

TEST REPORT

Product Name : **Smart Switch**
Model Number : **SUN-SMART-SWITCHU2P3**
FCC ID : **2AV6USTU2P3**

Prepared for : NingBo Deye Inverter Technology Co., Ltd.
Address : No. 26 South YongJiang Road, Daqi, Beilun, NingBo,
Zhejiang, China

Prepared by : EMTEK (NINGBO) CO., LTD.
Address : No. 8, Building 8, Lane 216, Qingyi Road, Ningbo
High-Tech Zone, Ningbo, Zhejiang, China

Tel: +86-574-27907998
Fax: +86-574-27721538

Report Number : ENB2604290048W00201R
Date(s) of Tests : Apr,27, 2026 to Jun,18, 2026
Date of Issue : Jun,18, 2026

Table of Contents

1 TEST RESULT CERTIFICATION	3
2 EUT TECHNICAL DESCRIPTION	5
3 SUMMARY OF TEST RESULT	6
4 TEST METHODOLOGY	7
4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS	7
4.2 MEASUREMENT EQUIPMENT USED	7
4.3 DESCRIPTION OF TEST MODES	9
5 FACILITIES AND ACCREDITATIONS	10
5.1 FACILITIES	10
5.2 LABORATORY ACCREDITATIONS AND LISTINGS	10
6 TEST SYSTEM UNCERTAINTY	11
7 SETUP OF EQUIPMENT UNDER TEST	12
7.1 RADIO FREQUENCY TEST SETUP 1	12
7.2 RADIO FREQUENCY TEST SETUP 2	12
7.3 CONDUCTED EMISSION TEST SETUP	14
7.4 SUPPORT EQUIPMENT	14
8 TEST REQUIREMENTS	15
8.1 BANDWIDTH TEST	15
8.2 RADIATED SPURIOUS EMISSION	18
8.3 CONDUCTED EMISSIONS TEST	35
8.4 ANTENNA APPLICATION	40

1 TEST RESULT CERTIFICATION

Applicant	:	NingBo Deye Inverter Technology Co., Ltd.
Address	:	No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China
Manufacturer	:	NingBo Deye Inverter Technology Co., Ltd.
Address	:	No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China
Trade Mark	:	Deye
EUT	:	Smart Switch
Model No.	:	SUN-SMART-SWITCHU2P3

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart C	PASS

The above equipment was tested by EMTEK (NINGBO) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2020) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 2 and Part 15.249.

The test results of this report relate only to the tested sample identified in this report.

Date of Test :	Apr,27, 2026 to Jun,18, 2026
Prepared by :	 WK Luo /Engineer
Reviewer :	 June Gao /Supervisor
Approved & Authorized Signer :	 Tony Wei /Manager

Modified History

Version	Report No.	Revision Date	Summary
/	ENB2604290048W00201R	/	See Note



2 EUT TECHNICAL DESCRIPTION

Product:	Smart Switch
Model Number:	SUN-SMART-SWITCHU2P3
Sample Number:	ENB2604290048W002-1-1
Power Supply:	AC 94~238V, 50/60Hz
Test Voltage:	AC 120V/60Hz
Modulation:	FSK
Frequency Range:	920.0-928.0 MHz
Number of Channels:	10 Channels
Max Transmit Power:	79.55 dBuV/m
Antenna:	FPC
Antenna Gain:	-0.03dbi
Temperature Range:	-40 °C ~ +45 °C
Date of Receiver:	Apr,27, 2026

Note: for more details, please refer to the user's manual of the EUT.

3 SUMMARY OF TEST RESULT

FCC Part Clause	Test Parameter	Verdict	Remark
15.207	Conducted Emission	PASS	
15.209	Radiated Emission	PASS	
15.249	Radiated Spurious Emission	PASS	
15.249	Band edge test	PASS	
15.249	20dB Bandwidth	PASS	
15.203	Antenna Requirement	PASS	
NOTE1: N/A is an abbreviation for not applicable NOTE2: The report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits.			

RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for FCC ID: 2AV6USTU2P3 filing to comply with Section 15.249 of the FCC Part 15, Subpart C Rules.



4 TEST METHODOLOGY

4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:
FCC 47 CFR Part 2, Subpart J
FCC 47 CFR Part 15, Subpart C

4.2 MEASUREMENT EQUIPMENT USED

4.2.1 Conducted Emission Test Equipment

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-001	EMI Test Receiver	R & S	ESCI	101108	Oct. 24, 2025	1 Year
ENE-158	L.I.S.N	Schwarzbeck	NNLK 8129	0373	Oct. 24, 2025	1 Year
ENE-159	Pulse Limiter	Schwarzbeck	VTSD 9561F-N	2611115-001-0033	Oct. 23, 2025	1 Year
ENE-278	RF Switching Unit	HTEC	HRSU	222101	June 19, 2025	1 Year
ENE-149	Conduction Test Room 1#	SKET	11.5*5*4m	/	March 04, 2026	3 Year

4.2.2 Radiated Emission Test Equipment

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-185	EMI Test Receiver	R&S	ESR7	102480	March 02, 2026	1 Year
ENE-188	Low Frequency Field Antenna	Schwarzbeck	FMZB 1513-60	00026	June 26, 2025	3 Year
ENE-190	Antenna Multiple	Schwarzbeck	VULB 9163	01499	March 09, 2025	3 Year
ENE-195	Pre-Amplifier	JS Denki	PA09K03-40	JSPA21019	March 02, 2026	1 Year
ENE-204	Low Frequency Notch Filter RF Switching	JS Denki	JSDSW-F	JSDSW2211 D02	March 02, 2026	1 Year
ENE-251	6dB Attenuator	Mini-Circuits	UNAT-6+	11542	June 18, 2025	1 Year
ENE-144	3-Meter Anechoic Chamber2#	SKET	9*6*6m	/	June 21, 2025	3 Year
ENE-171	EXA Signal Analyzer	KEYSIGHT	N9010B	MY60242467	Oct. 24, 2025	1 Year
ENE-191	Horn Antenna	Schwarzbeck	BBHA 9120 D	02588	March 08, 2026	3 Year
ENE-198	Pre-Amplifier	JS Denki	PA0118-50	JSPA21022	March 02, 2026	1 Year
ENE-206	High Frequency Notch FilterRf Switching	JS Denki	JSDSW-F	202083582	March 02, 2026	1 Year

4.2.3 Radio Frequency Test Equipment

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-256	EXA Signal Anaalyzer	Keysight	N9010B	MY62060219	June 19, 2025	1 Year
ENE-172	RF Control Unit	Tonscend	JS0806-2(V.6E)	21L8060521	March 02, 2026	1 Year
ENE-302-1	RF cable	Rosenberger	N/A	N/A	June 19, 2025	1 Year
ENE-302-2	RF cable	Rosenberger	N/A	N/A	June 19, 2025	1 Year
ENE-302-3	RF cable	Rosenberger	N/A	N/A	June 19, 2025	1 Year



4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

The EUT has been tested under its typical operating condition so those modulation and channel were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Frequency and Channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	920.95	4	923.95	8	926.55
1	921.60	5	924.60	9	927.20
2	922.25	6	925.25		
3	922.90	7	925.90		
Note: N/A					

Test Frequency and Channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	920.95	4	923.95	9	927.20

5 FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at:

EMTEK (NINGBO) Co., Ltd.

No. 8, Building 8, Lane 216, Qingyi Road, Ningbo High-Tech Zone, Ningbo, Zhejiang, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

EMC Lab.

: **Accredited by CNAS**

The Certificate Registration Number is L6666.

The Laboratory has been assessed and proved to be in compliance with CNAS-CL01:2018 (identical to ISO/IEC 17025:2017)

Designation by FCC

Designation Number: CN1354

Test Firm Registration Number: 427606

Accredited by A2LA

The Certificate Number is 4321.03.

Accredited by ISED

The Conformity Assessment Body Identifier is CN0114

Name of Firm : EMTEK (NINGBO) CO., LTD.

Site Location : No. 8, Building 8, Lane 216, Qingyi Road, Ningbo High-Tech Zone, Ningbo, Zhejiang, China

6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-5}$
Maximum Peak Output Power Test	$\pm 1.0\text{dB}$
Conducted Emissions Test	$\pm 2.0\text{dB}$
Radiated Emission Test	$\pm 2.0\text{dB}$
Occupied Bandwidth Test	$\pm 1.0\text{dB}$
Band Edge Test	$\pm 3\text{dB}$
All emission, radiated	$\pm 3\text{dB}$
Temperature	$\pm 0.5^\circ\text{C}$
Humidity	$\pm 3\%$

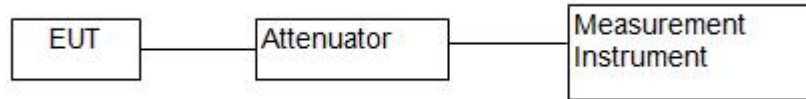
Measurement Uncertainty for a level of Confidence of 95%



7 SETUP OF EQUIPMENT UNDER TEST

7.1 RADIO FREQUENCY TEST SETUP 1

The EUT wireless component's antenna port(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



7.2 RADIO FREQUENCY TEST SETUP 2

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2020 and CAN/CSA-CEI/IEC CISPR 32.

Below 30MHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

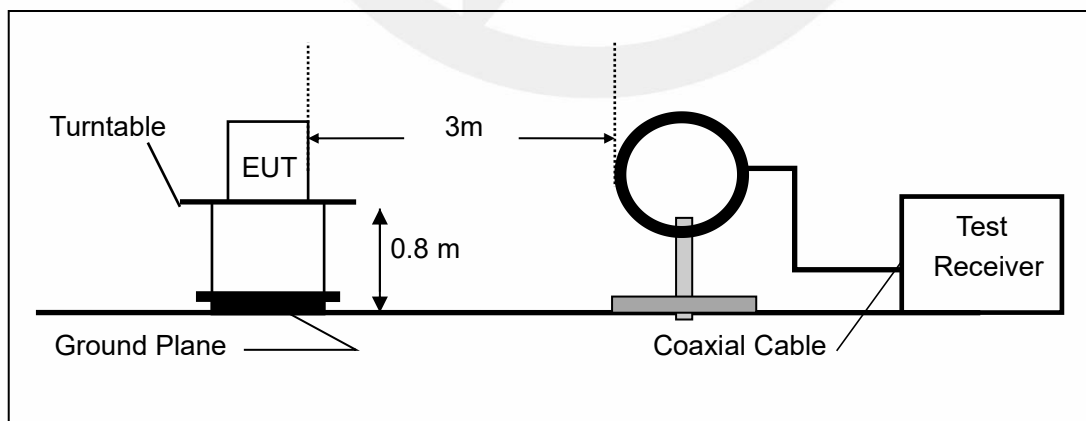
30MHz-1GHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

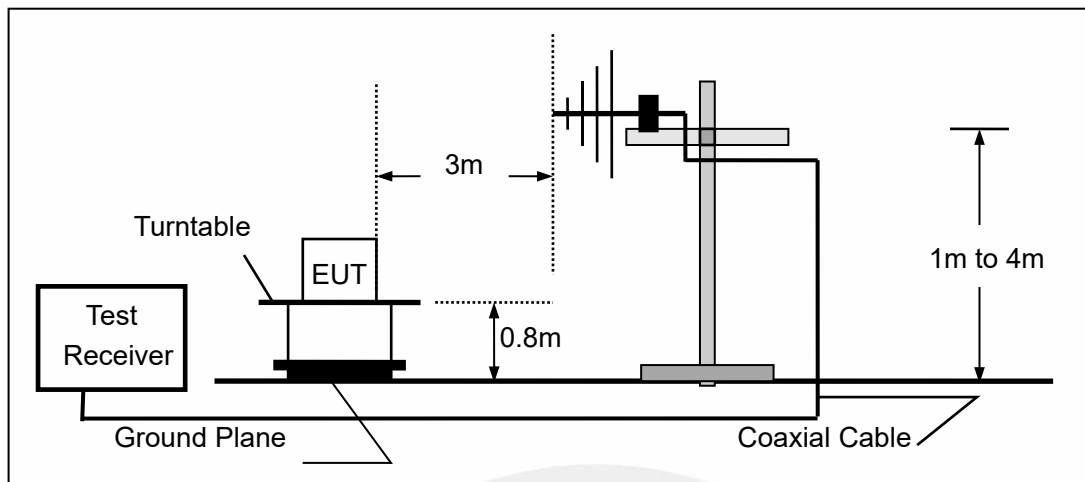
Above 1GHz:

The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

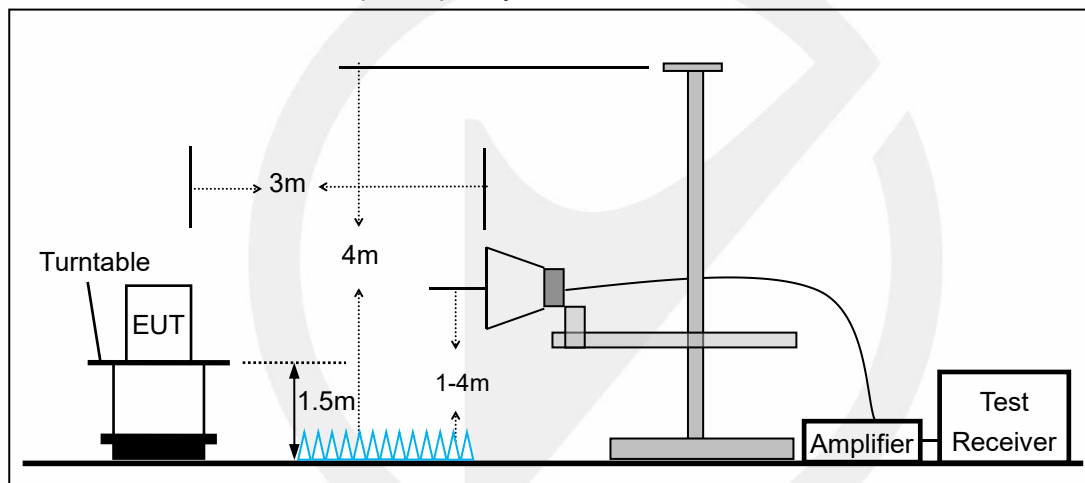
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(c) Radiated Emission Test Set-Up, Frequency above 1000MHz

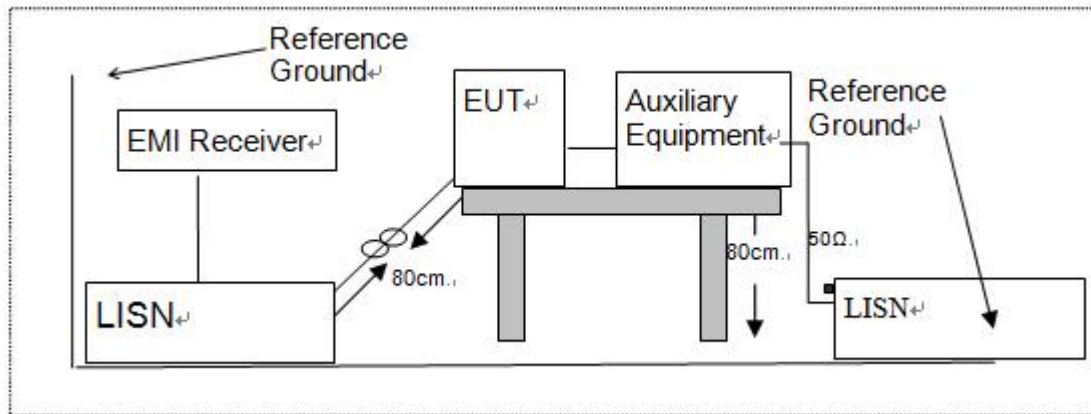


7.3 CONDUCTED EMISSION TEST SETUP

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2020 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.



7.4 SUPPORT EQUIPMENT

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

8 TEST REQUIREMENTS

8.1 BANDWIDTH TEST

8.1.1 Applicable Standard

According to FCC Part 15.249

8.1.2 Conformance Limit

N/A

8.1.3 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

8.1.4 Test Procedure

The EUT was operating in controlled its channel. Printed out the test result from the spectrum by hard copy function.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW $\geq$ 1% of the 20 dB bandwidth

Set the video bandwidth (VBW) $\geq$ RBW

Set Span= approximately 2 to 3 times the 20 dB bandwidth

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

Measure and record the results in the test report.

Test Results

Temperature:	26° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

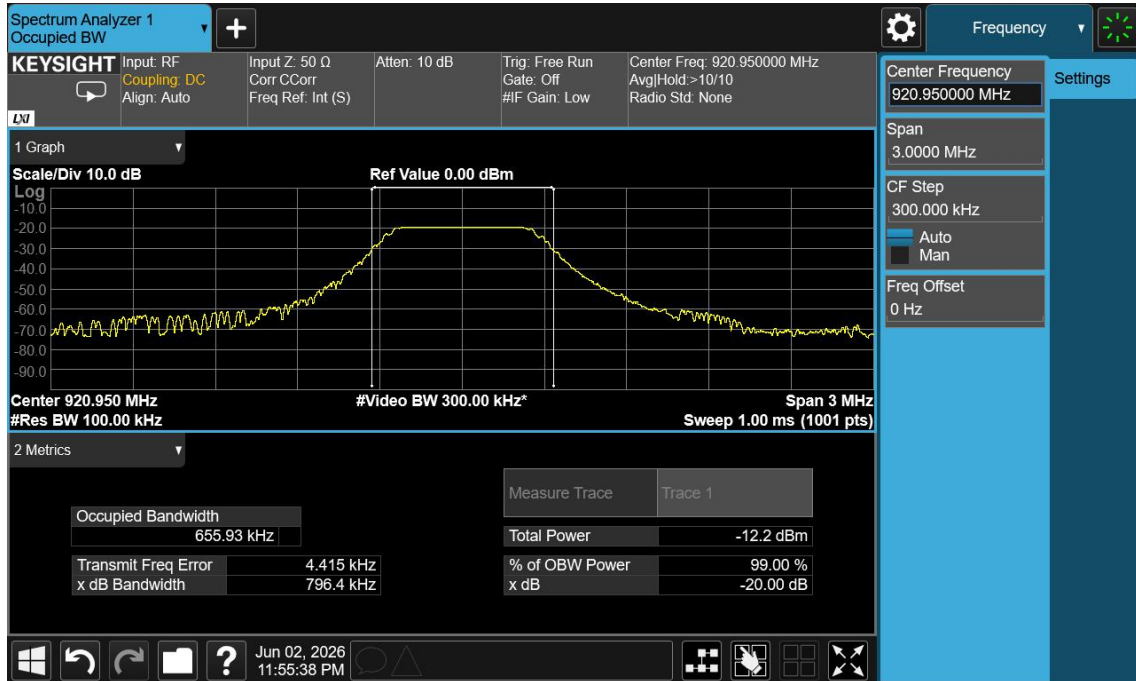
Operation Mode	Channel Frequency (MHz)	20db Measurement Bandwidth (kHz)	99% Measurement Bandwidth (kHz)	Limit (kHz)	Verdict
FSK	920.95	796.4	655.93	N/A	PASS
FSK	923.95	809.0	655.44	N/A	PASS
FSK	927.20	781.2	651.92	N/A	PASS

Note: N/A (Not Applicable).

Test Model

Occupied Bandwidth

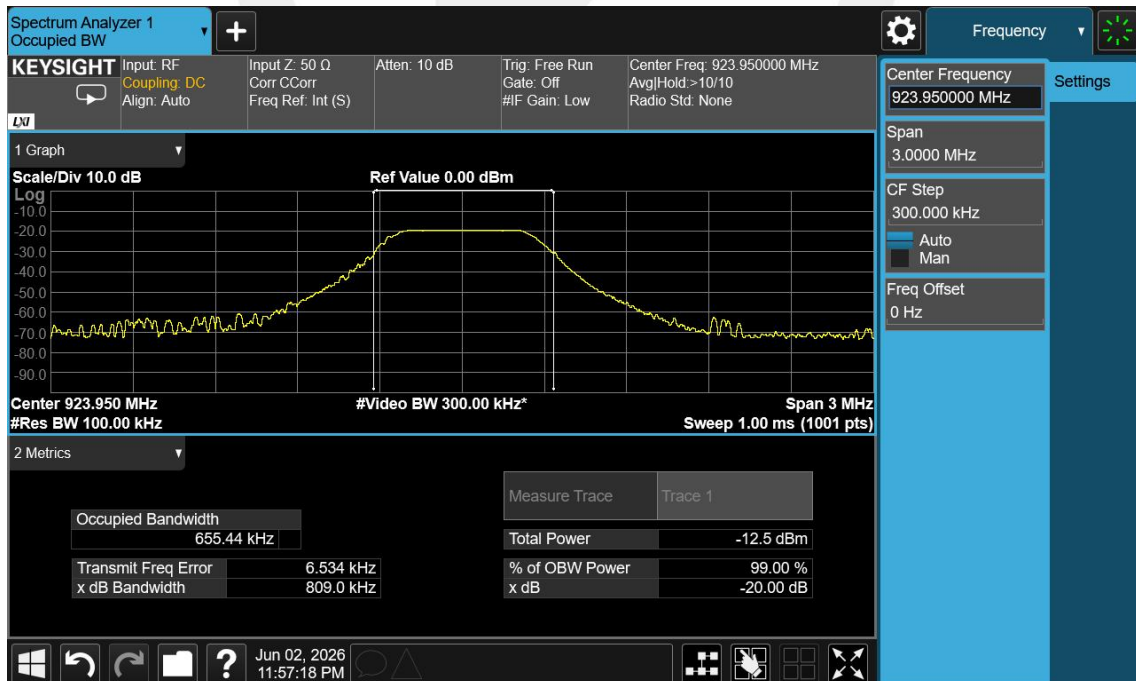
Channel : 920.95 MHz



Test Model

Occupied Bandwidth

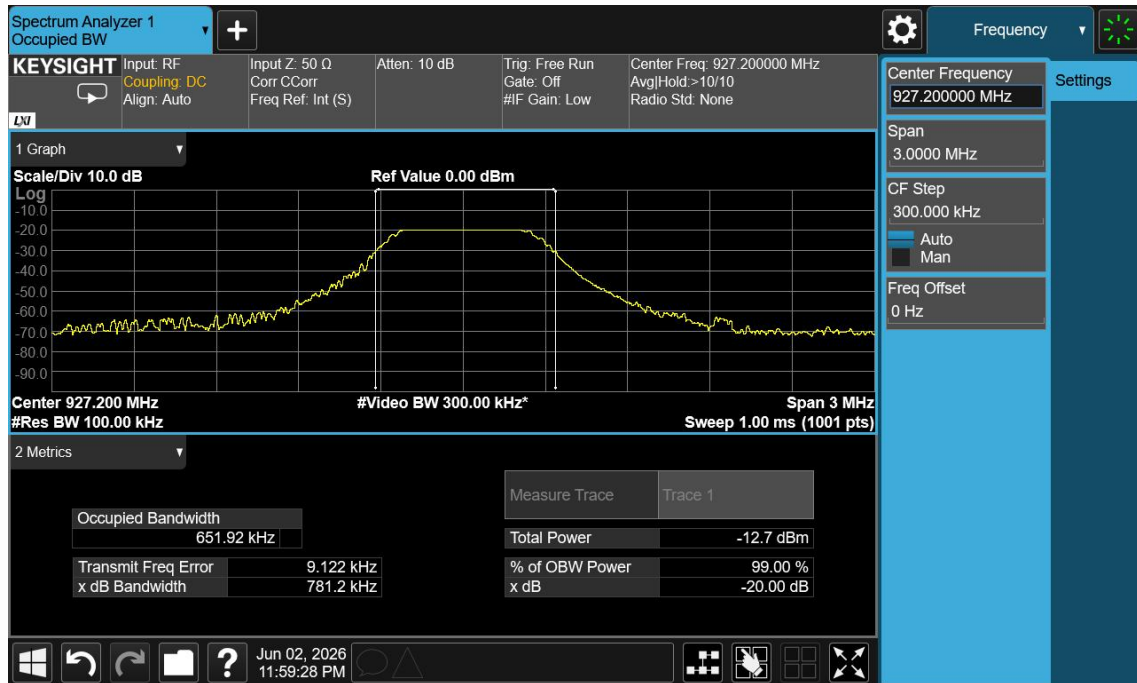
Channel : 923.95 MHz



Test Model

Occupied Bandwidth

Channel : 927.20 MHz



8.2 RADIATED SPURIOUS EMISSION

8.2.1 Applicable Standard

According to FCC Part 15.249 and 15.209

8.2.2 Conformance Limit

According to FCC Part 15.249: radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

According to FCC Part 15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

According to FCC Part 15.205, the level of any transmitter spurious emission in Restricted bands shall not exceed the level of the emission specified in the following table

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (uV/m)	300
0.490-1.705	24000/F(KHz)	20 log (uV/m)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Remark :1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =10*Ig(100 [kHz]/narrower RBW [kHz]). , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

Field strength of fundamental and Field strength of harmonics Limit:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50(94 dBV/m)	500(54 dBV/m)
2400-2483.5 MHz	50(94 dBV/m)	500(54 dBV/m)
5725-5875 MHz	50(94 dBV/m)	500(54 dBV/m)
24.0-24.25 GHz	250(108 dBV/m)	2500(68 dBV/m)

8.2.3 Test Configuration

Test according to clause 7.2 radio frequency test setup 2

8.2.4 Test Procedure

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

The EUT was placed on a turn table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz(1GHz to 25GHz), 100 kHz for $f < 1$ GHz(30MHz to 1GHz)

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.10-2020 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Now set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the dwell time per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a "duty cycle correction factor", derived from $20\log(\text{dwell time}/100 \text{ ms})$, in an effort to demonstrate compliance with the 15.209 limit. Submit this data.

Repeat above procedures until all frequency measured was complete.

8.2.5 Test Results

Temperature:	22° C
Relative Humidity:	57%
ATM Pressure:	1011 mbar

■ Spurious Emission below 30MHz (9KHz to 30MHz)

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
--	--	--	--	--	--	--	--

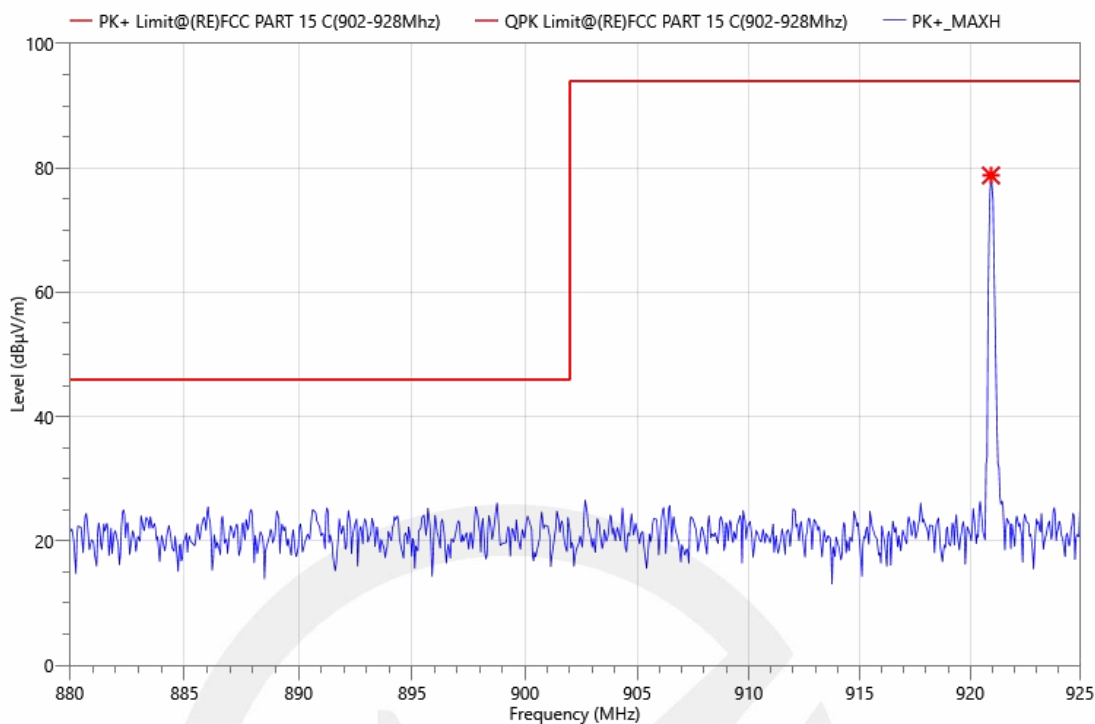
Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

Distance extrapolation factor = $40\log(\text{Specific distance}/\text{test distance})$ (dB);

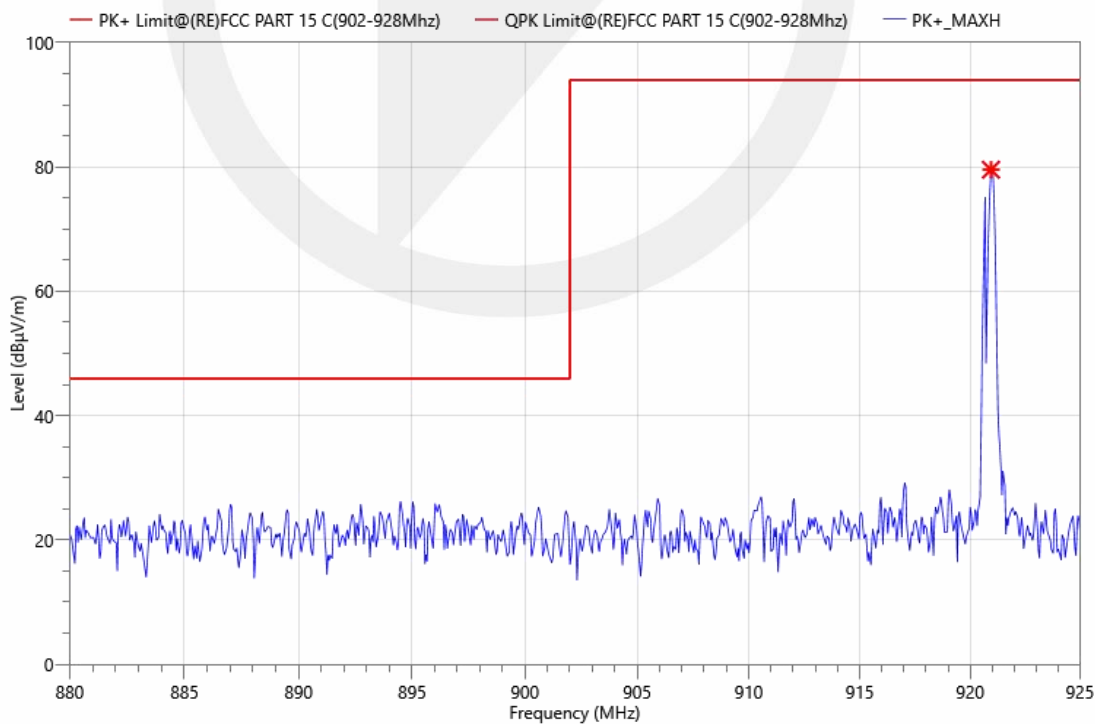
Limit line = Specific limits(dBuV) + distance extrapolation factor

■ Field Strength of the fundamental signal

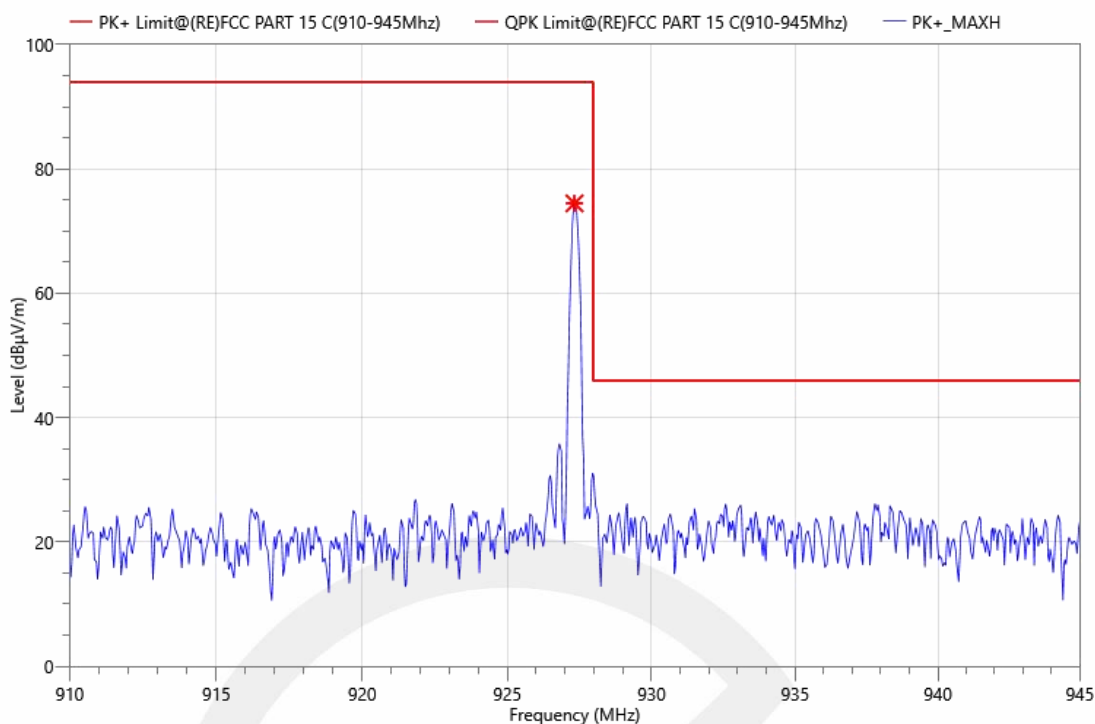
Freq. (MHz)	Ant.Pol.	Emission Level for PEAK (dBuV/m)	Emission Level for RMS (dBuV/m)	Limit for RMS (dBuV/m)	Limit for PEAK (dBuV/m)	Verdict
920.95	V	79.55	N/A	94	114	PASS
920.95	H	78.79	N/A	94	114	PASS
927.20	V	66.28	N/A	94	114	PASS
927.20	H	74.46	N/A	94	114	PASS



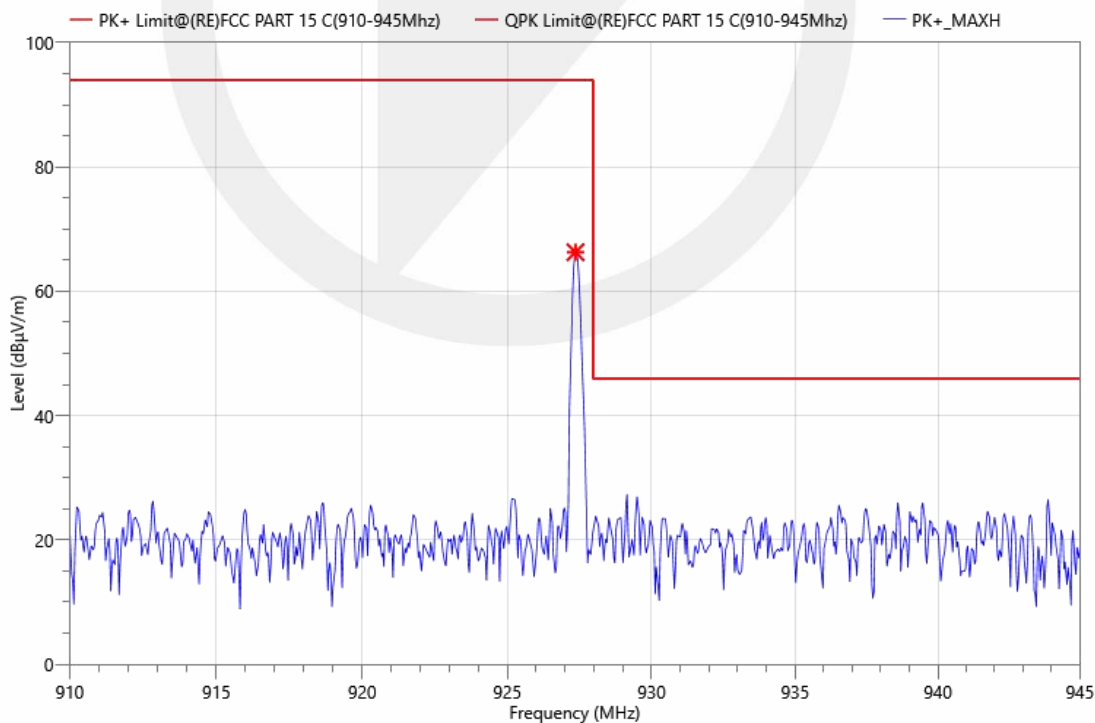
No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	920.950	90.27	-11.48	78.79	94.00	15.21	QPK	H



No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	920.950	91.03	-11.48	79.55	94.00	14.45	QPK	V



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	927.325	85.92	-11.46	74.46	94.00	19.54	QPK	H

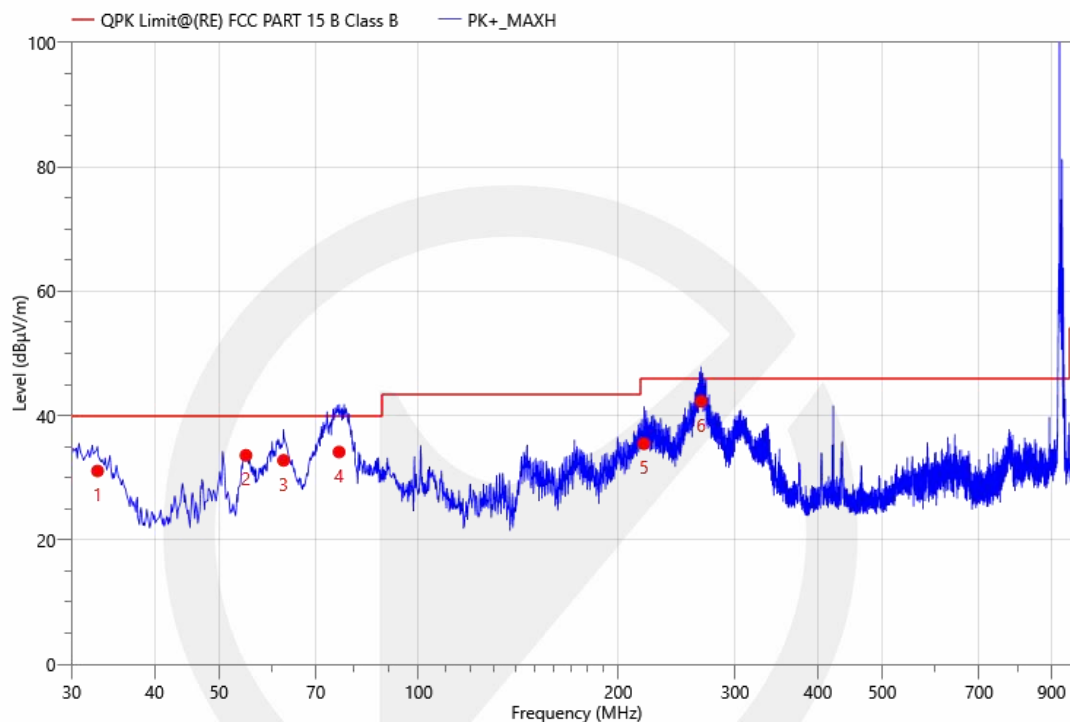


No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	927.360	77.74	-11.46	66.28	94.00	27.72	QPK	V

Spurious Emission below 1GHz (30MHz to 1GHz)

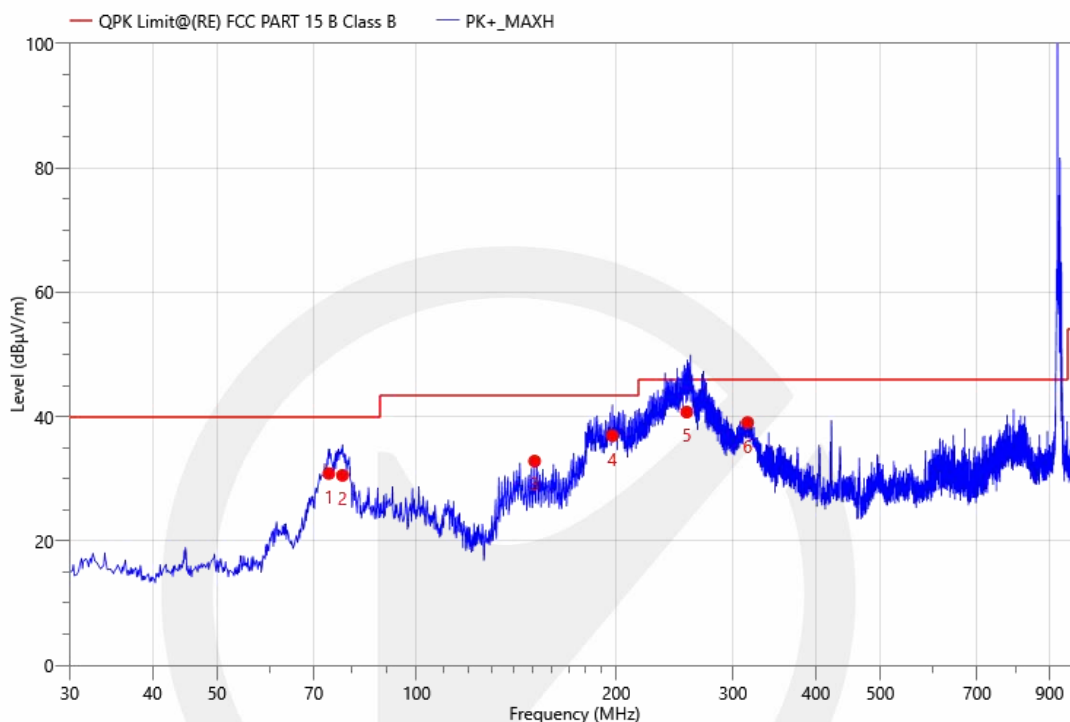
All modes and frequencies have been tested, and only the worst data is reflected in the report

Project No. :	ENB2604290048W002	Customer :	Ningbo Deye Inverter Technology Co.,Ltd
Sample No. :	ENB2604290048W002-1-1	EUT :	Smart Switch
EUT :	SUN-SMART-SWITCHU2P3	Mode :	TX 920.95MHz
Voltage :	AC 120V/60Hz	Engineer :	Alan Yu
Temp :	18°C	Humi :	67%



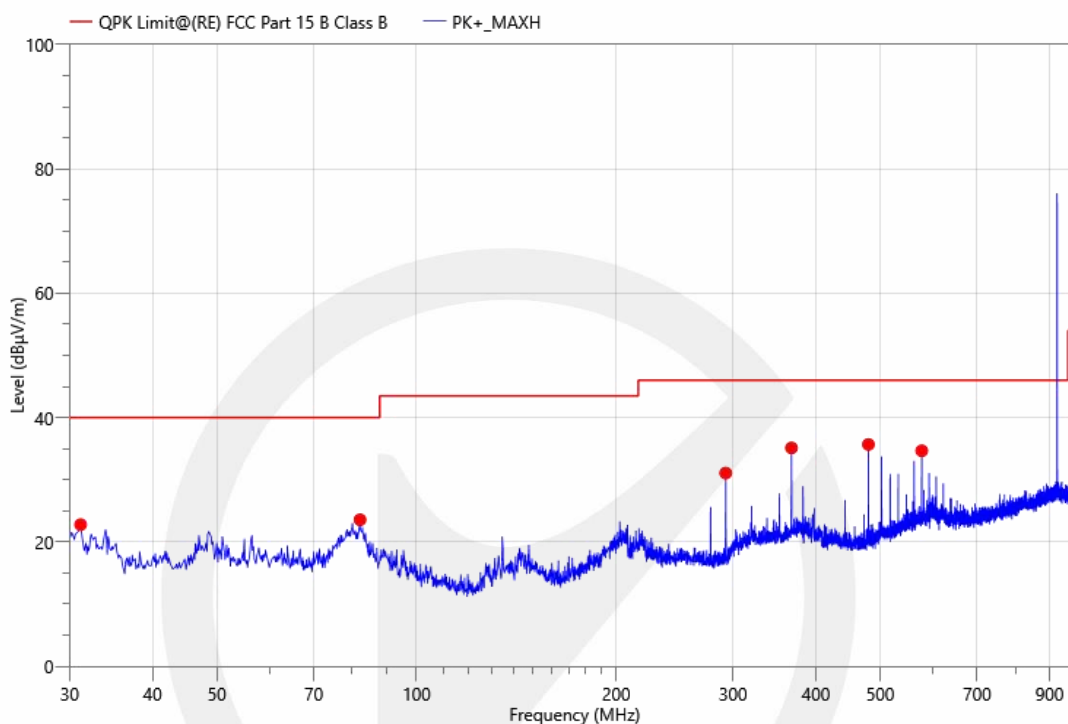
No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.	Verdict
1	32.813	55.70	-24.6	31.10	40.00	8.90	PK+	V	PASS
2	54.929	58.32	-24.71	33.61	40.00	6.39	PK+	V	PASS
3	62.592	58.64	-25.84	32.80	40.00	7.20	PK+	V	PASS
4	75.896	60.68	-26.53	34.15	40.00	5.85	PK+	V	PASS
5	218.665	59.16	-23.68	35.48	46.00	10.52	PK+	V	PASS
6	266.655	64.41	-22.1	42.31	46.00	3.69	PK+	V	PASS

Project No. :	ENB2604290048W002	Customer :	Ningbo Deye Inverter Technology Co.,Ltd
Sample No. :	ENB2604290048W002-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2P3	Mode :	TX 920.95MHz
Voltage :	AC 120V/60Hz	Engineer :	Alan Yu
Temp :	18°C	Humi :	67%



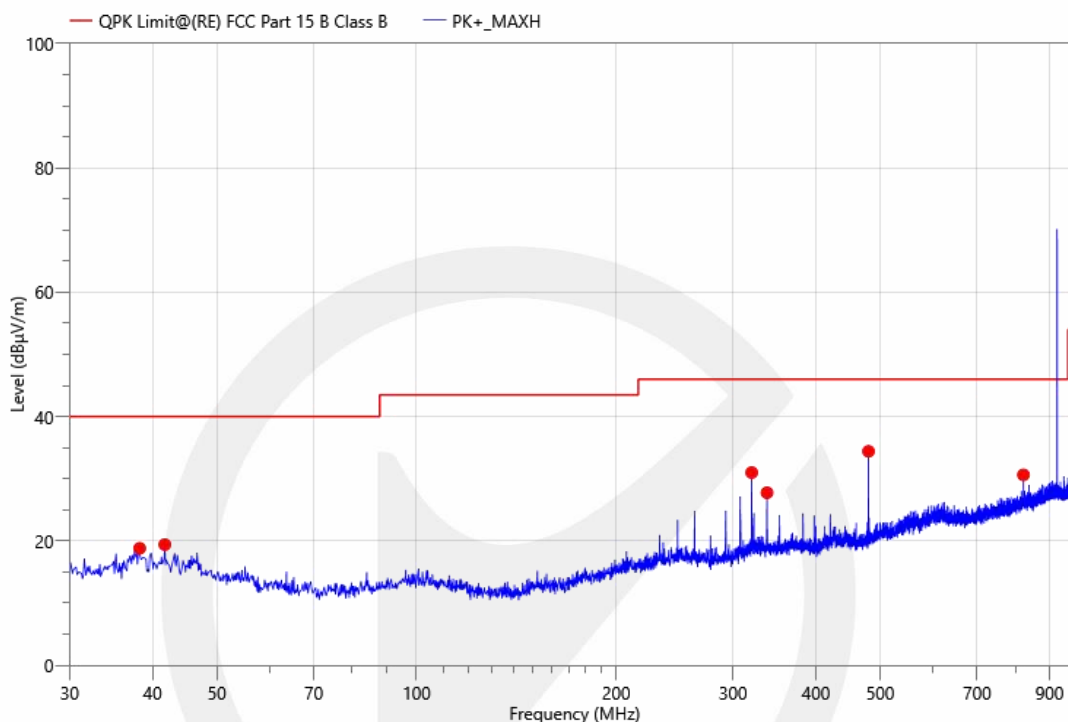
No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.	Verdict
1	73.747	57.31	-26.46	30.85	40.00	9.15	PK+	H	PASS
2	77.336	57.12	-26.57	30.55	40.00	9.45	PK+	H	PASS
3	150.668	59.75	-26.91	32.84	43.50	10.66	PK+	H	PASS
4	197.325	61.46	-24.5	36.96	43.50	6.54	PK+	H	PASS
5	255.477	62.93	-22.2	40.73	46.00	5.27	PK+	H	PASS
6	315.568	60.22	-21.17	39.05	46.00	6.95	PK+	H	PASS

Project No. :	ENB2604290048W002	Customer :	Ningbo Deye Inverter Technology Co.,Ltd
Sample No :	ENB2604290048W002-1-1	EUT :	Smart Switch
EUT :	SUN-SMART-SWITCHU2P3	Mode :	TX 923.95MHz
Voltage :	AC 120V/60Hz	Engineer :	Alan Yu
Temp :	18°C	Humi :	67%



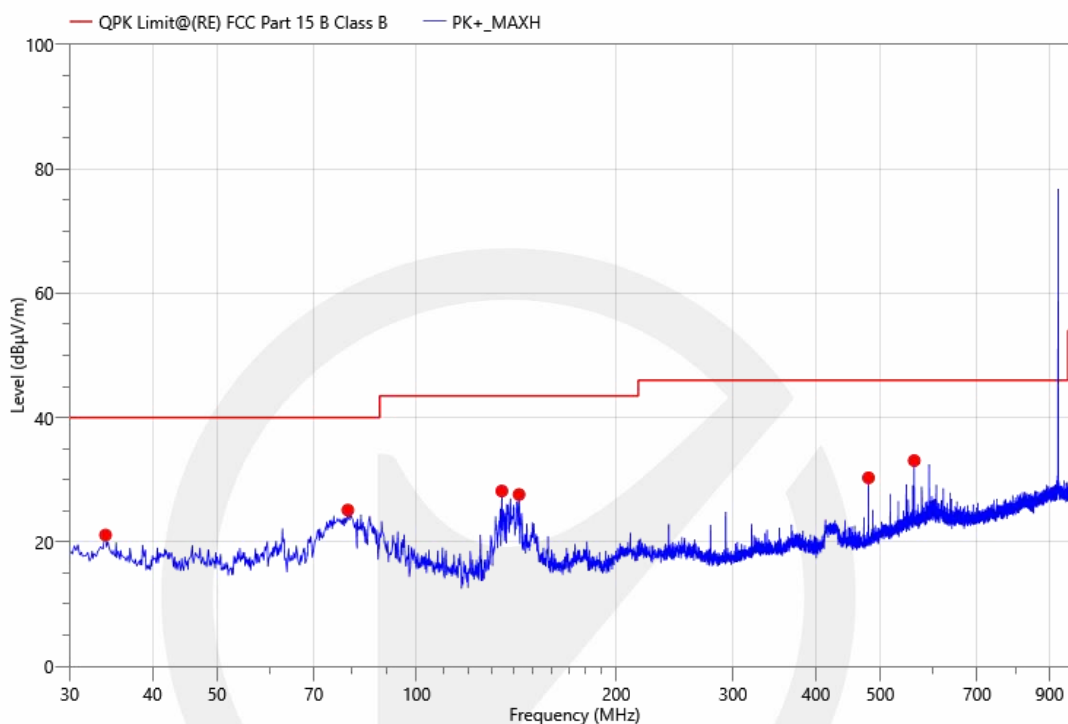
No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.	Verdict
1	31.164	48.07	-25.28	22.79	40.00	17.21	PK+	V	PASS
2	82.186	50.31	-26.74	23.57	40.00	16.43	PK+	V	PASS
3	292.482	53.52	-22.44	31.08	46.00	14.92	PK+	V	PASS
4	367.463	55.48	-20.35	35.13	46.00	10.87	PK+	V	PASS
5	479.983	54.54	-18.86	35.68	46.00	10.32	PK+	V	PASS
6	577.565	50.37	-15.7	34.67	46.00	11.33	PK+	V	PASS

Project No. :	ENB2604290048W002	Customer :	Ningbo Deye Inverter Technology Co.,Ltd
Sample No :	ENB2604290048W002-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2P3	Mode :	TX 923.95MHz
Voltage :	AC 120V/60Hz	Engineer :	Alan Yu
Temp :	18°C	Humi :	67%



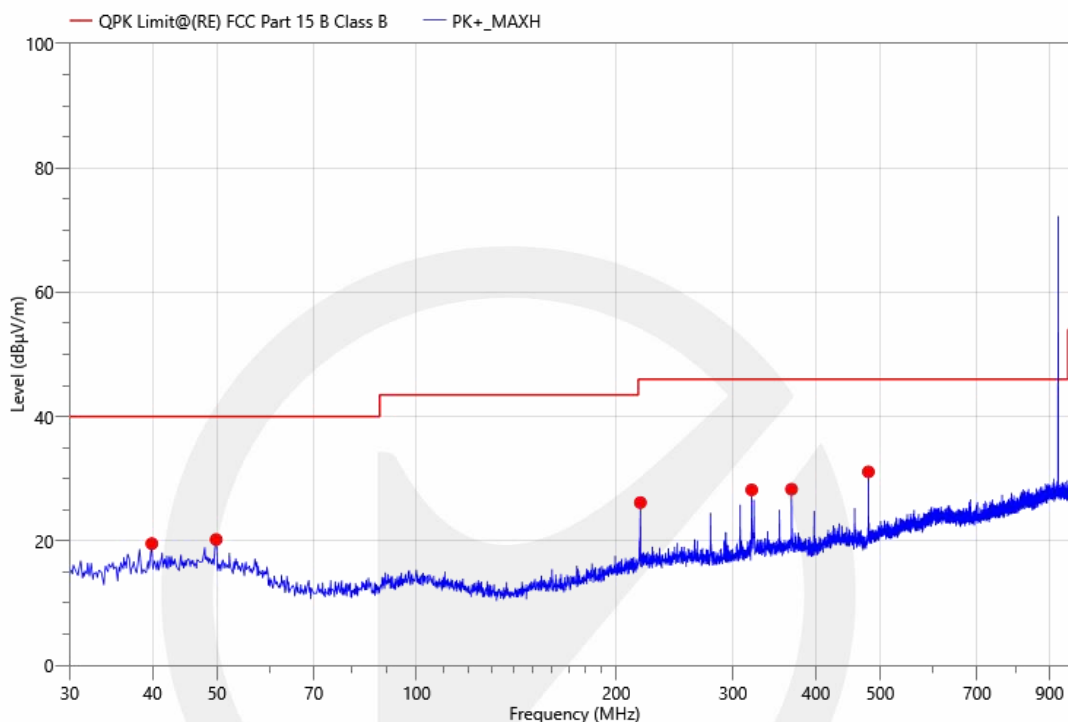
No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.	Verdict
1	38.245	43.52	-24.7	18.82	40.00	21.18	PK+	H	PASS
2	41.737	43.79	-24.38	19.41	40.00	20.59	PK+	H	PASS
3	320.030	52.19	-21.19	31.00	46.00	15.00	PK+	H	PASS
4	337.587	48.56	-20.8	27.76	46.00	18.24	PK+	H	PASS
5	480.080	53.27	-18.85	34.42	46.00	11.58	PK+	H	PASS
6	822.102	43.49	-12.86	30.63	46.00	15.37	PK+	H	PASS

Project No. :	ENB2604290048W002	Customer :	Ningbo Deye Inverter Technology Co.,Ltd
Sample No :	ENB2604290048W002-1-1	EUT :	Smart Switch
EUT :	SUN-SMART-SWITCHU2P3	Mode :	TX 927.20MHz
Voltage :	AC 120V/60Hz	Engineer :	Alan Yu
Temp :	18°C	Humi :	67%



No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.	Verdict
1	33.977	46.17	-25.05	21.12	40.00	18.88	PK+	V	PASS
2	78.791	52.07	-26.94	25.13	40.00	14.87	PK+	V	PASS
3	134.469	56.05	-27.85	28.20	43.50	15.30	PK+	V	PASS
4	142.714	55.40	-27.77	27.63	43.50	15.87	PK+	V	PASS
5	480.080	49.17	-18.85	30.32	46.00	15.68	PK+	V	PASS
6	562.627	49.09	-16	33.09	46.00	12.91	PK+	V	PASS

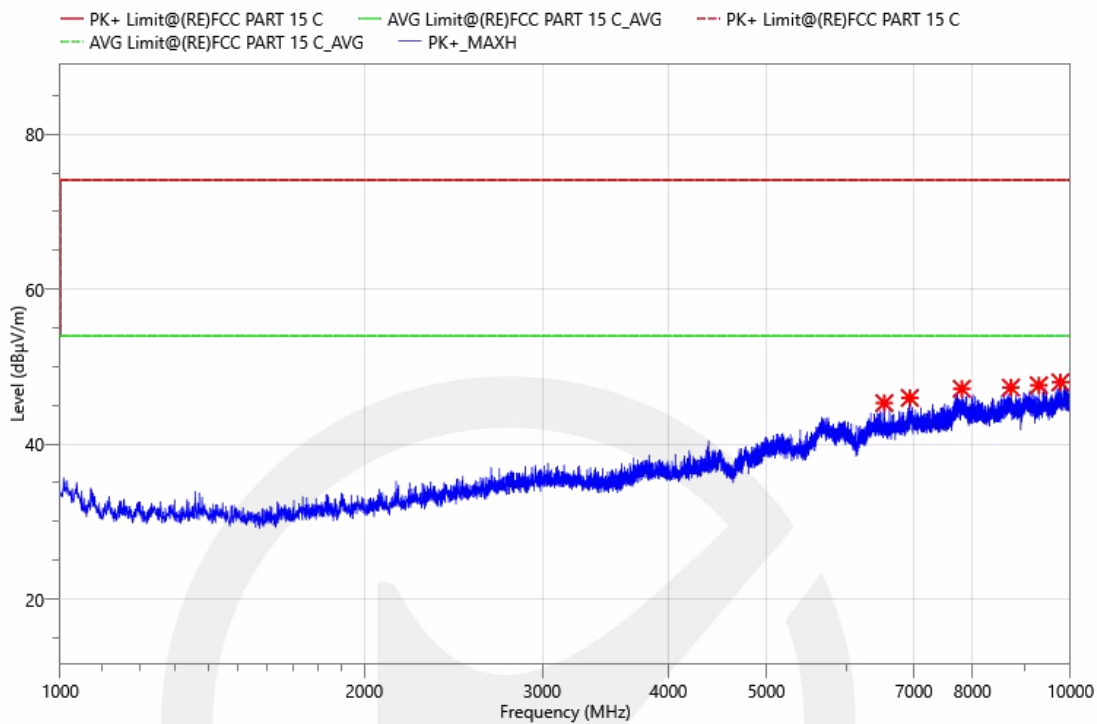
Project No. :	ENB2604290048W002	Customer :	Ningbo Deye Inverter Technology Co.,Ltd
Sample No. :	ENB2604290048W002-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2P3	Mode :	TX 927.20MHz
Voltage :	AC 120V/60Hz	Engineer :	Alan Yu
Temp :	18°C	Humi :	67%



No.	Freq. (MHz)	Reading (dBμV/m)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.	Verdict
1	39.894	44.14	-24.57	19.57	40.00	20.43	PK+	H	PASS
2	49.885	44.38	-24.15	20.23	40.00	19.77	PK+	H	PASS
3	217.501	50.34	-24.17	26.17	46.00	19.83	PK+	H	PASS
4	320.030	49.41	-21.19	28.22	46.00	17.78	PK+	H	PASS
5	367.560	48.67	-20.34	28.33	46.00	17.67	PK+	H	PASS
6	479.983	49.98	-18.86	31.12	46.00	14.88	PK+	H	PASS

- Spurious Emission Above 1GHz (1GHz to 10GHz)
- All modes and frequencies have been tested, and only the worst data is reflected in the report

Test mode: FSK Frequency: Channel : 920.95 MHz

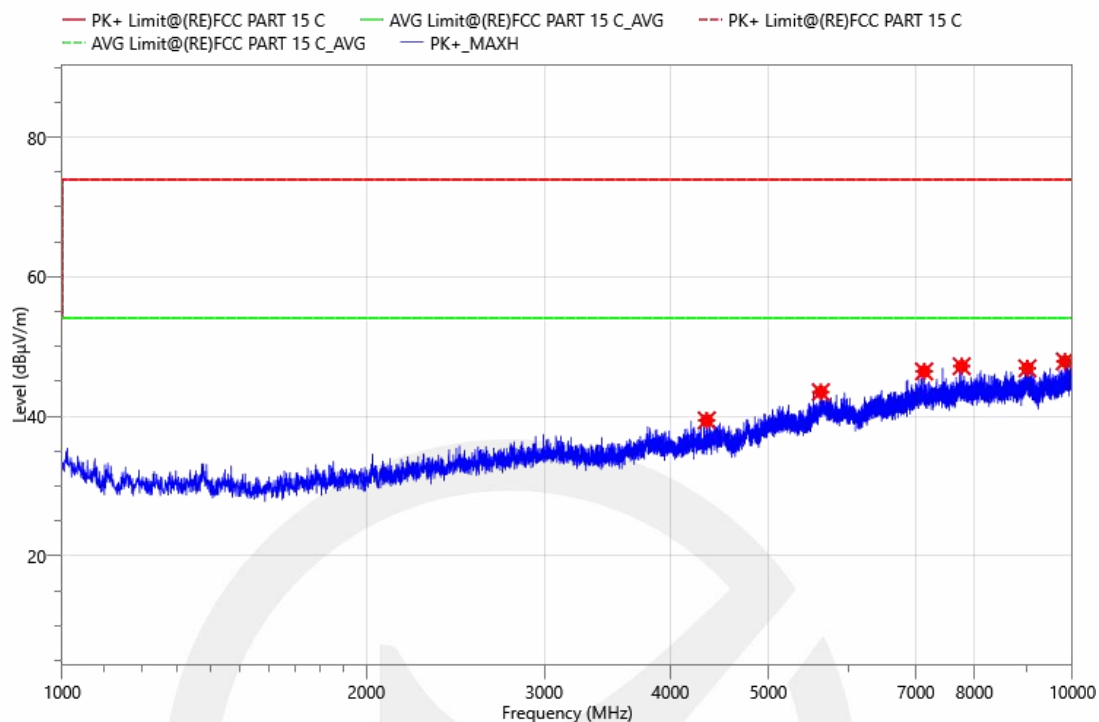


No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Verdict
1	6544.000	47.77	-2.47	45.30	74.00	28.70	PK+	150	V	PASS
2	6934.857	47.16	-1.19	45.97	74.00	28.03	PK+	150	V	PASS
3	7807.214	46.30	0.85	47.15	74.00	26.85	PK+	150	V	PASS
4	8731.643	45.70	1.61	47.31	74.00	26.69	PK+	150	V	PASS
5	9305.714	45.71	1.89	47.60	74.00	26.40	PK+	150	V	PASS
6	9775.000	44.91	3.07	47.98	74.00	26.02	PK+	150	V	PASS

Test mode: FSK

Frequency:

Channel : 920.95 MHz

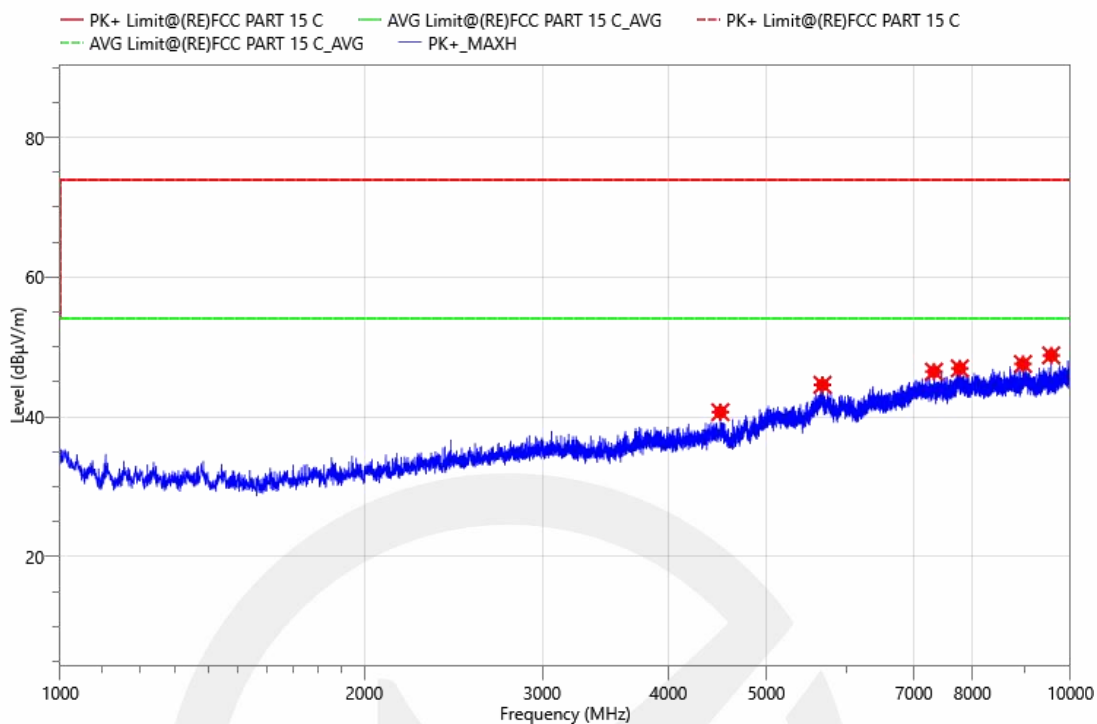


No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Verdict
1	4345.429	49.78	-10.36	39.42	74.00	34.58	PK+	150	H	PASS
2	5635.643	47.46	-3.99	43.47	74.00	30.53	PK+	150	H	PASS
3	7132.857	47.16	-0.72	46.44	74.00	27.56	PK+	150	H	PASS
4	7769.286	46.38	0.8	47.18	74.00	26.82	PK+	150	H	PASS
5	9024.786	44.63	2.25	46.88	74.00	27.12	PK+	150	H	PASS
6	9829.643	44.54	3.33	47.87	74.00	26.13	PK+	150	H	PASS

Test mode: FSK

Frequency:

Channel : 923.95 MHz

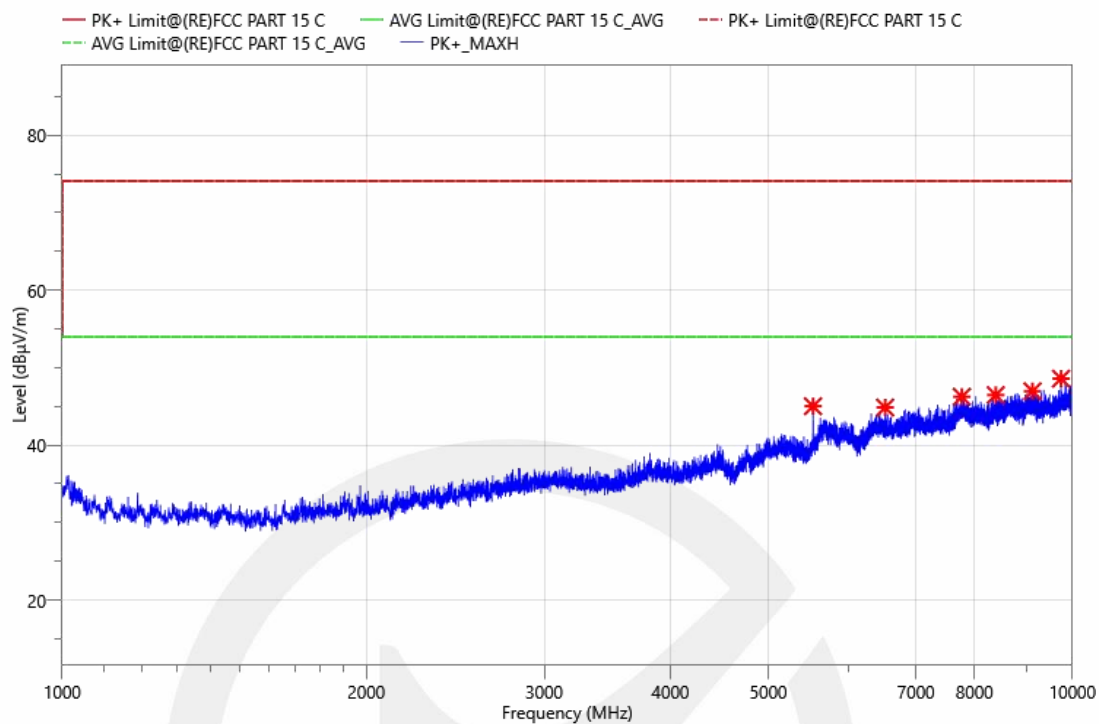


No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Verdict
1	4502.929	50.07	-9.39	40.68	74.00	33.32	PK+	150	V	PASS
2	5683.214	48.37	-3.78	44.59	74.00	29.41	PK+	150	V	PASS
3	7327.643	46.61	-0.13	46.48	74.00	27.52	PK+	150	V	PASS
4	7771.214	46.13	0.81	46.94	74.00	27.06	PK+	150	V	PASS
5	8974.643	45.57	2	47.57	74.00	26.43	PK+	150	V	PASS
6	9571.857	46.18	2.62	48.80	74.00	25.20	PK+	150	V	PASS

Test mode: FSK

Frequency:

Channel : 923.95 MHz

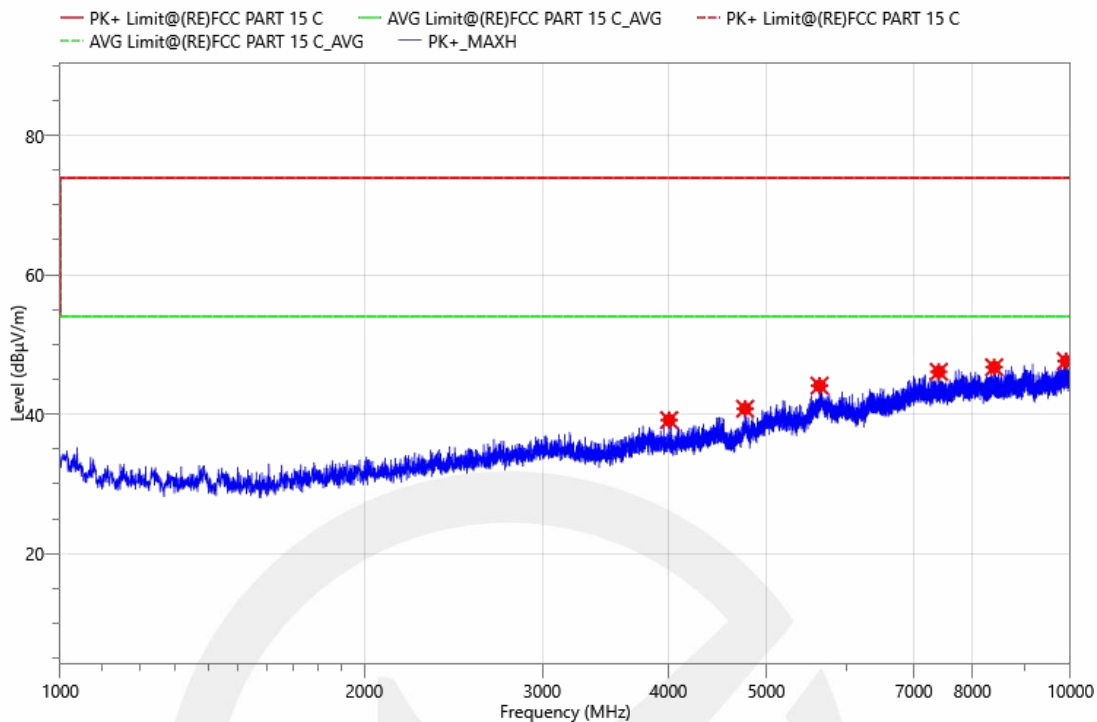


No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Verdict
1	5536.643	49.96	-4.93	45.03	74.00	28.97	PK+	150	H	PASS
2	6525.357	47.39	-2.53	44.86	74.00	29.14	PK+	150	H	PASS
3	7772.500	45.44	0.81	46.25	74.00	27.75	PK+	150	H	PASS
4	8396.714	45.42	1.05	46.47	74.00	27.53	PK+	150	H	PASS
5	9130.857	44.88	2.08	46.96	74.00	27.04	PK+	150	H	PASS
6	9744.143	45.66	2.92	48.58	74.00	25.42	PK+	150	H	PASS

Test mode: FSK

Frequency:

Channel : 927.20 MHz

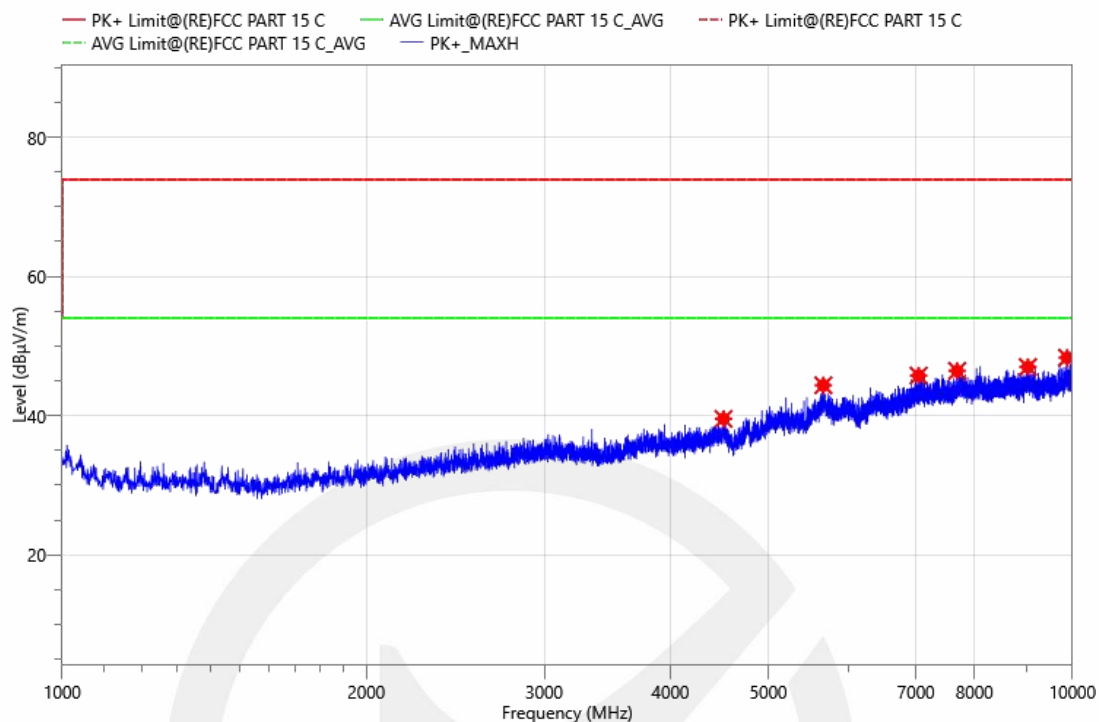


No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Verdict
1	4006.643	50.39	-11.22	39.17	74.00	34.83	PK+	150	V	PASS
2	4764.571	49.70	-8.9	40.80	74.00	33.20	PK+	150	V	PASS
3	5645.286	48.06	-3.95	44.11	74.00	29.89	PK+	150	V	PASS
4	7407.357	46.02	0.07	46.09	74.00	27.91	PK+	150	V	PASS
5	8405.071	45.70	1.05	46.75	74.00	27.25	PK+	150	V	PASS
6	9899.714	43.98	3.65	47.63	74.00	26.37	PK+	150	V	PASS

Test mode: FSK

Frequency:

Channel : 927.20 MHz



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Verdict
1	4514.500	48.99	-9.44	39.55	74.00	34.45	PK+	150	H	PASS
2	5668.429	48.21	-3.84	44.37	74.00	29.63	PK+	150	H	PASS
3	7043.500	46.53	-0.76	45.77	74.00	28.23	PK+	150	H	PASS
4	7689.571	45.91	0.53	46.44	74.00	27.56	PK+	150	H	PASS
5	9035.714	44.75	2.25	47.00	74.00	27.00	PK+	150	H	PASS
6	9881.071	44.77	3.56	48.33	74.00	25.67	PK+	150	H	PASS

Note: (1) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (2) Correct Factor= Ant_F + Cab_L - Preamp
 (3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

8.3 CONDUCTED EMISSIONS TEST

8.3.1 Applicable Standard

According to FCC Part 15.207(a)

8.3.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

8.3.3 Test Configuration

Test according to clause 7.3 conducted emission test setup

8.3.4 Test Procedure

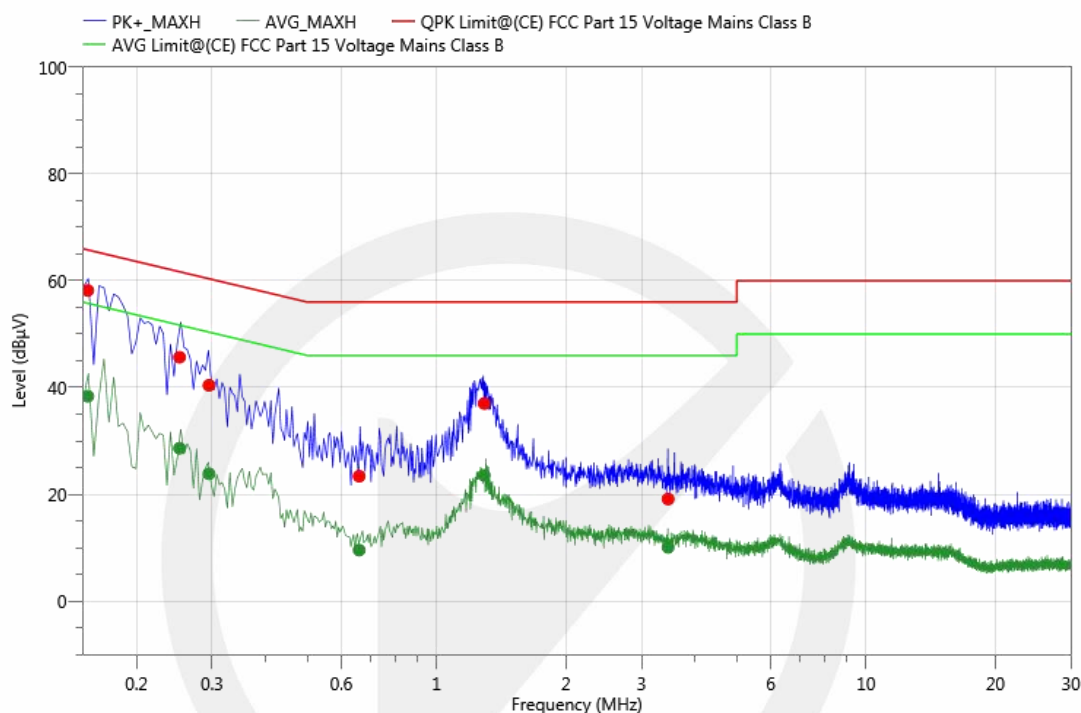
The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

8.3.5 Test Results

Pass.

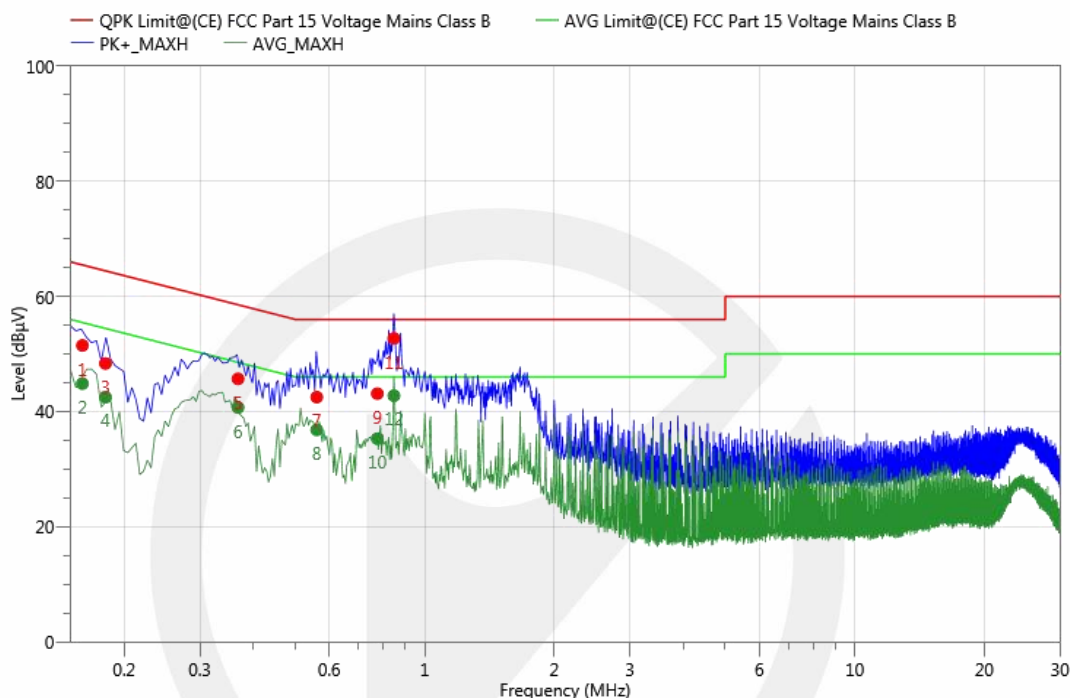
All the modes have been tested, and the worst (Antenna 1,FSK) for 920.95 MHz result recorded was report as below:

Project No. :	ENB2604290048W002	Customer :	NingBo Deye Inverter Technology Co., Ltd.
Sample No. :	ENB2604290048W002-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2 P3	Mode :	TX 920.95MHz
Voltage :	AC 120V/60Hz	Engineer :	WK Luo
Temp :	23°C	Humi :	75%



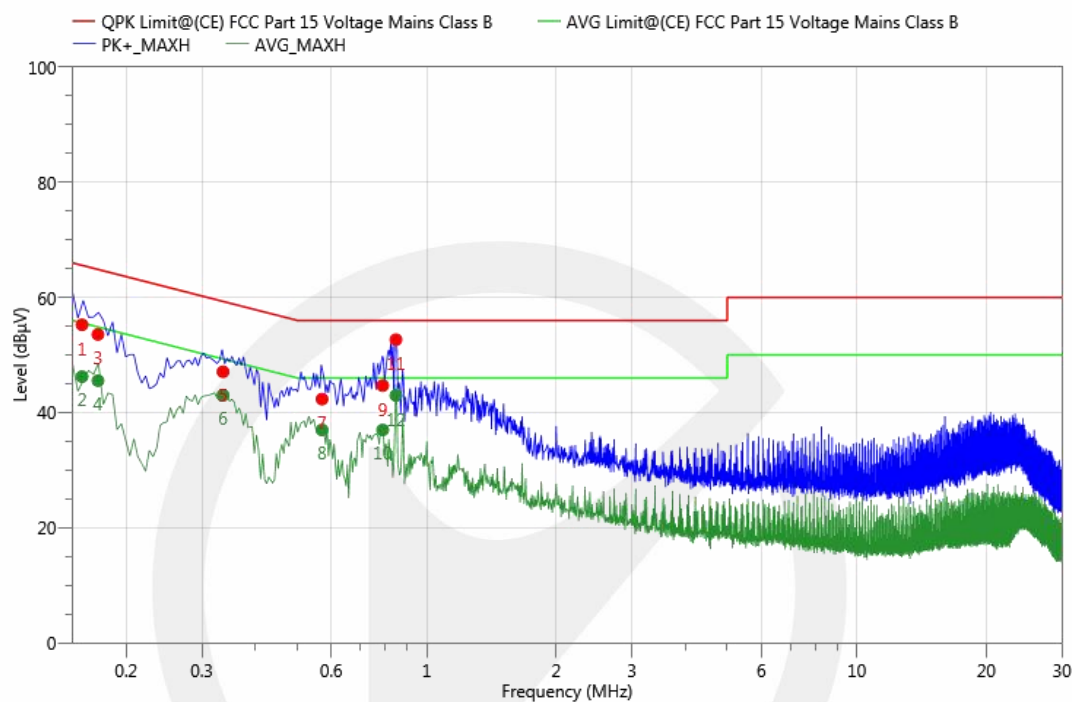
No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.154	48.09	10.1	58.19	65.78	7.59	QPK	N	GND	PASS
2	0.154	28.26	10.1	38.36	55.78	17.42	AVG	N	GND	PASS
3	0.252	35.59	10.08	45.67	61.69	16.02	QPK	N	GND	PASS
4	0.252	18.54	10.08	28.62	51.69	23.07	AVG	N	GND	PASS
5	0.295	30.34	10.07	40.41	60.38	19.97	QPK	N	GND	PASS
6	0.295	13.77	10.07	23.84	50.38	26.54	AVG	N	GND	PASS
7	0.660	13.30	10.08	23.38	56.00	32.62	QPK	N	GND	PASS
8	0.660	-0.54	10.08	9.54	46.00	36.46	AVG	N	GND	PASS
9	1.290	26.88	10.13	37.01	56.00	18.99	QPK	N	GND	PASS
10	1.290	13.41	10.13	23.54	46.00	22.46	AVG	N	GND	PASS
11	3.458	9.09	10.02	19.11	56.00	36.89	QPK	N	GND	PASS
12	3.458	0.04	10.02	10.06	46.00	35.94	AVG	N	GND	PASS

Project No. :	ENB2603300254W008	Customer :	NingBo Deye Inverter Technology Co., Ltd.
Sample No. :	ENB2603300254W008-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2 P3	Mode :	TX 920.95
Voltage :	AC 120V/60Hz	Engineer :	WK
Temp. :	24°C	Humi. :	61%



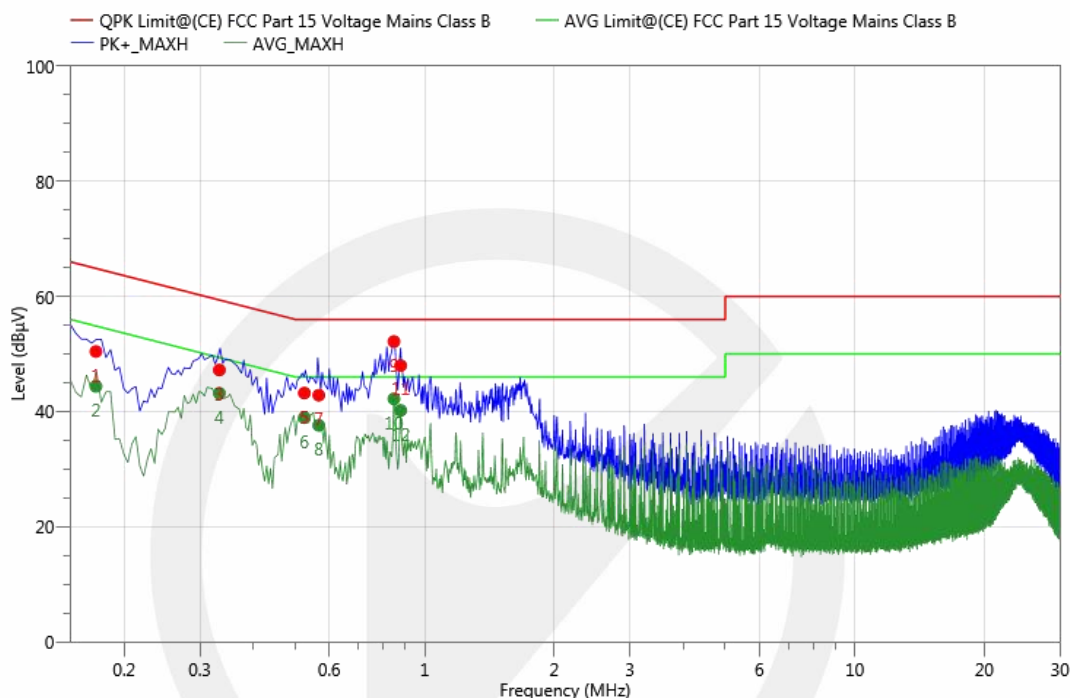
No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.160	31.89	19.59	51.48	65.46	13.98	QPK	L1	GND	PASS
2	0.160	25.26	19.59	44.85	55.46	10.61	AVG	L1	GND	PASS
3	0.181	29.70	18.64	48.34	64.44	16.10	QPK	L1	GND	PASS
4	0.181	23.84	18.64	42.48	54.44	11.96	AVG	L1	GND	PASS
5	0.368	28.28	17.4	45.68	58.55	12.87	QPK	L1	GND	PASS
6	0.368	23.29	17.4	40.69	48.55	7.86	AVG	L1	GND	PASS
7	0.561	26.15	16.35	42.50	56.00	13.50	QPK	L1	GND	PASS
8	0.561	20.46	16.35	36.81	46.00	9.19	AVG	L1	GND	PASS
9	0.776	26.85	16.26	43.11	56.00	12.89	QPK	L1	GND	PASS
10	0.776	19.02	16.26	35.28	46.00	10.72	AVG	L1	GND	PASS
11	0.848	36.47	16.22	52.69	56.00	3.31	QPK	L1	GND	PASS
12	0.848	26.53	16.22	42.75	46.00	3.25	AVG	L1	GND	PASS

Project No. :	ENB2603300254W008	Customer :	NingBo Deye Inverter Technology Co., Ltd.
Sample No. :	ENB2603300254W008-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2 P3	Mode :	TX 920.95
Voltage :	AC 120V/60Hz	Engineer :	WK
Temp :	24°C	Humi. :	61%



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.158	35.59	19.65	55.24	65.57	10.33	QPK	L2	GND	PASS
2	0.158	26.59	19.65	46.24	55.57	9.33	AVG	L2	GND	PASS
3	0.172	34.54	19.02	53.56	64.86	11.30	QPK	L2	GND	PASS
4	0.172	26.52	19.02	45.54	54.86	9.32	AVG	L2	GND	PASS
5	0.336	29.67	17.42	47.09	59.30	12.21	QPK	L2	GND	PASS
6	0.336	25.61	17.42	43.03	49.30	6.27	AVG	L2	GND	PASS
7	0.571	26.01	16.32	42.33	56.00	13.67	QPK	L2	GND	PASS
8	0.571	20.65	16.32	36.97	46.00	9.03	AVG	L2	GND	PASS
9	0.790	28.45	16.22	44.67	56.00	11.33	QPK	L2	GND	PASS
10	0.790	20.75	16.22	36.97	46.00	9.03	AVG	L2	GND	PASS
11	0.848	36.46	16.2	52.66	56.00	3.34	QPK	L2	GND	PASS
12	0.848	26.76	16.2	42.96	46.00	3.04	AVG	L2	GND	PASS

Project No. :	ENB2603300254W008	Customer :	NingBo Deye Inverter Technology Co., Ltd.
Sample No. :	ENB2603300254W008-1-1	EUT :	Smart Switch
Model :	SUN-SMART-SWITCHU2 P3	Mode :	TX 920.95
Voltage :	AC 120V/60Hz	Engineer :	WK
Temp :	24°C	Humi. :	61%



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.172	31.32	19.1	50.42	64.86	14.44	QPK	L3	GND	PASS
2	0.172	25.27	19.1	44.37	54.86	10.49	AVG	L3	GND	PASS
3	0.333	29.79	17.42	47.21	59.38	12.17	QPK	L3	GND	PASS
4	0.333	25.76	17.42	43.18	49.38	6.20	AVG	L3	GND	PASS
5	0.525	26.66	16.55	43.21	56.00	12.79	QPK	L3	GND	PASS
6	0.525	22.39	16.55	38.94	46.00	7.06	AVG	L3	GND	PASS
7	0.567	26.30	16.53	42.83	56.00	13.17	QPK	L3	GND	PASS
8	0.567	21.06	16.53	37.59	46.00	8.41	AVG	L3	GND	PASS
9	0.848	35.86	16.3	52.16	56.00	3.84	QPK	L3	GND	PASS
10	0.848	25.90	16.3	42.20	46.00	3.80	AVG	L3	GND	PASS
11	0.879	31.71	16.27	47.98	56.00	8.02	QPK	L3	GND	PASS
12	0.879	23.92	16.27	40.19	46.00	5.81	AVG	L3	GND	PASS

8.4 ANTENNA APPLICATION

8.4.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 15.203	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 shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 15.203, 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.

8.4.2 Result

PASS.

- Note:
- ☐ Antenna use a permanently attached antenna which is not replaceable.
 - ☒ Using a standard antenna jack or electrical connector for antenna replacement
 - ☐ The antenna has to be professionally installed (please provide method of installation)

which in accordance to section 15.203, please refer to the internal photos.

*** End of Report ***