

Test Information:

Serial No.:	20XN-2	Test Date:	2024/08/13
Test Site:	RF	Test Mode:	Transmitting
Tester:	Chin Qin	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	25.8	Relative Humidity: (%)	54	ATM Pressure: (kPa)	100.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	N/A	N/A
R&S	Spectrum Analyzer	FSU26	200256	2024/04/01	2025/03/31

** 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).*

6dB Emission Bandwidth**BLE 1M**

Mode	Value (MHz)	Limit (MHz)	Result
Low	0.670	≥ 0.5	Pass
Middle	0.668	≥ 0.5	Pass
High	0.668	≥ 0.5	Pass

BLE 2M

Mode	Value (MHz)	Limit (MHz)	Result
Low	1.184	≥ 0.5	Pass
Middle	1.184	≥ 0.5	Pass
High	1.188	≥ 0.5	Pass

99% Occupied Bandwidth**BLE 1M**

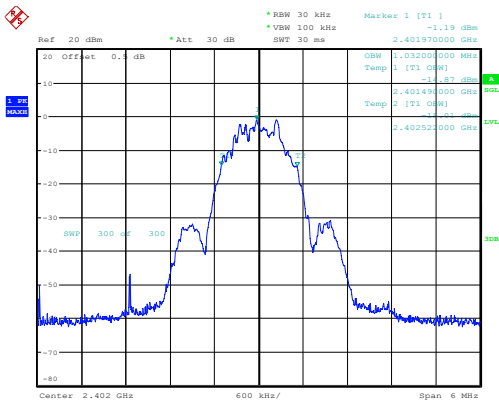
Mode	99% OBW (MHz)
Low	1.032
Middle	1.074
High	1.032

BLE 2M

Mode	99% OBW (MHz)
Low	2.058
Middle	2.070
High	2.064

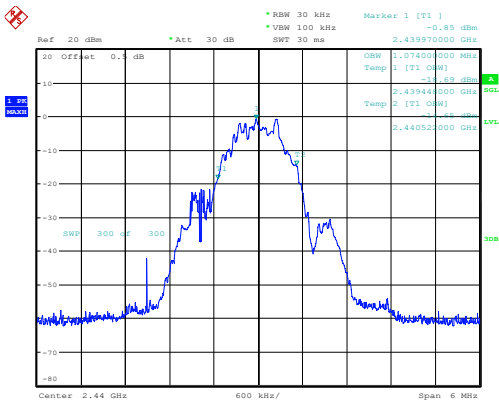
BLE 1M

Low 1.032MHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:07:00

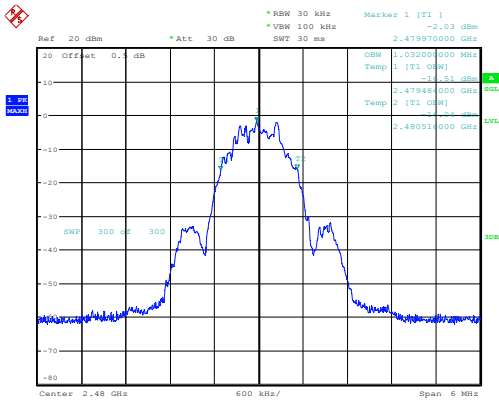
Middle 1.074MHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:12:24

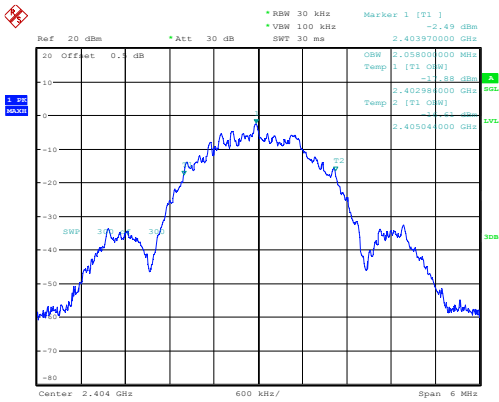
BLE 2M

High 1.032MHz



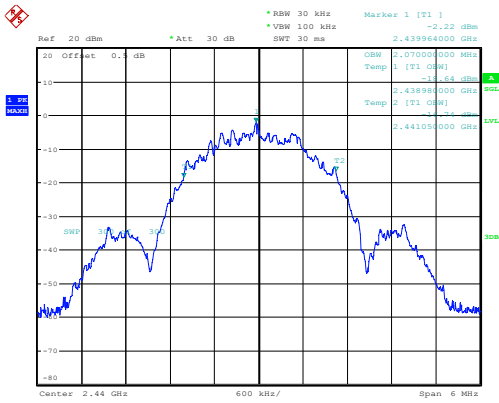
ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:16:11

Low 2.058MHz



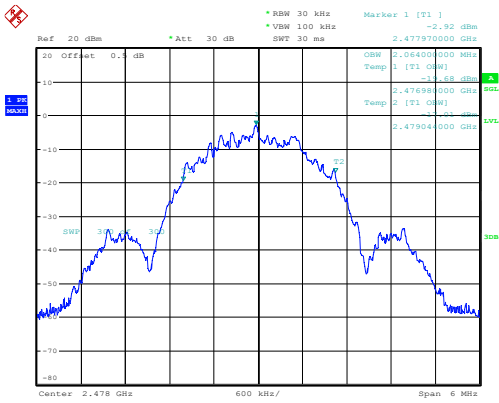
ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:33:27

Middle 2.070MHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:47:41

High 2.064MHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:34:25

Maximum Conducted Output Power**BLE 1M**

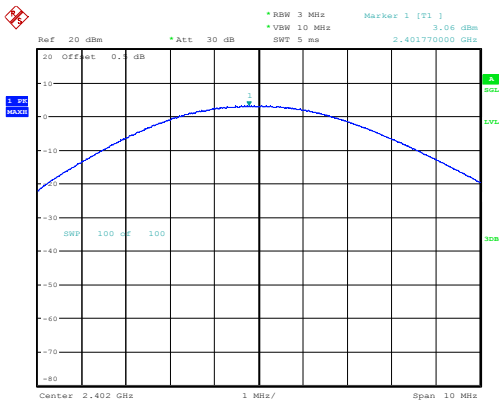
Mode	Value (dBm)	Limit (dBm)	Result
Low	3.06	30.00	Pass
Middle	3.34	30.00	Pass
High	2.21	30.00	Pass

BLE 2M

Mode	Value (dBm)	Limit (dBm)	Result
Low	3.47	30.00	Pass
Middle	3.77	30.00	Pass
High	3.12	30.00	Pass

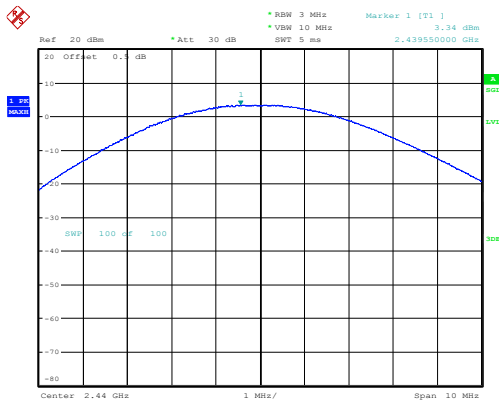
BLE 1M

Low 3.06dBm



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:07:22

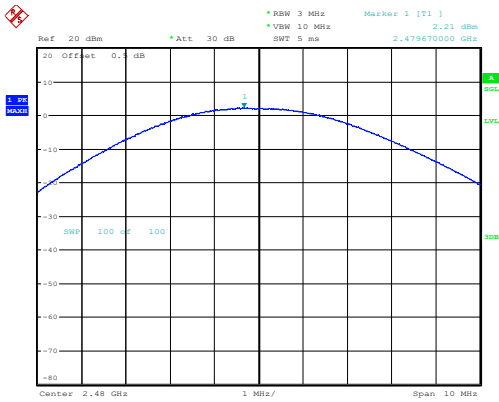
Middle 3.34dBm



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:12:38

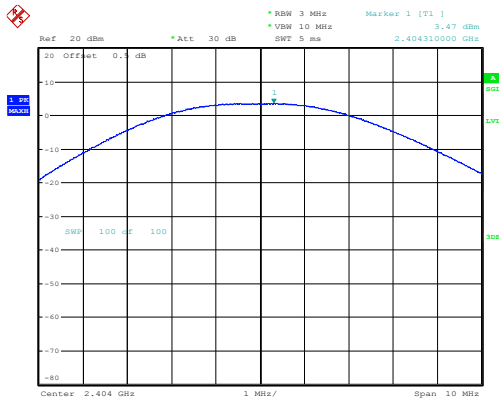
BLE 2M

High 2.21dBm



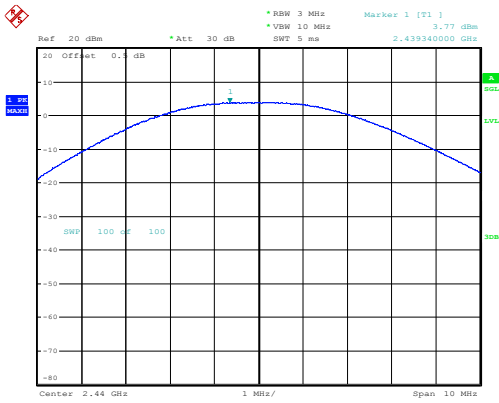
ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:16:31

Low 3.47dBm



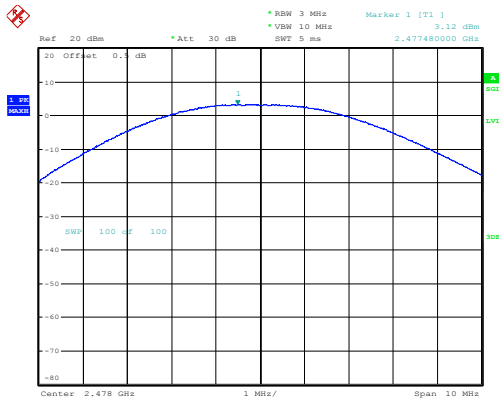
ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:35:11

Middle 3.77dBm



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:23:12

High 3.12dBm



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:35:50

Power Spectral Density**BLE 1M**

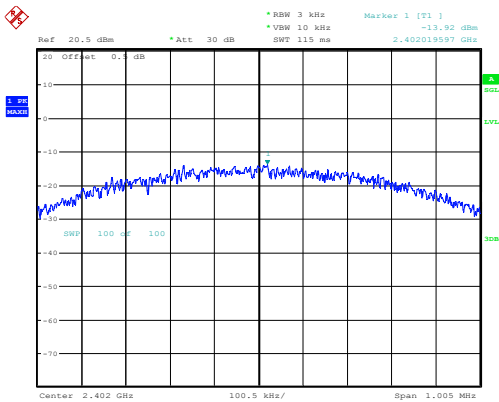
Mode	Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-13.92	8	Pass
Middle	-13.59	8	Pass
High	-14.78	8	Pass

BLE 2M

Mode	Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-15.76	8	Pass
Middle	-15.41	8	Pass
High	-16.06	8	Pass

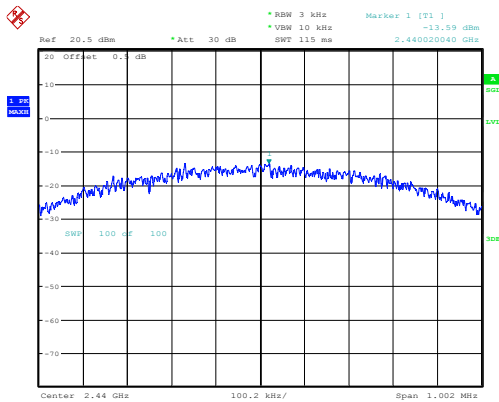
BLE 1M

Low -13.92dBm/3kHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:07:45

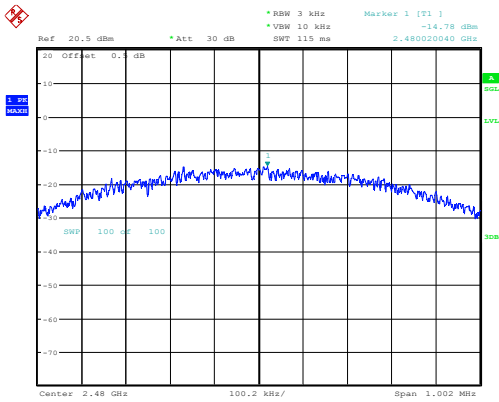
Middle -13.59dBm/3kHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:13:01

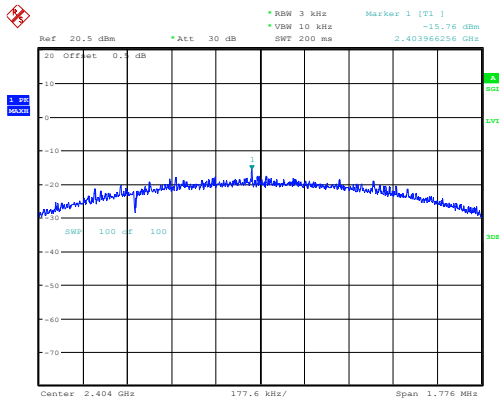
BLE 2M

High -14.78dBm/3kHz



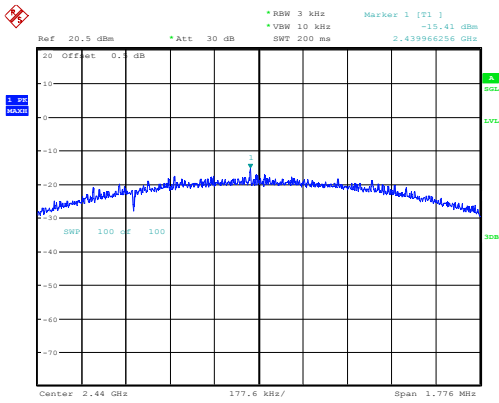
ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:16:54

Low -15.76dBm/3kHz



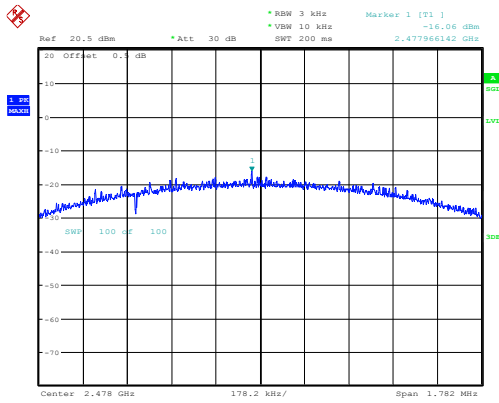
ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:41:49

Middle -15.41dBm/3kHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:23:44

High -16.06dBm/3kHz



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:42:47

100 kHz Bandwidth of Frequency Band Edge**BLE 1M**

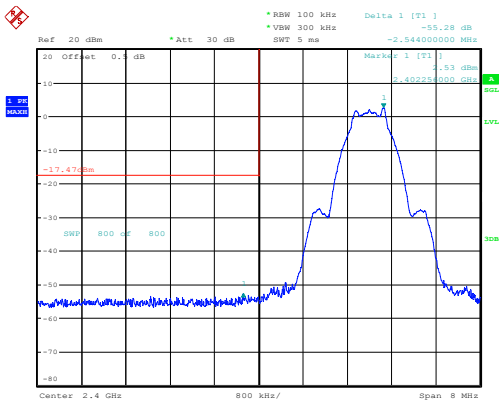
Mode	Value (dB)	Limit (dB)	Result
Low	55.28	20	Pass
High	54.11	20	Pass

BLE 2M

Mode	Value (dB)	Limit (dB)	Result
Low	53.06	20	Pass
High	54.26	20	Pass

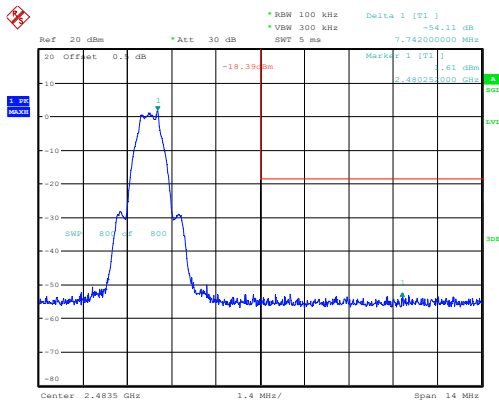
BLE 1M

Low 55.28dB



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:05:15

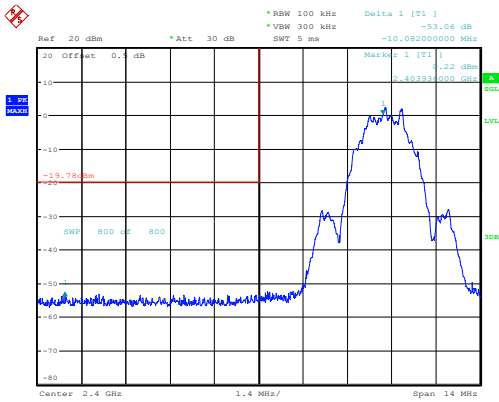
High 54.11dB



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:14:28

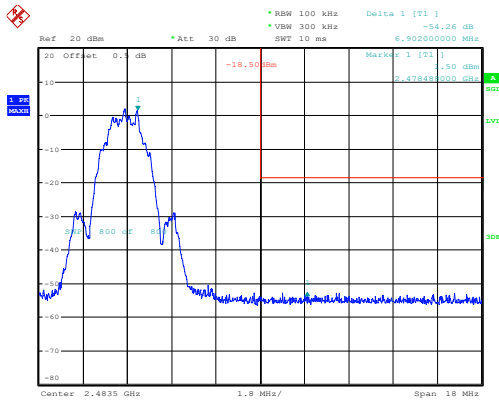
BLE 2M

Low 53.06dB



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:37:47

High 54.26dB



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:40:15

Duty Cycle**BLE 1M**

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)	VBW Setting (kHz)
Middle	2.132	2.510	84.94	0.71	469	0.500

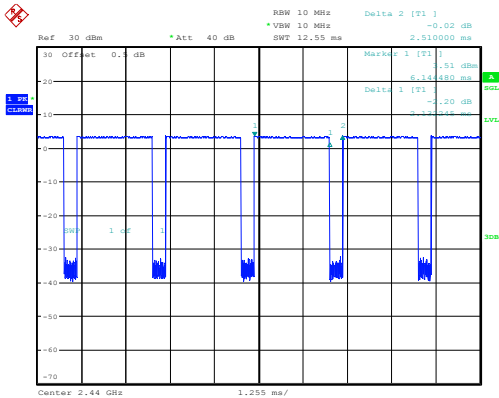
BLE 2M

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)	VBW Setting (kHz)
Middle	1.072	1.880	57.02	2.44	933	1

$$\text{Duty Cycle} = \text{Ton}/(\text{Ton}+\text{Toff})*100\%$$

BLE 1M

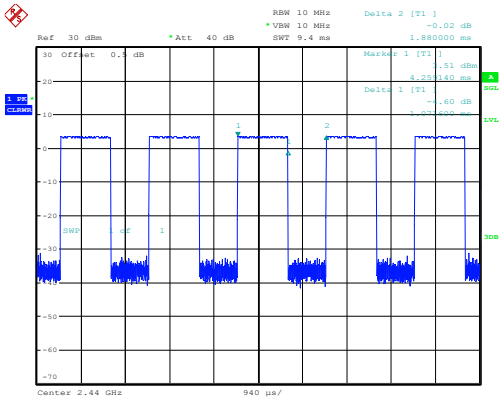
Middle



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:17:56

BLE 2M

Middle



ProjectNo.:2403V87404E-RF Tester:Chin Qin
Date: 13.AUG.2024 21:19:03