

NCC RADIO TEST REPORT

Product name	HyRead Gaze X Plus電子紙閱讀器
Applicant	凌網科技股份有限公司 Hyweb Technology Co., Ltd
Manufacture	深圳市皓擎科技有限公司 Shenzhen Haoqing Technology Co., LTD
Rating(s)	DC5V from Adapter or DC3.8V from battery
Trademark	Gaze
Model and/or type reference	K10P
Standard	LP0002:2020
Test Result	PASS

Date of receipt : 12-15-2021

signature :



Date of Issue : 12-30-2021

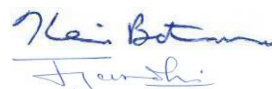
NCC RADIO TEST REPORT

Report Reference No......: M220104N4-04

Compiled by (+ signature) Kevin Bothmann

Approved by (+ signature) Jay Gandhi

Date of issue.....: 2021-12-30



Applicant's name 凌網科技股份有限公司

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Test specification:

Standard LP0002:2020

Test procedure EIA 603、ANSI、FCC/47 CFR/2.1046、2.1047、2.1049、2.1051、2.1053 and 2.1055

Non-standard testmethod..... N/A

Test item description

Product name HyRead Gaze X Plus 電子紙閱讀器

Trademark Gaze

Model and/or type reference K10P

Rating(s)..... DC5V from Adapter or DC3.8V from battery

Testing Laboratory information:

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CAB Identifier Number US0036

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Testing.....:

Date of receipt of test item.....: Dec. 15, 2021

Date (s) of performance of tests.....: Dec. 15~ Dec. 30, 2021

Date of Issue: Dec. 30, 2021

Test Result: **Pass**

GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Electro Magnetic Test, Inc., which is an independent testing and consulting firm. The test report is based on testing performed Electro Magnetic Test, Inc. personnel according to the measurement procedure described in the test specification given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form unless done so in full.

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

Electro Magnetic Test, Inc. is recognized by the following agencies for performing EMI/EMC testing:

COUNTRY	AGENCY	IDENTIFYING #
USA	Federal Communications Commission (FCC) (EMT's test site is recognized by the FCC)	Registration Number: 90576
USA, Canada, Taiwan, Australia/New Zealand, European Community	National Voluntary Lab Accreditation Program (NVLAP) (EMT is accredited by NVLAP. A copy of the NVLAP Scope Of Accreditation is available upon request.)	Lab Code: 200147-0
Canada	Industry Canada	File No.: IC 2804
Japan	Voluntary Control Council For Interference (VCCI)	A-0118
	Open Field Test Site "A"	-
	Mains Conducted Emissions Test Site "A"	-
	Telecom Conducted Emissions Test Site "A"	-
	3 Meter Semi-Anechoic Chamber Site "E"	-
	3 Meter Semi-Anechoic Chamber Site "E" (1GHz – 6GHz)	-
	Mains Conducted Emissions Test Site "E"	-
	Telecom Conducted Emissions Test Site "E"	-
Korea	Ministry of Information and Communication's Radio Research Laboratory (RRL) under the Asia Pacific Economic Cooperation (APEC) Mutual Recognition Arrangement (A copy of the Scope Of Accreditation is available upon request)	US0036
Taiwan	Bureau Of Standards, Metrology and Inspection (BSMI)	Reference Number: SL2-IN-E-1024
Australia / New Zealand	Australian Communications Authority (AUSTEL)	*

***THESE AGENCIES DO NOT ISSUE AN IDENTIFYING NUMBER TO TEST LABS.**

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

LP0002:2020			
Standard Section	Test Item	Judgment	Remark
5.7.3.4(2)	26 dB Emissions Bandwidth	PASS	None
5.7.3.1	Peak Transmit Power	PASS	None
5.7.3.1	Peak Power Spectral Density	PASS	None
5.7.4.5/3.3	AC Power Line Emissions	PASS	None
5.7.4/3.6	Radiated Emissions	PASS	None
5.7.4/3.6	Band Edge	PASS	None

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report.

(2) Reference to the KDB-789033 and KDB-662911.

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	1.38dB
2	Radiated Emission Test	3.17dB
3	RF power,conducted	0.16dB
4	Spurious emissions,conducted	0.21dB
5	All emissions,radiated(<1G)	4.68dB
6	All emissions,radiated(>1G)	4.89dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	HyRead Gaze X Plus 電子紙閱讀器	
Trade Name	Gaze	
Model Name	K10P	
Product Description	The EUT is a HyRead Gaze X Plus 電子紙閱讀器	
	Operation Frequency:	5.18GHz-5.24GHz
	Modulation Type:	IEEE for 802.11a: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE for 802.11n: OFDM (BPSK/QPSK/16QAM/64QAM)
	Number Of Channel	Please see Note 2.
	Antenna Designation:	Please see Note 3.
	Antenna Gain(Peak)	-1.3 dBi
	Output Power:	802.11a: 15.64dBm 802.11n 20: 15.21dBm
Channel List	Please refer to the Note 2.	
Power Rating	DC5V from Adapter or DC3.8V from battery	
Adapter Manufacturer /Model No.	N/A	
Connecting I/O Port(s)	Please refer to the User's Manual	
Products Covered	N/A	
EUT Modification(s)	N/A	
Model difference	N/A	

Note:

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

2.

Channel List							
802.11a/n (20MHz) (5.15-5.25GHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	40	5200	44	5220	48	5240
38	5190	42	5210	46	5230	-	-

3.

Table for Filed Antenna

Ant	Manufacture' Name	Model Name	Antenna Type	Connector	Gain (dBi)
ANT	深圳市艾匯 科技有限公司	K103	PIFA Antenna	N/A	2.4G WIFI:-3.87 dBi 5G WIFI: -1.3 dBi BLE/BT: -3.87 dBi

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11a : All Rate
Mode 2	802.11n(20 MHz) : All Rate
Mode 3	RX Mode

For Conducted Emission	
Final Test Mode	Description
Mode 1	TX Mode (802.11a CH48 worst case)

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11a : All Rate
Mode 2	802.11n(20 MHz) : All Rate
Mode 3	RX Mode

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) This product can be powered by adapter, have pretested powered by adapter, found to be the worst case is powered by the adapter, and recorded the data in the report.
- (3) Pre-scan the X-axis, Y-axis, z-axis, X-axis mode is the worst.

2.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters.

Test software Version	V1.0	Test program:	RF TestTool
Frequency	5180 MHz	5220 MHz	5240 MHz
Mode		Power setting	
802.11 a/n		15	

1. Open the “RF TestTool” installed on your EUT, select the relevant parameters to start the test.

2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

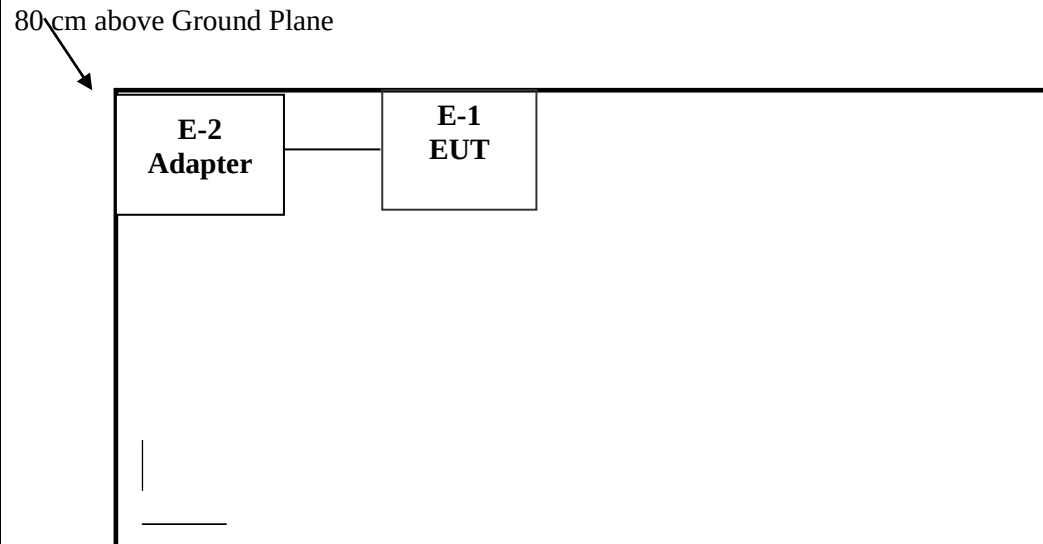
Block diagram of EUT configuration

CONDUCTED EMISSION

Test mode: mode 1

Non-Conductive Table

80 cm above Ground Plane



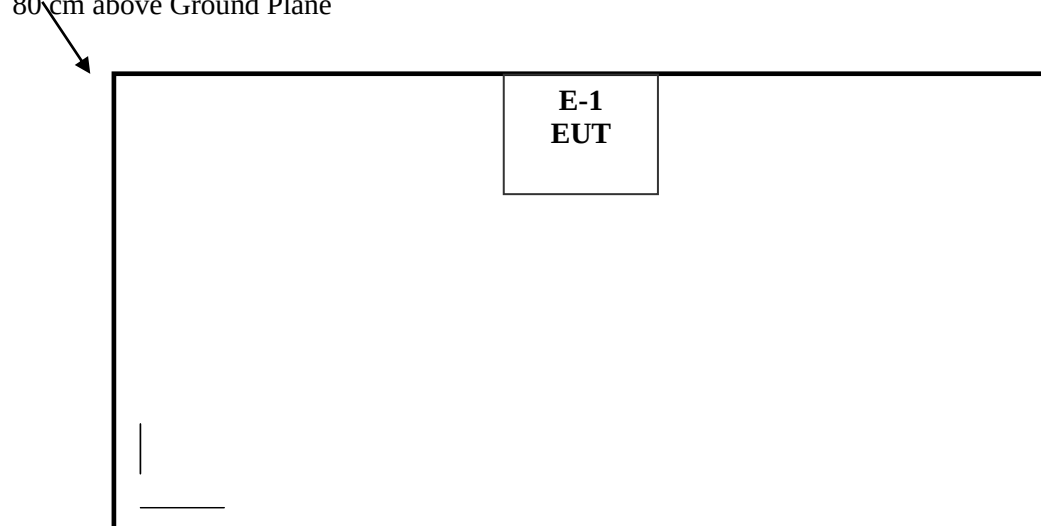
Block diagram of EUT configuration

RADIATED EMISSION

Test mode: mode 1,3

Non-Conductive Table

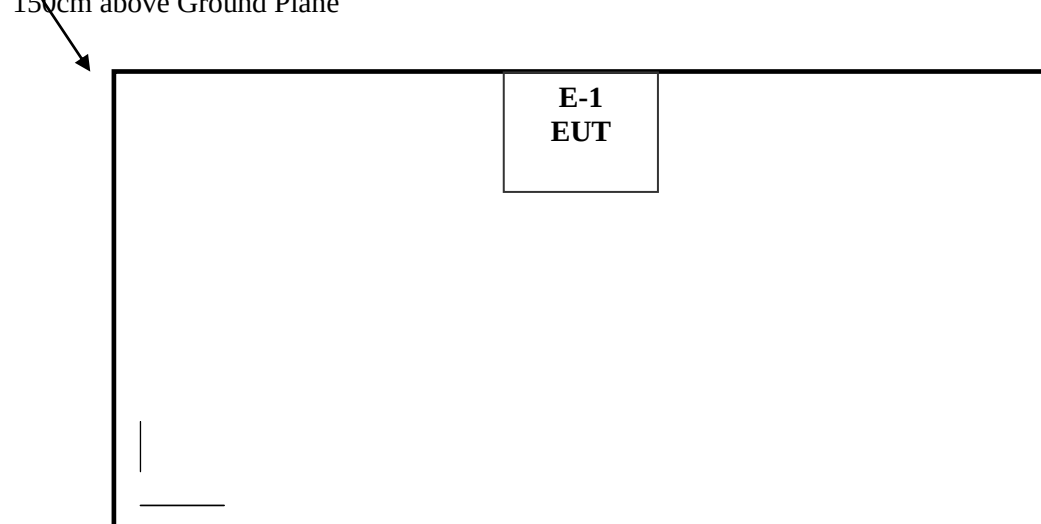
80cm above Ground Plane



Test mode: mode 1,2,3

Non-Conductive Table

150cm above Ground Plane



2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	HyRead Gaze X Plus 電子紙閱讀器	Gaze	K10P	N/A	N/A	EUT
E-2	Adapter	NOKIA	FC0302	N/A	N/A	Test Accessory*

Item	Equipment	Mfr/Brand	Model/Type No.	Note
1	USB Line	Gaze	K10P	EUT Line length: 100cm
2	全能觸控筆	Gaze	K10P	EUT
3	Rechargeable Li-ion Battery	Gaze	2575147P	EUT

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” means “shielded” or “with ferrite core”; “NO” means “unshielded” or “without ferrite core”
- (4) “*”: In this report, the applicant did not provide the accompanying accessories with the equipment. The accessories were provided by the laboratory (or the applicant) and inspected simultaneously.

EQUIPMENTS LIST FOR ALL TEST ITEMS

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
Spectrum Analyzer	Keysight	N9020A	MY53300466	April 29, 2021	1 Year
RF Preselector	Hewlett Packard	85685A	3010A01157	April 29, 2021	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650	2521A00584	April 29, 2021	1 Year
Preamplifier	Com Power	PA-102	1482	April 29, 2021	1 Year
RF Attenuator	Mini-Circuits	CAT-10	Asset #1000	December 08, 2021	1 Year
LISN	Com Power	LI-200	12012	September 09, 2021	1 Year
LISN	Com Power	LI-200	12214	September 09, 2021	1 Year
LISN	Com Power	LI-200	1767	September 09, 2021	1 Year
LISN	Com Power	LI-200	1768	September 09, 2021	1 Year
Biconical Antenna	Com Power	AB-100	01557	December 29, 2021	1 Year
Log Periodic Antenna	Com Power	AL-100	16037	December 22, 2021	1 Year
Horn Antenna	Com Power	AHA-118	711054	December 22, 2021	1 Year
Antenna Mast	Com Power	AM-400	N/A	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Dell, Inc.	DHS	DNSV641	N/A	N/A
Color TV pattern generator	PHILIPS	PM5418	L0621747	Mar 22, 2021	1 Year

Biconical Antenna	Com Power	AB-100	01557	December 28, 2021	1 Year
Log Periodic Antenna	Com Power	AL-100	16037	December 21, 2021	1 Year
Horn Antenna	Com Power	AHA-118	711054	December 21, 2021	1 Year

EMI Test Equipment (Continued)

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
EMI Receiver	Rohde & Schwarz	ESU40	100127	June 12, 2021	1 Year
BiConiLog Antenna	ETS-Lindgren	3142D	00102183	August 13, 2021	1 Year
Horn Antenna (1GHz-18GHz)	ETS-Lindgren	3117	00109294	May 6, 2021	1 Year
Horn Antenna (15GHz-40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170242	May 6, 2021	1 Year
Preamplifier	Rohde & Schwarz	TS-PR18	100056	June 12, 2021	1 Year
Pre-Amplifier	Agilent	8449B	3008A00409	June 12, 2021	1 Year
Antenna Mast	ETS-Lindgren	2175	00095727	N/A	N/A
Turntable	ETS-Lindgren	2187-3.0	00118231	N/A	N/A
Computer	Acer	Aspire 8930	85100050123	N/A	N/A
Multi-Function Controller	ETS-Lindgren	2090	00102270	N/A	N/A
Loop Antenna	ARA	PLA-1030/B	1029	May 19, 2021	1 Year

2.6. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

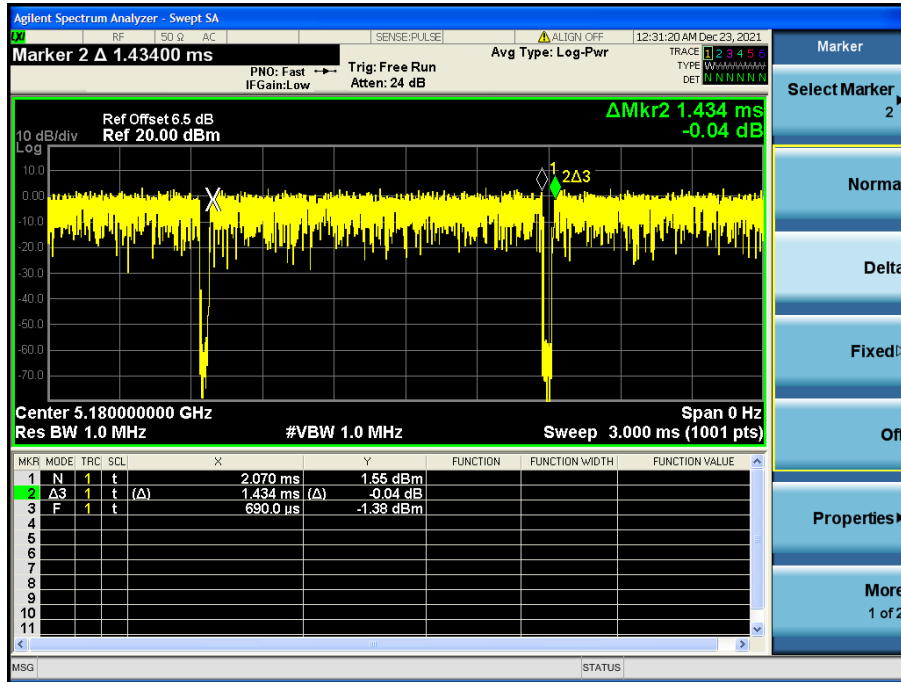
2.6.1 LIMITS

None; for reporting purposes only.

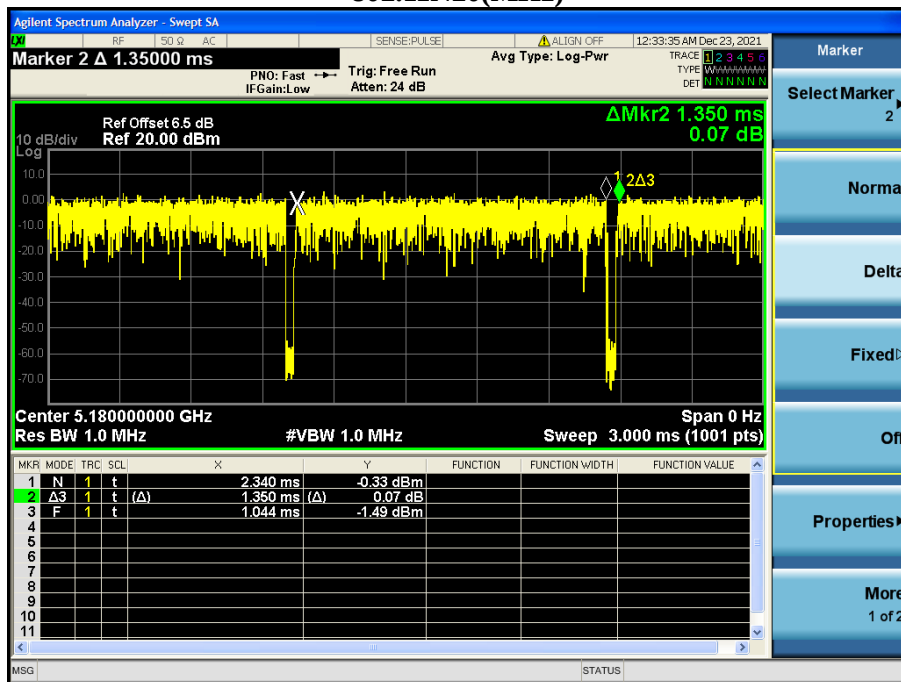
2.6.2 ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	10log(1/x)Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a	1.380	1.434	0.962	96.23%	0.167	0.725
802.11N20(MHz)	1.296	1.350	0.960	96.00%	0.177	0.772

802.11a



802.11N20(MHz)



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5			66 - 56 *	56 - 46 *	CISPR
0.50 -5.0			56.00	46.00	
5.0 -30.0			60.00	50.00	

0.15 -0.5			66 - 56 *	56 - 46 *	Section 15.407 (b)
0.50 -5.0			56.00	46.00	
5.0 -30.0			60.00	50.00	

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

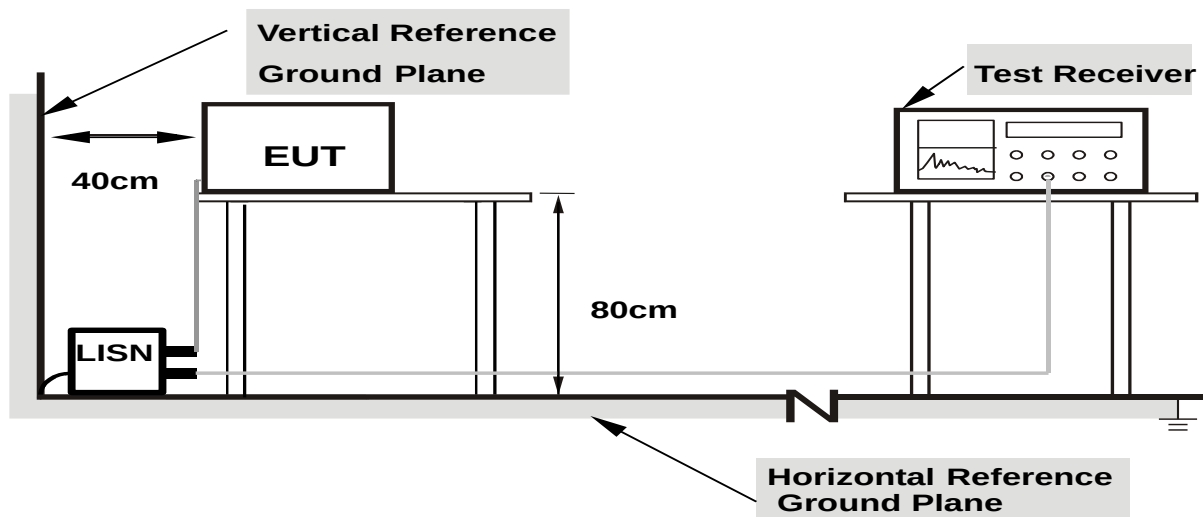
3.1.2 TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP

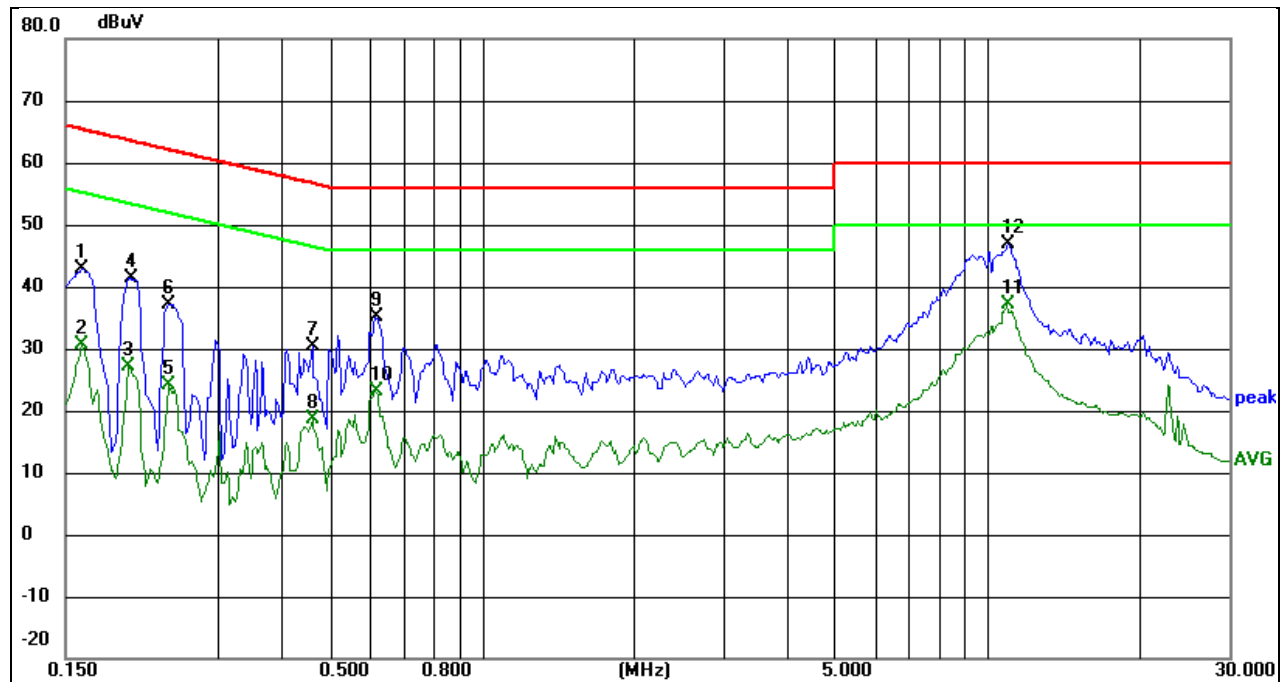


Note: 1.Support units were connected to second LISN.

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

3.1.5 TEST RESULTS

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name. :	K10P
Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2021-12-21
Test Mode :	TX(802.11a CH48 worst case)	Phase :	L
Test Voltage :	AC 110V/60Hz for Adapter		

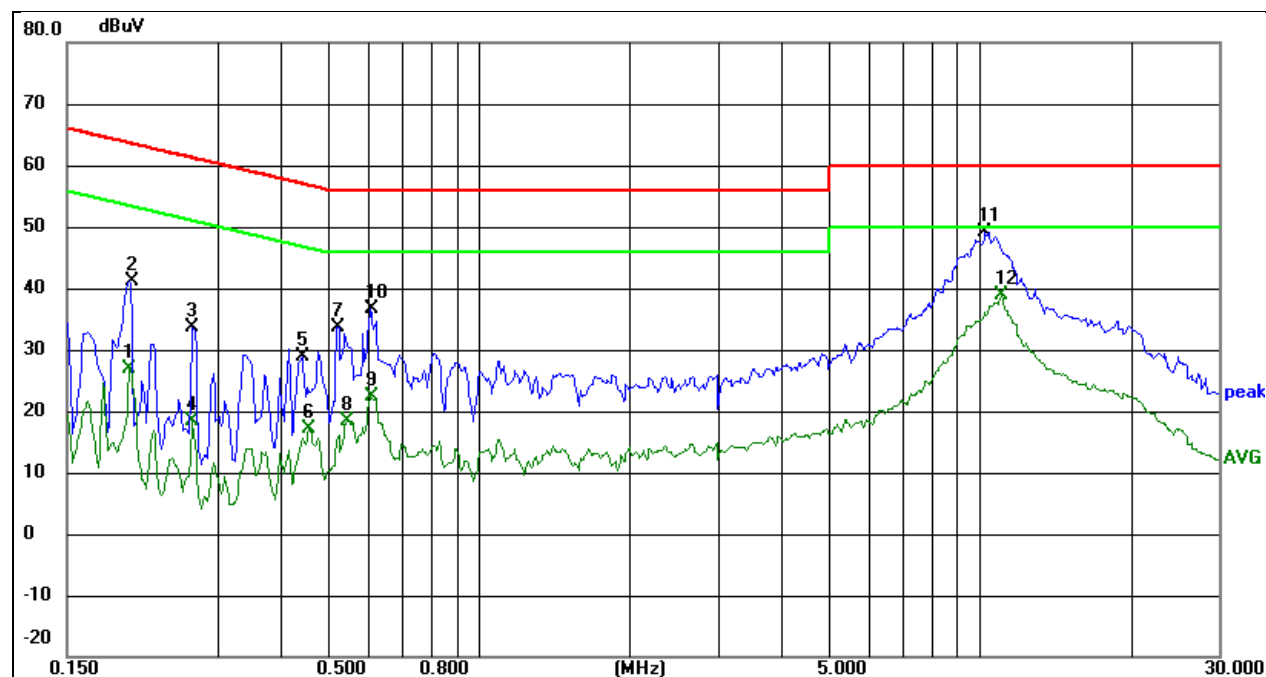


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '*' means the worst case

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1617	33.07	9.78	42.85	65.38	-22.53	peak	P
2	0.1617	20.77	9.78	30.55	55.38	-24.83	AVG	P
3	0.2006	17.28	9.75	27.03	53.59	-26.56	AVG	P
4	0.2007	31.65	9.75	41.40	63.58	-22.18	peak	P
5	0.2396	14.33	9.75	24.08	52.11	-28.03	AVG	P
6	0.2397	27.45	9.75	37.20	62.11	-24.91	peak	P
7	0.4620	20.72	9.77	30.49	56.66	-26.17	peak	P
8	0.4620	8.74	9.77	18.51	46.66	-28.15	AVG	P
9	0.6140	25.30	9.78	35.08	56.00	-20.92	peak	P
10	0.6140	13.27	9.78	23.05	46.00	-22.95	AVG	P
11 *	10.9208	15.99	21.12	37.11	50.00	-12.89	AVG	P
12	11.0028	25.71	21.20	46.91	60.00	-13.09	peak	P

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name. :	K10P
Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2021-12-21
Test Mode :	TX(802.11a CH48 worst case)	Phase :	N
Test Voltage :	AC 110V/60Hz for Adapter		



Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '*' means the worst case

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2006	17.23	9.75	26.98	53.59	-26.61	AVG	P
2	0.2007	31.36	9.75	41.11	63.58	-22.47	peak	P
3	0.2670	23.87	9.75	33.62	61.21	-27.59	peak	P
4	0.2670	8.62	9.75	18.37	51.21	-32.84	AVG	P
5	0.4425	19.10	9.77	28.87	57.01	-28.14	peak	P
6	0.4581	7.41	9.77	17.18	46.73	-29.55	AVG	P
7	0.5205	23.94	9.77	33.71	56.00	-22.29	peak	P
8	0.5439	8.57	9.77	18.34	46.00	-27.66	AVG	P
9	0.6062	12.54	9.78	22.32	46.00	-23.68	AVG	P
10	0.6063	26.73	9.78	36.51	56.00	-19.49	peak	P
11 *	10.2577	28.73	20.43	49.16	60.00	-10.84	peak	P
12	11.0340	17.58	21.24	38.82	50.00	-11.18	AVG	P

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

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

Frequencies (MHz)	Field Strength (microvolt/meter)	Measurement Distance (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 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Frequency measurement range:

1 The spectrum shall be measured from the lowest radio frequency signal generated in the device (without going below 9 kHz), and the upper limit of the measurement range shall be decided according to the maximum operating frequency.

1.1 Maximum operating frequency less than 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

1.2 Maximum operating frequency between 10 GHz~30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

1.3 Maximum operating frequency over 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower.

2 Particular attention should be paid to harmonics and subharmonics of the carrier frequency as well as to those frequencies removed from the carrier by multiples of the oscillator frequency. Radiation at the frequencies of multiplier stages should also be checked.

Spectrum Parameter		Setting	
Attenuation		Auto	
Start Frequency		1000 MHz	
Stop Frequency		10th carrier harmonic	
Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3MHz
AV	$\geq 98\%$	1MHz	10Hz
	$< 98\%$	1MHz	1/T

NOTE:KDB 558074 Zero-Span Spectrum Analyzer Method

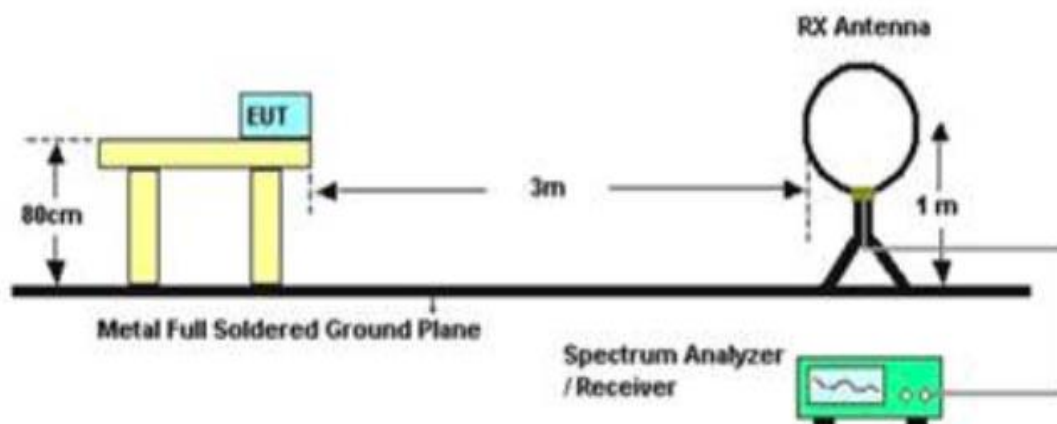
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

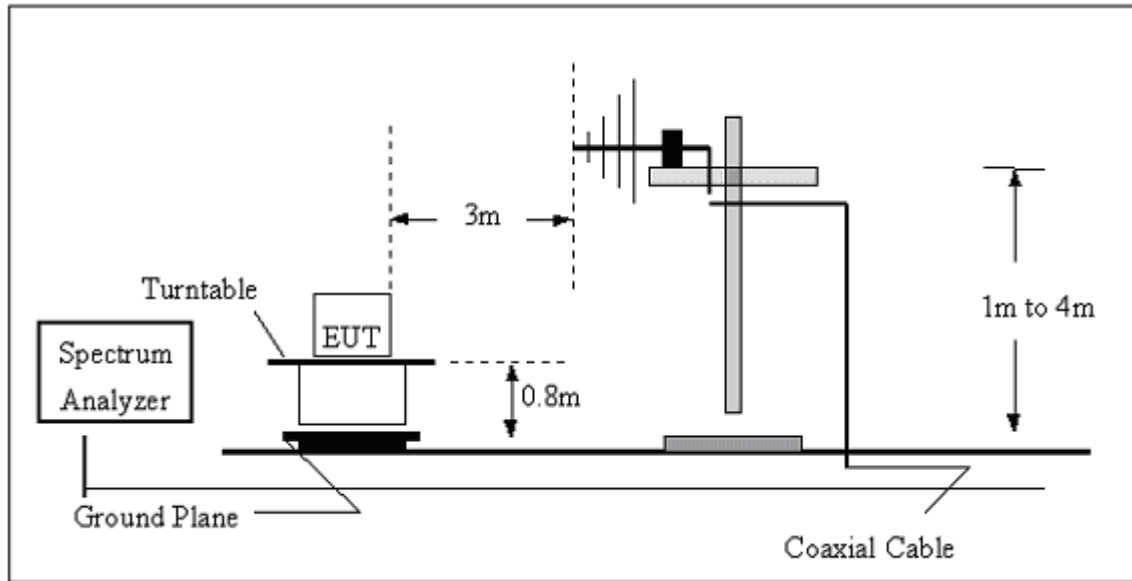
- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the Antenna 1#re set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

2 TEST SETUP

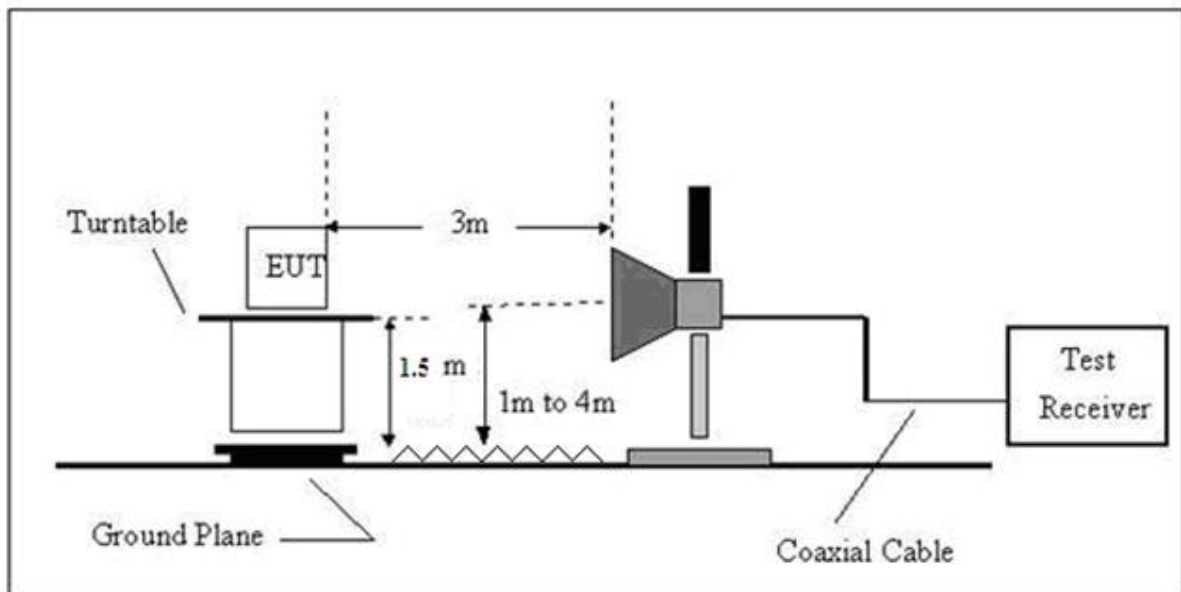
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz

**3EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.4 TEST RESULTS

Between 9KHz – 30 MHz

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name. :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode:	TX(802.11a CH48 worst case)	Polarization:	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	N/A
--	--	--	--	N/A

NOTE:

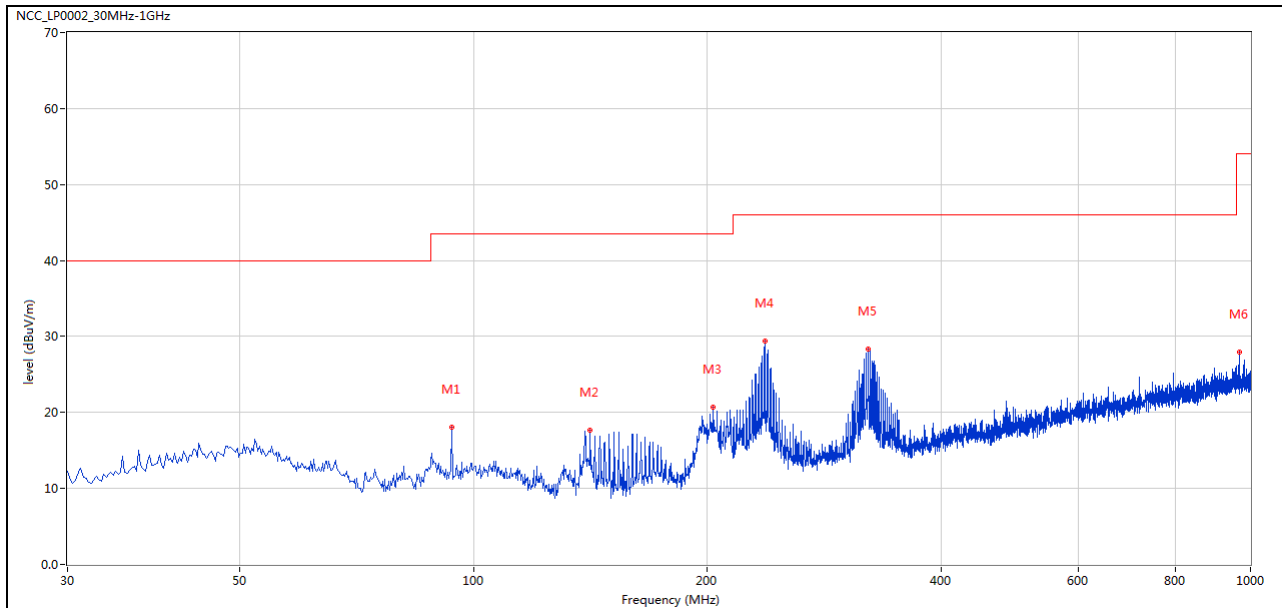
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

BETWEEN30 – 1000 MHZ

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	TX(802.11a CH48 worst case)	Polarization :	Horizontal
Test Power :	DC3.8V from battery		

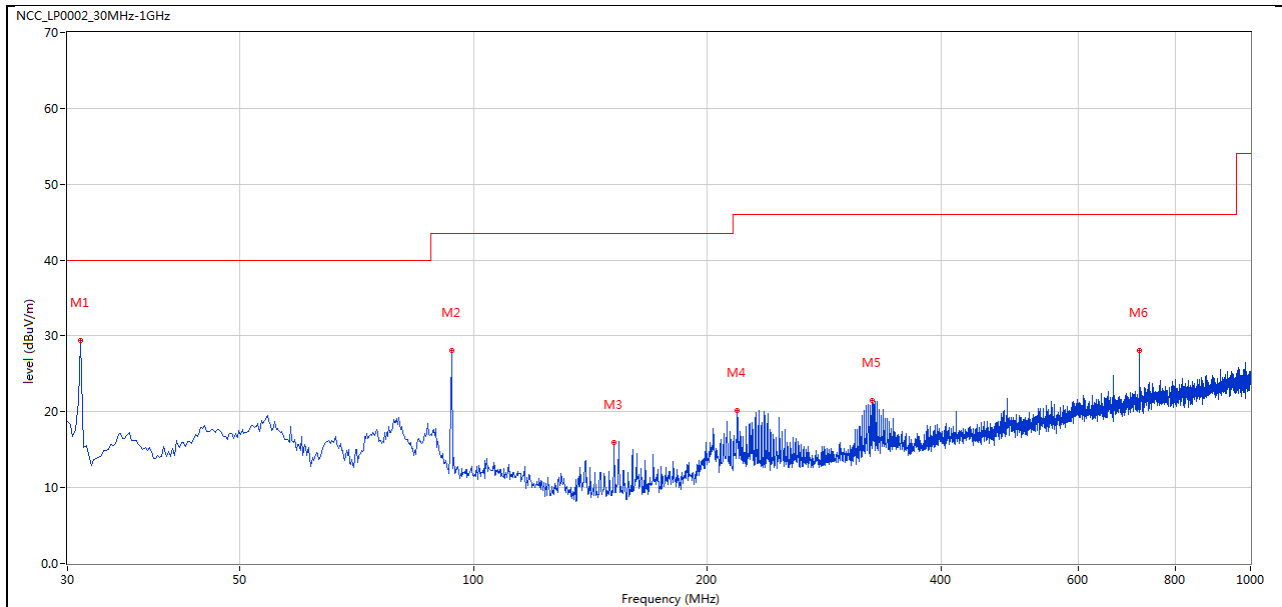


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	93.762	18.02	-14.39	43.5	-25.48	Peak	Horizontal	Pass
2	141.280	17.67	-17.27	43.5	-25.83	Peak	Horizontal	Pass
3	203.587	20.70	-13.48	43.5	-22.80	Peak	Horizontal	Pass
4	237.043	29.34	-12.37	46.0	-16.66	Peak	Horizontal	Pass
5	322.139	28.35	-10.52	46.0	-17.65	Peak	Horizontal	Pass
6	968.725	27.95	-1.50	54.0	-26.05	Peak	Horizontal	Pass

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	TX(802.11a CH48 worst case)	Polarization :	Vertical
Test Power :	DC3.8V from battery		

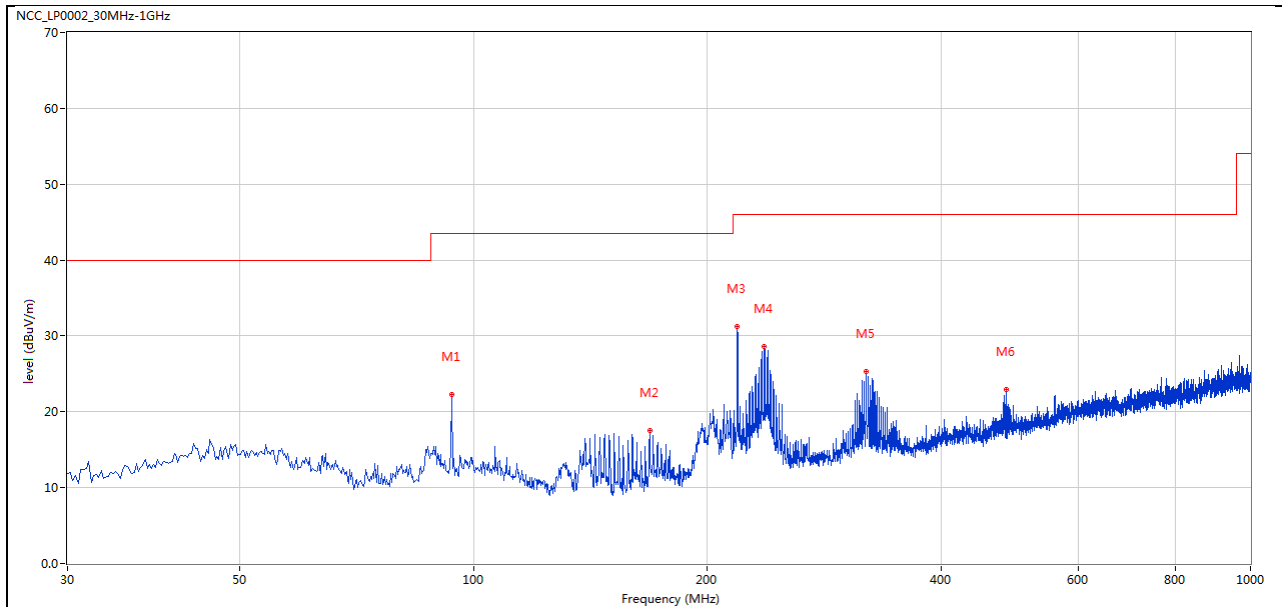


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	31.212	29.45	-14.58	40.0	-10.55	Peak	Vertical	Pass
2	93.762	28.03	-14.39	43.5	-15.47	Peak	Vertical	Pass
3	151.705	15.90	-16.94	43.5	-27.60	Peak	Vertical	Pass
4	218.618	20.14	-13.35	46.0	-25.86	Peak	Vertical	Pass
5	326.261	21.46	-10.33	46.0	-24.54	Peak	Vertical	Pass
6	718.770	28.06	-3.98	46.0	-17.94	Peak	Vertical	Pass

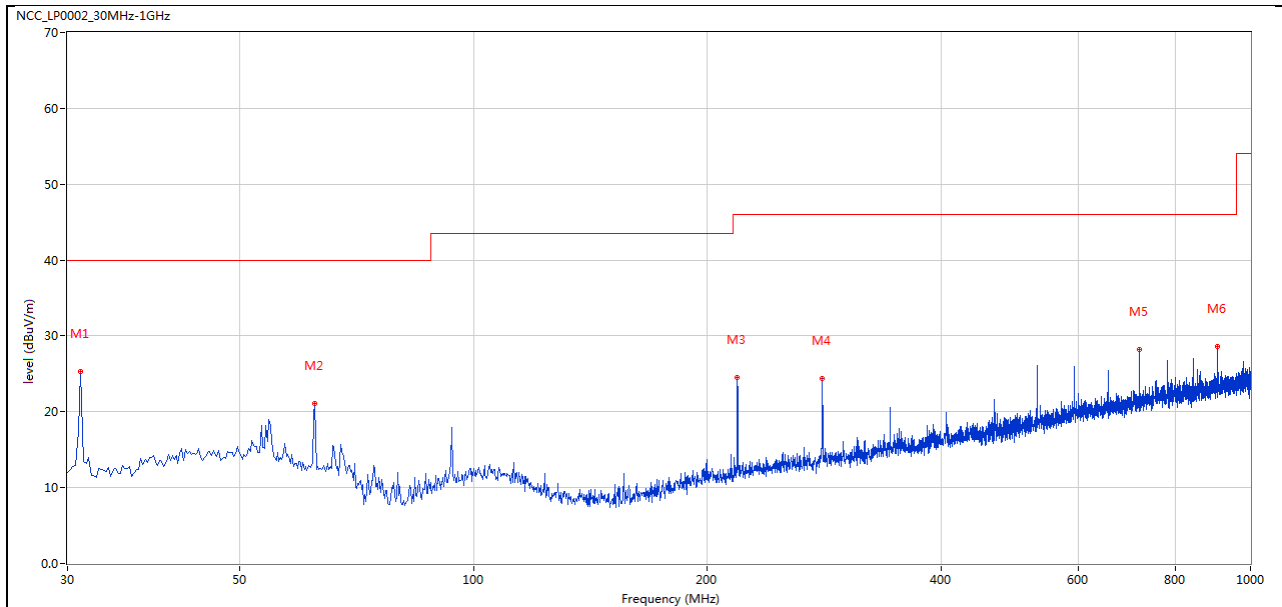
EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	RX	Polarization :	Horizontal
Test Power :	DC3.8V from battery		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	93.762	22.23	-14.39	43.5	-21.27	Peak	Horizontal	Pass
2	168.433	17.52	-16.13	43.5	-25.98	Peak	Horizontal	Pass
3	218.618	31.19	-13.35	46.0	-14.81	Peak	Horizontal	Pass
4	236.801	28.60	-12.34	46.0	-17.40	Peak	Horizontal	Pass
5	320.200	25.30	-10.59	46.0	-20.70	Peak	Horizontal	Pass
6	484.331	22.93	-7.33	46.0	-23.07	Peak	Horizontal	Pass

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	RX	Polarization :	Vertical
Test Power :	DC3.8V from battery		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

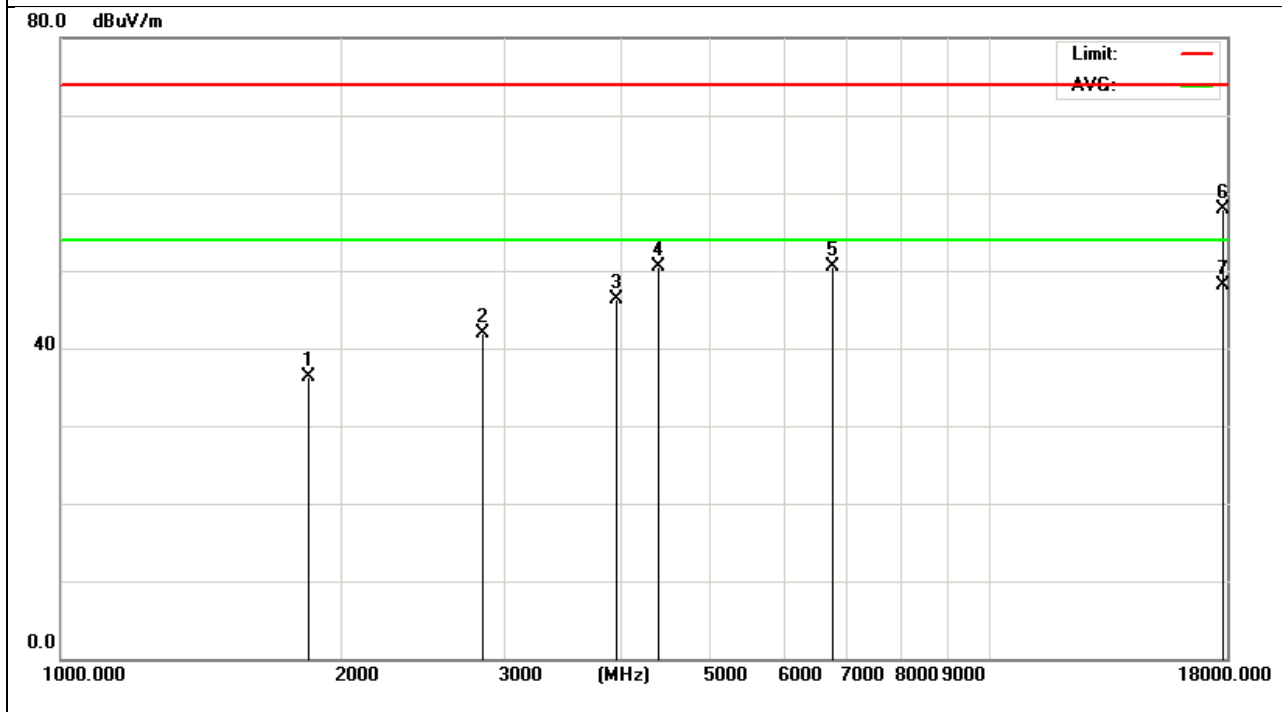
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	ANT	Verdict
1	31.212	25.28	-14.58	40.0	-14.72	Peak	Vertical	Pass
2	62.487	21.10	-13.28	40.0	-18.90	Peak	Vertical	Pass
3	218.618	24.56	-13.35	46.0	-21.44	Peak	Vertical	Pass
4	281.167	23.17	-11.50	46.0	-22.83	Peak	Vertical	Pass
5	718.770	28.26	-3.98	46.0	-17.74	Peak	Vertical	Pass
6	906.176	28.59	-1.76	46.0	-17.41	Peak	Vertical	Pass

3.2.5 TEST RESULTS (ABOVE 1000 MHZ)

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1843.297	45.65	-9.43	36.22	74.00	-37.78	peak
2845.374	44.56	-2.64	41.92	74.00	-32.08	peak
3955.356	42.88	3.51	46.39	74.00	-27.61	peak
4384.365	45.94	4.50	50.44	74.00	-23.56	peak
6759.575	44.56	6.02	50.58	74.00	-23.42	peak
17756.235	33.08	24.85	57.93	74.00	-16.07	peak
17756.235	23.20	24.85	48.05	54.00	-5.95	AVG

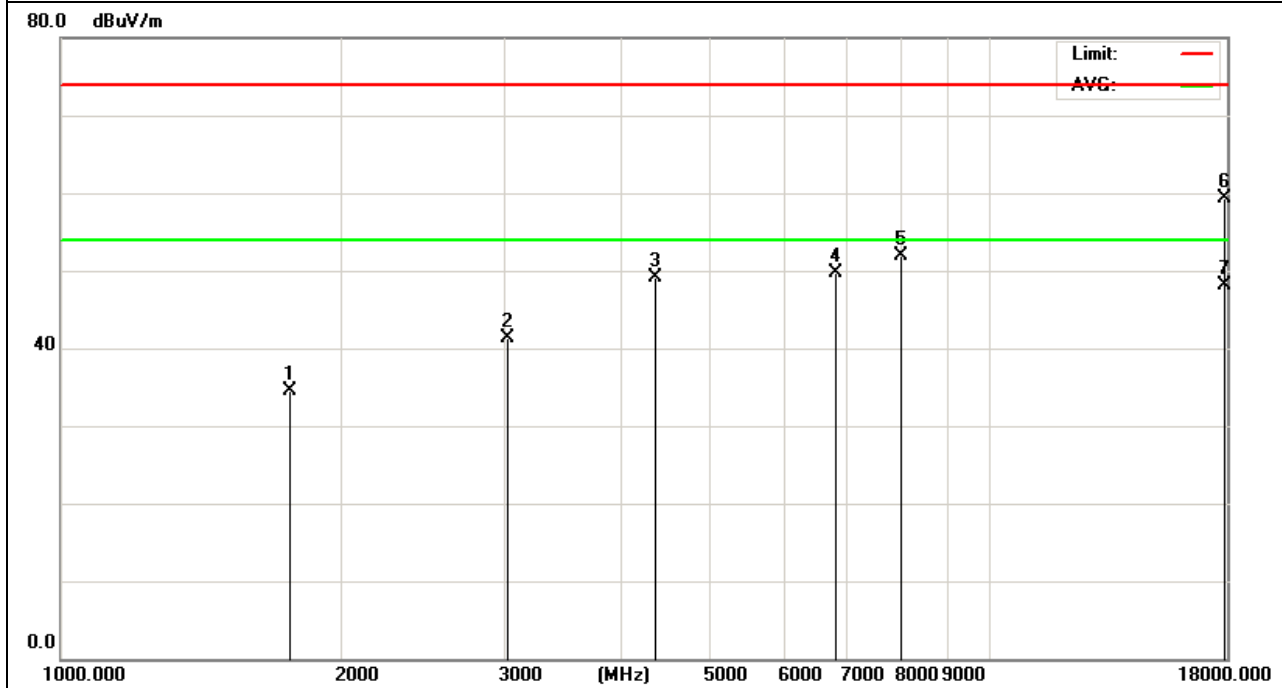
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1757.564	44.03	-9.46	34.57	74.00	-39.43	peak
3024.225	42.89	-1.62	41.27	74.00	-32.73	peak
4356.259	44.67	4.45	49.12	74.00	-24.88	peak
6834.579	43.55	6.08	49.63	74.00	-24.37	peak
8011.994	41.41	10.40	51.81	74.00	-22.19	peak
17852.024	34.56	24.79	59.35	74.00	-14.65	peak
17852.024	23.33	24.79	48.12	54.00	-5.88	AVG

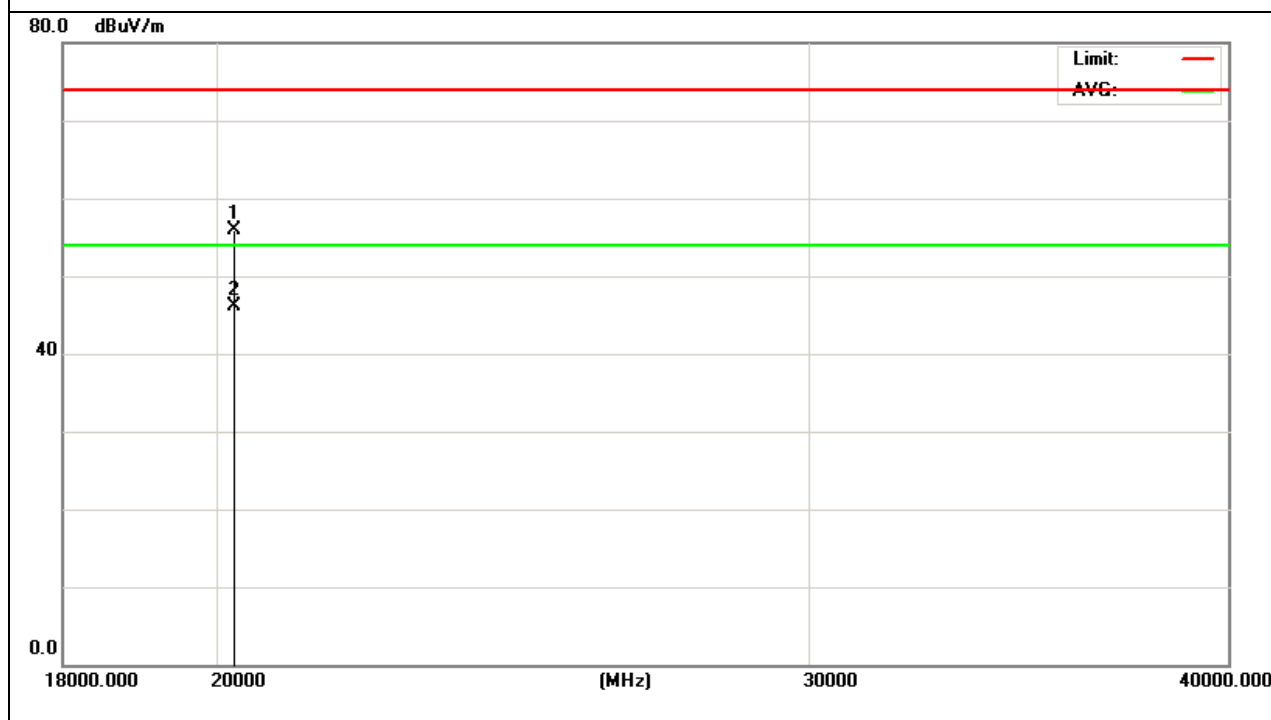
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20235.000	40.23	15.62	55.85	74.00	-18.15	peak
20235.000	30.49	15.62	46.11	54.00	-7.89	AVG

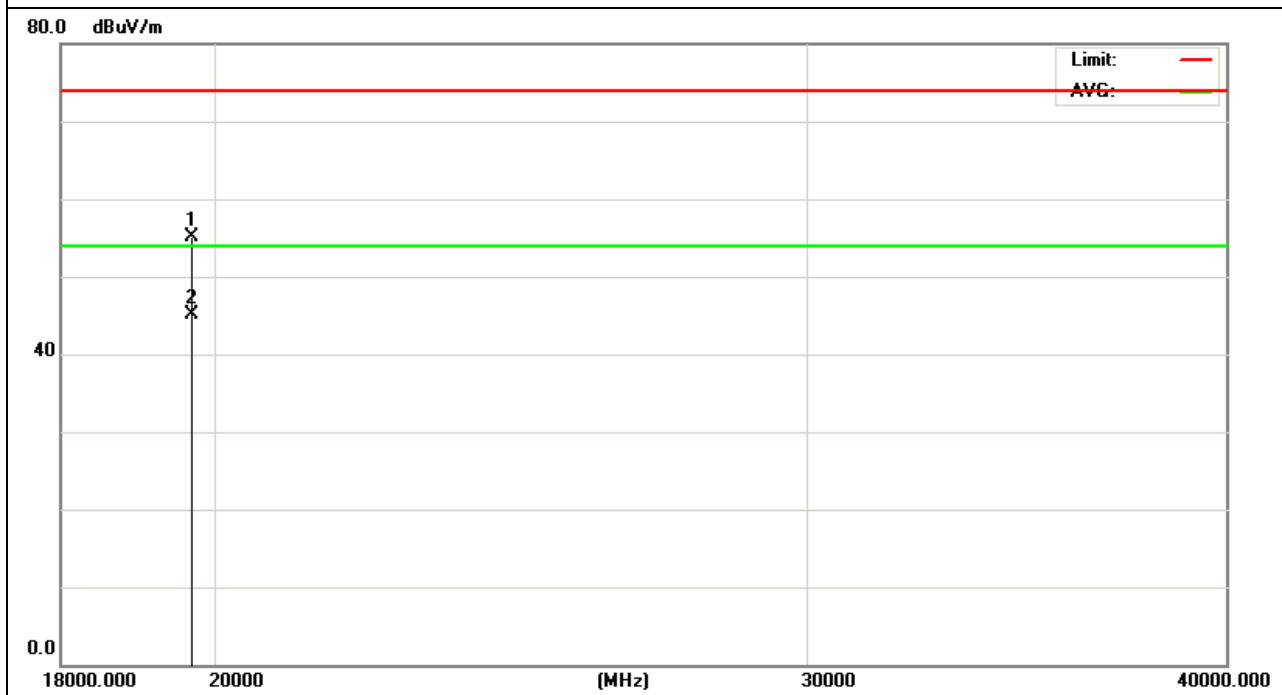
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19699.000	40.11	14.82	54.93	74.00	-19.07	
19699.000	30.63	14.82	45.45	54.00	-8.55	AVG

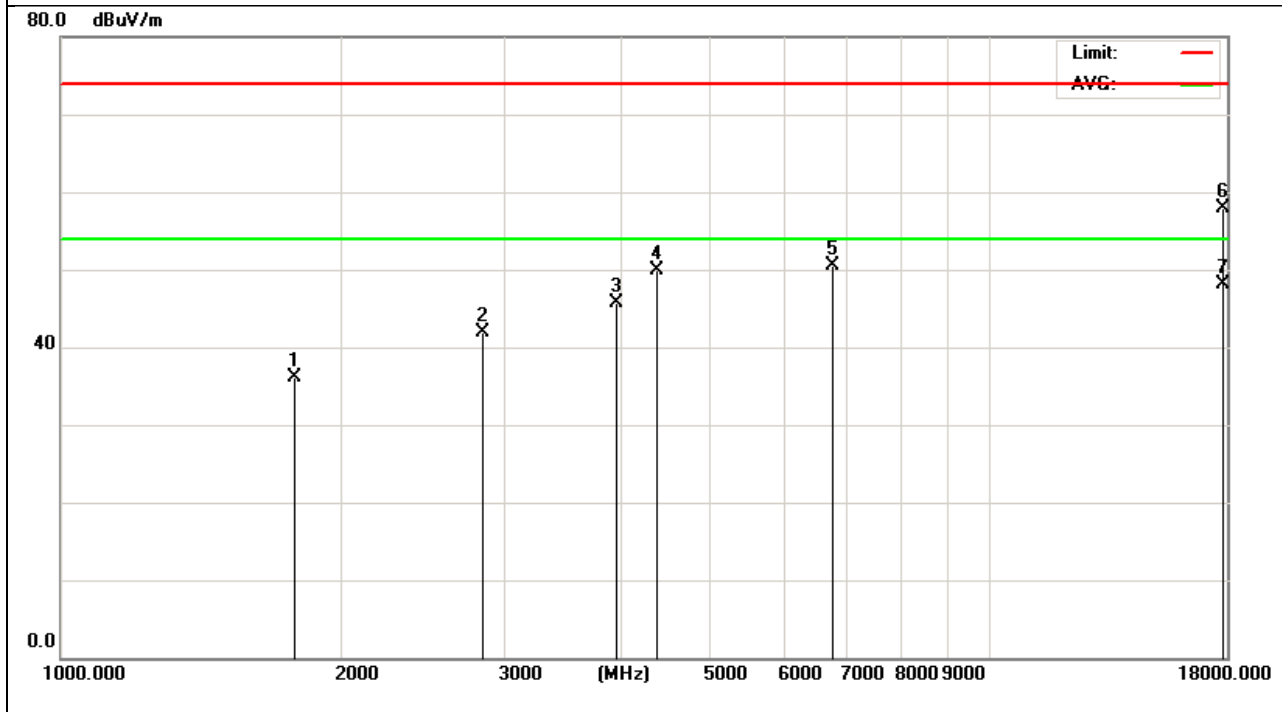
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 44	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1778.659	45.44	-9.40	36.04	74.00	-37.96	peak
2846.647	44.53	-2.63	41.90	74.00	-32.10	peak
3955.418	42.28	3.51	45.79	74.00	-28.21	peak
4369.269	45.36	4.47	49.83	74.00	-24.17	peak
6775.004	44.56	6.03	50.59	74.00	-23.41	peak
17785.000	33.00	24.83	57.83	74.00	-16.17	peak
17785.000	23.36	24.83	48.19	54.00	-5.81	AVG

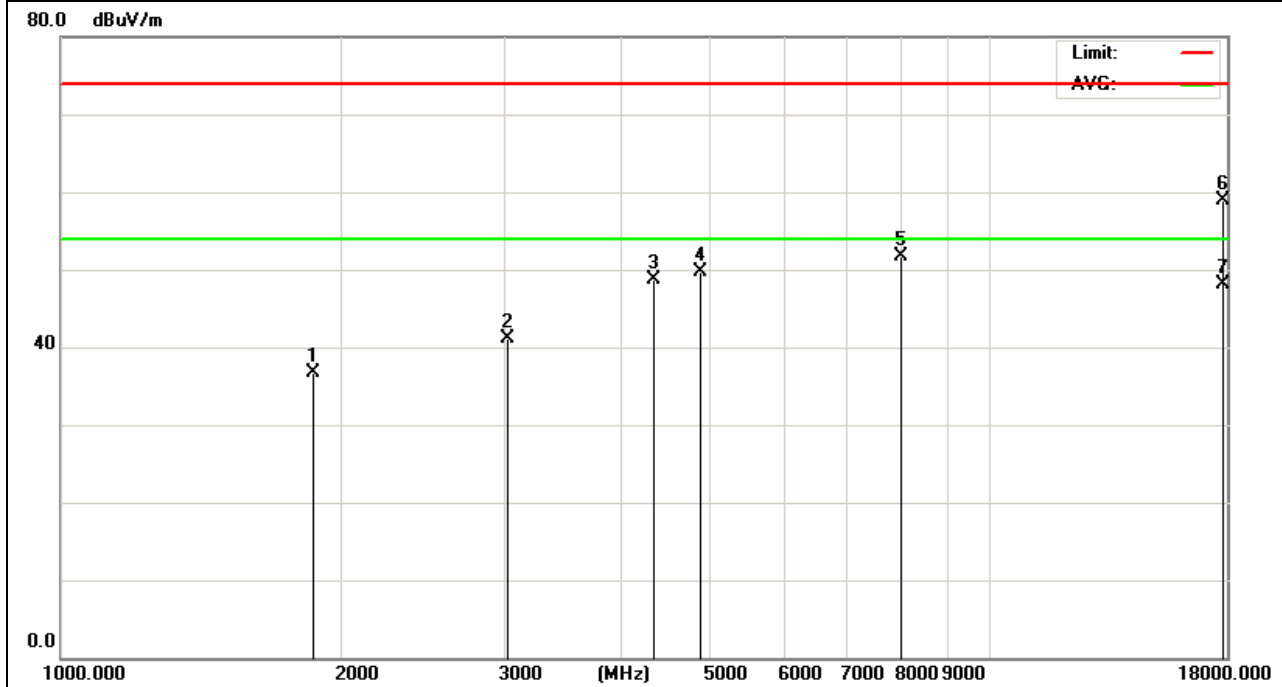
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 44	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1869.567	46.26	-9.46	36.80	74.00	-37.20	peak
3021.248	42.71	-1.63	41.08	74.00	-32.92	peak
4335.206	44.28	4.40	48.68	74.00	-25.32	peak
4887.559	44.56	5.14	49.70	74.00	-24.30	peak
8011.547	41.33	10.40	51.73	74.00	-22.27	peak
17789.000	34.05	24.83	58.88	74.00	-15.12	peak
17789.000	23.36	24.83	48.19	54.00	-5.81	AVG

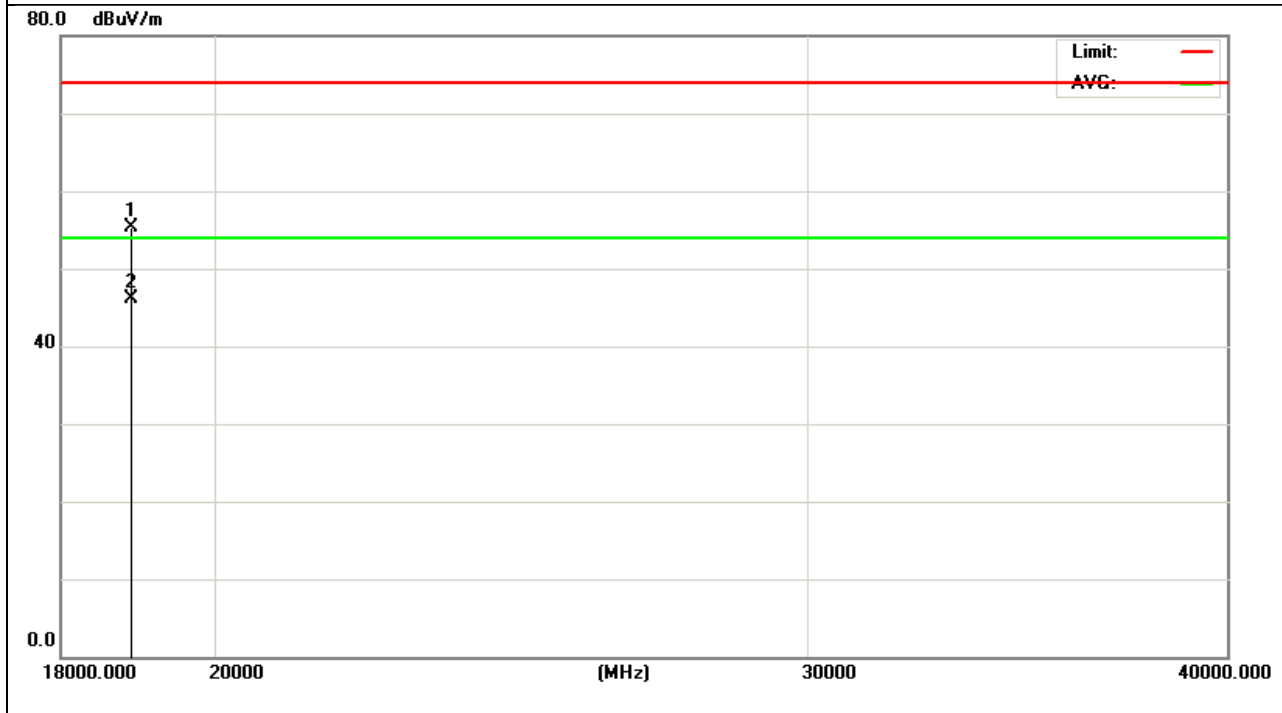
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 44	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18897.000	41.68	13.63	55.31	74.00	-18.69	
18897.000	32.45	13.63	46.08	54.00	-7.92	AVG

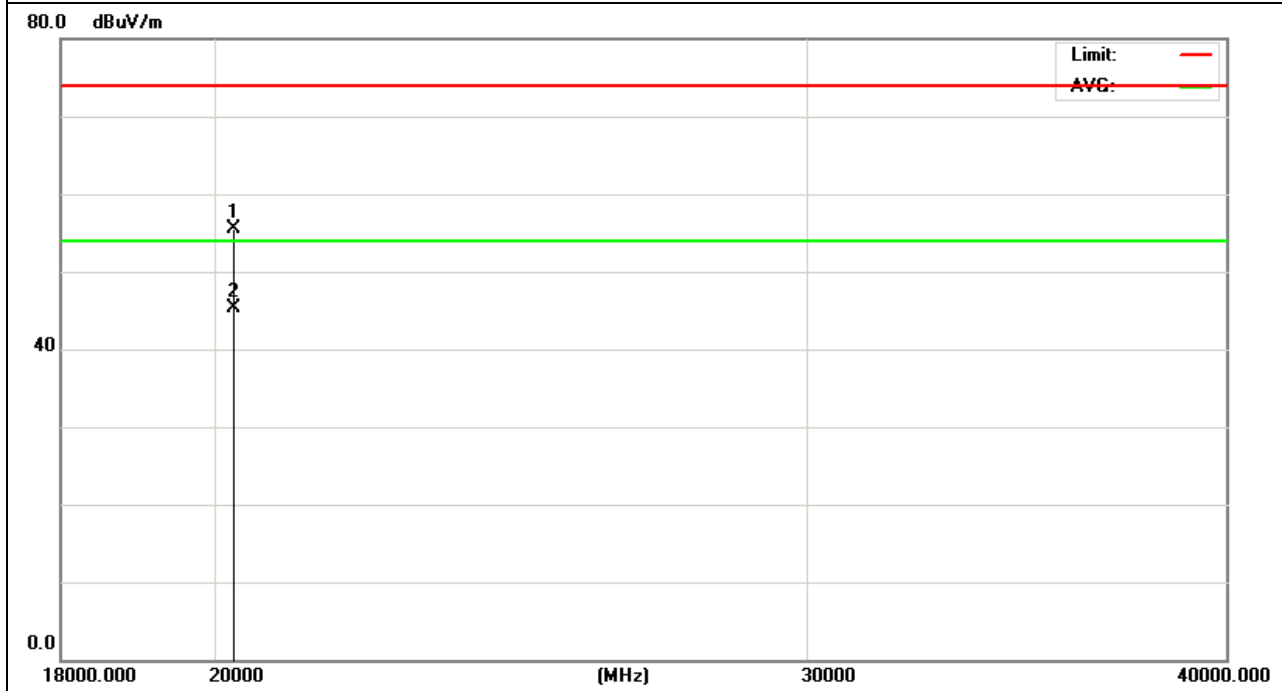
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 44	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20270.000	39.37	15.66	55.03	74.00	-18.97	peak
20270.000	29.42	15.66	45.08	54.00	-8.92	AVG

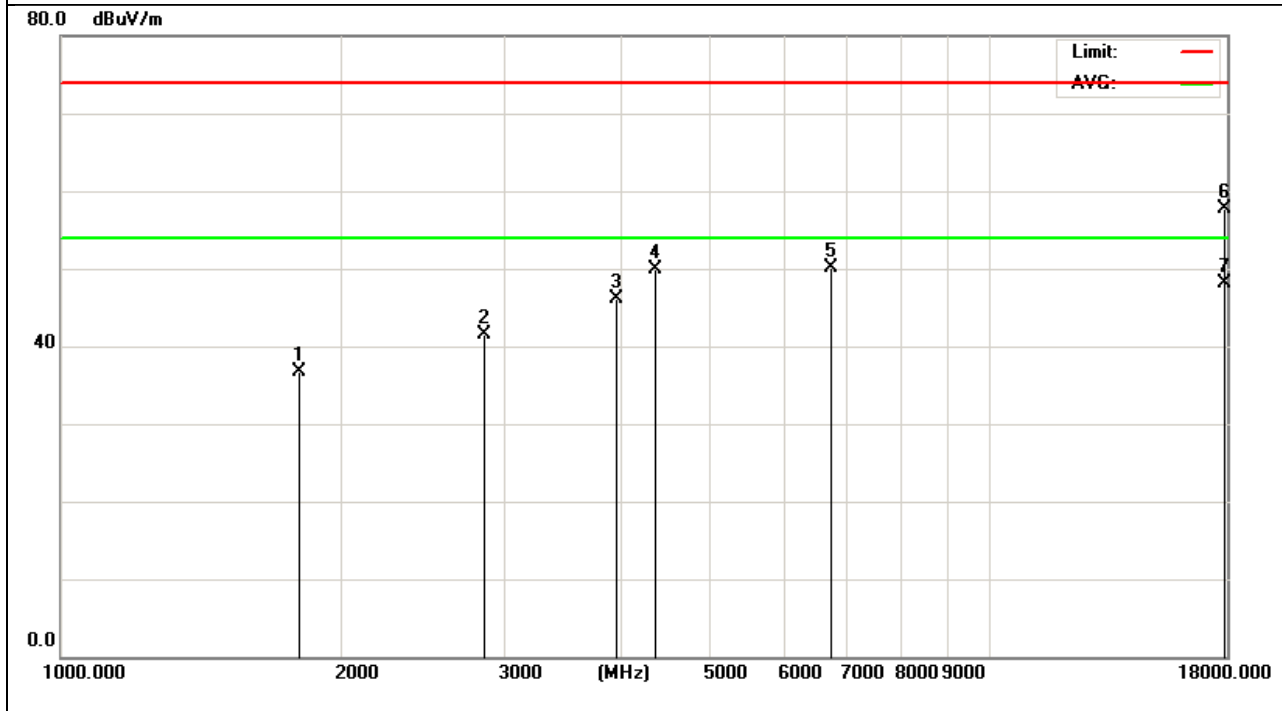
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1798.367	46.13	-9.34	36.79	74.00	-37.21	peak
2854.159	44.01	-2.59	41.42	74.00	-32.58	peak
3955.650	42.58	3.51	46.09	74.00	-27.91	peak
4356.591	45.36	4.45	49.81	74.00	-24.19	peak
6744.258	44.17	6.02	50.19	74.00	-23.81	peak
17889.232	33.02	24.76	57.78	74.00	-16.22	peak
17889.232	23.41	24.76	48.17	54.00	-5.83	AVG

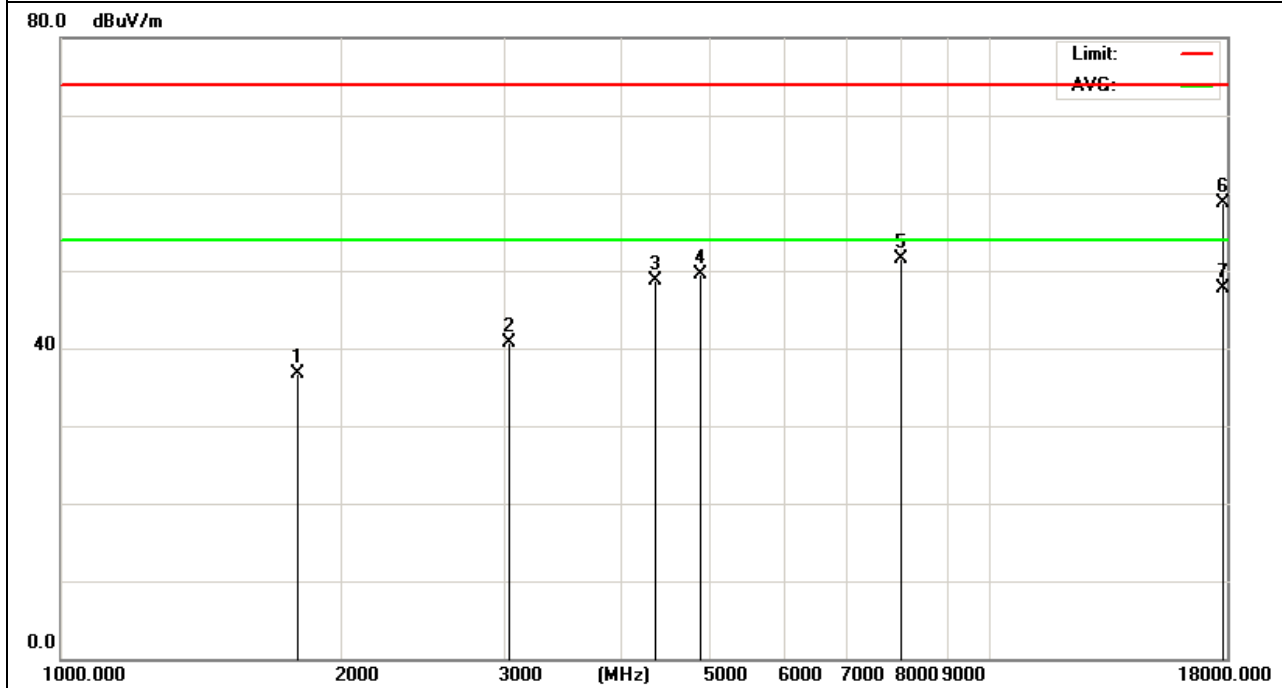
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1795.255	46.11	-9.35	36.76	74.00	-37.24	peak
3026.136	42.26	-1.62	40.64	74.00	-33.36	peak
4357.225	44.27	4.45	48.72	74.00	-25.28	peak
4865.977	44.36	5.13	49.49	74.00	-24.51	peak
8022.647	41.15	10.41	51.56	74.00	-22.44	peak
17789.265	33.94	24.83	58.77	74.00	-15.23	peak
17789.265	22.97	24.83	47.80	54.00	-6.20	AVG

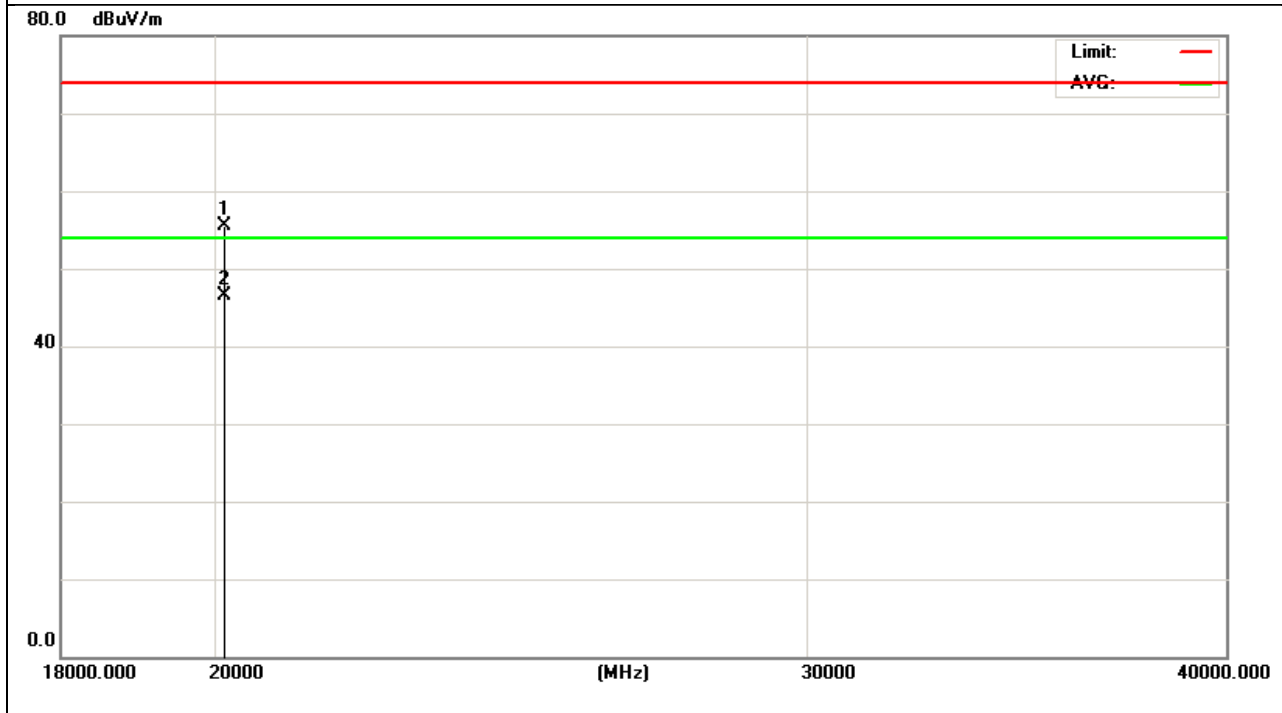
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20143.000	40.02	15.48	55.50	74.00	-18.50	peak
20143.000	31.11	15.48	46.59	54.00	-7.41	AVG

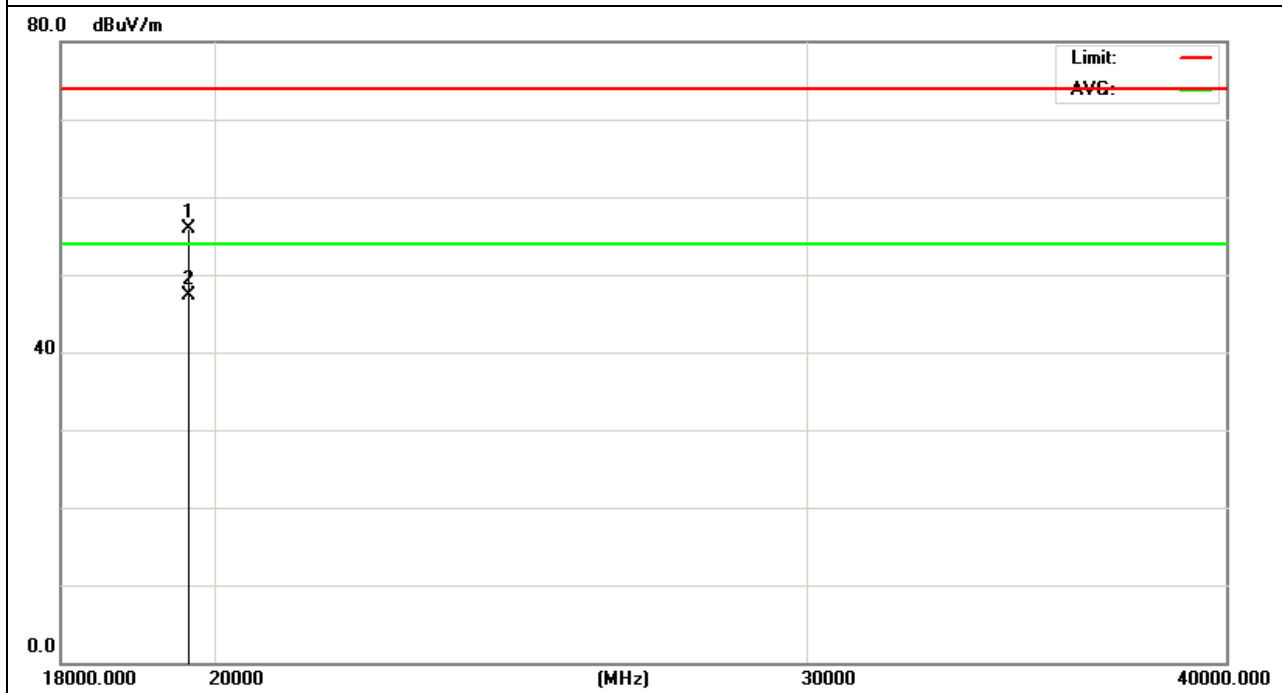
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11a Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19648.000	41.23	14.74	55.97	74.00	-18.03	
19648.000	32.56	14.74	47.30	54.00	-6.70	AVG

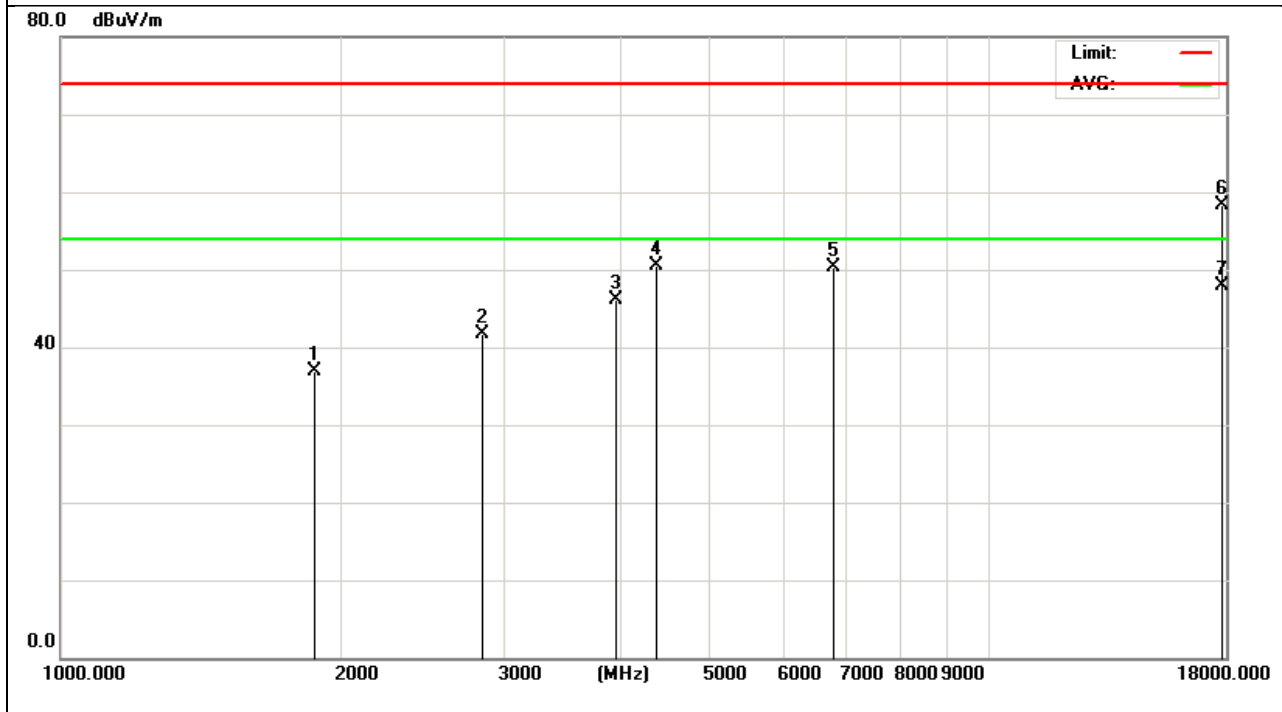
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1875.447	46.36	-9.48	36.88	74.00	-37.12	peak
2845.235	44.28	-2.64	41.64	74.00	-32.36	peak
3947.559	42.74	3.45	46.19	74.00	-27.81	peak
4368.664	46.09	4.47	50.56	74.00	-23.44	peak
6788.029	44.26	6.04	50.30	74.00	-23.70	peak
17748.361	33.41	24.86	58.27	74.00	-15.73	peak
17748.361	23.06	24.86	47.92	54.00	-6.08	AVG

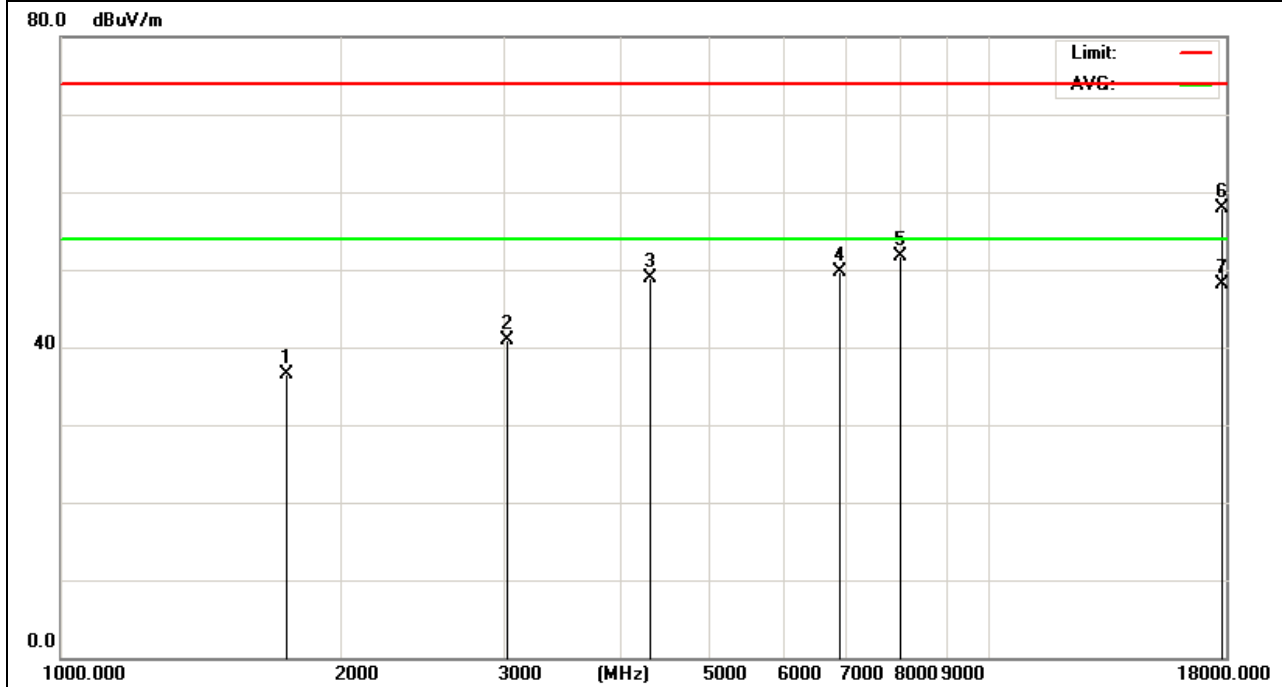
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1748.947	46.03	-9.49	36.54	74.00	-37.46	peak
3022.478	42.57	-1.62	40.95	74.00	-33.05	peak
4315.394	44.55	4.36	48.91	74.00	-25.09	peak
6881.225	43.57	6.11	49.68	74.00	-24.32	peak
8004.267	41.26	10.38	51.64	74.00	-22.36	peak
17785.181	33.14	24.83	57.97	74.00	-16.03	peak
17785.181	23.24	24.83	48.07	54.00	-5.93	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 36	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20029.000	40.53	15.31	55.84	74.00	-18.16	peak
20029.000	32.21	15.31	47.52	54.00	-6.48	AVG

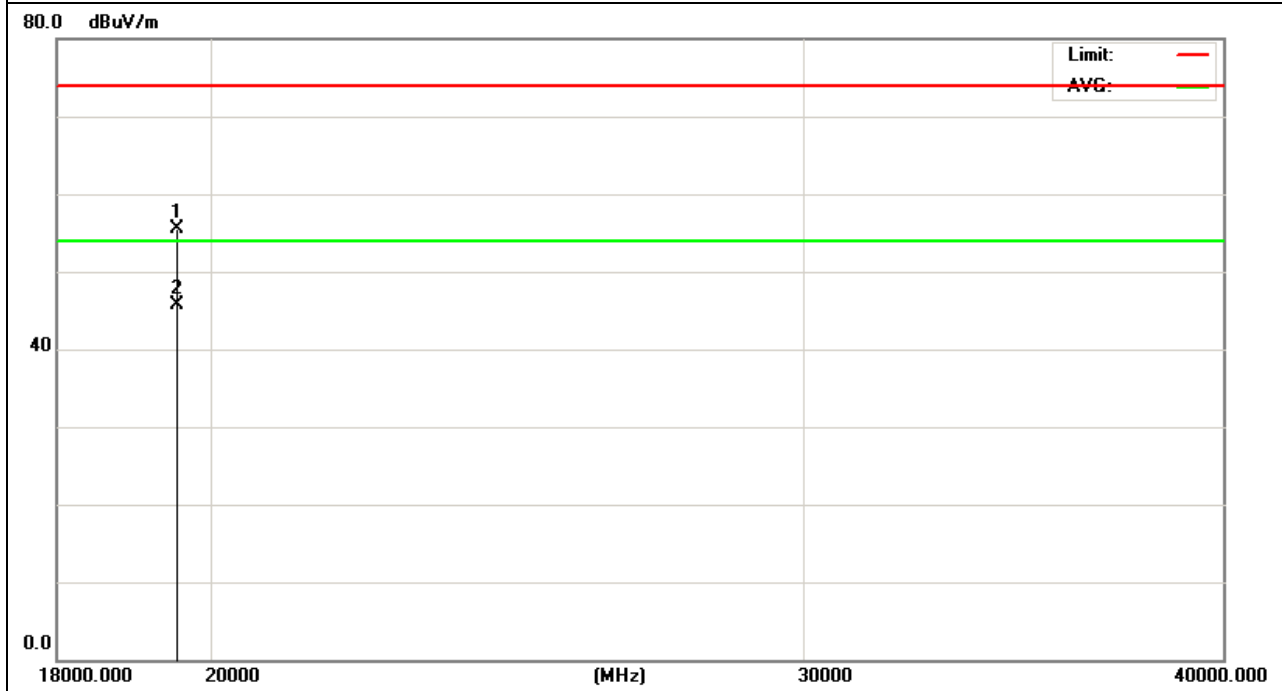
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 36	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19527.000	40.95	14.56	55.51	74.00	-18.49	
19527.000	31.14	14.56	45.70	54.00	-8.30	AVG

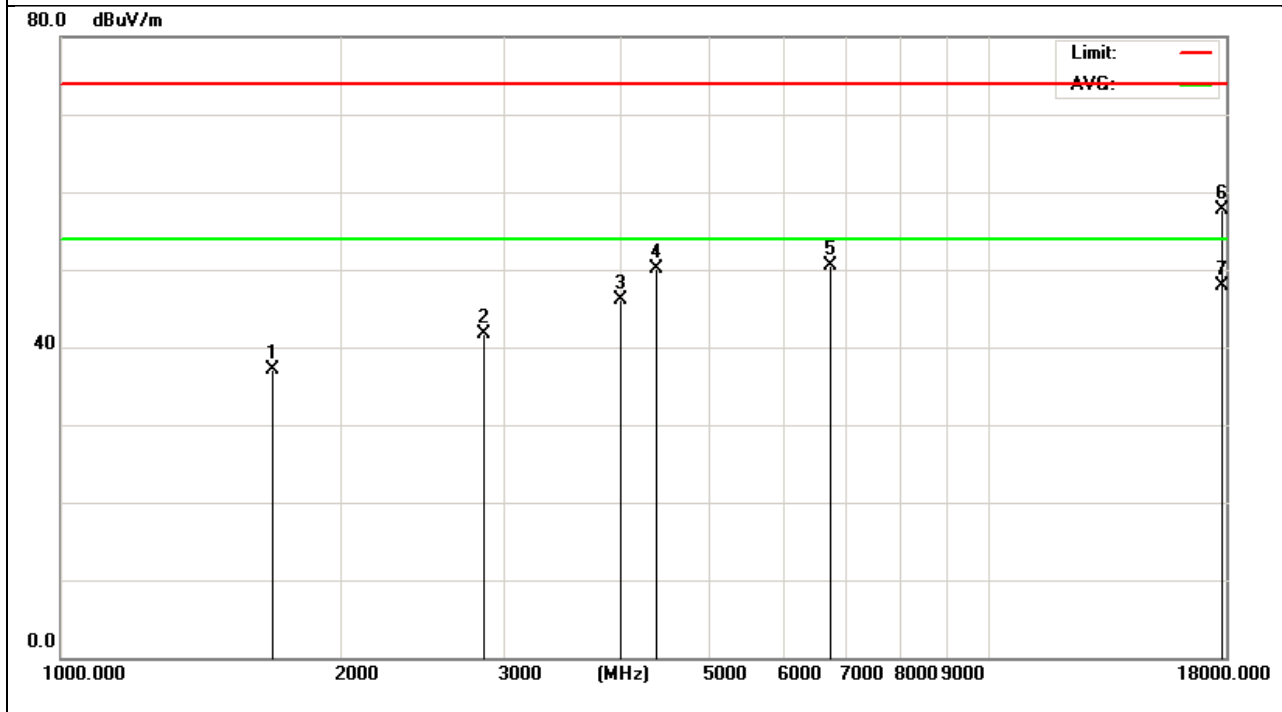
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 44	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1687.914	46.69	-9.66	37.03	74.00	-36.97	peak
2848.236	44.33	-2.62	41.71	74.00	-32.29	peak
3997.481	42.26	3.82	46.08	74.00	-27.92	peak
4367.219	45.55	4.46	50.01	74.00	-23.99	peak
6755.220	44.56	6.01	50.57	74.00	-23.43	peak
17787.000	32.87	24.83	57.70	74.00	-16.30	peak
17787.000	23.02	24.83	47.85	54.00	-6.15	AVG

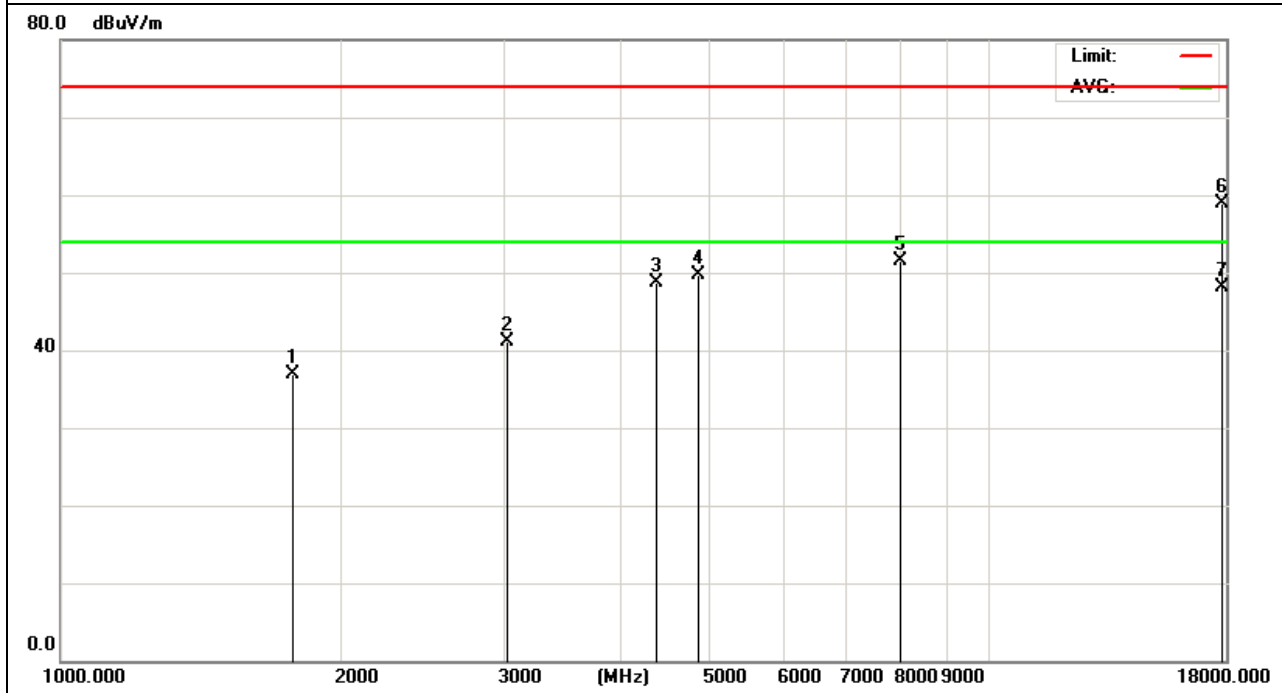
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 44	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1776.592	46.34	-9.40	36.94	74.00	-37.06	peak
3022.336	42.69	-1.62	41.07	74.00	-32.93	peak
4369.657	44.25	4.47	48.72	74.00	-25.28	peak
4855.548	44.68	5.11	49.79	74.00	-24.21	peak
8022.032	41.02	10.41	51.43	74.00	-22.57	peak
17789.000	34.14	24.83	58.97	74.00	-15.03	peak
17789.000	23.26	24.83	48.09	54.00	-5.91	AVG

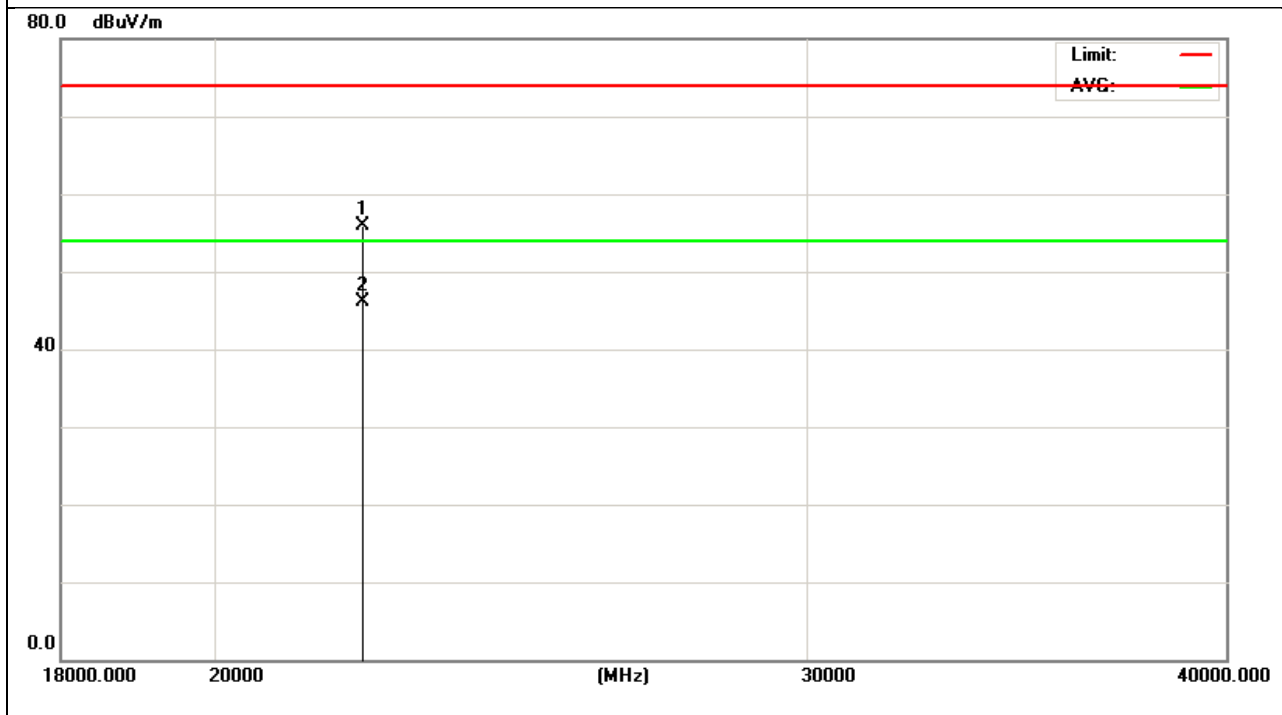
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 44	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
22120.000	37.48	18.42	55.90	74.00	-18.10	peak
22120.000	27.63	18.42	46.05	54.00	-7.95	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 44	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19961.000	40.65	15.21	55.86	74.00	-18.14	peak
19961.000	30.69	15.21	45.90	54.00	-8.10	AVG

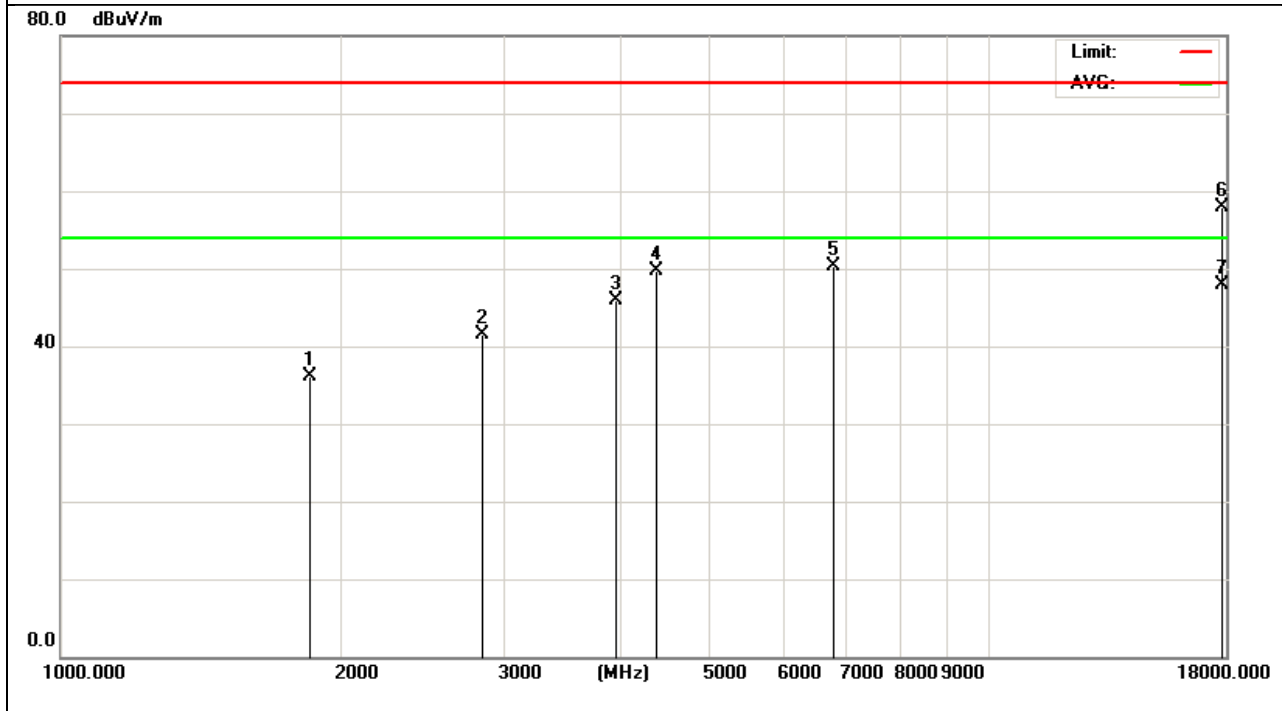
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1854.258	45.55	-9.45	36.10	74.00	-37.90	peak
2844.567	44.18	-2.64	41.54	74.00	-32.46	peak
3947.669	42.37	3.45	45.82	74.00	-28.18	peak
4369.326	45.26	4.47	49.73	74.00	-24.27	peak
6788.025	44.26	6.04	50.30	74.00	-23.70	peak
17789.636	33.02	24.83	57.85	74.00	-16.15	peak
17789.636	23.11	24.83	47.94	54.00	-6.06	AVG

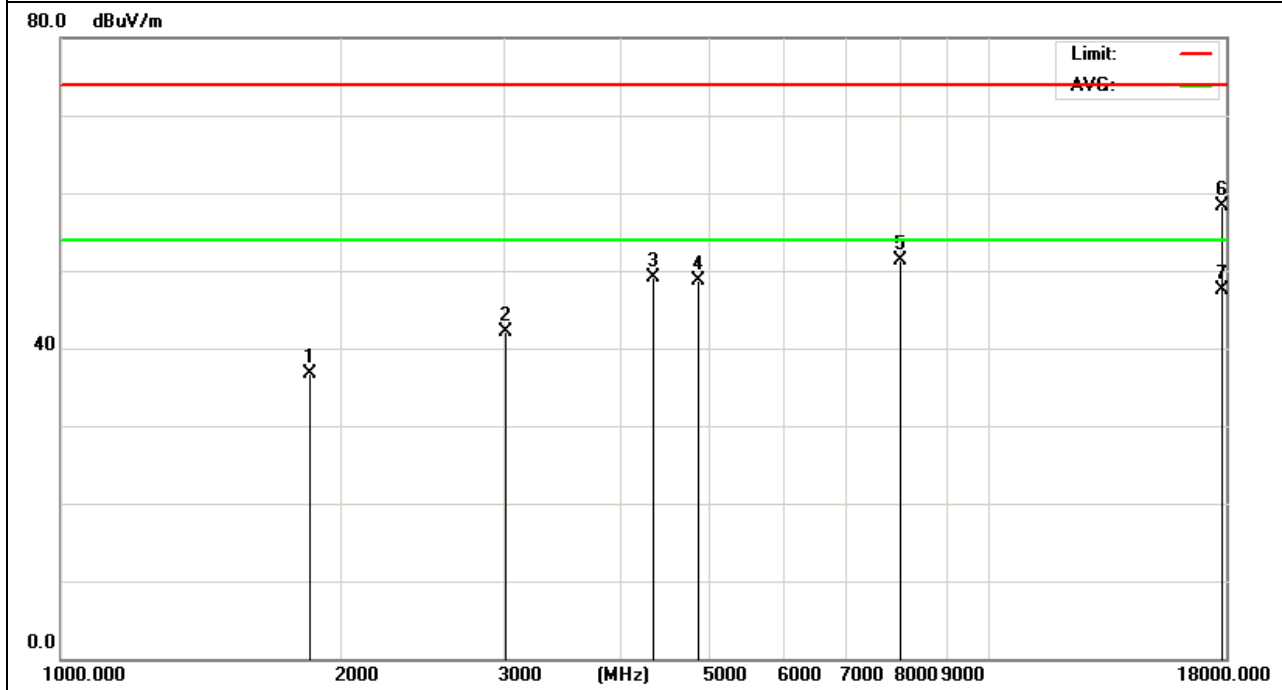
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1856.663	46.24	-9.45	36.79	74.00	-37.21	peak
3014.058	43.89	-1.65	42.24	74.00	-31.76	peak
4353.023	44.77	4.43	49.20	74.00	-24.80	peak
4855.498	43.82	5.11	48.93	74.00	-25.07	peak
8021.887	40.94	10.41	51.35	74.00	-22.65	peak
17796.220	33.85	24.83	58.68	74.00	-15.32	peak
17796.220	22.71	24.83	47.54	54.00	-6.46	AVG

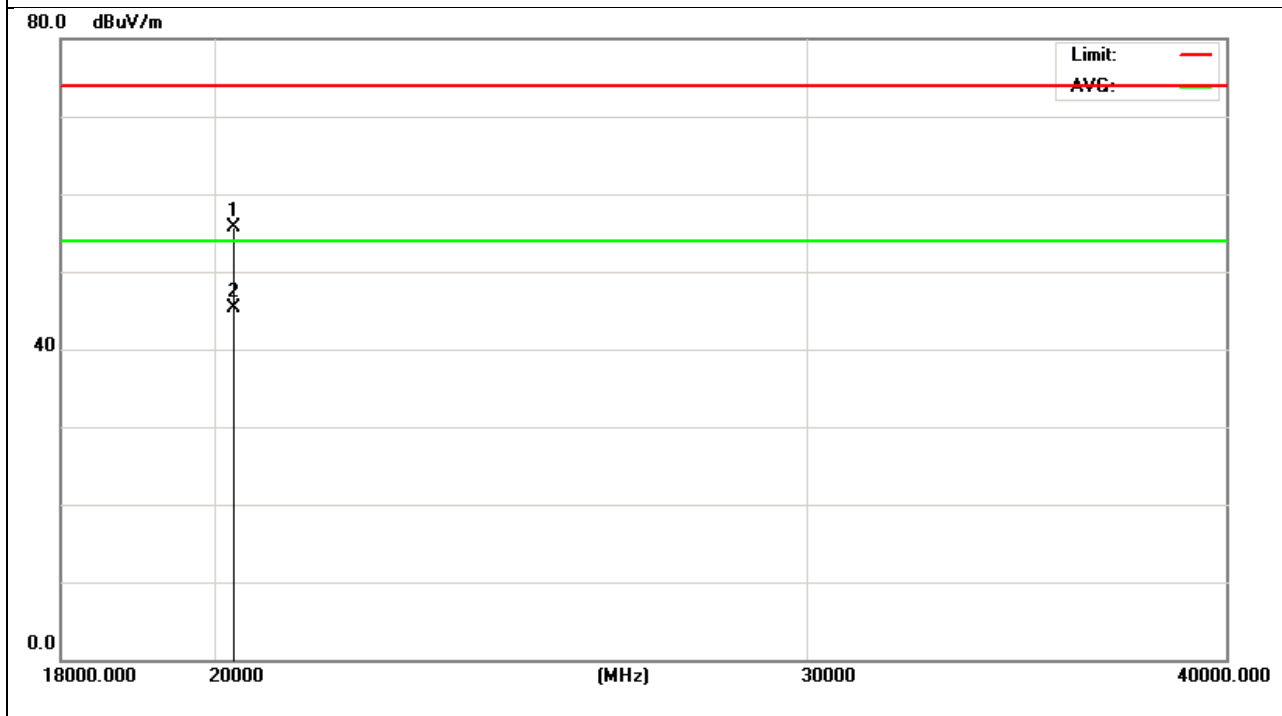
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 48	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20267.000	40.15	15.66	55.81	74.00	-18.19	peak
20267.000	29.63	15.66	45.29	54.00	-8.71	AVG

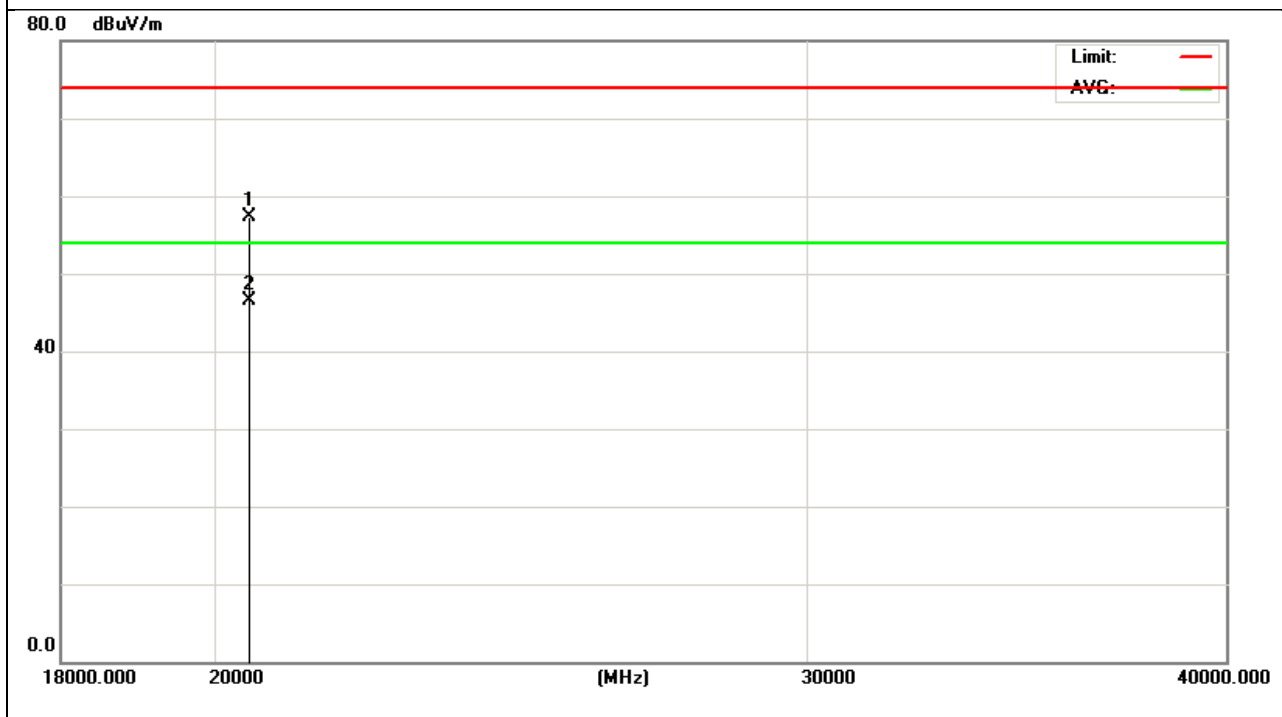
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	802.11n20 Channel 48	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
20475.000	41.32	15.98	57.30	74.00	-16.70	peak
20475.000	30.52	15.98	46.50	54.00	-7.50	AVG

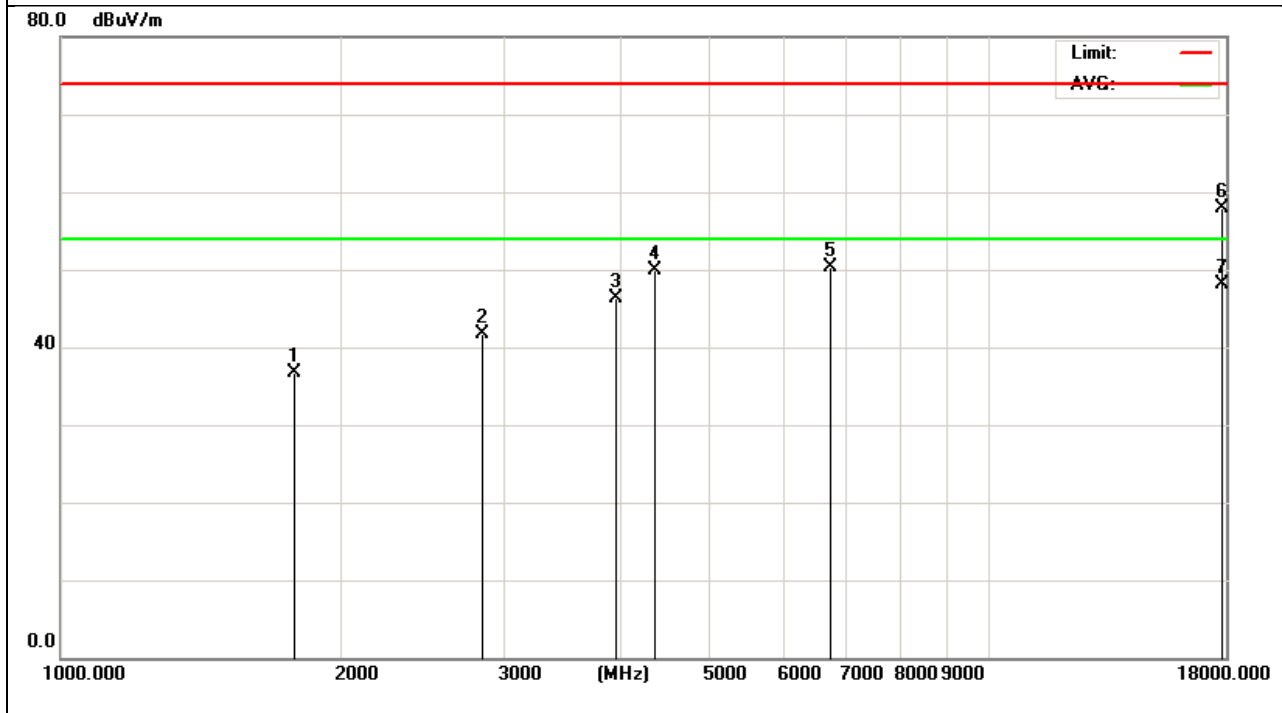
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	RX	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1785.047	46.15	-9.37	36.78	74.00	-37.22	peak
2844.692	44.26	-2.64	41.62	74.00	-32.38	peak
3948.365	42.84	3.46	46.30	74.00	-27.70	peak
4358.774	45.36	4.45	49.81	74.00	-24.19	peak
6749.659	44.23	6.01	50.24	74.00	-23.76	peak
17782.014	33.14	24.83	57.97	74.00	-16.03	peak
17782.014	23.25	24.83	48.08	54.00	-5.92	AVG

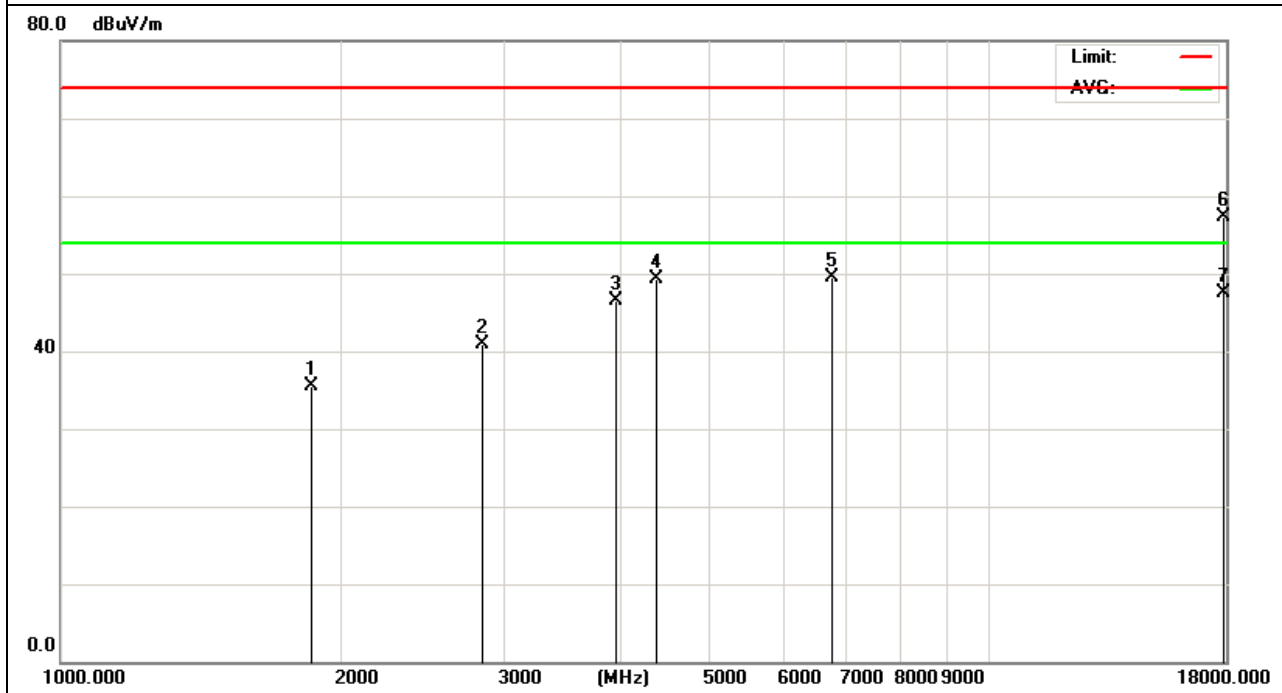
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	RX	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1867.065	46.51	-9.45	37.06	74.00	-36.94	peak
2847.115	43.39	-2.65	40.74	74.00	-33.26	peak
3955.253	43.82	3.47	47.29	74.00	-26.71	peak
4382.070	46.06	4.49	50.55	74.00	-23.45	peak
6781.114	44.35	6.03	50.38	74.00	-23.62	peak
17894.229	33.81	24.76	58.57	74.00	-15.43	peak
17894.229	22.68	24.76	47.44	54.00	-6.56	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	RX	Polarization :	Horizontal
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19693.000	40.33	14.81	55.14	74.00	-18.86	
19693.000	31.65	14.81	46.46	54.00	-7.54	AVG

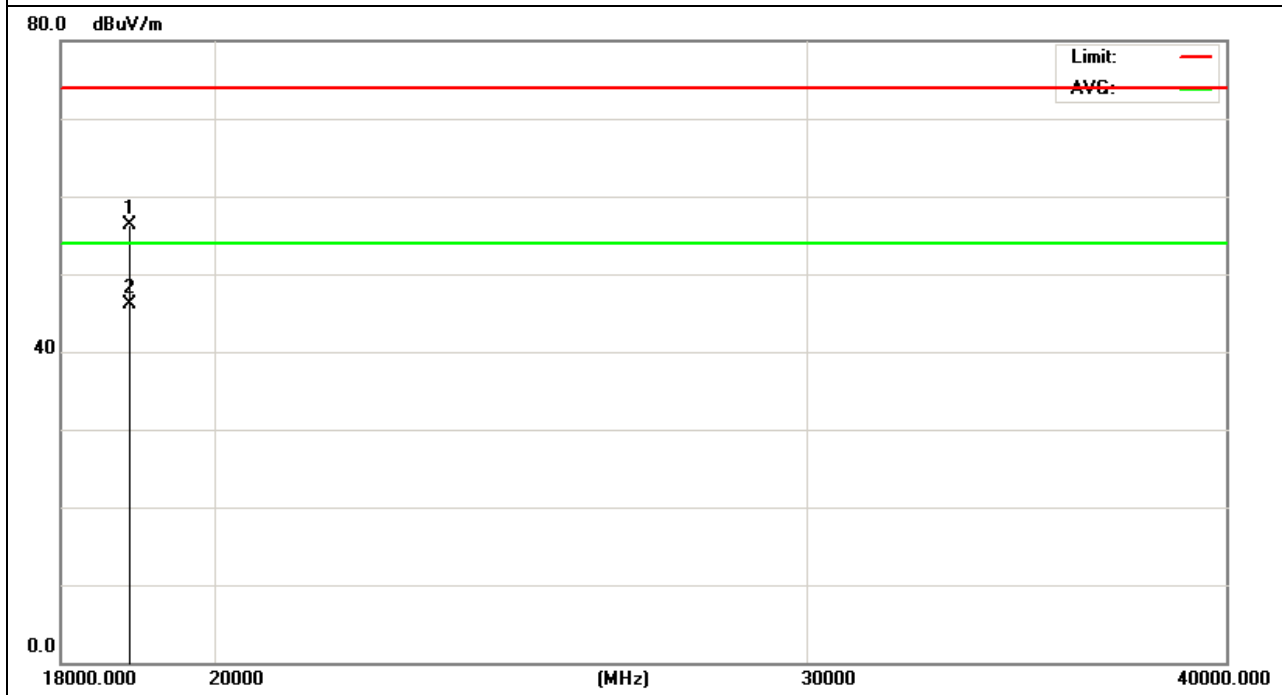
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2021-12-21
Test Mode :	RX	Polarization :	Vertical
Measurement Distance	3 m	Frequency Range	1GHz to 40GHz
Test Power :	DC3.8V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18859.000	43.38	13.58	56.96	74.00	-17.04	
18859.000	33.05	13.58	46.63	54.00	-7.37	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.

3.2.6 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

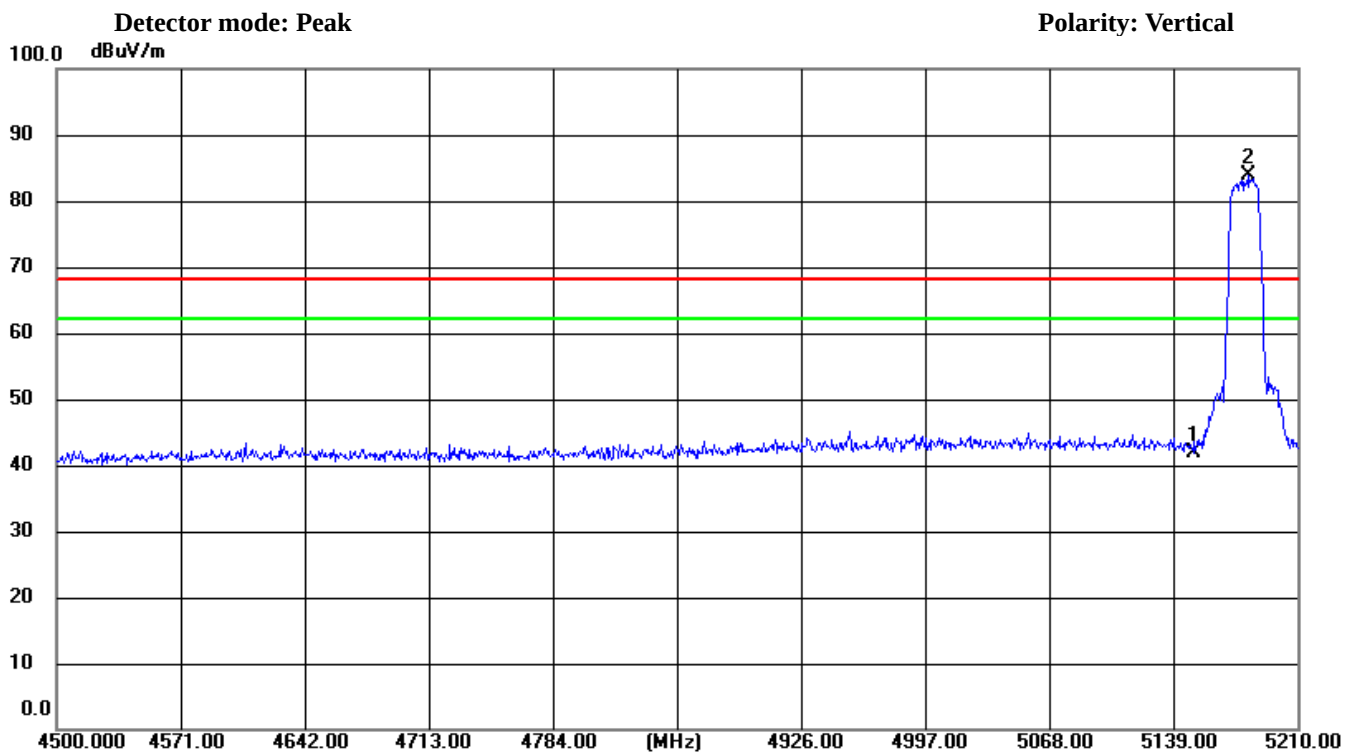
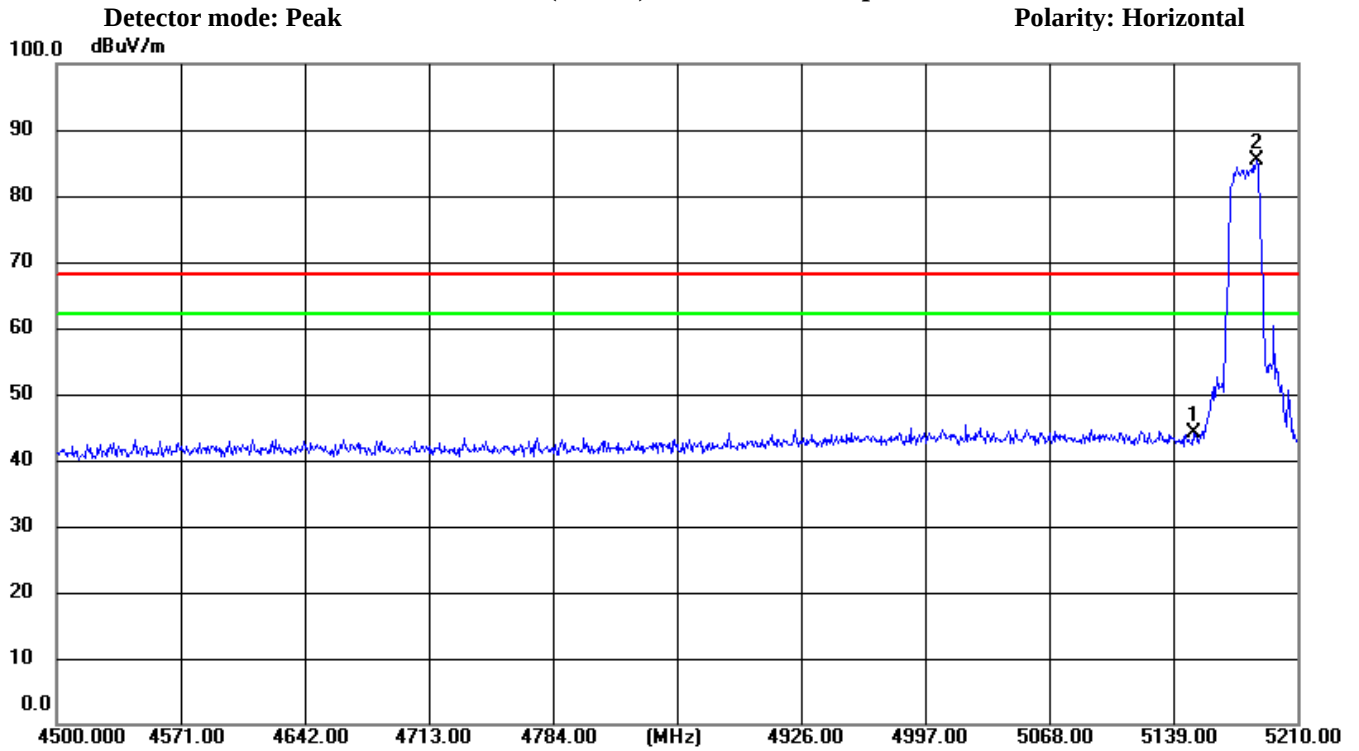
EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Power :	DC3.8V from battery
Test Mode :	802.11a		
Test Date :	2021-12-21		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH36). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH48). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.00	V	37.22	4.78	42	68.20	CH36
5182.31	V	83.91	4.71	---	---	CH36
5150.00	H	39.34	4.78	44.12	68.20	CH36
5186.57	H	85.37	4.67	---	---	CH36
5244.70	V	82.54	4.52	---	---	CH48
5350.00	V	36.95	4.30	41.25	68.20	CH48
5245.27	H	83.23	4.52	---	---	CH48
5350.00	H	31.91	4.30	36.21	68.20	CH48

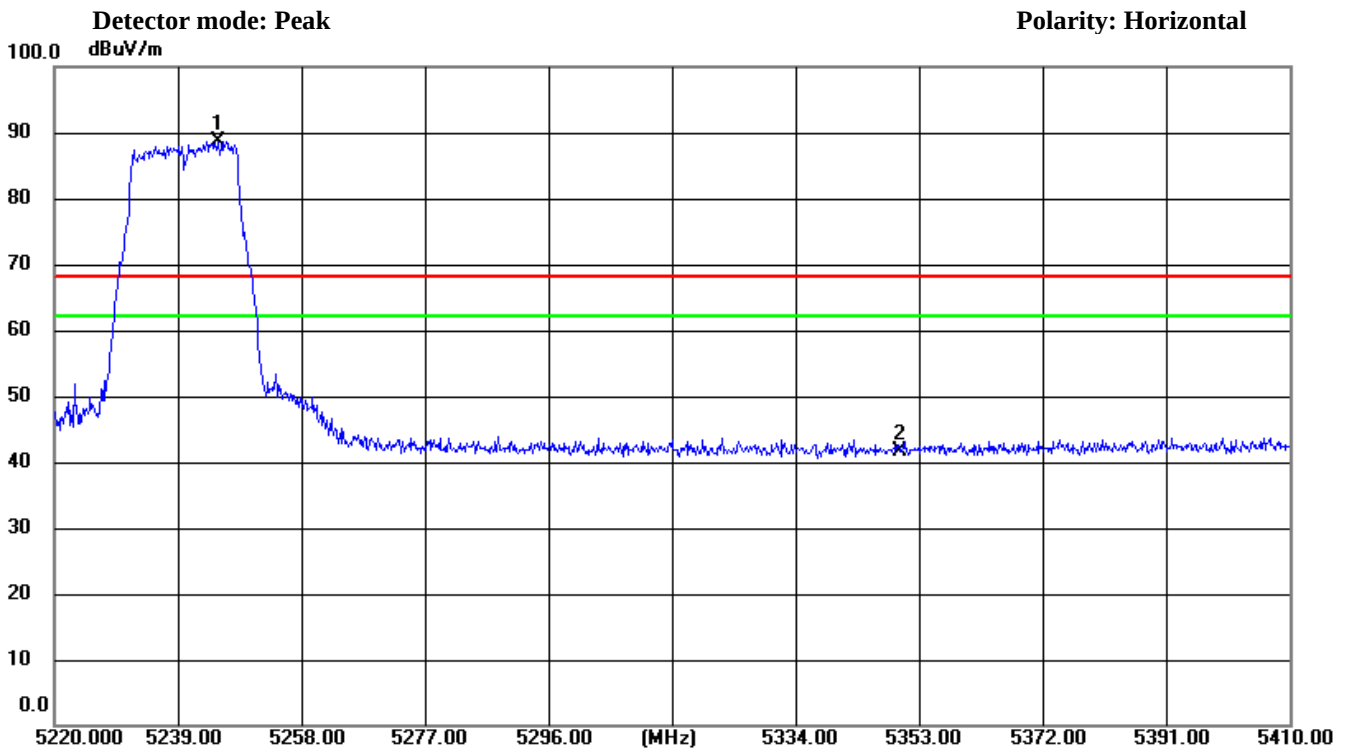
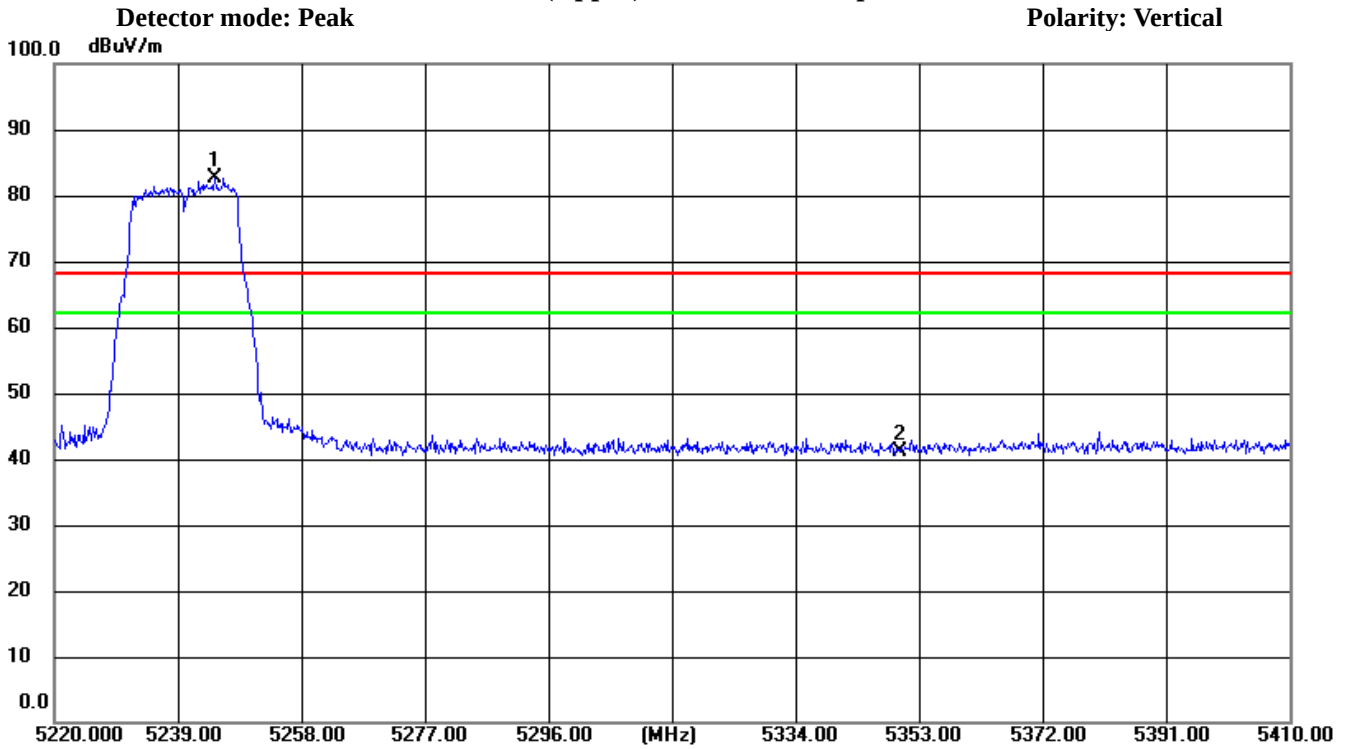
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11a (5.15GHz-5.25GHz) CH 36 (Lower) Data rate 6Mbps



802.11a (5.15GHz-5.25GHz)
CH 48 (Upper) Data rate 6Mbps



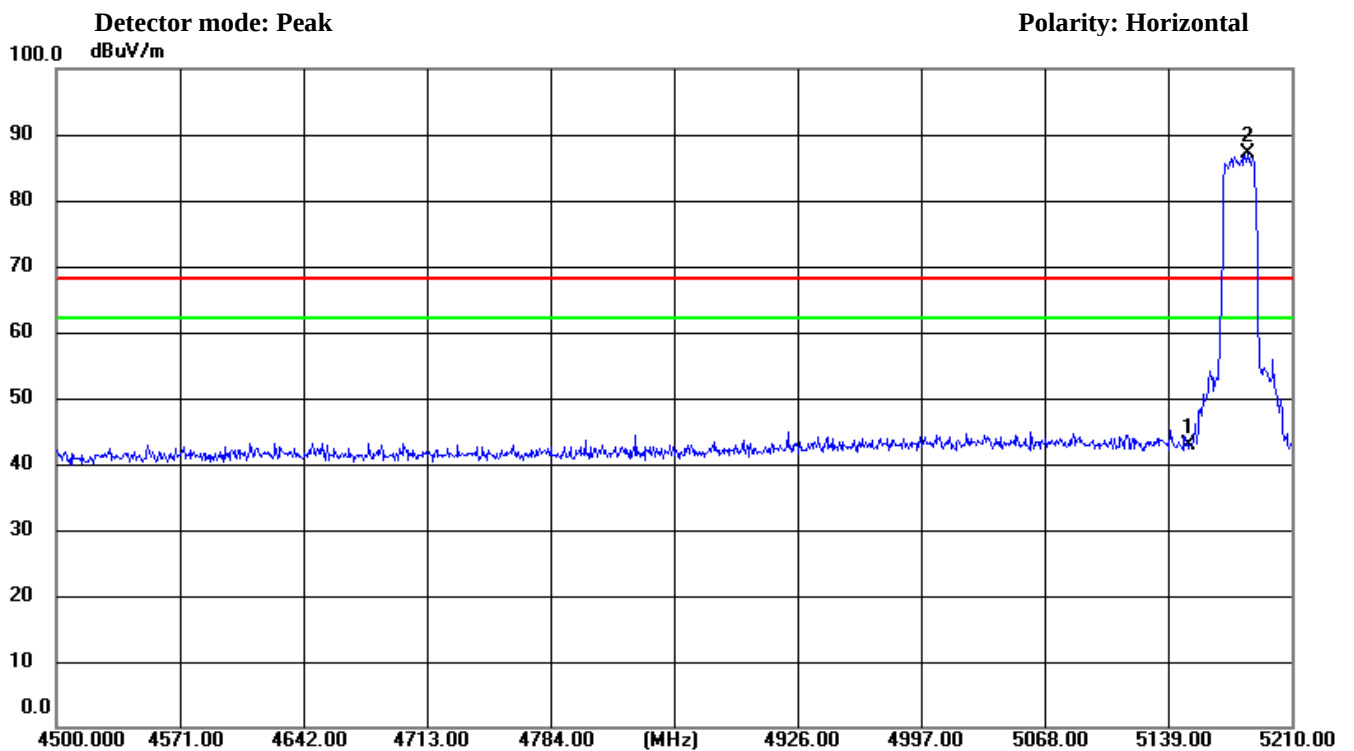
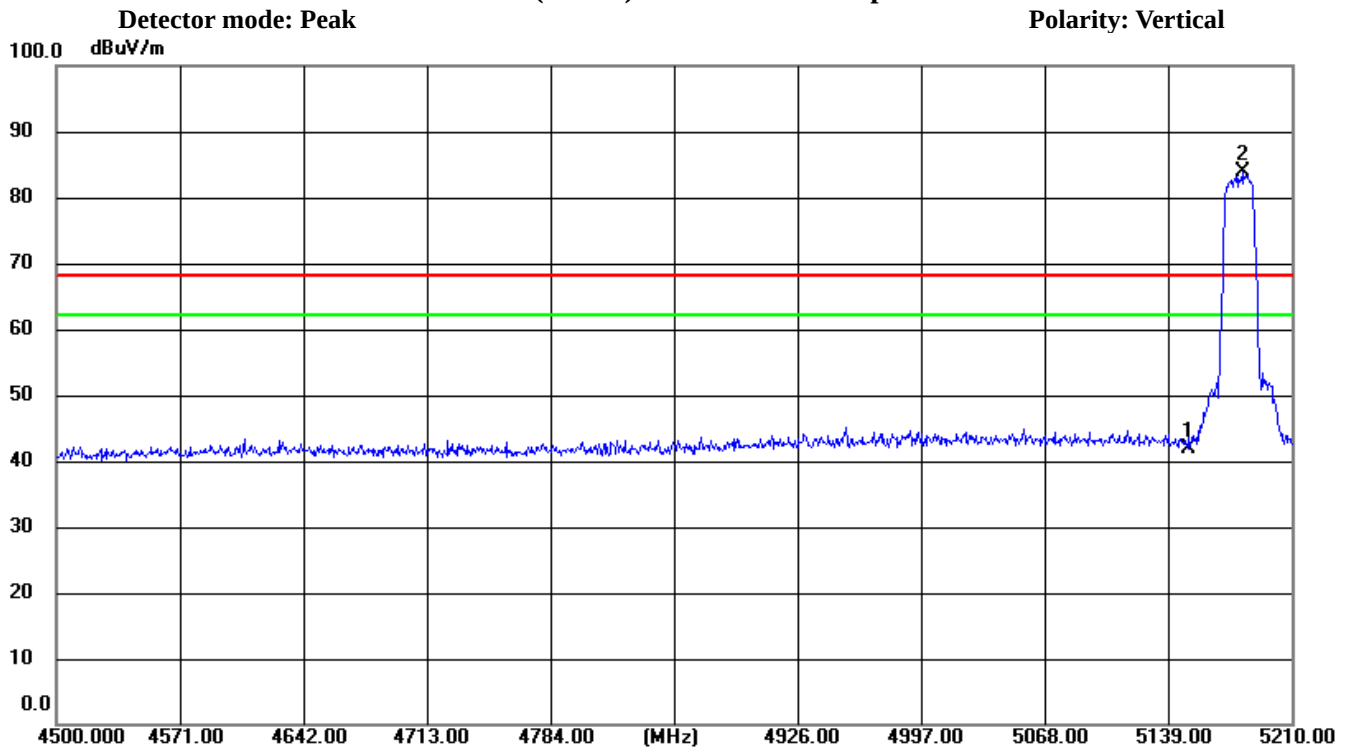
EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	24°C	Relative Humidity :	51%
Pressure :	1010 hPa	Test Power :	DC3.8V from battery
Test Mode :	802.11n BW20MHz		
Test Date :	2021-12-21		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH36). Then the field strength was measured at 4500-5150 MHz. 2. The transmitter was setup to transmit at the highest channel (CH48). Then the field strength was measured at 5190-5410 MHz. 3. The data of 5150MHz and 5350MHz was the worst.		

Freq. (MHz) (Peak)	Ant.Pol. H/V	Reading	Ant/CF	Act	Limit	Note
		Peak (dBuv)	Peak (dB)	Peak (dBuv/m)	Peak (dBuv/m)	
5150.00	V	37.22	4.78	42.00	68.20	CH36
5182.31	V	83.91	4.67	---	---	CH36
5150.00	H	38.19	4.78	42.97	68.20	CH36
5184.44	H	87.11	4.67	---	---	CH36
5246.60	V	83.08	4.51	---	---	CH48
5350.00	V	37.59	4.30	41.89	68.20	CH48
5246.41	H	87.62	4.51	---	---	CH48
5350.00	H	36.88	4.30	41.18	68.20	CH48

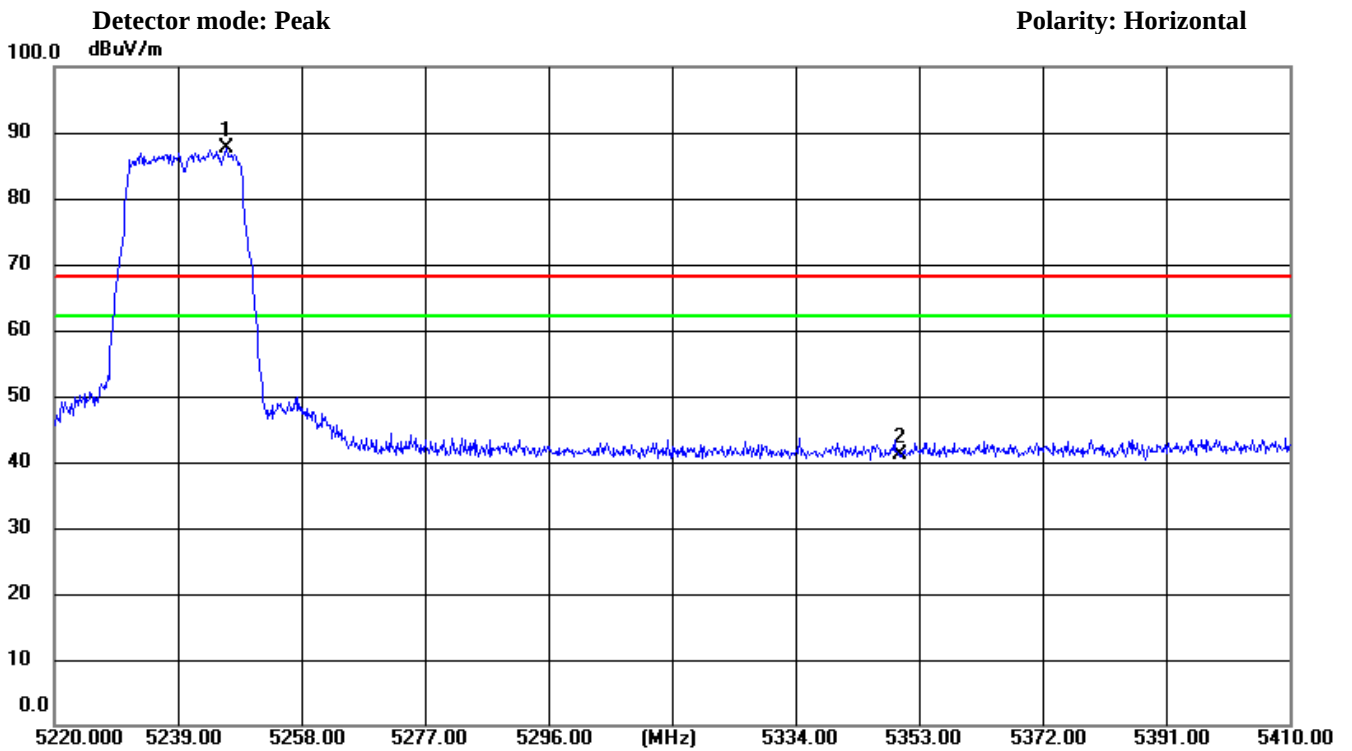
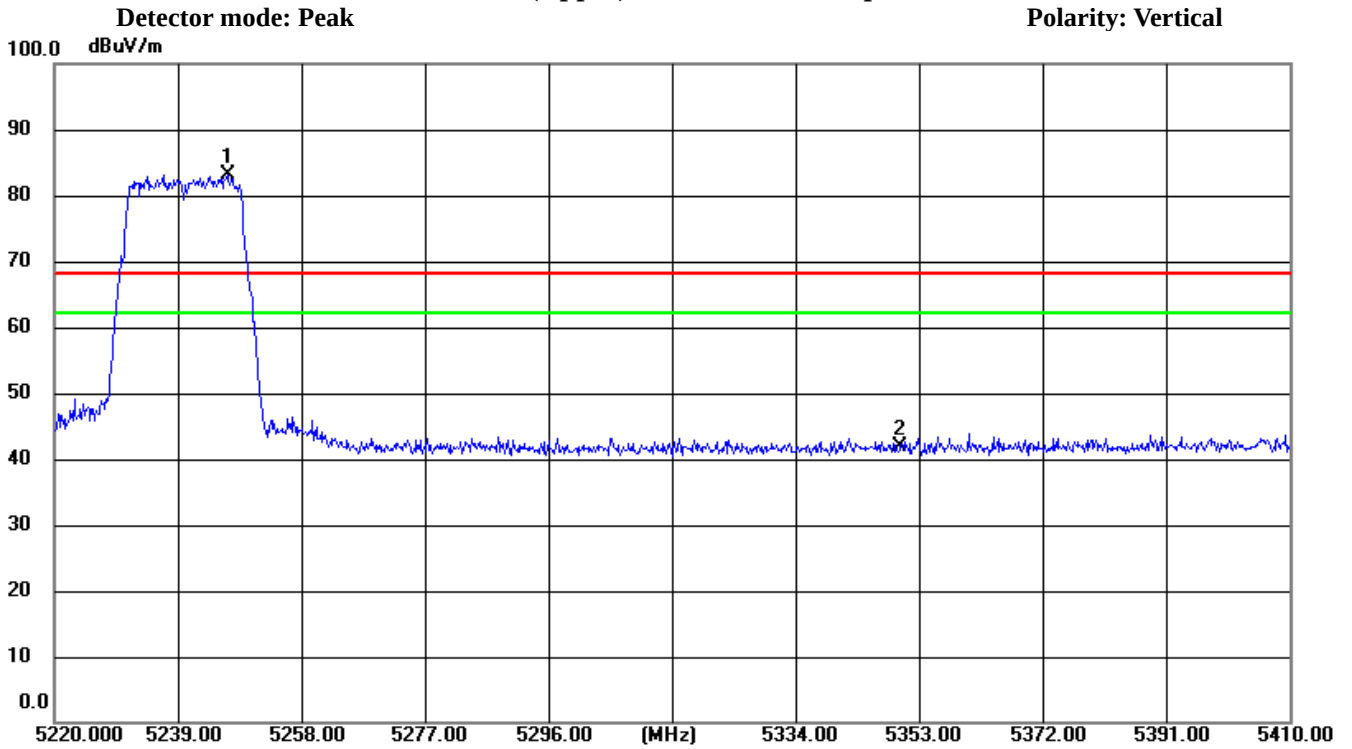
Remark :

- (1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode
- (2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (3) Corr.Factor = Antenna Factor + Cable Loss – Pre-amplifier.

802.11n(20M) (5.15GHz-5.25GHz)
CH 36 (Lower) Data rate 7.2Mbps



802.11n(20M) (5.15GHz-5.25GHz)
CH 48(Upper) Data rate 7.2Mbps



4 OCCUPIED BANDWIDTH TEST

4.1 26DB BANDWIDTH TEST

According to §15.303(c), for purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Compliance with the emissions limits is based on the use of measurement instrumentation employing a peak detector function with an instrument resolutions bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

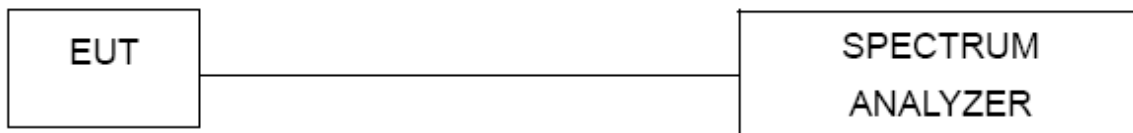
4.2 TEST PROCEDURE

- 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= 300kHz(802.11a/n20), VBW $\geq$ RBW, Sweep time = Auto.

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP

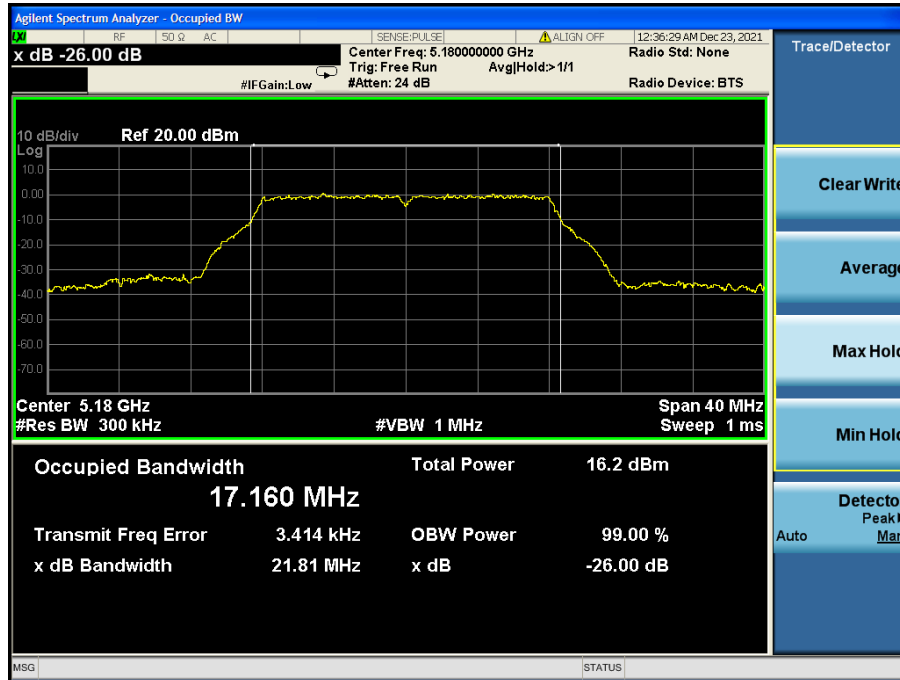


4.5 TEST RESULTS

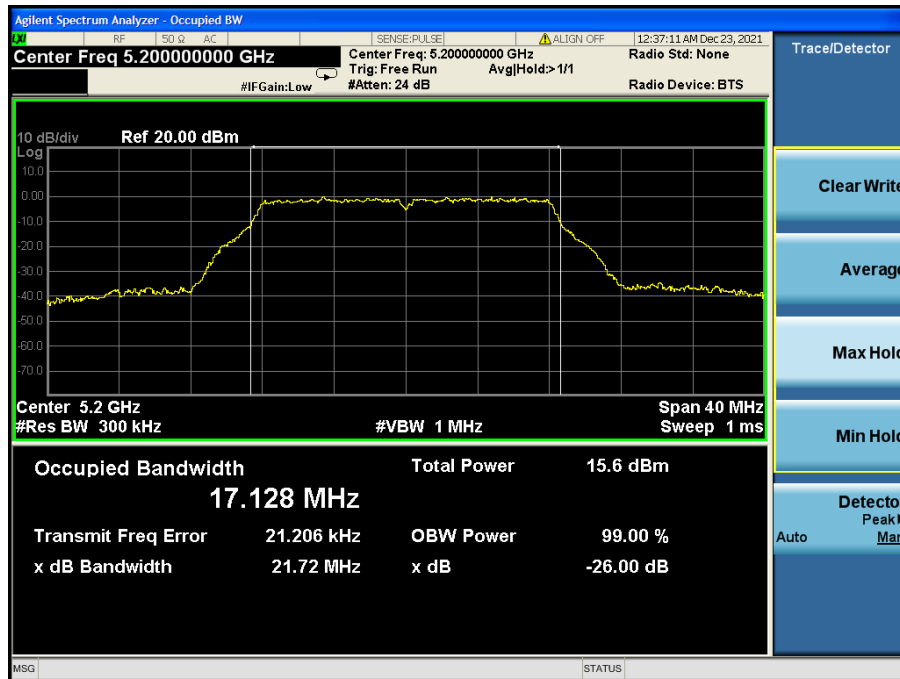
EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	26℃	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC3.8V from battery
Test Mode :	802.11a/n20		
Test Date :	2021-12-22		

Test Mode	Test Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
802.11a (5.15GHz-5.25GHz) Data rate 6Mbps	CH36	5180	21.81
	CH40	5200	21.72
	CH48	5240	21.77
802.11n(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	CH36	5180	21.89
	CH40	5200	21.73
	CH48	5240	21.85

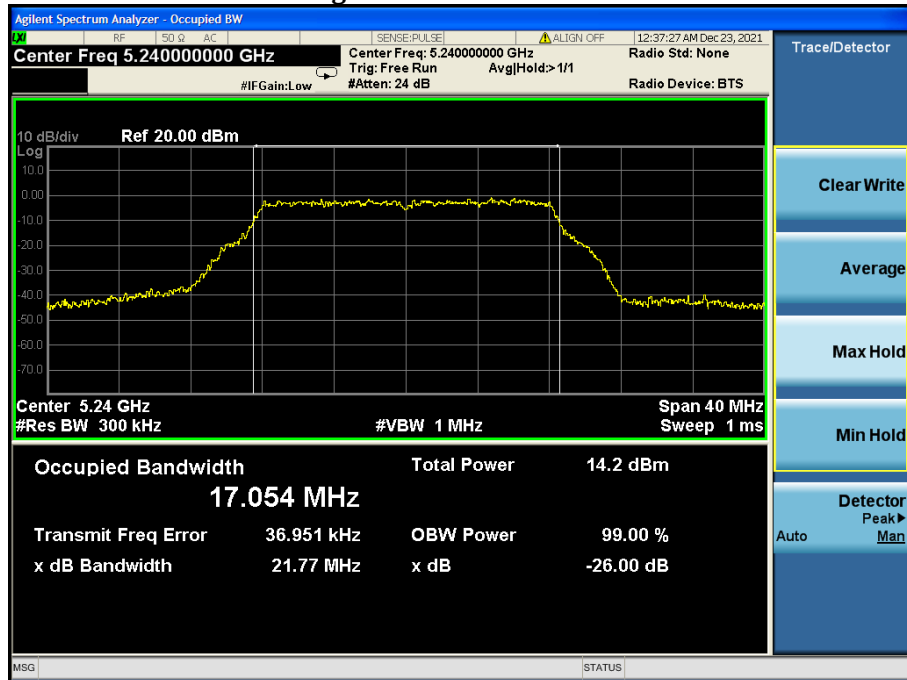
802.11a (5.15GHz-5.25GHz) The Low Channel 36: 5180MHz



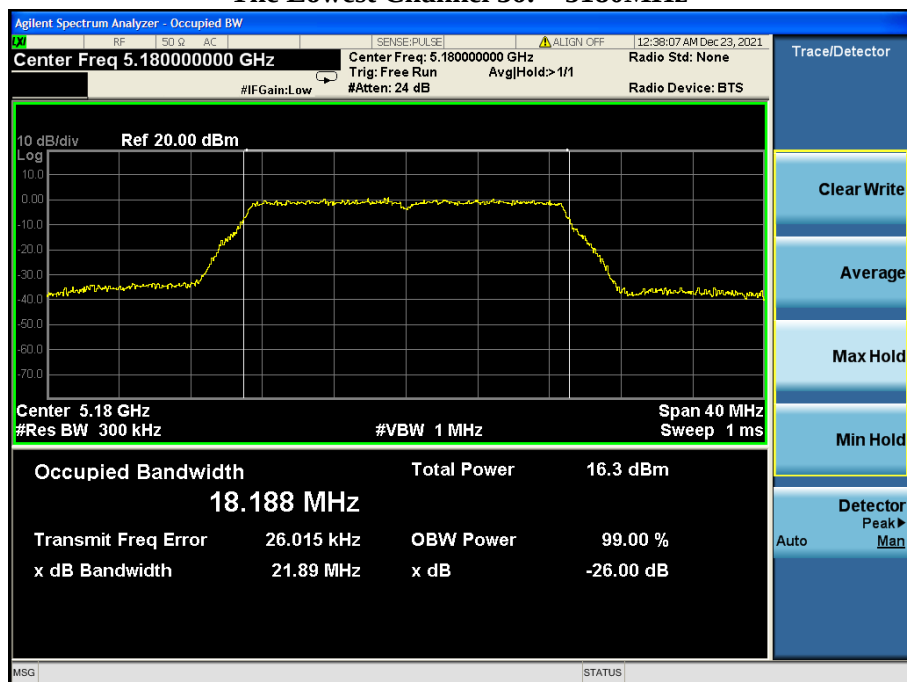
802.11a (5.15GHz-5.25GHz) The Middle Channel 40: 5200MHz



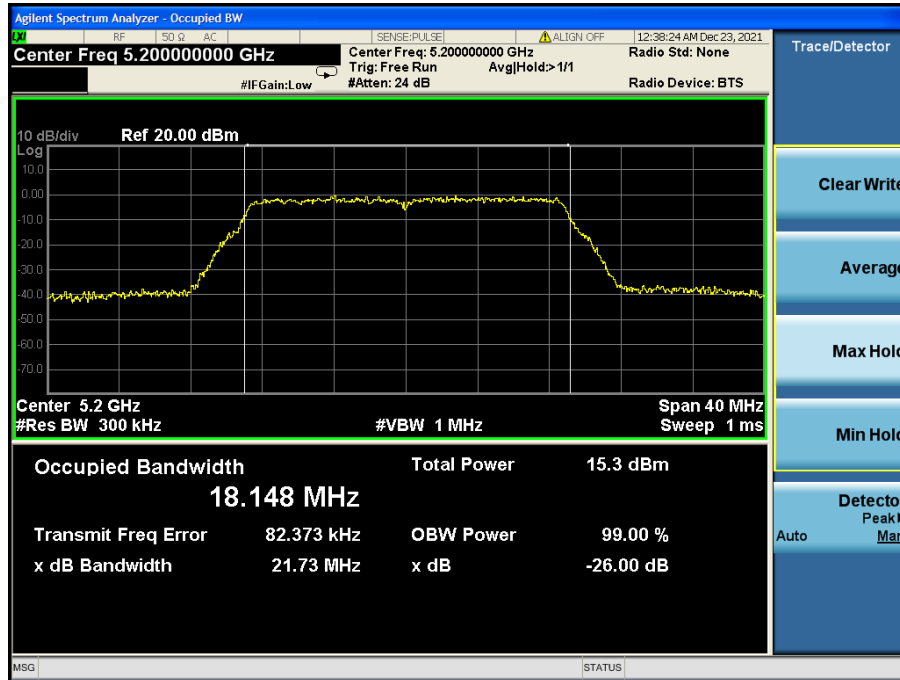
802.11a (5.15GHz-5.25GHz) The High Channel 48: 5240MHz



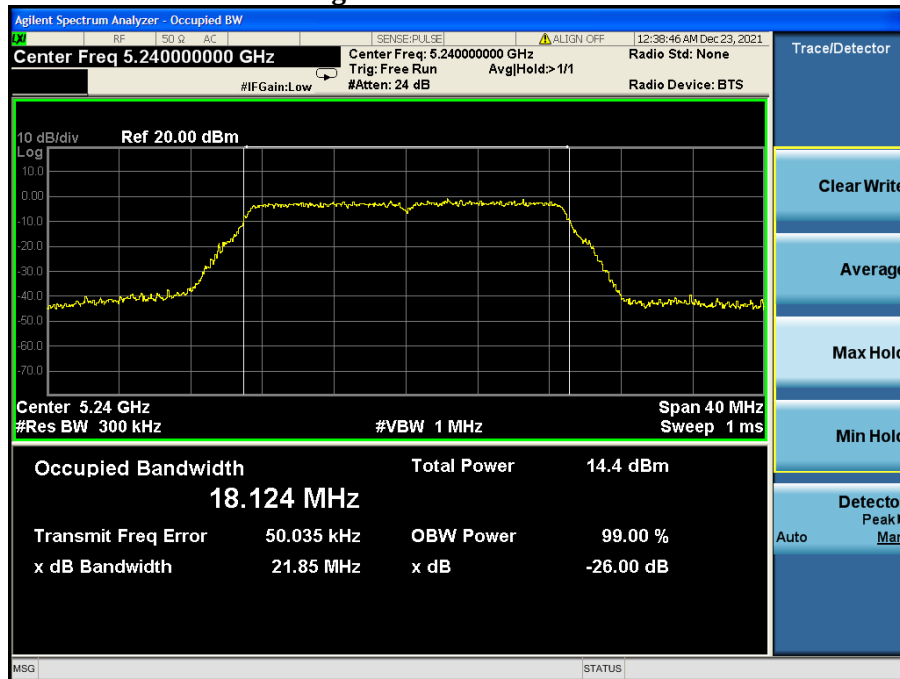
802.11n(20M) (5.15GHz-5.25GHz) The Lowest Channel 36: 5180MHz



802.11n(20M) (5.15GHz-5.25GHz) The Middle Channel 40: 5200MHz



802.11n(20M) (5.15GHz-5.25GHz) The High Channel 48: 5240MHz



5 PEAK POWER DENSITY

5.1 APPLIED PROCEDURES / LIMIT

15.407(a) For UNII Device in the 5.15-5.25GHz, 5.25-5.35 GHz and 5.47-5.725GHz bands: peak power Density as follows.

Frequency Band	Limit
5.15 – 5.25 GHz	11dBm
5.25– 5.35GHz	11dBm
5.47 – 5.725 GHz	11dBm

5.2 TEST PROCEDURE

- a. The Transmitter output of EUT was connected to the spectrum analyzer.

Equipment mode: Spectrum analyzer

Detector function: Peak mode

SPAN: 40MHz

RBW: 1MHz

VBW: 3MHz

Center frequency: fundamental frequency tested.

Sweep time= 1msec.

- b. Using Peak Search to read the peak power after Maximum Hold function is completed.

5.3 DEVIATION FROM STANDARD

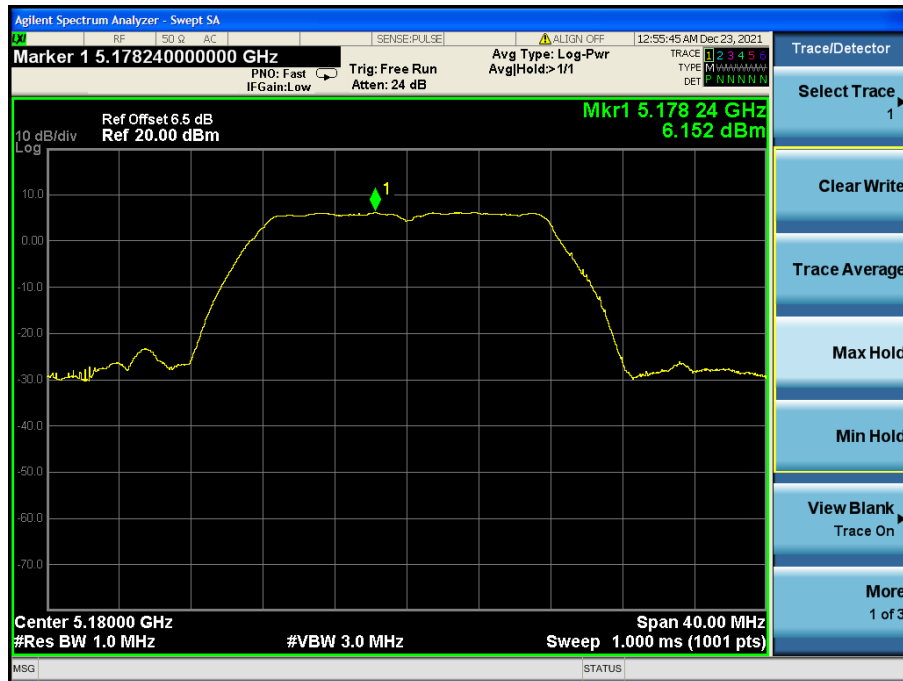
No deviation.

5.4 TEST RESULTS

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	22°C	Relative Humidity :	53%
Pressure :	1010 hPa	Test Power :	DC3.8V from battery
Test Mode :	802.11a/n20		
Test Date :	2021-12-22		

Test Mode	Channel	Channel Frequency (MHz)	Power Density (MHz)	Limit (dBm)	Result
802.11a (5.15GHz-5.25GHz) Data rate 6Mbps	Low	5180	6.152	11	Pass
	Middle	5200	5.420	11	Pass
	Highest	5240	4.608	11	Pass
802.11n(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	Low	5180	6.466	11	Pass
	Middle	5200	5.451	11	Pass
	Highest	5240	4.648	11	Pass

802.11a (5.15GHz-5.25GHz) The Lowest Channel 36: 5180MHz



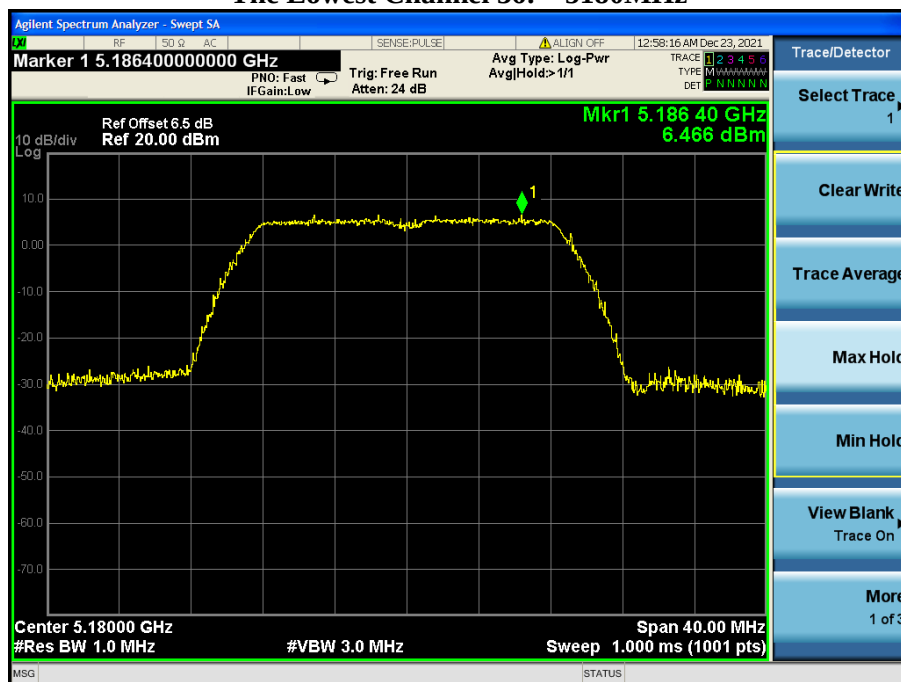
802.11a (5.15GHz-5.25GHz) The Middle Channel 40: 5200MHz



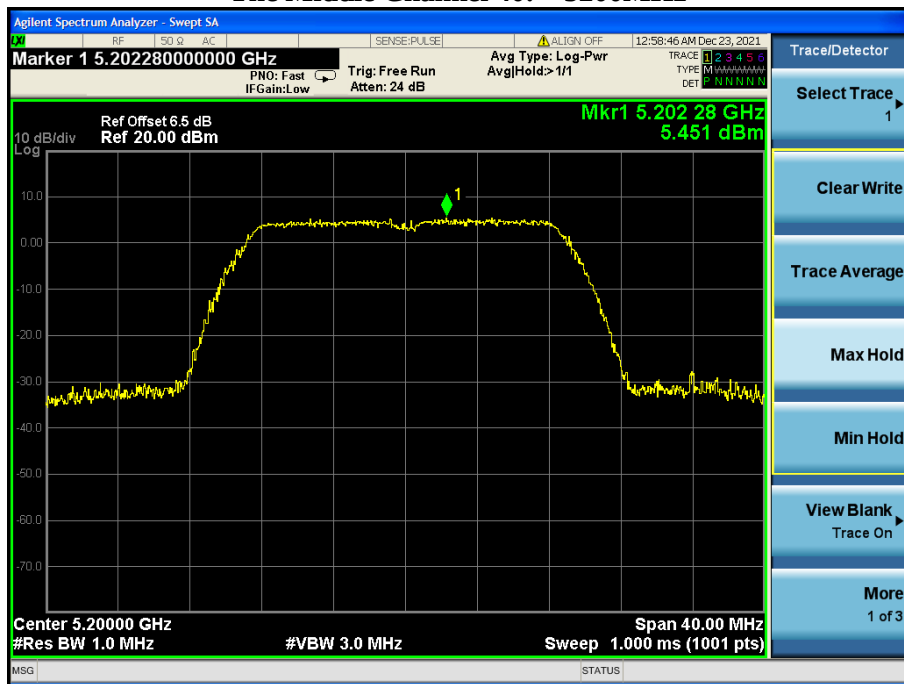
802.11a (5.15GHz-5.25GHz)
The Highest Channel 48: 5240MHz



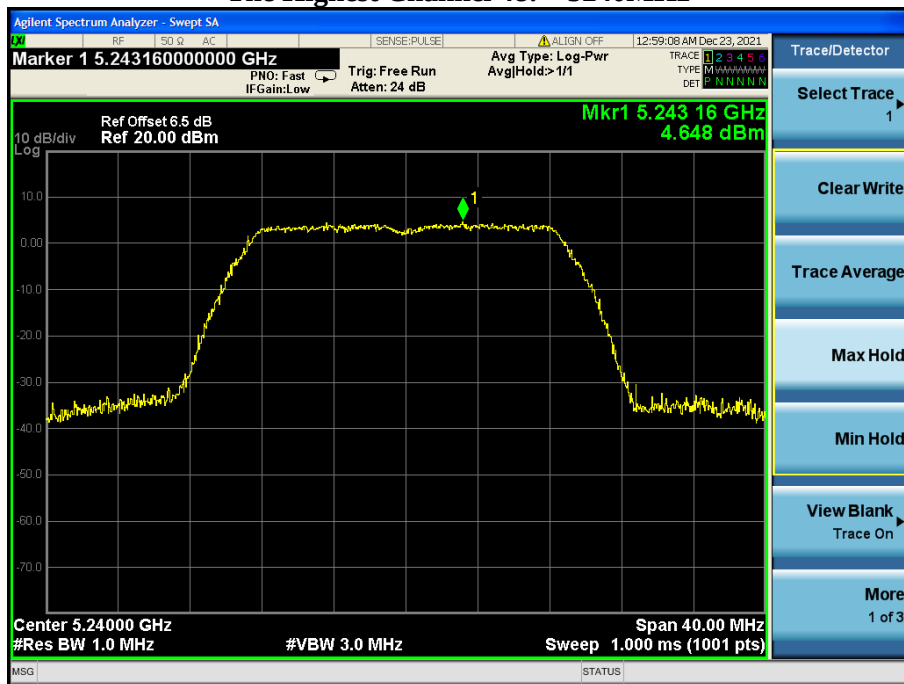
802.11n(20M) (5.15GHz-5.25GHz)
The Lowest Channel 36: 5180MHz



802.11n(20M) (5.15GHz-5.25GHz)
The Middle Channel 40: 5200MHz



802.11n(20M) (5.15GHz-5.25GHz)
The Highest Channel 48: 5240MHz



6 MAXIMUM PEAK OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

For UNII Device in the 5.15-5.25 GHz, 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log (26 dB BW).

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Band	Limit
5.15 – 5.25 GHz	24 dBm
5.25-5.35 GHz	24 dBm
5.47 – 5.725 GHz	24 dBm

6.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as shown in the block diagram below.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



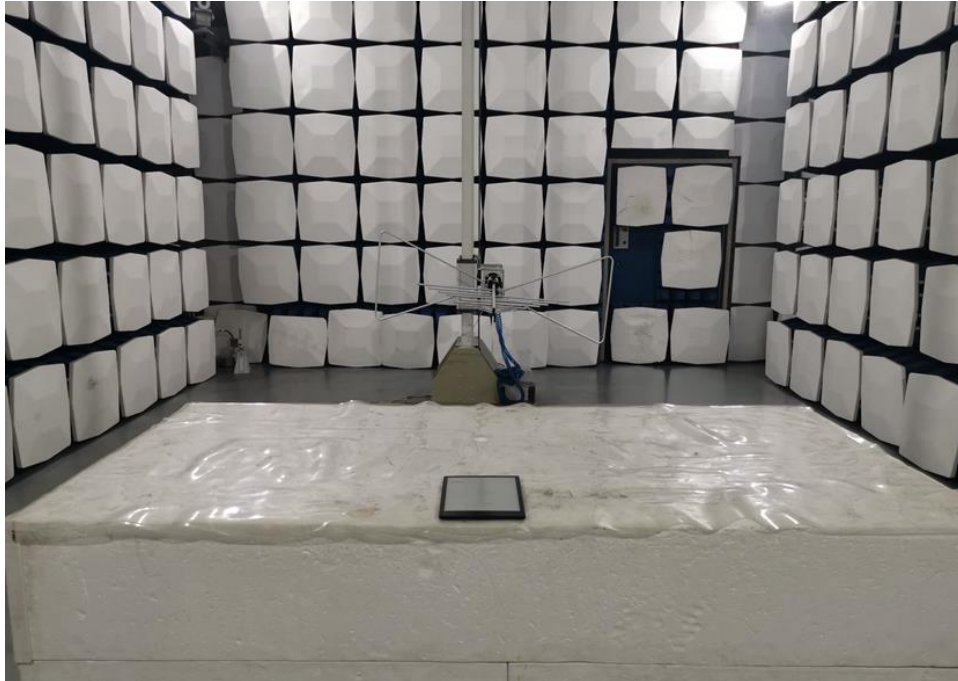
6.5 TEST RESULTS

EUT :	HyRead Gaze X Plus 電子紙閱讀器	Model Name :	K10P
Temperature :	22℃	Relative Humidity :	60%
Pressure :	1010 hPa	Test Power :	DC3.8V from battery
Test Mode :	802.11a/n20		
Test Date :	2021-12-22		

Test Mode	Channel	Channel Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Result
802.11a (5.15GHz-5.25GHz) Data rate 6Mbps	CH36	5180	15.64	24	Pass
	CH40	5200	14.96	24	Pass
	CH48	5240	13.87	24	Pass
802.11n(20M) (5.15GHz-5.25GHz) Data rate 13Mbps	CH36	5180	15.21	24	Pass
	CH40	5200	14.78	24	Pass
	CH48	5240	13.85	24	Pass

7. EUT TEST PHOTO

**Radiated Measurement Photos
30MHz-1GHz**



**Radiated Measurement Photos
Above 1GHz**



Conducted Measurement Photos**8. APPENDIX-Photographs of EUT Constructional Details**

Please refer to report APPENDIX.

**** End of Report ****