

FCC Part 15.247

Test Information:

Serial No.:	2GUJ-1	Test Date:	2024/02/02
Test Site:	RF	Test Mode:	Transmitting
Tester:	Chin	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.1
----------------------	----	---------------------------	----	------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/03/31	2024/03/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Tester: Chin Qin

Reviewer: Gary Ling

6dB Emission Bandwidth

BLE 1M

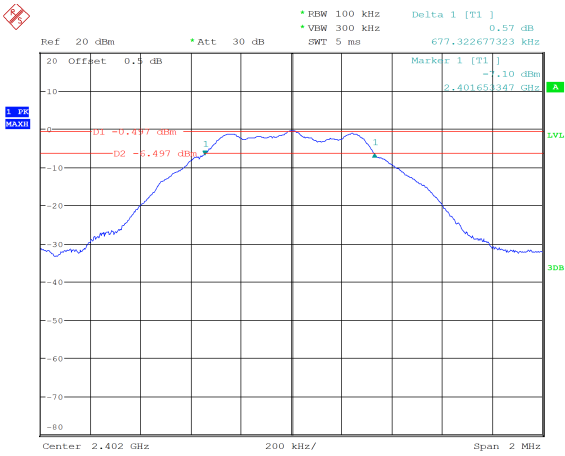
Mode	Value (MHz)	Limit (MHz)	Result
Low	0.677	0.5	Pass
Middle	0.669	0.5	Pass
High	0.673	0.5	Pass

BLE 2M

Mode	Value (MHz)	Limit (MHz)	Result
Low	1.159	0.5	Pass
Middle	1.163	0.5	Pass
High	1.155	0.5	Pass

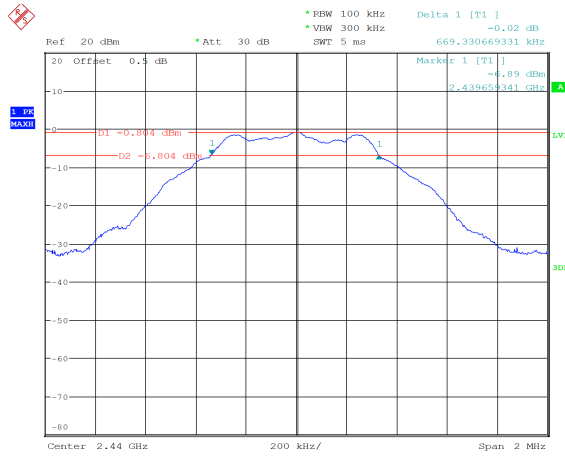
BLE 1M

Low 0.677 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:36:50

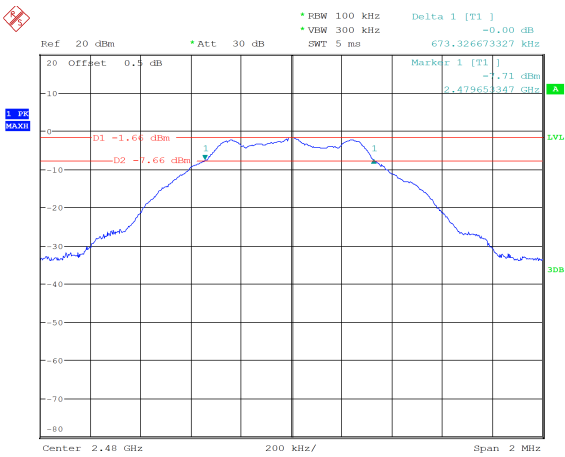
Middle 0.669 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:38:20

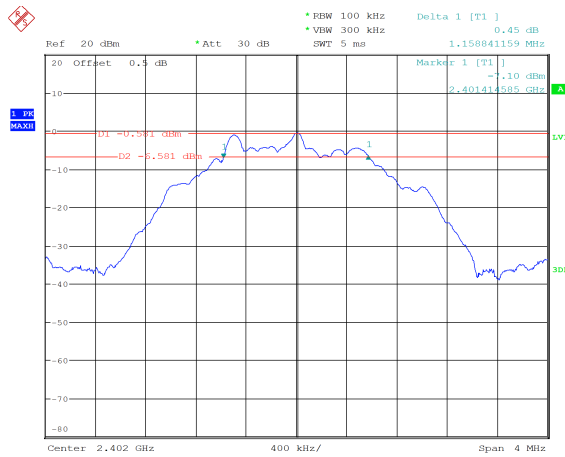
BLE 2M

High 0.673 MHz



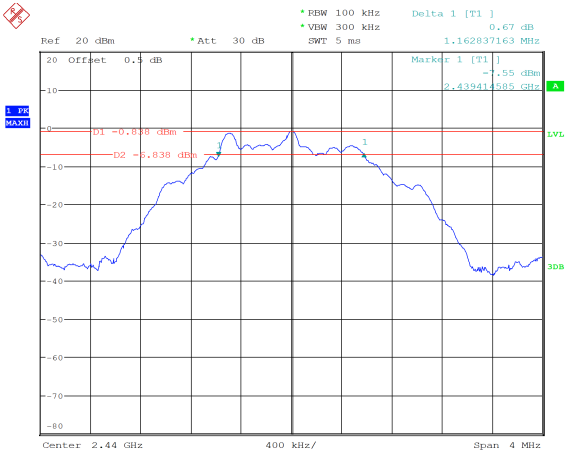
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:39:24

Low 1.159 MHz



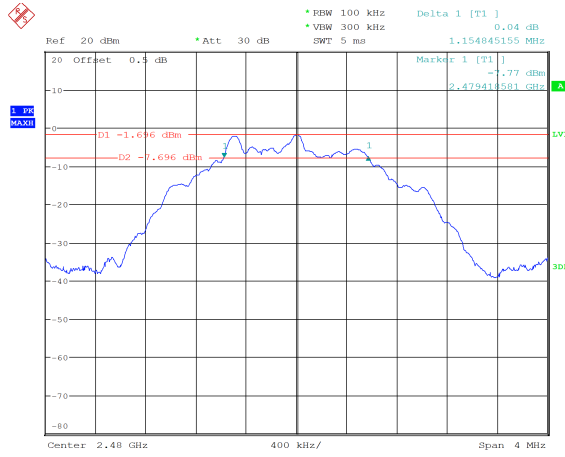
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:40:33

Middle 1.163 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:41:59

High 1.155 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:43:13

99% Occupied Bandwidth

BLE 1M

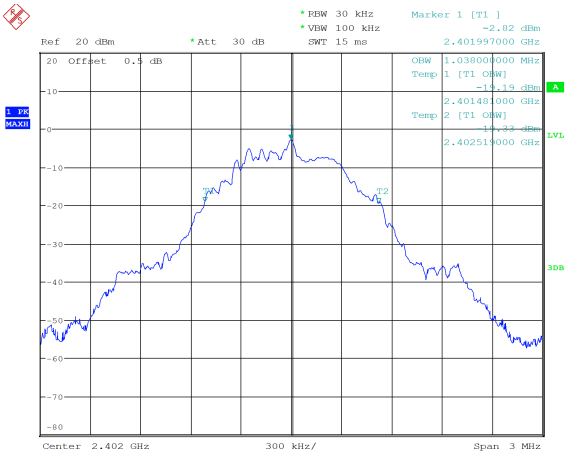
Mode	99% OBW (MHz)
Low	1.038
Middle	1.044
High	1.047

BLE 2M

Mode	99% OBW (MHz)
Low	2.028
Middle	2.034
High	2.034

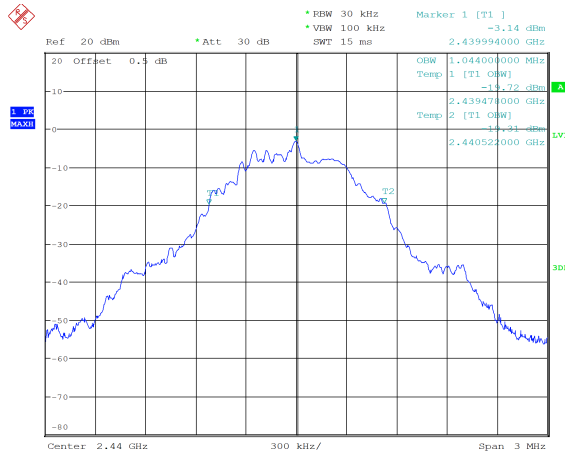
BLE 1M

Low 1.038 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:24:17

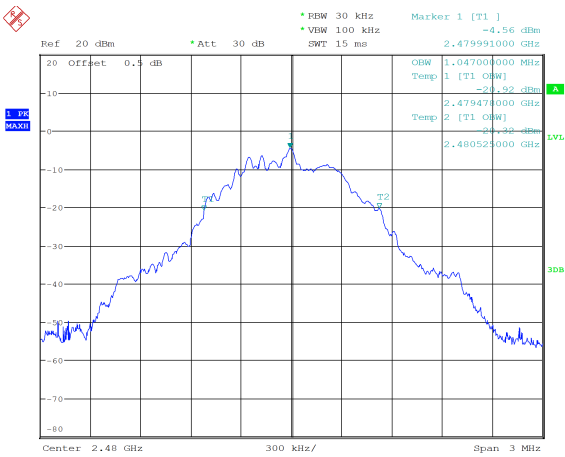
Middle 1.044 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:27:41

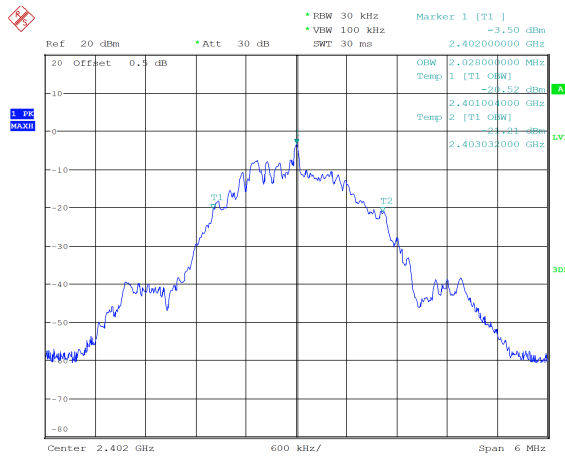
BLE 2M

High 1.047 MHz



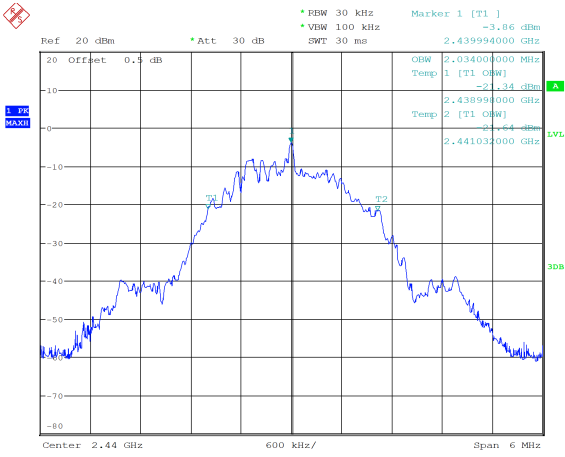
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:31:01

Low 2.028 MHz



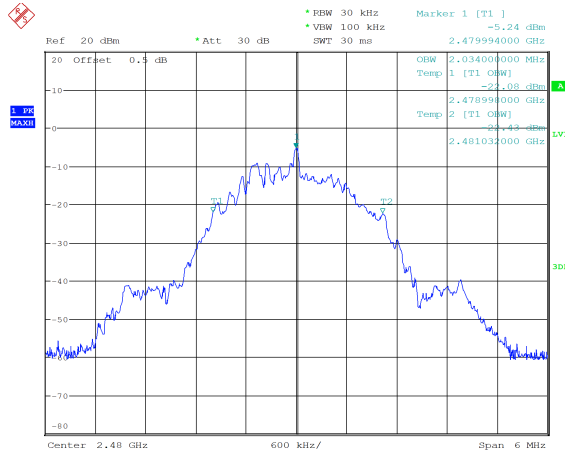
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:33:59

Middle 2.034 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:35:44

High 2.034 MHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:38:30

Maximum Conducted Output Power

BLE 1M

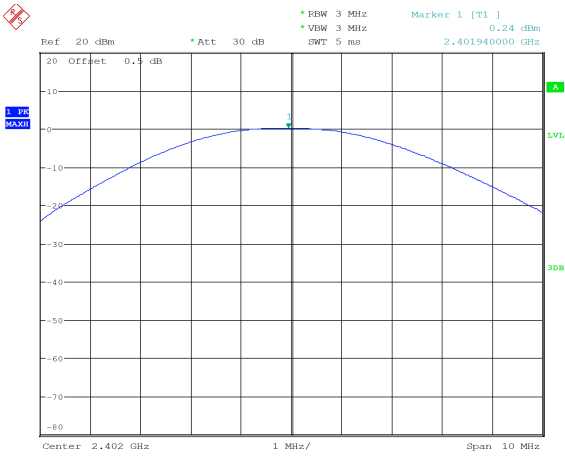
Mode	Value (dBm)	Limit (dBm)	Result
Low	0.24	30.00	Pass
Middle	-0.14	30.00	Pass
High	-1.37	30.00	Pass

BLE 2M

Mode	Value (dBm)	Limit (dBm)	Result
Low	0.25	30.00	Pass
Middle	-0.10	30.00	Pass
High	-1.24	30.00	Pass

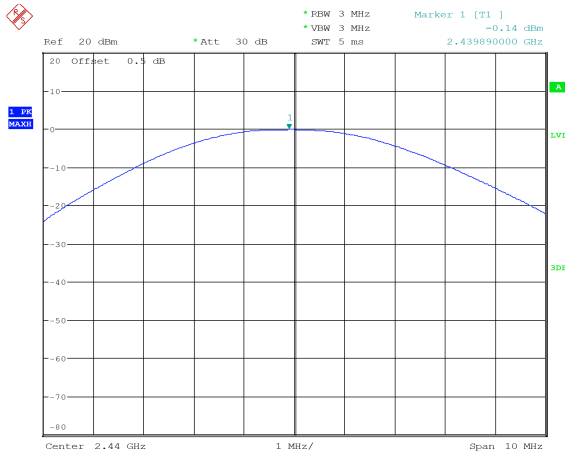
BLE 1M

Low 0.24 dBm



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:22:39

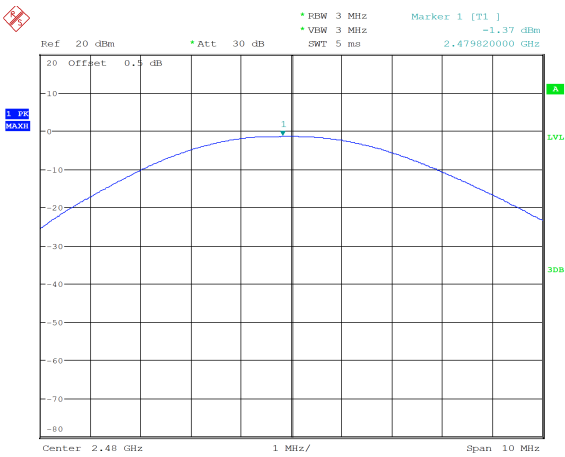
Middle -0.14 dBm



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:27:12

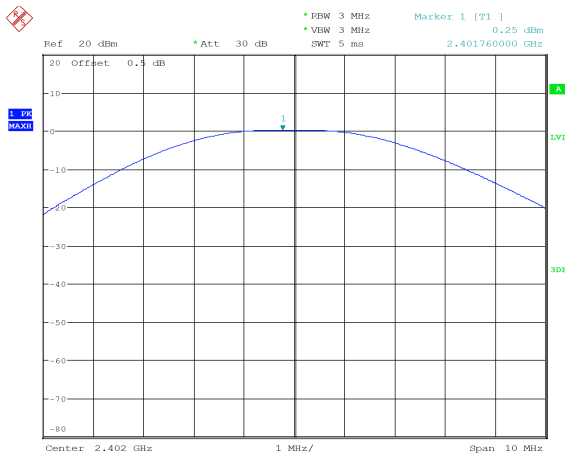
BLE 2M

High -1.37 dBm



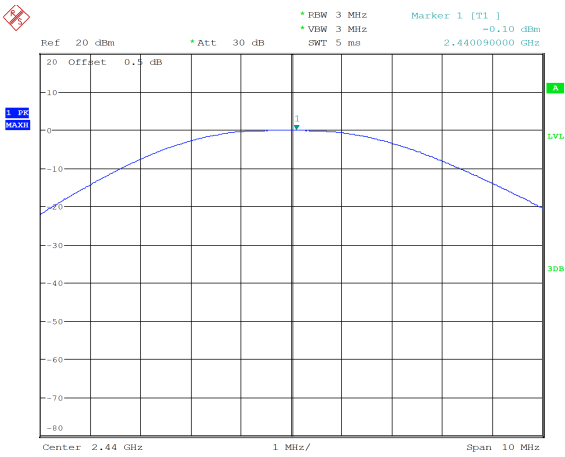
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:29:18

Low 0.25 dBm



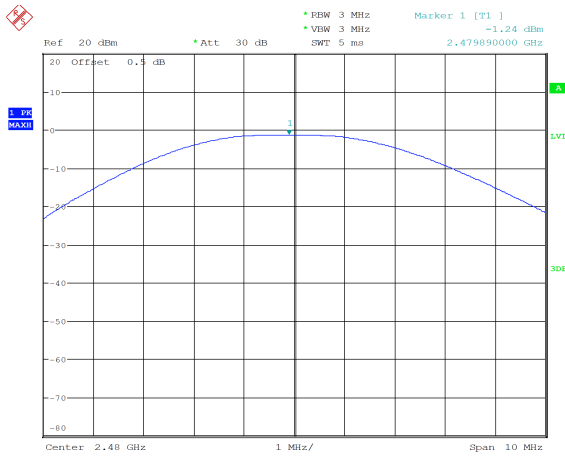
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:32:30

Middle -0.10 dBm



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:35:21

High -1.24 dBm



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:37:04

100 kHz Bandwidth of Frequency Band Edge

BLE 1M

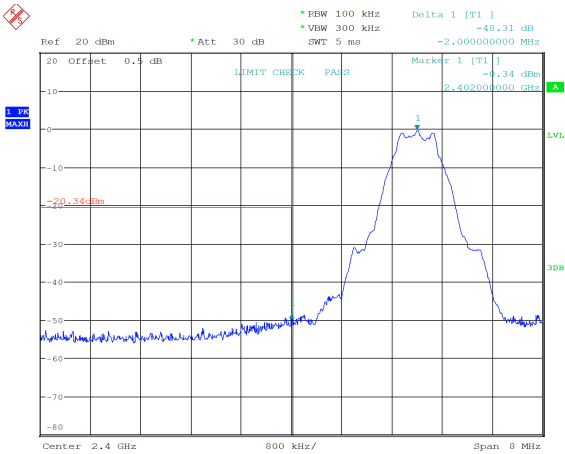
Mode	Value (dB)	Limit (dB)	Result
Low	48.31	20.00	Pass
High	50.09	20.00	Pass

BLE 2M

Mode	Value (dB)	Limit (dB)	Result
Low	32.17	20.00	Pass
High	47.43	20.00	Pass

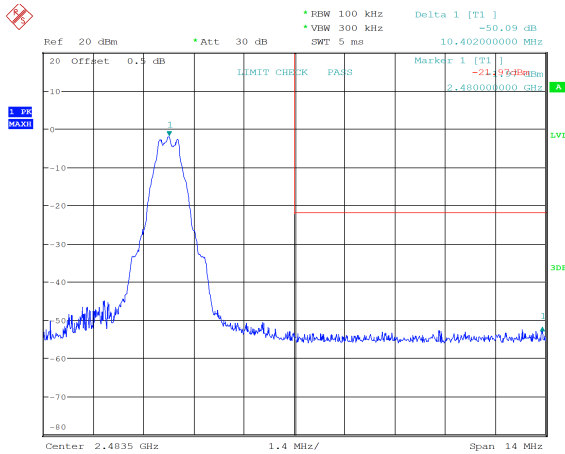
BLE 1M

Low 48.31 dB



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:23:52

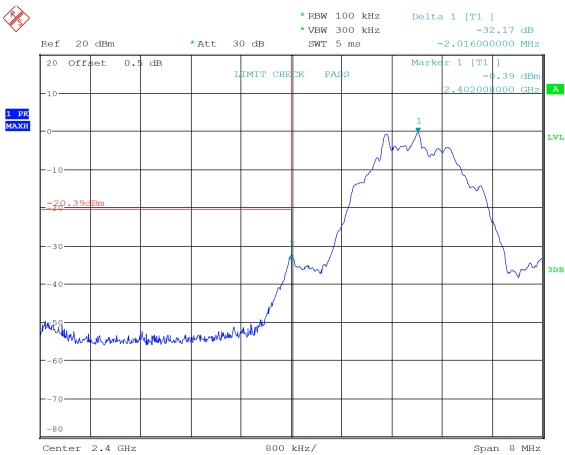
High 50.09 dB



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:30:30

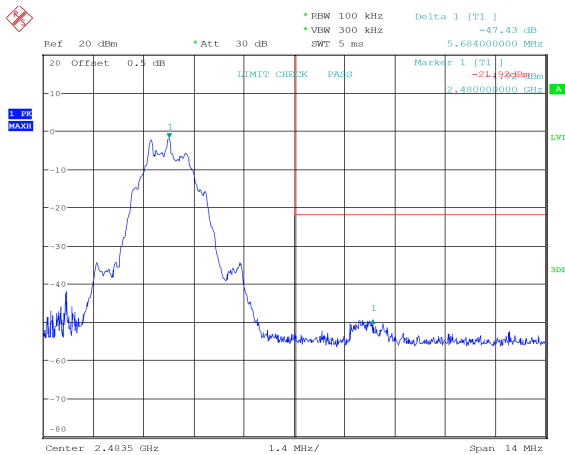
BLE 2M

Low 32.17 dB



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:33:30

High 47.43 dB



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:38:01

Power Spectral Density

BLE 1M

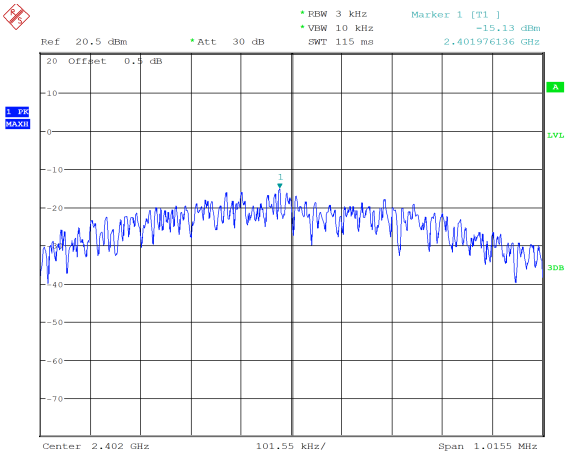
Mode	Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-15.13	8.00	Pass
Middle	-15.10	8.00	Pass
High	-16.14	8.00	Pass

BLE 2M

Mode	Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-18.12	8.00	Pass
Middle	-18.23	8.00	Pass
High	-19.48	8.00	Pass

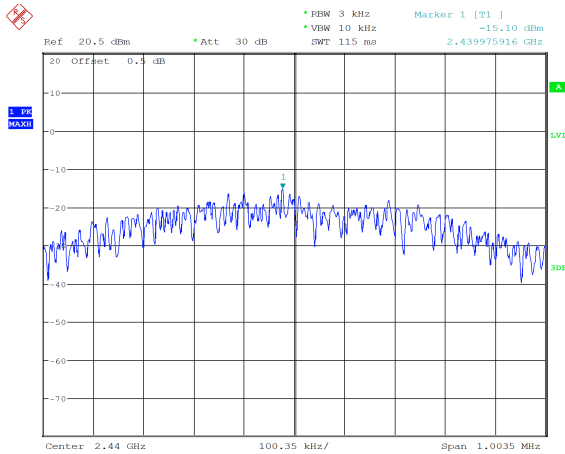
BLE 1M

Low -15.13 dBm/3kHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:37:11

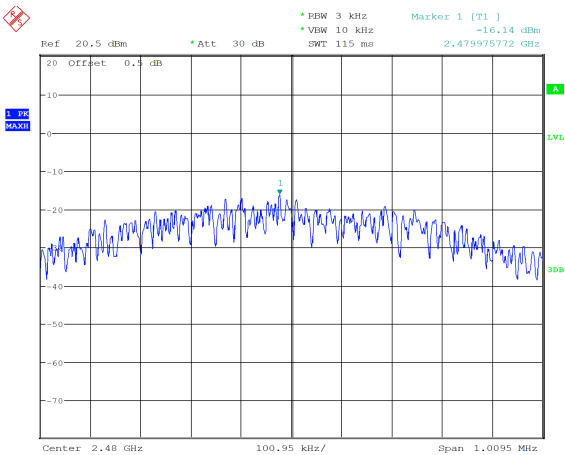
Middle -15.10 dBm/3kHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:38:48

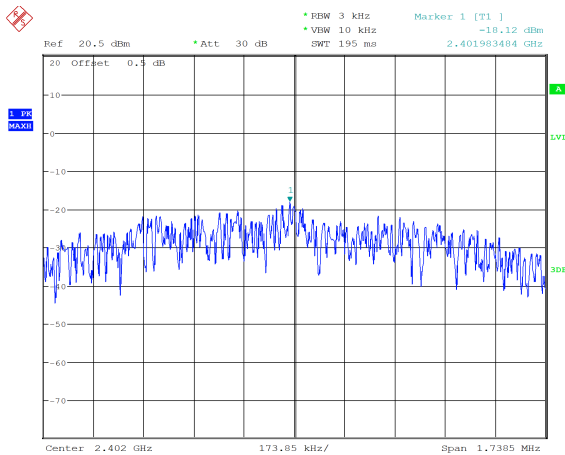
BLE 2M

High -16.14 dBm/3kHz



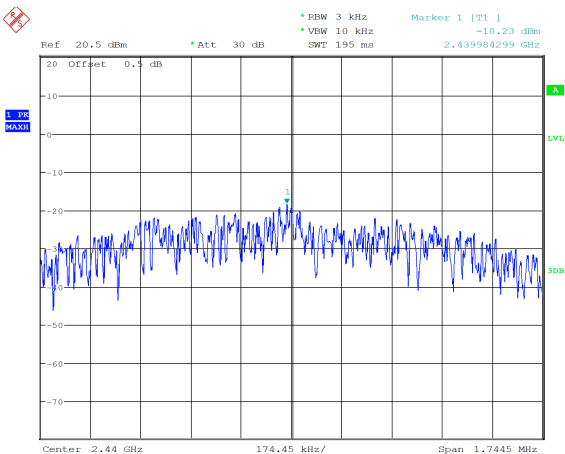
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:39:50

Low -18.12 dBm/3kHz



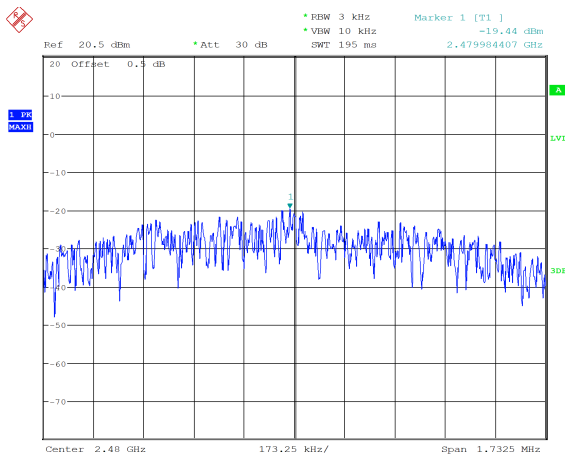
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:41:11

Middle -18.23 dBm/3kHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:42:27

High -19.48 dBm/3kHz



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 13:43:43

Duty Cycle

BLE 1M

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	1/Ton (Hz)	VBW Setting (kHz)
Low	0.406	0.624	65.06	2463	3
Middle	0.406	0.622	65.27	2463	3
High	0.405	0.624	64.90	2469	3

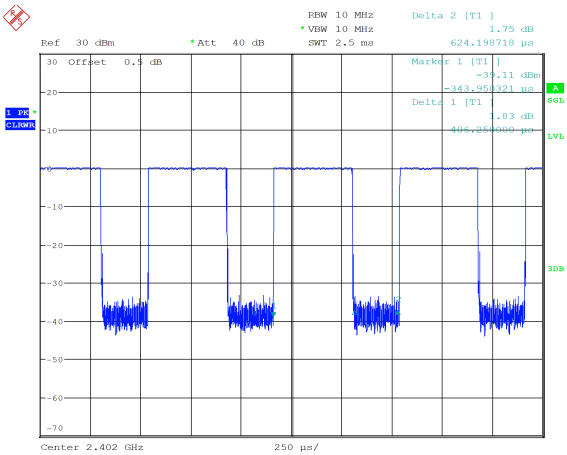
BLE 2M

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	1/Ton (Hz)	VBW Setting (kHz)
Low	0.240	0.630	38.10	4167	5
Middle	0.228	0.630	36.19	4386	5
High	0.220	0.626	35.14	4545	5

Duty Cycle = Ton/(Ton+Toff)*100%

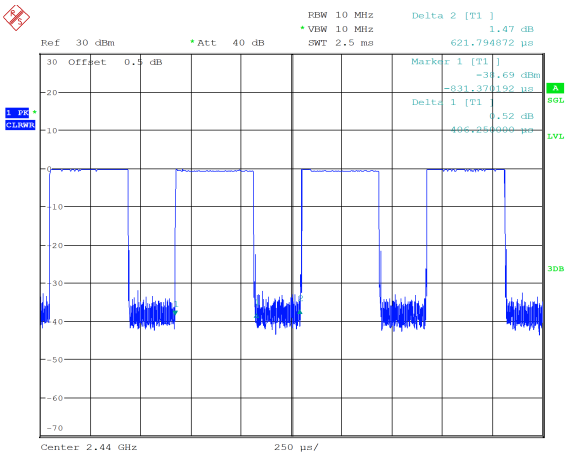
BLE 1M

Low
0.406 ms,0.624ms



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:25:19

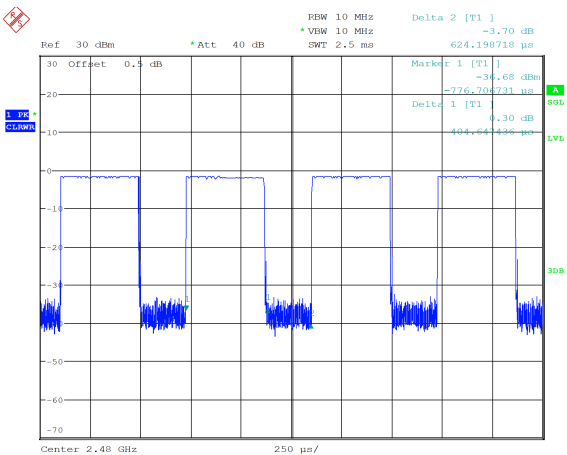
Middle
0.406 ms,0.622ms



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:28:29

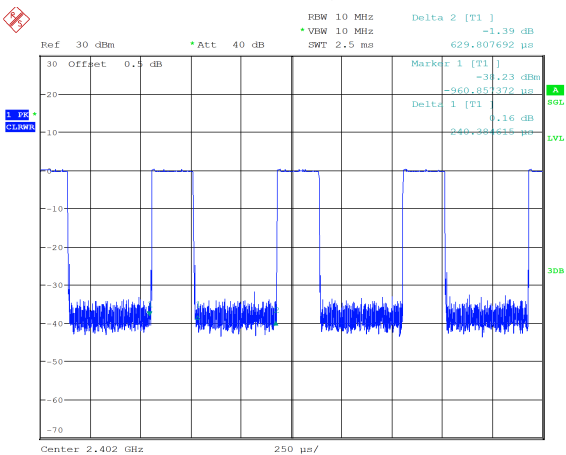
BLE 2M

High
0.405 ms,0.624ms



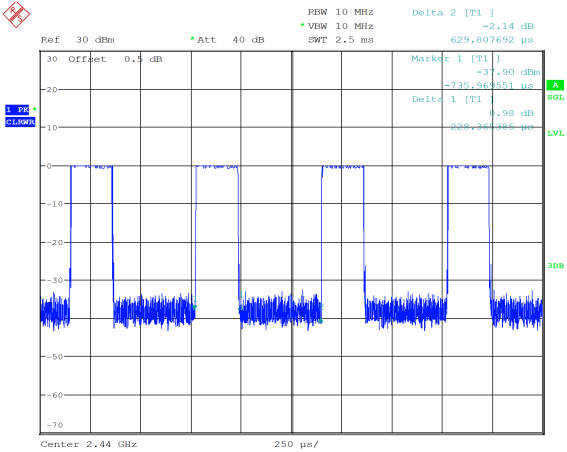
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:31:55

Low
0.240 ms,0.63ms



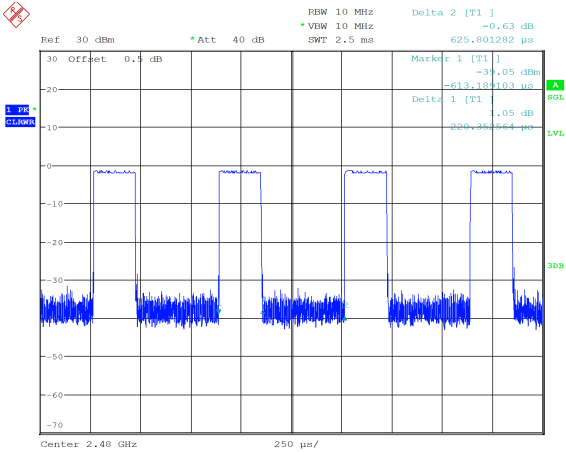
ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:34:51

Middle
0.228 ms,0.63ms



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:36:36

High
0.220 ms,0.626ms



ProjectNo.:CR240104514-RF Tester:Chin
Date: 2.FEB.2024 10:40:05