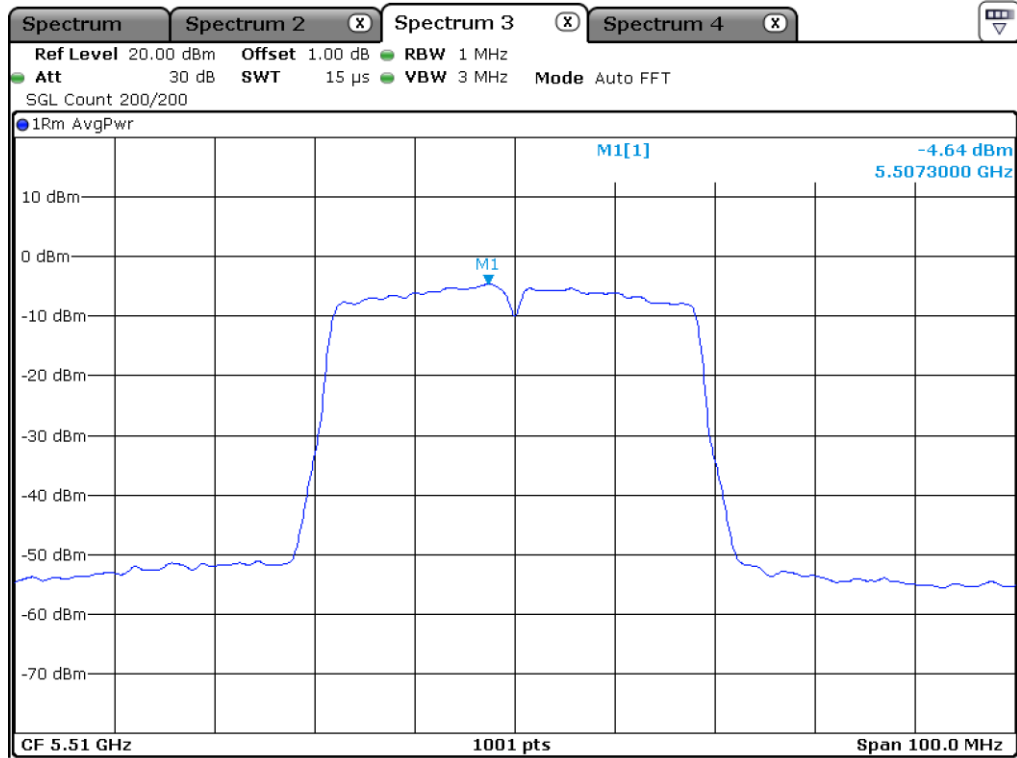
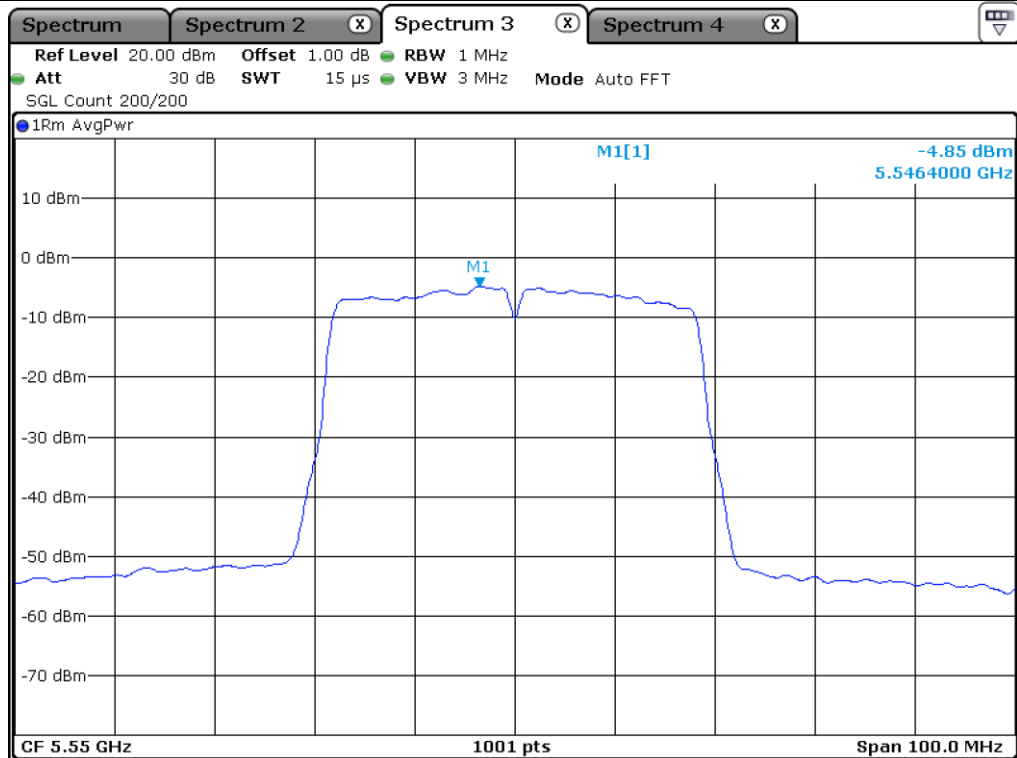
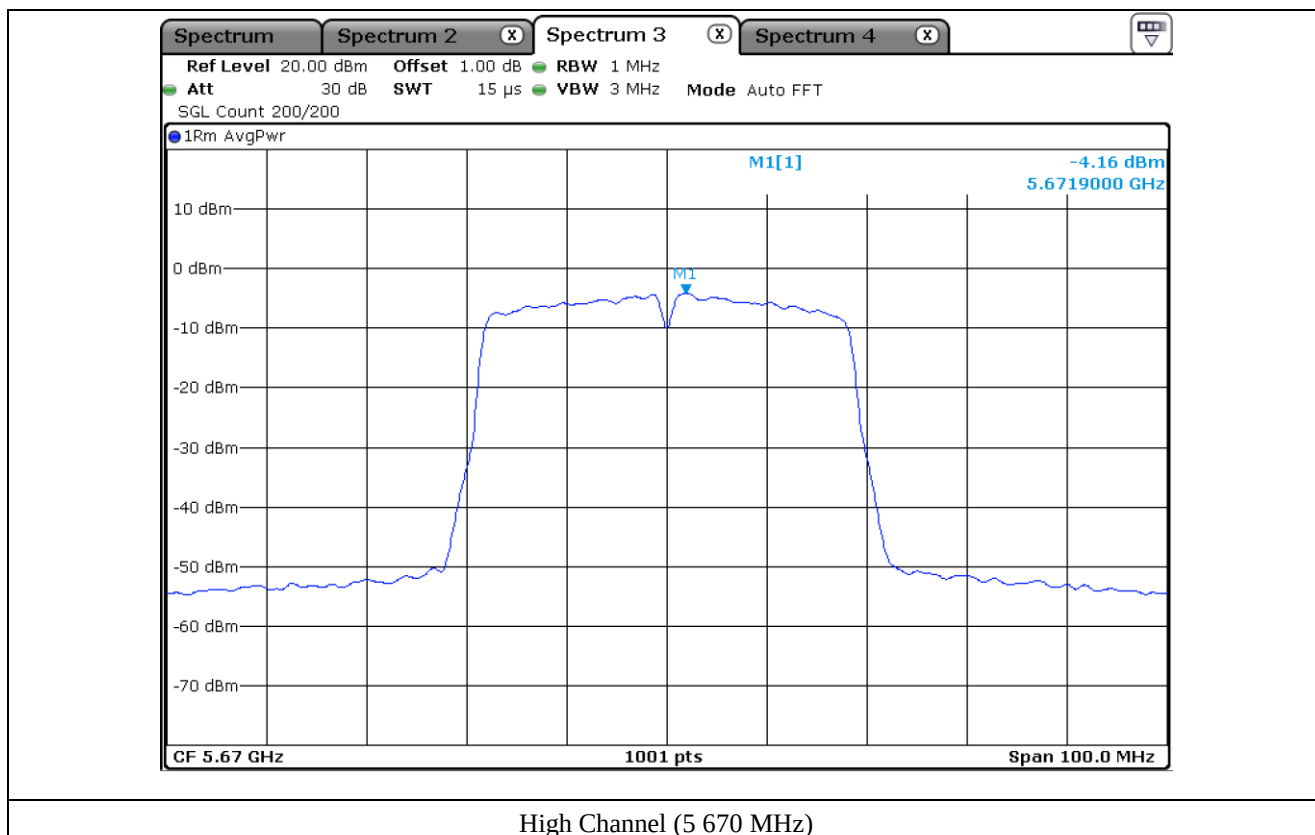


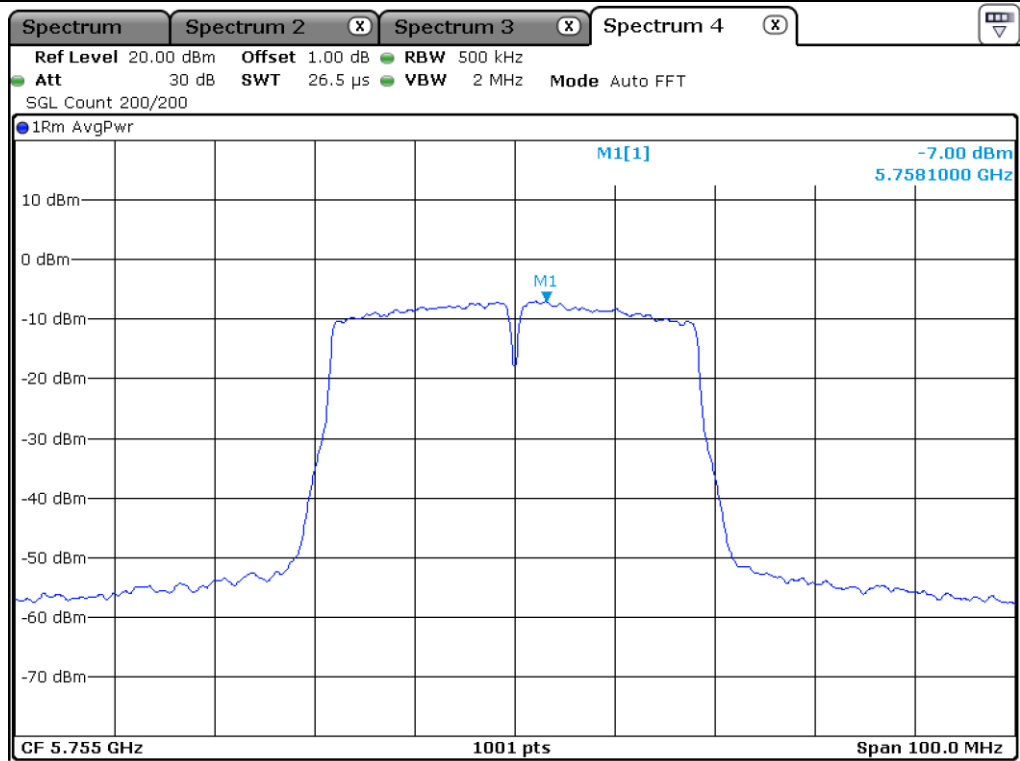


Low Channel (5 510 MHz)

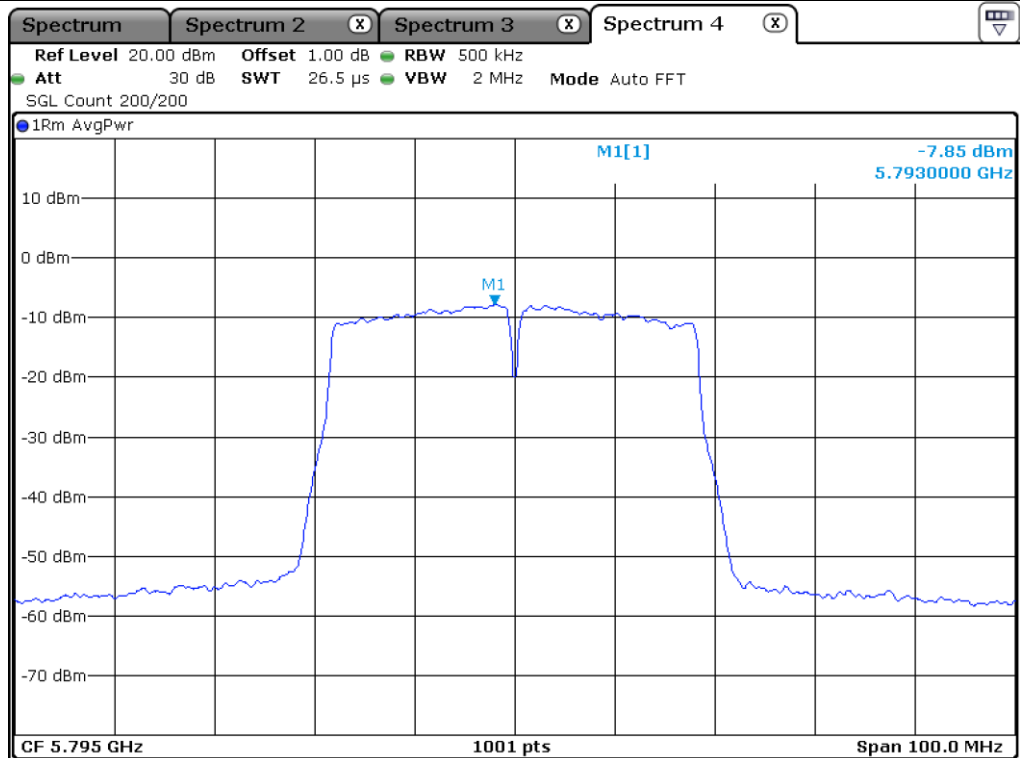


Middle Channel (5 550 MHz)





Low Channel (5 755 MHz)



High Channel (5 795 MHz)

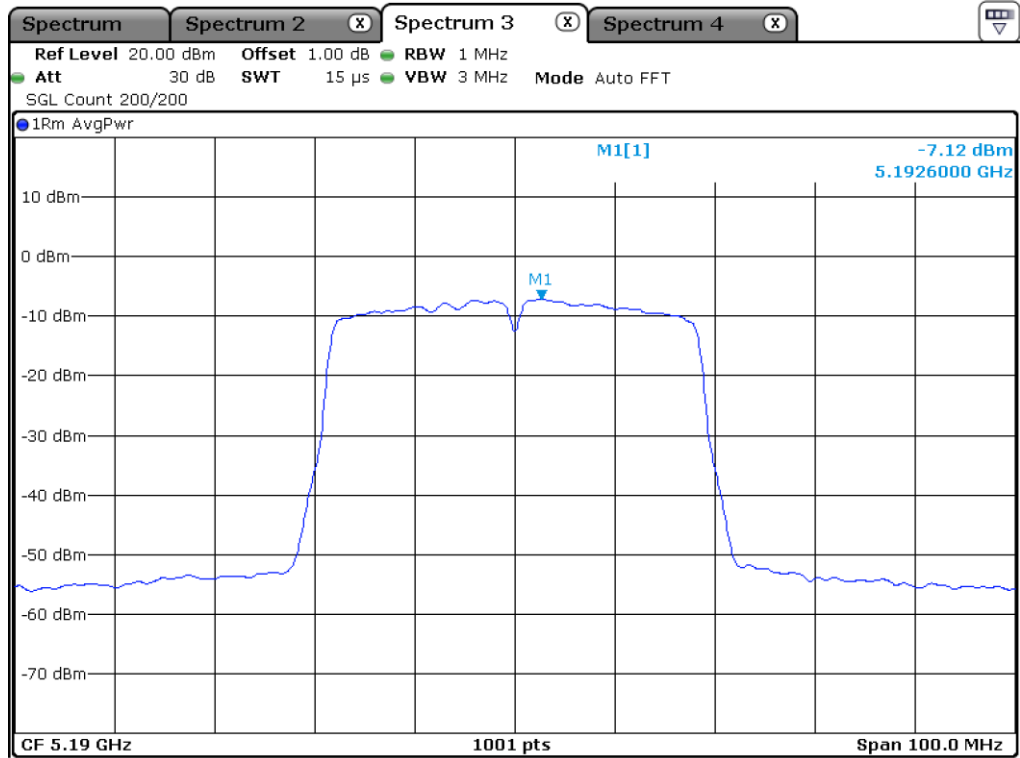
10.6.2 Test data for Antenna 1

-. Operating condition : Highest Output Power Transmitting Mode

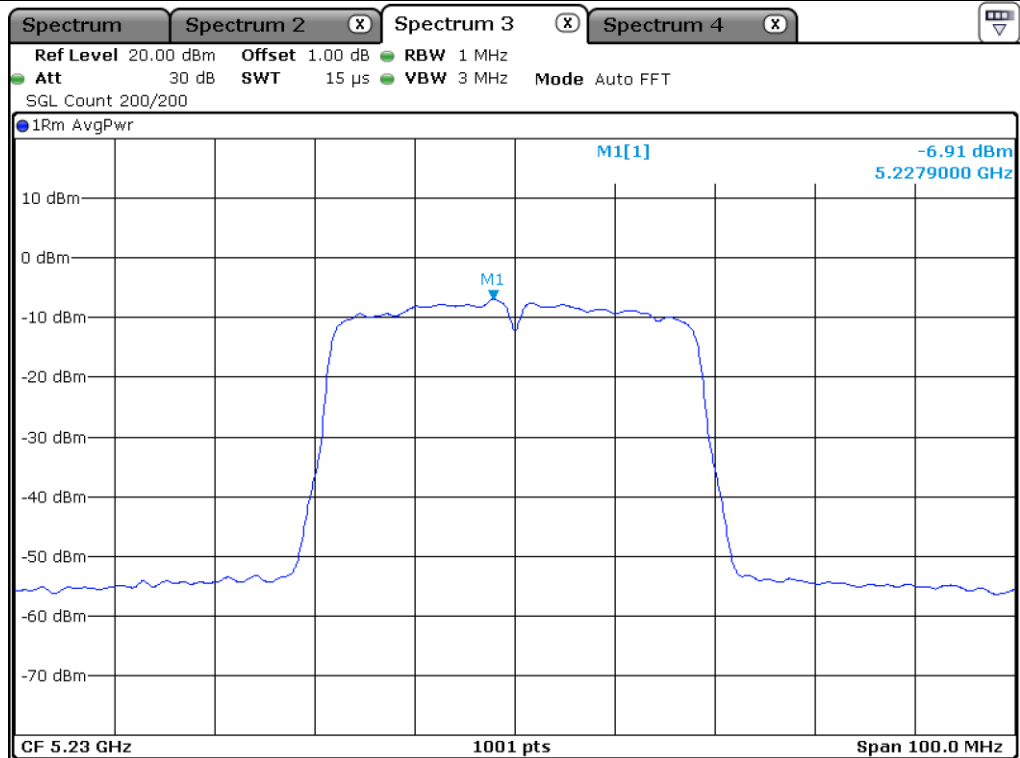
-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190.00	-7.12	11.00	18.12
	High	5 230.00	-6.91	11.00	17.91
5 250 ~ 5 350	Low	5 270.00	-5.50	11.00	16.50
	High	5 310.00	-6.12	11.00	17.12
5 470 ~ 5 725	Low	5 510.00	-4.71	11.00	15.71
	Middle	5 550.00	-4.14	11.00	15.14
	High	5 670.00	-4.13	11.00	15.13
5 725 ~ 5 850	Low	5 755.00	-5.30	30.00	35.30
	High	5 795.00	-6.14	30.00	36.14

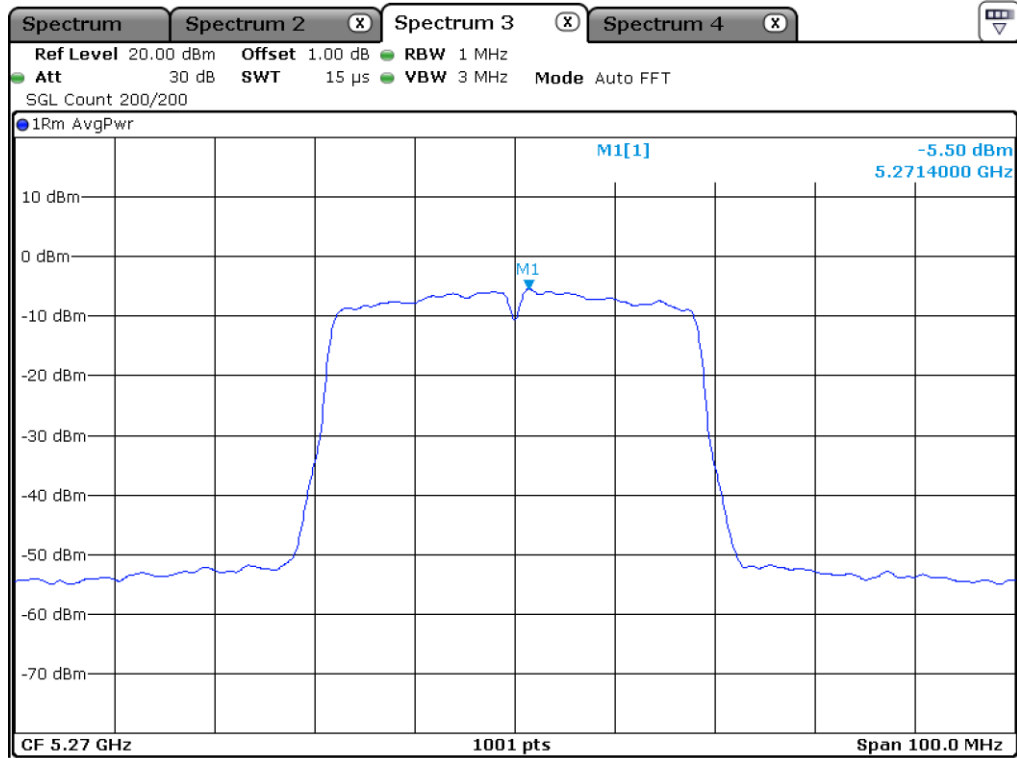
Remark: See next page for measurement data.



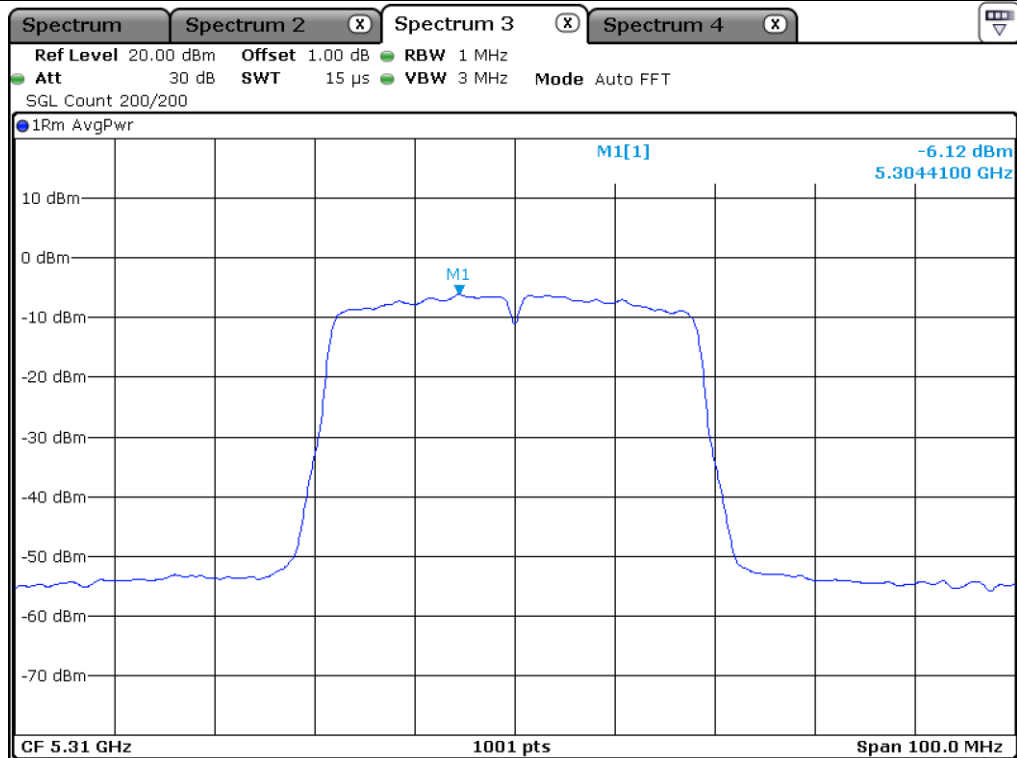
Low Channel (5 190 MHz)



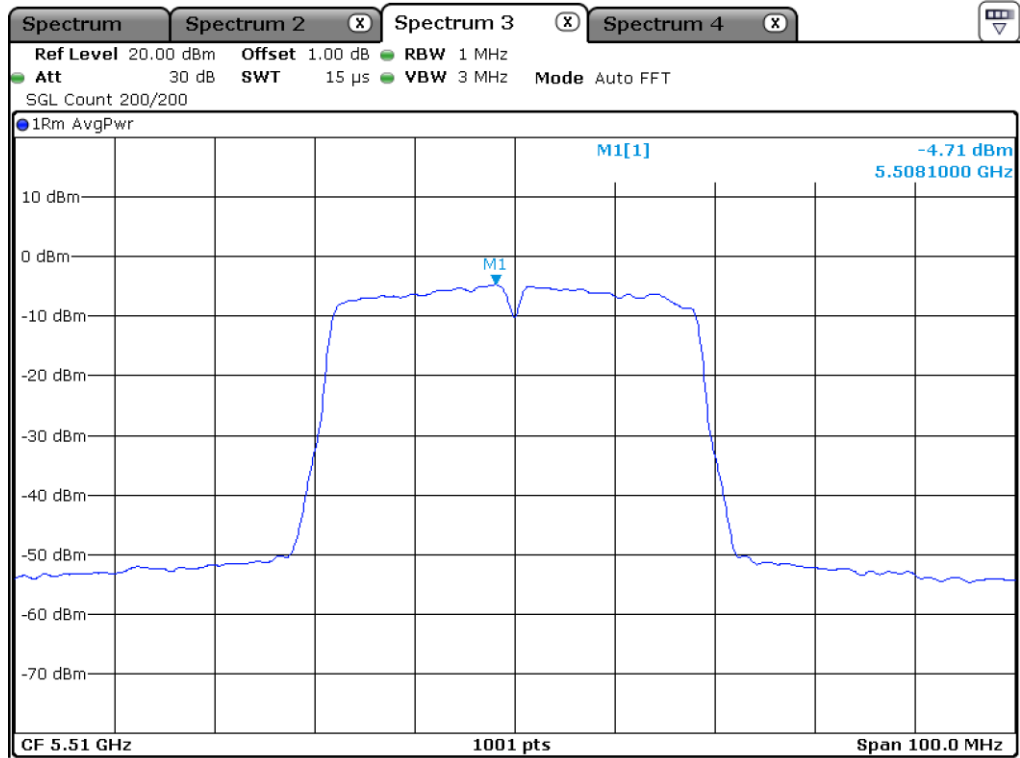
High Channel (5 230 MHz)



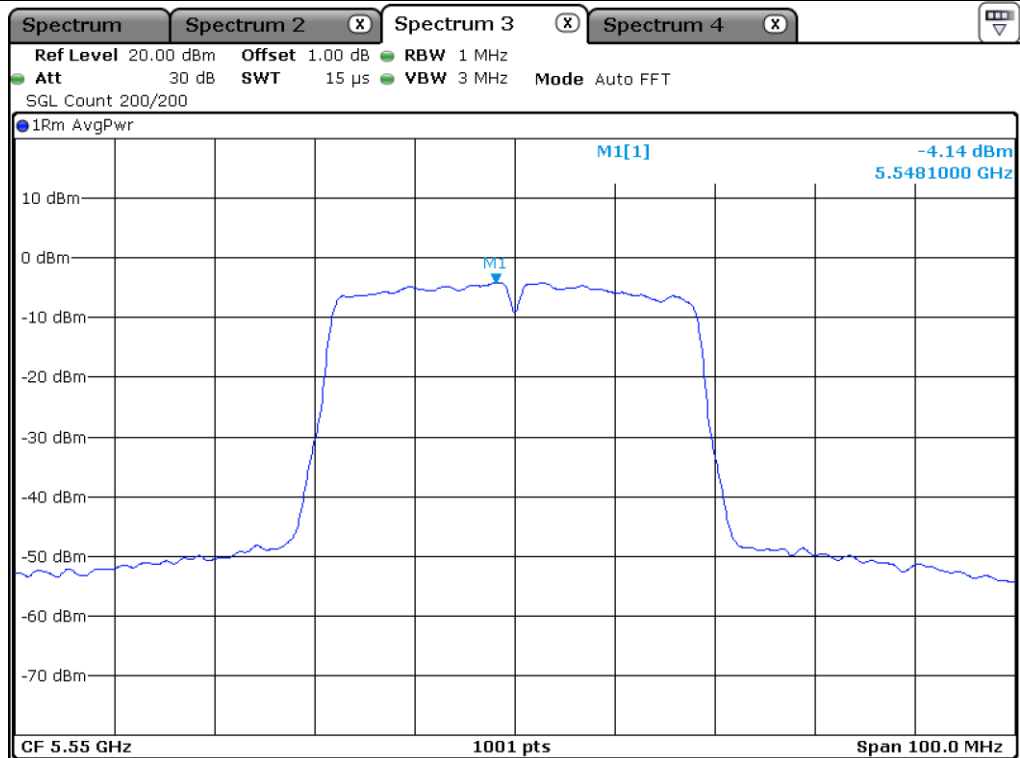
Low Channel (5 270 MHz)



High Channel (5 310 MHz)



Low Channel (5 510 MHz)



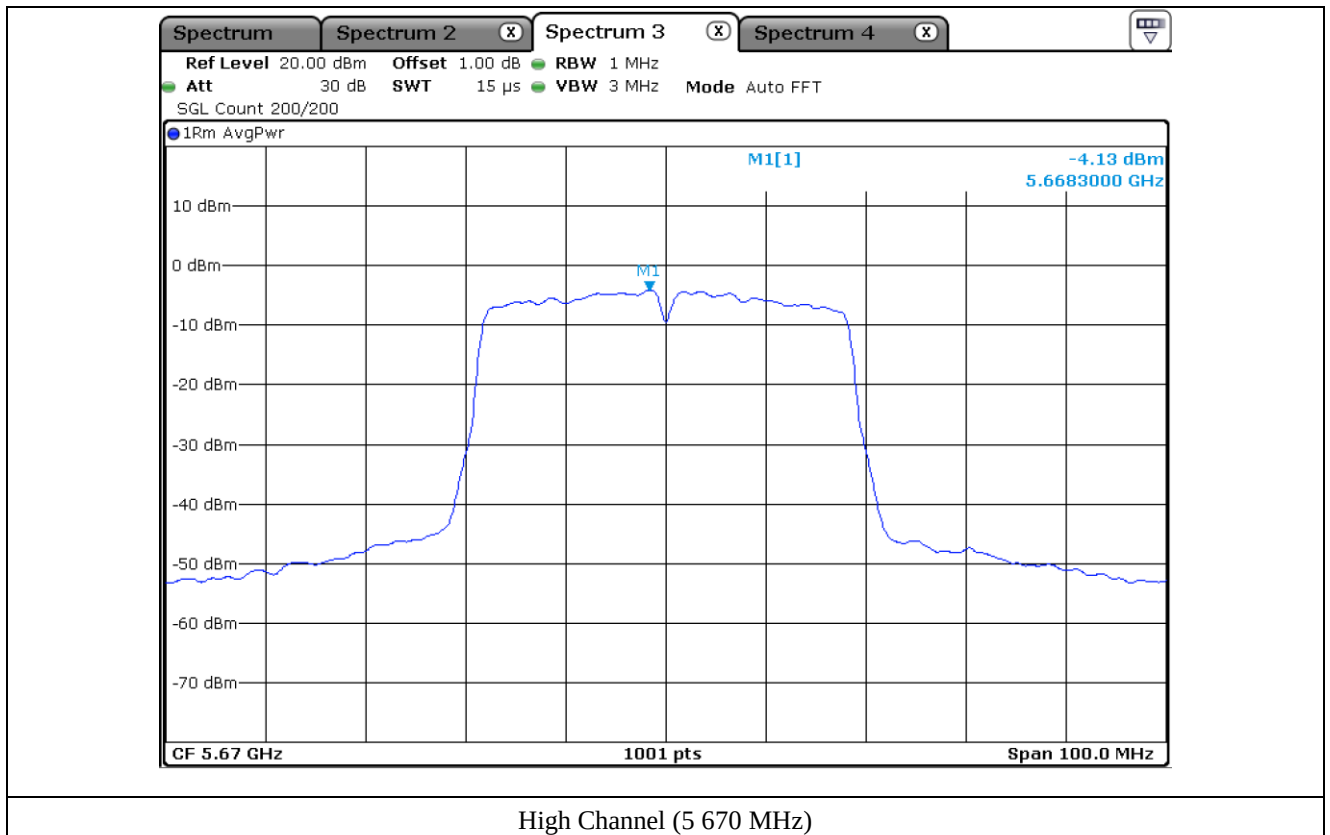
Middle Channel (5 550 MHz)

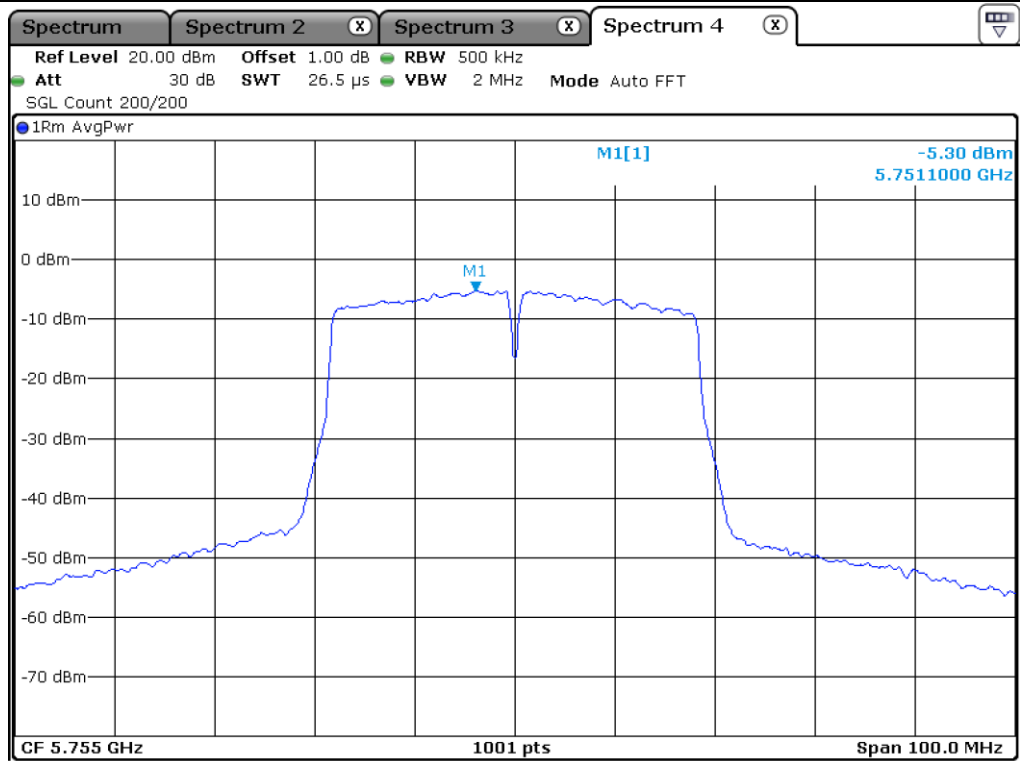
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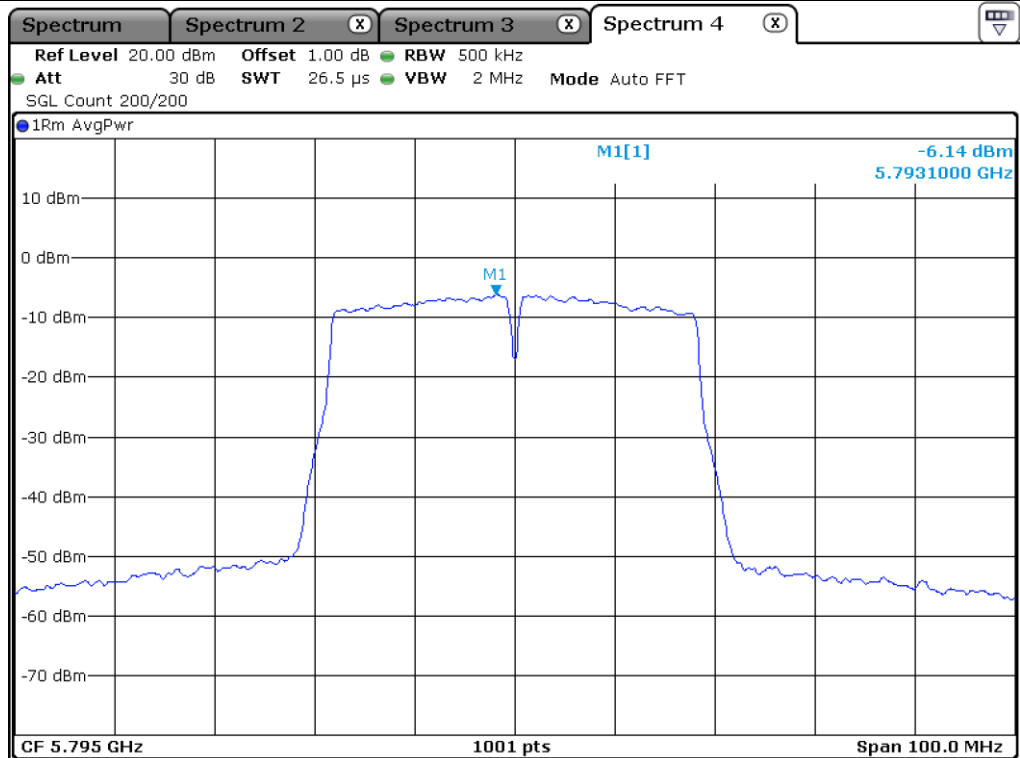
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Low Channel (5 755 MHz)



High Channel (5 795 MHz)

10.6.3 Test data for Multiple Transmit

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190.00	-3.93	11.00	14.93
	High	5 230.00	-3.95	11.00	14.95
5 250 ~ 5 350	Low	5 270.00	-2.47	11.00	13.47
	High	5 310.00	-2.75	11.00	13.75
5 470 ~ 5 725	Low	5 510.00	-1.66	11.00	12.66
	Middle	5 550.00	-1.47	11.00	12.47
	High	5 670.00	-1.13	11.00	12.13
5 725 ~ 5 850	Low	5 755.00	-3.06	30.00	33.06
	High	5 795.00	-3.90	30.00	33.90

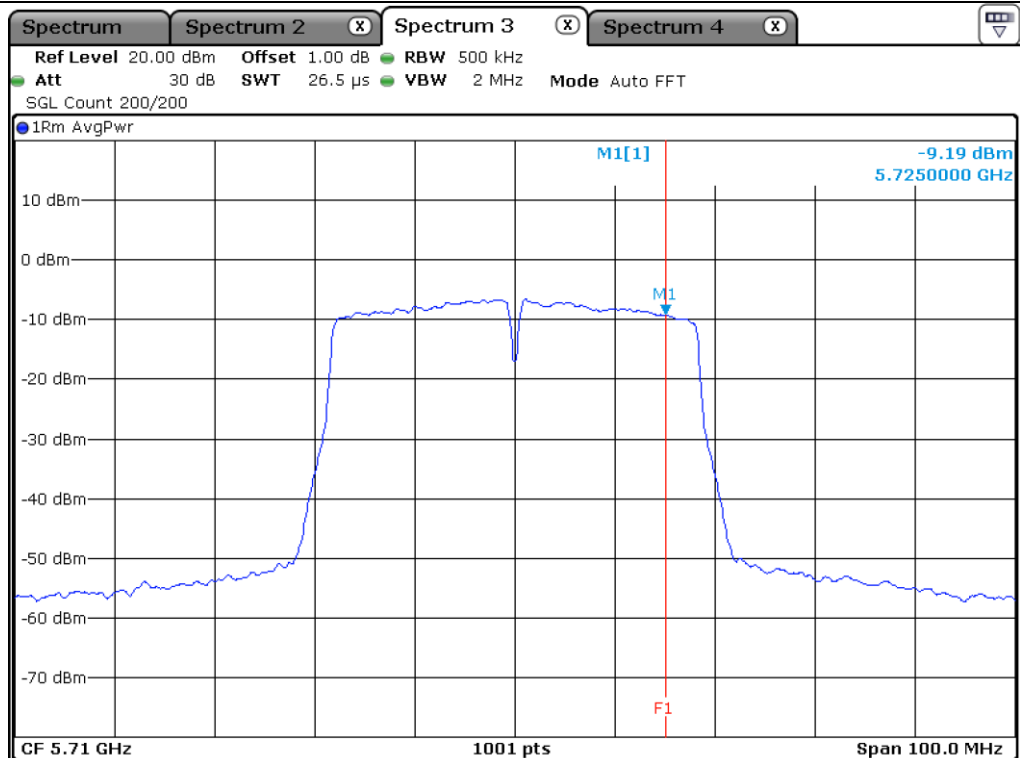
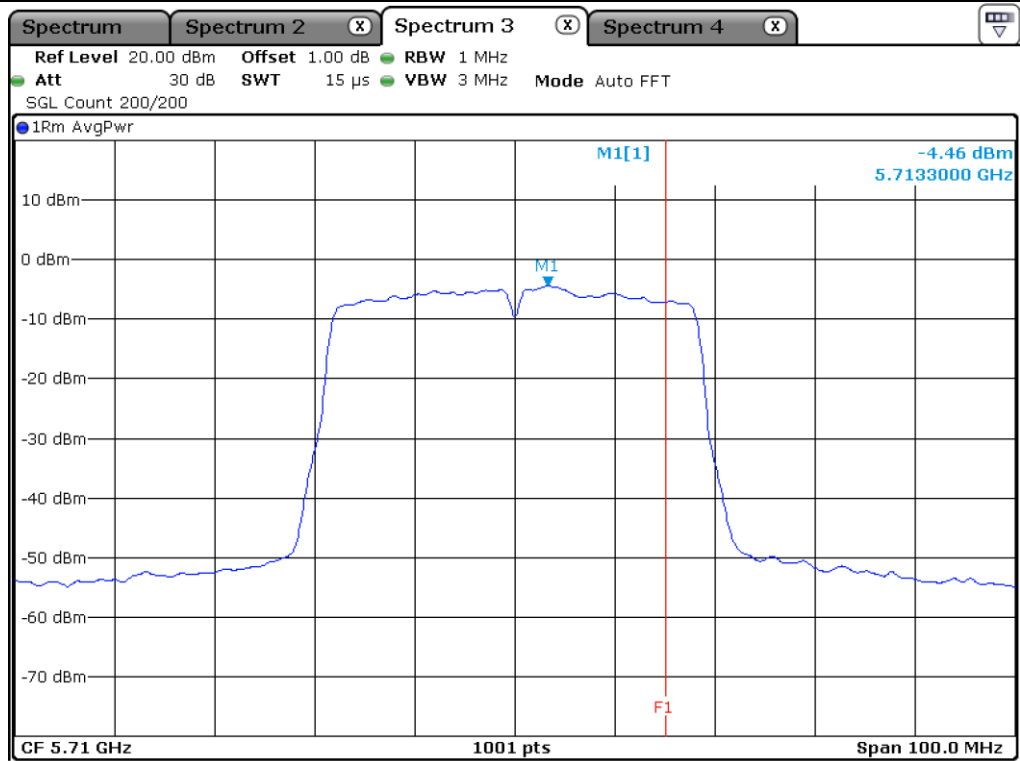
10.6.4 Test data for Staddle Channel_Antenna 0

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710.00	-4.46	11.00	15.46
5 725 ~ 5 850	5 710.00	-9.19	30.00	39.19

Remark: See next page for measurement data.



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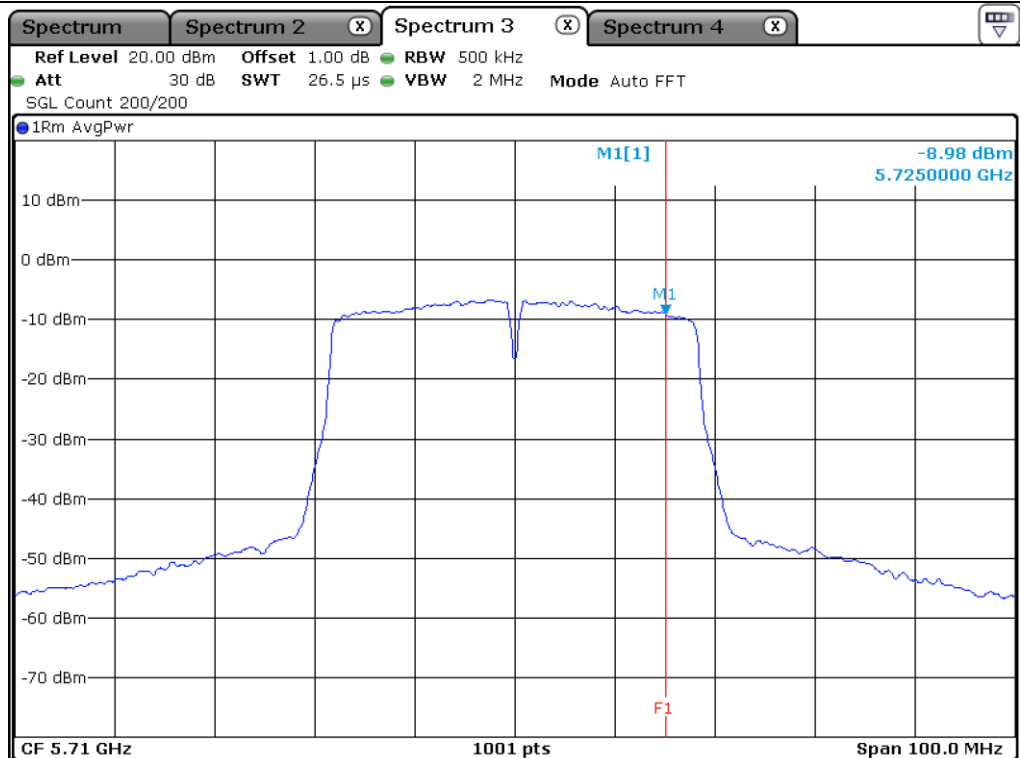
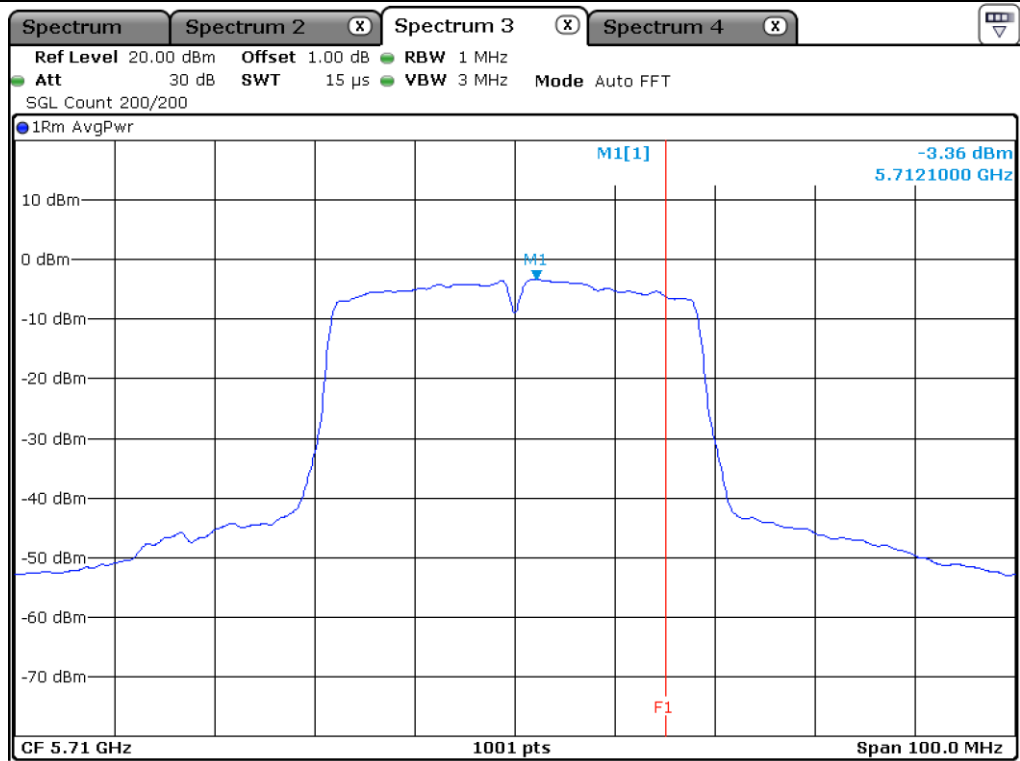
10.6.5 Test data for Staddle Channel_Antenna 1

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710.00	-3.36	11.00	14.36
5 725 ~ 5 850	5 710.00	-8.98	30.00	38.98

Remark: See next page for measurement data.



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10.6.6 Test data for Staddle Channel_Multiple Transmit

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 710.00	-0.86	11.00	11.86
5 725 ~ 5 850	5 710.00	-6.07	30.00	36.07

10.7 Test data for 802.11ac_HT80 RLAN Mode

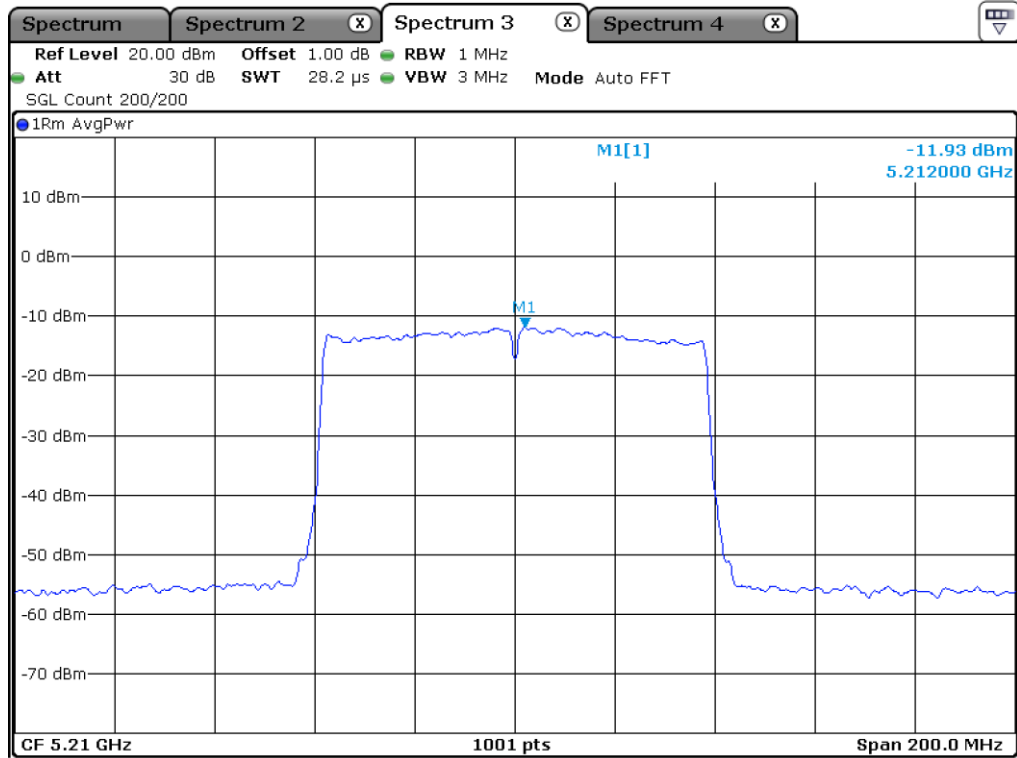
10.7.1 Test data for Antenna 0

-. Operating condition : Highest Output Power Transmitting Mode

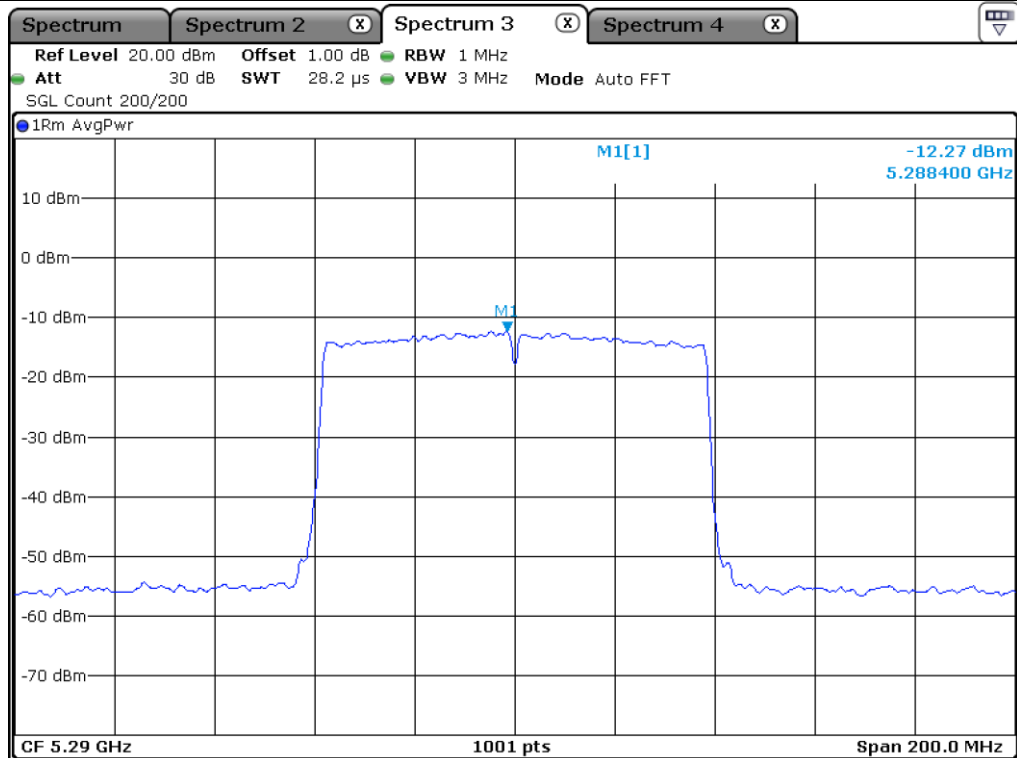
-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210.00	-11.93	11.00	22.93
5 250 ~ 5 350	Low	5 290.00	-12.27	11.00	23.27
5 470 ~ 5 725	Low	5 530.00	-11.83	11.00	22.83
5 725 ~ 5 850	Low	5 775.00	-11.22	30.00	41.22

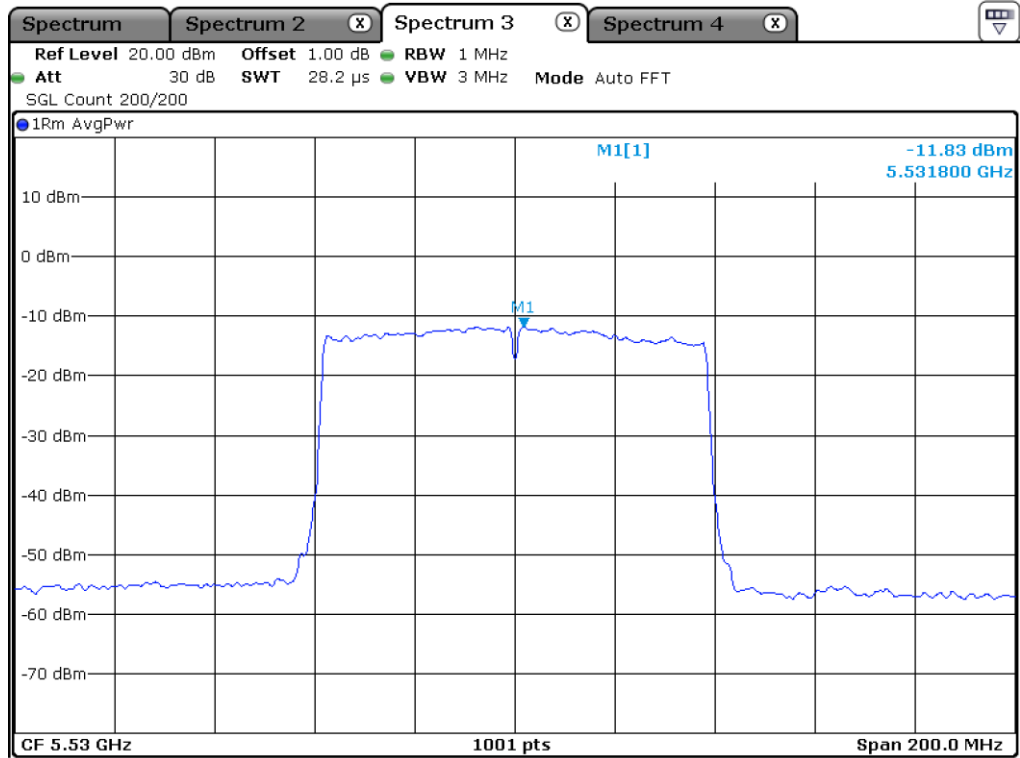
Remark: See next page for measurement data.



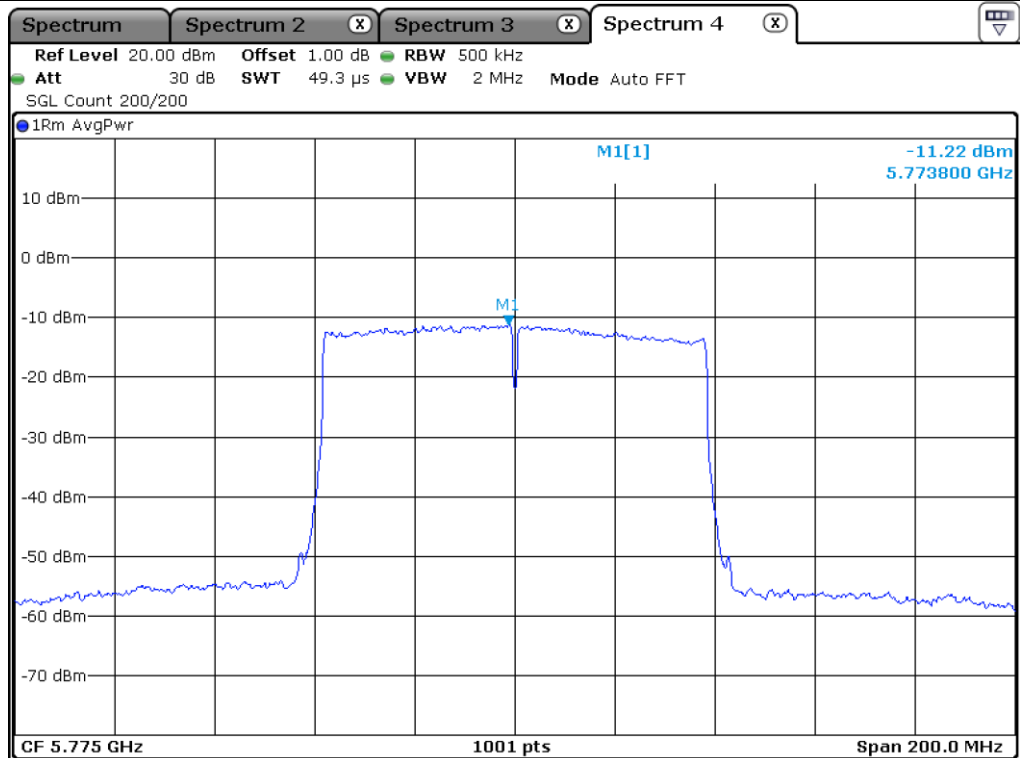
Middle Channel (5 210 MHz)



Middle Channel (5 290 MHz)



Middle Channel (5 530 MHz)



Middle Channel (5 775 MHz)

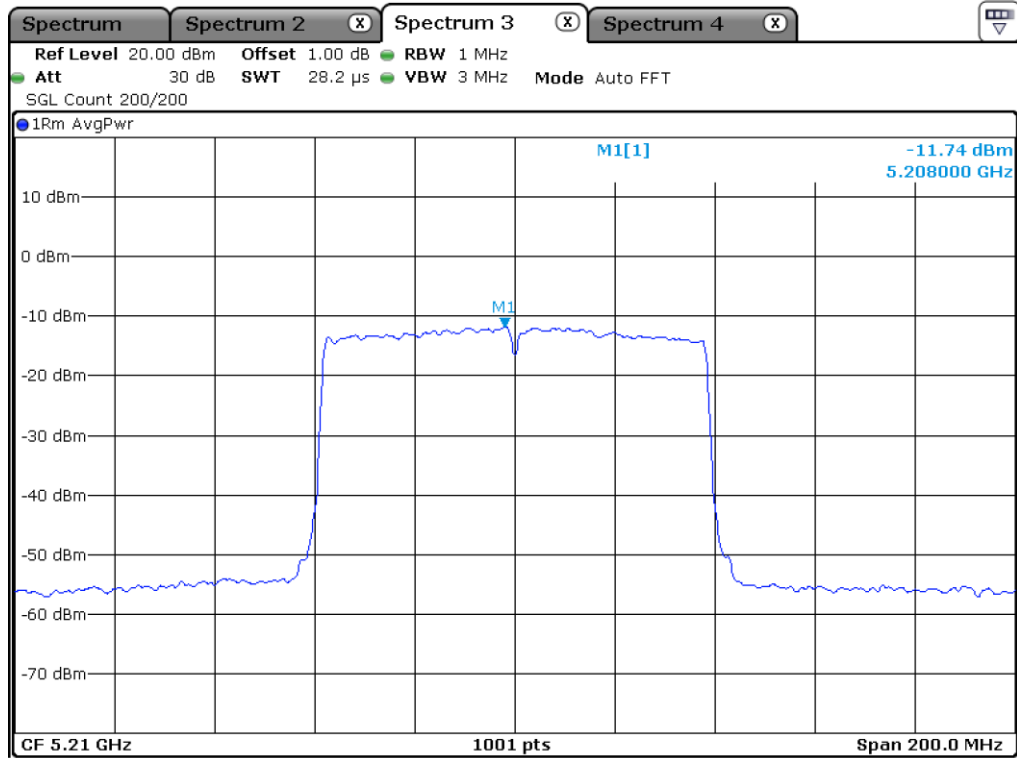
10.7.2 Test data for Antenna 1

-. Operating condition : Highest Output Power Transmitting Mode

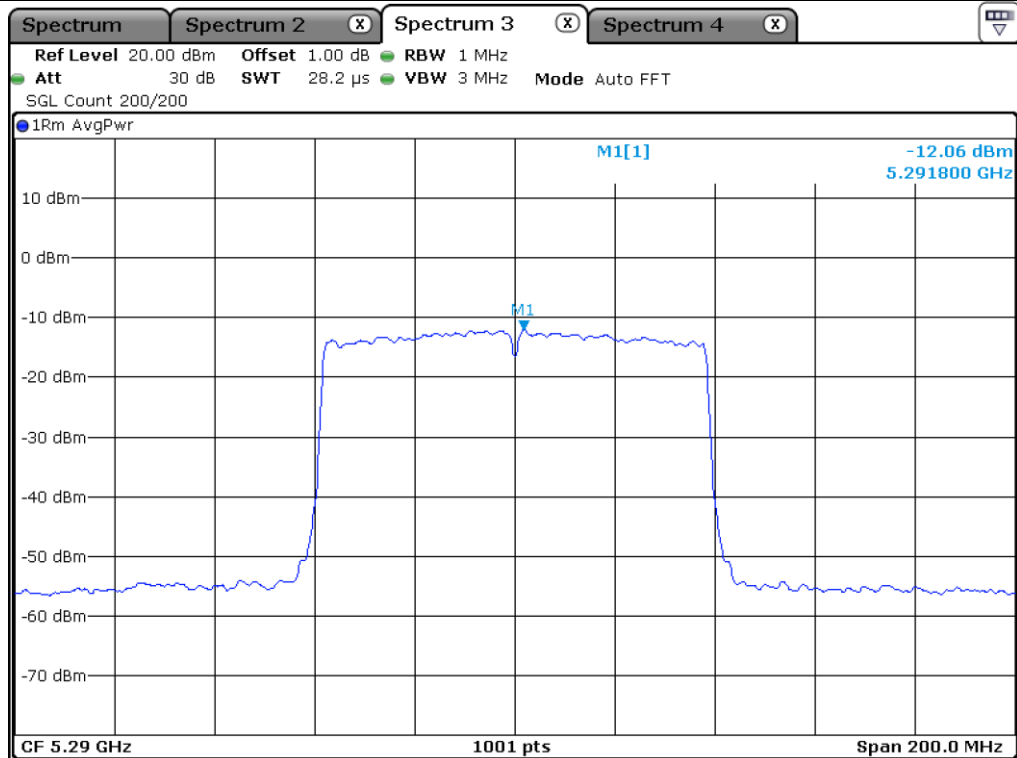
-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210.00	-11.74	11.00	22.74
5 250 ~ 5 350	Low	5 290.00	-12.06	11.00	23.06
5 470 ~ 5 725	Low	5 530.00	-11.59	11.00	22.59
5 725 ~ 5 850	Low	5 775.00	-9.52	30.00	39.52

Remark: See next page for measurement data.



Middle Channel (5 210 MHz)



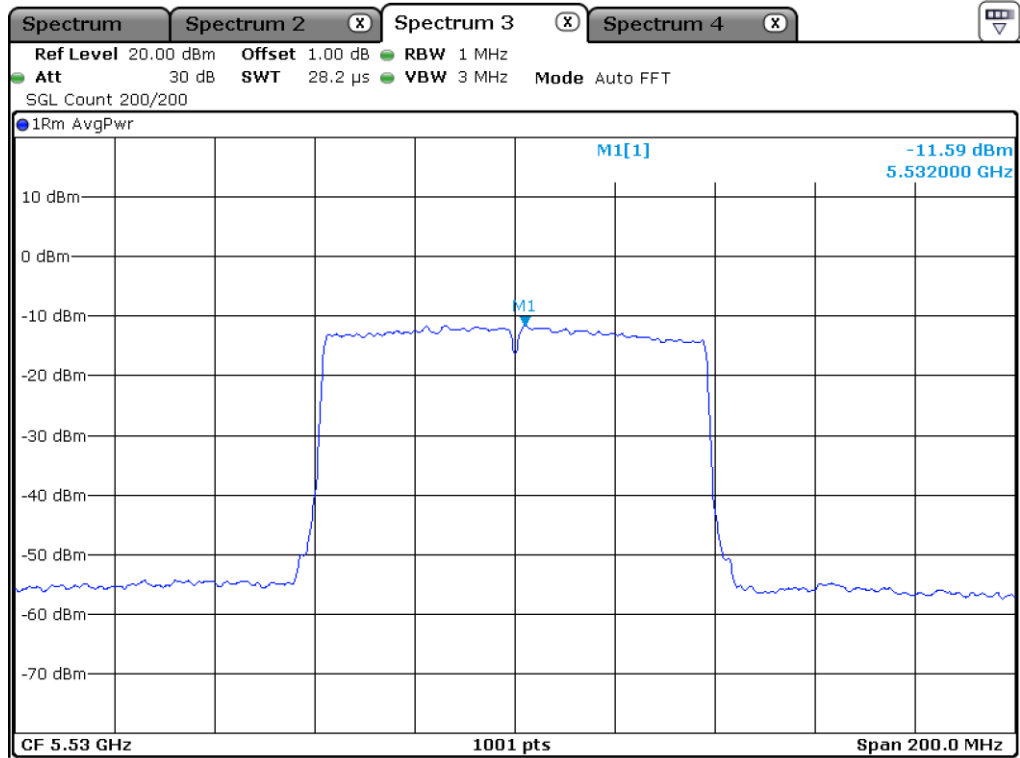
Middle Channel (5 290 MHz)

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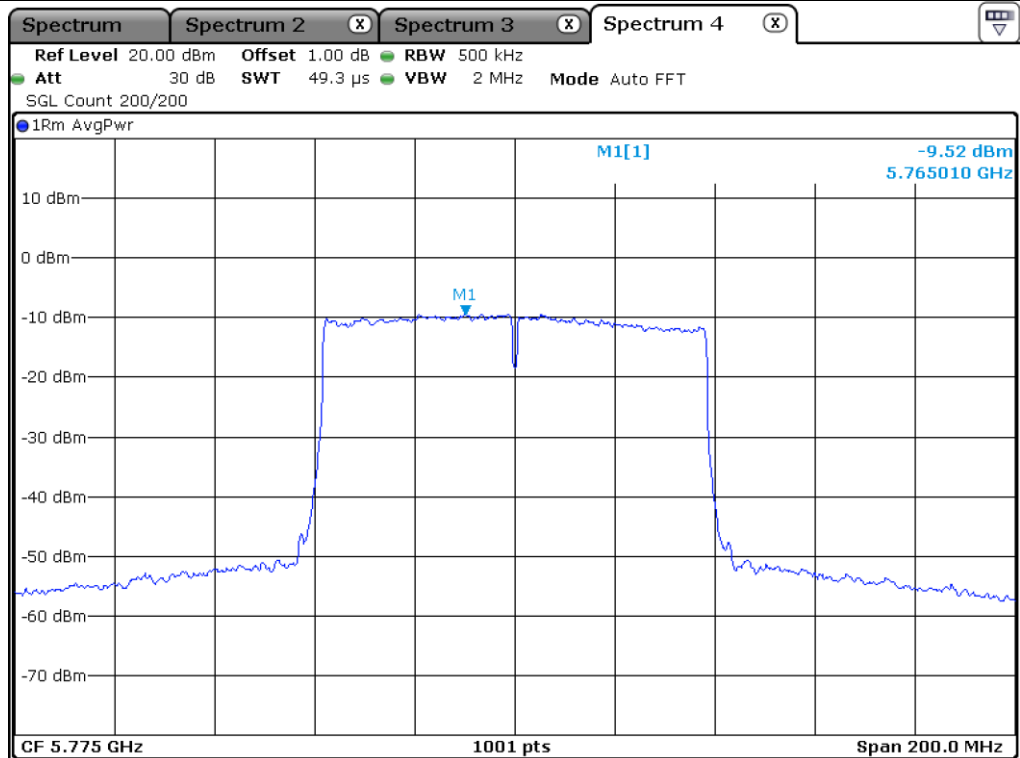
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Middle Channel (5 530 MHz)



Middle Channel (5 775 MHz)

10.7.3 Test data for Multiple Transmit

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210.00	-8.82	11.00	19.82
5 250 ~ 5 350	Low	5 290.00	-9.15	11.00	20.15
5 470 ~ 5 725	Low	5 530.00	-8.70	11.00	19.70
5 725 ~ 5 850	Low	5 775.00	-7.28	30.00	37.28

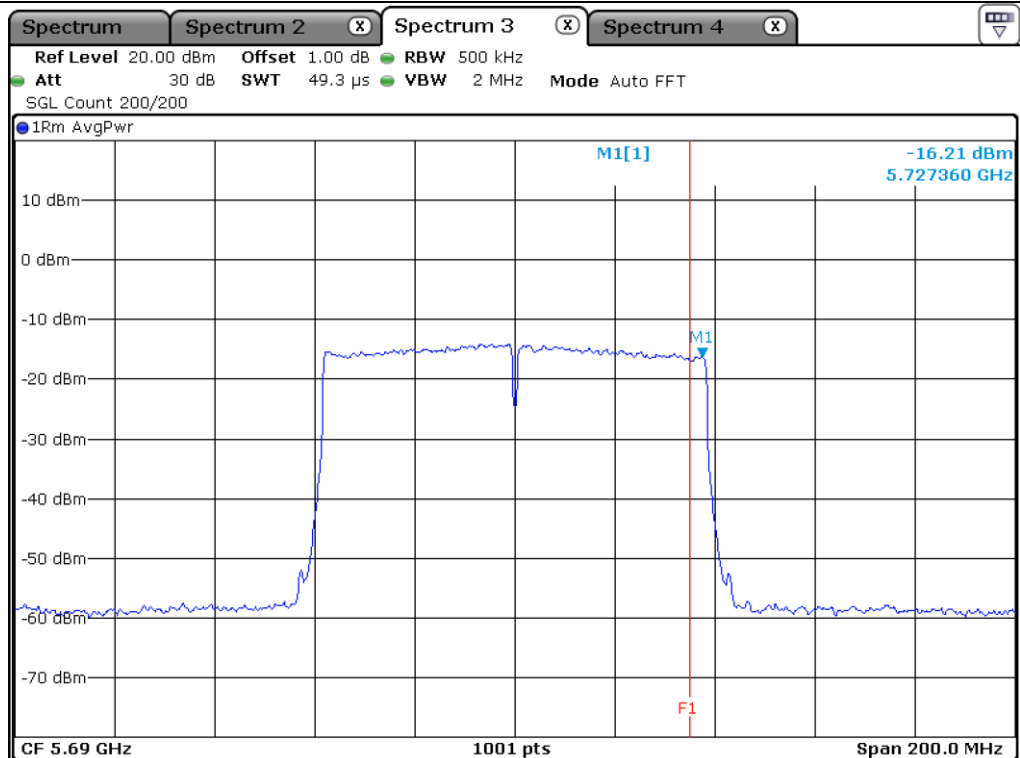
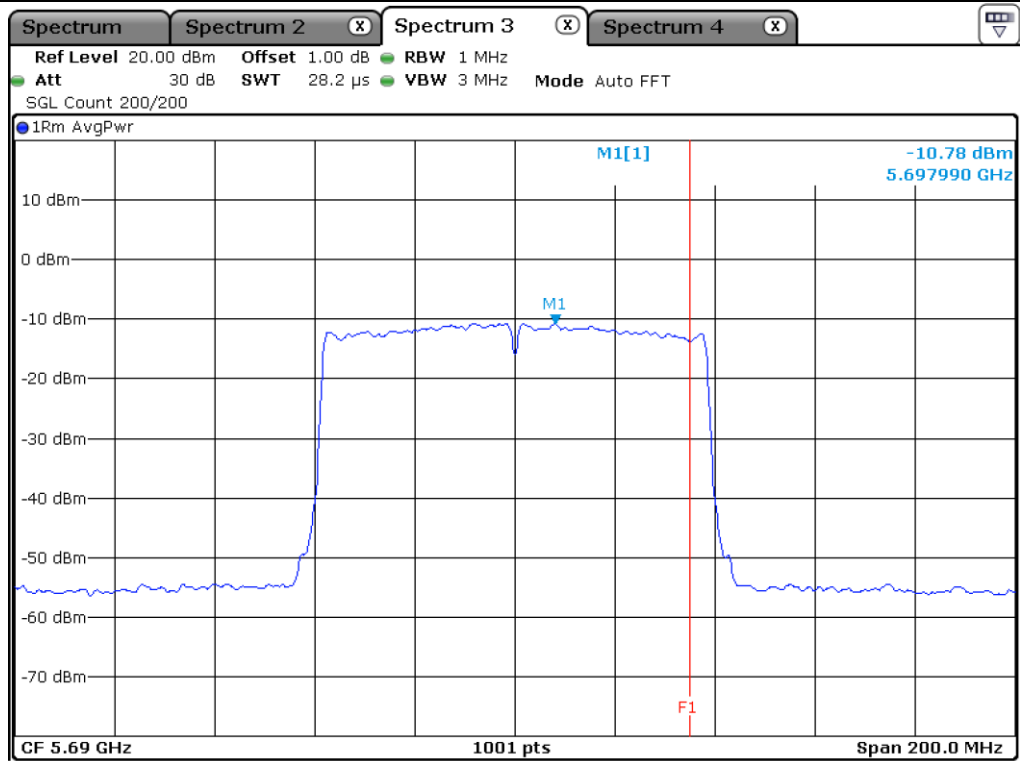
10.7.4 Test data for Staddle Channel_Antenna 0

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690.00	-10.78	11.00	21.78
5 725 ~ 5 850	5 690.00	-16.21	30.00	46.21

Remark: See next page for measurement data.



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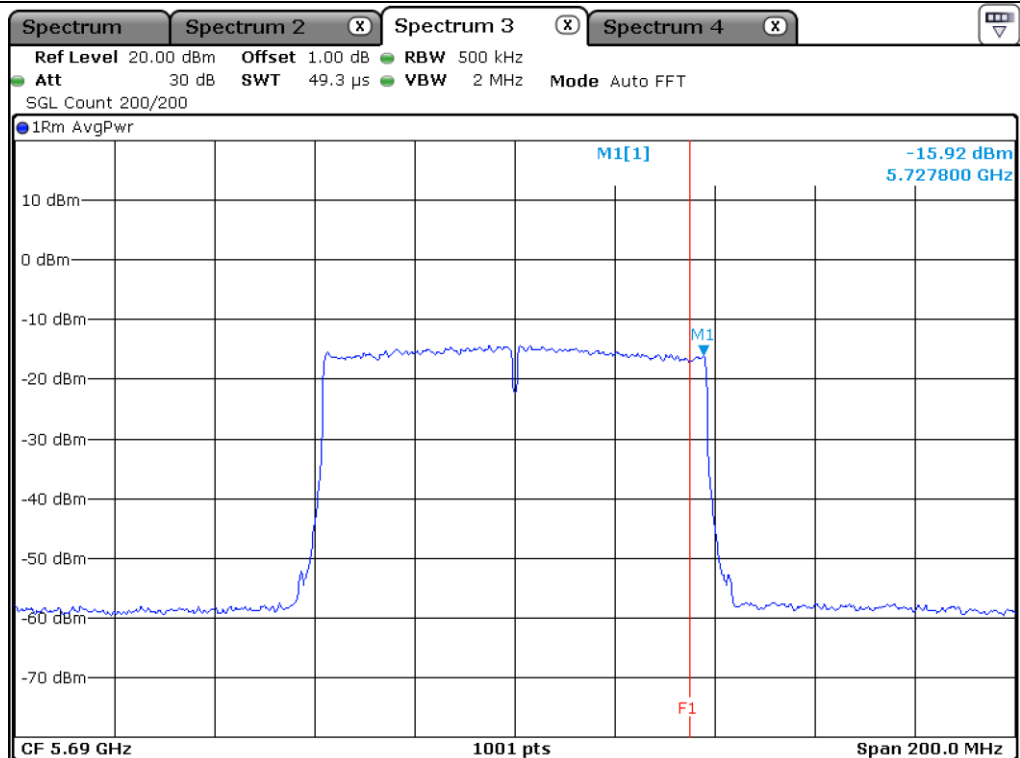
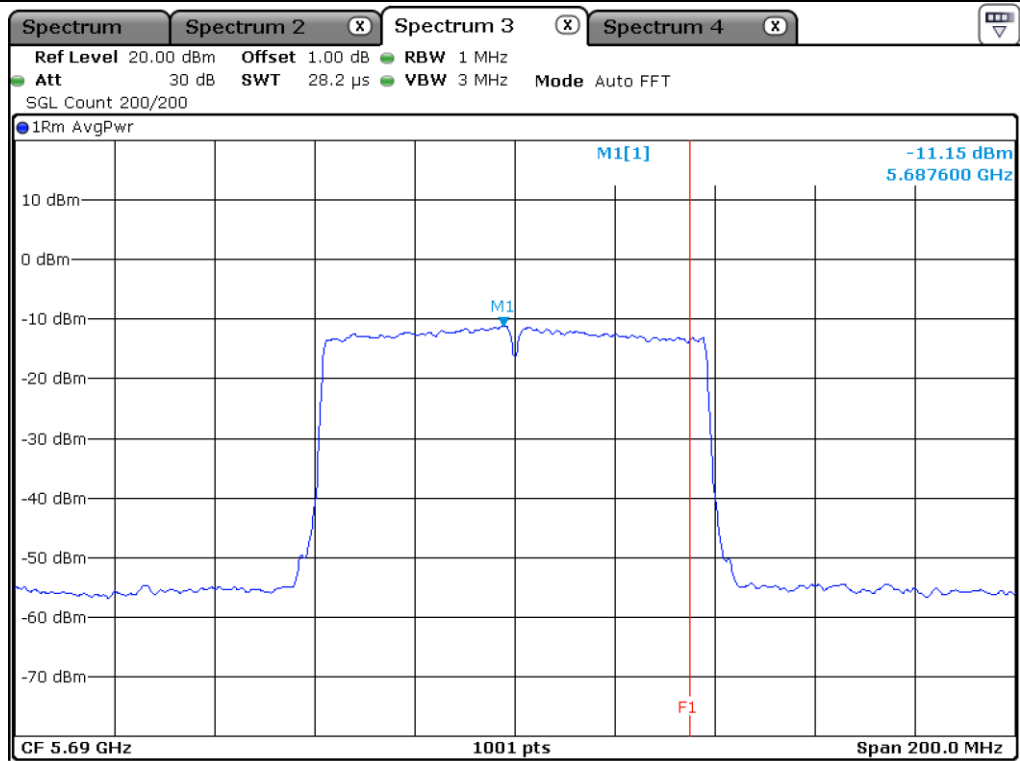
10.7.5 Test data for Staddle Channel_Antenna 1

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690.00	-11.15	11.00	22.15
5 725 ~ 5 850	5 690.00	-15.92	30.00	45.92

Remark: See next page for measurement data.



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10.7.6 Test data for Staddle Channel_Multiple Transmit

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	FREQUENCY (MHz)	MEASURED VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 470 ~ 5 725	5 690.00	-7.95	11.00	18.95
5 725 ~ 5 850	5 690.00	-13.05	30.00	43.05

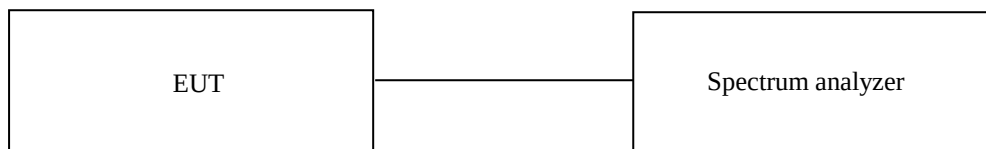
11. FREQUENCY STABILITY WITH TEMPERATURE VARIATION

11.1 Operating environment

Temperature : 23 °C
Relative humidity : 44 % R.H.

11.2 Test set-up

Turn EUT off and set chamber temperature to -20 °C and then allow sufficient time (approximately 20 min to 30 min after chamber reach the assigned temperature) for EUT to stabilize. Turn on the EUT and measure the EUT operating frequency and then turn off the EUT after the measurement. The temperature in the chamber was raised 10 °C step from -20 °C to +80 °C. Repeat above method for frequency measurements every 10 °C step and then record all measured frequencies on each temperature step.



11.3 Test Date

October 07, 2021 ~ October 20, 2021

11.4 Test Data for U-NII-1

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-20	5 180 000 000	5 179 965 911	-34 089
-10		5 179 969 677	-30 323
0		5 179 969 958	-30 042
10		5 179 970 123	-29 877
20		5 179 975 518	-24 482
30		5 179 973 528	-26 472
40		5 180 028 142	28 142
50		5 180 029 901	29 901
-20	5 220 000 000	5 219 970 334	-29 666
-10		5 219 972 916	-27 084
0		5 219 973 583	-26 417
10		5 219 974 803	-25 197
20		5 219 976 469	-23 531
30		5 219 977 633	-22 367
40		5 220 028 597	28 597
50		5 220 031 137	31 137
-20	5 240 000 000	5 239 970 171	-29 829
-10		5 239 971 935	-28 065
0		5 239 975 166	-24 834
10		5 239 973 287	-26 713
20		5 239 973 568	-26 432
30		5 239 973 456	-26 544
40		5 240 030 137	30 137
50		5 240 033 587	33 587

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

11.5 Test Data for U-NII-2A

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-20	5 260 000 000	5 259 972 017	-27 983
-10		5 259 974 467	-25 533
0		5 259 978 902	-21 098
10		5 259 976 481	-23 519
20		5 259 974 584	-25 416
30		5 259 972 581	-27 419
40		5 260 025 687	25 687
50		5 260 028 516	28 516
-20	5 300 000 000	5 299 970 513	-29 487
-10		5 299 976 316	-23 684
0		5 299 976 110	-23 890
10		5 299 975 558	-24 442
20		5 299 977 168	-22 832
30		5 299 977 581	-22 419
40		5 300 022 689	22 689
50		5 300 024 759	24 759
-20	5 320 000 000	5 319 975 468	-24 532
-10		5 319 976 612	-23 388
0		5 319 978 031	-21 969
10		5 319 979 678	-20 322
20		5 319 980 050	-19 950
30		5 319 977 767	-22 233
40		5 320 027 458	27 458
50		5 320 030 582	30 582

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

11.6 Test Data for U-NII-2C

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-20	5 500 000 000	5 499 978 796	-21 204
-10		5 499 980 514	-19 486
0		5 499 982 376	-17 624
10		5 499 980 776	-19 224
20		5 499 982 511	-17 489
30		5 499 980 512	-19 488
40		5 500 023 375	23 375
50		5 500 026 356	26 356
-20	5 580 000 000	5 579 980 108	-19 892
-10		5 579 982 111	-17 889
0		5 579 982 491	-17 509
10		5 579 984 167	-15 833
20		5 579 986 135	-13 865
30		5 579 983 518	-16 482
40		5 580 025 916	25 916
50		5 580 028 447	28 447
-20	5 700 000 000	5 699 972 916	-27 084
-10		5 699 973 344	-26 656
0		5 699 976 213	-23 787
10		5 699 977 044	-22 956
20		5 699 979 153	-20 847
30		5 699 975 813	-24 187
40		5 700 023 614	23 614
50		5 700 025 869	25 869

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

11.7 Test Data for U-NII-3

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-20	5 745 000 000	5 744 974 811	-25 189
-10		5 744 975 134	-24 866
0		5 744 978 735	-21 265
10		5 744 978 304	-21 696
20		5 744 980 225	-19 775
30		5 744 976 853	-23 147
40		5 745 025 915	25 915
50		5 745 027 164	27 164
-20	5 785 000 000	5 784 972 210	-27 790
-10		5 784 975 784	-24 216
0		5 784 976 513	-23 487
10		5 784 978 175	-21 825
20		5 784 980 258	-19 742
30		5 784 982 158	-17 842
40		5 785 027 665	27 665
50		5 785 030 059	30 059
-20	5 825 000 000	5 824 973 548	-26 452
-10		5 824 975 486	-24 514
0		5 824 977 800	-22 200
10		5 824 977 678	-22 322
20		5 824 980 028	-19 972
30		5 824 979 164	-20 836
40		5 825 025 966	25 966
50		5 825 028 674	28 674

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

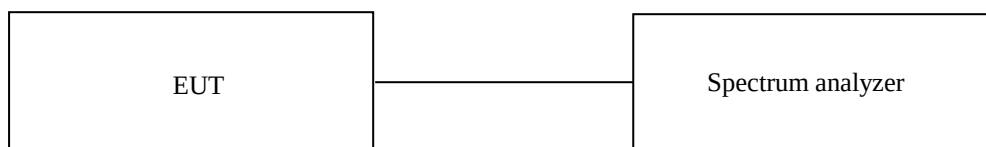
12. FREQUENCY STABILITY WITH VOLTAGE VARIATION

12.1 Operating environment

Temperature : 23 °C
Relative humidity : 44 % R.H.

12.2 Test set-up

An external DC power supply was connected to the input of the EUT. The voltage of EUT set to 110.0 % of the nominal value and then was reduced to 90.0 % of nominal voltage. The output frequency was recorded at each step.



12.3 Test Date

October 07, 2021 ~ October 20, 2021

12.4 Test Data for U-NII-1

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5	5 180 000 000	5 179 975 518	-24 482
4.25		5 179 975 196	-24 804
5.75		5 179 975 768	-24 232
5	5 220 000 000	5 219 976 469	-23 531
4.25		5 219 976 225	-23 775
5.75		5 219 976 694	-23 306
5	5 240 000 000	5 239 973 568	-26 432
4.25		5 239 973 341	-26 659
5.75		5 239 973 778	-26 222

12.5 Test Data for U-NII-2A

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5	5 260 000 000	5 259 974 584	-25 416
4.25		5 259 974 369	-25 631
5.75		5 259 974 743	-25 257
5	5 300 000 000	5 299 977 168	-22 832
4.25		5 299 976 915	-23 085
5.75		5 299 976 440	-23 560
5	5 320 000 000	5 319 980 050	-19 950
4.25		5 319 979 753	-20 247
5.75		5 319 980 301	-19 699

12.6 Test Data for U-NII-2C

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5	5 500 000 000	5 499 982 511	-17 489
4.25		5 499 982 275	-17 725
5.75		5 499 982 763	-17 237
5	5 580 000 000	5 579 986 135	-13 865
4.25		5 579 985 867	-14 133
5.75		5 579 986 346	-13 654
5	5 700 000 000	5 699 979 153	-20 847
4.25		5 699 978 908	-21 092
5.75		5 699 979 404	-20 596

12.7 Test Data for U-NII-3

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5	5 745 000 000	5 744 980 225	-19 775
4.25		5 744 980 057	-19 943
5.75		5 744 980 463	-19 537
5	5 785 000 000	5 784 980 258	-19 742
4.25		5 784 980 013	-19 987
5.75		5 784 980 465	-19 535
5	5 825 000 000	5 824 980 028	-19 972
4.25		5 824 979 895	-20 105
5.75		5 824 980 235	-19 765

13. RADIATED SPURIOUS EMISSIONS

13.1 Operating environment

Temperature : 23 °C
Relative humidity : 44 % R.H.

13.2 Test set-up for conducted measurement

The radiated emissions measurements were on the 3 m semi anechoic chamber. The EUT and other support equipment were placed on a non-conductive turntable above the ground plane. The interconnecting cables from outside test site were inserted into ferrite clamps at the point where the cables reach the turntable.

The frequency spectrum from 30 MHz to 40 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



13.3 Test Date

October 07, 2021 ~ October 20, 2021

13.4 Test data for Below 30 MHz

- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Emission from the EUT more than 20 dB below the limit in each frequency range.									

13.5 Test data for 30 MHz ~ 1 000 MHz

13.5.1 Test data for WLAN 5 GHz

Humidity Level : 44 % R.H.

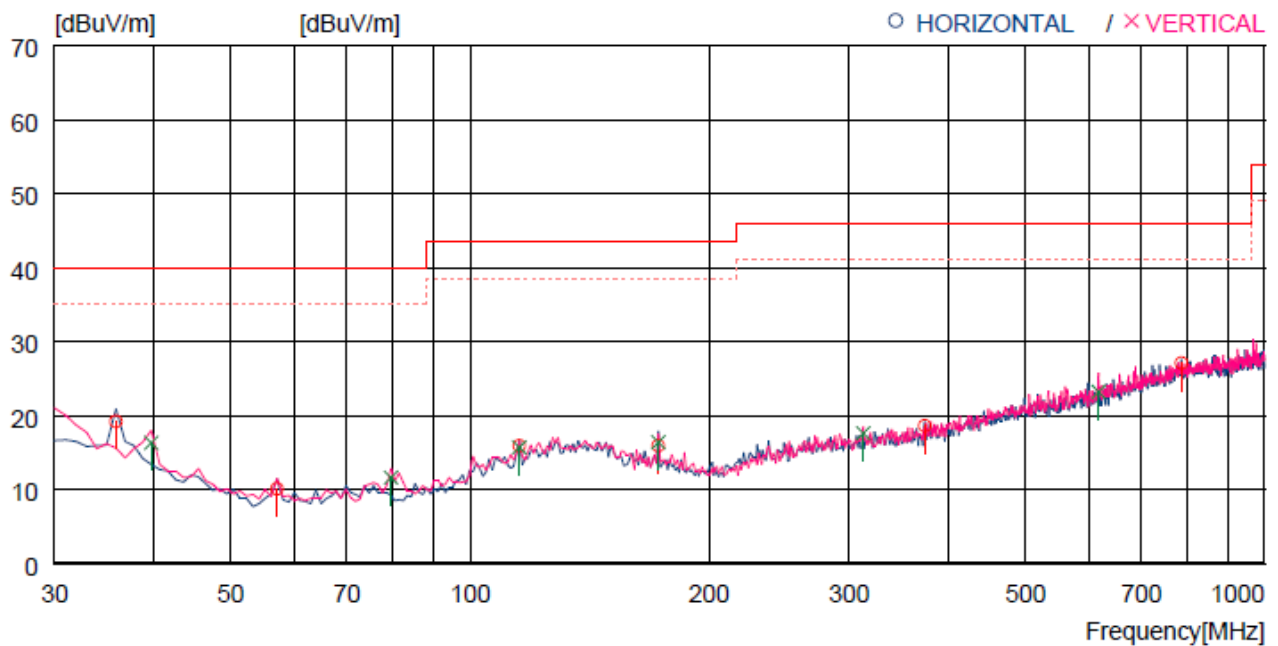
Temperature: 23 ° C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

Result : PASSED

EUT : Wi-Fi/BT Transceiver

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
---- Horizontal ----										
1	35.820	31.1	18.8	1.3	32.0	19.2	40.0	20.8	100	68
2	57.160	28.3	12.4	1.5	32.1	10.1	40.0	29.9	100	68
3	115.360	28.2	17.8	1.9	32.0	15.9	43.5	27.6	100	158
4	172.590	28.5	17.1	2.3	32.0	15.9	43.5	27.6	100	68
5	373.380	27.0	20.3	3.4	32.1	18.6	46.0	27.4	100	175
6	785.622	27.3	26.9	4.9	32.0	27.1	46.0	18.9	100	84
---- Vertical ----										
7	39.700	29.6	17.4	1.3	32.0	16.3	40.0	23.7	100	341
8	79.470	29.0	12.9	1.7	32.0	11.6	40.0	28.4	100	341
9	115.360	28.0	17.8	1.9	32.0	15.7	43.5	27.8	100	341
10	172.590	29.0	17.1	2.3	32.0	16.4	43.5	27.1	100	341
11	312.270	27.1	19.4	3.1	32.0	17.6	46.0	28.4	100	149
12	617.817	26.9	24.4	4.3	32.4	23.2	46.0	22.8	100	50

-.Antenna 0, Antenna 1 and Multiple transmit tested, but the worst data were recorded.

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13.5.2 Test data for Intermodulation Mode(Bluetooth LE + WLAN 2.4 GHz + WLAN 5 GHz)

Humidity Level : 44 % R.H.

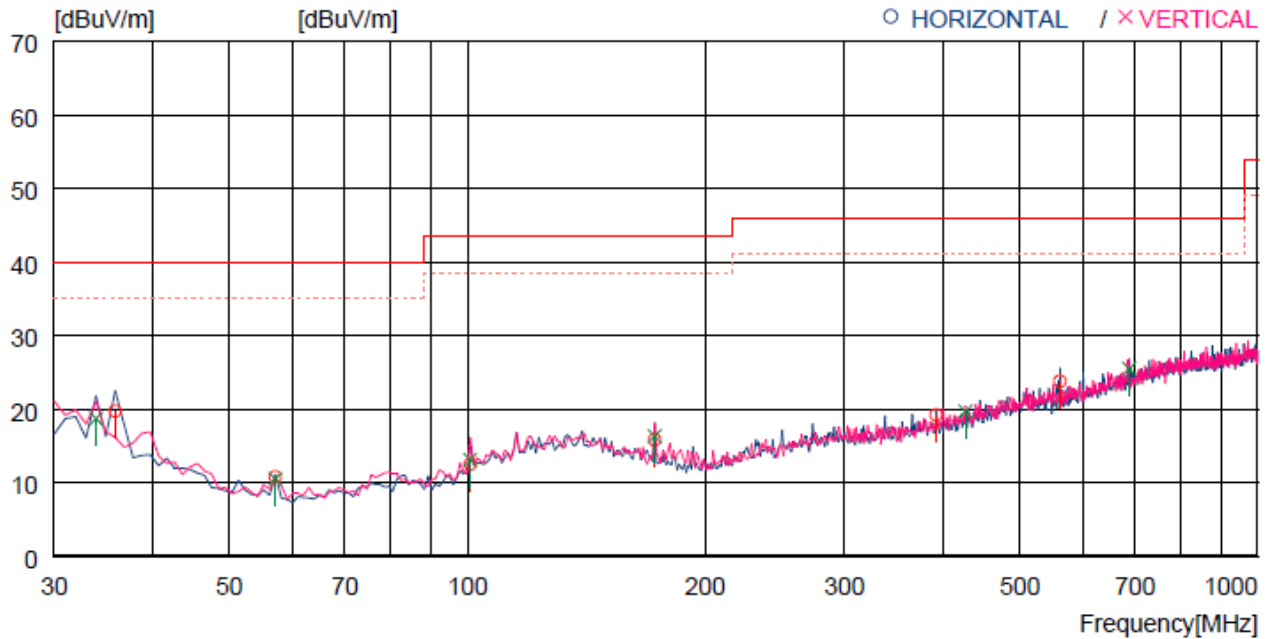
Temperature: 23 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

Result : PASSED

EUT : Wi-Fi/BT Transceiver

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
---- Horizontal ----										
1	35.820	31.6	18.8	1.3	32.0	19.7	40.0	20.3	100	246
2	57.160	29.0	12.4	1.5	32.1	10.8	40.0	29.2	100	220
3	100.810	27.3	15.4	1.8	32.0	12.5	43.5	31.0	100	220
4	172.590	28.4	17.1	2.3	32.0	15.8	43.5	27.7	100	311
5	391.810	27.3	20.6	3.4	32.1	19.2	46.0	26.8	100	343
6	562.529	28.3	23.8	4.1	32.4	23.8	46.0	22.2	100	253
---- Vertical ----										
7	33.880	30.0	19.5	1.2	32.0	18.7	40.0	21.3	100	77
8	57.160	28.7	12.4	1.5	32.1	10.5	40.0	29.5	100	8
9	100.810	27.9	15.4	1.8	32.0	13.1	43.5	30.4	100	45
10	172.590	28.9	17.1	2.3	32.0	16.3	43.5	27.2	100	68
11	426.731	27.0	21.3	3.6	32.2	19.7	46.0	26.3	100	8
12	687.655	27.8	25.4	4.6	32.3	25.5	46.0	20.5	100	8

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13.5.3 Test data for Intermodulation Mode(Bluetooth + WLAN 2.4 GHz + WLAN 5 GHz)

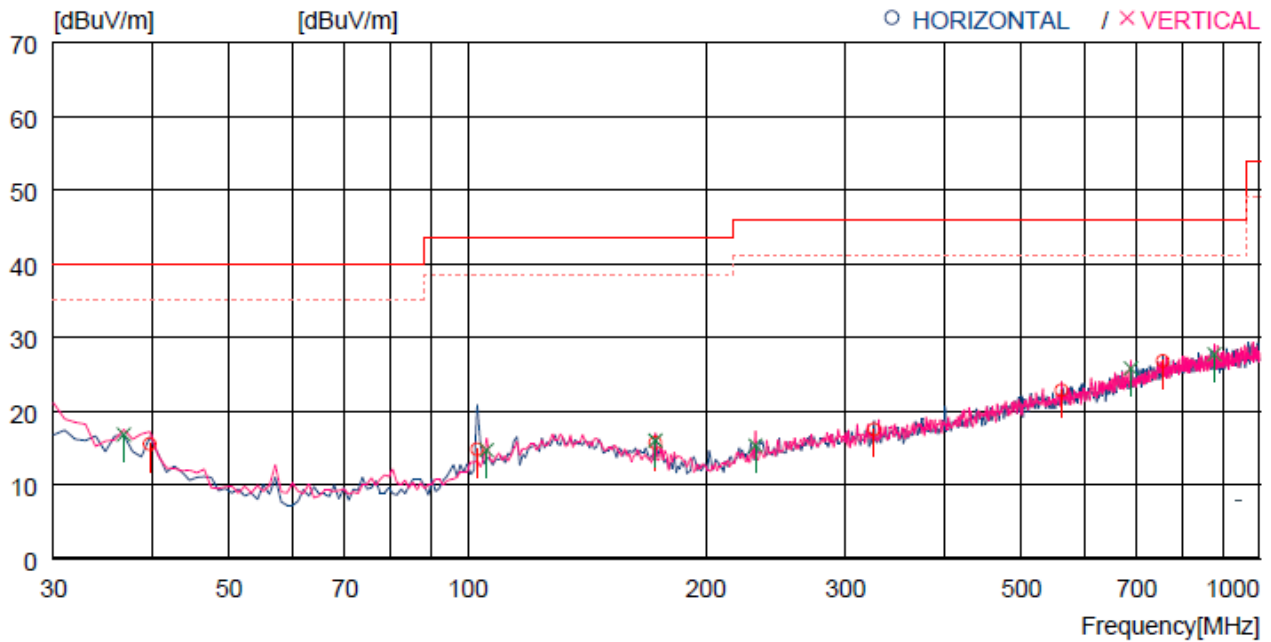
Humidity Level : 44 % R.H. Temperature: 23 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

Result : PASSED

EUT : Wi-Fi/BT Transceiver

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
---- Horizontal ----										
1	39.700	28.8	17.4	1.3	32.0	15.5	40.0	24.5	100	185
2	102.750	29.2	15.8	1.8	32.0	14.8	43.5	28.7	100	204
3	172.590	28.3	17.1	2.3	32.0	15.7	43.5	27.8	100	185
4	325.850	26.8	19.6	3.1	32.0	17.5	46.0	28.5	100	185
5	562.529	27.3	23.8	4.1	32.4	22.8	46.0	23.2	100	331
6	754.583	27.7	26.4	4.8	32.1	26.8	46.0	19.2	100	354
---- Vertical ----										
7	36.790	29.0	18.5	1.3	32.0	16.8	40.0	23.2	100	180
8	105.660	28.6	16.2	1.9	32.0	14.7	43.5	28.8	100	289
9	172.590	28.6	17.1	2.3	32.0	16.0	43.5	27.5	100	359
10	230.790	27.7	17.0	2.6	32.0	15.3	46.0	30.7	100	359
11	687.655	28.1	25.4	4.6	32.3	25.8	46.0	20.2	100	180
12	876.800	26.9	27.4	5.2	31.8	27.7	46.0	18.3	100	206

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13.6 Test data for Above 1 GHz

13.6.1 Test data for Frequency UNII I

13.6.1.1 Test data for 802.11a RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 360.00	52.33	Peak	H	39.80	7.04	46.44	52.73	68.20	15.47
10 360.00	51.88	Peak	V	39.80	7.04	46.44	52.28	68.20	15.92
Middle Channel									
10 440.00	51.68	Peak	H	40.00	7.08	46.44	52.32	68.20	15.88
10 440.00	52.33	Peak	V	40.00	7.08	46.44	52.97	68.20	15.23
High Channel									
10 480.00	52.11	Peak	H	40.05	7.08	46.44	52.80	68.20	15.40
10 480.00	52.12	Peak	V	40.05	7.08	46.44	52.81	68.20	15.39

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.1.2 Test data for 802.11n_HT20 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 360.00	52.21	Peak	H	39.80	7.04	46.44	52.61	68.20	15.59
10 360.00	51.56	Peak	V	39.80	7.04	46.44	51.96	68.20	16.24
Middle Channel									
10 440.00	52.38	Peak	H	40.00	7.08	46.44	53.02	68.20	15.18
10 440.00	51.95	Peak	V	40.00	7.08	46.44	52.59	68.20	15.61
High Channel									
10 480.00	52.11	Peak	H	40.05	7.08	46.44	52.80	68.20	15.40
10 480.00	51.89	Peak	V	40.05	7.08	46.44	52.58	68.20	15.62

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.1.3 Test data for 802.11n_HT40 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 380.00	51.35	Peak	H	39.80	7.04	46.44	51.75	68.20	16.45
10 380.00	50.98	Peak	V	39.80	7.04	46.44	51.38	68.20	16.82
High Channel									
10 460.00	51.61	Peak	H	40.00	7.08	46.44	52.25	68.20	15.95
10 460.00	50.99	Peak	V	40.00	7.08	46.44	51.63	68.20	16.57

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.1.4 Test data for 802.11ac_HT80 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Middle Channel									
10 420.00	51.11	Peak	H	40.00	7.08	46.44	51.75	68.20	16.45
10 420.00	50.96	Peak	V	40.00	7.08	46.44	51.60	68.20	16.60

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.2 Test data for Frequency UNII 2A

13.6.2.1 Test data for 802.11a RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 520.00	51.66	Peak	H	40.05	7.07	46.44	52.34	68.20	15.86
10 520.00	51.20	Peak	V	40.05	7.07	46.44	51.88	68.20	16.32
Middle Channel									
10 600.00	51.35	Peak	H	40.08	7.11	46.31	52.23	74.00	21.77
10 600.00	41.35	Average	H	40.08	7.11	46.31	42.23	54.00	11.77
10 600.00	51.62	Peak	V	40.08	7.11	46.31	52.50	74.00	21.50
10 600.00	40.89	Average	V	40.08	7.11	46.31	41.77	54.00	12.23
High Channel									
10 640.00	51.62	Peak	H	40.08	7.11	46.31	52.50	74.00	21.50
10 640.00	41.33	Average	H	40.08	7.11	46.31	42.21	54.00	11.79
10 640.00	51.41	Peak	V	40.08	7.11	46.31	52.29	74.00	21.71
10 640.00	41.10	Average	V	40.08	7.11	46.31	41.98	54.00	12.02

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.2.2 Test data for 802.11n_HT20 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 520.00	51.37	Peak	H	40.05	7.07	46.44	52.05	68.20	16.15
10 520.00	51.11	Peak	V	40.05	7.07	46.44	51.79	68.20	16.41
Middle Channel									
10 600.00	51.56	Peak	H	40.08	7.11	46.31	52.44	74.00	21.56
10 600.00	41.05	Average	H	40.08	7.11	46.31	41.93	54.00	12.07
10 600.00	51.11	Peak	V	40.08	7.11	46.31	51.99	74.00	22.01
10 600.00	40.98	Average	V	40.08	7.11	46.31	41.86	54.00	12.14
High Channel									
10 640.00	51.62	Peak	H	40.08	7.11	46.31	52.50	74.00	21.50
10 640.00	41.32	Average	H	40.08	7.11	46.31	42.20	54.00	11.80
10 640.00	51.05	Peak	V	40.08	7.11	46.31	51.93	74.00	22.07
10 640.00	40.83	Average	V	40.08	7.11	46.31	41.71	54.00	12.29

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.2.3 Test data for 802.11n_HT40 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 540.00	52.65	Peak	H	40.05	7.07	46.44	53.33	68.20	14.87
10 540.00	51.85	Peak	V	40.05	7.07	46.44	52.53	68.20	15.67
High Channel									
10 620.00	51.88	Peak	H	40.08	7.11	46.31	52.76	74.00	21.24
10 620.00	41.26	Average	H	40.08	7.11	46.31	42.14	54.00	11.86
10 620.00	51.31	Peak	V	40.08	7.11	46.31	52.19	74.00	21.81
10 620.00	40.98	Average	V	40.08	7.11	46.31	41.86	54.00	12.14

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.2.4 Test data for 802.11ac_HT80 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Middle Channel									
10 580.00	51.62	Peak	H	40.08	7.11	46.44	52.37	68.20	15.83
10 580.00	50.95	Peak	V	40.08	7.11	46.44	51.70	68.20	16.50

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.3 Test data for Frequency UNII 2C

13.6.3.1 Test data for 802.11a RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 000.00	52.36	Peak	H	40.30	7.13	46.04	53.75	74.00	20.25
11 000.00	41.33	Average	H	40.30	7.13	46.04	42.72	54.00	11.28
11 000.00	51.95	Peak	V	40.30	7.13	46.04	53.34	74.00	20.66
11 000.00	40.21	Average	V	40.30	7.13	46.04	41.60	54.00	12.40
Middle Channel									
11 160.00	52.45	Peak	H	39.95	7.13	46.09	53.44	74.00	20.56
11 160.00	41.41	Average	H	39.95	7.13	46.09	42.40	54.00	11.60
11 160.00	52.05	Peak	V	39.95	7.13	46.09	53.04	74.00	20.96
11 160.00	40.97	Average	V	39.95	7.13	46.09	41.96	54.00	12.04
High Channel									
11 400.00	52.33	Peak	H	40.00	7.16	46.09	53.40	74.00	20.60
11 400.00	41.05	Average	H	40.00	7.16	46.09	42.12	54.00	11.88
11 400.00	52.05	Peak	V	40.00	7.16	46.09	53.12	74.00	20.88
11 400.00	40.95	Average	V	40.00	7.16	46.09	42.02	54.00	11.98

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.3.2 Test data for 802.11n_HT20 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 000.00	52.51	Peak	H	40.30	7.13	46.04	53.90	74.00	20.10
11 000.00	41.38	Average	H	40.30	7.13	46.04	42.77	54.00	11.23
11 000.00	52.24	Peak	V	40.30	7.13	46.04	53.63	74.00	20.37
11 000.00	41.05	Average	V	40.30	7.13	46.04	42.44	54.00	11.56
Middle Channel									
11 160.00	52.66	Peak	H	39.95	7.13	46.09	53.65	74.00	20.35
11 160.00	41.21	Average	H	39.95	7.13	46.09	42.20	54.00	11.80
11 160.00	52.15	Peak	V	39.95	7.13	46.09	53.14	74.00	20.86
11 160.00	40.98	Average	V	39.95	7.13	46.09	41.97	54.00	12.03
High Channel									
11 400.00	52.34	Peak	H	40.00	7.16	46.09	53.41	74.00	20.59
11 400.00	41.08	Average	H	40.00	7.16	46.09	42.15	54.00	11.85
11 400.00	51.91	Peak	V	40.00	7.16	46.09	52.98	74.00	21.02
11 400.00	41.21	Average	V	40.00	7.16	46.09	42.28	54.00	11.72

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.3.3 Test data for 802.11n_HT40 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 020.00	52.34	Peak	H	40.30	7.13	46.04	53.73	74.00	20.27
11 020.00	41.25	Average	H	40.30	7.13	46.04	42.64	54.00	11.36
11 020.00	52.05	Peak	V	40.30	7.13	46.04	53.44	74.00	20.56
11 020.00	41.05	Average	V	40.30	7.13	46.04	42.44	54.00	11.56
Middle Channel									
11 100.00	52.41	Peak	H	40.00	7.13	46.09	53.45	74.00	20.55
11 100.00	41.22	Average	H	40.00	7.13	46.09	42.26	54.00	11.74
11 100.00	51.98	Peak	V	40.00	7.13	46.09	53.02	74.00	20.98
11 100.00	40.56	Average	V	40.00	7.13	46.09	41.60	54.00	12.40
High Channel									
11 340.00	52.31	Peak	H	39.98	7.16	46.09	53.36	74.00	20.64
11 340.00	41.05	Average	H	39.98	7.16	46.09	42.10	54.00	11.90
11 340.00	52.18	Peak	V	39.98	7.16	46.09	53.23	74.00	20.77
11 340.00	40.98	Average	V	39.98	7.16	46.09	42.03	54.00	11.97

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.3.4 Test data for 802.11ac_HT80 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Middle Channel									
11 060.00	52.22	Peak	H	40.30	7.13	46.04	53.61	74.00	20.39
11 060.00	41.21	Average	H	40.30	7.13	46.04	42.60	54.00	11.40
11 060.00	52.08	Peak	V	40.30	7.13	46.04	53.47	74.00	20.53
11 060.00	41.06	Average	V	40.30	7.13	46.04	42.45	54.00	11.55

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.4 Test data for Frequency UNII 3

13.6.4.1 Test data for 802.11a RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 490.00	51.33	Peak	H	40.00	7.27	46.09	52.51	74.00	21.49
11 490.00	40.95	Average	H	40.00	7.27	46.09	42.13	54.00	11.87
11 490.00	51.21	Peak	V	40.00	7.27	46.09	52.39	74.00	21.61
11 490.00	40.85	Average	V	40.00	7.27	46.09	42.03	54.00	11.97
Middle Channel									
11 570.00	52.13	Peak	H	39.90	7.31	46.09	53.25	74.00	20.75
11 570.00	41.32	Average	H	39.90	7.31	46.09	42.44	54.00	11.56
11 570.00	51.88	Peak	V	39.90	7.31	46.09	53.00	74.00	21.00
11 570.00	41.15	Average	V	39.90	7.31	46.09	42.27	54.00	11.73
High Channel									
11 650.00	52.08	Peak	H	39.30	7.31	46.21	52.48	74.00	21.52
11 650.00	41.26	Average	H	39.30	7.31	46.21	41.66	54.00	12.34
11 650.00	51.98	Peak	V	39.30	7.31	46.21	52.38	74.00	21.62
11 650.00	41.33	Average	V	39.30	7.31	46.21	41.73	54.00	12.27

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.4.2 Test data for 802.11n_HT20 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 490.00	52.36	Peak	H	40.00	7.27	46.09	53.54	74.00	20.46
11 490.00	41.58	Average	H	40.00	7.27	46.09	42.76	54.00	11.24
11 490.00	52.18	Peak	V	40.00	7.27	46.09	53.36	74.00	20.64
11 490.00	41.41	Average	V	40.00	7.27	46.09	42.59	54.00	11.41
Middle Channel									
11 570.00	52.11	Peak	H	39.90	7.31	46.09	53.23	74.00	20.77
11 570.00	41.34	Average	H	39.90	7.31	46.09	42.46	54.00	11.54
11 570.00	52.06	Peak	V	39.90	7.31	46.09	53.18	74.00	20.82
11 570.00	41.26	Average	V	39.90	7.31	46.09	42.38	54.00	11.62
High Channel									
11 650.00	52.32	Peak	H	39.30	7.31	46.21	52.72	74.00	21.28
11 650.00	41.22	Average	H	39.30	7.31	46.21	41.62	54.00	12.38
11 650.00	51.86	Peak	V	39.30	7.31	46.21	52.26	74.00	21.74
11 650.00	41.12	Average	V	39.30	7.31	46.21	41.52	54.00	12.48

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.4.3 Test data for 802.11n_HT40 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 510.00	52.13	Peak	H	40.00	7.27	46.09	53.31	74.00	20.69
11 510.00	41.35	Average	H	40.00	7.27	46.09	42.53	54.00	11.47
11 510.00	51.98	Peak	V	40.00	7.27	46.09	53.16	74.00	20.84
11 510.00	41.22	Average	V	40.00	7.27	46.09	42.40	54.00	11.60
High Channel									
11 590.00	52.22	Peak	H	39.90	7.31	46.09	53.34	74.00	20.66
11 590.00	41.21	Average	H	39.90	7.31	46.09	42.33	54.00	11.67
11 590.00	52.16	Peak	V	39.90	7.31	46.09	53.28	74.00	20.72
11 590.00	40.95	Average	V	39.90	7.31	46.09	42.07	54.00	11.93

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

13.6.4.4 Test data for 802.11ac_HT80 RLAN Mode

13.6.4.4.1 Test data for Multiple Transmit

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Factor	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Middle Channel									
11 550.00	51.88	Peak	H	39.90	7.31	46.09	53.00	74.00	21.00
11 550.00	41.15	Average	H	39.90	7.31	46.09	42.27	54.00	11.73
11 550.00	51.35	Peak	V	39.90	7.31	46.09	52.47	74.00	21.53
11 550.00	40.95	Average	V	39.90	7.31	46.09	42.07	54.00	11.93

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14. RADIATED RESTRICTED BAND EDGE MEASUREMENTS

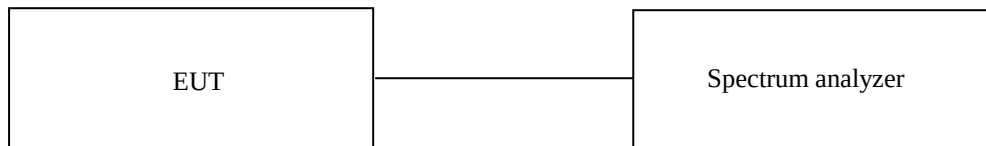
14.1 Operating environment

Temperature : 23 °C
Relative humidity : 44 % R.H.

14.2 Test set-up for conducted measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



14.3 Test Date

October 07, 2021 ~ October 20, 2021

14.4 Test data for Frequency UNII I

14.4.1 Test data for 802.11a RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 148.60	59.27	Peak	H	31.80	4.73	6.70	45.03	57.47	74.00	16.53
5 149.30	47.82	Average	H	31.80	4.73	6.70	45.03	46.02	54.00	7.98
5 146.50	55.09	Peak	V	31.80	4.73	6.70	45.03	53.29	74.00	20.71
5 149.30	44.65	Average	V	31.80	4.73	6.70	45.03	42.85	54.00	11.15

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

$$\text{Margin (dB)} = \text{Limits (dBμV/m)} - \text{Emission Level (dBμV/m)}$$

14.4.2 Test data for 802.11n_HT20 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 149.30	58.82	Peak	H	31.80	4.73	6.70	45.03	57.02	74.00	16.98
5 149.30	48.13	Average	H	31.80	4.73	6.70	45.03	46.33	54.00	7.67
5 148.60	55.57	Peak	V	31.80	4.73	6.70	45.03	53.77	74.00	20.23
5 150.00	44.37	Average	V	31.80	4.73	6.70	45.03	42.57	54.00	11.43

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

$$\text{Margin (dB)} = \text{Limits (dBμV/m)} - \text{Emission Level (dBμV/m)}$$

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14.4.3 Test data for 802.11n_HT40 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 149.30	57.94	Peak	H	31.80	4.73	10.50	45.03	59.94	74.00	14.06
5 149.30	47.37	Average	H	31.80	4.73	10.50	45.03	49.37	54.00	4.63
5 145.10	54.05	Peak	V	31.80	4.73	10.50	45.03	56.05	74.00	17.95
5 149.30	43.18	Average	V	31.80	4.73	10.50	45.03	45.18	54.00	8.82

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.4.4 Test data for 802.11ac_HT80 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 145.80	60.32	Peak	H	31.80	4.73	10.50	45.03	62.32	74.00	11.68
5 147.20	48.43	Average	H	31.80	4.73	10.50	45.03	50.43	54.00	3.57
5 138.81	54.79	Peak	V	31.80	4.73	10.50	45.03	56.79	74.00	17.21
5 149.30	43.64	Average	V	31.80	4.73	10.50	45.03	45.64	54.00	8.36

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

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14.5 Test data for Frequency UNII 2A

14.5.1 Test data for 802.11a RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 350.14	56.15	Peak	H	31.50	5.52	10.50	45.21	58.46	74.00	15.54
5 350.70	45.27	Average	H	31.50	5.52	10.50	45.21	47.58	54.00	6.42
5 354.20	54.19	Peak	V	31.50	5.52	10.50	45.21	56.50	74.00	17.50
5 351.12	43.00	Average	V	31.50	5.52	10.50	45.21	45.31	54.00	8.69

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.5.2 Test data for 802.11n_HT20 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 350.84	58.03	Peak	H	31.50	5.52	10.50	45.21	60.34	74.00	13.66
5 350.14	45.70	Average	H	31.50	5.52	10.50	45.21	48.01	54.00	5.99
5 354.48	54.36	Peak	V	31.50	5.52	10.50	45.21	56.67	74.00	17.33
5 350.28	42.71	Average	V	31.50	5.52	10.50	45.21	45.02	54.00	8.98

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

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14.5.3 Test data for 802.11n_HT40 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 353.22	60.48	Peak	H	31.50	5.52	10.50	45.21	62.79	74.00	11.21
5 350.28	47.31	Average	H	31.50	5.52	10.50	45.21	49.62	54.00	4.38
5 353.64	53.94	Peak	V	31.50	5.52	10.50	45.21	56.25	74.00	17.75
5 350.00	42.72	Average	V	31.50	5.52	10.50	45.21	45.03	54.00	8.97

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.5.4 Test data for 802.11ac_HT80 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 351.26	62.46	Peak	H	31.50	5.52	10.50	45.21	64.77	74.00	9.23
5 350.00	48.38	Average	H	31.50	5.52	10.50	45.21	50.69	54.00	3.31
5 368.46	54.60	Peak	V	31.50	5.52	10.50	45.21	56.91	74.00	17.09
5 350.14	42.61	Average	V	31.50	5.52	10.50	45.21	44.92	54.00	9.08

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

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14.6 Test data for Frequency UNII 2C

14.6.1 Test data for 802.11a RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 417.14	56.04	Peak	H	31.80	5.52	6.70	45.31	54.75	74.00	19.25
5 453.02	44.78	Average	H	31.80	5.52	6.70	45.31	43.49	54.00	10.51
5 453.11	54.62	Peak	V	31.80	5.52	6.70	45.31	53.33	74.00	20.67
5 457.45	42.99	Average	V	31.80	5.52	6.70	45.31	41.70	54.00	12.30

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.6.2 Test data for 802.11n_HT20 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 459.55	56.62	Peak	H	31.80	5.52	6.70	45.31	55.33	74.00	18.67
5 459.10	44.44	Average	H	31.80	5.52	6.70	45.31	43.15	54.00	10.85
5 456.70	54.79	Peak	V	31.80	5.52	6.70	45.31	53.50	74.00	20.50
5 458.65	42.45	Average	V	31.80	5.52	6.70	45.31	41.16	54.00	12.84

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

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OTC-TRF-RF-001(0)

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

14.6.3 Test data for 802.11n_HT40 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 459.10	58.16	Peak	H	31.80	5.52	6.70	45.31	56.87	74.00	17.13
5 459.85	45.78	Average	H	31.80	5.52	6.70	45.31	44.49	54.00	9.51
5 459.40	56.63	Peak	V	31.80	5.52	6.70	45.31	55.34	74.00	18.66
5 459.40	43.69	Average	V	31.80	5.52	6.70	45.31	42.40	54.00	11.60

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.6.4 Test data for 802.11ac_HT80 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 456.40	61.58	Peak	H	31.80	5.52	6.70	45.31	60.29	74.00	13.71
5 459.70	48.32	Average	H	31.80	5.52	6.70	45.31	47.03	54.00	6.97
5 459.70	55.02	Peak	V	31.80	5.52	6.70	45.31	53.73	74.00	20.27
5 455.50	43.61	Average	V	31.80	5.52	6.70	45.31	42.32	54.00	11.68

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

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OTC-TRF-RF-001(0)

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

14.7 Test data for Frequency U-NII-3

14.7.1 Test data for 802.11a RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- Video bandwidth : 3 MHz for Peak and Average Mode
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel										
5 676.80	56.22	Peak	H	31.80	5.63	6.70	45.31	55.04	88.03	32.99
5 719.97	62.32	Peak	H	31.80	5.63	6.70	45.31	61.14	110.79	49.65
5 723.60	76.02	Peak	H	31.80	5.63	6.70	45.31	74.84	119.01	44.17
5 851.31	52.89	Peak	H	32.30	5.71	6.70	45.19	52.41	119.21	66.80
5 859.17	53.26	Peak	H	32.30	5.71	6.70	45.19	52.78	109.63	56.85
5 878.42	54.16	Peak	H	32.30	5.71	6.70	45.19	53.68	102.67	48.99
5 657.82	54.88	Peak	V	31.80	5.63	6.70	45.31	53.70	73.99	20.29
5 719.41	60.28	Peak	V	31.80	5.63	6.70	45.31	59.10	110.63	51.53
5 724.72	72.52	Peak	V	31.80	5.63	6.70	45.31	71.34	121.56	50.22
5 851.22	52.58	Peak	V	32.30	5.71	6.70	45.19	52.10	119.42	67.32
5 864.34	52.01	Peak	V	32.30	5.71	6.70	45.19	51.53	108.18	56.65
5 905.44	51.68	Peak	V	32.30	5.71	6.70	45.19	51.20	82.67	31.47

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
High Channel										
5 673.65	55.52	Peak	H	31.80	5.63	6.70	45.31	54.34	85.70	31.36
5 709.08	56.45	Peak	H	31.80	5.63	6.70	45.31	55.27	107.74	52.47
5 721.02	55.10	Peak	H	31.80	5.63	6.70	45.31	53.92	113.13	59.21
5 850.69	59.90	Peak	H	32.30	5.71	6.70	45.19	59.42	120.63	61.21
5 855.41	55.63	Peak	H	32.30	5.71	6.70	45.19	55.15	110.69	55.54
5 918.03	53.84	Peak	H	32.30	5.71	6.70	45.19	53.36	73.36	20.00
5 697.08	53.35	Peak	V	31.80	5.63	6.70	45.31	52.17	103.04	50.87
5 718.09	53.76	Peak	V	31.80	5.63	6.70	45.31	52.58	110.27	57.69
5 724.16	54.04	Peak	V	31.80	5.63	6.70	45.31	52.86	120.28	67.42
5 850.28	58.11	Peak	V	32.30	5.71	6.70	45.19	57.63	121.56	63.93
5 859.29	53.51	Peak	V	32.30	5.71	6.70	45.19	53.03	109.60	56.57
5 879.37	52.85	Peak	V	32.30	5.71	6.70	45.19	52.37	101.97	49.60

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.7.2 Test data for 802.11n_HT20 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- Video bandwidth : 3 MHz for Peak and Average Mode
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel										
5 667.71	56.10	Peak	H	31.80	5.63	6.70	45.31	54.92	81.31	26.39
5 717.13	67.35	Peak	H	31.80	5.63	6.70	45.31	66.17	110.00	43.83
5 724.38	77.11	Peak	H	31.80	5.63	6.70	45.31	75.93	120.79	44.86
5 851.53	53.71	Peak	H	32.30	5.71	6.70	45.19	53.23	118.71	65.48
5 864.50	52.70	Peak	H	32.30	5.71	6.70	45.19	52.22	108.14	55.92
5 878.62	52.12	Peak	H	32.30	5.71	6.70	45.19	51.64	102.52	50.88
5 674.30	54.36	Peak	V	31.80	5.63	6.70	45.31	53.18	86.18	33.00
5 718.53	60.38	Peak	V	31.80	5.63	6.70	45.31	59.20	110.39	51.19
5 724.11	72.58	Peak	V	31.80	5.63	6.70	45.31	71.40	120.17	48.77
5 853.54	52.62	Peak	V	32.30	5.71	6.70	45.19	52.14	114.13	61.99
5 861.84	52.54	Peak	V	32.30	5.71	6.70	45.19	52.06	108.88	56.82
5 888.46	52.29	Peak	V	32.30	5.71	6.70	45.19	51.81	95.24	43.43

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
High Channel										
5 689.59	54.57	Peak	H	31.80	5.63	6.70	45.31	53.39	97.50	44.11
5 708.32	55.64	Peak	H	31.80	5.63	6.70	45.31	54.46	107.53	53.07
5 723.00	55.54	Peak	H	31.80	5.63	6.70	45.31	54.36	117.64	63.28
5 850.24	59.96	Peak	H	32.30	5.71	6.70	45.19	59.48	121.65	62.17
5 855.25	55.13	Peak	H	32.30	5.71	6.70	45.19	54.65	110.73	56.08
5 876.97	53.68	Peak	H	32.30	5.71	6.70	45.19	53.20	103.74	50.54
5 666.61	53.12	Peak	V	31.80	5.63	6.70	45.31	51.94	80.49	28.55
5 716.63	53.69	Peak	V	31.80	5.63	6.70	45.31	52.51	109.86	57.35
5 720.49	53.86	Peak	V	31.80	5.63	6.70	45.31	52.68	111.92	59.24
5 850.02	57.44	Peak	V	32.30	5.71	6.70	45.19	56.96	122.15	65.19
5 870.07	54.22	Peak	V	32.30	5.71	6.70	45.19	53.74	106.58	52.84
5 878.37	53.31	Peak	V	32.30	5.71	6.70	45.19	52.83	102.71	49.88

Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.7.3 Test data for 802.11n_HT40 RLAN Mode

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- Video bandwidth : 3 MHz for Peak and Average Mode
- Measurement distance : 3 m
- Duty Cycle : > 98 %
- Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel										
5 698.93	58.02	Peak	H	31.80	5.63	6.70	45.31	56.84	104.41	47.57
5 718.93	74.79	Peak	H	31.80	5.63	6.70	45.31	73.61	110.50	36.89
5 723.90	76.13	Peak	H	31.80	5.63	6.70	45.31	74.95	119.69	44.74
5 851.77	54.74	Peak	H	32.30	5.71	6.70	45.19	54.26	118.16	63.90
5 866.42	53.50	Peak	H	32.30	5.71	6.70	45.19	53.02	107.60	54.58
5 895.95	52.61	Peak	H	32.30	5.71	6.70	45.19	52.13	89.70	37.57
5 696.73	55.97	Peak	V	31.80	5.63	6.70	45.31	54.79	102.78	47.99
5 718.73	70.45	Peak	V	31.80	5.63	6.70	45.31	69.27	110.44	41.17
5 724.25	72.38	Peak	V	31.80	5.63	6.70	45.31	71.20	120.49	49.29
5 853.98	52.51	Peak	V	32.30	5.71	6.70	45.19	52.03	113.13	61.10
5 868.04	53.13	Peak	V	32.30	5.71	6.70	45.19	52.65	107.15	54.50
5 922.98	52.06	Peak	V	32.30	5.71	6.70	45.19	51.58	69.69	18.11

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
High Channel										
5 693.48	56.70	Peak	H	31.80	5.63	6.70	45.31	55.52	100.38	44.86
5 715.81	56.59	Peak	H	31.80	5.63	6.70	45.31	55.41	109.63	54.22
5 722.50	56.77	Peak	H	31.80	5.63	6.70	45.31	55.59	116.50	60.91
5 850.19	55.16	Peak	H	32.30	5.71	6.70	45.19	54.68	121.77	67.09
5 860.30	54.82	Peak	H	32.30	5.71	6.70	45.19	54.34	109.32	54.98
5 884.17	53.36	Peak	H	32.30	5.71	6.70	45.19	52.88	98.41	45.53
5 682.24	53.49	Peak	V	31.80	5.63	6.70	45.31	52.31	92.06	39.75
5 701.63	54.23	Peak	V	31.80	5.63	6.70	45.31	53.05	105.66	52.61
5 720.47	54.45	Peak	V	31.80	5.63	6.70	45.31	53.27	111.87	58.60
5 854.13	53.67	Peak	V	32.30	5.71	6.70	45.19	53.19	112.78	59.59
5 855.63	53.63	Peak	V	32.30	5.71	6.70	45.19	53.15	110.62	57.47
5 895.50	52.17	Peak	V	32.30	5.71	6.70	45.19	51.69	90.03	38.34

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.7.4 Test data for 802.11ac_HT80 RLAN Mode

- . Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- . Video bandwidth : 3 MHz for Peak and Average Mode
- . Measurement distance : 3 m
- . Duty Cycle : > 98 %
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	ATT Loss	AMP FACTOR	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel										
5 696.63	71.95	Peak	H	31.80	5.63	6.70	45.31	70.77	102.71	31.94
5 712.46	76.50	Peak	H	31.80	5.63	6.70	45.31	75.32	108.69	33.37
5 724.22	77.68	Peak	H	31.80	5.63	6.70	45.31	76.50	120.42	43.92
5 852.41	70.26	Peak	H	32.30	5.71	6.70	45.19	69.78	116.71	46.93
5 860.66	69.35	Peak	H	32.30	5.71	6.70	45.19	68.87	109.22	40.35
5 875.27	60.12	Peak	H	32.30	5.71	6.70	45.19	59.64	105.00	45.36
5 694.28	61.46	Peak	V	31.80	5.63	6.70	45.31	60.28	100.97	40.69
5 716.43	71.30	Peak	V	31.80	5.63	6.70	45.31	70.12	109.80	39.68
5 720.89	69.80	Peak	V	31.80	5.63	6.70	45.31	68.62	112.83	44.21
5 851.73	61.24	Peak	V	32.30	5.71	6.70	45.19	60.76	118.26	57.50
5 856.87	56.68	Peak	V	32.30	5.71	6.70	45.19	56.20	110.28	54.08
5 876.22	53.10	Peak	V	32.30	5.71	6.70	45.19	52.62	104.30	51.68

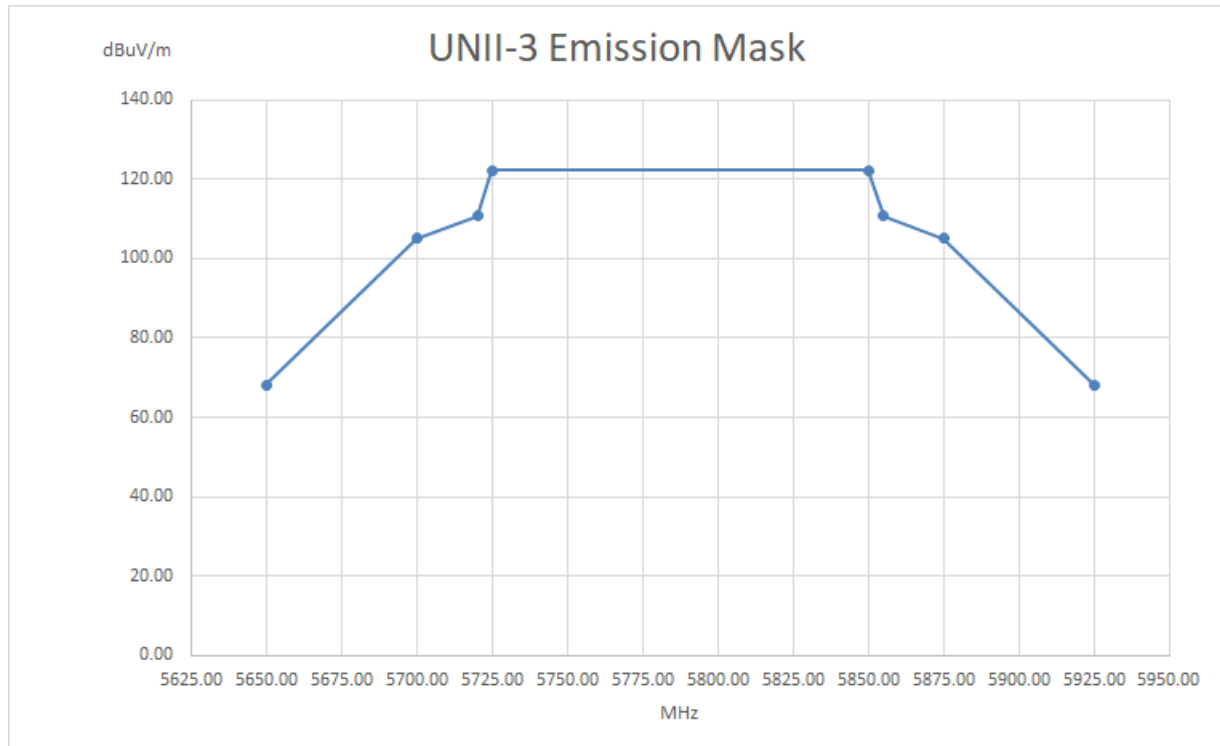
Tabulated test data for Restricted Band

Remark - “H”: Horizontal, “V”: Vertical

$$\text{Margin (dB)} = \text{Limits (dB}\mu\text{V/m)} - \text{Emission Level (dB}\mu\text{V/m)}$$

14.7.5 U-NII-3 Emission Limits

14.7.5.1 Emission Mask Plots



Remark.

-. Title 47 → Part 15 → Subpart E—UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES

§ 15.407 General technical requirements.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

15. CONDUCTED EMISSION TEST

15.1 Operating environment

Temperature : 23 °C
Relative humidity : 44 % R.H.

15.2 Test set-up

The EUT was placed on a wooden table, 0.8 m height above the floor. Power was fed to the EUT through a 50 Ω / 50 μ H + 5 Ω Artificial Mains Network (AMN). The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient.

15.3 Test Date

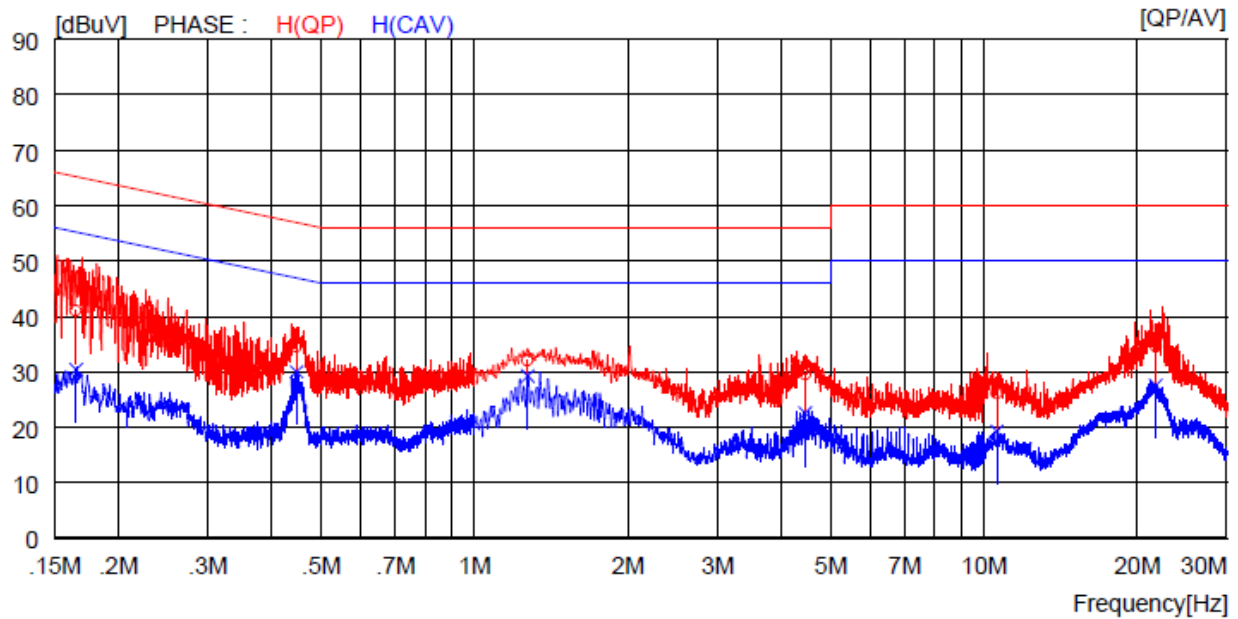
October 07, 2021 ~ October 20, 2021

15.4 Test data

15.4.1 Test data for WLAN 5 GHz

- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : LIVE LINE

LIMIT : EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Quasi-Peak Limits (Mains Ports)
EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Average Limits (Mains Ports)

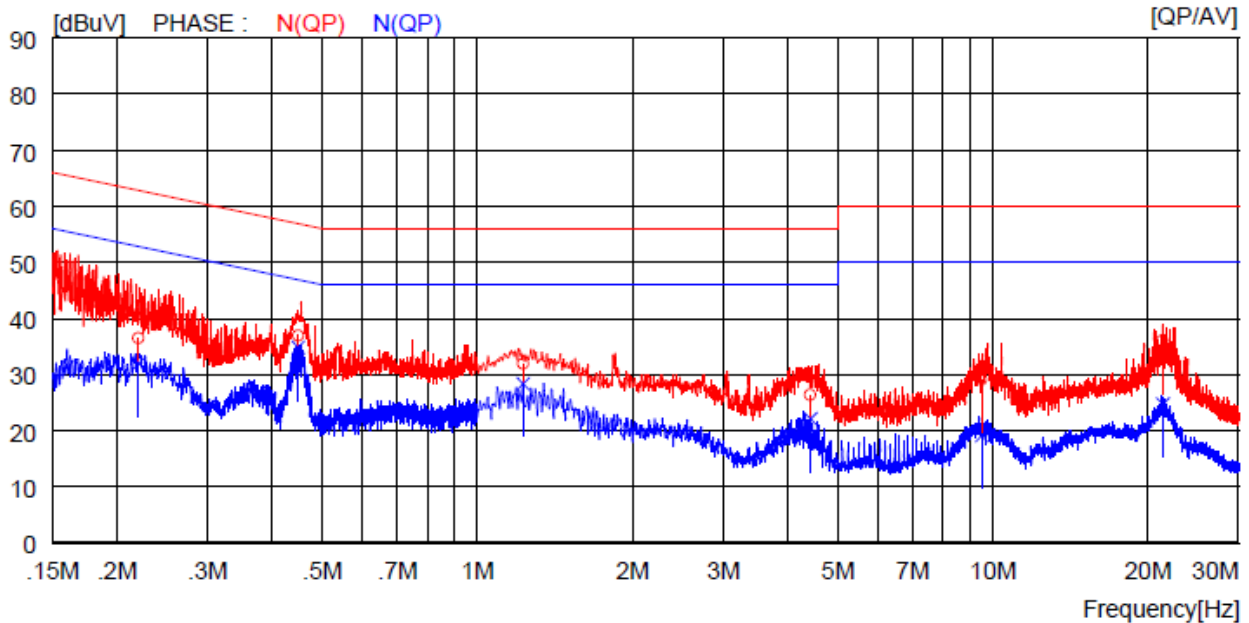


NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16500	31.0	----	10.0	41.0	----	65.2	----	24.2	----	H (QP)
2	0.44700	24.6	----	10.0	34.6	----	56.9	----	22.3	----	H (QP)
3	1.27200	22.0	----	10.1	32.1	----	56.0	----	23.9	----	H (QP)
4	4.46000	19.4	----	10.1	29.5	----	56.0	----	26.5	----	H (QP)
5	10.61000	16.0	----	10.2	26.2	----	60.0	----	33.8	----	H (QP)
6	21.75000	24.1	----	10.4	34.5	----	60.0	----	25.5	----	H (QP)
7	0.16500	----	20.4	10.0	----	30.4	----	55.2	----	24.8	H (CAV)
8	0.44700	----	20.0	10.0	----	30.0	----	46.9	----	16.9	H (CAV)
9	1.27200	----	19.2	10.1	----	29.3	----	46.0	----	16.7	H (CAV)
10	4.46000	----	12.5	10.1	----	22.6	----	46.0	----	23.4	H (CAV)
11	10.61000	----	9.1	10.2	----	19.3	----	50.0	----	30.7	H (CAV)
12	21.75000	----	17.2	10.4	----	27.6	----	50.0	----	22.4	H (CAV)

- Antenna 0, Antenna 1 and Multiple transmit tested, but the worst data were recorded.

-. Tested Line : NEUTRAL LINE

LIMIT : EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Quasi-Peak Limits (Mains Ports)
EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Average Limits (Mains Ports)



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.22000	26.5	----	10.0	36.5	----	62.8	----	26.3	----	N (QP)
2	0.44900	26.9	----	10.0	36.9	----	56.9	----	20.0	----	N (QP)
3	1.22800	21.8	----	10.1	31.9	----	56.0	----	24.1	----	N (QP)
4	4.43200	16.3	----	10.1	26.4	----	56.0	----	29.6	----	N (QP)
5	9.51500	18.9	----	10.2	29.1	----	60.0	----	30.9	----	N (QP)
6	21.37000	25.6	----	10.4	36.0	----	60.0	----	24.0	----	N (QP)
7	0.22000	----	22.0	10.0	----	32.0	----	52.8	----	20.8	N (CAV)
8	0.44900	----	24.8	10.0	----	34.8	----	46.9	----	12.1	N (CAV)
9	1.22800	----	18.3	10.1	----	28.4	----	46.0	----	17.6	N (CAV)
10	4.43200	----	12.0	10.1	----	22.1	----	46.0	----	23.9	N (CAV)
11	9.51500	----	8.9	10.2	----	19.1	----	50.0	----	30.9	N (CAV)
12	21.37000	----	14.3	10.4	----	24.7	----	50.0	----	25.3	N (CAV)

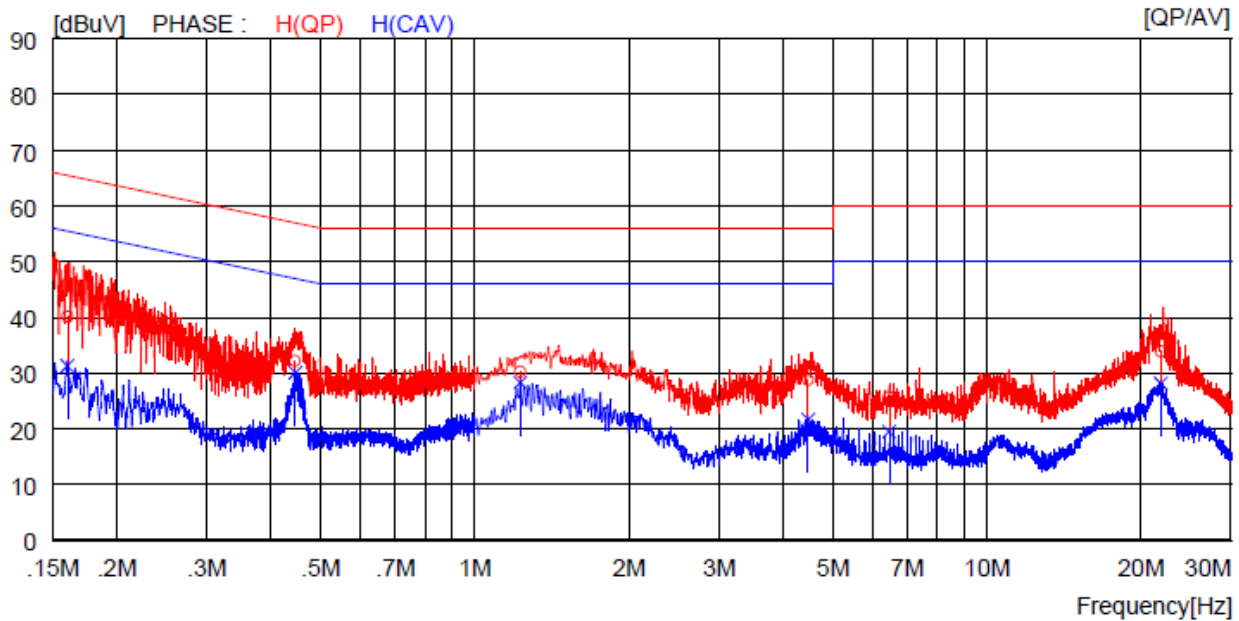
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

15.4.2 Test data for Intermodulation Mode(Bluetooth LE + WLAN 2.4 GHz + WLAN 5 GHz)

- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : LIVE LINE

LIMIT : EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Quasi-Peak Limits (Mains Ports)
EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Average Limits (Mains Ports)



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16000	30.1	----	10.0	40.1	----	65.5	----	25.4	----	H (QP)
2	0.44600	22.2	----	10.0	32.2	----	56.9	----	24.7	----	H (QP)
3	1.22800	20.1	----	10.1	30.2	----	56.0	----	25.8	----	H (QP)
4	4.48000	18.7	----	10.1	28.8	----	56.0	----	27.2	----	H (QP)
5	6.45000	15.5	----	10.2	25.7	----	60.0	----	34.3	----	H (QP)
6	21.89000	23.5	----	10.4	33.9	----	60.0	----	26.2	----	H (QP)
7	0.16000	----	21.3	10.0	----	31.3	----	55.5	----	24.2	H (CAV)
8	0.44600	----	20.1	10.0	----	30.1	----	46.9	----	16.8	H (CAV)
9	1.22800	----	18.2	10.1	----	28.3	----	46.0	----	17.7	H (CAV)
10	4.48000	----	11.6	10.1	----	21.7	----	46.0	----	24.3	H (CAV)
11	6.45000	----	9.3	10.2	----	19.5	----	50.0	----	30.5	H (CAV)
12	21.89000	----	17.7	10.4	----	28.1	----	50.0	----	21.9	H (CAV)

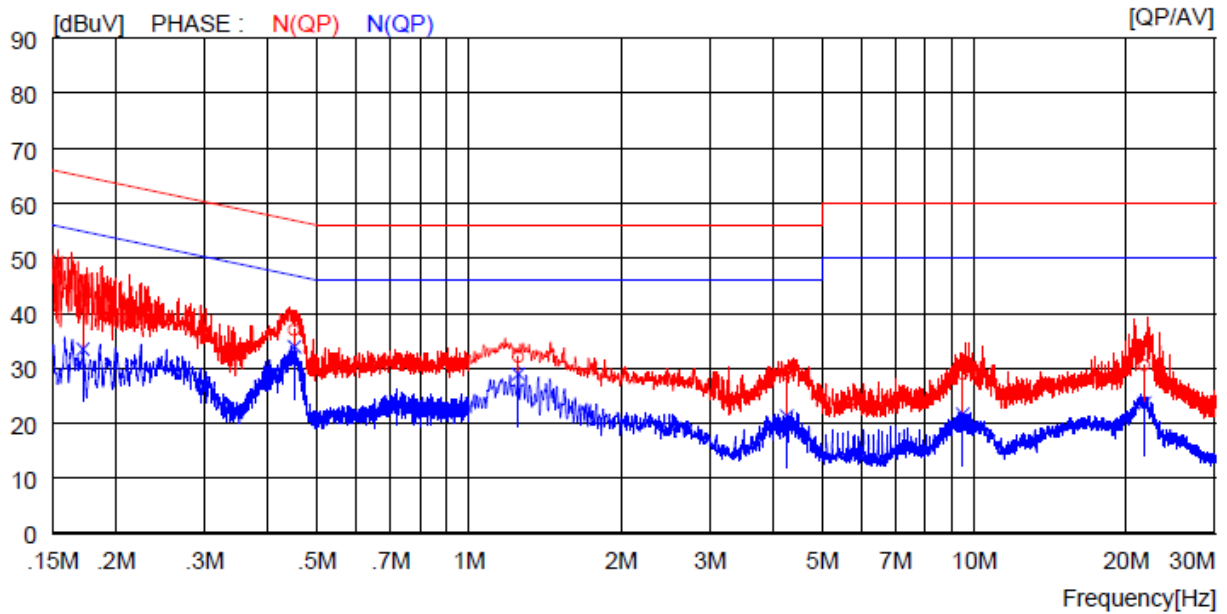
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-. Tested Line : NEUTRAL LINE

LIMIT : EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Quasi-Peak Limits (Mains Ports)
EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Average Limits (Mains Ports)



NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17200	32.2	----	10.0	42.2	----	64.9	----	22.7	----	N (QP)
2	0.45100	26.9	----	10.0	36.9	----	56.9	----	20.0	----	N (QP)
3	1.25200	22.0	----	10.1	32.1	----	56.0	----	23.9	----	N (QP)
4	4.26000	18.9	----	10.1	29.0	----	56.0	----	27.0	----	N (QP)
5	9.49000	18.8	----	10.2	29.0	----	60.0	----	31.0	----	N (QP)
6	21.73000	20.2	----	10.4	30.6	----	60.0	----	29.4	----	N (QP)
7	0.17200	----	23.5	10.0	----	33.5	----	54.9	----	21.4	N (CAV)
8	0.45100	----	23.9	10.0	----	33.9	----	46.9	----	13.0	N (CAV)
9	1.25200	----	18.9	10.1	----	29.0	----	46.0	----	17.0	N (CAV)
10	4.26000	----	11.2	10.1	----	21.3	----	46.0	----	24.7	N (CAV)
11	9.49000	----	11.5	10.2	----	21.7	----	50.0	----	28.3	N (CAV)
12	21.73000	----	13.3	10.4	----	23.7	----	50.0	----	26.3	N (CAV)

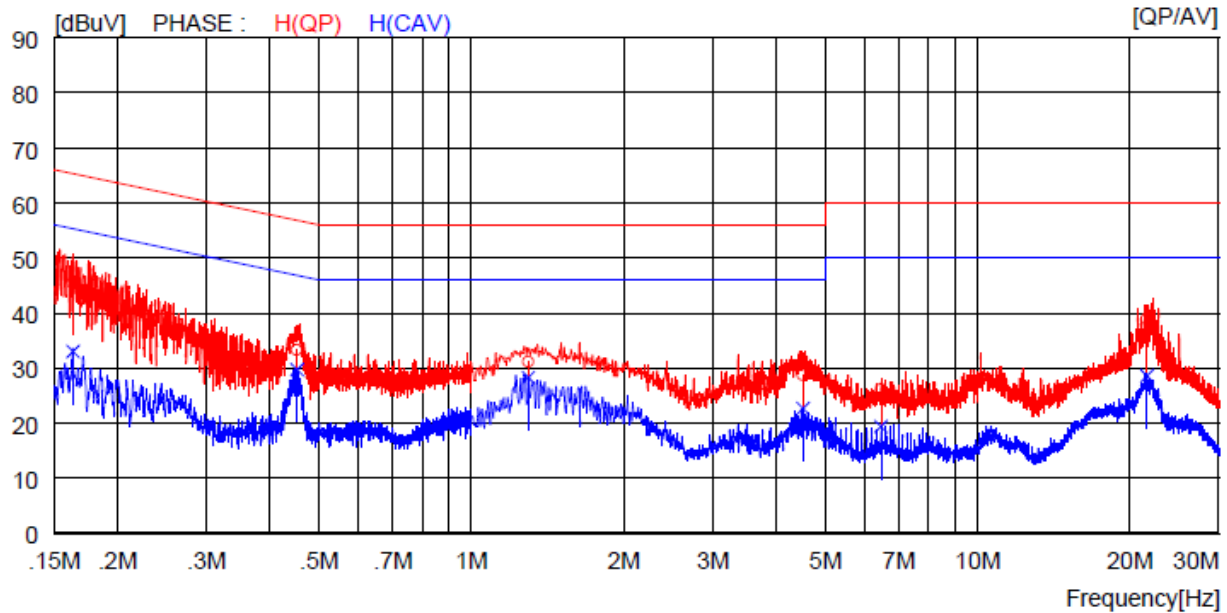
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

15.4.3 Test data for Intermodulation Mode(Bluetooth + WLAN 2.4 GHz + WLAN 5 GHz)

- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : LIVE LINE

LIMIT : EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Quasi-Peak Limits (Mains Ports)
EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Average Limits (Mains Ports)



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16300	35.5	----	10.0	45.5	----	65.3	----	19.8	----	H (QP)
2	0.45200	23.3	----	10.0	33.3	----	56.8	----	23.5	----	H (QP)
3	1.29600	21.1	----	10.1	31.2	----	56.0	----	24.8	----	H (QP)
4	4.51600	18.5	----	10.2	28.7	----	56.0	----	27.3	----	H (QP)
5	6.45000	15.9	----	10.2	26.1	----	60.0	----	33.9	----	H (QP)
6	21.62000	28.5	----	10.4	38.9	----	60.0	----	21.1	----	H (QP)
7	0.16300	----	23.0	10.0	----	33.0	----	55.3	----	22.3	H (CAV)
8	0.45200	----	19.7	10.0	----	29.7	----	46.8	----	17.1	H (CAV)
9	1.29600	----	18.2	10.1	----	28.3	----	46.0	----	17.7	H (CAV)
10	4.51600	----	12.5	10.2	----	22.7	----	46.0	----	23.3	H (CAV)
11	6.45000	----	9.2	10.2	----	19.4	----	50.0	----	30.6	H (CAV)
12	21.62000	----	18.2	10.4	----	28.6	----	50.0	----	21.4	H (CAV)

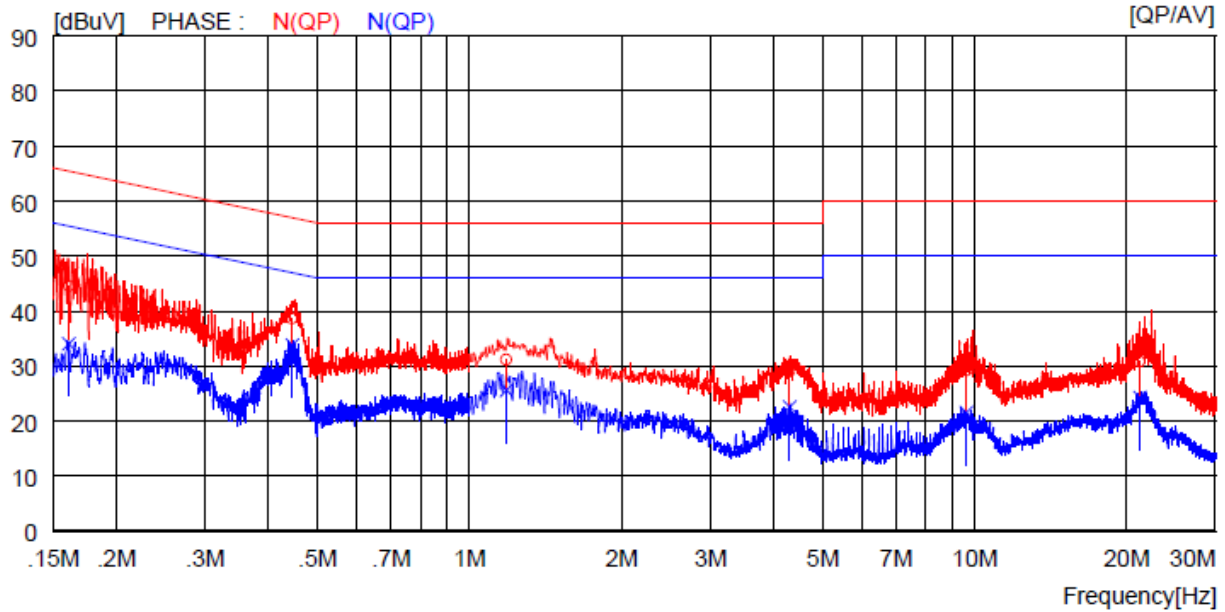
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-. Tested Line : NEUTRAL LINE

LIMIT : EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Quasi-Peak Limits (Mains Ports)
EN.KN.FCC.VCCI_CISPR Pub.22 Class B, Average Limits (Mains Ports)



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16100	34.5	----	10.0	44.5	----	65.4	----	20.9	----	N(QP)
2	0.44600	28.7	----	10.0	38.7	----	56.9	----	18.2	----	N(QP)
3	1.18400	21.0	----	10.1	31.1	----	56.0	----	24.9	----	N(QP)
4	4.30400	18.9	----	10.1	29.0	----	56.0	----	27.0	----	N(QP)
5	9.64500	19.0	----	10.2	29.2	----	60.0	----	30.8	----	N(QP)
6	21.25000	20.4	----	10.4	30.8	----	60.0	----	29.2	----	N(QP)
7	0.16100	----	24.0	10.0	----	34.0	----	55.4	----	21.4	N(CAV)
8	0.44600	----	23.8	10.0	----	33.8	----	46.9	----	13.1	N(CAV)
9	1.18400	----	15.5	10.1	----	25.6	----	46.0	----	20.4	N(CAV)
10	4.30400	----	12.5	10.1	----	22.6	----	46.0	----	23.4	N(CAV)
11	9.64500	----	11.3	10.2	----	21.5	----	50.0	----	28.5	N(CAV)
12	21.25000	----	13.9	10.4	----	24.3	----	50.0	----	25.7	N(CAV)

Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

16. DYNAMIC FREQUENCY SELECTION (DFS)

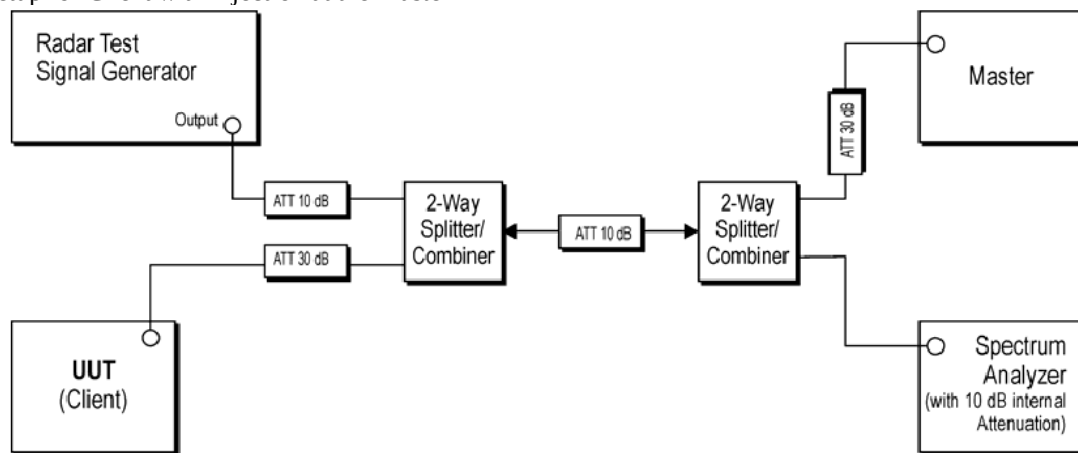
16.1 Operating environment

Temperature : 23 °C
Relative humidity : 44 % R.H.

16.2 Test set-ups

The FCC 06-96 and RSS-210 A9.3 describes a conducted test setup. A conducted test setup was user this testing. Figure 1 shows the typical test setup. Each one channel selected between 5 250 MHz and 5 350 MHz, 5 470 MHz and 5 725 MHz is chosen for the testing.

Figure 1. Setup for Client with injection at the Master



The operational behavior and individual DFS requirements that are associated with these modes are as follows:

<Master Devices>

- The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5 250 – 5 350 MHz and 5 470 – 5 725 MHz bands. DFS is not required in the 5 150 – 5 250 MHz or 5 725 – 5 825 MHz bands.
- Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for a specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.
- The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.
- During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).
- If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.

f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period. 3

g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

<Client Devices>

a) A Client Device will not transmit before having received appropriate control signals from a Master Device.

b) A Client Device will stop all its transmissions whenever instructed by a Master Device to which it is associated and will meet the Channel Move Time and Channel Closing Transmission Time requirements. The Client Device will not resume any transmissions until it has again received control signals from a Master Device.

c) If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform and d) through f) of section 5.1.1 apply.

d) Irrespective of Client Device or Master Device detection the Channel Move Time and Channel Closing Transmission Time requirements remain the same.

e) The client test frequency must be monitored to ensure no transmission of any type has occurred for 30 minutes. Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.

<Channel Connection Information>

a) Master Devices : RF-AX88U

b) Client(=EUT) Devices : WCB735M

c) Connect to test channel : See next page for measurement data.

16.3 DFS Test Signals

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	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 (Radar Types 1-4)				80%	120

Table 6 – Long Pulse Radar Test Waveform

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

16.4 Technical Requirement Specification

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

Requirement	Operational Mode		
	Master	Client (without DFS)	Client (with DFS)
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>Uniform Spreading</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client (without DFS)	Client (with DFS)
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Closing Transmission Time</i>	Yes	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

16.5 Test Date

October 07, 2021 ~ October 20, 2021

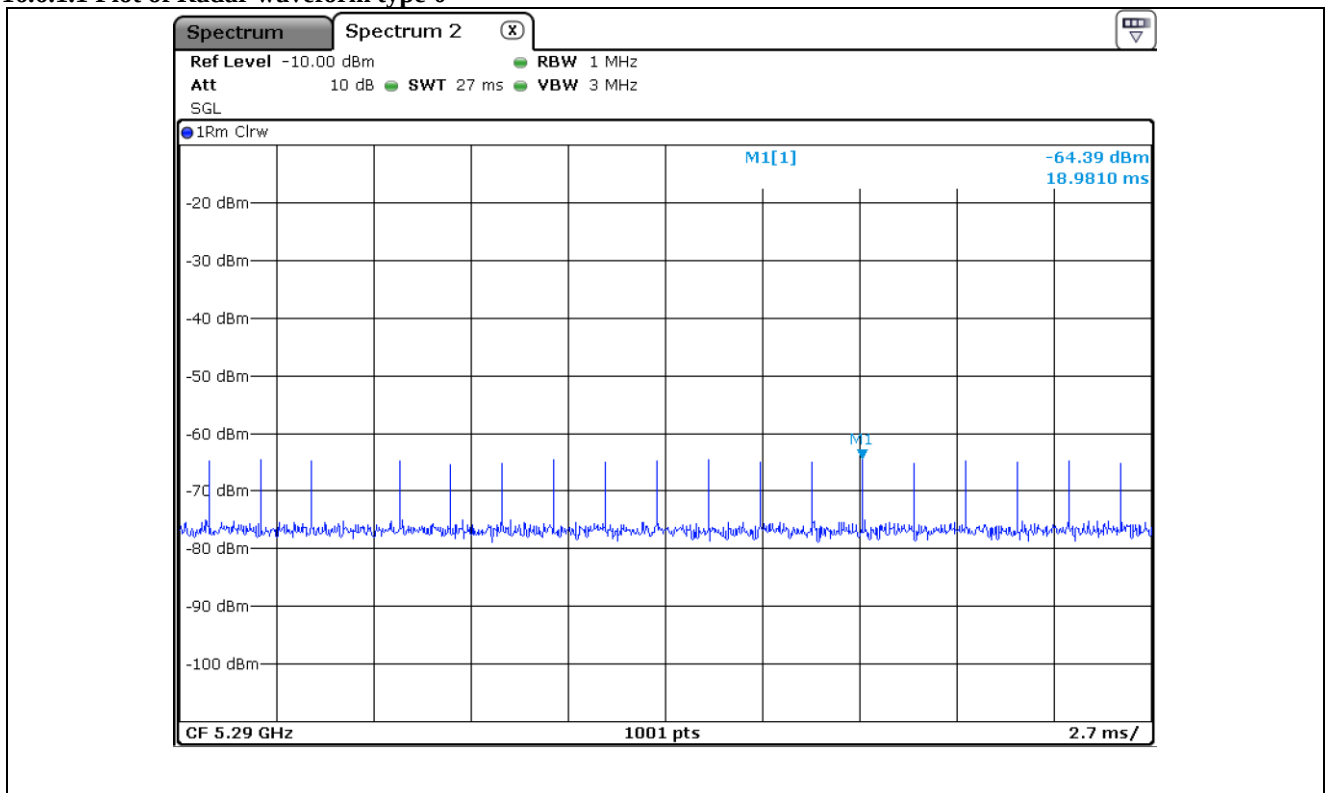
16.6 Test data

Band	Frequency (MHz)	Channel move time(s)		Channel closing transmission time(ms)	
		Measured	Limit	Measured	Limit
UNII 2A	5 290.00	0.84	10.00	6.4	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.
UNII 2C	5 530.00	0.84		4.8	

Note. Channel closing transmission time: 16 * 0.4 ms = 6.4 ms, 12 * 0.4 ms = 4.8 ms

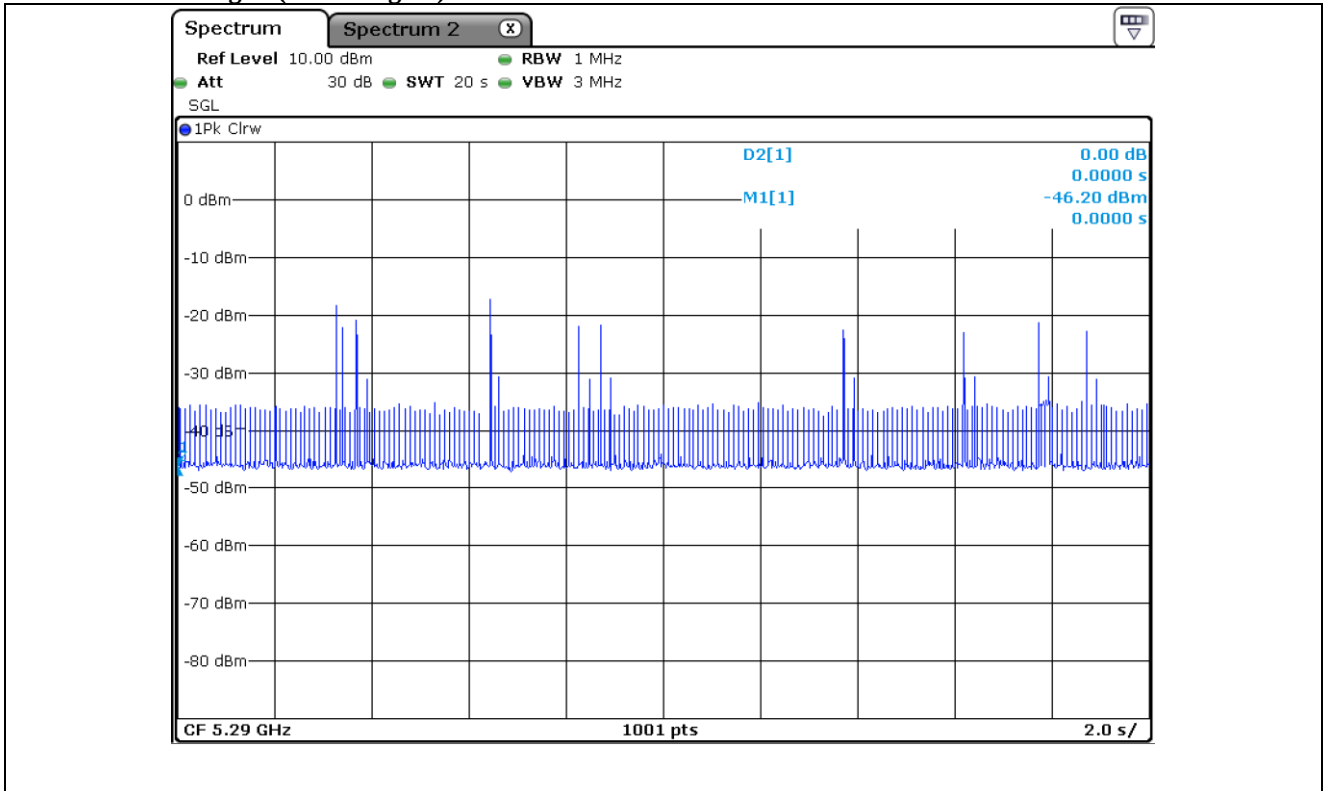
16.6.1 UNII 2A

16.6.1.1 Plot of Radar waveform type 0

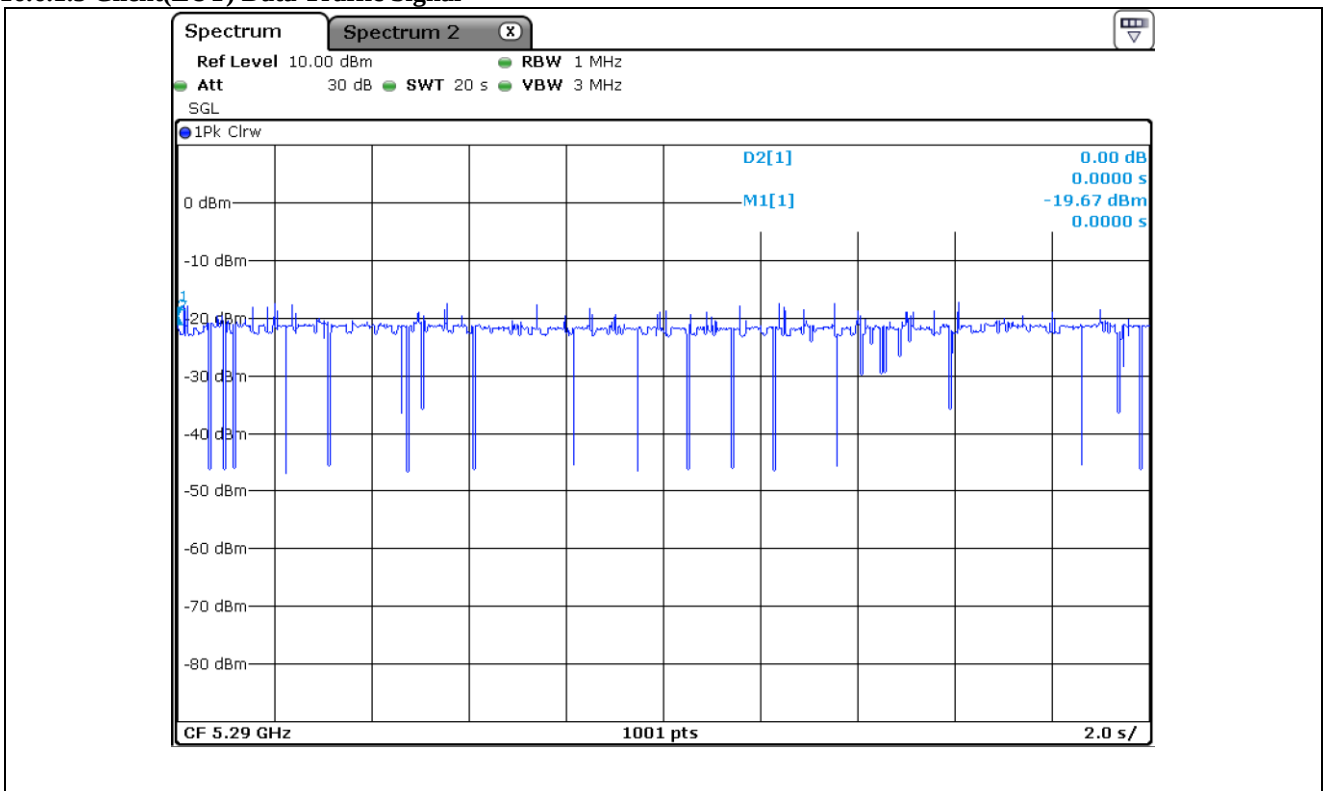


Note: The calibrated conducted DFS detection threshold level is set to -64.39 dBm ($-62+1+0.37= -60.63$ dBm)

16.6.1.2 No traffic signal(master signal)



16.6.1.3 Client(EUT) Data Traffic Signal



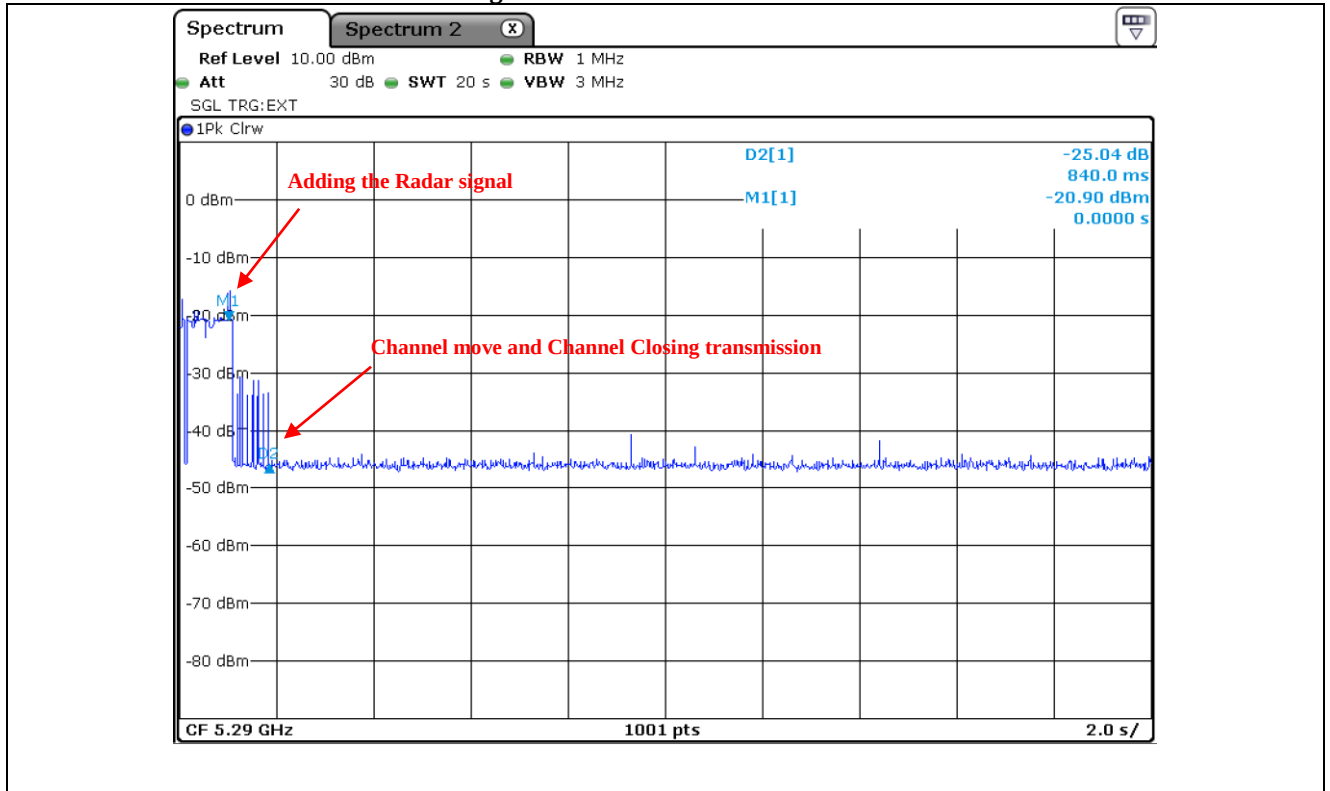
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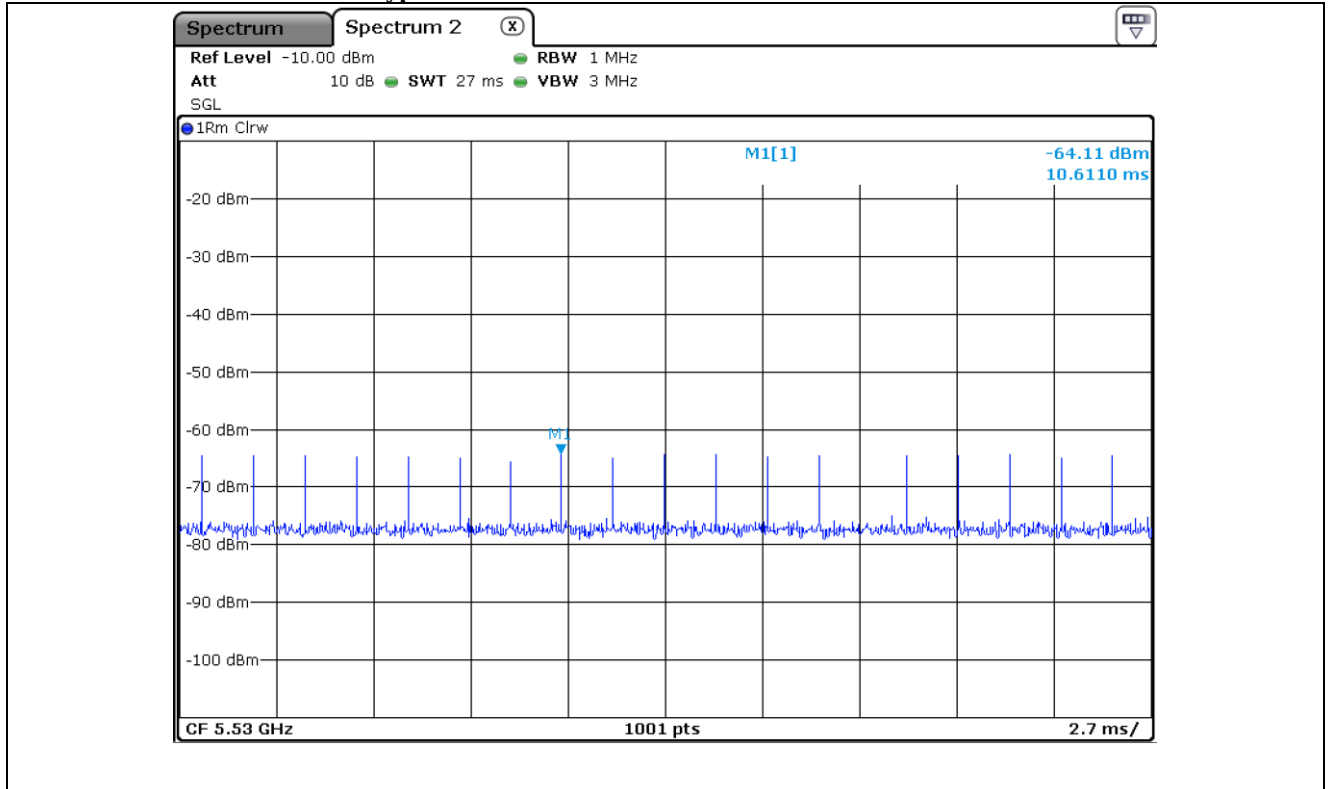
ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

16.6.1.4 Channel move and Channel Closing transmission time



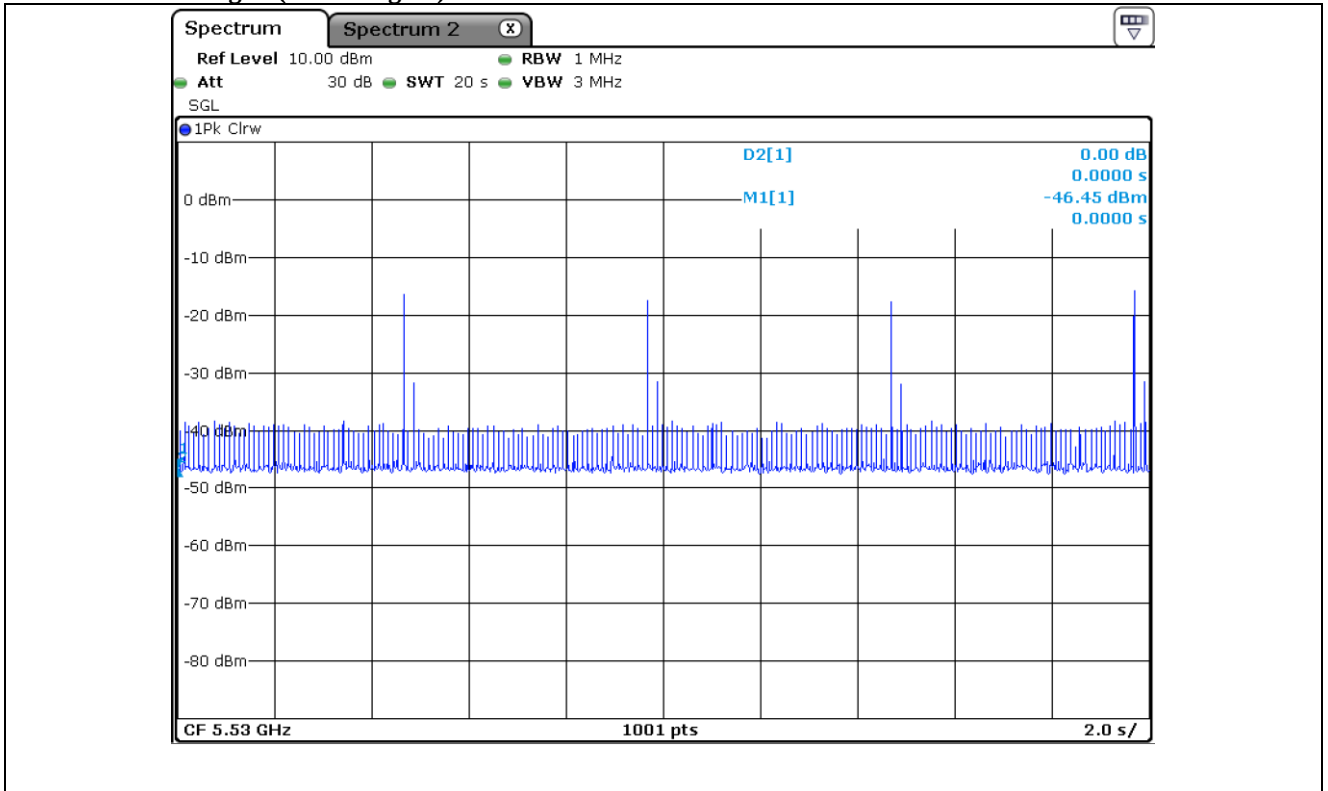
16.6.2 UNII 3

16.6.2.1 Plot of Radar waveform type 1

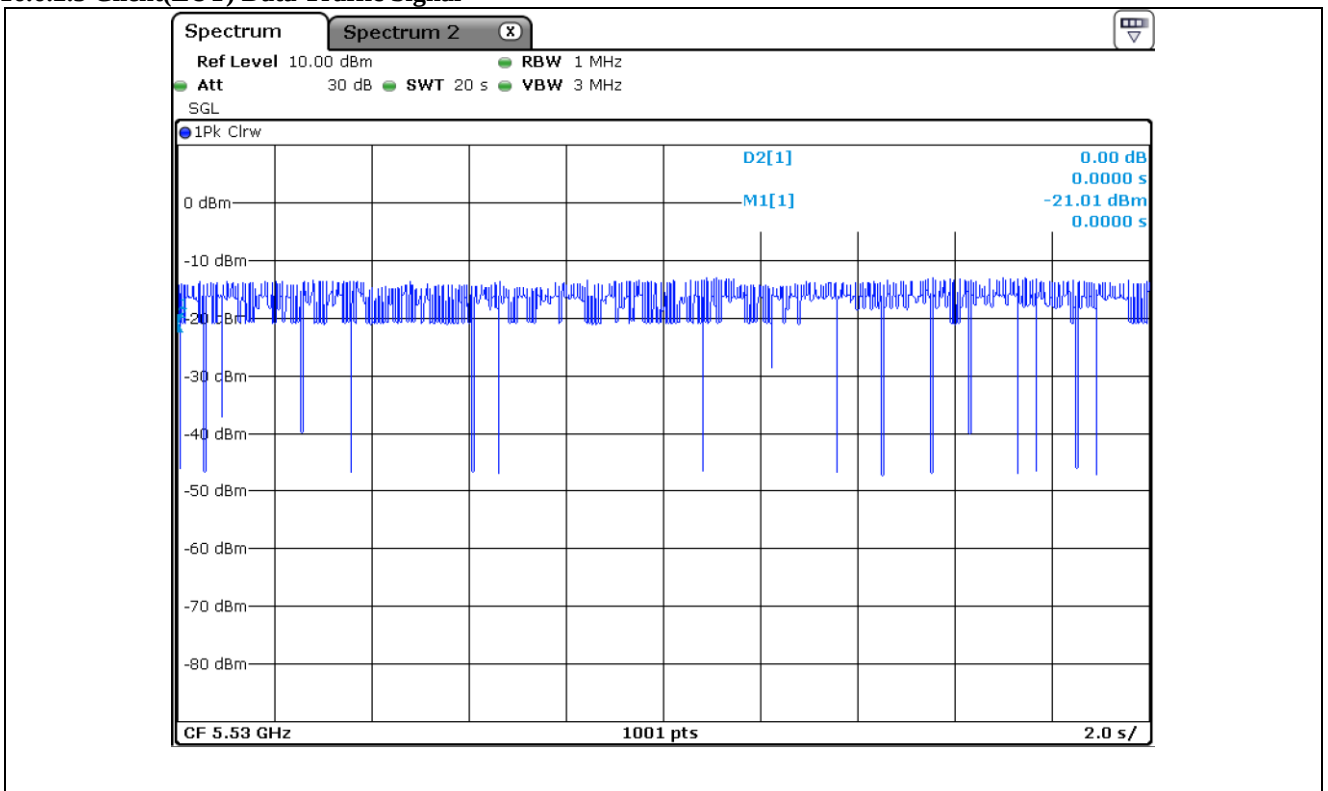


Note: The calibrated conducted DFS detection threshold level is set to -64.11 dBm ($-62+1-0.17= -61.17$ dBm)

16.6.2.2 No traffic signal(master signal)



16.6.2.3 Client(EUT) Data Traffic Signal



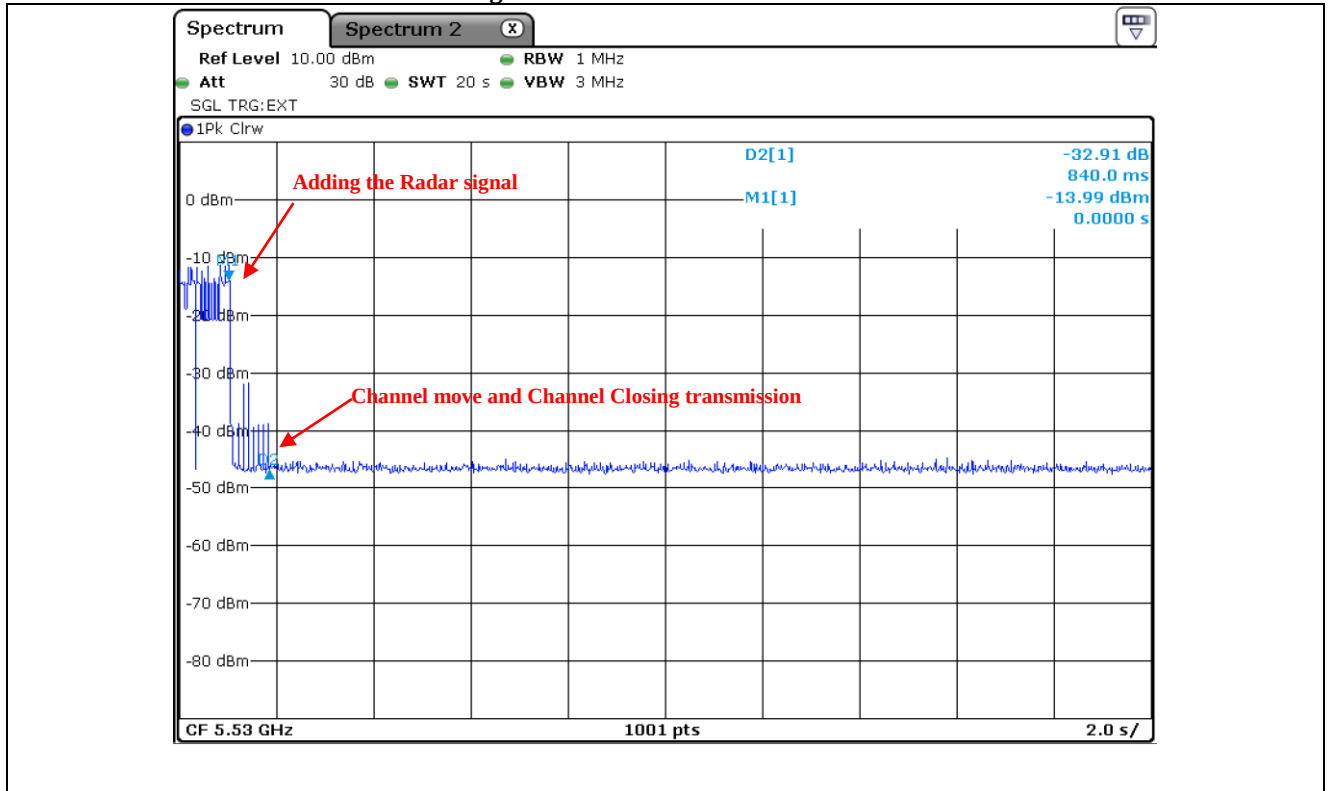
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16.6.2.4 Channel move and Channel Closing transmission time



17. LIST OF TEST EQUIPMENT

Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
FSV40-N	Rohde & Schwarz	Signal Analyzer	102177	Apr. 16, 2021 (1Y)
ESW 44	Rohde & Schwarz	EMI Test Receiver	101851	Mar. 23, 2021 (1Y)
FSW43	Rohde & Schwarz	Signal Analyzer	104544	Jul. 14, 2021 (1Y)
PSL-2KP	ESPEC	Environmental Test Chamber	14009407	Feb. 16, 2020 (1Y)
310N	Sonoma Instrument	Pre-Amplifier	392756	Oct. 14, 2021 (1Y)
SCU18	Rohde & Schwarz	Pre-Amplifier	102266	Jul. 14, 2021 (1Y)
PAM-840A	Com-Power	Pre-Amplifier	461339	Oct. 12, 2021 (1Y)
DT3000-3t	Innco System	Turn Table	DT3000/093	N/A
MA-4000XPET	Innco System	Antenna Master	MA4000/509	N/A
FMZB 1513	Schwarzbeck	Loop Antenna	1513-235	Mar. 24, 2020 (2Y)
HLP-2008	TDK	Hybrid Antenna	131316	Feb. 27, 2020 (2Y)
BBHA9120D	Schwarzbeck	Horn Antenna	9120D-1366	Jul. 20, 2021 (1Y)
BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Jan. 07, 2021(1Y)
F-40-10.0-RF	RLC Electronis	High Pass Filter	427	Feb. 08, 2020 (1Y)
NRP-Z81	Rohde & Schwarz	Wide band Sensor	101975	Feb. 09, 2021 (1Y)
10 dB Attenuator	Rohde & Schwarz	10 dB Attenuator	14100882-3	Jul. 14, 2021 (1Y)
E3632A	Agilent	DC Power supply	MY50370016	Feb. 08, 2021 (1Y)
ESCI	Rohde & Schwarz	EMI TEST RECEIVER	101012	Oct. 20, 2021 (1Y)
NSLK8126	Schwarzbeck	AMN	8126-404	Mar. 16, 2021 (1Y)
ESH3-Z2	Rohde & Schwarz	PULSE LIMITER	100655	Mar. 15, 2021 (1Y)
D-05180-2	RLC Electronis Inc.	Combiner	0813	N/A
11636B	Hewlett Packard	Combiner	12268	N/A
SMBV100A	R/S	Vector Signal Generator	260423	Feb. 21, 2021 (1Y)
RF-AX88U	ASUS	Dual Band Gigabit Router	NA	N/A

Note. Dual Band Gigabit Router(Model : RF-AX88U) Information.

; FCC ID : MSQ-RTAXHP00, IC ID : 3568A-RTAXHP00

Note. This Device not support TPC Function.

All test equipment used is calibrated on a regular basis.