

Test Report For

Applicant : **Jesmay Electronics Co., Ltd.**
Equipment Type : **Viedo Sender**
Model : **2065R**
FCC ID : **NOQJM2065R**

Report No. : 999H016FI



Test Report Certification

QuieTek Corporation

No.75-1, Wang-Yeh Valley, Yung-Hsing, Chiung-Lin,
Hsin-Chu County, Taiwan, R.O.C.

Tel : 886-3-592-8858, Fax: 886-3-592-8859

E-Mail : quietek@ms24.hinet.net

Accredited by NIST(NVLAP), VCCI, BSMI, DNV, TUV

Applicant : [Jesmay Electronics Co., Ltd.](#)
Address : [74, Chung-Der 20th Street, Tainan, Taiwan, R.O.C.](#)
Equipment Type : [Viedo Sender](#)
Model : [2065R](#)
FCC ID. : [NOQJM2065R](#)
Measurement Standard : [FCC Part 15](#)
[418MHz Intentional Radiators for Subpart C Paragraph 15.231](#)
Measurement Procedure : [ANSI C63.4 /1992](#)
Operation Voltage : [120VAC/60Hz](#)
Test Result : [Complied](#)
Test Date : [September 15, 1999](#)
Report No. : [999H016FI](#)



The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuiteTek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented by: Zoe Lee

Test Engineer: Calien Kang

Approved: Gene Chang



TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION.....	4
1.1 EUT Description	4
1.2 Tested System Details.....	5
1.3 EUT Configuration.....	5
1.4 EUT Exercise Software.....	6
1.5 Test performed	6
1.6 Test Facility	7
2. CONDUCTED EMISSION.....	8
2.1 Test Equipment List.....	8
2.2 Test Setup	8
2.3 Limits	8
2.4 Test Procedure.....	9
2.5 Test Results.....	9
3. RADIATED EMISSION	10
3.1 Test Equipment	10
3.2 Test Setup	10
3.3 Limits	11
3.4 Test Procedure.....	12
3.5 Test Results.....	12
4. EMI REDUCTION METHOD DURING COMPLIANCE TESTING	13
5. ATTACHMENT	14
ATTACHMENT 1: SUMMARY OF TEST RESULTS	
ATTACHMENT 2: EUT TEST PHOTOGRAPHS	
ATTACHMENT 3: EUT DETAIL PHOTOGRAPHS	



1. General Information

1.1 EUT Description

Applicant : Jesmay Electronics Co., Ltd.
Address : 74, Chung-Der 20th Street, Tainan, Taiwan, R.O.C.
Equipment Type : Viedo Sender
Model : 2065R
FCC ID : NOQJM2065R
Working Frequency : 418 MHz
Operation Voltage : 120VAC/60Hz
Audio/Video RCA Cable : Non-shielded, 1.8m
Power Adapter : HON-KWANG, D7-10-01
Cable Out: Non-shielded, 1.7m

Remark :

1. This device is a 2.4GHz wireless Video Sender included a 2.4GHz receiving function, a 418MHz transmitting function, an Audio/Video port and a RF output.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart B Paragraph 15.115 and Subpart C Paragraph 15.231.
3. This device is a composite device in accordance with Part 15 regulations. The function for the 2.4GHz receiving was, measured and made a test report that the report number is 995040F, certified under Verification. The function for connecting to personal computer was, measured and made a test report that the report number is 995041F, certified under Declaration of Conformity.



1.2 Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

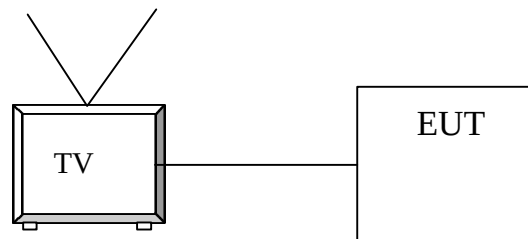
1.2.1 Viedo Sender (EUT)

Model Number	: 2065R
Serial Number	: N/A
FCC ID	: NOQJM2065R
Manufacturer	: JESMAY

1.2.2 TV

Model Number	: kV-14NX
Manufacturer	: SONY
Serial Number	: 103125
BSMI ID	: 3863A019
Power Cord	: Non-shielded, 1.8m

1.3 EUT Configuration



1.4 EUT Exercise Software

The EUT exercise program used during conducted testing was designed to exercise the EUT in a manner similar to a typical use. The exercise sequence is listed as below:

1.4.1 Setup the EUT and simulators as shown on 1.3.

1.4.2 Turn on the power of all equipment.

1.4.3 The EUT will operate in typical operation.

1.4.4 Repeat the above procedure 1.4.2 to 1.4.4

1.5 Test performed

Conducted emissions were investigated over the frequency range from **0.15MHz to 30MHz** using a receiver bandwidth of 9kHz.

Radiated emissions were investigated over the frequency range from **30MHz to 1000MHz** using a receiver bandwidth of 120kHz and the frequency range above **1GHz** using a receiver bandwidth of 1MHz.

Radiated testing was performed at an antenna to EUT distance of **3 meters**.



1.6 Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: November 3, 1998 File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Reference 31040/SIT1300F2



September 30, 1998 Accreditation on NVLAP
NVLAP Lab Code: 200347-0

February 23, 1999 Accreditation on DNV
Statement No. : 413-99-LAB11



December 8, 1998 Registration on VCCI
Registration No. for No.2 Shielded Room C-858
Registration No. for No.1 Open Area Test Site R-823
Registration No. for No.2 Open Area Test Site R-835



January 04, 1999 Accreditation on TÜV Rheinland
Certificate No.: I9865712-9901



Name of firm : QuieTek Corporation

Site location : No.75-1, Wang-Yeh Valley, Yung-Hsing Tsuen,
Chiung-Lin, Hsin-Chu County, Taiwan, R.O.C.



2. Conducted Emission

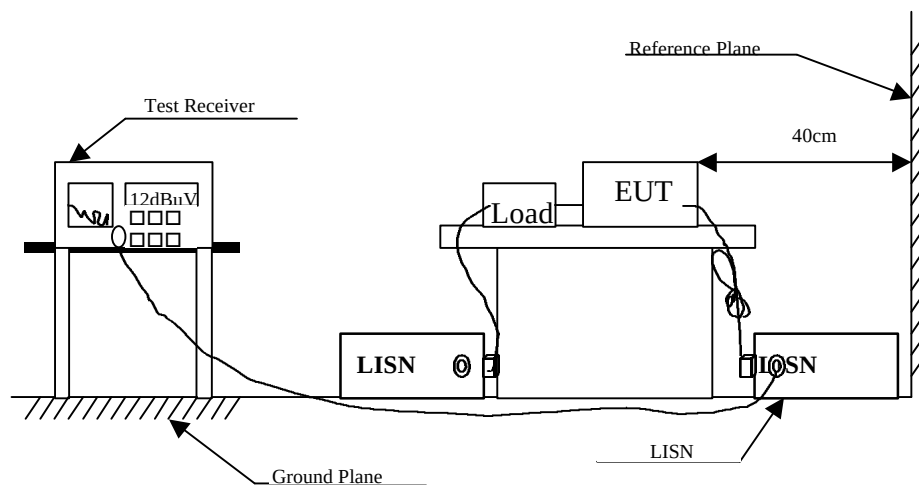
2.1 Test Equipment List

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal..	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 1999	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 1999	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 1999	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	N/A	
5	N0.2 Shielded Room			N/A	

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.2 Test Setup



2.3 Limits

FCC Part 15 Paragraph 15.207 (dBuV)		
Frequency MHz	Limits	
	uV	dBuV
0.45 - 30	250	48.0

2.4 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4 /1992 on conducted measurement.

The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

2.5 Test Results

The conducted emission from the EUT is measured and shown in attachment 1. The acceptance criterion was met and the EUT passed the test.



3. Radiated Emission

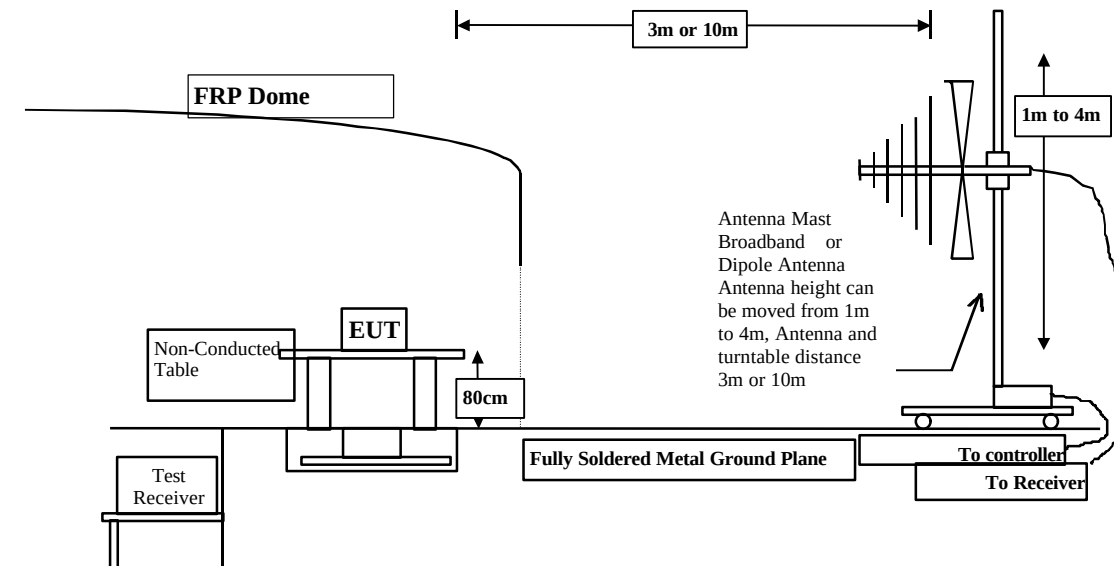
3.1 Test Equipment

The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 1	X	Test Receiver	R & S	ESCS 30 / 825442/14	May, 1999
		Spectrum Analyzer	Advantest	R3261C / 71720140	May, 1999
		Pre-Amplifier	HP	8447D/3307A01812	May, 1999
	X	Bilog Antenna	Chase	CBL6112B / 12452	Sep., 1999
	X	Horn Antenna	EM	EM6917 / 103325	May, 1999
Site # 2	X	Test Receiver	R & S	ESCS 30 / 825442/17	May, 1999
		Spectrum Analyzer	Advantest	R3261C / 71720609	May, 1999
		Pre-Amplifier	HP	8447D/3307A01814	May, 1999
	X	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 1999
	X	Horn Antenna	EM	EM6917 / 103325	May, 1999

- Note: 1. All equipment upon which need to calibrated are with calibration period of 1 year.
2.. Mark "X" test instruments are used to measure the final test results.

3.2 Test Setup



3.3 Limits

FCC Part 15 Subpart C Paragraph 15.231 Limit

Fundamental Frequency MHz	Field strength of fundamental		Field Strength of spurious emissions	
	uV/m	dBuV/m	uV/m	dBuV/m
40.66-40.70	2250	67.0	225	47.0
70-130	1250	61.9	125	41.9
130-174	1250-3750 ¹	61.9 – 71.5	125-375 ¹	41.9 – 51.5
174-260	3750	71.5	375	51.5
260-470	3750-12500 ¹	71.5 – 81.9	375-1250 ¹	51.5 – 61.9
above 470	12500	81.9	1250	61.9

Remarks :/ 1. RF Line Voltage (dBuV) = 20 log RF Line Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Frequencies in restricted band are complied to limits on Paragraph 15.209.

Frequency MHz	15.209 Limits (dBuV/m @3m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Remarks : 1. RF Line Voltage (dBuV) = 20 log RF Line Voltage (uV)
2. In the above table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.



3.4 Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters .

The antenna can move 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 measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4 /1992 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30) is 120 kHz and above 1GHz is 1MHz.

3.5 Test Results

The radiated emission from the EUT is measured and shown in attachment 1. The acceptance criterion was met and the EUT passed the test.



4. EMI Reduction Method During Compliance Testing

No modification was made during testing.



5. **Attachment**

Attachment 1: Summary of Test Results	Number of Pages: 8
Attachment 2: EUT Test Photographs	Number of Pages: 2
Attachment 3: EUT detailed photographs	Number of Pages: 17

