




Prüfbericht-Nr.: <i>Test Report No.:</i>	CN24NTLA 001	Auftrags-Nr.: <i>Order No.:</i>	158290277	Seite 1 von 15 <i>Page 1 of 15</i>	
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	09.05.2024		
Auftraggeber: <i>Client:</i>	Carrera Toys GmbH Rennbahn Allee 1, 5412 Puch, Salzburg, Austria				
Prüfgegenstand: <i>Test Item:</i>	Short Range Device - Radio Control Toy Transmitter (2.4GHz)				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	370900049				
Auftrags-Inhalt: <i>Order content:</i>	Radio Equipment testing				
Prüfgrundlage: <i>Test specification:</i>	EN 300 440 V2.2.1:2018, EN 301 489-1 V2.2.3:2019 , EN 301 489-3 V2.3.2:2023, EN 62479:2010, AS/NZS 4268:2017+A1:2021, Radiation Protection Series S-1 (Rev. 1), RPS S-1 Advisory Note				
Wareneingangsdatum: <i>Date of receipt:</i>	09.05.2024				
Prüfmuster-Nr.: <i>Test sample No.:</i>	A003714707-002 to 007				
Prüfzeitraum: <i>Testing period:</i>	09.05.2024 –16.05.2024				
Ort der Prüfung: <i>Place of testing:</i>	Shenzhen				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland Hong Kong Ltd.				
Prüfergebnis*: <i>Test result*:</i>	Pass				
geprüft von / tested by:		kontrolliert von / reviewed by:			
30.05.2024	Gigi Tam Engineer		30.05.2024	Billy Yip Laboratory Manager	
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>
Sonstiges / Other: Client declared conformity with Directive 2009/48/EC. “Decision Rule” document announced in our website (https://www.tuv.com/landingpage/en/qm-gcn/) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.					
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet * Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested					
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

<p>1</p>	<p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfbedingungen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>
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<p>3</p>	<p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>
<p>4</p>	<p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p>

Table of Content

Page

Cover Page	1
Table of Content.....	3
Product Information	4
Client Declaration.....	4
Submitted Documents	5
Remarks	5
List of Test and Measurement Instruments.....	6
Results EN 300 440 V2.2.1:2018/ AS/NZS 4268:2017+A1:2021	8
Transmitter 2.4 GHz	8
EN 300 440 – 4.2.2/ AS/NZS 4268 – 6.3 Equivalent Isotropic Radiated Power	Pass 8
EN 300 440 – 4.2.3/ AS/NZS 4268 – 6.5 Emission bandwidth limits.....	Pass 8
EN 300 440 – 4.2.3/ AS/NZS 4268 – 6.6 Permitted range of operating frequencies.....	Pass 9
EN 300 440 – 4.2.4/ AS/NZS 4268 – 6.4 Unwanted emissions in spurious domain	Pass 10
EN 300 440 – 4.2.5 Duty Cycle	Pass 10
Results EN 301 489-3 V2.3.2:2023	11
Emission.....	11
EN 301 489-1 – 8.2 Radiated Emission - Enclosure of Ancillary Equipment.....	N/A 11
EN 301 489-1 – 8.3 Conducted Emission - DC Power Input / Output Ports.....	N/A 11
EN 301 489-1 – 8.4 Conducted Emission - AC Mains Power Input / Output Ports	N/A 11
EN 301 489-1 – 8.5 Harmonic Current Emissions - AC Mains Input Port	N/A 11
EN 301 489-1 – 8.6 Voltage Fluctuations and Flicker - AC Mains Input Port	N/A 11
EN 301 489-1 – 8.7 Conducted Emission –Wired Network Ports.....	N/A 11
Immunity.....	12
EN 301 489-1 – 9.2 Radio Frequency Electromagnetic Field	Pass 12
EN 301 489-1 – 9.3 Electrostatic Discharge	Pass 12
EN 301 489-1 – 9.4 Fast Transients, Common Mode	N/A 13
EN 301 489-1 – 9.5 Radio Frequency, Common Mode.....	N/A 13
EN 301 489-1 – 9.6 Transients and Surges - Vehicular Environment	N/A 13
EN 301 489-1 – 9.7 Voltage Dips and Interruptions	N/A 13
EN 301 489-1 – 9.8 Surges.....	N/A 13
Results EN 62479:2010	14
EN 62479:2010– Human exposure to electromagnetic fields (10 MHz to 300 GHz)	Pass 14
Results Radiation Protection Series S-1 (Rev. 1).....	15
RPS S-1 (Rev. 1) –Standard for Limiting Exposure to Radio frequency Fields (100kHz – 300GHz)	Pass 15
Appendix 1 – Test protocols	
Appendix 2 – Test setup	
Appendix 3 – Photo documentation	

EMC	<p>Type of equipment Standalone device</p> <p>Equipmentclassification</p> <p><input type="checkbox"/> Fixed use <input checked="" type="checkbox"/> Portable use <input type="checkbox"/> Vehicle use</p> <p>List of ports</p> <p><input checked="" type="checkbox"/> No input/output port <input type="checkbox"/> AC mains input/output ports <input type="checkbox"/> DC power input/output ports, DC-cable longer than 3 m <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Signal ports <input type="checkbox"/> Wired network ports <input type="checkbox"/> Control ports</p> <p>Independent Operation Modes</p> <p>Transmitter: <input checked="" type="checkbox"/> Transmitting <input type="checkbox"/> Standby</p> <p>Reference Receiver: <input checked="" type="checkbox"/> Forward, backward, left and right movement <input checked="" type="checkbox"/> Standby</p> <p>Minimum performance level declared by the manufacturer</p> <p>Transceiver can transmit the signal and properly respond to the received signal.</p> <p>Primary functions during EMC exposure</p> <p>Transceiver can transmit the signal and properly respond to the received signal.</p>	
Others	<p>The manufacturer declares that the models listed below are all identical in schematics, PCB layout, and electronic components used except model number.</p>	
Models	Identification	Description
	370900049	2.4GHz RC toy transmitter

Submitted Documents

- Declaration of Equivalence
- Declaration of Conformity in Toy Safety Directive 2009/48/EC

Remarks

A reference receiver of model 370181066/ 370181066P/ 370181067/ 370181067P/ 370200996X/ 370200996P/ 370200997X/ 370200997P/ 370200999X/ 370200999P provided by the client was used to perform the EMC test. The test report number of receiver 370181066/ 370181066P/ 370181067/ 370181067P is CN24Y9ZZ 001 and the test report number of receiver 370200996X/ 370200996P/ 370200997X/ 370200997P/ 370200999X/ 370200999P is CN24YRE8 001, both issued by TÜV Rheinland Hong Kong Ltd.

List of Test and Measurement Instruments

Global United Technology Services Co., Ltd.

Radio Frequency Test

Equipment	Manufacturer	Type	S/N	Cal Date	Due Date
MXA Signal Analyzer	Agilent	N9020A	GTS566	April 11, 2024	April 10, 2025
EMI Test Receiver	R&S	ESCI 7	GTS552	April 11, 2024	April 10, 2025
PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	April 11, 2024	April 10, 2025
MXG vector Signal Generator	Agilent	N5182A	GTS567	April 11, 2024	April 10, 2025
ESG Analog Signal Generator	Agilent	E4428C	GTS568	April 11, 2024	April 10, 2025
USB RF Power Sensor	DARE	RPR3006W	GTS569	April 11, 2024	April 10, 2025
RF Switch Box	Shongyi	RFSW3003328	GTS571	April 11, 2024	April 10, 2025
Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	April 11, 2024	April 10, 2025
Thermo meter	JINCHUANG	GSP-8A	GTS641	April 18, 2024	April 17, 2025

Spurious Radiation

Equipment	Manufacturer	Type	S/N	Cal Date	Due Date
3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)*6.4(H)	GTS250	June 23, 2021	June 22, 2024
Control Room	ZhongYu Electron	6.2(L)*2.5(W)*2.4(H)	GTS251	N/A	N/A
EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 11, 2024	April 10, 2025
BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 19, 2023	March 18, 2025
Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	April 17, 2023	April 16, 2025
EMI Test Software	AUDIX	E3	N/A	N/A	N/A
Coaxial Cable	GTS	N/A	GTS213	April 11, 2024	April 10, 2025
Coaxial Cable	GTS	N/A	GTS211	Nov. 13, 2023	Nov.12, 2024
Coaxial cable	GTS	N/A	GTS210	April 11, 2024	April 10, 2025
Coaxial Cable	GTS	N/A	GTS212	April 11, 2024	April 10, 2025
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Oct. 29, 2023	Oct. 28, 2024
Loop Antenna	ZHINAN	ZN30900A	GTS534	Oct. 29, 2023	Oct. 28, 2024
Broadband Preamplicifier	SCHWARZBECK	BBV9718	GTS535	March 13, 2024	March 12, 2025
Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 11, 2024	April 10, 2025
Horn Antenna (18-26.5GHz)	/	UG-598A/U	GTS664	Nov. 08, 2023	Nov.07, 2024
Horn Antenna (26.5-40GHz)	A.H Systems	SAS-573	GTS665	April 11, 2024	April 10, 2025
FSV· Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	April 18, 2024	April 17, 2025
Amplifier	/	LNA-1000-30S	GTS650	July 31. 2023	July 30. 2024
CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS668	July 31. 2023	July 30. 2024
Thermo meter	JINCHUANG	GSP-8A	GTS643	July 31. 2023	July 30. 2024

RE cable 1	GTS	N/A	GTS675	July 31. 2023	July 30. 2024
RE cable 2	GTS	N/A	GTS676	July 31. 2023	July 30. 2024
RE cable 3	GTS	N/A	GTS677	July 31. 2023	July 30. 2024
RE cable 4	GTS	N/A	GTS678	July 31. 2023	July 30. 2024
RE cable 5	GTS	N/A	GTS679	July 31. 2023	July 30. 2024
RE cable 6	GTS	N/A	GTS680	June 23, 2021	June 22, 2024
RE cable 7	GTS	N/A	GTS681	N/A	N/A
RE cable 8	GTS	N/A	GTS682	April 11, 2024	April 10, 2025

Electrostatic Discharge

Equipment	Manufacturer	Type	S/N	Cal Date	Due Date
ESD Simulator	LINCEL	ESD-203B	GTS645	April 16, 2024	April 15, 2025
Thermo meter	KTJ	TA328	GTS243	April 17, 2024	April 16, 2025

Radio Frequency Electromagnetic Field

Equipment	Manufacturer	Type	S/N	Cal Date	Due Date
Probe	STT	SEM-600	GTS648	April 16, 2024	April 15, 2025
Stacked Log.-Per.- Broadband Antenna	SCHWARZBECK	STLP 9129	GTS658	Aug. 04, 2023	Aug. 03, 2024
MXG vector Signal Generator	Agilent	N5181A	GTS659	Nov. 08, 2023	Nov.07, 2024
Power amplifier	Micotop	MPA-20- 1000-250	GTS660	Aug. 04, 2023	Aug. 03, 2024
Power amplifier	Micotop	MPA-1000- 6000-100	GTS661	Aug. 04, 2023	Aug. 03, 2024
EPM S SERIES POWER METER	Agilent	E4419B	GTS662	Nov. 08, 2023	Nov.07, 2024
E-SERIES AVG POWER SENSOR	HP	E9301A	GTS670	Nov. 08, 2023	Nov.07, 2024
Thermo meter	JINCHUANG	GSP-8A	GTS643	April 18, 2024	April 17, 2025

Results EN 300 440 V2.2.1:2018/ AS/NZS 4268:2017+A1:2021
Transmitter 2.4 GHz

EN 300 440 – 4.2.2/ AS/NZS 4268 – 6.3 Equivalent Isotropic Radiated Power					Pass
Measurement uncertainty: $\pm 2.5\text{dB}$					
Conducted Measurement					
Tx Freq. (MHz)	Temp. (°C)	Voltage (V)	e.i.r.p. (dBm)	Limit (dBm)	Verdict
2410	T _{nor}	V _{nor}	-5.61	10.0	Pass
	T _{min}	V _{min}	-5.59	10.0	Pass
	T _{min}	V _{max}	-5.61	10.0	Pass
	T _{max}	V _{min}	-5.64	10.0	Pass
	T _{max}	V _{max}	-5.60	10.0	Pass
2442	T _{nor}	V _{nor}	-5.06	10.0	Pass
	T _{min}	V _{min}	-5.14	10.0	Pass
	T _{min}	V _{max}	-5.14	10.0	Pass
	T _{max}	V _{min}	-5.12	10.0	Pass
	T _{max}	V _{max}	-5.08	10.0	Pass
2474	T _{nor}	V _{nor}	-5.05	10.0	Pass
	T _{min}	V _{min}	-5.01	10.0	Pass
	T _{min}	V _{max}	-5.03	10.0	Pass
	T _{max}	V _{min}	-5.03	10.0	Pass
	T _{max}	V _{max}	-5.00	10.0	Pass

EN 300 440 – 4.2.3/ AS/NZS 4268 – 6.5 Emission bandwidth limits						Pass
Measurement uncertainty: $\pm 1 \times 10^{-7}$						
Tx Freq. (MHz)	Temp (°C)	Volt (V)	Frequency (MHz)	Limit (MHz)	Verdict	Remark
Occupied bandwidth (99%)						
2410	T _{nor}	V _{nor}	2409.95	> 2400.000	Pass	Please refer to Appendix 1
			2410.64	< 2483.500	Pass	
2442	T _{nor}	V _{nor}	2440.60	> 2400.000	Pass	
			2442.53	< 2483.500	Pass	
2474	T _{nor}	V _{nor}	2472.57	> 2400.000	Pass	
			2474.54	< 2483.500	Pass	

EN 300 440 – 4.2.3/ AS/NZS 4268 – 6.6 Permitted range of operating frequencies						Pass
Measurement uncertainty: $\pm 1 \times 10^{-7}$						
Tx Freq. (MHz)	Temp (°C)	Volt (V)	Frequency (MHz)	Limit (MHz)	Verdict	Remark
Frequency range						
2410	T _{nor}	V _{nor}	2409.41	> 2400.000	Pass	Please refer to Appendix 1
	T _{min}	V _{min}	2409.42		Pass	
	T _{min}	V _{max}	2409.42		Pass	
	T _{max}	V _{min}	2409.42		Pass	
	T _{max}	V _{max}	2409.41		Pass	
2474	T _{nor}	V _{nor}	2474.62	< 2483.500	Pass	
	T _{min}	V _{min}	2474.62		Pass	
	T _{min}	V _{max}	2474.62		Pass	
	T _{max}	V _{min}	2474.62		Pass	
	T _{max}	V _{max}	2474.62		Pass	

EN 300 440 – 4.2.4/ AS/NZS 4268 – 6.4 Unwanted emissions in spurious domain					Pass
Measurement uncertainty: ±6 dB					
Operating mode: 2410MHz – Vertical Polarization					
Frequency range (MHz)	Spurious Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)	Verdict
25 – 1000	No Peak Found	--	-54.00	--	Pass
1000 – 25000	No Peak Found	--	-30.00	--	Pass
Operating mode: 2410MHz – Horizontal Polarization					
Frequency range (MHz)	Spurious Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)	Verdict
25 – 1000	No Peak Found	--	-54.00	--	Pass
1000 – 25000	No Peak Found	--	-30.00	--	Pass
Operating mode: 2474MHz – Vertical Polarization					
Frequency range (MHz)	Spurious Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)	Verdict
25 – 1000	No Peak Found	--	-54.00	--	Pass
1000 – 25000	No Peak Found	--	-30.00	--	Pass
Operating mode: 2474MHz – Horizontal Polarization					
Frequency range (MHz)	Spurious Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)	Verdict
25 – 1000	No Peak Found	--	-54.00	--	Pass
1000 – 25000	No Peak Found	--	-30.00	--	Pass
Standby mode: Vertical Polarization					
Frequency range (MHz)	Spurious Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)	Verdict
25 – 1000	45.217	-74.73	-57.00	-17.73	Pass
	90.537	-73.64	-57.00	-16.64	Pass
	726.805	-75.92	-57.00	-18.92	Pass
1000 – 25000	No Peak Found	--	-30.00	--	Pass
Standby mode: Horizontal Polarization					
Frequency range (MHz)	Spurious Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)	Verdict
25 – 1000	586.844	-76.92	-57.00	-19.92	Pass
1000 – 25000	No Peak Found	--	-30.00	--	Pass
Remark: If the spurious emissions are 20dB below the limit, the result column will mention no peak found.					
EN 300 440 – 4.2.5 Duty Cycle					Pass
According to table 4, clause 4.2.5.4 of EN300 440, the EUT does not have restriction on the duty cycle.					

Results EN 301 489-3 V2.3.2:2023

Emission

EN 301 489-3 – 7.1.1 General / 7.1.2 Special conditions for emissions EN 301 489-1 – 8.2 Radiated Emission - Enclosure of Ancillary Equipment	N/A
No ancillary equipment was provided for testing.	
EN 301 489-3 – 7.1.1 General / 7.1.2 Special conditions for emissions EN 301 489-1 – 8.3 Conducted Emission - DC Power Input / Output Ports	N/A
This test is applicable for radio equipment and ancillary equipment for fixed use that may have DC cables longer than 3 m.	
EN 301 489-3 – 7.1.1 General / 7.1.2 Special conditions for emissions EN 301 489-1 – 8.4 Conducted Emission - AC Mains Power Input / Output Ports	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply.	
EN 301 489-3 – 7.1.1 General / 7.1.2 Special conditions for emissions EN 301 489-1 – 8.5 Harmonic Current Emissions - AC Mains Input Port	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply.	
EN 301 489-3 – 7.1.1 General / 7.1.2 Special conditions for emissions EN 301 489-1 – 8.6 Voltage Fluctuations and Flicker - AC Mains Input Port	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply.	
EN 301 489-3 – 7.1.1 General / 7.1.2 Special conditions for emissions EN 301 489-1 – 8.7 Conducted Emission –Wired Network Ports	N/A
There is no telecommunication ports on the EUT.	

Immunity

EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.2 Radio Frequency Electromagnetic Field							Pass
Ambient Temperature: 24°C, Relative Humidity: 51% Operating mode: I) Motor ON mode II)Tx and Rx are switched ON, Standby mode							
Frequency range (MHz)	Pol.	Mod.	Level	Result	Crit.	Verdict	
80 - 6000	Vertical	80% AM 1kHz	3V/m	Mode of operation: I & II No unintentional response found. No degradation of performance.	A	Pass	
80 - 6000	Horizontal	80% AM 1kHz	3V/m	Mode of operation: I & II No unintentional response found. No degradation of performance.	A	Pass	

EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.3 Electrostatic Discharge							Pass
Ambient Temperature: 24°C, Relative Humidity: 51% Operating mode: I) Motor On mode II)Tx and Rx are switched ON, Standby mode							
Direct application of discharge							
Discharge location	Discharge type	Test level	Result	Crit.	Verdict		
Enclosure	Air	±2,4,8kV	Mode of operation: I & II No unintentional response found. Operated as intended.	B	Pass		
Screws	Contact	±2,4kV	Mode of operation: I & II No unintentional response found. Operated as intended.	B	Pass		
Indirect application of discharge							
Discharge location	Discharge type	Test level	Result	Crit.	Verdict		
HCP	Contact	±4kV	Mode of operation: I & II No unintentional response found. Operated as intended.	B	Pass		
VCP	Contact	±4kV	Mode of operation: I & II No unintentional response found. Operated as intended.	B	Pass		
Remark: The intermediate levels of ESD were evaluated and the EUT passes with the ESD test at the highest severity level.							

EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.4 Fast Transients, Common Mode	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply. In addition, there is no DC port, signal ports, wired network ports, control ports.	
EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.5 Radio Frequency, Common Mode	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply. In addition, there is no signal ports, wired network ports, control ports.	
EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.6 Transients and Surges - Vehicular Environment	N/A
The EUT is not intended for vehicular use.	
EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.7 Voltage Dips and Interruptions	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply.	
EN 301 489-3 –7.2.1 General / 7.2.2 Special conditions for immunity EN 301 489-1 – 9.8 Surges	N/A
EUT is not indented for direct connection to a dedicated AC/DC power supply. In addition, there is no wired network ports on the EUT.	

Results EN 62479:2010

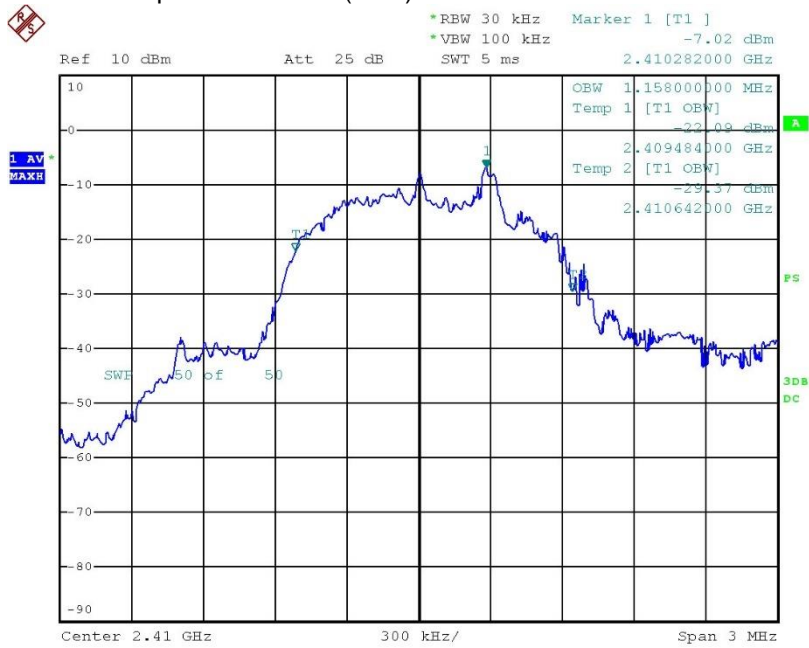
EN 62479:2010– Human exposure to electromagnetic fields (10 MHz to 300 GHz)			Pass
Test Case	Result	Limit	Verdict
4.2	See Test results EN 300 440 4.2.2 equivalent isotropic radiated power, 4.2.4 unwanted emissions in spurious domain 4.3.5 receiver spurious radiation	Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level P_{MAX} . $P_{MAX} = SAR_{MAX} * m$ $= 2W/Kg * 10g$ $= 20mW$ P_{MAX} : Low-power exclusion level (mW) SAR_{MAX} : SAR limit (W/Kg) m: averaging mass (g)	Pass

Results Radiation Protection Series S-1 (Rev. 1)

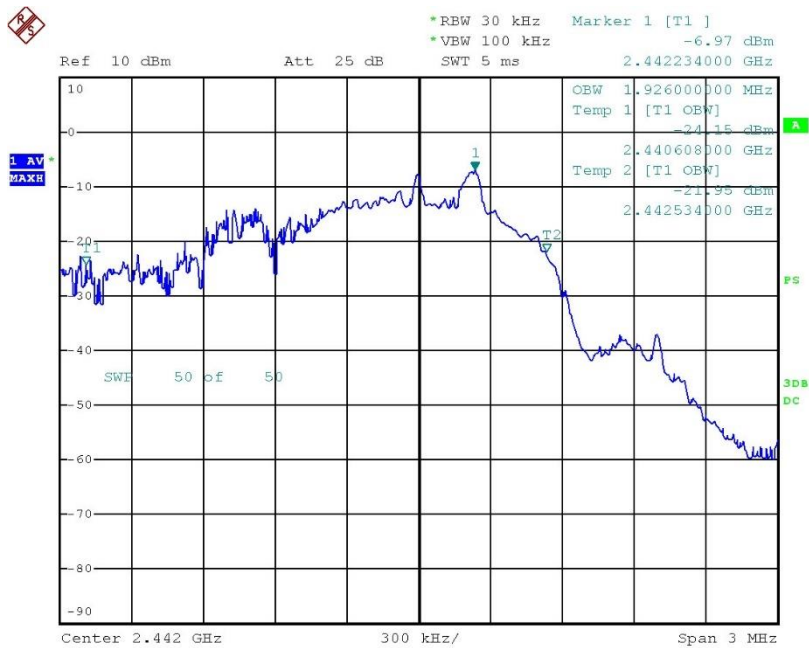
RPS S-1 (Rev. 1) –Standard for Limiting Exposure to Radio frequency Fields (100kHz – 300GHz) Pass				
Testing requirements	Low Power Exclusion Level at frequency, f	Output power (mW)	Limit (mW)	Verdict
RPS S-1 Advisory Note	$100 \text{ kHz} \leq f \leq 6 \text{ GHz}$	0.316	20mW	Pass
	$6 \text{ GHz} \leq f \leq 30 \text{ GHz}$	N/A	8mW	
	$30 \text{ GHz} \leq f \leq 300 \text{ GHz}$	N/A	4mW	

Appendix 1

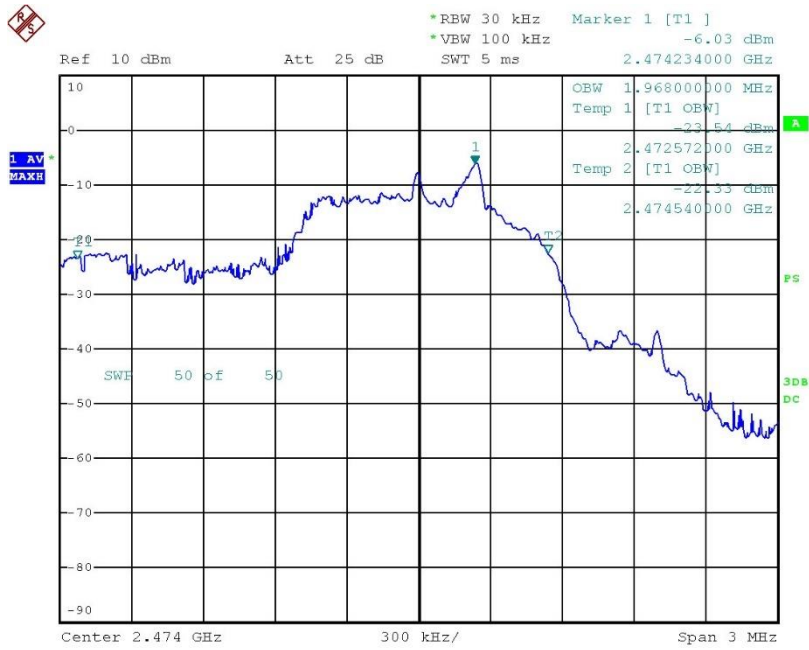
Test protocols

Test results for occupied bandwidth (99%)


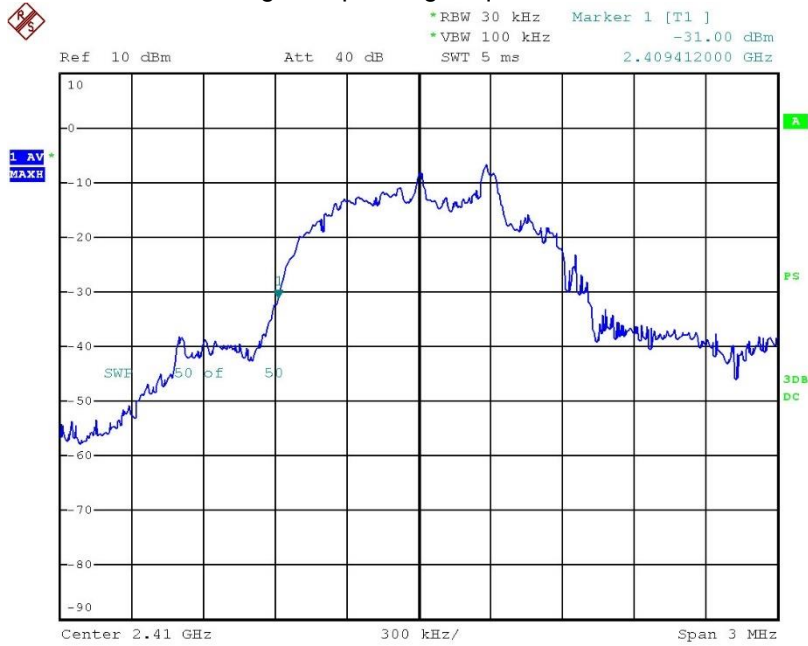
2410MHz at 25°C, 3.0V



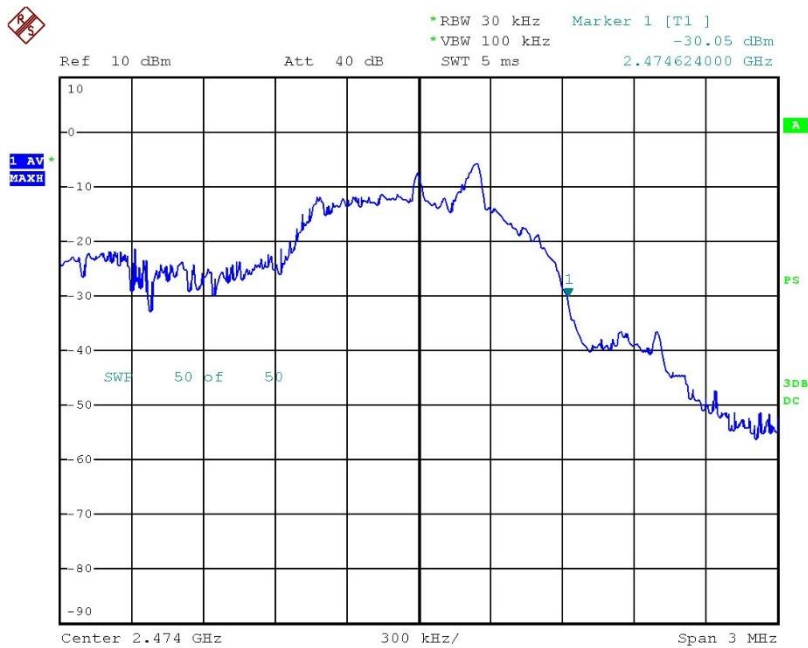
2442MHz at 25°C, 3.0V



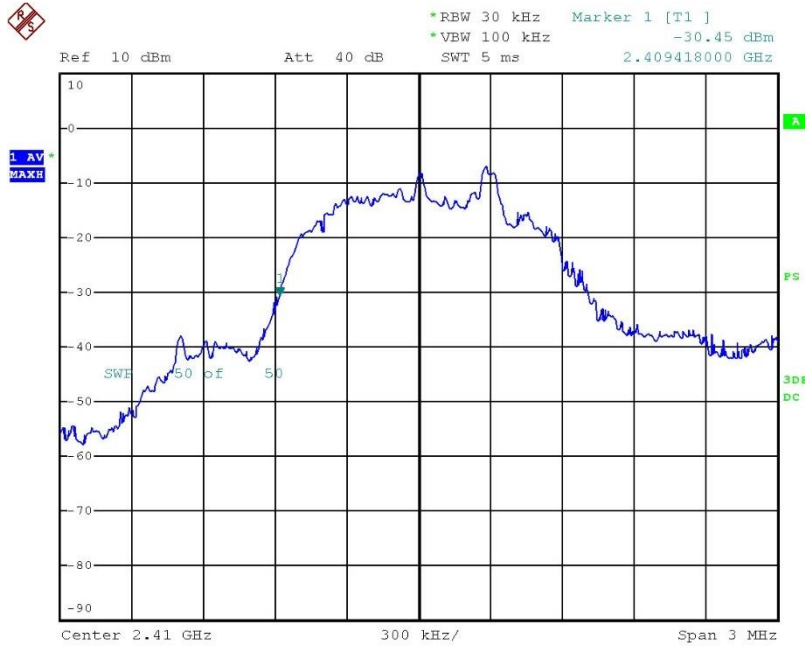
2474MHz at 25°C, 3.0V

Test results for Permitted range of operating frequencies


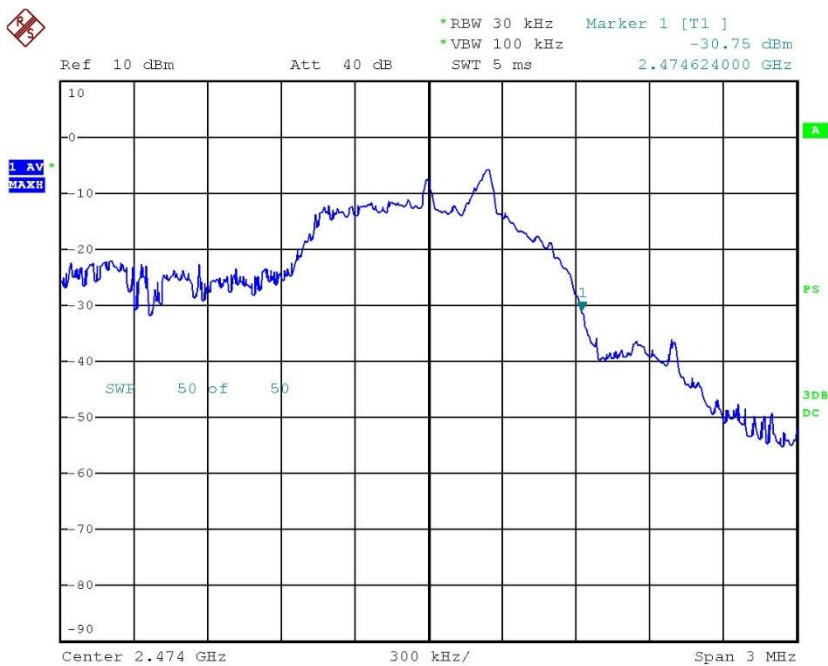
2410MHz at 25°C, 3.0V



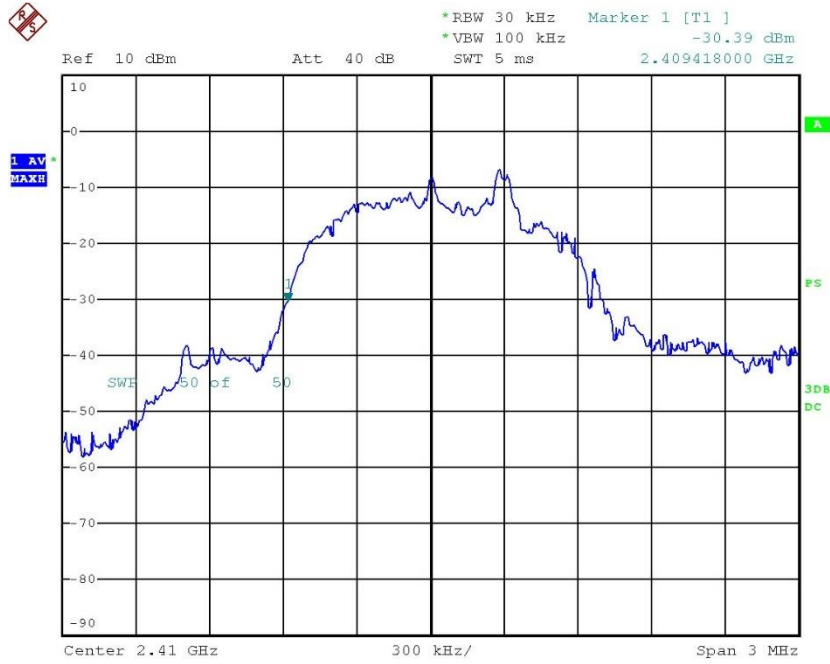
2474MHz at 25°C, 3.0V



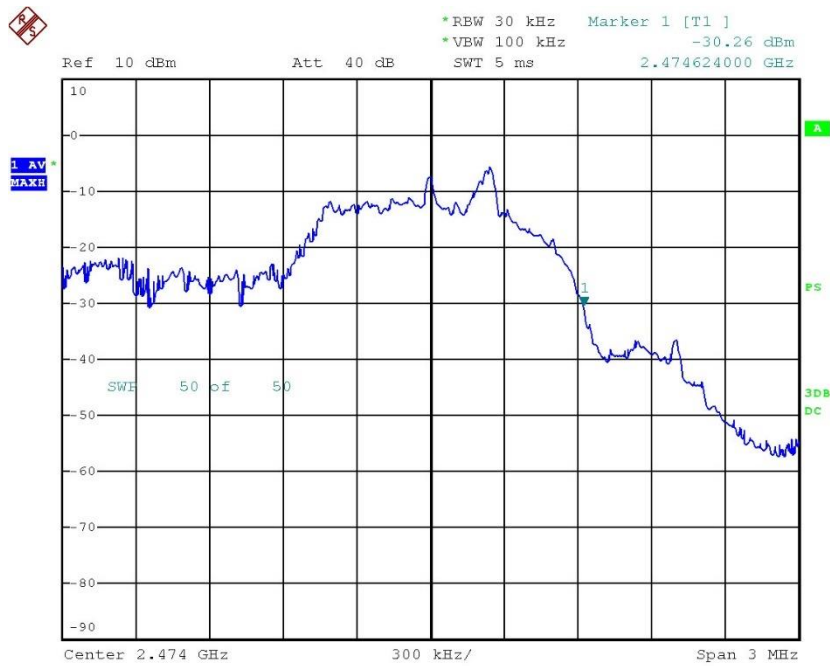
2410MHz at -10°C, 2.4V



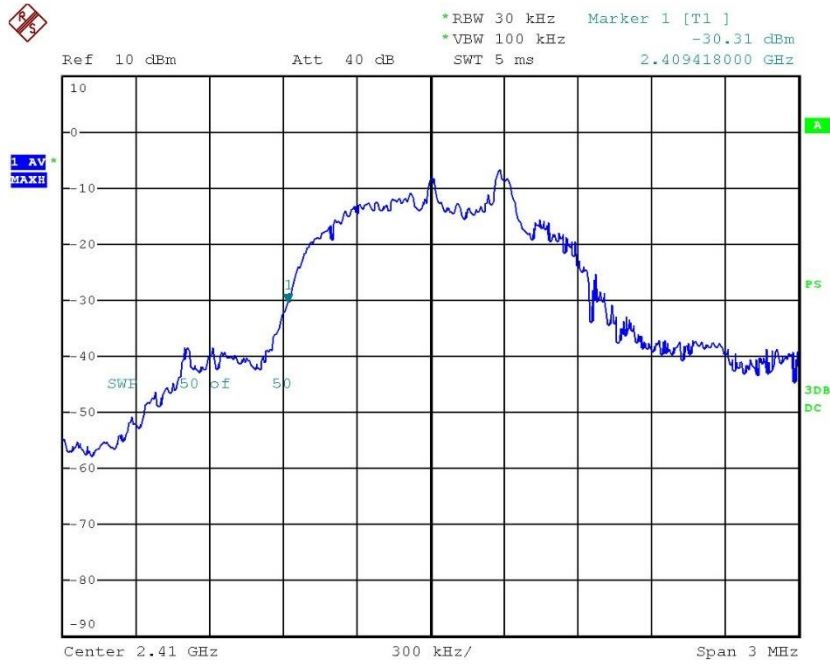
2474MHz at -10°C, 2.4V



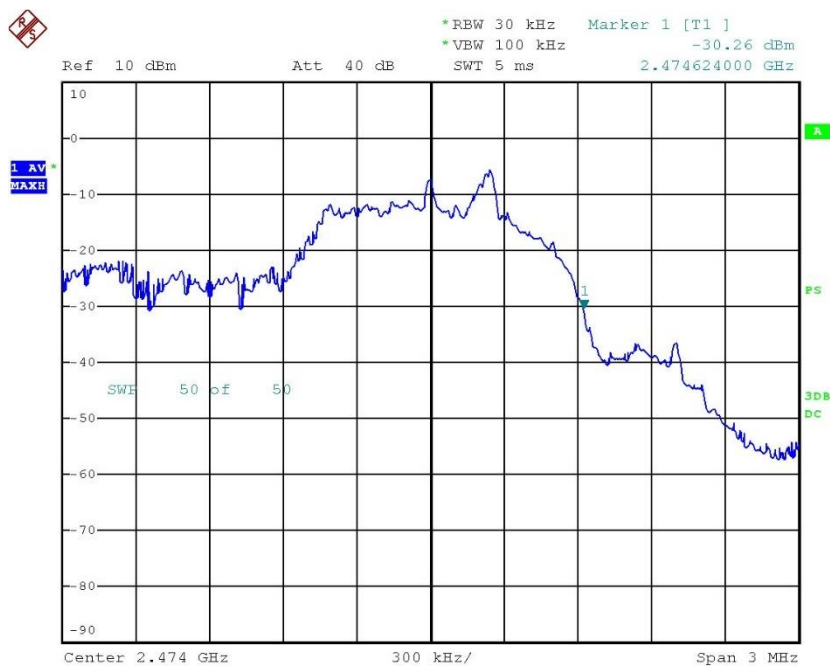
2410MHz at -10°C, 3.0V



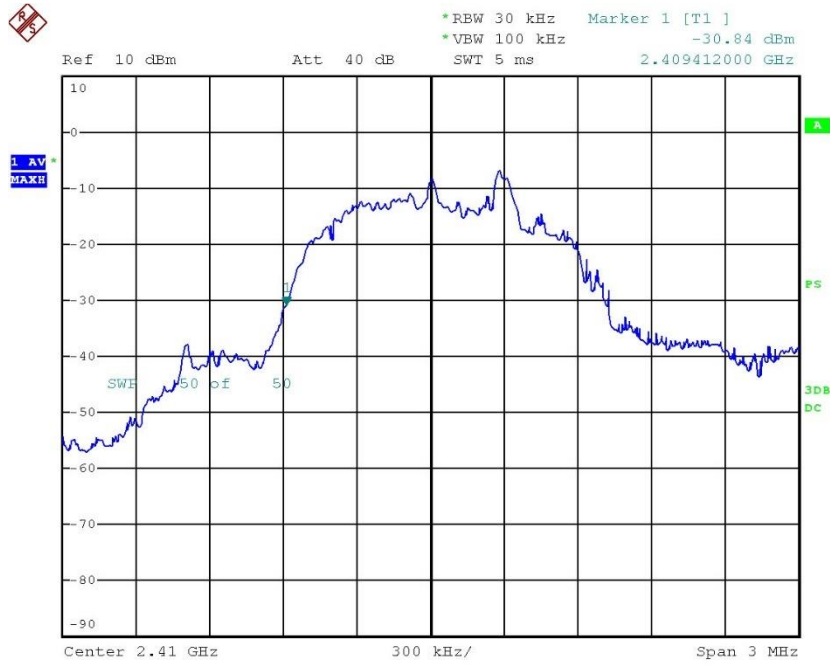
2474MHz at -10°C, 3.0V



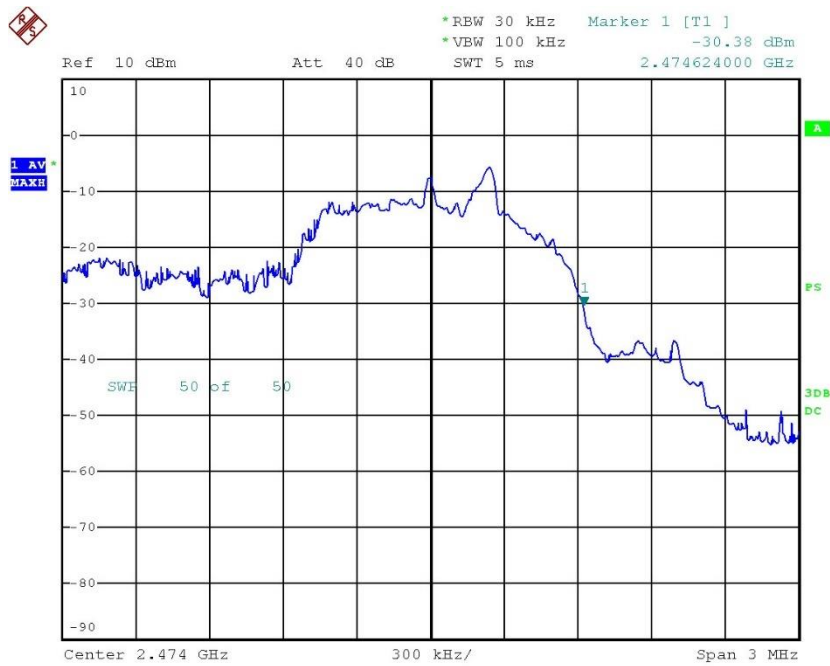
2410MHz at +55°C, 2.4V



2474MHz at +55°C, 2.4V



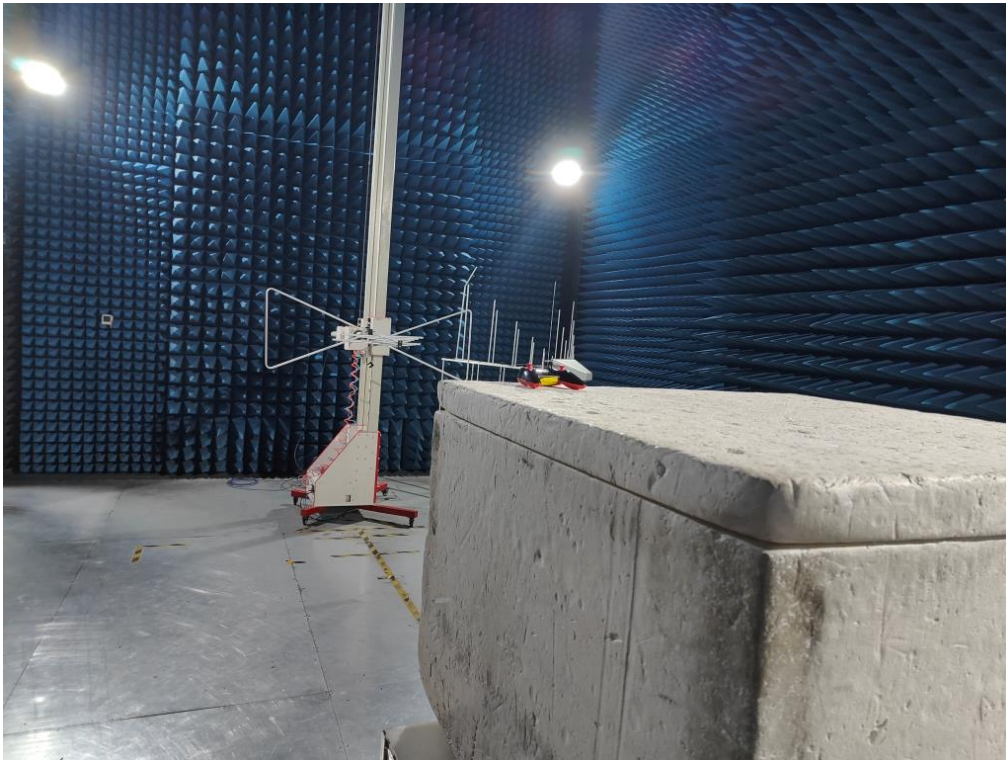
2410MHz at +55°C, 3.0V



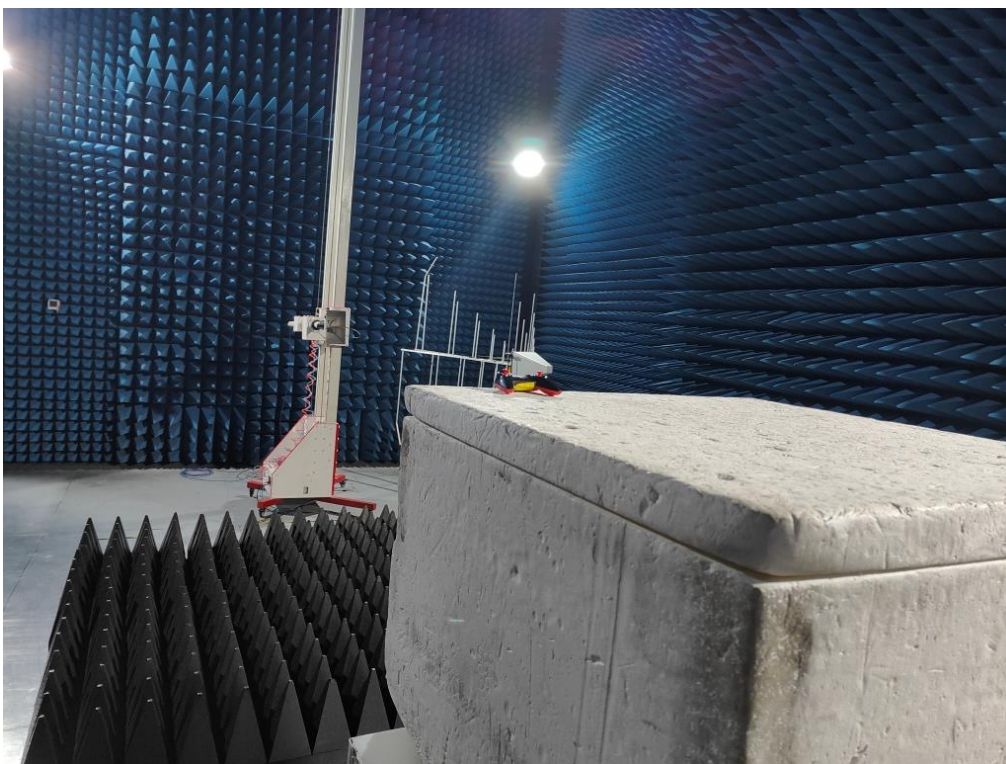
2474MHz at +55°C, 3.0V

Appendix 2

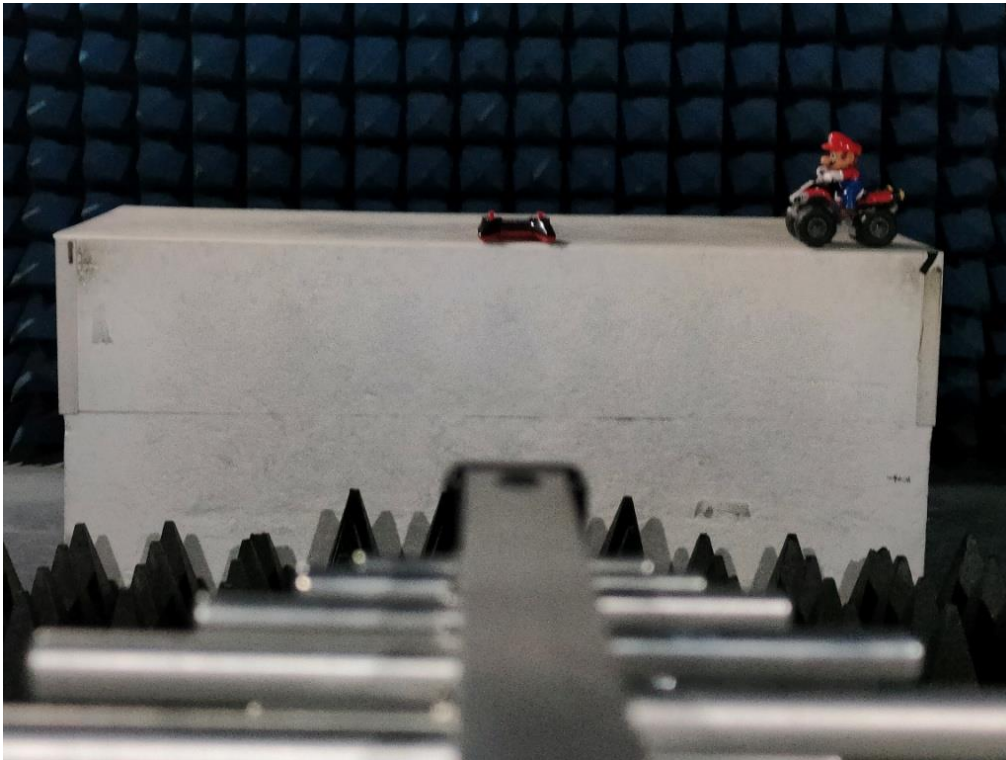
Test setup



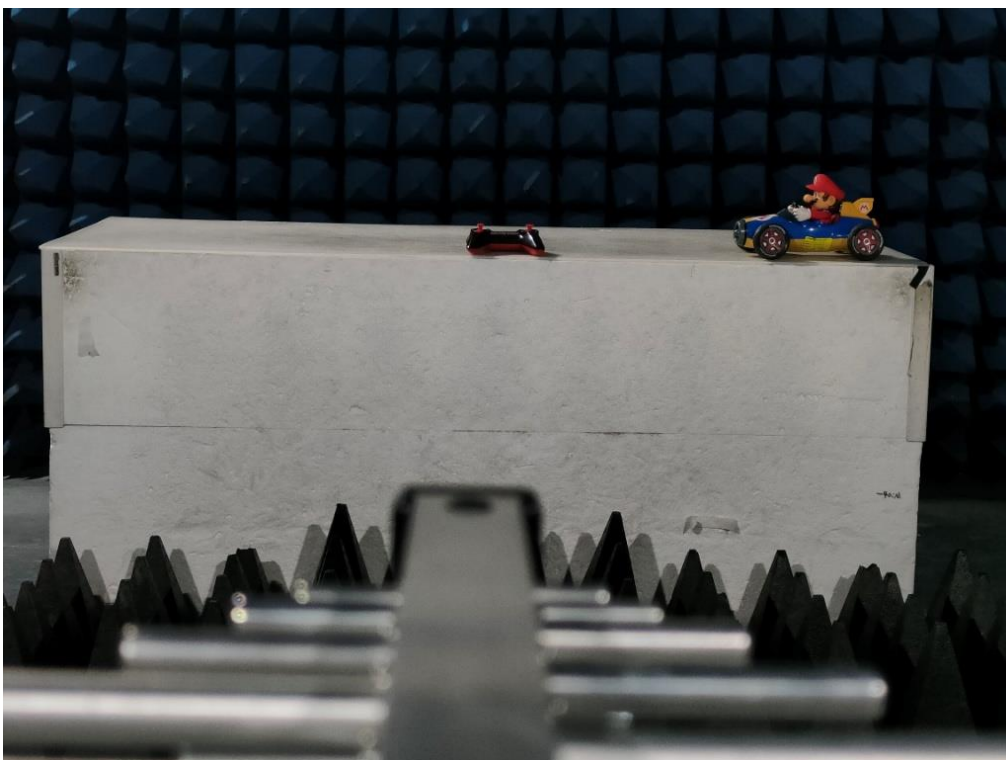
Setup for Radiated Spurious Emission



Setup for Radiated Spurious Emission



Setup for RF Electromagnetic Field



Setup for RF Electromagnetic Field



Setup for Electrostatic Discharge



Setup for Electrostatic Discharge

Appendix 3

Photo documentation



External View



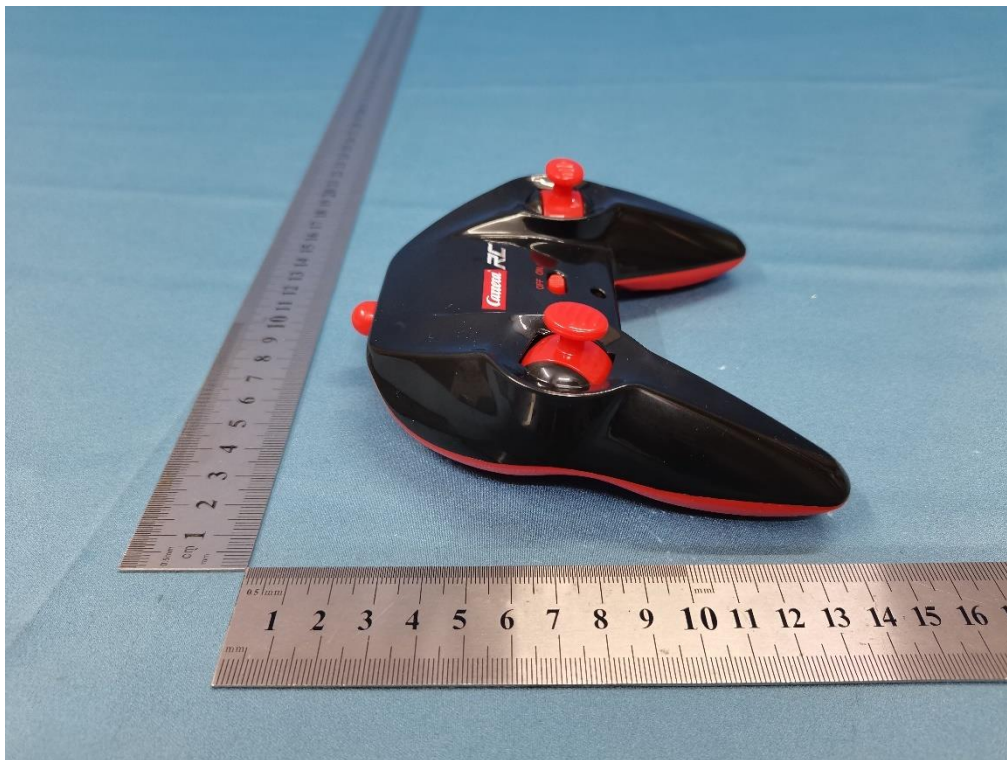
External View



External View



External View



External View



External View



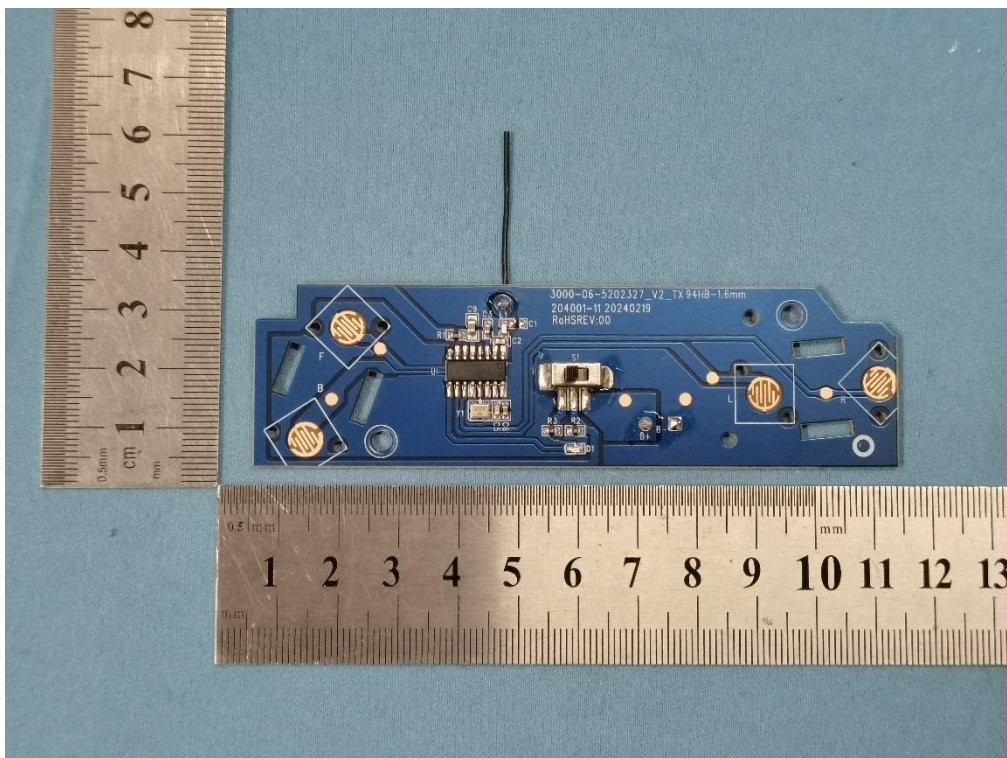
Internal View



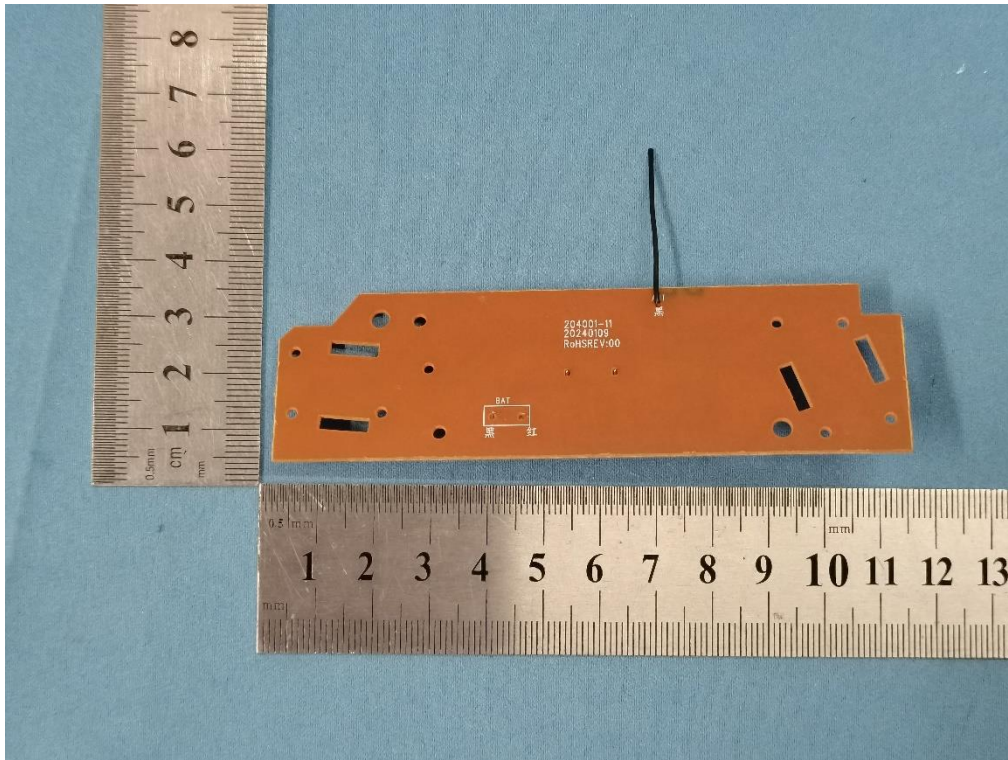
Internal View



Internal View



Internal View



Internal View