

TEST REPORT

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Report Number: 2604V73211E-RF-07B

Test Standard (s)

Article 2 Paragraph 1 Item 19-3

Sample Description

Product Name: P3C
Model No.: PF006-P
Trade Mark: N/A
Received Date: 2026-07-30
Report Date: 2026-09-23

Test Result:	The EUT complied with the standards above.
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Note: The information marked “#” is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included but no need marked.
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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2604V73211E-RF-07B	Original Report	2026-09-23

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	P3C
Tested Model	PF006-P
Nominal Power Supply [#]	AC 100-120V
Power Board 1 Information [#]	MEGMEET MODEL: MPT150-24V-TZ-B INPUT: 100-240V~50/60Hz, 4.0A Max OUTPUT: 24V $\Rightarrow$ 6.5A
Power Board 2 Information [#]	trelin MODEL: TDP-150-24 INPUT: 100-240V~4A 50/60Hz OUTPUT: 24V $\Rightarrow$ 6.5A
Power Board 3 Information [#]	MOSO MODEL: T30-T6250J240-150B0 INPUT: 100-240V~50/60Hz 3.0A max. OUTPUT: 24.0V $\Rightarrow$ 6.25A 150.0W

Radio Type		RLAN
Technical Parameters	Modulation Type	OFDM, OFDMA
	Frequency Range	802.11a/n20/ac20/ax20: 5180-5240MHz, 5260-5320MHz, 5500-5720MHz 802.11n40/ac40/ax40: 5190-5230MHz, 5270-5310MHz, 5510-5710MHz
	Rated Output Power [#]	W52(5.2G): 802.11a: 0.8 mW/MHz 802.11n20/ac20/ax20: 0.4 mW/MHz 802.11n40/ac40/ax40: 0.2 mW/MHz
		W53(5.3G): 802.11a: 0.9 mW/MHz 802.11n20/ac20/ax20: 0.4 mW/MHz 802.11n40/ac40/ax40: 0.2 mW/MHz
		W56(5.6G): 802.11a: 1.5 mW/MHz 802.11n20/ac20/ax20: 1.5 mW/MHz 802.11n40/ac40/ax40: 0.7 mW/MHz
	Antenna Gain [#]	W52(5.2G) Gain: 2.35 dBi, W53(5.3G) Gain: 2.29 dBi W56(5.6G) Gain: 3.15 dBi (The gain was provided by the applicant)
Sample Serial Number		3R4H-1 (Assigned by BACL, Shenzhen, Guangming)
Sample/EUT Status		Good condition

Objective

The objective of the manufacturer is to demonstrate compliance with Radio Law of Japan item 19-3 of Article 2 Paragraph 1, Radio equipment for 5G band low-power data communications system which uses indoors a radio wave of 5.2GHz band, 5.3GHz band and 5.6G band.

Test Methodology

DSPP 5GHz 帯小電力データ通信システムの特性試験方法

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen, Guangming) to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	5 %
RF Frequency	0.064×10^{-7}
RF output power, conducted	0.3 dB
Unwanted Emission, conducted	1.2 dB
Temperature	1 °C
Humidity	2 %
Supply voltages	0.4 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

EUT TEST CONFIGURATION

Description of Test Configuration

Choose the power board 1 for testing.

The device supports 802.11a/n20/n40/ac20/ac40/ax20/ax40 mode, the 802.11n20/n40 mode was reduced test as identical parameter with 802.11ac20/ac40 mode.

For W52(5150-5250MHz), 6 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240

EUT was tested with Channel 36, 40 and 48 for 802.11a/ac20/ax20.

EUT was tested with Channel 38 and 46 for 802.11ac40/ax40.

For W53(5250-5350MHz), 6 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320

EUT was tested with Channel 52, 56 and 64 for 802.11a/ac20/ax20.

EUT was tested with Channel 54 and 62 for 802.11ac40/ax40.

For W56(5470-5730MHz), 18 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
102	5510	126	5630
104	5520	128	5640
108	5540	132	5660
110	5550	134	5670
112	5560	136	5680
116	5580	140	5700
118	5590	142	5710
120	5600	144	5720

EUT was tested with Channel 100, 120 and 144 for 802.11a/ac20/ax20.

EUT was tested with Channel 102, 118 and 142 for 802.11ac40/ax40.

Test Voltage[#]

The EUT has one power manage system, the fluctuation of power supply to the RF circuit of EUT is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition tests, EUT only operated in normal voltage to test all regulations. Details as following:

Voltage Condition	Input (V _{AC})	RF System Voltage (V _{DC})
Normal Voltage (NV)	100	3.3
Low Voltage (LV)	90	3.3
High Voltage (HV)	110	3.3

Test voltage: 100 V_{AC} (Normal Voltage) (It is provided by the applicant.)

EUT Exercise Software and Power Level

Software “adb shell” was used during testing and the power level was provided by the applicant. The worse-case data rates are determined to be as follows:

Band	Mode	Data Rate	Power Level		
			Low channel	Middle channel	High channel
W52	802.11 a	6Mbps	13	13	13
	802.11 ac20	MCS0	11	11	11
	802.11 ac40	MCS0	11	/	11
	802.11 ax20	MCS0	11	11	11
	802.11 ax40	MCS0	11	/	11
W53	802.11 a	6Mbps	13	13	13
	802.11 ac20	MCS0	11	11	11
	802.11 ac40	MCS0	11	/	11
	802.11 ax20	MCS0	11	11	11
	802.11 ax40	MCS0	11	/	11
W56	802.11 a	6Mbps	16	16	16
	802.11 ac20	MCS0	16	16	16
	802.11 ac40	MCS0	16	16	16
	802.11 ax20	MCS0	16	16	16
	802.11 ax40	MCS0	16	16	16

Note: The 802.11 AX mode only support full RU configuration. (It is provided by the applicant.)

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
LENOVO	Laptop	ThinkPad x240	SL10F31638JS
Grandstream Networks, Inc.	Router	GWN7665	C074AD251F0E

External I/O Cable

Cable Description	Shielding Type	Length (m)	From Port	To
USB Cable	No	1.5	EUT	Laptop
RF cable	Yes	0.5	EUT	Test Equipment
AC Cable	No	1.22	EUT	AC Mains

SUMMARY OF TEST RESULTS

DSPP 5GHz 帯小電力データ通信システムの特性試験方法, Article 2, Paragraph 1, Item 19-3 Rules Section

Items	Description Of Test	Result
1	Frequency Tolerance	Compliance
2	Occupied Bandwidth	Compliance
3	Transmitter Spurious Emission Strength	Compliance
4	Output Power and Output Power Tolerance	Compliance
5	Adjacent Channel Power	Compliance
6	Secondary Radiated Emission Strength	Compliance
7	Radio Interference Prevention Capability	Compliance
8	Transmission Burst Length	Compliance
9	Carrier Sensing Function	Compliance
10	Transmission Power Control Function (TPC)	Not Applicable
11	DFS Function	Compliance*
12	Construction Protection Confirmation	Compliance

Note 1: MIC Ordinance Regulating Radio Equipment Section 4.17 of Article 49.20

Note 2: Not Applicable - The device doesn't have TPC function.

Note 3: Compliant*- DFS report please refer to 2604V73211E-RF-07C.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Authority	Calibration Method
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101590	2026/05/07	2027/05/06	BACL Cal	C
WEINSCHTEL	10dB Attenuator	5324	AU 3842	2026/01/20	2027/01/19	BACL Cal	C
Unknown	RF Coaxial Cable	No.35	/	2026/05/07	2027/05/06	BACL Cal	C
Unknown	RF Coaxial Cable	No.36	/	2026/05/07	2027/05/06	BACL Cal	C
Mini-Circuits	Power Splitter	ZFRSC-183-S+	SF10944151S	2026/01/20	2027/01/19	BACL Cal	C
Rohde & Schwarz	Vector Signal Generator	SMBV100A	260434	2026/05/07	2027/05/06	BACL Cal	C
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	124441	2026/05/07	2027/05/06	BACL Cal	C
etosource	AC POWER SOURCE	ES-CPF-SD20K300	EO20230727001	NCR	NCR	/	D
Fluke	Multimeter	15B+	3778819WS	2026/01/20	2027/01/19	BACL Cal	C

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen, Guangming) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Note

A. Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1)

B. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No.51of1992)

C. Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph(1)

D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from A to C.

FREQUENCY TOLERANCE

Limit

- $\pm 20\text{ppm}$

Test Procedure

Frequency accuracy of SA shall be less than 10% of limits tolerance (2ppm).

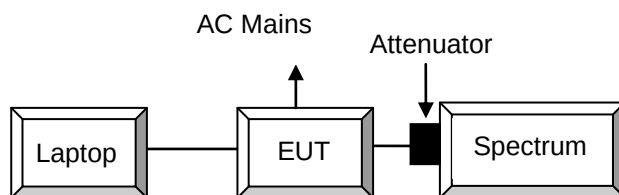
Setting of SA is following as:

- Center Frequency: The center frequency of testing for EUT
- RBW: 1 kHz, VBW: 3 kHz
- Sweep time: Auto
- Sweep mode: Continuous Sweep
- Detect mode: Positive Peak
- Mark function: Frequency Counter (Resolution 100Hz)

EUT have transmitted absence of modulation signal and fixed channelize. f is using the mark cursor to mark the peak frequency value, f_c is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f_c \times 10^6$ ppm and the limit is less than $\pm 20\text{ppm}$.

EUT operation mode: Transmitting (un-modulation)

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.1).

OCCUPIED BANDWIDTH

Limit

- ≤20MHz (20MHz Mode OFDM/OFDMA)
- ≤40MHz (40MHz Mode OFDM/OFDMA)
- ≤80MHz (80MHz Mode OFDM/OFDMA)

Test Procedure

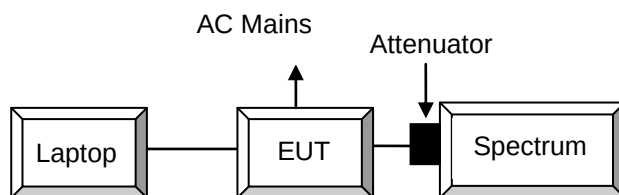
1. Setting of SA is following as:

- Center Frequency: Frequency to measure
- RBW: 300 kHz, VBW: 300 kHz
- Sweep time: Auto
- Sweep mode: Continuous Sweep
- Detect mode: Positive Peak
- Trace mode: Max hold

2. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 99% of occupied bandwidth to measure occupied bandwidth.

EUT operation mode: Transmitting

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.2).

TRANSMITTER SPURIOUS EMISSION STRENGTH

Limit

For OFDM/OFDMA, refer to Article 2, paragraph 1, item 19-3

W52			
20MHz system		40MHz system	80MHz system
OBW : 18MHz or less	OBW : 18 - 20 MHz		
5,142 MHz or less : 2.5 μ W/MHz	5,142 MHz or less : 2.5 μ W/MHz	5,141.6 MHz or less : 2.5 μ W/MHz	5,123.2 MHz or less : 2.5 μ W/MHz
5,142 - 5,150 MHz : 15 μ W/MHz	5,142 - 5,150 MHz : 15 μ W/MHz	5,141.6 - 5,150 MHz : 15 μ W/MHz	5,123.2 - 5,150 MHz : 15 μ W/MHz
	5,250 - 5,250.2 MHz : $10^{1-(8/3)(f-9.75)}$ mW/MHz		
5,250 - 5,251 MHz : $10^{1-(f-9)}$ mW/MHz	5,250.2 - 5,251 MHz : $10^{1-(f-9)}$ mW/MHz	5,250 - 5,251 MHz : $10^{-(f-20)+\log(1/2)}$ mW/MHz	5,250 - 5,251 MHz : $10^{-(f-40)+\log(1/4)}$ mW/MHz
5,251 - 5,260 MHz : $10^{-1-(8/90)(f-11)}$ mW/MHz	5,251 - 5,260 MHz : $10^{-1-(8/90)(f-11)}$ mW/MHz	5,251 - 5,270 MHz : $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz	5,251 - 5,290 MHz : $10^{-(8/390)(f-41)-1+\log(1/4)}$ mW/MHz
5,260 - 5,266.7 MHz : $10^{-1.8-(6/50)(f-20)}$ mW/MHz	5,260 - 5,266.7 MHz : $10^{-1.8-(6/50)(f-20)}$ mW/MHz	5,270 - 5,278.4 MHz : $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz	5,290 - 5,296.7 MHz : $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz
5,266.7 MHz or more : 2.5 μ W/MHz	5,266.7 MHz or more : 2.5 μ W/MHz	5,278.4 MHz or more : 2.5 μ W/MHz	5,296.7 MHz or more : 2.5 μ W/MHz
f = MHz, Difference from 5240 (MHz)	f = MHz, Difference from 5240 (MHz)	f = MHz, Difference from 5230 (MHz)	f = MHz, Difference from 5210 (MHz)

W53			
20MHz system		40MHz system	80MHz system
OBW : 18MHz or less	OBW : 18 - 20 MHz		
5,233.3 MHz or less : 2.5 μ W/MHz	5,233.3 MHz or less : 2.5 μ W/MHz	5,221.6 MHz or less : 2.5 μ W/MHz	5,203.3 MHz or less : 2.5 μ W/MHz
5,233.3 - 5,240 MHz : $10^{-1.8-(6/50)(f-20)}$ mW/MHz	5,233.3 - 5,240 MHz : $10^{-1.8-(6/50)(f-20)}$ mW/MHz	5,221.6 - 5,230 MHz : $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz	5,203.3 - 5,210 MHz : $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz
5,240 - 5,249 MHz : $10^{-1-(8/90)(f-11)}$ mW/MHz	5,240 - 5,249 MHz : $10^{-1-(8/90)(f-11)}$ mW/MHz	5,230 - 5,249 MHz : $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz	5,210 - 5,249 MHz : $10^{-(8/390)(f-41)-1+\log(1/4)}$ mW/MHz
5,249 - 5,250 MHz : $10^{1-(f-9)}$ mW/MHz	5,249 - 5,249.8 MHz : $10^{1-(f-9)}$ mW/MHz	5,249 - 5,250 MHz : $10^{-(f-20)+\log(1/2)}$ mW/MHz	5,249 - 5,250 MHz : $10^{-(f-40)+\log(1/4)}$ mW/MHz
	5,249.8 - 5,250 MHz : $10^{1-(8/3)(f-9.75)}$ mW/MHz	5,350 - 5,358.4 MHz : 15 μ W/MHz	5,350 - 5,376.8 MHz : 15 μ W/MHz
5,350 MHz or more : 2.5 μ W/MHz	5,350 MHz or more : 2.5 μ W/MHz	5,358.4 MHz or more : 2.5 μ W/MHz	5,376.8 MHz or more : 2.5 μ W/MHz
f = MHz, Difference from 5260 (MHz)	f = MHz, Difference from 5260 (MHz)	f = MHz, Difference from 5270 (MHz)	f = MHz, Difference from 5290 (MHz)

W56			
20MHz system		40MHz system	80MHz system
DSSS, etc.	OFDM		
5,470 MHz or less : 12.5 μ W/MHz	5,460 MHz or less : 2.5 μ W/MHz	5,460 MHz or less : 12.5 μ W/MHz	5,460 MHz or less : 12.5 μ W/MHz
	5,460 - 5,470 MHz : 12.5 μ W/MHz	5,460 - 5,470 MHz : 50 μ W/MHz	5,460 - 5,469.5 MHz : 50 μ W/MHz
5,730 MHz or more : 12.5 μ W/MHz	5,745 - 5,765 MHz : 12.5 μ W/MHz	5,770 MHz or more : 12.5 μ W/MHz	5,469.5 - 5,470 MHz : 51.2 μ W/MHz
	Over 5,765 MHz : 2.5 μ W/MHz		5,770 MHz or more : 12.5 μ W/MHz

Note:

0.25 μ W/100kHz= -36dBm/100kHz; 2.5 μ W/MHz= -26dBm/MHz;

25 μ W/MHz= -16dBm/MHz; 15 μ W/MHz= -18.24dBm/MHz; 12.5 μ W/MHz= -19dBm/MHz;

50 μ W/MHz= -13dBm/MHz; 51.2 μ W/MHz= -12.9dBm/MHz;

W52

20MHz system:

OBW: 18MHz or less:

•5250-5251MHz: $10^{1-(f-9)}$ mW/MHz= 1mW/MHz to 0.1 mW/MHz= 0dBm/MHz to -10dBm/MHz

•5251-5260MHz: $10^{1-(8/90)(f-11)}$ mW/MHz= 0.1mW/MHz to 0.016mW/MHz= -10dBm/MHz to -18dBm/MHz

•5260-5266.7MHz: $10^{-1.8-(6/50)(f-20)}$ mW/MHz= 0.016mW/MHz to 2.5 μ W/MHz= -18dBm/MHz to -26dBm/MHz

OBW: 18-20MHz:

•5250-5250.2MHz: $10^{1-(8/3)(f-9.75)}$ mW/MHz= 2.15 mW/MHz to 0.63 mW/MHz= 3.3dBm/MHz to -2 dBm/MHz

•5250.2-5251MHz: $10^{1-(f-9)}$ mW/MHz= 0.63 mW/MHz to 0.1mW/MHz= -2 dBm/MHz to -10dBm/MHz

•5251-5260MHz: $10^{1-(8/90)(f-11)}$ mW/MHz= 0.1mW/MHz to 0.016mW/MHz= -10dBm/MHz to -18dBm/MHz

•5260-5266.7MHz: $10^{-1.8-(6/50)(f-20)}$ mW/MHz= 0.016 mW/MHz to 2.5 μ W/MHz= -18dBm/MHz to -26dBm/MHz

40MHz system:

•5250-5251MHz: $10^{-(f-20)+\log(1/2)}$ mW/MHz= 0.5 mW/MHz to 0.05 mW/MHz= -3dBm/MHz to -13dBm/MHz

•5251-5270MHz: $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz= 0.05 mW/MHz to 8 μ W/MHz= -13dBm/MHz to -21dBm/MHz

•5270-5278.4MHz: $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz= 8 μ W/MHz to 2.5 μ W/MHz= -21dBm/MHz to -26dBm/MHz

80MHz system:

•5250-5251MHz: $10^{-(f-40)+\log(1/4)}$ mW/MHz= 0.25mW/MHz to 0.025mW/MHz= -6 dBm/MHz to -16dBm/MHz

•5251-5290MHz: $10^{-(8-390)(f-41)-1+\log(1/4)}$ mW/MHz= 0.025mW/MHz to 4 μ W/MHz= -16dBm/MHz to -24dBm/MHz

•5290-5296.7MHz: $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz= 4 μ W/MHz to 2.5 μ W/MHz= -24 dBm/MHz to -26dBm/MHz

W53**20MHz system:**

OBW: 18MHz or less:

•5233.3-5240MHz: $10^{-1.8-(6/50)(f-20)}$ mW/MHz= 2.49μW/MHz to 15.85μ W/MHz= -26dBm/MHz to -18dBm/MHz

•5240-5249MHz: $10^{-1-(8/90)(f-11)}$ mW/MHz=15.85μW/MHz to 0.1mW/MHz= -18dBm/MHz to -10dBm/MHz

•5249-5250MHz: $10^{1-(f-9)}$ mW/MHz=0.1mW/MHz to 1mW/MHz= -10dBm/MHz to 0dBm/MHz

OBW: 18-20MHz:

•5233.3-5240MHz: $10^{-1.8-(6/50)(f-20)}$ mW/MHz= 2.49μW/MHz to 15.85μ W/MHz= -26dBm/MHz to -18dBm/MHz

•5240-5249MHz: $10^{-1-(8/90)(f-11)}$ mW/MHz= 15.85μ W/MHz to 0.1mW/MHz= -18dBm/MHz to -10dBm/MHz

•5249-5249.8MHz: $10^{1-(f-9)}$ mW/MHz= 0.1mW/MHz to 0.63mW/ MHz= -10dBm/MHz to -2dBm/MHz

•5249.8-5250MHz: $10^{-1-(8/3)(f-9.75)}$ mW/MHz= 0.63mW/MHz to 2.15mW/MHz= -2dBm/MHz to 0.33dBm/MHz

40MHz system:

•5221.6-5230MHz: $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz= 2.483μW/MHz to 7.93μW/MHz= -26dBm/MHz to -21dBm/MHz

•5230-5249MHz: $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz= 7.93μW/MHz to 50μW/MHz= -21dBm/MHz to -13dBm/MHz

•5249-5250MHz: $10^{-(f-20)(f-21)+\log(1/2)}$ mW/MHz= 50 mW/MHz to 0.5mW/MHz= -13dBm/MHz to -3dBm/MHz

80MHz system:

•5203.3-5210MHz: $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz= 2.5μW/MHz to 0.004mW/MHz= -26 dBm/MHz to -24dBm/MHz

•5210-5249MHz: $10^{-(8-390)(f-41)-1+\log(1/4)}$ mW/MHz= 0.004mW/MHz to 0.025mW/MHz= -24dBm/MHz to -16dBm/MHz

•5249-5250MHz: $10^{-(f-40)+\log(1/4)}$ mW/MHz= 0.025mW/MHz to 0.25mW/MHz= -16 dBm/MHz to -6dBm/MHz

Test Procedure

Conditions of Application Equipment (EUT)

- The modulation state shall be in continuously transmitting mode.

Spectrum Analyzer Conditions:

- Span: Measuring Frequency Range
- RBW: 1MHz
- VBW: Same as RBW
- Sweep time: Auto(Minimum time to ensure measurement accuracy.)
- Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak

If the measured value is under the technical standard value, do not need to measure more detail.

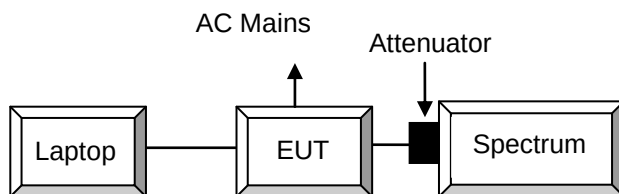
If the results obtained from the above step 1 exceed the limit, then proceed with the step 2.

Step 2:

- Measurement Mode: Time Domain Power
- Centre Frequency: Equal to the frequency recorded in step 1
- Span: Zero Span.
- Resolution BW: 1 MHz.
- Video BW: 1 MHz.
- Sweep Mode: Single
- Trigger conditions: Video trigger
- Detector: Sample.
- Trace Mode: Clear Write.

EUT operation mode: Transmitting

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.3).

OUTPUT POWER AND POWER TOLERANCE

Limit

For W52:

Item	Limits(OFDM/OFDMA)		
	20MHz	40MHz	80MHz
Antenna Power	10mW/MHz	5mW/MHz	2.5mW/MHz
E.I.R.P.	10mW/MHz	5mW/MHz	2.5mW/MHz
Antenna Power Tolerance	$\leq +20\%$, -80%		

For W53:

Item	Limits(OFDM/OFDMA)		
	20MHz	40MHz	80MHz
Antenna Power	10mW/MHz	5mW/MHz	2.5mW/MHz
E.I.R.P.	10mW/MHz (with TPC function)	5mW/MHz (with TPC function)	2.5mW/MHz (with TPC function)
	5mW/MHz (without TPC function)	2.5mW/MHz (without TPC function)	1.25mW/MHz (without TPC function)
Antenna Power Tolerance	$\leq +20\%$, -80%		

For W56

Item	Limits(OFDM/OFDMA)		
	20MHz	40MHz	80MHz
Antenna Power	10mW/MHz	5mW/MHz	2.5mW/MHz
E.I.R.P.	50mW/MHz (with TPC function)	25mW/MHz (with TPC function)	12.5mW/MHz (with TPC function)
	25mW/MHz (without TPC function)	12.5mW/MHz (without TPC function)	6.25mW/MHz (without TPC function)
Antenna Power Tolerance	$\leq +50\%$, -50%		

Test Procedure

For OFDM, OFDMA, DSSS UUT:

Step 1:

Connect the UUT to the spectrum analyser and use the following settings:

- Centre Frequency: The centre frequency of the channel under test.
- RBW: 1MHz.
- VBW: 1 MHz.
- Span: Wide enough to cover the complete power envelope of the signal of the UUT.
- Detector: Peak.
- Trace Mode: MaxHold.

Step 2:

When the trace is complete, find the peak value of the power envelope and record the frequency.

Step 3:

Make the following changes to the settings of the spectrum analyser:

- Measurement Mode: Time Domain Power
- Centre Frequency: Equal to the frequency recorded in step 2.
- Span: Zero Span.
- RBW: 1 MHz.
- VBW: 1 MHz.
- Sweep Mode: Single.
- Detector: RMS.
- Trace Mode: Clear Write.

When the trace is complete, capture the trace, for example using the "View" option on the spectrum analyser.

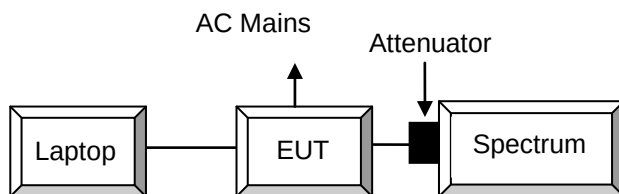
Find the peak value of the trace and place the analyser marker on this peak. This level is recorded as the highest mean power (spectral power density) D in a 1 MHz band.

Alternatively, where a spectrum analyser is equipped with a facility to measure spectral power density, this facility may be used to display the spectral power density D in dBm/MHz.

The maximum e.i.r.p. spectral density is calculated from the above measured power density (D), the observed duty cycle x, and the applicable antenna assembly gain "G" in dBi, according to the formula below. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the highest gain shall be used.

- $PD = D + G + 10 \log (1/x)$;
- PD shall be recorded in the test report.

EUT operation mode: Transmitting

Measurement System Diagram

Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.4).

ADJACENT CHANNEL POWER

Limit

Item	Limits
Adjacent Channel Power	$\geq 25\text{dB}$ ($f_c \pm 80\text{MHz}$) Channel power bandwidth 80MHz
	$\geq 25\text{dB}$ ($f_c \pm 40\text{MHz}$) Channel power bandwidth 40MHz
	$\geq 40\text{dB}$ ($f_c \pm 80\text{MHz}$) Channel power bandwidth 40MHz
	$\geq 25\text{dB}$ ($f_c \pm 20\text{MHz}$) Channel power bandwidth 20MHz
	$\geq 40\text{dB}$ ($f_c \pm 40\text{MHz}$) Channel power bandwidth 20MHz

Test Procedure

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as:
 - Channel Power Function and Center Frequency: The center frequency of testing for EUT.
 - RBW: 300 kHz
 - VBW: 300 kHz
 - Sweep time: Auto
 - Sweep Mode: Continuous sweep
 - Detect mode: Positive peak
 - Trace Mode: Max Hold

-For 20MHz system, set the Channel Bandwidth: 20MHz, Channel Spacing: 20MHz for adjacent channel and 40MHz for alternate channel;

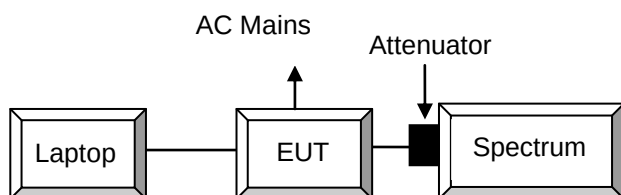
-For 40MHz system, set the Channel Bandwidth: 40MHz, Channel Spacing: 40MHz for adjacent channel and 80MHz for alternate channel;

-For 80MHz system, set the Channel Bandwidth: 80MHz, Channel Spacing: 80MHz for adjacent channel.

3. Adjust the setting then SA automatically calculate the adjacent and alternate channel power ratio of EUT.
4. Reading the result from the test plots and compared it with the limit

EUT operation mode: Transmitting

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.5).

RECEIVER SECONDARY RADIATED EMISSION STRENGTH

Limit

Frequency Band	Limit
30MHz-1GHz	4nW (-54dBm)
1GHz-26GHz	20nW (-47dBm)

Test Procedure

Conditions of Application Equipment (EUT)

- The modulation state shall be “continuous receiving mode”.

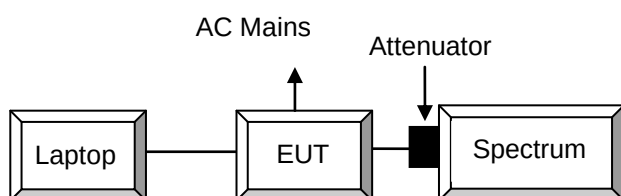
Spectrum Analyzer Conditions

- Start Frequency: Start Frequency of frequency range to measure (30MHz or 1GHz)
- Stop Frequency: Stop Frequency of frequency range to measure (1GHz or 26GHz)
- Span: AUTO (Measurement Range)
- RBW: 100 kHz, VBW: 100 kHz for Frequency < 1 GHz
- RBW: 1MHz, VBW: 1MHz for Frequency > 1 GHz
- Sweep time: AUTO or more
- Log scale: 10dB/Div, Data points: 501points (400 points or more)
- Detection: Positive Peak
- Reference Level: Enough level for maximum dynamic range

If searched value is under the technical standard value, do not need to measure more detail.

EUT operation mode: Receiving

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.6).

RADIO INTERFERENCE PREVENTION CAPABILITY

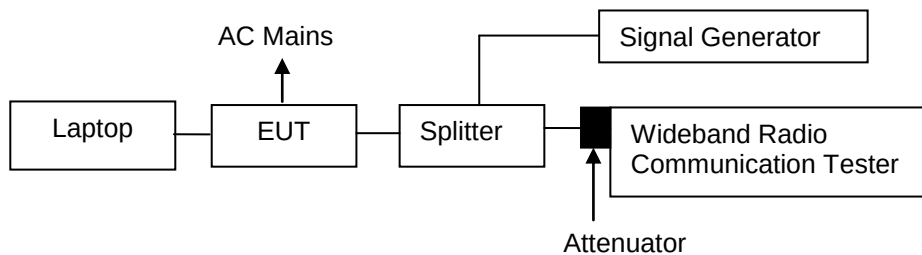
Limit

- ≤ 48 bits(Identification code)

Test Procedure

1. In the case that the EUT has the function of automatically transmitting the identification code:
 - a. Transmit the predetermined identification codes form EUT.
 - b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code:
 - a. Transmit the predetermined identification codes form the counterpart.
 - b. Check if communication is normal.
 - c. Transmit the signals other than predetermined ID codes form the counterpart.
 - d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.9).

TRANSMISSION BURST LENGTH

Limit

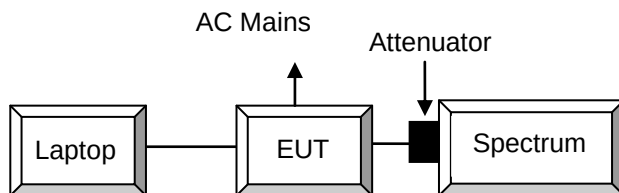
- ≤ 8 ms (Transmission Burst Length)

Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set RBW of spectrum analyzer to 10MHz and VBW to 10MHz.
3. Use a video trigger with the trigger level set to enable triggering only on full pulses.
4. Sweep Time is more than once pulse time.
5. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
6. Measure the maximum time duration of one single pulse.

EUT operation mode: Transmitting

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.7).

CARRIER SENSING FUNCTION

Limit

- EUT stop RF transmission signal after carrier inject to EUT

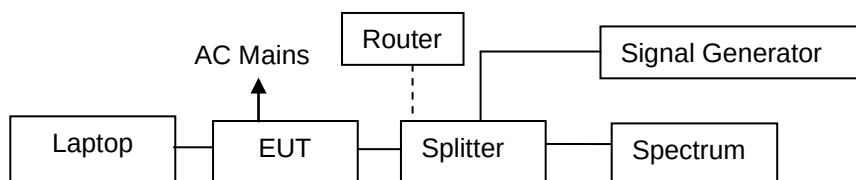
Test Procedure

Conditions of Application Equipment (EUT)

The EUT state shall be “normal mode link with wireless router”.

1. SG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SG.
2. Turn off the RF signal of the SG.
3. EUT have transmitted the maximum modulation signal and fixed channelize.
4. Setting of SA: RBW/VBW=1MHz/1MHz, Span=50MHz, Sweep time=auto, Sweep mode=continuous, Detect mode=positive peak
5. SG RF signal on.
6. EUT shall be stop the transmitted any signal and SG RF signal off, the EUT will be continuous transmitted signal.

Measurement System Diagram



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Please refer to the attachment of 2604V73211E-RF-07B-Appendix A(A.8).

CONSTRUCTION PROTECTION CONFIRMATION

Limit

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

Confirmation Method

The EUT has a casing that is screwed shut and cannot be easily opened. Please refer to the EUT photos.

EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2604V73211E-RF EUT External Photos and Attachment No.2 2604V73211E-RF EUT Internal Photos.

EXHIBIT B-TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2604V73211E-RF Test Photos.

******* END OF REPORT *******