



CFR 47 FCC PART 15 SUBPART E

CERTIFICATION TEST REPORT

For

DJI Ronin 4D Video Transmitter

MODEL NUMBER: TX2

FCC ID: 2ANDR-TX2202109

REPORT NUMBER: 4789980498.1-3-7

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Prepared for

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	07/15/2021	Initial Issue	Mick Zhang
V1	08/20/2021	Updated modulation to OFDM (QPSK, 16QAM, 64QAM)	Mick Zhang
V2	10/15/2021	Update ISED frequency range for use by deleting 5150-5250MHz	Mick Zhang
V3	10/18/2021	Divide the report into FCC and ISED	Mick Zhang



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB/26dB Bandwidth	FCC 15.407 (a)&(e)	PASS
2	99% Occupied Bandwidth	RSS-Gen Clause 6.7	PASS
3	Conducted Output Power	FCC 15.407 (a)	PASS
4	Power Spectral Density	FCC 15.407 (a)	PASS
5	Radiated Bandedge and Spurious Emission	FCC 15.407 (b) FCC 15.209 FCC 15.205	PASS
6	Conducted Emission Test for AC Power Port	FCC 15.207	PASS
7	Frequency Stability	FCC 15.407 (g)	PASS
8	Dynamic Frequency Selection	FCC 15.407 (h)	PASS
9	Antenna Requirement	FCC 15.203	PASS
Nata			1

Note:

1. This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

2. The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART C > when <Accuracy Method> decision rule is applied.



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Address:	SZ DJI Osmo Technology Co.,Ltd. 4F, Jingkou Community Comprehensive Service Building, No. 83 Bishui Road North, Guangming Street, Guangming District, Shenzhen	
Manufacturer Information Company Name:	SZ DJI Osmo Technology Co.,Ltd.	
Address:	4F, Jingkou Community Comprehensive Service Building, No. 83 Bishui Road North, Guangming Street, Guangming District, Shenzhen	
EUT Information		
EUT Name:	DJI Ronin 4D Video Transmitter	
Model:	TX2	
Brand:	DJI	
Sample Received Date:	June 03, 2021	
Sample Status:	Normal	
Sample ID:	3991066	
Date of Tested:	June 03. 2021 ~ July 15. 2021	

APPLICABLE STANDARDS		
STANDARD TEST RESULTS		
CFR 47 FCC PART 15 SUBPART E	PASS	

June 03, 2021 ~ July 15, 2021

Prepared By:

Mick. Zha

Mick Zhang **Project Engineer**

Approved By:

Stephen Guo Laboratory Manager

Check By:

lun n

Shawn Wen Laboratory Leader



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, CFR 47 FCC Part 2, CFR 47 FCC Part 15, KDB 789033 D02 v02r01, KDB414788 D01 Radiated Test Site v01 and KDB 662911 D01 Multiple Transmitter Output v02r01.

3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Delcaration of Conformity (DoC) and Certification
	rules
	ISED (Company No.: 21320)
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with ISED.
	The Company Number is 21320 and the test lab Conformity Assessment
	Body Identifier (CABID) is CN0046.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty	
Conduction emission	3.62 dB	
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB	
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB	
Radiated Emission	5.78 dB (1 GHz ~ 18 GHz)	
(Included Fundamental Emission) (1 GHz to 26 GHz)	5.23 dB (18 GHz ~ 26 GHz)	
Duty Cycle	±0.028%	
Emission Bandwidth and 99% Occupied Bandwidth	±0.0196%	
Maximum Conducted Output Power	±0.766 dB	
Maximum Power Spectral Density Level	±1.22 dB	
Frequency Stability	±2.76%	
Conducted Band-edge Compliance	±1.328 dB	
Conducted Unwanted Emissions In Non-restricted	±0.746 dB (9 kHz ~ 1 GHz)	
Frequency Bands	±1.328dB (1 GHz ~ 26 GHz)	
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.		



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	DJI Ronin 4D Video Transmitter
Model	TX2
Radio Technology	SRD 5G
Operation frequency	UNII-1/UNII-2A/UNII-2C/UNII-3
Modulation	OFDM (QPSK,16QAM,64QAM)
Supply Voltage	DC 12V

5.2. MAXIMUM OUTPUT POWER

UNII-1 BAND

SRD 5G	Frequency (MHz)	Maximum Average Conducted Power (dBm)
20M Mode	5150 ~ 5250	20.41
40M Mode		20.92

UNII-2A BAND

SRD 5G	Frequency (MHz)	Maximum Average Conducted Power (dBm)
20M Mode	E2E0 - E2E0	21.91
40M Mode	5250 ~ 5350	22.47

UNII-2C BAND

SRD 5G	Frequency (MHz)	Max Power (dBm)	
20M Mode	E470 - E72E	21.78	
40M Mode	5470 ~ 5725	23.08	

UNII-3 BAND

SRD 5G	Frequency (MHz)	Max Power (dBm)			
1.4M Mode		15.78			
1.4M-CA Mode		15.57			
3M Mode		15.81			
3M-CA Mode	5725 ~ 5850	15.96			
10M Mode		25.93			
20M Mode		25.94			
40M Mode		21.00			



5.3. CHANNEL LIST

UNI	I-1	UNII-1		
(For Bandwidt	th = 20 MHz)	(For Bandwidth = 40 MHz)		
Channel	Frequency (MHz)	Channel Frequenc (MHz)		
1	5180	1	5190	
2	5200	2	5230	
3	3 5220			
4 5240				

UNII	-2A	UNII-2A		
(For Bandwidt	th = 20 MHz)	(For Bandwidth = 40 MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
1	5260	1	5270	
2	5280	2	5310	
3 5300				
4 5320				

UNII	-2C	UNII-2C		
(For Bandwidt	th = 20 MHz)	(For Bandwid	lth = 40 MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
1	5500	1	5510	
2	5520	2	5550	
3	5540	3	5590	
4	5560	4	5630	
5	5580	5	5670	
6	5600	/	/	
7	5620			
8	5640			
9	5660			
10	5680			
11	11 5700			
/	/			



	UNII-3 SRD 5G 1.4MHz Bandwidth (5726.5MHz-5846.5MHz)									
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)			
1	5726.5	17	5758.5	33	5790.5	49	5822.5			
2	5728.5	18	5760.5	34	5792.5	50	5824.5			
3	5730.5	19	5762.5	35	5794.5	51	5826.5			
4	5732.5	20	5764.5	36	5796.5	52	5828.5			
5	5734.5	21	5766.5	37	5798.5	53	5830.5			
6	5736.5	22	5768.5	38	5800.5	54	5832.5			
7	5738.5	23	5770.5	39	5802.5	55	5834.5			
8	5740.5	24	5772.5	40	5804.5	56	5836.5			
9	5742.5	25	5774.5	41	5806.5	57	5838.5			
10	5744.5	26	5776.5	42	5808.5	58	5840.5			
11	5746.5	27	5778.5	43	5810.5	59	5842.5			
12	5748.5	28	5780.5	44	5812.5	60	5844.5			
13	5750.5	29	5782.5	45	5814.5	61	5846.5			
14	5752.5	30	5784.5	46	5816.5	/	/			
15	5754.5	31	5786.5	47	5818.5	/	/			
16	5756.5	32	5788.5	48	5820.5	/	/			

	UNII-3 SRD 5G 1.4MHz Bandwidth-CA Mode(5728.12MHz-5848.12MHz)								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)		
1	5728.12	17	5760.12	33	5792.12	49	5824.12		
2	5730.12	18	5762.12	34	5794.12	50	5826.12		
3	5732.12	19	5764.12	35	5796.12	51	5828.12		
4	5734.12	20	5766.12	36	5798.12	52	5830.12		
5	5736.12	21	5768.12	37	5800.12	53	5832.12		
6	5738.12	22	5770.12	38	5802.12	54	5834.12		
7	5740.12	23	5772.12	39	5804.12	55	5836.12		
8	5742.12	24	5774.12	40	5806.12	56	5838.12		
9	5744.12	25	5776.12	41	5808.12	57	5840.12		
10	5746.12	26	5778.12	42	5810.12	58	5842.12		
11	5748.12	27	5780.12	43	5812.12	59	5844.12		
12	5750.12	28	5782.12	44	5814.12	60	5846.12		
13	5752.12	29	5784.12	45	5816.12	61	5848.12		
14	5754.12	30	5786.12	46	5818.12	/	/		
15	5756.12	31	5788.12	47	5820.12	/	/		
16	5758.12	32	5790.12	48	5822.12	/	/		



	UNII-3 SRD 5G 3MHz Bandwidth Mode(5727.5MHz-5844.5MHz)										
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)				
1	5727.5	11	5757.5	21	5787.5	31	5817.5				
2	5730.5	12	5760.5	22	5790.5	32	5820.5				
3	5733.5	13	5763.5	23	5793.5	33	5823.5				
4	5736.5	14	5766.5	24	5796.5	34	5826.5				
5	5739.5	15	5769.5	25	5799.5	35	5829.5				
6	5742.5	16	5772.5	26	5802.5	36	5832.5				
7	5745.5	17	5775.5	27	5805.5	37	5835.5				
8	5748.5	18	5778.5	28	5808.5	38	5838.5				
9	5751.5	19	5781.5	29	5811.5	39	5841.5				
10	5754.5	20	5784.5	30	5814.5	40	5844.5				

	UNII-3 SRD 5G 3MHz Bandwidth-CA Mode(5730.2MHz-5847.2MHz)									
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)			
1	5730.2	11	5760.2	21	5790.2	31	5820.2			
2	5733.2	12	5763.2	22	5793.2	32	5823.2			
3	5736.2	13	5766.2	23	5796.2	33	5826.2			
4	5739.2	14	5769.2	24	5799.2	34	5829.2			
5	5742.2	15	5772.2	25	5802.2	35	5832.2			
6	5745.2	16	5775.2	26	5805.2	36	5835.2			
7	5748.2	17	5778.2	27	5808.2	37	5838.2			
8	5751.2	18	5781.2	28	5811.2	38	5841.2			
9	5754.2	19	5784.2	29	5814.2	39	5844.2			
10	5757.2	20	5787.2	30	5817.2	40	5847.2			

	UNII-3 SRD 5G 10MHz Bandwidth (5730.5MHz-5844.5MHz)										
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)				
1	5730.5	30	5759.5	59	5788.5	88	5817.5				
2	5731.5	31	5760.5	60	5789.5	89	5818.5				
3	5732.5	32	5761.5	61	5790.5	90	5819.5				
4	5733.5	33	5762.5	62	5791.5	91	5820.5				
5	5734.5	34	5763.5	63	5792.5	92	5821.5				
6	5735.5	35	5764.5	64	5793.5	93	5822.5				
7	5736.5	36	5765.5	65	5794.5	94	5823.5				
8	5737.5	37	5766.5	66	5795.5	95	5824.5				
9	5738.5	38	5767.5	67	5796.5	96	5825.5				
10	5739.5	39	5768.5	68	5797.5	97	5826.5				



11	5740.5	40	5769.5	69	5798.5	98	5827.5
12	5741.5	41	5770.5	70	5799.5	99	5828.5
13	5742.5	42	5771.5	71	5800.5	100	5829.5
14	5743.5	43	5772.5	72	5801.5	101	5830.5
15	5744.5	44	5773.5	73	5802.5	102	5831.5
16	5745.5	45	5774.5	74	5803.5	103	5832.5
17	5746.5	46	5775.5	75	5804.5	104	5833.5
18	5747.5	47	5776.5	76	5805.5	105	5834.5
19	5748.5	48	5777.5	77	5806.5	106	5835.5
20	5749.5	49	5778.5	78	5807.5	107	5836.5
21	5750.5	50	5779.5	79	5808.5	108	5837.5
22	5751.5	51	5780.5	80	5809.5	109	5838.5
23	5752.5	52	5781.5	81	5810.5	110	5839.5
24	5753.5	53	5782.5	82	5811.5	111	5840.5
25	5754.5	54	5783.5	83	5812.5	112	5841.5
26	5755.5	55	5784.5	84	5813.5	113	5842.5
27	5756.5	56	5785.5	85	5814.5	114	5843.5
28	5757.5	57	5786.5	86	5815.5	115	5844.5
29	5758.5	58	5787.5	87	5816.5	/	1

UNII-3 SRD 5G 20MHz Bandwidth (5735.5MHz-5839.5MHz)								
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	
1	5735.5	28	5762.5	55	5789.5	82	5816.5	
2	5736.5	29	5763.5	56	5790.5	83	5817.5	
3	5737.5	30	5764.5	57	5791.5	84	5818.5	
4	5738.5	31	5765.5	58	5792.5	85	5819.5	
5	5739.5	32	5766.5	59	5793.5	86	5820.5	
6	5740.5	33	5767.5	60	5794.5	87	5821.5	
7	5741.5	34	5768.5	61	5795.5	88	5822.5	
8	5742.5	35	5769.5	62	5796.5	89	5823.5	
9	5743.5	36	5770.5	63	5797.5	90	5824.5	
10	5744.5	37	5771.5	64	5798.5	91	5825.5	
11	5745.5	38	5772.5	65	5799.5	92	5826.5	
12	5746.5	39	5773.5	66	5800.5	93	5827.5	
13	5747.5	40	5774.5	67	5801.5	94	5828.5	
14	5748.5	41	5775.5	68	5802.5	95	5829.5	
15	5749.5	42	5776.5	69	5803.5	96	5830.5	
16	5750.5	43	5777.5	70	5804.5	97	5831.5	



17	5751.5	44	5778.5	71	5805.5	98	5832.5
18	5752.5	45	5779.5	72	5806.5	99	5833.5
19	5753.5	46	5780.5	73	5807.5	100	5834.5
20	5754.5	47	5781.5	74	5808.5	101	5835.5
21	5755.5	48	5782.5	75	5809.5	102	5836.5
22	5756.5	49	5783.5	76	5810.5	103	5837.5
23	5757.5	50	5784.5	77	5811.5	104	5838.5
24	5758.5	51	5785.5	78	5812.5	105	5839.5
25	5759.5	52	5786.5	79	5813.5	/	/
26	5760.5	53	5787.5	80	5814.5	/	/
27	5761.5	54	5788.5	81	5815.5	/	/

UNII-3 SRD 5G 40MHz Bandwidth (5745.5MHz-5829.5MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5745.5	23	5767.5	45	5789.5	67	5811.5
2	5746.5	24	5768.5	46	5790.5	68	5812.5
3	5747.5	25	5769.5	47	5791.5	69	5813.5
4	5748.5	26	5770.5	48	5792.5	70	5814.5
5	5749.5	27	5771.5	49	5793.5	71	5815.5
6	5750.5	28	5772.5	50	5794.5	72	5816.5
7	5751.5	29	5773.5	51	5795.5	73	5817.5
8	5752.5	30	5774.5	52	5796.5	74	5818.5
9	5753.5	31	5775.5	53	5797.5	75	5819.5
10	5754.5	32	5776.5	54	5798.5	76	5820.5
11	5755.5	33	5777.5	55	5799.5	77	5821.5
12	5756.5	34	5778.5	56	5800.5	78	5822.5
13	5757.5	35	5779.5	57	5801.5	79	5823.5
14	5758.5	36	5780.5	58	5802.5	80	5824.5
15	5759.5	37	5781.5	59	5803.5	81	5825.5
16	5760.5	38	5782.5	60	5804.5	82	5826.5
17	5761.5	39	5783.5	61	5805.5	83	5827.5
18	5762.5	40	5784.5	62	5806.5	84	5828.5
19	5763.5	41	5785.5	63	5807.5	85	5829.5
20	5764.5	42	5786.5	64	5808.5	/	/
21	5765.5	43	5787.5	65	5809.5	/	/
22	5766.5	44	5788.5	66	5810.5	/	/



Antenna No.	Antenna No. Frequency (MHz)		Max Antenna Gain (dBi)					
0	5150~5725	Dipole antenna	2.5					
0	5725~5850	Dipole antenna	3					
4	5150~5725	Dipole antenna	2.5					
I	5725~5850	Dipole antenna	3					
2	5150~5725	Dipole antenna	2.5					
۷.	5725~5850	Dipole antenna	3					
2	5150~5725	Dipole antenna	2.5					
5	5725~5850	Dipole antenna	3					

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The EUT support Cyclic Shift Diversity(CDD) mode.

MIMO output power port and MIMO PSD port summing was performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following mothed.

For output power measurements:

Directional gain= G_{ANT} + Array Gain = 2.5 dBi (for 5150~5725MHz) or 3 dBi (for 5725~5850MHz) G_{ANT} : equal to the gain of the antenna having the highest gain

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \le 4$

For power spectral density (PSD) measurements:

Directional gain= G_{ANT} + Array Gain = 5.51 dBi (for 5150~5725MHz) or 6.01 dBi (for 5725~5850MHz)

Array Gain = 10 log (NANT/NSS) dB.

NANT: number of transmit antennas

Nss: number of spatial streams, the worst case directional gain will occur when $N_{SS} = 1$ Note: The value of the antenna gain was declared by customer. The customer declared that SRD 2.4G and SRD 5G can't transmit simultaneously.

Test Mode	Transmit and Receive Mode	Description
1.4MHz Mode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.
1.4MHz- CAMode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.
3MHz Mode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.
3MHz-CA Mode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.
10MHz Mode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.
20MHz Mode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.
40MHz Mode	⊠2TX, 4RX	ANT 0,1, 2,3 can be used as transmitting and receiving antenna.

Note: The device supports 2x4 MIMO (2Tx, 4Rx), with four different combinations of transmit antenna - ANT 0&1, ANT 0&3, ANT 2&1 or ANT 2&3.

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5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 5150 ~ 5850MHz Band						
Test Software DjiSdrConsole						
	Transmit Antenna	Tes	Test Software setting value			
Modulation		NCB: 1.4M	Hz/3MHz/10MHz/20M	/Hz/40MHz		
Wode	Number	Low Channel	MID Channel	High Channel		
All	All	Default	Default	Default		

5.6. THE WORSE CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.6.

Worst case Data Rates declared by the customer:

SRD 5G-1.4M Mode/QPSK SRD 5G-1.4M-CA Mode/QPSK SRD 5G-3M Mode/QPSK SRD 5G-3M-CA Mode/QPSK SRD 5G-10M Mode/QPSK SRD 5G-20M Mode/QPSK SRD 5G-40M Mode/QPSK

The EUT has 4 separate antennas which correspond to 4 separate antenna ports. The EUT only support 2TX4RX mode, and Only 4 TX models as ANT 0&1/ANT 0&3/ANT 2&1/ANT 2&3 were used.

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

Duty cycle and occupied channel bandwidth tests, only one chain were tested since the duty cycle and bandwidth does not change depending on chains used.

The EUT support Cyclic Shift Diversity (CDD), They use the same conducted power per chain in any given mode, so we only chose the worst-case mode CDD 2TX at ANT 0&1 for final testing.



5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	ThinkPad E480	/
2	DJI RONIN 4D	DJI	R4D	/
3	DJI Ultra-Bright Remote Monitor	DJI	RXD2	FCC ID: 2ANDR-RXD2202109

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	/	/	1.0	/

ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

TEST SETUP

The EUT can work in engineering mode with a software.

SETUP DIAGRAM FOR TESTS

For DFS Test:





For the other RF Test:





6. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions									
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date				
EMI Test Receiver	R&S	ESR3	101961	Nov. 12, 2020	Nov. 11, 2021				
Two-Line V- Network	R&S	ENV216	101983	Nov. 12, 2020	Nov. 11, 2021				
		So	ftware						
[Description		Manufacturer	Name	Version				
Test Software	for Conducted	Emissions	Farad	EZ-EMC	Ver. UL-3A1				
		Radiated	Emissions						
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date				
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Nov. 12, 2020	Nov. 11, 2021				
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Aug. 11, 2018	Aug. 10, 2021				
Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Nov. 11, 2021				
EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Nov. 11, 2021				
Horn Antenna	TDK	HRN-0118	130939	Sept. 17, 2018	Sept. 17, 2021				
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Nov. 20, 2020	Nov. 19, 2021				
Horn Antenna	Schwarzbeck	BBHA9170	#691	Aug. 11, 2018	Aug. 11, 2021				
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Nov. 12, 2020	Nov. 11, 2021				
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Nov. 12, 2020	Nov. 11, 2021				
Loop antenna	Schwarzbeck	1519B	00008	Jan.17, 2019	Jan.17,2022				
Preamplifier	TDK	PA-02-001- 3000	TRS-302- 00050	Nov. 12, 2020	Nov. 11, 2021				
Preamplifier	Mini-Circuits	ZX60-83LN- S+	SUP01201941	Nov. 20, 2020	Nov. 19, 2021				
Band Reject Filter	Wainwright	WRCJV8- 2350-2400- 2483.5- 2533.5-40SS	4	Nov. 12, 2020	Nov. 11, 2021				
Highpass Filter	Wainwright	WHKX10- 5850-6500- 1800-40SS	4	Nov. 12, 2020	Nov. 11, 2021				
Band Reject Filter	Wainwright	WRCJV12- 5695-5725- 5850-5880- 40SS	4	Nov. 12, 2020	Nov. 11, 2021				



Band Reject Filter	Wainwright	WRCJV20- 5120-5150- 5350-5380- 60SS	2	Nov. 12, 2020	Nov. 11, 2021
Band Reject Filter	Wainwright	WRCJV20- 5440-5470- 5725-5755- 60SS	1	Nov. 12, 2020	Nov. 11, 2021
		So	ftware		
Description		Manufacturer	Name	Version	
Test Software	for Radiated E	Emissions	Farad	EZ-EMC	Ver. UL-3A1

Tonsend RF Test System									
Equipment	Manufacturer	Мо	odel No.	Serial No.	Last	t Cal.	Due. D)ate	
Wideband Radio Communication Tester	R&S	R&S C		155523	Nov.2	0,2020	Nov.19,	2021	
PXA Signal Analyzer	Keysight	Ν	19030A	MY55410512	Nov.2	0,2020	Nov.19,	2021	
MXG Vector Signal Generator	Keysight	Keysight N5182B		MY56200284	Nov.2	0,2020	Nov.19,	2021	
MXG Vector Signal Generator	Keysight	t N5172B		MY56200301	Nov.2	0,2020	Nov.19,	2021	
DC power supply	Keysight	Ш	3642A	MY55159130	Nov.2	4,2020	Nov.23,	2021	
Temperature & Humidity Chamber	SANMOOD	SG	-80-CC-2	2088	Nov.2	0,2020	Nov.19,	2021	
Software									
Description	Manufacturer			Name		١	/ersion		
Tonsend SRD Test Syste	m Tonsend	1	JS1120	-3 RF Test Sys	stem	2.6	6.77.0518	8	

R&S TS 8997 Test System										
Equipment	Manufacturer	Model No.	Seria	l No.	Last Cal.		Next Cal.			
Power sensor, Power Meter	R&S	OSP120	100	921	21 Mar.23,2021		Mar.22,2022			
Vector Signal Generator	R&S	SMBV100A	261	637 Nov.20,2020		Nov.19,2021				
Signal Generator	R&S	SMB100A	178	178553 Nov.20,202		2020	Nov.19,2021			
Signal Analyzer	R&S	FSV40	A151	2015	Nov.20,2	2020	Nov.19,2021			
		Softwa	are							
Description		Manufacturer		Name			Version			
For R&S TS 8997 Te	est System	Rohde & Schwarz R&S		R&S EMC 32			V10.40.10			



7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.B.

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW \geq EBW if possible; otherwise, set RBW to the largest available value. Set VBW \geq RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T \leq 16.7 microseconds.)

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5 C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 12V

RESULTS

Please refer to appendix D.



7.2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH

<u>LIMITS</u>

CFR 47 FCC Part15, Subpart E				
Test Item	Limit	Frequency Range (MHz)		
26 dB Emission Bandwidth	For reporting purposes only.	5150 ~ 5250		
26 dB Emission Bandwidth	For reporting purposes only.	5250 ~ 5350		
26 dB Emission Bandwidth	For reporting purposes only.	5470 ~ 5725 (For FCC) 5470 ~ 5600 (For ISED) 5650 ~ 5725 (For ISED)		
6 dB Emission Bandwidth	The minimum 6 dB emission bandwidth shall be 500 kHz.	5725 ~ 5850		
99 % Occupied Bandwidth	For reporting purposes only.	5150 ~ 5850 (For ISED)		

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C1. for 26 dB Emission Bandwidth; section II.C2. for 6 dB Emission Bandwidth; section II.D. for 99 % Occupied Bandwidth.

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

Center Frequency	The center frequency of the channel under test	
Detector	Peak	
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz For 26 dB Emission bandwidth: approximately 1 % of the EBW. For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.	
VBW	For 6 dB Bandwidth: ≥ 3*RBW For 26 dB Bandwidth: > RBW For 99 % Bandwidth: >3*RBW	
Trace	Max hold	
Sweep	Auto couple	

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.

TEST SETUP





TEST ENVIRONMENT

Temperature	25.5 C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 12V

RESULTS

Please refer to Appendix A1&A2&A3.



7.3. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	
Conducted	 Outdoor Access Point: 1 W (30 dBm) Indoor Access Point: 1 W (30 dBm) Fixed Point-To-Point Access Points: 1 W (30 dBm) Client Devices: 250 mW (24 dBm) 	5150 ~ 5250	
Output Power	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250 ~ 5350 5470 ~ 5725	
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850	

Note:

The above limits are based upon the maximum antenna gain does not exceed 6 dBi.

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep $\ge 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\le \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode. (vii) If transmit duty cycle < 98 %, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle \ge 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."

(viii) Trace average at least 100 traces in power averaging (rms) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

Method PM (Measurement using an RF average power meter):

(i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:

a. The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b. At all times when the EUT is transmitting, it must be transmitting at its maximum power

control level.

c. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

(ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in II.B.

(iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

(iv) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g., 10 log (1/0.25) if the duty cycle is 25 %).

Method PM-G (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. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Straddle channel power was measured using spectrum analyzer.



TEST SETUP



TEST ENVIRONMENT

Temperature	25.5 C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 12V

RESULTS

Please refer to Appendix B.



7.4. POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	
Power Spectral	 Outdoor Access Point: 17 dBm/MHz Indoor Access Point: 17 dBm/MHz Fixed Point-To-Point Access Points: 17 dBm/MHz Client Devices: 11 dBm/MHz 	5150 ~ 5250	
Density	11 dBm/MHz	5250 ~ 5350 5470 ~ 5725	
	30 dBm/500kHz	5725 ~ 5850	

Note:

The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.F.



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

Center Frequency	The center frequency of the channel under test	
Detector	RMS	
RBW	1 MHz	
VBW	≥3 × RBW	
Span	Encompass the entire emissions bandwidth (EBW) of the signal	
Trace	Max hold	
Sweep time	Auto	

For U-NII-1, U-NII-2A and U-NII-2C band:

For U-NII-3:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Allow trace to fully stabilize and Use the peak search function on the instrument to find the peak of the spectrum and record its value.

Add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum, the result is the Maximum PSD over 1 MHz / 500 kHz reference bandwidth.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5 C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 12V

RESULTS

Please refer to Appendix C.



8. RADIATED TEST RESULTS

LIMITS

Refer to CFR 47 FCC §15.205, §15.209 and §15.407 (b).

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Stren (dBuV/m)	gth Limit at 3 m
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz			
Frequency (MHz) Field strength (microvolts/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	



FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz	
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15	
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46	
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75	
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5	
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2	
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5	
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7	
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4	
6.31175-6.31225	123-138	2200-2300	14.47-14.5	
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2	
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4	
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12	
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0	
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8	
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5	
12.57675-12.57725	322-335.4	3600-4400	(²)	
13.36-13.41				

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. ²Above 38.6c

Limits of unwanted/undesirable emission out of the restricted bands refer to CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1GHz)				
Frequency Range		Field Strength Limit		
(MHz)		(dBuV/m) at 3 m		
5150~5250 MHz				
5250~5350 MHz	PK: -27 (dBm/MHz)	PK:68.2(dBµV/m)		
5470~5725 MHz				
	PK: -27 (dBm/MHz) *1	PK: 68.2(dBµV/m) *1		
5725~5850 MHz	PK: 10 (dBm/MHz) *2	PK: 105.2 (dBµV/m) *2		
	PK: 15.6 (dBm/MHz) *3	PK: 110.8(dBµV/m) *3		
	PK: 27 (dBm/MHz) *4	PK: 122.2 (dBµV/m) *4		

Note:

*1 beyond 75 MHz or more above of the band edge.

*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.



TEST SETUP AND PROCEDURE

Below 30 MHz



The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz) / 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz) / 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode remeasured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30 m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.



Below 1 GHz and above 30 MHz



The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.



Above 1 GHz



The setting of the spectrum analyser

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.G.3 ~ II.G.6.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5 m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.



X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT do not support transmit simultaneously for SRD 2.4G and SRD 5G.

Note 3: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

TEST ENVIRONMENT

Temperature	22.7 C	Relative Humidity	64.3 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 12V

RESULTS



8.1. RESTRICTED BANDEDGE

8.1.1. 5G SRD 1.4MHz MODE

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5628.130	17.75	41.68	59.43	68.20	-8.77	peak
2	5725.000	63.05	41.67	104.72	122.20	-17.48	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	29.55	42.52	72.07	122.20	-50.13	peak
2	5943.650	19.32	42.82	62.14	68.20	-6.06	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.

PEAK


8.1.2. 5G SRD 1.4MHz CA MODE

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5640.455	18.10	41.66	59.76	68.20	-8.44	peak
2	5725.000	38.65	41.67	80.32	122.20	-41.88	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	56.14	42.52	98.66	122.20	-23.54	peak
2	5952.400	19.29	42.78	62.07	68.20	-6.13	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.



8.1.3. 5G SRD 3MHz MODE

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5624.795	17.80	41.69	59.49	68.20	-8.71	peak
2	5725.000	54.78	41.67	96.45	122.20	-25.75	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	23.00	42.52	65.52	122.20	-56.68	peak
2	5850.025	22.99	42.53	65.52	122.14	-56.62	peak
3	5960.275	18.68	42.74	61.42	68.20	-6.78	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.



8.1.4. 5G SRD 3MHz CA MODE

UNII-3 BAND



RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5640.890	17.66	41.66	59.32	68.20	-8.88	peak
2	5725.000	25.70	41.67	67.37	122.20	-54.83	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	47.00	42.52	89.52	122.20	-32.68	peak
2	5943.125	18.35	42.83	61.18	68.20	-7.02	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.



8.1.5. 5G SRD 10MHz MODE

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5628.200	24.01	41.68	65.69	68.20	-2.51	peak
2	5650.000	22.27	41.64	63.91	68.20	-4.29	peak
3	5700.000	23.46	41.55	65.01	105.20	-40.19	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5875.000	23.14	42.78	65.92	105.20	-39.28	peak
2	5925.000	22.53	42.91	65.44	68.20	-2.76	peak
3	5978.760	23.74	42.66	66.40	68.20	-1.80	peak
4	5847.360	81.29	42.50	123.79	/	/	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.



8.1.6. 5G SRD 20MHz MODE

UNII-1 BAND

<u>RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)</u>



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	21.48	41.19	62.67	74.00	-11.33	peak
2	5180.180	78.36	41.45	119.81	/	/	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	8.22	41.19	49.41	54.00	-4.59	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.60	41.19	57.79	74.00	-16.21	peak
2	5179.985	70.07	41.45	111.52	/	/	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	7.75	41.19	48.94	54.00	-5.06	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



UNII-2A BAND

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5319.900	77.37	41.04	118.41	/	/	fundamental
2	5350.000	21.42	41.20	62.62	74.00	-11.38	peak
3	5350.860	23.68	41.21	64.89	74.00	-9.11	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	9.15	41.20	50.35	54.00	-3.65	AVG
2	5350.860	9.12	41.21	50.33	54.00	-3.67	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	20.16	41.82	61.98	68.20	-6.22	peak
2	5470.000	22.31	41.87	64.18	68.20	-4.02	peak
3	5499.840	74.18	42.05	116.23	/	/	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	7.46	41.82	49.28	54.00	-4.72	AVG
2	5470.000	8.10	41.87	49.97	68.20	-18.23	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5700.040	72.06	41.55	113.61	/	/	fundamental
2	5725.000	21.08	41.67	62.75	68.20	-5.45	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5650.000	22.40	41.64	64.04	68.20	-4.16	peak
2	5700.000	30.81	41.55	72.36	105.20	-32.84	peak
3	5735.600	81.20	41.71	122.91	1	1	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5839.440	81.51	42.42	123.93	/	/	fundamental
2	5875.000	30.38	42.78	73.16	105.20	-32.04	peak
3	5925.000	22.02	42.91	64.93	68.20	-3.27	peak
4	5960.220	23.95	42.74	66.69	68.20	-1.51	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.



8.1.7. 5G SRD 40MHz MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5145.320	22.79	41.14	63.93	74.00	-10.07	peak
2	5150.000	21.38	41.19	62.57	74.00	-11.43	peak
3	5198.870	68.72	41.61	110.33	/	/	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5145.320	7.80	41.14	48.94	54.00	-5.06	AVG
2	5150.000	8.19	41.19	49.38	54.00	-4.62	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



PEAK

Note: 1. Measurement = Reading Level + Correct Factor.

24.35

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

74.00

-8.43

peak

3. Peak: Peak detector.

3

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

41.22



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	8.87	41.20	50.07	54.00	-3.93	AVG
2	5354.000	8.56	41.22	49.78	54.00	-4.22	AVG

Note: 1. Measurement = Reading Level + Correct Factor

2. AVG: VBW=1/Ton where: ton is transmit duration.

3. For duty cycle, please refer to clause 7.1.



fundamental

UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



PEAK

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

109.37

1

1

3. Peak: Peak detector.

5510.040

3

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

42.02



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	7.30	41.82	49.12	54.00	-4.88	AVG
2	5470.000	7.47	41.87	49.34	68.20	-18.86	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5669.950	71.59	41.60	113.19	/	/	fundamental
2	5725.000	21.87	41.67	63.54	68.20	-4.66	peak

Note: 1. Measurement = Reading Level + Correct Factor.

If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
Peak: Peak detector.



UNII-3 BAND



RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5613.600	23.97	41.71	65.68	68.20	-2.52	peak
2	5650.000	22.00	41.64	63.64	68.20	-4.56	peak
3	5700.000	30.95	41.55	72.50	105.20	-32.70	peak
4	5745.860	75.46	41.76	117.22	/	/	fundamental

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.





RESTRICTED BANDEDGE	HIGH CHANNEL	HORIZONTAL)
REGINIOTED BANDEDGE		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5829.400	74.22	42.32	116.54	/	/	fundamental
2	5875.000	28.38	42.78	71.16	105.20	-34.04	peak
3	5925.000	22.35	42.91	65.26	68.20	-2.94	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

Note: Both horizontal and vertical had been tested, but only the worst data was recorded in the report.



8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

8.2.1. 5G SRD 10MHz MODE

UNII-3 BAND

TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.000	50.61	-13.00	37.61	74.00	-36.39	peak
2	1918.000	49.09	-10.13	38.96	74.00	-35.04	peak
3	5314.000	41.83	1.98	43.81	74.00	-30.19	peak
4	5728.000	49.88	2.49	52.37	74.00	-21.63	peak
5	5950.000	39.87	3.10	42.97	74.00	-31.03	peak
6	6658.000	36.85	5.51	42.36	74.00	-31.64	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1192.000	50.43	-13.03	37.40	74.00	-36.60	peak
2	1918.000	47.72	-10.13	37.59	74.00	-36.41	peak
3	4786.000	40.87	0.51	41.38	74.00	-32.62	peak
4	5728.000	48.84	2.49	51.33	74.00	-22.67	peak
5	6010.000	39.44	3.31	42.75	74.00	-31.25	peak
6	6382.000	37.79	4.27	42.06	74.00	-31.94	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1192.000	51.85	-13.03	38.82	74.00	-35.18	peak
2	1918.000	49.19	-10.13	39.06	74.00	-34.94	peak
3	5314.000	41.50	1.98	43.48	74.00	-30.52	peak
4	5530.000	42.82	2.25	45.07	74.00	-28.93	peak
5	5788.000	46.60	2.50	49.10	74.00	-24.90	peak
6	5884.000	40.50	2.84	43.34	74.00	-30.66	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.000	50.92	-13.00	37.92	74.00	-36.08	peak
2	1918.000	47.24	-10.13	37.11	74.00	-36.89	peak
3	5314.000	40.37	1.98	42.35	74.00	-31.65	peak
4	5788.000	48.84	2.50	51.34	74.00	-22.66	peak
5	5926.000	39.26	3.01	42.27	74.00	-31.73	peak
6	6658.000	36.28	5.51	41.79	74.00	-32.21	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1204.000	51.48	-12.98	38.50	74.00	-35.50	peak
2	1918.000	49.60	-10.13	39.47	74.00	-34.53	peak
3	5488.000	42.82	2.13	44.95	74.00	-29.05	peak
4	5668.000	43.92	2.47	46.39	74.00	-27.61	peak
5	5848.000	49.79	2.70	52.49	74.00	-21.51	peak
6	6652.000	36.58	5.52	42.10	74.00	-31.90	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.000	51.07	-13.00	38.07	74.00	-35.93	peak
2	1918.000	48.25	-10.13	38.12	74.00	-35.88	peak
3	4780.000	40.86	0.48	41.34	74.00	-32.66	peak
4	5524.000	39.89	2.23	42.12	74.00	-31.88	peak
5	5848.000	47.59	2.70	50.29	74.00	-23.71	peak
6	6658.000	36.08	5.51	41.59	74.00	-32.41	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

8.3.1. 5G SRD 1.4MHz MODE

UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9233.000	37.89	10.72	48.61	74.00	-25.39	peak
2	10542.000	37.16	13.25	50.41	74.00	-23.59	peak
3	11807.000	35.87	16.70	52.57	74.00	-21.43	peak
4	13875.000	32.59	18.04	50.63	74.00	-23.37	peak
5	16900.000	30.62	21.18	51.80	74.00	-22.20	peak
6	17296.000	29.06	22.18	51.24	74.00	-22.76	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9277.000	38.11	10.90	49.01	74.00	-24.99	peak
2	10608.000	36.52	13.47	49.99	74.00	-24.01	peak
3	11741.000	34.64	16.43	51.07	74.00	-22.93	peak
4	13864.000	32.66	18.03	50.69	74.00	-23.31	peak
5	16438.000	31.63	19.98	51.61	74.00	-22.39	peak
6	17263.000	29.78	22.28	52.06	74.00	-21.94	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.


HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9376.000	37.75	11.34	49.09	74.00	-24.91	peak
2	10949.000	35.49	14.27	49.76	74.00	-24.24	peak
3	11807.000	34.80	16.70	51.50	74.00	-22.50	peak
4	13919.000	33.19	17.97	51.16	74.00	-22.84	peak
5	14810.000	32.57	17.82	50.39	74.00	-23.61	peak
6	17681.000	28.64	23.12	51.76	74.00	-22.24	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8980.000	37.23	11.52	48.75	74.00	-25.25	peak
2	10597.000	36.74	13.45	50.19	74.00	-23.81	peak
3	11356.000	36.31	15.31	51.62	74.00	-22.38	peak
4	11796.000	34.80	16.69	51.49	74.00	-22.51	peak
5	13952.000	32.62	17.94	50.56	74.00	-23.44	peak
6	17098.000	29.89	21.91	51.80	74.00	-22.20	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9057.000	37.54	11.40	48.94	74.00	-25.06	peak
2	10608.000	36.14	13.47	49.61	74.00	-24.39	peak
3	11730.000	34.81	16.39	51.20	74.00	-22.80	peak
4	13919.000	32.45	17.97	50.42	74.00	-23.58	peak
5	14766.000	32.43	17.78	50.21	74.00	-23.79	peak
6	16856.000	31.07	21.10	52.17	74.00	-21.83	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10564.000	36.65	13.33	49.98	74.00	-24.02	peak
2	11510.000	36.51	15.62	52.13	74.00	-21.87	peak
3	11774.000	35.19	16.58	51.77	74.00	-22.23	peak
4	13952.000	32.60	17.94	50.54	74.00	-23.46	peak
5	14425.000	33.30	17.89	51.19	74.00	-22.81	peak
6	16592.000	30.39	20.75	51.14	74.00	-22.86	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.2. 5G SRD 1.4MHz CA MODE

UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



3	11818.000	35.16	16.68	51.84	/4.00	-22.16	реак
4	13919.000	32.57	17.97	50.54	74.00	-23.46	peak
5	17208.000	28.87	22.45	51.32	74.00	-22.68	peak
6	17956.000	27.70	24.00	51.70	74.00	-22.30	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10564.000	36.62	13.33	49.95	74.00	-24.05	peak
2	11543.000	35.25	15.68	50.93	74.00	-23.07	peak
3	12533.000	33.51	16.76	50.27	74.00	-23.73	peak
4	13919.000	32.45	17.97	50.42	74.00	-23.58	peak
5	14436.000	32.19	17.88	50.07	74.00	-23.93	peak
6	17241.000	29.27	22.34	51.61	74.00	-22.39	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9354.000	37.33	11.23	48.56	74.00	-25.44	peak
2	10487.000	37.33	13.03	50.36	74.00	-23.64	peak
3	11719.000	35.33	16.34	51.67	74.00	-22.33	peak
4	13875.000	32.41	18.04	50.45	74.00	-23.55	peak
5	16592.000	30.44	20.75	51.19	74.00	-22.81	peak
6	17725.000	29.44	23.42	52.86	74.00	-21.14	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9376.000	37.89	11.34	49.23	74.00	-24.77	peak
2	10520.000	36.63	13.17	49.80	74.00	-24.20	peak
3	11367.000	36.16	15.33	51.49	74.00	-22.51	peak
4	11818.000	34.75	16.68	51.43	74.00	-22.57	peak
5	13908.000	32.86	17.99	50.85	74.00	-23.15	peak
6	17120.000	29.88	22.03	51.91	74.00	-22.09	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9387.000	37.70	11.38	49.08	74.00	-24.92	peak
2	10476.000	37.29	12.98	50.27	74.00	-23.73	peak
3	11543.000	35.80	15.68	51.48	74.00	-22.52	peak
4	12698.000	34.39	16.81	51.20	74.00	-22.80	peak
5	13908.000	32.89	17.99	50.88	74.00	-23.12	peak
6	17087.000	29.82	21.85	51.67	74.00	-22.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10597.000	35.90	13.45	49.35	74.00	-24.65	peak
2	11719.000	35.46	16.34	51.80	74.00	-22.20	peak
3	12599.000	33.38	16.83	50.21	74.00	-23.79	peak
4	13919.000	32.14	17.97	50.11	74.00	-23.89	peak
5	16735.000	30.78	20.92	51.70	74.00	-22.30	peak
6	17714.000	28.86	23.34	52.20	74.00	-21.80	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.3. 5G SRD 3MHz MODE

UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



Note: 1. Measurement = Reading Level + Correct Factor.

32.71

30.11

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

50.53

52.35

74.00

74.00

-23.47

-21.65

peak

peak

3. Peak: Peak detector.

14799.000

17274.000

5

6

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

17.82

22.24

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8936.000	37.70	11.10	48.80	74.00	-25.20	peak
2	11730.000	35.02	16.39	51.41	74.00	-22.59	peak
3	12544.000	33.52	16.77	50.29	74.00	-23.71	peak
4	13622.000	32.86	17.50	50.36	74.00	-23.64	peak
5	14656.000	32.80	17.65	50.45	74.00	-23.55	peak
6	17120.000	29.87	22.03	51.90	74.00	-22.10	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	39.44	9.17	48.61	74.00	-25.39	peak
2	9563.000	37.49	11.87	49.36	74.00	-24.64	peak
3	11730.000	35.43	16.39	51.82	74.00	-22.18	peak
4	13875.000	32.67	18.04	50.71	74.00	-23.29	peak
5	14425.000	32.62	17.89	50.51	74.00	-23.49	peak
6	17087.000	29.96	21.85	51.81	74.00	-22.19	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9233.000	38.36	10.72	49.08	74.00	-24.92	peak
2	10674.000	35.83	13.61	49.44	74.00	-24.56	peak
3	11851.000	35.30	16.64	51.94	74.00	-22.06	peak
4	12588.000	33.99	16.81	50.80	74.00	-23.20	peak
5	13853.000	32.89	18.05	50.94	74.00	-23.06	peak
6	17274.000	29.54	22.24	51.78	74.00	-22.22	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11730.000	35.67	16.39	52.06	74.00	-21.94	peak
2	12610.000	34.65	16.82	51.47	74.00	-22.53	peak
3	13908.000	33.04	17.99	51.03	74.00	-22.97	peak
4	14755.000	32.65	17.77	50.42	74.00	-23.58	peak
5	16900.000	30.95	21.18	52.13	74.00	-21.87	peak
6	17219.000	29.85	22.41	52.26	74.00	-21.74	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9057.000	37.41	11.40	48.81	74.00	-25.19	peak
2	9442.000	38.16	11.57	49.73	74.00	-24.27	peak
3	11730.000	34.61	16.39	51.00	74.00	-23.00	peak
4	13919.000	32.92	17.97	50.89	74.00	-23.11	peak
5	16460.000	31.22	20.10	51.32	74.00	-22.68	peak
6	17087.000	30.27	21.85	52.12	74.00	-21.88	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.4. 5G SRD 3MHz CA MODE

UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



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Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9574.000	37.24	11.90	49.14	74.00	-24.86	peak
2	11818.000	34.98	16.68	51.66	74.00	-22.34	peak
3	13952.000	32.44	17.94	50.38	74.00	-23.62	peak
4	14821.000	33.27	17.82	51.09	74.00	-22.91	peak
5	16603.000	30.66	20.80	51.46	74.00	-22.54	peak
6	17230.000	29.70	22.37	52.07	74.00	-21.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9475.000	36.89	11.68	48.57	74.00	-25.43	peak
2	10619.000	36.53	13.50	50.03	74.00	-23.97	peak
3	11730.000	34.45	16.39	50.84	74.00	-23.16	peak
4	13622.000	33.37	17.50	50.87	74.00	-23.13	peak
5	14678.000	32.77	17.67	50.44	74.00	-23.56	peak
6	17956.000	27.67	24.00	51.67	74.00	-22.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10509.000	36.50	13.12	49.62	74.00	-24.38	peak
2	11664.000	36.49	16.09	52.58	74.00	-21.42	peak
3	12654.000	33.36	16.81	50.17	74.00	-23.83	peak
4	13919.000	33.15	17.97	51.12	74.00	-22.88	peak
5	16900.000	30.70	21.18	51.88	74.00	-22.12	peak
6	17923.000	27.52	23.99	51.51	74.00	-22.49	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9343.000	37.84	11.19	49.03	74.00	-24.97	peak
2	10619.000	36.52	13.50	50.02	74.00	-23.98	peak
3	11730.000	35.34	16.39	51.73	74.00	-22.27	peak
4	13809.000	32.32	18.11	50.43	74.00	-23.57	peak
5	16658.000	30.22	20.85	51.07	74.00	-22.93	peak
6	17945.000	26.29	23.99	50.28	74.00	-23.72	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10487.000	36.72	13.03	49.75	74.00	-24.25	peak
2	11851.000	35.31	16.64	51.95	74.00	-22.05	peak
3	12698.000	34.24	16.81	51.05	74.00	-22.95	peak
4	13941.000	32.41	17.95	50.36	74.00	-23.64	peak
5	16933.000	30.15	21.25	51.40	74.00	-22.60	peak
6	17857.000	28.24	23.96	52.20	74.00	-21.80	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



peak

peak

peak

8.3.5. 5G SRD 10MHz MODE

UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



Note: 1. Measurement = Reading Level + Correct Factor.

32.51

28.69

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

50.55

52.03

74.00

74.00

-23.45

-21.97

3. Peak: Peak detector.

13875.000

17714.000

5

6

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

18.04

23.34

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9365.000	37.99	11.29	49.28	74.00	-24.72	peak
2	10564.000	36.75	13.33	50.08	74.00	-23.92	peak
3	11741.000	35.33	16.43	51.76	74.00	-22.24	peak
4	13963.000	32.63	17.92	50.55	74.00	-23.45	peak
5	16449.000	30.06	20.04	50.10	74.00	-23.90	peak
6	17208.000	28.96	22.45	51.41	74.00	-22.59	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9079.000	37.57	11.26	48.83	74.00	-25.17	peak
2	10553.000	36.42	13.28	49.70	74.00	-24.30	peak
3	11642.000	35.58	15.98	51.56	74.00	-22.44	peak
4	13919.000	33.02	17.97	50.99	74.00	-23.01	peak
5	17241.000	29.27	22.34	51.61	74.00	-22.39	peak
6	17967.000	28.16	24.00	52.16	74.00	-21.84	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8958.000	37.90	11.31	49.21	74.00	-24.79	peak
2	9343.000	37.76	11.19	48.95	74.00	-25.05	peak
3	11708.000	35.44	16.28	51.72	74.00	-22.28	peak
4	12533.000	33.84	16.76	50.60	74.00	-23.40	peak
5	14425.000	33.62	17.89	51.51	74.00	-22.49	peak
6	17274.000	29.42	22.24	51.66	74.00	-22.34	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9453.000	37.50	11.61	49.11	74.00	-24.89	peak
2	10564.000	36.97	13.33	50.30	74.00	-23.70	peak
3	11807.000	35.21	16.70	51.91	74.00	-22.09	peak
4	13919.000	32.43	17.97	50.40	74.00	-23.60	peak
5	16548.000	30.39	20.54	50.93	74.00	-23.07	peak
6	17681.000	28.26	23.12	51.38	74.00	-22.62	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9387.000	37.51	11.38	48.89	74.00	-25.11	peak
2	10564.000	36.42	13.33	49.75	74.00	-24.25	peak
3	11774.000	35.42	16.58	52.00	74.00	-22.00	peak
4	13908.000	32.62	17.99	50.61	74.00	-23.39	peak
5	16449.000	30.49	20.04	50.53	74.00	-23.47	peak
6	17934.000	27.89	23.99	51.88	74.00	-22.12	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.6. 5G SRD 20MHz MODE

UNII-1 BAND



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9563.000	37.16	11.87	49.03	74.00	-24.97	peak
2	10476.000	36.65	12.98	49.63	74.00	-24.37	peak
3	11785.000	33.32	16.63	49.95	74.00	-24.05	peak
4	12566.000	33.38	16.79	50.17	74.00	-23.83	peak
5	13908.000	32.21	17.99	50.20	74.00	-23.80	peak
6	17219.000	29.29	22.41	51.70	74.00	-22.30	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9266.000	37.78	10.85	48.63	74.00	-25.37	peak
2	10542.000	36.06	13.25	49.31	74.00	-24.69	peak
3	11356.000	35.35	15.31	50.66	74.00	-23.34	peak
4	13908.000	32.79	17.99	50.78	74.00	-23.22	peak
5	14744.000	32.71	17.75	50.46	74.00	-23.54	peak
6	16812.000	30.00	21.02	51.02	74.00	-22.98	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.80	9.17	47.97	74.00	-26.03	peak
2	9134.000	37.99	10.95	48.94	74.00	-25.06	peak
3	11510.000	35.14	15.62	50.76	74.00	-23.24	peak
4	13908.000	32.30	17.99	50.29	74.00	-23.71	peak
5	16460.000	30.46	20.10	50.56	74.00	-23.44	peak
6	17087.000	30.00	21.85	51.85	74.00	-22.15	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	39.64	9.17	48.81	74.00	-25.19	peak
2	10399.000	37.11	12.62	49.73	74.00	-24.27	peak
3	11741.000	35.32	16.43	51.75	74.00	-22.25	peak
4	13919.000	32.56	17.97	50.53	74.00	-23.47	peak
5	16812.000	30.88	21.02	51.90	74.00	-22.10	peak
6	17098.000	29.80	21.91	51.71	74.00	-22.29	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9343.000	37.84	11.19	49.03	74.00	-24.97	peak
2	10388.000	37.28	12.57	49.85	74.00	-24.15	peak
3	11719.000	35.47	16.34	51.81	74.00	-22.19	peak
4	13919.000	32.71	17.97	50.68	74.00	-23.32	peak
5	16438.000	31.04	19.98	51.02	74.00	-22.98	peak
6	17659.000	29.12	22.97	52.09	74.00	-21.91	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7836.000	38.95	9.38	48.33	74.00	-25.67	peak
2	9321.000	37.95	11.10	49.05	74.00	-24.95	peak
3	11708.000	34.75	16.28	51.03	74.00	-22.97	peak
4	12588.000	33.49	16.81	50.30	74.00	-23.70	peak
5	13919.000	32.33	17.97	50.30	74.00	-23.70	peak
6	16845.000	31.04	21.09	52.13	74.00	-21.87	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9376.000	37.42	11.34	48.76	74.00	-25.24	peak
2	10960.000	35.32	14.31	49.63	74.00	-24.37	peak
3	11818.000	34.31	16.68	50.99	74.00	-23.01	peak
4	14425.000	32.54	17.89	50.43	74.00	-23.57	peak
5	16845.000	30.98	21.09	52.07	74.00	-21.93	peak
6	17901.000	27.69	23.98	51.67	74.00	-22.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9376.000	37.83	11.34	49.17	74.00	-24.83	peak
2	11785.000	35.08	16.63	51.71	74.00	-22.29	peak
3	12698.000	33.36	16.81	50.17	74.00	-23.83	peak
4	13919.000	32.73	17.97	50.70	74.00	-23.30	peak
5	16460.000	30.88	20.10	50.98	74.00	-23.02	peak
6	17263.000	29.55	22.28	51.83	74.00	-22.17	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.


HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7066.000	41.46	7.86	49.32	74.00	-24.68	peak
2	10564.000	36.94	13.33	50.27	74.00	-23.73	peak
3	11499.000	35.24	15.60	50.84	74.00	-23.16	peak
4	12588.000	33.41	16.81	50.22	74.00	-23.78	peak
5	13864.000	32.95	18.03	50.98	74.00	-23.02	peak
6	17516.000	29.51	22.16	51.67	74.00	-22.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7066.000	41.98	7.86	49.84	74.00	-24.16	peak
2	9277.000	38.21	10.90	49.11	74.00	-24.89	peak
3	10564.000	36.52	13.33	49.85	74.00	-24.15	peak
4	11686.000	36.01	16.19	52.20	74.00	-21.80	peak
5	13864.000	33.18	18.03	51.21	74.00	-22.79	peak
6	17945.000	27.90	23.99	51.89	74.00	-22.11	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8969.000	37.24	11.42	48.66	74.00	-25.34	peak
2	10564.000	36.62	13.33	49.95	74.00	-24.05	peak
3	11499.000	35.54	15.60	51.14	74.00	-22.86	peak
4	13886.000	32.84	18.02	50.86	74.00	-23.14	peak
5	15613.000	32.31	17.93	50.24	74.00	-23.76	peak
6	17098.000	29.65	21.91	51.56	74.00	-22.44	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10476.000	36.01	12.98	48.99	74.00	-25.01	peak
2	11631.000	35.62	15.93	51.55	74.00	-22.45	peak
3	12698.000	34.06	16.81	50.87	74.00	-23.13	peak
4	13908.000	32.54	17.99	50.53	74.00	-23.47	peak
5	16812.000	30.53	21.02	51.55	74.00	-22.45	peak
6	17263.000	29.49	22.28	51.77	74.00	-22.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2C BAND





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9244.000	38.42	10.76	49.18	74.00	-24.82	peak
2	10597.000	36.28	13.45	49.73	74.00	-24.27	peak
3	11730.000	35.70	16.39	52.09	74.00	-21.91	peak
4	13908.000	32.75	17.99	50.74	74.00	-23.26	peak
5	16460.000	30.15	20.10	50.25	74.00	-23.75	peak
6	17560.000	28.99	22.37	51.36	74.00	-22.64	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	38.84	10.41	49.25	74.00	-24.75	peak
2	10476.000	37.55	12.98	50.53	74.00	-23.47	peak
3	11818.000	35.06	16.68	51.74	74.00	-22.26	peak
4	13875.000	32.85	18.04	50.89	74.00	-23.11	peak
5	14777.000	32.82	17.79	50.61	74.00	-23.39	peak
6	17241.000	29.87	22.34	52.21	74.00	-21.79	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9574.000	36.96	11.90	48.86	74.00	-25.14	peak
2	10498.000	36.60	13.08	49.68	74.00	-24.32	peak
3	11730.000	33.96	16.39	50.35	74.00	-23.65	peak
4	13919.000	32.32	17.97	50.29	74.00	-23.71	peak
5	14425.000	32.57	17.89	50.46	74.00	-23.54	peak
6	17076.000	30.36	21.79	52.15	74.00	-21.85	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9343.000	37.96	11.19	49.15	74.00	-24.85	peak
2	10630.000	36.59	13.52	50.11	74.00	-23.89	peak
3	11422.000	34.91	15.47	50.38	74.00	-23.62	peak
4	13919.000	32.78	17.97	50.75	74.00	-23.25	peak
5	15998.000	31.60	18.52	50.12	74.00	-23.88	peak
6	16911.000	30.86	21.21	52.07	74.00	-21.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10608.000	35.82	13.47	49.29	74.00	-24.71	peak
2	11642.000	35.12	15.98	51.10	74.00	-22.90	peak
3	13908.000	32.70	17.99	50.69	74.00	-23.31	peak
4	14810.000	32.59	17.82	50.41	74.00	-23.59	peak
5	16999.000	29.73	21.37	51.10	74.00	-22.90	peak
6	17945.000	27.85	23.99	51.84	74.00	-22.16	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9013.000	37.16	11.65	48.81	74.00	-25.19	peak
2	11741.000	34.36	16.43	50.79	74.00	-23.21	peak
3	12544.000	33.37	16.77	50.14	74.00	-23.86	peak
4	13930.000	33.22	17.97	51.19	74.00	-22.81	peak
5	17208.000	29.04	22.45	51.49	74.00	-22.51	peak
6	17923.000	28.15	23.99	52.14	74.00	-21.86	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-3 BAND



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9343.000	37.33	11.19	48.52	74.00	-25.48	peak
2	10586.000	36.24	13.41	49.65	74.00	-24.35	peak
3	11642.000	35.89	15.98	51.87	74.00	-22.13	peak
4	13886.000	33.49	18.02	51.51	74.00	-22.49	peak
5	16801.000	31.11	21.00	52.11	74.00	-21.89	peak
6	17714.000	28.33	23.34	51.67	74.00	-22.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9244.000	38.38	10.76	49.14	74.00	-24.86	peak
2	10597.000	35.99	13.45	49.44	74.00	-24.56	peak
3	11697.000	35.28	16.24	51.52	74.00	-22.48	peak
4	12610.000	34.95	16.82	51.77	74.00	-22.23	peak
5	14810.000	32.70	17.82	50.52	74.00	-23.48	peak
6	17065.000	30.21	21.73	51.94	74.00	-22.06	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9387.000	38.10	11.38	49.48	74.00	-24.52	peak
2	10619.000	36.42	13.50	49.92	74.00	-24.08	peak
3	11829.000	35.23	16.67	51.90	74.00	-22.10	peak
4	13919.000	32.50	17.97	50.47	74.00	-23.53	peak
5	17175.000	29.73	22.33	52.06	74.00	-21.94	peak
6	17934.000	27.44	23.99	51.43	74.00	-22.57	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10333.000	37.43	12.33	49.76	74.00	-24.24	peak
2	11697.000	35.69	16.24	51.93	74.00	-22.07	peak
3	12599.000	33.02	16.83	49.85	74.00	-24.15	peak
4	13952.000	32.50	17.94	50.44	74.00	-23.56	peak
5	17098.000	30.11	21.91	52.02	74.00	-21.98	peak
6	17923.000	28.08	23.99	52.07	74.00	-21.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9321.000	37.91	11.10	49.01	74.00	-24.99	peak
2	10410.000	36.76	12.67	49.43	74.00	-24.57	peak
3	11818.000	34.66	16.68	51.34	74.00	-22.66	peak
4	13919.000	33.60	17.97	51.57	74.00	-22.43	peak
5	14810.000	32.83	17.82	50.65	74.00	-23.35	peak
6	17274.000	29.07	22.24	51.31	74.00	-22.69	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7770.000	39.10	9.37	48.47	74.00	-25.53	peak
2	9376.000	38.00	11.34	49.34	74.00	-24.66	peak
3	10476.000	36.54	12.98	49.52	74.00	-24.48	peak
4	11730.000	35.79	16.39	52.18	74.00	-21.82	peak
5	13908.000	32.42	17.99	50.41	74.00	-23.59	peak
6	17065.000	29.60	21.73	51.33	74.00	-22.67	peak

Note: 1. Measurement = Reading Level + Correct Factor.

If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.7. 5G SRD 40MHz MODE

UNII-1 BAND



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	38.95	9.24	48.19	74.00	-25.81	peak
2	9574.000	37.40	11.90	49.30	74.00	-24.70	peak
3	10564.000	37.08	13.33	50.41	74.00	-23.59	peak
4	12698.000	33.71	16.81	50.52	74.00	-23.48	peak
5	14766.000	32.47	17.78	50.25	74.00	-23.75	peak
6	17219.000	29.49	22.41	51.90	74.00	-22.10	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9365.000	37.78	11.29	49.07	74.00	-24.93	peak
2	10520.000	36.46	13.17	49.63	74.00	-24.37	peak
3	11785.000	34.01	16.63	50.64	74.00	-23.36	peak
4	13919.000	32.80	17.97	50.77	74.00	-23.23	peak
5	14678.000	32.22	17.67	49.89	74.00	-24.11	peak
6	17263.000	29.06	22.28	51.34	74.00	-22.66	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.86	9.35	48.21	74.00	-25.79	peak
2	9244.000	38.56	10.76	49.32	74.00	-24.68	peak
3	11818.000	34.88	16.68	51.56	74.00	-22.44	peak
4	12511.000	33.64	16.74	50.38	74.00	-23.62	peak
5	13919.000	33.01	17.97	50.98	74.00	-23.02	peak
6	16625.000	30.33	20.81	51.14	74.00	-22.86	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9387.000	36.87	11.38	48.25	74.00	-25.75	peak
2	10564.000	35.90	13.33	49.23	74.00	-24.77	peak
3	11807.000	34.97	16.70	51.67	74.00	-22.33	peak
4	13039.000	33.70	16.84	50.54	74.00	-23.46	peak
5	13919.000	32.58	17.97	50.55	74.00	-23.45	peak
6	16834.000	30.55	21.06	51.61	74.00	-22.39	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2A BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9321.000	37.94	11.10	49.04	74.00	-24.96	peak
2	10344.000	37.17	12.38	49.55	74.00	-24.45	peak
3	11796.000	34.43	16.69	51.12	74.00	-22.88	peak
4	13974.000	32.27	17.90	50.17	74.00	-23.83	peak
5	17186.000	29.33	22.39	51.72	74.00	-22.28	peak
6	17648.000	29.20	22.89	52.09	74.00	-21.91	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7022.000	43.57	7.63	51.20	74.00	-22.80	peak
2	9563.000	37.45	11.87	49.32	74.00	-24.68	peak
3	10597.000	35.95	13.45	49.40	74.00	-24.60	peak
4	11730.000	35.12	16.39	51.51	74.00	-22.49	peak
5	13930.000	32.47	17.97	50.44	74.00	-23.56	peak
6	17769.000	28.44	23.73	52.17	74.00	-21.83	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7077.000	42.35	7.92	50.27	74.00	-23.73	peak
2	10366.000	37.26	12.48	49.74	74.00	-24.26	peak
3	11796.000	34.53	16.69	51.22	74.00	-22.78	peak
4	12599.000	33.62	16.83	50.45	74.00	-23.55	peak
5	13875.000	32.63	18.04	50.67	74.00	-23.33	peak
6	14821.000	33.17	17.82	50.99	74.00	-23.01	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9376.000	37.67	11.34	49.01	74.00	-24.99	peak
2	11741.000	34.85	16.43	51.28	74.00	-22.72	peak
3	12599.000	33.63	16.83	50.46	74.00	-23.54	peak
4	13864.000	32.63	18.03	50.66	74.00	-23.34	peak
5	14799.000	32.51	17.82	50.33	74.00	-23.67	peak
6	17208.000	28.86	22.45	51.31	74.00	-22.69	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9178.000	38.68	10.69	49.37	74.00	-24.63	peak
2	10553.000	36.56	13.28	49.84	74.00	-24.16	peak
3	11807.000	34.99	16.70	51.69	74.00	-22.31	peak
4	12665.000	33.61	16.82	50.43	74.00	-23.57	peak
5	13875.000	33.01	18.04	51.05	74.00	-22.95	peak
6	17659.000	29.14	22.97	52.11	74.00	-21.89	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9244.000	38.52	10.76	49.28	74.00	-24.72	peak
2	10597.000	36.41	13.45	49.86	74.00	-24.14	peak
3	11730.000	35.86	16.39	52.25	74.00	-21.75	peak
4	13908.000	32.96	17.99	50.95	74.00	-23.05	peak
5	16801.000	30.96	21.00	51.96	74.00	-22.04	peak
6	17923.000	27.87	23.99	51.86	74.00	-22.14	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8969.000	37.56	11.42	48.98	74.00	-25.02	peak
2	10410.000	37.22	12.67	49.89	74.00	-24.11	peak
3	11356.000	35.79	15.31	51.10	74.00	-22.90	peak
4	12610.000	34.12	16.82	50.94	74.00	-23.06	peak
5	14447.000	32.50	17.86	50.36	74.00	-23.64	peak
6	17549.000	29.33	22.33	51.66	74.00	-22.34	peak
7	17549.000	29.33	22.33	51.66	74.00	-22.34	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9134.000	37.82	10.95	48.77	74.00	-25.23	peak
2	10597.000	36.57	13.45	50.02	74.00	-23.98	peak
3	11785.000	35.24	16.63	51.87	74.00	-22.13	peak
4	12610.000	33.56	16.82	50.38	74.00	-23.62	peak
5	14821.000	32.80	17.82	50.62	74.00	-23.38	peak
6	17197.000	29.31	22.46	51.77	74.00	-22.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9343.000	38.04	11.19	49.23	74.00	-24.77	peak
2	10564.000	36.92	13.33	50.25	74.00	-23.75	peak
3	11741.000	35.59	16.43	52.02	74.00	-21.98	peak
4	12610.000	33.84	16.82	50.66	74.00	-23.34	peak
5	13919.000	32.96	17.97	50.93	74.00	-23.07	peak
6	16812.000	30.87	21.02	51.89	74.00	-22.11	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9574.000	37.26	11.90	49.16	74.00	-24.84	peak
2	10608.000	37.07	13.47	50.54	74.00	-23.46	peak
3	11752.000	34.60	16.48	51.08	74.00	-22.92	peak
4	13864.000	33.30	18.03	51.33	74.00	-22.67	peak
5	14810.000	32.41	17.82	50.23	74.00	-23.77	peak
6	17670.000	28.97	23.04	52.01	74.00	-21.99	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-3 BAND



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9365.000	37.70	11.29	48.99	74.00	-25.01	peak
2	10575.000	36.07	13.36	49.43	74.00	-24.57	peak
3	11796.000	36.04	16.69	52.73	74.00	-21.27	peak
4	13039.000	33.50	16.84	50.34	74.00	-23.66	peak
5	13941.000	32.31	17.95	50.26	74.00	-23.74	peak
6	17219.000	29.31	22.41	51.72	74.00	-22.28	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9376.000	37.89	11.34	49.23	74.00	-24.77	peak
2	10509.000	36.56	13.12	49.68	74.00	-24.32	peak
3	11796.000	35.34	16.69	52.03	74.00	-21.97	peak
4	13853.000	32.18	18.05	50.23	74.00	-23.77	peak
5	14678.000	32.33	17.67	50.00	74.00	-24.00	peak
6	17208.000	28.79	22.45	51.24	74.00	-22.76	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit. 3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10476.000	36.66	12.98	49.64	74.00	-24.36	peak
2	11730.000	35.17	16.39	51.56	74.00	-22.44	peak
3	13875.000	32.74	18.04	50.78	74.00	-23.22	peak
4	14810.000	32.15	17.82	49.97	74.00	-24.03	peak
5	15998.000	32.69	18.52	51.21	74.00	-22.79	peak
6	17285.000	29.11	22.21	51.32	74.00	-22.68	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9640.000	36.85	11.79	48.64	74.00	-25.36	peak
2	10597.000	36.00	13.45	49.45	74.00	-24.55	peak
3	11818.000	35.55	16.68	52.23	74.00	-21.77	peak
4	13908.000	32.36	17.99	50.35	74.00	-23.65	peak
5	16823.000	30.42	21.05	51.47	74.00	-22.53	peak
6	17186.000	29.95	22.39	52.34	74.00	-21.66	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10564.000	36.05	13.33	49.38	74.00	-24.62	peak
2	11818.000	35.07	16.68	51.75	74.00	-22.25	peak
3	12698.000	33.24	16.81	50.05	74.00	-23.95	peak
4	13853.000	32.39	18.05	50.44	74.00	-23.56	peak
5	16438.000	30.76	19.98	50.74	74.00	-23.26	peak
6	16856.000	30.41	21.10	51.51	74.00	-22.49	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9365.000	37.76	11.29	49.05	74.00	-24.95	peak
2	10509.000	36.43	13.12	49.55	74.00	-24.45	peak
3	11334.000	35.27	15.26	50.53	74.00	-23.47	peak
4	13941.000	32.36	17.95	50.31	74.00	-23.69	peak
5	14821.000	31.81	17.82	49.63	74.00	-24.37	peak
6	16812.000	30.25	21.02	51.27	74.00	-22.73	peak

Note: 1. Measurement = Reading Level + Correct Factor.

If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.


8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

8.4.1. 5G SRD 10MHz MODE





NO.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18248.000	50.68	-5.56	45.12	74.00	-28.88	peak
2	20000.000	50.81	-5.45	45.36	74.00	-28.64	peak
3	21248.000	49.79	-4.77	45.02	74.00	-28.98	peak
4	23064.000	48.99	-3.42	45.57	74.00	-28.43	peak
5	24248.000	47.82	-2.83	44.99	74.00	-29.01	peak
6	25968.000	45.63	-1.00	44.63	74.00	-29.37	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18528.000	50.11	-5.26	44.85	74.00	-29.15	peak
2	19784.000	50.07	-5.28	44.79	74.00	-29.21	peak
3	21544.000	49.26	-4.63	44.63	74.00	-29.37	peak
4	22688.000	48.32	-3.74	44.58	74.00	-29.42	peak
5	25312.000	46.70	-1.70	45.00	74.00	-29.00	peak
6	25728.000	46.61	-0.72	45.89	74.00	-28.11	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)

8.5.1. 5G SRD 10MHz MODE





Note: 1. Measurement = Reading Level + Correct Factor.

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4.33

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.

38964.000

6

4. Proper operation of the transmitter prior to adding the filter to the measurement chain.

47.61

74.00

-26.39

peak



SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	26546.000	51.84	-4.76	47.08	74.00	-26.92	peak
2	29444.000	47.82	-0.76	47.06	74.00	-26.94	peak
3	31320.000	48.11	-0.93	47.18	74.00	-26.82	peak
4	34302.000	46.95	1.10	48.05	74.00	-25.95	peak
5	37158.000	44.84	3.17	48.01	74.00	-25.99	peak
6	39972.000	43.95	5.13	49.08	74.00	-24.92	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

8.6.1. 5G SRD 10MHz MODE

TEST RESULTS (WORST CASE)

SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	242.4300	49.70	-19.12	30.58	46.00	-15.42	QP
2	332.6400	50.12	-14.62	35.50	46.00	-10.50	QP
3	375.3200	41.77	-13.79	27.98	46.00	-18.02	QP
4	562.5300	33.71	-10.26	23.45	46.00	-22.55	QP
5	796.3000	37.37	-7.35	30.02	46.00	-15.98	QP
6	921.4300	35.58	-4.76	30.82	46.00	-15.18	QP

Note: 1. Result Level = Read Level + Correct Factor.

If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



SPURIOUS EMISSIONS (UNII-2C BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	47.4600	47.62	-20.55	27.07	40.00	-12.93	QP
2	332.6400	44.80	-14.62	30.18	46.00	-15.82	QP
3	375.3200	41.49	-13.79	27.70	46.00	-18.30	QP
4	567.3800	40.60	-10.13	30.47	46.00	-15.53	QP
5	798.2400	37.51	-7.34	30.17	46.00	-15.83	QP
6	999.0300	40.53	-4.15	36.38	54.00	-17.62	QP

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

8.7. SPURIOUS EMISSIONS BELOW 30 MHz

8.7.1. 5G SRD 10MHz MODE

SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)



<u>9 kHz~ 150 kHz</u>

No.	Frequency	Reading	Correct	FCC Result	FCC Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0100	75.22	-101.40	-26.18	47.6	-73.78	peak
2	0.0181	68.85	-101.36	-32.51	42.45	-74.96	peak
3	0.0221	68.13	-101.35	-33.22	40.71	-73.93	peak
4	0.0316	64.74	-101.40	-36.66	37.61	-74.27	peak
5	0.0492	61.55	-101.47	-39.92	33.76	-73.68	peak
6	0.0675	60.14	-101.56	-41.42	31.02	-72.44	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



<u>150 kHz ~ 490 kHz</u>



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1554	75.27	-101.65	-26.38	23.77	-50.15	peak
2	0.1621	73.92	-101.65	-27.73	23.41	-51.14	peak
3	0.2190	66.77	-101.75	-34.98	20.79	-55.77	peak
4	0.2570	62.85	-101.80	-38.95	19.4	-58.35	peak
5	0.3234	61.48	-101.88	-40.4	17.41	-57.81	peak
6	0.3800	58.52	-101.94	-43.42	16.01	-59.43	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



<u>490 kHz ~ 30 MHz</u>



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.5039	64.44	-62.07	2.37	33.56	-31.19	peak
2	0.8296	63.44	-62.17	1.27	29.23	-27.96	peak
3	1.0577	58.47	-62.24	-3.77	27.12	-30.89	peak
4	1.5564	57.68	-62.02	-4.34	23.76	-28.10	peak
5	5.2705	54.54	-61.45	-6.91	29.54	-36.45	peak
6	16.3959	54.17	-60.96	-6.79	29.54	-36.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to CFR 47 FCC §15.207 (a)

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST SETUP AND PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.



The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST ENVIRONMENT

Temperature	24.3 C	Relative Humidity	64.4 %
Atmosphere Pressure	101 kPa	Test Voltage	AC120 V,60 Hz

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RESULTS

9.1. 5G SRD 10MHz MODE



LINE N RESULTS (UNII-3 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1763	38.72	9.59	48.31	64.66	-16.35	QP
2	0.1763	22.64	9.59	32.23	54.66	-22.43	AVG
3	0.1886	38.52	9.59	48.11	64.10	-15.99	QP
4	0.1886	25.09	9.59	34.68	54.10	-19.42	AVG
5	0.2075	38.06	9.59	47.65	63.30	-15.65	QP
6	0.2075	28.67	9.59	38.26	53.30	-15.04	AVG
7	0.4184	33.87	9.60	43.47	57.48	-14.01	QP
8	0.4184	25.23	9.60	34.83	47.48	-12.65	AVG
9	0.6320	23.21	9.60	32.81	56.00	-23.19	QP
10	0.6320	13.25	9.60	22.85	46.00	-23.15	AVG
11	19.5356	8.64	9.73	18.37	60.00	-41.63	QP
12	19.5356	4.05	9.73	13.78	50.00	-36.22	AVG

Note: 1. Result = Reading + Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).

4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

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LINE L RESULTS (UNII-3 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1533	40.05	9.59	49.64	65.82	-16.18	QP
2	0.1533	21.30	9.59	30.89	55.82	-24.93	AVG
3	0.1852	39.24	9.59	48.83	64.25	-15.42	QP
4	0.1852	27.16	9.59	36.75	54.25	-17.50	AVG
5	0.2746	31.92	9.59	41.51	60.98	-19.47	QP
6	0.2746	19.99	9.59	29.58	50.98	-21.40	AVG
7	0.4010	32.42	9.59	42.01	57.83	-15.82	QP
8	0.4010	21.74	9.59	31.33	47.83	-16.50	AVG
9	4.4691	9.77	9.61	19.38	56.00	-36.62	QP
10	4.4691	3.99	9.61	13.60	46.00	-32.40	AVG
11	19.0975	11.45	9.80	21.25	60.00	-38.75	QP
12	19.0975	7.07	9.80	16.87	50.00	-33.13	AVG

Note: 1. Result = Reading + Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).

4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

auto.



10. FREQUENCY STABILITY

<u>LIMITS</u>

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -10 \degree ~ 40 \degree C (declared by customer).

2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non handcarried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

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

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.

5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST SETUP





TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % - 75 %	/
Atmospheric Pressure	100 kPa ~102 kPa	/
Temperature	T _N (Normal Temperature):	TL (Low Temperature): -10 C
	22 °C – 28 °C	TH (High Temperature): 40 ℃
Supply Voltage	V (Normal Valtage): DC 12 V	V _L (Low Voltage): AC 10.2 V
	V _N (Normal Voltage). DC 12 V	V _H (High Voltage): AC 13.8 V

RESULTS

Please refer to Appendix E.

11. DYNAMIC FREQUENCY SELECTION

APPLICABILITY OF DFS REQUIREMENTS

A U-NII network will employ a DFS function to detect signals from radar systems and to avoid co-channel operation with these systems. This applies to the 5250-5350 MHz and/or 5470-5725 MHz bands.

Within the context of the operation of the DFS function, a U-NII device will operate in either Master Mode or Client Mode. U-NII devices operating in Client Mode can only operate in a network controlled by a U-NII device operating in Master Mode.

	Operational Mode			
Requirement	Master	Client Without	Client With Radar	
		Radar Detection	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	

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Table 2: Applicability of DFS requirements during normal operation

	Operational Mode			
Requirement	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 multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection			
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required			
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link			
All other tests	Any single BW mode	Not required			
Note: Frequencies selected for statistical performance check 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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LIMITS

(1) 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 dPm				
power spectral density < 10 dBm/MHz	-02 นิปิโโ				
EIRP < 200 milliwatt that do not meet the					
power	-64 dBm				
spectral density 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.					

(2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value	
Non-occupancy period	Minimum 30 minutes	
Channel Availability Check Time	60 seconds	
Channal Maya Tima	10 seconds	
	See Note 1.	
	200 milliseconds + an aggregate of 60	
Channel Closing Transmission Time	milliseconds over	
	remaining 10 second period.	
	See Notes 1 and 2.	
II NII Detection Rendwidth	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 facilitating 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.



PARAMETERS OF RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table C Obert Dulas Davis Tastillaustanas

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
Q	1	1428	18	See Note 1	See Note 1
		Test A	(1)		-
1	Ţ	Test B	$\begin{array}{c} \text{Roundup} \\ \left(\frac{19 \cdot 10^{\prime\prime}}{\text{PRI}_{rest}} \right) \end{array}$	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
Aggregate (F	Radar Types 1-4)		80%	120
Note 1: Shor and ch Test A: 15 ui Test B: 15 ui increm	t Pulse Radar T nannel closing ti nique PRI values nique PRI values nent of 1 usec. e	ype 0 should I me tests. s randomly se s randomly se xcluding PRI	be used for the detection lected from the list of 23 lected within the range of values selected in Test J	n bandwidth test, channe I PRI values in Table 5a of 518-3066 µsec, with a A	i move time, minimum

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4.



TEST SETUP

Setup for Client with injection at the Master



	Equipment	Brand Name	Model Name	Remarks
Master	DJI Ultra-Bright Remote Monitor	DJI	RXD2	FCC ID: 2ANDR-RXD2202109

RESULTS

Please refer to Appendix F.



12. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §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 an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. 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.

Please refer to FCC §15.407(a)(1)(2)(3)

If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi...

RESULTS

Complies