

Report No.: SEWM2312000502RG05

Rev.:

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TEST REPORT

SEWM2312000502RG **Application No.:**

Applicant: Lenovo (Shanghai) Electronics Technology Co., Ltd.

Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot **Address of Applicant:**

Free Trade Zone

Manufacturer: Lenovo PC HK Limited

23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, Address of Manufacturer:

China

EUT Description: Portable Tablet Computer

Model No.: TB330XUP Trade Mark: Lenovo

FCC ID: O57TB330XUP

Standards: FCC 47 CFR Part 2, Subpart J

FCC 47 CFR Part 15, Subpart E

2023/09/02 (for report XEWM2309000447RG05) **Date of Receipt:**

2023/12/06 (for report SEWM2312000502RG05)

2023/09/08 to 2023/09/13 (for report XEWM2309000447RG05) Date of Test:

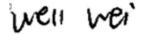
2023/12/10 to 2023/12/23 (for report SEWM2312000502RG05)

Date of Issue: 2023/12/26

Test Result: PASS *

In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:



Well Wei Wireless Laboratory Manager



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1 Version

Revision Record					
Version	Chapter	Date	Modifier	Remark	
01		2023/12/26		Original	

Prepared By	(Ives Cheng) / Test Engineer
Checked By	(Stone Gu) / Reviewer



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Test Summary 2

Test Item	Band ^[1]	FCC rules No.	Test Requirements	Test Result	Result	Lab ^[2]
Antenna Requirement		15.203/15.407(a)		Clause 4.1	PASS	
26dB Emission Bandwidth	Band II-A Band II-C	15.407(a)(1) 15.407(a)(2) 15.407(a)(2)	No limit.	Clause 4.5	For Report Purpose	В
6dB Emission Bandwidth	Band III	15.407(e)	≥ 500 kHz.	Clause 4.6	PASS	В
99% Occupied Bandwidth	Band II-A Band II-C Band III	KDB 789033 D02§ D	No limit.	Clause 4.7	For Report Purpose	В
Duty Cycle	Band I Band II-A Band II-C Band III		No limit.	Clause 4.3	For Report Purpose	В
Maximum Conducted Output	Band I Band II-A Band II-C	15.407(a)(iv) 15.407(a)(2)	< 250mW <min{250mw,11dbm+10*lg(ebw)}< td=""><td>Clause 4.4</td><td>PASS</td><td>В</td></min{250mw,11dbm+10*lg(ebw)}<>	Clause 4.4	PASS	В
Power	Band III Band I	15.407(a)(3) 15.407(a)(iv)	< 1W <11dBm/MHz			
Maximum Power Spectral	Band II-A Band II-C	15.407(a)(2)	<11dBm/MHz	Clause 4.8	PASS	В
Density	Band III Band I	15.407(a)(3) 15.407(b) 15.205/15.209	<30dBm/500KHz F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.15-5.35 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).		PASS	
Radiated Spurious Emissions	Band II-A	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.25-5.35 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).	Clause 4.9	PASS	А
	Band II-C	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.47-5.725 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).		PASS	
	Band III	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP)		PASS	



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			F≥1GHz &out-restricted:(PK) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. F≥1GHz & in-restricted: §15.209 limit (AV&PK).			
Restricted bands around fundamental frequency	Band I Band II-A Band II-C Band III	15.407(b) 15.205/15.209		Clause 4.10	PASS	Α
AC Power Line Conducted Emissions	Band I Band II-A Band II-C Band III	15.207		Clause 4.2	PASS	А
Dynamic Frequency Selection	Band II-A Band II-C	15.407	Channel Move Time:10 Seconds	Clause 4.11	PASS	Α
Frequency Stability	Band I Band II-A Band II-C Band III	15.407(g)	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual	N/A	N/A	N/A

Note 1:

Band I: 5150-5250MHz Band II-A: 5250-5350MHz Band II-C: 5470-5725MHz Band III: 5725-5850MHz

Note 2:

Lab A SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. Lab B SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.

Remark:

According to the declaration letter from client.

Only SKU3 was fully tested, RSE were tested on worst mode for SKU4 and SKU6.



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Remark:

This test report (Report No.: SEWM2312000502RG05 issue on 2023/12/26) is based on the original test report (Report No.: XEWM2309000447RG05 issue on 2023/09/27).

Review this report and original report, this report just changing the parts according to the declaration letter from client.

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report the AC Power Line Conducted Emission, Radiated Spurious emissions, Restricted bands around fundamental frequency and Dynamic Frequency Selection were tested, and other test data in this report are based on the previous report with report number XEWM2309000447RG05 issue on 2023/09/27.





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General Information 3

3.1 Details of Client

Applicant:	Lenovo (Shanghai) Electronics Technology Co., Ltd.	
Address of Applicant: Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Free Trade Zone		
Manufacturer:	Lenovo PC HK Limited	
Address of Manufacturer:	23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, China	

3.2 Test Location

Lab A:	
Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Address:	South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test engineer:	Ives Cheng, Tizzy Song
Lab B:	
Company:	SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Address:	1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi' an, Shaanxi China
Post code:	710086
Test engineer:	Qiang Zhang





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3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Lab A:

• A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• FCC -Designation Number: CN1312

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an

accredited testing laboratory. Designation Number: CN1312.

Test Firm Registration Number: 717327

Lab B:

•A2LA (Certificate No. 4854.01)

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0095.

IC#: 25613.

FCC –Designation Number: CN1337

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Designation Number: CN1337.

Test Firm Registration Number: 917410



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3.4 General Description of EUT

EUT Description:	Portable Ta	Portable Tablet Computer			
Model No.:	TB330XUP				
Trade Mark:	Lenovo	Lenovo			
Hardware Version:	TB330XUP				
Software Version:	TB330XUP	_RF01_231121			
Power Supply:	3.91V				
	RF Conduc	ted	867560070004135		
IMEI:	RSE & AC	power line	867560070002097		
	802.11a:	20 MHz chann	el bandwidth		
WLAN Mode Supported:	802.11n:	20 MHz / 40 M	Hz channel bandwidth		
	802.11ac:	20 MHz / 40 M	lHz / 80 MHz channel bandwidth		
Operation Frequency:	5250MHz to 5470MHz to	5150MHz to 5250MHz 5250MHz to 5350MHz 5470MHz to 5725MHz 5725MHz to 5850MHz			
	802.11a:	OFDM (BPSK, QPSK, 16QAM, 64QAM)			
Modulation Type:	802.11n:	OFDM (BPSK, QPSK, 16QAM, 64QAM)			
	802.11ac:	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)			
	20MHz:	802.11a/n(HT2	20)/ac(VHT20)		
Channel Spacing:	40MHz:	802.11n(HT40)/ac(VHT40)			
	80MHz:	802.11ac(VHT80)			
Antenna Type:	PIFA Anten	ına			
Antenna Gain:	5250MHz to 5470MHz to 5725MHz to	o 5250MHz: -3.2 o 5350MHz: -3.2 o 5725MHz: -3.2 o 5850MHz: -3.2	27dBi 27dBi		
	Note: The antenna gain are derived from the gain information report provided by the manufacturer.				
	⊠ siso	802.11a/n/a	c		
		CDD: 802.1	1a/n/ac: Tx & Rx		
Smart System:	☐ MIMO		11n/ac: Tx & Rx		
			I1n/ac: Tx & Rx		
		Diversity 802.11a: Tx & Rx			
TPC Function:	□Support, ⊠Not Support				
DFS Function:	□Master				



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	☐Slave with radar detection	⊠Slave without radar detection			
RF Cable:	1.5dB				
Remark:					
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Remark:

In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:

Frequency range over which device operates	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre

For UNII Band I:				
Mode	Channel	Frequency(MHz)		
	The Lowest channel	5180		
IEEE 802.11a/n/ac 20MHz	The Middle channel	5200		
	The Highest channel	5240		
IEEE 000 44m/ 40MI	The Lowest channel	5190		
IEEE 802.11n/ac 40MHz	The Highest channel	5230		
IEEE 802.11ac 80MHz	The Middle channel	5210		

For UNII Band II-A:				
Mode	Channel	Frequency(MHz)		
	The Lowest channel	5260		
IEEE 802.11a/n/ac 20MHz	The Middle channel	5280		
	The Highest channel	5320		
JEEE 000 44m/s - 40MUs	The Lowest channel	5270		
IEEE 802.11n/ac 40MHz	The Highest channel	5310		
IEEE 802.11ac 80MHz	The Middle channel	5290		



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For UNII Band II-C:					
Mode	Channel	Frequency(MHz)			
	The Lowest channel	5500			
IEEE 802.11a/n/ac 20MHz	The Middle channel	5580			
	The Highest channel	5700			
	The Lowest channel	5510			
IEEE 802.11n/ac 40MHz	The Middle channel	5550			
	The Highest channel	5670			
IEEE 802.11ac 80MHz	The Middle channel	5530			

For UNII Band III:		
Mode	Channel	Frequency(MHz)
	The Lowest channel	5745
IEEE 802.11a/n/ac 20MHz	The Middle channel	5785
	The Highest channel	5825
IEEE 000 11m/cc 40MHz	The Lowest channel	5755
IEEE 802.11n/ac 40MHz	The Highest channel	5795
IEEE 802.11ac 80MHz	The Middle channel	5775



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3.5 Test Environment and Mode

Environment Parameter	96.0~101.0 kPa Selected Values During Tests						
Relative Humidity	40-60 % RH Ambient						
Value	Temperature(°C)	Voltage(V)					
NTNV	22~25	3.91					
Domark:							

Remark:

NV: Normal Voltage **Normal Temperature** NT:

3.6 Description of Support Units

Description	Manufacturer	Model No.			
Router	ASUS	GT-AXE11000			
Koulei	A303	(FCC ID MSQ-RTAXJF00)			

3.7 Worst-case configuration and mode

Low data rate was used to test on antenna port conducted tests and radiated spurious emissions since it has the highest maximum power. Following are the worst-case data rates set for test:

Modulation Type	SISO - Data Rate	MIMO - Data Rate				
802.11a	6 Mbps	/				
802.11n (HT 20)	MCS0 (6.5 Mbps)	1				
802.11n (HT 40)	MCS0 (13.5 Mbps)	/				
802.11ac (VHT 20)	MCS0 (6.5 Mbps)	1				
802.11ac (VHT 40)	MCS0 (13.5 Mbps)	1				
802.11ac (VHT 80)	MCS0 (29.3 Mbps)	/				



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4 Test results and Measurement Data

4.1 Antenna Requirement

Standard requirement: 47 CFR Part 15 Section 15.203

The antenna is PIFA Antenna and no consideration of replacement. The best case gain of the antenna is

5150MHz to 5250MHz: -3.27dBi; 5250MHz to 5350MHz: -3.27dBi; 5470MHz to 5725MHz: -3.27dBi; 5725MHz to 5850MHz: -3.27dBi;

*Note:

The antenna gain are derived from the gain information report provided by the manufacturer.

As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.



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4.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15 Section	47 CFR Part 15 Section 15.207								
Test Method:	ANSI C63.10-2020 Sect	ion 6.2								
Test Frequency Range:	150kHz to 30MHz									
Receiver Setup:	RBW = 9kHz, VBW = 30	kHz								
Limit:	Fraguency range (MUz)	Limit (d	BuV)							
	Frequency range (MHz)	Quasi-peak	Average							
	0.15-0.5	66 to 56*	56 to 46*							
	0.5-5	56	46							
	5-30	60	50							
	* Decreases with the log	arithm of the frequency.								
Test Procedure:	room. 2) The EUT was connected to a second plane in the same was multiple socket outlet single LISN provided 3) The tabletop EUT was ground reference plane placed on the horizor of the EUT shall be overtical ground reference plane. The unit under test and be mounted on top of the EUT and associated in order to find the mequipment and all of	cted to AC power source throusion Network) which provides er cables of all other units of ad LISN 2, which was bonded by as the LISN 1 for the unit be strip was used to connect must the rating of the LISN was not as placed upon a non-metallic ne. And for floor-standing arrantal ground reference plane, and the was bonded to the LISN 1 was placed 0.8 m frow the points of the LISN 1 and the Ed ground reference plane. The points of the LISN 1 and the Ed aximum emission, the relative the interface cables must be n conducted measurement.	ugh a LISN 1 (Line a 50Ω/50μH + 5Ω linear the EUT were to the ground reference being measured. A ultiple power cables to a context to the ground reference being measured. A ultiple power cables to a context to the exceeded. It also the exceeded. It also the exceeded. It also the exceeded. It also the exceeded to the exceeded. It also the exceeded to the excee							



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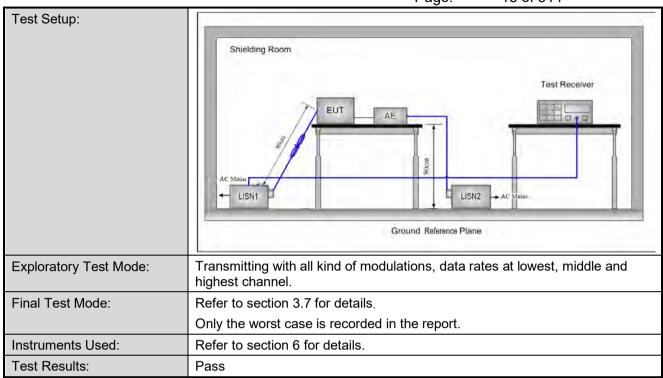
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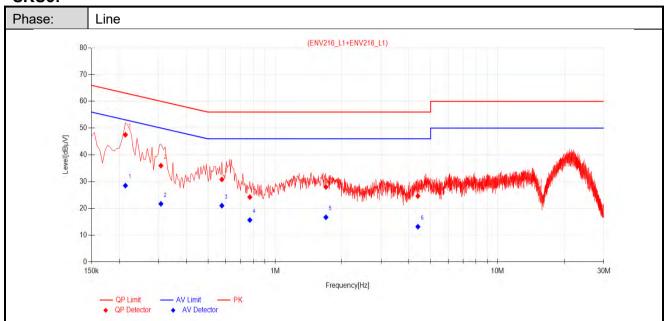
Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission

were detected.

SKU3:



Data I	Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict		
1	0.2130	11.65	35.87	47.52	63.09	15.57	16.86	28.51	53.09	24.58	PASS		
2	0.3075	11.63	24.34	35.97	60.04	24.07	10.06	21.69	50.04	28.35	PASS		
3	0.5775	11.62	19.20	30.82	56.00	25.18	9.39	21.01	46.00	24.99	PASS		
4	0.7710	11.69	12.51	24.20	56.00	31.80	3.95	15.64	46.00	30.36	PASS		
5	1.6935	11.72	16.28	28.00	56.00	28.00	4.95	16.67	46.00	29.33	PASS		
6	4.3845	11.78	12.83	24.61	56.00	31.39	1.37	13.15	46.00	32.85	PASS		

Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[dB μ V] Value[dB μ V]



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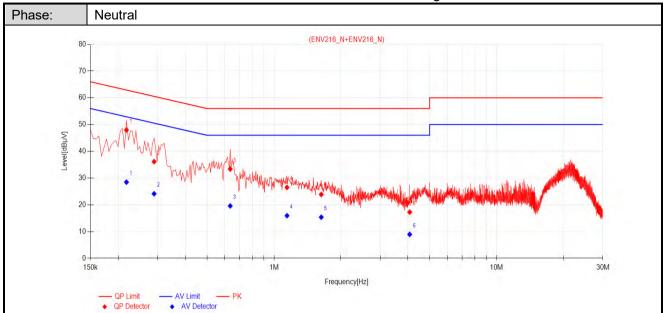
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Data I	Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict		
1	0.2175	11.65	36.30	47.95	62.91	14.96	16.83	28.48	52.91	24.43	PASS		
2	0.2895	11.62	24.51	36.13	60.54	24.41	12.51	24.13	50.54	26.41	PASS		
3	0.6360	11.64	21.74	33.38	56.00	22.62	7.95	19.59	46.00	26.41	PASS		
4	1.1445	11.72	14.77	26.49	56.00	29.51	4.22	15.94	46.00	30.06	PASS		
5	1.6305	11.73	12.14	23.87	56.00	32.13	3.65	15.38	46.00	30.62	PASS		
6	4.0695	11.77	5.49	17.26	56.00	38.74	-2.83	8.94	46.00	37.06	PASS		

Remark

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value = Reading[dB μ V] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[$dB\mu V$] Value[$dB\mu V$]



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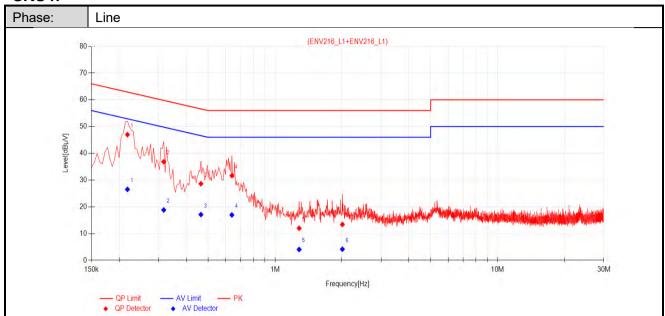


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SKU4:



Data I	Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict		
1	0.2175	11.65	35.35	47.00	62.91	15.91	14.87	26.52	52.91	26.39	PASS		
2	0.3165	11.62	25.23	36.85	59.80	22.95	7.21	18.83	49.80	30.97	PASS		
3	0.4650	11.60	17.04	28.64	56.60	27.96	5.51	17.11	46.60	29.49	PASS		
4	0.6405	11.65	20.03	31.68	56.00	24.32	5.32	16.97	46.00	29.03	PASS		
5	1.2840	11.73	0.27	12.00	56.00	44.00	-7.67	4.06	46.00	41.94	PASS		
6	2.0085	11.73	1.69	13.42	56.00	42.58	-7.56	4.17	46.00	41.83	PASS		

Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[dBµV] Value[dBµV]



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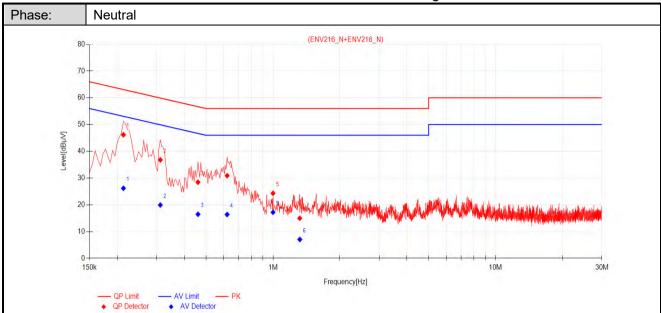
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Data I	Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict		
1	0.2130	11.65	34.53	46.18	63.09	16.91	14.54	26.19	53.09	26.90	PASS		
2	0.3120	11.63	25.18	36.81	59.92	23.11	8.29	19.92	49.92	30.00	PASS		
3	0.4605	11.60	16.84	28.44	56.68	28.24	4.87	16.47	46.68	30.21	PASS		
4	0.6225	11.64	19.26	30.90	56.00	25.10	4.74	16.38	46.00	29.62	PASS		
5	1.0005	11.73	12.58	24.31	56.00	31.69	5.48	17.21	46.00	28.79	PASS		
6	1.3200	11.73	3.26	14.99	56.00	41.01	-4.67	7.06	46.00	38.94	PASS		

Remark

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value = Reading[dB μ V] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[$dB\mu V$] Value[$dB\mu V$]



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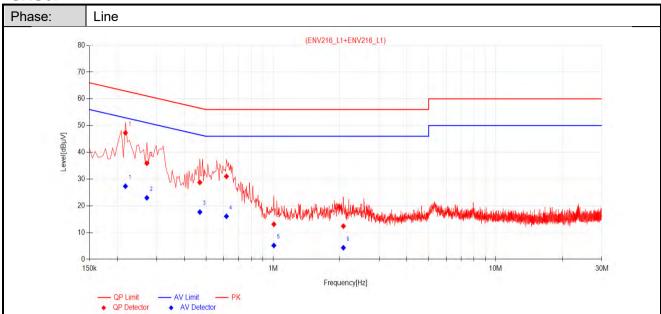


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SKU6:



Data I	Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict		
1	0.2175	11.65	35.62	47.27	62.91	15.64	15.69	27.34	52.91	25.57	PASS		
2	0.2715	11.64	24.27	35.91	61.07	25.16	11.35	22.99	51.07	28.08	PASS		
3	0.4695	11.60	17.15	28.75	56.52	27.77	6.07	17.67	46.52	28.85	PASS		
4	0.6180	11.64	19.37	31.01	56.00	24.99	4.45	16.09	46.00	29.91	PASS		
5	1.0095	11.72	1.39	13.11	56.00	42.89	-6.53	5.19	46.00	40.81	PASS		
6	2.0715	11.73	0.68	12.41	56.00	43.59	-7.39	4.34	46.00	41.66	PASS		

Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[dBµV] Value[dBµV]



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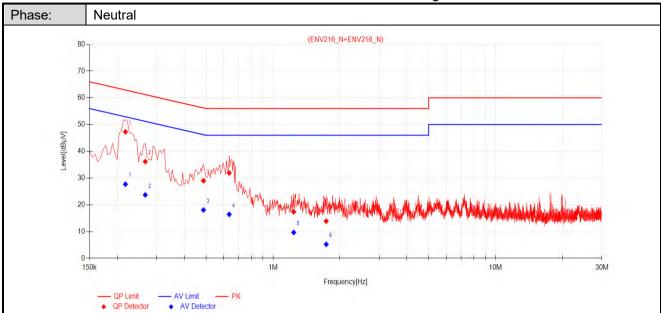
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Data	Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict		
1	0.2175	11.65	35.62	47.27	62.91	15.64	16.05	27.70	52.91	25.21	PASS		
2	0.2670	11.64	24.53	36.17	61.21	25.04	12.08	23.72	51.21	27.49	PASS		
3	0.4875	11.60	17.40	29.00	56.21	27.21	6.48	18.08	46.21	28.13	PASS		
4	0.6360	11.64	20.25	31.89	56.00	24.11	4.77	16.41	46.00	29.59	PASS		
5	1.2390	11.73	5.68	17.41	56.00	38.59	-2.06	9.67	46.00	36.33	PASS		
6	1.7340	11.72	2.19	13.91	56.00	42.09	-6.49	5.23	46.00	40.77	PASS		

Remark

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value = Reading[dB μ V] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[$dB\mu V$] Value[$dB\mu V$]



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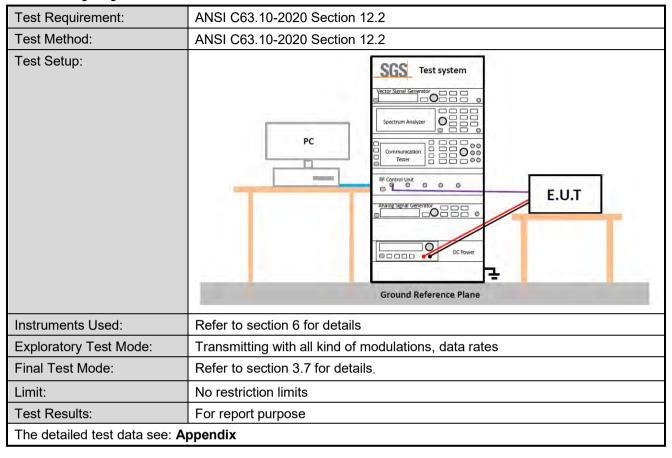


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4.3 Duty Cycle





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4.4 Conducted Output Power

Test Requirement:	47 CFR Part 15 Section 15.407(a)		
Test Method:	ANSI C63.10-2020 Section 12.4.3.2		
Test Setup:	Flower arabe E.U.T Ground Reference Plane		
	* Test with power meter (Detector function: Average) Method PM-G is measurement using a gated RF average power meter. Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.		
Test Instruments:	Refer to section 6 for details.		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Refer to section 3.7	7 for details.	
Limit:	Frequency Band	Limit	
	5150-5250MHz	Not exceed 250mW(23.98dBm)	
	5250-5350MHz	The lesser of 250mW(23.98dBm) or 11+ 10logB	
	5470-5725MHz	The lesser of 250mW(23.98dBm) or 11+ 10logB	
5725-5850MHz Not exceed 1W(30dBm)		Not exceed 1W(30dBm)	
	*Where B is the 26dB emission bandwidth in MHz		
Test Results:	Pass		
The detailed test data see: A	ppendix		



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4.5 26dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a), KDB 789033 D02& C		
Test Method:	ANSI C63.10-2020 Section 12.5.2		
Test Setup:	PC Spectrum Analyzer O O O O O O O O O		
Instruments Used:	Refer to section 6 for details.		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Refer to section 3.7 for details.		
Limit:	No restriction limits		
Test Results:	For Report Purpose		
The detailed test data see: A	ppendix		



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4.6 6dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(e)		
Test Method:	ANSI C63.10-2020 Section 12.5.1		
Test Setup:	PC	SGS Test system Vector Signal Generator Spectrum Analyzer Communication Tester RF Control Unit DC Prower E.U.T Ground Reference Plane	
Test Instruments:	Refer to section 6 for details.		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Refer to section 3.7 for details.		
Limit:	Frequency Band	Limit	
	5725-5850MHz	At lease 500kHz	
Test Results:	Pass		
The detailed test data see: A	The detailed test data see: Appendix		



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4.7 99% Occupied Bandwidth

Test Requirement:	KDB 789033 D02§ D		
Test Method:	ANSI C63.10-2020 Section 12.5.3		
Test Setup:	SGS Test system Sector Signal Generator		
Instruments Used:	Refer to section 6 for details.		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Refer to section 3.7 for details.		
Limit:	No restriction limits		
Test Results:	For Report Purpose		
The detailed test data see: Appendix			



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4.8 Power Spectral Density

Test Requirement:	47 CFR Part 15 Sec	tion 15.407(a)	
Test Method:	ANSI C63.10-2020 Section 12.6		
	KDB 789033 D02 v02r01, Section F.		
Test Setup:	PC	SGS Test system Visitor Signal Generator Spectrum Analyzer Communication Tester RF Control Unit Communication DC Power For Control Unit Communication Communicati	
Instruments Used:	Refer to section 6 for	or details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Refer to section 3.7 for details.		
Limit:	Frequency Band	Limit	
	5150-5250MHz	The power spectral density less than 11dBm/1MHz	
	5250-5350MHz	The power spectral density less than 11dBm/1MHz	
	5470-5725MHz The power spectral density less than 11dBm/1MHz		
	5725-5850MHz	The power spectral density less than <30dBm/500KHz	
Test Results:	Pass		
The detailed test data see: A	The detailed test data see: Appendix		



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4.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15 Section 15.205/15.209/15.407(b)
Test Method:	ANSI C63.10-2020 Section 6.4 / 6.5 / 6.6
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)
Test frequency:	9kHz ~ 40GHz(or 10 Harmonic)

Test Setup:

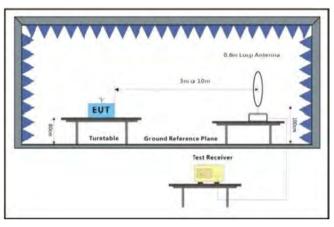
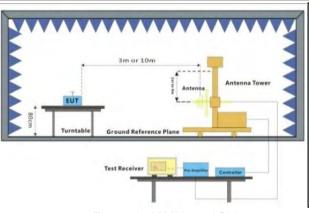


Figure 1. 9kHz to 30MHz



Antenna Tower

Im or 3m

Turntable

Ground Reference Plane

Test Receiver

Trest Receiver

Trest Receiver

Trest Receiver

Trest Receiver

Trest Receiver

Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz

Test Procedure:

- a. For below 1GHz test, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz test, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
 (Distance from antenna to EUT is 1m for measurements >18GHz).
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.



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	e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	g. Test the EUT in the outermost channels.
	h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
	i. Repeat above procedures until all frequencies measured was complete.
	j. The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported
	K. The disturbance above 18GHz was very low, and the harmonics were the highest point could be found when testing, so only the harmonics had been displayed.
	 At a measurement distance of 1 meter the limit line was increased by 20*LOG(3/1) = 9.54 dB.
Test Configuration:	 RBW = 10 kHz VBW = 30 kHz Detector = Peak & Average & Quasi-peak Trace mode = max hold Measurements Below 1000MHz RBW = 120 kHz VBW = 300 kHz Detector = Quasi-peak Trace mode = max hold Peak Measurements Above 1000 MHz RBW = 1 MHz VBW ≥ 3 MHz Detector = Peak Sweep time = auto Trace mode = max hold Average Measurements Above 1000MHz RBW = 1 MHz VBW ≥ 1 MHz VBW = 1 MHz VBW ≥ 1/T, when duty cycle is less than 98 percent where Tis the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 3.7 for details.
ai 100t Mode.	For below 1GHz part, through pre-scan all channels, but only the worst case is recorded in the report.
Instruments Used:	Refer to section 6 for details.
Test Results:	Pass



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The detailed test data see: Appendix



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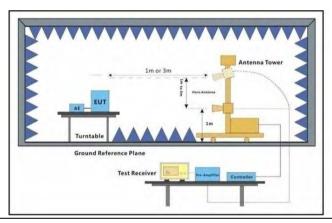
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4.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15 Section 15	47 CFR Part 15 Section 15.205/15.209/15.407(b)			
Test Method:	ANSI C63.10-2020 Section	ANSI C63.10-2020 Section 12.7			
Test Site:	Measurement Distance: 3m	Measurement Distance: 3m (Semi-Anechoic Chamber)			
Limit:	Frequency	Limit (dBuV/m)	Remark		
	30MHz-88MHz	40.0	Quasi-peak		
	88MHz-216MHz	43.5	Quasi-peak		
	216MHz-960MHz	46.0	Quasi-peak		
	960MHz-1GHz	54.0	Quasi-peak		
	Above 10Hz	54.0	Average Value		
	Above 1GHz	74.0	Peak Value		

Test Setup:



Test Procedure:

- a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel.
- g. Test the EUT in the outermost channels.
- h. The radiation measurements are performed in X, Y, Z axis positioning for



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	<u> </u>
	Transmitting mode, And found the X axis positioning which it is worse case.
	i. Repeat above procedures until all frequencies measured was complete.
Test Configuration:	Measurements Below 1000MHz
	• RBW = 120 kHz
	• VBW = 300 kHz
	Detector = Quasi-peak
	Trace mode = max hold
	Peak Measurements Above 1000 MHz
	• RBW = 1 MHz
	• VBW ≥ 3 MHz
	Detector = Peak
	Sweep time = auto
	Trace mode = max hold
	Average Measurements Above 1000MHz
	• RBW = 1 MHz
	 VBW = 10Hz, when duty cycle is no less than 98 percent.
	 VBW ≥ 1/T, when duty cycle is less than 98 percent where Tis the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 3.7 for details.
Instruments Used:	Refer to section 6 for details.
Test Results:	Pass
The detailed test data see	e: Appendix



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4.11 Dynamic Frequency Selection

4.11.1 DFS Overview

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode			
	Master	Client Without Radar Detection	Client With Radar Detection	
Non-Occupancy Period	Yes	Not required	Yes	
DFS Detection Threshold	Yes	Not required	Yes	
Channel Availability Check Time	Yes	Not required	Not required	
U-NII Detection Bandwidth	Yes	Not required	Yes	

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master Device or Client with Radar Detection	Client Without Radar Detection	
DFS Detection Threshold	Yes	Not required	
Channel Closing Transmission Time	Yes	Yes	
Channel Move Time	Yes	Yes	
U-NII Detection Bandwidth	Yes	Not required	

Additional requirements for devices with	Master Device or Client with	Client Without Radar
multiple bandwidth modes	Radar Detection	Detection
U-NII Detection Bandwidth and Statistical	All BW modes must be tested	Not required
Performance Check		_
Channel Move Time and Channel Closing	Test using widest BW mode	Test using the widest
Transmission Time	available	BW mode available for
		the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.



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4.11.2 DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value
	(See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and	-62 dBm
power spectral density < 10 dBm/MHz	
EIRP < 200 milliwatt that do not meet the power spectral density	-64 dBm
requirement	

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.



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4.11.3 RADAR TEST WAVEFORMS

Table 5 - Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A	Roundup $ \left\{ $	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
ggregate (Radar Types 1-4)				80%	120

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.



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Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition	Pulse Repetition Frequency	Pulse Repetition	
Frequency	(Pulses Per Second)	Interval (Microseconds)	
Number			
1	1930.5	518	
2	1858.7	538	
3	1792.1	558	
4	1730.1	578	
5	1672.2	598	
6	1618.1	618	
7	1567.4	638	
8	1519.8	658	
9	1474.9	678	
10	1432.7	698	
11	1392.8	718	
12	1355	738	
13	1319.3	758	
14	1285.3	778	
15	1253.1	798	
16	1222.5	818	
17	1193.3	838	
18	1165.6	858	
19	1139	878	
20	1113.6	898	
21	1089.3	918	
22	1066.1	938	
23	326.2	3066	

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful			
		Detections	Detection			
1	35	29	82.9%			
2	30	18	60%			
3	30	27	90%			
4	50	44	88%			
Aggregate (82.9% + 60% + 90% + 88%)/4 = 80.2%						



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Table 6 – Long Pulse Radar Test Waveform

Radar	Pulse	Chirp	PRI	Number	Number	Minimum	Minimum
Type	Width	Width	(µsec)	of Pulses	of Bursts	Percentage of	Number of
	(µsec)	(MHz)		per Burst		Successful	Trials
						Detection	
5	50-100	5-20	1000-	1-3	8-20	80%	30
			2000				

Table 7 - Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width	PRI (µsec)	Pulses	Hopping Rate	Hopping Sequence	Minimum Percentage of	Minimum Number of
Type	(µsec)	(μεςς)	Hop	(kHz)	Length	Successful	Trials
					(msec)	Detection	
6	1	333	9	0.333	300	70%	30

4.11.4 Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
	See Note 1.
Channel Closing Transmission Time	200 milliseconds + an
	aggregate of 60
	milliseconds over remaining
	10 second period.
	See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-
	NII 99% transmission
	power bandwidth. See Note
	3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. **Note 2:** The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

The detailed test data see: Appendix



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5 Measurement Uncertainty (95% confidence levels, k=2)

	Lab B For report XEWM23090	00447RG05
No.	Item	Measurement Uncertainty
1	Radio Frequency	± 7.25 x 10 ⁻⁸ GHz
2	Duty cycle	± 0.37%
3	Occupied Bandwidth	± 0.2%
4	RF conducted power	± 0.21dB
5	RF power density	± 2.84dB
6	Conducted Spurious emissions	± 0.75dB

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cispt/ETSI} (CISPR/ETSI Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

Lab A For report SEWM2312000502RG05							
No.	No. Item Measurement Uncertainty						
1	Conduction Emission	± 2.90dB (150kHz to 30MHz)					
		± 3.13dB (9k -30MHz)					
2	Radiated Emission	± 4.88dB (30M -1GHz)					
2	Radiated Emission	± 4.75dB (1GHz to 18GHz)					
		± 4.77dB (Above 18GHz)					

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{\text{cispr/ETSI}}$ (CISPR/ETSI Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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6 Equipment List

<u> </u>					_		
		Lab	_				
	_	RF Test S					
For report XEWM2309000447RG05							
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)		
MXA signal analyzer	Agilent	N9020A	XAW01-06-07	2023/02/16	2024/02/15		
MXG vector signal Generator	Agilent	N5182B	XAW01-07-16	2023/02/16	2024/02/15		
Measurement Software	Tonscend	JS1120-3 (3.2.18)	XAW02-14-01	NCR	NCR		
RF control unit	Tonscend	JS0806-2	XAW03-37-01	NCR	NCR		
Power Meter	Anritsu	ML2495A	XAW01-25-03	2023/02/16	2024/02/15		
Power Supply	Agilent	66311B	XAW01-17-01	2023/02/16	2024/02/15		
Temperature and humidity meter	MingGao	T809	XAW01-01-16	2023/09/04	2024/09/03		

		Lab A duction Test ort SEWM231			
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)
Shielding Room	Brilliant-emc	N/A	SUWI-04-03-01	2021/05/08	2024/05/07
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2023/02/08	2024/02/07
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2023/02/07	2024/02/06
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-03	2023/02/08	2024/02/07
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-04	2023/02/08	2024/02/07
Measurement Software	Tonscend	JS32-CE V4.0.0.2	SUWI-02-09-05	NCR	NCR



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			r aye.	40 01 3 12	
	For	Lab A RSE Test S report SEWM23	System		
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)
Semi- Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-02	2021/11/25	2024/11/24
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-13	2023/02/07	2024/02/06
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2023/05/11	2024/05/10
Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-06	2023/11/21	2024/11/20
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2023/02/08	2024/02/07
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	2023/11/25	2024/11/24
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	2023/11/25	2024/11/24
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	2023/05/12	2024/05/11
Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2023/05/13	2024/05/12
Amplifier	Tonscend	TAP9K3G32	SUWI-01-14-06	2023/11/21	2024/11/20
Amplifier	Tonscend	TAP01018050	SUWI-01-14-04	2023/11/21	2024/11/20
Amplifier	Tonscend	TAP30M7G30	SUWI-01-14-05	2023/11/21	2024/11/20
Measurement Software	Tonscend	JS32-RE V4.0.0.0	SUWI-02-09-04	NCR	NCR



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7 Photographs - Setup Photos

Refer to Appendix A.2 WLAN Setup Photos.



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Appendix



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26dB Emission Bandwidth Test Result

TestMode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
		5180	19.840	5170.000	5189.840	
		5200	20.040	5189.920	5209.960	
		5240	19.880	5230.000	5249.880	
		5260	19.880	5250.160	5270.040	
		5280	19.680	5270.160	5289.840	
11a	Ant1	5320	19.880	5310.080	5329.960	
IIa	Allti	5500	19.640	5490.200	5509.840	
		5580	19.800	5570.240	5590.040	
		5700	19.800	5690.080	5709.880	
		5745	19.800	5735.080	5754.880	
		5785	19.720	5775.040	5794.760	
		5825	20.000	5815.040	5835.040	
		5180	20.000	5170.000	5190.000	
		5200	20.400	5189.800	5210.200	
		5240	20.200	5229.880	5250.080	
		5260	19.960	5250.120	5270.080	
		5280	20.360	5269.880	5290.240	
11n20SISO	Ant1	5320	20.240	5309.920	5330.160	
1111200100	74161	5500	20.120	5490.000	5510.120	
		5580	20.440	5569.880	5590.320	
	-	5700	20.160	5689.960	5710.120	
		5745	20.040	5735.000	5755.040	
		5785	20.040	5774.920	5794.960	
		5825	20.200	5814.960	5835.160	
		5190	40.560	5169.520	5210.080	For
		5230	40.080	5210.160	5250.240	Report
	_	5270	40.160	5249.920	5290.080	Purpose
44 400100	l	5310	40.160	5290.000	5330.160	
11n40SISO	Ant1	5510	40.160	5489.760	5529.920	
		5550	39.760	5530.320	5570.080	
		5670	40.480	5649.840	5690.320	
		5755	40.240	5735.000	5775.240	
		5795	40.400	5774.680	5815.080	
	-	5180	20.080	5169.960	5190.040	
		5200	20.240	5189.920	5210.160	
	-	5240	20.120	5230.000	5250.120	
	-	5260	20.080	5250.040	5270.120	
		5280	19.960	5269.960	5289.920	-
11ac20SISO	Ant1	5320	20.040	5309.960	5330.000	
	-	5500	20.040	5490.000	5510.040	
		5580	20.200	5569.960	5590.160	
		5700 5745	19.880	5690.080	5709.960	-
		5745	20.160	5734.960	5755.120	-
		5785 5825	20.040 20.120	5774.920	5794.960 5835.200	-
		5825 5190	40.400	5815.080	5835.200	-
		5230		5169.760 5210.160	5210.160 5249.840	-
		5230 5270	39.680	5210.160		-
11ac40SISO	Ant1	5310	39.520 40.080	5250.240 5290.080	5289.760 5330.160	1
						-
		5510 5550	40.000 40.320	5490.000 5530.000	5530.000	-
		5550	40.320	JJJJU.UUU	5570.320	



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		5670	40.560	5649.760	5690.320
		5755	40.000	5735.000	5775.000
		5795	39.600	5775.000	5814.600
	Ant1	5210	80.800	5169.360	5250.160
11ac80SISO		5290	80.480	5250.000	5330.480
1180805150		5530	80.640	5489.680	5570.320
		5775	80.480	5734.680	5815.160



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Test Graphs





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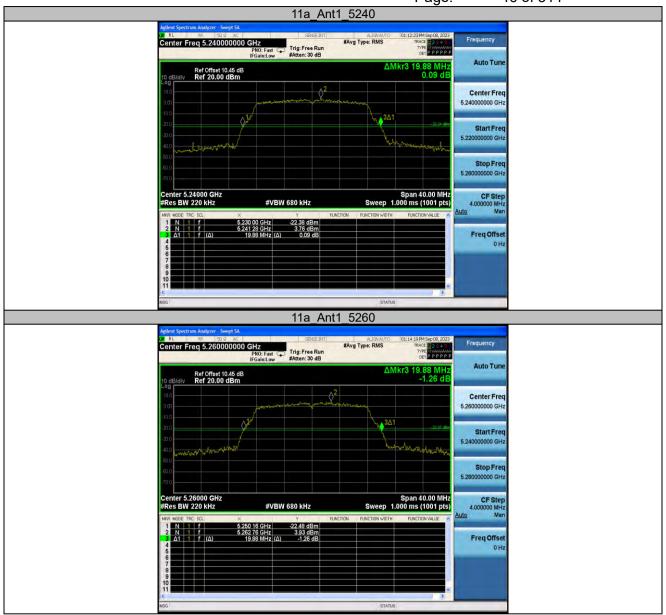
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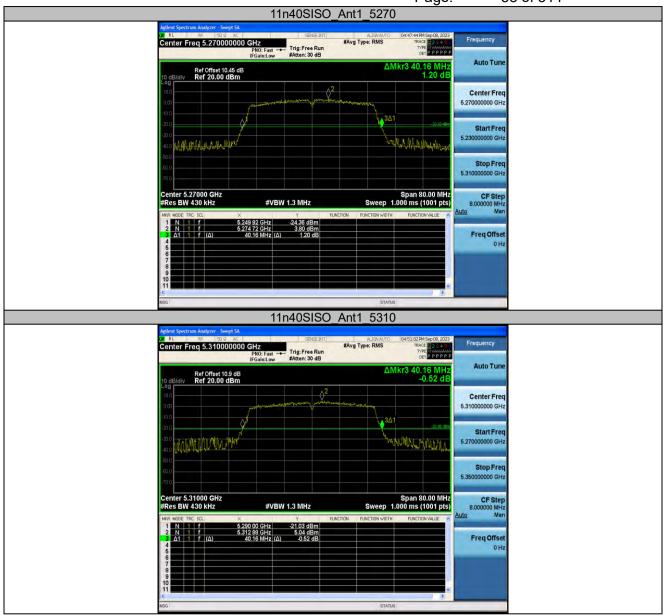
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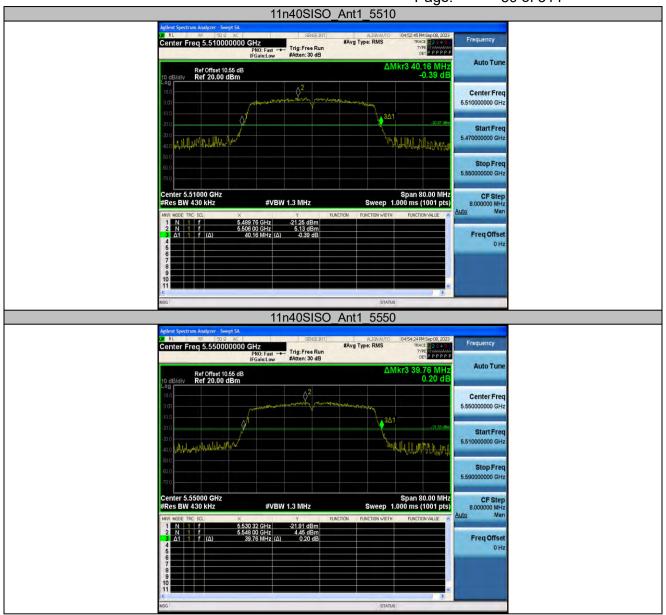
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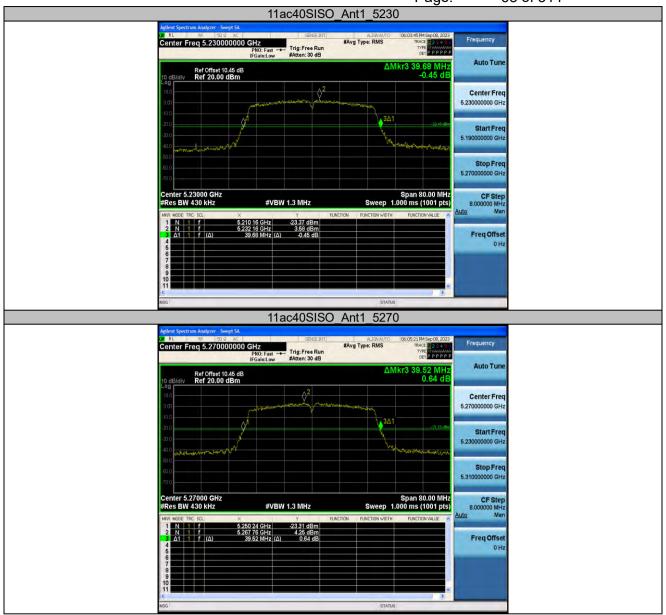
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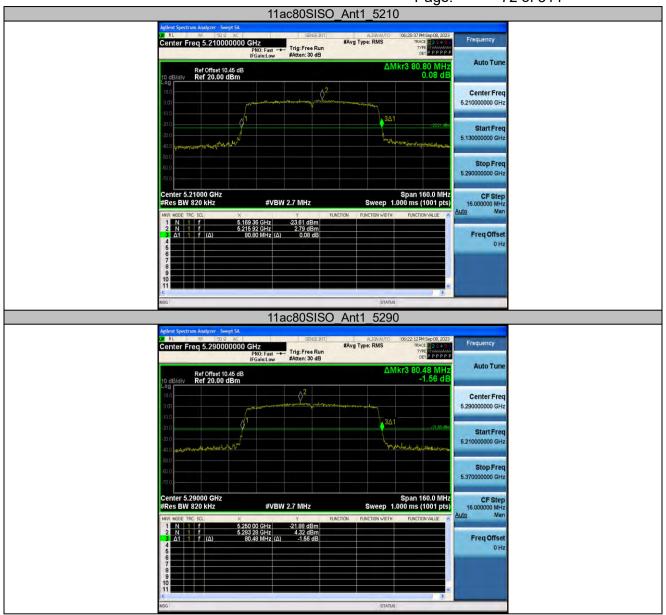
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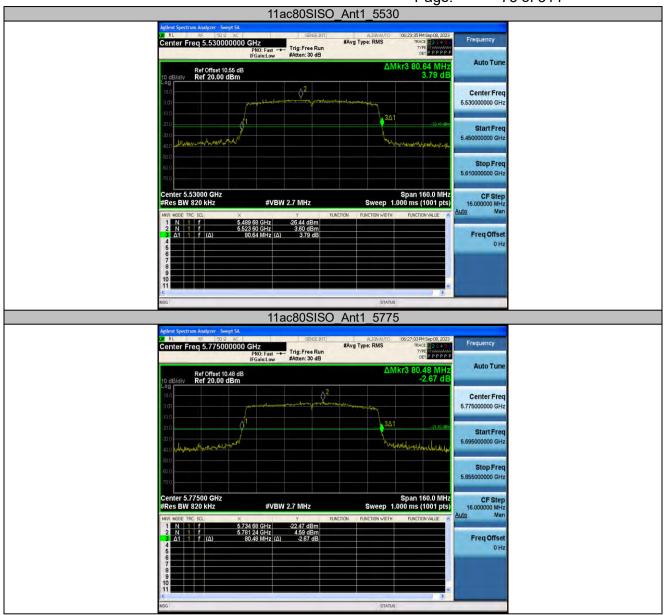
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99%Occupied bandwidth Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
		5180	16.785	5171.6191	5188.4041	
		5200	16.947	5191.4888	5208.4358]
		5240	16.895	5231.5255	5248.4205	
		5260	16.904	5251.6163	5268.5203	
		5280	16.915	5271.5208	5288.4358	
11a	Ant1	5320	16.817	5311.6030	5328.4200	
i i a	Anti	5500	16.870	5491.6198	5508.4898	
		5580	16.986	5571.5364	5588.5224	
		5700	16.869	5691.5083	5708.3773	
	_	5745	16.825	5736.5672	5753.3922	
		5785	16.843	5776.6131	5793.4561	
		5825	16.869	5816.6408	5833.5098	
	_	5180	17.822	5171.0836	5188.9056	
	_	5200	17.868	5191.0462	5208.9142	
	_	5240	17.872	5231.0083	5248.8803	
		5260	17.857	5251.1295	5268.9865	
		5280	17.787	5271.0745	5288.8615	
11n20SISO	Ant1	5320	17.766	5311.1521	5328.9181	
1111203130	Allti	5500	17.847	5491.0957	5508.9427	
		5580	17.900	5571.0559	5588.9559	
		5700	17.851	5691.0686	5708.9196	
		5745	17.809	5736.0918	5753.9008	
		5785	17.873	5776.0853	5793.9583	
		5825	17.884	5816.1310	5834.0150	
	_	5190	36.095	5171.8889	5207.9839	For
	_	5230	36.073	5211.9177	5247.9907	Report
	-	5270	36.107	5252.0339	5288.1409	Purpose
	_	5310	36.251	5291.9932	5328.2442	
11n40SISO	Ant1	5510	36.139	5491.8567	5527.9957	
	-	5550	36.181	5531.9554	5568.1364	
	-	5670	36.438	5651.7907	5688.2287	
	-	5755	36.337	5736.8099	5773.1469	
		5795	36.131	5776.9039	5813.0349	
	-	5180	17.789	5171.0985	5188.8875	
	-	5200	17.861	5191.0339	5208.8949	
	-	5240	17.839	5231.0286	5248.8676	
	-	5260	17.810	5251.1645	5268.9745	
	-	5280	17.761	5271.1093	5288.8703	
11ac20SISO	Ant1	5320	17.767	5311.1467	5328.9137	
1140200100	,	5500	17.809	5491.1197	5508.9287	
	-	5580	17.798	5571.1134	5588.9114	
	-	5700	17.764	5691.1100	5708.8740	
		5745	17.765	5736.0971	5753.8621	
		5785	17.780	5776.1282	5793.9082	
		5825	17.829	5816.1751	5834.0041	
		5190	36.129	5171.8732	5208.0022	
		5230	36.105	5211.9454	5248.0504	
11ac40SISO	Ant1	5270	35.977	5252.0735	5288.0505	
1140100100	,	5310	36.124	5292.0468	5328.1708	
		5510	36.079	5491.9294	5528.0084	
		5550	36.039	5532.0435	5568.0825	



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		5670	36.380	5651.7487	5688.1287
		5755	36.191	5736.8876	5773.0786
		5795	36.117	5776.8742	5812.9912
	Ant1	5210	75.102	5172.2996	5247.4016
11ac80SISO		5290	75.115	5252.5842	5327.6992
1180005150		5530	75.204	5492.3959	5567.5999
		5775	75.102	5737.3016	5812.4036



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