

Report on the EMC Testing of:

KYOCERA Corporation
Mobile Phone, Model: EB1136

In accordance with FCC Part 15 Subpart B Class B

Prepared for: KYOCERA Corporation
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Japan

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Document Number: JPD-TR-22175-0

SIGNATURE

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Hiroaki Suzuki	Deputy Manager of RF Group	Approved Signatory	

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 (excluding the deviations mentioned in section 1.4 of this document).



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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
Tsuyoshi Okumura	Testing	
Nobuhiko Iwasawa	Testing	



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1 Summary of Test

1.1 Modification history of the test report

Document Number	Modification History	Issue Date
JPD-TR-22175-0	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 judgment of conformance to Emission test, a value of measurement uncertainty was not taken in account.

Test Name	Classification of EUT	Test	Worst Point (Margin)	Result	Remarks
Conducted emission at mains port	Class B	Applied	S/N: 354649890001379, Case 2 MP4 + USB Read with PC mode L2 0.150 MHz QP 8.9 dB	Pass	-
Radiated emission (below 1 GHz)	Class B	Applied	S/N: 354649890001379, Case2 Out Camera with ADP mode V 63.320 MHz QP 7.6 dB	Pass	-
Radiated emission (above 1 GHz)	Class B	Applied	S/N: 354649890001379, Case2 Out Camera with ADP mode V 2880.001 MHz AV 11.0 dB	Pass	-

1.6 Test information

EB1136 is a model with the following changes to EB1134 (Test Report JPD-TR-22048-0).

- a. Change the shape of the LED display on the back of the LCD
- b. Addition of LED Driver, memory and LCD vendors

Case 1 has been pre-tested with EB1134.

	Case1 (Base pattern)	Case 2	Case 3	Case 4
LCD	Sitronix	ILITEK	Sitronix	Sitronix
LED Driver	On Semiconductor	On Semiconductor	Texas Instruments	On Semiconductor
Memory	Samsung	Samsung	Samsung	Nanya

The following EMC test conditions were applied based on the conditions specified by the applicant.

- Tested supply voltage and supply frequency
- Operation mode

1.7 Test set up

Table-top

1.8 Test period

29-September-2022 - 01-October-2022

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	EB1136
Serial number	354649890001379, 354649890001387, 354649890001395
Trade name	KYOCERA
Authorization	JOYEB1136
Number of sample(s)	3
EUT condition	Pre-production
Maximum frequency	2000 MHz
Power rating	Battery: DC 3.8 V
Size	(W) 112.9 × (D) 51.3 × (H) 18.1 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
EB1136, S/N: 354649890001379			
0	As supplied by the applicant	Not Applicable	Not Applicable
EB1136, S/N: 354649890001387			
0	As supplied by the applicant	Not Applicable	Not Applicable
EB1136, S/N: 354649890001395			
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)

Not applicable

2.3.2 Reason for selection of EUT

Not applicable



Japan

2.4 Operation mode

1. Out Camera with ADP mode
 - i) Power ON
 - ii) Record

2. MP4 + USB Read with PC mode
 - i) Power ON
 - ii) EUT connects to PC via USB cable
 - iii) Read / write of MP4 moving picture data
 - iv) Execution of Color Bar moving picture data

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	EB1136	354649890001379	JOYEB1036	EUT, *3
				354649890001387	JOYEB1036	EUT, *4
				354649890001395	JOYEB1036	EUT, *5
AE1	AC adapter	KDDI	0602PQA	NKA	N/A	*1
AE2	Personal Computer	Lenovo	Lenovo G570 (4334)	CB07410173	DoC	*2
AE3	AC adapter	Lenovo	CPA-A065	11S36001943ZZ2001 1I16S	N/A	*2

*1: AC adapter is connected to keep operating.

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

*3: Case2: Vendor of LCD: ILITEK, Vendor of LED driver: On Semiconductor, Vendor of Memory: Samsung

*4: Case3: Vendor of LCD: Sitronix, Vendor of LED driver: Texas Instruments, Vendor of Memory: Samsung

*5: Case4: Vendor of LCD: Sitronix, Vendor of LED driver: On Semiconductor, Vendor of Memory: Nanya

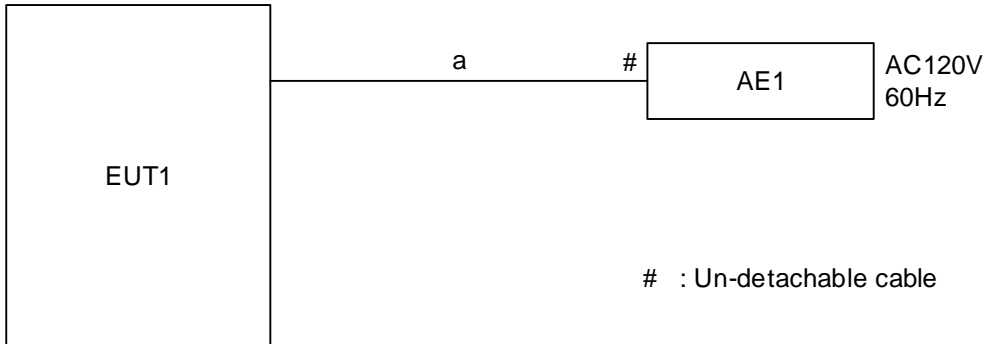
3.2 Cable(s) used

No.	Cable	Length (m)	Shield	EUT accessory Ferrite core	Remarks
a	DC cable	1.5	Yes	-	-
b	DC cable for PC AC adapter	1.8	No	-	*1
c	AC power cord for PC AC adapter	1.0	No	-	*1
d	USB cable	1.0	Yes	-	-

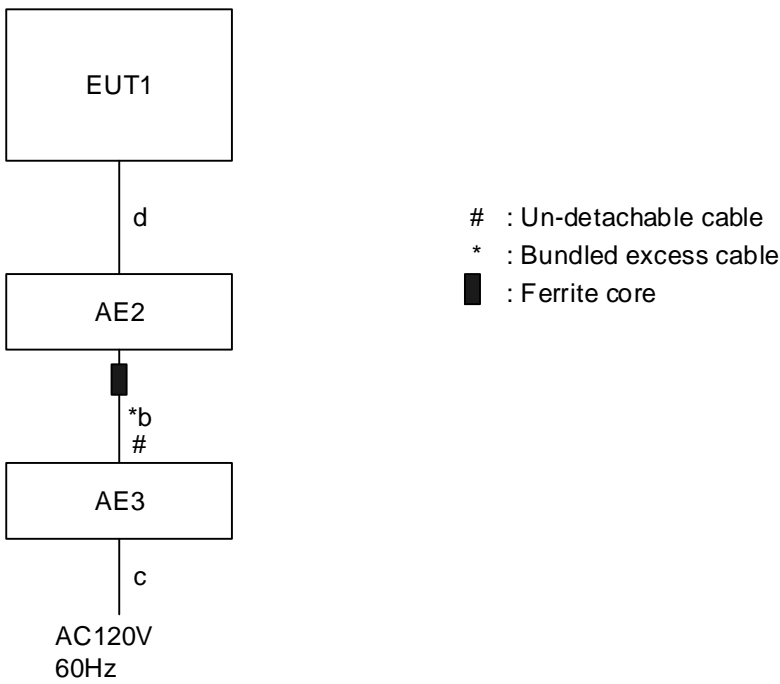
*1: The property of TÜV SÜD Japan was used.

3.3 System configuration

1. Out Camera with ADP mode



2. MP4 + USB Read with PC mode



4 Test Result

4.1 Conducted emission at mains port

4.1.1 Measurement condition

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

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.

4.1.2 Calculation method

Emission Level = Reading + Factor*

Margin = Limit – Emission Level

*Note: Factor = AMN 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

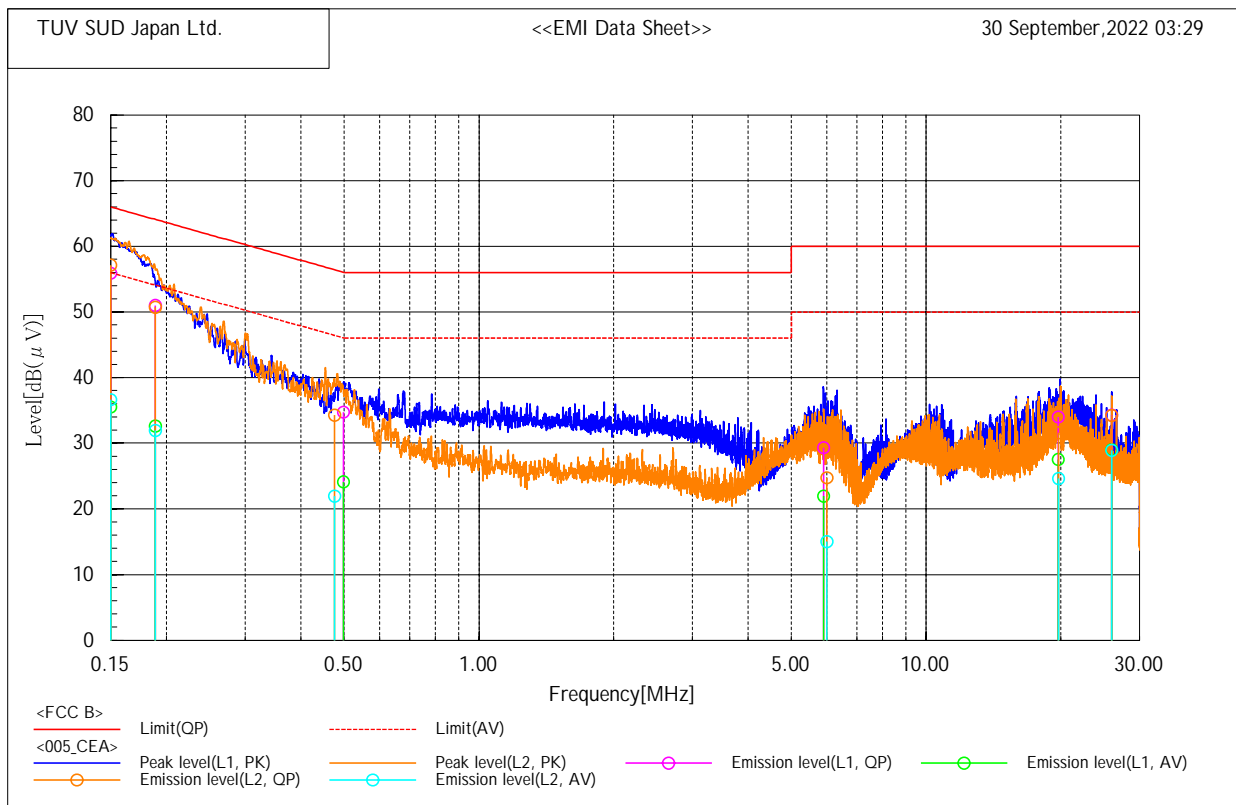
4.1.3 Test data and Configuration photographs

Operation mode	MP4 + USB Read with PC mode
EUT	EB1136, S/N: 354649890001379 - Modification State 0

S/N: 354649890001379, Case 2

Standard : FCC Part 15 Class B
 Date of test : 30 September,2022 03:29
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 21.6 [°C], 56.2 [%], 987 [hPa]
 Supply power : AC 120 V, 60 Hz, 1 phase

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



Final Result

Line	Frequency MHz	Reading dB(μV)		Factor dB	Level dB(μV)		Limit dB(μV)		Margin dB	
		QP	CAV		QP	CAV	QP	AV	QP	AV
L1	0.150	45.4	25.0	10.5	55.9	35.5	66.0	56.0	10.1	20.5
L1	0.189	40.6	22.2	10.4	51.0	32.6	64.1	54.1	13.1	21.5
L1	0.498	24.4	13.8	10.3	34.7	24.1	56.0	46.0	21.3	21.9
L1	5.903	18.6	11.2	10.7	29.3	21.9	60.0	50.0	30.7	28.1
L1	19.749	22.8	16.3	11.2	34.0	27.5	60.0	50.0	26.0	22.5
L1	26.000	23.0	17.7	11.3	34.3	29.0	60.0	50.0	25.7	21.0
L2	0.150	46.6	26.1	10.5	57.1	36.6	66.0	56.0	8.9	19.4
L2	0.189	40.3	21.5	10.4	50.7	31.9	64.1	54.1	13.4	22.2
L2	0.476	24.0	11.6	10.3	34.3	21.9	56.4	46.4	22.1	24.5
L2	5.998	14.0	4.3	10.7	24.7	15.0	60.0	50.0	35.3	35.0
L2	19.797	20.3	13.3	11.3	31.6	24.6	60.0	50.0	28.4	25.4
L2	26.000	22.7	17.4	11.5	34.2	28.9	60.0	50.0	25.8	21.1

4.2 Radiated emission (below 1 GHz)

4.2.1 Measurement condition

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

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.

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 dB μ V/m (Quasi-peak)

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

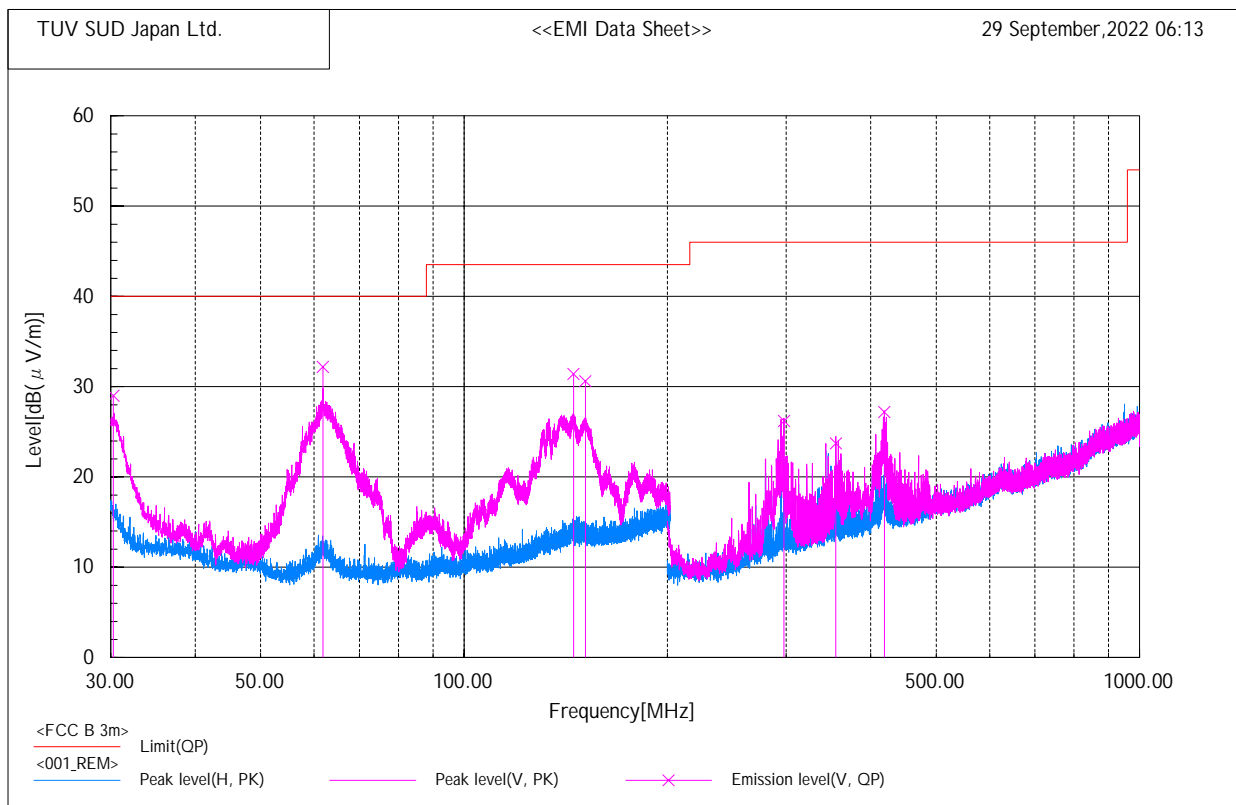
4.2.3 Test data and Configuration photographs

Operation mode	Out Camera with ADP mode
EUT	EB1136, S/N: 354649890001379 - Modification State 0 EB1136, S/N: 354649890001387 - Modification State 0 EB1136, S/N: 354649890001395 - Modification State 0

S/N: 354649890001387, Case 3

Standard : FCC Part 15 Class B
 Date of test : 29 September,2022 06:13
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 21.9 [°C], 57.8 [%], 983 [hPa]
 Supply power : DC 5 V

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



Final Result

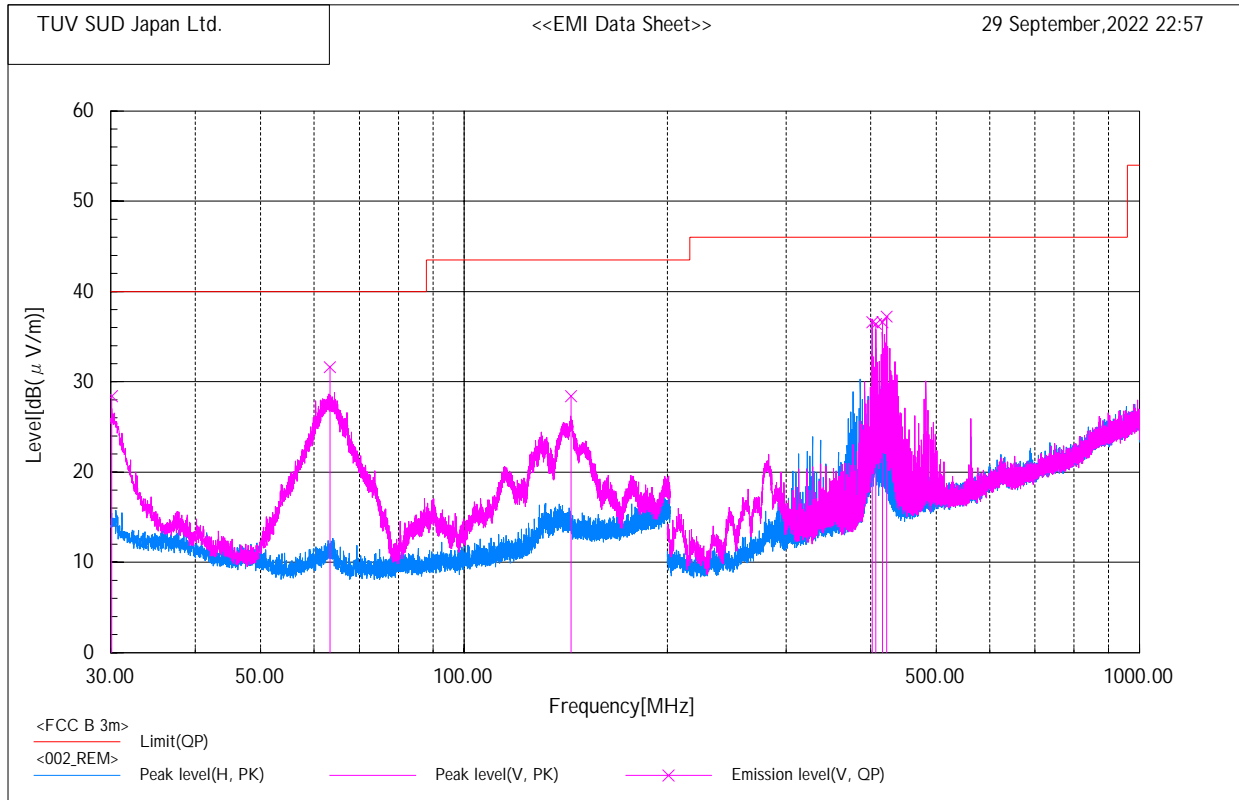
Frequency MHz	Pol.	Reading	Factor dB(1/m)	Level	Limit	Margin	Height cm	Angle deg
		dB(μV) QP		dB(μV/m) QP	dB(μV/m) QP	dB QP		
30.274	V	41.8	-12.8	29.0	40.0	11.0	100.0	63.0
61.818	V	49.2	-17.0	32.2	40.0	7.8	100.0	167.0
145.245	V	44.5	-13.1	31.4	43.5	12.1	100.0	108.0
151.255	V	43.4	-12.8	30.6	43.5	12.9	100.0	161.0
297.620	V	39.6	-13.4	26.2	46.0	19.8	165.0	179.0
355.330	V	35.3	-11.6	23.7	46.0	22.3	150.0	46.0
419.106	V	37.5	-10.3	27.2	46.0	18.8	152.0	12.0



S/N: 354649890001395, Case 4

Standard : FCC Part 15 Class B
 Date of test : 29 September,2022 22:57
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 21.6 [°C], 56.2 [%], 987 [hPa]
 Supply power : DC 5 V

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



Final Result

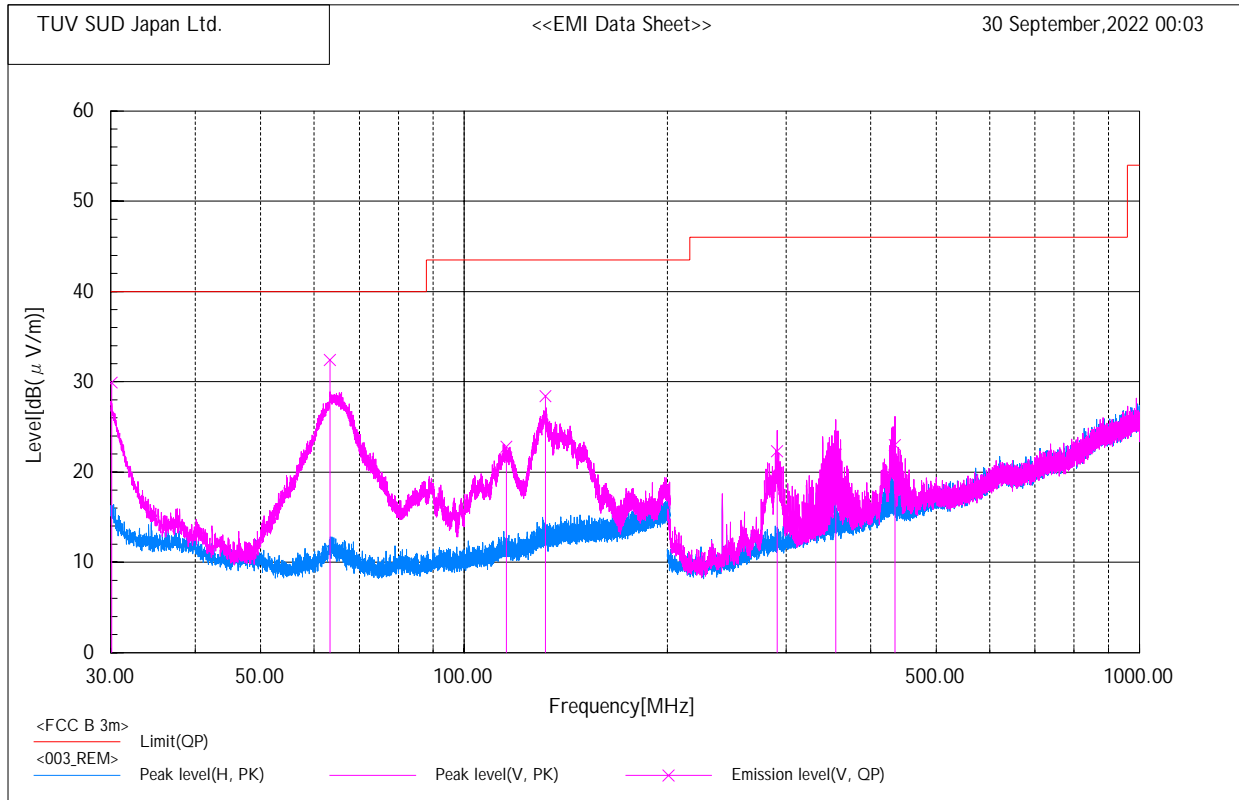
Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)		dB(1/m)				
		QP		QP	QP	QP	cm	deg
30.096	V	41.1	-12.7	28.4	40.0	11.6	100.0	119.0
63.293	V	48.6	-17.0	31.6	40.0	8.4	100.0	174.0
144.095	V	41.5	-13.1	28.4	43.5	15.1	100.0	144.0
402.200	V	47.3	-10.7	36.6	46.0	9.4	151.0	210.0
407.140	V	47.0	-10.6	36.4	46.0	9.6	131.0	147.0
416.256	V	47.0	-10.4	36.6	46.0	9.4	113.0	147.0
422.311	V	47.4	-10.2	37.2	46.0	8.8	128.0	149.0



S/N: 354649890001379, Case 2

Standard : FCC Part 15 Class B
 Date of test : 30 September,2022 00:03
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 21.6 [°C], 56.2 [%], 987 [hPa]
 Supply power : DC 5 V

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



Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV)		dB(1/m)				
		QP		QP	QP	QP	cm	deg
30.080	V	42.6	-12.7	29.9	40.0	10.1	100.0	107.0
63.320	V	49.4	-17.0	32.4	40.0	7.6	100.0	168.0
115.541	V	37.6	-14.8	22.8	43.5	20.7	100.0	145.0
131.967	V	42.2	-13.8	28.4	43.5	15.1	100.0	189.0
290.738	V	35.8	-13.5	22.3	46.0	23.7	172.0	182.0
355.055	V	33.5	-11.6	21.9	46.0	24.1	100.0	216.0
434.562	V	33.0	-10.0	23.0	46.0	23.0	172.0	146.0

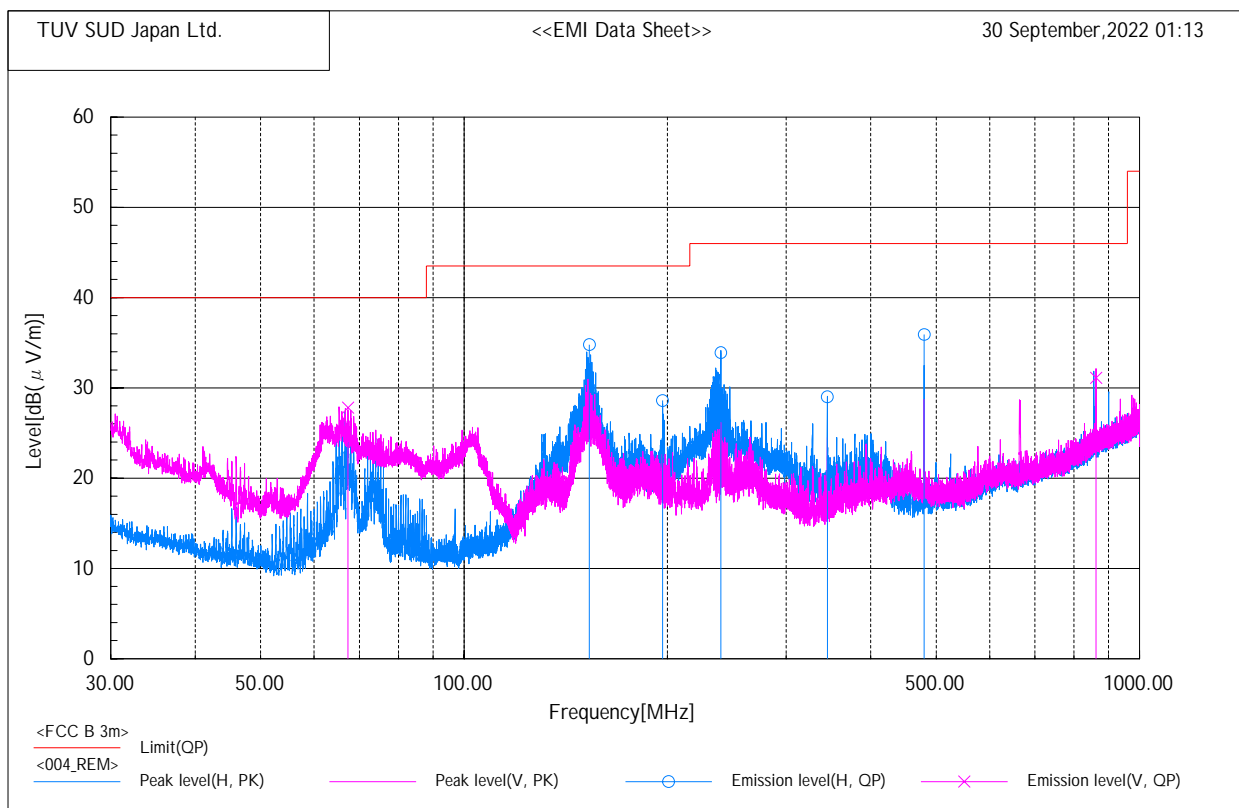


Operation mode	MP4 + USB Read with PC mode
EUT	EB1136, S/N: 354649890001379 - Modification State 0

S/N: 354649890001379, Case 2

Standard : FCC Part 15 Class B
 Date of test : 30 September,2022 01:13
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 21.6 [°C], 56.2 [%], 987 [hPa]
 Supply power : AC 120 V, 60 Hz, 1 phase

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



Final Result

Frequency	Pol.	Reading	Factor	Level	Limit	Margin	Height	Angle
MHz		dB(μV) QP		dB(1/m)				
67.343	V	44.8	-17.0	27.8	40.0	12.2	100.0	199.0
153.332	H	47.5	-12.7	34.8	43.5	8.7	219.0	216.0
196.760	H	39.2	-10.6	28.6	43.5	14.9	187.0	191.0
240.000	H	49.7	-15.8	33.9	46.0	12.1	208.0	4.0
345.000	H	40.8	-11.8	29.0	46.0	17.0	100.0	170.0
480.000	H	45.0	-9.1	35.9	46.0	10.1	100.0	272.0
862.465	V	32.5	-1.4	31.1	46.0	14.9	100.0	4.0

4.3 Radiated emission (above 1 GHz)

4.3.1 Measurement condition

Frequency range	1000 MHz-10000 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: 3.95m, 4.03 m Height: 1-4 m Polarity: Horizontal/Vertical
Test receiver setting	Detector: Peak, Average Bandwidth: 1 MHz

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.

Antenna 3 dB beamwidth

Antenna: 3117

Frequency (GHz)	θ3 dB (°)	3 dB beamwidth w (m)
1.0	82	5.22
2.0	56	3.19
3.0	61	3.53
4.0	50	2.80
5.0	53	2.99
6.0	50	2.80

Measurement distance: $d = 3.0 \text{ m}$

$W = 2 \times d \times \tan(0.5 \times \theta_{3 \text{ dB}})$

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 dB μ V/m (Peak)
50.0 dB μ V/m (Average)

Measurement distance: 3.25 m

Distance conversion Factor: $20 \log (3.25\text{m}/3.0\text{m}) = 0.7 \text{ dB}$

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

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



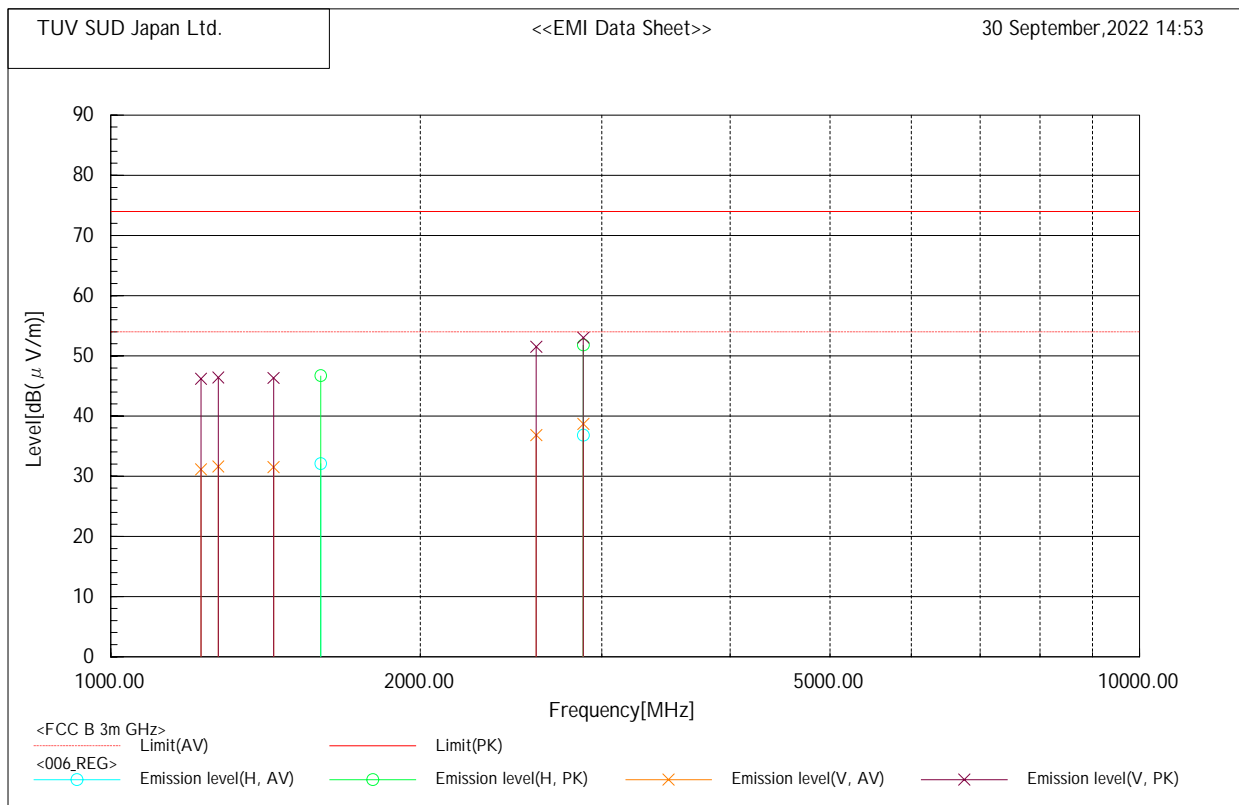
4.3.3 Test data and Configuration photographs

Operation mode	Out Camera with ADP mode
EUT	EB1136, S/N: 354649890001379 - Modification State 0 EB1136, S/N: 354649890001387 - Modification State 0 EB1136, S/N: 354649890001395 - Modification State 0

S/N: 354649890001387, Case 3

Standard : FCC Part 15 Class B
 Date of test : 30 September,2022 14:53
 Operator : Nobuhiko Iwasawa
 Temp, Hum, Atm : 20.8 [°C], 61.6 [%], 988 [hPa]
 Supply power : DC 5 V
 Antenna distance : 4.03 m
 Antenna height : 1.00 m - 4.00 m

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



Final Result

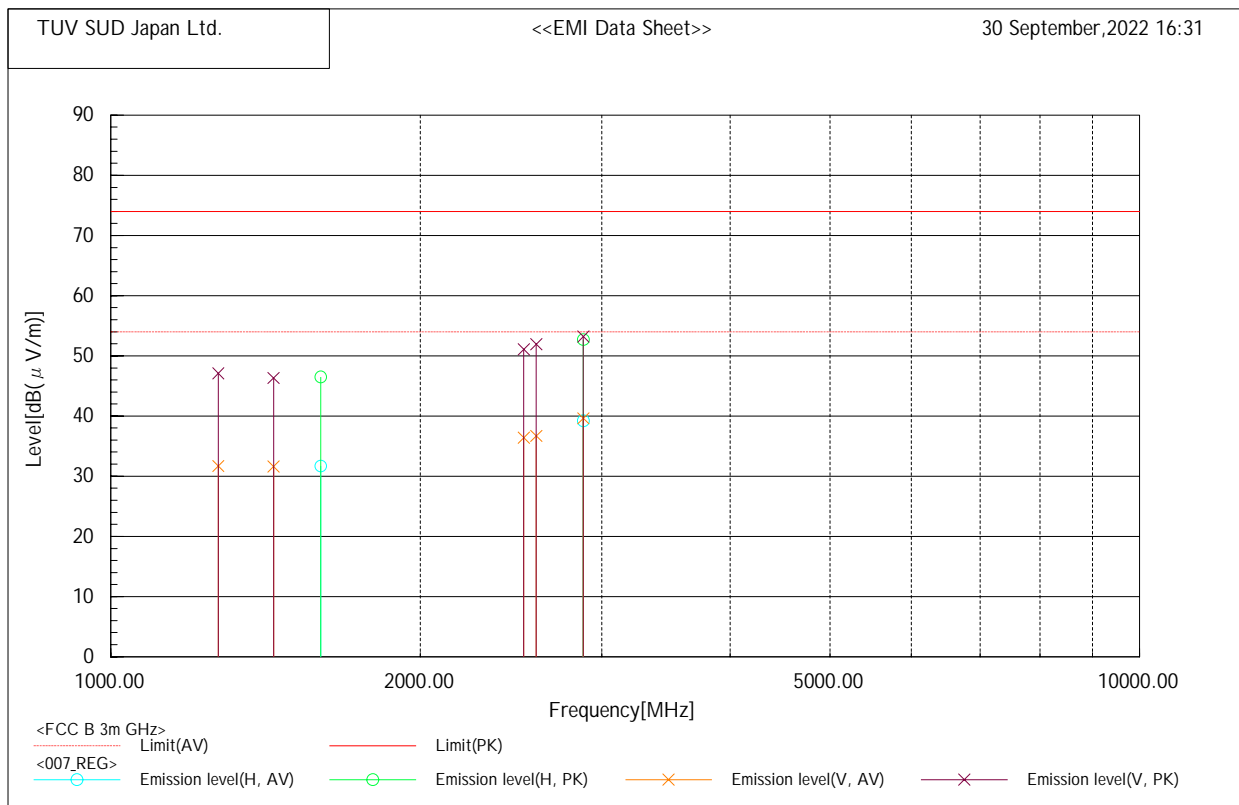
Frequency MHz	Pol.	Reading dB(μV)		Factor dB(1/m)				Level dB(μV/m)		Limit dB(μV/m)		Margin dB		Height cm	Angle deg	Tilt deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1224.000	V	35.4	50.5	-4.3	28.8	-35.7	2.6	31.1	46.2	54.0	74.0	22.9	27.8	270.0	135.0	29
1272.000	V	35.3	50.1	-3.7	29.2	-35.5	2.6	31.6	46.4	54.0	74.0	22.4	27.6	240.0	277.0	24
1440.000	V	35.4	50.2	-3.9	28.4	-34.9	2.6	31.5	46.3	54.0	74.0	22.5	27.7	277.0	154.0	30
1600.000	H	35.8	50.4	-3.7	28.0	-34.3	2.6	32.1	46.7	54.0	74.0	21.9	27.3	303.0	214.0	33
2591.997	V	33.7	48.4	3.1	32.6	-32.1	2.6	36.8	51.5	54.0	74.0	17.2	22.5	264.0	86.0	28
2880.000	H	33.6	48.6	3.2	32.3	-31.7	2.6	36.8	51.8	54.0	74.0	17.2	22.2	344.0	36.0	35
2880.001	V	35.5	49.8	3.2	32.3	-31.7	2.6	38.7	53.0	54.0	74.0	15.3	21.0	286.0	31.0	31



S/N: 354649890001395, Case 4

Standard : FCC Part 15 Class B
 Date of test : 30 September,2022 16:31
 Operator : Nobuhiko Iwasawa
 Temp, Hum, Atm : 20.8 [°C], 61.6 [%], 988 [hPa]
 Supply power : DC 5 V
 Antenna distance : 4.03 m
 Antenna height : 1.00 m - 4.00 m

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



Final Result

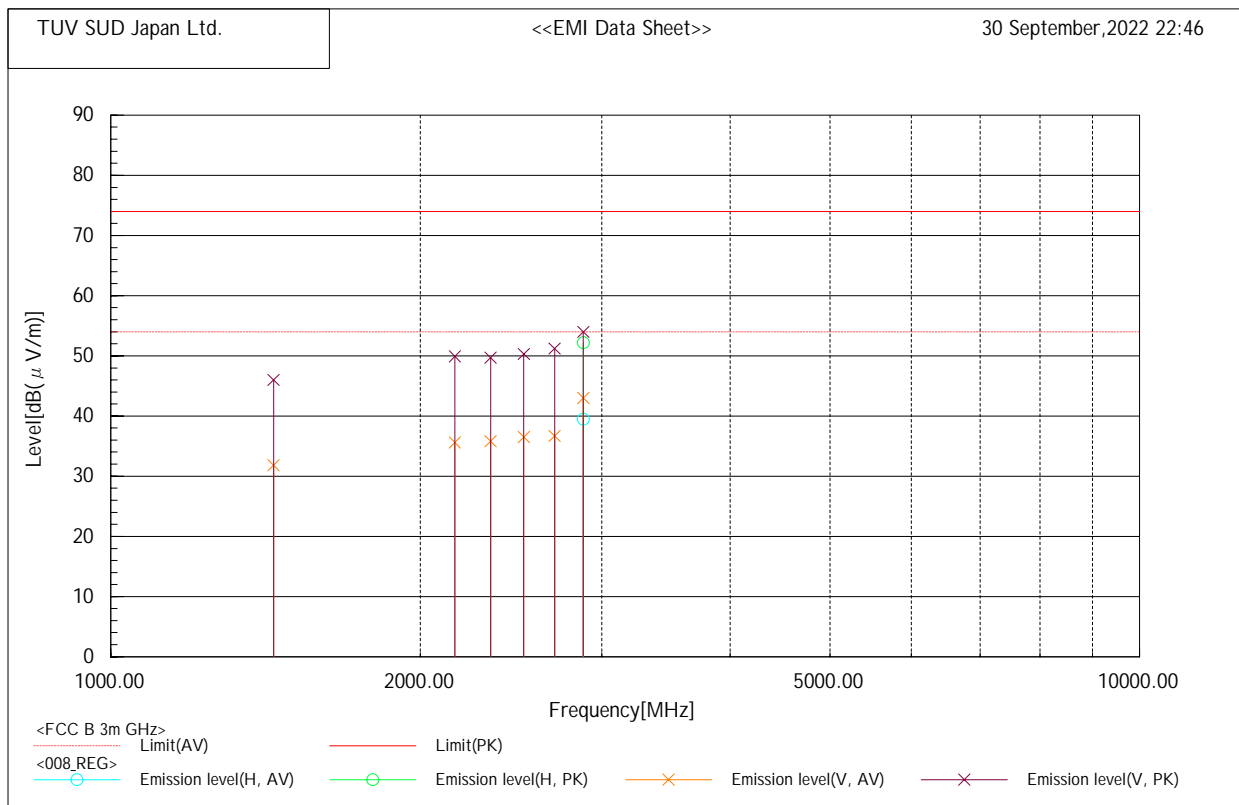
Frequency MHz	Pol.	Reading dB(μV)		Factor dB(1/m)				Level dB(μV/m)		Limit dB(μV/m)		Margin dB		Height cm	Angle deg	Tilt deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1272.000	V	35.4	50.8	-3.7	29.2	-35.5	2.6	31.7	47.1	54.0	74.0	22.3	26.9	311.0	102.0	34
1440.001	V	35.5	50.2	-3.9	28.4	-34.9	2.6	31.6	46.3	54.0	74.0	22.4	27.7	269.0	202.0	28
1600.000	H	35.4	50.2	-3.7	28.0	-34.3	2.6	31.7	46.5	54.0	74.0	22.3	27.5	261.0	35.0	27
2519.997	V	33.8	48.5	2.6	32.3	-32.3	2.6	36.4	51.1	54.0	74.0	17.6	22.9	373.0	105.0	36
2591.996	V	33.6	48.8	3.1	32.6	-32.1	2.6	36.7	51.9	54.0	74.0	17.3	22.1	231.0	325.0	23
2880.000	H	36.0	49.5	3.2	32.3	-31.7	2.6	39.2	52.7	54.0	74.0	14.8	21.3	268.0	49.0	28
2880.001	V	36.4	50.0	3.2	32.3	-31.7	2.6	39.6	53.2	54.0	74.0	14.4	20.8	295.0	26.0	32



S/N: 354649890001379, Case 2

Standard : FCC Part 15 Class B
 Date of test : 30 September,2022 22:46
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 20.8 [°C], 61.6 [%], 987 [hPa]
 Supply power : DC 5 V
 Antenna distance : 4.03 m
 Antenna height : 1.00 m - 4.00 m

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



Final Result

Frequency MHz	Pol.	Reading dB(μV)		Factor dB(1/m)				Level dB(μV/m)		Limit dB(μV/m)		Margin dB		Height cm	Angle deg	Tilt deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1440.000	V	35.7	49.9	-3.9	28.4	-34.9	2.6	31.8	46.0	54.0	74.0	22.2	28.0	119.0	202.0	4
2160.000	V	34.4	48.7	1.2	31.4	-32.8	2.6	35.6	49.9	54.0	74.0	18.4	24.1	288.0	244.0	31
2340.000	V	34.0	47.9	1.8	31.7	-32.5	2.6	35.8	49.7	54.0	74.0	18.2	24.3	321.0	14.0	35
2520.000	V	33.9	47.7	2.6	32.3	-32.3	2.6	36.5	50.3	54.0	74.0	17.5	23.7	188.0	195.0	16
2700.000	V	33.7	48.2	3.0	32.4	-32.0	2.6	36.7	51.2	54.0	74.0	17.3	22.8	225.0	180.0	22
2880.001	V	39.8	50.8	3.2	32.3	-31.7	2.6	43.0	54.0	54.0	74.0	11.0	20.0	349.0	125.0	35
2880.001	H	36.3	49.0	3.2	32.3	-31.7	2.6	39.5	52.2	54.0	74.0	14.5	21.8	299.0	42.0	32

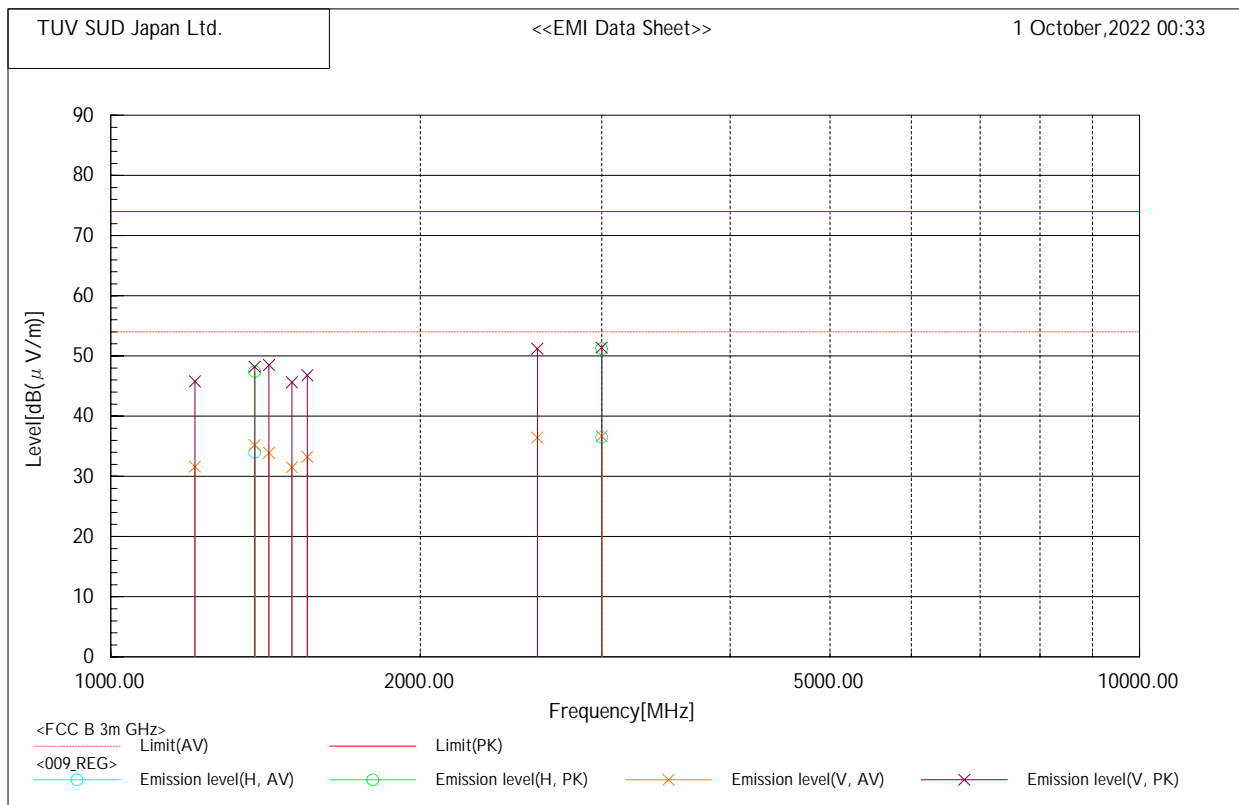


Operation mode	MP4 + USB Read with PC mode
EUT	EB1136, S/N: 354649890001379 - Modification State 0

S/N: 354649890001379, Case 2

Standard : FCC Part 15 Class B
 Date of test : 1 October,2022 00:33
 Operator : Tsuyoshi Okumura
 Temp, Hum, Atm : 20.8 [°C], 61.6 [%], 987 [hPa]
 Supply power : AC 120 V, 60 Hz, 1 phase
 Antenna distance : 3.95 m
 Antenna height : 1.00 m - 4.00 m

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



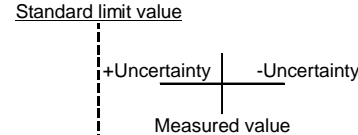

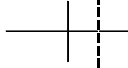

Final Result

Frequency MHz	Pol.	Reading dB(μV)		Factor dB(1/m)				Level dB(μV/m)		Limit dB(μV/m)		Margin dB		Height cm	Angle deg	Tilt deg
		AV	PK	CF	TF	PF	DF	AV	PK	AV	PK	AV	PK			
1207.455	V	36.3	50.5	-4.7	28.7	-35.8	2.4	31.6	45.8	54.0	74.0	22.4	28.2	242.0	238.0	25
1379.951	V	39.2	52.2	-4.0	28.7	-35.1	2.4	35.2	48.2	54.0	74.0	18.8	25.8	326.0	315.0	35
1379.951	H	38.0	51.4	-4.0	28.7	-35.1	2.4	34.0	47.4	54.0	74.0	20.0	26.6	369.0	308.0	37
1424.947	V	38.0	52.6	-4.1	28.4	-34.9	2.4	33.9	48.5	54.0	74.0	20.1	25.5	291.0	342.0	31
1499.944	V	35.5	49.6	-4.0	28.2	-34.6	2.4	31.5	45.6	54.0	74.0	22.5	28.4	157.0	194.0	11
1552.441	V	37.2	50.8	-4.0	28.1	-34.5	2.4	33.2	46.8	54.0	74.0	20.8	27.2	178.0	216.0	14
2598.540	V	33.5	48.3	2.9	32.7	-32.2	2.4	36.4	51.2	54.0	74.0	17.6	22.8	226.0	190.0	22
2999.900	V	33.3	48.0	3.4	32.6	-31.6	2.4	36.7	51.4	54.0	74.0	17.3	22.6	249.0	205.0	26
2999.900	H	33.1	47.8	3.4	32.6	-31.6	2.4	36.5	51.2	54.0	74.0	17.5	22.8	211.0	158.0	20

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	9kHz to 150kHz	± 3.7 dB	± 3.8 dB
Conducted Emission, V-AMN	150kHz to 30MHz	± 3.3 dB	± 3.4 dB
Conducted Emission, Δ -AN	150kHz to 30MHz	± 4.9 dB	-
Conducted Emission, AN	150kHz to 30MHz	± 4.3 dB	-
Conducted Emission, AAN	150kHz to 30MHz	± 4.8 dB	± 5.0 dB
Conducted Emission, Voltage Probe	9kHz to 30MHz	± 2.8 dB	± 2.9 dB
Conducted Emission, Current Probe	150kHz to 30MHz	± 2.9 dB	± 2.9 dB
Disturbance Power	30MHz to 300MHz	± 3.8 dB	± 4.5 dB
Radiated Emission	30MHz to 1000MHz	± 5.5 dB	± 6.3 dB
Radiated Emission	1GHz to 6GHz	± 4.9 dB	± 5.2 dB
Radiated Emission	6GHz to 18GHz	± 4.7 dB	± 5.5 dB
Radiated Emission	9kHz to 30MHz	± 3.2 dB	-

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



Japan

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-Dec-2022	14-Dec-2021
Line impedance stabilization network	Kyoritsu Technology Corporation	TNW-407F2	12-17-110-2	30-Jun-2023	15-Jun-2022
Attenuator	HUBER+SUHNER	6810.01.A	N/A(S442)	28-Feb-2023	01-Feb-2022
Coaxial cable	FUJIKURA	5D-2W/4m	N/A(S349)	31-Oct-2022	27-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	317672/4	31-Oct-2022	28-Oct-2021
Coaxial cable	HUBER+SUHNER	RG214/U/25m	N/A(S191)	31-Oct-2022	27-Oct-2021
Software	TOYO Technica	ES10/CE-AJ	Ver.2021.10.001	N/A	N/A

Radiated emission (below 1 GHz)

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
EMI receiver	ROHDE&SCHWARZ	ESR7	102352	31-Dec-2022	14-Dec-2021
Biconical antenna	Schwarzbeck	VHBB9124/BBA9106	1344	31-May-2023	27-May-2022
Log-periodic antenna	Schwarzbeck	VUSLP9111B	344	30-Jun-2023	28-Jun-2022
Attenuator	TDC	TAT-43B-06	N/A(S209)	31-Jul-2023	14-Jul-2022
Attenuator	TAMAGAWA.ELEC	CFA-10/3dB	N/A(S504)	31-Jul-2023	14-Jul-2022
Microwave cable	HUBER+SUHNER	SUCOFLEX104/9m	MY23758/4	31-Oct-2022	28-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX104/1m	MY24628/4	31-Oct-2022	28-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	SN MY28398/4	31-Oct-2022	28-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX106/13m	MY1159/6	31-Oct-2022	27-Oct-2021
Preamplifier	SONOMA	310	400315	31-Mar-2023	03-Mar-2022
10m Semi-anechoic Chamber	TOKIN	N/A	N/A(9001-NSA3m)	31-May-2023	29-May-2022
Software	TOYO Technica	ES10/RE-AJ	Ver.2021.10.001	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-Mar-2023	03-Mar-2022
Preamplifier	TSJ	MLA-0118-J02-40	14882	31-Oct-2022	27-Oct-2021
Double ridged guide antenna	ETS LINDGREN	3117	00209352	31-Jan-2023	28-Jan-2022
Attenuator	Agilent Technologies	8491B	MY39268633	30-Jun-2023	16-Jun-2022
Microwave cable	HUBER+SUHNER	SUCOFLEX104/9m	811445/4	31-Oct-2022	27-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX104/1.5m	SN MY19304/4	31-Oct-2022	27-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	SN MY28398/4	31-Oct-2022	28-Oct-2021
Microwave cable	HUBER+SUHNER	SUCOFLEX106/13m	MY1159/6	31-Oct-2022	27-Oct-2021
Absorber	RIKEN	PFP30	N/A	N/A	N/A
10m Semi-anechoic Chamber	TOKIN	N/A	N/A(9001-SVSWR)	31-May-2023	30-May-2022
Software	TOYO Technica	ES10/RE-AJ	Ver.2021.10.001	N/A	N/A