FCC Test Report

Report No.: AGC05734151201FE05

FCC ID	:	SMCP1
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	JmGO Smart Portable Theater
BRAND NAME	:	JmGO
MODEL NAME	:	P1 (Series model name please see page 4)
CLIENT	:	SHENZHEN HOLATEK CO., LTD
DATE OF ISSUE	:	Mar.01, 2016
STANDARD(S) TEST PROCEDURE(S)	:	FCC Part 15.247 KDB 558074 v03r02
REPORT VERSION	:	V1.0



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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes	
V1.0	1	Mar.01, 2016	Valid	Original Report	

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Applicant	SHENZHEN HOLATEK CO., LTD		
Address	1001#, Building 4, Keyuan Road, Kexing Science Park, Nanshan, Shenzhen, China		
Manufacturer	Fosunny (Huizhou) Innovation Electronic Technology Co.,Ltd		
Address	44&45 Building, the Seventh Zone Daxin Grounp, Shuguang Road, Chenjiang Town, Huizhou, Guangdong Province, P.R. China		
Product Designation	JmGO Smart Portable Theater		
Brand Name	JmGO		
Test Model	P1		
Series Model	P2, P3, P4, P5, P6, P1S, P2S, P3S, P4S, P5S, P1 Pro, P2 Pro, P3 Pro, P4 Pro, P5 Pro, P1S Pro, P2S Pro, P3S Pro, P4S Pro, P5S Pro, C1, C2, C3, C4, C5, V1, V2, V3, V4, V5		
Model Difference	All the same except the model name.		
Date of test	Dec.29,2015 to Dec.31,2015		
Deviation	None		
Condition of Test Sample	Normal		
Test Result	Pass		
Report Template	AGCRT-US-BGN/RF		

1. VERIFICATION OF CONFORMITY

We hereby certify that:

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2009) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Max 2han Tested by Max Zhang(Zhang Yi) Mar.01, 2016 Reviewed by Rock Huang(Huang Dinglue) Mar.01, 2016 Approved by Solger Zhang(Zhang Hongyi) Mar.01, 2016 Authorized Officer

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as "JmGO Smart Portable Theater". It is designed by way of utilizing the DSSS and OFDM technology to achieve the system operation.

Operation Frequency 2.412 GHz~2.462GHz IEEE 802.11b:16.40dBm; IEEE 802.11g:14.39dBm; **Output Power** IEEE 802.11n(20):14.14dBm; IEEE 802.11n(40):11.43dBm Modulation DSSS(DBPSK/DQPSK/CCK);OFDM(BPSK/QPSK/16-QAM/64-QAM) Number of channels 11 **Hardware Version** 1.1.0 **Software Version** 1.1.5 **Antenna Designation** Integrated Antenna(Main), Integrated Antenna(Assistant) Number of transmit chain 2 Antenna Gain 1.5dBi(Main), 1.5dBi(Assistant) **Power Supply** DC 11.1V by battery or DC 13.6V by adapter

A major technical description of EUT is described as following

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
	1	2412 MHZ
	2	2417 MHZ
	3	2422 MHZ
	4	2427 MHZ
	5	2432 MHZ
2400~2483.5MHZ	6	2437 MHZ
	7	2442 MHZ
	8	2447 MHZ
	9	2452 MHZ
	10	2457 MHZ
	11	2462 MHZ

Note: For 20MHZ bandwidth system use Channel 1 to Channel 11 For 40MHZ bandwidth system use Channel 3 to Channel 9

MCS Index	Nss	Modulation	R	NBPSC	NCI	BPS	NDI	BPS	rate(N	ata Mbps) nsGI
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0
6	1	64-QAM	3/4	6	312	648	234	489	58.5	121.5
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0

2.3. IEEE 802.11N MODULATION SCHEME

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

2.4. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: SMCP1** filing to comply with the FCC Part 15 requirements.

2.5. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4 (2003). Radiated testing was performed at an antenna to EUT distance 3 meters.

Others testing (listed at item 5.3) was performed according to the procedures in FCC Part 15.247 rules KDB 558074 D01 DTS Meas Guidance v03r02.

2.6. SPECIAL ACCESSORIES

Refer to section 5.2.

2.7. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 3.18dB Radiated measurement: +/- 3.91dB

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION		
1	Low channel TX		
2	Middle channel TX		
3	High channel TX		
4	Normal operating		
Note: Transmit by 802.11b with Date rate (1/2/5.5/11) Transmit by 802.11g with Date rate (6/9/12/18/24/36/48/54)			

Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65) Transmit by 802.11n (40MHz) with Date rate

(13.5/27/40.5/54/81/108/121.5/135)

Note:

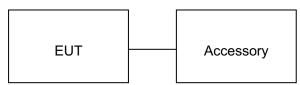
1. The EUT has been set to operate continuously on the lowest, middle and highest operation frequency Individually, and the eut is operating at its maximum duty cycle>or equal 98%

- 2. All modes under which configure applicable have been tested and the worst mode test data recording in the test report, if no other mode data.
- 3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure:



5.2. EQUIPMENT USED IN EUT SYSTEM

ltem	Equipment	Model No.	ID or Specification	Remark
1	JmGO Smart Portable Theater	P1	SMCP1	EUT
2	Adapter	RJ-AS136420	DC 13.6V	Accessory
3	PC	SONY	E1412AYCW	A.E

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247	Output Power	Compliant
§15.247	6 dB Bandwidth	Compliant
§15.247	Conducted Spurious Emission	Compliant
§15.247	Maximum Conducted Output Power SPECTRAL Density	Compliant
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Line Conduction Emission	Compliant

6. TEST FACILITY

Site	Dongguan Precise Testing Service Co., Ltd.
Location	Building D, Baoding Technology Park, Guangming Road2, Dongcheng District, Dongguan, Guangdong, China.
FCC Registration No.	371540
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009.

ALL TEST EQUIPMENT LIST

Radiated Emission Test Site						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016	
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 4, 2015	July 3, 2016	
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 4, 2015	July 3, 2016	
RF Cable	SCHWARZBECK	AK9515E	96221	July 4, 2015	July 3, 2016	
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 6, 2015	June 5, 2016	
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A	
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 6, 2015	June 5, 2016	
Spectrum analyzer	Agilent	E4407B	MY46185649	June 6, 2015	June 5, 2016	
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	June 6, 2015	June 5, 2016	
Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	9170-181	June 6, 2015	June 5, 2016	

Conducted Emission Test Site						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016	
Artificial Mains Network	Narda	L2-16B	000WX31025	July 8, 2015	July 7, 2016	
Artificial Mains Network (AUX)	Narda	L2-16B	000WX31026	July 8, 2015	July 7, 2016	
RF Cable	SCHWARZBECK	AK9515E	96222	July 4, 2015	July 3, 2016	
Shielded Room	CHENGYU	843	PTS-002	June 6,2015	June 5,2016	

7. OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

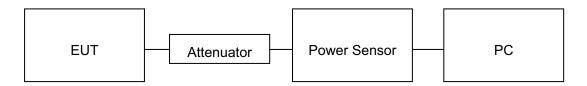
For average power test:

- 1. Connect EUT RF output port to power sensor through an RF attenuator.
- 2. Connect the power sensor to the PC.
- 3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 4. Record the maximum power from the software.

Note: The EUT was tested according to KDB 558074v03r02 for compliance to FCC 47CFR 15.247 requirements.

7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

AVERAGE POWER SETUP



7.3. LIMITS AND MEASUREMENT RESULT

TEST ITEM	OUTPUT POWER
TEST MODE	802.11b with data rate 1

Frequency (GHz)	Average Power Chain 0 (dBm)	Average Power Chain 1 (dBm)	Average Power Total (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	13.24	13.06	16.16	30	Pass
2.437	13.54	13.24	16.40	30	Pass
2.462	13.16	12.96	16.07	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11g with data rate 6

Frequency (GHz)	Average Power Chain 0 (dBm)	Average Power Chain 1 (dBm)	Average Power Total (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	11.28	11.08	14.19	30	Pass
2.437	11.45	11.31	14.39	30	Pass
2.462	11.42	11.21	14.33	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11n 20 with data rate 6.5

Frequency (GHz)	Average Power Chain 0 (dBm)	Average Power Chain 1 (dBm)	Average Power Total (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	11.12	10.94	14.04	30	Pass
2.437	11.24	11.02	14.14	30	Pass
2.462	11.18	10.98	14.09	30	Pass

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TEST ITEM	OUTPUT POWER
TEST MODE	802.11n 40 with data rate 13.5

Frequency (GHz)	Average Power Chain 0 (dBm)	Average Power Chain 1 (dBm)	Average Power Total (dBm)	Applicable Limits (dBm)	Pass or Fail
2.422	8.24	7.89	11.08	30	Pass
2.437	8.68	8.14	11.43	30	Pass
2.452	8.37	7.96	11.18	30	Pass

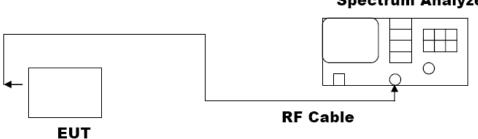
8.6 DB BANDWIDTH

8.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW≥3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



Spectrum Analyzer

8.3. LIMITS AND MEASUREMENT RESULTS

TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11b with data rate 11

LIMITS AND MEASUREMENT RESULT					
Applicable Limite	Applicable Limits				
Applicable Limits	Test Da	Criteria			
>500KHZ	Low Channel	10.05	PASS		
	Middle Channel	9.101	PASS		
	High Channel	9.582	PASS		

TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11g with data rate 54

LIMITS AND MEASUREMENT RESULT					
Applicable Limits					
Applicable Limits	Test Da	Test Data (MHz) Criteria			
	Low Channel	16.08	PASS		
>500KHZ	Middle Channel	15.71	PASS		
	High Channel	15.78	PASS		

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TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11n 20 with data rate 65

	LIMITS AND MEAS	UREMENT RESULT	
Applicable Limite		Applicable Limits	
Applicable Limits	Test Da	ta (MHz)	Criteria
	Low Channel	16.92	PASS
>500KHZ	Middle Channel	16.02	PASS
	High Channel	17.17	PASS

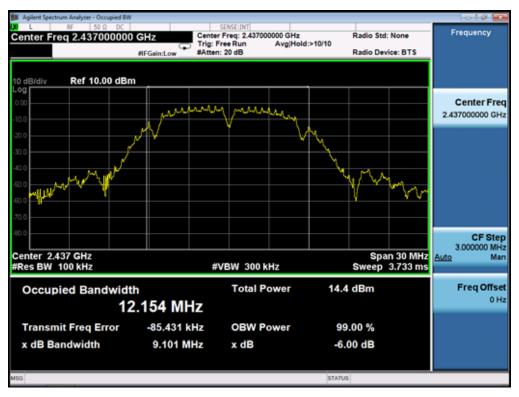
TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11n 40 with data rate 135

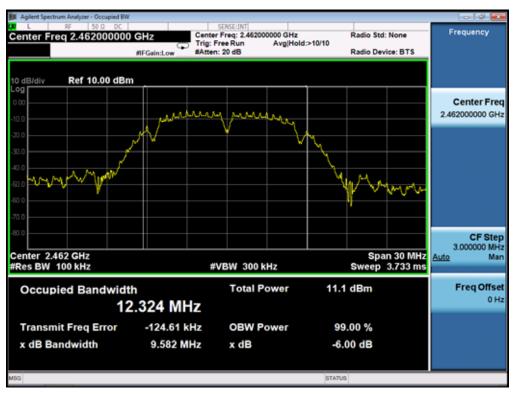
	LIMITS AND MEASU	JREMENT RESULT	
Applicable Limite		Applicable Limits	
Applicable Limits	Test Dat	a (MHz)	Criteria
	Low Channel	34.21	PASS
>500KHZ	Middle Channel	30.03	PASS
	High Channel	23.15	PASS



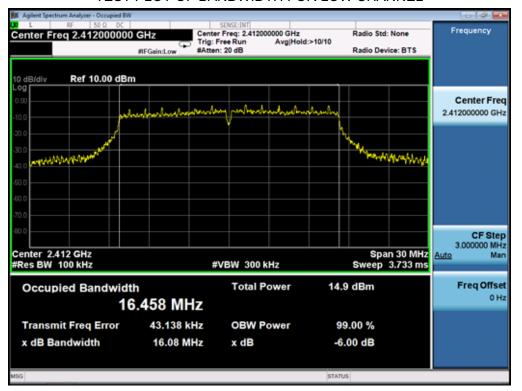
802.11b TEST RESULT TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL





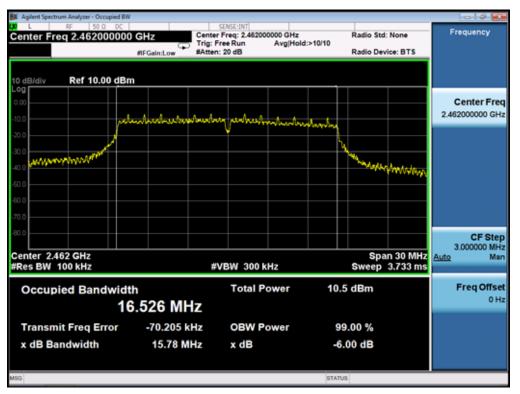
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



802.11g TEST RESULT TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

Agilent Spectrum Analyzer - Occupied BW					- ¢ 🕰
D L RF 50.0 DC DC Center Freq 2.437000000	GHz Center	SENSE:INT] Freq: 2.437000000 GHz ree Run Avg Hold : 20 dB	1:>10/10	io Std: None io Device: BTS	Frequency
10 dB/div Ref 10.00 dBm					
0.00 ۱۰۵۰ مالحو	alantan landa	m mar mar hand and and and and and and and and and	nhuntu		Center Freq 2.437000000 GHz
30.0					
-40.0 Water Water			~~~	Walker Mansheller	
-60.0					
-70.0					CF Step
Center 2.437 GHz #Res BW 100 kHz	#1	/BW 300 kHz	Sw	Span 30 MHz eep 3.733 ms	3.000000 MHz
Occupied Bandwidt	h	Total Power	13.5 dB	m	Freq Offset
16	.377 MHz				0 Hz
Transmit Freq Error	-49.974 kHz	OBW Power	99.00	%	
x dB Bandwidth	15.71 MHz	x dB	-6.00 d	В	
MSG			STATUS		



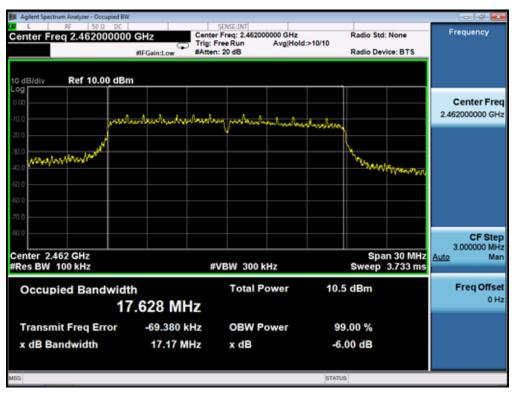
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



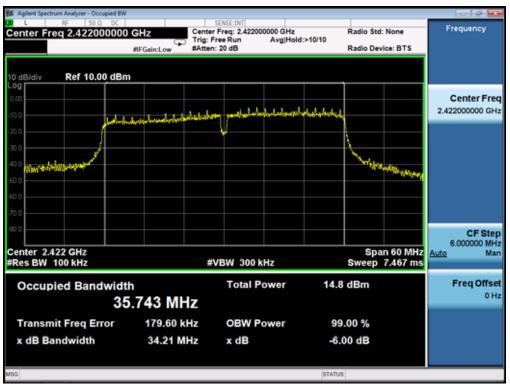
802.11n (20) TEST RESULT TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

Agitent Spectrum Analyzer - Occupied Bill Content Freq 2.437000000) GHz Center	sense:INT Freq: 2.437000000 GHz ree Run Avg Hold : 20 dB		d: None wice: BTS	Frequency
10 dB/div Ref 10.00 dB	n				Center Freq
-10.0	malasharana	Johnson	montany		2.437000000 GHz
-20.0					
-40.0 miles/Waywer				warmen	
-60.0					
-60.0					CF Step 3.000000 MHz
Center 2.437 GHz #Res BW 100 kHz	#\	/BW 300 kHz	Sp Sweep	an 30 MHz 3.733 ms	
Occupied Bandwid	th 7.497 MHz	Total Power	13.7 dBm		Freq Offset 0 Hz
Transmit Freq Error	-43.771 kHz	OBW Power	99.00 %		
x dB Bandwidth	16.02 MHz	x dB	-6.00 dB		
MSG			STATUS		



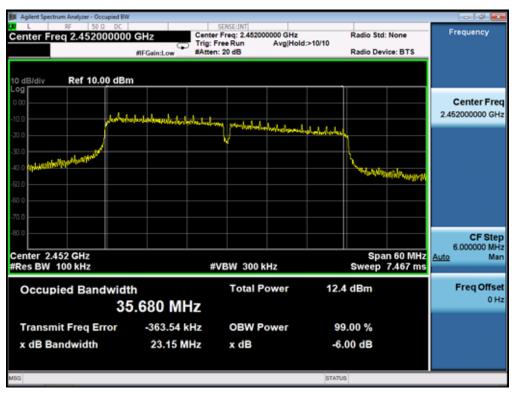
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



802.11n(40) TEST RESULT TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

III Agitent Spectrum Analyzer - Occupied BW	GHz Center #FGain:Low #Atten:	Freq: 2.437000000 GHz ree Run Avg Hold 20 dB	Radio Std d:>10/10 Radio Der		Frequency
10 dB/div Ref 10.00 dBr د من المعادية 10.0		y production descharter out	abop das		Center Freq 2.437000000 GHz
20.0 30.0 -40.0 50.0 -60.0 -70.0			Worker	Nikolo _{ti} Maation	
800 Center 2.437 GHz #Res BW 100 kHz	#\	/BW 300 kHz	Spa Sweep	an 60 MHz 7.467 ms	CF Step 6.00000 MHz Auto Man
Occupied Bandwidt	th 5.331 MHz	Total Power	13.9 dBm		Freq Offset 0 Hz
Transmit Freq Error x dB Bandwidth	-131.12 kHz 30.03 MHz	OBW Power x dB	99.00 % -6.00 dB		
MSG			STATUS		



TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.
- Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements. Owing to satisfy the requirements of the number of measurement points, we set the RBW=1MHz, VBW>RBW, scan up through 10th harmonic, and consider the tested results as the worst case, if the tested results conform to the requirement, we can deem that the real tested results(set the RBW=100KHz, VBW>RBW) are conform to the requirement.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 8.2.

9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEA	SUREMENT RESULT		
Angliaghta Limite	Measurement Result		
Applicable Limits	Test Data	Criteria	
In any 100 KHz Bandwidth Outside the	At least -20dBc than the limit		
frequency band in which the spread spectrum	Specified on the BOTTOM	PASS	
intentional radiator is operating, the radio frequency	Channel		
power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in§15.209(a))	At least -20dBc than the limit Specified on the TOP Channel	PASS	



TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11b FOR MODULATION IN LOW CHANNEL

Agilent Spectrum Analyzer - Swept SA	cruce durt			- # -
Marker 1 2.39703188127		Avg Type: Log-Pwr	TRACE	Peak Search
	PNO: Fast Trig: Pree Run IFGain:Low #Atten: 20 dB	Avg Hold:>100/100	DET	
		Mkr1	2.397 03 GHz -40.634 dBm	NextPeak
10 dB/div Ref 10.00 dBm			-40.034 (15)11	
0.00				Next Pk Right
0.00				-
-10.0				
-20.0			-19 20 dBm	Next Pk Lef
-30.0				Marker Delta
-40.0			<u>Y</u>	marker beau
-50.0				Mkr→CF
-60.0			n in the second s	
and the second stranger to the	and an an an advantage of the second s	and a state of the	and the state of the	
-70.0	and an an address of the state	Contraction in the local data		Mkr→RefLv
40.0				
				More
Start 1.0000 GHz	#UTDW 000 1-11-		Stop 2.4000 GHz	1 of 2
#Res BW 100 kHz	#VBW 300 kHz	Sweep 135	Stop 2.4000 GHz .0 ms (25000 pts)	1 of 2
#Res BW 100 kHz	#VBW 300 kHz			
#Res BW 100 kHz MSG Agilent Spectrum Analyzer - Swept SA L RF	SENSE:INT	Sweep 135	.0 ms (25000 pts)	08
#Res BW 100 kHz ISG Agilent Spectrum Analyzer - Swept SA	5 GHz PN0: Feet C	Sweep 135	10 ms (25000 pts)	
#Res BW 100 kHz MSG Agilent Spectrum Analyzer - Swept SA L RF	5 GHz	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 2345 (Peak Search
#Res BW 100 kHz #sg #sg # Agilent Spectrum Analyzer - Swept SA # L 85 # L 85 Marker 1 3.215765870633 10 dB/dly Ref 10.00 dBm	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	10 ms (25000 pts)	Peak Search
#Res BW 100 kHz Ass Ass Marker 1 3.215765870633 10 dB/div Ref 10.00 dBm	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz	Peak Search Next Peak
#Res BW 100 kHz #SG E Agilent Spectrum Analyzer - Swept SA D L RF 50 0 DC Marker 1 3.21576587063	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz	Peak Search Next Peak
#Res BW 100 kHz #sg #sg # Agilent Spectrum Analyzer - Swept SA # E S0 0 0C Marker 1 3.215765870633 10 dB/div Ref 10.00 dBm 000	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz	Peak Search Next Peak
#Res BW 100 kHz JSG Agilent Spectrum Analyzer - Swept SA X SS S0 OC Marker 1 3.215765870633 10 dB/div Ref 10.00 dBm	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ
#Res BW 100 kHz #sg #sg # Agilent Spectrum Analyzer - Swept SA # E S0 0 0C Marker 1 3.215765870633 10 dB/div Ref 10.00 dBm 000	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz	Peak Search Next Peak Next Pk Righ
#Res BW 100 kHz #sg Maglent Spectrum Analyzer - Swept SA C L RS 50 Ω DC Marker 1 3.21576587063: 10 dB/div Ref 10.00 dBm -10.0	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ
#Res BW 100 kHz #sg If Agitent Spectrum Analyzer - Swept SA D R5 S0 DC Marker 1 3.21576587063: 10 dB/dlv Ref 10.00 dBm -00	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz #sg If Agitent Spectrum Analyzer - Swept SA D R5 S0 DC Marker 1 3.21576587063: 10 dB/dlv Ref 10.00 dBm -00	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz #sg If Agitent Spectrum Analyzer - Swept SA D R5 S0 DC Marker 1 3.21576587063: 10 dB/dlv Ref 10.00 dBm -00	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz JSG Agilent Spectrum Analyzer - Swept SA X BE Barker 1 3.215765870633 10 dB/div Ref 10.00 dBm 000 BE -20.0 BE -300 BE	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peal Next Pk Righ Next Pk Lef
#Res BW 100 kHz JSG Agilent Spectrum Analyzer - Swept SA X L BE SO Ω DC Marker 1 3.215765870633 10 dB/div Ref 10.00 dBm -0.0 -0.0 -0.0 -0.0 -0.0	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Right Next Pk Left
#Res BW 100 kHz JSG Agilent Spectrum Analyzer - Swept SA X BE Barker 1 3.215765870633 10 dB/div Ref 10.00 dBm 000 BE -20.0 BE -300 BE	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef Marker Delta Mkr→CF
#Res BW 100 kHz #sg #sg #Agilent Spectrum Analyzer - Swept SA 2 Sc 8 50 Q OC Marker 1 3.215765870633 10 E Sc 00 E Sc Sc 10 E Sc Sc Sc 10 E Sc Sc Sc 10 E E Sc Sc 200 E E E Sc 10 E E E Sc Sc 200 E E E E E E 200 E <	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef Marker Delta Mkr→CF
#Res BW 100 kHz JSG Agilent Spectrum Analyzer - Swept SA X Sc Marker 1 3.215765870633 10 dEl/div Ref 10.00 dBm -00	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta MkrCF
#Res BW 100 kHz JSG Agilent Spectrum Analyzer - Swept SA X E BS 50 0 Marker 1 3.215765870633 10 dEl/div Ref 10.00 dBm 000	5 GHz PN0: Feet C	Sweep 135 status Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta MkrCF
#Res BW 100 kHz #sg #sg #Agilent Spectrum Analyzer - Swept SA 2 Sc 8 50 Q OC Marker 1 3.215765870633 10 E Sc 00 E Sc Sc 10 E Sc Sc Sc 10 E Sc Sc Sc 10 E E Sc Sc 200 E E E Sc 10 E E E Sc Sc 200 E E E E E E 200 E <	5 GHz PN0: Feet C	Sweep 135	1 3.215 8 GHz -46.559 dBm	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta Mkr→CF



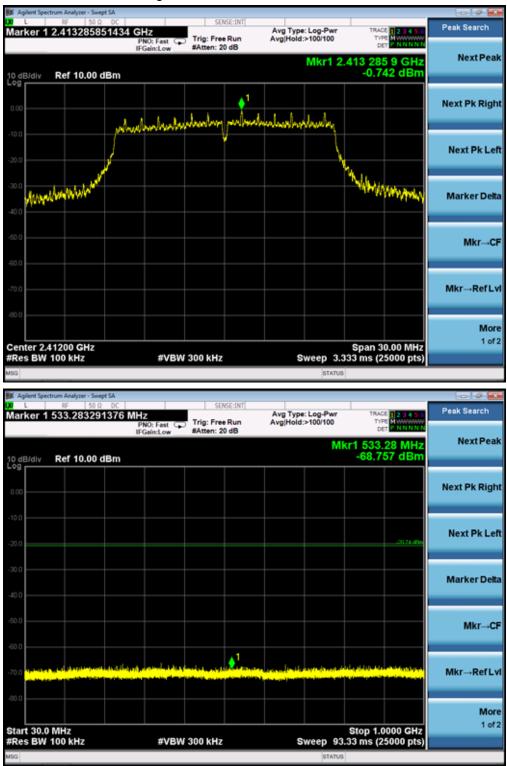
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11b FOR MODULATION IN MIDDLE CHANNEL

Agilent Spectrum Analyzer - Swept SA	SENSE:	INT		
arker 1 2.36998279931	2 GHz	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE M	Peak Search
	PNO: Fast Trig: Free Ru IFGain:Low #Atten: 20 dB		DET PNNNN	
		Mk	r1 2.369 98 GHz	Next Pea
dB/div Ref 10.00 dBm			-61.192 dBm	
0.00				Next Pk Rig
0.0				
				Next Pk Lo
0.0			-20.00 dBe	
~~				
0.0				Marker De
0.0				
0.0				Mkr→G
			.1	WIKI
0.0				
and the bar and the barrens of the	والمعجلة المتعرفين والمراجع والمتعاد والمراجع	d the international state of the first in		Miles Defi
	Sealing of the second sec	and all the second s		Mkr→RefL
0.0				
				Mo
			Oto = 0.4000 Otto	1 0
tart 1.0000 GHz Res BW 100 kHz	#VBW 300 kHz	0	Stop 2.4000 GHz	
		Sweed 1	35.U MS (Z5000 DISI	
0	#VDW 300 KH2	Sweep 1	35.0 ms (25000 pts)	
99	# VBW 300 KH2			
Agilent Spectrum Analyzer - Swept SA		STATU		
Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	0 GHz	INT] Avg Type: Log-Pwr	TRACE	Peak Search
Agilent Spectrum Analyzer - Swept SA	SENSE:	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 2345 C TYPE DET	Peak Search
Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 23456 TYPE MUNICIPALITY	
Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC arker 1 4.873947257891	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 2345 C TYPE DET	Peak Search
Agilent Spectrum Analyzer - Swept SA L RF 50 Q DC arker 14.873947257891	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 23456 TYPE MUNICIPALITY	Peak Search Next Pea
Agilent Spectrum Analyzer - Swept SA BF 500 0C arker 1 4.873947257891 dB/div Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 23456 TYPE MUNICIPALITY	Peak Search Next Pea
Agilent Spectrum Analyzer - Swept SA BF 500 0C arker 1 4.873947257891 dB/div Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 23456 TYPE MUNICIPALITY	Peak Search Next Pea
Agilent Spectrum Analyzer - Swept SA L RF 50 Q DC arker 1 4.873947257891 0 dBJ/dlv Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 23456 TYPE MUNICIPALITY	Peak Search Next Pea
Agilent Spectrum Analyzer - Swept SA L 85 50 0 C arker 1 4.873947257891 0 dB/div Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig
Agilent Spectrum Analyzer - Swept SA L 85 50 0 C arker 1 4.873947257891 dB/dlv Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	TRACE 23456 TYPE MUNICIPALITY	Peak Search Next Pea Next Pk Rig
Agilent Spectrum Analyzer - Swept SA L 85 50 0 C arker 1 4.873947257891 dBI/div Ref 10.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig
Agilent Spectrum Analyzer - Swept SA L 85 50 0 CC arker 1 4.873947257891 0 dEl/div Ref 10.00 dBm 9 00 0.0	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo
Agilent Spectrum Analyzer - Swept SA L 85 50 0 C arker 1 4.873947257891 dBI/div Ref 10.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo
Agilent Spectrum Analyzer - Swept SA L 85 50 0 C arker 1 4.873947257891 dBI/div Ref 10.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo
Agilent Spectrum Analyzer - Swept SA L RF 50 Q DC arker 1 4.873947257891 0 dEJ/div Ref 10.00 dBm 00 00 00 00 01 01 01 02 1	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Agilent Spectrum Analyzer - Swept SA L RF 50 Q DC arker 1 4.873947257891 dBI/div Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Agilent Spectrum Analyzer - Swept SA L RF 50 Q DC arker 1 4.873947257891 dBI/div Ref 10.00 dBm	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Agilent Spectrum Analyzer - Swept SA L RF 50 Q C arker 1 4.873947257891 dB/dlv Ref 10.00 dBm 9 00 00 00 00 00 00 00 00 00	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De Mkr-o
Agilent Spectrum Analyzer - Swept SA RF 50 0 C arker 1 4.873947257890 0 dB/div Ref 10.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De Mkr0
Agilent Spectrum Analyzer - Swept SA RF 50 0 C arker 1 4.873947257890 0 dEMdiy Ref 10.00 dBm 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search
Agilent Spectrum Analyzer - Swept SA RF 50 0 C arker 1 4.873947257890 0 dEMdiy Ref 10.00 dBm 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	к Тие От От 49.388 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr→C
Agilent Spectrum Analyzer - Swept SA L RF 50 Q C arker 1 4.873947257891 dBJ/dlv Ref 10.00 dBm 9 00 00 00 00 00 00 00 00 00	0 GHz PN0: Fest Trig: Free Ru	INT Avg Type: Log-Pwr n Avg[Hold:>100/100 B	IS TRACE 23456 TYPE WINNIN kr14.8739GHz -49.388dBm .000404 .000404 .000404	Peak Search Next Per Next Pk Rig Next Pk Lu Marker De Mkr-d Mkr-Ref L
Agilent Spectrum Analyzer - Swept SA RF 50 0 C arker 1 4.873947257890 0 dB/div Ref 10.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 GHz PN0: Fest Trig: Free Ru	Avg Type: Log-Pwr Avg/Hold:>100/100 B M	к Тие От От 49.388 dBm	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De Mkr0

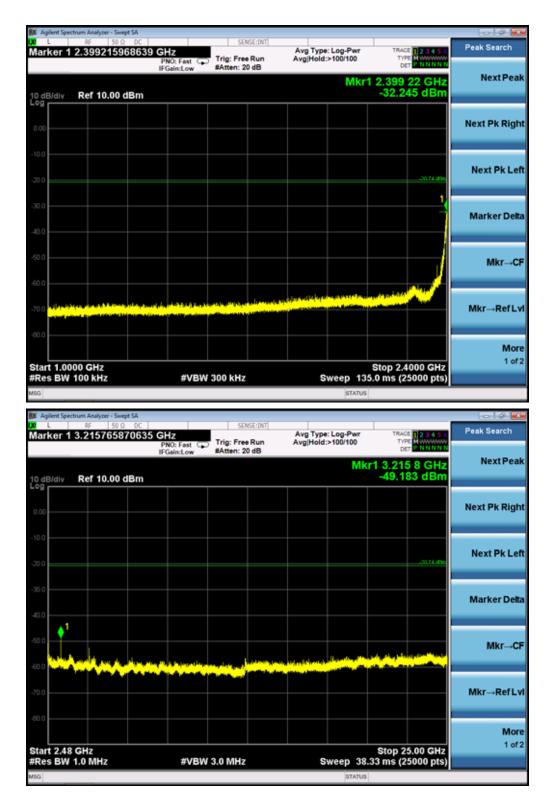


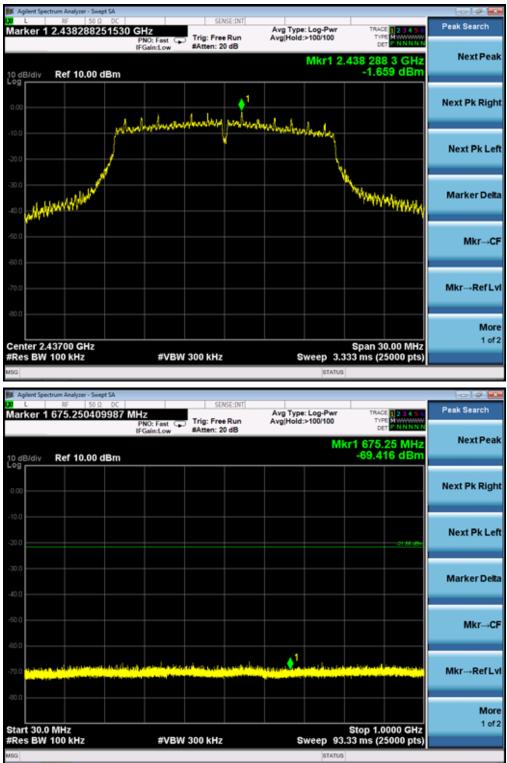
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11b FOR MODULATION IN HIGH CHANNEL

Agilent Spectrum Analyzer - Swept SA				
Marker 1 2.36315052602		Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456	Peak Search
	PNO: Fast Figure Run IFGain:Low #Atten: 20 dB		TYPE M	NextBook
o double - Dof 40.00 dBm		Mkr1 :	2.363 15 GHz -59.772 dBm	NextPeak
10 dB/div Ref 10.00 dBm				
0.00				Next Pk Right
-10.0				
-20.0				Next Pk Lef
			-23.50 dBm	
-30.0				Marker Delta
-40.0				
-50.0			_1	Mkr→CF
60.0				
70.0 tast de la state de la state de la state	and and an an and and an and the			Mkr→RefLv
And the second sec	a desta produce in a sub- second de la seconda de la s			
60.0				
				More
				1 012
Start 1.0000 GHz #Res BW 100 kHz	#VBW 300 kHz		top 2.4000 GHz ms (25000 pts)	1 of 2
	#VBW 300 kHz		top 2.4000 GHz) ms (25000 pts)	1 012
Res BW 100 kHz	#VBW 300 kHz	Sweep 135.0		1 072
#Res BW 100 kHz MSG MSG Agilent Spectrum Analyzer - Swept SA ロ	3 GHz	Sweep 135.(status Avg Type: Log-Pwr	TRACE DE CLER	
#Res BW 100 kHz ISG Agilent Spectrum Analyzer - Swept SA	SENSE:DIT	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE M	Peak Search
#Res BW 100 kHz Asg Asg Magient Spectrum Analyzer - Swept SA L RF SO DC Marker 1 3.28331807272	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE 0 2 3 4 5 0	Peak Search
#Res BW 100 kHz MSG MSG Agilent Spectrum Analyzer - Swept SA ロ	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE M	Peak Search
#Res BW 100 kHz Ass Agilent Spectrum Analyzer - Swept SA Image: Sector Spectrum Analyzer - Swept S	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE 0 2 3 4 5 0	Peak Search Next Peak
#Res BW 100 kHz Asg Agilent Spectrum Analyzer - Swept SA Δ L 85 50 Ω 0C Marker 1 3.28331807272 10 dB/dly Ref 10.00 dBm	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE 0 2 3 4 5 0	Peak Search Next Peak
#Res BW 100 kHz Ass Agilent Spectrum Analyzer - Swept SA Image: Sector Spectrum Analyzer - Swept S	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE 0 2 3 4 5 0	Peak Search Next Peak Next Pk Right
#Res BW 100 kHz Ass Ass Marker 1 3.28331807272 10 dB/div Ref 10.00 dBm 0 000	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Righ
#Res BW 100 kHz Asg (Control Analyzer - Swept SA (Control Analy	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 0 TYPE 0 2 3 4 5 0	Peak Search Next Peak Next Pk Righ
#Res BW 100 kHz Asg Asg Asg Asg Asg Asg Asg Asg	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz Asg (Control Analyzer - Swept SA (Control Analy	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Right
#Res BW 100 kHz Asg Agilent Spectrum Analyzer - Swept SA BL SE S0 OC Marker 1 3.28331807272 10 dB/div Ref 10.00 dBm 000 OC -00 OC -10.0 OC -20.0 OC -40.0 1	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Right
#Res BW 100 kHz Asg (Control Analyzer - Swept SA (Control Analy	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz Asg Agilent Spectrum Analyzer - Swept SA BL SE S0 OC Marker 1 3.28331807272 10 dB/div Ref 10.00 dBm 000 OC -00 OC -10.0 OC -20.0 OC -40.0 1	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz Asig Agilent Spectrum Analyzer - Swept SA B Agilent Spectrum Analyzer - Swept SA Marker 1 3.28331807272 Marker 1 3.28331807272 0 dB/div Ref 10.00 dBm 00	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta MkrCF
#Res BW 100 kHz Asg Agilent Spectrum Analyzer - Swept SA B Agilent Spectrum Analyzer - Swept SA V BF 50 Ω DC Marker 1 3.28331807272 10 dB/dlv Ref 10.00 dBm -000	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta MkrCF
#Res BW 100 kHz Asig Asig Agilent Spectrum Analyzer - Swept SA So Q DC Marker 1 3.28331807272 Marker 1 3.28331807272 10 dB/div Ref 10.00 dBm -00	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.0 status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta Mkr→CF
#Res BW 100 kHz Asig Asig Asig Image: An advection of the state of the sta	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.(status	TRACE 2345 TRACE 245 TRACE 24	Peak Search Next Peak Next Pk Righ Next Pk Lef Marker Delta Mkr-+Cf Mkr-+Ref Lv
#Res BW 100 kHz Asig Agilent Spectrum Analyzer - Swept SA B Agilent Spectrum Analyzer - Swept SA Marker 1 3.28331807272 Marker 1 3.28331807272 10 dB/div Ref 10.00 dBm 000	3 GHz PN0: Fast. C Trig: Free Run	Sweep 135.(STATUS Avg Type: Log-Pwr Avg Hold:>100/100 Mkr1	TRACE 23436 TYPE MUNICIPAL DET NNNNN 3.283 3 GHz -50.762 dBm	- 2 -



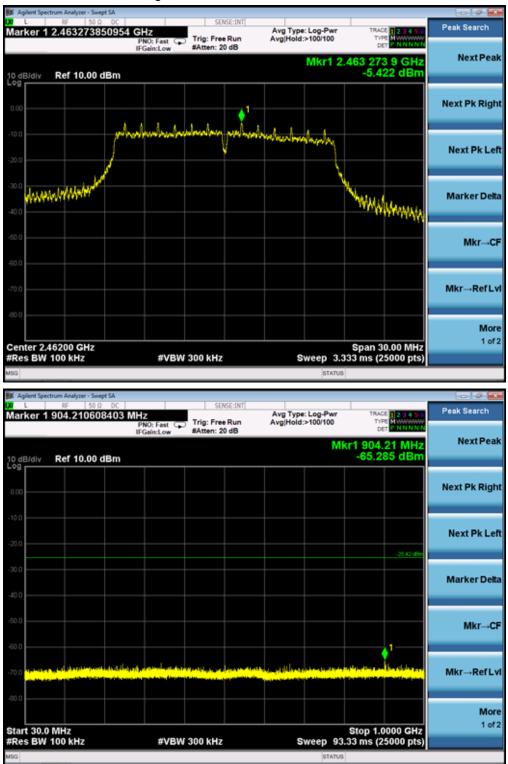
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11g FOR MODULATION IN LOW CHANNEL





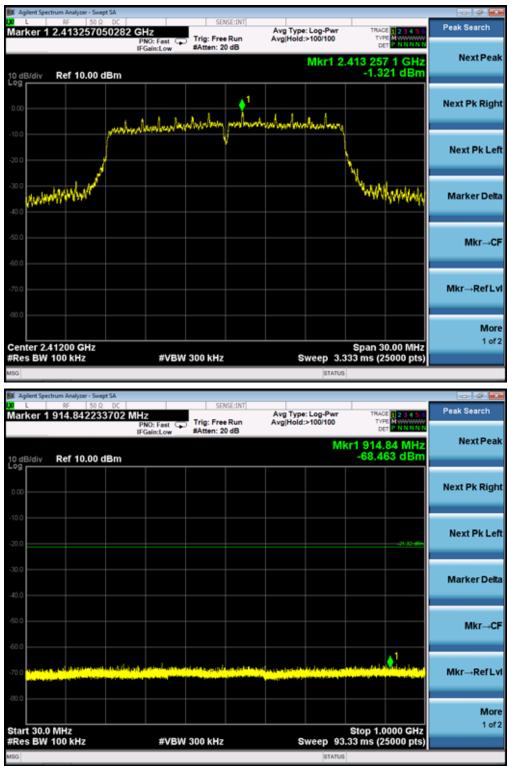
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11g FOR MODULATION IN MIDDLE CHANNEL

Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	SENSE:D	NT		00
larker 1 2.36578263130	5 GHz PNO: Fast Con Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456 TYPE MWWWWW	Peak Search
	IFGain:Low #Atten: 20 dB			NextPea
dB/div Ref 10.00 dBm		WIKI	1 2.365 78 GHz -61.019 dBm	
°° 🗌 🗌				
.00				Next Pk Rig
0.0				Next Pk Le
0.0			-21.68 (Da	NEALPKE
0.0				
~~~				Marker De
0.0				
0.0				
			1	Mkr→C
0.0			and a set of the second	
o o understation descention addee				Mkr→RefL
0.0				Мо
tart 1.0000 GHz			Stop 2,4000 GHz	1 of
	#VBW 300 kHz	Sweep 13	Stop 2.4000 GHz 5.0 ms (25000 pts)	1 of
Res BW 100 kHz	#VBW 300 kHz	Sweep 13	5.0 ms (25000 pts)	1 of
tart 1.0000 GHz Res BW 100 kHz IG Agilent Spectrum Analyzer - Swept SA		STATUS	5.0 ms (25000 pts)	1 of
Res         BW         100 kHz           8G	7 GHz	STATUS	5.0 ms (25000 pts)	1 of Peak Search
Res         BW         100 kHz           8G	SDSE:	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts) TRACE 23450 TYPE NNNNN	Peak Search
Res BW 100 kHz g Agilent Spectrum Analyzer - Swept SA L RF 50 0 DC larker 1 4.87124516980	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search
Res BW 100 kHz RG Agilent Spectrum Analyzer - Swept SA L RF 50 0 DC larker 1 4.87124516980	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search
Res BW 100 kHz           ig           ig           . Agilent Spectrum Analyzer - Swept SA           E         50 Ω           Ig           Ig<	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	08
Res BW 100 kHz           ig           id           Agilent Spectrum Analyzer - Swept SA           E         50 Q DC           arker 1 4.87124516980           OdB/div         Ref 10.00 dBm           99	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search Next Pea
Res BW 100 kHz           33           (Agilent Spectrum Analyzer - Swept SA L           85         50 Q           0 dB/div         Ref 10.00 dBm           99           000	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz g Agilent Spectrum Analyzer - Swept SA L 85 50 0 CC arker 1 4.87124516980 0 dB/div Ref 10.00 dBm	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz           kg           kg           L         85           L         86           L         86	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz           g           Agitest Spectrum Analyzer - Swept SA           L         85           SO Q           OdB/div           Ref 10.00 dBm           00           0.0	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo
Res BW 100 kHz  G  Agitent Spectrum Analyzer - Swept SA  B  B  C  B  C  C  C  C  C  C  C  C  C	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz G Agient Spectrum Analyzer - Swept SA L RF S0 0 DC larker 1 4.87124516980	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Res BW 100 kHz           id           id           Agilent Spectrum Analyzer - Swept SA           BS         50 Q           Itarker 1 4.87124516980           0 dB/dly         Ref 10.00 dBm           90         1           0.00         1           0.00         1	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Res BW 100 kHz  G  Agitent Spectrum Analyzer - Swept SA  B  B  C  B  C  C  C  C  C  C  C  C  C	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Res BW 100 kHz           sg           i. Agilent Spectrum Analyzer - Swept SA           L         85           Bit         50 Ω           D dB/dlv         Ref 10.00 dBm           0 dB/dlv         Ref 10.00 dBm           0 00         1           0 00         1           0 00         1           0 00         1           0 00         1           0 00         1           0 00         1           0 00         1           0 00         1           0 00         1	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Res BW 100 kHz           sg           if Agitert Spectrum Analyzer - Swept SA           L         85           SS         50 Q           D dB/dlv         Ref 10.00 dBm           00         1           00         1           00         1           00         1           00         1	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del
Res BW 100 kHz           isig           isi	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del Mkr-C
Res BW 100 kHz	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100	5.0 ms (25000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del
Res BW 100 kHz G Agilent Spectrum Analyzer - Swept SA C B B C C C C C C C C C C C C C C C C	7 GHz PN0: Fast C Trig: Free Ru	Avg Type: Log-Pwr Avg Hold:>100/100 Mk	TRACE 23436 TYPE NINNIN ott NINNIN r1 4.871 2 GHz -48.980 dBm	Peak Search Next Peak Next Pk Rig Next Pk Le Marker Del Mkr-AC

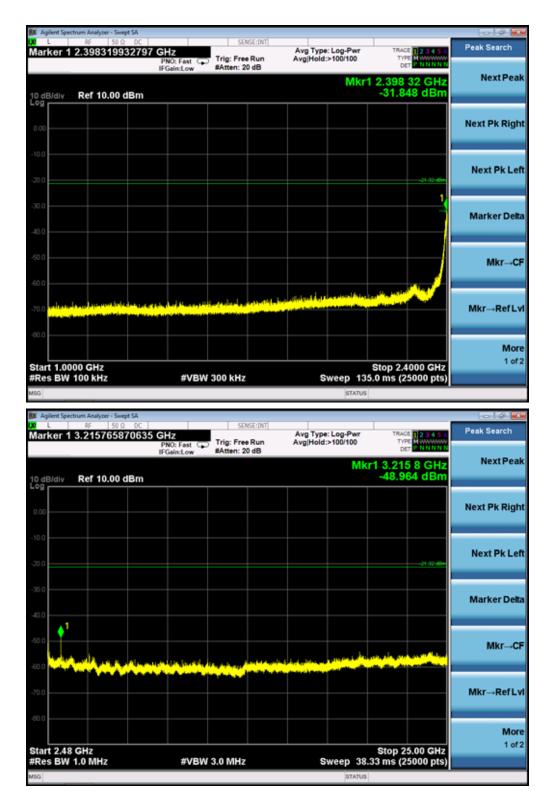


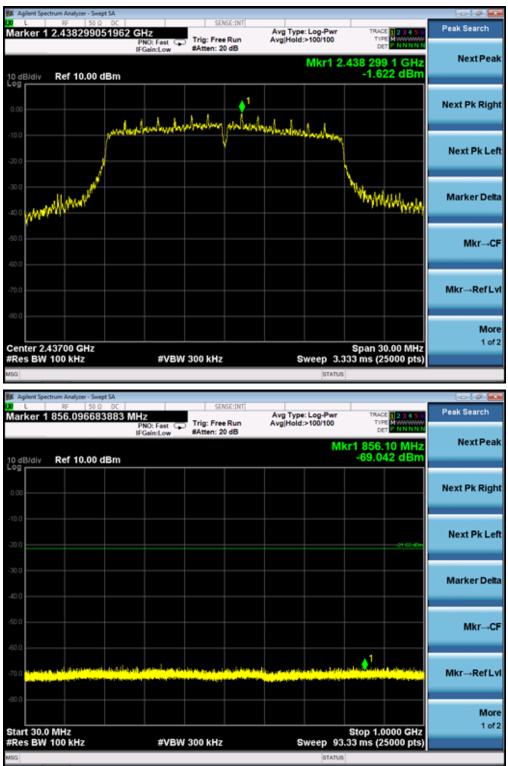
# TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11g FOR MODULATION IN HIGH CHANNEL

Agilent Spectrum Analyzer - Swept SA	enue un			
Marker 1 2.36908676347		Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23456	Peak Search
	IFGain:Low #Atten: 20 dB		TYPE M DET P NNNNN	NextBase
		Mkr1	2.369 09 GHz -59.635 dBm	NextPeak
.0 dB/div Ref 10.00 dBm			-33.033 (15)	
0.00				Next Pk Righ
0.00				
10.0				
20.0				Next Pk Lef
			-25.42 dBn	
30.0				Marker Delt
40.0				
50.0			1	Mkr→CF
60.0				
70.0 Holes Land at Landston at a	وبالماملين ويتقصف المتناطين والمتناص	s an le de la blance a fille a fait dé sean		Mkr→RefLv
neo or cellulation of	the state of the state of the local division in the state of the state			WKI→Rei LV
80.0				
				More 1 of 2
Start 1.0000 GHz			Stop 2.4000 GHz	1012
	#VBW 300 kHz			
Res BW 100 kHz	#VBW 300 kHz		0 ms (25000 pts)	
FRes BW 100 kHz	#VBW 300 kHz	Sweep 135.		
FRES BW 100 kHz ISG Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	SENSE:INT	Sweep 135.	0 ms (25000 pts)	Peak Search
FRes BW 100 kHz ISG Agilent Spectrum Analyzer - Swept SA	0 GHz PN0: Fast C Trig: Free Run	Sweep 135.		
FRES BW 100 kHz ISG Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	0 GHz PN0: Fast	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search
FRES BW 100 kHz ISG Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search
#Res BW 100 kHz           Isg           # Agient Spectrum Analyzer - Swept SA           0         SF           S0         DC           Marker 1 2.48350000000           0         dB/div           Ref 10.00 dBm	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peał
#Res BW 100 kHz           Iss           # Agient Spectrum Analyzer - Swept SA           L         85           BL         85           Marker 1 2.48350000000           IO dB/dly         Ref 10.00 dBm	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peał
#Res BW 100 kHz           Isg           # Agient Spectrum Analyzer - Swept SA           0         SF           S0         DC           Marker 1 2.48350000000           0         dB/div           Ref 10.00 dBm	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak
Res BW 100 kHz           Isg           Agilent Spectrum Analyzer - Swept SA           L         SF           S0 Ω         DC           Marker 1 2.48350000000           IO         dB/div           Ref 10.00 dBm           0	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ
Res BW 100 kHz           Isg           Agient Spectrum Analyzer - Swept SA           L         SF           S0 Q         DC           Marker 1 2,48350000000           IO         dB/div           Ref 10.00 dBm           .0	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ
#Res BW 100 kHz           Isg           # Agilent Spectrum Analyzer - Swept SA           L         RF           S0 Q         DC           Marker 1 2.48350000000           10 dB/dlv         Ref 10.00 dBm           00         000           10.00         000           10.00         0.00           10.00         0.00	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz           Isg           # Agilent Spectrum Analyzer - Swept SA           L         85           S0 Q         DC           Marker 1 2.48350000000           10 dB/dlv         Ref 10.00 dBm           20         200	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Right Next Pk Left
#Res BW 100 kHz           Isg           # Agilent Spectrum Analyzer - Swept SA           L         RF           S0 Q         DC           Marker 1 2.48350000000           10 dB/dlv         Ref 10.00 dBm           00         000           10.00         000           10.00         0.00           10.00         0.00	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ Next Pk Lef
#Res BW 100 kHz           Isg           # Agilent Spectrum Analyzer - Swept SA           L         RF           S0 Q         DC           Marker 1 2.48350000000           10 dB/dlv         Ref 10.00 dBm           00         000           10.00         000           10.00         0.00           10.00         0.00	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ Next Pk Lef
FRes BW 100 kHz           Isg           Isg           Agilent Spectrum Analyzer - Swept SA           L         SE           SO         OC           Marker 1 2.48350000000           IO         dB/div           Ref 10.00 dBm           000         I           100         I           100         I	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ Next Pk Lef
Res BW 100 kHz           Isg           Agitent Spectrum Analyzer - Swept SA           L         SE           Marker 1 2.48350000000           0         dB/div           Ref 10.00 dBm           0         dB/div           10         dB/div           0.00         dB/div           10         dB/div	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta Mkr-+CF
FRes BW 100 kHz           Isg           Isg           Agilent Spectrum Analyzer - Swept SA           Isg           Isg <td>0 GHz PN0: Fast C Trig: Free Run</td> <td>Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:&gt;100/100</td> <td>0 ms (25000 pts)</td> <td>Peak Search Next Peak Next Pk Righ Next Pk Lef Marker Delta Mkr-+CF</td>	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Righ Next Pk Lef Marker Delta Mkr-+CF
Res BW 100 kHz           Isg           Agitent Spectrum Analyzer - Swept SA           L         SE           Marker 1 2.48350000000           0         dB/div           Ref 10.00 dBm           0         dB/div           10         dB/div	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta MkrCF
Res BW 100 kHz           Isg           Agitent Spectrum Analyzer - Swept SA           L         SE           S0 0         DC           Marker 1 2.48350000000           0         dBJdlv           Ref 10.00 dBm           0         0           10         0           20.0         0           30.0         0           10         0           20.0         0           30.0         0           10         0           20.0         0           30.0         0           10         0           20.0         0           30.0         0           10.00         0           20.0         0           30.0         0           10.0         0           20.0         0           30.0         0           30.0         0           30.0         0           30.0         0           30.0         0           30.0         0           30.0         0           30.0         0           30.0         <	0 GHz PN0: Fast C Trig: Free Run	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta Mkr→Ref Lv More
Res BW 100 kHz           Isg           Agitent Spectrum Analyzer - Swept SA           L         SE           Marker 1 2.48350000000           0         BE           0	O CHZ PNO: Fast FGain:Low Trig: Free Run #Atten: 20 dB	Sweep 135.	0 ms (25000 pts)	Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta Mkr→Ref Lv More
Res         BW         100 kHz           Isg         Agilent Spectrum Analyzer - Swept SA         50 Ω         DC           Marker 1 2.48350000000         8/2         50 Ω         DC           Marker 1 2.48350000000         8/2         1         1         1           0.00         8/2         1         0         1         1           0.00         1         1         1         1         1         1           0.00         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	0 GHz PN0: Fast C Trig: Free Run	Sweep 135.	0 ms (25000 pts)	



## TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11n20 FOR MODULATION IN LOW CHANNEL





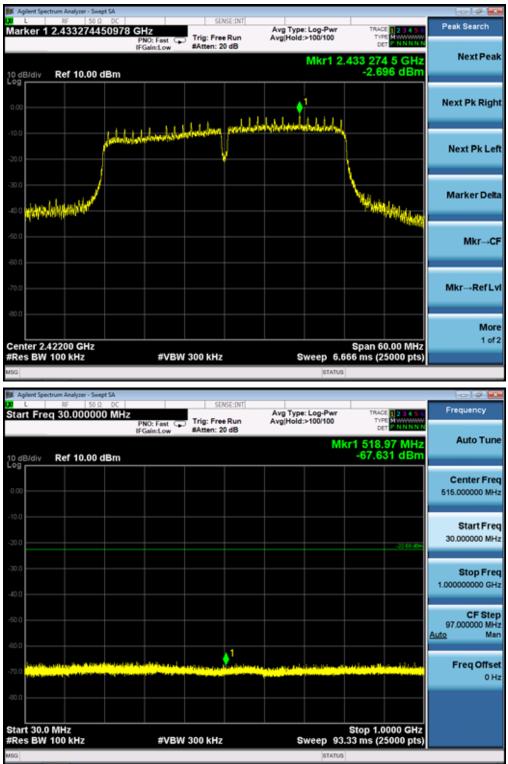
# TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n20 FOR MODULATION IN MIDDLE CHANNEL

L RF 50 Ω DC	SENSE:INT			
arker 1 2.39949597983	9 GHz	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE	Peak Search
	PNO: Fast Trig: Free Run IFGain:Low #Atten: 20 dB		DET	NextPea
0 dB/div Ref 10.00 dBm		Mkr1	2.399 50 GHz -60.771 dBm	Heatrea
0.00				Next Pk Righ
10.0				
20.0			21 22 000	Next Pk Le
30.0				Marker Del
40.0				marker ber
50.0				Mkr→C
50.0				
	and the dama have been presented as the	وبالمتحققة والمتحدية والمحمد والمحمد	les suis different 👫	
70.0 augusta dia dia kaominina dia kaominina dia kaominina dia kaominina dia kaominina dia kaominina dia kaomini		State of the local division of the local div		Mkr→RefL
0.0				
				Mo
tart 1.0000 GHz			top 2.4000 GHz	1 of
Res BW 100 kHz	#VBW 300 kHz	Sweep 135.	stop 2.4000 GHz 0 ms (25000 pts)	1 of
	#VBW 300 kHz			1 of
Res BW 100 kHz		Sweep 135.		088
Res BW 100 kHz 50 Agilent Spectrum Analyzer - Swept SA	SENSE:INT 1 GHz PNO: Feat	Sweep 135.	0 ms (25000 pts)	
Res BW 100 kHz           8G           8G           Agilent Spectrum Analyzer - Swept SA           L         85         50 Ω         DC	1 GHz	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123490	Peak Search
Res BW 100 kHz           sc           sc           Agitent Spectrum Analyzer - Swept SA           L         85           Jarker 1 4.86944377775           Q dB/div         Ref 10.00 dBm	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	0 ms (25000 pts)	08
Res BW 100 kHz G Agilent Spectrum Analyzer - Swept SA L SF SO Ω DC Narker 1 4.86944377775	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz	Peak Search
Res BW 100 kHz           50           4 Agitent Spectrum Analyzer - Swept SA           85         50 Q           1 arker 1 4.86944377775           0 dB/div         Ref 10.00 dBm	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz	Peak Search Next Pea
Res BW 100 kHz           sc           Agient Spectrum Analyzer - Swept SA           L         SC           SO         DC           Marker 1 4.86944377775           O dB/d/v         Ref 10.00 dBm           SO         DC	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz	Peak Search Next Pea
Res BW 100 kHz Agient Spectrum Analyze - Swept SA L SF 50 0 DC Narker 1 4.86944377775 0 dB/d/v Ref 10.00 dBm	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz           Image: Spectrum Analyzer - Swept SA           L         RF           SO         D C           Iarker 1 4.86944377775           D dB/div         Ref 10.00 dBm           O         Image: Spectrum Analyzer - Swept SA	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz           so           Agitent Spectrum Analyzer - Swept SA           L         85           SO Q         DC           Aarker 1 4.86944377775           0 dB/dlv         Ref 10.00 dBm           0.00         0           0.00         0	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig
Res BW 100 kHz           sc           Agient Spectrum Analyzer - Swept SA           L         SC           SO         DC           Marker 1 4.86944377775           O dB/d/v         Ref 10.00 dBm           SO         DC	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig Next Pk Le
Res BW 100 kHz           so           Agitent Spectrum Analyzer - Swept SA           L         85           SO Q         DC           Aarker 1 4.86944377775           0 dB/dlv         Ref 10.00 dBm           0.00         0           0.00         0	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig Next Pk Le
Res BW 100 kHz a Agient Spectrum Analyzer - Swept SA L SE SO Ω CC larker 1 4.869443777775 0 dB/div Ref 10.00 dBm 0 00 10 0 10 0	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig Next Pk Le
Res BW 100 kHz           sc           Agient Spectrum Analyzer - Swept SA           L         SC           SO Q         SO Q           O dB/d/v         Ref 10.00 dBm           SO Q         SO Q	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rigi Next Pk Le
Res BW 100 kHz a Agient Spectrum Analyzer - Swept SA L SE SO Ω CC larker 1 4.869443777775 0 dB/div Ref 10.00 dBm 0 00 10 0 10 0	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig Next Pk Le
Res         BW 100 kHz           sci         Agitent Spectrum Analyzer - Swept SA           L         Sci         Sci           Jarker 1 4.86944377775         Sci         DC           0 dB/d/v         Ref 10.00 dBm         Sci         Sci           0 0         1         Sci         Sci         Sci           0 0         1         Sci         Sci         Sci         Sci           0 0         1         Sci         Sci <t< td=""><td>1 GHz PN0: Fast C</td><td>Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:&gt;100/100</td><td>TRACE 23436 TYPE WWWWWW OFT PHILINE A</td><td>Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del Mkr-C</td></t<>	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del Mkr-C
Res BW 100 kHz a Agient Spectrum Analyzer - Swept SA L BS S0 0 C C C C C C C C C C C C C C C C C	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Righ Next Pk Le Marker Del Mkr-C
Res         BW 100 kHz           sci         Agitent Spectrum Analyzer - Swept SA           L         Sci         Sci           Jarker 1 4.86944377775         Sci         DC           0 dB/d/v         Ref 10.00 dBm         Sci         Sci           0 0         1         Sci         Sci         Sci           0 0         1         Sci         Sci         Sci         Sci           0 0         1         Sci         Sci <t< td=""><td>1 GHz PN0: Fast C</td><td>Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:&gt;100/100</td><td>TRACE 23436 TYPE WWWWWW OFT PHILINE A</td><td>Peak Search Next Pea Next Pk Righ Next Pk Le Marker Del Mkr-C</td></t<>	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHILINE A	Peak Search Next Pea Next Pk Righ Next Pk Le Marker Del Mkr-C
Res         BW 100 kHz           sci         Agitent Spectrum Analyzer - Swept SA           L         Sci         Sci           Arker 1 4.86944377775         Sci         DC           0 dB/d/v         Ref 10.00 dBm         Sci         Sci           0 0         1         Sci         Sci         Sci           0 0         1         Sci         Sci         Sci         Sci           0 0         1         Sci         Sci <td< td=""><td>1 GHz PN0: Fast C</td><td>Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:&gt;100/100</td><td>TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz</td><td>Peak Search Next Peak Next Pk Right Next Pk Lee Marker Def Mkr-A</td></td<>	1 GHz PN0: Fast C	Sweep 135. STATUS Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz	Peak Search Next Peak Next Pk Right Next Pk Lee Marker Def Mkr-A
Res         BW 100 kHz           sci         Agitent Spectrum Analyzer - Swept SA           L         Sci         Sci           Arker 1 4.86944377775         Sci         DC           0 dB/d/v         Ref 10.00 dBm         Sci         Sci           0 0         1         Sci         Sci         Sci           0 0         1         Sci         Sci         Sci         Sci           0 0         1         Sci         Sci <td< td=""><td>1 GHz PN0: Fast C</td><td>Sweep 135.</td><td>TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz</td><td>Peak Search</td></td<>	1 GHz PN0: Fast C	Sweep 135.	TRACE 23436 TYPE WWWWWW OFT PHYNHWA 4.869 4 GHz	Peak Search

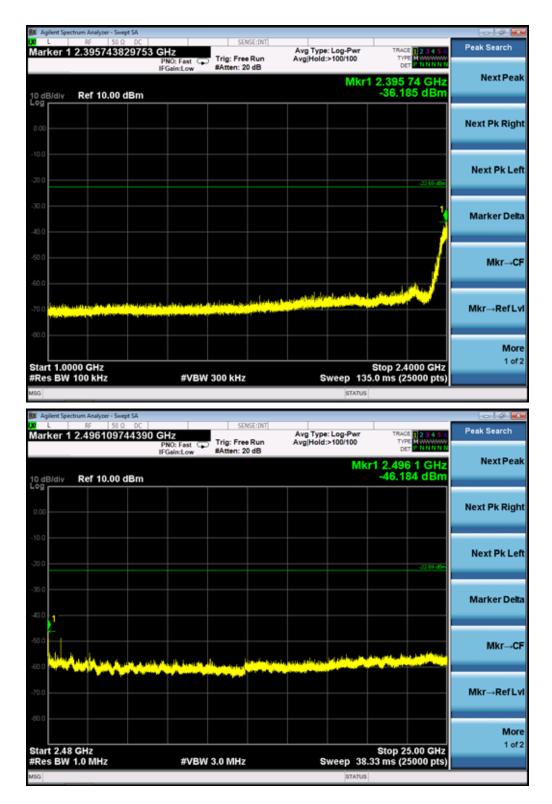


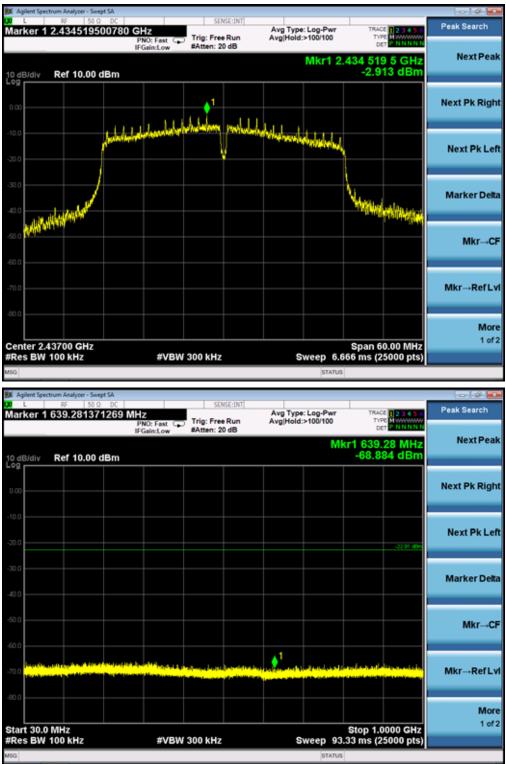
# TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n20 FOR MODULATION IN HIGH CHANNEL

Agilent Spectrum Analyzer - Swept SA	SENSE:INT		
arker 1 2.36757470298	B8 GHz	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23456 Peak Search
	PNO: Fast Ting: Free Run IFGain:Low #Atten: 20 dB		
Def 10.00 dBm		Mkr1	2.367 57 GHz NextPe -59.385 dBm
og			
0.00			Next Pk Rig
10.0			
20.0			Next Pk L
			25.22 dPs
30.0			Marker De
40.0			
50.0			Mkr→
60.0			
70.0 Standardianted in the	and the second state of th	والمرابع والمراجع أواريك والمراجع والتراجع	Mkr→RefL
a har being on the second s	Concerning and in president of the second states of		MKI→Ref
0.0			
			Mo 1 o
Start 1.0000 GHz		s	top 2.4000 GHz
TRee BW 100 kHz	#VBW 300 kHz		
#Res BW 100 kHz	#VBW 300 kHz		0 ms (25000 pts)
56	#VBW 300 kHz	Sweep 135.	0 ms (25000 pts)
ISG Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	SUNSE:DNT	Sweep 135.	0 ms (25000 pts)
ISG Agilent Spectrum Analyzer - Swept SA	DO GHZ PNO: Fast C Trig: Free Run	Sweep 135.	0 ms (25000 pts)
ISG Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC	SENSE:INT	Sweep 135.	TRACE 23434 TRACE 23434 TYPE MANNANA OUT > NNNNA 2483 5 GHz Next Pe
ISG Agitent Spectrum Analyzer - Swept SA C L RF 50 Ω DC Marker 1 2.48350000000 0 dBJdly Ref 10.00 dBm	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 12.3450 TRACE 12.3450 Peak Search
ISG Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC Marker 1 2.48350000000	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE         2345           TRACE         2345           Peak Search           TOTE           2.483 5 GHz           -37.466 dBm
ISG Agitent Spectrum Analyzer - Swept SA C L RF 50 Ω DC Marker 1 2.48350000000 0 dBJdly Ref 10.00 dBm	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 23434 TRACE 23434 TYPE MANNANA OUT > NNNNA 2483 5 GHz Next Pe
Agilent Spectrum Analyzer - Swept SA     L	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE         2345           TRACE         2345           Peak Search           TOTE           2.483 5 GHz           -37.466 dBm
Image: Sector management of the sector managemen	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE         2345           TRACE         2345           Peak Search           TOTE           2.483 5 GHz           -37.466 dBm
Image: Sector and Sec	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 23450 TRACE 23450 Peak Search Peak Search Next Pe -37.466 dBm Next Pk Rig
ISG Agilent Spectrum Analyzer - Swept SA L RF 50 0 DC Marker 1 2.48350000000 10 dB/div Ref 10.00 dBm 20 0 10	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	Dimis (25000 pts)
I Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC Marker 1 2.48350000000 0 dB/div Ref 10.00 dBm 20.0	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 2345 TRACE 2345 TRACE 2345 Peak Search Peak Search Next Pk Rig Next Pk Rig Next Pk L
ISG Agilent Spectrum Analyzer - Swept SA L RF 50 0 DC Marker 1 2.48350000000 10 dB/div Ref 10.00 dBm 20 0 10	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	Dimis (25000 pts)
ISG Agilent Spectrum Analyzer - Swept SA L RF 50 0 DC Marker 1 2.48350000000 10 dB/div Ref 10.00 dBm 20 0 10	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	Dimis (25000 pts)
Image: Applement Spectrum Analyzer - Swept SA	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 23450 TRACE 23450 Peak Search Next Pe -37.466 dBm Next Pk Rig Next Pk L
I Agilent Spectrum Analyzer - Swept SA L RF 50 Ω DC Marker 1 2.48350000000 0 dB/div Ref 10.00 dBm 20.0 30.0 10 dB/div 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 23450 TRACE 23450 Peak Search Next Pe -37.466 dBm Next Pk Rig Next Pk L
Image: Applement Spectrum Analyzer - Swept SA	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	TRACE 23450 TRACE 23450 Peak Search Next Pe -37.466 dBm Next Pk Rig Next Pk L
Image: Solution of the sector of th	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	D ms (25000 pts)       TRACE   2.3 4.5 d TYPE   Peak Search OTT   NNKK       2.483 5 GHz -37.466 dBm       Next Pk Rig       Next Pk Line       Marker De       Marker De
SSG         Agilent Spectrum Analyzer - Swept SA         L       RF       S0 Q       DC         Marker 1 2.483500000000         0       dB/dlv       Ref 10.00 dBm         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         00       0       0       0         <	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	D ms (25000 pts)       TRACE   2.3 4.5 d TYPE   Peak Search OTT   NNKK       2.483 5 GHz -37.466 dBm       Next Pk Rig       Next Pk Line       Marker De       Marker De
SSG         Agilent Spectrum Analyzer - Swept SA         L       RF       S0 Q       DC         Marker 1 2.483500000000         0       BF       S0 Q       DC         0       BF       BF       S0 Q       DC         0       BF       BF       BF       BF         0       BF       BF       BF       BF         0       BF       BF       BF       BF       BF         0       BF       BF       BF       BF       BF         0       BF       BF       BF       BF       BF       BF         0       BF       BF       BF       BF       BF       BF	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	Dims (25000 pts)           TRACE [] 2 3 4 3 0 TOTAL STRUCT           Peak Search Peak Search Next Pe -37.466 dBm           Next Pk Rig Next Pk Ling           Next Pk Rig Marker De           Marker De           Mkr-4           Mkr-4           Mkr-4           Mkr-4           Mkr - 1           Mkr - 1
SSG         Agilent Spectrum Analyzer - Swept SA         L       RF       S0 Q       DC         Marker 1 2.483500000000         0       dBJdiv       Ref 10.00 dBm         00       dBJdiv       dBJdiv	DO GHZ PN0: Fast IFGein:Low #Atten: 20 dB	Sweep 135.	Dimis (25000 pts)       TRACE 12.3 4.5       TRACE 12.3 4.5       Peak Search       Peak Search       Next Pe       -37.466 dBm       Next Pk Rig       Next Pk L       -35.7 dbc       Marker De       Mkr-ARef L       Mkr-ARef L



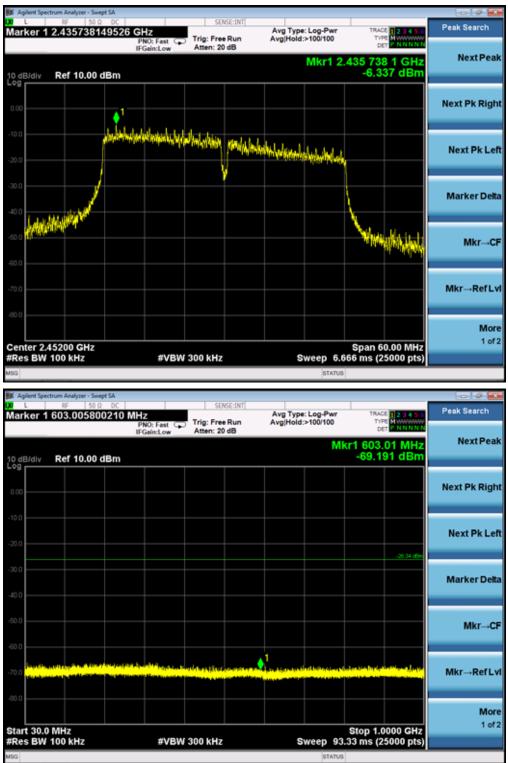
## TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11n40 FOR MODULATION IN LOW CHANNEL



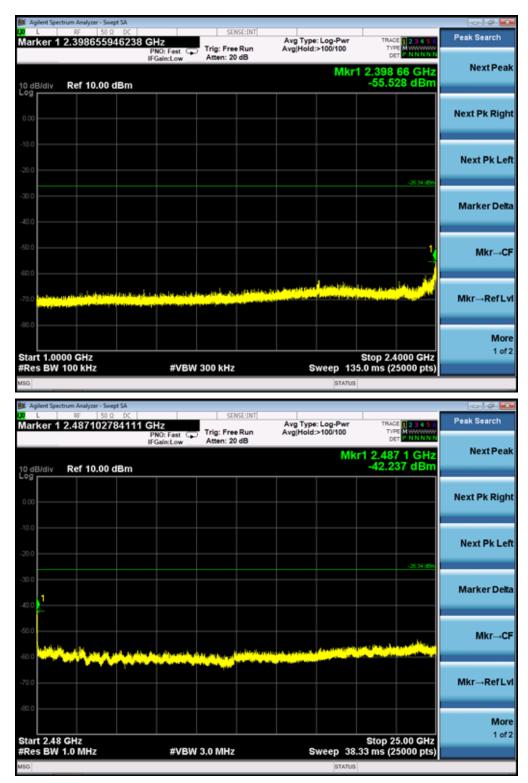


## TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n40 FOR MODULATION IN MIDDLE CHANNEL

L RF 50 Q DC	cruct duri		
larker 1 2.39955198207		Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456 Peak Sear
	PNO: Fast Trig: Free Run IFGain:Low #Atten: 20 dB		DET PINNINN
		Mkr1	2.399 55 GHz Next -48.232 dBm
o dB/div Ref 10.00 dBm			
0.00			Next Pk
10.0			
20.0			Next Pl
30.0			Marker
40.0			
50.0			
			Mkr
50.0		I a manufacture and	And the All Party of the
70.0 Attended in the Alastic States	والأرجاب ومرافعتها ويلتجا والمتعادية		Mkr→R
90.0			
tart 1.0000 GHz			top 2.4000 GHz
Res BW 100 kHz	#VBW 300 kHz	Sweep 135.0	top 2.4000 GHz ) ms (25000 pts)
	#VBW 300 kHz		
Res BW 100 kHz		Sweep 135.0	) ms (25000 pts)
Res BW 100 kHz so Agilent Spectrum Analyzer - Swept SA	0 GHz PN0: Feet CD Trig: Free Run	Sweep 135.0	) ms (25000 pts)
Res         BW         100 kHz           8G	0 GHz	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 2 4 5 C TYPE Peak Sear
Res BW 100 kHz           50           4 Apilert Spectrum Analyzer - Swept SA           L         85           L         85           Jarker 1 2.48350000000           0 dB/d/y         Ref 10.00 dBm	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 23436 TYPE Peak Sear
Res BW 100 kHz GG Agient Spectrum Analyzer - Swept SA L RF 50 Q DC Narker 1 2.48350000000	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 2 3 4 5 C TRACE 2 3 4 5 C Peak Sear Peak Sear Next
Res BW 100 kHz           50           4 Apilert Spectrum Analyzer - Swept SA           L         85           L         85           Jarker 1 2.48350000000           0 dB/d/y         Ref 10.00 dBm	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 2 3 4 5 C TRACE 2 3 4 5 C Peak Sear Peak Sear Next
Res BW 100 kHz           sci           Apilent Spectrum Analyzer - Swept SA           L         RF           SC           Narker 1 2.48350000000           0 dB/div           Ref 10.00 dBm           0 0	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE         2.3.4.5         Peak Sear           TWEE         P.N.N.N.N         Peak Sear           2.4.83.5         GHz         Next           -45.400         dBm         Peak Sear
Res BW 100 kHz           80           Apilert Spectrum Analyzer - Swept SA           L         RF           SO 00           Jarker 1 2.48350000000           0 dB/div         Ref 10.00 dBm	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE         2.3.4.5         Peak Sear           TWEE         P.N.N.N.N         Peak Sear           2.4.83.5         GHz         Next           -45.400         dBm         Peak Sear
Res BW 100 kHz           sci           Apilent Spectrum Analyzer - Swept SA           L         RF           SC           Narker 1 2.48350000000           0 dB/div           Ref 10.00 dBm           0 0	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE         2 3 4 3 6           Trace         Next           Abs         Next           Next         Next
Res BW 100 kHz           sci           Agitert Spectrum Analyzer - Swept SA           L         RS           SG           Carker 1 2.48350000000           O dB/div           Ref 10.00 dBm           O           O	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 2 2 4 5 C TRACE 2 2 4 5 C TYPE Peak Sear Next Pi A5.400 dBm Next Pi
Res BW 100 kHz           sci           Agilent Spectrum Analyzer - Swept SA           L         RF           SG           C           Agilent Spectrum Analyzer - Swept SA           L         RF           SG           O dB/div           Ref 10.00 dBm           SG           SG	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 2 2 4 5 C TRACE 2 2 4 5 C TYPE Peak Sear Next Pi A5.400 dBm Next Pi
Res BW 100 kHz           sci           Agilent Spectrum Analyzer - Swept SA           L         RF           SG           C           Agilent Spectrum Analyzer - Swept SA           L         RF           SG           O dB/div           Ref 10.00 dBm           SG           SG	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	2.483 5 GHz -45.400 dBm -229 der
Res BW 100 kHz           sci           Agilent Spectrum Analyzer - Swept SA           L         RF           SG           C           Agilent Spectrum Analyzer - Swept SA           L         RF           SG           O dB/div           Ref 10.00 dBm           SG           SG	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	2.483 5 GHz -45.400 dBm -229 der
Res BW 100 kHz           50           4 Agitert Spectrum Analyzer - Swept SA           85         50 0           1         85           0         68           0         68           0         68           0         68           0         68           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE     2 3 4 3 6       Peak Sear     Peak Sear       Next     Next       Address     Next       Next     Next Ph       Address     Marker
Res BW 100 kHz           56           Agilert Spectrum Analyzer - Swept SA           B5         50 Q DC           Iarker 1 2.48350000000           0 dBJdly         Ref 10.00 dBm           90         1           90         1	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE     2 3 4 3 6       TRACE     Next       Next     Next       Next     Next       Next     Next       Narker     Marker
Res BW 100 kHz           50           4 Agitert Spectrum Analyzer - Swept SA           85         50 0           1         85           0         68           0         68           0         68           0         68           0         68           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60           0         60	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE     2 3 4 3 6       TRACE     Next       Next     Next       Next     Next       Next     Next       Narker     Marker
Res BW 100 kHz           so           (Applett Spectrum Analyzer - Swept SA L           Re         50 0           L         Re           SO         50 0           L         Re           SO         50 0           L         Re           SO         50 0           D         D           SO         0	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE   2.3 4 5 ( TRACE   2.3 4 5 ( TYPE   2.3
Res BW 100 kHz           Image: Second Secon	0 GHz PN0: Fast C	Sweep 135.( status Avg Type: Log-Pwr Avg Hold:>100/100	TRACE   2.3 4 5 ( TRACE   2.3 4 5 ( TYPE   2.3
Res BW 100 kHz           Image: Second Secon	0 GHz PN0: Fast C	Sweep 135.( status	TRACE     2.3.4.5.6       TRACE     2.3.4.5.6       TYPE     Peak Sear       TYPE     Next       2.483.5     GHz       -45.400 dBm     Next       -22.5.600     Marker       -22.5.600     Marker       -22.5.600     Marker



# TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n40 FOR MODULATION IN HIGH CHANNEL



Note: Two transmit chains had been tested, the chain 0 was the worst case and record in the test report.

# **10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY**

## **10.1 MEASUREMENT PROCEDURE**

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of AVGPSD-1 in the KDB 558074 item 10.3 was used in this testing.

## 10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 8.2.

## **10.3 MEASUREMENT EQUIPMENT USED**

Refer To Section 6.

## **10.4 LIMITS AND MEASUREMENT RESULT**

TEST ITEM	POWER PECTRAL DENSITY
TEST MODE	802.11b with data rate 1

Channel No.	Power density Chain 0 (dBm/3kHz)	Power density Chain 1 (dBm/3kHz)	Power density Total (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-10.02	-10.82	-7.39	8	Pass
Middle Channel	-9.25	-9.49	-6.36	8	Pass
High Channel	-10.14	-11.95	-7.94	8	Pass

TEST ITEM	POWER PECTRAL DENSITY
TEST MODE	802.11g with data rate 6

Channel No.	Power density Chain 0 (dBm/3kHz)	Power density Chain 1 (dBm/3kHz)	Power density Total (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-11.12	-11.68	-8.38	8	Pass
Middle Channel	-10.08	-10.73	-7.38	8	Pass
High Channel	-10.87	-11.43	-8.13	8	Pass

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TEST ITEM	POWER PECTRAL DENSITY
TEST MODE	802.11n 20 with data rate 6.5

Channel No.	Power density Chain 0 (dBm/3kHz)	Power density Chain 1 (dBm/3kHz)	Power density Total (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-11.37	-11.84	-8.59	8	Pass
Middle Channel	-10.42	-11.02	-7.70	8	Pass
High Channel	-11.12	-11.76	-8.42	8	Pass

TEST ITEM	POWER PECTRAL DENSITY
TEST MODE	802.11n 40 with data rate 13.5

Channel No.	Power density Chain 0 (dBm/3kHz)	Power density Chain 1 (dBm/3kHz)	Power density Total (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-16.74	-17.28	-13.99	8	Pass
Middle Channel	-15.86	-16.12	-12.98	8	Pass
High Channel	-16.34	-16.76	-13.53	8	Pass

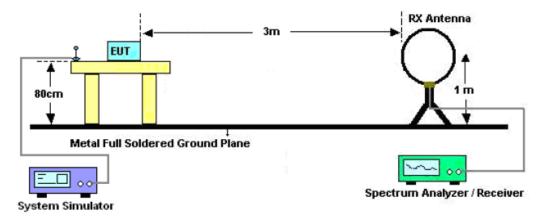
# **11. RADIATED EMISSION**

## **11.1. MEASUREMENT PROCEDURE**

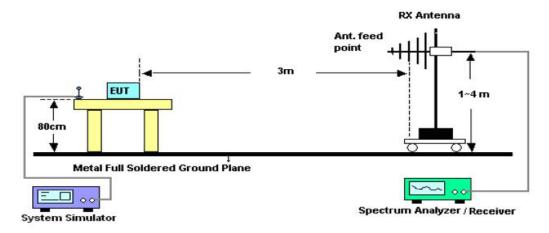
- 1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

### 11.2. TEST SETUP

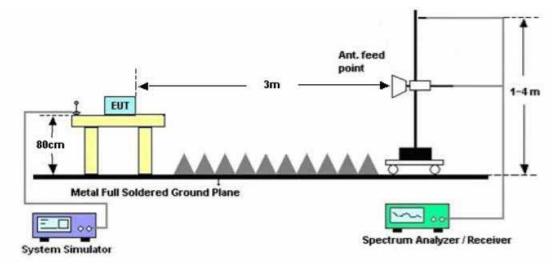
Radiated Emission Test-Setup Frequency Below 30MHz



#### RADIATED EMISSION TEST SETUP 30MHz-1000MHz



## RADIATED EMISSION TEST SETUP ABOVE 1000MHz



## **11.3. LIMITS AND MEASUREMENT RESULT**

15.209(a) Limit in the below table has to be followed

Frequencies (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

Note: All modes were tested For restricted band radiated emission,

the test records reported below are the worst result compared to other modes.

# 11.4. TEST RESULT

## **RADIATED EMISSION BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.

Horizontal

	RADIATED EMISSION BELOW 1GHZ					
EUT	JmGO Smart Portable Theater	Model Name	P1			
Temperature	25°C Relative Humin		55.4%			
Pressure	960hPa	Test Voltage	Normal Voltage			

802.11b with date rate 1

2412MHZ

# **RADIATED EMISSION BELOW 1GHZ**

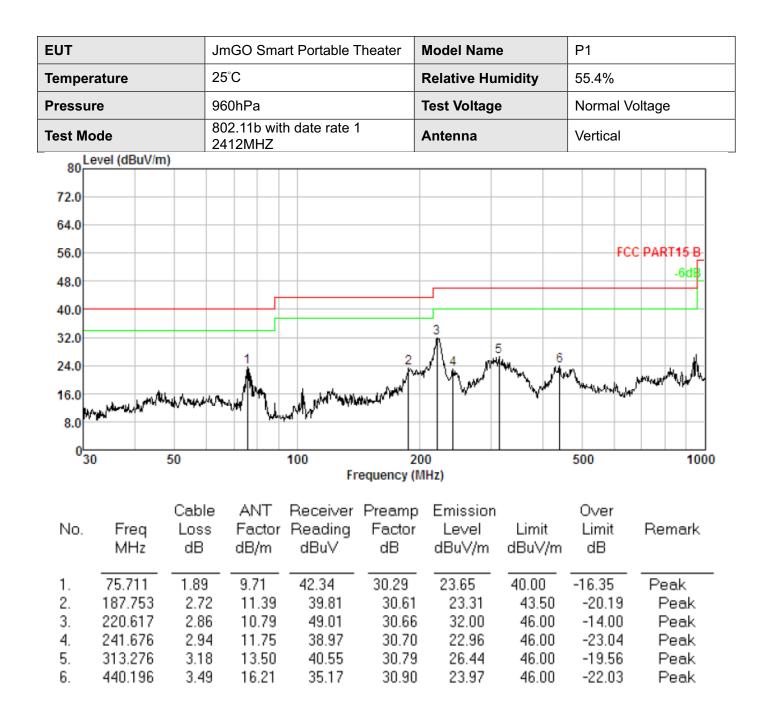
Antenna

80	Level (dBuV/m)				
72.0					
64.0					
56.0				FCC	PART15 B
48.0					-6d8
40.0			3	5	
32.0		1 Л	2 / 4 [man / 4]	5 ////////////////////////////////////	
24.0					un ch
16.0	I Marine	J . J . J			Martine Co.
8.0	W Stranger March 199	hormon			
0	30 50	100	200	500	1000
	50 50		equency (MHz)	500	1000

No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBuV	Preamp Factor dB	Emission Level dBuV/m	Limit dBuV/m	O∨er Limit dB	Remark
1.	75.977	1.90	9.65	50.00	30.29	31.26	40.00	-8.74	Peak
2.	187.096	2.71	11.48	48.07	30.61	31.65	43.50	-11.85	Peak
3.	222.170	2.87	10.87	58.43	30.67	41.50	46.00	-4.50	Peak
4.	245.951	2.96	11.84	47.56	30.70	31.66	46.00	-14.34	Peak
5.	325.596	3.21	13.78	48.90	30.80	35.09	46.00	-10.91	Peak
6.	429.523	3.46	15.95	41.17	30.90	29.68	46.00	-16.32	Peak

**RESULT: PASS** 

**Test Mode** 



## **RESULT: PASS**

Note:

- 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- 2. The "Factor" value can be calculated automatically by software of measurement system.
- 3. All test modes had been pre-tested. The 802.11b at low channel is the worst case and recorded in the report.

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Horizontal

# **RADIATED EMISSION ABOVE 1GHZ**

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value i ype		
4824.058	47.89	3.72	51.61	74	-22.39	peak		
4824.063	42.16	3.72	45.88	54	-8.12	AVG		
7236.076	42.58	8.15	50.73	74	-23.27	peak		
7236.088	37.14	8.15	45.29	54	-8.71	AVG		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value rype	
4824.105	46.52	3.72	50.24	74	-23.76	peak	
4824.021	40.54	3.72	44.26	54	-9.74	AVG	
7236.097	39.78	8.15	47.93	74	-26.07	peak	
7236.097	34.36	8.15	42.51	54	-11.49	AVG	
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

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EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHZ	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value rype	
4874.093	50.02	3.75	53.77	74	-20.23	peak	
4874.117	45.12	3.75	48.87	54	-5.13	AVG	
7311.054	42.36	8.16	50.52	74	-23.48	peak	
7311.064	38.16	8.16	46.32	54	-7.68	AVG	
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHZ	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value rype	
4874.054	48.65	3.75	52.4	74	-21.6	peak	
4874.079	43.52	3.75	47.27	54	-6.73	AVG	
7311.030	41.23	8.16	49.39	74	-24.61	peak	
7311.078	39.67	8.16	47.83	54	-6.17	AVG	
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

### Report No.: AGC05734151201FE05 Page 60 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value rype			
4924.100	47.65	3.81	51.46	74	-22.54	peak			
4924.099	42.31	3.81	46.12	54	-7.88	AVG			
7386.097	40.02	8.19	48.21	74	-25.79	peak			
7386.056	34.56	8.19	42.75	54	-11.25	AVG			
Remark:									
Factor = Ante	enna Factor + Ca	able Loss – F	Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value i ype	
4924.108	45.32	3.81	49.13	74	-24.87	peak	
4924.078	40.05	3.81	43.86	54	-10.14	AVG	
7386.117	38.96	8.19	47.15	74	-26.85	peak	
7386.050	33.85	8.19	42.04	54	-11.96	AVG	
Remark:							
Factor = Ante	Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

## **RESULT: PASS**

Note:

Other emission from 1G to 25 GHz are considered as ambient noise. No recording in the test report. Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

All test modes had been pre-tested. The 802.11b mode is the worst case and recorded in the report.

# **12. BAND EDGE EMISSION**

## **12.1. MEASUREMENT PROCEDURE**

Radiated restricted band edge measurements

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting

## 12.2. TEST SET-UP

same as 11.2

Note:

1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level

2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB( $\mu$ V) to represent the Amplitude. Use the F dB( $\mu$ V/m) to represent the Field Strength. So A=F.

### Report No.: AGC05734151201FE05 Page 62 of 93

## 12.3. Test Result

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Horizontal







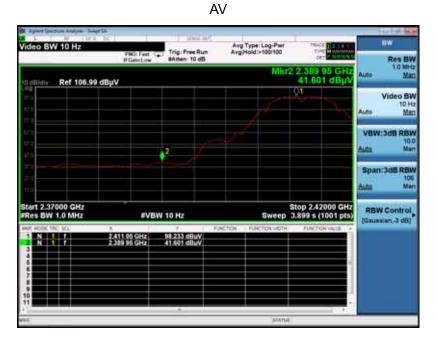
larker 2 2 3900000	00000 GHz PNC Feet	Trig: Free Run	Avg	Type: Log-Pwr Hold > 100/100	THING		Peak Search
0 olikely Ref 106.99				Mkr	2 2.390 0	0 GHz dBµV	Next Peak
<b>01</b> 1711 1713				15	<u>v</u>	Tr	Next Pk Righ
		, J					Next Pk Lef
							Marker Dela
tart 2.37000 GHz Res BW 1.0 MHz	#VE	W 10 Hz	E-MATRICK	Sweep	Stop 2.420 3.899 s (1	001 pts)	MkrCf
	2.411 20 GHz 2.390 00 GHz	100.342 dBuV 43.300 dBuV	198,104		704,183		Mkr-RefLy
6.7 7 9 10							Mon 1 of
		•		Second			1.000

### Report No.: AGC05734151201FE05 Page 63 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Vertical

rker 2 2.389950000000 GHz PRC Feet Trig: Free Run B Gain Law B Gain Law Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 Next Peak kr2 2.389 95 GH 53.788 dBp Ref 106.99 dBµV 11 Next Pk Right 2 Next Pk Left Marker Delta Stop 2.42000 GHz Sweep 1.000 ms (1001 pts) Start 2.37000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Mkr-CF 2.411 05 GHz 2.389 95 GHz 103.563 dBuV 53.788 dBuV Mkr-RefLvi More 1 of 2

ΡK



### Report No.: AGC05734151201FE05 Page 64 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Horizontal

larker 2 2.484100000000 GHz PNC Feet Trig: Free Run From Law Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 Next Peak Mkr2 2.484 10 GHz 51.493 dBµV Ref 106.99 dBµV Next Pk Right Next Pk Left Marker Delta Start 2,45000 GHz #Res BW 1.0 MHz Stop 2.50000 GHz Sweep 1.000 ms (1001 pts) #VBW 1.0 MHz Mkr-CF 2.463 05 GHz 102.649 dBuV 2.484 10 GHz 61.493 dBuV Mkr-RefLvi More 1 of 2

ΡK

AV



### Report No.: AGC05734151201FE05 Page 65 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Vertical

Ref 2 2.493950000000 GHz PRO Feet Free Run B Gan Law Amer. 10 dB Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 Next Peak Mkr2 2,483 95 GH 50,895 dBp Ref 106.99 dBµV Next Pk Right P Next Pk Left Marker Delta Start 2,45000 GHz #Res BW 1.0 MHz Stop 2.50000 GHz Sweep 1.000 ms (1001 pts) #VBW 1.0 MHz Mkr-CF 2.463 10 GHz 2.483 96 GHz 100.963 dBuV 50.895 dBuV Mkr-RefLvi More 1 of 2



AV



### Report No.: AGC05734151201FE05 Page 66 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 1 2412MHZ	Antenna	Horizontal

ker 2 2.390990000000 GHz PR0: Feat Trig: Free Run IF Gain Law Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 Next Peak Mkr2 2.390 990 GH2 65,813 dBµ\ Ref 106.99 dBµV V١ Next Pk Right e Next Pk Left Marker Delta Stop 2.42500 GHz Sweep 1.000 ms (1001 pts) Start 2.37000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Mkr-CF 99.553 dBuV 65.813 dBuV 2.410 920 GHz 2.390 990 GHz Mkr-RefLvi More 1 of 2



AV

Ideo BW 10 Hz		ree Run A	vg Type Log-Pwr vg Hold:>100/100	TRACE NO. OF	BW
and the second second	FRO: Fest Trig: F IFGainLine #Atten		*g/noid.>100100	OFT DESIGNATION	Res BV
o dilidiy Ref 106.99 dBµV			Mkr2 2.	390 990 GHz 45.012 dBµV	Auto Ma
07.0 17.0 15.3			01	-	Video Bi 10 H Auto Ma
	2			Ţ	VBW:3dB RBI 10 Auto Me
					Span:3dB RB 10 Auto Me
Start 2.37000 GHz Res BW 1.0 MHz	#VBW 10 Hz		Sto Sweep 4.2	p 2.42500 GHz 89 s (1001 pts)	RBW Contro
2 N 1 f 2,390 3 4 6 8	920 GHz 90.961 ( 990 GHz 45.012 (	1BuV	<ul> <li>PUNCTOX HOTH</li> </ul>	PUNCTION VALUE	
7 8 9 10					

### Report No.: AGC05734151201FE05 Page 67 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 1 2412MHZ	Antenna	Vertical

rker 2 2.390990000000 GHz FN0: Feat Trig: Free Run Float Law Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 Next Peak 4kr2 2.390 990 GH: 63.901 dBp/ Ref 106.99 dBµV Next Pk Right ¢² Next Pk Left Marker Delta Stop 2.42500 GHz Sweep 1.000 ms (1001 pts) Start 2.37000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Mkr-CF 2.413 460 GHz 2.390 990 GHz 97.693 dBuV 63.901 dBuV Mkr-RefLvi More 1 of 2

ΡK





### Report No.: AGC05734151201FE05 Page 68 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 1 2462MHZ	Antenna	Horizontal

ΡK





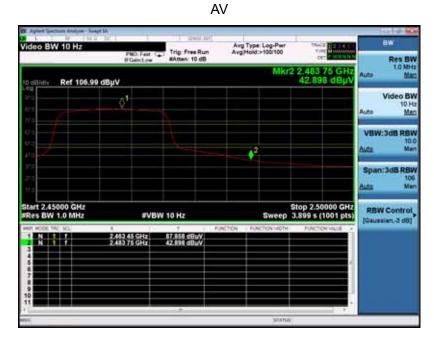


### Report No.: AGC05734151201FE05 Page 69 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 1 2462MHZ	Antenna	Vertical

arker 2 2.483750000000 GHz PRC: Feat Frame Low SAmer: 10 dB Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 NextPeak Mkr2 2,483 75 GHz 61,619 dBµV Ref 106.99 dBµV Next Pk Right ¢² Next Pk Left Marker Delta Start 2.45000 GHz #Res BW 1.0 MHz Stop 2.50000 GHz Sweep 1.000 ms (1001 pts) #VBW 1.0 MHz Mkr-CF 2.463 45 GHz 2.483 76 GHz 96.811 dBuV 61.619 dBuV Mkr-RefLvi More 1 of 2

ΡK



### Report No.: AGC05734151201FE05 Page 70 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 1 2412MHZ	Antenna	Horizontal

ΡK



AV

	FRO: Fast C IFGainLine	Atten: 10 dB	n Avg	Hold:>100/100	THE REPORT	Res Bi
oBidly Ref 106.99 dBpV	,			Mkr2	2.389 340 GHz 45.213 dBµV	Auto Ma
9 U			+	^1		Video B 10 / Auto M
9 u 1 0	• ²				Ţ	VBW:3dB RB 10 Auto M
						Span:3dB RB
art 2,37000 GHz es BW 1.0 MHz	#VB	W 10 Hz		Sweep	Stop 2.42500 GHz 4.289 s (1001 pts)	RBW Contro (Gaussian,-3 dB
N HOOK 1962 ALL X	0 920 GHz 9 340 GHz	90.179 dBuV 46.213 dBuV	FUNCTION	- PUNCTONINGTH	FUNCTION HELE	

### Report No.: AGC05734151201FE05 Page 71 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 1 2412MHZ	Antenna	Vertical

ΡK



AV

deo BW 10 Hz	PHO Fast (	Trig: Free Rur	Avg	Type Log-Pwr Hold > 100/100	Ting Constant	BW
dilidiy Ref 106.99 dBpl	#Gain.Low	#Amen: 10 dB		Mkr2	2.389 560 GHz 43.786 dBµV	Res BV 1.0 MH Auto Ma
90 70 70			r	Q1		Video B 10 / Auto M
912	¢ ²					VBW:3dB RB 10 Auto: M
70						Span:3dB RB
tart 2.37000 GHz Res BW 1.0 MHz	#VB	W 10 Hz		Sweep	Stop 2.42500 GHz 4.289 s (1001 pts)	RBW Contro (Gaussian,-3 dB
NR NOOD THE SCI. X N 1 1 7 241 N 1 7 238 3 4 5 6 7	0 965 GHz 9 560 GHz	88.459 dBuV 43.786 dBuV	FUNCTION	FUNCTON/UDTH	FUNCTION VALUE	

### Report No.: AGC05734151201FE05 Page 72 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20with data rate 1 2462MHZ	Antenna	Horizontal

ΡK







## Report No.: AGC05734151201FE05 Page 73 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 1 2462MHZ	Antenna	Vertical

ΡK





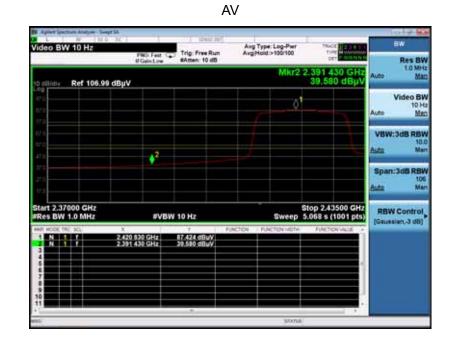


## Report No.: AGC05734151201FE05 Page 74 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40with data rate 1 2412MHZ	Antenna	Horizontal

rker 2 2.391430000000 GHz FN0: Feat Trig: Free Run R Gaines 10 dB Peak Search Avg Type: Log-Pwr Avg Hold > 100/100 Next Peak 4kr2 2.391 430 GH 57.640 dBµ Ref 106.99 dBµV Next Pk Right ¢² Next Pk Left Marker Delta Stop 2.43500 GHz Sweep 1.000 ms (1001 pts) Start 2.37000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Mkr-CF 2.420 830 GHz 2.391 430 GHz 96.867 dBuV 67.640 dBuV Mkr-RefLvi More 1 of 2

ΡK



## Report No.: AGC05734151201FE05 Page 75 of 93

Properties+

More 1 of 2

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 1 2412MHZ	Antenna	Vertical

ker 2 2.391495000000 GHz PNO: Feat Car If Gain Law SAmer: 10 dB Mark Avg Type: Log-Pwr Avg Hold > 100/100 Select Marker kr2 2.391 495 Gi 56.066 dBj Ref 106.99 dBµV Norma ¢² Delta Fixed Stop 2.43500 GHz Sweep 1.000 ms (1001 pts) Start 2.37000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz on 2.420 830 GHz 2.391 495 GHz 94,714 dBu/ 56,066 dBu/ 

ΡK

ideo BW 10 Hz	PNO Fest	Trip: Free Run	Avg Typ Avg Hold	Log-Pwr I>100/100	THUCK THE REAL	BW
	FGain1.re	#Amen: 10 dB			391 495 GHz	Res B
Collidia Ref 106.9	i9 dBµV			minite a.	38.062 dBµV	Auto Mi
00 U U U U U U U U U U U U U U U U U U				01		Video B 10 ) Auto Ma
173 (2 u						VBW:3dB RB
27.0 27.0 27.0	¢ ²				- T	Auto Mi
200 27.0						Span:3dB RB 10 Auto Mi
tart 2.37000 GHz Res BW 1.0 MHz	#V8	W 10 Hz		Steep 5.0	p 2.43500 GHz 68 s (1001 pts)	RBW Control (Gaussian,-3 dB)
NR HOOK THE SOL	2. 2.420 830 GHz 2.391 495 GHz	7 85.332 dBuV 38.052 dBuV	UNCTON	NCTON HOTH	FUNCTION VALUE	(and serve and
3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2.001.400.0014					
10 11						
				Status -		-

RESULT: PASS

AV

## Report No.: AGC05734151201FE05 Page 76 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 1 2462MHZ	Antenna	Horizontal

ΡK



## AV

Marker	THACE PROCEED	Type: Log-Pwr Hold:>100/100	Avg	Trig: Free Run	Hz	000000 G	2.483500	rker 2 2
Select Marker	DET CONTRACTOR	100.9100100	0.19	#Amen: 10 dB	PNO: Fast ( FGain:Low		0.285.451.564	12012/04
3	.483 50 GHz 38.613 dBµV	Mkr2				99 dBµV	Ref 106.	sāldiv -
Norm						Q1		
-								H
Dell								Ų.
	_	¢ ²						g G
Fixed								1
0	op 2.50000 GHz 978 s (1001 pts)	Sweep		W 10 Hz	#VB		00 GHz	rt 2,440 es BW 1
	FUNCTION VALUE	FUNCTION/HOTH	FUNCTION	7 86.480 dBuV	20 GHz	×	NO.	HODE THE
Properties				38.612 dBuV	SO GHZ	243	ń	R I
Mor								
1 of								
		'savaras'						_

## Report No.: AGC05734151201FE05 Page 77 of 93

EUT	JmGO Smart Portable Theater	Model Name	P1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 1 2462MHZ	Antenna	Vertical

ΡK



## AV

Marker	TRACE IN COMPANY	Type: Log-Pwr Hold > 100/100	Avg	Trig: Free Run		0000000 G	2.48350	arker 2
Select Marker	DET CONTRACTOR	100.9100100	- Arg	#Amen: 10 dB	PNO: Fast ( IFGain:Low	NCCROOKESH C	-noves-theorem	x0500.0404
2	2.483 50 GHz 37.368 dBµV	Mkr2				.99 dBµV	Ref 106	o dili div
Norm						01		V.0
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0	top 2.50000 GHz	Sweep		W 10 Hz	#VB			tart 2,440 Res BW
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Properties				84.483 dBuV 37.368 dBuV	3 26 GHz 3 50 GHz	2,453 2,483	1	1 N 1 N 1
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10								0
		SEATURE .						

# **13. FCC LINE CONDUCTED EMISSION TEST**

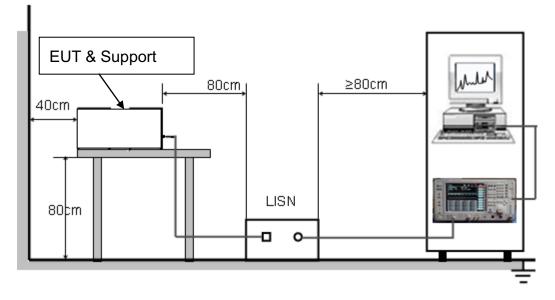
## **13.1. LIMITS OF LINE CONDUCTED EMISSION TEST**

Frequency	Maximum RF Line Voltage				
Frequency	Q.P.( dBuV)	Average( dBuV)			
150kHz~500kHz	66-56	56-46			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

## **13.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST**



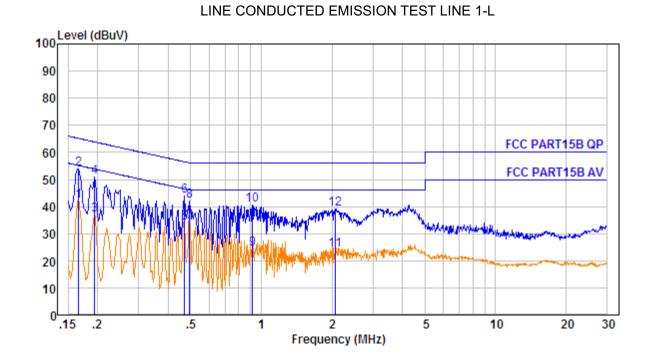
## **13.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST**

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.4.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4. All support equipments received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received charging voltage by adapter which received 120V/60Hzpower by a LISN..
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

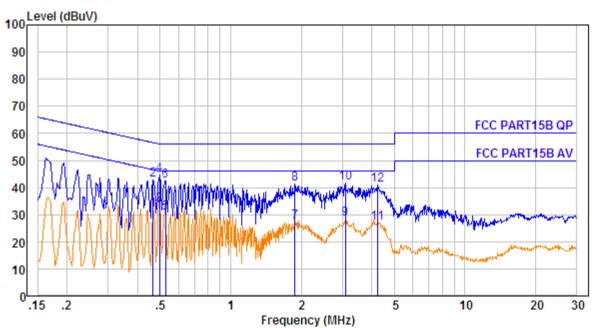
## 13.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case condition(s) was reported on the Summary Data page.



## 13.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

No.	Freq MHz	Cable Loss dB	AMN Factor dB	Receiver Reading dBuV	Emission Level dBuV	Limit dBu∨	O∨er Limit dB	Remark
1.	0.166	10.60	0.60	30.80	42.00	55.16	-13.16	Average
2.	0.166	10.60	0.60	42.80	54.00	65.16	-11.16	Peak
3.	0.194	10.61	0.60	25.69	36.90	53.84	-16.94	Average
4.	0.194	10.61	0.60	39.69	50.90	63.84	-12.94	Peak -
5.	0.471	10.64	0.60	22.70	33.94	46.49	-12.55	Average
6.	0.471	10.64	0.60	32.70	43.94	56.49	-12.55	Peak
7.	0.494	10.64	0.60	22.95	34.19	46.10	-11.91	Average
8.	0.494	10.64	0.60	30.95	42.19	56.10	-13.91	Peak
9.	0.918	10.67	0.60	13.20	24.47	46.00	-21.53	Average
10.	0.918	10.67	0.60	29.20	40.47	56.00	-15.53	Peak
11.	2.066	10.70	0.60	12.82	24.12	46.00	-21.88	Average
12.	2.066	10.70	0.60	27.82	39.12	56.00	-16.88	Peak



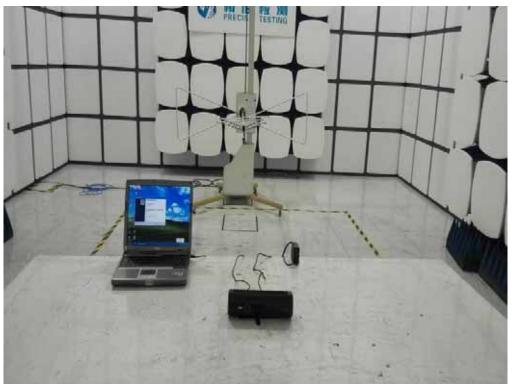
Line Conducted Emission Test Line 2-N

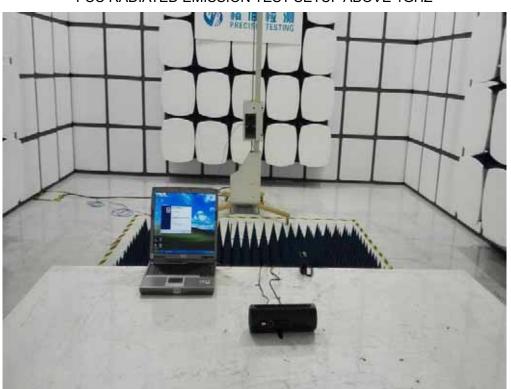
No.	Freq MHz	Cable Loss dB	AMN Factor dB	Receiver Reading dBuV	Emission Le∨el dBuV	Limit dBu∨	O∨er Limit dB	Remark
1.	0.466	10.64	0.60	20.55	31.79	46.58	-14.79	Average
2.	0.466	10.64	0.60	31.55	42.79	56.58	-13.79	Peak [–]
3.	0.497	10.65	0.60	22.46	33.71	46.05	-12.34	Average
4.	0.497	10.65	0.60	33.46	44.71	56.05	-11.34	Peak [–]
5.	0.527	10.65	0.60	19.25	30.50	46.00	-15.50	Average
6.	0.527	10.65	0.60	31.25	42.50	56.00	-13.50	Peak [–]
7.	1.878	10.70	0.60	16.02	27.32	46.00	-18.68	Average
8.	1.878	10.70	0.60	30.02	41.32	56.00	-14.68	Peak ⁻
9.	3.090	10.71	0.60	17.24	28.55	46.00	-17.45	Average
10.	3.090	10.71	0.60	30.24	41.55	56.00	-14.45	Peak
11.	4.224	10.73	0.60	15.68	27.01	46.00	-18.99	Average
12.	4.224	10.73	0.60	29.68	41.01	56.00	-14.99	Peak -

# APPENDIX A: PHOTOGRAPHS OF TEST SETUP FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ





FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ



# APPENDIX B: PHOTOGRAPHS OF EUT ALL VIEW OF EUT

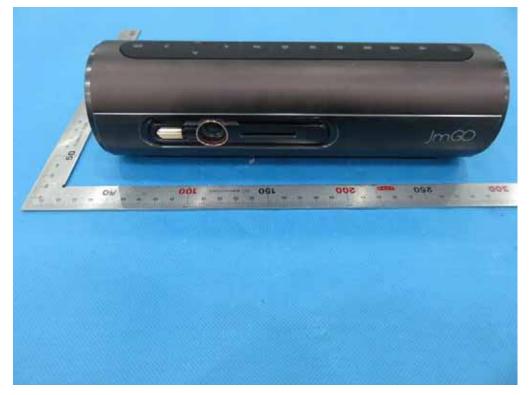
TOP VIEW OF EUT





BOTTOM VIEW OF EUT

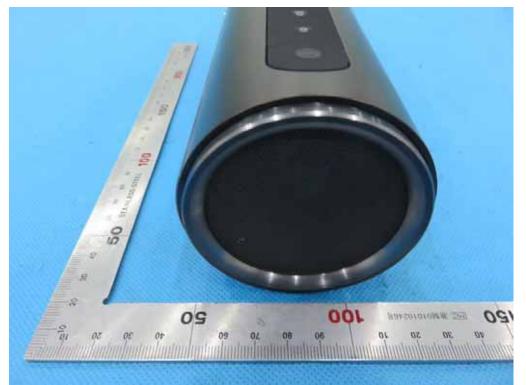
FRONT VIEW OF EUT



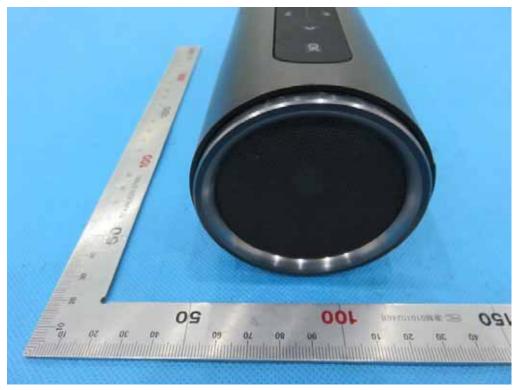


BACK VIEW OF EUT

LEFT VIEW OF EUT



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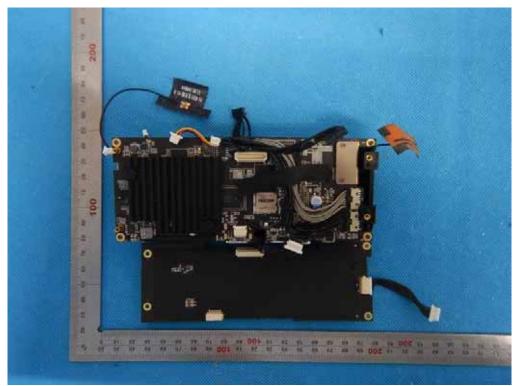
**RIGHT VIEW OF EUT** 

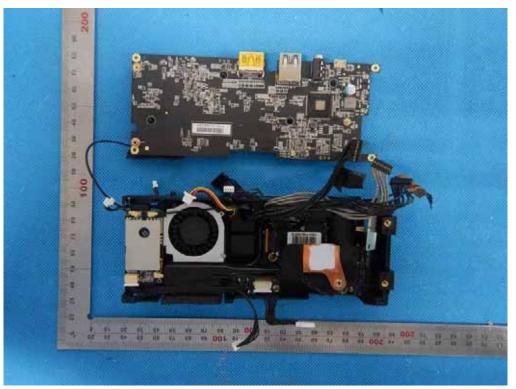
OPEN VIEW OF EUT



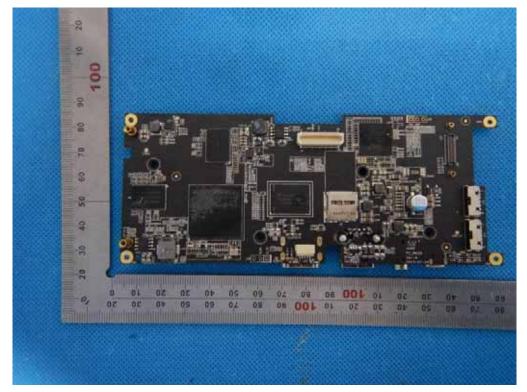


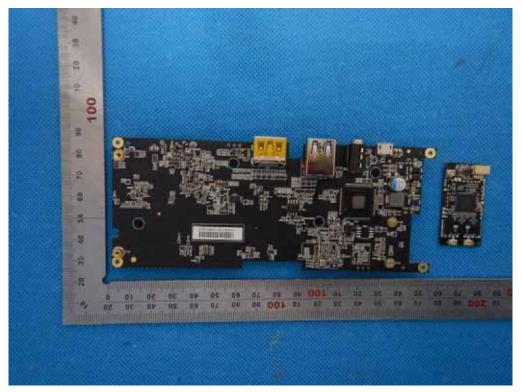
**INTERNAL VIEW OF EUT-2** 

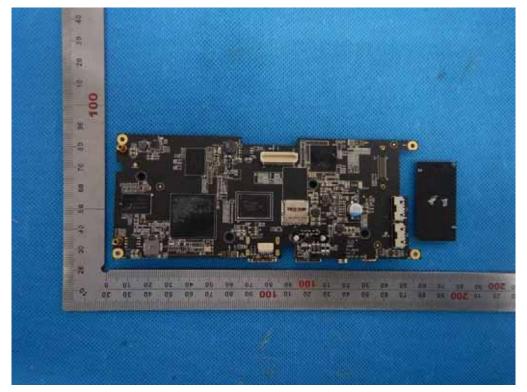


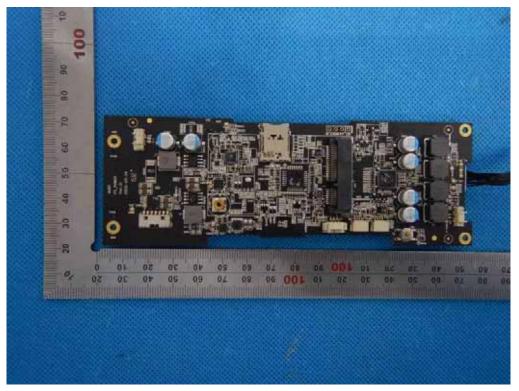


**INTERNAL VIEW OF EUT-3** 

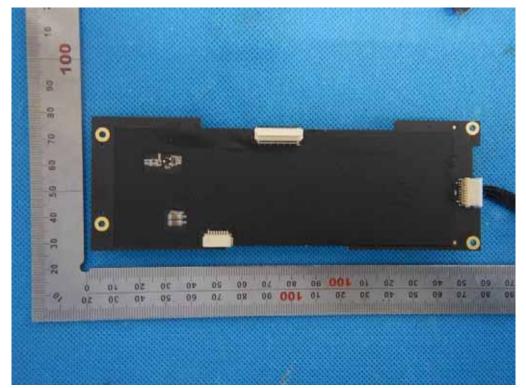






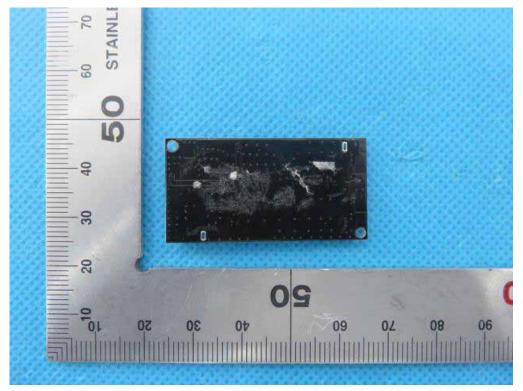


**INTERNAL VIEW OF EUT-7** 



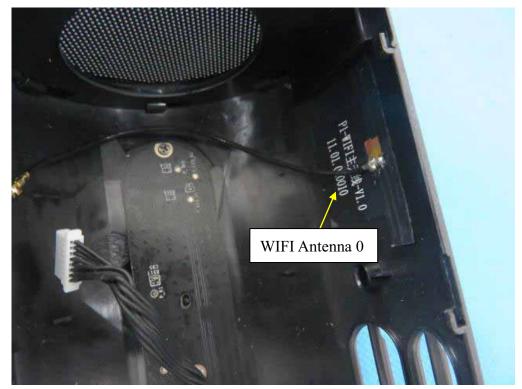
# STAINLES O NUMBER OF STREET

INTERNAL VIEW OF EUT-9





INTERNAL VIEW OF EUT-12



----END OF REPORT----