

Radio Test Report

FCC ID: TQYBSJS6305WA10

This report concerns (check one) : ⊠ Original Grant ☐ Class II Change

Issued Date : Sep. 17, 2013 **Project No.** : 1308248

Equipment: Home Theatre System **Model Name**: JS6305WA | NK22

Applicant: JAZZ HIPSTER CORPORATION **Address**: 2FD, NO. 512, YUAN-SAN RD.,

CHUNG-HO DISTRICT, NEW TAIPEI CITY, TAIWAN.

Tested by: Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Aug. 30, 2013

Date of Test: Aug. 30, 2013 ~ Sep. 17, 2013

Testing Engineer: (Sary Chou)

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Declaration

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REPORT ISSUED HISTORY

Revised Version No.	Description	Issued Date
-	Initial Issue.	Sep. 17, 2013

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1 CERTIFICATION

Equipment: Home Theatre System

Brand Name : JS | Nakamichi Model Name : JS6305WA | NK22

Applicant: JAZZ HIPSTER CORPORATION Date of Test: Aug. 30, 2013 ~ Sep. 17, 2013 Standards: FCC Part 15, Subpart C: 2012

ANSI C63.4: 2009

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1308248) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

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2.SUMMARY OF TEST RESULTS

Standard Clause	Test Item	Result
15.207	Conducted Emission	PASS
15.247 (c)	Antenna conducted Spurious Emission	PASS
15.247 (a)(1)	Hopping Channel Separation	PASS
15.247 (b)	Maximum Peak Conducted Output Power	PASS
15.247 (c)	Radiated Spurious Emission	PASS
15.247 (b)(1)	Number of Hopping Frequency	PASS
15.247 (a)(1)	Average time of occupancy	PASS
15.205	Restricted Bands	PASS
15.203	Antenna Requirement	PASS
1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	PASS

NOTE:

- N/A: denotes test is not applicable in this Test Report
 Portable device; SAR report is required.

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2.1 TEST FACILITY

The test facilities used to collect the test data in this report:

Conducted emission Test:

C02: (VCCI RN: C-3477; FCC RN: 614388; FCC DN: TW1054)

1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Below 1 GHz):

CB08: (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)

1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Above 1 GHz):

CB08: (VCCI RN: G-91; FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)

1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty is not specified by FCC rules and for reference only.

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95%.

The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

A. Conducted emission test:

Test Site	Measurement Frequency Range	U,(dB)	NOTE
C02	150 kHz ~ 30 MHz	2.59	

B. Radiated emission test:

Test Site	Item	Measurement	Frequency Range	Uncertainty	NOTE		
			30 - 200MHz	3.35 dB			
		Horizontal	200 - 1000MHz	3.11 dB			
	Dadiated	Polarization	1 - 18GHz	3.97 dB			
CB08	Radiated emission at		18 - 40GHz	4.01 dB			
СБОО	3m		30 - 200MHz	3.22 dB			
	3111	Vertical	200 - 1000MHz	3.24 dB			
			Polar	Polarization	1 - 18GHz	4.05 dB	
			18 - 40GHz	4.04 dB			

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR} , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz : 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz : 5.2 dB

It can be seen that our U_{lab} values are smaller than U_{CISPR} .

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3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Home Theatre System			
Brand Name	JS Nakamichi			
Model Name	JS6305WA NK22			
OEM Brand/Model Name	N/A			
Model Difference	Models' differences between each other only the changes of brand name and model name which do not affect the EMI performance. Model JS6305WA was used for final testing and collecting test data included in this report.			
	The EUT is a Home Theatr			
	Operation Frequency	2402 MHz ~ 2480 MHz		
	Modulation Type	FHSS(GFSK, pi/4 DQPSK, 8DPSK)		
	Bit Rate of Transmitter	1/2/3 Mbps		
	Number Of Channel	Please refer to the Note 2.		
Product Description	Antenna Designation	Please refer to the Note 3.		
	Antenna Gain(Peak)	Please refer to the Note 3.		
	Maximum Conducted	1 Mbps: -0.49dBm		
	Output Power 3 Mbps: -0.55dBm			
	More details of EUT technical specification, please refer to the User's Manual.			
Power Source	DC Voltage supplied from External Power Supply.			
	1. EUT: I/P: DC 24V 2.9A 6	9W		
Power Rating	2. External Power Supply:			
	I/P: AC 100-240V 50/60F	Hz 1.5A / O/P: DC 24V 2900mA 69.6W		
Connecting I/O Port(s)	Please refer to the User's Manual			
	1 * Bluetooth Module			
	1 * RF Module			
Products Covered	1 * SWITCHING MODE POWER SUPPLY: GPE, GPE060D-240290D			
	1 * Remote Control (two options corresponding to brand name)			
	1 * Audio Cable			
EUT Modification(s)	N/A			

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NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2. Channel List:

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

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Printed	N/A	-2.51

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3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test Items	Mode	Data Rate	Tested Channel/Mode	
Conducted Emission	GFSK	1 Mbps	2441 MHz	
Antenna conducted Spurious	GFSK	1 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
Emission	8DPSK	3 Mbps	2402 101112, 2441 101112, 2460 101112	
Hopping Channel Separation	GFSK	1 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
Hopping Charmer Separation	8DPSK	3 Mbps	2402 101112, 2441 101112, 2460 101112	
Maximum Peak Conducted	GFSK	1 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
Output Power	8DPSK	3 Mbps	2402 101112, 2441 101112, 2460 101112	
Radiated Spurious Emission (30 MHz to 1 GHz)	GFSK	1 Mbps	2441 MHz	
Radiated Spurious Emission	GFSK	1 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
(above 1 GHz)	8DPSK	3 Mbps	2402 MHZ, 2441 MHZ, 2460 MHZ	
Number of Hopping	GFSK	1 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
Frequency	8DPSK	3 Mbps	2402 MHZ, 2441 MHZ, 2460 MHZ	
Average time of equipment	GFSK	1 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
Average time of occupancy	8DPSK	3 Mbps	2402 MHZ, 2441 MHZ, 2460 MHZ	
Dootrioted Danda	GFSK	1 Mbps	2402 MHz 2444 MHz 2490 MHz	
Restricted Bands	8DPSK	3 Mbps	2402 MHz, 2441 MHz, 2480 MHz	
Antenna Requirement	GFSK			
RF Exposure Compliance	GFSK			

NOTE: The measurements are performed at the highest, middle, lowest available channels.

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3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

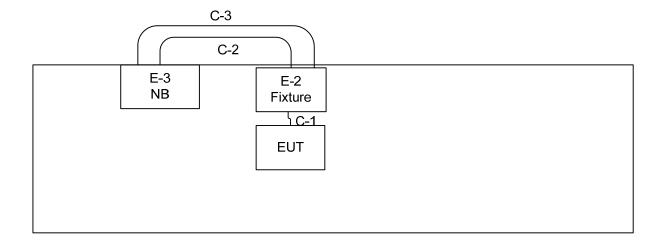
Data Rate	1 Mbps			
Test software Version	Bluetooth test			
Frequency	2402 MHz	2441 MHz	2480 MHz	
Parameter	53	53	53	

Data Rate	3 Mbps					
Test software Version	Bluetooth test					
Frequency	2402 MHz	2441 MHz	2480 MHz			
Parameter	120 120 120					

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3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



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3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Home Theatre System	JS	JS6305WA	TQYBSJS6305WA10	N/A	EUT
E-2	Fixture	N/A	N/A	N/A	N/A	
E-3	Notebook PC	DELL	D620	DOC	7T390 A03	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	0.15M	Control line
C-2	NO	NO	1.5M	RS-232
C-3	NO	NO	1.0M	USB CABLE

NOTE: The support equipment was authorized by Declaration of Conformity (DOC).

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4 CONDUCTED EMISSION

4.1 LIMIT

FREQUENCY	Class A	(dBuV)	Class B (dBuV)		
(MHz)	Quasi-peak	Average	Quasi-peak	Average	
0.15 - 0.5	79.00	66.00	66 - 56 *	56 - 46 *	
0.50 - 5.0	73.00	60.00	56.00	46.00	
5.0 - 30.0	73.00	60.00	60.00	50.00	

NOTE:

- 1. The tighter limit applies at the band edges.
- 2. The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
 Margin Level = Measurement Value Limit Value

4.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	Schwarzbeck	NSLK 8127	8127685	Jun. 03, 2014
2	Test Cable	TIMES	CFD300-NL	130	Jun. 13, 2014
3	EMI Test Receiver	Agilent	N9038A	MY51210215	Feb. 24, 2014
4	Measurement Software	EZ	EZ_EMC (Version NB-02A)	N/A	N/A

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

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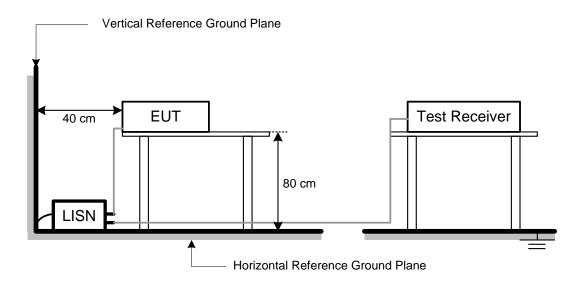
4.3 TEST PROCEDURES

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

NOTE:

- a. Reading in which marked as Peak, QP or AVG means measurements by using are Quasi-Peak or Average Mode with Detector BW=9 kHz (6 dB Bandwidth).
- b. All readings are Peak Mode value unless otherwise stated QP or AVG in column of Note. If the Peak or QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only Peak or QP Mode was measured, but AVG Mode didn't perform.

4.4 TEST SETUP LAYOUT



4.5 DEVIATION FROM TEST STANDARD

No deviation

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4.6 EUT OPERATING CONDITIONS

The EUT used during radiated and/or conducted emission measurement was designed to exercise in a manner similar to a typical use.

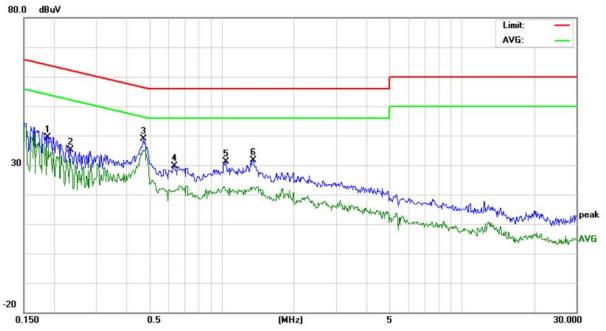
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4.7 TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA			
Temperature	24°C	Relative Humidity	46%			
Test Voltage	AC 120V/60Hz					
Test Mode	Bluetooth/1 Mbps/2441 MHz					





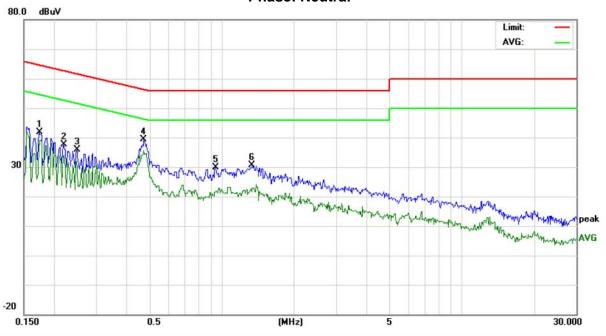
No. Mk.	Freq.	Reading Level	Correct	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.1884	38.89	0.54	39.43	64.11	-24.68	peak		
2	0.2332	34.80	0.45	35.25	62.33	-27.08	peak		
3 *	0.4733	38.74	0.17	38.91	56.46	-17.55	peak		
4	0.6350	29.53	0.14	29.67	56.00	-26.33	peak		
5	1.0399	31.09	0.01	31.10	56.00	-24.90	peak		
6	1.3459	31.69	-0.01	31.68	56.00	-24.32	peak		

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2441 MHz		

Phase: Neutral



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.1737	41.63	0.34	41.97	64.78	-22.81	peak		
2	0.2192	36.96	0.55	37.51	62.85	-25.34	peak		
3	0.2493	35.56	0.34	35.90	61.78	-25.88	peak		
4 *	0.4726	39.31	0.17	39.48	56.47	-16.99	peak		
5	0.9410	29.87	0.03	29.90	56.00	-26.10	peak		
6	1.3369	30.55	-0.01	30.54	56.00	-25.46	peak		

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5 ANTENNA CONDUCTED SPURIOUS EMISSION

5.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Antenna conducted Spurious Emission	1 3(1= /5(1(1))	20 dB less than the peak value of fundamental frequency

5.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

5.3 TEST PROCEDURES

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

5.4 TEST SETUP LAYOUT

EUT	SPECTRUM
	ANALYZER

5.5 DEVIATION FROM TEST STANDARD

No deviation

5.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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5.7 TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps		

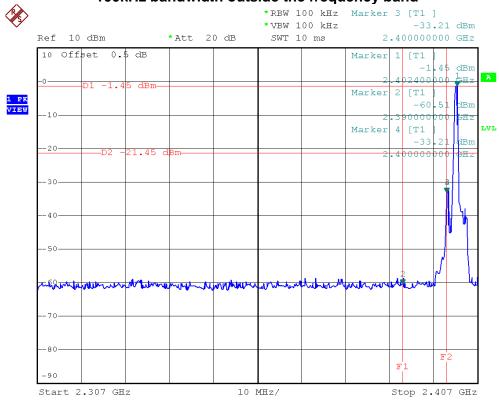
Channel of Worst Data					
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth within the frequency band.					
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2400.00	-33.21	2484.00	-49.79		
	•	•	_		

Result

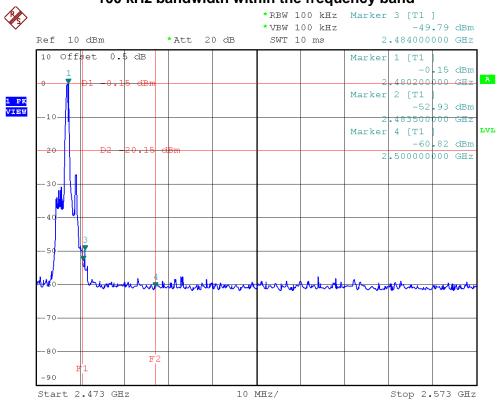
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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Bluetooth/1 Mbps/The max. radio frequency power in any 100kHz bandwidth outside the frequency band



Bluetooth/1 Mbps/The max. radio frequency power in any 100 kHz bandwidth within the frequency band



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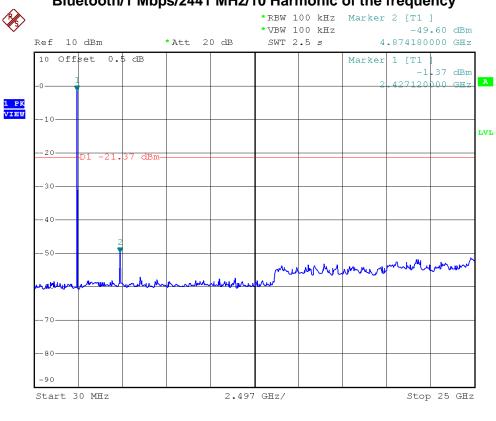
Stop 25 GHz

Start 30 MHz

Bluetooth/1 Mbps/2402 MHz/10 Harmonic of the frequency *RBW 100 kHz Marker 2 [T1] * VBW 100 kHz -51.91 dBm 21.703960000 GHz Ref 10 dBm *Att 20 dB SWT 2.5 s 10 Offset 0.5 dB Marker 1 [T1 -3.67 dBm 377180000 GHz 1 PK VIEW LVL -20-D1 -23.67 dBm-

Bluetooth/1 Mbps/2441 MHz/10 Harmonic of the frequency

2.497 GHz/



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Stop 25 GHz

Start 30 MHz

#RBW 100 kHz Marker 2 [T1] *VBW 100 kHz Marker 2 [T1] *VBW 100 kHz -47.17 dBm Ref 10 dBm *Att 20 dB SWT 2.5 s 4.924120000 GHz | 10 Offset 0.5 dB | Marker 1 [T1] | -0.33 dBm | 2.477060000 GHz | 1.VL

2.497 GHz/

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps		

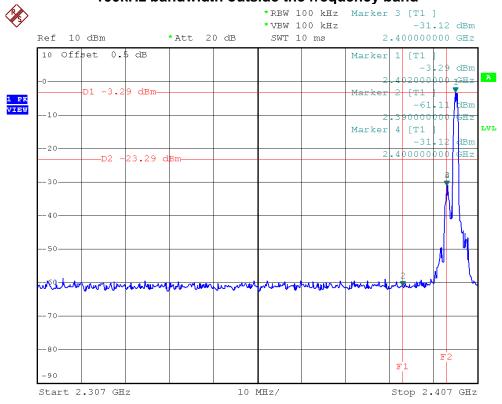
Channel of Worst Data					
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth within the frequency band.					
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2400.00	-31.12	2483.60	-48.79		
	•				

Result

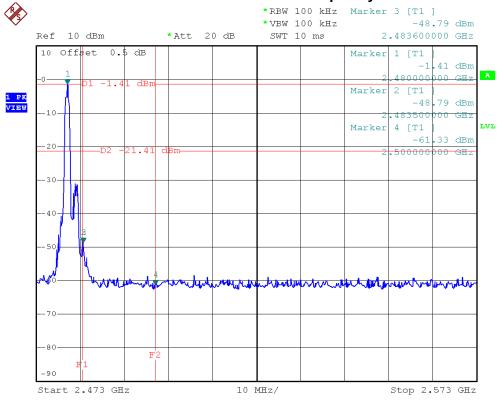
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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Bluetooth/3 Mbps/The max. radio frequency power in any 100kHz bandwidth outside the frequency band



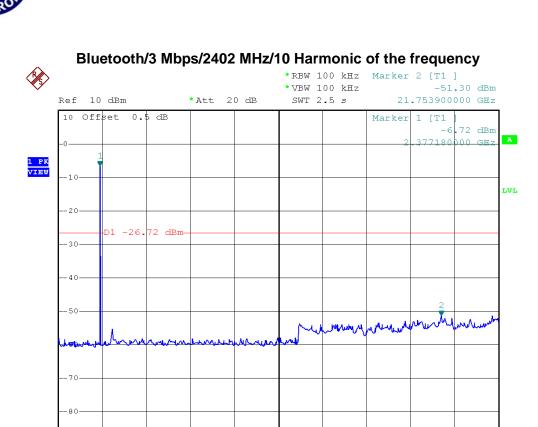
Bluetooth/3 Mbps/The max. radio frequency power in any 100 kHz bandwidth within the frequency band



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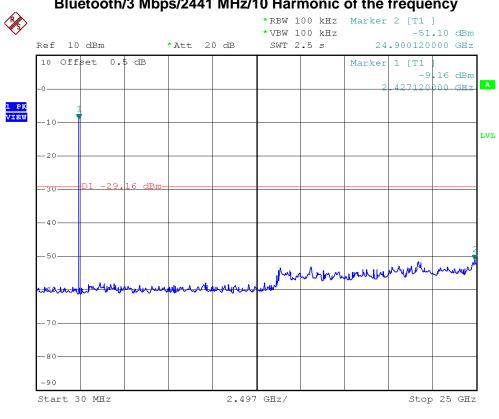
Stop 25 GHz

Start 30 MHz

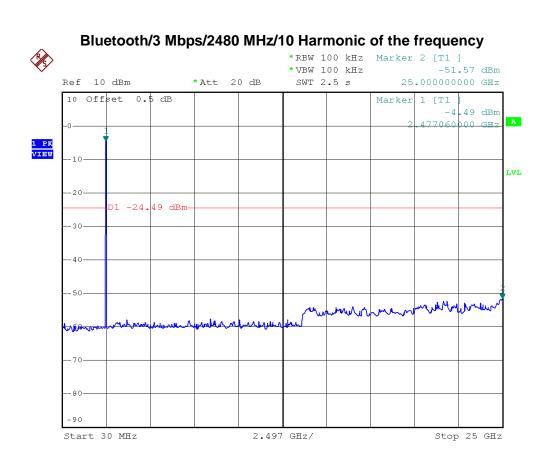


Bluetooth/3 Mbps/2441 MHz/10 Harmonic of the frequency

2.497 GHz/



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6 HOPPING CHANNEL SEPARATION

6.1 LIMIT

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.

6.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

6.3 MEASURING INSTRUMENTS SETTING

EMI Test Receiver	Parameter Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 300 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

6.4 TEST PROCEDURES

- a. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode
- b. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
- c. The resolution bandwidth of 100 kHz and the video bandwidth of 300 kHz were utilised for channel separation measurement.

6.5 TEST SETUP LAYOUT

EUT	SPECTRUM
	ANALYZER

6.6 DEVIATION FROM TEST STANDARD

No deviation

6.7 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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6.8 TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA	
Temperature	26°C	Relative Humidity	46%	
Test Voltage	AC 120V/60Hz			
Test Mode	Bluetooth/1 Mbps/2402 MHz, 2441 MHz, 2480 MHz			

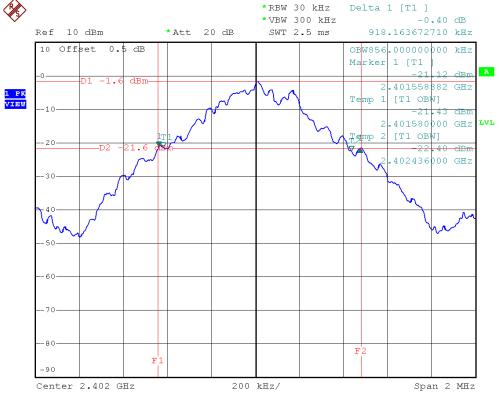
Frequency	Channel Separation (MHz)	20 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Two-thirds of the 20 dB Bandwidth	Result
2402 MHz	1.00	0.918	0.856	0.612	PASS
2441 MHz	1.05	0.934	0.856	0.623	PASS
2480 MHz	1.01	0.930	0.930	0.620	PASS

NOTE: Ch. Separation Limits: >25 KHz or >2/3 of 20dB bandwidth

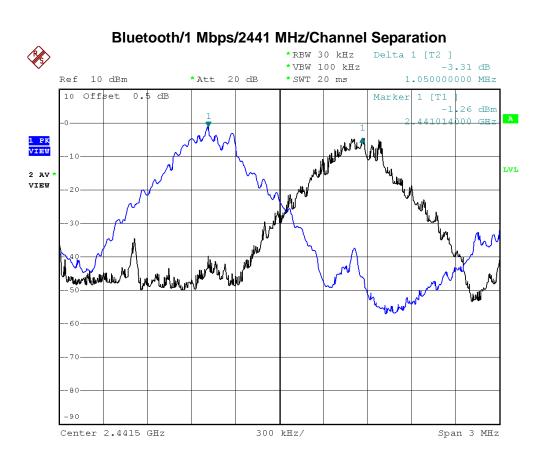
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Bluetooth/1 Mbps/2402 MHz/Channel Separation *RBW 30 kHz Delta 1 [T2] *VBW 100 kHz -0.89 dB 1.002000000 MHz Ref 10 dBm *Att 20 dB *SWT 20 ms 10 Offset 0.5 dB Marker 1 [T1 -1,96 dBm 1 PK VIEW LVL 2 AV VIEW Span 3 MHz Center 2.4025 GHz 300 kHz/





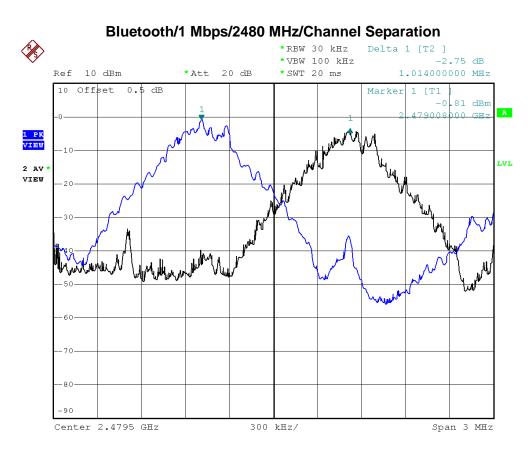
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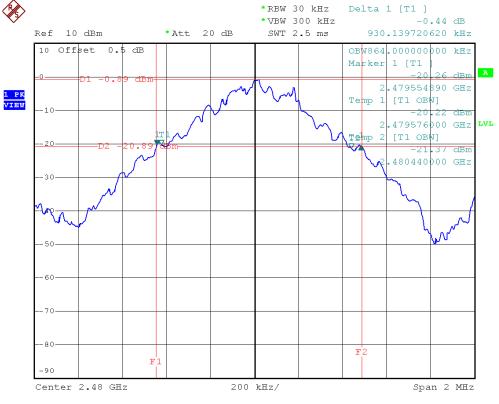
Bluetooth/1 Mbps/2441 MHz/20dB Bandwidth *RBW 30 kHz Delta 1 [T1] *VBW 300 kHz Ref 10 dBm *Att 20 dB SWT 2.5 ms 934.131736590 kHz 10 Offset 0.5 dB OBW856.000000000 kHz Marker 1 [T1 .440554890 GHz 1 PK VIEW Temp 1 [T1 OBW] 440580000 GHz LVL [T1 OBW] -21.74 441436000 GHz

200 kHz/

Center 2.441 GHz



Bluetooth/1 Mbps/2480 MHz/20dB Bandwidth



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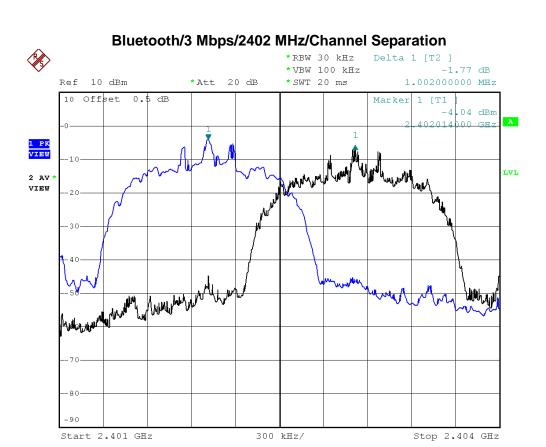


E.U.T	Home Theatre System	Model Name	JS6305WA	
Temperature	26°C	Relative Humidity	46%	
Test Voltage	AC 120V/60Hz			
Test Mode	Bluetooth/3 Mbps/2402 MHz, 2441 MHz, 2480 MHz			

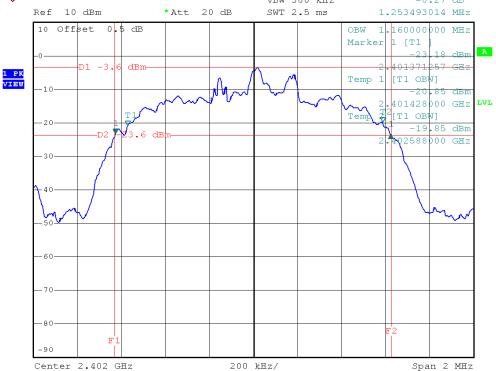
Frequency	Channel Separation (MHz)	20 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Two-thirds of the 20 dB Bandwidth	Result
2402 MHz	1.00	1.253	1.160	0.835	PASS
2441 MHz	1.01	1.253	1.164	0.835	PASS
2480 MHz	1.02	1.265	1.156	0.843	PASS

NOTE: Ch. Separation Limits: >25 KHz or >2/3 of 20dB bandwidth

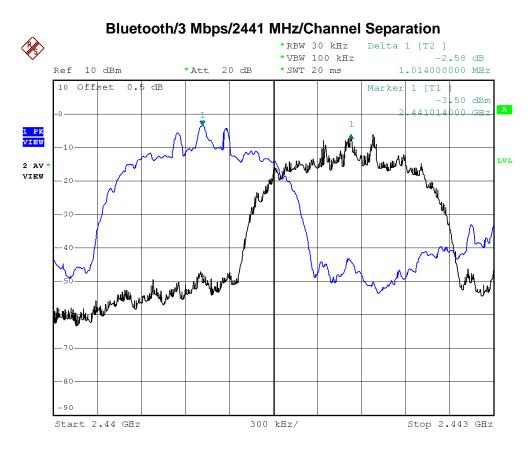
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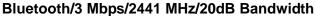


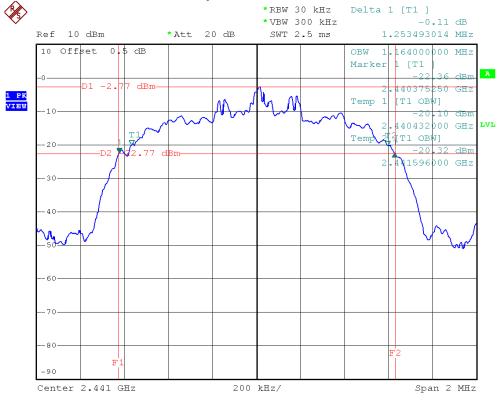
Bluetooth/3 Mbps/2402 MHz/20dB Bandwidth *RBW 30 kHz Delta 1 [T1] *VBW 300 kHz -0



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Bluetooth/3 Mbps/2480 MHz/Channel Separation *RBW 30 kHz Delta 1 [T2] -2.58 dB *VBW 100 kHz 1.020000000 MHz Ref 10 dBm *Att 20 dB *SWT 20 ms 10 Offset 0.5 dB Marker 1 [T1] .92 dBm 479014000 GHz 1 PK VIEW 2 AV VIEW John Market Comment of the Comment o Span 3 MHz Center 2.4795 GHz 300 kHz/

Bluetooth/3 Mbps/2480 MHz/20dB Bandwidth *RBW 30 kHz Delta 1 [T1] *VBW 300 kHz SWT 2.5 ms Ref 10 dBm *Att 20 dB 1.265469062 MHz 10 Offset 0.5 dB OBW 1.156000000 MHz [T1 Marker -21 89 dBm 479371257 GHz 1 PK VIEW T1 OBW] 79436000 GHz LVL T1 OBW] -18 49 dBm **0592000 GHz**

200 kHz/

Center 2.48 GHz



7 MAXIMUM PEAK CONDUCTED OUTPUT POWER

7.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Maximum Peak Conducted Output Power	2400-2483.5	1 watt or 30 dBm

7.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

7.3 TEST PROCEDURES

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 3 MHz, VBW= 3 MHz, Sweep time = Auto.

7.4 TEST SETUP LAYOUT

EUT	SPECTRUM
	ANALYZER

7.5 DEVIATION FROM TEST STANDARD

No deviation

7.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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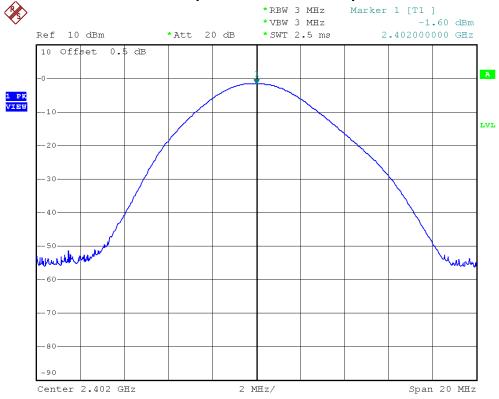


7.7 TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2402 MHz, 2441 MHz, 2480 MHz		

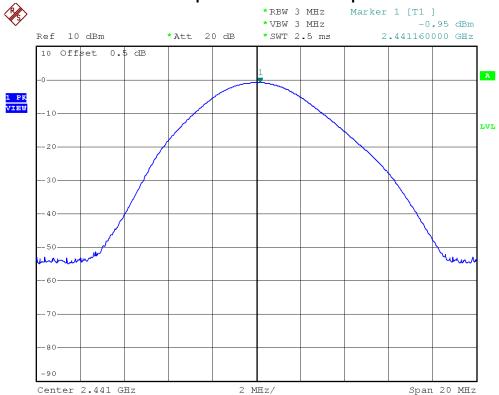
Frequency	Peak Output Power (dBm)	LIMIT (dBm)	Result
2402 MHz	-1.60	30	PASS
2441 MHz	-0.95	30	PASS
2480 MHz	-0.49	30	PASS

Bluetooth/1 Mbps/2402 MHz/Peak Output Power

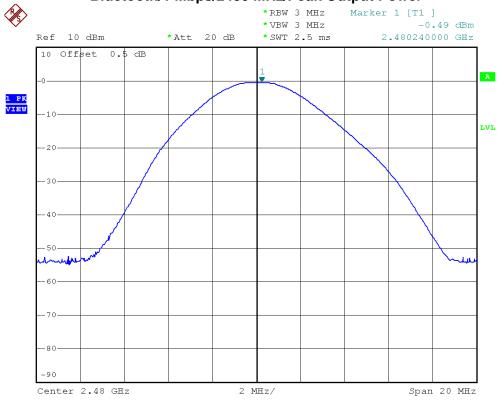


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Bluetooth/1 Mbps/2480 MHz/Peak Output Power



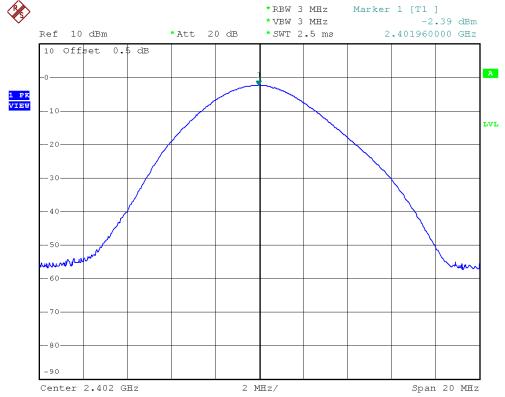
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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2402 MHz, 2441 MHz, 2480 MHz		

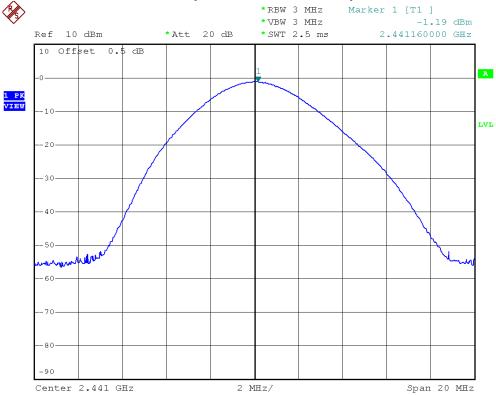
Frequency	Peak Output Power (dBm)	LIMIT (dBm)	Result
2402 MHz	-2.39	30	PASS
2441 MHz	-1.19	30	PASS
2480 MHz	-0.55	30	PASS

Bluetooth/3 Mbps/2402 MHz/Peak Output Power

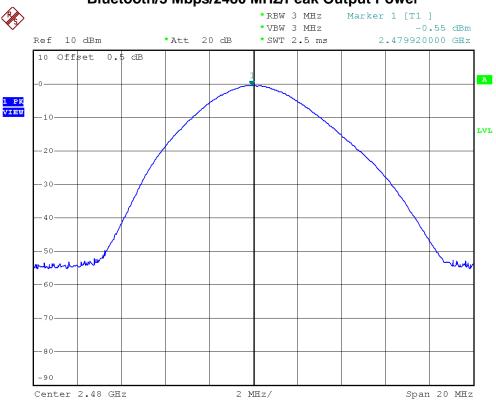


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Bluetooth/3 Mbps/2480 MHz/Peak Output Power



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8 RADIATED SPURIOUS EMISSION (9 KHZ TO 1 GHZ)

8.1 LIMIT

20 dB in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency Range: 9 kHz to 1 GHz				
FREQUENCY (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)		
0.009~0.490	2400/F(kHz)	300		
0.490~1.705	24000/F(kHz)	30		
1.705~30.0	30	30		
30~88	100	3		
88~216	150	3		
216~960	200	3		
Above 960	500	3		

Frequency Range: above 1 GHz				
FREQUENCY	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
(MHz)	PEAK	AVERAGE	PEAK	AVERAGE
above 1 GHz	80	60	74	54

NOTE:

- (1) The limit for radiated test was performed according to FCC PART 15B.
- (2) The tighter limit applies at the band edges.(3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use) Margin Level = Measurement Value - Limit Value

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8.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 15, 2014
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 16, 2014
4	Microflex Cable	Harbour industries	27478LL142	1m	May. 13, 2014
5	Microflex Cable	EMC	S104-SMA	8m	May. 13, 2014
6	Microflex Cable	Harbour industries	27478LL142	3m	May. 13, 2014
7	Test Cable	LMR	LMR-400	12m	May. 14, 2014
8	Test Cable	LMR	LMR-400	3m	May. 14, 2014
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 18, 2014
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jun. 11, 2014
11	Preamplifier With Adaptor	EMC	EMC2654045	980030	Feb. 18, 2014
12	Horn Antenna	Schwarzbeck	BBHA 9170	187	Dec. 24, 2013

Remark: "N/A" denotes No Model Name, No Serial No. or No Calibration specified.

8.3 MEASURING INSTRUMENTS SETTING

EMI Test Receiver	Parameter Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

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8.4 TEST PROCEDURES

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1 GHz. For frequencies above 1 GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m Semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.
- g. The testing follows the guidelines in ANSI C63.4 and FCC Public Notice DA 00-705 Measurement Guidelines. In case the emission is fail due to the used RBW/VBW is too wide, marker-delta method of FCC Public Notice DA 00-705 will be followed.

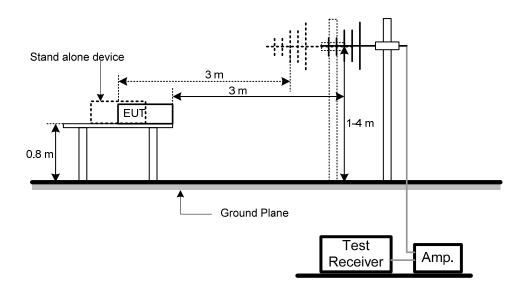
NOTE:

- a. Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode with Detector BW=120 kHz; SPA setting in RBW=100 kHz, VBW =100 kHz, Swp. Time = 0.3 sec./ MHz.
- b. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.

8.5 DEVIATION FROM TEST STANDARD

No deviation

8.6 TEST SETUP LAYOUT



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8.7 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

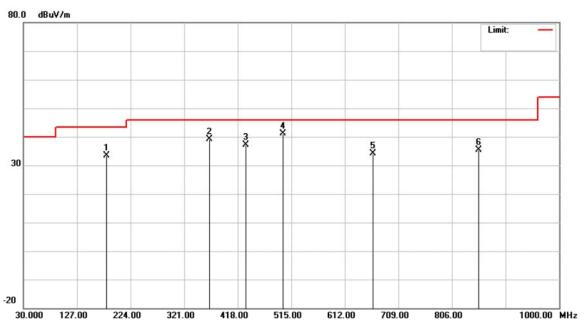
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8.8 TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2441 MHz		

Polarization: Vertical

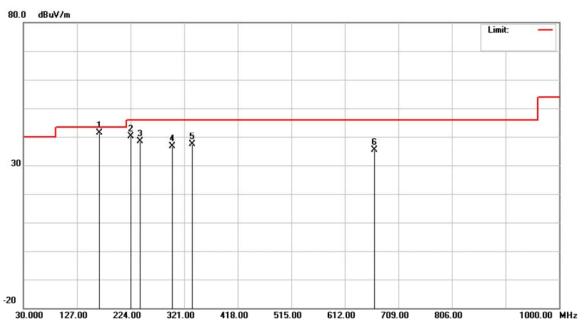


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	1	80.3500	49.38	-15.94	33.44	43.50	-10.06	peak	
2	3	367.0750	51.40	-12.20	39.20	46.00	-6.80	peak	
3	4	132.5498	47.45	-10.26	37.19	46.00	-8.81	peak	
4	* 5	500.4500	50.64	-9.48	41.16	46.00	-4.84	peak	
5	6	62.9249	40.91	-6.78	34.13	46.00	-11.87	peak	
6	8	354.5000	39.37	-4.00	35.37	46.00	-10.63	peak	

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2441 MHz		



No.	Mk	ζ.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	168	.2250	55.94	-14.47	41.47	43.50	-2.03	peak	
2		224	.0000	56.68	-16.64	40.04	46.00	-5.96	peak	
3		240	.9750	53.70	-15.42	38.28	46.00	-7.72	peak	
4		299	.1749	50.68	-13.97	36.71	46.00	-9.29	peak	
5		335	.5499	50.10	-12.73	37.37	46.00	-8.63	peak	
6		665	.3499	42.22	-6.76	35.46	46.00	-10.54	peak	

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9 RADIATED SPURIOUS EMISSION (ABOVE 1 GHZ)

9.1 LIMIT

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency Range: 9 kHz to 1 GHz									
FREQUENCY (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)							
0.009~0.490	2400/F(kHz)	300							
0.490~1.705	24000/F(kHz)	30							
1.705~30.0	30	30							
30~88	100	3							
88~216	150	3							
216~960	200	3							
Above 960	500	3							

Frequency Range: above 1 GHz									
FREQUENCY	Class A (dBu	IV/m) (at 3m)	Class B (dBuV/m) (at 3m)						
(MHz)	PEAK	AVERAGE	PEAK	AVERAGE					
above 1 GHz	80	60	74	54					

NOTE:

- (1) The limit for radiated test was performed according to FCC PART 15B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain(if use) Margin Level = Measurement Value – Limit Value

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9.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 15, 2014
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 16, 2014
4	Microflex Cable	Harbour industries	27478LL142	1m	May. 13, 2014
5	Microflex Cable	EMC	S104-SMA	8m	May. 13, 2014
6	Microflex Cable	Harbour industries	27478LL142	3m	May. 13, 2014
7	Test Cable	LMR	LMR-400	12m	May. 14, 2014
8	Test Cable	LMR	LMR-400	3m	May. 14, 2014
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 18, 2014
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jun. 11, 2014
11	Preamplifier With Adaptor	EMC	EMC2654045	980030	Feb. 18, 2014
12	Horn Antenna	Schwarzbeck	BBHA 9170	187	Dec. 24, 2013

Remark: "N/A" denotes No Model Name, No Serial No. or No Calibration specified.

9.3 MEASURING INSTRUMENTS SETTING

Spectrum Analyzer	Parameter Setting				
Attenuation	Auto				
Start Frequency	1000 MHz				
Stop Frequency	10th carrier harmonic				
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average				
RB / VB (other emission)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average				

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9.4 TEST PROCEDURES

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1 GHz. For frequencies above 1 GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m Semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.
- g. The testing follows the guidelines in ANSI C63.4 and FCC Public Notice DA 00-705 Measurement Guidelines. In case the emission is fail due to the used RBW/VBW is too wide, marker-delta method of FCC Public Notice DA 00-705 will be followed.

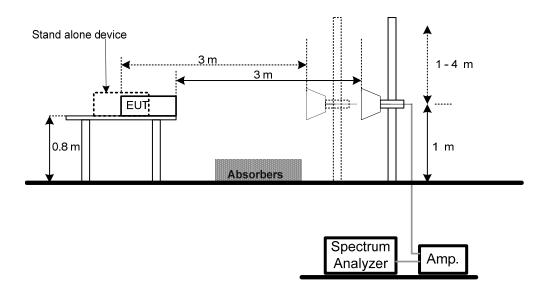
NOTE:

- a. Reading in which marked as Peak means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
 Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.
- b. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform.

9.5 DEVIATION FROM TEST STANDARD

No deviation

9.6 TEST SETUP LAYOUT



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9.7 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

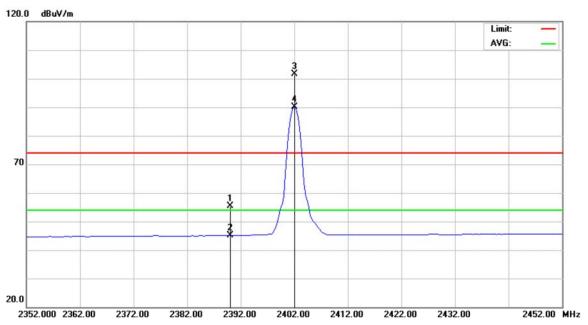
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9.8 TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2402 MHz		

Polarization: Vertical

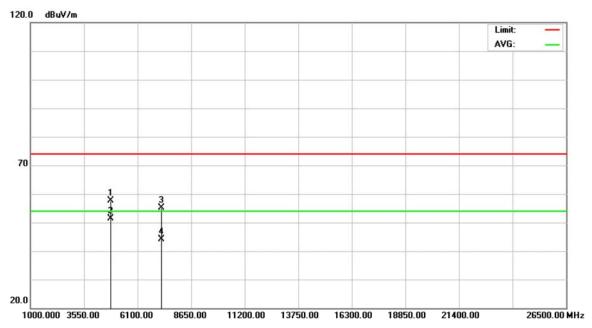


No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	23.75	31.67	55.42	74.00	-18.58	peak	
2		2390.000	13.41	31.67	45.08	54.00	-8.92	AVG	
3	Χ	2402.000	69.85	31.72	101.57	74.00	27.57	peak	
4	*	2402.000	58.39	31.72	90.11	54.00	36.11	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2402 MHz		

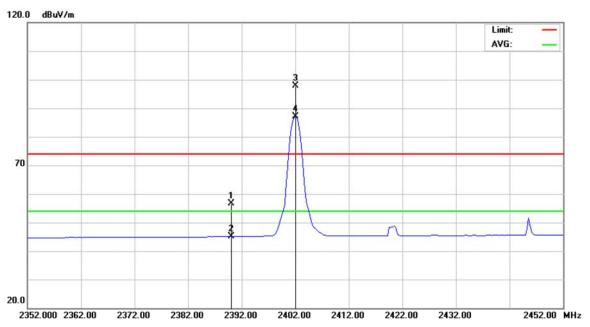


No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4804.000	51.85	5.69	57.54	74.00	-16.46	peak	
2	*	4804.000	45.81	5.69	51.50	54.00	-2.50	AVG	
3		7205.950	43.03	12.18	55.21	74.00	-18.79	peak	
4		7205.950	32.04	12.18	44.22	54.00	-9.78	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2402 MHz		

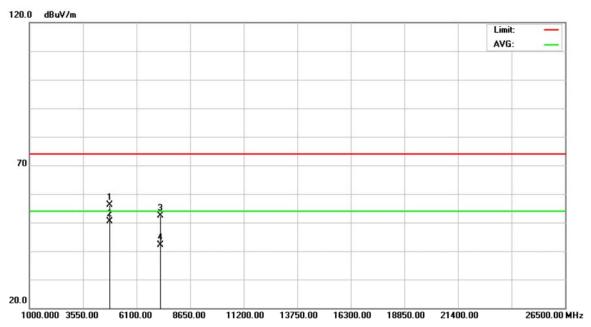


	No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		2390.000	24.89	31.67	56.56	74.00	-17.44	peak	
	2		2390.000	13.38	31.67	45.05	54.00	-8.95	AVG	
_	3	Χ	2401.975	66.24	31.72	97.96	74.00	23.96	peak	
	4	*	2401.975	55.45	31.72	87.17	54.00	33.17	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	26°C	Relative Humidity	60%					
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2402 MHz							

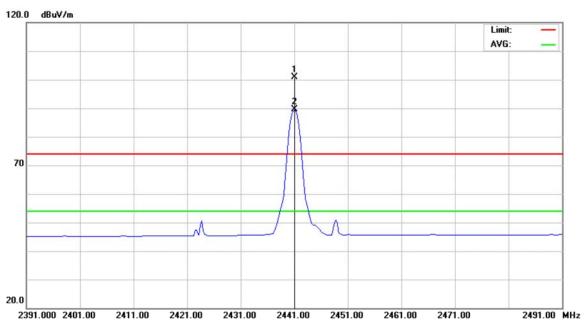


No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4804.000	50.42	5.69	56.11	74.00	-17.89	peak	
2	*	4804.000	44.67	5.69	50.36	54.00	-3.64	AVG	
3		7205.950	40.11	12.18	52.29	74.00	-21.71	peak	
4		7205.950	30.03	12.18	42.21	54.00	-11.79	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	26°C	Relative Humidity	60%					
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2441 MHz							

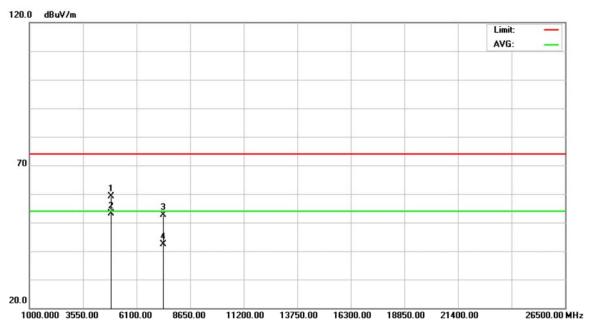


No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Χ	2441.000	68.92	31.90	100.82	74.00	26.82	peak		
2	*	2441.000	57.64	31.90	89.54	54.00	35.54	AVG		

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	26°C	Relative Humidity	60%					
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2441 MHz							

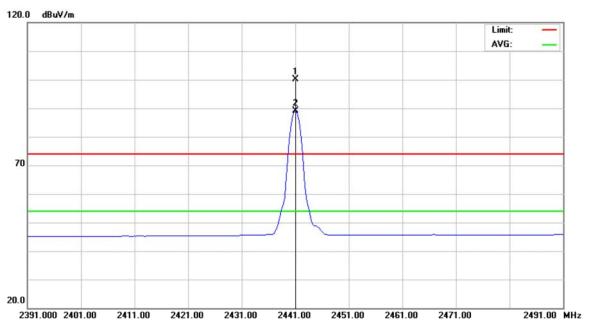


No.	MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4882.000	53.42	5.79	59.21	74.00	-14.79	peak	
2	*	4882.000	47.37	5.79	53.16	54.00	-0.84	AVG	
3		7322.900	40.00	12.61	52.61	74.00	-21.39	peak	
4		7322.900	29.71	12.61	42.32	54.00	-11.68	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	26°C	Relative Humidity	60%					
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2441 MHz							

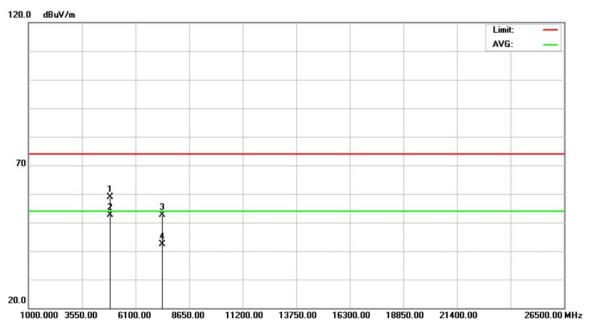


	No.	Mk	. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	Х	2441.000	68.30	31.90	100.20	74.00	26.20	peak	
	2	*	2441.000	57.22	31.90	89.12	54.00	35.12	AVG	
_										

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	ge AC 120V/60Hz						
Test Mode Bluetooth/1 Mbps/2441 MHz							

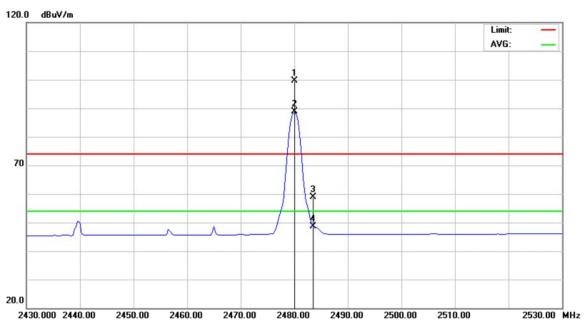


No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4881.975	53.19	5.79	58.98	74.00	-15.02	peak	
2	*	4881.975	46.88	5.79	52.67	54.00	-1.33	AVG	
3		7322.975	40.13	12.61	52.74	74.00	-21.26	peak	
4		7322.975	29.67	12.61	42.28	54.00	-11.72	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	26°C	Relative Humidity	60%					
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2480 MHz							

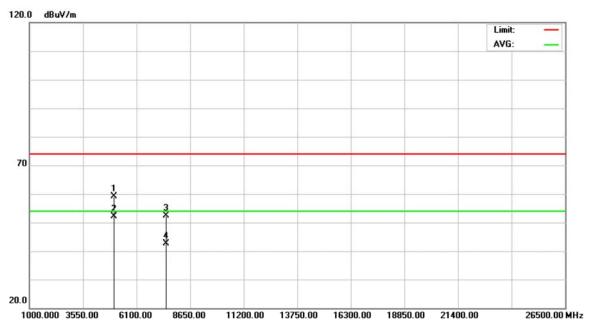


No.	Mŀ	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Χ	2480.000	67.67	32.07	99.74	74.00	25.74	peak	
2	*	2480.000	56.71	32.07	88.78	54.00	34.78	AVG	
3		2483.500	26.72	32.09	58.81	74.00	-15.19	peak	
4		2483.500	16.54	32.09	48.63	54.00	-5.37	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	26°C	Relative Humidity	60%					
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2480 MHz							

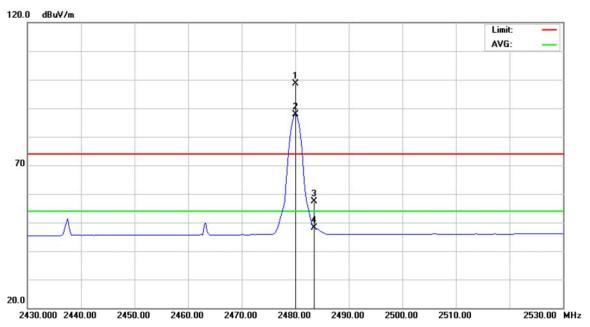


No	. М	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		496	30.000	53.13	5.89	59.02	74.00	-14.98	peak	
2	*	496	30.000	46.32	5.89	52.21	54.00	-1.79	AVG	
3		744	10.000	39.28	13.05	52.33	74.00	-21.67	peak	
4		744	10.000	29.63	13.05	42.68	54.00	-11.32	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	ge AC 120V/60Hz						
Test Mode	Bluetooth/1 Mbps/2480 MHz						

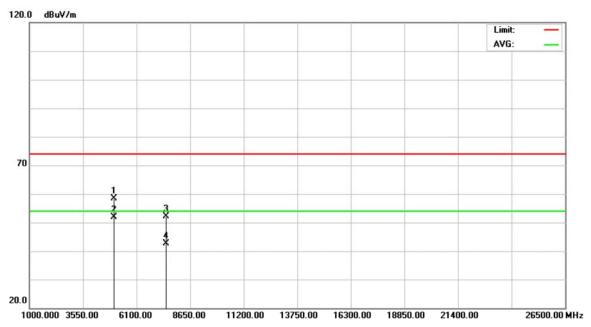


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Χ	2480.000	66.49	32.07	98.56	74.00	24.56	peak	
2	*	2480.000	55.74	32.07	87.81	54.00	33.81	AVG	
3		2483.500	25.33	32.09	57.42	74.00	-16.58	peak	
4		2483.500	16.05	32.09	48.14	54.00	-5.86	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	ge AC 120V/60Hz						
Test Mode	Bluetooth/1 Mbps/2480 MHz						

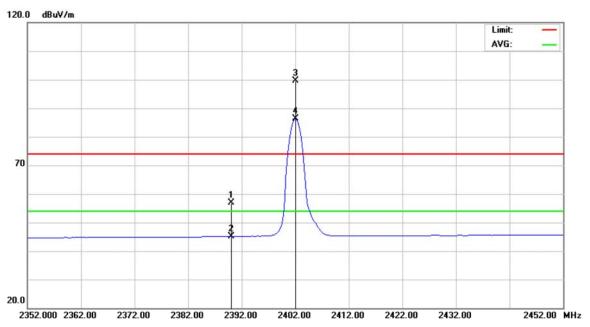


No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4960.000	52.61	5.89	58.50	74.00	-15.50	peak	
2	*	4960.000	46.02	5.89	51.91	54.00	-2.09	AVG	
3		7440.000	39.08	13.05	52.13	74.00	-21.87	peak	
4		7440.000	29.49	13.05	42.54	54.00	-11.46	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	AC 120V/60Hz						
Test Mode	Bluetooth/3 Mbps/2402 MHz						

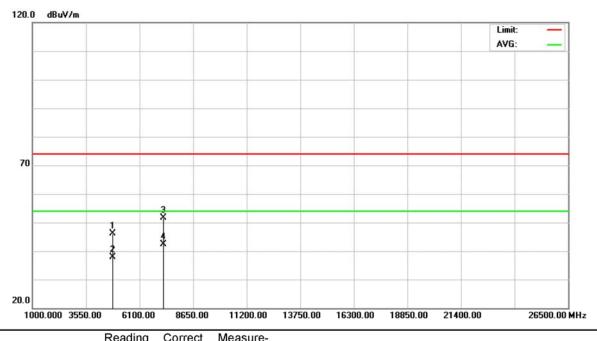


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	25.09	31.67	56.76	74.00	-17.24	peak	
2		2390.000	13.39	31.67	45.06	54.00	-8.94	AVG	
3	Χ	2402.000	67.92	31.72	99.64	74.00	25.64	peak	
4	*	2402.000	54.54	31.72	86.26	54.00	32.26	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	AC 120V/60Hz						
Test Mode	Bluetooth/3 Mbps/2402 MHz						

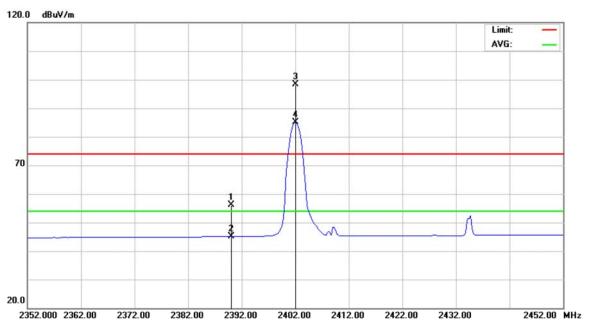


No.	Mk	c. Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4804.000	40.43	5.69	46.12	74.00	-27.88	peak	
2		4804.000	32.24	5.69	37.93	54.00	-16.07	AVG	
3		7206.000	39.37	12.18	51.55	74.00	-22.45	peak	
4	*	7206.000	30.18	12.18	42.36	54.00	-11.64	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	e AC 120V/60Hz						
Test Mode	Bluetooth/3 Mbps/2402 MHz						

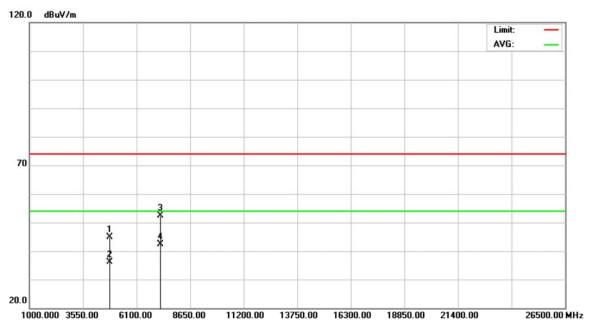


No.	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	24.57	31.67	56.24	74.00	-17.76	peak	
2		2390.000	13.38	31.67	45.05	54.00	-8.95	AVG	
3	Χ	2402.000	66.54	31.72	98.26	74.00	24.26	peak	
4	*	2402.000	53.39	31.72	85.11	54.00	31.11	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	AC 120V/60Hz						
Test Mode Bluetooth/3 Mbps/2402 MHz							

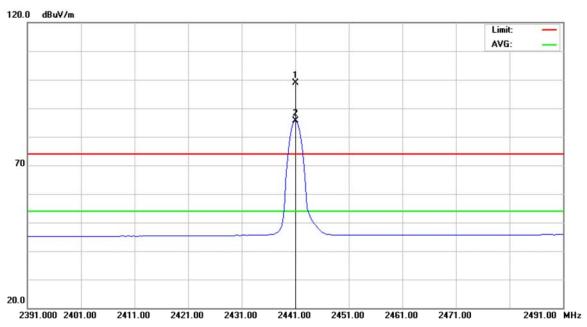


	No.	М	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		4804.000	39.17	5.69	44.86	74.00	-29.14	peak	
	2		4804.000	30.56	5.69	36.25	54.00	-17.75	AVG	
_	3		7206.000	40.23	12.18	52.41	74.00	-21.59	peak	
_	4	*	7206.000	30.17	12.18	42.35	54.00	-11.65	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	AC 120V/60Hz						
Test Mode Bluetooth/3 Mbps/2441 MHz							

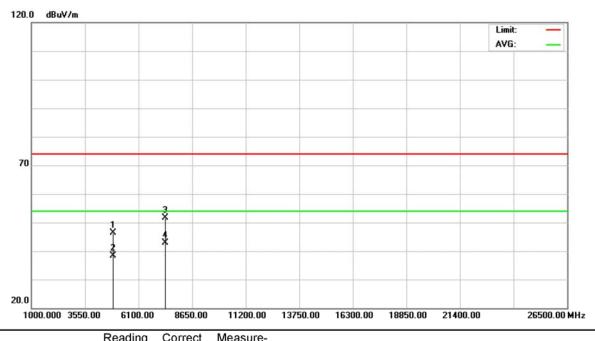


No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Χ	2441.000	66.96	31.90	98.86	74.00	24.86	peak	
2	*	2441.000	53.72	31.90	85.62	54.00	31.62	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA			
Temperature	26°C	Relative Humidity	60%			
Test Voltage	AC 120V/60Hz					
Test Mode Bluetooth/3 Mbps/2441 MHz						

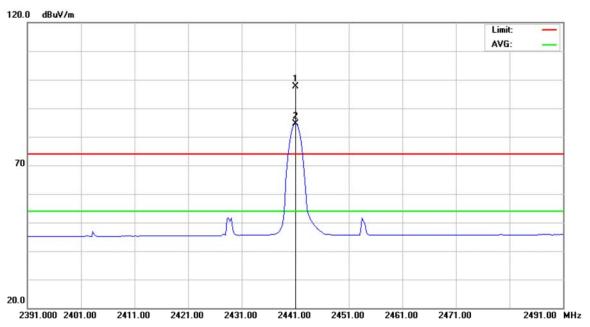


No.	Mk	. Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4882.000	40.56	5.79	46.35	74.00	-27.65	peak	
2		4882.000	32.58	5.79	38.37	54.00	-15.63	AVG	
3		7323.000	39.03	12.61	51.64	74.00	-22.36	peak	
4	*	7323.000	30.24	12.61	42.85	54.00	-11.15	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA				
Temperature	26°C	Relative Humidity	60%				
Test Voltage	AC 120V/60Hz						
Test Mode Bluetooth/3 Mbps/2441 MHz							

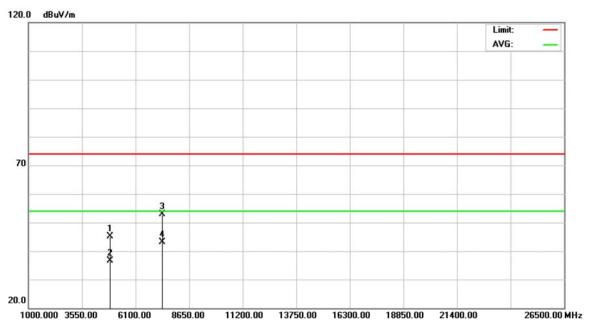


ı	No.	Mk	. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	Χ	2441.000	65.63	31.90	97.53	74.00	23.53	peak	
	2	*	2441.000	52.79	31.90	84.69	54.00	30.69	AVG	
_										

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2441 MHz		



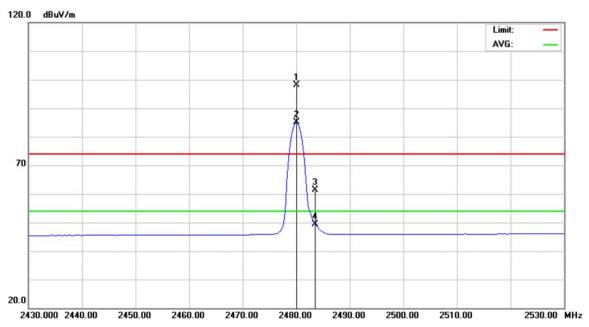
No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4882.000	39.42	5.79	45.21	74.00	-28.79	peak	
2		4882.000	30.87	5.79	36.66	54.00	-17.34	AVG	
3		7323.000	40.23	12.61	52.84	74.00	-21.16	peak	
4	*	7323.000	30.56	12.61	43.17	54.00	-10.83	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA							
Temperature	26°C	Relative Humidity	60%							
Test Voltage	AC 120V/60Hz	AC 120V/60Hz								
Test Mode	Bluetooth/3 Mbps/2480 MHz									

Polarization: Vertical



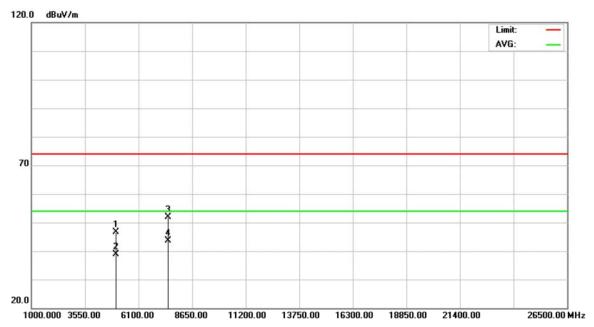
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Χ	2480.000	66.09	32.07	98.16	74.00	24.16	peak	
2	*	2480.000	53.00	32.07	85.07	54.00	31.07	AVG	
3		2483.500	29.19	32.09	61.28	74.00	-12.72	peak	
4		2483.500	17.34	32.09	49.43	54.00	-4.57	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2480 MHz		

Polarization: Vertical

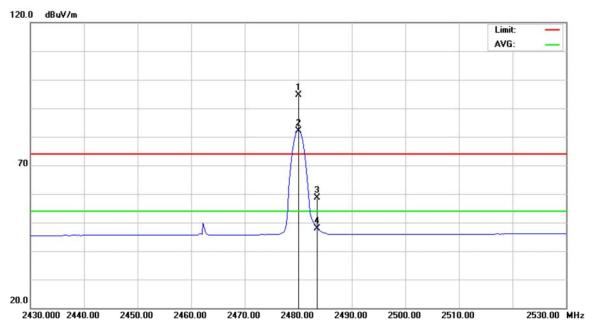


No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4960.050	40.84	5.89	46.73	74.00	-27.27	peak	
2		4960.050	32.97	5.89	38.86	54.00	-15.14	AVG	
3		7440.000	38.74	13.05	51.79	74.00	-22.21	peak	
4	*	7440.000	30.49	13.05	43.54	54.00	-10.46	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2480 MHz		

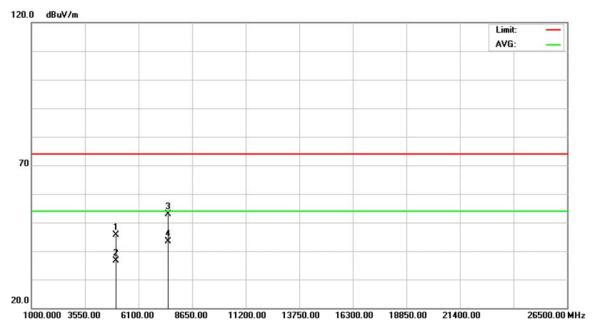


No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Χ	2480.000	62.49	32.07	94.56	74.00	20.56	peak	
2	*	2480.000	50.17	32.07	82.24	54.00	28.24	AVG	
3		2483.500	26.55	32.09	58.64	74.00	-15.36	peak	
4		2483.500	15.86	32.09	47.95	54.00	-6.05	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2480 MHz		



No.	М	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4960.175	39.75	5.89	45.64	74.00	-28.36	peak	
2		4960.175	30.86	5.89	36.75	54.00	-17.25	AVG	
3		7440.000	39.87	13.05	52.92	74.00	-21.08	peak	
4	*	7440.000	30.45	13.05	43.50	54.00	-10.50	AVG	

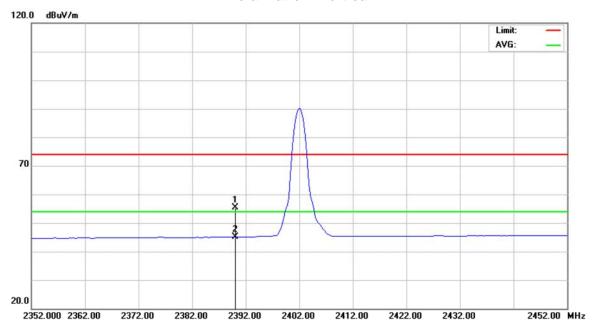
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9.9 TEST RESULTS (RESTRICTED BANDS)

E.U.T	Home Theatre System	Model Name	JS6305WA						
Temperature	24°C Relative Humidity 46%								
Test Voltage	AC 120V/60Hz	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2402 MHz								
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.								

Polarization: Vertical



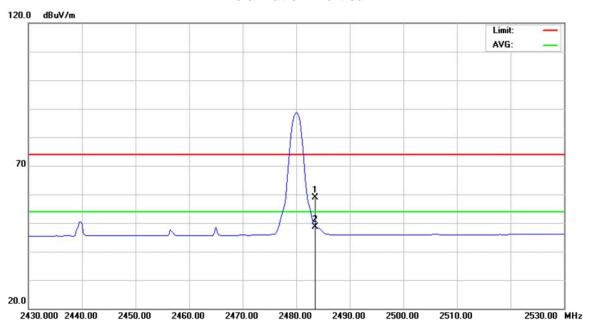
	No.	Mk	c. Freq.	Reading Level		Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		2390.000	23.75	31.67	55.42	74.00	-18.58	peak	
	2	*	2390.000	13.41	31.67	45.08	54.00	-8.92	AVG	
-										

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E.U.T	Home Theatre System	Model Name	JS6305WA						
Temperature	24°C	Relative Humidity	46%						
Test Voltage	AC 120V/60Hz	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2480 MHz								
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.								

Polarization: Vertical

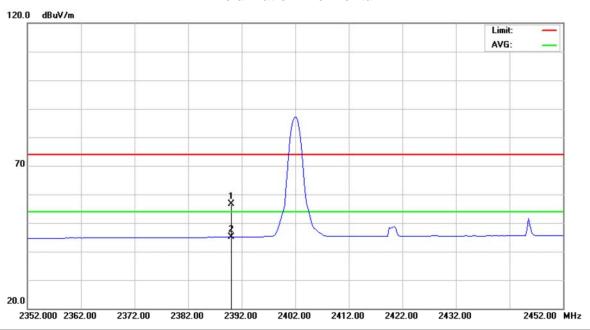


No.	MI	k. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	26.72	32.09	58.81	74.00	-15.19	peak	
2	*	2483.500	16.54	32.09	48.63	54.00	-5.37	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	24°C Relative Humidity 46%							
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2402 MHz							
	OTE The transmitter was setup to transmit at the lowest channel and the field strength measured at 2310-2390 MHz.							

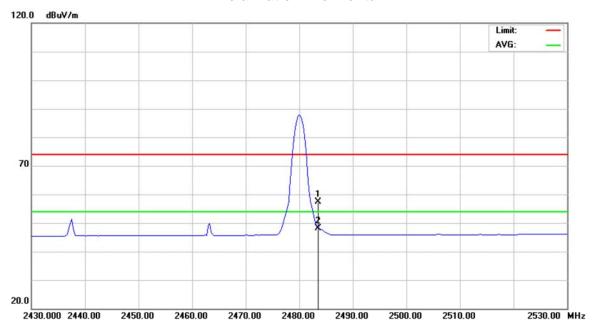


No). N	∕lk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		23	90.000	24.89	31.67	56.56	74.00	-17.44	peak	
2	*	23	90.000	13.38	31.67	45.05	54.00	-8.95	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA						
Temperature	24°C	Relative Humidity	46%						
Test Voltage	AC 120V/60Hz	AC 120V/60Hz							
Test Mode	Bluetooth/1 Mbps/2480 MHz								
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.								



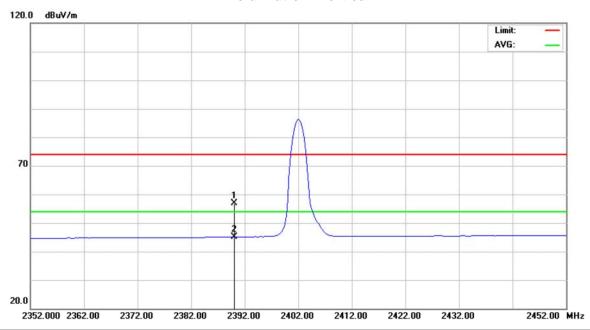
No.	MI	k. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	25.33	32.09	57.42	74.00	-16.58	peak	
2	*	2483.500	16.05	32.09	48.14	54.00	-5.86	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA						
Temperature	24°C Relative Humidity 46%								
Test Voltage	AC 120V/60Hz	AC 120V/60Hz							
Test Mode	Bluetooth/3 Mbps/2402 MHz								
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength measured at 2310-2390 MHz.								

Polarization: Vertical



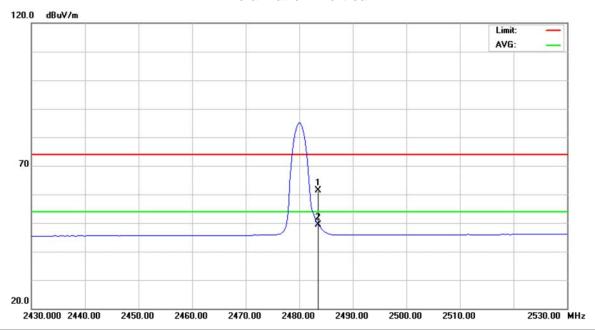
No.	MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	25.09	31.67	56.76	74.00	-17.24	peak	
2	*	2390.000	13.39	31.67	45.06	54.00	-8.94	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA					
Temperature	24°C Relative Humidity 46%							
Test Voltage	AC 120V/60Hz							
Test Mode	Bluetooth/3 Mbps/2480 MHz							
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.							

Polarization: Vertical

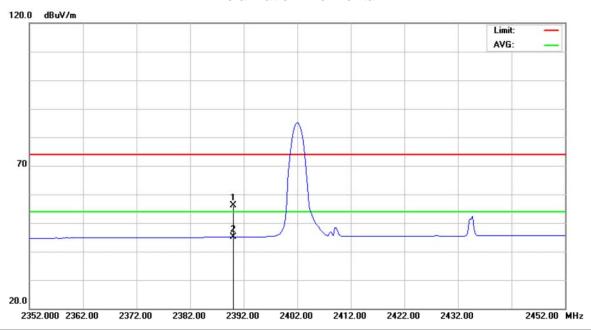


No	. N	∕lk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		24	83.500	29.19	32.09	61.28	74.00	-12.72	peak	
2	*	24	83.500	17.34	32.09	49.43	54.00	-4.57	AVG	

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E.U.T	Home Theatre System	Model Name	JS6305WA						
Temperature	24°C Relative Humidity 46%								
Test Voltage	AC 120V/60Hz	AC 120V/60Hz							
Test Mode	Bluetooth/3 Mbps/2402 MHz								
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength measured at 2310-2390 MHz.								

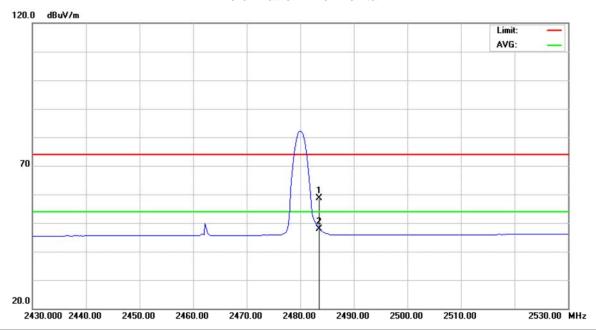


	No.	MI	k. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		2390.000	24.57	31.67	56.24	74.00	-17.76	peak	
	2	*	2390.000	13.38	31.67	45.05	54.00	-8.95	AVG	
_										

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E.U.T	Home Theatre System	Model Name	JS6305WA		
Temperature	24°C	Relative Humidity	46%		
Test Voltage	AC 120V/60Hz				
Test Mode	Bluetooth/3 Mbps/2480 MHz				
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.				



ı	No.	MI	k. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		2483.500	26.55	32.09	58.64	74.00	-15.36	peak	
	2	*	2483.500	15.86	32.09	47.95	54.00	-6.05	AVG	
_										

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10 NUMBER OF HOPPING FREQUENCY

10.1LIMIT

Test Item	Frequency Range (MHz)	Limit
Number of Hopping Channel	2400-2483.5	shall use at least 15 channels

10.2MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

10.3MEASURING INSTRUMENTS SETTING

Spectrum Analyzer	Parameter Setting
Attenuation	Auto
Span Frequency	> Operating Frequency Range
RB	100 kHz
VB	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

10.4TEST PROCEDURES

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100 kHz, VBW=100 kHz, Sweep time = Auto.

10.5TEST SETUP LAYOUT



10.6 DEVIATION FROM TEST STANDARD

No deviation

10.7EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

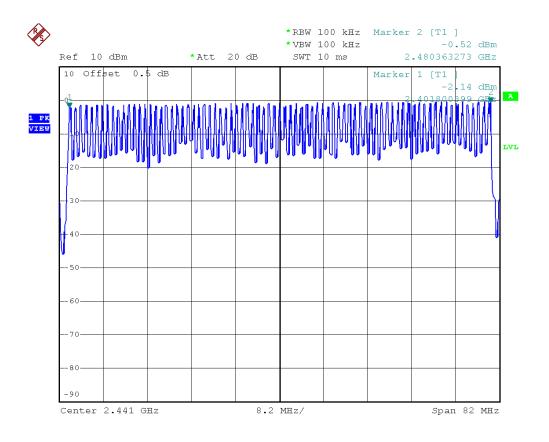
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10.8TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps		

Number of Hopping Channel	Limit	Result
79	15	Pass

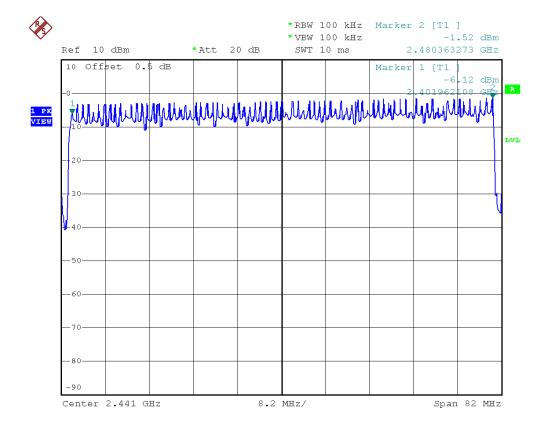


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E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps		

Number of Hopping Channel	Limit	Result
79	15	Pass



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11 AVERAGE TIME OF OCCUPANCY

11.1 LIMIT

	Test Item	Frequency Range (MHz)	Limit
Av	verage time of occupancy	2400-2483 5	shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

11.2MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 01, 2013

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

11.3TEST PROCEDURES

- a. The transmitter output (antenna port) was connected to the spectrum analyzer
- b. Set RBW of spectrum analyzer to 100 kHz and VBW to 100 kHz.
- c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
- d. Sweep Time is more than once pulse time.
- e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- f. Measure the maximum time duration of one single pulse.
- g. Set the EUT for DH5, DH3 and DH1 packet transmitting.
- h. Measure the maximum time duration of one single pulse.
- i. DH5 Packet permit maximum 1600/79/6 = 3.37 hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $3.37 \times 31.6 = 106.6$ within 31.6 seconds.
- j. DH3 Packet permit maximum 1600 / 79 / 4 = 5.06 hops per second in each channel (3 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $5.06 \times 31.6 = 160$ within 31.6 seconds.
- k. DH1 Packet permit maximum 1600 / 79 / 2 = 10.12 hops per second in each channel (1 time slot RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds.

11.4TEST SETUP LAYOUT

EUT	SPECTRUM
	ANALYZER

11.5 DEVIATION FROM TEST STANDARD

No deviation

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11.6EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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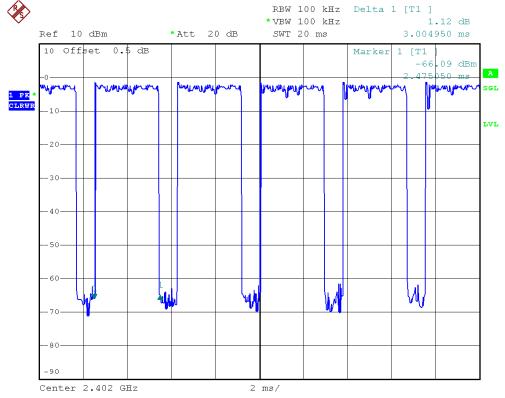


11.7TEST RESULTS

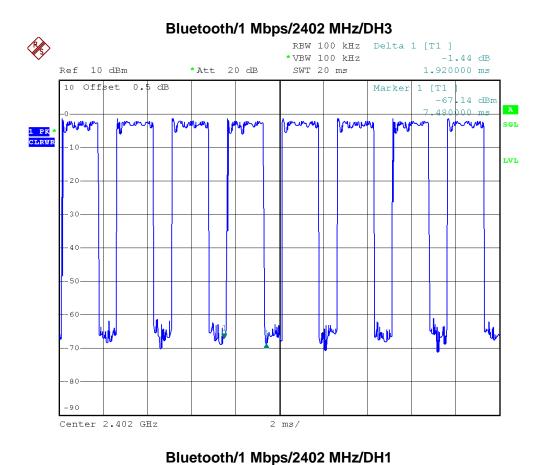
E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2402 MHz		

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limit (s)	Result
DH5	2402 MHz	3.0050	0.3205	0.4	PASS
DH3	2402 MHz	1.9200	0.3072	0.4	PASS
DH1	2402 MHz	0.8010	0.2563	0.4	PASS

Bluetooth/1 Mbps/2402 MHz/DH5



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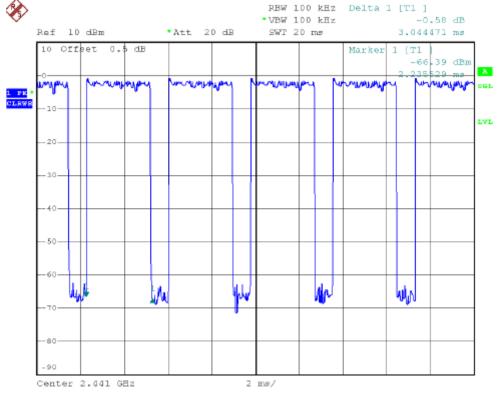
Report No.: NEI-FCCP-1-1308248



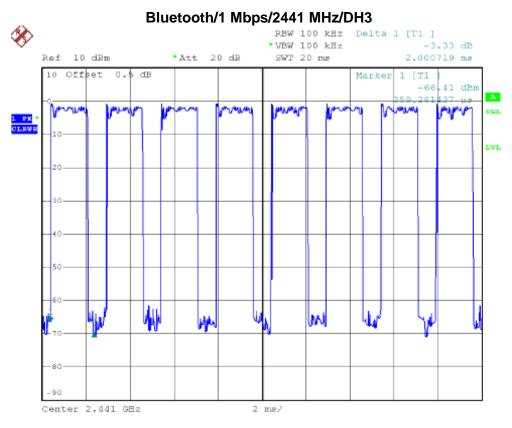
E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2441 MHz		

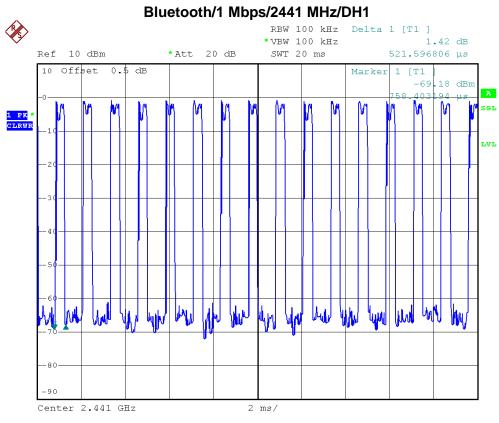
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limit (s)	Result
DH5	2441 MHz	3.0445	0.3247	0.4	PASS
DH3	2441 MHz	2.0007	0.3201	0.4	PASS
DH1	2441 MHz	0.5216	0.1669	0.4	PASS

Bluetooth/1 Mbps/2441 MHz/DH5



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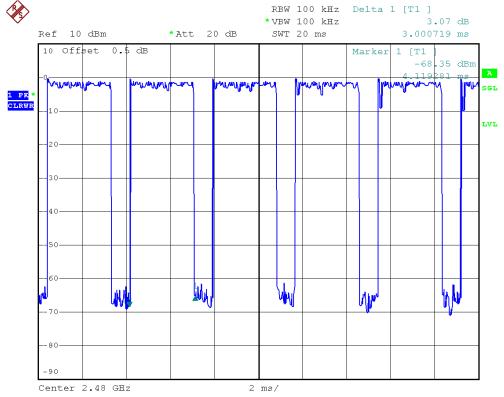




E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/1 Mbps/2480 MHz		

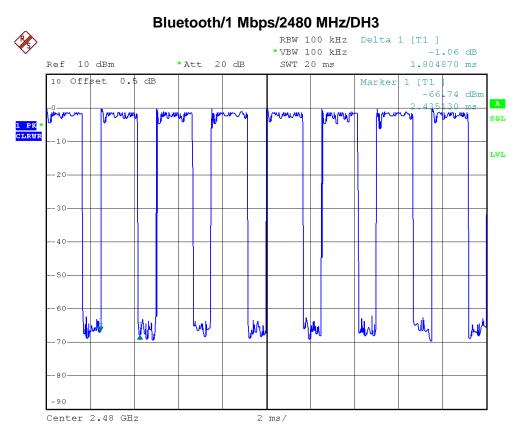
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limit (s)	Result
DH5	2480 MHz	3.0007	0.3201	0.4	PASS
DH3	2480 MHz	1.8048	0.2888	0.4	PASS
DH1	2480 MHz	0.5612	0.1796	0.4	PASS

Bluetooth/1 Mbps/2480 MHz/DH5

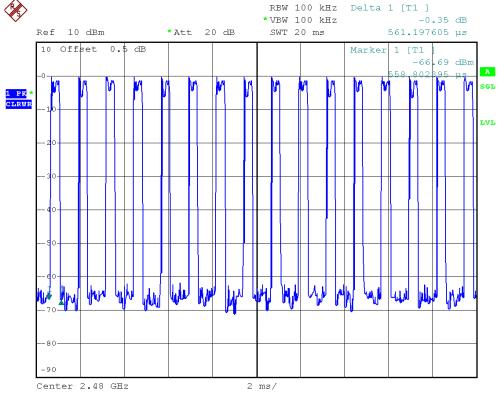


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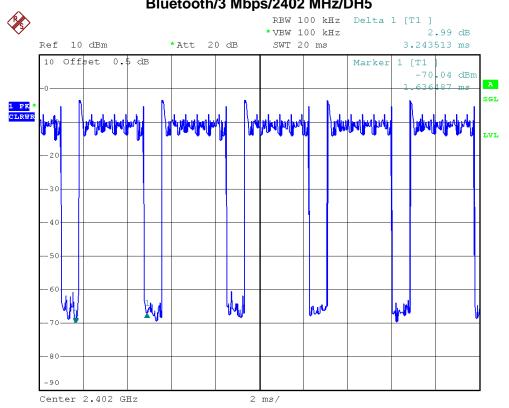
Report No.: NEI-FCCP-1-1308248



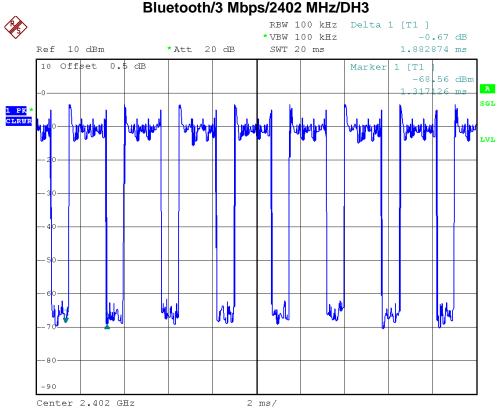
E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2402 MHz		

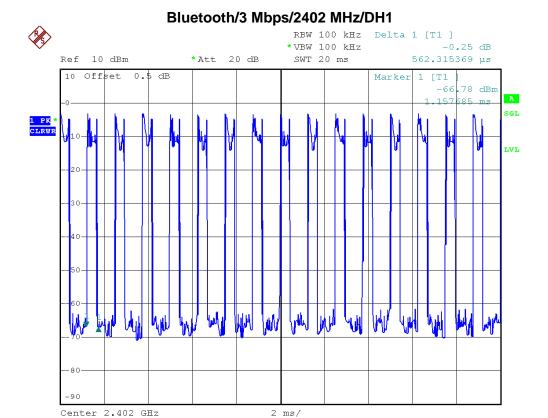
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limit (s)	Result
DH5	2402 MHz	3.2435	0.3460	0.4	PASS
DH3	2402 MHz	1.8828	0.3012	0.4	PASS
DH1	2402 MHz	0.5623	0.1799	0.4	PASS

Bluetooth/3 Mbps/2402 MHz/DH5



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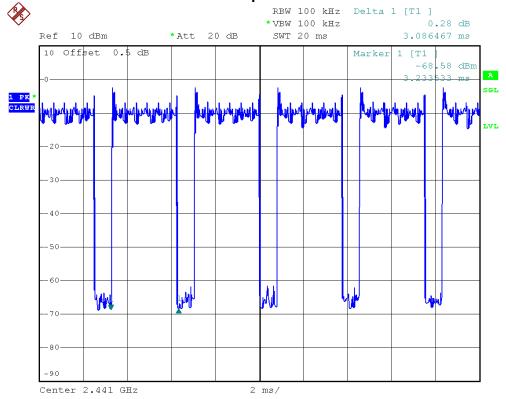
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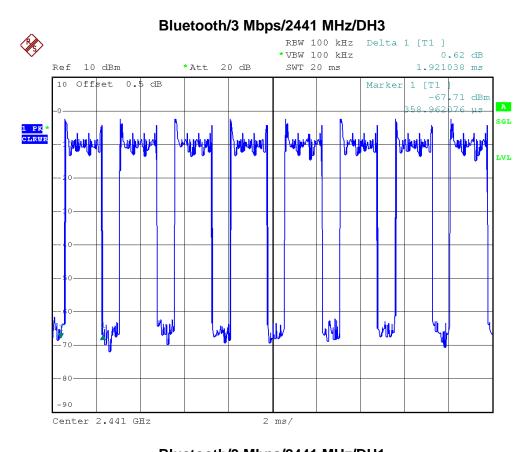
E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2441 MHz		

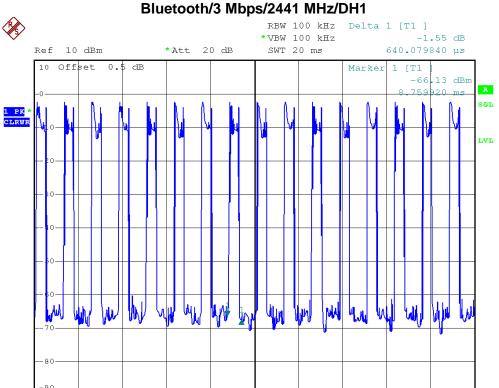
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limit (s)	Result
DH5	2441 MHz	3.0865	0.3292	0.4	PASS
DH3	2441 MHz	1.9210	0.3074	0.4	PASS
DH1	2441 MHz	0.6401	0.2048	0.4	PASS

Bluetooth/3 Mbps/2441 MHz/DH5



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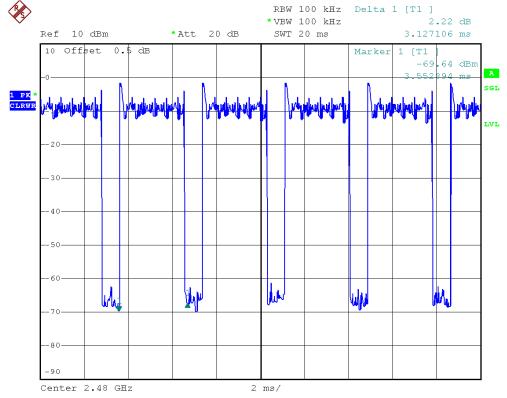
Center 2.441 GHz



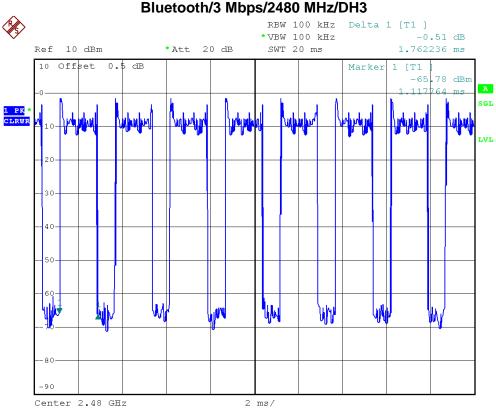
E.U.T	Home Theatre System	Model Name	JS6305WA
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	Bluetooth/3 Mbps/2480 MHz		

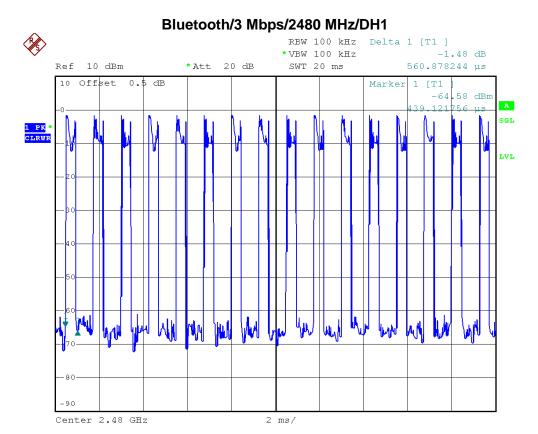
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limit (s)	Result
DH5	2480 MHz	3.1271	0.3336	0.4	PASS
DH3	2480 MHz	1.7622	0.2820	0.4	PASS
DH1	2480 MHz	0.5609	0.1795	0.4	PASS

Bluetooth/3 Mbps/2480 MHz/DH5



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12 RF EXPOSURE COMPLIANCE

12.1LIMIT

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)		Magnetic Field Strength (H) (A/m)	Power Density (3)	Averaging Time E ², H ²or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)		Magnetic Field Strength (H) (A/m)	Power Density (3)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

NOTE: f = frequency in MHz; *Plane-wave equivalent power density.

12.2MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	Feb,20,2013
2	Power Meter Sensor	Anritsu	MA2411B	1126001	Feb,20,2013

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

12.3MPE CALCULATION METHOD

E (V/m)
$$=\frac{\sqrt{30\times P\times G}}{d}$$
 Power Density: Pd (W/m²) $=\frac{E^2}{377}$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

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12.4TEST SETUP LAYOUT

FIIT	Power Meter
LUI	rower Meter

12.5 DEVIATION FROM TEST STANDARD

No deviation

12.6EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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12.7TEST RESULTS

E.U.T	Home Theatre System	Model Name	JS6305WA		
Temperature	26°C	Relative Humidity	46%		
Test Voltage	AC 120V/60Hz				
Test Mode	Bluetooth/1 Mbps/2402 MHz, 2441 MHz, 2480 MHz				

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Result
2402 MHz	-2.51	0.5610	-1.6000	0.6918	0.000077	1	PASS
2441 MHz	-2.51	0.5610	-0.9500	0.8035	0.000090	1	PASS
2480 MHz	-2.51	0.5610	-0.4900	0.8933	0.000100	1	PASS

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