CTC Laboratories, Inc.
1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China
Tel: +86-755- 27521059 Fax: +86-755- 27521011 Http://www.sz-ctc.org.cn

Appendix for 5GHz WIFI

Applicant: Launch Tech Co., Ltd.

Address: Launch Industrial Park, North of Wuhe Rd, Banxuegang, Longgang, Shenzhen, Guangdong, P.R. China

Product Name: Remote Diagnosis Interface

Model: S4001A

FCC ID: XUJS4001A

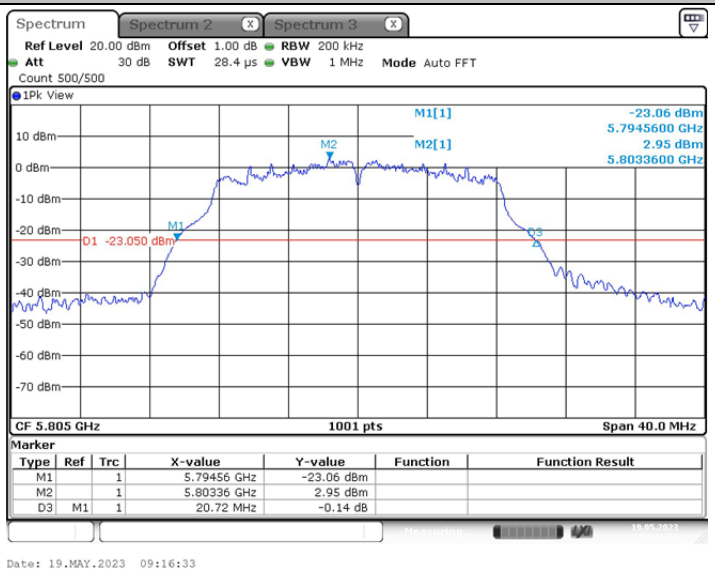
TABLE OF CONTENTS

Appendix A1: Emission Bandwidth

Test Result

Test Mode	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
802.11a	5805	20.72	5794.56	5815.28	PASS

Test Graphs

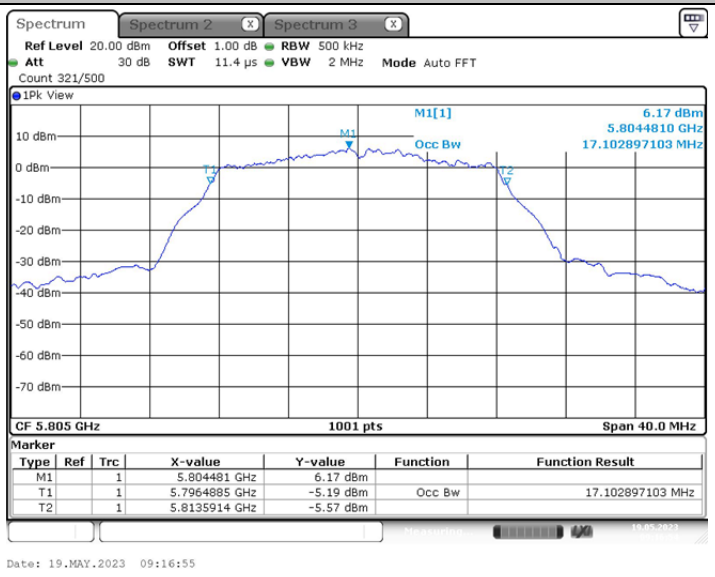
802.11a_5805


Appendix A2: Occupied channel bandwidth

Test Result

Test Mode	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
802.11a	5805	17.103	5796.489	5813.591	PASS

Test Graphs

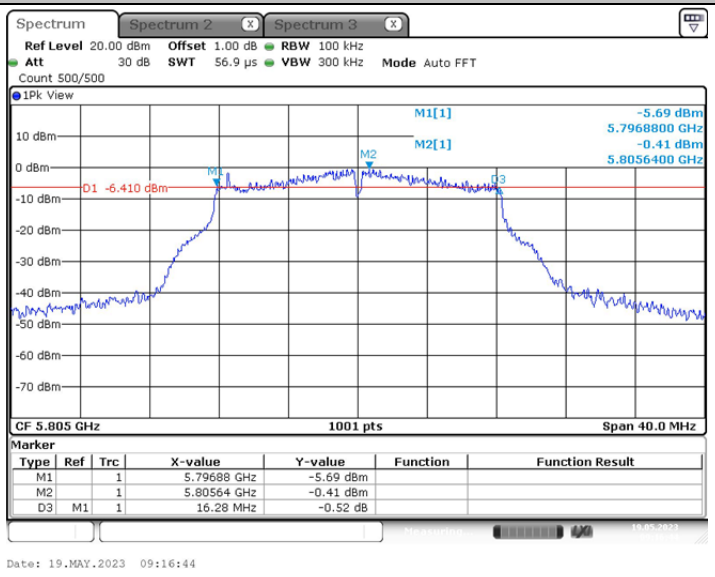
802.11a_5805


Appendix A3: Min emission bandwidth

Test Result

Test Mode	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
802.11a	5805	16.28	5796.88	5813.16	>0.5	PASS

Test Graphs

802.11a_5805


Appendix B: Maximum conducted output power

Test Result

Test Mode	Channel	Result Avg[dBm]	Limit[dBm]	Verdict
802.11a	5805	11.46	<=24	PASS

Note：1. Test results increased RF cable loss by 1dB.

2. Test results increased Duty Cycle Factor.

Appendix C: Maximum power spectral density

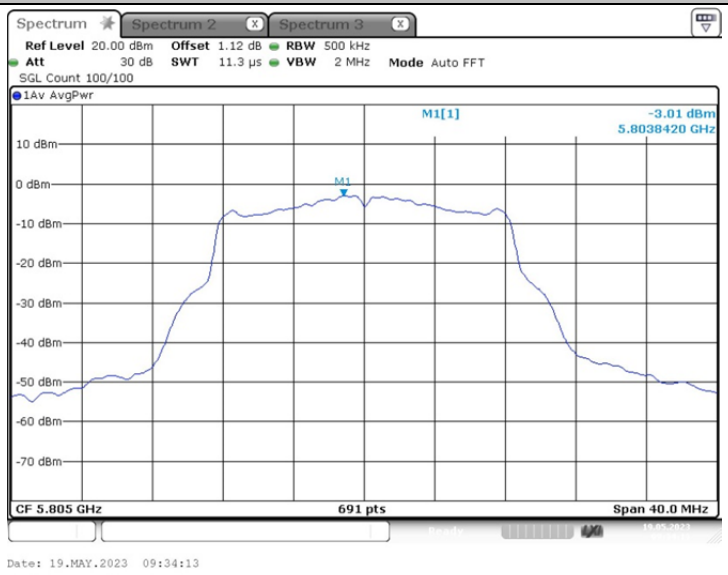
Test Result

Test Mode	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
802.11a	5805	-3.01	<=11	PASS

Note：1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

802.11a_5805


Appendix D: Frequency Stability

Test Result

Voltage							
Test Mode	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20MHz	5805	NV	NT	24000	4.134367	±20	PASS
		LV	NT	24000	4.134367	±20	PASS
		HV	NT	24000	4.134367	±20	PASS

Temperature							
TestMode	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20MHz	5805	NV	0	23000	3.962102	±20	PASS
		NV	10	23000	3.962102	±20	PASS
		NV	20	24000	4.134367	±20	PASS
		NV	30	23000	3.962102	±20	PASS
		NV	40	24000	4.134367	±20	PASS
		NV	50	23000	3.962102	±20	PASS

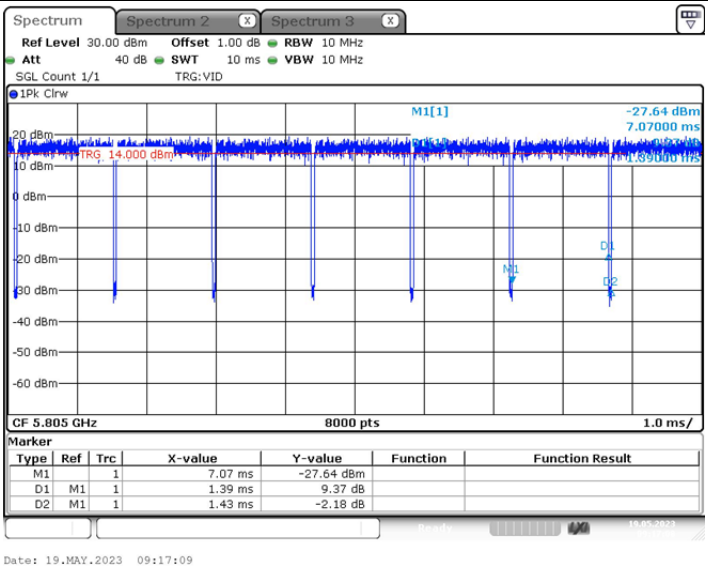
Appendix E: Duty Cycle

Test Result

Test Mode	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
802.11a	5805	1.39	1.43	97.20	0.12	0.719	1

Note: Duty Cycle Factor = 10*Log10(1/ Duty Cycle)

Test Graphs

802.11a_5805


----------End----------