TESTING LABORATORY
CERTIFICATE#4323.01

FCC PART 95

TEST REPORT

For

Quanzhou Wouxun Electronics Co., Ltd.

Jiangnan High Technology Industry Park, No.928 Nanhuan Road, Quanzhou, Fujian, China

FCC ID: WVTWOUXUN24

Report Type:	**Product Type:**
Original Report	Two way Radio(MURS radio)

Project Engineer:	Stone Zhang
Report Number:	RXM210322050-00B
Report Date:	2021-05-10
Reviewed By:	Oscar Ye EMC Manager
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu province, China Tel: +86-0512-86175000 Fax: +86-0512-88934268 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant	Quanzhou Wouxun Electronics Co., Ltd.
Tested Model	KG-1000M
Series Model	KG-1000M+, KG-1000M Plus, KG-1000MX, KG-1000MX+, KG-1000MX Plus
Product Type	Two way Radio(MURS radio)
Modulation Mode	FM
Maximum Output Power (ERP)	151.82 MHz ~151.94 MHz: 32.66 dBm 154.57 MHz ~154.60 MHz: 32.49 dBm
Operation Frequency	151.82 MHz, 151.88 MHz, 151.94 MHz, 154.57 MHz, 154.60 MHz
Power Supply	DC 13.8V
*Maximum Antenna Gain:	4.5 dBi

Note: The antenna gain was provided by the applicant.

Note: The difference between tested model and series model was explained in the attached declaration letter.

**All measurement and test data in this report was gathered from production sample serial number: RXM210322050-1 (Assigned by the BACL. The EUT supplied by the applicant was received on 2021-03-22)*

Objective

This report is prepared on behalf of *Quanzhou Wouxun Electronics Co., Ltd.* in accordance with Part 2 and Part 95, Subpart J of the Federal Communication Commissions rules.

Related Submittal(s)/Grant(s)

FCC Part 15B CSR submissions with FCC ID: WVTWOUXUN24

Test Methodology

All tests and measurements indicated in this document were performed in accordance with Part 95 Subpart A, Subpart J of the Federal Communication Commissions rules with ANSI C63.26-2015, American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Item		Uncertainty
Occupied Channel Bandwidth		±5%
RF Output Power with Power meter		±0.73dB
RF conducted test with spectrum		±1.6dB
Emissions, Radiated	Below 1GHz	±4.75dB
	Above 1GHz	±4.88dB
Temperature		±1℃
Humidity		±6%
Supply voltages		±0.4%

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01) and the FCC designation No. CN1185 under the FCC KDB 974614 D01 and CAB identifier CN0004 under the ISED requirement. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

Test channel list as below:

Channel	Frequency (MHz)
1	154.57
2	154.60
3	151.82
4	151.88
5	151.94

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

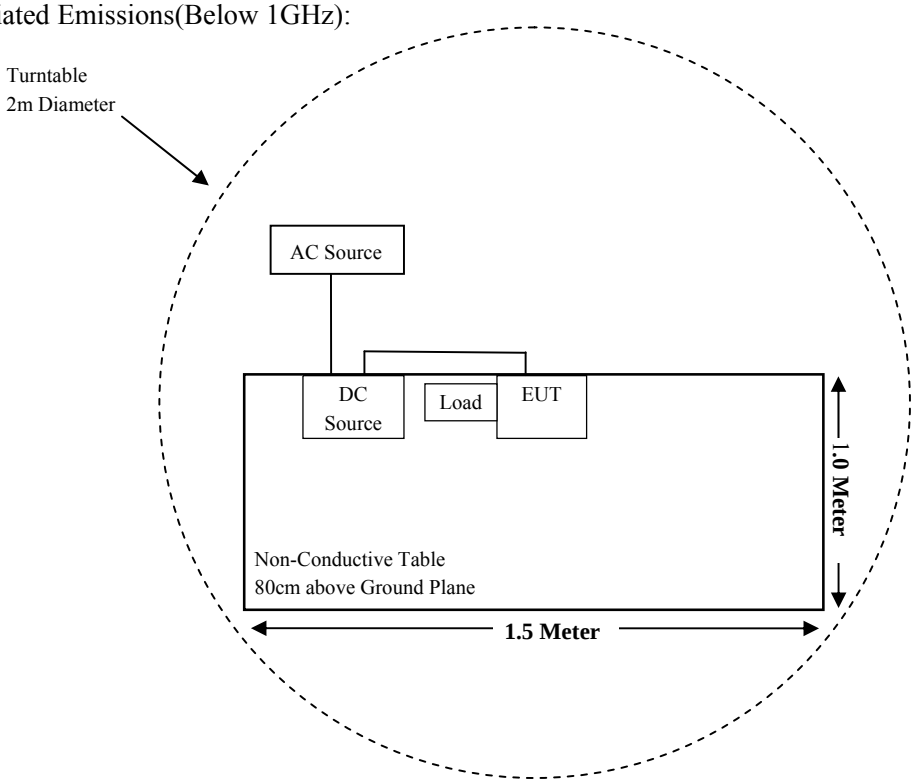
Manufacturer	Description	Model	Serial Number
Unknown	Load	Unknown	Unknown
ZHAOXIN	DC Power Supply	RXN-605D	DC002

External I/O Cable

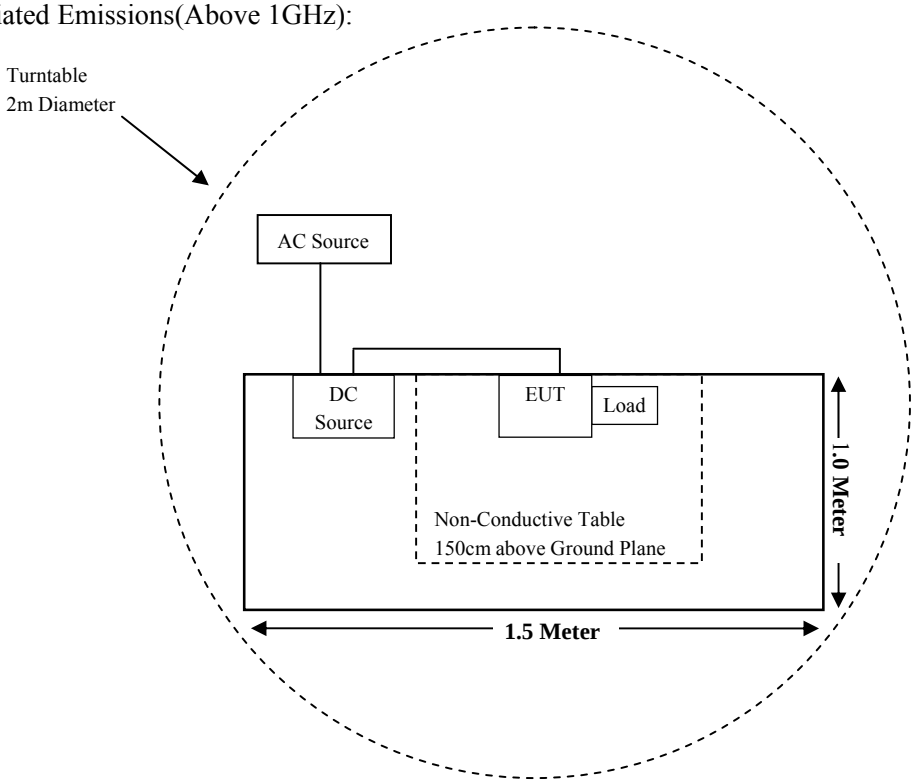
Cable Description	Length (m)	From/Port	To
Power Cable	1.5	EUT	DC Source
Power Cable	1.0	DC Source	AC Source

Block Diagram of Test Setup

For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant
§2.1046, §95.2767	RF Output Power	Compliant
§2.1049, §95.2773 & §95.2779(a)	Occupied Bandwidth and Emission Mask	Compliant
§2.1051 & §95.2779	Spurious Emission at Antenna Terminal	Compliant
FCC §2.1053 & §95.2779	Radiated Spurious Emission	Compliant
§2.1055 (d), §95.2765	Frequency Stability	Compliant
§2.1047 & §95.2775	Modulation Characteristic	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test（Chamber 1#）					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2020-11-27	2021-11-26
Sunol Sciences	Broadband Antenna	JB3	A090314-1	2020-08-05	2023-08-04
Sunol Sciences	Bilog antenna	JB3	A060217	2020-11-28	2023-11-27
HP	Signal Generator	N5183A	MY51040755	2020-11-27	2021-11-26
Sonoma Instrunent	Pre-amplifier	310N	171205	2020-08-14	2021-08-13
Rohde & Schwarz	Auto test Software	EMC32	100361	/	/
MICRO-COAX	Coaxial Cable	Cable-8	008	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-9	009	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-10	010	2020-08-15	2021-08-14
Radiated Emission Test（Chamber 2#）					
HP	Signal Generator	N5183A	MY51040755	2020-11-27	2021-11-26
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2021-04-01	2022-03-31
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2020-07-15	2023-07-14
ETS-LINDGREN	Horn Antenna	3115	6229	2020-01-07	2023-01-06
A.H.Systems,inc	Amplifier	PAM-0118P	512	2020-08-14	2021-08-13
Rohde & Schwarz	Auto test Software	EMC32	100361	/	/
MICRO-COAX	Coaxial Cable	Cable-6	006	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-11	011	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-12	012	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-13	013	2020-08-15	2021-08-14
RF Conducted Test					
Rohde & Schwarz	EMI Test Receiver	ESIB26	100146/026	2020-12-14	2021-12-13
Narda	Attenuator	10dB	010	2020-08-15	2021-08-14
BACL	Temperature & Humidity Chamber	BTH-150	30023	2020-11-25	2021-11-24
ZHAOXIN	DC Power Supply	RXN-605D	DC002	2020-10-10	2021-10-09
HP	RF communication test SET.	8920B	US36141849	2021-04-01	2022-03-31
Quanzhou Wouxun	RF Cable	Quanzhou Wouxun C01	C01	Each Time	/

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1310 & § 2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.247 (i) and subpart 1.1310, 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f^2)	30
30-300	27.5	0.073	0.2	30
300-1500	/		f/1500	30
1500-100,000	/		1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density

Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Mode	**Frequency Range (MHz)**	**Maximum Antenna Gain**		**Tune-up Conducted Power**		**Evaluation Distance (cm)**	**Power Density (mW/cm^2)**	**MPE Limit (mW/cm^2)**
		(dBi)	**(numeric)**	**(dBm)**	**(mW)**			
FM	151.82~151.94	4.5	2.82	33.00	1995.26	50	0.1791	0.2
	154.57~154.60	4.5	2.82	33.00	1995.26	50	0.1791	0.2

Note: The target output power was declared by the manufacturer.

FCC §2.1046, §95.2767 - RF OUTPUT POWER

Applicable Standard

Each MURS transmitter type must be designed such that the transmitter power output does not exceed 2Watts under normal operating conditions

Test Procedure

Conducted RF Output Power:

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

Spectrum Analyzer Setting:

R B/W	Video B/W
100 kHz	300 kHz

Test Data

Environmental Conditions

Temperature:	24.9 ℃
Relative Humidity:	51 %
ATM Pressure:	101.2 kPa

The testing was performed by Stone Zhang on 2021-04-28.

Test Result: Compliant.

Test Mode: Transmitting

Item	Frequency (MHz)	Output Power		Limit (W)	Result
		(dBm)	(W)		
MURS	151.82	32.66	1.85	2	Pass
MURS	151.88	32.64	1.84	2	Pass
MURS	151.94	32.56	1.80	2	Pass
MURS	154.57	32.49	1.77	2	Pass
MURS	154.60	32.40	1.74	2	Pass

FCC §2.1049, §95.2773 & §95.2779(a) - OCCUPIED BANDWIDTH AND EMISSION MASK

Applicable Standard

According to §95.2773, the MURS transmitter type must be designed to meet the emission bandwidthlimitations in this section:

(a) The occupied bandwidth of emissions transmitted on the center frequencies 151.820 MHz, 151.880 MHz, and 151.940 MHz must not exceed 11.25 kHz.

(b) The occupied bandwidth of emissions transmitted on the center frequencies 154.570 MHz and 154.600 MHz must not exceed 20.0 kHz.

(c) The occupied bandwidth of type A3E emissions must not exceed 8.0 kHz.

According to §95.2779(a), for transmitters designed to operate in the MURS, transmitters shall comply
with the following:

Channel center frequencies (MHz)	Paragraphs
151.820, 151.880 and 151.940	(1), (2).
154.570 & 154.600, with audio filter	(3), (4), (7).
154.570 & 154.600, without audio filter	(5), (6), (7).

(1) Each MURS transmitter type that transmits F3E or G3E emissions on 154.570 MHz or 154.600 MHz and incorporates an audio filter satisfying the requirements of §95.2775 in its design may comply with the less stringent unwanted emissions attenuation requirements set forth in paragraphs (b)(3), (4), and (7) of this section.

(2) Each MURS transmitter type that transmits on 154.570 MHz or 154.600 MHz, but does not incorporate an audio filter satisfying the requirements of §95.2775 in its design, must comply with the unwanted emissions attenuation requirements set forth in paragraphs (b)(5) through (7) of this section.

(b) Attenuation requirements. The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1) 7.27(fd−2.88 kHz) dB on any frequency removed from the channel center frequency by a displacement frequency (fd in kHz) that is more than 5.625 kHz, but not more than 12.5 kHz.

(2) 50 + 10 log (P) dB or 70 dB, whichever is the lesser attenuation, on any frequency removed from the channel center frequency by more than 12.5 kHz.

(3) 25 dB on any frequency removed from the channel center frequency by more than 10 kHz, but not more than 20 kHz.

(4) 35 dB on any frequency removed from the channel center frequency by more than 20 kHz, but not more than 50 kHz.

5) 83 log (fd ÷ 5) dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency (fd in kHz) that is more than 5 kHz, but not more than 10 kHz.

(6) 29 log (fd2 ÷ 11) dB or 50 dB, whichever is the lesser attenuation on any frequency removed from the channel center frequency by a displacement frequency (fd in kHz) that is more than 10 kHz, but not more than 50 kHz.

(7) 43 + 10 log(P) dB on any frequency removed from the channel center frequency by more than 50 kHz.

(c) Measurement bandwidths. The power of unwanted emissions in the frequency bands specified in paragraphs (b)(1) and (3) through (6) of this section is measured with a reference bandwidth of 300 Hz
.
The power of unwanted emissions in the frequency ranges specified in paragraphs (b)(2) and (7) of this section is measured with a reference bandwidth of at least 30 kHz.

Test Procedure

ANSI C63.26-2015

Test Data

Environmental Conditions

Temperature:	25.3 ℃
Relative Humidity:	51 %
ATM Pressure:	101.2 kPa

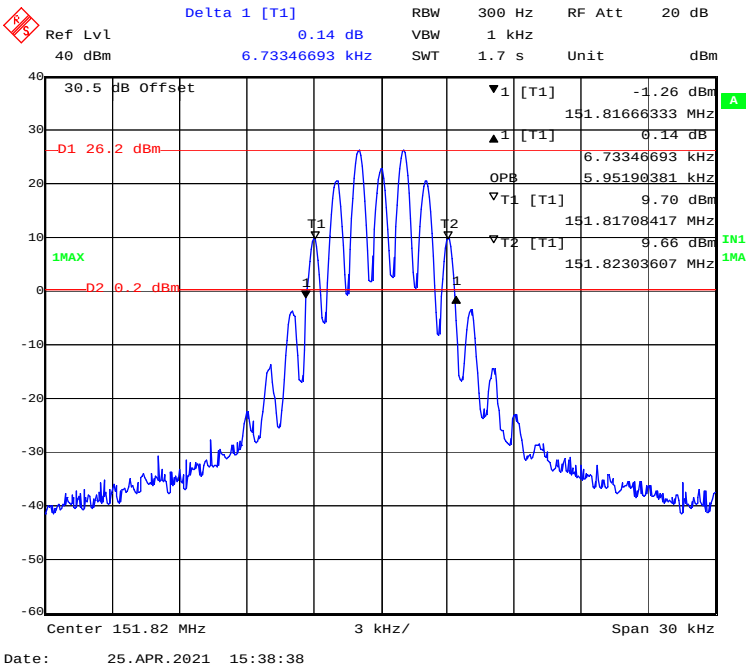
The testing was performed by Stone Zhang on 2021-04-25.

Test Mode: Transmitting

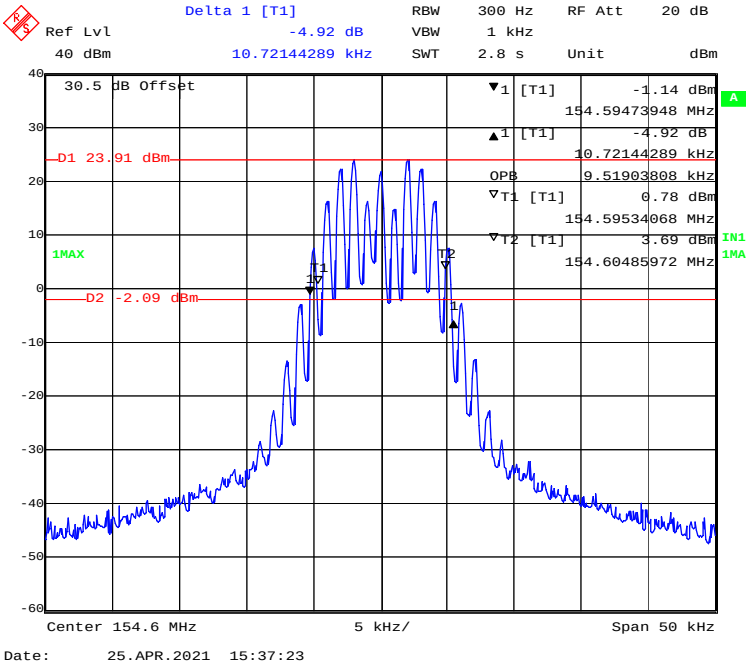
Item	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
MURS	151.82	5.952	11.25	Pass
MURS	154.60	9.519	20	Pass

Occupied Bandwidth：

151.82 MHz

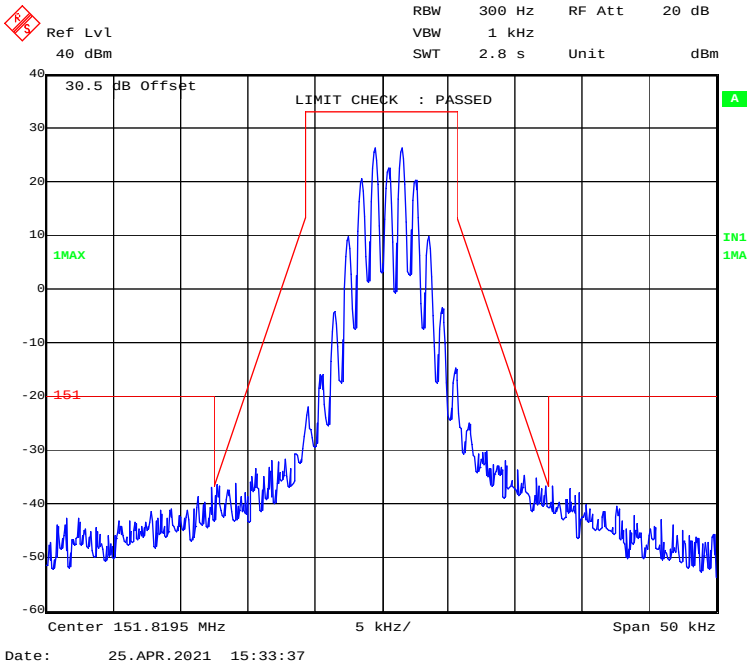


154.60 MHz

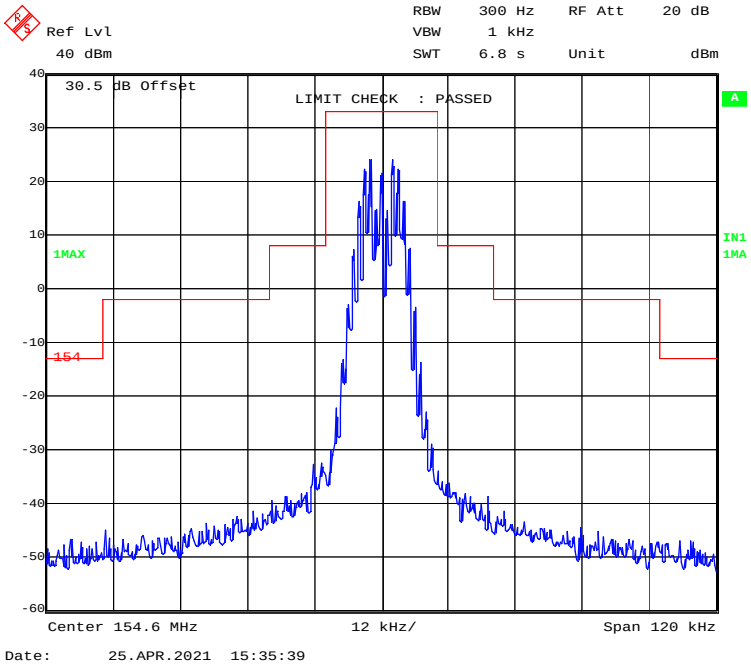


Emission Mask:

151.82 MHz



154.60 MHz



FCC §2.1051 & §95.2779 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard

According to §95.2779, for transmitters designed to operate in the MURS, transmitters shall comply with the following:

Spurious emissions in dB =10 1g (TXpwr in Watts/0.001)-the absolute level
For 151.820 MHz, 151.880 MHz and 151.940 MHz:
Spurious attenuation limit in dB = 50+10 Log10 (power out in Watts)
For 154.570 MHz and 154.600 MHz:
Spurious attenuation limit in dB = 43+10 Log10 (power out in Watts)

Test Procedure

The RF output of the EUT was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100 kHz for below 1GHz, and 1MHz for above 1GHz. sufficient scans were taken to show any out of band emissions up to 10th harmonic.

Test Data

Environmental Conditions

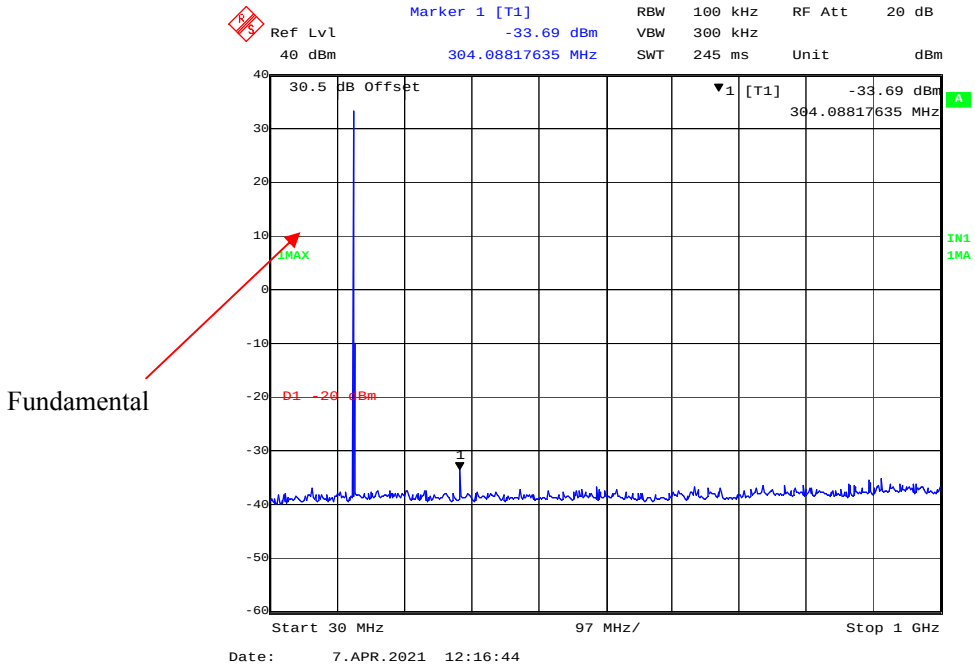
Temperature:	25.3 ℃
Relative Humidity:	52 %
ATM Pressure:	101.2 kPa

The testing was performed by Stone Zhang on 2021-04-07.

Test Mode: Transmitting

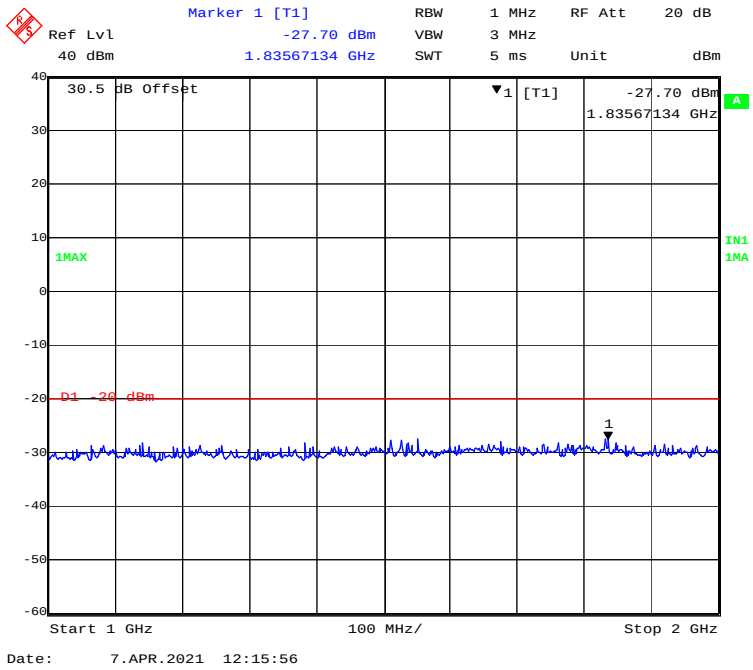
Please refer to the following plots.

151.82 MHz, 30 MHz – 1 GHz

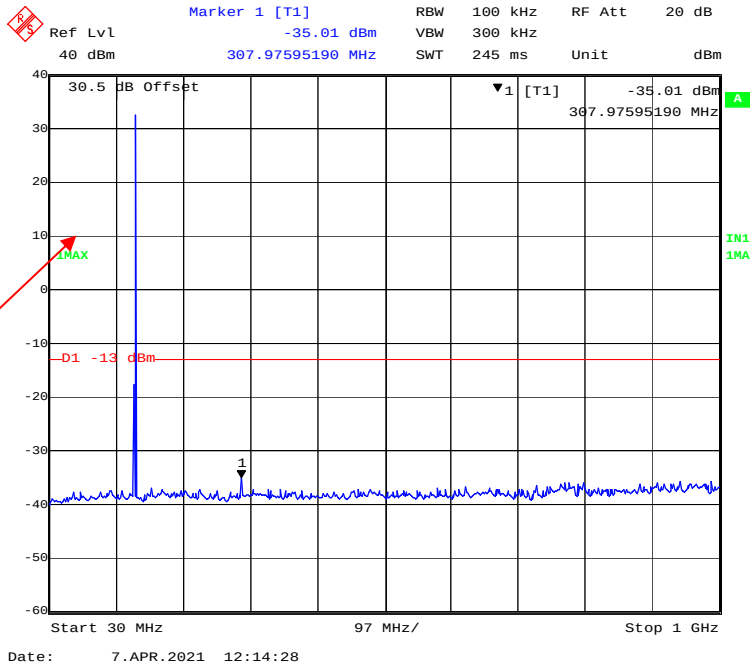


Fundamental

151.82 MHz ,1 GHz~2 GHz

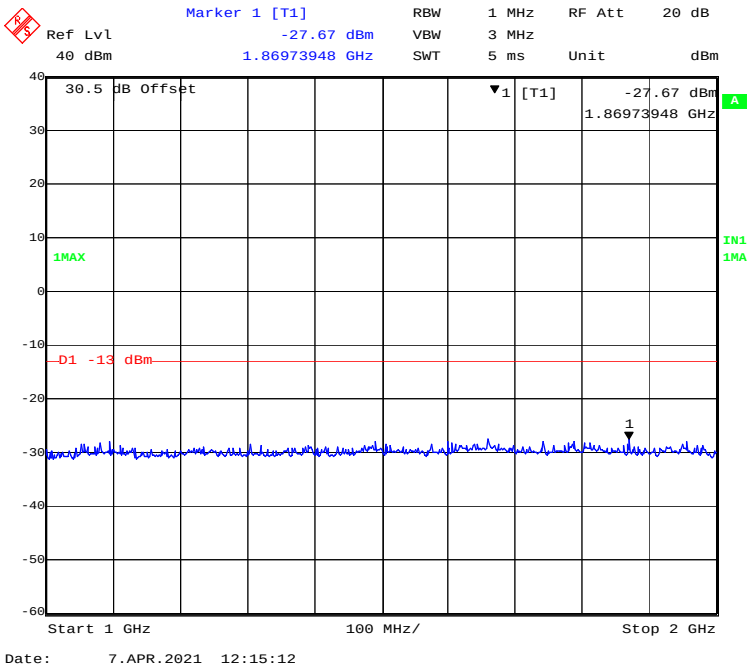


154.60 MHz, 30 MHz – 1 GHz



Fundamental

154.60 MHz, 1 GHz – 2 GHz



FCC §2.1053 & §95.2779 - RADIATED SPURIOUS EMISSION

Applicable Standard

FCC §2.1053 & §95.2779

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT .The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB =10 1g (TXpwr in Watts/0.001)-the absolute level
For 151.820 MHz, 151.880 MHz and 151.940 MHz:
Spurious attenuation limit in dB = 50+10 Log10 (power out in Watts)
For 154.570 MHz and 154.600 MHz:
Spurious attenuation limit in dB = 43+10 Log10 (power out in Watts)

Test Data

Environmental Conditions

Temperature:	25.3 ℃
Relative Humidity:	51 %
ATM Pressure:	101.2 kPa

The testing was performed by Stone Zhang on 2021-04-28.

Test Mode: Transmitting

Frequency (MHz)	Receiver Reading (dBuV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/ dBi)			
FM, Frequency：151.82 MHz										
303.64	36.12	14	100	H	-71.19	0.46	-2.12	-73.77	-20	53.77
303.64	38.45	49	100	V	-68.86	0.46	-2.12	-71.44	-20	51.44
455.46	45.89	248	150	H	-53.1	0.54	-1.68	-55.32	-20	35.32
455.46	47.02	124	150	V	-51.97	0.54	-1.68	-54.19	-20	34.19
607.28	39.23	200	150	H	-62.15	0.59	-0.73	-63.47	-20	43.47
607.28	41.35	147	150	V	-60.03	0.59	-0.73	-61.35	-20	41.35
759.10	50.37	328	150	H	-50.28	0.62	-1.45	-52.35	-20	32.35
759.10	52.64	145	150	V	-48.01	0.62	-1.45	-50.08	-20	30.08
910.92	47.64	8	150	H	-49.87	0.63	-1.00	-51.50	-20	31.5
910.92	49.67	37	150	V	-47.84	0.63	-1.00	-49.47	-20	29.47
1366.38	57.95	114	100	H	-56.15	0.82	7.82	-49.15	-20	29.15
1366.38	59.37	112	100	V	-55.96	0.82	7.82	-48.96	-20	28.96
1518.20	50.67	115	100	H	-50.72	0.83	8.23	-43.32	-20	23.32
1518.20	52.91	245	100	V	-51.43	0.83	8.23	-44.03	-20	24.03
FM, Frequency：154.60 MHz										
309.20	38.97	68	150	H	-58.69	0.47	-2.08	-61.24	-13	48.24
309.20	41.69	97	150	V	-55.97	0.47	-2.08	-58.52	-13	45.52
463.80	49.86	359	150	H	-49.89	0.55	-1.73	-52.17	-13	39.17
463.80	52.02	286	150	V	-47.73	0.55	-1.73	-50.01	-13	37.01
618.40	40.23	332	150	H	-59.60	0.59	-0.85	-61.04	-13	48.04
618.40	43.01	106	150	V	-56.82	0.59	-0.85	-58.26	-13	45.26
773.00	47.55	323	150	H	-52.28	0.62	-1.39	-54.29	-13	41.29
773.00	49.76	276	150	V	-50.07	0.62	-1.39	-52.08	-13	39.08
927.60	45.37	72	150	H	-52.31	0.64	-1.06	-54.01	-13	41.01
927.60	47.12	260	150	V	-50.56	0.64	-1.06	-52.26	-13	39.26
1082.20	52.79	71	150	H	-57.69	0.79	7.03	-51.45	-13	38.45
1082.20	55.66	67	150	V	-57.87	0.79	7.03	-51.63	-13	38.63
1546.00	44.79	196	100	H	-58.05	0.83	8.27	-50.61	-13	37.61
1546.00	45.94	347	100	V	-58.23	0.83	8.27	-50.79	-13	37.79

Note: The unit of antenna gain is dBd for frequency below 1GHz and dBi for frequency above 1GHz.
Absolute Level = Substituted Level - Cable loss + Antenna Gain
Margin = Limit- Absolute Level.

FCC§2.1055 (d), §95.2765 - FREQUENCY STABILITY

Applicable Standard

According to FCC §2.1055(a) (1), the frequency stability shall be measured with variation of ambient temperature from –30 ºC to +50 ºC, and according to FCC 2.1055(d) (2), the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point which is specified by the manufacturer.

(a) MURS transmitters that operate with an emission bandwidth of 6.25 kHz or less must be designed such that the carrier frequencies remain within ±2.0 parts-per-million (ppm) of the channel center frequencies specified in §95.2763 during normal operating conditions.

(b) MURS transmitters that operate with an emission bandwidth greater than 6.25 kHz must be designed such that the carrier frequencies remain within ±5.0 ppm of the channel center frequencies specified in § 95.2763 during normal operating conditions.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a Frequency Counter via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the Frequency Counter.

Frequency Stability vs. Voltage (item 1 or item 2 will be chosen according to different condition):

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

The output frequency was recorded for each voltage.

Test Data

Environmental Conditions

Temperature:	25.3 ℃
Relative Humidity:	51 %
ATM Pressure:	101.2 kPa

The testing was performed by Stone Zhang on 2021-04-28.

Test Mode: Transmitting

FM,Reference Frequency：151.82 MHz				
Temerature (℃)	**Voltage (V_{DC})**	**Reading (MHz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	13.8	151.82006	0.40	±2
-20		151.82007	0.46	
-10		151.82007	0.46	
0		151.82002	0.13	
10		151.82003	0.20	
20		151.82008	0.53	
30		151.8200	0.00	
40		151.82001	0.07	
50		151.82004	0.26	
20	11.73	151.82008	0.53	
20	15.87	151.82005	0.33	

FM,Reference Frequency：154.60 MHz				
Temerature (℃)	**Voltage (V_{DC})**	**Reading (MHz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	13.8	154.60001	0.06	±5
-20		154.60004	0.26	
-10		154.60007	0.45	
0		154.60003	0.19	
10		154.60006	0.39	
20		154.60008	0.52	
30		154.60009	0.58	
40		154.60007	0.45	
50		154.60008	0.52	
20	11.73	154.60009	0.58	
20	15.87	154.60009	0.58	

FCC §2.1047, §95.2775 - MODULATION CHARACTERISTIC

Applicable Standard

PPer FCC §2.1047 and §95.2775: The audio filter must be between the modulation limiter and the modulated stage of the transmitter. And at any frequency (f in kHz) between 3 and 15 kHz, the filter must have an attenuation of at least 40 log (f/3) dB more than the attenuation at 1 kHz. Above 15 kHz, it must have an attenuation of at least 28 dB more than the attenuation at 1 kHz.

Test Procedure

Test Method: ANSI C63.26:2015

Test Data

Environmental Conditions

Temperature:	25.3 ℃
Relative Humidity:	51 %
ATM Pressure:	101.2 kPa

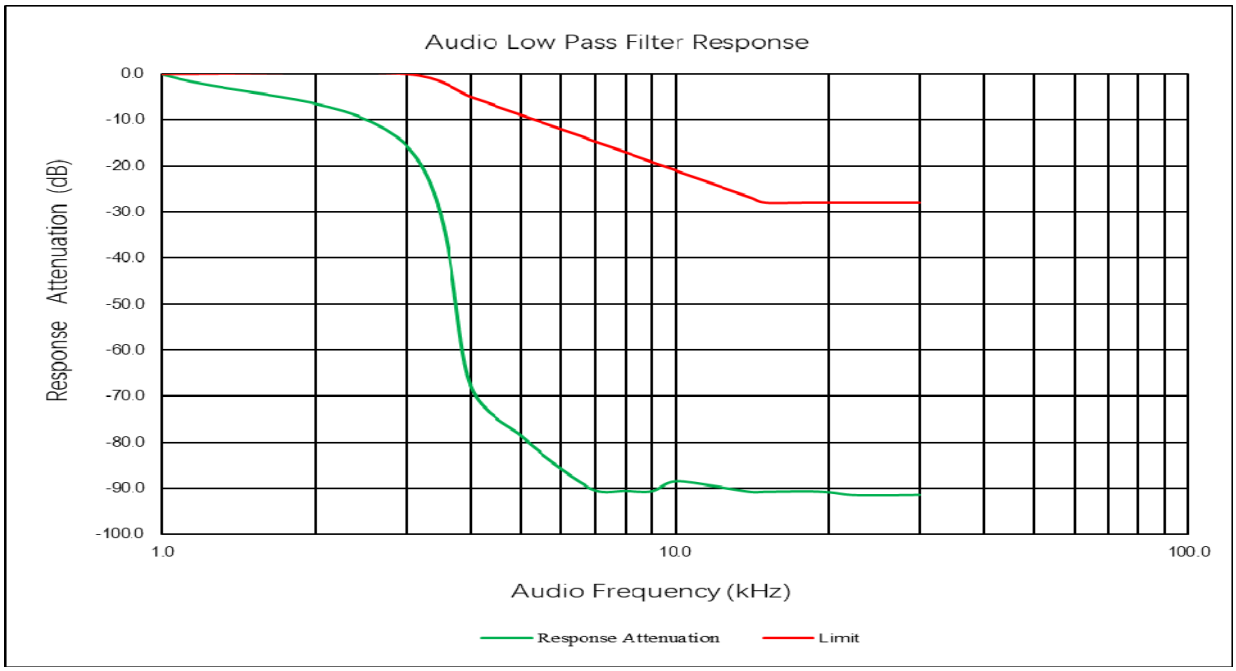
The testing was performed by Stone Zhang on 2021-04-28.

Test Mode: Transmitting

Please refer to the following plots.

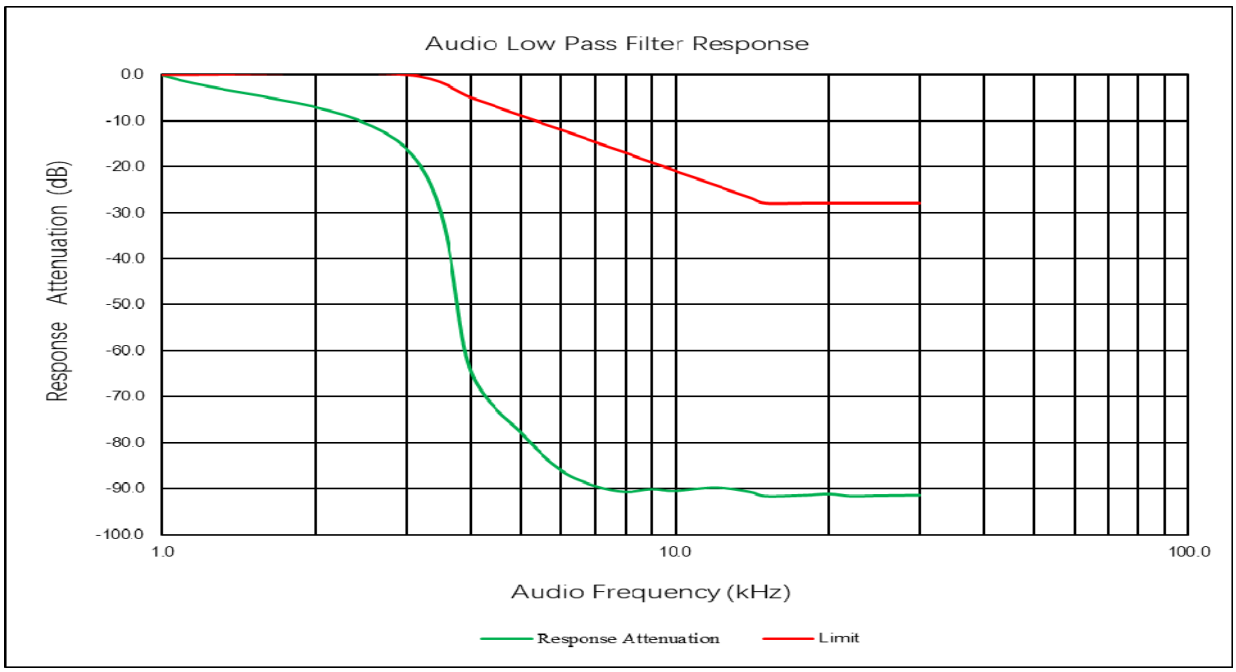
Audio frequency lows pass filter response

Carrier Frequency:151.82 MHz		
Audio Frequency (kHz)	**Response Attenuation (dB)**	**Limit (dB)**
1.0	0	/
3.0	-15.6	0
4.0	-67.8	-5
5.0	-78.5	-8.9
6.0	-85.8	-12
7.0	-90.5	-14.7
8.0	-90.6	-17
9.0	-90.7	-19.1
10.0	-88.5	-20.9
12.0	-89.6	-24.1
14.0	-90.8	-26.8
15.0	-90.8	-28
18.0	-90.7	-28
20.0	-90.9	-28
22.0	-91.5	-28
25.0	-91.6	-28
30.0	-91.5	-28



Audio frequency lows pass filter response

Carrier Frequency:154.60 MHz		
Audio Frequency (kHz)	**Response Attenuation (dB)**	**Limit (dB)**
1.0	0	/
3.0	-16.1	0
4.0	-64.4	-5
5.0	-77.7	-8.9
6.0	-86	-12
7.0	-89.4	-14.7
8.0	-90.7	-17
9.0	-90.1	-19.1
10.0	-90.5	-20.9
12.0	-89.7	-24.1
14.0	-90.7	-26.8
15.0	-91.6	-28
18.0	-91.4	-28
20.0	-91.1	-28
22.0	-91.6	-28
25.0	-91.5	-28
30.0	-91.4	-28



Declarations

1: BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.

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

3: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

4: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

5: This report cannot be reproduced except in full, without prior written approval of the Company.

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******* END OF REPORT*******