

3.2.8 TEST RESULTS (1G-25GHZ)

GFSK,
Normal Voltage

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (2402 MHz)							
Vertical	2491.777	59.75	-11.65	48.1	74	25.9	Pk
Horizontal	2498.247	56.65	-12.73	43.92	74	30.08	Pk
Vertical	4804.156	56.75	-3.6	53.15	74	20.85	Pk
Horizontal	4804.156	56.75	-9.23	47.52	74	26.48	Pk
Vertical	1485.838	60.45	-17.1	43.35	74	30.65	Pk
Vertical	1636.784	60.14	-16.06	44.08	74	29.92	Pk
Vertical	2095.928	58.95	-11.88	47.07	74	26.93	Pk
Horizontal	1074.301	60.68	-19.69	40.99	74	33.01	Pk
Horizontal	1483.178	59.67	-17.09	42.58	74	31.42	Pk
Horizontal	1895.832	56.69	-14.25	42.44	74	31.56	Pk
Mid Channel (2441 MHz)							
Vertical	2474.777	56.37	-11.65	44.72	74	29.28	Pk
Horizontal	2474.144	57.06	-9.37	47.69	74	26.31	Pk
Vertical	4882.539	56.44	-6.15	50.29	74	23.71	Pk
Horizontal	4882.539	56.44	-6.83	49.61	74	24.39	Pk
Vertical	1433.535	63.43	-17.12	46.31	74	27.69	Pk
Vertical	1636.784	60.76	-16.06	44.7	74	29.3	Pk
Vertical	2284.166	54.5	-12.83	41.67	74	32.33	Pk
Horizontal	1280.515	60.16	-17.82	42.34	74	31.66	Pk
Horizontal	1636.784	58.99	-16.06	42.93	74	31.07	Pk
Horizontal	1892.438	59.11	-14.28	44.83	74	29.17	Pk
High Channel (2480 MHz)							
Vertical	2453.883	57.03	-12.91	44.12	74	29.88	Pk
Horizontal	2453.839	57.03	-11.59	45.44	74	28.56	Pk
Vertical	4960.256	53.54	-9.22	44.32	74	29.68	Pk
Horizontal	4960.478	53.54	-3.64	49.9	74	24.1	Pk
Vertical	1187.688	58.06	-18.27	39.79	74	34.21	Pk
Vertical	1636.784	56.87	-16.06	40.81	74	33.19	Pk
Vertical	2084.693	54.46	-11.99	42.47	74	31.53	Pk
Horizontal	1534.540	57.12	-16.94	40.18	74	33.82	Pk
Horizontal	1786.985	56.83	-15.04	41.79	74	32.21	Pk
Horizontal	1892.438	56.71	-14.28	42.43	74	31.57	Pk

π/4-DQPSK

Normal Voltage

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:2402							
V	4804.428	53.58	-3.5	50.08	74	23.92	Pk
V	4804.428	31.08	-3.5	27.58	74	46.42	AV
H	4804.529	52.77	-3.5	49.27	74	24.73	Pk
H	4804.529	31.82	-3.5	28.32	74	45.68	AV
operation frequency:2441							
V	4882.548	52.17	-6.11	46.06	74	27.94	Pk
V	4882.548	31.24	-6.11	25.13	74	48.87	AV
H	4882.279	51.06	-6.11	44.95	74	29.05	Pk
H	4882.279	31.08	-6.11	24.97	74	49.03	AV
operation frequency:2480							
V	4960.358	52.56	-3.49	49.07	74	24.93	pk
V	4960.358	31.21	-3.49	27.72	74	46.28	AV
H	4960.591	51.64	-3.49	48.15	74	25.85	pk
H	4960.591	31.76	-3.49	28.27	74	45.73	pk
Remark:							
Absolute Level= Reading Level+ Factor, Margin= Absolute Level - Limit							

8-DPSK

Normal Voltage

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:2402							
V	4804.428	54.55	-3.53	51.02	68.2	17.18	Pk
H	4804.529	55.26	-3.54	51.72	68.2	16.48	Pk
operation frequency:2441							
V	4882.548	54.53	-3.64	50.89	68.2	17.31	54.85
H	4882.279	55.45	-3.64	51.81	68.2	16.39	55.77
operation frequency:2480							
V	4960.358	50.37	-3.75	46.62	68.2	21.58	pk
H	4960.591	49.69	-3.74	45.95	68.2	22.25	pk
Remark:							
Absolute Level= Reading Level+ Factor, Margin= Absolute Level - Limit							

Note: The PK value is less than the AV value, AV value is not required
Factor added by measurement software automatically.

BAND EDGE(Radiated)

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type	Comment
GFSK							
2390	56.83	-13.06	43.77	74	30.23	peak	Vertical
2390	57.37	-13.06	44.31	74	29.69	peak	Horizontal
2483.5	56.6	-12.78	43.82	74	30.18	peak	Vertical
2483.5	57.47	-12.78	44.69	74	29.31	peak	Horizontal
$\pi/4$-DQPSK							
2390	57.61	-13.06	44.55	74	29.45	peak	Vertical
2390	57.8	-13.06	44.74	74	29.26	peak	Horizontal
2483.5	57.99	-12.78	45.21	74	28.79	peak	Vertical
2483.5	57.1	-12.78	44.32	74	29.68	peak	Horizontal
8-DPSK							
2390	58.04	-13.06	44.98	74	29.02	peak	Vertical
2390	58.5	-13.06	45.44	74	28.56	peak	Horizontal
2483.5	57.72	-12.78	44.94	74	29.06	peak	Vertical
2483.5	56.08	-12.78	43.3	74	30.7	peak	Horizontal

NOTE: The PK value is less than the AV value, AV value is not required.

BAND EDGE(Radiated)(Hopping Mode)

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type	Comment
GFSK							
2390	56.56	-13.06	43.5	74	30.5	peak	Vertical
2390	57.19	-13.06	44.13	74	29.87	peak	Horizontal
2483.5	56.51	-12.78	43.73	74	30.27	peak	Vertical
2483.5	53.65	-12.78	40.87	74	33.13	peak	Horizontal
$\pi/4$-DQPSK							
2390	56.74	-13.06	43.68	74	30.32	peak	Vertical
2390	57.28	-13.06	44.22	74	29.78	peak	Horizontal
2483.5	56.51	-12.78	43.73	74	30.27	peak	Vertical
2483.5	57.38	-12.78	44.6	74	29.4	peak	Horizontal
8-DPSK							
2390	57.52	-13.06	44.46	74	29.54	peak	Vertical
2390	57.71	-13.06	44.65	74	29.35	peak	Horizontal
2483.5	57.9	-12.78	45.12	74	28.88	peak	Vertical
2483.5	57.01	-12.78	44.23	74	29.77	peak	Horizontal

NOTE: The PK value is less than the AV value, AV value is not required.

4. 20 DB OCCUPY BANDWIDTH

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247a(1)	20dB bandwidth	/	2400-2483.5	PASS

4.1.1 TEST PROCEDURE

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:
Bandwidth: RBW=10 kHz, VBW=30 kHz, detector= Peak

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

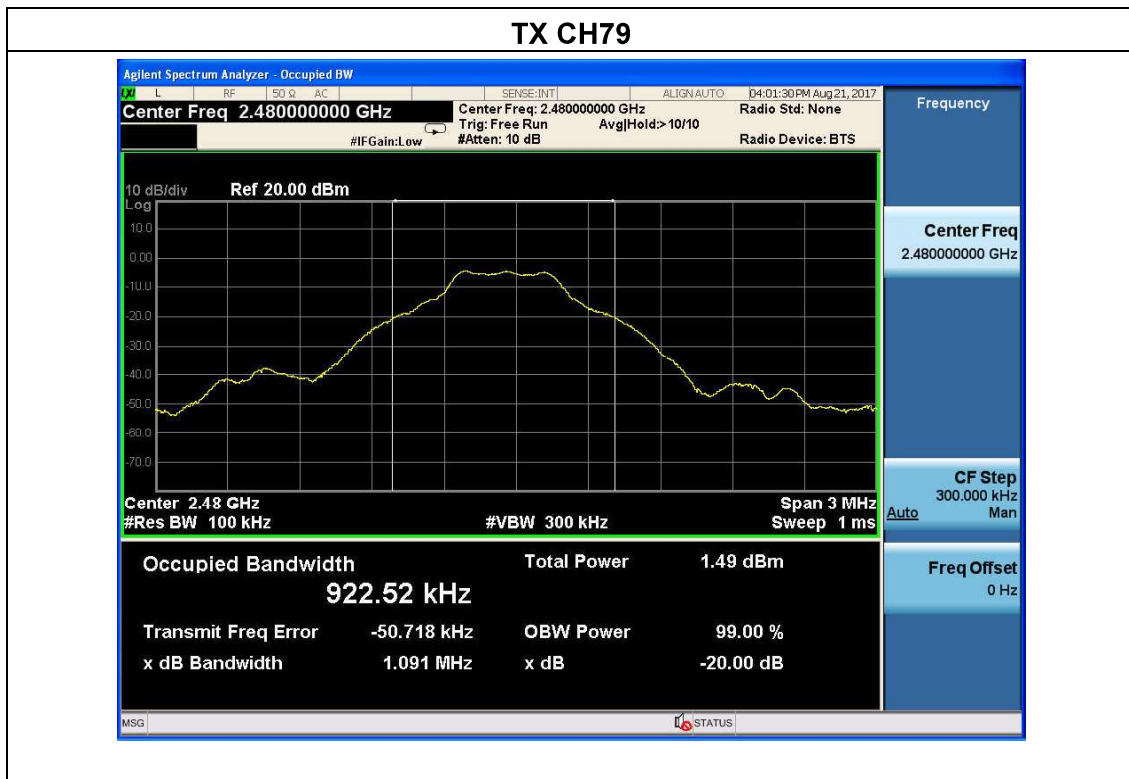
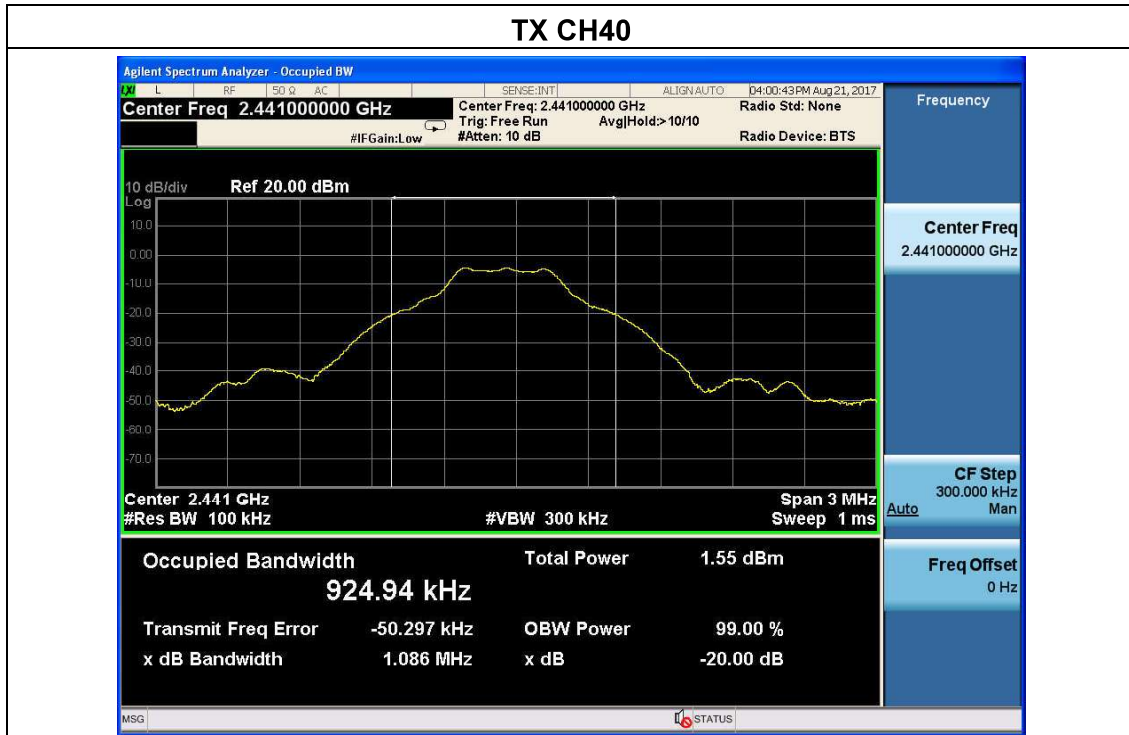
The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

EUT :	Bluetooth Hearphone Amp	Model Name :	FB1121
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5Vfrom adapter
Test Mode :	GFSK Mode /CH00, CH39, CH78		

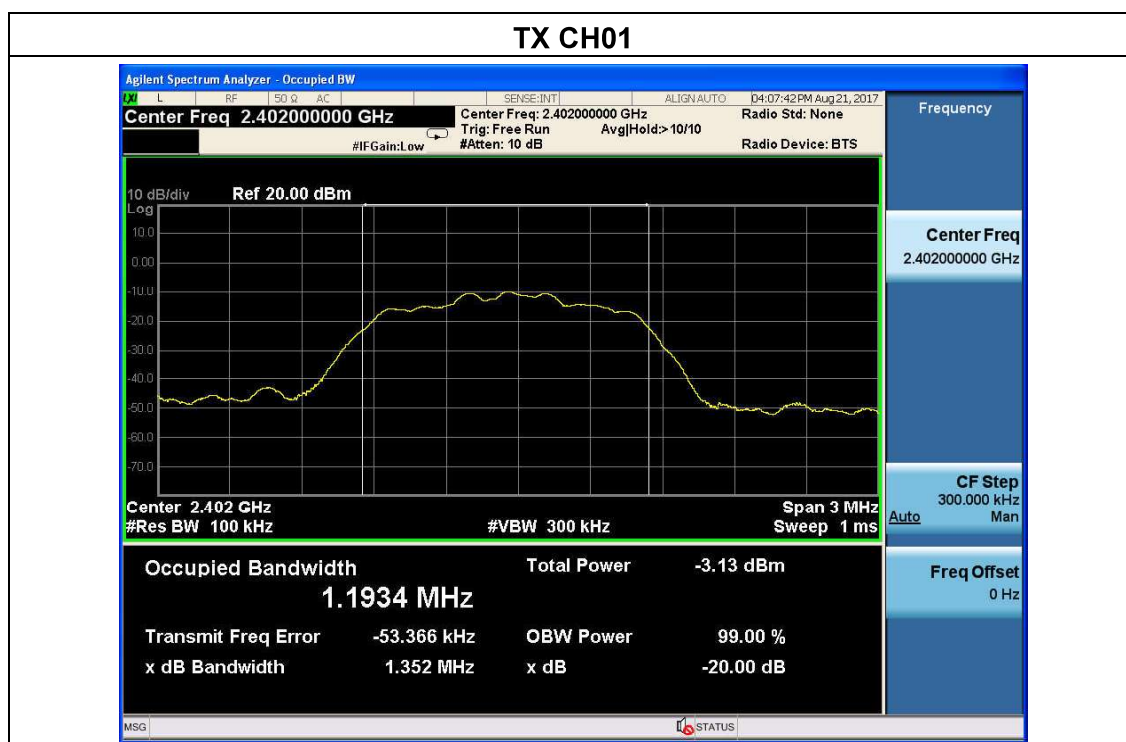
Frequency	20dB Bandwidth (MHz)	Limit	Result
2402 MHz	1.091	/	PASS
2441 MHz	1.086	/	PASS
2480 MHz	1.091	/	PASS

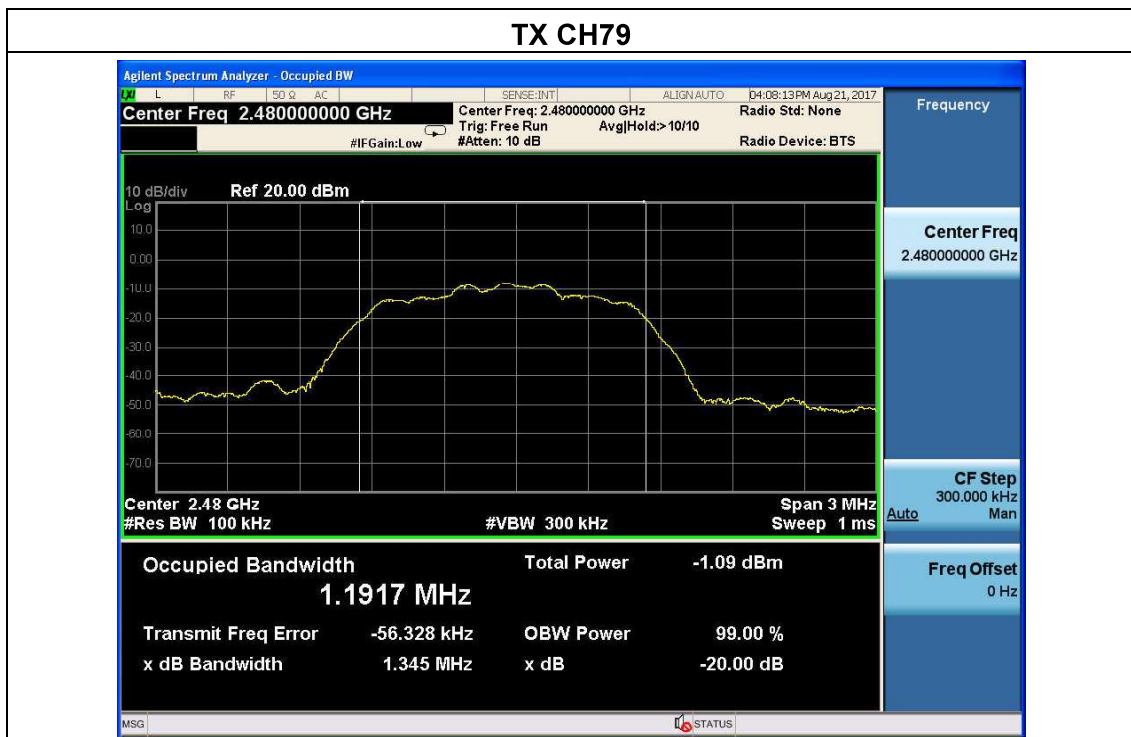
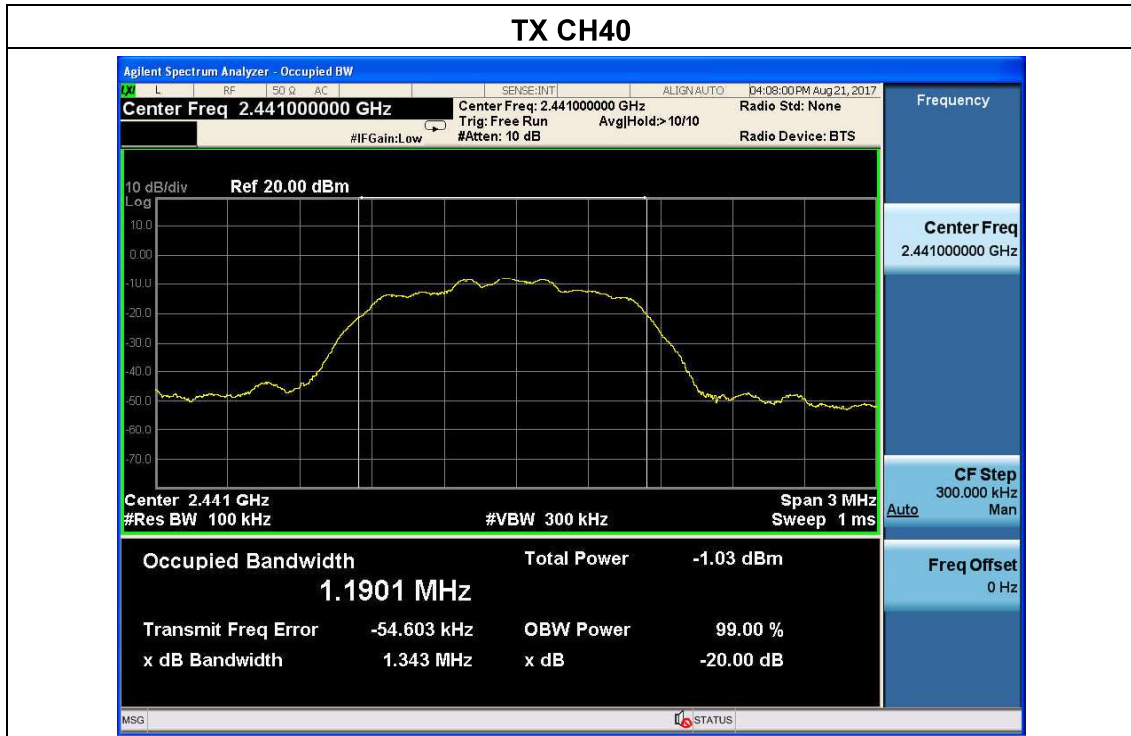




EUT :	Bluetooth Hearphone Amp	Model Name :	FB1121
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5Vfrom adapter
Test Mode :	π/4-DQPSK, Mode /CH00, CH39, CH78		

Frequency	20dB Bandwidth (MHz)	Limit	Result
2402 MHz	1.352	/	PASS
2441 MHz	1.343	/	PASS
2480 MHz	1.345	/	PASS





EUT :	Bluetooth Hearphone Amp	Model Name :	FB1121
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5Vfrom adapter
Test Mode :	8-DPSK Mode /CH00, CH39, CH78		

Frequency	20dB Bandwidth (MHz)	Limit	Result
2402 MHz	1.339	/	PASS
2441 MHz	1.341	/	PASS
2480 MHz	1.339	/	PASS



