



**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART 15 SUBPART C REQUIREMENT
OF**

INTRA ORAL CAMERA

MODEL No.: ME-15

BRAND NAME: EVIEW

FCC ID: QPEEVIEWME15TX

REPORT NO: 020080-RF-ID

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Prepared for

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1. GENERAL INFORMATION

1.1 Product Description

The EVIEW Inc. Model: ME-15 (referred to as the EUT in this report) The EUT is an short range, lower power, designed as an " wireless video sender device". It is designed by way of utilizing the FM modulation achieves the system operating.

A major technical descriptions of EUT is described as following:

- A). Operation Frequency: 2453 MHz, 1 channel.
- B). Modulation: Frequency Modulation (FM)
- C). Antenna Designation: Non-User Replaceable (Fixed)
- D). Power Supply: 6 Vdc by chargeable from a AC/DC Power adaptor.

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **QPEEVIEWME15TX** filing to comply with Section 15.249 of the FCC Part 15, Subpart C Rules. The composite system (receiver) is compliance with Subpart B is authorized under a DoC procedure.

1.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (1992). Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the address of C&C Laboratory, Co., Ltd. No. 81-1, 210 Lane, Pa-de 2nd Road, Lu-Chu Hsiang, Taoyuan, Taiwan, R.O.C.. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 1992 and CISPR 22/EN 55022 requirements.

1.5 Special Accessories

Not available for this EUT intended for grant.

1.6 Equipment Modifications

Not available for this EUT intended for grant.



2. System Test Configuration

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The Transmitter was operated in the normal operating mode. the Tx frequency was fixed which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on a table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4-1992. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

2.3.2 Radiated Emissions

The EUT is a placed on a turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, according to the requirements in Section 13.1.4.1 of ANSI C63.4-1992.

2.4 Limitation

(1) Conducted Emission

According to section 15.207(a) Conducted Emission Limits is as following.

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 – 0.5	66 - 56	56 - 46
0.5 – 5	56	46
5 - 30	60	50

(2) Radiated Emission 15.249(a)

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following.

Frequency (MHz)	Field strength of Fundamental	Field strength of Harmonics	Distance(m)
902 - 928	50 mV/m (94dBuV/m)	500 uV/m (54dBuV/m)	3
2400 – 2483.5	50 mV/m (94dBuV/m)	500 uV/m (54dBuV/m)	3
5725 – 5875	50 mV/m (94dBuV/m)	500 uV/m (54dBuV/m)	3
24.0 – 24.25 GHz	250 mV/m (107.95dBuV/m)	2500 uV/m (67.95dBuV/m)	3

(3) Radiated Emission 15.249(d)

Emission Radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in Section 15.209 as below, whichever is the lesser attenuation.

Frequency (MHz)	Field strength $\mu\text{V/m}$	Distance(m)	Field strength at 3m $\text{dB}\mu\text{V/m}$
1.705-30	30	30	69.54
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

(4) Radiated Emission 15.249(e)

For frequencies above 1000MHz, the above field strength limits are based on average limits. The peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20dB under any condition of modulation.

- Remark:
1. Emission level in $\text{dB}\mu\text{V/m} = 20 \log (\mu\text{V/m})$
 2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
 3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of § 15.205
 4. Emission spurious frequency which appearing within the Restricted Bands specified in provision of § 15.205, then the general radiated emission limits in § 15.209 apply.

2.5 Configuration of Tested System

Fig. 2-1 Configuration of TX

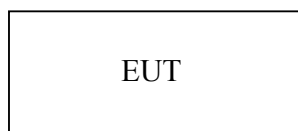


Fig. 2-2 Configuration of Video Mode

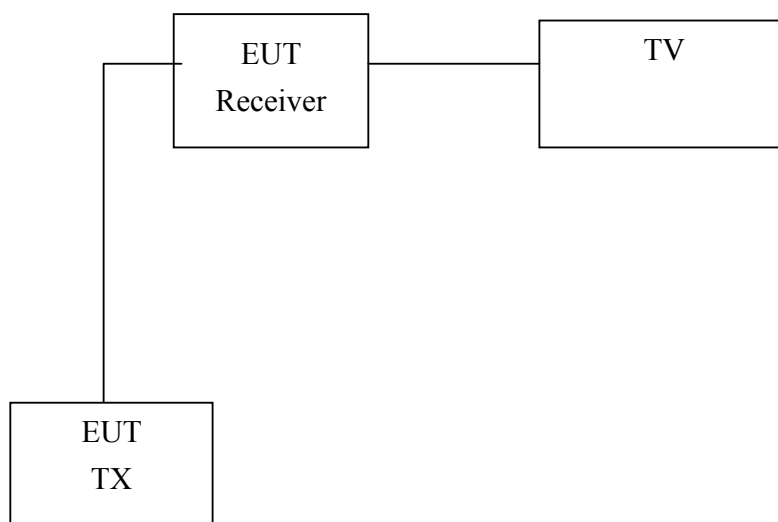


Table 2-1 Equipment Used in Tested System

No.	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
1.	INTRA ORAL CAMERA (RX)	EVIEW	ME-15	QPEEVIEWME15TX	N/A	<i>EUT</i>
2.	INTRA ORAL CAMERA (TX)	EVIEW	ME-15	QPEEVIEWME15TX	N/A	<i>EUT</i>
3.	TV	PROTON	FT-21S	N/A	FT-21S00002 CA00112	

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

3. Summary Of Test Results

FCC Rules	Description Of Test	Result
§15.207	Conducted Emission	Compliant
§15.249(a)(e)	Radiated Emission	Compliant
§15.249(d)	26dB band width Measurement	Compliant

Description of test modes

The EUT (INTRA ORAL CAMERA) has been tested under normal operating condition. The EUT stay in continuous mode as below. The Frequency 2453MHz of transmitting mode, battery charge and video mode were chosen for testing. The video signal is transmitted by cable in video model.



4. Conducted Emissions Test

4.1 Measurement Procedure:

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

4.2 Test SET-UP (Block Diagram of Configuration)

4.3 Measurement Equipment Used:

Conducted Emission Test Site # 4					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EMI Test Receiver	R&S	ESCS30	847793/012	12/19/2001	12/18/2002
LISN	R&S	ENV 4200	830326/016	02/08/2002	02/07/2003
LISN	EMCO	3825/2	9003/1382	02/18/2002	02/17/2003
Spectrum Analyzer	ADVANTEST	R3261AN	31720234	08/06/2002	08/05/2003
2X2 WIRE ISN	R&S	ENY22	100020	06/20/2002	06/19/2003
FOUR WIRE ISN	R&S	ENY41	100006	06/20/2002	06/19/2003



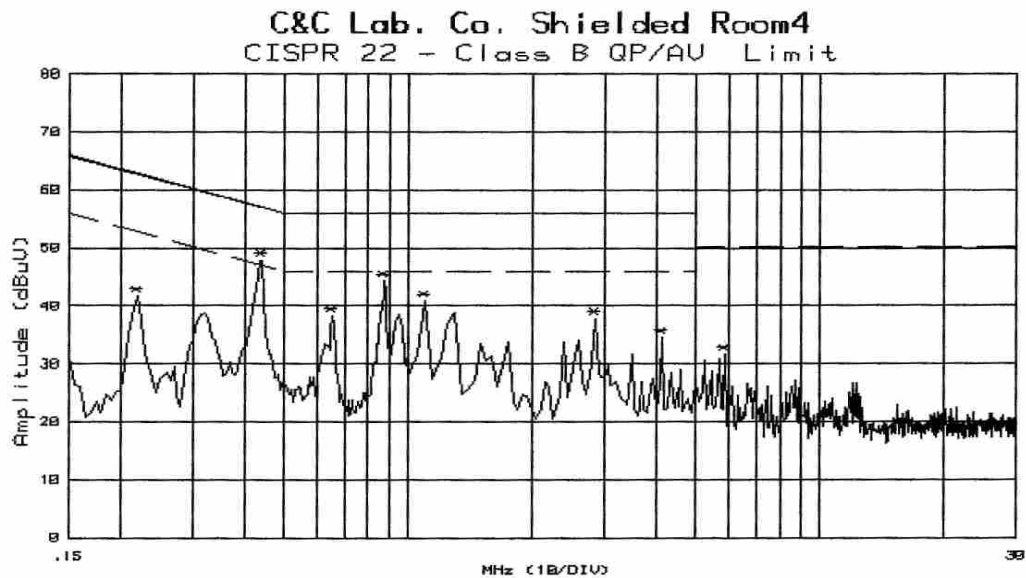
4.4 Measurement Result:

Operation Mode: Battery Charge Mode Test Date : Oct. 25, 2002
 Fundamental Frequency: 2453 MHz Test By: Markba
 Temperature : 27 °C Humidity : 67 %
 Judgement : Passed by -3.56 dB at 0.44 MHz At L1

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Safe Margins	
		QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note
0.220	L1	41.70	---	62.82	52.82	-21.12	(QP)
0.440	L1	47.90	43.50	57.06	47.06	-3.56	(AV)
0.655	L1	38.30	---	56.00	46.00	-17.70	(QP)
0.875	L1	44.20	---	56.00	46.00	-11.80	(QP)
1.100	L1	40.90	---	56.00	46.00	-15.10	(QP)
2.85	L1	37.80	---	56.00	46.00	-18.20	(QP)
0.325	L2	44.20	---	59.58	49.58	-15.38	(QP)
0.445	L2	44.30	---	56.97	46.97	-12.67	(QP)
0.655	L2	39.60	---	56.00	46.00	-16.40	(QP)
0.885	L2	43.40	---	56.00	46.00	-12.60	(QP)
0.975	L2	42.60	---	56.00	46.00	-13.40	(QP)
2.650	L2	34.90	---	56.00	46.00	-21.10	(QP)

Remark :

- (1) Measuring frequencies from 0.15 MHz to 30MHz .
- (2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.
- (3) “---” denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.
- (4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

Conducted Emission. Test data Plot

Customer: E-VIEW

Model : me-15

Mode :

Reading : Peak (R&S Receiver)

Remark :

File#: 4160

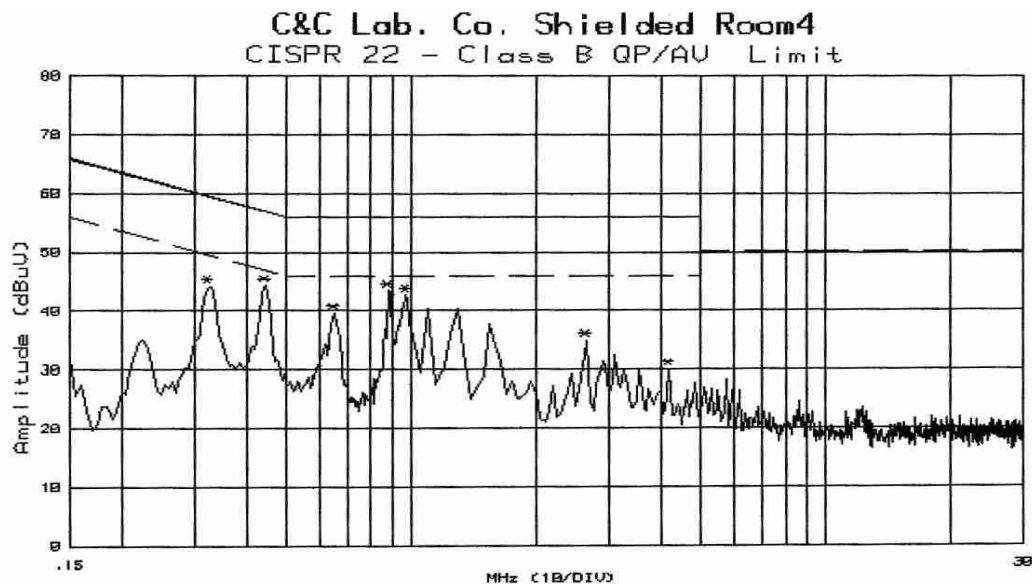
Humd.: 65 (%)

Port : L1

Date : 25 Oct 2002 17:27:06

Temp. : 25 (C)

Tested by: EDIT



Customer: E-VIEW

Model : me-15

Mode :

Reading : Peak (R&S Receiver)

Remark :

File#: 4163

Humd.: 65 (%)

Port : L2

Date : 25 Oct 2002 17:59:42

Temp. : 25 (C)

Tested by:



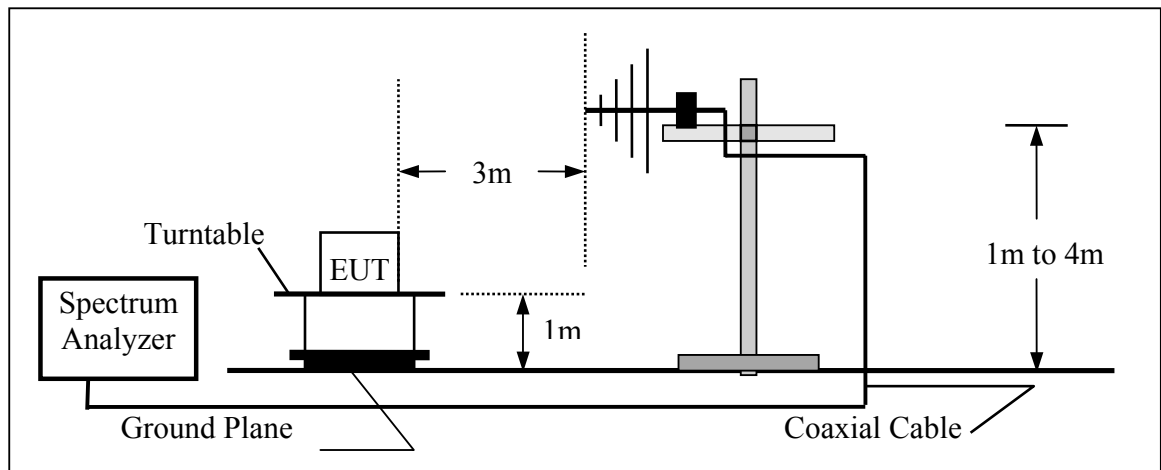
5. Radiated Emission Test

5.1 Measurement Procedure

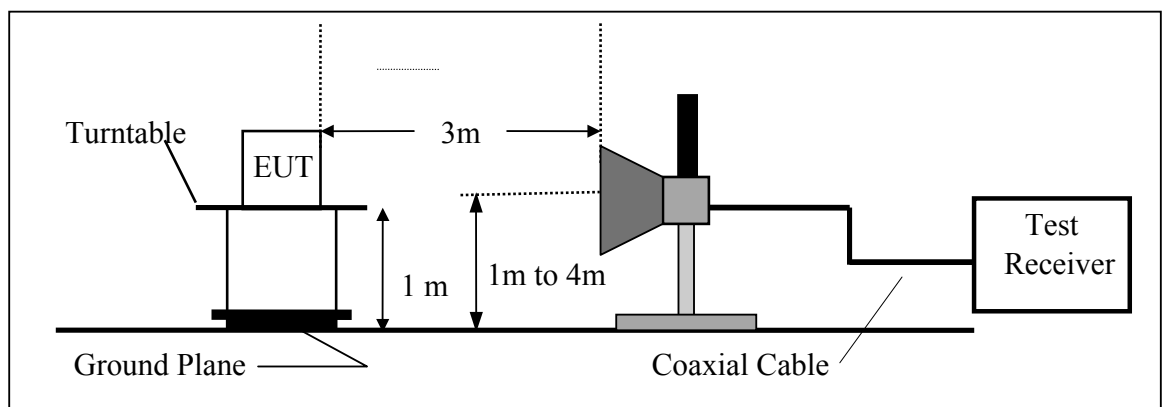
- 1.The EUT was placed on a turntable that is 0.8m above ground plane.
- 2.Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3.And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 4.Repeat above procedures until all frequency measured were complete.

5.2 Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(B) Radiated Emission Test Set-UP Frequency Over 1 GHz





5.3 Measurement Equipment Used:

Open Area Test Site # 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Loop Antenna	EMCO	6502	2356	07/11/2002	07/10/2003
Bilog Antenna	SCHWAZBECK	VULB9163	145	07/06/2002	07/05/2003
Horn antenna	SCHWAZBECK	BBHA 9120	D210	2/24/2002	2/23/2003
Spectrum Analyzer	ADVANTEST	R3261A	N/A	03/19/2002	03/18/2003
Spectrum Analyzer	R&S	FSP30	100112	05/29/2002	05/28/2003
EMI Test Receiver	R&S	ESVS20	838804/004	01/05/2002	01/04/2003
Pre-Amplifier	HP	8447D	2944A09173	03/04/2002	03/03/2003
Pre-Amplifier	HP	8449B	3008B00965	10/01/2001	10/01/2003
RF Switch	ANRITSU	MP59B	M53867	N.C.R	N.C.R
Turn Table	EMCO	2081-1.21	9709-1885	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2060	N.C.R	N.C.R
Controller	EMCO	2090	9709-1256	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	09/07/2002	09/06/2003

5.4 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	



5.5 Measurement Result

Operation Mode: TX Mode
 Fundamental Frequency: 2453 MHz
 Temperature : 26 °C
 Humidity : 68 %

Test Date : Nov. 18, 2002

Test By: Markba

Pol: Vertical

Judgment : Passed by -0.75 dB at 530.32 MHz Ant.Pol. Ver. EUT Axis Y

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Detector Mode (PK/AV)
414.86	S	22.87	20.39	20.56	43.43	40.95	46.00	46.00	-2.57	Peak
472.59	S	23.68	21.27	21.23	44.91	42.50	46.00	46.00	-1.09	Peak
500.75	S	22.46	20.26	22.54	45.00	42.80	46.00	46.00	-1.00	Peak
530.32	S	21.67	19.62	23.58	45.25	43.20	46.00	46.00	-0.75	Peak
558.48	S	19.40	17.04	24.46	43.86	41.50	46.00	46.00	-2.14	Peak
572.56	S	18.80	16.43	24.77	43.57	41.20	46.00	46.00	-2.43	Peak

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Detector Mode (PK/AV)
2452.0	F	86.18	--	-5.93	80.25	--	114.00	94.00	-13.75	Peak
4900.0	S	56.34	52.50	0.37	56.71	52.87	74.00	54.00	-1.13	AV
7356.0	S	--	--			0.00	74.00	54.00		
9808.0	S	--	--			0.00	74.00	54.00		
12260.0	S	--	--			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: TX Mode
 Fundamental Frequency: 2453 MHz
 Temperature : 26 °C
 Humidity : 68 %

Test Date : Nov. 18, 2002
 Test By: Markba
 Pol: Horizontal

Judgement : Passed by -5.0 dB at 35.00 MHz Ant.Pol. Hor. EUT Axis Y

Freq. (MHz)	F/S	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode (PK/AV)
35.00	S	22.38	12.62	35.00	40.00	-5.00	Peak
102.00	S	14.13	13.87	28.00	43.50	-15.50	Peak
500.75	S	--	22.54		46.00	-46.00	
530.32	S	--	23.58		46.00	-46.00	
558.48	S	--	24.46		46.00	-46.00	
572.56	S	--	24.77		46.00	-46.00	

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Detector Mode (PK/AV)
2452.0	F	79.74	--	-5.93	73.81	--	114.00	94.00	-20.19	Peak
4900.0	S	49.83	33.40	0.37	50.20	33.77	74.00	54.00	-20.23	AV
7356.0	S	--	--			0.00	74.00	54.00		
9808.0	S	--	--			0.00	74.00	54.00		
12260.0	S	--	--			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: TX Mode
 Fundamental Frequency: 2453 MHz
 Temperature : 26 °C
 Humidity : 68 %

Test Date : Nov. 18, 2002
 Test By: Markba
 Pol: Vertical

Judgement : Passed by -2.9 dB at 35.00 MHz Ant.Pol. Ver. EUT Axis X

Freq. (MHz)	F/S	Reading (dBuV)	Ant./CL/ Amp CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode
35.00	S	24.48	12.62	37.10	40.00	-2.90	Peak
149.76	S	11.14	11.12	22.26	43.50	-21.24	Peak
500.75	S	--	22.54		46.00	-46.00	
530.32	S	--	23.58		46.00	-46.00	
558.48	S	--	24.46		46.00	-46.00	
572.56	S	--	24.77		46.00	-46.00	

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Detector Mode (PK/AV)
2452.0	F	93.87	--	-5.94	87.93	--	114.00	94.00	-6.07	Peak
4900.0	S	50.48	--	0.37	50.85	--	74.00	54.00	-3.15	Peak
7356.0	S	--	--			0.00	74.00	54.00		
9808.0	S	--	--			0.00	74.00	54.00		
12260.0	S	--	--			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: TX Mode
 Fundamental Frequency: 2453 MHz

Test Date : Nov. 18, 2002

Test By: Markba

Temperature : 26 °C

Pol: Horizontal

Humidity : 68 %

Judgement : Passed by -3.20 dB at 35.0 MHz Ant.Pol. Hor. EUT Axis X

Freq. (MHz)	F/S	Reading (dBuV)	Ant./CL/ Amp CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode (PK/AV)
35.00	S	24.18	12.62	36.80	40.00	-3.20	Peak
149.76	S	11.03	11.12	22.15	43.50	-21.35	Peak
500.75	S	--	22.54		46.00	-46.00	
530.32	S	--	23.58		46.00	-46.00	
558.48	S	--	24.46		46.00	-46.00	
572.56	S	--	24.77		46.00	-46.00	

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Margin (dB)	Detector Mode (PK/AV)
2452.0	F	80.39	--	-5.93	74.46	--	114.00	94.00	-19.54	Peak
4900.0	S	52.65	48.90	0.37	53.02	49.27	74.00	54.00	-4.73	AV
7356.0	S	--	--			0.00	74.00	54.00		
9808.0	S	--	--			0.00	74.00	54.00		
12260.0	S	--	--			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: Video Mode

Test Date : Nov. 18, 2002

Fundamental Frequency: N/A

Test By: Markba

Temperature : 26 °C

Pol: Vertical

Humidity : 68 %

Judgement : Passed by -3.34 dB at 323.34 MHz Ant.Pol. Ver. EUT Axis X

Freq. (MHz)	F/S	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode
299.91	S	19.91	16.68	36.59	46.00	-9.41	Peak
323.34	S	25.35	17.31	42.66	46.00	-3.34	Peak
345.87	S	21.44	17.92	39.36	46.00	-6.64	Peak
626.06	S	13.35	25.11	38.46	46.00	-7.54	Peak
664.08	S	15.23	25.13	40.36	46.00	-5.64	Peak
680.97	S	13.15	25.43	38.58	46.00	-7.42	Peak

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Detector Margin Mode (dB) PK/AV
2452.0	F	--	--	-5.94	--	--	114.00	94.00	
4900.0	S	--	--	0.37	--	--	74.00	54.00	
7356.0	S	--	--		0.00	0.00	74.00	54.00	
9808.0	S	--	--		0.00	0.00	74.00	54.00	
12260.0	S	--	--		0.00	0.00	74.00	54.00	

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: Video Mode

Test Date : Nov. 18, 2002

Fundamental Frequency: N/A

Test By: Markba

Temperature : 26 °C

Pol: Horizontal

Humidity : 68 %

Judgement : Passed by -6.13 dB at 757.00 MHz Ant.Pol. Hor. EUT Axis X

Freq. (MHz)	E/S	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode (PK/AV)
300.53	S	17.78	16.69	34.47	46.00	-11.53	Peak
323.34	S	21.37	17.31	38.68	46.00	-7.32	Peak
648.59	S	13.40	24.89	38.29	46.00	-7.71	Peak
702.09	S	11.87	25.77	37.64	46.00	-8.36	Peak
757.00	S	13.95	25.92	39.87	46.00	-6.13	Peak
810.51	S	11.38	26.38	37.76	46.00	-8.24	Peak

Freq. (MHz)	E/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Detector Margin (dB)	Mode (PK/AV)
2452.0	F	--	--	-5.93		--	114.00	94.00		
4900.0	S	--	--	0.37		0.37	74.00	54.00		
7356.0	S	--	--			0.00	74.00	54.00		
9808.0	S	--	--			0.00	74.00	54.00		
12260.0	S	--	--			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: Battery Charge Mode

Test Date : Nov. 18, 2002

Fundamental Frequency: N/A

Test By: Markba

Temperature : 26 °C

Pol: Vertical

Humidity : 68 %

Judgement : Passed by -1.13 dB at 4900 MHz Ant.Pol. Ver. EUT Axis Y

Freq. (MHz)	F/S	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode
89.38	S	15.45	11.93	27.38	43.50	-16.12	Peak
141.60	S	16.47	10.91	27.38	43.50	-16.12	Peak
168.80	S	16.68	12.06	28.74	43.50	-14.76	Peak

Freq. (MHz)	F/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AV FS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AV Limit at 3m (dBuV/m)	Detector Margin (dB)	Mode (PK/AV)
2452.0	F	--	--	-5.94		-5.94	114.00	94.00		
4900.0	S	--	--	0.37		0.37	74.00	54.00		
7356.0	S	--	--			0.00	74.00	54.00		
9808.0	S	--	--			0.00	74.00	54.00		
12260.0	S	--	--			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



Operation Mode: Battery Charge Mode

Test Date : Nov. 18, 2002

Fundamental Frequency: N/A

Test By: Markba

Temperature : 26 °C

Pol: Horizontal

Humidity : 68 %

Judgement : Passed by -1.13 dB at 4900 MHz Ant.Pol. Ver. EUT Axis Y

Freq. (MHz)	E/S	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	DetectorMode (PK/AV)
30.63	S	23.84	13.16	37.00	40.00	-3.00	Peak
36.61	S	22.14	13.25	35.39	40.00	-4.61	Peak
87.75	S	9.14	11.51	20.65	40.00	-19.35	Peak
149.22	S	11.84	11.11	22.95	43.50	-20.55	Peak

Freq. (MHz)	E/S	Peak Reading (dBuV)	AV Reading (dBuV)	CF (dB)	Actual Peak FS (dBuV/m)	Actual AVFS (dBuV/m)	Peak Limit at 3m (dBuV/m)	AVLimit at 3m (dBuV/m)	Margin (dB)	Detector Mode (PK/AV)
2452.0	F	-	-	-5.93		-5.93	114.00	94.00		
4900.0	S	-	-	0.37		0.37	74.00	54.00		
7356.0	S	-	-			0.00	74.00	54.00		
9808.0	S	-	-			0.00	74.00	54.00		
12260.0	S	-	-			0.00	74.00	54.00		

Remark :

- (1) + F/S F : denotes Fundamental Frequency ; S : denotes Spurious Frequency
- (2) EUT Orthogonal Axes : X denotes Laid on Table ; Y denotes Vertical Stand .
- (3) Measuring frequencies from 30 MHz to the 26GHz .
- (4) Datas of measurement within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (6) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column .
- (7) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 5GHz, RBW= 1MHz, VBW= 1MHz, Sweep time= 200 ms



6 26 dB Band Width Measuremnet

6.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set ETU normal operating mode.
3. Set SPA Center Frequency = fundamental frequency , RBW,VBW= 100KHz, Span =20MHz.
4. Set SPA Max hold. Mark peak, -26dB.

6.2 Test SET-UP (Block Diagram of Configuration)

Same as 4.2 Radiated Emission Measurement.

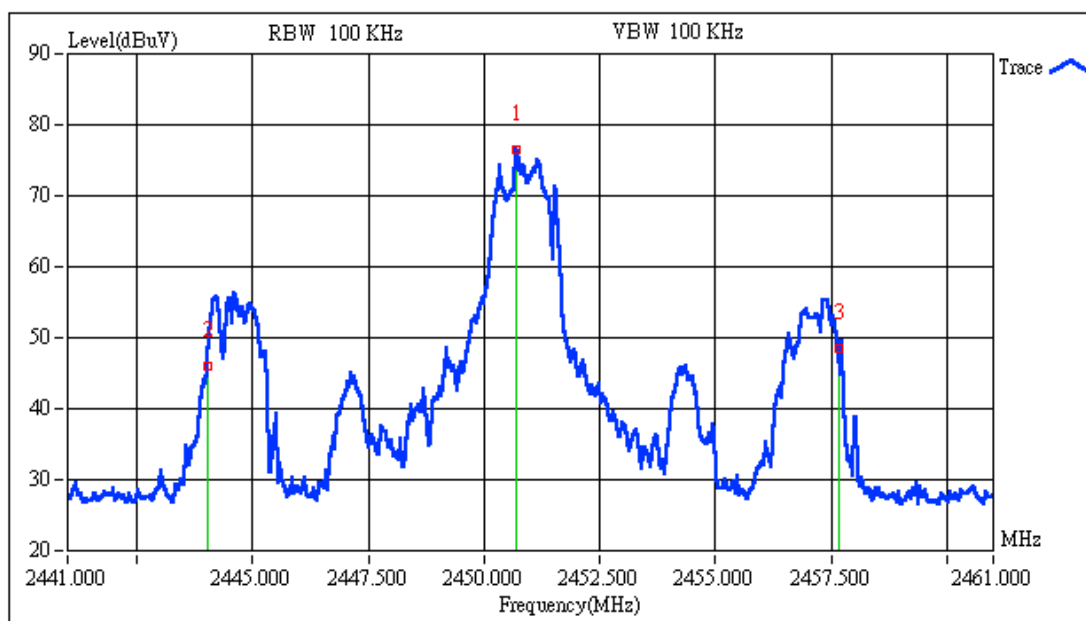
6.3 Measurement Equipment Used:

Same as 4.2 Radiated Emission Measurement.

6.4 Measurement Results:

26dB Bandwidth = 13.72 MHz

Refer to attached data chart.



Custom Name:

EVIEW

Engineer:

Peak 0.00 MHz

Band Width

0.00 dBuV

13.720 MHz

Model Name:

ME15

Report No.:

Delta1 2444.04 MHz

Delta2 2457.76 MHz

Test Mode:

TX

46.06 dBuV

49.47 dBuV