



FCC ID TEST REPORT

Report Number : **709502402825-00A** Date of Issue: July 31, 2024

Model : CG01

Product Type : Key Fob

Applicant : Continental Automotive Technologies GmbH

Address : Siemensstrasse 12 Regensburg 93055 Germany

Manufacturer : Continental Automotive Technologies GmbH

Address : Siemensstrasse 12 Regensburg 93055 Germany

Production Facility : Continental Automotive Changchun Co., Ltd. Jingyue Branch

Address : 5800, Shengtai Street, 130000 Changchun, P. R. China

Test Result : Positive Negative

Total pages including Appendices : 33



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2 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
-00A	First Issue	07/31/2024



3 Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
No.16 Lane, 1951 Du Hui Road,
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P.R. China

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FCC Registration No.: 820234

FCC Designation Number: CN1183



4 Description of the Equipment Under Test

Product:	Key Fob
Model no.:	CG01
FCC ID:	KR5CG01
Options and accessories:	NA
Rating:	Battery: 3VDC, 1 x CR2032
RF Transmission Frequency:	433.66MHz-434.18MHz
No. of Operated Channel:	2
Modulation:	FSK
RF Mode:	RF_RKE, RF_KV, RF_Approach
Hardware Version:	AD
Software Version:	43.0
Antenna Type:	internal, PCB loop antenna
Description of the EUT:	The EUT was a Key Fob transmit at 433.66MHz-434.18MHz. We tested it and listed the worst data in this report.
Test sample no.:	SHA-812923-1 (RF Radiated, RF_RKE) SHA-812923-2 (RF Radiated, RF_PASE, RF_Approach)

The sample's mentioned in this report is/are submitted/ supplied/ manufactured by client. The laboratory therefore assumes no responsibility for accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.



5 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2023 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

All the test methods were according to ANSI C63.10-2013.



6 Summary of Test Results

Technical Requirements				
FCC Part 15 Subpart C				
Test Condition		Pages	Test Site	Test Result
§15.207	Conducted emission AC power port	N/A	N/A	Not Applicable
§15.205, §15.209, 15.35 (c)§15.231(b)	Radiated Emission, 9kHz to 4.5GHz	12-19	3m chamber	Pass
§15.231(c)	Bandwidth Measurement	20-21	Shield room	Pass
§15.231(a)(1)	Deactivation Time	22-23	Shield room	Pass
§15.203	Antenna requirement	--	See Note 2	Pass

Note 1: N/A=Not Applicable. Conducted emission is not apply for battery operated device.

Note 2: The EUT uses a PCB loop antenna. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.



7 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: KR5CG01, complies with Section 15.207, 15.205, 15.209, 15.231 of the FCC Part 15, Subpart C Rules.

The test sample consists of a Key Fob with 3 RF signal type: RF_RKE (Remote key functionality), RF_KV and RF_Approach (Passive key functionality).

RF Signal Type	Trigger mode	Tx Frequency (MHz)	Power level	Duty cycle
RF_RKE	Key trigger	433.66/434.18	High power level	24.54%
RF_KV	After the key receives the 125kHz signal transmitted by the ZCU, it returns the RF signal to the ZCU, only emitted once		Same lower power level	37.68%
RF_Approach (courtesy light)	Similar to RF_KV, but only emitted once after receiving the ZCU 125kHz low-frequency signal when the customer walks to the vehicle from a distance			40.58%

So we tested the RF_RKE and RF_KV signal type for the radiated emission, tested all the signal type for duty cycle and Deactivation Time tests.



SUMMARY:

All tests according to the regulations cited on page 5 were

- Performed

- **Not** Performed

The Equipment Under Test

- **Fulfills** the general approval requirements.

- **Does not** fulfill the general approval requirements.

Sample Received Date: April 22, 2024

Testing Start Date: April 23, 2024

Testing End Date: July 23, 2024

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Reviewed by:

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Cheng Huali
EMC Test Engineer



8 Systems test configuration

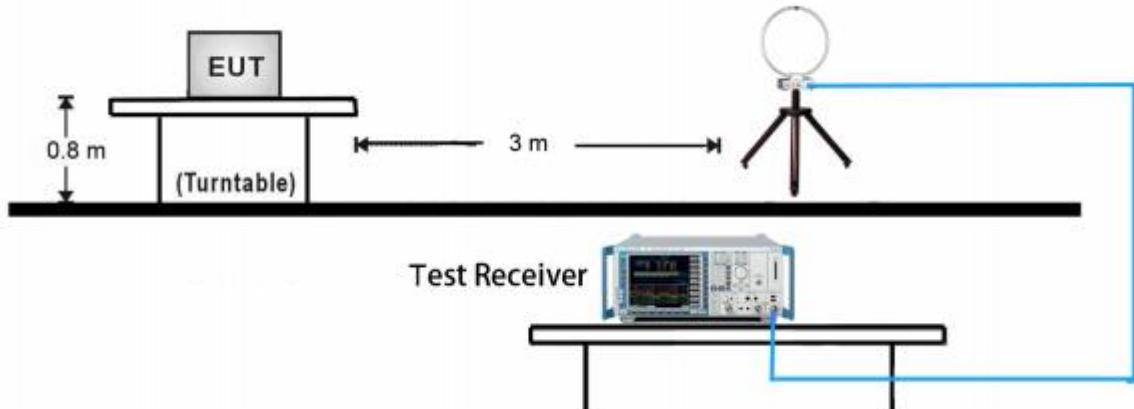
Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
--	--	--	--

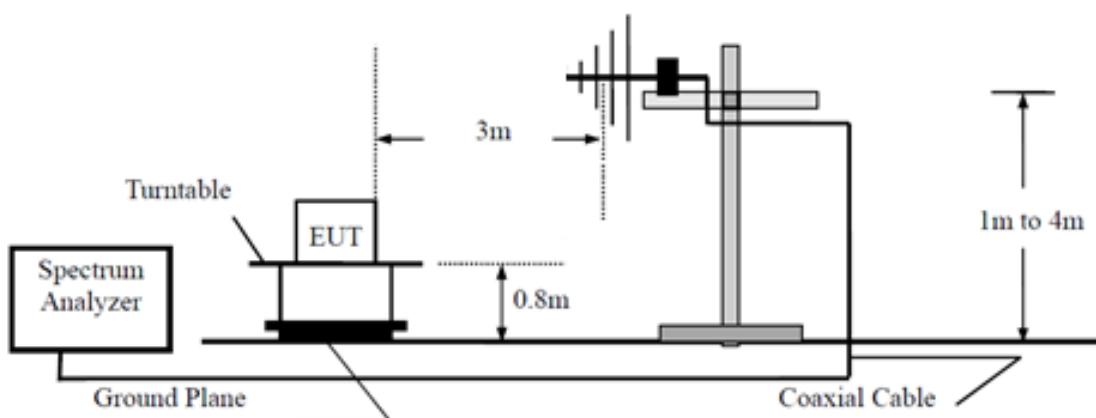
9 Test Setups

8.1 Radiated test setups

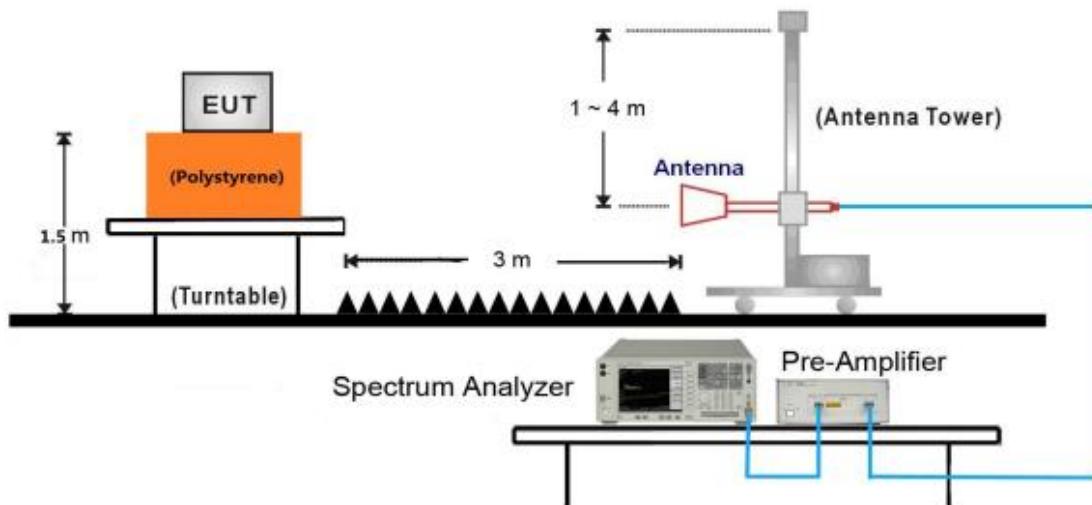
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test- Setup



1GHz ~ 5GHz Test Setup:



10 Test Methodology

10.1 Radiated Emission

Test Method

1. The EUT was placed on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3-meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 1MHz, VBW \geq 3RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 KHz, VBW \geq 3RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (duty cycle \geq 98%) for peak detection at frequency above 1GHz.
4. If the emission is pulsed (duty cycle <98%), modify the unit for continuous operation: use the settings shown above, then correct the reading by subcontracting the peak to average duty cycle correction factor $20\log$ (duty cycle),, derived from the appropriate duty cycle calculation.



Limit

According to §15.231 (b), the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

Fundamental frequency (MHz)	Field Strength of Fundamental (Microvolts /meter @3m)	Field Strength of spurious emissions ((Microvolts /meter @3m)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	1,250 to 3,370 *	125 to 3750 *
174-260	3,750	375
260-470 √	3,750 to 12, 500*	375 to 1,250*
Above 470	12,500	1,250

Limits for 15.209 Radiated emission limits; general requirements

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Frequency	Limit at 3m (dBuV/m)
0.009 MHz – 0.490 MHz	128.5 to 93.8 ¹
0.490 MHz – 1.705 MHz	73.8 to 63 ¹
1.705 MHz – 30 MHz	69.5 ¹
30 MHz – 88 MHz	40.0 ¹
88 MHz – 216 MHz	43.5 ¹
216 MHz – 960 MHz	46.0 ¹
Above 960 MHz	54.0 ¹
Above 1000 MHz	54.0 ²
Above 1000 MHz	74.0 ³

¹Limit is with detector with bandwidths as defined in CISPR-16-1-1 except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz where an Average detector is used.

²Limit is with 1 MHz measurement bandwidth and using an Average detector.

³Limit is with 1 MHz measurement bandwidth and using a Peak detector.



Spurious radiated emissions for transmitter

Signal Type: RF_RKE, 433.66MHz Tx

Radiated Emission								
Value	Emissions	E-Field	PK	Average	AV	Limit	Margin	Emission Type
	Frequency	Polarity	Emission	Factor	Emission			
	MHz		dB μ V/m	dB	dB μ V/m	dB μ V/m	dB	
Below 1GHz								
PK	433.66	H	89.80	0.00	/	100.80	11.00	Fundamental
AV	433.66	H	89.80	-12.21	77.59	80.80	3.21	Fundamental
PK	433.66	V	88.42	0.00	/	100.80	12.38	Fundamental
AV	433.66	V	88.42	-12.21	76.21	80.80	4.59	Fundamental
PK	867.32	H	39.25	0.00	/	80.80	41.55	Spurious
AV	867.32	H	39.12	-12.21	26.91	60.80	33.89	Spurious
PK	867.32	V	38.22	0.00	/	80.80	42.58	Spurious
AV	867.32	V	38.22	-12.21	26.01	60.80	34.79	Spurious
Above 1GHz								
PK	1301	H	34.29	0.00	/	74.00	39.71	Restricted band
AV	1301	H	32.29	-12.21	20.08	54.00	33.92	Restricted band
PK	1301	V	34.66	0.00	/	74.00	39.34	Restricted band
AV	1301	V	34.66	-12.21	22.45	54.00	31.55	Restricted band

Remark:

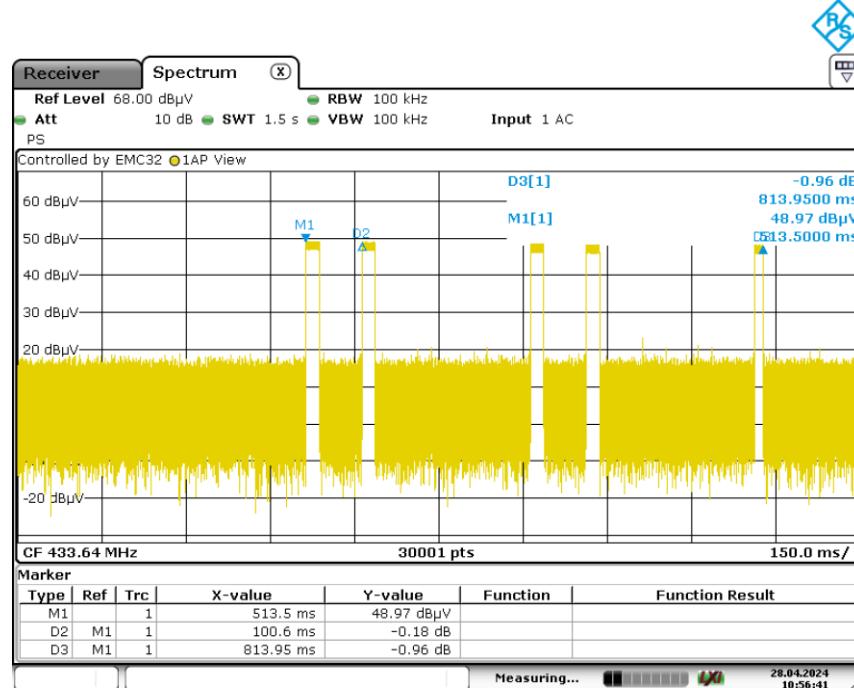
- Corrected Amplitude = Read level + Corrector factor
Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss
- Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz)
- Corrected Reading = Original Receiver Reading + Correct Factor
- Only the worst data listed in this report, Other frequency was 20dB below the limit
- Pre-scan all test modes (different power on modes) and only the worst case listed as above.
- AV Emission Level= PK Emission Level+20log (duty cycle),
Duty Cycle = (24.54*1) ms /100ms = 24.54%,
Duty Cycle Factor = 20log (Duty Cycle) = -12.21
- The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz), therefore no data appear in the report.



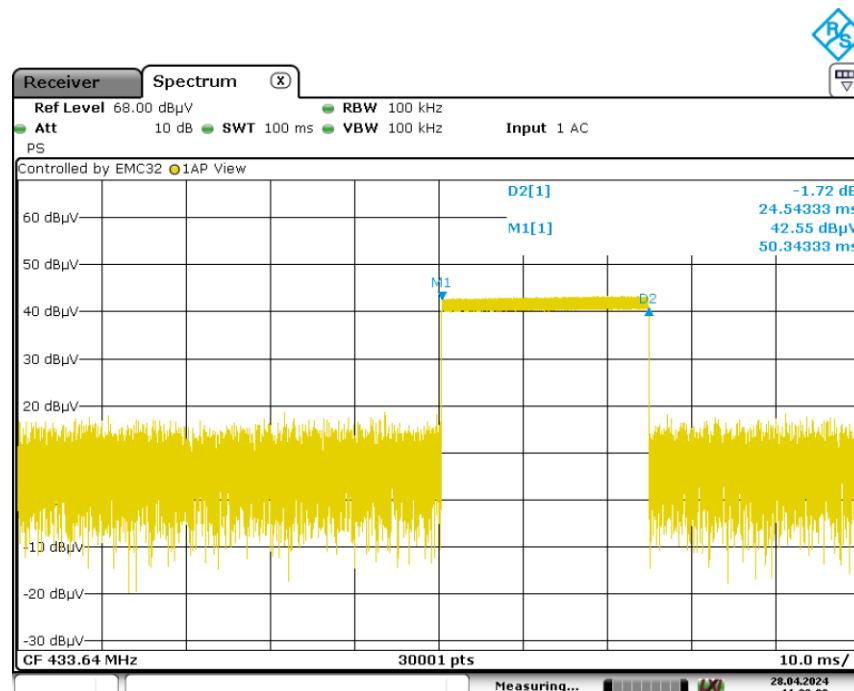
Duty Cycle

Signal Type: RF_RKE 433.6MHz

Duty Cycle = $(24.54*1) \text{ ms} / 100\text{ms} = 24.54\%$,
 Duty Cycle Factor = $20\log(\text{Duty Cycle}) = -12.21$



Date: 28 APR 2024 10:56:41



Date: 28 APR 2024 11:00:10



Signal Type: RF_RKE, 434.18MHz Tx

Radiated Emission								
Value	Emissions	E-Field	PK	Average	AV	Limit	Emission Type	
	Frequency	Polarity	Emission	Factor	Emission	Margin		
	MHz		dB μ V/m	dB	dB μ V/m	dB μ V/m	dB	
Below 1GHz								
PK	434.18	H	90.08	0.00	/	100.80	10.72	Fundamental
AV	434.18	H	90.08	-12.55	77.53	80.80	3.27	Fundamental
PK	434.18	V	88.76	0.00	/	100.80	12.04	Fundamental
AV	434.18	V	88.76	-12.55	76.21	80.80	4.59	Fundamental
PK	868.33	H	39.25	0.00	/	80.80	41.55	Spurious
AV	868.33	H	39.12	-12.55	26.57	60.80	34.23	Spurious
PK	868.36	V	38.22	0.00	/	80.80	42.58	Spurious
AV	868.36	V	38.22	-12.55	25.67	60.80	35.13	Spurious
Above 1GHz								
PK	1302.42	H	35.91	0.00	/	74.00	38.09	Restricted band
AV	1302.42	H	35.91	-12.55	23.36	54.00	30.64	Restricted band
PK	1302.42	V	35.63	0.00	/	74.00	38.37	Restricted band
AV	1302.42	V	35.63	-12.55	23.08	54.00	30.92	Restricted band

Remark:

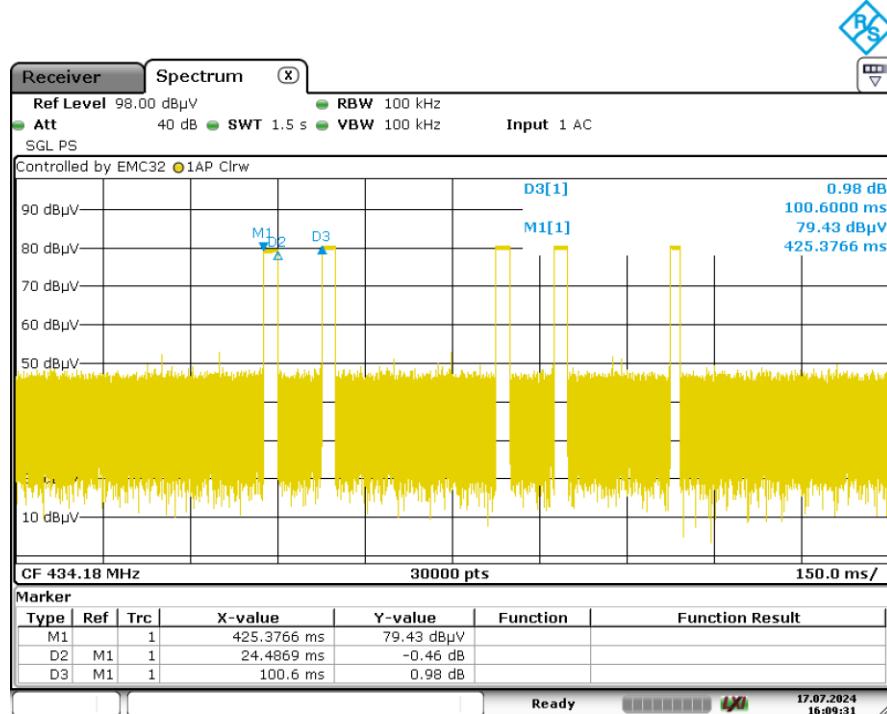
1. Corrected Amplitude = Read level + Corrector factor
Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss
2. Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz)
3. Corrected Reading = Original Receiver Reading + Correct Factor
4. Only the worst data listed in this report, other frequency was 20dB below the limit
5. Pre-scan all test modes (different power on modes) and only the worst case listed as above.
6. AV Emission Level= PK Emission Level+20log (duty cycle),
Duty Cycle = (23.57*1) ms /100ms = 23.57%,
Duty Cycle Factor = 20log (Duty Cycle) = -12.55
7. The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz), therefore no data appear in the report.



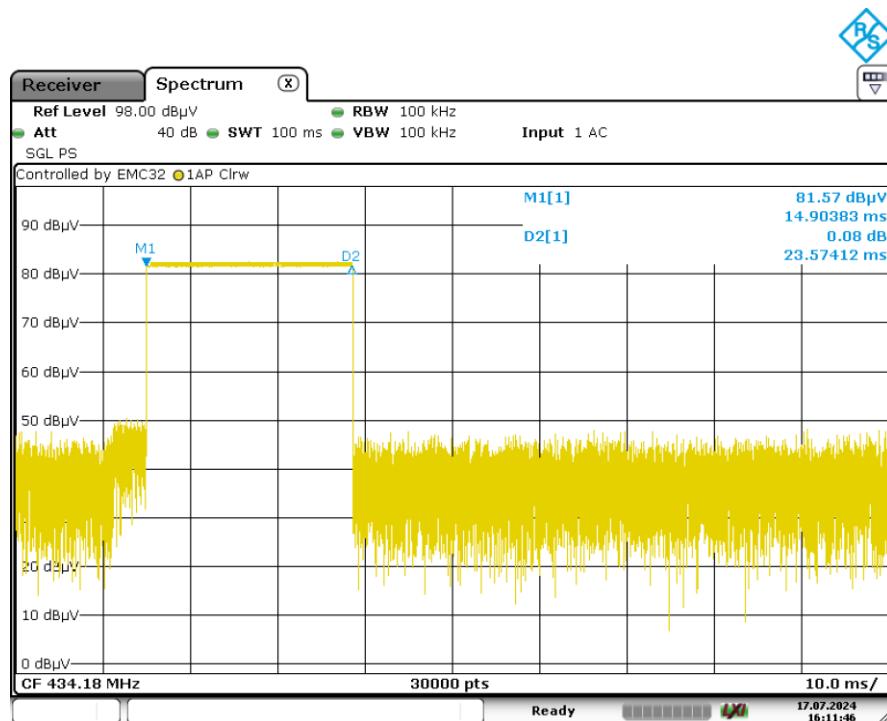
Duty Cycle

Signal Type: RF_RKE 434.18MHz

Duty Cycle = $(23.57 * 1) \text{ ms} / 100\text{ms} = 23.57\%$,
 Duty Cycle Factor = $20\log(\text{Duty Cycle}) = -12.55$



Date: 17.JUL.2024 16:09:32



Date: 17.JUL.2024 16:11:47



Signal Type: RF_Approach, 433.66MHz Tx

Radiated Emission								
Value	Emissions	E-Field	PK	Average	AV	Limit	Emission Type	
	Frequency	Polarity	Emission	Factor	Emission	Margin		
	MHz		dB μ V/m	dB	dB μ V/m	dB μ V/m	dB	
Below 1GHz								
PK	433.66	H	85.23	0.00	/	100.80	15.57	Fundamental
AV	433.66	H	85.23	-7.83	77.40	80.80	3.40	Fundamental
PK	433.66	V	83.72	0.00	/	100.80	17.08	Fundamental
AV	433.66	V	83.72	-7.83	75.89	80.80	4.91	Fundamental
PK	867.32	H	37.88	0.00	/	80.80	42.92	Spurious
AV	867.32	H	37.88	-7.83	30.05	60.80	30.75	Spurious
PK	867.32	V	38.29	0.00	/	80.80	42.51	Spurious
AV	867.32	V	38.29	-7.83	30.46	60.80	30.34	Spurious
Above 1GHz								
PK	1301	H	33.77	0.00	/	74.00	40.23	Restricted band
AV	1301	H	33.77	-7.83	25.94	54.00	28.06	Restricted band
PK	1734.89	V	33.15	0.00	/	74.00	40.85	Restricted band
AV	1734.89	V	33.15	-7.83	25.32	54.00	28.68	Restricted band

Remark:

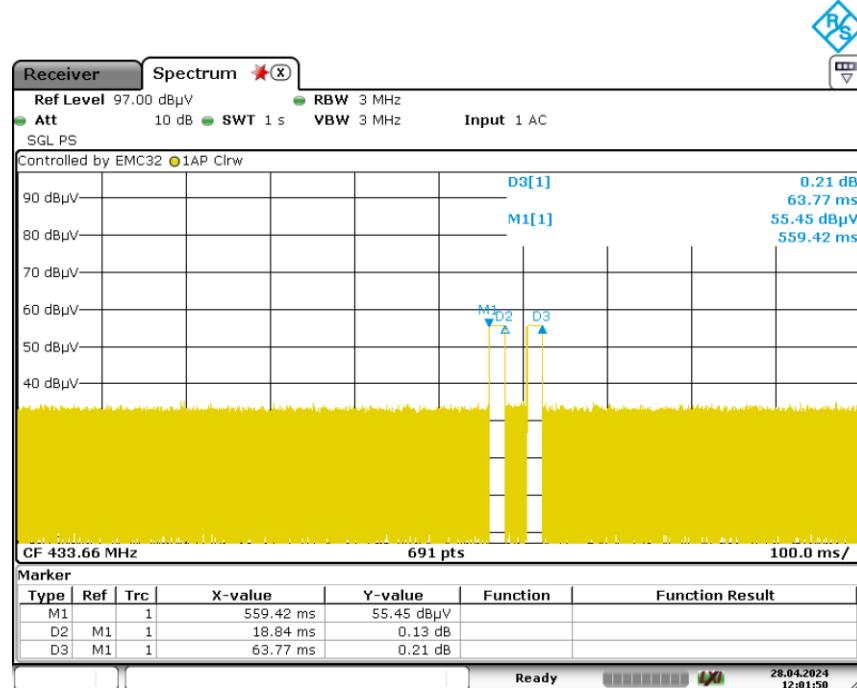
- Corrected Amplitude = Read level + Corrector factor
Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss
- Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz)
- Corrected Reading = Original Receiver Reading + Correct Factor
- Only the worst data listed in this report. Other frequency was 20dB below the limit
- Pre-scan all test modes (different power on modes) and only the worst case listed as above.
- AV Emission Level= PK Emission Level+20log (duty cycle),
Worst case Duty Cycle = $(40.58*1) \text{ ms} / 100\text{ms} = 40.58\%$,
Duty Cycle Factor = 20log (Duty Cycle) = -7.83
- The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz), therefore no data appear in the report.



Duty Cycle

Signal Type: RF_KV, 433.66MHz

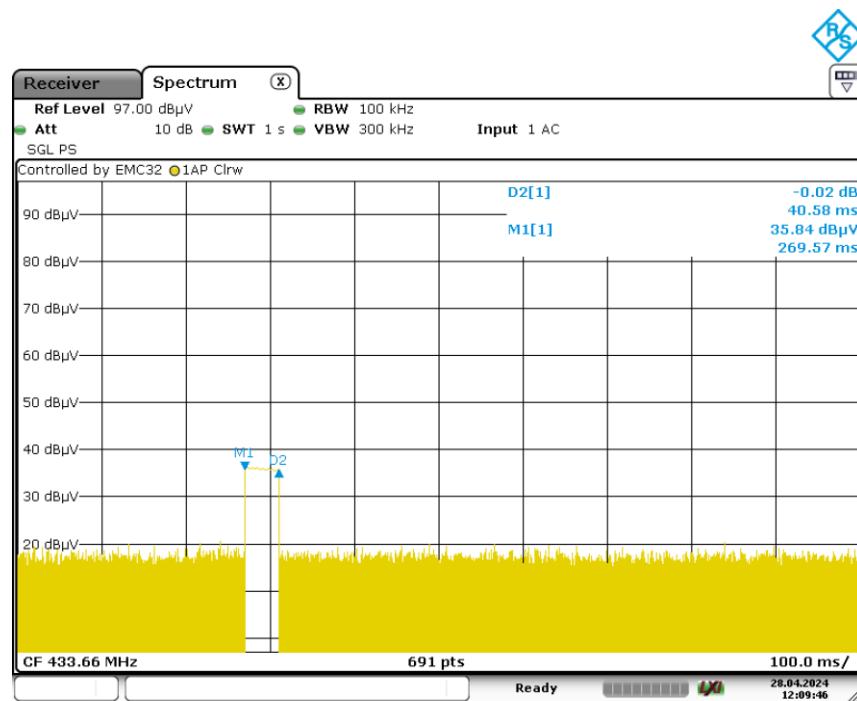
Duty Cycle = $(18.84*2)$ ms /100ms = 37.68%,
 Duty Cycle Factor = $20\log$ (Duty Cycle) = -8.47



Date: 28.APR.2024 12:01:50

Signal Type: RF_Approach, 433.66MHz

Duty Cycle = $(40.58*1)$ ms /100ms = 40.58%,
 Duty Cycle Factor = $20\log$ (Duty Cycle) = -7.83



Date: 28.APR.2024 12:09:46



Signal Type: RF_Approach, 434.18MHz Tx

Radiated Emission								
Value	Emissions	E-Field	PK	Average	AV	Limit	Emission Type	
	Frequency	Polarity	Emission	Factor	Emission	Margin		
	MHz		dB μ V/m	dB	dB μ V/m	dB μ V/m	dB	
Below 1GHz								
PK	434.18	H	85.27	0.00	/	100.80	15.53	Fundamental
AV	434.18	H	85.27	-7.83	77.44	80.80	3.36	Fundamental
PK	434.18	V	83.27	0.00	/	100.80	17.53	Fundamental
AV	434.18	V	83.27	-7.83	75.44	80.80	5.36	Fundamental
PK	868.33	H	38.17	0.00	/	80.80	42.63	Spurious
AV	868.33	H	38.17	-7.83	30.34	60.80	30.46	Spurious
PK	868.36	V	38.29	0.00	/	80.80	42.51	Spurious
AV	868.36	V	38.29	-7.83	30.46	60.80	30.34	Spurious
Above 1GHz								
PK	1302.42	H	30.80	0.00	/	74.00	43.20	Restricted band
AV	1302.42	H	30.80	-7.83	22.97	54.00	31.03	Restricted band
PK	1302.42	V	31.11	0.00	/	74.00	42.89	Restricted band
AV	1302.42	V	31.11	-7.83	23.28	54.00	30.72	Restricted band

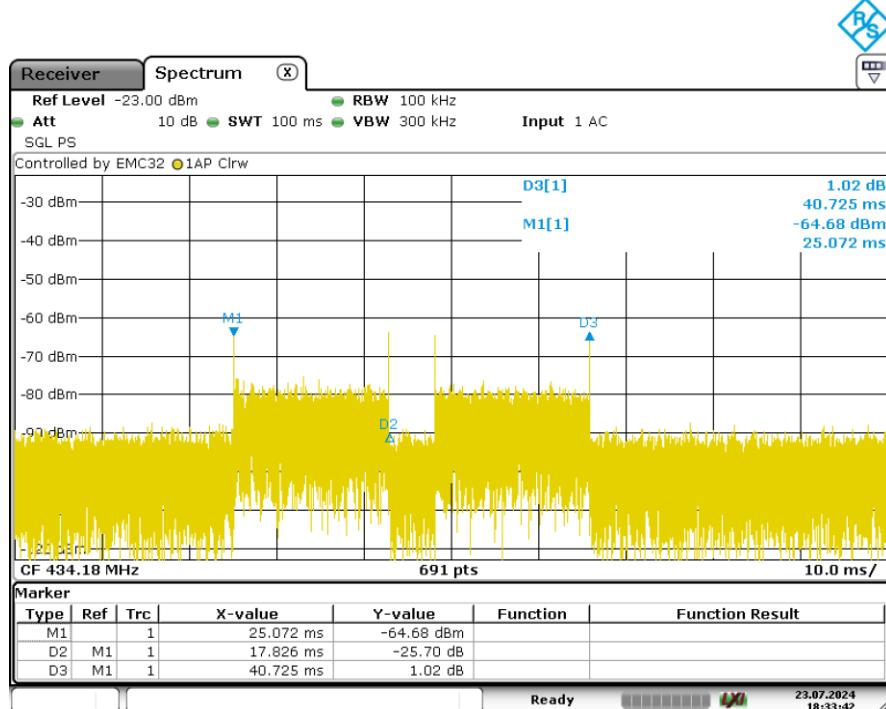
Remark:

1. Corrected Amplitude = Read level + Corrector factor
Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss
2. Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz)
3. Corrected Reading = Original Receiver Reading + Correct Factor
4. Only the worst data listed in this report, other frequency was 20dB below the limit
5. Pre-scan all test modes (different power on modes) and only the worst case listed as above.
6. AV Emission Level= PK Emission Level+20log (duty cycle),
Worst case Duty Cycle = (40.58*1) ms /100ms = 40.58%,
Duty Cycle Factor = 20log (Duty Cycle) = -7.83
7. The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz), therefore no data appear in the report.



Duty Cycle Signal Type: RF_KV

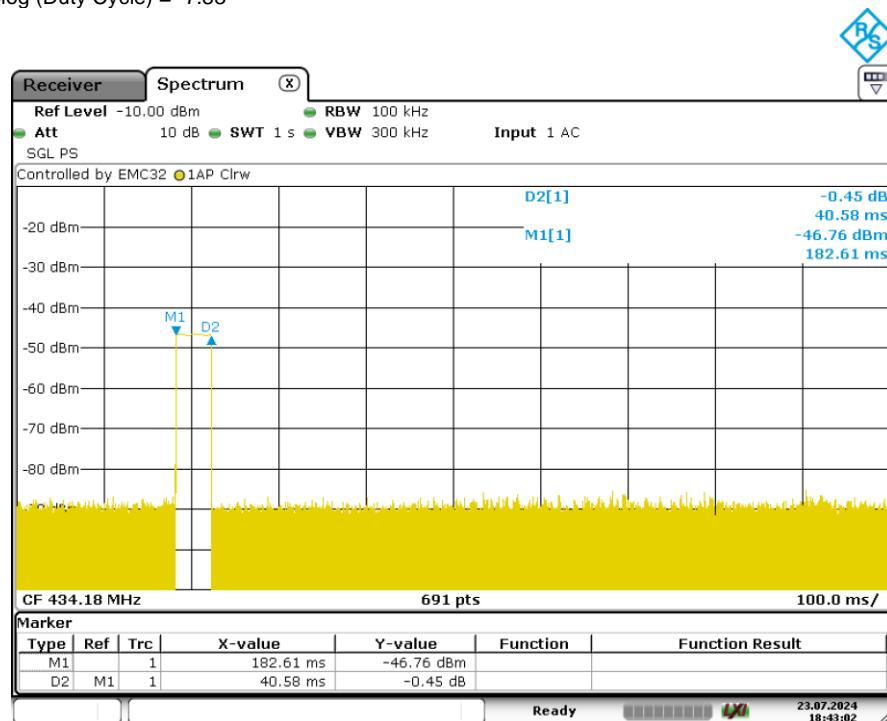
Duty Cycle = (17.83*2) ms /100ms = 35.66%,
Duty Cycle Factor = 20log (Duty Cycle) = -8.96



Date: 23.JUL.2024 18:33:42

Signal Type: RF_Approach

Duty Cycle = (40.58*1) ms /100ms = 40.58%,
Duty Cycle Factor = 20log (Duty Cycle) = -7.83



Date: 23.JUL.2024 18:43:01



10.2 Bandwidth Measurement

Test Method

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. Use the following test receiver settings:
Span = approximately 5 times the 20dB bandwidth, centered on a hopping channel
RBW = 1% to 5% of the 20dB bandwidth of the emission being measured, $VBW \geq RBW$,
Sweep = auto, Detector function = peak, Trace = max hold
3. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth. Record the results.
4. Repeat above procedures until all frequencies measured were complete.

Limit

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70MHz and below 900MHz. For devices operating above 900MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20dB down from the modulated carrier.

The limit for the EUT Channel 1 = $0.25\% * 433.66 \text{ MHz} = 1084 \text{ kHz}$

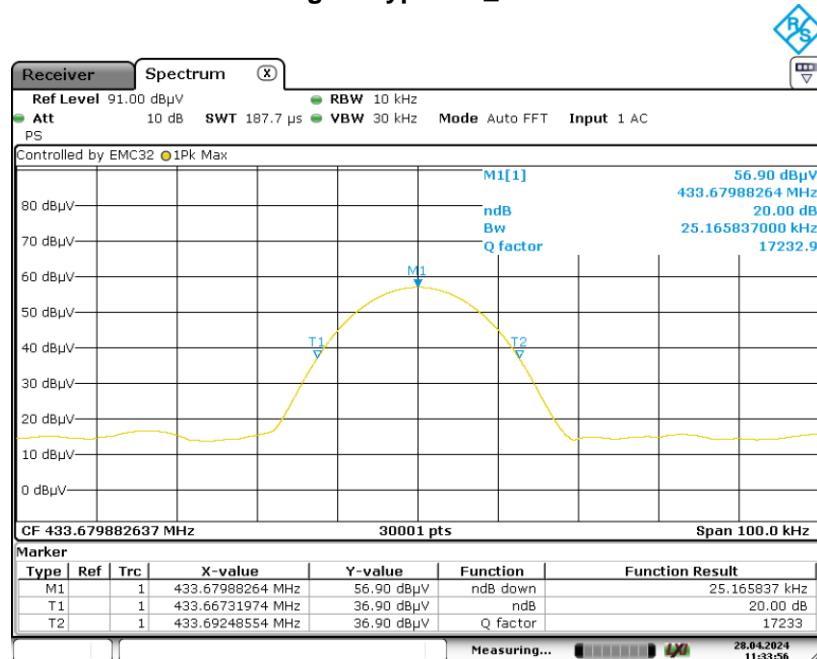
The limit for the EUT Channel 2 = $0.25\% * 434.18 \text{ MHz} = 1085 \text{ kHz}$

Test Result

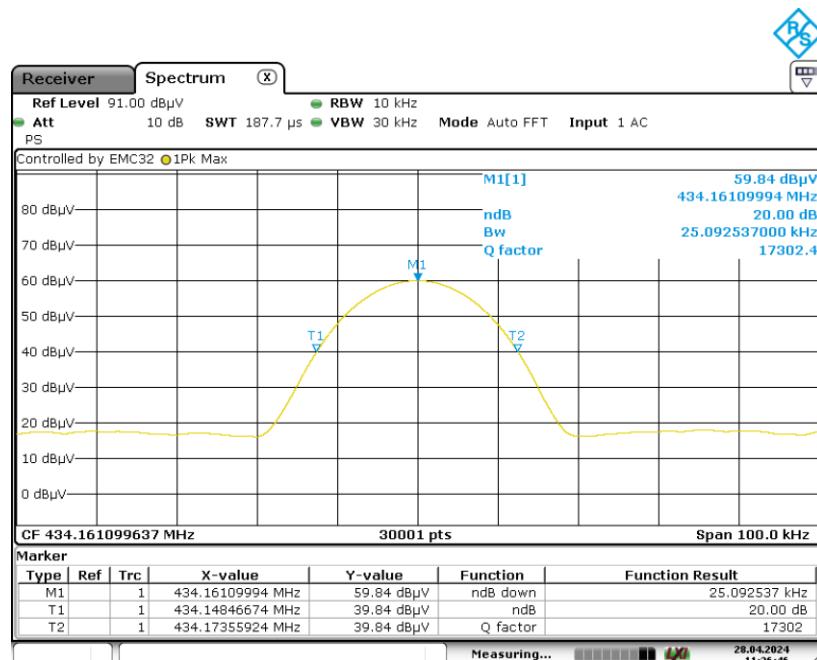
Channel	Frequency	20dB Bandwidth (kHz)	Limit (kHz)
1	433.66MHz	25.17	<1084
2	434.18MHz	25.09	<1085



Signal Type: RF_RKE



Date: 28.APR.2024 11:33:57



Date: 28.APR.2024 11:36:46



10.3 Deactivation Time

Test Method

1. Set to the maximum power setting and enable the EUT in transmitting mode.
2. Set center frequency of spectrum analyzer=operating frequency.
3. Set the spectrum analyzer as RBW=100 kHz, VBW=100 kHz, Span=0Hz.
4. Repeat above procedures until all frequency measured was complete.

Limit

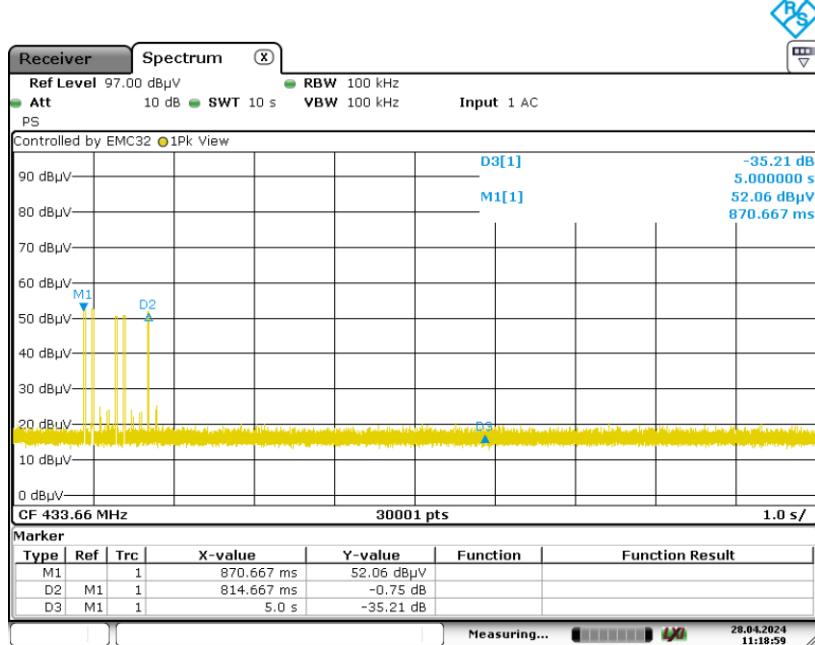
According to FCC Part 15.231 (a), the transmitter shall be complied the following requirements:
 (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.
 (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.

Test Result

Signal Type	Channel	Frequency	Deactivation Time	Result
RF_RKE	1	433.66MHz	814.667ms	Pass
	2	434.18MHz	715.0ms	Pass
RF_RKE on hold	1	433.66MHz	448.232ms	Pass
	2	434.18MHz	535.6ms	Pass
RF_KV	1	433.66MHz	58.0ms	Pass
	2	434.18MHz	58.0ms	Pass
RF_Approach	1	433.66MHz	58.0ms	Pass
	2	434.18MHz	58.0ms	Pass

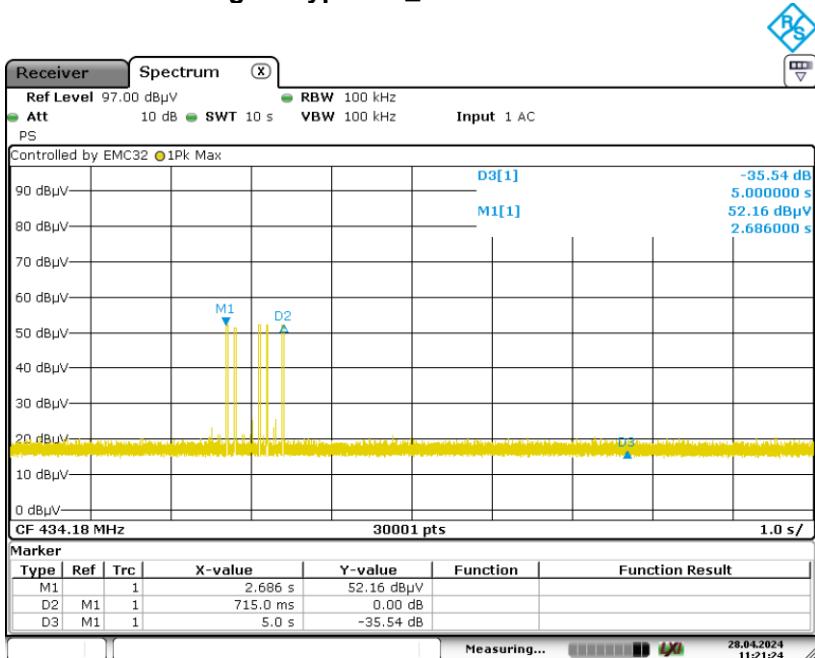


Signal Type: RF_RKE 433.66MHz

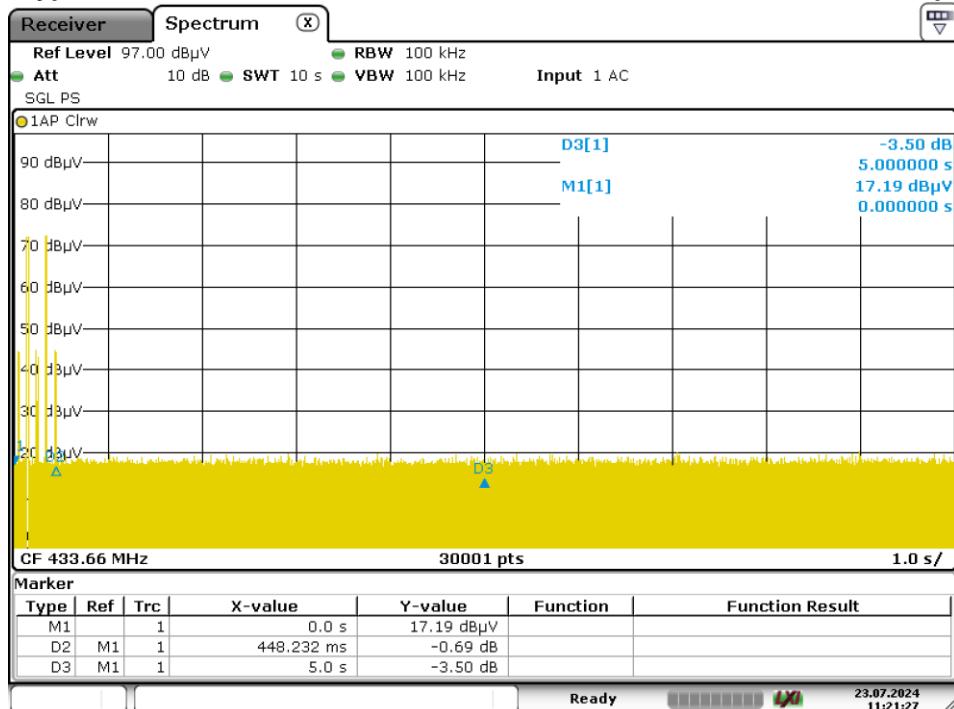


Date: 28.APR.2024 11:18:59

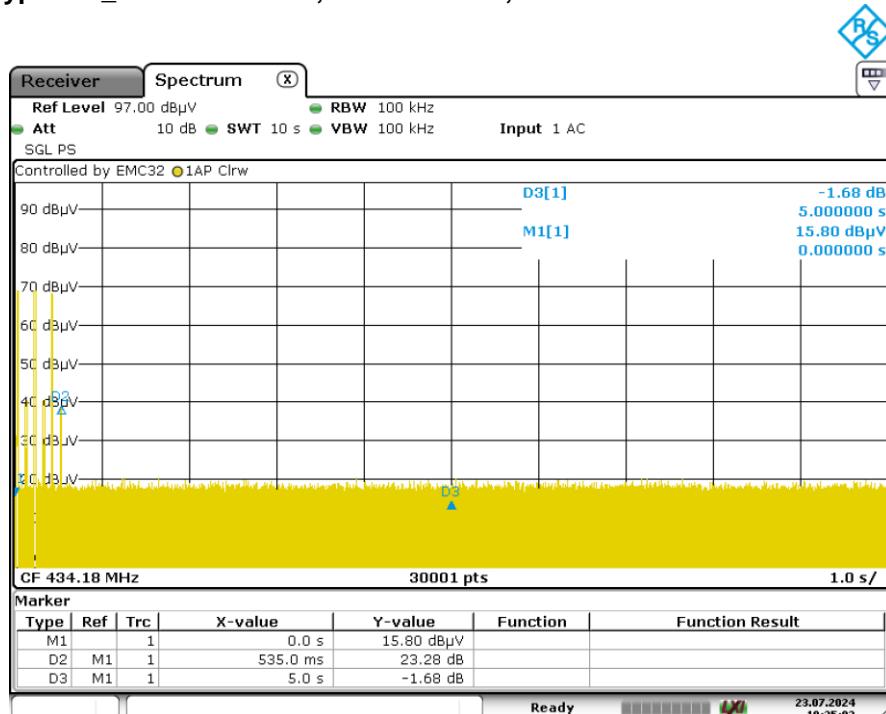
Signal Type: RF_RKE 434.18MHz



Date: 28.APR.2024 11:21:24


Signal Type: RF_RKE 433.66MHz, on hold mode, release the button at the sweep begin.


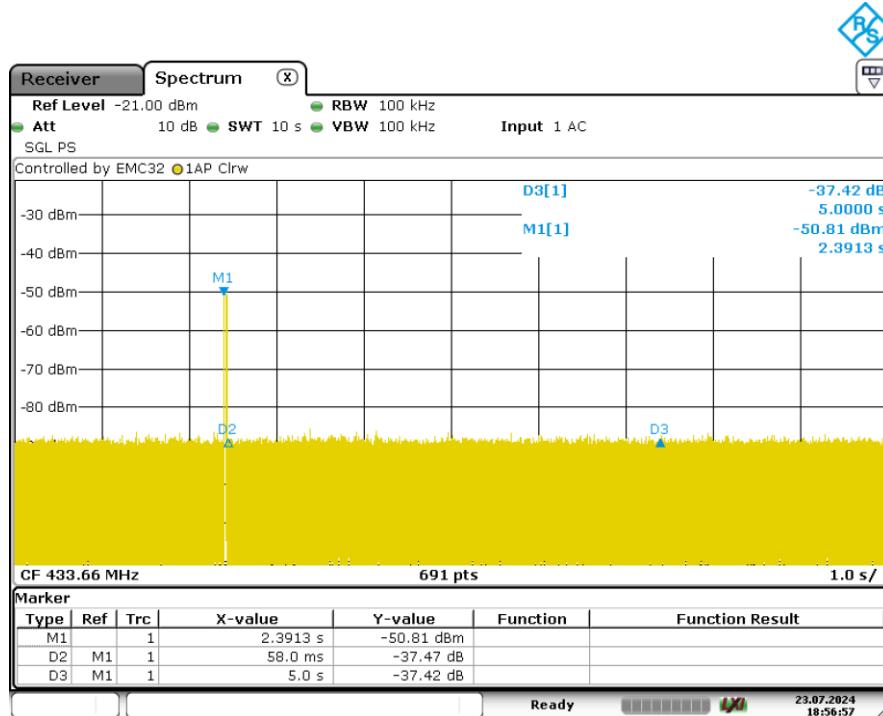
Date: 23.JUL.2024 11:21:27

Signal Type: RF_RKE 434.18MHz, on hold mode, release the button at the sweep begin.


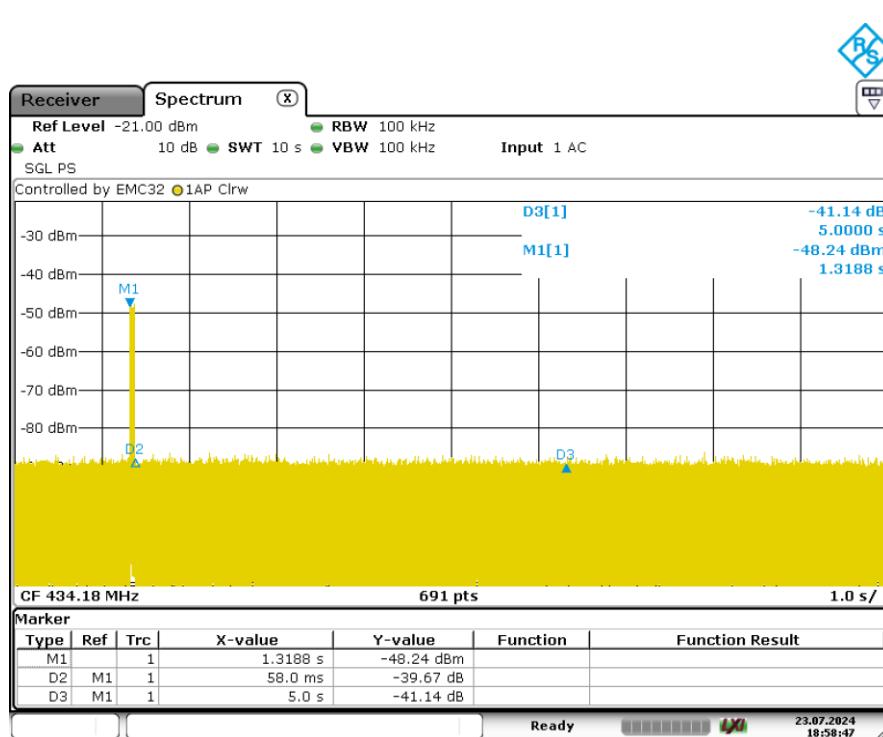
Date: 23.JUL.2024 19:25:03



Signal Type: RF_KV 433.66MHz

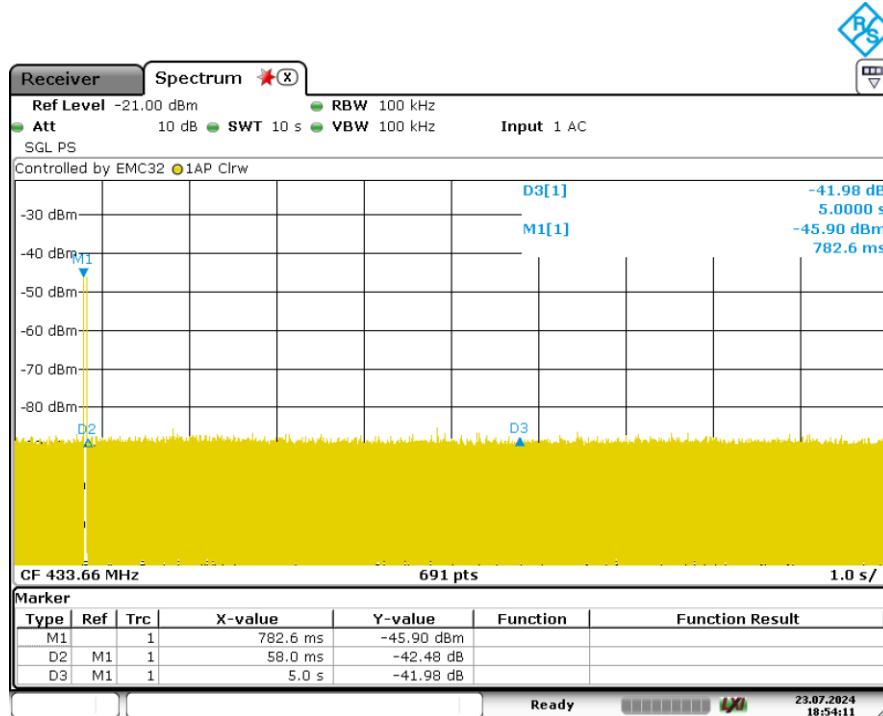


Signal Type: RF_KV 434.18MHz



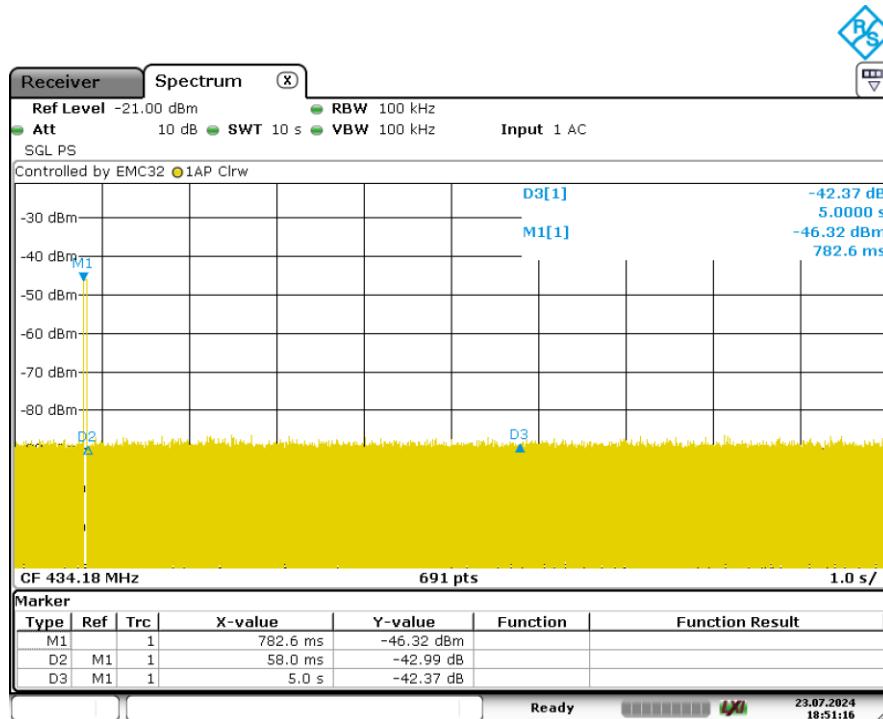


Signal Type: RF_Approach 433.66MHz



Date: 23.JUL.2024 18:54:11

Signal Type: RF_Approach 434.18MHz



Date: 23.JUL.2024 18:51:16



11 Test Equipment List

List of Test Instruments

RF Test

Description	Manufacturer	Model no.	Serial no.	Calibration Date	Calibration Due
Signal and spectrum analyzer	R&S	FSV40	S1503003-YQ-EMC	2023-8-01	2024-7-31

Radiated Emission Test

USED	Equipment Name	Model	Manufacturer	Equipment ID.	Calibration Date	Calibration Due
<input checked="" type="checkbox"/>	EMI test receiver	ESR3	R&S	S1503109-YQ-EMC	2023-8-01	2024-7-31
<input checked="" type="checkbox"/>	Trilog super broadband test antenna	SCHWARZBECK	VULB9168	S1808296-YQ-EMC	2021-9-23	2024-9-22
<input checked="" type="checkbox"/>	Double-ridged waveguide horn antenna	HF907	R&S	S1503009-YQ-EMC	2024-4-14	2027-4-13
<input checked="" type="checkbox"/>	Pre-amplifier	HPAP-9K0130	Shenzhen HzEMC	S2110423b-YQ-EMC	2023-8-01	2024-7-31
<input checked="" type="checkbox"/>	Signal and spectrum analyzer	FSV40	R&S	S1503003-YQ-EMC	2023-8-01	2024-7-31
<input checked="" type="checkbox"/>	Loop antenna	HFH2-Z2	R&S	S1503013-YQ-EMC	2024-6-26	2025-6-25

Measurement Software Information

Test Item	Software	Manufacturer	Version
RE	EMC 32	Rohde & Schwarz	V10.50.40

12 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

Items	Extended Uncertainty
Radiated Disturbance	9kHz to 30MHz, 3.52dB 30MHz to 1GHz, 5.03dB (Horizontal) 5.12dB (Vertical) 1GHz to 18GHz, 5.49dB 18GHz to 40GHz, 5.63dB

Measurement Uncertainty Decision Rule:

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.3.3.



13 Photographs of Test Set-ups

Refer to the < Test Setup photos >.



14 Photographs of EUT

Refer to the < External Photos > & < Internal Photos >.

-----**End of Test Report**-----