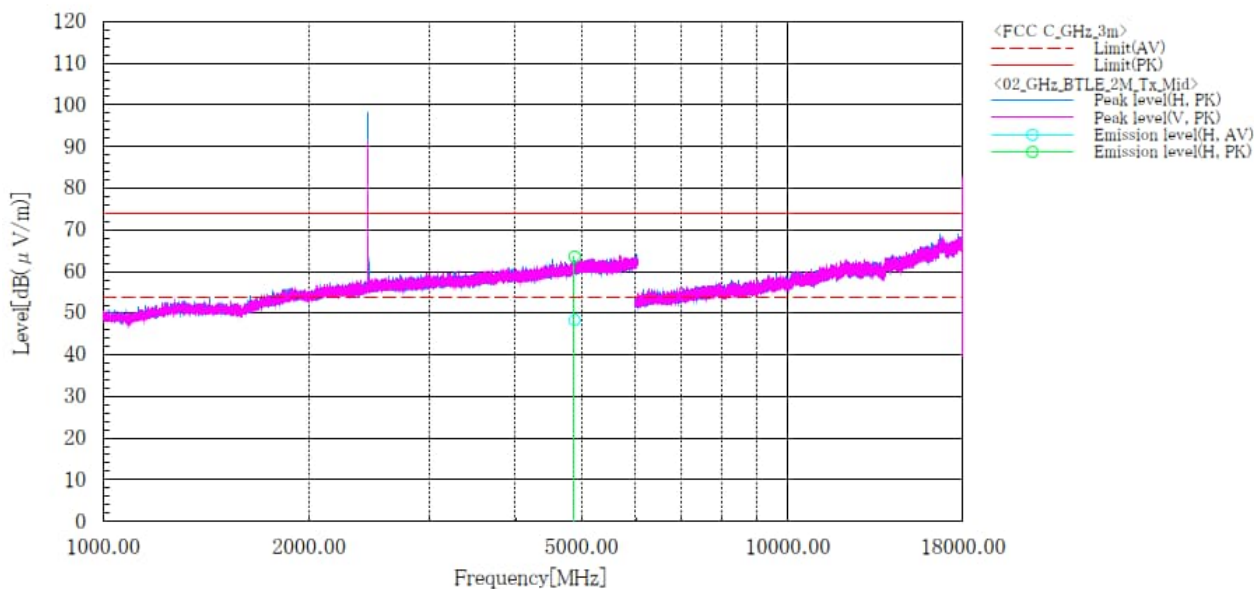


EB1190EM [BT_LE (2Mbps)]**Channel: Middle****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_2M_Tx

Sheet No. : 02
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 20.9 [° C], 40.3 [%]
 Note1 : CH:Mid (2440MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c.f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle	R
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]	
1	4880.000	H	32.8	48.1	15.5	48.3	63.6	54.0	74.0	5.7	10.4	172.0	240.0	

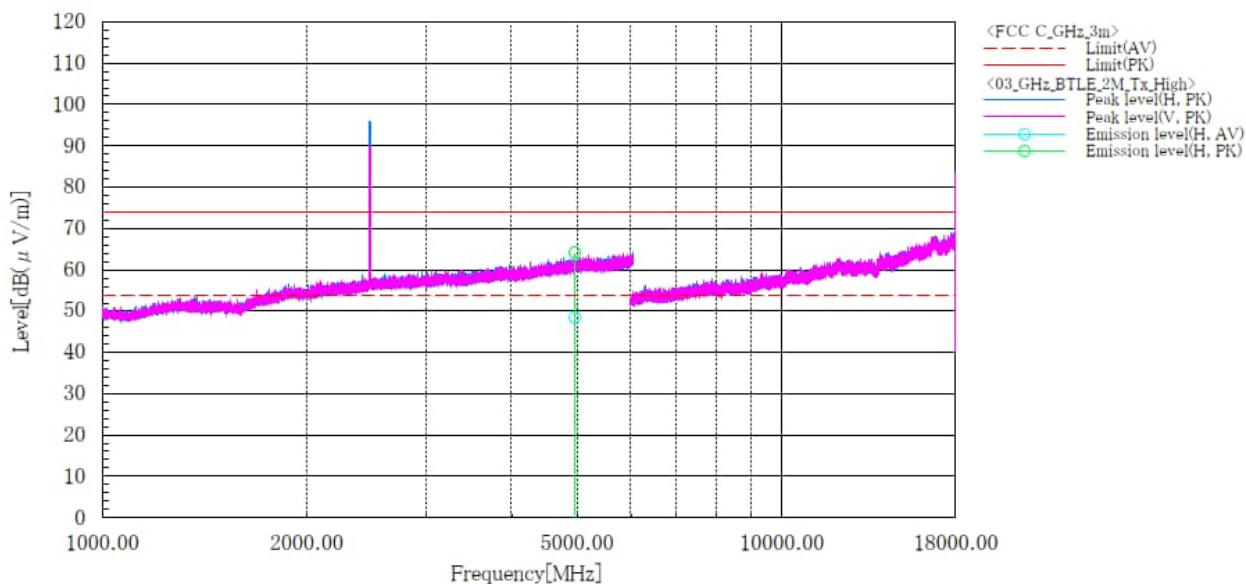
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1190EM [BT_LE (2Mbps)]**Channel: High****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_2M_Tx

Sheet No. : 03
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 20.9 [°C], 40.3 [%]
 Note1 : CH:High (2480MHz)

**Final Result**

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]	R
1	4960.000	H	32.7	48.3	15.8	48.5	64.1	54.0	74.0	5.5	9.9	143.0	171.0	

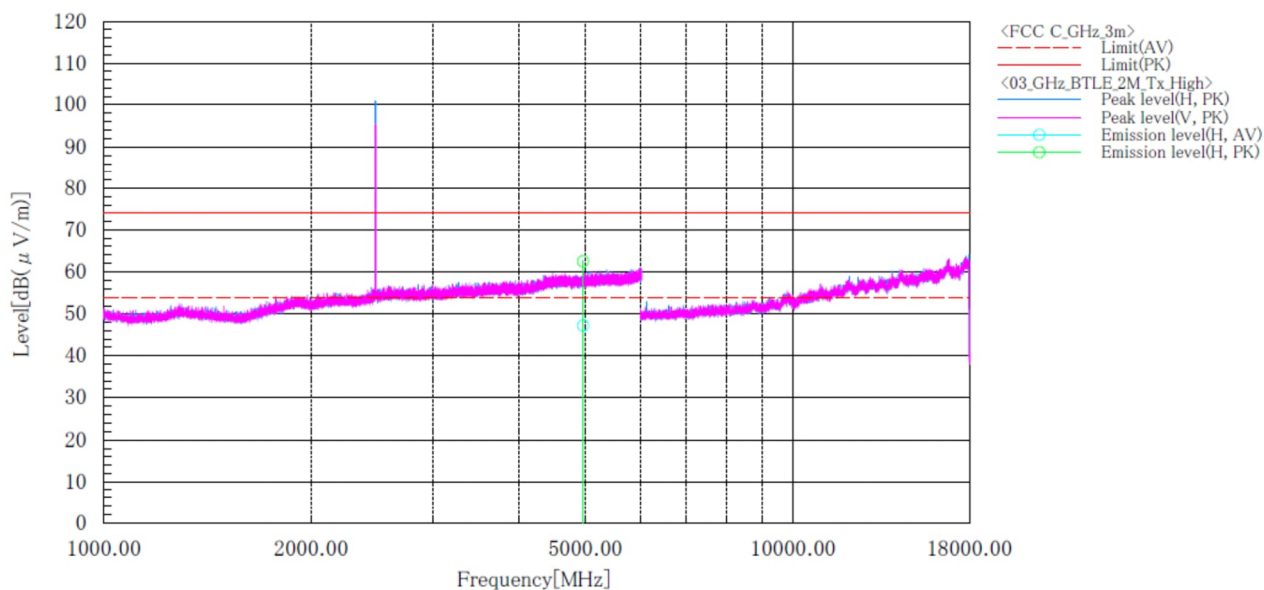
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1207 [BT_LE (2Mbps)]**Channel: High****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1207
 Serial No. : N/A
 Test mode : BT LE_2M_Tx

Sheet No. : 03
 Standard : FCC Part.15 subpart C
 Operator : T.Seino
 Temp,Hum,Atm : 21.1 [° C], 59.4 [%]
 Note1 : CH:High (2480MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]
1	4960.000	H	34.2	49.4	13.1	47.3	62.5	54.0	74.0	6.7	11.5	158.0	165.0

Note:

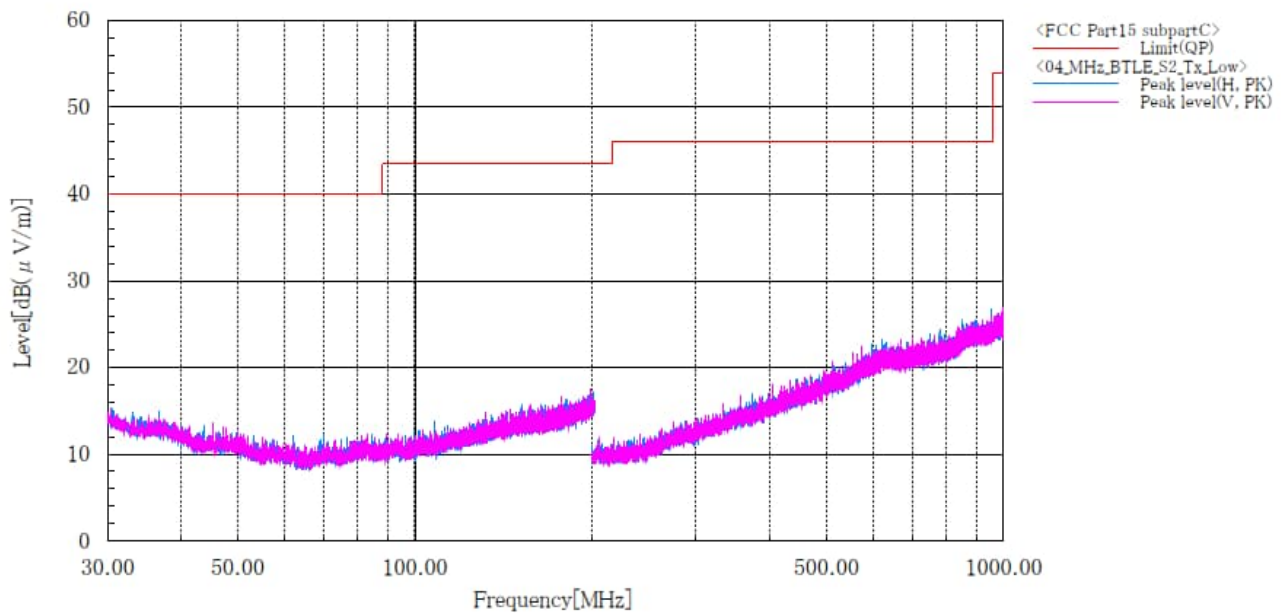
- Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
- No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

Comparison of the charts of EB1190EM and EB1207 showed that the difference in test results was less than 3 dB.

EB1190EM [BT_LE (LongRange S2)]
Channel: Low
BELOW 1 GHz

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BTLE_S2_Tx_CH:Low

Sheet No. : 04
 Standard : FCC Part15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 21.6 [°C], 47.4 [%]
 Note1 :



Final Result

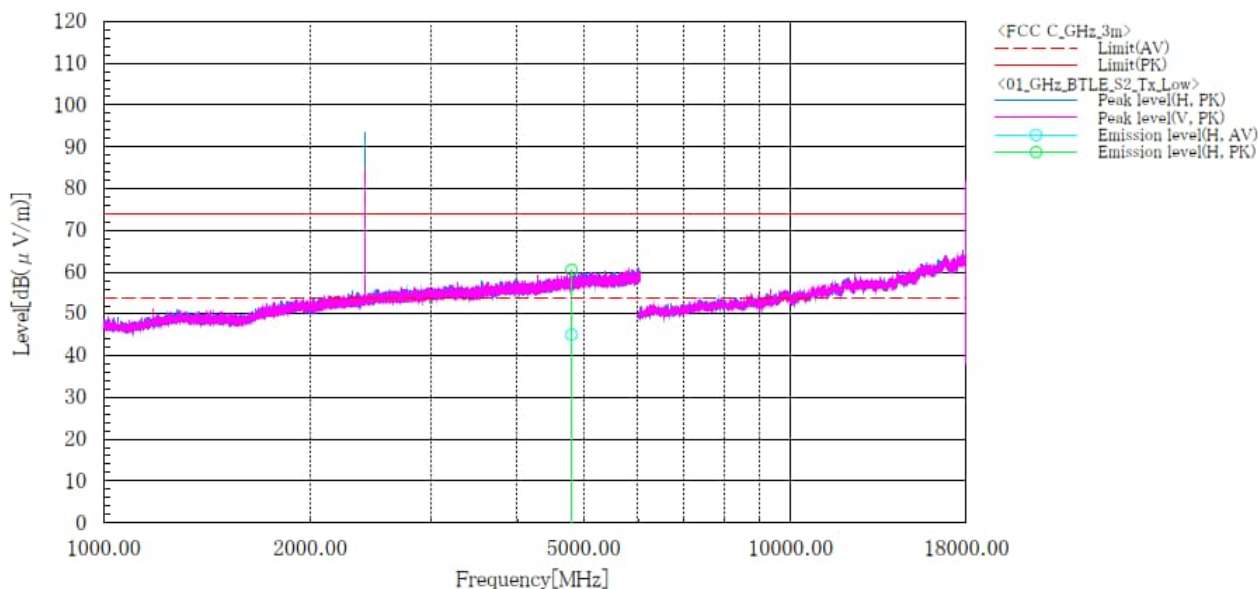
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S2)]**Channel: Low****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_S2_Tx

Sheet No. : 01
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 22.3 [°C], 43.4 [%]
 Note1 : CH:Low (2402MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]
1	4804.000	H	32.1	47.8	12.8	44.9	60.6	54.0	74.0	9.1	13.4	100.0	223.0

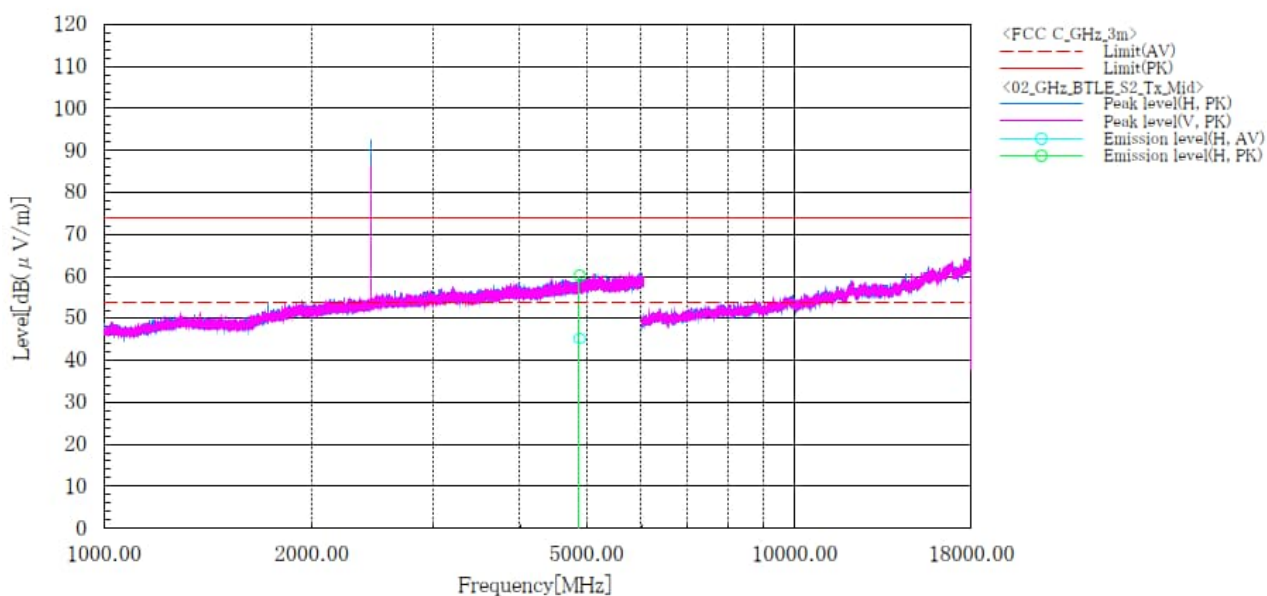
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S2)]**Channel: Middle****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_S2_Tx

Sheet No. : 02
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 22.3 [°C], 43.4 [%]
 Note1 : CH:Mid (2440MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]
1	4880.000	H	32.2	47.2	13.0	45.2	60.2	54.0	74.0	8.8	13.8	100.0	192.0

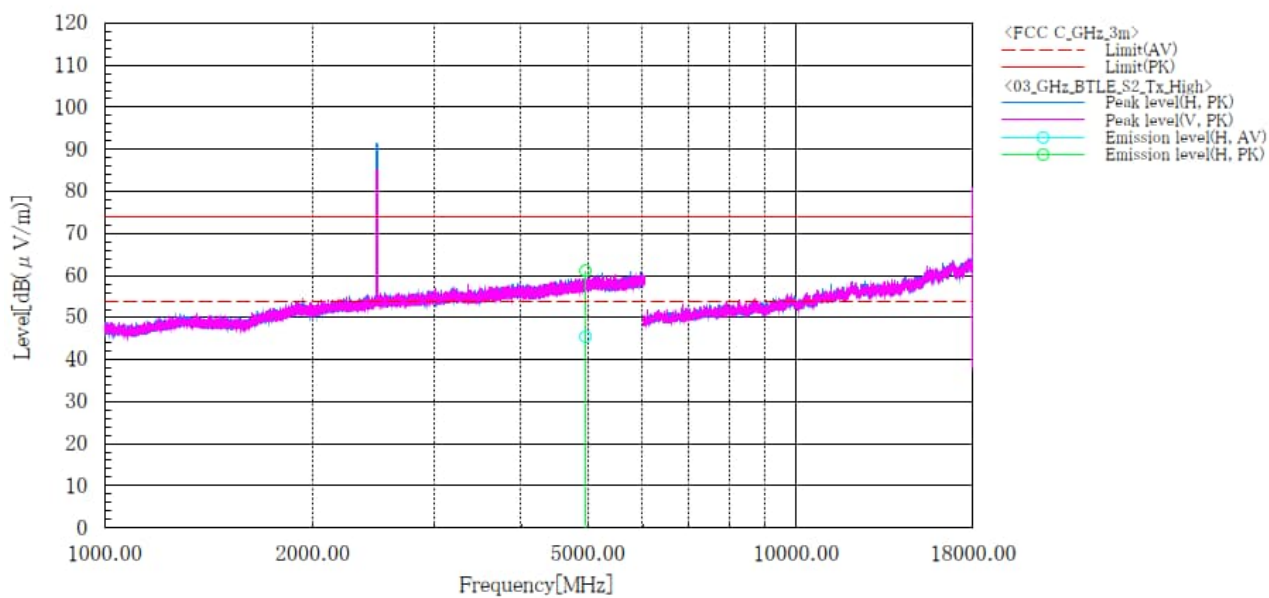
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S2)]**Channel: High****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_S2_Tx

Sheet No. : 03
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 22.3 [°C], 43.4 [%]
 Note1 : CH:High (2480MHz)

**Final Result**

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]
1	4960.000	H	32.2	47.8	13.3	45.5	61.1	54.0	74.0	8.5	12.9	100.0	242.0

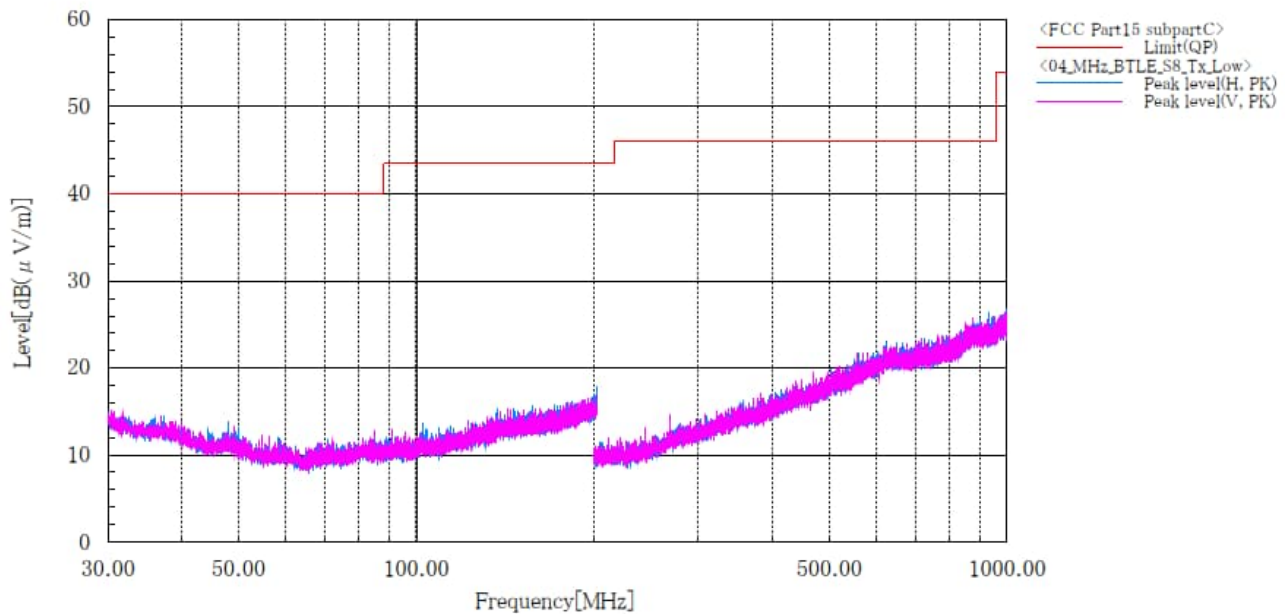
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S8)]**Channel: Low**
BELOW 1 GHz

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BTLE_S8_Tx_CH:Low

Sheet No. : 04
 Standard : FCC Part15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 21.6 [°C], 47.4 [%]
 Note1 :



Final Result

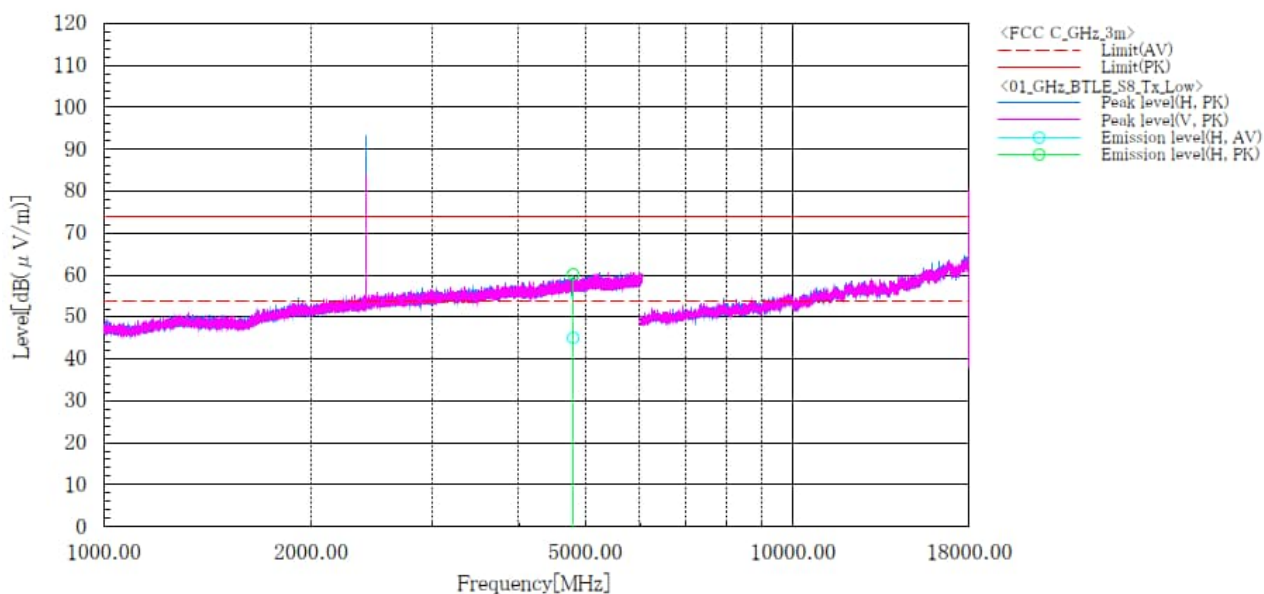
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable - Amp)]
2. No emission were detected in frequency range 9kHz to 30MHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S8)]**Channel: Low****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_S8_Tx

Sheet No. : 01
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 22.3 [°C], 43.4 [%]
 Note1 : CH:Low (2402MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]
1	4804.000	H	32.1	47.3	12.8	44.9	60.1	54.0	74.0	9.1	13.9	100.0	184.0

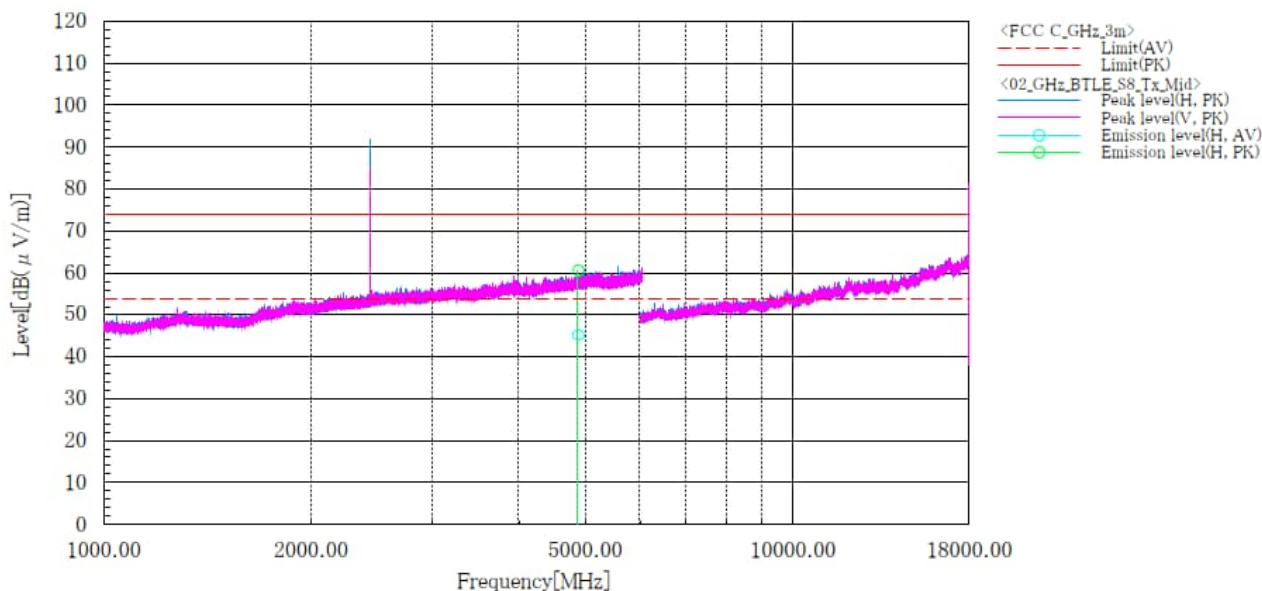
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S8)]**Channel: Middle****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_S8_Tx

Sheet No. : 02
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 22.3 [°C], 43.4 [%]
 Note1 : CH:Mid (2440MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]
1	4880.000	H	32.2	47.6	13.0	45.2	60.6	54.0	74.0	8.8	13.4	100.0	239.0

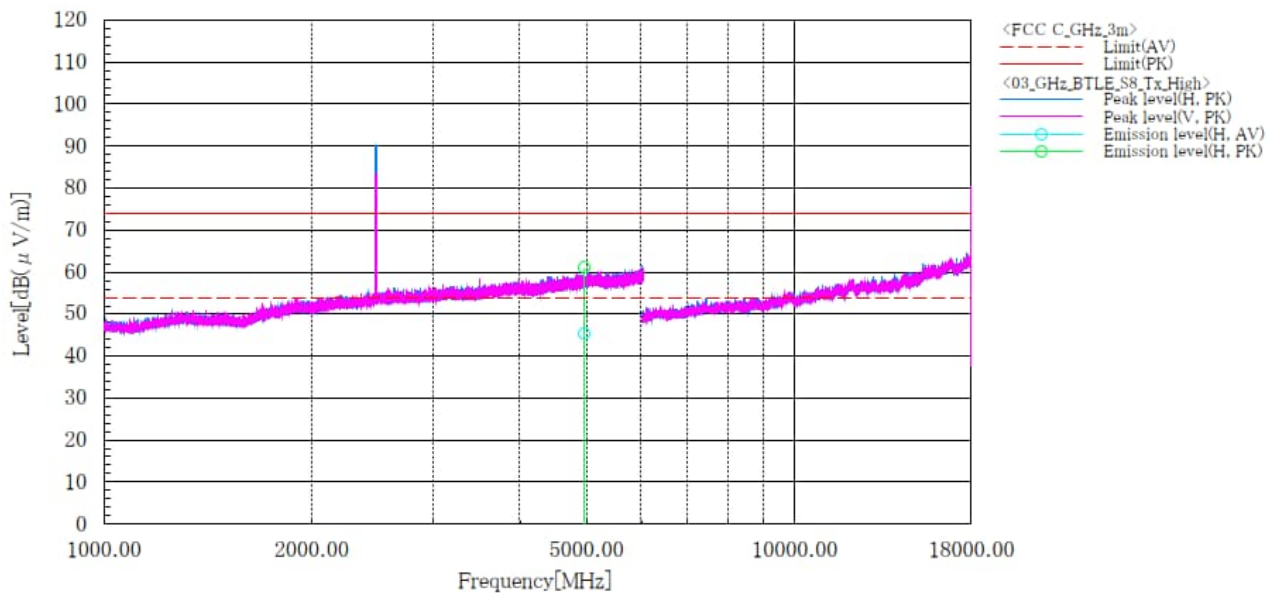
Note:

- Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
- No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

EB1190EM [BT_LE (LongRange S8)]**Channel: High****ABOVE 1 GHz**

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT LE_S8_Tx

Sheet No. : 03
 Standard : FCC Part.15 subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 22.3 [°C], 43.4 [%]
 Note1 : CH:High (2480MHz)

**Final Result**

No.	Frequency	Pol	Reading AV	Reading PK	c. f	Result AV	Result PK	Limit AV	Limit PK	Margin AV	Margin PK	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[deg]
1	4960.000	H	32.1	47.8	13.3	45.4	61.1	54.0	74.0	8.6	12.9	153.0	172.0

Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

4.6.2 Limit

Emission at the boundary of the restricted band provided by 15.205 shall be lower than 15.209 limit.

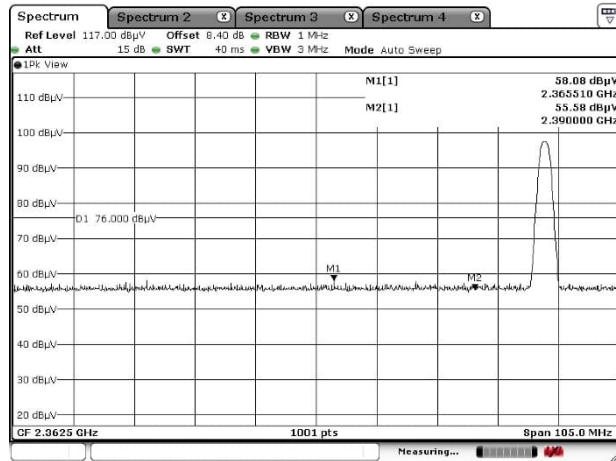
4.6.3 Measurement result

Channel	Frequency [MHz]	Results Chart	Result
Low	2402	See the Trace Data	Pass
High	2480	See the Trace Data	Pass

4.6.4 Test data

Date	: 9-May-2024		
Temperature	: 22.1 [°C]		
Humidity	: 32.1 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Chiaki Kanno</u>
Date	: 14-May-2024		
Temperature	: 20.9 [°C]		
Humidity	: 40.3 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Chiaki Kanno</u>
Date	: 8-August-2024		
Temperature	: 21.1 [°C]		
Humidity	: 59.4 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Tadahiro Seino</u>

Peak



Spectrum **Spectrum 2** **Spectrum 3** **Spectrum 4**

Ref Level 60.00 dBμV Offset 6.40 dB RBW 1 MHz
 Att 15 dB SWF 12 s VBW 1 kHz Mode Auto Sweep

● 1PK View

M1[1] 43.88 dBμV
 2.349280 GHz
 M2[1] 43.50 dBμV
 2.360000 GHz

D1 54.000 dBμV

50 dBμV
 40 dBμV
 30 dBμV

M1 M2

CF 2.3625 GHz 1001 pts Span 105.0 MHz

Measuring...

Spectrum | **Spectrum 2** | **Spectrum 3** | **Spectrum 4**

Ref Level 117.00 dBμV | **Offset** 8.40 dB | **RBW** 1 MHz | **Att** 15 dB | **SWT** 40 ms | **VBW** 3 MHz | **Mode** Auto Sweep

● **1PK View**

M1[1] 57.76 dBμV
2.367400 GHz

M2[1] 56.99 dBμV
2.390000 GHz

D1 76.000 dBμV

M1[42]

CF 2.3625 GHz | 1001 pts | Span 105.0 MHz

Measuring...

Spectrum Spectrum 2 Spectrum 3 Spectrum 4

Ref Level 60.00 dBμV Offset 6.40 dB RBW 1 MHz
 Att 15 dB SWT 12 s VBW 1 kHz Mode Auto Sweep

• IPR View

M1[1] 43.65 dBμV
 2.353260 GHz
 M2[1] 43.53 dBμV
 2.390000 GHz

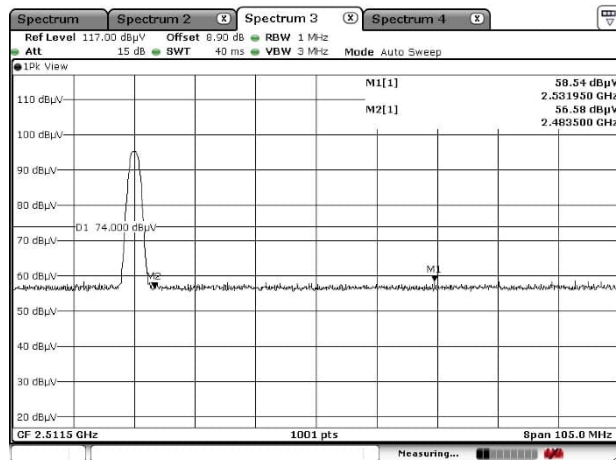
D1 54.000 dBμV

50 dBμV
 40 dBμV
 30 dBμV

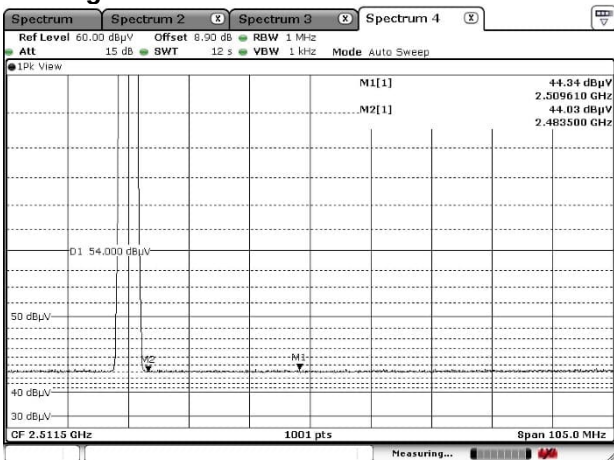
OF 2.3625 GHz 1001 pts 8pan 105.0 MHz

Measuring...

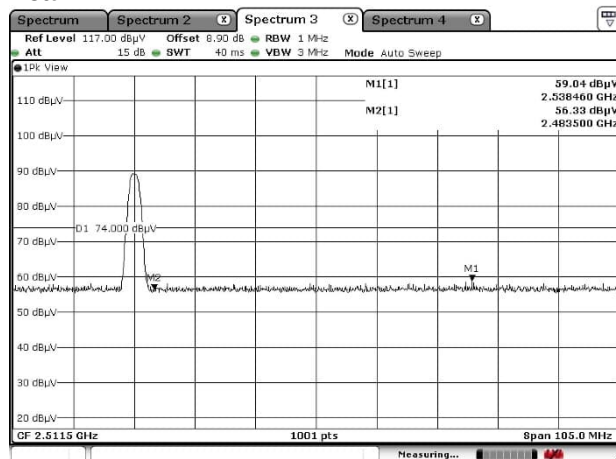
Channel: High Horizontal Peak



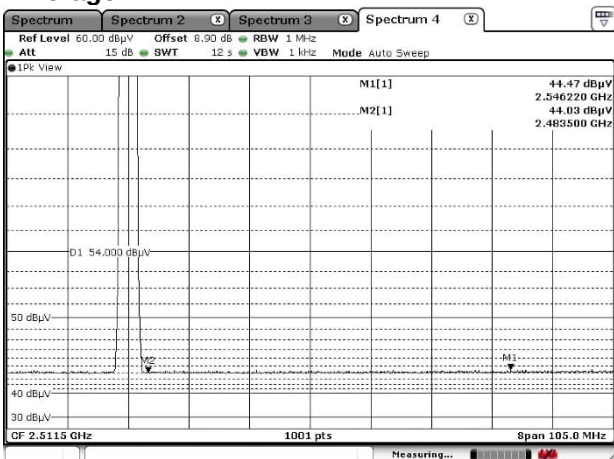
Average

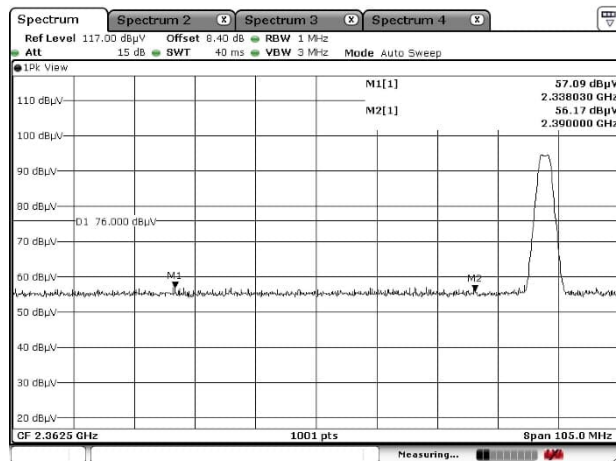
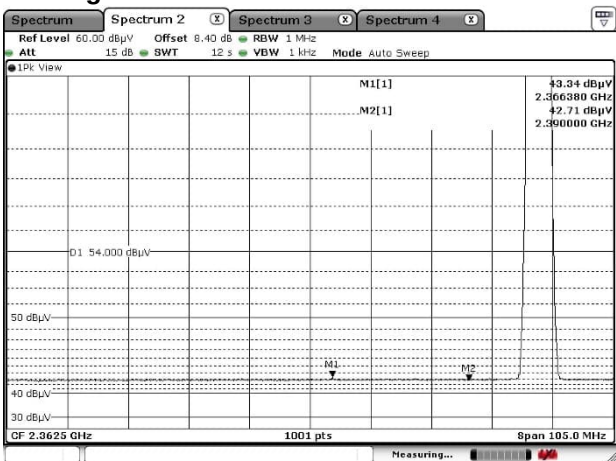
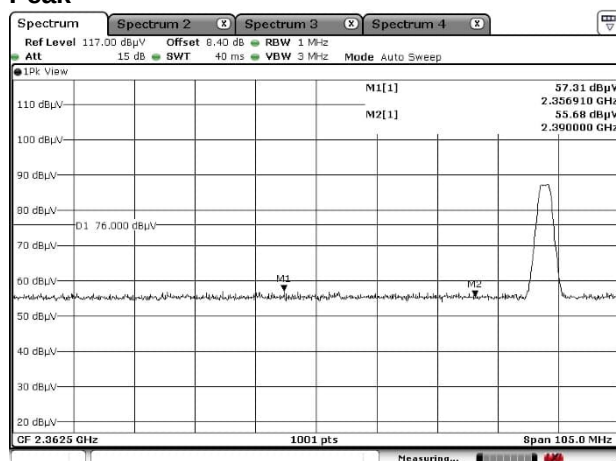
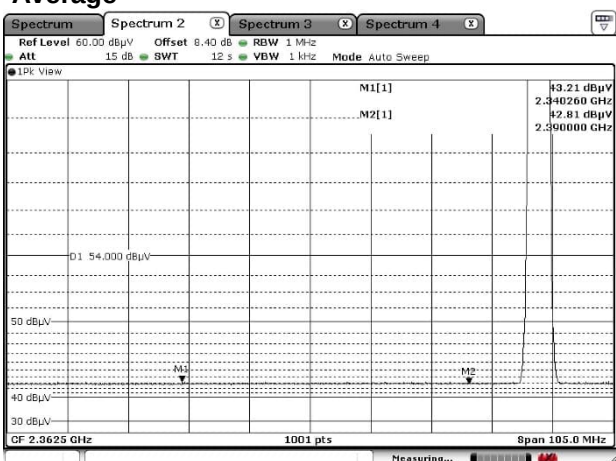


Vertical Peak

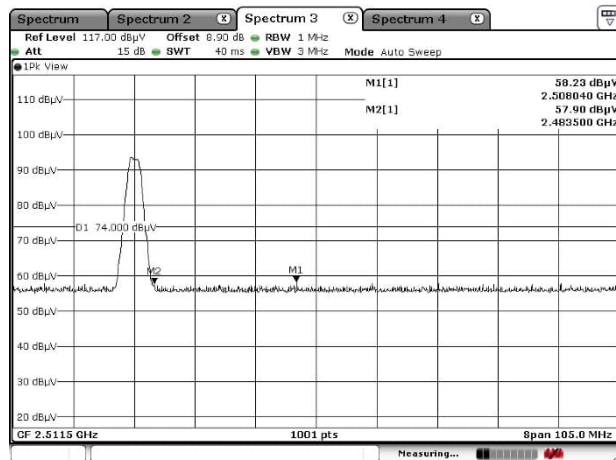


Average

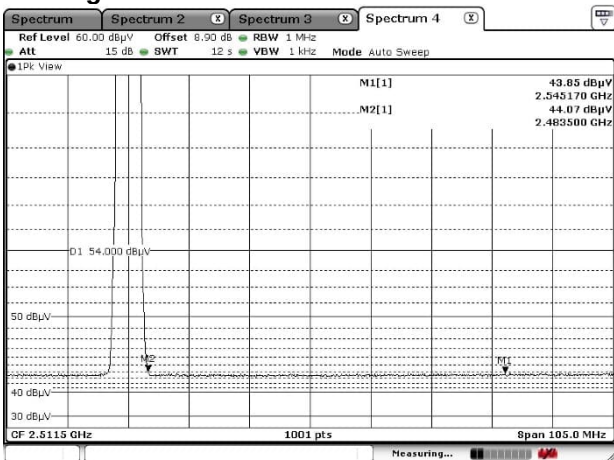


EB1190EM [BT_LE (2Mbps)]**Channel: Low****Horizontal****Peak****Average****Vertical**
Peak**Average**

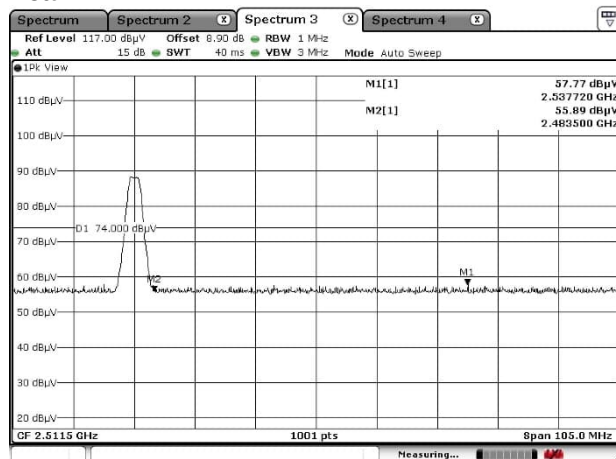
Channel: High Horizontal Peak



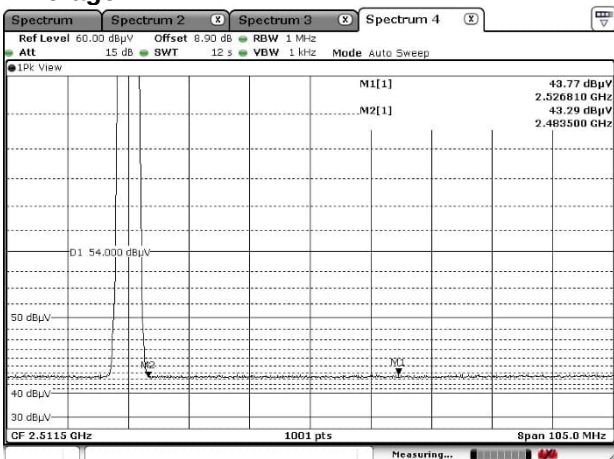
Average

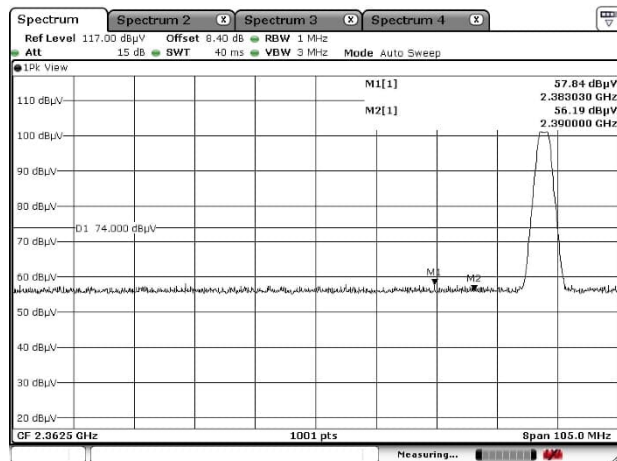
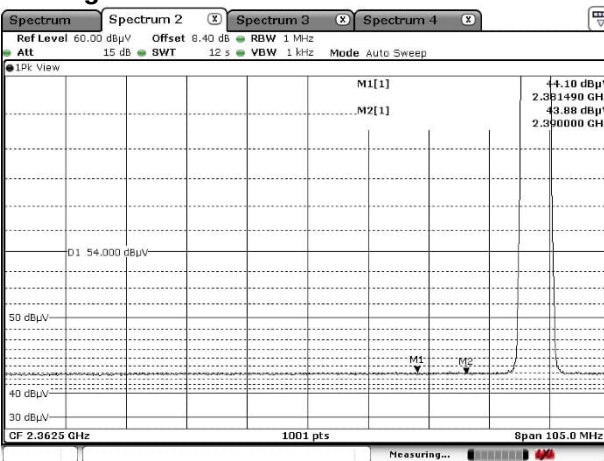
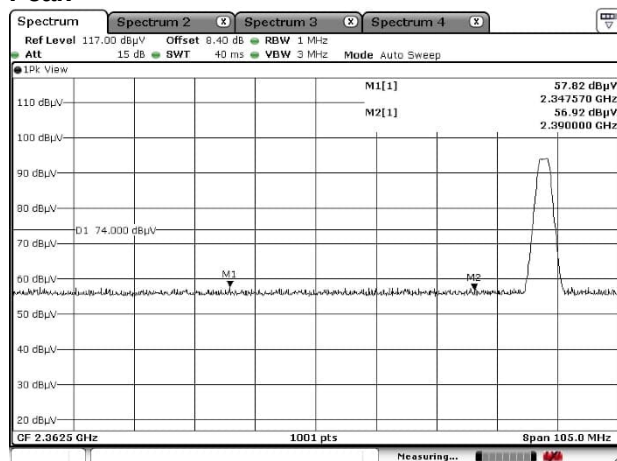
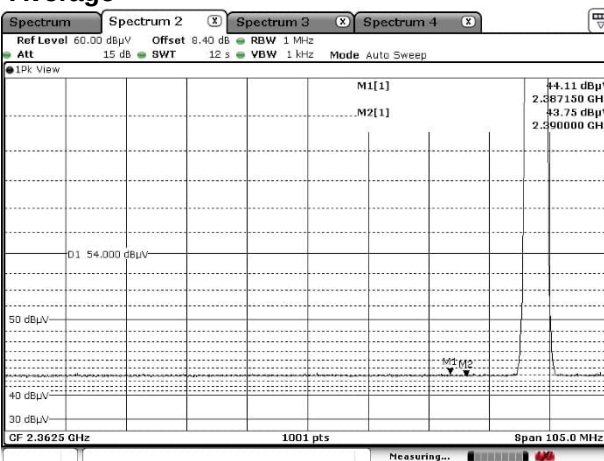


Vertical Peak

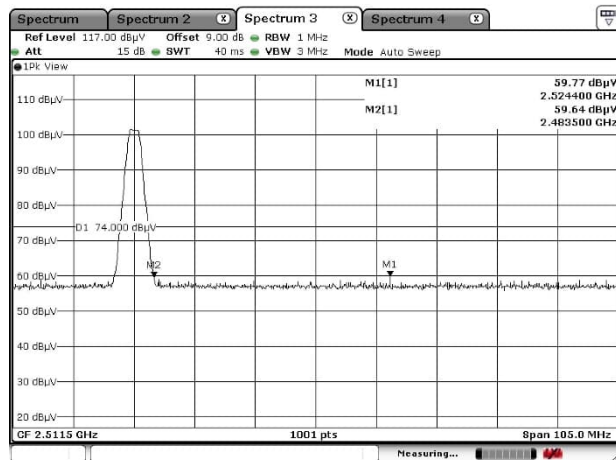


Average

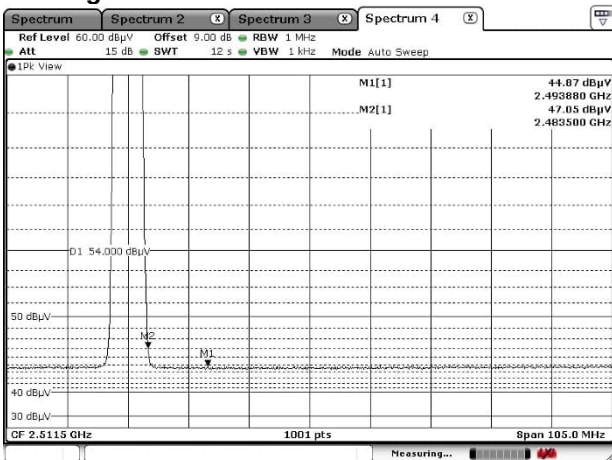


EB1207 [BT_LE (2Mbps)]**Channel: Low****Horizontal****Peak****Average****Vertical****Peak****Average**

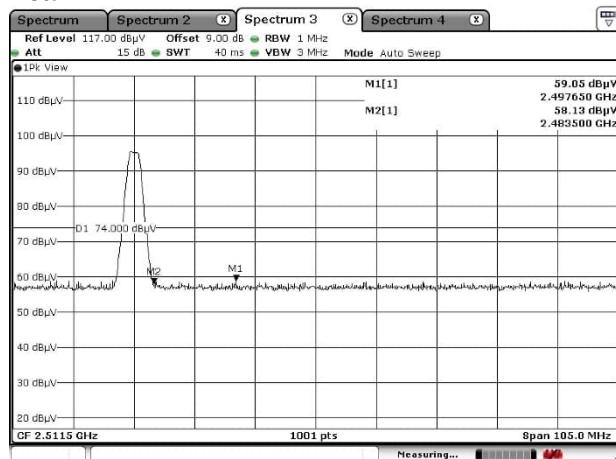
Channel: High Horizontal Peak



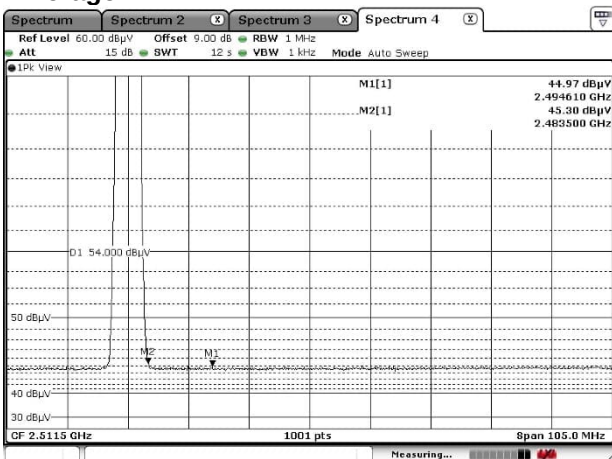
Average



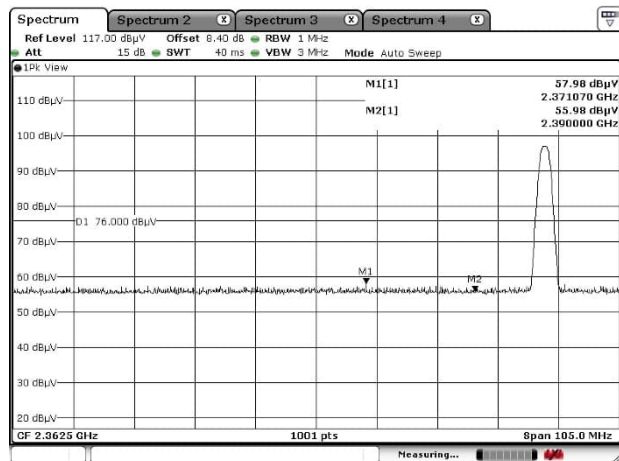
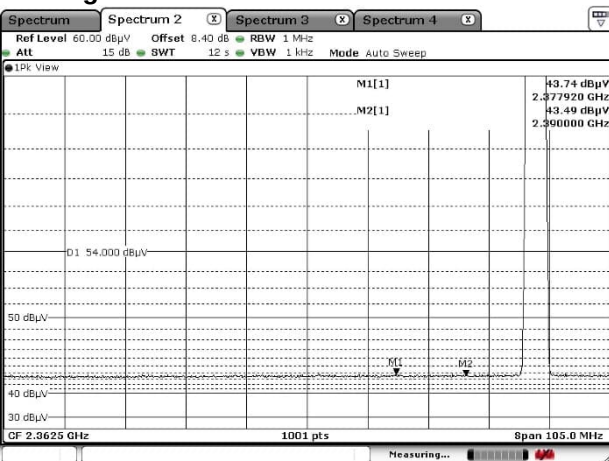
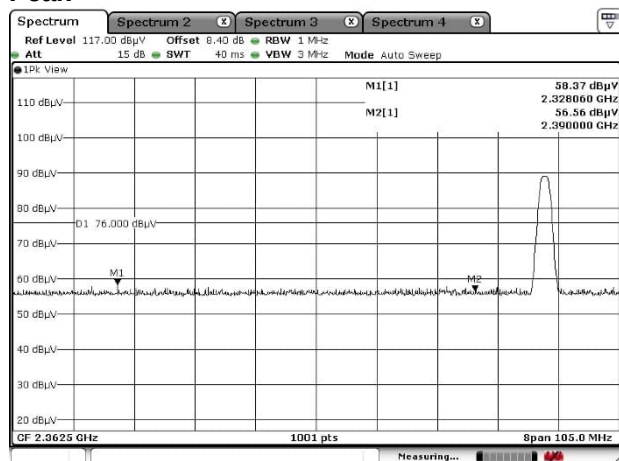
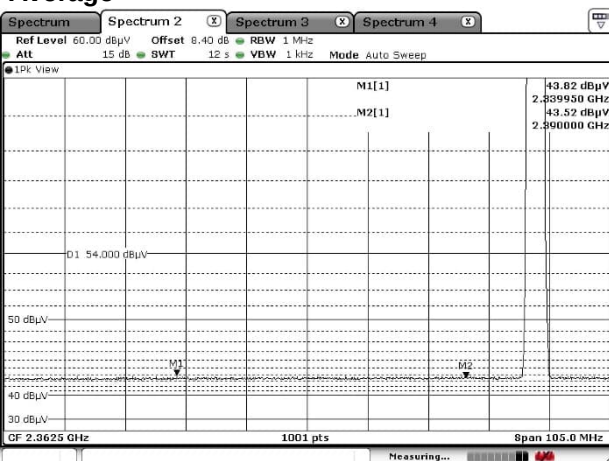
Vertical Peak



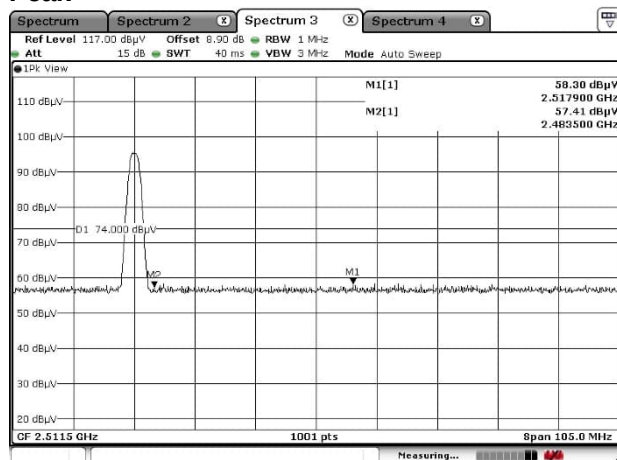
Average



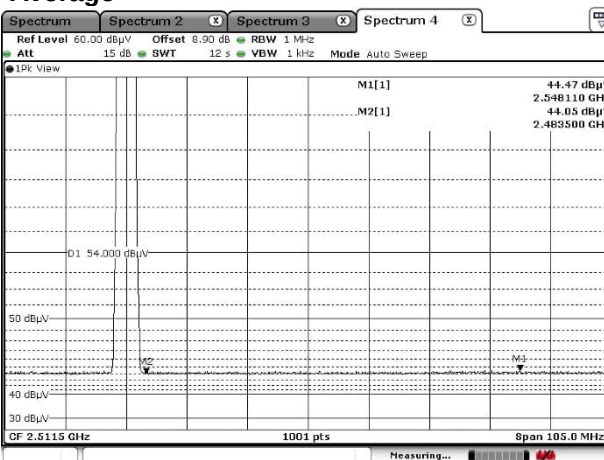
Comparison of the charts of EB1190EM and EB1207 showed that the difference in test results was less than 3 dB.

EB1190EM [BT_LE (LongRange S2)]**Channel: Low****Horizontal****Peak****Average****Vertical****Peak****Average**

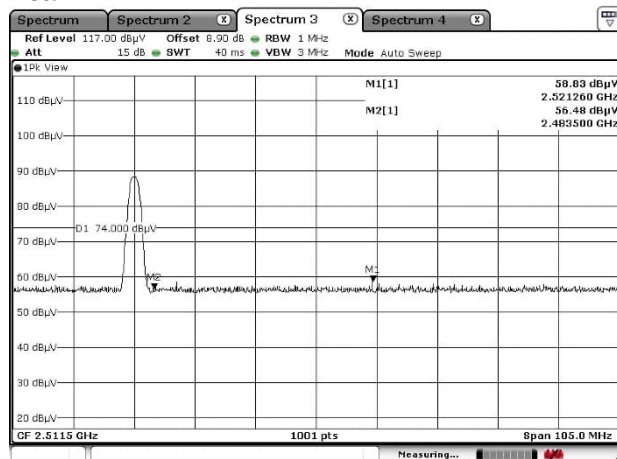
Channel: High Horizontal Peak



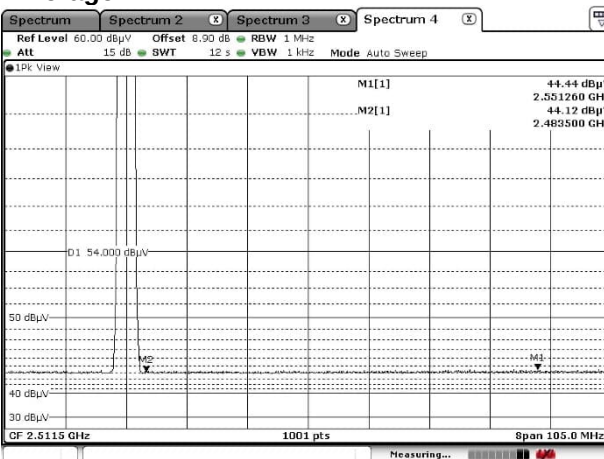
Average

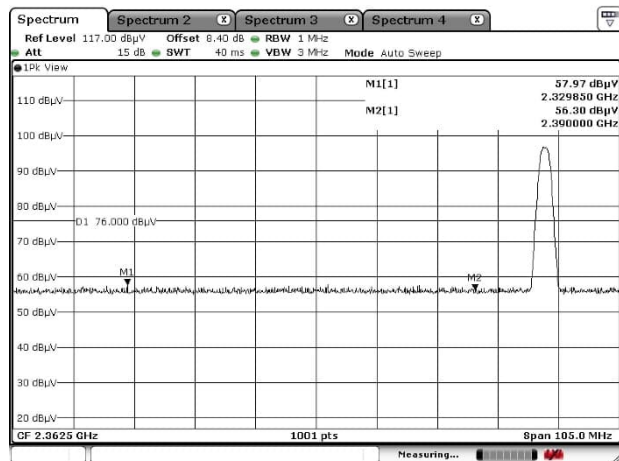
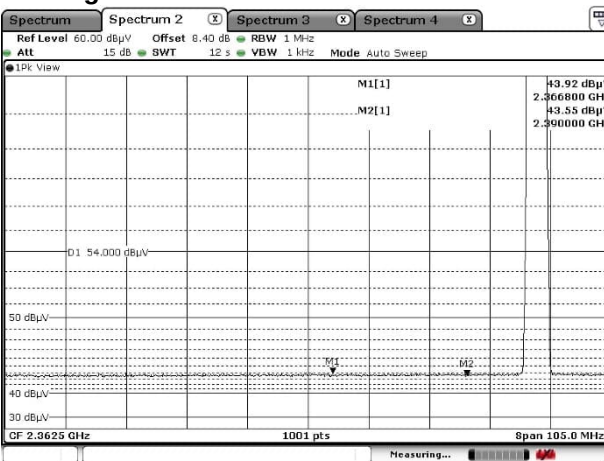
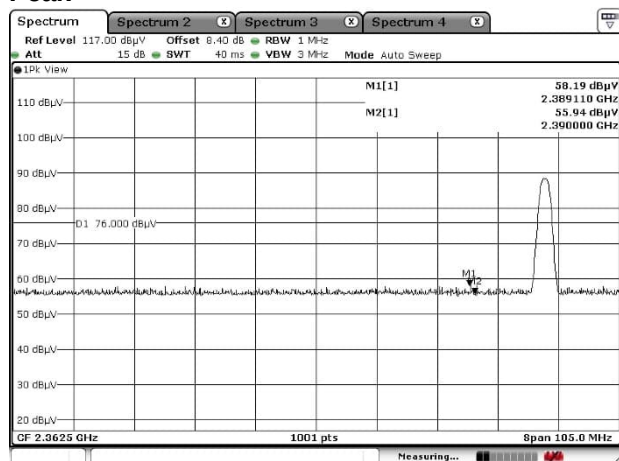
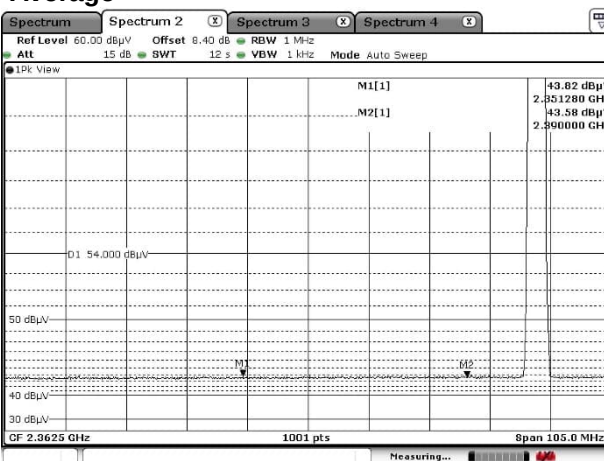


Vertical Peak

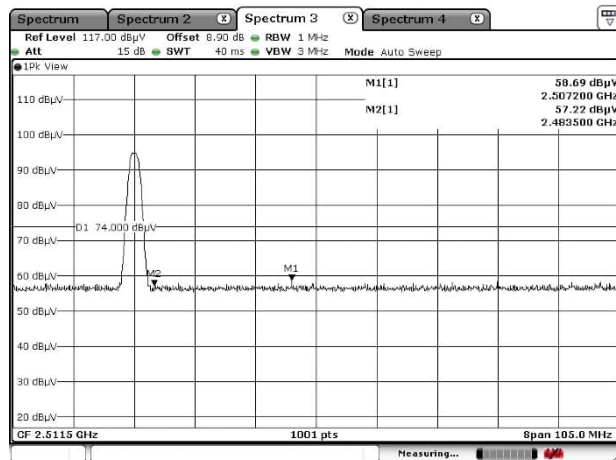


Average

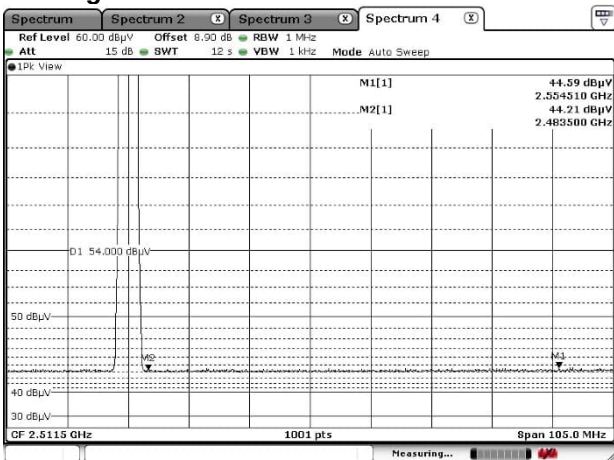


EB1190EM [BT_LE (LongRange S8)]**Channel: Low****Horizontal****Peak****Average****Vertical****Peak****Average**

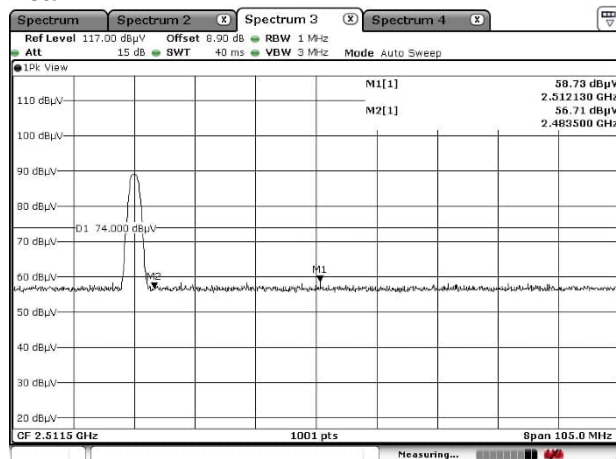
Channel: High Horizontal Peak



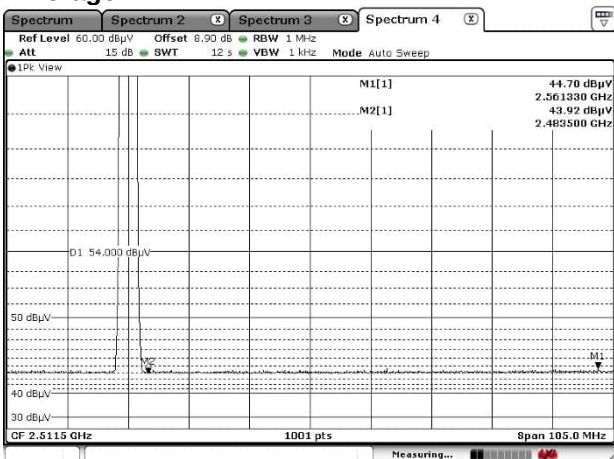
Average



Vertical Peak



Average



4.7 Transmitter Power Spectral Density

4.7.1 Measurement procedure

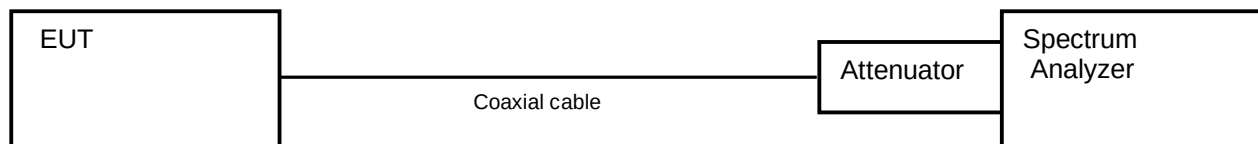
[FCC 15.247(e), KDB558074 D01 v05r02]

The peak power is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;

- a) Span = 1.5 times the 6 dB bandwidth.
- b) RBW = 3kHz - 100kHz.
- c) VBW $\geq 3 \times$ RBW.
- d) Sweep time = auto-couple.
- e) Detector = peak.
- f) Trace mode = max hold.

- Test configuration



4.7.2 Limit

The peak power spectral density shall not be greater than 8dBm in any 3kHz band.

4.7.3 Measurement result

Date : 8-May-2024
 Temperature : 21.4 [°C]
 Humidity : 46.2 [%]
 Test place : Shielded room No.4

Test engineer : Kazunori Saito

Date : 30-May-2024
 Temperature : 22.9 [°C]
 Humidity : 46.7 [%]
 Test place : Shielded room No.4

Test engineer : Kazunori Saito

Date : 24-July-2024
 Temperature : 23.1 [°C]
 Humidity : 56.9 [%]
 Test place : Shielded room No.3

Test engineer : Kazunori Saito

EB1190EM [BT_LE (1Mbps)]

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dBm)	Result
Low	2402	-21.53	10.52	-11.01	8.00	19.01	PASS
Middle	2440	-20.39	10.52	-9.87	8.00	17.87	PASS
High	2480	-20.71	10.52	-10.19	8.00	18.19	PASS

EB1207 [BT_LE (1Mbps)]

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dBm)	Result
Low	2402	-20.97	10.52	-10.45	8.00	18.45	PASS
Middle	2440	-20.19	10.52	-9.67	8.00	17.67	PASS
High	2480	-20.87	10.52	-10.35	8.00	18.35	PASS

[BT_LE (1Mbps)]

Channel	EB1190EM Level (dBm)	EB1207 Level (dBm)	Difference value (dBm)	Result Within ± 3 dBm
Low	-11.01	-10.45	-0.56	PASS
Middle	-9.87	-9.67	-0.20	PASS
High	-10.19	-10.35	0.16	PASS

EB1190EM [BT_LE (2Mbps)]

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dBm)	Result
Low	2402	-24.08	10.52	-13.56	8.00	21.56	PASS
Middle	2440	-22.97	10.52	-12.45	8.00	20.45	PASS
High	2480	-23.26	10.52	-12.74	8.00	20.74	PASS

Calculation;

Transmitter Power Spectral Density Level (Margin) = Limit – (Reading + Factor)

EB1190EM [BT_LE (LongRange S2)]

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dBm)	Result
Low	2402	-11.77	10.52	-1.25	8.00	9.25	PASS
Middle	2440	-10.58	10.52	-0.06	8.00	8.06	PASS
High	2480	-10.87	10.52	-0.35	8.00	8.35	PASS

EB1190EM [BT_LE (LongRange S8)]

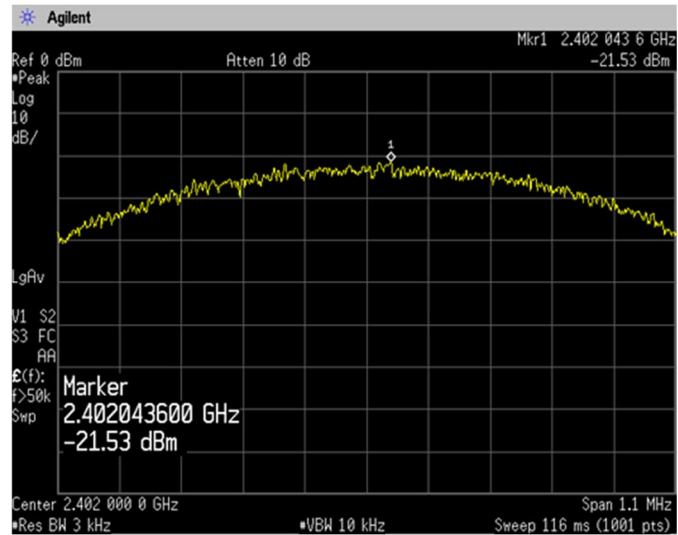
Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dBm)	Result
Low	2402	-11.73	10.52	-1.21	8.00	9.21	PASS
Middle	2440	-10.57	10.52	-0.05	8.00	8.05	PASS
High	2480	-10.87	10.52	-0.35	8.00	8.35	PASS

Calculation;

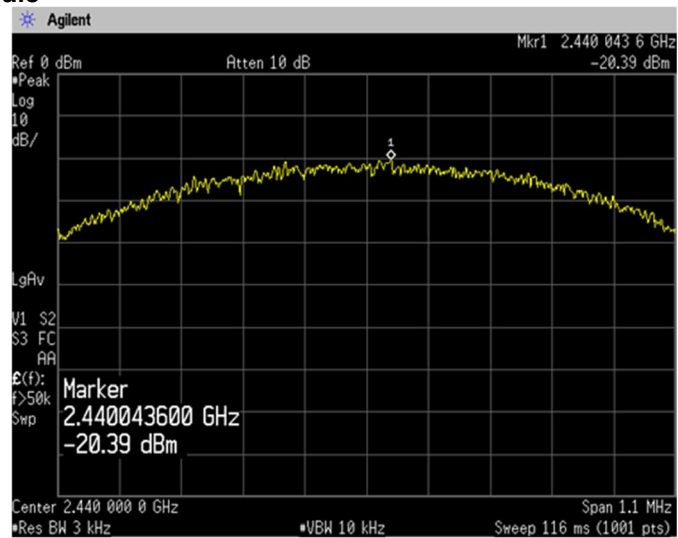
Transmitter Power Spectral Density Level (Margin) = Limit – (Reading + Factor)

4.7.4 Trace data

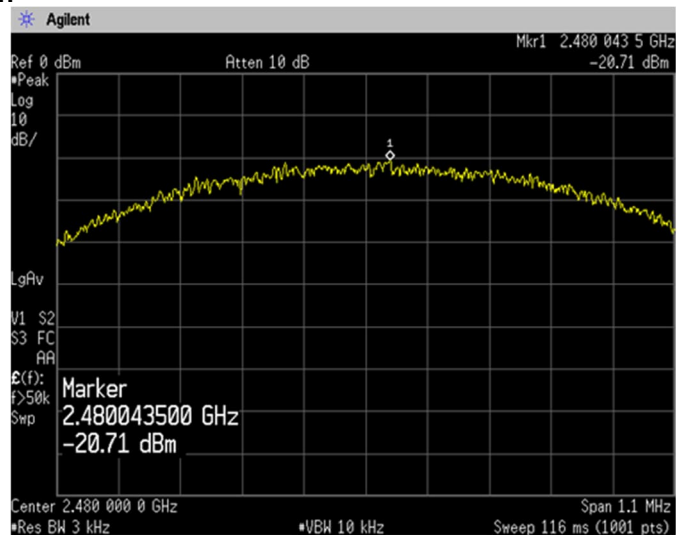
EB1190EM [BT_LE (1Mbps)] Channel Low



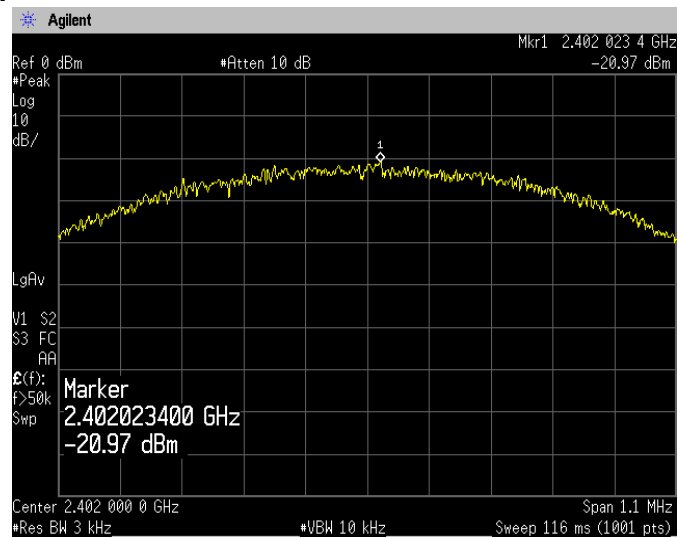
Channel Middle



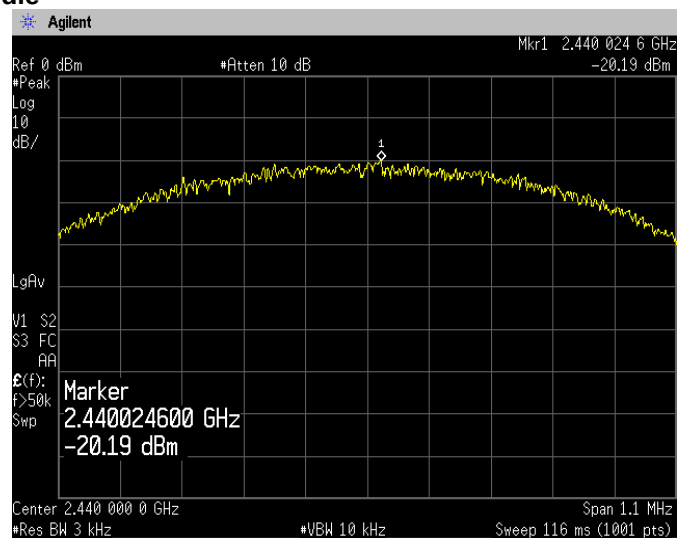
Channel High



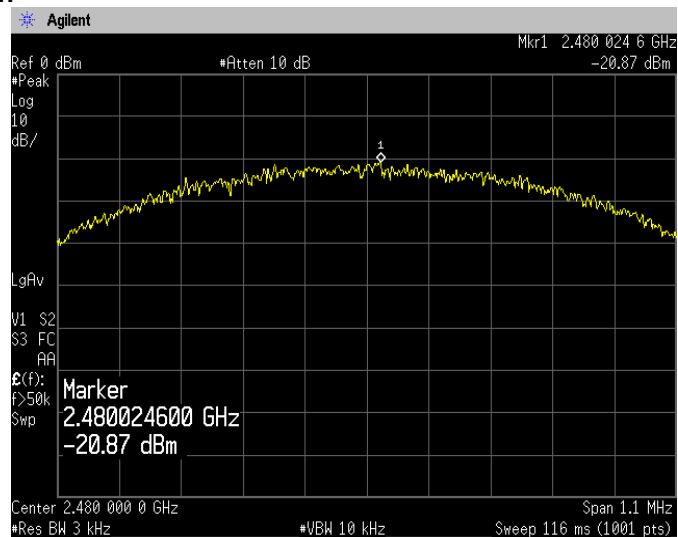
EB1207 [BT_LE (1Mbps)] Channel Low

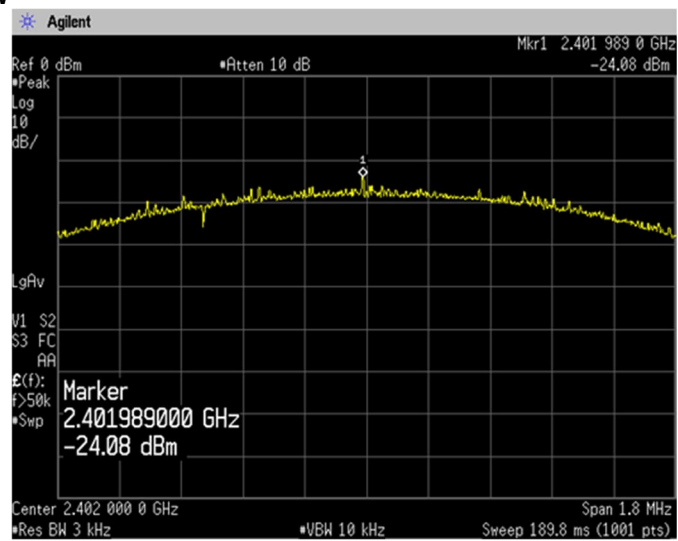
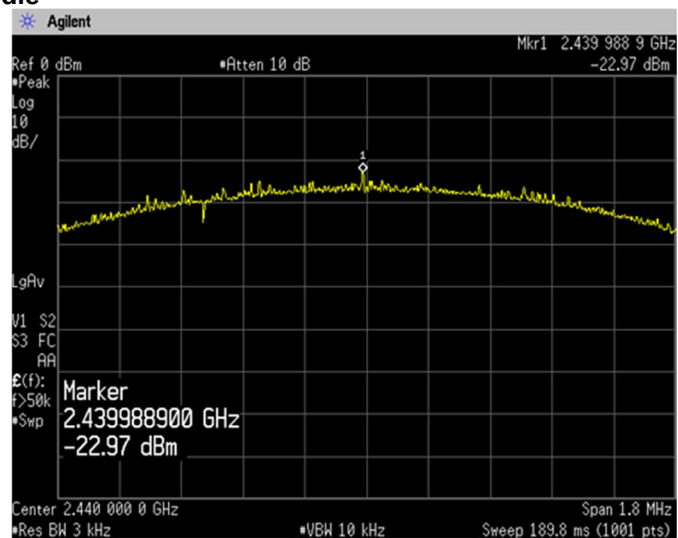
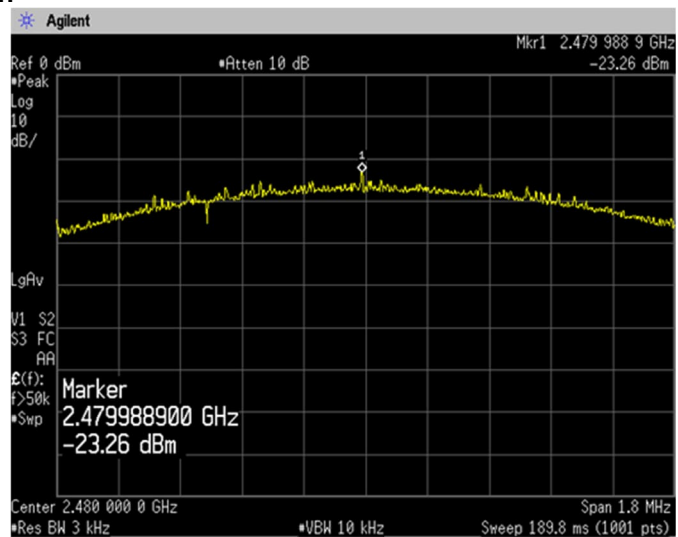


Channel Middle

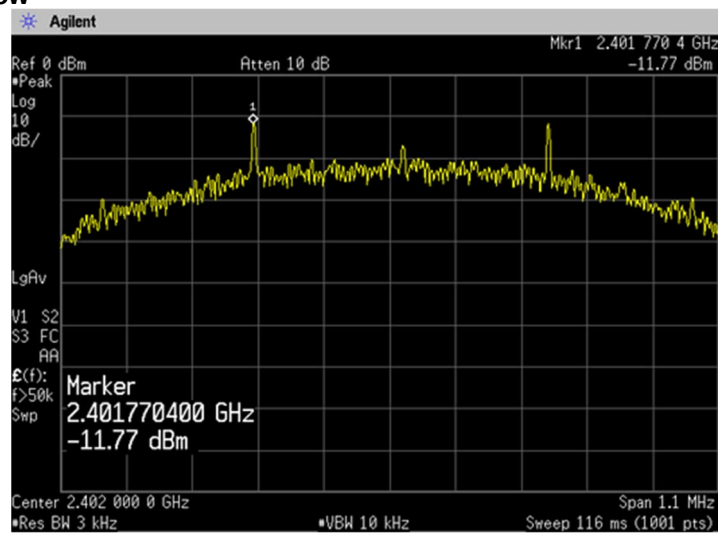


Channel High

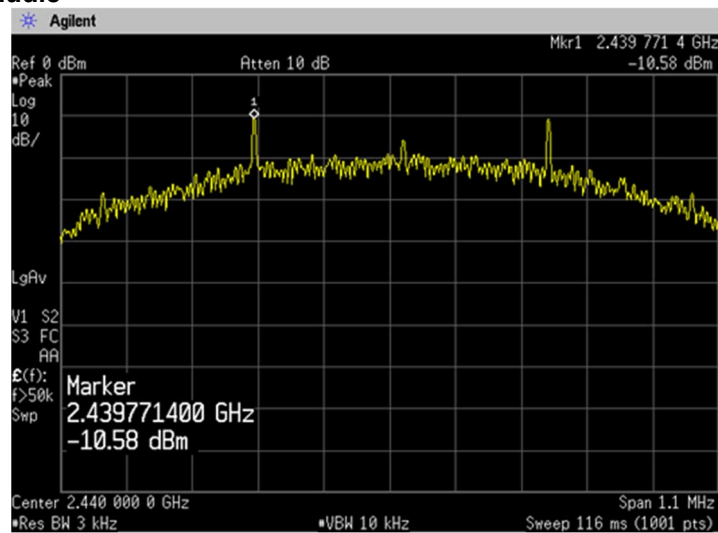


**EB1190EM [BT_LE (2Mbps)]
Channel Low****Channel Middle****Channel High**

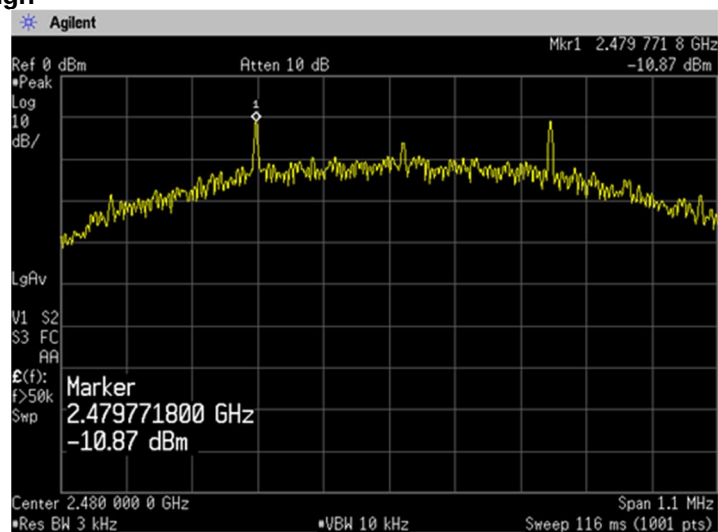
EB1190EM [BT_LE (LongRange S2)] Channel Low



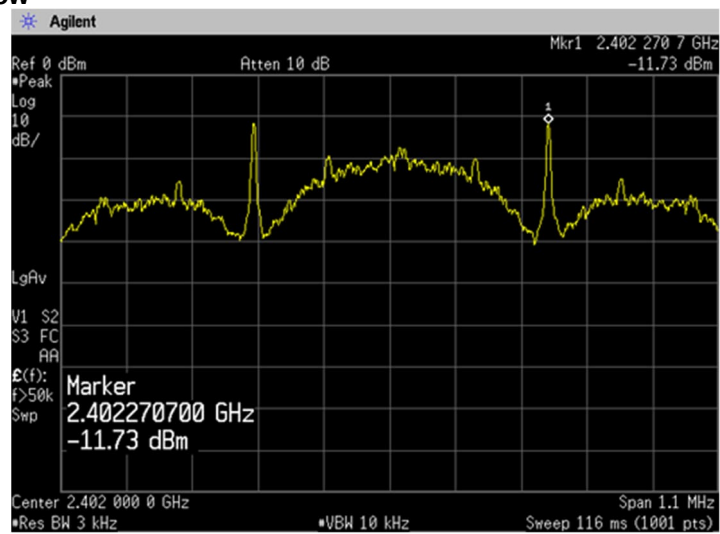
Channel Middle



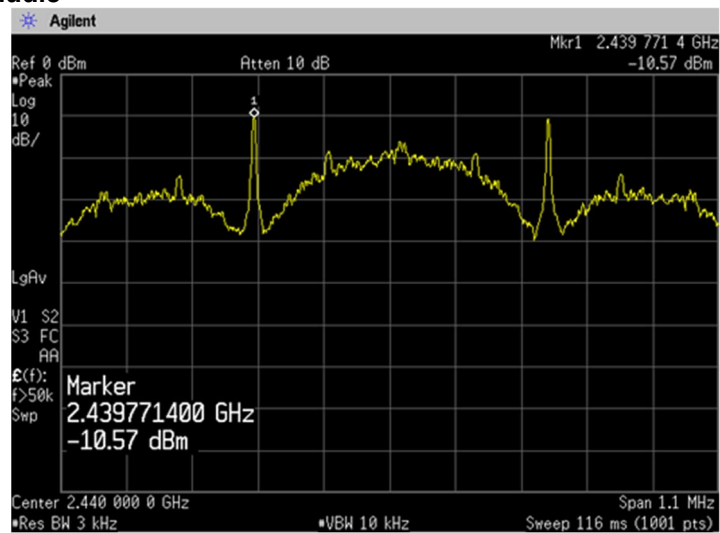
Channel High



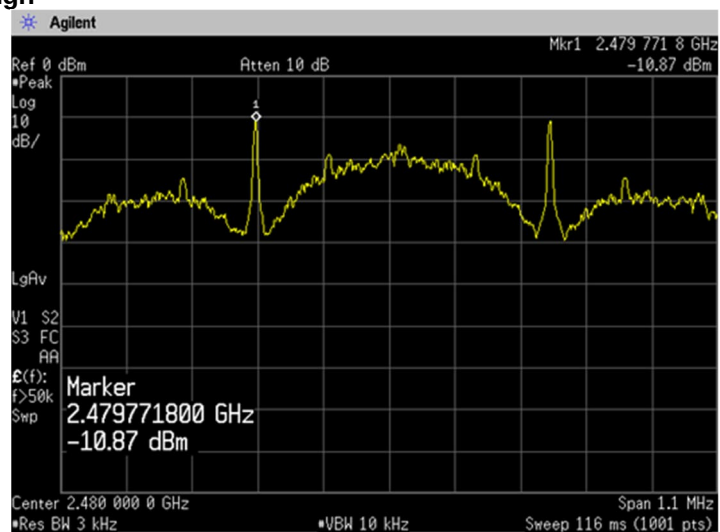
EB1190EM [BT_LE (LongRange S8)] Channel Low



Channel Middle



Channel High



4.8 AC Power Line Conducted Emissions

4.8.1 Measurement procedure

[FCC 15.207]

Test was applied by following conditions.

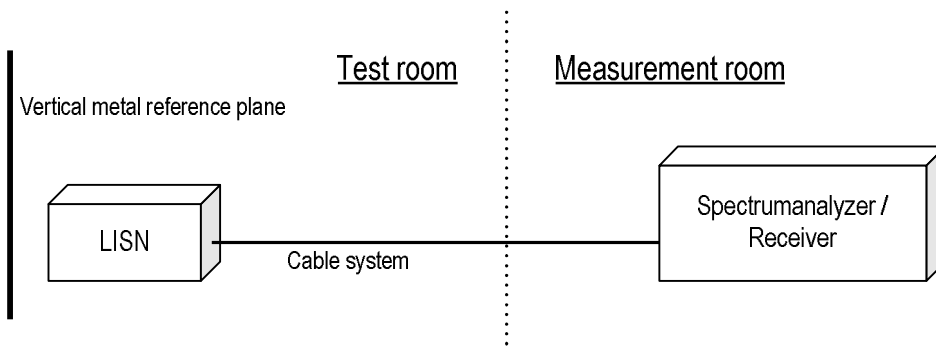
Test method	: ANSI C63.10
Frequency range	: 0.15 MHz to 30 MHz
Test place	: 3 m Semi-anechoic chamber
EUT was placed on	: Styrofoam table / (W)1.0m × (D)0.8m × (H)0.8m
Vertical Metal Reference Plane	: (W)2.0 m × (H)2.0 m 0.4 m away from EUT
Test receiver setting	
- Detector	: Quasi-peak, Average
- Bandwidth	: 9 kHz

EUT and peripherals are connected to 50Ω/50μH Line Impedance Stabilization Network (LISN) which are connected to reference ground plane, and are placed 80cm away from EUT. Excess of AC power cable is bundled in center.

LISN for peripheral is terminated in 50Ω.

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Maximum emission configuration is determined by manipulating the EUT, peripherals, interconnecting cables. Then, emission measurements are performed with test receiver in above setting to each current-carrying conductor of the mains port. Sufficient time for EUT, peripherals and test equipment is provided in order for them to warm up to their normal operating condition. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits.

- Test configuration



4.8.2 Calculation method

Emission level = Reading + (LISN. Factor + Cable system loss)

Margin = Limit – Emission level

Example:

Limit @ 6.770 MHz: 60.0 dB μ V(Quasi-peak)

: 50.0 dB μ V(Average)

(Quasi peak) Reading = 41.2 dB μ V c.f = 10.3 dB

Emission level = 41.2 + 10.3 = 51.5 dB μ V

Margin = 60.0 – 51.5 = 8.5 dB

(Average) Reading = 35.0 dB μ V c.f = 10.3 dB

Emission level = 35.0 + 10.3 = 45.3 dB μ V

Margin = 50.0 – 45.3 = 4.7 dB

4.8.3 Limit

Frequency [MHz]	Limit	
	QP [dB μ V]	AV [dB μ V]
0.15-0.5	66-56*	56-46*
0.5-5	56	46
5-30	60	50

*: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

4.8.4 Test data

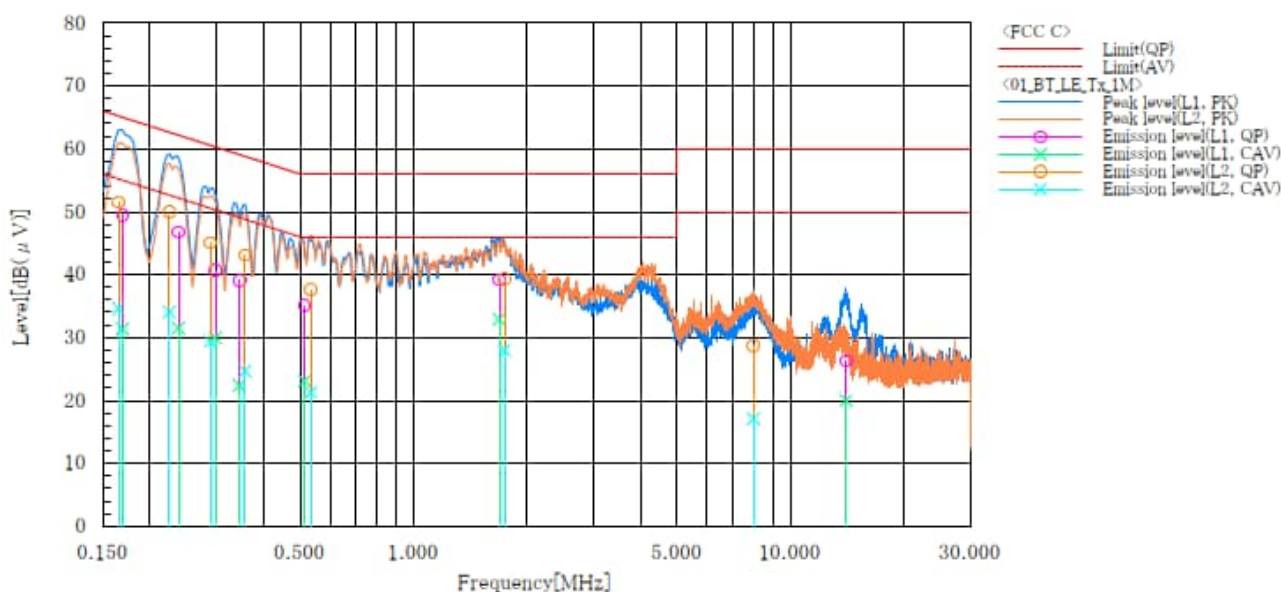
Date : 30-May-2024
 Temperature : 21.5 [°C]
 Humidity : 42.6 [%]
 Test place : 3m Semi-anechoic chamber

Test engineer : Chiaki Kanno

EB1190EM [BT_LE]

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1190EM
 Serial No. : N/A
 Test mode : BT_LE_Tx_1M

Standard : FCC Part 15 Subpart C
 Operator : C.Kanno
 Temp,Hum,Atm : 21.5 [°C], 42.6 [%]
 Note1 :
 Note2 :



Final Result

--- L1 ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result CAV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin CAV [dB]
1	0.169	39.1	21.0	10.4	49.5	31.4	65.0	55.0	15.5	23.6
2	0.238	36.5	21.2	10.3	46.8	31.5	62.2	52.2	15.4	20.7
3	0.298	30.4	19.7	10.3	40.7	30.0	60.3	50.3	19.6	20.3
4	0.345	28.8	12.1	10.3	39.1	22.4	59.1	49.1	20.0	26.7
5	0.514	24.8	12.8	10.3	35.1	23.1	56.0	46.0	20.9	22.9
6	1.688	28.8	22.5	10.4	39.2	32.9	56.0	46.0	16.8	13.1
7	14.052	14.8	8.5	11.5	26.3	20.0	60.0	50.0	33.7	30.0

--- L2 ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result CAV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin CAV [dB]
1	0.165	41.1	24.2	10.4	51.5	34.6	65.2	55.2	13.7	20.6
2	0.225	39.6	23.7	10.4	50.0	34.1	62.6	52.6	12.6	18.5
3	0.289	34.8	19.0	10.3	45.1	29.3	60.6	50.6	15.5	21.3
4	0.357	32.8	14.4	10.3	43.1	24.7	58.8	48.8	15.7	24.1
5	0.534	27.3	11.0	10.3	37.6	21.3	56.0	46.0	18.4	24.7
6	1.744	28.9	17.6	10.4	39.3	28.0	56.0	46.0	16.7	18.0
7	7.977	17.8	6.2	10.9	28.7	17.1	60.0	50.0	31.3	32.9

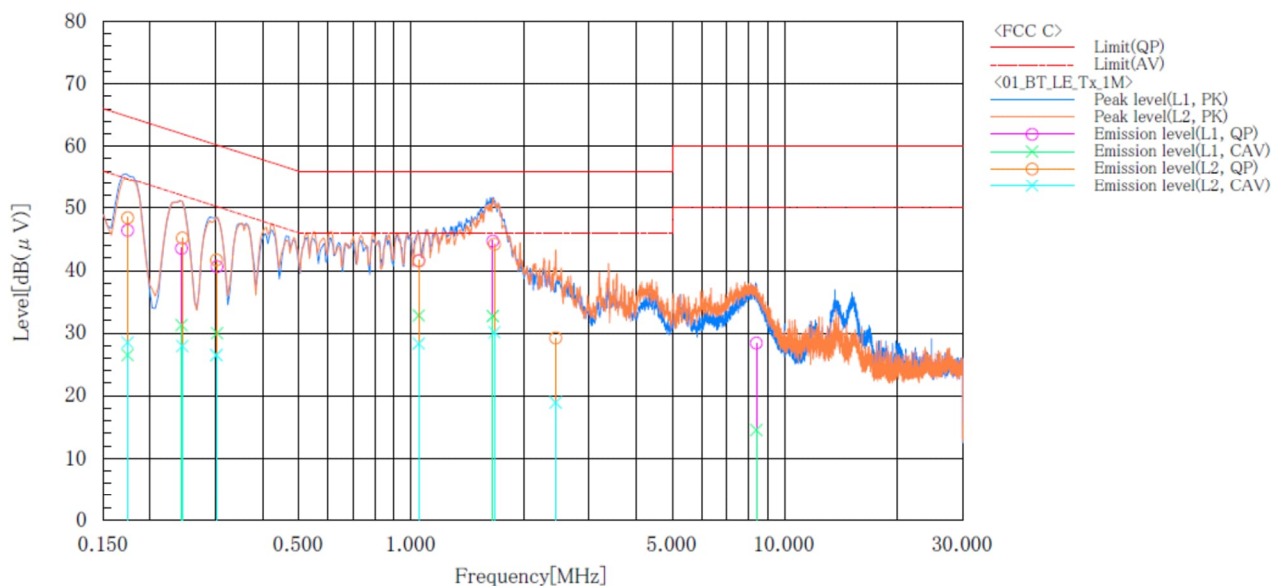
Date : 9-August-2024
 Temperature : 21.9 [°C]
 Humidity : 58.8 [%]
 Test place : 3m Semi-anechoic chamber

Test engineer : Tadahiro Seino

EB1207 [BT_LE]

Company name : KYOCERA Corporation
 EUT : Mobile Phone
 Model No. : EB1207
 Serial No. : N/A
 Test mode : BT_LE_Tx_1M

Standard : FCC Part 15 Class C
 Operator : T.Seino
 Temp,Hum,Atm : 21.9 [°C], 58.8 [%]
 Note1 :
 Note2 :



Final Result

--- L1 ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading CAV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result CAV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin CAV [dB]
1	0.174	36.0	16.1	10.4	46.4	26.5	64.8	54.8	18.4	28.3
2	0.243	33.1	20.9	10.4	43.5	31.3	62.0	52.0	18.5	20.7
3	0.302	30.3	19.7	10.3	40.6	30.0	60.2	50.2	19.6	20.2
4	1.049	31.2	22.5	10.3	41.5	32.8	56.0	46.0	14.5	13.2
5	1.655	34.3	22.3	10.4	44.7	32.7	56.0	46.0	11.3	13.3
6	8.411	17.4	3.5	11.0	28.4	14.5	60.0	50.0	31.6	35.5

--- L2 ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading CAV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result CAV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin CAV [dB]
1	0.174	38.0	18.1	10.4	48.4	28.5	64.8	54.8	16.4	26.3
2	0.244	34.9	17.6	10.3	45.2	27.9	62.0	52.0	16.8	24.1
3	0.301	31.4	16.2	10.3	41.7	26.5	60.2	50.2	18.5	23.7
4	1.048	31.3	18.0	10.3	41.6	28.3	56.0	46.0	14.4	17.7
5	1.671	33.8	19.7	10.4	44.2	30.1	56.0	46.0	11.8	15.9
6	2.438	18.8	8.5	10.4	29.2	18.9	56.0	46.0	26.8	27.1

Comparison of the charts of EB1190EM and EB1207 showed that the difference in test results was less than 3 dB.

5 Antenna requirement

According to FCC section 15.203, an intentional radiator shall be designed to ensure that no antenna other than furnished by the responsible party shall be used with the device. The antenna is a special antenna mounted inside of the EUT. Therefore, the EUT complies with the antenna requirement of FCC section 15.203.

6 Measurement Uncertainty

Expanded uncertainties stated are calculated with a coverage Factor $k=2$.
Please note that these results are not taken into account when measurement uncertainty considerations contained in ETSI TR 100 028 Parts 1 and 2 determining compliance or non-compliance with test result.

Test item	Measurement uncertainty
Conducted emission, AMN (9 kHz – 150 kHz)	± 3.7 dB
Conducted emission, AMN (150 kHz – 30 MHz)	± 3.3 dB
Radiated emission (9kHz – 30 MHz)	± 3.7 dB
Radiated emission (30 MHz – 1000 MHz)	± 5.4 dB
Radiated emission (1 GHz – 6 GHz)	± 5.1 dB
Radiated emission (6 GHz – 18 GHz)	± 4.8 dB
Radiated emission (18 GHz – 40 GHz)	± 6.0 dB
Radio Frequency	$\pm 0.9 \cdot 10^{-7}$
RF power, conducted	± 0.6 dB
Effective radiated power	± 4.3 dB
Radiated spurious emissions	± 4.4 dB
Adjacent channel power	± 1.5 dB
Bandwidth	± 2.8 %
Temperature	± 0.6 °C
Humidity	± 1.2 %
Voltage (DC)	± 0.4 %
Voltage (AC, <10kHz)	± 0.2 %

Judge	Measured value and standard limit value	
PASS	Standard limit value +Uncertainty -Uncertainty Measured value Even if it takes uncertainty into consideration, a standard limit value is fulfilled.	
	Standard limit value Measured value Although measured value is in a standard limit value, a limit value won't be fulfilled if uncertainty is taken into consideration.	
FAIL	Standard limit value Measured value Although measured value exceeds a standard limit value, a limit value will be fulfilled if uncertainty is taken into consideration.	
	Standard limit value Measured value Even if it takes uncertainty into consideration, a standard limit value isn't fulfilled.	

7 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

Antenna port conducted test

Equipment	Company	Model No.	Serial No.	Cal. Due	Cal. Date
Spectrum analyzer	Agilent Technologies	E4440A	US44302655	31-Oct-2024	06-Oct-2023
Attenuator	Weinschel	56-10	J4993	31-Dec-2024	19-Dec-2023
Power meter	ROHDE&SCHWARZ	NRP2	103269	31-Mar-2025	26-Mar-2024
Power sensor	ROHDE&SCHWARZ	NRP-Z81	102467	31-Mar-2025	26-Mar-2024

Radiated emission

Equipment	Company	Model No.	Serial No.	Cal. Due	Cal. Date
EMI receiver	ROHDE&SCHWARZ	ESW44	103171	31-Oct-2024	19-Oct-2023
Spectrum analyzer	ROHDE&SCHWARZ	FSV40	101731	31-Aug-2024	16-Aug-2023
Preamplifier	SONOMA	310	372170	30-Sep-2024	21-Sep-2023
Loop antenna	TESEQ	HLA6121	65079	31-Aug-2024	01-Aug-2023
Attenuator	TOYO Connector	NA-PJ-6/6dB	N/A(S542)	30-Jun-2024	22-Jun-2023
				30-Jun-2025	20-Jun-2024
Biconical antenna	Schwarzbeck	VHBB9124/BBA9106	1344	30-Jun-2024	19-Jun-2023
Biconical antenna	Schwarzbeck	VHA9103/BBA9106	VHA91032851	30-Jun-2025	20-Jun-2024
Log periodic antenna	Schwarzbeck	VUSLP9111B	346	31-Dec-2024	22-Dec-2023
Attenuator	TOYO Connector	NA-PJ-6/6dB	N/A(S541)	30-Sep-2024	21-Sep-2023
Attenuator	TAMAGAWA.ELEC	CFA-10/3dB	N/A(S503)	31-Jul-2024	20-Jul-2023
				31-Jul-2025	9-Jul-2024
Preamplifier	TSJ	MLA-100M18-B02-40	1929118	31-Dec-2024	19-Dec-2023
Attenuator	AEROFLEX	26A-10	081217-08	31-Dec-2024	19-Dec-2023
Double ridged guide antenna	ETS LINDGREN	3117	00052315	30-Jun-2024	22-Jun-2023
				30-Jun-2025	11-Jun-2024
Attenuator	HUBER+SUHNER	6803.17.B	N/A(2340)	31-Dec-2024	20-Dec-2023
Double ridged guide antenna	A.H.Systems Inc.	SAS-574	469	31-Aug-2024	8-Aug-2023
Preamplifier	TSJ	MLA-1840-B03-35	1240332	31-Aug-2024	8-Aug-2023
Notch Filter	Micro-Tronics	BRM50702	G433	30-Sep-2024	20-Sep-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/9m	800690/4	31-Oct-2024	20-Oct-2023
		SUCOFLEX104/1m	my24610/4	31-Dec-2024	20-Dec-2023
		SUCOFLEX104/9m	2001099/4	31-Dec-2024	20-Dec-2023
		SUCOFLEX104/1m	MY32976/4	31-Dec-2024	20-Dec-2023
		SUCOFLEX104/2m	SN MY28404/4	31-Dec-2024	20-Dec-2023
		SUCOFLEX104/7m	41625/6	31-Dec-2024	21-Dec-2023
Software	TOYO Technica	ES10/RE-AJ	Ver.2021.10.001	N/A	N/A
Absorber	RIKEN	PFP30	N/A	N/A	N/A
3m Semi an-echoic Chamber	TOKIN	N/A	N/A(9002-NSA)	31-May-2024	28-May-2023
				31-May-2025	14-May-2024
3m Semi an-echoic Chamber	TOKIN	N/A	N/A(9002-SVSWR)	31-May-2024	28-May-2023
				31-May-2025	14-May-2024

Conducted emission at mains port

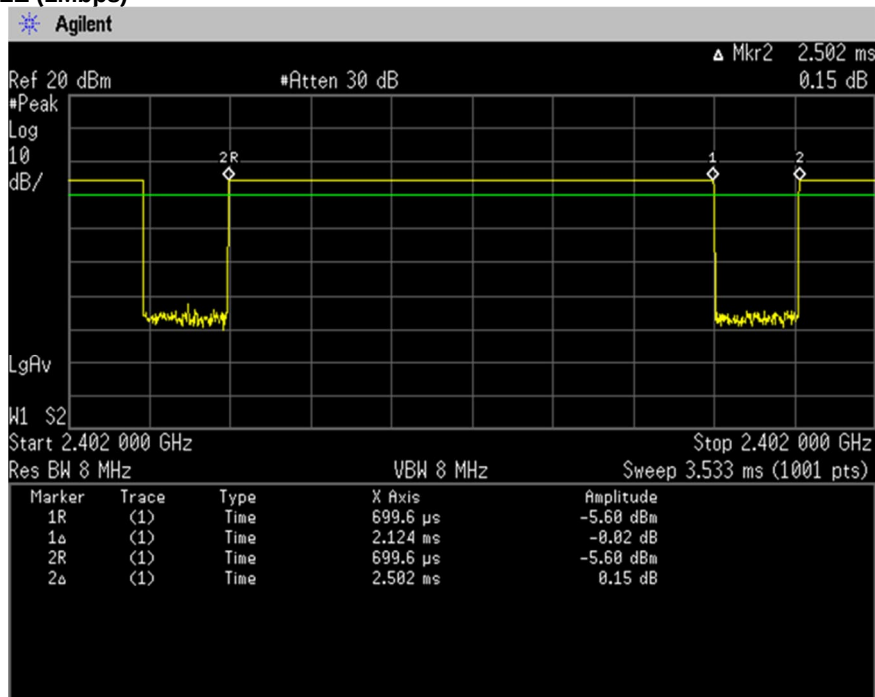
Equipment	Company	Model No.	Serial No.	Cal. Due	Cal. Date
EMI receiver	ROHDE&SCHWARZ	ESW44	103171	31-Oct-2024	19-Oct-2023
Attenuator	HUBER+SUHNER	6810.01.A	N/A (S411)	31-Dec-2024	20-Dec-2023
Line impedance stabilization network	Kyoritsu Electrical Works, Ltd.	TNW-407F2	12-17-110-2	30-Jun-2024	22-Jun-2023
				30-Jun-2025	20-Jun-2024
Microwave cable	HUBER+SUHNER	SUCOFLEX104/5m	MY33601/4	31-Dec-2024	20-Dec-2023
Microwave cable	HUBER+SUHNER	SUCOFLEX104/2m	MY37268/4	31-Dec-2024	20-Dec-2023
Coaxial cable	HUBER+SUHNER	RG214/U/10m	N/A (S194)	31-Dec-2024	21-Dec-2023
Software	TOYO Technica	ES10/RE-AJ	Ver.2021.10.001	N/A	N/A

*: The calibrations of the above equipment are traceable to NIST or equivalent standards of the reference organizations.

Appendix B. Duty Cycle

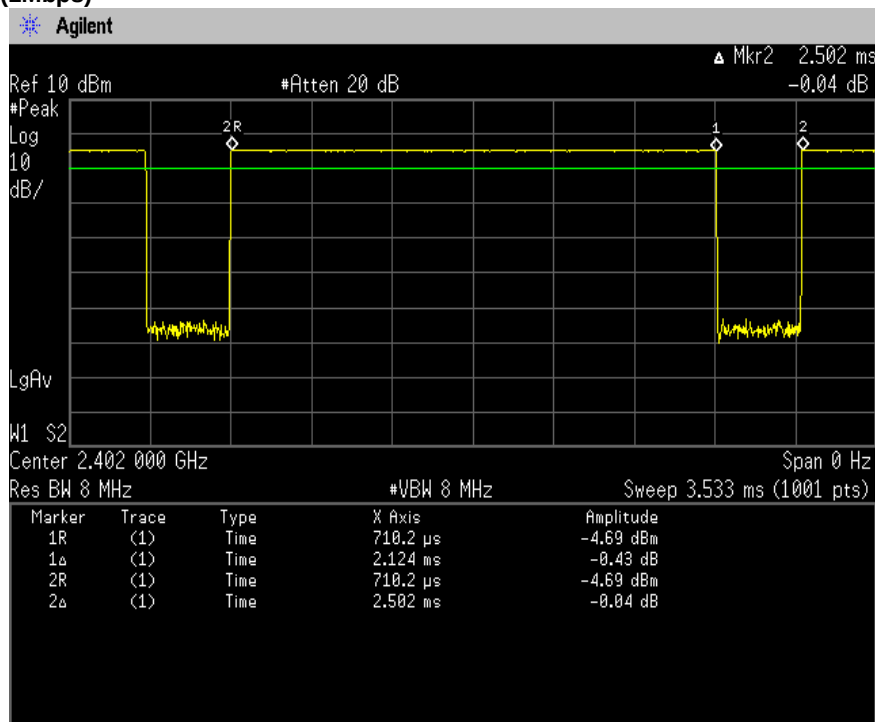
[Plot & Calculation]

EB1190EM BT_LE (1Mbps)



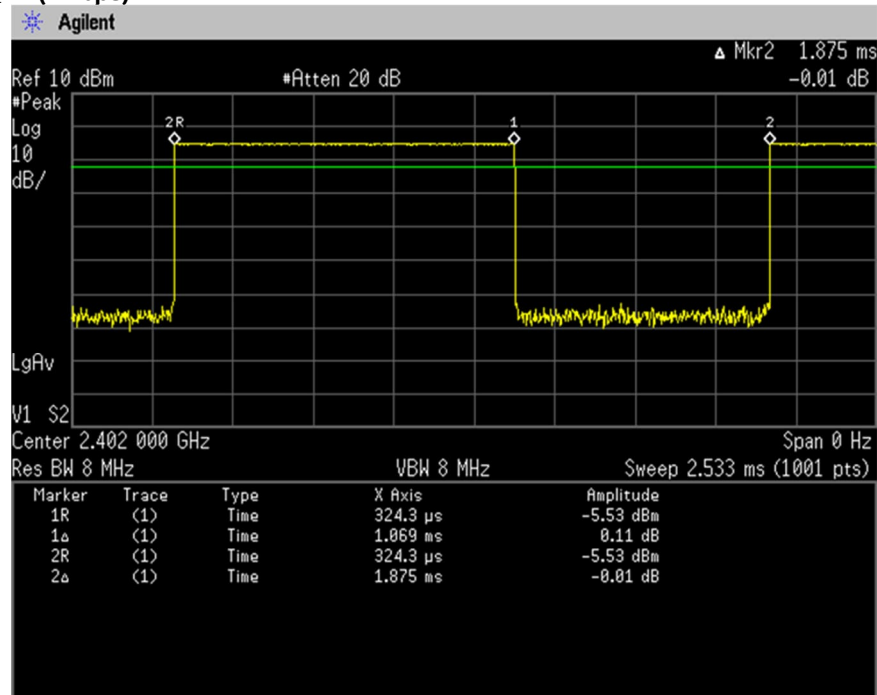
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff}) = 2.124[\text{ms}] / (2.124[\text{ms}] + 0.378[\text{ms}]) = 84.89[\%]$$

EB1207 BT_LE (1Mbps)



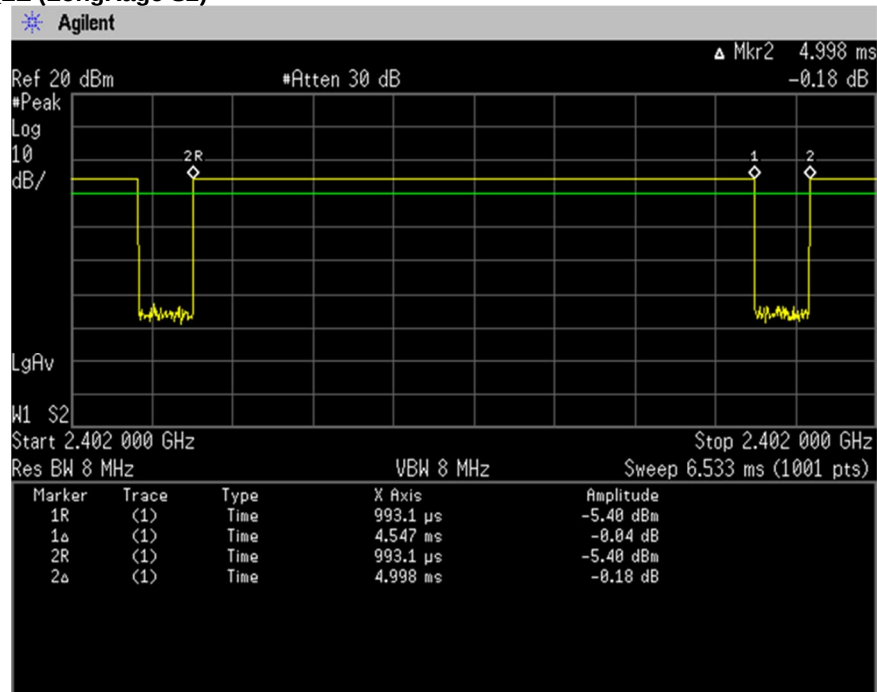
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff}) = 2.124[\text{ms}] / (2.124[\text{ms}] + 0.378[\text{ms}]) = 84.89[\%]$$

EB1190EM BT_LE (2Mbps)



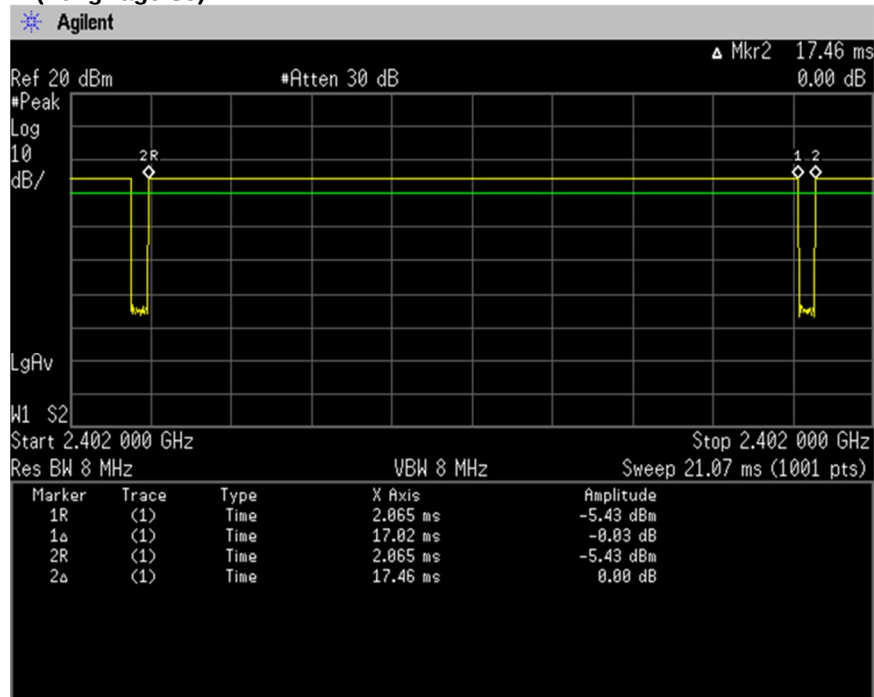
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff}) = 1.069[\text{ms}] / (1.069[\text{ms}] + 0.806[\text{ms}]) = 57.01[\%]$$

EB1190EM BT_LE (LongRange S2)



$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff}) = 4.547[\text{ms}] / (4.547[\text{ms}] + 0.451[\text{ms}]) = 90.98[\%]$$

EB1190EM BT_LE (LongRage S8)



Duty Cycle = $T_{on} / (T_{on} + T_{off}) = 17.02[ms] / (17.02[ms] + 0.44[ms]) = 97.48[\%]$