



FCC Radio Test Report

FCC ID: 2AR2SPDT60

This report concerns: Original Grant

Project No. : 2009C125

Equipment : True Wireless Earphones
Brand Name : PORSCHE DESIGN

Test Model : PDT60

Series Model : PDT60xx/yy (xx=AA-ZZ or blank denoted different color, yy=00-99

denoted different country destination)

Applicant: MMD Hong Kong Holding Limited

Address : Unit 1006, 10th Floor, C-Bons International Center, 108 Wai Yip Street,

Kwun Tong, Kowloon, Hong Kong

Manufacturer : MMD Hong Kong Holding Limited

Address : Unit 1006, 10th Floor, C-Bons International Center, 108 Wai Yip Street,

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Factory : Eastech (Huizhou) Co., Ltd.

Address : Dong Fong District, Xin Xu, Hui Yang, Hui Zhou City, Guang Dong

516226, China

Date of Receipt : Sep. 16, 2020

Date of Test : Sep. 22, 2020 ~ Jun. 21, 2021

Issued Date : Jul. 06, 2021

Report Version : R00

Test Sample : Engineering Sample No.:DG20200917111 for conducted,

DG20200917112 for radiated.

Standard(s) : FCC Part15, Subpart C (15.247)

ANSI C63.10-2013

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

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

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Iac-MRA



TESTING CERT #5123.02

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Declaration

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BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

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 Version	Description	Issued Date
R00	Original Issue.	Jul. 06, 2021



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart C (15.247)									
Standard(s) Section Test Item Test Result Judgment Rem									
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS						
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions APPENDIX C PAS APPENDIX D		PASS						
15.247(a)(2)			PASS						
15.247(b)(3)	Maximum Output Power		PASS						
15.247(d)	(d) Conducted Spurious APPEND		PASS						
15.247(e)	15.247(e) Power Spectral Density AF		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 Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm 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	2.68

B. Radiated emissions Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
		9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	Н	3.57
		30MHz ~ 200MHz	V	4.26
		30MHz ~ 200MHz	Н	3.38
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.98
DG-CB03 CISEK	200MHz ~ 1,000MHz	Н	3.94	
		1GHz ~ 6GHz	-	4.58
		6GHz ~ 18GHz	-	5.18
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	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
Time	±0.58 %
Supply voltages	±0.3 %

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	25°C	53%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-9K-30MHz	25°C	60%	DC 5V	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	26°C	52%	DC 5V	Kwok Guo
Radiated Emissions-Above 1000 MHz	26°C	52%	DC 5V	Kwok Guo
Bandwidth	24°C	52%	DC 5V	Jesse Wang
Maximum Output Power	24°C	52%	DC 5V	Hand Huang
Conducted Spurious Emission	24°C	52%	DC 5V	Jesse Wang
Power Spectral Density	24°C	52%	DC 5V	Jesse Wang



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	True Wireless Earphones
Brand Name	PORSCHE DESIGN
Test Model	PDT60
Series Model	PDT60xx/yy (xx=AA-ZZ or blank denoted different color, yy=00-99 denoted different country destination)
Model Difference(s)	Only differ in model name.
Power Source	Earphones: 1# Supplied from charging cardle. 2# Supplied from battery. Model: LIR1240 Charging cardle: 1# Supplied from USB port. 2# Supplied from charging base. 3# Supplied from battery. Model: FT601650P
Power Rating	Earphones: 1# DC 5V 2# DC 3.6V 50mAh 0.18Wh Charging cardle: 1# DC 5V 2# DC 5V. 3# DC 3.7V 410mAh 1.517Wh
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Technology	GFSK
Bit Rate of Transmitter	1Mbps, 2Mbps
Max. Output Power	0.96 dBm (0.0012 W) For 1Mbps -0.45 dBm (0.0009 W) For 2Mbps

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	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	South Star	N/A	Metal	N/A	-4.0	Left
2	South Star	N/A	Metal	N/A	-4.5	Right

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 NOTE (1)	
Mode 2	TX Mode Channel 19 _1Mbps	

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 2	TX Mode Channel 19 _1Mbps	

Radiated emissions test - Below 1GHz		
Final Test Mode	Description	
Mode 2	TX Mode Channel 19 _1Mbps	

Radiated emissions test - Above 1GHz		
Final Test Mode	Description	
Mode 1	TX Mode NOTE (1)	

Conducted test		
Final Test Mode	Description	
Mode 1	TX Mode NOTE (1)	

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) For radiated emission above 1 GHz test, 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.
- (3) For AC power line conducted emissions and radiated spurious emissions below 1 GHz test, the 1Mbps channel 19 are found to be the worst case and recorded.
- (4) Both left earphone and right earphone have been tested and left earphone is found to be the worst case and recorded.



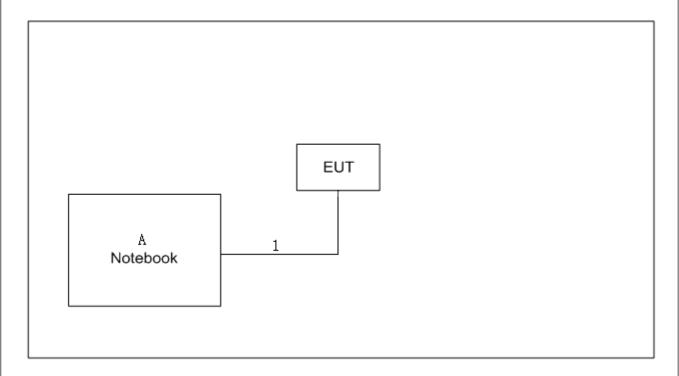
2.3 PARAMETERS OF TEST SOFTWARE

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	Airoha.Tool.Kit V1.6.1		
Frequency (MHz)	2402	2440	2480
1Mbps	N/A	N/A	N/A
2Mbps	N/A	N/A	N/A



2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.5 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
Α	Notebook	Lenovo	V310-14ISK	LR07GZNB

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	USB Cable	NO	NO	0.3m



3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Fraguency of Emission (MUT)	Limit (dBμV)		
Frequency of Emission (MHz)	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.

The following table is the setting of the receiver

Receiver Parameters	Setting	
Attenuation	10 dB	
Start Frequency	0.15 MHz	
Stop Frequency	30 MHz	
IF Bandwidth	9 kHz	

3.2 TEST PROCEDURE

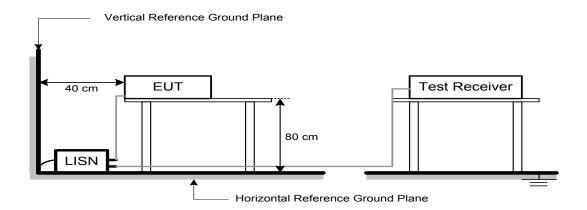
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.

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 EMISSION TEST

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)

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

Note:

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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	RBW 1 MHz VBW 3 MHz peak detector for Pk value
(Emission in restricted band)	RMS detector for AV value

Receiver Parameter	Setting	
Attenuation	Auto	
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	



4.2 TEST PROCEDURE

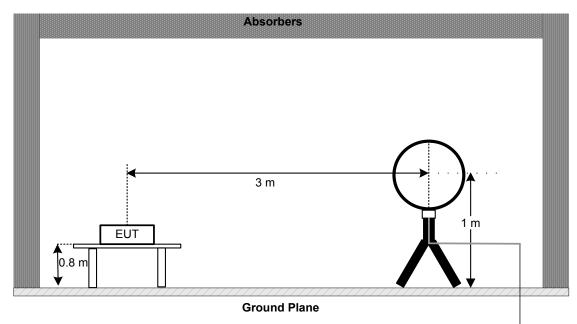
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b. The measuring distance 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.

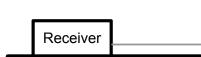
4.3 DEVIATION FROM TEST STANDARD No deviation



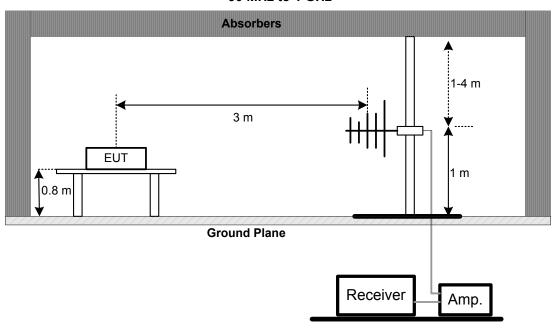
4.4 TEST SETUP

9 kHz-30 MHz





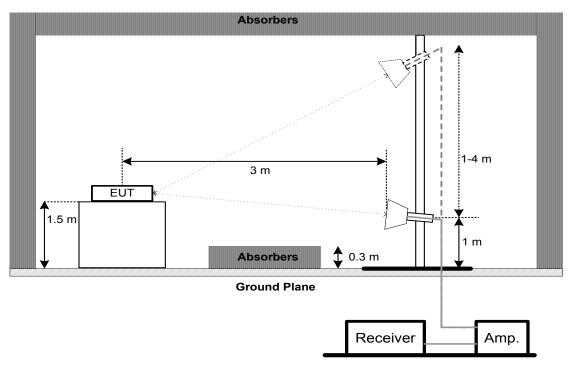
30 MHz to 1 GHz



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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 TEST

5.1 LIMIT

FCC Part15, Subpart C (15.247)						
Section Test Item Limit						
15.247(a)(2)	Bandwidth	>= 500 kHz (6 dB 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. Spectrum Setting:

For 6 dB Bandwidth: RBW= 100 kHz, VBW=300 kHz, Sweep time = 2.5 ms For 99 % Emission Bandwidth: RBW= 30 kHz, VBW=100 kHz, Sweep time = 2.5 ms.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP

EUT		SPECTRUM	
		ANALYZER	

5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULTS

Please refer to the APPENDIX E.



6. MAXIMUM OUTPUT POWER

6.1 LIMIT

FCC Part15, Subpart C (15.247)				
Section Test Item Limit				
15.247(b)(3) Maximum Output Power 1 watt or 30 dBm				

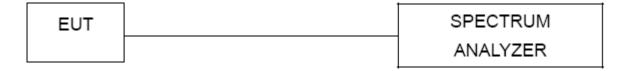
6.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. The maximum conducted output power was performed in accordance with method 11.9.1.1 of ANSI C63.10-2013.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

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. Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, Sweep time = 10 ms.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP

EUT		SPECTRUM	
		ANALYZER	

7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULTS

Please refer to the APPENDIX G.



8. POWER SPECTRAL DENSITY TEST

8.1 LIMIT

FCC Part15, Subpart C (15.247)				
Section Test Item Limit				
15.247(e)	15.247(e) Power Spectral Density			

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. Spectrum Setting: RBW=3 kHz, VBW=10 kHz, Sweep time = auto.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

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	Feb. 28, 2022	
2	LISN	EMCO	3816/2	52765	Feb. 27, 2022	
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 27, 2022	
4	50Ω Terminator	SHX	TF5-3	15041305	Feb. 27, 2022	
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
6	Cable	N/A	RG223	12m	Mar. 09, 2022	
7	643 Shield Room	ETS	6*4*3m	N/A	N/A	

	Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Loop Antenna	EM	EM-6876-1	230	Apr. 28, 2022	
2	Cable	N/A	RG 213/U (9kHz~1GHz)	N/A	May 27, 2022	
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 27, 2022	
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
5	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021	

	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. 15, 2022	
2	Amplifier	HP	8447D	2944A08742	Feb. 28, 2022	
3	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021	
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 20, 2022	
5	Controller	CT	SC100	N/A	N/A	
6	Controller	MF	MF-7802	MF780208416	N/A	
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
8	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021	

	Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Double Ridged Guide Antenna	ETS	3115	75789	May 10, 2022	
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021	
3	Amplifier	Agilent	8449B	3008A02584	Jul. 25, 2021	
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 28, 2022	
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021	
6	Controller	CT	SC100	N/A	N/A	
7	Controller	MF	MF-7802	MF780208416	N/A	
8	Cable	N/A	EMC104-SM-SM-6 000	N/A	Oct. 16, 2021	
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
10	Filter	STI	STI15-9912	N/A	Jul. 25, 2021	
11	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021	



Number of Hopping Frequency & Average Time of Occupancy & **Hopping Channel Separation Measurement &** Bandwidth & **Maximum Output Power & Conducted Spurious Emission** Manufacturer Kind of Equipment Serial No. Calibrated until Item Type No. Spectrum Analyzer FSP40 Jul. 25, 2021 R&S 100185 N/A 2 DC Block Mini N/A N/A 3 RF Cable Tongkaichuan N/A N/A N/A

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

All calibration period of equipment list is one year.



10. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos

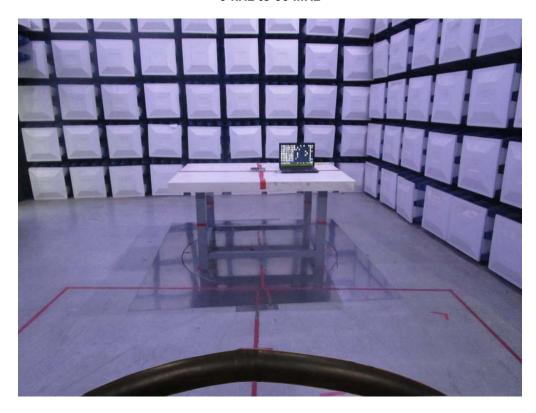


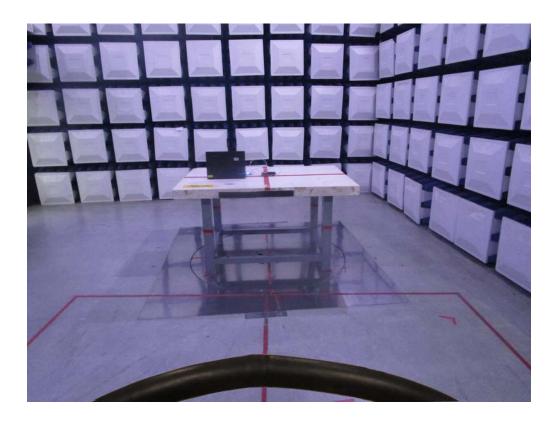




Radiated Emissions Test Photos

9 kHz to 30 MHz



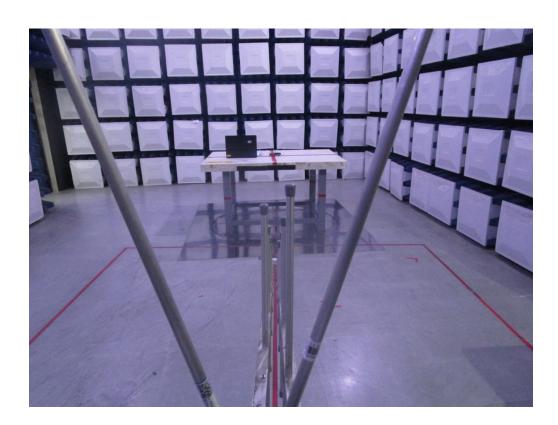




Radiated Emissions Test Photos

30 MHz to 1000 MHz







Radiated Emissions Test Photos

Above 1 GHz





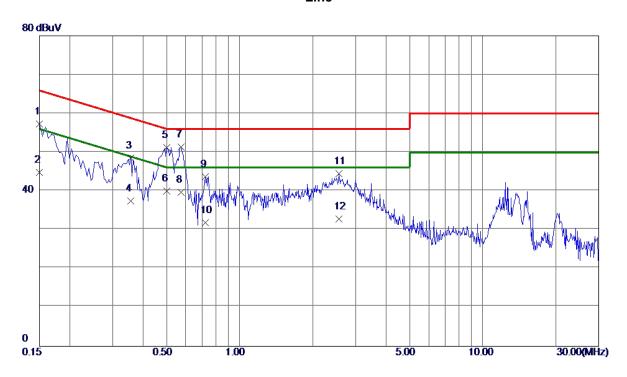


APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS



Test Mode: TX Mode Channel 19 _1Mbps

Line



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1500	47. 53	9. 67	57. 20	66.00	-8. 80	Peak	
2	0. 1500	35. 20	9. 67	44. 87	56.00	-11. 13	AVG	
3	0. 3570	38. 60	9. 91	48. 51	58.80	-10. 29	Peak	
4	0. 3570	27. 50	9. 91	37. 41	48.80	-11. 39	AVG	
5	0. 5010	41. 31	9. 95	51. 26	56.00	-4.74	Peak	
6	0. 5010	30. 10	9. 95	40. 05	46.00	-5. 95	AVG	
7 *	0. 5730	41. 35	9. 96	51. 31	56.00	-4. 69	Peak	
8	0. 5730	29. 80	9. 96	39. 76	46.00	-6. 24	AVG	
9	0.7214	33. 81	9. 89	43. 70	56.00	-12. 30	Peak	
10	0.7214	21. 90	9. 89	31. 79	46.00	-14. 21	AVG	
11	2. 5665	34. 33	10. 14	44. 47	56.00	-11. 53	Peak	
12	2. 5665	22. 70	10. 14	32. 84	46.00	-13. 16	AVG	

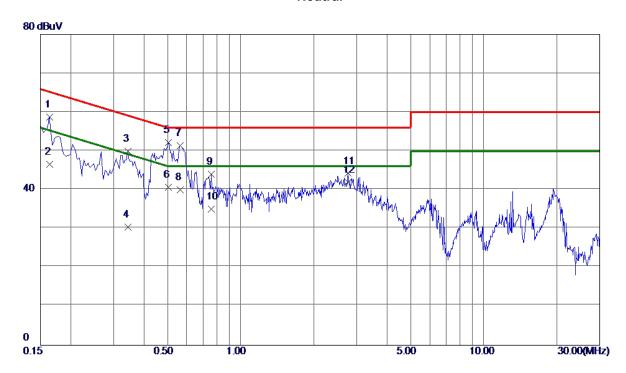
REMARKS:

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



Test Mode: TX Mode Channel 19 _1Mbps

Neutral



No.	Freq.	Reading Level	Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1635	48. 87	9. 85	58. 72	65. 28	-6. 56	Peak	
2	0. 1635	36. 70	9.85	46. 55	55. 28	-8. 73	AVG	
3	0. 3435	39. 83	10. 05	49. 88	59 . 12	-9. 24	Peak	
4	0. 3435	20. 30	10. 05	30. 35	49 . 12	-18. 77	AVG	
5 *	0. 5055	42.05	10. 14	52. 19	56.00	-3.81	Peak	
6	0. 5055	30. 50	10. 14	40. 64	46.00	-5. 36	AVG	
7	0. 5639	41. 13	10. 17	51. 30	56.00	-4. 70	Peak	
8	0. 5639	29. 81	10. 17	39. 98	46.00	-6.02	AVG	
9	0. 7575	33. 75	10. 18	43. 93	56.00	-12. 07	Peak	
10	0. 7575	24. 81	10. 18	34. 99	46. 00	-11. 01	AVG	
11	2. 7690	33. 75	10. 49	44. 24	56.00	-11. 76	Peak	
12	2. 7690	31. 40	10. 49	41.89	46.00	-4. 11	AVG	

REMARKS:

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

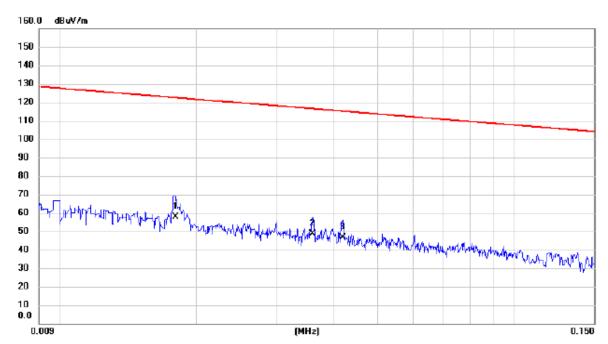


APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ



Test Mode: TX Mode Channel 19 _1Mbps

Ant 0°



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	0.0180	44.09	13.84	57.93	122.50	-64.57	AVG		
2	0.0360	35.66	12.79	48.45	116.48	-68.03	AVG		
3	0.0420	33.90	12.63	46.53	115.14	-68.61	AVG		

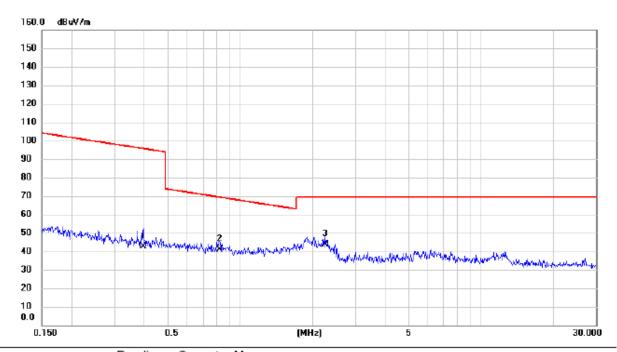
REMARKS:

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



Test Mode: TX Mode Channel 19 _1Mbps

Ant 0°



	No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
•		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
-	1	0.3955	30.38	12.27	42.65	95.66	-53.01	AVG		
-	2	0.8174	28.94	11.87	40.81	69.36	-28.55	QP		
-	3 *	2.2486	32.77	11.18	43.95	69.54	-25.59	QP		

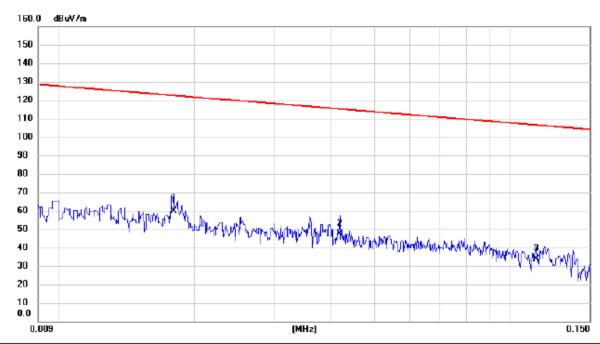
REMARKS:

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



Test Mode: TX Mode Channel 19 _1Mbps

Ant 90°



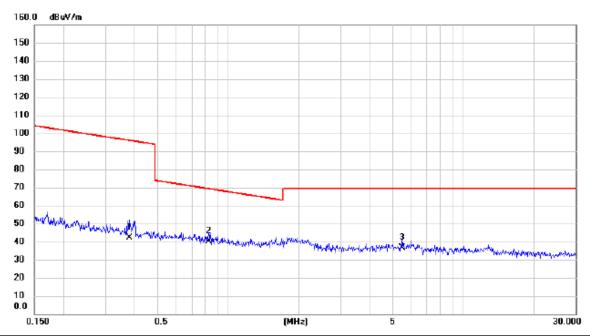
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	0.0180	45.80	13.84	59.64	122.50	-62.86	AVG	
2	0.0420	34.73	12.63	47.36	115.14	-67.78	AVG	
3	0.1142	20.91	12.73	33.64	106.45	-72.81	AVG	

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



Test Mode: TX Mode Channel 19 _1Mbps

Ant 90°



	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
_			MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1		0.3791	30.05	12.31	42.36	96.03	-53.67	AVG	
_	2	*	0.8261	28.24		40.11		-29.15	QP	
	3		5.5054	25.37	11.14	36.51	69.54	-33.03	QP	

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

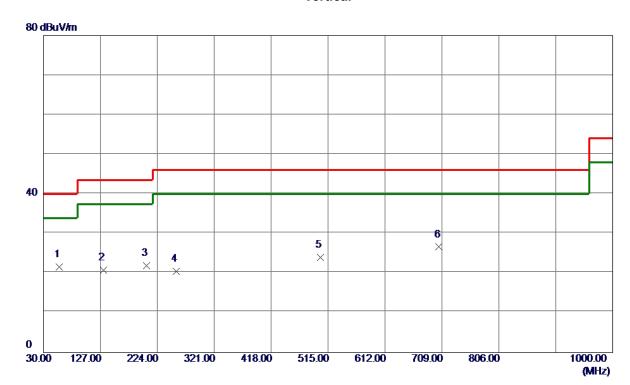


APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ



Test Mode: TX Mode Channel 19 _1Mbps

Vertical



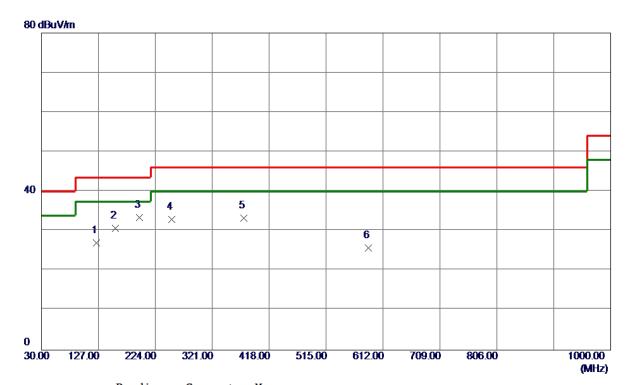
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	57. 1600	35. 64	-14. 09	21. 55	40.00	-18. 45	Peak	
2	132. 8200	33. 57	-12. 69	20.88	43. 50	-22. 62	Peak	
3	205. 5700	36. 98	-15. 04	21. 94	43. 50	-21. 56	Peak	
4	256. 0100	33. 06	-12. 65	20. 41	46.00	-25.59	Peak	
5	502. 3900	31. 21	-7. 24	23. 97	46. 00	-22. 03	Peak	
6	704. 1500	30. 19	-3. 55	26. 64	46. 00	-19. 36	Peak	

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



Test Mode: TX Mode Channel 19 _1Mbps

Horizontal



MHz dBuV/m dB dBuV/m dBuV/m dB Detector Comment 1 124.0900 39.73 -12.74 26.99 43.50 -16.51 Peak 2 156.1000 41.89 -11.17 30.72 43.50 -12.78 Peak 3 * 196.8400 48.06 -14.58 33.48 43.50 -10.02 Peak 4 252.1300 46.10 -13.07 33.03 46.00 -12.97 Peak 5 375.3200 42.91 -9.60 33.31 46.00 -12.69 Peak 6 586.7800 31.49 -5.74 25.75 46.00 -20.25 Peak	No.	Freq.	keading Level	Factor	measure ment	Limit	Margin		
2 156. 1000 41. 89 -11. 17 30. 72 43. 50 -12. 78 Peak 3 * 196. 8400 48. 06 -14. 58 33. 48 43. 50 -10. 02 Peak 4 252. 1300 46. 10 -13. 07 33. 03 46. 00 -12. 97 Peak 5 375. 3200 42. 91 -9. 60 33. 31 46. 00 -12. 69 Peak		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
3 * 196. 8400 48. 06 -14. 58 33. 48 43. 50 -10. 02 Peak 4 252. 1300 46. 10 -13. 07 33. 03 46. 00 -12. 97 Peak 5 375. 3200 42. 91 -9. 60 33. 31 46. 00 -12. 69 Peak	1	124. 0900	39. 73	-12. 74	26. 99	43. 50	-16. 51	Peak	
4 252. 1300 46. 10 -13. 07 33. 03 46. 00 -12. 97 Peak 5 375. 3200 42. 91 -9. 60 33. 31 46. 00 -12. 69 Peak	2	156. 1000	41.89	-11. 17	30. 72	43. 50	-12. 78	Peak	
5 375. 3200 42. 91 -9. 60 33. 31 46. 00 -12. 69 Peak	3 *	196. 8400	48. 06	-14. 58	33. 48	43. 50	-10.02	Peak	
	4	252. 1300	46. 10	-13. 07	33. 03	46.00	-12. 97	Peak	
6 586, 7800 31, 49 -5, 74 25, 75 46, 00 -20, 25 Peak	5	375. 3200	42. 91	-9. 60	33. 31	46. 00	-12. 69	Peak	
	6	586. 7800	31. 49	-5. 74	25. 75	46. 00	-20. 25	Peak	

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

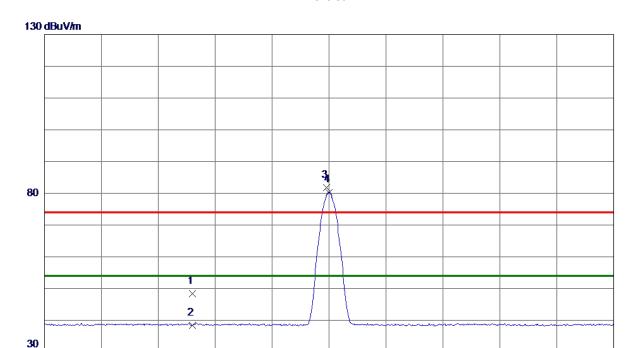


AP	PENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ



Test Mode: TX 2402 MHz _CH00_1Mbps

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. 14	8. 29	48. 43	74.00	-25. 57	Peak	
2	2390. 0000	30. 16	8. 29	38. 45	54.00	-15. 55	AVG	
3	2401. 8000	73. 47	8. 30	81. 77	74. 00	7. 77	Peak	No Limit
4 *	2402. 0000	72. 00	8. 30	80. 30	54. 00	26. 30	AVG	No Limit

2402.00

2407.00

2412.00

2417.00

2427.00 (MHz)

REMARKS:

2377.00 2382.00

2387.00

2392.00

2397.00

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



Test Mode: TX 2402 MHz _CH00_1Mbps

Vertical



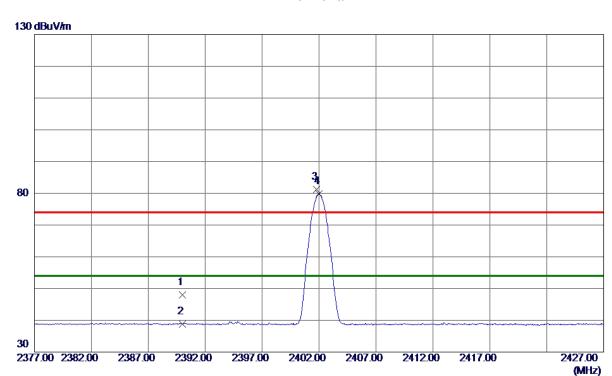
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4802. 5200	40.00	5. 26	45. 26	74.00	-28. 74	Peak	
2 *	4805. 9600	29. 89	5. 27	35. 16	54. 00	-18. 84	AVG	

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



Test Mode: TX 2402 MHz _CH00_1Mbps

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	39. 76	8. 29	48. 05	74.00	-25. 95	Peak	
2	2390. 0000	30. 56	8. 29	38. 85	54.00	-15. 15	AVG	
3	2401. 8000	72. 92	8. 30	81. 22	74.00	7. 22	Peak	No Limit
4 *	2402. 0000	71. 48	8. 30	79. 78	54.00	25. 78	AVG	No Limit

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



Test Mode: TX 2402 MHz _CH00_1Mbps

Horizontal



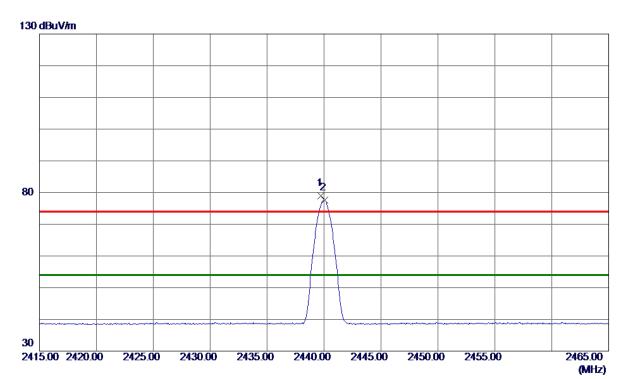
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4805. 0650	39. 85	5. 27	45. 12	74.00	-28. 88	Peak	
2 *	4805. 1750	29. 14	5. 27	34. 41	54.00	-19. 59	AVG	

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



Test Mode: TX 2440 MHz _CH19_1Mbps

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	70. 68	8. 34	79. 02	74.00	5. 02	Peak	No Limit
2 *	2440. 0500	69. 17	8. 34	77. 51	54. 00	23. 51	AVG	No Limit

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



Test Mode: TX 2440 MHz _CH19_1Mbps

Vertical



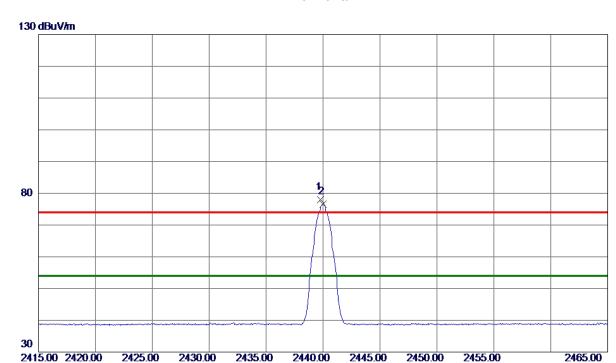
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4878. 8550	39. 66	5. 47	45. 13	74.00	-28.87	Peak	
2 *	4879. 2250	28. 61	5. 47	34. 08	54. 00	-19. 92	AVG	

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



Test Mode: TX 2440 MHz _CH19_1Mbps

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2439. 8000	69. 65	8. 34	77. 99	74.00	3. 99	Peak	No Limit
2 *	2440. 0000	68. 17	8. 34	76. 51	54. 00	22. 51	AVG	No Limit

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



Test Mode: TX 2440 MHz _CH19_1Mbps

Horizontal



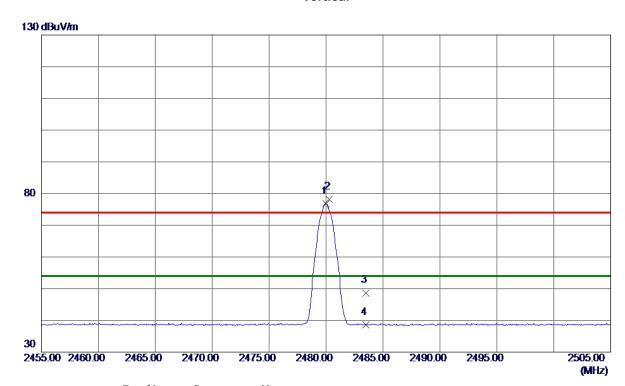
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4880. 2200	28. 93	5. 48	34. 41	54.00	-19. 59	AVG	
2	4880. 8750	40. 50	5. 48	45. 98	74. 00	-28. 0 2	Peak	

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



Test Mode: TX 2480 MHz _CH39_1Mbps

Vertical



No.	Freq.	Reading Level	Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2480. 0000	68. 44	8. 38	76. 82	54.00	22.82	AVG	No Limit
2	2480. 3000	69. 88	8. 38	78. 26	74.00	4. 26	Peak	No Limit
3	2483. 5000	40. 31	8. 39	48. 70	74. 00	-25. 30	Peak	
4	2483. 5000	30. 17	8. 39	38. 56	54. 00	-15. 44	AVG	

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

26500.00

(MHz)



Test Mode: TX 2480 MHz _CH39_1Mbps

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4960. 6150	39. 52	5. 69	45. 21	74.00	-28. 79	Peak	
2 *	4961. 0750	28. 21	5. 69	33. 90	54. 00	-20. 10	AVG	

11200.00 13750.00 16300.00 18850.00 21400.00

REMARKS:

1000.00 3550.00

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

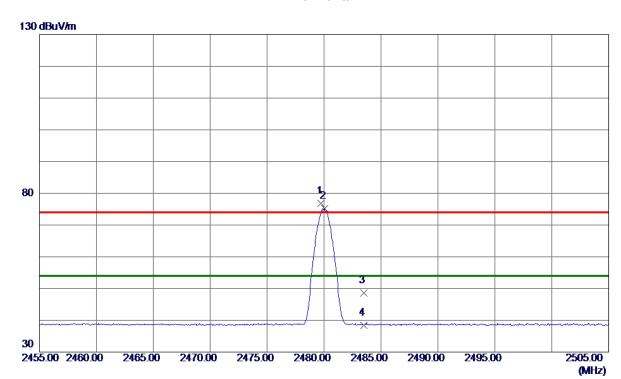
8650.00

6100.00



Test Mode: TX 2480 MHz _CH39_1Mbps

Horizontal



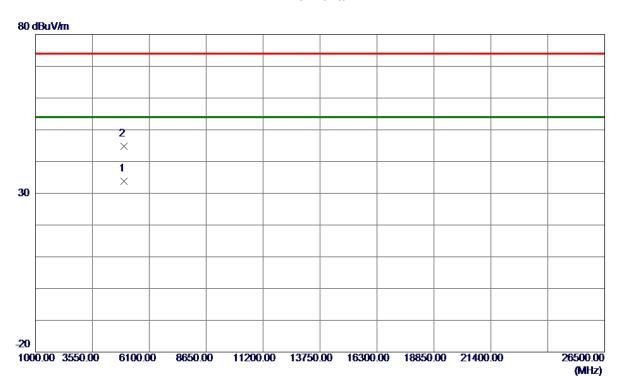
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2479. 7500	68. 50	8. 38	76. 88	74.00	2. 88	Peak	No Limit
2 *	2480. 0500	66. 91	8. 38	75. 29	54.00	21. 29	AVG	No Limit
3	2483. 5000	40. 22	8. 39	48. 61	74.00	-25. 39	Peak	
4	2483. 5000	30. 06	8. 39	38. 45	54. 00	-15. 55	AVG	

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



Test Mode: TX 2480 MHz _CH39_1Mbps

Horizontal



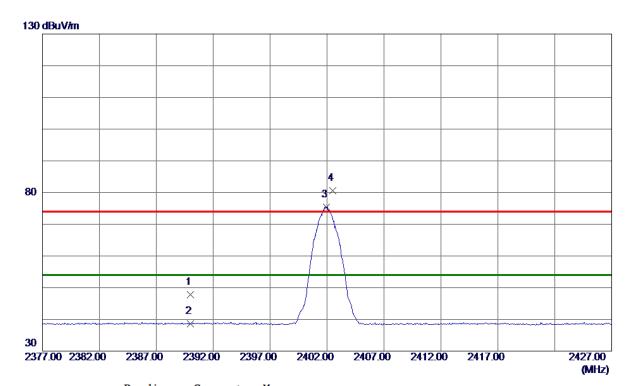
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4959. 0250	28. 20	5. 69	33. 89	54.00	-20. 11	AVG	
2	4961. 4700	39. 13	5. 70	44. 83	74. 00	-29. 17	Peak	

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



Test Mode: TX 2402 MHz _CH00_2Mbps

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	39. 54	8. 29	47. 83	74.00	-26. 17	Peak	
2	2390. 0000	30. 37	8. 29	38. 66	54.00	-15. 34	AVG	
3 *	2401. 9500	67. 17	8. 30	75. 47	54. 00	21. 47	AVG	No Limit
4	2402. 5000	72. 39	8. 30	80. 69	74. 00	6. 69	Peak	No Limit

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

26500.00 (MHz)



Test Mode: TX 2402 MHz _CH00_2Mbps

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4804. 0950	29. 43	5. 27	34. 70	54.00	-19. 30	AVG	
2	4905 5600	20 00	5 27	45 17	74 00	_20 02	Dook	

11200.00 13750.00 16300.00 18850.00 21400.00

REMARKS:

1000.00 3550.00

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

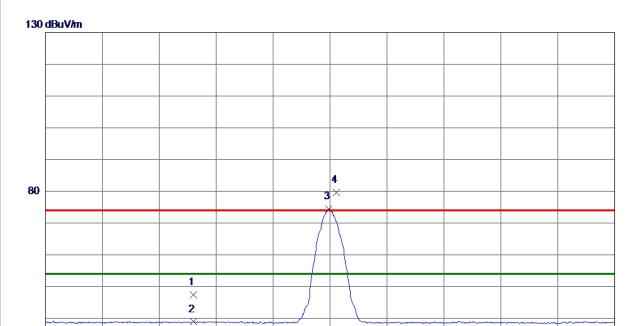
8650.00

6100.00



Test Mode: TX 2402 MHz _CH00_2Mbps

Horizontal



Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2390. 0000	39. 17	8. 29	47. 46	74.00	-26. 54	Peak	
2390. 0000	30. 61	8. 29	38. 90	54.00	-15. 10	AVG	
2401. 9000	66. 13	8. 30	74. 43	54.00	20. 43	AVG	No Limit
2402. 5500	71. 39	8. 30	79. 69	74.00	5. 69	Peak	No Limit
	MHz 2390. 0000 2390. 0000 2401. 9000	- Level	MHz dBuV/m dB 2390.0000 39.17 8.29 2390.0000 30.61 8.29 2401.9000 66.13 8.30	MHz dBuV/m dB dBuV/m 2390.0000 39.17 8.29 47.46 2390.0000 30.61 8.29 38.90 2401.9000 66.13 8.30 74.43	MHz dBuV/m dB dBuV/m dBuV/m 2390.0000 39.17 8.29 47.46 74.00 2390.0000 30.61 8.29 38.90 54.00 2401.9000 66.13 8.30 74.43 54.00	MHz dBuV/m dB dBuV/m dB dW/m dBuV/m dB 2390.0000 39.17 8.29 47.46 74.00 -26.54 2390.0000 30.61 8.29 38.90 54.00 -15.10 2401.9000 66.13 8.30 74.43 54.00 20.43	MHz dBuV/m dB dBuV/m dBuV/m dB Detector 2390.0000 39.17 8.29 47.46 74.00 -26.54 Peak 2390.0000 30.61 8.29 38.90 54.00 -15.10 AVG 2401.9000 66.13 8.30 74.43 54.00 20.43 AVG

2402.00

2407.00

2412.00

2417.00

2427.00 (MHz)

REMARKS:

2377.00 2382.00

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

2392.00

2397.00

2387.00



Test Mode: TX 2402 MHz _CH00_2Mbps

Horizontal



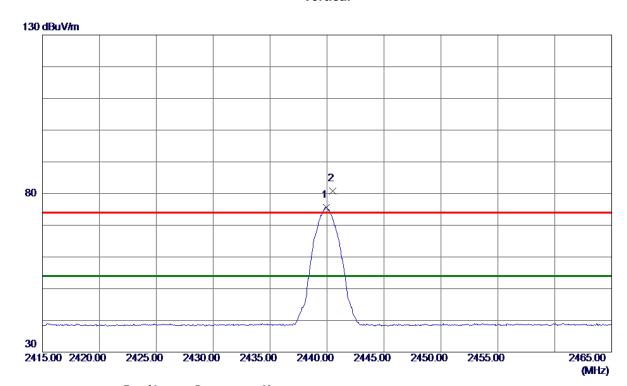
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4803. 7799	39. 87	5. 27	45. 14	74.00	-28.86	Peak	
2 *	4806. 4950	28. 46	5. 28	33. 74	54. 00	-20. 26	AVG	

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



Test Mode: TX 2440 MHz _CH19_2Mbps

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2439. 9500	67. 32	8. 34	75. 66	54.00	21.66	AVG	No Limit
2	2440. 5000	72. 53	8. 34	80. 87	74.00	6. 87	Peak	No Limit

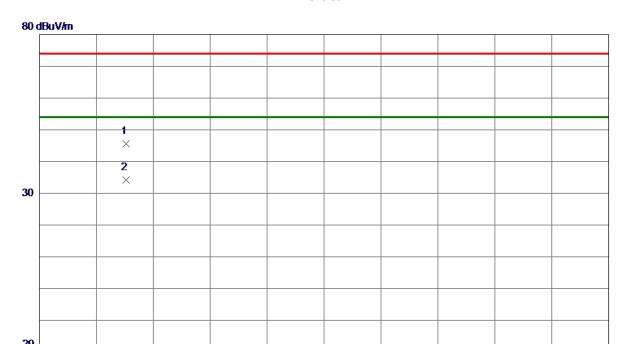
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

26500.00 (MHz)



Test Mode: TX 2440 MHz _CH19_2Mbps

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4878. 4400	40.05	5. 47	45 . 52	74.00	-28. 48	Peak	
2 *	4878. 9900	28. 77	5. 47	34. 24	54. 00	-19. 76	AVG	

11200.00 13750.00 16300.00 18850.00 21400.00

REMARKS:

1000.00 3550.00

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

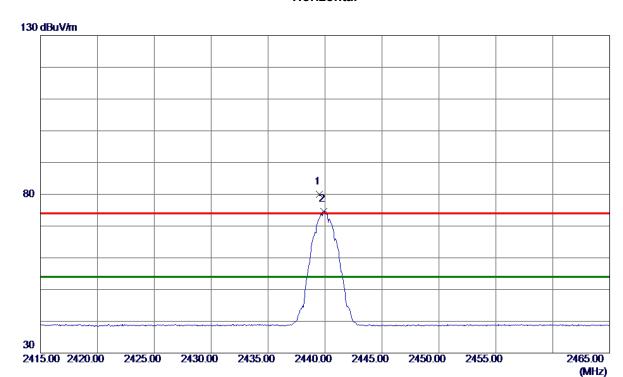
8650.00

6100.00



Test Mode: TX 2440 MHz _CH19_2Mbps

Horizontal



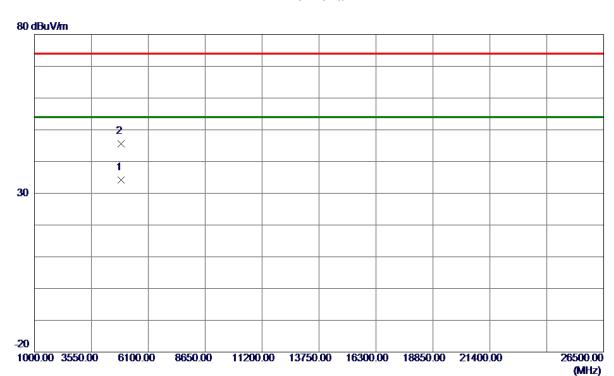
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2439. 5000	71. 58	8. 34	79. 92	74.00	5. 92	Peak	No Limit
2 *	2439. 9000	66. 34	8. 34	74. 68	54. 00	20. 68	AVG	No Limit

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



Test Mode: TX 2440 MHz _CH19_2Mbps

Horizontal



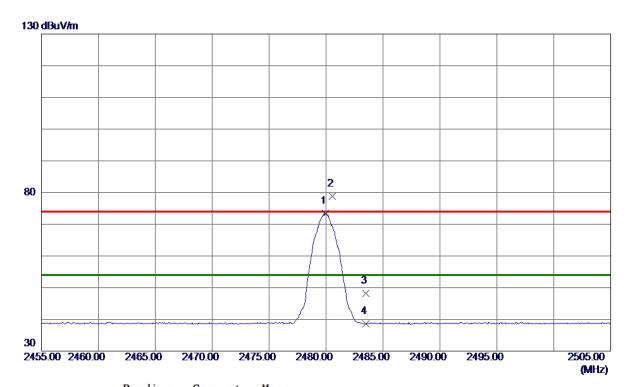
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4881. 8450	28. 65	5. 48	34. 13	54.00	-19.87	AVG	
2	4882. 0700	40. 07	5. 48	45. 55	74.00	-28.45	Peak	

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



Test Mode: TX 2480 MHz _CH39_2Mbps

Vertical



No.	Freq.	Reading Level	Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2479. 9500	65. 06	8. 38	73. 44	54.00	19. 44	AVG	No Limit
2	2480. 5500	70. 37	8. 38	78. 75	74.00	4. 75	Peak	No Limit
3	2483. 5000	39. 72	8. 39	48. 11	74.00	-25. 89	Peak	
4	2483. 5000	30. 26	8. 39	38. 65	54.00	-15. 35	AVG	

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

26500.00

(MHz)



Test Mode: TX 2480 MHz _CH39_2Mbps

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4958. 6600	40. 52	5. 69	46. 21	74.00	-27. 79	Peak	
2 *	4960. 1750	28. 83	5. 69	34. 52	54. 00	-19. 48	AVG	

11200.00 13750.00 16300.00 18850.00 21400.00

REMARKS:

1000.00 3550.00

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

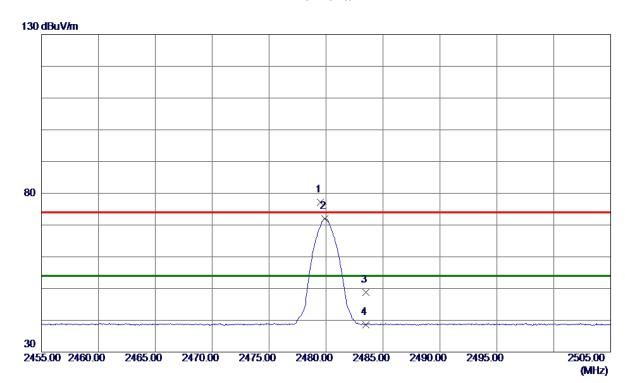
8650.00

6100.00



Test Mode: TX 2480 MHz _CH39_2Mbps

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2479. 5000	68. 90	8. 38	77. 28	74.00	3. 28	Peak	No Limit
2 *	2479. 9000	63. 65	8. 38	72. 03	54.00	18. 03	AVG	No Limit
3	2483. 5000	40. 35	8. 39	48. 74	74.00	-25. 26	Peak	
4	2483. 5000	30. 26	8. 39	38. 65	54.00	-15. 35	AVG	

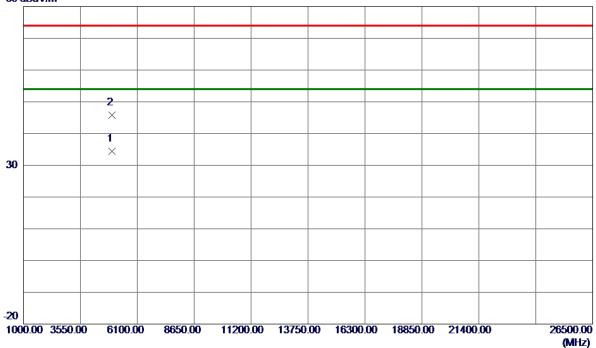
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX 2480 MHz _CH39_2Mbps

Horizontal





No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4959. 4350	28. 66	5. 69	34. 35	54.00	-19.65	AVG	
2	4960. 2950	40. 18	5. 69	45. 87	74. 00	-28. 13	Peak	

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

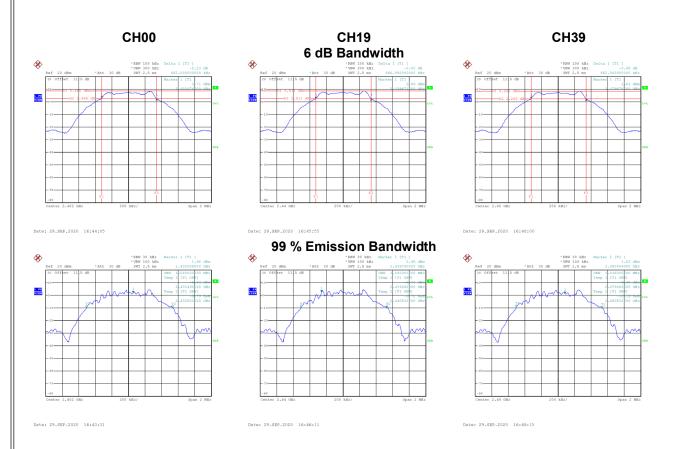


APPENDIX E - BANDWIDTH



Test Mode: CH00, CH19, CH39 - 1Mbps

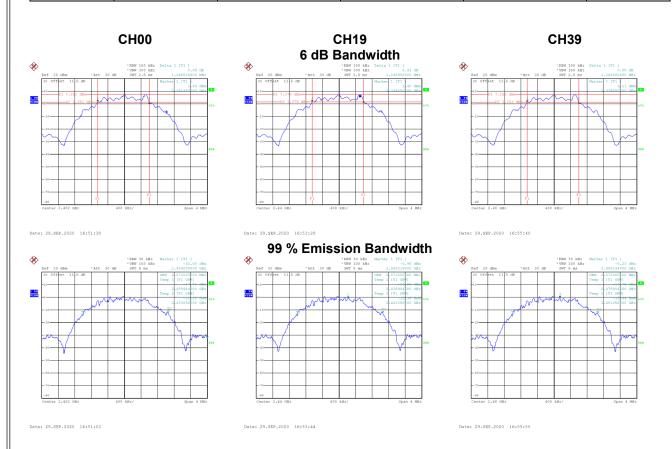
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Test Result
00	2402	0.662	1.040	500	Pass
19	2440	0.667	1.040	500	Pass
39	2480	0.662	1.036	500	Pass





Test Mode: CH00, CH19, CH39 - 2Mbps

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Test Result
00	2402	1.248	2.072	500	Pass
19	2440	1.246	2.072	500	Pass
39	2480	1.248	2.072	500	Pass



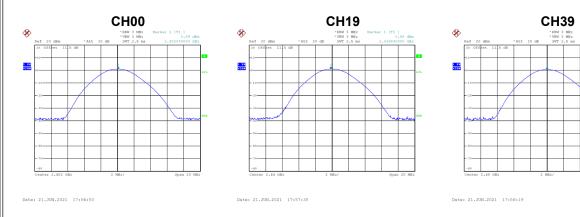


APPENDIX F - MAXIMUM OUTPUT POWER



Test Mode: CH00, CH19, CH39 - 1Mbps

Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	0.89	0.0012	30.00	1.00	Pass
2440	0.96	0.0012	30.00	1.00	Pass
2480	0.48	0.0011	30.00	1.00	Pass



Test Mode: CH00, CH19, CH39 - 2Mbps

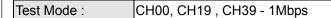
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	-0.56	0.0009	30.00	1.00	Pass
2440	-0.45	0.0009	30.00	1.00	Pass
2480	-0.87	0.0008	30.00	1.00	Pass



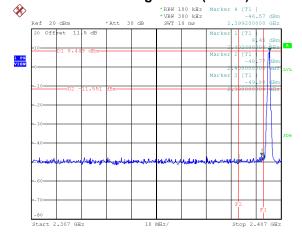


APPENDIX G - CONDUCTED SPURIOUS EMISSION

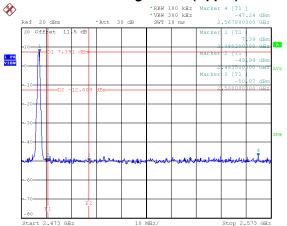




Bandedge CH00 (Lower)



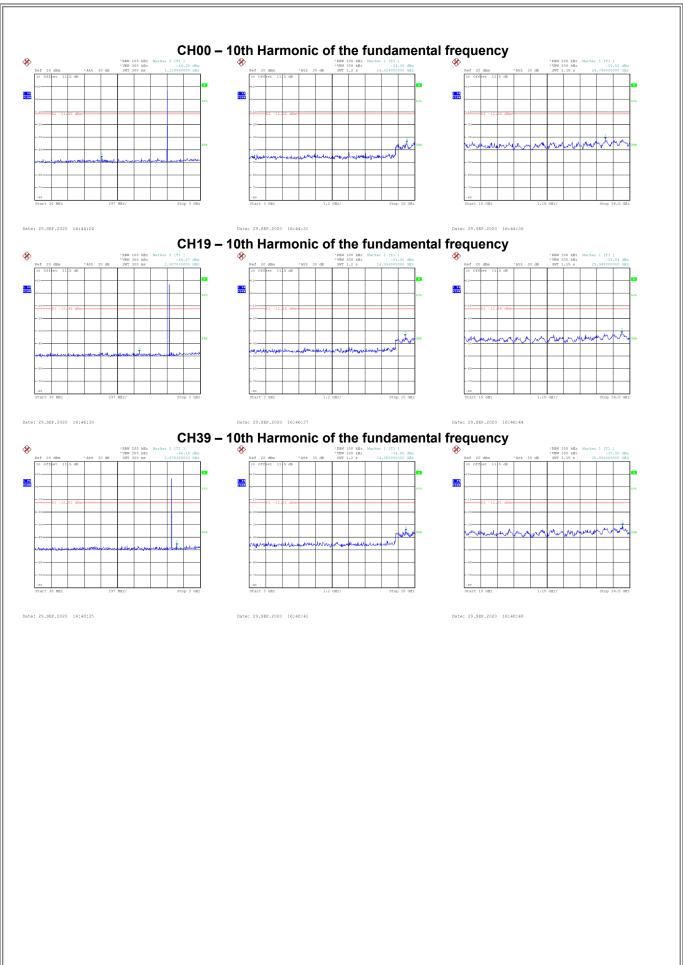
Bandedge CH39 (Upper)



Date: 29.SEP.2020 16:44:12

Date: 29.SEP.2020 16:48:22



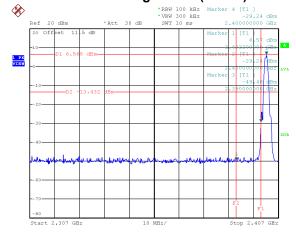




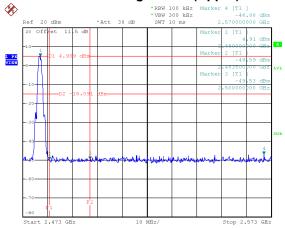
Date: 29.SEP.2020 16:51:45



Bandedge CH00 (Lower)

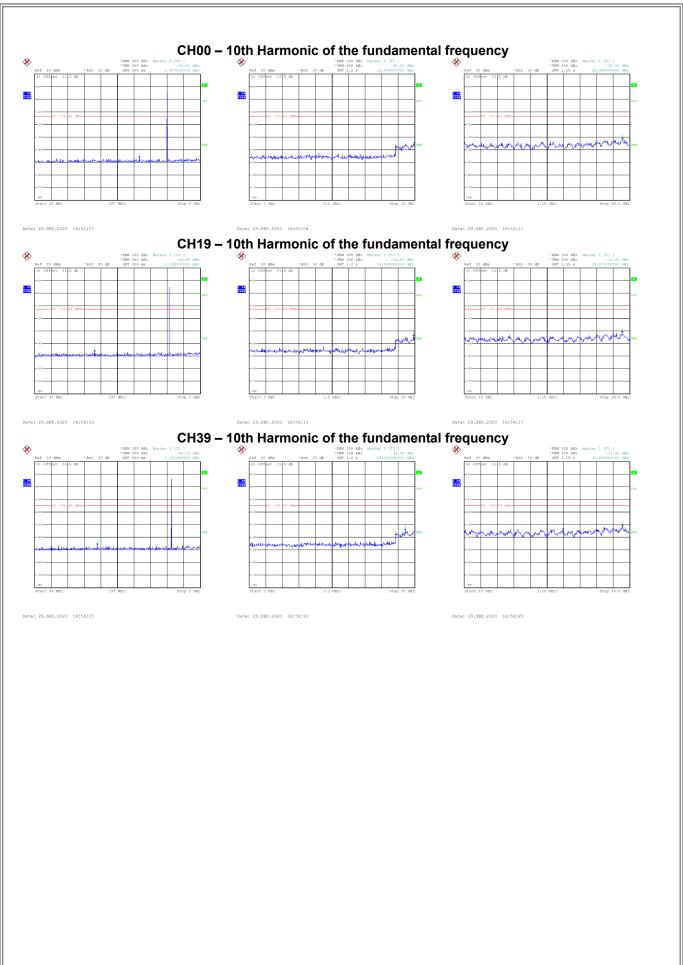


Bandedge CH39 (Upper)



Date: 29.SEP.2020 16:56:02







APPENDIX H - POWER SPECTRAL DENSITY



Test Mode: CH00, CH19, CH39 - 1Mbps

Channel	Frequency (MHz)	Power Spectral Density (dBm/3 kHz)	Max. Limit (dBm/3 kHz)	Test Result
00	2402	-8.04	8.00	Pass
19	2440	-7.85	8.00	Pass
39	2480	-8.11	8.00	Pass



Test Mode: CH00, CH19, CH39 - 2Mbps

Channel	Frequency (MHz)	Power Spectral Density (dBm/3 kHz)	Max. Limit (dBm/3 kHz)	Test Result
00	2402	-11.06	8.00	Pass
19	2440	-10.99	8.00	Pass
39	2480	-11.90	8.00	Pass



End of Test Report