



Test Report

According to

RTCA DO-160G

Product : **Dry Ice Temperature USB Logger**

Trade Name : N/A

Model Number : 88165

Prepared for

AZ Instrument Corp.

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Prepared by

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Testing Laboratory

1113

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 : Dry Ice Temperature USB Logger
Model No. : 88165
Tested Power Supply : Battery (DC 3.6V)
Receipt date of EUT : Oct. 12, 2021
Date of Test : Oct. 14 ~ 15, 2021

Measurement Procedures and Standards Used :

RTCA DO-160G (Section 21.5 & Section 25)

Test Item		Special	Test Result
Sec.21.5	Radiated RF Emission	Equipment Category H Frequency Range: 100 MHz - 6 GHz	PASS
Sec. 25	Electrostatic Discharge Resistance Test	Air discharge: ± 15 kV	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. Judgment of conformity is based on test result, regardless of measurement uncertainty.

Report Issued: 2021/10/22

Prepared by: Max Chiu Approved: Elli Chang
 Max Chiu Elli Chang



Measurement Uncertainty

Item	Value
Chamber 2:	
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
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%	



1 Radiated RF Emission

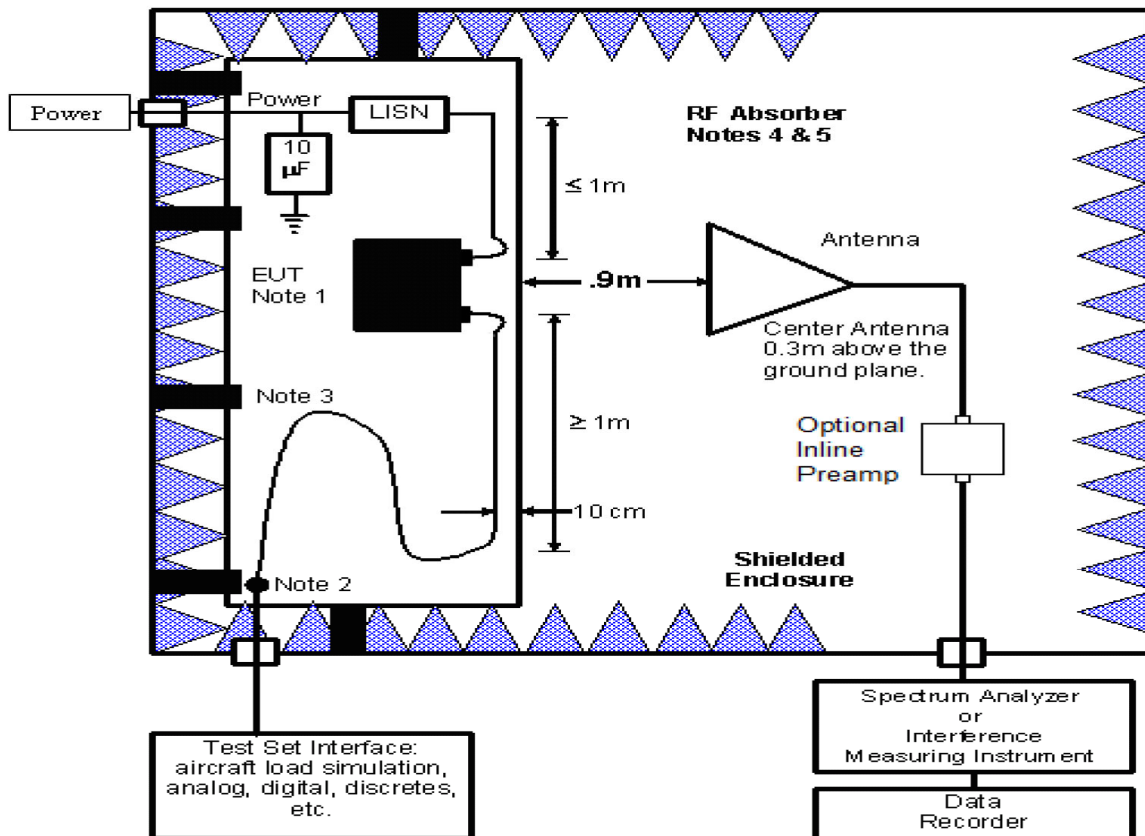
1.1 Instrument

Chamber 2

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
Biconical Antenna	Schwarzbeck	VHA 9103 & BBA 9106	VHA 9103-2484	2022/06/16
Log Antenna	Schwarzbeck	UHALP 9108-A	9108-A 0765	2022/06/16
Horn Antenna	Schwarzbeck	BBHA 9120	9120D-1051	2022/08/31
Pre-amplifier	EMCI	EMC330	980003	2022/08/17
Pre-amplifier	EMCI	EMC051845	980110	2022/07/12
EMI Test Receiver	Agilent	N9038A	MY51210178	2022/08/22
DC LISN	SCHWARZBECK	NNBM 8126D	8126D-213	2022/02/02
DC LISN	SCHWARZBECK	NNBM 8126D	8126D-214	2022/02/02
RF Cable	EMCI	EM106-SMSM-500	02	2022/02/19
RF Cable	EMCI	EM106-SMSM-290	01	2022/02/19
RF Cable	EMCI	EM106-SMSM-80	01	2022/02/19

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

1.2 Block Diagram of Test Configuration





1.3 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.

1.4 Test Procedure

Procedure is followed by RTCA DO-160G Section 21.6.3.

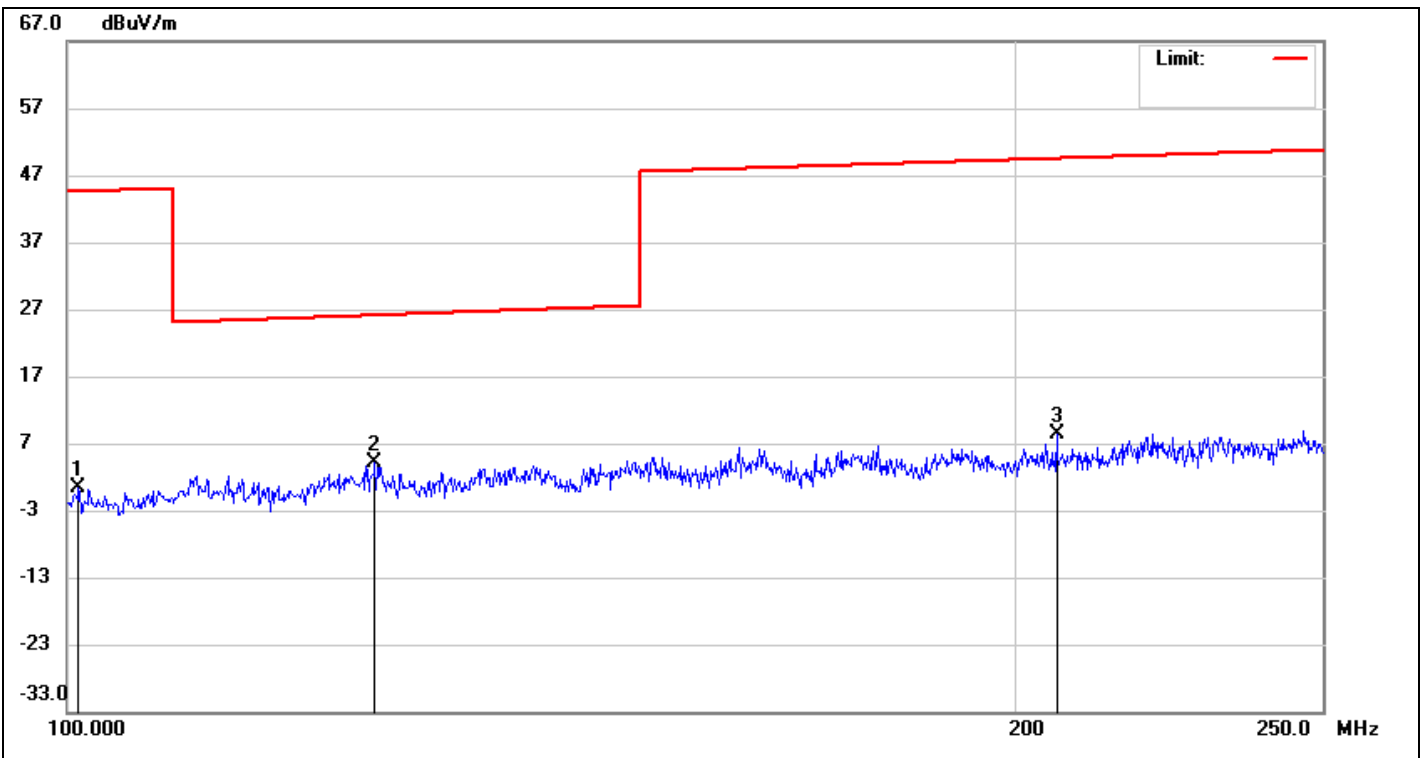
1.5 Test Result

The final test data is shown as following pages.



Test Mode: Working Mode (Front)

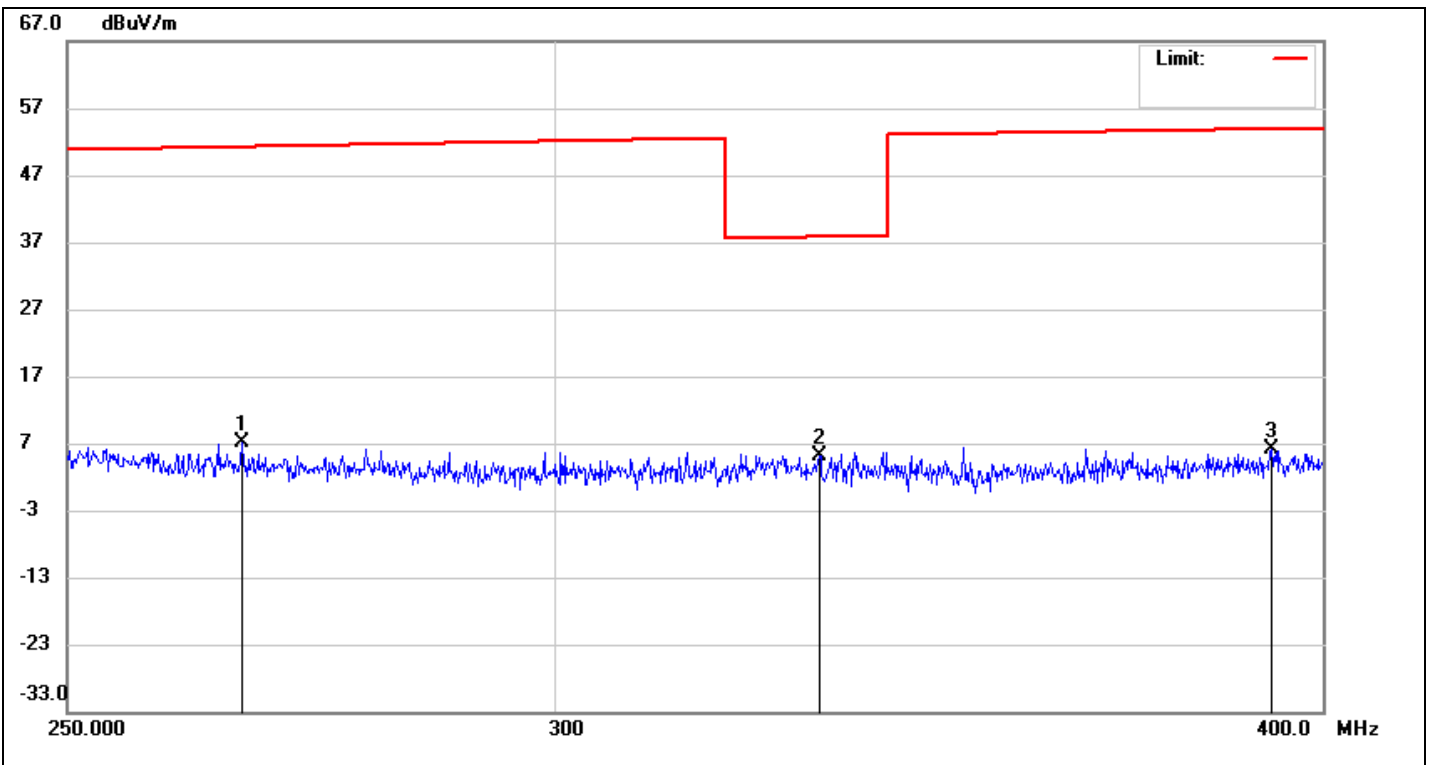
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	10:09:56 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	100.9000	20.90	-20.58	0.32	44.67	-44.35	peak	P	
2	125.2000	21.87	-17.81	4.06	26.08	-22.02	peak	P	
3	206.0500	22.49	-14.02	8.47	49.62	-41.15	peak	P	



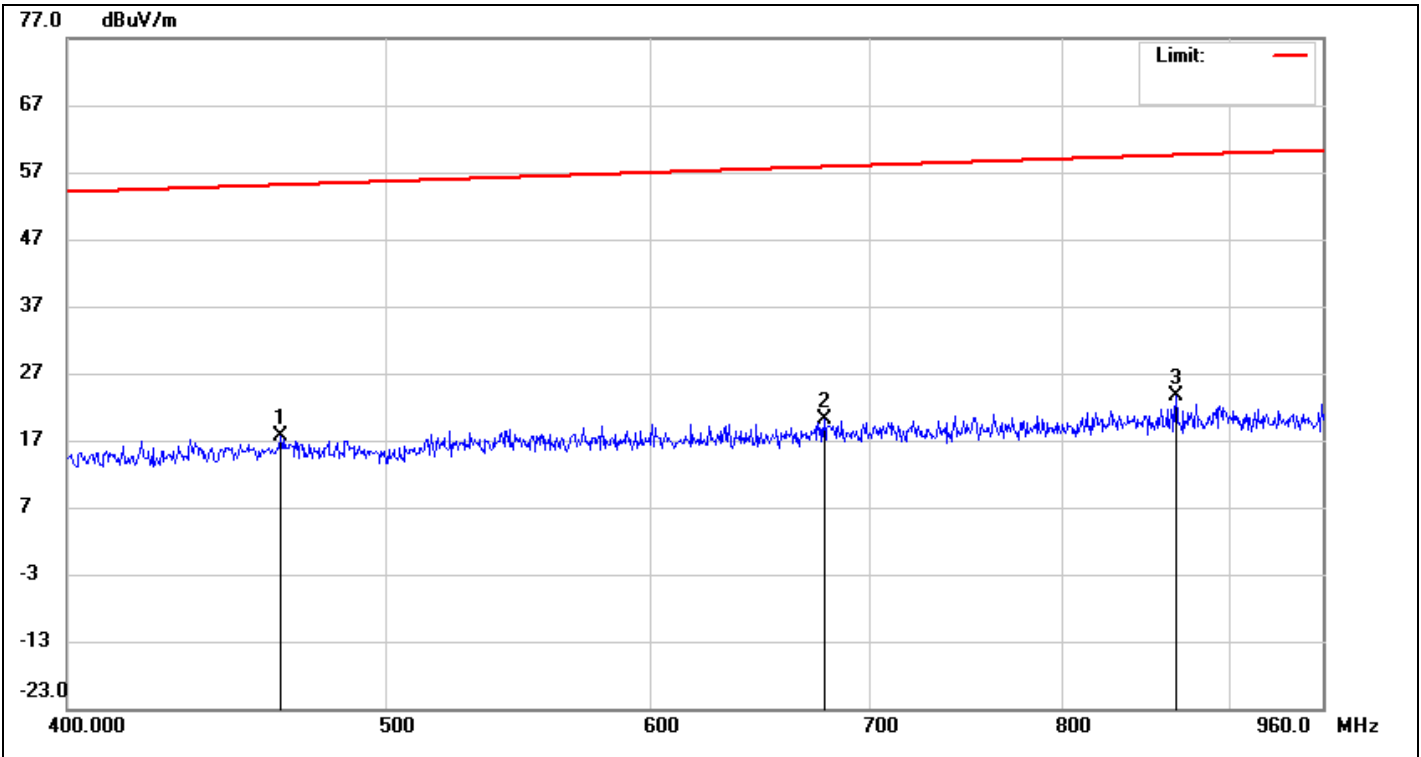
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	10:26:40 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	266.9500	21.95	-14.83	7.12	51.42	-44.30	peak	P	
2	331.3000	20.55	-15.41	5.14	37.93	-32.79	peak	P	
3	392.5000	20.32	-14.15	6.17	54.09	-47.92	peak	P	



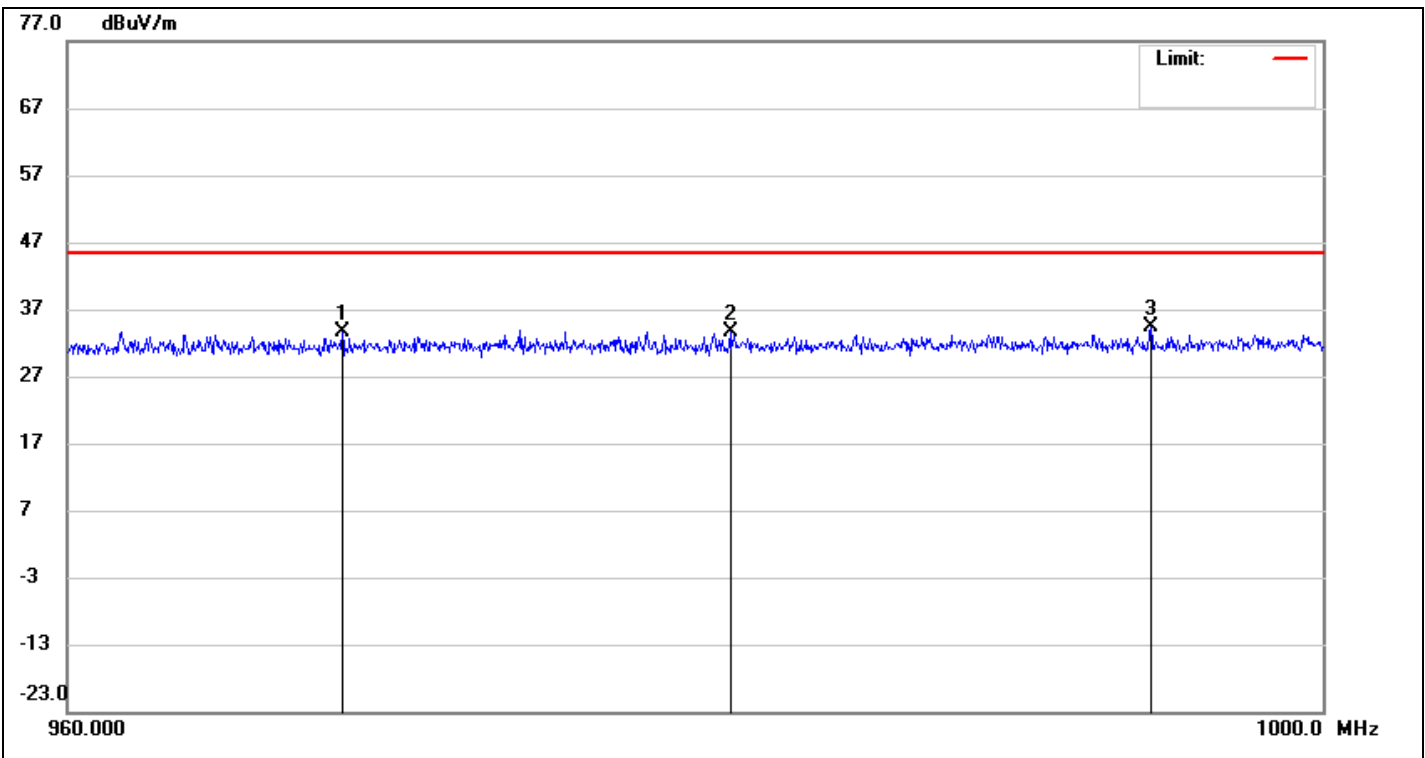
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:08:07 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 100kHz	VBW: 100kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	464.4000	30.34	-12.62	17.72	55.25	-37.53	peak	P	
2	678.3200	30.18	-10.10	20.08	57.88	-37.80	peak	P	
3	867.0400	30.56	-7.00	23.56	59.58	-36.02	peak	P	



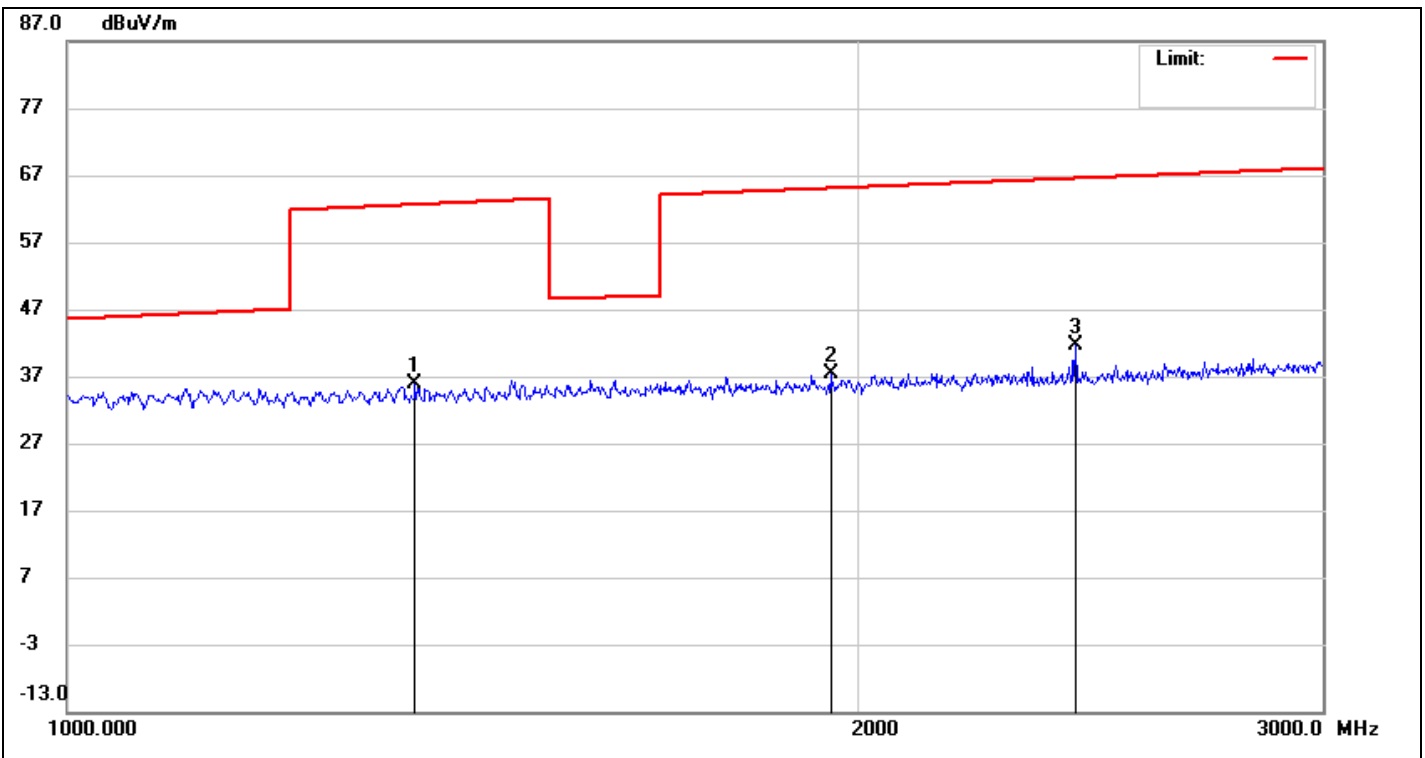
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:09:40 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	968.6400	40.73	-7.10	33.63	45.36	-11.73	peak	P	
2	980.9200	40.41	-6.90	33.51	45.46	-11.95	peak	P	
3	994.4400	41.12	-6.70	34.42	45.55	-11.13	peak	P	



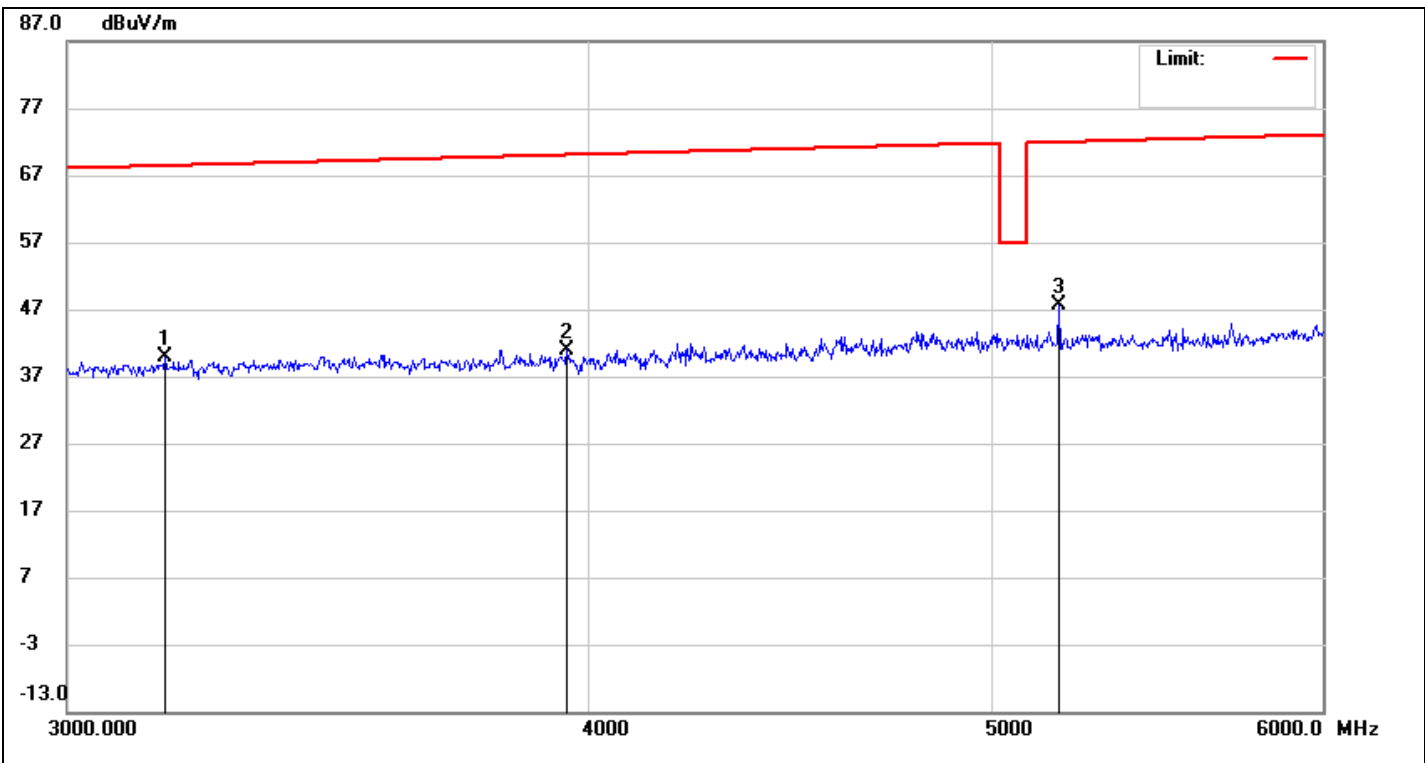
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	1:50:17 PM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1356.0000	59.56	-23.73	35.83	62.68	-26.85	peak	P	
2	1952.0000	59.33	-22.00	37.33	65.21	-27.88	peak	P	
3	2418.0000	62.25	-20.61	41.64	66.69	-25.05	peak	P	



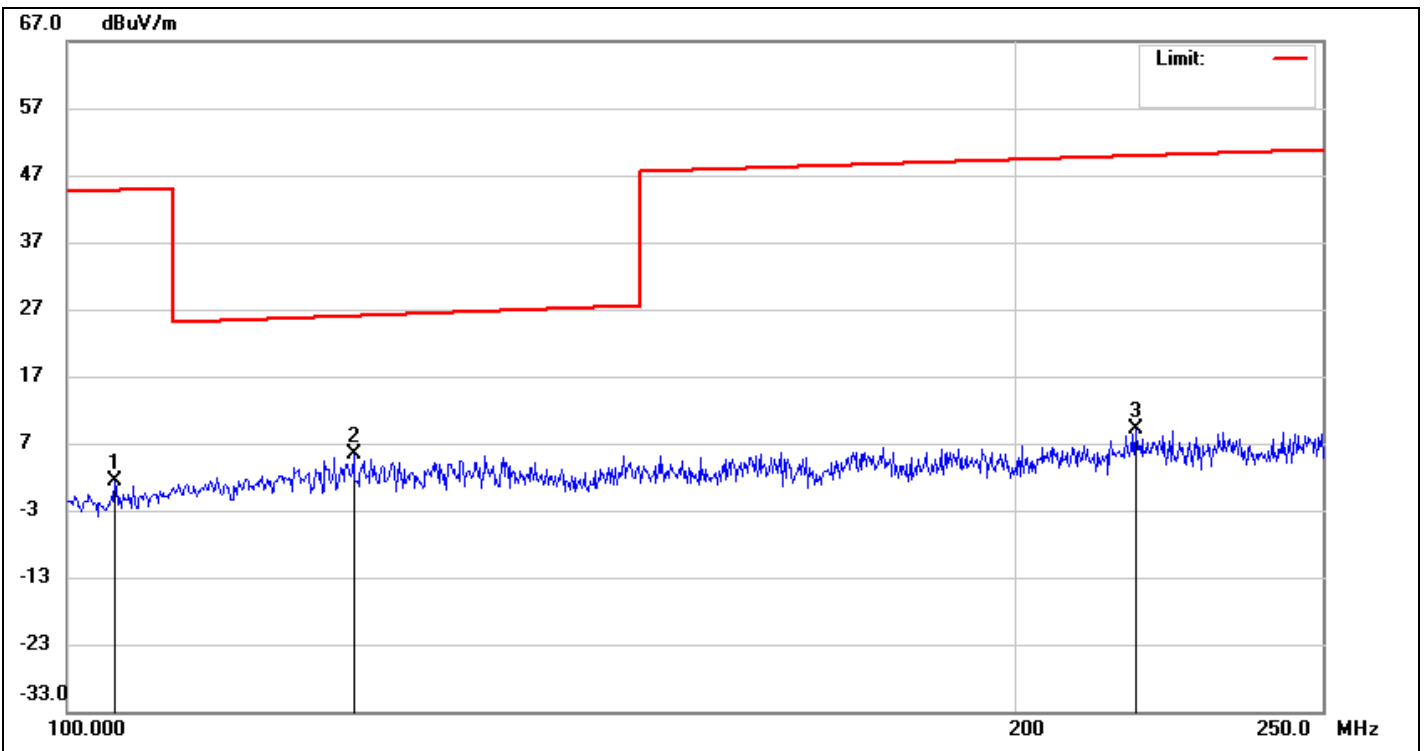
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	1:47:01 PM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3168.0000	58.19	-18.33	39.86	68.57	-28.71	peak	P	
2	3954.0000	57.50	-16.63	40.87	70.10	-29.23	peak	P	
3	5190.0000	61.22	-13.50	47.72	71.99	-24.27	peak	P	



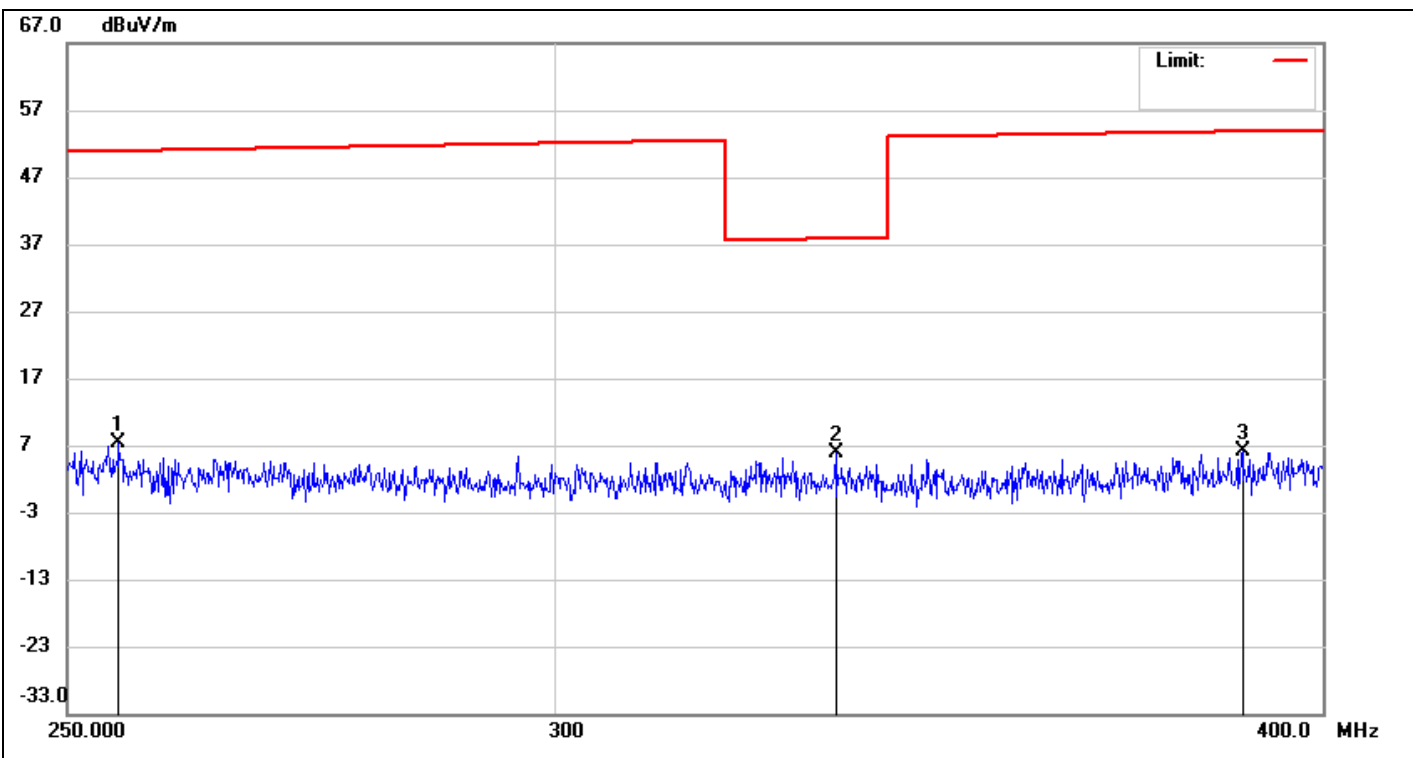
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	10:22:13 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	103.6000	21.51	-20.24	1.27	44.86	-43.59	peak	P	
2	123.2500	23.29	-17.97	5.32	25.97	-20.65	peak	P	
3	218.2000	21.98	-12.98	9.00	50.02	-41.02	peak	P	



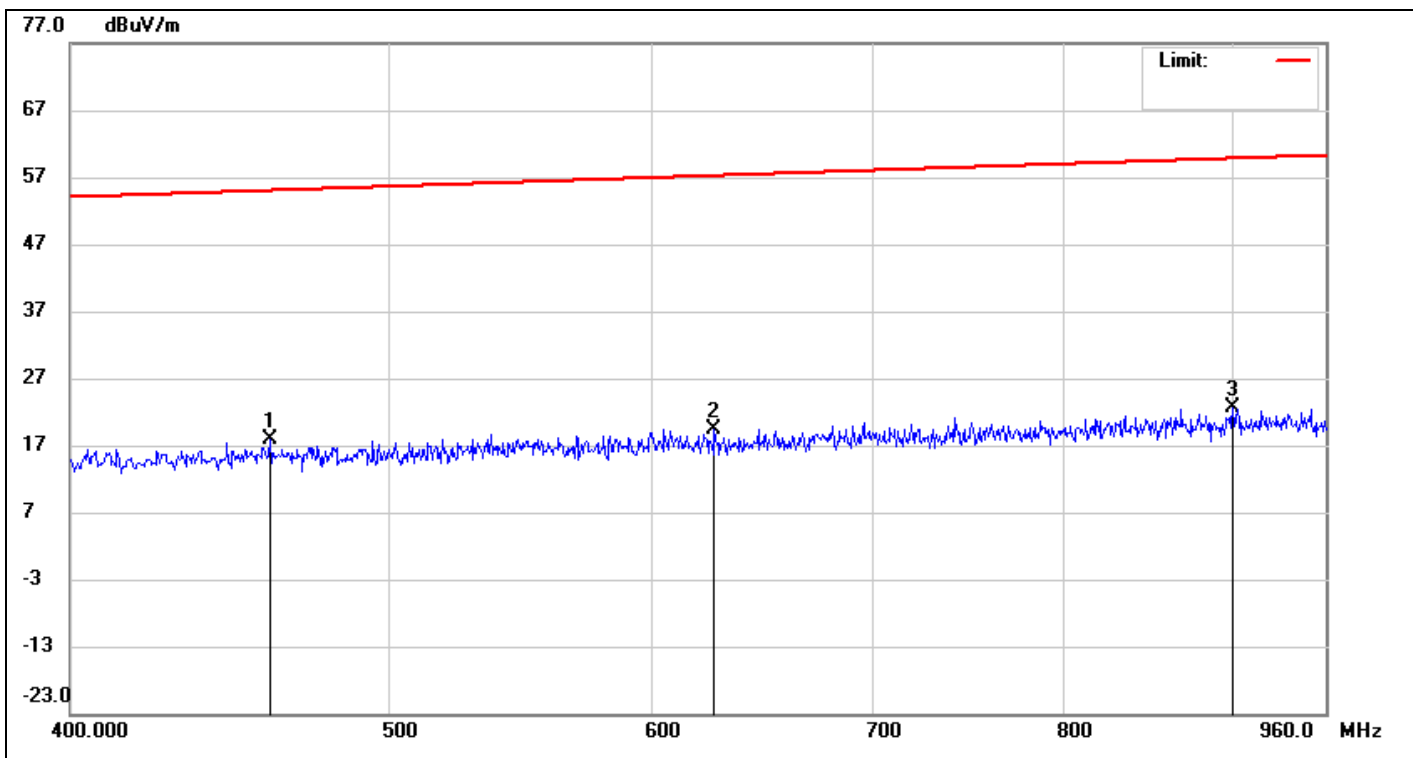
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:03:03 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	254.9500	21.47	-14.03	7.44	51.10	-43.66	peak	P	
2	333.4000	21.30	-15.46	5.84	37.97	-32.13	peak	P	
3	388.1500	20.31	-14.31	6.00	54.01	-48.01	peak	P	



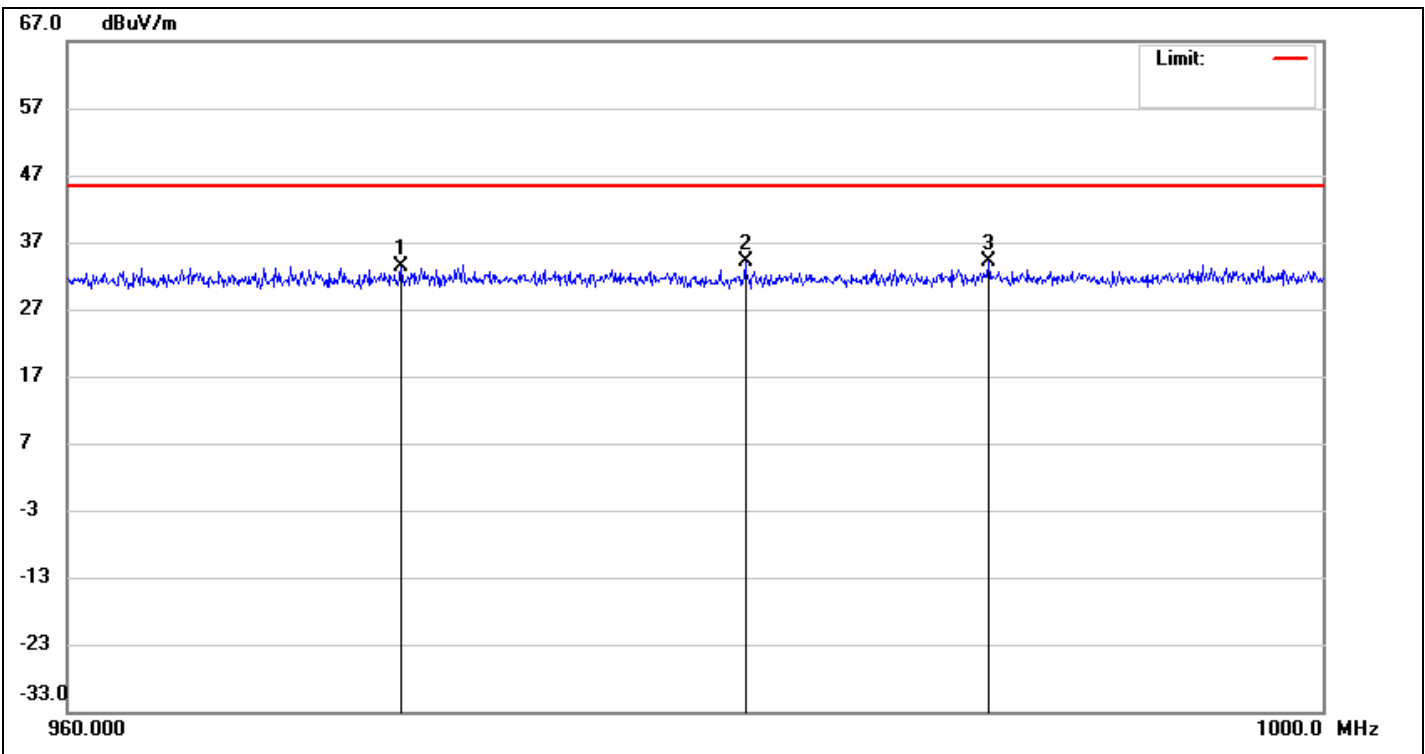
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:05:14 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 100kHz	VBW: 100kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	459.9200	30.57	-12.67	17.90	55.19	-37.29	peak	P	
2	626.8000	30.59	-11.18	19.41	57.33	-37.92	peak	P	
3	900.0800	29.20	-6.67	22.53	59.84	-37.31	peak	P	



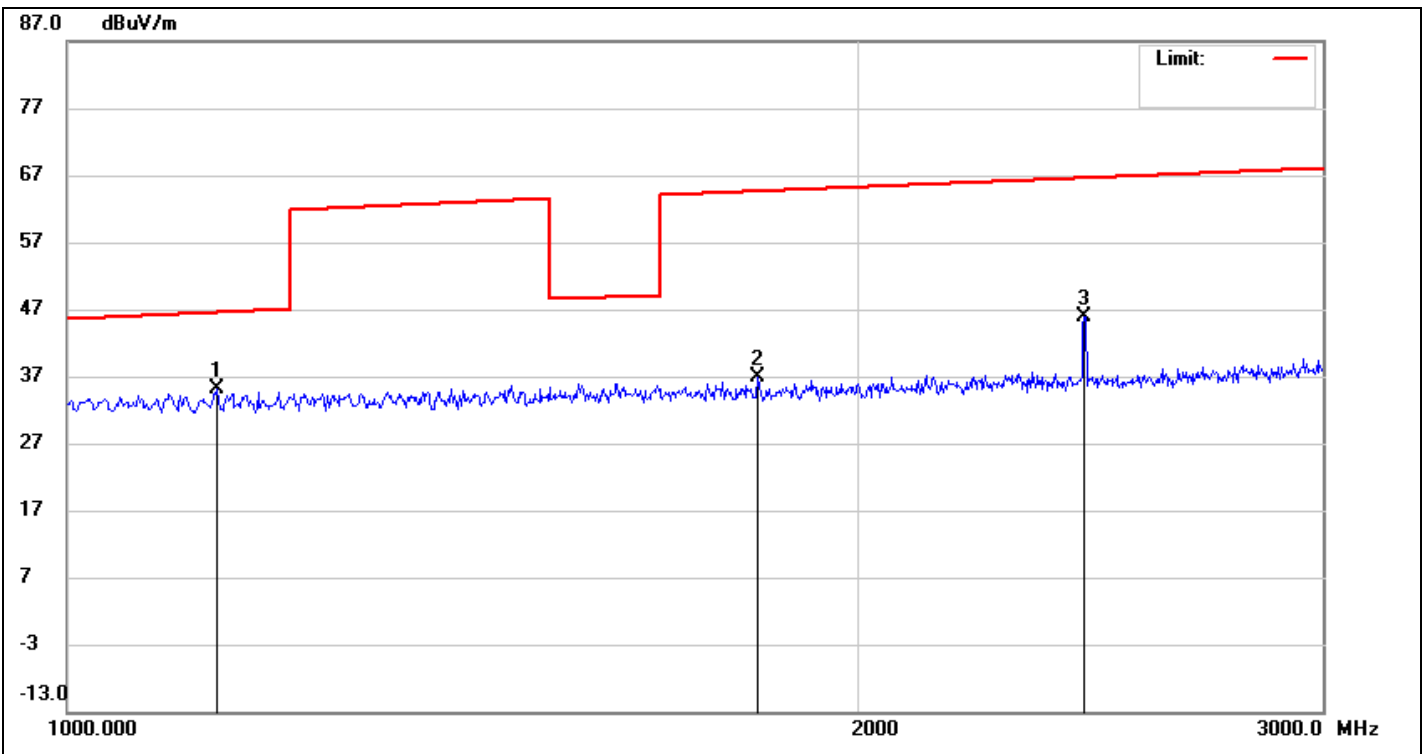
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:11:30 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	970.5200	40.42	-7.06	33.36	45.38	-12.02	peak	P	
2	981.4000	41.08	-6.89	34.19	45.46	-11.27	peak	P	
3	989.2400	40.96	-6.77	34.19	45.52	-11.33	peak	P	



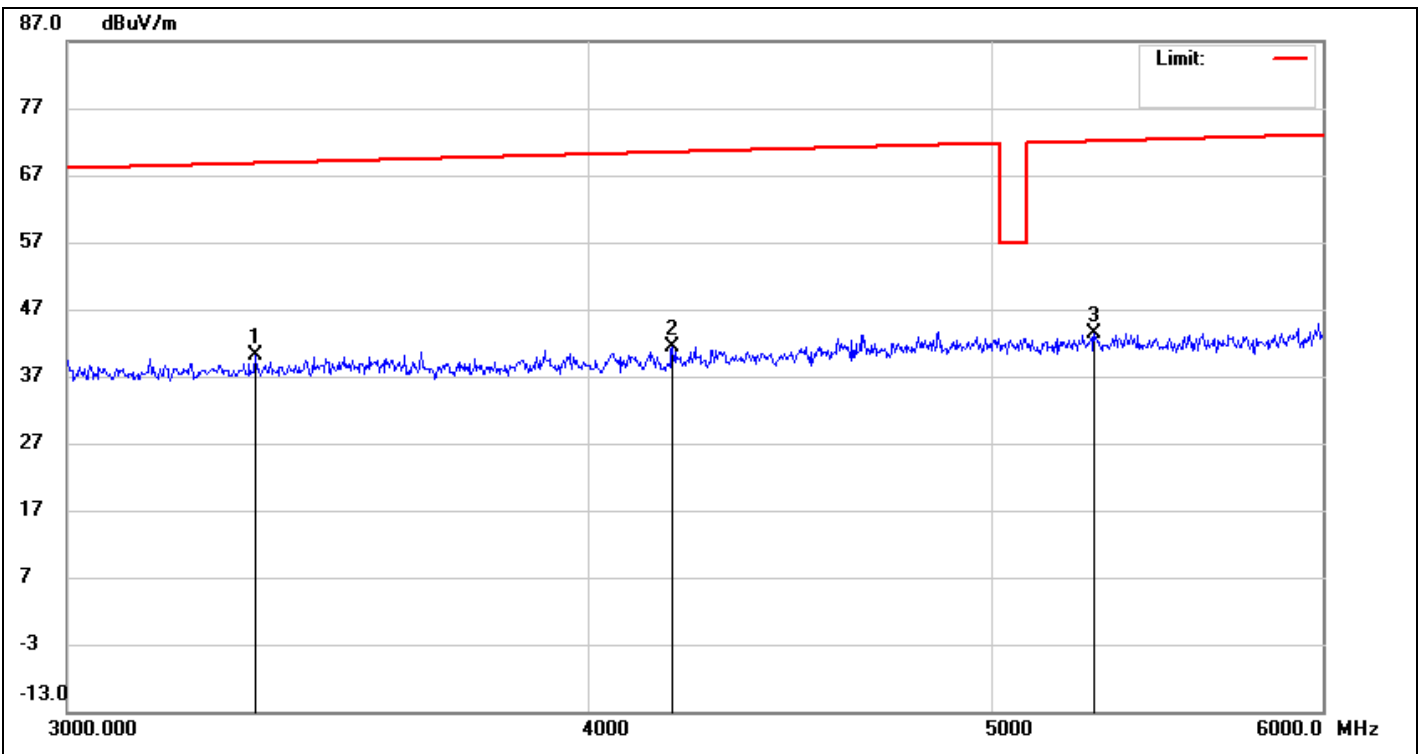
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Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:29:25 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Front		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1140.0000	59.40	-24.40	35.00	46.54	-11.54	peak	P	
2	1830.0000	59.15	-22.35	36.80	64.76	-27.96	peak	P	
3	2436.0000	66.47	-20.56	45.91	66.75	-20.84	peak	P	



Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	1:43:27 PM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Front		

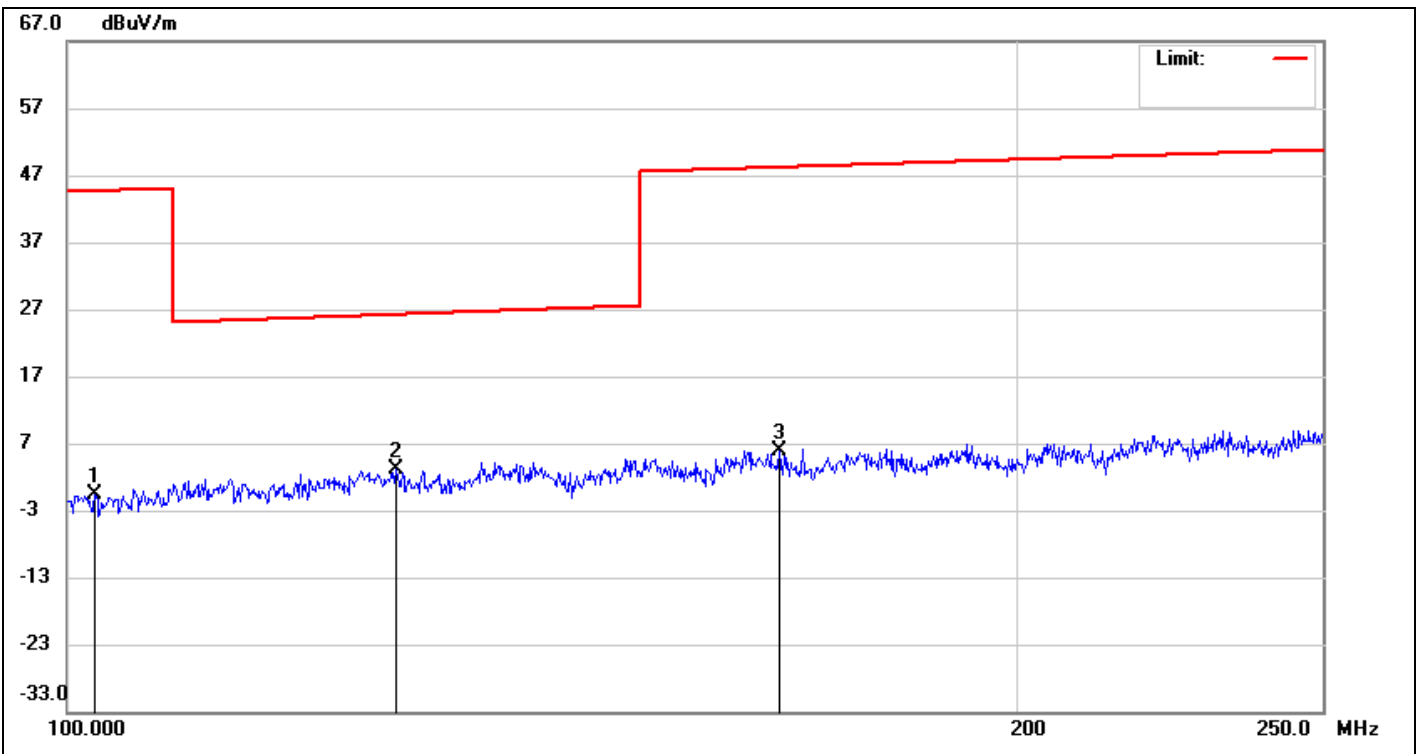


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3330.0000	58.17	-18.01	40.16	68.91	-28.75	peak	P	
2	4191.0000	57.28	-16.01	41.27	70.51	-29.24	peak	P	
3	5292.0000	56.87	-13.53	43.34	72.13	-28.79	peak	P	



Test Mode: Working Mode (Rear)

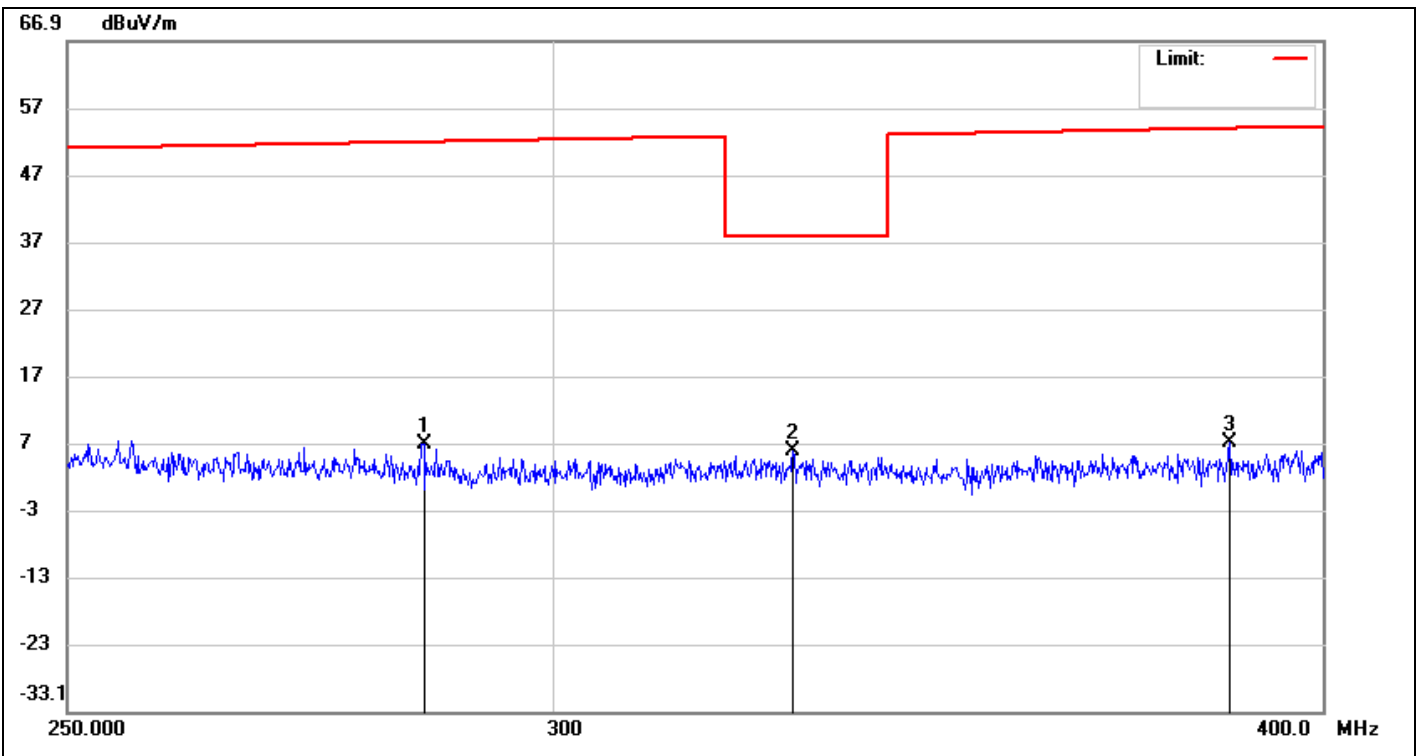
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	10:15:46 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	102.1000	19.79	-20.43	-0.64	44.75	-45.39	peak	P	
2	127.1500	20.85	-17.68	3.17	26.19	-23.02	peak	P	
3	168.2500	21.07	-15.16	5.91	48.22	-42.31	peak	P	



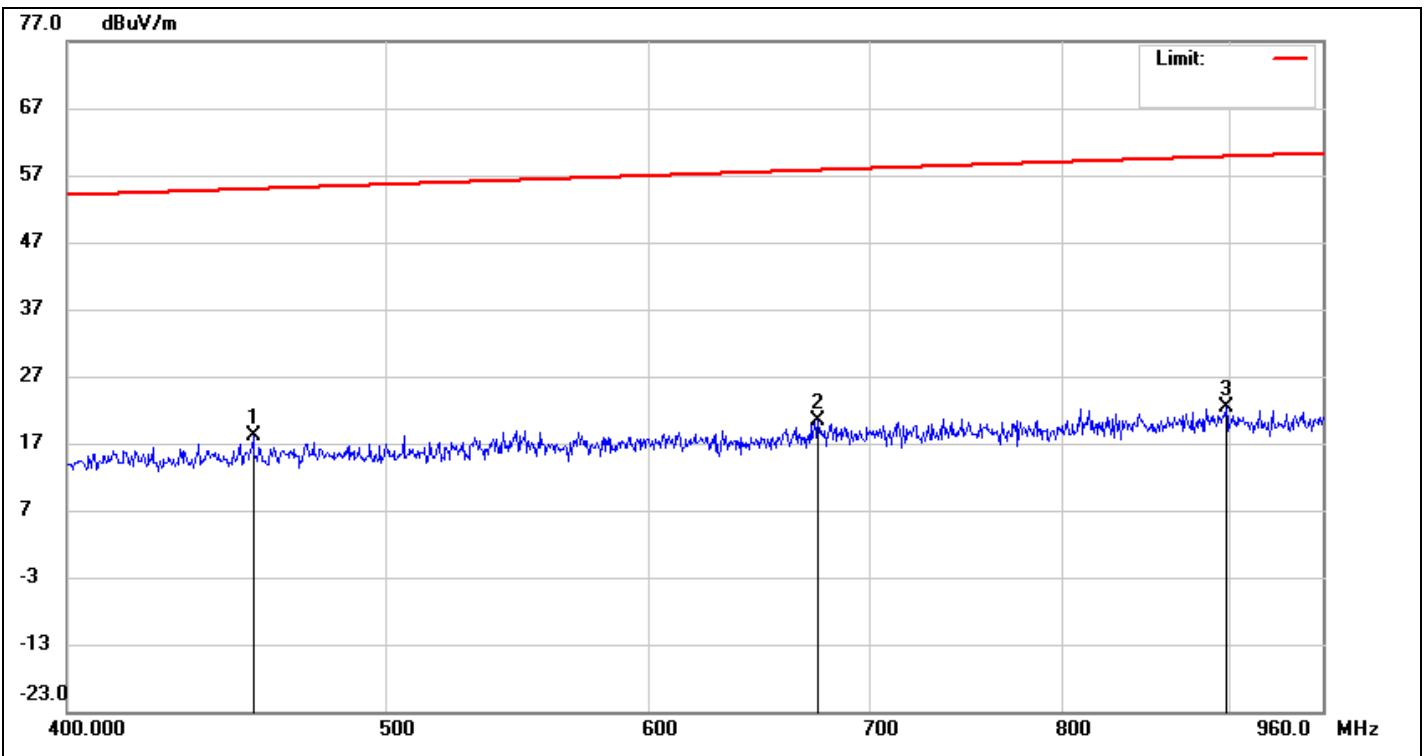
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	10:52:47 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	285.7000	22.23	-15.48	6.75	51.89	-45.14	peak	P	
2	328.1500	21.05	-15.33	5.72	37.87	-32.15	peak	P	
3	386.5000	21.43	-14.39	7.04	53.98	-46.94	peak	P	



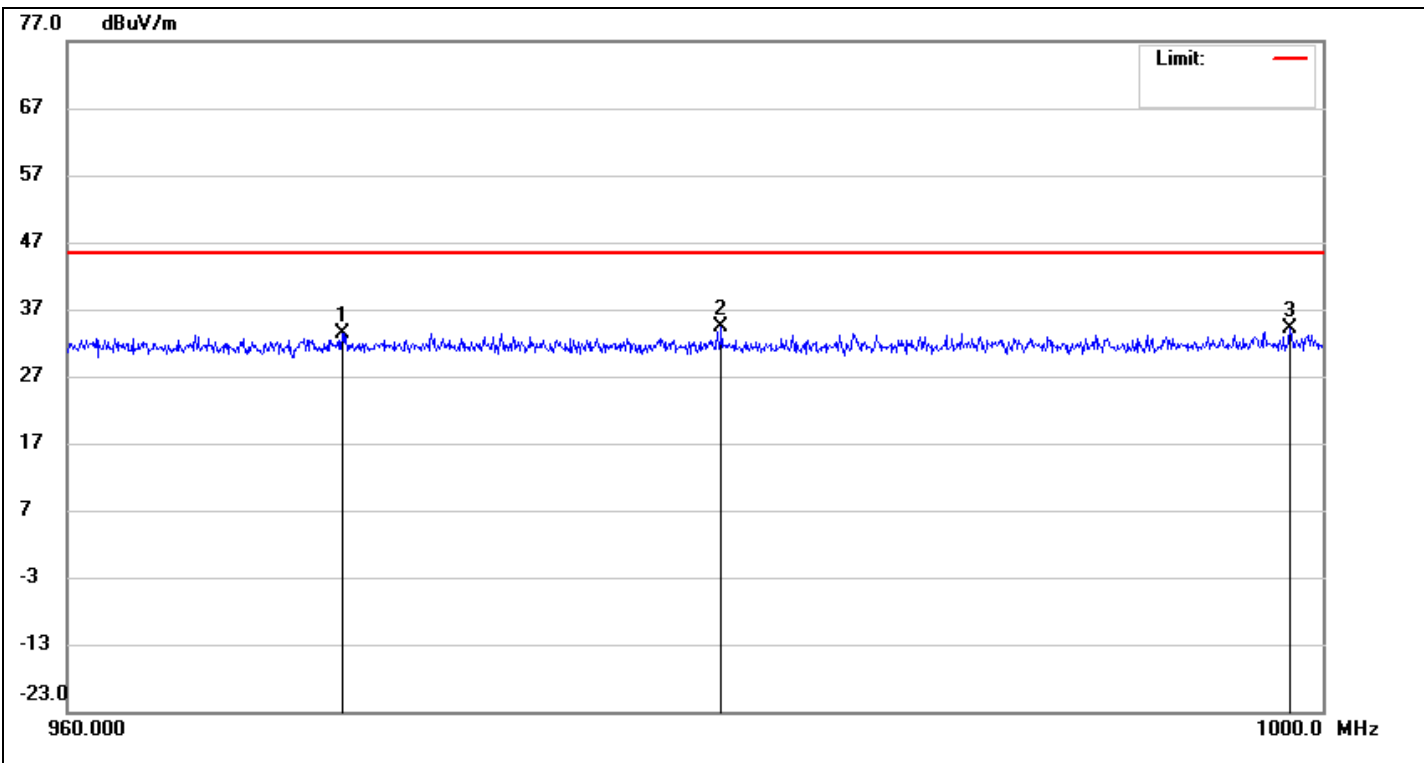
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:07:33 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 100kHz	VBW: 100kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	455.4400	30.94	-12.72	18.22	55.12	-36.90	peak	P	
2	675.5200	30.55	-10.15	20.40	57.85	-37.45	peak	P	
3	897.8400	29.10	-6.69	22.41	59.83	-37.42	peak	P	



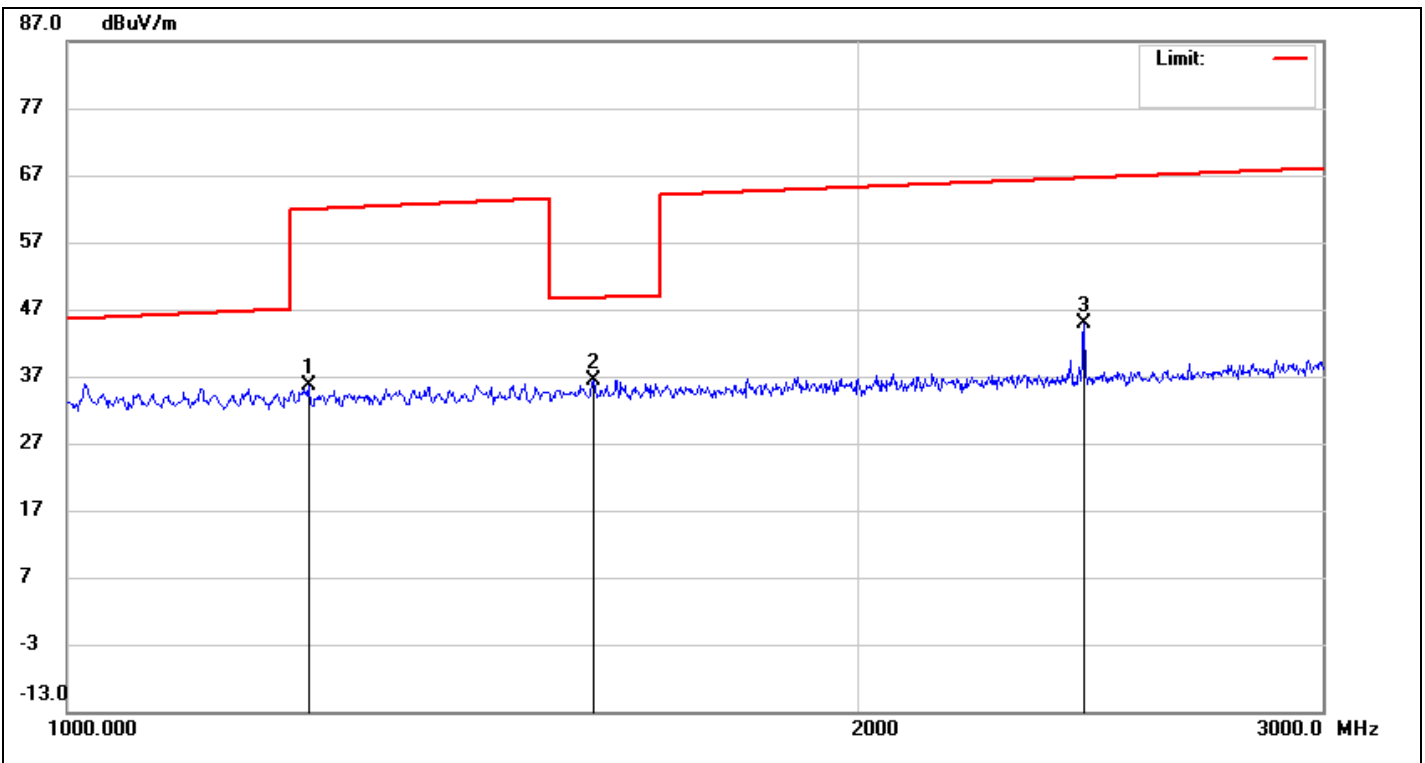
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:10:24 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	968.6400	40.49	-7.10	33.39	45.36	-11.97	peak	P	
2	980.6400	41.16	-6.90	34.26	45.45	-11.19	peak	P	
3	998.9600	40.78	-6.63	34.15	45.59	-11.44	peak	P	



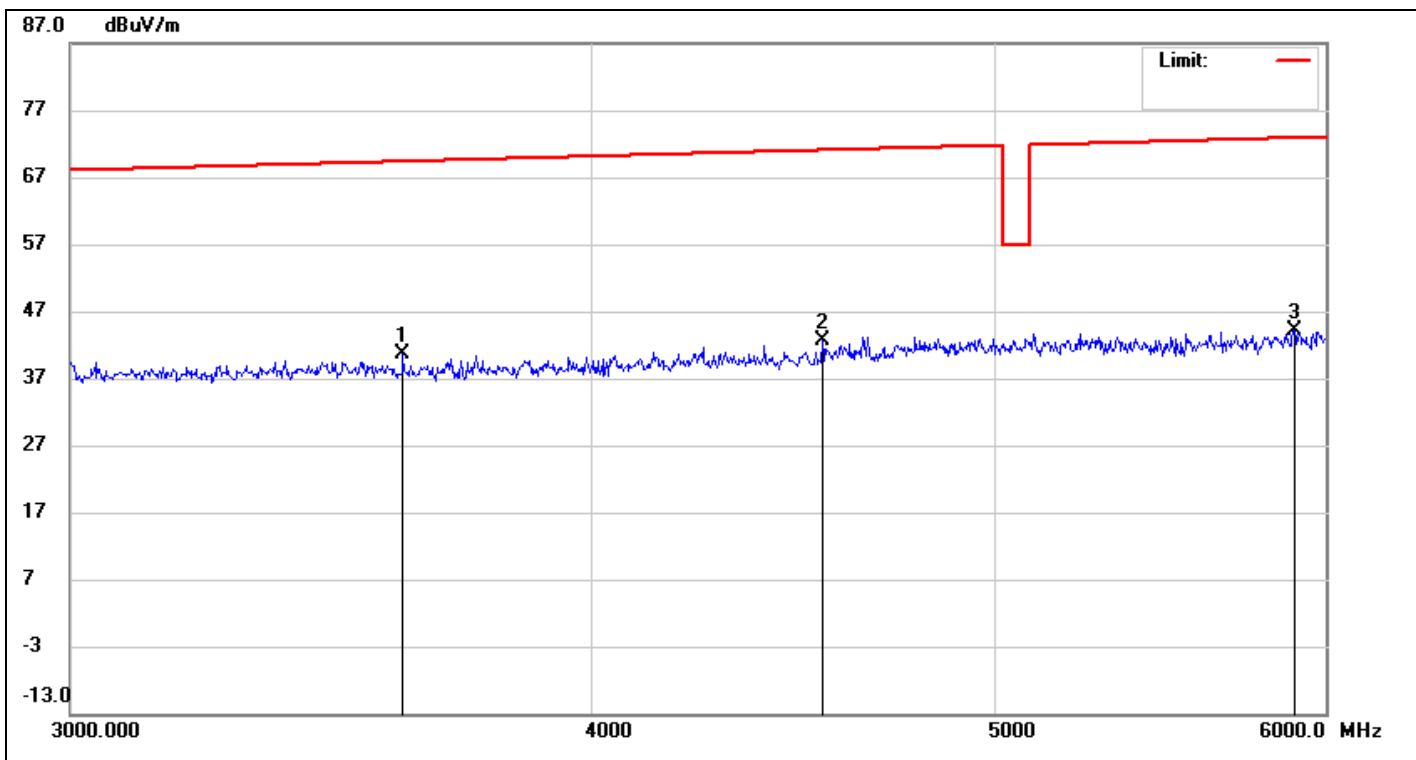
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	1:51:14 PM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1236.0000	59.74	-24.10	35.64	62.04	-26.40	peak	P	
2	1586.0000	59.50	-23.06	36.44	48.78	-12.34	peak	P	
3	2436.0000	65.43	-20.56	44.87	66.75	-21.88	peak	P	



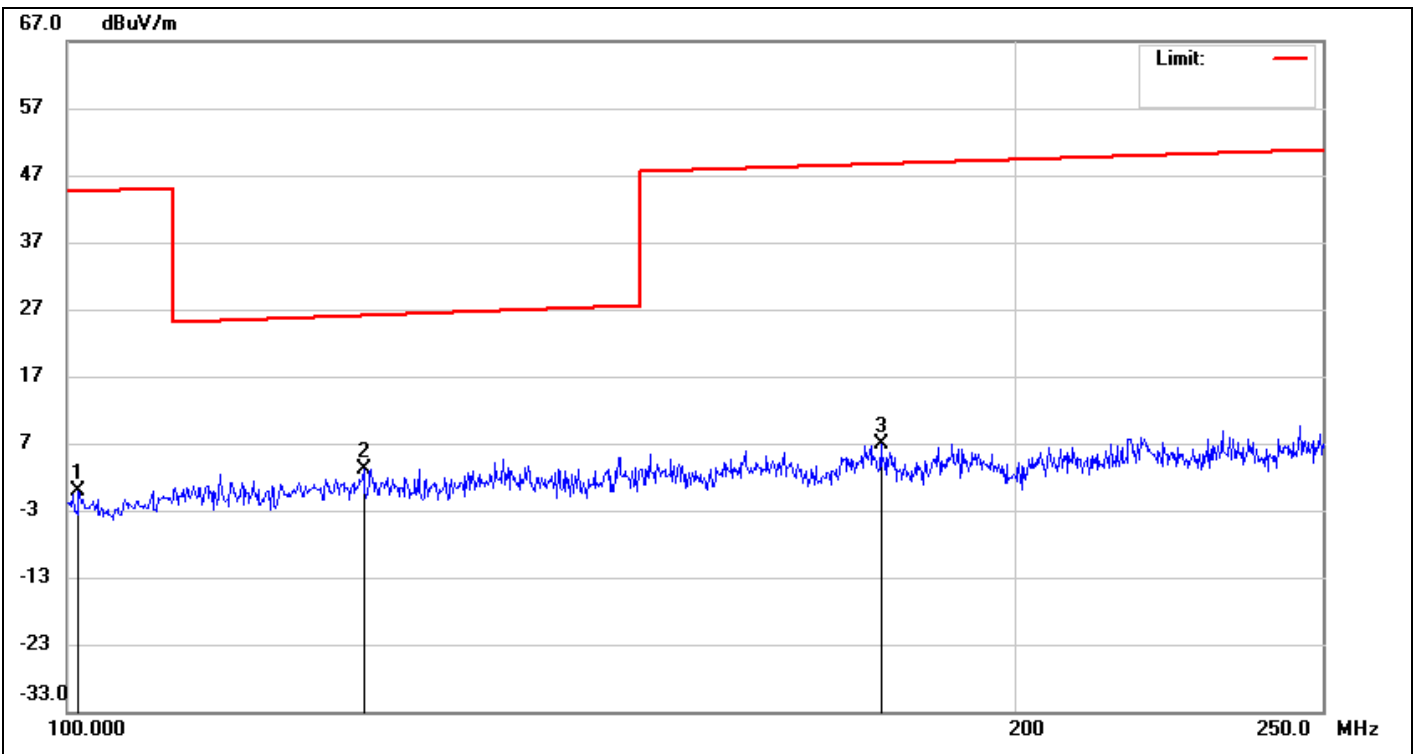
Job No.:	21A101204V	Polarization:	Vertical
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	1:46:21 PM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3606.0000	57.97	-17.44	40.53	69.47	-28.94	peak	P	
2	4545.0000	57.68	-15.03	42.65	71.07	-28.42	peak	P	
3	5901.0000	56.53	-12.38	44.15	72.88	-28.73	peak	P	



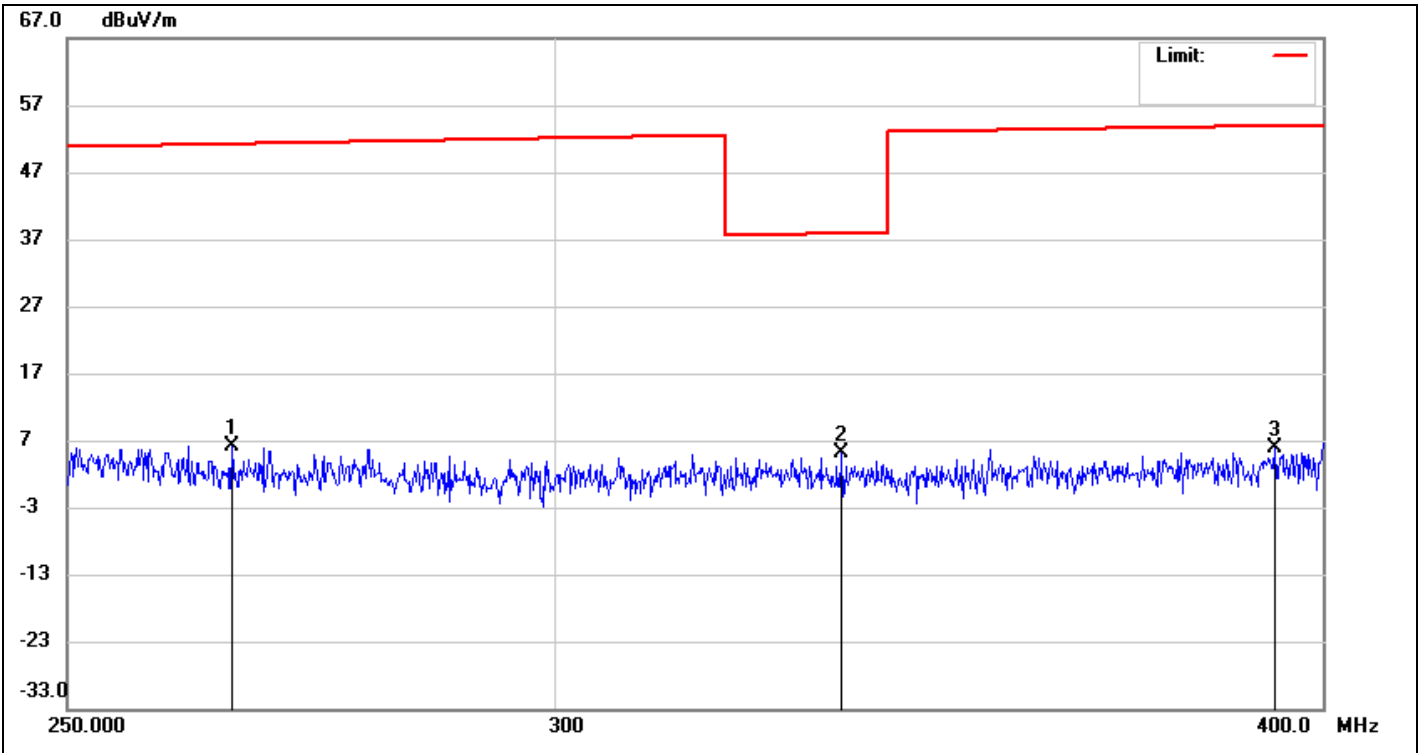
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	10:19:06 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	100.9000	20.40	-20.58	-0.18	44.67	-44.85	peak	P	
2	124.1500	21.05	-17.90	3.15	26.02	-22.87	peak	P	
3	181.1500	21.51	-14.70	6.81	48.73	-41.92	peak	P	



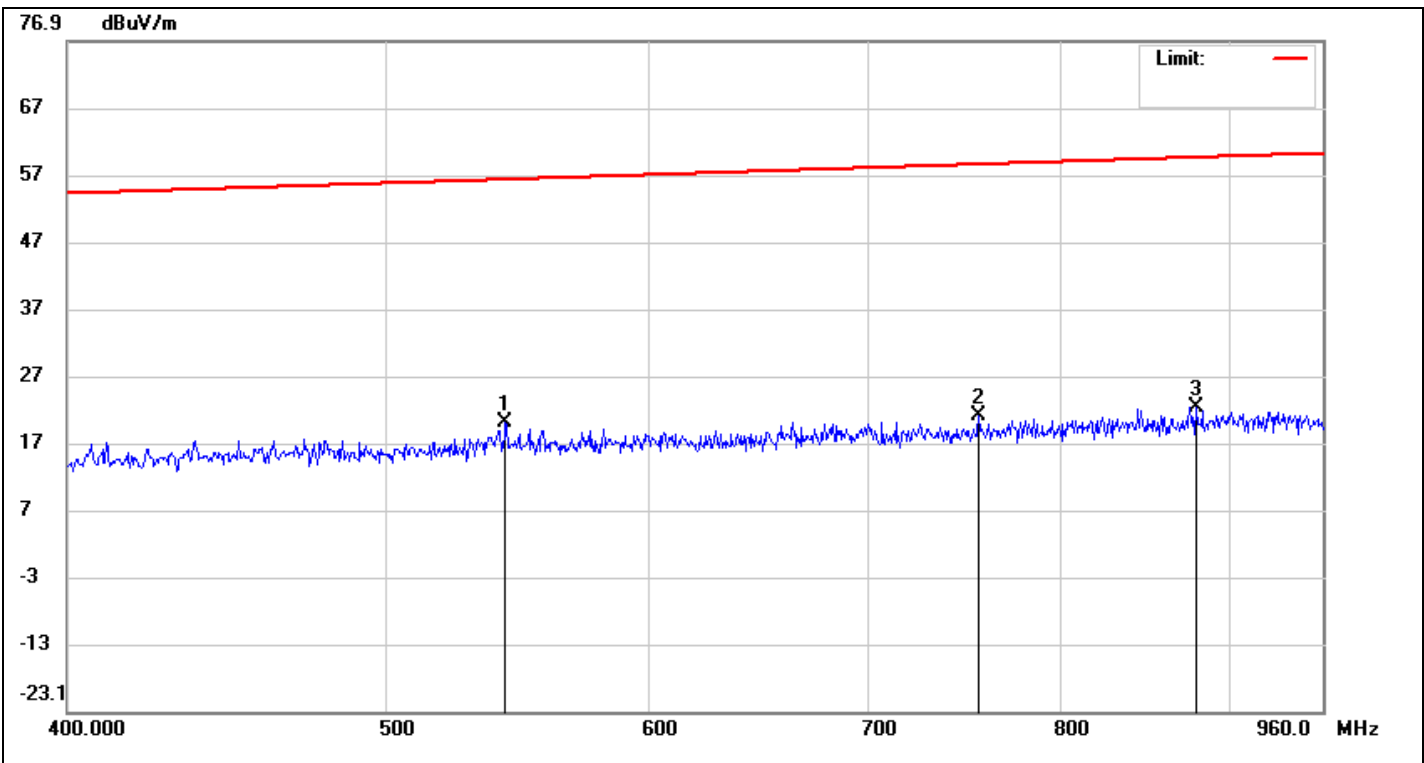
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:01:33 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 10kHz	VBW: 10kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	265.9000	20.78	-14.78	6.00	51.39	-45.39	peak	P	
2	334.1500	20.70	-15.47	5.23	37.99	-32.76	peak	P	
3	393.1000	19.89	-14.13	5.76	54.10	-48.34	peak	P	



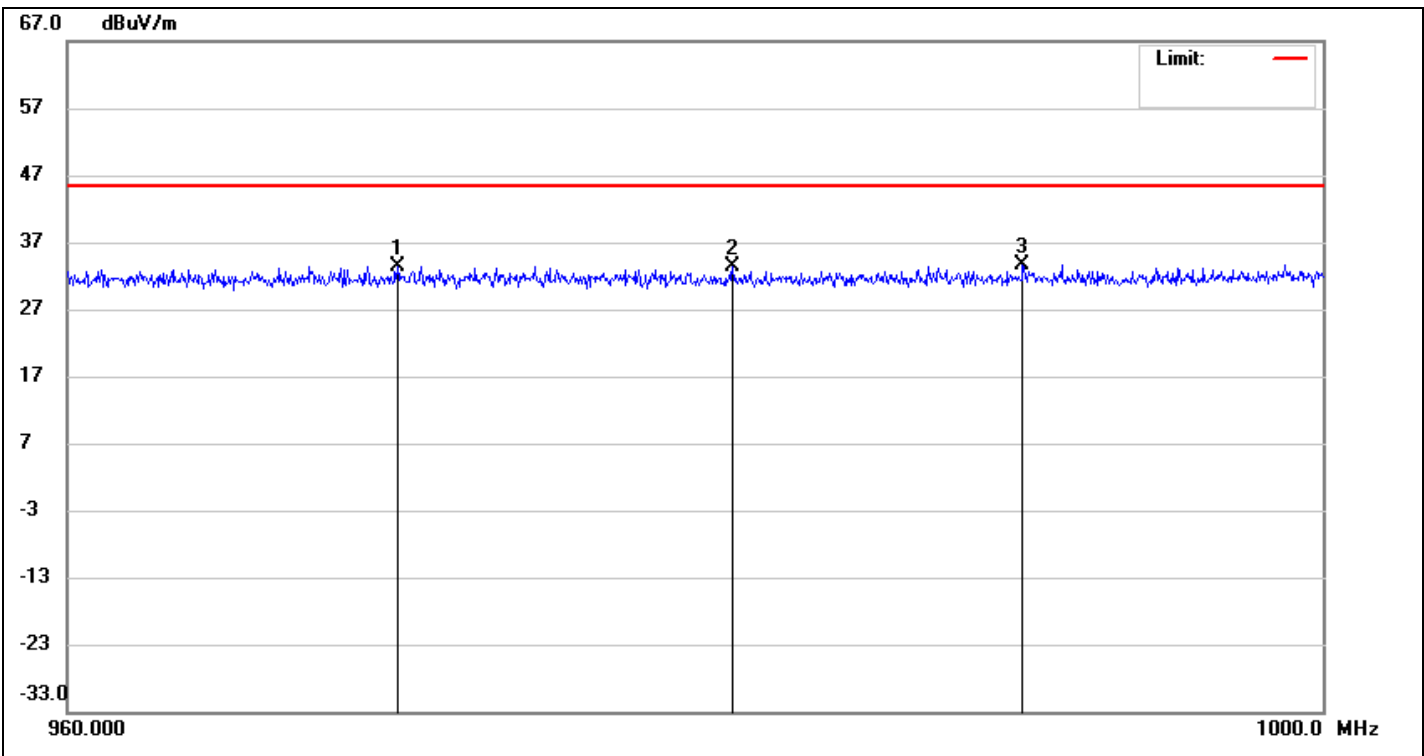
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:06:17 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 100kHz	VBW: 100kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	543.3600	31.84	-11.75	20.09	56.34	-36.25	peak	P	
2	755.6000	30.12	-8.99	21.13	58.63	-37.50	peak	P	
3	878.8000	29.22	-6.88	22.34	59.68	-37.34	peak	P	



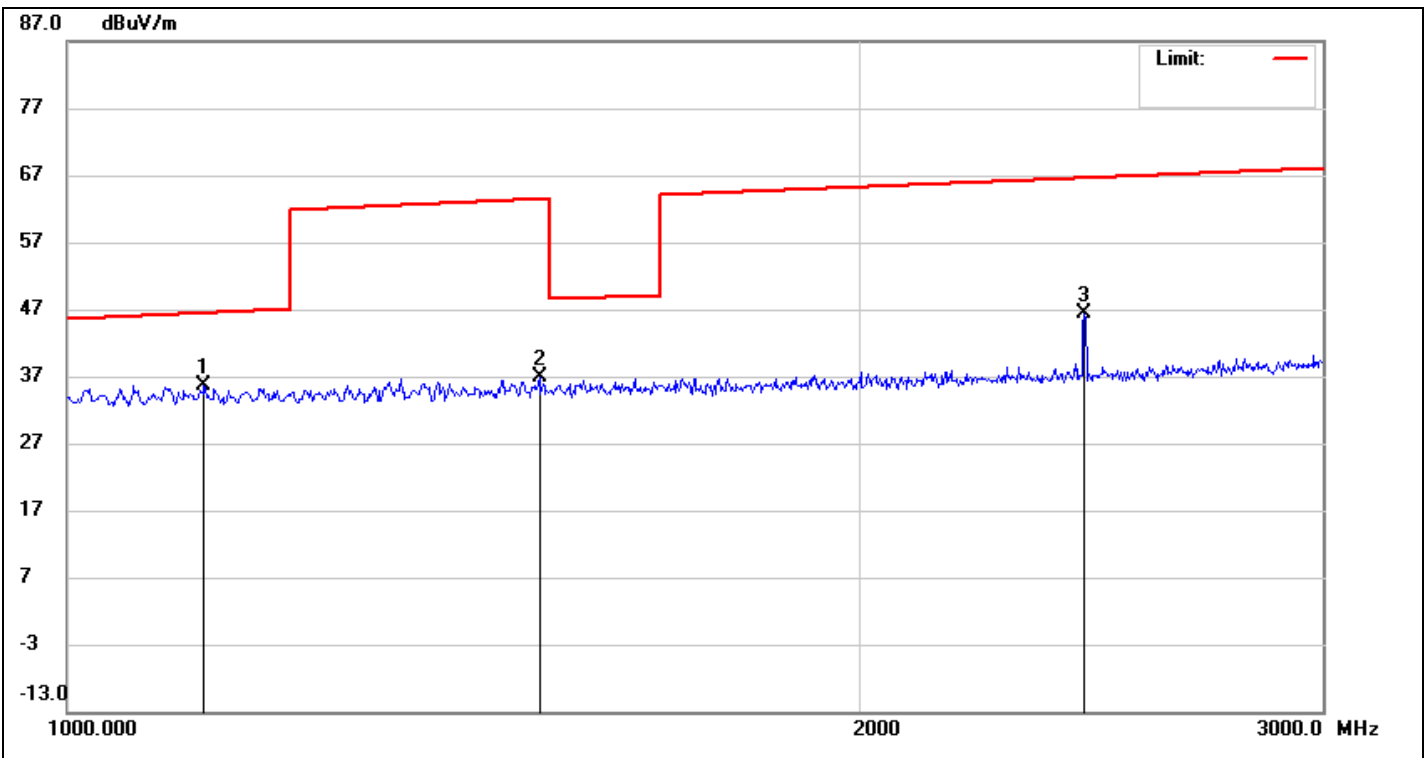
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:11:01 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	970.4000	40.53	-7.06	33.47	45.38	-11.91	peak	P	
2	981.0000	40.20	-6.90	33.30	45.46	-12.16	peak	P	
3	990.3200	40.35	-6.76	33.59	45.52	-11.93	peak	P	



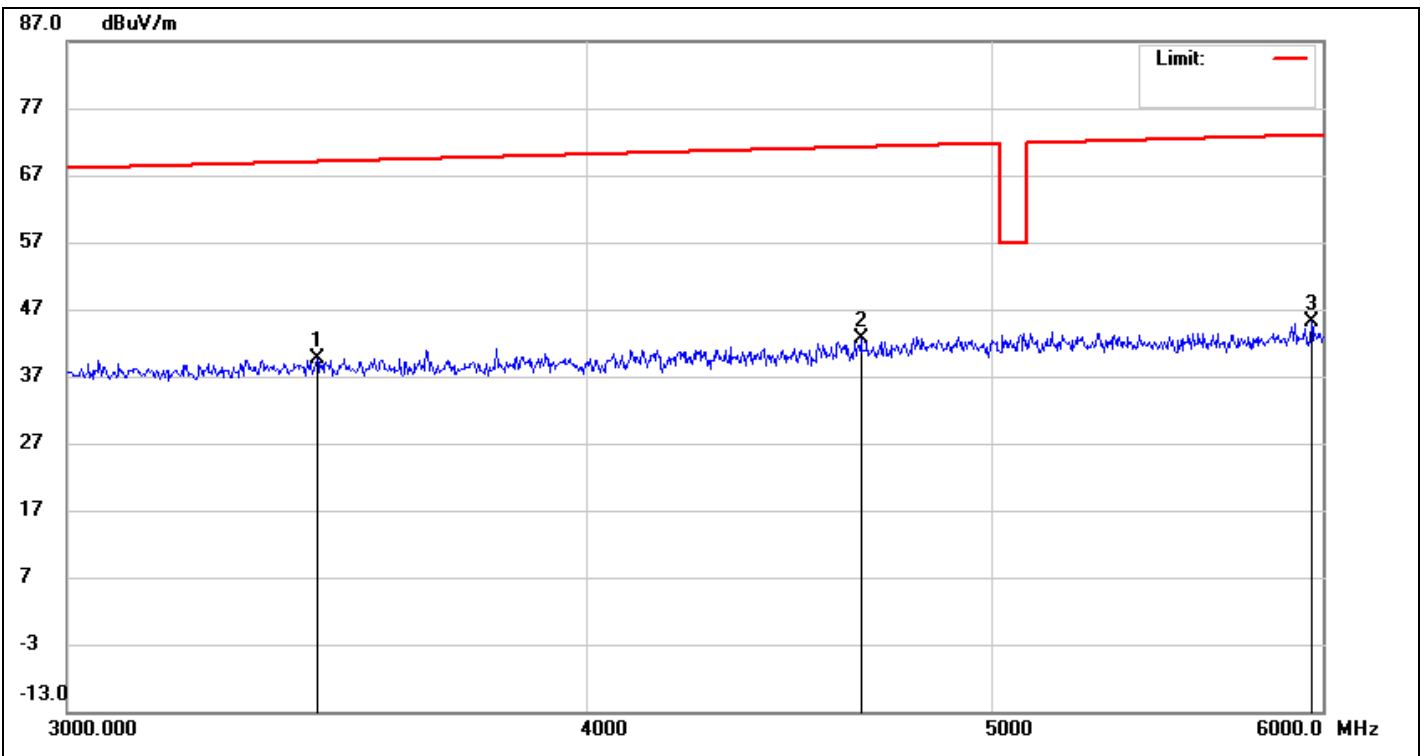
Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	11:30:34 AM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	1128.0000	60.15	-24.43	35.72	46.46	-10.74	peak	P	
2	1512.0000	60.04	-23.27	36.77	63.44	-26.67	peak	P	
3	2436.0000	66.97	-20.56	46.41	66.75	-20.34	peak	P	



Job No.:	21A101204V	Polarization:	Horizontal
Standard:	RCTA-DO-160G_RE_H	Power Source:	Battery(DC 3.6V)
Test item:	Radiation Test	Date:	2021 / 10 / 14
Temp.(°C)/Hum.(%):	25.1 (°C) / 57 %	Time:	1:45:22 PM
Company:	AZ Instrument Corp.	Engineer Signature:	Max Chiu
Product:	Dry Ice Temperature USB Logger	Distance:	1m
Model:	88165	RBW: 1000kHz	VBW: 1000kHz
Description:	Rear		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3444.0000	57.52	-17.80	39.72	69.15	-29.43	peak	P	
2	4650.0000	57.32	-14.66	42.66	71.23	-28.57	peak	P	
3	5964.0000	57.19	-12.18	45.01	72.96	-27.95	peak	P	



2 Electrostatic Discharge (ESD)

2.1 Instrument

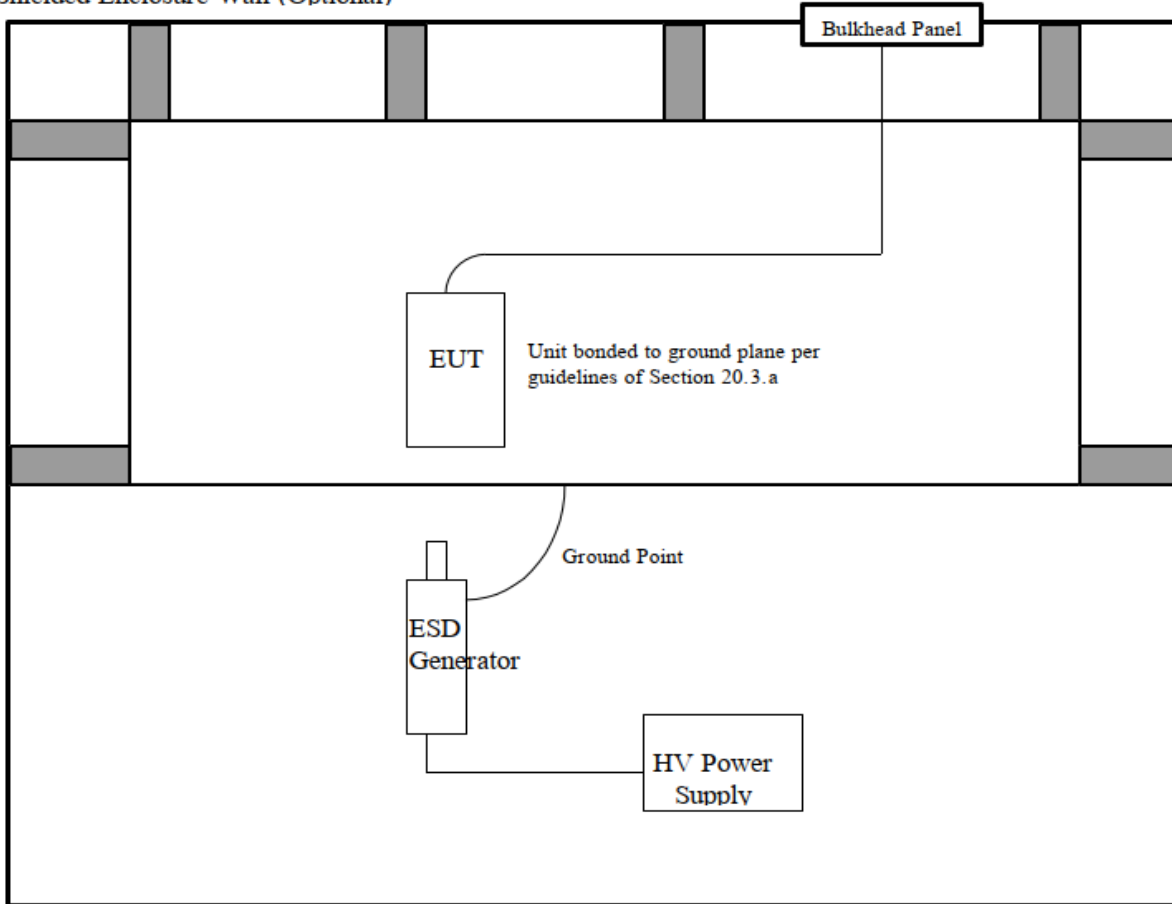
Shielding Room 3

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
ESD Simulator	NOISEKEN	ESS-B3011	ESS11Y2454	2022/05/27

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

2.2 Block Diagram of Test Configuration

Shielded Enclosure Wall (Optional)



2.3 Test Procedure

Procedure is followed by RTCA DO-160G Section 25.5.

2.4 Test Result

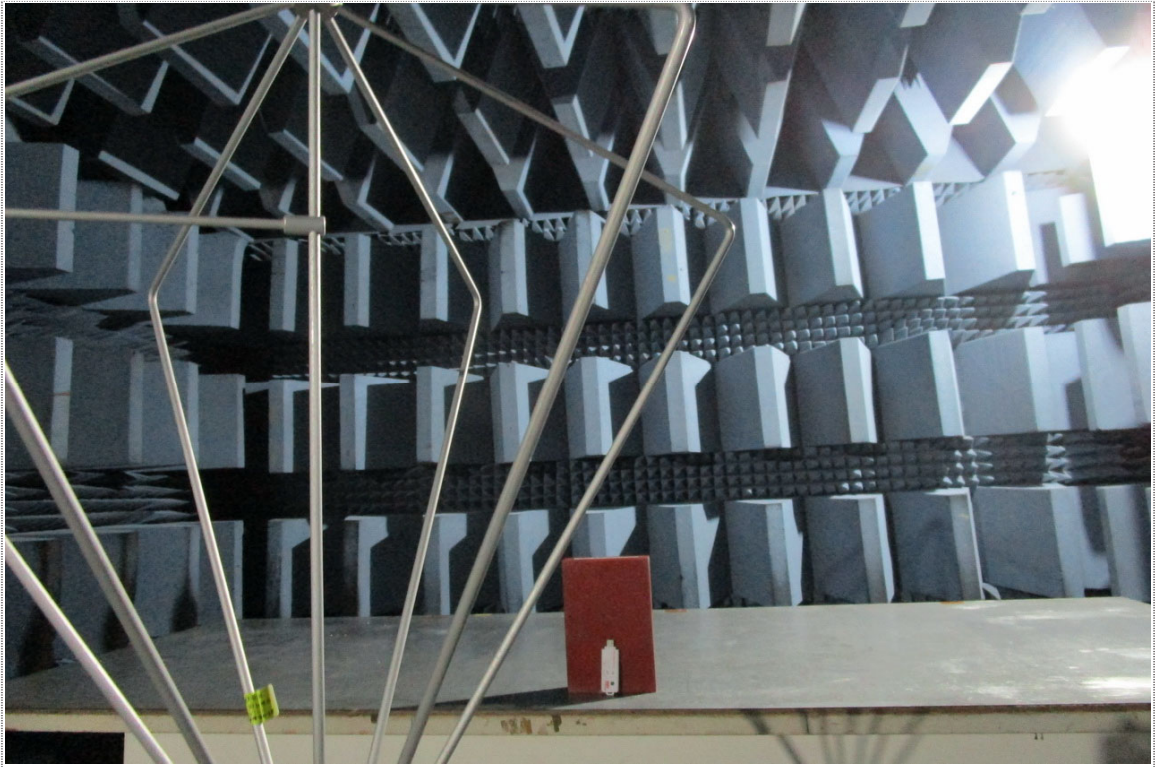
The final test data is shown as following pages.



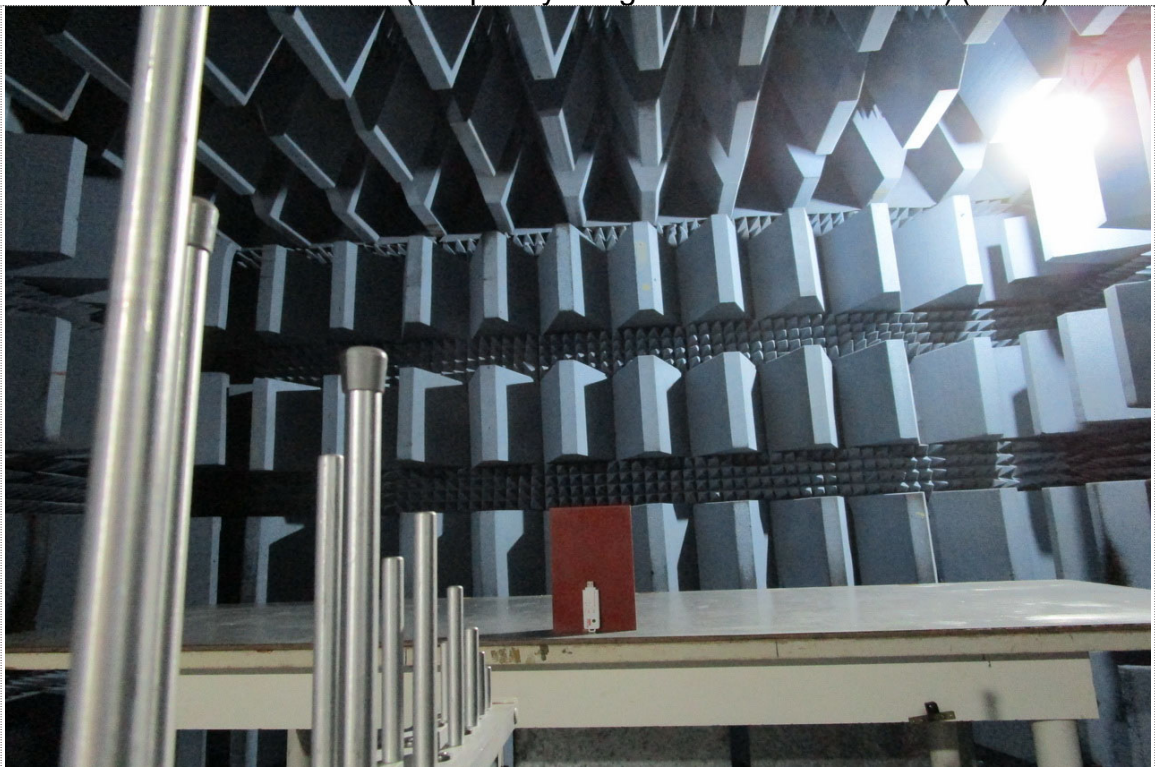
Applicant : AZ Instrument Corp.			Date of Measurement : 2021 / 10 / 15		
EUT : Dry Ice Temperature USB Logger			Temp./Humidity/Atm.press. : 23°C / 40% / 988hPa		
M/N : 88165			Test Mode : Working mode		
Input Voltage : Battery(DC 3.6V)			Test Engineer : Peter Su		
Apply Voltage	Times (each point)	Discharges intervals	Type of Discharge		Results
			Contact	Air	
± 15 kV	10	1 s	---	○	As in NOTE
<ul style="list-style-type: none"> ■ Energy accumulation capacitance 150 pF. ■ Discharge resistance 330 Ω. 					
<p>NOTE :</p> <ul style="list-style-type: none"> ■ Monitoring method: Observe LED indicator then record the phenomena. ■ Before the test: The LED indicator is in normal state. ■ During the test: The LED indicator is in normal state. ■ After the test: The LED indicator is in normal state. 					

3 Photographs of Test

3.1 Radiated RF Emission



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



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



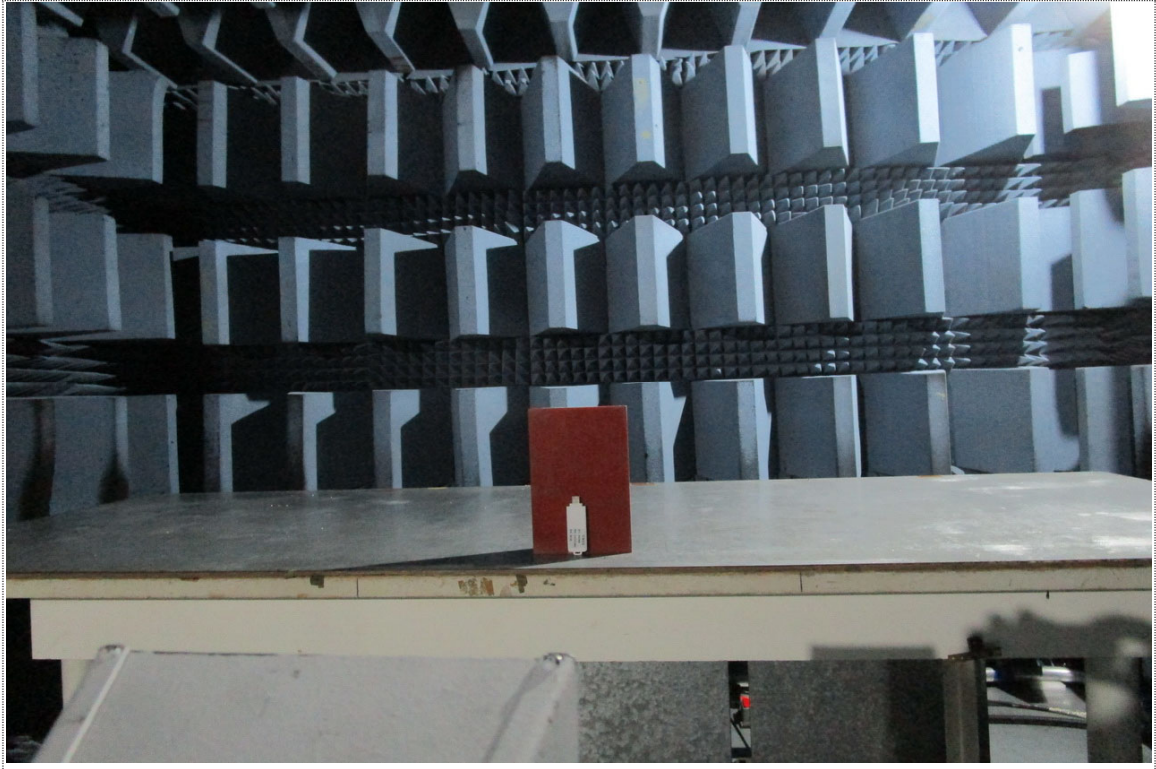
View of Measurement (Frequency Range: 1 GHz ~ 6 GHz) (Front)



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



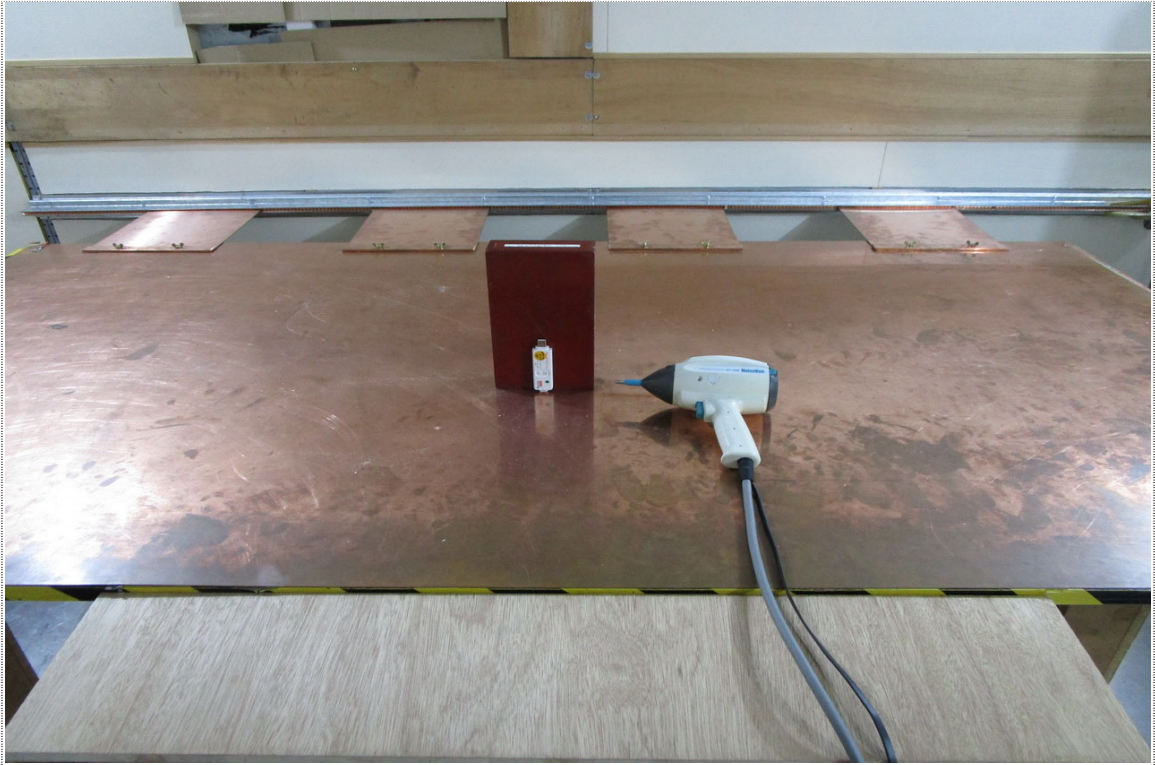
View of Measurement (Frequency Range: 250 MHz ~ 1 GHz) (Rear)



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



3.2 Electrostatic Discharge Resistance Test (ESD)



View of Measurement



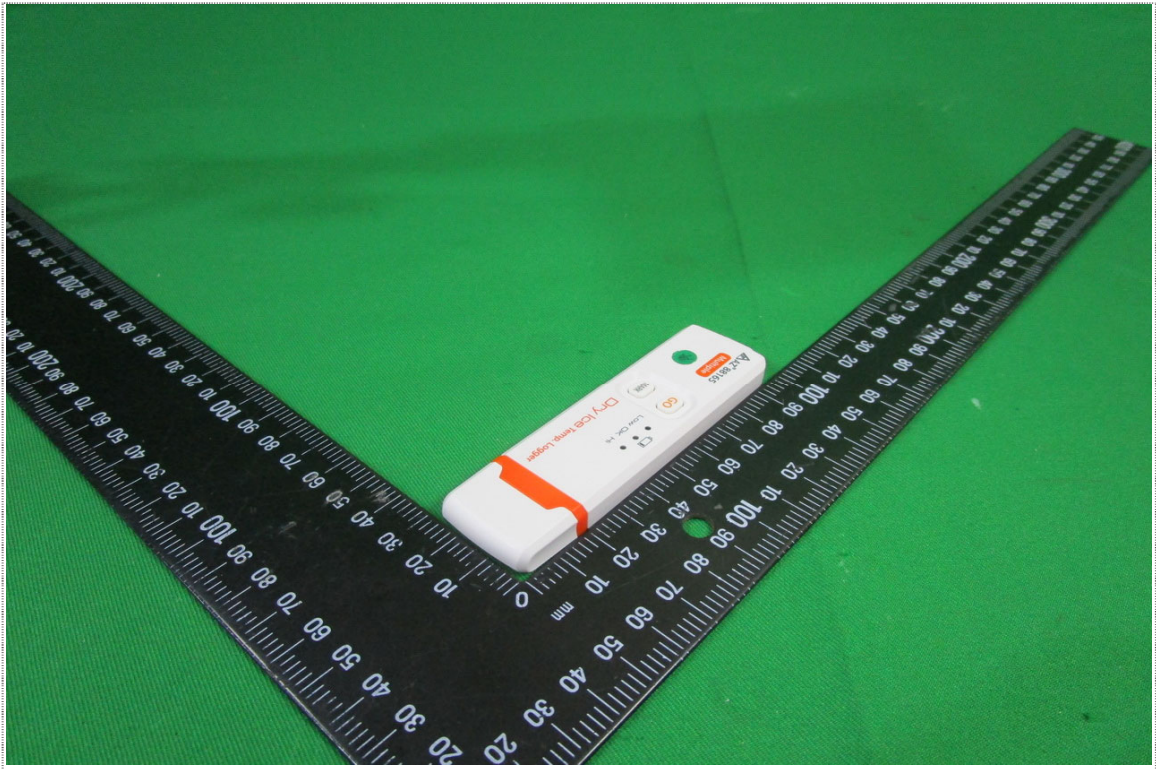
View of Measurement (Discharge point -1)



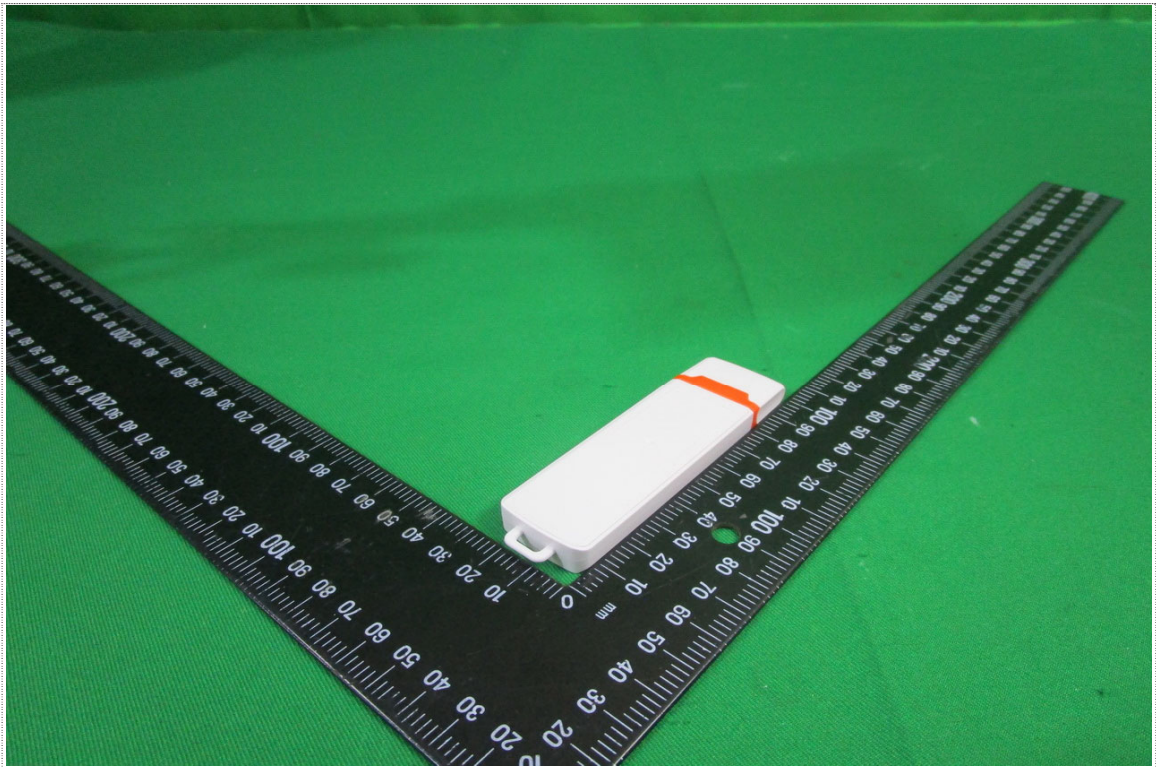
View of Measurement (Discharge point -2)



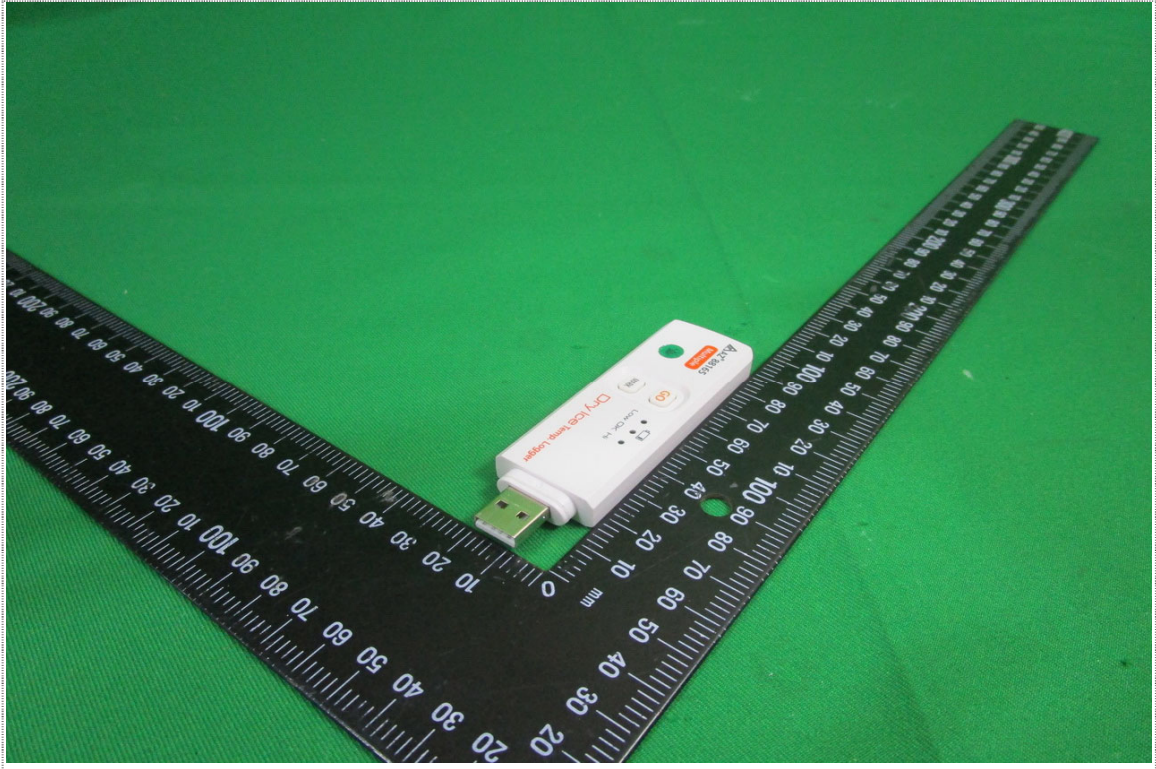
4 Photographs of EUT



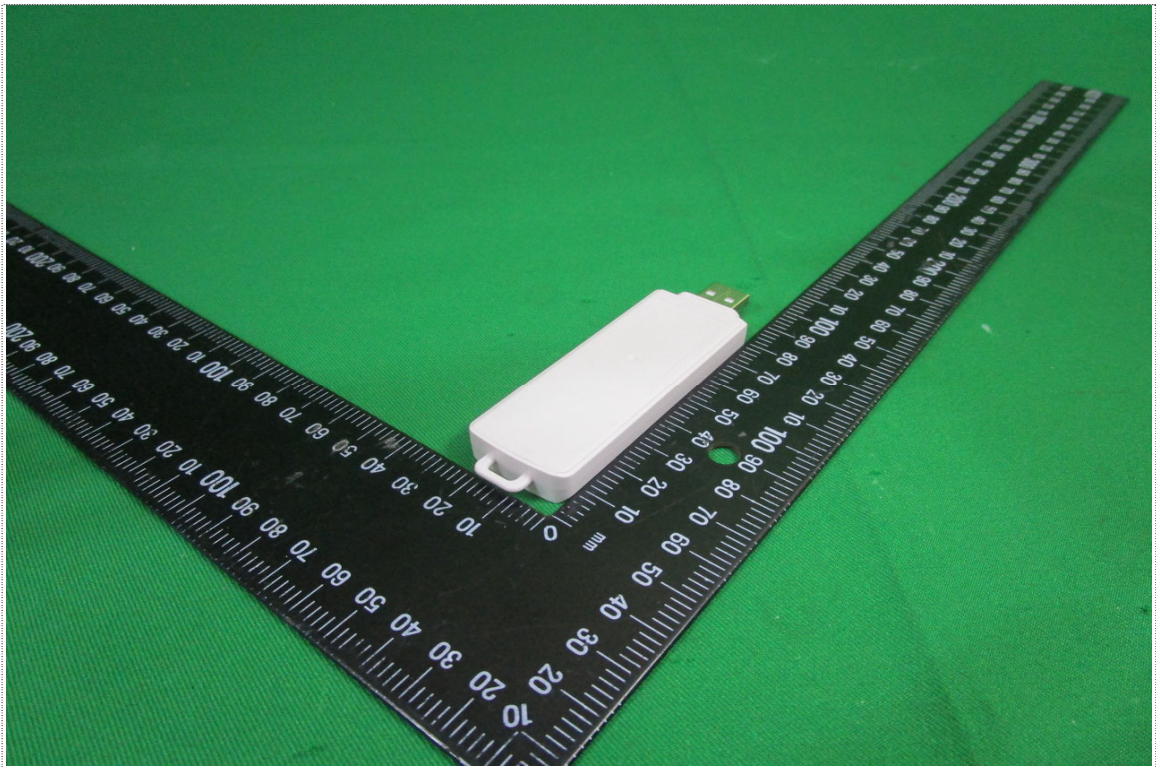
Front View of EUT-1



Rear View of EUT-1



Front View of EUT-2



Rear View of EUT-2