



Co-location Report

FCC ID: Q9DAPIN0504505

APPLICANT: Hewlett Packard Enterprise Company

Application Type: Class III Permissive Change

Product: ACCESS POINT

Model No.: APIN0504, APIN0505

Brand Name:  

FCC Rule Part(s): Part15 Subpart C (Section 15.247)
Part15 Subpart E (Section 15.407)

Test Date: June 10 ~ July 10, 2019

Reviewed By:



(Paddy Chen)

Approved By:



(Chenz Ker)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2013. Test results reported herein relate only to the item(s) tested.

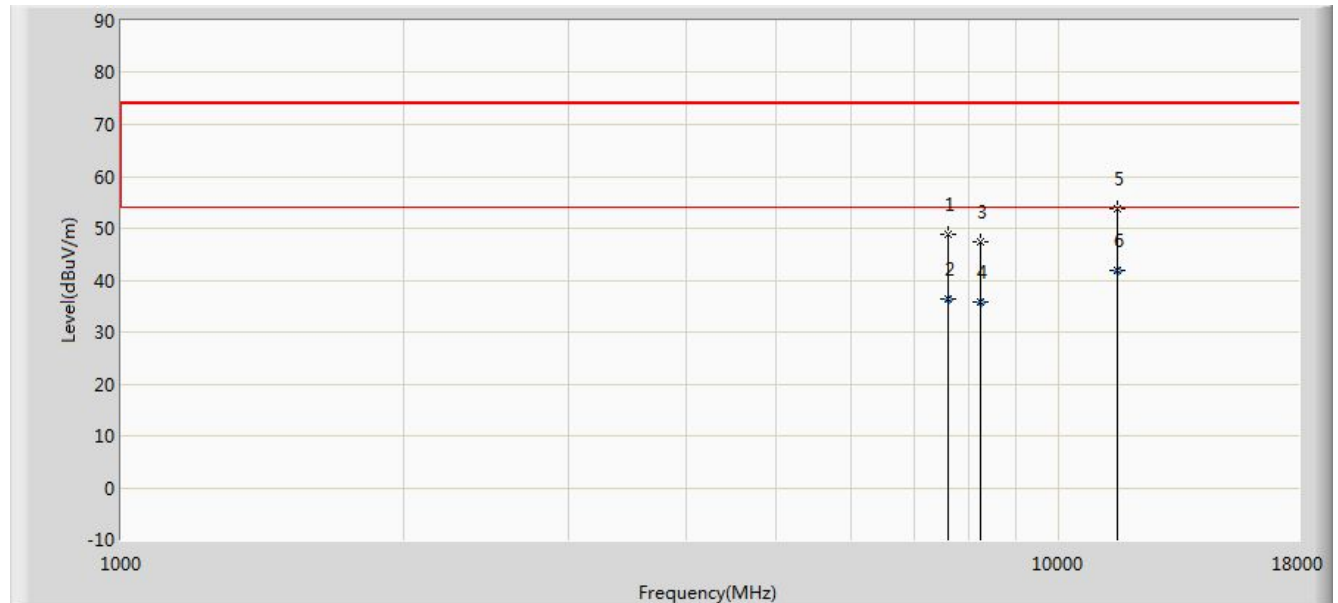
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Revision History

Report No.	Version	Description	Issue Date	Note
1906TW0102-U11	Rev. 01	Initial Report	09-25-2019	Valid

1. TEST RESULT of Radiated Emissions for Co-located

Test Mode:	2.4GHz, 5GHz Wi-Fi + BLE Transmit	Test Site:	AC1
Test Engineer:	Kevin	Polarity:	Horizontal
Antenna Type:	Omni Antenna (M/N: AP-ANT-20W)	Model No.:	APIN0504
Remark:	There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.		



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7630.000	48.777	37.089	-25.223	74.000	11.688	PK
2			7630.514	36.418	24.568	-17.582	54.000	11.850	AV
3			8250.500	47.529	35.260	-26.471	74.000	12.270	PK
4			8250.687	35.930	23.587	-18.070	54.000	12.343	AV
5			11557.000	53.687	36.131	-20.313	74.000	17.556	PK
6		*	11557.284	41.868	23.845	-12.132	54.000	18.024	AV

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: We selected the 2.4GHz and 5GHz worst-case mode of radiated spurious emissions in the DTS and UNII reports.

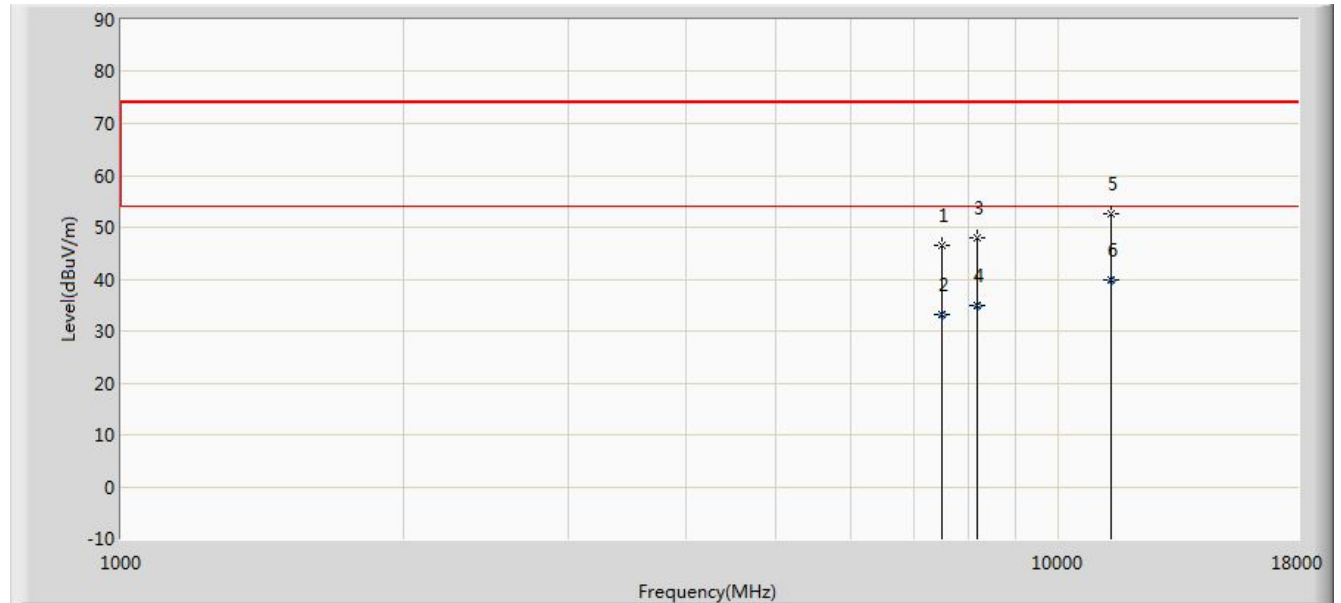
Note 3: 2.4GHz Wi-Fi 802.11n-HT20 Channel 2437MHz Power setting = 80;

5GHz Wi-Fi 802.11a Channel 5320MHz Power setting = 76;

2.4GHz Bluetooth LE channel 2402MHz Power setting = 8;

Note 4: ZigBee and Bluetooth-LE can't transmit simultaneously and Bluetooth-LE power higher than ZigBee, so we only assess the WIFI and Bluetooth-LE simultaneous transmission.

Test Mode:	2.4GHz, 5GHz Wi-Fi + BLE Transmit	Test Site:	AC1
Test Engineer:	Kevin	Polarity:	Vertical
Antenna Type:	Omni Antenna (M/N: AP-ANT-20W)	Model No.:	APIN0504
Remark:	There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.		



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7511.000	46.408	34.488	-27.592	74.000	11.920	PK
2			7511.547	33.296	21.569	-20.704	54.000	11.727	AV
3			8199.500	47.896	35.492	-26.104	74.000	12.404	PK
4			8199.557	34.867	22.547	-19.133	54.000	12.320	AV
5			11370.000	52.605	34.987	-21.395	74.000	17.618	PK
6		*	11370.847	39.782	21.854	-14.218	54.000	17.929	AV

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: We selected the 2.4GHz and 5GHz worst-case mode of radiated spurious emissions in the DTS and UNII reports.

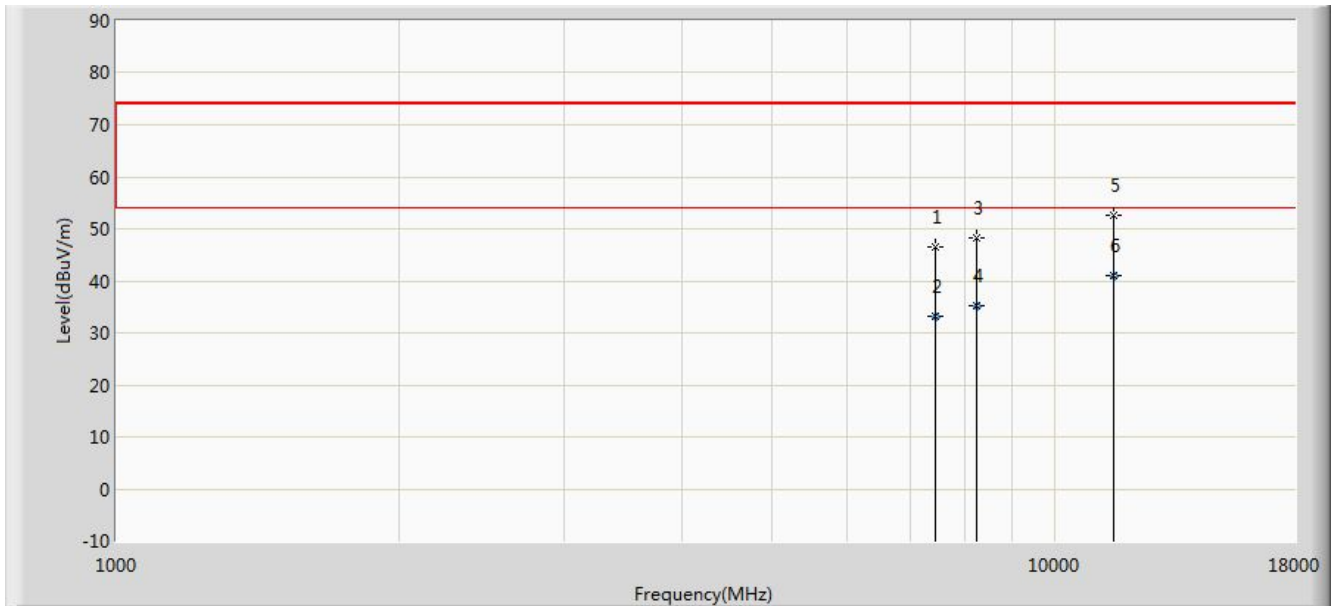
Note 3: 2.4GHz Wi-Fi 802.11n-HT20 Channel 2437MHz Power setting = 80;

5GHz Wi-Fi 802.11a Channel 5320MHz Power setting = 76;

2.4GHz Bluetooth LE channel 2402MHz Power setting = 8;

Note 4: ZigBee and Bluetooth-LE can't transmit simultaneously and Bluetooth-LE power higher than ZigBee, so we only assess the WIFI and Bluetooth-LE simultaneous transmission.

Test Mode:	2.4GHz, 5GHz Wi-Fi + BLE Transmit	Test Site:	AC1
Test Engineer:	Kevin	Polarity:	Horizontal
Antenna Type:	Directional Antenna (M/N: AP-ANT-28)	Model No.:	APIN0504
Remark:	There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.		



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7451.500	46.598	34.742	-27.402	74.000	11.856	PK
2			7451.658	33.241	21.634	-20.759	54.000	11.608	AV
3			8259.000	48.203	35.964	-25.797	74.000	12.239	PK
4			8259.347	35.093	22.746	-18.907	54.000	12.347	AV
5			11540.000	52.711	35.097	-21.289	74.000	17.614	PK
6		*	11540.785	40.872	22.840	-13.128	54.000	18.031	AV

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: We selected the 2.4GHz and 5GHz worst-case mode of radiated spurious emissions in the DTS and UNII reports.

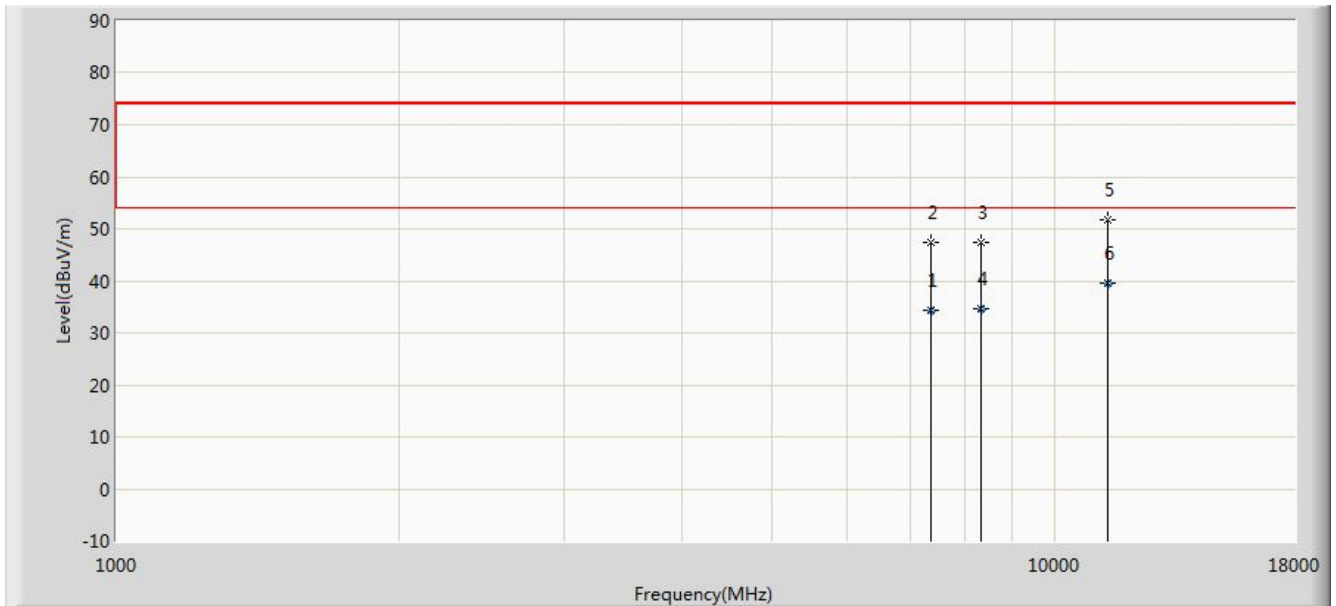
Note 3: 2.4GHz Wi-Fi 802.11n-HT20 Channel 2437MHz Power setting = 80;

5GHz Wi-Fi 802.11ac-VHT20 Channel 5320MHz Power setting = 71;

2.4GHz Bluetooth LE channel 2402MHz Power setting = 8;

Note 4: ZigBee and Bluetooth-LE can't transmit simultaneously and Bluetooth-LE power higher than ZigBee, so we only assess the WIFI and Bluetooth-LE simultaneous transmission.

Test Mode:	2.4GHz, 5GHz Wi-Fi + BLE Transmit	Test Site:	AC1
Test Engineer:	Kevin	Polarity:	Vertical
Antenna Type:	Directional Antenna (M/N: AP-ANT-28)	Model No.:	APIN0504
Remark:	There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.		



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7383.412	34.318	22.864	-19.682	54.000	11.454	AV
2			7383.500	47.523	35.817	-26.477	74.000	11.706	PK
3			8352.500	47.355	35.277	-26.645	74.000	12.078	PK
4			8352.758	34.547	22.159	-19.453	54.000	12.388	AV
5			11387.000	51.811	34.186	-22.189	74.000	17.625	PK
6		*	11387.658	39.583	21.638	-14.417	54.000	17.945	AV

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: We selected the 2.4GHz and 5GHz worst-case mode of radiated spurious emissions in the DTS and UNII reports.

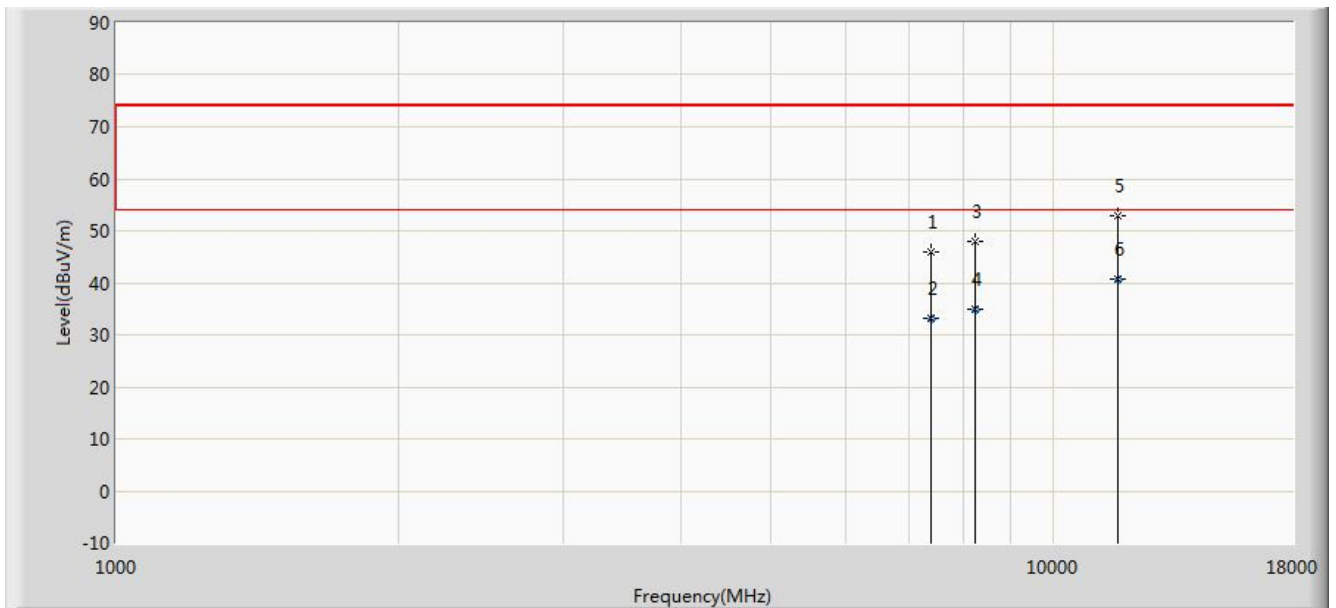
Note 3: 2.4GHz Wi-Fi 802.11n-HT20 Channel 2437MHz Power setting = 80;

5GHz Wi-Fi 802.11ac-VHT20 Channel 5320MHz Power setting = 71;

2.4GHz Bluetooth LE channel 2402MHz Power setting = 8;

Note 4: ZigBee and Bluetooth-LE can't transmit simultaneously and Bluetooth-LE power higher than ZigBee, so we only assess the WIFI and Bluetooth-LE simultaneous transmission.

Test Mode:	2.4GHz, 5GHz Wi-Fi + BLE Transmit	Test Site:	AC1
Test Engineer:	Kevin	Polarity:	Horizontal
Antenna Type:	Internal Antenna	Model No.:	APIN0505
Remark:	There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.		



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7409.000	46.016	34.291	-27.984	74.000	11.725	PK
2			7409.545	33.097	21.584	-20.903	54.000	11.514	AV
3			8250.500	47.966	35.697	-26.034	74.000	12.270	PK
4			8250.657	35.027	22.684	-18.973	54.000	12.343	AV
5			11727.000	52.884	35.706	-21.116	74.000	17.178	PK
6		*	11727.545	40.701	22.756	-13.299	54.000	17.945	AV

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: We selected the 2.4GHz and 5GHz worst-case mode of radiated spurious emissions in the DTS and UNII reports.

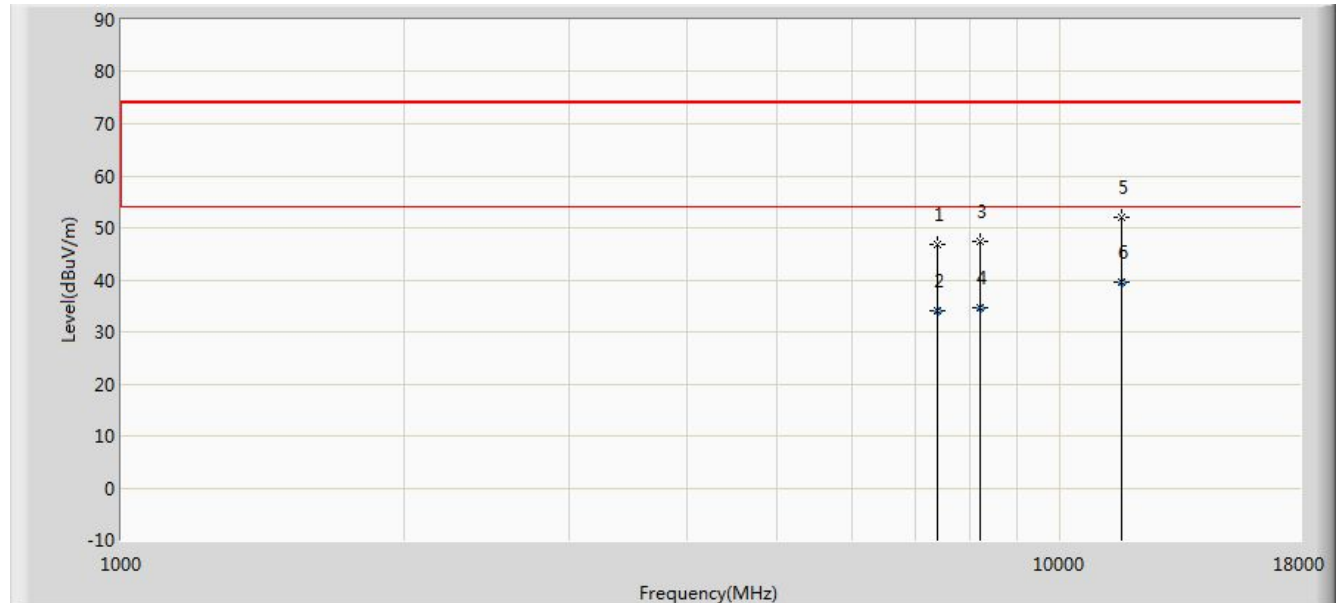
Note 3: 2.4GHz Wi-Fi 802.11b Channel 2412MHz Power setting = 75;

5GHz Wi-Fi 802.11ac-VHT40 Channel 5270MHz Power setting = 78;

2.4GHz Bluetooth LE channel 2402MHz Power setting = 8;

Note 4: ZigBee and Bluetooth-LE can't transmit simultaneously and Bluetooth-LE power higher than ZigBee, so we only assess the WIFI and Bluetooth-LE simultaneous transmission.

Test Mode:	2.4GHz, 5GHz Wi-Fi + BLE Transmit	Test Site:	AC1
Test Engineer:	Kevin	Polarity:	Vertical
Antenna Type:	Internal Antenna	Model No.:	APIN0505
Remark:	There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.		



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7400.500	46.758	35.044	-27.242	74.000	11.714	PK
2			7400.854	34.177	22.684	-19.823	54.000	11.493	AV
3			8208.000	47.460	35.138	-26.540	74.000	12.322	PK
4			8208.698	34.772	22.448	-19.228	54.000	12.324	AV
5			11616.500	52.161	34.812	-21.839	74.000	17.348	PK
6		*	11616.825	39.564	21.568	-14.436	54.000	17.997	AV

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: We selected the 2.4GHz and 5GHz worst-case mode of radiated spurious emissions in the DTS and UNII reports.

Note 3: 2.4GHz Wi-Fi 802.11b Channel 2412MHz Power setting = 75;

5GHz Wi-Fi 802.11ac-VHT40 Channel 5270MHz Power setting = 78;

2.4GHz Bluetooth LE channel 2402MHz Power setting = 8;

Note 4: ZigBee and Bluetooth-LE can't transmit simultaneously and Bluetooth-LE power higher than ZigBee, so we only assess the WIFI and Bluetooth-LE simultaneous transmission.

The End

Appendix A – Test Setup Photograph

Refer to 1906TW0102-UT file.

Appendix B – EUT Photograph

Refer to 1906TW0102-UE file.