





Spurious_2 412 MHz	Spurious_2 437 MHz				
Spectrum Analyzer 1 + Swept SA	🗱 Frequency 🔹 👬	Spectrum Analyzer 1		(	🗘 Frequency 🔹 👯
KEYSIGHT         Input 2: 50:0         Atten: 30:016         PNO Feat         alking Tippe Tower (RMS)         2: 3: 4: 5: 6           →         Align: Auto         Nor Corr         Prange Off         Gate Off         Align: Auto         Nor WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Center Frequency 13.265000000 GHz	KEYSIGHT Input RF Coupling DC Align: Auto NFE: Adaptive	Atten: 30 dB PNO: Fast # Preamp: Off Gate: Off A IF Gain: Low T Sig Track: Off		Center Frequency 13.265000000 GHz
1 Spectrum Mkr2 25.840 9 GHz Scale/Div 10 dB Ref Level 20.00 dBm -48.15 dBm	Span 26.4700000 GHz	1 Spectrum   Scale/Div 10 dB	Ref Level 20.00 dBm	Mkr2 25.807 1 GHz -48.82 dBm	Span 26.4700000 GHz
	Swept Span Zero Span				Swept Span Zero Span
	Full Span Start Freq	-10.0			Full Span Start Freq
-30.0 UL 47.5 dem	30.000000 MHz	-30.0		0L1-29.40 dBm	30.000000 MHz Stop Freg
	26.500000000 GHz	-50.0 -60.0 -70.0			26.500000000 GHz
Start 30 MHz #Video BW 300 kHz Stop 26.50 GHz #Res BW 100 kHz Sweep ~976 ms (40001 pts)	AUTO TUNE CF Step	Start 30 MHz #Res BW 100 kHz	#Video BW 300 kHz	Stop 26.50 GHz Sweep ~976 ms (40001 pts)	AUTO TUNE CF Step
5 Marker Table V	2.647000000 GHz	5 Marker Table V			2.647000000 GHz
Mode         Trace         Scale         X         Y         Function         Function Width         Function Value           1         N         1         f         2.407 0 GHz         2.426 dBm         2.426 dBm           2         N         1         f         2.407 0 GHz         2.426 dBm         2.426 dBm	Man Freq Offset	Mode         Trace         Scale         X           1         N         1         f         2.444.7 GH;           2         N         1         f         25.807.1 GH;	2 0.5961 dBm	tion Width Function Value	Man Freq Offset
2 m i zumororomz molioruznii	0 Hz X Axis Scale	2 N 1 1 23.507 1 GH	-40.02 UDIII		0 Hz X Axis Scale
6	Log	6			Log
	Signal Track (Span Zoom)	Ct 16, 2021 4:20:00 AM			Signal Track (Span Zoom)
Spurious_2 462 MHz			-		
Swept SA	Center Frequency				
Couping DC Corr Corr Preamp Off Gate Off Anglidid 100100 MWWWWW Align Auto Free Rein Internet Network Sig Track Off PN N N N N N	13.265000000 GHz				
1 Spectrum         Mkr2         25.754 2 GHz           Scale/Div 10 dB         Ref Level 20.00 dBm         -47.48 dBm	26.4700000 GHz				
	Zero Span Full Span				
-100 -200 000	Start Freq 30.000000 MHz				
400 400 500	Stop Freq		_		
	26.500000000 GHz		_		
Start 30 MHz #Video BW 300 kHz Stop 26.50 GHz #Res BW 100 kHz Sweep ~976 ms (40001 pts)	CF Step				
5 Marker Table  Mode Trace Scale X Y Function Function Width Function Value	2.647000000 GHz				
1 N 1 f 2.456 0 GHz 1.394 dBm 2 N 1 f 25.754 2 GHz -47.48 dBm	Freq Offset 0 Hz				
5	X Axis Scale				
	Log Lin Signal Track				
CHI CA CHI CHI CHI A2220 AM () CHI	(Span Zoom)				



# 3.6 AC Conducted Emissions (150 kHz to 30 MHz)

## 3.6.1 Regulation

\$15.207(a): Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

	Conducted limit (dBµV)			
Frequency of emission (MHz)	Quasi-peak	Average		
0.15-0.5	66 to 56*	56 to 46*		
0.5-5	56	46		
5-30	60	50		

\* Decreases with the logarithm of the frequency.

#### 3.6.2 Test Procedure

- a) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm / 50  $\mu$ H of coupling impedance for the measuring instrument.
- b) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c) The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit 20 dB) was not recorded.

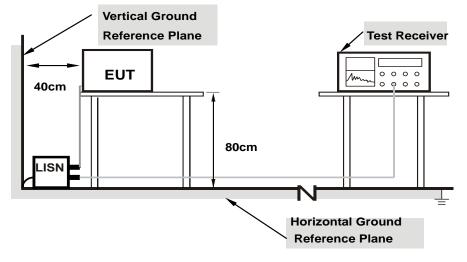
**Remark** : The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz – 30 MHz.

#### 3.6.3 Deviation from Test Standard

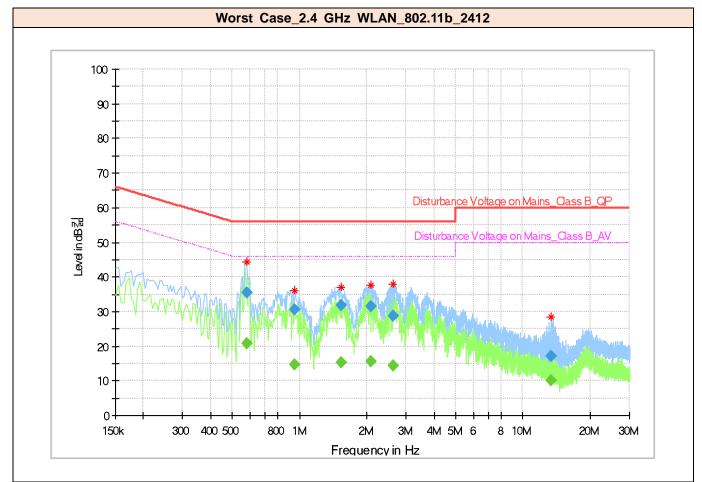
No deviation.



### 3.6.4 Test Setup







#### 3.6.5 **Test Result**

Frequency [MHz]	Quasi Reading Value [dBuV]	Quasi Peak [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Pol	Azimuth [deg]	Correction Factor [dB/m]
34.32	46.30	24.70	40.00	15.30	103	V	346	-21.60
43.63	46.96	28.16	40.00	11.84	100	V	240	-18.80
49.98	51.42	32.72	40.00	7.28	100	V	216	-18.70
59.97	40.77	20.67	40.00	19.33	100	V	20	-20.10
74.14	41.94	16.84	40.00	23.16	103	V	287	-25.10
374.98	36.53	20.73	46.02	25.29	100	V	254	-15.80
437.50	40.21	25.81	46.02	20.21	317	V	78	-14.40
562.53	41.66	29.36	46.02	16.66	250	Н	182	-12.30

#### Remarks

1. Final Value (QP and/or CAV) = Reading Value (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)

Margin (QP and/or CAV) = Limit – Final Value (QP and/or CAV) QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor 2. Two graphs measured for both Live (L1) and Neutral (N) of the LISN are combined into one graph.



# **Appendix – Information of the Testing Laboratories**

We, Bureau Veritas Consumer Products Services Korea. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

Test Firm Name : BV CPS ADT Korea Ltd.

Address : Innoplex No.2 106, Sinwon-ro 306, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675 KOREA

FCC

Designation Number : KR0158 Test Firm Registration Number : 666061

ISED

Designation Number : KR0158 Test Firm Registration Number : 25944

If you have any comments, please feel free to contact us at the following:

Email: <u>Meyer.Shin@bureauveritas.com</u> Web Site: <u>www.bureauveritas.co.kr/cps/eaw</u>

The address and road map of all our labs can be found in our web site also.

# - End of report -