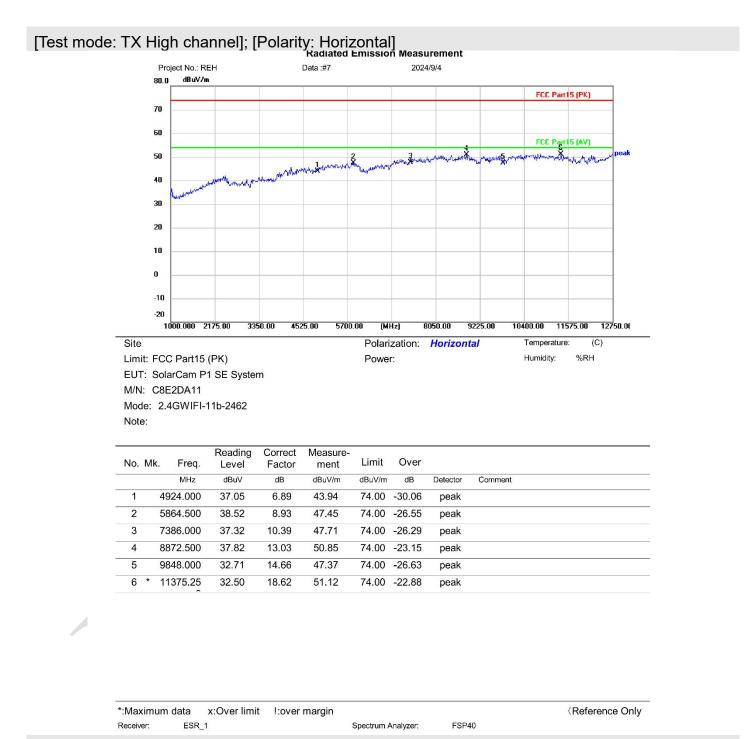


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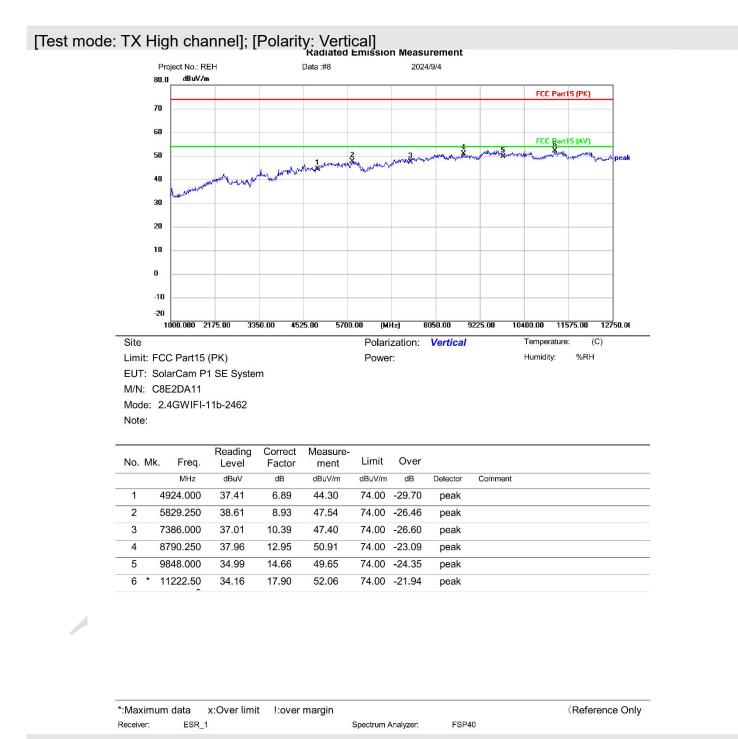


**Test Result: Pass** 

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**Test Result: Pass** 

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### 6.9 Radiated emissions which fall in the restricted bands

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.10.5
Test Mode (Pre-Scan)	ТХ
Test Mode (Final Test)	ТХ

#### 6.9.1 Limit

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

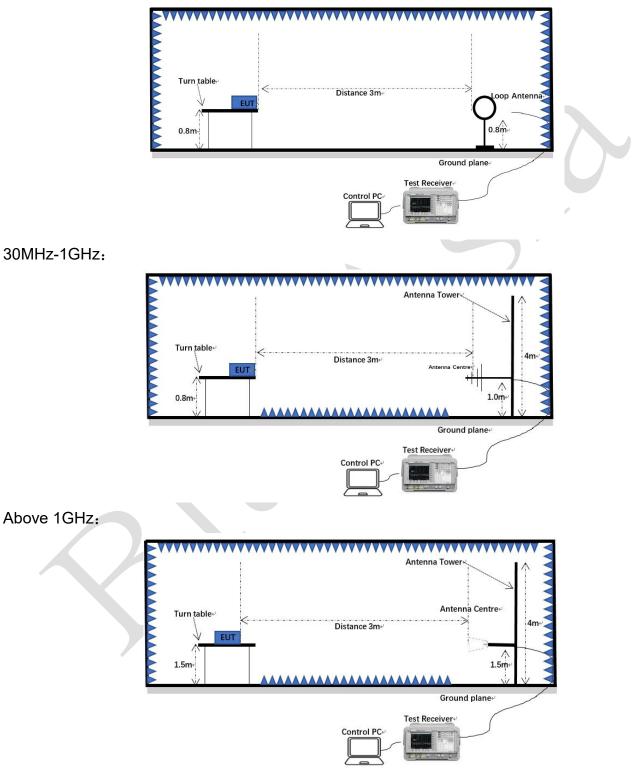
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#### 6.9.2 Test setup

Below 1GHz:



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#### 6.9.3 Procedure

- a) For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h) Test the EUT in the lowest channel, the middle channel, the highest channel.
- i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j) Repeat above procedures until all frequencies measured was complete.

#### Note 1: Level (dBuV) = Reading (dBuV) + Factor (dB/m)

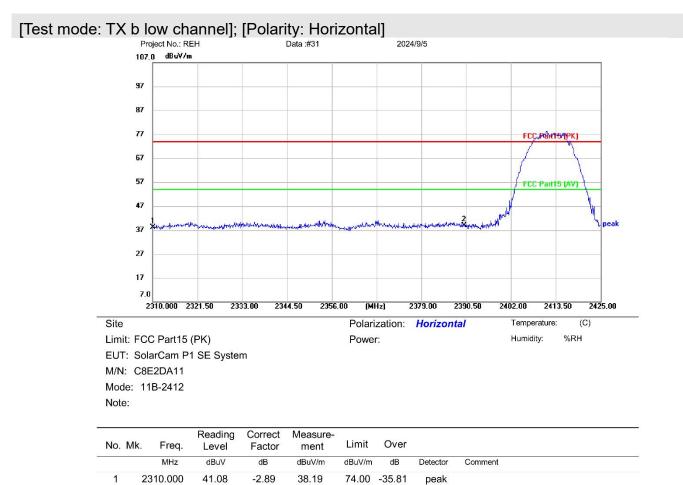
Note 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

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#### 6.9.4 Test data



\*:Maximum data x:Over limit !:over margin

41.57

-2.70

38.87

74.00 -35.13

peak

(Reference Only

**Test Result: Pass** 

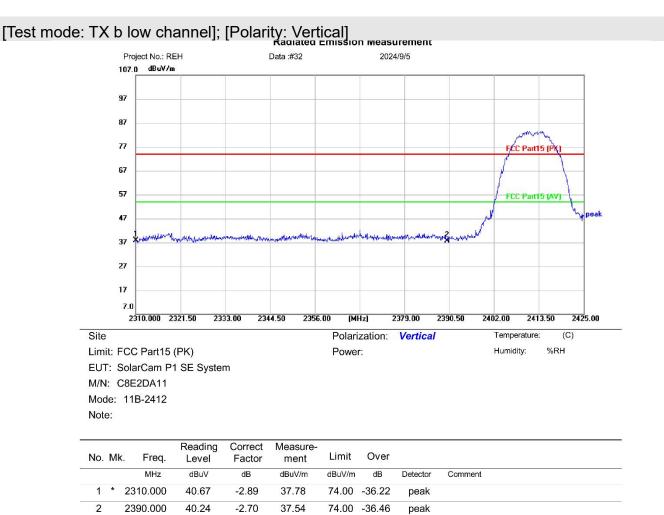
2

2390.000

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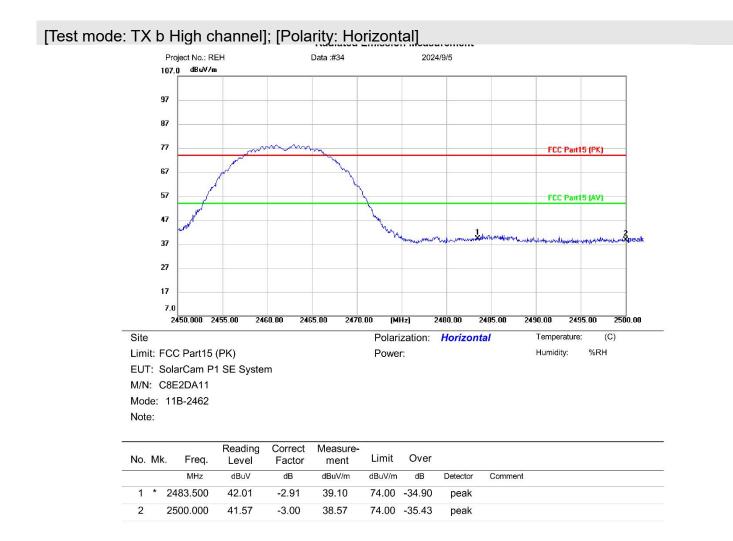
*:Maximum	ı data	x:Over limit	!:over margin			Reference Only
Receiver:	ESR	_1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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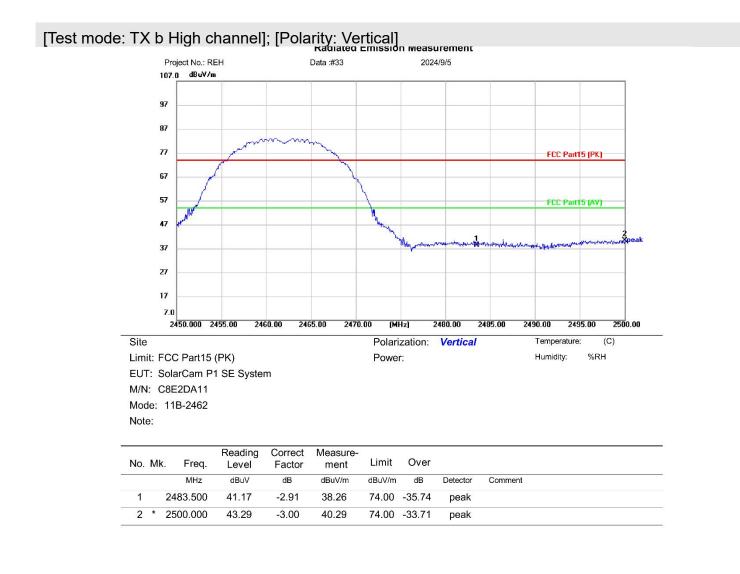
*:Maximum d	ata	x:Over limit	l:over margin			Reference Only	
Receiver:	ESR	_1		Spectrum Analyzer:	FSP40		

**Test Result: Pass** 

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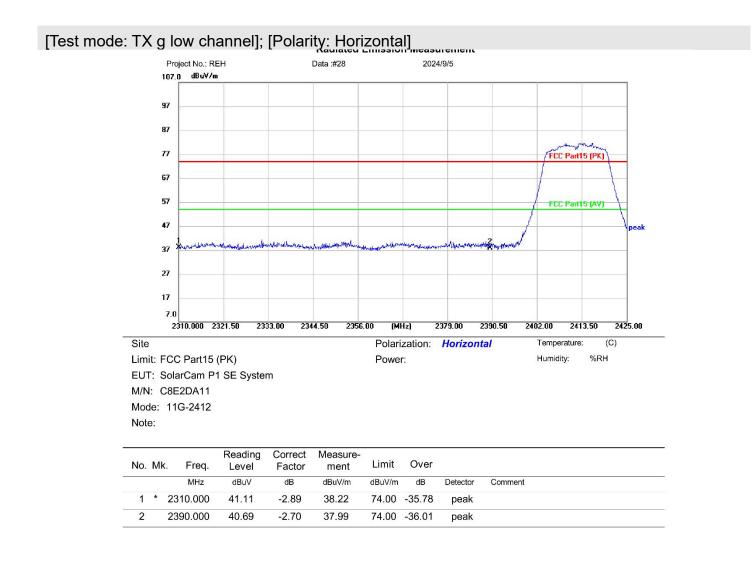
*:Maximum da	ata	x:Over limit	l:over margin			<reference only<="" th=""></reference>
Receiver:	ESR_	1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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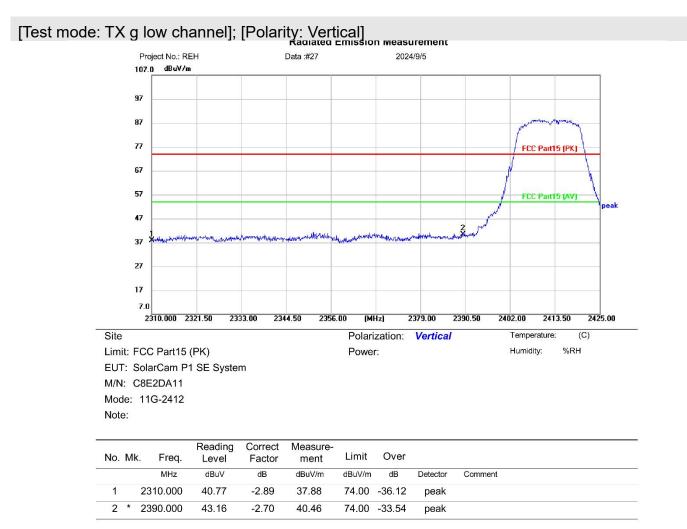
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Receiver:	ESR	_1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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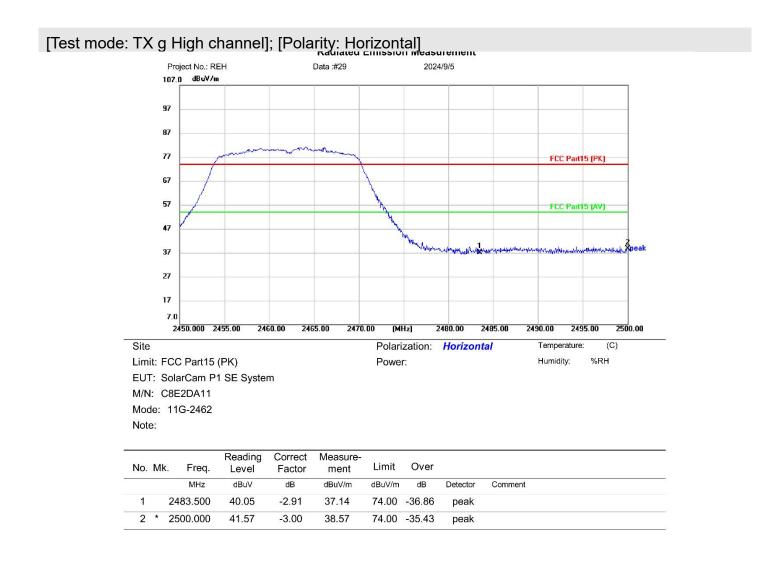
*:Maximum	ı data	x:Over limit	l:over margin			Reference Only
Receiver:	ESR	_1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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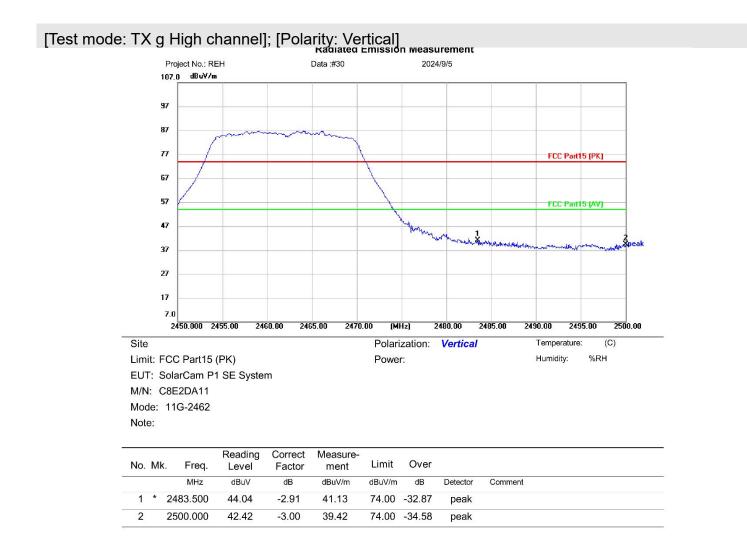
*:Maximum	data	x:Over limit	l:over margin			Reference Only
Receiver:	ESR	1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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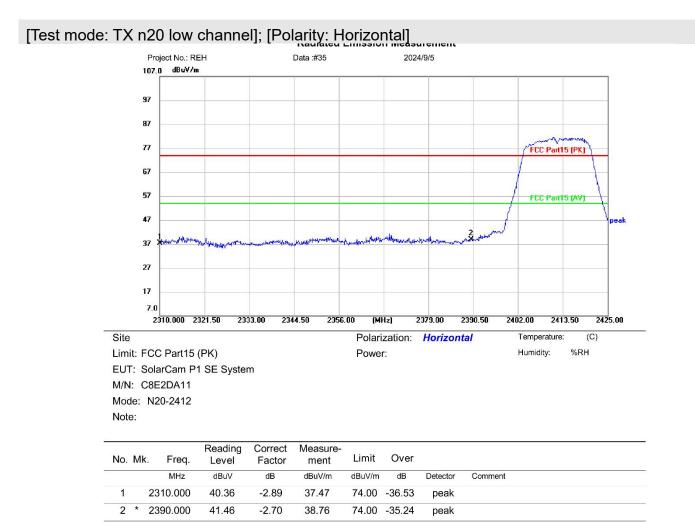
*:Maximum d	ata	x:Over limit	l:over margin			<reference only<="" th=""></reference>
Receiver:	ESR	1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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*:Maximum dat	a	x:Over limit	!:over margin		
Receiver: E	ESR	1		Spectrum Analyzer:	FSP40

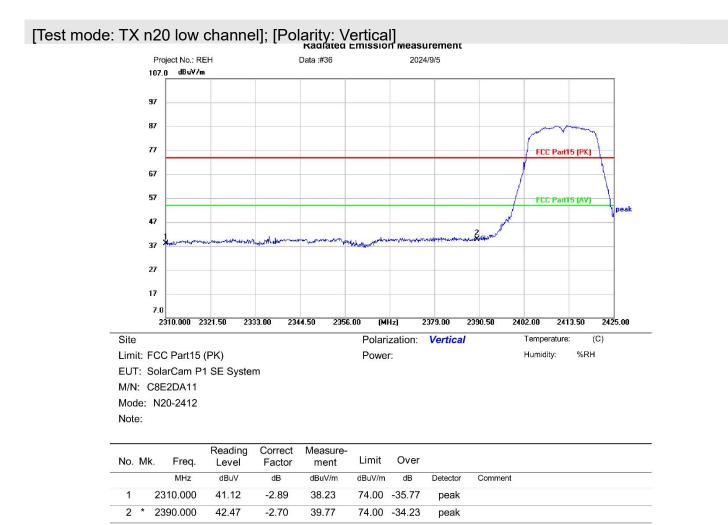
**Reference** Only

**Test Result: Pass** 

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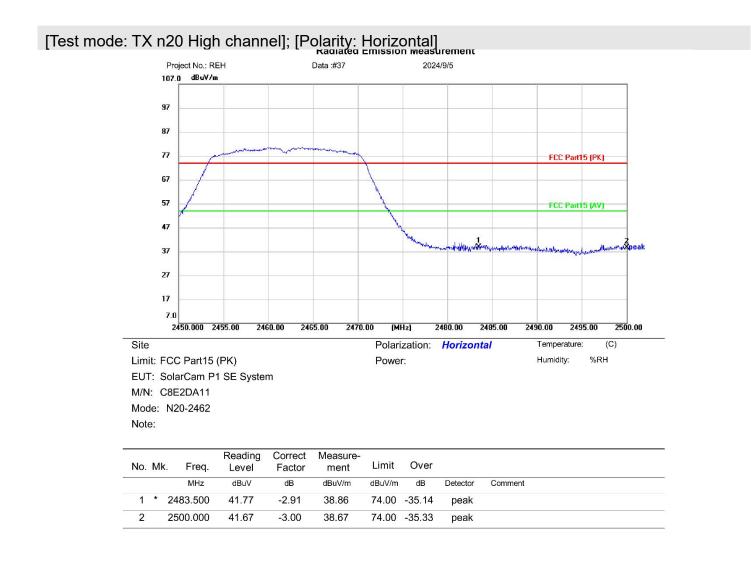
*:Maximum d	ata	x:Over limit	l:over margin			Reference Only
Receiver:	ESR	1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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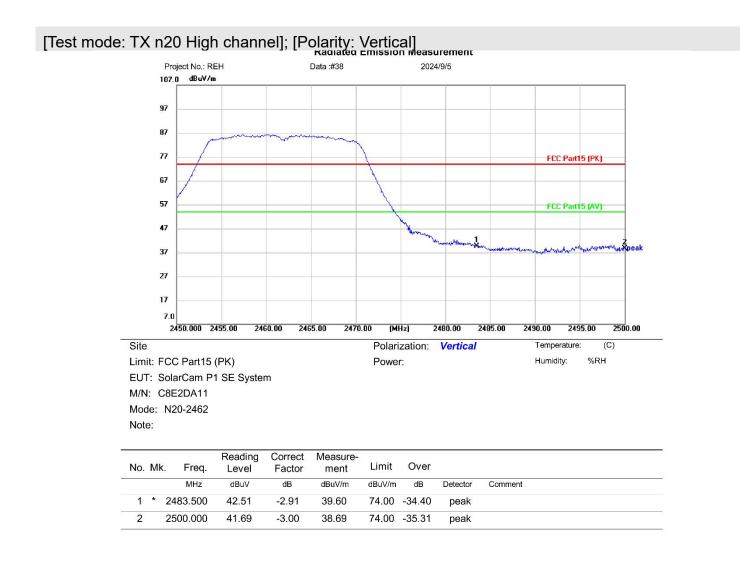
*:Maximum data		x:Over limit	!:over margin			Reference Only
Receiver:	ESR	1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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*:Maximum da	ata	x:Over limit	l:over margin			Reference Only
Receiver:	ESR_	_1		Spectrum Analyzer:	FSP40	

**Test Result: Pass** 

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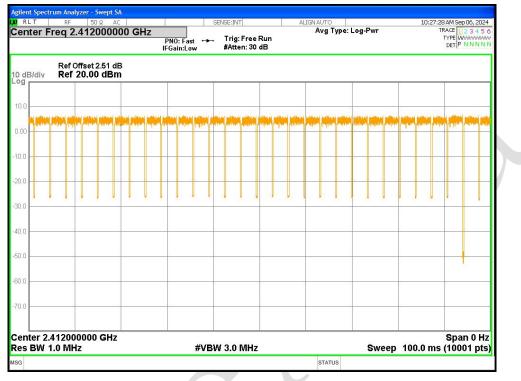
# 7 Appendix A

#### **Duty Cycle**

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	99.75	0.01
NVNT	b	2437	Ant1	100	0
NVNT	b	2462	Ant1	100	0
NVNT	g	2412	Ant1	100	0
NVNT	g	2437	Ant1	99.83	0.01
NVNT	g	2462	Ant1	100	0
NVNT	n20	2412	Ant1	99.74	0.01
NVNT	n20	2437	Ant1	100	0
NVNT	n20	2462	Ant1	100	0

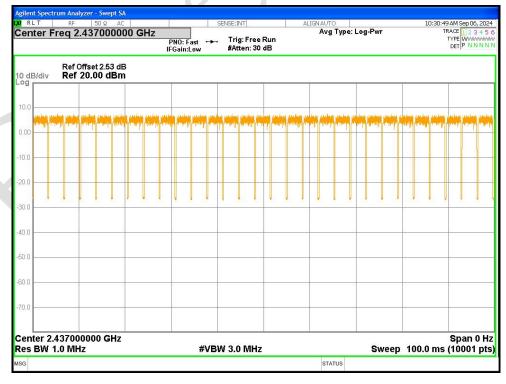
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## Duty Cycle NVNT b 2412MHz Ant1

# Duty Cycle NVNT b 2437MHz Ant1



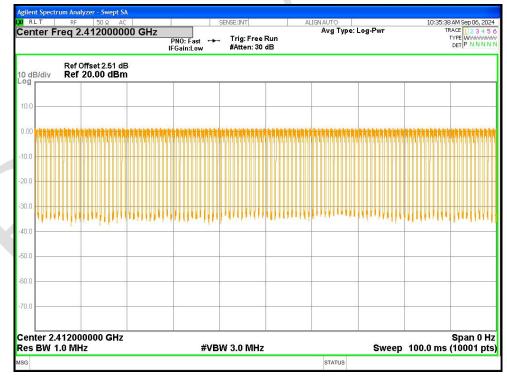
Duty Cycle NVNT b 2462MHz Ant1



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# Duty Cycle NVNT g 2412MHz Ant1



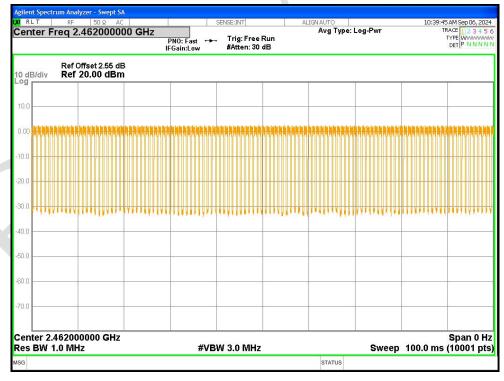
### Duty Cycle NVNT g 2437MHz Ant1



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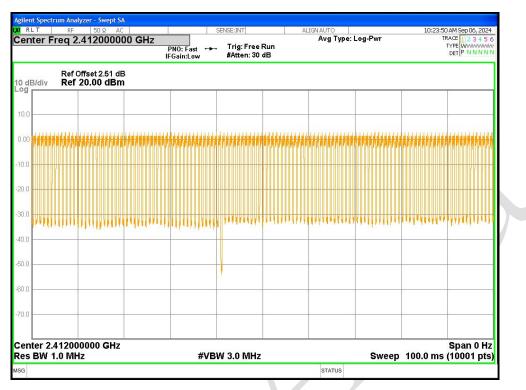
# Duty Cycle NVNT g 2462MHz Ant1



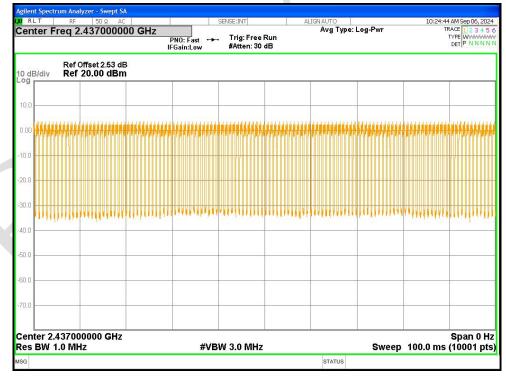
# Duty Cycle NVNT n20 2412MHz Ant1



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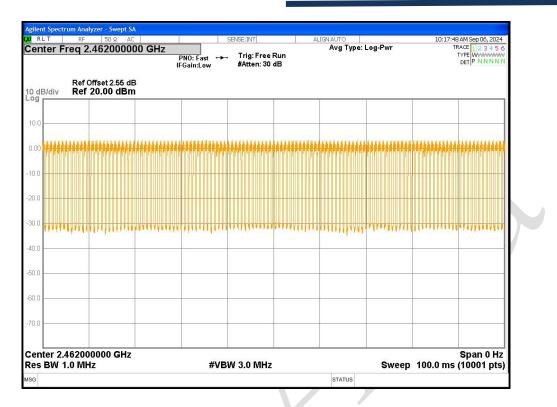
# Duty Cycle NVNT n20 2437MHz Ant1



### Duty Cycle NVNT n20 2462MHz Ant1



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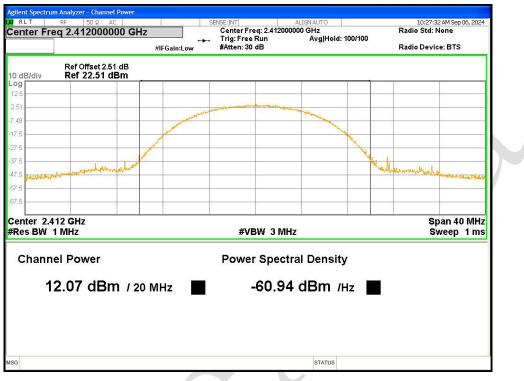
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#### **Maximum Conducted Output Power**

Condition	Mode	Frequency	Antenna	Conducted	Duty	Total	Limit	Verdict
		(MHz)		Power (dBm)	Factor	Power	(dBm)	
					(dB)	(dBm)		
NVNT	b	2412	Ant1	12.068	0.01	12.078	30	Pass
NVNT	b	2437	Ant1	12.795	0	12.795	30	Pass
NVNT	b	2462	Ant1	12.918	0	12.918	30	Pass
NVNT	g	2412	Ant1	12.447	0	12.447	30	Pass
NVNT	g	2437	Ant1	13.413	0.01	13.423	30	Pass
NVNT	g	2462	Ant1	13.527	0	13.527	30	Pass
NVNT	n20	2412	Ant1	12.629	0.01	12.639	30	Pass
NVNT	n20	2437	Ant1	13.53	0	13.53	30	Pass
NVNT	n20	2462	Ant1	13.419	0	13.419	30	Pass

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#### Power NVNT b 2412MHz Ant1

Power NVNT b 2437MHz Ant1



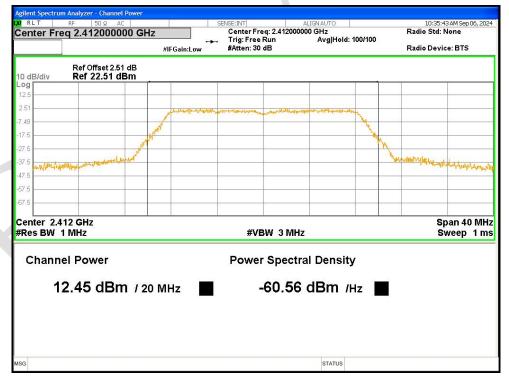
#### Power NVNT b 2462MHz Ant1



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### Power NVNT g 2412MHz Ant1

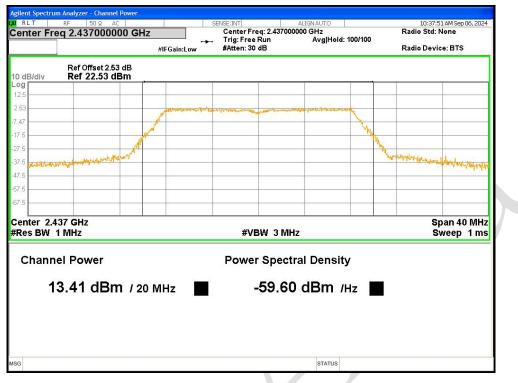


#### Power NVNT g 2437MHz Ant1

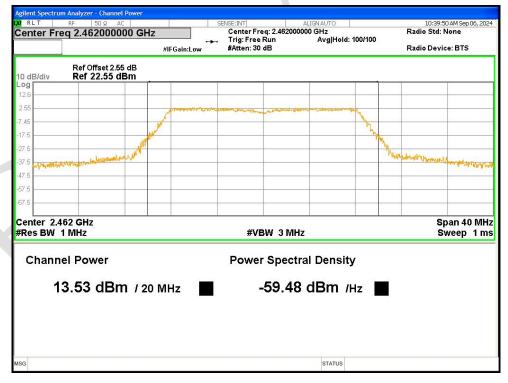
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### Power NVNT g 2462MHz Ant1

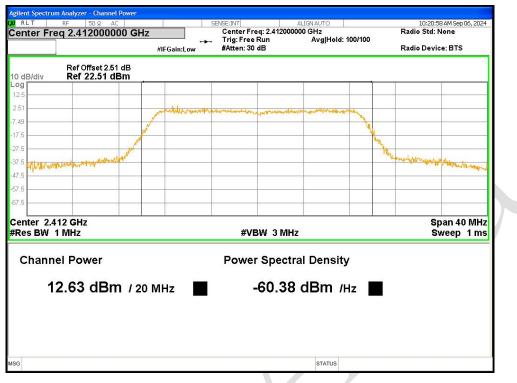


### Power NVNT n20 2412MHz Ant1

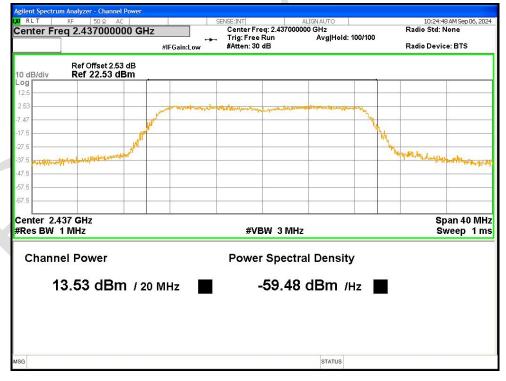
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### Power NVNT n20 2437MHz Ant1



#### Power NVNT n20 2462MHz Ant1

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#### -6dB Bandwidth

Condition	Mode	Frequency	Antenna -6 dB Bandwidth		Limit -6 dB Bandwidth	Verdict
		(MHz)		(MHz)	(MHz)	
NVNT	b	2412	Ant1	8.899	0.5	Pass
NVNT	b	2437	Ant1	8.4	0.5	Pass
NVNT	b	2462	Ant1	8.665	0.5	Pass
NVNT	g	2412	Ant1	16.456	0.5	Pass
NVNT	g	2437	Ant1	16.434	0.5	Pass
NVNT	g	2462	Ant1	16.462	0.5	Pass
NVNT	n20	2412	Ant1	17.655	0.5	Pass
NVNT	n20	2437	Ant1	17.746	0.5	Pass
NVNT	n20	2462	Ant1	17.665	0.5	Pass

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