT on the table and set it in transmitting mode.

2). Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Spectrum Analyzer.

3). Set center frequency of Spectrum Analyzer = middle of hopping channel.

4). Set the Spectrum Analyzer as RBW = 30 kHz, VBW =100 kHz, Span = wide enough to capture the peaks of two adjacent channels, Sweep = auto.

5). Max hold, mark 2 peaks of hopping channel and record the 2 peaks frequency.

20dB bandwidth test procedure：

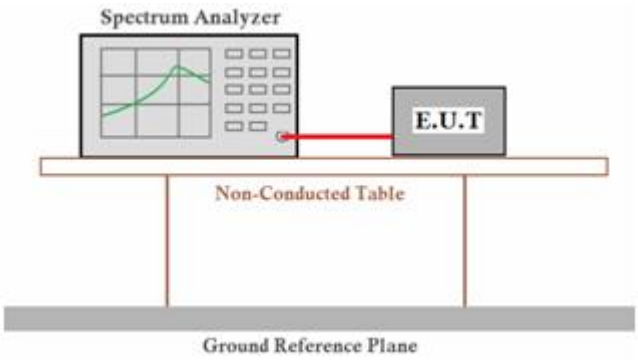
1). Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel.

2). RBW ≥1% of the 20 dB bandwidth, VBW ≥RBW.

3). Detector function = peak.

4). Trace = max hold.

6.3.4 Test Setup Layout



6.3.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.3.6 Test result

PASS

Please refer to Appendix A.3 for 20 dB bandwidth

Please refer to Appendix A.4 for Frequency separation

Remark:

1). Test results including cable loss;

2). Measured at difference Packet Type for each mode and recorded worst case for each mode.

6.4 Number of Hopping Frequency

6.4.1 Standard requirement:

According to §15.247(a)(1)(ii), Frequency hopping systems operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels.

6.4.2 Measuring Instruments and Setting:

Please refer to equipment's list in this report.

6.4.3 Test Procedures

1). Place the EUT on the table and set it in transmitting mode.

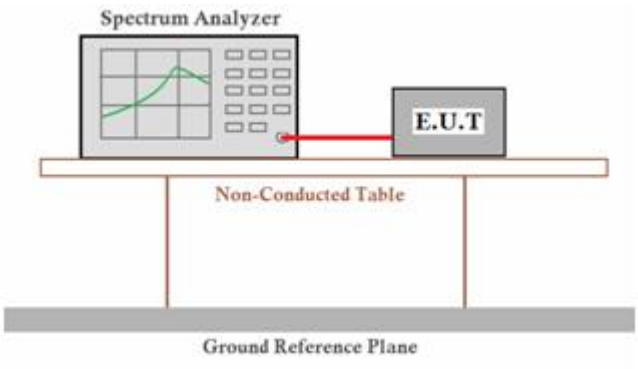
2). Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Spectrum Analyzer.

3). Set Spectrum Analyzer Start=2400MHz, Stop = 2483.5MHz, Sweep = auto.

4). Set the Spectrum Analyzer as RBW/VBW=100KHz/300KHz.

5). Max hold, view and count how many channel in the band.

6.4.4 Test Setup Layout



6.4.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.4.6 Test result

PASS

Please refer to Appendix A.5

Remark:

1). Test results including cable loss;

2). Measured at difference Packet Type for each mode and recorded worst case for each mode.

6.5 Time of Occupancy (Dwell Time)

6.5.1 Standard requirement:

According to §15.247(a)(1)(iii), Frequency hopping systems operating in the 2400MHz- 2483.5 MHz bands. The average time of occupancy on any channels shall not greater than 0.4 s within a period 0.4 s multiplied by the number of hopping channels employed.

6.5.2 Measuring Instruments and Setting:

Please refer to equipment's list in this report. The following table is the setting of Spectrum Analyzer.

6.5.3 Test Procedures

1). Place the EUT on the table and set it in transmitting mode.

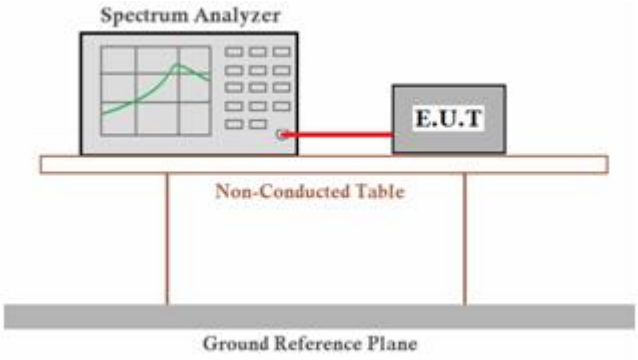
2). Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Spectrum Analyzer.

3). Set center frequency of Spectrum Analyzer = operating frequency.

4). Set the Spectrum Analyzer as RBW=1MHz, VBW=3MHz, Span = 0Hz, Sweep = auto.

5). Repeat above procedures until all frequency measured was complete.

6.5.4 Test Setup Layout



6.5.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.5.6 Test result

PASS

Please refer to Appendix A.6

Remark:

1). Test results including cable loss;

2). Measured at difference Packet Type for each mode and recorded worst case for each mode.

3). The Dwell Time=Burst Width*Total Hops. The detailed calculations are showed as follows:

The duration for dwell time calculation: 0.4[s]*hopping number=0.4[s]*79[ch]=31.6[s*ch];

The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.

The hops per second for all channels: The selected EUT Conf uses a slot type of 5-Tx&1-Rx and a hopping rate of 1600 [ch*hop/s] for all channels. So the final hopping rate for all channels is 1600/6=266.67 [ch*hop/s]

The hops per second on one channel: 266.67 [ch*hops/s]/79 [ch]=3.38 [hop/s];

The total hops for all channels within the dwell time calculation duration: 3.38 [hop/s]*31.6[s*ch]=106.67 [hop*ch];

The dwell time for all channels hopping: 106.67 [hop*ch]*Burst Width [ms/hop/ch].

Dwell Time Calculate formula:

DH1: Dwell time=Pulse time (ms) × (1600 ÷ 2 ÷ 79) ×31.6 Second

DH3: Dwell time=Pulse time (ms) × (1600 ÷ 4 ÷ 79) ×31.6 Second

DH5: Dwell time=Pulse Time (ms) × (1600 ÷ 6 ÷ 79) ×31.6 Second

4). Measured at low, middle and high channel, recorded the worst case.

5). Only Recorded DH5.

6.6 Conducted Spurious Emissions and Band Edges Test

6.6.1 Standard requirement:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.

6.6.2 Measuring Instruments and Setting:

Please refer to equipment list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Detector	Peak
Attenuation	Auto
RB / VB (Emission in restricted band)	100KHz/300KHz
RB / VB (Emission in non-restricted band)	100KHz/300KHz

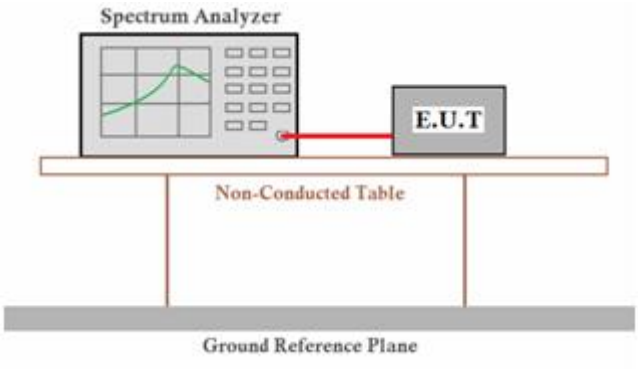
6.6.3 Test Procedures

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 KHz. The video bandwidth is set to 300 KHz.

Measurements are made over the 9kHz to 25GHz range with the transmitter set to the lowest, middle, and highest channels.

6.6.4 Test Setup Layout



6.6.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.6.6 Test result

PASS

No non-compliance noted. Only record the worst test result in this report. The test data refer to the following page.

PASS

Please refer to Appendix A.7 for conducted spurious emission.

Please refer to Appendix A.8 for conducted band edge.

Remark:

1. Test results including cable loss;

2. Measured at difference Packet Type for each mode and recorded worst case for each mode.

Worst case data at DH5 for GFSK, 2DH5 for π/4-DQPSK and 3DH5 for 8DPSK modulation type;

3. "---"means that the fundamental frequency not for 15.209 limits requirement.

Not recorded emission from 9 KHz to 30 MHz as emission level at least 20dBc lower than emission limit.

6.7 Restrict-band Band-edge Measurements

6.7.1 Standard requirement:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

6.7.2 Measuring Instruments:

Please refer to equipment list in this report.

6.7.3 Test Procedures

According to KDB 412172 section 1.1 Field Strength Approach (linear terms):

$eirp = p_t \times g_t = (E \times d)^2/30$

Where:

p_t = transmitter output power in watts,

g_t = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m,

d = measurement distance in meters (m).

$erp = eirp/1.64 = (E \times d)^2/(30 \times 1.64)$

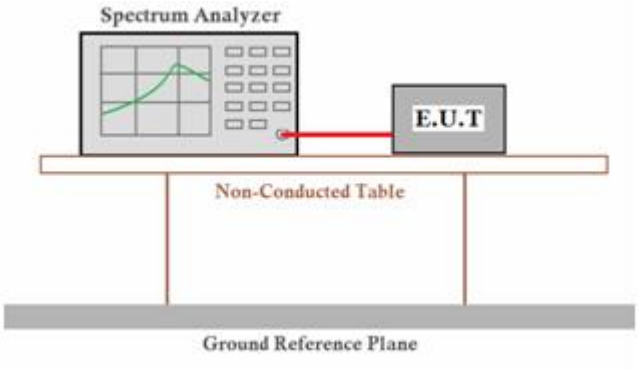
Where all terms are as previously defined.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, for Radiated emissions restricted band RBW=1MHz, VBW=3MHz for peak detector and RBW=1MHz, VBW=1/T for AV detector.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.
6. Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
7. Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see 12.2.5 for guidance on determining the applicable antenna gain)
8. Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤

30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

9. For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
10. Compare the resultant electric field strength level to the applicable regulatory limit.
11. Perform radiated spurious emission test duress until all measured frequencies were complete.

6.7.4 Test Setup Layout



6.7.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.7.6 Test result

PASS

Please refer to Appendix A.9

Remark:

1. Measured at difference Packet Type for each mode and recorded worst case for each mode.
2. Worst case data at DH5 for GFSK, 2DH5 for π/4DQPSK modulation type;
3. Measured at Hopping and Non-Hopping mode, recorded worst at Non-Hopping mode.
4. The other emission levels were very low against the limit.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. Detector AV is setting spectrum/receiver. RBW=1MHz/VBW=330Hz/Sweep time=Auto/Detector=Peak;

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

6.8 Radiated Emissions Measurement

6.8.1 Standard requirement:

According to §15.247 (d): 20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

I

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

6.8.2 Measuring Instruments and Setting:

Please refer to equipment list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB/VB 200Hz/1KHz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB/VB 9kHz/30KHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB/VB 120kHz/1MHz for QP

6.8.3 Test Procedures

1) Sequence of testing 9 kHz to 30 MHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions.

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna height is 1.5 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

--- Identified emissions during the premeasurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1 GHz to 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height scan range is 1 meter to 2.5 meter.

--- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.

--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 1 meter.

--- The EUT was set into operation.

Premeasurement:

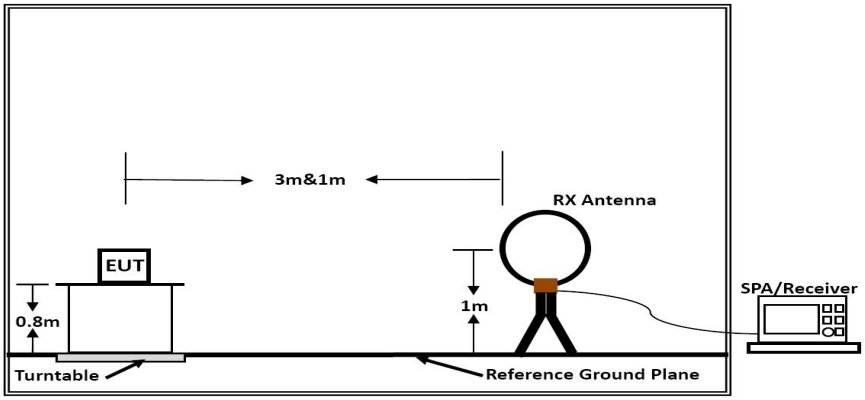
--- The antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

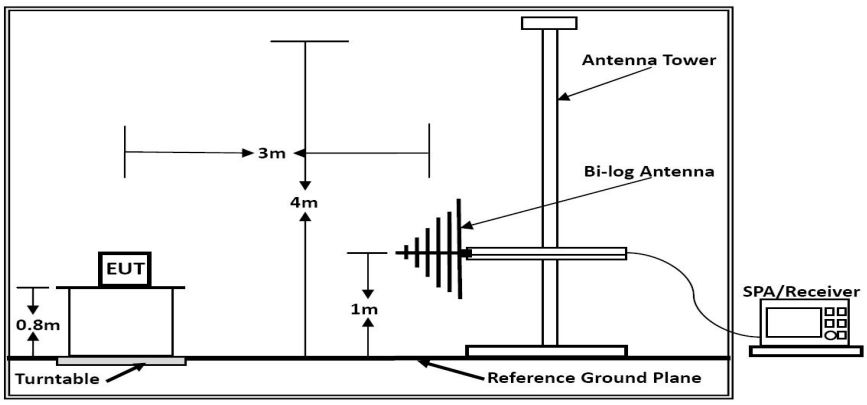
--- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

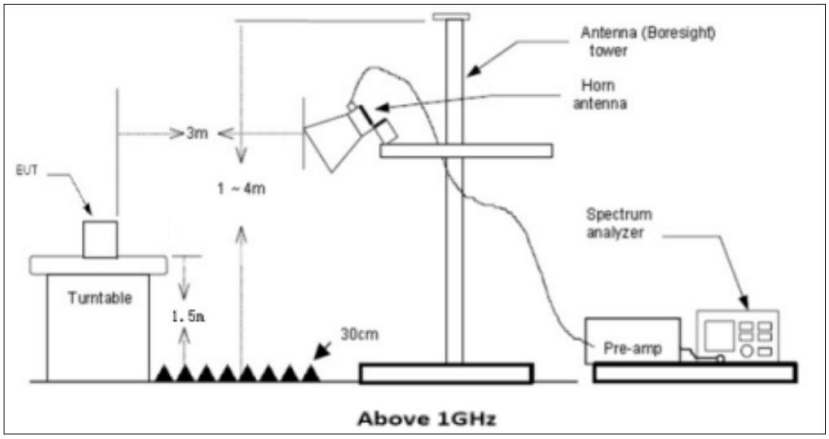
6.8.4 Test Setup Layout



Below 30MHz



Below 1GHz



Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

6.8.5 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.8.6 Test result

.

Temperature	25.5℃	Humidity	52.2%
Test Engineer	Emiya Lin	Configurations	BT

Remarks:

1. Only the worst case Main Antenna test data.
2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

■ **Results of Radiated Emissions (9 KHz~30MHz)**

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Over Limit (dBuV)	Remark
-	-	-	-	See Note

Note:

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and the permissible value has no need to be reported.

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor.

■ **Results of Radiated Emissions (30MHz~1GHz)**

Pre-scan all test modes, found worst case at GFSK (LCH), and so only show the test result of GFSK (LCH).

I3+Adapter 1:

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Vertical	Test Result:	☒ Pass ☐ Fail

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		57.3923	26.57	-1.16	25.41	40.00	-14.59	QP
2		138.8735	31.38	-1.90	29.48	43.50	-14.02	QP
3		208.5803	28.93	1.72	30.65	43.50	-12.85	QP
4		351.7079	28.77	5.01	33.78	46.00	-12.22	QP
5	*	487.3151	36.13	5.28	41.41	46.00	-4.59	QP
6		766.0571	28.25	11.11	39.36	46.00	-6.64	QP

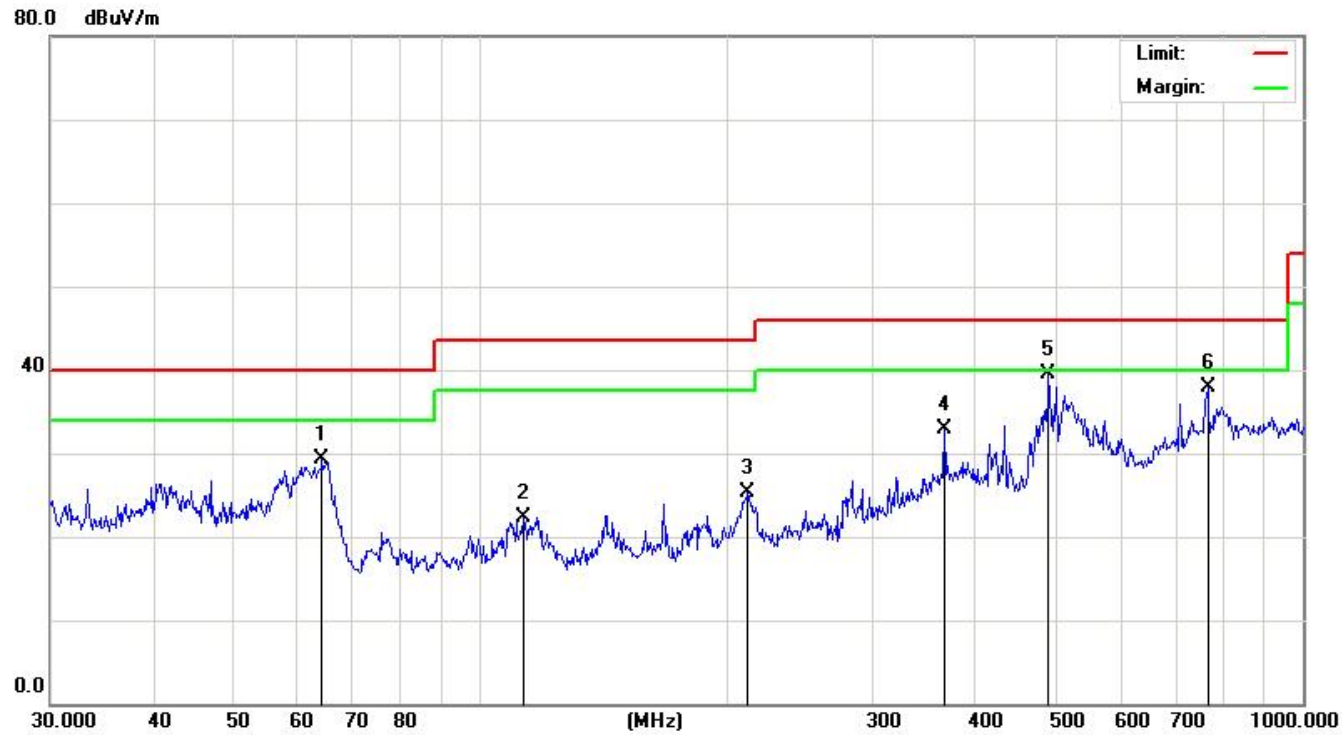
Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Horizontal	Test Result:	☒ Pass ☐ Fail

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		46.0164	22.90	3.43	26.33	40.00	-13.67	QP
2		57.1914	25.46	0.95	26.41	40.00	-13.59	QP
3		207.8501	31.41	-1.23	30.18	43.50	-13.32	QP
4		348.0274	33.38	2.51	35.89	46.00	-10.11	QP
5	*	490.7447	31.94	8.40	40.34	46.00	-5.66	QP
6		766.0571	26.01	12.39	38.40	46.00	-7.60	QP

I3+Adapter 2:

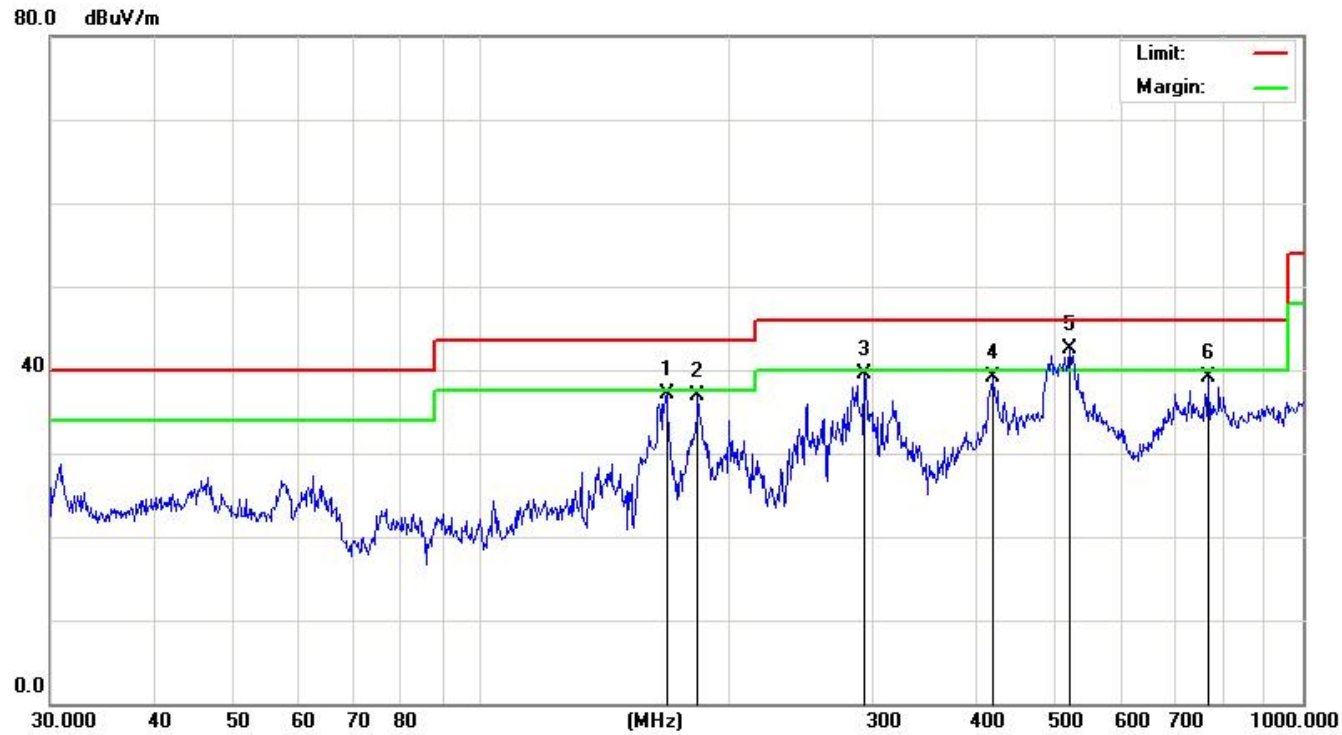
Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Vertical	Test Result:	☒ Pass ☐ Fail



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		64.2074	31.89	-2.68	29.21	40.00	-10.79	QP
2		112.9196	24.52	-2.15	22.37	43.50	-21.13	QP
3		211.5265	23.65	1.73	25.38	43.50	-18.12	QP
4		366.8231	27.54	5.44	32.98	46.00	-13.02	QP
5	*	490.7447	34.25	5.27	39.52	46.00	-6.48	QP
6		766.0571	26.83	11.11	37.94	46.00	-8.06	QP

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Horizontal	Test Result:	☒ Pass ☐ Fail

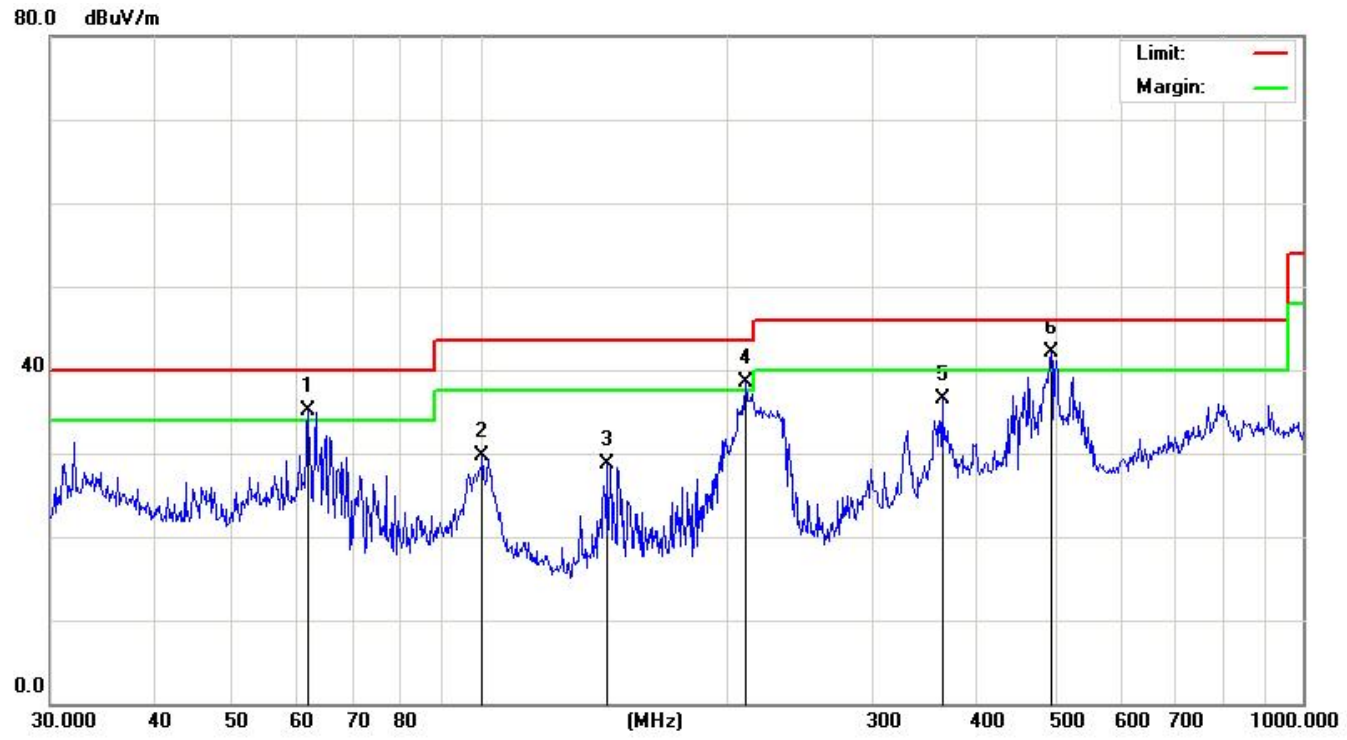


Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		168.4138	38.62	-1.53	37.09	43.50	-6.41	QP
2		183.8440	36.47	0.38	36.85	43.50	-6.65	QP
3		293.0842	38.56	0.85	39.41	46.00	-6.59	QP
4		419.1081	32.08	7.05	39.13	46.00	-6.87	QP
5	*	520.8882	33.51	9.09	42.60	46.00	-3.40	QP
6		766.0571	26.62	12.39	39.01	46.00	-6.99	QP

I5+Adapter 3:

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Vertical	Test Result:	☒ Pass ☐ Fail



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	!	61.7781	37.17	-2.04	35.13	40.00	-4.87	QP
2		100.5806	32.33	-2.63	29.70	43.50	-13.80	QP
3		142.8243	30.11	-1.41	28.70	43.50	-14.80	QP
4	!	210.0482	36.34	2.18	38.52	43.50	-4.98	QP
5		364.2595	31.02	5.48	36.50	46.00	-9.50	QP
6	*	494.1984	36.96	5.08	42.04	46.00	-3.96	QP

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Horizontal	Test Result:	☒ Pass ☐ Fail

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		57.1914	25.26	0.95	26.21	40.00	-13.79	QP
2		145.3506	29.02	-0.83	28.19	43.50	-15.31	QP
3	*	210.0482	39.77	-1.21	38.56	43.50	-4.94	QP
4		346.8092	30.33	2.45	32.78	46.00	-13.22	QP
5		530.1014	29.67	9.43	39.10	46.00	-6.90	QP
6		766.0571	24.01	12.39	36.40	46.00	-9.60	QP

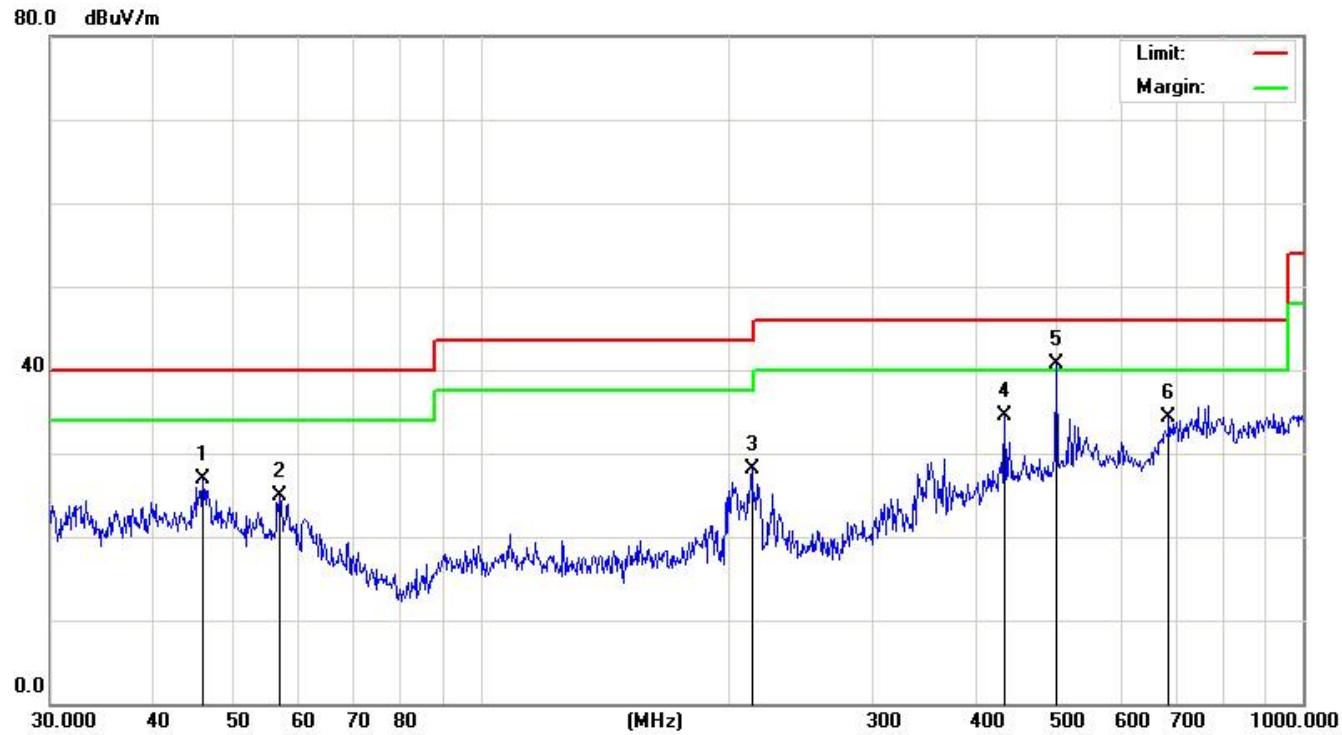
I5+Adapter 4:

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Vertical	Test Result:	☒ Pass ☐ Fail

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	57.9993	35.71	-1.25	34.46	40.00	-5.54	QP
2		80.0806	30.47	-5.29	25.18	40.00	-14.82	QP
3		209.3129	22.08	1.97	24.05	43.50	-19.45	QP
4		366.8231	25.60	5.44	31.04	46.00	-14.96	QP
5		501.1790	32.61	4.89	37.50	46.00	-8.50	QP
6		766.0571	24.83	11.11	35.94	46.00	-10.06	QP

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Horizontal	Test Result:	☒ Pass ☐ Fail

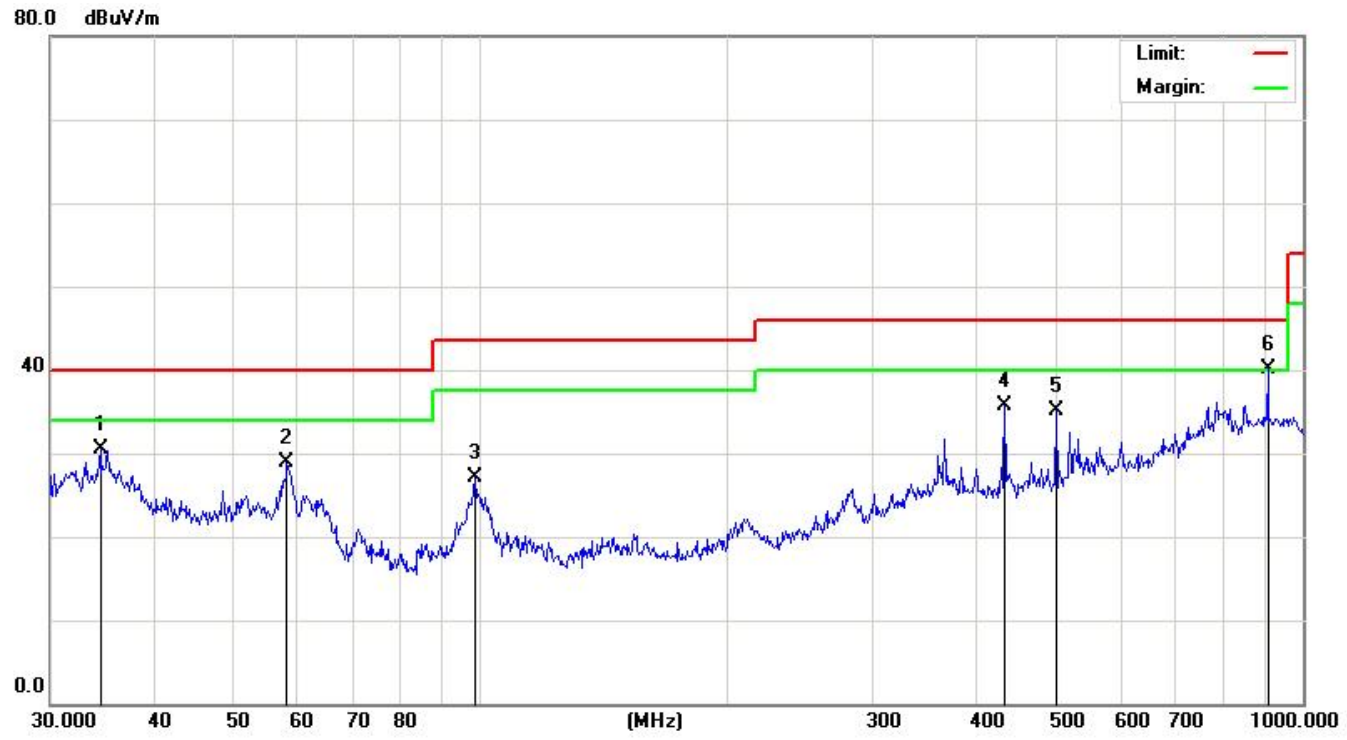


Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		46.0164	23.43	3.43	26.86	40.00	-13.14	QP
2		56.9912	23.94	1.02	24.96	40.00	-15.04	QP
3		213.7634	29.12	-1.06	28.06	43.50	-15.44	QP
4		434.0651	27.01	7.41	34.42	46.00	-11.58	QP
5	*	501.1790	32.24	8.44	40.68	46.00	-5.32	QP
6		687.1507	22.36	11.99	34.35	46.00	-11.65	QP

I9+Adapter 3:

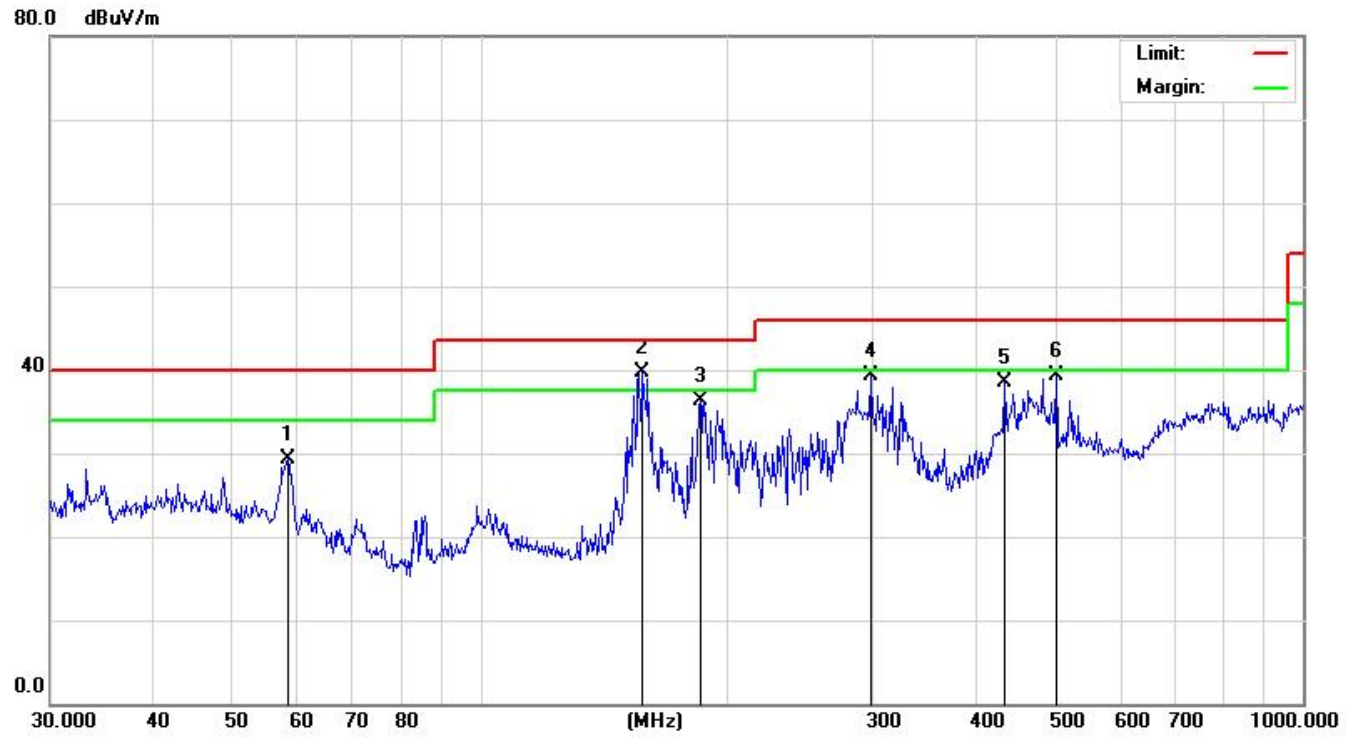
Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Vertical	Test Result:	☒ Pass ☐ Fail



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		34.5173	29.39	1.10	30.49	40.00	-9.51	QP
2		58.2030	30.27	-1.29	28.98	40.00	-11.02	QP
3		98.4866	30.13	-3.05	27.08	43.50	-16.42	QP
4		434.0651	30.88	4.83	35.71	46.00	-10.29	QP
5		501.1790	30.25	4.89	35.14	46.00	-10.86	QP
6	*	906.4824	28.70	11.32	40.02	46.00	-5.98	QP

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Horizontal	Test Result:	☒ Pass ☐ Fail

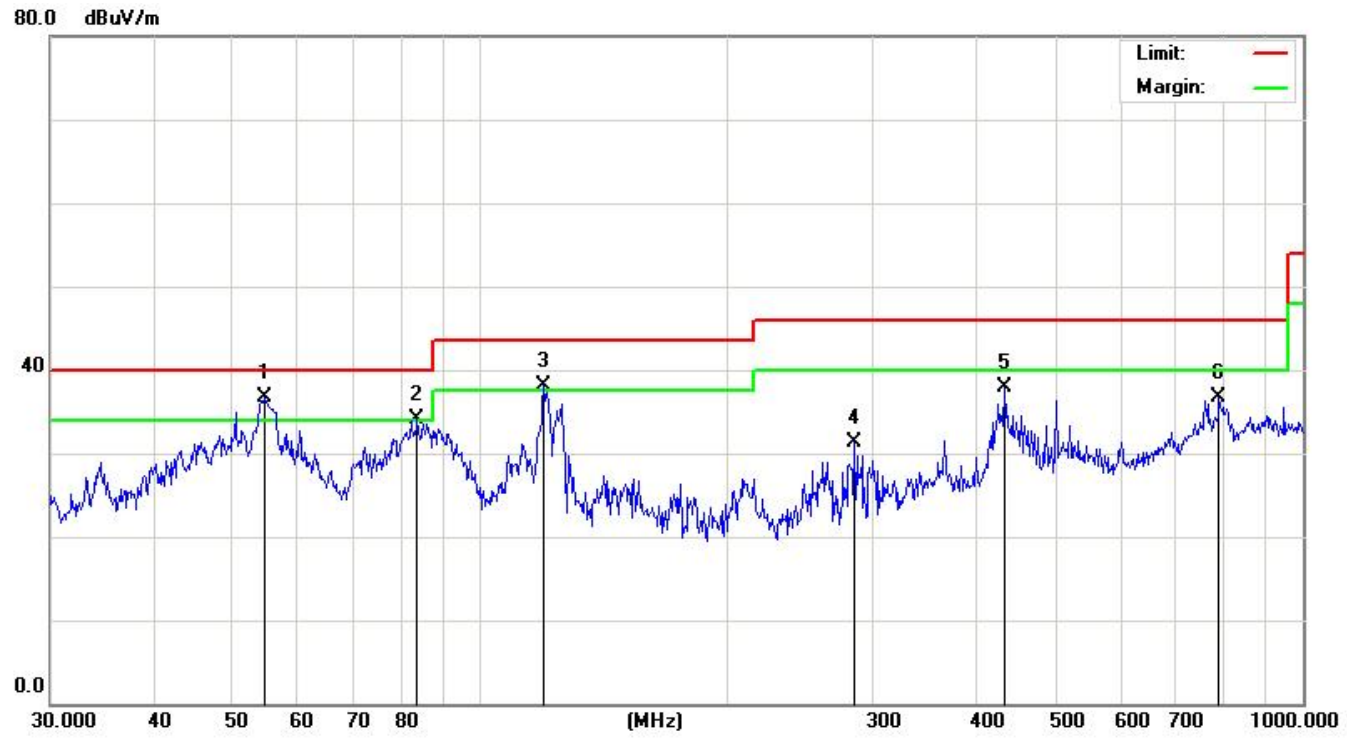


Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		58.4074	28.93	0.33	29.26	40.00	-10.74	QP
2	*	157.5588	40.25	-0.64	39.61	43.50	-3.89	QP
3		185.1379	36.61	-0.24	36.37	43.50	-7.13	QP
4		298.2681	38.14	1.08	39.22	46.00	-6.78	QP
5		434.0651	31.17	7.41	38.58	46.00	-7.42	QP
6		501.1790	30.83	8.44	39.27	46.00	-6.73	QP

I9+Adapter 4:

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Vertical	Test Result:	☒ Pass ☐ Fail



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	54.6429	37.44	-0.74	36.70	40.00	-3.30	QP
2	!	83.8156	38.92	-4.86	34.06	40.00	-5.94	QP
3	!	119.4361	41.17	-3.05	38.12	43.50	-5.38	QP
4		284.9767	30.78	0.62	31.40	46.00	-14.60	QP
5		434.0651	33.17	4.83	38.00	46.00	-8.00	QP
6		790.6188	23.83	12.87	36.70	46.00	-9.30	QP

Model name:	MP100 Pro	Test Date :	2025-05-22
Polarization :	Horizontal	Test Result:	☒ Pass ☐ Fail

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		57.9993	28.56	0.69	29.25	40.00	-10.75	QP
2		121.5486	28.72	-1.86	26.86	43.50	-16.64	QP
3		183.2005	25.29	0.70	25.99	43.50	-17.51	QP
4	*	452.7197	34.26	7.65	41.91	46.00	-4.09	QP
5		501.1790	31.44	8.44	39.88	46.00	-6.12	QP
6		766.0571	25.55	12.39	37.94	46.00	-8.06	QP

Results for Radiated Emissions (1- 26 GHz)

Note: All modes have been tested. I9+Adapter 4 is the worst mode, and the report only records the worst data.

Test channel:	Lowest channel

H

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB/m)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4804.000	48.52	5.06	53.58	74.00	-20.42	PEAK
4804.000	34.72	5.06	39.78	54.00	-14.22	AVG
7206.000	42.02	7.03	49.05	74.00	-24.95	PEAK
7206.000	32.33	7.03	39.36	54.00	-14.64	AVG

V

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4804.000	47.03	5.06	52.09	74.00	-21.91	PEAK
4804.000	37.60	5.06	42.66	54.00	-11.34	AVG
7206.000	44.06	7.03	51.09	74.00	-22.91	PEAK
7206.000	32.17	7.03	39.20	54.00	-14.80	AVG

Test channel:	Middle channel

H

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB/m)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4882.000	48.47	5.14	53.61	74.00	-20.39	PEAK
4882.000	37.53	5.14	42.67	54.00	-11.33	AVG
7323.000	41.35	7.52	48.87	74.00	-25.13	PEAK
7323.000	30.61	7.52	38.13	54.00	-15.87	AVG

V

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4882.000	47.31	5.14	52.45	74.00	-21.55	PEAK
4882.000	36.00	5.14	41.14	54.00	-12.86	AVG
7323.000	42.51	7.52	50.03	74.00	-23.97	PEAK
7323.000	30.96	7.52	38.48	54.00	-15.52	AVG

Test channel:	Highest channel

H

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB/m)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4960.000	48.42	5.22	53.64	74.00	-20.36	PEAK
4960.000	35.78	5.22	41.00	54.00	-13.00	AVG
7440.000	41.82	8.06	49.88	74.00	-24.12	PEAK
7440.000	30.67	8.06	38.73	54.00	-15.27	AVG

V

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4960.000	47.05	5.22	52.27	74.00	-21.73	PEAK
4960.000	37.76	5.22	42.98	54.00	-11.02	AVG
7440.000	40.89	8.06	48.95	74.00	-25.05	PEAK
7440.000	31.49	8.06	39.55	54.00	-14.45	AVG

Remarks:

1). Measuring frequencies from 9 KHz - 10th harmonic or 26.5GHz (which is less), No emission found between lowest internal used/generated frequency to 30MHz.
2). Radiated emissions measured in frequency range from 9 KHz~10th harmonic or 26.5GHz (which is less) were made with an instrument using Peak detector mode.
3). Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4). Margin= Final Level – Limit
5).Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
6). All the modes have been tested and the only shows the worst case GFSK mode

6.9 Conducted Emissions

6.9.1 Standard requirement:

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

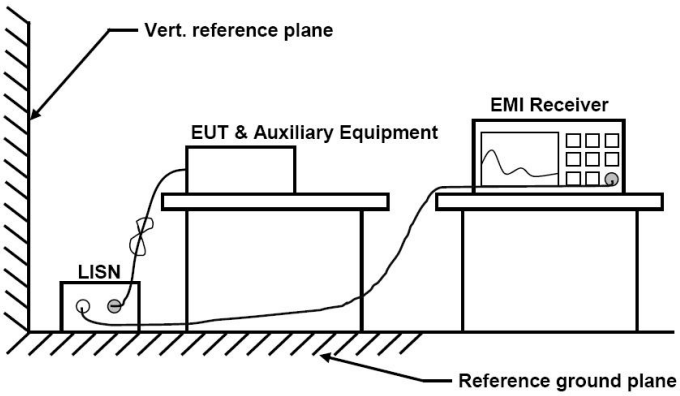
* Decreasing linearly with the logarithm of the frequency

6.9.2 Test Procedures

The transmitter output is connected to EMI receiver. The resolution bandwidth is set to 9 kHz. The video bandwidth is set to 30 kHz, Sweep time=Auto

The spectrum from 150 kHz to 30MHz is investigated with the transmitter set to the lowest, middle, and highest channels.

6.9.3 Test Setup Layout



6.9.4 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

6.9.5 Test result

PASS

The test data please refer to following page.

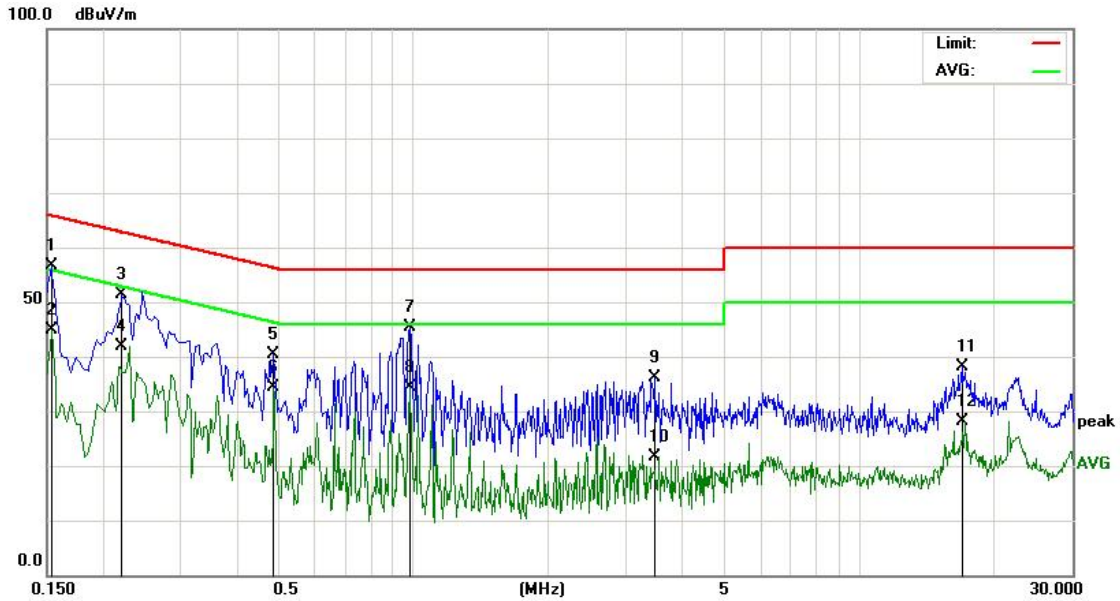
Temperature	25.5℃	Humidity	52.2%
Test Engineer	Emiya Lin	Configurations	BT

Measurement data:

Pre-scan all test modes, found worst case at GFSK 2480MHz, and so only show the test result of GFSK 2480MHz

I3+Adapter 1:

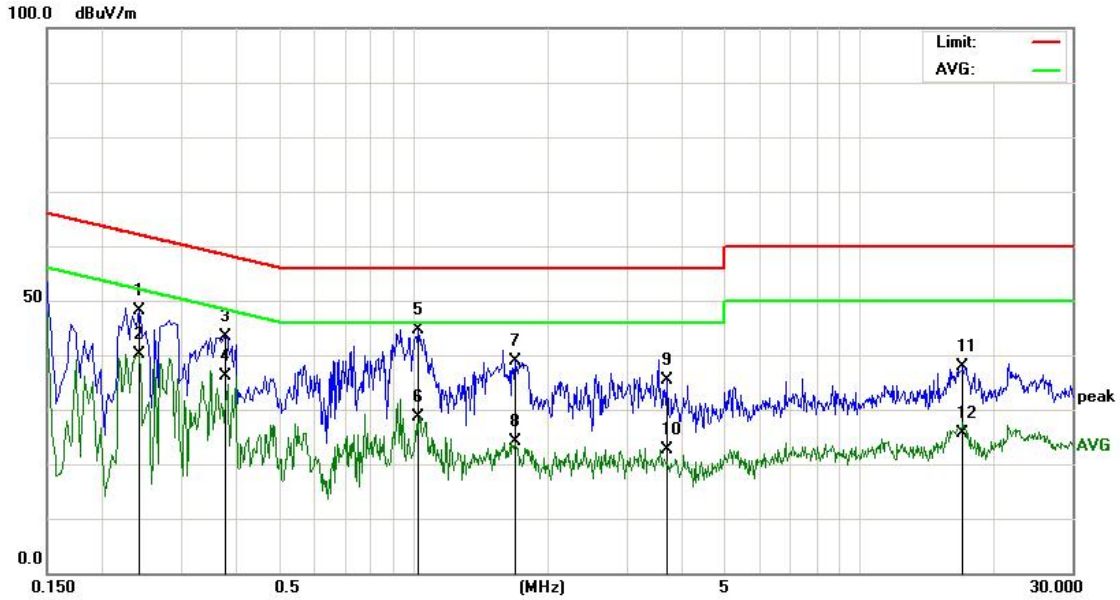
Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Line	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	*	0.1539	44.87	11.84	56.71	65.78	-9.07	QP
2		0.1539	33.09	11.84	44.93	55.78	-10.85	AVG
3		0.2220	40.38	10.98	51.36	62.74	-11.38	QP
4		0.2220	30.87	10.98	41.85	52.74	-10.89	AVG
5		0.4860	30.36	10.00	40.36	56.24	-15.88	QP
6		0.4860	24.48	10.00	34.48	46.24	-11.76	AVG
7		0.9820	35.57	9.90	45.47	56.00	-10.53	QP
8		0.9820	24.49	9.90	34.39	46.00	-11.61	AVG
9		3.4900	26.10	9.98	36.08	56.00	-19.92	QP
10		3.4900	11.70	9.98	21.68	46.00	-24.32	AVG
11		16.9780	27.80	10.45	38.25	60.00	-21.75	QP
12		16.9780	17.58	10.45	28.03	50.00	-21.97	AVG

Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Neutral	Test Result:	☒ Pass ☐ Fail

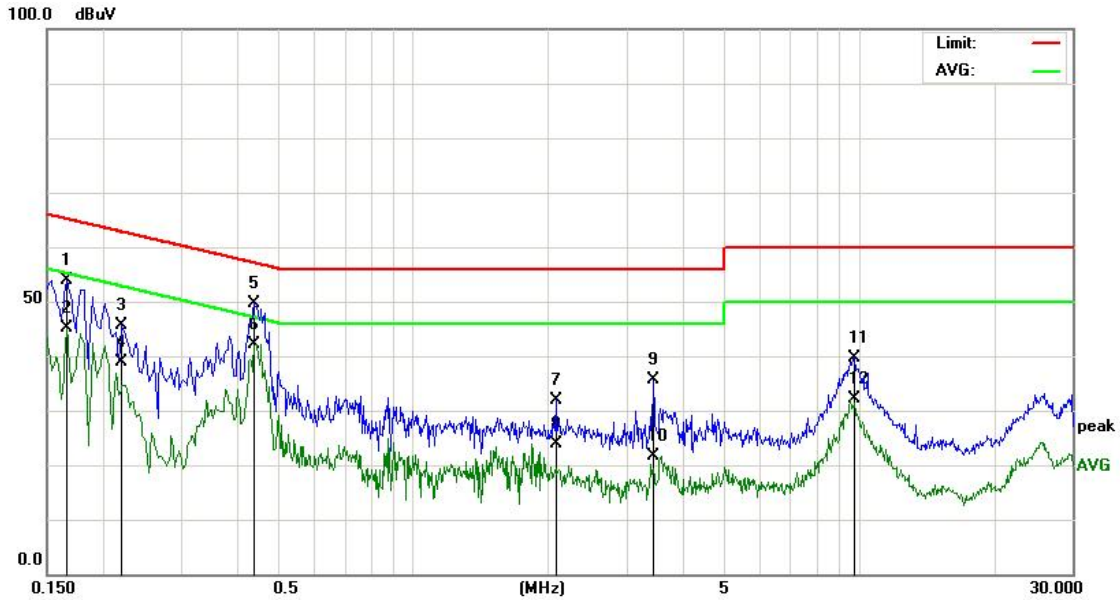


Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1		0.2420	37.31	10.91	48.22	62.02	-13.80	QP
2		0.2420	29.16	10.91	40.07	52.02	-11.95	AVG
3		0.3780	33.29	10.11	43.40	58.32	-14.92	QP
4		0.3780	25.96	10.11	36.07	48.32	-12.25	AVG
5	*	1.0220	34.80	9.90	44.70	56.00	-11.30	QP
6		1.0220	18.79	9.90	28.69	46.00	-17.31	AVG
7		1.6820	29.06	9.94	39.00	56.00	-17.00	QP
8		1.6820	14.16	9.94	24.10	46.00	-21.90	AVG
9		3.6820	25.30	9.99	35.29	56.00	-20.71	QP
10		3.6820	12.60	9.99	22.59	46.00	-23.41	AVG
11		17.0780	27.49	10.46	37.95	60.00	-22.05	QP
12		17.0780	15.12	10.46	25.58	50.00	-24.42	AVG

I3+Adapter 2:

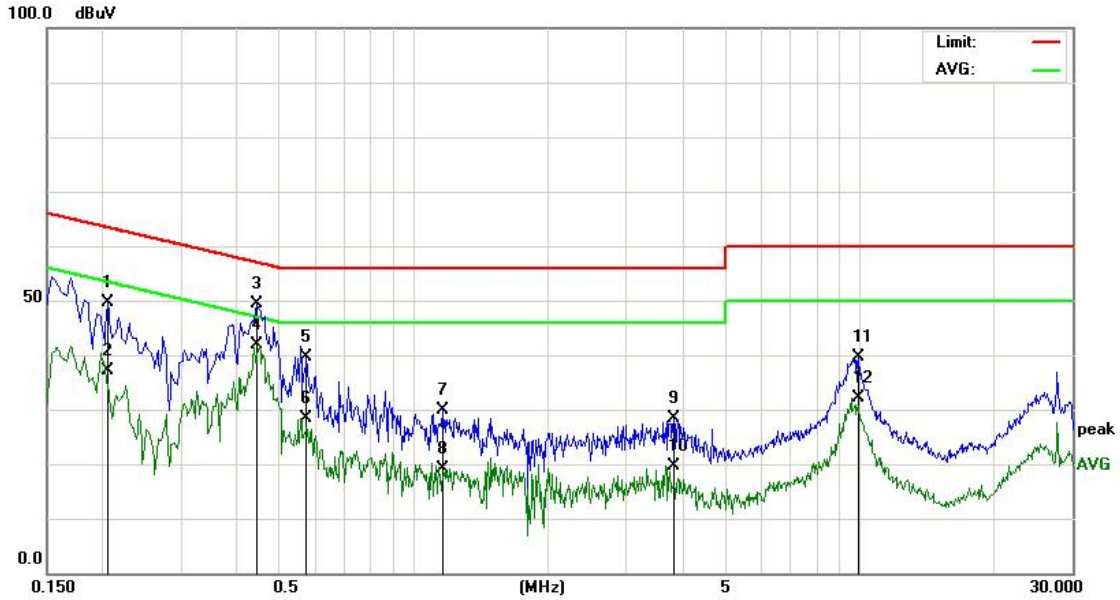
Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Line	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1660	42.35	11.61	53.96	65.15	-11.19	QP
2		0.1660	33.42	11.61	45.03	55.15	-10.12	AVG
3		0.2220	34.65	10.98	45.63	62.74	-17.11	QP
4		0.2220	27.99	10.98	38.97	52.74	-13.77	AVG
5		0.4380	39.53	10.05	49.58	57.10	-7.52	QP
6	*	0.4380	32.20	10.05	42.25	47.10	-4.85	AVG
7		2.0780	21.84	9.96	31.80	56.00	-24.20	QP
8		2.0780	13.83	9.96	23.79	46.00	-22.21	AVG
9		3.4380	25.54	9.98	35.52	56.00	-20.48	QP
10		3.4380	11.54	9.98	21.52	46.00	-24.48	AVG
11		9.7340	29.58	10.17	39.75	60.00	-20.25	QP
12		9.7340	21.95	10.17	32.12	50.00	-17.88	AVG

Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Neutral	Test Result:	☒ Pass ☐ Fail

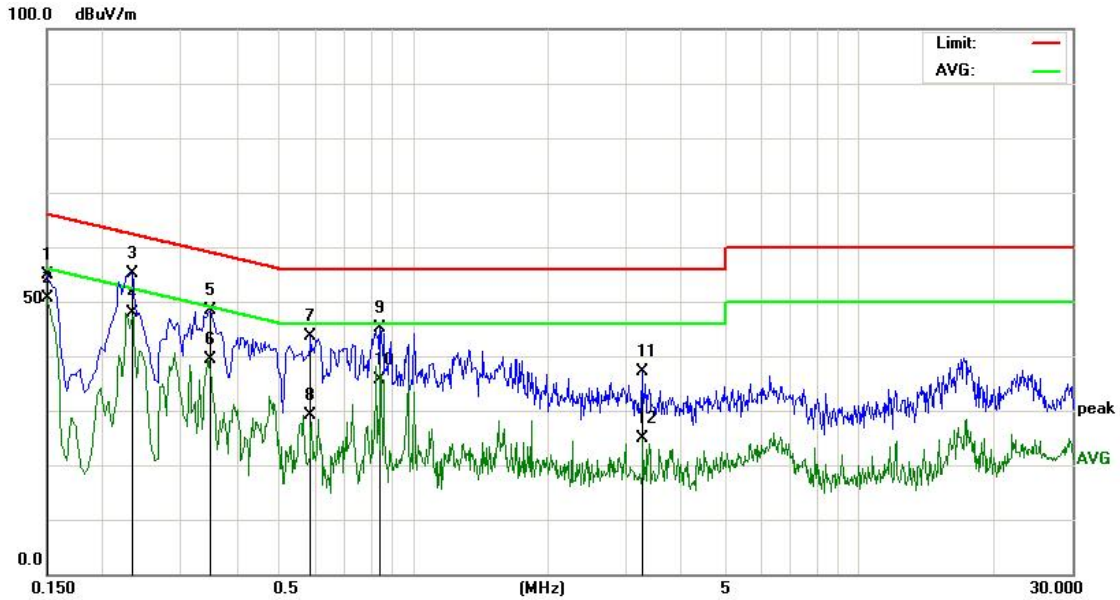


Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2060	38.63	11.09	49.72	63.36	-13.64	QP
2		0.2060	25.98	11.09	37.07	53.36	-16.29	AVG
3		0.4460	39.34	10.04	49.38	56.95	-7.57	QP
4	*	0.4460	31.78	10.04	41.82	46.95	-5.13	AVG
5		0.5740	29.73	9.97	39.70	56.00	-16.30	QP
6		0.5740	18.32	9.97	28.29	46.00	-17.71	AVG
7		1.1620	19.88	9.91	29.79	56.00	-26.21	QP
8		1.1620	9.17	9.91	19.08	46.00	-26.92	AVG
9		3.8260	18.41	9.99	28.40	56.00	-27.60	QP
10		3.8260	9.54	9.99	19.53	46.00	-26.47	AVG
11		9.9140	29.40	10.17	39.57	60.00	-20.43	QP
12		9.9140	21.84	10.17	32.01	50.00	-17.99	AVG

I5+Adapter 3:

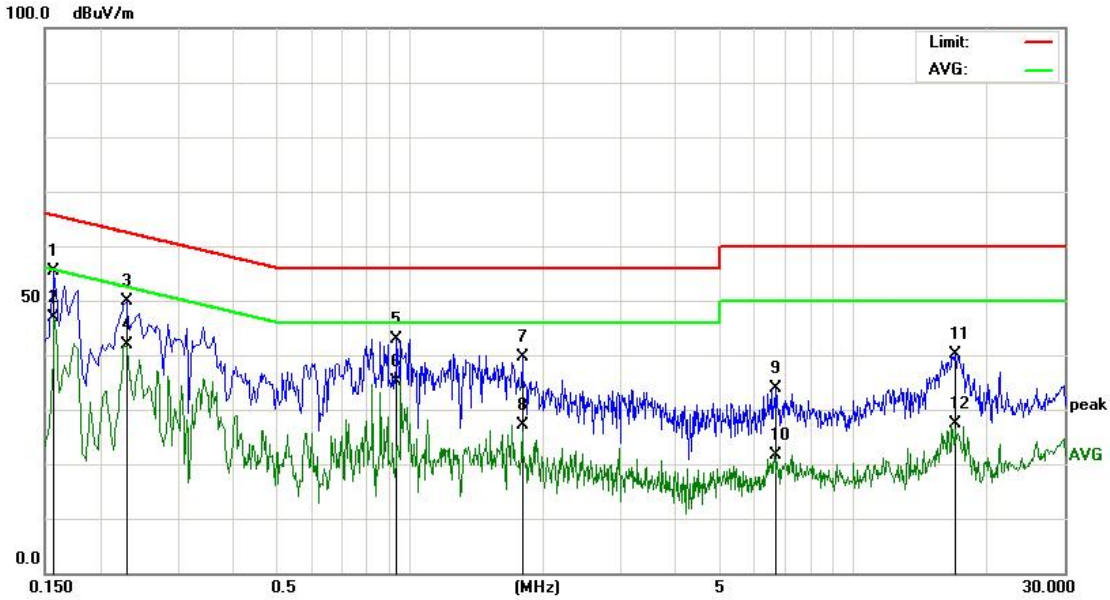
Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Line	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1		0.1500	42.96	11.94	54.90	65.99	-11.09	QP
2		0.1500	38.67	11.94	50.61	55.99	-5.38	AVG
3		0.2340	44.25	10.94	55.19	62.30	-7.11	QP
4	*	0.2340	37.05	10.94	47.99	52.30	-4.31	AVG
5		0.3500	38.20	10.13	48.33	58.96	-10.63	QP
6		0.3500	29.36	10.13	39.49	48.96	-9.47	AVG
7		0.5860	33.68	9.96	43.64	56.00	-12.36	QP
8		0.5860	19.11	9.96	29.07	46.00	-16.93	AVG
9		0.8420	35.14	9.92	45.06	56.00	-10.94	QP
10		0.8420	25.60	9.92	35.52	46.00	-10.48	AVG
11		3.2420	27.24	9.99	37.23	56.00	-18.77	QP
12		3.2420	14.84	9.99	24.83	46.00	-21.17	AVG

Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Neutral	Test Result:	☒ Pass ☐ Fail

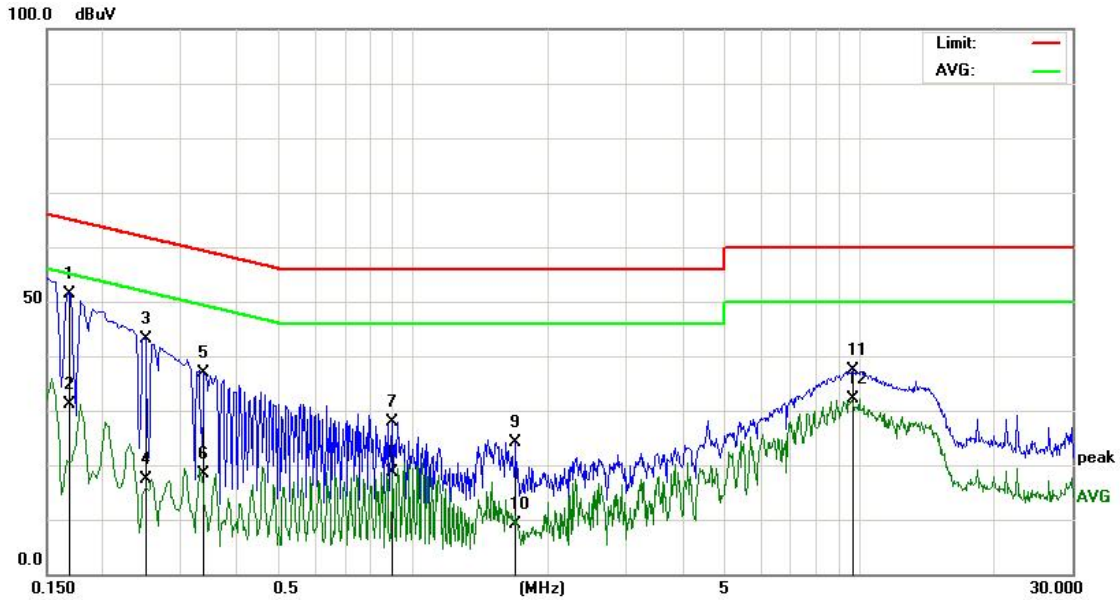


Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1		0.1580	43.53	11.75	55.28	65.56	-10.28	QP
2	*	0.1580	35.08	11.75	46.83	55.56	-8.73	AVG
3		0.2300	38.94	10.95	49.89	62.45	-12.56	QP
4		0.2300	30.81	10.95	41.76	52.45	-10.69	AVG
5		0.9340	33.06	9.90	42.96	56.00	-13.04	QP
6		0.9340	25.34	9.90	35.24	46.00	-10.76	AVG
7		1.7980	29.73	9.95	39.68	56.00	-16.32	QP
8		1.7980	17.14	9.95	27.09	46.00	-18.91	AVG
9		6.6979	23.68	10.08	33.76	60.00	-26.24	QP
10		6.6979	11.53	10.08	21.61	50.00	-28.39	AVG
11		17.0779	29.72	10.46	40.18	60.00	-19.82	QP
12		17.0779	16.82	10.46	27.28	50.00	-22.72	AVG

I5+Adapter 4:

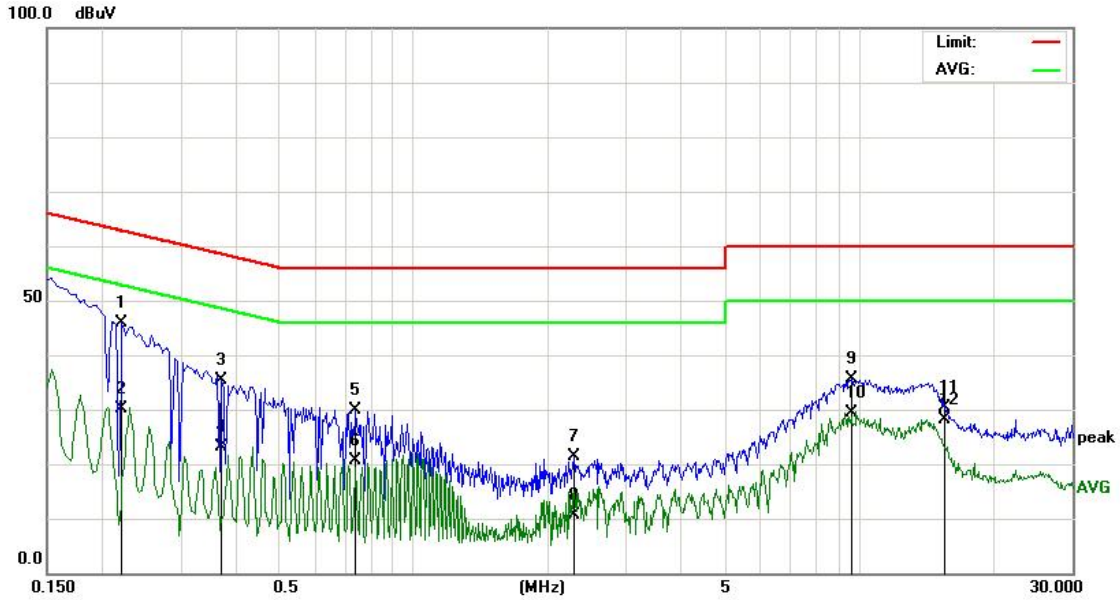
Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Line	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1685	39.82	11.57	51.39	65.03	-13.64	QP
2		0.1685	19.59	11.57	31.16	55.03	-23.87	AVG
3		0.2500	32.34	10.89	43.23	61.75	-18.52	QP
4		0.2500	6.38	10.89	17.27	51.75	-34.48	AVG
5		0.3379	26.60	10.18	36.78	59.25	-22.47	QP
6		0.3379	8.16	10.18	18.34	49.25	-30.91	AVG
7		0.8980	17.88	9.93	27.81	56.00	-28.19	QP
8		0.8980	8.70	9.93	18.63	46.00	-27.37	AVG
9		1.6980	14.17	9.97	24.14	56.00	-31.86	QP
10		1.6980	-0.80	9.97	9.17	46.00	-36.83	AVG
11		9.6580	27.06	10.23	37.29	60.00	-22.71	QP
12		9.6580	21.79	10.23	32.02	50.00	-17.98	AVG

Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Neutral	Test Result:	☒ Pass ☐ Fail

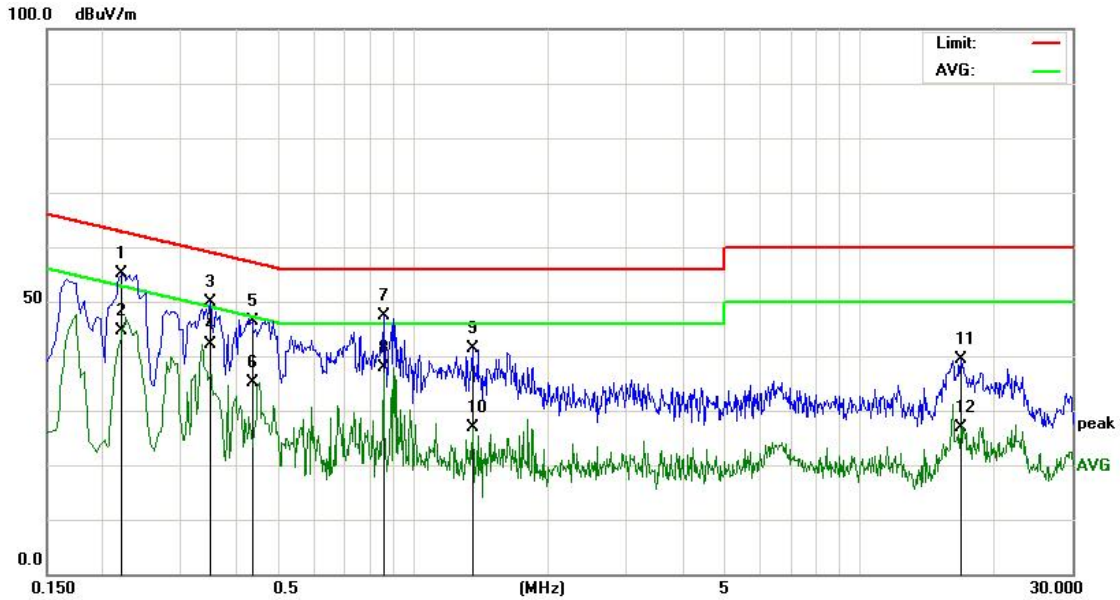


Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.2220	34.88	10.98	45.86	62.74	-16.88	QP
2		0.2220	19.27	10.98	30.25	52.74	-22.49	AVG
3		0.3700	25.22	10.16	35.38	58.50	-23.12	QP
4		0.3700	12.90	10.16	23.06	48.50	-25.44	AVG
5		0.7420	19.82	9.97	29.79	56.00	-26.21	QP
6		0.7420	10.65	9.97	20.62	46.00	-25.38	AVG
7		2.2940	11.50	10.00	21.50	56.00	-34.50	QP
8		2.2940	0.63	10.00	10.63	46.00	-35.37	AVG
9		9.6340	25.38	10.23	35.61	60.00	-24.39	QP
10		9.6340	19.17	10.23	29.40	50.00	-20.60	AVG
11		15.4780	29.00	1.46	30.46	60.00	-29.54	QP
12		15.4780	26.67	1.46	28.13	50.00	-21.87	AVG

I9+Adapter 3:

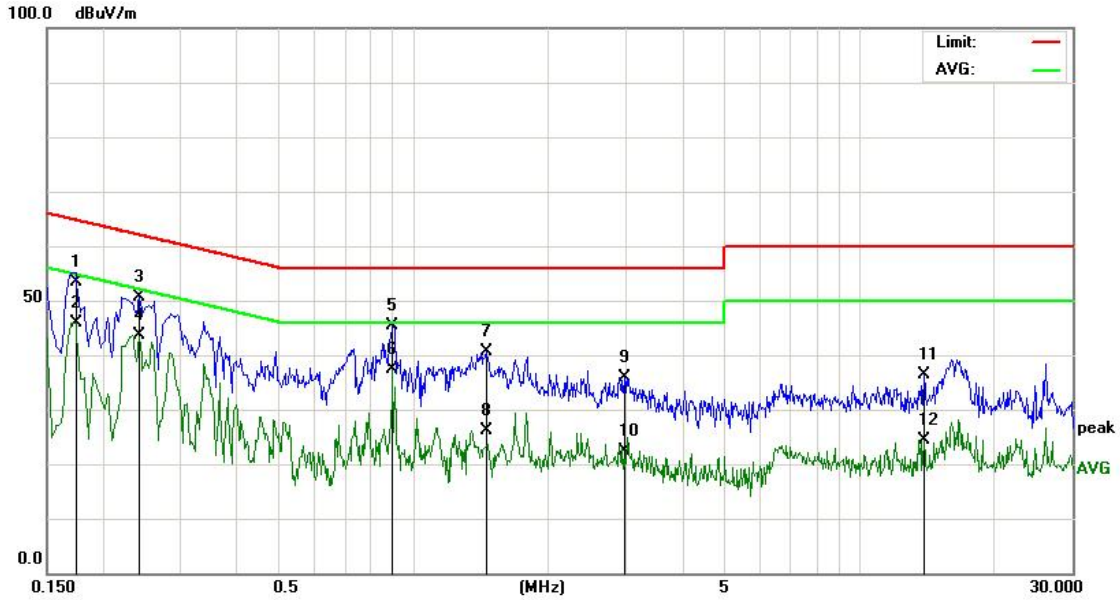
Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Line	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1		0.2220	44.21	10.98	55.19	62.74	-7.55	QP
2		0.2220	33.61	10.98	44.59	52.74	-8.15	AVG
3		0.3500	39.63	10.13	49.76	58.96	-9.20	QP
4	*	0.3500	31.89	10.13	42.02	48.96	-6.94	AVG
5		0.4340	36.30	10.06	46.36	57.18	-10.82	QP
6		0.4340	25.17	10.06	35.23	47.18	-11.95	AVG
7		0.8540	37.36	9.92	47.28	56.00	-8.72	QP
8		0.8540	28.02	9.92	37.94	46.00	-8.06	AVG
9		1.3540	31.52	9.92	41.44	56.00	-14.56	QP
10		1.3540	17.02	9.92	26.94	46.00	-19.06	AVG
11		16.8540	29.02	10.44	39.46	60.00	-20.54	QP
12		16.8540	16.36	10.44	26.80	50.00	-23.20	AVG

Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Neutral	Test Result:	☒ Pass ☐ Fail

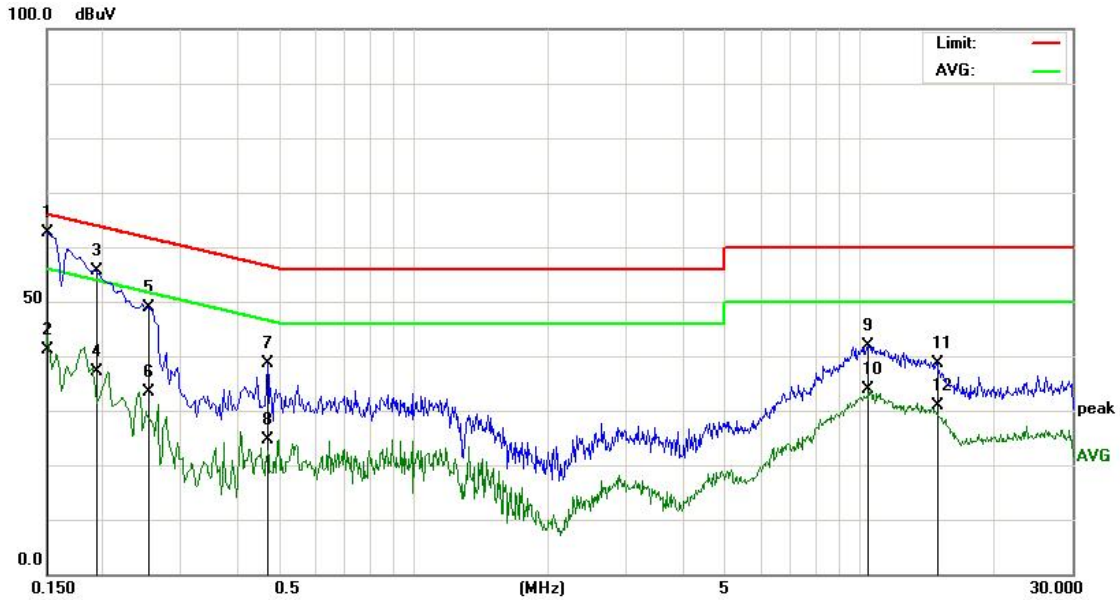


Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1		0.1749	41.86	11.47	53.33	64.72	-11.39	QP
2		0.1749	34.32	11.47	45.79	54.72	-8.93	AVG
3		0.2420	39.76	10.91	50.67	62.02	-11.35	QP
4	*	0.2420	32.61	10.91	43.52	52.02	-8.50	AVG
5		0.8980	35.39	9.91	45.30	56.00	-10.70	QP
6		0.8980	27.49	9.91	37.40	46.00	-8.60	AVG
7		1.4540	30.72	9.93	40.65	56.00	-15.35	QP
8		1.4540	16.25	9.93	26.18	46.00	-19.82	AVG
9		2.9620	25.81	9.98	35.79	56.00	-20.21	QP
10		2.9620	12.47	9.98	22.45	46.00	-23.55	AVG
11		13.9620	26.04	10.25	36.29	60.00	-23.71	QP
12		13.9620	14.03	10.25	24.28	50.00	-25.72	AVG

I9+Adapter 4:

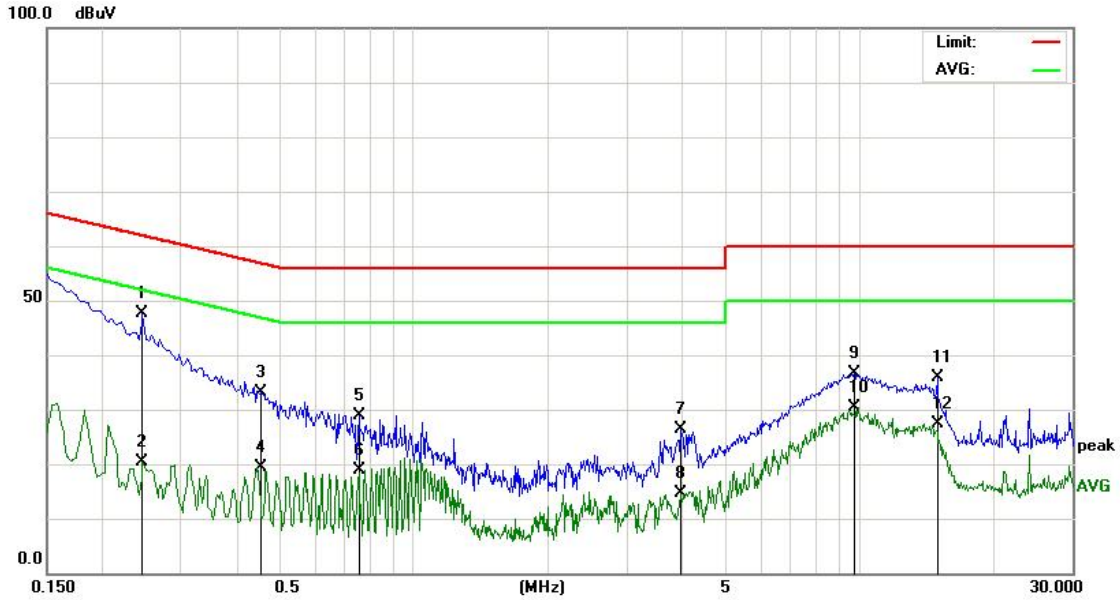
Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Line	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1500	50.69	11.94	62.63	65.99	-3.36	QP
2		0.1500	29.29	11.94	41.23	55.99	-14.76	AVG
3		0.1940	44.53	11.21	55.74	63.86	-8.12	QP
4		0.1940	25.80	11.21	37.01	53.86	-16.85	AVG
5		0.2540	38.11	10.88	48.99	61.62	-12.63	QP
6		0.2540	22.54	10.88	33.42	51.62	-18.20	AVG
7		0.4700	28.64	10.05	38.69	56.51	-17.82	QP
8		0.4700	14.46	10.05	24.51	46.51	-22.00	AVG
9		10.4780	31.61	10.26	41.87	60.00	-18.13	QP
10		10.4780	23.57	10.26	33.83	50.00	-16.17	AVG
11		14.9820	37.30	1.40	38.70	60.00	-21.30	QP
12		14.9820	29.51	1.40	30.91	50.00	-19.09	AVG

Model name:	MP100 Pro	Test Date :	2025-05-22
ATM Pressure:	101 kPa	Test by:	Emiya Lin
Phase :	Neutral	Test Result:	☒ Pass ☐ Fail



Remark: Factor =insertion loss of LISN + Cable loss +insertion loss of Pulse Limiter +insertion loss of Switch.
Measurement Result=Reading Level +Correct Factor;
Over Limit= Measurement Result- Limit;

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.2460	36.82	10.90	47.72	61.89	-14.17	QP
2		0.2460	9.42	10.90	20.32	51.89	-31.57	AVG
3		0.4540	23.14	10.06	33.20	56.80	-23.60	QP
4		0.4540	9.43	10.06	19.49	46.80	-27.31	AVG
5		0.7539	18.83	9.97	28.80	56.00	-27.20	QP
6		0.7539	8.82	9.97	18.79	46.00	-27.21	AVG
7		3.9660	16.23	10.05	26.28	56.00	-29.72	QP
8		3.9660	4.54	10.05	14.59	46.00	-31.41	AVG
9		9.7180	26.41	10.23	36.64	60.00	-23.36	QP
10		9.7180	20.15	10.23	30.38	50.00	-19.62	AVG
11		14.9260	34.50	1.40	35.90	60.00	-24.10	QP
12		14.9260	26.01	1.40	27.41	50.00	-22.59	AVG

Notes:
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.

6.10 Pseudorandom frequency hopping sequence

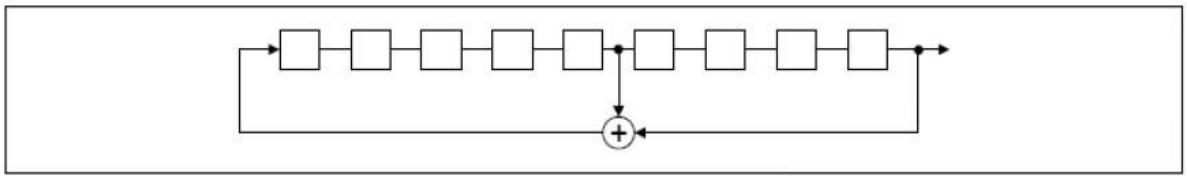
For 47 CFR Part 15C sections §15.247(a)(1) or RSS-247§5.1 requirement:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hop-ping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hop-ping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

EUT Pseudorandom Frequency Hopping Sequence Requirement:

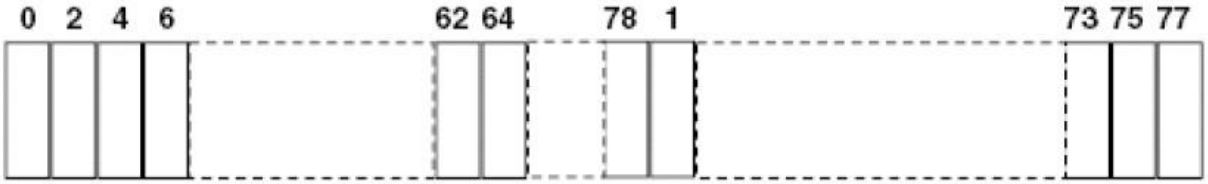
The pseudorandom frequency hopping sequence may be generated in a nice-stage shift register whose 5th first stage. The sequence begins with the first one of 9 consecutive ones, for example: the shift register is initialized with nine ones.

- Number of shift register stages:9
- Length of pseudo-random sequence:29-1=511 bits
- Longest sequence of zeros:8(non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of pseudorandom frequency hopping sequence as follows:



Each frequency used equally one the average by each transmitter.

The system receiver have input bandwidths that match the hopping channel bandwidths of their corresponding transmitter and shift frequencies in synchronization with the transmitted signals.

.

7 Test Setup Photographs of EUT

Please refer to separated files for Test Setup Photos of the EUT.

8 External Photographs of EUT

Please refer to separated files for External Photos of the EUT.

9 Internal Photographs of EUT

Please refer to separated files for Internal Photos of the EUT.

------End------