

## FCC CERTIFICATION TEST REPORT FOR

<b>Applicant</b>	:	VIEVU, LLC
<b>Address</b>	:	105 W. John St, Seattle WA 98119, USA
<b>Equipment under Test</b>	:	Wearable Video Camera
<b>Model No.</b>	:	LE4 mini
<b>FCC ID</b>	:	2ABBNLE4MIN
<b>Trade Mark</b>	:	VIEVU
<b>Manufacturer</b>	:	VIEVU, LLC
<b>Address</b>	:	105 W. John St, Seattle WA 98119, USA

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

**Add:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City,  
Guangdong Province, China, 523808

**Tel:** +86-0769-22891499 [Http://www.dgddt.com](http://www.dgddt.com)

# REPORT

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## TEST REPORT DECLARE

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**Test Standard Used:**

FCC Rules and Regulations Part 15 Subpart B Class B 2014; ANSI C63.4:2013.

**We Declare:**

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above (class B). The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.**

<b>Report No.:</b>	DDT-R15Q0819-3E1		
<b>Date of Test:</b>	Aug. 20, 2015~Sep. 11, 2015	<b>Date of Report:</b>	Sep. 14, 2015

*Prepared By:*

*Damon Hu*

**Damon Hu/Engineer**

*Approved by:*



**Kevin Feng/EMC Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

## 1. Summary of test results

Description of Test Item	Standard	Limits	Results
Power Line Conducted Emission Test	FCC Part 15: 2014 ANSI C63.4: 2013	Class B	PASS
Radiated Emission Test	FCC Part 15: 2014 ANSI C63.4: 2013	Class B	PASS

## 2. General test information

### 2.1. Description of EUT

EUT* Name	: Wearable Video Camera
Model Number	: LE4 mini
EUT function description	: Please reference user manual of this device
Power supply	: DC 5V from external power adapter input AC 120V/60Hz and DC 3.7V from built-in battery
EUT Class	: Class B, intended primarily for use in the domestic environment
Maximum work frequency	: 27MHz
Date of Receipt	: 2015/8/20
Sample Type	: Series production

Note1: EUT is the ab. of equipment under test.

Note2: EUT can powered from external power adapter and built-in battery, according exploration test, when powered from external power adapter will have worse EMC performance, so all the final tests were performed with external power adapter.

Note3: This test report only for EMC performance of non-wireless function of device, and for all other wireless functions EMC performance was tested and reported in another EMC test report.

### 2.2. Accessories of EUT

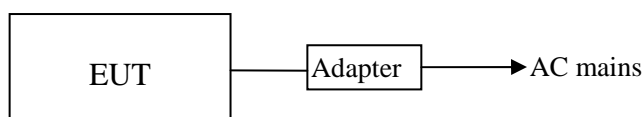
Description of Accessories	Manufacturer	Model number or Type	EMC Compliance	SN
Adapter	HON-KWANG	HK-AP-050A100-US	FCC DOC	/
Adapter	SAMYA	PS30-AM501A-V	FCC DOC	/

### 2.3. Assistant equipment used for test

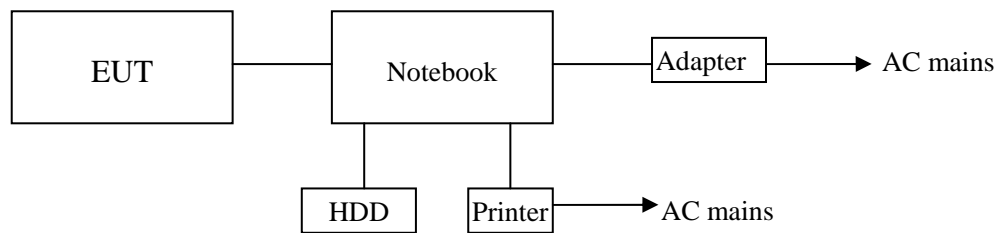
Description of Assistant equipment	Manufacturer	Model number or Type	EMC Compliance	SN
Notebook	DELL	Latitude D610	FCC DOC	00045-534-136-300
Mouse	Logitech	M-UO003	FCC DOC	810-001397
HDD	Click-free	HD425	FCC DOC	/
Printer	HP	LaserJet 1020 plus	FCC DOC	CNCFV90866

### 2.4. Block diagram EUT configuration for test

For Charge mode:



For Data transmission mode:



## 2.5. Decision of final test mode

The following test mode was scanned during the preliminary test, and found to produce the highest emission level:

Pre-Test mode		
Emission	Conducted Emission (Main Port)	Charge mode Data transmission
	Radiated Emission	Data transmission Charge mode

After the preliminary scan, EUT power from adapter (SAMYA) will have highest emission, was selected and recorded in this report.

## 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25°C
Humidity range:	40-75%
Pressure range:	86-106kPa

## 2.7. Deviations of test standard

No Deviation

## 2.8. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808 Tel: +86-0769-22891499 <http://www.dgddt.com>

FCC Registration Number: 270092

**2.9. Measurement uncertainty**

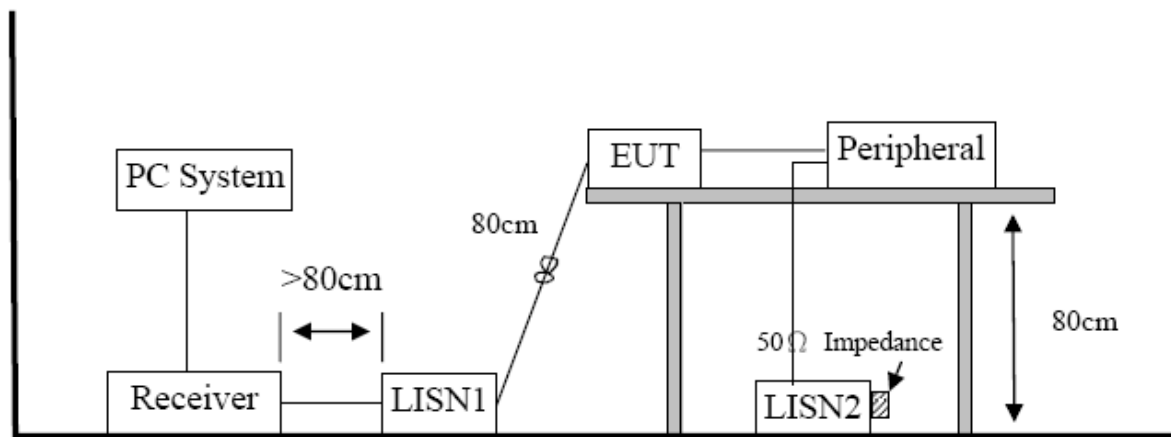
Test Item	Uncertainty
Uncertainty for Conduction emission test	$\pm 2.44\text{dB}$ (150KHz-30MHz)
	$\pm 2.94\text{dB}$ (9KHz-150KHz)
Uncertainty for Radiation Emission test (30MHz-1GHz)	$\pm 3.14\text{ dB}$ (Antenna Polarize: V)
	$\pm 3.16\text{ dB}$ (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1GHz-18GHz)	$\pm 4.14\text{dB}$ (1-6GHz)
	$\pm 4.46\text{dB}$ (6GHz-18Gz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

### 3. Power Line Conducted Emission Test

#### 3.1. Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Test Receiver	R&S	ESU8	100316	2014/10/25	1 Year
2	LISN 1	R&S	ENV216	101109	2014/10/25	1 Year
3	LISN 2	R&S	ESH2-Z5	100309	2014/10/25	1 Year
4	Pulse Limiter	R&S	ESH3-Z2	101242	2014/10/25	1 Year
5	CE Cable 1	HUBSER	ESU8/RF2	W10.01	2014/10/25	1 Year
6	Test software	Audix	E3	V 6.11111b	/	/

#### 3.2. Block diagram of test setup



#### 3.3. Power Line Conducted Emission Limits(Class B)

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Note 1: \* Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

#### 3.4. Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 10cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 3.2 of this report.



All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second AMN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 KHz.

### **3.5. Test Result**

#### **PASS. (See below detailed test result)**

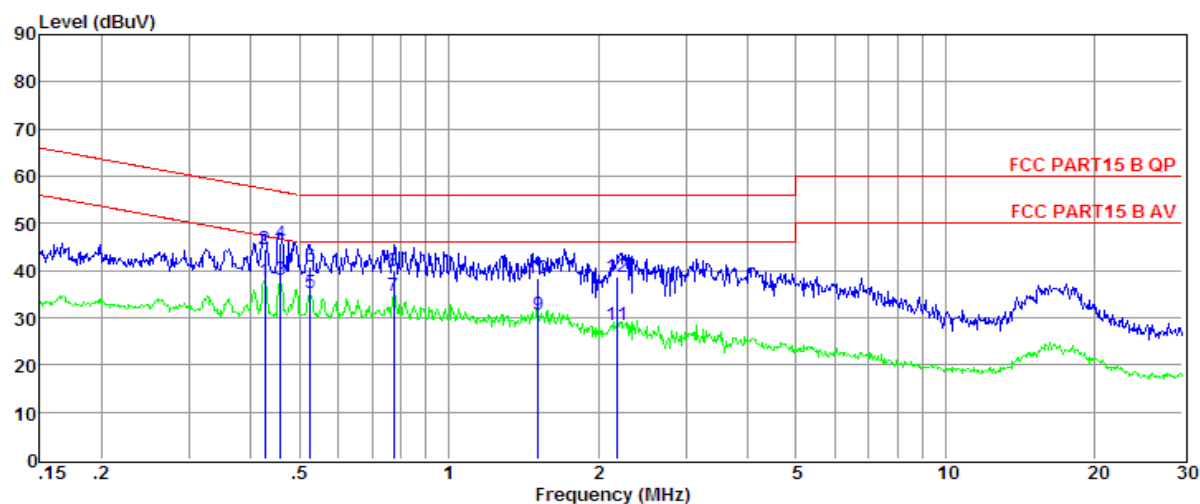
Note1: All emissions not reported below are too low against the prescribed limits.

Note2: “----” means Peak detection; “-----” mans Average detection

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 1# Shield Room **E:\2015 report data\15Q0819-3\CE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Damon  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : AC 120V/60Hz **Test Mode** : Charging  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **LISN** : 2014 ENV216/LINE  
**Memo** : Adapter: HK-AP-050A100-US

Data: 6



Item (Mark)	Freq (MHz)	Read Level (dBUV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBUV)	Limit Line (dBUV)	Over Limit (dB)	Detector	Phase
1	0.43	18.15	9.63	0.03	9.86	37.67	47.33	-9.66	Average	LINE
2	0.43	25.08	9.63	0.03	9.86	44.60	57.33	-12.73	QP	LINE
3	0.46	18.45	9.63	0.03	9.87	37.98	46.71	-8.73	Average	LINE
4	0.46	26.22	9.63	0.03	9.87	45.75	56.71	-10.96	QP	LINE
5	0.53	15.65	9.63	0.04	9.87	35.19	46.00	-10.81	Average	LINE
6	0.53	21.37	9.63	0.04	9.87	40.91	56.00	-15.09	QP	LINE
7	0.78	14.99	9.62	0.08	9.86	34.55	46.00	-11.45	Average	LINE
8	0.78	20.26	9.62	0.08	9.86	39.82	56.00	-16.18	QP	LINE
9	1.51	10.95	9.63	0.06	9.87	30.51	46.00	-15.49	Average	LINE
10	1.51	18.86	9.63	0.06	9.87	38.42	56.00	-17.58	QP	LINE
11	2.19	9.04	9.63	0.07	9.86	28.60	46.00	-17.40	Average	LINE
12	2.19	19.17	9.63	0.07	9.86	38.73	56.00	-17.27	QP	LINE

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

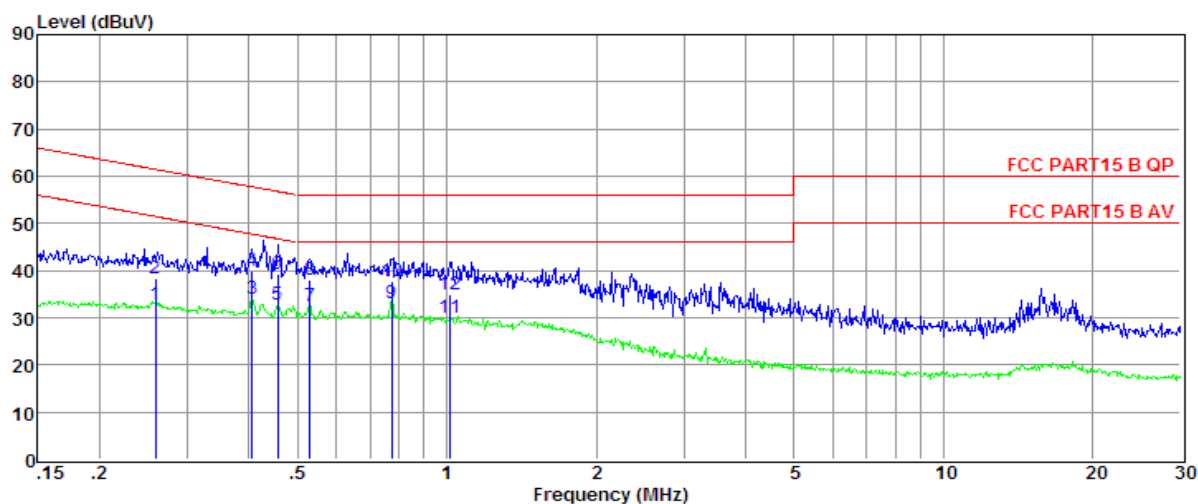
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 1# Shield Room **E:\2015 report data\15Q0819-3\CE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Damon  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : AC 120V/60Hz **Test Mode** : Charging  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **LISN** : 2014 ENV216/NEUTRAL  
**Memo** : Adapter: HK-AP-050A100-US

Data: 8



Item (Mark)	Freq (MHz)	Read Level (dBμV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBμV)	Limit Line (dBμV)	Over Limit (dB)	Detector	Phase
1	0.26	13.28	9.60	0.02	9.85	32.75	51.47	-18.72	Average	NEUTRAL
2	0.26	18.90	9.60	0.02	9.85	38.37	61.47	-23.10	QP	NEUTRAL
3	0.41	14.43	9.61	0.03	9.86	33.93	47.73	-13.80	Average	NEUTRAL
4	0.41	20.48	9.61	0.03	9.86	39.98	57.73	-17.75	QP	NEUTRAL
5	0.46	13.40	9.61	0.03	9.87	32.91	46.76	-13.85	Average	NEUTRAL
6	0.46	19.87	9.61	0.03	9.87	39.38	56.76	-17.38	QP	NEUTRAL
7	0.53	12.89	9.61	0.04	9.87	32.41	46.00	-13.59	Average	NEUTRAL
8	0.53	18.49	9.61	0.04	9.87	38.01	56.00	-17.99	QP	NEUTRAL
9	0.78	13.58	9.61	0.08	9.86	33.13	46.00	-12.87	Average	NEUTRAL
10	0.78	18.17	9.61	0.08	9.86	37.72	56.00	-18.28	QP	NEUTRAL
11	1.02	10.46	9.60	0.04	9.87	29.97	46.00	-16.03	Average	NEUTRAL
12	1.02	15.42	9.60	0.04	9.87	34.93	56.00	-21.07	QP	NEUTRAL

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

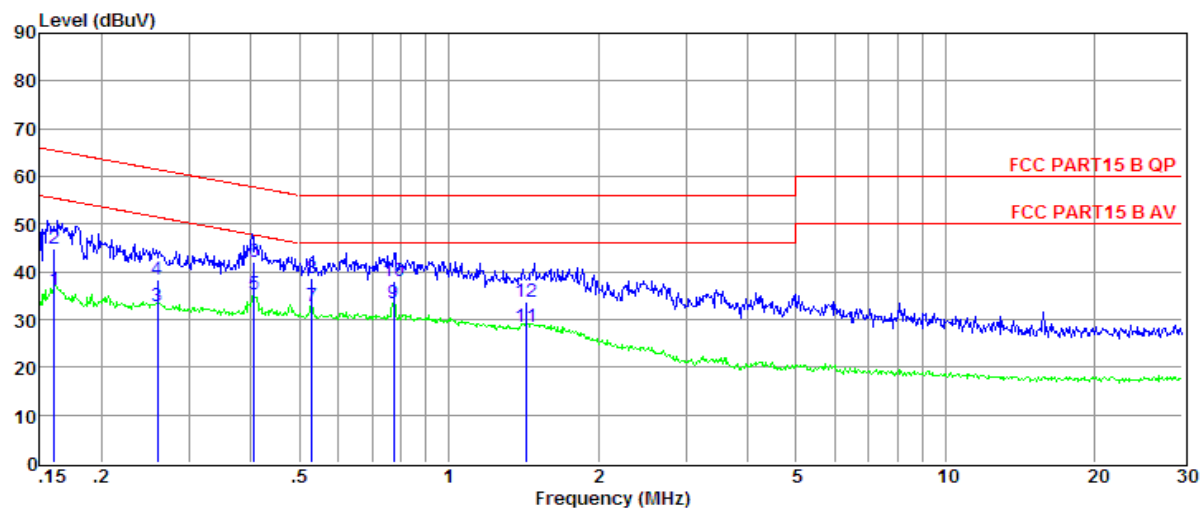
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 1# Shield Room **E:\2015 report data\15Q0819-3\CE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Damon  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : AC 120V/60Hz **Test Mode** : Charging  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **LISN** : 2014 ENV216/NEUTRAL  
**Memo** : Adapter: PS30-AM501A-V

Data: 18



Item	Freq	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Over Limit	Detector	Phase
(Mark)	(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV)	(dBμV)	(dB)		
1	0.16	16.59	9.60	0.01	9.84	36.04	55.43	-19.39	Average	NEUTRAL
2	0.16	25.28	9.60	0.01	9.84	44.73	65.43	-20.70	QP	NEUTRAL
3	0.26	13.31	9.60	0.02	9.85	32.78	51.47	-18.69	Average	NEUTRAL
4	0.26	18.78	9.60	0.02	9.85	38.25	61.47	-23.22	QP	NEUTRAL
5	0.41	15.81	9.61	0.03	9.86	35.31	47.73	-12.42	Average	NEUTRAL
6	0.41	22.71	9.61	0.03	9.86	42.21	57.73	-15.52	QP	NEUTRAL
7	0.53	13.30	9.61	0.04	9.87	32.82	46.00	-13.18	Average	NEUTRAL
8	0.53	19.12	9.61	0.04	9.87	38.64	56.00	-17.36	QP	NEUTRAL
9	0.78	13.71	9.61	0.08	9.86	33.26	46.00	-12.74	Average	NEUTRAL
10	0.78	18.51	9.61	0.08	9.86	38.06	56.00	-17.94	QP	NEUTRAL
11	1.43	9.06	9.61	0.06	9.87	28.60	46.00	-17.40	Average	NEUTRAL
12	1.43	14.09	9.61	0.06	9.87	33.63	56.00	-22.37	QP	NEUTRAL

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

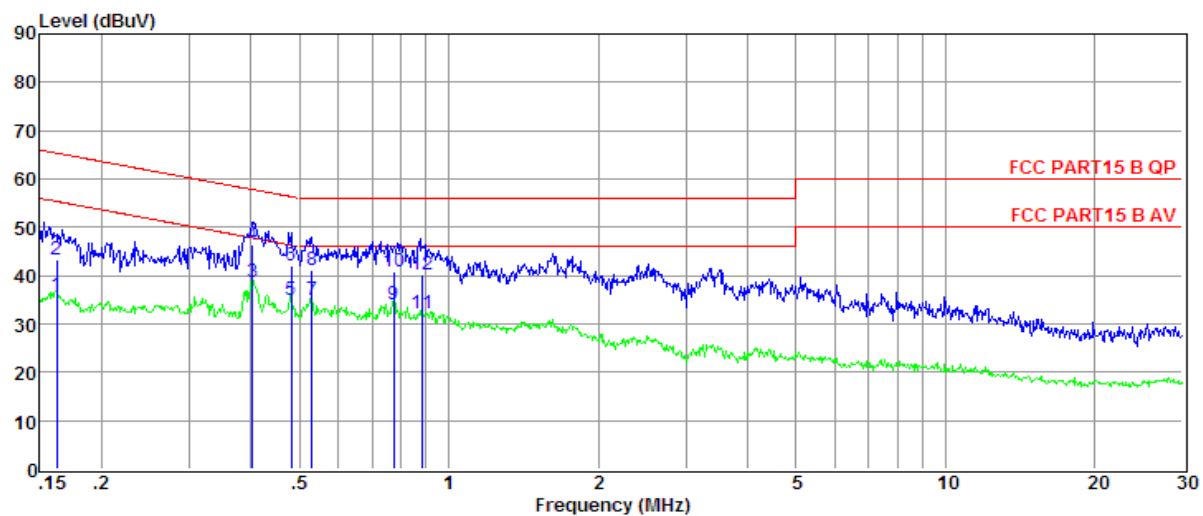
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 1# Shield Room **E:\2015 report data\15Q0819-3\CE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Damon  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : AC 120V/60Hz **Test Mode** : Charging  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **LISN** : 2014 ENV216/LINE  
**Memo** : Adapter: PS30-AM501A-V

Data: 20



Item	Freq	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Over Limit	Detector	Phase
(Mark)	(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV)	(dBμV)	(dB)		
1	0.16	16.46	9.61	0.01	9.84	35.92	55.34	-19.42	Average	LINE
2	0.16	23.78	9.61	0.01	9.84	43.24	65.34	-22.10	QP	LINE
3	0.40	18.99	9.63	0.03	9.86	38.51	47.81	-9.30	Average	LINE
4	0.40	26.94	9.63	0.03	9.86	46.46	57.81	-11.35	QP	LINE
5	0.48	15.32	9.63	0.03	9.87	34.85	46.32	-11.47	Average	LINE
6	0.48	22.55	9.63	0.03	9.87	42.08	56.32	-14.24	QP	LINE
7	0.53	15.36	9.63	0.04	9.87	34.90	46.00	-11.10	Average	LINE
8	0.53	21.60	9.63	0.04	9.87	41.14	56.00	-14.86	QP	LINE
9	0.78	14.55	9.62	0.08	9.86	34.11	46.00	-11.89	Average	LINE
10	0.78	21.37	9.62	0.08	9.86	40.93	56.00	-15.07	QP	LINE
11	0.88	12.67	9.62	0.06	9.86	32.21	46.00	-13.79	Average	LINE
12	0.88	20.78	9.62	0.06	9.86	40.32	56.00	-15.68	QP	LINE

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

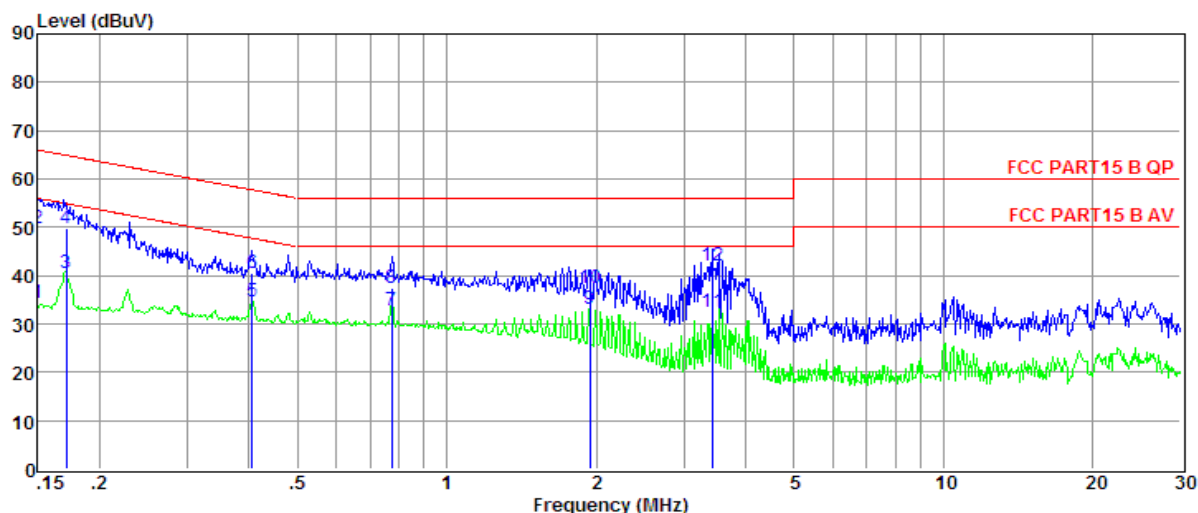
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 1# Shield Room **E:\2015 report data\15Q0819-3\CE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Damon  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : DC 5V from notebook **Test Mode** : Data transmitting  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **LISN** : 2014 ENV216/LINE  
**Memo** :

Data: 30



Item	Freq	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Over Limit	Detector	Phase
(Mark)	(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV)	(dBμV)	(dB)		
1	0.15	14.98	9.61	0.01	9.84	34.44	56.00	-21.56	Average	LINE
2	0.15	30.45	9.61	0.01	9.84	49.91	66.00	-16.09	QP	LINE
3	0.17	20.98	9.61	0.01	9.84	40.44	54.90	-14.46	Average	LINE
4	0.17	30.41	9.61	0.01	9.84	49.87	64.90	-15.03	QP	LINE
5	0.41	15.05	9.63	0.03	9.86	34.57	47.73	-13.16	Average	LINE
6	0.41	21.08	9.63	0.03	9.86	40.60	57.73	-17.13	QP	LINE
7	0.78	13.30	9.62	0.08	9.86	32.86	46.00	-13.14	Average	LINE
8	0.78	17.71	9.62	0.08	9.86	37.27	56.00	-18.73	QP	LINE
9	1.94	13.54	9.63	0.07	9.86	33.10	46.00	-12.90	Average	LINE
10	1.94	17.76	9.63	0.07	9.86	37.32	56.00	-18.68	QP	LINE
11	3.42	12.95	9.66	0.09	9.87	32.57	46.00	-13.43	Average	LINE
12	3.42	22.31	9.66	0.09	9.87	41.93	56.00	-14.07	QP	LINE

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

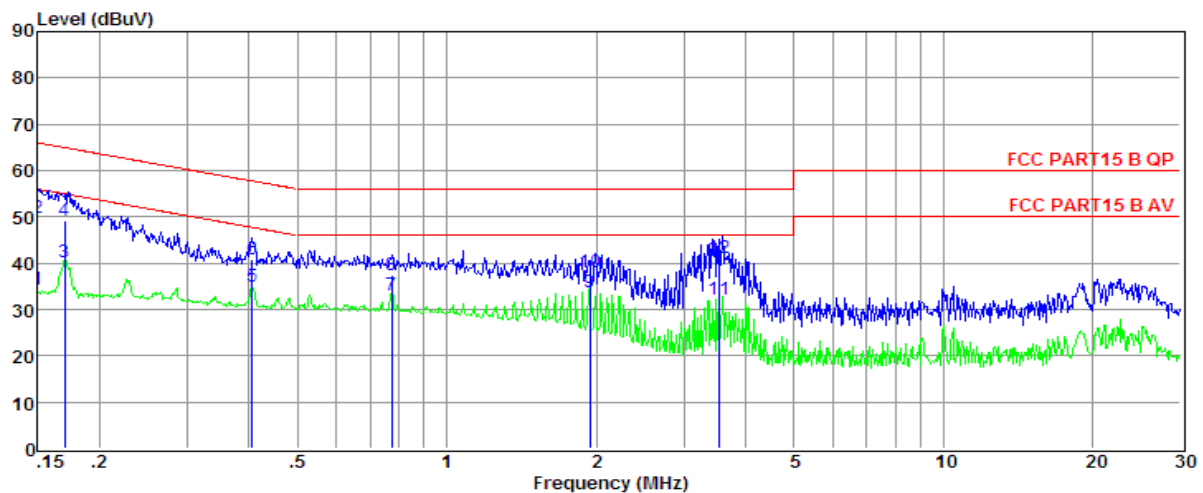
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 1# Shield Room **E:\2015 report data\15Q0819-3\CE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Damon  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : DC 5V from notebook **Test Mode** : Data transmitting  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **LISN** : 2014 ENV216/NEUTRAL  
**Memo** :

Data: 32



Item (Mark)	Freq (MHz)	Read Level (dBμV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBμV)	Limit Line (dBμV)	Over Limit (dB)	Detector	Phase
1	0.15	14.98	9.60	0.01	9.84	34.43	56.00	-21.57	Average	NEUTRAL
2	0.15	30.32	9.60	0.01	9.84	49.77	66.00	-16.23	QP	NEUTRAL
3	0.17	20.64	9.60	0.01	9.84	40.09	54.94	-14.85	Average	NEUTRAL
4	0.17	29.85	9.60	0.01	9.84	49.30	64.94	-15.64	QP	NEUTRAL
5	0.41	15.45	9.61	0.03	9.86	34.95	47.73	-12.78	Average	NEUTRAL
6	0.41	21.40	9.61	0.03	9.86	40.90	57.73	-16.83	QP	NEUTRAL
7	0.78	13.50	9.61	0.08	9.86	33.05	46.00	-12.95	Average	NEUTRAL
8	0.78	17.87	9.61	0.08	9.86	37.42	56.00	-18.58	QP	NEUTRAL
9	1.94	14.12	9.61	0.07	9.86	33.66	46.00	-12.34	Average	NEUTRAL
10	1.94	18.65	9.61	0.07	9.86	38.19	56.00	-17.81	QP	NEUTRAL
11	3.53	12.59	9.62	0.09	9.87	32.17	46.00	-13.83	Average	NEUTRAL
12	3.53	21.40	9.62	0.09	9.87	40.98	56.00	-15.02	QP	NEUTRAL

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

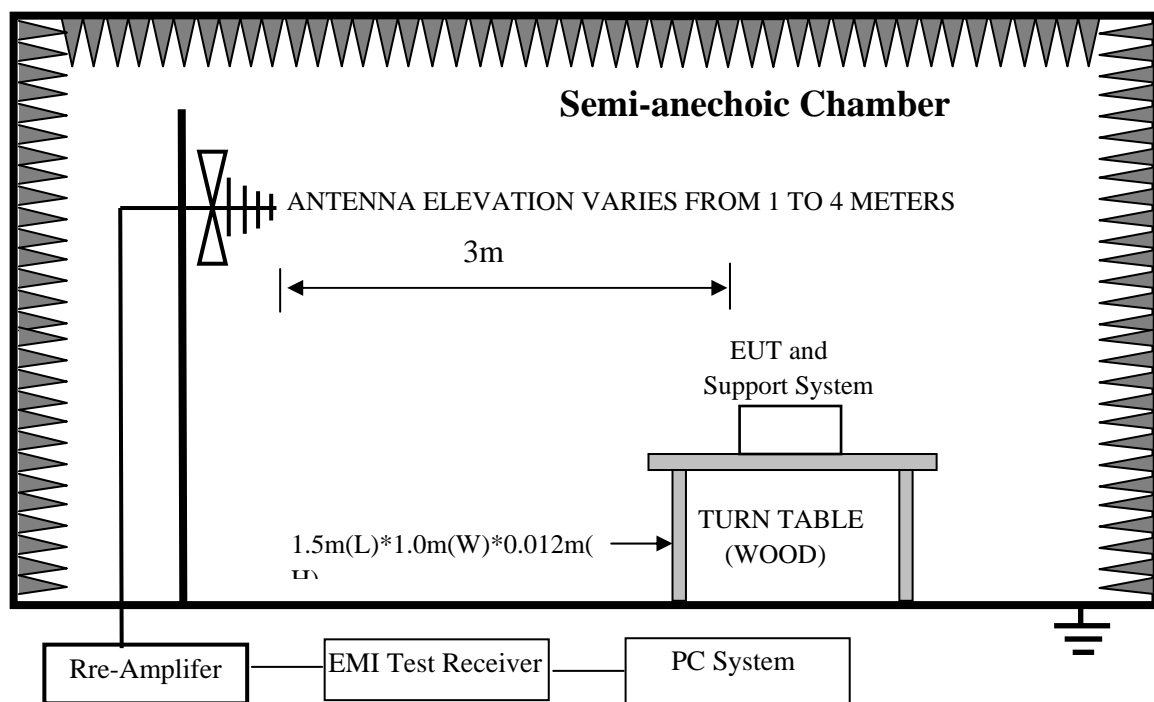
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

## 4. Radiated emission test

### 4.1. Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	EMI Test Receiver	R&S	ESU8	100316	2014/10/25	1Year
2	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2015/05/30	1 Year
3	RF Cable	HUBSER	CP-X2	W11.03	2014/10/25	1Year
4	Test software	Audix	E3	V 6.11111b	/	/

### 4.2. Block diagram of test setup



### 4.3. Radiated emission limit(Class B)

Frequency (MHz)	Distance (Meters)	Field Strengths Limits dB( $\mu$ V)/m
30--88	3	40.0
88--216	3	43.5
216--960	3	46.0
960--1000	3	54.0

Note: (1) The smaller limit shall apply at the cross point between two frequency bands.

(2) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



## 4.4. Test Procedure

### Procedure of Preliminary Test

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 12cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 4.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

Mains cables, telephone lines or other connections to auxiliary equipment located outside the test are shall drape to the floor, be fitted with ferrite clamps or ferrite tubes placed on the floor at the point where the cable reaches the floor and then routed to the place where they leave the turntable. No extension cords shall be used to mains receptacle.

The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.

The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

The test mode(s) described in clause 2.4 were scanned during the preliminary test:

After the preliminary scan, we found the test mode producing the highest emission level. The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

### Procedure of Final Test

EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.

The Analyzer / Receiver scanned from 30MHz to 1000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.

The test data of the worst-case condition(s) was recorded.

The bandwidth setting of the test receiver is 120 kHz.

## 4.5. Test result

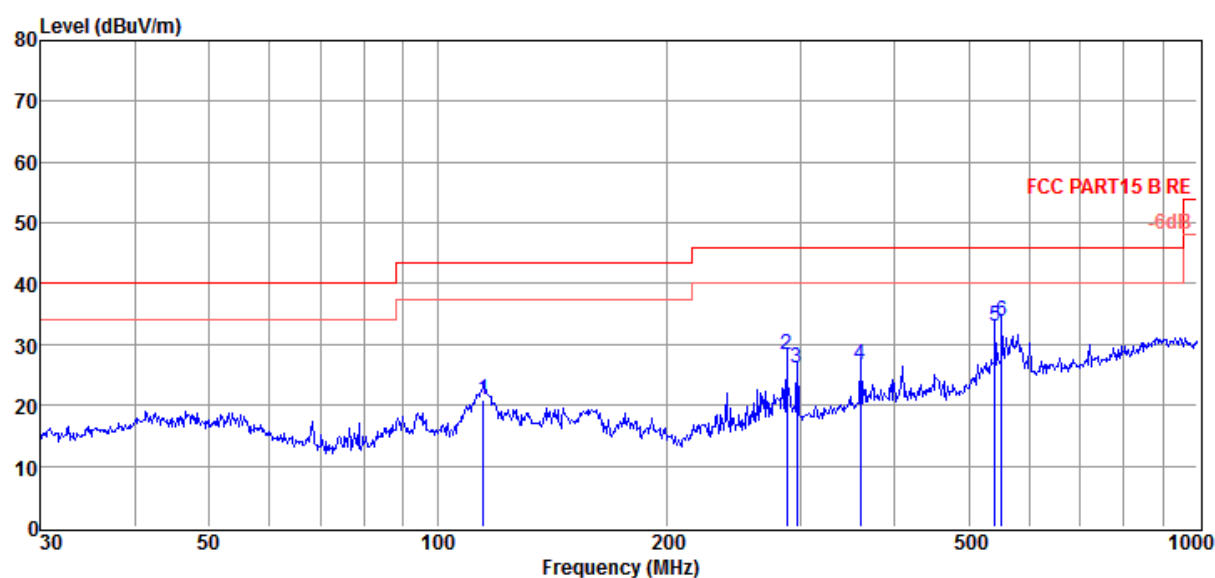
### PASS. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

## TR-4-E-009 Radiated Emission Test Result

<b>Test Site</b>	: DDT 3m Chamber	<b>E:\2015 Report Data\15Q0819-3\RE.EM6</b>
<b>Test Date</b>	: 2015-08-21	<b>Tested By</b> : Toby
<b>EUT</b>	: Wearable Video Camera	<b>Model Number</b> : LE4 mini
<b>Power Supply</b>	: AC 120V/60Hz	<b>Test Mode</b> : Charging
<b>Condition</b>	: Temp:24.5'C,Humi:55%, Press:100.1kPa	<b>Antenna/Distance</b> : 2014 VULB 9163/3m/HORIZONTAL
<b>Memo</b>	: Adapter: PS30-AM501A-V	

Data: 5



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	114.92	8.14	11.10	1.54	20.78	43.50	-22.72	QP	HORIZONTAL
2	287.99	11.49	14.25	2.67	28.41	46.00	-17.59	QP	HORIZONTAL
3	297.22	9.46	13.83	2.69	25.98	46.00	-20.02	QP	HORIZONTAL
4	360.45	8.62	14.98	3.07	26.67	46.00	-19.33	QP	HORIZONTAL
5	541.37	12.45	16.81	3.77	33.03	46.00	-12.97	QP	HORIZONTAL
6	552.88	12.70	17.21	3.84	33.75	46.00	-12.25	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

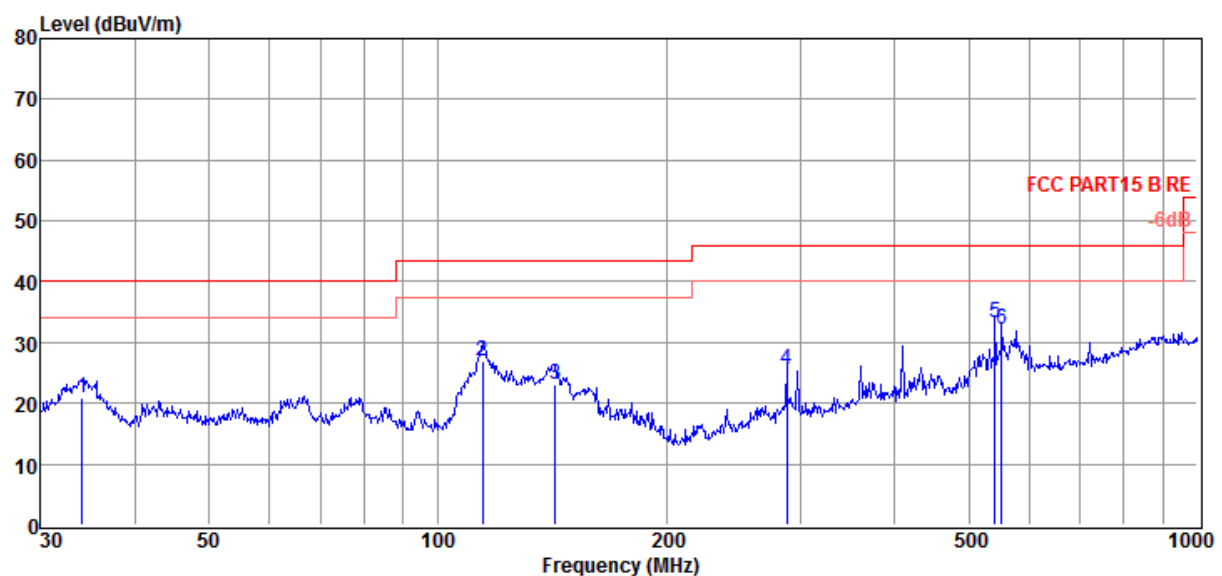
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

<b>Test Site</b>	: DDT 3m Chamber	<b>E:\2015 Report Data\15Q0819-3\RE.EM6</b>
<b>Test Date</b>	: 2015-08-21	<b>Tested By</b> : Toby
<b>EUT</b>	: Wearable Video Camera	<b>Model Number</b> : LE4 mini
<b>Power Supply</b>	: AC 120V/60Hz	<b>Test Mode</b> : Charging
<b>Condition</b>	: Temp:24.5'C,Humi:55%, Press:100.1kPa	<b>Antenna/Distance</b> : 2014 VULB 9163/3m/VERTICAL
<b>Memo</b>	: Adapter: PS30-AM501A-V	

Data: 6



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	34.04	7.65	12.30	0.94	20.89	40.00	-19.11	QP	VERTICAL
2	114.52	14.28	11.10	1.54	26.92	43.50	-16.58	QP	VERTICAL
3	142.82	12.60	8.83	1.72	23.15	43.50	-20.35	QP	VERTICAL
4	287.99	8.62	14.25	2.67	25.54	46.00	-20.46	QP	VERTICAL
5	541.37	12.59	16.81	3.77	33.17	46.00	-12.83	QP	VERTICAL
6	552.88	11.14	17.21	3.84	32.19	46.00	-13.81	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

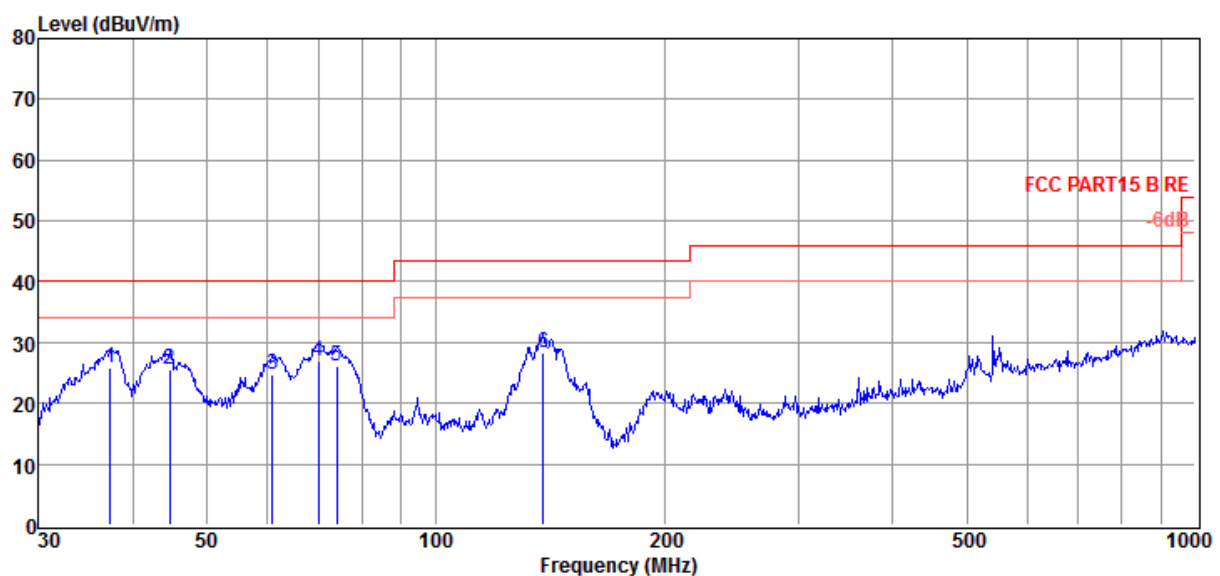
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

<b>Test Site</b>	: DDT 3m Chamber	<b>E:\2015 Report Data\15Q0819-3\RE.EM6</b>
<b>Test Date</b>	: 2015-08-21	<b>Tested By</b> : Toby
<b>EUT</b>	: Wearable Video Camera	<b>Model Number</b> : LE4 mini
<b>Power Supply</b>	: AC 120V/60Hz	<b>Test Mode</b> : Charging
<b>Condition</b>	: Temp:24.5'C,Humi:55%, Press:100.1kPa	<b>Antenna/Distance</b> : 2014 VULB 9163/3m/VERTICAL
<b>Memo</b>	: Adapter: HK-AP-050A100-US	

Data: 7



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	37.29	11.78	13.15	0.96	25.89	40.00	-14.11	QP	VERTICAL
2	44.59	9.72	14.90	1.04	25.66	40.00	-14.34	QP	VERTICAL
3	60.92	11.42	12.10	1.13	24.65	40.00	-15.35	QP	VERTICAL
4	70.09	16.68	9.10	1.21	26.99	40.00	-13.01	QP	VERTICAL
5	74.14	17.68	7.20	1.26	26.14	40.00	-13.86	QP	VERTICAL
6	138.39	17.73	8.90	1.67	28.30	43.50	-15.20	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

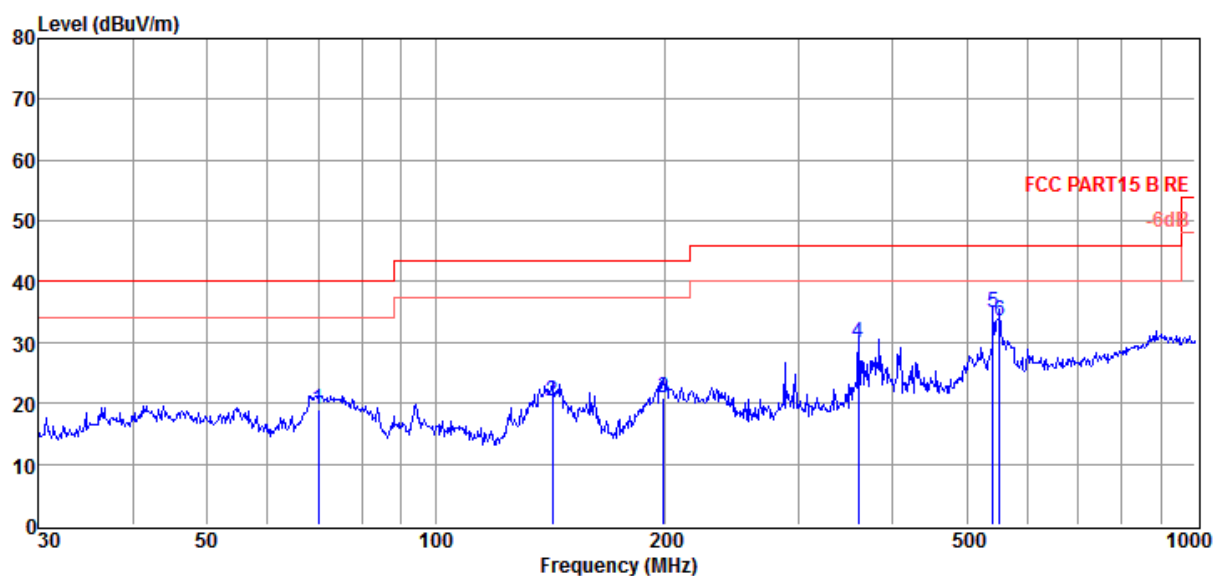
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2015 Report Data\15Q0819-3\RE.EM6**  
**Test Date** : 2015-08-21 **Tested By** : Toby  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : AC 120V/60Hz **Test Mode** : Charging  
**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa **Antenna/Distance** : 2014 VULB 9163/3m/HORIZONTAL  
**Memo** : Adapter: HK-AP-050A100-US

Data: 8



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	70.09	8.54	9.10	1.21	18.85	40.00	-21.15	QP	HORIZONTAL
2	142.32	9.70	8.83	1.71	20.24	43.50	-23.26	QP	HORIZONTAL
3	199.29	8.85	9.80	2.15	20.80	43.50	-22.70	QP	HORIZONTAL
4	360.45	11.96	14.98	3.07	30.01	46.00	-15.99	QP	HORIZONTAL
5	541.37	14.24	16.81	3.77	34.82	46.00	-11.18	QP	HORIZONTAL
6	552.88	12.45	17.21	3.84	33.50	46.00	-12.50	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

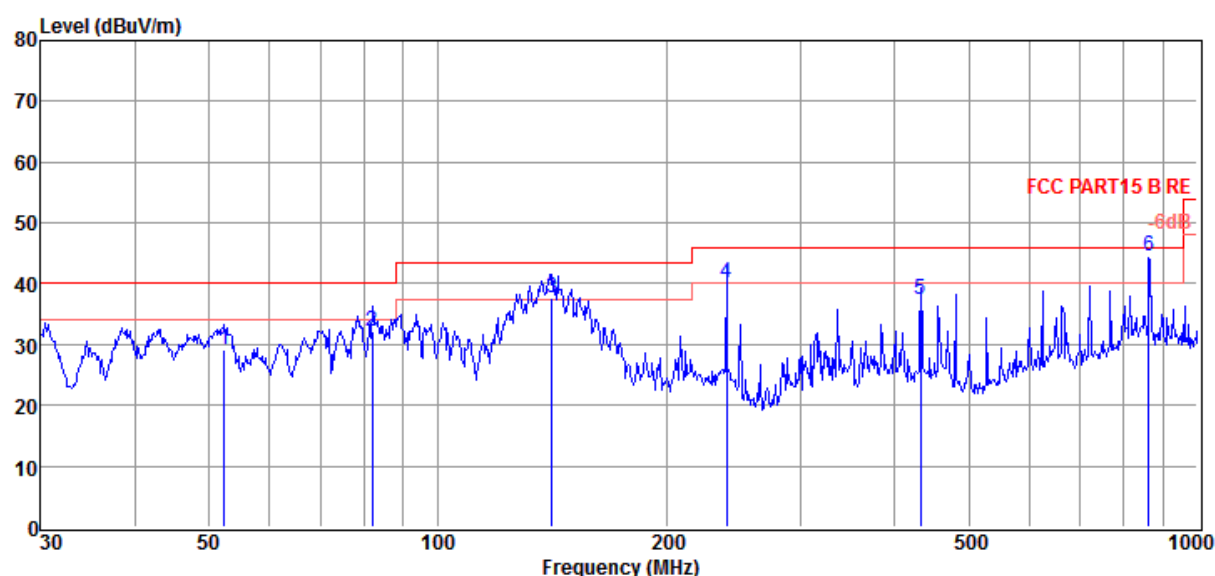
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2015 Report Data\15Q0819-3\RE.EM6**  
**Test Date** : 2015-08-24 **Tested By** : Toby  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini  
**Power Supply** : DC 5V from notebook **Test Mode** : Data transmitting  
**Condition** : Temp:24.5°C,Humi:55%,  
Press:100.1kPa **Antenna/Distance** : 2014 VULB 9163/3m/VERTICAL  
**Memo** :

Data: 23



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	52.39	13.88	14.20	1.08	29.16	40.00	-10.84	QP	VERTICAL
2	82.07	21.74	9.15	1.37	32.26	40.00	-7.74	QP	VERTICAL
3	141.33	27.01	8.83	1.70	37.54	43.50	-5.96	QP	VERTICAL
4	239.99	26.20	11.70	2.32	40.22	46.00	-5.78	QP	VERTICAL
5	432.55	18.17	15.93	3.33	37.43	46.00	-8.57	QP	VERTICAL
6	863.97	18.10	21.60	4.89	44.59	46.00	-1.41	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

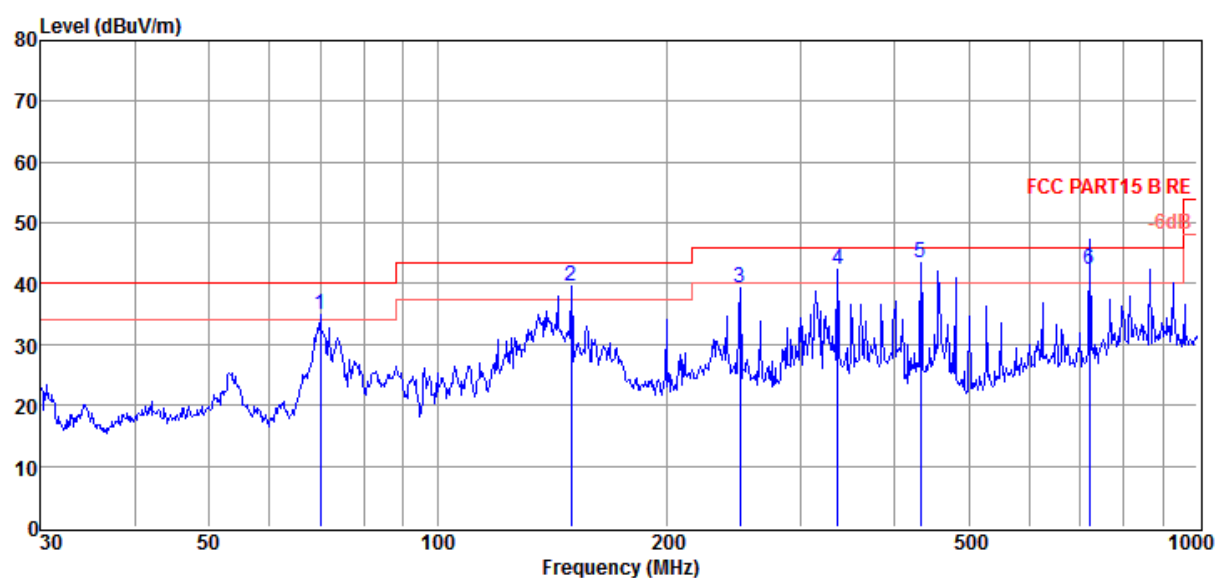
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2015 Report Data\15Q0819-3\RE.EM6  
**Test Date** : 2015-08-24 **Tested By** : Toby  
**EUT** : Wearable Video Camera **Model Number** : LE4 mini 1#  
**Power Supply** : DC 5V from notebook **Test Mode** : Data transmitting  
**Condition** : Temp:24.5°C,Humi:55%,  
**Antenna/Distance** : 2014 VULB 9163/3m/HORIZONTAL  
**Memo** :

Data: 24



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	70.09	24.72	9.10	1.21	35.03	40.00	-4.97	QP	HORIZONTAL
2	150.01	29.22	8.60	1.82	39.64	43.50	-3.86	QP	HORIZONTAL
3	250.30	25.59	11.40	2.43	39.42	46.00	-6.58	QP	HORIZONTAL
4	336.04	25.49	14.14	2.84	42.47	46.00	-3.53	QP	HORIZONTAL
5	432.55	24.27	15.93	3.33	43.53	46.00	-2.47	QP	HORIZONTAL
6	721.73	19.00	18.87	4.45	42.32	46.00	-3.68	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## Appendix I

### Regulatory Statement and Label Marking Advice for the FCC Verification

#### 1. Marking Suggested for the label:

Trade Name and model number

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### 2. Statement suggested for the User Manual:

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

Notes: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: If shielded cables or special accessories are required for compliance, a statement must be included which instructs the user to employ them, for example, Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

**END OF REPORT**