

FC

Test Report

Product Name	VFD Combo
Model No.	MS-6874
FCC ID.	I4L-MS6874

Applicant	MICRO-STAR INT'L Co., LTD.
Address	No. 69, Li-De St., Jung-He City, Taipei Hsien, Taiwan, R.O.C.

Date of Receipt	Dec. 22, 2006
Issued Date	Jan. 25, 2007
Report No.	06CL130-RFUSP06V01

The Test Results relate only to the samples tested.

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

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

Test Report Certification

Issued Date: Jan. 25, 2007

Report No.: 06CL130-RFUSP06V01



Product Name	VFD Combo
Applicant	MICRO-STAR INT'L Co., LTD.
Address	No. 69, Li-De St., Jung-He City, Taipei Hsien, Taiwan, R.O.C.
Manufacturer	MICRO-STAR INT'L Co., LTD.
Model No.	MS-6874
FCC ID.	I4L-MS6874
Rated Voltage	AC 120V/60Hz
Working Voltage	DC 5V (via USB)
Trade Name	MSI
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2005 ANSI C63.4: 2003
Test Result	Complied



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Documented By : Rita Huang
(Rita Huang)



Tested By : Dino Chen
(Dino Chen)



Approved By : George Chen
(George Chen)

0914

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Attachment 1: EUT Test Photographs
 Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	VFD Combo
Trade Name	MSI
Model No.	MS-6874
FCC ID.	I4L-MS6874
Frequency Range	802.11b/g: 2412-2462MHz Bluetooth: 2402-2480MHz
Number of Channels	802.11b/g: 11 Bluetooth: 80
Data Rate	802.11b: 1 - 11Mbps, 802.11g: 6 - 54Mbps Bluetooth: 2Mbps
Type of Modulation	DSSS/OFDM
Antenna Type	Chip
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	YAGEO	CAN4311153002451K	4dBi for 2.4 GHz

Frequency of Each Channel (802.11b/g):

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2412 MHz	Channel 5:	2432 MHz	Channel 9:	2452 MHz
Channel 2:	2417 MHz	Channel 6:	2437 MHz	Channel 10:	2457 MHz
Channel 3:	2422 MHz	Channel 7:	2442 MHz	Channel 11:	2462 MHz
Channel 4:	2427 MHz	Channel 8:	2447 MHz		

Frequency of Each Channel (Bluetooth):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals

Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. The transmitter is presented with a continuous data stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its 79 channels and over the minimum number of hopping channels (75 channels).

The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Note:

1. The EUT is a VFD Combo with two built-in 2.4GHz transceivers.
2. These tests were conducted on a sample for demonstrating the compliance of Bluetooth with Part 15 Subpart C Paragraph 15.247.
3. Regarding to the operation frequency band, the lowest, middle, and highest frequency are selected to perform the test.
4. Quietek verified constructions and functions, which are shown in the test report, in typical operation.
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

1.2. Operational Description

The EUT is a VFD Combo with two built-in 2.4GHz transceivers. The EUT is a module that provides 802.11b/g and Bluetooth wireless connections. 802.11b/g supports 11 channels in 2412-2462MHz and the data rates of 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54Mbps. Bluetooth supports 79 channels in 2402-2480MHz and the data rate of 2Mbps. The signals of 802.11b/g are modulated by DSSS and OFDM. The signals of Bluetooth are modulated by FHSS. The antenna types are all chip.

Test Mode	Mode 1: Transmitter
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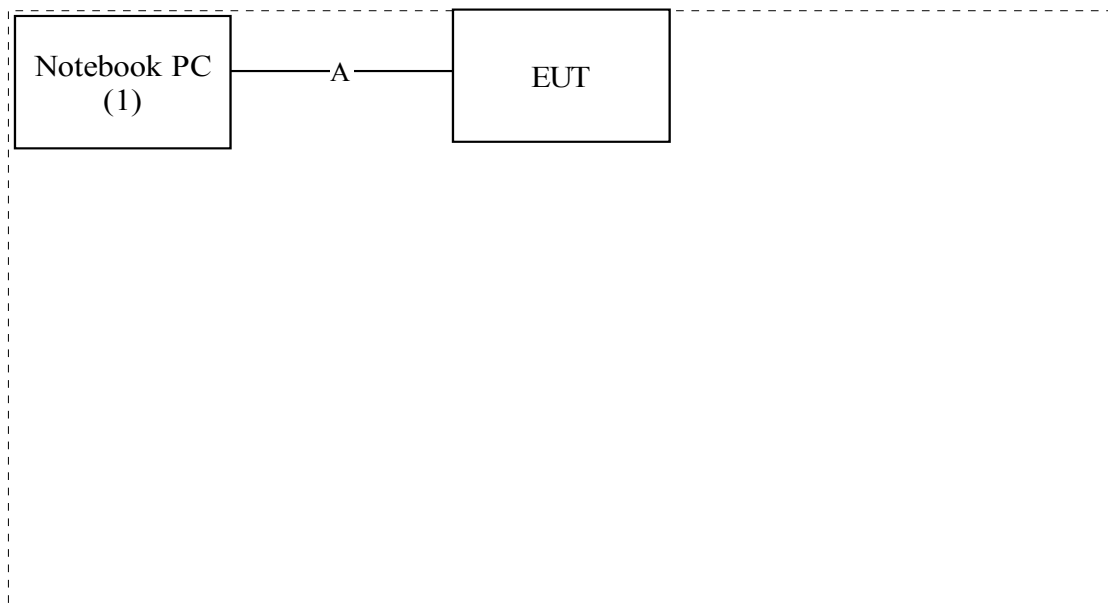
1.3. Test System Details

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

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
(1) Notebook PC	DELL	PP04X	2D2ZM1S	DoC	Non-Shielded, 0.8m

Signal Cable Type	Signal cable Description
A. USB Cable	Shielded, 0.5m

1.4. Configuration of Test System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in section 1.4
- (2) Execute QAU2571W.exe (the continuous transmission program of 802.11b/g) on the notebook.
- (3) Execute BlueTest.exe (the continuous transmission program of Bluetooth) on the notebook.
- (4) Setup the test mode, the test channel, and the data rate.
- (5) Press OK to start the transmission.
- (6) Verify that the EUT works correctly.

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	30-65
Barometric pressure (mbar)	860-1060	950-1000

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



Accreditation on NVLAP
 NVLAP Lab Code: 200533-0



Site Name: Quietek Corporation
 Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
 Lin-Kou Shiang, Taipei,
 Taiwan, R.O.C.
 TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
 E-Mail : service@quietek.com



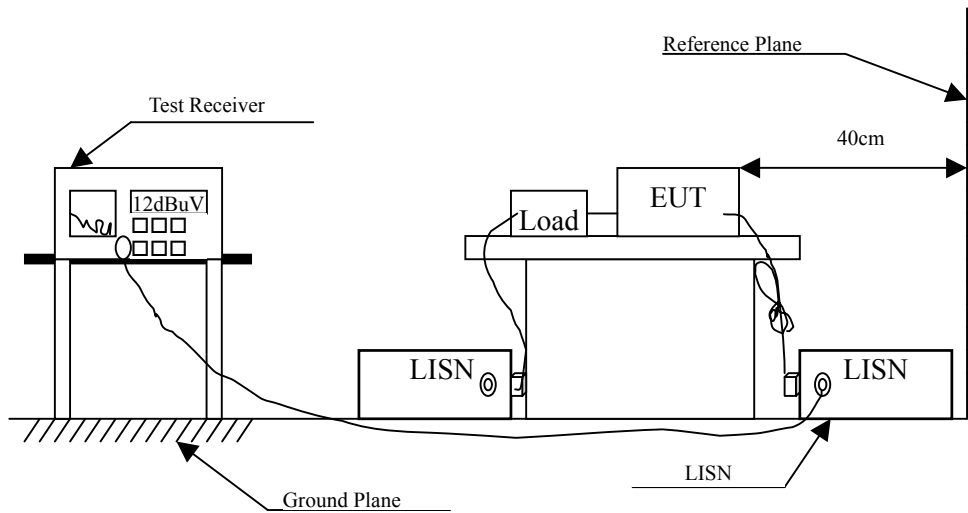
2. Conducted Emission

2.1. Test Equipment

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	EMI Test Receiver	R&S	ESCS 30/100367	Aug., 2006	
2	LISN	R&S	ESH3-Z5/836679/023	July, 2006	EUT
3	LISN	R&S	ESH3-Z5/836679/017	Feb., 2006	Peripherals
4	Pulse Limiter	R&S	ESH3-Z2/357.8810.52	Sep., 2006	
5	No.7 Shielded Room			N/A	

Note: All equipments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

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: 2003 on conducted measurement.

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

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : VFD Combo
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 1					
Quasi-Peak					
0.189	0.202	45.440	45.642	-19.244	64.886
0.310	0.214	40.200	40.414	-21.015	61.429
0.478	0.216	36.150	36.366	-20.263	56.629
0.627	0.218	37.860	38.078	-17.922	56.000
1.005	0.233	32.390	32.623	-23.377	56.000
4.841	0.394	21.740	22.134	-33.866	56.000
Average					
0.189	0.202	39.830	40.032	-14.854	54.886
0.310	0.214	34.060	34.274	-17.155	51.429
0.478	0.216	23.140	23.356	-23.273	46.629
0.627	0.218	31.520	31.738	-14.262	46.000
1.005	0.233	25.720	25.953	-20.047	46.000
4.841	0.394	16.030	16.424	-29.576	46.000

Note:

1. All reading levels are quasi-peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The 802.11b transmitter is enabled and the transmission is in 2437MHz.

Product : VFD Combo
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 2					
Quasi-Peak					
0.185	0.202	44.200	44.402	-20.598	65.000
0.322	0.214	41.620	41.834	-19.252	61.086
0.466	0.216	35.760	35.976	-20.995	56.971
0.638	0.218	36.350	36.568	-19.432	56.000
1.103	0.244	32.850	33.094	-22.906	56.000
2.982	0.309	25.970	26.279	-29.721	56.000
Average					
0.185	0.202	38.880	39.082	-15.918	55.000
0.322	0.214	34.230	34.444	-16.642	51.086
0.466	0.216	22.630	22.846	-24.125	46.971
0.638	0.218	31.280	31.498	-14.502	46.000
1.103	0.244	26.140	26.384	-19.616	46.000
2.982	0.309	19.880	20.189	-25.811	46.000

Note:

1. All reading levels are quasi-peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The 802.11b transmitter is enabled and the transmission is in 2437MHz.

Product : VFD Combo
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 1					
Quasi-Peak					
0.189	0.202	47.090	47.292	-17.594	64.886
0.298	0.214	37.550	37.764	-24.007	61.771
0.486	0.216	36.750	36.966	-19.434	56.400
0.974	0.232	33.470	33.702	-22.298	56.000
3.158	0.322	24.520	24.842	-31.158	56.000
6.228	0.453	18.890	19.343	-40.657	60.000
Average					
0.189	0.202	41.190	41.392	-13.494	54.886
0.298	0.214	25.790	26.004	-25.767	51.771
0.486	0.216	21.770	21.986	-24.414	46.400
0.974	0.232	23.160	23.392	-22.608	46.000
3.158	0.322	19.090	19.412	-26.588	46.000
6.228	0.453	13.110	13.563	-36.437	50.000

Note:

1. All reading levels are quasi-peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The 802.11g transmitter is enabled and the transmission is in 2437MHz.

Product : VFD Combo
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 2					
Quasi-Peak					
0.154	0.202	48.880	49.082	-16.804	65.886
0.189	0.202	47.210	47.412	-17.474	64.886
0.302	0.212	38.050	38.262	-23.395	61.657
0.408	0.215	37.180	37.395	-21.234	58.629
0.869	0.231	32.300	32.531	-23.469	56.000
2.939	0.309	26.040	26.349	-29.651	56.000
Average					
0.154	0.202	38.700	38.902	-16.984	55.886
0.189	0.202	41.590	41.792	-13.094	54.886
0.302	0.212	25.790	26.002	-25.655	51.657
0.408	0.215	29.290	29.505	-19.124	48.629
0.869	0.231	21.600	21.831	-24.169	46.000
2.939	0.309	19.640	19.949	-26.051	46.000

Note:

1. All reading levels are quasi-peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The 802.11g transmitter is enabled and the transmission is in 2437MHz.

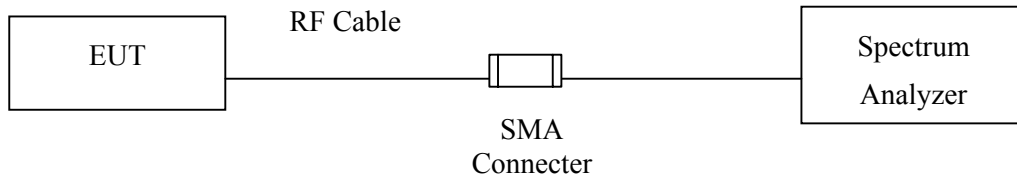
3. Peak Power Output

3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2006

Note: 1. All equipments are calibrated every one year.
 2. Test instruments marked by "X" are used to measure the final test results.

3.2. Test Setup



3.3. Limit

The maximum peak power shall be less 1Watt.

3.4. Uncertainty

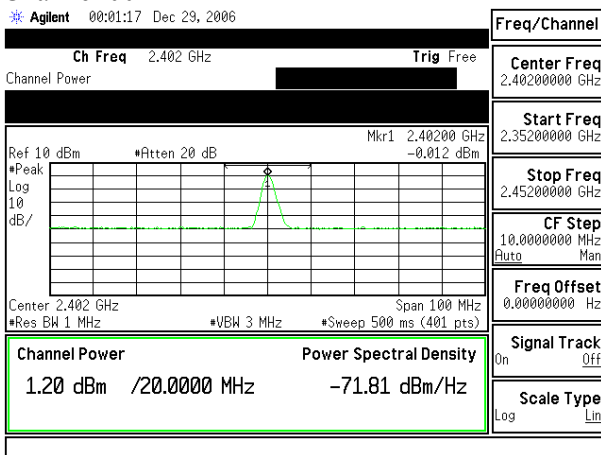
± 1.27 dB

3.5. Test Result of Peak Power Output

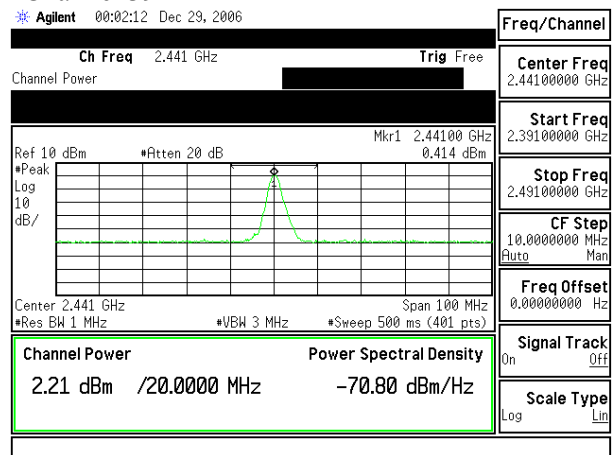
Product : VFD Combo
 Test Item : Peak Power Output
 Test Site : CTR1
 Test Mode : Mode 1: Transmitter

Channel No.	Frequency (MHz)	Measurement	Required Limit	Result
Channel 00	2402.00	1.20dBm	1 Watt= 30 dBm	Pass
Channel 39	2441.00	2.21dBm	1 Watt= 30 dBm	Pass
Channel 78	2480.00	0.40dBm	1 Watt= 30 dBm	Pass

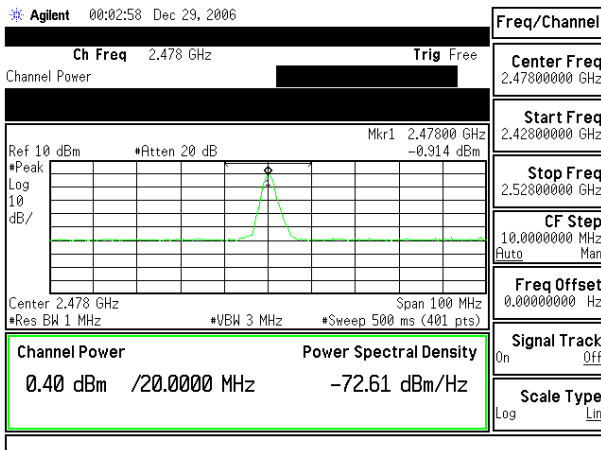
Channel 00



Channel 39



Channel 78



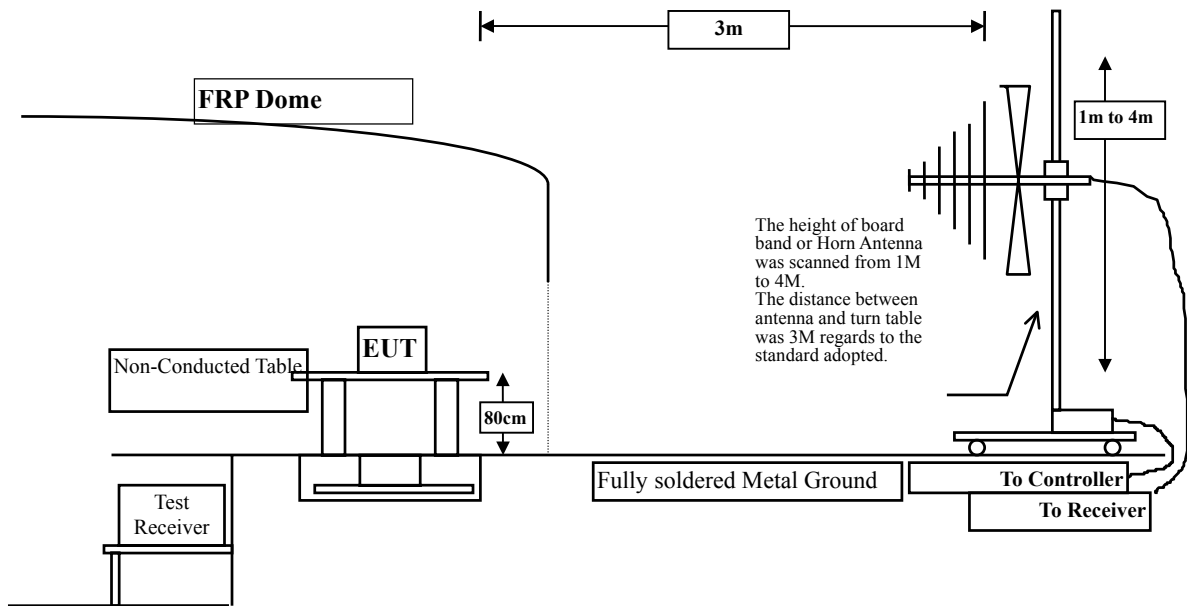
4. Radiated Emission

4.1. Test Equipment

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
<input type="checkbox"/> Site # 1		Test Receiver	R & S	ESVS 10 / 834468/003	May, 2006
		Spectrum Analyzer	Advantest	R3162/ 00803480	May, 2006
		Pre-Amplifier	Advantest	BB525C/ 3307A01812	May, 2006
		Bilog Antenna	SCHAFFNER	CBL6112B / 2697	Sep., 2006
<input type="checkbox"/> Site # 2		Test Receiver	R & S	ESCS 30 / 836858 / 022	May, 2006
		Spectrum Analyzer	Advantest	R3162 / 100803466	May, 2006
		Pre-Amplifier	Advantest	BB525C/3307A01814	May, 2006
		Bilog Antenna	SCHAFFNER	CBL6112B / 2705	May, 2006
		Horn Antenna	ETS	3115 / 0005-6160	Sep., 2006
		Pre-Amplifier	QTK	QTK-AMP-01/ 0001	May, 2006
<input checked="" type="checkbox"/> Site # 3	X	Test Receiver	R & S	ESI 26 / 838786/004	May, 2006
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2006
	X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2006
	X	Horn Antenna	Schwarzbeck	BBHA9120D / 305, 306	July, 2006
	X	Horn Antenna	Schwarzbeck	BBHA9170 / 208, 209	July, 2006
	X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2006
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2006
	X	Pre-Amplifier	HP	8449B / 3008A01123	July, 2006

- Note:
1. All equipments are calibrated every one year.
 2. Test equipments marked by "X" are used to measure the final test results.

4.2. Test Setup



4.3. Limits

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

- Remarks:
1. RF Voltage (dBuV) = 20 log RF 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.

4.4. 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: 2003 on radiated measurement.

The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field strength of harmonics measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

The frequency range from 30MHz to 10th harmonics is checked.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : VFD Combo
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 00)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4804.000	3.737	48.405	52.142	-21.858	74.000
4824.000	3.781	42.690	46.471	-27.529	74.000
7206.000	10.741	37.581	48.322	-25.678	74.000
7236.000	10.969	37.140	48.109	-25.891	74.000
9608.000	14.854	38.325	53.179	-20.821	74.000
9648.000	14.882	41.097	55.979	-18.021	74.000
Average Detector:					
9648.000	14.882	34.166	49.048	-4.952	54.000
Vertical					
Peak Detector:					
4804.000	3.737	46.149	49.886	-24.114	74.000
4824.000	3.781	42.967	46.748	-27.252	74.000
7206.000	10.741	37.442	48.183	-25.817	74.000
7236.000	10.969	38.291	49.260	-24.740	74.000
9608.000	14.854	37.757	52.611	-21.389	74.000
9648.000	14.882	40.377	55.259	-18.741	74.000
Average Detector:					
9648.000	14.882	33.491	48.373	-5.627	54.000

Note:

- All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
- Receiver setting (Avg Detector) : RBW:1MHz; VBW:30Hz (802.11b/g) or 3kHz (Bluetooth); Span:20MHz.
- Emission Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
- The 802.11b transmitter is enabled and the transmission is in 2412MHz.

Product : VFD Combo
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 39)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.913	40.812	44.725	-29.275	74.000
4882.000	3.932	45.469	49.401	-24.599	74.000
7311.000	11.547	37.226	48.773	-25.227	74.000
7323.000	11.633	37.479	49.111	-24.889	74.000
9748.000	14.260	40.229	54.489	-19.511	74.000
9764.000	13.740	36.458	50.198	-23.802	74.000
Average Detector:					
9748.000	14.260	33.310	47.570	-6.430	54.000
Vertical					
Peak Detector:					
4874.000	3.913	42.987	46.900	-27.100	74.000
4882.000	3.932	45.460	49.392	-24.608	74.000
7311.000	11.547	38.107	49.654	-24.346	74.000
7323.000	11.633	38.098	49.730	-24.270	74.000
9748.000	14.260	39.920	54.180	-19.820	74.000
9764.000	13.740	37.901	51.641	-22.359	74.000
Average Detector:					
9748.000	14.260	33.905	48.165	-5.835	54.000

Note:

- All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
- Receiver setting (Avg Detector) : RBW:1MHz; VBW:30Hz (802.11b/g) or 3kHz (Bluetooth); Span:20MHz.
- Emission Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
- The 802.11b transmitter is enabled and the transmission is in 2437MHz.

Product : VFD Combo
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 78)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	4.054	38.918	42.972	-31.028	74.000
4960.000	4.151	41.956	46.106	-27.894	74.000
7386.000	11.873	37.461	49.335	-24.665	74.000
7440.000	12.067	39.244	51.310	-22.690	74.000
9848.000	13.462	39.255	52.717	-21.283	74.000
9920.000	13.472	38.449	51.920	-22.080	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	4.054	41.984	46.038	-27.962	74.000
4960.000	4.151	43.344	47.494	-26.506	74.000
7386.000	11.873	36.827	48.701	-25.299	74.000
7440.000	12.067	39.162	51.228	-22.772	74.000
9848.000	13.462	39.162	52.624	-21.376	74.000
9920.000	13.472	40.058	53.529	-20.471	74.000
Average Detector:					
--					

Note:

- All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
- Receiver setting (Avg Detector) : RBW:1MHz; VBW:30Hz (802.11b/g) or 3kHz (Bluetooth); Span:20MHz.
- Emission Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
- The 802.11b transmitter is enabled and the transmission is in 2462MHz.

Product : VFD Combo
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 00)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4804.000	3.737	47.824	51.561	-22.439	74.000
4824.000	3.781	38.129	41.910	-32.090	74.000
7206.000	10.741	38.074	48.815	-25.185	74.000
7236.000	10.969	37.741	48.710	-25.290	74.000
9608.000	14.854	37.306	52.160	-21.840	74.000
9648.000	14.882	38.093	52.975	-21.025	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4804.000	3.737	47.271	51.008	-22.992	74.000
4824.000	3.781	39.102	42.883	-31.117	74.000
7206.000	10.741	37.554	48.295	-25.705	74.000
7236.000	10.969	37.974	48.943	-25.057	74.000
9608.000	14.854	38.743	53.597	-20.403	74.000
9648.000	14.882	39.551	54.433	-19.567	74.000
Average Detector:					
9648.000	14.882	30.987	45.869	-8.131	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (Avg Detector) : RBW:1MHz; VBW:30Hz (802.11b/g) or 3kHz (Bluetooth); Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
6. The 802.11g transmitter is enabled and the transmission is in 2412MHz.

Product : VFD Combo
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 39)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.913	38.369	42.282	-31.718	74.000
4882.000	3.932	44.918	48.850	-25.150	74.000
7311.000	11.547	37.859	49.406	-24.594	74.000
7323.000	11.633	37.553	49.185	-24.815	74.000
9748.000	14.260	37.384	51.644	-22.356	74.000
9764.000	13.740	37.022	50.762	-23.238	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	3.913	38.890	42.803	-31.197	74.000
4882.000	3.932	47.838	51.770	-22.230	74.000
7311.000	11.547	37.436	48.983	-25.017	74.000
7323.000	11.633	37.785	49.417	-24.583	74.000
9748.000	14.260	38.791	53.051	-20.949	74.000
9764.000	13.740	37.570	51.310	-22.690	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (Avg Detector) : RBW:1MHz; VBW:30Hz (802.11b/g) or 3kHz (Bluetooth); Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
6. The 802.11g transmitter is enabled and the transmission is in 2437MHz.

Product : VFD Combo
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 78)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	4.054	38.091	42.145	-31.855	74.000
4960.000	4.151	43.498	47.648	-26.352	74.000
7386.000	11.873	37.174	49.048	-24.952	74.000
7440.000	12.067	39.218	51.284	-22.716	74.000
9848.000	13.462	37.167	50.629	-23.371	74.000
9920.000	13.472	38.175	51.646	-22.354	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	4.054	38.492	42.546	-31.454	74.000
4960.000	4.151	43.432	47.582	-26.418	74.000
7386.000	11.873	37.821	49.695	-24.305	74.000
7440.000	12.067	38.301	50.367	-23.633	74.000
9848.000	13.462	37.006	50.468	-23.532	74.000
9920.000	13.472	41.038	54.509	-19.491	74.000
Average Detector:					
9920.000	13.472	33.596	47.067	-6.933	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (Avg Detector) : RBW:1MHz; VBW:30Hz (802.11b/g) or 3kHz (Bluetooth); Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
6. The 802.11g transmitter is enabled and the transmission is in 2462MHz.

Product : VFD Combo
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 39)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
119.725	12.953	25.628	38.581	-4.919	43.500
359.800	15.288	22.227	37.515	-8.485	46.000
481.050	18.786	21.964	40.750	-5.250	46.000
599.875	19.999	22.802	42.801	-3.199	46.000
721.125	20.929	17.921	38.850	-7.150	46.000
900.575	22.049	19.409	41.458	-4.542	46.000
Vertical					
119.725	11.494	26.746	38.240	-5.260	43.500
481.050	18.586	17.624	36.210	-9.790	46.000
599.875	21.898	16.646	38.544	-7.456	46.000
721.125	22.229	14.211	36.440	-9.560	46.000
839.950	21.403	19.481	40.884	-5.116	46.000
961.200	23.009	20.862	43.871	-10.129	54.000

Note:

- All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- “■” means the worst emission level.
- Measurement Level = Reading Level + Correct Factor.
- The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.
- The 802.11b transmitter is enabled and the transmission is in 2437MHz.

Product : VFD Combo
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 39)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
119.725	12.953	24.588	37.541	-5.959	43.500
359.800	15.288	21.259	36.547	-9.453	46.000
481.050	18.786	21.468	40.254	-5.746	46.000
599.875	19.999	22.675	42.674	-3.326	46.000
900.575	22.049	18.649	40.698	-5.302	46.000
961.200	22.909	21.338	44.247	-9.753	54.000
Vertical					
71.225	7.715	26.844	34.558	-5.442	40.000
119.725	11.494	26.047	37.541	-5.959	43.500
481.050	18.586	17.659	36.245	-9.755	46.000
599.875	21.898	16.516	38.414	-7.586	46.000
839.950	21.403	18.454	39.857	-6.143	46.000
961.200	23.009	20.212	43.221	-10.779	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.
5. The 802.11g transmitter is enabled and the transmission is in 2437MHz.

5. Band Edge

5.1. Test Equipment

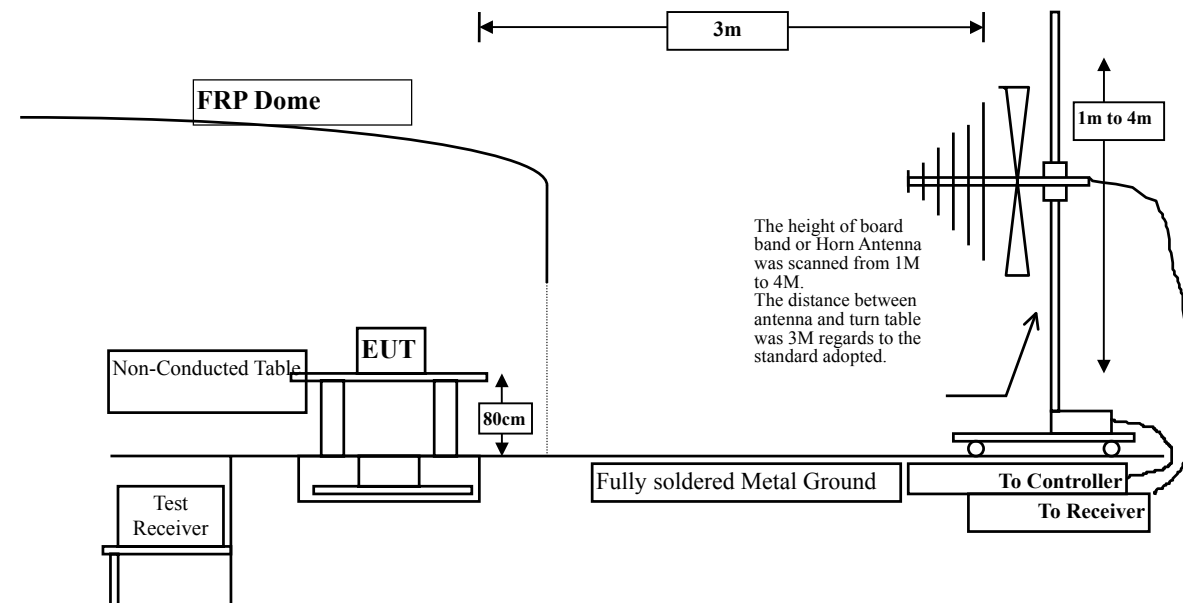
Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Test Receiver	R & S	ESI 26 / 838786/004	May, 2006
X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2006
X Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2006
X Horn Antenna	Schwarzbeck	BBHA9120D / 305, 306	July, 2006
X Horn Antenna	Schwarzbeck	BBHA9170 / 208, 209	July, 2006
X Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2006
X Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2006
X Pre-Amplifier	HP	8449B / 3008A01123	July, 2006

OATS No.3

- Note:
1. All equipments are calibrated every one year.
 2. The test equipments marked by “X” are used to measure the final test results.

5.2. Test Setup

RF Radiated Measurement:



5.3. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, 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(a) (see Section 15.205(c)).

5.4. 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 C63.4:2003 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

5.5. Uncertainty

± 3.9 dB above 1GHz

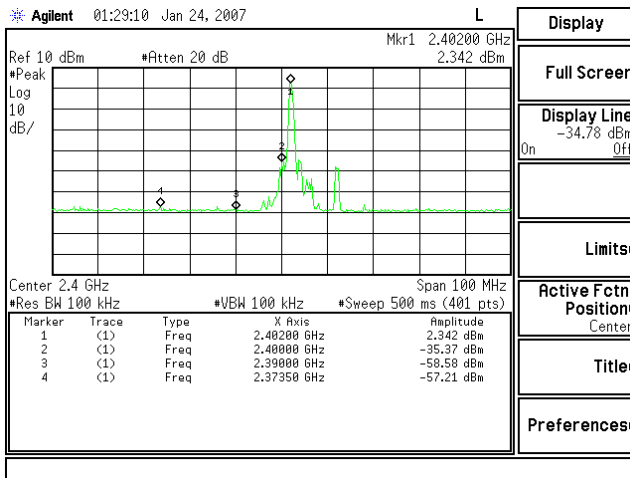
± 3.8 dB below 1GHz

5.6. Test Result of Band Edge

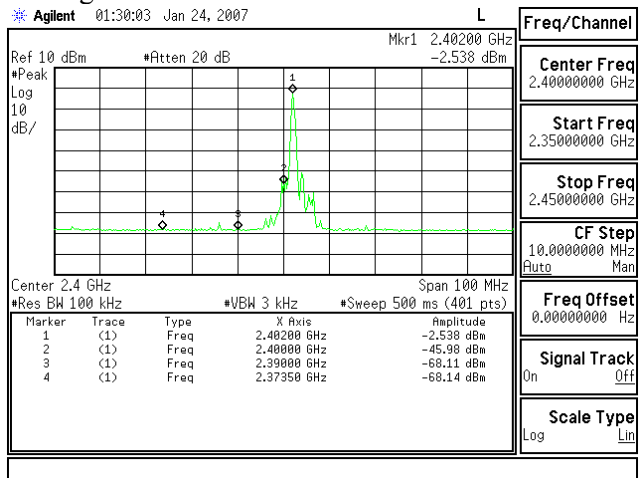
Product : VFD Combo
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 00)

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
00	<2400	>20	Pass

Peak



Average



Fundamental Field Strength:

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)
Horizontal				
00 (Peak)	2402.000	-2.217	93.829	91.612
00 (Avg)	2402.000	-2.217	93.171	90.954
Vertical				
00 (Peak)	2402.000	-2.217	95.032	92.815
00 (Avg)	2402.000	-2.217	94.776	92.559

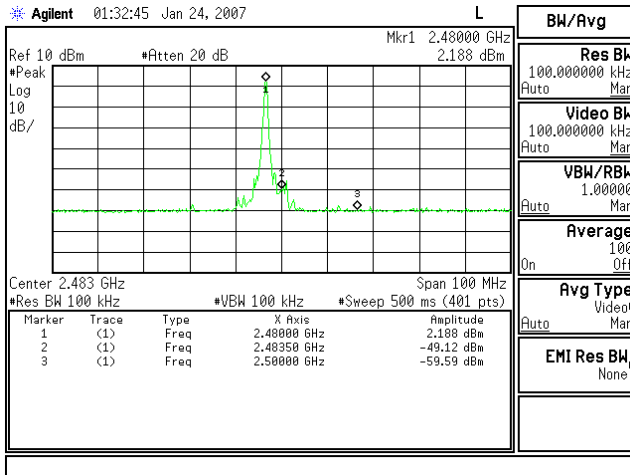
Note:

- The peak conducted emission plot shows 59.55 dBc between the carrier and the maximum emission in the restricted band. The maximum fundamental field strength in the peak measurement is 92.815 dBuV/m. So the maximum field strength in the restricted band is 92.815 – 59.55 = 33.265 dBuV/m which is under 74 dBuV/m.
- The average conducted emission plot shows 65.60 dBc between the carrier and the maximum emission in the restricted band. The maximum fundamental field strength in the average measurement is 92.559 dBuV/m. So the maximum field strength in the restricted band is 92.559 – 65.60 = 26.959 dBuV/m which is under 54 dBuV/m.

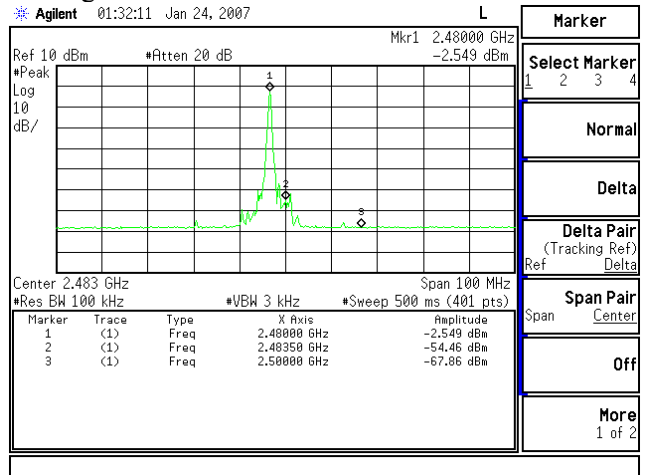
Product : VFD Combo
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 78)

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
00	>2483.5	>20	Pass

Peak



Average



Fundamental Field Strength:

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)
Horizontal				
00 (Peak)	2480.000	-1.909	91.199	89.290
00 (Avg)	2480.000	-1.909	91.079	89.170
Vertical				
00 (Peak)	2480.000	-1.909	93.416	91.507
00 (Avg)	2480.000	-1.909	93.161	91.252

Note:

- The peak conducted emission plot shows 51.31 dBc between the carrier and the maximum emission in the restricted band. The maximum fundamental field strength in the peak measurement is 91.507 dBuV/m. So the maximum field strength in the restricted band is 91.507 – 51.31 = 40.197 dBuV/m which is under 74 dBuV/m.
- The average conducted emission plot shows 51.91 dBc between the carrier and the maximum emission in the restricted band. The maximum fundamental field strength in the average measurement is 91.252 dBuV/m. So the maximum field strength in the restricted band is 91.252 – 51.91 = 39.342 dBuV/m which is under 54 dBuV/m.

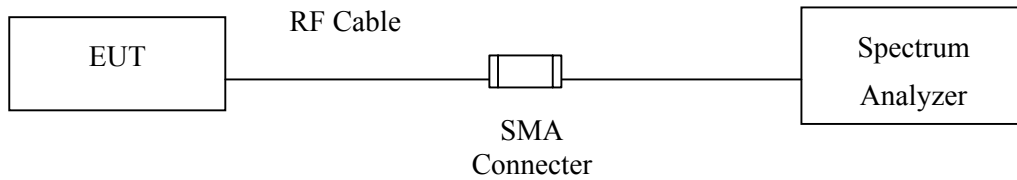
6. Channel Number

6.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2006

Note: 1. All equipments are calibrated every one year.
 2. The test equipments marked by “X” are used to measure the final test results.

6.2. Test Setup



6.3. Limit

Frequency hopping systems operating in the 2400-2483.5 MHz bands shall use at least 75 hopping frequencies.

6.4. Uncertainty

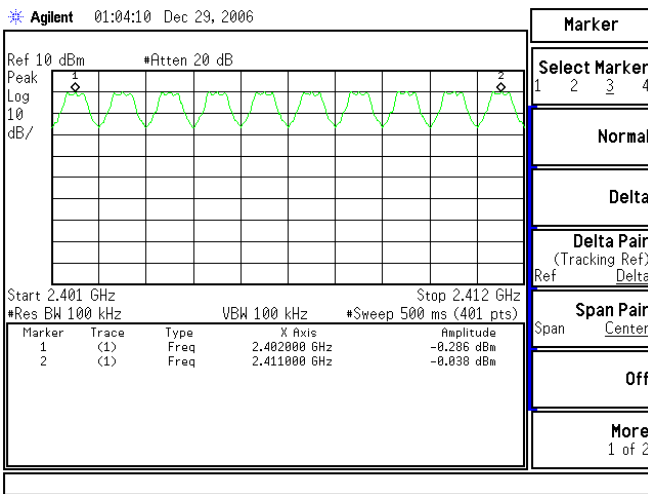
N/A

6.5. Test Result of Channel Number

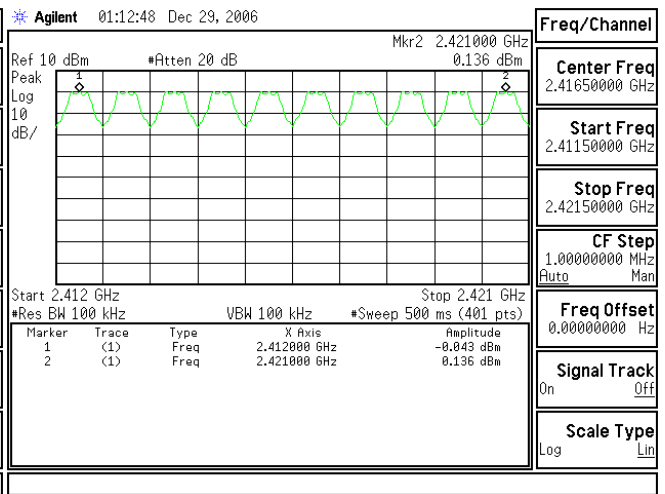
Product : VFD Combo
 Test Item : Channel Number
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter

Frequency Range (MHz)	Measurement (Hopping Channel)	Required Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

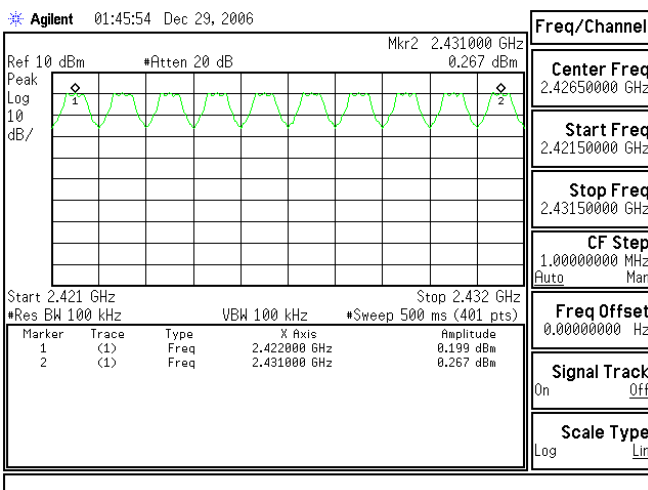
2402-2411MHz



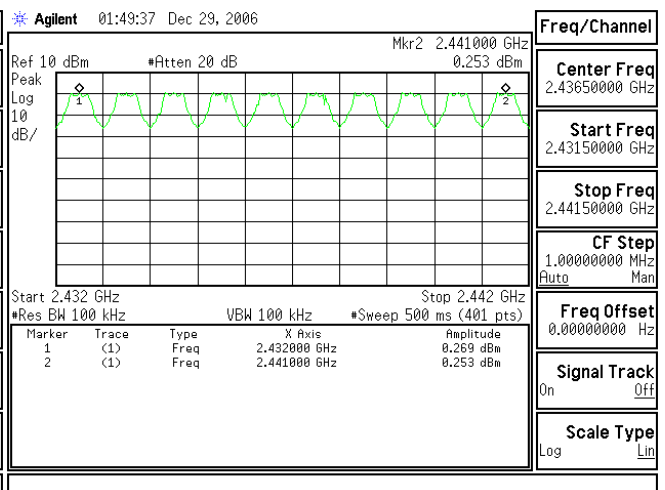
2412-2421MHz



2422-2431MHz

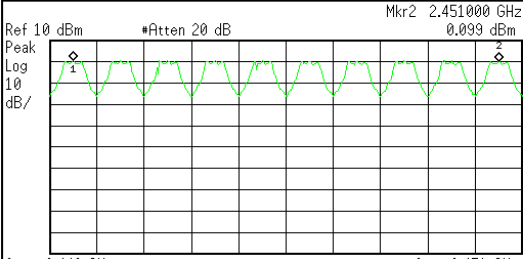


2432-2441MHz



2442-2451MHz

* Agilent 01:53:25 Dec 29, 2006



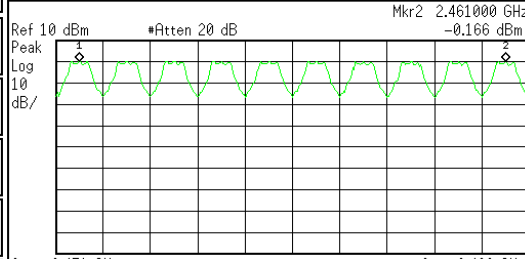
Freq/Channel	
Center Freq	2.44650000 GHz
Start Freq	2.44150000 GHz
Stop Freq	2.45150000 GHz
CF Step	1.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off
Scale Type	Log Lin

Start 2.442 GHz #Res BW 100 kHz VBW 100 kHz *Sweep 500 ms (401 pts) Stop 2.451 GHz

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.442000 GHz	0.281 dBm
2	(1)	Freq	2.451000 GHz	0.099 dBm

2452-2461MHz

* Agilent 01:57:19 Dec 29, 2006



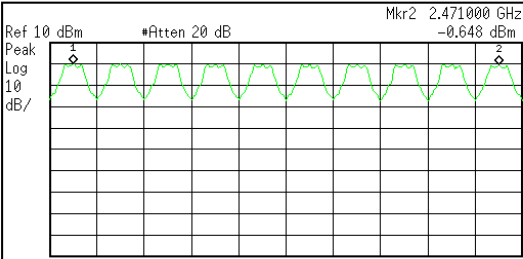
Freq/Channel	
Center Freq	2.45650000 GHz
Start Freq	2.45150000 GHz
Stop Freq	2.46150000 GHz
CF Step	1.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off
Scale Type	Log Lin

Start 2.451 GHz #Res BW 100 kHz VBW 100 kHz *Sweep 500 ms (401 pts) Stop 2.462 GHz

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.452000 GHz	0.133 dBm
2	(1)	Freq	2.461000 GHz	-0.166 dBm

2462-2471MHz

* Agilent 02:02:09 Dec 29, 2006



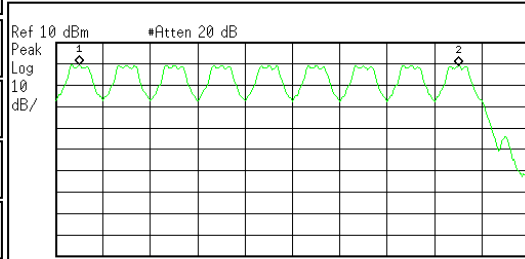
Freq/Channel	
Center Freq	2.46650000 GHz
Start Freq	2.46150000 GHz
Stop Freq	2.47150000 GHz
CF Step	1.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off
Scale Type	Log Lin

Start 2.462 GHz #Res BW 100 kHz VBW 100 kHz *Sweep 500 ms (401 pts) Stop 2.471 GHz

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.462000 GHz	-0.149 dBm
2	(1)	Freq	2.471000 GHz	-0.648 dBm

2472-2481MHz

* Agilent 02:07:57 Dec 29, 2006



Marker	
Select Marker	1 2 3 4
Normal	
Delta	
Delta Pair (Tracking Ref) Delta	
Span Pair Span Center	
Off	
More	1 of 2

Start 2.471 GHz #Res BW 100 kHz VBW 100 kHz *Sweep 500 ms (401 pts) Stop 2.482 GHz

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.472000 GHz	-0.687 dBm
2	(1)	Freq	2.480000 GHz	-1.115 dBm

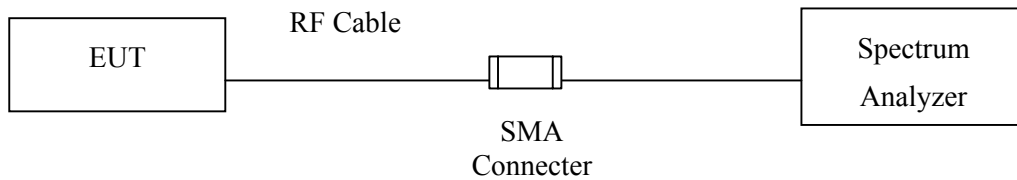
7. Channel Separation

7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2006

- Note:
1. All equipments are calibrated every one year.
 2. The test instruments marked by “X” are used to measure the final test results.

7.2. Test Setup



7.3. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125mW.

7.4. Uncertainty

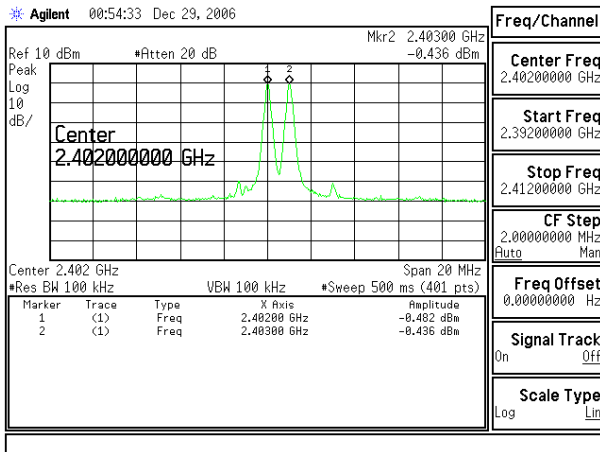
± 150Hz

7.5. Test Result of Channel Separation

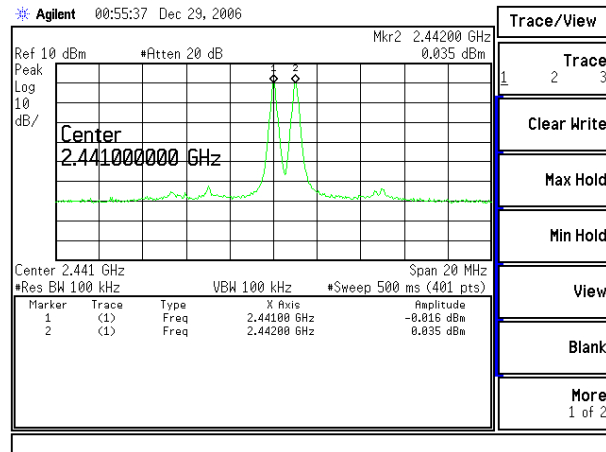
Product : VFD Combo
 Test Item : Channel Separation
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter

Frequency (MHz)	Measurement Level (MHz)	Required Limit	Result
2402	1.00	>25 kHz or 2/3 * 20 dB BW	Pass
2441	1.00	>25 kHz or 2/3 * 20 dB BW	Pass
2480	1.00	>25 kHz or 2/3 * 20 dB BW	Pass

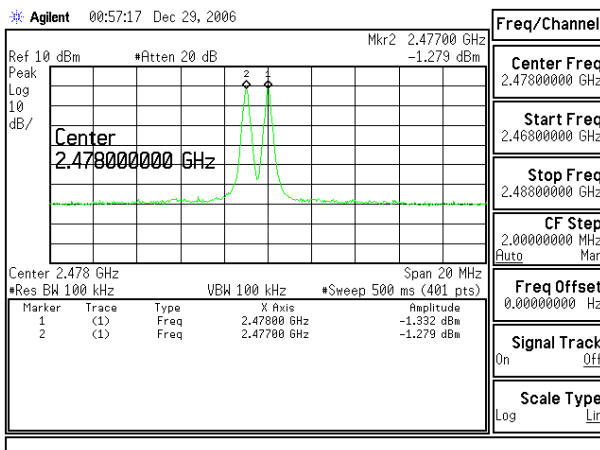
Channel 00 2402MHz



Channel 39 2441MHz



Channel 78 2480 MHz



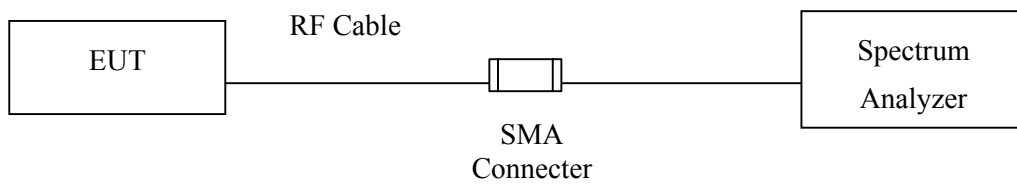
8. Dwell Time

8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	EMI Test Receiver	R&S	ESI 26 / 838786/004	May, 2006

Note: 1. All equipments are calibrated every one year.
 2. The test equipments marked “X” are used to measure the final test results.

8.2. Test Setup



8.3. Limit

The dwell time shall be the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

8.4. Uncertainty

± 25msec

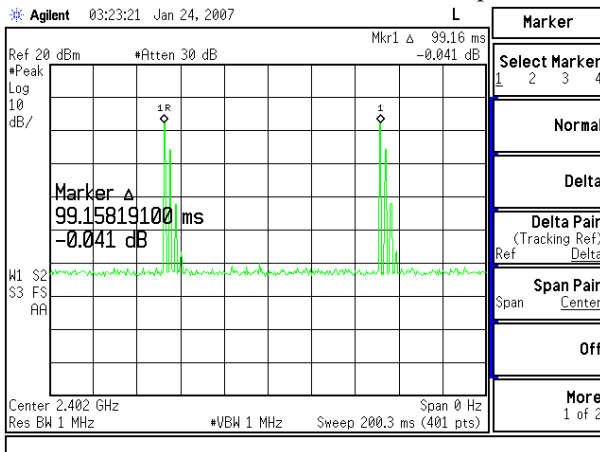
8.5. Test Result of Dwell Time

Product : VFD Combo
 Test Item : Dwell Time
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 00,39,78 –DH1)

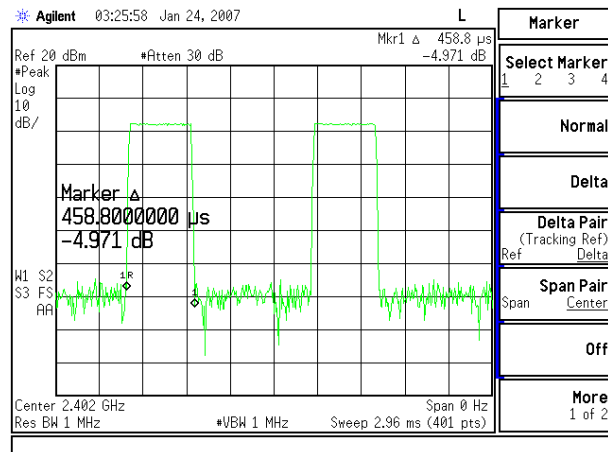
Channel No.	Frequency (MHz)	Time Interval between hops (ms)	Transmission Time (us)	Dwell Time (ms)	Limit (ms)	Result
00	2402	99.16	458.8	146.209	400	Pass
39	2441	99.16	488.4	155.641	400	Pass
78	2480	99.66	466.2	147.822	400	Pass

Note: Dwell Time = 79 * 400 / Time Interval Between Hops * Transmission Time / 1000

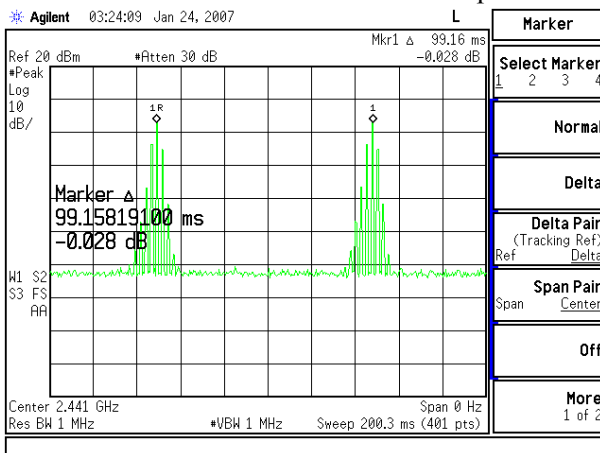
CH 2402MHz Time Interval between hops



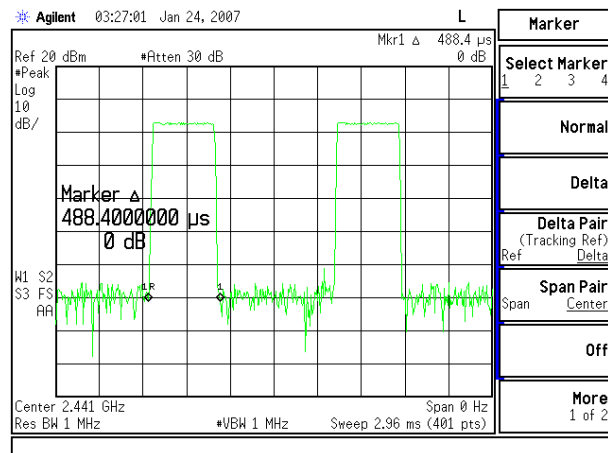
Transmission Time



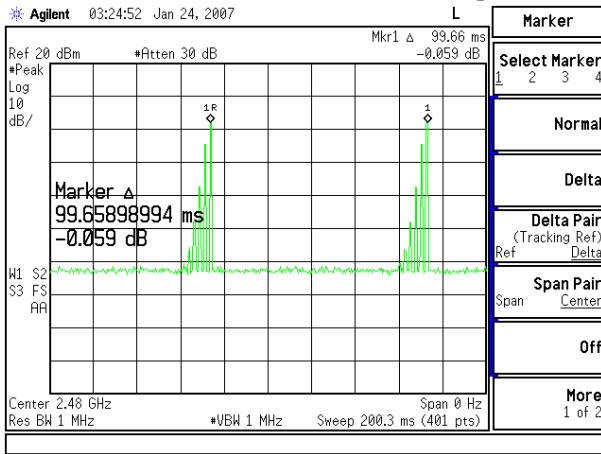
CH 2441MHz Time Interval between hops



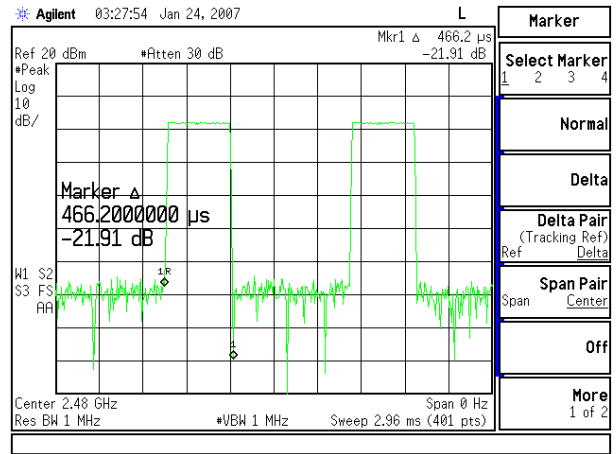
Transmission Time



CH 2480MHz Time Interval between hops



Transmission Time

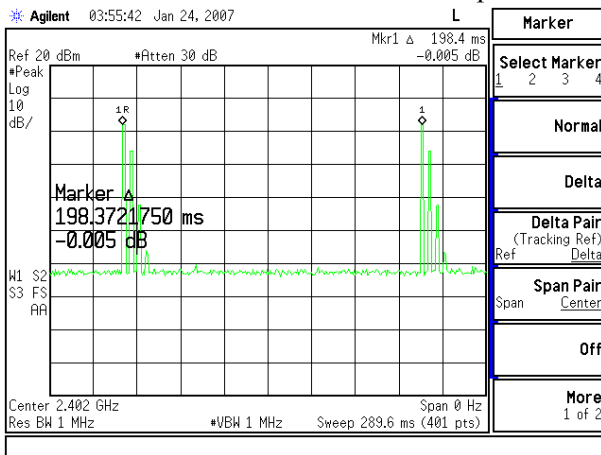


Product : VFD Combo
 Test Item : Dwell Time
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 00,39,78 –DH3)

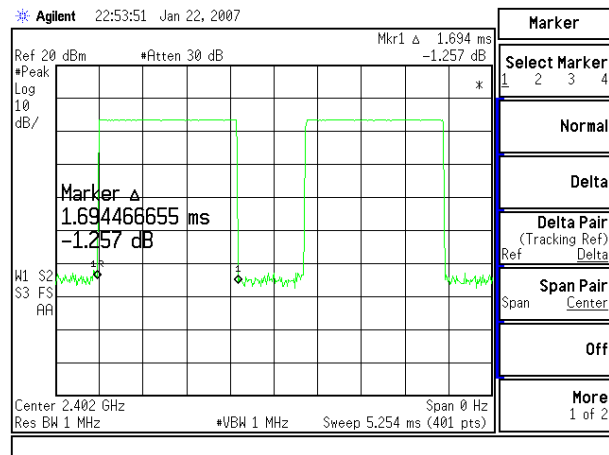
Channel No.	Frequency (MHz)	Time Interval between hops (ms)	Transmission Time (us)	Dwell Time (ms)	Limit (ms)	Result
00	2402	198.4	1794	285.738	400	Pass
39	2441	198.6	1753	278.926	400	Pass
78	2480	198.6	1767	281.154	400	Pass

Note: Dwell Time = 79 * 400 / Time Interval Between Hops * Transmission Time / 1000

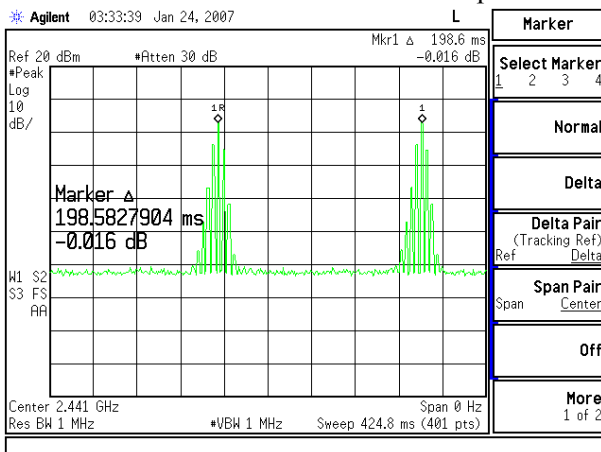
CH 2402MHz Time Interval between hops



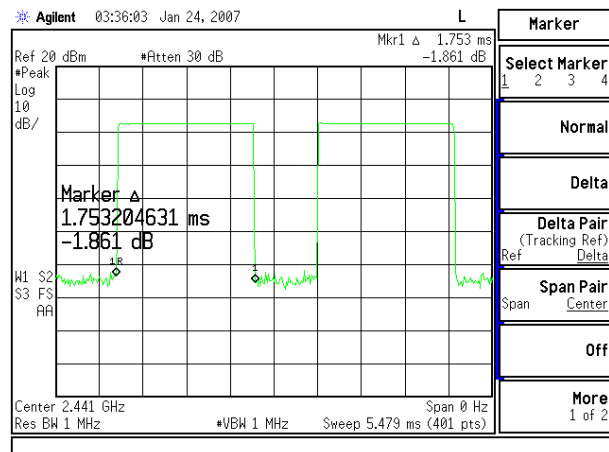
Transmission Time



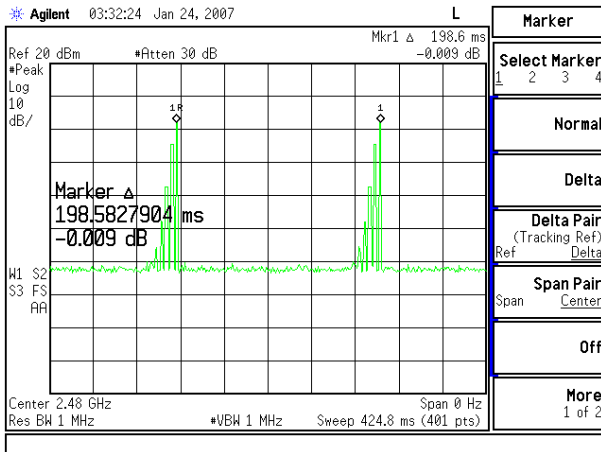
CH 2441MHz Time Interval between hops



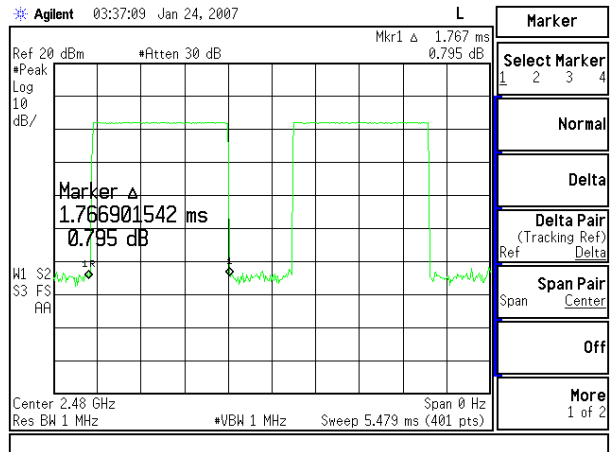
Transmission Time



CH 2480MHz Time Interval between hops



Transmission Time

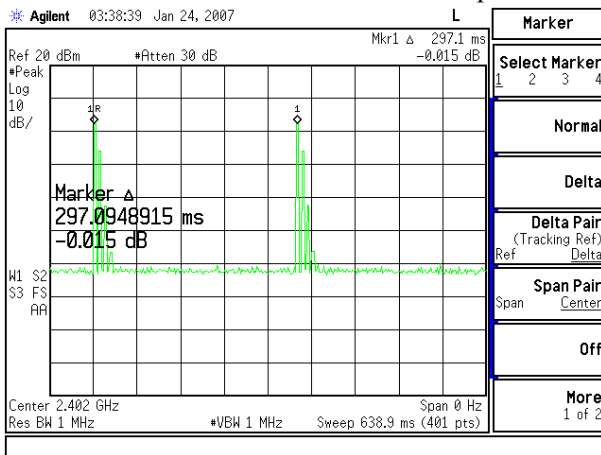


Product : VFD Combo
 Test Item : Dwell Time
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (Channel 00,39,78 –DH5)

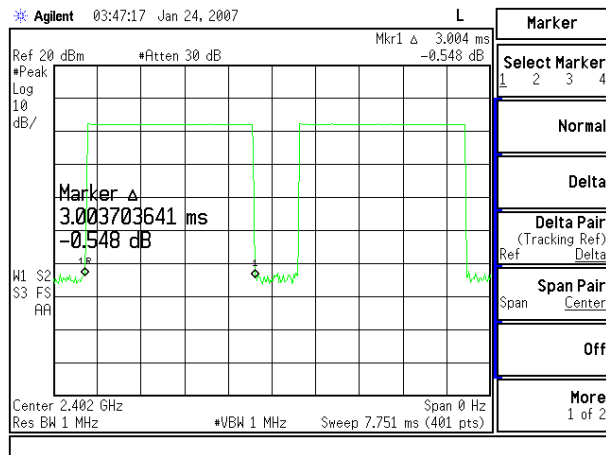
Channel No.	Frequency (MHz)	Time Interval between hops (ms)	Transmission Time (us)	Dwell Time (ms)	Limit (ms)	Result
00	2402	297.1	3004	319.5099293	400	Pass
39	2441	298.2	3042	322.3581489	400	Pass
78	2480	299.4	3004	317.0554442	400	Pass

Note: Dwell Time = 79 * 400 / Time Interval Between Hops * Transmission Time / 1000

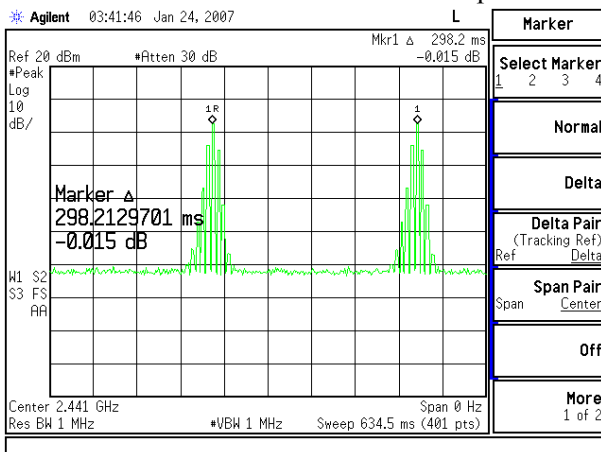
CH 2402MHz Time Interval between hops



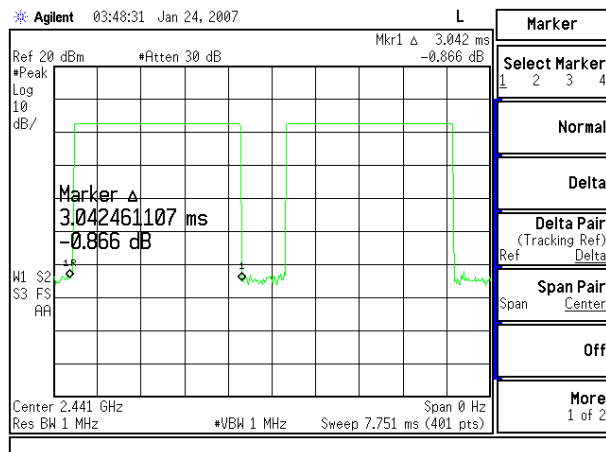
Transmission Time



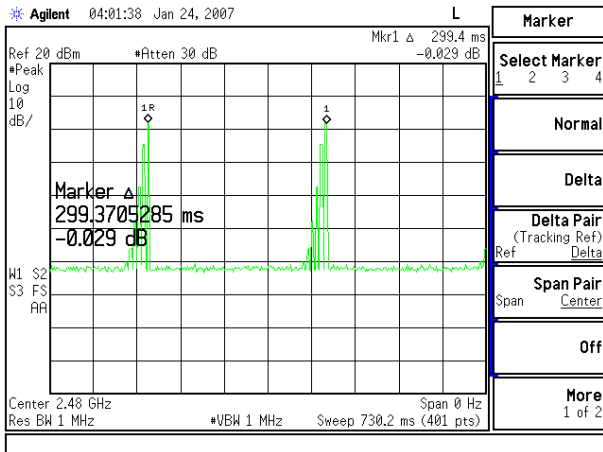
CH 2441MHz Time Interval between hops



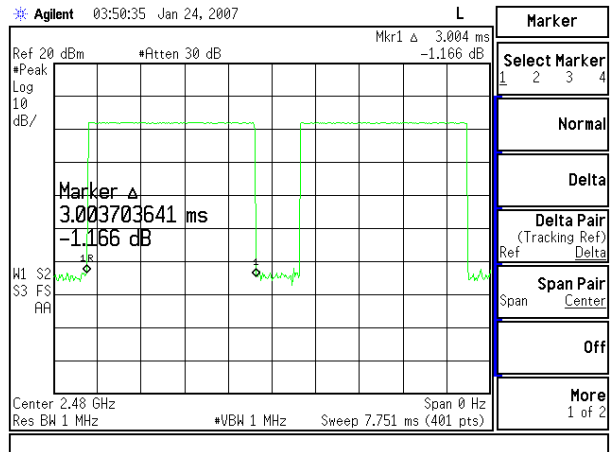
Transmission Time



CH 2480MHz Time Interval between hops



Transmission Time



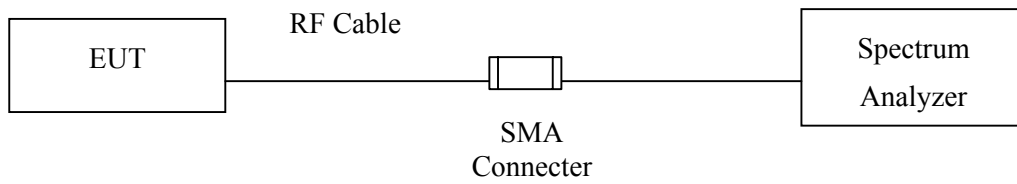
9. Occupied Bandwidth

9.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2006

Note: 1. All equipments are calibrated every one year.
 2. The test instruments Marked “X” are used to measure the final test results.

9.2. Test Setup



9.3. Limits

N/A

9.4. Uncertainty

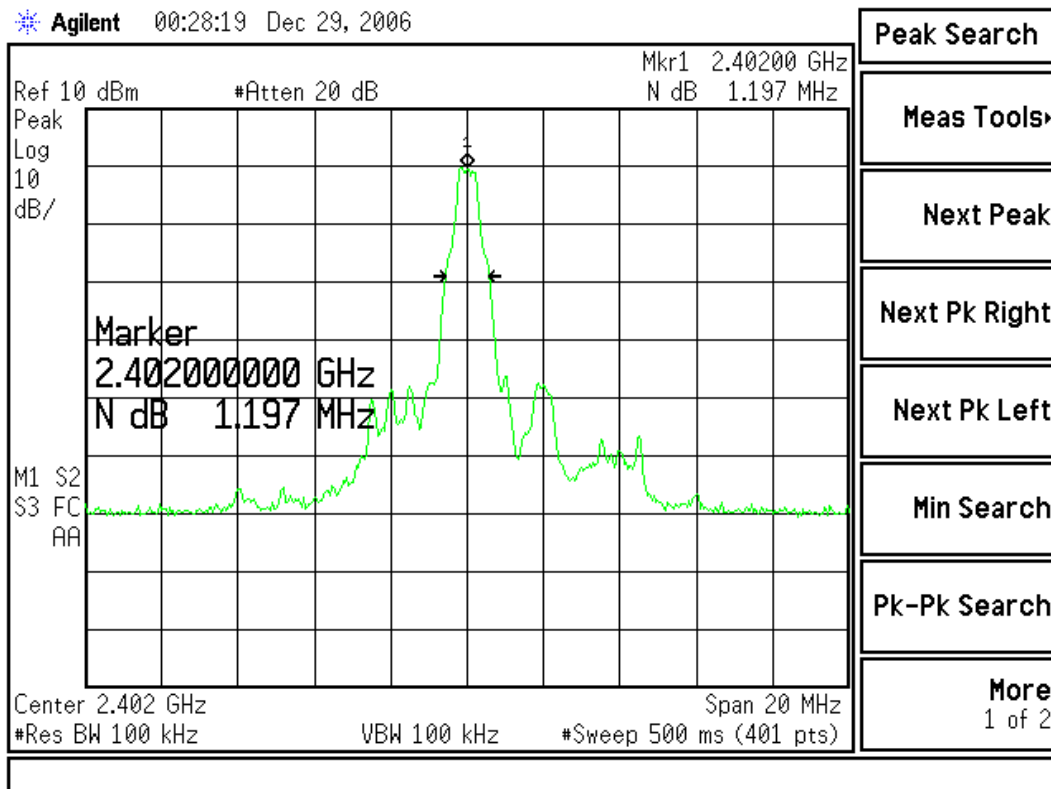
± 150Hz

9.5. Test Result of Occupied Bandwidth

Product : VFD Combo
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (2402MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
00	2402	1197	--	N/A

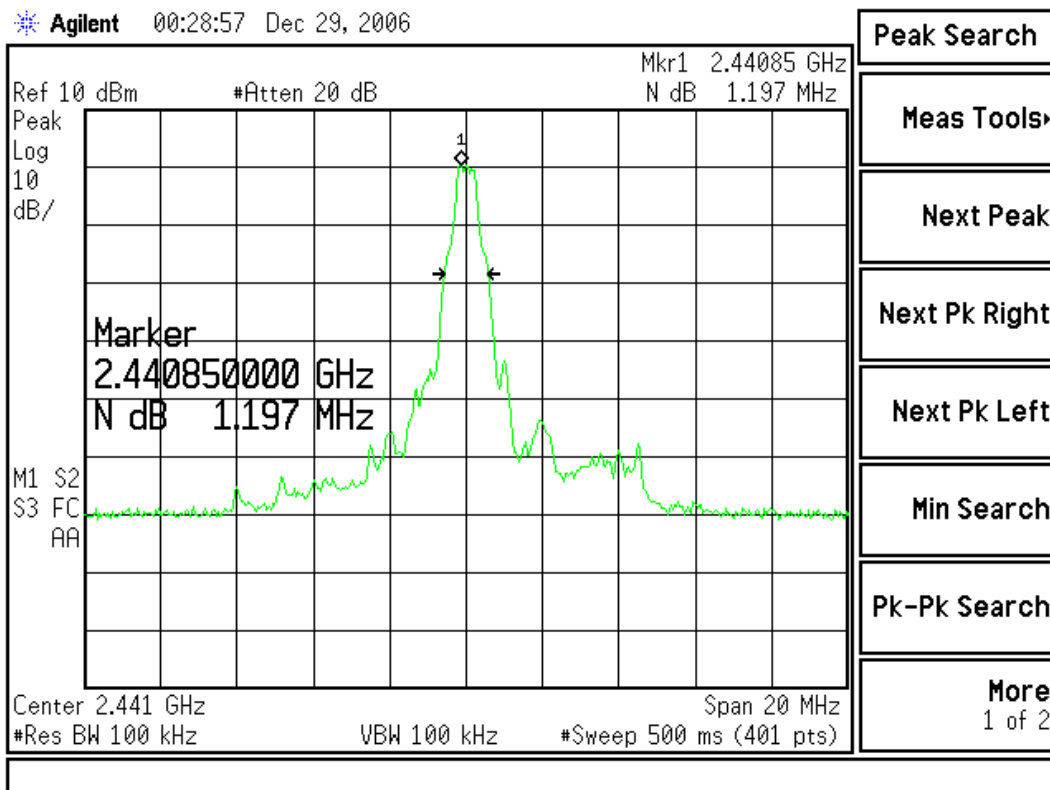
Figure Channel 00:



Product : VFD Combo
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (2441MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
39	2441	1197	--	N/A

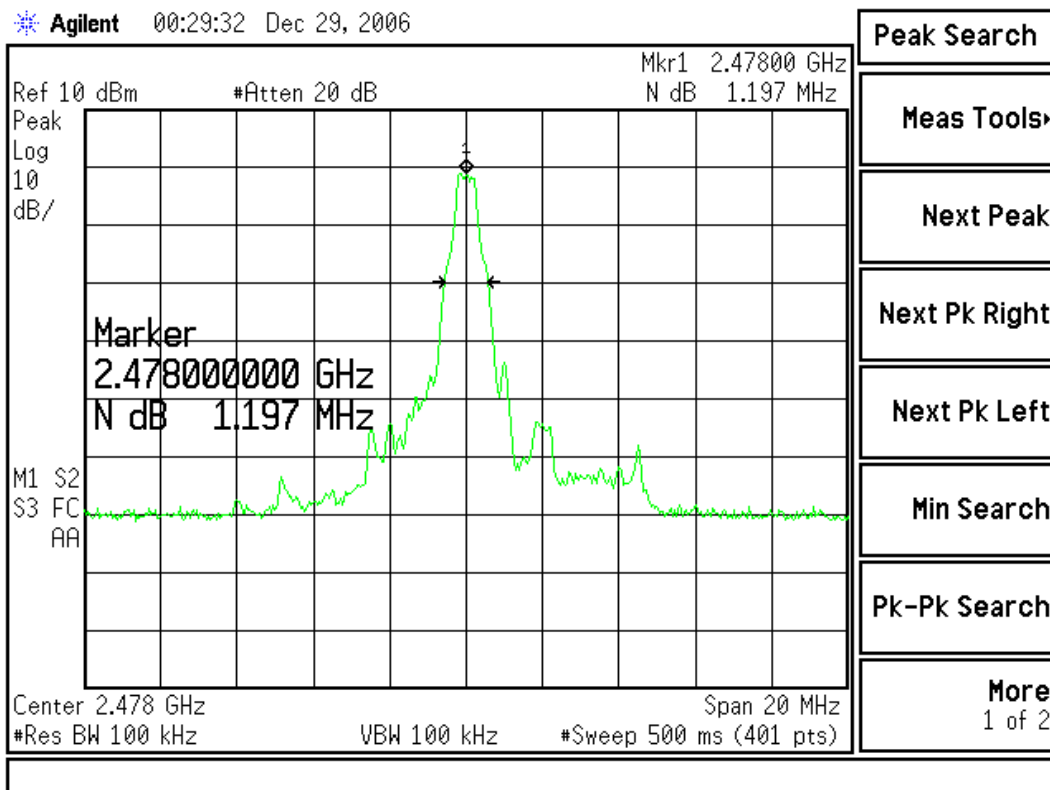
Figure Channel 39:



Product : VFD Combo
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (2480MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
78	2480	1197	--	N/A

Figure Channel 78:



10. EMI Reduction Method During Compliance Testing

No modification was made during testing.