

9.4. POWER SPECTRAL DENSITY

802.11b		Test Result			
Frequency (MHz)	Channel No.	Measured Power (dBm/10kHz)	Duty Factor (dB)	Result (dBm/10kHz)	Limit (dBm/3kHz)
2412	1	-15.86	3.20	-12.66	≤ 8.00
2437	6	-15.62	3.20	-12.43	≤ 8.00
2462	11	-16.02	3.20	-12.82	≤ 8.00

802.11g		Test Result			
Frequency (MHz)	Channel No.	Measured Power (dBm/10kHz)	Duty Factor (dB)	Result (dBm/10kHz)	Limit (dBm/3kHz)
2412	1	-19.45	3.22	-16.22	≤ 8.00
2437	6	-19.51	3.22	-16.29	≤ 8.00
2462	11	-19.17	3.22	-15.95	≤ 8.00

802.11n HT20		Test Result			
Frequency (MHz)	Channel No.	Measured Power (dBm/10kHz)	Duty Factor (dB)	Result (dBm/10kHz)	Limit (dBm/3kHz)
2412	1	-20.46	3.32	-17.13	≤ 8.00
2437	6	-19.68	3.32	-16.36	≤ 8.00
2462	11	-19.94	3.32	-16.61	≤ 8.00

802.11n HT40		Test Result			
Frequency (MHz)	Channel No.	Measured Power (dBm/10kHz)	Duty Factor (dB)	Result (dBm/10kHz)	Limit (dBm/3kHz)
2422	3	-23.66	3.23	-20.42	≤ 8.00
2437	6	-23.18	3.23	-19.95	≤ 8.00
2452	9	-23.18	3.23	-19.94	≤ 8.00

Note :

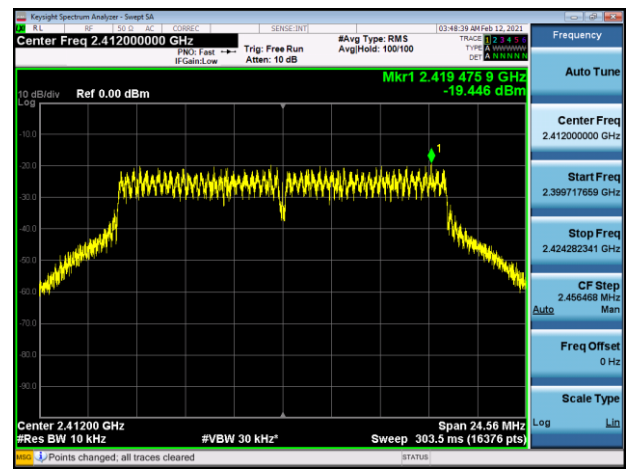
1. The output power results in plot include the spectrum offset, which is a combination loss of the attenuator and the cable used for testing.

TET PLOTS

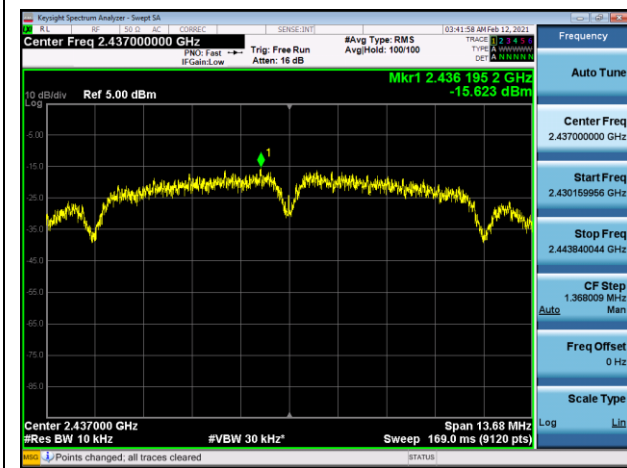
802.11b (CH1 : 2412 MHz)



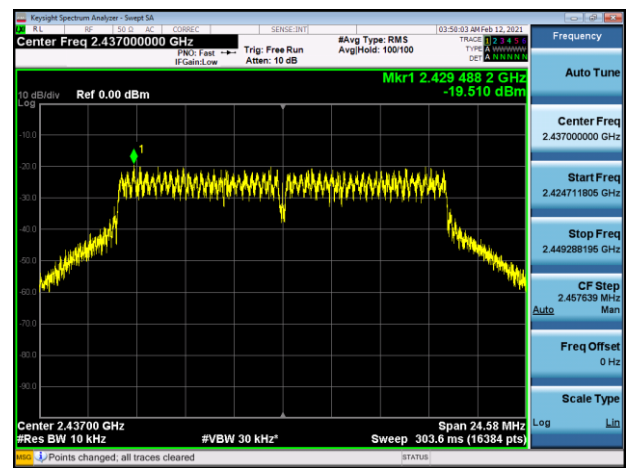
802.11g (CH1 : 2412 MHz)



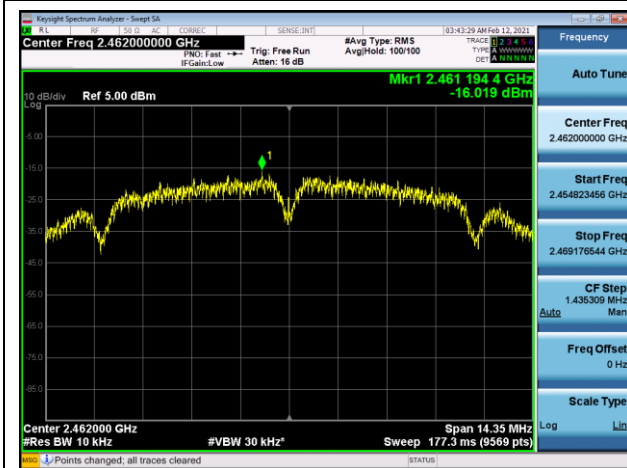
802.11b (CH6 : 2437 MHz)



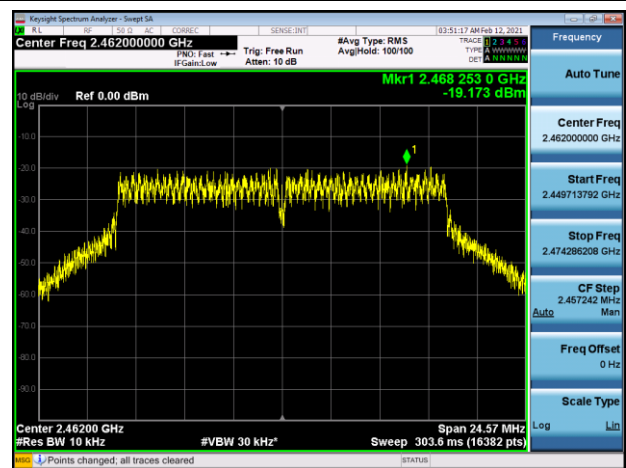
802.11g (CH6 : 2437 MHz)



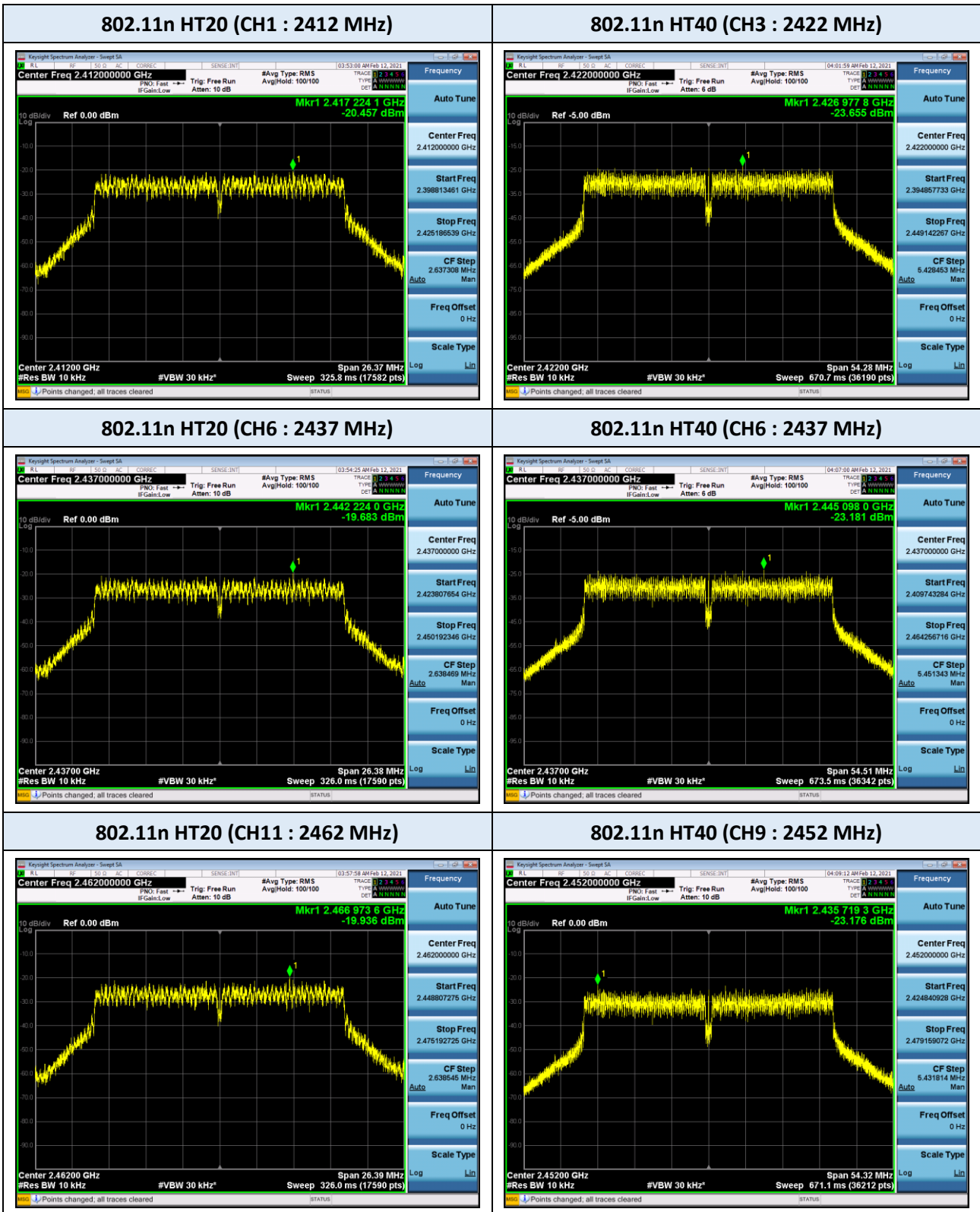
802.11b (CH11 : 2462 MHz)



802.11g (CH11 : 2462 MHz)



TET PLOTS (PSD)



9.5. CONDUCTED BAND EDGE & SPURIOUS EMISSIONS

Out of Band Emissions at the Band Edge

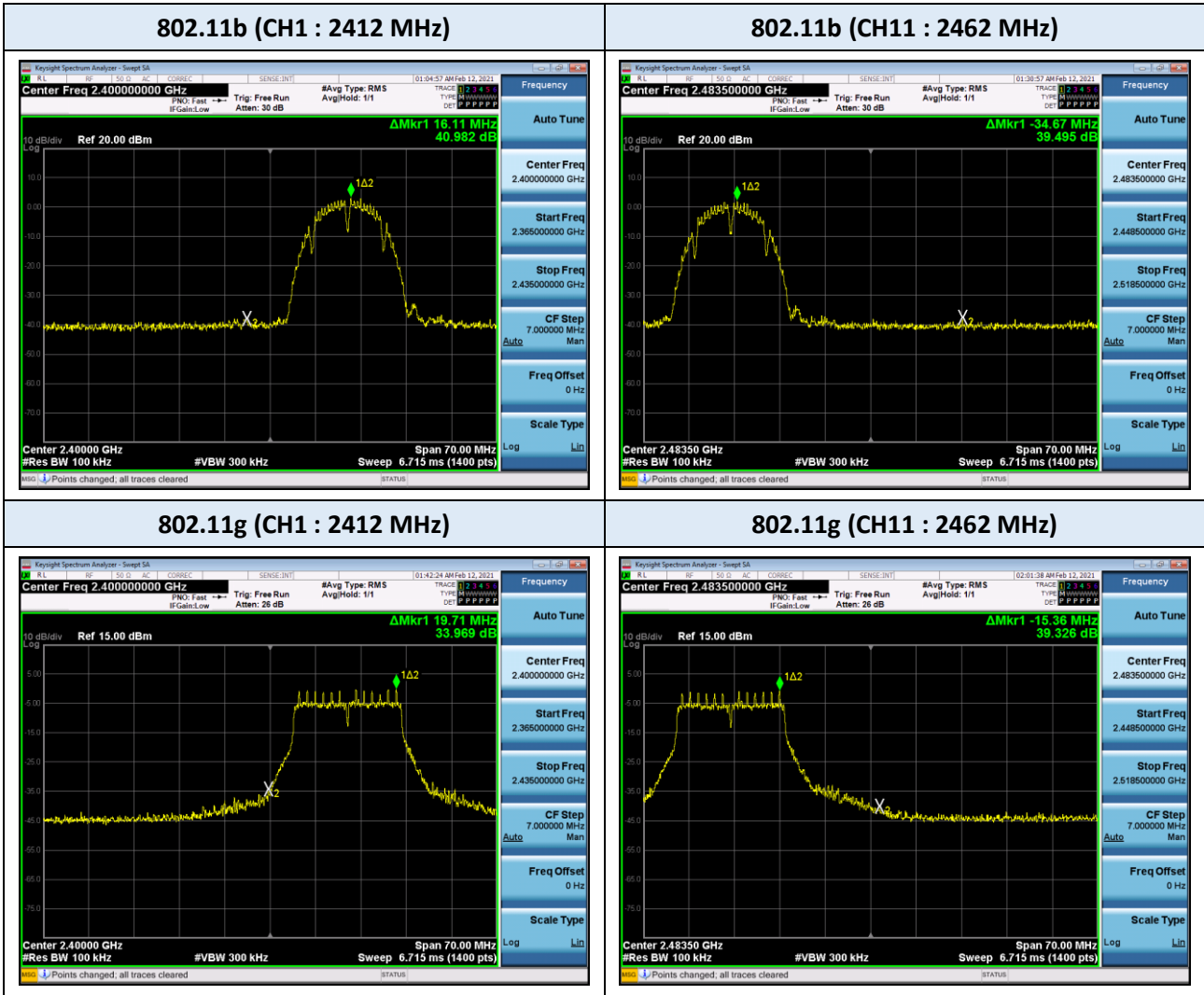
802.11b			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dB]	Limit [dBc]	Result
2412	1	Low	40.982	≥ 20	Compliant
2462	11	High	39.495	≥ 20	Compliant

802.11g			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dB]	Limit [dBc]	Result
2412	1	Low	33.969	≥ 20	Compliant
2462	11	High	39.326	≥ 20	Compliant

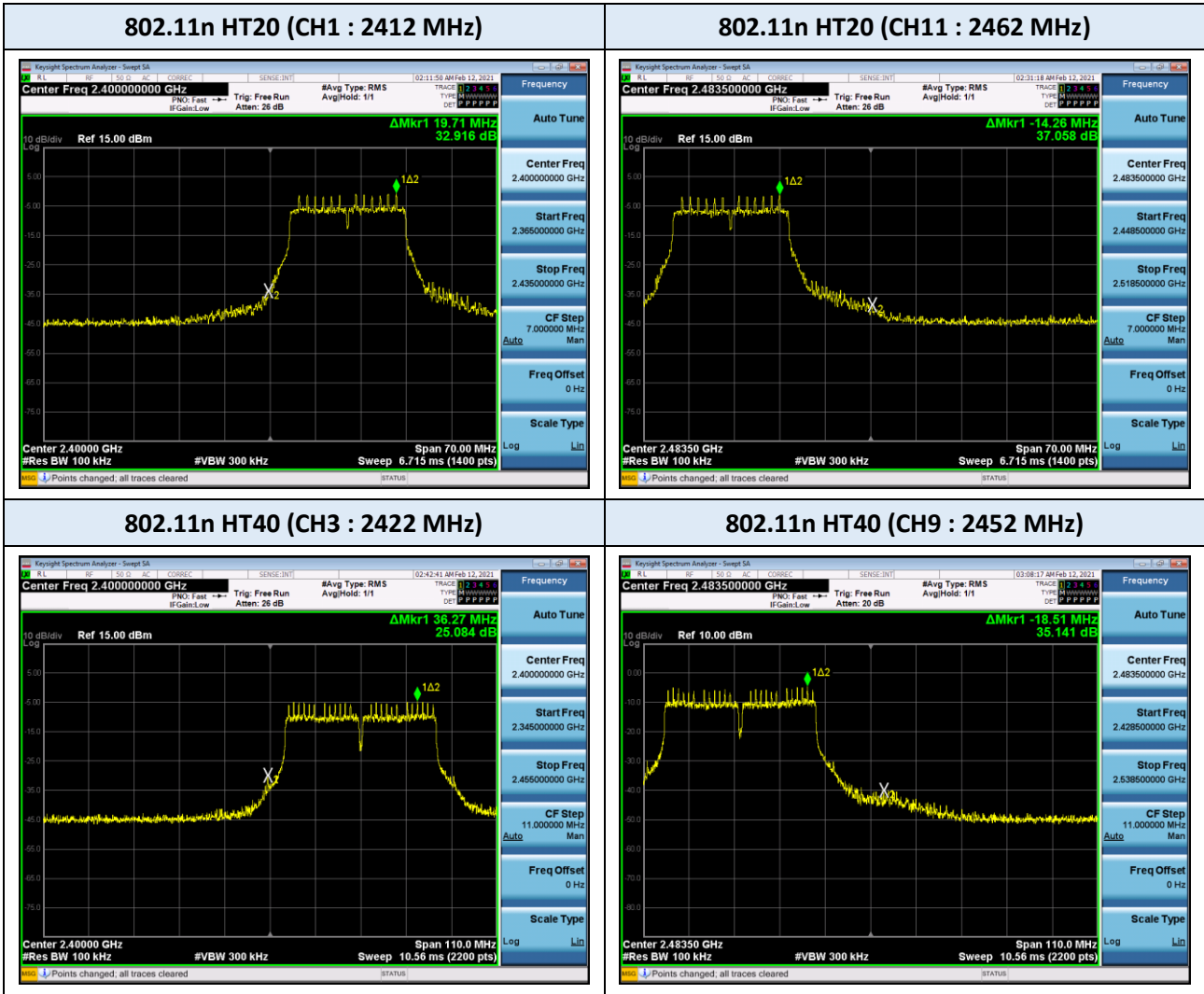
802.11n HT20			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dB]	Limit [dBc]	Result
2412	1	Low	32.916	≥ 20	Compliant
2462	11	High	37.058	≥ 20	Compliant

802.11n HT40			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dB]	Limit [dBc]	Result
2422	3	Low	25.084	≥ 20	Compliant
2452	9	High	35.141	≥ 20	Compliant

TEST PLOTS



TEST PLOTS



Conducted Spurious Emissions

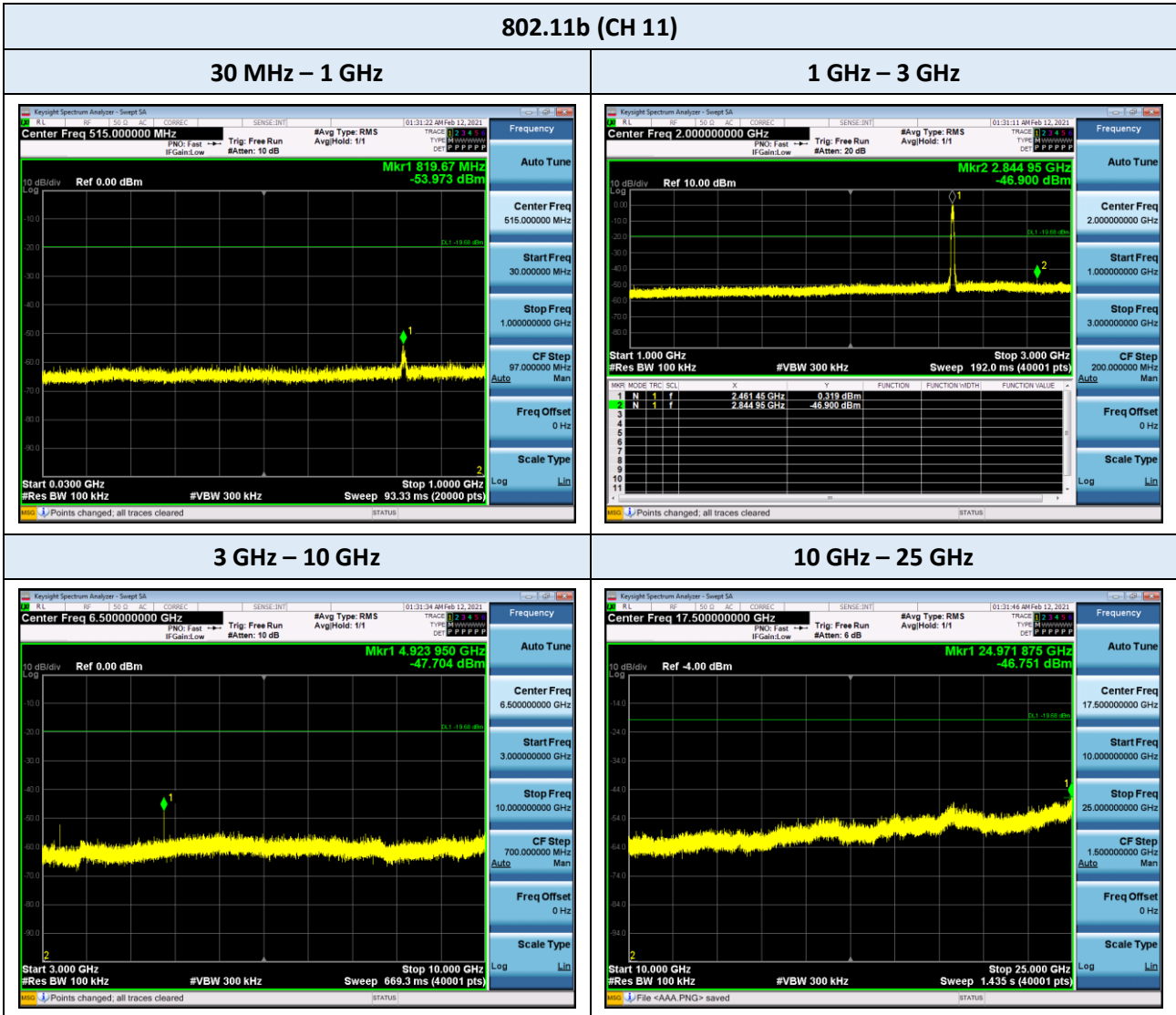
802.11b			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dBc]	Limit [dBc]	Result
2412	1	Low	48.088	≥ 20	Compliant
2437	6	Middle	47.902	≥ 20	Compliant
2462	11	High	47.070	≥ 20	Compliant

802.11g			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dBc]	Limit [dBc]	Result
2412	1	Low	44.407	≥ 20	Compliant
2437	6	Middle	42.078	≥ 20	Compliant
2462	11	High	44.248	≥ 20	Compliant

802.11n HT20			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dBc]	Limit [dBc]	Result
2412	1	Low	44.679	≥ 20	Compliant
2437	6	Middle	43.167	≥ 20	Compliant
2462	11	High	43.571	≥ 20	Compliant

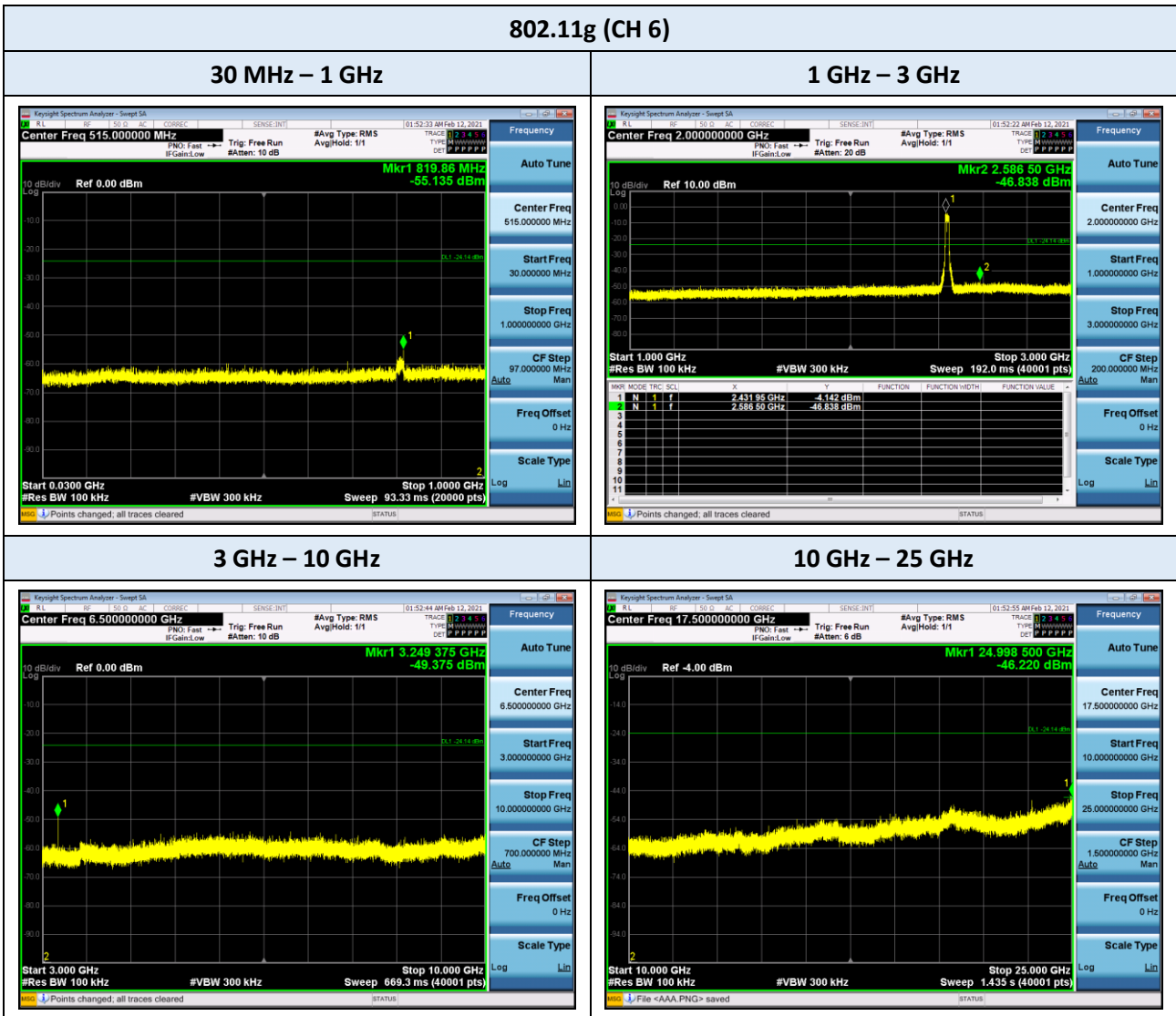
802.11n HT40			Test Result		
Frequency [MHz]	Channel No.	Position	Measured Level [dBc]	Limit [dBc]	Result
2422	3	Low	40.599	≥ 20	Compliant
2437	6	Middle	40.485	≥ 20	Compliant
2452	9	High	39.396	≥ 20	Compliant

TEST PLOTS



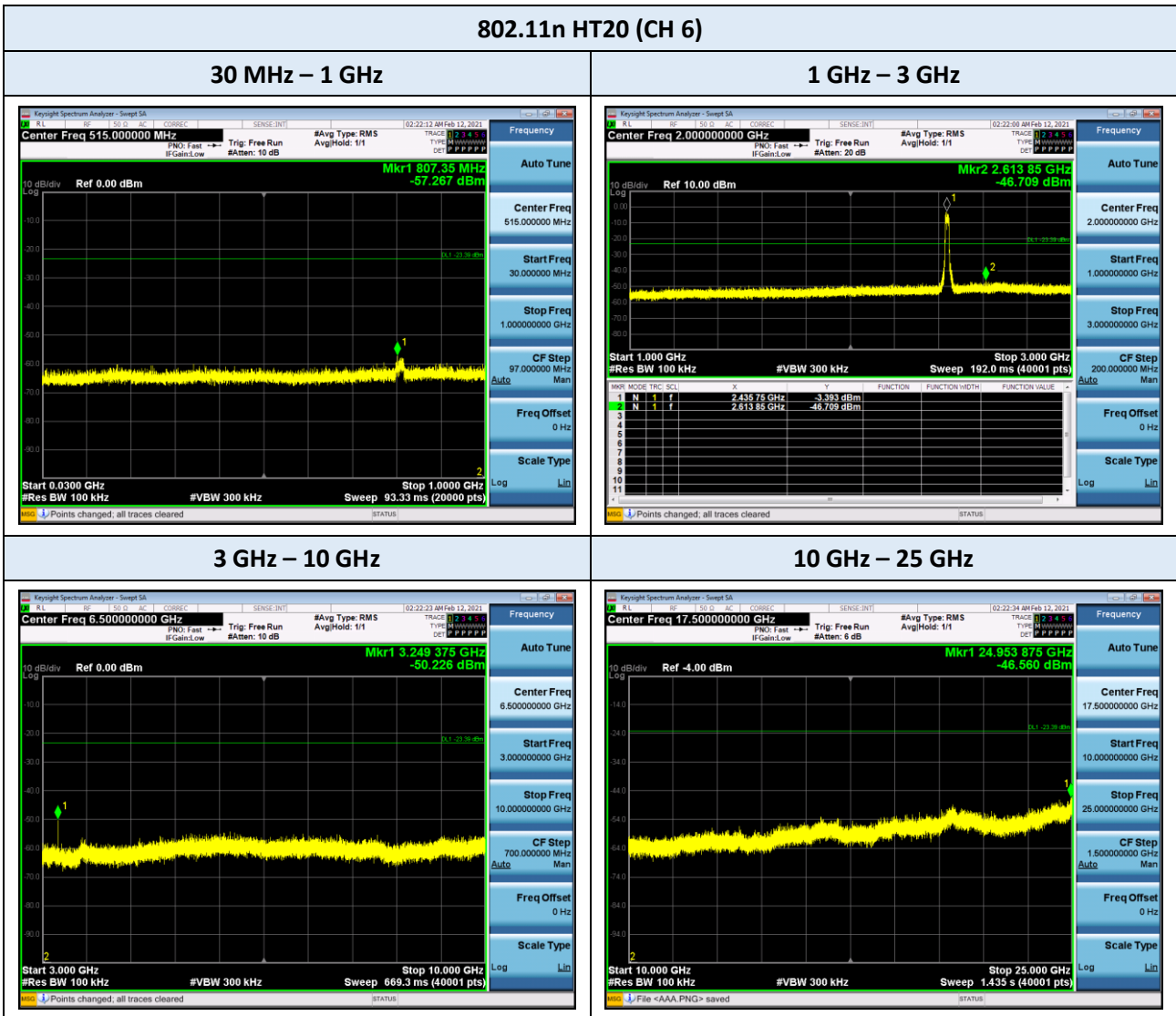
Note:
The plots included in this report are only at the worst-case channel

TEST PLOTS



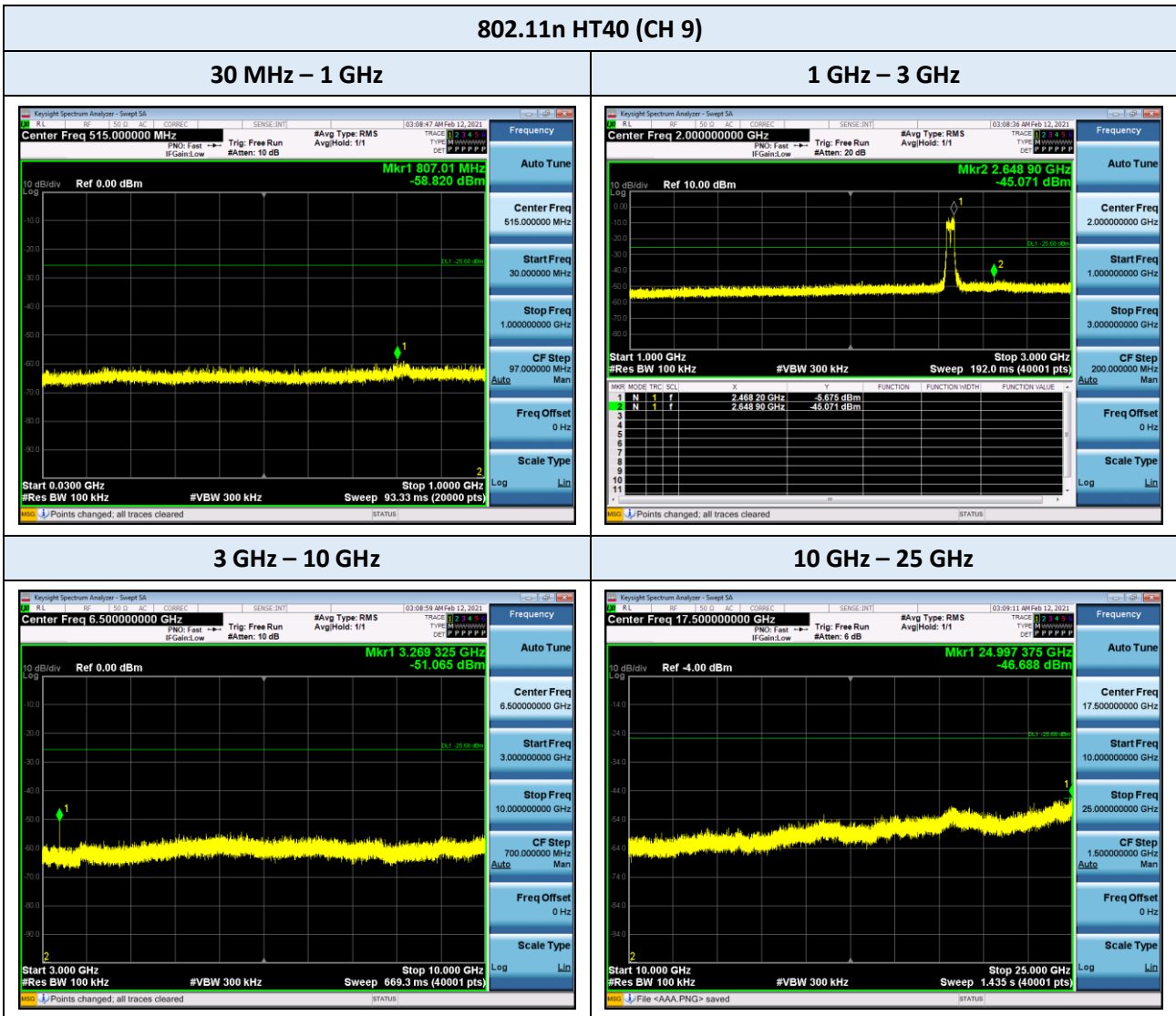
Note:
The plots included in this report are only at the worst-case channel

TEST PLOTS



Note:
 The plots included in this report are only at the worst-case channel

TEST PLOTS



Note:
The plots included in this report are only at the worst-case channel

9.6. RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30 MHz

Test Mode 802.11b : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
0.559	90°	28.9	14.7	43.6	72.7	29.1	QP
0.678	180°	27.2	14.8	42.0	71.0	29.0	QP
11.060	90°	19.6	14.9	34.5	69.5	35.0	QP
22.121	90°	22.4	13.2	35.6	69.5	33.9	QP

Test Mode 802.11g : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
0.512	90°	29.7	14.7	44.4	73.4	29.0	QP
0.674	180°	27.1	14.8	41.9	71	29.1	QP
11.061	90°	19.3	14.9	34.2	69.5	35.3	QP
22.119	90°	22.2	13.2	35.4	69.5	34.1	QP

Test Mode 802.11n HT20 : TX mode
 Operating Frequency 2462 MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
0.566	90°	28.8	14.7	43.5	72.5	29.0	QP
0.670	180°	27.3	14.8	42.1	71.1	29.0	QP
11.059	90°	19.1	14.9	34.0	69.5	35.5	QP
22.121	90°	22.3	13.2	35.5	69.5	34.0	QP

Notes:

1. Correction Factor: Antenna Factor + Cable loss
2. Limit line = Specific Limits (dBuV) + Distance extrapolation factor
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
4. The measurement distance is 3 meters.

Frequency Range : Below 1 GHz

Test Mode 802.11b : TX mode
 Operating Frequency 2412 MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
61.901	V	35.7	-12.9	22.8	40	17.2	QP
166.673	H	31.6	-8.7	22.9	43.5	20.6	QP

Test Mode 802.11b : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
62.936	V	36.1	-12.8	23.3	40	16.7	QP
167.249	H	31.5	-8.7	22.8	43.5	20.7	QP

Test Mode 802.11b : TX mode
 Operating Frequency 2462 MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
62.797	V	35.8	-12.8	23.0	40	17.0	QP
166.195	H	31.0	-8.6	22.4	43.5	21.1	QP

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Preamplifier Gain

Frequency Range : Above 1 GHz

Test Mode 802.11b : TX mode
 Operating Frequency 2412 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3215.990	V	55.4	56.6	-9.3	-	46.1	47.3	54	74	7.9	26.7
3216.004	H	54.1	55.5	-9.3	-	44.8	46.2	54	74	9.2	27.8
4823.925	H	50.6	55.4	-6.3	3.20	47.5	49.1	54	74	6.5	24.9
4823.930	V	52.4	56.7	-6.3	3.20	49.3	50.4	54	74	4.7	23.6
7235.406	H	45.5	51.8	-0.5	3.20	48.2	51.3	54	74	5.8	22.7
7235.455	V	46.5	52.4	-0.5	3.20	49.2	51.9	54	74	4.8	22.1

Test Mode 802.11b : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3249.316	H	55.5	56.6	-9.0	-	46.5	47.6	54	74	7.5	26.4
3249.330	V	57.3	58.3	-9.0	-	48.3	49.3	54	74	5.7	24.7
4873.972	V	54.1	58.7	-6.1	3.20	51.2	52.6	54	74	2.8	21.4
4873.976	H	52.6	57.5	-6.1	3.20	49.7	51.4	54	74	4.3	22.6
7311.421	H	47.6	53.9	-0.2	3.20	50.6	53.7	54	74	3.4	20.3
7311.526	V	48.1	54.0	-0.2	3.20	51.1	53.8	54	74	2.9	20.2

Test Mode 802.11b : TX mode
 Operating Frequency 2462 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3282.650	H	54.8	55.9	-8.8	-	46.0	47.1	54	74	8.0	26.9
3282.680	V	56.8	57.7	-8.8	-	48.0	48.9	54	74	6.0	25.1
4923.962	H	52.8	57.3	-5.9	3.20	50.1	51.4	54	74	3.9	22.6
4924.017	V	53.7	58.2	-5.9	3.20	51.0	52.3	54	74	3.0	21.7
7385.419	H	43.9	50.5	-0.1	3.20	47.0	50.4	54	74	7.0	23.6
7386.410	V	44.0	50.8	-0.1	3.20	47.1	50.7	54	74	6.9	23.3

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Preamplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

Frequency Range : Above 1 GHz (Continued)

Test Mode 802.11g : TX mode
 Operating Frequency 2412 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3215.987	H	54.2	55.5	-9.3	-	44.9	46.2	54	74	9.1	27.8
3215.996	V	55.4	56.6	-9.3	-	46.1	47.3	54	74	7.9	26.7
4825.149	V	39.4	49.4	-6.3	3.21	36.3	43.1	54	74	17.7	30.9
4825.270	H	38.3	48.2	-6.3	3.21	35.2	41.9	54	74	18.8	32.1
7235.575	V	39.7	50.3	-0.5	3.21	42.4	49.8	54	74	11.6	24.2
7239.126	H	38.9	49.4	-0.5	3.21	41.6	48.9	54	74	12.4	25.1

Test Mode 802.11g : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3249.332	H	55.5	56.9	-9.0	-	46.5	47.9	54	74	7.5	26.1
3249.337	V	57.1	58.1	-9.0	-	48.1	49.1	54	74	5.9	24.9
4872.783	H	39.8	49.6	-6.1	3.22	36.9	43.5	54	74	17.1	30.5
4875.046	V	40.8	50.5	-6.1	3.22	37.9	44.4	54	74	16.1	29.6
7302.423	H	38.8	50.1	-0.3	3.22	41.7	49.8	54	74	12.3	24.2
7319.329	V	38.6	50.9	-0.2	3.22	41.6	50.7	54	74	12.4	23.3

Test Mode 802.11g : TX mode
 Operating Frequency 2462 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3282.610	H	54.7	55.9	-8.8	-	45.9	47.1	54	74	8.1	26.9
3282.667	V	56.8	57.8	-8.8	-	48.0	49.0	54	74	6.0	25.0
4922.621	V	40.3	50.1	-5.9	3.22	37.6	44.2	54	74	16.4	29.8
4924.993	H	39.8	49.7	-5.9	3.22	37.1	43.8	54	74	16.9	30.2
7377.367	H	37.4	48.8	-0.1	3.22	40.5	48.7	54	74	13.5	25.3
7385.696	V	38.5	48.7	-0.1	3.22	41.6	48.6	54	74	12.4	25.4

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Preamplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

Frequency Range : Above 1 GHz (Continued)

Test Mode 802.11n HT20 : TX mode
 Operating Frequency 2412 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3215.990	V	54.7	55.7	-9.3	-	45.4	46.4	54	74	8.6	27.6
3216.038	H	54.3	55.6	-9.3	-	45.0	46.3	54	74	9.0	27.7
4823.553	H	37.1	47.0	-6.3	3.22	34.0	40.7	54	74	20.0	33.3
4825.182	V	39.1	48.6	-6.3	3.22	36.0	42.3	54	74	18.0	31.7
7236.518	V	38.1	48.2	-0.5	3.22	40.8	47.7	54	74	13.2	26.3
7236.703	H	37.6	48.0	-0.5	3.22	40.3	47.5	54	74	13.7	26.5

Test Mode 802.11n HT20 : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3249.295	H	55.8	57.0	-9.0	-	46.8	48.0	54	74	7.2	26.0
3249.317	V	56.4	57.3	-9.0	-	47.4	48.3	54	74	6.6	25.7
4872.520	V	40.1	50.0	-6.1	3.22	37.2	43.9	54	74	16.8	30.1
4876.513	H	38.7	48.3	-6.1	3.22	35.8	42.2	54	74	18.2	31.8
7306.537	V	37.6	48.3	-0.3	3.22	40.5	48.0	54	74	13.5	26.0
7318.914	H	36.5	47.5	-0.2	3.22	39.5	47.3	54	74	14.5	26.7

Test Mode 802.11n HT20 : TX mode
 Operating Frequency 2462 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3282.647	V	56.3	57.3	-8.8	-	47.5	48.5	54	74	6.5	25.5
3282.657	H	55.1	56.1	-8.8	-	46.3	47.3	54	74	7.7	26.7
4922.775	H	39.0	48.6	-5.9	3.22	36.3	42.7	54	74	17.7	31.3
4922.780	V	39.9	49.3	-5.9	3.22	37.2	43.4	54	74	16.8	30.6
7381.054	V	37.1	47.6	-0.1	3.22	40.2	47.5	54	74	13.8	26.5
7386.834	H	37.0	47.9	-0.1	3.22	40.1	47.8	54	74	13.9	26.2

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Preamplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

Frequency Range : Above 1 GHz (Continued)

Test Mode 802.11n HT40 : TX mode
 Operating Frequency 2422 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3229.274	H	55.2	56.4	-9.2	-	46.0	47.2	54	74	8.0	26.8
3229.308	V	55.3	56.5	-9.2	-	46.1	47.3	54	74	7.9	26.7
7260.915	V	35.0	45.0	-0.4	3.44	38.0	44.6	54	74	16.0	29.4
7269.487	H	35.1	44.0	-0.4	3.44	38.1	43.6	54	74	15.9	30.4

Test Mode 802.11n HT40 : TX mode
 Operating Frequency 2437 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3249.342	H	55.9	57.1	-9.0	-	46.9	48.1	54	74	7.1	25.9
3249.344	V	56.3	57.4	-9.0	-	47.3	48.4	54	74	6.7	25.6
4980.433	V	33.7	47.3	-5.8	-	27.9	41.5	54	74	26.1	32.5
7304.872	H	34.4	43.1	-0.3	3.23	37.3	42.8	54	74	16.7	31.2
7315.338	V	34.5	43.9	-0.2	3.23	37.5	43.7	54	74	16.5	30.3

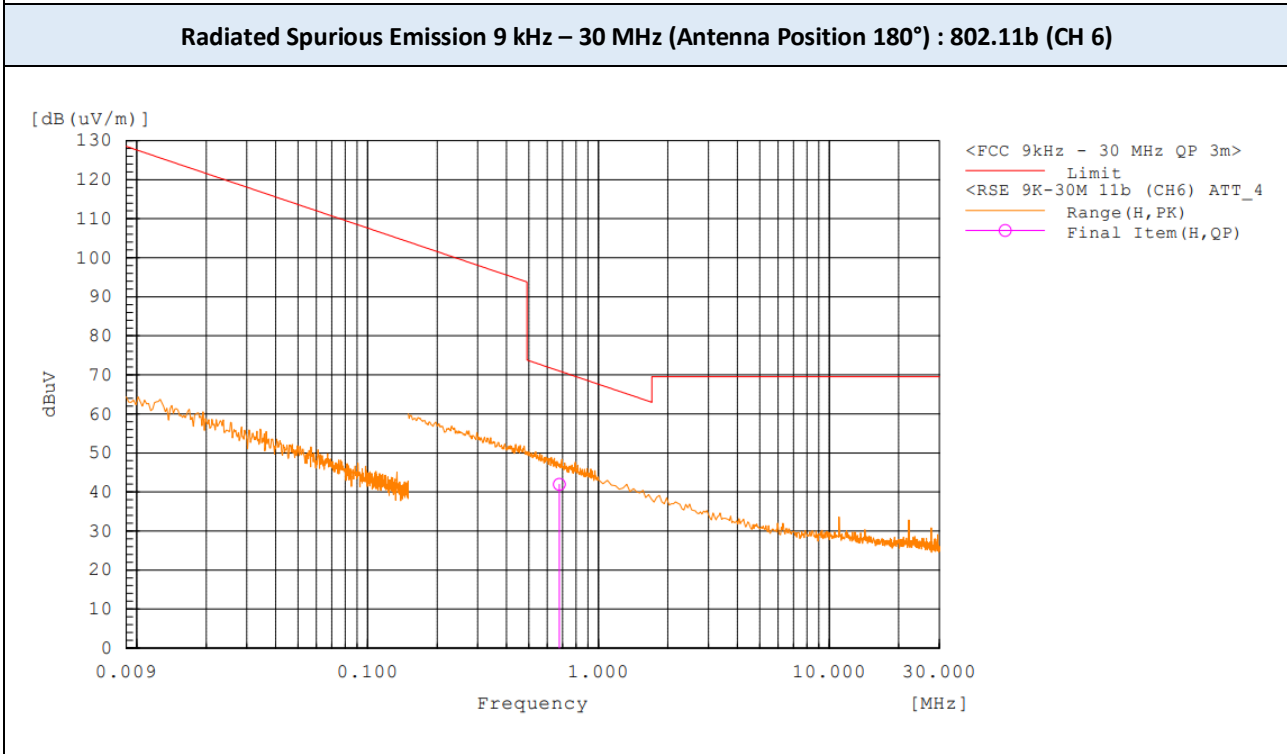
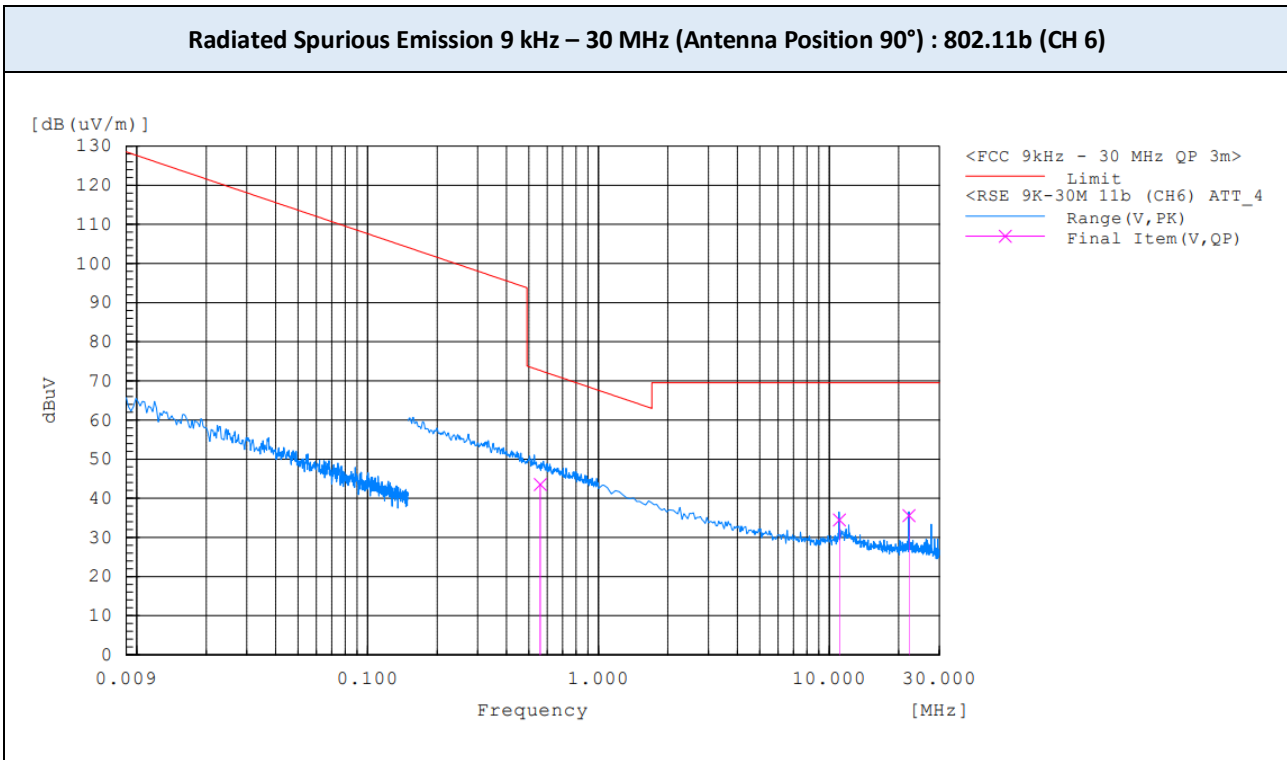
Test Mode 802.11n HT40 : TX mode
 Operating Frequency 2452 MHz

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
3269.301	V	56.5	57.6	-8.8	-	47.7	48.8	54	74	6.3	25.2
3269.402	H	55.6	56.8	-8.8	-	46.8	48.0	54	74	7.2	26.0
7353.261	H	34.6	43.6	-0.1	3.49	38.0	43.5	54	74	16.0	30.5
7357.714	V	35.0	43.4	-0.1	3.49	38.4	43.3	54	74	15.6	30.7

Notes:

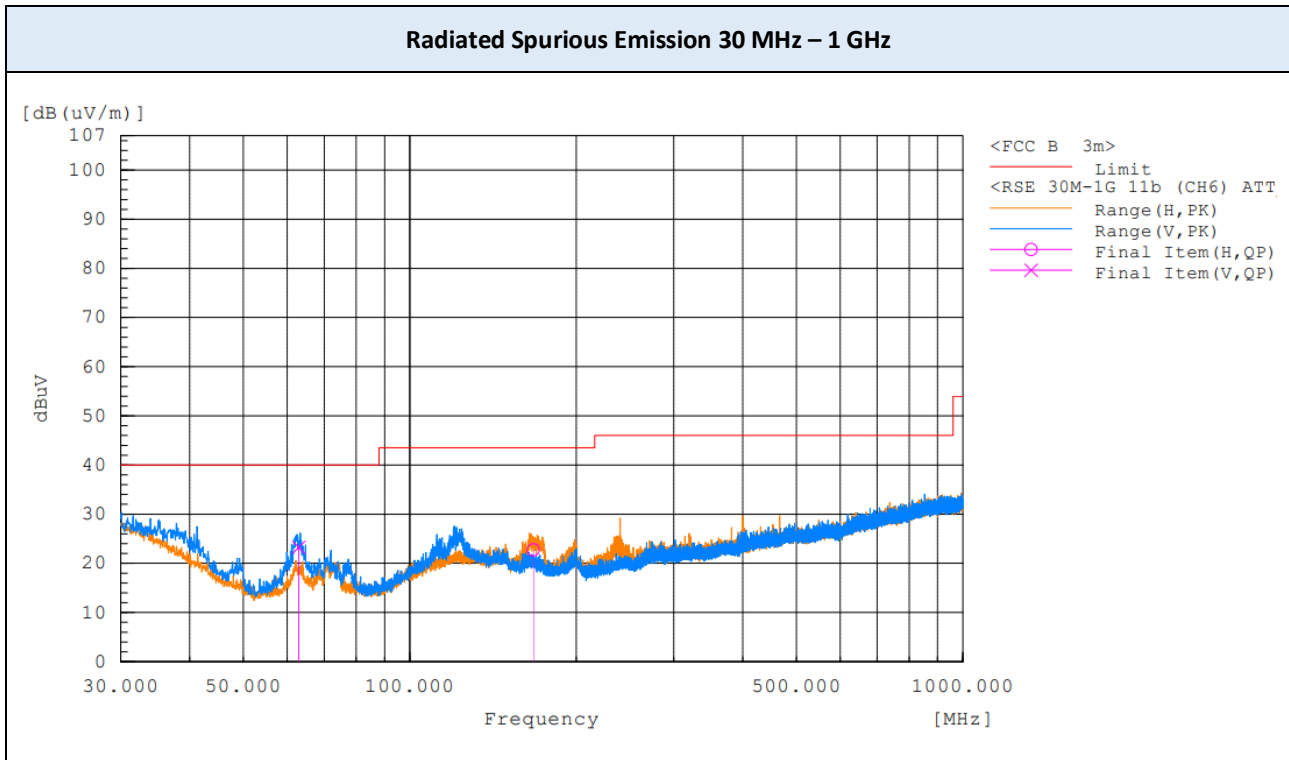
1. Correction Factor: Antenna Factor + Cable loss + Pre-amplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

▣ TEST PLOTS



Note:
The worst-case plots are included in this report.

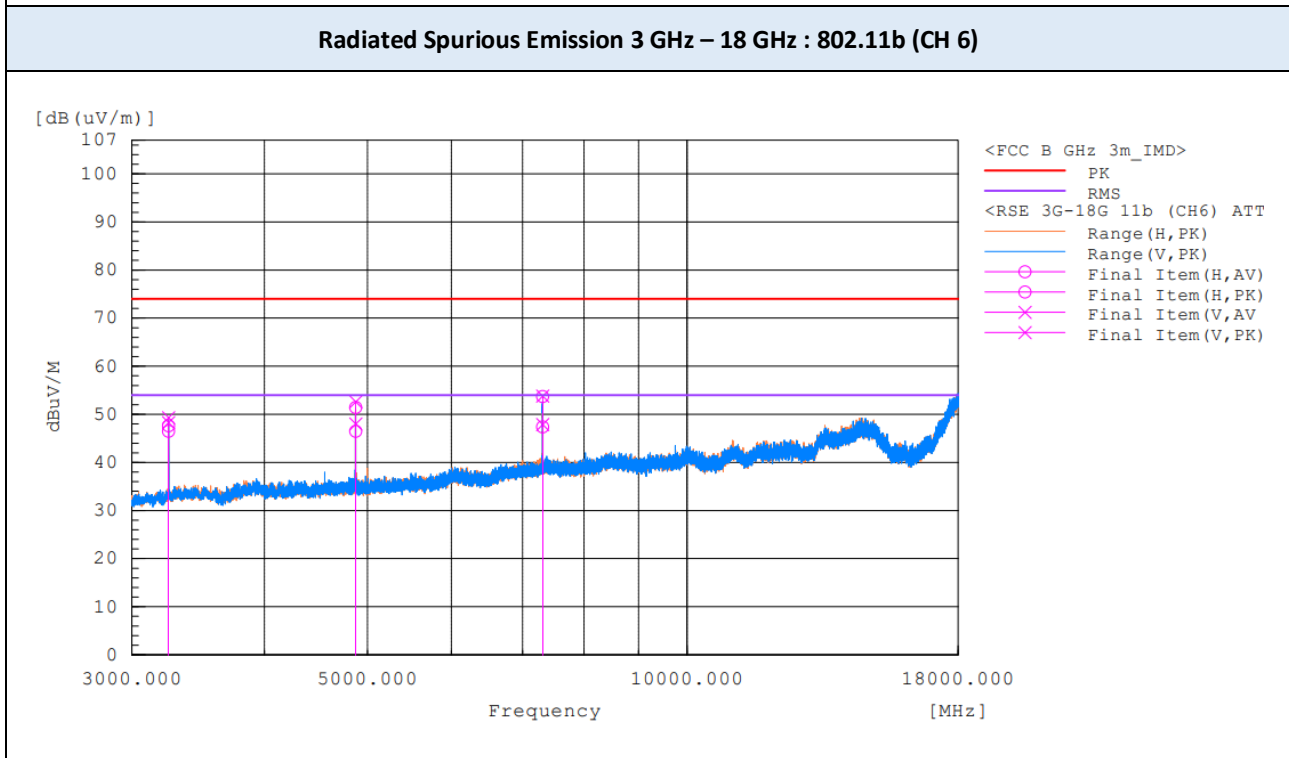
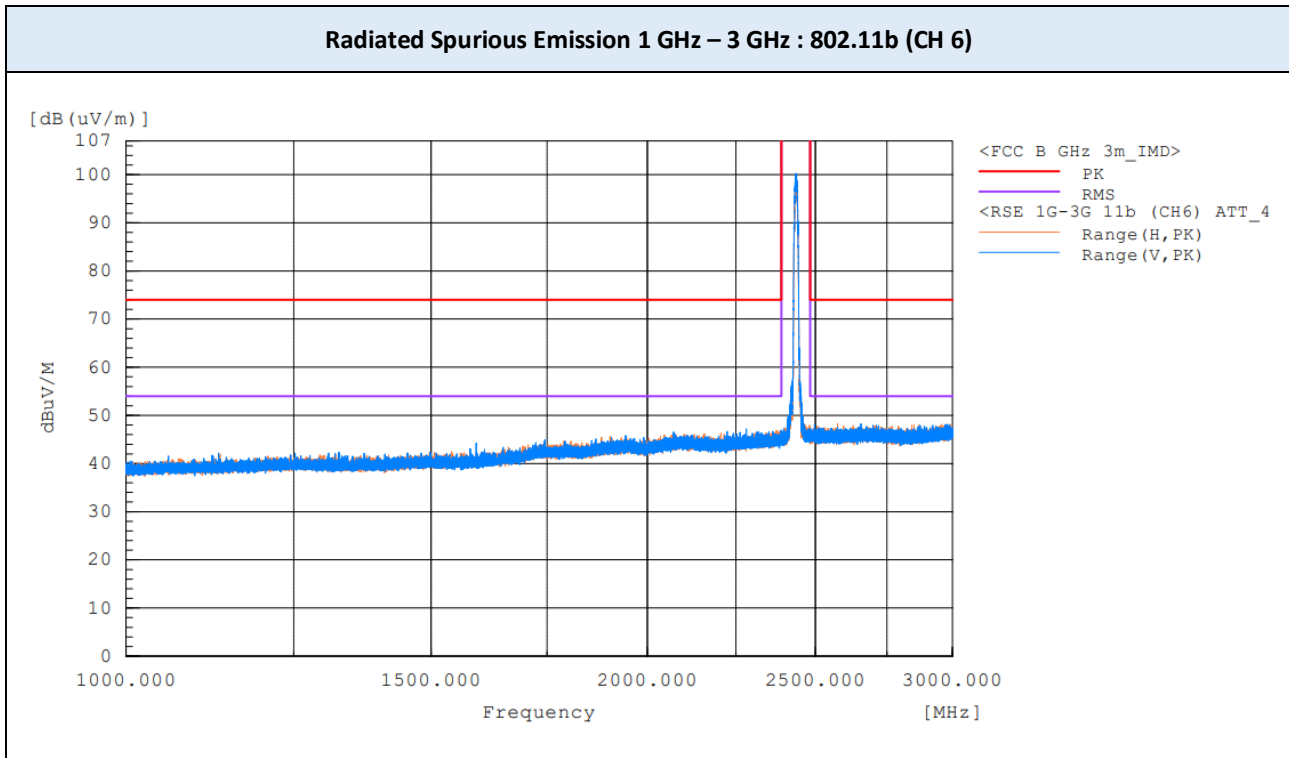
▣ TEST PLOTS



Note:

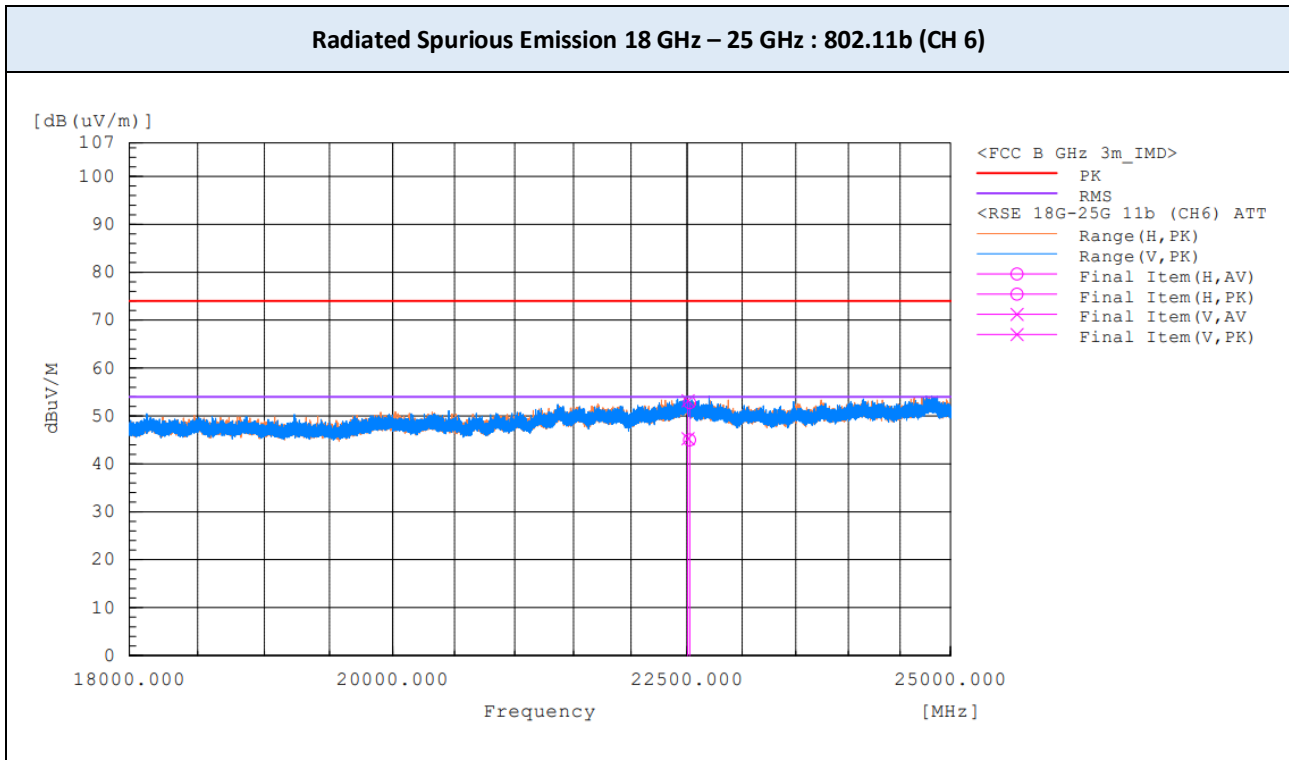
The worst-case plots are included in this report.

▣ TEST PLOTS



Note:
The worst-case plots are included in this report.

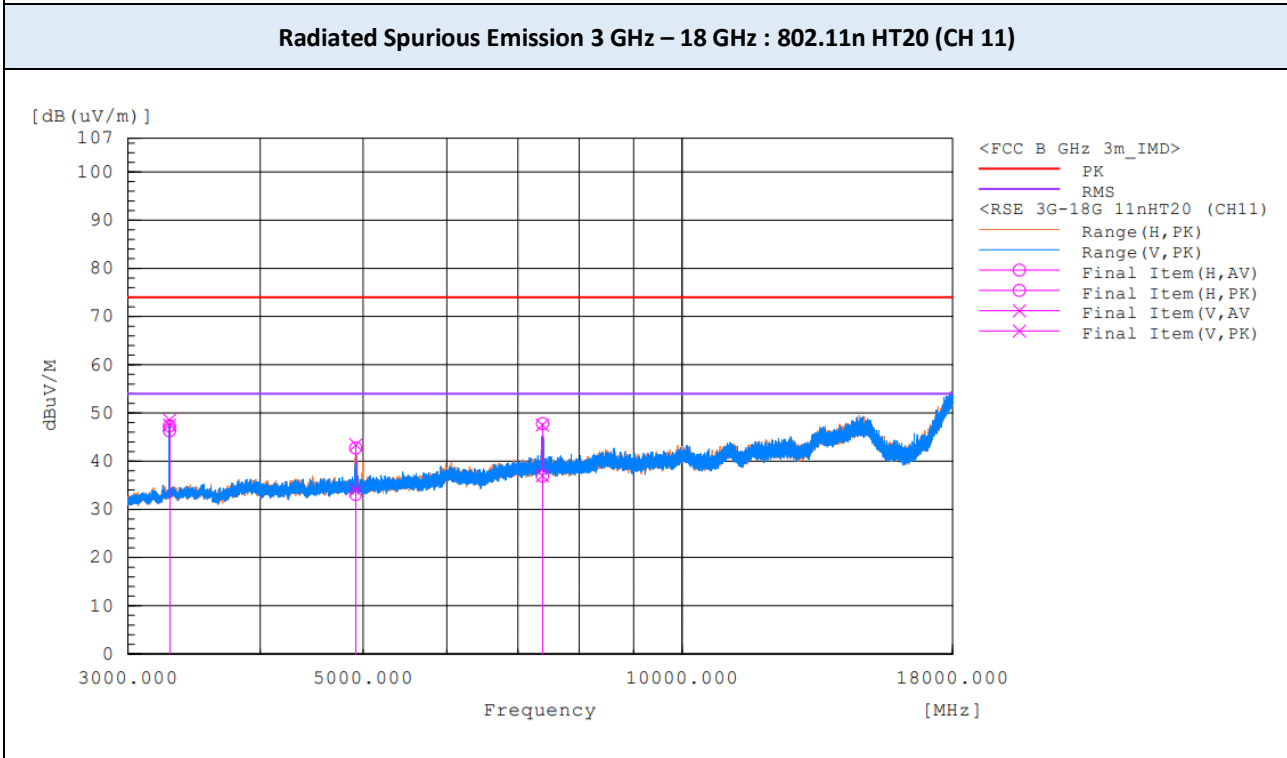
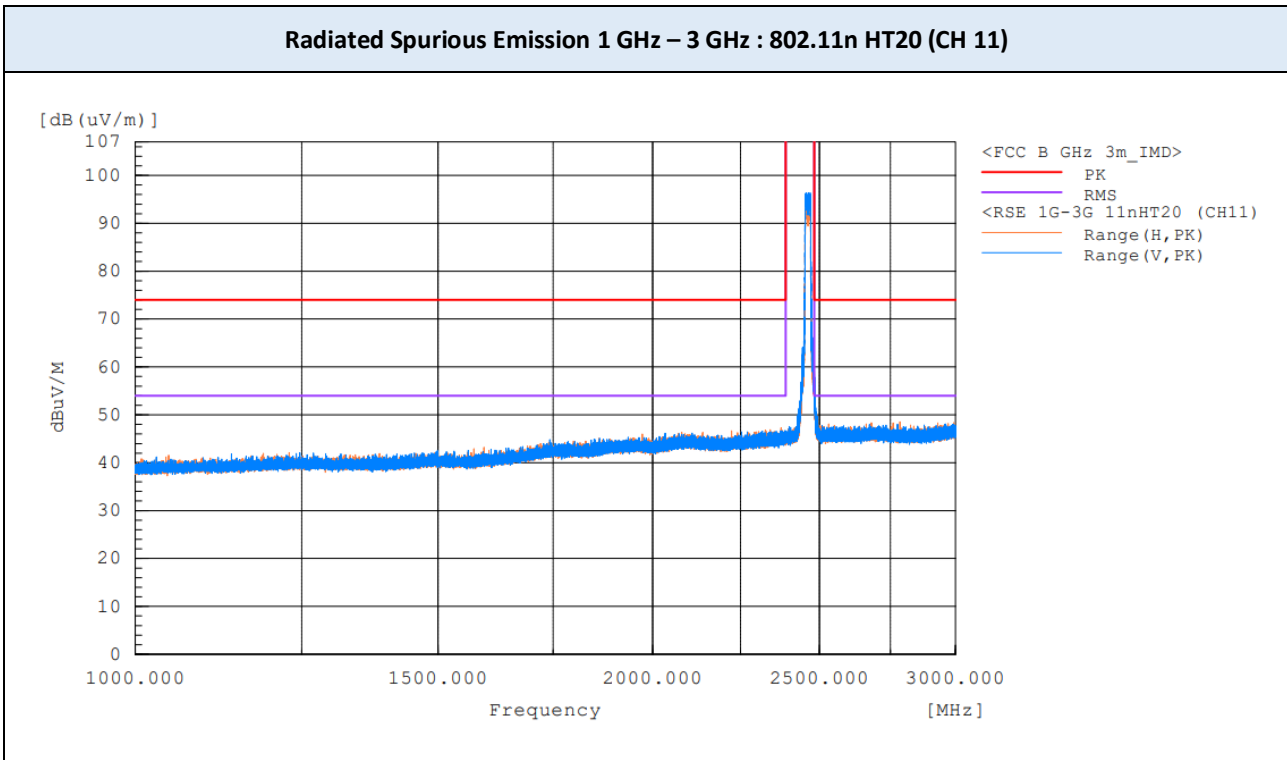
▣ TEST PLOTS



Note:

The worst-case plots are included in this report.

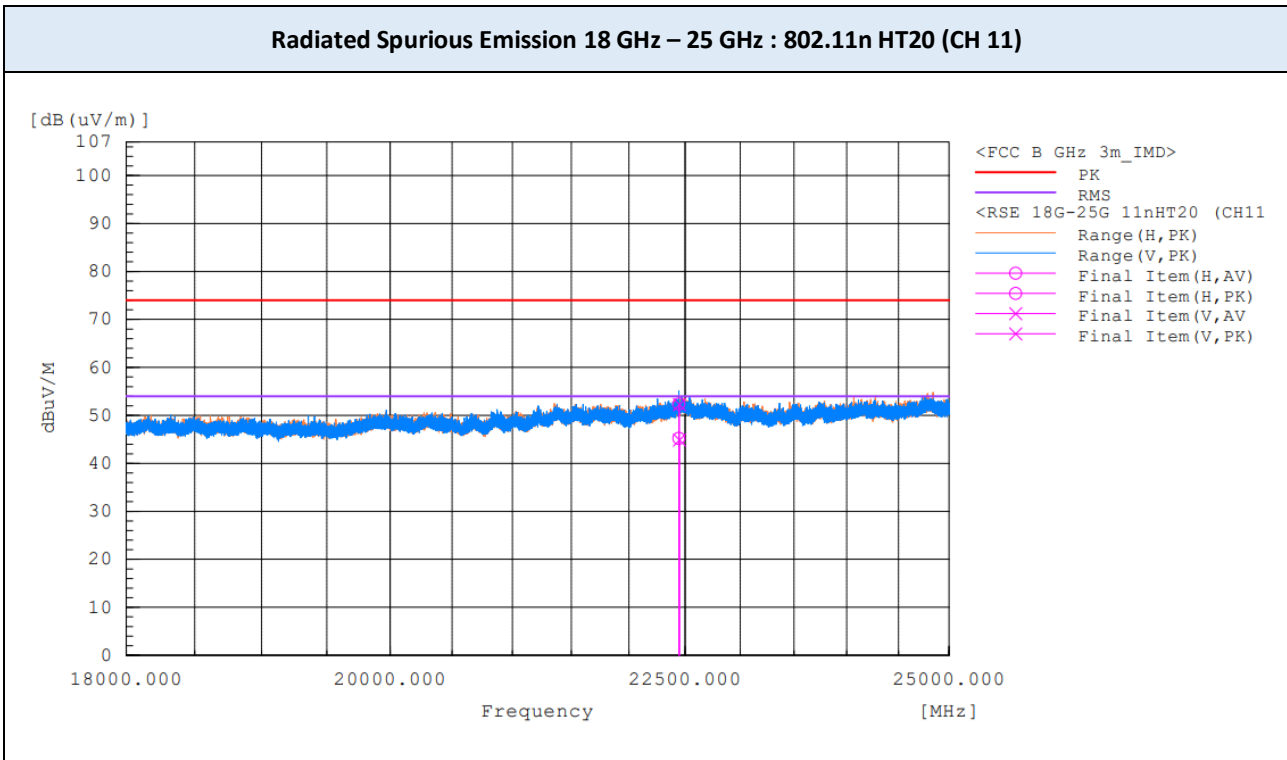
▣ TEST PLOTS



Note:

The worst-case plots are included in this report.

▣ TEST PLOTS



Note:

The worst-case plots are included in this report.

9.7. RADIATED RESTRICTED BAND EDGES

Test Mode 802.11b
 Operating Frequency 2412 MHz
 Channel No. CH 1

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2386.850	H	9.0	18.3	30.9	3.20	43.1	49.2	54	74	10.9	24.8
2386.902	V	9.5	18.7	30.9	3.20	43.6	49.6	54	74	10.4	24.4
2389.486	V	9.0	17.9	31.0	3.20	43.2	48.9	54	74	10.8	25.1
2389.792	H	8.3	18.0	31.0	3.20	42.5	49.0	54	74	11.5	25.0

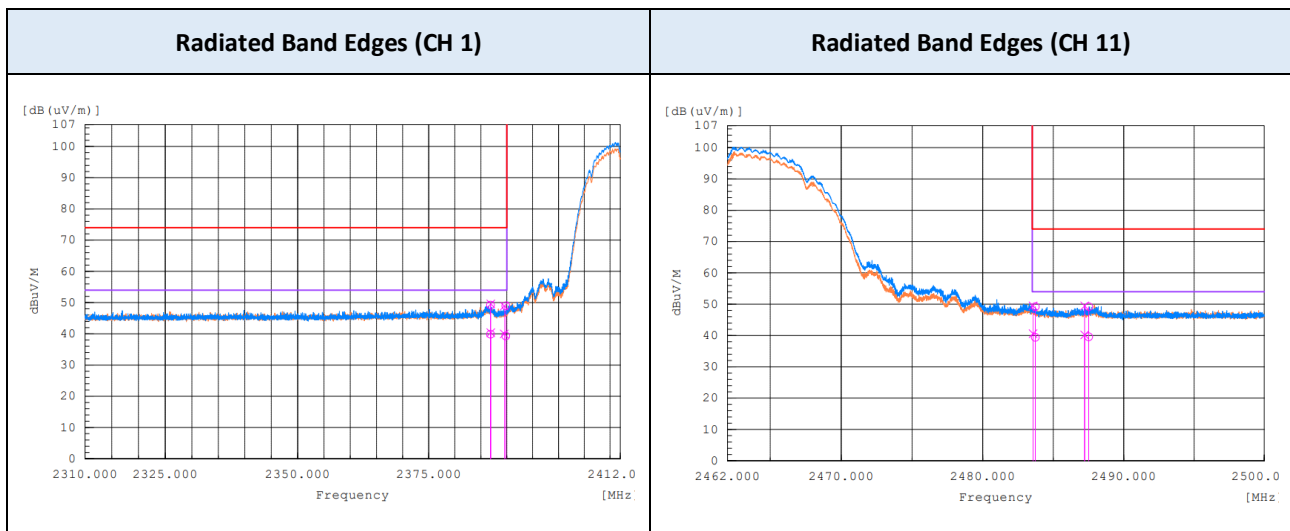
Test Mode 802.11b
 Operating Frequency 2462 MHz
 Channel No. CH 11

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2483.559	V	9.0	17.9	31.6	3.20	43.8	49.5	54	74	10.2	24.5
2483.726	H	7.8	17.6	31.6	3.20	42.6	49.2	54	74	11.4	24.8
2487.216	V	8.6	17.9	31.6	3.20	43.4	49.5	54	74	10.6	24.5
2487.515	H	8.0	17.6	31.6	3.20	42.8	49.2	54	74	11.2	24.8

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Pre-amplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

TEST PLOTS



Test Mode 802.11g
 Operating Frequency 2412 MHz
 Channel No. CH 1

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2389.939	H	16.0	27.3	31.0	3.21	50.2	58.3	54	74	3.8	15.7
2389.943	V	16.8	27.7	31.0	3.21	51.0	58.7	54	74	3.0	15.3

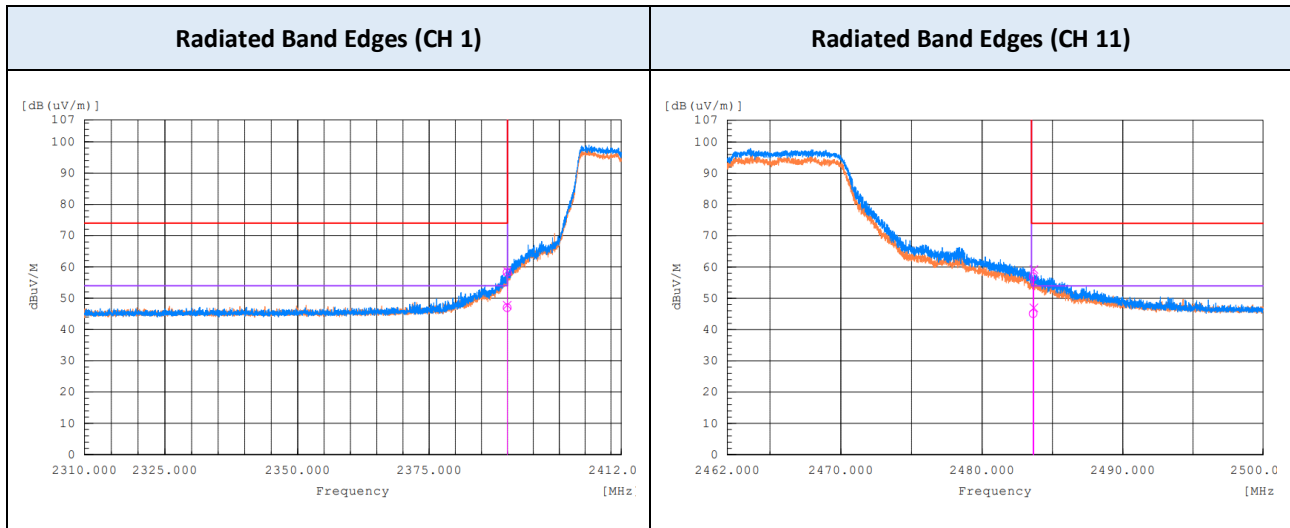
Test Mode 802.11g
 Operating Frequency 2462 MHz
 Channel No. CH 11

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2483.625	H	13.5	25.3	31.6	3.22	48.3	56.9	54	74	5.7	17.1
2483.666	V	15.4	27.7	31.6	3.22	50.2	59.3	54	74	3.8	14.7

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Preamplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

TEST PLOTS



Test Mode 802.11n HT20
 Operating Frequency 2412 MHz
 Channel No. CH 1

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2389.801	H	16.3	29.3	31.0	3.22	50.5	60.3	54	74	3.5	13.7
2389.965	V	17.6	30.4	31.0	3.22	51.8	61.4	54	74	2.2	12.6

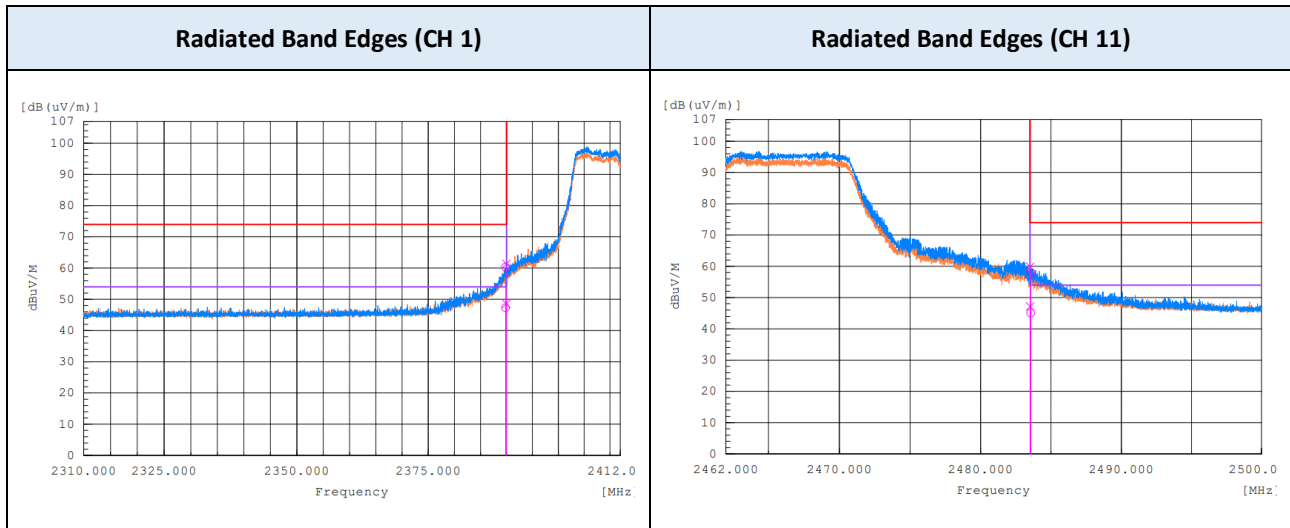
Test Mode 802.11n HT20
 Operating Frequency 2462 MHz
 Channel No. CH 11

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2483.509	V	15.6	28.3	31.6	3.22	50.4	59.9	54	74	3.6	14.1
2483.556	H	13.5	26.4	31.6	3.22	48.3	58.0	54	74	5.7	16.0

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Pre-amplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

TEST PLOTS



Test Mode 802.11n HT40
 Operating Frequency 2422 MHz
 Channel No. CH 3

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2386.723	H	15.1	29.0	30.9	3.44	49.4	59.9	54	74	4.6	14.1
2387.903	V	16.1	30.6	30.9	3.44	50.4	61.5	54	74	3.6	12.5
2389.656	V	16.3	30.1	31.0	3.44	50.7	61.1	54	74	3.3	12.9
2389.995	H	16.1	28.4	31.0	3.44	50.5	59.4	54	74	3.5	14.6

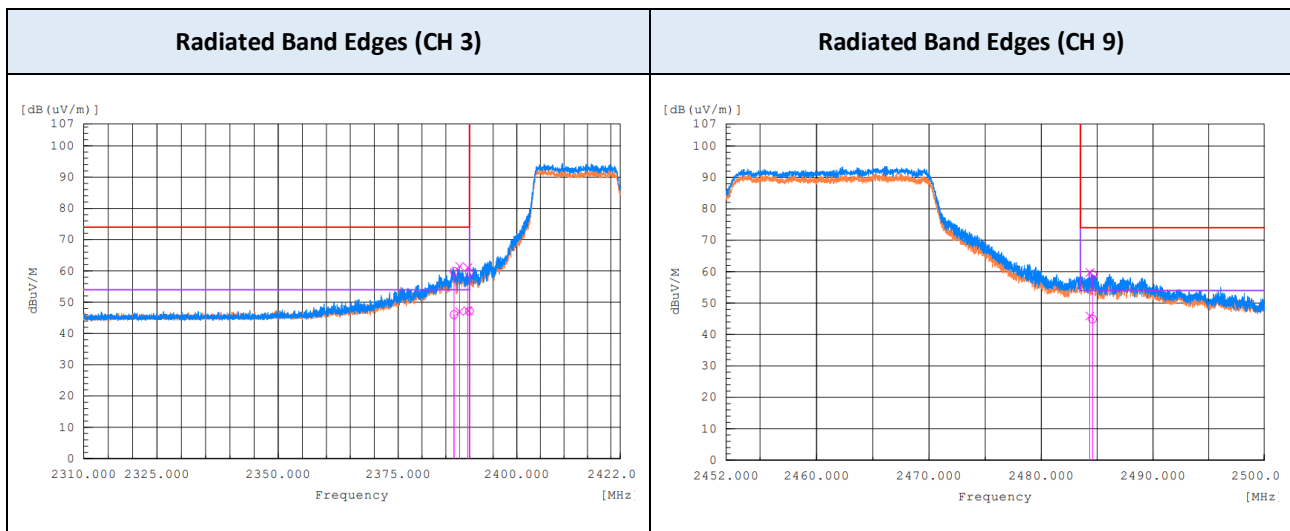
Test Mode 802.11n HT40
 Operating Frequency 2452 MHz
 Channel No. CH 9

Frequency (MHz)	Polarization	Reading (dBuV)		Factor (dB)		Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
		AV	PK	Corr. ¹⁾	Duty	AV	PK	AV	PK	AV	PK
2484.343	V	14.3	28.2	31.6	3.49	49.4	59.8	54	74	4.6	14.2
2484.576	H	13.3	27.5	31.6	3.49	48.4	59.1	54	74	5.6	14.9

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Pre-amplifier Gain
2. AV Level = Measured Power(dBm) + Correction Factor(dB) + Duty Cycle Factor(dB)

TEST PLOTS



9.8. RECEIVER SPURIOUS EMISSION

Test Mode 802.11b
 Operating Frequency 2437 MHz

Frequency Range : Below 1 GHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
62.729	V	36.0	-12.8	23.2	40	16.8	QP
163.720	H	32.0	-8.5	23.5	43.5	20.0	QP

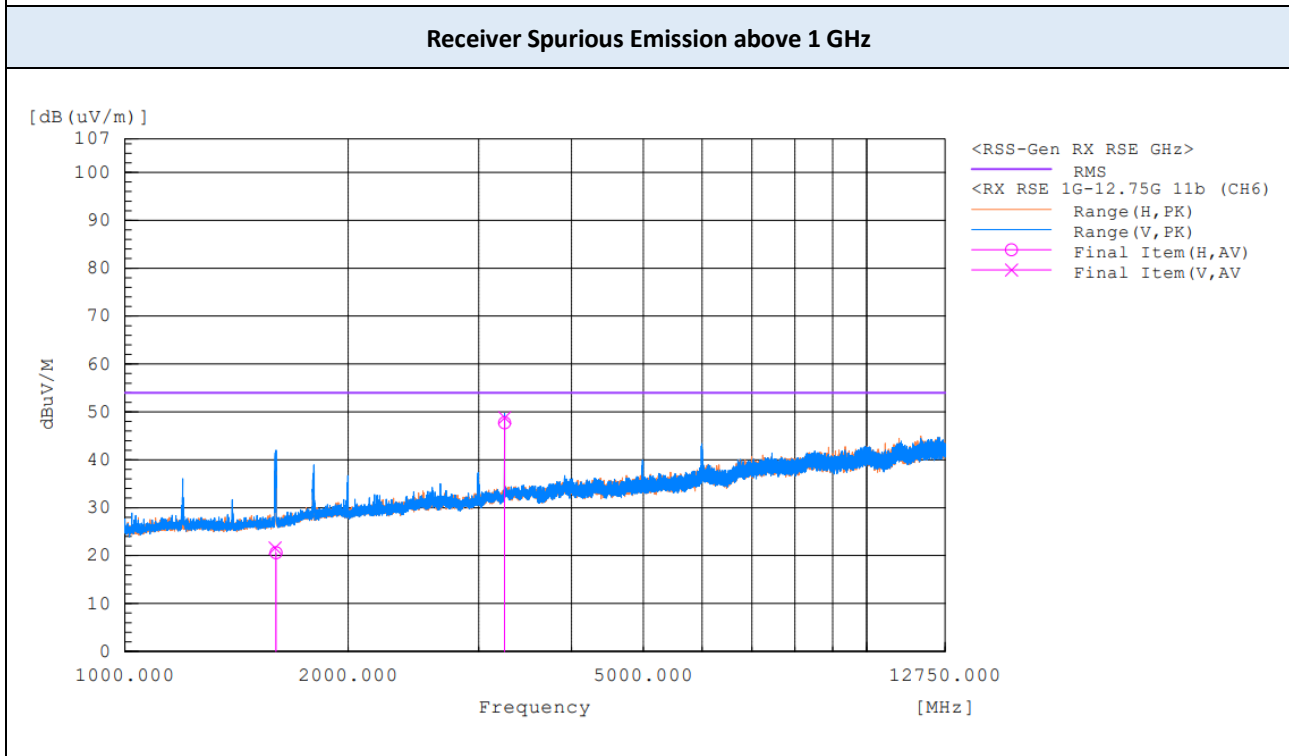
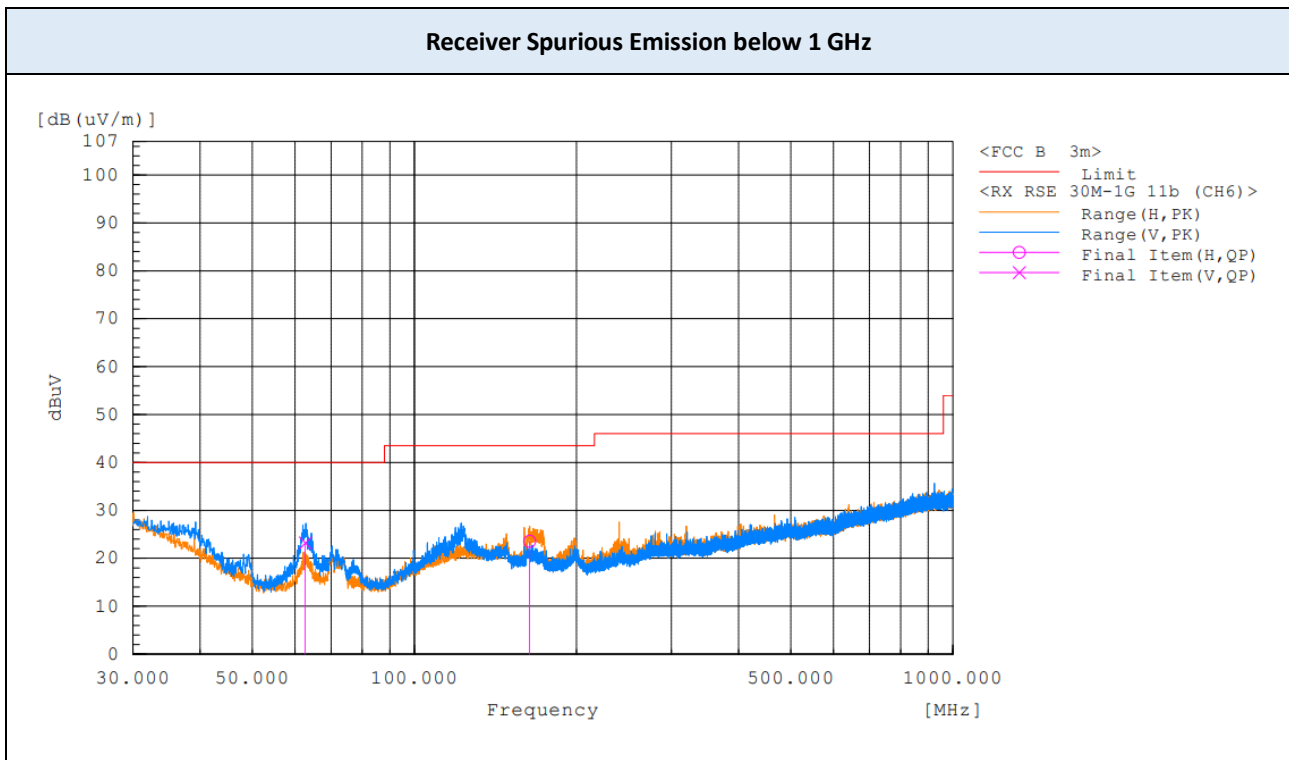
Frequency Range : Above 1 GHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. ¹⁾ (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
1593.083	V	35.9	-14.3	21.6	54	32.4	RMS
1599.471	H	34.8	-14.2	20.6	54	33.4	RMS
3249.265	V	57.8	-9.0	48.8	54	5.2	RMS
3249.323	H	56.7	-9.0	47.7	54	6.3	RMS

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Pre-amplifier Gain

▣ TEST PLOTS



Note:
The worst-case plots are included in this report.

9.9. POWERLINE CONDUCTED EMISSIONS

AC Main

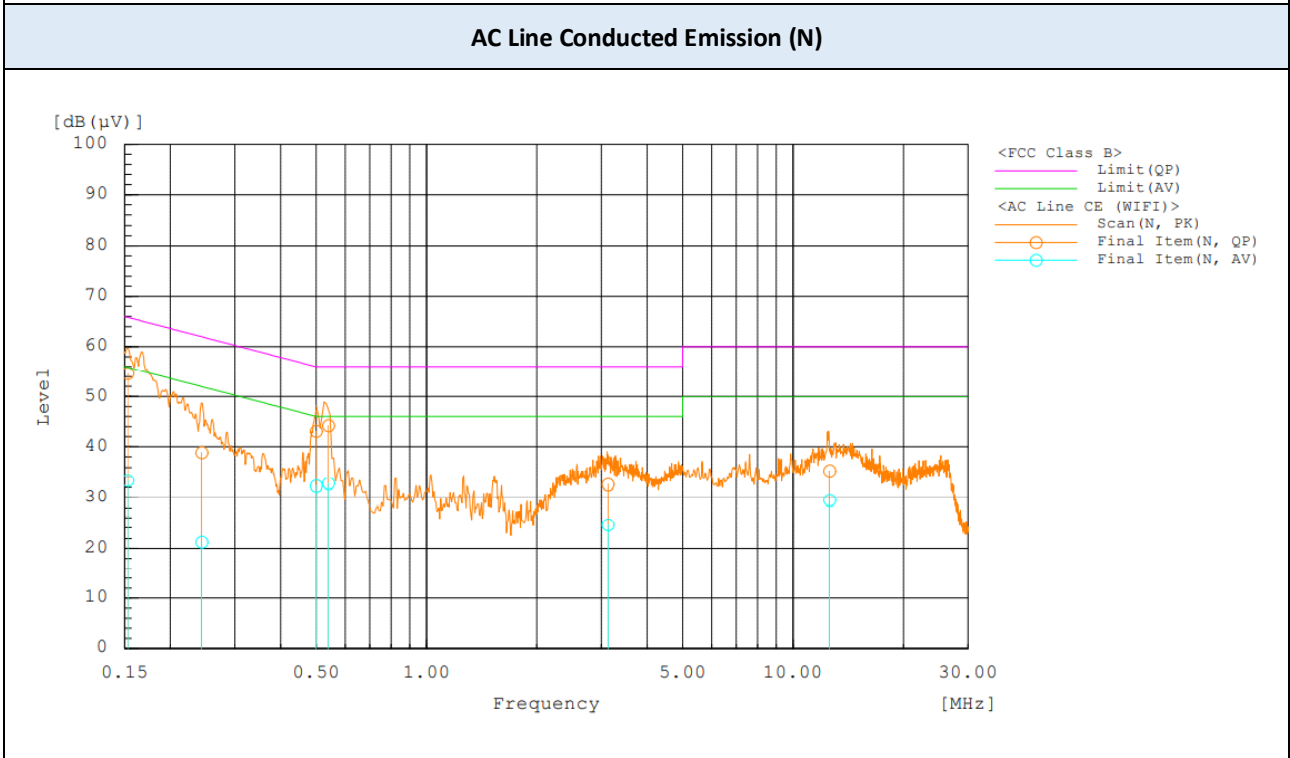
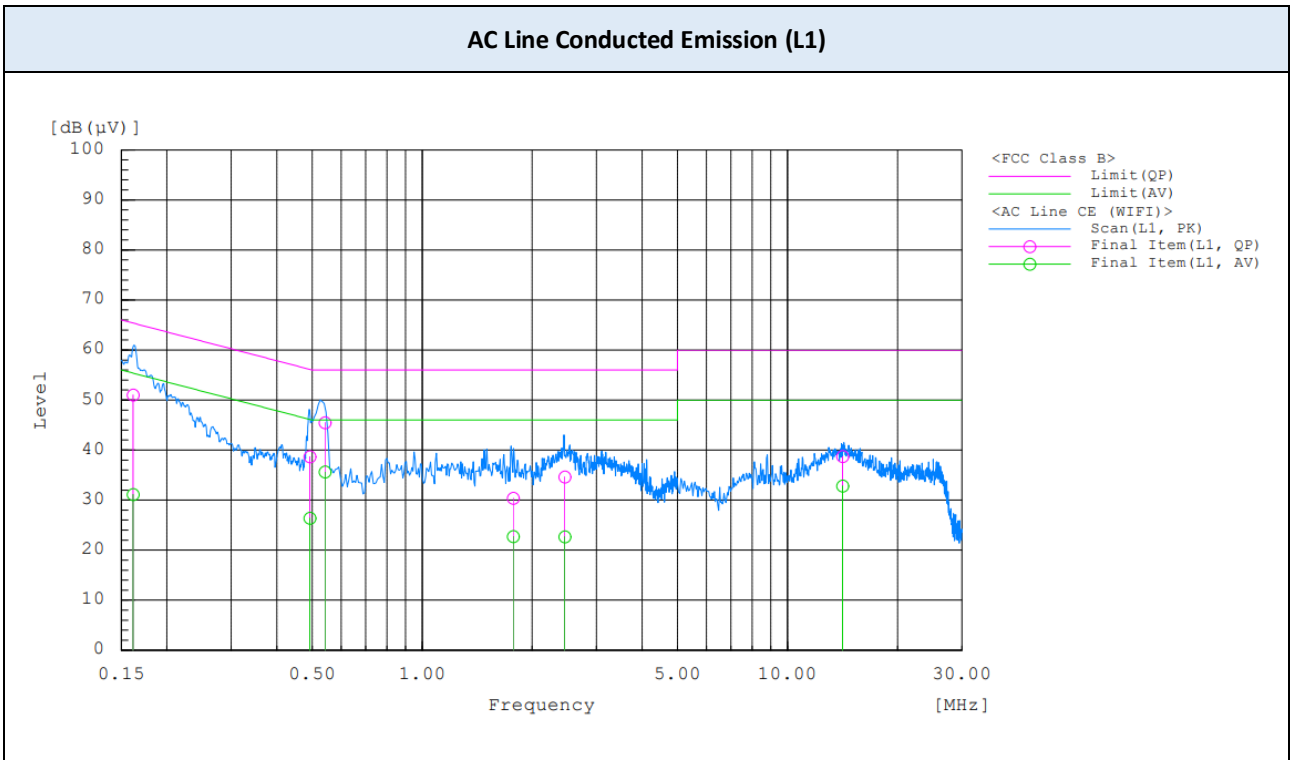
Frequency (MHz)	Line	Reading (dB μ V)		Corr. ¹⁾ (dB)	Level (dB μ V)		Limit (dB μ V)		Margin (dB)	
		QP	CAV		QP	CAV	QP	CAV	QP	CAV
0.162	L1	41.2	21.3	9.8	51	31.1	65.4	55.4	14.4	24.3
0.492	L1	29	16.7	9.7	38.7	26.4	56.1	46.1	17.4	19.7
0.542	L1	35.8	26	9.7	45.5	35.7	56	46	10.5	10.3
1.774	L1	20.7	13	9.7	30.4	22.7	56	46	25.6	23.3
2.456	L1	24.8	12.9	9.8	34.6	22.7	56	46	21.4	23.3
14.153	L1	28.7	22.7	10.1	38.8	32.8	60	50	21.2	17.2

Frequency (MHz)	Line	Reading (dB μ V)		Corr. ¹⁾ (dB)	Level (dB μ V)		Limit (dB μ V)		Margin (dB)	
		QP	CAV		QP	CAV	QP	CAV	QP	CAV
0.153	N	44.8	23.6	9.8	54.6	33.4	65.8	55.8	11.2	22.4
0.244	N	29.1	11.6	9.7	38.8	21.3	62	52	23.2	30.7
0.500	N	33.4	22.7	9.7	43.1	32.4	56	46	12.9	13.6
0.540	N	34.5	23.1	9.7	44.2	32.8	56	46	11.8	13.2
3.129	N	22.8	14.8	9.8	32.6	24.6	56	46	23.4	21.4
12.580	N	25.3	19.4	10.1	35.4	29.5	60	50	24.6	20.5

Note :

1. Quasi-peak(Final Result) = Reading Value + Correction Factor

▣ TEST PLOTS



10. LIST OF TEST EQUIPMENT

No.	Instrument	Model No.	Calibration Due (mm/dd/yy)	Manufacture	Serial No.
<input checked="" type="checkbox"/>	Signal Analyzer (20 Hz ~ 40.0 GHz)	ESU40	12/09/2021	Rohde & Schwarz	100529
<input checked="" type="checkbox"/>	Signal Analyzer (10 Hz ~ 40.0 GHz)	FSV40	03/23/2021	Rohde & Schwarz	101424
<input checked="" type="checkbox"/>	Signal Analyzer (10 Hz ~ 26.5 GHz)	N9020A	11/07/2021	Keysight	MY52091291
<input checked="" type="checkbox"/>	Attenuator (20 dB, DC ~ 26.5 GHz)	8493C	12/07/2021	HP	09072
<input type="checkbox"/>	Attenuator (10 dB, DC ~ 26.5 GHz)	CFAD261002	01/07/2022	CERNEX	H0044
<input checked="" type="checkbox"/>	Loop Antenna (0.009 ~ 30 MHz)	AL-130R	04/05/2021	Com-Power	121082
<input checked="" type="checkbox"/>	BI-LOG Antenna (30 MHz ~ 6 GHz)	JB6	10/26/2022	Sunol	A071116
<input checked="" type="checkbox"/>	LNA (30 MHz ~ 1GHz)	8447D	08/06/2021	HP	2443A03587
<input checked="" type="checkbox"/>	Horn Antenna (1 GHz ~ 18 GHz)	DRH-118	10/21/2022	Sunol	A070516
<input checked="" type="checkbox"/>	LNA (1 GHz ~ 18 GHz)	PAM-118A	07/09/2021	Com-Power	18040074
<input checked="" type="checkbox"/>	Horn Antenna (18 GHz ~ 40 GHz)	DRH-1840	02/20/2021	Sunol	17120
<input checked="" type="checkbox"/>	LNA (18 GHz ~ 40 GHz)	CBL184050-45-01	02/03/2022	CERNEX, Inc.	43964
<input type="checkbox"/>	Power Divider-2way (DC ~ 26.5 GHz)	11636B	12/11/2021	HP	50820
<input type="checkbox"/>	Directional Coupler (1-4GHz)	3022	12/15/2021	Narda	72118
<input checked="" type="checkbox"/>	High Pass Filter (2.4 GHz)	WHK10-2520-3000-18000-40EF	01/06/2022	Wainwright	9
<input checked="" type="checkbox"/>	EMI Test Receiver	ESR3	12/17/2021	Rohde & Schwarz	102363
<input checked="" type="checkbox"/>	LISN	ENV216	01/16/2022	Rohde & Schwarz	101349

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date

APPENDIX A. TEST SETUP PHOTOS

The setup photos are provided as a separate document.

APPENDIX B. PHOTOGRAPHS OF EUT

B.1. EXTERNAL PHOTOS

The external photos are provided as a separate document.

B.2. INTERNAL PHOTOS

The internal photos are provided as a separate document.

END OF TEST REPORT