

Project No.	SHT2212043201EW		
Test sample No.	YPHT22120432004	Model No.	RB66
Start test date	2022/12/15	Finish date	2022/12/19
Temperature	22.3℃	Humidity	42%
Test Engineer	<i>Chunshui Gu</i>	Auditor	<i>Xiaodong Zhao</i>

Appendix clause	Test Item	Test Result (PASS/FAIL)
A	Transmit Power (ERP)	PASS
B	Occupied Bandwidth	PASS
C	Emission Mask	PASS
D	Modulation Limit	PASS
E	Audio Frequency Response	PASS
F	Audio Low Pass Filter Response	PASS
G	Frequency Stability Test & Temperature	PASS
H	Frequency Stability Test & Voltage	PASS

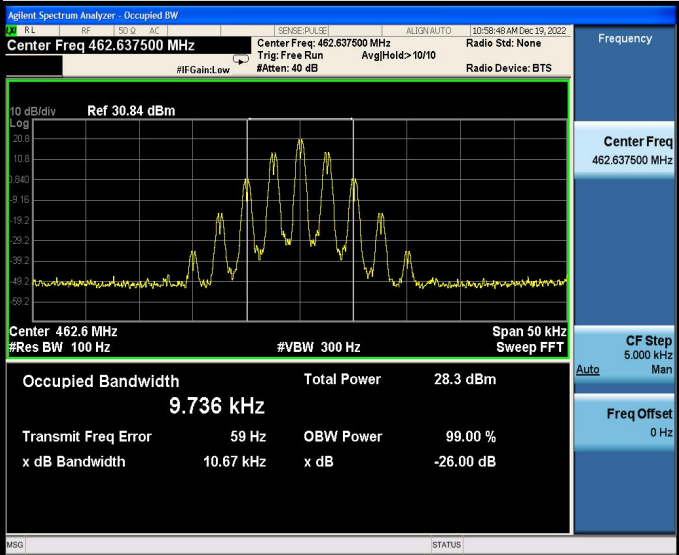
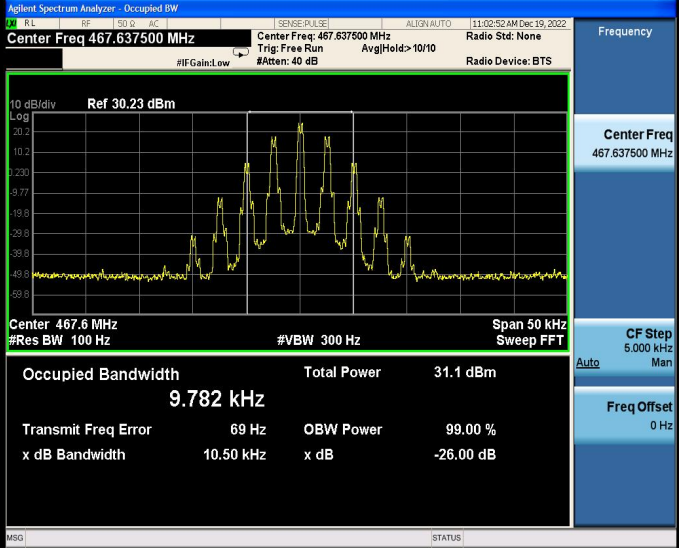
Appendix A: Transmit Power (ERP)

Test Mode	Modulation Type	Test Channel	Measured power (dBm)	Measured power (W)	Limit(W)	Result
TX-FRS	FM	CH _{M1}	28.22	0.66	≤2	PASS
TX-FRS	FM	CH _{M2}	26.88	0.49	≤0.5	PASS

Appendix B: 99% Occupied Bandwidth & 26dB Bandwidth

Test Mode	Modulation Type	Test Channel	Occupied Bandwidth		99% Limit(kHz)	Result
			99%(kHz)	26dB(kHz)		
TX-FRS	FM	CH _{M1}	9.736	10.67	≤12.5	PASS
TX-FRS	FM	CH _{M2}	9.782	10.50	≤12.5	PASS

Appendix B: 99% Occupied Bandwidth & 26dB Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-FRS	FM	CH _{M1}	 Agilent Spectrum Analyzer - Occupied BW Center Freq 462.637500 MHz Ref 30.84 dBm Occupied Bandwidth 9.736 kHz Total Power 28.3 dBm Transmit Freq Error 59 Hz OBW Power 99.00 % x dB Bandwidth 10.67 kHz x dB -26.00 dB
TX-FRS	FM	CH _{M2}	 Agilent Spectrum Analyzer - Occupied BW Center Freq 467.637500 MHz Ref 30.23 dBm Occupied Bandwidth 9.782 kHz Total Power 31.1 dBm Transmit Freq Error 69 Hz OBW Power 99.00 % x dB Bandwidth 10.50 kHz x dB -26.00 dB

Appendix C:Emission Mask

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-FRS	FM	CH _{M1}	
TX-FRS	FM	CH _{M2}	

Appendix D:Modulation Limit

Test Mode	Modulation Type	Test Channel	Modulation Level (dB)	Peak Frequency Deviation (Hz)				Limit (kHz)	Result
				300	1004	1500	2500		
TX-FRS	FM	CH _{M1}	-20	0.328	0.383	0.421	0.488	2.5	PASS
TX-FRS	FM	CH _{M1}	-15	0.342	0.459	0.52	0.643	2.5	PASS
TX-FRS	FM	CH _{M1}	-10	0.371	0.687	0.815	1.031	2.5	PASS
TX-FRS	FM	CH _{M1}	-5	0.479	0.989	1.286	1.824	2.5	PASS
TX-FRS	FM	CH _{M1}	0	0.614	1.525	2.042	2.441	2.5	PASS
TX-FRS	FM	CH _{M1}	5	0.867	2.395	2.446	2.46	2.5	PASS
TX-FRS	FM	CH _{M1}	10	1.304	2.411	2.385	2.462	2.5	PASS
TX-FRS	FM	CH _{M1}	15	1.74	2.394	2.374	2.47	2.5	PASS
TX-FRS	FM	CH _{M1}	20	1.895	2.397	2.367	2.468	2.5	PASS
TX-FRS	FM	CH _{M2}	-20	0.201	0.269	0.305	0.385	2.5	PASS
TX-FRS	FM	CH _{M2}	-15	0.213	0.342	0.408	0.535	2.5	PASS
TX-FRS	FM	CH _{M2}	-10	0.275	0.584	0.761	1.079	2.5	PASS
TX-FRS	FM	CH _{M2}	-5	0.359	0.91	1.239	1.825	2.5	PASS
TX-FRS	FM	CH _{M2}	0	0.504	1.491	2.065	2.331	2.5	PASS
TX-FRS	FM	CH _{M2}	5	0.783	2.293	2.305	2.347	2.5	PASS
TX-FRS	FM	CH _{M2}	10	1.256	2.289	2.249	2.34	2.5	PASS
TX-FRS	FM	CH _{M2}	15	1.568	2.269	2.241	2.339	2.5	PASS
TX-FRS	FM	CH _{M2}	20	1.71	2.276	2.249	2.348	2.5	PASS

Appendix D:Modulation Limit

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-FRS	FM	CH _{M1}	
TX-FRS	FM	CH _{M2}	

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-FRS	FM	CH _{M1}	100	-8.64			PASS
TX-FRS	FM	CH _{M1}	200	-8.64			PASS
TX-FRS	FM	CH _{M1}	300	-10.08	-17.84	-9.42	PASS
TX-FRS	FM	CH _{M1}	400	-7.01	-12.86	-6.93	PASS
TX-FRS	FM	CH _{M1}	500	-5.91	-9.00	-5.00	PASS
TX-FRS	FM	CH _{M1}	600	-3.83	-7.42	-3.42	PASS
TX-FRS	FM	CH _{M1}	700	-2.68	-6.09	-2.09	PASS
TX-FRS	FM	CH _{M1}	800	-1.70	-4.93	-0.93	PASS
TX-FRS	FM	CH _{M1}	900	-0.80	-3.91	0.09	PASS
TX-FRS	FM	CH _{M1}	1000	-0.01	-3.00	1.00	PASS
TX-FRS	FM	CH _{M1}	1200	1.28	-1.42	2.58	PASS
TX-FRS	FM	CH _{M1}	1400	2.32	-0.09	3.91	PASS
TX-FRS	FM	CH _{M1}	1600	3.21	1.07	5.07	PASS
TX-FRS	FM	CH _{M1}	1800	4.04	2.09	6.09	PASS
TX-FRS	FM	CH _{M1}	2000	4.92	3.00	7.00	PASS
TX-FRS	FM	CH _{M1}	2100	5.32	3.42	7.42	PASS
TX-FRS	FM	CH _{M1}	2200	5.66	3.83	7.83	PASS
TX-FRS	FM	CH _{M1}	2300	5.97	4.21	8.21	PASS
TX-FRS	FM	CH _{M1}	2400	6.16	4.58	8.58	PASS
TX-FRS	FM	CH _{M1}	2500	6.24	4.93	8.93	PASS
TX-FRS	FM	CH _{M1}	2600	6.20	4.59	9.27	PASS
TX-FRS	FM	CH _{M1}	2700	5.96	4.27	9.60	PASS
TX-FRS	FM	CH _{M1}	2800	5.51	3.95	9.91	PASS
TX-FRS	FM	CH _{M1}	2900	4.83	3.65	10.22	PASS
TX-FRS	FM	CH _{M1}	3000	3.89	3.35	10.51	PASS
TX-FRS	FM	CH _{M1}	3500	-4.69			PASS
TX-FRS	FM	CH _{M1}	4000	-8.58			PASS
TX-FRS	FM	CH _{M1}	4500	-8.59			PASS
TX-FRS	FM	CH _{M1}	5000	-8.65			PASS

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-FRS	FM	CH _{M2}	100	-18.49			PASS
TX-FRS	FM	CH _{M2}	200	-18.76			PASS
TX-FRS	FM	CH _{M2}	300	-10.58	-17.84	-9.42	PASS
TX-FRS	FM	CH _{M2}	400	-7.92	-12.86	-6.93	PASS
TX-FRS	FM	CH _{M2}	500	-6.45	-9.00	-5.00	PASS
TX-FRS	FM	CH _{M2}	600	-4.86	-7.42	-3.42	PASS
TX-FRS	FM	CH _{M2}	700	-3.29	-6.09	-2.09	PASS
TX-FRS	FM	CH _{M2}	800	-2.04	-4.93	-0.93	PASS
TX-FRS	FM	CH _{M2}	900	-0.93	-3.91	0.09	PASS
TX-FRS	FM	CH _{M2}	1000	0.00	-3.00	1.00	PASS
TX-FRS	FM	CH _{M2}	1200	1.39	-1.42	2.58	PASS
TX-FRS	FM	CH _{M2}	1400	2.50	-0.09	3.91	PASS
TX-FRS	FM	CH _{M2}	1600	3.47	1.07	5.07	PASS
TX-FRS	FM	CH _{M2}	1800	4.34	2.09	6.09	PASS
TX-FRS	FM	CH _{M2}	2000	5.25	3.00	7.00	PASS
TX-FRS	FM	CH _{M2}	2100	5.68	3.42	7.42	PASS
TX-FRS	FM	CH _{M2}	2200	6.00	3.83	7.83	PASS
TX-FRS	FM	CH _{M2}	2300	6.33	4.21	8.21	PASS
TX-FRS	FM	CH _{M2}	2400	6.53	4.58	8.58	PASS
TX-FRS	FM	CH _{M2}	2500	6.62	4.93	8.93	PASS
TX-FRS	FM	CH _{M2}	2600	6.56	4.59	9.27	PASS
TX-FRS	FM	CH _{M2}	2700	6.32	4.27	9.60	PASS
TX-FRS	FM	CH _{M2}	2800	5.86	3.95	9.91	PASS
TX-FRS	FM	CH _{M2}	2900	5.15	3.65	10.22	PASS
TX-FRS	FM	CH _{M2}	3000	4.18	3.35	10.51	PASS
TX-FRS	FM	CH _{M2}	3500	-6.12			PASS
TX-FRS	FM	CH _{M2}	4000	-16.86			PASS
TX-FRS	FM	CH _{M2}	4500	-16.75			PASS
TX-FRS	FM	CH _{M2}	5000	-17.22			PASS

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-FRS	FM	CH _{M1}	
TX-FRS	FM	CH _{M2}	

Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	Audio Frequency(Hz)	Audio Frequency Response(dB)	Limit	Result
TX-FRS	FM	CH _{M1}	1000	-16.48	0	PASS
TX-FRS	FM	CH _{M1}	3000	-22.53	0	PASS
TX-FRS	FM	CH _{M1}	4000	-41.67	-7.5	PASS
TX-FRS	FM	CH _{M1}	5000	-54.3	-13.3	PASS
TX-FRS	FM	CH _{M1}	6000	-54.56	-18.1	PASS
TX-FRS	FM	CH _{M1}	8000	-54.46	-25.6	PASS
TX-FRS	FM	CH _{M1}	10000	-54.71	-31.4	PASS
TX-FRS	FM	CH _{M1}	15000	-54.33	-41.9	PASS
TX-FRS	FM	CH _{M1}	20000	-54.15	-50	PASS
TX-FRS	FM	CH _{M1}	30000	-54.4	-50	PASS
TX-FRS	FM	CH _{M1}	40000	-54.81	-50	PASS
TX-FRS	FM	CH _{M1}	50000	-54.54	-50	PASS
TX-FRS	FM	CH _{M1}	60000	-54.74	-50	PASS
TX-FRS	FM	CH _{M1}	70000	-55.31	-50	PASS
TX-FRS	FM	CH _{M1}	80000	-55.33	-50	PASS
TX-FRS	FM	CH _{M1}	90000	-55.27	-50	PASS
TX-FRS	FM	CH _{M1}	100000	-55.35	-50	PASS
TX-FRS	FM	CH _{M2}	1000	-16.52	0	PASS
TX-FRS	FM	CH _{M2}	3000	-22.57	0	PASS
TX-FRS	FM	CH _{M2}	4000	-41.71	-7.5	PASS
TX-FRS	FM	CH _{M2}	5000	-54.34	-13.3	PASS
TX-FRS	FM	CH _{M2}	6000	-54.6	-18.1	PASS
TX-FRS	FM	CH _{M2}	8000	-54.5	-25.6	PASS
TX-FRS	FM	CH _{M2}	10000	-54.75	-31.4	PASS
TX-FRS	FM	CH _{M2}	15000	-54.37	-41.9	PASS
TX-FRS	FM	CH _{M2}	20000	-54.19	-50	PASS
TX-FRS	FM	CH _{M2}	30000	-54.46	-50	PASS
TX-FRS	FM	CH _{M2}	40000	-54.87	-50	PASS
TX-FRS	FM	CH _{M2}	50000	-54.60	-50	PASS
TX-FRS	FM	CH _{M2}	60000	-54.80	-50	PASS
TX-FRS	FM	CH _{M2}	70000	-55.37	-50	PASS
TX-FRS	FM	CH _{M2}	80000	-55.39	-50	PASS
TX-FRS	FM	CH _{M2}	90000	-55.33	-50	PASS
TX-FRS	FM	CH _{M2}	100000	-55.41	-50	PASS

Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-FRS	FM	CH _{M1}	Audio Frequency Response(dB) Limit Audio Frequency Response(dB)
TX-FRS	FM	CH _{M2}	Audio Frequency Response(dB) Limit Audio Frequency Response(dB)

Appendix G:Frequency Stability Test & Temperature

Test Mode	Modulation Type	Test Conditions		Frequency error (ppm)		Limit (ppm)	Result
		Voltage	Temperature	CH _{M1}	CH _{M2}		
TX-FRS	FM	V _N	-30	0.213	0.241	±2.5	PASS
TX-FRS	FM	V _N	-20	0.206	0.259	±2.5	PASS
TX-FRS	FM	V _N	-10	0.211	0.244	±2.5	PASS
TX-FRS	FM	V _N	0	0.213	0.256	±2.5	PASS
TX-FRS	FM	V _N	10	0.208	0.259	±2.5	PASS
TX-FRS	FM	V _N	20	0.206	0.238	±2.5	PASS
TX-FRS	FM	V _N	30	0.225	0.238	±2.5	PASS
TX-FRS	FM	V _N	40	0.220	0.249	±2.5	PASS
TX-FRS	FM	V _N	50	0.218	0.244	±2.5	PASS

Appendix H:Frequency Stability Test & Voltage

Test Mode	Modulation Type	Test Conditions		Frequency error (ppm)		Limit (ppm)	Result
		Voltage	Temperature	CH _{M1}	CH _{M2}		
TX-FRS	FM	V _N	T _N	0.206	0.238	±2.5	PASS
TX-FRS	FM	V _L	T _N	0.193	0.229	±2.5	PASS
TX-FRS	FM	V _H	T _N	0.211	0.242	±2.5	PASS

-----End of Report-----