



# **FCC Radio Test Report**

# **FCC ID: 2APRZ-FILTER**

This report concerns: Original Grant

**Project No.** : 2203C186

**Equipment**: Bluetooth USB dual-mode conference machine

Brand Name : AUDEZE
Test Model : FILTER
Series Model : N/A

Applicant : Audeze LLC.

Address : 3410 S. Susan Street, Santa Ana CA 92704, U.S.A

Manufacturer : Audeze LLC.

Address : 3410 S. Susan Street, Santa Ana CA 92704, U.S.A

**Factory** : Ione Electronic technology co.,ltd.

Address : Yong Jun Er Rd, Jin Qian Ling Ind District, Jitigang, Huang Jiang

Town, Dong Guan, Guang Dong Province, China.

Date of Receipt : Apr. 20, 2022

**Date of Test** : May 12, 2022 ~ Aug. 02, 2022

**Issued Date** : Aug. 24, 2022

Report Version : R00

Test Sample : Engineering Sample No.: DG2022051217 for conducted,

DG2022051216 for radiated&conducted emissions.

Standard(s) : FCC CFR Title 47, Part 15, Subpart C

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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lac-MRA



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BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective. Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.



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# **REPORT ISSUED HISTORY**

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2203C186	R00	Original Report.	Aug. 24, 2022	Valid



### 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C				
Standard(s) Section	Test Item Test Result Judg			Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	
15.247(a)(2)	Bandwidth	APPENDIX E	PASS	
15.247(b)(3)	Maximum Output Power	APPENDIX F	PASS	
15.247(d)	Conducted Spurious Emission	APPENDIX G	PASS	
15.247(e)	Power Spectral Density	APPENDIX H	PASS	
15.203	Antenna Requirement		PASS	Note(2)

### NOTE:

- (1) "N/A" denotes test is not applicable to this device.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.



### 1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town Dongguan City, Guangdong 523792 People's Republic of China.

BTL's Registration Number for FCC: 357015 BTL's Designation Number for FCC: CN1240

### 1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

### A. AC power line conducted emissions Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.60

### B. Radiated emissions Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03	CICDD	30MHz ~ 200MHz	V	4.36
		30MHz ~ 200MHz	Н	3.32
(3m)	CISPR	200MHz ~ 1,000MHz	V	4.08
		200MHz ~ 1,000MHz	Н	3.96

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB03	-CB03	1GHz ~ 6GHz	3.80
(3m)	CISPR	6GHz ~ 18GHz	4.82

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB03	CISPR	18 ~ 26.5 GHz	3.62
(1m)	CIOPK	26.5 ~ 40 GHz	4.00

### C. Other Measurement:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Output Power	±0.95 dB
Conducted Spurious Emission	±2.71 dB
Power Spectral Density	±0.86 dB
Temperature	±0.08 °C
Humidity	±1.5%

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.



# 1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	24°C	58%	AC 120V/60Hz	Rod Tang
Radiated Emissions-9 kHz to 30 MHz	24°C	58%	DC 5V	Rod Tang
Radiated Emissions-30 MHz to 1000 MHz	23°C	52%	DC 5V	Chen Mo
Radiated Emissions-Above 1000 MHz	23°C	52%	DC 5V	Chen Mo
Bandwidth	25°C	45%	DC 5V	Kwok Guo
Maximum Output Power	25°C	45%	DC 5V	Kwok Guo
Conducted Spurious Emission	25°C	45%	DC 5V	Kwok Guo
Power Spectral Density	25°C	45%	DC 5V	Kwok Guo



# 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Bluetooth USB dual-mode conference machine
Brand Name	AUDEZE
Test Model	FILTER
Series Model	N/A
Model Difference(s)	N/A
Software Version	V37-2022-04-08-2-PVT
Hardware Version	V1.3
Power Source	1# Supplied from PC USB port. 2# Supplied from Lithium-ion battery Model: FT593545P
Power Rating	1# DC 5V 2# DC 3.7V, 1050mAh
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Type	GFSK
Bit Rate of Transmitter	1Mbps, 2Mbps
Max. Output Power	2Mbps: 8.71 dBm (0.0074 W)

### Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

### 2. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	20	2442
01	2404	21	2444
02	2406	22	2446
03	2408	23	2448
04	2410	24	2450
05	2412	25	2452
06	2414	26	2454
07	2416	27	2456
08	2418	28	2458
09	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

### 3. Table for Filed Antenna:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Unictron Technologies Corp.	H2U38D1E1B0100	Chip	N/A	1.5

Note:

The antenna gain is provided by the manufacturer.



### 2.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description	
Mode 1	TX Mode_1Mbps Channel 00/19/39	
Mode 2	TX Mode_2Mbps Channel 00/19/39	
Mode 3	TX Mode_2Mbps Channel 39	

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test		
Final Test Mode Description		
Mode 3	TX Mode_2Mbps Channel 39	

Radiated emissions test - Below 1GHz		
Final Test Mode	Description	
Mode 3	TX Mode_2Mbps Channel 39	

Radiated emissions test - Above 1GHz		
Final Test Mode Description		
Mode 1	TX Mode_1Mbps Channel 00/19/39	
Mode 2	TX Mode_2Mbps Channel 00/19/39	

Conducted test		
Final Test Mode Description		
Mode 1 TX Mode_1Mbps Channel 00/19/39		
Mode 2	TX Mode_2Mbps Channel 00/19/39	

### Note:

- (1) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
- (2) For AC power line conducted emissions and radiated emissions below 1 GHz test, the 2Mbps Channel 39 is found to be the worst case and recorded.

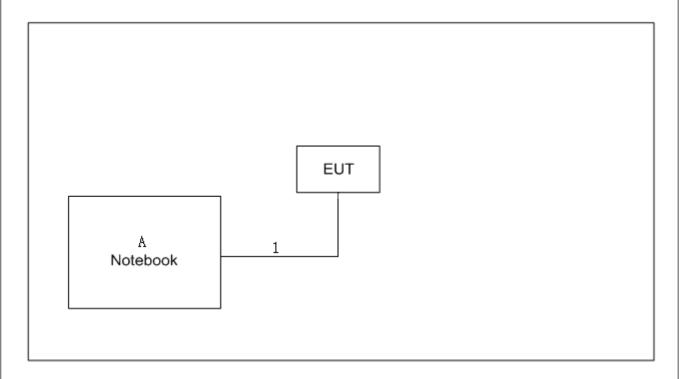
### 2.3 PARAMETERS OF TEST SOFTWARE

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

Test Software Version	BlueSuite.WIN.3.3 Installer_3.3.7.1018		
Frequency (MHz)	2402	2440	2480
1Mbps	Default	Default	Default
2Mbps	Default	Default	Default



# 2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



# 2.5 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remark
^	Notebook	Lenovo	V310-14ISK	LR07GZNB	Radiated Emissions-30 MHz to 1000 MHz & Above 1000 MHz
A	Notebook	HONOR	14SER5 3500	N/A	Radiated Emissions-9 kHz to 30 MHz &Conducted Emissions

Ite	em	Cable Type	Shielded Type	Ferrite Core	Length
	1	USB Cable	NO	NO	0.8m



### 3. AC POWER LINE CONDUCTED EMISSIONS

### **3.1 LIMIT**

Frequency of Emission (MHz)	Limit (dl	ΒμV)
Frequency of Emission (Miriz)	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

### Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

### 3.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

The following table is the setting of the receiver:

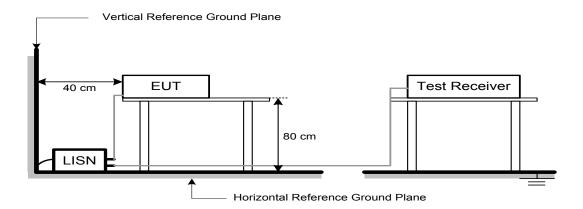
Receiver Parameters	Setting
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

### 3.3 DEVIATION FROM TEST STANDARD

No deviation.



### 3.4 TEST SETUP



### 3.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

### 3.6 TEST RESULTS

Please refer to the APPENDIX A.

### Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of <code>Note</code>. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a " \* " marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150 kHz to 30 MHz.



### 4. RADIATED EMISSIONS

### **4.1 LIMIT**

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000 MHz)

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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

### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Fraguency (MHz)	(dBuV/m at 3 m)	
Frequency (MHz)	Peak	Average
Above 1000	74	54

### Note:

- (1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).



### **4.2 TEST PROCEDURE**

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1 GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

The following table is the setting of the receiver:

Spectrum Parameters	Setting	
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz	
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz	
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz	

Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1 MHz / 3 MHz for PK value
(Emission in restricted band)	1 MHz / 1/T Hz for AVG value

Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector
Start ~ Stop Frequency	1 GHz~26.5 GHz for PK/AVG detector

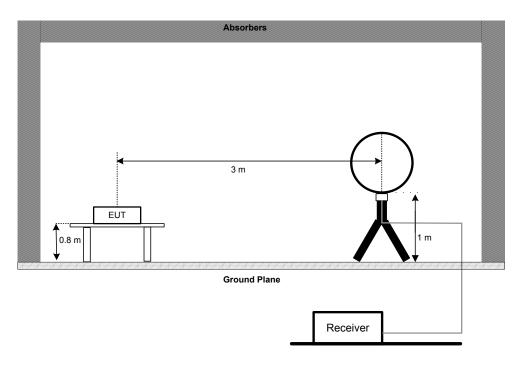


# 4.3 DEVIATION FROM TEST STANDARD

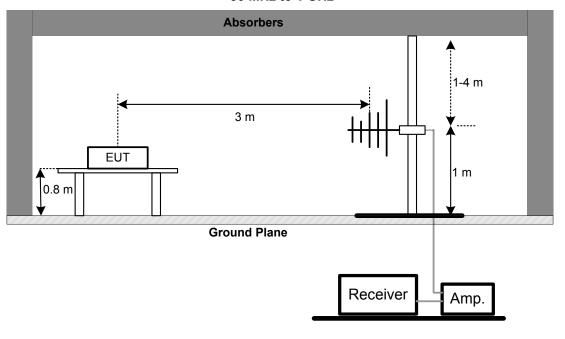
No deviation.

# 4.4 TEST SETUP

### 9 kHz to 30 MHz

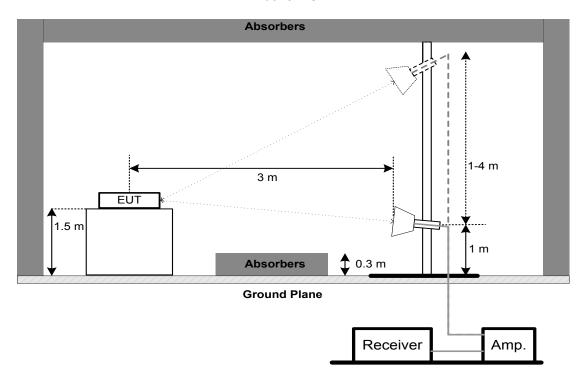


### 30 MHz to 1 GHz





### **Above 1 GHz**



### 4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 4.6 TEST RESULT - 9 kHz TO 30 MHz

Please refer to the APPENDIX B.

### Remark:

- (1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

# 4.7 TEST RESULT - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C.

### 4.8 TEST RESULT - ABOVE 1000 MHz

Please refer to the APPENDIX D.

### Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



### 5. BANDWIDTH

### **5.1 LIMIT**

Section	Test Item	Limit
FCC 15.247(a)(2)	6 dB Bandwidth	>= 500 kHz
	99% Emission Bandwidth	-

### **5.2 TEST PROCEDURE**

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. The following table is the setting of the spectrum analyzer:

### For 6 dB Bandwidth:

Spectrum Parameters	Setting	
Span Frequency	> Measurement Bandwidth	
RBW	100 kHz	
VBW	300 kHz	
Detector	Peak	
Trace	Max Hold	
Sweep Time	Auto	
Sweep Time	Auto	

### For 99% Emission Bandwidth:

Of 33 /0 Efficación Danawidti	11	
Spectrum Parameters	Setting	
Span Frequency	Between 1.5 times and 5.0 times the OBW	
RBW	30 kHz	
VBW	100 kHz	
Detector	Peak	
Trace	Max Hold	
Sweep Time	Auto	

### **5.3 DEVIATION FROM STANDARD**

No deviation.

### **5.4 TEST SETUP**



### 5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### **5.6 TEST RESULTS**

Please refer to the APPENDIX E.



### **6. MAXIMUM OUTPUT POWER**

### **6.1 LIMIT**

Section	Test Item	Limit
FCC 15.247(b)(3)	Maximum Output Power	1.0000 watt or 30.00 dBm

### **6.2 TEST PROCEDURE**

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. The following table is the setting of the spectrum analyzer:

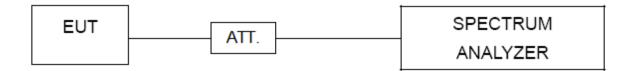
Spectrum Parameters	Setting	
Span Frequency	At least 1.5 times the OBW	
RBW	1% to 5% of the OBW, not to exceed 1 MHz	
VBW	≥ 3×RBW	
Detector	RMS	
Trace	Max Hold	
Sweep Time		

Note: Where T is defined in 11.6 of ANSI C63.10-2013.

### 6.3 DEVIATION FROM STANDARD

No deviation.

### **6.4 TEST SETUP**



### **6.5 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

### **6.6 TEST RESULTS**

Please refer to the APPENDIX F.



### 7. CONDUCTED SPURIOUS EMISSION

### **7.1 LIMIT**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required.

### 7.2 TEST PROCEDURE

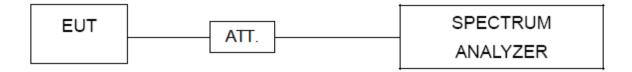
- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting	
Start Frequency	30 MHz	
Stop Frequency	26.5 GHz	
RBW	100 kHz	
VBW	300 kHz	
Detector	Peak	
Trace	Max Hold	
Sweep Time	Auto	

### 7.3 DEVIATION FROM STANDARD

No deviation.

### 7.4 TEST SETUP



### 7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 7.6 TEST RESULTS

Please refer to the APPENDIX G.



### 8. POWER SPECTRAL DENSITY

# **8.1 LIMIT**

Section	Test Item	Limit
FCC 15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)

### **8.2 TEST PROCEDURE**

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting			
Span Frequency	2 MHz (1 Mbps) / 4 MHz (2 Mbps)			
RBW	3 kHz			
VBW	10 kHz			
Detector	Peak			
Trace	Max Hold			
Sweep Time	Auto			

### 8.3 DEVIATION FROM STANDARD

No deviation.

### 8.4 TEST SETUP



### **8.5 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

### **8.6 TEST RESULTS**

Please refer to the APPENDIX H.



# 9. MEASUREMENT INSTRUMENTS LIST

	AC Power Line Conducted Emissions										
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until						
1	EMI Test Receiver	R&S	ESCI	100382	Jan. 22, 2023						
2	LISN	EMCO	3816/2	52765	Jan. 23, 2023						
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Jan. 23, 2023						
4	50Ω Terminator	SHX	TF5-3	15041304	Jan. 22, 2023						
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A						
6	Cable	N/A	RG223	12m	Mar. 08, 2023						
7	643 Shield Room	ETS	6*4*3	N/A	N/A						

	Radiated Emissions - 9 kHz to 30 MHz										
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until						
1	MXE EMI Receiver	Keysight	N9038A	MY56400091	Jan. 22, 2023						
2*	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Aug. 23, 2024						
3	Cable	N/A	RG 213/U (9kHz~1GHz)	N/A	Jun. 17, 2022 Jun. 17, 2023						
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A						
5	966 Chamber Room	ETS	9*6*6	N/A	Jul. 14, 2022 Jul. 14, 2023						

	Radiated Emissions - 30 MHz to 1 GHz									
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until					
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 03, 2023					
2	Amplifier	HP	8447D	2944A08742	Jan. 22, 2023					
3	Cable	Cable emci LMR-400 N/A		N/A	Nov. 30, 2022					
4	Controller	CT	SC100	N/A	N/A					
5	Controller	MF	MF-7802	MF780208416	N/A					
6	Receiver	Agilent	N9038A	MY52130039	Jan. 22, 2023					
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A					
8	966 Chamber Room	RM	9*6*6	N/A	Jul. 15, 2022 Jul. 15, 2023					



		Radiated E	missions - Above 1	GHz	
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Horn Antenna	ARA	DRG-118A	16554	Apr. 18, 2023
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	May 27, 2022 May 27, 2023
3	Amplifier	Agilent	8449B	3008A02584	Jul. 03, 2022 Jul. 03, 2023
4	Controller	CT	SC100	N/A	N/A
5	Controller	MF	MF-7802	MF780208416	N/A
6	Receiver	r Agilent N9038A MY52130039		Jan. 22, 2023	
7	EXA Spectrum Analyzer	Keysight	N9010A	MY56480488	Jan. 22, 2023
8*	Low Noise Amplifier	CONNPHY	CLN-18G40G-4330 -K	619413	Jul. 05, 2022 Jul. 05, 2025
9	Cable	Talent microwave	A81-SMAMSMAM- 12.5M	N/A	Oct. 15, 2022
10	Cable	Talent microwave	A40-2.92M2.92M-2. 5M	N/A	Nov. 30, 2022
11	Filter	STI	STI15-9912	N/A	Jul. 03, 2022 Jul. 03, 2023
12	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
13	966 Chamber Room RM		9*6*6	N/A	Jul. 15, 2022 Jul. 15, 2023

	Bandwidth & Maximum Output Power & Power Spectral Density & Conducted Spurious Emission									
Item	em Kind of Equipment Manufacturer Type No. Serial No. Calibrated until									
1	Spectrum Analyzer	Jul 03 3								
2	Attenuator	WOKEN	6SM3502	VAS1214NL	N/A					
3	3 RF Cable Tongkaichuan N/A N/A N/A									
4	DC Block	Mini	N/A	N/A	N/A					

Remark: "N/A" denotes no model name, serial no. or calibration specified.

"\*" calibration period of equipment list is three year.

Except \* item, all calibration period of equipment list is one year.



# 10. EUT TEST PHOTO



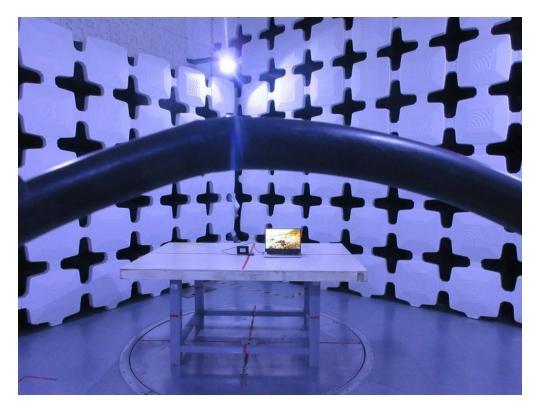


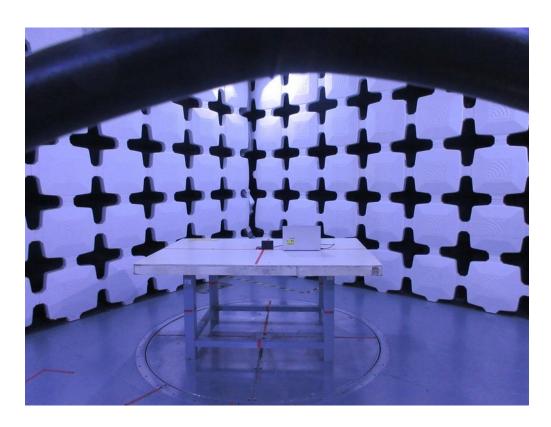




# Radiated Emissions Test Photos

# 9 kHz to 30 MHz

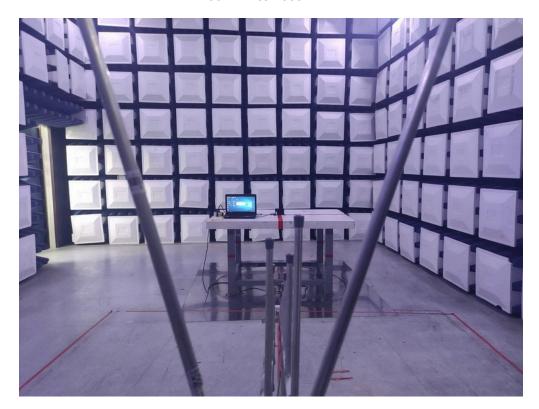


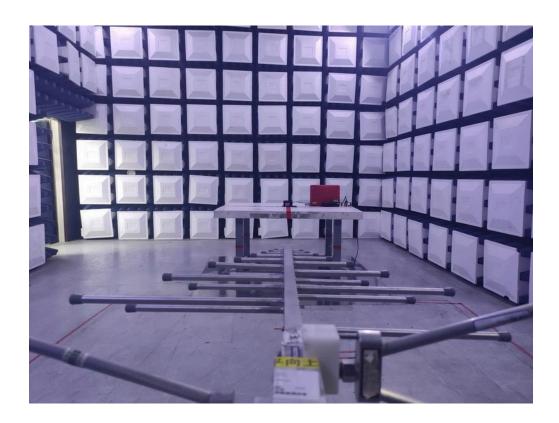




# **Radiated Emissions Test Photos**

# 30 MHz to 1000 MHz







# **Radiated Emissions Test Photos**

# Above 1 GHz







# **Conducted Test Photos**



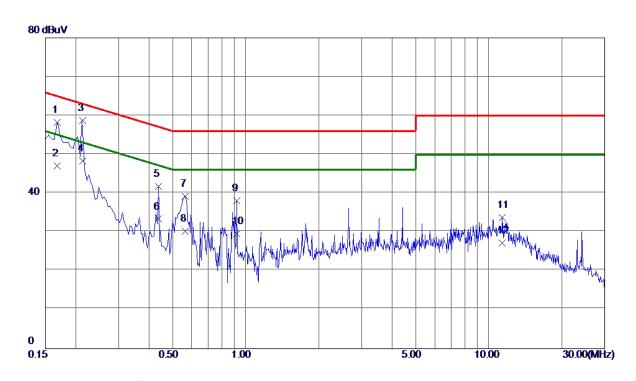




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS	





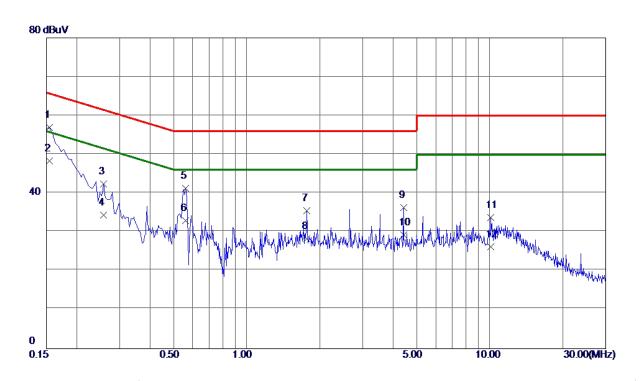


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1680	48. 58	9. 67	58. 25	65. 06	-6. 81	QP	
2	0. 1680	37. 30	9. 67	46. 97	55.06	-8. 09	AVG	
3 *	0. 2130	49. 11	9. 69	58. 80	63.09	-4. 29	QP	
4	0. 2130	38. 60	9. 69	48. 29	53.09	-4. 80	AVG	
5	0. 4380	32. 06	9. 76	41.82	57. 10	-15. 28	QP	
6	0. 4380	23. 60	9. 76	33. 36	47. 10	-13. 74	AVG	
7	0. 5639	29. 36	9. 78	39. 14	56.00	-16. 86	QP	
8	0. 5639	20. 40	9. 78	30. 18	46.00	-15. 82	AVG	
9	0. 9195	28. 33	9. 81	38. 14	56.00	-17. 86	QP	
10	0. 9195	19. 80	9. 81	29. 61	46.00	-16. 39	AVG	
11	11. 3865	23. 18	10. 51	33. 69	60.00	-26. 31	QP	
12	11. 3865	16. 70	10. 51	27. 21	50.00	-22. 79	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.







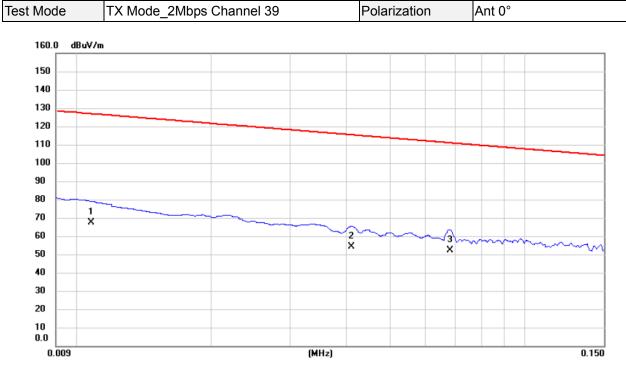
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1545	47. 30	9. 71	57. 01	65. 75	-8. 74	QP	
2 *	0. 1545	38. 60	9. 71	48. 31	55. 75	-7. 44	AVG	
3	0. 2580	32. 62	9. 75	42. 37	61. 50	-19. 13	QP	
4	0. 2580	24. 60	9. 75	34. 35	51. 50	-17. 15	AVG	
5	0. 5595	31. 49	9.81	41. 30	56.00	<b>-14.</b> 70	QP	
6	0. 5595	23. 20	9. 81	33. 01	46.00	-12. 99	AVG	
7	1.7700	25. 54	9. 91	35. 45	56.00	-20. 55	QP	
8	1.7700	18. 40	9. 91	28. 31	46.00	-17. 69	AVG	
9	4. 4250	26. 15	10. 11	36. 26	56.00	-19. 74	QP	
10	4. 4250	19. 10	10. 11	29. 21	46.00	-16. 79	AVG	
11	10. 1085	23. 25	10. 47	33. 72	60.00	-26. 28	QP	
12	10. 1085	15. 70	10. 47	26. 17	50.00	-23. 83	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



# **APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ**

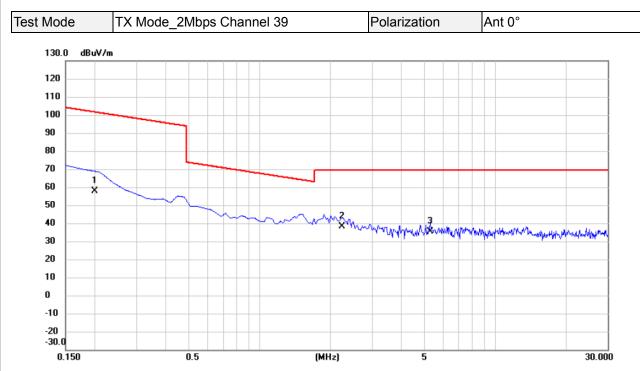




No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.0108	50.12	17.18	67.30	126.94	-59.64	AVG	
2	0.0410	40.35	13.81	54.16	115.35	-61.19	AVG	
3 *	0.0680	38.56	13.61	52.17	110.95	-58.78	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

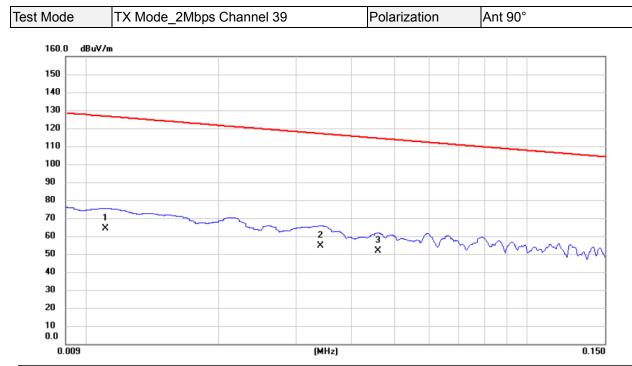




No.	Mk.	Freq.	Reading Level		Measure- ment		Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1995	44.13	13.87	58.00	101.61	-43.61	AVG	
2	*	2.2395	25.64	12.39	38.03	69.54	-31.51	QP	
3		5.2842	23.15	12.30	35.45	69.54	-34.09	QP	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

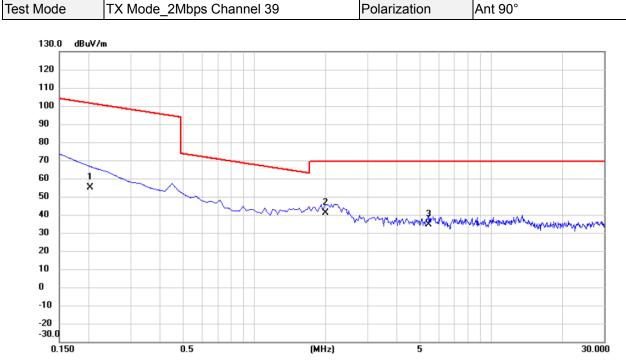




No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0111	47.21	17.09	64.30	126.70	-62.40	AVG	
2		0.0340	40.56	13.97	54.53	116.98	-62.45	AVG	
3		0.0460	38.17	13.69	51.86	114.35	-62.49	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





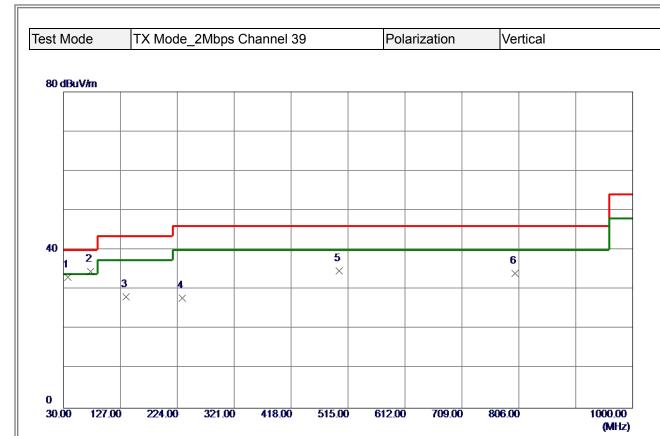
No.	Mk.	Freq.	Reading Level		Measure- ment		Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1		0.2028	41.26	13.87	55.13	101.46	-46.33	AVG		
2	*	2.0007	28.46	12.45	40.91	69.54	-28.63	QP		
3		5.4333	22.31	12.31	34.62	69.54	-34.92	QP		

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ



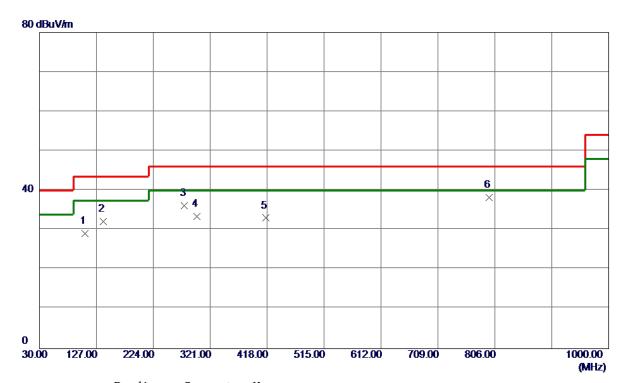


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	37. 2750	47. 91	-14. 75	33. 16	40.00	-6. 84	Peak	
2 *	76. 0750	52. 08	-17. 55	34. 53	40.00	-5. 47	Peak	
3	136. 7000	41. 26	-13. 05	28. 21	43. 50	-15. 29	Peak	
4	232. 2450	41. 67	-13. 81	27. 86	46.00	-18. 14	Peak	
5	499. 9650	41. 21	-6. 54	34. 67	46.00	-11. 33	Peak	
6	799. 6950	34. 82	-0. 69	34. 13	46. 00	-11. 87	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.







Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
108. 0850	44. 51	-15. 33	29. 18	43. 50	-14. 32	Peak	
138. 6400	45. 16	-12. 95	32. 21	43. 50	-11. 29	Peak	
277. 3500	47. 89	-11. 73	36. 16	46.00	<b>-9.84</b>	Peak	
298. 6900	44. 36	-10. 93	33. 43	46.00	-12.57	Peak	
415. 5750	41. 39	-8. 35	33. 04	46.00	-12. 96	Peak	
796. 7849	38. 97	-0. 76	38. 21	46.00	-7. 79	Peak	
	MHz 108. 0850 138. 6400 277. 3500 298. 6900 415. 5750	Freq. Level	MHz         dBuV/m         dB           108.0850         44.51         -15.33           138.6400         45.16         -12.95           277.3500         47.89         -11.73           298.6900         44.36         -10.93           415.5750         41.39         -8.35	MHz         dBuV/m         dB         dBuV/m           108.0850 44.51         -15.33         29.18           138.6400 45.16         -12.95         32.21           277.3500 47.89         -11.73         36.16           298.6900 44.36         -10.93         33.43           415.5750 41.39         -8.35         33.04	MHz         dBuV/m         dB         dBuV/m         dBuV/m           108.0850         44.51         -15.33         29.18         43.50           138.6400         45.16         -12.95         32.21         43.50           277.3500         47.89         -11.73         36.16         46.00           298.6900         44.36         -10.93         33.43         46.00           415.5750         41.39         -8.35         33.04         46.00	MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB           108.0850 44.51         -15.33         29.18         43.50         -14.32           138.6400 45.16         -12.95         32.21         43.50         -11.29           277.3500 47.89         -11.73         36.16         46.00         -9.84           298.6900 44.36         -10.93         33.43         46.00         -12.57           415.5750 41.39         -8.35         33.04         46.00         -12.96	MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector           108. 0850 44. 51         -15. 33         29. 18         43. 50         -14. 32         Peak           138. 6400 45. 16         -12. 95         32. 21         43. 50         -11. 29         Peak           277. 3500 47. 89         -11. 73         36. 16         46. 00         -9. 84         Peak           298. 6900 44. 36         -10. 93         33. 43         46. 00         -12. 97         Peak           415. 5750 41. 39         -8. 35         33. 04         46. 00         -12. 96         Peak

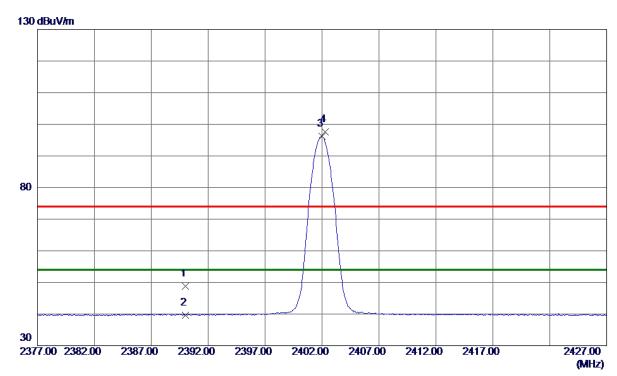
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ	



Test Mode	TX 2402 MHz _CH00_1Mbps	Polarization	Vertical

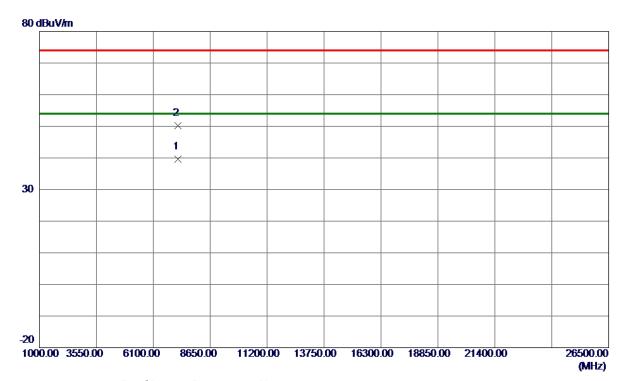


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	40. 86	7. 98	48. 84	74.00	-25. 16	Peak	
2	2390. 0000	31. 70	7. 98	39. 68	54.00	-14. 32	AVG	
3 *	2402. 0000	88. 14	8. 00	96. 14	54.00	42. 14	AVG	No Limit
4	2402. 3000	89. 61	8. 00	97. 61	74.00	23. 61	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.





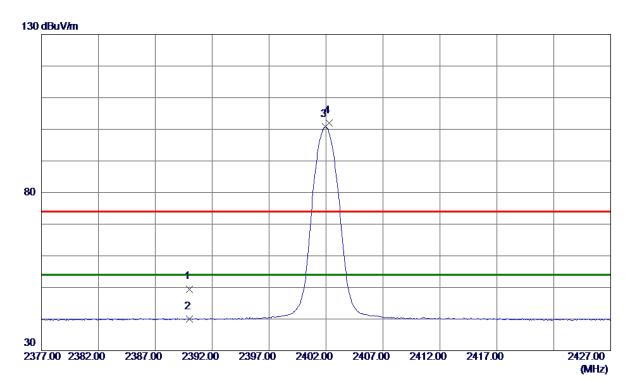


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7205. 1550	29. 50	10.02	39. 52	<b>54.00</b>	-14. 48	AVG	
2	7206. 8250	40.09	10.02	50. 11	74.00	-23.89	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2402 MHz _CH00_1Mbps	Polarization	Horizontal

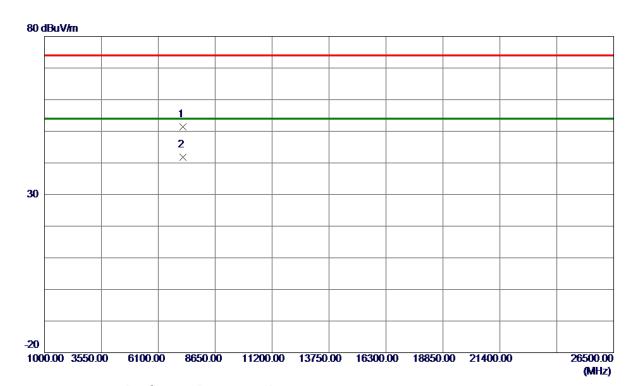


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	41. 52	7. 98	49. 50	74.00	-24. 50	Peak	
2	2390. 0000	32. 02	7. 98	40.00	54.00	-14. 00	AVG	
3 *	2401. 9500	92. 71	8. 00	100. 71	54.00	46. 71	AVG	No Limit
4	2402. 3000	94. 10	8. 00	102. 10	74.00	28. 10	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2402 MHz CH00 1Mbps	Polarization	Horizontal

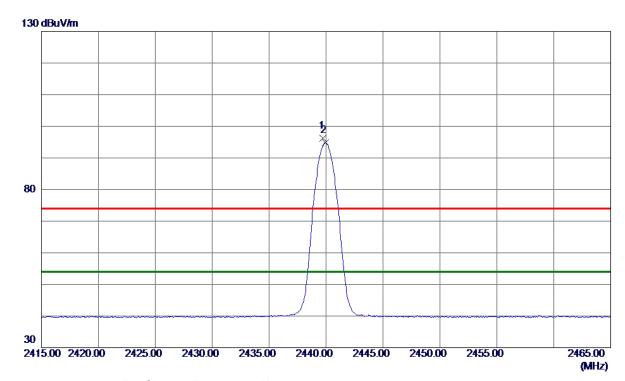


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7205. 0500	41. 31	10.02	51. 33	74.00	-22. 67	Peak	
2 *	7205. 2400	31. 70	10.02	41.72	<b>54.00</b>	-12. 28	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19_1Mbps	Polarization	Vertical

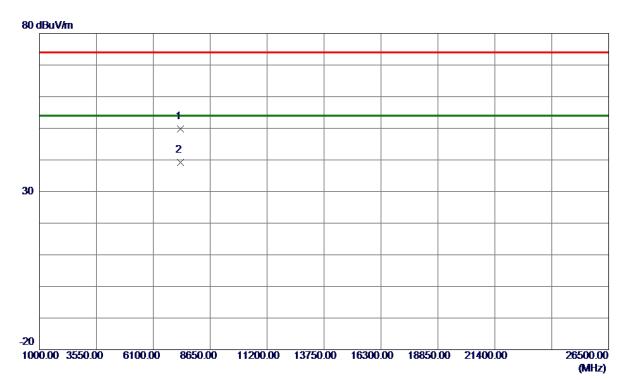


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2439. 7500	88. 10	8. 06	96. 16	74.00	22. 16	Peak	No Limit
2 *	2439. 9500	86. 72	8. 06	94. 78	<b>54.00</b>	40. 78	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19	_1Mbps	Polarization	Vertical

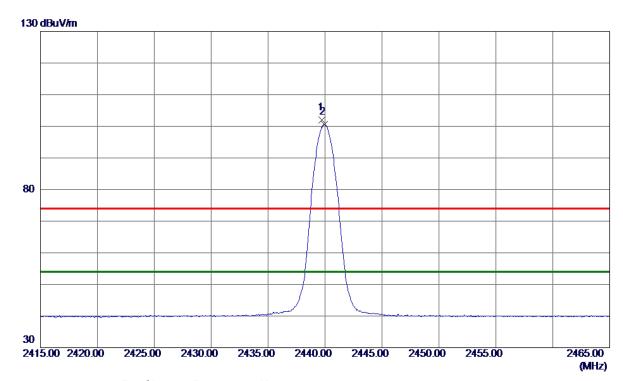


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7319. 5450	39. 72	10. 14	49.86	74.00	-24. 14	Peak	
2 *	7320. 1650	29. 08	10. 14	39. 22	54. 00	-14. 78	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19_1Mbps	Polarization	Horizontal

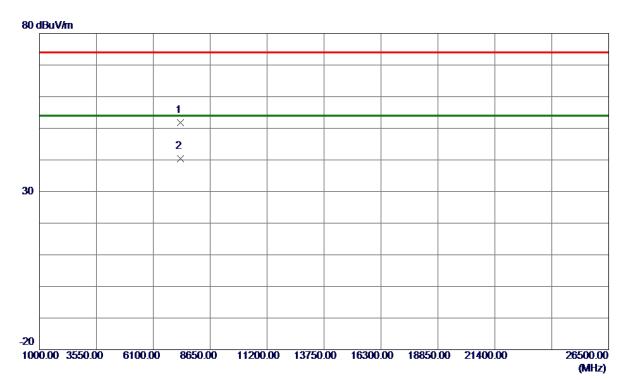


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2439. 7500	93. 86	8. 06	101. 92	74.00	27. 92	Peak	No Limit
2 *	2439. 9500	92. 52	8. 06	100. 58	<b>54.00</b>	46. 58	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz CH19 1Mbps	Polarization	Horizontal

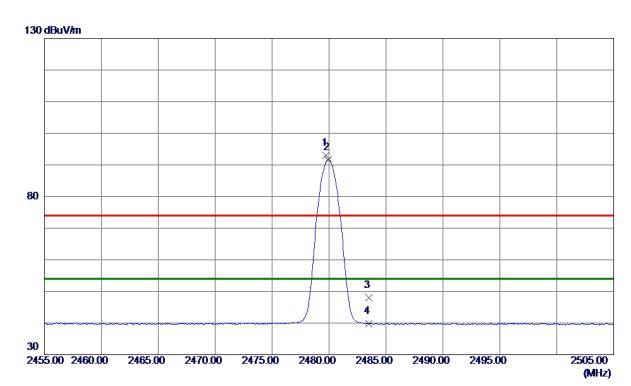


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7319. 6300	41. 61	10. 14	51. 75	74.00	-22. 25	Peak	
2 *	7321. 2750	30. 30	10. 14	40. 44	54. 00	-13. 56	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz _CH39_1Mbps	Polarization	Vertical

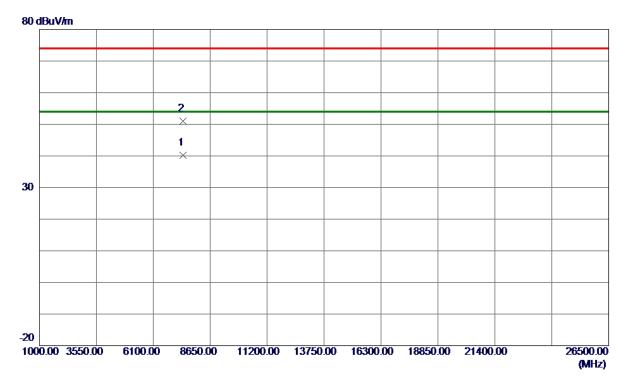


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2479. 7500	84. 97	8. 13	93. 10	74.00	19. 10	Peak	No Limit
2 *	2479. 9500	83. 53	8. 13	91. 66	54.00	37. 66	AVG	No Limit
3	2483. 5000	39. 86	8. 14	48.00	74.00	-26. 00	Peak	
4	2483. 5000	31. 63	8. 14	39. 77	54.00	-14. 23	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz CH39 1Mbps	Polarization	Vertical

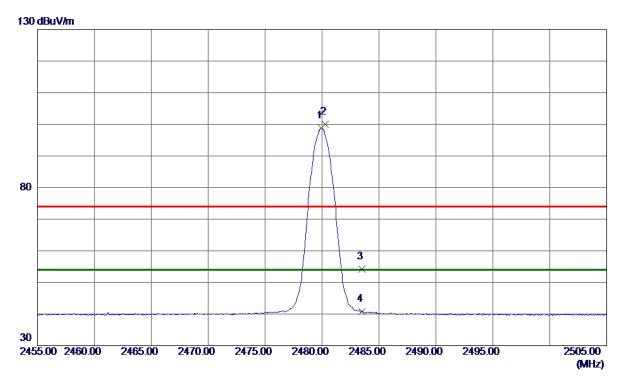


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7438. 0350	29. 90	10. 27	40. 17	54.00	-13. 83	AVG	
2	7439, 2600	40.71	10. 27	50. 98	74. 00	-23. 02	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz _CH39_1Mbps	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2479. 9500	90. 58	8. 13	98. 71	54.00	44. 71	AVG	No Limit
2	2480. 3000	91. 89	8. 13	100.02	74.00	26. 02	Peak	No Limit
3	2483. 5000	45. 97	8. 14	54. 11	74.00	-19.89	Peak	
4	2483. 5000	32. 63	8. 14	40. 77	54.00	-13. 23	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz _	_CH39_1Mbps	Polarization	Horizontal

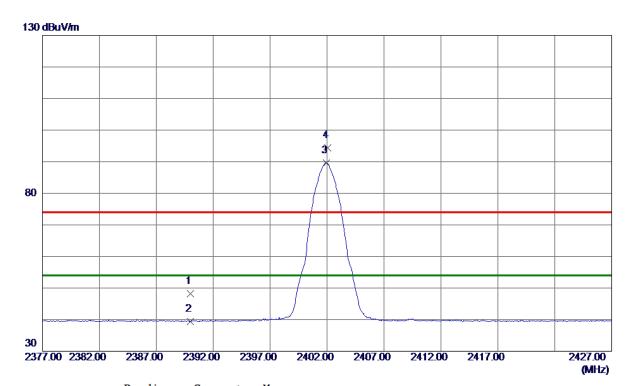


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7439. 1600	31. 86	10. 27	42. 13	54.00	-11.87	AVG	
2	7442. 1700	41. 92	10. 28	52. 20	74.00	-21. 80	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





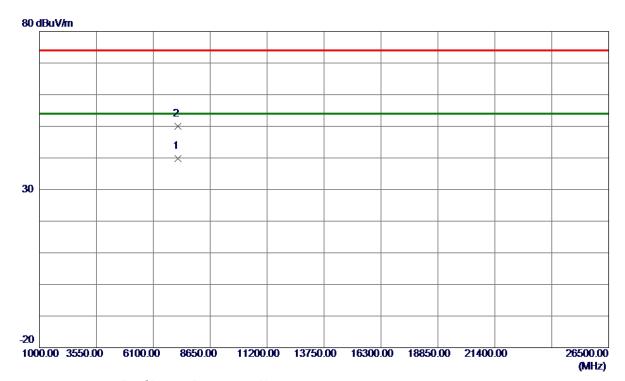


Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2390. 0000	40. 26	7. 98	48. 24	74.00	-25. 76	Peak	
2390. 0000	31. 49	7. 98	39. 47	54.00	-14. 53	AVG	
2401. 9500	81. 60	8. 00	89. 60	54.00	35. 60	AVG	No Limit
2402. 0500	86. 48	8. 00	94. 48	74.00	20. 48	Peak	No Limit
	MHz 2390. 0000 2390. 0000 2401. 9500	- Level	Hz dBuV/m dB 2390.0000 40.26 7.98 2390.0000 31.49 7.98 2401.9500 81.60 8.00	MHz         dBuV/m         dB         dBuV/m           2390.0000         40.26         7.98         48.24           2390.0000         31.49         7.98         39.47           2401.9500         81.60         8.00         89.60	MHz         dBuV/m         dB         dBuV/m         dBuV/m           2390.0000         40.26         7.98         48.24         74.00           2390.0000         31.49         7.98         39.47         54.00           2401.9500         81.60         8.00         89.60         54.00	MHz         dBuV/m         dB         dBuV/m         dB         dBuV/m         dB         dBuV/m         dB         dBuV/m         dB         dB	MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector           2390.0000 40.26         7.98         48.24         74.00         -25.76         Peak           2390.0000 31.49         7.98         39.47         54.00         -14.53         AVG           2401.9500 81.60         8.00         89.60         54.00         35.60         AVG

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2402 MHz CH00 2Mb	pps Polarization	Vertical

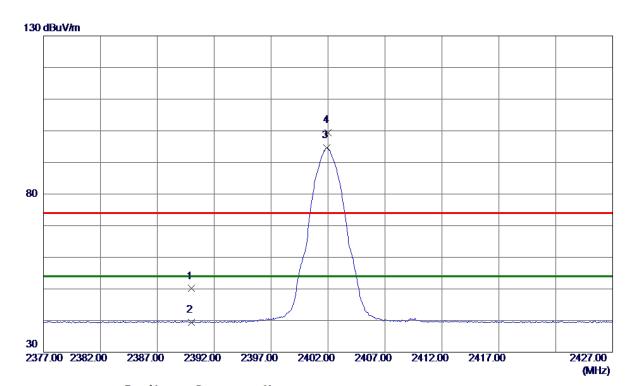


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7206. 2100	29. 72	10.02	39. 74	54.00	-14. 26	AVG	
2	7207. 1300	39. 93	10.02	49. 95	74.00	-24.05	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





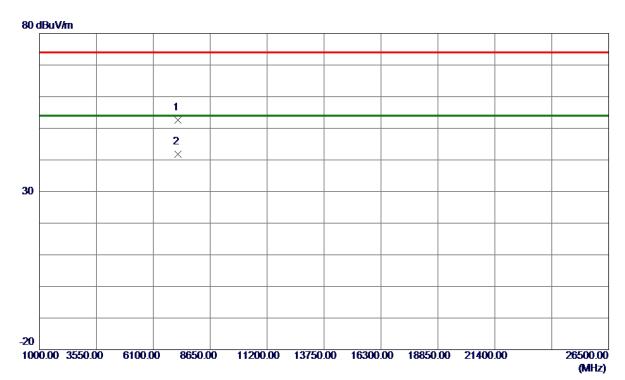


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	42. 12	7. 98	50. 10	74.00	-23.90	Peak	
2	2390. 0000	31. 39	7. 98	39. 37	54.00	-14. 63	AVG	
3 *	2401. 9000	86. 53	8. 00	94. 53	54.00	40. 53	AVG	No Limit
4	2402. 0000	91. 36	8. 00	99. 36	74. 00	25. 36	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2402 MHz _CH00_2Mbps	Polarization	Horizontal

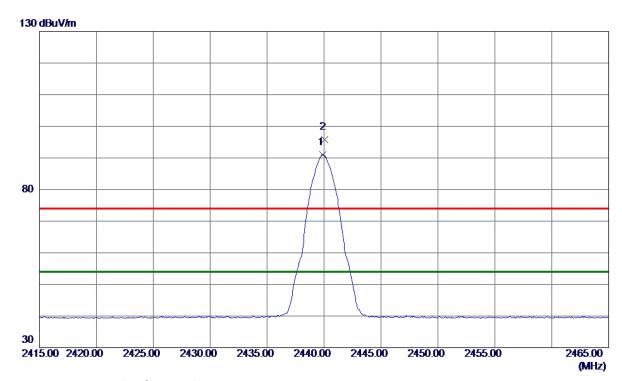


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7204. 3600	42. 52	10. 01	52. 53	74.00	-21. 47	Peak	
2 *	7205. 0700	31. 83	10. 02	41.85	54. 00	-12. 15	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19_2Mbps	Polarization	Vertical

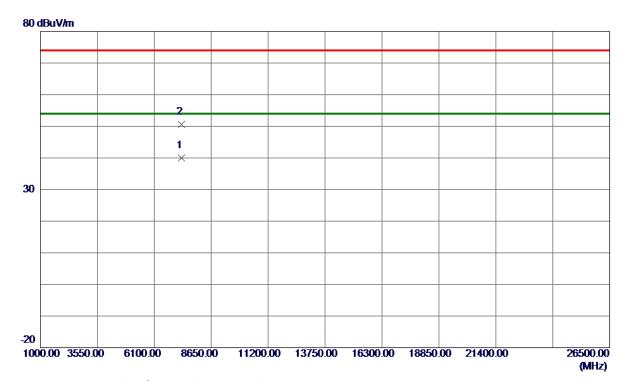


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2439. 9000	83. 01	8. 06	91. 07	54.00	37. 07	AVG	No Limit
2	2440. 0500	87. 80	8. 06	95. 86	74.00	21.86	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19_2Mbps	Polarization	Vertical

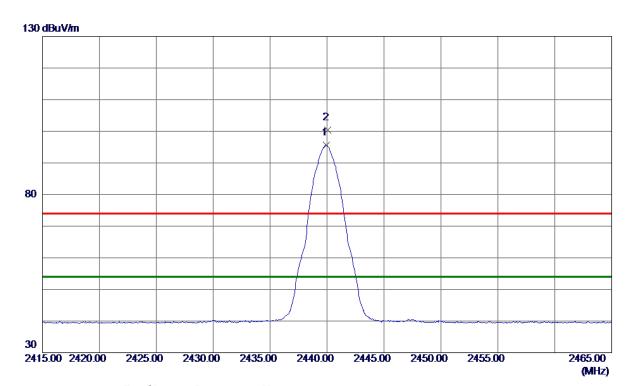


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7316. 3000	29. 85	10. 14	39. 99	54.00	-14. 01	AVG	
2	7320. 8000	40. 44	10. 14	50. 58	74.00	-23. 42	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19_2Mbps	Polarization	Horizontal

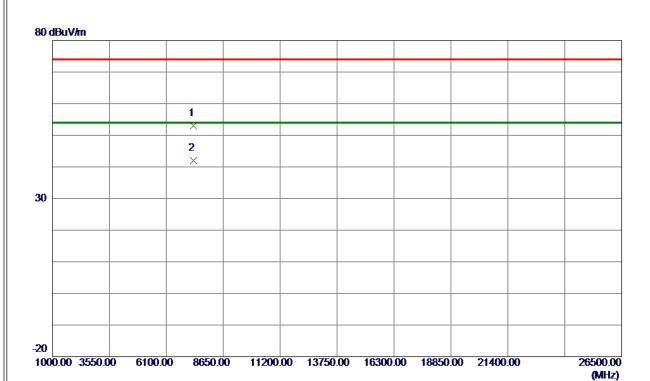


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2439. 9500	87. 48	8. 06	95. 54	54.00	41. 54	AVG	No Limit
2	2440. 0500	92. 28	8. 06	100. 34	74.00	26. 34	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2440 MHz _CH19_2Mbps	Polarization	Horizontal

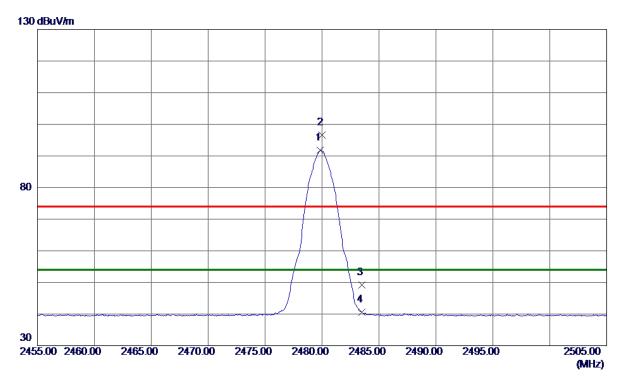


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7321. 6200	42. 86	10. 14	53. 00	74.00	-21.00	Peak	
2 *	7323. 1300	31. 82	10. 15	41. 97	54.00	-12. 03	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz _CH39_2Mbps	Polarization	Vertical

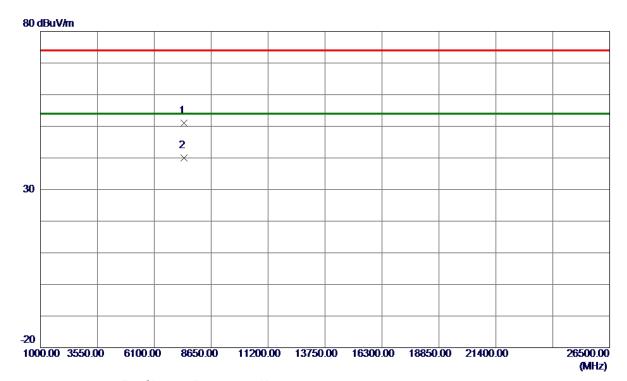


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2479. 8500	83. 65	8. 13	91. 78	54.00	37. 78	AVG	No Limit
2	2480. 0000	88. 47	8. 13	96. 60	74.00	22. 60	Peak	No Limit
3	2483. 5000	41.07	8. 14	49. 21	74.00	-24. 79	Peak	
4	2483. 5000	32. 49	8. 14	40. 63	54.00	-13. 37	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz _CH39_2Mbps	Polarization	Vertical

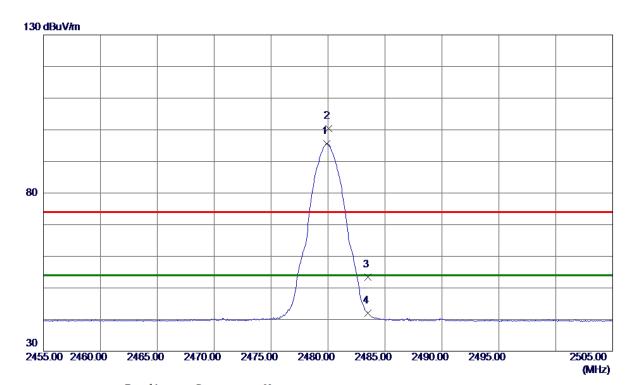


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7438. 8300	40. 68	10. 27	50. 95	74.00	-23. 05	Peak	
2 *	7439. 6300	29. 69	10. 27	39. 96	<b>54.00</b>	-14. 04	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





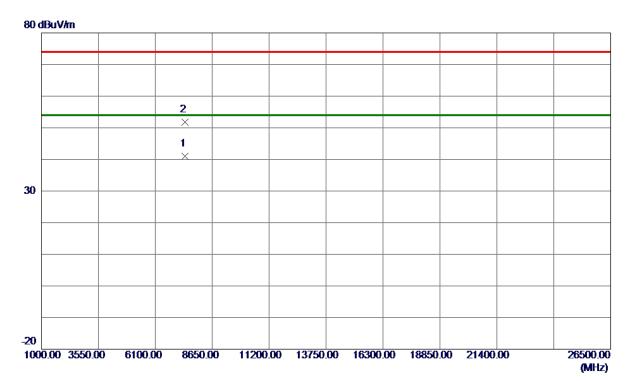


No. Freq. Reading collect measure Limit Margin	
MHz dBuV/m dB dBuV/m dBuV/m dB Detect	or Comment
1 * 2479. 9000 87. 44 8. 13 95. 57 54. 00 41. 57 AVG	No Limit
2 2480. 0500 92. 32 8. 13 100. 45 74. 00 26. 45 Peak	No Limit
3 2483. 5000 45. 22 8. 14 53. 36 74. 00 -20. 64 Peak	
4 2483. 5000 33. 84 8. 14 41. 98 54. 00 -12. 02 AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode	TX 2480 MHz	CH39 2Mbps	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7440. 2600	30. 72	10. 27	40. 99	54.00	-13. 01	AVG	
2	7440. 9000	41. 53	10. 27	51. 80	74. 00	-22. 20	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

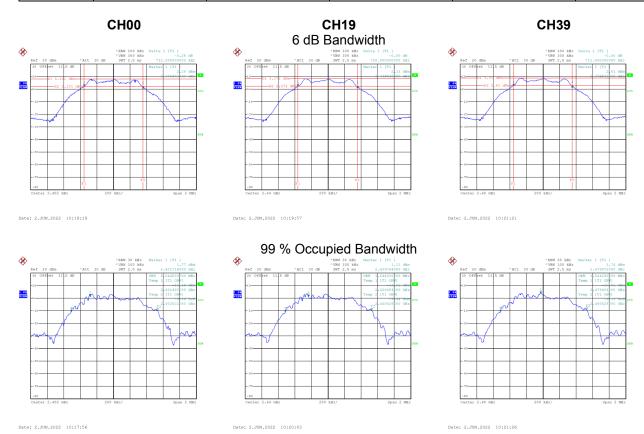


APPENDIX E - BANDWIDTH



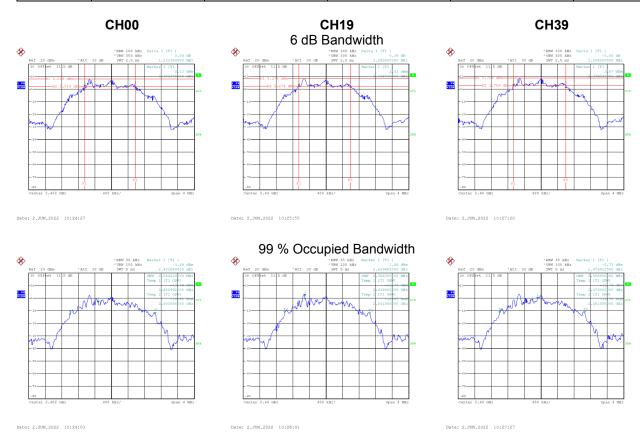
Test Mode TX Mode \_1Mbps

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Test Result
00	2402	0.712	1.044	0.5	Pass
19	2440	0.720	1.044	0.5	Pass
39	2480	0.712	1.044	0.5	Pass





Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Test Result
00	2402	1.232	2.064	0.5	Pass
19	2440	1.256	2.056	0.5	Pass
39	2480	1.264	2.056	0.5	Pass



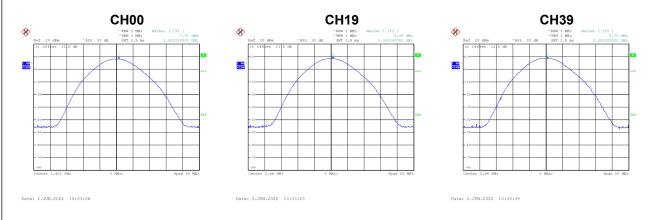


APPENDIX F - MAXIMUM OUTPUT POWER	



Test Mode	TX Mode	1Mbps
100t Wiodo	174 111000	1111000

Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	7.97	0.0063	30.00	1.0000	Pass
2440	8.26	0.0067	30.00	1.0000	Pass
2480	8.70	0.0074	30.00	1.0000	Pass



Toot Mode	TV Made OMbre	
Test Mode	TX Mode _2Mbps	

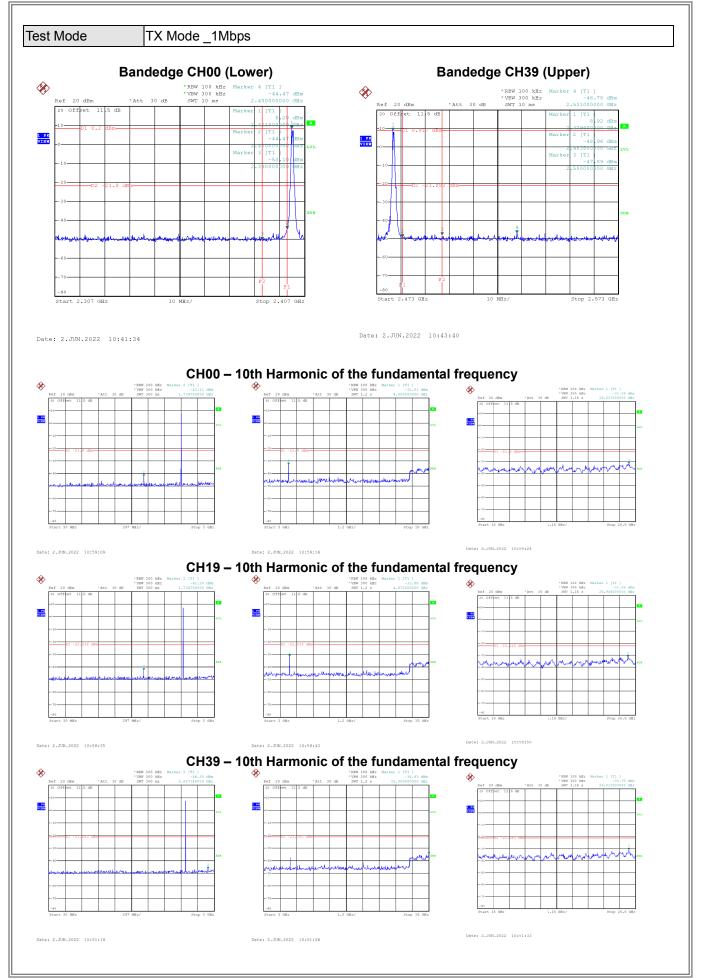
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	7.95	0.0062	30.00	1.0000	Pass
2440	8.24	0.0067	30.00	1.0000	Pass
2480	8.71	0.0074	30.00	1.0000	Pass



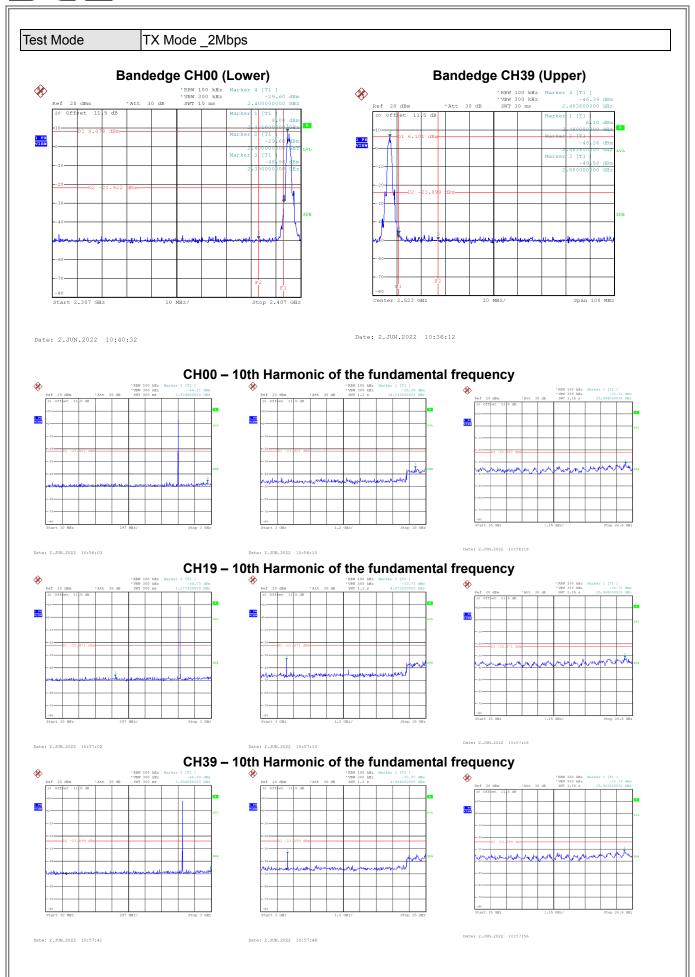


APPENDIX G - CONDUCTED SPURIOUS EMISSION	











APPENDIX H - POWER SPECTRAL DENSITY



Test Mode	TX Mode	1Mbps

Channel	Frequency (MHz)	Power Spectral Density (dBm/3 kHz)	Max. Limit (dBm/3 kHz)	Test Result
00	2402	-7.61	8.00	Pass
19	2440	-7.31	8.00	Pass
39	2480	-6.75	8.00	Pass



Test Mode	TX Mode _2Mbps

Channel	Frequency (MHz)	Power Spectral Density (dBm/3 kHz)	Max. Limit (dBm/3 kHz)	Test Result
00	2402	-11.33	8.00	Pass
19	2440	-10.98	8.00	Pass
39	2480	-11.24	8.00	Pass



**End of Test Report**