Report on the RF Testing of:

KYOCERA Corporation Tablet, Model: KC-T303DT

FCC ID: JOYEB1080

In accordance with FCC Part 15 Subpart C

Prepared for: KYOCERA Corporation

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EXECUTIVE SUMMARY - Result: Complied

A sample(s) of this product was tested and the result above was confirmed in accordance with FCC Part 15 Subpart C.



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1 Summary of Test

1.1 Modification history of the test report

Document Number	Modification History	Issue Date
JPD-TR-21231-0	First Issue	Refer to the cover page

1.2 Standards

CFR47 FCC Part 15 Subpart C

1.3 Test methods

ANSI C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05r02

1.4 Deviation from standards

None

1.5 List of applied test(s) of the EUT

Test item section	Test item	Condition	Result	Remark
15.247(a)(2)	6dB Bandwidth	Conducted	PASS	-
15.247(b)(3)	Maximum Peak Output Power	Conducted	PASS	-
15.247(d)	Band Edge Compliance of RF Conducted Emissions	Conducted	PASS	-
15.247(d)		Conducted	PASS	-
15.205 15.209	Spurious Emissions	Radiated	PASS	-
15.247(d) 15.205 15.209	Restricted Bands of Operation	Radiated	PASS	-
15.247(e)	Transmitter Power Spectral Density	Conducted	PASS	-
15.207	AC Power Line Conducted Emissions	Conducted	PASS	-

1.6 Test information

None

1.7 Test set up

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1.8 Test period

24-September-2021 - 9-November-2021



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, Japan

Phone: +81-45-943-6253 Fax: +81-45-943-6314

Equipment Under Test (EUT) Tablet

Model number KC-T303DT

Serial number 1080FCCRF01, 1080FCCRF02

Trade name Kyocera

Number of sample(s) 2

EUT condition Prototype

Power rating Battery: DC 3.8 V

Size (W) 260 mm \times (D) 169 mm \times (H) 10.2 mm

Environment Indoor and Outdoor use

Terminal limitation -20 °C to 60 °C

Hardware version DMT1
Software version 0.130.JS

Firmware version Not applicable

RF Specification

Protocol Bluetooth 5.1 + EDR
Frequency range 2402 MHz-2480 MHz

Number of RF Channels 40 Channels

Modulation method/Data rate GFSK (1 Mbps, 2Mbps),

LongRange S2/S8 (500 kbps/125 kbps)

Channel separation 2 MHz

Conducted power 3.559 mW

Antenna type Internal antenna

Antenna gain 1.9 dBi



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
Model: KC-T303DT	, Serial Number: 1080FCCRF01, 1080FCCRF02		
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

2.4 Operating channels and frequencies

Channel	Frequency [MHz]	Channel	Frequency [MHz]
0	2402	20	2442
1	2404	21	2444
2	2406	22	2446
3	2408	23	2448
4	2410	24	2450
5	2412	25	2452
6	2414	26	2454
7	2416	27	2456
8	2418	28	2458
9	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480



2.5 Operating mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Tested Channel	Frequency [MHz]
Low	2402
Middle	2440
High	2480

The pre-test has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.

Tested Channel	Modulation Type	Data Rate
Low, Middle, High	GFSK	1 Mbps
Low, Middle, High	GFSK	2 Mbps
Low, Middle, High	GFSK, LongRange S2	500 kbp
Low, Middle, High	GFSK, LongRange S8	125 kbps

The field strength of spurious emissions was measured at each position of all three axis X, Y and Z to compare the level, and the maximum noise.

The worst emission was found in X-axis and the worst case recorded.

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports.

2.6 Operating flow

[Tx mode]

- i) Test program setup to the Software
- ii) Select a Test mode
 - Operating frequency: Channel Low: 2402 MHz, Channel Middle: 2440 MHz, Channel High: 2480 MHz
- iii) Start test mode

[Rx mode]

- i) Test program setup to the Software
- ii) Select a Test mode
 - Operating frequency: Channel Low: 2402 MHz, Channel Middle: 2440 MHz, Channel High: 2480 MHz
- iii) Start test mode



3 Configuration of Equipment

Numbers assigned to equipment on the diagram in "3.3 System configuration" correspond to the list in "3.1 Equipment used" and "3.2 Cable(s) used".

This test configuration is based on the manufacture's instruction.

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	Comment
1	Tablet	KYOCERA	KC-T303DT	1080FCCRF01,	JOYEB1080	EUT
				1080FCCRF02		
2	AC Adapter	JUSTSYSTEMS.	ADT306	JHA	N/A	*

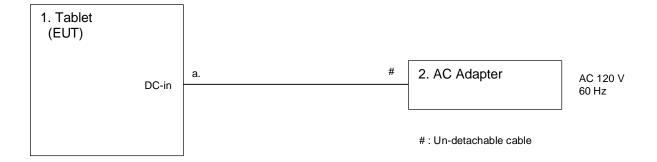
^{*:}AC power line Conducted Emission Test.

3.2 Cable(s) used

No	. Equipment	Length[m]	Shield	Connector	Comment
а	DC cable for AC Adapter	1.2	No	Plastic	*

^{*:} AC power line Conducted Emission Test.

3.3 System configuration





4 Test Result

4.1 6dB Bandwidth

4.1.1 Measurement procedure

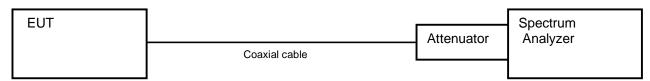
[FCC 15.247(a)(2), KDB558074 D01 v05r02]

The bandwidth at 6 dB down from the highest inband spectral density is measured with 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) RBW = 100 kHz
- b) $VBW \ge 3 \times RBW$
- c) Sweep time = auto-couple
- d) Detector = peak
- e) Trace mode = max hold

- Test configuration



4.1.2 Limit

The minimum permissible 6dB bandwidth is 500kHz.



4.1.3 Measurement result

Date : 24-September-2021

Temperature : 23.1 [°C] Humidity : 60.6 [%]

Test place : Shielded room No.4

Test engineer : Kazunori Saito

Date : 11-November-2021

Temperature : 21.9 [°C]

Humidity : 39.4 [%]

Test place : Shielded room No.4 Kazunori Saito

Test engineer

6dB bandwidth [MHz]						
Channel			BT_LE			
	1Mbps	2Mbps	LongRange S2	LongRange S8		
Low	0.680	1.172	0.676	0.681		
Middle	0.680	1.178	0.675	0.681		
High	0.676	1.177	0.670	0.685		

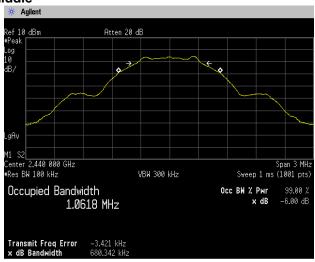


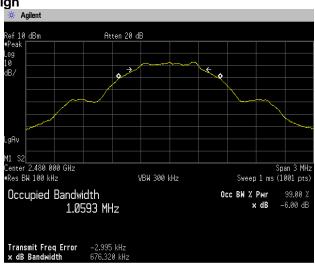
4.1.4 Trace data

[BT_LE (1Mbps)] Channel Low



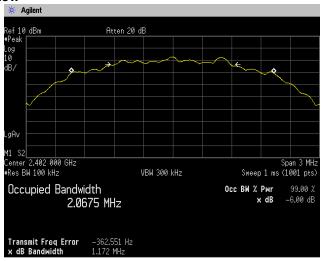
Channel Middle



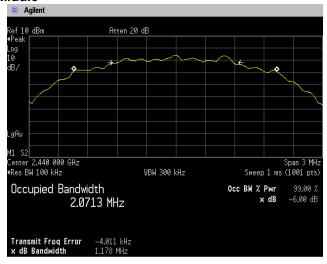


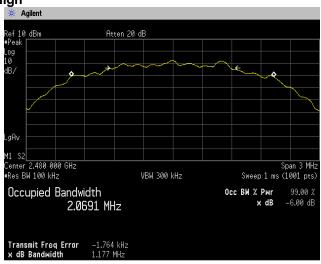


[BT_LE (2Mbps)] Channel Low



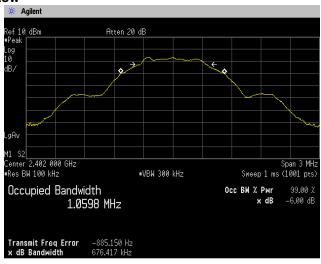
Channel Middle



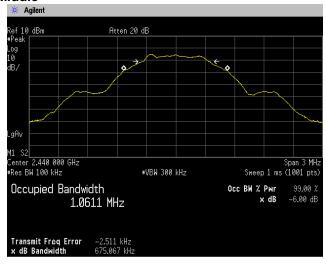


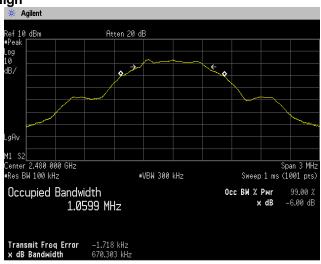


[BT_LE (LongRange S2)] Channel Low



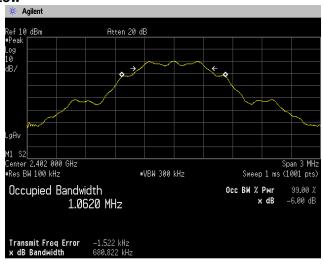
Channel Middle



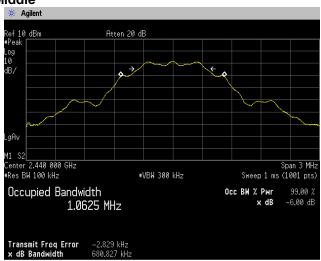


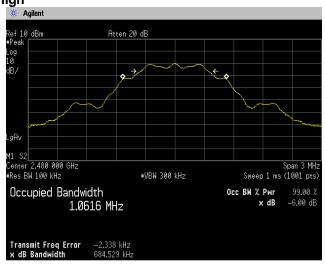


BT_LE (LongRange S8)] Channel Low



Channel Middle







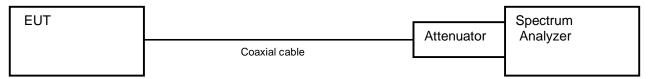
4.2 **Maximum Peak Output Power**

4.2.1 Measurement procedure

[FCC 15.247(b)(3), KDB558074 D01 v05r02]

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

- Test configuration



Test engineer

Test engineer

4.2.2 Limit

1 W(1000 mW) or less

4.2.3 Measurement result

Date 24-September-2021

Temperature 23.1 [°C]

Humidity 60.6 [%]

Test place Shielded room No.4 Kazunori Saito

Date 11-November-2021

Temperature 21.9 [°C] Humidity 39.4 [%]

Test place Shielded room No.4 Kazunori Saito

Battery Full (1Mbps)

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Peak Output Power (mW)	Limit (mW)	Result
Low	2402	-6.45	10.49	4.04	2.535	≦1000	PASS
Middle	2440	-5.09	10.49	5.40	3.467	≦1000	PASS
High	2480	-6.88	10.49	3.61	2.296	≦1000	PASS

Calculation;

Reading (dBm) + Factor (dB) = Level (dBm)

10logP = Level (dBm) P = 10^(Maximum Peak Output Power / 10) (mW)



Battery Full (2Mbps)

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Peak Output Power (mW)	Limit (mW)	Result
Low	2402	-6.41	10.49	4.08	2.559	≦1000	PASS
Middle	2440	-5.06	10.49	5.43	3.491	≦1000	PASS
High	2480	-6.82	10.49	3.67	2.328	≦1000	PASS

Battery Full (LongRange S2)

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Peak Output Power (mW)	Limit (mW)	Result
Low	2402	-6.39	10.49	4.11	2.573	≦1000	PASS
Middle	2440	-4.99	10.49	5.50	3.547	≦1000	PASS
High	2480	-6.79	10.49	3.70	2.346	≦1000	PASS

Battery Full (LongRange S8)

Channel	Center Frequenc y (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Peak Output Power (mW)	Limit (mW)	Result
Low	2402	-6.38	10.49	4.12	2.579	≦1000	PASS
Middle	2440	-4.98	10.49	5.51	3.559	≦1000	PASS
High	2480	-6.78	10.49	3.71	2.348	≦1000	PASS

Calculation;

Reading (dBm) + Factor (dB) = Level (dBm)

10logP = Level (dBm) P = 10^(Maximum Peak Output Power / 10) (mW)



4.3 Band Edge Compliance of RF Conducted Emissions

4.3.1 Measurement procedure

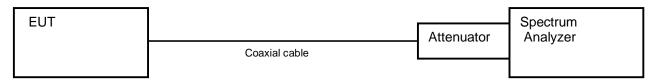
[FCC 15.247(d), KDB558074 D01 v05r02]

The Band Edge 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 = Arbitrary setting. (Setting suitable for measurement.)
- b) RBW = 100 kHz
- c) VBW ≥ 3 x RBW
- d) Sweep time = auto-couple
- e) Detector = peak
- f) Trace mode = max hold

- Test configuration



4.3.2 Limit

In any 100kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

4.3.3 Measurement result

Date : 24-September-2021

Temperature : 23.1 [°C]

Humidity : 60.6 [%]

Test place : Shielded room No.4 <u>Kazunori Saito</u>

Date : 11-November-2021

Temperature : 21.9 [°C]

Humidity : 39.4 [%]

Test place : Shielded room No.4 Kazunori Saito

Test engineer

Test engineer

[BT_LE (1Mbps)]

Channel	Frequency (MHz)	RF Power Level (dBm)	Band- edge Frequency (MHz)	Band- edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2402	-6.71	2399.75	-65.19	58.48	At least 20dB below from peak of RF	
High	2480	-7.17	2483.55	-68.50	61.33	At least 20dB below from peak of RF	PASS



[BT_LE (2Mbps)]

<u> </u>							
Channel	Frequency (MHz)	RF Power Level (dBm)	Band- edge Frequency (MHz)	Band- edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2402	-7.11	2399.95	-38.26	31.15	At least 20dB below from peak of RF	
High	2480	-7.60	2483.55	-65.60	58.00	At least 20dB below from peak of RF	PASS

[BT_LE (LongRange S2)]

<u> /-</u>	(2011g/Kallgo 02/j							
Channel	Frequency (MHz)	RF Power Level (dBm)	Band- edge Frequency (MHz)	Band- edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result	
Low	2402	-6.64	2399.70	-65.60	58.96	At least 20dB below from peak of RF PA		
High	2480	-7.06	2483.65	-68.78	61.72	At least 20dB below from peak of RF	PASS	

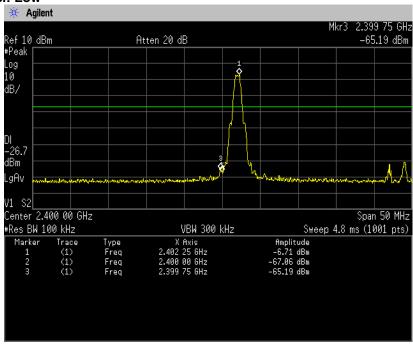
[BT_LE (LongRange S8)]

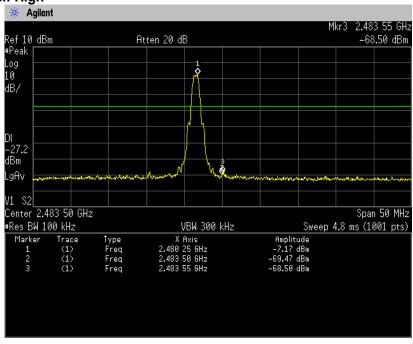
Channel	Frequency (MHz)	RF Power Level (dBm)	Band- edge Frequency (MHz)	Band- edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2402	-9.88	2399.75	-66.13	56.25 At least 20dB below from peak of RF		PASS
High	2480	-10.34	2485.55	-68.59	58.25	At least 20dB below from peak of RF	PASS



4.3.4 Trace data

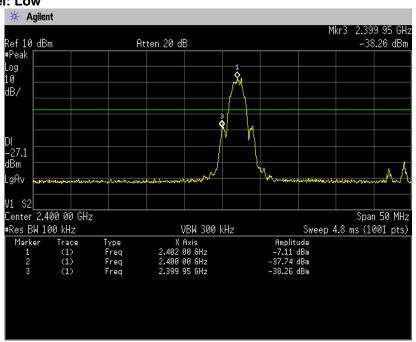
[BT_LE (1Mbps)] Channel: Low

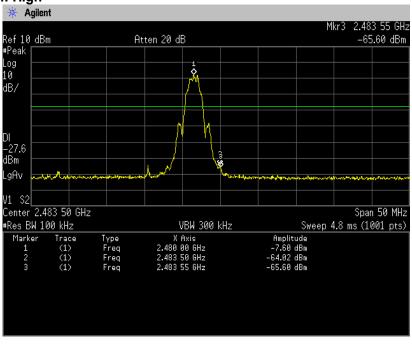






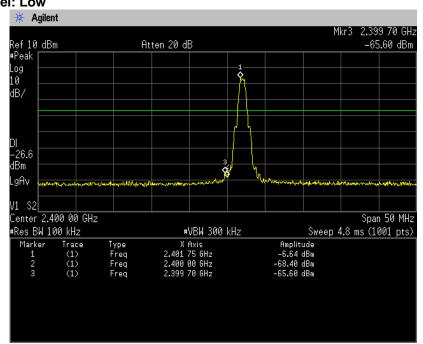
[BT_LE (2Mbps)] Channel: Low



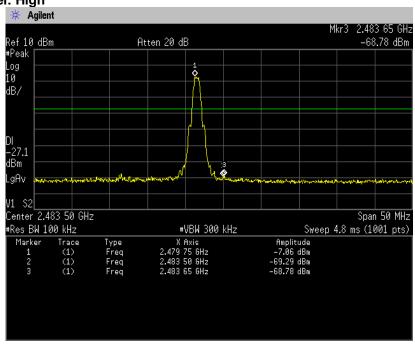




[BT_LE (LongRange S2)] Channel: Low

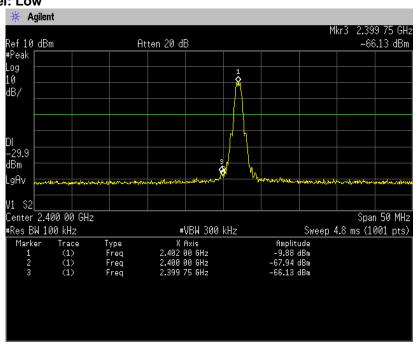


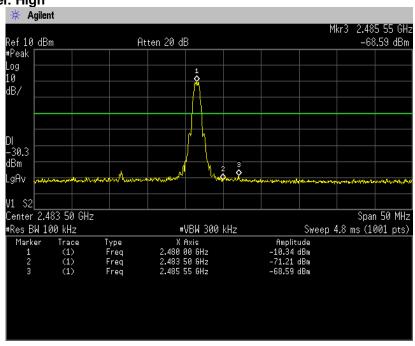






[BT_LE (LongRange S8)] Channel: Low







4.4 Spurious emissions - Conducted -

4.4.1 Measurement procedure

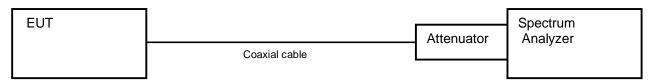
[FCC 15.247(d), KDB558074 D01 v05r02]

The spurious emissions (Conducted) are 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 = wide enough to fully capture the emission being measured.
- b) RBW = 100 kHz
- c) VBW ≥ RBW
- d) Sweep time = auto-couple
- e) Detector = peak
- f) Trace mode = max hold

- Test configuration



4.4.2 Limit

In any 100kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

4.4.3 Measurement result

Date : 24-September-2021

Temperature : 23.1 [°C] Humidity : 60.6 [%]

Humidity : 60.6 [%] Test engineer

Test place : Shielded room No.4 Kazunori Saito

Date : 11-November-2021

Temperature : 21.9 [°C]

Humidity : 39.4 [%] Test engineer :

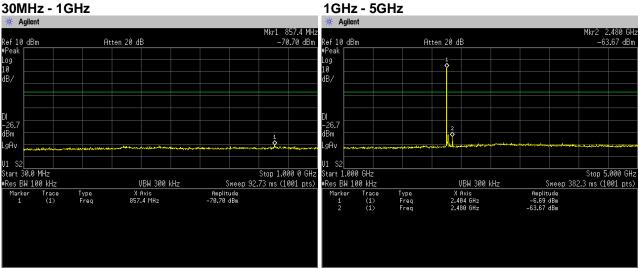
Test place : Shielded room No.4 <u>Kazunori Saito</u>

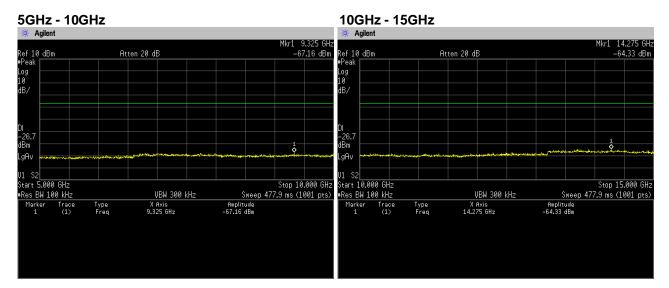
Channel	Frequency [MHz]	Limit [dB]	Results Chart	Result
Low	2402	At least 20dB below from peak of RF	See the trace Data	PASS
Middle	2440	At least 20dB below from peak of RF	See the trace Data	PASS
High	2480	At least 20dB below from peak of RF	See the trace Data	PASS

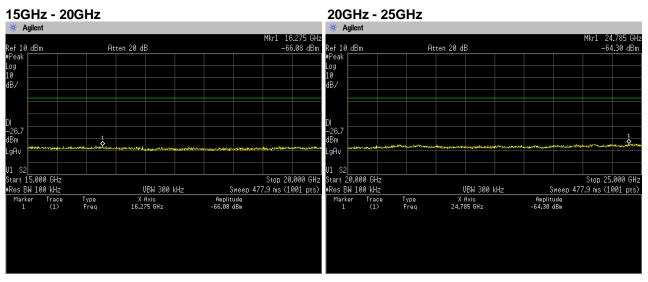


4.4.4 Trace data

[BT_LE (1Mbps)] Channel: Low

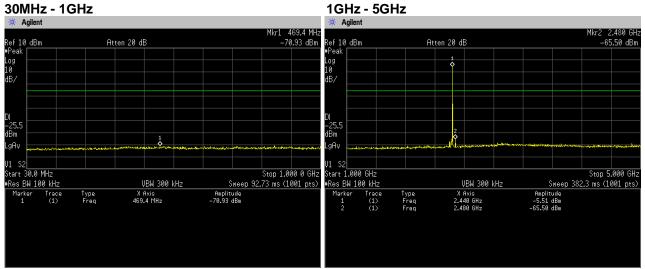


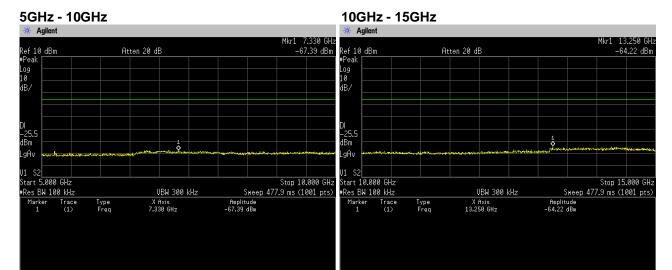


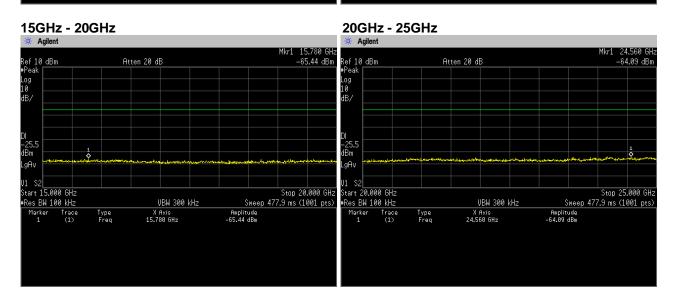




[BT_LE (1Mbps)] Channel: Middle

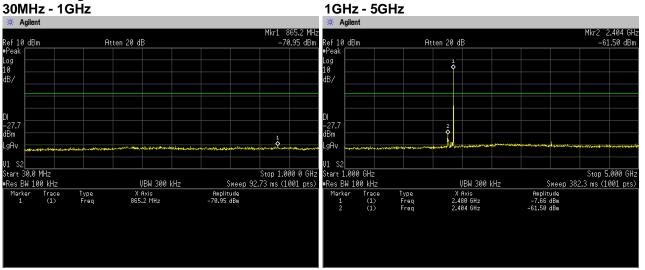




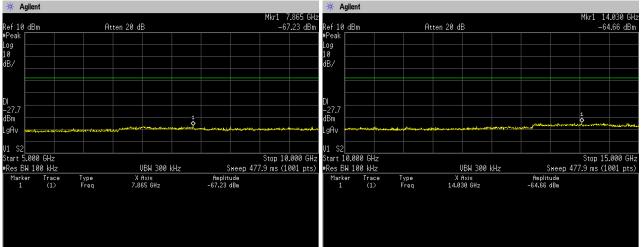


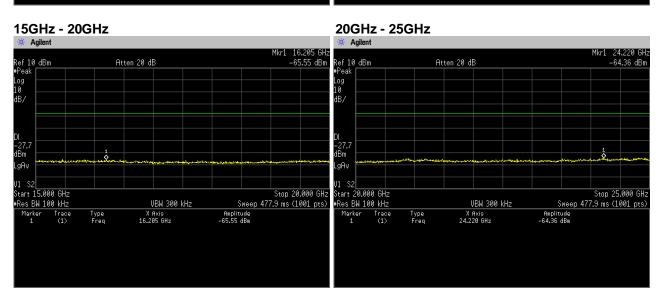


[BT_LE (1Mbps)] Channel: High

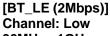


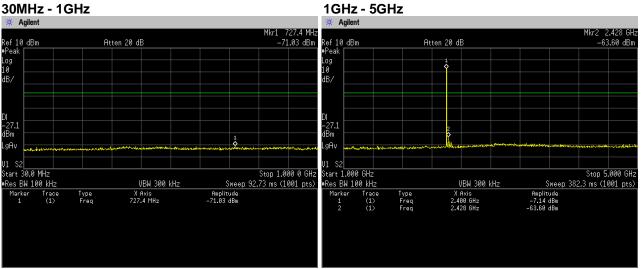
5GHz - 10GHz 10GHz - 15GHz



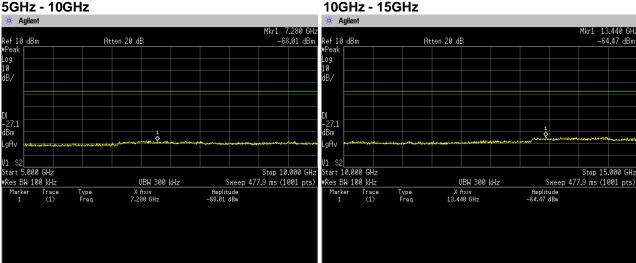


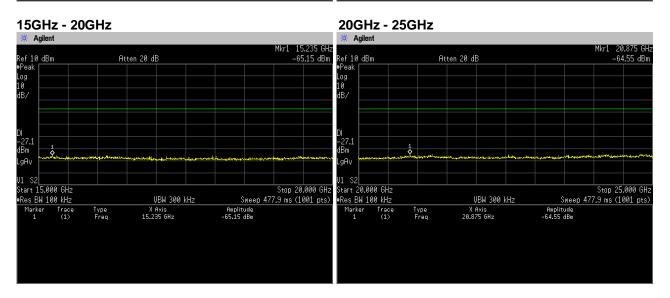






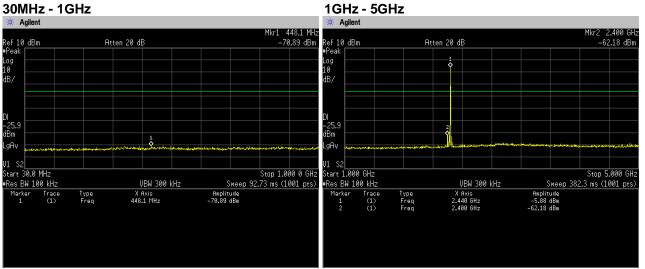




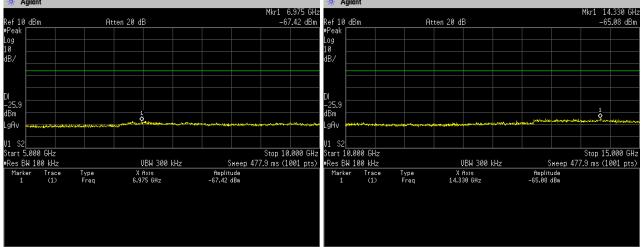




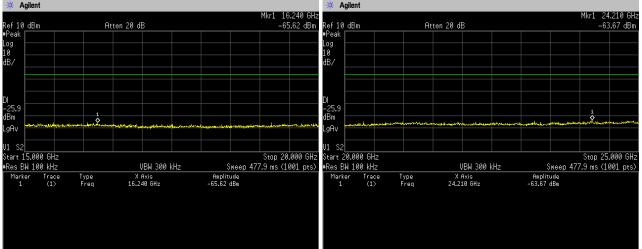
[BT_LE (2Mbps)] Channel: Middle





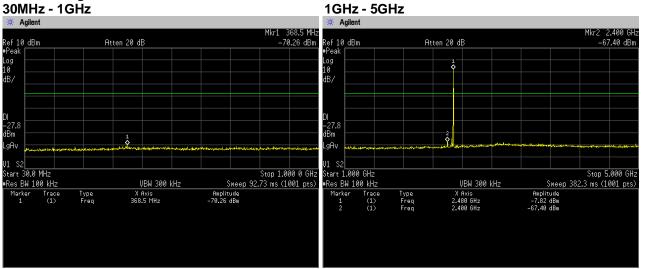


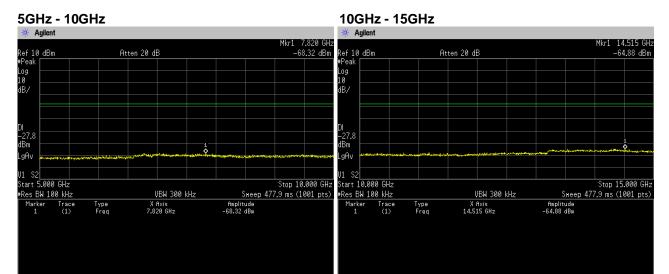


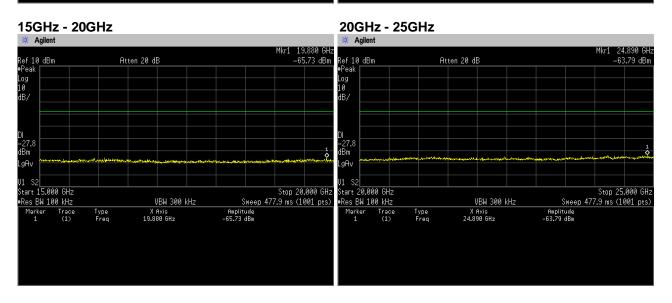




[BT_LE (2Mbps)] Channel: High





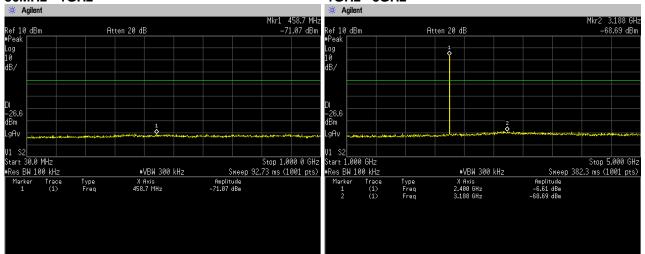




[BT_LE (LongRange S2)]

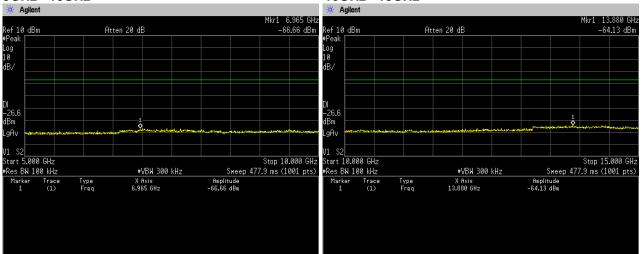
Channel: Low 30MHz - 1GHz



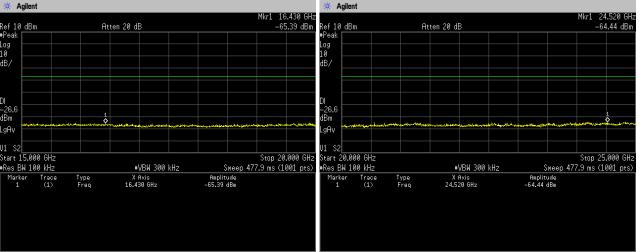


5GHz - 10GHz

10GHz - 15GHz



15GHz - 20GHz

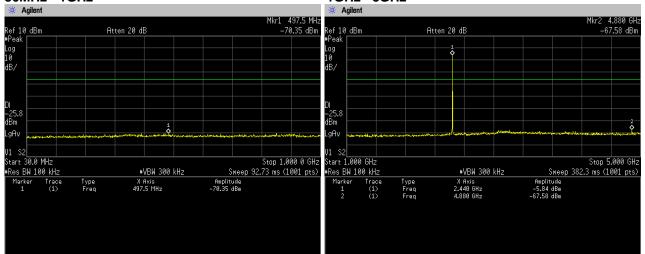




[BT_LE (LongRange S2)]

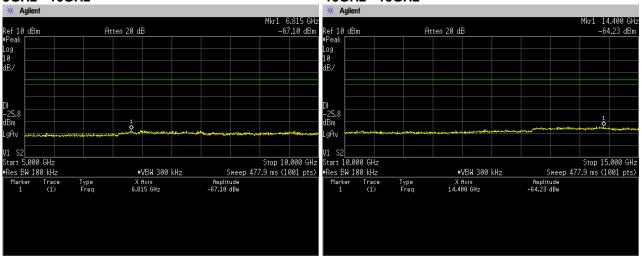
Channel: Middle 30MHz - 1GHz



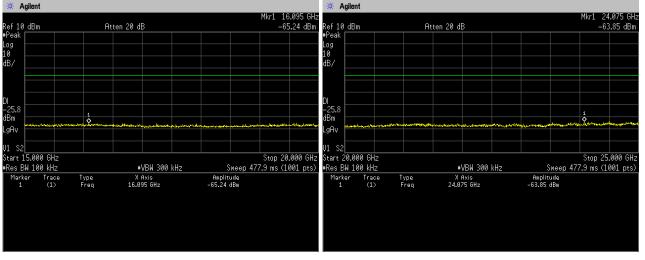


5GHz - 10GHz

10GHz - 15GHz



15GHz - 20GHz

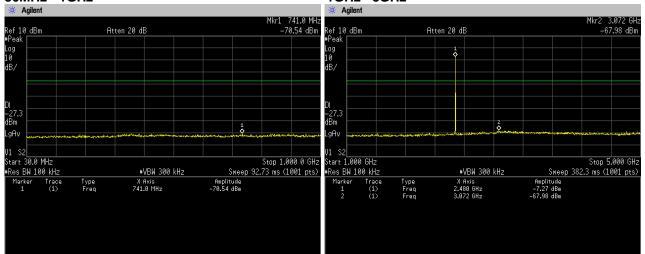




[BT_LE (LongRange S2)]

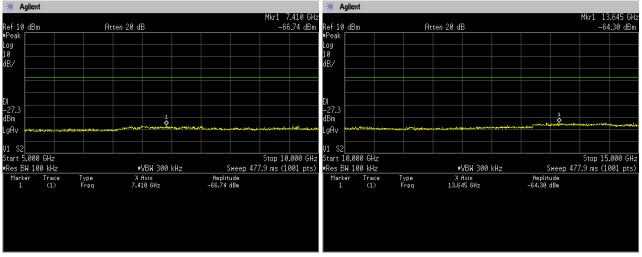
Channel: High 30MHz - 1GHz



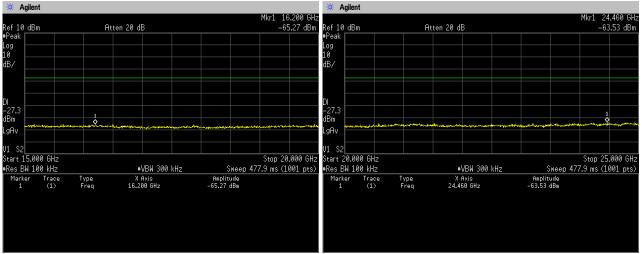


5GHz - 10GHz

10GHz - 15GHz



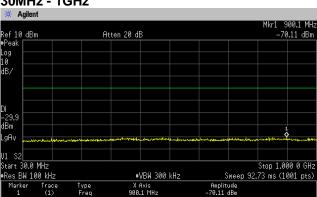
15GHz - 20GHz



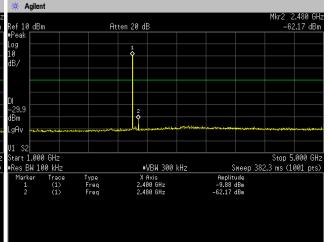


[BT_LE (LongRange S8)]

Channel: Low 30MHz - 1GHz

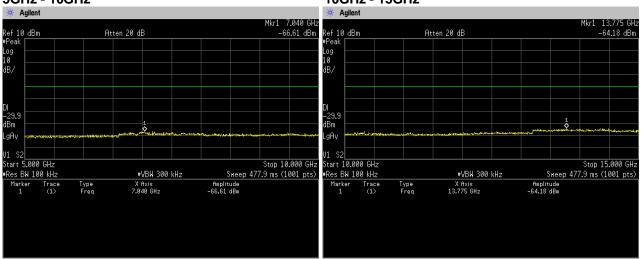




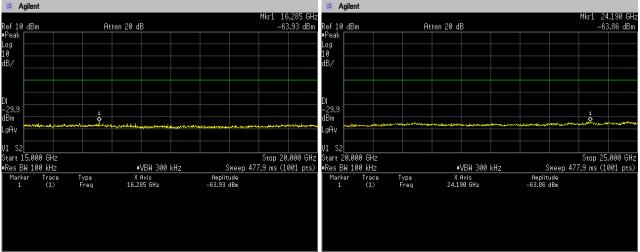


5GHz - 10GHz

10GHz - 15GHz



15GHz - 20GHz

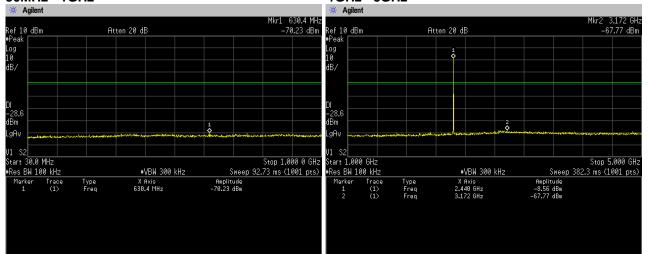




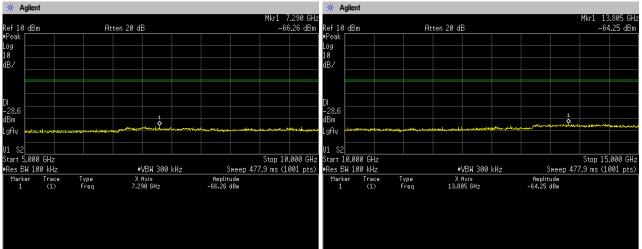
[BT_LE (LongRange S8)]

Channel: Middle 30MHz - 1GHz

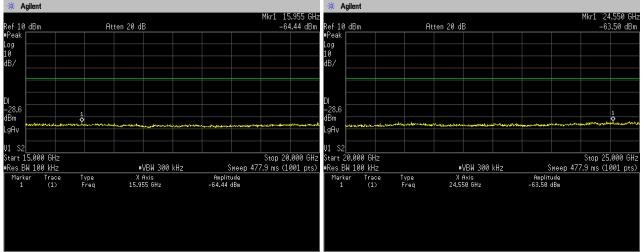




5GHz - 10GHz 10GHz - 15GHz



15GHz - 20GHz 20GHz - 25GHz

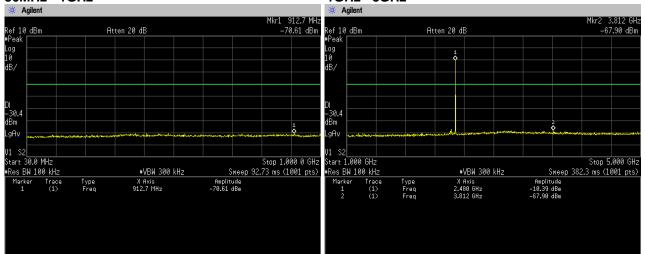




[BT_LE (LongRange S8)]

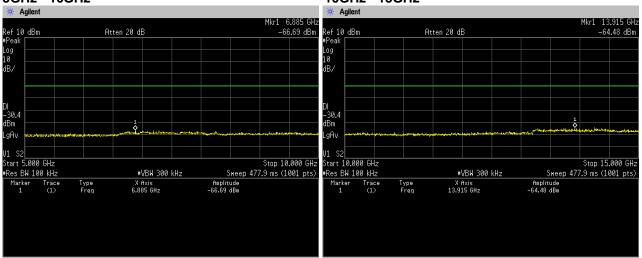
Channel: High 30MHz - 1GHz



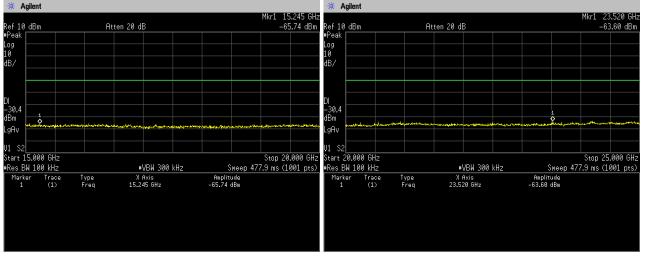


5GHz - 10GHz

10GHz - 15GHz



15GHz - 20GHz





4.5 purious Emissions - Radiated -

4.5.1 Measurement procedure

[FCC 15.247(d), 15.205, 15.209, KDB558074 D01 v05r02]

Test was applied by following conditions.

Test method : ANSI C63.10 Frequency range : 9kHz to 25GHz

Test place : 3m Semi-anechoic chamber

EUT was placed on : Styrofoam table / (W)1.0m \times (D)1.0m \times (H)0.8m (below 1GHz)

Styrofoam table / (W)0.6m \times (D)0.6m \times (H)1.5m (above 1GHz)

Antenna distance : 3m

Test receiver setting Below 1GHz

- Detector : Average (9kHz-90kHz, 110kHz-490kHz), Quasi-peak

- Bandwidth : 200Hz, 120kHz Spectrum analyzer setting : Above 1GHz

Peak
 RBW=1MHz, VBW=3MHz, Span=0Hz, Sweep=auto
 Average
 RBW=1MHz, VBW=1kHz, Span=0Hz, Sweep=auto

Display mode=Linear

Average Measurement Setting [VBW]

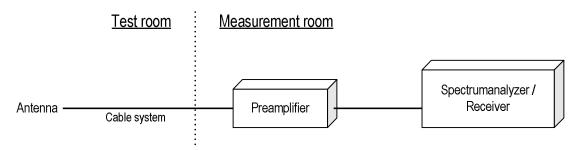
Mode	Duty Cycle (%)	T _{on} (us)	T _{off} (us)	1/T _{on} (kHz)	Determined VBW Setting
Bluetooth 5.1 LE (1Mbps)	85.00	2125	375	0.471	1kHz
Bluetooth 5.1 LE (2Mbps)	57.03	1071	807	0.934	1kHz
Bluetooth 5.1 LE (LongRange S2)	90.82	4543	459	0.220	1kHz
Bluetooth5.1 LE (LongRange S8)	97.37	17040	460	0.059	1kHz

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 937606.

Radiated emission measurements are performed at 3m distance with the broadband antenna (Loop antenna, Biconical antenna, Log periodic antenna, Double ridged guide antenna and Broad-band horn Antenna). The antenna is positioned both the horizontal and vertical planes of polarization and height is varied 1m to 4m and stopped at height producing the maximum emission. As for the Loop antenna, it is positioned with its plane vertical, and the center of the Loop antenna is 1m above the ground plane. The EUT is Placed on a turntable, which is 0.8 m/1.5 m above ground plane. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. The test results represent the worst case emission for each emission with manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation. Sufficient time for the EUT, support equipment, and test equipment are allowed in order for them to warm up to their normal operating condition.



- Test configuration



4.5.2 Calculation method

[9kHz to 150kHz]

Emission level = Reading + (Ant factor + Cable system loss)

Margin = Limit - Emission level

[150kHz to 25GHz]

Emission level = Reading + (Ant factor + Cable system loss - Amp. Gain)

Margin = Limit - Emission level

Example:

Limit @ 4804.0MHz: 74.0dBuV/m (Peak Limit) S.A Reading = 39.9dBuV Cable system loss = 8.3dB

Result = 39.9 + 8.3 = 48.2dBuV/m Margin = 74.0 - 48.2 = 25.8dB

4.5.3 Limit

Frequency	Field s	trength	Distance
[MHz]	[uV/m]	[dBuV/m]	[m]
0.009-0.490	2400 / F [kHz]	20logE [uV/m]	300
0.490-1.705	24000 / F [kHz]	20logE [uV/m]	30
1.705-30	30	29.5	30
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Note:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level [dBuV/m] = 20log Emission [uV/m]
- 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition modulation.



4.5.4 Test data

Date 1-November-2021

Temperature 22.0 [°C] Humidity

37.0 [%] Test engineer

Test place 3m Semi-anechoic chamber Tadahiro Seino

Date 2-November-2021

Temperature 22.5 [°C]

43.6 [%] Humidity

Test place 3m Semi-anechoic chamber Tadahiro Seino

Test engineer

Test engineer

Test engineer

Date 6-November-2021

Temperature 20.6 [°C]

34.4 [%] Humidity

Test place 3m Semi-anechoic chamber

Kazunori Saito

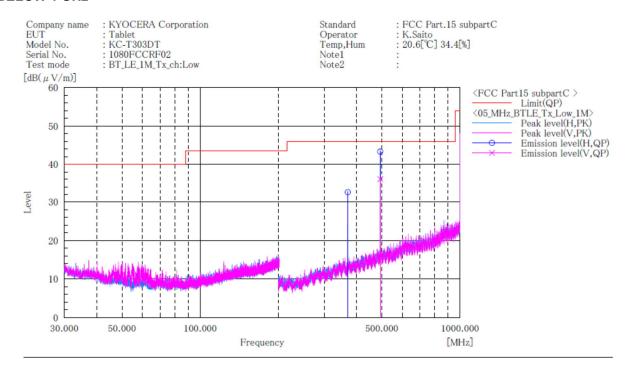
Date 7-November-2021

Temperature 20.7 [°C] Humidity 32.1 [%]

Test place 3m Semi-anechoic chamber Kazunori Saito



[Transmission mode] [BT_LE (1Mbps)] Channel: Low BELOW 1 GHz



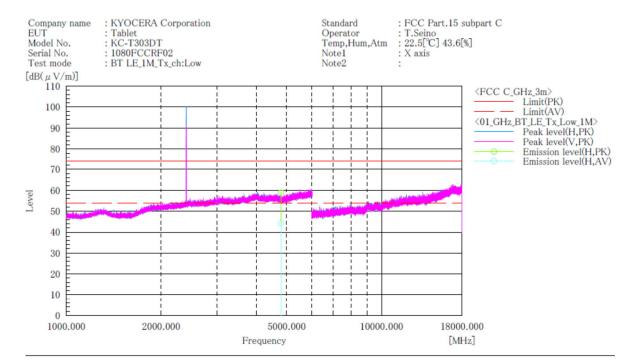
Final Result

No.	Frequency	(P)	Reading QP	c. f	Result QP	Limit OP		Height	Angle	Remark
			-64		-4.a	-4.	QP		FO B	
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	dB	cm	[°]	
1	369.756	H	44.6	-12.0	32.6	46.0	13. 4	100.0	91.0	
2	493.001	H	52.4	-9.1	43.3	46.0	2. 7	194.0	262.0	
3	493, 001	V	45. 1	-9.1	36.0	46.0	10.0	232.0	0.0	

- 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.



[BT_LE (1Mbps)] **Channel: Low ABOVE 1 GHz**



Margin Height AV [dB] [cm] 9.8 143.0

Angle Remark

[°] 151.0

Margin PK [dB] 15.1

Final Result

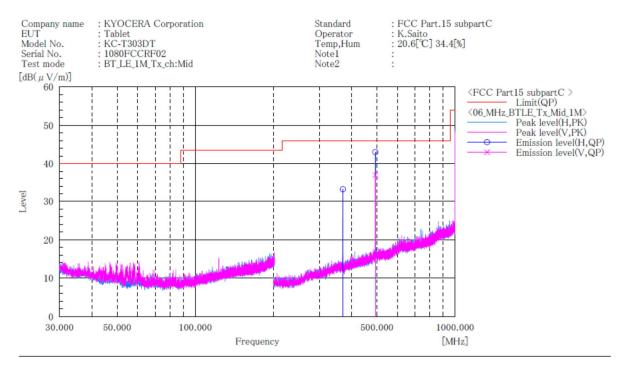
[MHz]

No. Frequency (P) Reading Reading

- 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.



[BT_LE (1Mbps)] Channel: Middle BELOW 1 GHz



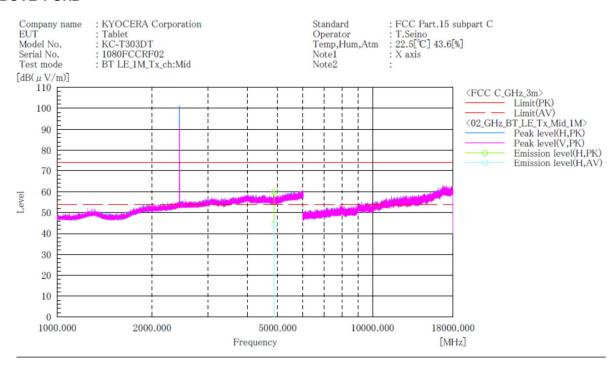
Final Result

No.	Frequency	(P)	Reading QP	c. f	Result QP	Limit	Margin QP	Height	Angle	Remark
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.752	H	45. 2	-12.0	33. 2	46.0	12.8	100.0	78.0	
2	493.001	H	52. 1	-9.1	43.0	46.0	3.0	177.0	273.0	
3	493 001	V	46 0	-Q 1	36 9	46 0	Q 1	230 0	326 0	

- 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.



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



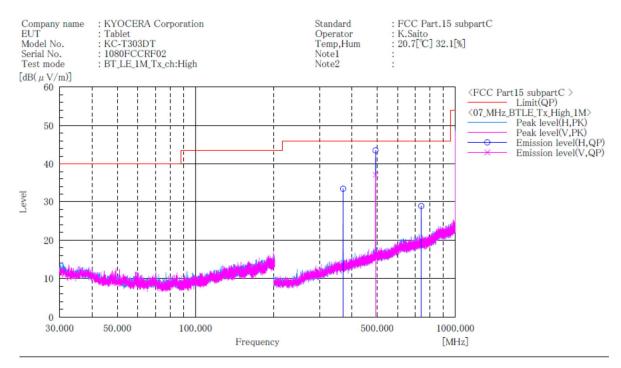
Final Result

NO.	Frequency	(P)	Keading	Keading	C. I	Kesult	Kesult	Limit	Limit	Margin	Margin	neight	Angle	Kemark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
1	4880.000	H	49. 1	33.8	10.7	59.8	44.5	74.0	54.0	14.2	9.5	115.0	148.0	

- 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.



[BT_LE (1Mbps)] Channel: High BELOW 1 GHz



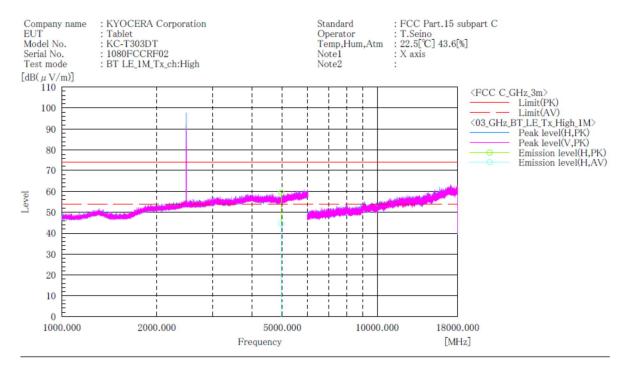
Final Result

No.	Frequency	(P)	Reading	c.f	Result	Limit	Margin	Height	Angle	Remark
			QP		QP	QP	QP			
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.750	H	45.4	-12.0	33.4	46.0	12.6	100.0	105.0	
2	493.001	H	52.6	-9.1	43.5	46.0	2.5	202.0	252.0	
3	493.001	V	46.2	-9.1	37. 1	46.0	8.9	202.0	318.0	
4	739.510	H	34.7	-5.8	28.9	46.0	17. 1	129.0	282.0	

- 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.



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



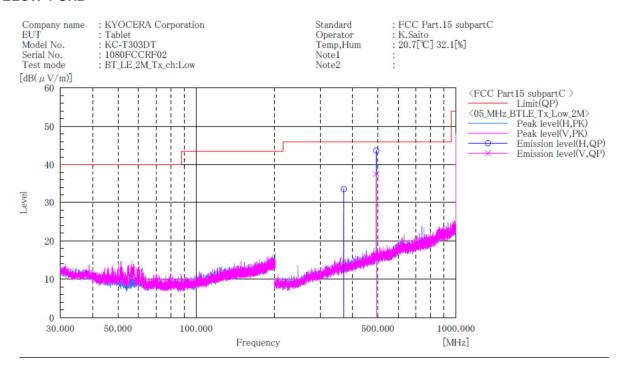
Final Result

No.	Frequency					Result	Result	Limit	Limit	Margin				Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	PK [dB(μV/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
	1000 000	2.7						74.0	EA O	140	0.4	121 0	157 0	

- 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.



[BT_LE (2Mbps)] Channel: Low BELOW 1 GHz



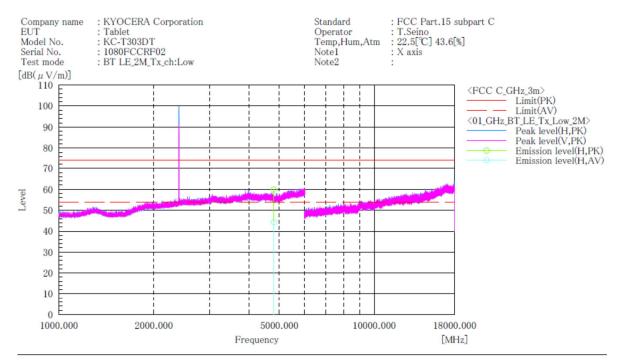
Final Result

No.	Frequency	(P)	Reading QP	c. f	Result QP	Limit QP	Margin QP	Height	Angle	Remark
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.745	H	45. 5	-12.0	33. 5	46.0	12.5	100.0	86.0	
2	493.001	H	52.8	-9.1	43.7	46.0	2.3	195.0	279.0	
3	493 001	V	16 6	-Q 1	37 5	46 0	8 5	203 0	336 0	

- 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.



[BT_LE (2Mbps)] Channel: Low ABOVE 1 GHz

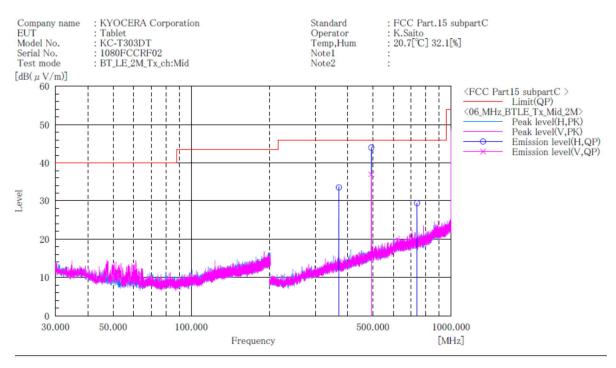


Final Result

- 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.



[BT_LE (2Mbps)] Channel: Middle BELOW 1 GHz



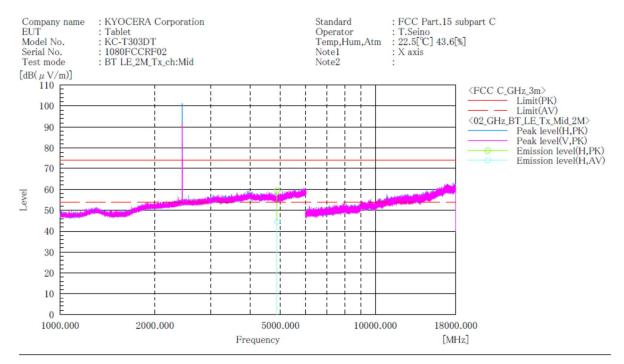
Final Result

No.	Frequency	(P)	Reading	c.f	Result	Limit	Margin	Height	Angle	Remark
			QP		QP	QP	QP			
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.752	H	45.5	-12.0	33. 5	46.0	12.5	100.0	87.0	
2	493.001	H	53. 1	-9.1	44.0	46.0	2.0	207.0	268.0	
3	493.001	V	46. 1	-9.1	37.0	46.0	9.0	214.0	0.0	
4	739. 505	H	35. 2	-5.8	29.4	46.0	16.6	125.0	277.0	

- 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.



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



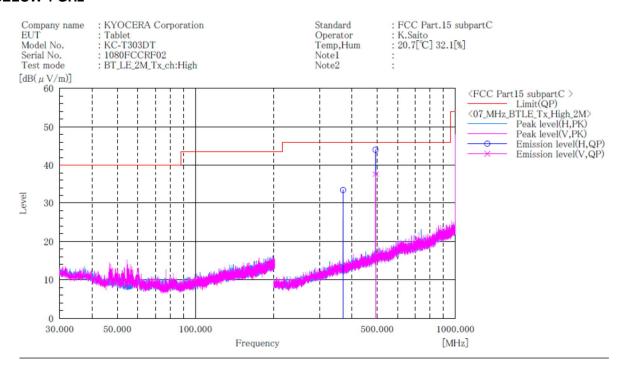
Final Result

No.	Frequency	(P)	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
1	4880, 000	H	48. 7	33.9	10.7	59.4	44.6	74.0	54.0	14.6	9.4	117.0	151.0	

- 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.



[BT_LE (2Mbps)] Channel: High BELOW 1 GHz



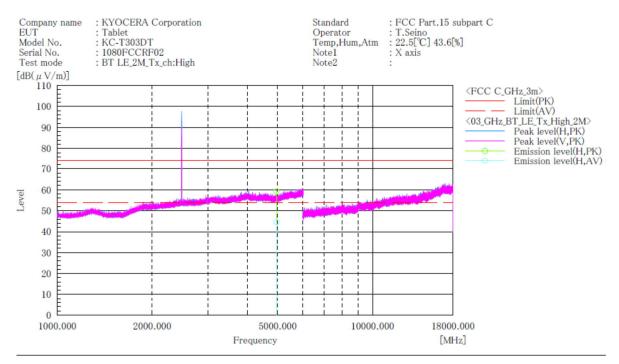
Final Result

No.	Frequency	(P)	Reading	c.f	Result	Limit	-	Height	Angle	Remark
	Day 3		QP	F 10 /1 /) 7	QP	QP	QP	F 3	F9 7	
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]		
1	369.751	H	45. 4	-12.0	33. 4	46.0	12.6	103.0	94.0	
2	493.001	H	53. 1	-9.1	44.0	46.0	2.0	198.0	270.0	
3	493 001	V	46 7	-9 1	37 6	46 0	8 4	210 0	326 0	

- 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.



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



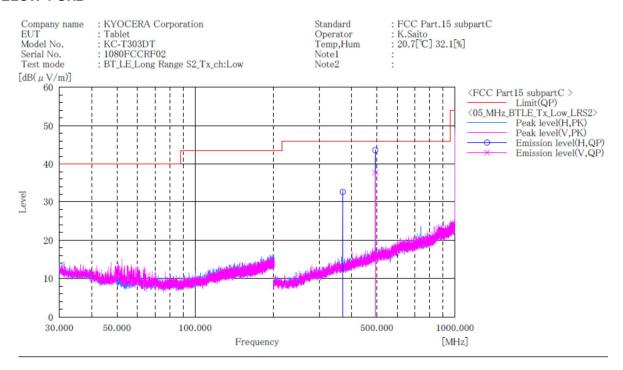
Final Result

No.	Frequency	(P)	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
1	4960 000	H	48 4	33 8	10.8	59 2	44 6	74 0	54 0	14 8	9 4	132 0	162 0	

- 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.



Channel: Low BELOW 1 GHz



Final Result

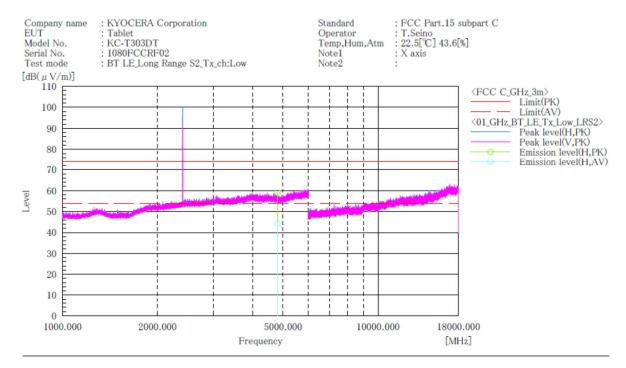
No.	Frequency	(P)	Reading OP	c. f	Result QP	Limit QP	Margin QP	Height	Angle	Remark
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.740	п	44.6	-12.0	32.6	46.0	13. 4	101.0	90.0	
2	493.001	H	52.7	-9.1	43.6	46.0	2.4	191.0	261.0	
3	493 001	V	46 8	-9 1	37 7	46 0	8 3	212 0	340 0	

- 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.



[BT_LE (LongRange S2)]

Channel: Low ABOVE 1 GHz



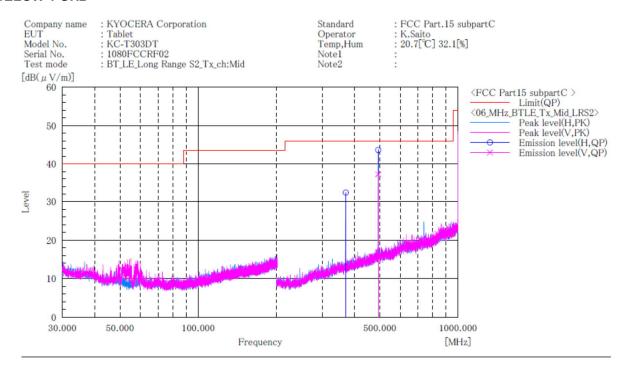
Final Result

No.	Frequency	(P)	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
4	4904 000	1.1	40 E	22 0	10 6	EQ 1	44 4	74.0	E4 0	1.4 0	0 6	142 0	140 0	

- 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.



Channel: Middle BELOW 1 GHz



Final Result

No.	Frequency	(P)	Reading QP	c. f	Result QP	Limit	Margin QP	Height	Angle	Remark
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369. 753	Н	44. 4	-12.0	32. 4	46.0	13.6	100.0	253.0	
2	493.001	H	52. 7	-9.1	43.6	46.0	2.4	196.0	177.0	
3	493 001	V	46 3	-9 1	37 2	46 0	88	213 0	0.0	

- 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.



Channel: Middle ABOVE 1 GHz

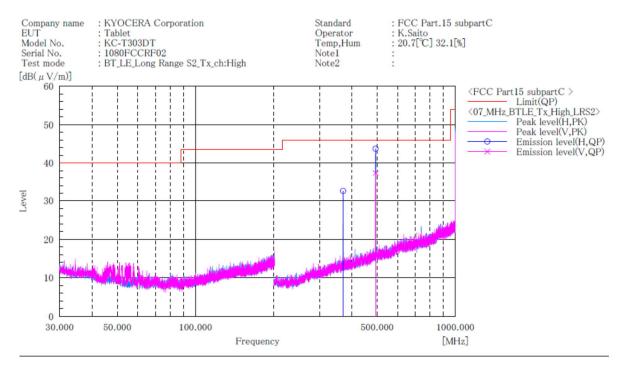
> : FCC Part.15 subpart C Company name : KYOCERA Corporation Standard EUT Model No. : Tablet : KC-T303DT : T.Seino : 22.5[°C] 43.6[%] Operator Temp, Hum, Atm Serial No. : 1080FCCRF02 : X axis : BT LE_Long Range S2_Tx_ch:Mid Test mode Note2 $[dB(\mu V/m)]$ 110 <FCC C_GHz_3m> Limit(PK)
> Limit(AV)
>
> (02_GHz_BT_LE_Tx_Mid_LRS2>
> Peak level(H,PK) 100 90 Peak level(V,PK) Emission level(H,PK) 80 Emission level(H,AV) 70 60 50 40 30 20 10 1000.000 2000.000 5000.000 10000.000 18000.000 Frequency [MHz]

Final Result
No. Frequency (P) Reading Reading c.f Result Result Limit Limit Margin Margin Height Angle Remark
[MHz] [dB(μ V)] [dB(μ V)] [dB(μ V)] [dB(μ V)] [dB(μ V)m] [dB(μ V/m)] [dB(μ V/m)] [dB(μ V/m)] [dB(μ V)m] [dB(

- 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.



Channel: High BELOW 1 GHz



Final Result

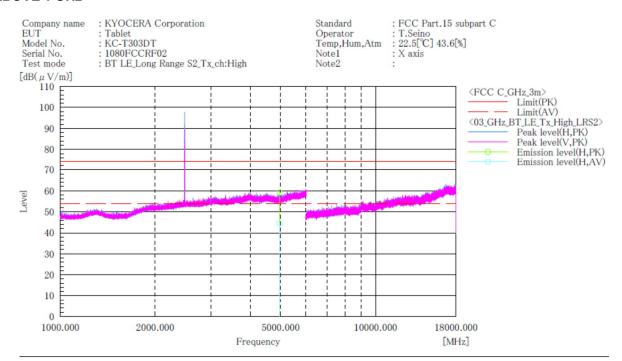
No.	Frequency	(P)	Reading QP	c. f	Result QP	Limit	Margin QP	Height	Angle	Remark
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.753	H	44.6	-12.0	32.6	46.0	13.4	100.0	247.0	
2	493.001	H	52.8	-9.1	43.7	46.0	2.3	207.0	274.0	
3	493 001	V	46 4	-9 1	37 3	46 0	8 7	219 0	323 0	

- 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.



[BT_LE (LongRange S2)]

Channel: High ABOVE 1 GHz



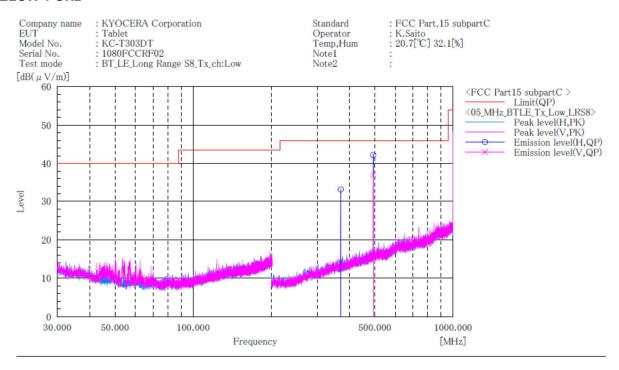
Final Result

No.	Frequency	(P)	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
1	4960 000	H	48 4	33 8	10.8	50 2	44 6	74.0	54.0	14 8	9 4	178 0	156 0	

- 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.



Channel: Low BELOW 1 GHz



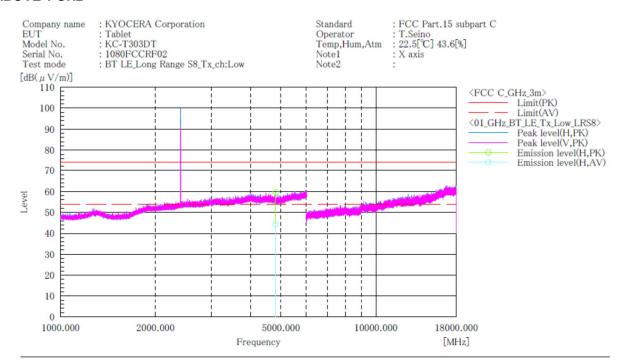
Final Result

No.	Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle	Remark
			QP		QP	QP	QP			
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369. 753	H	45. 1	-12.0	33. 1	46.0	12.9	100.0	97.0	
2	493.001	H	51. 3	-9.1	42. 2	46.0	3.8	195.0	43.0	
3	493 001	V	46 0	-9 1	36. 9	46. 0	9.1	203 0	0.0	

- 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.



Channel: Low ABOVE 1 GHz



Final Result

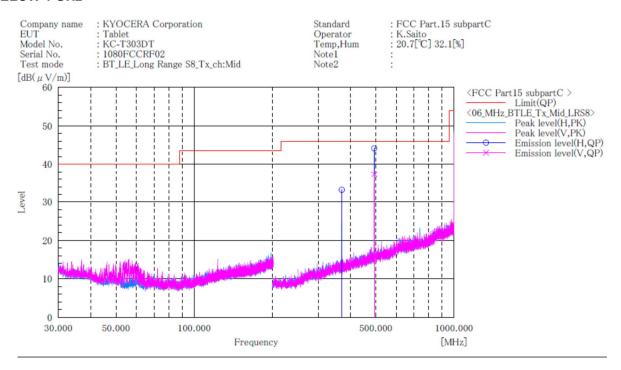
No.	Frequency	(P)	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB(µV/m)]	[dB]	[dB]	[cm]	[°]	
	4904 000	LI	40 1	22 0	10 6	EQ 7	44 4	74.0	E4 0	14 2	0 6	142 0	147 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.



Channel: Middle BELOW 1 GHz



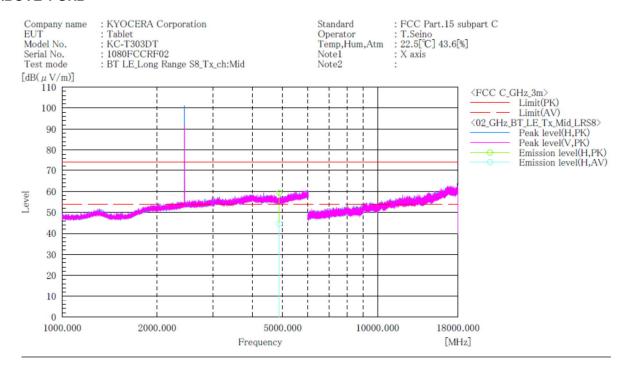
Final Result

No.	Frequency	(P)	Reading	c.f	Result	Limit	Margin	Height	Angle	Remark
			QP		QP	QP	QP			
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.750	H	45. 2	-12.0	33. 2	46.0	12.8	100.0	85.0	
2	493.001	H	53. 2	-9.1	44. 1	46.0	1.9	194.0	262.0	
3	493 001	V	46 4	-9 1	37 3	46 0	8 7	203 0	0.0	

- 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.



Channel: Middle ABOVE 1 GHz



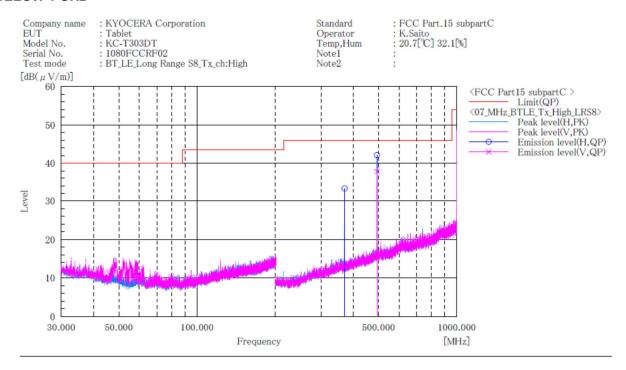
Final Result

NO.	rrequency	(P)	Keading	Keading	C. I	Kesult	Kesult	Limit	Limit	Margin	Margin	Height	Angle	Kemark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		[dB(μV)]	$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[dB]	[cm]	[°]	
1	4880.000	H	48. 6	33.9	10.7	59. 3	44.6	74.0	54.0	14.7	9.4	160.0	151.0	

- 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.



Channel: High BELOW 1 GHz



Final Result

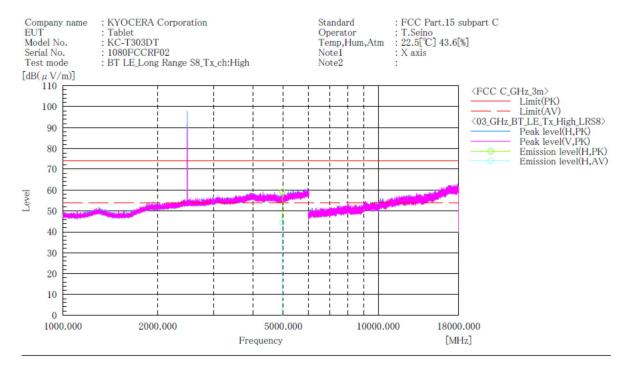
No.	Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle	Remark
			QP		QP	QP	QP			
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.746	H	45.3	-12.0	33. 3	46.0	12.7	100.0	90.0	
2	493.001	H	51.2	-9.1	42.1	46.0	3.9	210.0	40.0	
3	493, 001	V	46. 9	-9.1	37. 8	46.0	8. 2	203. 0	334.0	

- 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.



[BT_LE (LongRange S8)]

Channel: High ABOVE 1 GHz



Final Result

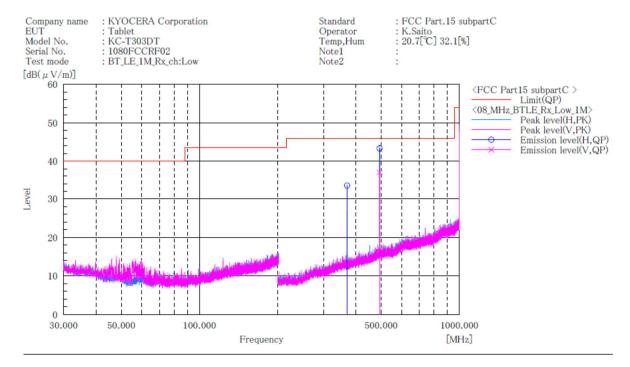
No.	Frequency	(P)	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
			PK	AV		PK	AV	PK	AV	PK	AV			
	[MHz]		$[dB(\mu V)]$	$[dB(\mu V)]$	[dB(1/m)]	[dB(µV/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	AV [dB]	[cm]	[°]	
1	4960 000	H	48 3	33 7	10.8	59 1	44 5	74 0	54 0	14 9	9.5	131 0	154 0	

- 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.



[Receive mode]

Channel: Low BELOW 1 GHz



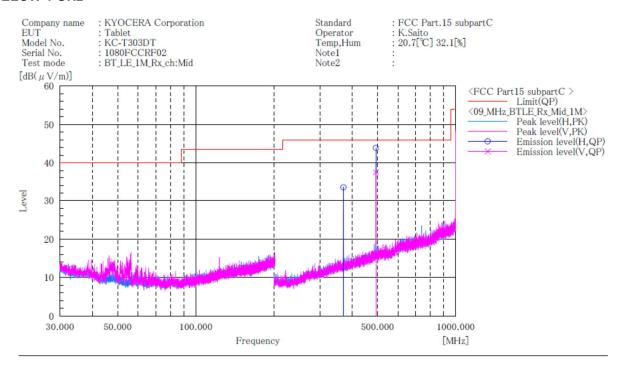
Final Result

No.	Frequency	(P)	Reading	c. f	Result	Limit	Margin	Height	Angle	Remark
			QP		QP	QP	QP			
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.751	H	45. 5	-12.0	33. 5	46.0	12.5	100.0	86.0	
2	493.001	H	52.4	-9.1	43.3	46.0	2.7	181.0	278.0	
3	493.001	V	46. 1	-9.1	37.0	46.0	9.0	199.0	0.0	

- 1. Emission Level (Margin) = Limit [Reading + Factor (Antenna + Cable Amp)]
- 2. No emission were detected in frequency range 9kHz to 30MHz and 1GHz to 25GHz at the 3 meters distance.



Channel: Middle BELOW 1 GHz



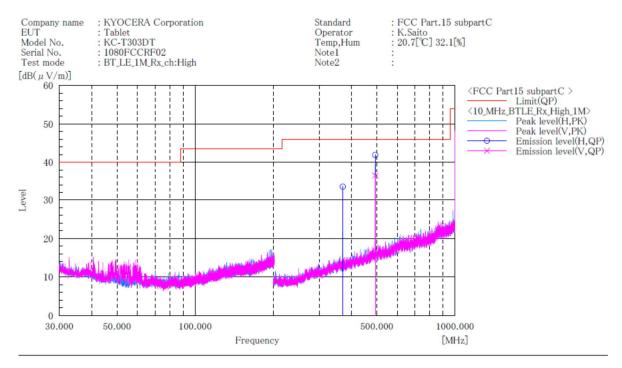
Final Result

No.	Frequency	(P)	Reading	c. f	Result QP	Limit QP	Margin QP	Height	Angle	Remark
1	[MHz] 369.750	н	[dB(µV)] 45.5	[dB(1/m)] -12.0	$\begin{bmatrix} dB (\mu V/m) \\ 33.5 \end{bmatrix}$	[dB(µV/m)] 46.0	[dB] 12.5	[cm]	[°] 82.0	
2	493, 001	п	53. 0	-9. 1	43. 9	46. 0	2.0	208. 0	269. 0	
3	493. 001	V	46. 6	-9. 1 -9. 1	37. 5	46. 0	8. 5	203. 0	344. 0	

- 1. Emission Level (Margin) = Limit [Reading + Factor (Antenna + Cable Amp)]
- 2. No emission were detected in frequency range 9kHz to 30MHz and 1GHz to 25GHz at the 3 meters distance.



Channel: High BELOW 1 GHz



Final Result

No.	Frequency	(P)	Reading QP	c. f	Result QP	Limit QP	Margin QP	Height	Angle	Remark
	[MHz]		$[dB(\mu V)]$	[dB(1/m)]	$[dB(\mu V/m)]$	$[dB(\mu V/m)]$	[dB]	[cm]	[°]	
1	369.755	H	45.5	-12.0	33. 5	46.0	12.5	100.0	85.0	
2	493.001	H	51.0	-9.1	41.9	46.0	4. 1	210.0	47.0	
3	493, 001	V	45. 5	-9.1	36. 4	46.0	9.6	244.0	0.0	

- 1. Emission Level (Margin) = Limit [Reading + Factor (Antenna + Cable Amp)]
- 2. No emission were detected in frequency range 9kHz to 30MHz and 1GHz to 25GHz at the 3 meters distance.