

TEST REPORT

Applicant: WOUXUN COMMUNICATIONS LIMITED

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THOMSON RD WAN CHAI HK, 999077 HONGKONG

Product Name: TWO WAY RADIO

FCC ID: 2BGESWX002

Standard(s): FCC Part 15B
ANSI C63.4-2014

Report Number: 2402Y66271E-RF-00A

Report Date: 2025/3/13

The above device has been tested and found compliant with the requirement of the relative standards by Bay Area Compliance Laboratories Corp. (Dongguan).

Pedro Yun

Gavin Xu

Reviewed By: Pedro Yun

Approved By: Gavin Xu

Title: Project Engineer

Title: RF Supervisor

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2402Y66271E-RF-00A	Original Report	2025/3/13

1. GENERAL INFORMATION

1.1 General Description Of Equipment under Test

EUT Name:	TWO WAY RADIO
EUT Model:	KG-XS20H
Multiple Models:	KG-XS20H Plus, KG-XS20H+, KG-XS20HR, KG-XS20HX, KG-XS20HR Plus, KG-XS20HX Plus
Scanning Receive Operation Frequency:	136-174MHz, 222-225MHz, 400-480MHz
Rated Input Voltage:	DC 13.8V from vehicle system
Serial Number:	2T5H-1
EUT Received Date:	2024/10/18
EUT Received Status:	Good
Note: The multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.	

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
MIC	WOUXUN COMMUNICATIONS LIMITED	Unknown	Unknown

1.3 Equipment Modifications

No modifications are made to the EUT during all test items.

2. SUMMARY OF TEST RESULTS

Standard Clause	Description of Test	Test Result
FCC§15.107	Conducted emissions	Not Applicable
FCC§15.109	Radiated emissions	Compliant
FCC§15.121(b)	Scanning receivers and frequency converters used with scanning receivers	Compliant
FCC§15.111	Antenna power conduction limits for receivers	Compliant
Note: AC line conducted emissions is not applicable, the device was powered by vehicle system.		

3. DESCRIPTION OF TEST CONFIGURATION

3.1 Operation Frequency And Test Channel:

Operation Modes	Operation Frequency Range (MHz)	Test Frequency (MHz)
Scanning	136-174	136-174
	222-225	222-225
	400-480	400-480
Receiving	136-174	136.0125, 155, 173.9875,
	222-225	222.0125, 224.9875
	400-480	400.0125, 440, 479.9875

3.2 Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user). The following summary table is showing all test modes to demonstrate in compliance with the standard:

Test Items	Test Mode(s)
Radiated Spurious Emission :	Test Mode 1: Scanning Test Mode 2: Receiving
AC Line Conducted Emission	Not applicable, the device was powered by vehicle system.

3.3 EUT Exercise Software

No software was used to test.

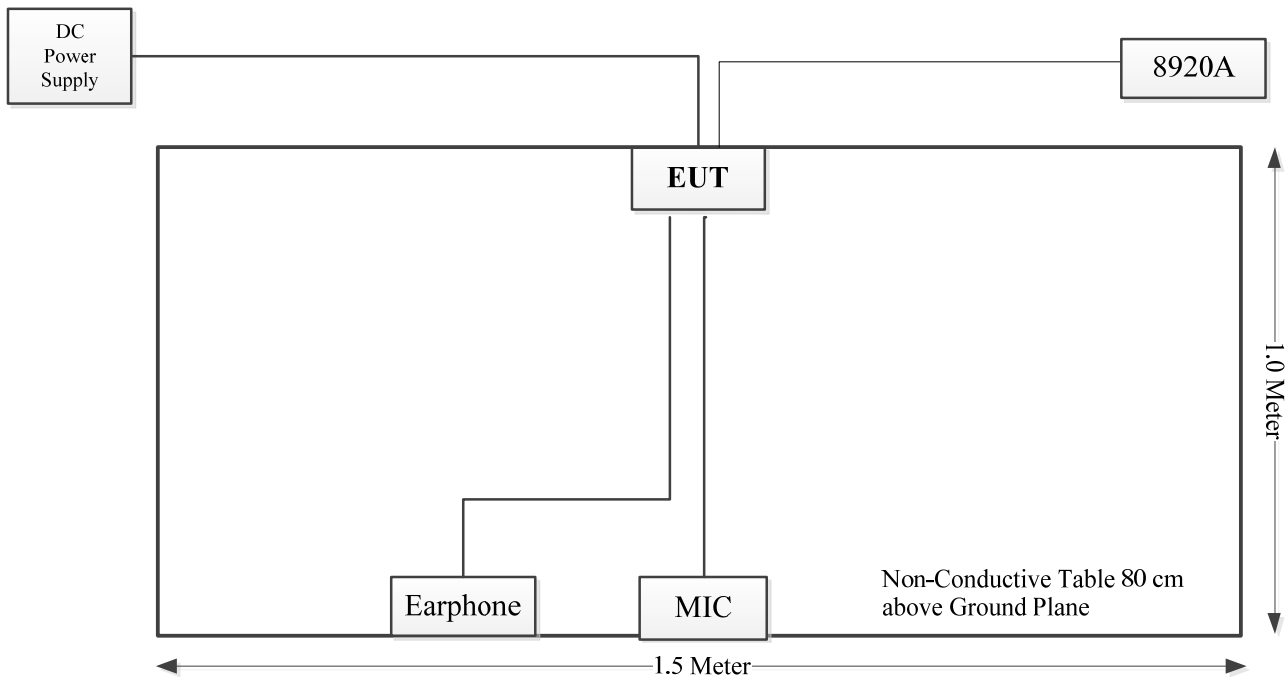
3.4 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
TDK-Lambda	DC Power Supply	KYT173381	LOC-825A153-0016
HP	RF Communications Test Set	8920A	3438A05201

3.5 Support Cable List and Details

Cable Description	Shielding Cable	Ferrite Core	Length (m)	From Port	To
MIC cable	Yes	No	2	MIC	EUT
Power cable	No	No	3	DC Power Supply	EUT

3.6 Block Diagram of Test Setup



3.7 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 829273, the FCC Designation No. : CN5044.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

3.8 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Unwanted Emissions, radiated	9kHz~30MHz: 3.3dB, 30MHz~200MHz: 4.55 dB 200MHz~1GHz: 5.92 dB, 1GHz~6GHz: 4.98 dB 6GHz~18GHz: 5.89 dB, 18GHz~26.5GHz: 5.47 dB 26.5GHz~40GHz: 5.63 dB
Unwanted Emissions, Conducted	0.6 dB
AC Power Lines Conducted Emission	3.11 dB (150 kHz to 30 MHz)
Temperature	±1°C
Humidity	±5%

4. REQUIREMENTS AND TEST PROCEDURES

4.1 AC Line Conducted Emissions

Not applicable, the device was powered by vehicle system.

4.2 Radiation Spurious Emissions

4.2.1 Applicable Standard

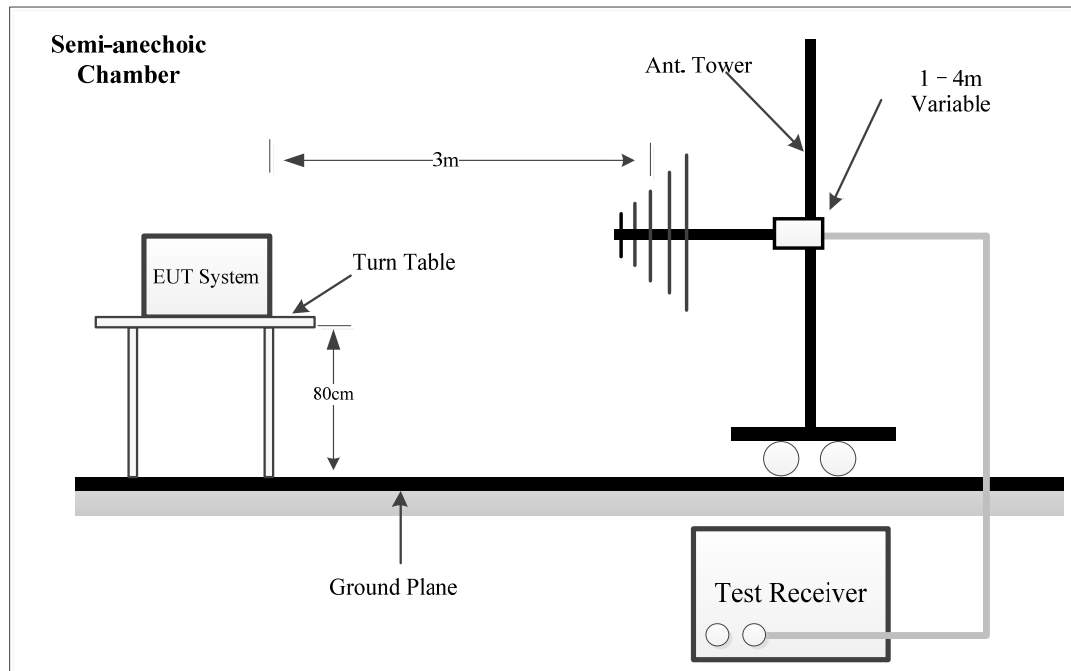
FCC§15.109

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

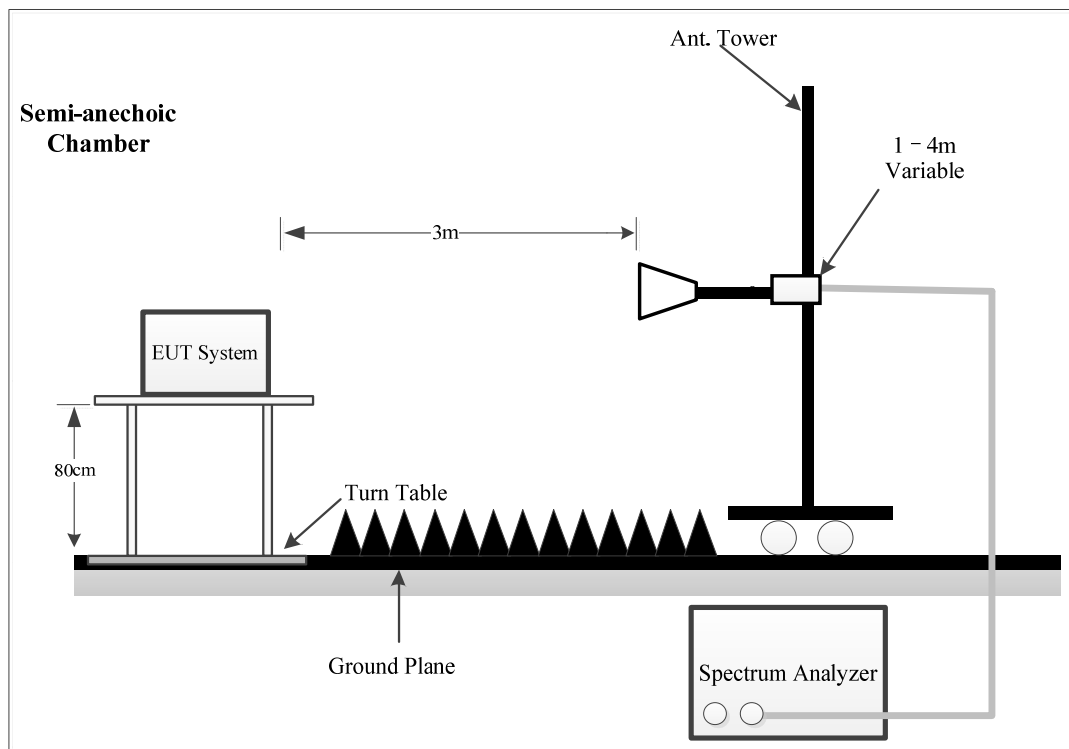
Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500

4.2.2 Test System Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed at the 3 meters distance, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15B Class B limits.

4.2.3 EMI Test Receiver Setup

The system was investigated from 30 MHz to 6 GHz.

30 MHz-1000 MHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	PK	100 kHz	300 kHz	/	PK
	QP	/	/	120 kHz	QP

1 GHz- 6 GHz:

Pre-scan:

Measurement	RBW	Video B/W	Detector
PK	1MHz	3 MHz	PK
Ave.	1MHz	5kHz	PK

Final measurement for emission identified during the pre-scan:

Measurement	RBW	Video B/W	Detector
PK	1MHz	3 MHz	PK
Ave.	1MHz	10 Hz	PK

4.2.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

If the maximized peak measured value complies with under the QP limit more than 6dB, then it is unnecessary to perform an QP measurement.

4.2.5 Corrected Result & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = Antenna Factor + Cable Loss- Amplifier Gain

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

4.2.6 Test Result and Data

Serial Number:	2T5H-1	Test Date:	2024/11/14~2024/11/16
Test Site:	Chamber10m, Chamber A	Test Mode:	Mode 1, Mode 2
Tester:	Zoo Zou, Jayce Wang	Test Result:	Pass

Environmental Conditions:

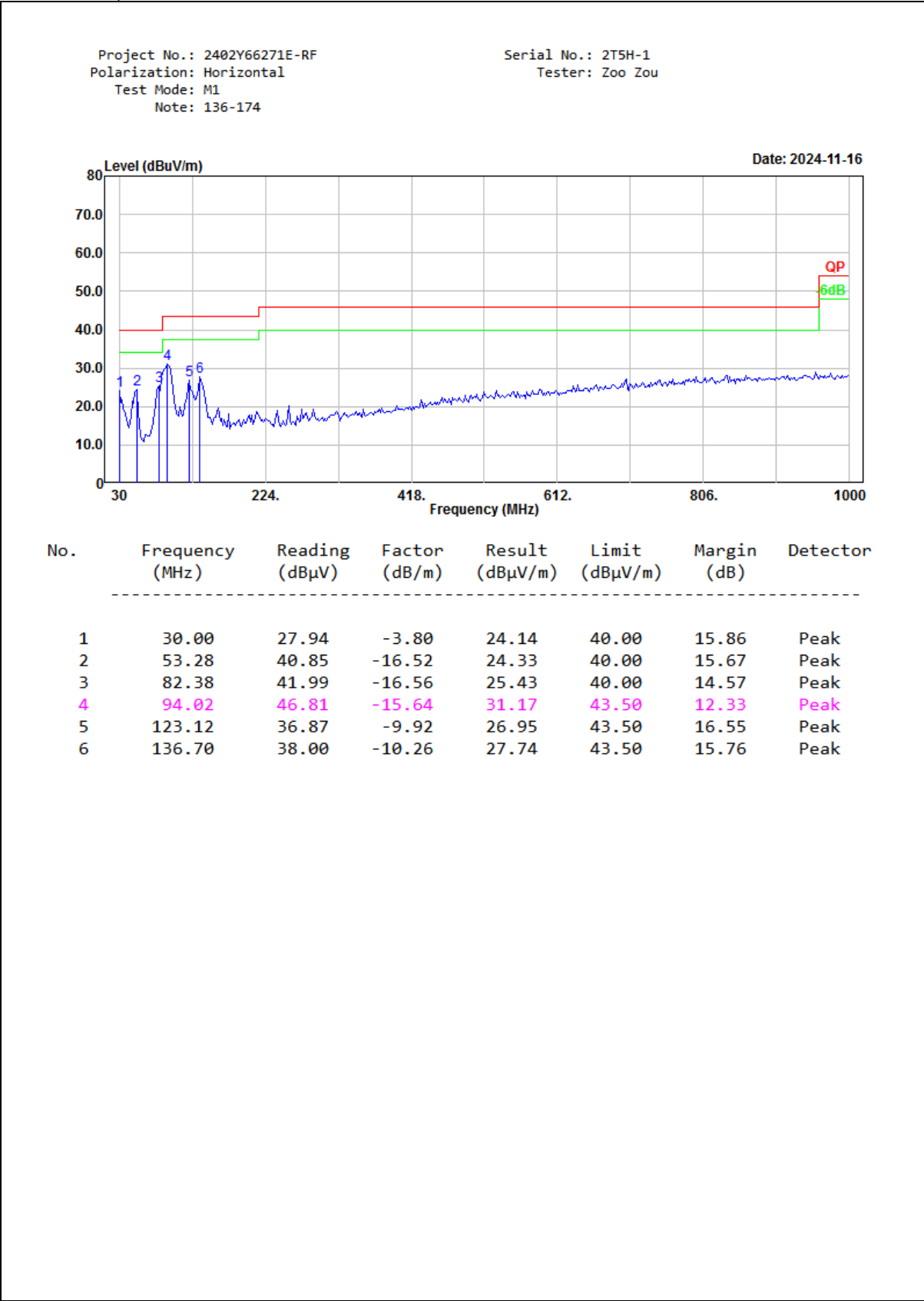
Temperature: (°C)	19.6~26	Relative Humidity: (%)	35~42	ATM Pressure: (kPa)	101~101.2
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Hybrid Antenna	JB3	A060611-1	2023/9/6	2026/9/5
Narda	Coaxial Attenuator	779-6dB	04269	2023/9/6	2026/9/5
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-04	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2024/7/1	2025/6/30
Sonoma	Amplifier	310N	185914	2024/8/26	2025/8/25
R&S	EMI Test Receiver	ESCI	100224	2024/8/26	2025/8/25
Audix	Test Software	E3	191218 V9	N/A	N/A
AH	Horn Antenna	SAS-571	1177	2023/2/22	2026/2/21
HUBER+SUHNER	Coaxial Cable	SUCOFLEX 126EA	MY369/26/26EA	2024/7/1	2025/6/30
Mini-Circuits	Preamplifier	ZVZ-183-S+	5696001267	2024/3/1	2025/2/28
R&S	Spectrum Analyzer	FSP 38	100478	2024/9/5	2025/9/4

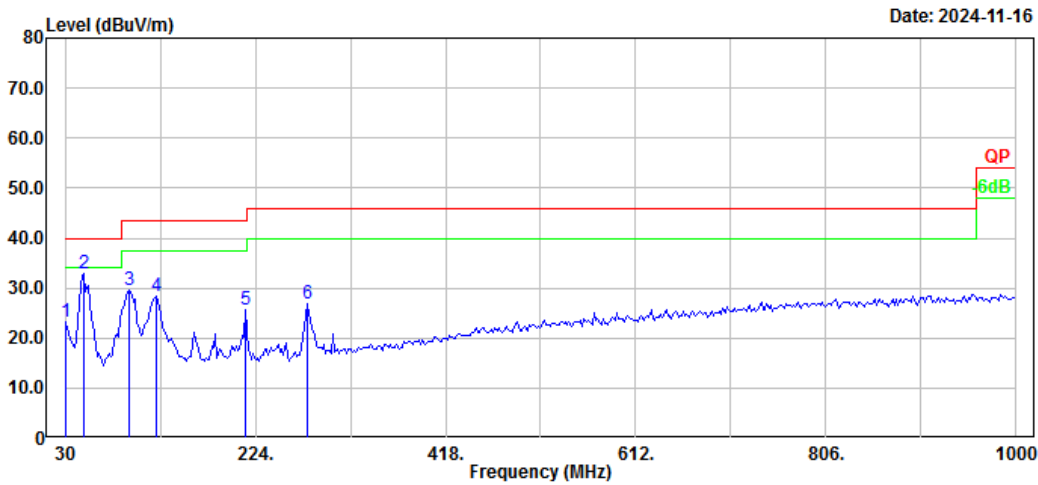
* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

1) 30MHz-1GHz:
M1(136-174MHz)



Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M1
Note: 136-174

Serial No.: 2T5H-1
Tester: Zoo Zou

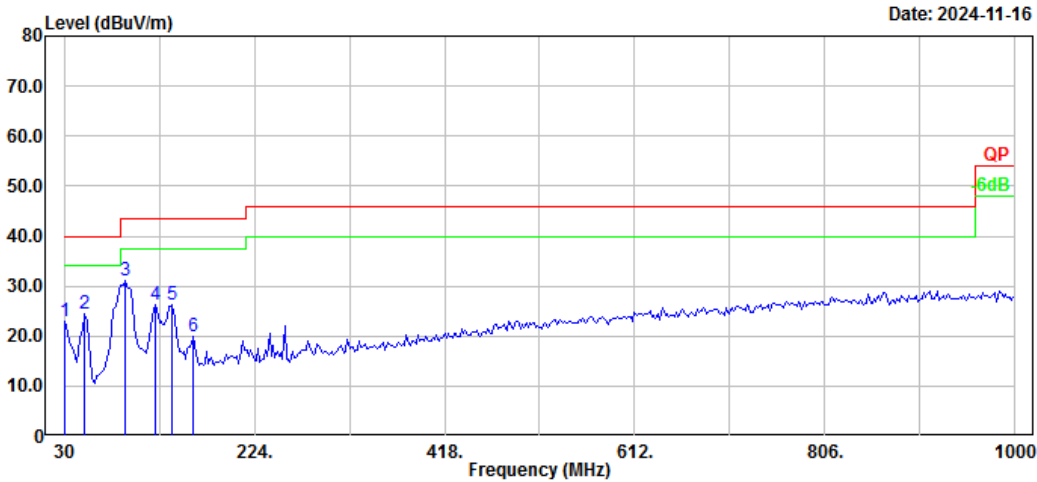


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.19	-3.80	23.39	40.00	16.61	Peak
2	49.40	49.01	-16.14	32.87	40.00	7.13	Peak
3	95.96	44.80	-15.22	29.58	43.50	13.92	Peak
4	123.12	38.18	-9.92	28.26	43.50	15.24	Peak
5	214.30	38.06	-12.54	25.52	43.50	17.98	Peak
6	276.38	36.79	-9.85	26.94	46.00	19.06	Peak

M1(400-480MHz)

Project No.: 2402Y66271E-RF
 Polarization: Horizontal
 Test Mode: M1
 Note: 400-480

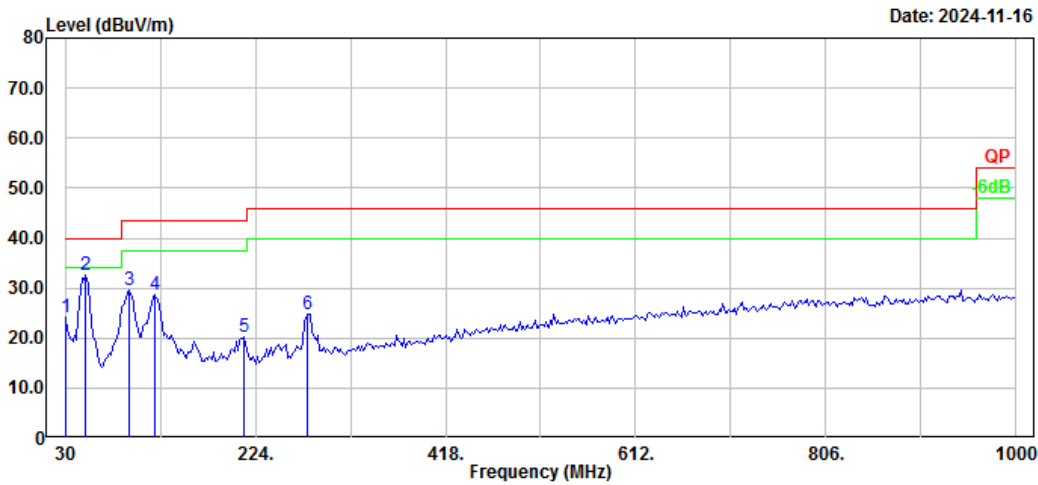
Serial No.: 2T5H-1
 Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	26.73	-3.80	22.93	40.00	17.07	Peak
2	51.34	41.00	-16.49	24.51	40.00	15.49	Peak
3	92.08	47.26	-16.08	31.18	43.50	12.32	Peak
4	123.12	36.04	-9.92	26.12	43.50	17.38	Peak
5	140.58	36.67	-10.49	26.18	43.50	17.32	Peak
6	161.92	31.07	-11.27	19.80	43.50	23.70	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M1
Note: 400-480

Serial No.: 2T5H-1
Tester: Zoo Zou

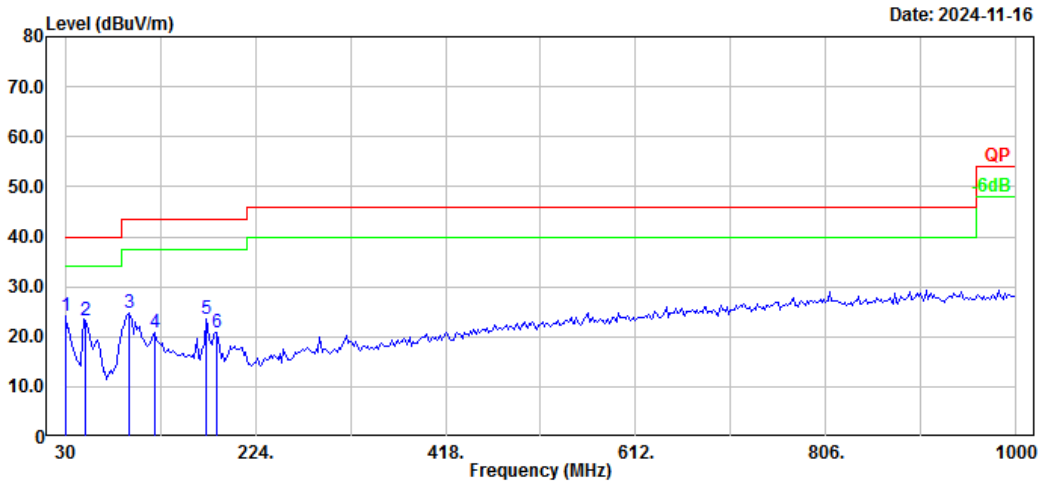


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	28.10	-3.80	24.30	40.00	15.70	Peak
2	51.34	49.23	-16.49	32.74	40.00	7.26	Peak
3	95.96	44.67	-15.22	29.45	43.50	14.05	Peak
4	121.18	38.58	-9.94	28.64	43.50	14.86	Peak
5	212.36	32.66	-12.55	20.11	43.50	23.39	Peak
6	276.38	34.63	-9.85	24.78	46.00	21.22	Peak

M1(222-225MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M1
Note: 222-225

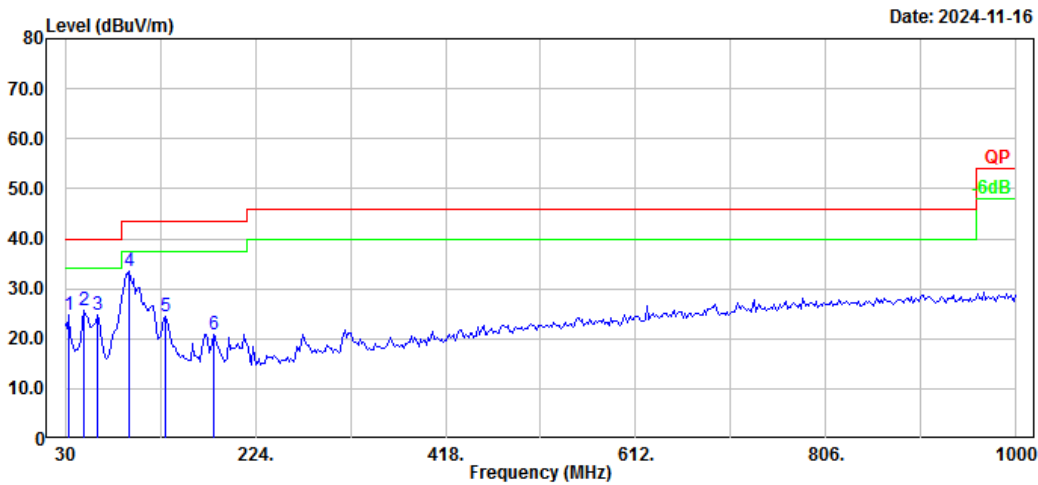
Serial No.: 2T5H-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.98	-3.80	24.18	40.00	15.82	Peak
2	51.34	39.82	-16.49	23.33	40.00	16.67	Peak
3	95.96	39.92	-15.22	24.70	43.50	18.80	Peak
4	121.18	30.76	-9.94	20.82	43.50	22.68	Peak
5	173.56	35.44	-11.98	23.46	43.50	20.04	Peak
6	185.20	33.17	-12.24	20.93	43.50	22.57	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M1
Note: 222-225

Serial No.: 2T5H-1
Tester: Zoo Zou

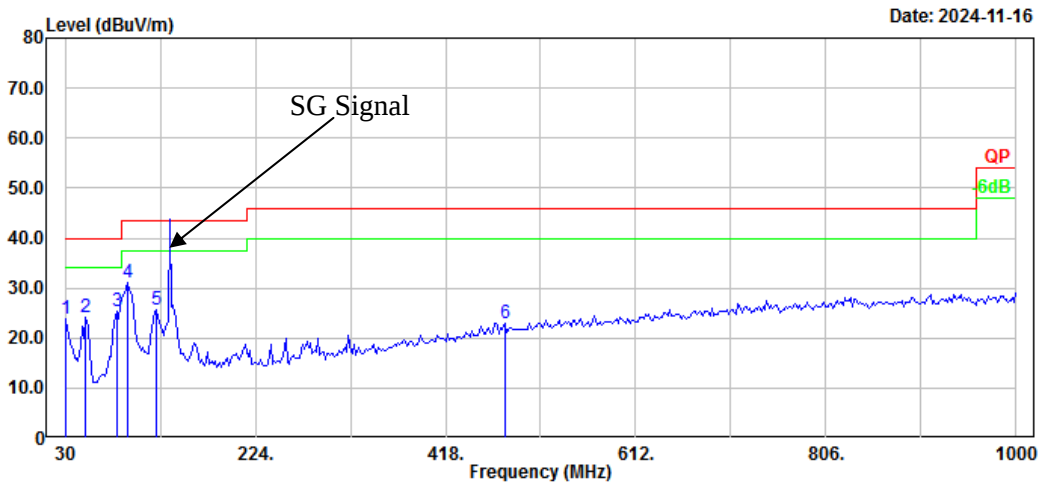


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.88	31.36	-6.62	24.74	40.00	15.26	Peak
2	49.40	41.70	-16.14	25.56	40.00	14.44	Peak
3	62.98	41.22	-16.56	24.66	40.00	15.34	Peak
4	95.96	48.75	-15.22	33.53	43.50	9.97	Peak
5	132.82	34.47	-10.03	24.44	43.50	19.06	Peak
6	181.32	33.23	-12.33	20.90	43.50	22.60	Peak

M2(136.0125MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M2
Note: 136.0125

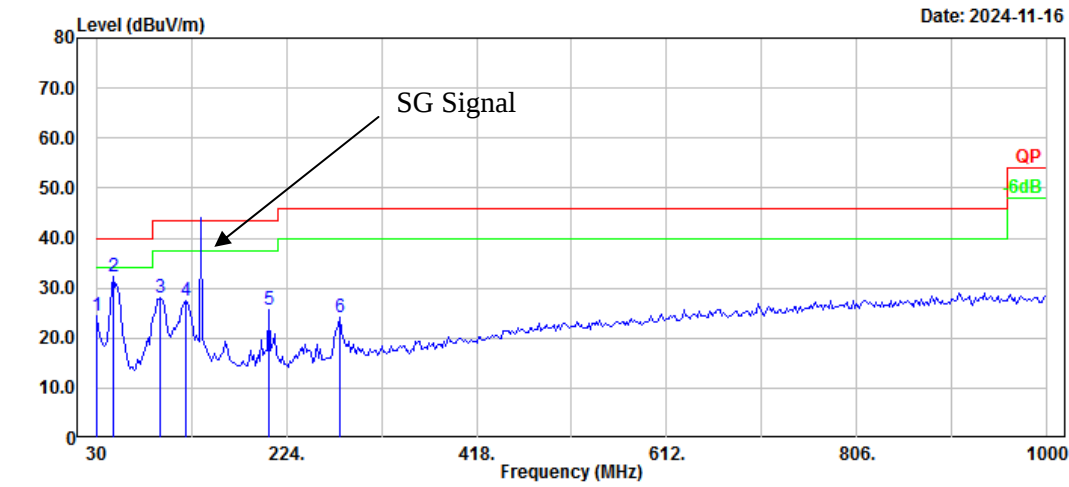
Serial No.: 2T5H-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.62	-3.80	23.82	40.00	16.18	Peak
2	51.34	40.64	-16.49	24.15	40.00	15.85	Peak
3	82.38	41.96	-16.56	25.40	40.00	14.60	Peak
4	94.02	46.65	-15.64	31.01	43.50	12.49	Peak
5	123.12	35.52	-9.92	25.60	43.50	17.90	Peak
6	478.14	27.66	-4.75	22.91	46.00	23.09	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 136.0125

Serial No.: 2T5H-1
Tester: Zoo Zou

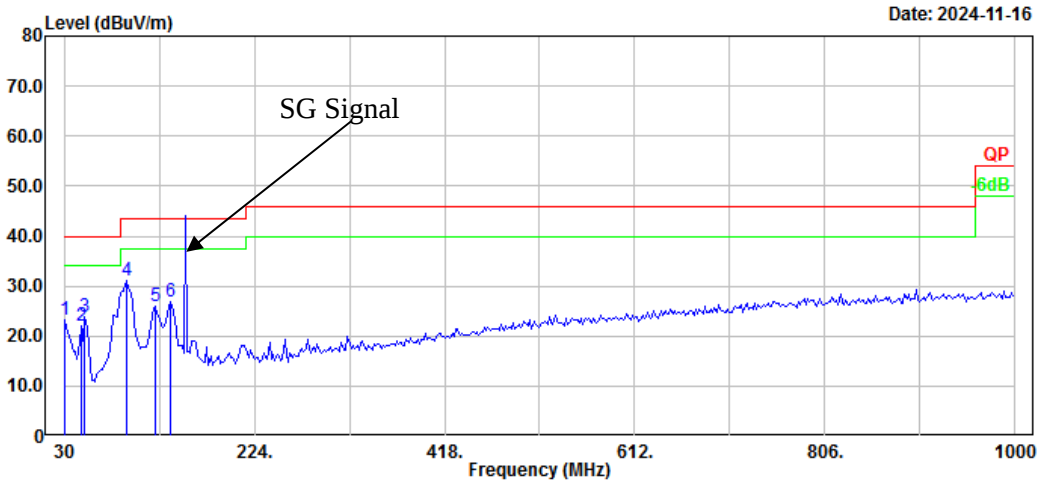


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	28.12	-3.80	24.32	40.00	15.68	Peak
2	47.46	47.22	-15.04	32.18	40.00	7.82	Peak
3	95.96	43.39	-15.22	28.17	43.50	15.33	Peak
4	121.18	37.36	-9.94	27.42	43.50	16.08	Peak
5	206.54	37.84	-12.21	25.63	43.50	17.87	Peak
6	278.32	33.80	-9.79	24.01	46.00	21.99	Peak

M2(155MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M2
Note: 155

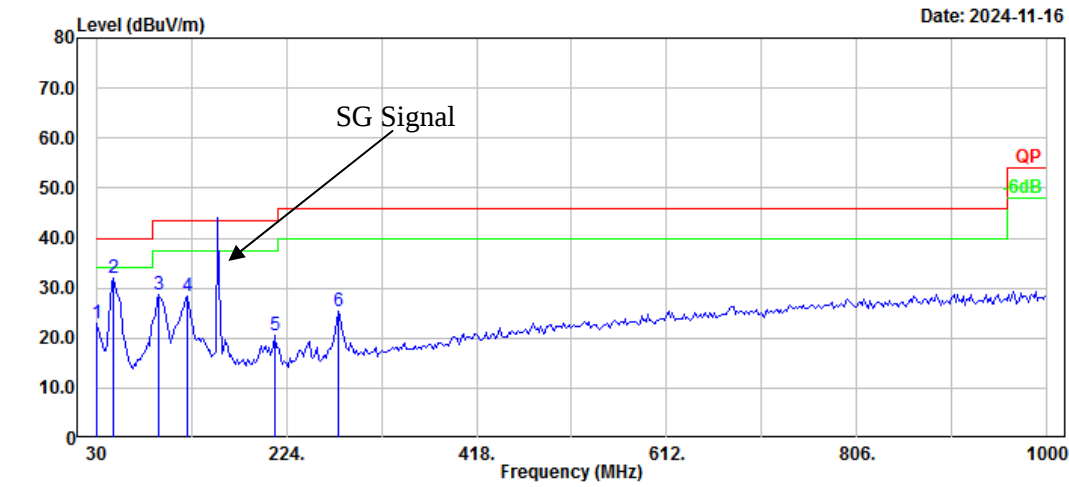
Serial No.: 2T5H-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.16	-3.80	23.36	40.00	16.64	Peak
2	47.46	37.11	-15.04	22.07	40.00	17.93	Peak
3	51.34	40.33	-16.49	23.84	40.00	16.16	Peak
4	94.02	46.61	-15.64	30.97	43.50	12.53	Peak
5	123.12	35.76	-9.92	25.84	43.50	17.66	Peak
6	138.64	37.18	-10.38	26.80	43.50	16.70	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 155

Serial No.: 2T5H-1
Tester: Zoo Zou



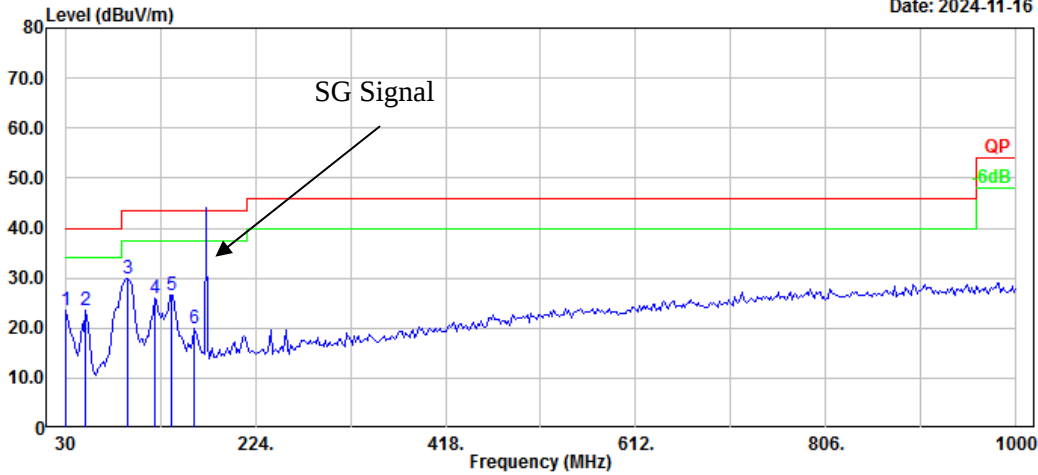
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	26.73	-3.80	22.93	40.00	17.07	Peak
2	47.46	46.97	-15.04	31.93	40.00	8.07	Peak
3	94.02	44.44	-15.64	28.80	43.50	14.70	Peak
4	123.12	38.16	-9.92	28.24	43.50	15.26	Peak
5	212.36	33.23	-12.55	20.68	43.50	22.82	Peak
6	276.38	35.18	-9.85	25.33	46.00	20.67	Peak

M2(173.9875MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M2
Note: 173.9875

Serial No.: 2T5H-1
Tester: Zoo Zou

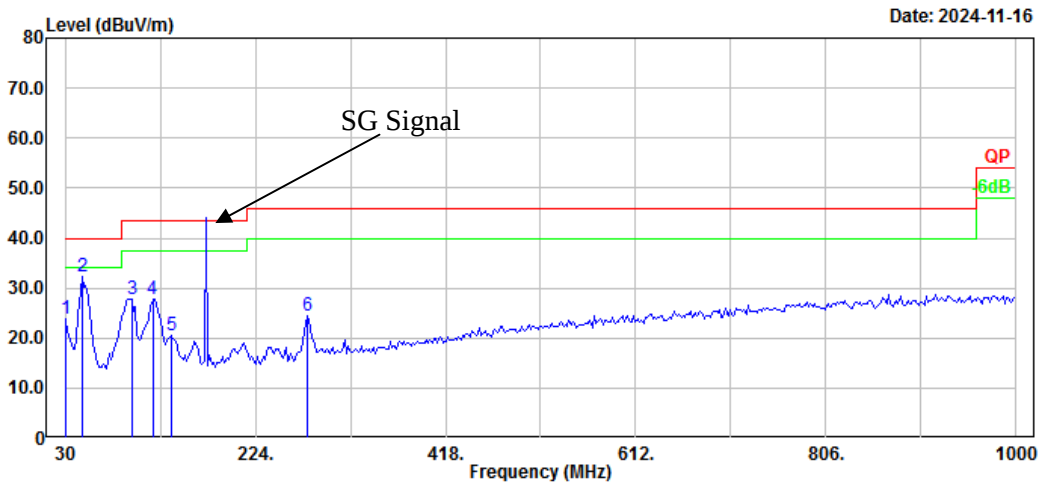
Date: 2024-11-16



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.40	-3.80	23.60	40.00	16.40	Peak
2	51.34	39.89	-16.49	23.40	40.00	16.60	Peak
3	94.02	45.62	-15.64	29.98	43.50	13.52	Peak
4	121.18	35.98	-9.94	26.04	43.50	17.46	Peak
5	138.64	36.88	-10.38	26.50	43.50	17.00	Peak
6	161.92	31.07	-11.27	19.80	43.50	23.70	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 173.9875

Serial No.: 2T5H-1
Tester: Zoo Zou



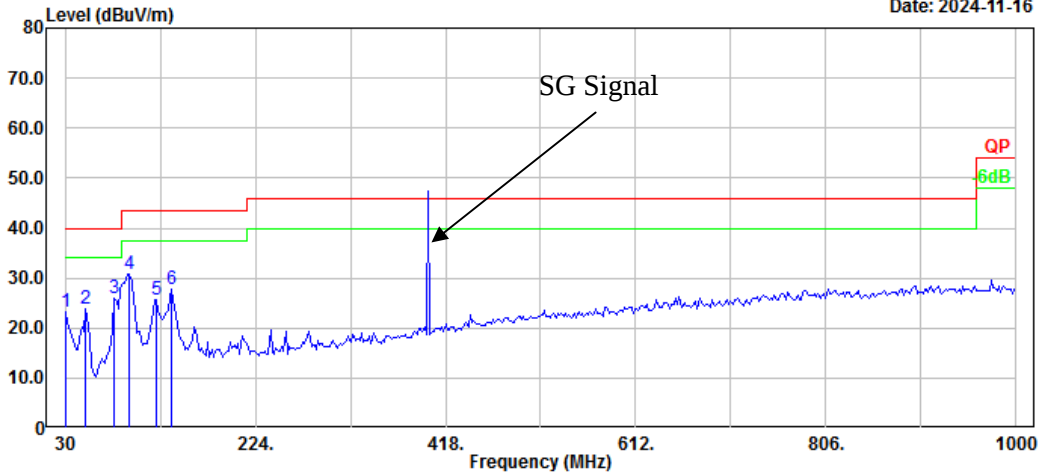
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.78	-3.80	23.98	40.00	16.02	Peak
2	47.46	47.38	-15.04	32.34	40.00	7.66	Peak
3	97.90	42.71	-14.83	27.88	43.50	15.62	Peak
4	119.24	37.94	-10.05	27.89	43.50	15.61	Peak
5	138.64	30.93	-10.38	20.55	43.50	22.95	Peak
6	276.38	34.30	-9.85	24.45	46.00	21.55	Peak

M2(400.0125MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M2
Note: 400.0125

Serial No.: 2T5H-1
Tester: Zoo Zou

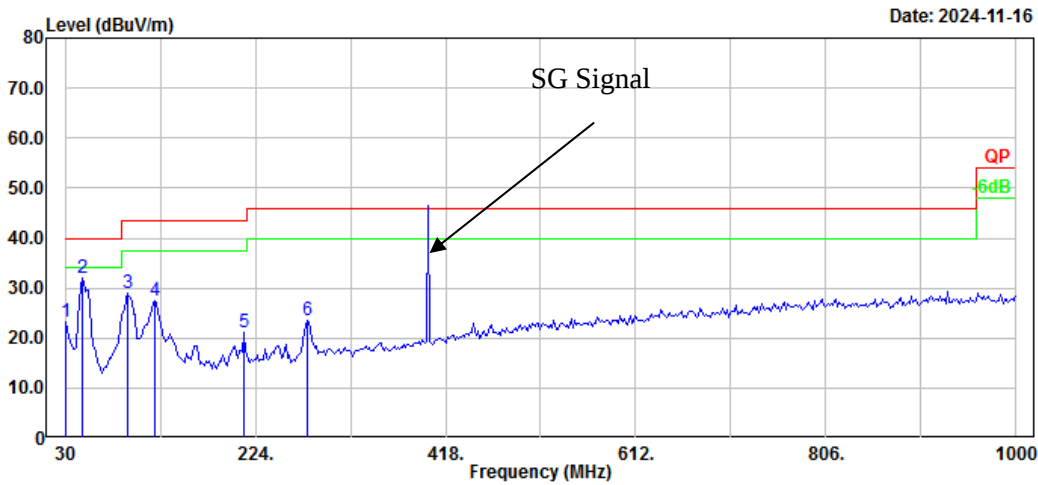
Date: 2024-11-16



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.04	-3.80	23.24	40.00	16.76	Peak
2	51.34	40.42	-16.49	23.93	40.00	16.07	Peak
3	80.44	42.32	-16.50	25.82	40.00	14.18	Peak
4	95.96	46.04	-15.22	30.82	43.50	12.68	Peak
5	123.12	35.45	-9.92	25.53	43.50	17.97	Peak
6	138.64	38.16	-10.38	27.78	43.50	15.72	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 400.0125

Serial No.: 2T5H-1
Tester: Zoo Zou

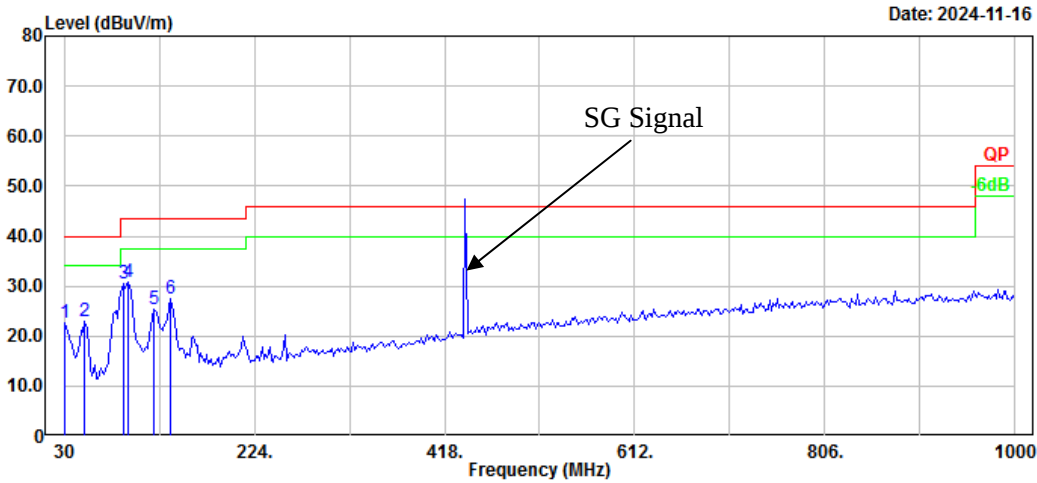


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.14	-3.80	23.34	40.00	16.66	Peak
2	47.46	46.99	-15.04	31.95	40.00	8.05	Peak
3	94.02	44.59	-15.64	28.95	43.50	14.55	Peak
4	121.18	37.34	-9.94	27.40	43.50	16.10	Peak
5	212.36	33.55	-12.55	21.00	43.50	22.50	Peak
6	276.38	33.38	-9.85	23.53	46.00	22.47	Peak

M2(440MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M2
Note: 440

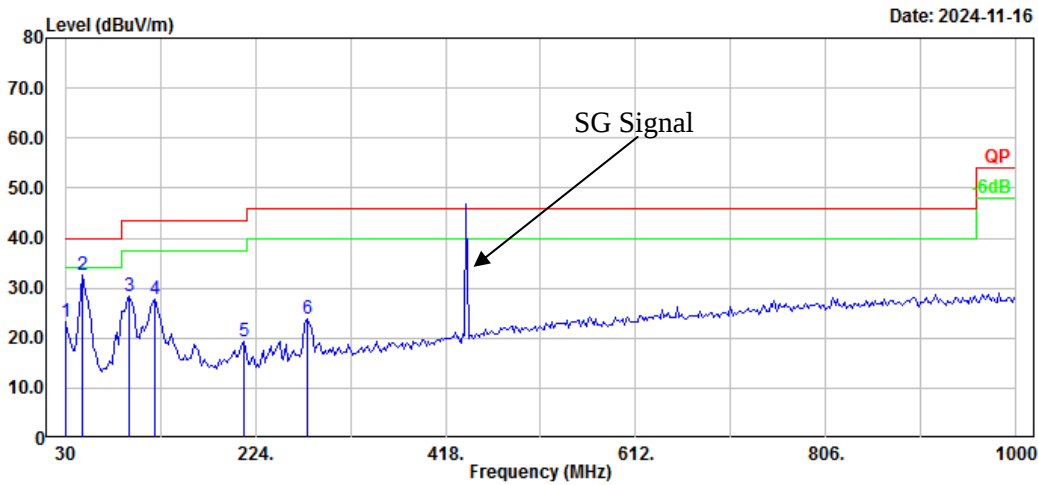
Serial No.: 2T5H-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	26.46	-3.80	22.66	40.00	17.34	Peak
2	51.34	39.57	-16.49	23.08	40.00	16.92	Peak
3	90.14	46.93	-16.52	30.41	43.50	13.09	Peak
4	95.96	46.02	-15.22	30.80	43.50	12.70	Peak
5	121.18	35.26	-9.94	25.32	43.50	18.18	Peak
6	138.64	37.74	-10.38	27.36	43.50	16.14	Peak

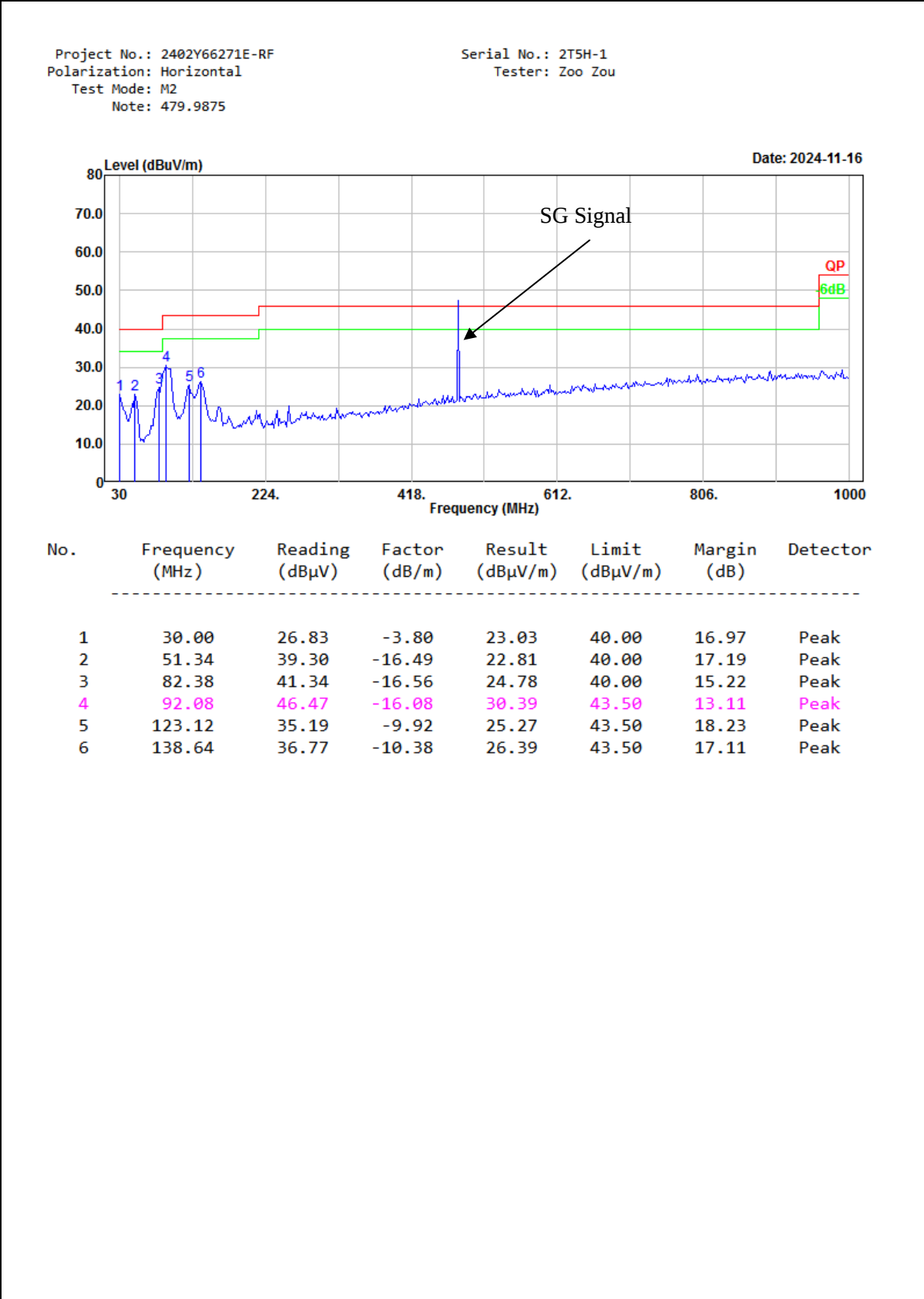
Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 440

Serial No.: 2T5H-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.01	-3.80	23.21	40.00	16.79	Peak
2	47.46	47.53	-15.04	32.49	40.00	7.51	Peak
3	95.96	43.61	-15.22	28.39	43.50	15.11	Peak
4	121.18	37.58	-9.94	27.64	43.50	15.86	Peak
5	212.36	31.90	-12.55	19.35	43.50	24.15	Peak
6	276.38	33.67	-9.85	23.82	46.00	22.18	Peak

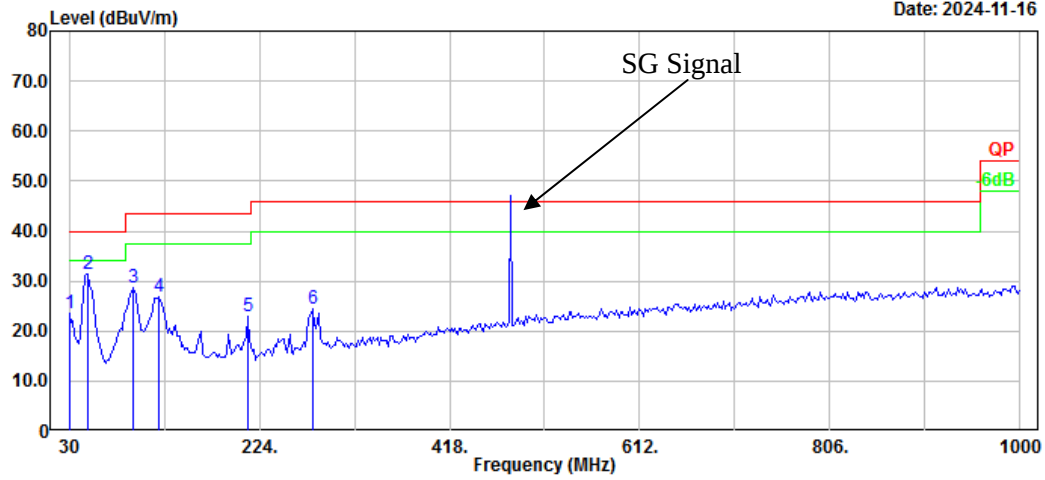
M2(479.9875MHz)



Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 479.9875

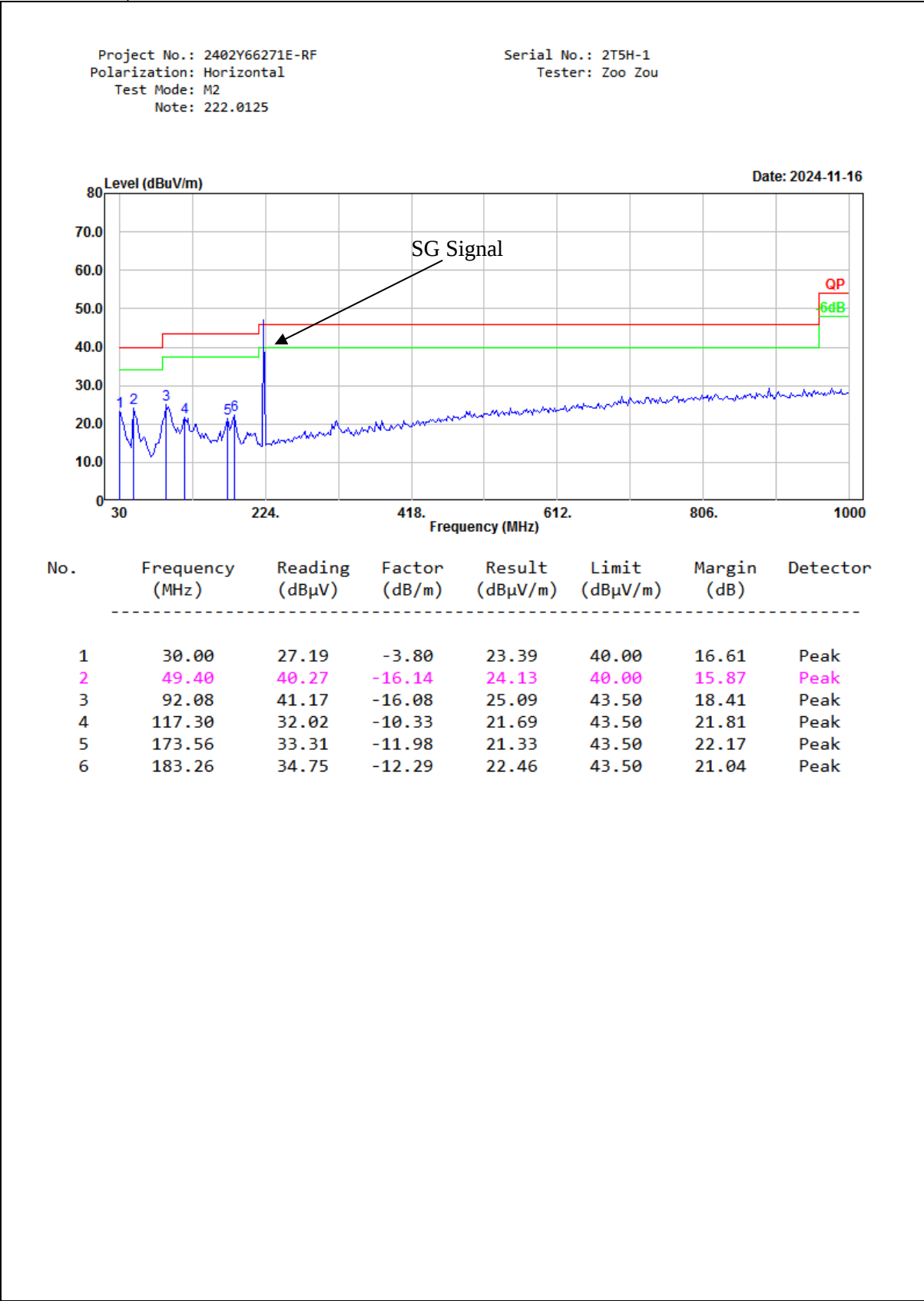
Serial No.: 2T5H-1
Tester: Zoo Zou

Date: 2024-11-16



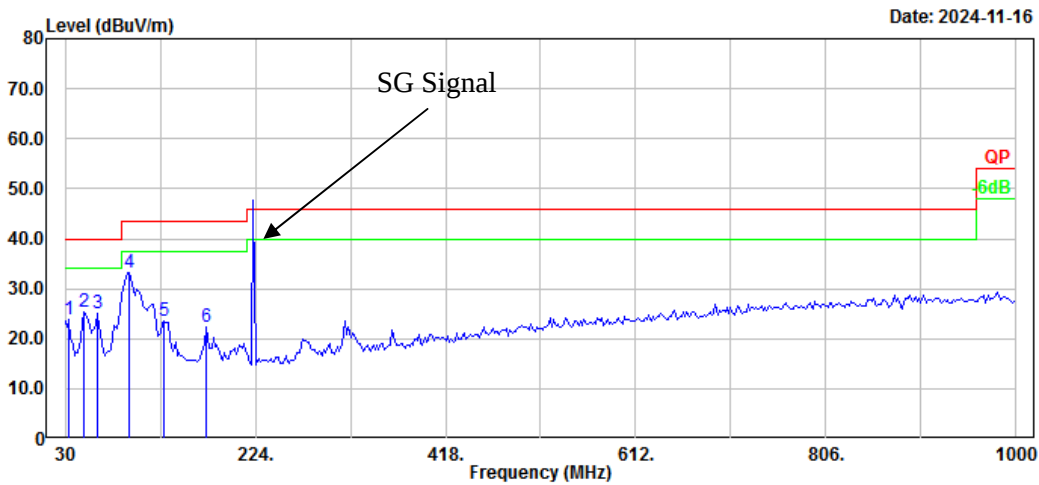
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.32	-3.80	23.52	40.00	16.48	Peak
2	49.40	47.67	-16.14	31.53	40.00	8.47	Peak
3	95.96	43.87	-15.22	28.65	43.50	14.85	Peak
4	121.18	36.67	-9.94	26.73	43.50	16.77	Peak
5	212.36	35.52	-12.55	22.97	43.50	20.53	Peak
6	278.32	34.26	-9.79	24.47	46.00	21.53	Peak

M2(222.0125MHz)



Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 222.0125

Serial No.: 2T5H-1
Tester: Zoo Zou

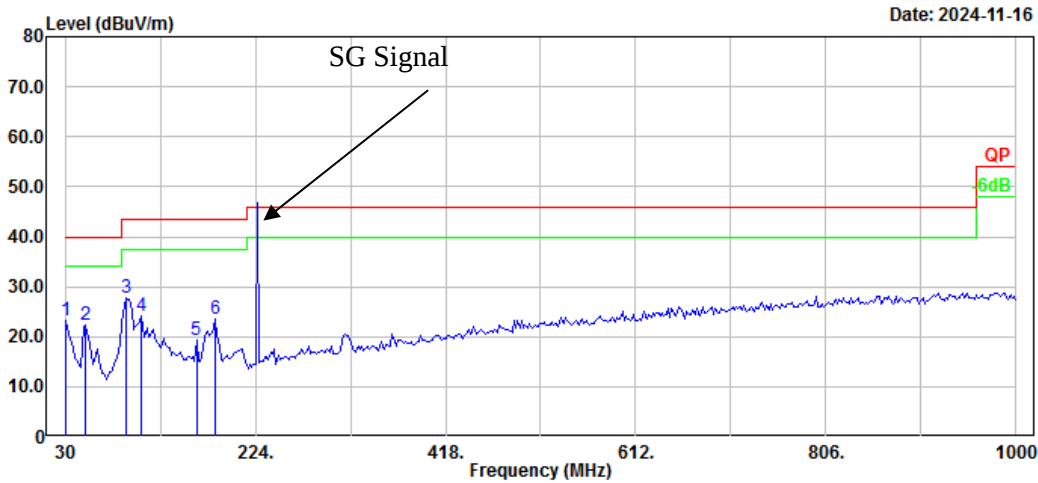


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.88	30.59	-6.62	23.97	40.00	16.03	Peak
2	49.40	41.37	-16.14	25.23	40.00	14.77	Peak
3	62.98	41.47	-16.56	24.91	40.00	15.09	Peak
4	95.96	48.33	-15.22	33.11	43.50	10.39	Peak
5	130.88	33.57	-9.91	23.66	43.50	19.84	Peak
6	173.56	34.25	-11.98	22.27	43.50	21.23	Peak

M2(224.9875MHz)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M2
Note: 224.9875

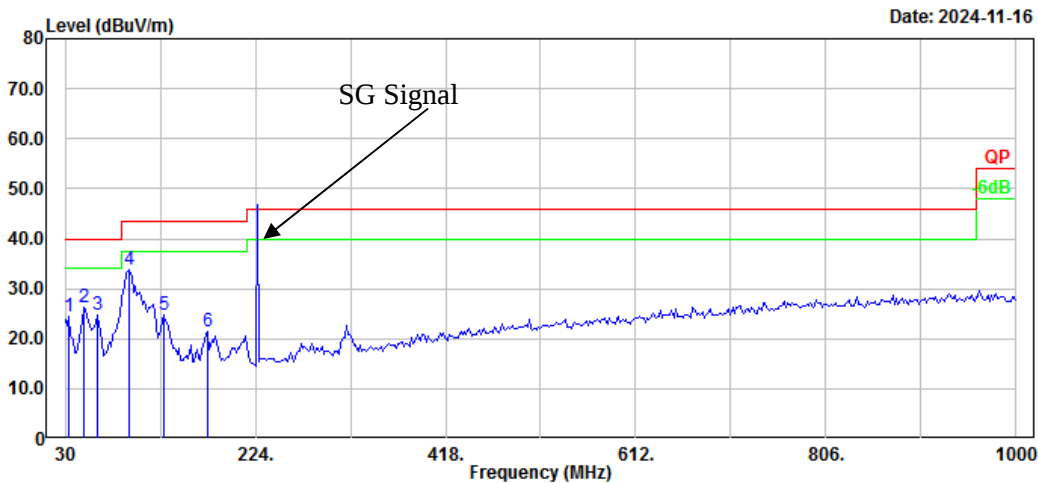
Serial No.: 2T5H-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	27.01	-3.80	23.21	40.00	16.79	Peak
2	51.34	38.86	-16.49	22.37	40.00	17.63	Peak
3	92.08	43.87	-16.08	27.79	43.50	15.71	Peak
4	107.60	36.33	-12.09	24.24	43.50	19.26	Peak
5	163.86	30.79	-11.39	19.40	43.50	24.10	Peak
6	183.26	35.87	-12.29	23.58	43.50	19.92	Peak

Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 224.9875

Serial No.: 2T5H-1
Tester: Zoo Zou

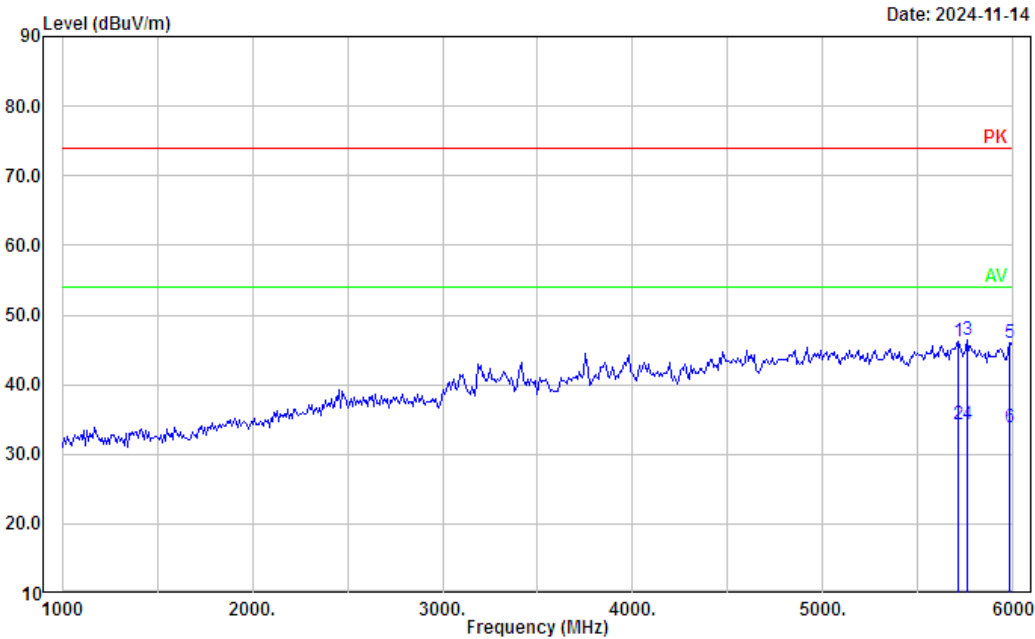


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.88	31.18	-6.62	24.56	40.00	15.44	Peak
2	49.40	42.37	-16.14	26.23	40.00	13.77	Peak
3	62.98	41.29	-16.56	24.73	40.00	15.27	Peak
4	95.96	49.00	-15.22	33.78	43.50	9.72	Peak
5	130.88	34.58	-9.91	24.67	43.50	18.83	Peak
6	175.50	33.47	-12.10	21.37	43.50	22.13	Peak

2) 1GHz-6GHz:
M1(136-174MHz was the worst)

Project No.: 2402Y66271E-RF
Polarization: Horizontal
Test Mode: M1
Note: 136-174

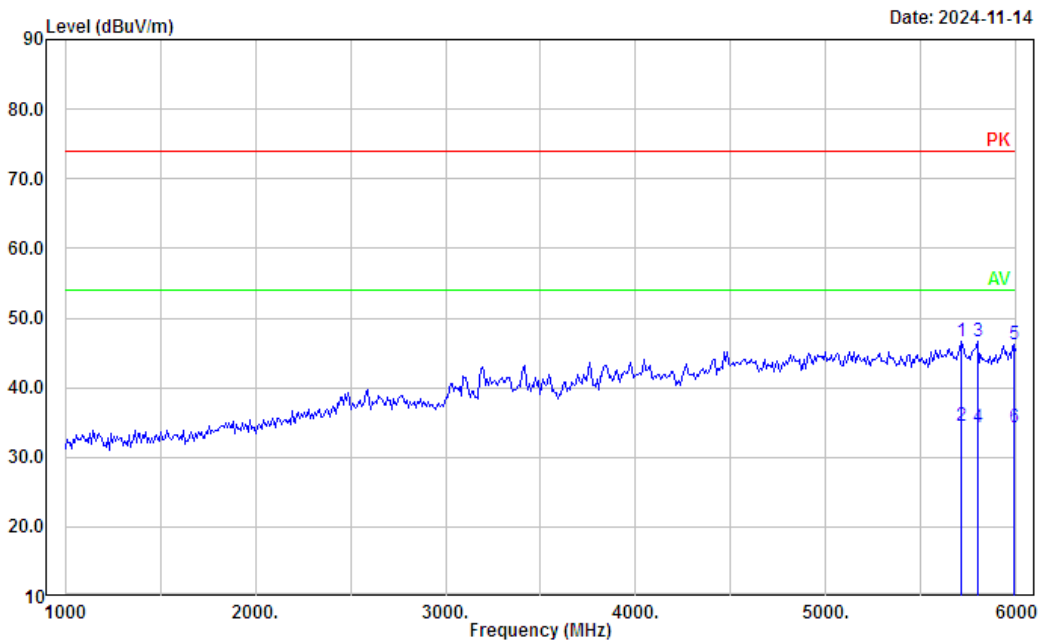
Serial No.: 2T5H-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	5708.33	35.00	11.23	46.23	74.00	27.77	Peak
2	5708.33	22.95	11.23	34.18	54.00	19.82	Average
3	5758.33	35.08	11.24	46.32	74.00	27.68	Peak
4	5758.33	23.01	11.24	34.25	54.00	19.75	Average
5	5983.33	34.27	11.80	46.07	74.00	27.93	Peak
6	5983.33	22.07	11.80	33.87	54.00	20.13	Average

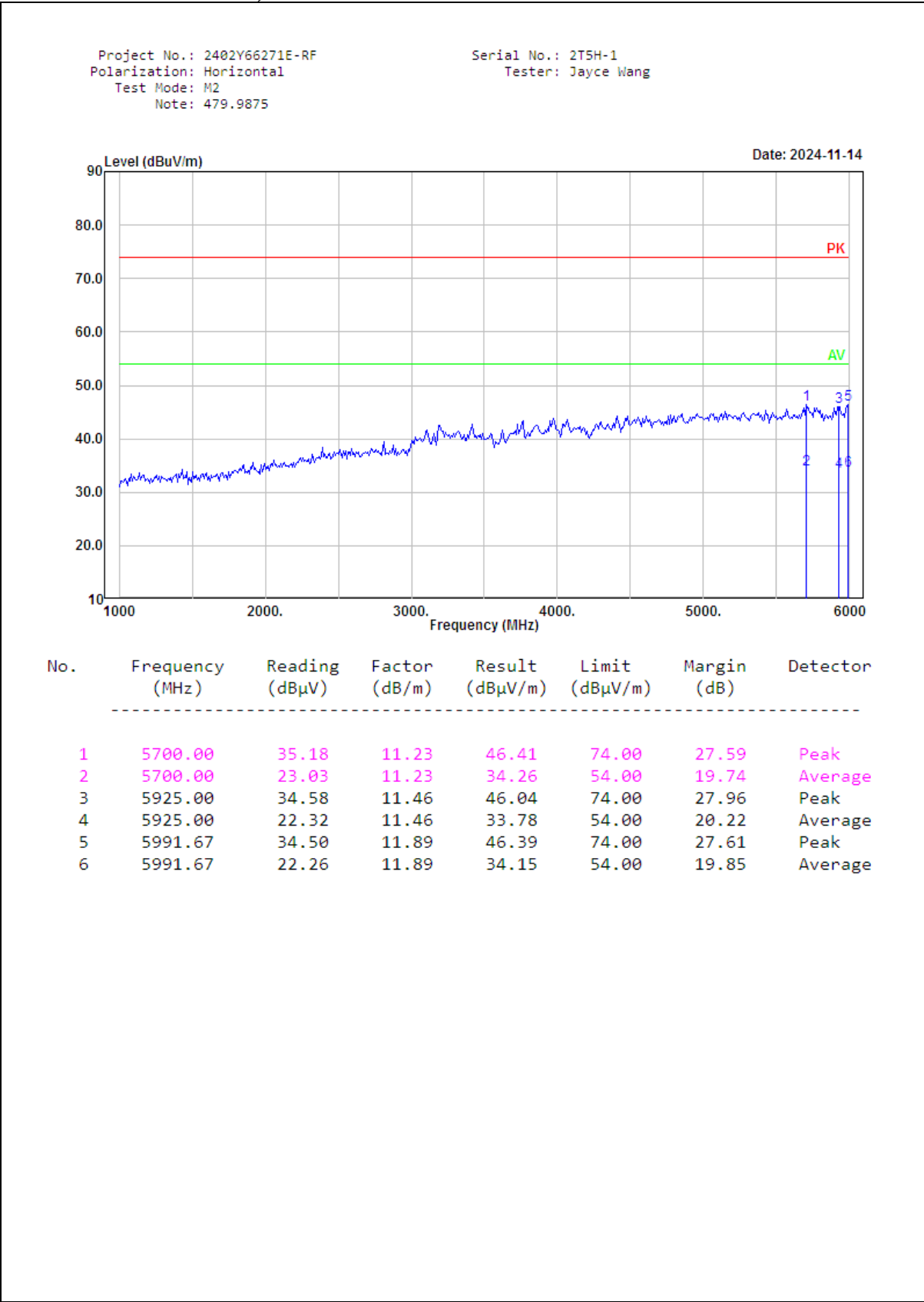
Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M1
Note: 136-174

Serial No.: 2T5H-1
Tester: Jayce Wang



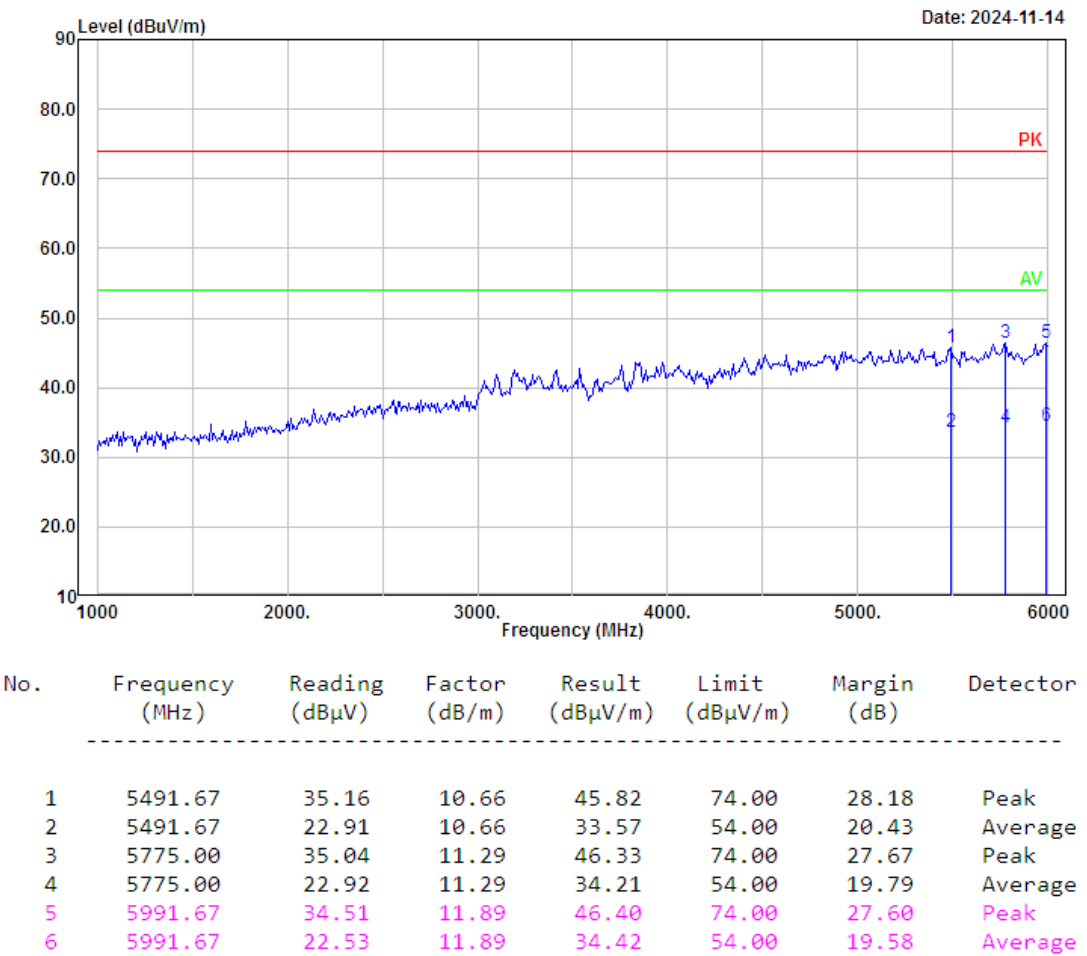
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	5708.33	35.35	11.23	46.58	74.00	27.42	Peak
2	5708.33	23.22	11.23	34.45	54.00	19.55	Average
3	5800.00	35.23	11.35	46.58	74.00	27.42	Peak
4	5800.00	23.03	11.35	34.38	54.00	19.62	Average
5	5991.67	34.23	11.89	46.12	74.00	27.88	Peak
6	5991.67	22.35	11.89	34.24	54.00	19.76	Average

M2(479.9875MHz was the worst)



Project No.: 2402Y66271E-RF
Polarization: Vertical
Test Mode: M2
Note: 479.9875

Serial No.: 2T5H-1
Tester: Jayce Wang



4.3 Scanning Receivers and Frequency Converters Used with Scanning Receivers

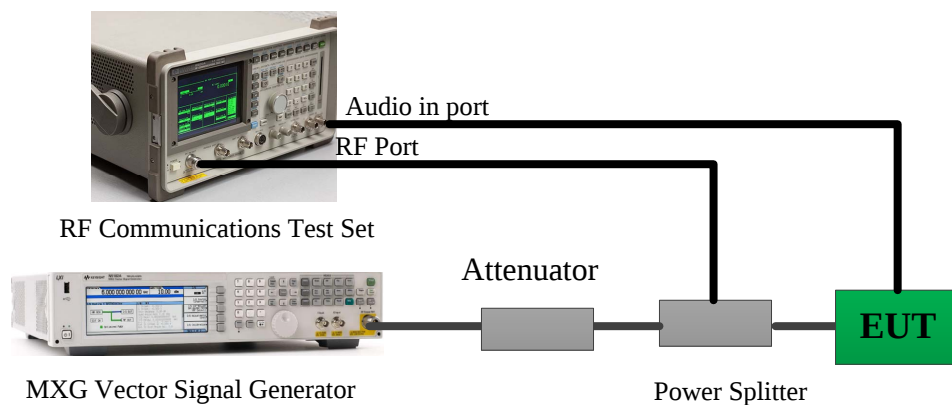
4.3.1 Applicable Standard

FCC §15.121(b).

(b) Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.

4.3.2 Test Procedure

1. Connected the EUT as the below block diagram;



2. Apply a signal to the EUT antenna port at lowest, middle, highest channel frequencies of the operating band;
3. Adjust the audio output level of the EUT to its rated value with the distortion less than 10%;
4. Adjust the 8920 output power to produce 12 dB SINAD without the audio output power dropping by more than 3 dB; These output level of the 8920 at each channel frequency is the sensitivity of the EUT;
5. Select the lowest or worst case sensitivity level for all of the bands as the reference sensitivity;
6. Adjust the Signal Generator output to a level of +60 dB above the reference sensitivity obtained in step 5 and its frequency to the frequency point in the Cellular Band;
7. Set the EUT squelch to threshold, the signal required to open the squelch must be lower than the reference sensitivity level;
8. Set the EUT in a scanning mode and allow it to scan through its complete receiving range;
9. If the EUT un-squelched or stopped on any frequency, receiving at this frequency, then adjust the signal generator output level until 12 dB SINAD is produced, this level is the spurious value and the difference between the reference sensitivity and the spurious value is the rejection ratio and must be at least 38 dB;
10. Repeat above procedure at the frequencies 824, 836, 849 MHz for the mobile band, and 869, 881.5 and 894 MHz for the Cellular Base Band.

4.3.3 Scanning Receivers and Frequency Converters Used with Scanning Receivers

Serial Number:	2T5H-1	Test Date:	2025/1/21
Test Site:	RF	Test Mode:	Scanning
Tester:	Stu Song	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	20.9	Relative Humidity: (%)	42	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Micro-Coax	Coaxial Cable	UFB205A	323308-024	2024/6/1	2025/5/31
Micro-Coax	Coaxial Cable	UFB205A	323308-015	2024/6/1	2025/5/31
Micro-Coax	Coaxial Cable	UFB205A	323308-018	2024/6/1	2025/5/31
HP	RF Communications Test Set	8920A	3438A05201	2024/10/17	2025/10/16
Agilent	MXG Vector Signal Generator	N5182B	MY51350142	2024/8/26	2025/8/25
Mini-Circuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2024/2/25	2025/2/24

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

Test Data:

Scanning Frequency Range (MHz)	Test Frequency (MHz)	Measurement Result (dB)	Limit (dB)
136-174	824, 836, 849, 869, 881.5, 894	47	>38
222-225	824, 836, 849, 869, 881.5, 894	45	>38
400-480	824, 836, 849, 869, 881.5, 894	42	>38

4.4 Antenna Power Conduction Limits for Receivers

4.4.1 Applicable Standard

FCC§15.111.

(a) In addition to the radiated emission limits, receivers that operate (tune) in the frequency range 30 to 960 MHz and CB receivers that provide terminals for the connection of an external receiving antenna may be tested to demonstrate compliance with the provisions of § 15.109 with the antenna terminals shielded and terminated with a resistive termination equal to the impedance specified for the antenna, provided these receivers also comply with the following: With the receiver antenna terminal connected to a resistive termination equal to the impedance specified or employed for the antenna, the power at the antenna terminal at any frequency within the range of measurements specified in § 15.33 shall not exceed 2.0 nanowatts.

4.4.2 Test Procedure

EUT antenna port connected to a spectrum analyzer, the traces were recorded as shown on the data pages.

4.4.3 Test Result and Data

Serial Number:	2T5H-1	Test Date:	2025/1/21
Test Site:	RF	Test Mode:	Scanning, Receiving
Tester:	Stu Song	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	20.9	Relative Humidity: (%)	42	ATM Pressure: (kPa)	101

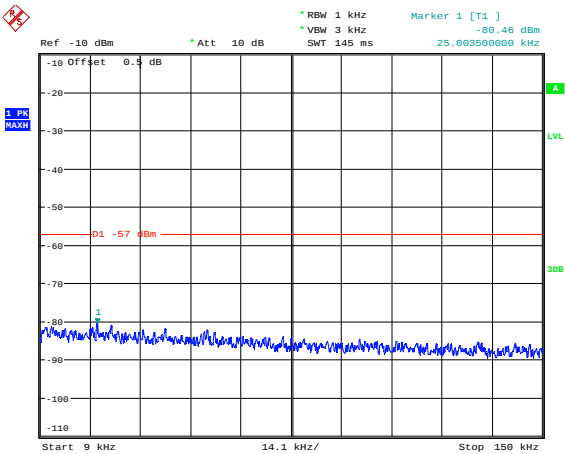
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-03	2024/8/23	2025/8/22
R&S	Spectrum Analyzer	FSU 26	200160/026	2024/9/5	2025/9/4

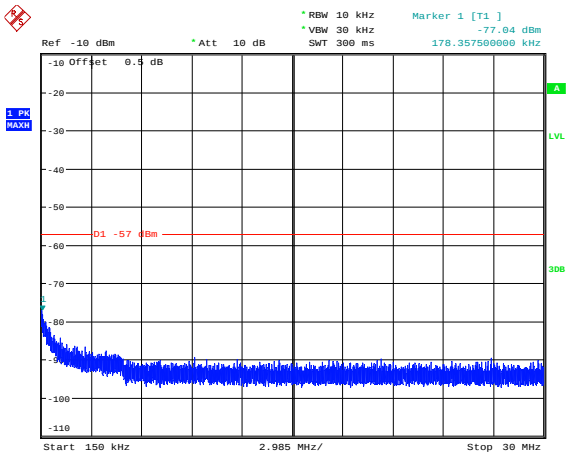
* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

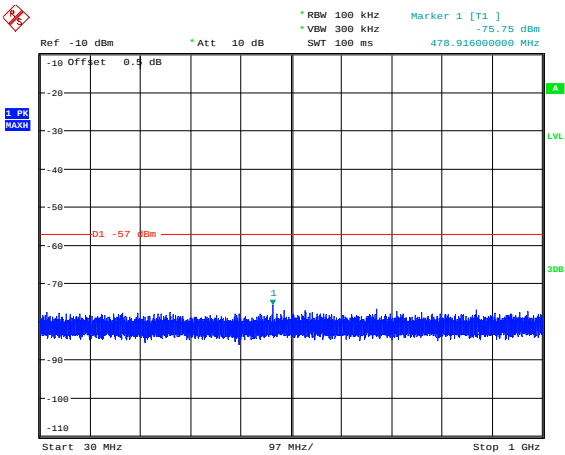
M1:Scanning
136-174 MHz



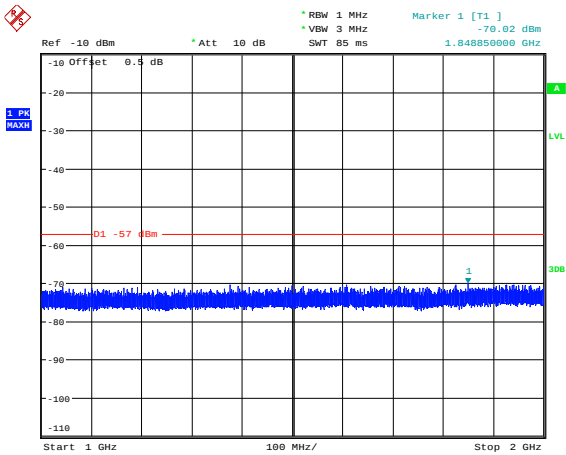
ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:17:42



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:34:41

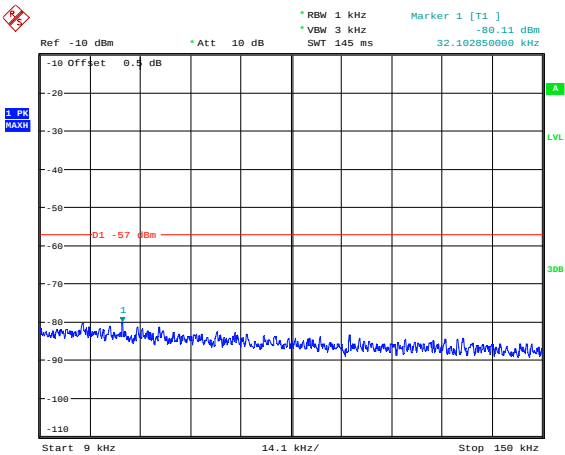


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Date: 21.JAN.2025 14:49:31

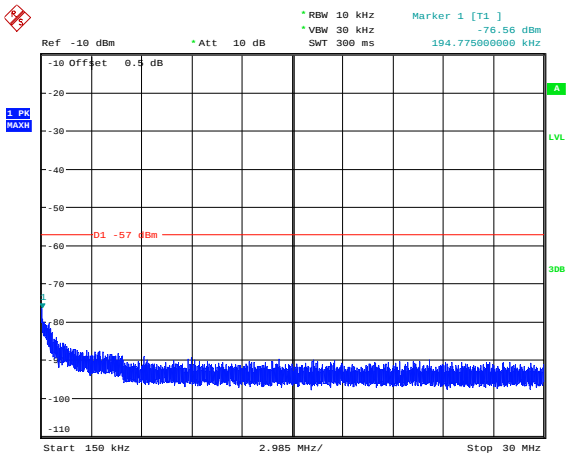


ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:09:54

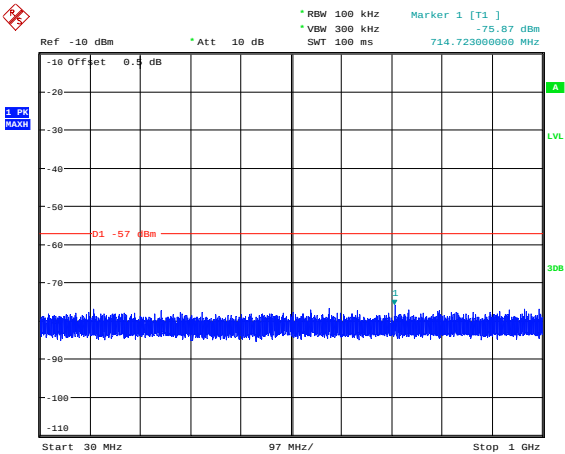
222-225MHz



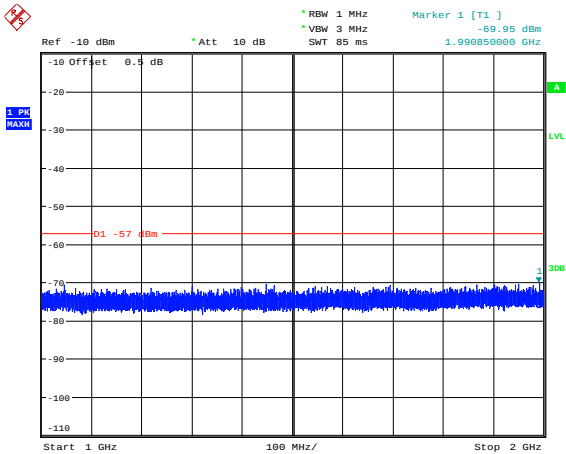
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Date: 21.JAN.2025 14:19:21



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:36:34

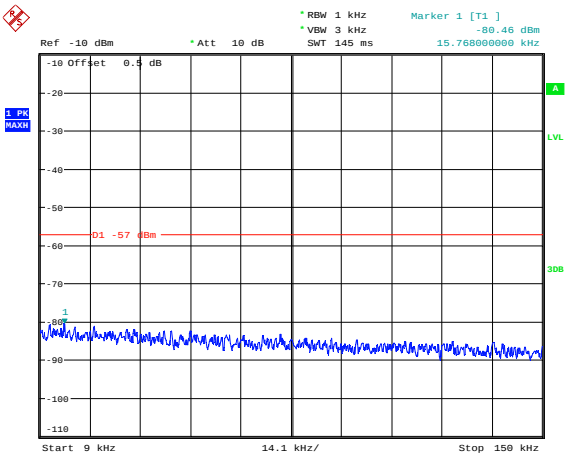


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Date: 21.JAN.2025 14:50:20

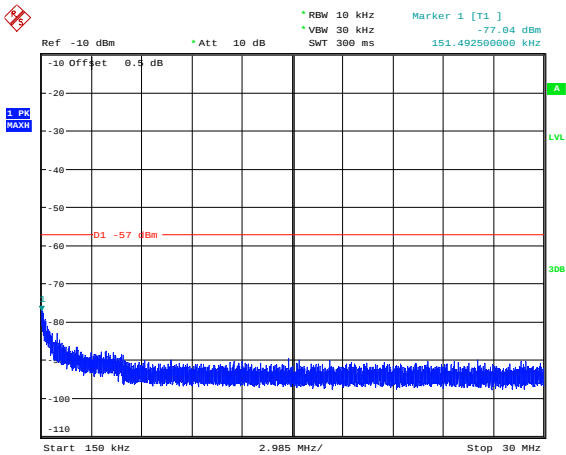


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Date: 21.JAN.2025 15:11:10

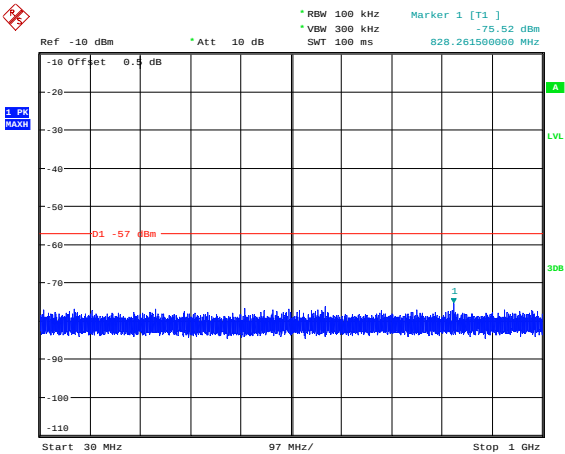
400-480MHz



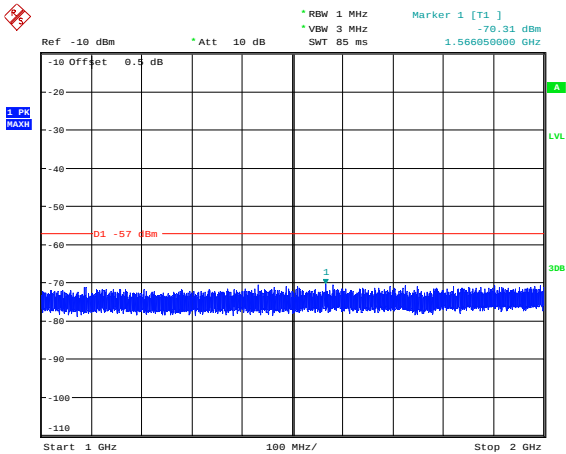
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Date: 21.JAN.2025 14:22:16



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:38:02

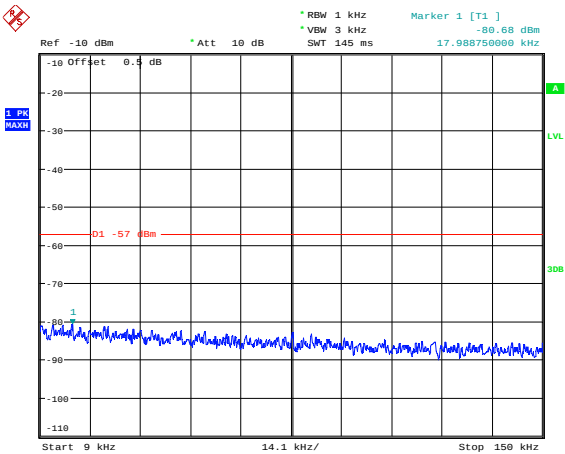


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Date: 21.JAN.2025 14:51:54

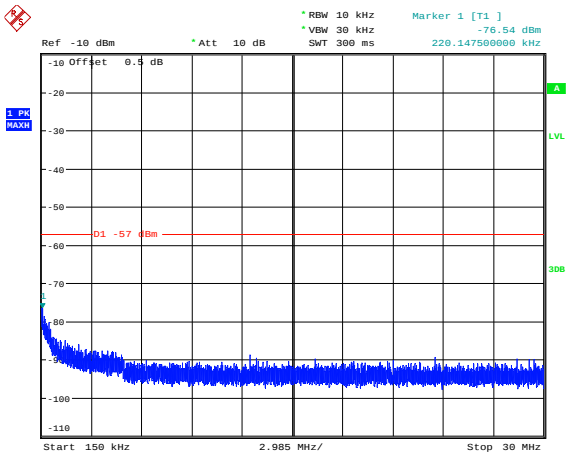


ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:12:02

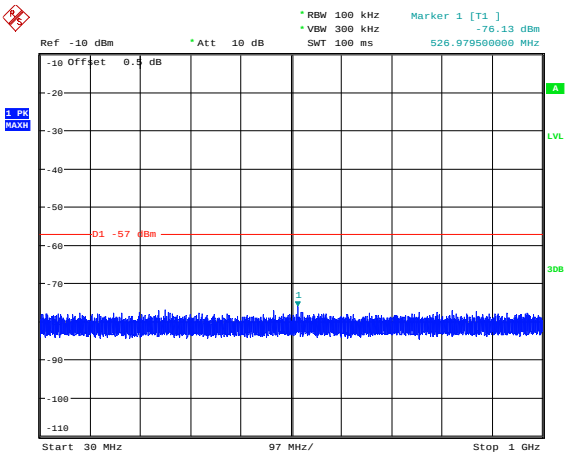
M2: Receiving
136.0125MHz:



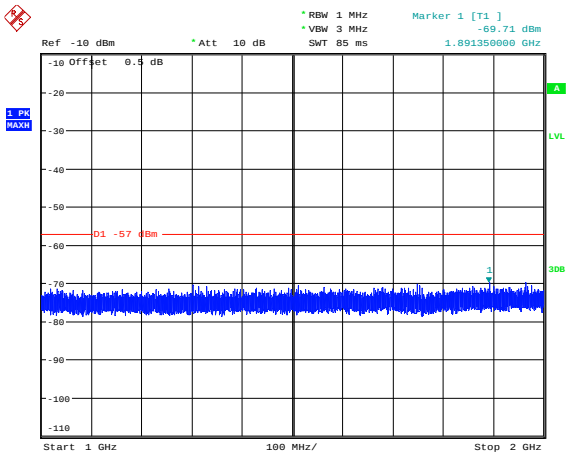
ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:23:30



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:39:03

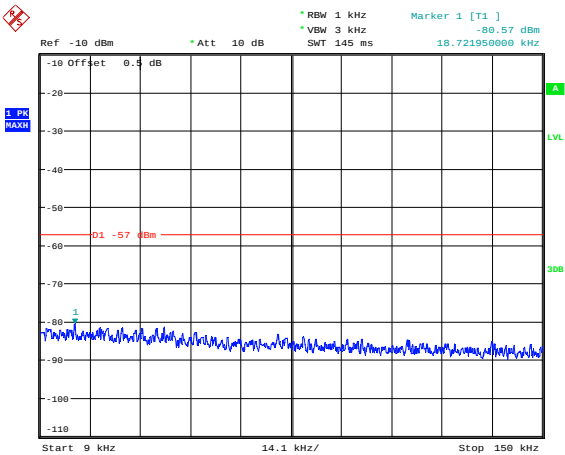


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Date: 21.JAN.2025 14:58:00

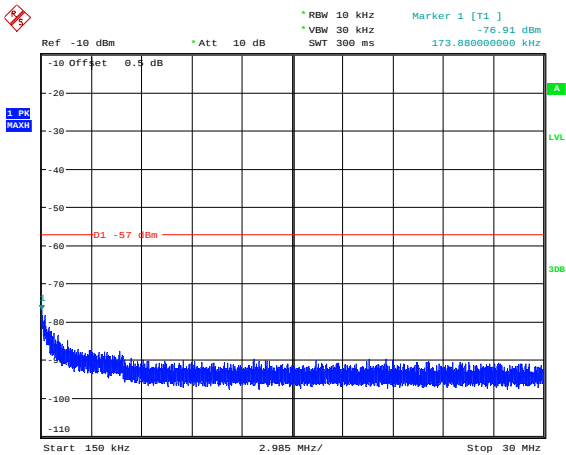


ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:12:37

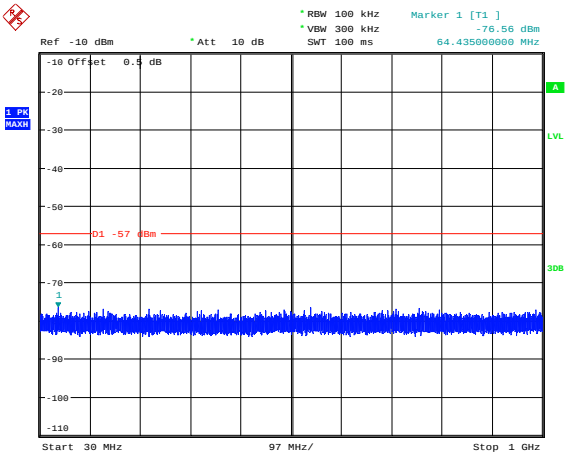
155MHz:



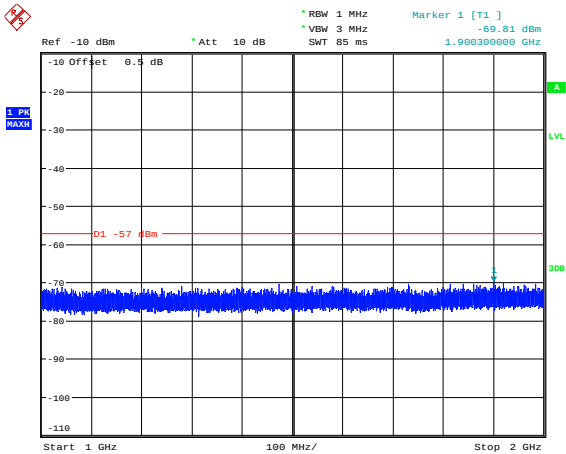
ProjectNo.:2402Y66271E-RF Tester:Stu Song
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ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:40:03

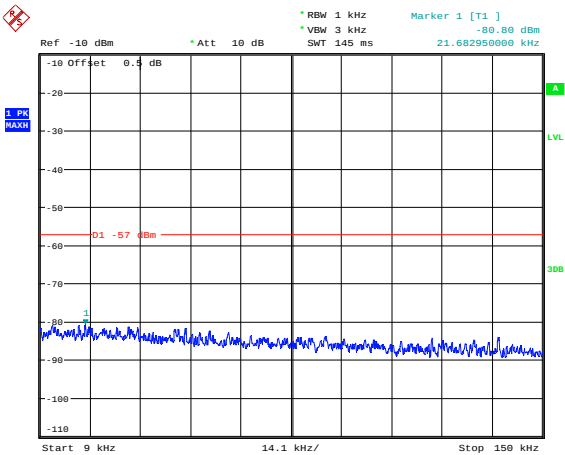


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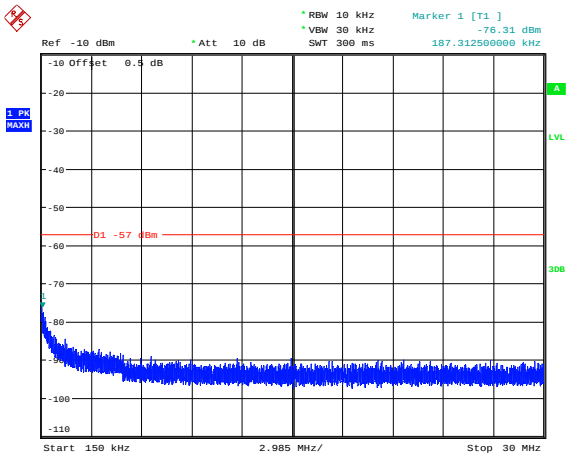


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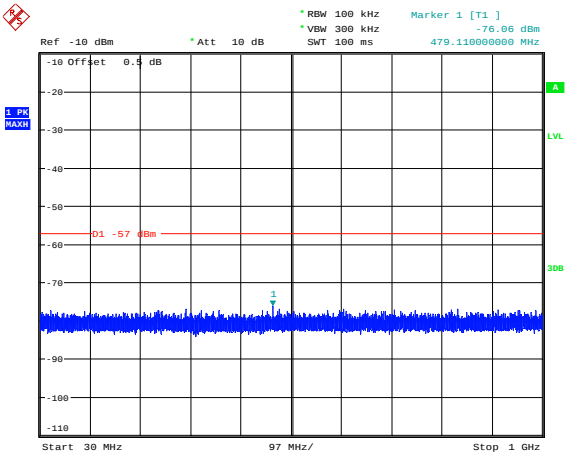
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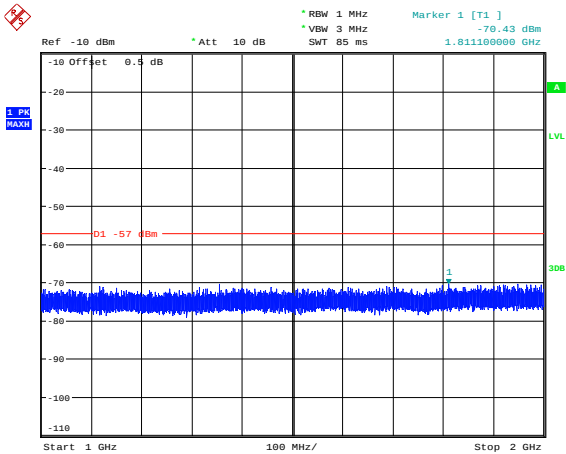
ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:26:41



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:41:06

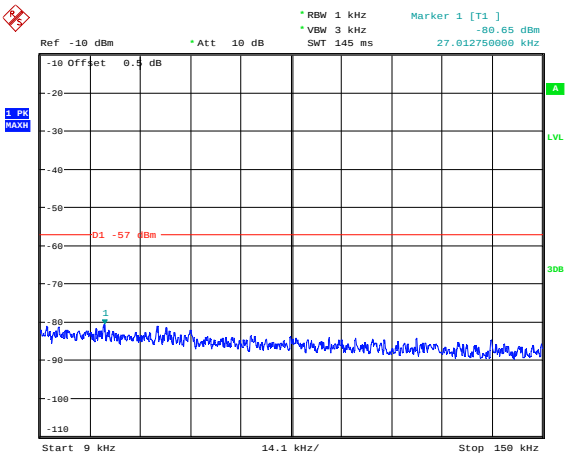


ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:01:20

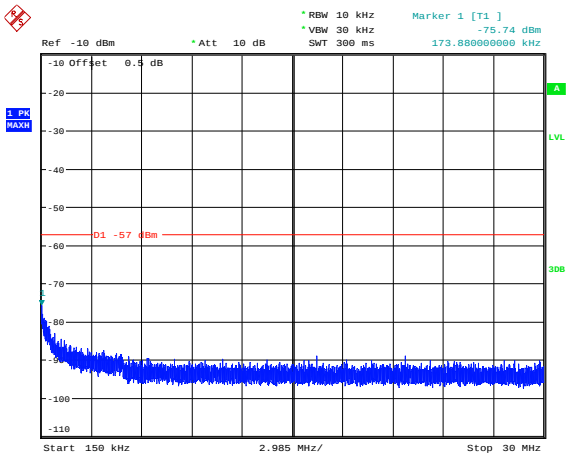


ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:14:03

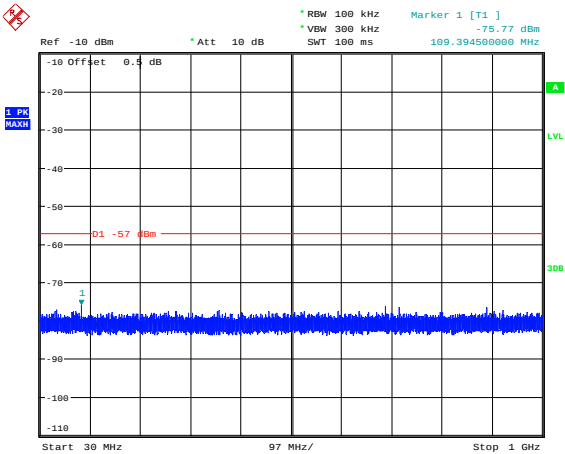
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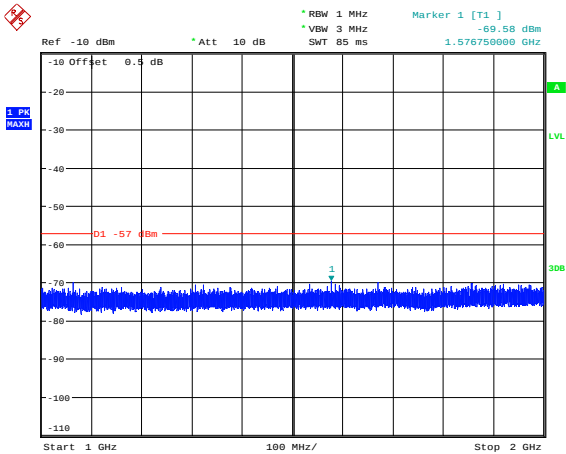
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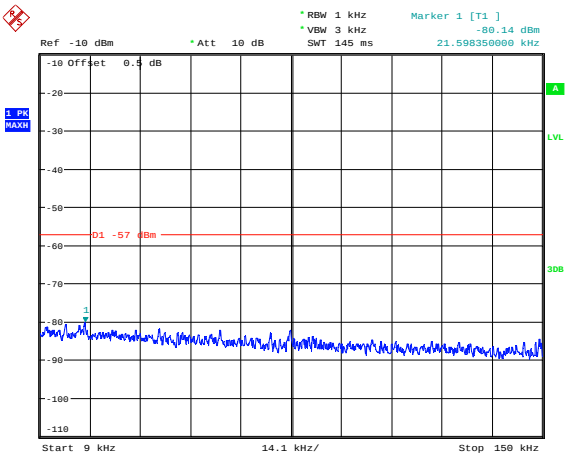


ProjectNo.:2402Y66271E-RF Tester:Stu Song
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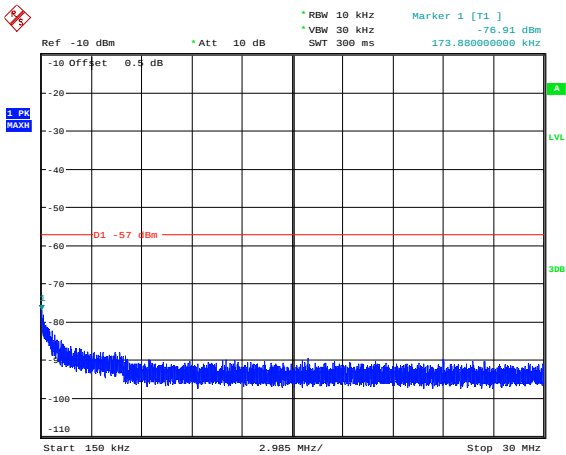


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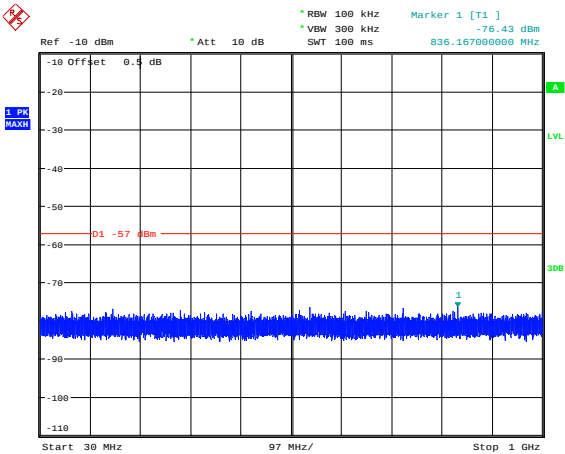
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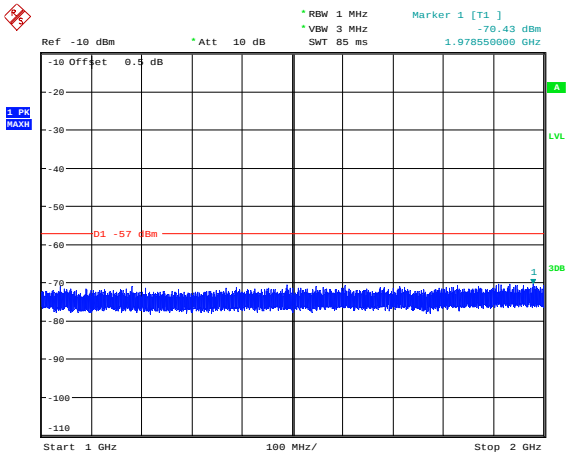
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Date: 21.JAN.2025 14:44:20

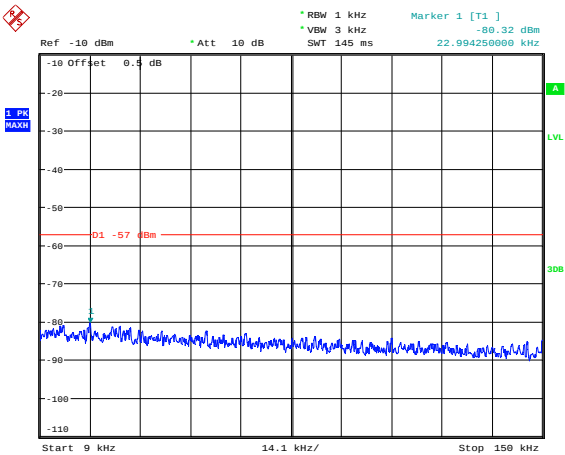


ProjectNo.:2402Y66271E-RF Tester:Stu Song
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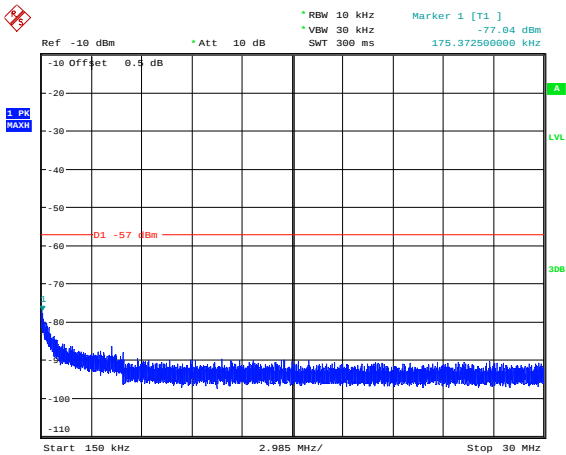


ProjectNo.:2402Y66271E-RF Tester:Stu Song
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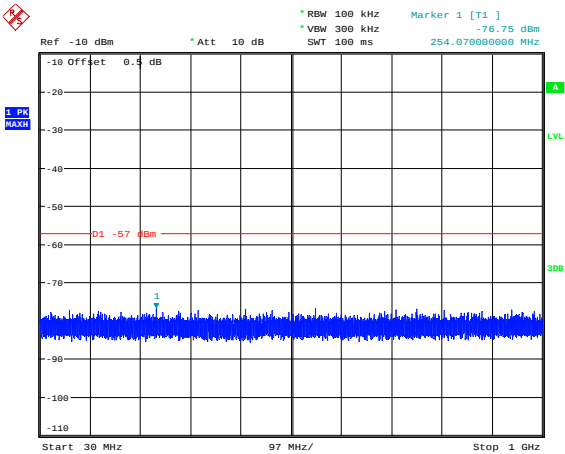
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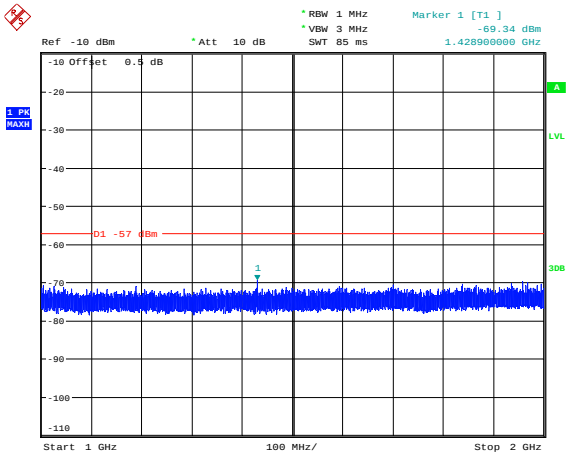
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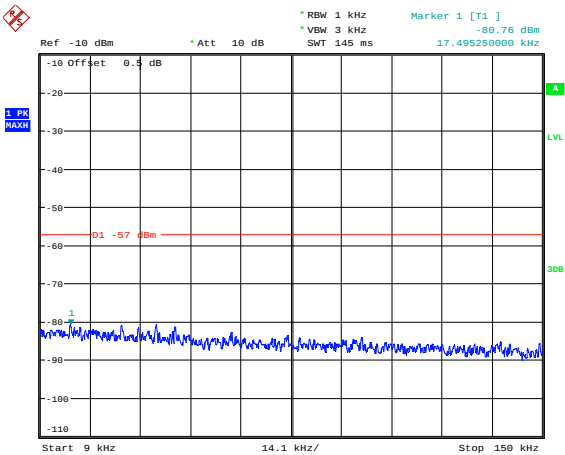


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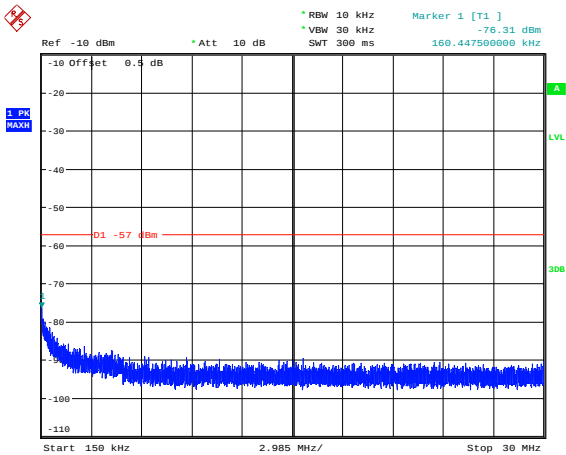


ProjectNo.:2402Y66271E-RF Tester:Stu Song
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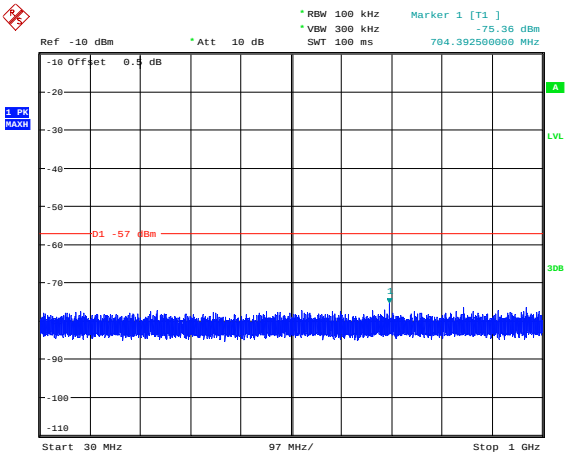
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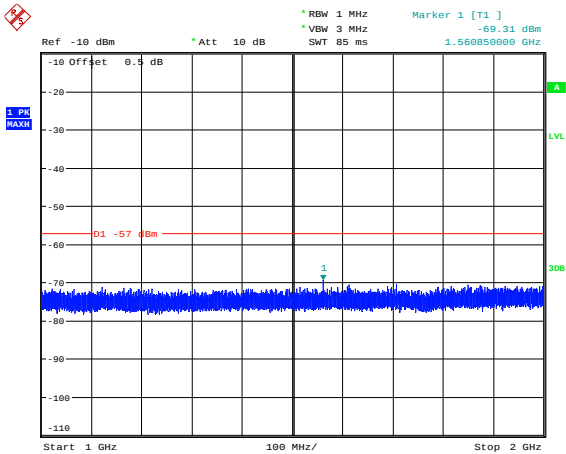
ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 14:31:41



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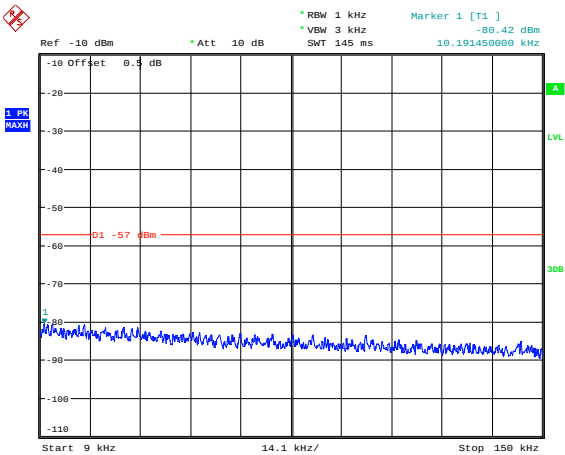


ProjectNo.:2402Y66271E-RF Tester:Stu Song
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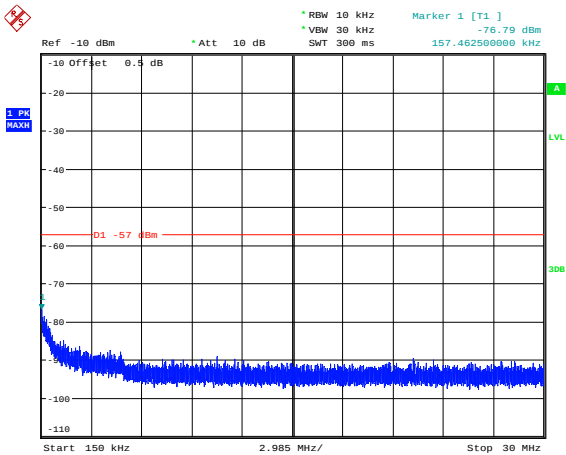


ProjectNo.:2402Y66271E-RF Tester:Stu Song
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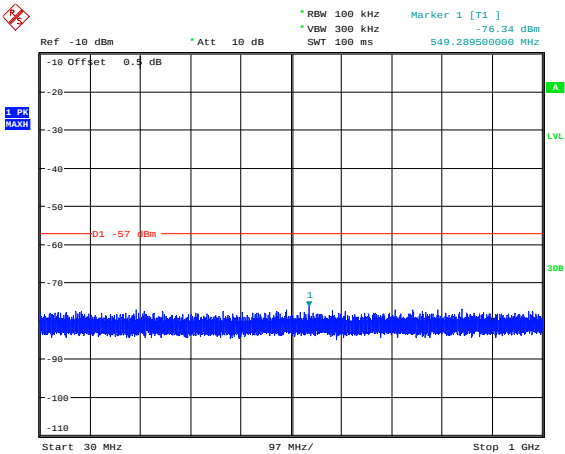
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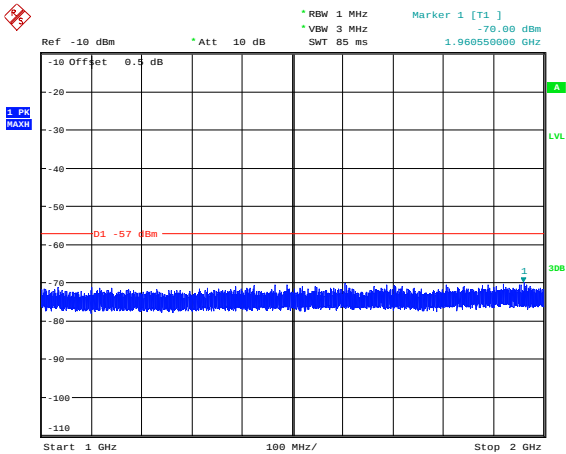
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Date: 21.JAN.2025 14:33:13



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Date: 21.JAN.2025 14:47:22



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:07:31



ProjectNo.:2402Y66271E-RF Tester:Stu Song
Date: 21.JAN.2025 15:19:16

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2402Y66271E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and
2402Y66271E-RF-INP EUT INTERNAL PHOTOGRAPHS

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2402Y66271E-RF-00A-TSP TEST SETUP PHOTOGRAPHS.

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