Report on the EMC Testing of:

KYOCERA Corporation
Mobile Phone, Model: EB1190EM

In accordance with FCC Part 15 Subpart B Class B

Prepared for: KYOCERA Corporation
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COMMERCIAL-IN-CONFIDENCE

Document Number: JPD-TR-24117-0

SIGNATURE			
Hiroaki Suzuki			
NAME	**JOB TITLE**	**RESPONSIBLE FOR**	**ISSUE DATE**
Hiroaki Suzuki	RF Deputy Manager of EMC Lab	Approved Signatory	2024.06.26

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Japan Ltd. document control rules.

EXECUTIVE SUMMARY – Result: Complied

A sample of this product was tested and the result above was confirmed in accordance with FCC Part 15 Subpart B. (Applied the deviations mentioned in section 1.4 of this document and performed only the test items mentioned in section 1.5.)

Certificate #3686.03

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Additional signatures required by FCC 47 CFR Part 2, § 2.938 (b) (10)

Signatures of the individuals responsible for testing the product

ENGINEERING STATEMENT
The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC Part 15 Subpart B. The sample tested was found Complied compliant with the requirements defined in the applied rules.

NAME	RESPONSIBLE FOR	SIGNATURE
Yoshiyuki Takahashi	Testing	
Satoshi Hosoya	Testing	

Contents

1 Summary of Test

1.1 Modification history of the test report

Document Number	Modification History	Issue Date
JPD-TR-24117-0	First Issue	Refer to the cover page

1.2 Standards

FCC Part 15 Subpart B

1.3 Measurement standards

ANSI C63.4 2014

1.4 Deviation from standards

None

1.5 List of applied test(s) of the EUT

Regarding determination of conformity to the emission test, a value of measurement uncertainty was taken in account.

Test Name	Classification of EUT	Test	Worst Point (Margin)	Result	Remarks
Conducted emission at mains port	Class B	Applied	MP4 with Earphone + USB Read with PC + BT EDR + WCDMA Band 5 mode, S/N: 353343640002959 L2 0.150MHz QP 9.6dB	Pass	-
Radiated emission (below 1 GHz)	Class B	Applied	MP4 with ADP and Earphone +WiFi 11 a/ac +LTE Band 41 mode, V 38.997MHz OP 3.3dB	Pass	-
Radiated emission (above 1 GHz)	Class B	Applied	Out Camera with ADP and Earphone + GSM 1900 mode, S/N: 353343640002959 H 5729.603 MHz AV 10.6 dB	Pass	-

1.6 Test information

The following EMC test conditions were applied based on the conditions specified by the applicant.
- Tested supply voltage and supply frequency
- Operation mode

This product supports two types of main memory Samsung and Hynix and two types of LCD BOE and Tenma.

These combinations were implemented at the discretion of the applicant as follows.

Serial No	353343640002959	353343640002975	353343640002983
	EMC①	EMC③	EMC④
LCD	BOE	BOE	Tenma
Memory	Hynix	SAMSUNG	Hynix

Radiated emission (below 1GHz), Radiated emission (above 1 GHz)
- The operation of the wireless functions installed in the device was selected and implemented at the applicant's discretion.

1.7 Test set up

Table-top

1.8 Test period

18-May-2024 - 24-May-2024

2 Equipment Under Test

All information in this chapter was provided by the applicant.

2.1 EUT information

Applicant	KYOCERA Corporation Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku, Yokohama-shi, Kanagawa, 224-8502 Japan Phone: +81-45-943-6253 Fax: +81-45-943-6314
Equipment Under Test (EUT)	Mobile Phone
Model number	EB1190EM
Serial number	353343640002959, 353343640002975, 353343640002983
Authorization	JOYPC9699
Number of sample(s)	3
EUT condition	Pre-production
Maximum frequency	2200 MHz
Power rating	Battery: DC 3.87 V DC 5 V (USB) DC 5.2 V (Adapter)
Size	(W) 73.0 × (D) 157.0 × (H) 11.43 mm

2.2 Modification to the EUT

The table below details modifications made to the EUT during the test project.

Modification State	Description of Modification	Modification fitted by	Date of Modification
EB1190EM, S/N: 353343640002959			
0	As supplied by the applicant	Not Applicable	Not Applicable
EB1190EM, S/N: 353343640002975			
0	As supplied by the applicant	Not Applicable	Not Applicable
EB1190EM, S/N: 353343640002983			
0	As supplied by the applicant	Not Applicable	Not Applicable

2.3 Variation of family model(s)

2.3.1 List of family model(s)

EUT

Model number	EB1190EM *1	EB1201	EB1190	EB1190NC
Memory	expansion	standard	standard	standard
Camera	with	with	with	without
Fingerprint Sensor	with	with	without	without
NFC	with	with	without	without
size	73.0 × 157.0 × 11.43 [mm]			

*1: Tested model

AC Adapter

Model No.	Remarks
KYCFP1	*Tested model
ADS303U	

2.3.2 Reason for selection of EUT

The applicant decided that the differences between the design had no EMC impact and selected EB1190EM with full function.

The AC adapter has no difference according to the model number.
The model used for testing was selected at the applicant's discretion.

2.4 Operation mode

1. Out Camera with ADP and Earphone + GSM 1900 mode
i) Power ON
ii) GSM link establishment between EUT and the radio tester, Operation
iii) Bluetooth link establishment between EUT and the PC, Operation

2. In camera with ADP and earphone+ LTE Band 12 mode
i) Power ON
ii) LTE link establishment between EUT and the radio tester, Operation

3. MP4 with ADP and Earphone + WiFi 11 a/ac + LTE Band 41 mode
i) Power ON
ii) LTE link establishment between EUT and the radio tester, Operation
iii) WiFi link establishment between EUT and the Router, Operation
iv) Execution of Color Bar moving picture data

4. MP4 with ADP + WiFi 11 b/g/n + WCDMA Band 4 mode
i) Power ON
ii) WCDMA link establishment between EUT and the radio tester, Operation
iii) WiFi link establishment between EUT and the Router, Operation
iv) Execution of Color Bar moving picture data

5. MP4 with Earphone + USB Read with PC + BT EDR + WCDMA Band 5 mode
i) Power ON
ii) WCDMA link establishment between EUT and the radio tester, Operation
iii) Bluetooth link establishment between EUT and the PC, Operation
iv) Execution of Color Bar moving picture data

6. with ADP and Earphone + NFC mode
i) Power ON
ii) NFC link establishment between EUT and the Mobile Phone, Operation

3 Configuration of Equipment

Numbers assigned to equipment or cables in “3.1 Equipment(s) used” and “3.2 Cable(s) used” correspond to numbers in "3.3 System configuration".
Cabling and setup(s) were taken into consideration and test data was taken under worse case condition.

3.1 Equipment used

No.	Equipment	Company	Model No.	Serial No.	FCC ID /DoC	Remarks
EUT1	Mobile Phone	KYOCERA	EB1190EM	353343640002959	JOYPC9699	EUT, EUT①*1
				353343640002975		EUT, EUT③*2
				353343640002983		EUT, EUT④*3
ACC1	AC adapter	KYOCERA	KYCFP1	240417A	N/A	Accessory, *4
AE1	Earphone	N/A	N/A	N/A	N/A	-
AE2	Personal Computer	hp	Compaq 6720s	CNU8321Q6M	DoC	*5
AE3	AC adapter	hp	PPP009L	8633881718	N/A	*5
AE4	Bluetooth Module	Logitec	LBT-UAN04C2	27R37132A	N/A	*5
AE5	Wi-Fi Router	Buffalo	WNR-5400XE6/N	20632920702692	N/A	-
AE6	AC adapter for Wi-Fi Router	Asian Power Devices	WA-24Q12FU	Z086 YNT2122713000229 400	N/A	-
AE7	Bluetooth Mouse	Logicool	M-R0064	2128LZD5EPS8	N/A	-
AE8	Personal Computer	Lenovo	4334	CB07410173	DoC	*5
AE9	AC adapter	Lenovo	CPA-A065	11S36001943ZZ2001 1l16S	N/A	*5
AE10	Mobile Phone	KYOCERA	OYA	N/A	N/A	-

*1: LCD: BOE, Memory: Hynix
*2: LCD: BOE, Memory: SAMSUNG
*3: LCD: Tenma, Memory: Hynix
*4: AC adapter is connected to keep operating.
*5: The property of TÜV SÜD Japan was used.

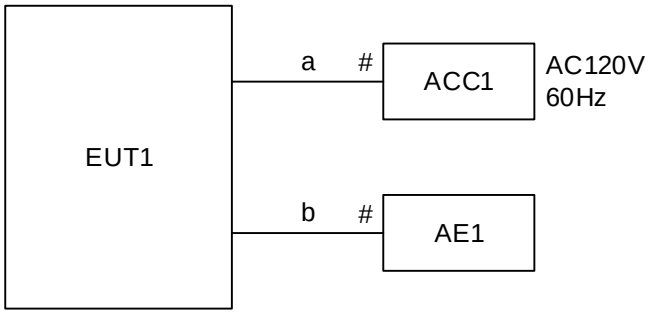
3.2 Cable(s) used

No.	Cable	Length (m)	Shield	EUT accessory Ferrite core	Remarks
a	DC cable	1.2	Yes	-	-
b	Earphone cable	1.2	No	-	-
c	DC cable for PC AC adapter	1.8	No	-	*1
d	AC power cord for PC AC adapter	1.8	No	-	*1
e	LAN cable	2.0	No	-	*1
f	DC cable for Wi-Fi Router AC adapter	1.5	No	-	*1
g	USB cable	5.0	Yes	-	*1
h	USB cable	1.0	Yes	-	-
i	DC cable for PC AC adapter	1.8	No	-	*1
j	AC power cord for PC AC adapter	1.0	No	-	*1

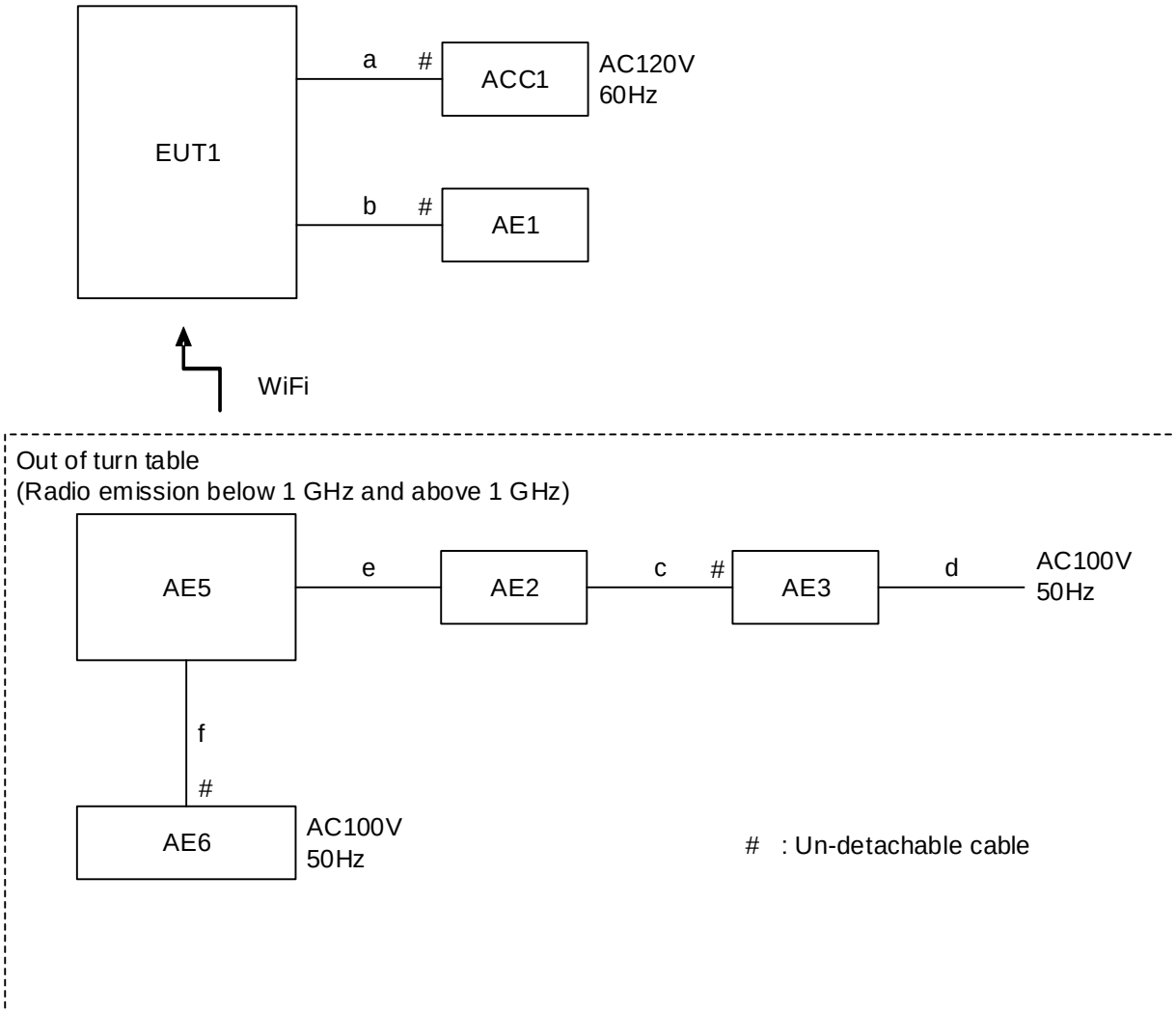
*1: The property of TÜV SÜD Japan was used.

3.3 System configuration

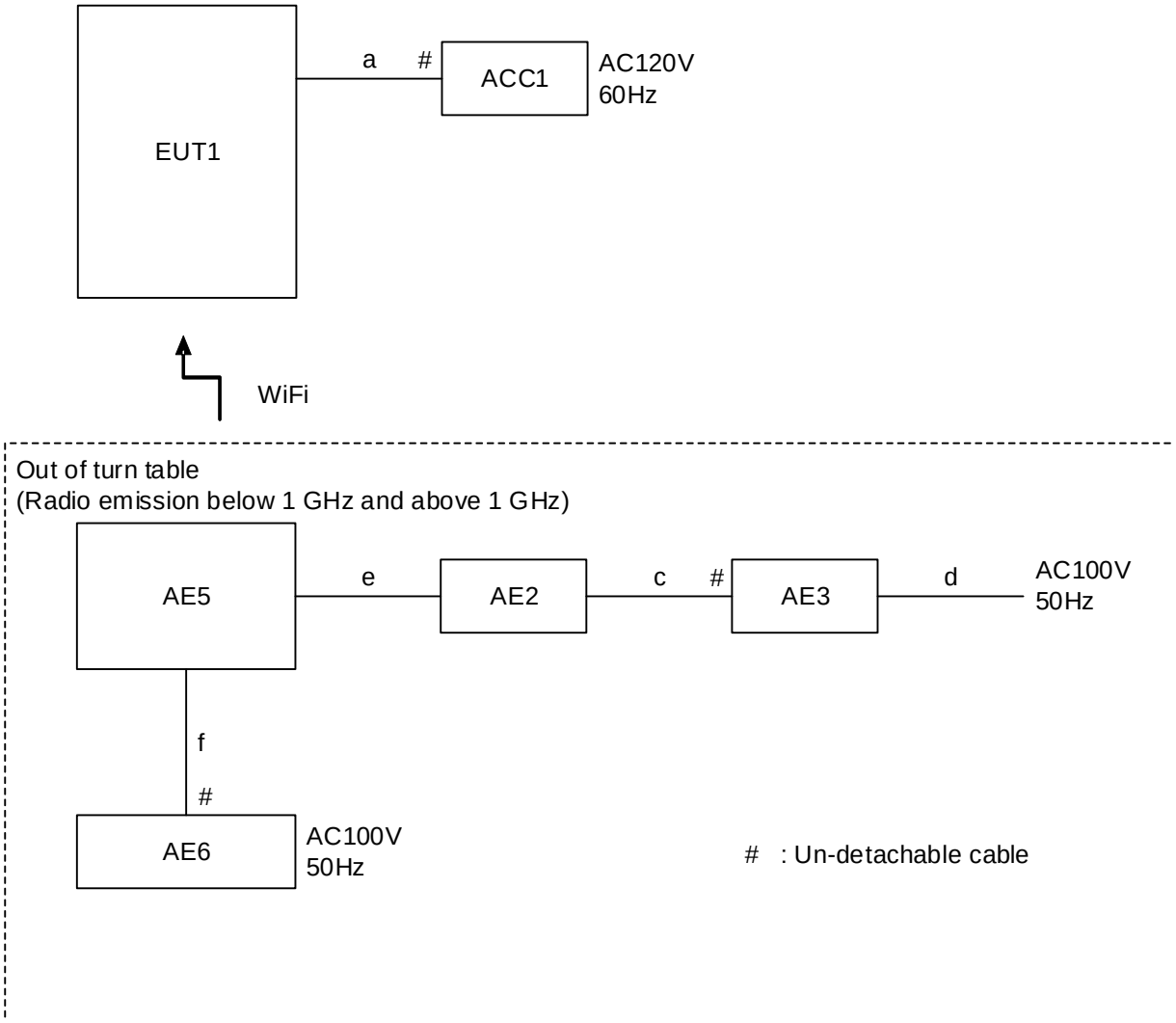
1. Out Camera with ADP and Earphone + GSM 1900 mode
2. In camera with ADP and earphone+ LTE Band 12 mode



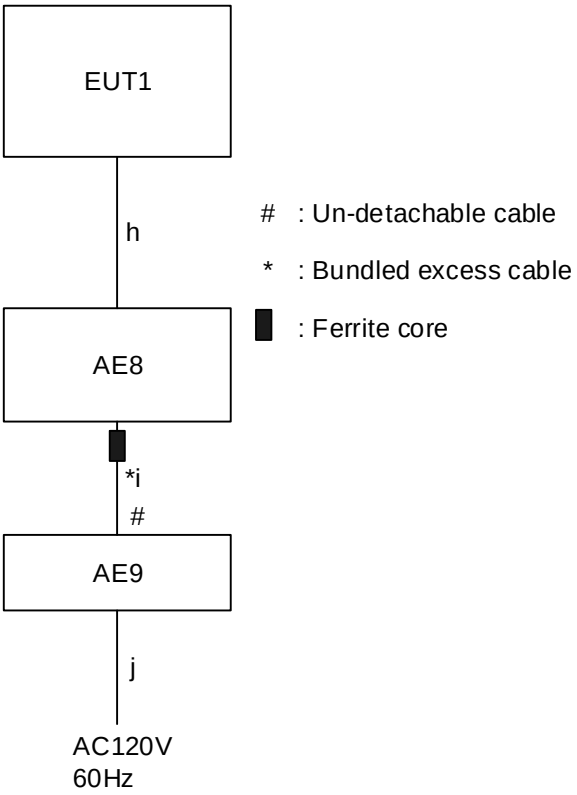
3. MP4 with ADP and Earphone + WiFi 11 a/ac + LTE Band 41 mode

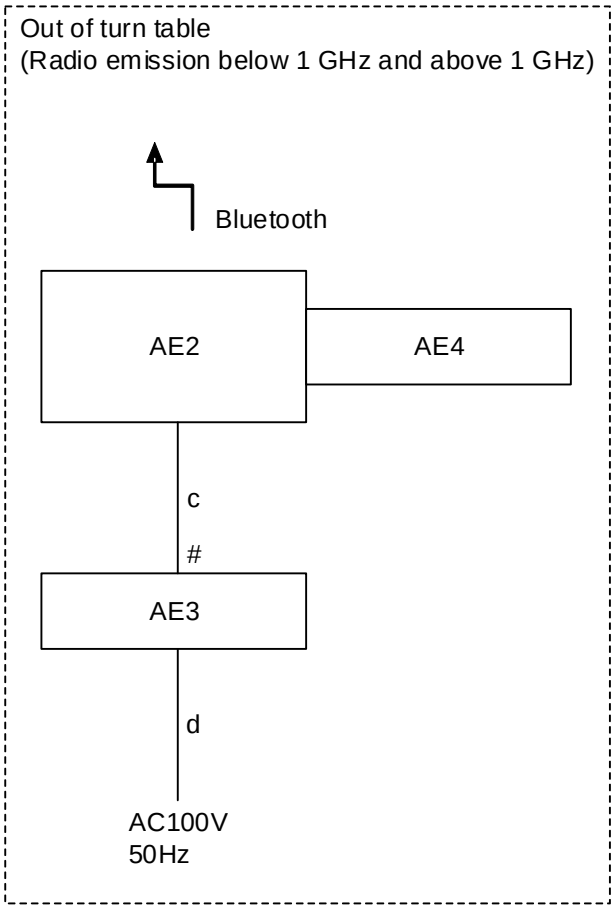


4. MP4 with ADP + WiFi 11 b/g/n + WCDMA Band 4 mode

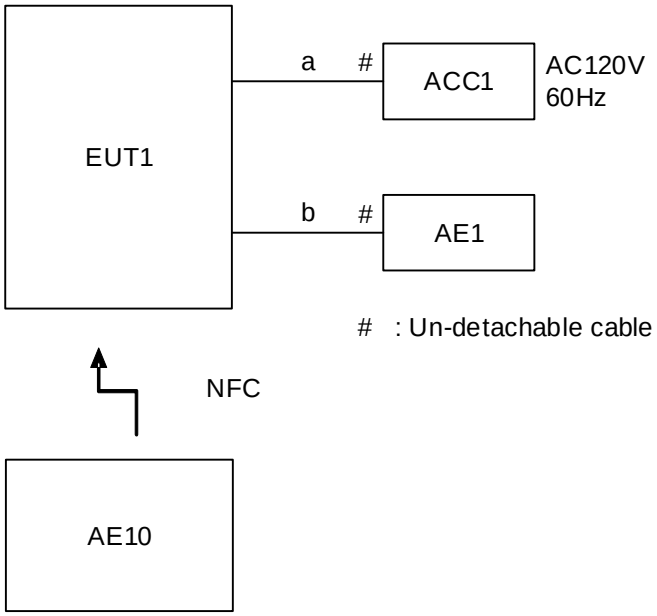


5. MP4 with Earphone + USB Read with PC + BT EDR + WCDMA Band 5 mode





6.with ADP and Earphone + NFC mode



4 Test Result

4.1 Conducted emission at mains port

4.1.1 Measurement condition

EUT is placed on a non-conducting table for table-top equipment or on insulation material for a floor-standing equipment. In addition, a table-top equipment is located 0.4 m to a metal reference plane.
Line Impedance Stabilization Network (LISN) is placed 0.8 m away from the EUT. The power code of the EUT is connected to LISN and its excess part is bundled in the center. The length of bundling is 0.3-0.4 m.
A power code of a peripheral is connected to LISN and terminated into 50 Ω.
Excess cables between equipment are bundled in the center. The length of bundling is 0.3-0.4 m.
Where LISN cannot be applied, the test is performed using a voltage probe.
After overall frequency range is investigated with spectrum analyzer using peak detector, measurements are performed with test receiver in setting to the defined values.

Items	Description
Frequency range	0.15 MHz-30 MHz
Test place	10 m Semi-Anechoic Chamber No. 1
EUT was placed on	Styrene foam table (W) 2.0 × (D) 1.0 × (H) 0.8 m
Metal reference plane	Vertical
Test receiver setting	Detector: Quasi-peak, Average Bandwidth: 9 kHz
Line Impedance Stabilization Network (LISN)	Specification: 50 Ω/50 µH Distance from EUT: 0.8 m

4.1.2 Calculation method

Emission Level = Reading + Factor*
Margin = Limit – Emission Level
*Note: Factor = LISN factor + Cable system loss + ATT. loss

Example)
Limit @ 6.770 MHz: 60.0 dBµV (Quasi-peak)
50.0 dBµV (Average)

Quasi-peak Reading = 41.2 dBµV Factor = 10.3 dB
Emission level = 41.2 + 10.3 = 51.5 dBµV
Margin = 60.0 - 51.5 = 8.5 dB

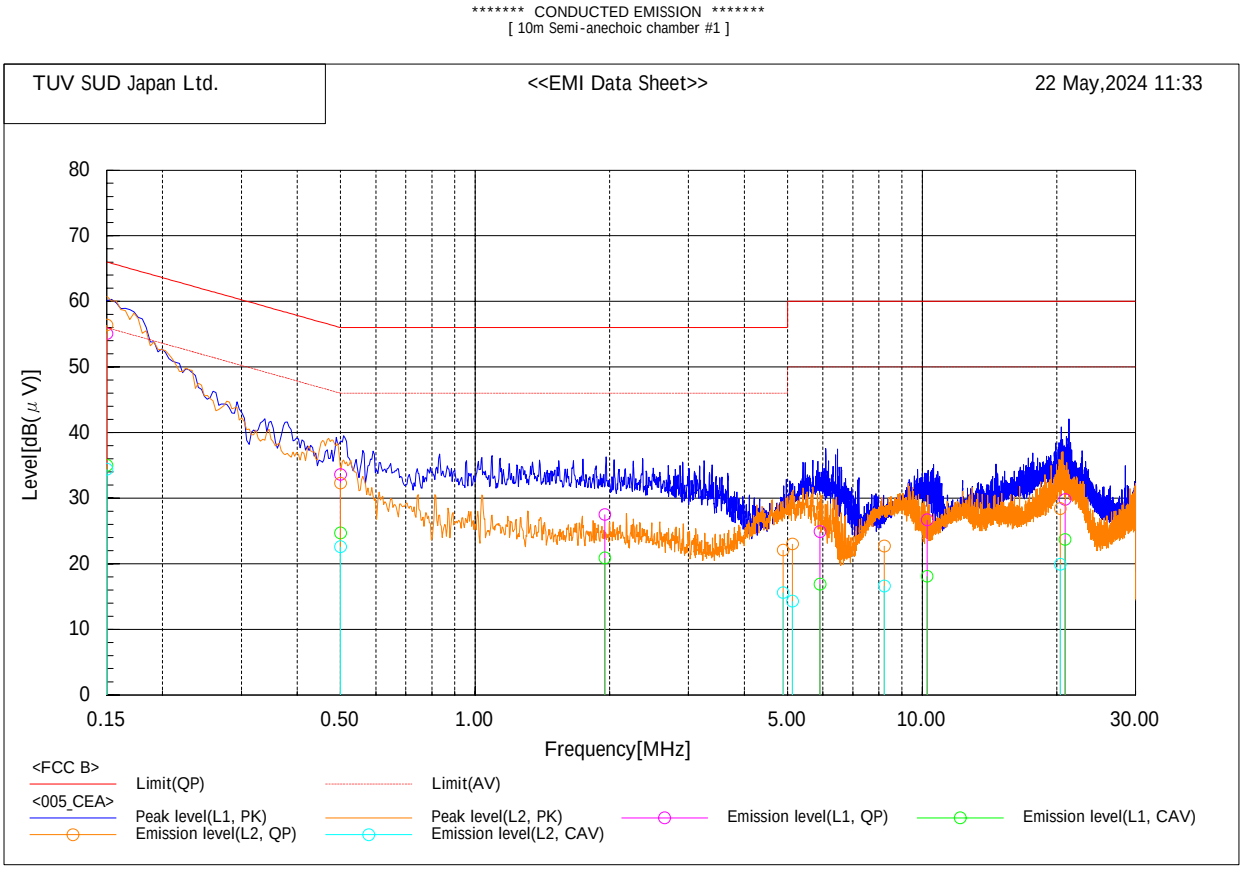
Average Reading = 35.0 dBµV Factor = 10.3 dB
Emission level = 35.0 + 10.3 = 45.3 dBµV
Margin = 50.0 - 45.3 = 4.7 dB

4.1.3 Test data and Configuration photographs

Operation mode	MP4 with Earphone + USB Read with PC + BT EDR + WCDMA Band 5 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0 EB1190EM, S/N: 353343640002975 - Modification State 0 EB1190EM, S/N: 353343640002983 - Modification State 0

S/N: 353343640002959

Standard : FCC Part 15 Class B
Date of test : 22 May,2024 11:33
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 18.7[°C], 50.3 [%], 988 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase



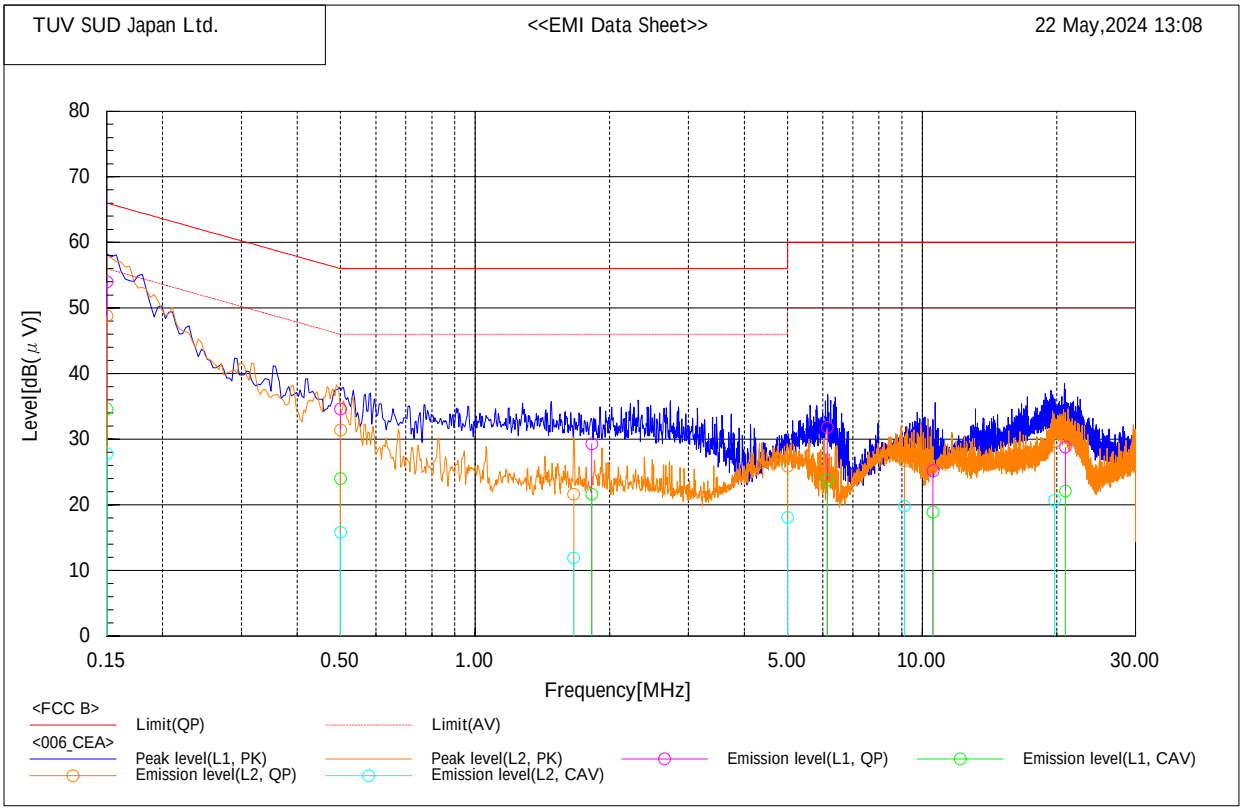
Final Result

Line	Frequency	Reading		Factor	Level		Limit		Margin	
	MHz	dB(uV)		dB	dB(uV)		dB(uV)		dB	
		QP	CAV		QP	CAV	QP	AV	QP	AV
L1	0.150	44.6	24.5	10.5	55.1	35.0	66.0	56.0	10.9	21.0
L1	0.500	23.3	14.4	10.3	33.6	24.7	56.0	46.0	22.4	21.3
L1	1.951	17.1	10.5	10.4	27.5	20.9	56.0	46.0	28.5	25.1
L1	5.908	14.2	6.2	10.7	24.9	16.9	60.0	50.0	35.1	33.1
L1	10.261	15.8	7.2	10.9	26.7	18.1	60.0	50.0	33.3	31.9
L1	20.877	18.6	12.5	11.2	29.8	23.7	60.0	50.0	30.2	26.3
L2	0.150	45.9	23.9	10.5	56.4	34.4	66.0	56.0	9.6	21.6
L2	0.500	22.0	12.3	10.3	32.3	22.6	56.0	46.0	23.7	23.4
L2	4.885	11.5	5.0	10.6	22.1	15.6	56.0	46.0	33.9	30.4
L2	5.129	12.3	3.6	10.7	23.0	14.3	60.0	50.0	37.0	35.7
L2	8.227	11.9	5.8	10.8	22.7	16.6	60.0	50.0	37.3	33.4
L2	20.354	17.1	8.6	11.3	28.4	19.9	60.0	50.0	31.6	30.1

S/N: 353343640002975

Standard	:	FCC Part 15 Class B
Date of test	:	22 May,2024 13:08
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	18.7[°C], 50.3 [%], 988 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase

******* CONDUCTED EMISSION *******
[10m Semi-anechoic chamber #1]



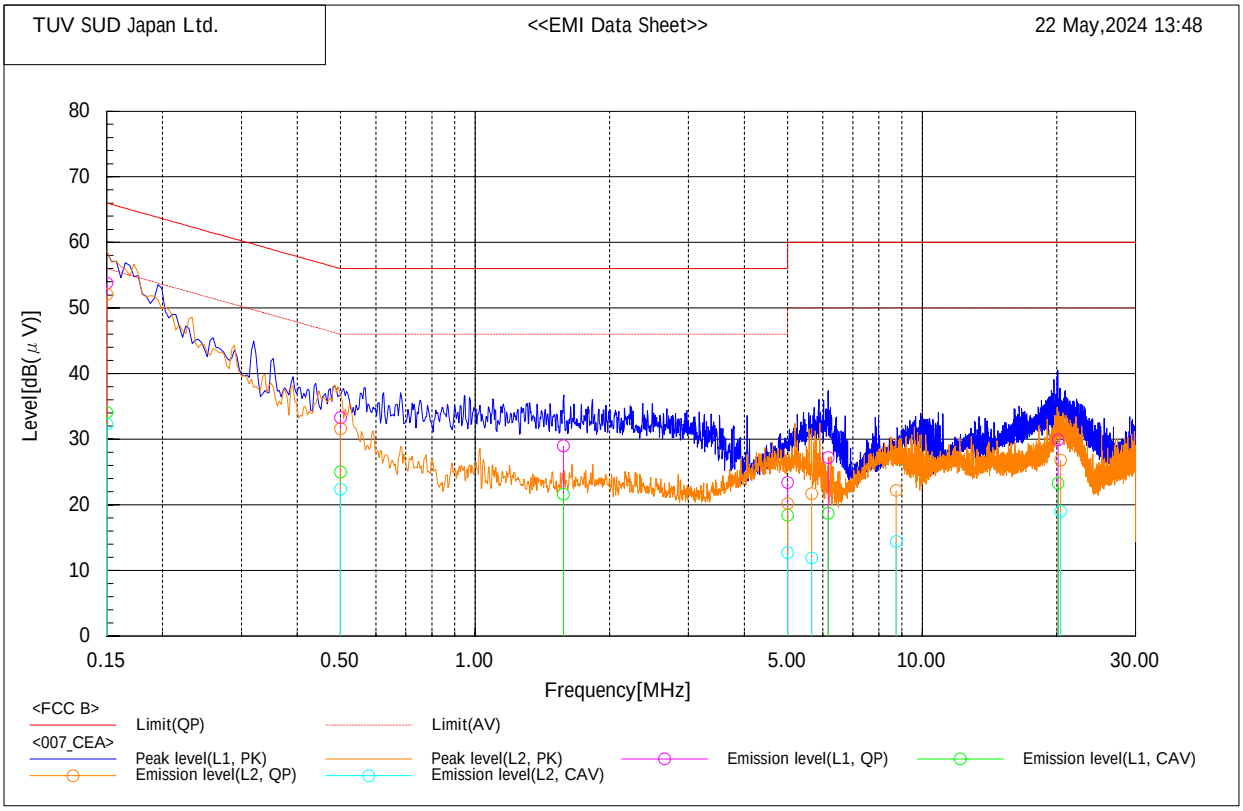
Final Result

Line	Frequency	Reading		Factor	Level		Limit		Margin	
	MHz	dB(uV)		dB	dB(uV)		dB(uV)		dB	
		QP	CAV		QP	CAV	QP	AV	QP	AV
L1	0.150	43.5	24.1	10.5	54.0	34.6	66.0	56.0	12.0	21.4
L1	0.500	24.3	13.7	10.3	34.6	24.0	56.0	46.0	21.4	22.0
L1	1.824	18.9	11.2	10.4	29.3	21.6	56.0	46.0	26.7	24.4
L1	6.134	21.1	13.1	10.7	31.8	23.8	60.0	50.0	28.2	26.2
L1	10.577	14.3	8.0	10.9	25.2	18.9	60.0	50.0	34.8	31.1
L1	20.912	17.6	10.9	11.2	28.8	22.1	60.0	50.0	31.2	27.9
L2	0.150	38.3	17.3	10.5	48.8	27.8	66.0	56.0	17.2	28.2
L2	0.500	21.1	5.5	10.3	31.4	15.8	56.0	46.0	24.6	30.2
L2	1.661	11.2	1.5	10.4	21.6	11.9	56.0	46.0	34.4	34.1
L2	4.999	15.3	7.5	10.6	25.9	18.1	56.0	46.0	30.1	27.9
L2	9.129	15.8	8.9	10.9	26.7	19.8	60.0	50.0	33.3	30.2
L2	19.782	18.3	9.4	11.3	29.6	20.7	60.0	50.0	30.4	29.3

S/N: 353343640002983

Standard	:	FCC Part 15 Class B
Date of test	:	22 May,2024 13:48
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	18.7[°C], 50.3 [%], 988 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase

******* CONDUCTED EMISSION *******
[10m Semi-anechoic chamber #1]



Final Result

Line	Frequency	Reading		Factor	Level		Limit		Margin	
	MHz	dB(uV)		dB	dB(uV)		dB(uV)		dB	
		QP	CAV		QP	CAV	QP	AV	QP	AV
L1	0.150	43.3	23.6	10.5	53.8	34.1	66.0	56.0	12.2	21.9
L1	0.500	23.0	14.7	10.3	33.3	25.0	56.0	46.0	22.7	21.0
L1	1.575	18.6	11.2	10.4	29.0	21.6	56.0	46.0	27.0	24.4
L1	4.999	12.8	7.8	10.6	23.4	18.4	56.0	46.0	32.6	27.6
L1	6.165	16.5	8.0	10.7	27.2	18.7	60.0	50.0	32.8	31.3
L1	20.127	18.7	12.1	11.2	29.9	23.3	60.0	50.0	30.1	26.7
L2	0.150	41.6	21.8	10.5	52.1	32.3	66.0	56.0	13.9	23.7
L2	0.500	21.3	12.1	10.3	31.6	22.4	56.0	46.0	24.4	23.6
L2	4.999	9.6	2.1	10.6	20.2	12.7	56.0	46.0	35.8	33.3
L2	5.660	11.0	1.2	10.7	21.7	11.9	60.0	50.0	38.3	38.1
L2	8.745	11.4	3.6	10.8	22.2	14.4	60.0	50.0	37.8	35.6
L2	20.403	15.5	7.7	11.3	26.8	19.0	60.0	50.0	33.2	31.0

4.2 Radiated emission (below 1 GHz)

4.2.1 Measurement condition

EUT is placed on a non-conducting table for table-top equipment or on insulation material for a floor-standing equipment. The non-conducting table or the insulation material is placed on a rotating turn table.
Excess cables between equipment are bundled in the center. The length of bundling is 0.3-0.4 m.
An antenna is adjusted between 1-4 m in height and varied its polarization (horizontal and vertical), and the EUT azimuth is varied by the rotating turntable 0 to 360 degrees.
After overall frequency range is investigated with spectrum analyzer using peak detector, measurements are performed with test receiver in setting to the defined values.

Items	Description
Frequency range	30 MHz-1000 MHz
Test place	10 m Semi-Anechoic Chamber No. 1
EUT was placed on	Styrene foam table (W) 2.0 × (D) 1.0 × (H) 0.8 m
Axis	0°-360°
Antenna	Distance from EUT: 3 m Height: 1-4 m Polarity: Horizontal/Vertical
Test receiver setting	Detector: Quasi-peak Bandwidth: 120 kHz

4.2.2 Calculation method

Emission level = Reading + Factor*
Margin = Limit - Emission level
*Note: Factor = Antenna factor + Cable system loss + ATT. loss - Amplifier Gain

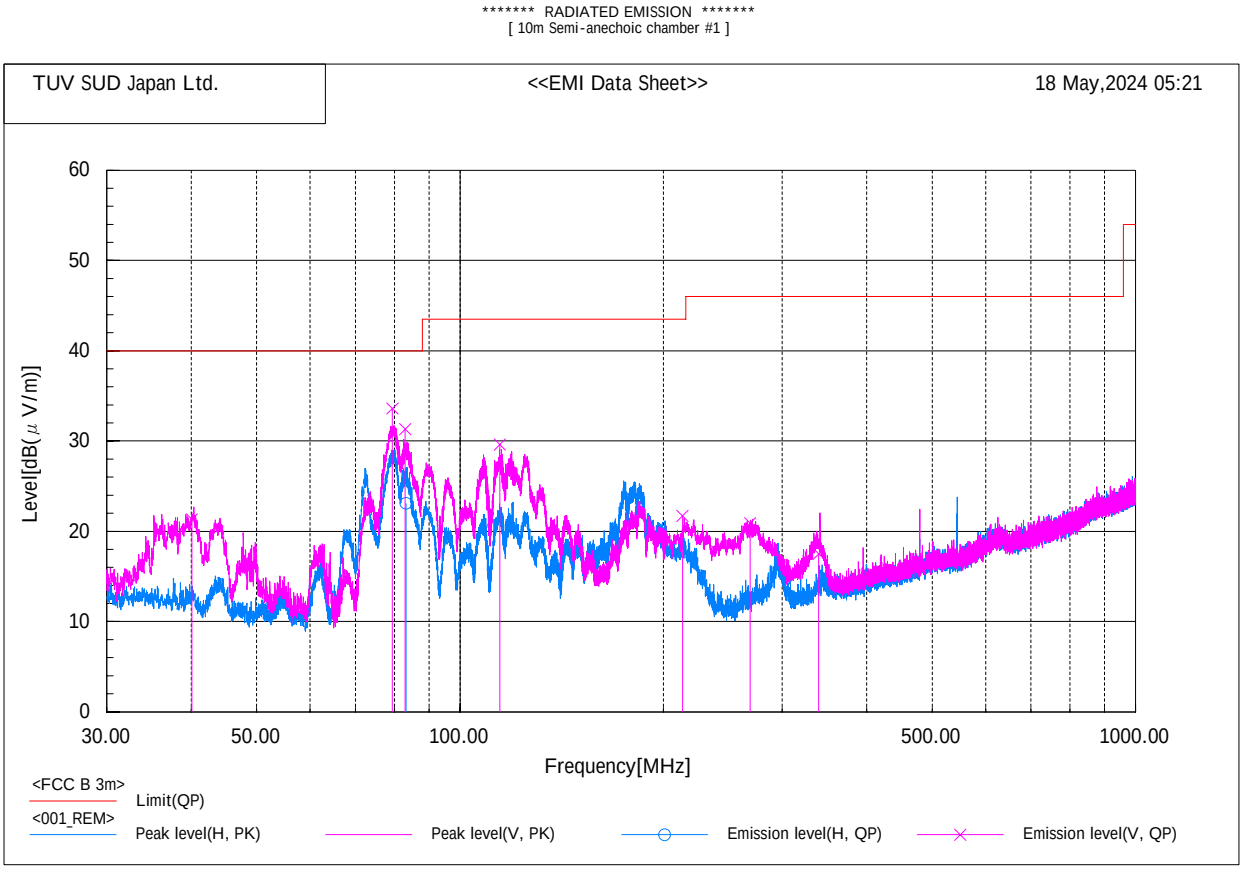
Example)
Limit @ 350.0 MHz: 37.0 dBµV/m (Quasi-peak)

Quasi-peak Reading = 41.1 dBµV Factor = -11.8 dB/m
Emission level = 41.1 - 11.8 = 29.3 dBµV/m
Margin = 37.0 - 29.3 = 7.7 dB

4.2.3 Test data and Configuration photographs

Operation mode	Out Camera with ADP and Earphone + GSM 1900 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0 EB1190EM, S/N: 353343640002975 - Modification State 0 EB1190EM, S/N: 353343640002983 - Modification State 0

S/N: 353343640002959
Standard : FCC Part 15 Class B
Date of test : 18 May,2024 05:21
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 19.3 [°C], 46.1 [%], 976 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase

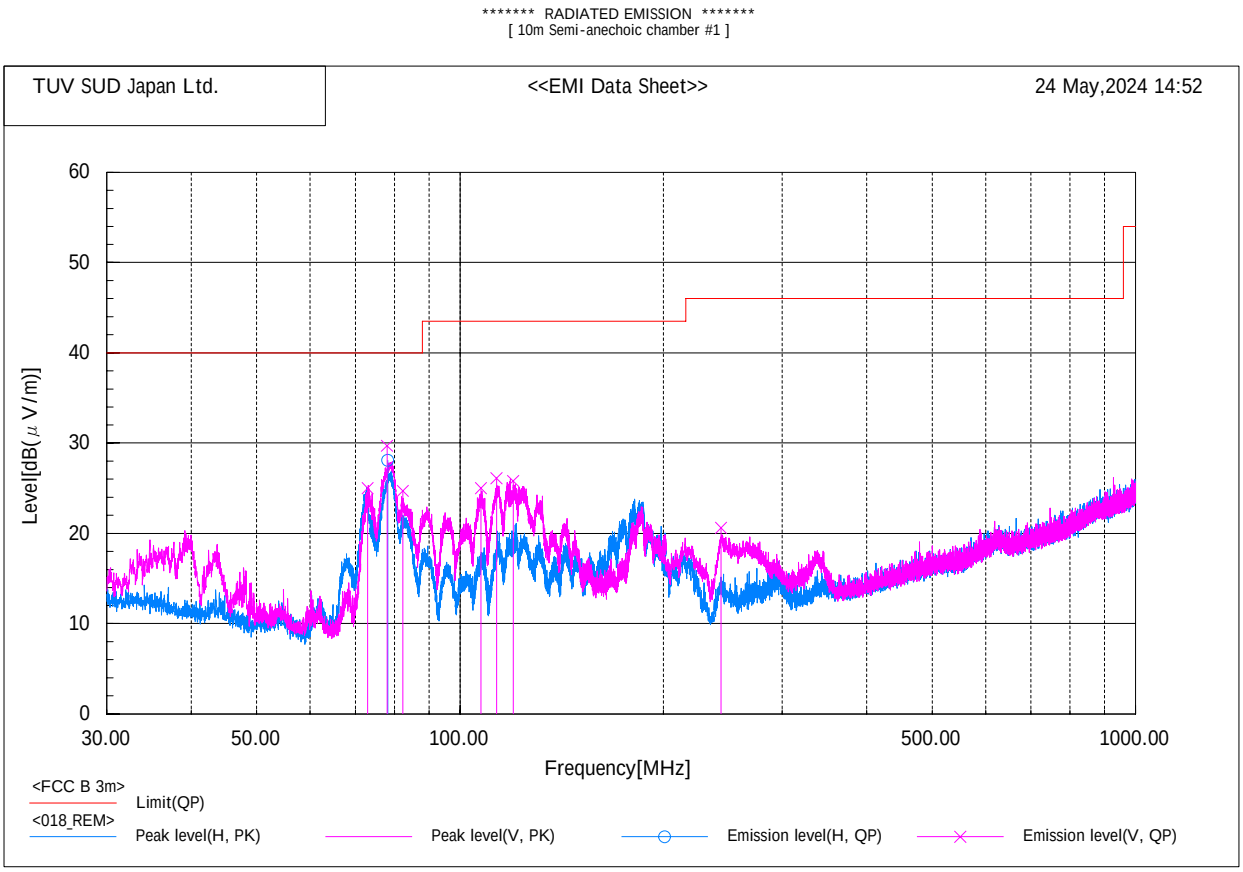


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
40.092	V	36.3	-15.0	21.3	40.0	18.7	100.0	234.0
79.420	V	50.0	-16.4	33.6	40.0	6.4	100.0	228.0
82.974	V	47.6	-16.3	31.3	40.0	8.7	100.0	227.0
83.187	H	39.4	-16.3	23.1	40.0	16.9	400.0	89.0
114.571	V	44.8	-15.2	29.6	43.5	13.9	100.0	240.0
213.492	V	38.3	-16.6	21.7	43.5	21.8	159.0	62.0
268.834	V	35.7	-14.8	20.9	46.0	25.1	190.0	34.0
339.621	V	30.0	-12.5	17.5	46.0	28.5	184.0	106.0

S/N: 353343640002975

Standard	:	FCC Part 15 Class B
Date of test	:	24 May,2024 14:52
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	22.9 [°C], 47.7 [%], 976 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase

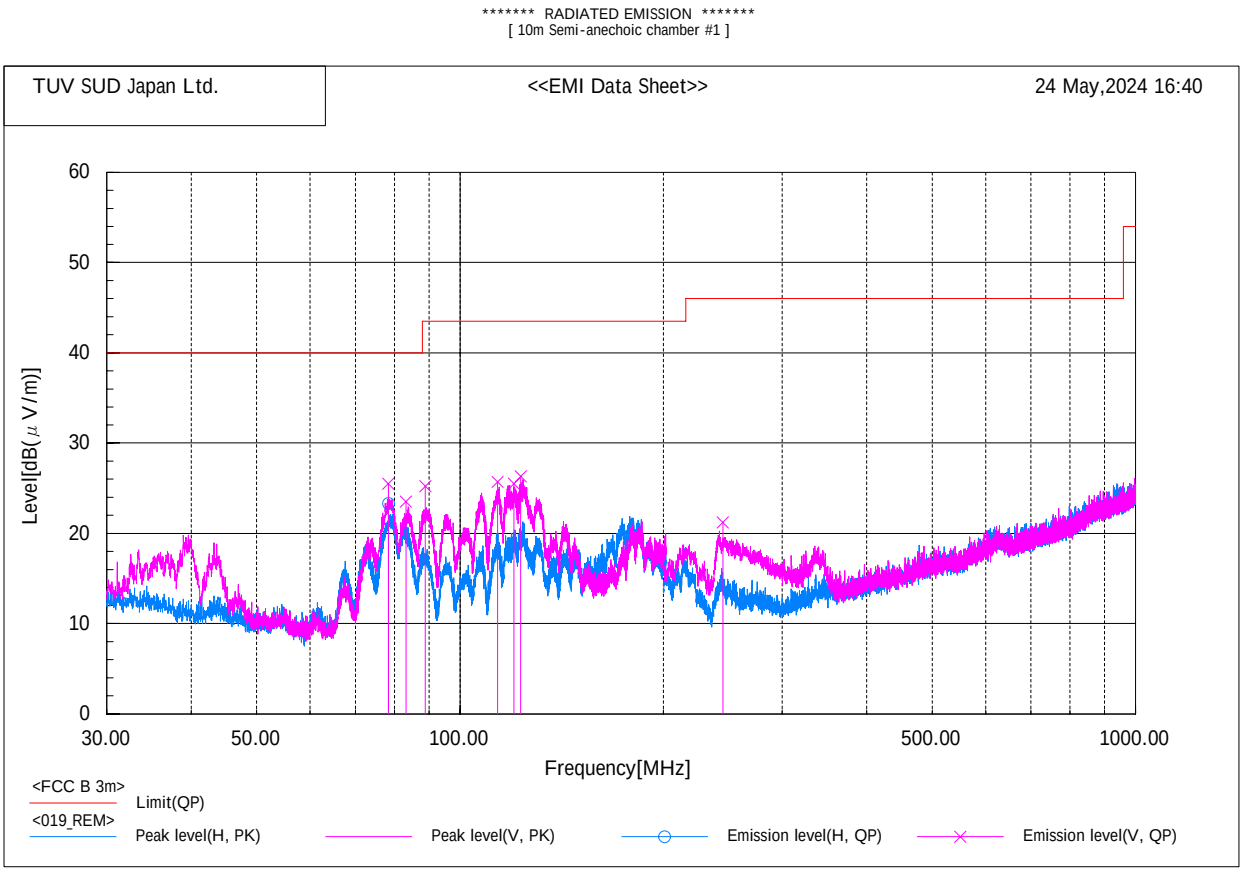


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
72.982	V	41.7	-16.7	25.0	40.0	15.0	100.0	98.0
77.981	V	46.1	-16.4	29.7	40.0	10.3	100.0	97.0
78.139	H	44.5	-16.4	28.1	40.0	11.9	340.0	270.0
82.312	V	41.0	-16.3	24.7	40.0	15.3	100.0	94.0
107.396	V	40.6	-15.6	25.0	43.5	18.5	100.0	98.0
113.270	V	41.4	-15.3	26.1	43.5	17.4	100.0	113.0
119.892	V	40.6	-14.8	25.8	43.5	17.7	100.0	156.0
243.488	V	36.6	-16.0	20.6	46.0	25.4	278.0	203.0

S/N: 353343640002983

Standard	:	FCC Part 15 Class B
Date of test	:	24 May,2024 16:40
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	22.9 [°C], 47.7 [%], 976 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase

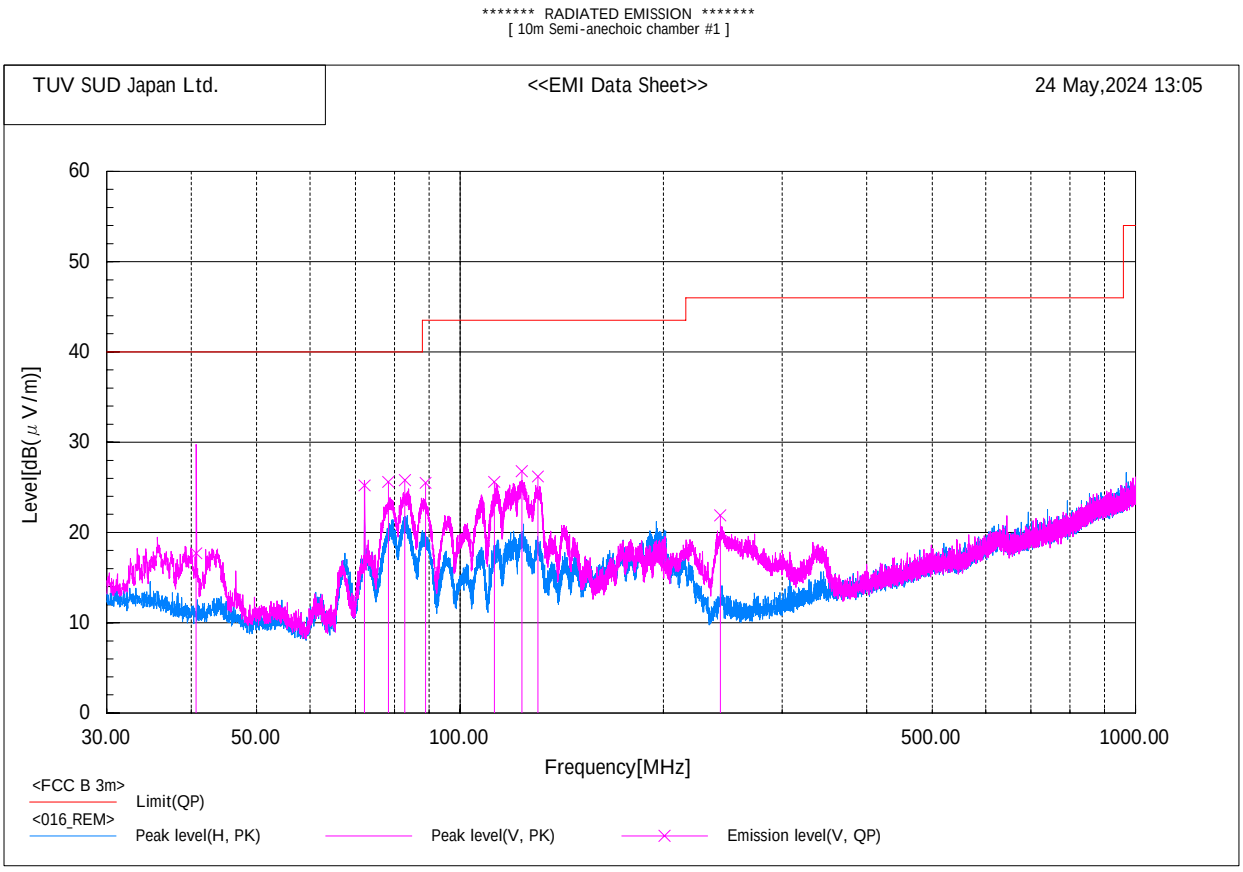


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
78.343	V	41.9	-16.4	25.5	40.0	14.5	100.0	121.0
78.387	H	39.7	-16.4	23.3	40.0	16.7	400.0	258.0
83.168	V	39.8	-16.3	23.5	40.0	16.5	100.0	140.0
88.892	V	41.4	-16.2	25.2	43.5	18.3	100.0	155.0
113.695	V	40.9	-15.2	25.7	43.5	17.8	100.0	122.0
120.151	V	40.3	-14.8	25.5	43.5	18.0	100.0	178.0
123.019	V	40.9	-14.6	26.3	43.5	17.2	100.0	159.0
245.038	V	37.2	-16.0	21.2	46.0	24.8	290.0	210.0

Operation mode	In camera with ADP and earphone + LTE Band 12 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959
Standard : FCC Part 15 Class B
Date of test : 24 May,2024 13:05
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 22.9 [°C], 47.7 [%], 976 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase

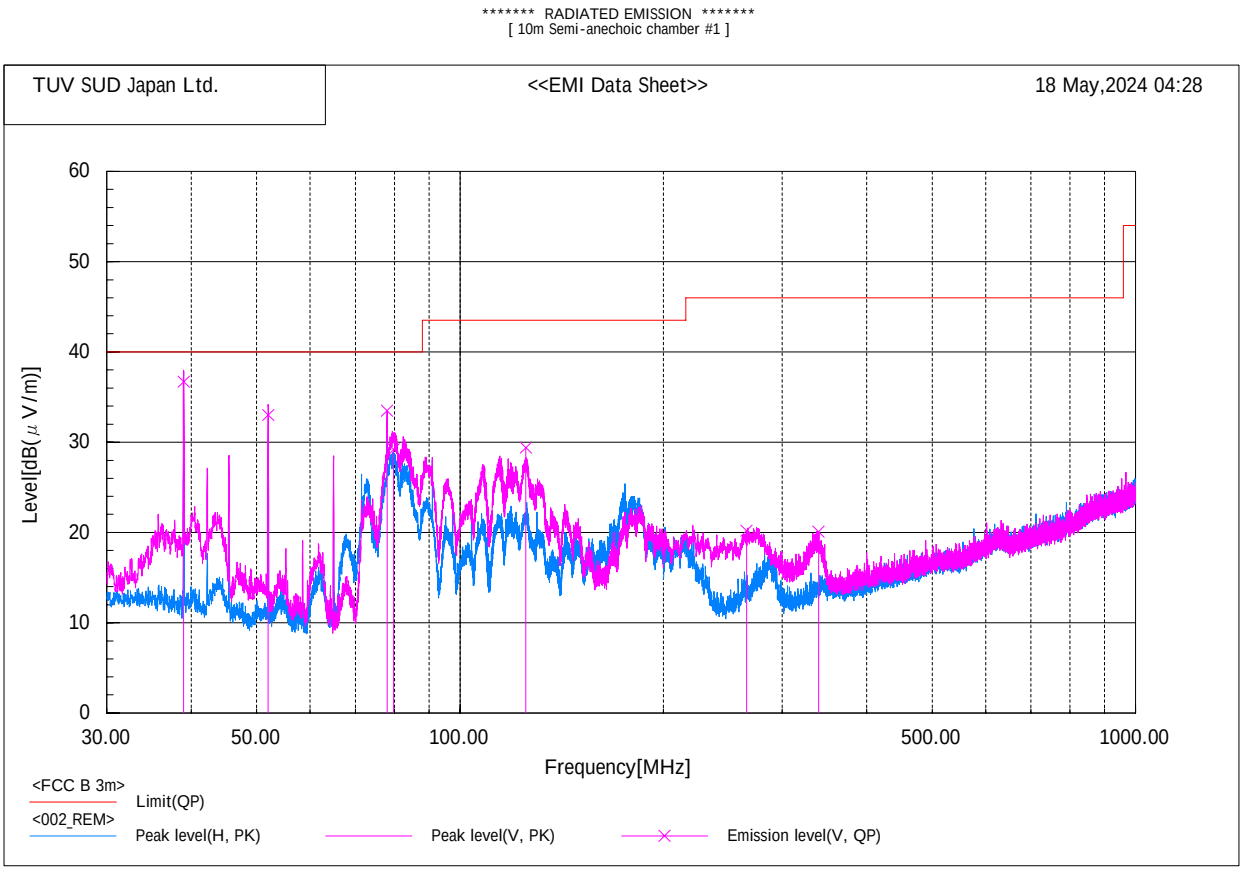


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
40.683	V	32.7	-15.0	17.7	40.0	22.3	100.0	231.0
72.237	V	41.9	-16.7	25.2	40.0	14.8	100.0	286.0
78.320	V	42.0	-16.4	25.6	40.0	14.4	100.0	101.0
82.884	V	42.1	-16.3	25.8	40.0	14.2	100.0	105.0
88.920	V	41.7	-16.2	25.5	43.5	18.0	100.0	105.0
112.433	V	40.9	-15.3	25.6	43.5	17.9	100.0	132.0
123.433	V	41.4	-14.6	26.8	43.5	16.7	100.0	139.0
130.431	V	40.3	-14.1	26.2	43.5	17.3	100.0	149.0
242.848	V	37.9	-16.0	21.9	46.0	24.1	266.0	40.0

Operation mode	MP4 with ADP and Earphone + WiFi 11 a/ac + LTE Band 41 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959
Standard : FCC Part 15 Class B
Date of test : 18 May,2024 04:28
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 19.3 [°C], 46.1 [%], 976 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase

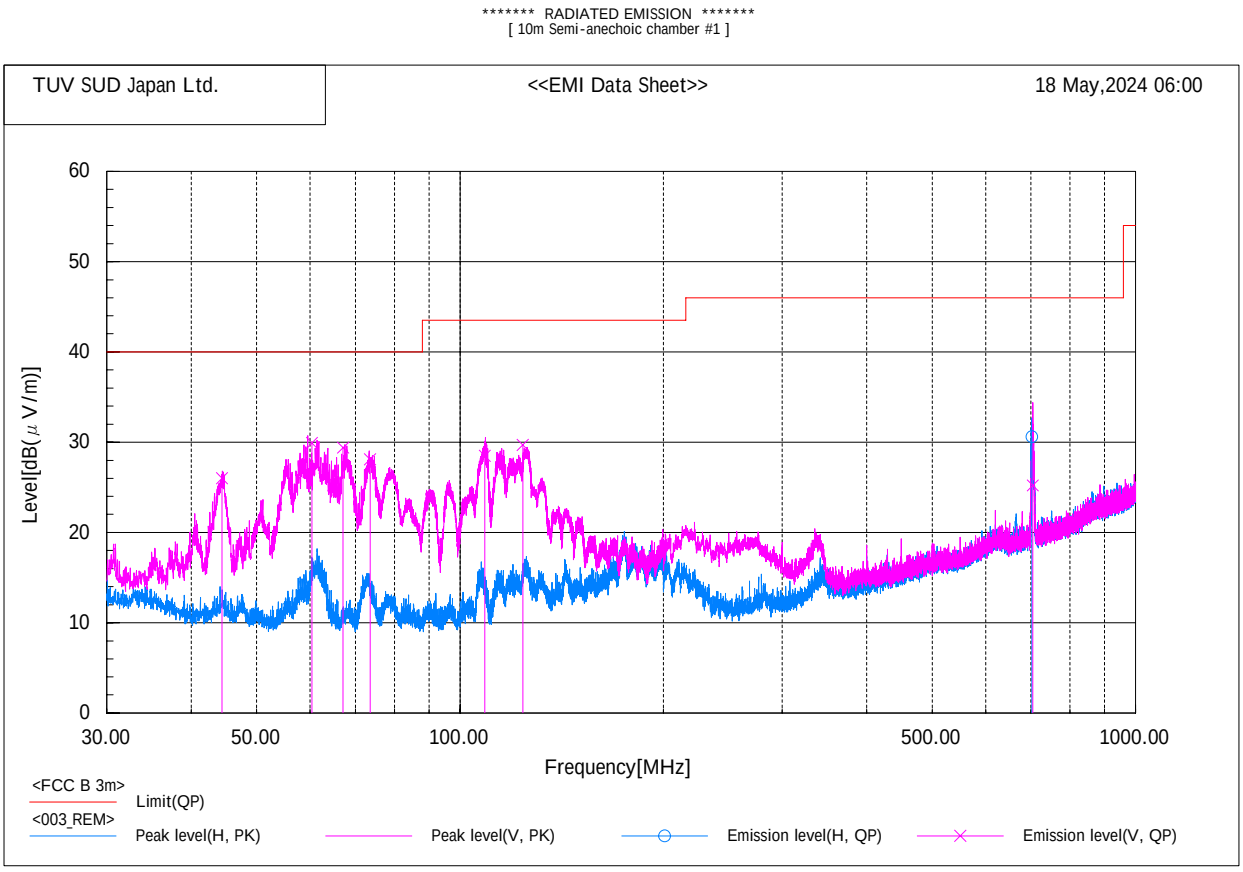


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
38.997	V	51.5	-14.8	36.7	40.0	3.3	100.0	16.0
51.995	V	49.3	-16.3	33.0	40.0	7.0	100.0	260.0
78.001	V	49.9	-16.4	33.5	40.0	6.5	100.0	247.0
79.775	V	45.5	-16.3	29.2	40.0	10.8	100.0	358.0
125.153	V	43.9	-14.5	29.4	43.5	14.1	100.0	252.0
265.543	V	35.2	-15.0	20.2	46.0	25.8	173.0	0.0
339.436	V	32.6	-12.5	20.1	46.0	25.9	159.0	172.0

Operation mode	MP4 with ADP + WiFi 11 b/g/n + WCDMA Band 4 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959
Standard : FCC Part 15 Class B
Date of test : 18 May,2024 06:00
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 19.3 [°C], 46.1 [%], 976 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase

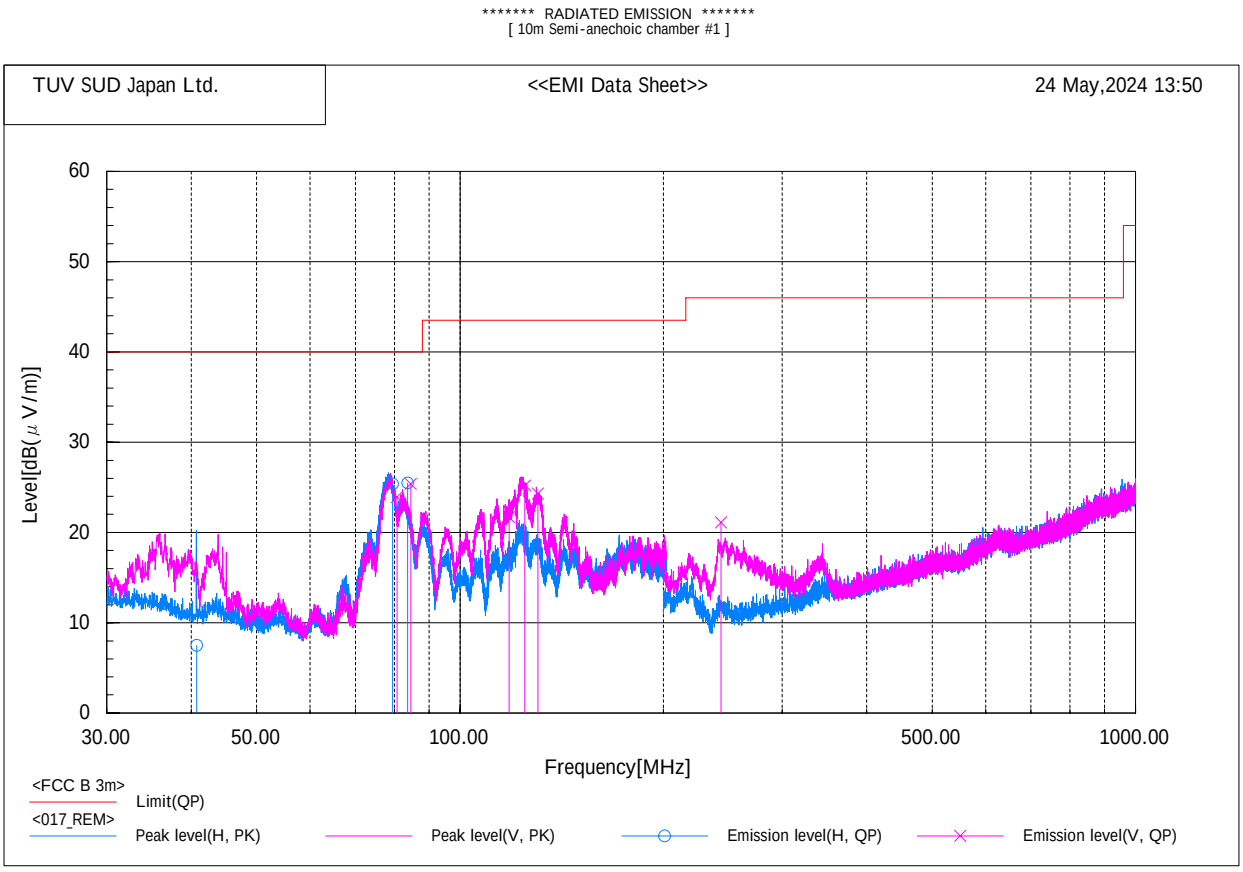


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
44.437	V	41.5	-15.5	26.0	40.0	14.0	100.0	212.0
60.376	V	46.8	-16.9	29.9	40.0	10.1	100.0	222.0
67.156	V	46.4	-17.0	29.4	40.0	10.6	100.0	222.0
73.576	V	44.7	-16.6	28.1	40.0	11.9	100.0	220.0
108.806	V	44.1	-15.6	28.5	43.5	15.0	100.0	252.0
123.804	V	44.2	-14.5	29.7	43.5	13.8	100.0	250.0
702.213	H	36.5	-5.9	30.6	46.0	15.4	311.0	14.0
704.798	V	31.1	-5.9	25.2	46.0	20.8	135.0	136.0

Operation mode	with ADP and Earphone + NFC mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959
Standard : FCC Part 15 Class B
Date of test : 24 May,2024 13:50
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 22.9 [°C], 47.7 [%], 976 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase

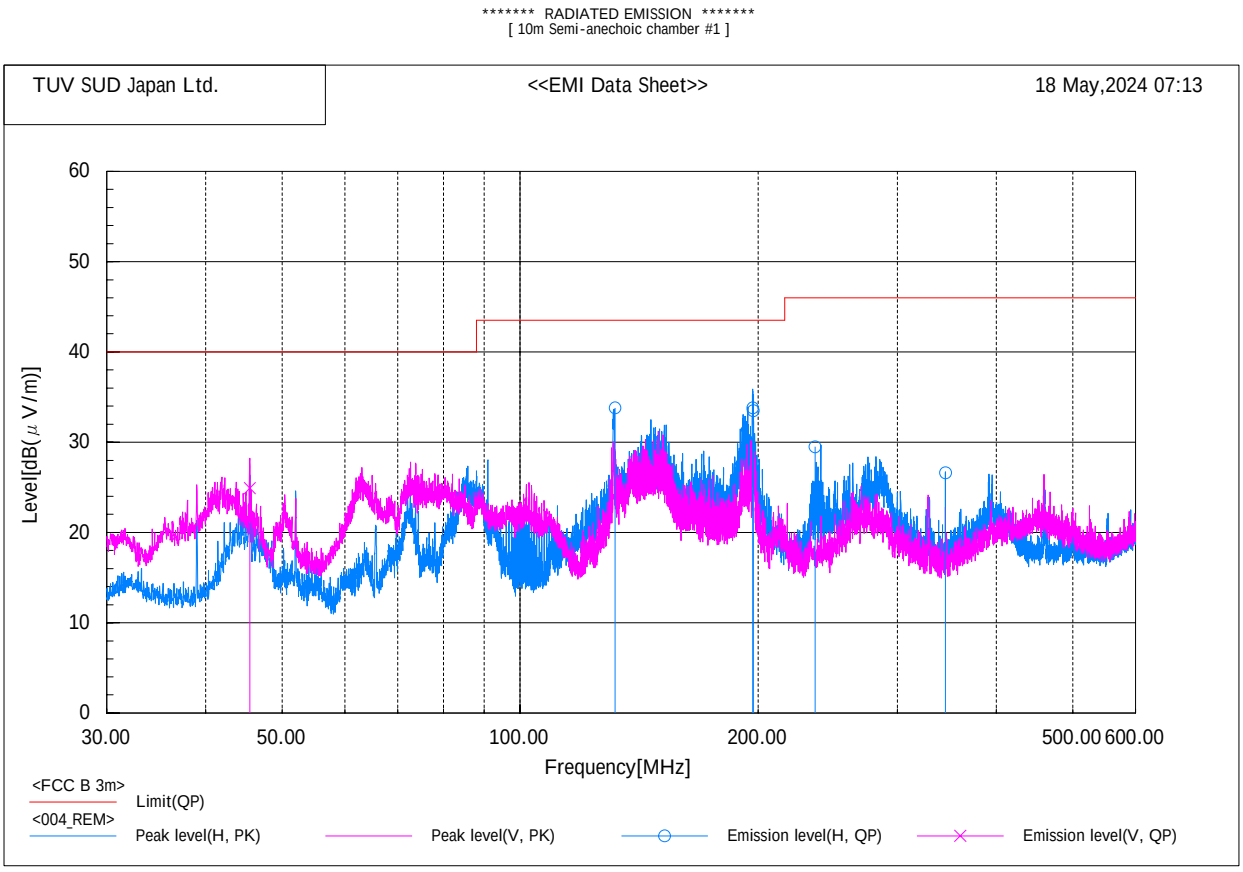


Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
40.751	H	22.5	-15.0	7.5	40.0	32.5	100.0	358.0
79.492	H	41.8	-16.4	25.4	40.0	14.6	400.0	96.0
80.664	V	40.2	-16.3	23.9	40.0	16.1	100.0	218.0
83.673	H	41.8	-16.3	25.5	40.0	14.5	400.0	97.0
84.532	V	41.7	-16.3	25.4	40.0	14.6	100.0	215.0
118.145	V	36.6	-14.9	21.7	43.5	21.8	100.0	229.0
124.744	V	39.7	-14.5	25.2	43.5	18.3	100.0	227.0
130.406	V	38.4	-14.1	24.3	43.5	19.2	100.0	238.0
243.408	V	37.1	-16.0	21.1	46.0	24.9	268.0	226.0

Operation mode	MP4 with Earphone + USB Read with PC + BT EDR + WCDMA Band 5 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959
Standard : FCC Part 15 Class B
Date of test : 18 May,2024 07:13
Operator : Yoshiyuki Takahashi
Temp, Hum, Atm : 19.3 [°C], 46.1 [%], 976 [hPa]
Supply power : AC 120 V, 60 Hz, 1 phase



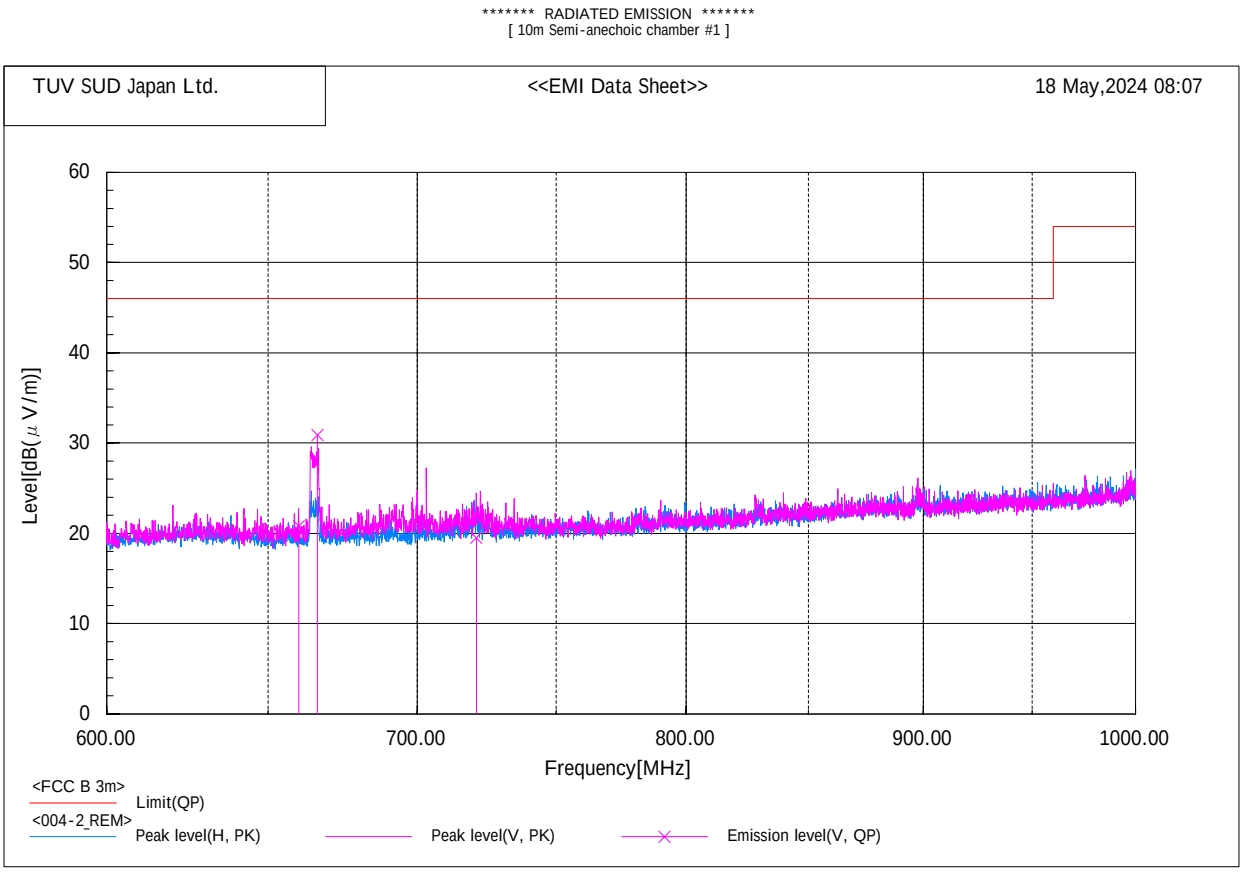
Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
45.500	V	40.4	-15.5	24.9	40.0	15.1	294.0	294.0
131.792	H	47.7	-13.9	33.8	43.5	9.7	274.0	222.0
196.767	H	44.7	-10.9	33.8	43.5	9.7	178.0	200.0
197.162	H	44.4	-10.9	33.5	43.5	10.0	172.0	202.0
235.998	H	45.5	-16.0	29.5	46.0	16.5	107.0	199.0
344.991	H	38.7	-12.1	26.6	46.0	19.4	100.0	191.0

With wireless operation: Measurement was performed to the band that was not affected by rejection filter due to radio frequency.

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	18 May,2024 08:07
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	19.3 [°C], 46.1 [%], 976 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase



Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)	dB(1/m)	dB(μV/m)	dB(μV/m)	dB	cm	deg
		QP		QP	QP	QP		
660.005	V	27.4	-6.6	20.8	46.0	25.2	100.0	260.0
666.161	V	37.4	-6.5	30.9	46.0	15.1	100.0	343.0
720.829	V	25.1	-5.6	19.5	46.0	26.5	100.0	176.0

Without wireless operation: Additional measurement was performed only to the band that was affected by filter.

4.3 Radiated emission (above 1 GHz)

4.3.1 Measurement condition

EUT is placed on a styrene form table for table-top equipment or on insulation material for a floor-standing equipment. The styrene form table or the insulation material is placed on a rotating turn table.
Excess cables between equipment are bundled in the center. The length of bundling is 0.3-0.4 m.
Absorbers are placed between the EUT and an antenna.
The antenna is adjusted between 1-4 m in height and varied its polarization (horizontal and vertical), and the EUT azimuth is varied by the rotating turntable 0 to 360 degrees. Where height of the antenna is changed, its angle is also adjusted to the position of the EUT.
After overall frequency range is investigated with spectrum analyzer using peak detector, measurements are performed with test receiver in setting to the defined values.
The antenna is positioned from the test volume that was predetermined by the site VSWR measurement. Since this predetermined test volume is different from maximum circumference where the EUT and the peripheral devices are actually placed, the measurement distance conversion factor is added to the measurement data.

Items	Description
Frequency range	1000 MHz-11000 MHz, 1000 MHz-12500 MHz, 1000 MHz-29000 MHz
Test place	10 m Semi-Anechoic Chamber No. 1
EUT was placed on	Styrene foam table (W) 2.0 × (D) 1.0 × (H) 0.8 m
Axis	0°-360°
Antenna	Distance from EUT: 390 cm, 402 cm Height: 100-400 cm Polarity: Horizontal/Vertical
Test receiver setting	Detector: Peak, Average Bandwidth: 1 MHz

Antenna 3 dB beamwidth
Antenna: 3117

Frequency (GHz)	θ3 dB (°)	3 dB beamwidth w (m)
1.0	83	5.31
2.0	51	2.86
3.0	64	3.75
4.0	51	2.86
5.0	52	2.93
6.0	51	2.86

Measurement distance: d = 3.0 m
$W = 2 \times d \times \tan(0.5 \times \theta 3\ dB)$

4.3.2 Calculation method

Emission level = Reading + CF*

Margin = Limit - Emission level
*Note: CF (correction factor) = TF (Transducer Factor; Antenna factor) + PF (Path Factor; Cable system loss + ATT. loss - Amplifier Gain) + DF (Distance correction Factor)

Example)

Limit @ 1100.0 MHz: 70.0 dBµV/m (Peak)
50.0 dBµV/m (Average)

Measurement distance: 3.25 m
Distance conversion Factor: 20 log (3.25m/3.0m) = 0.7 dB

Peak
Reading = 50.2 dBµV CF = 2.4 dB
Emission level = 50.2 + 2.4 = 52.6 dBµV/m
Margin = 70.0 - 52.6 = 17.4 dB

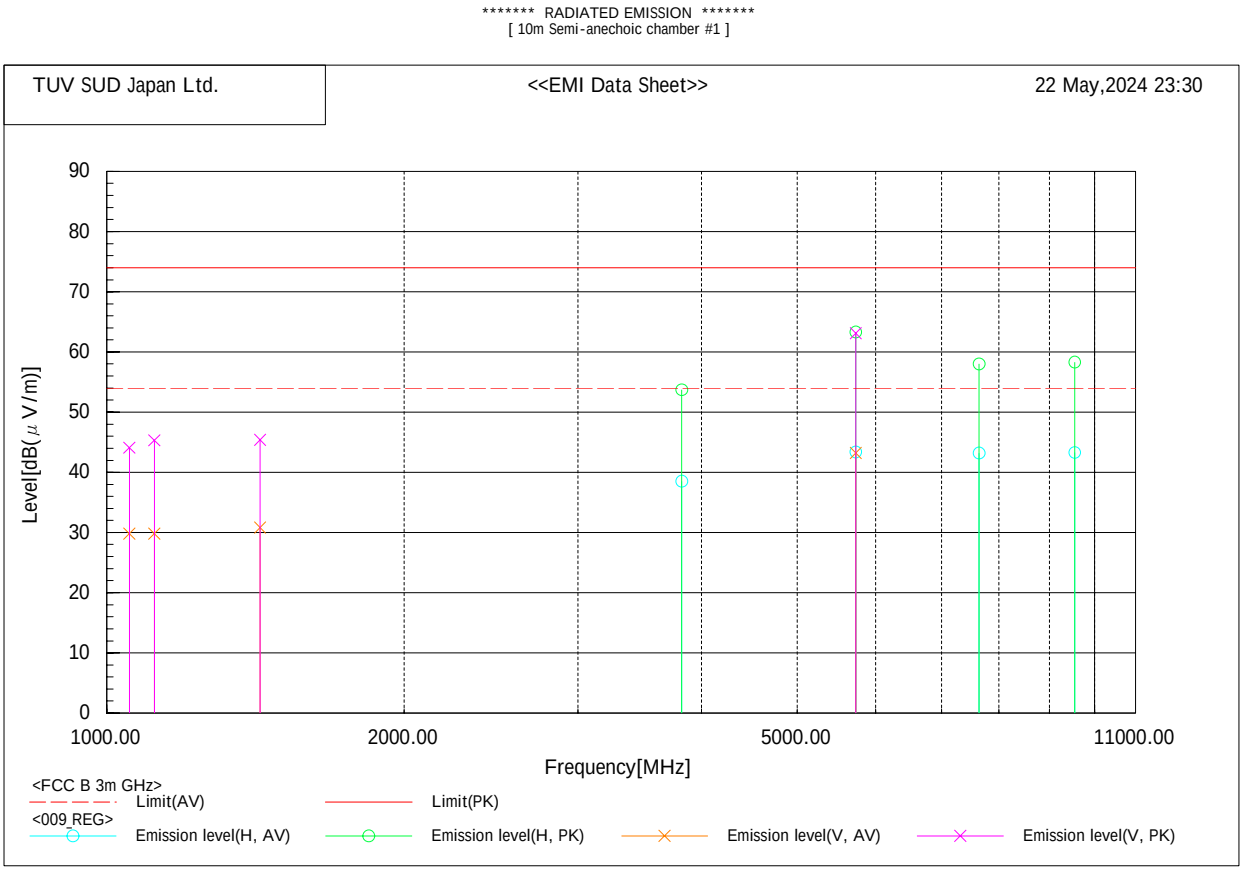
Average
Reading = 32.0 dBµV CF = 2.4 dB
Emission level = 32.0 + 2.4 = 34.4 dBµV/m
Margin = 50.0 - 34.4 = 15.6 dB

4.3.3 Test data and Configuration photographs

Operation mode	Out Camera with ADP and Earphone + GSM 1900 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0 EB1190EM, S/N: 353343640002975 - Modification State 0 EB1190EM, S/N: 353343640002983 - Modification State 0

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	22 May,2024 23:30
Operator	:	Satoshi Hosoya
Temp, Hum, Atm	:	22.4 [°C], 44.2 [%], 985 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400

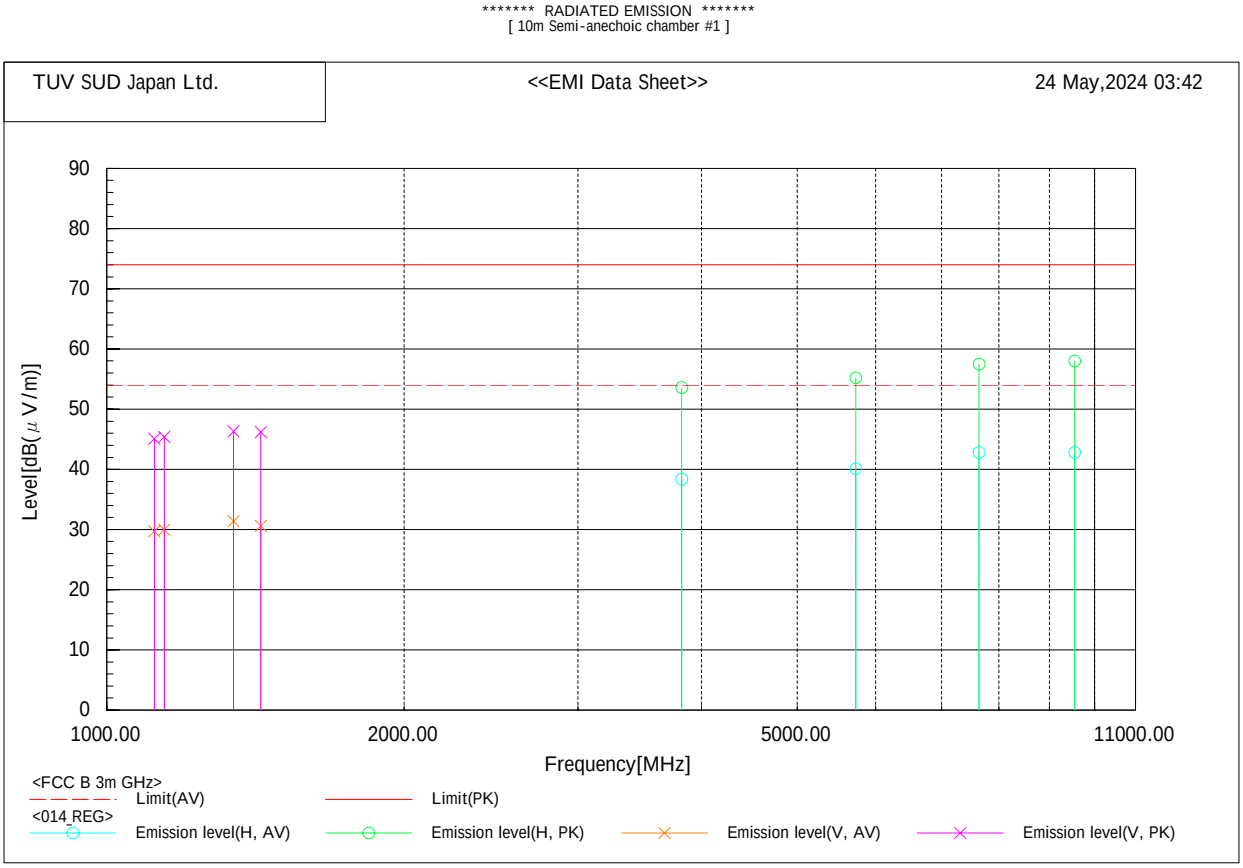


Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1053.963	V	36.9	51.2	-7.1	27.7	-37.3	2.5	29.8	44.1	54.0	74.0	24.2	29.9	100.0	168.0	0.0
1117.369	V	36.7	52.2	-6.9	27.6	-37.0	2.5	29.8	45.3	54.0	74.0	24.2	28.7	132.0	254.0	6.0
1429.712	V	36.0	50.6	-5.2	28.5	-36.2	2.5	30.8	45.4	54.0	74.0	23.2	28.6	106.0	198.0	1.1
3819.736	H	32.7	47.9	5.8	33.8	-30.5	2.5	38.5	53.7	54.0	74.0	15.5	20.3	332.0	226.0	22.4
5729.603	H	33.3	53.2	10.1	34.7	-27.1	2.5	43.4	63.3	54.0	74.0	10.6	10.7	242.0	329.0	24.5
5729.603	V	33.1	53.0	10.1	34.7	-27.1	2.5	43.2	63.1	54.0	74.0	10.8	10.9	173.0	148.0	12.5
7639.471	H	29.4	44.2	13.8	35.8	-24.5	2.5	43.2	58.0	54.0	74.0	10.8	16.0	235.0	338.0	23.7
9549.340	H	27.3	42.3	16.0	36.7	-23.2	2.5	43.3	58.3	54.0	74.0	10.7	15.7	270.0	298.0	28.4

S/N: 353343640002975

Standard	:	FCC Part 15 Class B
Date of test	:	24 May,2024 03:42
Operator	:	Satoshi Hosoya
Temp, Hum, Atm	:	25.0 [°C], 45.4 [%], 980 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400

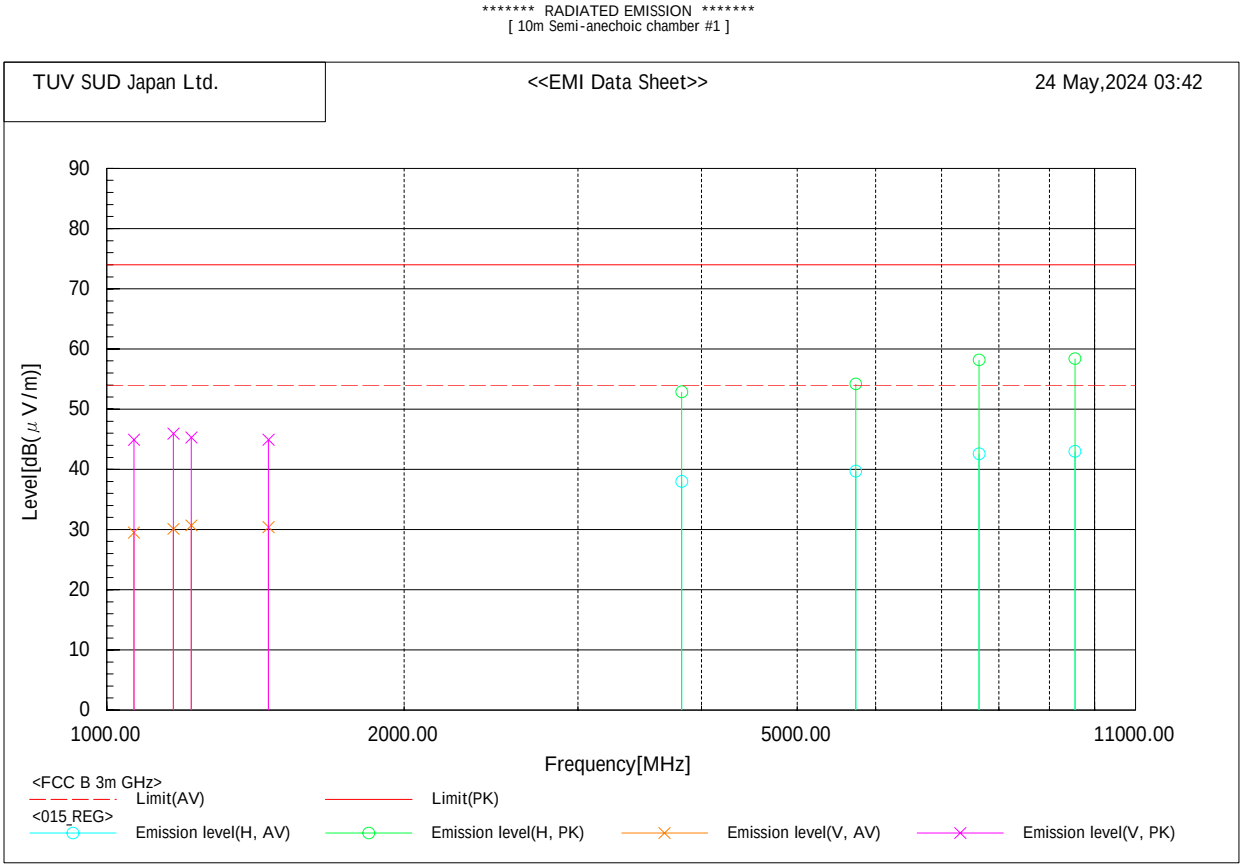


Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1117.276	V	36.6	52.0	-6.9	27.6	-37.0	2.5	29.7	45.1	54.0	74.0	24.3	28.9	162.0	219.0	11.5
1143.135	V	36.5	51.9	-6.5	27.9	-36.9	2.5	30.0	45.4	54.0	74.0	24.0	28.6	138.0	178.0	7.1
1343.891	V	36.1	51.0	-4.7	29.2	-36.4	2.5	31.4	46.3	54.0	74.0	22.6	27.7	110.0	180.0	2.1
1432.288	V	35.8	51.4	-5.2	28.5	-36.2	2.5	30.6	46.2	54.0	74.0	23.4	27.8	123.0	207.0	4.3
3819.736	H	32.6	47.8	5.8	33.8	-30.5	2.5	38.4	53.6	54.0	74.0	15.6	20.4	393.0	128.0	36.2
5729.600	H	30.0	45.1	10.1	34.7	-27.1	2.5	40.1	55.2	54.0	74.0	13.9	18.8	234.0	257.0	23.3
7639.473	H	29.0	43.7	13.8	35.8	-24.5	2.5	42.8	57.5	54.0	74.0	11.2	16.5	224.0	321.0	21.8
9549.343	H	27.0	42.2	15.8	36.7	-23.4	2.5	42.8	58.0	54.0	74.0	11.2	16.0	244.0	245.0	24.8

S/N: 353343640002983

Standard	:	FCC Part 15 Class B
Date of test	:	24 May,2024 03:42
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	21.6 [°C], 49.7 [%], 977 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400



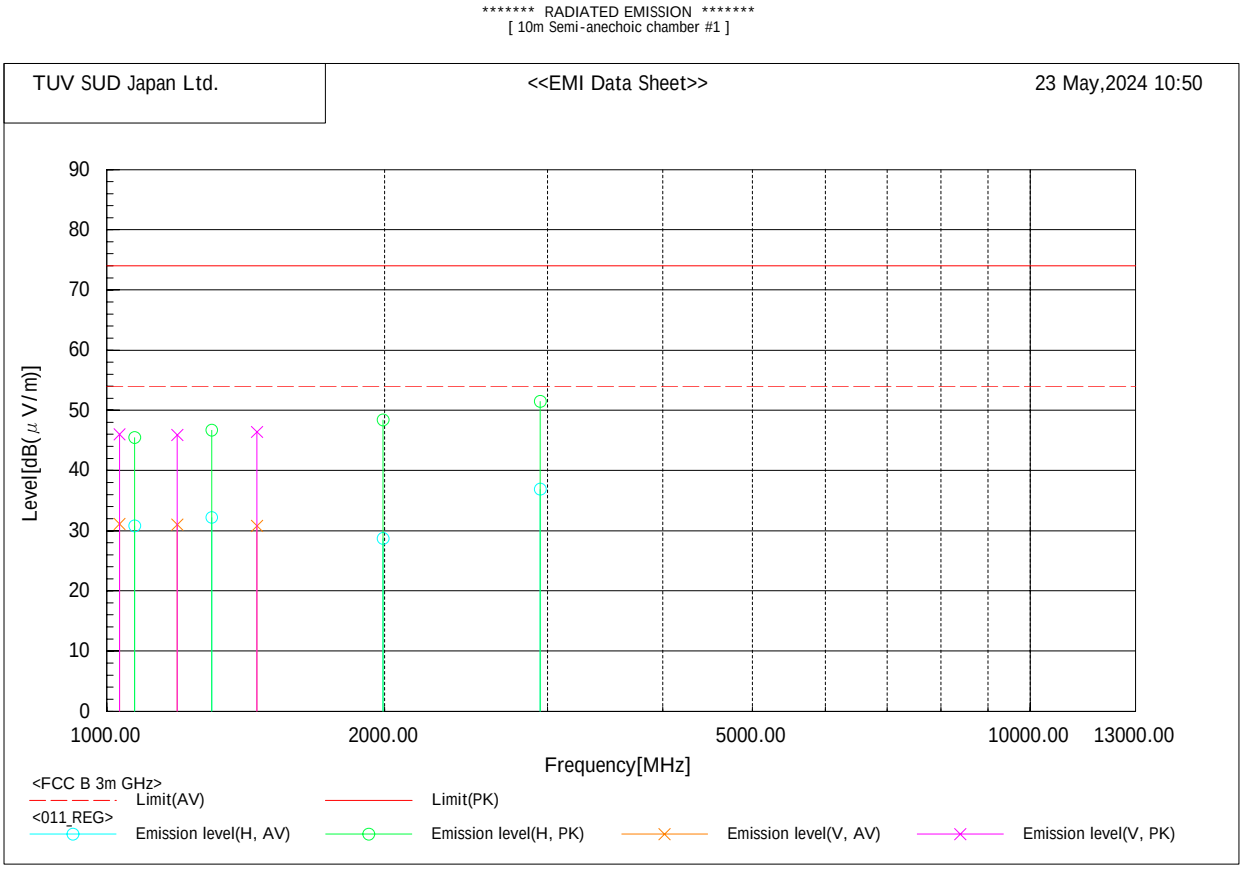
Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1065.339	V	36.6	52.0	-7.1	27.6	-37.2	2.5	29.5	44.9	54.0	74.0	24.5	29.1	179.0	339.0	14.7
1168.180	V	36.2	52.0	-6.1	28.3	-36.9	2.5	30.1	45.9	54.0	74.0	23.9	28.1	119.0	12.0	3.6
1217.849	V	36.1	50.7	-5.4	28.8	-36.7	2.5	30.7	45.3	54.0	74.0	23.3	28.7	254.0	167.0	26.3
1458.047	V	35.7	50.2	-5.3	28.3	-36.1	2.5	30.4	44.9	54.0	74.0	23.6	29.1	100.0	358.0	0
3819.648	H	32.2	47.1	5.8	33.8	-30.5	2.5	38.0	52.9	54.0	74.0	16.0	21.1	144.0	121.0	8.3
5729.517	H	29.6	44.1	10.1	34.7	-27.1	2.5	39.7	54.2	54.0	74.0	14.3	19.8	234.0	263.0	23.4
7639.407	H	28.8	44.4	13.8	35.8	-24.5	2.5	42.6	58.2	54.0	74.0	11.4	15.8	213.0	289.0	20.5
9550.438	H	27.0	42.4	16.0	36.7	-23.2	2.5	43.0	58.4	54.0	74.0	11.0	15.6	232.0	261.0	23.1

Operation mode	In camera with ADP and earphone + LTE Band 12 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	23 May,2024 10:50
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	21.3 [°C], 46.3 [%], 982 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400



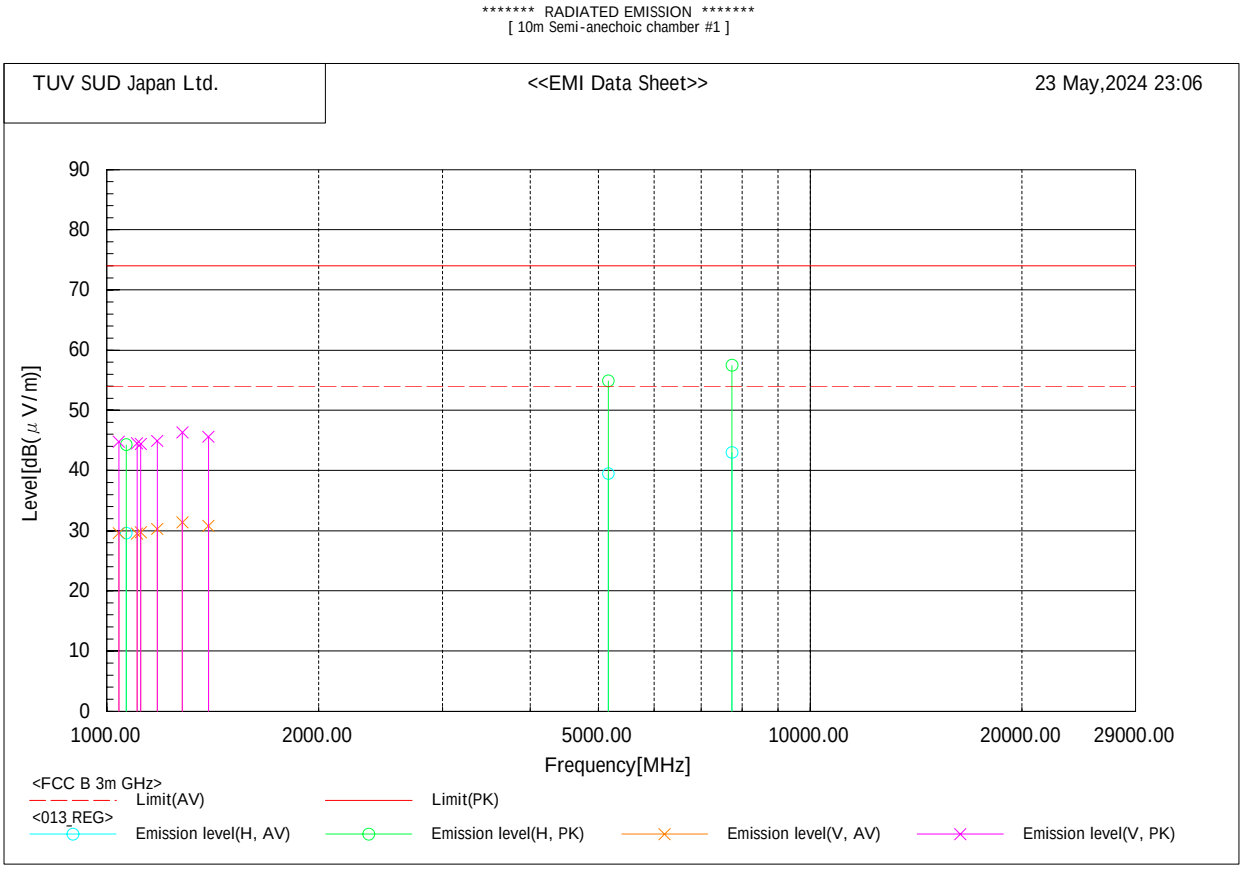
Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1032.188	V	36.6	51.5	-5.5	27.8	-35.8	2.5	31.1	46.0	54.0	74.0	22.9	28.0	174.0	178.0	13.7
1072.269	H	36.6	51.3	-5.8	27.6	-35.9	2.5	30.8	45.5	54.0	74.0	23.2	28.5	178.0	235.0	14.6
1192.195	V	36.0	50.9	-5.0	28.5	-36.0	2.5	31.0	45.9	54.0	74.0	23.0	28.1	259.0	348.0	27.0
1299.135	H	36.1	50.6	-3.9	29.6	-36.0	2.5	32.2	46.7	54.0	74.0	21.8	27.3	186.0	107.0	15.9
1454.182	V	35.4	51.0	-4.6	28.4	-35.5	2.5	30.8	46.4	54.0	74.0	23.2	27.6	263.0	301.0	27.6
1991.526	H	29.9	49.6	-1.2	30.6	-34.3	2.5	28.7	48.4	54.0	74.0	25.3	25.6	285.0	337.0	30.6
2946.869	H	33.8	48.4	3.1	32.5	-31.9	2.5	36.9	51.5	54.0	74.0	17.1	22.5	233.0	256.0	23.3

Operation mode	MP4 with ADP and Earphone + WiFi 11 a/ac + LTE Band 41 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	23 May,2024 23:06
Operator	:	Satoshi Hosoya
Temp, Hum, Atm	:	25.0 [°C], 45.4 [%], 980 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400



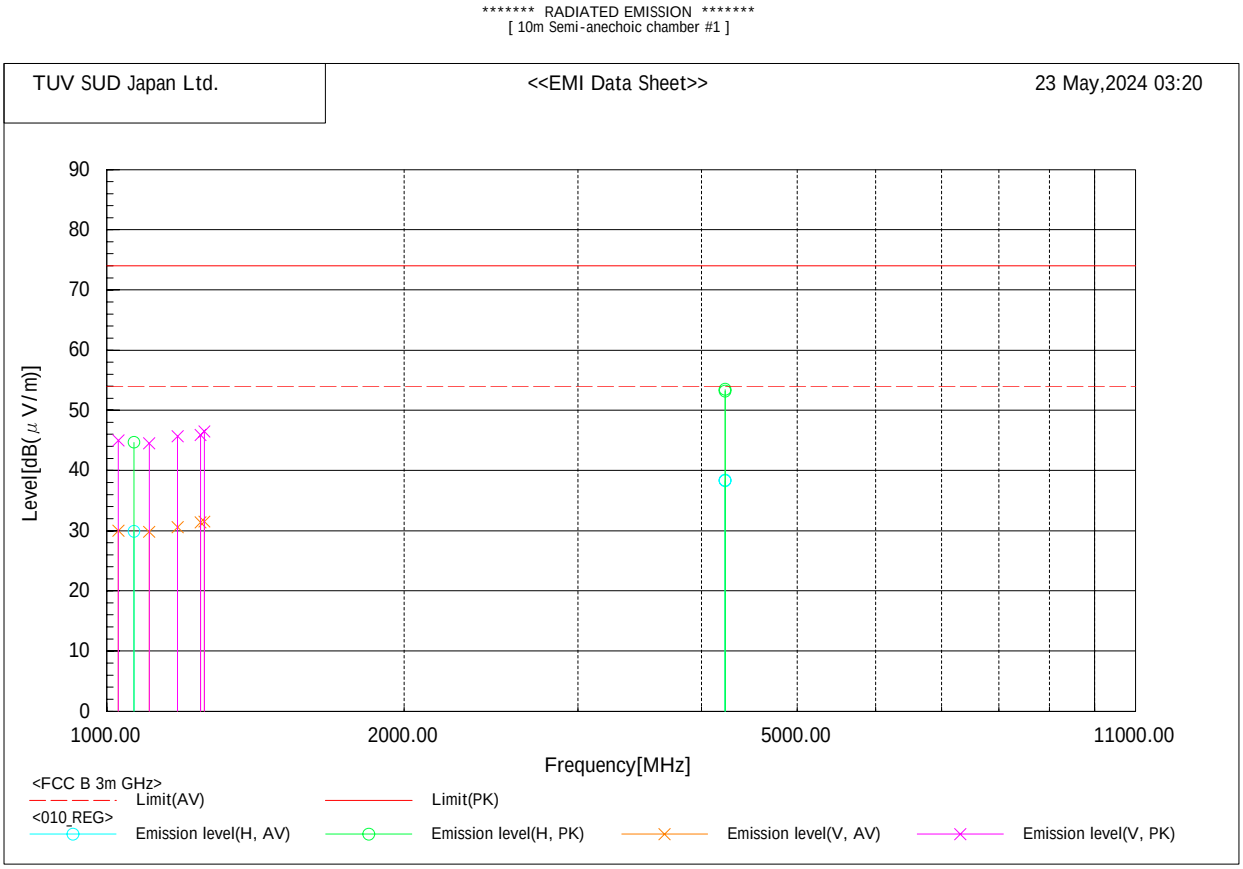
Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1040.383	V	36.7	51.9	-7.1	27.7	-37.3	2.5	29.6	44.8	54.0	74.0	24.4	29.2	120.0	232.0	3.8
1065.707	H	36.7	51.4	-7.1	27.6	-37.2	2.5	29.6	44.3	54.0	74.0	24.4	29.7	308.0	172.0	33.4
1104.135	V	36.7	51.7	-7.2	27.4	-37.1	2.5	29.5	44.5	54.0	74.0	24.5	29.5	112.0	159.0	2.2
1117.642	V	36.6	51.3	-6.9	27.6	-37.0	2.5	29.7	44.4	54.0	74.0	24.3	29.6	106.0	254.0	1.3
1179.769	V	36.3	50.9	-6.0	28.4	-36.9	2.5	30.3	44.9	54.0	74.0	23.7	29.1	114.0	229.0	2.7
1280.693	V	36.1	51.0	-4.7	29.4	-36.6	2.5	31.4	46.3	54.0	74.0	22.6	27.7	159.0	197.0	11.1
1394.694	V	35.9	50.7	-5.1	28.7	-36.3	2.5	30.8	45.6	54.0	74.0	23.2	28.4	123.0	165.0	4.3
5162.430	H	30.8	46.2	8.7	34.4	-28.2	2.5	39.5	54.9	54.0	74.0	14.5	19.1	255.0	213.0	26.3
7743.358	H	29.1	43.6	13.9	35.8	-24.4	2.5	43.0	57.5	54.0	74.0	11.0	16.5	220.0	249.0	21.3

Operation mode	MP4 with ADP + WiFi 11 b/g/n + WCDMA Band 4 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	23 May,2024 03:20
Operator	:	Satoshi Hosoya
Temp, Hum, Atm	:	22.4 [°C], 44.2 [%], 985 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400



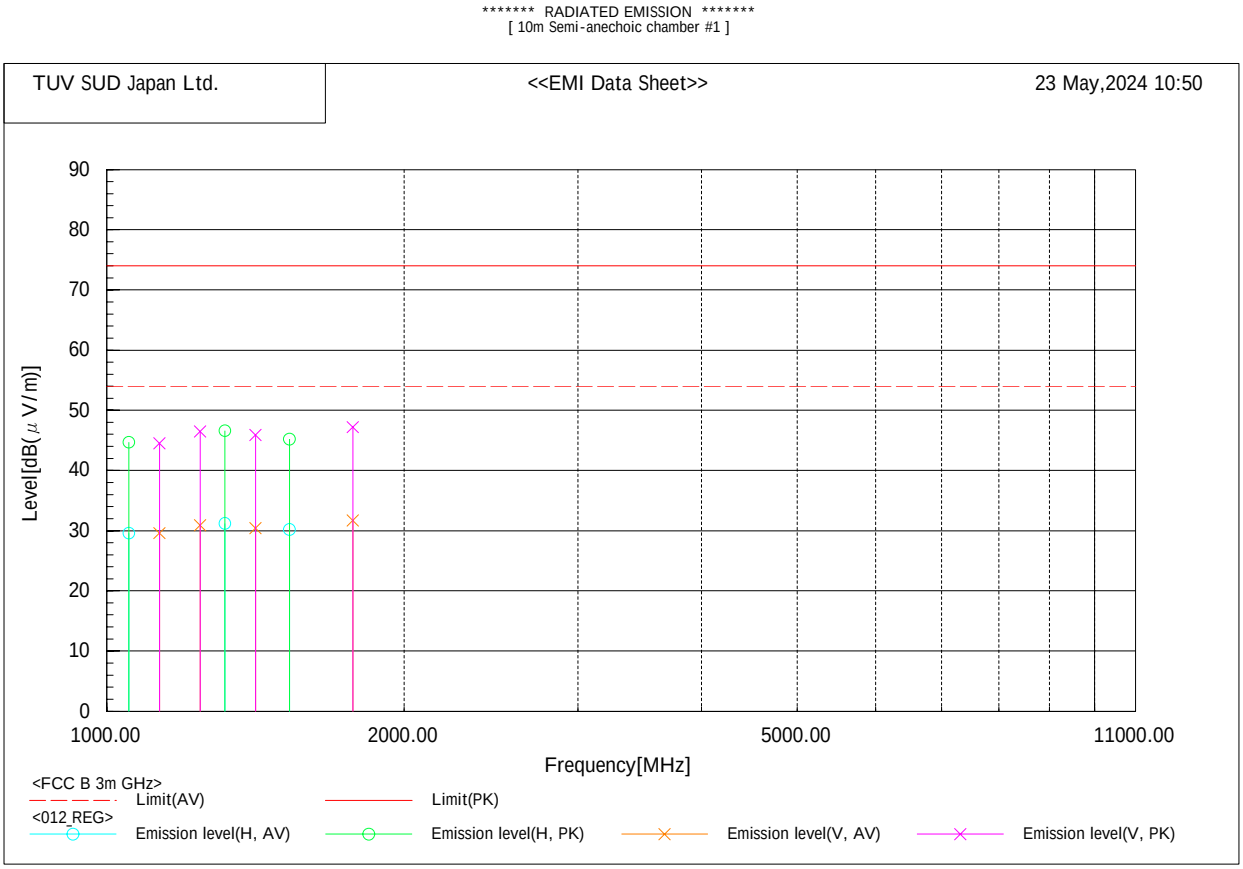
Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1027.545	V	37.0	52.0	-7.0	27.8	-37.3	2.5	30.0	45.0	54.0	74.0	24.0	29.0	133.0	260.0	6.2
1065.326	H	37.0	51.8	-7.1	27.6	-37.2	2.5	29.9	44.7	54.0	74.0	24.1	29.3	324.0	132.0	35.0
1104.083	V	37.0	51.7	-7.2	27.4	-37.1	2.5	29.8	44.5	54.0	74.0	24.2	29.5	108.0	135.0	1.6
1179.597	V	36.6	51.7	-6.0	28.4	-36.9	2.5	30.6	45.7	54.0	74.0	23.4	28.3	100.0	291.0	0.0
1244.301	V	36.5	51.0	-5.1	29.1	-36.7	2.5	31.4	45.9	54.0	74.0	22.6	28.1	154.0	351.0	10.1
1255.569	V	36.5	51.5	-5.0	29.2	-36.7	2.5	31.5	46.5	54.0	74.0	22.5	27.5	141.0	92.0	7.5
4225.033	H	32.0	47.1	6.4	33.5	-29.6	2.5	38.4	53.5	54.0	74.0	15.6	20.5	263.0	266.0	27.4
4225.033	V	31.9	46.8	6.4	33.5	-29.6	2.5	38.3	53.2	54.0	74.0	15.7	20.8	112.0	280.0	2.2

Operation mode	with ADP and Earphone + NFC mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	23 May,2024 10:50
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	21.3 [°C], 46.3 [%], 982 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	402
Antenna height (cm)	:	100 - 400



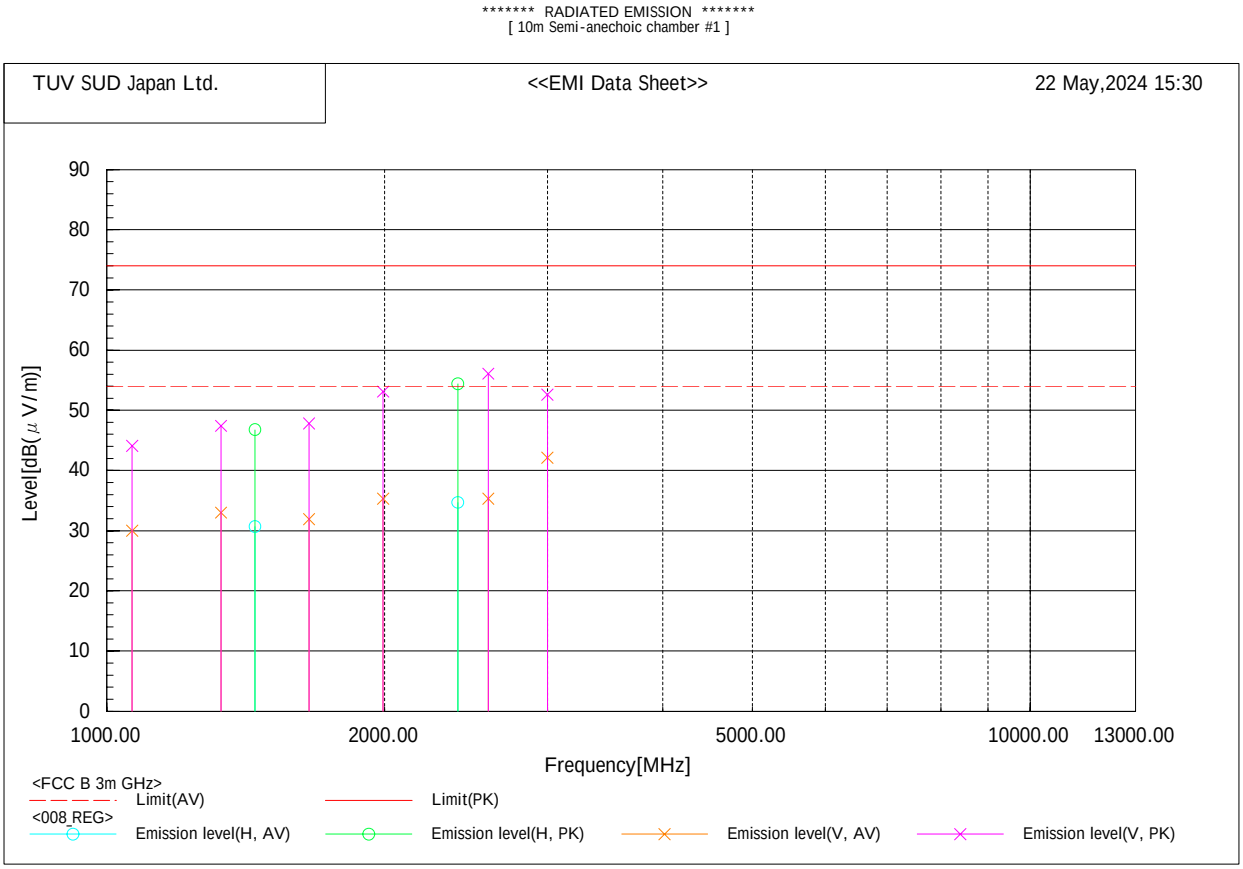
Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1052.891	H	36.7	51.8	-7.1	27.7	-37.3	2.5	29.6	44.7	54.0	74.0	24.4	29.3	199.0	4.0	17.9
1130.506	V	36.3	51.2	-6.7	27.8	-37.0	2.5	29.6	44.5	54.0	74.0	24.4	29.5	182.0	301.0	15.2
1243.402	V	36.0	51.6	-5.1	29.1	-36.7	2.5	30.9	46.5	54.0	74.0	23.1	27.5	309.0	352.0	33.2
1317.229	H	35.8	51.2	-4.6	29.4	-36.5	2.5	31.2	46.6	54.0	74.0	22.8	27.4	266.0	93.0	27.9
1414.098	V	35.5	51.0	-5.1	28.6	-36.2	2.5	30.4	45.9	54.0	74.0	23.6	28.1	354.0	339.0	36.4
1530.714	H	35.6	50.6	-5.4	28.0	-35.9	2.5	30.2	45.2	54.0	74.0	23.8	28.8	143.0	4.0	8.1
1774.666	V	34.5	50.0	-2.8	30.0	-35.3	2.5	31.7	47.2	54.0	74.0	22.3	26.8	192.0	322.0	16.9

Operation mode	MP4 with Earphone + USB Read with PC + BT EDR + WCDMA Band 5 mode
EUT	EB1190EM, S/N: 353343640002959 - Modification State 0

S/N: 353343640002959

Standard	:	FCC Part 15 Class B
Date of test	:	22 May,2024 15:30
Operator	:	Yoshiyuki Takahashi
Temp, Hum, Atm	:	18.7 [°C], 50.3 [%], 987 [hPa]
Supply power	:	AC 120 V, 60 Hz, 1 phase
Antenna distance (cm)	:	390
Antenna height (cm)	:	100 - 400



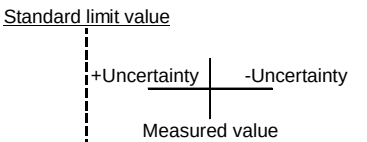
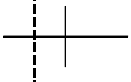
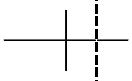
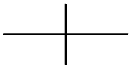
Final Result

Frequency	Pol.	Reading		Factor				Level		Limit		Margin		Height	Angle	Tilt
MHz		dB(μV)		dB(1/m)				dB(μV/m)		dB(μV/m)		dB		cm	deg	deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1065.231	V	37.3	51.4	-7.3	27.6	-37.2	2.3	30.0	44.1	54.0	74.0	24.0	29.9	208.0	112.0	19.4
1329.734	V	37.2	51.6	-4.2	29.3	-35.8	2.3	33.0	47.4	54.0	74.0	21.0	26.6	239.0	4.0	24.2
1446.809	H	35.4	51.5	-4.7	28.4	-35.4	2.3	30.7	46.8	54.0	74.0	23.3	27.2	273.0	329.0	29
1655.560	V	36.3	52.2	-4.4	28.6	-35.3	2.3	31.9	47.8	54.0	74.0	22.1	26.2	100.0	164.0	0
1991.507	V	36.8	54.6	-1.5	30.6	-34.4	2.3	35.3	53.1	54.0	74.0	18.7	20.9	231.0	289.0	23.1
2399.260	H	34.3	54.0	0.4	31.7	-33.6	2.3	34.7	54.4	54.0	74.0	19.3	19.6	245.0	257.0	24.9
2589.004	V	33.7	54.5	1.6	32.5	-33.2	2.3	35.3	56.1	54.0	74.0	18.7	17.9	100.0	4.0	0
3000.001	V	39.3	49.8	2.8	32.7	-32.2	2.3	42.1	52.6	54.0	74.0	11.9	21.4	100.0	83.0	0

5 Measurement Uncertainty

The reported measurement uncertainty is based on a value obtained by multiplying standard uncertainty by coverage factor of k=2, and a level of confidence becomes 95 %.

Item	Parameter	U_{lab}	U_{cispr}
Conducted Emission, V-AMN	9 kHz to 150 kHz	± 3.7 dB	± 3.8 dB
Conducted Emission, V-AMN	150 kHz to 30 MHz	± 3.3 dB	± 3.4 dB
Conducted Emission, Δ-AN	150 kHz to 30 MHz	± 4.9 dB	-
Conducted Emission, AN	150 kHz to 30 MHz	± 3.3 dB	-
Conducted Emission, AAN	150 kHz to 30 MHz	± 4.8 dB	± 5.0 dB
Conducted Emission, Voltage Probe	9 kHz to 30 MHz	± 2.9 dB	± 2.9 dB
Conducted Emission, Current Probe	150 kHz to 30 MHz	± 2.9 dB	± 2.9 dB
Disturbance Power	30 MHz to 300 MHz	± 3.8 dB	± 4.5 dB
Radiated Emission	30 MHz to 1000 MHz	± 5.4 dB	± 6.3 dB
Radiated Emission	1 GHz to 6 GHz	± 5.2 dB	± 5.2 dB
Radiated Emission	6 GHz to 18 GHz	± 4.9 dB	± 5.5 dB
Radiated Emission	9 kHz to 30 MHz	± 3.8 dB	-

Judge	Measured value and standard limit value
PASS	**Case1**  Even if it takes uncertainty into consideration, a standard limit value is fulfilled.
	Case2  Although measured value is in a standard limit value, a limit value won't be fulfilled if uncertainty is taken into consideration.
FAIL	**Case3**  Although measured value exceeds a standard limit value, a limit value will be fulfilled if uncertainty is taken into consideration.
	Case4  Even if it takes uncertainty into consideration, a standard limit value isn't fulfilled.

6 Laboratory Information

Testing was performed and the report was issued at:

TÜV SÜD Japan Ltd. Yonezawa Testing Center

Address: 5-4149-7 Hachimanpara, Yonezawa-shi, Yamagata, 992-1128 Japan
Phone: +81-238-28-2881

Accreditation and Registration

A2LA
Certificate #3686.03

VLAC
Accreditation No.: VLAC-013

BSMI
Laboratory Code: SL2-IN-E-6018, SL2-A1-E-6018

Innovation, Science and Economic Development Canada
ISED#: 4224A

VCCI Council
Registration number: A-0166

Appendix A. Test Equipment

Conducted emission at mains port

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
EMI receiver	ROHDE&SCHWARZ	ESR7	102352	31-Jan-2025	19-Jan-2024
LISN	Kyoritsu Technology Corporation	TNW-407F2	12-17-110-2	30-Jun-2024	22-Jun-2023
Attenuator	HUBER+SUHNER	6810.01.A	N/A(S442)	31-Mar-2025	06-Mar-2024
Coaxial cable	FUJIKURA	5D-2W/4m	N/A(S349)	31-Oct-2024	18-Oct-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	317672/4	31-Oct-2024	18-Oct-2023
Coaxial cable	HUBER+SUHNER	RG214/U/25m	N/A(S191)	31-Oct-2024	19-Oct-2023
Software	TOYO Technica	ES10/CE-AJ	Ver.2023.01.001	N/A	N/A

Radiated emission (above 1 GHz)

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	ROHDE&SCHWARZ	FSV40	101732	31-May-2025	17-May-2024
Preamplifier	TSJ	MLA-0118-J02-40	14882	31-Oct-2024	19-Oct-2023
Double ridged guide antenna	ETS LINDGREN	3117	00224193	31-Dec-2024	25-Dec-2023
Attenuator	Agilent Technologies	8491B	MY39268633	30-Jun-2024	22-Jun-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/9m	811445/4	31-Oct-2024	18-Oct-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/1.5m	SN MY19304/4	31-Oct-2024	18-Oct-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	MY37295/4	30-Sep-2024	22-Sep-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX106/13m	MY1159/6	31-Oct-2024	19-Oct-2023
Absorber	RIKEN	PFP30	N/A	N/A	N/A
10m Semi-anechoic Chamber	TOKIN	N/A	N/A(9001-SVSWR)	31-May-2024	28-May-2023
Software	TOYO Technica	ES10/RE-AJ	Ver.2023.01.001	N/A	N/A
Notch Filter	Micro-Tronics	BRM50716	006	31-Jul-2024	19-Jul-2023
Notch Filter	Micro-Tronics	BRM50702	G433	30-Sep-2024	20-Sep-2023
High Pass Filter	Wainwright	WHKX2.8/18G-6SS	1	31-Jul-2024	19-Jul-2023

Radiated emission (above 1 GHz)

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	ROHDE&SCHWARZ	FSV40	101732	31-May-2025	17-May-2024
DRGH antenna	A.H.Systems Inc.	SAS-574	469	31-Aug-2024	08-Aug-2023
Preamplifier	TSJ	MLA-1840-B03-35	1240332	31-Aug-2024	08-Aug-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/9m	811445/4	31-Oct-2024	18-Oct-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/1.5m	SN MY19304/4	31-Oct-2024	18-Oct-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	MY37295/4	30-Sep-2024	22-Sep-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX106/13m	MY1159/6	31-Oct-2024	19-Oct-2023
Microwave cable	HUBER SUNER	Sucoflex 102/5m	31647	31-Jul-2024	20-Jul-2023
Absorber	RIKEN	PFP30	N/A	N/A	N/A
10m Semi-anechoic Chamber	TOKIN	N/A	N/A(9001-SVSWR)	31-May-2024	28-May-2023
Software	TOYO Technica	ES10/RE-AJ	Ver.2023.01.001	N/A	N/A
Notch Filter	Micro-Tronics	BRM50716	006	31-Jul-2024	19-Jul-2023
Notch Filter	Micro-Tronics	BRM50702	G433	30-Sep-2024	20-Sep-2023
High Pass Filter	Wainwright	WHKX2.8/18G-6SS	1	31-Jul-2024	19-Jul-2023