FCC Test Report

Report No.:	2405Z107560EB
Applicant:	Zhuhai Glory Technology Co., Ltd
Address:	8F, Bldg 7, No. 178 Dingxing Road, Tangjiawan Town, Zhuhai, Guangdong, China
Product Name:	WIRELESS NETWORK CAMERA
Product Model:	GL-228XK-I1V1B
Multiple Models:	GL-228XL-I1V1B
Trade Mark:	N/A
FCC ID:	2BMPT-228XK-I1V1B
Standards:	FCC CFR Title 47 Part 15C (§15.247)
Test Date:	2024-12-05 to 2025-02-13
Test Result:	Complied
Report Date:	2025-02-19

Reviewed by:

Frank Tin

Approved by:

Jacob Gong

Frank Yin Project Engineer Jacob Kong Manager

Prepared by:

World Alliance Testing & Certification (Shenzhen) Co., Ltd

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Announcement

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4. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

Revision History

Version No.	Issued Date	Description
00	2025-02-19	Original

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1 General Information

1.1 Client Information

Applicant:	Zhuhai Glory Technology Co., Ltd
Address:	8F, Bldg 7, No. 178 Dingxing Road, Tangjiawan Town, Zhuhai, Guangdong, China
Manufacturer:	Zhuhai Glory Technology Co., Ltd
Address:	8F, Bldg 7, No. 178 Dingxing Road, Tangjiawan Town, Zhuhai, Guangdong, China

1.2 Product Description of EUT

The EUT is WIRELESS NETWORK CAMERA that contains Wi-Fi HaLow radio, this report covers the full testing of the Wi-Fi HaLow radio.

Sample Serial Number	2V9U-1 for CE&RE test, 2V9U-2 for RF test conducted test (assigned by WATC)
Sample Received Date	2024-12-02
Sample Status	Good Condition
Frequency Range	903.5-926.5MHz for 802.11ah(1MHz channel bandwidth)
	905-925MHz for 802.11ah(2MHz channel bandwidth)
	906-926MHz for 802.11ah(4MHz channel bandwidth)
	908-924MHz for 802.11ah(8MHz channel bandwidth)
Maximum Conducted Peak Output Power	27.86dBm
Modulation Technology	OFDM
Spatial Streams	1T1R
Antenna Gain [#]	2.45dBi(It is provided by the applicant.)
Power Supply	DC 3.7V from battery or DC 5.0V from Adapter
Adapter Information	N/A
Modification	Sample No Modification by the test lab

1.3 Antenna information

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Device Antenna information:

The Wi-Fi antenna is an external antenna which with unique antenna connector. Please see product external photos for details.

······································				
Para	meter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))		
AC Power Lines Conducted Emissions		±3.14dB		
Emissions, Radiated	Below 30MHz	±2.78dB		
	Below 1GHz	±4.84dB		
	Above 1GHz	±5.44dB		
Emissions, Conducted		1.75dB		
Conducted Power		0.74dB		
Frequency Error		150Hz		
Bandwidth		0.34%		
Power Spectral Density		0.74dB		

1.4 Measurement Uncertainty

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

1.5 Laboratory Location

World Alliance Testing & Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: <u>qa@watc.com.cn</u>

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. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.6 Test Methodology

FCC CFR 47 Part 2 FCC CFR 47 Part 15 KDB 558074 D01 15.247 Meas Guidance v05r02 ANSI C63.10-2013

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method

2 Description of Measurement

2.1 Test Configuration

Operating cha	Operating channels:(903.5MHz-926.5MHz, 1MHz bandwidth)						
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)		
1	903.5	9	911.5	17	919.5		
2	904.5	10	912.5	18	920.5		
3	905.5	11	913.5	19	921.5		
4	906.5	12	914.5	20	922.5		
5	907.5	13	915.5	21	923.5		
6	908.5	14	916.5	22	924.5		
7	909.5	15	917.5	23	925.5		
8	910.5	16	918.5	24	926.5		
channel, and	According to ANSI C63.10-2013 chapter 5.6.1 Table 11 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:						
Lowest channel		Middle channel		Highest channel			
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)		
1	903.5	12	914.5	24	926.5		

Operating cha	Operating channels:(905MHz-925MHz, 2MHz Bandwidth)					
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	
1	905	5	913	9	921	
2	907	6	915	10	923	
3	909	7	917	11	925	
4	911	8	919	/	/	
According to ANSI C63.10-2013 chapter 5.6.1 Table 11 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:						
Lowes	t channel	Middle channel		Highes	st channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	
1	905	6	915	11	925	

Operating cha	Operating channels:(906MHz-926MHz, 4MHz Bandwidth)						
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)		
1	906	3	914	5	922		
2	910	4	918	6	926		
channel, and	According to ANSI C63.10-2013 chapter 5.6.1 Table 11 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:						
Lowes	t channel	Middle	channel	Highes	st channel		
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)		
1	906	3	914	6	926		

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Operating channels:(908MHz-924MHz, 8MHz Bandwidth)							
Channel No.	Frequency (MHz)	Channel No. Frequency (MHz)		Channel No.	Frequency (MHz)		
1	908	2	916	3	924		
channel, and	According to ANSI C63.10-2013 chapter 5.6.1 Table 11 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:						
Lowes	t channel	Middle	channel	Highes	st channel		
Channel No. Frequency (MHz) Frequency (MHz)			Channel No.	Frequency (MHz)			
1	908	2	916	3	924		

Test Mode:							
Transmitting mode:	•	The system was configured for testing in Engineering Mode, which was provided by the manufacturer.					
Exercise software [#] :	SecureCRT						
Mode	Mode Data rate Power Level Setting [#]						
wode	Dala Tale	Low Channel	Middle Channel	High Channel			
802.11ah(1MHz BW)	MCS0	11	11	11			
802.11ah(2MHz BW)	MCS0	11	11	11			
802.11ah(4MHz BW)	MCS0	13	13	13			
802.11ah(8MHz BW)	MCS0 15 15 15						
Note: The exercise sof	tware and the may	kimum power setting th	nat provided by manu	facturer.			

Worst-Case Configuration:

For radiated emissions, EUT was investigated in three orthogonal orientation, the worst-case orientation was recorded in report

For AC power line conducted emission and radiated emission 9kHz-30MHz was performed with the EUT transmits at the channel with highest output power as worst-case scenario.

For radiated emission 30MHz-1GHz was performed with the EUT transmits at the mode with highest output power as worst-case scenario.

For radiated emissions below 30MHz, three antenna orientations (parallel, perpendicular, gound-parallel) were tested, only record the worse case test data in report.

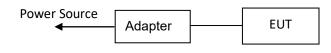
2.2 Test Auxiliary Equipment

Manufacturer	Description	Model	Serial Number
unknown	AC Adapter	unknown	unknown

2.3 Interconnecting Cables

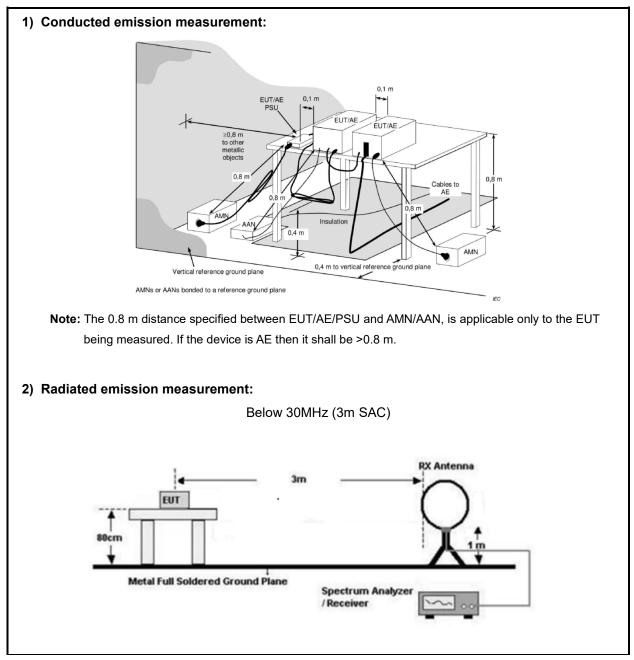
Manufacturer	Description	Length(m)	From	То
Unknown	known USB Cable		AC Adapter	EUT

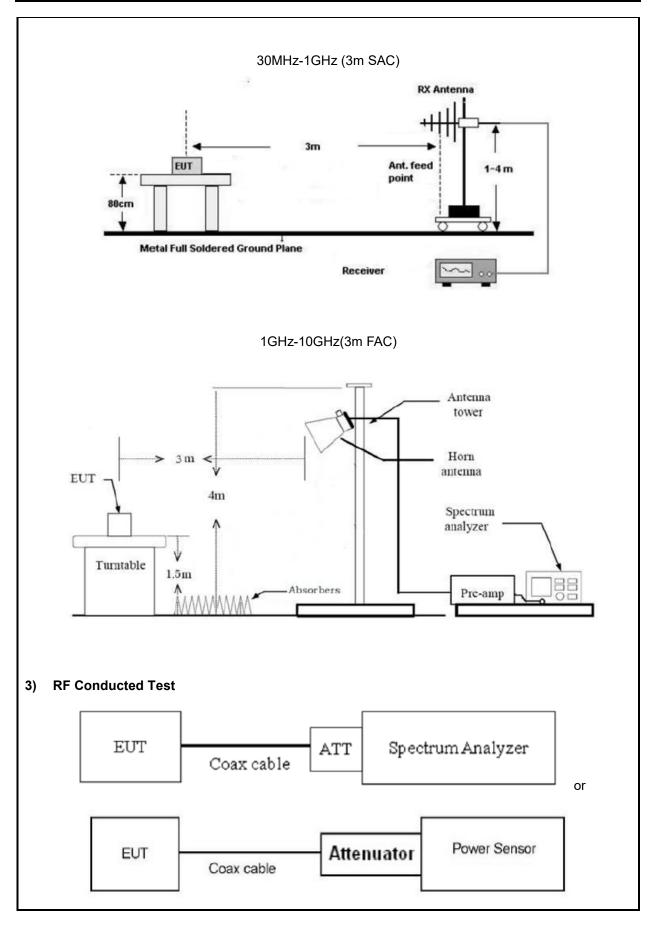
2.4 Block Diagram of Connection between EUT and AE



Note: for reference only, the actual connection setup used for testing please refer to the test photos.

2.5 Test Setup





2.6 Test Procedure

Conducted emission:

- 1. The E.U.T is placed on a non-conducting table 40cm from the vertical ground plane and 80cm above the horizontal ground plane (Please refer to the block diagram of the test setup and photographs).
- 2. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.
- 3. Line conducted data is recorded for both Line and Neutral

Radiated Emission Procedure:

a) For below 30MHz

- All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz- 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40*Log (test distance / specification distance).
- 2. Loop antenna use, investigation was done on the three antenna orientations (parallel, perpendicular, gound-parallel)
- 3. The RBW/VBW of receiver is set to 300Hz/1kHz for 9kHz to 150kHz range, to 10kHz/30kHz for 150kHz to 30MHz range for scan Peak emission, 200Hz/9kHz IF BW was used for final measurement in the Quasi-peak or average detection mode for frequency range 9~150kHz/150kHz~30MHz respectively.
- 4. If the Peak emission complies with the QP limit, then perform final measurement is optional.
- b) For 30MHz-1GHz:
- 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
- 2. EUT works in each mode of operation that needs to be tested. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
- 3. The RBW/VBW of receiver is set to 100kHz/300kHz for scan Peak emission, 120kHz IF BW was used for final measurement in the Quasi-peak detection mode.
- 4. If the Peak emission complies with the QP limit, then perform final measurement is optional.
- c) For above 1GHz:
- The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m (1-18GHz) and 1.5 m (above 18GHz).
- 2. EUT works in each mode of operation that needs to be tested, and having the EUT continuously working. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
- 3. The RBW/VBW of spectrum analyzer is set to 1MHz/3MHz for scan Peak emission, for measured average emission, reduce the VBW to 10Hz(for duty cycle≥98%), or ≥1/T(for duty cycle<98%). T is

minimum transmission duration. (Note: a high VBW (for example 1kHz, not less than 1/T) may used to scan average emissions to avoid long sweep time.)

- 4. If the Peak emission complies with the Average limit, then perform average measurement is optional.
- 5. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.

RF Conducted Test:

- 1. The antenna port of EUT was connected to the RF port of the test equipment (Power Meter or Spectrum analyzer) through Attenuator and RF cable.
- 2. The cable assembly insertion loss of 8.0dB (including 6dB Attenuator and 2.0dB cable) was entered as an offset in the power meter. Note: Actual cable loss was unavailable at the time of testing, therefore a loss of 2.0dB was assumed as worst case. This was later verified to be true by laboratory. (if the RF cable provided by client, the cable loss declared by client)
- 3. The EUT is keeping in continuous transmission mode and tested in all modulation modes.

Description of Test	Measurement Method		
AC Line Conducted Emissions	ANSI C63.10-2020 Section 6.2		
Maximum Conducted Output Power	ANSI C63.10-2020 Section 11.9.1.3		
Power Spectral Density	ANSI C63.10-2020 Section 11.10.2		
6 dB Emission Bandwidth	ANSI C63.10-2020 Section 11.8.1		
99% Occupied Bandwidth	ANSI C63.10-2020 Section 6.9.3		
100kHz Bandwidth of Frequency Band Edge	ANSI C63.10-2020 Section 6.10		
Radiated emission	ANSI C63.10-2020 Section 11.11&11.12.1		
Duty Cycle	ANSI C63.10-2020 Section 11.6		

2.7 Measurement Method

2.8 Measurement Equipment

Manufacturer	Description	Model	Management No.	Calibration Date	Calibration Due Date	
		Conducted Emission	on Test			
ROHDE&	EMI TEST	ESR	101817	2024/6/4	2025/6/3	
SCHWARZ	RECEIVER	LOIN	101017	2024/0/4	2023/0/3	
R&S	LISN	ENV216	101748	2024/6/4	2025/6/3	
N/A	Coaxial Cable	NO.12	N/A	2024/6/4	2025/6/3	
Farad	Test Software	EZ-EMC	Ver. EMEC-3A1	/	/	
		Dedicted Emissic				
		Radiated Emissio				
R&S	EMI test receiver	ESR3	102758	2024/6/4	2025/6/3	
ROHDE&	SPECTRUM	FSV40-N	101608	2024/6/4	2025/6/3	
SCHWARZ	ANALYZER					
SONOMA	Low frequency	310	186014	2024/6/4	2025/6/3	
INSTRUMENT	amplifier				ļ	
A.H. Systems	PREAMPLIFIER	PAM-0118P	531	2024/6/4	2025/6/3	
BACL	Loop Antenna	1313-1A	4010611	2024/2/7	2027/2/6	
SCHWARZBECK	Log - periodic wideband antenna	VULB 9163	9163-872	2023/7/7	2026/7/6	
Astro Antenna Ltd	Horn antenna	AHA-118S	3015	2023/7/6	2026/7/5	
Oulitong	Band Reject Filter	OBSF-902-928-4 0S	OE02104362	2024/6/4	2025/6/3	
N/A	Coaxial Cable	NO.9	N/A	2024/6/4	2025/6/3	
N/A	Coaxial Cable	NO.15	N/A	2024/6/4	2025/6/3	
N/A	Coaxial Cable	NO.16	N/A	2024/6/4	2025/6/3	
N/A	Coaxial Cable	NO.17	N/A	2024/6/4	2025/6/3	
Audix	Test Software	E3	191218 V9	/	/	
		RF Conducted	Test			
ROHDE&	SPECTRUM	FSU-26	200680/026	2024/6/4	2025/6/3	
SCHWARZ	ANALYZER					
ANRITSU	USB Power Sensor	MA24418A	12620	2024/6/4	2025/6/3	
MEEA	6dB attenuator	603-06-1	N/A	2024/6/4	2025/6/3	

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 Test Results

3.1 Test Summary

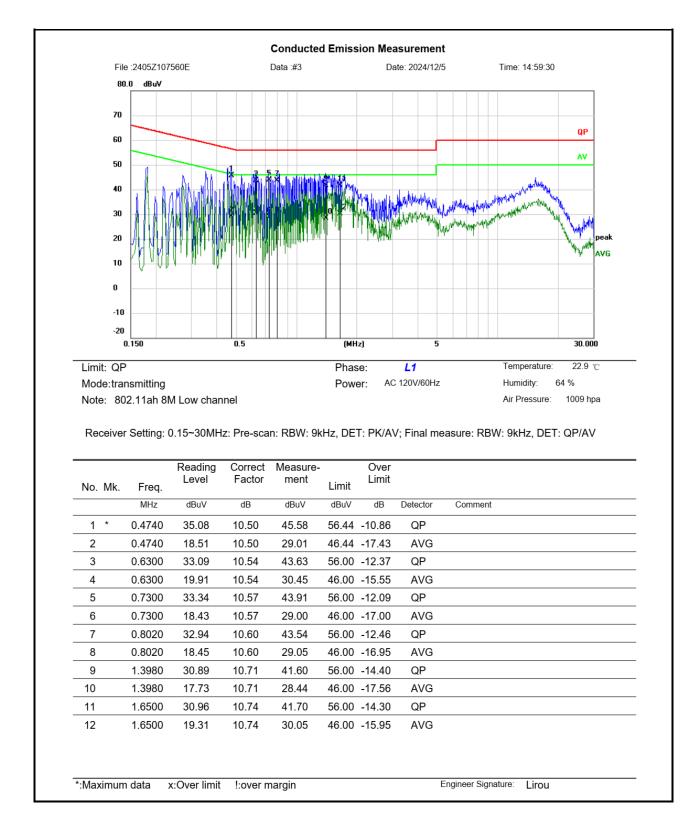
FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.247(b)(3)	Maximum Conducted Output Power	Compliance
§15.247(e)	Power Spectral Density	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance
-	99% Occupied Bandwidth	Report only
§15.247(d)	100kHz Bandwidth of Frequency Band Edge	Compliance
§15.205, §15.209, §15.247(d)	Radiated emission	Compliance
-	Duty Cycle	Report only

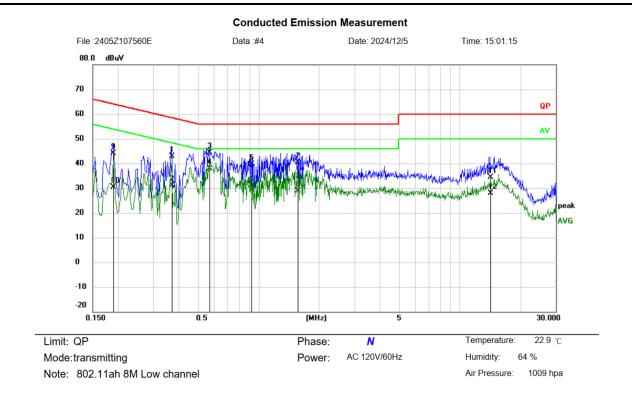
3.2 Limit

Test items	Limit
AC Line Conducted Emissions	See details §15.207 (a)
Conducted Output Power	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.
6dB Emission Bandwidth	The minimum 6 dB bandwidth shall be at least 500 kHz.
Power Spectral Density	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
Spurious Emissions, 100kHz Bandwidth of Frequency Band Edge	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.209(a) (see §15.205(c)).

3.3 AC Line Conducted Emissions Test Data

Test Date:	2024-12-05	Test By:	Lirou Li	
Environment condition:	Temperature: 22.9°C; Relative Humidity: 64%; ATM Pressure: 100.9kPa			





Receiver Setting: 0.15~30MHz: Pre-scan: RBW: 9kHz, DET: PK/AV; Final measure: RBW: 9kHz, DET: QP/AV

No. N	lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over Limit				
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment		
1	0.3700	32.30	10.46	42.76	58.50	-15.74	QP			
2	0.3700	20.58	10.46	31.04	48.50	-17.46	AVG			
3	0.5700	33.92	10.49	44.41	56.00	-11.59	QP			
4 *	0.5700	27.37	10.49	37.86	46.00	-8.14	AVG			
5	0.9220	29.18	10.53	39.71	56.00	-16.29	QP			
6	0.9220	18.74	10.53	29.27	46.00	-16.73	AVG			
7	1.5660	29.69	10.64	40.33	56.00	-15.67	QP			
8	1.5660	18.35	10.64	28.99	46.00	-17.01	AVG			
9	0.1900	33.89	10.29	44.18	64.04	-19.86	QP			
10	0.1900	20.21	10.29	30.50	54.04	-23.54	AVG			
11	14.1820	24.07	10.39	34.46	60.00	-25.54	QP			
12	14.1820	17.50	10.39	27.89	50.00	-22.11	AVG			
:Maxin	num data	x:Over limit	!:over n	nargin			I	Engineer Signature:	Lirou	

Remark:

Measurement (dBuV)= Reading Level (dBuV) + Correct Factor(dB)

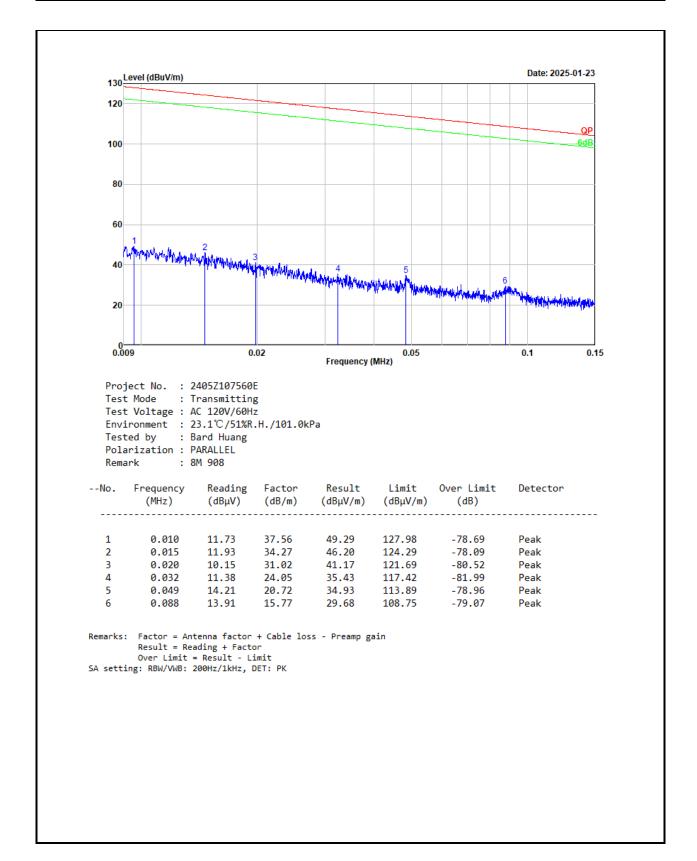
Correct Factor(dB)= LISN Voltage Division Factor (dB)+ Cable loss(dB)

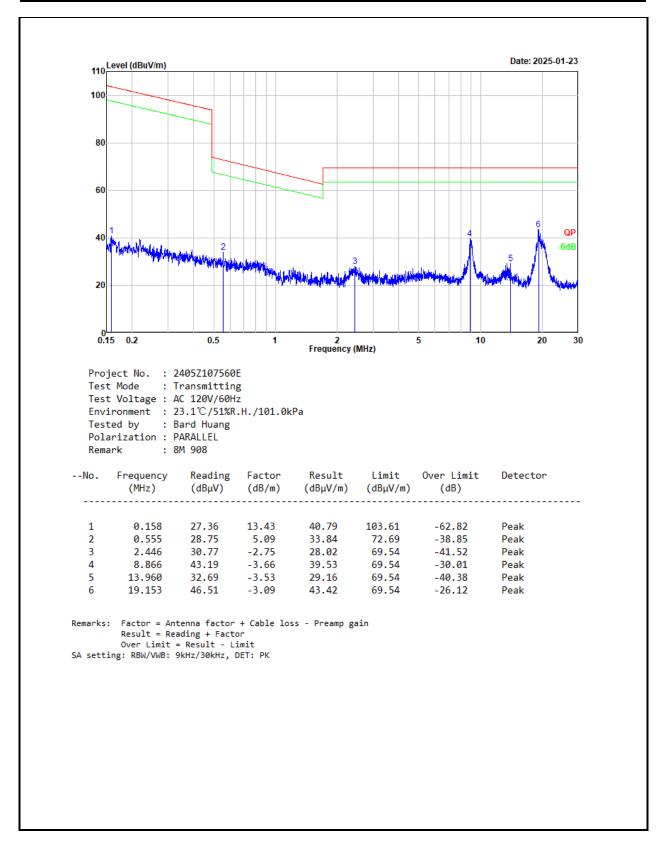
Over Limit = Measurement – Limit

3.4 Radiated emission Test Data

9 kHz-30MHz:

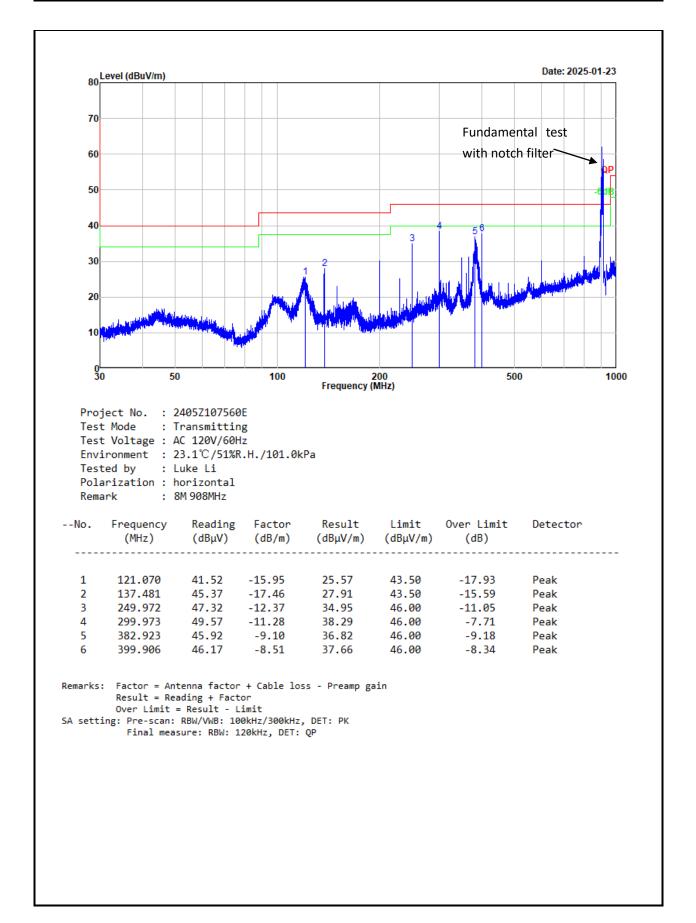
Test Date:	2025-01-23	Test By:	Bard Huang
Environment condition:	Temperature: 23.1°C; Relative	Humidity:51%; ATM Pr	essure: 101.0kPa

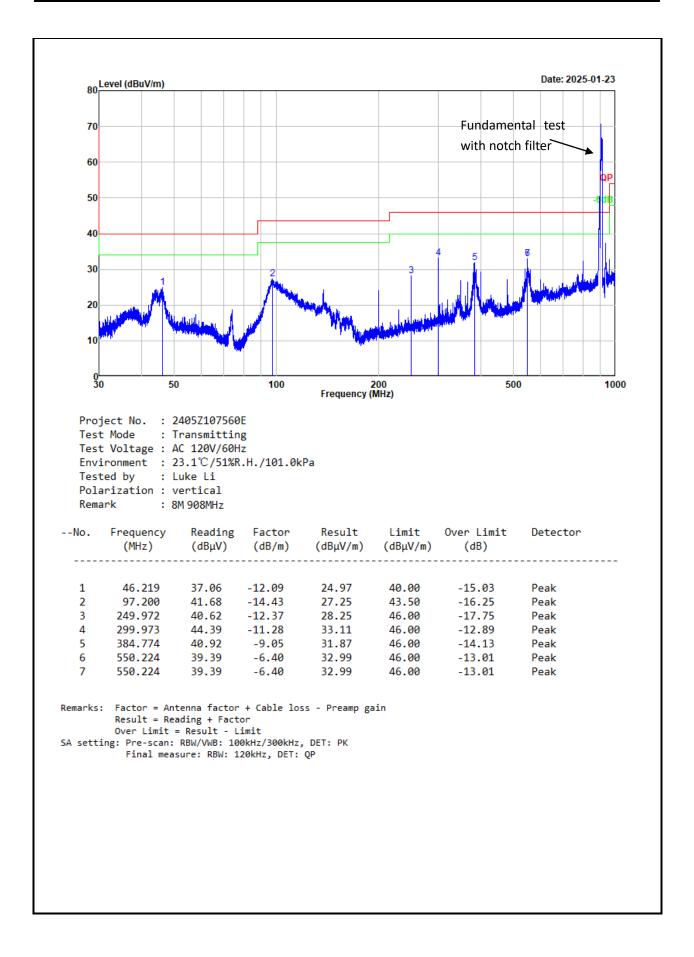


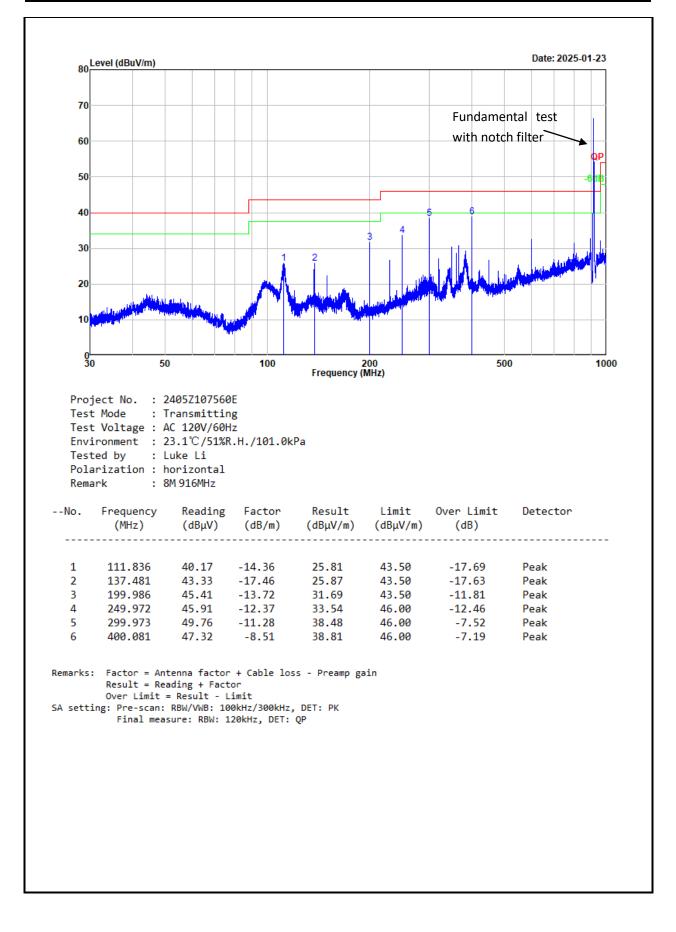


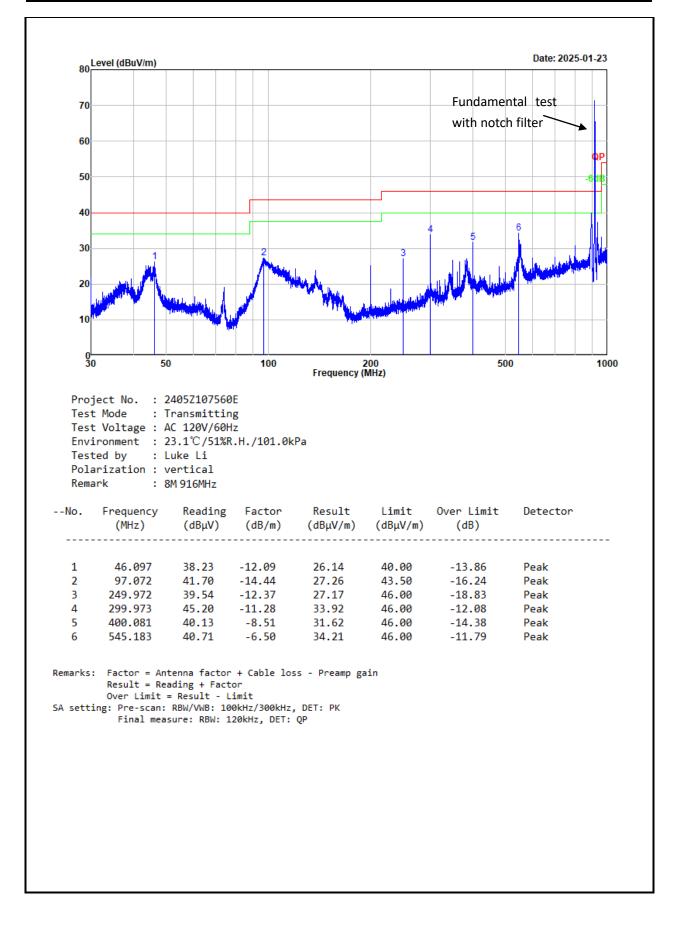
30MHz-1GHz:

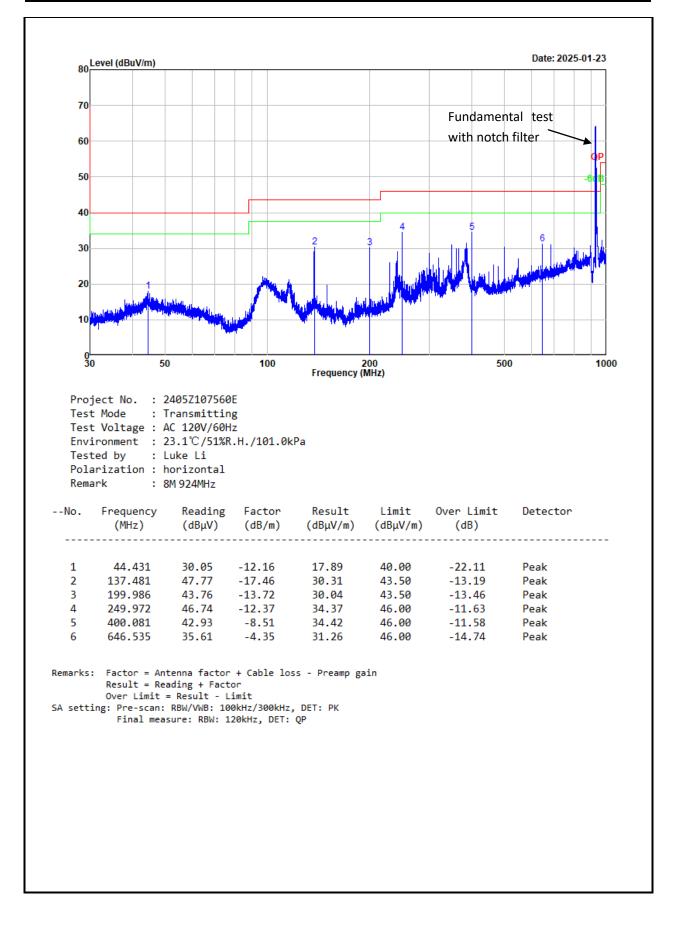
Test Date:	2025-01-23	Test By:	Bard Huang
Environment condition:	Temperature: 23.1°C; Relative	Humidity:51%; ATM Pr	essure: 101.0kPa

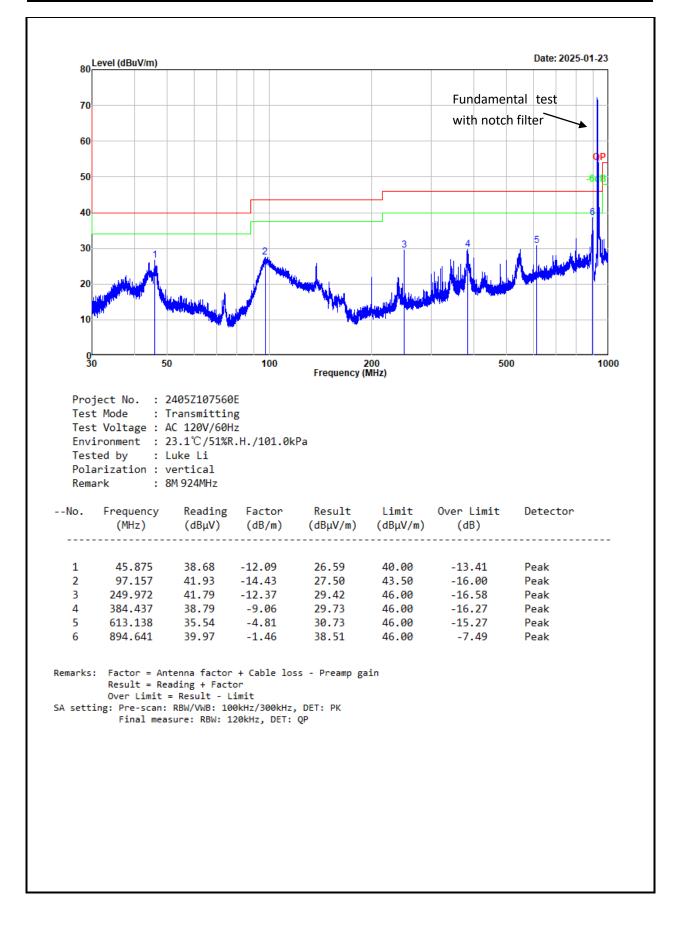












Above 1GHz:

Test Date:	2025-01-17	Test By:	Luke Li
Environment condition:	Temperature: 22.5°C; Relative	Humidity:32%; ATM P	ressure:101.3kPa

Frequency (MHz)	Reading level (dBµV)	Polar	Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark
			1M Lowes	t channel	-		
1807.000	57.09	horizontal	-3.76	53.33	74.00	-20.67	Peak
2710.500	49.83	horizontal	-2.36	47.47	74.00	-26.53	Peak
3614.000	40.09	horizontal	-2.59	37.50	54.00	-16.50	Average
3614.000	60.36	horizontal	-2.59	57.77	74.00	-16.23	Peak
1807.000	54.74	vertical	-3.76	50.98	54.00	-3.02	Average
1807.000	70.07	vertical	-3.76	66.31	74.00	-7.69	Peak
2710.500	36.70	vertical	-2.36	34.34	54.00	-19.66	Average
2710.500	61.01	vertical	-2.36	58.65	74.00	-15.35	Peak
3614.000	39.17	vertical	-2.59	36.58	54.00	-17.42	Average
3614.000	57.88	vertical	-2.59	55.29	74.00	-18.71	Peak
4517.500	52.30	vertical	-3.99	48.31	74.00	-25.69	Peak
			1M Middle	Channel			
1829.000	54.50	horizontal	-3.83	50.67	74.00	-23.33	Peak
2743.500	48.20	horizontal	-2.35	45.85	74.00	-28.15	Peak
3658.000	45.12	horizontal	-2.61	42.51	54.00	-11.49	Average
3658.000	64.39	horizontal	-2.61	61.78	74.00	-12.22	Peak
1829.000	51.65	vertical	-3.83	47.82	54.00	-6.18	Average
1829.000	65.77	vertical	-3.83	61.94	74.00	-12.06	Peak
2743.500	36.39	vertical	-2.35	34.04	54.00	-19.96	Average
2743.500	60.72	vertical	-2.35	58.37	74.00	-15.63	Peak
3658.000	40.07	vertical	-2.61	37.46	54.00	-16.54	Average
3658.000	57.57	vertical	-2.61	54.96	74.00	-19.04	Peak
4572.500	51.49	vertical	-3.20	48.29	74.00	-25.71	Peak
			1M Highest	Channel			
1853.000	52.01	horizontal	-3.91	48.10	74.00	-25.90	Peak
3706.000	44.40	horizontal	-2.56	41.84	54.00	-12.16	Average
3706.000	67.78	horizontal	-2.56	65.22	74.00	-8.78	Peak
1853.000	47.17	vertical	-3.91	43.26	54.00	-10.74	Average
1853.000	61.89	vertical	-3.91	57.98	74.00	-16.02	Peak
2779.500	36.29	vertical	-2.34	33.95	54.00	-20.05	Average

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2779.500	59.91	vertical	-2.34	57.57	74.00	-16.43	Peak
3706.000	40.58	vertical	-2.56	38.02	54.00	-15.98	Average
3706.000	59.08	vertical	-2.56	56.52	74.00	-17.48	Peak
		<u> </u>	2M Lowest	channel			
1810.000	56.25	horizontal	-3.77	52.48	74.00	-21.52	Peak
2715.000	50.25	horizontal	-2.36	47.89	74.00	-26.11	Peak
3620.000	41.84	horizontal	-2.59	39.25	54.00	-14.75	Average
3620.000	57.13	horizontal	-2.59	54.54	74.00	-19.46	Peak
1810.000	53.30	vertical	-3.77	49.53	54.00	-4.47	Average
1810.000	66.76	vertical	-3.77	62.99	74.00	-11.01	Peak
2715.000	56.09	vertical	-2.36	53.73	74.00	-20.27	Peak
3620.000	38.61	vertical	-2.59	36.02	54.00	-17.98	Average
3620.000	57.88	vertical	-2.59	55.29	74.00	-18.71	Peak
		· · · ·	2M Middle	Channel			
1830.000	53.75	horizontal	-3.83	49.92	74.00	-24.08	Peak
2745.000	49.30	horizontal	-2.35	46.95	74.00	-27.05	Peak
3660.000	45.67	horizontal	-2.60	43.07	54.00	-10.93	Average
3660.000	63.53	horizontal	-2.60	60.93	74.00	-13.07	Peak
1830.000	49.94	vertical	-3.83	46.11	54.00	-7.89	Average
1830.000	64.56	vertical	-3.83	60.73	74.00	-13.27	Peak
2745.000	37.10	vertical	-2.35	34.75	54.00	-19.25	Average
2745.000	58.90	vertical	-2.35	56.55	74.00	-17.45	Peak
3660.000	56.37	vertical	-2.60	53.77	74.00	-20.23	Peak
			2M Highest	Channel			
1850.000	50.91	horizontal	-3.89	47.02	74.00	-26.98	Peak
2775.000	49.07	horizontal	-2.35	46.72	74.00	-27.28	Peak
3700.000	44.94	horizontal	-2.55	42.39	54.00	-11.61	Average
3700.000	63.34	horizontal	-2.55	60.78	74.00	-13.21	Peak
1850.000	47.61	vertical	-3.89	43.72	54.00	-10.28	Average
1850.000	62.44	vertical	-3.89	58.55	74.00	-15.45	Peak
2775.000	36.56	vertical	-2.35	34.51	54.00	-19.49	Average
2775.000	65.06	vertical	-2.35	62.71	74.00	-11.29	Peak
3700.000	41.00	vertical	-2.55	38.45	54.00	-15.55	Average
3700.000	57.86	vertical	-2.55	55.31	74.00	-18.69	Peak
		· · ·	4M Lowest	channel	I	1	1
1812.000	54.02	horizontal	-3.77	50.25	74.00	-23.75	Peak
2718.000	47.42	horizontal	-2.36	45.06	74.00	-28.94	Peak
3624.000	44.35	horizontal	-2.60	41.75	54.00	-12.25	Average

0004.000	50.00	1		50.70	74.00	47.04	Durk				
3624.000	59.36	horizontal	-2.60	56.76	74.00	-17.24	Peak				
1812.000	54.30	vertical	-3.77	50.53	54.00	-3.47	Average				
1812.000	67.10	vertical	-3.77	63.33	74.00	-10.67	Peak				
2718.000	36.61	vertical	-2.36	34.25	54.00	-19.75	Average				
2718.000	60.27	vertical	-2.36	57.91	74.00	-16.09	Peak				
3624.000	55.35	vertical	-2.60	52.75	74.00	-21.25	Peak				
4M Middle Channel											
1828.000	52.58	horizontal	-3.83	48.75	74.00	-25.25	Peak				
2742.000	48.44	horizontal	-2.35	46.09	74.00	-27.91	Peak				
3656.000	46.92	horizontal	-2.61	44.31	54.00	-9.69	Average				
3656.000	62.88	horizontal	-2.61	60.27	74.00	-13.73	Peak				
1828.000	51.61	vertical	-3.83	47.78	54.00	-6.22	Average				
1828.000	65.32	vertical	-3.83	61.49	74.00	-12.51	Peak				
2742.000	38.58	vertical	-2.35	36.23	54.00	-17.77	Average				
2742.000	61.42	vertical	-2.35	59.07	74.00	-14.93	Peak				
3646.000	56.60	vertical	-2.61	53.99	74.00	-20.01	Peak				
			4M Highest	Channel							
1852.000	52.09	horizontal	-3.91	48.18	74.00	-25.82	Peak				
2778.000	48.15	horizontal	-2.35	45.80	54.00	-28.20	Peak				
3704.000	45.34	horizontal	-2.56	42.78	74.00	-11.22	Average				
3704.000	61.64	horizontal	-2.56	59.08	74.00	-14.92	Peak				
1852.000	47.31	vertical	-3.91	43.40	54.00	-10.60	Average				
1852.000	60.00	vertical	-3.91	56.09	74.00	-17.91	Peak				
2778.000	38.03	vertical	-2.35	35.68	54.00	-18.32	Average				
2778.000	61.14	vertical	-2.35	58.79	74.00	-15.21	Peak				
3704.000	56.27	vertical	-2.56	53.71	74.00	-20.29	Peak				
			8M Lowest	channel							
1816.000	53.63	horizontal	-3.78	49.85	74.00	-24.15	Peak				
2724.000	49.78	horizontal	-2.35	47.43	74.00	-26.57	Peak				
3632.000	45.91	horizontal	-2.60	43.31	54.00	-10.69	Average				
3632.000	59.22	horizontal	-2.60	56.62	74.00	-17.38	Peak				
1816.000	53.70	vertical	-3.78	49.92	54.00	-4.08	Average				
1816.000	65.68	vertical	-3.78	61.90	74.00	-12.10	Peak				
2724.000	41.96	vertical	-2.35	39.61	54.00	-14.39	Average				
2724.000	60.20	vertical	-2.35	57.85	74.00	-16.15	Peak				
3632.000	55.63	vertical	-2.60	53.03	74.00	-20.97	Peak				
8M Middle Channel											
1832.000	51.46	horizontal	-3.83	47.63	74.00	-26.37	Peak				
1832.000	51.46	norizontal	-3.83	47.03	74.00	-20.37	Peak				

2748.000	47.32	horizontal	-2.35	44.97	74.00	-29.03	Peak		
3664.000	46.59	horizontal	-2.59	44.00	54.00	-10.00	Average		
3664.000	59.94	horizontal	-2.59	57.35	74.00	-16.65	Peak		
1832.000	50.65	vertical	-3.83	46.82	54.00	-7.18	Average		
1832.000	62.17	vertical	-3.83	58.34	74.00	-15.66	Peak		
2748.000	43.03	vertical	-2.35	40.68	54.00	-13.32	Average		
2748.000	60.10	vertical	-2.35	57.75	74.00	-16.25	Peak		
3664.000	55.24	vertical	-2.59	52.65	74.00	-21.35	Peak		
8M Highest Channel									
1848.000	51.10	horizontal	-3.88	47.22	74.00	-26.78	Peak		
2772.000	48.43	horizontal	-2.35	46.08	74.00	-27.92	Peak		
3696.000	47.25	horizontal	-2.56	44.69	54.00	-9.31	Average		
3696.000	61.64	horizontal	-2.56	59.08	74.00	-14.92	Peak		
1848.000	48.45	vertical	-3.88	44.57	54.00	-9.43	Average		
1848.000	60.28	vertical	-3.88	56.40	74.00	-17.60	Peak		
2772.000	45.39	vertical	-2.35	43.04	54.00	-10.96	Average		
2772.000	64.10	vertical	-2.35	61.75	74.00	-12.25	Peak		
3696.000	43.98	vertical	-2.56	41.42	54.00	-12.58	Average		
3696.000	59.16	vertical	-2.56	56.60	74.00	-17.40	Peak		

Remark:

Corrected Amplitude= Reading level + corrected Factor

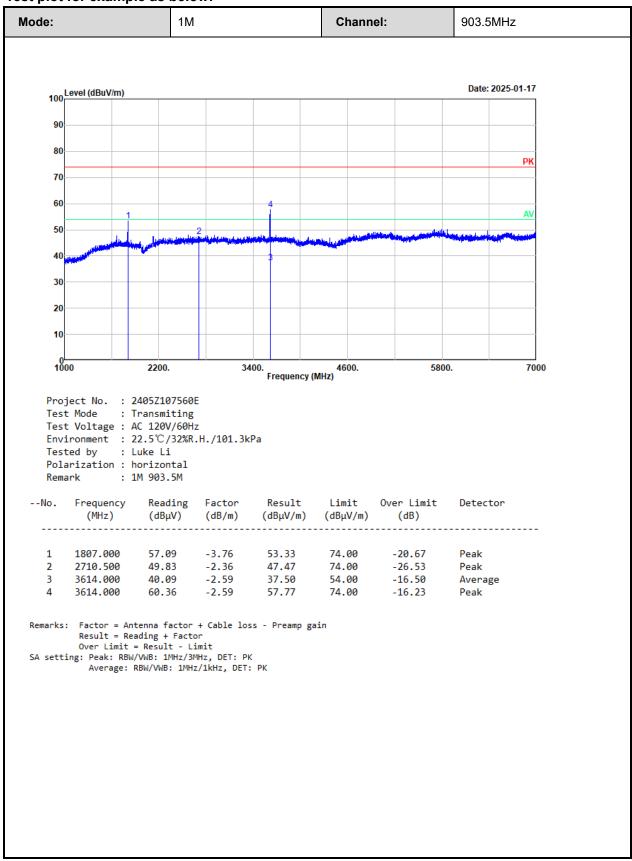
Corrected Factor = Antenna factor + Cable loss – Amplifier gain

Margin = Corrected Amplitude – Limit

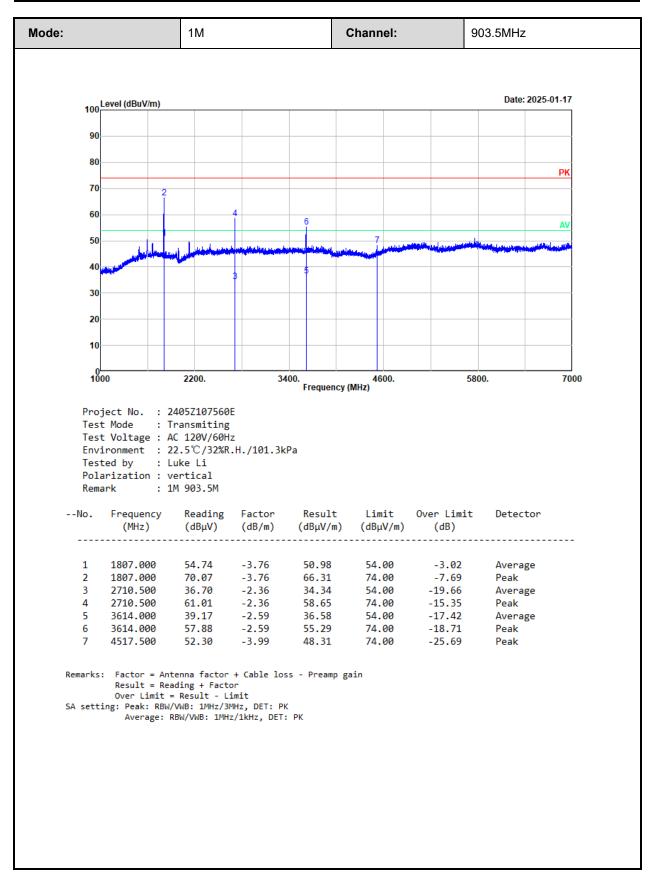
For the test result of Peak below the Peak limit more than 20dB, which can compliance with the average limit, just the Peak level was recorded.

The emission levels of other frequencies that were lower than the limit 20dB not show in test report.

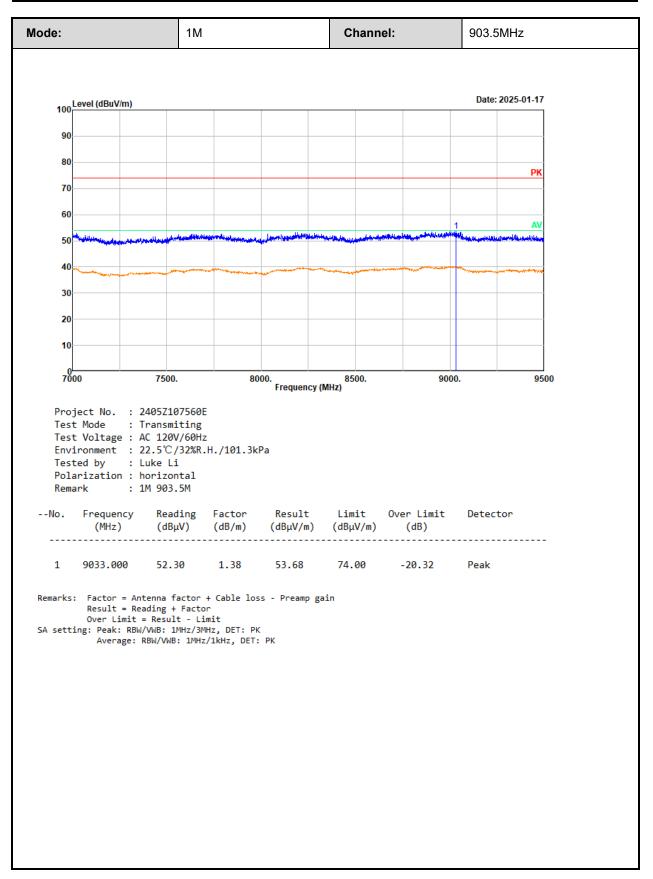
Test plot for example as below:



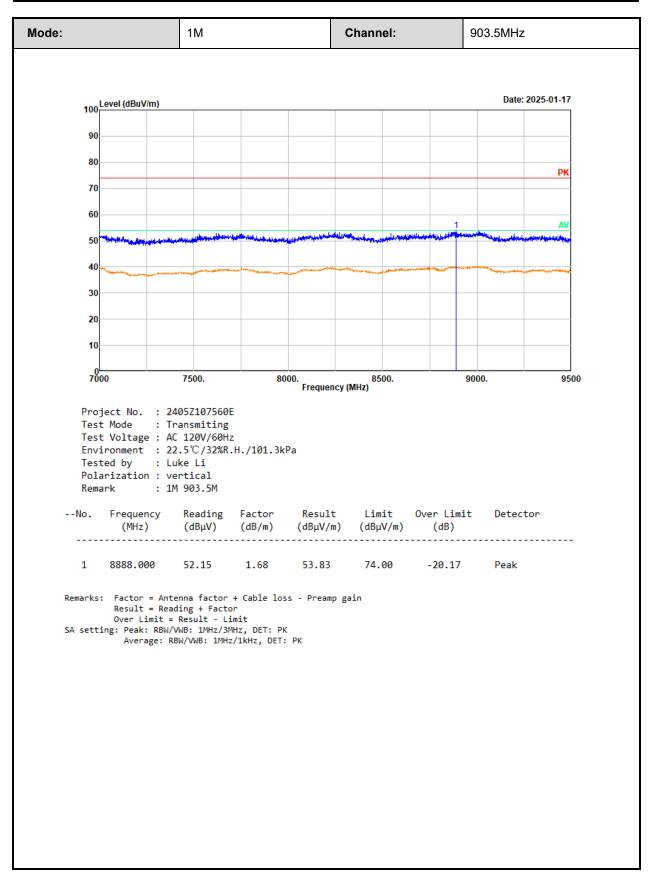
Report No.: 2405Z107560EB



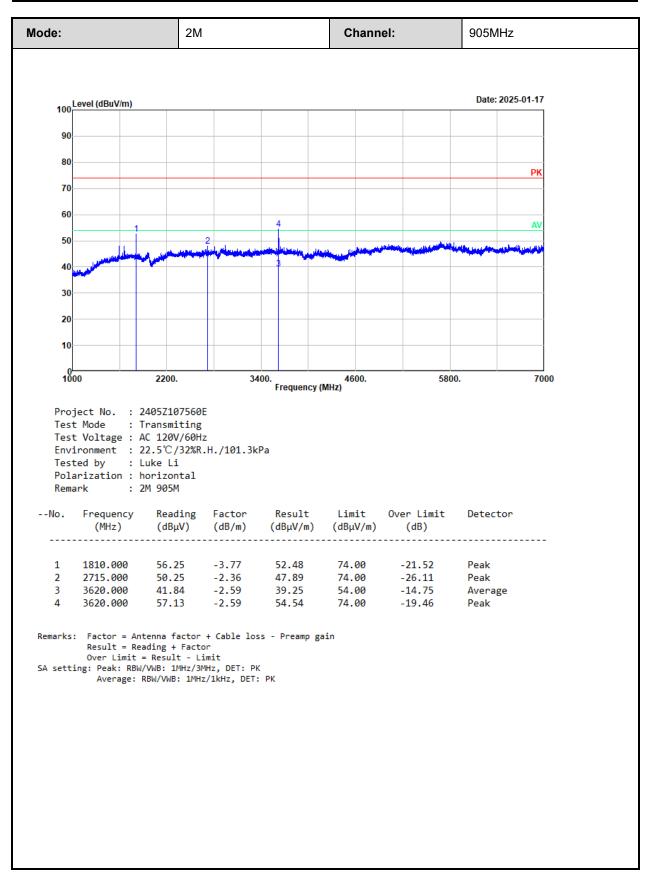
Report No.: 2405Z107560EB



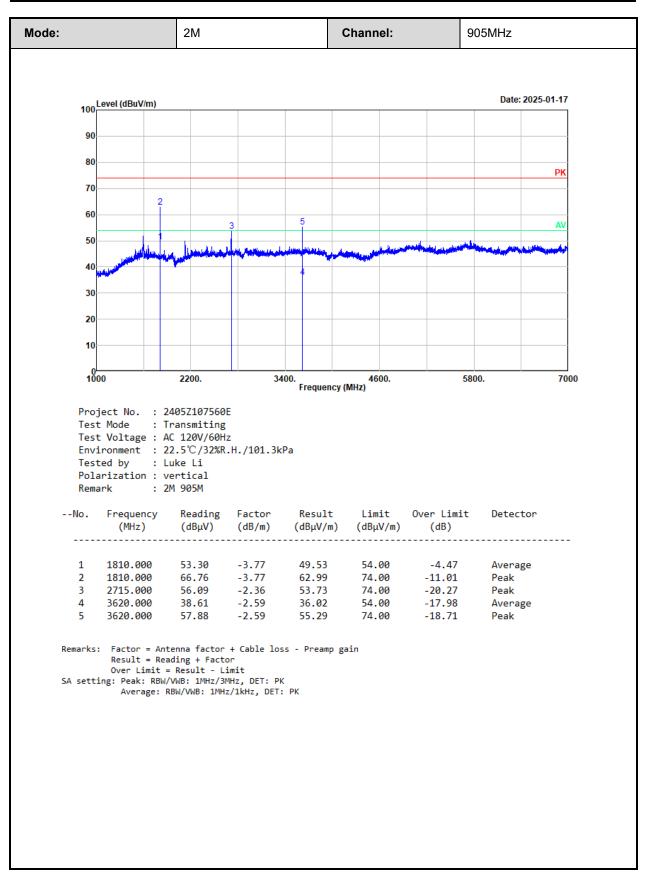
Report No.: 2405Z107560EB



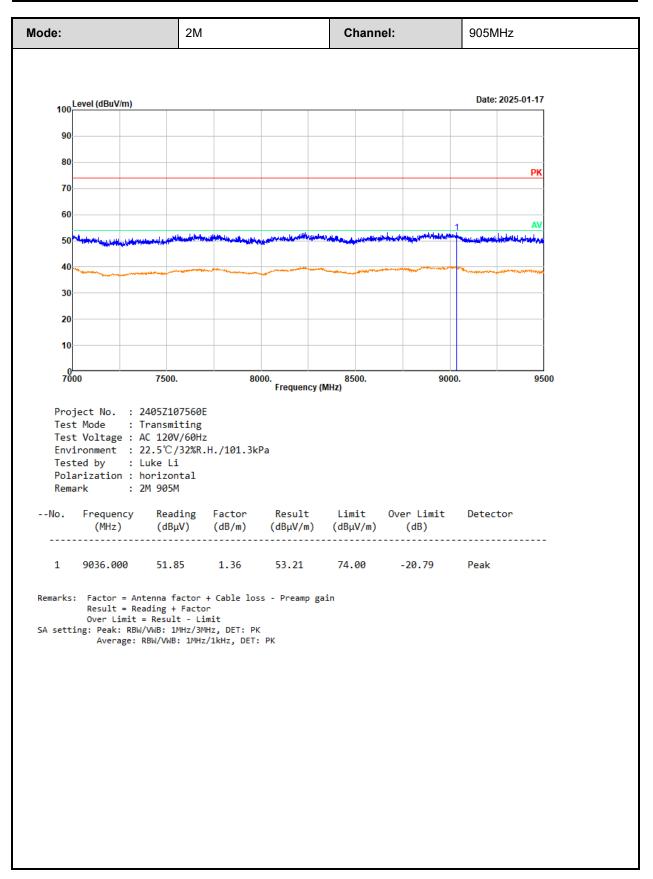
Report No.: 2405Z107560EB



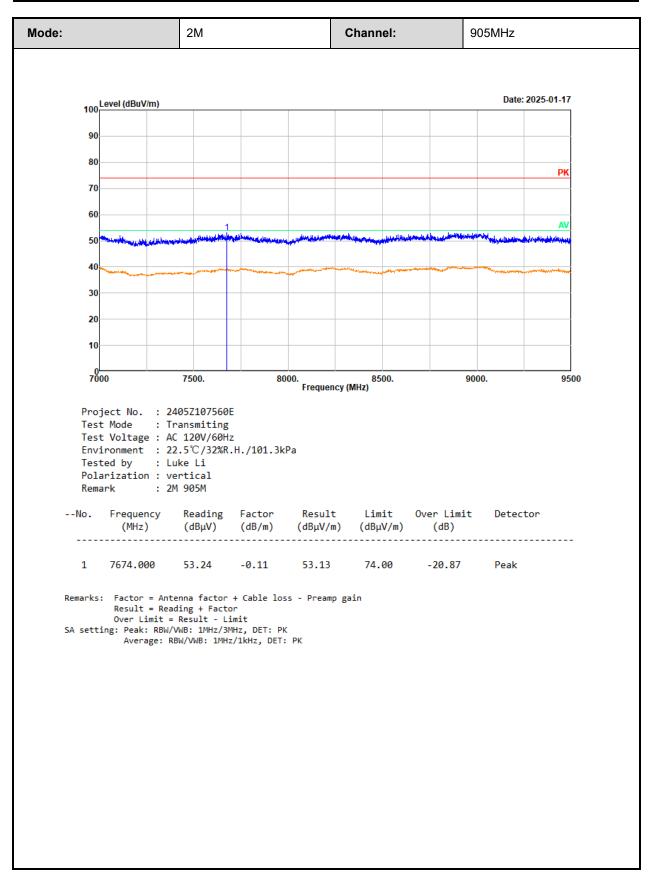
Report No.: 2405Z107560EB



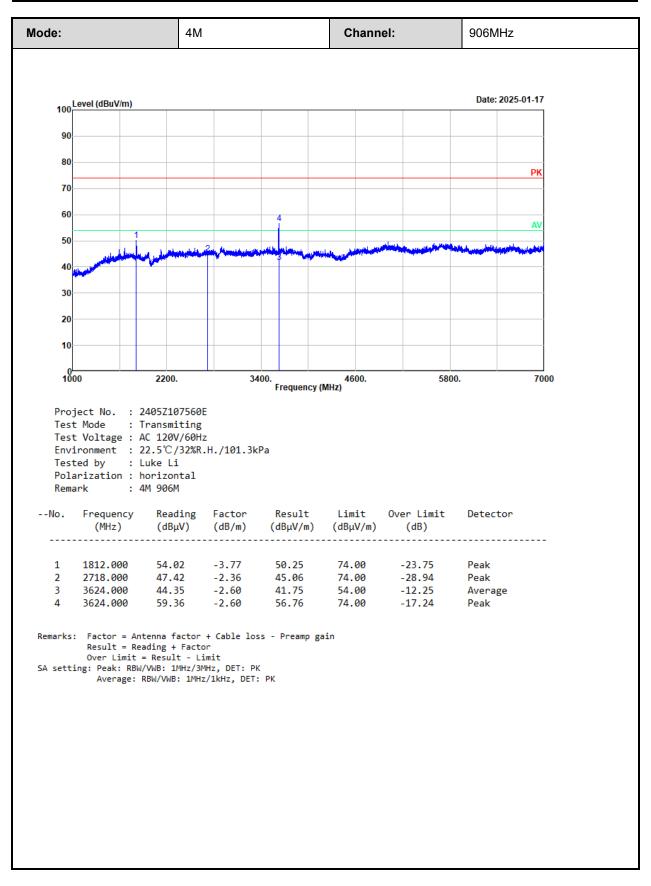
Report No.: 2405Z107560EB



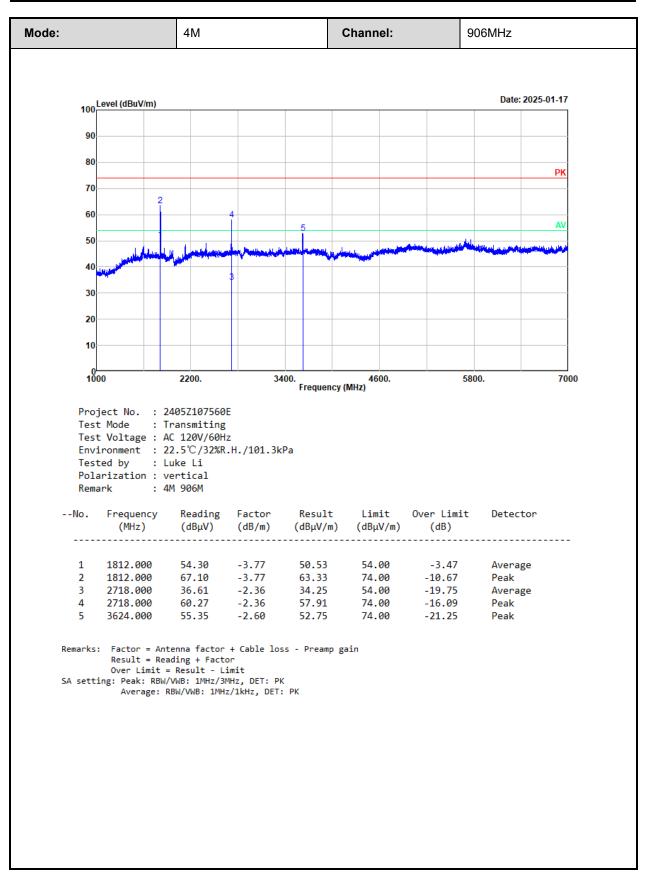
Report No.: 2405Z107560EB



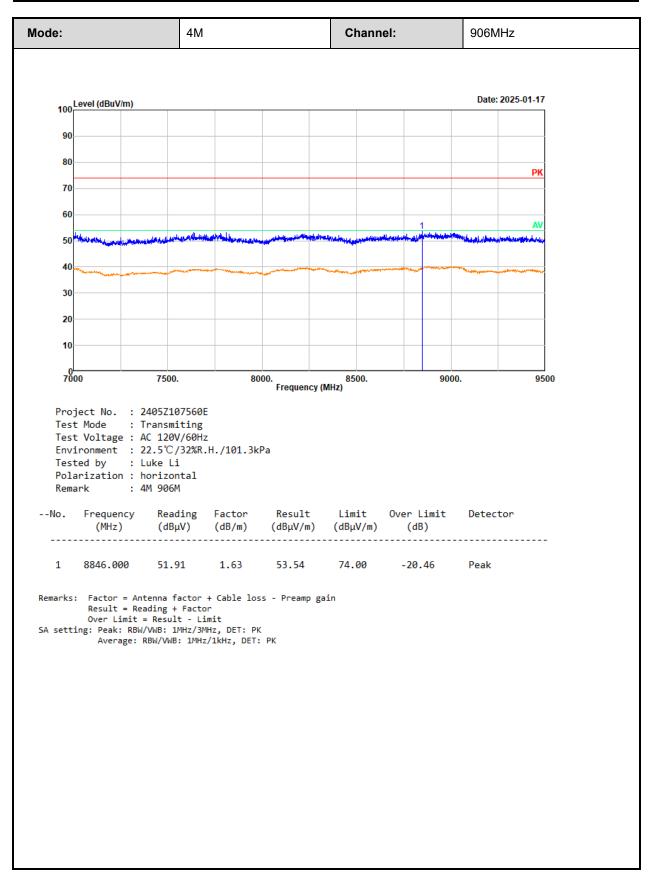
Report No.: 2405Z107560EB



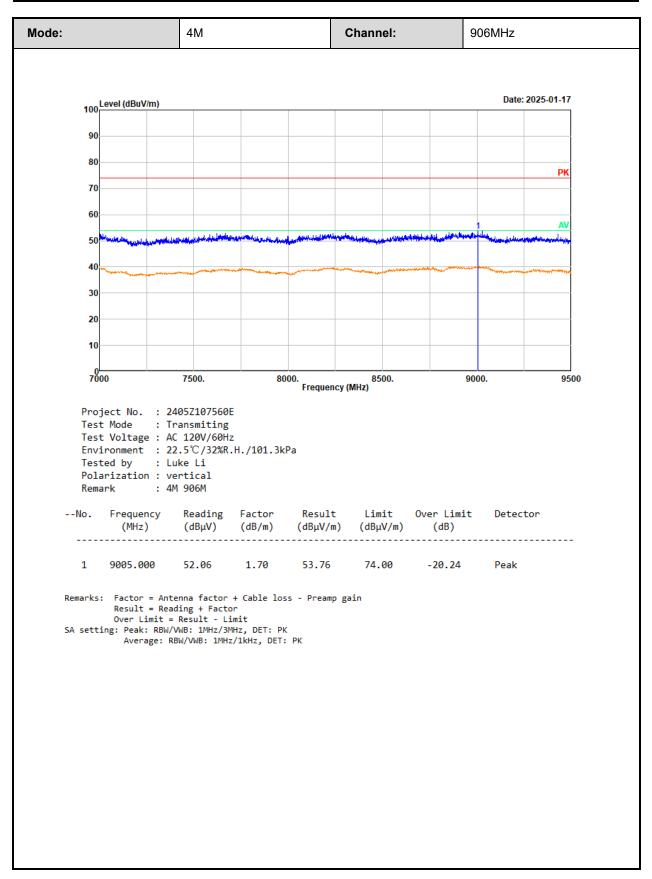
Report No.: 2405Z107560EB



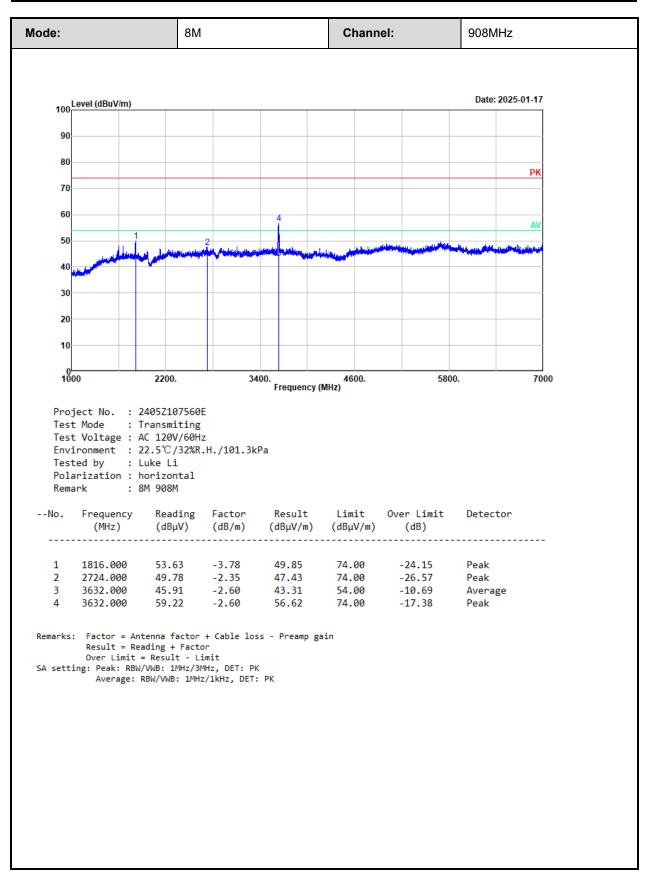
Report No.: 2405Z107560EB



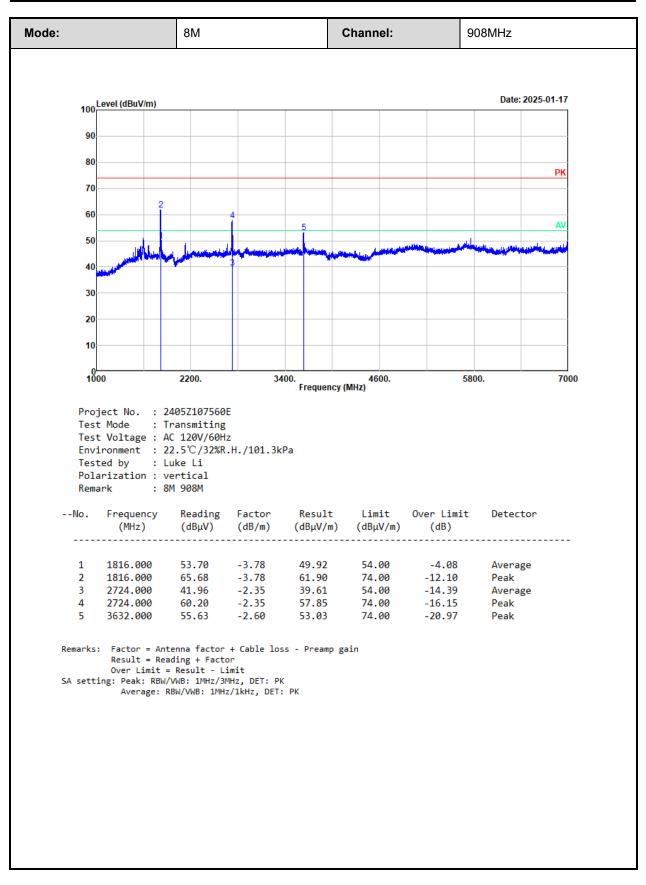
Report No.: 2405Z107560EB



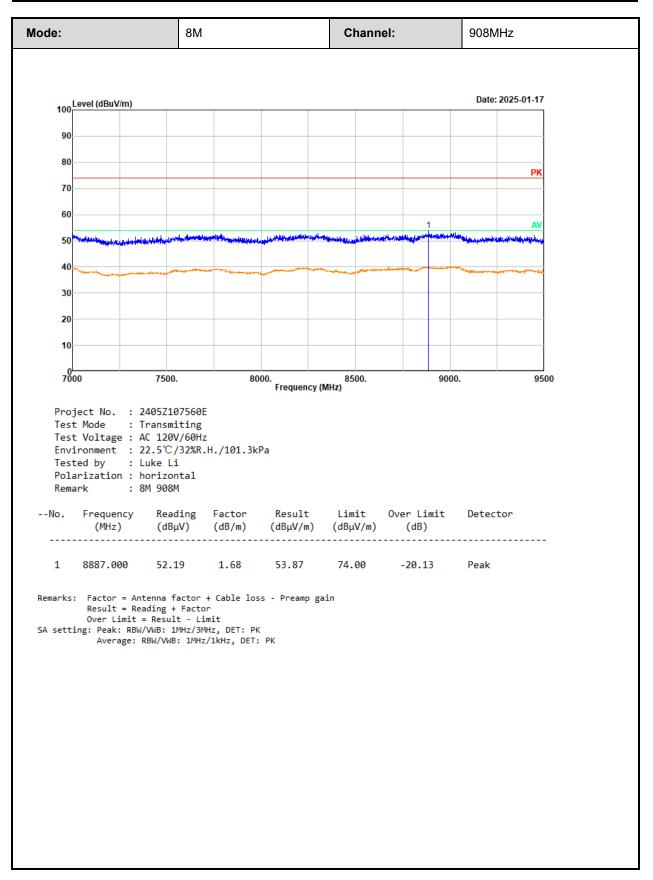
Report No.: 2405Z107560EB



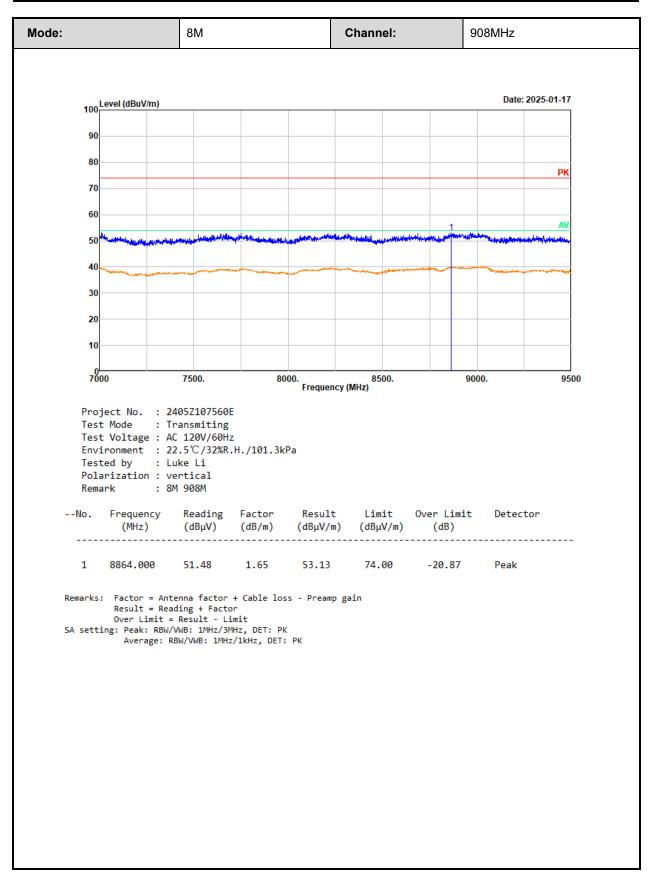
Report No.: 2405Z107560EB



Report No.: 2405Z107560EB



Report No.: 2405Z107560EB



3.5 RF Conducted Test Data

Test Date:	2025-01-23~2025-02-13	Test By:	Ryan Zhang
Environment condition:	Temperature: 23.1~23.9°C; Re 100.8~101.5kPa	lative Humidity:40~41%;	ATM Pressure:

3.5.1 6 dB Emission Bandwidth

Mode	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict	
	903.5	0.888	≥0.5	Pass	
1M	914.5	914.5 0.908		Pass	
	926.5	0.880	≥0.5	Pass	
	905	1.816	≥0.5	Pass	
2M	915	1.824	≥0.5	Pass	
	925	1.832	≥0.5	Pass	
	906	3.648	≥0.5	Pass	
4M	914	3.696	≥0.5	Pass	
	926	3.680	≥0.5	Pass	
	908	7.616	≥0.5	Pass	
8M	916	7.680	≥0.5	Pass	
	924	7.488	≥0.5	Pass	

3.5.2 99% Occupied Bandwidth

Mode	Test Frequency	99% OBW
Ivioue	(MHz)	(MHz)
	903.5	0.912
1M	914.5	0.916
	926.5	0.908
	905	1.824
2M	915	1.816
	925	1.824
	906	3.664
4M	914	3.696
	926	3.696
8M	908	7.552
	916	7.584
	924	7.584

3.5.3 Maximum Conducted Peak Output Power

Mode	Test Frequency (MHz)	Peak Output Power(dBm)	Limit (dBm)	Verdict
	903.5	23.88	30	Pass
1M	914.5	23.39	30	Pass
	926.5	22.20	30	Pass
	905	24.86	30	Pass
2M	915	23.48	30	Pass
	925	23.89	30	Pass
	906	26.25	30	Pass
4M	914	25.68	30	Pass
	926	25.11	30	Pass
8M	908	27.86	30	Pass
	916	26.79	30	Pass
	924	27.34	30	Pass

3.5.4 Power Spectral Density

Mode	Test Frequency (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
	903.5	-0.47	8	Pass
1M	914.5	-0.65	8	Pass
	926.5	-1.41	8	Pass
	905	-3.38	8	Pass
2M	915	-4.35	8	Pass
	925	-4.41	8	Pass
	906	-4.23	8	Pass
4M	914	-4.68	8	Pass
	926	-5.84	8	Pass
8M	908	-5.23	8	Pass
	916	-6.71	8	Pass
	924	-6.08	8	Pass

3.5.5 100 kHz Bandwidth of Frequency Band Edge

Mode	Test Frequency (MHz)	Result (dB)	Limit (dB)	Verdict	
154	903.5	46.03	20	Pass	
1M	926.5	45.42	20	Pass	
2M	905	43.38	20	Pass	
	925	44.08	20	Pass	
4M	906	41.22	20	Pass	
	926	30.23	20	Pass	
8M	908	37.28	20	Pass	
	924	27.67	20	Pass	

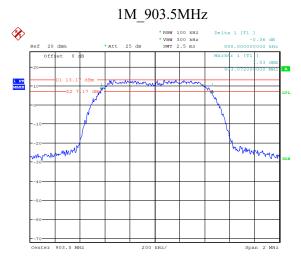
3.5.6 Duty Cycle

Mode	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)	1/Ton (Hz)	VBW Setting (kHz)
1M	914.5	100	100	100	/	/	0.010
2M	915	100	100	100	/	/	0.010
4M	914	100	100	100	/	/	0.010
8M	916	100	100	100	/	/	0.010

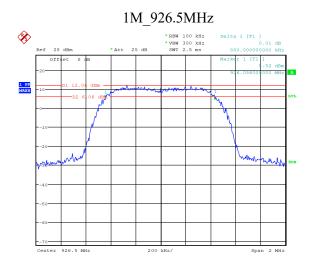
Duty Cycle = Ton/(Ton+Toff)*100%

Test Plots:

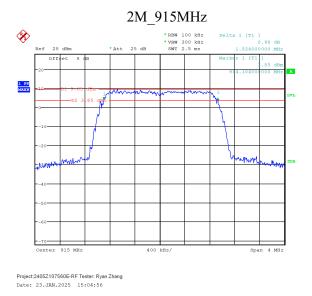
6 dB Emission Bandwidth: 902~928

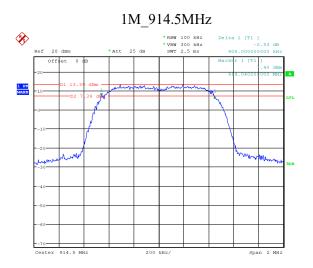


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:48:16

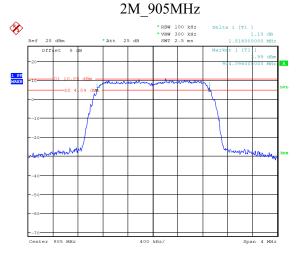


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:52:03

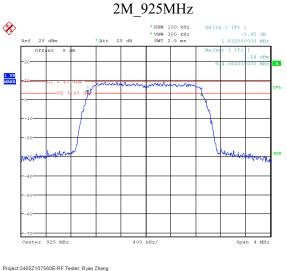




Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:50:17

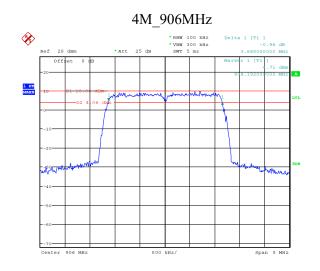


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:03:55

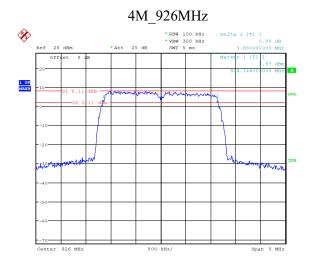


Date: 23.JAN.2025 15:05:57

Report Template: TR-4-E-039/V1.1



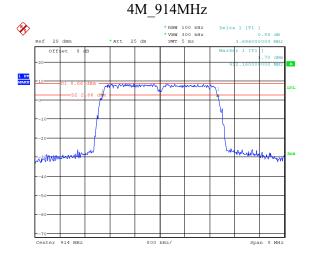
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:21:26



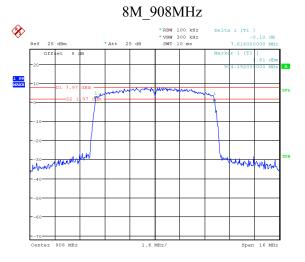
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:12:09

ESM_916MHZ

Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:23:11

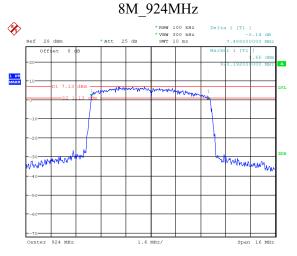


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:10:57



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:21:40

014

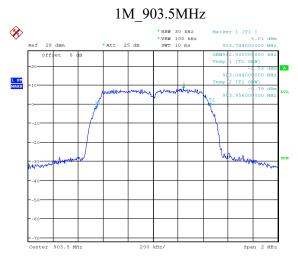


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:28:13

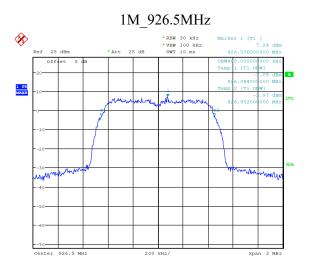
Report Template: TR-4-E-039/V1.1

99% Occupied Bandwidth:

902~928

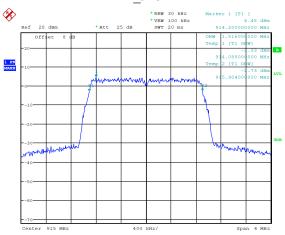


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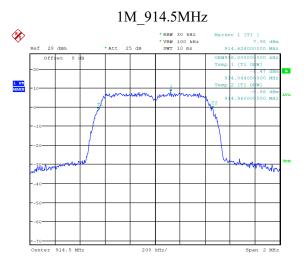


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:52:40

2M_915MHz



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:05:10

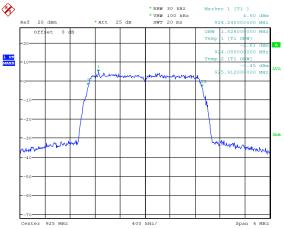


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:51:05

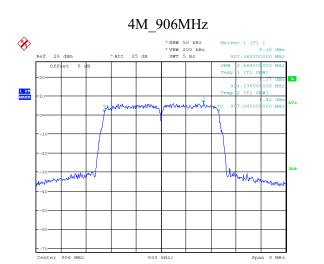
2M 905MHz * RBW 30 kHz * VBW 100 kHz SWT 20 ms ker 1 [T1] 5.33 dBm 904.912000000 MHz Ì Ref 28 dBm * Att 25 dB Offs 1 PR MAXH 9120 Monteman . 16. 400 kHz. Span 4 ente:

Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:04:07

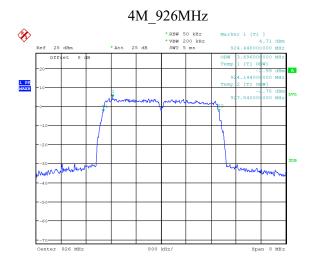
2M_925MHz



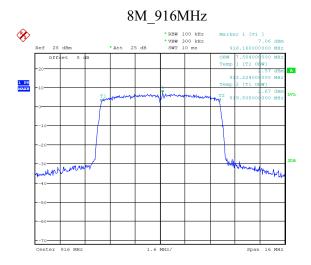
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:06:11



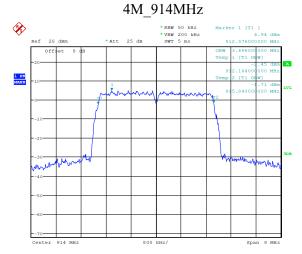
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:21:43



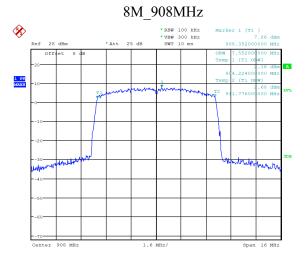
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:12:22



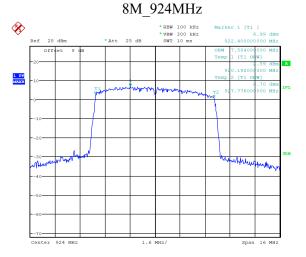
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:30:12



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:11:11



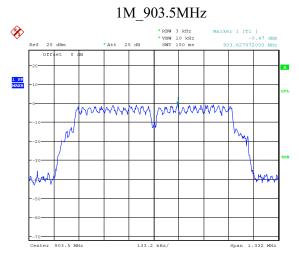
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:29:37



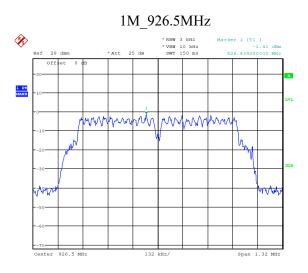
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:28:27

Power Spectral Density:

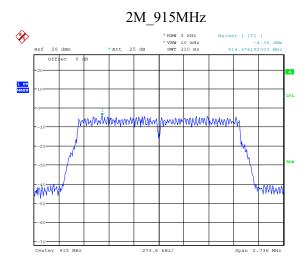
902~928



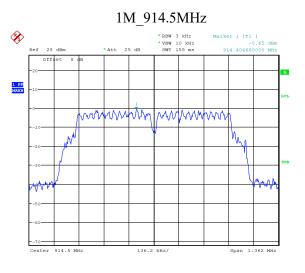
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:49:19



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:52:53



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:05:23



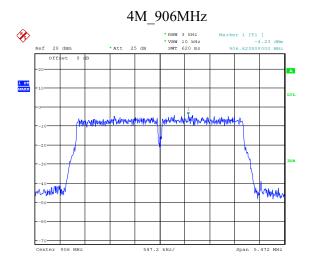
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:51:19

2M 905MHz Marker 1 [T1] -3.38 dBm 904.498784000 MHz Ì * RBW 3 kHz * VBW 10 kHz SWT 310 ms 28 dBr Ref * Att 25 di Offset 1 PR MAXH www.www.www mmmmmmmmm MIM MMW 272.4 kHz/ Center 905 MHz Span 2.724 MHz

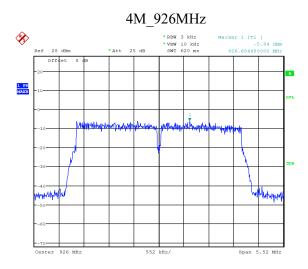
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:04:20

2M 925MHz * RBW 3 kHz * VBW 10 kHz SWT 310 ms rker 1 [T1] -4.41 dB 924.499864000 MH Ì Ref 28 dBm * Att 25 dE 0110 1 PK MAXH www.whileweight Mammunuhan mm mm Center 925 MHz 274.8 kHz/ Span 2.748 MHz

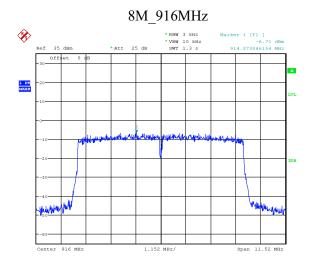
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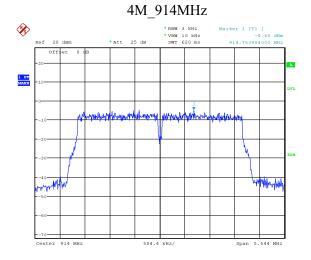
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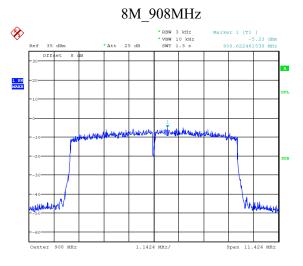
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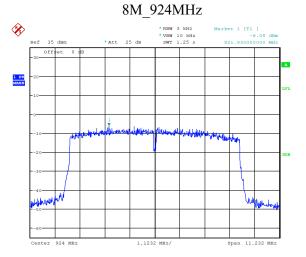
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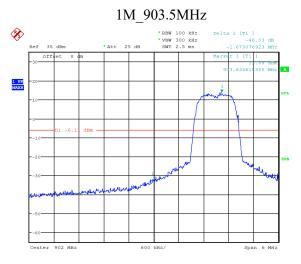


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 17:55:17

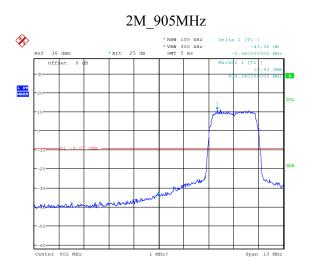


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 17:59:02

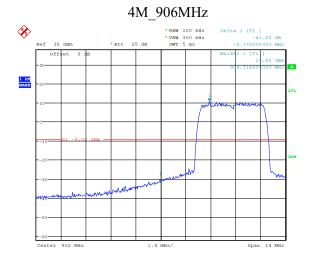
100kHz Bandwidth of Frequency Band Edge: 902~928



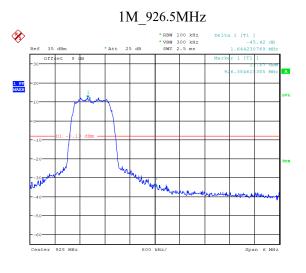
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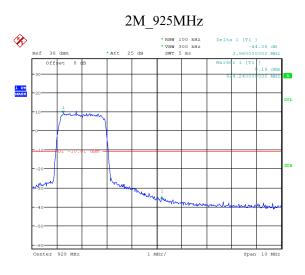
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:01:21



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:19:02

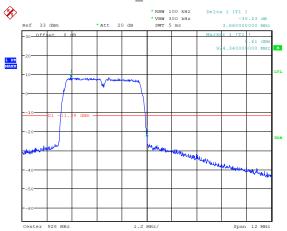


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 14:43:49

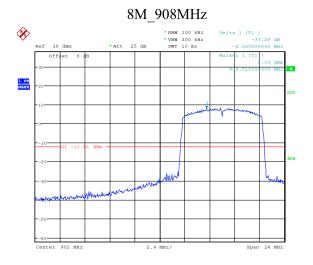


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 15:00:20

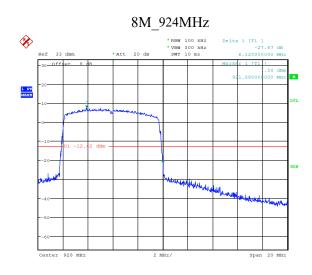
4M_926MHz



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 13.FEB.2025 19:03:00

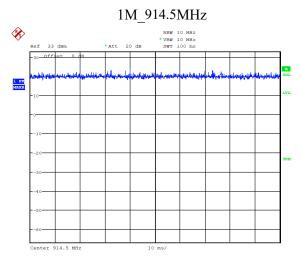


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 23.JAN.2025 16:17:22

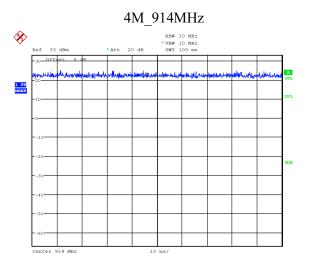


Project:2405Z107560E-RF Tester: Ryan Zhang Date: 13.FEB.2025 19:04:49

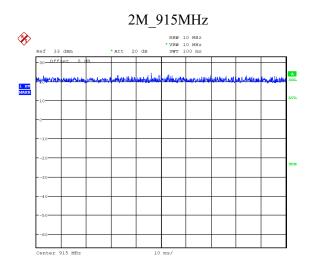
Duty Cycle: 902~928



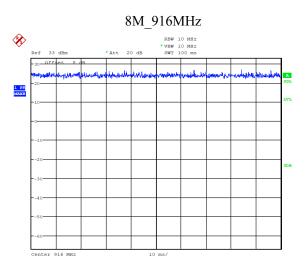
Project:2405Z107560E-RF Tester: Ryan Zhang Date: 13.FEB.2025 17:03:26



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 13.FEB.2025 17:04:58



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 13.FEB.2025 17:04:23



Project:2405Z107560E-RF Tester: Ryan Zhang Date: 13.FEB.2025 17:05:39

4 Test Setup Photo

Please refer to the attachment 2405Z107560E Test Setup photo.

5 E.U.T Photo

Please refer to the attachment 2405Z107560E External photo and 2405Z107560E Internal photo.

---End of Report---