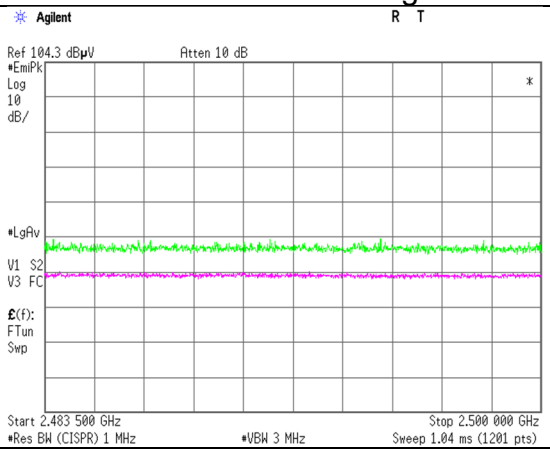
Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	January 30, 2024
Temperature / Humidity	20 deg. C / 38 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 2.8 GHz)
Mode	Tx BT LE, 2M-PHY 2480 MHz

Horizontal

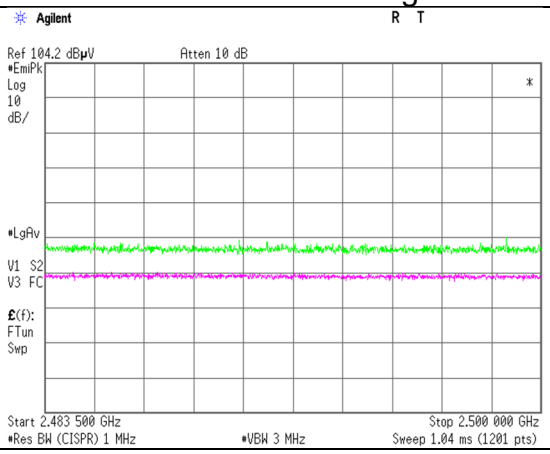
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot

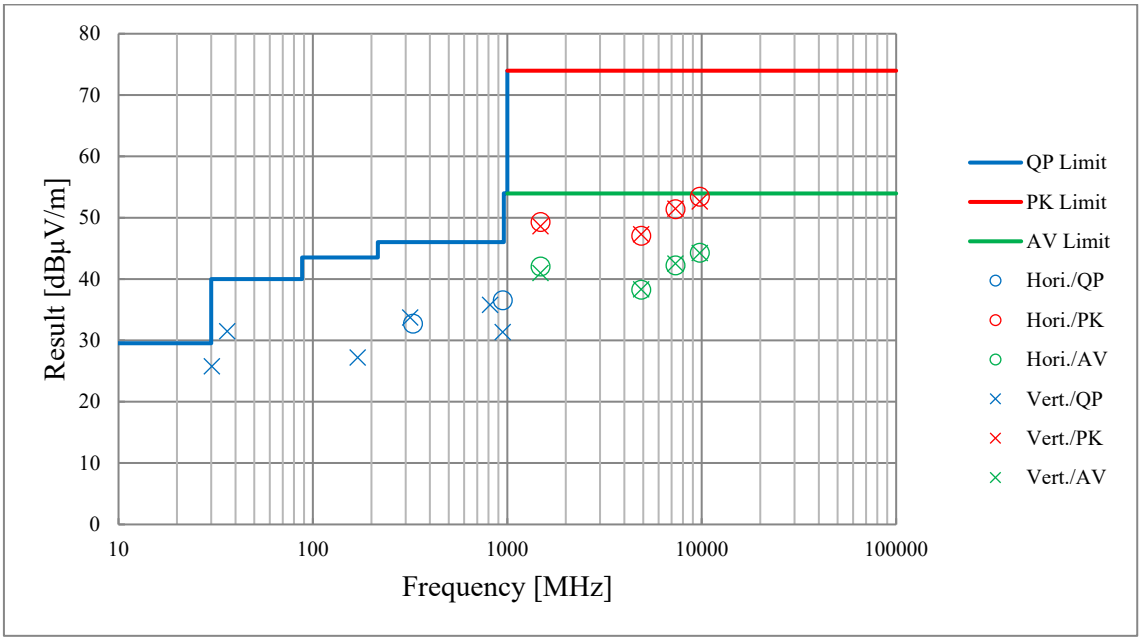


Trace Green : Peak Plot
Trace Purple : Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission
(Plot data, Worst case mode for Maximum Peak Output Power)

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.11	No.11	No.11	No.11
Date	January 31, 2024	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	22 deg. C / 40 % RH	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(30 MHz to 1 GHz)	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 2M-PHY 2440 MHz			



*These plots data contain sufficient number to show the trend of characteristic features for EUT.

Radiated Spurious Emission

Test place	Kashima EMC Lab.		
Semi Anechoic Chamber	No.11	No.11	No.11
Date	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 1M-PHY 2402 MHz with Tx 11a 5180 MHz		

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	2390.000	PK	54.38	27.57	13.21	46.26	2.26	51.16	73.9	22.7	150	231	
Vert.	2390.000	PK	53.43	27.57	13.21	46.26	2.26	50.21	73.9	23.6	217	244	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	44.35	27.57	13.21	46.26	1.76	2.26	42.89	53.9	**11.0**	*1)
Vert.	2390.000	AV	44.31	27.57	13.21	46.26	1.76	2.26	42.85	53.9	**11.0**	*1)

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Duty factor + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB
Duty factor refer to "Burst rate confirmation" sheet.
*1) Not out of band emission (Leakage Power)

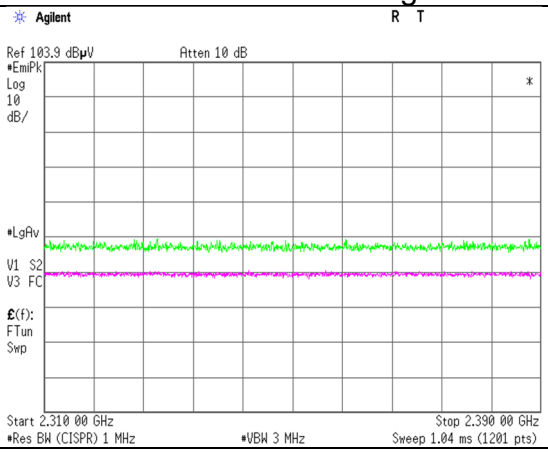
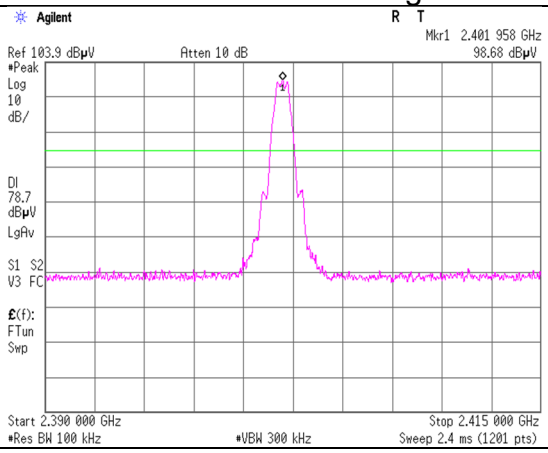
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

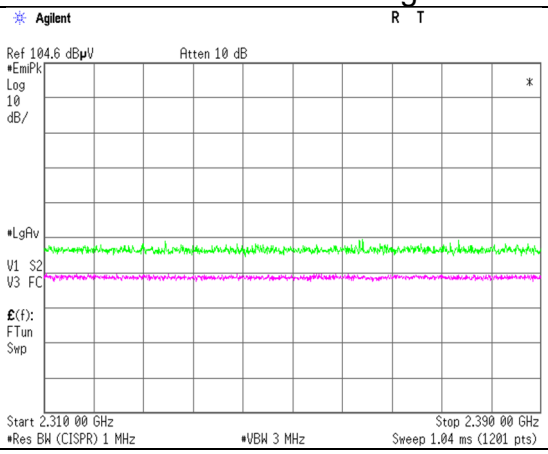
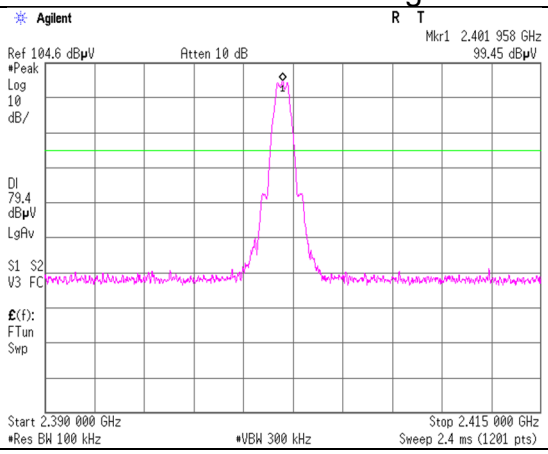
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2402.000	PK	98.68	27.59	13.22	46.25	2.26	95.50	-	-	Carrier
Hori.	2400.000	PK	45.27	27.58	13.22	46.25	2.26	42.08	75.5	33.4	-
Vert.	2402.000	PK	99.45	27.59	13.22	46.25	2.26	96.27	-	-	Carrier
Vert.	2400.000	PK	46.31	27.58	13.22	46.25	2.26	43.12	76.3	33.1	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	January 30, 2024
Temperature / Humidity	20 deg. C / 38 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 2.8 GHz)
Mode	Tx BT LE, 1M-PHY 2402 MHz with Tx 11a 5180 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge and authorized band edge were shown in tabular data.

Radiated Spurious Emission

Test place	Kashima EMC Lab.		
Semi Anechoic Chamber	No.11	No.11	No.11
Date	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 1M-PHY 2480 MHz with Tx 11a 5180 MHz		

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	2483.500	PK	53.85	27.99	13.29	46.16	2.26	51.23	73.9	22.6	161	49	
Vert.	2483.500	PK	53.41	27.99	13.29	46.16	2.26	50.79	73.9	23.1	210	213	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	44.63	27.99	13.29	46.16	1.76	2.26	43.77	53.9	**10.1**	*1)
Vert.	2483.500	AV	44.57	27.99	13.29	46.16	1.76	2.26	43.71	53.9	**10.1**	*1)

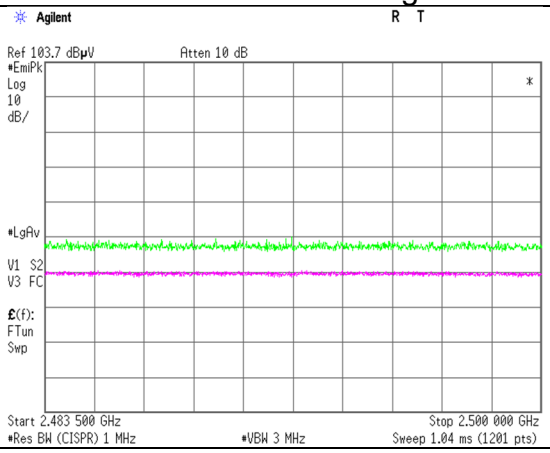
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Duty factor + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB
Duty factor refer to "Burst rate confirmation" sheet.
*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	January 30, 2024
Temperature / Humidity	20 deg. C / 38 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 2.8 GHz)
Mode	Tx BT LE, 1M-PHY 2480 MHz with Tx 11a 5180 MHz

Horizontal

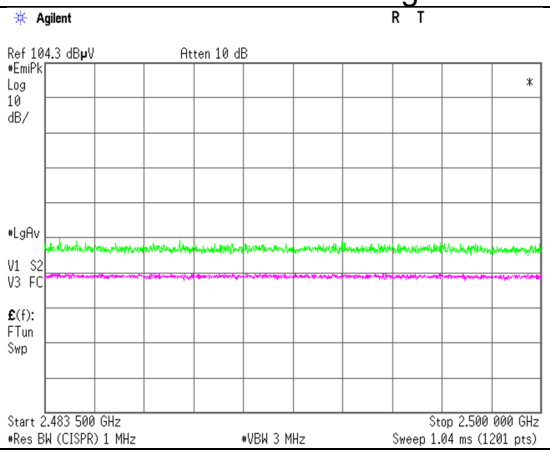
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place	Kashima EMC Lab.		
Semi Anechoic Chamber	No.11	No.11	No.11
Date	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 2M-PHY 2402 MHz with Tx 11a 5180 MHz		

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	2390.000	PK	53.48	27.57	13.21	46.26	2.26	50.26	73.9	23.6	154	232	
Vert.	2390.000	PK	53.63	27.57	13.21	46.26	2.26	50.41	73.9	23.4	158	294	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	44.33	27.57	13.21	46.26	4.31	2.26	45.42	53.9	**8.4**	*1)
Vert.	2390.000	AV	44.41	27.57	13.21	46.26	4.31	2.26	45.50	53.9	**8.4**	*1)

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Duty factor + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB
Duty factor refer to "Burst rate confirmation" sheet.
*1) Not out of band emission (Leakage Power)

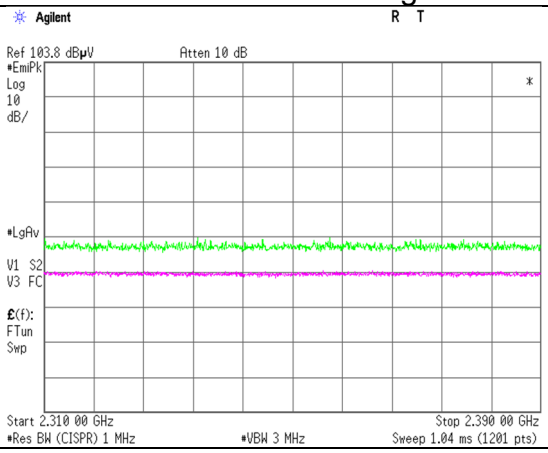
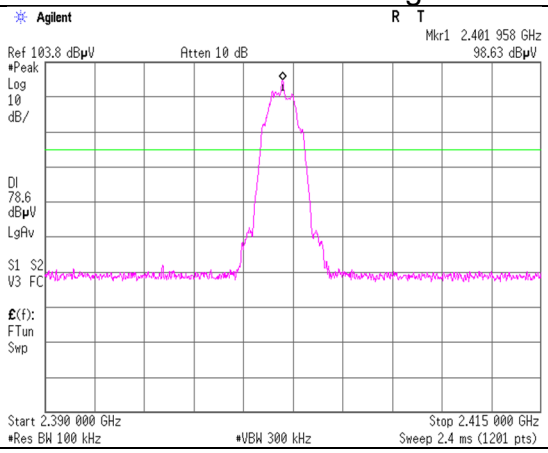
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

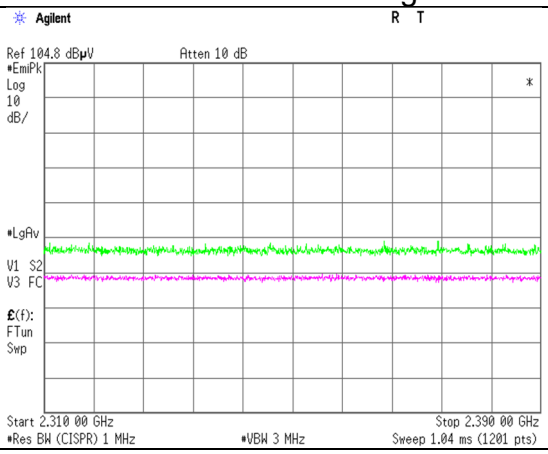
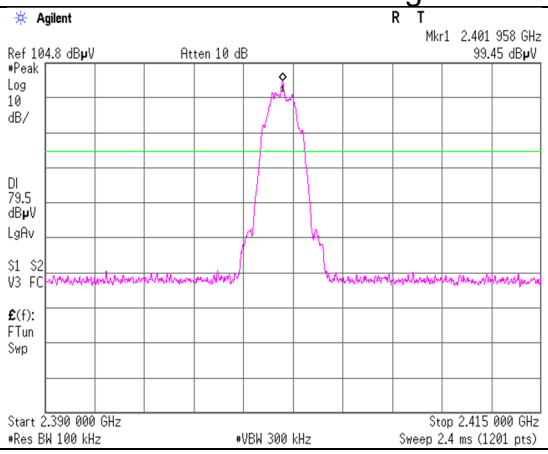
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2402.000	PK	98.63	27.59	13.22	46.25	2.26	95.45	-	-	Carrier
Hori.	2400.000	PK	52.58	27.58	13.22	46.25	2.26	49.39	75.5	26.0	-
Vert.	2402.000	PK	99.45	27.59	13.22	46.25	2.26	96.27	-	-	Carrier
Vert.	2400.000	PK	53.07	27.58	13.22	46.25	2.26	49.88	76.3	26.3	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	January 30, 2024
Temperature / Humidity	20 deg. C / 38 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 2.8 GHz)
Mode	Tx BT LE, 2M-PHY 2402 MHz with Tx 11a 5180 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge and authorized band edge were shown in tabular data.

Radiated Spurious Emission

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.11	No.11	No.11	No.11
Date	January 31, 2024	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	22 deg. C / 40 % RH	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(30 MHz to 1 GHz)	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 2M-PHY 2440 MHz with Tx 11a 5180 MHz			

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	318.299	QP	44.00	13.99	7.71	31.94	0.00	33.76	46.0	12.2	148	305	
Hori.	947.831	QP	30.30	23.96	10.06	30.96	0.00	33.36	46.0	12.6	152	214	
Hori.	1481.760	PK	55.15	25.53	12.44	46.47	2.26	48.91	73.9	24.9	166	147	
Hori.	4880.000	PK	51.16	32.66	5.68	45.76	2.26	46.00	73.9	27.9	150	0	Floor noise
Hori.	7320.000	PK	50.82	37.25	7.00	44.64	2.26	52.69	73.9	21.2	150	0	Floor noise
Hori.	9760.000	PK	47.27	38.24	7.95	43.11	2.26	52.61	73.9	21.2	150	0	Floor noise
Hori.	1481.760	AV	47.18	25.53	12.44	46.47	2.26	40.94	53.9	12.9	166	147	
Hori.	4880.000	AV	42.55	32.66	5.68	45.76	2.26	37.39	53.9	16.5	150	0	Floor noise
Hori.	7320.000	AV	40.79	37.25	7.00	44.64	2.26	42.66	53.9	11.2	150	0	Floor noise
Hori.	9760.000	AV	38.84	38.24	7.95	43.11	2.26	44.18	53.9	9.7	150	0	Floor noise
Vert.	31.855	QP	42.90	12.55	5.68	32.18	0.00	28.95	40.0	11.0	100	0	
Vert.	36.270	QP	45.90	12.91	5.74	32.17	0.00	32.38	40.0	**7.6**	100	256	
Vert.	170.000	QP	37.60	12.87	6.89	32.06	0.00	25.30	43.5	18.2	100	180	
Vert.	314.486	QP	41.70	13.90	7.69	31.94	0.00	31.35	46.0	14.6	100	166	
Vert.	816.000	QP	37.60	22.62	9.63	31.75	0.00	38.10	46.0	7.9	141	196	
Vert.	947.594	QP	29.40	23.95	10.06	30.96	0.00	32.45	46.0	13.5	156	302	
Vert.	1481.760	PK	54.94	25.53	12.44	46.47	2.26	48.70	73.9	25.2	165	129	
Vert.	4880.000	PK	51.68	32.66	5.68	45.76	2.26	46.52	73.9	27.3	150	0	Floor noise
Vert.	7320.000	PK	50.28	37.25	7.00	44.64	2.26	52.15	73.9	21.7	150	0	Floor noise
Vert.	9760.000	PK	47.19	38.24	7.95	43.11	2.26	52.53	73.9	21.3	150	0	Floor noise
Vert.	1481.760	AV	46.88	25.53	12.44	46.47	2.26	40.64	53.9	13.2	165	129	
Vert.	4880.000	AV	42.69	32.66	5.68	45.76	2.26	37.53	53.9	16.3	150	0	Floor noise
Vert.	7320.000	AV	40.45	37.25	7.00	44.64	2.26	42.32	53.9	11.5	150	0	Floor noise
Vert.	9760.000	AV	38.75	38.24	7.95	43.11	2.26	44.09	53.9	9.8	150	0	Floor noise

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Kashima EMC Lab.		
Semi Anechoic Chamber	No.11	No.11	No.11
Date	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 2M-PHY 2480 MHz with Tx 11a 5180 MHz		

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	2483.500	PK	54.02	27.99	13.29	46.16	2.26	51.40	73.9	22.5	193	50	
Vert.	2483.500	PK	53.73	27.99	13.29	46.16	2.26	51.11	73.9	22.7	151	290	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	44.59	27.99	13.29	46.16	4.31	2.26	46.28	53.9	**7.6**	*1)
Vert.	2483.500	AV	44.52	27.99	13.29	46.16	4.31	2.26	46.21	53.9	**7.6**	*1)

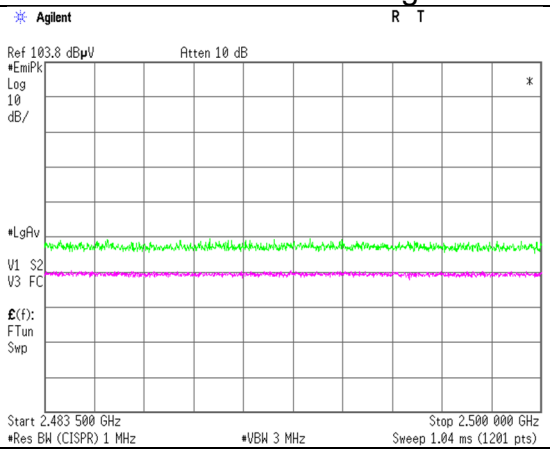
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Duty factor + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB
Duty factor refer to "Burst rate confirmation" sheet.
*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	January 30, 2024
Temperature / Humidity	20 deg. C / 38 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 2.8 GHz)
Mode	Tx BT LE, 2M-PHY 2480 MHz with Tx 11a 5180 MHz

Horizontal

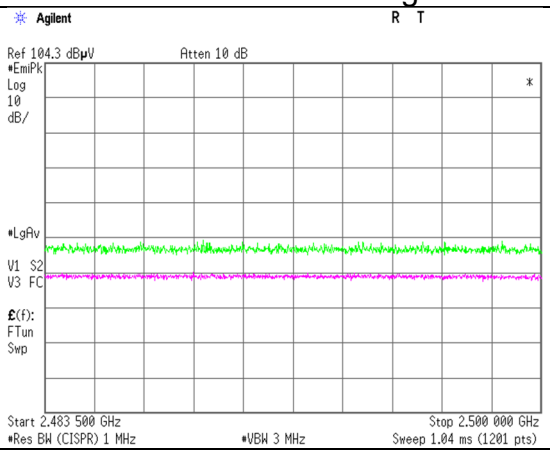
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot

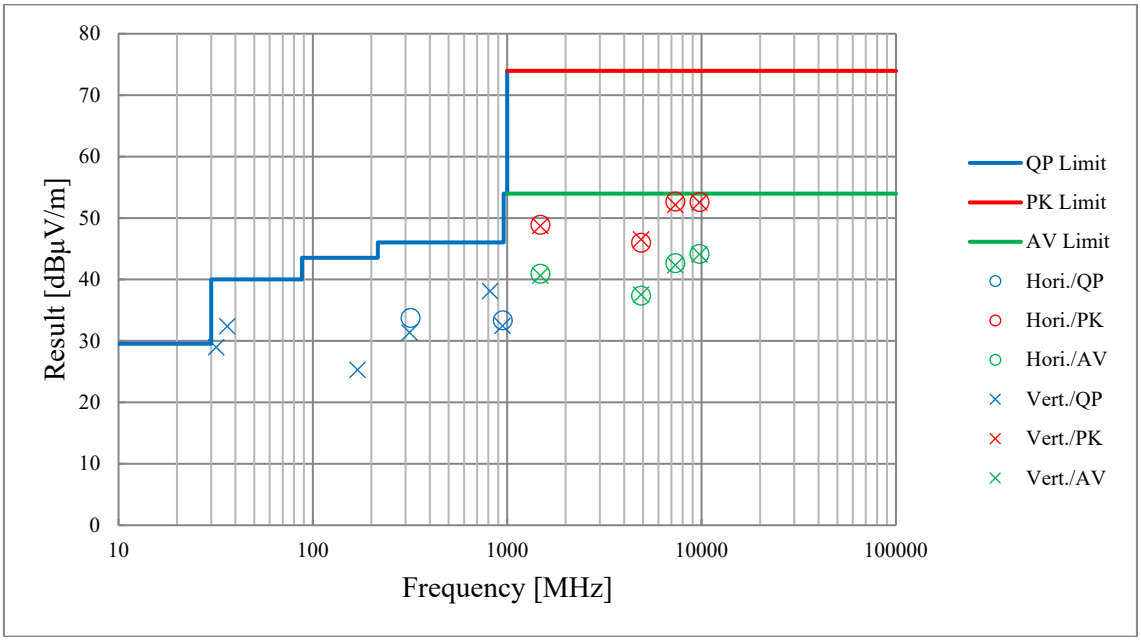


Trace Green : Peak Plot
Trace Purple : Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission
(Plot data, Worst case mode for Maximum Peak Output Power)

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.11	No.11	No.11	No.11
Date	January 31, 2024	January 30, 2024	January 30, 2024	January 31, 2024
Temperature / Humidity	22 deg. C / 40 % RH	20 deg. C / 38 % RH	20 deg. C / 38 % RH	22 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(30 MHz to 1 GHz)	(1 GHz to 2.8 GHz)	(2.8 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE, 2M-PHY 2440 MHz with Tx 11a 5180 MHz			



*These plots data contain sufficient number to show the trend of characteristic features for EUT.

APPENDIX 2: Test Instruments

Test Equipment

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	143122	LOGBICON	Schwarzbeck Mess-Elektronik OHG	VULB 9168	508	2023/04/18	12
RE	178807	5dB Fixed Atten.	Pasternack Enterprises	PE7047-5	none	2023/04/18	12
RE	143169	11Site RE 3m System	N/A	none(No.11 RE)	none	2023/11/15	12
RE	142936	Pre-Amplifier	SONOMA INSTRUMENT	310N	325015	2023/05/23	12
RE	144193	Test Receiver	Rohde & Schwarz	ESU40	100426	2023/04/20	12
RE	144648	Semi Anechoic Chamber	TDK	NSA (No.11)	11	2023/05/11	12
RE	143456	Double Ridged Wave Guide	ETS-Lindgren (Cedar Park, Texas)	3115	00204573	2023/02/04	12
RE	175395	Pre Amplifier	Erzia Technologies S.L.	ERZ-LNA-0100-2700-45-4	16A2001702002	2023/12/07	12
RE	192241	Microwave Cable	Huber+Suhner	SF104/PC35m/PC35m/1000mm	805411/4	2024/01/19	12
RE	231901	Micro Wave Cable	Junkosha	MWX221	FEB-20-23-020	2023/03/10	12
RE	143642	Spectrum Analyzer	Keysight Technologies Inc	N9030A	MY53310670 Version A.13.12	2023/05/23	12
RE	143643	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY52490024	2023/06/21	12
RE	235556	10dB Fixed Attenuator	Weinschel Associates	WA54-10-1314	0H3E9	2023/06/13	12
RE	143442	HPF	Micro-Tronics	HPM50111-02	009	2023/05/24	12
RE	143438	Double Ridged Horn	ETS-Lindgren (Cedar Park, Texas)	3160-09	00166043	2023/06/19	12
RE	142937	Pre-Amplifier	TOYO	HAP18-26W	00000035	2023/06/19	12
RE	142992	Micro Wave Cable	Suhner	SUCOFLEX102	MY010/2A	2023/06/04	12
RE	222746	Measure	SHINWA RULES CO., LTD.	80862	none	-	-
RE	200033	Temperature & Humidity Logger	HIOKI E.E. CORPORATION	LR5001/LR9504	200636447/200699543	2023/07/18	12
RE	143133	Barometer	Sanoh Co., Ltd	SBR-151	001439	2023/03/10	36
RE	144215	Digital Multimeter	Fluke Corporation	FLK-83-V	14610320	2023/10/24	12
RE	178804	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3 (RE,CE,ME,PE)	Ver 3.1.0484	-	-

***Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

Test item:
RE: Radiated Emission