

Report No.: AGC02724180602FE05

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## 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 ANSI C63.10 (2013) item 11.10 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 SPECTRAL DENSITY	The Manual Completions	The Compliance 60 4
TEST MODE	802.11b with data rate 1	C Mestion of Call	Artes unforce

Channel No.	Power density (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-1.336	8	Pass
Middle Channel	-1.902	8	Pass
High Channel	-1.838	8	Pass

TEST ITEM	POWER SPECTRAL DENSITY		
TEST MODE	802.11g with data rate 6	The All Maries	® # Ton of Clobal Committee

Channel No.	Power density (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-10.361	8	Pass
Middle Channel	-10.104	8	Pass
High Channel	-11.061	8	Pass

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TEST ITEM	POWER SPECTRAL DENSITY	The State Compliance	T. E. Mario
TEST MODE	802.11n 20 with data rate 6.5	C Mestation of C	A A A A A A A A A A A A A A A A A A A

Channel No.	Power density (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-11.344	- 4 8 CC	Pass
Middle Channel	-11.288	8	Pass
High Channel	-10.855	8 1	Pass

TEST ITEM	POWER SPECTRAL DENSITY		:111
TEST MODE	802.11n 40 with data rate 13.5	The Complance	THE Security of the Second

Channel No.	Power density (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-13.637	8 Figure Committee	Pass
Middle Channel	-13.422	8	Pass
High Channel	-13.214	8	Pass

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# 802.11b TEST RESULT TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



#### TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



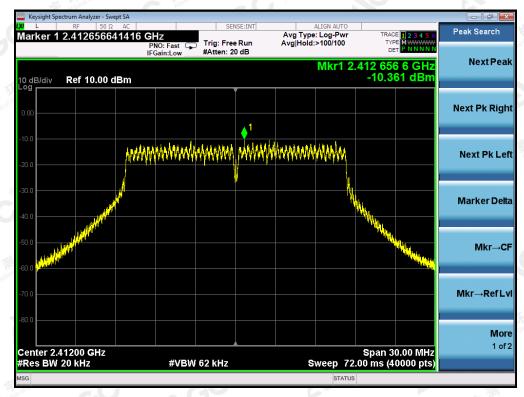
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## TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



802.11g TEST RESULT
TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

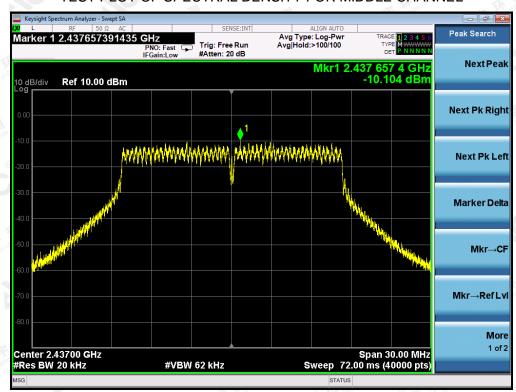


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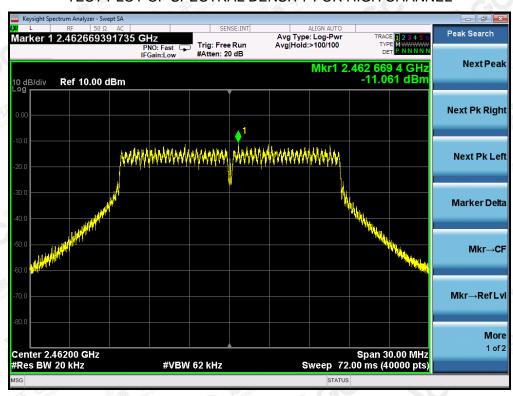
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#### TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



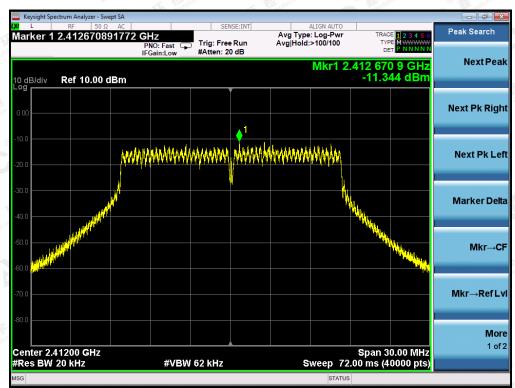
#### TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



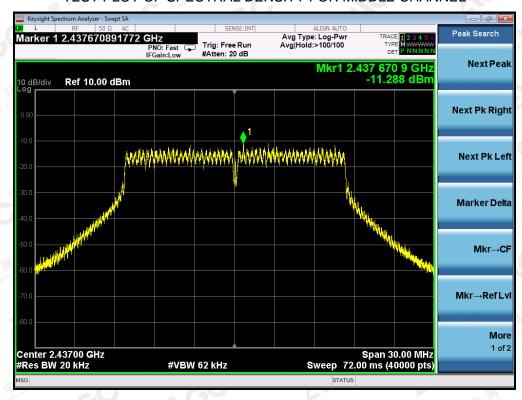
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# 802.11n 20 TEST RESULT TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



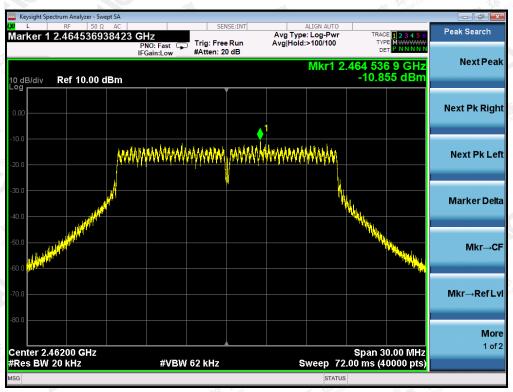
#### TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



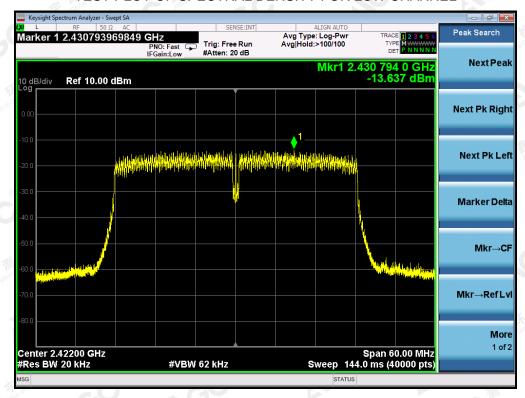
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#### TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



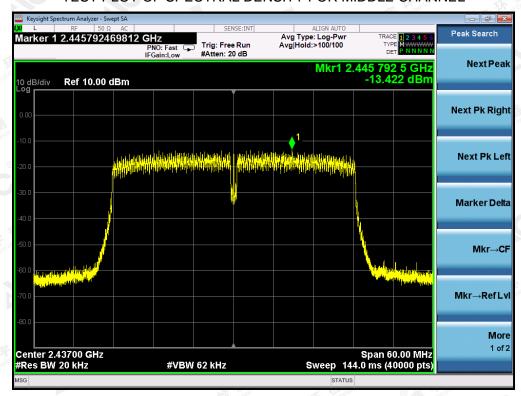
802.11n 40 TEST RESULT
TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



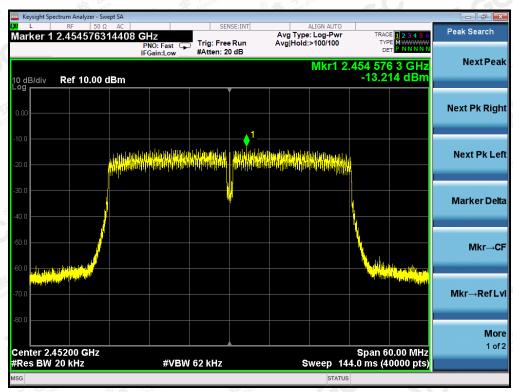
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#### TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



#### TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



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## 11. RADIATED EMISSION

#### 11.1. MEASUREMENT PROCEDURE

- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 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.
- Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 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 RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 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.

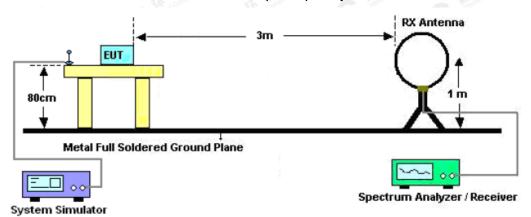
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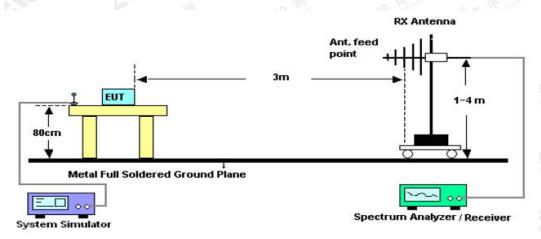


#### 11.2. TEST SETUP

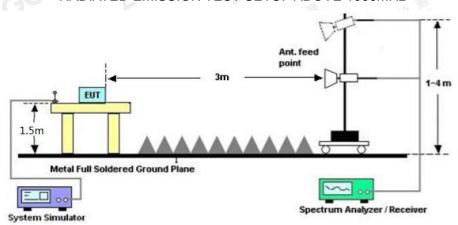
# Radiated Emission Test-Setup Frequency Below 30MHz



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



# RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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## 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	The state of the s
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**

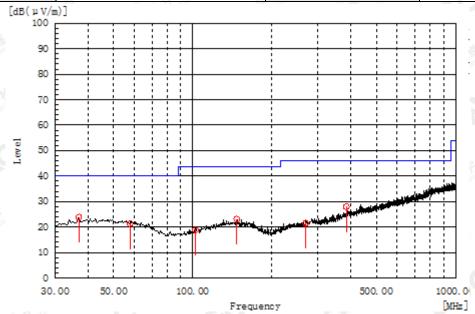
No emission found between lowest internal used/generated frequencies to 30MHz.

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# **RADIATED EMISSION BELOW 1GHZ**

	31111	101	
EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Horizontal



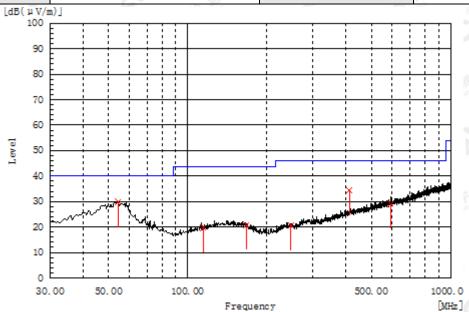
Frequency MHz	Polarization	Reading dB(uV)	Factor dB (1/m)	Level dB(uV/m) PK	Limit dB(uV/m) QP	Margin dB	Pass/Fail	Height cm	Angle deg
36.790	T. TH	7.1	16.8	23.9	40.0	16.1	Pass	200.0	9.0
57.645	h H	4.8	16.5	21.3	40.0	18.7	Pass	200.0	84.7
102.265	Н	5.1	13.7	18.8	43.5	24.7	Pass	100.0	130.5
146.885	H	6.5	16.6	23.1	43.5	20.4	Pass	200.0	47.3
268.620	® # Honor Clobs	4.7	16.7	21.4	46.0	24.6	Pass	200.0	42.3
384.050	У н	7.8	20.2	28.0	46.0	18.0	Pass	100.0	42.9

RESULT: PASS

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
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 MHz	Polarization	Reading dB(uV)	Factor dB (1/m)	Level dB(uV/m) PK	Limit dB(uV/m) QP	Margin dB	Pass/Fail	Height cm	Angle deg
54.250	V	13.1	16.8	29.9	40.0	10.1	Pass	100.0	63.1
114.390	T V	4.9	14.9	19.8	43.5	23.7	Pass	200.0	354.5
167.255	rot V	4.6	16.2	20.8	43.5	22.7	Pass	200.0	198.9
246.795	V	4.6	16.1	20.7	46.0	25.3	Pass	100.0	179.3
412.180	V	13.2	21.2	34.4	46.0	11.6	Pass	100.0	4.1
592.600	(S) All Chopse	4.4	24.8	29.2	46.0	16.8	Pass	100.0	105.7

# **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.

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## **RADIATED EMISSION ABOVE 1GHZ**

EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4824.035	42.21	3.72	45.93	74	-28.07	peak
4824.047	39.48	3.72	43.2	54	-10.8	AVG
7236.071	41.19	8.15	49.34	74	-24.66	peak
7236.058	36.11	8.15	44.26	54	-9.74	AVG
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actor = Ante	enna Factor + Ca	able Loss –	Pre-amplifier.	® A Jon of Give	(C) Williams to the state of th	Jones

EUT	WiFi Smart Plug	Model Name	XO-9563-1
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 Type
4824.099	42.18	3.72	45.9	74	-28.1	peak
4824.052	38.62	3.72	42.34	54	-11.66	AVG
7236.026	42.47	8.15	50.62	74	-23.38	peak
7236.097	36.53	8.15	44.68	54	-9.32	AVG
i have	Global C	The stion of Glov	Attesta			
omy	lestation	Artes	6			
temark:				lin:	NZ.	
actor = Ante	enna Factor + C	able Loss – I	Pre-amplifier.	The Milliance	I IN A COM	Jim C Street
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EUT	WiFi Smart Plug	Model Name	XO-9563-1
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 Type
4874.074	44.37	3.75	48.12	74	-25.88	peak
4874.104	40.15	3.75	43.9	54	-10.1	AVG
7311.075	41.34	8.16	49.5	74	-24.5	peak
7311.076	36.52	8.16	44.68	54	-9.32	AVG
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emark:			III):	玉	of Combina	3 Klopal Co.
actor = Ante	enna Factor + Ca	able Loss - I	Pre-amplifier.	® Stand of Glo.	(B) ### (S) (B)	Jones
	-1777	2. N CONTROL		Allesa		

EUT	WiFi Smart Plug	Model Name	XO-9563-1
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 Type
4874.114	45.23	3.75	48.98	74	-25.02	peak
4874.083	39.67	3.75	43.42	54	-10.58	AVG
7311.085	40.19	8.16	48.35	74	-25.65	peak
7311.048	35.86	8.16	44.02	54	-9.98	AVG
-GU				TEL MINOS	IN KENNY	
emark:		:101	15 july	F Global Comb	® # of Gloval	20
actor = Ante	enna Factor + Ca	ble Loss – P	re-amplifier.	testation.	Attes	

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
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 Type
4924.049	44.67	3.81	48.48	74	-25.52	peak
4924.037	39.82	3.81	43.63	54	-10.37	AVG
7386.087	41.43	8.19	49.62	74	-24.38	peak
7386.101	37.12	8.19	45.31	54	-8.69	AVG
T. Tr.	County Transfer	4 7	liop Co.,	state	Alle	
® tation of C	® Alion of Gio	R The station of				
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actor = Ante	enna Factor + Cal	ole Loss – P	re-amplifier.	- To 1	Tipliance	EK Complian

EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Vertical

Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
43.81	3.81	47.62	74	-26.38	peak
39.44	3.81	43.25	54	-10.75	AVG
38.43	8.19	46.62	74	-27.38	peak
34.28	8.19	42.47	54	-11.53	AVG
The mpliance	El Compilia.	® # Glov	® ## all	onord	
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Miles Att	35"				
enna Factor + Ca	able Loss - I	Pre-amplifier.	lin:		The state of the s
	(dBµV) 43.81 39.44 38.43 34.28	(dBµV) (dB) 43.81 3.81 39.44 3.81 38.43 8.19 34.28 8.19	(dBμV)     (dB)     (dBμV/m)       43.81     3.81     47.62       39.44     3.81     43.25       38.43     8.19     46.62	(dBμV)     (dB)     (dBμV/m)     (dBμV/m)       43.81     3.81     47.62     74       39.44     3.81     43.25     54       38.43     8.19     46.62     74       34.28     8.19     42.47     54	(dBμV)     (dB)     (dBμV/m)     (dBμV/m)     (dBμV/m)       43.81     3.81     47.62     74     -26.38       39.44     3.81     43.25     54     -10.75       38.43     8.19     46.62     74     -27.38       34.28     8.19     42.47     54     -11.53

## **RESULT: PASS**

#### Note:

Other emissions from 1G to 25 GHz are considered as ambient noise. No recording in the test report. Factor = Antenna Factor + Cable lss - 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.

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## 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.

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# 12.3. TEST RESULT

EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Horizontal

PK



AV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Vertical



## AV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Horizontal



## $\mathsf{AV}$



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Vertical



## ΑV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Horizontal



## AV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Vertical



## ΑV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Horizontal



## ΑV



**RESULT: PASS** 

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18",05"		7 N CO!!"	
EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Vertical

## PK



#### ΑV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Horizontal



## $\mathsf{AV}$



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Vertical



## ΑV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Horizontal



## ΑV



**RESULT: PASS** 

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18",05"		7 N CO!!"	A TOP Y
EUT	WiFi Smart Plug	Model Name	XO-9563-1
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Vertical

## PK



#### AV



**RESULT: PASS** 

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EUT	WiFi Smart Plug Model Name		XO-9563-1	
Temperature	25°C	Relative Humidity	55.4%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11n 40 with data rate 13.5 2422MHZ	Antenna	Horizontal	



## AV



**RESULT: PASS** 

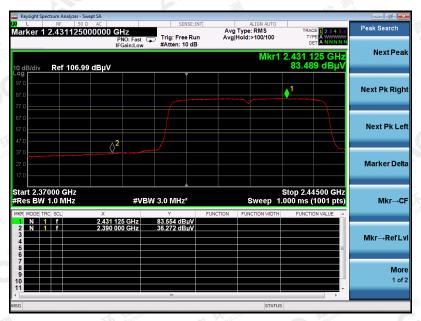
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EUT	WiFi Smart Plug	Smart Plug Model Name	
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 13.5 2422MHZ	Antenna	Vertical



## AV



**RESULT: PASS** 

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EUT	WiFi Smart Plug	iFi Smart Plug Model Name	
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40with data rate 13.5 2452MHZ	Antenna	Horizontal



## ΑV



**RESULT: PASS** 

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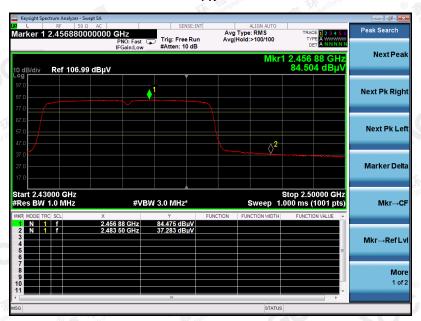


30,000			2 N CONT			
EU	т	WiFi Smart Plug	Model Name	XO-9563-1		
Ter	nperature	25°C	Relative Humidity	55.4%		
Pre	essure	960hPa	Test Voltage	Normal Voltage		
Tes	st Mode	802.11n 40 with data rate 13.5 2452MHZ	Antenna	Vertical		

## PK



#### AV



**RESULT: PASS** 

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# 13. FCC LINE CONDUCTED EMISSION TEST

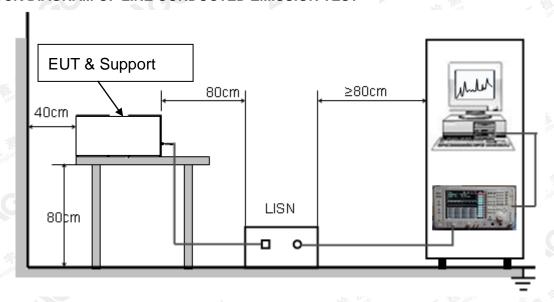
## 13.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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



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## 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 LISN, if any.
- 5. The EUT received AC120 charging voltage by 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

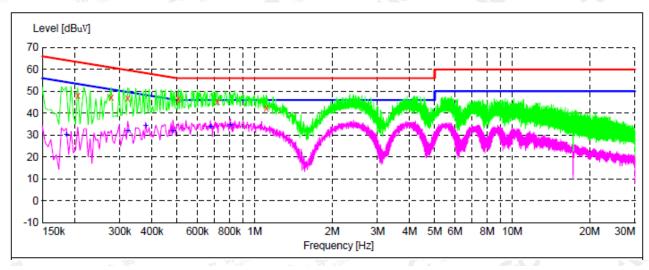
- EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used 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.

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## 13.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L



MEASUREMENT RESULT: "TEST fin"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.206000	48.20	10.1	63	15.2	QP	N	FLO
0.278000	47.10	10.1	61	13.8	QP	N	FLO
0.322000	46.70	10.1	60	13.0	QP	N	FLO
0.506000	46.30	9.9	56	9.7	QP	N	FLO
0.718000	45.40	9.9	56	10.6	QP	N	FLO
1.110000	42.30	10.1	56	13.7	QP	N	FLO

## MEASUREMENT RESULT: "TEST fin2"

		Limit dBuV	Margin dB	Detector	Line	PE
30.00	10.0	54	24.2	AV	N	FLO
31.60	10.1	50	18.1	AV	N	FLO
34.00	10.0	48	14.3	AV	N	FLO
31.60	10.0	46	14.7	AV	N	FLO
33.70	9.9	46	12.3	AV	N	FLO
34.60	10.0	46		AV	N	FLO
	dBuV 30.00 31.60 34.00 31.60 33.70	dBuV dB  30.00 10.0 31.60 10.1 34.00 10.0 31.60 10.0 33.70 9.9	dBuV dB dBuV  30.00 10.0 54  31.60 10.1 50  34.00 10.0 48  31.60 10.0 46  33.70 9.9 46  34.60 10.0 46	dBuV dB dBuV dB  30.00 10.0 54 24.2 31.60 10.1 50 18.1 34.00 10.0 48 14.3 31.60 10.0 46 14.7 33.70 9.9 46 12.3 34.60 10.0 46 11.4	dBuV dB dBuV dB  30.00 10.0 54 24.2 AV  31.60 10.1 50 18.1 AV  34.00 10.0 48 14.3 AV  31.60 10.0 46 14.7 AV  33.70 9.9 46 12.3 AV  34.60 10.0 46 11.4 AV	30.00 10.0 54 24.2 AV N 31.60 10.1 50 18.1 AV N 34.00 10.0 48 14.3 AV N 31.60 10.0 46 14.7 AV N 33.70 9.9 46 12.3 AV N 34.60 10.0 46 11.4 AV N

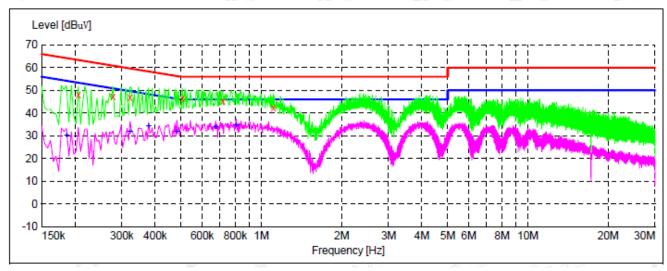
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### Line Conducted Emission Test Line 2-N



MEASUREMENT RESULT: "TEST\_fin"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.206000	48.20	10.1	63	15.2	QP	N	FLO
0.278000	47.10	10.1	61	13.8	QP	N	FLO
0.322000	46.70	10.1	60	13.0	QP	N	FLO
0.506000	46.30	9.9	56	9.7	QP	N	FLO
0.718000	45.40	9.9	56	10.6	QP	N	FLO
1.110000	42.30	10.1	56	13.7	QP	N	FLO

## MEASUREMENT RESULT: "TEST\_fin2"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.186000	30.00	10.0	54	24.2	AV	N	FLO
0.322000	31.60	10.1	50	18.1	AV	N	FLO
0.378000	34.00	10.0	48	14.3	AV	N	FLO
0.482000	31.60	10.0	46	14.7	AV	N	FLO
0.674000	33.70	9.9	46	12.3	AV	N	FLO
0.806000	34.60	10.0	46	11.4	AV	N	FLO

## **RESULT: PASS**

Note: All the test modes had been tested, the mode 1 was the worst case. Only the data of the worst case would be record in this test report.

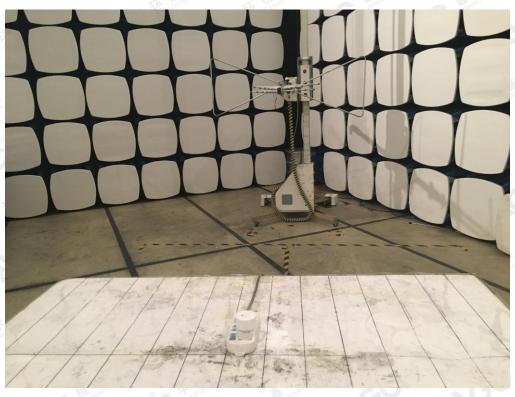
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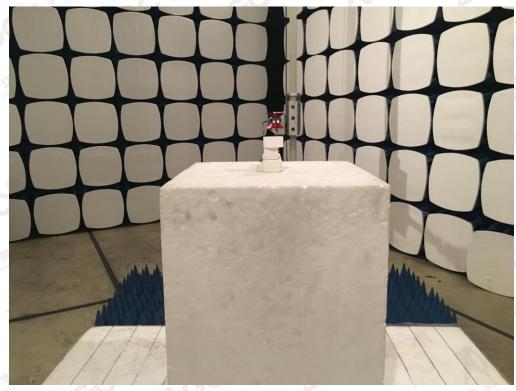


# APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ



FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ



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# CONDUCTED EMISSION TEST SETUP



----END OF REPORT----

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