

Site no. : 966 1# chamber Data no. : 630

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

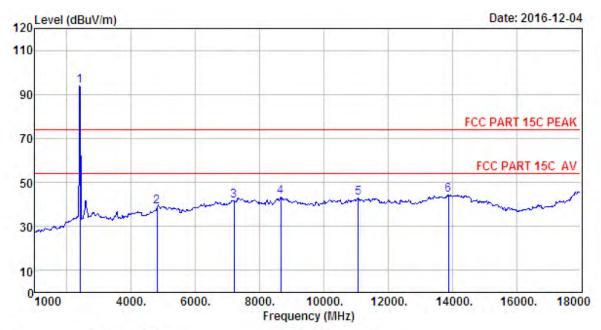
Power : DC 7.4V M/N : Beoplay P2

Test Mode : (n/4) DQPSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	95.62	94.80	74.00	-20.80	Peak
2	4960.00	31.49	12.44	36.01	30.75	38.67	74.00	35.33	Peak
3	7440.00	36.54	11.61	34.22	28.50	42.43	74.00	31.57	Peak
4	8684.00	37.32	11.45	33.66	27.85	42.96	74.00	31.04	Peak
5	11285.00	39.33	11.08	33.32	25.53	42.62	74.00	31.38	Peak
6	14124.00	41.57	10.91	33.22	25.09	44.35	74.00	29.65	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 966 1# chamber Data no. : 631 Site no. Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

: FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

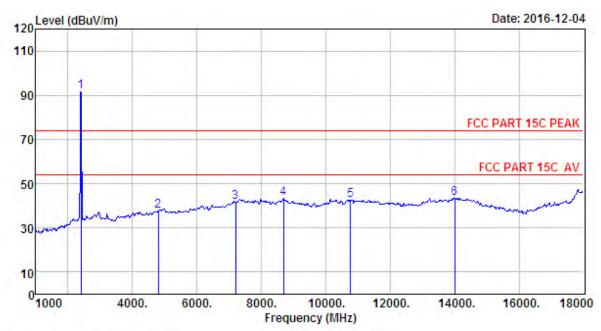
: DC 7.4V Power M/N : Beoplay P2

Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.64	94.11	93.70	74.00	-19.70	Peak
2	4804.00	31.25	11.77	35.64	31.63	39.01	74.00	34.99	Peak
3	7206.00	36.52	11.54	33.95	27.52	41.63	74.00	32.37	Peak
4	8650.00	37.27	11.45	33.68	28.24	43.28	74.00	30.72	Peak
5	11064.00	39.48	11.24	33.83	26.01	42.90	74.00	31.10	Peak
6	13886.00	41.16	11.04	33.03	25.09	44.26	74.00	29.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 632
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

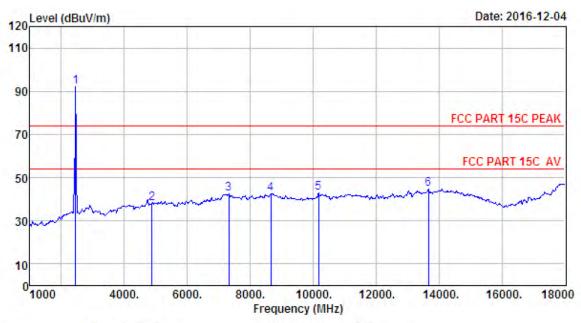
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.64	91,85	91.44	74.00	-17.44	Peak
2	4804.00	31.25	11.77	35.64	30.38	37.76	74.00	36.24	Peak
3	7206.00	36.52	11.54	33.95	27.32	41.43	74.00	32.57	Peak
4	8684.00	37.32	11.45	33.66	28.20	43.31	74.00	30.69	Peak
5	10775.00	39.28	11.30	34.02	26.16	42.72	74.00	31.28	Peak
6	14005.00	41.46	10.90	33.01	24.06	43.41	74.00	30.59	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

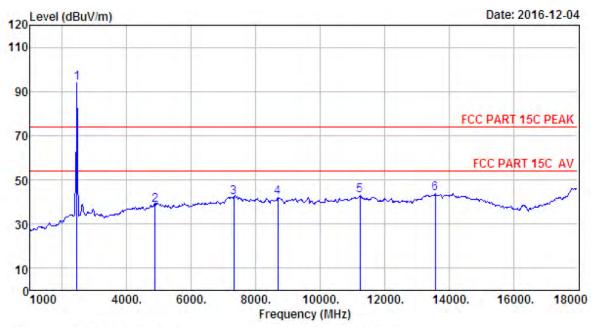
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.85	92.71	92.13	74.00	-18.13	Peak
2	4882.00	31.37	12.07	35.76	30.25	37.93	74.00	36.07	Peak
3	7323.00	36.55	11.57	34.14	28.50	42.48	74.00	31.52	Peak
4	8650.00	37.27	11.45	33.68	27.57	42.61	74.00	31.39	Peak
5	10180.00	38.42	11.49	34.53	27.53	42.91	74.00	31.09	Peak
6	13665.00	40.55	11.30	32.75	25.73	44.83	74.00	29.17	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 634
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

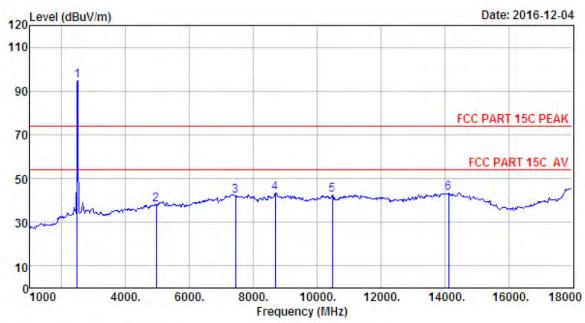
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.85	94.25	93.67	74.00	-19.67	Peak
2	4882.00	31.37	12.07	35.76	31.03	38.71	74.00	35.29	Peak
3	7323.00	36.55	11.57	34.14	28.16	42.14	74.00	31.86	Peak
4	8684.00	37.32	11.45	33.66	27.01	42.12	74.00	31.88	Peak
5	11234.00	39.37	11.12	33.25	25.74	42.98	74.00	31.02	Peak
6	13580.00	40.31	11.40	32.64	24.74	43.81	74.00	30.19	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 635
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

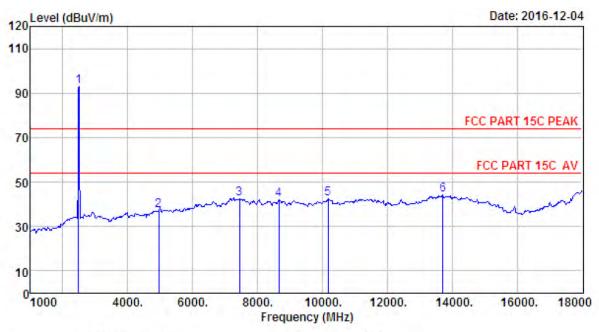
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2480MHz

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2480.00	27.58	6.71	35.11	95.44	94.62	74.00	-20.62	Peak
4960.00	31.49	12.44	36.01	30.37	38.29	74.00	35.71	Peak
7440.00	36.54	11,61	34.22	28.21	42.14	74.00	31.86	Peak
8684.00	37.32	11.45	33.66	28.49	43.60	74.00	30.40	Peak
10486.00	38.95	11.32	34.50	26.61	42.38	74.00	31.62	Peak
14124.00	41.57	10.91	33.22	23.93	43.19	74.00	30.81	Peak
	2480.00 4960.00 7440.00 8684.00 10486.00	Freq. Factor (MHz) (dB/m) 2480.00 27.58 4960.00 31.49 7440.00 36.54 8684.00 37.32 10486.00 38.95	Freq. Factor Loss (MHz) (dB/m) (dB) 2480.00 27.58 6.71 4960.00 31.49 12.44 7440.00 36.54 11.61 8684.00 37.32 11.45 10486.00 38.95 11.32	Freq. Factor Loss Factor (MHz) (dB/m) (dB) (dB) 2480.00 27.58 6.71 35.11 4960.00 31.49 12.44 36.01 7440.00 36.54 11.61 34.22 8684.00 37.32 11.45 33.66 10486.00 38.95 11.32 34.50	Freq. Factor Loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBuV) 2480.00 27.58 6.71 35.11 95.44 4960.00 31.49 12.44 36.01 30.37 7440.00 36.54 11.61 34.22 28.21 8684.00 37.32 11.45 33.66 28.49 10486.00 38.95 11.32 34.50 26.61	Freq. Factor Loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) 2480.00 27.58 6.71 35.11 95.44 94.62 4960.00 31.49 12.44 36.01 30.37 38.29 7440.00 36.54 11.61 34.22 28.21 42.14 8684.00 37.32 11.45 33.66 28.49 43.60 10486.00 38.95 11.32 34.50 26.61 42.38	Freq. Factor Loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) 2480.00 27.58 6.71 35.11 95.44 94.62 74.00 4960.00 31.49 12.44 36.01 30.37 38.29 74.00 7440.00 36.54 11.61 34.22 28.21 42.14 74.00 8684.00 37.32 11.45 33.66 28.49 43.60 74.00 10486.00 38.95 11.32 34.50 26.61 42.38 74.00	Freq. Factor Loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB) 2480.00 27.58 6.71 35.11 95.44 94.62 74.00 -20.62 4960.00 31.49 12.44 36.01 30.37 38.29 74.00 35.71 7440.00 36.54 11.61 34.22 28.21 42.14 74.00 31.86 8684.00 37.32 11.45 33.66 28.49 43.60 74.00 30.40 10486.00 38.95 11.32 34.50 26.61 42.38 74.00 31.62

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Ant. pol. : HORIZONTAL

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Tony Engineer

: Bluetooth Speaker EUT

: DC 7.4V Power : Beoplay P2 M/N

: 8-DPSK TX 2480MHz Test Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	93.60	92.78	74.00	-18.78	Peak
2	4960.00	31.49	12.44	36.01	29.34	37.26	74.00	36.74	Peak
3	7440.00	36.54	11.61	34.22	28.37	42.30	74.00	31.70	Peak
4	8650.00	37.27	11.45	33.68	26.87	41.91	74.00	32.09	Peak
5	10180.00	38.42	11.49	34.53	26.91	42.29	74.00	31.71	Peak
6	13716.00	40.69	11.24	32.94	25.43	44.42	74.00	29.58	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



18000MHz - 25000MHz

Pass

Note: The amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.



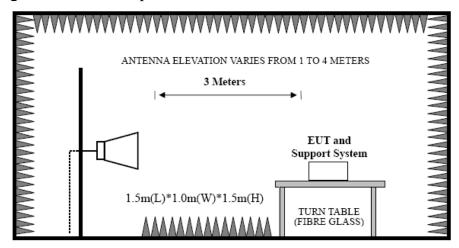
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9. BAND EDGE COMPLIANCE

9.1. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

9.2. Block Diagram of Test setup



9.3. Test Procedure

EUT was placed on a turn table, which is 1.5 m high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of emissions

Peak: RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto. AV: RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto.

9.4. Test Result

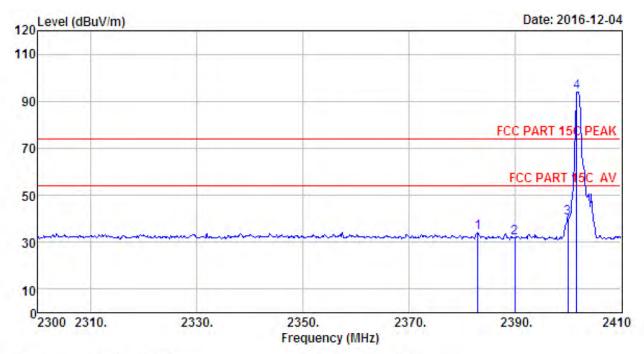
Pass

Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

2. The frequency 2402MHz . 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

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9.5. Test Data



Site no. : 966 1# chamber Data no. : 637

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

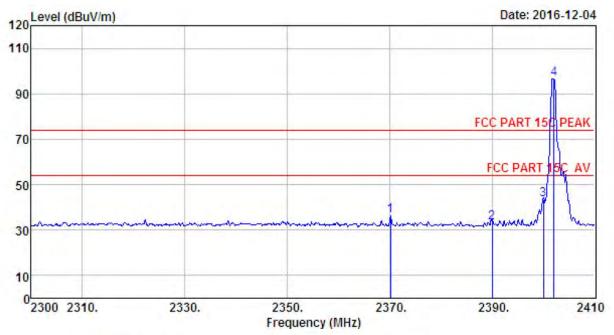
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2383.05	27.64	6.60	34.62	34.50	34.12	74.00	39.88	Peak
2	2390.00	27.64	6.62	34.62	32.30	31.94	74.00	42.06	Peak
3	2400.00	27.61	6.62	34.64	40.67	40.26	74.00	33.74	Peak
4	2401.75	27.61	6.62	34.64	94.29	93.88	74.00	-19.88	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 638
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

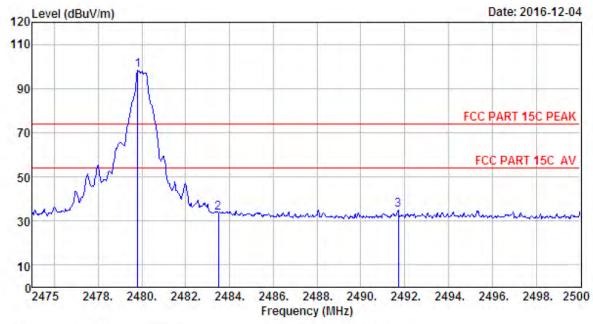
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2370.18	27.67	6.60	34.59	36.73	36.41	74.00	37.59	Peak
2	2390.00	27.64	6.62	34.62	33.55	33.19	74.00	40.81	Peak
3	2400.00	27.61	6.62	34.64	43.71	43.30	74.00	30.70	Peak
4	2402.08	27.61	6.62	34.64	96.78	96.37	74.00	-22.37	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 639
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

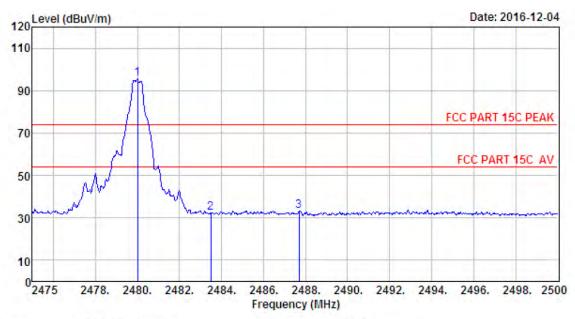
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2480MHz (No Hopping)

7.00.75	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.80	27,58	6.71	35.11	98.95	98.13	74.00	-24.13	Peak
2	2483.50	27.58	6.71	35.11	34.42	33.60	74.00	40.40	Peak
3	2491.70	27.58	6.73	35.24	35.87	34.94	74.00	39.06	Peak

Remarks: 1, Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

Power : DC 7.4V

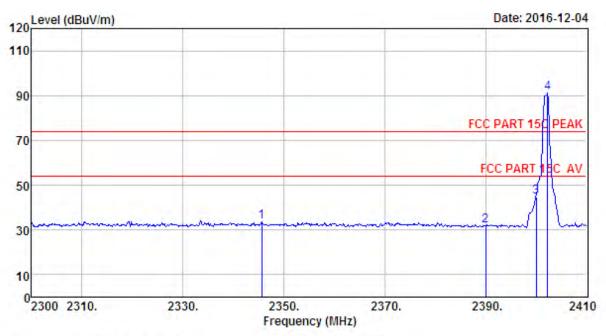
M/N : Beoplay P2

Test Mode : GFSK TX 2480MHz (No Hopping)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27,58	6.71	35.11	96.51	95.69	74.00	-21.69	Peak
2	2483.50	27.58	6.71	35.11	33.30	32.48	74.00	41.52	Peak
3	2487.70	27.58	6.73	35.11	34.16	33.36	74.00	40.64	Peak

Remarks: 1, Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

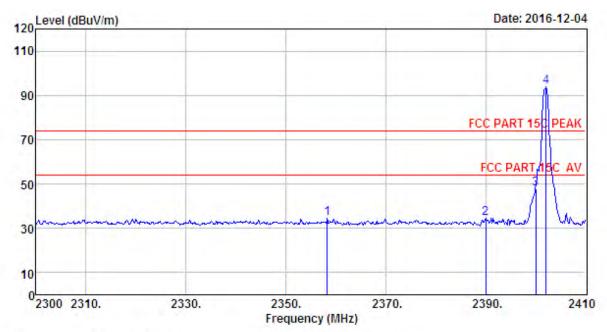
Power ; DC 7.4V M/N : Beoplay P2

Test Mode : (m/4) DQPSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2345.65	27.70	6.56	34.57	33.77	33.46	74.00	40.54	Peak
2	2390.00	27.64	6.62	34.62	32.19	31.83	74.00	42.17	Peak
3	2400.00	27.61	6.62	34.64	44.97	44.56	74.00	29.44	Peak
4	2402.30	27.61	6.62	34.64	91.64	91.23	74.00	-17.23	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 642
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

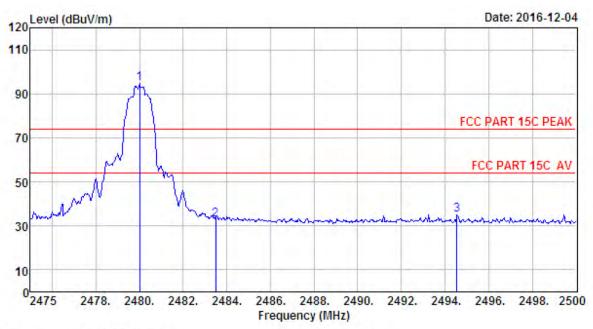
Power : DC 7.4V M/N : Beoplay P2

Test Mode : (m/4) DQPSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2358.30	27.67	6.58	34.57	34.71	34.39	74.00	39.61	Peak
2	2390.00	27.64	6.62	34.62	34.81	34.45	74.00	39.55	Peak
3	2400.00	27.61	6.62	34.64	48.35	47.94	74.00	26.06	Peak
4	2402.08	27.61	6.62	34.64	94.22	93.81	74.00	-19.81	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Data no. : 643 Ant. pol. : VERTICAL

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Tony Engineer

: Bluetooth Speaker EUT

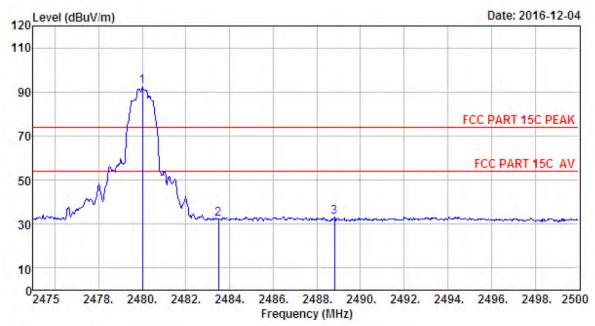
: DC 7.4V Power M/N : Beoplay P2

Test Mode : (n/4) DQPSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	95.47	94.65	74.00	-20.65	Peak
2	2483.50	27.58	6.71	35.11	33.40	32.58	74.00	41.42	Peak
3	2494.55	27.57	6.73	35.24	36.09	35.15	74.00	38.85	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

Power : DC 7.4V M/N : Beoplay P2

Test Mode : (m/4) DQPSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	93.38	92.56	74.00	-18.56	Peak
2	2483.50	27.58	6.71	35.11	32.95	32.13	74.00	41.87	Peak
3	2488.80	27.58	6.73	35.11	34.07	33,27	74.00	40.73	Peak

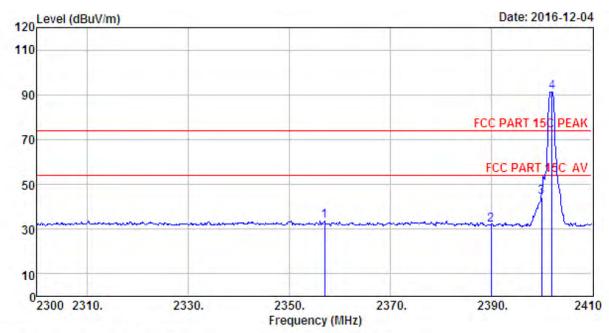
Remarks: 1, Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported.



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Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

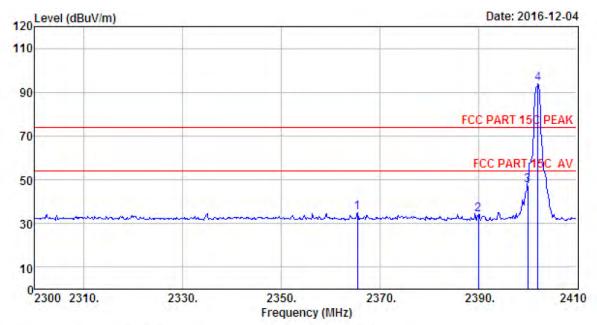
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2356.98	27.67	6.58	34.57	34.16	33.84	74.00	40.16	Peak
2	2390.00	27.64	6,62	34.62	32.16	31.80	74.00	42.20	Peak
3	2400.00	27.61	6.62	34.64	44.84	44.43	74.00	29.57	Peak
4	2402.08	27.61	6.62	34.64	91.69	91.28	74.00	-17.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Dis. / Ant. : 3m ANT 1-18G Data no. : 646 Ant. pol. : VERTICAL

: FCC PART 15C PEAK

: Temp:23.6'; Humi:56%; Press:101.52kPa : Tony Env. / Ins.

Engineer

: Bluetooth Speaker EUT

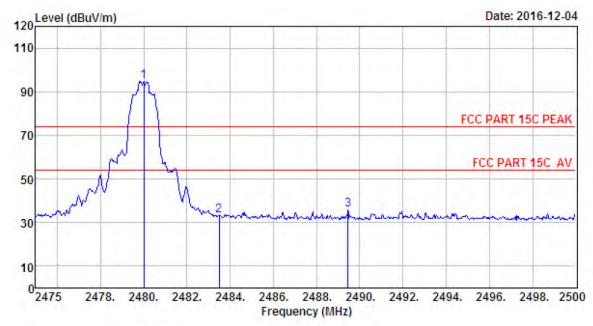
: DC 7.4V Power M/N : Beoplay P2

: 8-DPSK TX 2402MHz (No Hopping) Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2365.45	27.67	6.58	34.59	35,34	35.00	74.00	39.00	Peak
2	2390.00	27.64	6.62	34.62	34.28	33.92	74.00	40.08	Peak
3	2400.00	27.61	6.62	34.64	47.81	47.40	74.00	26.60	Peak
4	2402.08	27.61	6.62	34.64	94.09	93.68	74.00	-19.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 647
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2480MHz (No Hopping)

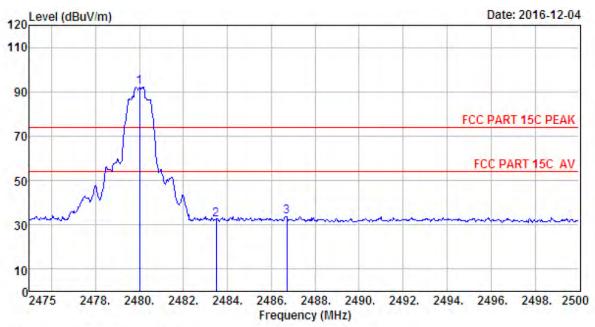
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	95.76	94.94	74.00	-20.94	Peak
2	2483.50	27.58	6.71	35.11	34.19	33.37	74.00	40.63	Peak
3	2489.45	27.58	6.73	35.24	36,69	35.76	74.00	38.24	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported,



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Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

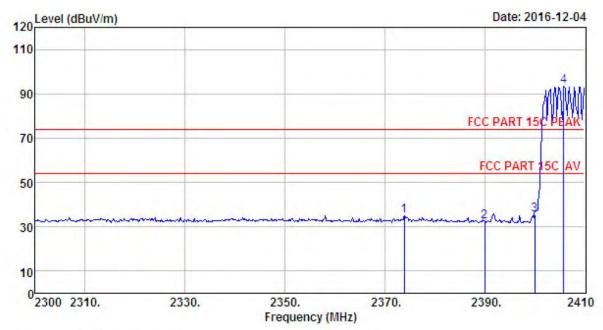
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	93.13	92.31	74.00	-18.31	Peak
2	2483.50	27.58	6.71	35.11	33.06	32.24	74.00	41.76	Peak
3	2486.70	27.58	6.71	35.11	34.56	33.74	74.00	40.26	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUI : Bluetooth Speaker

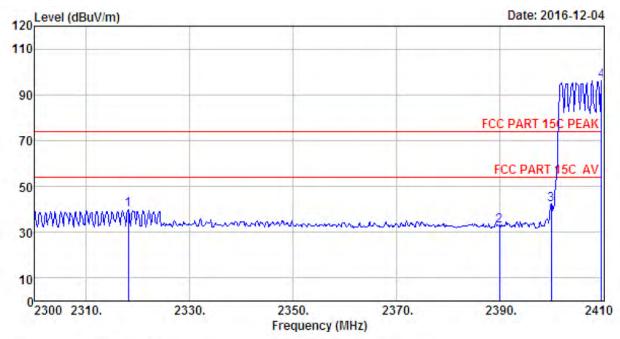
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2373.92	27.64	6.60	34.59	35.46	35.11	74.00	38.89	Peak
2	2390.00	27.64	6.62	34.62	32.57	32.21	74.00	41.79	Peak
3	2400.00	27.61	6.62	34.64	35.96	35.55	74.00	38.45	Peak
4	2405.82	27.61	6.64	34.64	93.90	93.51	74.00	-19.51	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 650
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

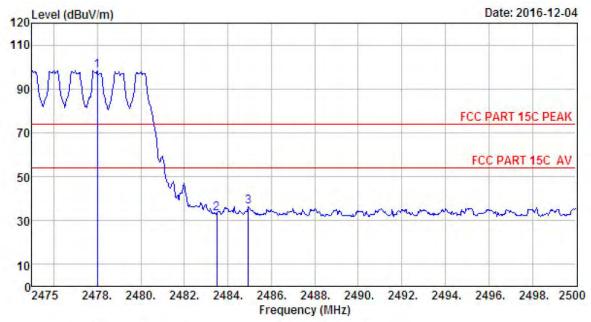
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2318.15	27.76	6.54	34.60	39.98	39.68	74.00	34.32	Peak
2	2390.00	27.64	6.62	34.62	32.92	32.56	74.00	41.44	Peak
3	2400.00	27.61	6.62	34.64	42.44	42.03	74.00	31.97	Peak
4	2409.78	27.60	6.64	34.64	96.46	96.06	74.00	-22.06	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 651
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

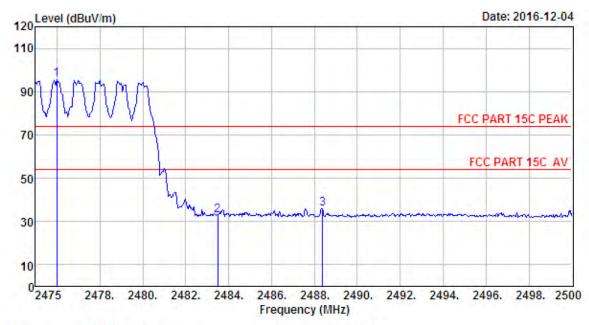
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)			Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2478.00	27.58	6.71	35.11	99.24	98.42	74.00	-24.42	Peak
2	2483.50	27.58	6.71	35.11	34.19	33.37	74.00	40.63	Peak
3	2484.95	27.58	6.71	35.11	37.05	36.23	74.00	37.77	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUI : Bluetooth Speaker

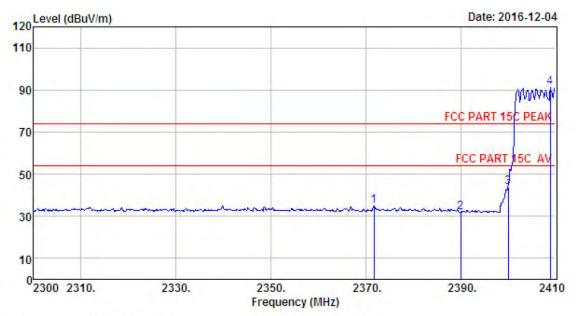
Power : DC 7.4V M/N : Beoplay P2

Test Mode : GFSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2476.00	27.58	6.71	35.11	96.33	95.51	74.00	-21.51	Peak
2	2483.50	27.58	6.71	35.11	33.62	32.80	74.00	41.20	Peak
3	2488.38	27.58	6.73	35.11	36.75	35.95	74.00	38.05	Peak

Remarks: 1, Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

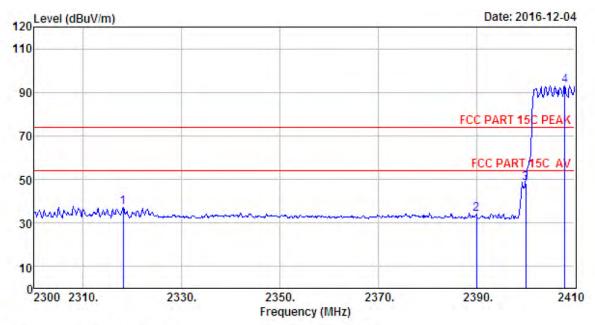
Power : DC 7.4V M/N : Beoplay P2

Test Mode : (m/4) DQFSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2371.72	27,67	6.60	34.59	35.20	34.88	74.00	39.12	Peak
2	2390.00	27.64	6.62	34.62	32.34	31.98	74.00	42.02	Peak
3	2400.00	27.61	6.62	34.64	44.15	43.74	74.00	30.26	Peak
4	2408.90	27.60	6.64	34.64	91.51	91.11	74.00	-17.11	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 654
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUI : Bluetooth Speaker

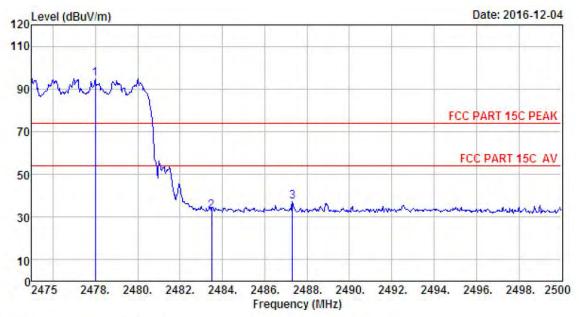
Power : DC 7.4V M/N : Beoplay P2

Test Mode : (m/4) DQPSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2318.15	27.76	6.54	34.60	37.31	37.01	74.00	36.99	Peak
2	2390.00	27.64	6.62	34.62	34.62	34.26	74.00	39.74	Peak
3	2400.00	27.61	6.62	34.64	48.79	48.38	74.00	25.62	Peak
4	2408.02	27.61	6.64	34.64	93.58	93.19	74.00	-19.19	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 655
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

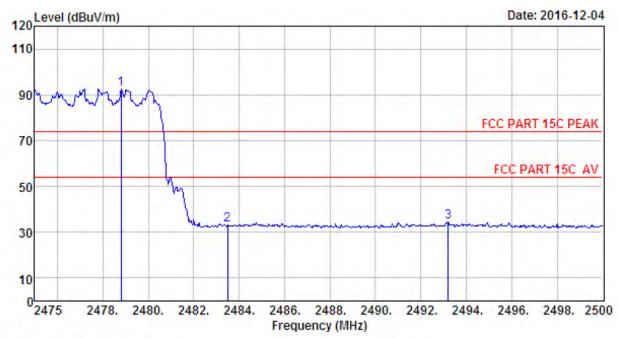
Power : DC 7.4V M/N : Beoplay P2

Test Mode : (π/4) DQPSK TX 2480MHz (Hopping On)

	Freq.		Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2478.00	27.58	6.71	35.11	95.75	94.93	74.00	-20.93	Peak
2	2483.50	27.58	6.71	35.11	33.44	32.62	74.00	41.38	Peak
3	2487.30	27.58	6.71	35.11	37.82	37.00	74.00	37.00	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

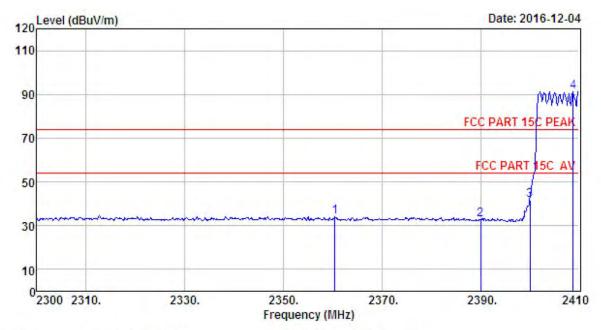
Power : DC 7.4V M/N : Beoplay P2

Test Mode : (m/4) DQPSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2478.80	27.58	6.71	35.11	93.42	92.60	74.00	-18.60	Peak
2	2483.50	27.58	6.71	35.11	33.86	33.04	74.00	40.96	Peak
3	2493.20	27.58	6.73	35.24	35.58	34.65	74.00	39.35	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

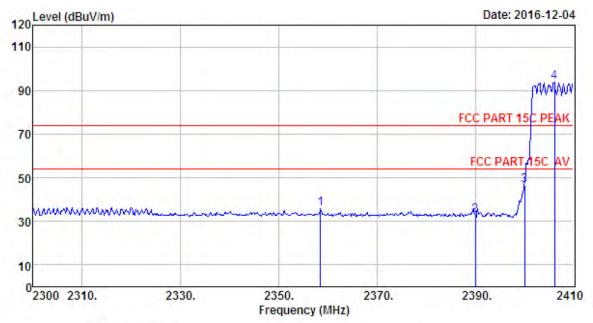
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2360.50	27.67	6.58	34.57	34.51	34.19	74.00	39.81	Peak
2	2390.00	27.64	6.62	34.62	33.30	32.94	74.00	41.06	Peak
3	2400.00	27.61	6.62	34.64	42.00	41.59	74.00	32.41	Peak
4	2408.79	27.60	6.64	34.64	91.68	91.28	74.00	-17.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 658
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

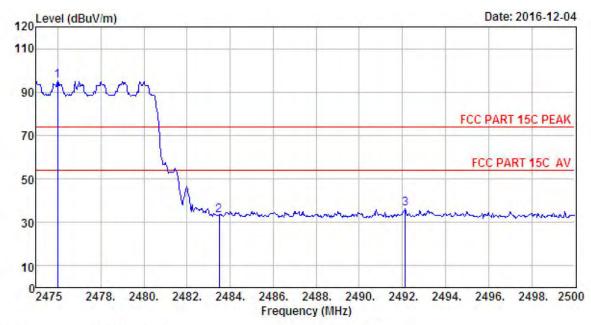
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2358.52	27.67	6.58	34.57	36.15	35.83	74.00	38.17	Peak
2	2390.00	27.64	6.62	34.62	33.19	32.83	74.00	41.17	Peak
3	2400.00	27.61	6.62	34.64	47.05	46.64	74.00	27.36	Peak
4	2406.15	27.61	6.64	34.64	94.12	93.73	74.00	-19.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 659
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

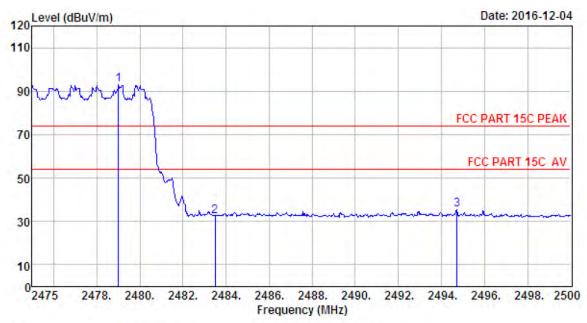
Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2480MHz (Hopping On)

	Freq. (MHz)	Factor			Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2476.00	27.58	6.71	35.11	95.85	95.03	74.00	-21.03	Peak
2	2483.50	27.58	6.71	35.11	34.01	33.19	74.00	40.81	Peak
3	2492.13	27.58	6.73	35.24	37.20	36.27	74.00	37.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Bluetooth Speaker

Power : DC 7.4V M/N : Beoplay P2

Test Mode : 8-DPSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.00	27.58	6.71	35.11	93.72	92.90	74.00	-18.90	Peak
2	2483.50	27.58	6.71	35.11	33.28	32.46	74.00	41.54	Peak
3	2494.73	27.57	6.73	35.24	36.53	35.59	74.00	38.41	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



10. CONDUCTED SPURIOUS EMISSION

10.1.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, 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.

10.2. Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz for frequency range from 30MHz to 1000 MHz; The resolution bandwidth is set to 1 MHz, The video bandwidth is set to 3 MHz for frequency range from 1000MHz to 25000 MHz.

10.3. Test Result

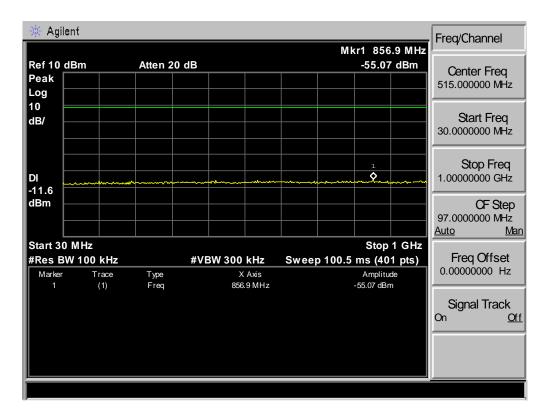
PASS (The testing data was attached in the next pages.)

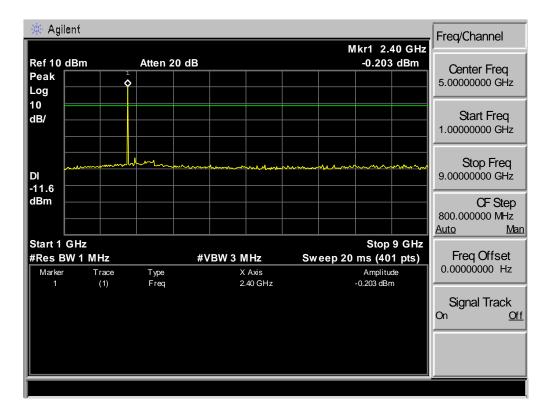
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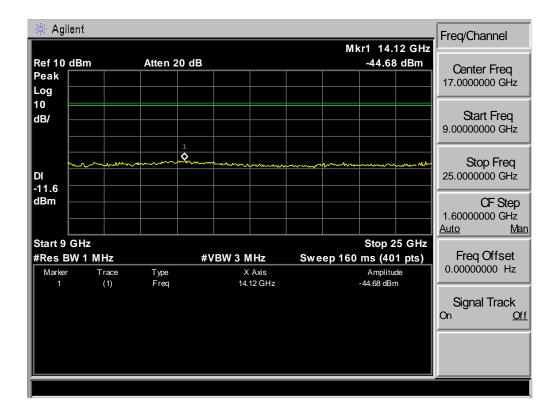
10.4. Test Data

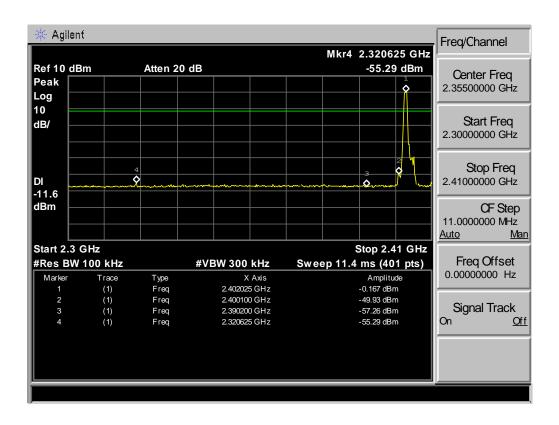
Test Mode: GFSK 2402MHz





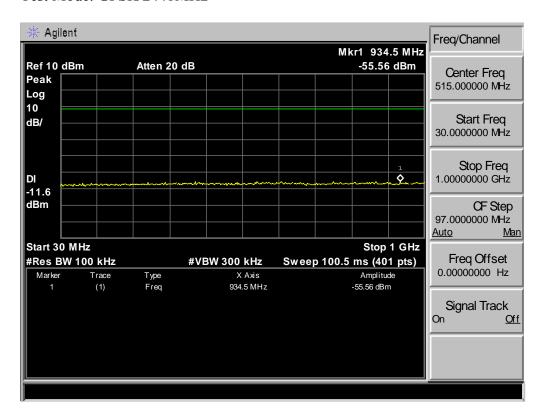


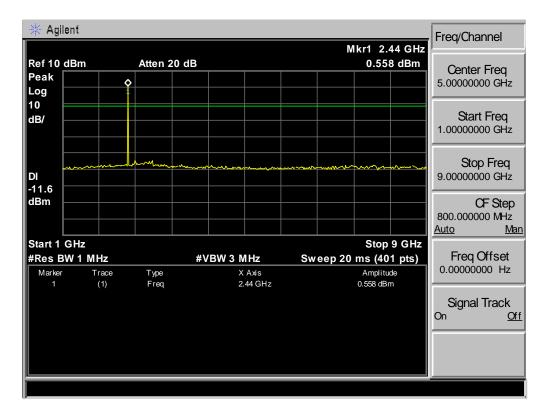




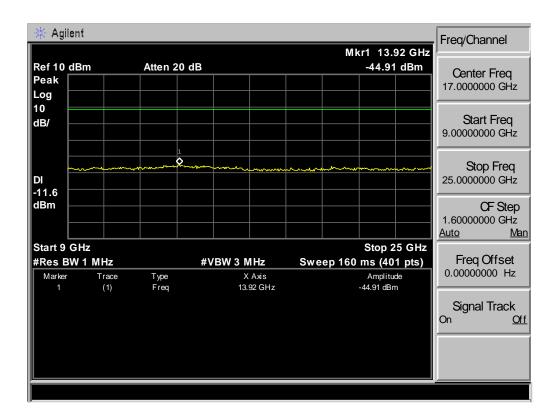


Test Mode: GFSK 2441MHz



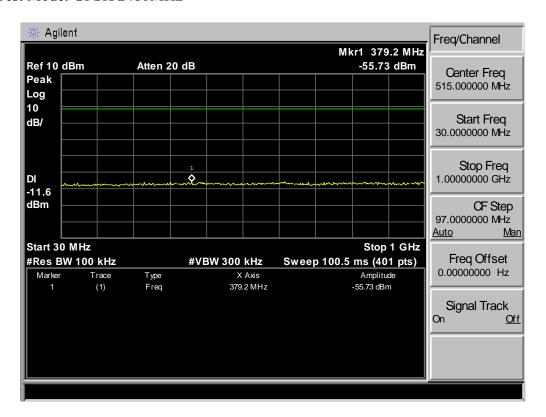


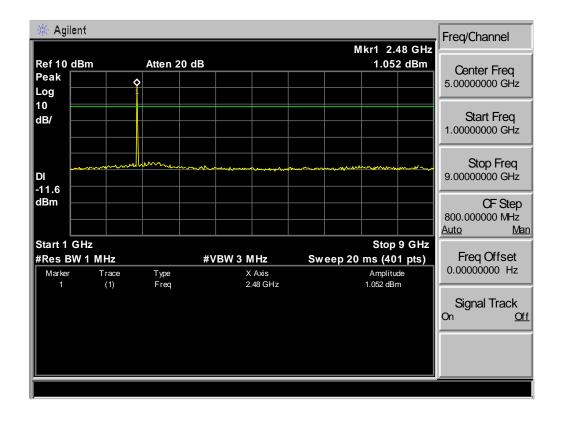




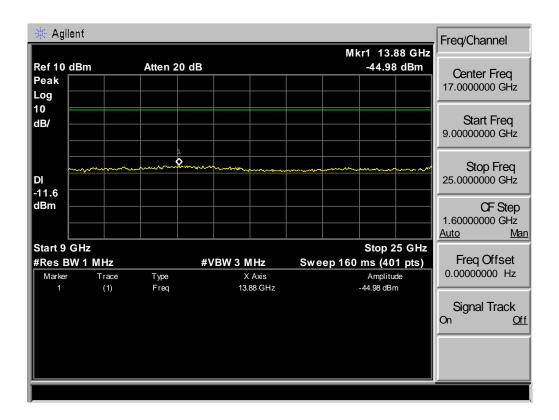


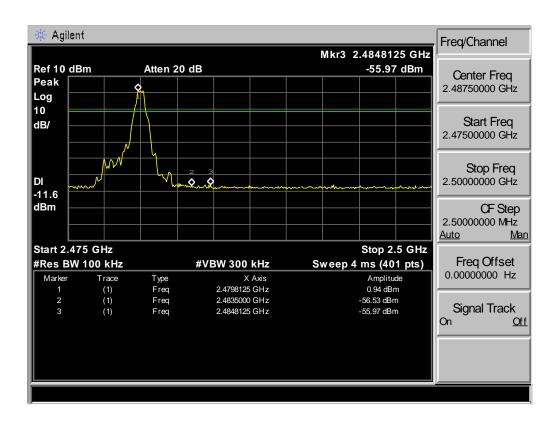
Test Mode: GFSK 2480MHz





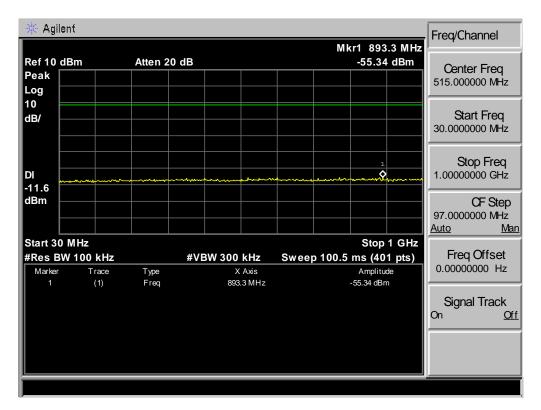


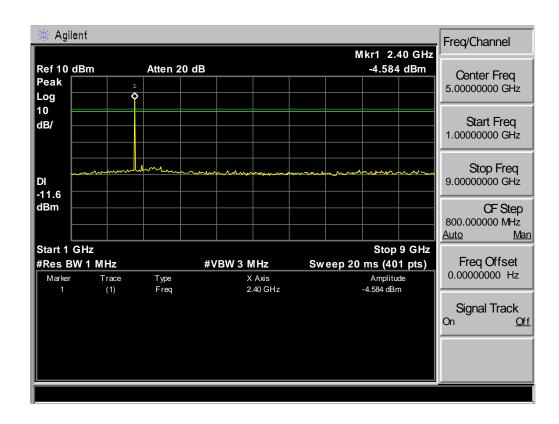




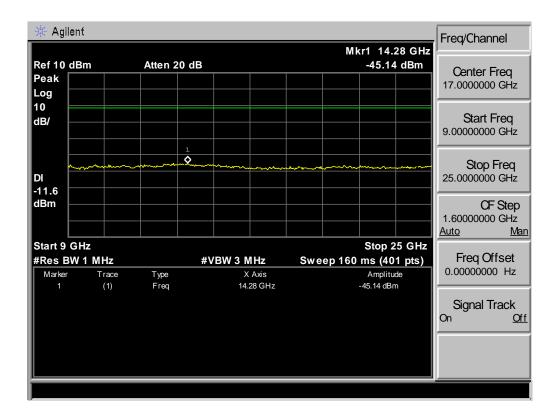


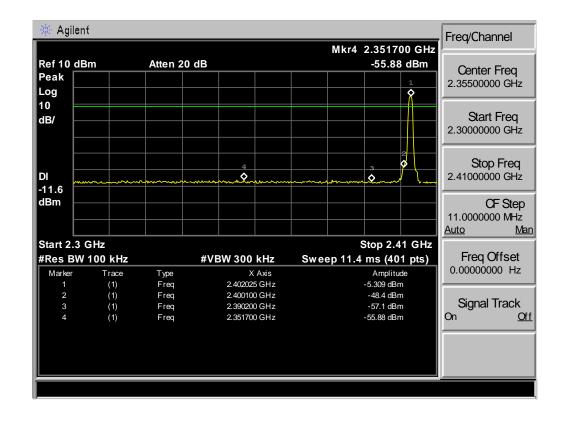
Test Mode: π/4-DQPSK 2402MHz





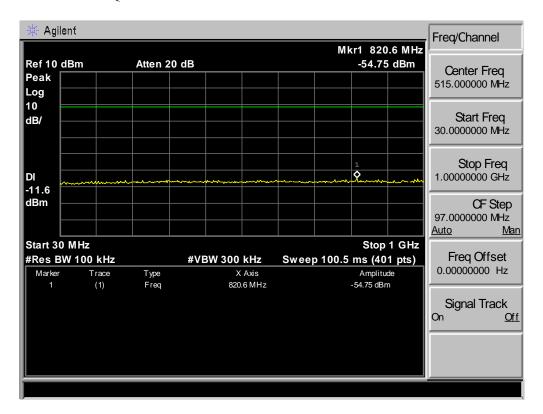


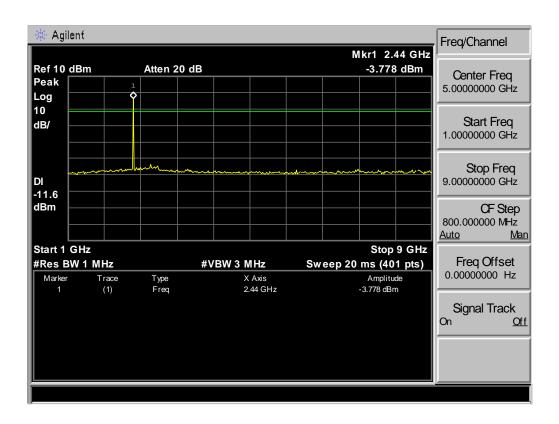




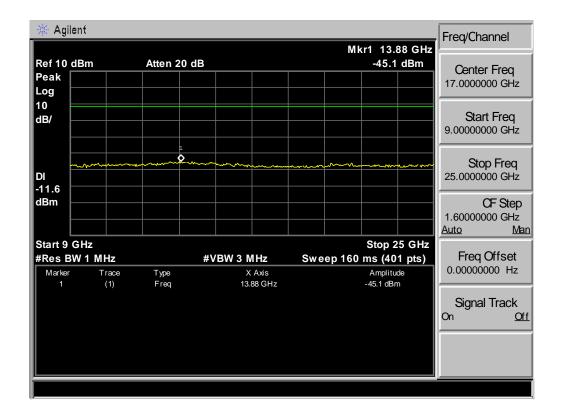


Test Mode: π/4-DQPSK 2441MHz



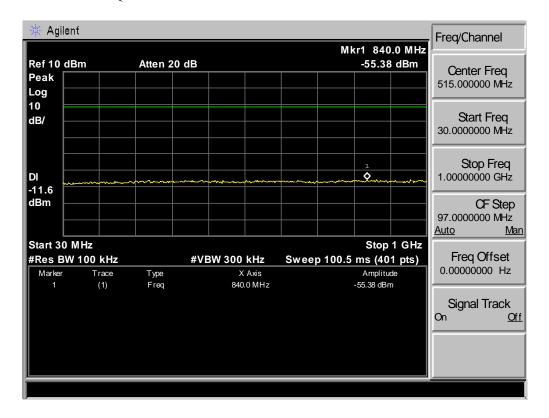


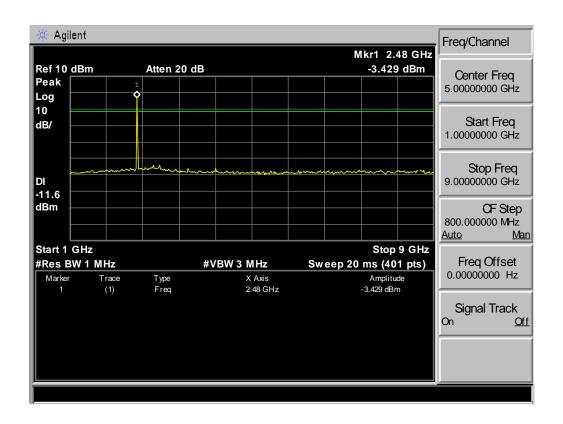




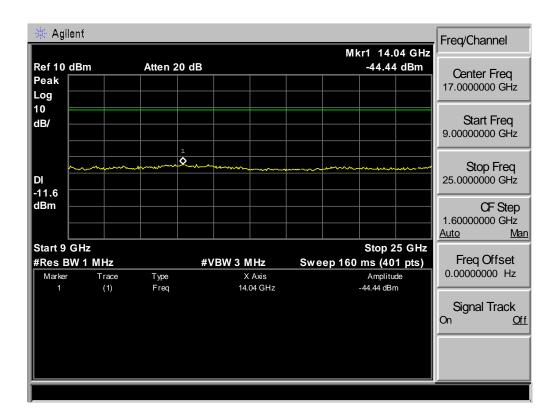


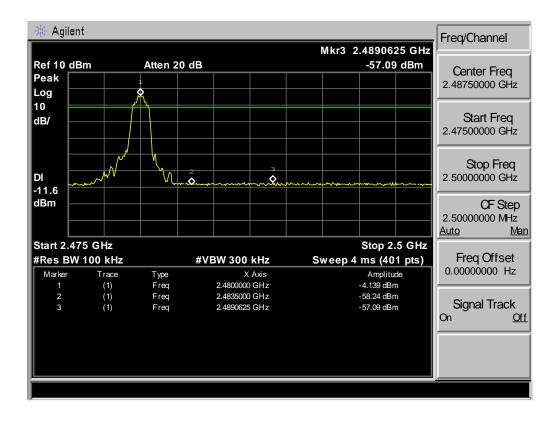
Test Mode: π/4-DQPSK 2480MHz





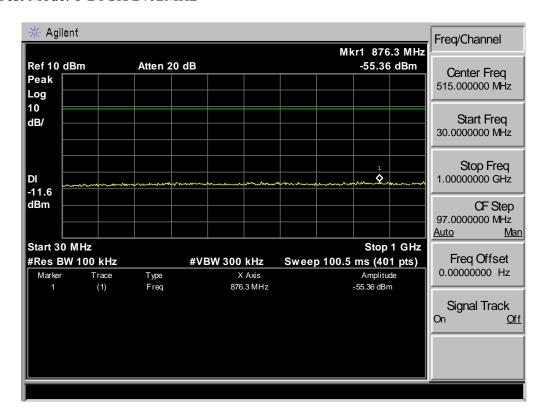


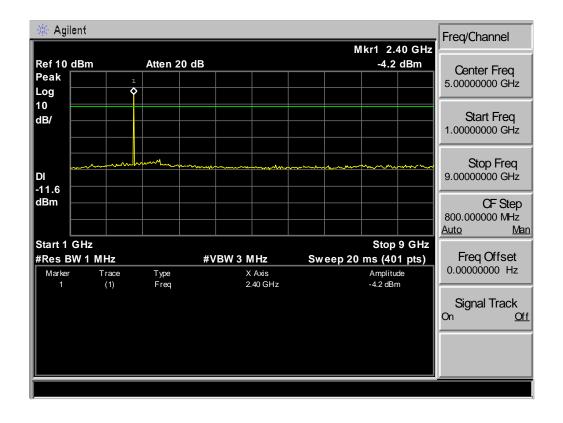




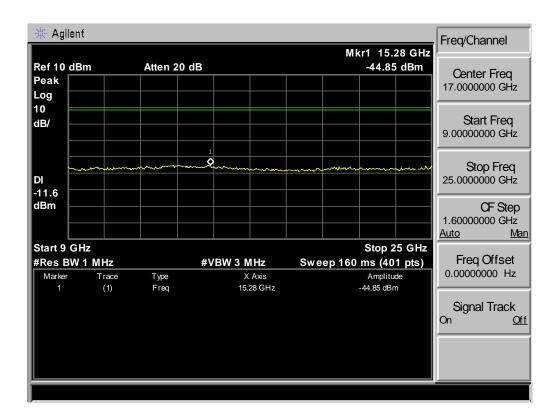


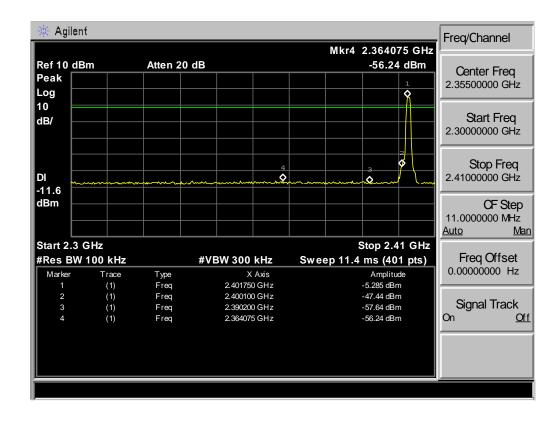
Test Mode: 8-DPSK 2402MHz





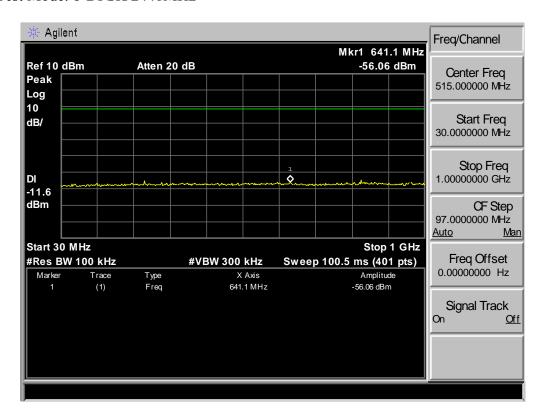


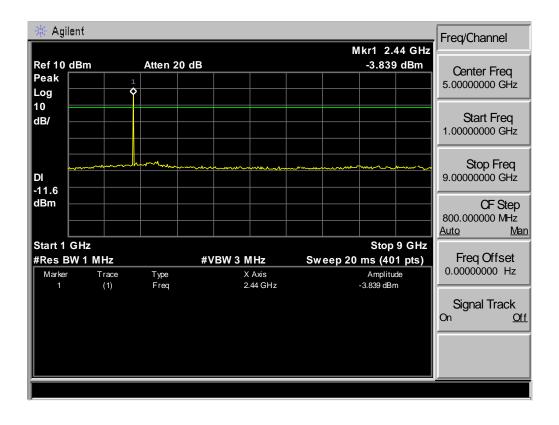




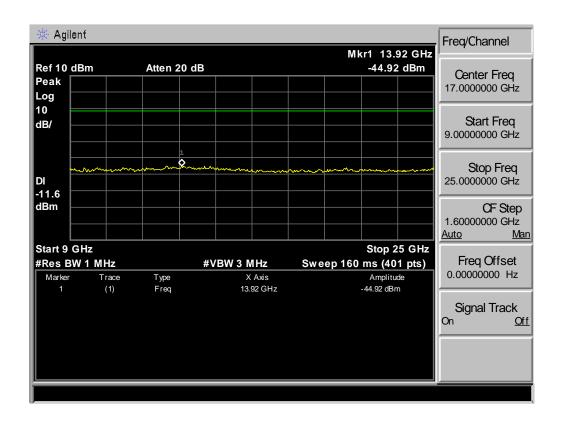


Test Mode: 8-DPSK 2441MHz



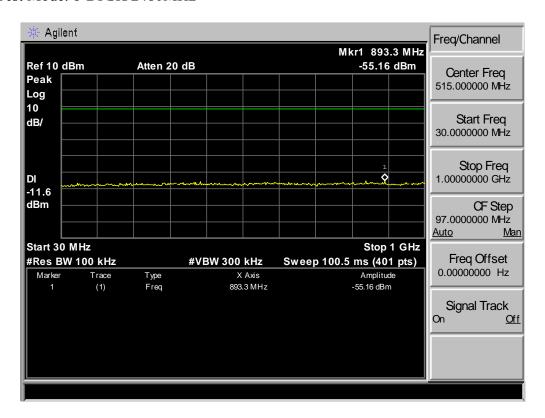


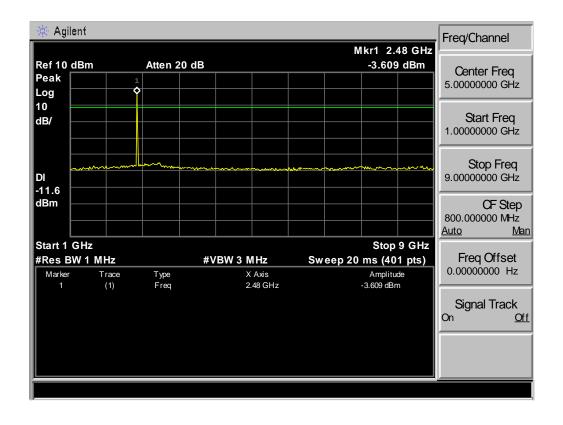




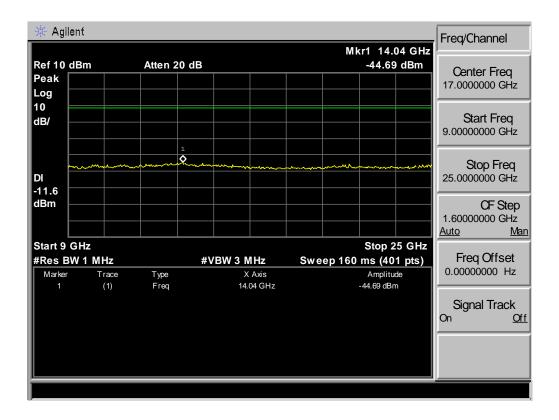


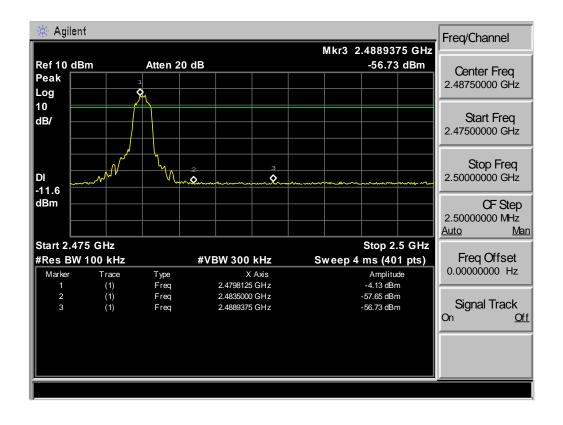
Test Mode: 8-DPSK 2480MHz













11. POWER LINE CONDUCTED EMISSIONS

11.1.Limit

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	$dB(\mu V)$	dB(µV)		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
$500\text{kHz} \sim 5\text{MHz}$	56	46		
$5MHz \sim 30MHz$	60	50		

Notes: 1. * Decreasing linearly with logarithm of frequency.

11.2.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT was charged form PC's USB port which connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#).. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS30) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

11.3.Test Result

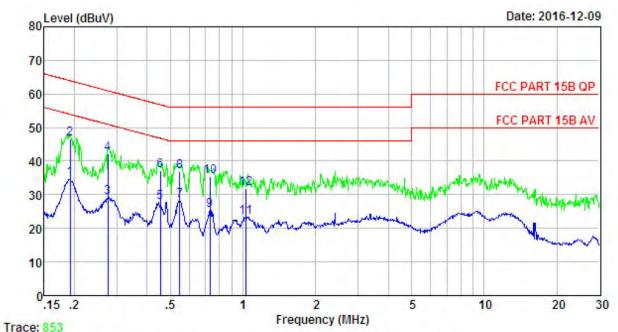
PASS. (All emissions not reported below are too low against the prescribed limits.)

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^{2.} The lower limit shall apply at the transition frequencies.

11.4. Test data



Site no : 844 Shield Room Data no. : 854

Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Tony

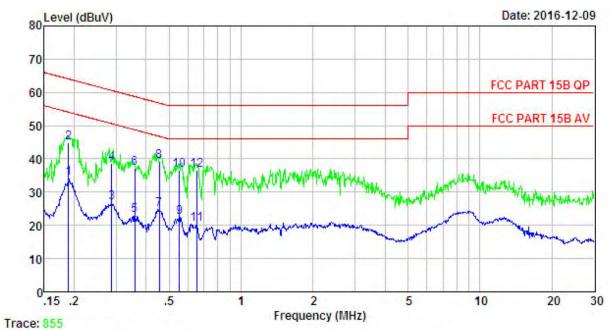
EUT : Bluetooth Speaker

Power : DC 5V From Adapter Input AC 120V/60Hz

M/N : Beoplay P2 Test Mode : TX Mode

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.19	9.58	9.80	15.31	34.69	53.93	19.24	Average
2	0.19	9.58	9.80	27.18	46.56	63.93	17.37	QP
3	0.28	9.60	9.83	9.93	29.36	50.94	21.58	Average
4	0.28	9.60	9.83	22.86	42.29	60.94	18.65	QP
5	0.45	9.59	9.81	8.27	27.67	46.80	19.13	Average
6	0.45	9.59	9.81	17.83	37.23	56.80	19.57	QP
7	0.55	9.60	9.82	8.90	28.32	46.00	17.68	Average
8	0.55	9.60	9.82	17.45	36.87	56.00	19.13	QP
9	0.73	9.63	9.81	5.84	25.28	46.00	20.72	Average
10	0.73	9.63	9.81	16.13	35.57	56.00	20.43	QP
11	1.03	9.61	9.85	3.93	23.39	46.00	22.61	Average
12	1.03	9.61	9.85	12.45	31.91	56.00	24.09	QP

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Site no : 844 Shield Room Data no. : 856 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Tony

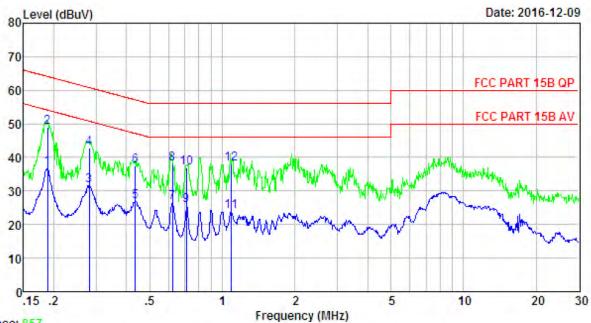
EUT : Bluetooth Speaker

Power : DC 5V From Adapter Input AC 120V/60Hz

M/N : Beoplay P2 Test Mode : TX Mode

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.19	9.61	9.80	14.74	34.15	54.06	19.91	Average
2	0.19	9.61	9.80	25.57	44.98	64.06	19.08	QP
3	0.29	9.61	9.83	7.37	26.81	50.59	23.78	Average
4	0.29	9.61	9.83	19.31	38.75	60.59	21.84	QP
5	0.36	9.61	9.82	3.51	22.94	48.74	25.80	Average
6	0.36	9.61	9.82	17.80	37.23	58.74	21.51	QP
7	0.45	9.61	9.81	5.28	24.70	46.80	22.10	Average
8	0.45	9.61	9.81	19.93	39.35	56.80	17.45	QP
9	0.55	9.60	9.82	3.11	22.53	46.00	23.47	Average
10	0.55	9.60	9.82	17.12	36.54	56.00	19.46	QP
11	0.65	9.59	9.81	1.00	20.40	46.00	25.60	Average
12	0.65	9.59	9.81	17.11	36.51	56.00	19.49	QP

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Trace: 857

Site no : 844 Shield Room Data no. : 858 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Tony

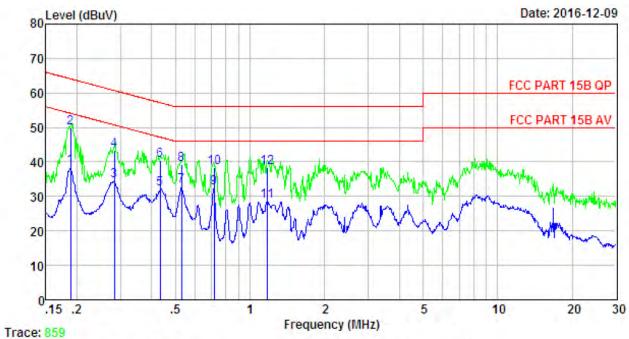
EUT : Bluetooth Speaker

Power : DC 5V From Adapter Input AC 240V/60Hz

M/N : Beoplay P2 Test Mode : TX Mode

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.19	9.61	9.80	17.35	36.76	54.11	17.35	Average
2	0.19	9.61	9.80	29.57	48.98	64.11	15.13	QP
3	0.28	9.61	9.83	12.15	31.59	50.81	19.22	Average
-4	0.28	9.61	9.83	23.50	42.94	60.81	17.87	QP
5	0.44	9.61	9.81	7.54	26.96	47.15	20.19	Average
6	0.44	9.61	9.81	18.10	37.52	57.15	19.63	QP
7	0.62	9.60	9.82	7.22	26.64	46.00	19.36	Average
8	0.62	9.60	9.82	18.75	38.17	56.00	17.83	QP
9	0.71	9.59	9.81	6.20	25.60	46.00	20.40	Average
10	0.71	9.59	9.81	17.64	37.04	56.00	18.96	QP
11	1.09	9.64	9.83	4.30	23.77	46.00	22.23	Average
12	1.09	9.64	9.83	18.71	38.18	56.00	17.82	QP

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Site no : 844 Shield Room Data no. : 860
Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Tony

EUT : Bluetooth Speaker

Power : DC 5V From Adapter Input AC 240V/60Hz

M/N : Beoplay P2 Test Mode : TX Mode

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.19	9.57	9.80	19.20	38.57	54.11	15.54	Average
2	0.19	9.57	9.80	30.37	49.74	64.11	14.37	QP
3	0.28	9.60	9.83	15.22	34.65	50.72	16.07	Average
4	0.28	9.60	9.83	23.88	43.31	60.72	17.41	QP
5	0.43	9.59	9.81	12.78	32.18	47.20	15.02	Average
6	0.43	9.59	9.81	20.94	40.34	57.20	16.86	QP
7	0.53	9.60	9.81	13.54	32.95	46.00	13.05	Average
8	0.53	9.60	9.81	19.93	39.34	56.00	16.66	QP
9	0.72	9.63	9.81	13.07	32.51	46.00	13,49	Average
10	0.72	9.63	9.81	19.04	38.48	56.00	17.52	QP
11	1.17	9.61	9.81	9.35	28.77	46.00	17.23	Average
12	1.17	9.61	9.81	18.88	38.30	56.00	17.70	QP

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12. ANTENNA REQUIREMENTS

12.1.Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

12.2.Result

The antennas used for this product are internal Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 3.12dBi.

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