

CO-LOCATION RADIO TEST REPORT

Product : IEEE 802.11ax/ac/a/b/g/n 2x2 WiFi with Bluetooth5.3 M.2 LGA Type 1216 Module

Model Name : AP6275SDSR

FCC ID : RYK-AP6275SDSR

Test Regulation : FCC 47 CFR Part 15 Subpart C (Section 15.247)
FCC 47 CFR Part 15 Subpart E (Section 15.407)

Received Date : 2026/1/2

Test Date : 2026/01/06 ~ 2026/04/07

Issued Date : 2026/5/6

Applicant : SparkLAN Communications, Inc.
5F, No. 199, Ruihu St., Neihu Dist., Taipei City 114067, 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

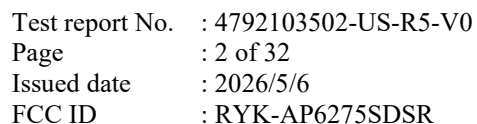


The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report are responsible of the test sample(s) provided by the client only and are not to be used to indicate applicability to other similar products.

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



Original Test Report No.: 4792103502-US-R5-V0

Underwriters Laboratories Taiwan Co., Ltd.

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

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1. Attestation of Test Results

APPLICANT: SparkLAN Communications, Inc.
5F, No. 199, Ruihu St., Neihu Dist., Taipei City 114067, Taiwan

MANUFACTURER: SparkLAN Communications, Inc.
5F, No. 199, Ruihu St., Neihu Dist., Taipei City 114067, Taiwan

EUT DESCRIPTION: IEEE 802.11ax/ac/a/b/g/n 2x2 WiFi with Bluetooth5.3 M.2 LGA Type 1216 Module

BRAND: SparkLAN, Ampak

MODEL: AP6275SDSR

SAMPLE STAGE: Engineering Verification Test Sample

DATE of TESTED: 2026/01/06 ~ 2026/04/07

APPLICABLE STANDARDS	
STANDARD	Test Results
FCC 47 CFR PART 15 Subpart C (Section 15.247)	PASS
FCC 47 CFR PART 15 Subpart E (Section 15.407)	

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 : 2026/5/6

Approved and Authorized By:



Kent Liu
Senior Laboratory Engineer

Date : 2026/5/6

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2. Summary of Test Results

Summary of Test Results		
FCC Clause	Test Items	Result
15.209	Radiated Spurious Emission	PASS
15.209	Antenna Port Emission	Note 1
15.207	AC Power Conducted Emission	Note 1

Note:

1. This report is as a supplementary report of report no.: 4790471812-US-R6-V0. The test result refer to the original report.

3. Test Methodology and Reference Procedures

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2, KDB558074 D01 Meas Guidance v05r02, KDB 789033 D02 General UNII Test Procedure New Rules v02r01KDB414788 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

The EUT support table is constructed of high-density Expandable Polystyrene (EPS) with dimensions of $1\text{ m} \times 1.5\text{ m}$.

The Measurement Uncertainty (MU) report is prepared in accordance with CISPR 16-4-2:2011-06; the potential impact of the setup table material has been evaluated and included as a component of the overall uncertainty value.

6. Equipment under Test

6.1. Description of EUT

Product	IEEE 802.11ax/ac/a/b/g/n 2x2 WiFi with Bluetooth5.3 M.2 LGA Type 1216 Module
Brand Name	SparkLAN, Ampak
Model Name	AP6275SDSR
Normal Voltage	3.3Vdc from Host

Operating Frequency	BT EDR: 2402MHz ~ 2480MHz BT LE: 2402MHz ~ 2480MHz 2.4G WiFi: 2412MHz ~ 2462MHz 5G WiFi: 5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
Sample ID	Conducted Test:5258006
	Radiated Test:5258006

Note:

- This report is as a supplementary report of report no.: 4790471812-US-R6-V0. The differences were as below:
 - Add new PIFA antennas.
- According to above conditions, therefore only the radiated spurious emission worse case need to be performed, others result please refer to the original report.
- The model has two brand names as follows:

Brand	Product name	Model
SparkLAN	IEEE 802.11ax/ac/a/b/g/n 2x2 WiFi with Bluetooth5.3 M.2 LGA Type 1216 Module	AP6275SDSR
Ampak		

- 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.

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6.2. 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	3.3Vdc	2026/01/06~ 2026/04/07	Scott Chang/ Jubo Shen

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).

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6.3. Description of Available Antennas

Original							
Ant. No.	Transmitter Circuit	Frequency Range (MHz)	Brand Name	Model Name	Maximum Gain (dBi)	Ant. Type	Connector Type
1	Chain0+1	2400~2500 5150~5875	SparkLAN	AD-103AG	2.4G: 2.02 5G: 2.03	Dipole	RP-SMA
2	Chain0+1	2400~2500 5150~5850	SparkLAN	AD-301N	2.4G: 4.4 5G: 5.8	Dipole	RP-SMA
3	Chain0+1	2400~2500 5150~5850	SparkLAN	AD-302N	2.4G: 3.14 5G: 2.87	Dipole	RP-SMA
4	Chain0+1	2400~2500 5150~5850	SparkLAN	AD-303N	2.4G: 3.14 5G: 3.45	Dipole	RP-SMA
5	Chain0+1	2400~2500 5150~5825	SparkLAN	AD-305N	2.4G: 5 5G: 5.53	Dipole	RP-SMA
6	Chain0+1	2400~2500 5150~5825	SparkLAN	AD-308N	2.4G: 3 5G: 5	Dipole	I-PEX
7	Chain0+1	2400~2500 5150~5875	SparkLAN	AD-309N	2.4G: 1.68 5G: 4.72	Dipole	I-PEX
8	Chain0+1	2400~2500 5150~5875	SparkLAN	AD-310N	2.4G: 2.65 5G: 4.86	Dipole	I-PEX
9	Chain0+1	2400~2500 5150~5875	SparkLAN	AD-311N	2.4G: 2.67 5G: 4.91	Dipole	I-PEX
10	Chain0+1	2400~2500 5150~5875	GRAND-TEK Technology	103DG00000140	2.4G: 4.8 5G: 5	Dipole	I-PEX
11	Chain0+1	2400~2500 5150~5875	GRAND-TEK Technology	103DG00000150	2.4G: 2.5 5G: 5.3	Dipole	I-PEX
Newly							
Ant. No.	Transmitter Circuit	Frequency Range (MHz)	Brand Name	Model Name	Maximum Gain (dBi)	Ant. Type	Connector Type
12	Chain0+1	2400~2500 5150~5895	Aristotle	RFA-25-JP818P1-4C036	2.4G: 2.91 5G: 4.43	PIFA	i-pex(MHF)
13	Chain0+1	2400~2500 5150~5895	Aristotle	RFA-25-KP010-4B-70	2.4G: -2.44 5G: 5.23	PIFA	i-pex(MHF)
14	Chain0+1	2400~2500 5150~5895	Aristotle	RFA-27-KP208-4B-115	2.4G: 2.98 5G: 4.89	PIFA	i-pex(MHF)
15	Chain0+1	2400~2500 5150~5895	Aristotle	RFA-27-KP209-74G-315	2.4G: 2.28 5G: 3.64	PIFA	i-pex(MHF)
16	Chain0+1	2400~2500 5150~5895	Aristotle	RFA-25-KP290-4B-70	2.4G: 3.13 5G: 4.71	PIFA	i-pex(MHF)
17	Chain0+1	2400~2500 5150~5895	Aristotle	RFA-25-KP291-4G-70	2.4G: -1.48 5G: -0.99	PIFA	i-pex(MHF)
18	Chain0+1	2400~2500 5150~5895	SparkLAN	AD-303PF	2.4G: 2.91 5G: 4.43	PIFA	i-pex(MHF)
19	Chain0+1	2400~2500 5150~5895	SparkLAN	AD-304PF	2.4G: -2.44 5G: 5.23	PIFA	i-pex(MHF)
20	Chain0+1	2400~2500 5150~5895	SparkLAN	AD-305PF	2.4G: 2.98 5G: 4.89	PIFA	i-pex(MHF)

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21	Chain0+1	2400~2500 5150~5895	SparkLAN	AD-306PF	2.4G: 2.28 5G: 3.64	PIFA	i-pex(MHF)
22	Chain0+1	2400~2500 5150~5895	SparkLAN	AD-307PF	2.4G: 3.13 5G: 4.71	PIFA	i-pex(MHF)
23	Chain0+1	2400~2500 5150~5895	SparkLAN	AD-308PF	2.4G: -1.48 5G: -0.99	PIFA	i-pex(MHF)

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.

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6.4. Test Mode Applicability and Tested Channel Detail

Simultaneously transmission condition:

Condition	Technology	
1	BTLE	WLAN (2.4GHz)
2	BTLE	WLAN (5GHz)

- Antenna No. 16 has the highest gain for 2.4G and Antenna No. 13 has the highest gain for 5G, both antennas perform the co-location radiated emissions testing.

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

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
				2026/2/9	2027/2/8
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
				2026/3/24	2027/3/23
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

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

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8. Description of Test Setup

Tx Mode

Support Equipment

ID	Equipment	Brand Name	Model Name	S/N	Remark
A	PC	GIGABYTE	GA-H81M-DS2	N/A	Supplied by Client
B	Fixture	AMPAK	UART_V07	N/A	Supplied by Client
C	EVb Board	AMPAK	EVb	N/A	Supplied by Client

I/O Cables

ID	Equipment	Brand Name	Model Name	Length (m)	Remark
1	SDIO extension cable	AMPAK	UART	0.8	Supplied by Client
2	USB Cable	AMPAK	USB	1.8	Supplied by Client
3	USB Cable	AMPAK	USB	1.8	Supplied by Client

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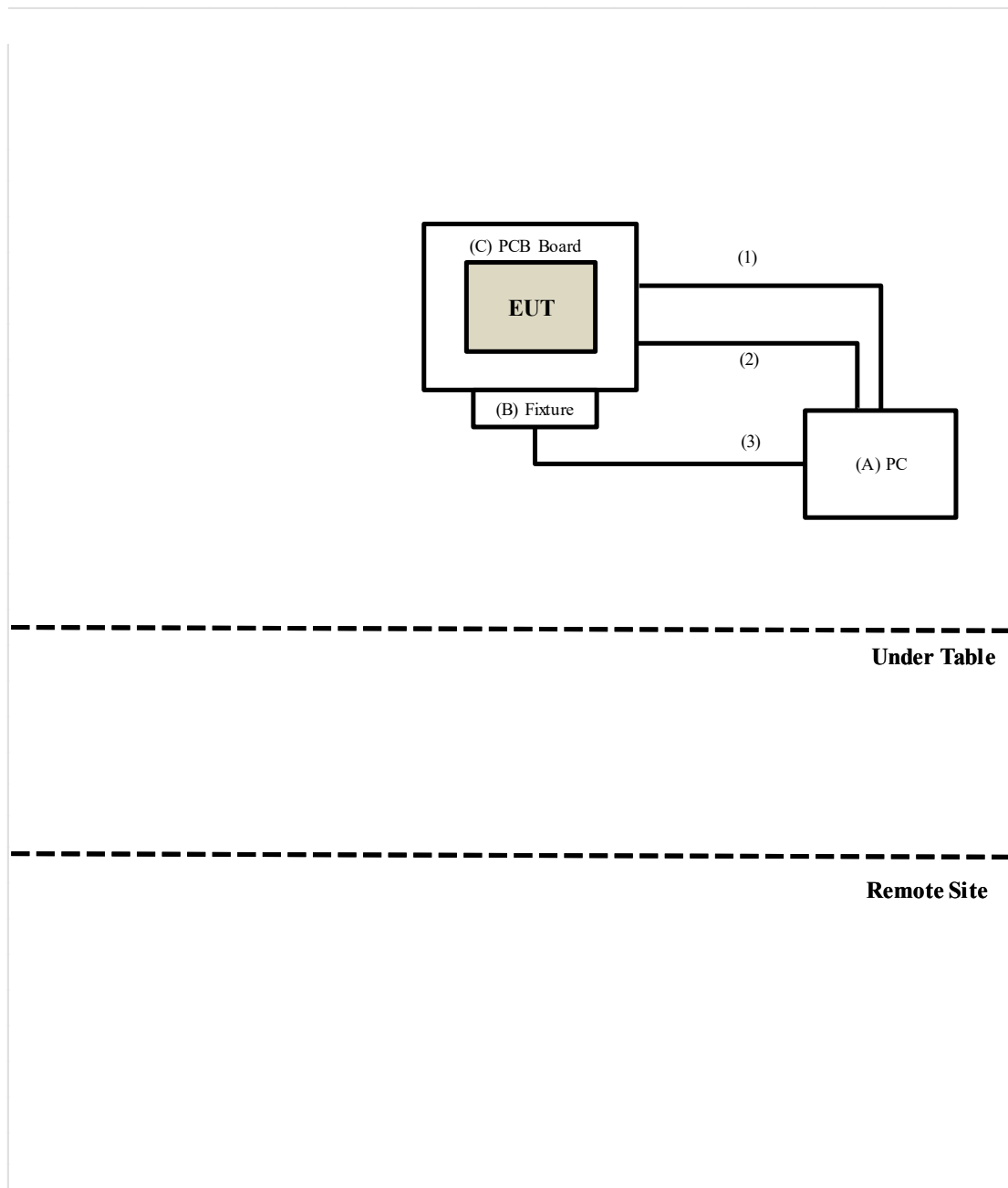
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Test Setup

Controlled using a bespoke application (WIFI : Typing RF command by terminal tool (ubuntu terminal) / BT : BlueTool_Version 1.9.7.4) 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

Tx Mode



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9. Test Results

9.1. Radiated Spurious Emission

Requirements

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.

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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.

[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.

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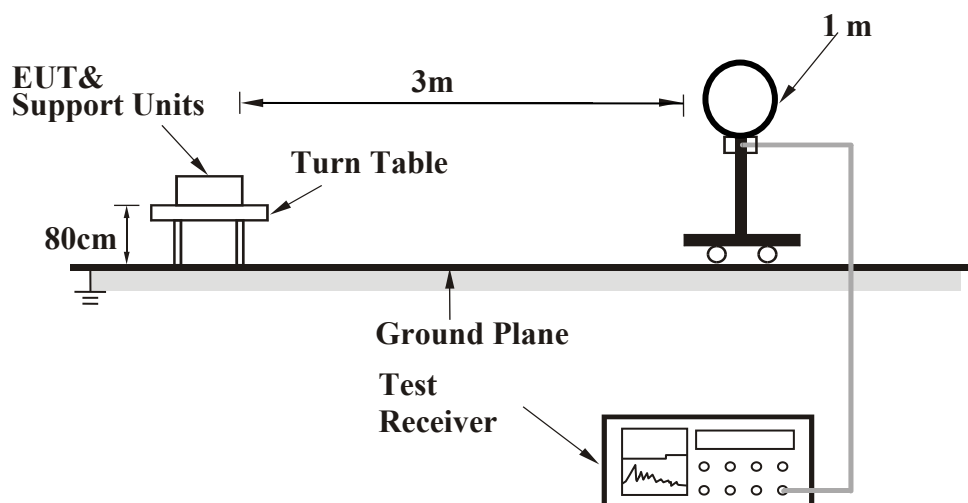
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Note:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 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.
- The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz, for $1/T$ (Duty cycle $< 98\%$) video bandwidth detail information refer to main report duty cycle test result.
- 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.
- Test data of Result value (dBuV/m) = Reading value (dBuV) + Correction Factor (dB/m).
- Test data of Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Test data of Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- Test data of Notation "@" = Fundamental Frequency
- 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>

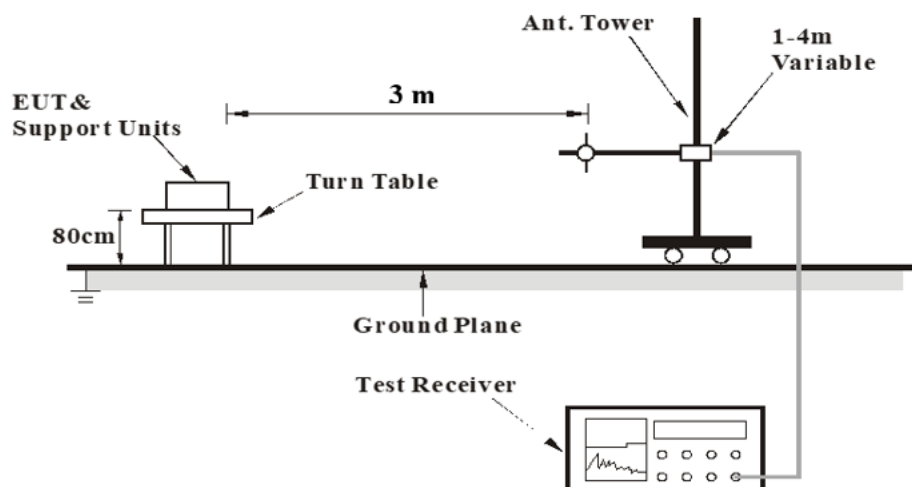


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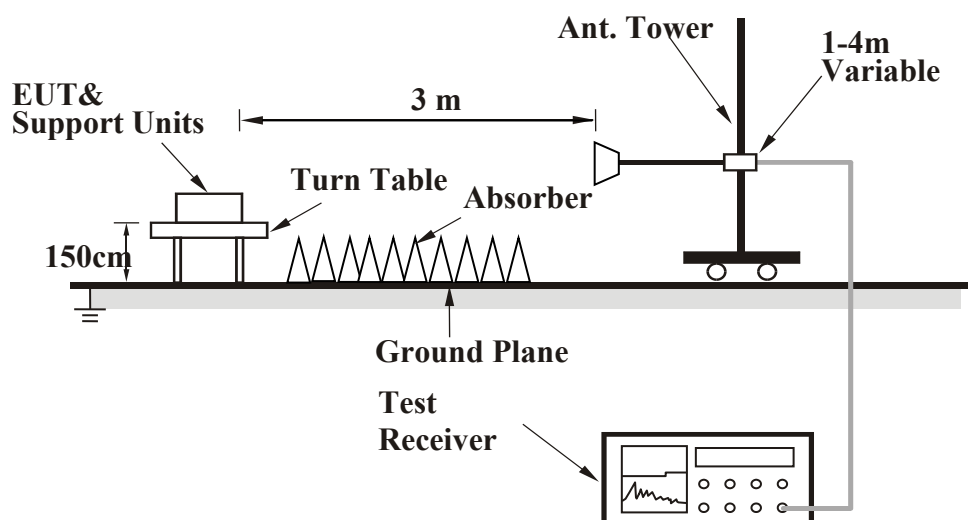
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<Frequency Range 30 MHz ~ 1 GHz >



<Frequency Range above 1 GHz>



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

Test Data

ANTENNA NO.13 (RFA-25-KP010-4B-70)

Above 1 GHz

Mode	Co-location	Channel	11b_TX2412+3DH5_TX2402
------	-------------	---------	------------------------

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		4810	36.37	4.22	40.59	74	-33.41	PK
		4825	37.82	4.21	42.03	74	-31.97	PK
		14395	31.68	27.88	59.56	74	-14.44	PK
		14395	23.16	27.88	51.04	54	-2.96	AVG
		15430	32.17	26.08	58.25	74	-15.75	PK
		15430	23.45	26.08	49.53	54	-4.47	AVG
		16814	35.41	5.41	40.82	74	-33.18	PK
		16882	33.44	5.53	38.97	74	-35.03	PK
		19216	35.51	3.58	39.09	74	-34.91	PK
		19297	33.74	3.66	37.4	74	-36.6	PK
		21618	33.35	6.16	39.51	74	-34.49	PK
		21712	32.34	6.19	38.53	74	-35.47	PK
		24020	33.48	10.74	44.22	74	-29.78	PK
		24116.5	31.44	11.02	42.46	74	-31.54	PK
Vertical		4804	38.47	4.22	42.69	74	-31.31	PK
	*	4824	40.15	4.2	44.35	74	-29.65	PK
		14515	32.42	28.01	60.43	74	-13.57	PK
		14515	22.64	28.01	50.65	54	-3.35	AVG
		15610	31.18	25.47	56.65	74	-17.35	PK
		15610	22.39	25.47	47.86	54	-6.14	AVG
		16814	35.91	5.41	41.32	74	-32.68	PK
	*	16884	32.68	5.54	38.22	74	-35.78	PK
		19216	34.78	3.58	38.36	74	-35.64	PK
	*	19296	36.11	3.66	39.77	74	-34.23	PK
		21618	33.46	6.16	39.62	74	-34.38	PK
	*	21708	33.04	6.18	39.22	74	-34.78	PK
		24020	30.79	10.74	41.53	74	-32.47	PK
	*	24120	32.72	11.03	43.75	74	-30.25	PK

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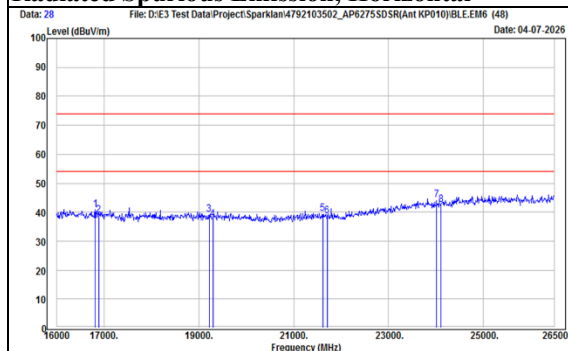
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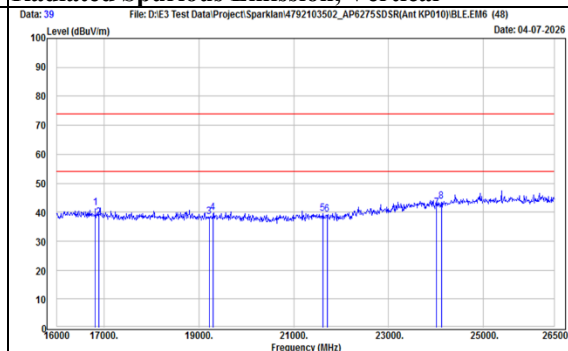
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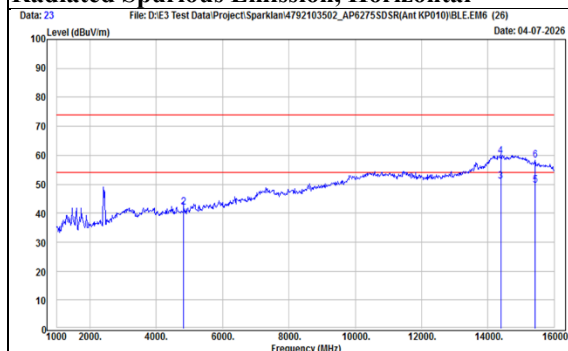
BT+2.4G, Co-location
Radiated Spurious Emission, Horizontal



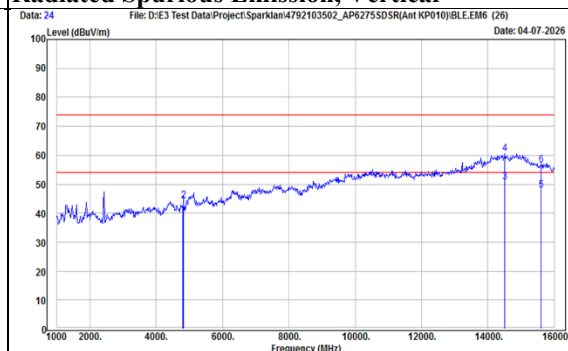
BT+2.4G, Co-location
Radiated Spurious Emission, Vertical



BT+2.4G, Co-location
Radiated Spurious Emission, Horizontal



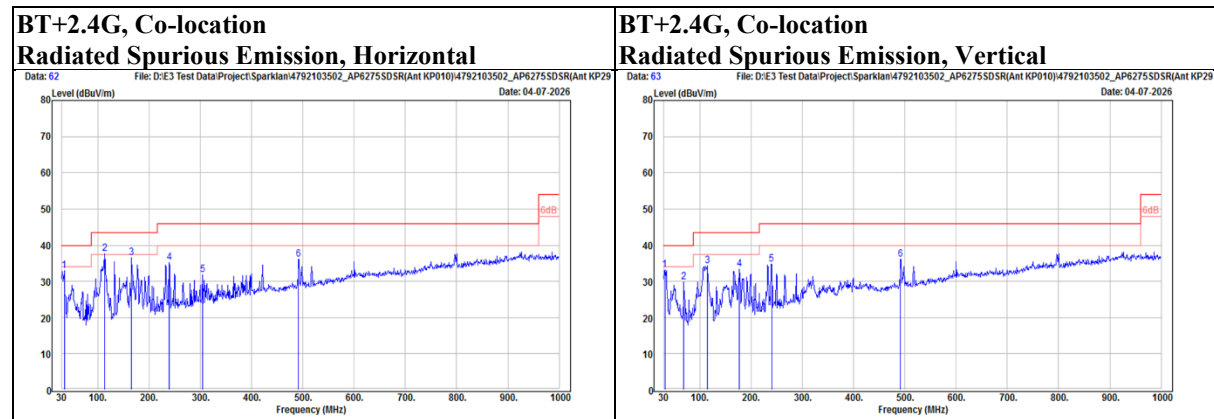
BT+2.4G, Co-location
Radiated Spurious Emission, Vertical



Below 1 GHz

Mode	Co-location	Channel	11b_TX2412+3DH5_TX2402
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		34.85	47.9	-14.87	33.03	40	-6.97	PK
		113.42	51.52	-13.97	37.55	43.5	-5.95	PK
		165.8	52.48	-15.85	36.63	43.5	-6.87	PK
		239.52	46.76	-11.67	35.09	46	-10.91	PK
		304.51	42.19	-10.3	31.89	46	-14.11	PK
		491.72	41.67	-5.57	36.1	46	-9.9	PK
Vertical		31.94	48.88	-15.7	33.18	40	-6.82	PK
		68.8	45.8	-15.97	29.83	40	-10.17	PK
		115.36	48.6	-14.31	34.29	43.5	-9.21	PK
		177.44	48.86	-15.41	33.45	43.5	-10.05	PK
		240.49	46.31	-11.62	34.69	46	-11.31	PK
		491.72	41.67	-5.57	36.1	46	-9.9	PK



Above 1 GHz

Mode	Co-location	Channel	11a_TX5220+3DH5_TX2402
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		3985	45.58	2.06	47.64	74	-26.36	PK
		4810	39.74	4.22	43.96	74	-30.04	PK
		5605	42.67	5.67	48.34	74	-25.66	PK
		10435	32	20.26	52.26	74	-21.74	PK
		14785	31.42	28.28	59.7	74	-14.3	PK
		14785	23.31	28.28	51.59	54	-2.41	AVG
		15595	31.01	25.5	56.51	74	-17.49	PK
		15595	22.44	25.5	47.94	54	-6.06	AVG
		16814	35.34	5.41	40.75	68.2	-27.45	PK
		19216	35.1	3.58	38.68	74	-35.32	PK
	*	20880	33.54	5.19	38.73	74	-35.27	PK
		21618	32.57	6.16	38.73	68.2	-29.47	PK
		24020	31.55	10.74	42.29	68.2	-25.91	PK
	*	26100	34.82	10.69	45.51	68.2	-22.69	PK
	*	31320	34.21	14.24	48.45	74	-25.55	PK
	*	36540	38.39	12.59	50.98	68.2	-17.22	PK
		39640	39.35	17.49	56.84	74	-17.16	PK
		39640	29.51	17.49	47	54	-7	AVG
Vertical		3910	48.45	2.01	50.46	74	-23.54	PK
		4810	36.19	4.22	40.41	74	-33.59	PK
		10435	31.18	20.26	51.44	74	-22.56	PK
		14920	31.51	28.11	59.62	74	-14.38	PK
		14920	22.36	28.11	50.47	54	-3.53	AVG
		15625	30.42	25.47	55.89	74	-18.11	PK
		15625	20.54	25.47	46.01	54	-7.99	AVG
		16814	34.37	5.41	39.78	68.2	-28.42	PK
		19216	35.95	3.58	39.53	74	-34.47	PK
	*	20880	34.39	5.19	39.58	74	-34.42	PK
		21618	32.63	6.16	38.79	68.2	-29.41	PK
		24020	32.96	10.74	43.7	68.2	-24.5	PK
	*	26100	34.97	10.69	45.66	68.2	-22.54	PK
	*	31320	33.2	14.24	47.44	74	-26.56	PK
	*	36540	37.4	12.59	49.99	68.2	-18.21	PK
		39016	38.88	16.72	55.6	74	-18.4	PK
		39016	29.04	16.72	45.76	54	-8.24	AVG

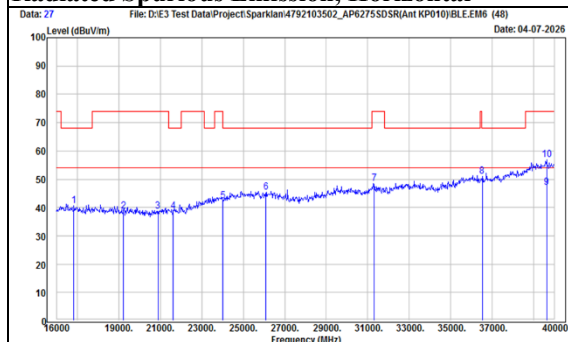
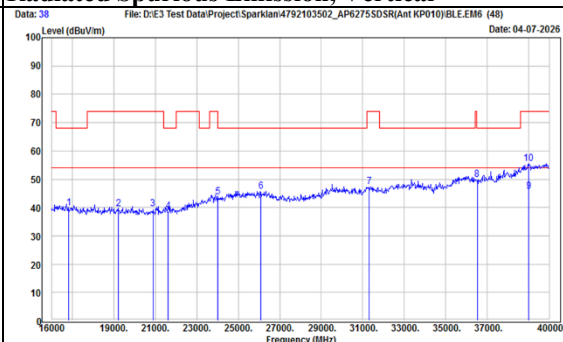
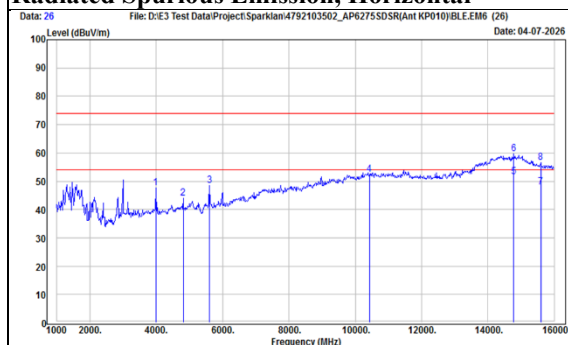
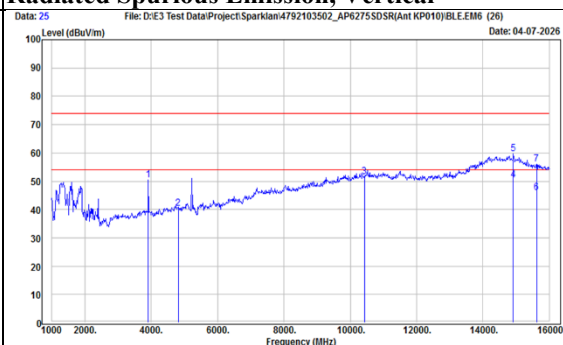
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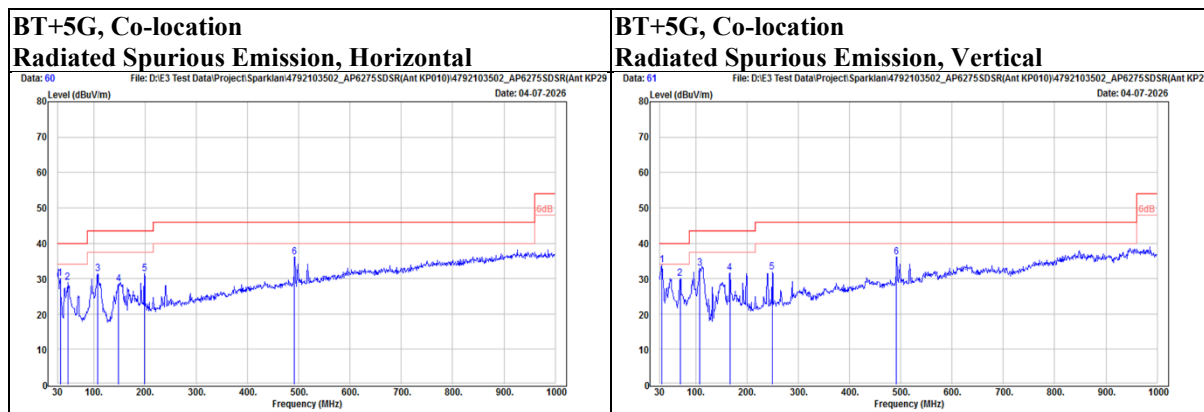
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BT+5G, Co-location
Radiated Spurious Emission, Horizontal

BT+5G, Co-location
Radiated Spurious Emission, Vertical

BT+5G, Co-location
Radiated Spurious Emission, Horizontal

BT+5G, Co-location
Radiated Spurious Emission, Vertical


Below 1 GHz

Mode	Co-location	Channel	11a_TX5220+3DH5_TX2402
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		34.85	44.9	-14.87	30.03	40	-9.97	PK
		49.4	40.76	-11.79	28.97	40	-11.03	PK
		107.6	44.83	-13.47	31.36	43.5	-12.14	PK
		148.34	45.32	-16.94	28.38	43.5	-15.12	PK
		198.78	44.56	-13.13	31.43	43.5	-12.07	PK
		491.72	41.67	-5.57	36.1	46	-9.9	PK
Vertical		33.88	49.31	-15.37	33.94	40	-6.06	PK
		69.77	46.51	-16.41	30.1	40	-9.9	PK
		107.6	46.49	-13.47	33.02	43.5	-10.48	PK
		166.77	47.48	-15.83	31.65	43.5	-11.85	PK
		249.22	43.31	-11.42	31.89	46	-14.11	PK
		491.72	41.67	-5.57	36.1	46	-9.9	PK



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Antenna No.16 (RFA-25-KP290-4B-70)

Above 1 GHz

Mode	Co-location	Channel	11b TX2412+3DH5 TX2402
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		4804	36.02	4.22	40.24	74	-33.76	PK
	*	4824	35.11	4.2	39.31	74	-34.69	PK
		14500	28.99	28	56.99	74	-17.01	PK
		14500	19.97	28	47.97	54	-6.03	AVG
		15350	28.96	26.39	55.35	74	-18.65	PK
		15350	20.13	26.39	46.52	54	-7.48	AVG
		16814	33.51	5.41	38.92	74	-35.08	PK
	*	16884	34.24	5.54	39.78	74	-34.22	PK
		19216	33.99	3.58	37.57	74	-36.43	PK
	*	19296	34.29	3.66	37.95	74	-36.05	PK
		21618	33.3	6.16	39.46	74	-34.54	PK
	*	21708	31.19	6.18	37.37	74	-36.63	PK
		24020	32.6	10.74	43.34	74	-30.66	PK
Vertical	*	24120	31.26	11.03	42.29	74	-31.71	PK
		4804	34.52	4.22	38.74	74	-35.26	PK
	*	4824	34.65	4.2	38.85	74	-35.15	PK
		14500	28.81	28	56.81	74	-17.19	PK
		14500	19.79	28	47.79	54	-6.21	AVG
		15625	29.94	25.47	55.41	74	-18.59	PK
		15625	21.11	25.47	46.58	54	-7.42	AVG
		16814	33.44	5.41	38.85	74	-35.15	PK
	*	16884	33.7	5.54	39.24	74	-34.76	PK
		19216	35.42	3.58	39	74	-35	PK
	*	19296	35.67	3.66	39.33	74	-34.67	PK
		21618	33.32	6.16	39.48	74	-34.52	PK
	*	21708	32.87	6.18	39.05	74	-34.95	PK
		24020	33.29	10.74	44.03	74	-29.97	PK
	*	24120	31.97	11.03	43	74	-31	PK

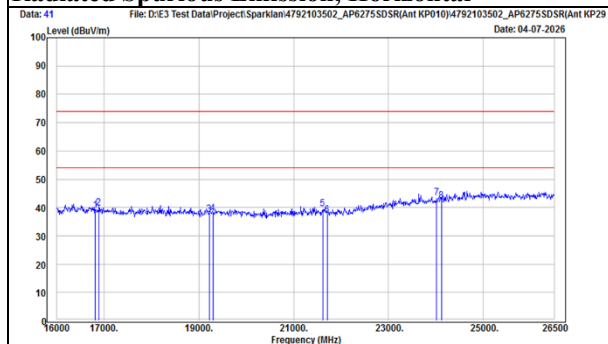
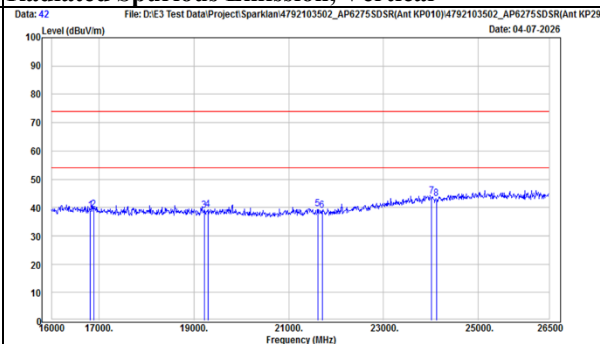
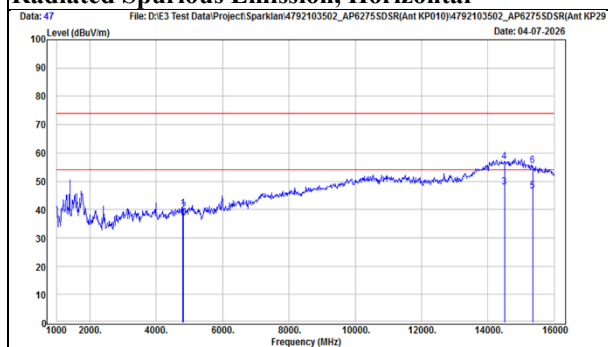
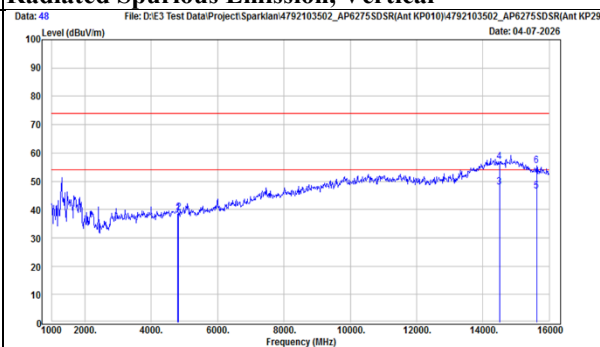
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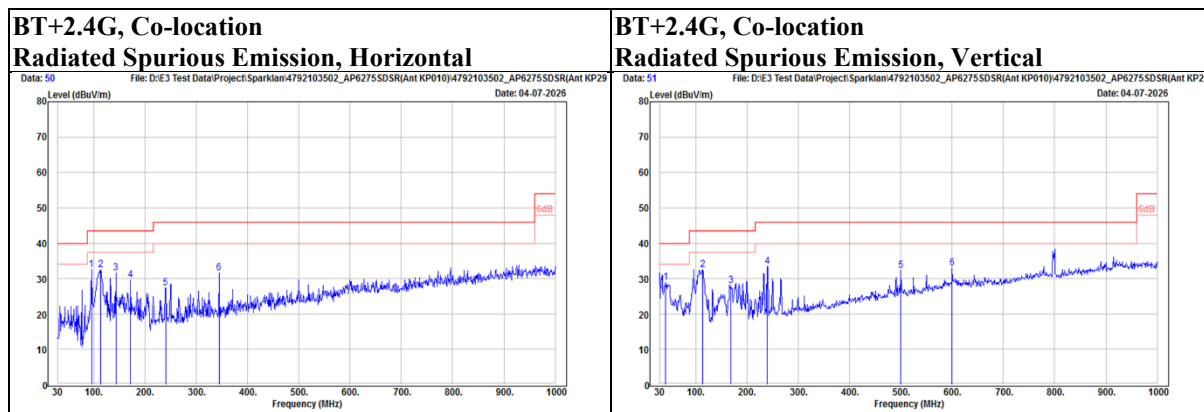
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BT+2.4G, Co-location
Radiated Spurious Emission, Horizontal

BT+2.4G, Co-location
Radiated Spurious Emission, Vertical

BT+2.4G, Co-location
Radiated Spurious Emission, Horizontal

BT+2.4G, Co-location
Radiated Spurious Emission, Vertical


Below 1 GHz

Mode	Co-location	Channel	11b_TX2412+3DH5_TX2402
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		95.96	46.43	-13.9	32.53	43.5	-10.97	PK
		113.42	46.35	-13.97	32.38	43.5	-11.12	PK
		143.49	48.54	-17.02	31.52	43.5	-11.98	PK
		171.62	45.2	-15.7	29.5	43.5	-14	PK
		240.49	39.06	-11.62	27.44	46	-18.56	PK
		344.28	40.16	-8.45	31.71	46	-14.29	PK
Vertical		41.64	41.63	-12.7	28.93	40	-11.07	PK
		113.42	46.43	-13.97	32.46	43.5	-11.04	PK
		168.71	43.79	-15.74	28.05	43.5	-15.45	PK
		239.52	45.04	-11.67	33.37	46	-12.63	PK
		500.45	37.48	-5.24	32.24	46	-13.76	PK
		600.36	35.62	-2.6	33.02	46	-12.98	PK



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Above 1 GHz

Mode	Co-location	Channel	11a_TX5220+3DH5_TX2402
------	-------------	---------	------------------------

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5995	39.72	6.83	46.55	68.2	-21.65	PK
	*	10360	31.98	19.97	51.95	68.2	-16.25	PK
		14470	28.94	27.97	56.91	68.2	-11.29	PK
		14470	19.92	27.97	47.89	54	-6.11	AVG
		15400	29.24	26.14	55.38	74	-18.62	PK
		15400	20.41	26.14	46.55	54	-7.45	AVG
		16814	34.11	5.41	39.52	68.2	-28.68	PK
		19216	33.8	3.58	37.38	74	-36.62	PK
	*	20720	34.6	4.98	39.58	74	-34.42	PK
		21618	32.61	6.16	38.77	68.2	-29.43	PK
		24020	31.88	10.74	42.62	68.2	-25.58	PK
	*	25900	34.64	10.72	45.36	68.2	-22.84	PK
	*	31080	33.55	13.27	46.82	68.2	-21.38	PK
	*	36260	37.43	13.44	50.87	68.2	-17.33	PK
		39856	38.29	17.85	56.14	74	-17.86	PK
Vertical		39856	28.45	17.85	46.3	54	-7.7	AVG
		4810	35.08	4.22	39.3	74	-34.7	PK
		5980	40.64	6.79	47.43	68.2	-20.77	PK
	*	10360	30.73	19.97	50.7	68.2	-17.5	PK
		14485	28.69	27.98	56.67	74	-17.33	PK
		14485	19.67	27.98	47.65	54	-6.35	AVG
		15370	29.33	26.29	55.62	74	-18.38	PK
		15370	20.5	26.29	46.79	54	-7.21	AVG
		16814	34.65	5.41	40.06	68.2	-28.14	PK
		19216	34.89	3.58	38.47	74	-35.53	PK
	*	20720	33.75	4.98	38.73	74	-35.27	PK
		21616	33.95	6.16	40.11	68.2	-28.09	PK
		24020	31.79	10.74	42.53	68.2	-25.67	PK
	*	25900	34.5	10.72	45.22	68.2	-22.98	PK
	*	31080	33.91	13.27	47.18	68.2	-21.02	PK
	*	36260	37	13.44	50.44	68.2	-17.76	PK
		39376	38.43	17.29	55.72	74	-18.28	PK
		39376	28.59	17.29	45.88	54	-8.12	AVG

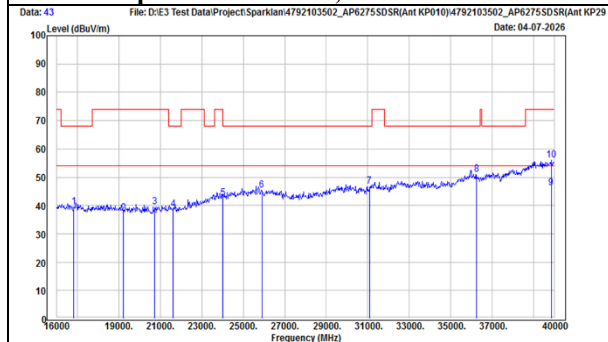
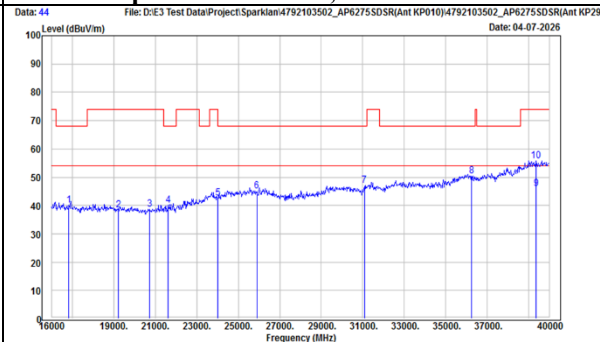
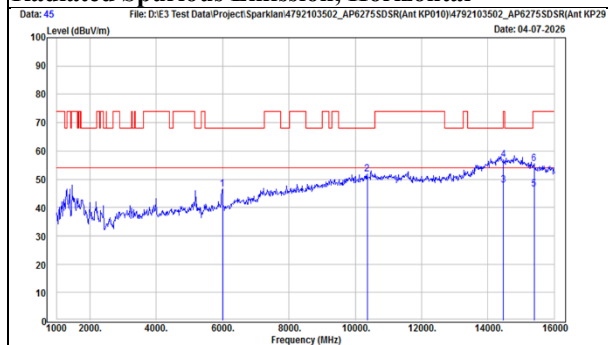
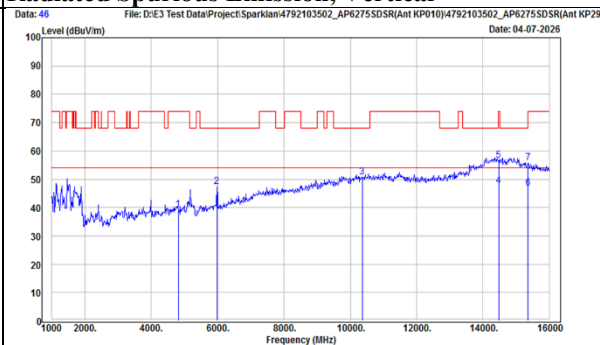
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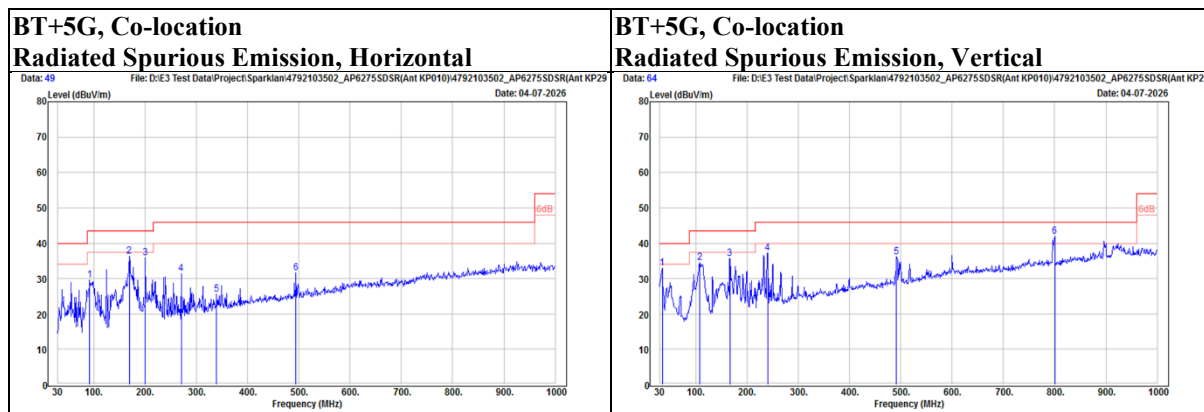
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BT+5G, Co-location
Radiated Spurious Emission, Horizontal

BT+5G, Co-location
Radiated Spurious Emission, Vertical

BT+5G, Co-location
Radiated Spurious Emission, Horizontal

BT+5G, Co-location
Radiated Spurious Emission, Vertical


Below 1 GHz

Mode	Co-location	Channel	11a_TX5220+3DH5_TX2402
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		92.08	44.45	-14.88	29.57	43.5	-13.93	PK
		169.68	52.12	-15.71	36.41	43.5	-7.09	PK
		200.72	49.18	-13.42	35.76	43.5	-7.74	PK
		270.56	42.68	-11.34	31.34	46	-14.66	PK
		339.43	34.22	-8.71	25.51	46	-20.49	PK
		494.63	36.99	-5.41	31.58	46	-14.42	PK
Vertical		34.85	47.9	-14.87	33.03	40	-6.97	PK
		107.6	47.87	-13.47	34.4	43.5	-9.1	PK
		166.77	51.53	-15.83	35.7	43.5	-7.8	PK
		240.49	48.86	-11.62	37.24	46	-8.76	PK
		491.72	41.67	-5.57	36.1	46	-9.9	PK
		800.18	42.04	-0.03	42.01	46	-3.99	PK



Underwriters Laboratories Taiwan Co., Ltd.

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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.

END OF REPORT**Underwriters Laboratories Taiwan Co., Ltd.**

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