RADIO TEST REPORT

Product	:	EV Charging Connectors
Model Name	:	VCPNXD350A0
Series Model	:	VCPNXD080A0, VCPNXD200A0, VCPNXD250A0, VCPN2A032A0, VCPN2A050A0, VCPN2A080A0
FCC ID	:	2BF7W-VCNA0
Test Regulation	:	FCC 47 CFR Part 15 Subpart C (Section 15.231)
Received Date	:	2024/3/6
Test Date	:	2024/3/19 ~ 2024/3/21
Issued Date	:	2024/8/27
Applicant	:	K.S. Terminals Inc No.08, Zhangbin E. 3rd Road., Xianxi Township, Changhua County 507 Taiwan
Issued By	:	Underwriters Laboratories Taiwan Co., Ltd. Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Testing Laboratory
3398

REVISION HISTORY

Original Test Report No.: 4791194982-US-R0-V0

Revision	Test report No.	Date	Page revised	Contents
Original	4791194982-US-R0-V0	2024/8/27	-	Initial issue

Table of Contents

1. Attestation of Test Results

APPLICANT:	K.S. Terminals Inc No.08, Zhangbin E. 3rd Road., Xianxi Township, Changhua County 507 Taiwan
MANUFACTURER:	K.S. Terminals Inc No.08, Zhangbin E. 3rd Road., Xianxi Township, Changhua County 507 Taiwan
EUT DESCRIPTION:	EV Charging Connectors
BRAND:	KST™
MODEL:	VCPNXD350A0
SERIES MODEL:	VCPNXD080A0, VCPNXD200A0, VCPNXD250A0, VCPN2A032A0, VCPN2A050A0, VCPN2A080A0
SAMPLE STAGE:	Pilot-run Verification Test sample
DATE of TESTED:	2024/3/19 ~ 2024/3/21

APPLICABLE STANDARDS	
STANDARD	**Test Results**
FCC 47 CFR PART 15 Subpart C (Section 15.231)	PASS

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:

Sally Lu Date : 2024/8/27
Project Handler

Approved and Authorized By:

Eric Lee Date : 2024/8/27
Senior Laboratory Engineer

2. Summary of Test Results

Summary of Test Results		
FCC Clause	**Test Items**	**Result**
15.207	AC Power Conducted Emission	PASS
15.209 / 15.231(b)	Radiated Emissions	PASS
15.231(c)	Emission Bandwidth Test	PASS
15.231(a)	De-activation	PASS

3. Facilities and Accreditation

Test Location	Underwriters Laboratories Taiwan Co., Ltd.
Address	Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
Accreditation Certificate	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398.

4. Measurement Uncertainty

For statement of conformity, Simple acceptance (Section 3.1.4 of IEC Guide 115) was applied as decision rule for measurement in this test report.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor k=2.

Determining compliance based on the results of the compliance measurement, not considering measurement instrumentation uncertainty.

Measurement	Frequency	Uncertainty
Conducted disturbance at mains terminals ports	150kHz ~ 30MHz	3.1 dB
RF Conducted	9 kHz - 40GHz	2.3 dB
Radiated disturbance below 30MHz	9 kHz - 30 MHz	3.2 dB
Radiated disturbance below 1 GHz	30MHz ~ 1GHz	6.1 dB
Radiated disturbance above 1 GHz	1GHz ~ 40GHz	5.1 dB

5. Equipment under Test

5.1. Description of EUT

Product	EV Charging Connectors
Brand Name	KST™
Model Name	VCPNXD350A0
Series Model	VCPNXD080A0, VCPNXD200A0, VCPNXD250A0, VCPN2A032A0, VCPN2A050A0, VCPN2A080A0
Operating Frequency	315 MHz
Modulation	ASK
Transfer Rate	2.5Kbps
Number of Channel	1
Maximum Field Strength (dBuV/m)	75.72 dBuV/m
Normal Voltage	10Vdc to RF Module from DC supply 120Vac/ 60Hz
Sample ID	6985064

Note:

1. The models difference table as below:

Type	Model	Rated Current	Difference
AC Charging Connectors	VCPN2A032A0	32A	240V AC
	VCPN2A050A0	50A	
	VCPN2A080A0	80A	
DC Charging Connectors	VCPNXD080A0	16A	1000V DC
	VCPNXD200A0	200A	
	VCPNXD250A0	250A	
	VCPNXD350A0	350A	

2. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual, the laboratory shall not be held responsible.

5.2. Channel List

1 channels are provided to this EUT:

Channel	Frequency (MHz)
1	315

5.3. Test Condition

Test Item	Test Site No.	Environmental Condition	Input Power	Test Date	Tested by
Radiated Spurious Emission	966-2	22~26℃/ 62~68%RH	10Vdc to RF Module from DC supply	2024/03/19~ 2024/03/20	WaterNil Guan
AC power Line Conducted Emission	SR1	23℃/ 65%RH	120Vac/ 60Hz	2024/03/21	WaterNil Guan

FCC Test Firm Registration Number: 498077

Sample Calculation:

Antenna Port Conducted Measurement:

- Where relevant, the follow sample calculation is provided:
  Result Value (dBm) = Reading Value (dBm) +Attenuator Factor (dB) + Cable Loss (dB).
  Example: Result Value (10dBm) = Reading Value (-2dBm) +Attenuator Factor (10dB) + Cable Loss(2dB).
  *Test plot only shown the “Result Value”.

Radiated Spurious Emission:

- Where relevant, the follow sample calculation is provided:
  Result Value (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
  Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Preamp Factor (dB).
  Example: Result Value (34.5dBuV/m) = Reading Value (40.1dBuV) + Antenna Factor (18.7dB/m) + Cable Loss (4.2dB) - Preamp Factor (28.5dB).

AC power Line Conducted Emission:

- Where relevant, the follow sample calculation is provided:
  Result Value (dBuV) = Reading Value (dBuV) + Correction Factor (dB).
  Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).
  Example: Result Value (53.7dBuV) = Reading Value (35.1dBuV) + Insertion loss(18.1dB) + Cable loss(0.5dB).

5.4. Description of Available Antennas

Ant. No.	Transmitter Circuit	Brand Name	Model Name	Ant. Type	Maximum Gain (dBi)
1	Chain (0)	N/A	N/A	PCB	-17.14

Note: The above antenna information was provided from customer and for more detailed features description, please refer the manufacturer's specification or user's manual, the laboratory shall not be held responsible.

5.5. Test Mode Applicability and Tested Channel Detail

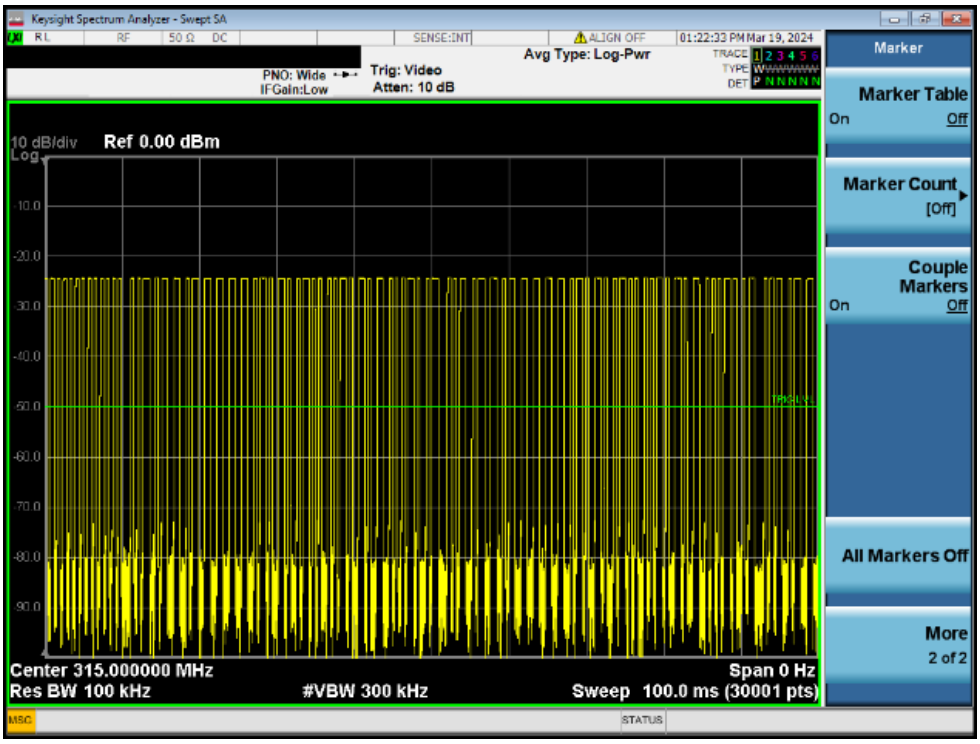
- For radiated spurious emission and AC power line conducted emission, all models(VCPNXD350A0, VCPNXD080A0, VCPNXD200A0, VCPNXD250A0, VCPN2A032A0, VCPN2A050A0 and VCPN2A080A0) have been pre-tested, worst case being the VCPNXD350A0.
- Therefore, this test report only uses this model as a representative.The fundamental of the EUT was investigated in three orthogonal axes X-Y/Y-Z/X-Z, it was determined that X-Y plane was worst-case. Therefore, all final radiated testing was performed with the EUT in X-Y plane.

Test Item	Modulation Type	Available Channel	Test Channel	Data Rate
Radiated Emissions	ASK	315MHz	315MHz	2.5Kbps
AC Power Line Conducted Emission	ASK	315MHz	315MHz	2.5Kbps

5.6. Duty Cycle of Test Signal

Mode	TX on (ms)	TX on+off (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
ASK	56.850	100.000	56.85%	2.45

Duty Cycle Correction Factor = -4.91 dB
AVG= Peak + duty cycle correction factor
AVG= Peak -4.91 dB



6. Test Equipment

Test Equipment List					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Expired date**
Radiated Spurious Emission					
Spectrum Analyzer	Keysight	N9010A	MY56070827	2023/4/7	2024/4/6
EMI Test Receiver	Rohde & Schwarz	ESR7	101754	2023/11/22	2024/11/21
Loop Antenna	ETS lindgren	6502	00213440	2023/12/13	2024/12/12
Trilog-Broadband Antenna with 5dB Attenuator	Schwarzbeck & EMCI	VULB 9168 & N-6-05	774 & AT-N0538	2024/1/5	2025/1/4
Horn Antenna (1-18 GHz)	Schwarzbeck	BBHA 9120 D	01690	2023/12/8	2024/12/7
Preamplifier (30-1000 MHz)	EMCI	EMC330E	980405	2023/6/7	2024/6/6
Preamplifier (1-18 GHz)	EMCI	EMC051835BE	980406	2024/1/23	2025/1/22
Cables	Hanyitek	K1K50-UP0264-K1K50-2500	170214-4 & 170425-2	2023/11/29	2024/11/28
AC power Line Conducted Emission					
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	2023/10/23	2024/10/22
Two-Line V-Network	Rohde & Schwarz	ENV216	102136	2023/5/24	2024/5/23
Impuls-Begrenzer Pulse Limiter	Rohde & Schwarz	ESH3-Z2	102219-Qt	2023/9/7	2024/9/6
Cables	TITAN	CFD200	T0732ACFD2 0020A300-2	2023/5/23	2024/5/22

UL Software		
Description	**Name**	**Version**
Radiated measurement	e3	6.191211 (V6)
AC power Line Conducted Emission	EZ_EMC	UL-3A1.2

7. Description of Test Setup

Support Equipment

ID	Equipment	Brand Name	Model Name	S/N	Remark
A	DC Power Supply	GWINSTEK	GPD-2303S	N/A	Provide by Lab

I/O Cables

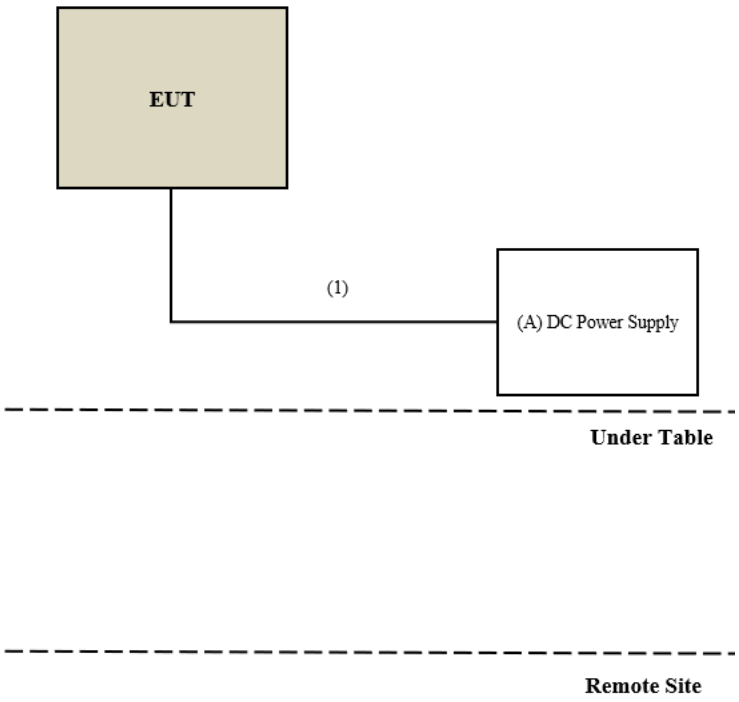
ID	Equipment	Brand Name	Model Name	Length (m)	Remark
1	DC Cable	TAYA	PT0020-2	0.8m	Provide by Lab

Test Setup

The EUT was worked in engineering mode to transmit signal.

Controlled using a bespoke application (Teraterm469) on a test Notebook. The application was used to enable a continuous transmission mode and to select the test channels, data rates, modulation schemes and power setting as required.

Setup Diagram for Test



8. Test Results

8.1. Radiated Spurious Emission

Requirements

Limits of Radiated Emission Measurement

Fundamental Frequency (MHz)	Field Strength of Fundamental		Field Strength of Spurious	
	uV/meter	dBuV/meter	uV/meter	dBuV/meter
40.66 ~ 40.70	2250	67.04	225	48.04
70 ~ 130	1250	61.94	125	41.94
130 ~ 174	1250 ~ 3750	61.94 ~ 71.48	125 ~ 375	41.94 ~ 51.48
174 ~ 260	3750	71.48	375	51.48
260 ~ 470	3750 ~ 12500	71.48 ~ 81.94	375 ~ 1250	51.48 ~ 61.94
Above 470	12500	81.94	1250	61.94

Note:
1. Where F is the frequency in MHz, the formula for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 56.81818(F)-6136.3636; for the band 260-470 MHz, uV/m at 3 meters = 41.6667(F)-7083.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.
2. The above field strength limits are specified at a distance of 3meters. The tighter limits apply at the band edges.

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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

Note:
1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Test Procedures

[For 9 kHz ~ 30 MHz]

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

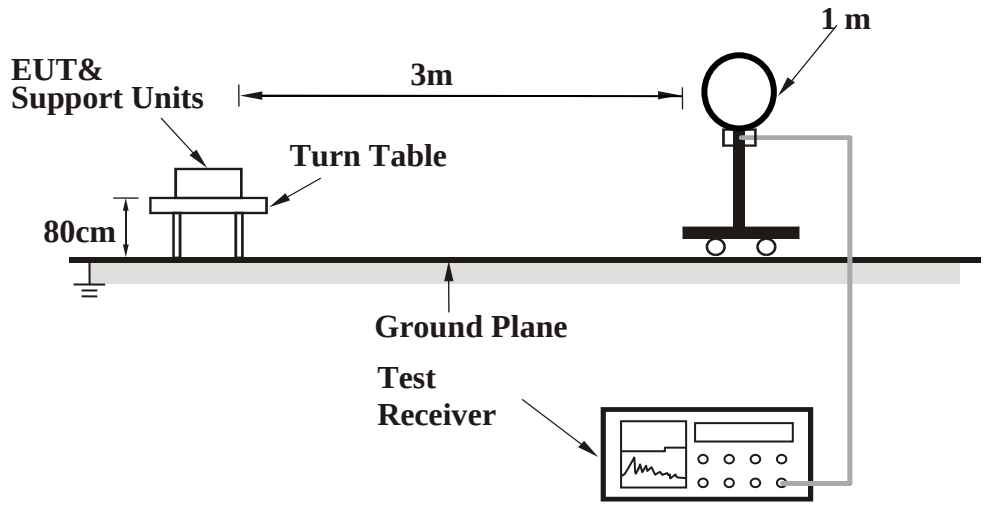
a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

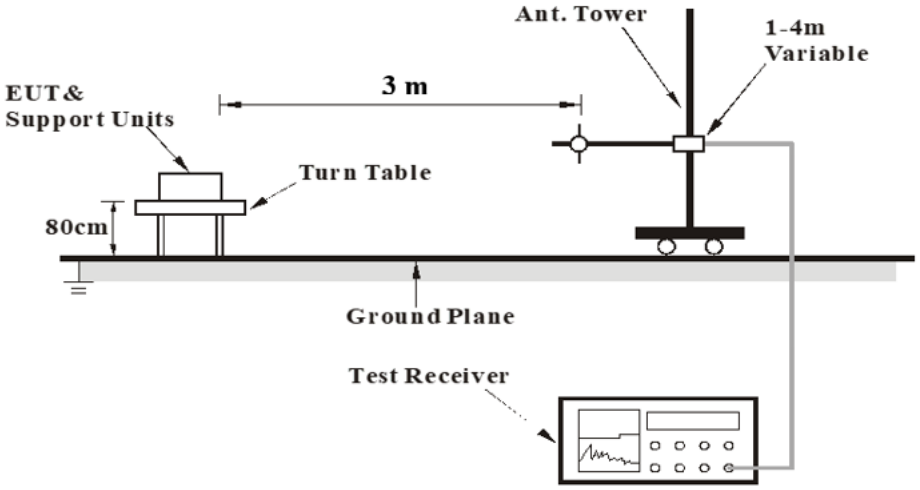
a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
d. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported, the other emission levels were low against the limit.
e. Test data of Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
f. Test data of Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
g. Test data of Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
h. Test data of Notation "@" = Fundamental Frequency
i. Test data of Notation " * " = The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.

Test Setup

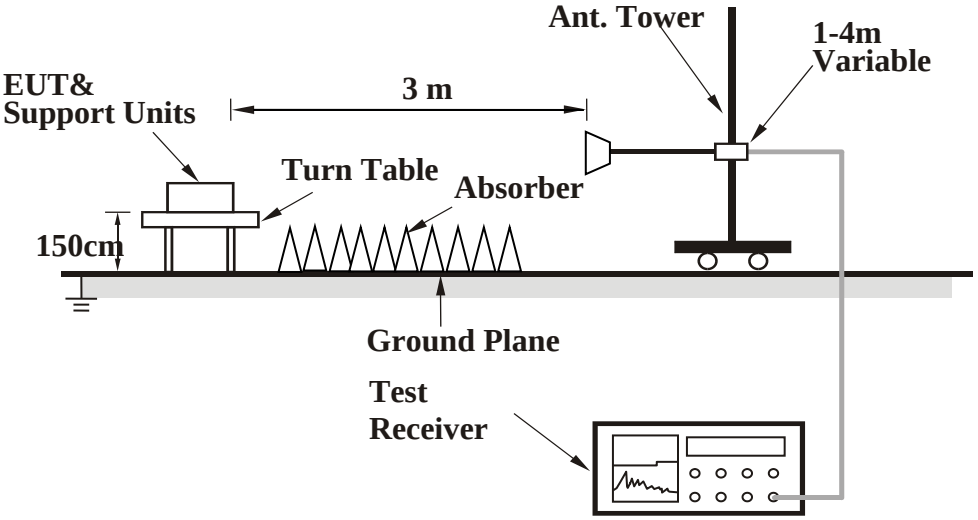
<Frequency Range 9 kHz ~ 30 MHz>



<Frequency Range 30 MHz ~ 1 GHz >



<Frequency Range above 1 GHz>



For the actual test configuration, please refer to the Setup Configurations.

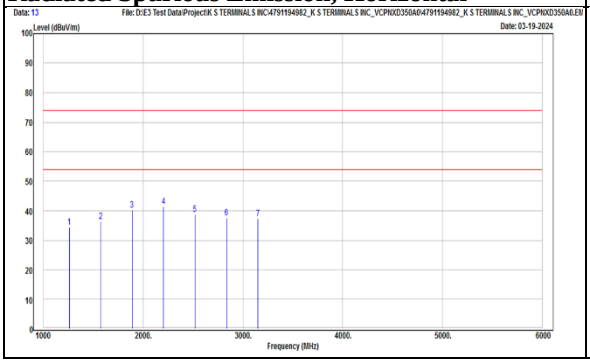
Test Data

Above 1 GHz

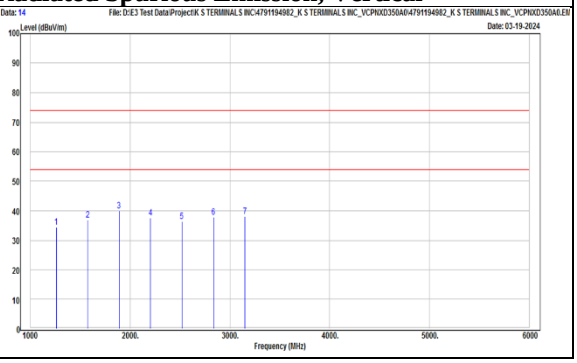
Mode	ASK 315MHz Tx	Channel	0

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	1260	43.1	-8.72	34.38	74	-39.62	PK
	*	1575	43.87	-7.55	36.32	74	-37.68	PK
	*	1890	46.58	-6.44	40.14	74	-33.86	PK
	*	2205	45.22	-3.79	41.43	74	-32.57	PK
	*	2520	42.37	-3.46	38.91	74	-35.09	PK
	*	2835	40.14	-2.45	37.69	74	-36.31	PK
	*	3150	38.22	-0.93	37.29	74	-36.71	PK
Vertical	*	1260	43.29	-8.72	34.57	74	-39.43	PK
	*	1575	44.52	-7.55	36.97	74	-37.03	PK
	*	1890	46.34	-6.44	39.9	74	-34.1	PK
	*	2205	41.41	-3.79	37.62	74	-36.38	PK
	*	2520	39.95	-3.46	36.49	74	-37.51	PK
	*	2835	40.35	-2.45	37.9	74	-36.1	PK
	*	3150	38.91	-0.93	37.98	74	-36.02	PK

TX, ASK 315MHz Tx (Ch 0)
Radiated Spurious Emission, Horizontal



TX, ASK 315MHz Tx (Ch 0)
Radiated Spurious Emission, Vertical

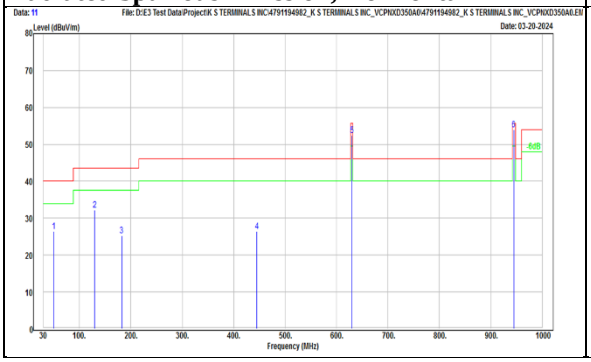


Below 1 GHz

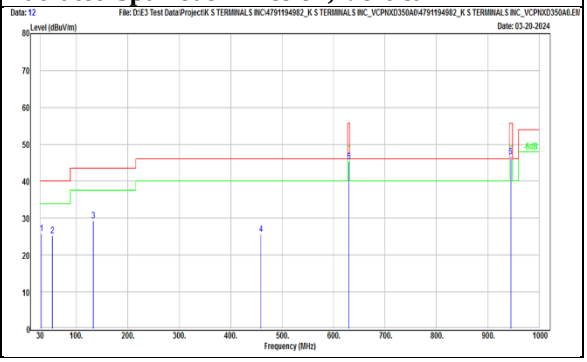
Mode	ASK 315MHz Tx	Channel	0

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		50.37	38.36	-11.86	26.5	40	-13.5	PK
		129.91	45.9	-13.64	32.26	43.5	-11.24	PK
		182.29	38.4	-13.15	25.25	43.5	-18.25	PK
		445.16	32.55	-6.06	26.49	46	-19.51	PK
	*	630	54.41	-1.98	52.43	55.62	-3.19	PK
	*	945	50.5	3.48	53.98	55.62	-1.64	PK
Vertical		31.94	40.31	-14.5	25.81	40	-14.19	PK
		53.28	36.92	-11.65	25.27	40	-14.73	PK
		132.82	42.76	-13.44	29.32	43.5	-14.18	PK
		458.74	31.27	-5.72	25.55	46	-20.45	PK
	*	630	47.36	-1.98	45.38	55.62	-10.24	PK
	*	945	43.26	3.48	46.74	55.62	-8.88	PK

TX, ASK 315MHz Tx (Ch 0)
Radiated Spurious Emission, Horizontal



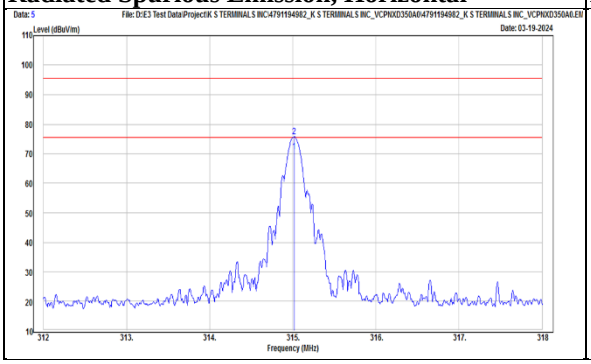
TX, ASK 315MHz Tx (Ch 0)
Radiated Spurious Emission, Vertical



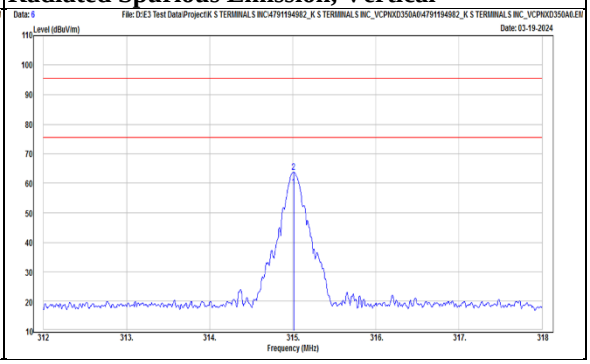
Mode	Fundamental 315MHz Tx	Channel	0

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		315.018	85.7	-9.98	75.72	95.62	-19.9	PK
		315.018	80.79	-9.98	70.81	75.62	-4.81	AVG
Vertical		315.012	73.61	-9.98	63.63	95.62	-31.99	PK
		315.012	68.7	-9.98	58.72	75.62	-16.9	AVG

TX, Fundamental 315MHz Tx (Ch 0)
Radiated Spurious Emission, Horizontal



TX, Fundamental 315MHz Tx (Ch 0)
Radiated Spurious Emission, Vertical



9 kHz ~ 30 MHz Data:

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

KDB 414788 D01 OATS and Chamber Correlation Justification

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

8.2. 20dB Bandwidth Measurement

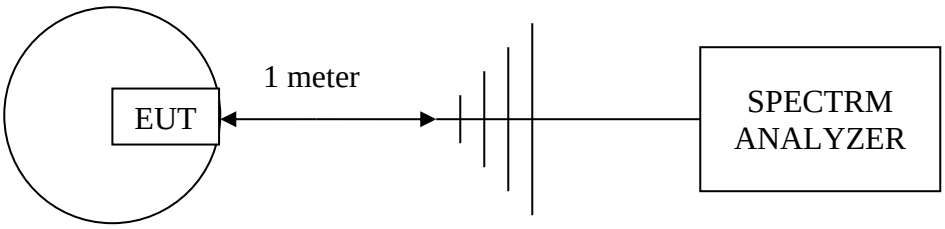
Requirements

Limits of 20dB Bandwidth Measurement

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for device operating above 70 MHz and below 900 MHz.

Fundamental Frequency (MHz)	Limit of Emission Bandwidth (kHz)
315	787.5

Test Setup



Test Instruments

Refer to section 6 to get information of above instrument.

Test Procedure

a. The EUT was placed on the turn table.
b. The signal was coupled to the spectrum analyzer through an antenna.
c. Set the resolution bandwidth to 10 kHz and video bandwidth to 30 kHz then select Peak function to scan the channel frequency.
d. The emission bandwidth was measured and recorded.

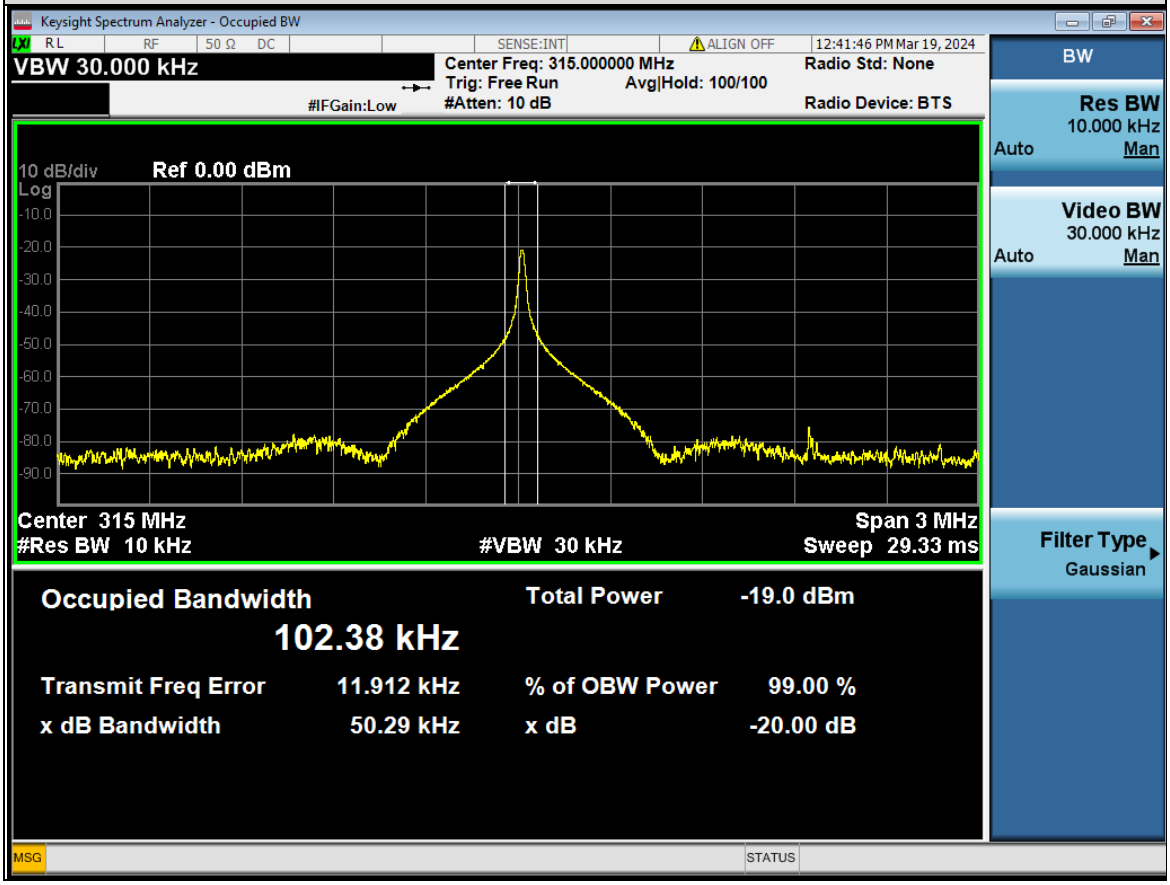
Deviation from Test Standard

No deviation.

Test Data

Channel	Frequency (MHz)	20dB Bandwidth (kHz)	Maximum Limit (kHz)	Pass / Fail
1	315	50.29	787.5	PASS

SPECTRUM PLOT OF VALUE



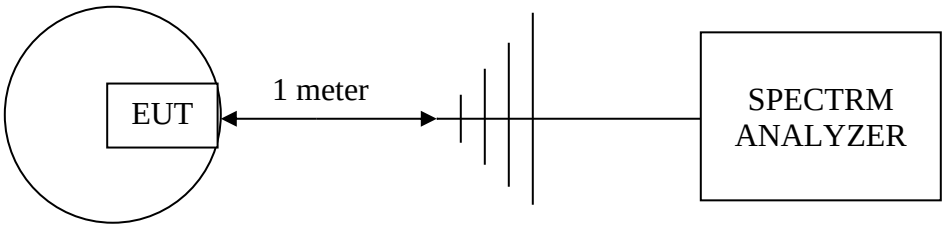
8.3. Deactivation Time Measurement

Requirements

Limits Of Deactivation Time Measurement

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

Test Setup



Test Instruments

Refer to section 6 to get information of above instrument.

Test Procedure

a. The EUT was placed on the turning table.

b. The signal was coupled to the spectrum analyzer through an antenna.

c. Set the resolution bandwidth to 100kHz and video bandwidth to 100kHz. The spectrum analyser was turned to the centre frequency of the transmitter's and the analyser's marker function was used to determine the duration of transmission.

d. The transmission duration was measured and recorded.

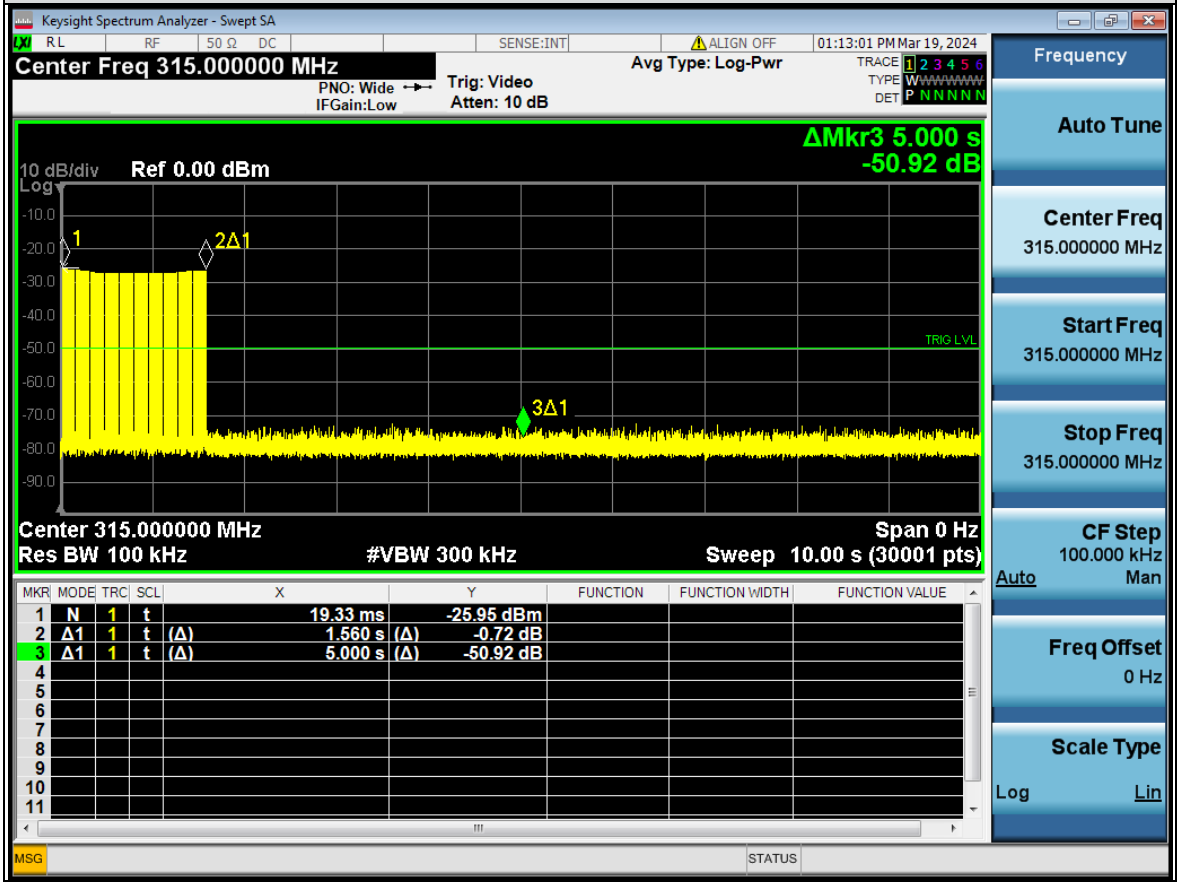
Deviation from Test Standard

No deviation.

Test Data

Push Button	Frequency (Mhz)	Maximum Limit (Sec)	Pass/Fail
1	315	5	PASS

SPECTRUM PLOT OF VALUE



8.4. AC Power Line Conducted Emission

Requirements

Frequency (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

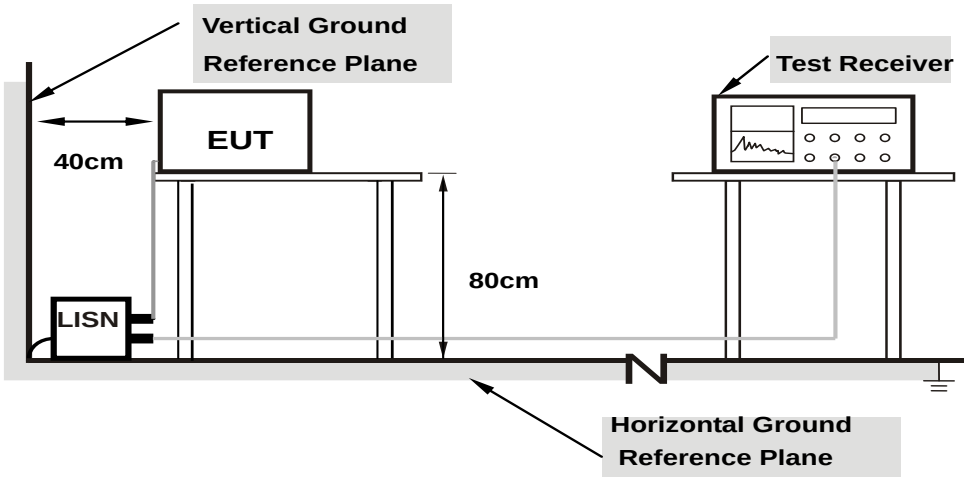
Note:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Procedures

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:
1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.
2. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported, the other emission levels were low against the limit.
3. Test data of Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB).
4. Test data of Margin(dB) = Result value (dBuV) - Limit value (dBuV).
5. Test data of Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).

Test Setup



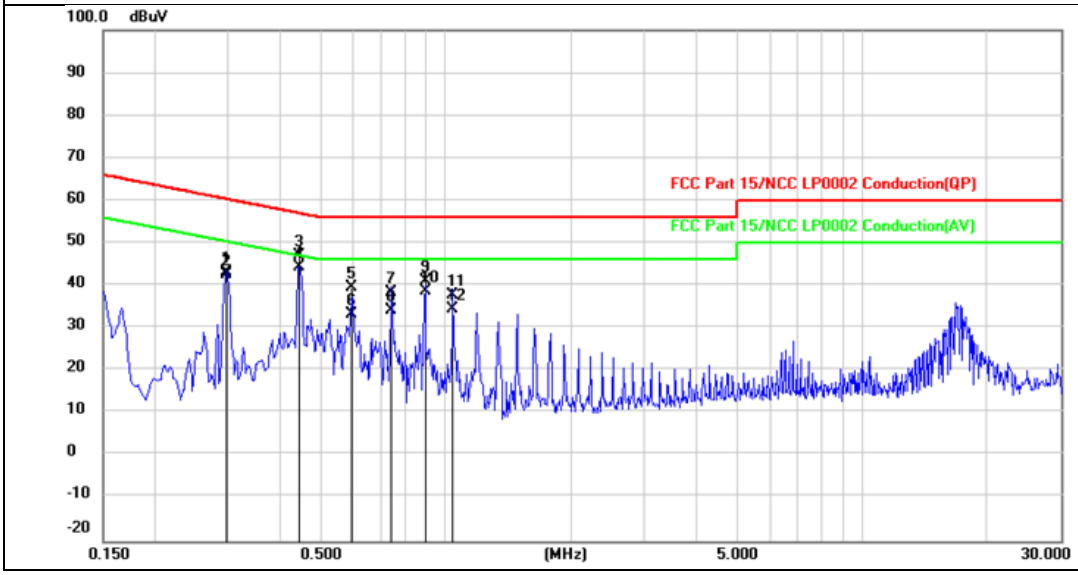
Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the Setup Configurations.

Test Data

Mode	ASK_TX315	Channel	0

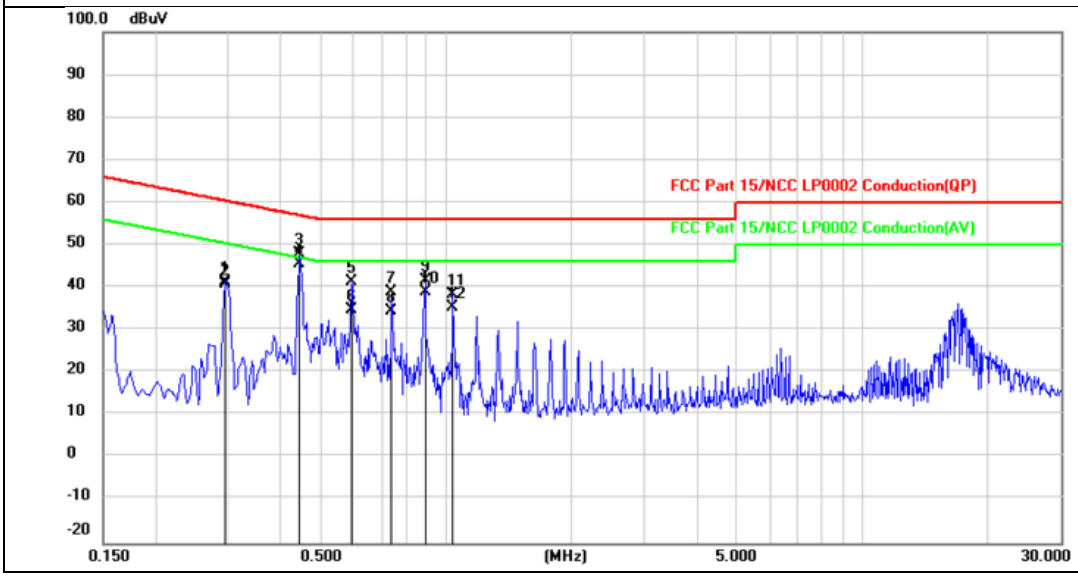
Phase: Line



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2980	33.33	9.95	43.28	60.30	-17.02	QP
2	0.2980	32.58	9.95	42.53	50.30	-7.77	AVG
3	0.4460	36.98	9.95	46.93	56.95	-10.02	QP
4	0.4460	34.38	9.95	44.33	46.95	-2.62	AVG
5	0.5940	29.56	9.96	39.52	56.00	-16.48	QP
6	0.5940	23.17	9.96	33.13	46.00	-12.87	AVG
7	0.7420	28.37	9.96	38.33	56.00	-17.67	QP
8	0.7420	24.16	9.96	34.12	46.00	-11.88	AVG
9	0.8900	30.93	9.98	40.91	56.00	-15.09	QP
10	0.8900	28.57	9.98	38.55	46.00	-7.45	AVG
11	1.0380	27.79	9.98	37.77	56.00	-18.23	QP
12	1.0380	24.48	9.98	34.46	46.00	-11.54	AVG

Mode	ASK_TX315	Channel	0

Phase: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2940	31.44	9.94	41.38	60.41	-19.03	QP
2	0.2940	30.67	9.94	40.61	50.41	-9.80	AVG
3	0.4460	37.99	9.95	47.94	56.95	-9.01	QP
4	0.4460	35.58	9.95	45.53	46.95	-1.42	AVG
5	0.5940	31.38	9.95	41.33	56.00	-14.67	QP
6	0.5940	24.69	9.95	34.64	46.00	-11.36	AVG
7	0.7420	28.99	9.96	38.95	56.00	-17.05	QP
8	0.7420	24.62	9.96	34.58	46.00	-11.42	AVG
9	0.8900	31.57	9.97	41.54	56.00	-14.46	QP
10	0.8900	29.01	9.97	38.98	46.00	-7.02	AVG
11	1.0380	28.48	9.97	38.45	56.00	-17.55	QP
12	1.0380	25.39	9.97	35.36	46.00	-10.64	AVG

END OF REPORT