Project No.	SHT2101077001EW		
Test sample No.	YPHT21010770005	Model No.	DH-2880
Start test date	2021/3/2	Finish date	2021/3/3
Temperature	22.3℃	Humidity	49%
Test Engineer	Zijian Li	Auditor	Xiaodong Zhao

Appendix clause	Test Item	Test date （M/D)	Test Result (PASS/FAIL)
A	Maximum Transmitter Power	3/2	PASS
B	Occupied Bandwidth	3/3	PASS
C	Emission Mask	3/3	PASS
D	Modulation Limit	3/2	PASS
E	Audio Frequency Response	3/2	PASS
F	Frequency Stability Test & Temperature	3/2	PASS
G	Frequency Stability Test & Voltage	3/2	PASS
H	Transmitter Frequency Behavior	3/3	PASS
I	Spurious Emission On Antenna Port	3/3	PASS

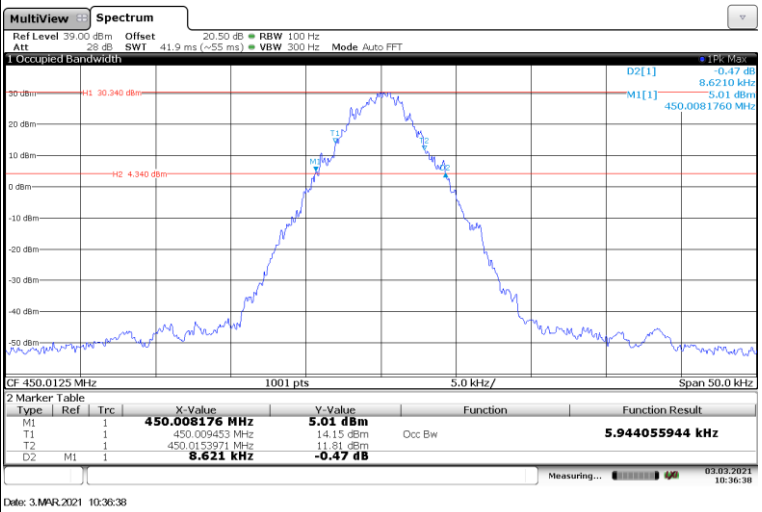
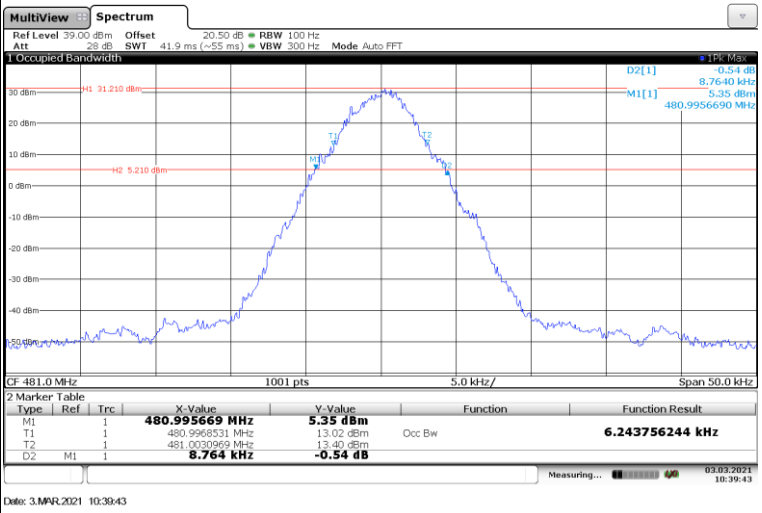
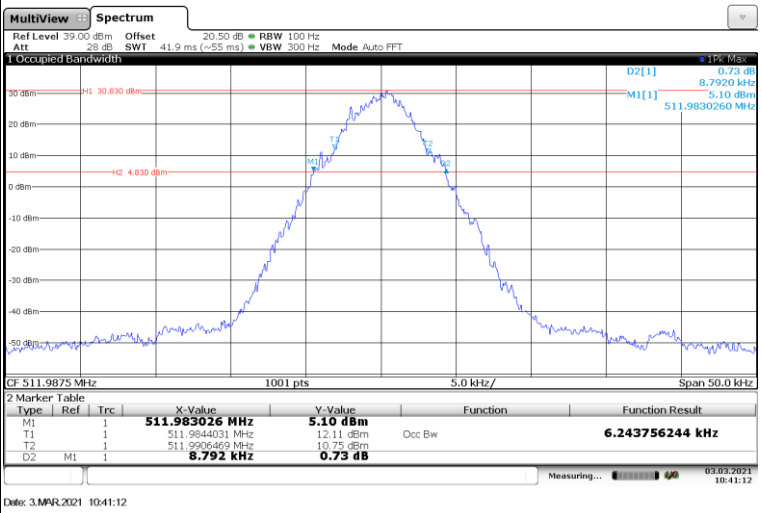
Appendix A:Maximum Transmitter Power

Operation Mode	Modulation Type	Test Channel	Measured Power(dBm)	Measured Power(W)	Rated Power(W)	Percentage (%)	Limit (%)	Result
TX-DNH	4FSK	CH_L	36.30	4.266	5.00	-14.68	±20	PASS
TX-DNH	4FSK	CH_M	36.50	4.467	5.00	-10.66	±20	PASS
TX-DNH	4FSK	CH_H	36.10	4.074	5.00	-18.52	±20	PASS
TX-DNL	4FSK	CH_L	30.10	1.023	1.00	2.33	±20	PASS
TX-DNL	4FSK	CH_M	30.60	1.148	1.00	14.82	±20	PASS
TX-DNL	4FSK	CH_H	30.20	1.047	1.00	4.71	±20	PASS
TX-ANH	FM	CH_L	36.90	4.898	5.00	-2.04	±20	PASS
TX-ANH	FM	CH_M	36.80	4.786	5.00	-4.27	±20	PASS
TX-ANH	FM	CH_H	36.66	4.634	5.00	-7.31	±20	PASS
TX-ANL	FM	CH_L	30.12	1.028	1.00	2.80	±20	PASS
TX-ANL	FM	CH_M	30.60	1.148	1.00	14.82	±20	PASS
TX-ANL	FM	CH_H	30.39	1.094	1.00	9.40	±20	PASS

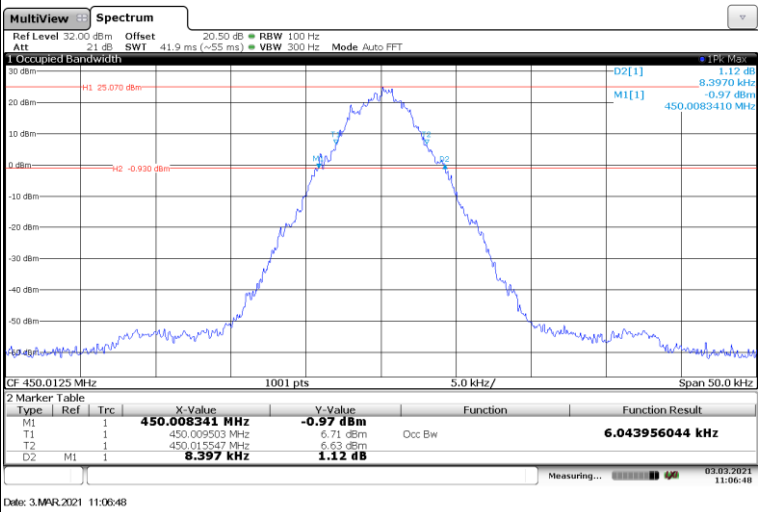
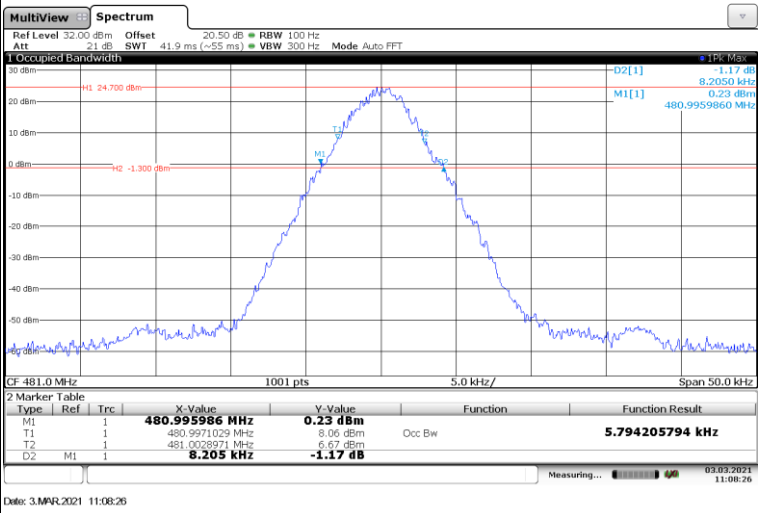
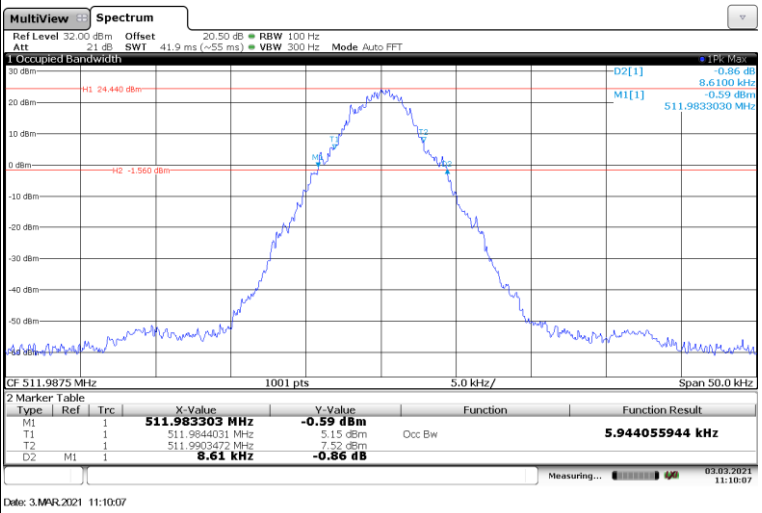
Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	Occupied Bandwidth		99% Limit(kHz)	Result
			99%(kHz)	26dB(kHz)		
TX-DNH	4FSK	CH_L	5.944	8.621	⩽11.25	PASS
TX-DNH	4FSK	CH_M	6.244	8.764	⩽11.25	PASS
TX-DNH	4FSK	CH_H	6.244	8.792	⩽11.25	PASS
TX-DNL	4FSK	CH_L	6.044	8.397	⩽11.25	PASS
TX-DNL	4FSK	CH_M	5.794	8.205	⩽11.25	PASS
TX-DNL	4FSK	CH_H	5.944	8.610	⩽11.25	PASS
TX-ANH	FM	CH_L	5.245	10.157	⩽11.25	PASS
TX-ANH	FM	CH_M	5.245	10.137	⩽11.25	PASS
TX-ANH	FM	CH_H	5.245	10.146	⩽11.25	PASS
TX-ANL	FM	CH_L	5.195	10.121	⩽11.25	PASS
TX-ANL	FM	CH_M	5.245	10.173	⩽11.25	PASS
TX-ANL	FM	CH_H	5.195	10.092	⩽11.25	PASS

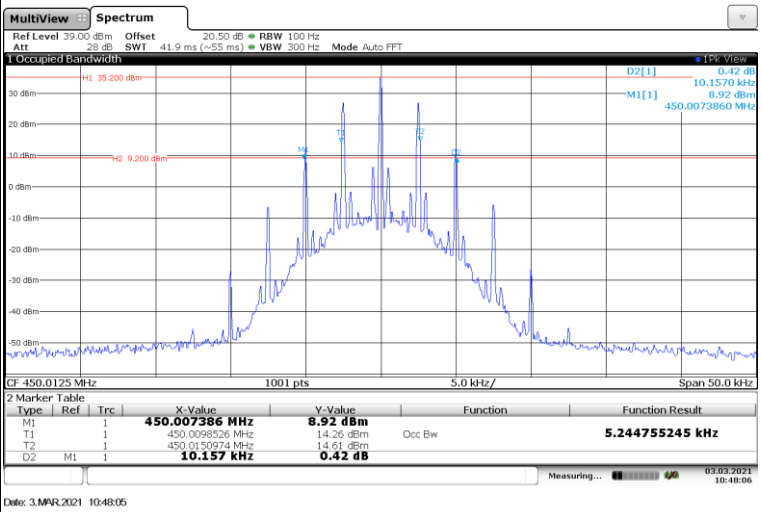
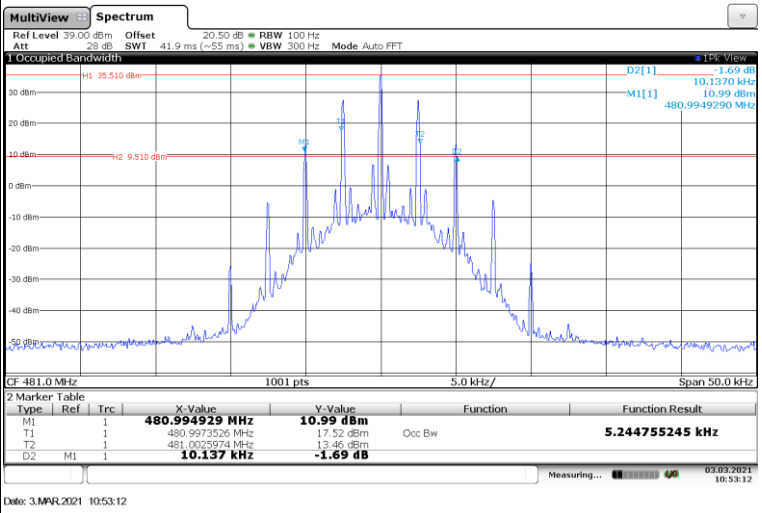
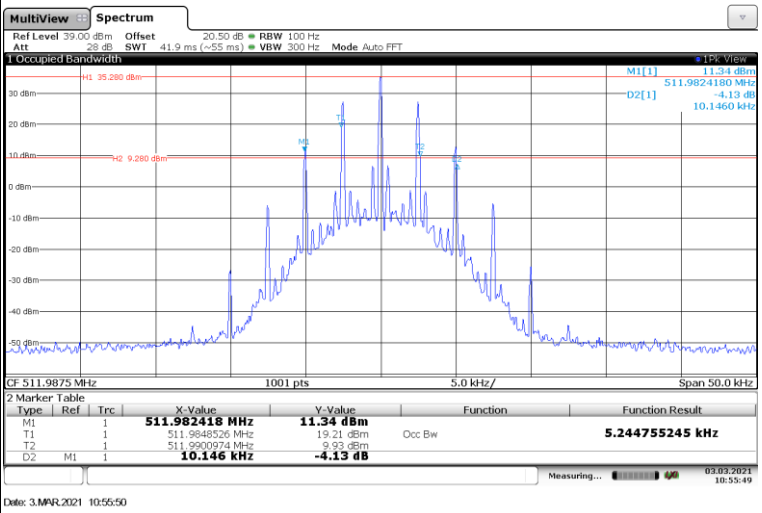
Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH_L	
TX-DNH	4FSK	CH_M	
TX-DNH	4FSK	CH_H	

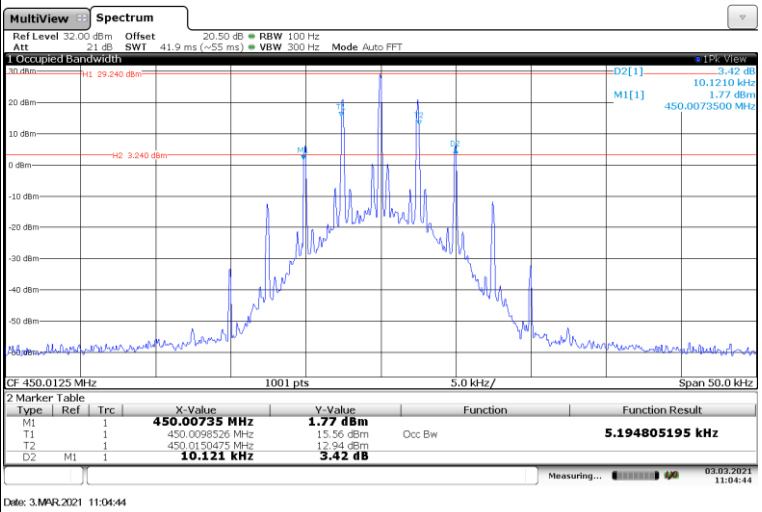
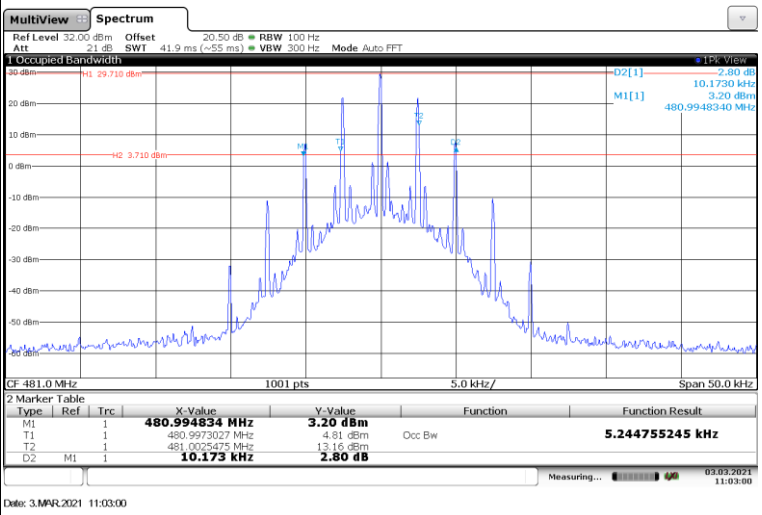
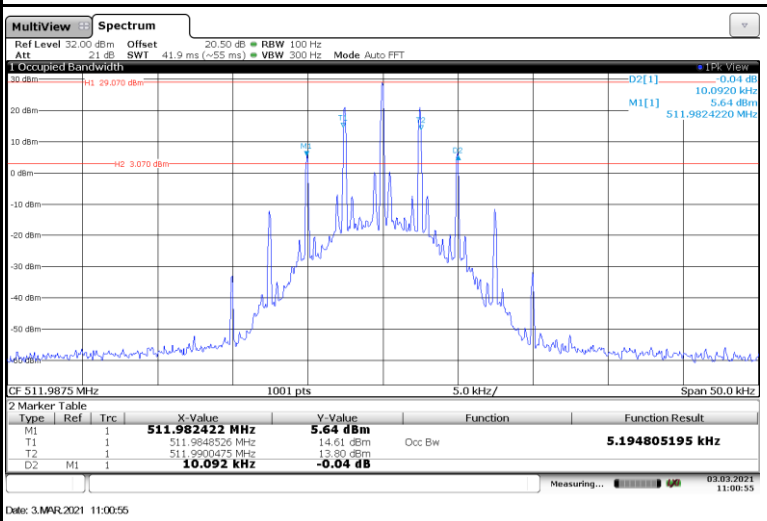
Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNL	4FSK	CH_L	
TX-DNL	4FSK	CH_M	
TX-DNL	4FSK	CH_H	

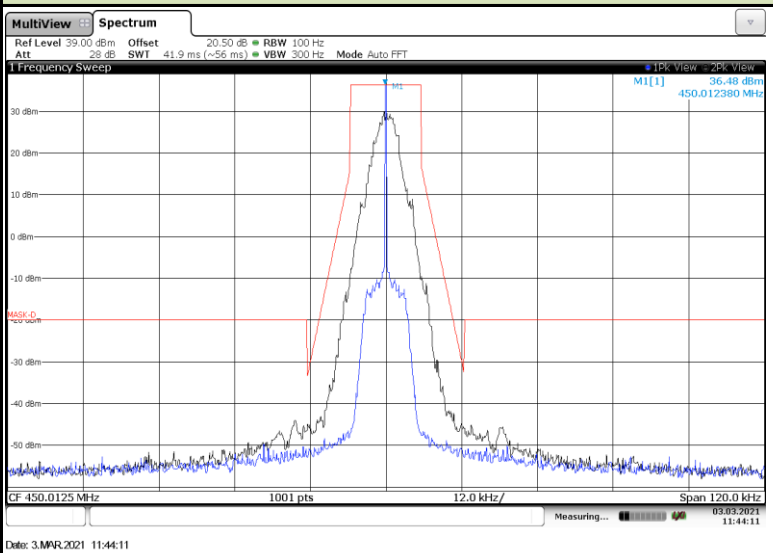
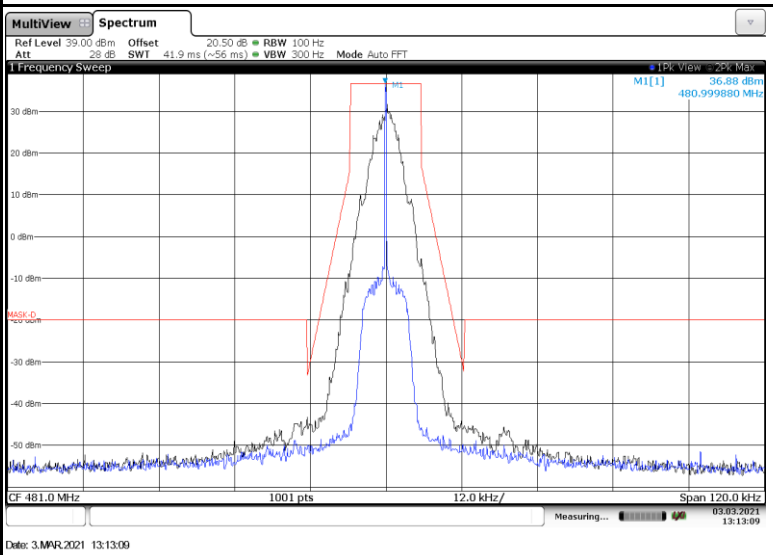
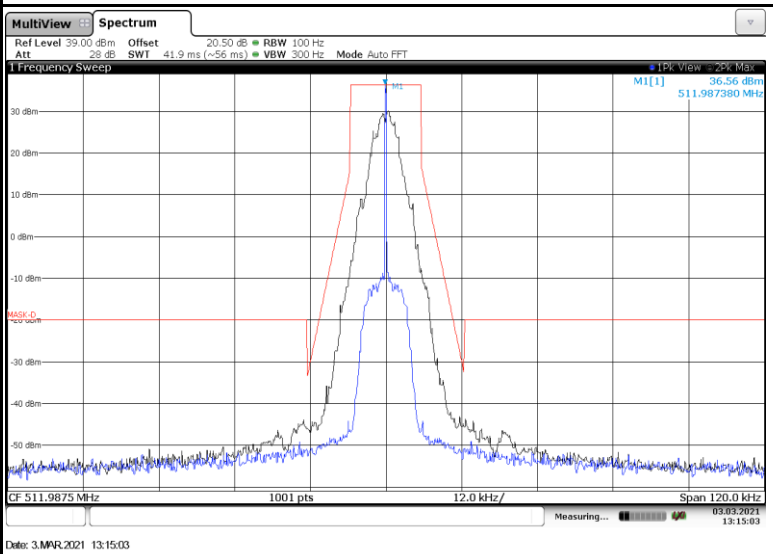
Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH_L	
TX-ANH	FM	CH_M	
TX-ANH	FM	CH_H	

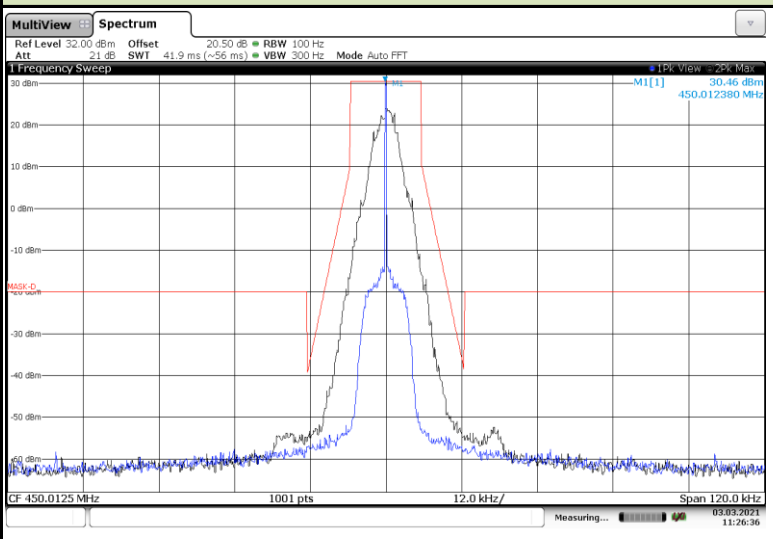
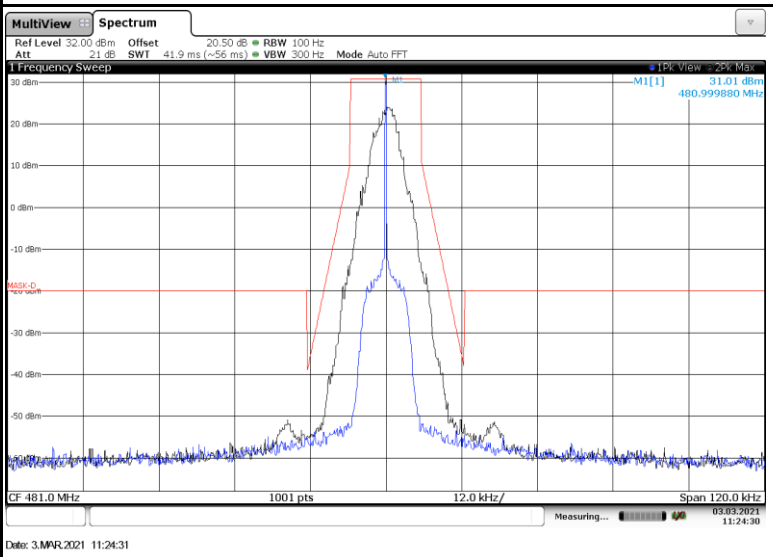
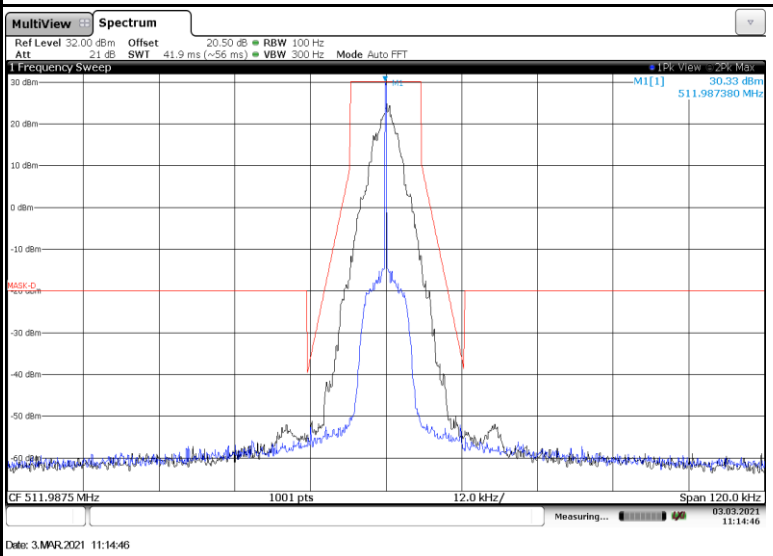
Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANL	FM	CH_L	
TX-ANL	FM	CH_M	
TX-ANL	FM	CH_H	

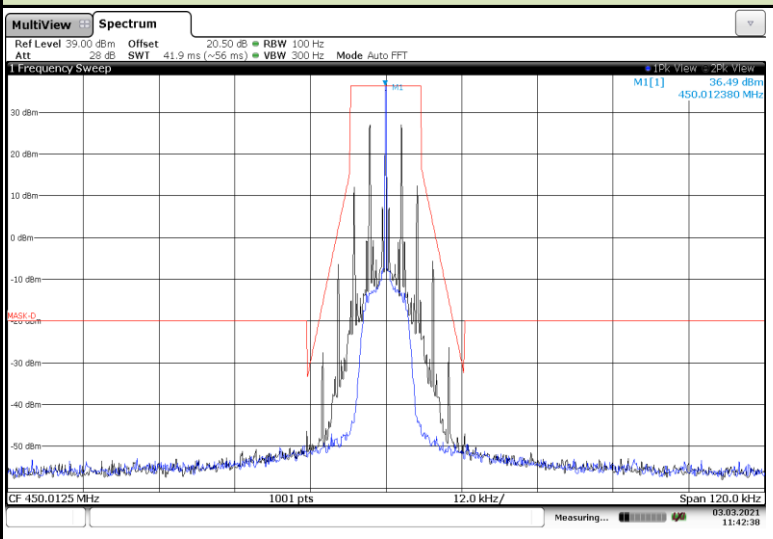
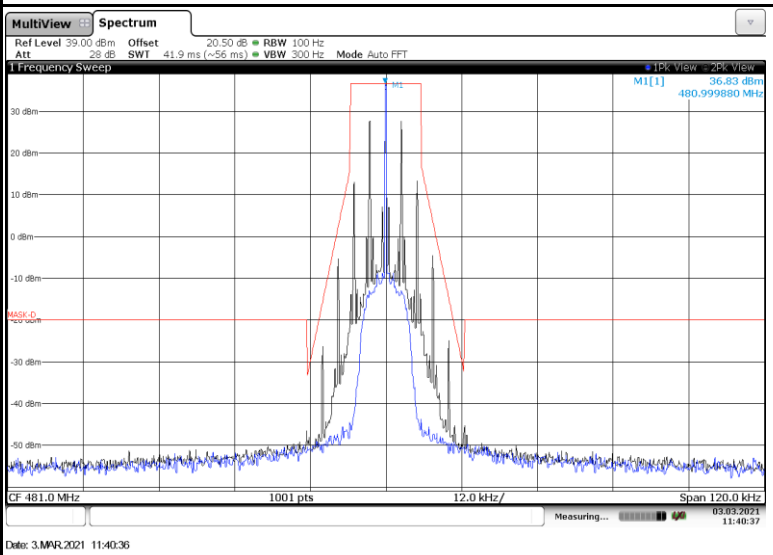
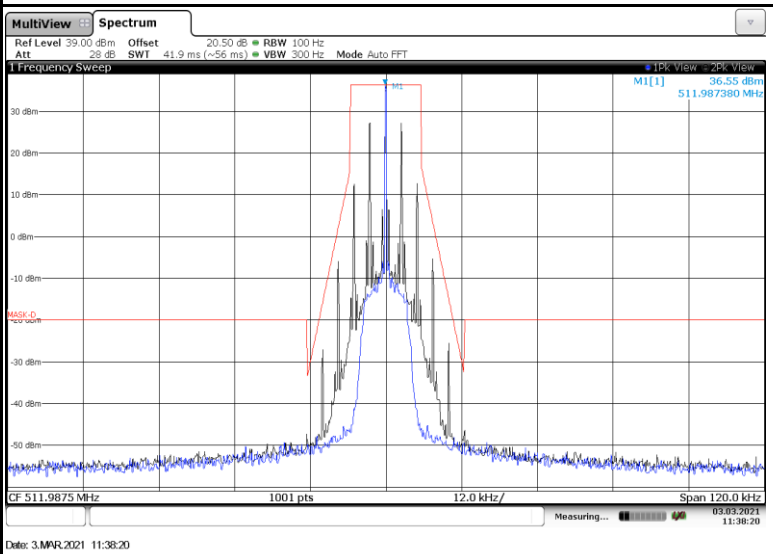
Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH_L	
TX-DNH	4FSK	CH_M	
TX-DNH	4FSK	CH_H	

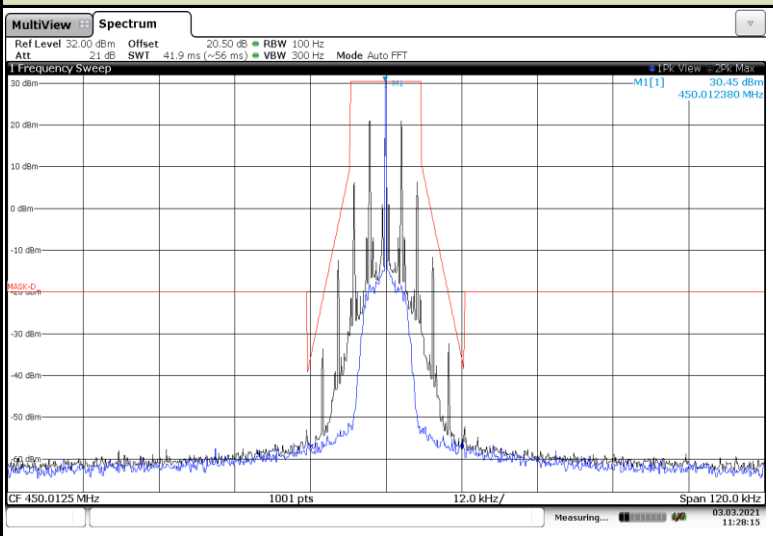
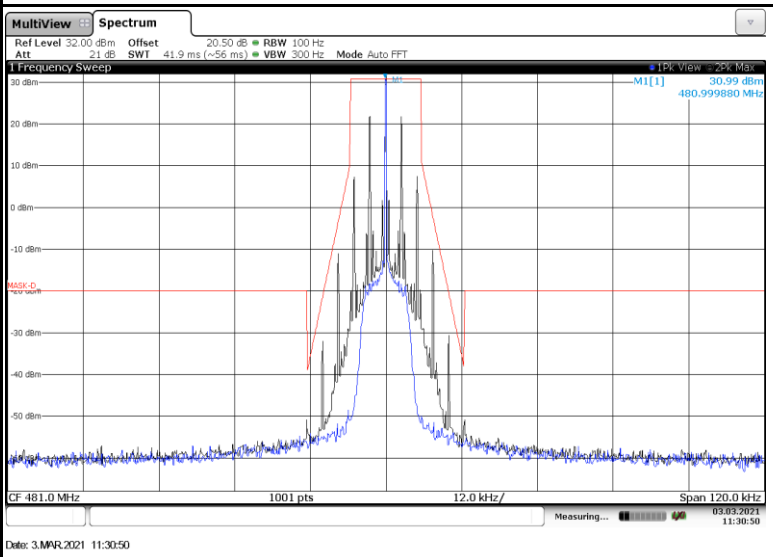
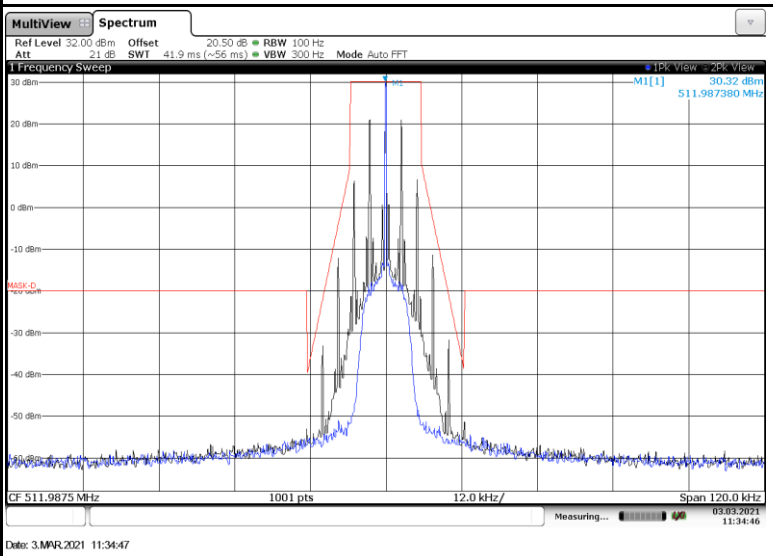
Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNL	4FSK	CH_L	
TX-DNL	4FSK	CH_M	
TX-DNL	4FSK	CH_H	

Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH_L	
TX-ANH	FM	CH_M	
TX-ANH	FM	CH_H	

Appendix C:Emission Mask

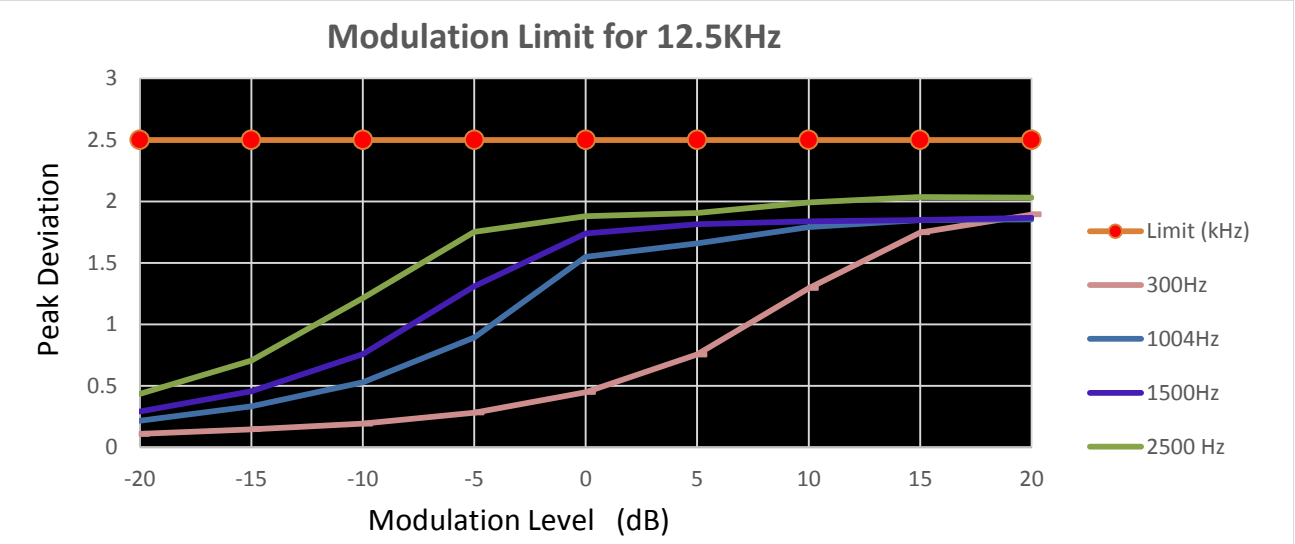
Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANL	FM	CH_L	
TX-ANL	FM	CH_M	
TX-ANL	FM	CH_H	

Appendix D:Modulation Limit

Operation Mode	Modulation Type	Test Channel	Modulation Level (dB)	Peak frequency deviation (kHz)				Limit (kHz)	Result
				300Hz	1004Hz	1500Hz	2500 Hz		
TX-ANH	FM	CH_M	-20	0.109	0.216	0.292	0.436	2.5	PASS
TX-ANH	FM	CH_M	-15	0.147	0.334	0.456	0.707	2.5	PASS
TX-ANH	FM	CH_M	-10	0.192	0.529	0.759	1.214	2.5	PASS
TX-ANH	FM	CH_M	-5	0.283	0.894	1.310	1.752	2.5	PASS
TX-ANH	FM	CH_M	0	0.449	1.548	1.740	1.880	2.5	PASS
TX-ANH	FM	CH_M	5	0.755	1.658	1.814	1.905	2.5	PASS
TX-ANH	FM	CH_M	10	1.295	1.791	1.838	1.991	2.5	PASS
TX-ANH	FM	CH_M	15	1.747	1.847	1.847	2.036	2.5	PASS
TX-ANH	FM	CH_M	20	1.893	1.853	1.867	2.030	2.5	PASS

Appendix D:Modulation Limit

TEST PLOT RESULT

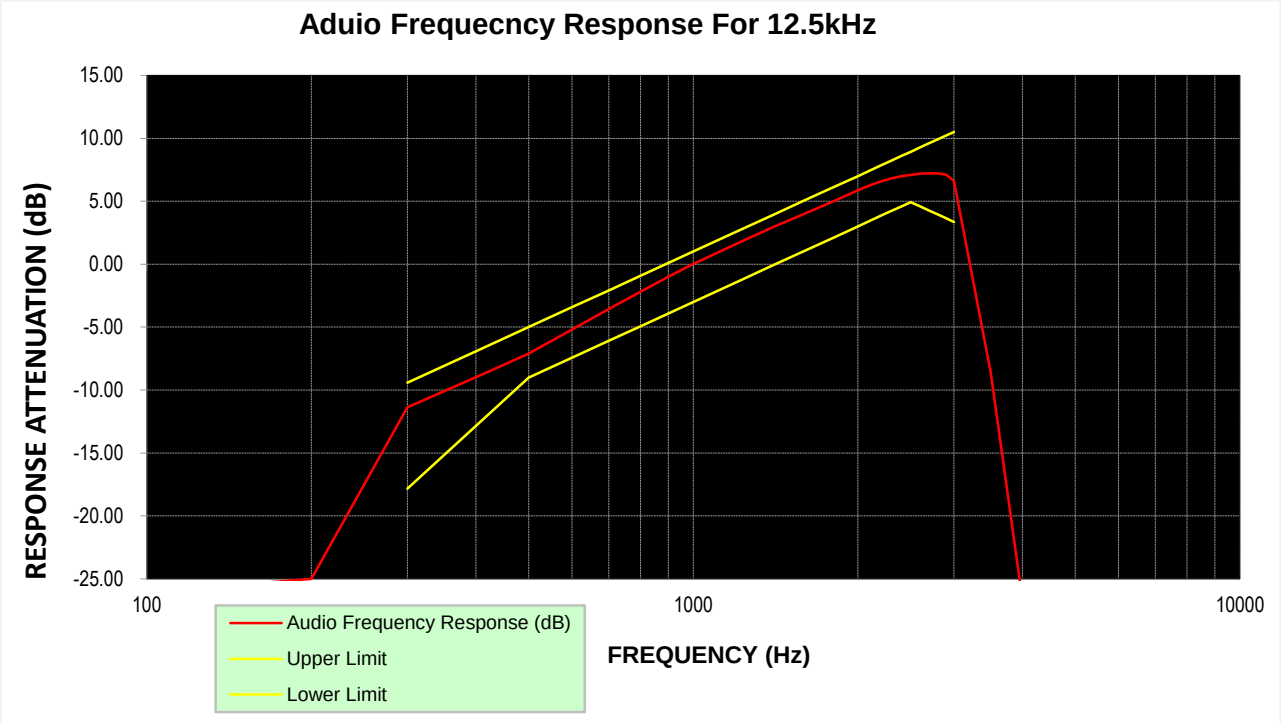


Appendix E:Audio Frequency Response

Operation Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-ANH	FM	CH_M	100	-26.08			PASS
TX-ANH	FM	CH_M	200	-25.00			PASS
TX-ANH	FM	CH_M	300	-11.38	-17.84	-9.42	PASS
TX-ANH	FM	CH_M	400	-8.99	-12.86	-6.93	PASS
TX-ANH	FM	CH_M	500	-7.09	-9.00	-5.00	PASS
TX-ANH	FM	CH_M	600	-5.19	-7.42	-3.42	PASS
TX-ANH	FM	CH_M	700	-3.56	-6.09	-2.09	PASS
TX-ANH	FM	CH_M	800	-2.20	-4.93	-0.93	PASS
TX-ANH	FM	CH_M	900	-1.00	-3.91	0.09	PASS
TX-ANH	FM	CH_M	1000	0.01	-3.00	1.00	PASS
TX-ANH	FM	CH_M	1200	1.62	-1.42	2.58	PASS
TX-ANH	FM	CH_M	1400	2.94	-0.09	3.91	PASS
TX-ANH	FM	CH_M	1600	4.01	1.07	5.07	PASS
TX-ANH	FM	CH_M	1800	4.97	2.09	6.09	PASS
TX-ANH	FM	CH_M	2000	5.88	3.00	7.00	PASS
TX-ANH	FM	CH_M	2100	6.26	3.42	7.42	PASS
TX-ANH	FM	CH_M	2200	6.55	3.83	7.83	PASS
TX-ANH	FM	CH_M	2300	6.80	4.21	8.21	PASS
TX-ANH	FM	CH_M	2400	6.98	4.58	8.58	PASS
TX-ANH	FM	CH_M	2500	7.10	4.93	8.93	PASS
TX-ANH	FM	CH_M	2600	7.19	4.59	9.27	PASS
TX-ANH	FM	CH_M	2700	7.22	4.27	9.60	PASS
TX-ANH	FM	CH_M	2800	7.21	3.95	9.91	PASS
TX-ANH	FM	CH_M	2900	7.11	3.65	10.22	PASS
TX-ANH	FM	CH_M	3000	6.64	3.35	10.51	PASS
TX-ANH	FM	CH_M	3500	-8.59			PASS
TX-ANH	FM	CH_M	4000	-26.67			PASS
TX-ANH	FM	CH_M	4500	-26.56			PASS
TX-ANH	FM	CH_M	5000	-26.17			PASS

Appendix E:Audio Frequency Response

TEST PLOT RESULT



Note: The highest audio frequency response at 3kHz<3.125kHz, so meet the requirement.

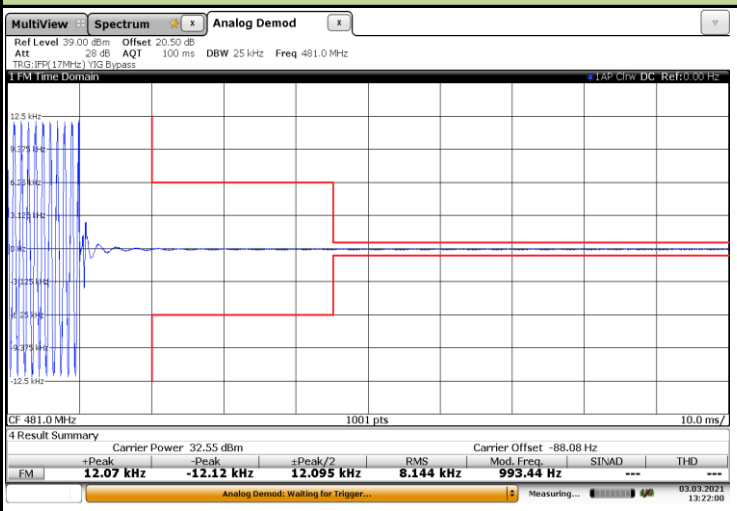
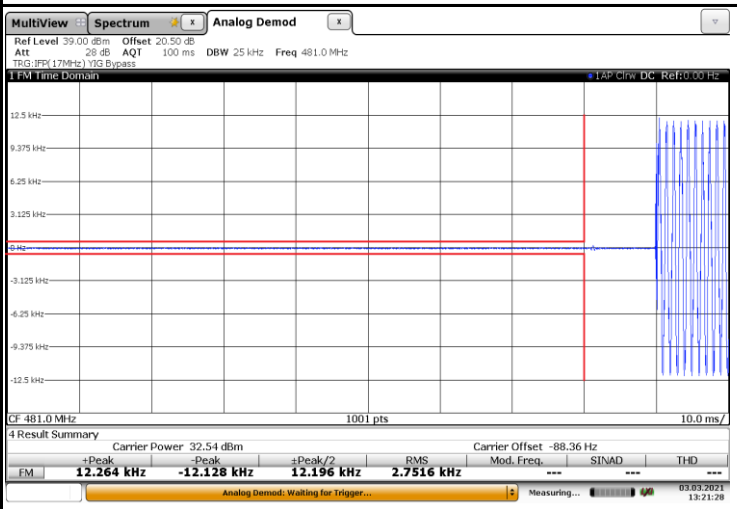
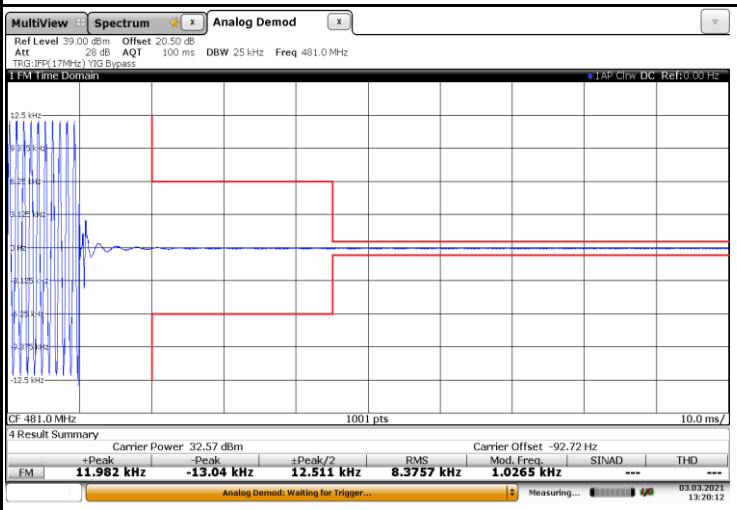
Appendix F:Frequency Stability Test & Temperature

Operation Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH_L	CH_M	CH_H		
TX-DNH	4FSK	V_N	-30	-0.211	-0.204	-0.106	±2.5	PASS
TX-DNH	4FSK	V_N	-20	-0.207	-0.220	-0.102	±2.5	PASS
TX-DNH	4FSK	V_N	-10	-0.217	-0.208	-0.103	±2.5	PASS
TX-DNH	4FSK	V_N	0	-0.213	-0.201	-0.108	±2.5	PASS
TX-DNH	4FSK	V_N	10	-0.209	-0.216	-0.105	±2.5	PASS
TX-DNH	4FSK	V_N	20	-0.200	-0.200	-0.100	±2.5	PASS
TX-DNH	4FSK	V_N	30	-0.205	-0.204	-0.102	±2.5	PASS
TX-DNH	4FSK	V_N	40	-0.213	-0.217	-0.100	±2.5	PASS
TX-DNH	4FSK	V_N	50	-0.210	-0.206	-0.107	±2.5	PASS
TX-DNL	4FSK	V_N	-30	-0.102	0.100	-0.202	±2.5	PASS
TX-DNL	4FSK	V_N	-20	-0.100	0.100	-0.213	±2.5	PASS
TX-DNL	4FSK	V_N	-10	-0.110	0.103	-0.205	±2.5	PASS
TX-DNL	4FSK	V_N	0	-0.108	0.101	-0.201	±2.5	PASS
TX-DNL	4FSK	V_N	10	-0.107	0.106	-0.217	±2.5	PASS
TX-DNL	4FSK	V_N	20	-0.100	0.100	-0.200	±2.5	PASS
TX-DNL	4FSK	V_N	30	-0.108	0.108	-0.218	±2.5	PASS
TX-DNL	4FSK	V_N	40	-0.106	0.108	-0.217	±2.5	PASS
TX-DNL	4FSK	V_N	50	-0.106	0.102	-0.220	±2.5	PASS
TX-ANH	FM	V_N	-30	-0.052	-0.049	-0.056	±2.5	PASS
TX-ANH	FM	V_N	-20	-0.054	-0.047	-0.060	±2.5	PASS
TX-ANH	FM	V_N	-10	-0.055	-0.049	-0.059	±2.5	PASS
TX-ANH	FM	V_N	0	-0.054	-0.050	-0.057	±2.5	PASS
TX-ANH	FM	V_N	10	-0.054	-0.050	-0.059	±2.5	PASS
TX-ANH	FM	V_N	20	-0.051	-0.046	-0.056	±2.5	PASS
TX-ANH	FM	V_N	30	-0.051	-0.048	-0.062	±2.5	PASS
TX-ANH	FM	V_N	40	-0.052	-0.048	-0.057	±2.5	PASS
TX-ANH	FM	V_N	50	-0.055	-0.050	-0.058	±2.5	PASS
TX-ANL	FM	V_N	-30	-0.056	-0.039	-0.036	±2.5	PASS
TX-ANL	FM	V_N	-20	-0.054	-0.042	-0.034	±2.5	PASS
TX-ANL	FM	V_N	-10	-0.056	-0.040	-0.036	±2.5	PASS
TX-ANL	FM	V_N	0	-0.056	-0.042	-0.036	±2.5	PASS
TX-ANL	FM	V_N	10	-0.053	-0.042	-0.036	±2.5	PASS
TX-ANL	FM	V_N	20	-0.051	-0.039	-0.034	±2.5	PASS
TX-ANL	FM	V_N	30	-0.052	-0.040	-0.035	±2.5	PASS
TX-ANL	FM	V_N	40	-0.055	-0.041	-0.036	±2.5	PASS
TX-ANL	FM	V_N	50	-0.053	-0.040	-0.036	±2.5	PASS

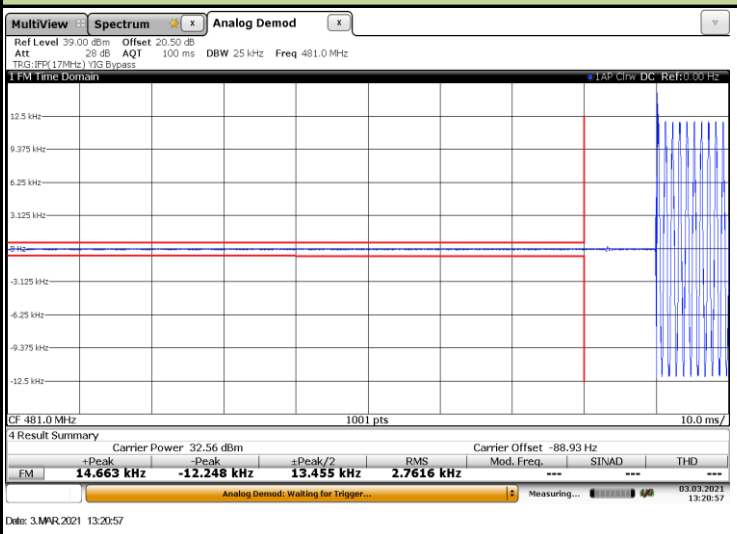
Appendix G:Frequency Stability Test & Voltage

Operation Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH_L	CH_M	CH_H		
TX-DNH	4FSK	V_N	T_N	-0.200	-0.200	-0.100	±2.5	PASS
TX-DNH	4FSK	V_L	T_N	-0.202	-0.202	-0.100	±2.5	PASS
TX-DNH	4FSK	V_H	T_N	-0.212	-0.203	-0.103	±2.5	PASS
TX-DNL	4FSK	V_N	T_N	-0.100	0.100	-0.200	±2.5	PASS
TX-DNL	4FSK	V_L	T_N	-0.102	0.101	-0.204	±2.5	PASS
TX-DNL	4FSK	V_H	T_N	-0.102	0.102	-0.209	±2.5	PASS
TX-ANH	FM	V_N	T_N	-0.051	-0.046	-0.056	±2.5	PASS
TX-ANH	FM	V_L	T_N	-0.052	-0.046	-0.057	±2.5	PASS
TX-ANH	FM	V_H	T_N	-0.054	-0.048	-0.059	±2.5	PASS
TX-ANL	FM	V_N	T_N	-0.051	-0.039	-0.034	±2.5	PASS
TX-ANL	FM	V_L	T_N	-0.051	-0.039	-0.034	±2.5	PASS
TX-ANL	FM	V_H	T_N	-0.054	-0.040	-0.035	±2.5	PASS

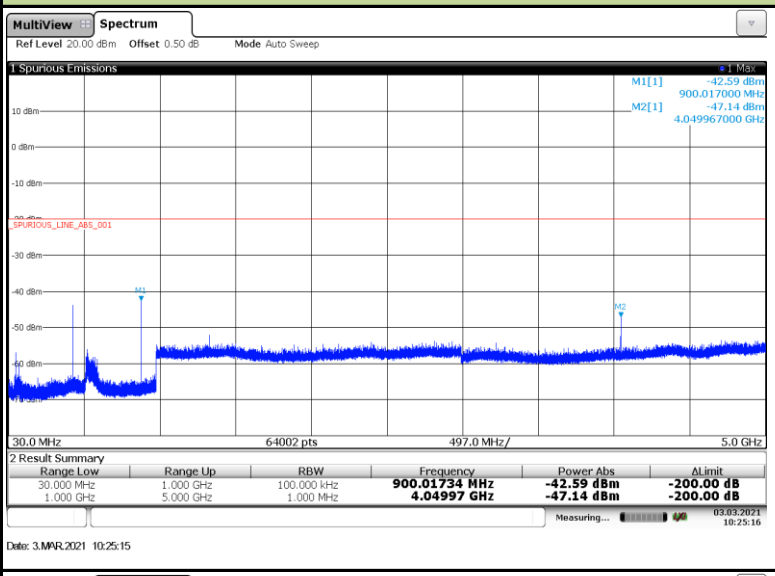
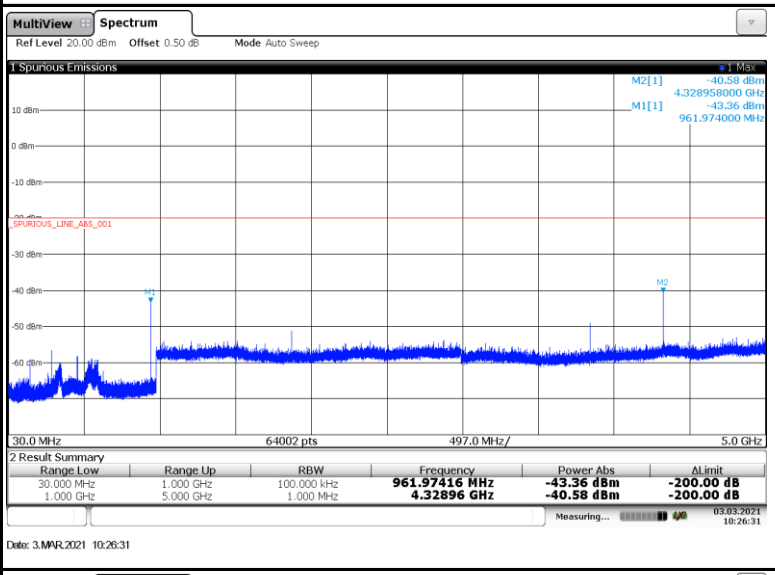
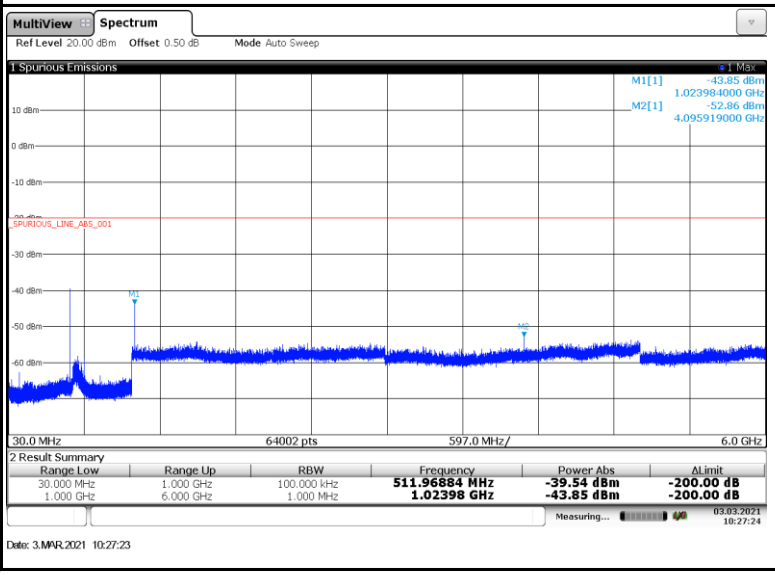
Appendix H:Transmitter Frequency Behavior

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CHM	 OFF~ON
TX-DNH	4FSK	CHM	 ON-OFF
TX-ANH	FM	CHM	 OFF~ON

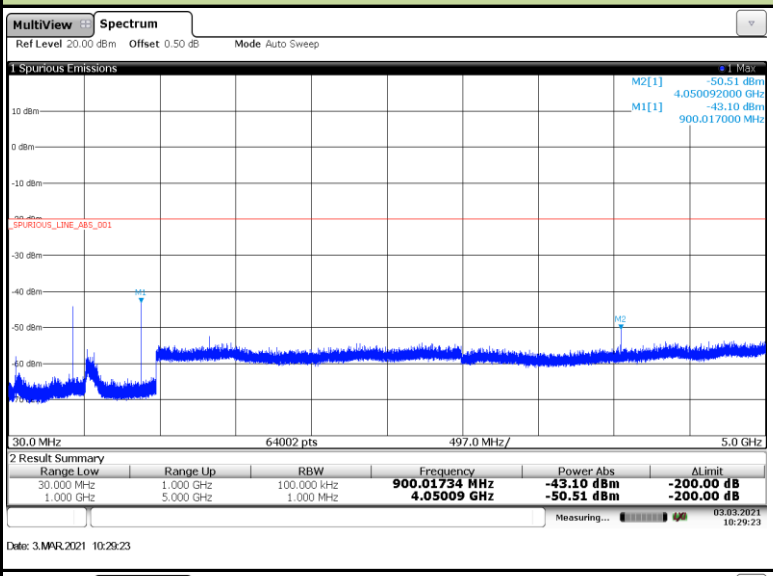
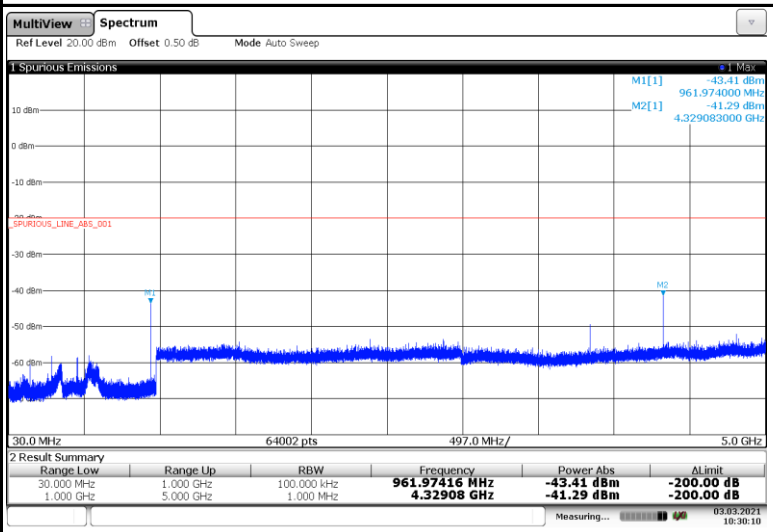
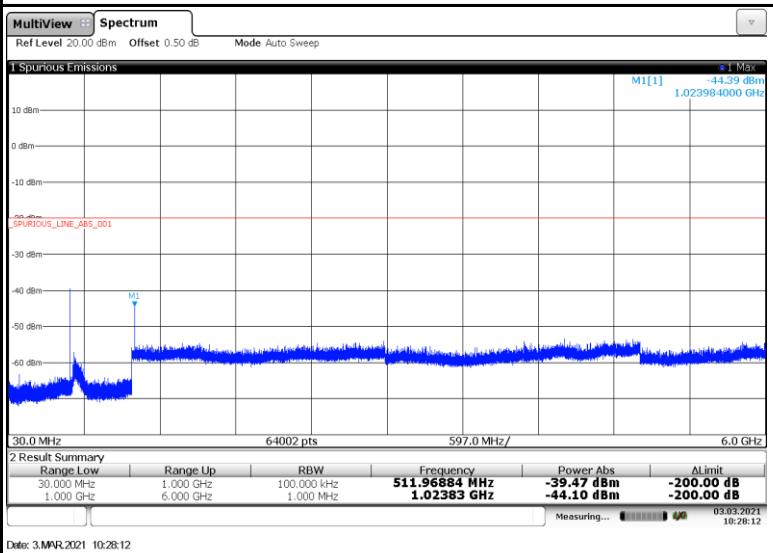
Appendix H:Transmitter Frequency Behavior

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH_M	 ON-OFF

Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH_L	
TX-DNH	4FSK	CH_M	
TX-DNH	4FSK	CH_H	

Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH_L	
TX-ANH	FM	CH_M	
TX-ANH	FM	CH_H	

----End of Report----