



FCC Radio Test Report

FCC ID: 057C640A13

Project No. : 2007T046

Equipment: Notebook Computer

Brand Name : Lenovo

Test Model : Yoga 6 13ARE05

Series Model : Yoga 6 13ARE05******* (*=0~9, A~z, "_" or blank)

Applicant : Lenovo (Shanghai) Electronics Technology Co., Ltd.

Address : Section 304-305, Building No. 4, # 222, Meiyue Road, China

(Shanghai) Pilot Free Trade Zone

Manufacturer : Lenovo PC HK Limited

Address : 23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong

Kong, P.R.China

Date of Receipt : Jul. 16, 2020

Date of Test : Jul. 16, 2020 ~ Aug. 13, 2020

Issued Date : 2020/8/28 **Report Version** : R00

Test Sample : Engineering Sample No.: DG20200660175 for conducted,

DG20200660178 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.

Prepared by: Welly Zhou

Approved by: Ethan Ma

IAC MRA
ACCREDITED

Certificate #5123.02

Add: No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

Tel: +86-769-8318-3000 Web: www.newbtl.com



Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

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.	2020/8/28



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 Ren				
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	PASS	

Note:

- (1) "N/A" denotes test is not applicable to this device.
- (2) This is to request a Class II permissive change for FCC ID: O57C640A13.

This FCC ID: O57C640A13 is change ID based on Lenovo (Shanghai) Electronics Technology Co., Ltd., the original application information follow as FCC ID: O57-AX200NGW, approved on 01/07/2020 (which is change ID based on Intel Corporation, the original application information follow as model: AX200NGW, FCC ID: PD9AX200NG, approved on 03/05/2019)

Thus, only conducted emissions and radiated spurious emissions were evaluated and recorded in this report. For the test results of all other test items please refer to module test report as below table:

The state of the s				
RF Module model	Report Number	Module Function		
AX200NGW	181210-03.TR04	WLAN 2.4G		
	181210-03.TR01			
AX200NGW	181210-03.TR02	RLAN 5G Band 1~4		
	181210-03.TR03			
AX200NGW	181210-03.TR05	Bluetooth EDR		
AX200NGW	181210-03.TR04	Bluetooth LE		



(3) Based on the RF module the antennas for this Notebook Computer were updated as below table:

Antenna Information				
	Manufacturer AWAN			
	Antenna Type	Main: PIFA Antenna	Aux: PIFA Antenna	
	Part number	AUF6Y-100025 (DC33002GC00)	AUF6Y-100026 (DC33002GC10)	
Antenna 1	Peak gain	Main Antenna :	Aux Antenna :	
(WLAN combo)		WLAN(2.4G):1.14dBi	WLAN(2.4G):-1.53dBi	
		WLAN(5G B1-3):-1.73dBi WLAN(5G B4):-2.83dBi	WLAN(5G B1-3):-2.43dBi WLAN(5G B4):-1.54dBi	

Antenna Information			
Manufacturer luxshare-ict co.		-ict co. ltd	
	Antenna Type	Main: PIFA Antenna	Aux: PIFA Antenna
	Part number	L59AT001-CS-H (DC33002HB00)	L59AT002-CS-H (DC33002HB10)
Antenna 2 (WLAN combo)	Peak gain	Main Antenna:	Aux Antenna :
		WLAN(2.4G):0.6dBi	WLAN(2.4G):-1.6dBi
		WLAN(5G B1-3):-1.2dBi WLAN(5G B4):-1.7dBi	WLAN(5G B1-3):-0.6dBi WLAN(5G B4):-1.8dBi



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	2.60

B. Radiated emissions Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
		9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	Τ	3.57
		30MHz ~ 200MHz	V	4.88
		30MHz ~ 200MHz	Τ	4.14
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	4.62
DG-CB03		200MHz ~ 1,000MHz	Τ	4.80
		1GHz ~ 6GHz	ı	4.58
		6GHz ~ 18GHz	ı	5.18
		18GHz ~ 26.5GHz	ı	3.62
		26.5GHz ~ 40GHz	-	4.00

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	57%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	22°C	61%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	22°C	61%	AC 120V/60Hz	Kwok Guo



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Notebook Computer
Brand Name	Lenovo
Test Model	Yoga 6 13ARE05
Series Model	Yoga 6 13ARE05****** (*=0~9, A~z, "_" or blank)
Model Difference(s)	Differ in marketing purpose.
Hardware Version	LA-K211P
Software Version	19041.329
RF Module Model	AX200NGW
EUT Power Rating	20Vdc 3.25A
Power Adapter Power Rating	Input:100-240V~1.3A 50-60Hz Output:20Vdc 3.25A / 15Vdc 3A / 9Vdc 2A / 5Vdc 2A
Power Adapter	Chicony / ADLX45YCC3D
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Technology	GFSK
Bit Rate of Transmitter	1Mbps, 2Mbps
Max. Output Power (Reference module report)	8.98 dBm (0.0079 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



2.2 DESCRIPTION OF TEST MODES

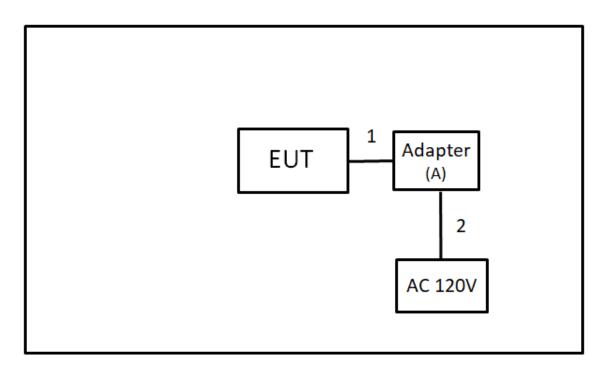
Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	1 Mbps	00	-
Transmitter Radiated Emissions	1/2 Mbps	00/39	Bandedge
(above 1GHz)	1/2 Mbps	00/19/39	Harmonic

NOTE:

- (1) The Radiated emissions test was verified based on the worst conducted power and Bandwidth test results reported in the original report.
- (2) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Horizontal) is recorded.
- (3) All X, Y and Z axes are evaluated, but only the worst case (Y axis) is recorded.
- (4) There were no emissions found below 30 MHz within 20 dB of the limit.



2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
Α	Adapter	Lenove	ADLX45YAC3D	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	Adapter Cable	NO	NO	1.8m
2	Power Cord	NO	NO	0.9m



3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)		
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.

The following table is the setting of the receiver

The fellevilling table to the cottains 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

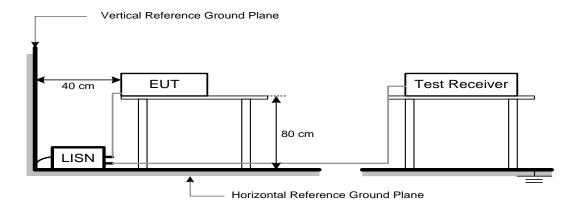
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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 『Note』. 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)	Band edge/ Harmonic at 3m (dBµV/m)		Harmonic at 1.5m (dBµV/m)	
r requeries (iiii iz)	Peak	Average	Peak	Average
Above 1000	74	54	80 (Note 5)	60 (Note 5)

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).
- (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use) Margin Level = Measurement Value - Limit Value

$$FS_{\text{limit}} = FS_{\text{max}} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

20log d limit/d measure=20log 3/1.5=6 dB.



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 or 1.5m 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 1GHz)
- 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.

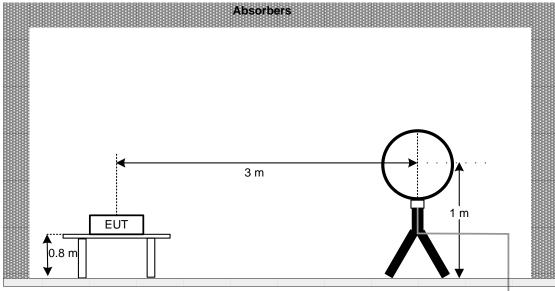
4.3 DEVIATION FROM TEST STANDARD

No deviation

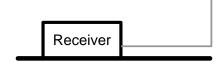


4.4 TEST SETUP

9 kHz-30 MHz



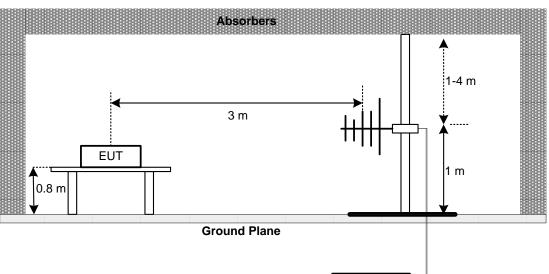
Ground Plane



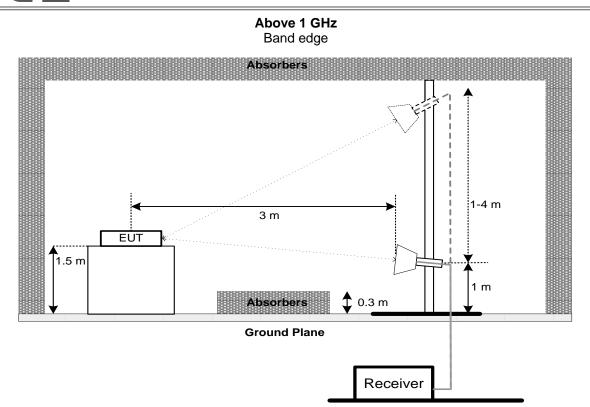
Receiver

Amp.

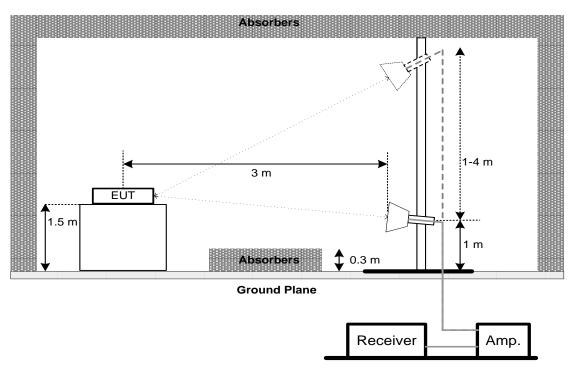
30 MHz to 1 GHz





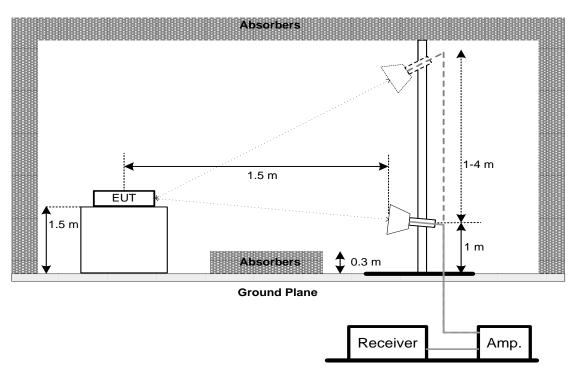


Harmonic(1 GHz to 18 GHz)





Harmonic(Above 18 GHz)



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT - 30 MHz TO 1000 MHz

Please refer to the APPENDIX B.

4.7 TEST RESULT - ABOVE 1000 MHz

Please refer to the APPENDIX C.

Remark:

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



5. 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, 2021
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 28, 2021
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 01, 2021
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 10, 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. 09, 2021
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 22, 2021
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

	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 12, 2021
2	Amplifier	Agilent	8449B	3008A02333	Mar. 01, 2021
3	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
4	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Cable	N/A	EMC104-SM-SM-6 000	N/A	May 09, 2021
8	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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

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

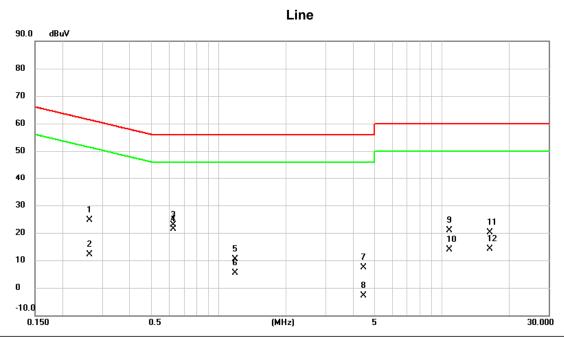
[&]quot;*" calibration period of equipment list is three year.



	APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS
I	





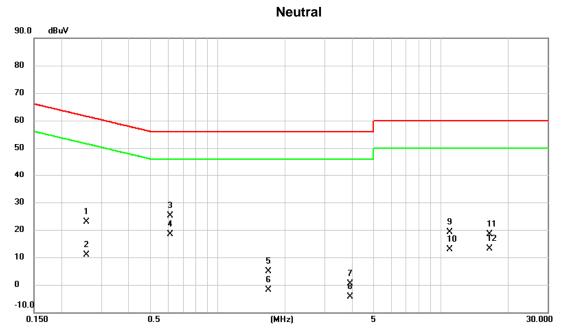


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1		0.2625	24.65	0.02	24.67	61.35	-36.68	QР	
2		0.2625	12.21	0.02	12.23	51.35	-39.12	AVG	
3		0.6270	22.90	0.03	22.93	56.00	-33.07	QP	
4	*	0.6270	21.33	0.03	21.36	46.00	-24.64	AVG	
5		1.1872	10.34	0.05	10.39	56.00	-45.61	QP	
6		1.1872	5.35	0.05	5.40	46.00	-40.60	AVG	
7		4.4363	7.30	0.13	7.43	56.00	-48.57	QP	
8		4.4363	-3.06	0.13	-2.93	46.00	-48.93	AVG	
9		10.8060	20.79	0.21	21.00	60.00	-39.00	QP	
10		10.8060	13.66	0.21	13.87	50.00	-36.13	AVG	
11		16.4220	19.98	0.22	20.20	60.00	-39.80	QP	
12		16.4220	13.79	0.22	14.01	50.00	-35.99	AVG	

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





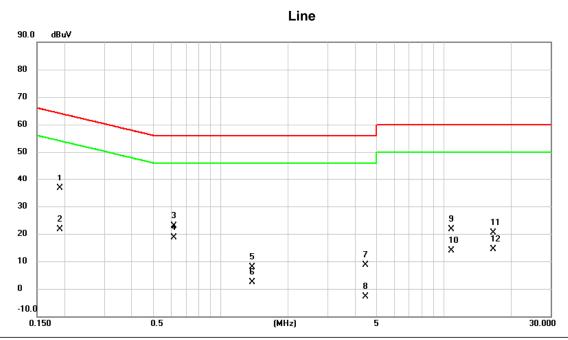


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1	0.2580	22.98	0.02	23.00	61.50	-38.50	QР	
2	0.2580	10.85	0.02	10.87	51.50	-40.63	AVG	
3	0.6157	24.98	0.03	25.01	56.00	-30.99	QP	
4 *	0.6157	18.34	0.03	18.37	46.00	-27.63	AVG	
5	1.6913	4.69	0.07	4.76	56.00	-51.24	QP	
6	1.6913	-2.01	0.07	-1.94	46.00	-47.94	AVG	
7	3.9053	0.21	0.11	0.32	56.00	-55.68	QP	
8	3.9053	-4.53	0.11	-4.42	46.00	-50.42	AVG	
9	10.9568	18.89	0.21	19.10	60.00	-40.90	QP	
10	10.9568	12.77	0.21	12.98	50.00	-37.02	AVG	
11	16.5660	18.16	0.22	18.38	60.00	-41.62	QP	
12	16.5660	12.80	0.22	13.02	50.00	-36.98	AVG	

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



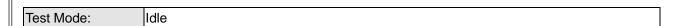


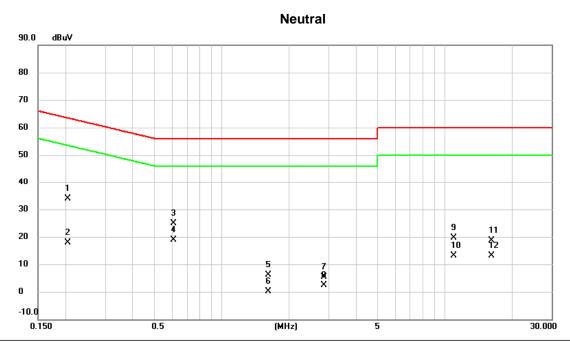


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1	*	0.1905	36.62	0.01	36.63	64.01	-27.38	QP	
2		0.1905	21.59	0.01	21.60	54.01	-32.41	AVG	
3		0.6202	22.83	0.03	22.86	56.00	-33.14	QP	
4		0.6202	18.48	0.03	18.51	46.00	-27.49	AVG	
5		1.3808	7.79	0.06	7.85	56.00	-48.15	QP	
6		1.3808	2.20	0.06	2.26	46.00	-43.74	AVG	
7		4.4385	8.54	0.13	8.67	56.00	-47.33	QP	
8		4.4385	-3.10	0.13	-2.97	46.00	-48.97	AVG	
9		10.8060	21.31	0.21	21.52	60.00	-38.48	QP	
10		10.8060	13.77	0.21	13.98	50.00	-36.02	AVG	
11		16.6110	20.23	0.22	20.45	60.00	-39.55	QP	
12		16.6110	14.12	0.22	14.34	50.00	-35.66	AVG	

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







No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1		0.2040	33.77	0.01	33.78	63.45	-29.67	QP	
2		0.2040	17.87	0.01	17.88	53.45	-35.57	AVG	
3		0.6112	24.74	0.03	24.77	56.00	-31.23	QP	
4	*	0.6112	18.83	0.03	18.86	46.00	-27.14	AVG	
5		1.6215	6.09	0.06	6.15	56.00	-49.85	QP	
6		1.6215	0.02	0.06	0.08	46.00	-45.92	AVG	
7		2.8590	5.29	0.09	5.38	56.00	-50.62	QР	
8		2.8590	2.32	0.09	2.41	46.00	-43.59	AVG	
9		10.9432	19.44	0.21	19.65	60.00	-40.35	QP	
10		10.9432	12.84	0.21	13.05	50.00	-36.95	AVG	
11		16.1408	18.49	0.22	18.71	60.00	-41.29	QР	
12		16.1408	12.95	0.22	13.17	50.00	-36.83	AVG	

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

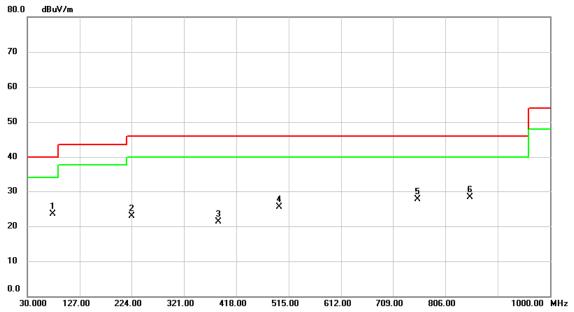


APPENDIX B - RADIATED EMISSION - 30 MHZ TO 1000 MHZ	



Test Mode: TX 2402 MHz _CH00_1Mbps

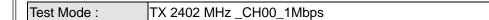
Vertical



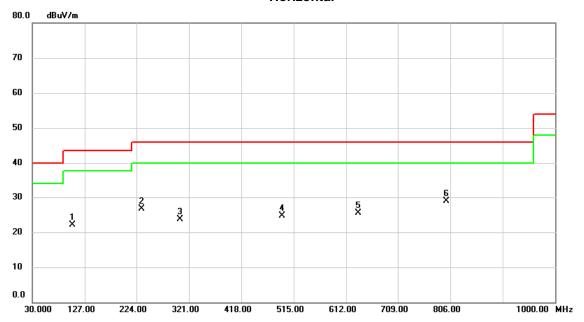
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	77.530	40.74	-17.29	23.45	40.00	-16.55	peak	
2	224.970	36.98	-14.06	22.92	46.00	-23.08	peak	
3	385.020	30.68	-9.37	21.31	46.00	-24.69	peak	
4	497.540	32.77	-7.28	25.49	46.00	-20.51	peak	
5	754.590	30.81	-3.13	27.68	46.00	-18.32	peak	
6	851.590	30.10	-1.72	28.38	46.00	-17.62	peak	

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





Horizontal



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	103.720	36.83	-14.67	22.16	43.50	-21.34	peak	
2	233.700	40.45	-13.76	26.69	46.00	-19.31	peak	
3	304.510	34.65	-10.93	23.72	46.00	-22.28	peak	
4	493.660	31.95	-7.31	24.64	46.00	-21.36	peak	
5	634.310	30.17	-4.61	25.56	46.00	-20.44	peak	
6 *	798.240	31.53	-2.56	28.97	46.00	-17.03	peak	

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

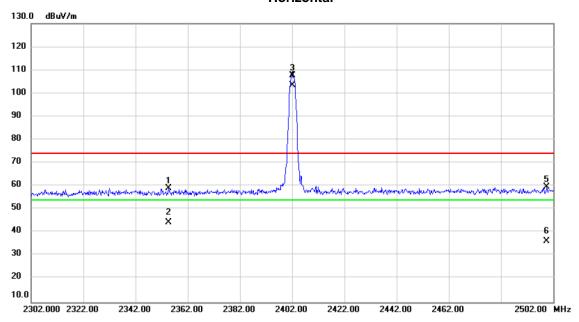


APPENDIX C - RADIATED EMISSION - ABOVE 1000 MHZ



TX 2402 MHz _CH00_1Mbps Test Mode:

Horizontal



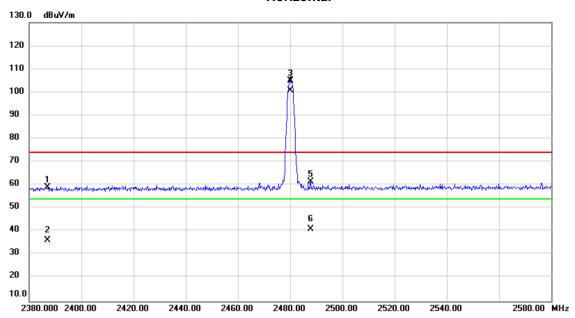
No. MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2354.600	26.29	32.79	59.08	74.00	-14.92	peak	
2	2354.600	11.62	32.79	44.41	54.00	-9.59	AVG	
3 X	2402.000	74.88	32.82	107.70	74.00	33.70	peak	No Limit
4 *	2402.000	70.63	32.82	103.45	54.00	49.45	AVG	No Limit
5	2499.400	26.76	32.88	59.64	74.00	-14.36	peak	
6	2499.400	3.51	32.88	36.39	54.00	-17.61	AVG	

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



Test Mode: TX 2480 MHz _CH39_1Mbps

Horizontal



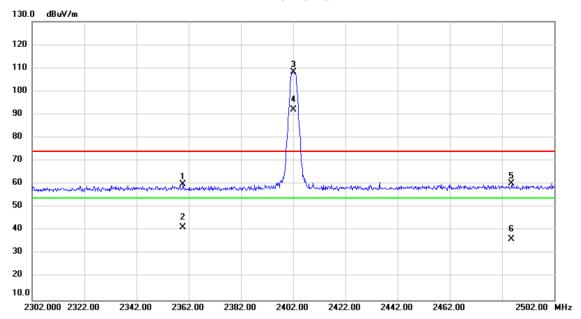
No. M	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	23	87.200	26.27	32.81	59.08	74.00	-14.92	peak	
2	23	87.200	3.32	32.81	36.13	54.00	-17.87	AVG	
3 X	24	80.000	71.98	32.86	104.84	74.00	30.84	peak	No Limit
4 *	24	80.000	67.84	32.86	100.70	54.00	46.70	AVG	No Limit
5	24	87.800	28.71	32.87	61.58	74.00	-12.42	peak	
6	24	87.800	8.20	32.87	41.07	54.00	-12.93	AVG	

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



Test Mode: TX 2402 MHz _CH00_2Mbps

Horizontal



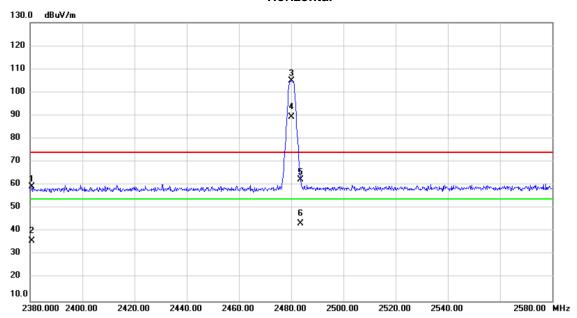
No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2359.800	27.09	32.80	59.89	74.00	-14.11	peak	
2	2359.800	8.42	32.80	41.22	54.00	-12.78	AVG	
3 X	2402.000	75.31	32.82	108.13	74.00	34.13	peak	No Limit
4 *	2402.000	59.16	32.82	91.98	54.00	37.98	AVG	No Limit
5	2485.600	27.45	32.87	60.32	74.00	-13.68	peak	
6	2485.600	3.45	32.87	36.32	54.00	-17.68	AVG	

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



Test Mode: TX 2480 MHz _CH39_2Mbps

Horizontal



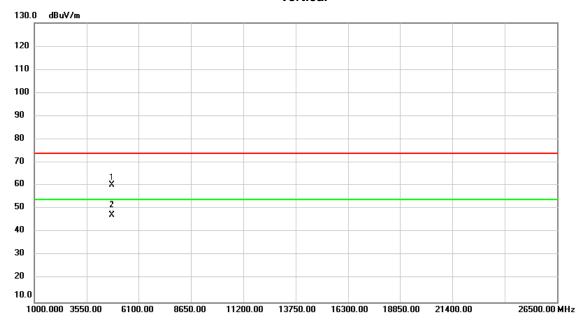
No. M	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2	380.600	26.47	32.80	59.27	74.00	-14.73	peak	
2	2	380.600	3.21	32.80	36.01	54.00	-17.99	AVG	
3 X	2	480.000	72.04	32.86	104.90	74.00	30.90	peak	No Limit
4 *	2	480.000	56.61	32.86	89.47	54.00	35.47	AVG	No Limit
5	2	483.500	29.35	32.87	62.22	74.00	-11.78	peak	
6	2	483.500	10.64	32.87	43.51	54.00	-10.49	AVG	

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



Test Mode: TX 2402 MHz _CH00_1Mbps

Vertical



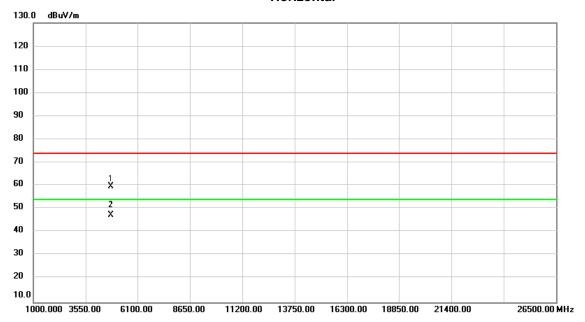
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	804.000	55.13	5.27	60.40	74.00	-13.60	peak	
2 *	* 4	804.000	41.98	5.27	47.25	54.00	-6.75	AVG	

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



Test Mode: TX 2402 MHz _CH00_1Mbps

Horizontal



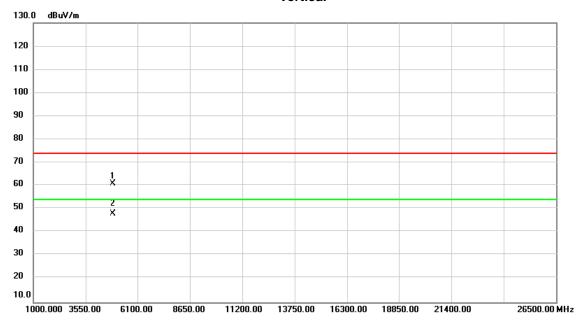
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	804.000	54.53	5.27	59.80	74.00	-14.20	peak	
2	* 4	804.000	42.09	5.27	47.36	54.00	-6.64	AVG	

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



Test Mode: TX 2440 MHz _CH19_1Mbps

Vertical



No.	Mk.	Freq.	Reading Level		Measure- ment		Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	880.000	55.27	5.48	60.75	74.00	-13.25	peak	
2	* 4	880.000	42.36	5.48	47.84	54.00	-6.16	AVG	

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



Test Mode: TX 2440 MHz _CH19_1Mbps

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	880.000	55.08	5.48	60.56	74.00	-13.44	peak	
2	* 4	880.000	42.38	5.48	47.86	54.00	-6.14	AVG	

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



Test Mode: TX 2480 MHz _CH39_1Mbps

Vertical



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	960.000	55.85	5.69	61.54	74.00	-12.46	peak	
2	* 4	960.000	42.57	5.69	48.26	54.00	-5.74	AVG	

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



Test Mode: TX 2480 MHz _CH39_1Mbps

Horizontal



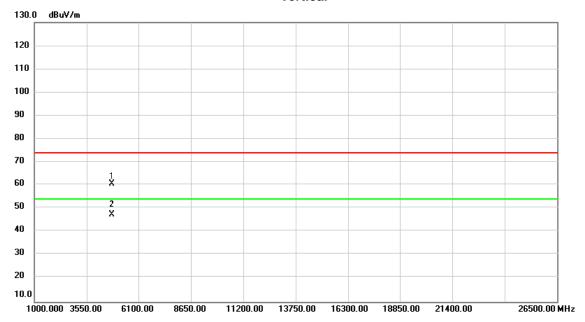
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	960.000	54.93	5.69	60.62	74.00	-13.38	peak	
2	* 4	960.000	42.60	5.69	48.29	54.00	-5.71	AVG	

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



Test Mode: TX 2402 MHz _CH00_2Mbps

Vertical



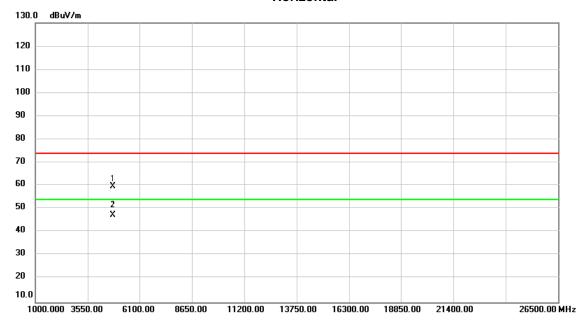
	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
_			MHz	dBu∨	dB	dBu√/m	dBuV/m	dB	Detector	Comment
_	1	4	804.000	55.35	5.27	60.62	74.00	-13.38	peak	
	2	* 4	804.000	42.18	5.27	47.45	54.00	-6.55	AVG	

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



Test Mode: TX 2402 MHz _CH00_2Mbps

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	804.000	54.41	5.27	59.68	74.00	-14.32	peak	
2 1	* 4	804.000	42.23	5.27	47.50	54.00	-6.50	AVG	

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



Test Mode: TX 2440 MHz _CH19_2Mbps

Vertical



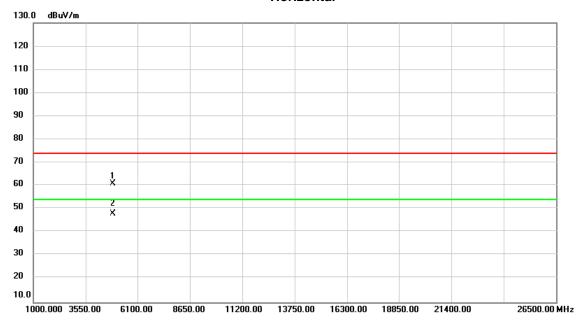
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	880.000	54.67	5.48	60.15	74.00	-13.85	peak	
2	* 4	880.000	42.53	5.48	48.01	54.00	-5.99	AVG	

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



Test Mode: TX 2440 MHz _CH19_2Mbps

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	880.000	55.40	5.48	60.88	74.00	-13.12	peak	
2	* 4	880.000	42.45	5.48	47.93	54.00	-6.07	AVG	

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



Test Mode: TX 2480 MHz _CH39_2Mbps

Vertical



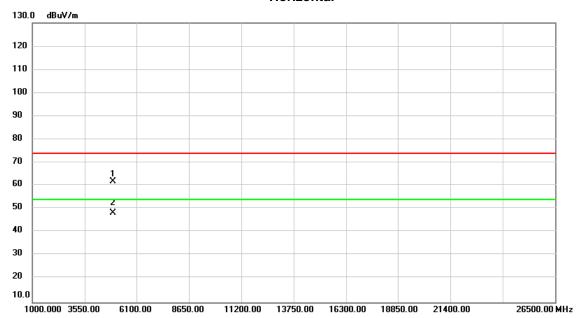
No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	960.000	55.02	5.69	60.71	74.00	-13.29	peak	
2	* 4	960.000	42.72	5.69	48.41	54.00	-5.59	AVG	

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



Test Mode: TX 2480 MHz _CH39_2Mbps

Horizontal



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBuV/m	dBu√/m	dB	Detector	Comment
1	4	960.000	56.17	5.69	61.86	74.00	-12.14	peak	
2	* 4	960.000	42.67	5.69	48.36	54.00	-5.64	AVG	

REMARKS:

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

End of Test Report