

APPENDIX REPORT

Project No.	SHT2310045701EW	Radio Specification	5.8G SDR
Test sample No.	YPHT23040066001	Model No.	CVX-EC2-BU
Start test date	2023-08-02	Finish date	2024-05-28
Temperature	23.8℃	Humidity	48%
Test Engineer	Xiangyu Wei	Auditor	Xiaodong Zhao

Appendix clause	Test item	Result
A	Maximum Conducted Output Power	PASS
B	Maximum Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Frequency stability	PASS

Appendix A: Maximum Conducted Output Power

Antenna Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
LG	CH _L	8.06	90.74	0.42	8.48	≤ 30.00	Pass
	CH _M	8.19	90.74	0.42	8.61		
	CH _H	8.60	90.74	0.42	9.02		
HG	CH _L	2.89	90.79	0.42	3.31	≤ 27.50	Pass
	CH _M	3.63	90.79	0.42	4.05		
	CH _H	3.72	90.74	0.42	3.14		

NOTE: duty cycle factor =10LOG(1/ duty cycle)

Appendix B: Maximum Power Spectral Density

Antenna Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/500KHz)	Limit (dBm/500KHz)	Result
LG	CH _L	3.29	90.74	0.42	3.71	≤ 30.00	Pass
	CH _M	3.67	90.74	0.42	4.09		
	CH _H	3.96	90.74	0.42	4.38		
HG	CH _L	-1.96	90.79	0.42	-1.54	≤ 27.50	Pass
	CH _M	-1.54	90.79	0.42	-1.12		
	CH _H	-1.46	90.74	0.42	-1.04		

NOTE: duty cycle factor =10LOG(1/ duty cycle)

Antenna Type:		LG
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep 1Rm AvgPwr M1 M1[1] 3.29 dBm 5.73702890 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.737 GHz 691 pts Span 5.0 MHz Date: 28 MAY 2024 11:52:17	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep 1Rm AvgPwr M1 M1[1] 3.67 dBm 5.79976120 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.8 GHz 691 pts Span 5.0 MHz Date: 28 MAY 2024 13:35:47	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep 1Rm AvgPwr M1 M1[1] 3.96 dBm 5.84466710 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.845 GHz 691 pts Span 5.0 MHz Date: 28 MAY 2024 13:36:52	

Appendix report page: 5 of 12

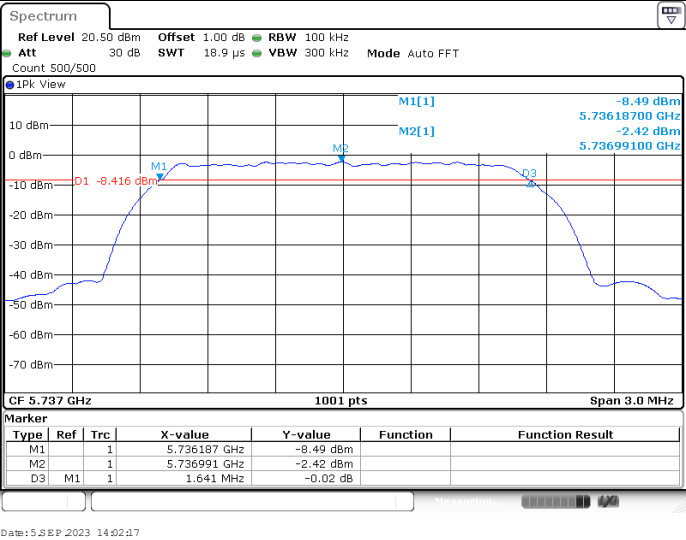
Appendix C: 6dB bandwidth

Antenna Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
LG	CH _L	1.64	≥0.5	Pass
	CH _M	1.64		
	CH _H	1.66		
HG	CH _L	1.67	≥0.5	Pass
	CH _M	1.69		
	CH _H	1.64		

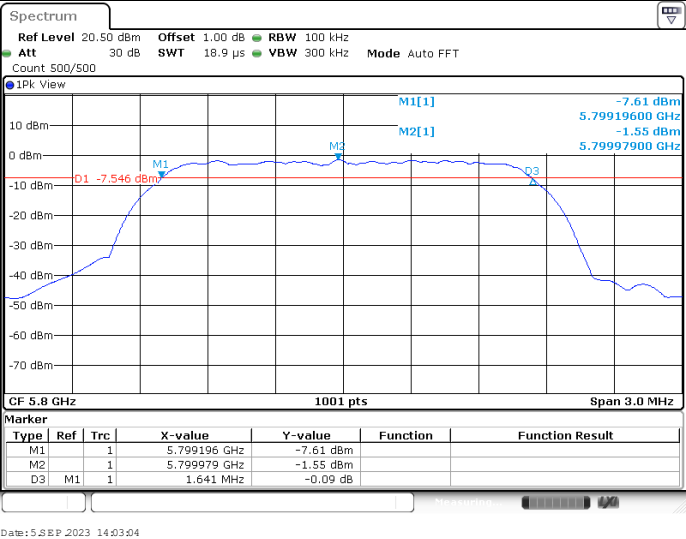
Antenna Type:

LG

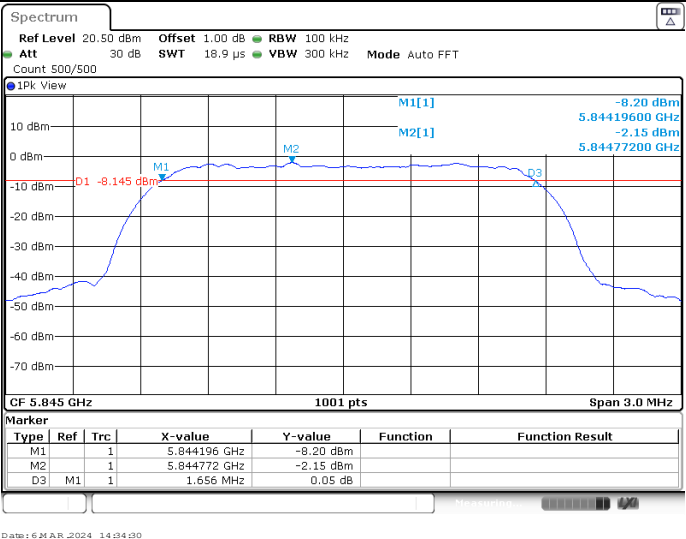
CH_L



CH_M



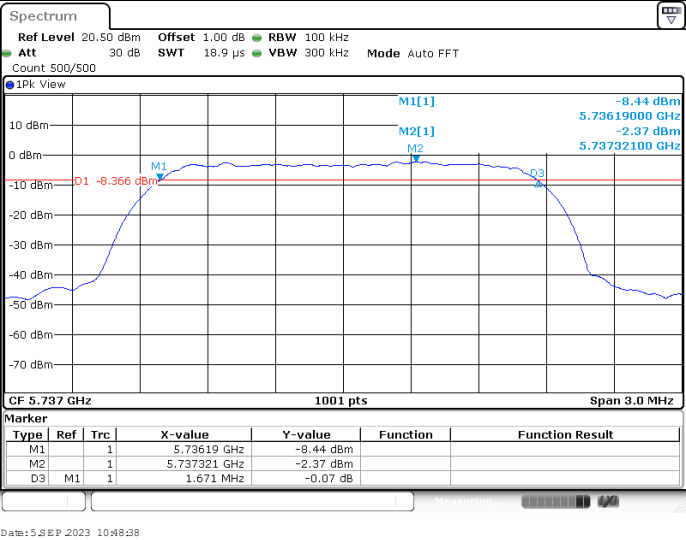
CH_H



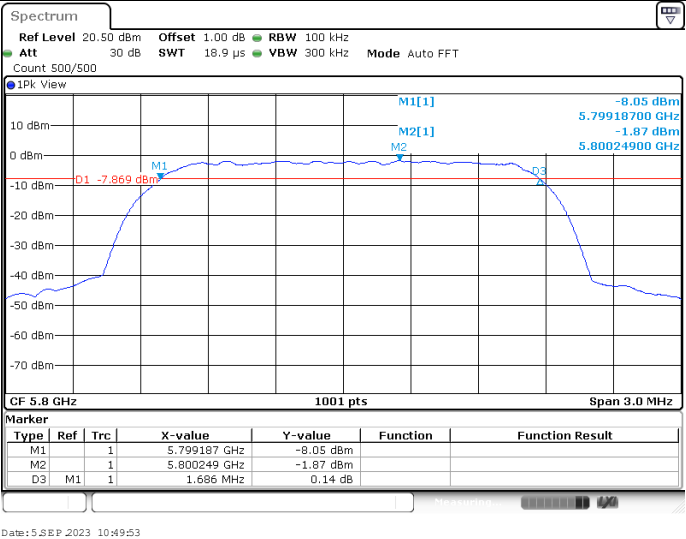
Antenna Type:

HG

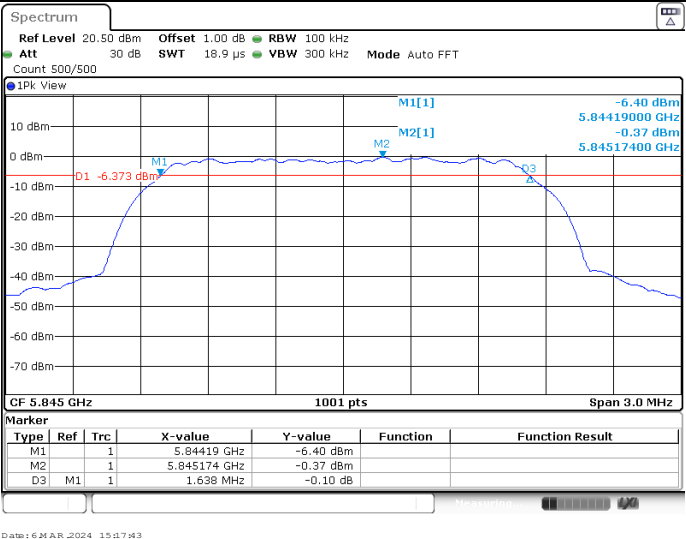
CH_L



CH_M



CH_H



Appendix D: 99% Occupied Bandwidth

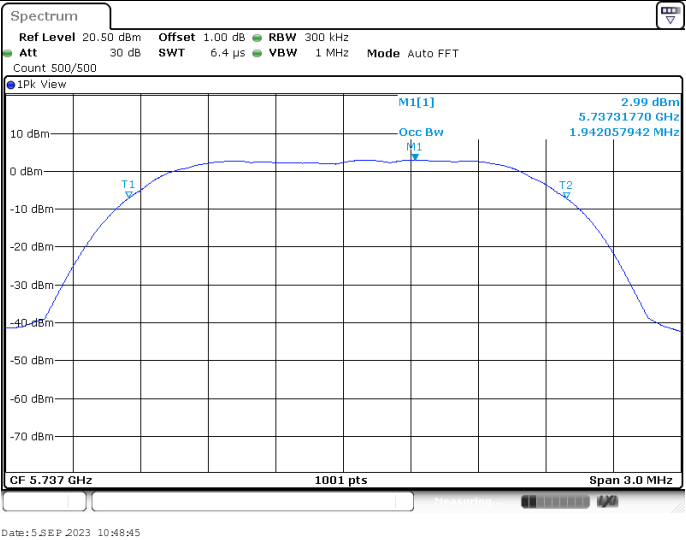
Antenna Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
LG	CH _L	1.93	-	Pass
	CH _M	1.94		
	CH _H	1.95		
HG	CH _L	1.94	-	Pass
	CH _M	1.93		
	CH _H	1.92		

Antenna Type:	LG
CH _L	Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 6.4 μs VBW 1 MHz Mode Auto FFT Count 500/500 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] Occ Bw T1 T2 3.11 dBm 5.73716480 GHz 1.930069930 MHz CF 5.737 GHz 1001 pts Span 3.0 MHz Date: 5 SEP 2023 14:02:25
CH _M	Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 6.4 μs VBW 1 MHz Mode Auto FFT Count 500/500 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] Occ Bw T1 T2 3.72 dBm 5.79960440 GHz 1.939060939 MHz CF 5.8 GHz 1001 pts Span 3.0 MHz Date: 5 SEP 2023 14:03:11
CH _H	Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 6.4 μs VBW 1 MHz Mode Auto FFT Count 500/500 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] Occ Bw T1 T2 3.49 dBm 5.84485610 GHz 1.951048951 MHz CF 5.845 GHz 1001 pts Span 3.0 MHz Date: 6 SEP 2024 14:34:38

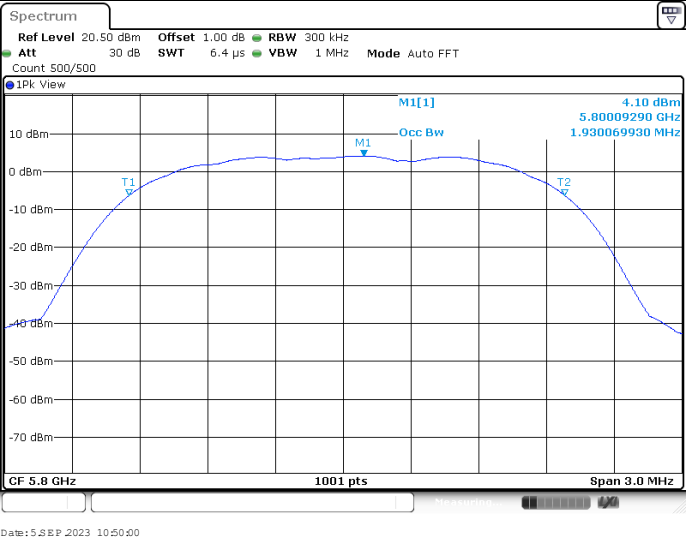
Antenna Type:

HG

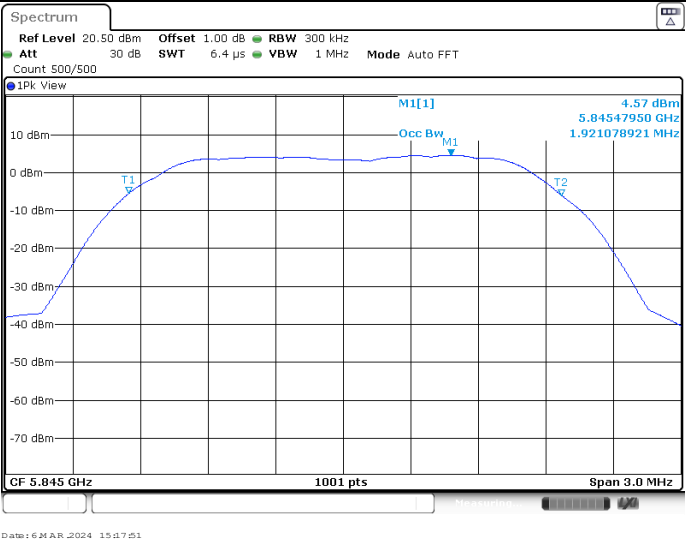
CH_L



CH_M



CH_H



Appendix E: Frequency stability**Voltage VS Frequency stability**

LG			Test Frequency: 5800.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
		Antenna 0	Antenna 0	
T _N	V _L	14000	2.4138	PASS
T _N	V _N	15000	2.5862	PASS
T _N	V _H	14000	2.4138	PASS

HG			Test Frequency: 5800.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
		Antenna 0	Antenna 0	
T _N	V _L	14000	2.4138	PASS
T _N	V _N	15000	2.5862	PASS
T _N	V _H	15000	2.5862	PASS

Temperature VS Frequency stability

LG			Test Frequency: 5800.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
		Antenna 0	Antenna 0	
V _N	-20	14000	2.4138	PASS
V _N	-10	15000	2.5862	PASS
V _N	0	14000	2.4138	PASS
V _N	10	14000	2.4138	PASS
V _N	20	14000	2.4138	PASS
V _N	30	15000	2.5862	PASS
V _N	40	14000	2.4138	PASS
V _N	50	15000	2.5862	PASS

HG			Test Frequency: 5800.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
		Antenna 0	Antenna 0	
V _N	-20	15000	2.5862	PASS
V _N	-10	14000	2.4138	PASS
V _N	0	14000	2.4138	PASS
V _N	10	14000	2.4138	PASS
V _N	20	14000	2.4138	PASS
V _N	30	14000	2.4138	PASS
V _N	40	14000	2.4138	PASS
V _N	50	14000	2.4138	PASS

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