



中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: HONG KONG IPRO TECHNOLOGY
CO.,LIMITED

Address: 12/F., San Toi Building 137-139 Connaught Road Central HK

FCC ID: PQ4IPROY300

Product Name: Smart Phone

Standard(s): FCC Part 15B
ANSI C63.4-2014

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR230206153-00D

Date Of Issue: 2023/3/9

Reviewed By: Sun Zhong

Sun Zhong

Title: Manager

Test Laboratory: China Certification ICT Co., Ltd (Dongguan)
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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230206153-00D	Original Report	2023/3/9

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Smart Phone
EUT Model:	Y300
Highest Operation Frequency:	2690 MHz
Rated Input Voltage:	DC 3.8V from battery or DC 5V from adapter
Serial Number:	1WTO-1
EUT Received Date:	2023/2/16
EUT Received Status:	Good

Accessory Information:

Accessory Description	Manufacturer	Model
Adapter	IPO	NTR-S05

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Typical Use Mode, which was provided by the manufacturer. Test Mode: Downloading
Equipment Modifications:	No
EUT Exercise Software:	Winthrax.exe

1.2.2 Support Equipment List and Details

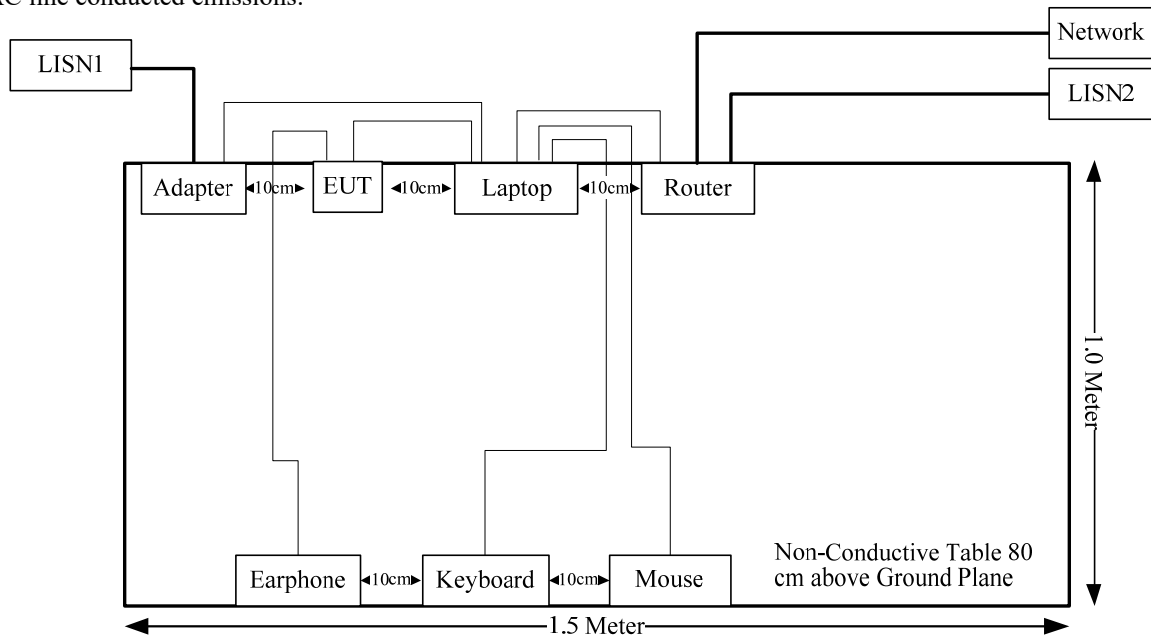
Manufacturer	Description	Model	Serial Number
Lenovo	Laptop	T460S	60PDTEK8
Lenovo	Adapter	ADLX45DLC3A	00HM613
FAST	Router	FS05	11923811054
PHILIPS	Mouse	SPK7214	M214BQ210411615
PHILIPS	Keyboard	SPT6234	K234210510742
IPRO	Earphone	Phonenix 5.0s	EP221126001

1.2.3 Support Cable List and Details

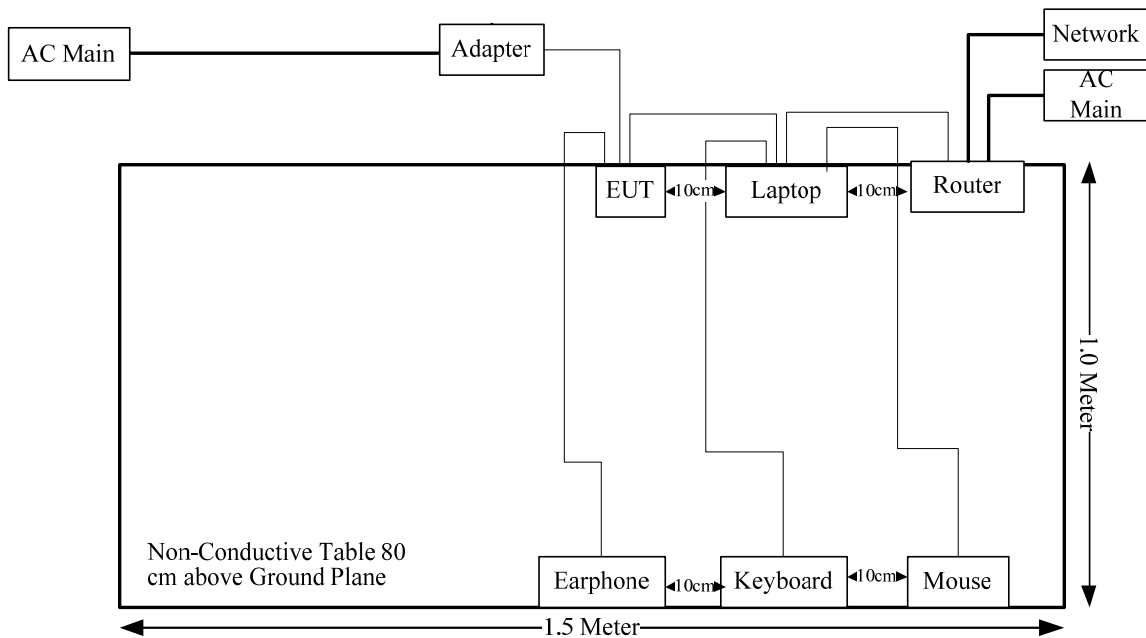
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Power Cable	No	Yes	1.2	Adapter	Laptop
RJ45	No	No	0.3	Laptop	Router
RJ45	No	No	10	Network	Router
Mouse Cable	No	No	1.2	Laptop	Mouse
Keyboard Cable	No	No	1.2	Laptop	Keyboard

1.2.4 Block Diagram of Test Setup

AC line conducted emissions:



Radiated emissions:



1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB, 200M~1GHz: 5.61 dB, 1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB, 18G~26.5G: 5.47 dB, 26.5G~40G: 5.63 dB
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

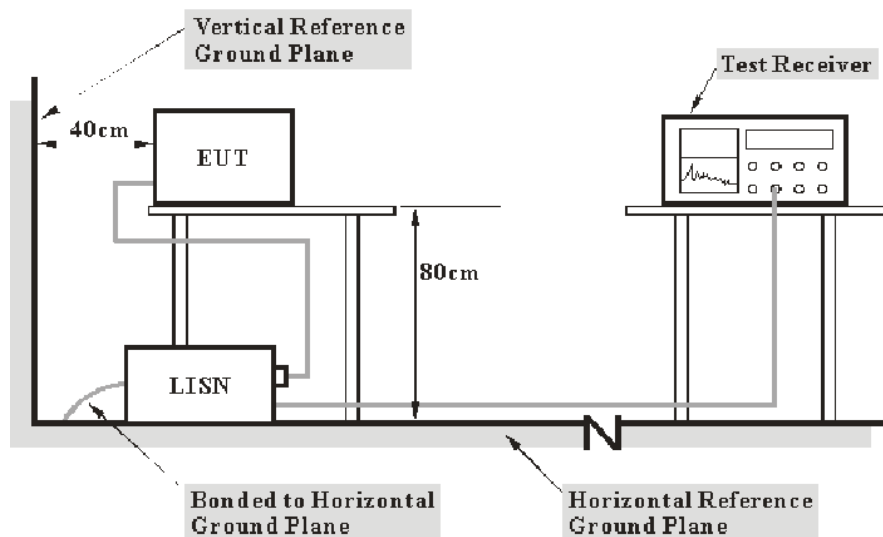
2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
§15.107	Conducted emissions	Compliant
§15.109	Radiated emissions	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 EUT Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The adapter was connected to the main LISN with a 120 V/60 Hz AC power source.

3.1.2 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.3 Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the first LISN and the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT, the report shall list the six emissions with the smallest margin relative to the limit, unless the margin is greater than 20 dB.

All data was recorded in the Quasi-peak and average detection mode.

The report shall list the six emissions with the smallest margin relative to the limit, unless the margin is greater than 20 dB.

3.1.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

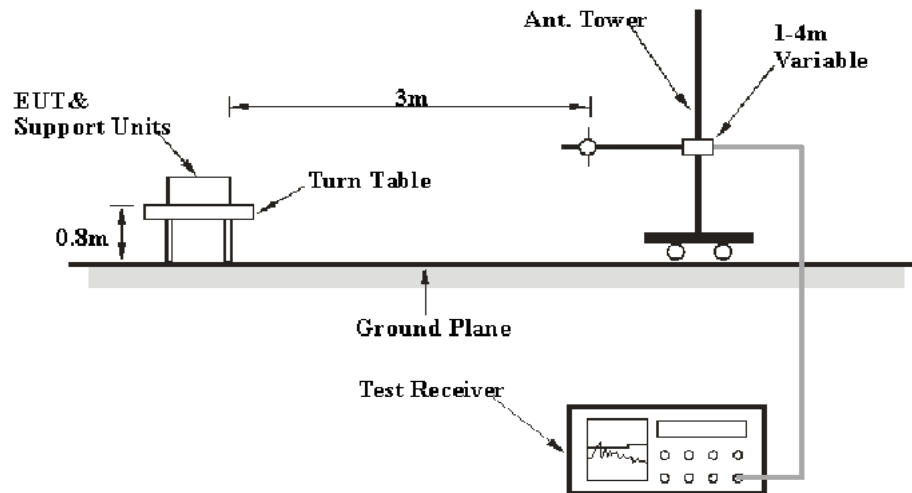
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

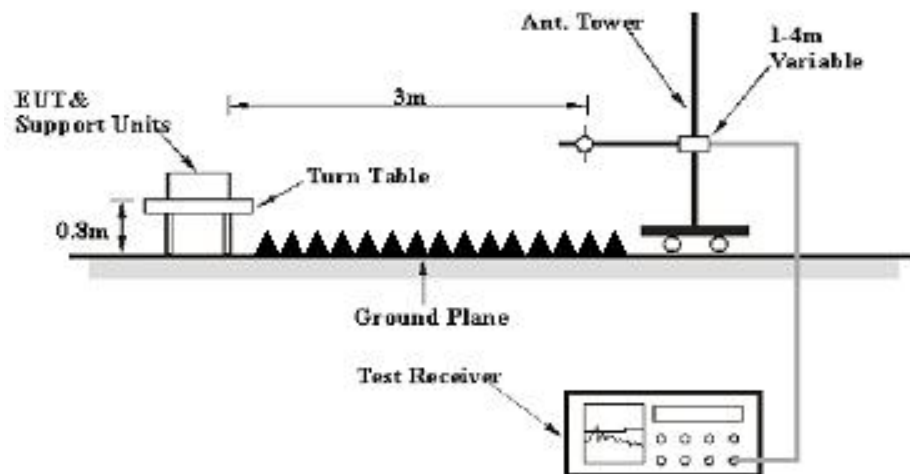
3.2 Radiation Spurious Emissions

3.2.1 EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber, using the setup accordance with the ANSI C63.4-2014. The specification used was with the FCC Part 15 B Class B limits.

3.2.2 EMI Test Receiver Setup

The system was investigated from 30 MHz to 13.5 GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	Peak
	1 MHz	Reduced video bandwidth	/	AVG

If the maximized peak measured value complies with under the limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

3.2.3 Test Procedure

During the radiated emissions, the adapter was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = Antenna Factor + Cable Loss- Amplifier Gain

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

4. TEST DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	1WTO-1	Test Date:	2023/2/24
Test Site:	CE	Test Mode:	Downloading
Tester:	Bob Yang	Test Result:	Pass

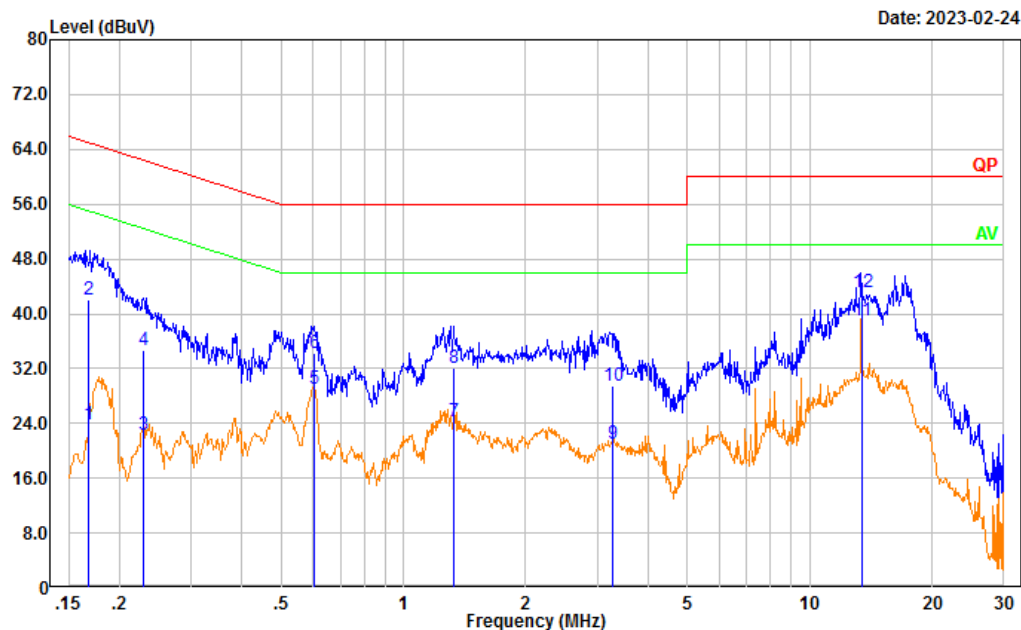
Environmental Conditions:					
Temperature: (°C)	22.5	Relative Humidity: (%)	52	ATM Pressure: (kPa)	101.9

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2022/04/01	2023/03/31
R&S	EMI Test Receiver	ESR3	102726	2022/07/15	2023/07/14
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2022/08/07	2023/08/06
Audix	Test Software	E3	190306 (V9)	N/A	N/A

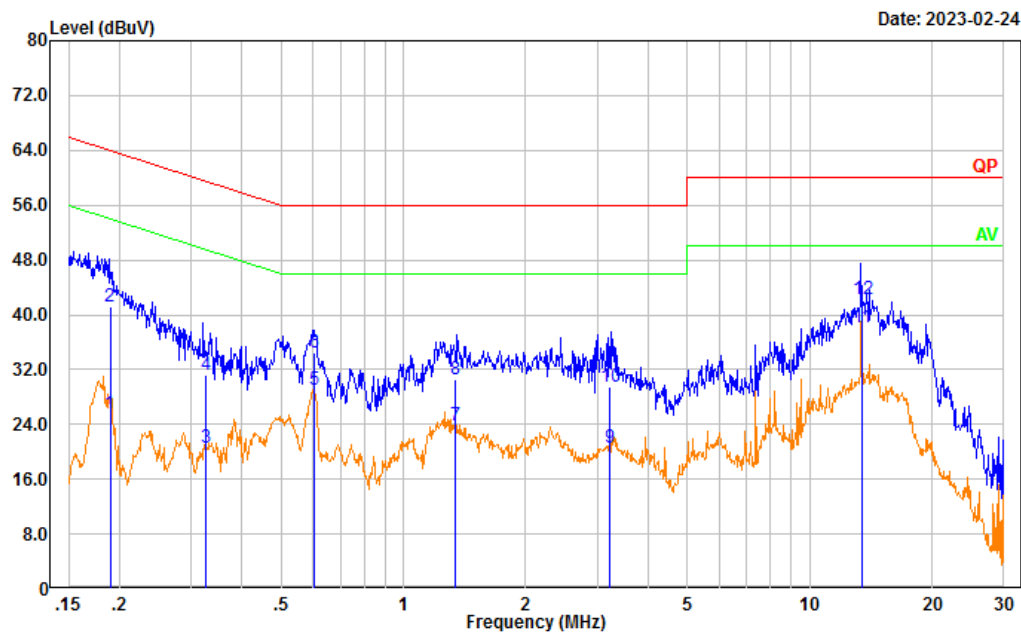
* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Mode: Downloading
Port: Line
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.169	14.32	9.61	23.93	55.03	31.10	Average
2	0.169	32.48	9.61	42.09	65.03	22.94	QP
3	0.229	12.63	9.61	22.24	52.50	30.26	Average
4	0.229	25.11	9.61	34.72	62.50	27.78	QP
5	0.605	19.47	9.62	29.09	46.00	16.91	Average
6	0.605	24.74	9.62	34.36	56.00	21.64	QP
7	1.325	14.62	9.62	24.24	46.00	21.76	Average
8	1.325	22.47	9.62	32.09	56.00	23.91	QP
9	3.278	11.35	9.65	21.00	46.00	25.00	Average
10	3.278	19.90	9.65	29.55	56.00	26.45	QP
11	13.419	29.44	9.68	39.12	50.00	10.88	Average
12	13.419	33.42	9.68	43.10	60.00	16.90	QP

Test Mode: Downloading
Port: neutral
Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.190	16.06	9.61	25.67	54.05	28.38	Average
2	0.190	31.66	9.61	41.27	64.05	22.78	QP
3	0.328	11.05	9.61	20.66	49.51	28.85	Average
4	0.328	21.50	9.61	31.11	59.51	28.40	QP
5	0.604	19.46	9.62	29.08	46.00	16.92	Average
6	0.604	24.79	9.62	34.41	56.00	21.59	QP
7	1.345	14.14	9.62	23.76	46.00	22.24	Average
8	1.345	20.94	9.62	30.56	56.00	25.44	QP
9	3.217	10.88	9.65	20.53	46.00	25.47	Average
10	3.217	19.94	9.65	29.59	56.00	26.41	QP
11	13.417	28.47	9.68	38.15	50.00	11.85	Average
12	13.417	32.49	9.68	42.17	60.00	17.83	QP

4.2 Radiation Spurious Emissions

Serial Number:	1WTO-1	Test Date:	2023/2/21~2023/2/23
Test Site:	966-1, 966-2	Test Mode:	Downloading
Tester:	Carl Xue, Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.4~24.8	Relative Humidity: (%)	54~68	ATM Pressure: (kPa)	101.7~102.2
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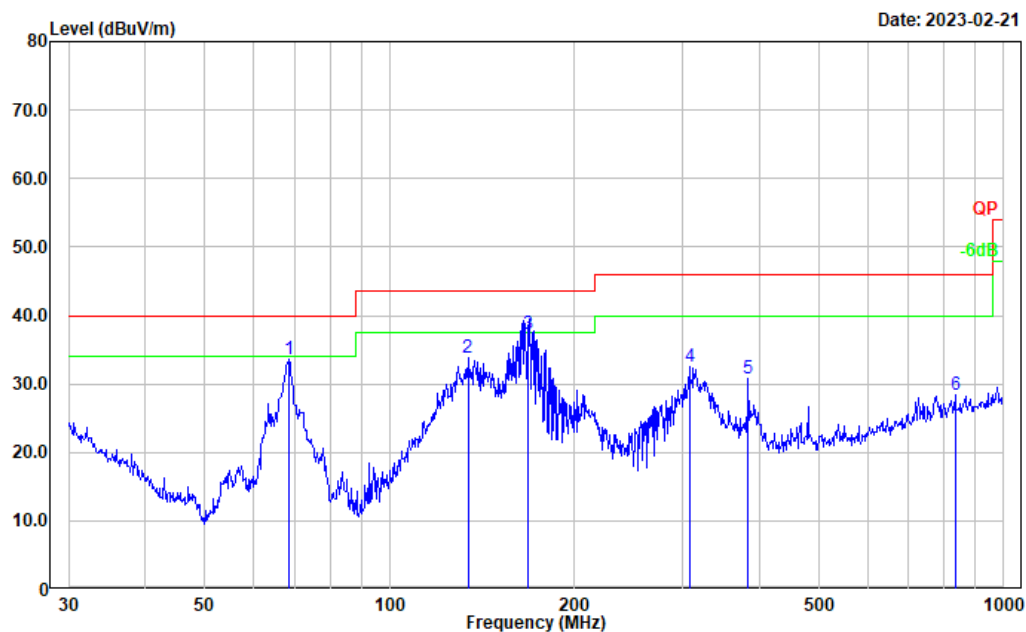
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2022/07/15	2023/07/14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022/07/17	2023/07/16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022/07/17	2023/07/16
Sonoma	Amplifier	310N	186165	2022/07/17	2023/07/16
Audix	Test Software	E3	201021 (V9)	N/A	N/A
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2022/07/15	2023/07/14
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022/08/07	2023/08/06
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022/08/07	2023/08/06
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/09	2023/11/08
E-Microwave	Band Rejection Filter	2400-2483.5MHz	OE01902424	2022/08/07	2023/08/06
Mini Circuits	High Pass Filter	VHF-6010+	31119	2022/08/07	2023/08/06

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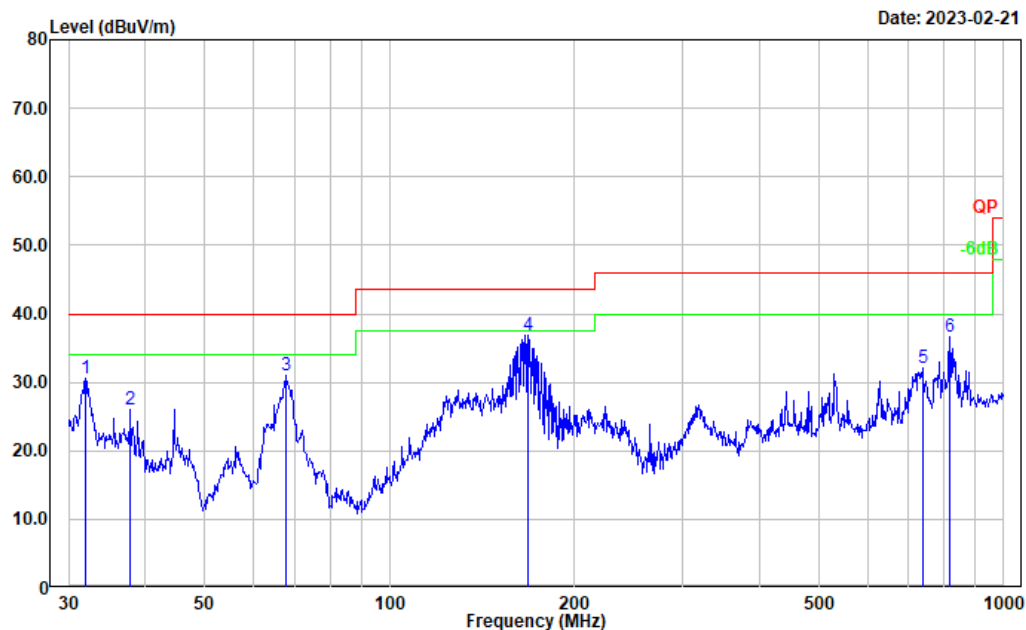
1) 30MHz-1GHz:

Test Mode: Downloading
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	68.391	50.17	-16.65	33.52	40.00	6.48	Peak
2	134.088	45.29	-11.57	33.72	43.50	9.78	Peak
3	167.621	50.07	-12.72	37.35	43.50	6.15	QP
4	307.831	43.06	-10.59	32.47	46.00	13.53	Peak
5	383.932	39.71	-9.03	30.68	46.00	15.32	Peak
6	833.317	30.03	-1.65	28.38	46.00	17.62	Peak

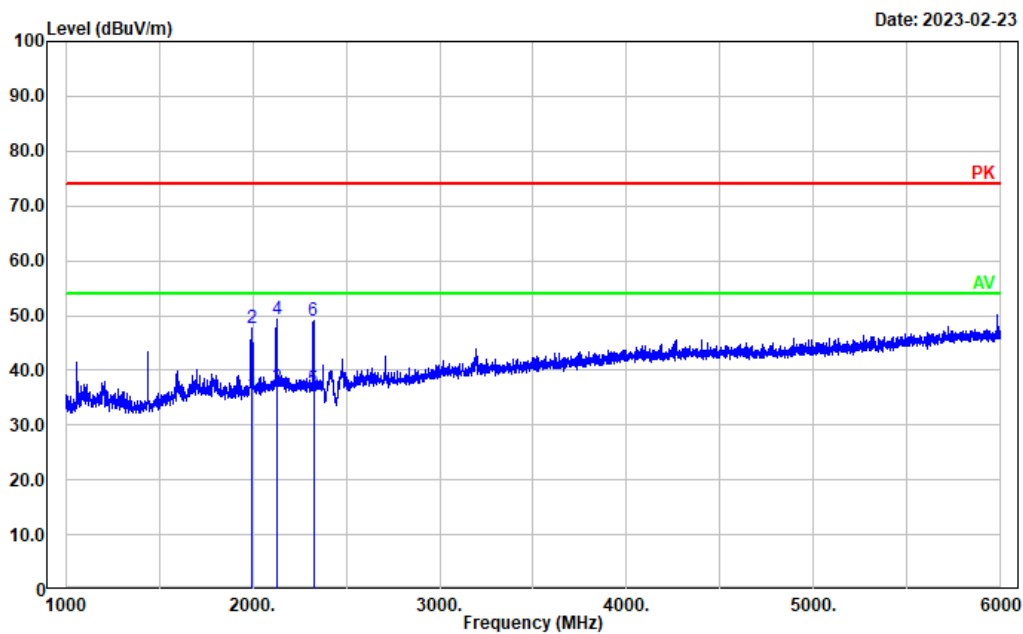
Test Mode: Downloading
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	31.955	35.67	-5.08	30.59	40.00	9.41	Peak
2	37.812	35.62	-9.59	26.03	40.00	13.97	Peak
3	67.913	47.80	-16.69	31.11	40.00	8.89	Peak
4	167.824	49.68	-12.73	36.95	43.50	6.55	Peak
5	737.071	35.09	-2.91	32.18	46.00	13.82	Peak
6	815.968	38.34	-1.79	36.55	46.00	9.45	Peak

Above 1GHz:

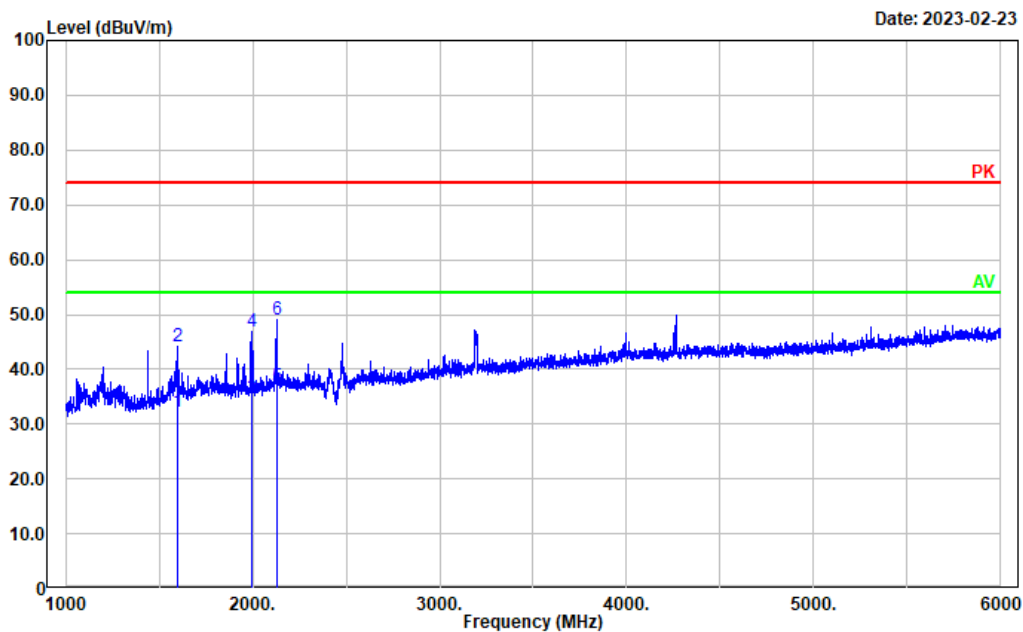
Test Mode: Downloading
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector

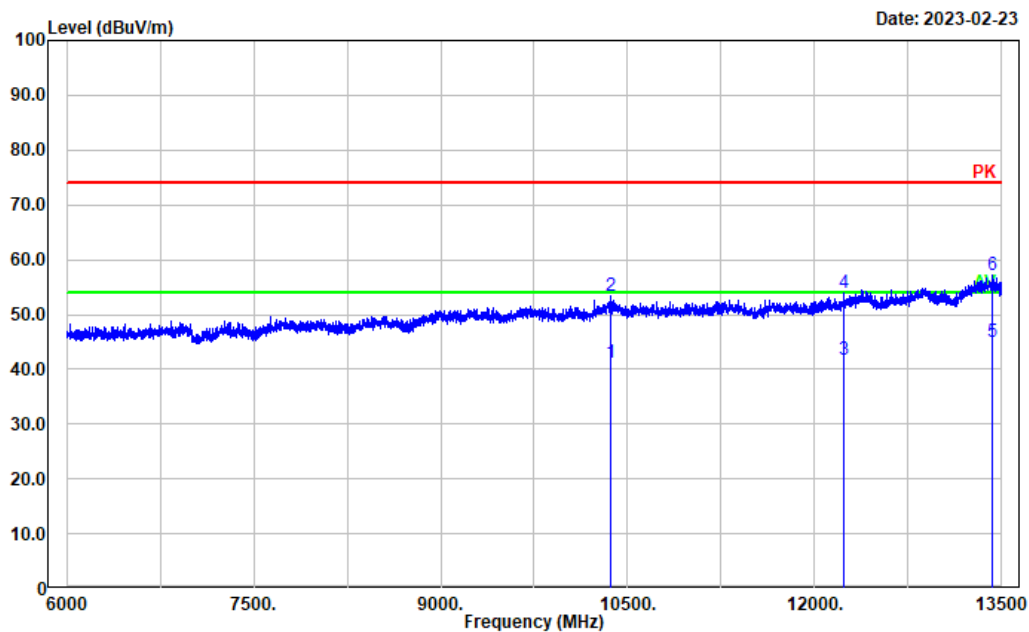
1	1992.198	33.17	2.28	35.45	54.00	18.55	Average
2	1992.198	45.34	2.28	47.62	74.00	26.38	Peak
3	2131.226	34.23	2.75	36.98	54.00	17.02	Average
4	2131.226	46.46	2.75	49.21	74.00	24.79	Peak
5	2325.265	33.37	3.22	36.59	54.00	17.41	Average
6	2325.265	45.74	3.22	48.96	74.00	25.04	Peak

Test Mode: Downloading
Polarization: vertical
Note:



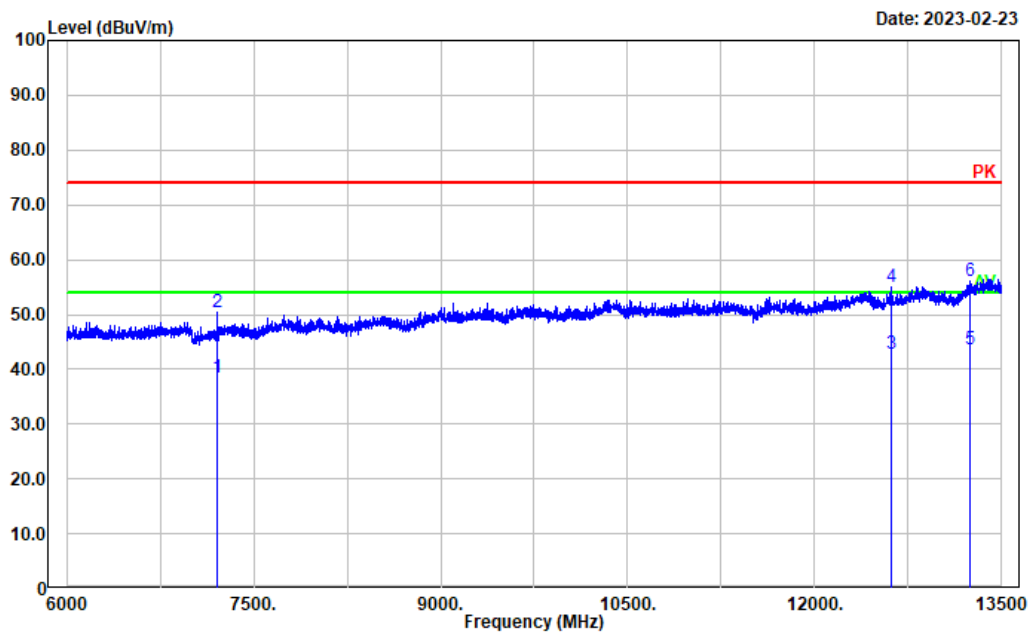
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1596.119	32.01	0.20	32.21	54.00	21.79	Average
2	1596.119	44.04	0.20	44.24	74.00	29.76	Peak
3	1996.199	32.26	2.30	34.56	54.00	19.44	Average
4	1996.199	44.52	2.30	46.82	74.00	27.18	Peak
5	2129.226	34.18	2.74	36.92	54.00	17.08	Average
6	2129.226	46.37	2.74	49.11	74.00	24.89	Peak

Test Mode: Downloading
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10358.370	22.10	19.18	41.28	54.00	12.72	Average
2	10358.370	34.21	19.18	53.39	74.00	20.61	Peak
3	12229.250	20.33	21.38	41.71	54.00	12.29	Average
4	12229.250	32.66	21.38	54.04	74.00	19.96	Peak
5	13427.990	22.03	23.08	45.11	54.00	8.89	Average
6	13427.990	34.00	23.08	57.08	74.00	16.92	Peak

Test Mode: Downloading
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector

1	7204.741	24.16	14.21	38.37	54.00	15.63	Average
2	7204.741	36.31	14.21	50.52	74.00	23.48	Peak
3	12616.320	21.22	21.67	42.89	54.00	11.11	Average
4	12616.320	33.45	21.67	55.12	74.00	18.88	Peak
5	13240.450	21.35	22.39	43.74	54.00	10.26	Average
6	13240.450	33.70	22.39	56.09	74.00	17.91	Peak

=====END OF REPORT=====