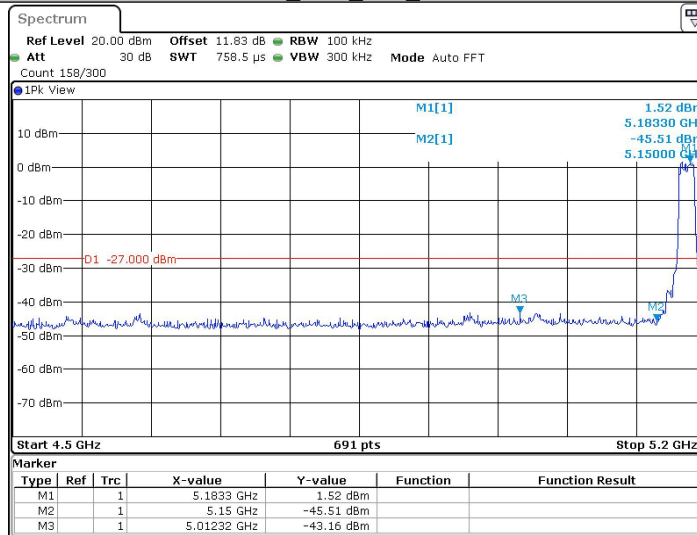
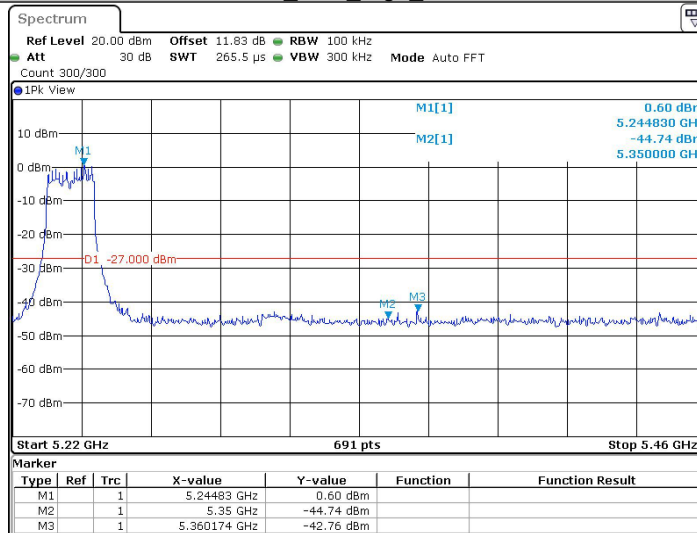


11A_Ant1_Low_5180



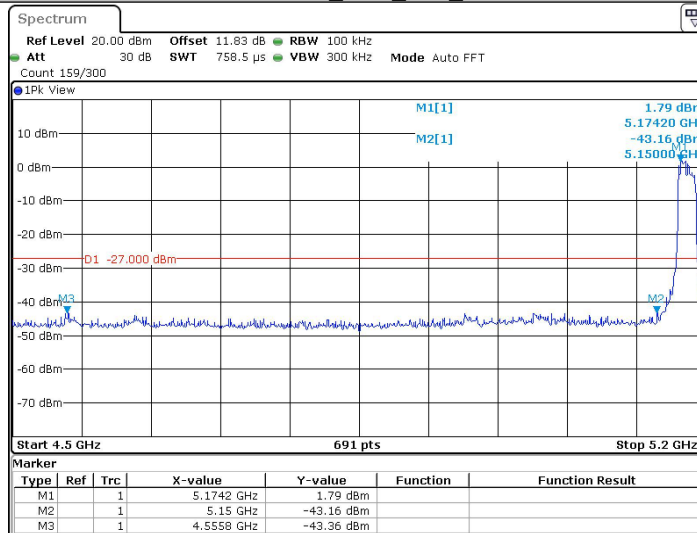
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11A_Ant1_High_5240



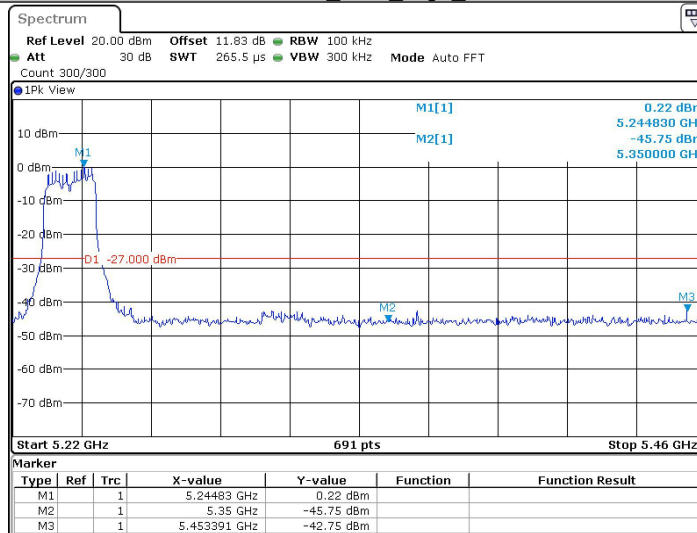
Date: 12.SEP.2023 14:48:20

11N20SISO_Ant1_Low_5180



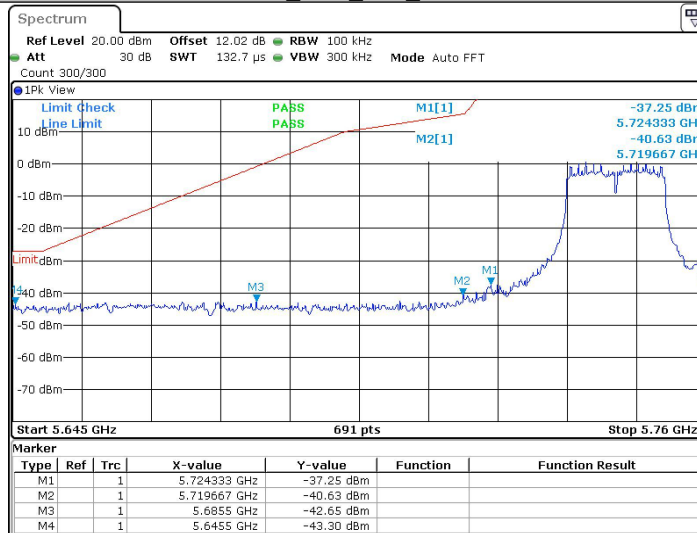
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11N20SISO_Ant1_High_5240



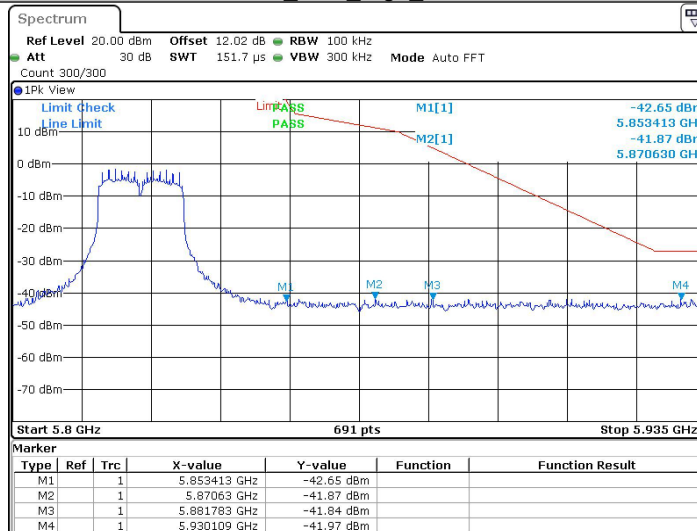
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11A_Ant1_Low_5745



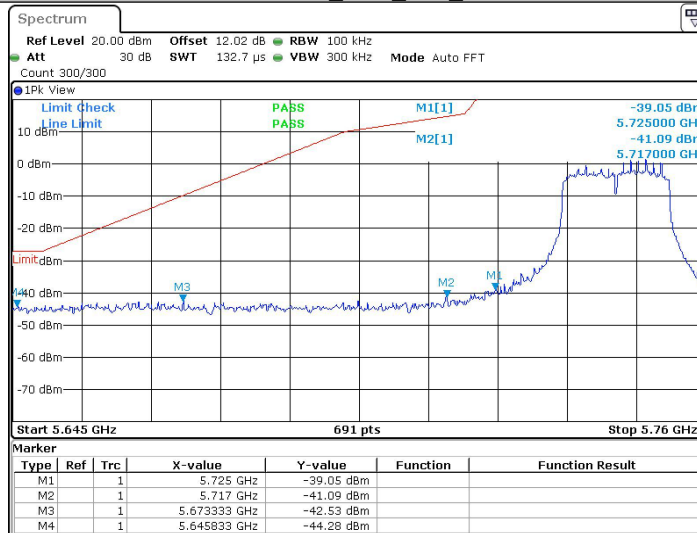
Date: 12 SEP. 2023 14:51:09

11A_Ant1_High_5825



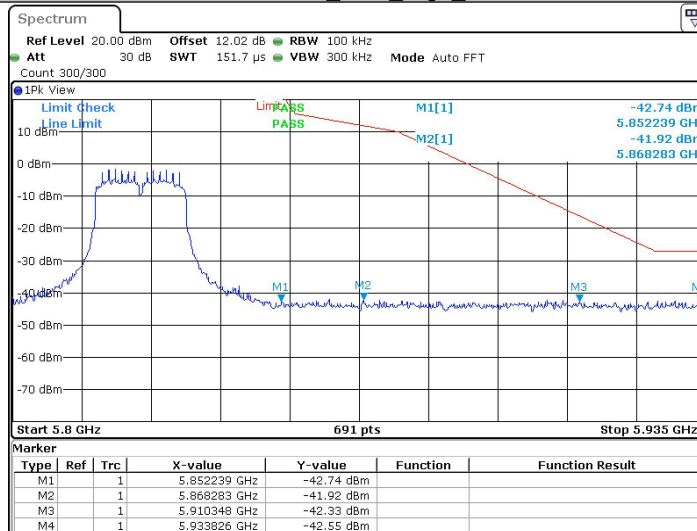
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11N20SISO_Ant1_Low_5745



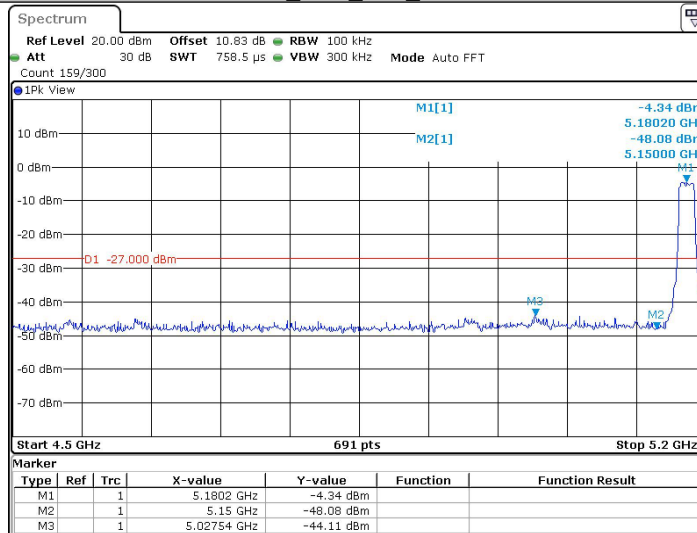
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11N20SISO_Ant1_High_5825



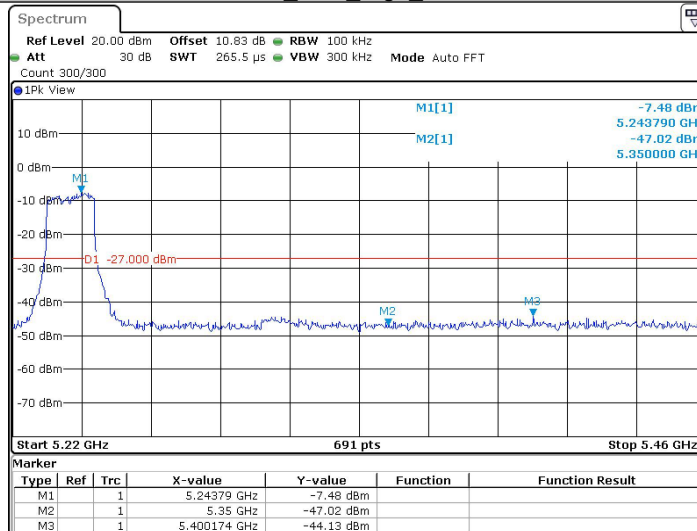
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11A_Ant2_Low_5180



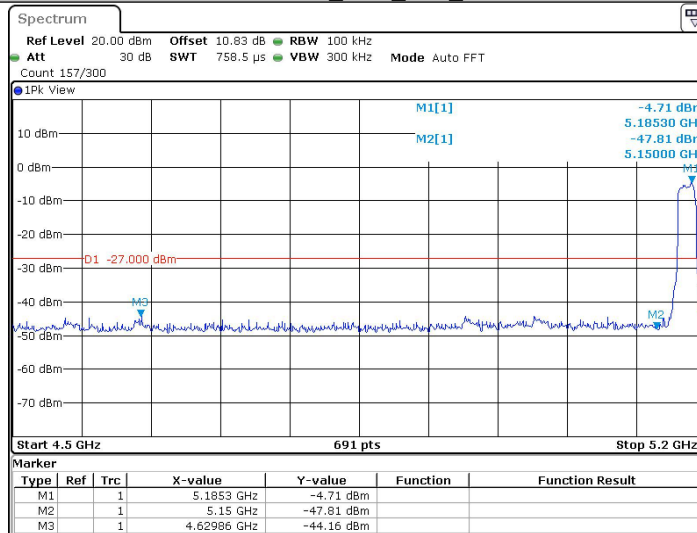
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11A_Ant2_High_5240



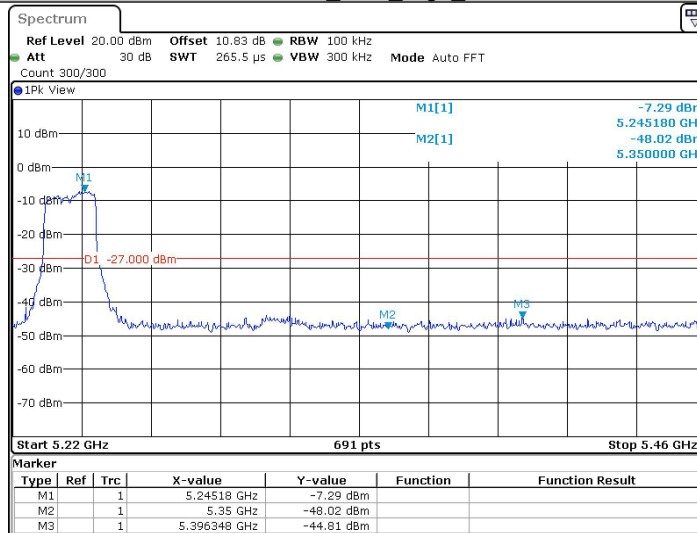
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11N20SISO_Ant2_Low_5180



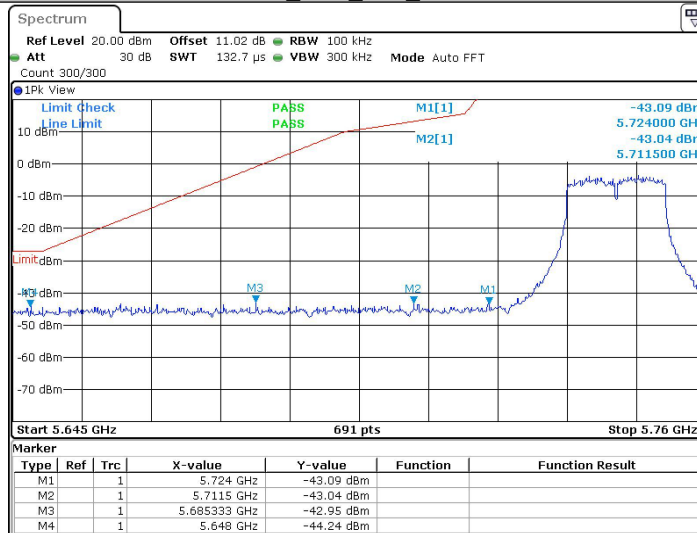
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11N20SISO_Ant2_High_5240



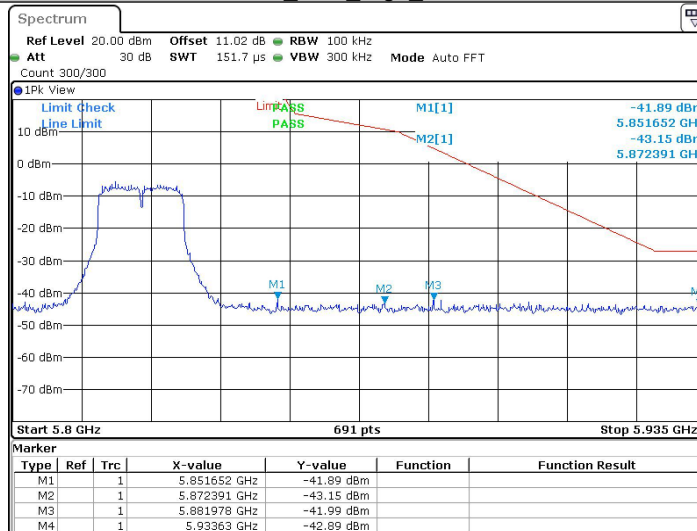
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11A_Ant2_Low_5745



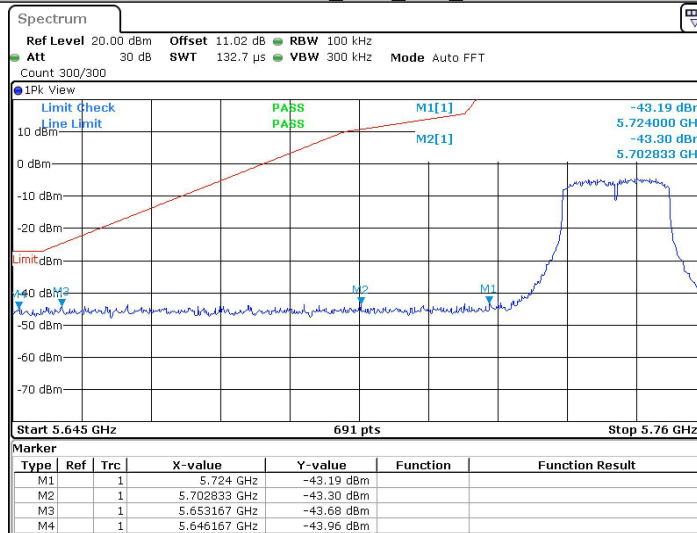
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11A_Ant2_High_5825



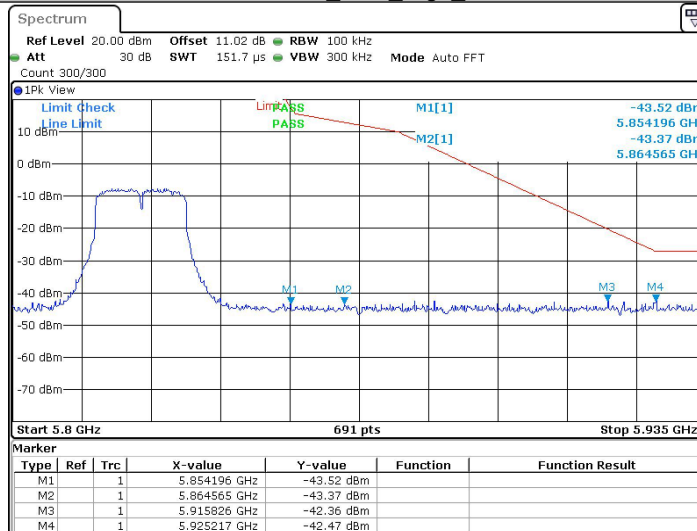
Date: 9 AUG.2023 17:40:42

11N20SISO_Ant2_Low_5745



Date: 10.AUG.2023 10:33:40

11N20SISO_Ant2_High_5825



Date: 10.AUG.2023 10:52:28

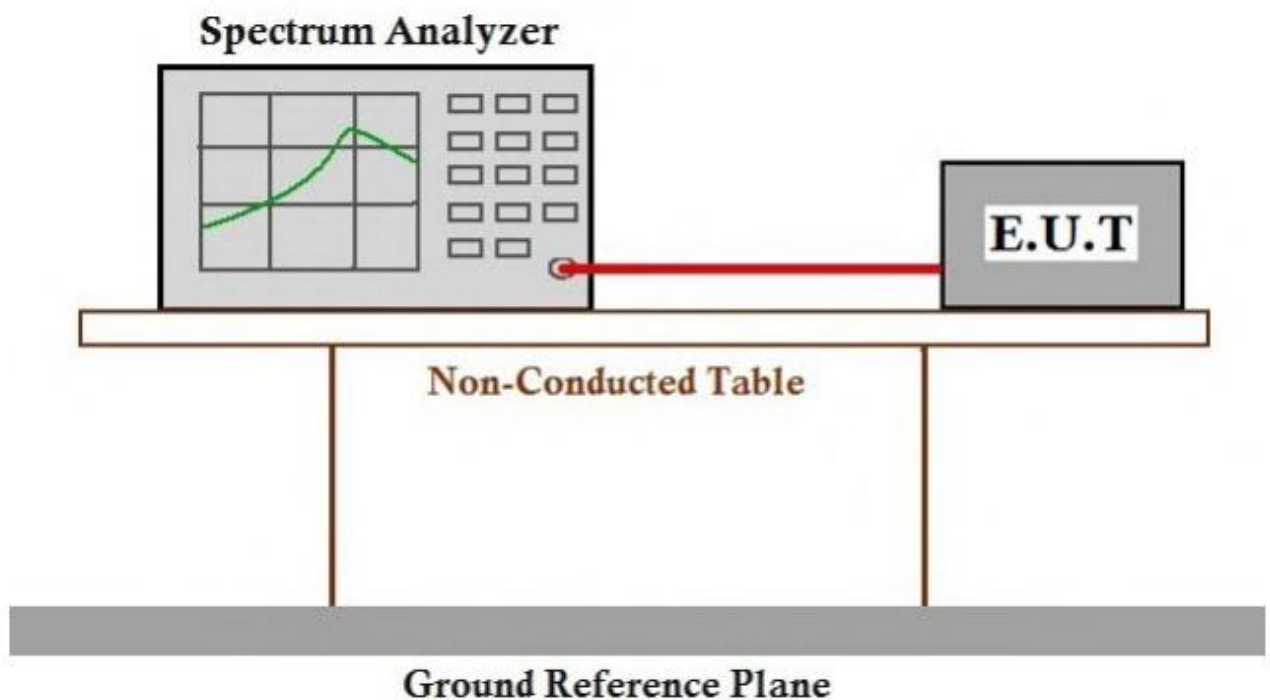
Appendix E): Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)

Test Method: ANSI C63.10 (2013) Section 6.8

Limit: The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

Test Setup Diagram



Measurement Data

TestMode	Antenna	Freq(MHz)	Voltage			Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)					
11A	Ant1	5180	NV	NT	7000.00	1.351351	20	PASS	
			LV	NT	18000.00	3.474903	20	PASS	
			HV	NT	28000.00	5.405405	20	PASS	
		5200	NV	NT	35000.00	6.730769	20	PASS	
			LV	NT	46000.00	8.846154	20	PASS	
			HV	NT	50900.00	9.788462	20	PASS	
		5240	NV	NT	33000.00	6.297710	20	PASS	
			LV	NT	44000.00	8.396947	20	PASS	
			HV	NT	48000.00	9.160305	20	PASS	
		5745	NV	NT	42000.00	7.310705	20	PASS	
			LV	NT	62900.00	10.948651	20	PASS	
			HV	NT	74900.00	13.037424	20	PASS	
		5785	NV	NT	-35000.00	-6.050130	20	PASS	
			LV	NT	-36000.00	-6.222990	20	PASS	
			HV	NT	-36000.00	-6.222990	20	PASS	
		5825	NV	NT	-37000.00	-6.351931	20	PASS	
			LV	NT	-37000.00	-6.351931	20	PASS	
			HV	NT	-38000.00	-6.523605	20	PASS	
11N20SISO	Ant1	5180	NV	NT	30000.00	5.791506	20	PASS	
			LV	NT	46000.00	8.880309	20	PASS	
			HV	NT	53900.00	10.405405	20	PASS	
		5200	NV	NT	32000.00	6.153846	20	PASS	
			LV	NT	47000.00	9.038462	20	PASS	
			HV	NT	53900.00	10.365385	20	PASS	
		5240	NV	NT	23000.00	4.389313	20	PASS	
			LV	NT	38000.00	7.251908	20	PASS	
			HV	NT	46000.00	8.778626	20	PASS	
		5745	NV	NT	37000.00	6.440383	20	PASS	
			LV	NT	58900.00	10.252393	20	PASS	
			HV	NT	71900.00	12.515231	20	PASS	
		5785	NV	NT	-37000.00	-6.395851	20	PASS	
			LV	NT	-37000.00	-6.395851	20	PASS	
			HV	NT	-38000.00	-6.568712	20	PASS	

		5825	NV	NT	-36000.00	-6.180258	20	PASS
			LV	NT	-37000.00	-6.351931	20	PASS
			HV	NT	-37000.00	-6.351931	20	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	35000.00	6.756757	20	PASS
			NV	-20	40000.00	7.722008	20	PASS
			NV	-10	44000.00	8.494208	20	PASS
			NV	0	49000.00	9.459459	20	PASS
			NV	10	50900.00	9.826255	20	PASS
			NV	20	51900.00	10.019305	20	PASS
			NV	30	53900.00	10.405405	20	PASS
			NV	40	54900.00	10.598456	20	PASS
			NV	50	56900.00	10.984556	20	PASS
		5200	NV	-30	53900.00	10.365385	20	PASS
			NV	-20	54900.00	10.557692	20	PASS
			NV	-10	56900.00	10.942308	20	PASS
			NV	0	56900.00	10.942308	20	PASS
			NV	10	57900.00	11.134615	20	PASS
			NV	20	58900.00	11.326923	20	PASS
			NV	30	58900.00	11.326923	20	PASS
			NV	40	59900.00	11.519231	20	PASS
			NV	50	59900.00	11.519231	20	PASS
		5240	NV	-30	50900.00	9.713740	20	PASS
			NV	-20	52900.00	10.095420	20	PASS
			NV	-10	53900.00	10.286260	20	PASS
			NV	0	54900.00	10.477099	20	PASS
			NV	10	55900.00	10.667939	20	PASS
			NV	20	56900.00	10.858779	20	PASS
			NV	30	56900.00	10.858779	20	PASS
			NV	40	56900.00	10.858779	20	PASS
			NV	50	56900.00	10.858779	20	PASS
		5745	NV	-30	84900.00	14.778068	20	PASS
			NV	-20	91900.00	15.996519	20	PASS
			NV	-10	95900.00	16.692776	20	PASS

			NV	0	99900.00	17.389034	20	PASS
			NV	10	103900.00	18.085292	20	PASS
			NV	20	105900.00	18.433420	20	PASS
			NV	30	106900.00	18.607485	20	PASS
			NV	40	109900.00	19.129678	20	PASS
			NV	50	109900.00	19.129678	20	PASS
		5785	NV	-30	-36000.00	-6.222990	20	PASS
			NV	-20	-36000.00	-6.222990	20	PASS
			NV	-10	-36000.00	-6.222990	20	PASS
			NV	0	-36000.00	-6.222990	20	PASS
			NV	10	-36000.00	-6.222990	20	PASS
			NV	20	-37000.00	-6.395851	20	PASS
			NV	30	-36000.00	-6.222990	20	PASS
			NV	40	-37000.00	-6.395851	20	PASS
			NV	50	-36000.00	-6.222990	20	PASS
		5825	NV	-30	-38000.00	-6.523605	20	PASS
			NV	-20	-38000.00	-6.523605	20	PASS
			NV	-10	-37000.00	-6.351931	20	PASS
			NV	0	-38000.00	-6.523605	20	PASS
			NV	10	-38000.00	-6.523605	20	PASS
			NV	20	-37000.00	-6.351931	20	PASS
			NV	30	-38000.00	-6.523605	20	PASS
			NV	40	-38000.00	-6.523605	20	PASS
			NV	50	-38000.00	-6.523605	20	PASS
11N20SISO	Ant1	5180	NV	-30	59900.00	11.563707	20	PASS
			NV	-20	63900.00	12.335907	20	PASS
			NV	-10	66900.00	12.915058	20	PASS
			NV	0	67900.00	13.108108	20	PASS
			NV	10	68900.00	13.301158	20	PASS
			NV	20	69900.00	13.494208	20	PASS
			NV	30	70900.00	13.687259	20	PASS
			NV	40	70900.00	13.687259	20	PASS
			NV	50	70900.00	13.687259	20	PASS
		5200	NV	-30	57900.00	11.134615	20	PASS
			NV	-20	60900.00	11.711538	20	PASS
			NV	-10	62900.00	12.096154	20	PASS
			NV	0	63900.00	12.288462	20	PASS

			NV	10	64900.00	12.480769	20	PASS
			NV	20	65900.00	12.673077	20	PASS
			NV	30	65900.00	12.673077	20	PASS
			NV	40	65900.00	12.673077	20	PASS
			NV	50	65900.00	12.673077	20	PASS
		5240	NV	-30	50900.00	9.713740	20	PASS
			NV	-20	52900.00	10.095420	20	PASS
			NV	-10	55900.00	10.667939	20	PASS
			NV	0	57900.00	11.049618	20	PASS
			NV	10	57900.00	11.049618	20	PASS
			NV	20	58900.00	11.240458	20	PASS
			NV	30	59900.00	11.431298	20	PASS
			NV	40	59900.00	11.431298	20	PASS
			NV	50	60900.00	11.622137	20	PASS
		5745	NV	-30	81900.00	14.255875	20	PASS
			NV	-20	88900.00	15.474326	20	PASS
			NV	-10	93900.00	16.344648	20	PASS
			NV	0	98900.00	17.214970	20	PASS
			NV	10	100900.00	17.563098	20	PASS
			NV	20	102900.00	17.911227	20	PASS
			NV	30	104900.00	18.259356	20	PASS
			NV	40	106900.00	18.607485	20	PASS
			NV	50	107900.00	18.781549	20	PASS
		5785	NV	-30	-37000.00	-6.395851	20	PASS
			NV	-20	-37000.00	-6.395851	20	PASS
			NV	-10	-37000.00	-6.395851	20	PASS
			NV	0	-37000.00	-6.395851	20	PASS
			NV	10	-37000.00	-6.395851	20	PASS
			NV	20	-37000.00	-6.395851	20	PASS
			NV	30	-37000.00	-6.395851	20	PASS
			NV	40	-38000.00	-6.568712	20	PASS
			NV	50	-38000.00	-6.568712	20	PASS
		5825	NV	-30	-37000.00	-6.351931	20	PASS
			NV	-20	-37000.00	-6.351931	20	PASS
			NV	-10	-37000.00	-6.351931	20	PASS
			NV	0	-37000.00	-6.351931	20	PASS
			NV	10	-37000.00	-6.351931	20	PASS

			NV	20	-37000.00	-6.351931	20	PASS
			NV	30	-38000.00	-6.523605	20	PASS
			NV	40	-38000.00	-6.523605	20	PASS
			NV	50	-38000.00	-6.523605	20	PASS

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant2	5180	NV	NT	-33000.00	-6.370656	20	PASS
			LV	NT	-34000.00	-6.563707	20	PASS
			HV	NT	-34000.00	-6.563707	20	PASS
		5200	NV	NT	-32000.00	-6.153846	20	PASS
			LV	NT	-33000.00	-6.346154	20	PASS
			HV	NT	-33000.00	-6.346154	20	PASS
		5240	NV	NT	-33000.00	-6.297710	20	PASS
			LV	NT	-34000.00	-6.488550	20	PASS
			HV	NT	-33000.00	-6.297710	20	PASS
		5745	NV	NT	-36000.00	-6.266319	20	PASS
			LV	NT	-36000.00	-6.266319	20	PASS
			HV	NT	-36000.00	-6.266319	20	PASS
		5785	NV	NT	-37000.00	-6.395851	20	PASS
			LV	NT	-37000.00	-6.395851	20	PASS
			HV	NT	-37000.00	-6.395851	20	PASS
		5825	NV	NT	-38000.00	-6.523605	20	PASS
			LV	NT	-37000.00	-6.351931	20	PASS
			HV	NT	-37000.00	-6.351931	20	PASS
11N20SISO	Ant2	5180	NV	NT	-33000.00	-6.370656	20	PASS
			LV	NT	-33000.00	-6.370656	20	PASS
			HV	NT	-33000.00	-6.370656	20	PASS
		5200	NV	NT	-34000.00	-6.538462	20	PASS
			LV	NT	-33000.00	-6.346154	20	PASS
			HV	NT	-34000.00	-6.538462	20	PASS
		5240	NV	NT	-34000.00	-6.488550	20	PASS
			LV	NT	-34000.00	-6.488550	20	PASS
			HV	NT	-33000.00	-6.297710	20	PASS
		5745	NV	NT	-36000.00	-6.266319	20	PASS
			LV	NT	-36000.00	-6.266319	20	PASS

		5785	HV	NT	-37000.00	-6.440383	20	PASS
			NV	NT	-38000.00	-6.568712	20	PASS
			LV	NT	-38000.00	-6.568712	20	PASS
			HV	NT	-38000.00	-6.568712	20	PASS
		5825	NV	NT	-38000.00	-6.523605	20	PASS
			LV	NT	-38000.00	-6.523605	20	PASS
			HV	NT	-38000.00	-6.523605	20	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant2	5180	NV	-30	-34000.00	-6.563707	20	PASS
			NV	-20	-33000.00	-6.370656	20	PASS
			NV	-10	-33000.00	-6.370656	20	PASS
			NV	0	-33000.00	-6.370656	20	PASS
			NV	10	-33000.00	-6.370656	20	PASS
			NV	20	-33000.00	-6.370656	20	PASS
			NV	30	-33000.00	-6.370656	20	PASS
			NV	40	-33000.00	-6.370656	20	PASS
			NV	50	-34000.00	-6.563707	20	PASS
		5200	NV	-30	-33000.00	-6.346154	20	PASS
			NV	-20	-33000.00	-6.346154	20	PASS
			NV	-10	-34000.00	-6.538462	20	PASS
			NV	0	-33000.00	-6.346154	20	PASS
			NV	10	-33000.00	-6.346154	20	PASS
			NV	20	-34000.00	-6.538462	20	PASS
			NV	30	-33000.00	-6.346154	20	PASS
			NV	40	-33000.00	-6.346154	20	PASS
			NV	50	-33000.00	-6.346154	20	PASS
		5240	NV	-30	-33000.00	-6.297710	20	PASS
			NV	-20	-34000.00	-6.488550	20	PASS
			NV	-10	-33000.00	-6.297710	20	PASS
			NV	0	-33000.00	-6.297710	20	PASS
			NV	10	-34000.00	-6.488550	20	PASS
			NV	20	-34000.00	-6.488550	20	PASS
			NV	30	-34000.00	-6.488550	20	PASS
			NV	40	-34000.00	-6.488550	20	PASS

		5745	NV	50	-33000.00	-6.297710	20	PASS
			NV	-30	-37000.00	-6.440383	20	PASS
			NV	-20	-37000.00	-6.440383	20	PASS
			NV	-10	-37000.00	-6.440383	20	PASS
			NV	0	-37000.00	-6.440383	20	PASS
			NV	10	-37000.00	-6.440383	20	PASS
			NV	20	-37000.00	-6.440383	20	PASS
			NV	30	-37000.00	-6.440383	20	PASS
			NV	40	-37000.00	-6.440383	20	PASS
			NV	50	-37000.00	-6.440383	20	PASS
		5785	NV	-30	-37000.00	-6.395851	20	PASS
			NV	-20	-37000.00	-6.395851	20	PASS
			NV	-10	-37000.00	-6.395851	20	PASS
			NV	0	-37000.00	-6.395851	20	PASS
			NV	10	-37000.00	-6.395851	20	PASS
			NV	20	-37000.00	-6.395851	20	PASS
			NV	30	-37000.00	-6.395851	20	PASS
			NV	40	-37000.00	-6.395851	20	PASS
			NV	50	-37000.00	-6.395851	20	PASS
		5825	NV	-30	-37000.00	-6.351931	20	PASS
			NV	-20	-38000.00	-6.523605	20	PASS
			NV	-10	-38000.00	-6.523605	20	PASS
			NV	0	-38000.00	-6.523605	20	PASS
			NV	10	-38000.00	-6.523605	20	PASS
			NV	20	-38000.00	-6.523605	20	PASS
			NV	30	-38000.00	-6.523605	20	PASS
			NV	40	-38000.00	-6.523605	20	PASS
			NV	50	-38000.00	-6.523605	20	PASS
11N20SISO	Ant2	5180	NV	-30	-33000.00	-6.370656	20	PASS
			NV	-20	-33000.00	-6.370656	20	PASS
			NV	-10	-33000.00	-6.370656	20	PASS
			NV	0	-33000.00	-6.370656	20	PASS
			NV	10	-33000.00	-6.370656	20	PASS
			NV	20	-33000.00	-6.370656	20	PASS
			NV	30	-33000.00	-6.370656	20	PASS
			NV	40	-33000.00	-6.370656	20	PASS
			NV	50	-34000.00	-6.563707	20	PASS

		5200	NV	-30	-33000.00	-6.346154	20	PASS
			NV	-20	-34000.00	-6.538462	20	PASS
			NV	-10	-34000.00	-6.538462	20	PASS
			NV	0	-34000.00	-6.538462	20	PASS
			NV	10	-33000.00	-6.346154	20	PASS
			NV	20	-34000.00	-6.538462	20	PASS
			NV	30	-33000.00	-6.346154	20	PASS
			NV	40	-33000.00	-6.346154	20	PASS
			NV	50	-34000.00	-6.538462	20	PASS
		5240	NV	-30	-34000.00	-6.488550	20	PASS
			NV	-20	-34000.00	-6.488550	20	PASS
			NV	-10	-34000.00	-6.488550	20	PASS
			NV	0	-34000.00	-6.488550	20	PASS
			NV	10	-34000.00	-6.488550	20	PASS
			NV	20	-34000.00	-6.488550	20	PASS
			NV	30	-33000.00	-6.297710	20	PASS
			NV	40	-34000.00	-6.488550	20	PASS
			NV	50	-34000.00	-6.488550	20	PASS
		5745	NV	-30	-37000.00	-6.440383	20	PASS
			NV	-20	-36000.00	-6.266319	20	PASS
			NV	-10	-36000.00	-6.266319	20	PASS
			NV	0	-37000.00	-6.440383	20	PASS
			NV	10	-37000.00	-6.440383	20	PASS
			NV	20	-37000.00	-6.440383	20	PASS
			NV	30	-37000.00	-6.440383	20	PASS
			NV	40	-37000.00	-6.440383	20	PASS
			NV	50	-37000.00	-6.440383	20	PASS
		5785	NV	-30	-38000.00	-6.568712	20	PASS
			NV	-20	-38000.00	-6.568712	20	PASS
			NV	-10	-38000.00	-6.568712	20	PASS
			NV	0	-38000.00	-6.568712	20	PASS
			NV	10	-38000.00	-6.568712	20	PASS
			NV	20	-38000.00	-6.568712	20	PASS
			NV	30	-38000.00	-6.568712	20	PASS
			NV	40	-38000.00	-6.568712	20	PASS
			NV	50	-38000.00	-6.568712	20	PASS
		5825	NV	-30	-39000.00	-6.695279	20	PASS

			NV	-20	-38000.00	-6.523605	20	PASS
			NV	-10	-38000.00	-6.523605	20	PASS
			NV	0	-38000.00	-6.523605	20	PASS
			NV	10	-38000.00	-6.523605	20	PASS
			NV	20	-38000.00	-6.523605	20	PASS
			NV	30	-39000.00	-6.695279	20	PASS
			NV	40	-38000.00	-6.523605	20	PASS
			NV	50	-38000.00	-6.523605	20	PASS

Appendix F): Antenna Requirement

15.203 requirement:

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, 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.

15.407(a)(1) (2) requirement:

The conducted output power limit specified in paragraph (a) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (a) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power and the peak power spectral density shall be reduced by the by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:



The antenna is External antenna with ipex connector. The best case gain of the 5G WiFi antenna is
ANT1:0.18dBi@5GHz: Wi-Fi: U-NII-1, -0.14dBi@5GHz: Wi-Fi: U-NII-3
ANT2:0.18dBi@5GHz: Wi-Fi: U-NII-1, -0.14dBi@5GHz: Wi-Fi: U-NII-3

Appendix G): Operation in the absence of information to the transmit

15.407(c) requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

Operation in the absence of information to the transmit

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

Appendix H): AC Power Line Conducted Emission

Test Procedure:	Test frequency range :150KHz-30MHz 1)The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.														
Limit:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table> * The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. NOTE : The lower limit is applicable at the transition frequency	Frequency range (MHz)	Limit (dBμV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBμV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													

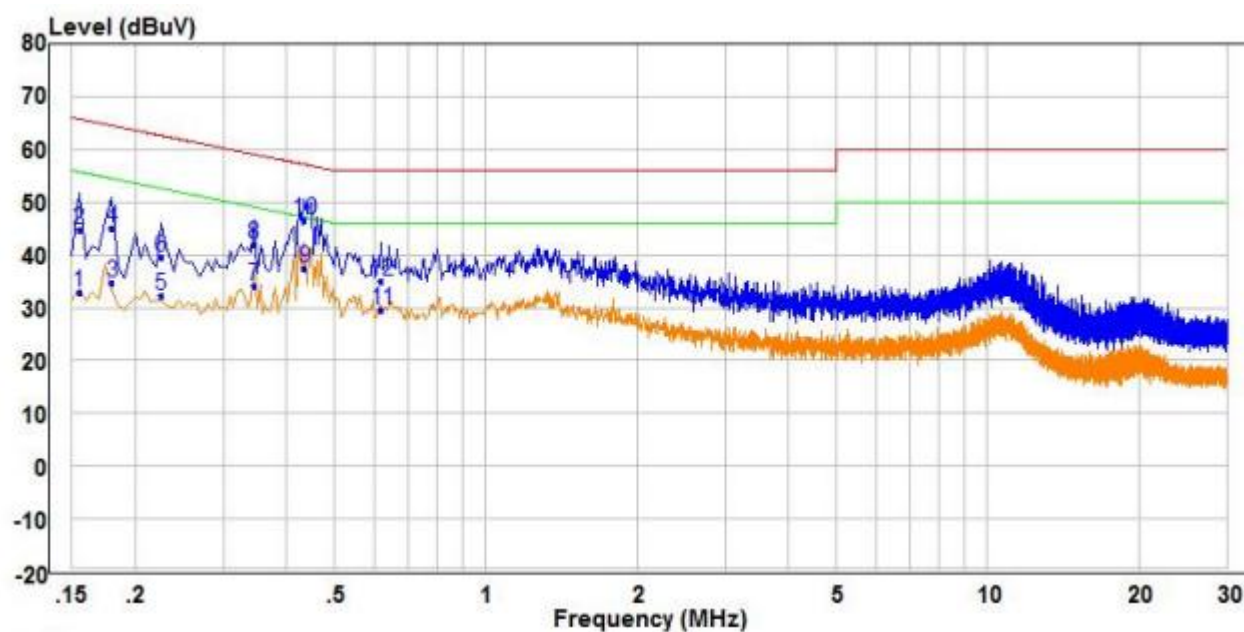
Measurement Data

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

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

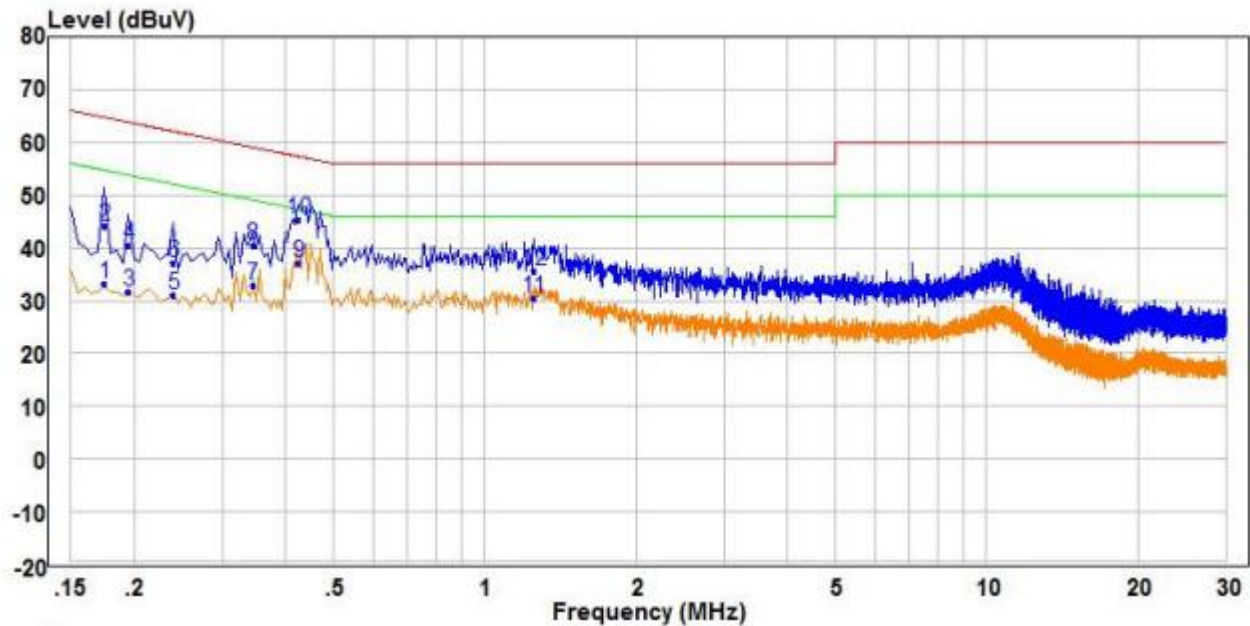
Ant1:

Live line:



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.155	23.26	9.69	32.95	55.73	-22.78	Average	Line
2	0.155	34.95	9.69	44.64	65.73	-21.09	QP	Line
3	0.180	25.20	9.64	34.84	54.49	-19.65	Average	Line
4	0.180	35.40	9.64	45.04	64.49	-19.45	QP	Line
5	0.225	22.58	9.58	32.16	52.63	-20.47	Average	Line
6	0.225	30.12	9.58	39.70	62.63	-22.93	QP	Line
7	0.345	24.51	9.55	34.06	49.08	-15.02	Average	Line
8	0.345	32.50	9.55	42.05	59.08	-17.03	QP	Line
9 PP	0.435	27.75	9.64	37.39	47.16	-9.77	Average	Line
10 QP	0.435	37.02	9.64	46.66	57.16	-10.50	QP	Line
11	0.620	19.77	9.82	29.59	46.00	-16.41	Average	Line
12	0.620	25.16	9.82	34.98	56.00	-21.02	QP	Line

Neutral line:



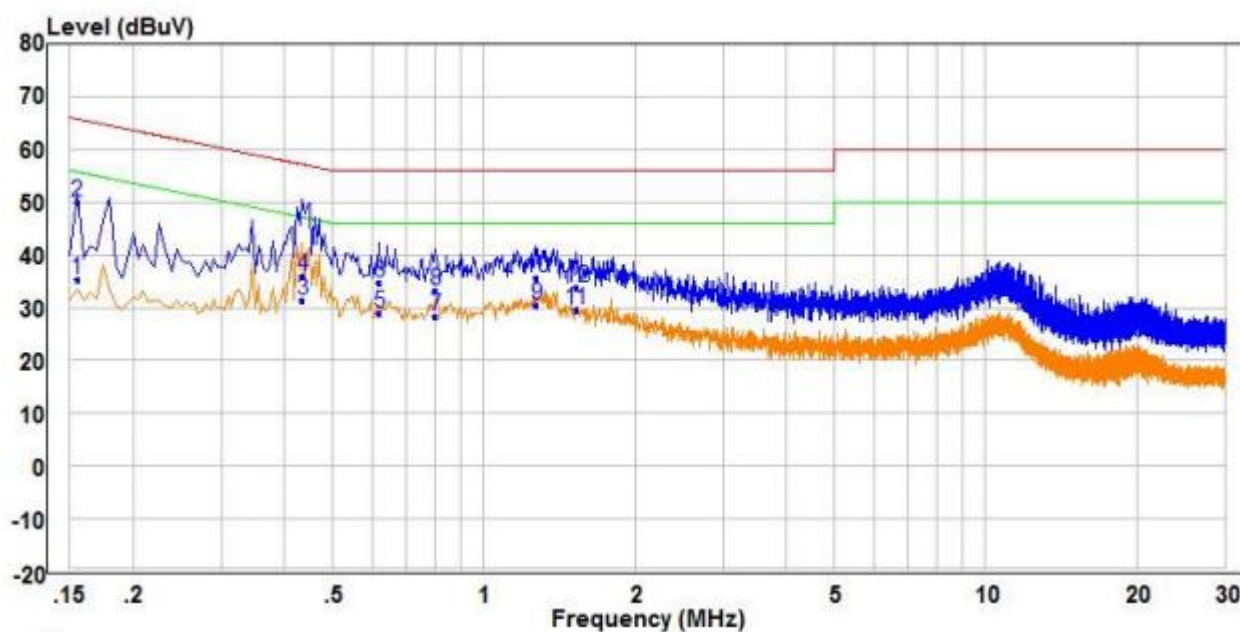
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.175	23.44	9.65	33.09	54.72	-21.63	Average	Neutral
2	0.175	34.55	9.65	44.20	64.72	-20.52	QP	Neutral
3	0.195	22.13	9.62	31.75	53.82	-22.07	Average	Neutral
4	0.195	30.85	9.62	40.47	63.82	-23.35	QP	Neutral
5	0.240	21.38	9.55	30.93	52.10	-21.17	Average	Neutral
6	0.240	27.56	9.55	37.11	62.10	-24.99	QP	Neutral
7	0.345	23.45	9.54	32.99	49.08	-16.09	Average	Neutral
8	0.345	30.90	9.54	40.44	59.08	-18.64	QP	Neutral
9 PP	0.425	27.46	9.63	37.09	47.35	-10.26	Average	Neutral
10 QP	0.425	35.72	9.63	45.35	57.35	-12.00	QP	Neutral
11	1.250	20.82	9.71	30.53	46.00	-15.47	Average	Neutral
12	1.250	25.92	9.71	35.63	56.00	-20.37	QP	Neutral

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A_5240 is the worst case, only the worst data recorded in the report.

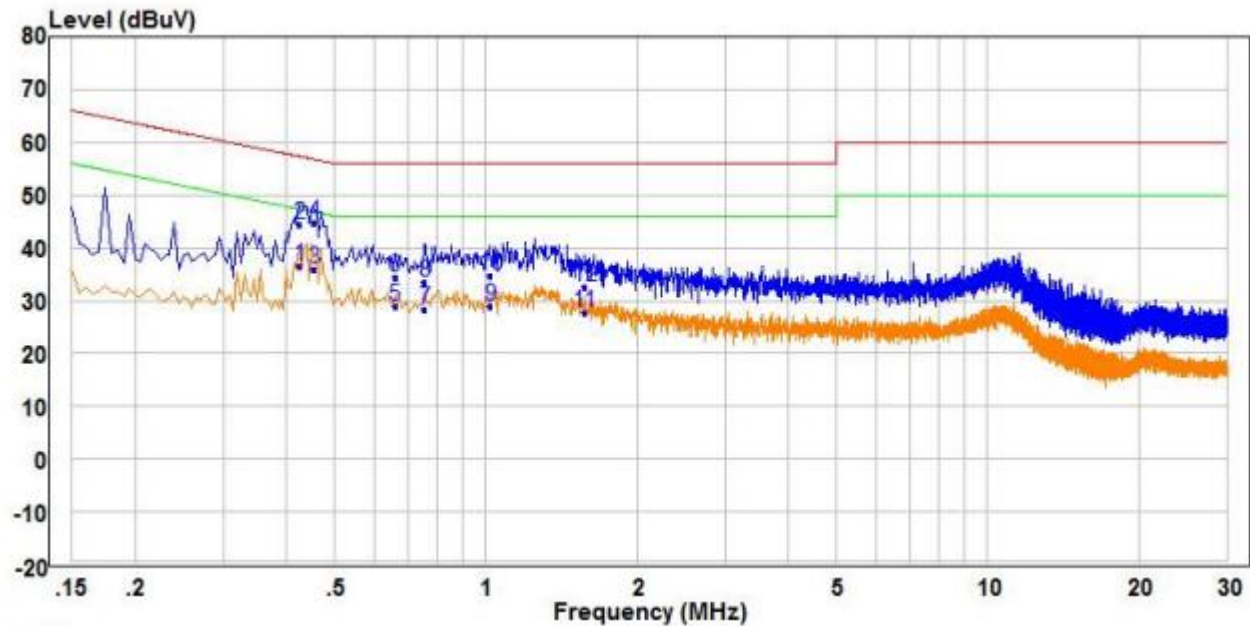
Ant2:

Live line:



		Read		Limit	Over		
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	Pol/Phase
1	0.155	25.75	9.69	35.44	55.73	-20.29	Average
2	QP	0.155	40.14	9.69	49.83	65.73	-15.90 QP
3	0.435	21.60	9.64	31.24	47.16	-15.92	Average
4	0.435	26.17	9.64	35.81	57.16	-21.35	QP
5	0.620	19.26	9.82	29.08	46.00	-16.92	Average
6	0.620	24.79	9.82	34.61	56.00	-21.39	QP
7	0.800	18.64	9.83	28.47	46.00	-17.53	Average
8	0.800	23.34	9.83	33.17	56.00	-22.83	QP
9	PP	1.275	20.15	10.38	30.53	46.00	-15.47
10	1.275	25.26	10.38	35.64	56.00	-20.36	QP
11	1.525	18.53	10.89	29.42	46.00	-16.58	Average
12	1.525	23.03	10.89	33.92	56.00	-22.08	QP

Neutral line:



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.425	26.87	9.63	36.50	47.35	-10.85	Average	Neutral
2	0.425	34.74	9.63	44.37	57.35	-12.98	QP	Neutral
3 PP	0.455	26.38	9.66	36.04	46.78	-10.74	Average	Neutral
4 QP	0.455	35.24	9.66	44.90	56.78	-11.88	QP	Neutral
5	0.660	19.10	9.86	28.96	46.00	-17.04	Average	Neutral
6	0.660	24.67	9.86	34.53	56.00	-21.47	QP	Neutral
7	0.755	18.49	9.86	28.35	46.00	-17.65	Average	Neutral
8	0.755	23.66	9.86	33.52	56.00	-22.48	QP	Neutral
9	1.020	19.39	9.70	29.09	46.00	-16.91	Average	Neutral
10	1.020	24.89	9.70	34.59	56.00	-21.41	QP	Neutral
11	1.570	17.87	9.73	27.60	46.00	-18.40	Average	Neutral
12	1.570	22.76	9.73	32.49	56.00	-23.51	QP	Neutral

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A_5240 is the worst case, only the worst data recorded in the report.

Appendix I): Restricted bands around fundamental frequency (Radiated Emission)

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Test Procedure:	Below 1GHz test procedure as below: - The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. - The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. - The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. - For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. - The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. - Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel Above 1GHz test procedure as below: - Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre). - Test the EUT in the lowest channel , the Highest channel - The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. - Repeat above procedures until all frequencies measured was complete.				
Limit:	Frequency	Limit (dBμV/m @3cm)		Remark	
	30MHz-88MHz	40.0		Quasi-peak Value	
	88MHz-216MHz	43.5		Quasi-peak Value	
	216MHz-960MHz	46.0		Quasi-peak Value	
	960MHz-1GHz	54.0		Quasi-peak Value	
	Above 1GHz	54.0		Average Value	
		74.0		Peak Value	

Test plot as follows:

Ant1:

Worse case mode:		802.11a(6Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	52.70	-3.63	49.07	74	-24.93	peak	H
5150.00	37.26	-3.63	33.63	54	-20.37	AVG	H
5150.00	50.28	-3.63	46.65	74	-27.35	peak	V
5150.00	38.47	-3.63	34.84	54	-19.16	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.29	-3.59	50.70	74	-23.30	peak	H
5350.00	39.55	-3.59	35.96	54	-18.04	AVG	H
5350.00	51.65	-3.59	48.06	74	-25.94	peak	V
5350.00	36.49	-3.59	32.90	54	-21.10	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	51.32	-3.44	47.88	74	-26.12	peak	H
5725	36.32	-3.44	32.88	54	-21.12	AV	H
5725	49.64	-3.44	46.20	74	-27.80	peak	V
5725	35.91	-3.44	32.47	54	-21.53	AV	V

Worse case mode:		802.11a(6Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	53.19	-3.42	49.77	74	-24.23	peak	H
5850	36.28	-3.42	32.86	54	-21.14	AV	H
5850	48.51	-3.42	45.09	74	-28.91	peak	V
5850	35.82	-3.42	32.40	54	-21.60	AV	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	53.01	-3.63	49.38	74	-24.62	peak	H
5150.00	36.18	-3.63	32.55	54	-21.45	AVG	H
5150.00	52.20	-3.63	48.57	74	-25.43	peak	V
5150.00	36.98	-3.63	33.35	54	-20.65	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.68	-3.59	52.09	74	-21.91	peak	H
5350.00	37.99	-3.59	34.40	54	-19.60	AVG	H
5350.00	52.21	-3.59	48.62	74	-25.38	peak	V
5350.00	35.16	-3.59	31.57	54	-22.43	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	51.25	-3.44	47.81	74	-26.19	peak	H
5725	37.95	-3.44	34.51	54	-19.49	AV	H
5725	50.04	-3.44	46.60	74	-27.40	peak	V
5725	36.11	-3.44	32.67	54	-21.33	AV	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	52.27	-3.42	48.85	74	-25.15	peak	H
5850	36.63	-3.42	33.21	54	-20.79	AV	H
5850	49.81	-3.42	46.39	74	-27.61	peak	V
5850	36.10	-3.42	32.68	54	-21.32	AV	V

Ant2:

Worse case mode:		802.11a(6Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	52.85	-3.63	49.22	74	-24.78	peak	H
5150.00	36.34	-3.63	32.71	54	-21.29	AVG	H
5150.00	52.07	-3.63	48.44	74	-25.56	peak	V
5150.00	38.05	-3.63	34.42	54	-19.58	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.96	-3.59	51.37	74	-22.63	peak	H
5350.00	38.74	-3.59	35.15	54	-18.85	AVG	H
5350.00	51.35	-3.59	47.76	74	-26.24	peak	V
5350.00	36.95	-3.59	33.36	54	-20.64	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	52.55	-3.44	49.11	74	-24.89	peak	H
5725	37.40	-3.44	33.96	54	-20.04	AV	H
5725	48.85	-3.44	45.41	74	-28.59	peak	V
5725	35.31	-3.44	31.87	54	-22.13	AV	V

Worse case mode:		802.11a(6Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	53.46	-3.42	50.04	74	-23.96	peak	H
5850	37.13	-3.42	33.71	54	-20.29	AV	H
5850	49.37	-3.42	45.95	74	-28.05	peak	V
5850	36.08	-3.42	32.66	54	-21.34	AV	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	53.65	-3.63	50.02	74	-23.98	peak	H
5150.00	36.87	-3.63	33.24	54	-20.76	AVG	H
5150.00	50.66	-3.63	47.03	74	-26.97	peak	V
5150.00	37.88	-3.63	34.25	54	-19.75	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.49	-3.59	50.90	74	-23.10	peak	H
5350.00	39.96	-3.59	36.37	54	-17.63	AVG	H
5350.00	50.71	-3.59	47.12	74	-26.88	peak	V
5350.00	35.22	-3.59	31.63	54	-22.37	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5725	51.73	-3.44	48.29	74	-25.71	peak	H
5725	37.62	-3.44	34.18	54	-19.82	AV	H
5725	49.19	-3.44	45.75	74	-28.25	peak	V
5725	35.10	-3.44	31.66	54	-22.34	AV	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	53.03	-3.42	49.61	74	-24.39	peak	H
5850	36.32	-3.42	32.90	54	-21.10	AV	H
5850	49.85	-3.42	46.43	74	-27.57	peak	V
5850	35.98	-3.42	32.56	54	-21.44	AV	V

Note:

1) Through Pre-scan transmitting mode with all kind of modulation and data rate, Only the worst case is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor