

RF Test Data for RLAN (Conducted Measurements)

General Description of EUT	
EUT Name:	Water Valve
Model:	NAS-WV07W
Test Standard:	ETSI EN 301 893 V2.1.1:2017
Environmental Conditions	
Ambient Temperature:	23.8℃
Ambient Humidity:	48%
Test Power Supply:	DC 5V
Test Engineer:	Rick. chen
Note: For a more detailed features description, please refer to the report TBR-C-202412-0109-42. The report only show the worst case data.	

Contents

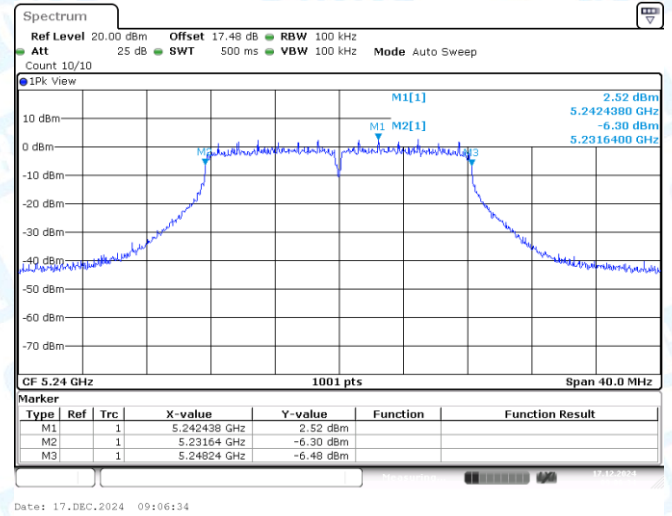
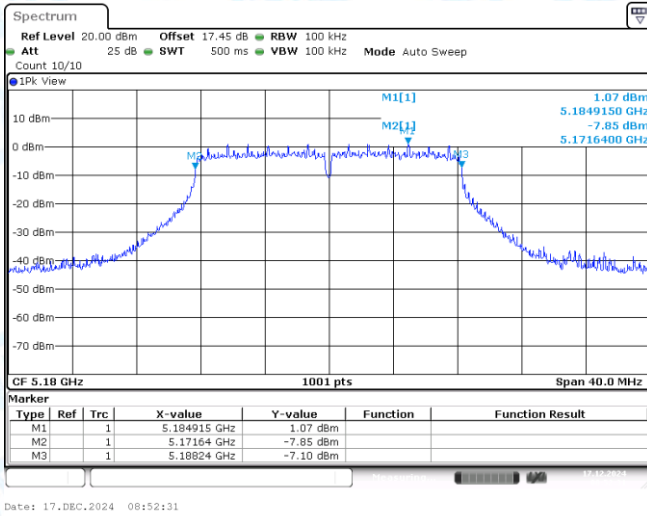
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1: Carrier frequencies

1.1 Test Result

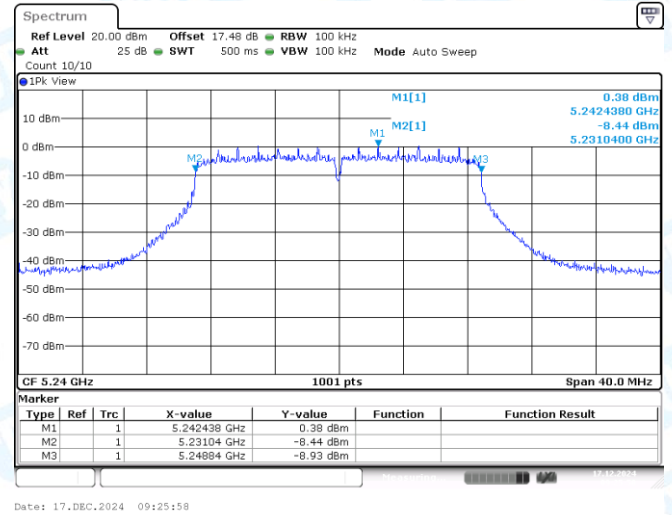
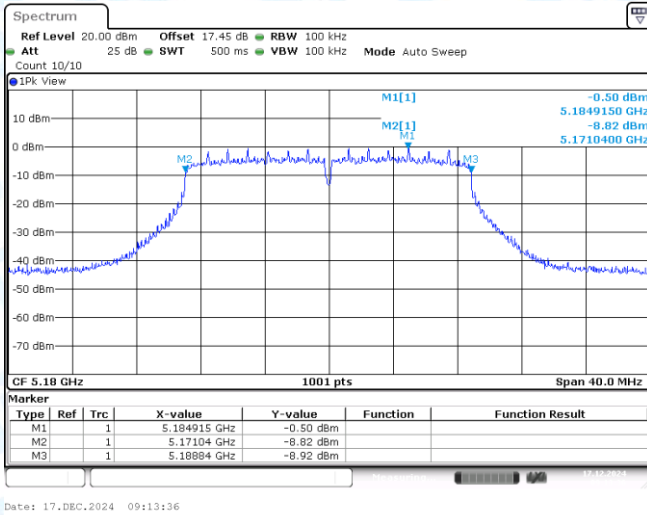
Test Condition	TestMode	Antenna	Frequency[MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	11A	Ant1	5180	-11.58301	±20	PASS
NTNV	11A	Ant1	5240	-11.45038	±20	PASS
NTNV	11N20SISO	Ant1	5180	-11.58301	±20	PASS
NTNV	11N20SISO	Ant1	5240	-11.45038	±20	PASS
NTNV	11N40SISO	Ant1	5190	-7.70713	±20	PASS
NTNV	11N40SISO	Ant1	5230	-7.64818	±20	PASS

1.2 Test Graphs



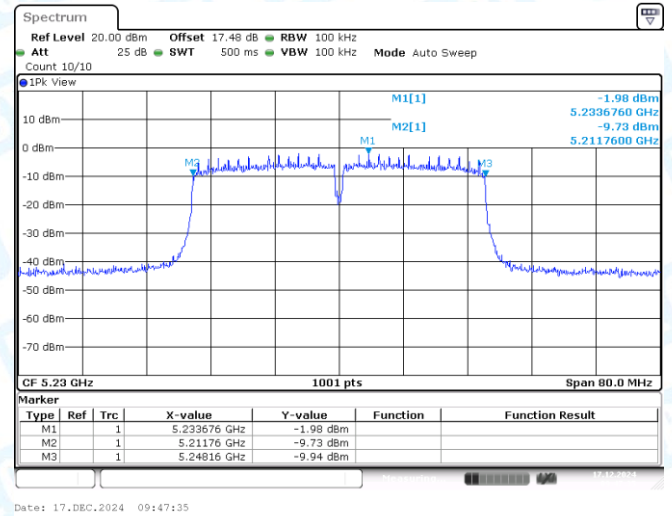
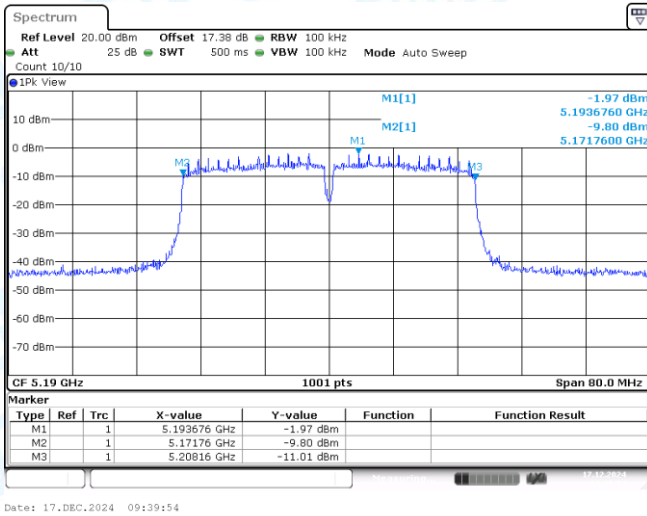
NTNV-11A-Ant1-5180-PASS

NTNV-11A-Ant1-5240-PASS



NTNV-11N20SISO-Ant1-5180-PASS

NTNV-11N20SISO-Ant1-5240-PASS



NTNV-11N40SISO-Ant1-5190-PASS

NTNV-11N40SISO-Ant1-5230-PASS

2: RF Output Power

2.1 Test Result

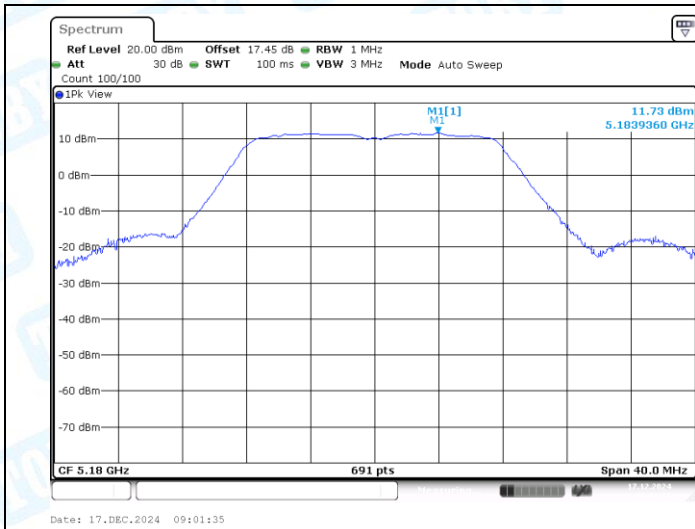
Test Mode	Ant.	Freq. [MHz]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	14.83	23	PASS
11A	Ant1	5240	14.31	23	PASS
11N20SISO	Ant1	5180	12.31	23	PASS
11N20SISO	Ant1	5240	12.53	23	PASS
11N40SISO	Ant1	5190	12.45	23	PASS
11N40SISO	Ant1	5230	12.63	23	PASS

3: Power Spectral Density

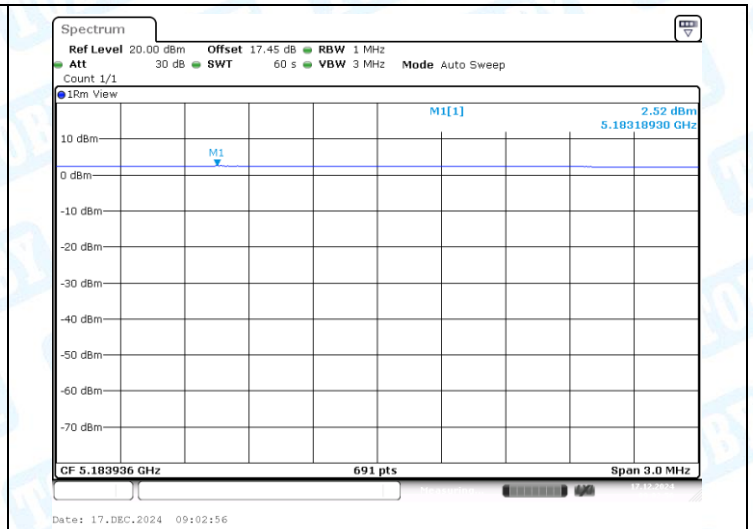
3.1 Test Result

Test Mode	Antenna	Channel	EIRP PSD [dBm/MHz]	Limit [dBm]	Verdict
11A	Ant1	5180	4.19	10	PASS
11A	Ant1	5240	4.05	10	PASS
11N20SISO	Ant1	5180	1.70	10	PASS
11N20SISO	Ant1	5240	1.58	10	PASS

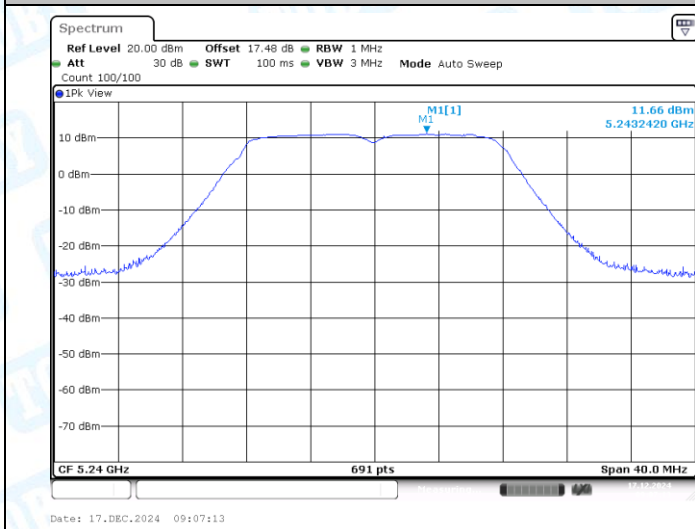
3.2 Test Graphs



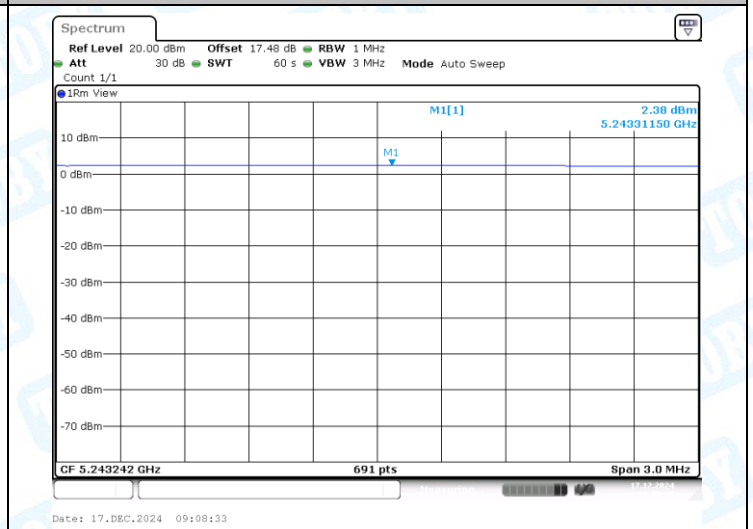
11A-Ant1-5180-PASS



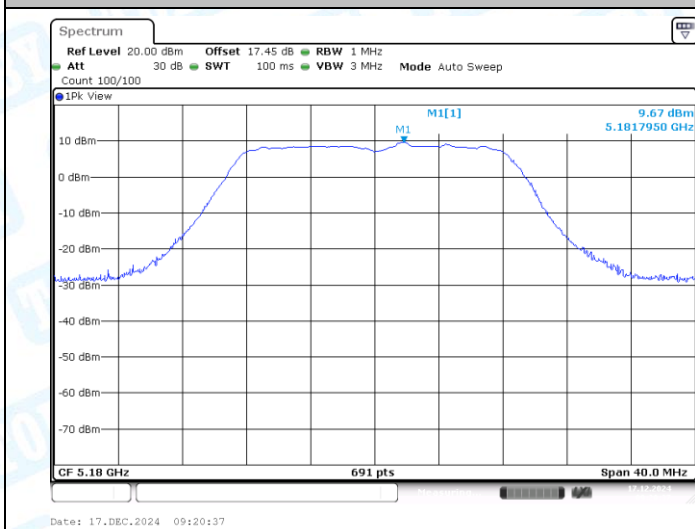
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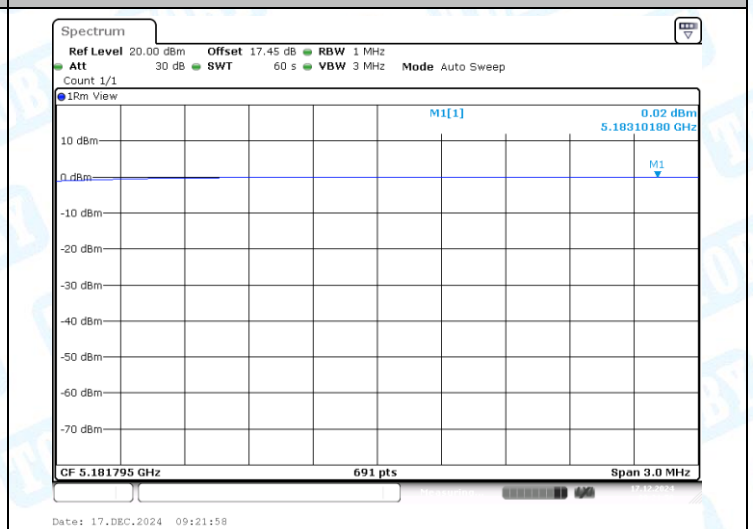
11A-Ant1-5240-PASS



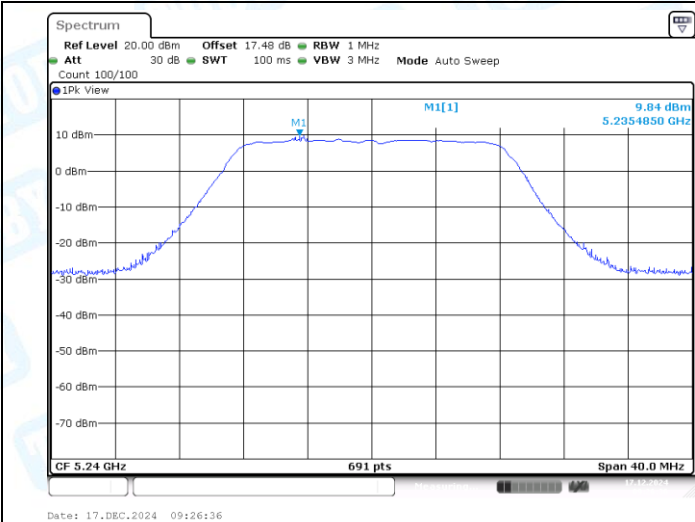
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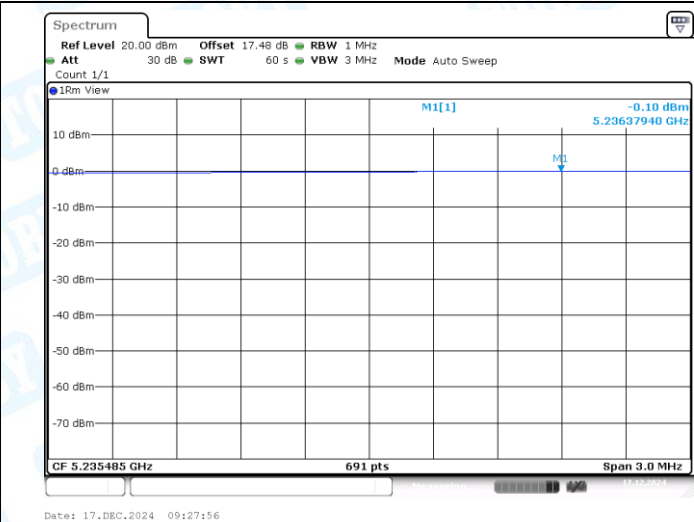
11N20SISO-Ant1-5180-PASS



11N20SISO-Ant1-5180-PASS



11N20SISO-Ant1-5240-PASS



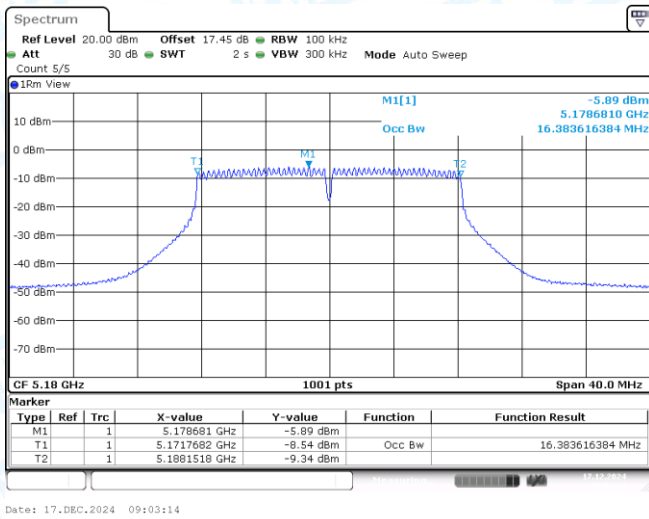
11N20SISO-Ant1-5240-PASS

4: Occupied Channel Bandwidth

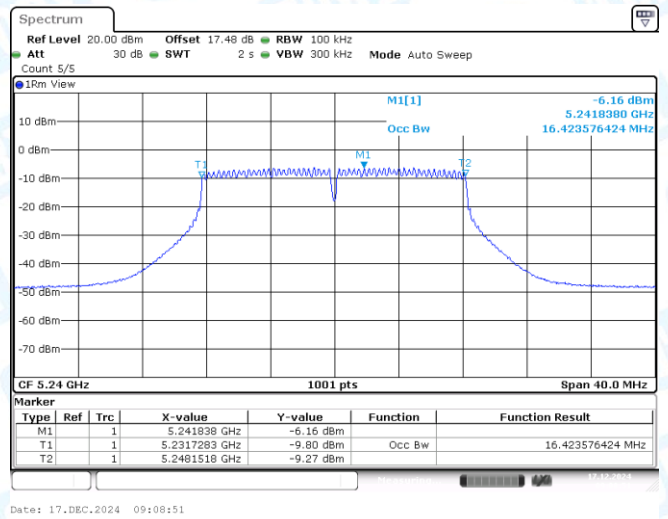
4.1 Test Result

Test Mode	Antenna	Frequency[MHz]	OCB[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.384	16 to 20	PASS
11A	Ant1	5240	16.424	16 to 20	PASS
11N20SISO	Ant1	5180	17.582	16 to 20	PASS
11N20SISO	Ant1	5240	17.622	16 to 20	PASS
11N40SISO	Ant1	5190	35.884	32 to 40	PASS
11N40SISO	Ant1	5230	35.884	32 to 40	PASS

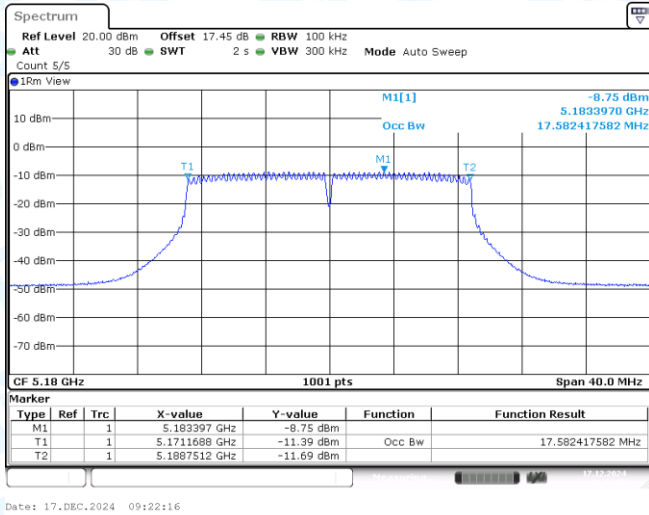
4.2 Test Graphs



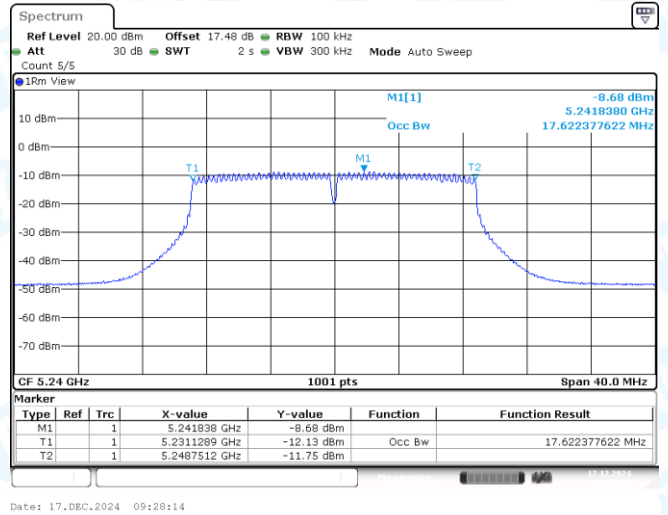
11A-Ant1-5180-PASS



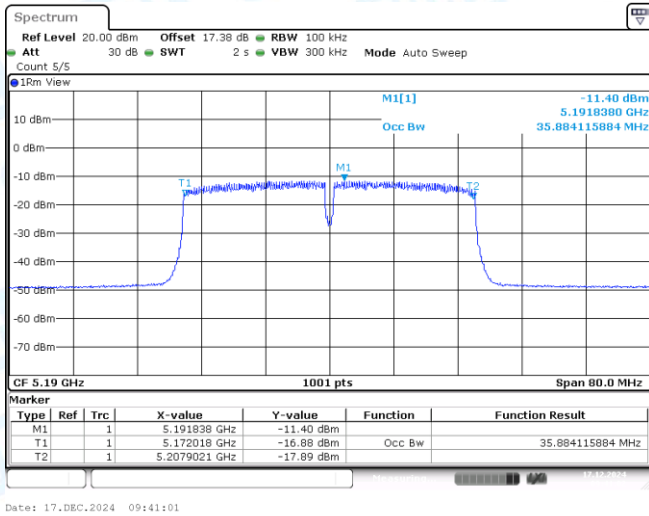
11A-Ant1-5240-PASS



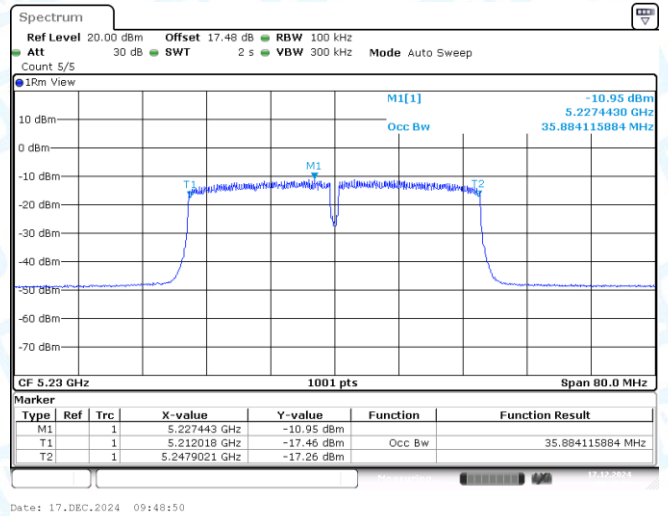
11N20SISO-Ant1-5180-PASS



11N20SISO-Ant1-5240-PASS



11N40SISO-Ant1-5190-PASS



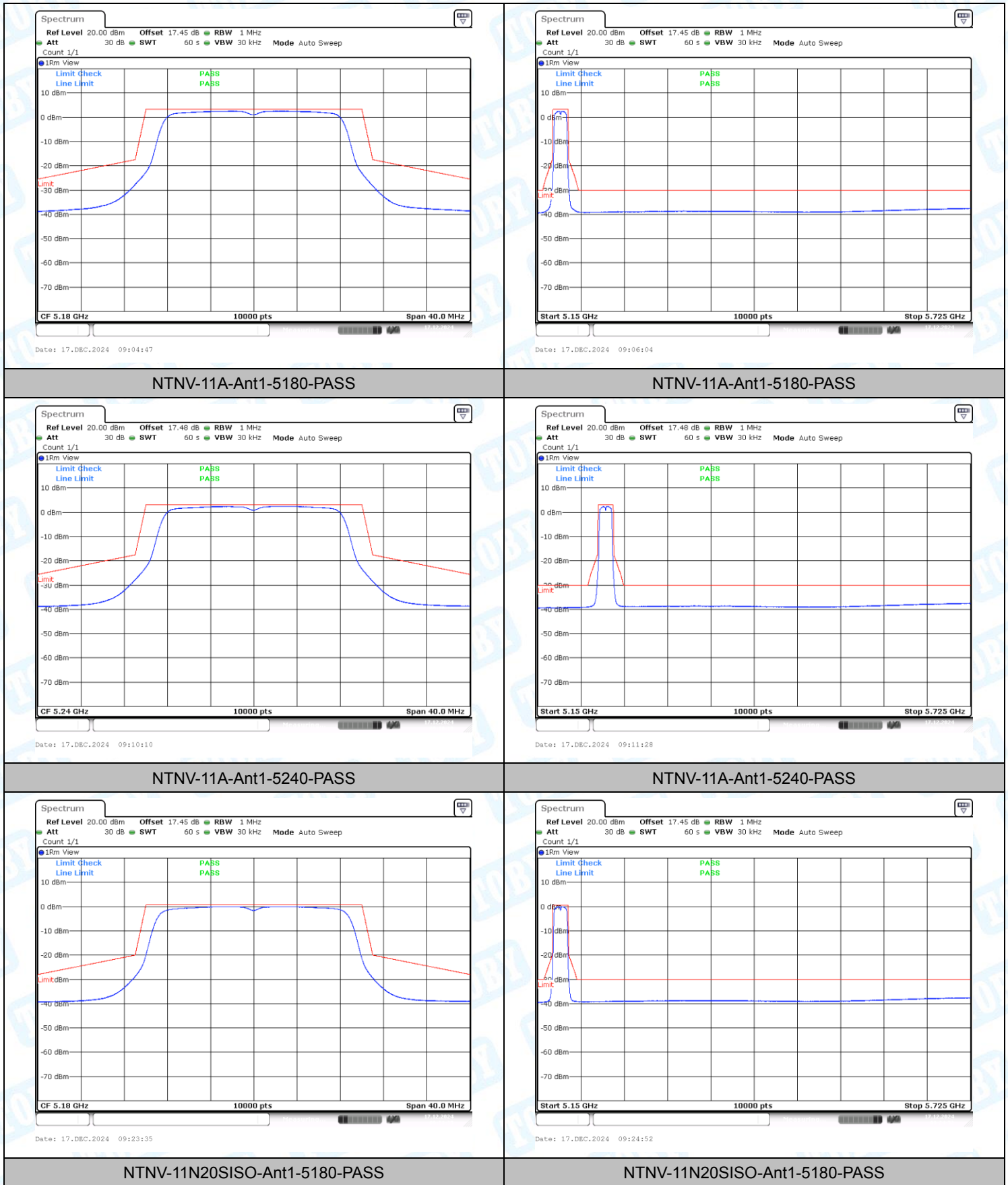
11N40SISO-Ant1-5230-PASS

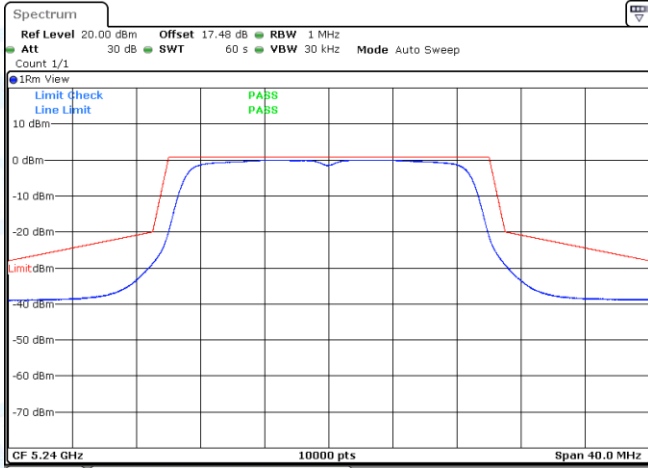
5: Transmitter unwanted emissions within the 5 GHz RLAN bands

5.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	See test graph	See test graph	PASS
11A	Ant1	5240	See test graph	See test graph	PASS
11N20SISO	Ant1	5180	See test graph	See test graph	PASS
11N20SISO	Ant1	5240	See test graph	See test graph	PASS
11N40SISO	Ant1	5190	See test graph	See test graph	PASS
11N40SISO	Ant1	5230	See test graph	See test graph	PASS

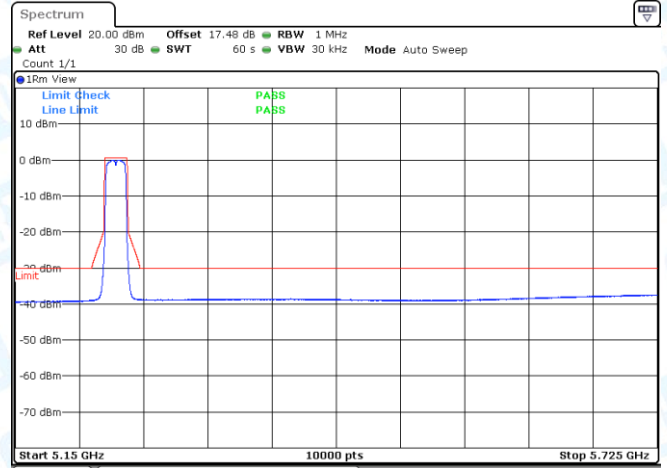
5.2 Test Graphs





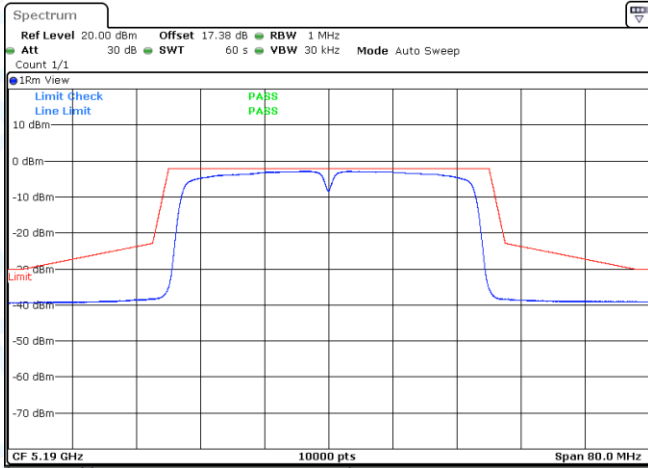
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NTNV-11N20SISO-Ant1-5240-PASS



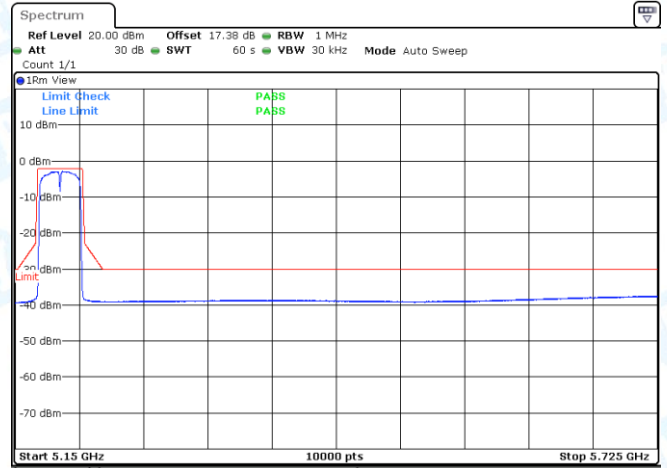
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NTNV-11N20SISO-Ant1-5240-PASS



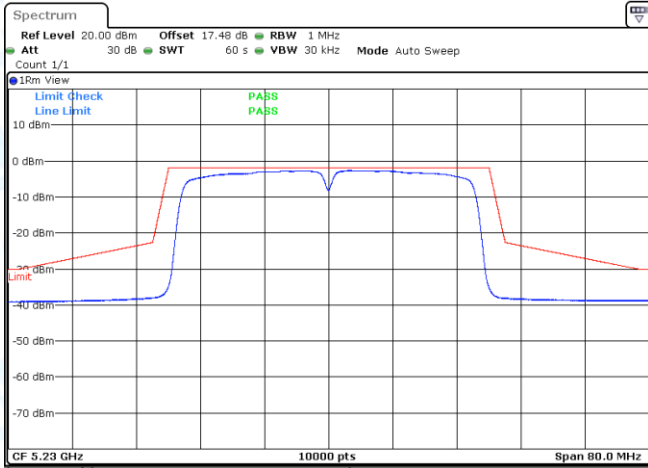
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NTNV-11N40SISO-Ant1-5190-PASS



Date: 17.DEC.2024 09:43:38

NTNV-11N40SISO-Ant1-5190-PASS



Date: 17.DEC.2024 09:50:10

NTNV-11N40SISO-Ant1-5230-PASS



Date: 17.DEC.2024 09:51:27

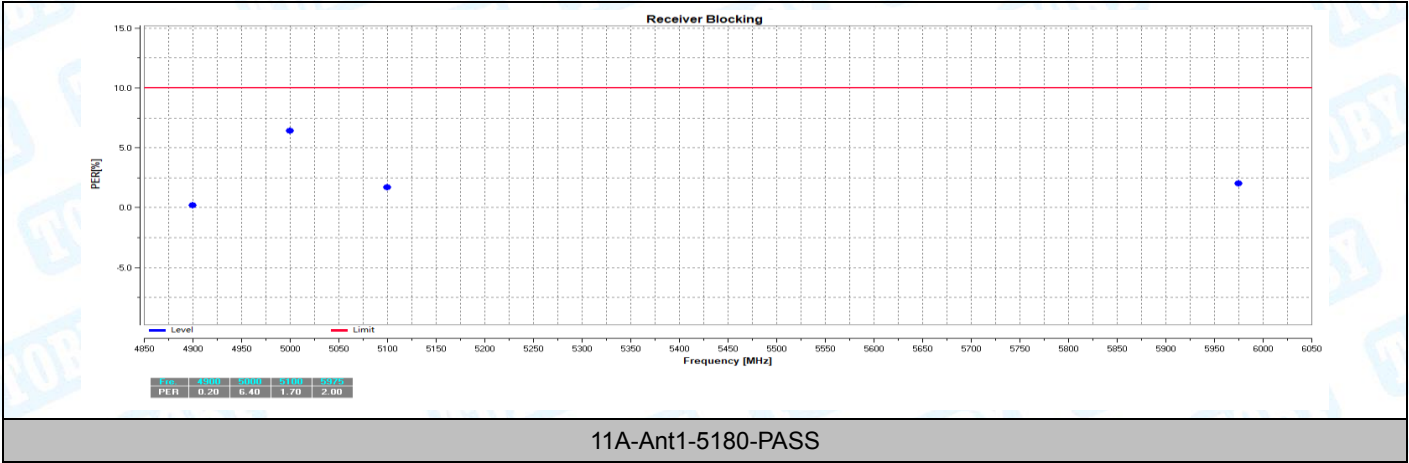
NTNV-11N40SISO-Ant1-5230-PASS

6: Receiver Blocking

6.1 Test Result

TestMode	Antenna	Frequency [MHz]	P _{min} [dBm]	Wanted signal [dBm]	Freq. [MHz]	CW [dBm]	PER [%]	Limit [%]	Verdict
11A	Ant1	5180	-90	-84	4900	-53	0.20	≤10	PASS
11A	Ant1	5180	-90	-84	5000	-53	6.40	≤10	PASS
11A	Ant1	5180	-90	-84	5100	-59	1.70	≤10	PASS
11A	Ant1	5180	-90	-84	5975	-53	2.00	≤10	PASS

6.2 Test Graphs



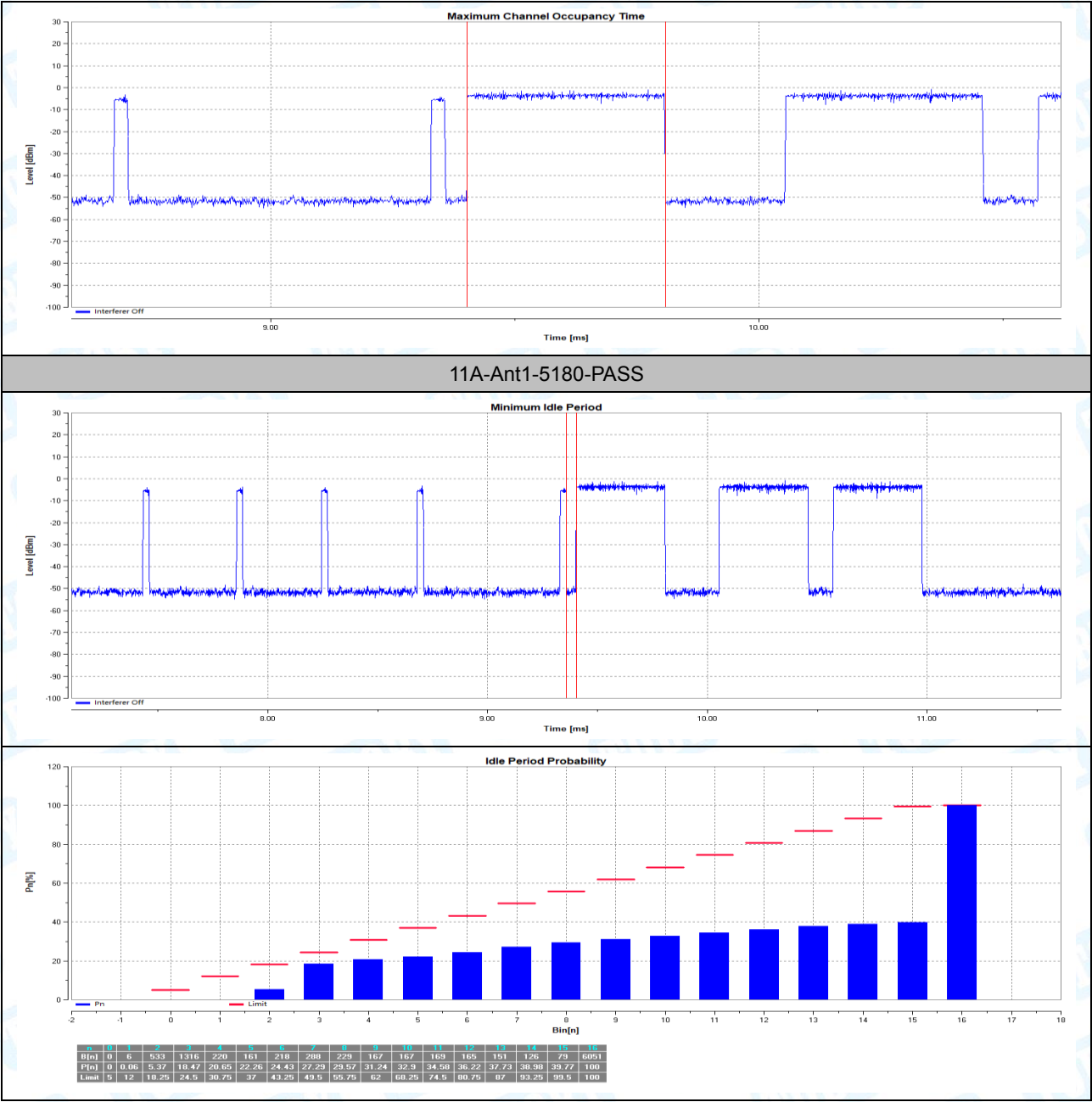
7: Adaptivity

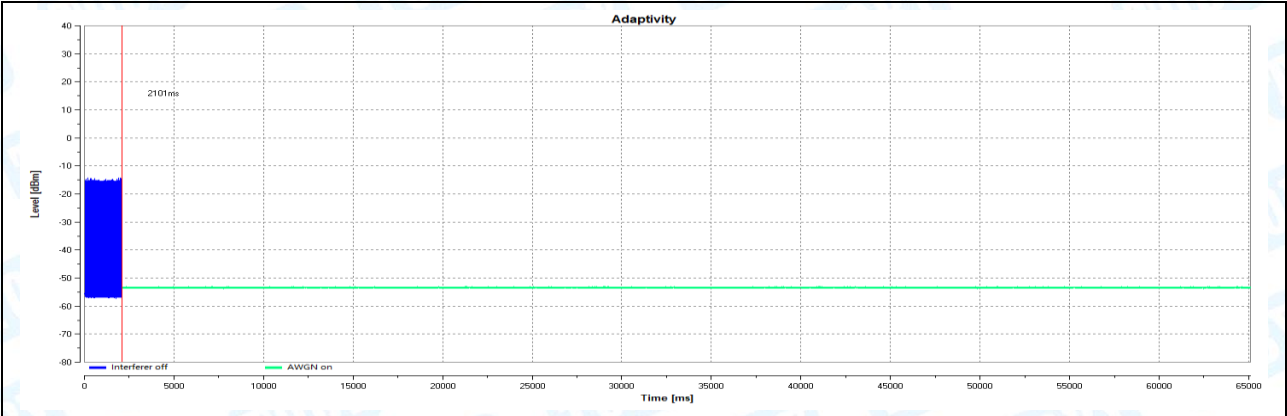
7.1 Test Result

TestMode	Ant.	Freq. [MHz]	Priority Class	Max. COT [ms]	Limit [ms]	Min.Idle Time[ms]	Limit [ms]	Idle Period probability	Verdict
11A	Ant1	5180	2	0.405	6.000	0.045	0.027	See the graph	PASS

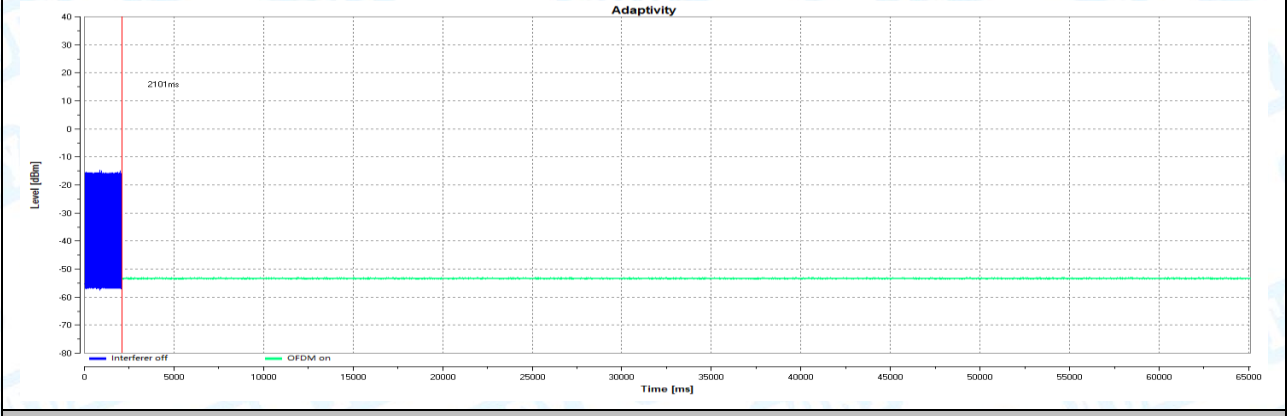
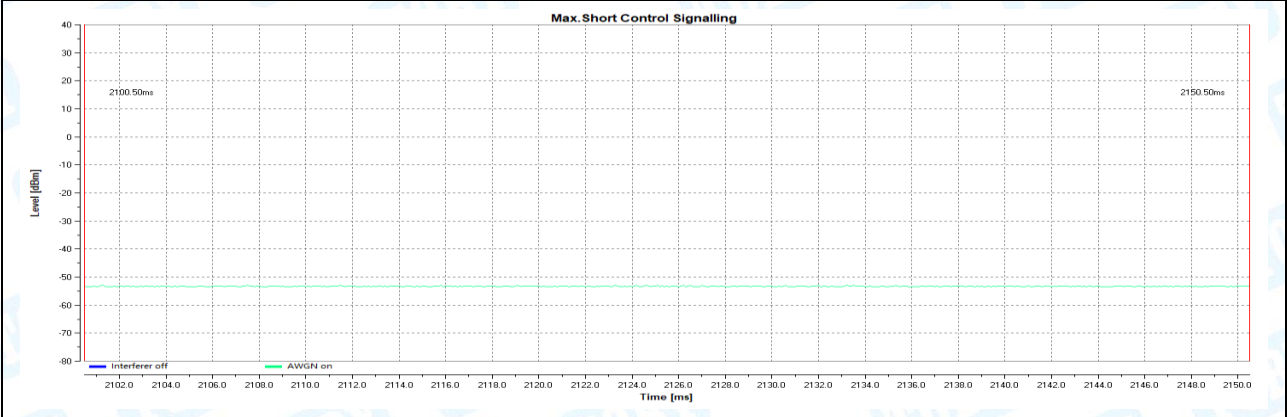
Test Mode	Ant.	Freq. [MHz]	Interference Type	Add interference Time [ms]	Interference Level [dBm/MHz]	Max. Short Control number [n]	Limit [n]	Max. Short Control Time [ms]	Limit [ms]	Verdict
11A	Ant1	5180	AWGN	2101	-73.60	0	50	0.00	2.5	PASS
11A	Ant1	5180	OFDM	2101	-73.60	0	50	0.00	2.5	PASS
11A	Ant1	5180	LTE	2101	-73.60	0	50	0.00	2.5	PASS

7.2 Test Graphs



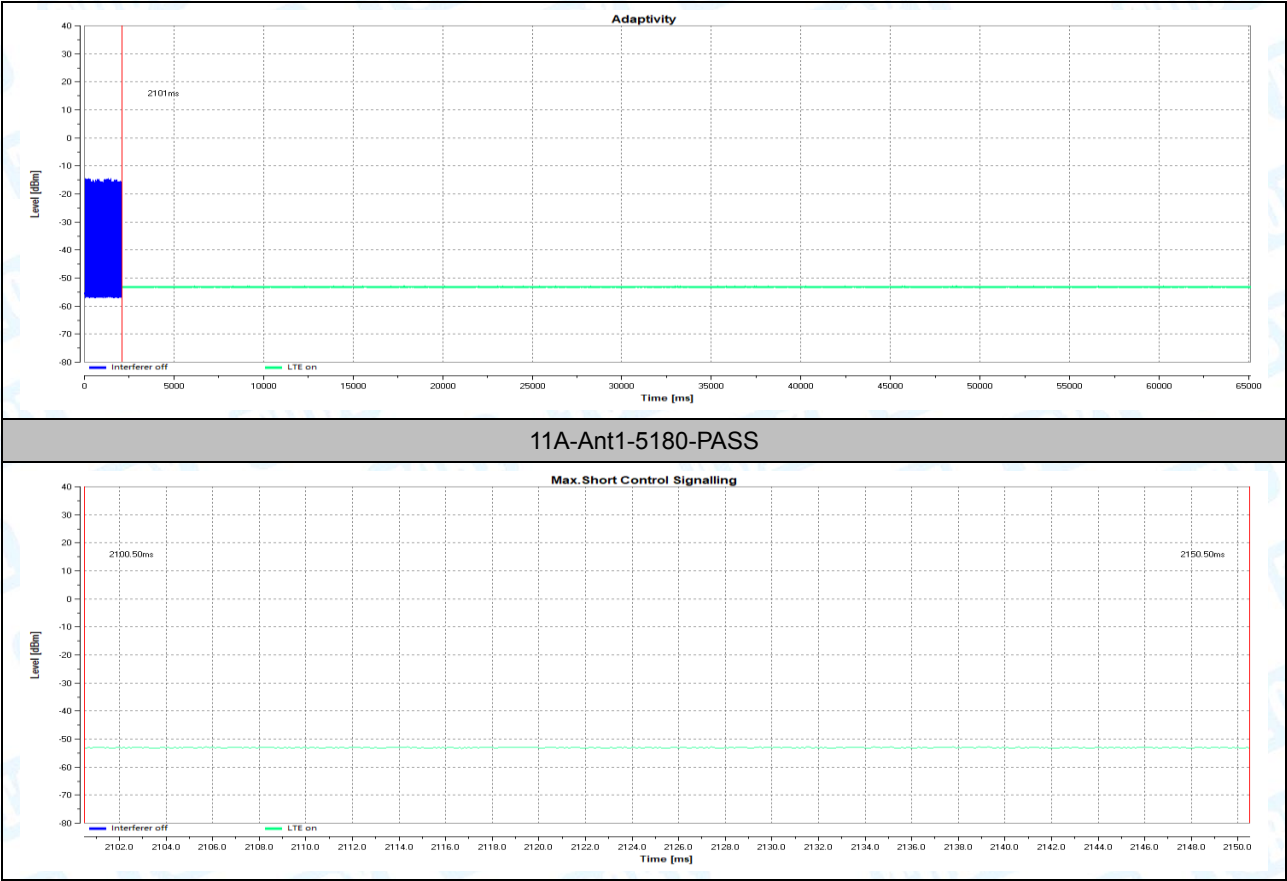


11A-Ant1-5180-PASS



11A-Ant1-5180-PASS





-----END OF THE REPORT-----