

Appendix A

RF Test Data for BT(BLE) (Conducted Measurement)

Product Name: Shenzhen SEI Robotics Co., Ltd.

Trade Mark: N/A

Test Model: SN8B6BB

FCC ID: 2A0VU-SN8B6BB

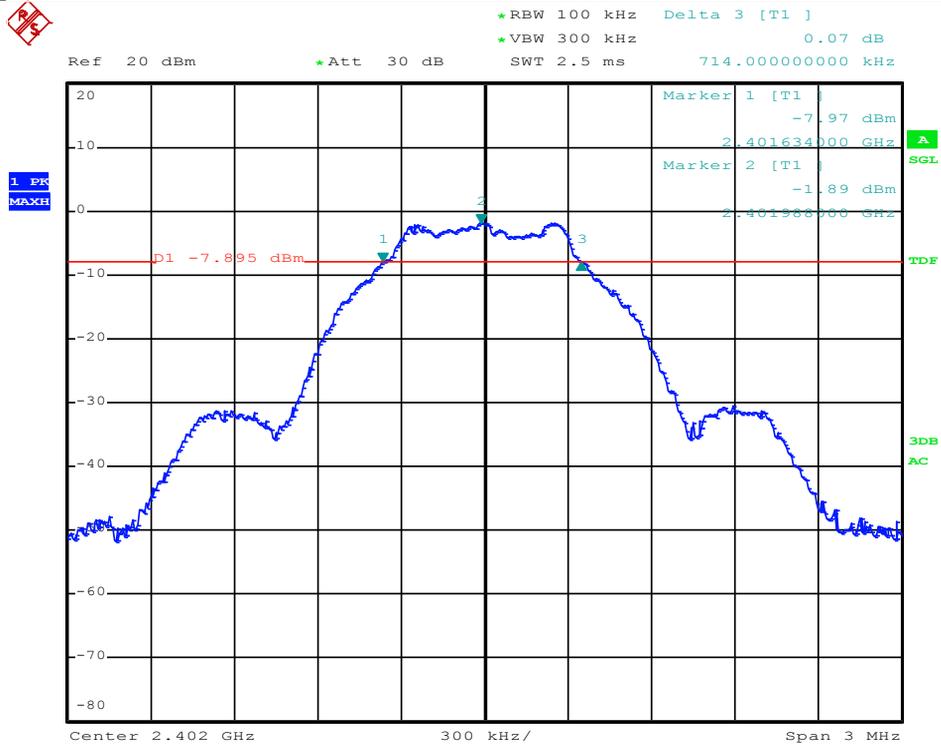
Environmental Conditions

Temperature:	22.9° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

1.6dB Bandwidth

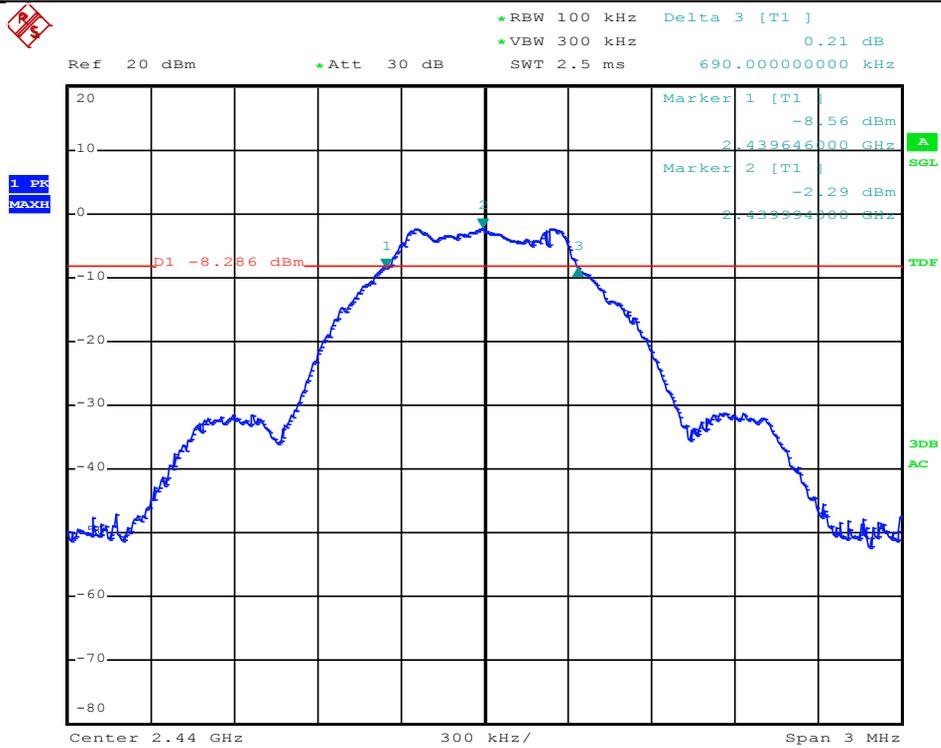
Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
BLE	2402	Ant1	0.714	0.5	PASS
BLE	2440	Ant1	0.690	0.5	PASS
BLE	2480	Ant1	0.720	0.5	PASS

6dB Bandwidth_BLE_2402_Ant1



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6dB Bandwidth_BLE_2440_Ant1

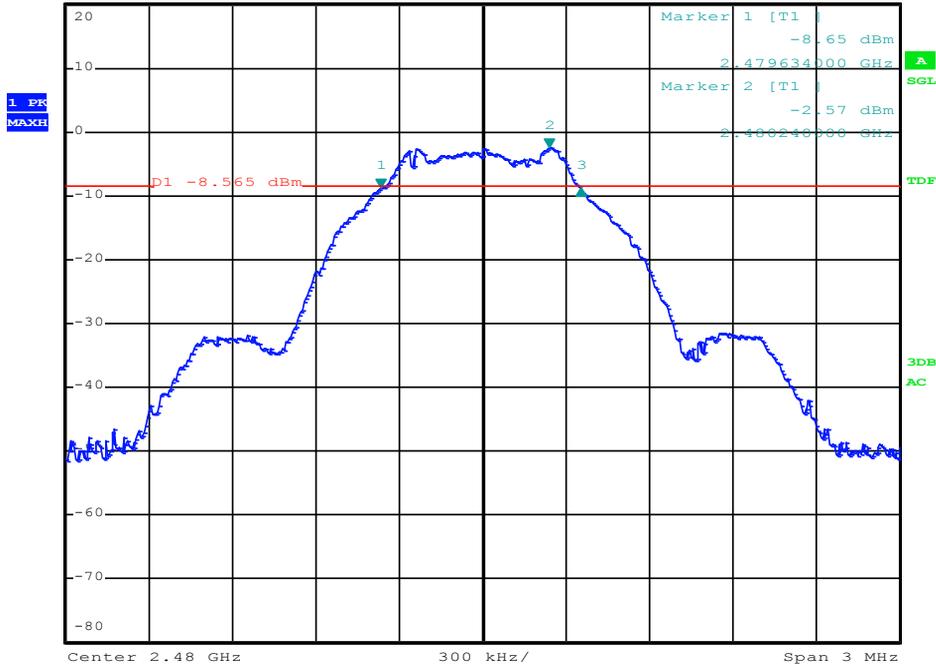


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6dB Bandwidth_BLE_2480_Ant1



Ref 20 dBm *Att 30 dB RBW 100 kHz Delta 3 [T1]
*VBW 300 kHz -0.03 dB
SWT 2.5 ms 720.000000000 kHz



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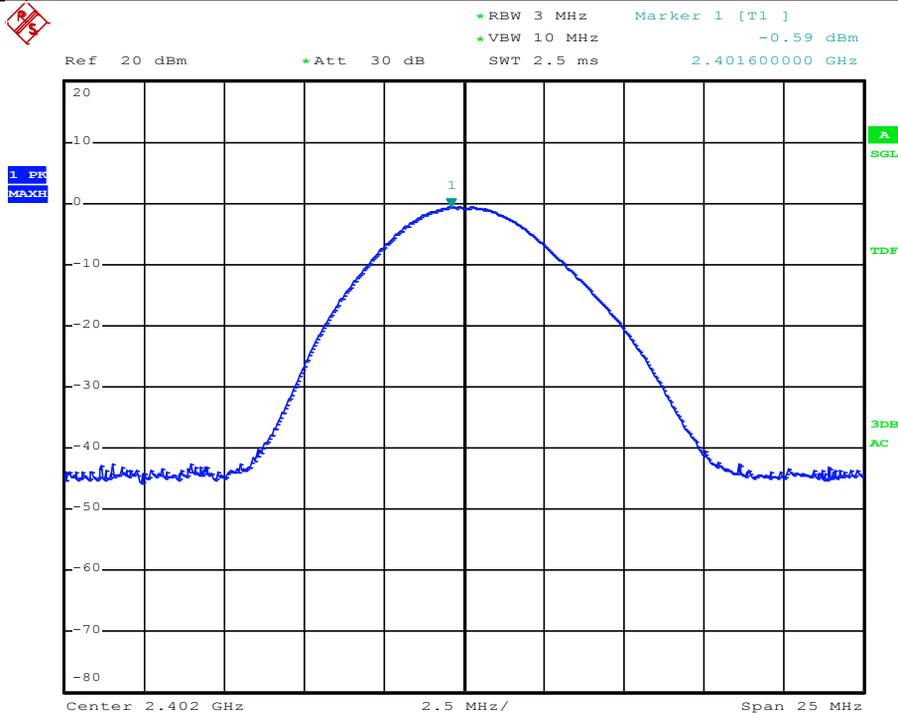
2.Occupied Bandwidth

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
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3.Maximum peak conducted output power

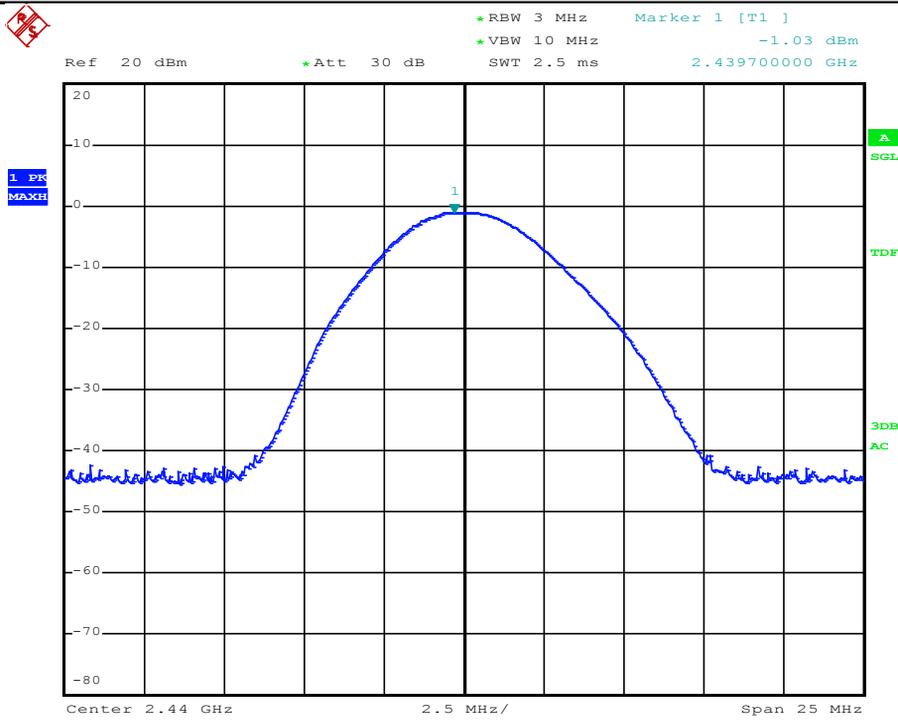
Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	Ant1	-0.59	30	PASS
BLE	2440	Ant1	-1.03	30	PASS
BLE	2480	Ant1	-1.24	30	PASS

Maximum peak conducted output power_BLE_2402_Ant1



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Maximum peak conducted output power_BLE_2440_Ant1

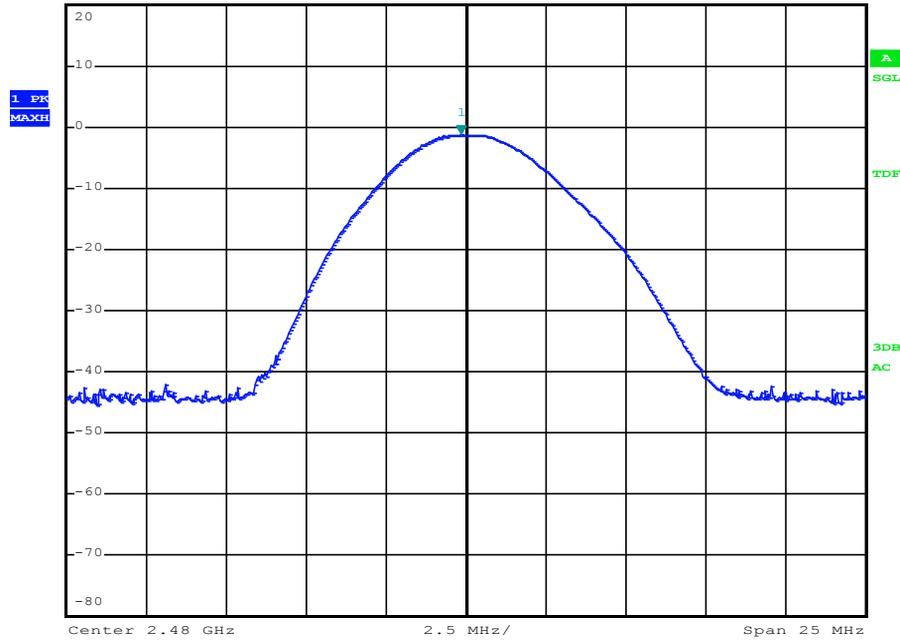


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Maximum peak conducted output power_BLE_2480_Ant1



Ref 20 dBm *Att 30 dB RBW 3 MHz Marker 1 [T1] -1.24 dBm
*VBW 10 MHz SWT 2.5 ms 2.479850000 GHz



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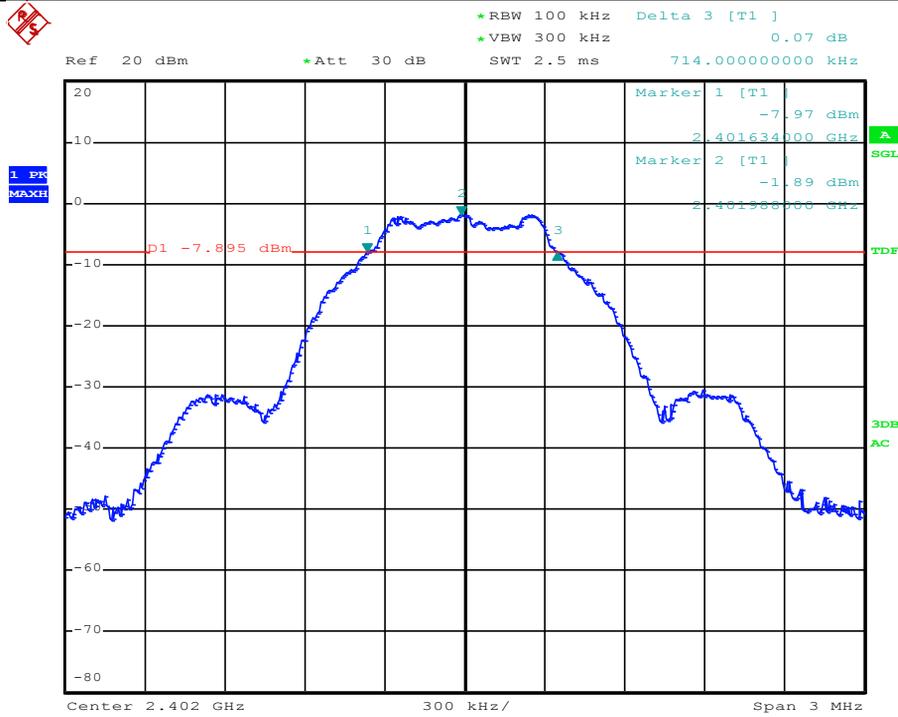
4. Maximum Peak power spectral density

Test Mode	Test Channel	Ant	PSD[dBm/100KHz]	Convert Factor(dB)	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
BLE	2402	Ant1	-1.89	-15.23	-17.12	8.00	PASS
BLE	2440	Ant1	-2.29	-15.23	-17.52	8.00	PASS
BLE	2480	Ant1	-2.57	-15.23	-17.80	8.00	PASS

Convert Factor= $10 \cdot \log_{10}(3/100) = -15.23$ (dB)

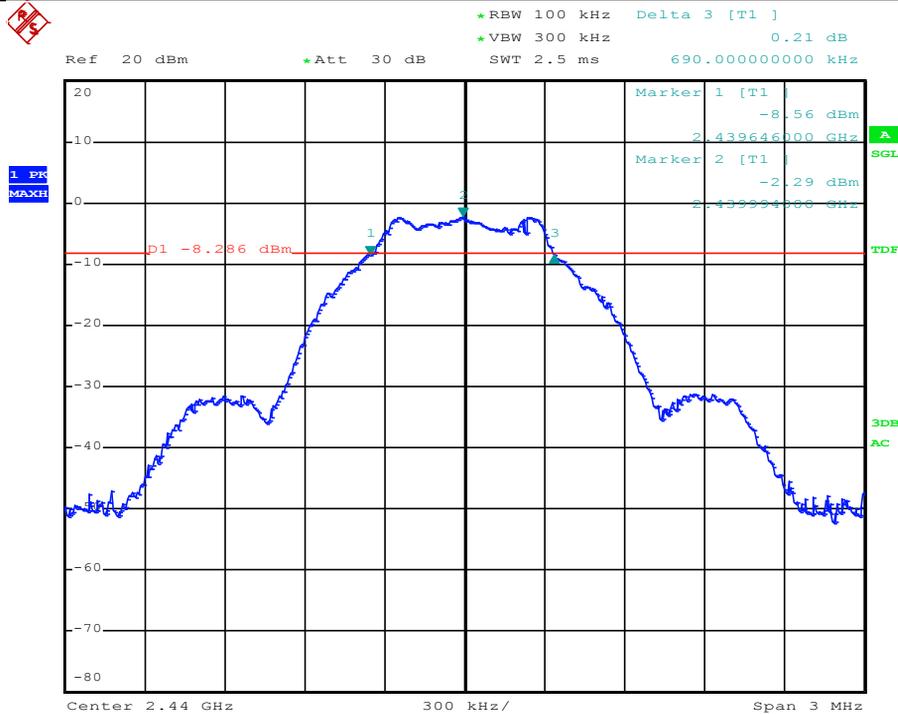
PSD[dBm/100KHz] + Convert Factor = PSD[dBm/3KHz]

Maximum Peak power spectral density_BLE_2402_Ant1



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Maximum Peak power spectral density_BLE_2440_Ant1

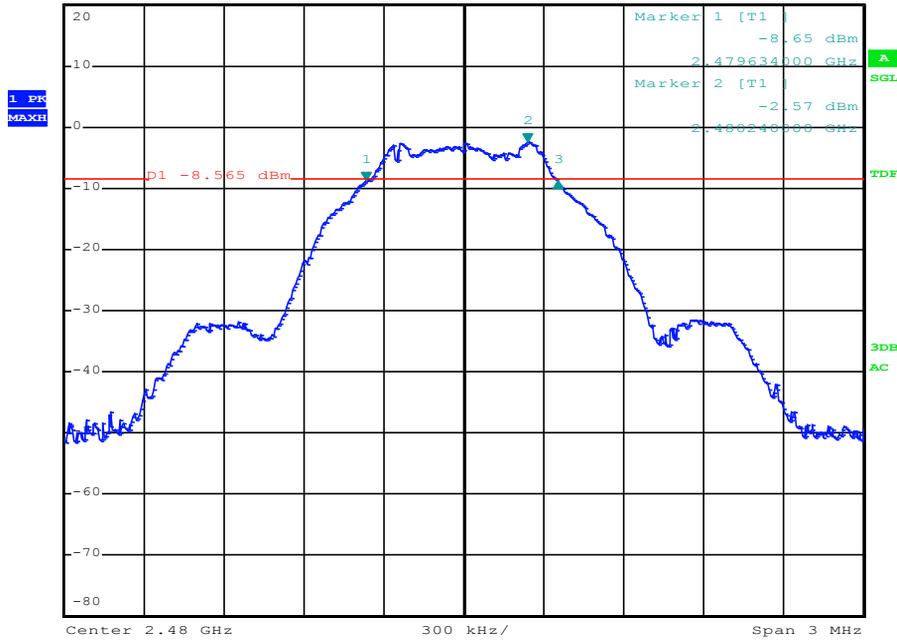


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Maximum Peak power spectral density_BLE_2480_Ant1



Ref 20 dBm *RBW 100 kHz Delta 3 [T1]
*Att 30 dB *VBW 300 kHz -0.03 dB
SWT 2.5 ms 720.000000000 kHz

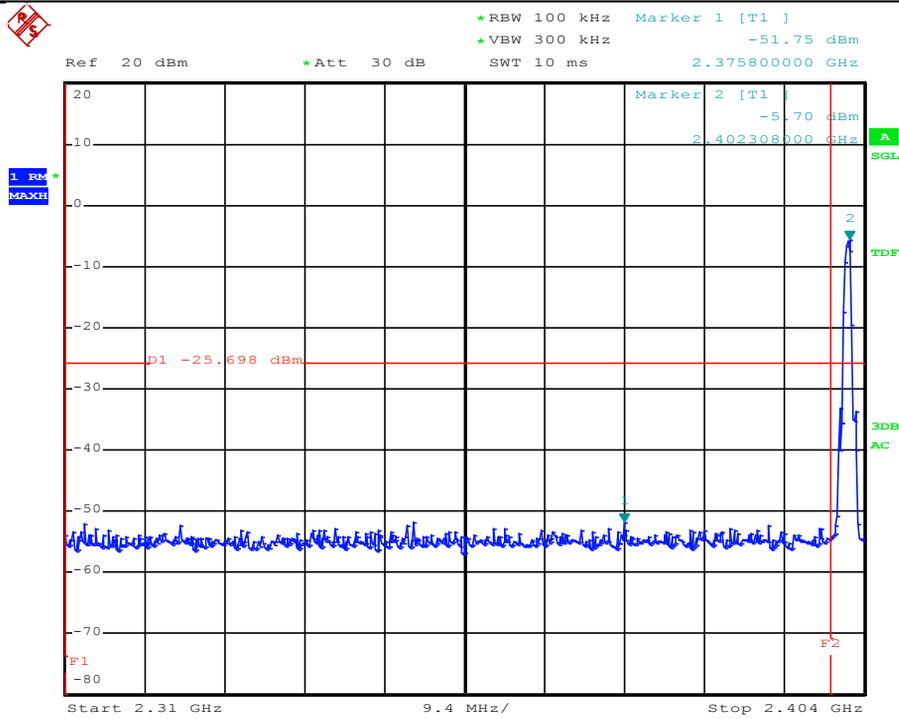


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5.Band-edge for RF Conducted Emissions

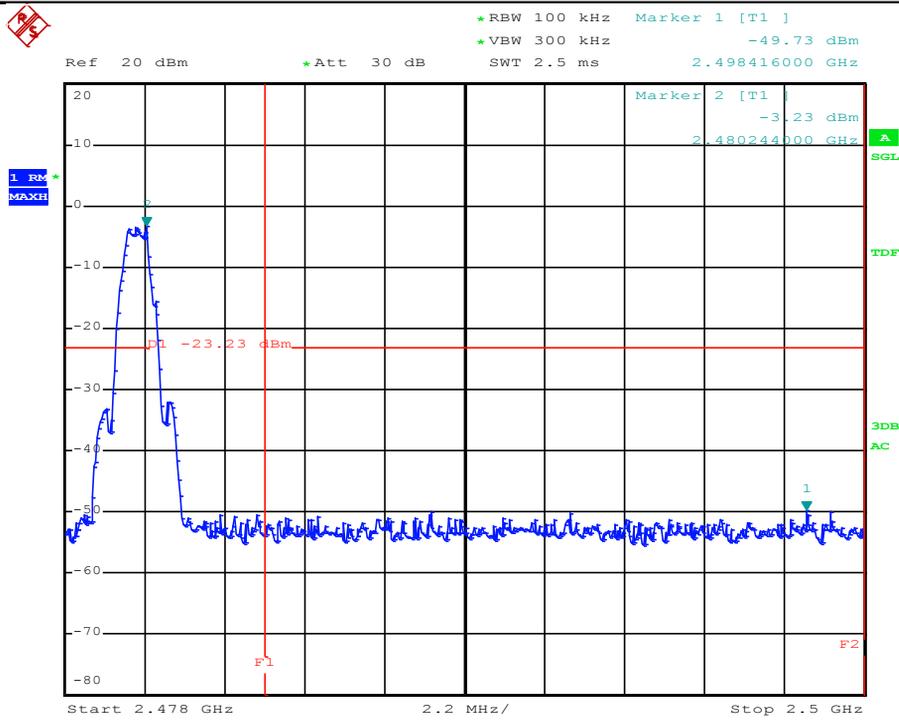
Test Mode	Test Channel	Ant	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
BLE	2402	Ant1	-5.70	-51.75	-28.48	PASS
BLE	2480	Ant1	-4.42	-46.74	-24.42	PASS

Band-edge for RF Conducted Emissions_BLE_2402_Ant1



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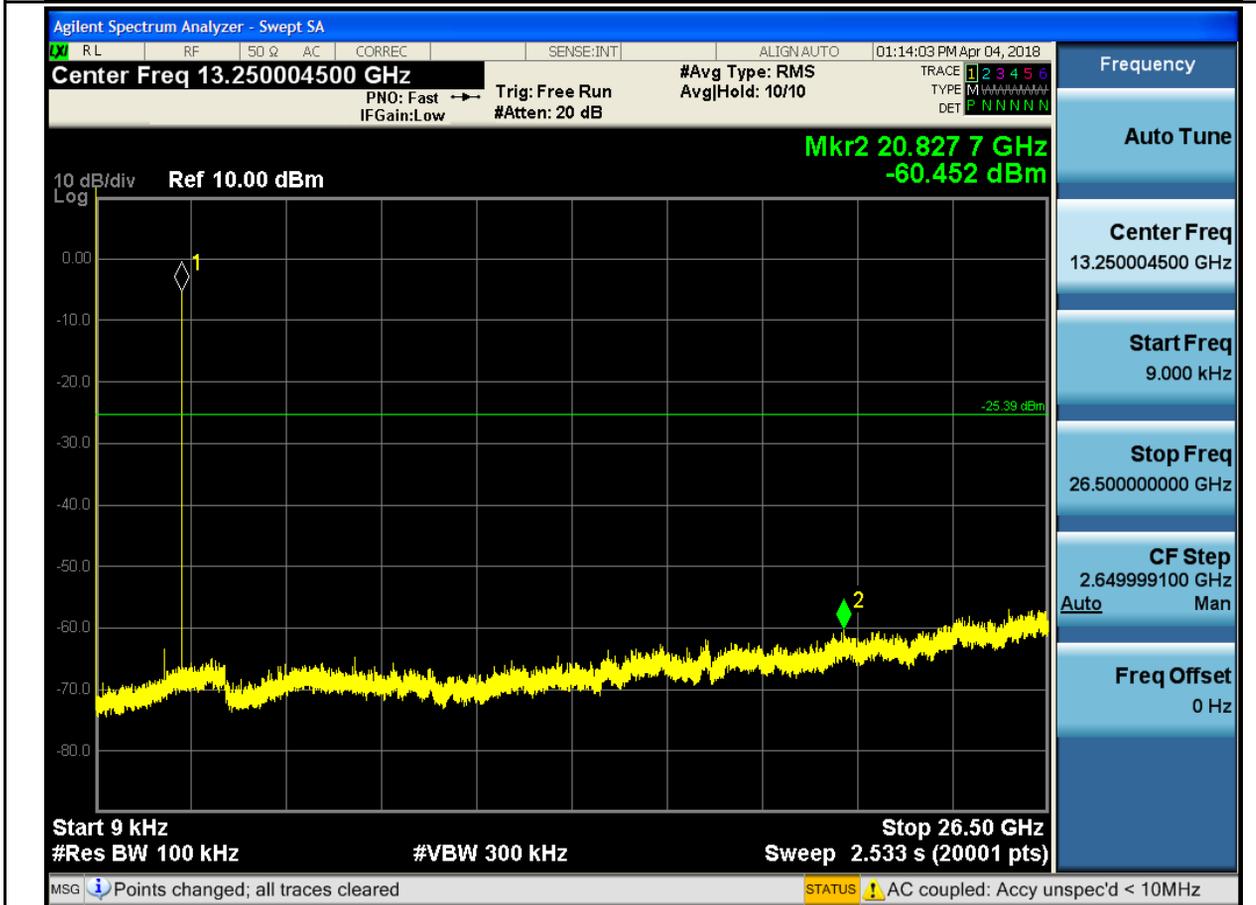
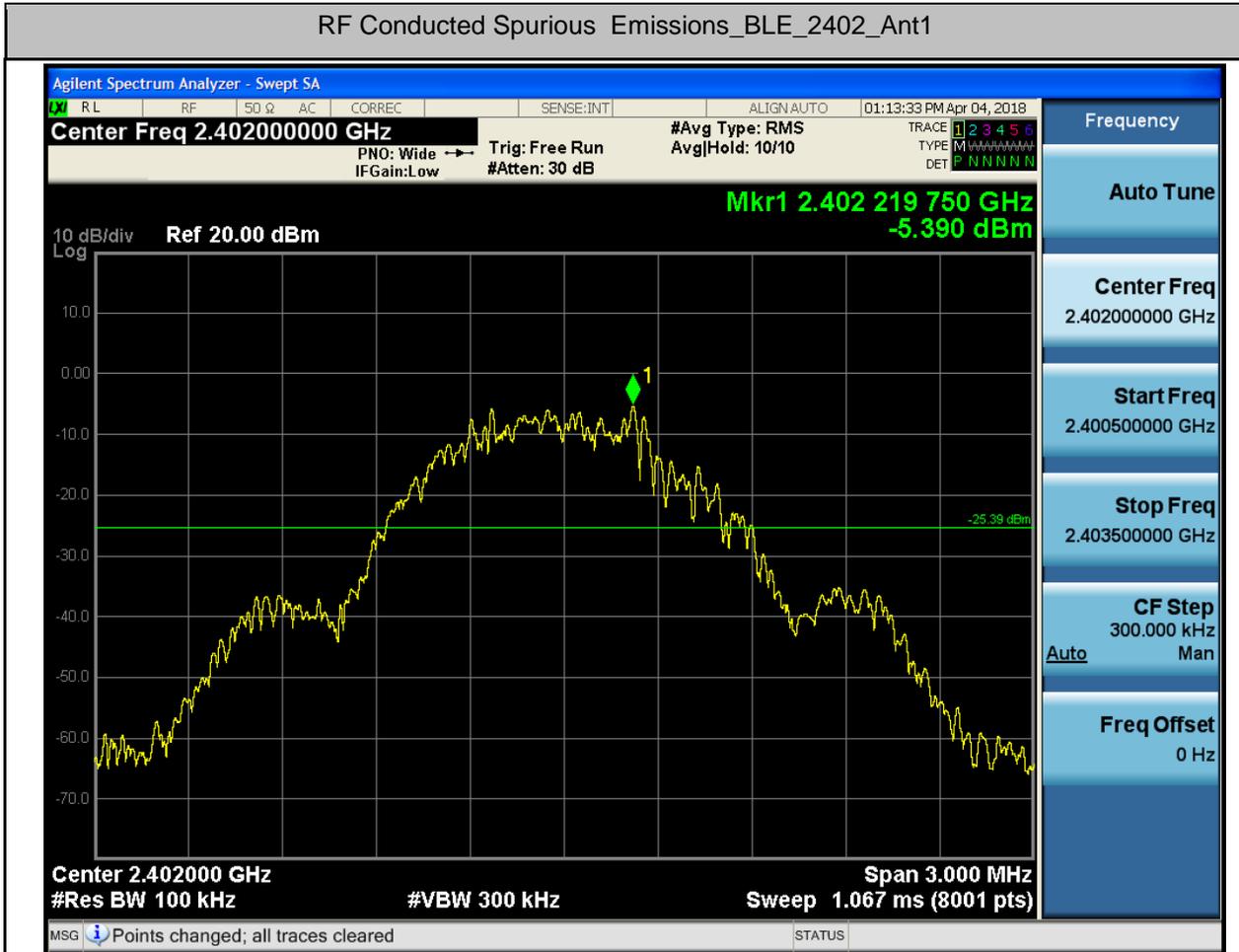
Band-edge for RF Conducted Emissions_BLE_2480_Ant1



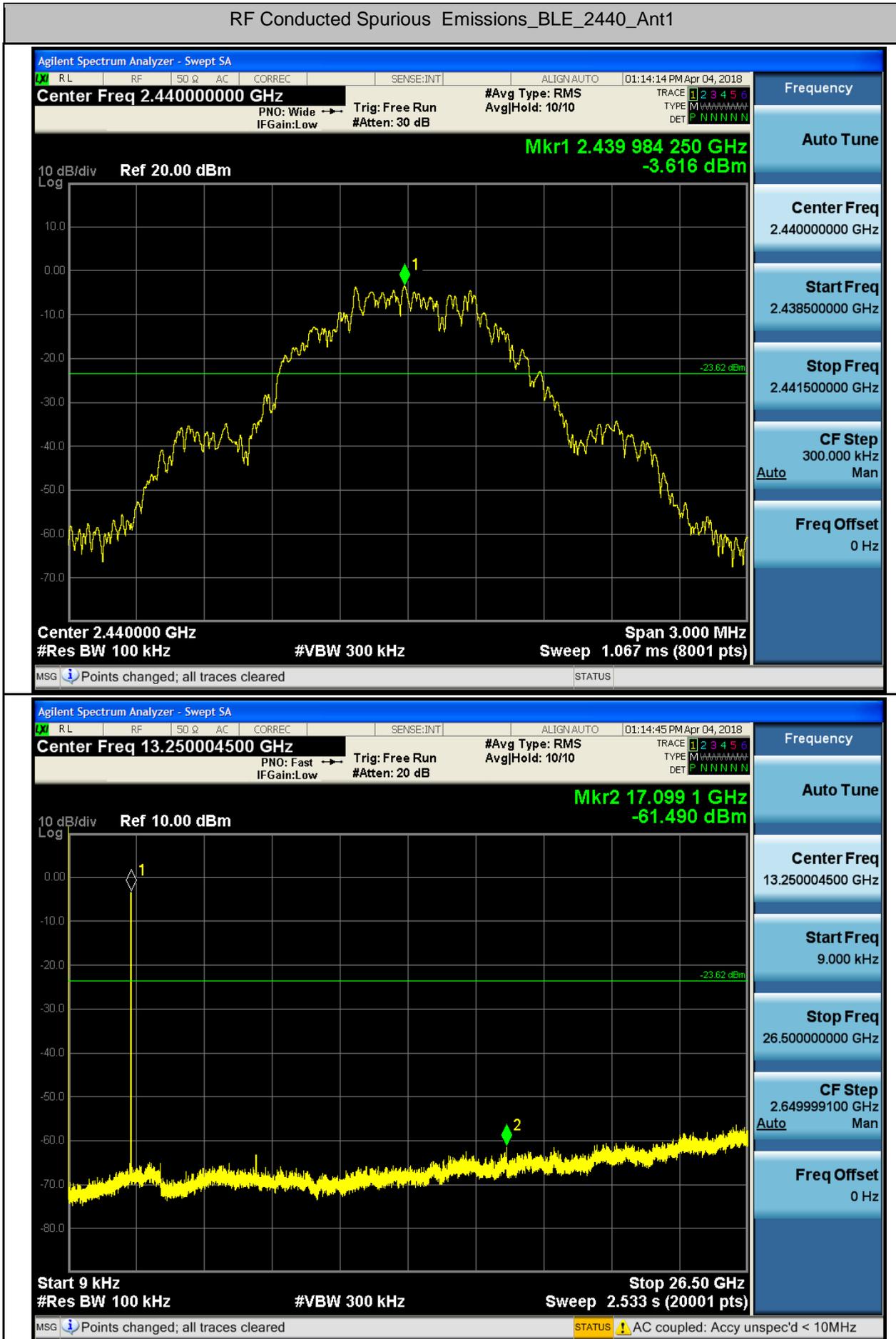
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6.RF Conducted Spurious Emissions

RF Conducted Spurious Emissions_BLE_2402_Ant1



RF Conducted Spurious Emissions_BLE_2440_Ant1

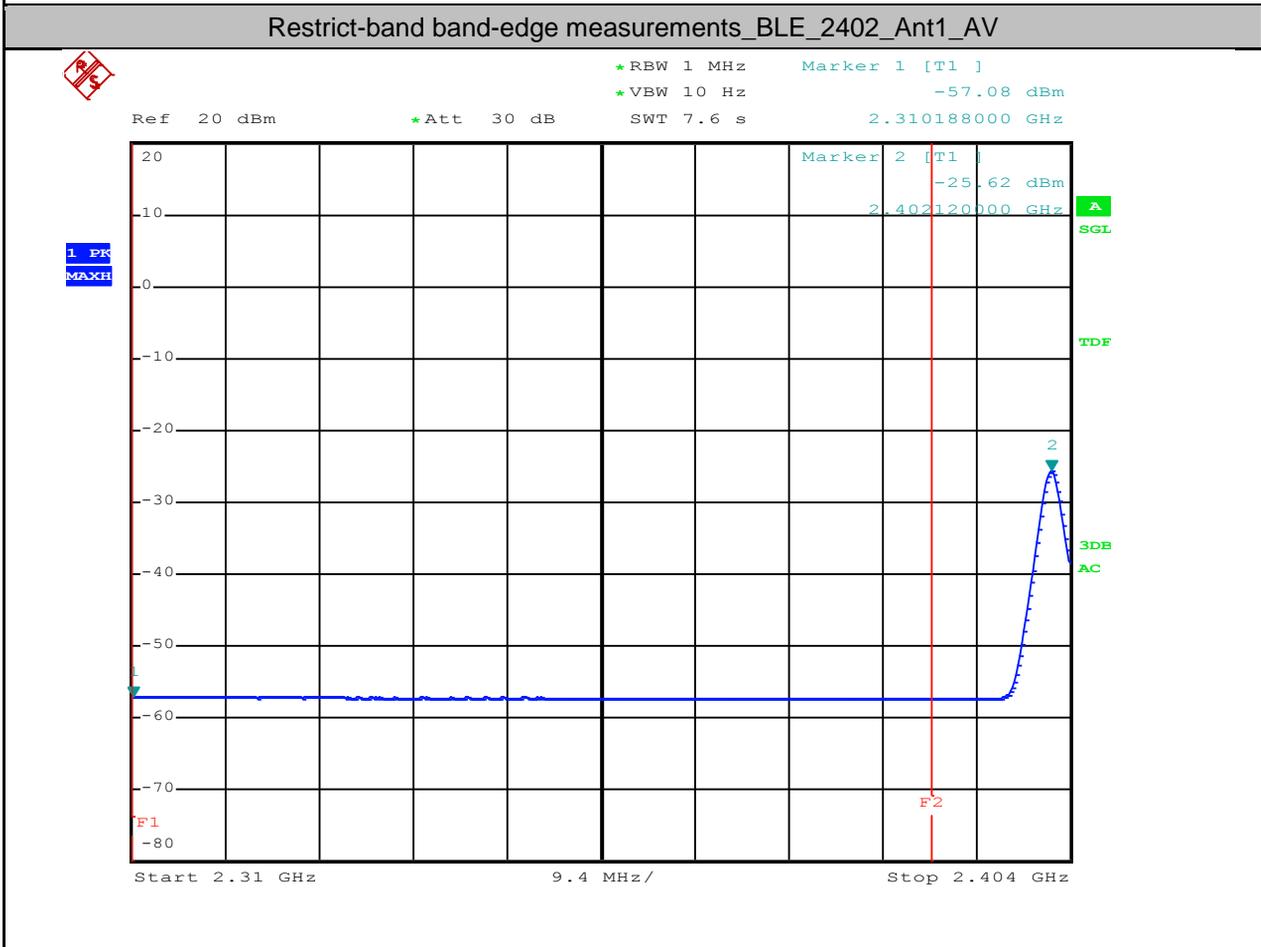
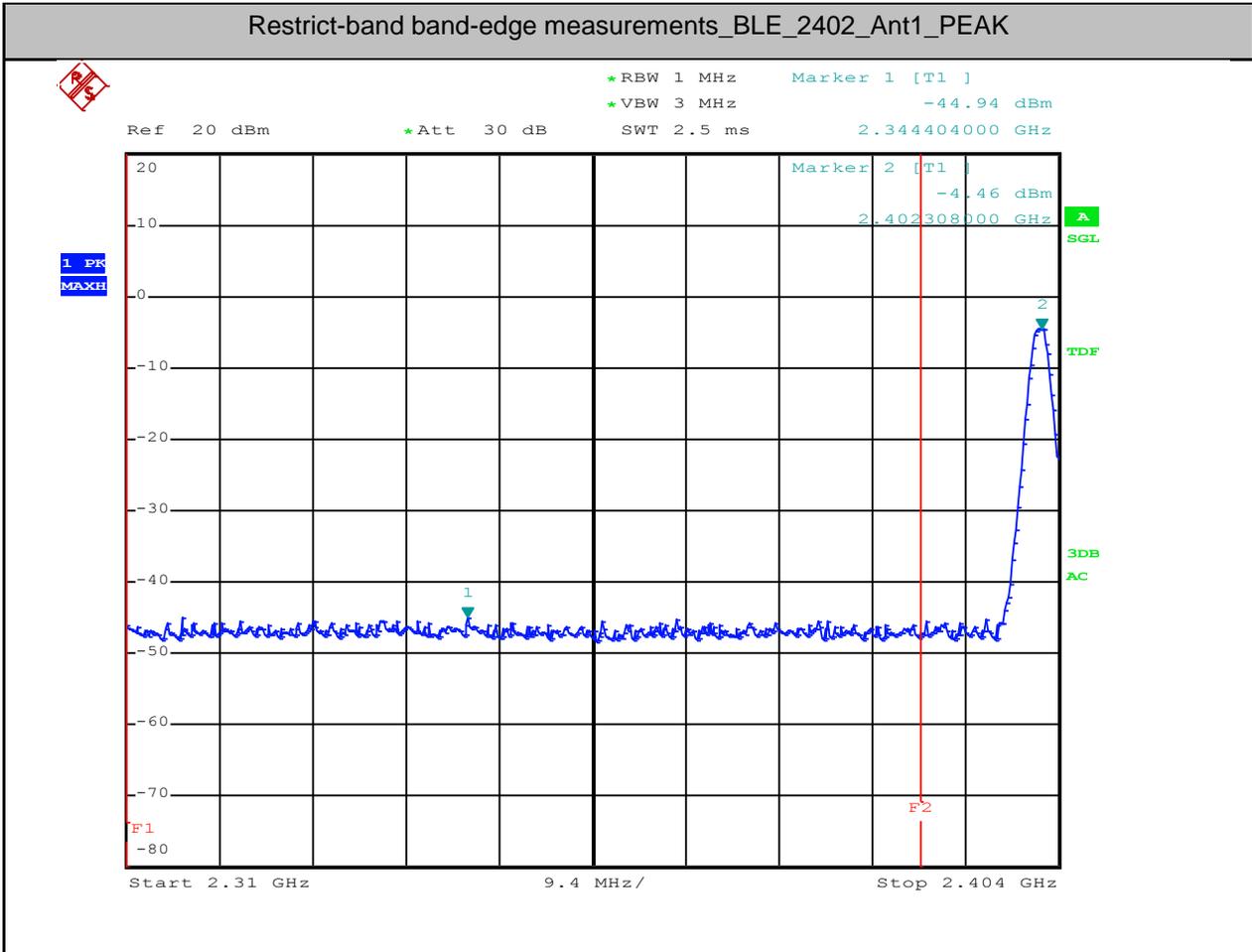


RF Conducted Spurious Emissions_BLE_2480_Ant1



7.Restrict-band band-edge measurements

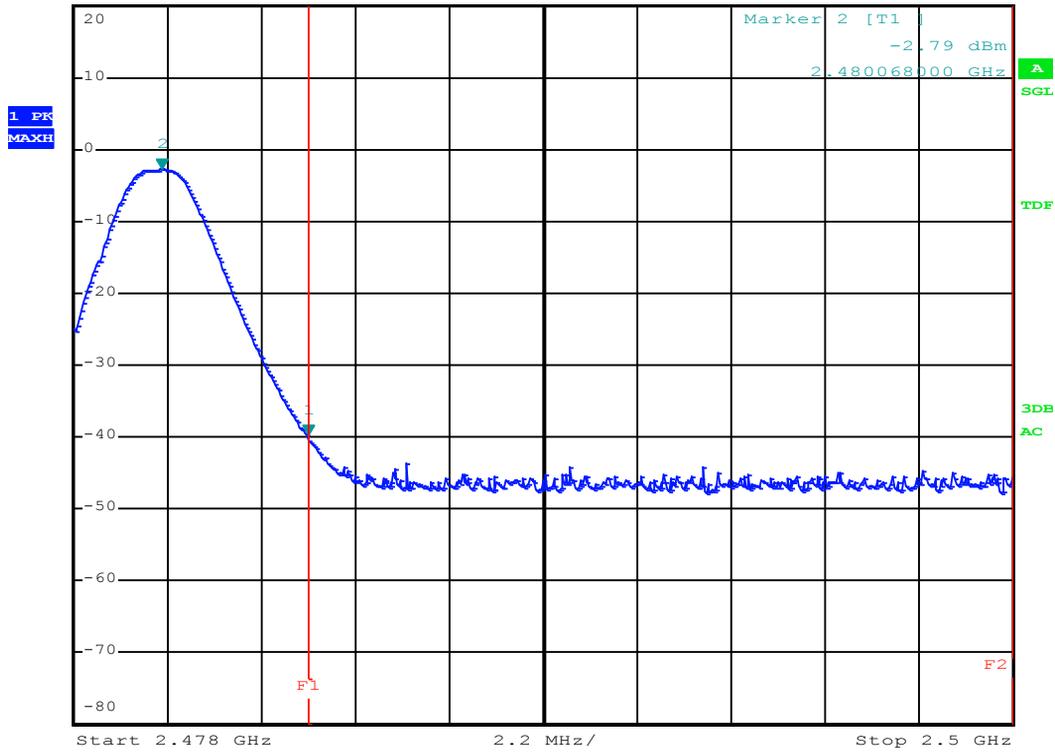
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
BLE	2402	Ant1	2310.0-2390.0	-44.94	1.76	0	52.02	PEAK	74	PASS
BLE	2402	Ant1	2310.0-2390.0	-57.08	1.76	0	39.88	AV	54	PASS
BLE	2480	Ant1	2483.5-2500.0	-39.78	1.76	0	57.18	PEAK	74	PASS
BLE	2480	Ant1	2483.5-2500.0	-49.83	1.76	0	47.13	AV	54	PASS



Restrict-band band-edge measurements_BLE_2480_Ant1_PEAK



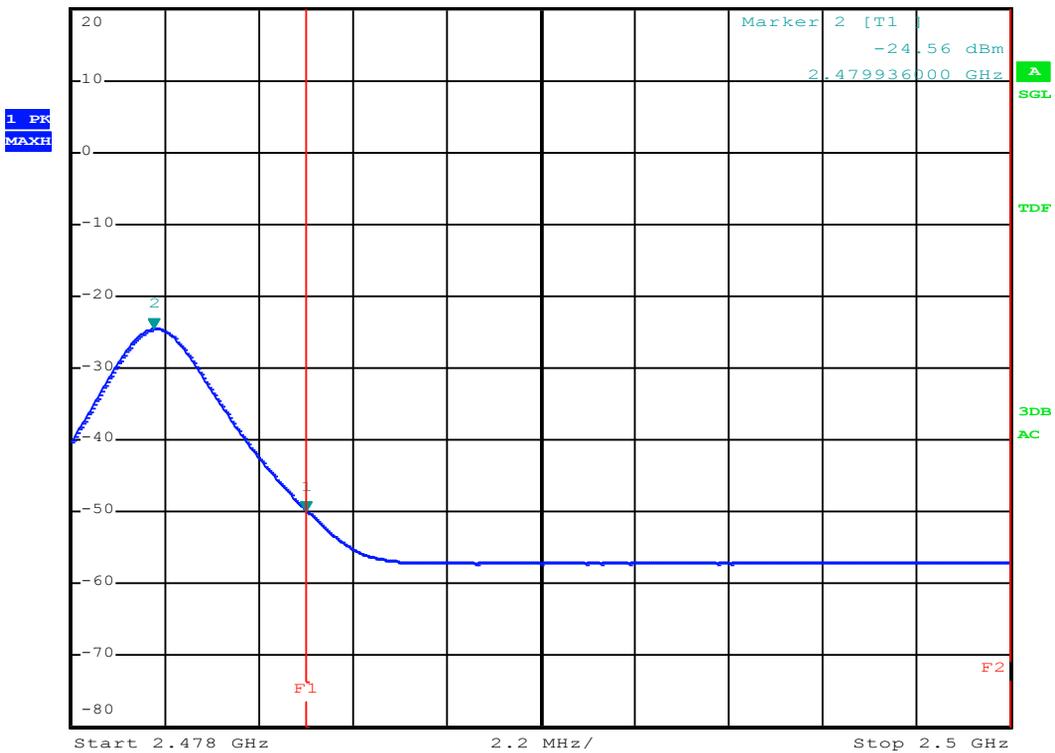
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -39.78 dBm
Ref 20 dBm *Att 30 dB SWT 2.5 ms 2.483500000 GHz



Restrict-band band-edge measurements_BLE_2480_Ant1_AV



*RBW 1 MHz Marker 1 [T1]
*VBW 10 Hz -49.83 dBm
Ref 20 dBm *Att 30 dB SWT 5 s 2.483500000 GHz



8.Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BLE	2440	Ant1	100	PASS

