



Test Report

According to

**RTCA DO-160G
(Section 21.5)**

of

Product : **Single Use Cold Chain PDF Logger**

Trade Name : N/A

Model Number : 88181

Serial Number : 18C1139

Prepared for

AZ Instrument Corp.

NO.3-2, 5-2, 7-3, 9-3, CHIEN-KUO ROAD, TANZIH DIST., Taichung City

TEL. : +886 4 2532 6680

FAX. : +886 4 2532 6593

Prepared by

Interocean EMC Technology Corp.

Interocean EMC Technology Tin-Fu Laboratory

No. 5-2, Lin 1, Tin-Fu, Lin-Kou Dist., New Taipei City,

Taiwan 244, R.O.C.

TEL. : +886 2 2600 6861

FAX. : +886 2 2600 6859



Remark:

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The test result in this report is only subjected to the test sample.



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Statement of Compliance

Applicant : AZ Instrument Corp.
Manufacturer : AZ Instrument Corp.
Product : Single Use Cold Chain PDF Logger
Model No. : 88181
Serial Number : 18C1139
Tested Power Supply : Battery (DC 3V)
Date of Test : Jan. 15, 2019
Revision of Report: Rev. 00

Measurement Procedures and Standards Used :

- RTCA DO-160G
- Emission of Radio Frequency Energy (Section 21)- Radiated RF Emission

Test Item		Special	Location of Test	Test Result
Section 21.5	Radiated RF Emission	Equipment Category H Frequency Range: 100 MHz - 6 GHz	IETC LAB	PASS

The measurement results in this test report were performed at Interocean EMC Technology Corp. the responsibility of measurement result is only subjected to the tested sample. This report shows the EUT is technically compliance with the above official standards. This report shall not be partial reproduced without written approval by Interocean EMC Technology Corporation.

Report Issued: 2019/01/22

Project Engineer: Zac Lin Approved: Mars Jen
 Zac Lin Mars Jen



1 General Information

1.1 Description of Equipment Under Test

- Product** : Single Use Cold Chain PDF Logger
- Model Number** : 88181
- Serial Number** : 18C1139
- Applicant** : **AZ Instrument Corp.**
NO.3-2, 5-2, 7-3, 9-3, CHIEN-KUO ROAD, TANZIH DIST.,
Taichung City
- Manufacturer** : **AZ Instrument Corp.**
NO.3-2, 5-2, 7-3, 9-3, CHIEN-KUO ROAD, TANZIH DIST.,
Taichung City
- Date of Test** : Jan. 15, 2019
- Additional Description** : 1.) The test model is “**88181**” and included in this report.
2.) For more detail specifications about EUT, please refer to the user’s manual.



1.2 Test Facility

- Site Description** : ☒ Chamber 6
- Name of Firm** : Interocean EMC Technology Corp.
- Company web** : <http://www.ietc.com.tw>
- Location** : No. 5-2, Lin 1, Tin-Fu, Lin-Kou Dist., New Taipei City, Taiwan 244, R.O.C.
- Site Filing** :
- Federal Communication Commissions – USA
Designation No.: TW1020 (Test Firm Registration #: 651092)
Designation No.: TW1113 (Test Firm Registration #: 959554)
 - Innovation, Science and Economic Development Canada (ISED)
CAB identifier: TW1113 (Ref. No 14962756)
OUR FILE: 46405-4437
Registration No. (OATS 1): Site# 4437A-1
Registration No. (OATS 3): Site# 4437A-3
Registration No. (Chamber 3): Site# 4437A-5
Registration No. (OATS 5): Site# 4437A-6
Voluntary Control Council for Interference by Information Technology Equipment (VCCI) – Japan
Member No.: 1349
Registration No. (Conducted Room): C-11094
Registration No. (Conducted Room): T-11562
Registration No. (OATS 1): R-11040; G-10274
- Site Accreditation** :
- Bureau of Standards and Metrology and Inspection (BSMI) – Taiwan, R.O.C.
Accreditation No.:
SL2-IN-E-0026 for CNS 13438 / CISPR 22
SL2-R1-E-0026 for CNS 13439 / CISPR 13
SL2-R2-E-0026 for CNS 13439 / CISPR 13
SL2-L1-E-0026 for CNS 14115 / CISPR 15
 - Taiwan Accreditation Foundation (TAF)
Accreditation No.: 1113
 - Vehicle Safety Certification Center (VSCC)
Approval No.: TW16-11
 - TÜV NORD
Certificate No: TNTW0801R



1.3 Measurement Uncertainty

Item	Value
Chamber 6:	
Conducted Emission Test (150 kHz to 152 MHz)	2.8 dB
Radiated Emission Test (2 MHz to 30 MHz)	2.9 dB
Radiated Emission Test (30 MHz to 250 MHz)	3.5 dB
Radiated Emission Test (250 MHz to 1000 MHz)	4.0 dB
Radiated Emission Test (1 GHz to 6 GHz)	4.0 dB
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%	



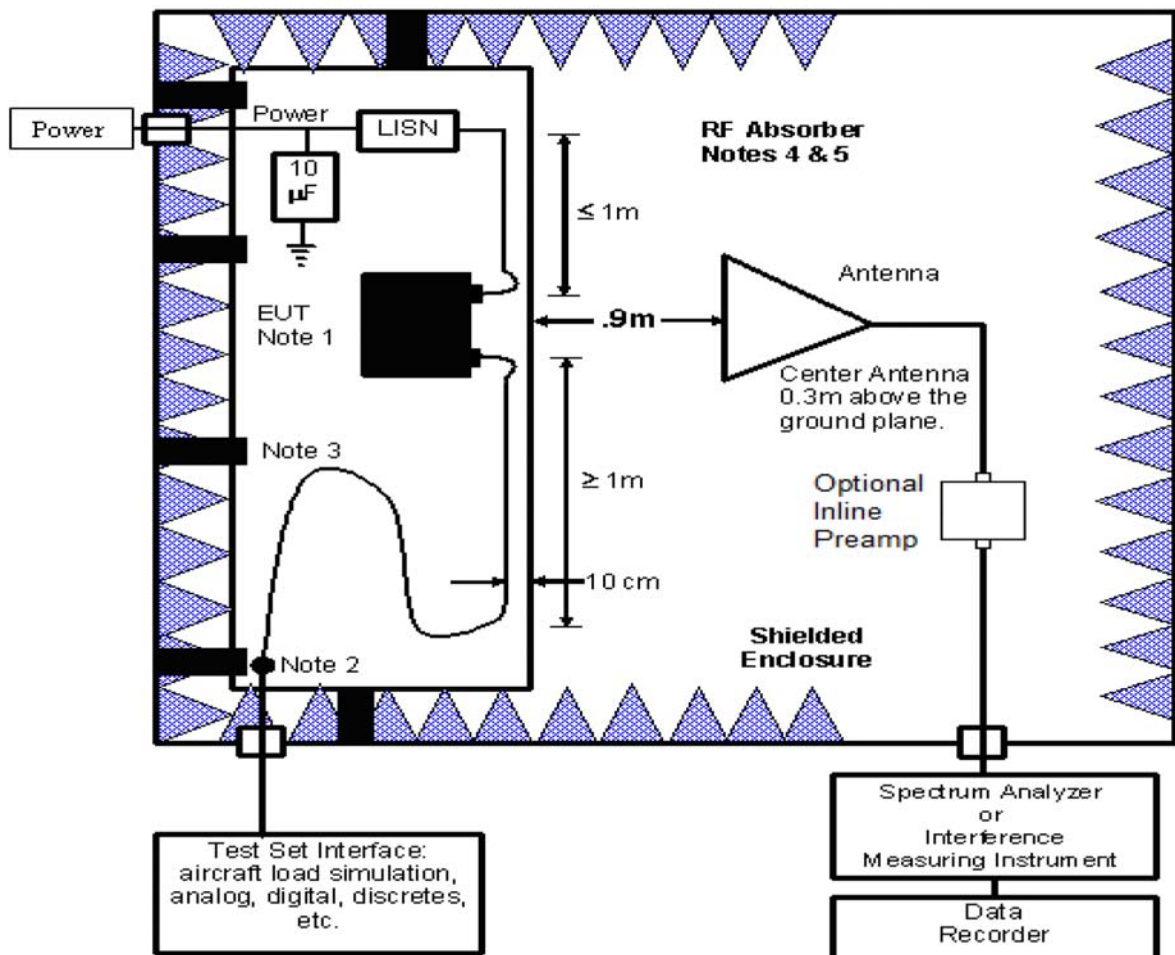
2 Section 21.5 - Radiated RF Emission

2.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
Biconical Antenna	Schwarzbeck	VHA 9103 & BBA 9106	VHA 9103-2484	2019/07/03
Log Antenna	Schwarzbeck	UHALP 9108-A	9108-A 0765	2019/07/03
Horn Antenna	Schwarzbeck	BBHA 9120	9120D-583	2019/10/15
Pre-amplifier	EMCI	EMC330	980003	2019/08/20
Pre-amplifier	Agilent	8449B	3008A01434	2019/10/24
EMI Test Receiver	R&S	ESCI	100836	2019/04/11
DC LISN	SCHWARZBECK	NNBM 8126D	8126D-213	2019/01/28
DC LISN	SCHWARZBECK	NNBM 8126D	8126D-214	2019/01/28
RF Cable	HARBOUR	27478LL142	CBL21	2019/03/11
RF Cable	HARBOUR	24778LL142	CBL35	2019/03/11
RF Cable	HARBOUR	24778LL142	CBL67	2019/03/11

Note: The above equipments are within the valid calibration period.

2.2 Block Diagram of Test Configuration





2.3 Equipment Categories

<input type="checkbox"/> Category B	This category is intended primarily for equipment where interference should be controlled to tolerable levels.
<input type="checkbox"/> Category L	This category is defined for equipment and interconnected wiring located in areas far from apertures of the aircraft (such as windows) and far from radio receiver's antenna. This category may be suitable for equipment and associated interconnecting wiring located in the electronic bay of an aircraft.
<input type="checkbox"/> Category M	This category is defined for equipment and interconnected wiring located in areas where apertures are electro-magnetically significant and not directly in view of radio receiver's antenna. This category may be suitable for equipment and associated interconnecting wiring located in the passenger cabin or in the cockpit of a transport aircraft.
<input checked="" type="checkbox"/> Category H	This category is defined for equipment located in areas which are in direct view of a radio receiver's antenna. This category is typically applicable for equipment located outside of the aircraft.
<input type="checkbox"/> Category P	This category is defined for equipment and associated wiring located in areas close to HF, VHF, or Global Positioning System (GPS) radio receiver antennas, or where the aircraft structure provides little shielding.
<input type="checkbox"/> Category Q	This category is defined for equipment and associated wiring located in areas close to VHF, or GPS radio receiver antennas, or where the aircraft structure provides little shielding.

2.4 Test Procedure

Procedure is followed by RTCA DO-160G Section 21.5.

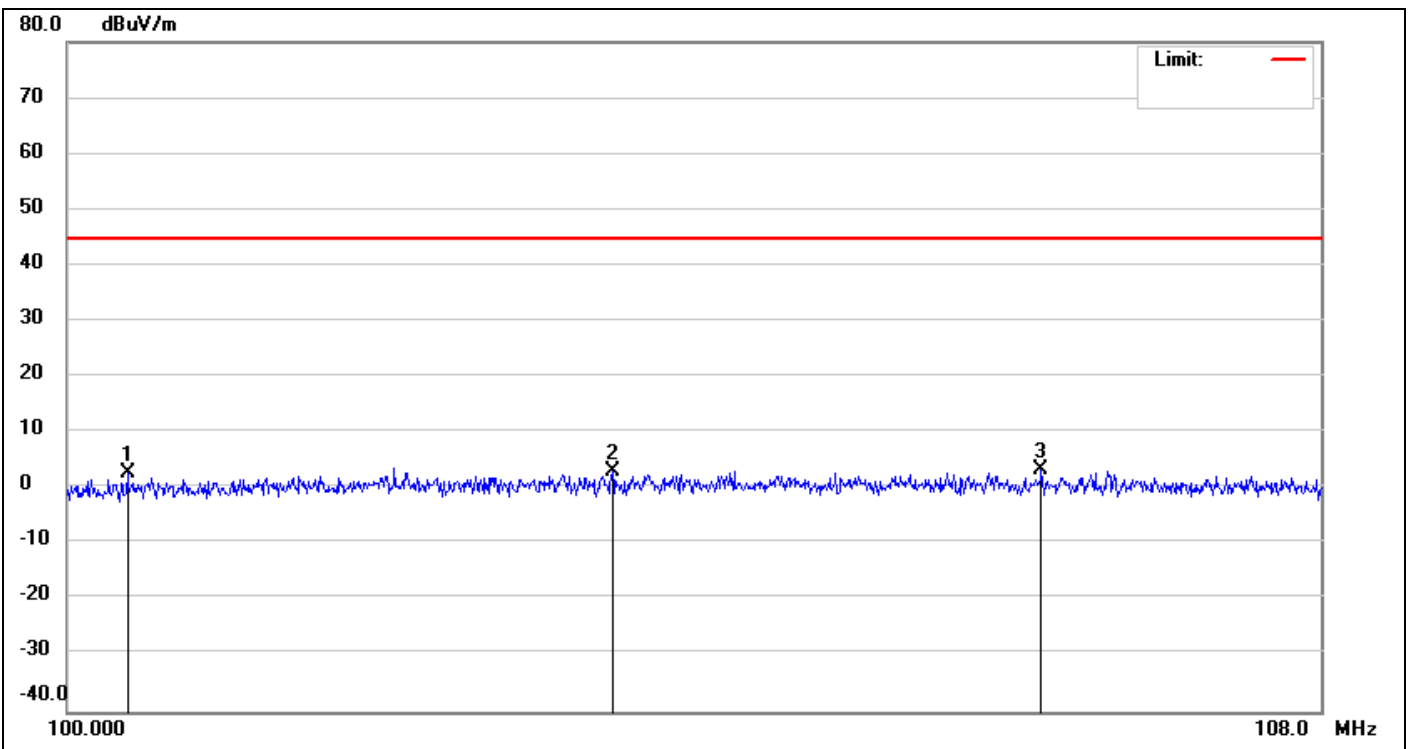
2.5 Test Result

The final test data is shown as following pages.



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:10:07
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

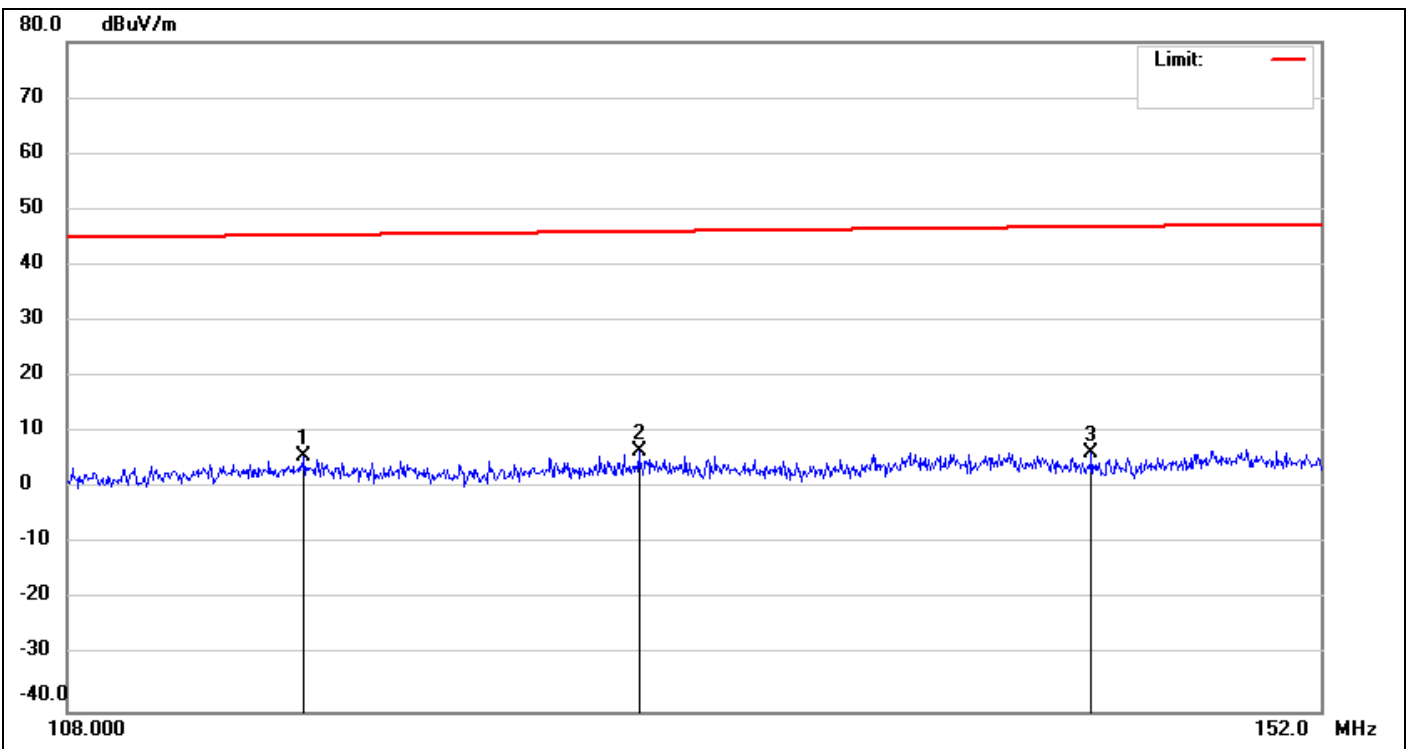


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	100.3760	21.49	-18.69	2.80	44.64	-41.84	peak	P	
2	103.4080	21.56	-18.37	3.19	44.84	-41.65	peak	P	
3	106.1680	21.33	-18.07	3.26	45.03	-41.77	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:09:22
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

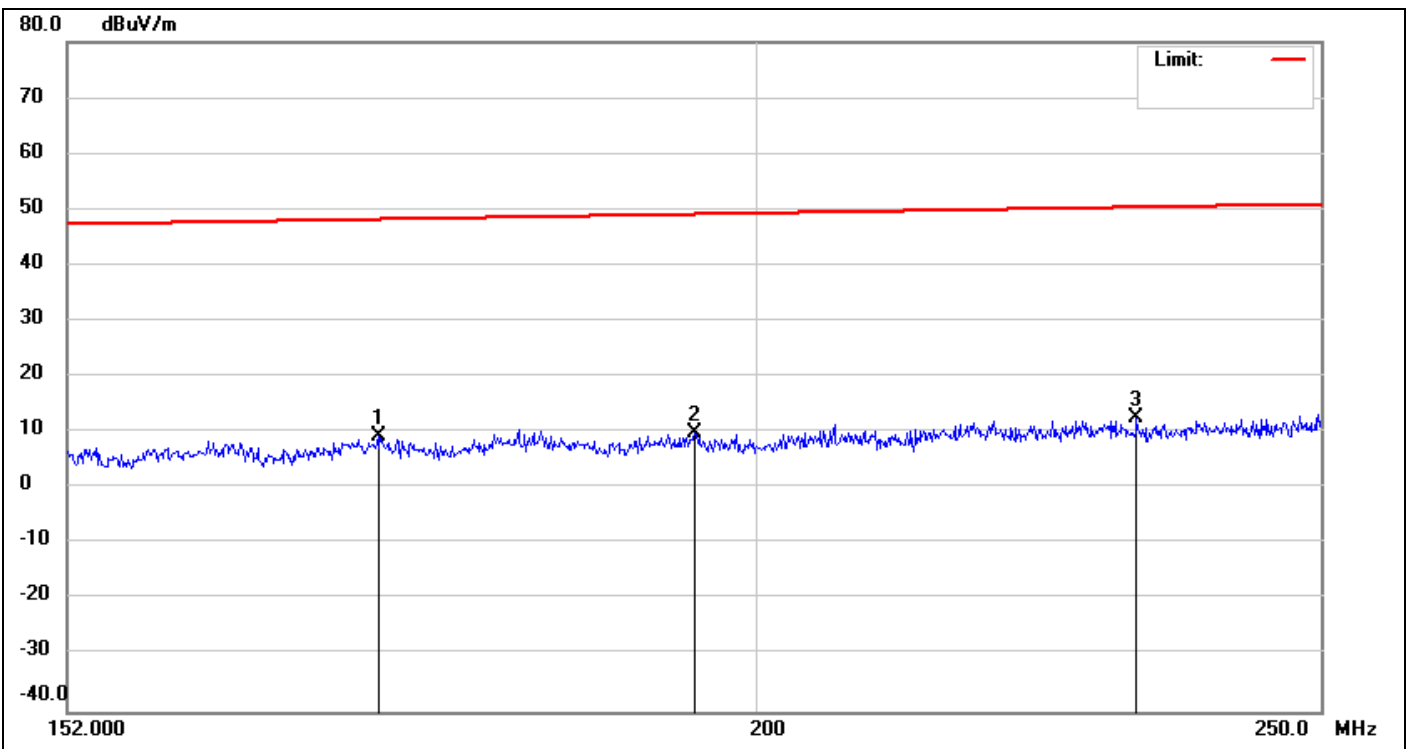


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	115.2160	22.93	-17.11	5.82	45.59	-39.77	peak	P	
2	126.2160	22.91	-16.32	6.59	46.23	-39.64	peak	P	
3	142.8040	21.91	-15.57	6.34	47.08	-40.74	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:08:43
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

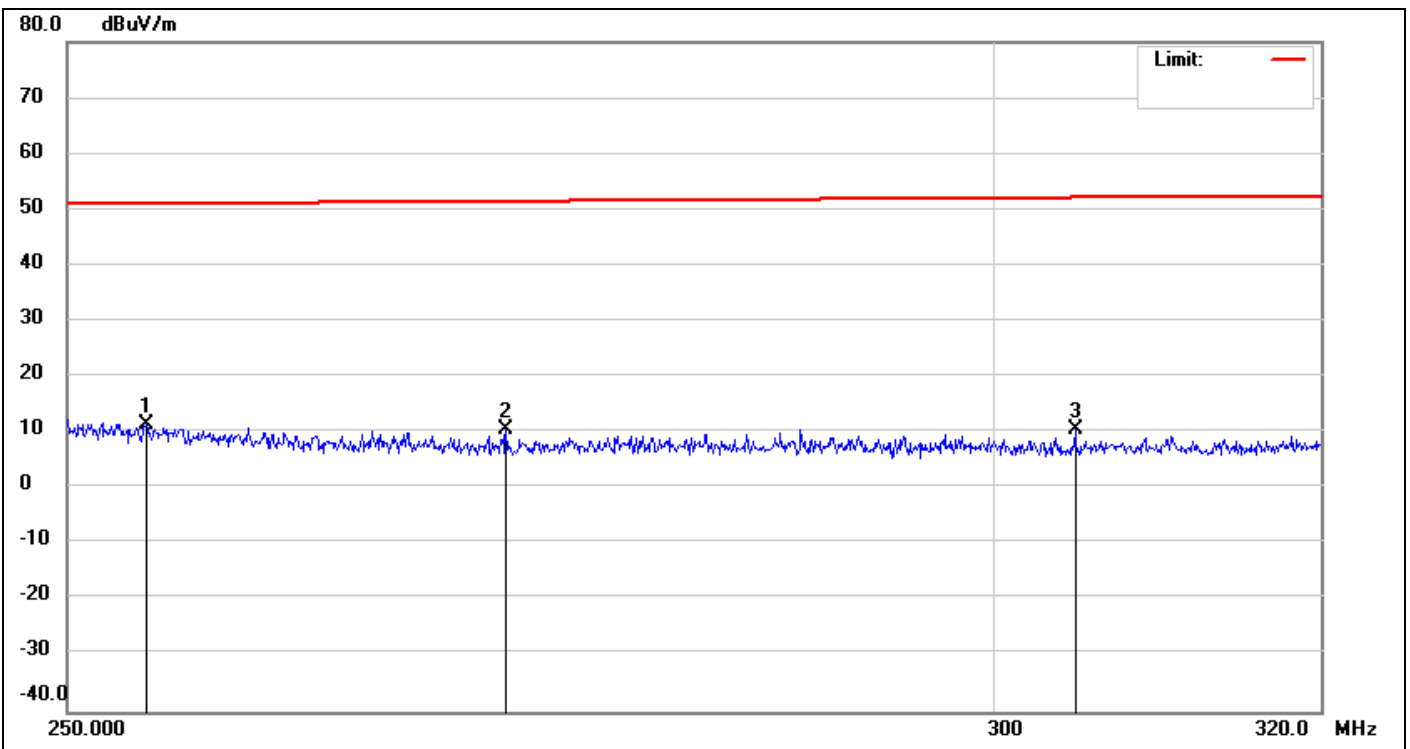


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	171.9920	23.25	-13.83	9.42	48.37	-38.95	peak	P	
2	195.0220	22.98	-12.98	10.00	49.24	-39.24	peak	P	
3	232.4580	23.48	-10.71	12.77	50.46	-37.69	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:12:50
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

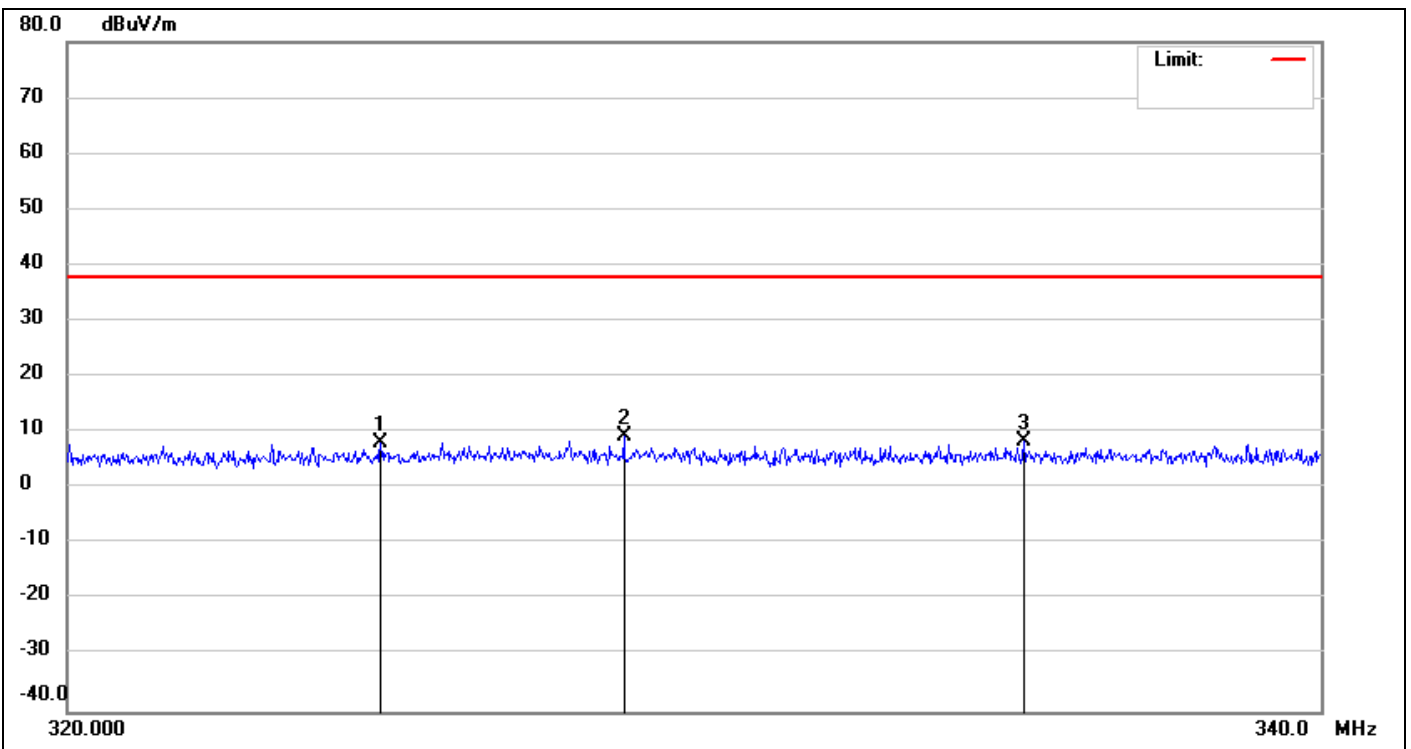


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	253.9200	22.74	-11.23	11.51	51.07	-39.56	peak	P	
2	272.6100	23.98	-13.46	10.52	51.57	-41.05	peak	P	
3	304.9500	24.31	-13.77	10.54	52.34	-41.80	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:13:38
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

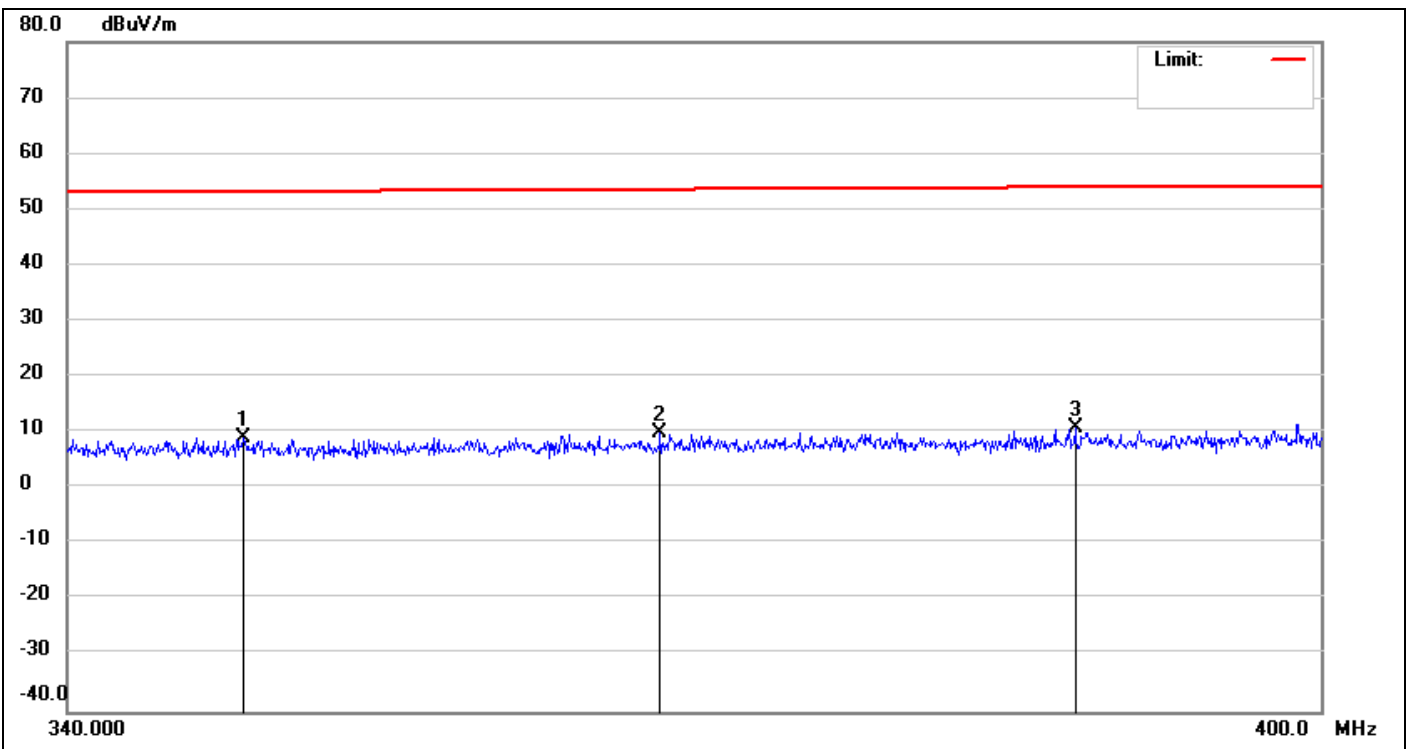


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	324.9000	21.58	-13.53	8.05	37.80	-29.75	peak	P	
2	328.7400	22.78	-13.57	9.21	37.88	-28.67	peak	P	
3	335.1600	22.12	-13.63	8.49	38.01	-29.52	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:14:22
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

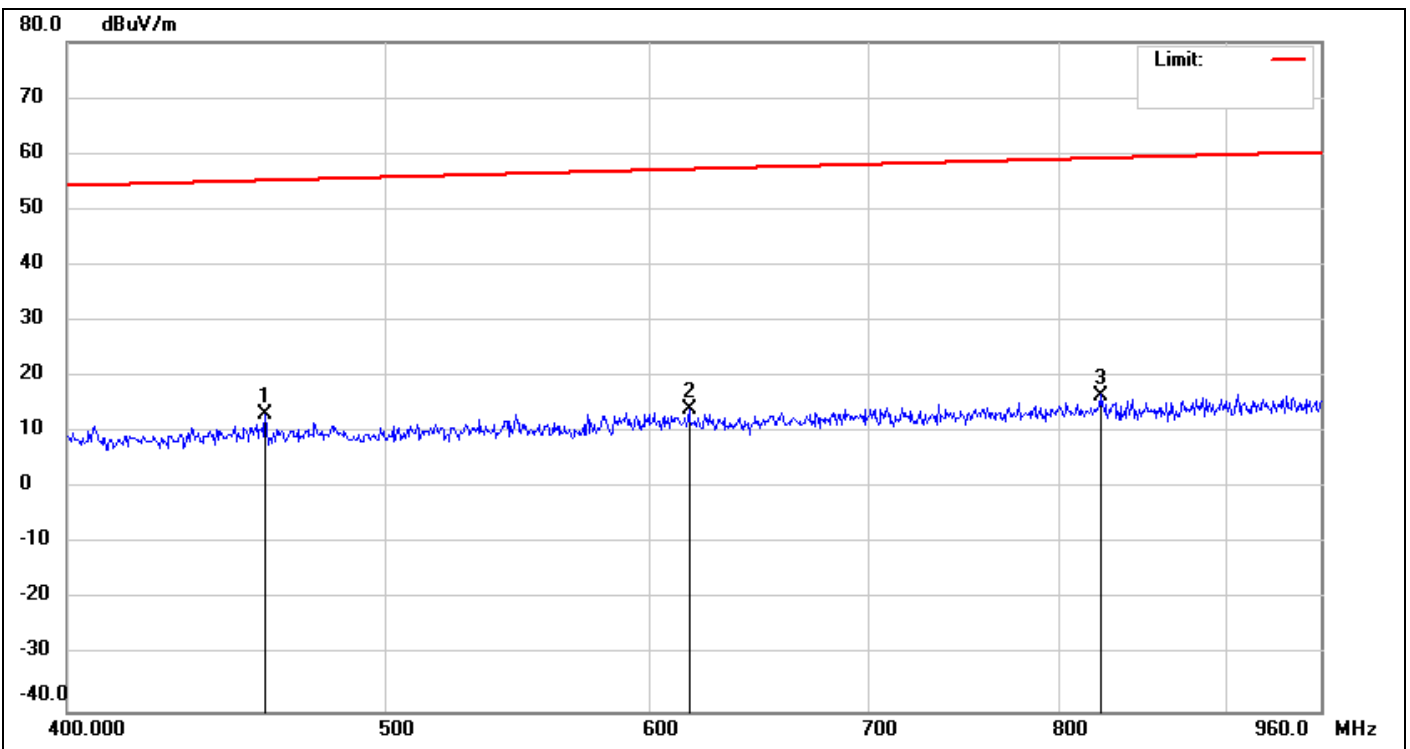


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	347.9200	22.87	-13.75	9.12	53.25	-44.13	peak	P	
2	367.1800	22.96	-12.95	10.01	53.62	-43.61	peak	P	
3	387.4600	23.12	-12.24	10.88	54.00	-43.12	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:15:00
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

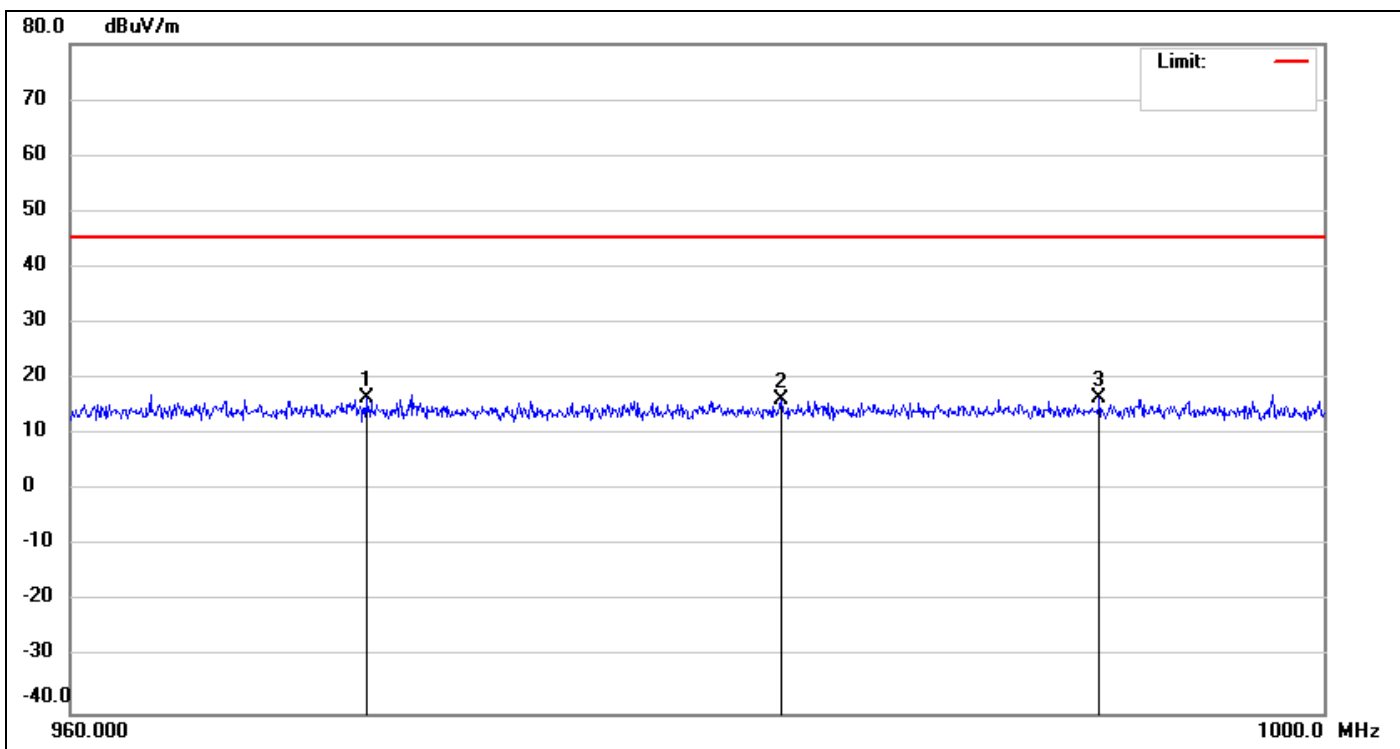


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	459.3600	24.06	-10.75	13.31	55.18	-41.87	peak	P	
2	617.8400	23.13	-8.92	14.21	57.23	-43.02	peak	P	
3	823.3600	22.03	-5.33	16.70	59.22	-42.52	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:16:03
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

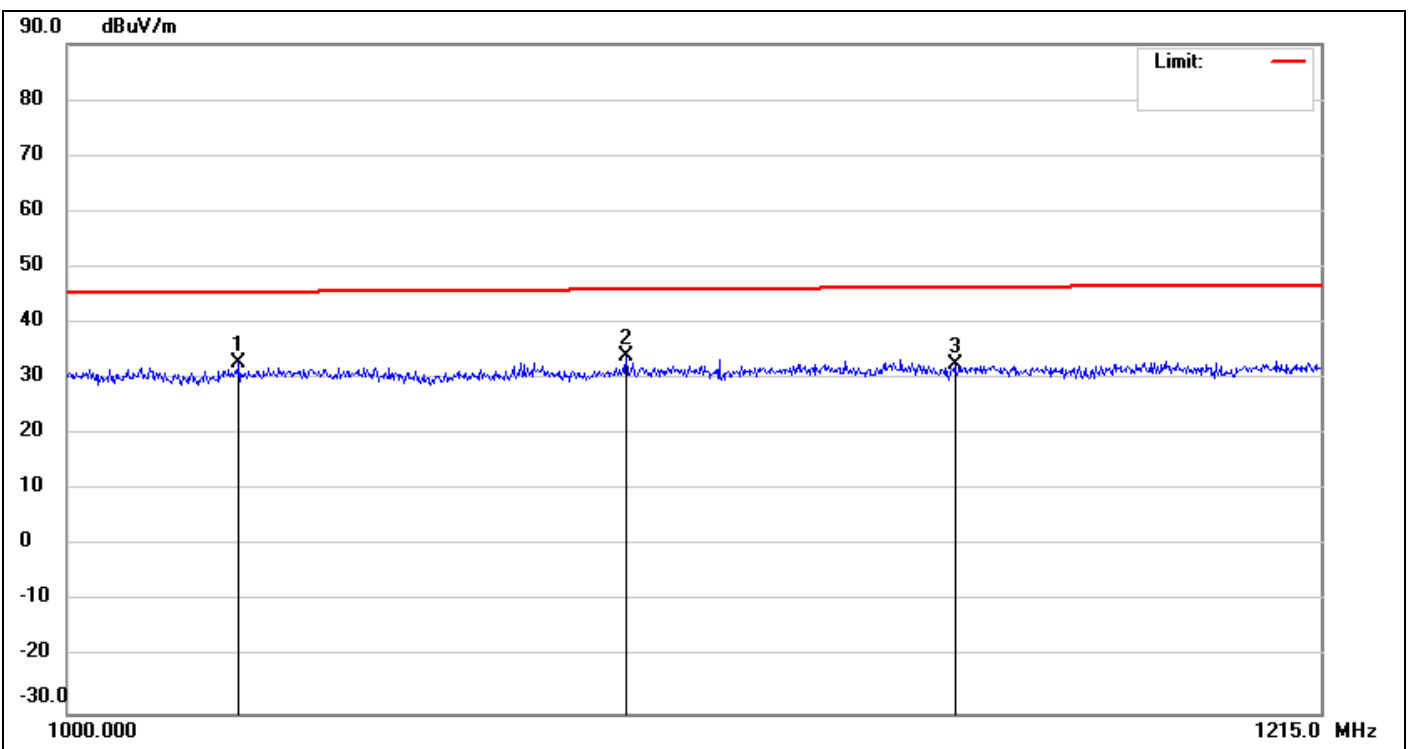


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	969.3200	21.10	-4.53	16.57	45.37	-28.80	peak	P	
2	982.4800	20.79	-4.45	16.34	45.47	-29.13	peak	P	
3	992.7200	20.96	-4.43	16.53	45.54	-29.01	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:58:36
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

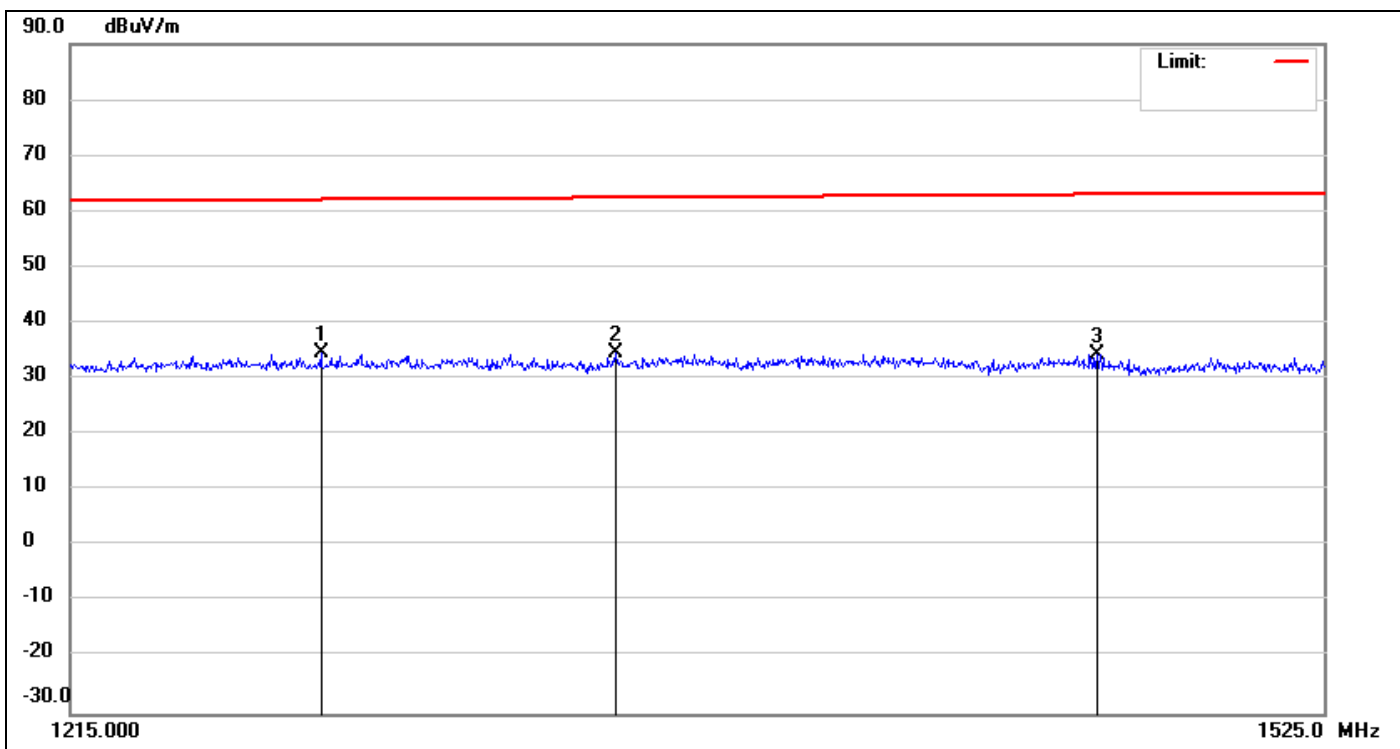


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1027.0900	68.09	-35.37	32.72	45.79	-13.07	peak	P	
2	1090.9450	69.19	-35.07	34.12	46.22	-12.10	peak	P	
3	1147.9200	67.25	-34.79	32.46	46.59	-14.13	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:57:38
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

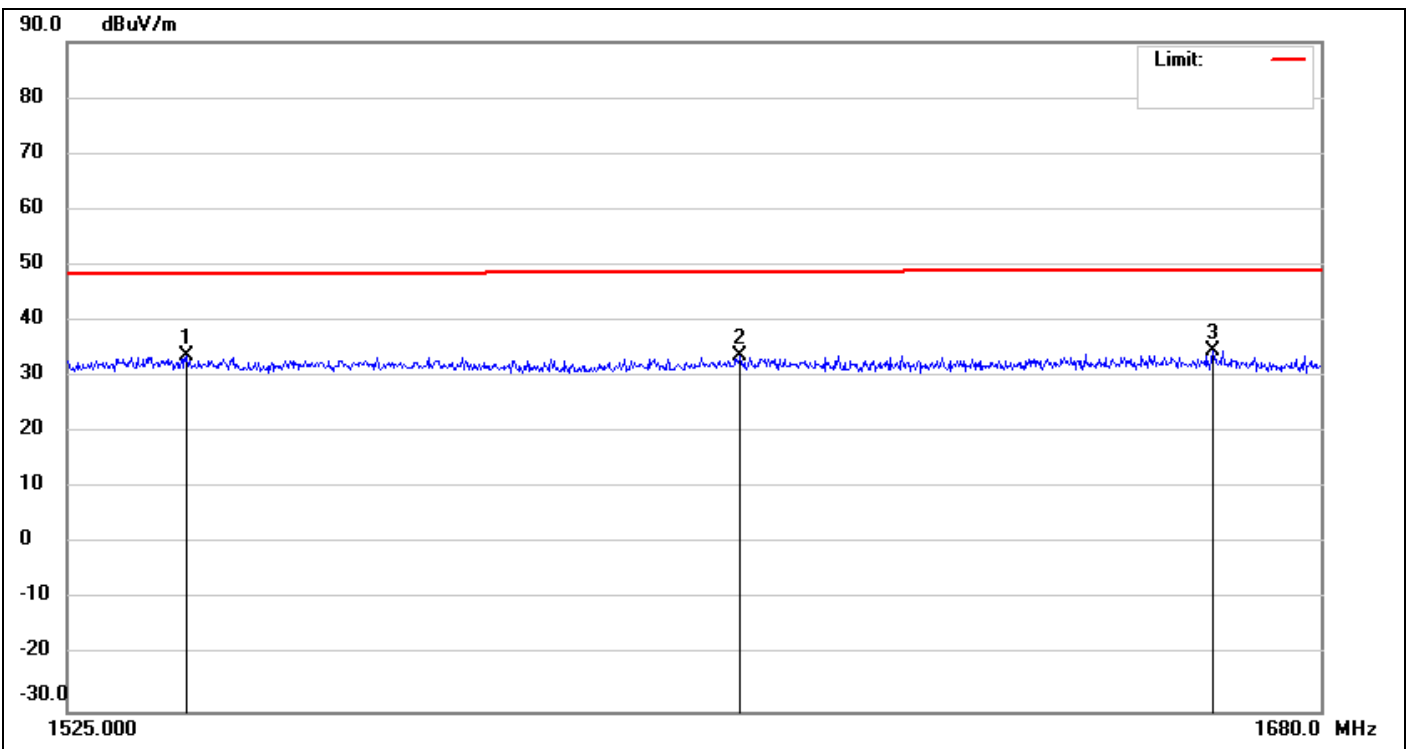


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1271.7300	68.94	-34.20	34.74	62.24	-27.50	peak	P	
2	1341.4800	68.47	-33.87	34.60	62.61	-28.01	peak	P	
3	1463.6200	67.57	-33.28	34.29	63.21	-28.92	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:56:57
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

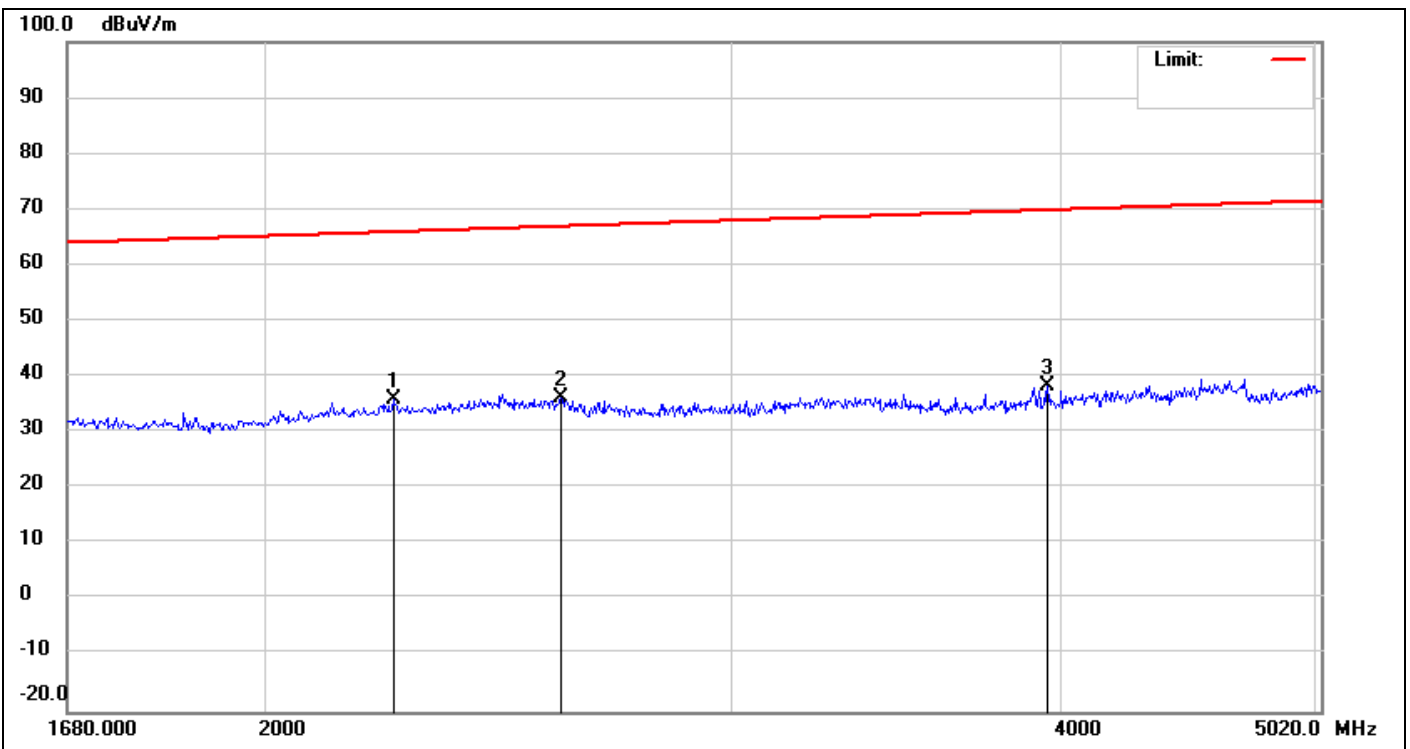


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1539.1050	66.62	-32.96	33.66	48.57	-14.91	peak	P	
2	1606.3750	66.54	-32.72	33.82	48.88	-15.06	peak	P	
3	1666.2050	67.14	-32.49	34.65	49.14	-14.49	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:56:26
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

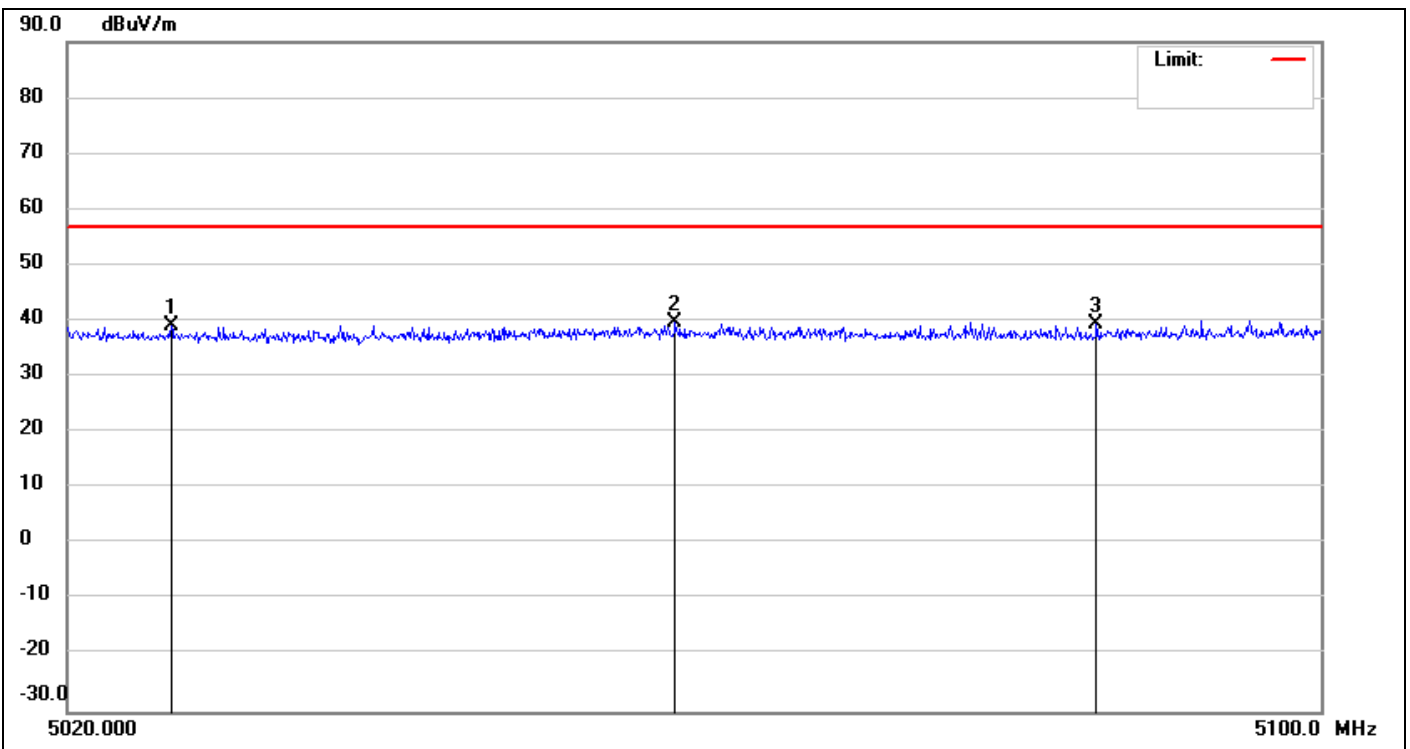


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	2234.4400	66.11	-30.16	35.95	66.15	-30.20	peak	P	
2	2588.4800	64.85	-28.73	36.12	67.17	-31.05	peak	P	
3	3957.8800	62.84	-24.49	38.35	70.11	-31.76	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:56:00
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

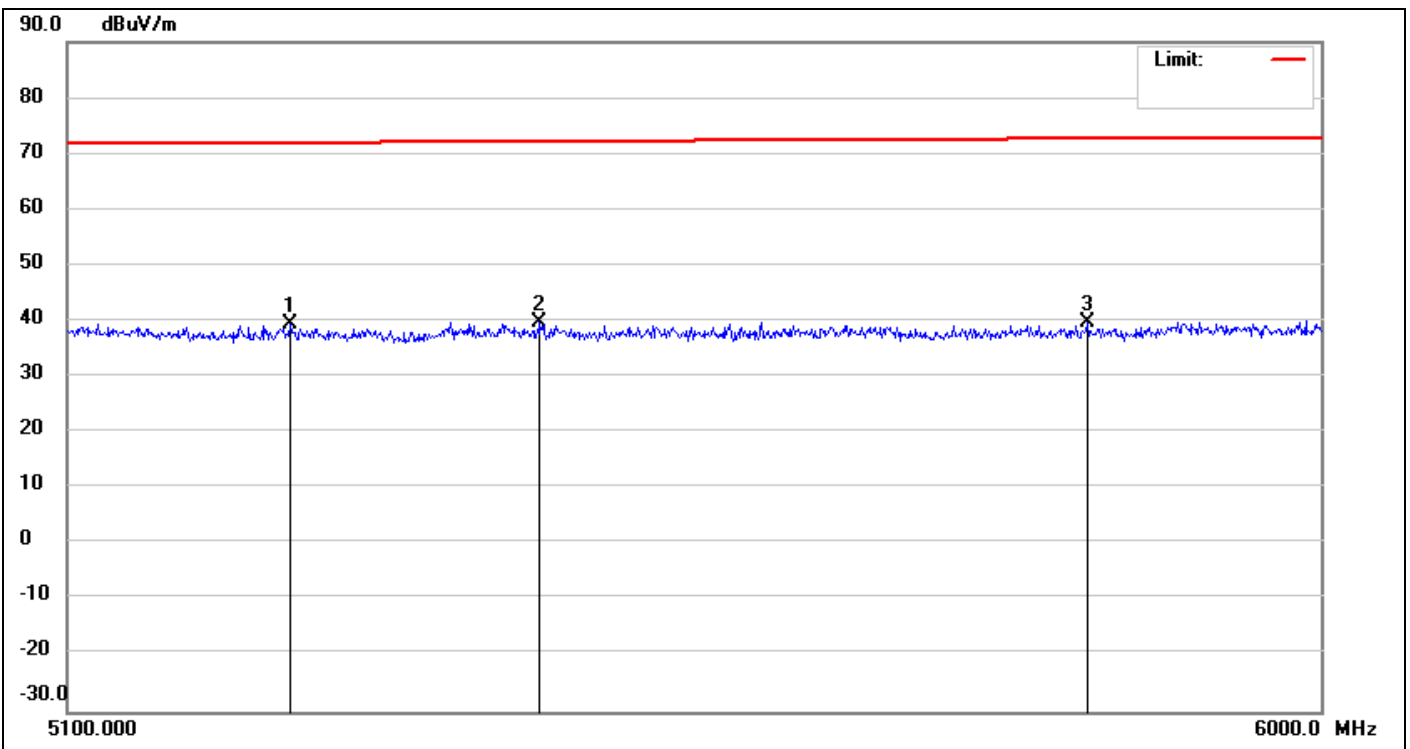


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5026.6400	59.68	-20.48	39.20	56.81	-17.61	peak	P	
2	5058.7200	60.20	-20.42	39.78	56.85	-17.07	peak	P	
3	5085.6000	59.77	-20.37	39.40	56.88	-17.48	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:55:36
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

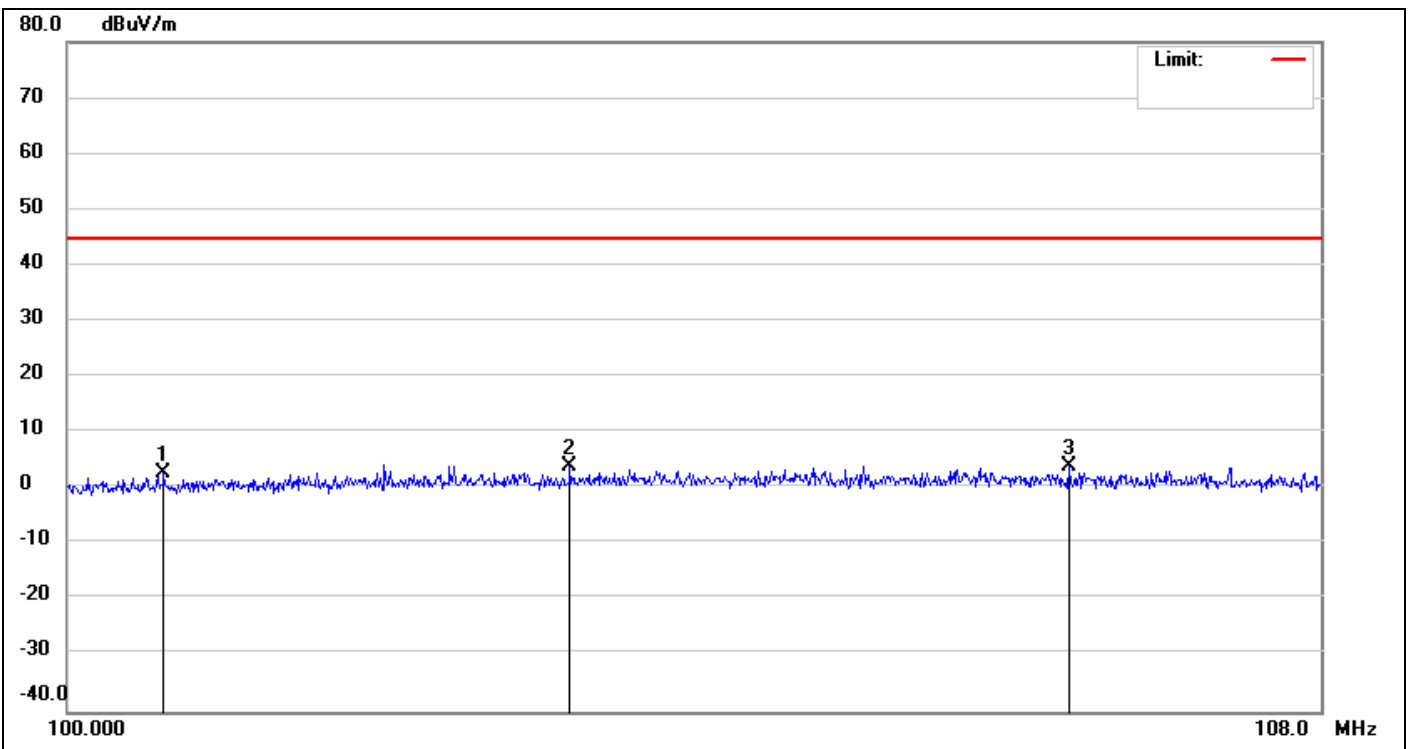


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5250.3000	59.42	-20.04	39.38	72.07	-32.69	peak	P	
2	5423.1000	59.41	-19.71	39.70	72.30	-32.60	peak	P	
3	5821.8000	58.36	-18.48	39.88	72.79	-32.91	peak	P	



Chamber 6

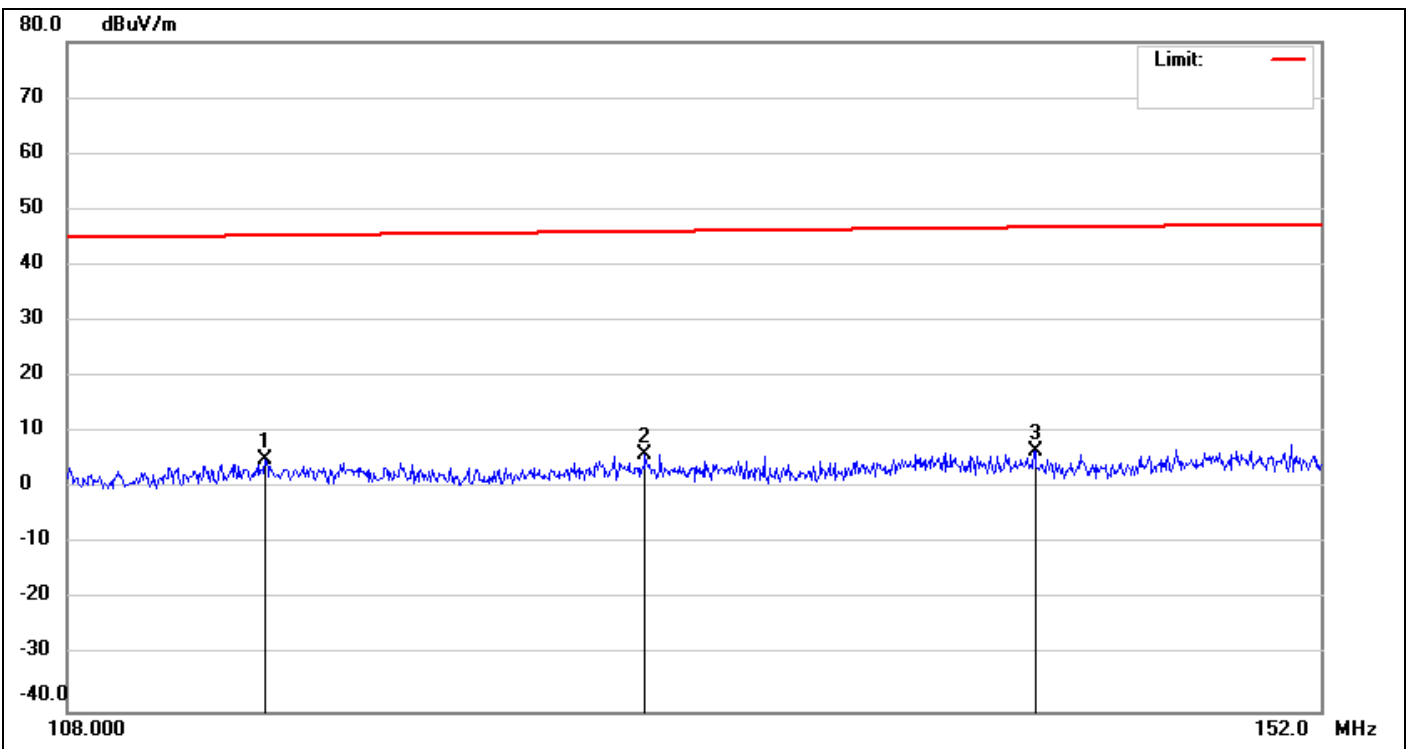
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:05:59
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	100.6000	21.47	-18.66	2.81	44.65	-41.84	peak	P	
2	103.1360	22.40	-18.40	4.00	44.82	-40.82	peak	P	
3	106.3440	21.89	-18.04	3.85	45.04	-41.19	peak	P	



Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:06:38
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

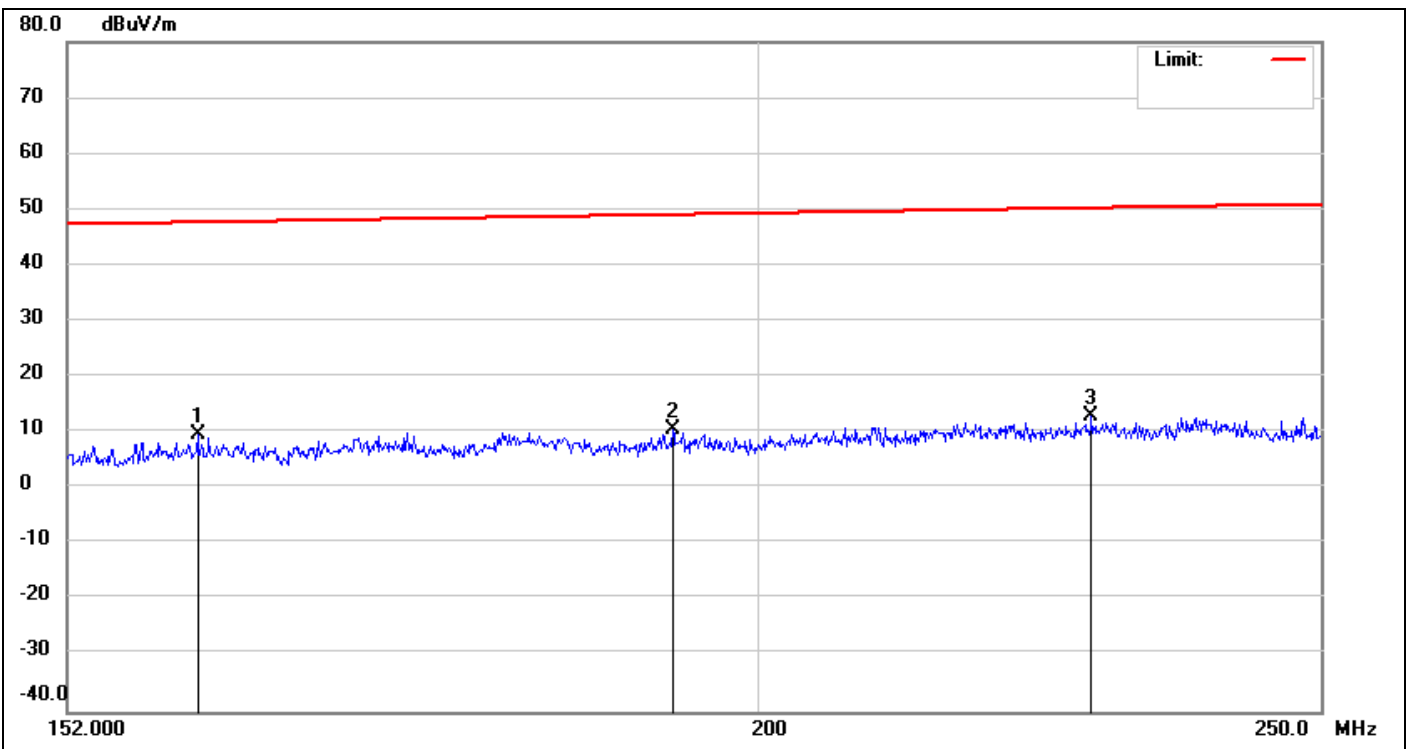


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	114.0280	22.30	-17.24	5.06	45.52	-40.46	peak	P	
2	126.4360	22.46	-16.31	6.15	46.24	-40.09	peak	P	
3	140.6480	22.43	-15.66	6.77	46.98	-40.21	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:07:19
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

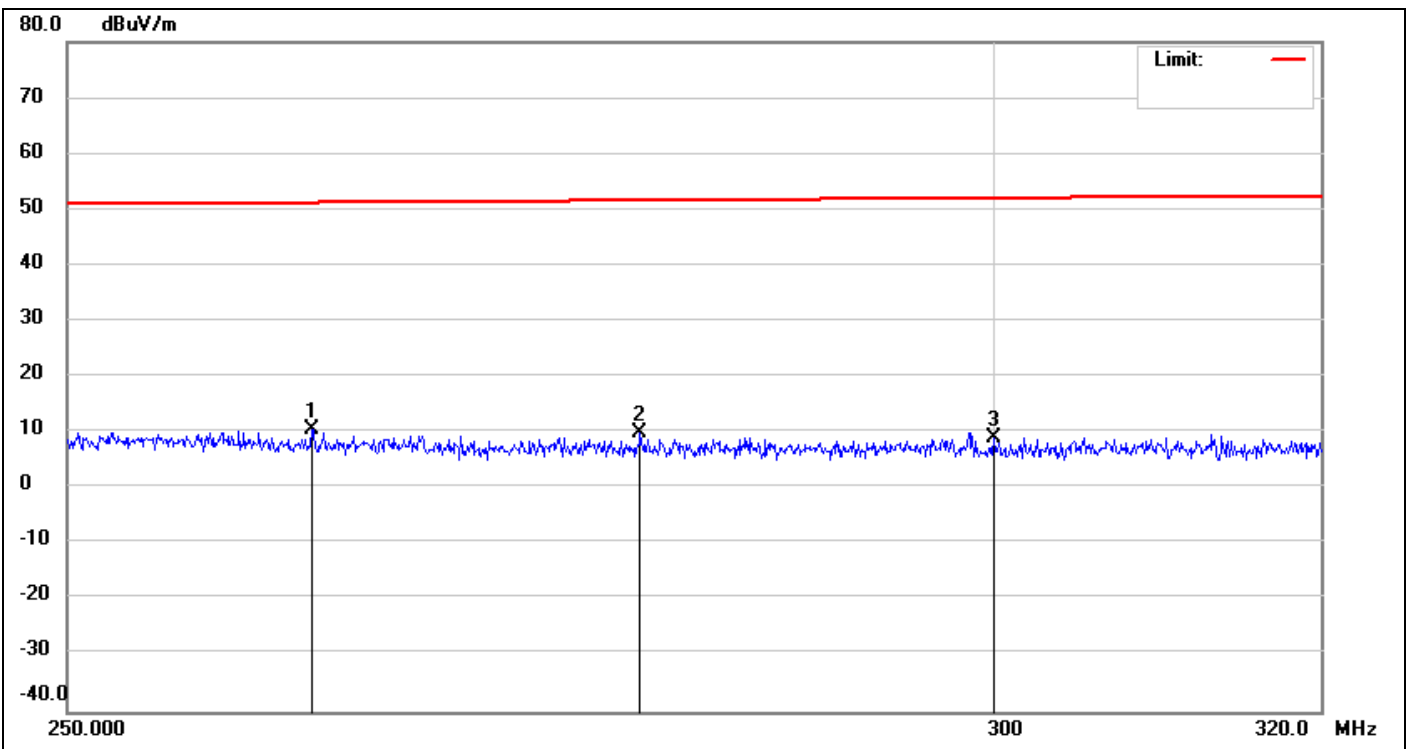


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	160.1340	24.18	-14.50	9.68	47.88	-38.20	peak	P	
2	193.3560	23.66	-13.00	10.66	49.18	-38.52	peak	P	
3	228.3420	23.89	-10.81	13.08	50.34	-37.26	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:20:35
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

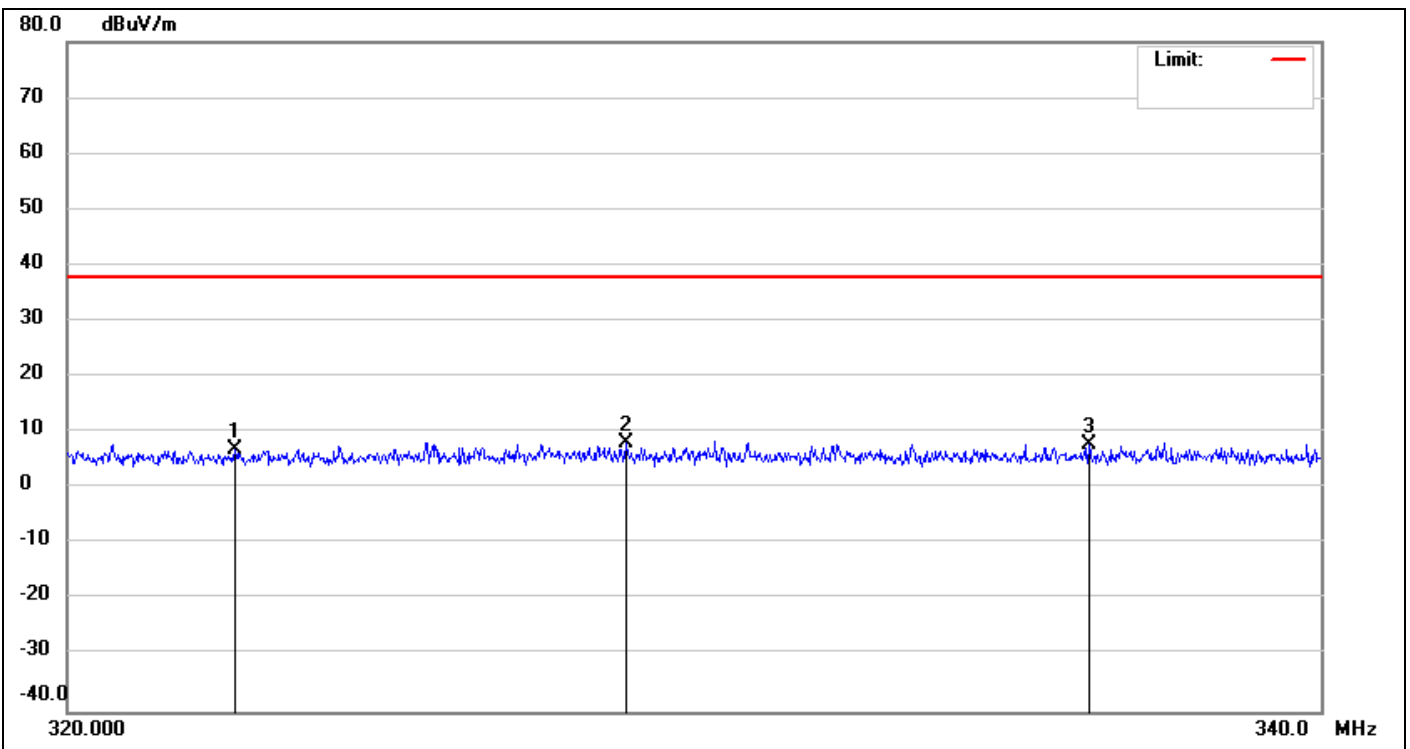


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	262.3900	23.35	-12.90	10.45	51.30	-40.85	peak	P	
2	279.8900	23.47	-13.55	9.92	51.75	-41.83	peak	P	
3	300.0500	22.98	-13.83	9.15	52.23	-43.08	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:19:59
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

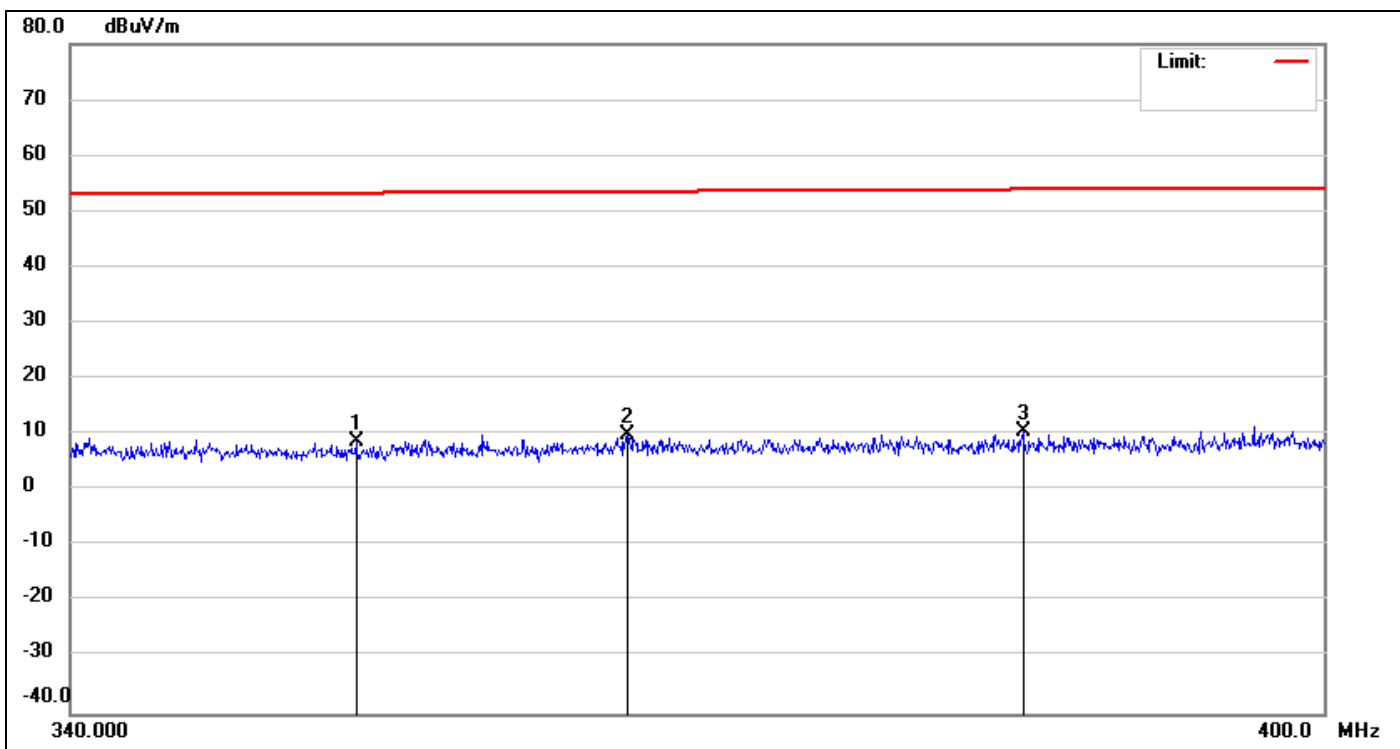


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	322.6200	20.59	-13.56	7.03	37.75	-30.72	peak	P	
2	328.7800	21.70	-13.57	8.13	37.88	-29.75	peak	P	
3	336.2200	21.48	-13.63	7.85	38.03	-30.18	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:19:12
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			

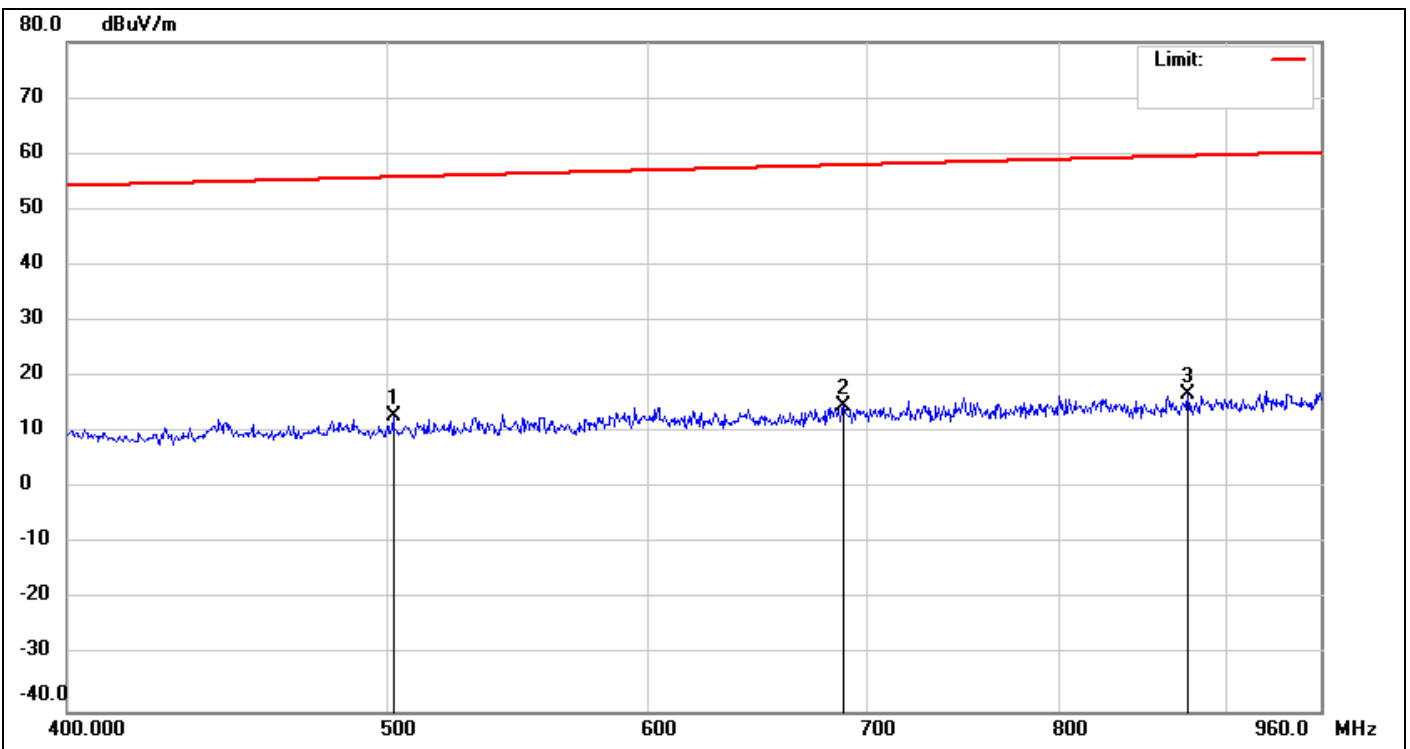


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	352.8400	22.45	-13.64	8.81	53.35	-44.54	peak	P	
2	365.5000	22.86	-13.04	9.82	53.59	-43.77	peak	P	
3	384.7000	22.82	-12.31	10.51	53.95	-43.44	peak	P	



Chamber 6

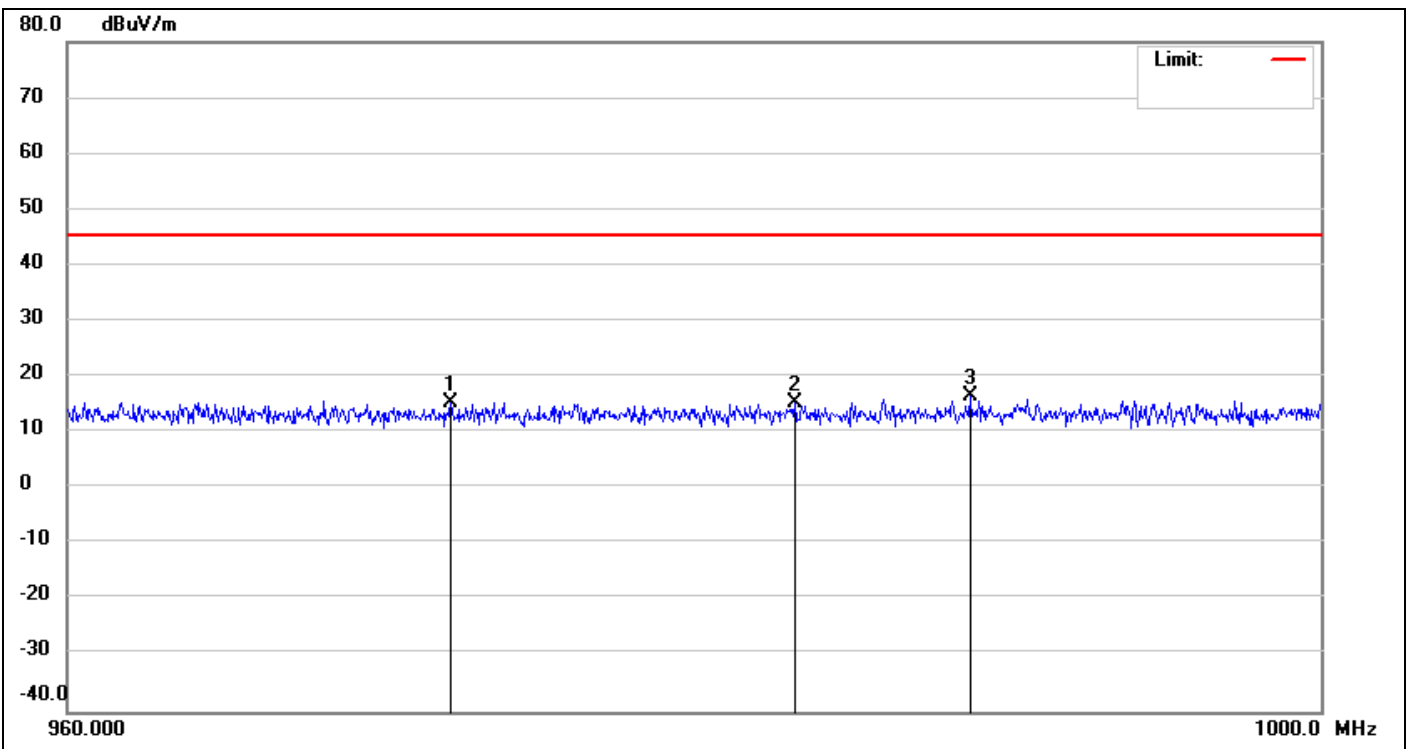
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:18:29
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	502.4800	23.77	-10.77	13.00	55.80	-42.80	peak	P	
2	687.8400	22.61	-7.86	14.75	57.98	-43.23	peak	P	
3	875.4400	21.58	-4.73	16.85	59.65	-42.80	peak	P	



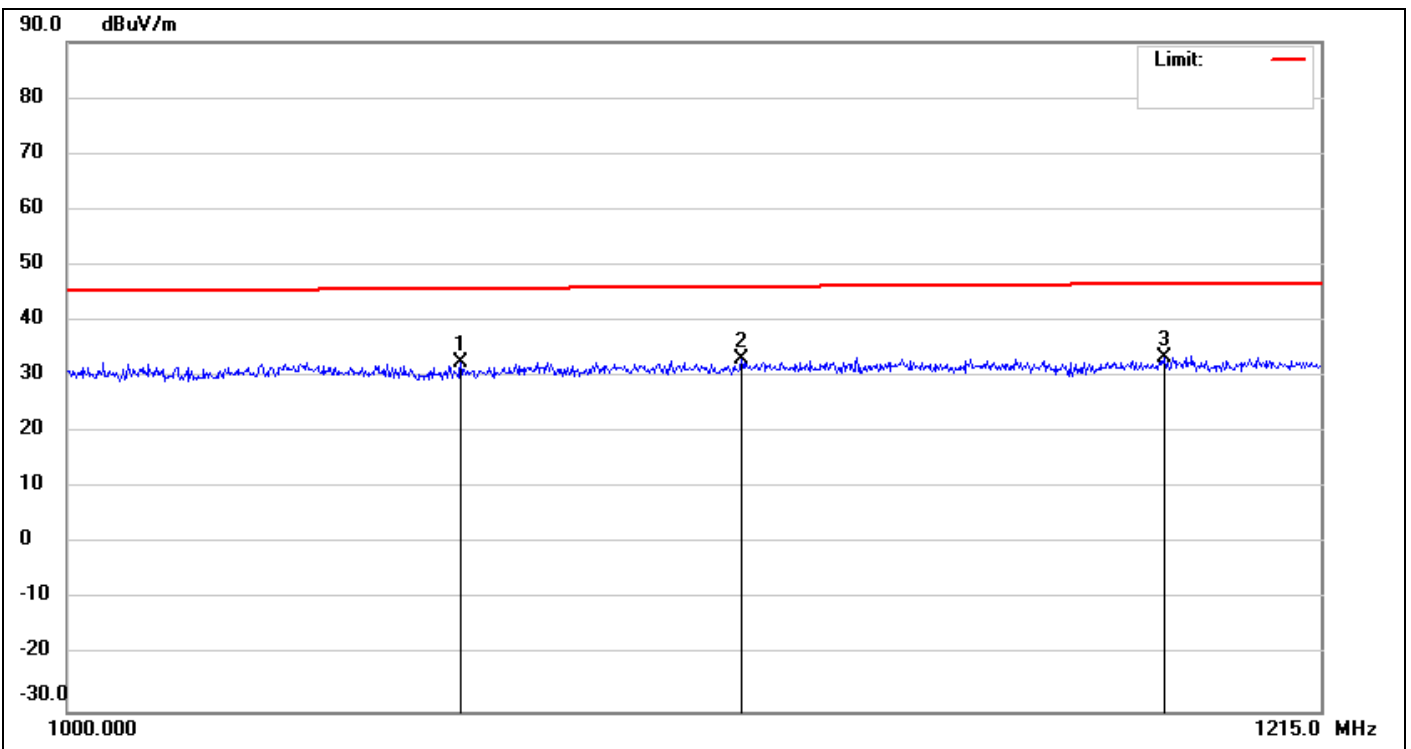
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:17:11
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 10kHz	VBW: 10kHz
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	972.0800	19.97	-4.49	15.48	45.39	-29.91	peak	P	
2	983.0400	19.86	-4.46	15.40	45.47	-30.07	peak	P	
3	988.6400	20.87	-4.43	16.44	45.51	-29.07	peak	P	



Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:52:27
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

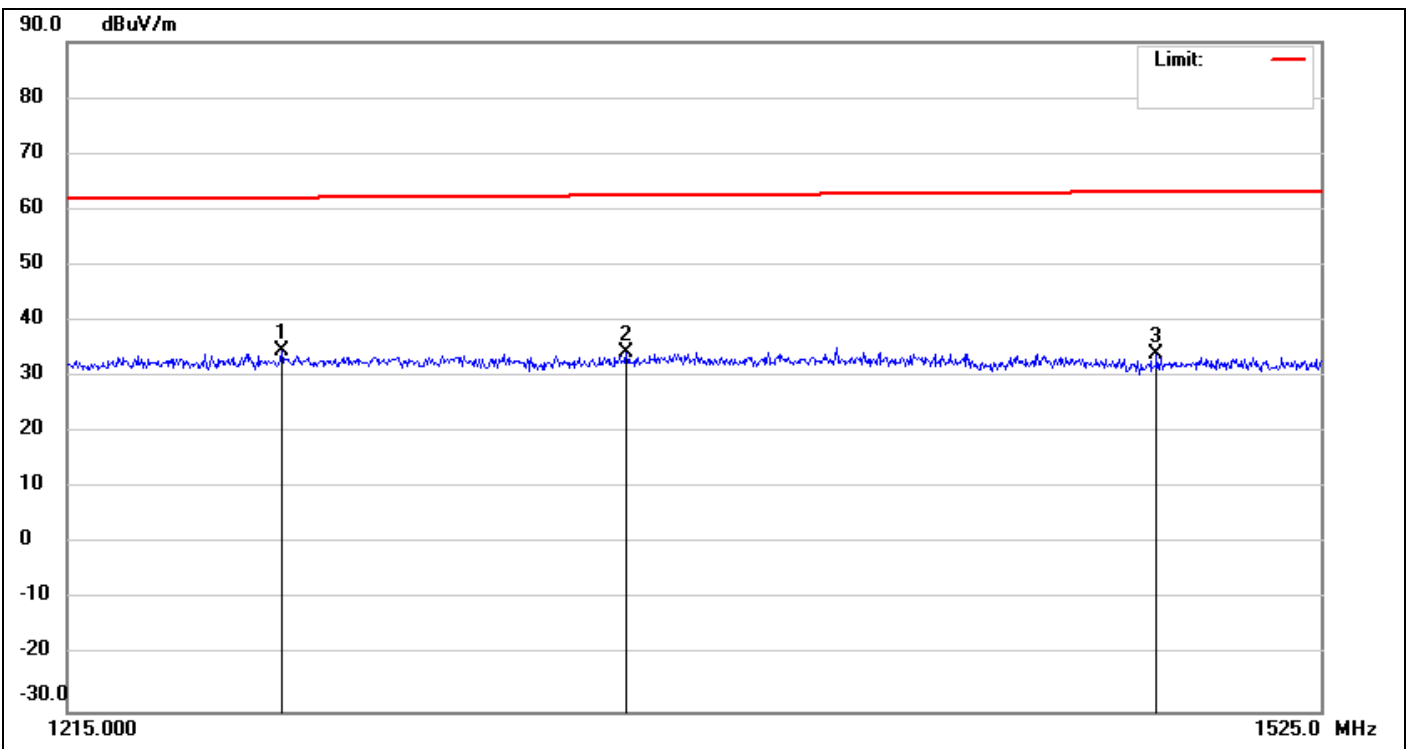


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1063.2100	67.72	-35.21	32.51	46.04	-13.53	peak	P	
2	1110.5100	68.02	-34.98	33.04	46.35	-13.31	peak	P	
3	1185.9750	68.04	-34.62	33.42	46.83	-13.41	peak	P	



Chamber 6

Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:53:01
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			

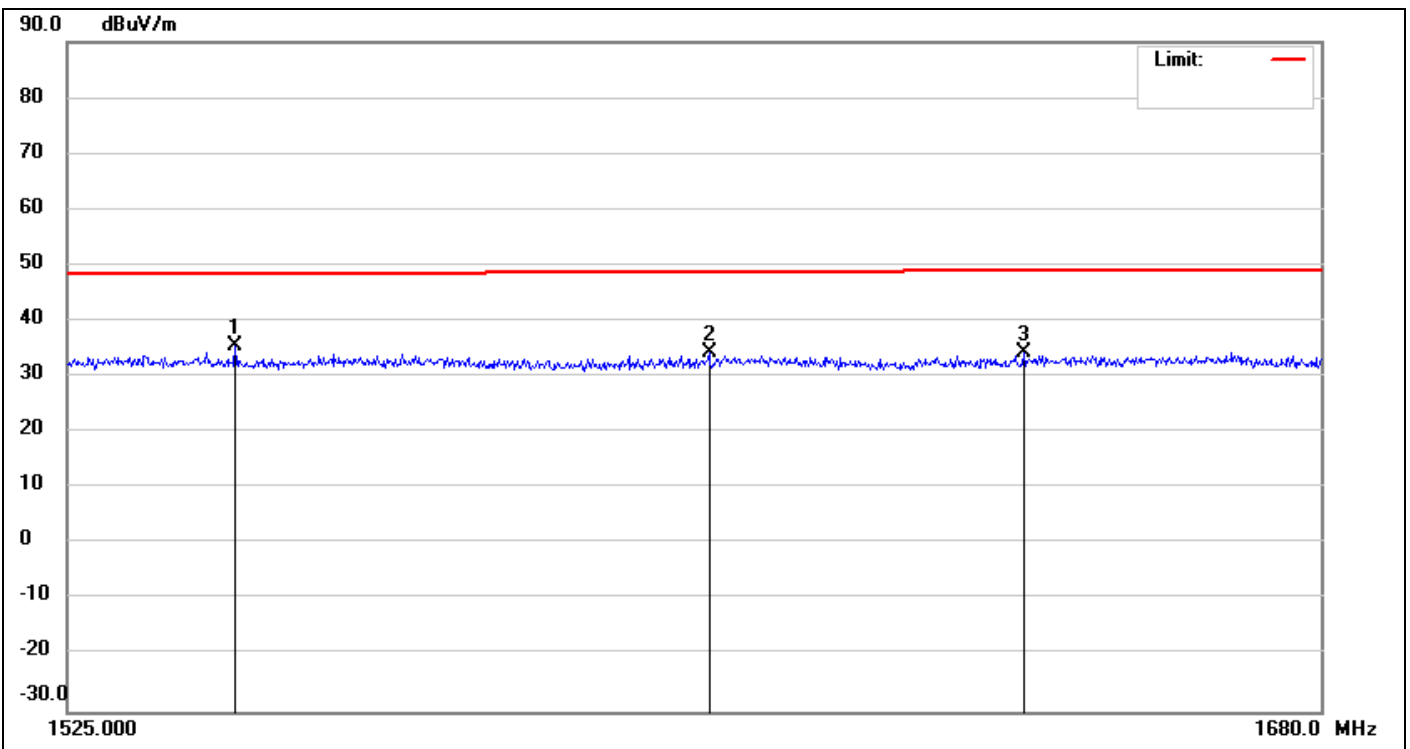


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1263.3600	68.84	-34.25	34.59	62.19	-27.60	peak	P	
2	1344.8900	68.36	-33.86	34.50	62.63	-28.13	peak	P	
3	1480.3600	67.33	-33.21	34.12	63.29	-29.17	peak	P	



Chamber 6

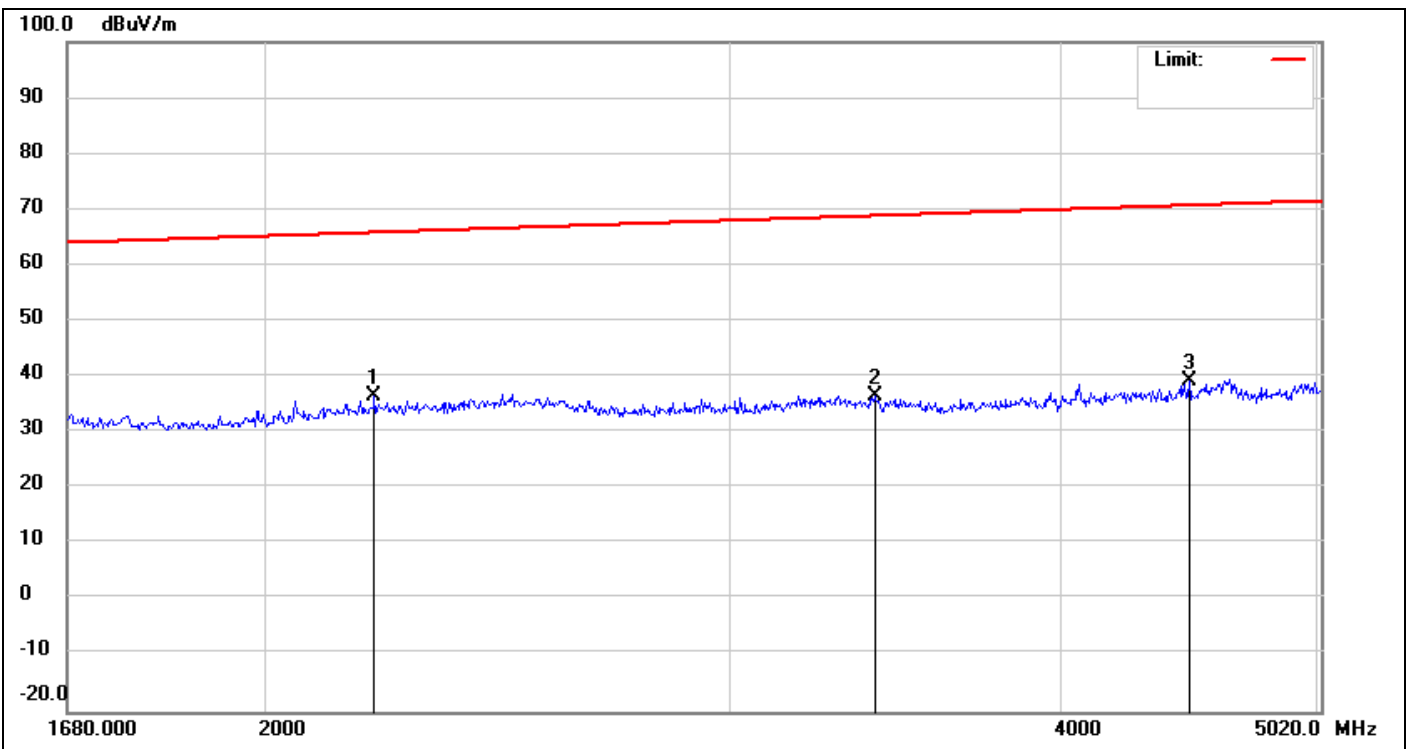
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:53:37
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1544.9950	68.42	-32.95	35.47	48.59	-13.12	peak	P	
2	1602.5000	67.02	-32.73	34.29	48.86	-14.57	peak	P	
3	1642.0250	66.87	-32.58	34.29	49.03	-14.74	peak	P	



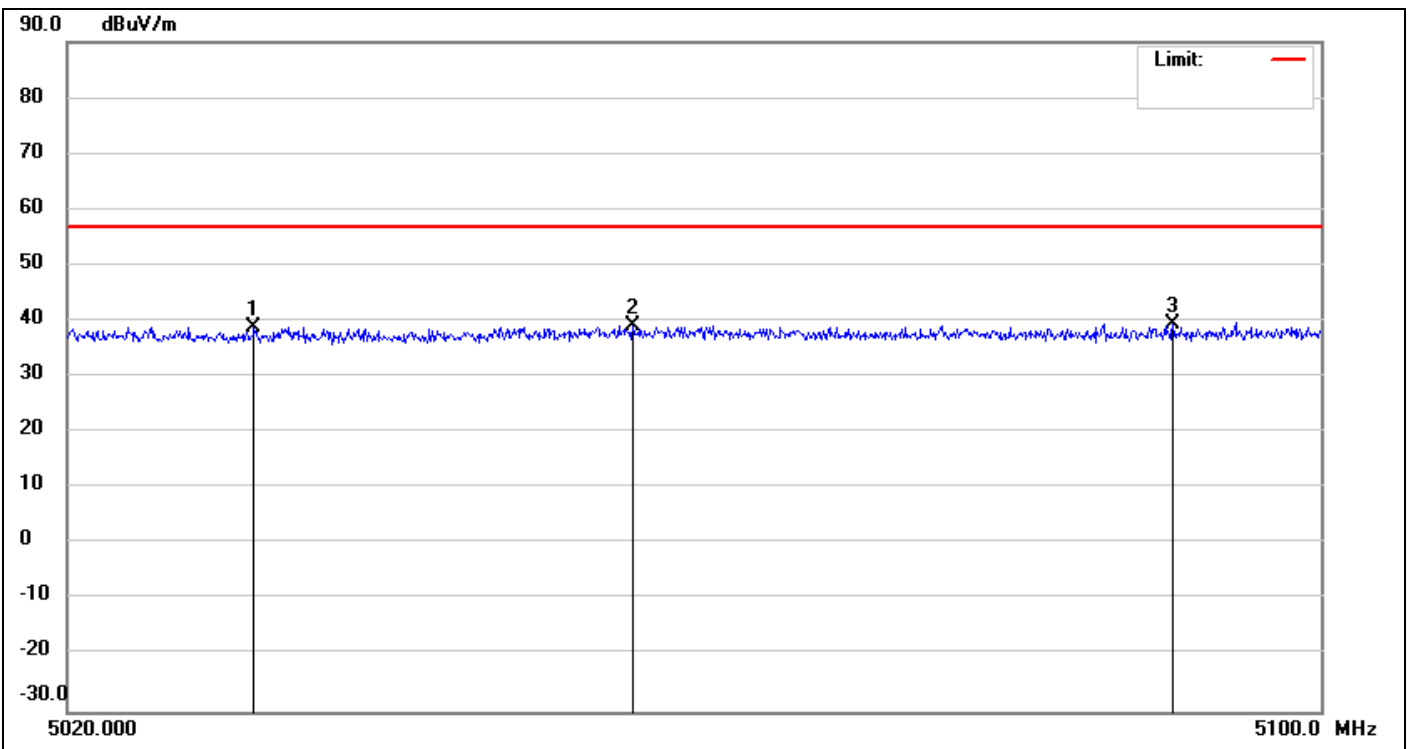
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:54:20
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	2197.7000	66.74	-30.32	36.42	66.03	-29.61	peak	P	
2	3400.1000	63.58	-27.02	36.56	69.06	-32.50	peak	P	
3	4478.9200	61.87	-22.66	39.21	70.97	-31.76	peak	P	



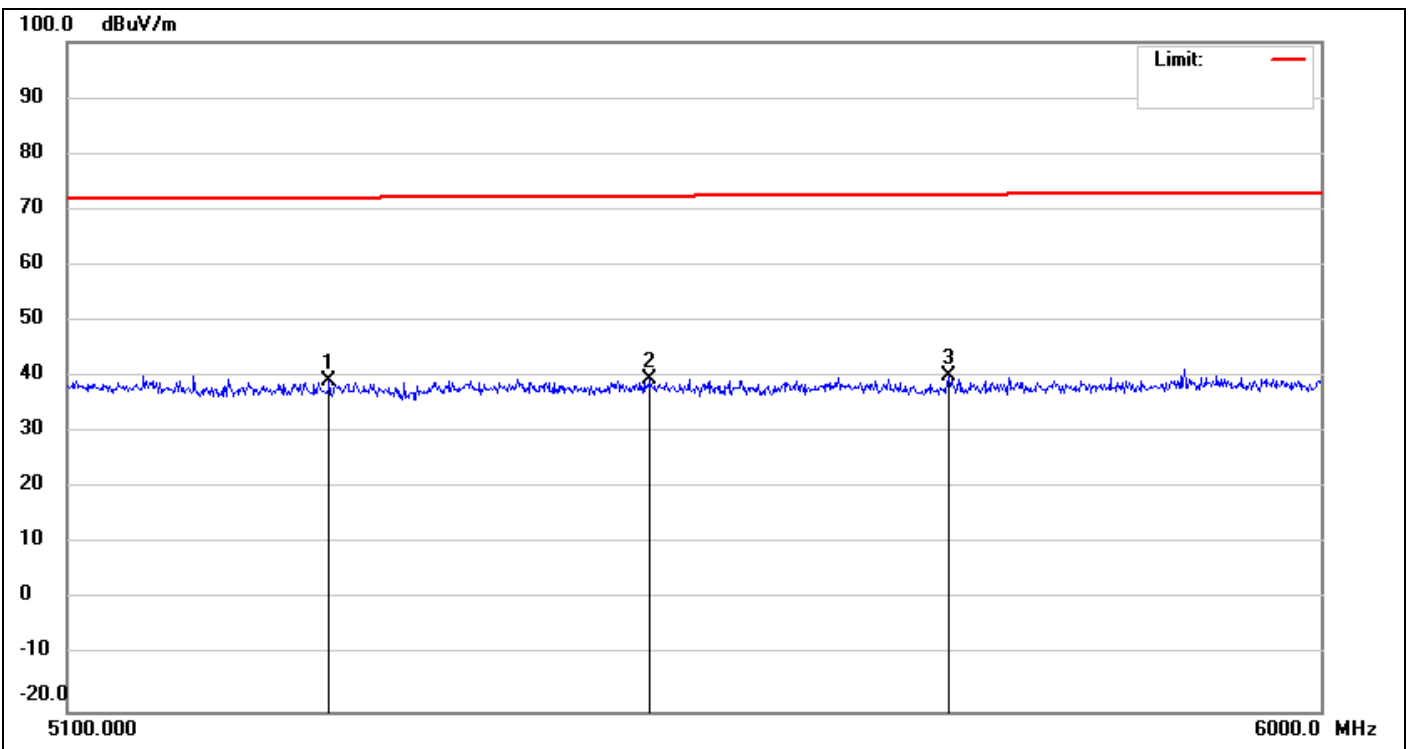
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:54:47
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5031.8400	59.46	-20.47	38.99	56.81	-17.82	peak	P	
2	5056.0000	59.57	-20.42	39.15	56.85	-17.70	peak	P	
3	5090.5600	59.72	-20.36	39.36	56.89	-17.53	peak	P	



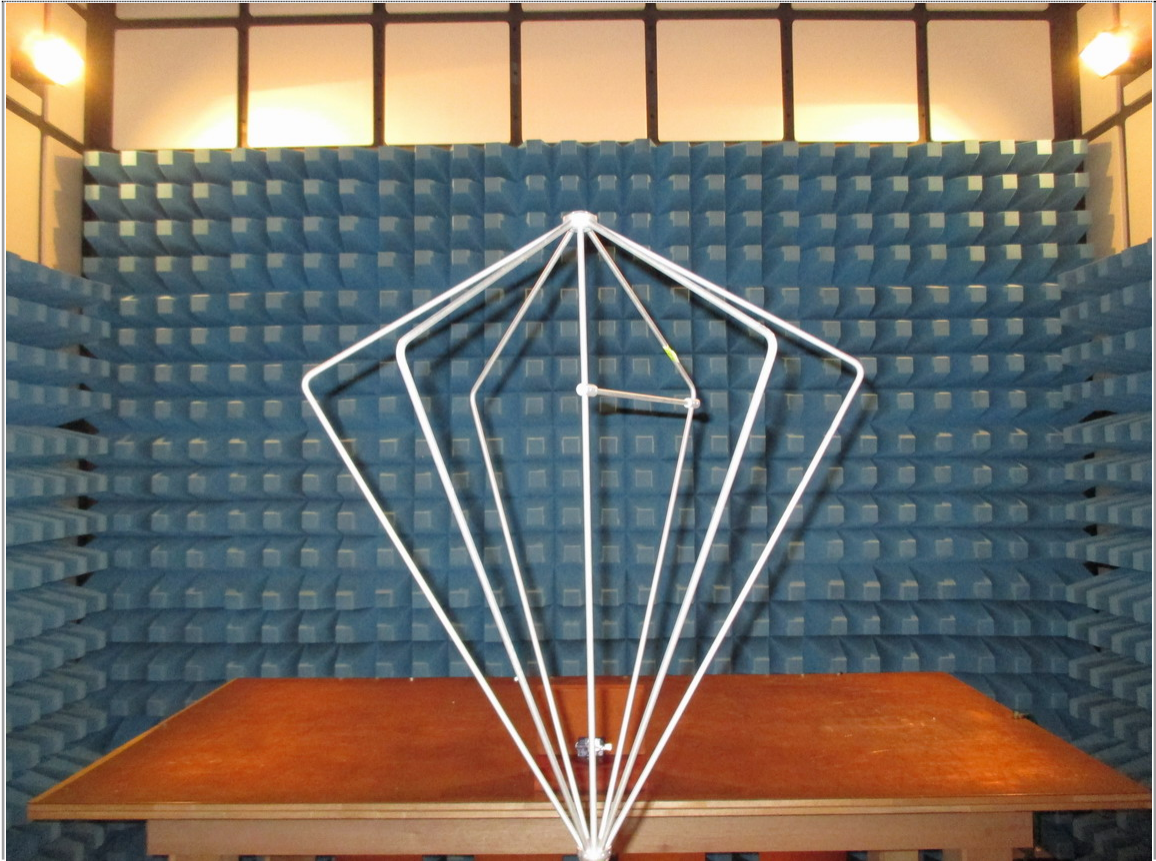
Job No.:	19A010403V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery (DC 3V)
Test item:	Radiation Test	Date:	2019/1/15
Temp.(°C)/Hum.(%):	23(°C)/62%	Time:	下午 04:55:13
Company:	AZ Instrument Corp.	Engineer Signature:	Zac Lin
Product:	Single Use Cold Chain PDF Logger	Distance:	1m
Model:	88181	RBW: 1000kHz	VBW: 1000kHz
Description:			



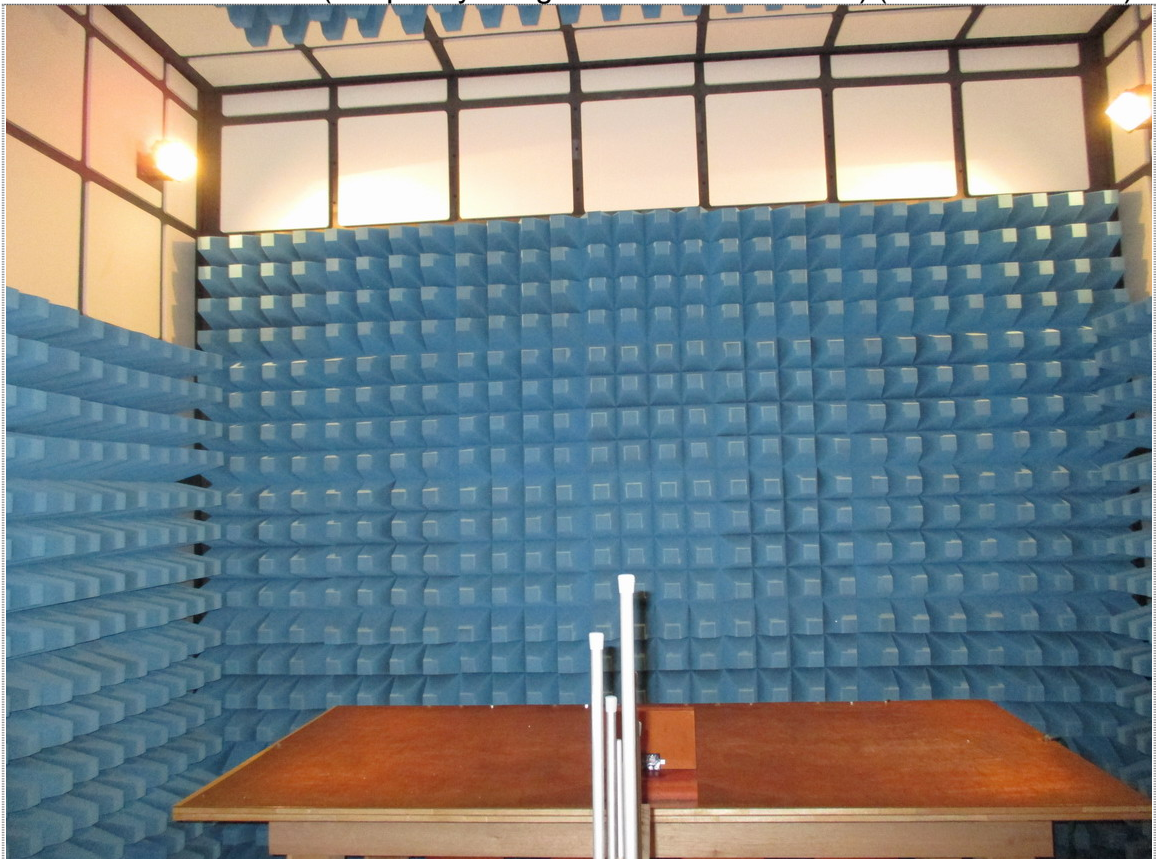
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5276.4000	59.16	-20.00	39.16	72.11	-32.95	peak	P	
2	5500.5000	59.09	-19.57	39.52	72.40	-32.88	peak	P	
3	5717.4000	58.95	-18.83	40.12	72.66	-32.54	peak	P	

3 Photographs of Test

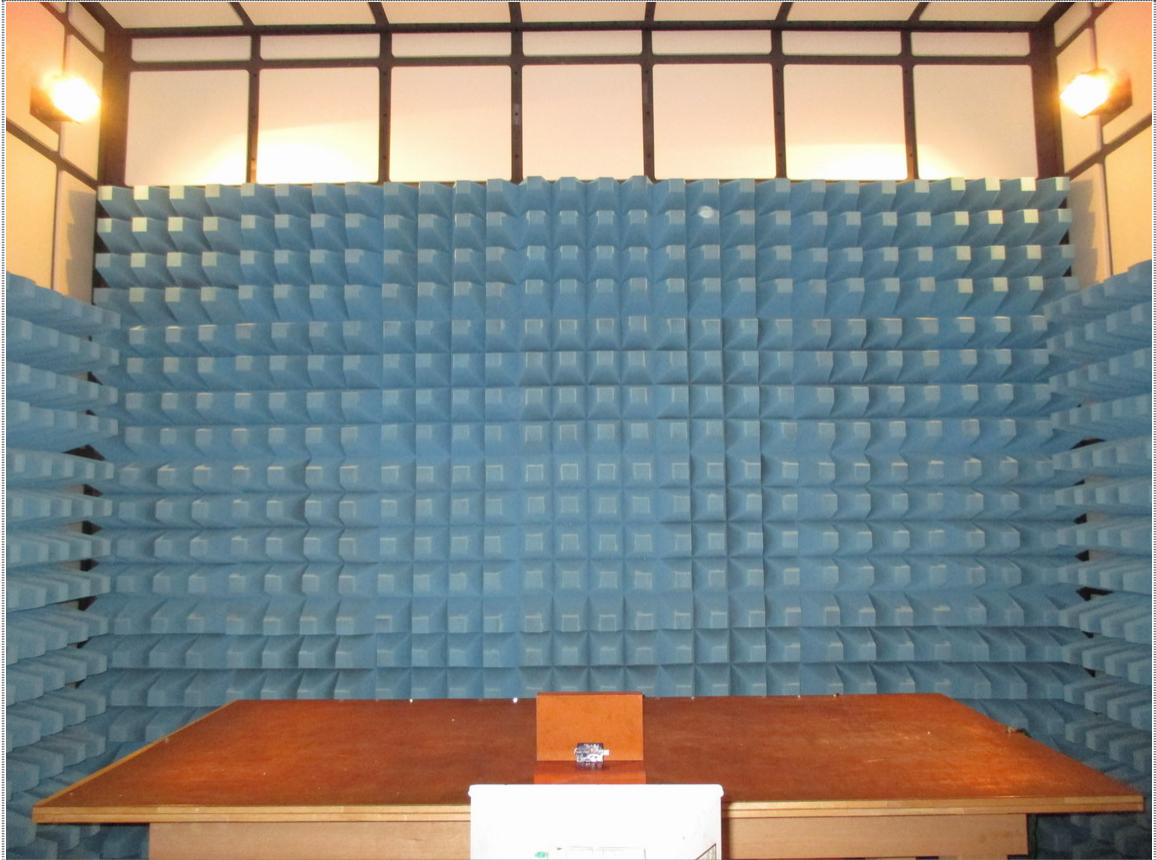
3.1 Section 21.5 - Radiated RF Emission



View of Measurement (Frequency Range: 100 MHz ~ 250 MHz) (Biconical Antenna)



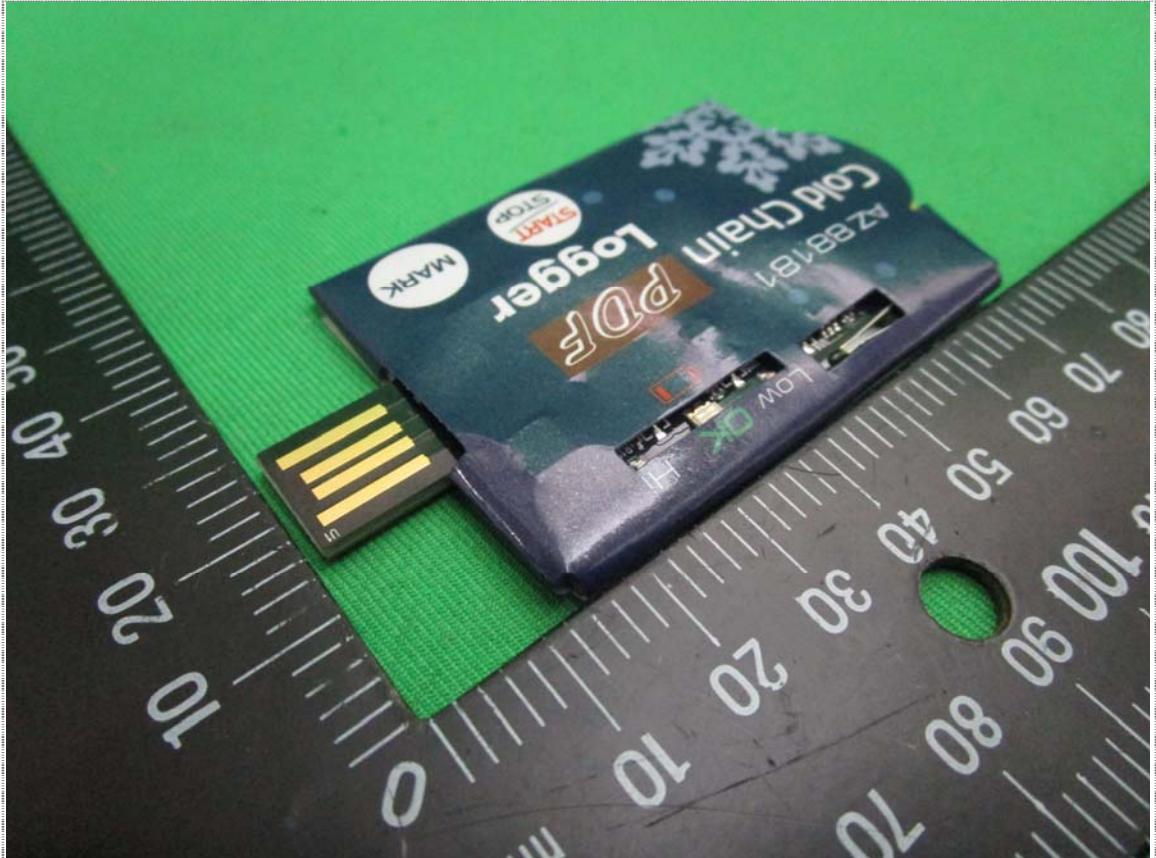
View of Measurement (Frequency Range: 250 MHz ~ 1 GHz) (Log Antenna)



View of Measurement (Frequency Range: 1 GHz ~ 6 GHz) (Horn Antenna)



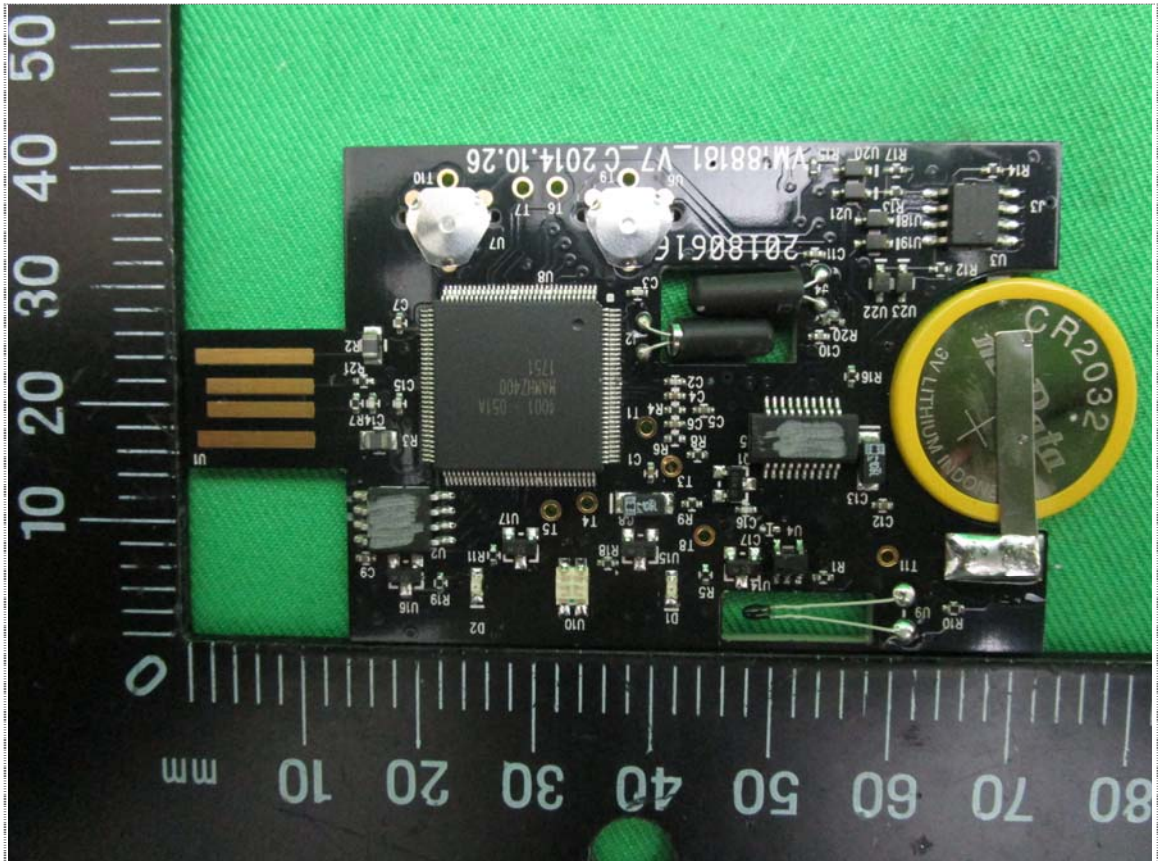
4 Photographs of EUT



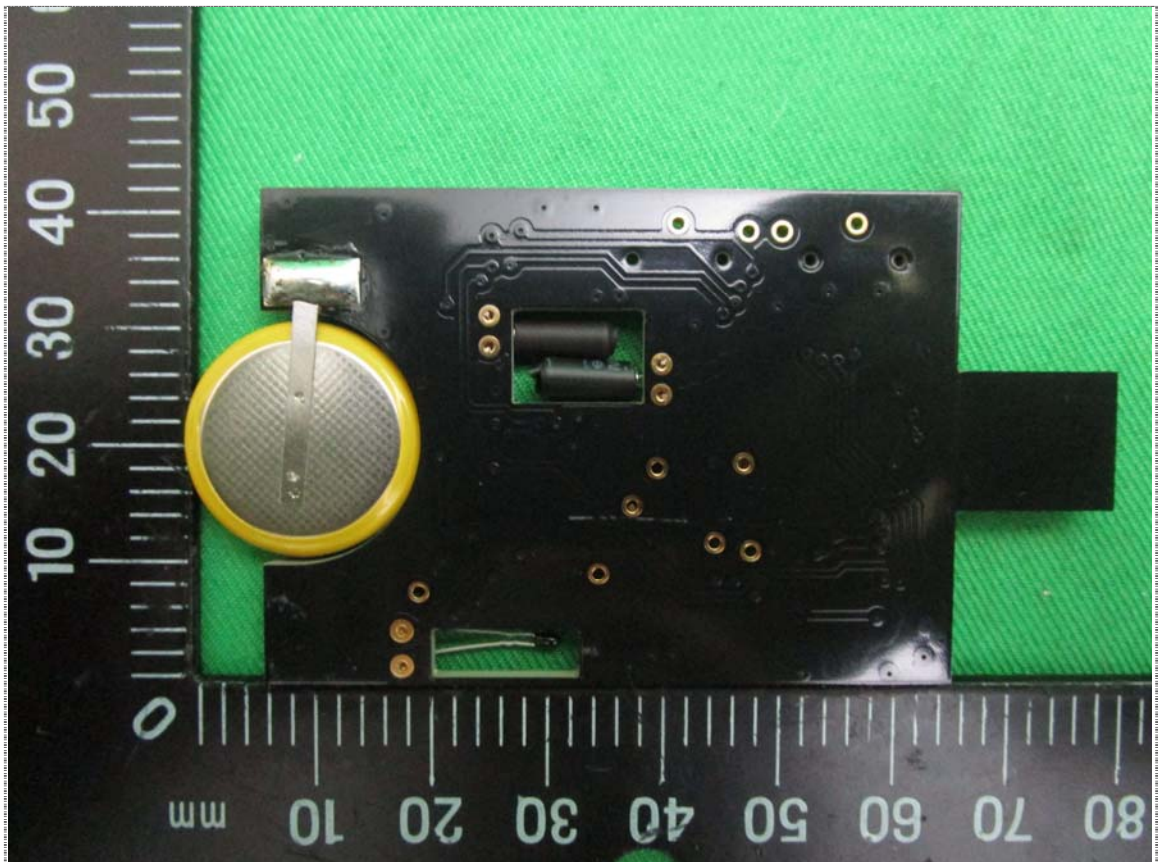
Front View of EUT



Rear View of EUT



Front View of PCB



Rear View of PCB