TEST REPORT

Date: 2009-06-30
Report No.: 60.870.9.009.01F

Applicant:	Binatone Electronics International Limited Floor 23A, 9 Des Voeux Road West, Sheung Wan, Hong Kong
Description of Samples:	Model name: Digital Baby Monitor Brand name: Motorola Model no.: MBP30BU (Baby Unit) FCCID: VLJ-MBP30BU
Date Samples Received:	2009-06-17
Date Tested:	2009-06-19 to 2009-06-25
Investigation Requested:	FCC Part 15 Subpart C, Section 15.247
Conclusions:	The submitted product COMPLIED with the requirements of Federal Communications Commission [FCC] Rules and Regulations Part 15. The tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.
Remarks:	----

Checked by:

Prudence Poon
Project Manager
Telecom department

Approved by:-

Victor Kwan
Manager
Telecom department

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5.0 List of Measurement Equipments

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Photos of Test Setup

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External EUT Photos

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Internal EUT Photos

1.0 General Details

1.1 Test Laboratory

EMC Laboratory registered by FCC with
FCC Registration Number: 607756

1.2 Applicant Details

Applicant

Binatone Electronics International Limited

Floor 23A, 9 Des Voeux Road West,
Sheung Wan, Hong Kong

Manufacturer

Pandachip Ltd.

.
Unit 210, 2/F (Lakeside 1), Building 15,
No.8 Science Park West Avenue,
Hong Kong Science Park, Phase II,
Shatin, N.T. Hong Kong

1.3 Equipment Under Test [EUT]

Description of EUT

Product Description:	Digital Baby Monitor
Model No.:	MBP30BU (Baby Unit)
Brand Name:	Nil
FCCID:	VLJ-MBP30BU
Rating:	- DC 5.0V,500mA powered by AC/DC power adaptor.
Antenna Type:	Integral
Operated Frequency:	2407 -2476 MHz
No. of Channel:	16
Accessories and Auxiliary Equipments:	-AC/DC power adaptor.

General Operation of EUT

The Equipment Under Test (EUT) is a transmitter of baby monitor operated at 2.4GHz, it takes live video and transmits the movie to the parent unit. This EUT is designed for fix used, as it is powered by AC/DC adaptor only, and the USB jack at the side panel of EUT is for power input, it cannot share data information with computer.

FHSS Operation Principle:

This module is controlled by microchip to generate Pseudorandom Frequency Hopping Sequence, this module support 16 hopping channels. Refer to section 4.5 of this report to have more detail of Pseudorandom Hopping Algorithm.

1.4 Related Submittal(s) Grants

This is a signal application subjected to Certificate Authorization.

2.0 Technical Details

2.1 Investigations Requested

Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15: 2008 and ANSI C63.4: 2003 for FCC Verification

2.2 Test Standards and Results Summary Tables

Test Condition	Test Requirement	Test Result	
		Pass	N/A
Number of Frequency Hopping	Section 15.247 (a1)	☒	☐
20dB Bandwidth Measurement	Section 15.247 (a1)	☒	☐
Hopping Channel Carrier Frequency Separation	Section 15.247 (a1)	☒	☐
Average Time of Occupancy	Section 15.247 (a1)	☒	☐
Pseudorandom Hopping Algorithm	Section 15.247 (a1)	☒	☐
Band Edge Measurement	Section 15.247	☒	☐
Maximum Output Power	Section 15.247 (b1)	☒	☐
Out of Band Emission	Section 15.247 (d)	☒	☐
Radiated Emission in Restricted Band	Section 15.247 (d)	☒	☐
Conducted Emission on AC Mains	Section 15.207	☒	☐
RF Exposure	Section 15.247 (i)	☒ See note 1	☐
Antenna Requirement	Section 15.203	☒ See note 2	☐

Note 1 : Since this EUT is not a portable product it is deemed to fulfill this requirement without conducting SAR measurement.

Note 2 : The EUT uses a permanently attached antenna, which in accordance to Section 15.203, is considered sufficient to comply with the provisions of this section.

Remark: N/A - Not Applicable

3.0 Test Methodology

3.1 Radiated Emission

The sample was placed 0.8m above the ground plane on a standard emission test site *. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

*On a standard emission test site with a metal ground plane filed with the FCC pursuant to section 2.948 of the FCC rules, with Registration Number: 607756.

3.2 Field Strength Calculation

The field strength at 3 m was established by adding the meter reading of the spectrum analyzer to the factors associated with antenna correction factor, cable loss, preamplifiers and filter attenuation.

The equation is expressed as follow:

FS = R + System Factor
System Factor = AF + CF + FA – PA

Where FS = Net Field Strength in dBuV/m at 3 meters.
R = Reading of Spectrum Analyzer / Test Receiver in dBuV.
AF = Antenna Factor in dB.
CF = Cable Attenuation Factor in dB.
FA = Filter Attenuation Factor in dB.
PA = Preamplifier Factor in dB.

FA and PA are only be used for the measuring frequency above 1 GHz.

3.3 Conducted Emissions

The test was performed in accordance with ANSI C63.4: 2003, with the following: initial measurements were performed in peak and average detection modes on the live line of personal computer, any emissions recorded within 30dB of the relevant limit lines were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

4.0 Test Results

4.1 Number of Hopping Frequency

Test Requirement:	FCC part 15 section 15.247 (a1)(iii)
Test Date:	2009-06-24
Mode of Operation:	Transmitting mode.
Detector Function:	Max Hold

Result: PASS

Measured Result :
Number of Channels = 16

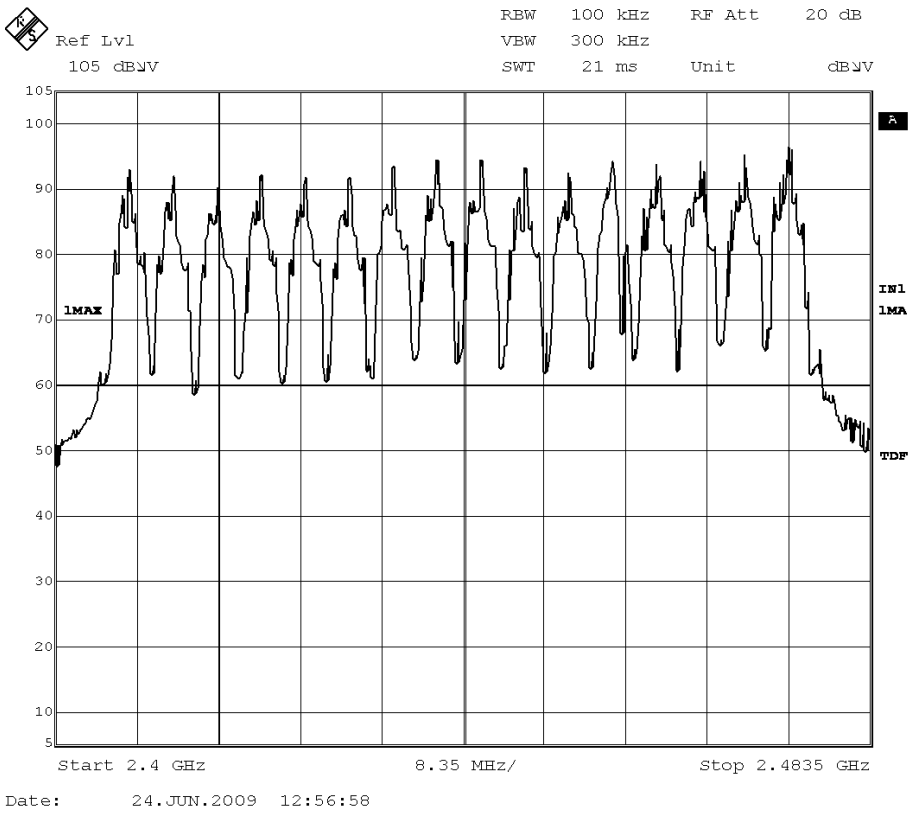
Channel Frequency in sequence:

2407.5MHz, 2412.0MHz, 2416.5MHz, 2421.0MHz, 2405.5MHz, 2430.0MHz
2434.5MHz, 2439.0MHz, 2443.5MHz, 2448.0MHz, 2452.5MHz, 2457.0MHz,
2461.5MHz, 2466.0MHz, 2470.5MHz, 2475.0MHz

Limit for Number of Hopping Channel [Section 15.247 (a1)(iii)]

At least 15 non-overlapping channels for 2400-2483.5MHz.

Figure 1 – Result data graph shows the number of operation channels:



4.2 20dB Bandwidth Measurement

Test Requirement:	FCC part 15 section 15.247 (a1)
Test Date:	2009-06-23
Mode of Operation:	Transmitting mode.
Detector Function:	Max Hold

Test Setup:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

Channel	Measured frequency (MHz)	20dB Bandwidth (MHz)
Lowest : 1	2407.0	4.368
Middle: 9	2443.9	4.448
Highest : 16	2475.3	4.408

This result is used for checking the hopping channel carrier frequencies separation.

Figure 2 – Result data graph shows 20 dB bandwidth, CF = 2.4070GHz, BW = 4.3687MHz

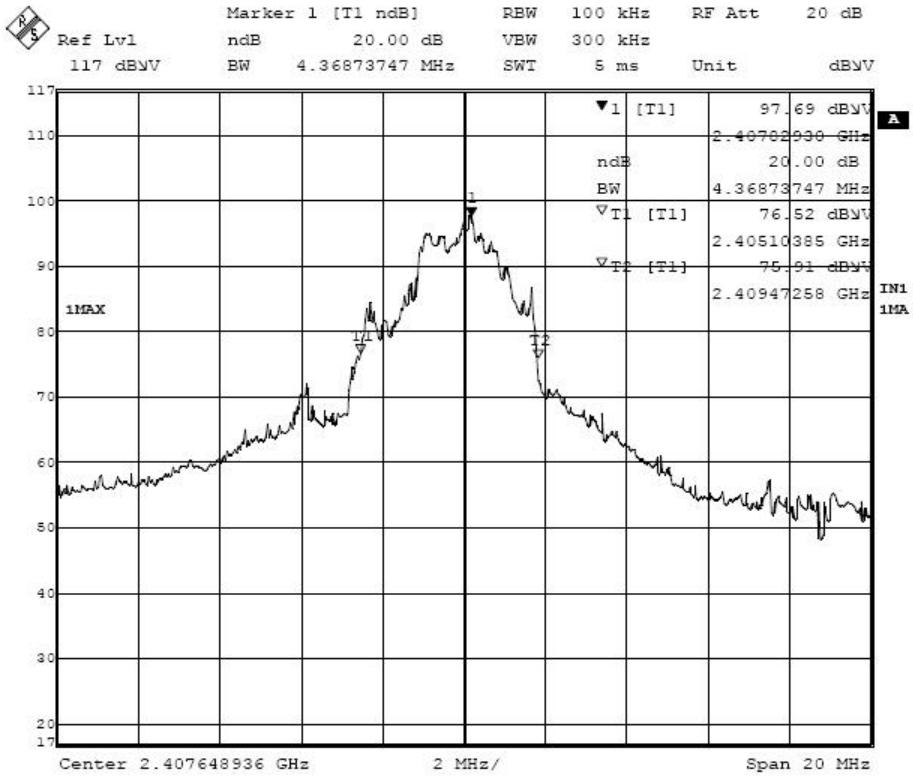


Figure 3 – Result data graph shows 20 dB bandwidth, CF = 2.4439GHz, BW = 4.4489MHz

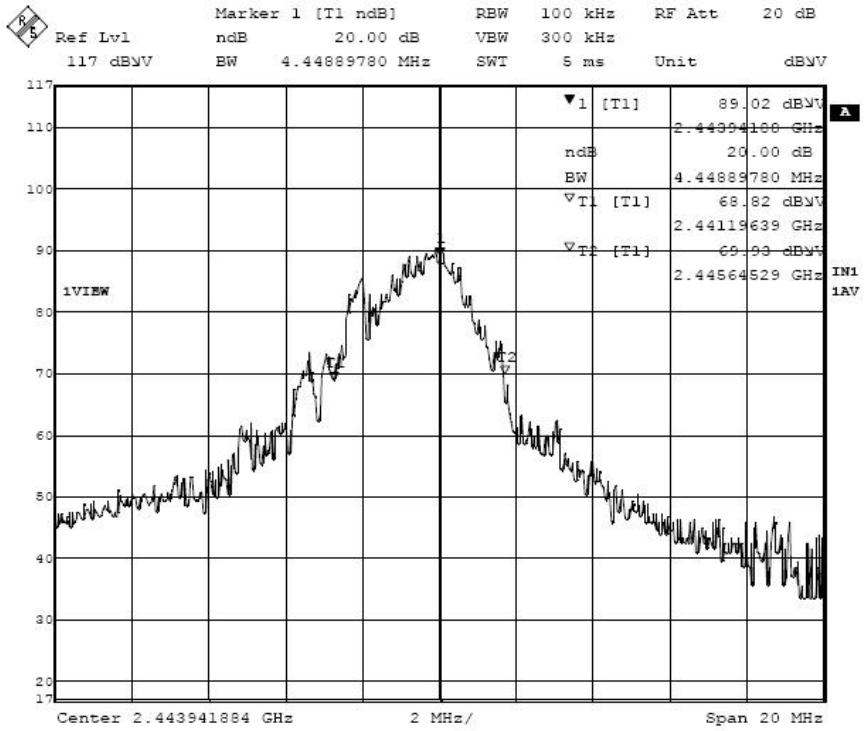
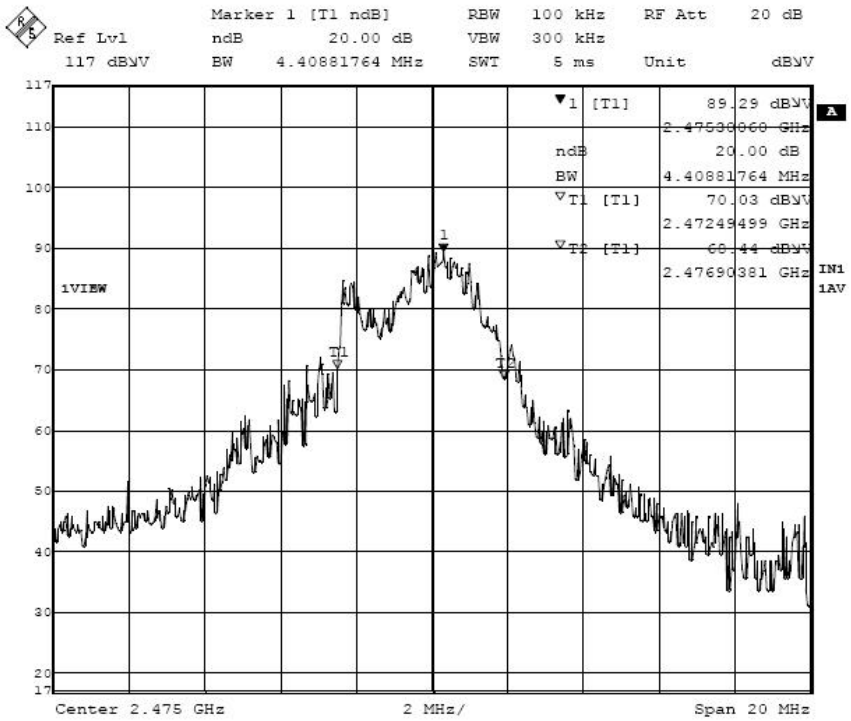


Figure 4 – Result data graph shows 20 dB bandwidth, CF = 2.4753GHz, BW = 4.4088MHz



4.3 Hopping Channel Carrier Frequency Separation

Test Requirement:	FCC part 15 section 15.247 (a1)
Test Date:	2009-06-23
Mode of Operation:	Transmitting mode.
Detector Function:	Max Hold

Result: PASS

Measured Result :

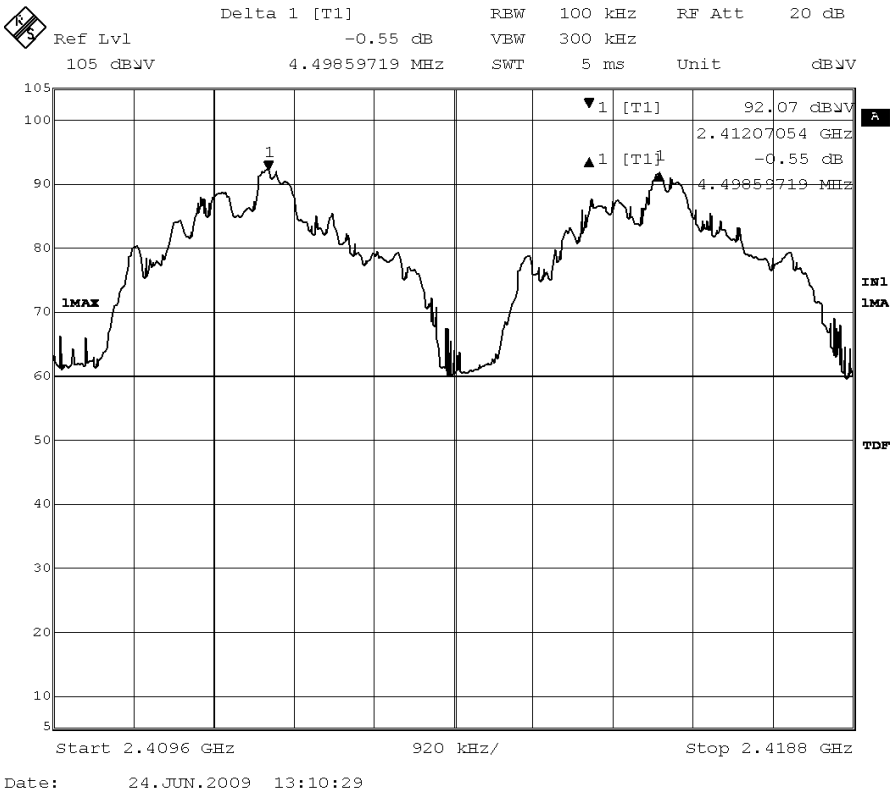
Refer to the delta marker, the frequency separation between two adjacent channels is 4.498MHz, therefore requirement of channel separated by a minimum of the 20dB bandwidth of the hopping channel is applied.

According to the test result shown in section 4.2, the maximum 20dB bandwidth is 4.448MHz, so the hopping channel separation of this EUT is found to comply with the requirement.

Limits for Hopping Channel Separation [Section 15.247 (a1)]:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25KHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band may have hopping channel carrier frequencies that are separated by 25KHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

Figure 5 – Result data graph shows the channel separation:



4.4 Average Time of Channel Occupancy

Test Requirement:	FCC part 15 section 15.247 (a1)(iii)
Test Date:	2009-06-24
Mode of Operation:	Transmitting mode.
Detector Function:	Zero span, Sweep time 6.4s

Result : PASS

Measured Result :

Observing time for total 16 hopping channels is 16 × 0.4s = 6.4s

Figure 6 and Figure 7 shows 52x 8= 416 pulses within 6.4s :

Figure 8 shows time of each pulse = 80.16us

Therefore, total transmitting time is 416 × 80.16us = 33.3ms. (<0.4s)

Limits for Average Time of Occupancy [Section 15.247 (a1)(iii)]:

The average time of occupancy on any channel shall not be greater than 0.4 second within a period of 0.4 seconds multiplied by the number of hopping channels employed.

Figure 6 – Result data graph shows the number of big pulse within 6.4s = 52

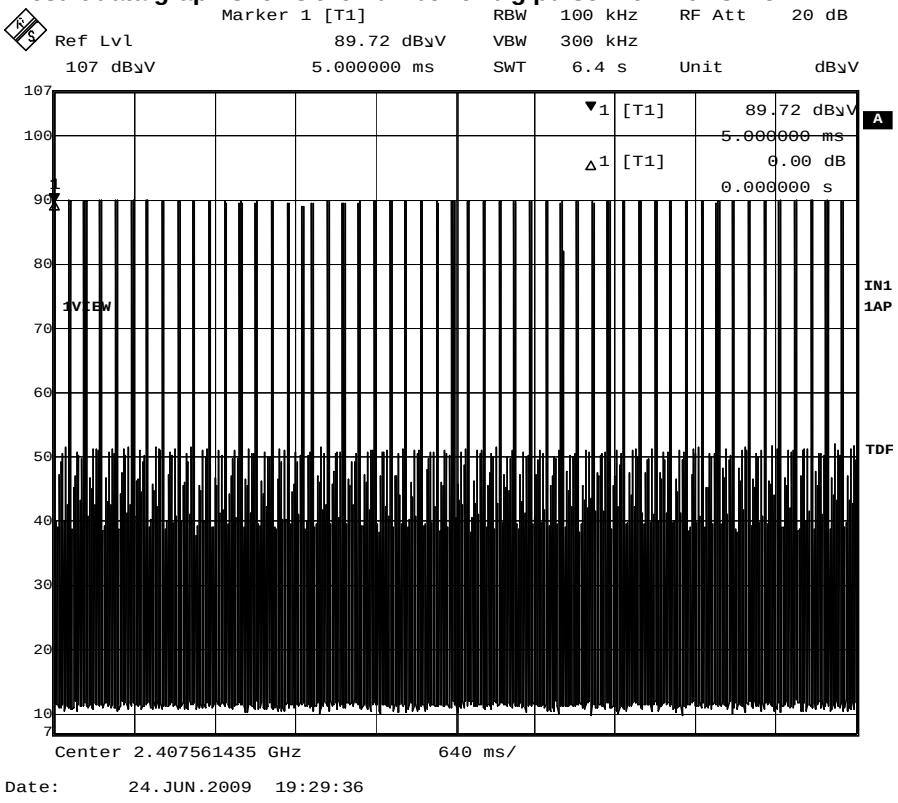


Figure 7 – Result data graph zooms into detail, one big pulse is built from 8 pulses..

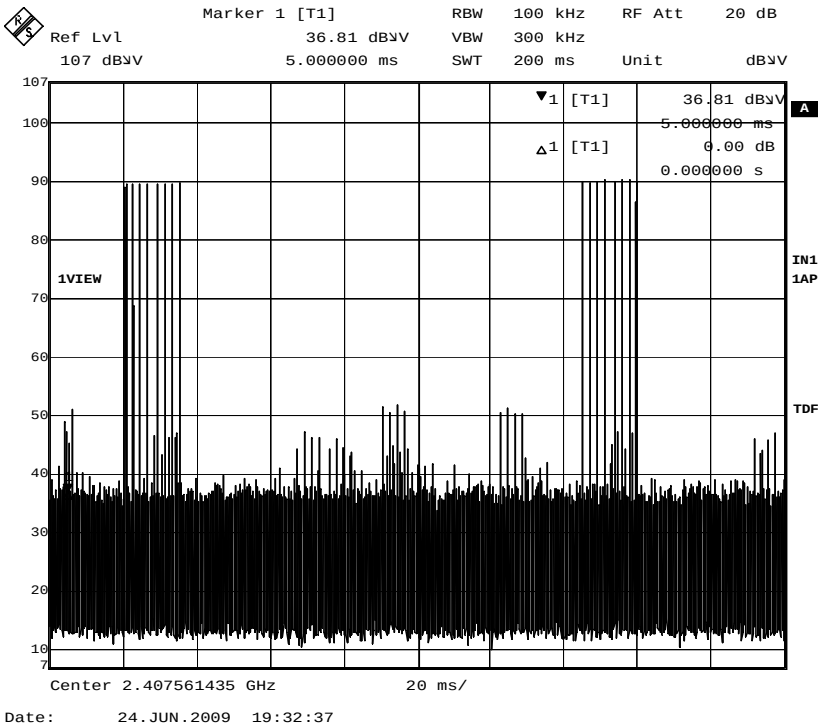
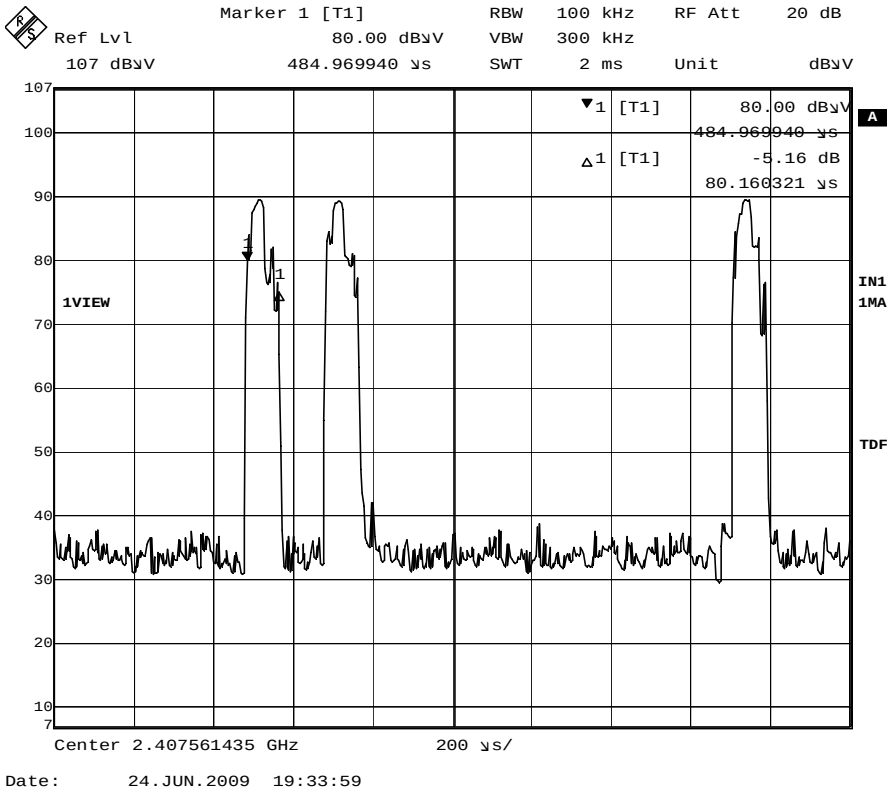


Figure 8 – Result data graph shows the time of each pulse = 80.16us.



4.5 Pseudorandom Hopping Algorithm

Pseudorandom Frequency Hopping

The embedded FHSS engine uses 16 hopping frequencies. Each channel frequency is selected from a pseudorandom ordered list of hopping frequencies, from 2407MHz to 2476MHz with separating in 4.5MHz apart from each of the channels. A single data frame is transmitted on each frequency location before skipping to the next hopping frequency in the list.

The system will generate a pseudorandom ordered list base on:

1/ A 16 bit Random ID (16 bit)
2/ A Sequence No. (8 bit)
3/ A 16 bit polynomial Randomization

Frequency use is equally used on average.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2407.5	9	2443.5
2	2412.0	10	2448.0
3	2416.5	11	2452.5
4	2421.0	12	2457.0
5	2425.5	13	2461.5
6	2430.0	14	2466.0
7	2434.5	15	2470.5
8	2439.1	16	2475.0

System Receiver Input Bandwidth

The receiver bandwidth is equal to the receiver bandwidth in the 16 hopping channel mode, which is 4.5MHz. The receiver bandwidth was verified during RF hopping to the relative channel.

Receiver Hopping Capability

The associated receiver has the ability to shift frequencies in synchronization with the transmitted signals, with they start connect with a same channel and then hop to next channel with a same formula among each other.

Requirement for Pseudorandom Hopping Algorithm [Section 15.247 (a1)]:

The channel frequencies shall be selected from a pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on average by the transmitter.

4.6 Band Edge Measurement

Test Requirement:	FCC part 15 section 15.247
Test Date:	2009-06-23
Mode of Operation:	Transmitting mode.
Detector Function:	Max Hold

Result: PASS

Measured Result :

Refer to the figure 9 and 10, it shows the frequency of lower band edge and upper band edge is 2.407GHz and 2.475GHz separately.

Limits of Band Edge for Carrier Frequencies Operated within the Bands [Section 15.247]:

The carrier frequencies should operate within 2400-2483.5MHz.

Figure 9 – Result data graph shows the frequency of lowest channel.

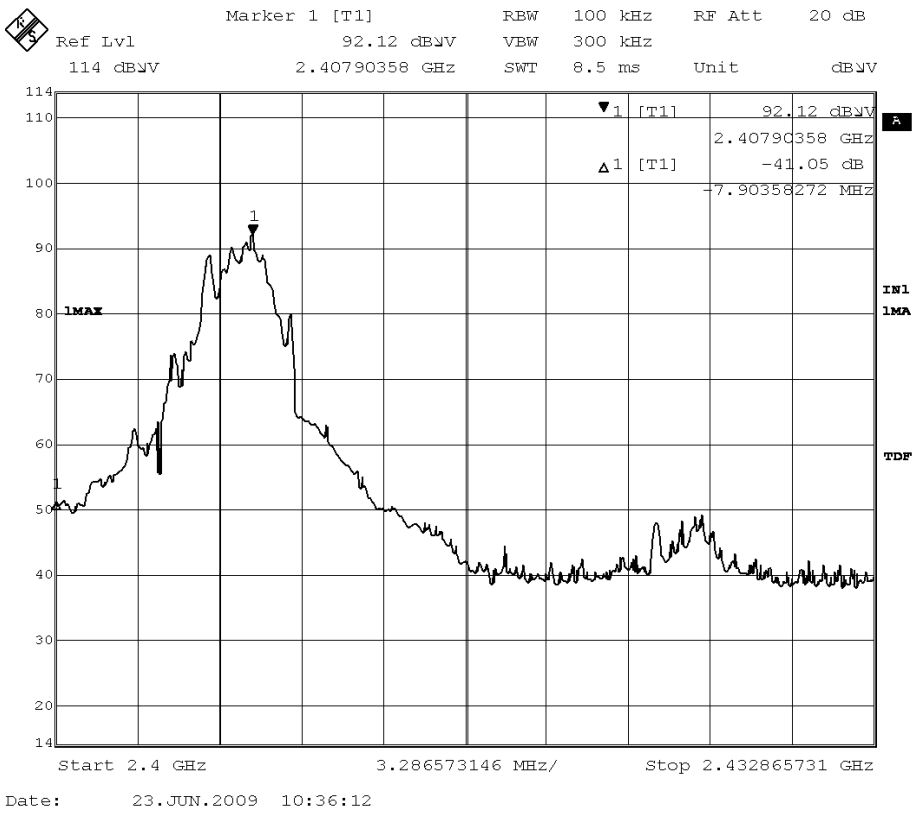
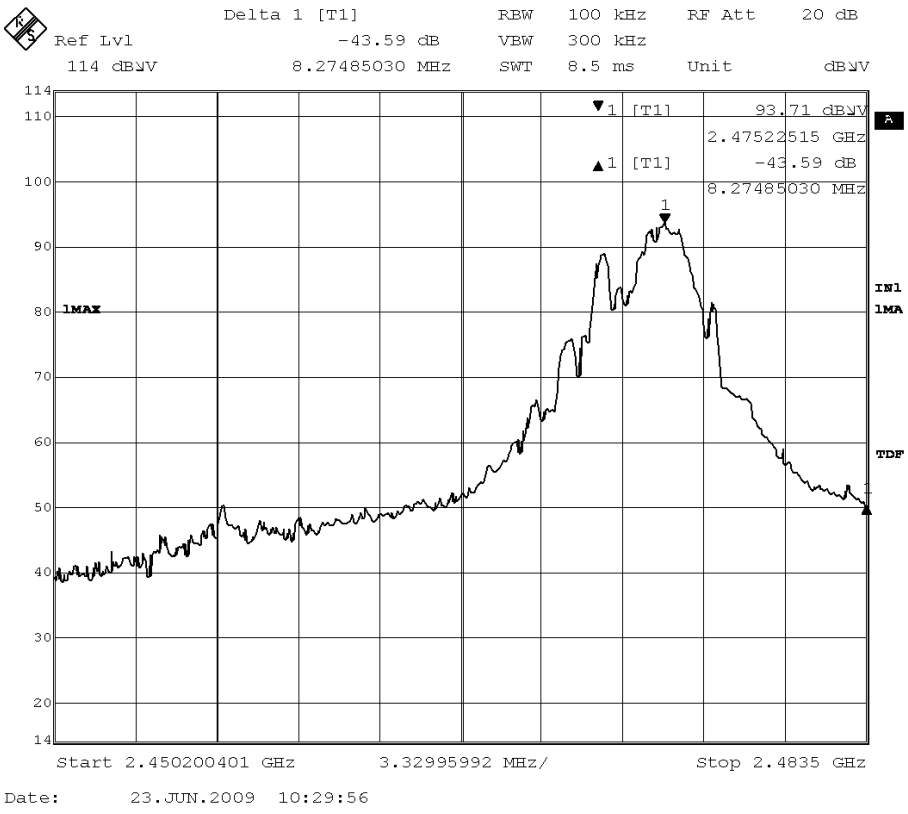


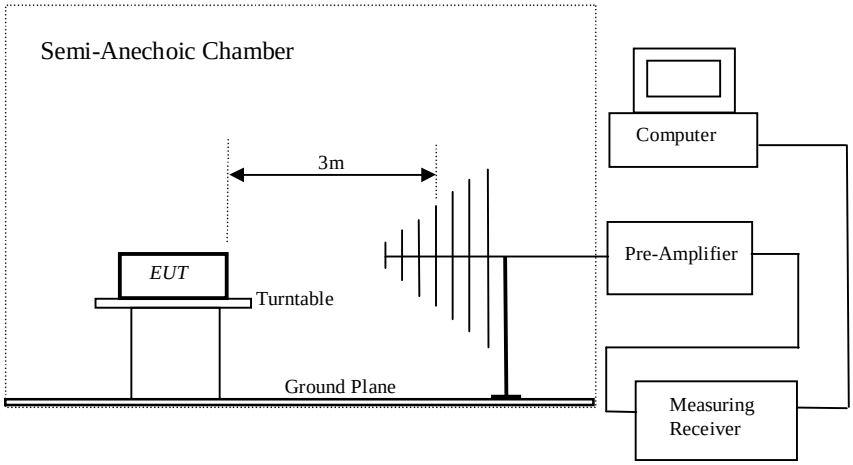
Figure 10 – Result data graph shows the frequency of highest channel.



4.7 Maximum Output Power

Test Requirement:	FCC part 15 section 15.247 (a1)
Test Method:	ANSI C63.4:2003
Test Date:	2009-06-23
Mode of Operation:	Transmitting mode.
Detector Function:	Peak
Measurement BW:	RBW 5MHz ; VBW 10MHz

Test Setup:



Result : PASS

Frequency (MHz)	Output Power		Max. Output Power (mW)
	(dBuV/m)	(V/m)	
Lowest Channel : 2407.9	**106.0**	**0.199**	**9.494**
Middle Channel : 2443.6	**107.4**	**0.234**	**13.11**
Highest Channel : 2475.2	**108.3**	**0.260**	**16.12**
Limit	**117.2**	**0.723**	**125.0**

Calculate the transmitter's peak power using the following equation:

$$E = \frac{\sqrt{30PG}}{d}$$

Where:E is the measured maximum fundamental field strength in V/m, utilizing a RBW ≥ the 20 dB bandwidth of the emission, VBW > RBW, peak detector function. Follow the procedures in C63.4-2003 with respect to maximizing the emission.

G is the numeric gain of the transmitting antenna with reference to an isotropic radiator.
G =1.258dBi.

d is the distance in meters from which the field strength was measured.

P is the power in watts for which you are solving:

$$P = \frac{(E*d)2}{30G}$$

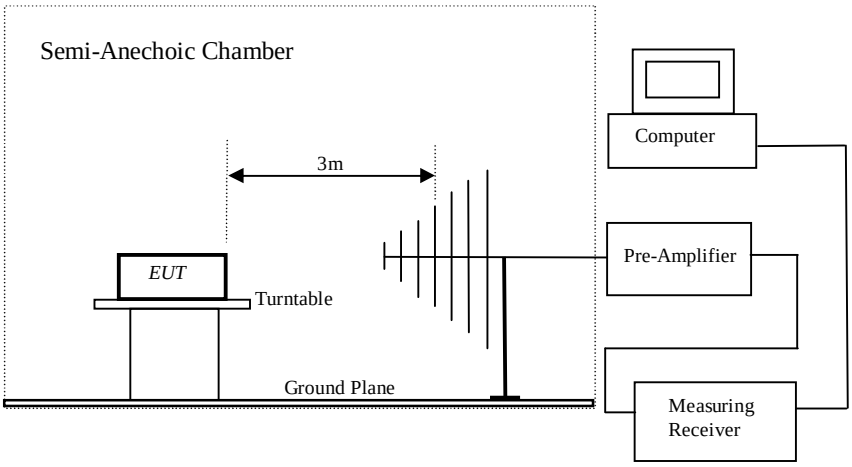
Limits for Maximum Output Power [Section 15.247 (a1)(iii)]:

For frequency hopping systems employing at least 75 hopping channels: 1 Watt
For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 Watts

4.8 Out of Band Emissions and Emissions in Restricted Bands

Test Requirement:	FCC part 15 section 15.247 (d)
Test Method:	ANSI C63.4:2003
Test Date:	2009-06-23
Mode of Operation:	Transmit mode.
Detector Function:	Peak
Measurement BW:	RBW 100KHz ; VBW 300KHz

Test Setup:



Result : PASS

Out of Frequency Band Emissions
For out of band emissions that are close to or exceed 20dB attenuation requirement, and emission falls into restricted band, radiated emission was performed in order to show compliance with the general radiated emission requirement.
Result Summary: Refer to Figure 11 to 13 for the emission data graph, result shows that the significant emissions detected are with more than 20dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power.

Limits for Out of Frequency Band Emission [Section 15.247 (d)]:

In any 100KHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power. Attenuation below the general limits specified in Section 15.209(a) is not required.

Result : PASS

All Emission and Emissions Fall into Restricted Band were recorded as below :

Radiated Emissions						
Emissions Frequency MHz	**E-Field Polarity**	**Reading dBuV/m**	**System Factor dB**	**Field strength at 3m dBuV/m**	**Limit dBuV/m**	**Delta to Limit dBuV/m**
Lowest	Ch.					
No		Peak		Found		
Middle	Ch.					
No		Peak		Found		
Highest	Ch.					
No		Peak		Found		

Refer to Figure 11 to 13 for the emission data graph from 1Ghz to 18Ghz.

Result Summary:

1) Communication mode : All other emissions are more than 20dB below FCC part 15.209 limit.

2) No further spurious emissions found between 30 MHz and lowest internal used/generated frequency, and from 30MHz to 1GHz.

Remarks : 1. " * " Radiated emissions which fall in the restricted bands as defined in Section 15.205(a).

2. Emission level with more than 20dB below the FCC required limit is not mentioned in table.

3. Delta to Limit = Field strength (dBμV/m) – Limit (dBμV/m).

3. Calculated measurement uncertainty: ±5.0dB.

Limit for Radiated Emission Falling in Restricted Bands [Section 15.209]:

Frequency (MHz)	Field Strength [μV/m]	Field Strength [dBμV/m]
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above 960	500	54.0

Radiated emissions, which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209.

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

Figure 11 – Radiated emission data graph of lowest channel.

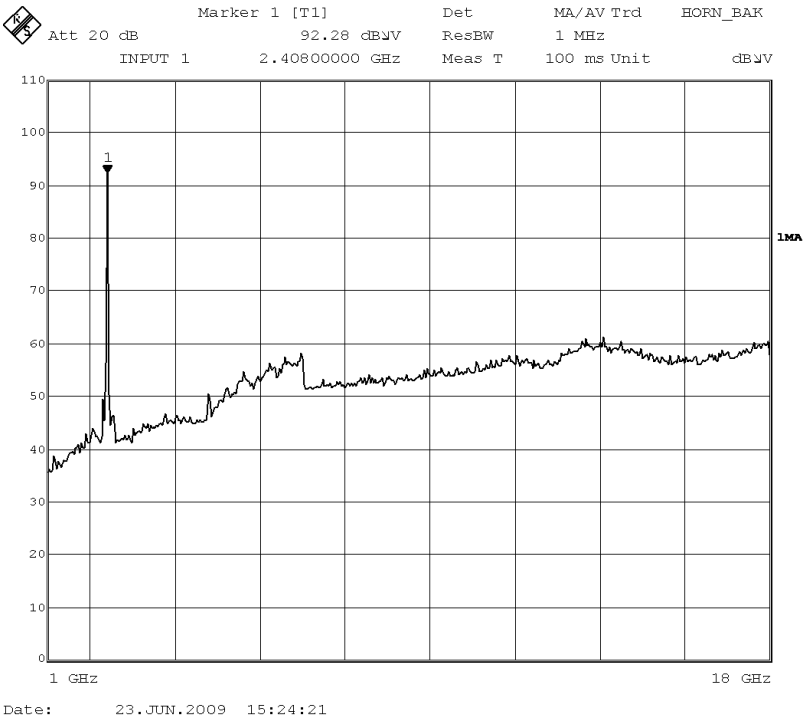


Figure 12 – Radiated emission data graph of middle channel.

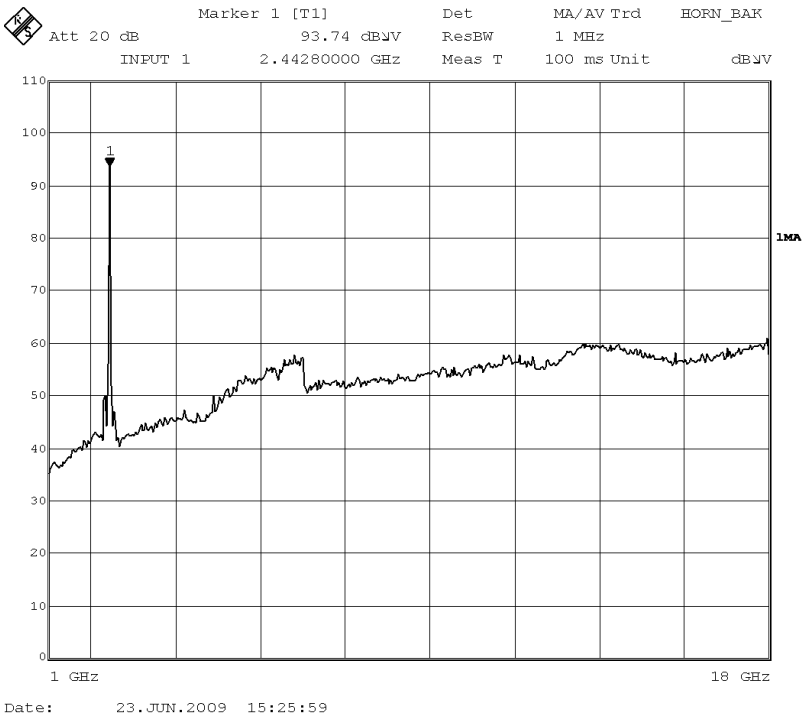
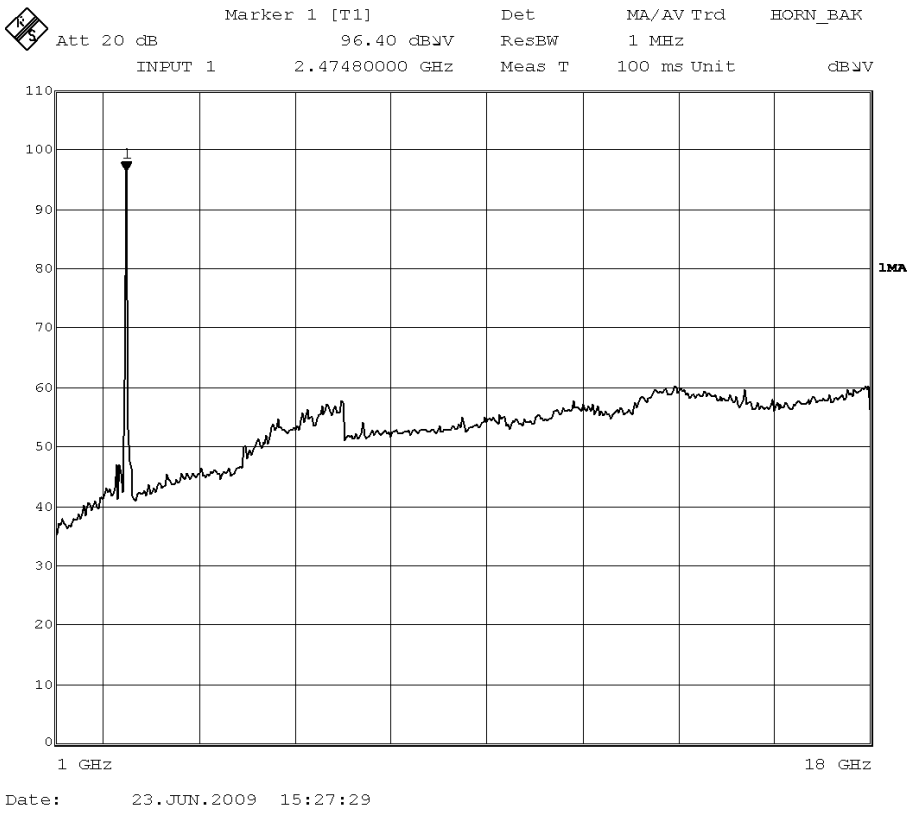


Figure 13 – Radiated emission data graph of highest channel.



4.9 Conducted Emissions (0.15MHz to 30MHz)

Test Requirement:	FCC part 15 Section 15.207 Class B
Test Method:	ANSI C63.4:2003
Test Date:	2009-06-23
Mode of Operation:	-Transmitting mode
Detector Function:	CISPR Quasi Peak
Measurement BW:	100 kHz
Worst Case Channel:	1

Results: PASS

- Refer Figure 14 and 15 for the result data graph .

Limits for Conducted Emission [Section 15.207]:

Frequency Range [MHz]	Quasi-Peak Limit [dBμV]	Average Limit [dBμV]
0.15-0.5	66 to 56*	56 to 46*
0.5-5.0	56	46
5.0-30.0	60	50

* Decreases with the logarithm of the frequency.

Remarks:
Calculated measurement uncertainty: ±2.8dB

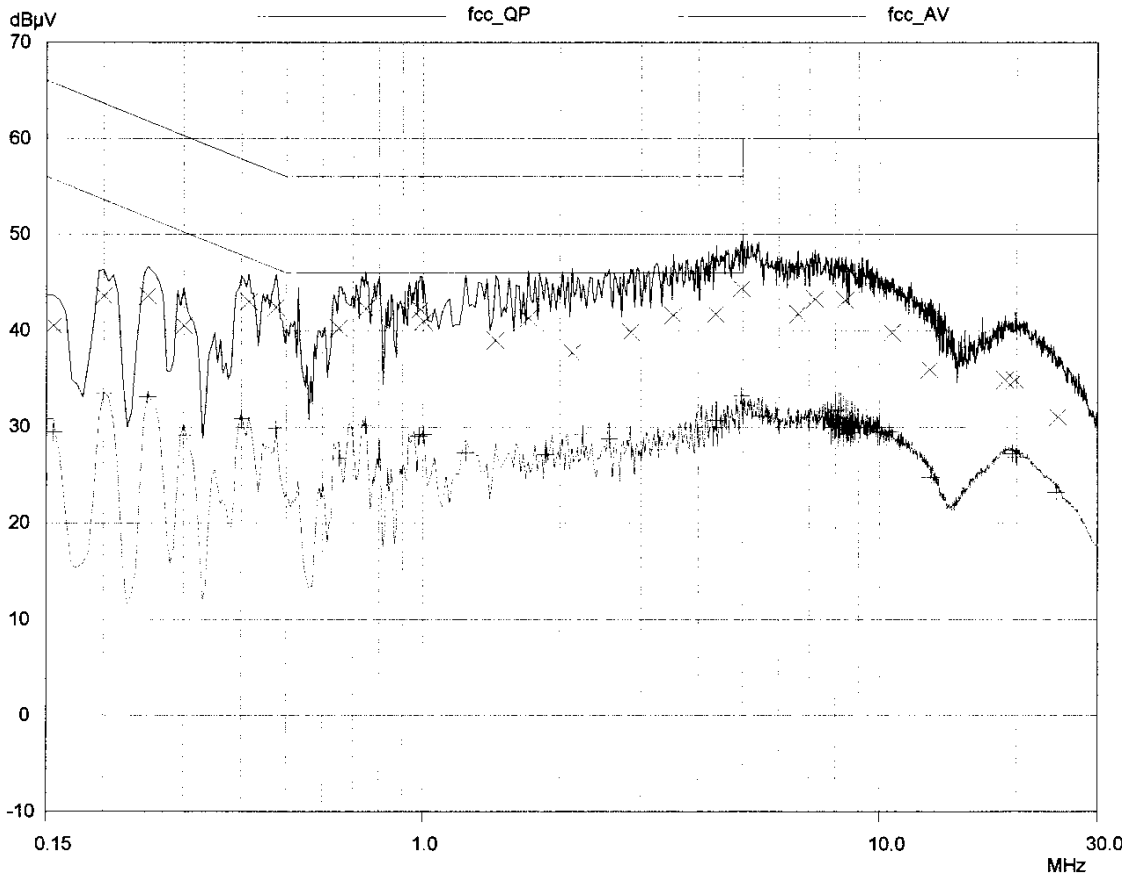
Figure 14 – Result data graph shows the conducted emission (Live).

Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150kHz	1000kHz	5kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB
1000kHz	30MHz	20kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB

Transducer	No.	Start	Stop	Name
	1	150kHz	30MHz	10dB

Final Measurement:		
	Detectors:	X QP / + AV
	Meas Time:	1sec
	Subranges:	25
	Acc Margin:	30 dB



Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150kHz	1000kHz	5kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB
1000kHz	30MHz	20kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB

Transducer	No.	Start	Stop	Name
	1	150kHz	30MHz	10dB

Final Measurement:

Detectors:	X QP / + AV
Meas Time:	1sec
Subranges:	25
Acc Margin:	30 dB

Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
0.155	40.53	65.73	25.20
0.2	43.64	63.61	19.97
0.25	43.64	61.76	18.12
0.3	40.53	60.24	19.71
0.415	43.02	57.55	14.53
0.475	42.44	56.43	13.99
0.65	40.26	56.00	15.74
0.745	42.29	56.00	13.71
0.985	42.22	56.00	13.78
1.0	40.97	56.00	15.03
1.44	38.99	56.00	17.01
1.7	41.31	56.00	14.69
2.12	37.71	56.00	18.29
2.84	39.85	56.00	16.15
3.52	41.62	56.00	14.38
4.36	41.73	56.00	14.27
4.96	44.40	56.00	11.60
6.6	41.72	60.00	18.28
7.2	43.28	60.00	16.72
8.4	43.18	60.00	16.82
10.62	39.80	60.00	20.20
12.86	35.96	60.00	24.04
18.86	34.90	60.00	25.10
19.8	34.85	60.00	25.15
24.48	31.03	60.00	28.97

* limit exceeded

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
0.155	29.45	55.73	26.28
0.2	33.51	53.61	20.10
0.25	33.12	51.76	18.64
0.3	29.17	50.24	21.07
0.4	30.87	47.85	16.98
0.475	29.81	46.43	16.62
0.65	26.71	46.00	19.29
0.745	30.19	46.00	15.81
0.98	29.08	46.00	16.92
1.0	29.21	46.00	16.79
1.24	27.34	46.00	18.66
1.86	27.14	46.00	18.86
2.24	29.29	46.00	16.71
2.56	28.73	46.00	17.27
3.26	27.64	46.00	18.36
4.36	30.66	46.00	15.34
4.96	33.29	46.00	12.71
5.5	31.14	50.00	18.86
8.11999	31.74	50.00	18.26
8.62	29.40	50.00	20.60
10.46	29.53	50.00	20.47
12.94	24.76	50.00	25.24
19.52	27.22	50.00	22.78
19.96	26.87	50.00	23.13
24.34	23.25	50.00	26.75

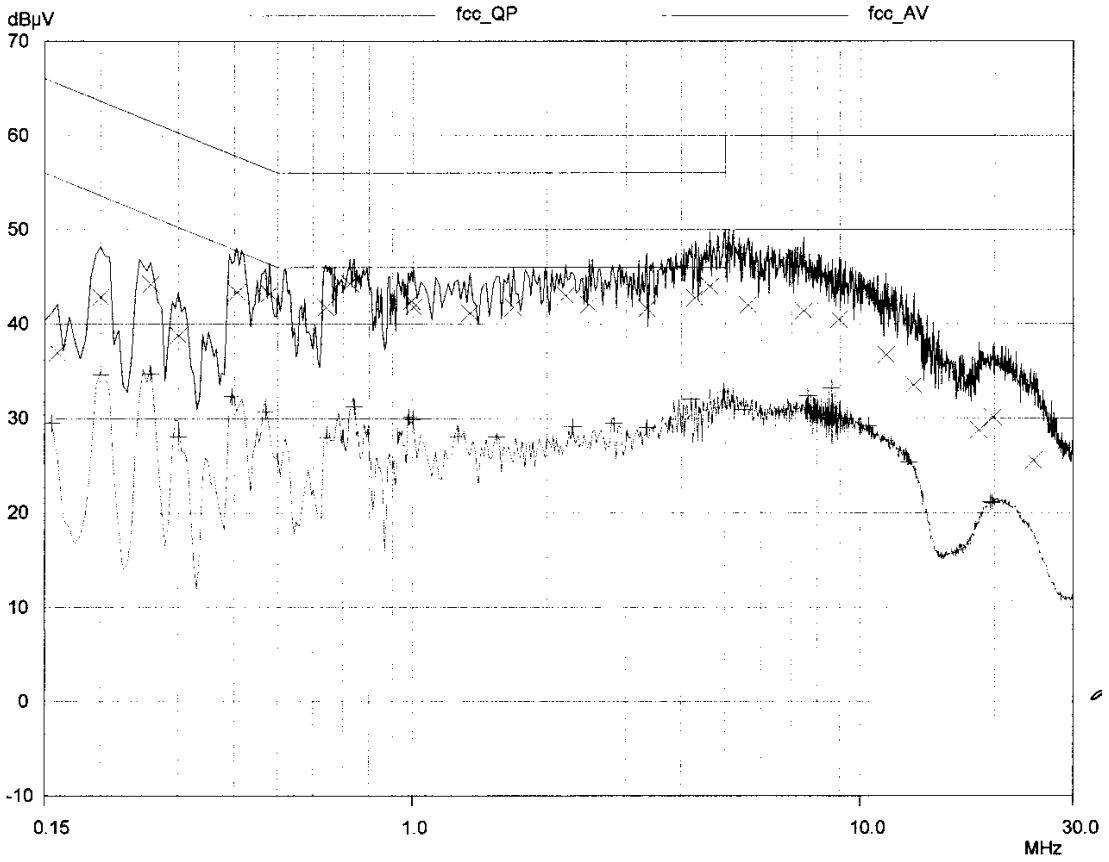
* limit exceeded

Figure 15 – Result data graph shows the conducted emission (Neutral).

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150kHz	1000kHz	5kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB
1000kHz	30MHz	20kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB

Transducer	No.	Start	Stop	Name
	1	150kHz	30MHz	10dB

Final Measurement:	Detectors:	X QP / + AV
	Meas Time:	1sec
	Subranges:	25
	Acc Margin:	30 dB



Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150kHz	1000kHz	5kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB
1000kHz	30MHz	20kHz	9kHz	PK+AV	20msec	Auto	OFF	60dB

Transducer	No.	Start	Stop	Name
	1	150kHz	30MHz	10dB

Final Measurement:		
	Detectors:	X QP / + AV
	Meas Time:	1sec
	Subranges:	25
	Acc Margin:	30 dB

Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
0.16	36.97	65.46	28.49
0.2	42.88	63.61	20.73
0.26	44.24	61.43	17.19
0.3	38.81	60.24	21.43
0.405	43.37	57.75	14.38
0.48	43.22	56.34	13.12
0.64	41.76	56.00	14.24
0.725	44.30	56.00	11.70
0.99	42.42	56.00	13.58
1.0	41.79	56.00	14.21
1.34	41.16	56.00	14.84
1.68	41.77	56.00	14.23
2.2	43.02	56.00	12.98
2.48	42.07	56.00	13.93
3.34	41.66	56.00	14.34
4.28	42.78	56.00	13.22
4.62	43.99	56.00	12.01
5.6	42.01	60.00	17.99
7.44	41.41	60.00	18.59
8.92	40.48	60.00	19.52
11.4	36.74	60.00	23.26
13.16	33.54	60.00	26.46
18.4	28.76	60.00	31.24
19.8	30.12	60.00	29.88
24.4	25.53	60.00	34.47

* limit exceeded

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
0.155	29.50	55.73	26.23
0.2	34.63	53.61	18.98
0.26	34.73	51.43	16.70
0.3	28.10	50.24	22.14
0.395	32.31	47.96	15.65
0.47	30.70	46.51	15.81
0.645	28.00	46.00	18.00
0.74	31.26	46.00	14.74
0.98	30.13	46.00	15.87
1.0	29.93	46.00	16.07
1.26	28.12	46.00	17.88
1.54	28.04	46.00	17.96
2.28	29.13	46.00	16.87
2.82	29.48	46.00	16.52
3.34	29.02	46.00	16.98
4.2	32.06	46.00	13.94
4.96	32.81	46.00	13.19
5.48	30.95	50.00	19.05
7.62	32.40	50.00	17.60
8.6	33.24	50.00	16.76
10.4	29.24	50.00	20.76
12.82	25.38	50.00	24.62
19.56	21.14	50.00	28.86
19.72	21.09	50.00	28.91

* limit exceeded

5.0 List of Measurement Equipment

Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM020	HORN ANTENNA	EMCO	3115	4032	2006/07/11	2009/07/11
EM215	MULTIDEVICE CONTROLER	EMCO	2090	00024676	N/A	N/A
EM216	MINI MAST SYSTEM	EMCO	2075	00026842	N/A	N/A
EM217	ELECTRIC POWERED TURNTABLE	EMCO	2088	00029144	N/A	N/A
EM218	ANECHOIC CHAMBER	ETS-Linggren	FACT-3	--	2008/12/01	2011/12/01
EM174	BICONILOG ANTENNA	EMCO	3142B	1671	2008/01/24	2010/01/24
EM229	EMI Test Receiver	R&S	ESIB40	100248	2008/09/08	2009/09/08
EM022	LOOP ANTENNA	EMCO	6502	1189-2424	2006/07/26	2009/07/26

Conducted Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM197	LISN	EMCO	4825/2	1193	2007/10/30	2009/10/30
EM181	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESIB7	100072	2009/05/16	2010/05/16
EM154	SHIELDING ROOM	SIEMENS MATSUSHITA COMPONENTS	N/A	803-740-057-99A	2009/01/23	2010/01/23

Remarks:
CM Corrective Maintenance
N/A Not Applicable or Not Available