

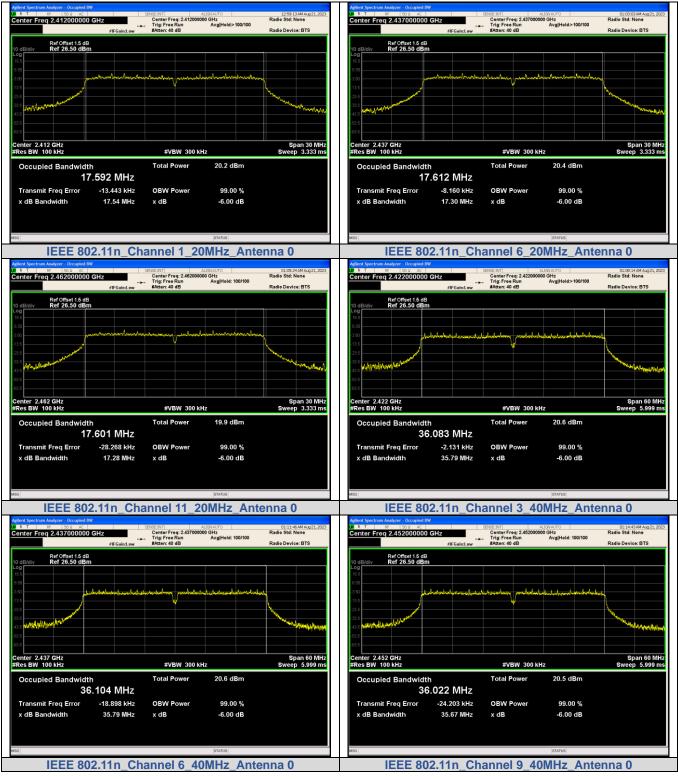
Tel.: (86)755-27521059 中国国家认证认可监督管理委员会

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Report No.: CTC20231665E05



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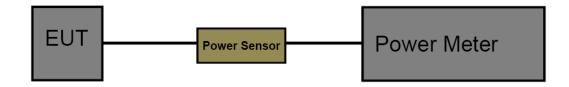
Peak Output Power 3.6.

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3)

Section	Test Item	Limit	Frequency Range (MHz)
FCC CFR 47 Part15.247 (b)(3)	Maximum Conducted Output Power	1 Watt or 30dBm	2400~2483.5

Test Configuration



Test Procedure

- 1. The maximum conducted output power may be measured using a broadband RF power meter.
- 2. Power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor.
- The power meter implemented triggering and gating capabilities which were set up such that power 3. measurements were recorded only during the ON time of the transmitter.
- Record the measurement data. 4.

Test Mode

ΕN

Please refer to the clause 2.4.



Test Result

Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
	1	17.399	30	PASS
IEEE 802.11b	6	17.598	30	PASS
	11	17.490	30	PASS
	1	15.260	30	PASS
IEEE 802.11g	6	15.207	30	PASS
	11	15.139	30	PASS
IEEE 802.11n_20	1	13.943	30	PASS
	6	14.076	30	PASS
	11	13.808	30	PASS
	3	13.881	30	PASS
IEEE 802.11n_40	6	13.511	30	PASS
	9	13.790	30	PASS



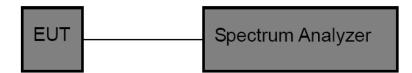
3.7. Power Spectral Density

<u>Limit</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e)

Test Item	Limit	Frequency Range (MHz)	
Power Spectral Density	8 dBm (in any 3 kHz)	2400~2483.5	

Test Configuration



Test Procedure

- 1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- 2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.

3. Spectrum Setting:

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz.

Set the VBW to: 10 kHz.

Detector: peak.

Sweep time: auto.

Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

Test Mode

Please refer to the clause 2.4.

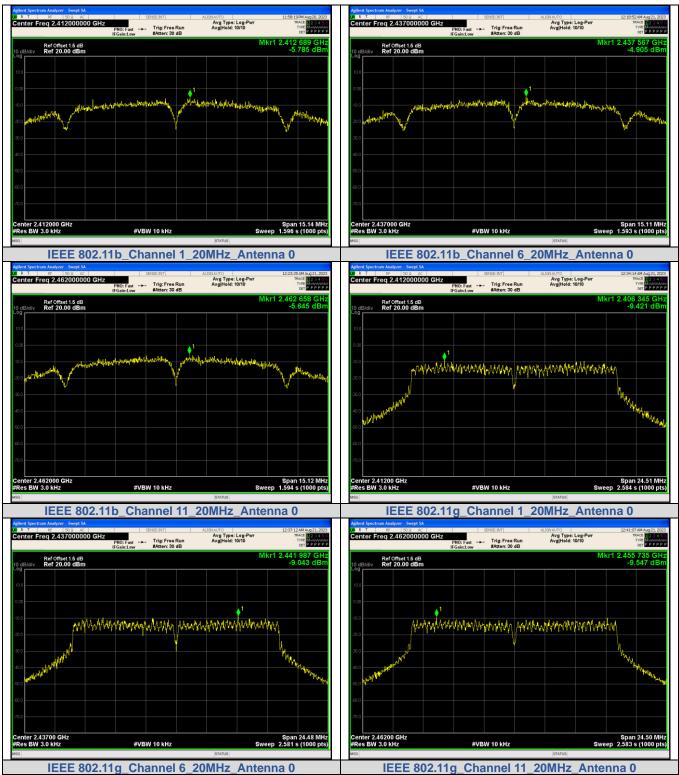


Test Result

Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
	1	-5.785		PASS
IEEE 802.11b	6	-4.905		PASS
	11	-5.645		PASS
	1	-9.421		PASS
IEEE 802.11g	6	-9.043		PASS
	11	-9.547	8	PASS
	1	-11.698	0	PASS
IEEE 802.11n_20	6	-11.556		PASS
	11	-10.629		PASS
	3	-13.971		PASS
IEEE 802.11n_40	6	-14.326		PASS
	9	-14.372		PASS



Test plot as follows:

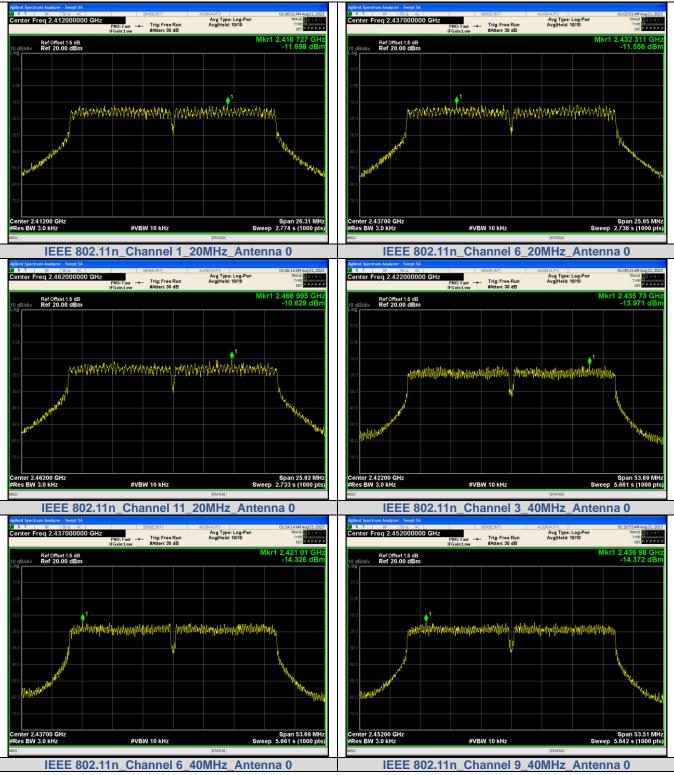


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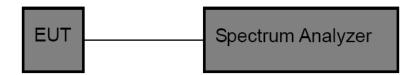


3.8. Duty Cycle

Limit

None, for report purposes only.

Test Configuration



Test Procedure

- 1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- 2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.

3. Spectrum Setting: Set analyzer center frequency to test channel center frequency. Set the span to 0Hz. Set the RBW to 10MHz. Set the VBW to 10MHz. Detector: Peak. Sweep time: Auto. Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

Test Mode

Please refer to the clause 2.4.



Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	1/T Minimum VBW (kHz)	Final Setting for VBW (kHz)
	1	12.420	12.536	99.08	0.08	1
IEEE 802.11b	6	12.420	12.554	98.93	0.08	1
	11	12.420	12.572	98.79	0.08	1
	1	2.068	2.174	95.09	0.48	1
IEEE 802.11g	6	2.068	2.102	98.35	0.48	1
	11	2.068	2.120	97.51	0.48	1
	1	1.924	2.093	91.89	0.52	1
IEEE - 802.11n_20 -	6	1.924	2.057	93.50	0.52	1
	11	1.923	2.030	94.73	0.52	1
1555	3	0.947	1.009	93.86	1.06	2
IEEE	6	0.947	1.000	94.69	1.06	2
802.11n_40	9	0.947	1.009	93.86	1.06	2



Test plot as follows:					
	Agilent Spectrum Analyzer - Swept SA μχι R T RF 50 Ω AC	SENSE:INT	ALIGN AUTO	11:50:11 PM Aug 20, 2023	
	Center Freq 2.412000000	GHz PNO: Fast ↔→ Trig: Free Run IFGain:Low Atten: 36 dB	Avg Type: RMS	TRACE 123456 TYPE WHAT AAAAA DET AAAAAA	
	Ref Offset 1.5 dB 10 dB/div Ref 26.00 dBm			ΔMkr3 12.54 ms -39.17 dB	
	10 dB/div Ref 26.00 dBm		<u>∂</u> 2∆1		
	6.00	1			
	-14.0				
	-34.0		3Δ1		
	-54.0				
	-64.0				
	Center 2.412000000 GHz Res BW 8 MHz	#VBW 8.0 MHz*		Span 0 Hz 45.33 ms (40000 pts)	
	MKR MODE TRC SCL X 1 N 1 t 2 Δ1 1 t (Δ) 3 Δ1 1 t (Δ) 4 4 4	Y FUNCTION I 14.79 ms -6.19 dBm -6.19 dBm	UNCTION WIDTH FUN	CTION VALUE	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12.54 ms (Δ) -39.17 dB		=	
	6 7 8				
	9 10 11			~	
	K MSG	11	STATUS		
	Agilent Spectrum Analyzer - Swept SA	IEEE 802.11b_20MHz_	Channel 1		
	Agrient Spectrum Analyzer - Swept SA X R T RF 50 Ω AC Center Freq 2.437000000	GHz	ALIGNAUTO Avg Type: RMS	12:17:57 AM Aug 21, 2023 TRACE 1 2 3 4 5 6 TYPE	
		PNO: Fast Trig: Free Run IFGain:Low Atten: 38 dB		ΔMkr3 12.55 ms	
	Ref Offset 1.5 dB 10 dB/div Ref 28.00 dBm			-37.17 dB	
	18.0 8.00			<u>201</u>	
	-2.00		� <mark>'</mark>		
	-22.0				
	-32.0			3∆1	
	-52.0				
	Center 2.437000000 GHz Res BW 8 MHz	#\/B\\// 0.0.04U\-*	Stucon	Span 0 Hz	
	MKR MODELTRC SCL X	#VBW 8.0 MHz*		45.33 ms (40000 pts)	
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	32.77 ms -4.80 dBm 12.42 ms (Δ) 16.88 dB 12.55 ms (Δ) -37.17 dB			
				Ē	
	8 9 10				
		u u			
	MSG	IEEE 802.11b_20MHz_	status		
	Agilent Spectrum Analyzer - Swept SA	SENSE:INT	ALIGNAUTO	12:22:29 AM Aug 21, 2023	
	Center Freq 2.46200000	CHZ PNO: Fast +++ Trig: Free Run IFGain:Low Atten: 38 dB	Avg Type: RMS	TRACE 123456 TYPE WWWWWWW DET A A A A A A	
	Ref Offset 1.5 dB 10 dB/div Ref 28.00 dBm			ΔMkr3 12.57 ms -34.44 dB	
	10 dB/div Ref 28.00 dBm				
	8.00	1			
	-12.0				
	-22.0		3∆1		
	-42.0				
	-62.0				
	Center 2.462000000 GHz Res BW 8 MHz	#VBW 8.0 MHz*		Span 0 Hz 45.33 ms (40000 pts)	
	MKR MODE TRC SCL Χ	Y FUNCTION 1 18.92 ms -6.20 dBm 1 1 12.42 ms (Δ) 21.53 dB 1 12.57 ms (Δ) -34.44 dB 1	UNCTION WIDTH FUN	CTION VALUE	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12.57 ms (Δ) -34.44 dB			
	6 				
	8 9 10 11				
	A MSG	ш	STATUS		

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Tel.: (86)755-27521059 下配中国国家认证认可监督管理委员会 Accreditation Administration of the People's Republic of China : http://yz.cnca.cn

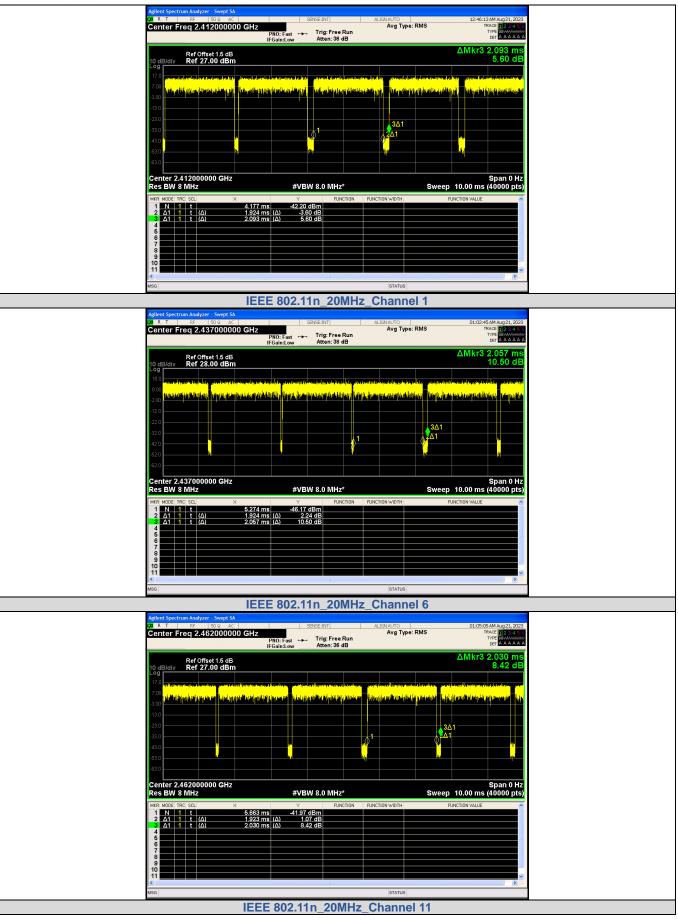
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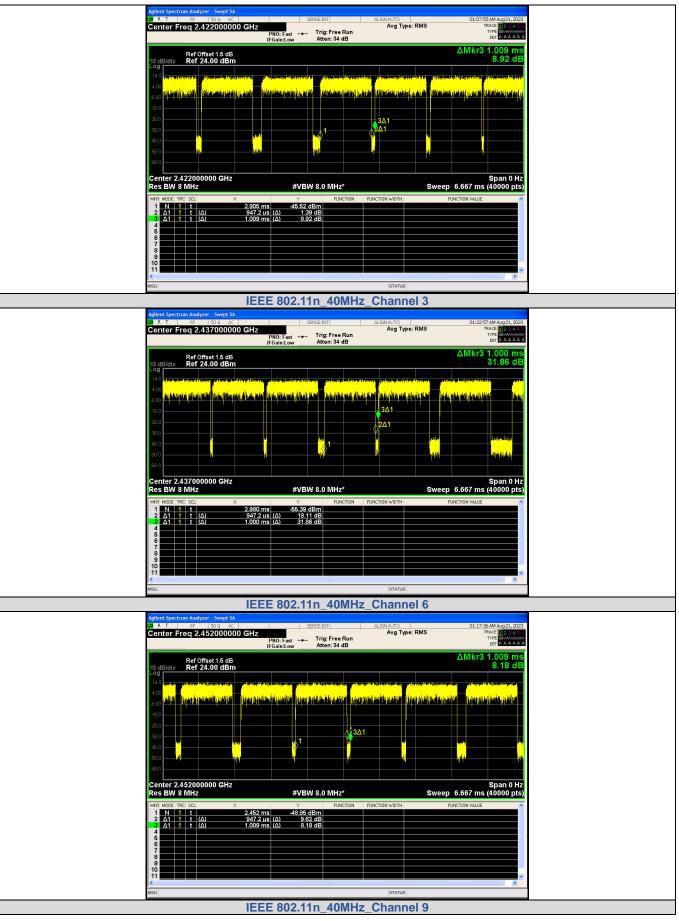
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3.9. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i)

(i) Systems operating in the 2400~2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

Test Result

The directional gain of the antenna is less than 6dBi, please refer to the EUT internal photographs antenna photo.