

## Appendix A: Test results

### 1 Duty Cycle

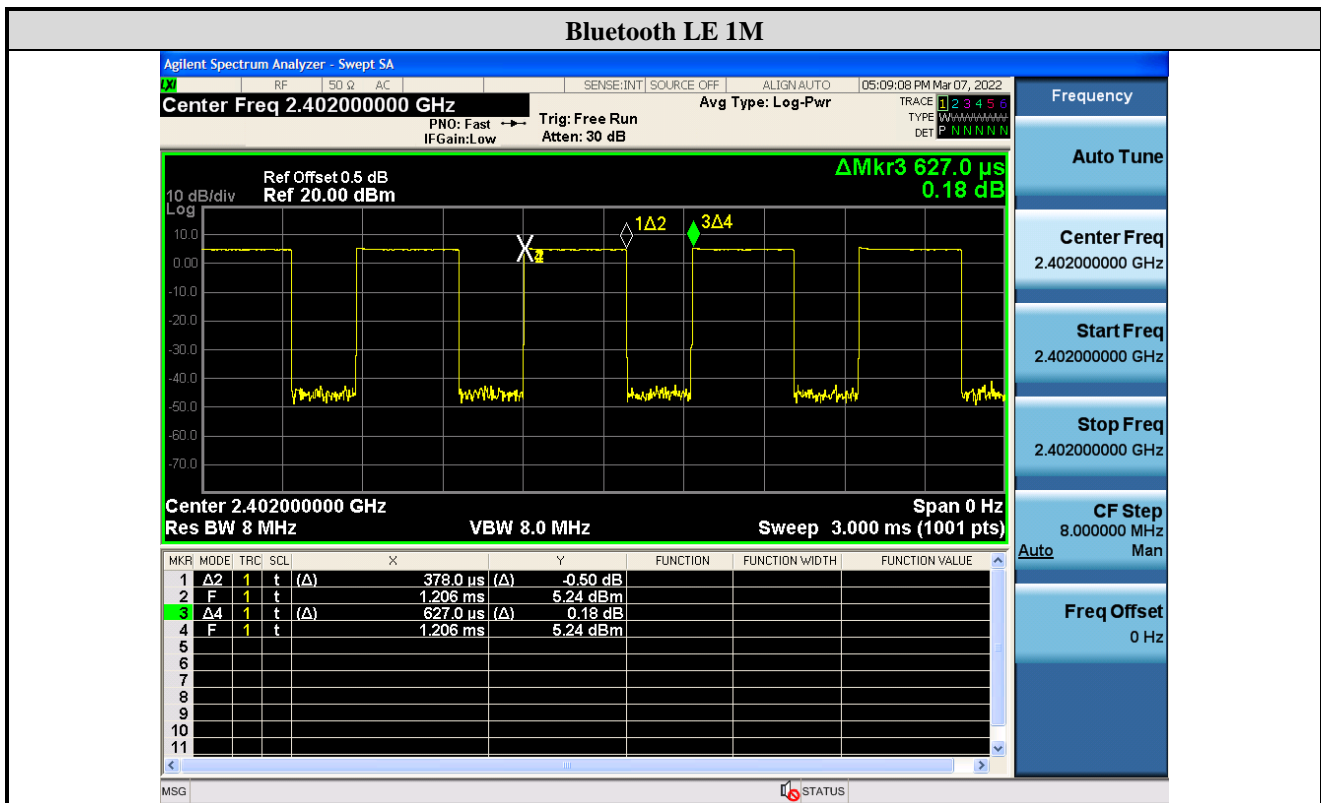
#### 1.1 Test Data

Bluetooth LE Duty Cycle				
Mode	Test Frequency (MHz)	Ant	Duty Cycle (%)	Duty Cycle Factor (dB)
Bluetooth LE 1M	2402	Ant0	60.29	2.20

**Remark:**

- 1) Duty cycle= On Time/ Period;
- 2) Duty Cycle factor = 10 \* log (1/ Duty cycle);

#### 1.2 Test Plots



## 2 Minimum 6dB bandwidth & 99% Occupied Bandwidth

### 2.1 Test Data

Bluetooth LE Occupied 6dB Bandwidth & 99% Occupied Bandwidth					
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Result
Bluetooth LE 1M	2402	Ant0	0.6897	1.0832	Pass
	2440	Ant0	0.6775	1.0811	Pass
	2480	Ant0	0.6866	1.0804	Pass

### 2.2 Test Plots



### 3 Maximum conducted output power and e.i.r.p

#### 3.1 Test Data

Bluetooth LE Maximum Peak Output Power								
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Total or max Power (dBm)	Limit (dBm)	EIRP (dBm)	Result
Bluetooth LE 1M	2402	Ant0	2.20	7.60	7.60	30	10.79	Pass
	2440			7.38	7.38	30	10.57	Pass
	2480			5.91	5.91	30	9.10	Pass

Note:

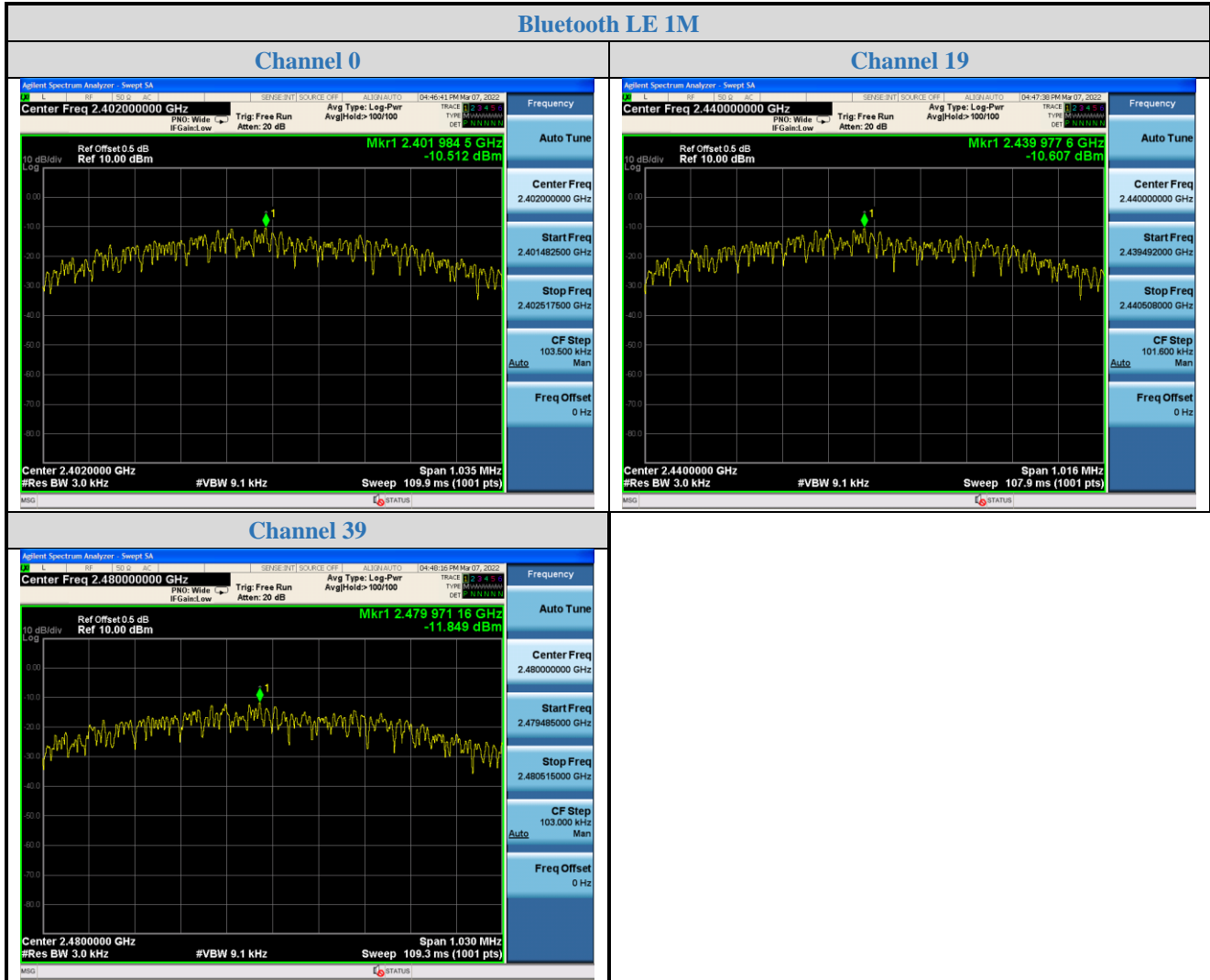
1. The antenna gain of 3.19 dBi less than 6dBi maximum permission antenna gain value based on 1 watt (30dBm) peak output power limit.
2. The max E.I.R.P = 10.79dBm = 0.012W < 4W, which meet the ISED requirement.

## 4 Power spectrum density

### 4.1 Test Data

BLUETOOTH LE Power Spectral Density						
Mode	Test Frequency (MHz)	Duty Cycle Factor (dB)	Power spectral density			
			Measured level (dBm/3kHz)	RBW (kHz)	Limit (dBm/3kHz)	Pass / Fail
Bluetooth LE 1M	2402	2.20	-10.512	3	8	Pass
	2440		-10.607	3	8	Pass
	2480		-11.849	3	8	Pass

4.2 Test Plots

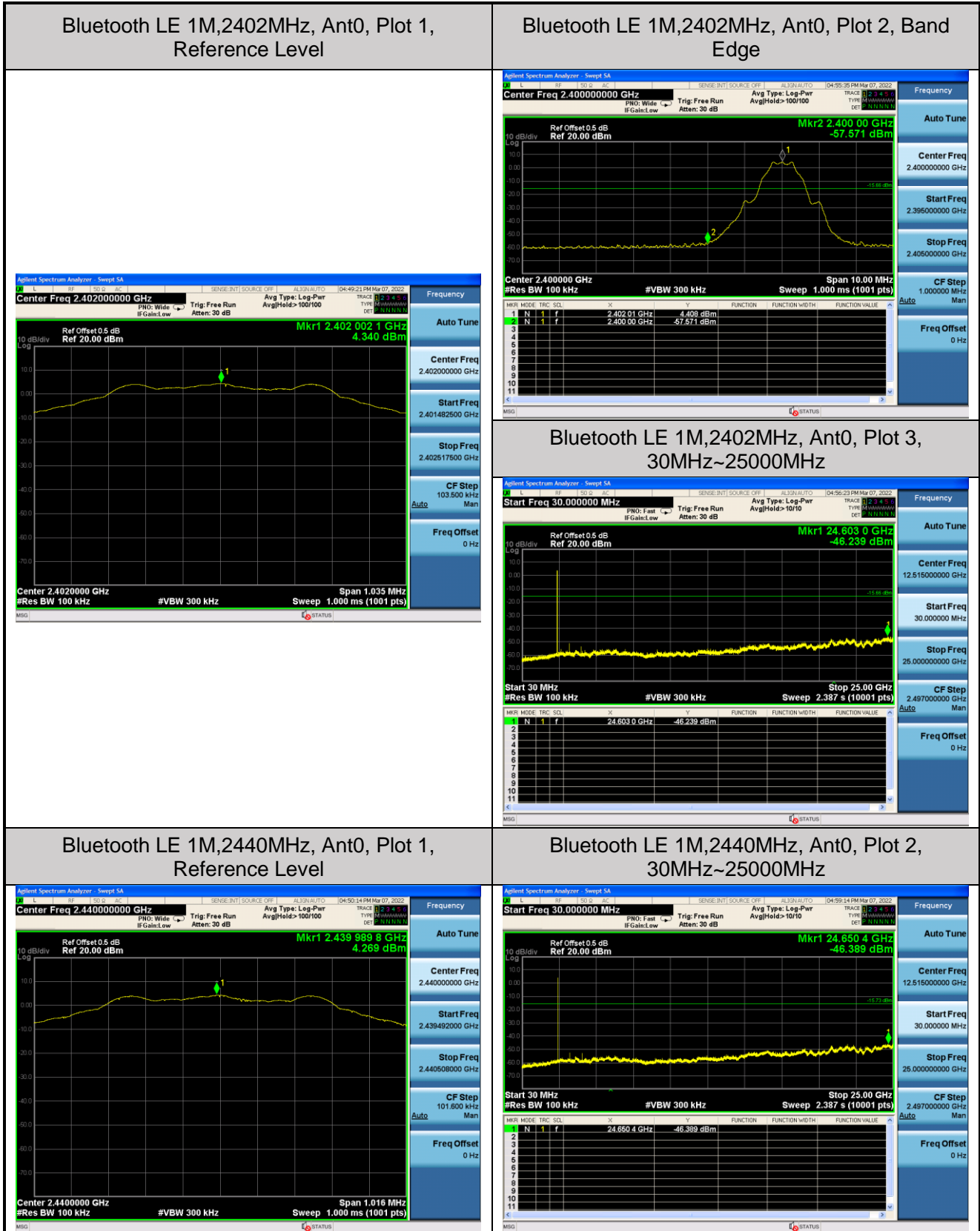


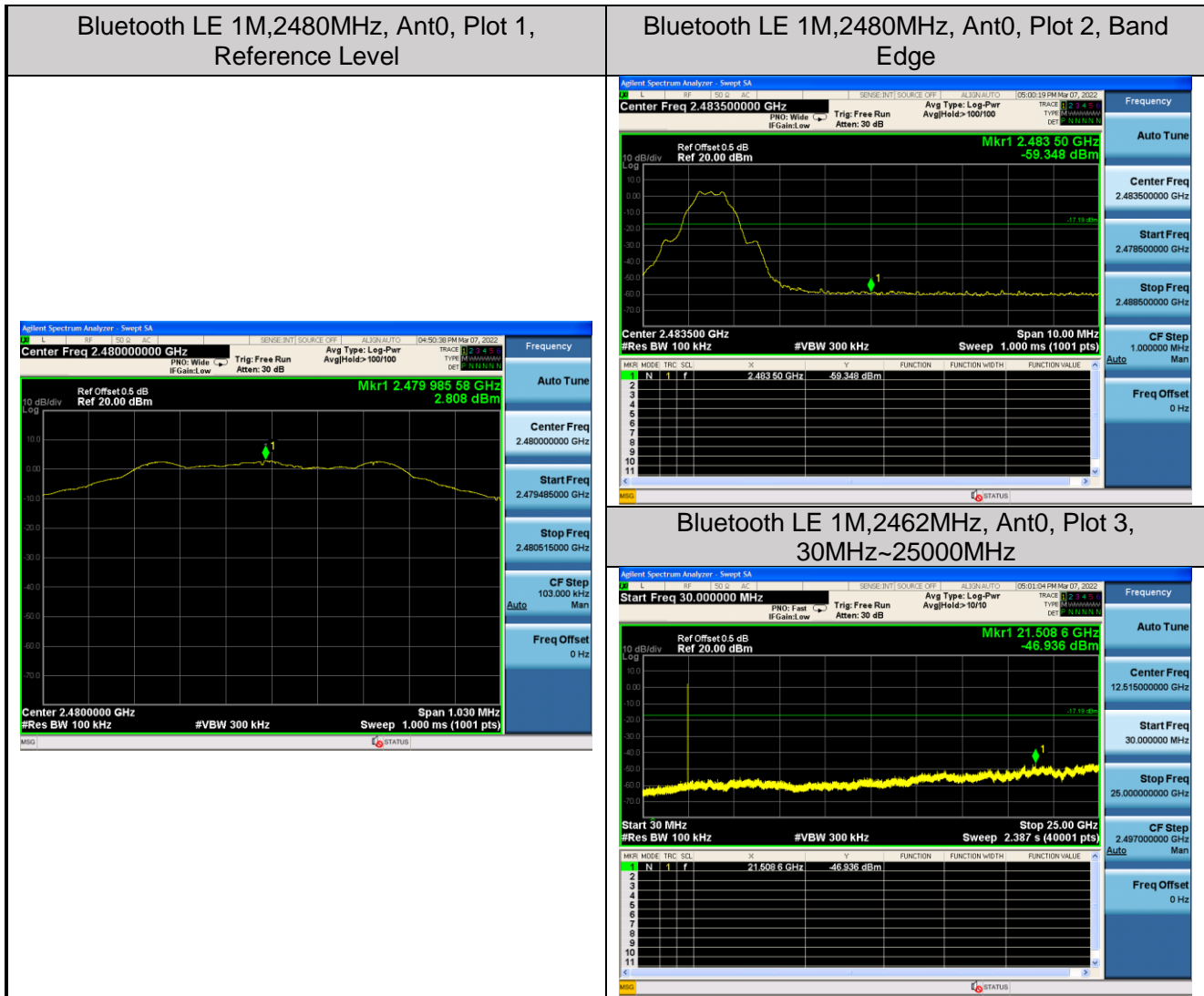
## 5 Emission outside the frequency band

### 5.1 Test Data

Bluetooth LE Transmitter Spurious Emission						
Mode	Test Frequency (MHz)	Ant	Plot No.	Frequency Range	Emission (dBm)	Result
Bluetooth LE 1M	2402	Ant0	1	Reference Level	4.340	Pass
			2	Band Edge	-57.571	Pass
			3	30MHz~25000MHz	-46.239	Pass
	2440	Ant0	1	Reference Level	4.269	Pass
			3	30MHz~25000MHz	-46.389	Pass
	2480	Ant0	1	Reference Level	2.808	Pass
			2	Band Edge	-59.348	Pass
			3	30MHz~25000MHz	-46.936	Pass

**5.2 Test Plots**







## 6 Band Edges Compliance

### 6.1 Test Data

#### Bluetooth LE 1M

