MITAC EMC Laboratory
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TEST REPORT

Regulatory Model No.:E420-12ADI

Prepared For:
MITAC COMPUTING TECHNOLOGY CORP.

According to
FCC Part 15 Subpart B 、
ANSI C63.4 & ICES-003 Class B

Test Report No:	20230032FAR0A
Application Date:	08/16/2023
Tested Date:	08/17/2023~08/24/2023
Issued Date:	09/07/2023
Prepared by:	MITAC EMC Laboratory

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The method of testing described in this report refers to the new version of the regulations according to customer’s requirements. If there is a risk of misjudgment, it is not the responsibility of the laboratory.

The results shown in this test report refer only to the EUT subjected under test.

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ADMINISTRATIVE DATA

Product Name:	:Embedded System
Classification of EUT	:Class B
Regulatory Model Number	:E420-12ADI
Series Model Number	:E420-XXXXXXXXXXXXXXXX (Where "X" can be 0-9, A-Z or blank for marketing purpose)
Rating of EUT	:DC Input: 12.0V ⎓ 7.5A
Brand Name	:MiTAC
Applicant Name	:MITAC COMPUTING TECHNOLOGY CORP.
Address	:3F., No.1, R&D Road 2, Hsinchu Science Park, Hsinchu, Taiwan

CONSTRUCTION OF EUT

Description	Model Number/ Part Number	Manufacturer	Technical Data
CPU	Raptor Lake	Intel	i3-13100TE 2.4GHz
DIMM	M425R4GA3BB0-CQK0D	Samsung	DDR5-4800, 32GB*2
SSD	MITSSL128GTLCG-SBC	Phison	M.2 2242, 128GB
SSD	MITSSO128GTLCG-SBC	Phison	M.2 2280, 128GB
STORAGE	MITSSB060GTLC9-SBA	TOSHIBA	SATA 2.5” HDD, 60GB
Wi-Fi & BT Module	AW-CB209NF	AzureWave	Wi-Fi 5
Wi-Fi Antenna	MPAMB24495804	PCTEL	2.4GHz / 5GHz WIFI Antenna
Chassis	E420	MiTAC	---
M/B	PH12ADI	MiTAC	R01 (PH12ADI-12V)
PSU	EA10953F-120	EDACPOWER ELEC.	Input: 100-240V, 2.5A, 50~60Hz; Output: 12.0V, 7.5A 90W

FINAL TEST CONSTRUCTION OF EUT

Regulatory Model Number: E420-12ADI	
Item	**Mode**
CPU	Raptor Lake/2.4GHz (Intel)
DIMM	M425R4GA3BB0-CQK0D/32GB*2 (Samsung)
SSD	MITSSL128GTLCG-SBC/128GB (Phison)
SSD	MITSSO128GTLCG-SBC/128GB (Phison)
STORAGE	MITSSB060GTLC9-SBA/60GB (Toshiba)
Wi-Fi & BT Module	AW-CB209NF (AzureWave)
Wi-Fi Antenna	MPAMB24495804 (PCTEL)
Chassis	E420 (MiTAC)
M/B	PH12ADI (MiTAC)
PSU	EA10953F-120 (EDACPOWER ELEC.)

DESCRIPTION OF RESOLUTION、 LAN SPEED AND OPERATING MODE OF WORST CASE

Interface	**Final Resolution/Max.Lan Speed**		**Lan Operating Mode**
	2.5G LAN	1G LAN	PC Transfer
DP	3840*2160/2.5Gbps	3840*2160/1Gbps	
HDMI	3840*2160/2.5Gbps	3840*2160/1Gbps	

MEASUREMENT UNCERTAINTY

Test Item	Measurement Uncertainty
Conducted Emission (Mains power port)	Conducted Emission Measurement Uncertainty =±3.18dB.Derived from ISO/IEC 17025 and CISPR 16-4-2:ed2.0+ AMD.1:2014. +AMD2:2018 to the determination of uncertainties with a coverage factor K=2.At 95% minimum confidence level.
Radiated Emission (10M Chamber)	Radiated Emission from 30MHz to 1GHz measurement uncertainly =±4.54dB. From 1GHz to 6GHz measurement uncertainty =±4.97dB. 6GHz to 18GHz measurement uncertainty =±4.83dB. Derived from ISO/IEC 17025 and CISPR 16-4-2:ed2.0+ AMD.1:2014. +AMD2:2018 to the determination of uncertainties with a coverage factor K=2. At 95% minimum confidence level.
	Reference 18GHz to 40GHz measurement uncertainty =±5.45dB.

Note: 18G-40G MU budget refer as 6G-18G MU budget table E.2 to evaluate 18G-40G MU. CISPR 16-4-2 is not included.

MEASUREMENT SOFTWARE

Test Item	Measurement Software
Conducted Emission Test	EZ_EMC for Windows Version Mit-A15
Radiated Emission Test	EZ_EMC for Windows Version Mit-A15

TEST SUMMARY

The Electromagnetic Interference requirements on model **E420-12ADI** for these tests are stated below. This report and test results are deemed satisfactory evidence of compliance with Federal Communications Commission Parts 15 Subpart B.

The test object complies with the FCC regulations and because the FCC limit values are more stringent than ICES-003, the result is equivalent to under limit values of ICES-003 published by the Innovation, Science, and Economic Development Canada (ISED).

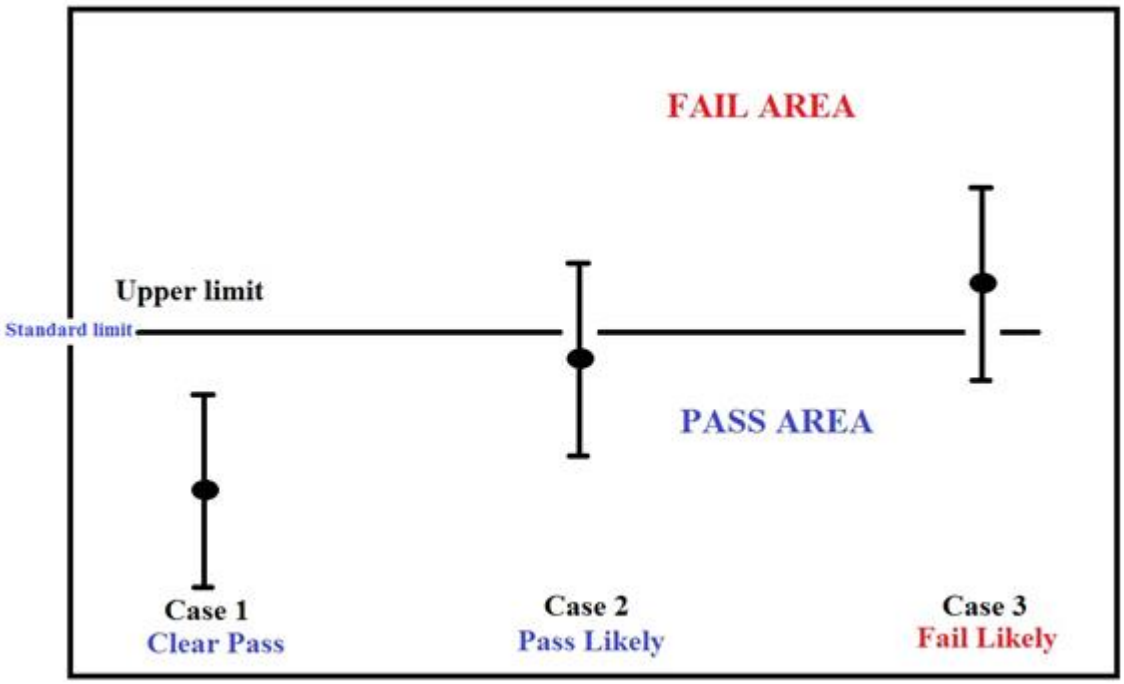
All results listed in this report relate exclusively to this above-mentioned model as the Equipment Under Test. This report confers no approval or endorsement upon any other component, host or subsystem used in the test set-up.

The function of Wifi and BT were operating during the test.

Test results conformance statement decision principle: Decision rules governed by regulations or standards.

Test results Compliant and Not compliant decision principle, in accordance with:
Priority when product (or product family) standards have individual specifications or the CISPR 16-4-2 and ANSI C63.4 decision rules apply. If MU does not need to be counted on FCC Part 15 Subpart B, under limit is Compliant.

In the Radiate and Conducted emission test, the test result is expressed with measurement uncertainty as the below.



Emission Tests				
Standard	**Test Item**	**Test Result**	**Specification of Result**	**Remark**
FCC Part 15 Subpart B ANSI C63.4-2014 ANSI C63.4a-2017 ICES-003 Issue 7:2020 Class B	Conducted Emission	Compliant	Worst margin is Passed by –14.01dB of QP Passed by –18.53dB of AVG At 0.1587MHz Frequency	Attachment 1
FCC Part 15 Subpart B ANSI C63.4-2014 ANSI C63.4a-2017 ICES-003 Issue 7:2020 Class B	Radiated Emission	Compliant	Worst margin is Passed by –3.06dB of QP At 400.6685MHz Frequency	Attachment 2

TECHNICAL REVIEWED: Jeff. T. Chan
Jeff.T.Chan

QUALITY REVIEWED: Richard Chien
Richard Chien

APPROVED: Vincent. Chia
Vincent Chia/Lab Manager

TEST LOCATION

MITAC EMC Laboratory
No.200, Wen Hwa 2nd Rd., Kuei Shan Dist., Taoyuan City 33383, Taiwan

ACCREDITIATION BODIES

In compliance with the FCC requirement is through BSMI multilateral MRA (Mutual Recognition Arrangement).MITAC EMC Lab has been accredited as a Conformity Assessment Body(CAB). Designation Number: TW-1080.

In compliance with the site registration requirements from BSMI according to ISO/IEC 17025. Site reference No.SL2-IN-E-0063

Registered in accordance with Japanese VCCI Regulations and member No.1433
Conduction Emission Registration No: C-11173
Radiation Emission Registration No: R-11114 & G-10021
Telecommunication Ports Conducted Emission Interference Measurement Registration No.: T-11551

In compliance with the Council of Chinese National Laboratory Accreditation accredited. Lab accreditation No.3021

EUT EXERCISE SOFTWARE

The EUT exercise program “BurnIn test Version 9.0” was used to test during compliance testing. The program contained in a hard disk, and was loaded under” Windows 10”. Once loaded, the test engineer selected each connected support device, then the program exercises each connected support device in turn, data is transmitted to them during testing.

EQUIPMENT MODIFICATION

Any modifications installed previous to testing by MITAC COMPUTING TECHNOLOGY CORP. will be incorporated in each production model sold or leased in the United States.

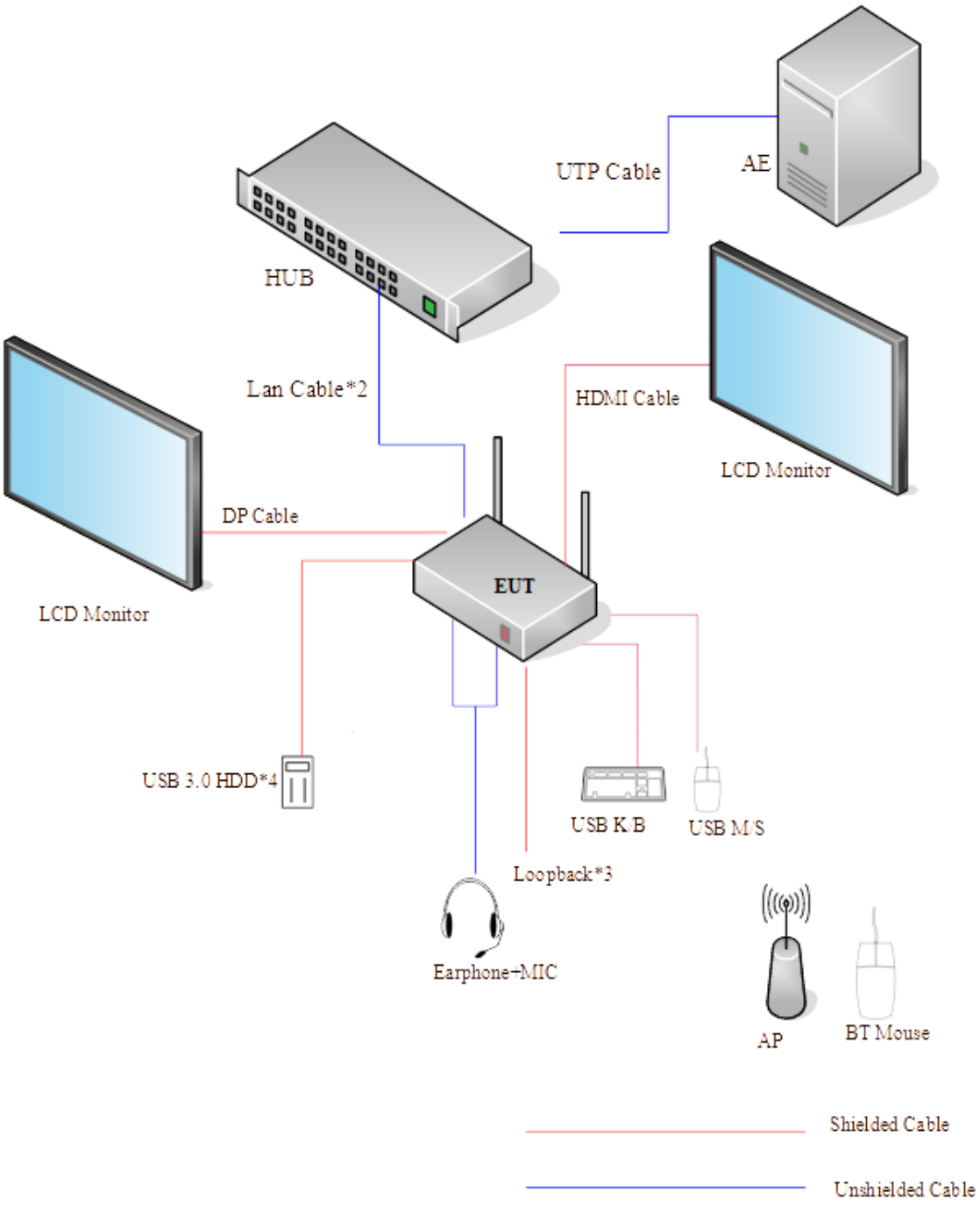
There were no modifications installed by MITAC EMC Laboratory.

DESCRIPTION OF PERIPHERAL DEVICES AND CABLE CONNECTION

Peripheral Device		
Description	**Model Number**	**Manufacturer**
27” LCD Monitor*2	P2715Qt	Dell Inc.
USB Keyboard	KB216t	Dell Inc.
USB Mouse	MS116p	Dell Inc.
USB HDD *4	Elements	WD
Audio	EM-1120MV	I-GOTA
BT mouse	RJN-00011	Microsoft
Loopback*3	---	---
AE	OPTIPLEX 3020	Dell Inc.
HUB	XS508M	Netgear
AP	Dir-859	Dink

Cable Description					
From	**To**	**Length (Meters)**	**Shielded (Y/N)**	**Ferrite Loaded (Y/N)**	**Type**
EUT	LCD	1.8	Y	N	DP Cable
EUT	LCD	1.8	Y	N	HDMI Cable
EUT	K/B	1.8	Y	N	USB Cable
EUT	Mouse	1.8	Y	N	USB Cable
EUT	MIC+EARPHONE	1.8	N	N	Audio Cable
EUT	Loopback	2.5	Y	N	GPIO Cable
EUT	Loopback	2.5	Y	N	COM Cable*2
EUT	USB HDD	1.2	Y	N	USB Cable*4
EUT	HUB	3	N	N	2.5GbE Lan Cable
EUT	HUB	3	N	N	1GbE Lan Cable
HUB	AE	RE:10 CE:3	N	N	UTP Cable

CONNECTION DIAGRAM OF EUT



Remark:
The AE is placed in outside of 10M chamber during the radiated emission test.

ATTACHMENT 1 - CONDUCTED EMISSION TEST RESULTS

- **Test Reference:** FCC Part 15 Subpart B、ANSI C63.4、ICES-003 Issue 7

- **Test Procedure:**
  The EUT is set up according to the guideline of FCC Part 15 Subpart B、ANSI C63.4 for conducted emissions. The measurement is using a LISN on each line and an EMI receiver peak scan is made at the frequency measurement range. The six highest significant peaks are then marked, and these signals are then quasi-peaked and averaged. The frequency range investigated is from 150kHz to 30MHz.

  The basic equation with a sample calculation is as follows:
  Corr.Data = Raw Data + LISN/ISN Loss (or AMN/AAN Loss) + Cable Loss

  Corr.Data = Field Strength

  Raw Data = Receiver Amplitude

  LISN/ISN Loss = LISN/ISN Factor

  AMN/AAN Loss = AMN/AAN Factor

  Cable Loss = Cable Loss

- **Test Result:** The EUT meets the Class B device requirement.

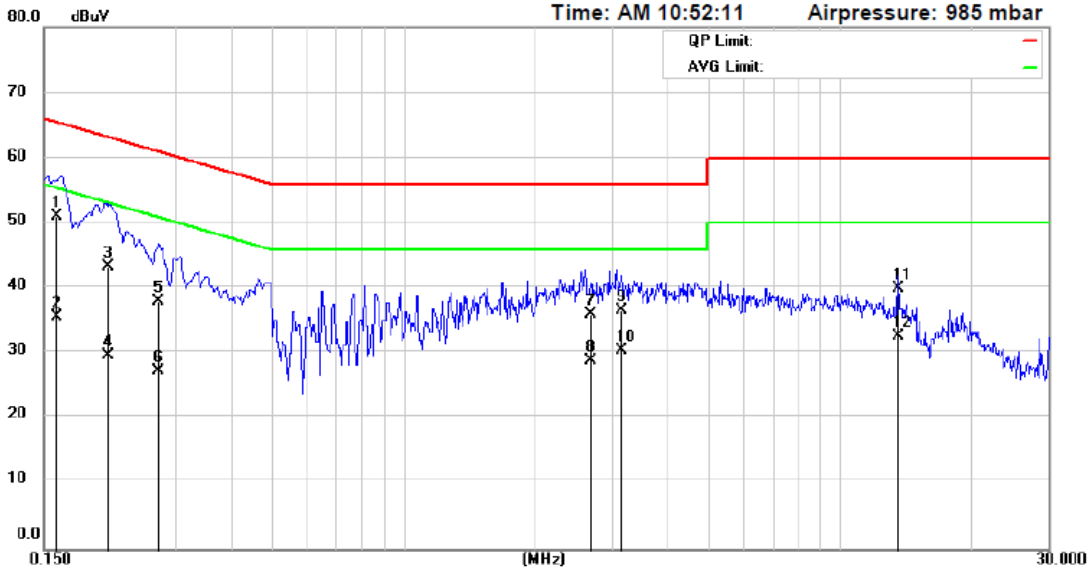
- **Change or Modification:** There is no modification installed by MITAC EMC Laboratory test personnel.

- **Test Raw Data:** Following pages are detailed testing contents

- **Test Equipment:**

Test Equipment	Manufacturer/ Model	Serial No.	Last Calibration Date	Due Date
EMI Receiver	ROHDE&SCHWARZ /ESR	10549	2023/4/25	2024/4/23
LISN	ROHDE&SCHWARZ /ENV216	101330	2023/6/28	2024/6/27
Cable	EMC400-BNCM-BNCM-6000	140304	2022/8/24	2023/8/23

Conducted Emission Measurement Temperature: 25 ℃
File :20230032CE001 Data :#3 Date: 8/17/2023 Humidity: 52 %
Time: AM 10:52:11 Airpressure: 985 mbar



Site : Conduction Emission
Limit : (CE)FCC Part 15 class B_QP Phase: L1
Company : MITAC Power : 120VAC/60Hz
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

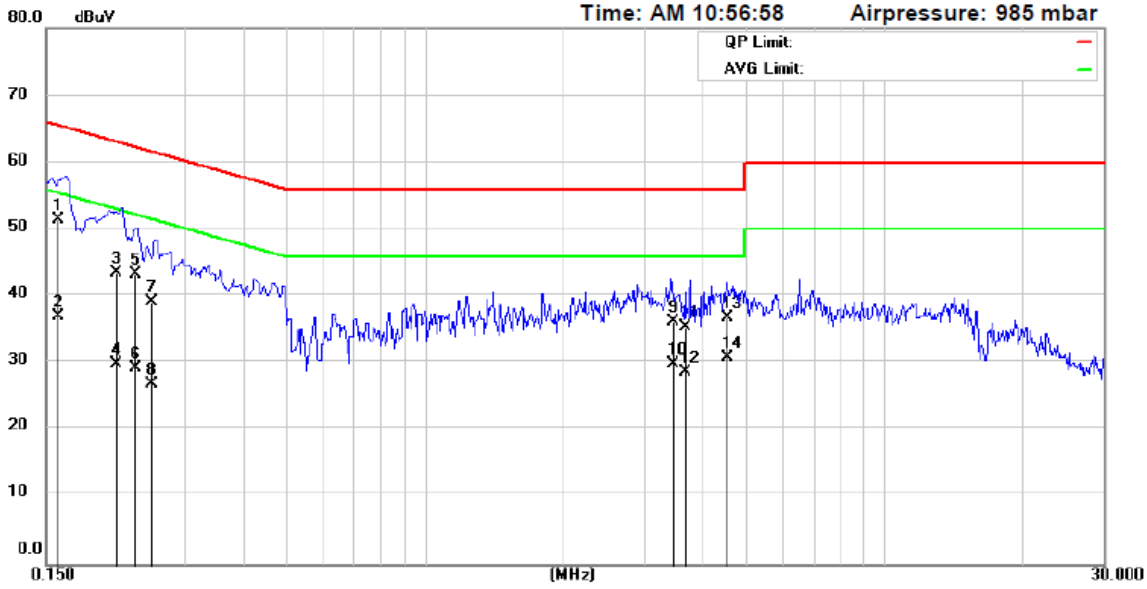
Mk.	Frequency MHz	Raw Data dBuV	AMN/AAN Loss	Cable Loss dB	Corr. Data dBuV	Limit dBuV	Margin dB	Detector	Remarks
*	0.1594	41.43	9.61	0.04	51.08	65.50	-14.42	QP	
	0.1594	25.92	9.61	0.04	35.57	55.50	-19.93	AVG	
	0.2098	33.80	9.61	0.04	43.45	63.21	-19.76	QP	
	0.2098	20.02	9.61	0.04	29.67	53.21	-23.54	AVG	
	0.2731	28.46	9.61	0.05	38.12	61.02	-22.90	QP	
	0.2731	17.76	9.61	0.05	27.42	51.02	-23.60	AVG	
	2.6665	26.20	9.62	0.14	35.96	56.00	-20.04	QP	
	2.6665	19.14	9.62	0.14	28.90	46.00	-17.10	AVG	
	3.1514	26.91	9.63	0.15	36.69	56.00	-19.31	QP	
	3.1514	20.77	9.63	0.15	30.55	46.00	-15.45	AVG	
	13.5622	30.12	9.67	0.29	40.08	60.00	-19.92	QP	
	13.5622	22.75	9.67	0.29	32.71	50.00	-17.29	AVG	

Spectrum Analyzer: ESR
Receiver: ESR_1
AMN/AAN ENV216-330
Cable: EMC400 B140304

*:Maximum data x:Over limit !:over margin
RBW: 9 KHz
VBW: 30 KHz

File :20230032CE001\Data :#3 Page: 1

Conducted Emission Measurement Temperature: 25 ℃
File :20230032CE001 Data :#4 Date: 8/17/2023 Humidity: 52 %
Time: AM 10:56:58 Airpressure: 985 mbar



Site : Conduction Emission
Limit : (CE)FCC Part 15 class B_QP Phase: N
Company : MITAC Power : 120VAC/60Hz
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

Mk.	Frequency MHz	Raw Data dBuV	AMN/AAN Loss	Cable Loss dB	Corr. Data dBuV	Limit dBuV	Margin dB	Detector	Remarks
*	0.1587	41.85	9.63	0.04	51.52	65.53	-14.01	QP	
	0.1587	27.33	9.63	0.04	37.00	55.53	-18.53	AVG	
	0.2118	33.86	9.63	0.04	43.53	63.13	-19.60	QP	
	0.2118	20.19	9.63	0.04	29.86	53.13	-23.27	AVG	
	0.2336	33.73	9.63	0.04	43.40	62.32	-18.92	QP	
	0.2336	19.73	9.63	0.04	29.40	52.32	-22.92	AVG	
	0.2534	29.56	9.63	0.05	39.24	61.64	-22.40	QP	
	0.2534	17.22	9.63	0.05	26.90	51.64	-24.74	AVG	
	3.4628	26.51	9.64	0.16	36.31	56.00	-19.69	QP	
	3.4628	20.22	9.64	0.16	30.02	46.00	-15.98	AVG	
	3.6681	25.65	9.65	0.17	35.47	56.00	-20.53	QP	
	3.6681	19.01	9.65	0.17	28.83	46.00	-17.17	AVG	
	4.5426	26.93	9.66	0.19	36.78	56.00	-19.22	QP	
	4.5426	21.02	9.66	0.19	30.87	46.00	-15.13	AVG	

Spectrum Analyzer: ESR
Receiver: ESR_1
AMN/AAN ENV216-330
Cable: EMC400 B140304

*:Maximum data x:Over limit !:over margin
RBW: 9 KHz
VBW: 30 KHz

File :20230032CE001\Data :#4 **Page: 1**

ATTACHMENT 2 - RADIATED EMISSION TEST RESULTS

- **Test Reference:** FCC Part 15 Subpart B、ANSI C63.4、ICES-003 Issue 7

- **Test Procedure:**
  The EUT is set up according to the guidelines of FCC Part 15 Subpart B、ANSI C63.4 for radiated emissions on table was placed on ground plane. The turn table can rotate 360 degrees to determine the position of the max. emission level. For 30MHz to 1GHz frequency range, EUT was set 10 meters distances and from 1GHz to 18GHz frequency range, EUT was set 3 meters distances Semi-Anechoic chamber away from the receiving antenna which was mounted on an antenna tower. The antenna moved up and down between 1 to 4 meters for 30MHz to 1GHz frequency range and above 1GHz to 18GHz frequency, use Bore-Sight antenna to find out the max. emission level contains horizontal and vertical polarization.

  The basic equation with a sample calculation is as follows:

  Corr.Data = Raw Data+Ant_F+Cab_L-PreAmp

  Corr.Data = Field Strength

  Raw Data = Receiver Amplitude

  Ant_F = Antenna Factor

  Cab_L = Cable Loss

  PreAmp = Amplifier Factor

  The limit value is calculated by truncate one digit after the decimal point. e.g. truncate 49.54 to the one digit after the decimal point= 49.5

- **Test Result:** The EUT meets the Class B device requirement.

- **Change or Modification:** There is no modification installed by MITAC EMC Laboratory test personnel.

- **Test Raw Data:** Following pages are detailed testing contents

- **Test Equipment:**

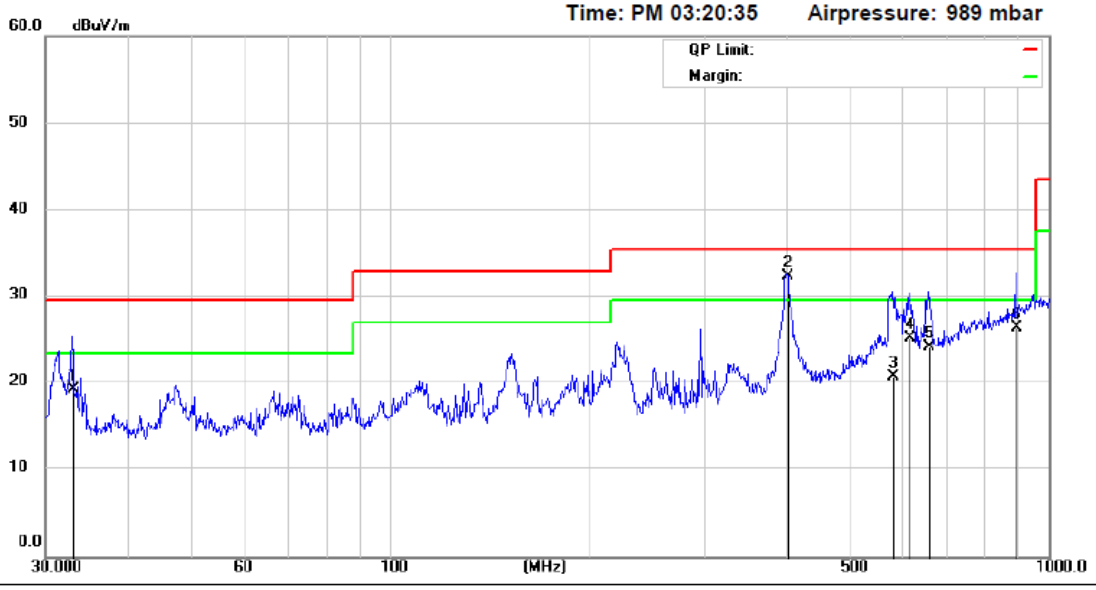
Test Equipment	Manufacturer/ Model	Serial No.	Last Calibration Date	Due Date
EMI Receiver	ROHDE&SCHWARZ / ESU	100501	2023/3/2	2024/3/1
EMI Receiver	ROHDE&SCHWARZ / ESCI	100696	2022/9/14	2023/9/13
Antenna	Shwazbeck & EMCI / VULB9168 & N-6-05	805 & AT-N0545	2023/3/10	2024/3/9
Antenna	EMCO 3117	86195	2022/9/27	2023/9/26
Pre-Amplifier	EMC9135	980517	2022/8/23	2023/8/22
Pre-Amplifier	AGILENT/8449B	3008A01732	2023/8/9	2024/8/8
CABLE	10m Left	---	2023/8/4	2024/8/3
CABLE	EMC105-NM	210230 210231	2022/9/15	2023/9/14
CABLE	EMC104-SM-SF	170812&141007	2022/9/15	2023/9/14

MiTAC EMC LAB Tel:+886-3-3962888 Fax:+886-3-3276328
Address: NO. 200, Wen Hua 2nd RD., Kuei San Dist., Taoyuan,
Operator: Weilin Wang

Radiated Emission Measurement

File :20230032RE001R0 Data :#5 Date: 8/17/2023 Time: PM 03:20:35

Temperature: 22 ℃ Humidity: 59 % Airpressure: 989 mbar



Site : 10m Chamber
Limit : (RE)FCC PART 15 class B 10m
Company : MiTAC
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

Polarization: *Horizontal*
Power : 120VAC/60Hz

Mk.	Frequency MHz	Raw Data dBuV	Ant_F dB/m	Cab_L dB	PreAmp dB	Corr. Data dBuV/m	Limit dBuV/m	Margin dB	Ant. cm	Ang. deg.	Detector	Remarks
	32.9744	37.77	17.67	0.96	37.1	19.30	29.50	-10.20	295	269	QP	
*	400.6685	44.32	20.72	3.5	36.1	32.44	35.50	-3.06	216	180	QP	
	580.7120	28.92	24.32	4.24	36.65	20.83	35.50	-14.67	100	226	QP	
	614.6342	32.67	25.02	4.37	36.74	25.32	35.50	-10.18	400	234	QP	
	660.1334	31.05	25.42	4.54	36.84	24.17	35.50	-11.33	100	219	QP	
	890.9292	30.32	27.99	5.25	37.1	26.46	35.50	-9.04	100	124	QP	

Spectrum Analyzer: ESCI
Receiver: ESCI_1
Antenna: 9168-805+PAD
Amplifier: 9135 980517

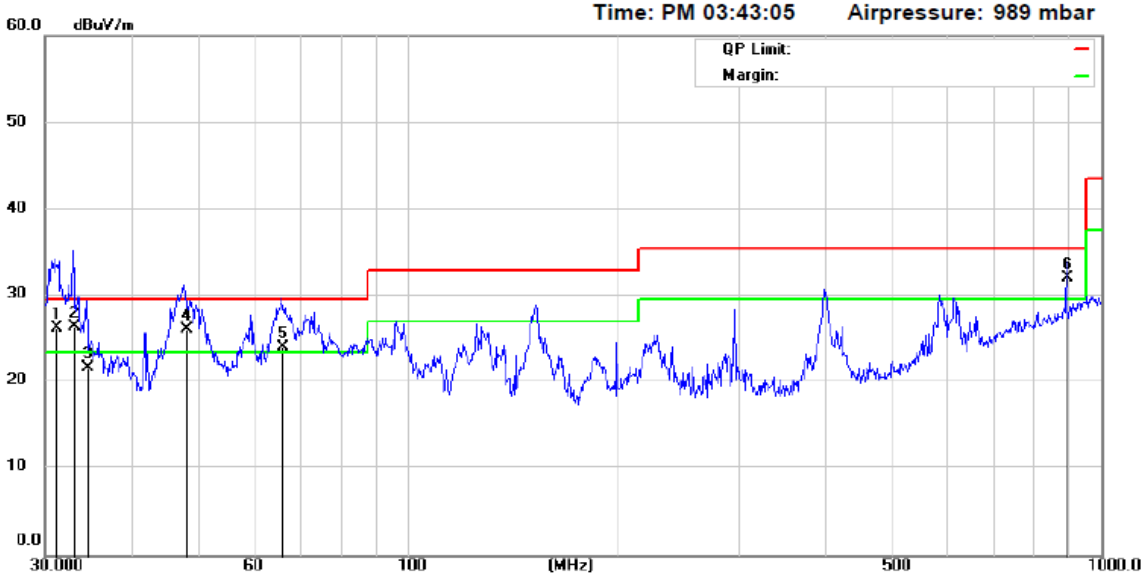
*:Maximum data x:Over limit !:over margin
RBW: 120 KHz
VBW: 300 KHz
Cable: 10ML + EMC105

File :20230032RE001R0\Data :#5 *Page: 1*

Radiated Emission Measurement

File :20230032RE001R0 Data :#6 Date: 8/17/2023 Time: PM 03:43:05

Temperature: 22 ℃ Humidity: 59 % Airpressure: 989 mbar



Site : 10m Chamber

Limit : (RE)FCC PART 15 class B 10m

Company : MiTAC

EUT : E420-12ADI

Exercise Program : BurnIn test

Comments: FULL SYSTEM

Polarization: *Vertical*

Power : 120VAC/60Hz

Mk.	Frequency MHz	Raw Data dBuV	Ant_F dB/m	Cab_L dB	PreAmp dB	Corr. Data dBuV/m	Limit dBuV/m	Margin dB	Ant. cm	Ang. deg.	Detector	Remarks
!	31.1560	44.98	17.5	0.92	37.13	26.27	29.50	-3.23	100	137	QP	
*	32.9973	44.85	17.67	0.96	37.1	26.38	29.50	-3.12	100	128	QP	
	34.4834	40.06	17.8	0.99	37.09	21.76	29.50	-7.74	100	255	QP	
!	47.8642	43.09	18.85	1.2	36.93	26.21	29.50	-3.29	100	95	QP	
!	65.8424	42.12	17.29	1.42	36.8	24.03	29.50	-5.47	188	162	QP	
!	890.9862	35.97	27.99	5.25	37.1	32.11	35.50	-3.39	232	197	QP	

Spectrum Analyzer: ESCI
Receiver: ESCI_1
Antenna: 9168-805+PAD
Amplifier: 9135 980517

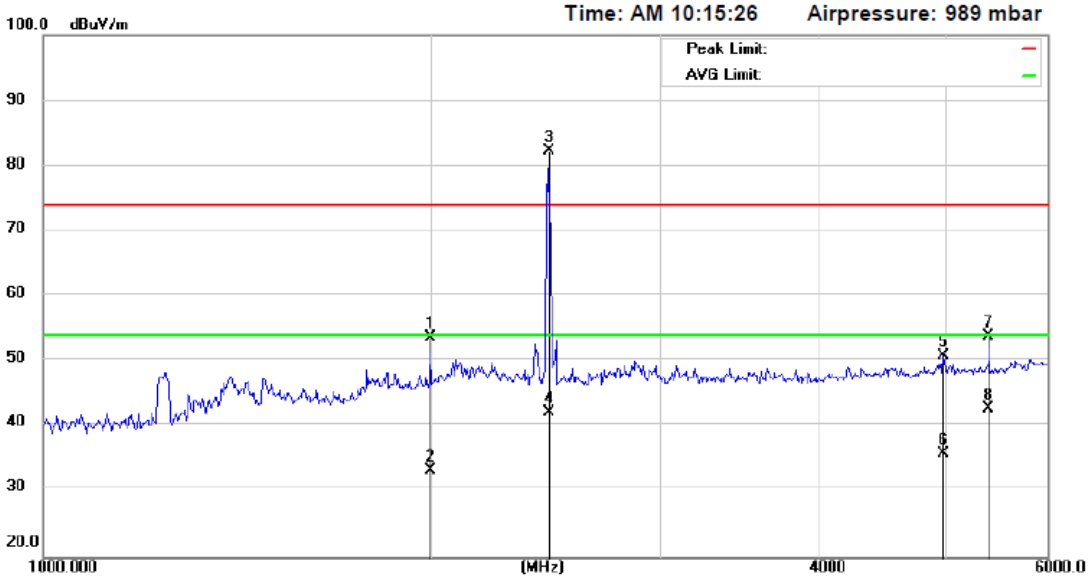
*:Maximum data x:Over limit !:over margin
RBW: 120 KHz
VBW: 300 KHz
Cable: 10ML + EMC105

File :20230032RE001R0\Data :#6 **Page: 1**

Radiated Emission Measurement

File :20230032RE002-1R0 Data :#3 Date: 08/24/2023 Time: AM 10:15:26

Temperature: 22 ℃ Humidity: 58 % Airpressure: 989 mbar



Site : 10m Chamber
Limit : (RE)FCC PART 15 class B 3m_PEAK
Company : MiTAC
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

Polarization: *Horizontal*
Power : 120VAC/60Hz

Mk.	Frequency MHz	Raw Data dBuV	Ant_F dB/m	Cab_L dB	PreAmp dB	Corr. Data dBuV/m	Limit dBuV/m	Margin dB	Ant. cm	Ang. deg.	Detector	Remarks
	1995.034	55.90	32.16	2.87	37.17	53.76	74.00	-20.24	108	36	peak	
	1995.034	35.51	32.16	2.87	37.17	33.37	54.00	-20.63	108	36	AVG	
*	2466.610	84.09	32.39	3.17	37.34	82.31	74.00	8.31	100	351	peak	WIFI
	2466.610	44.06	32.39	3.17	37.34	42.28	54.00	-11.72	100	351	AVG	WIFI
	4983.627	49.38	34.09	4.63	37.18	50.92	74.00	-23.08	100	215	peak	
	4983.627	34.37	34.09	4.63	37.18	35.91	54.00	-18.09	100	215	AVG	
	5400.434	51.69	34.42	4.83	37.14	53.80	74.00	-20.20	100	234	peak	
	5400.434	40.74	34.42	4.83	37.14	42.85	54.00	-11.15	100	234	AVG	

Spectrum Analyzer: ESU
Receiver: ESU_1
Antenna: 3117-3m-86195
Amplifier: PA-8449B-1732

*:Maximum data x:Over limit !:over margin
RBW: 1000 KHz
VBW: 3000 KHz
Cable: 104 170812&14

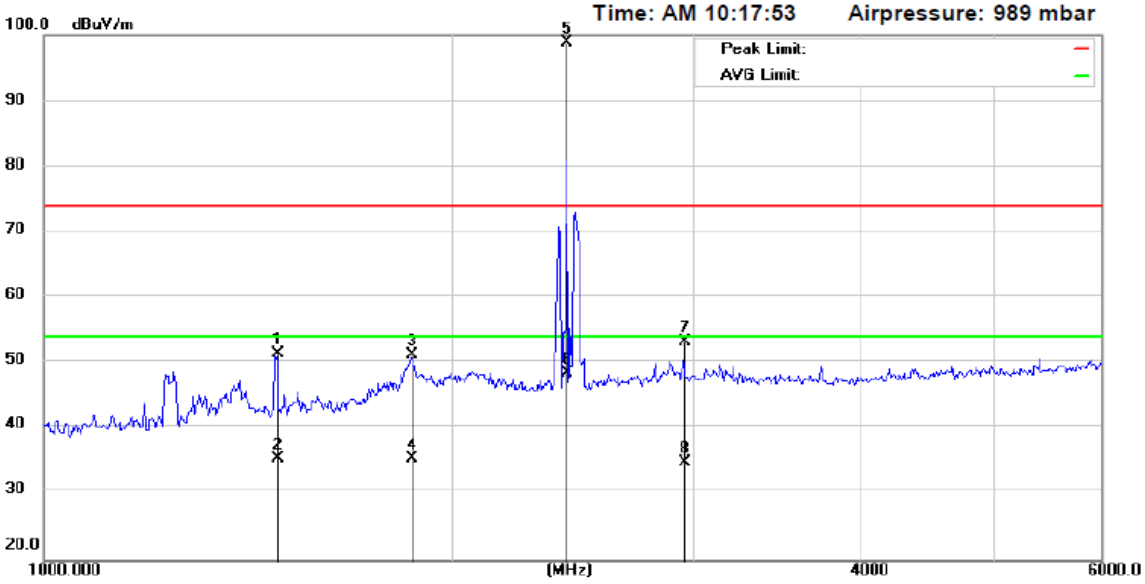
File :20230032RE002-1R0\Data :#3 **Page: 1**

MiTAC EMC LAB Tel:+886-3-3962888 Fax:+886-3-3276328
Address: NO. 200, Wen Hua 2nd RD., Kuei San Dist., Taoyuan, TAIWAN.
Operator: Weilin Wang

Radiated Emission Measurement

File :20230032RE002-1R0 Data :#4 Date: 08/24/2023 Time: AM 10:17:53

Temperature: 22 ℃ Humidity: 58 % Airpressure: 989 mbar



Site : 10m Chamber
Limit : (RE)FCC PART 15 class B 3m_PEAK
Company : MiTAC
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

Polarization: *Vertical*
Power : 120VAC/60Hz

Mk.	Frequency MHz	Raw Data dBuV	Ant_F dB/m	Cab_L dB	PreAmp dB	Corr. Data dBuV/m	Limit dBuV/m	Margin dB	Ant. cm	Ang. deg.	Detector	Remarks
	1484.839	58.30	27.98	2.44	37.31	51.41	74.00	-22.59	108	196	peak	
	1484.839	42.40	27.98	2.44	37.31	35.51	54.00	-18.49	108	196	AVG	
	1865.461	54.72	31.07	2.76	37.2	51.35	74.00	-22.65	100	174	peak	
	1865.461	38.87	31.07	2.76	37.2	35.50	54.00	-18.50	100	174	AVG	
*	2425.692	100.77	32.37	3.14	37.32	98.96	74.00	24.96	100	170	peak	WIFI
	2425.692	50.38	32.37	3.14	37.32	48.57	54.00	-5.43	100	170	AVG	WIFI
	2959.737	54.47	32.86	3.51	37.57	53.27	74.00	-20.73	116	152	peak	
	2959.737	36.17	32.86	3.51	37.57	34.97	54.00	-19.03	116	152	AVG	

Spectrum Analyzer: ESU
Receiver: ESU_1
Antenna: 3117-3m-86195
Amplifier: PA-8449B-1732

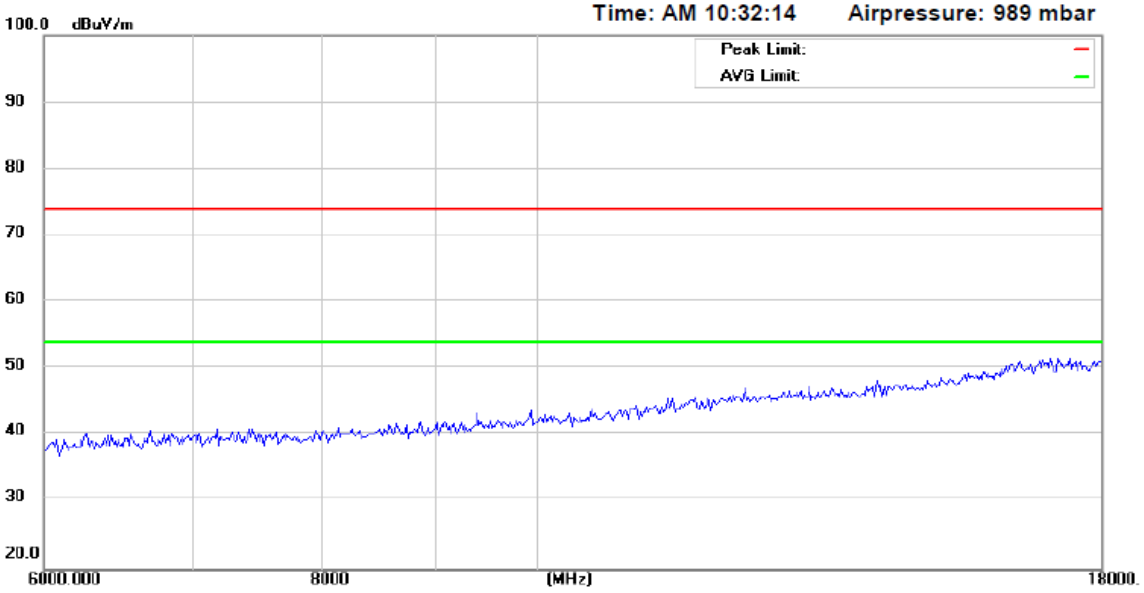
*:Maximum data x:Over limit !:over margin
RBW: 1000 KHz
VBW: 3000 KHz
Cable: 104 170812&14

File :20230032RE002-1R0\Data :#4 **Page: 1**

Radiated Emission Measurement

File :20230032RE002-1R0 Data :#5 Date: 08/24/2023 Time: AM 10:32:14

Temperature: 22 ℃ Humidity: 58 % Airpressure: 989 mbar



Site : 10m Chamber
Limit : (RE)FCC PART 15 class B 3m_PEAK
Company : MiTAC
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

Polarization: *Horizontal*
Power : 120VAC/60Hz

Mk.	Frequency MHz	Raw Data dBuV	Ant_F dB/m	Cab_L dB	PreAmp dB	Corr. Data dBuV/m	Limit dBuV/m	Margin dB	Ant. cm	Ang. deg.	Detector	Remarks

Spectrum Analyzer: ESU
Receiver: ESU_1
Antenna: 3117-3m-86195
Amplifier: PA-8449B-1732

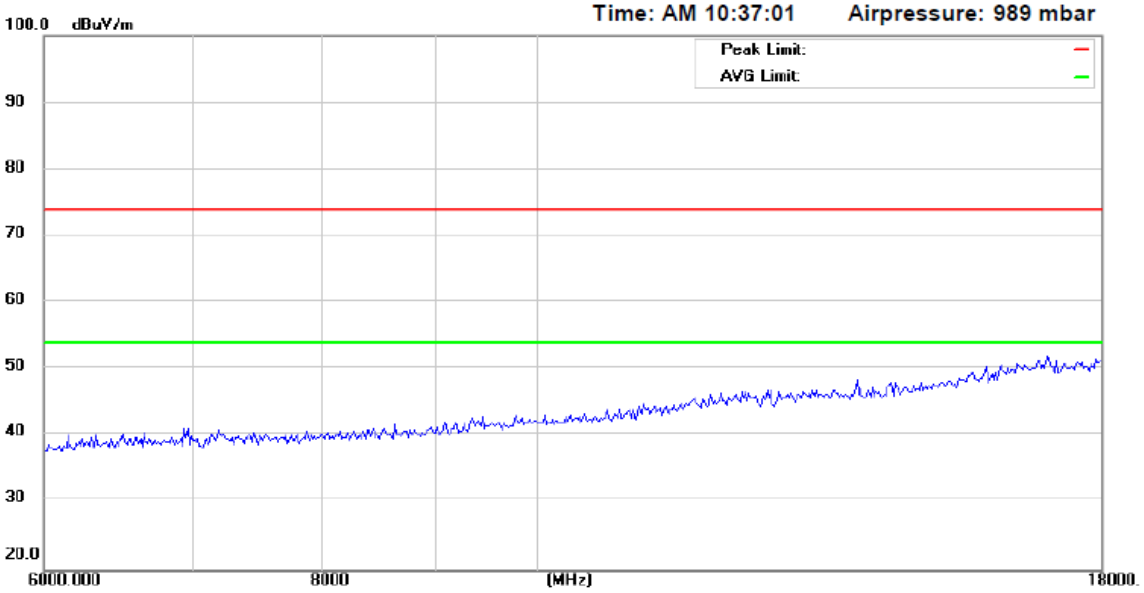
*:Maximum data x:Over limit !:over margin
RBW: 1000 KHz
VBW: 3000 KHz
Cable: 104 170812&14

File :20230032RE002-1R0\Data :#5 **Page: 1**

Radiated Emission Measurement

File :20230032RE002-1R0 Data :#6 Date: 08/24/2023 Time: AM 10:37:01

Temperature: 22 ℃ Humidity: 58 % Airpressure: 989 mbar



Site : 10m Chamber
Limit : (RE)FCC PART 15 class B 3m_PEAK
Company : MiTAC
EUT : E420-12ADI
Exercise Program : BurnIn test
Comments: FULL SYSTEM

Polarization: *Vertical*
Power : 120VAC/60Hz

Mk.	Frequency MHz	Raw Data dBuV	Ant_F dB/m	Cab_L dB	PreAmp dB	Corr. Data dBuV/m	Limit dBuV/m	Margin dB	Ant. cm	Ang. deg.	Detector	Remarks

Spectrum Analyzer: ESU
Receiver: ESU_1
Antenna: 3117-3m-86195
Amplifier: PA-8449B-1732

*:Maximum data x:Over limit !:over margin
RBW: 1000 KHz
VBW: 3000 KHz
Cable: 104 170812&14

File :20230032RE002-1R0\Data :#6 **Page: 1**

PHOTOGRAPHS OF TEST

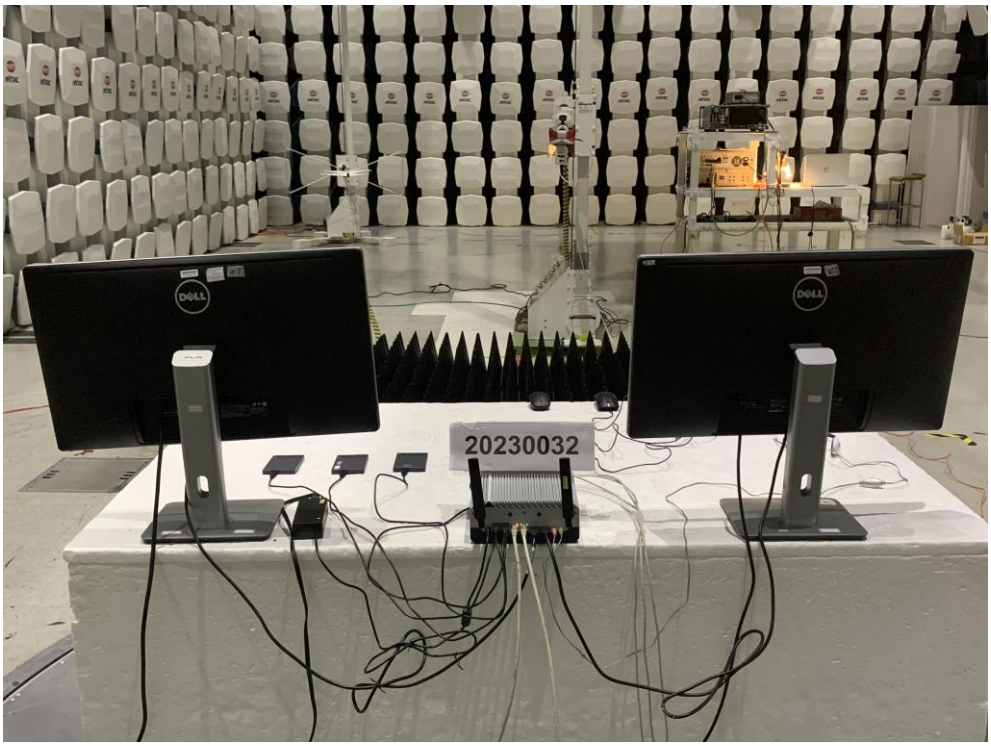
Conducted Emission Test Set up-Front View of AC mains power port

Conducted Emission Test Set up-Rear View of AC mains power port

Radiated Emission Test Set up (Below 1GHz)-Front View

Radiated Emission Test Set up (Below 1GHz)-Rear View

Radiated Emission Test Set up (Above 1GHz)-Front View



Radiated Emission Test Set up(Above 1GHz)-Rear View

PHOTOGRAPHS OF EUT

EUT-Front View

EUT-Rear View

IO Ports-Front View

IO Ports-Rear View