

RADIO TEST REPORT

Product : Schneider Charge Pro AC

Model Name : PROAC80USJ3400EVC

Series Model : PROAC48USJ3400EVC, PROAC80USJ1772EVC2,
PROAC48USJ1772EVC2

FCC ID : 2AODL-PROAC8048US

Test Regulation : FCC 47 CFR Part 15 Subpart C (Section 15.231)

Received Date : 2026/2/13

Test Date : 2026/2/26 ~ 2026/3/4

Issued Date : 2026/5/22

Applicant : Schneider Electric USA, Inc.
201 Washington Street, One Boston Place, Suite 2700, Boston,
MA 02108 USA

Issued By : Underwriters Laboratories Taiwan Co., Ltd.
Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd.,
Zhudong Township, Hsinchu County, Taiwan



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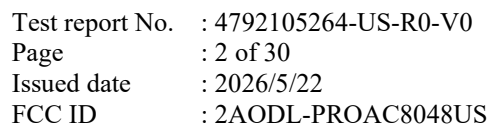
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Doc No: Form-ULID-004737 (DCS:17-EM-F0876) / 7.0



Original Test Report No.: 4792105264-US-R0-V0

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1. Attestation of Test Results

APPLICANT: Schneider Electric USA, Inc.
201 Washington Street, One Boston Place, Suite 2700, Boston, MA
02108 USA

MANUFACTURER: Schneider Electric USA, Inc.
201 Washington Street, One Boston Place, Suite 2700, Boston, MA
02108 USA

EUT DESCRIPTION: Schneider Charge Pro AC

BRAND: Schneider Electric

MODEL: PROAC80USJ3400EVC

SERIES MODEL: PROAC48USJ3400EVC, PROAC80USJ1772EVC2,
PROAC48USJ1772EVC2

SAMPLE STAGE: Manufacturing Sample

DATE of TESTED: 2026/02/26 ~ 2026/03/04

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
Project Handler

Date : 2026/5/22

Approved and Authorized By:



Eric Lee
Senior Laboratory Engineer

Date : 2026/5/22

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2. Summary of Test Results

FCC Clause	Test Item	Result
15.203	Antenna requirement	PASS
15.207	AC Power Conducted Emission	PASS
15.215 (c)	20dB Bandwidth	PASS
15.225 (a)	The field strength of any emissions within the band 13.553-13.567 MHz	PASS
15.225 (b)	The field strength of any emissions within the bands 13.410-13.553 MHz and 13.567-13.710 MHz	PASS
15.225 (c)	The field strength of any emissions within the bands 13.110-13.410 MHz and 13.710-14.010 MHz	PASS
15.225 (d)	The field strength of any emissions appearing outside of the 13.110-14.010 MHz band	PASS
15.225 (e)	The frequency tolerance	PASS

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3. Test Methodology and Reference Procedures

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2, KDB414788 D01 Radiated Test Site v01r01, ANSI C63.10-2020+Cor.1-2023.

4. 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.

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5. 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	3.0 dB
RF Conducted	9 kHz - 40GHz	2.4 dB
Radiated disturbance below 30MHz	9 kHz - 30 MHz	1.9 dB
Radiated disturbance below 1 GHz	30MHz ~ 1GHz	5.6 dB
Radiated disturbance above 1 GHz	1GHz ~ 40GHz	4.6 dB

6. Equipment under Test

6.1. Description of EUT

Product	Schneider Charge Pro AC
Brand Name	Schneider Electric
Model Name	PROAC80USJ3400EVC
Series Model	PROAC48USJ3400EVC, PROAC80USJ1772EVC2, PROAC48USJ1772EVC2
Normal Voltage	208/240Vac

Operating Frequency	13.56MHz
Modulation	ASK
Maximum Field Strength	10.76 dBuV/m @ 30m
Sample ID	9440492

Note:

- The measured field strength was extrapolated to distance from 3 meters to 30 meters, using the formula that converted to the field strength varies as the inverse distance square. (40dB per decade of distance for below 30MHz)

Example:

$$\begin{aligned}
 13.56\text{MHz} &= 10.76 \text{ dBuV/m} && @30\text{m} \\
 &= 10.76 + 20\log(30/3)^2 \text{ dBuV/m} && @3\text{m} \\
 &= 50.76 \text{ dBuV/m} && @3\text{m}
 \end{aligned}$$

- The models difference table as below:

	Model Name	EV Cable (Part Number)	Description
Main Model	PROAC80USJ3400EVC	MTAC-S-080A-V4-03-7.5M-88A(H)	Cable with J3400 (NACS) connector for PROAC80J3400EVC (80A)
Series Model	PROAC48USJ3400EVC	MTAC-S-048A-V3-03-7.5M-88A(H)	Cable with J3400 (NACS) connector for PROAC48J3400EVC (48A)
Series Model	PROAC80USJ1772EVC2	A9604971	Cable with J1772 (TYPE 1) connector for PROAC80J1772EVC2 (80A)
Series Model	PROAC48USJ1772EVC2	A9603381	Cable with J1772 (TYPE 1) connector for PROAC48J1772EVC2 (48A)

Note: The main units of series models are identical in circuit design, hardware, and components to the main model. The differences are limited to the charging gun specifications and current ratings. As the main model represents the worst-case condition, it is chosen as the representative model for testing.

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

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6.2. Channel List

1 channel is provided for NFC mode:

Channel	Frequency (MHz)
1	13.56

6.3. Test Condition

Test Item	Test Site No.	Environmental	Input Power	Test Date	Tested by
Radiated Spurious Emission	966-2	22~26°C/ 62~68%RH	240Vac/ 60Hz	2026/2/26~ 2026/3/3	Jubo Shen
AC power Line Conducted Emission	SR1	23~24°C/ 58~59%RH	240Vac/ 60Hz	2026/3/2~ 2026/3/4	Jubo Shen

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).

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6.4. Description of Available Antennas

Ant. No.	Transmitter Circuit	Frequency Range	Brand Name	Model Name	Maximum Gain (dBi)	Ant. Type	Connector Type
1	Chain0	13.56 MHz	Schneider Electric	SE-HMI-NFC	0	PCB	N/A

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.

6.5. Test Mode Applicability and Tested Channel Detail

Test Item	Modulation Type	Available Channel	Test Channel
Radiated Emissions (Field Strength)	ASK Type A	1	1
20dB Bandwidth	ASK Type A	1	1
AC Power Line Conducted Emission	ASK Type A	1	1
Radiated Emissions (Below 1GHz)	ASK Type A	1	1
Frequency Stability	ASK Type A	1	1

- For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

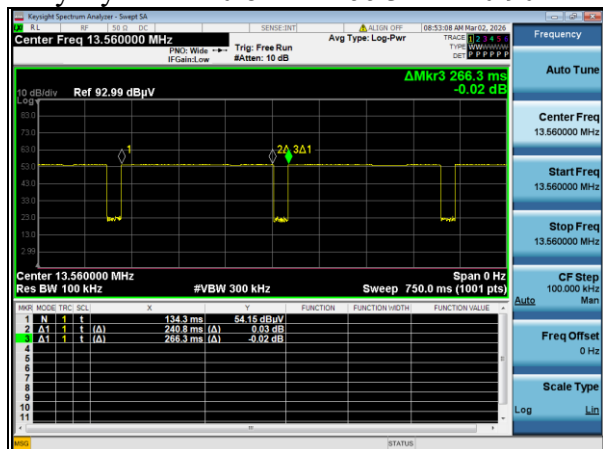
Simultaneously transmission condition:

Condition	Technology		
1	2.4G WIFI	2/3/4G	NFC

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

6.6. Duty Cycle of Test Signal

Duty Cycle = $240.8 \text{ ms} / 266.3 \text{ ms} = 0.9042 = 90.42\%$



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7. Test Equipment

Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Expired date
Radiated Spurious Emission					
Spectrum Analyzer	Keysight	N9010A	MY56070818	2025/3/12	2026/3/11
EMI Test Receiver	Rohde & Schwarz	ESR7	101754	2025/12/9	2026/12/8
Loop Antenna	ETS lindgren	6502	00213440	2025/11/14	2026/11/13
Trilog-Broadband Antenna with 5dB Attenuator	Schwarzbeck & EMCI	VULB 9168 & N-6-05	774 & AT-N0538	2025/12/23	2026/12/22
Horn Antenna (1-18 GHz)	Schwarzbeck	BBHA 9120 D	01690	2025/11/18	2026/11/17
Horn Antenna (18-40 GHz)	Schwarzbeck	BBHA 9170	781	2025/12/2	2026/12/1
Preamplifier (30-1000 MHz)	EMCI	EMC330E	980405	2025/5/12	2026/5/11
Preamplifier (1-18 GHz)	EMCI	EMC051835BE	980406	2025/12/26	2026/12/25
Preamplifier (18-40GHz)	EMCI	EMC184040SEE	980426	2025/4/7	2026/4/6
Cables (9k-18 GHz)	Hanyitek	K1K50-UP0264-K1K50-2500	170214-4 & 170425-2	2025/11/21	2026/11/20
Cables (18-40GHz)	Hanyitek	K1K50-UP0264-K1K50-2500	170214-1 & 170214-2	2025/11/21	2026/11/20
AC power Line Conducted Emission					
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	2025/9/18	2026/9/17
Two-Line V-Network	Rohde & Schwarz	ENV216	102136	2025/5/27	2026/5/26
Impuls-Begrenzer Pulse Limiter	Rohde & Schwarz	ESH3-Z2	102219-Qt	2025/8/27	2026/8/26
Cables	TITAN	CFD200	T0732ACFD 20020A300-2	2025/4/21	2026/4/20

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

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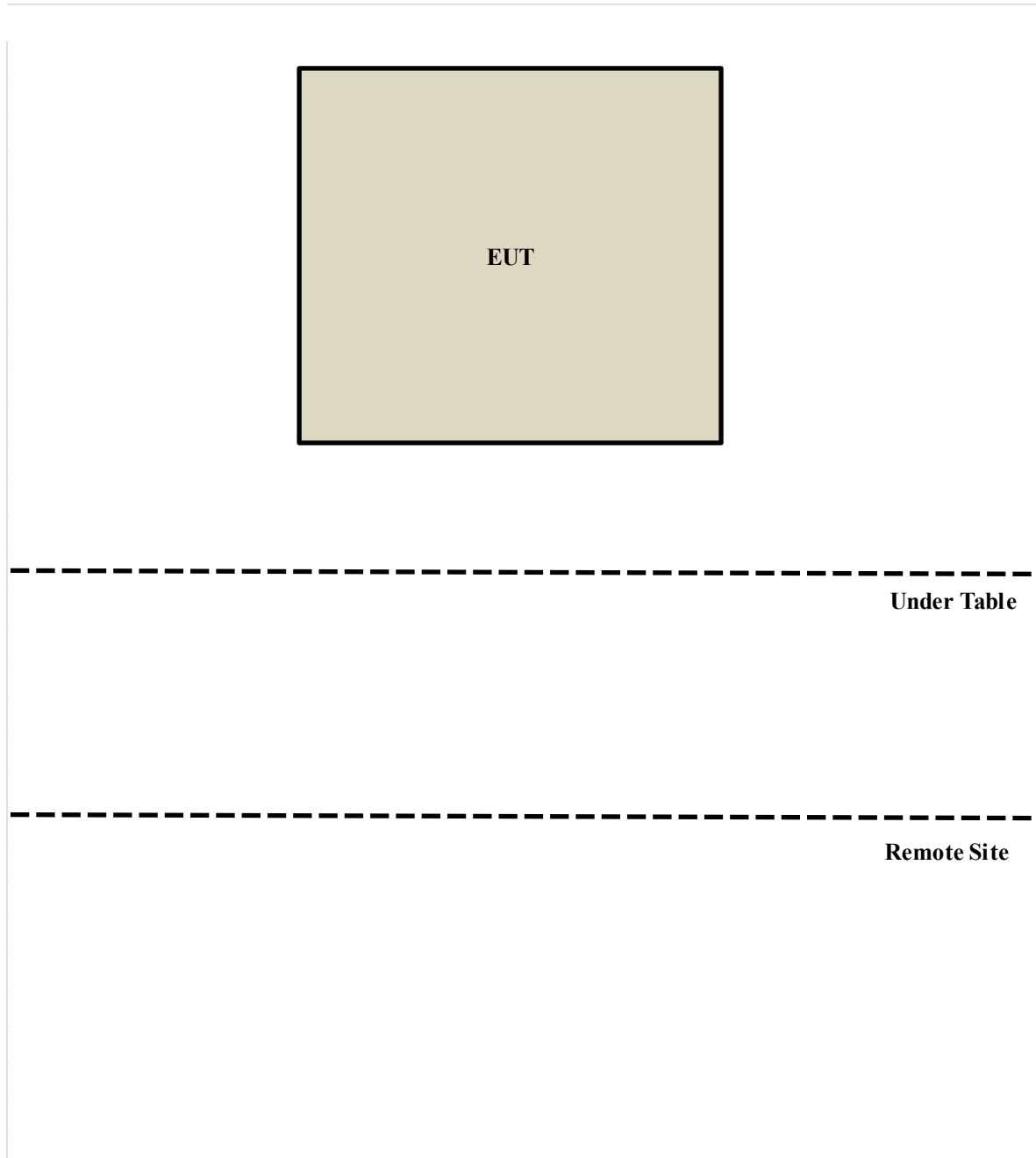
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8. Description of Test Setup

Test Setup

The continuous-transmission test routine has already been programmed into the chip. Therefore, once the EUT is powered on, it will automatically enter continuous-transmission mode.

Setup Diagram for Test



9. Test Results

9.1. Radiated Spurious Emission

Requirements

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209 as below table:

Frequencies (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 1000 MHz, 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.

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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.
2. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB) - DCF(dB)
3. DCF = Distance Correction Factor, for Frequency below 30MHz, 40dB per decade of distance.
4. Example for DCF below 0.49MHz, Test result of distance was extrapolated from 3 meters to 300 meters, $DCF = 20\log(300/3)^2 = 80 \text{ dB}$.
5. Example for DCF between 0.49MHz to 30MHz, Test result of distance was extrapolated from 3 meters to 30 meters, $DCF = 20\log(30/3)^2 = 40 \text{ dB}$.
6. Test data of Result value (dBuV/m) = Reading value (dBuV) + Correction Factor (dB/m).
7. Test data of Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
8. Test data of Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Preamp Factor (dB).

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 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.

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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. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported.
- c. Test data of Result value (dBuV/m) = Reading value (dBuV) + Correction Factor (dB/m).
- d. Test data of Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- e. Test data of Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Preamp Factor (dB).

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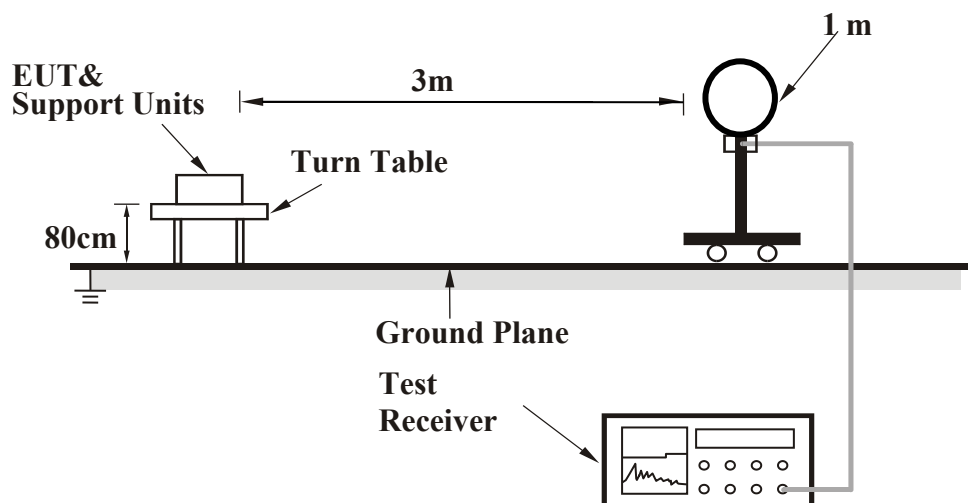
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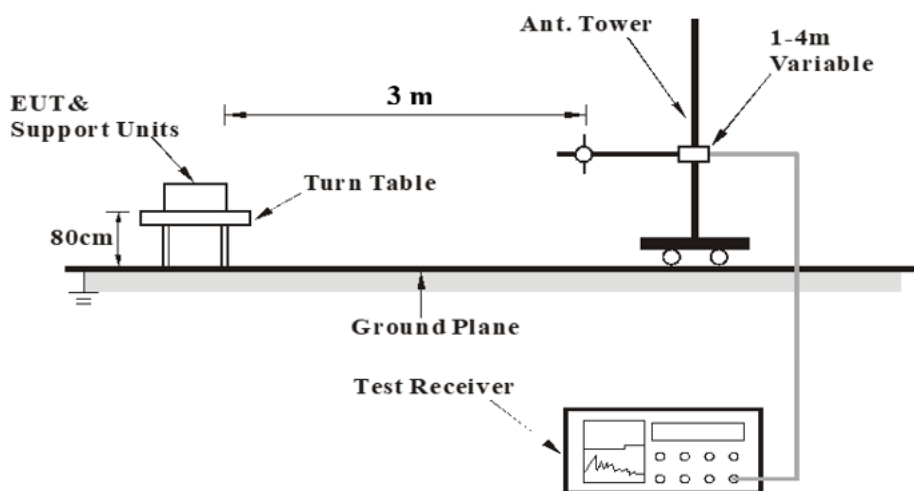
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Test Setup

<Frequency Range 9 kHz ~ 30 MHz>



<Frequency Range 30 MHz ~ 1 GHz >



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

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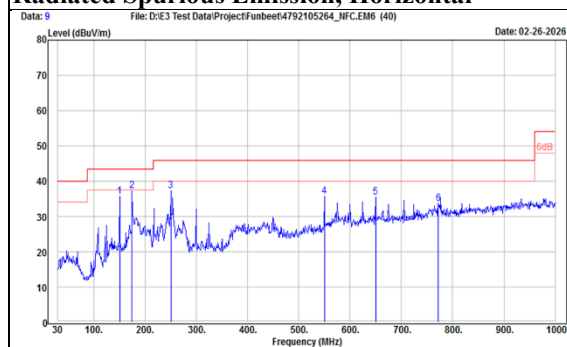
Test Data

Below 1 GHz

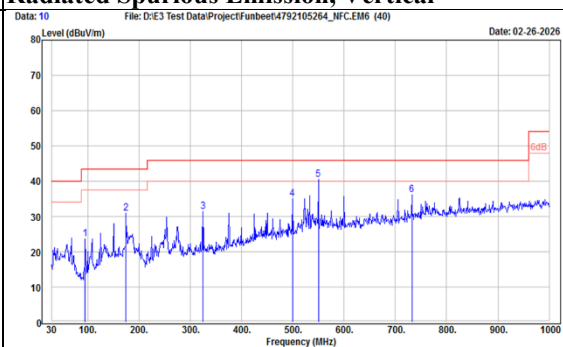
Mode	NFC-Type A	Channel	1
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		150.28	47.12	-11.35	35.77	43.5	-7.73	PK
		174.53	49.48	-12.17	37.31	43.5	-6.19	PK
		250.19	49.45	-12.09	37.36	46	-8.64	PK
		549.92	39.38	-3.64	35.74	46	-10.26	PK
		649.83	36.63	-1.13	35.5	46	-10.5	PK
		772.05	32.41	1.15	33.56	46	-12.44	PK
Vertical		94.99	41.01	-17.39	23.62	43.5	-19.88	PK
		174.53	43.17	-12.17	31	43.5	-12.5	PK
		324.88	40.75	-9.37	31.38	46	-14.62	PK
		499.48	39.85	-4.85	35	46	-11	PK
		549.92	44.15	-3.64	40.51	46	-5.49	PK
		732.28	35.86	0.28	36.14	46	-9.86	PK

TX, NFC-Type A (Ch 1)
Radiated Spurious Emission, Horizontal



TX, NFC-Type A (Ch 1)
Radiated Spurious Emission, Vertical



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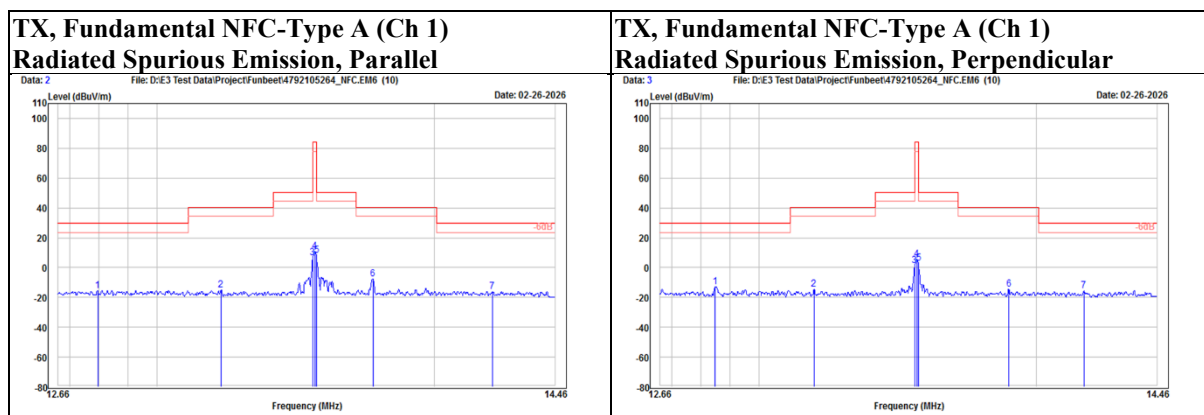
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Below 30MHz

Mode	Fundamental NFC-Type A	Channel	1
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Parallel		12.795	13.84	-29.24	-15.4	29.54	-44.94	PK
		13.224	14.05	-29.3	-15.25	40.51	-55.76	PK
		13.553	35.7	-29.34	6.36	50.47	-44.11	PK
		13.561	40.11	-29.35	10.76	84	-73.24	PK
		13.567	37.34	-29.35	7.99	50.47	-42.48	PK
		13.773	21.93	-29.38	-7.45	40.51	-47.96	PK
		14.22	13.51	-29.43	-15.92	29.54	-45.46	PK
Perpendicular		12.848	16.17	-29.25	-13.08	29.54	-42.62	PK
		13.193	14.59	-29.3	-14.71	40.51	-55.22	PK
		13.553	30.6	-29.34	1.26	50.47	-49.21	PK
		13.561	35.11	-29.35	5.76	84	-78.24	PK
		13.567	32.44	-29.35	3.09	50.47	-47.38	PK
		13.898	14.88	-29.39	-14.51	40.51	-55.02	PK
		14.18	14.01	-29.42	-15.41	29.54	-44.95	PK

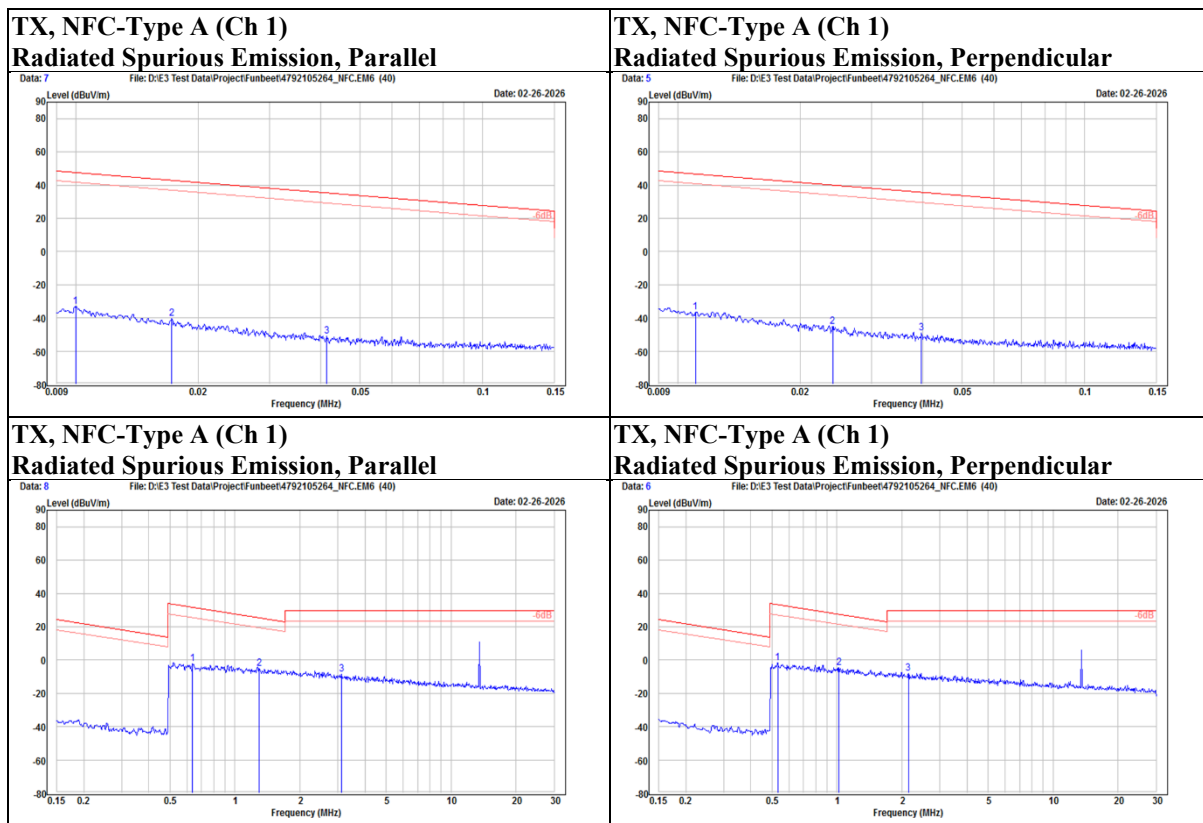


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Mode	NFC-Type A	Channel	1
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Parallel		0.01002	28.37	-61.45	-33.08	47.59	-80.67	PK
		0.01724	24.32	-64.91	-40.59	42.87	-83.46	PK
		0.04147	16.69	-67.81	-51.12	35.25	-86.37	PK
		0.6372	25.36	-27.82	-2.46	31.52	-33.98	PK
		1.296	22.8	-28.09	-5.29	25.35	-30.64	PK
		3.123	19.44	-28.16	-8.72	29.54	-38.26	PK
Perpendicular		0.01108	25.72	-62.1	-36.38	46.71	-83.09	PK
		0.02409	21.45	-66.53	-45.08	39.97	-85.05	PK
		0.03975	18.83	-67.77	-48.94	35.61	-84.55	PK
		0.53215	25.95	-27.72	-1.77	33.08	-34.85	PK
		1.021	23.29	-28.06	-4.77	27.42	-32.19	PK
		2.144	20.14	-28.06	-7.92	29.54	-37.46	PK



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.

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9.2. 20dB Bandwidth Measurement

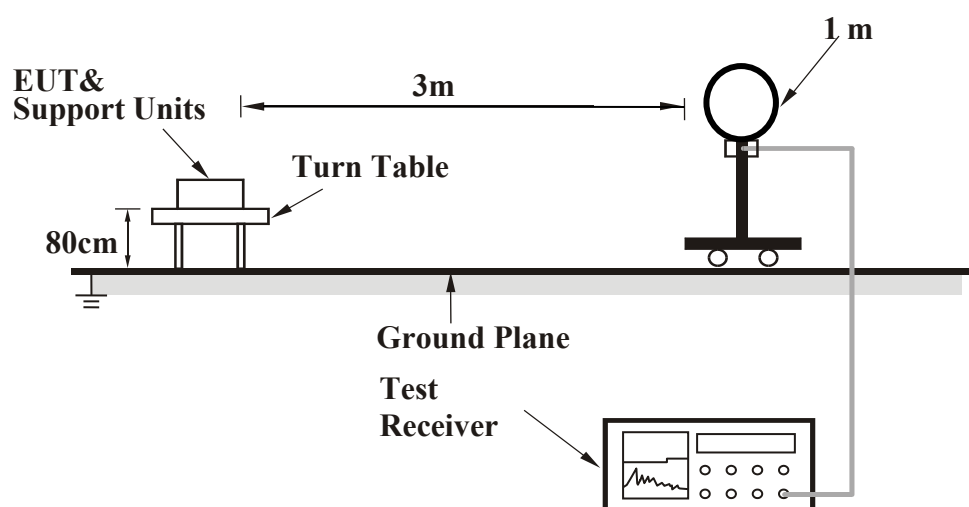
Requirements

Limits of 20dB Bandwidth Measurement

Test Procedures

- The testing follows the guidelines in ANSI C63.10-2013.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1kHz RBW and 3kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

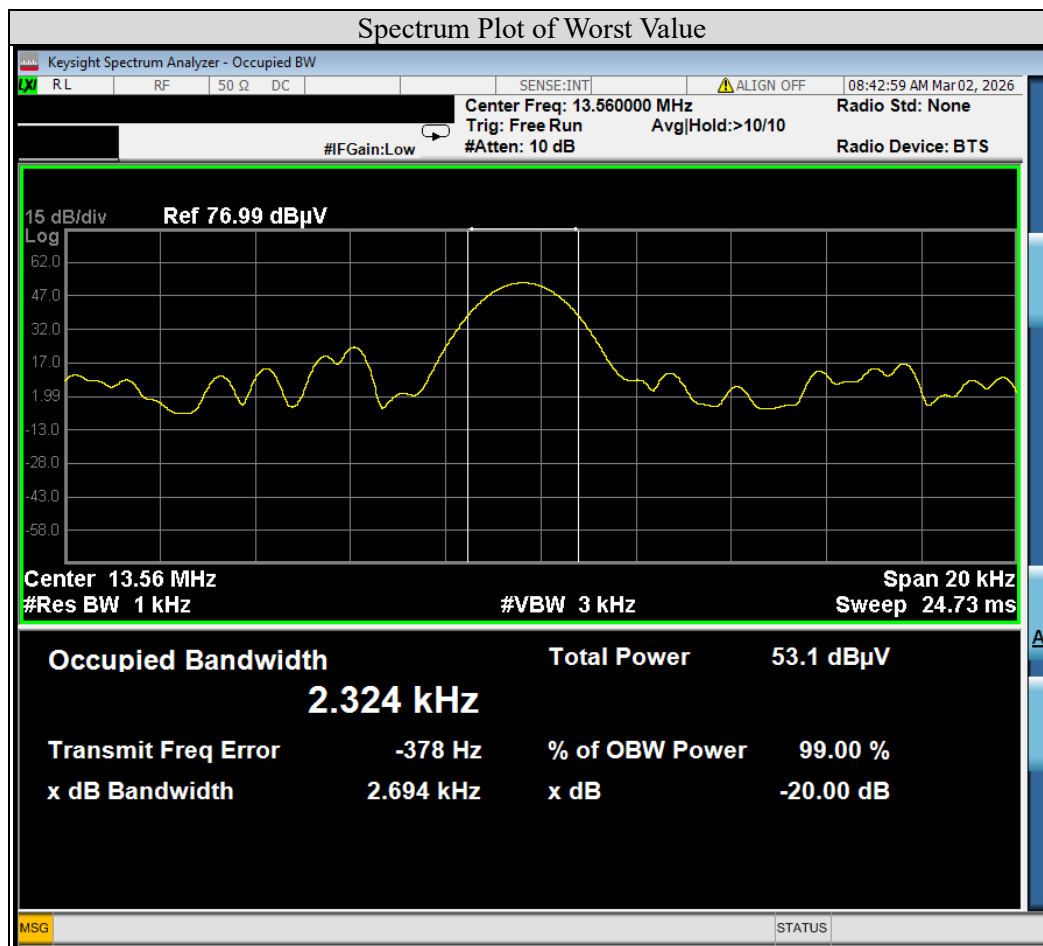
Test Setup



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

Test Data

Channel	Frequency (MHz)	20dB Bandwidth (kHz)
1	13.56	2.324



Note: For CW signals, sometimes EBW may vary with RBW. We use a more stringent setting value to account for this variation.

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9.3. Frequency Stability

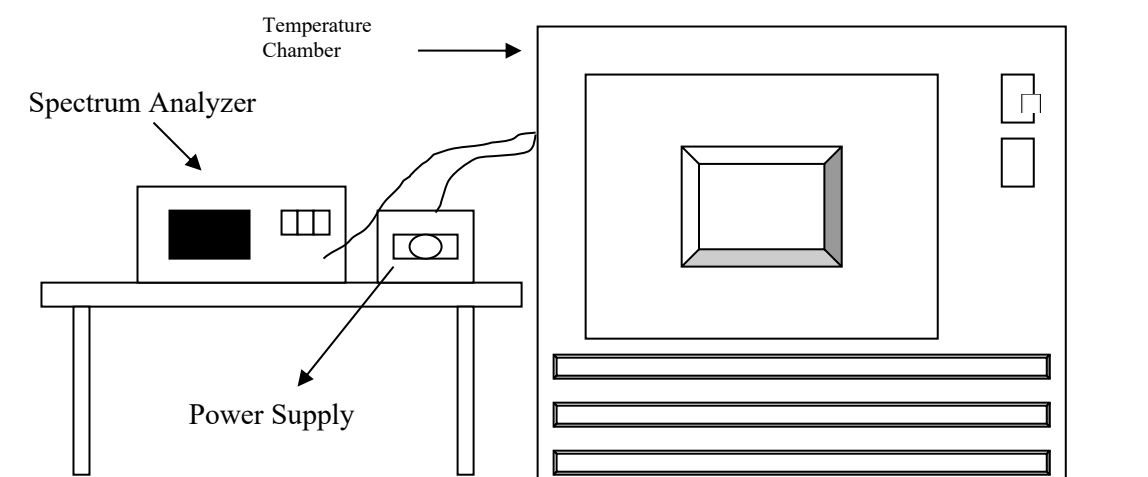
Requirements

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

Test Procedures

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turned the EUT on and coupled its output to a spectrum analyzer.
- Turned the EUT off and set the chamber to the highest temperature specified.
- Allowed sufficient time (approximately 30 min) for the temperature of the chamber to stabilize then turned the EUT on and measured the operating frequency after 2, 5, and 10 minutes.
- Repeated step 2 and 3 with the temperature chamber set to the lowest temperature.
- The test chamber was allowed to stabilize at $+20$ degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

Test Setup



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Test Data

Frequency Stability Versus Temp.									
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
60	120	13.55995	-0.00037	13.55994	-0.00044	13.55994	-0.00044	13.55994	-0.00044
50	120	13.56001	0.00007	13.56	0.00000	13.56001	0.00007	13.56001	0.00007
40	120	13.55996	-0.00030	13.55996	-0.00030	13.55996	-0.00030	13.55996	-0.00030
30	120	13.56006	0.00044	13.56006	0.00044	13.56007	0.00052	13.56006	0.00044
20	120	13.56004	0.00030	13.56004	0.00030	13.56003	0.00022	13.56004	0.00030
10	120	13.56001	0.00007	13.56002	0.00015	13.56001	0.00007	13.56001	0.00007
0	120	13.55994	-0.00044	13.55993	-0.00052	13.55994	-0.00044	13.55994	-0.00044
-10	120	13.55998	-0.00015	13.55996	-0.00030	13.55998	-0.00015	13.55997	-0.00022
-20	120	13.56001	0.00007	13.56	0.00000	13.56	0.00000	13.56	0.00000
-30	120	13.56006	0.00044	13.56005	0.00037	13.56005	0.00037	13.56005	0.00037
-40	120	13.56001	0.00007	13.56001	0.00007	13.56001	0.00007	13.56	0.00000

TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
20	138	13.56004	0.00030	13.56004	0.00030	13.56003	0.00022	13.56004	0.00030
20	120	13.56004	0.00030	13.56004	0.00030	13.56003	0.00022	13.56004	0.00030
20	102	13.56004	0.00030	13.56004	0.00030	13.56003	0.00022	13.56004	0.00030

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9.4. AC Power Line Conducted Emission

Requirements

Frequency (MHz)	Conducted limit (dB μ V)	
	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 (dB μ V) = Reading value (dB μ V) + Correction Factor (dB).
4. Test data of Margin(dB) = Result value (dB μ V) - Limit value (dB μ V).
5. Test data of Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).

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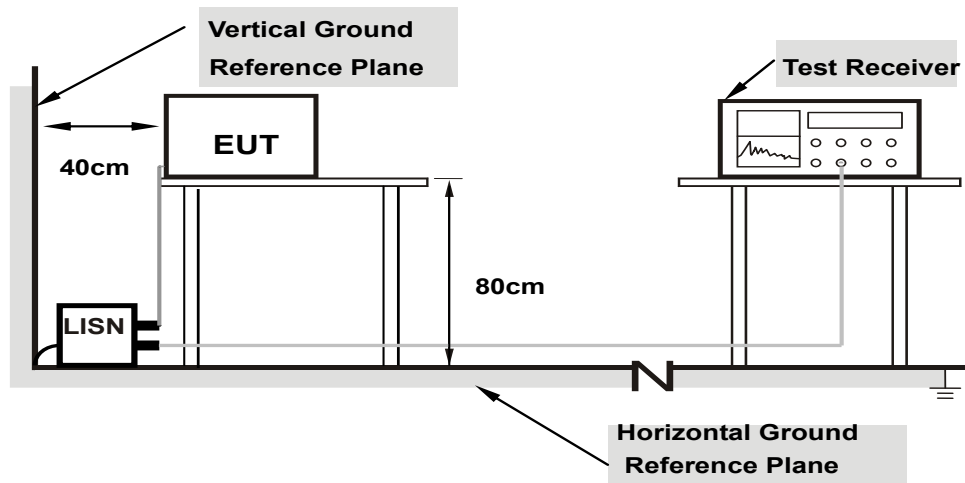
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Test Setup

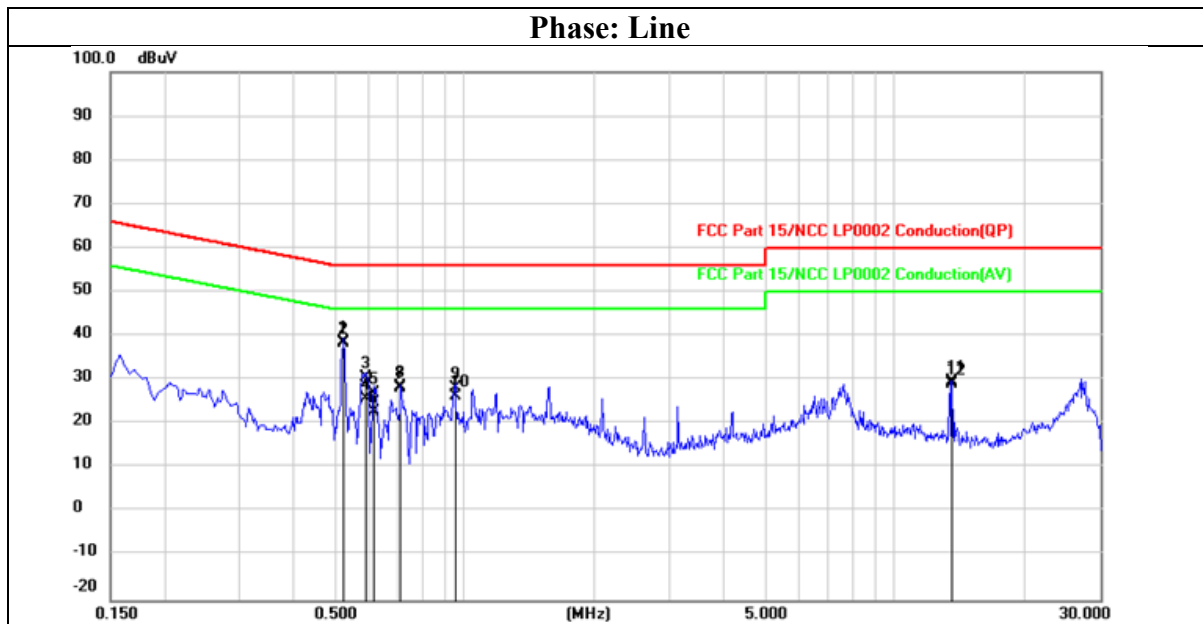


Note: 1.Support units were connected to second LISN.

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

Test Data

Mode	NFC TX13.56MHz	Channel	1
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.5225	28.67	9.98	38.65	56.00	-17.35	QP
2	0.5225	28.47	9.98	38.45	46.00	-7.55	AVG
3	0.5901	20.53	9.98	30.51	56.00	-25.49	QP
4	0.5901	15.71	9.98	25.69	46.00	-20.31	AVG
5	0.6171	17.12	9.98	27.10	56.00	-28.90	QP
6	0.6171	12.82	9.98	22.80	46.00	-23.20	AVG
7	0.7108	18.35	10.00	28.35	56.00	-27.65	QP
8	0.7108	18.33	10.00	28.33	46.00	-17.67	AVG
9	0.9488	18.04	10.02	28.06	56.00	-27.94	QP
10	0.9488	16.27	10.02	26.29	46.00	-19.71	AVG
11	13.5598	19.35	10.44	29.79	60.00	-30.21	QP
12	13.5598	18.61	10.44	29.05	50.00	-20.95	AVG

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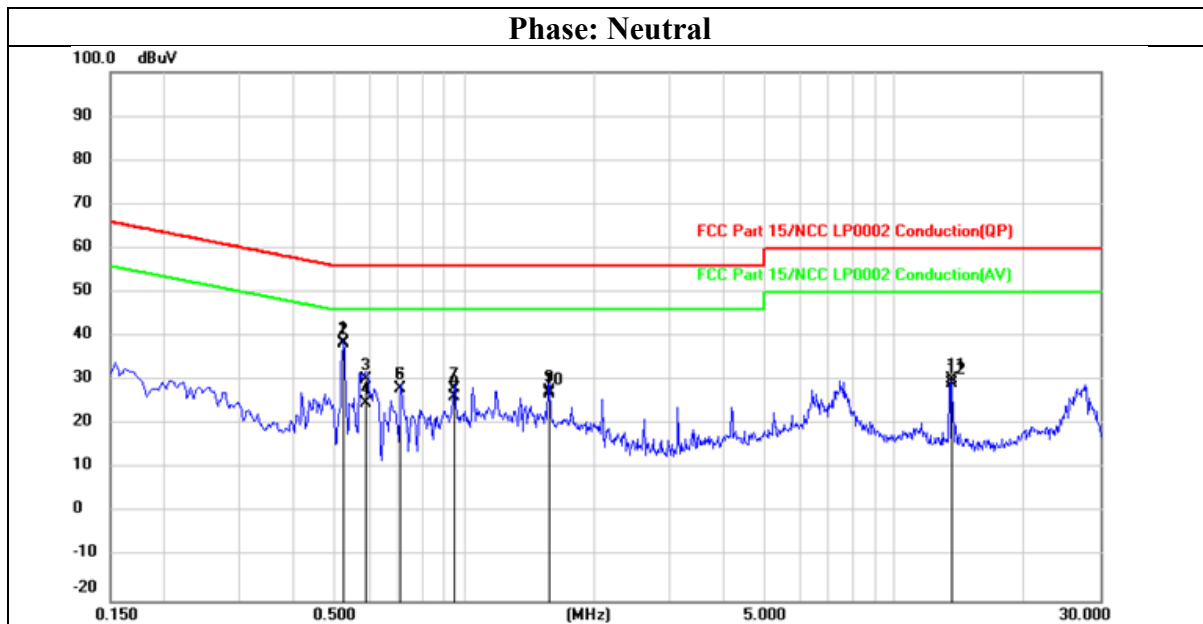
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Mode	NFC_TX13.56MHz	Channel	1
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.5228	28.60	9.94	38.54	56.00	-17.46	QP
2	0.5228	28.46	9.94	38.40	46.00	-7.60	AVG
3	0.5907	20.38	9.94	30.32	56.00	-25.68	QP
4	0.5907	14.78	9.94	24.72	46.00	-21.28	AVG
5	0.7104	18.20	9.96	28.16	56.00	-27.84	QP
6	0.7104	18.18	9.96	28.14	46.00	-17.86	AVG
7	0.9487	18.10	9.96	28.06	56.00	-27.94	QP
8	0.9487	16.37	9.96	26.33	46.00	-19.67	AVG
9	1.5676	17.71	9.98	27.69	56.00	-28.31	QP
10	1.5676	16.88	9.98	26.86	46.00	-19.14	AVG
11	13.5598	19.93	10.33	30.26	60.00	-29.74	QP
12	13.5598	19.15	10.33	29.48	50.00	-20.52	AVG

END OF REPORT

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