

PIFA Ant.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11a mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5180 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	57.40	-5.11	52.29	54.00	-1.71	Average	VERTICAL
2	5150.00	71.41	-5.11	66.30	68.20	-1.90	Peak	VERTICAL
3	5184.48	115.37	-4.90	110.47	F	--	Peak	VERTICAL
1	5150.00	57.21	-5.11	52.10	54.00	-1.90	Average	HORIZONTAL
2	5150.00	65.89	-5.11	60.78	68.20	-7.42	Peak	HORIZONTAL
3	5186.55	98.20	-4.89	93.31	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5320MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5321.20	114.59	-4.53	110.06	F	--	Peak	VERTICAL
2	5350.00	57.22	-4.50	52.72	54.00	-1.28	Average	VERTICAL
3	5350.00	70.42	-4.50	65.92	68.20	-2.28	Peak	VERTICAL
1	5324.70	101.49	-4.53	96.96	F	--	Peak	HORIZONTAL
2	5350.00	56.99	-4.50	52.49	54.00	-1.51	Average	HORIZONTAL
3	5350.00	65.56	-4.50	61.06	68.20	-7.14	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5180 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	56.75	-5.11	51.64	54.00	-2.36	Average	VERTICAL
2	5150.00	71.64	-5.11	66.53	68.20	-1.67	Peak	VERTICAL
3	5187.24	114.01	-4.89	109.12	F	--	Peak	VERTICAL
1	5150.00	56.04	-5.11	50.93	54.00	-3.07	Average	HORIZONTAL
2	5150.00	65.78	-5.11	60.67	68.20	-7.53	Peak	HORIZONTAL
3	5187.24	96.83	-4.89	91.94	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5320MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5325.54	113.74	-4.53	109.21	F	--	Peak	VERTICAL
2	5350.00	56.84	-4.50	52.34	54.00	-1.66	Average	VERTICAL
3	5350.00	70.44	-4.50	65.94	68.20	-2.26	Peak	VERTICAL
1	5316.72	100.09	-4.54	95.55	F	--	Peak	HORIZONTAL
2	5350.00	54.24	-4.50	49.74	54.00	-4.26	Average	HORIZONTAL
3	5350.00	65.54	-4.50	61.04	68.20	-7.16	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5190 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	56.30	-5.11	51.19	54.00	-2.81	Average	VERTICAL
2	5150.00	70.79	-5.11	65.68	68.20	-2.52	Peak	VERTICAL
3	5197.93	110.92	-4.84	106.08	F	--	Peak	VERTICAL
1	5150.00	56.24	-5.11	51.13	54.00	-2.87	Average	HORIZONTAL
2	5150.00	66.40	-5.11	61.29	68.20	-6.91	Peak	HORIZONTAL
3	5191.54	93.68	-4.87	88.81	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5310MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5318.48	109.98	-4.54	105.44	F	--	Peak	VERTICAL
2	5350.00	56.84	-4.50	52.34	54.00	-1.66	Average	VERTICAL
3	5350.00	69.87	-4.50	65.37	68.20	-2.83	Peak	VERTICAL
1	5322.48	96.00	-4.53	91.47	F	--	Peak	HORIZONTAL
2	5350.00	53.60	-4.50	49.10	54.00	-4.90	Average	HORIZONTAL
3	5350.00	65.83	-4.50	61.33	68.20	-6.87	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5210 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	54.24	-5.11	49.13	54.00	-4.87	Average	VERTICAL
2	5150.00	70.49	-5.11	65.38	68.20	-2.82	Peak	VERTICAL
3	5236.50	106.45	-4.70	101.75	F	--	Peak	VERTICAL
1	5150.00	54.17	-5.11	49.06	54.00	-4.94	Average	HORIZONTAL
2	5150.00	66.69	-5.11	61.58	68.20	-6.62	Peak	HORIZONTAL
3	5222.25	93.57	-4.75	88.82	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5290MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5296.40	105.87	-4.57	101.30	F	--	Peak	VERTICAL
2	5350.00	56.93	-4.50	52.43	54.00	-1.57	Average	VERTICAL
3	5350.00	70.09	-4.50	65.59	68.20	-2.61	Peak	VERTICAL
1	5315.40	91.25	-4.55	86.70	F	--	Peak	HORIZONTAL
2	5350.00	54.32	-4.50	49.82	54.00	-4.18	Average	HORIZONTAL
3	5350.00	66.50	-4.50	62.00	68.20	-6.20	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11a mode) -Radiated

Operation Mode TX CH Low
Channel Number 5500 MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	55.24	-4.21	51.03	54.00	-2.97	Average	VERTICAL
2	5460.00	69.80	-4.21	65.59	68.20	-2.61	Peak	VERTICAL
3	5470.00	69.06	-4.17	64.89	68.20	-3.31	Peak	VERTICAL
4	5494.16	115.42	-4.08	111.34	F	--	Peak	VERTICAL
1	5460.00	51.74	-4.21	47.53	54.00	-6.47	Average	HORIZONTAL
2	5460.00	65.48	-4.21	61.27	68.20	-6.93	Peak	HORIZONTAL
3	5470.00	65.40	-4.17	61.23	68.20	-6.97	Peak	HORIZONTAL
4	5495.37	101.12	-4.07	97.05	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5700MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5695.44	114.45	-3.38	111.07	F	--	Peak	VERTICAL
2	5725.00	68.02	-3.25	64.77	68.20	-3.43	Peak	VERTICAL
1	5705.52	96.11	-3.32	92.79	F	--	Peak	HORIZONTAL
2	5725.00	65.72	-3.25	62.47	68.20	-5.73	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5500 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	53.47	-4.21	49.26	54.00	-4.74	Average	VERTICAL
2	5460.00	66.15	-4.21	61.94	68.20	-6.26	Peak	VERTICAL
3	5470.00	71.38	-4.17	67.21	68.20	-0.99	Peak	VERTICAL
4	5497.68	114.53	-4.06	110.47	F	--	Peak	VERTICAL
1	5460.00	53.24	-4.21	49.03	54.00	-4.97	Average	HORIZONTAL
2	5460.00	65.63	-4.21	61.42	68.20	-6.78	Peak	HORIZONTAL
3	5470.00	66.23	-4.17	62.06	68.20	-6.14	Peak	HORIZONTAL
4	5495.26	100.14	-4.07	96.07	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5700MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5706.80	114.94	-3.32	111.62	F	--	Peak	VERTICAL
2	5725.00	68.94	-3.25	65.69	68.20	-2.51	Peak	VERTICAL
1	5696.88	97.08	-3.37	93.71	F	--	Peak	HORIZONTAL
2	5725.00	65.20	-3.25	61.95	68.20	-6.25	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5510 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	55.21	-4.21	51.00	54.00	-3.00	Average	VERTICAL
2	5460.00	65.30	-4.21	61.09	68.20	-7.11	Peak	VERTICAL
3	5470.00	54.02	-4.17	49.85	68.20	-18.35	Peak	VERTICAL
4	5505.04	109.43	-4.06	105.37	F	--	Peak	VERTICAL
1	5460.00	52.22	-4.21	48.01	54.00	-5.99	Average	HORIZONTAL
2	5460.00	65.28	-4.21	61.07	68.20	-7.13	Peak	HORIZONTAL
3	5470.00	64.97	-4.17	60.80	68.20	-7.40	Peak	HORIZONTAL
4	5500.23	94.28	-4.06	90.22	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5670MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5673.20	108.74	-3.54	105.20	F	--	Peak	VERTICAL
2	5725.00	67.63	-3.25	64.38	68.20	-3.82	Peak	VERTICAL
1	5677.20	93.82	-3.52	90.30	F	--	Peak	HORIZONTAL
2	5725.00	65.88	-3.25	62.63	68.20	-5.57	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5530 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	54.24	-4.21	50.03	54.00	-3.97	Average	VERTICAL
2	5460.00	67.76	-4.21	63.55	68.20	-4.65	Peak	VERTICAL
3	5470.00	69.69	-4.17	65.52	68.20	-2.68	Peak	VERTICAL
4	5526.82	107.22	-4.02	103.20	F	--	Peak	VERTICAL
1	5460.00	55.25	-4.21	51.04	54.00	-2.96	Average	HORIZONTAL
2	5460.01	65.87	-4.21	61.66	68.20	-6.54	Peak	HORIZONTAL
3	5470.00	64.96	-4.17	60.79	68.20	-7.41	Peak	HORIZONTAL
4	5562.86	93.30	-3.96	89.34	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 2kHz, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5610MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5592.68	106.91	-3.91	103.00	F	--	Peak	VERTICAL
2	5725.00	65.82	-3.25	62.57	68.20	-5.63	Peak	VERTICAL
1	5587.92	90.22	-3.92	86.30	F	--	Peak	HORIZONTAL
2	5725.00	64.59	-3.25	61.34	68.20	-6.86	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 2kHz, Sweep time= 200 ms.

Dipole Ant.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11a mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5180 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	58.12	-5.11	53.01	54.00	-0.99	Average	VERTICAL
2	5150.00	70.77	-5.11	65.66	68.20	-2.54	Peak	VERTICAL
3	5179.65	115.22	-4.94	110.28	F	--	Peak	VERTICAL
1	5000.94	50.12	-5.34	44.78	54.00	-9.22	Average	HORIZONTAL
2	5000.94	63.99	-5.34	58.65	74.00	-15.35	Peak	HORIZONTAL
3	5150.00	58.01	-5.11	52.90	54.00	-1.10	Average	HORIZONTAL
4	5150.00	63.76	-5.11	58.65	68.20	-9.55	Peak	HORIZONTAL
5	5178.96	103.09	-4.94	98.15	F	--	Peak	HORIZONTAL

Remark:

- Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5320MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5313.22	115.24	-4.55	110.69	F	--	Peak	VERTICAL
2	5350.00	57.41	-4.50	52.91	54.00	-1.09	Average	VERTICAL
3	5350.00	68.57	-4.50	64.07	68.20	-4.13	Peak	VERTICAL
1	5327.36	102.26	-4.53	97.73	F	--	Peak	HORIZONTAL
2	5350.00	56.25	-4.50	51.75	54.00	-2.25	Average	HORIZONTAL
3	5350.00	63.65	-4.50	59.15	68.20	-9.05	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5180 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	4794.63	49.42	-5.77	43.65	54.00	-10.35	Average	VERTICAL
2	4794.63	63.19	-5.77	57.42	74.00	-16.58	Peak	VERTICAL
3	5000.25	48.51	-5.34	43.17	54.00	-10.83	Average	VERTICAL
4	5000.25	63.84	-5.34	58.50	74.00	-15.50	Peak	VERTICAL
5	5000.25	63.84	-5.34	58.50	74.00	-15.50	Peak	VERTICAL
6	5150.00	58.11	-5.11	53.00	54.00	-1.00	Average	VERTICAL
7	5150.00	70.50	-5.11	65.39	68.20	-2.81	Peak	VERTICAL
8	5185.17	114.73	-4.90	109.83	F	--	Peak	VERTICAL
1	4783.59	49.35	-5.77	43.58	54.00	-10.42	Average	HORIZONTAL
2	4783.59	65.65	-5.77	59.88	74.00	-14.12	Peak	HORIZONTAL
3	5000.25	51.30	-5.34	45.96	54.00	-8.04	Average	HORIZONTAL
4	5000.25	64.16	-5.34	58.82	74.00	-15.18	Peak	HORIZONTAL
5	5150.00	48.83	-5.11	43.72	54.00	-10.28	Average	HORIZONTAL
6	5150.00	62.84	-5.11	57.73	68.20	-10.47	Peak	HORIZONTAL
7	5182.41	102.62	-4.93	97.69	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5320MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5326.38	113.93	-4.53	109.40	F	--	Peak	VERTICAL
2	5350.00	57.24	-4.50	52.74	54.00	-1.26	Average	VERTICAL
3	5350.00	68.00	-4.50	63.50	68.20	-4.70	Peak	VERTICAL
1	5319.38	100.73	-4.54	96.19	F	--	Peak	HORIZONTAL
2	5350.00	56.81	-4.50	52.31	54.00	-1.69	Average	HORIZONTAL
3	5350.00	59.30	-4.50	54.80	68.20	-13.40	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5190 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	4783.29	47.58	-5.77	41.81	54.00	-12.19	Average	VERTICAL
2	4783.29	65.90	-5.77	60.13	74.00	-13.87	Peak	VERTICAL
3	5114.15	48.42	-5.30	43.12	54.00	-10.88	Average	VERTICAL
4	5114.15	66.34	-5.30	61.04	74.00	-12.96	Peak	VERTICAL
5	5150.00	57.93	-5.11	52.82	54.00	-1.18	Average	VERTICAL
6	5150.00	70.65	-5.11	65.54	68.20	-2.66	Peak	VERTICAL
7	5206.45	111.90	-4.80	107.10	F	--	Peak	VERTICAL
1	4780.45	52.78	-5.77	47.01	54.00	-6.99	Average	HORIZONTAL
2	4780.45	67.21	-5.77	61.44	74.00	-12.56	Peak	HORIZONTAL
3	5150.00	53.52	-5.11	48.41	54.00	-5.59	Average	HORIZONTAL
4	5150.00	60.55	-5.11	55.44	68.20	-12.76	Peak	HORIZONTAL
5	5187.28	99.23	-4.89	94.34	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5310MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5312.40	111.29	-4.55	106.74	F	--	Peak	VERTICAL
2	5350.00	54.58	-4.50	50.08	54.00	-3.92	Average	VERTICAL
3	5350.00	68.89	-4.50	64.39	68.20	-3.81	Peak	VERTICAL
1	5324.72	97.48	-4.53	92.95	F	--	Peak	HORIZONTAL
2	5350.00	54.57	-4.50	50.07	54.00	-3.93	Average	HORIZONTAL
3	5350.00	62.36	-4.50	57.86	68.20	-10.34	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5210 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	56.22	-5.11	51.11	54.00	-2.89	Average	VERTICAL
2	5150.00	70.37	-5.11	65.26	68.20	-2.94	Peak	VERTICAL
3	5221.50	110.20	-4.75	105.45	F	--	Peak	VERTICAL
1	5150.00	56.24	-5.11	51.13	54.00	-2.87	Average	HORIZONTAL
2	5150.00	66.61	-5.11	61.50	68.20	-6.70	Peak	HORIZONTAL
3	5222.25	94.40	-4.75	89.65	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5290MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5317.20	108.54	-4.54	104.00	F	--	Peak	VERTICAL
2	5350.00	54.24	-4.50	49.74	54.00	-4.26	Average	VERTICAL
3	5350.00	68.33	-4.50	63.83	68.20	-4.37	Peak	VERTICAL
1	5285.20	93.17	-4.59	88.58	F	--	Peak	HORIZONTAL
2	5350.00	56.24	-4.50	51.74	54.00	-2.26	Average	HORIZONTAL
3	5350.00	66.61	-4.50	62.11	68.20	-6.09	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11a mode) -Radiated

Operation Mode TX CH Low
Channel Number 5500 MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	46.22	-4.21	42.01	54.00	-11.99	Average	VERTICAL
2	5460.17	70.08	-4.21	65.87	68.20	-2.33	Peak	VERTICAL
3	5460.17	70.08	-4.21	65.87	68.20	-2.33	Peak	VERTICAL
4	5470.00	67.83	-4.17	63.66	68.20	-4.54	Peak	VERTICAL
5	5493.94	115.33	-4.08	111.25	F	--	Peak	VERTICAL
1	5450.00	51.20	-4.23	46.97	54.00	-7.03	Average	HORIZONTAL
2	5450.00	57.71	-4.23	53.48	74.00	-20.52	Peak	HORIZONTAL
3	5470.00	62.72	-4.17	58.55	68.20	-9.65	Peak	HORIZONTAL
4	5495.37	103.26	-4.07	99.19	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5700MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5697.04	114.95	-3.37	111.58	F	--	Peak	VERTICAL
2	5725.00	69.63	-3.25	66.38	68.20	-1.82	Peak	VERTICAL
1	5699.12	101.44	-3.36	98.08	F	--	Peak	HORIZONTAL
2	5725.00	57.23	-3.25	53.98	68.20	-14.22	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 1kHz, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5500 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	53.24	-4.21	49.03	54.00	-4.97	Average	VERTICAL
2	5460.00	63.43	-4.21	59.22	68.20	-8.98	Peak	VERTICAL
3	5470.00	69.32	-4.17	65.15	68.20	-3.05	Peak	VERTICAL
4	5498.56	114.18	-4.06	110.12	F	--	Peak	VERTICAL
1	5460.00	52.36	-4.21	48.15	54.00	-5.85	Average	HORIZONTAL
2	5460.00	58.04	-4.21	53.83	68.20	-14.37	Peak	HORIZONTAL
3	5470.00	62.25	-4.17	58.08	68.20	-10.12	Peak	HORIZONTAL
4	5493.61	102.64	-4.08	98.56	F	--	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5700MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5698.96	113.93	-3.36	110.57	F	--	Peak	VERTICAL
2	5725.00	68.00	-3.25	64.75	68.20	-3.45	Peak	VERTICAL
1	5706.48	100.00	-3.32	96.68	F	--	Peak	HORIZONTAL
2	5725.00	56.99	-3.25	53.74	68.20	-14.46	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5510 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	54.34	-4.21	50.13	54.00	-3.87	Average	VERTICAL
2	5460.00	62.22	-4.21	58.01	68.20	-10.19	Peak	VERTICAL
3	5470.00	65.06	-4.17	60.89	68.20	-7.31	Peak	VERTICAL
4	5493.86	108.32	-4.08	104.24	F	--	Peak	VERTICAL
1	5460.00	55.73	-4.21	51.52	68.20	-16.68	Peak	HORIZONTAL
2	5470.00	56.95	-4.17	52.78	68.20	-15.42	Peak	HORIZONTAL
3	5500.36	95.17	-4.06	91.11	F	--	Peak	HORIZONTAL

Remark:

- Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Operation Mode TX CH High
Channel Number 5670MHz
Temperature 25 °C

Test Date 2022/11/11
Test By Barry
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5681.00	110.10	-3.48	106.62	F	--	Peak	VERTICAL
2	5725.00	62.66	-3.25	59.41	68.20	-8.79	Peak	VERTICAL
1	5675.20	96.65	-3.53	93.12	F	--	Peak	HORIZONTAL
2	5811.20	65.77	-3.00	62.77	68.20	-5.43	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/11/11
Channel Number	5530 MHz	Test By	Barry
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5460.00	55.24	-4.21	51.03	54.00	-2.97	Average	VERTICAL
2	5460.00	65.31	-4.21	61.10	68.20	-7.10	Peak	VERTICAL
3	5470.00	66.34	-4.17	62.17	68.20	-6.03	Peak	VERTICAL
4	5540.25	106.97	-3.99	102.98	F	--	Peak	VERTICAL
1	5460.00	53.59	-4.21	49.38	54.00	-4.62	Average	HORIZONTAL
2	5460.01	66.52	-4.21	62.31	68.20	-5.89	Peak	HORIZONTAL
3	5470.00	65.43	-4.17	61.26	68.20	-6.94	Peak	HORIZONTAL
4	5519.51	92.61	-4.03	88.58	F	--	Peak	HORIZONTAL

Remark:

- Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 2kHz, Sweep time= 200 ms.

Operation Mode TX CH High
 Channel Number 5610MHz
 Temperature 25 °C

Test Date 2022/11/11
 Test By Barry
 Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5599.68	107.02	-3.90	103.12	F	--	Peak	VERTICAL
2	5725.00	65.85	-3.25	62.60	68.20	-5.60	Peak	VERTICAL
1	5606.68	91.97	-3.88	88.09	F	--	Peak	HORIZONTAL
2	5725.00	65.91	-3.25	62.66	68.20	-5.54	Peak	HORIZONTAL

Remark:

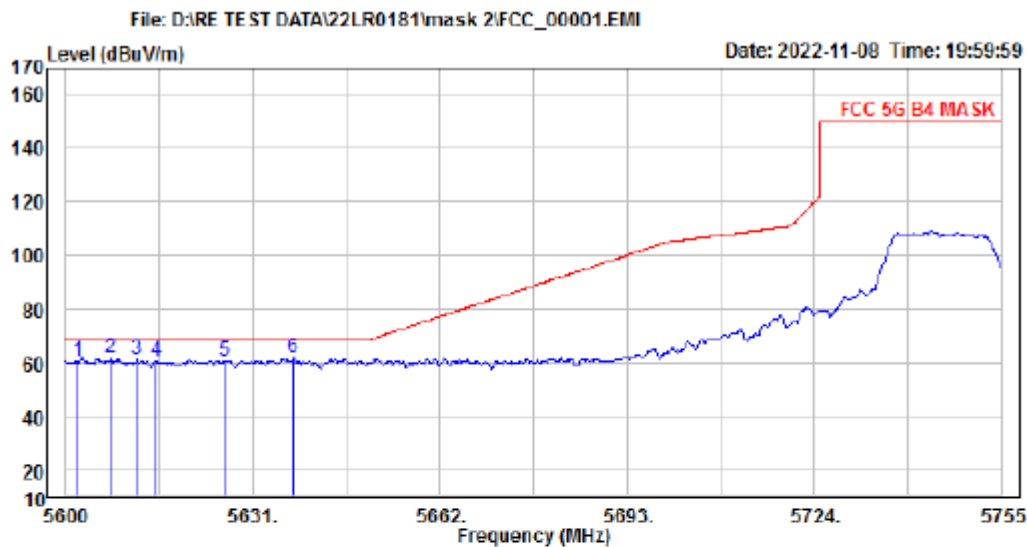
- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW= 2kHz, Sweep time= 200 ms.

PIFA Ant.

Band Edges test (Band UNII-3, 802.11a mode) –Radiated

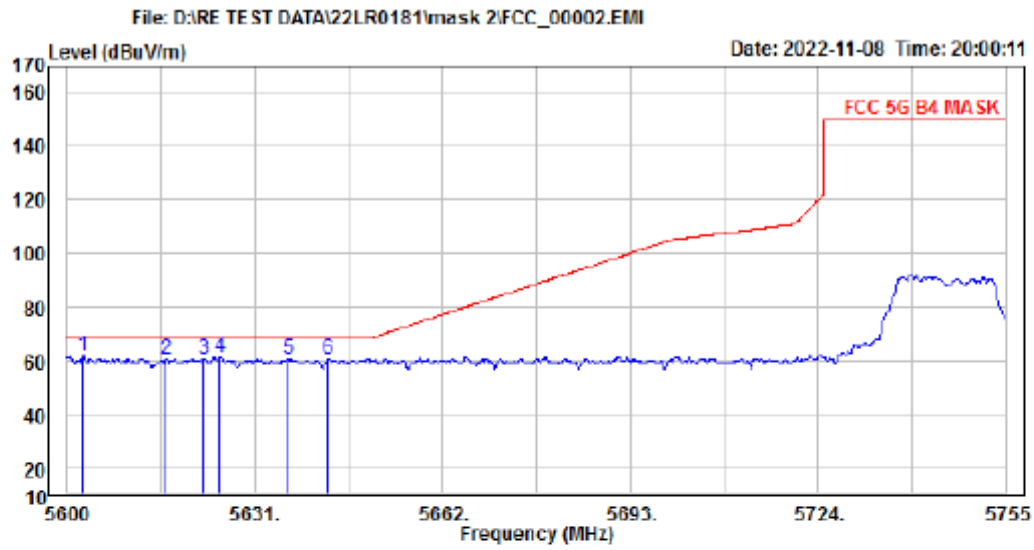
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 a Mode Low Ch
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5602.015	64.95	-4.61	60.34	68.20	-7.86	Vertical
2	5607.440	66.03	-4.62	61.41	68.20	-6.79	Vertical
3	5611.780	65.59	-4.63	60.96	68.20	-7.24	Vertical
4	5615.035	65.02	-4.63	60.39	68.20	-7.81	Vertical
5	5626.350	65.40	-4.66	60.74	68.20	-7.46	Vertical
6 PP	5637.665	66.20	-4.68	61.52	68.20	-6.68	Vertical

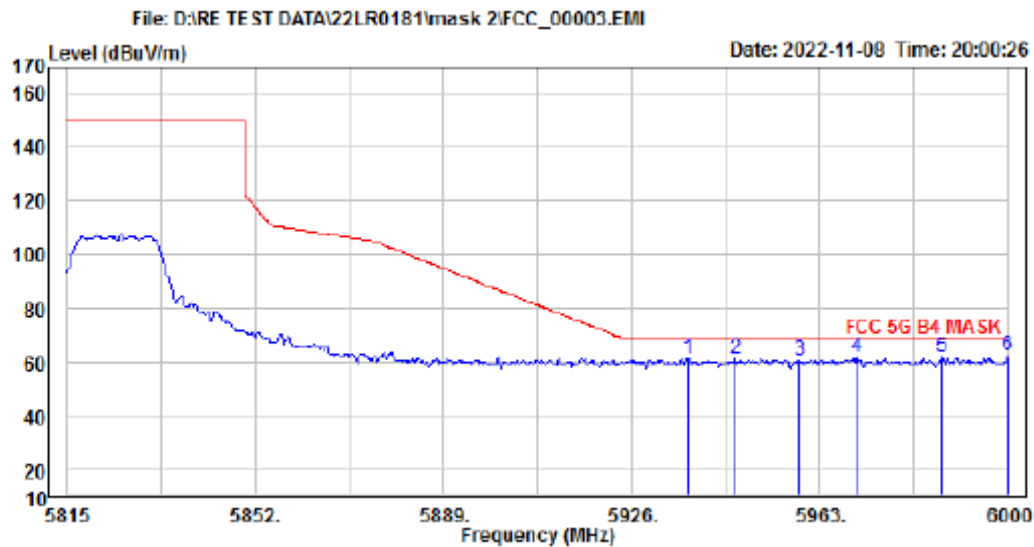


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT : :22LR0181
 Mode : 5G Mask B4 a Mode Low Ch
 Note :

		Read		Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5602.635	66.25	-4.61	61.64	68.20	-6.56	Horizontal
2 5616.430	65.27	-4.64	60.63	68.20	-7.57	Horizontal
3 5622.630	65.41	-4.65	60.76	68.20	-7.44	Horizontal
4 5625.265	66.04	-4.65	61.39	68.20	-6.81	Horizontal
5 5636.425	65.39	-4.68	60.71	68.20	-7.49	Horizontal
6 5643.090	65.02	-4.70	60.32	68.20	-7.88	Horizontal

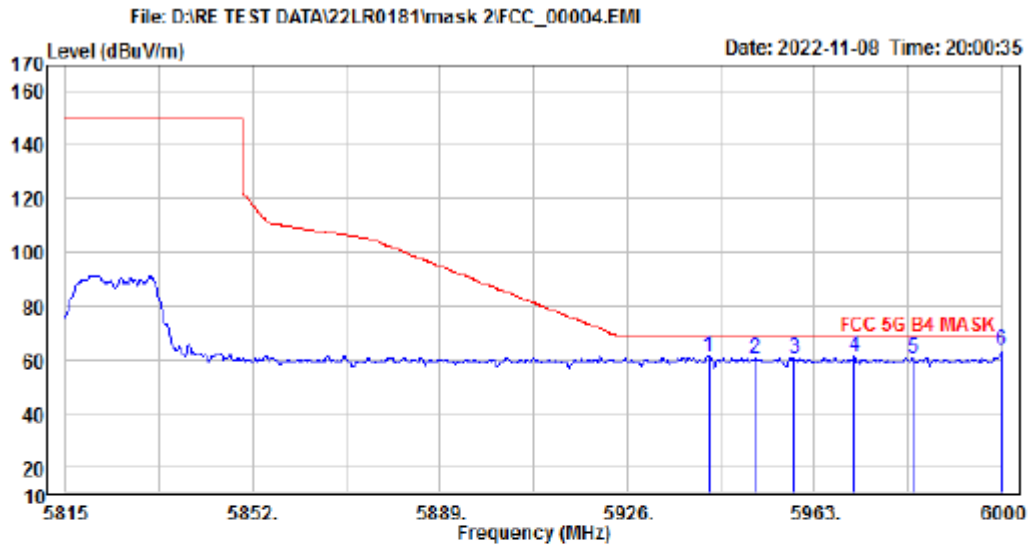
Operation Mode TX CH High
Channel Number 5825MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 a Mode High Ch
Note :

	Freq	Read Level	Factor	Level	Limit	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5937.100	65.14	-3.87	61.27	68.20	-6.93	Vertical
2	5946.350	64.89	-3.87	61.02	68.20	-7.18	Vertical
3	5958.930	64.60	-3.84	60.76	68.20	-7.44	Vertical
4	5970.215	65.22	-3.80	61.42	68.20	-6.78	Vertical
5	5987.050	65.24	-3.74	61.50	68.20	-6.70	Vertical
6 PP	6000.000	66.16	-3.69	62.47	68.20	-5.73	Vertical



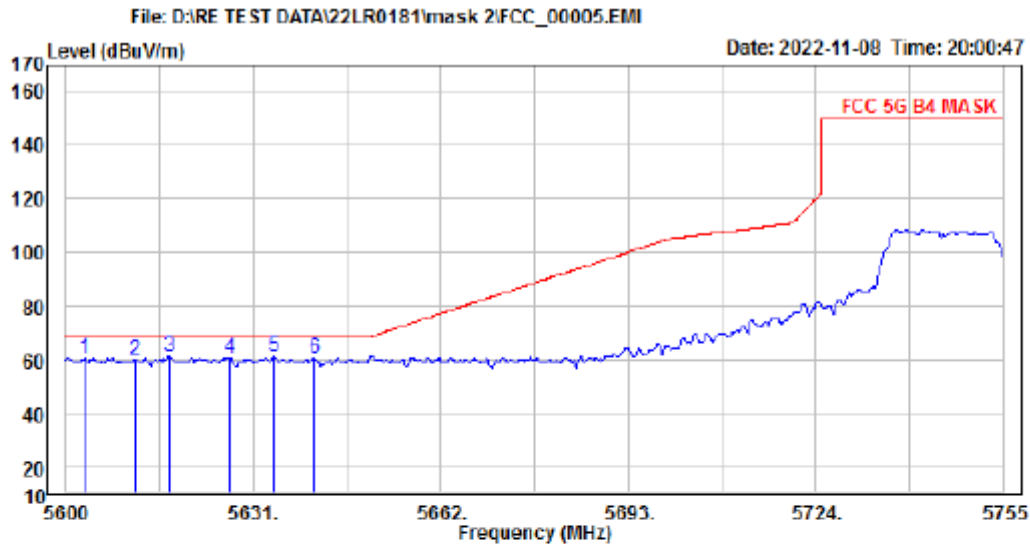
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT : 22LR0181
 Mode : 5G Mask B4 a Mode High Ch
 Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5942.095	64.99	-3.88	61.11	68.20	-7.09 Horizontal
2	5951.160	64.15	-3.88	60.27	68.20	-7.93 Horizontal
3	5958.930	64.41	-3.84	60.57	68.20	-7.63 Horizontal
4	5970.955	64.67	-3.80	60.87	68.20	-7.33 Horizontal
5	5982.425	64.38	-3.76	60.62	68.20	-7.58 Horizontal
6 PP	6000.000	67.38	-3.69	63.69	68.20	-4.51 Horizontal

Band Edges test (Band UNII-3, 802.11n HT20 mode) –Radiated

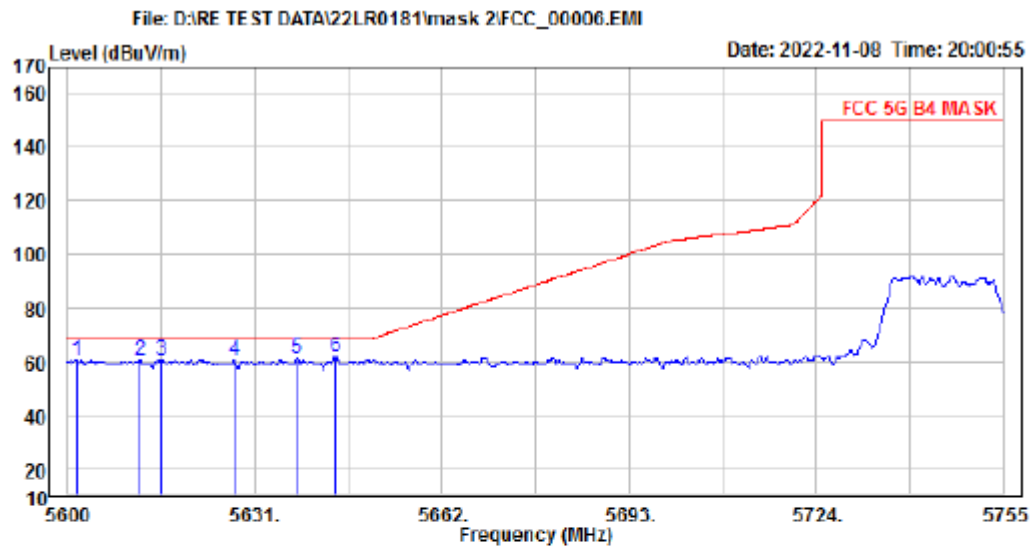
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 n20 Mode Low Ch
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5603.100	65.06	-4.61	60.45	68.20	-7.75	Vertical
2	5611.470	64.36	-4.63	59.73	68.20	-8.47	Vertical
3	5617.050	65.60	-4.64	60.96	68.20	-7.24	Vertical
4	5627.125	65.37	-4.66	60.71	68.20	-7.49	Vertical
5 PP	5634.410	65.70	-4.69	61.01	68.20	-7.19	Vertical
6	5641.075	65.15	-4.69	60.46	68.20	-7.74	Vertical

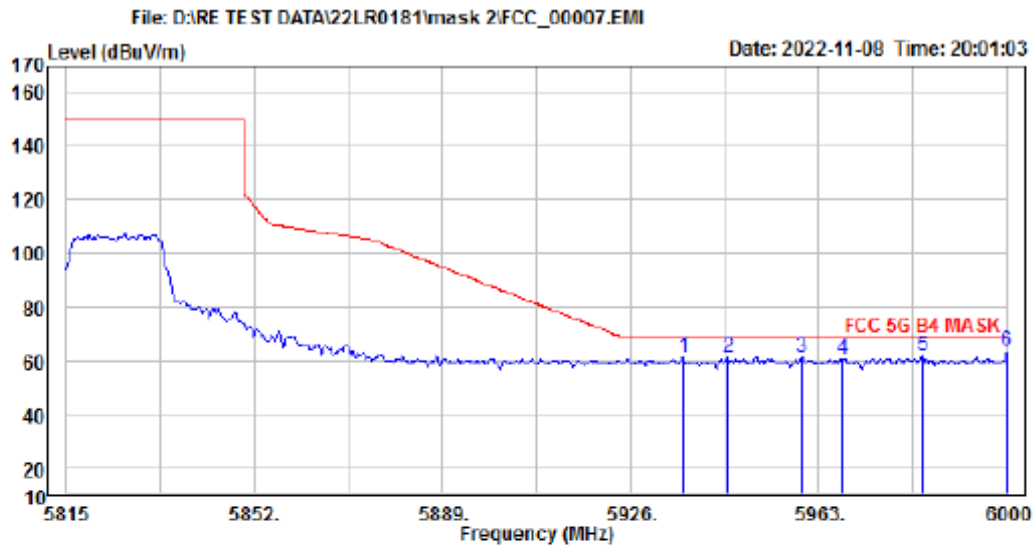


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT : 22LR0181
 Mode : 5G Mask B4 n20 Mode Low Ch
 Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5601.395	65.36	-4.61	60.75	68.20	-7.45 Horizontal
2	5611.935	65.30	-4.63	60.67	68.20	-7.53 Horizontal
3	5615.500	65.38	-4.63	60.75	68.20	-7.45 Horizontal
4	5627.590	65.35	-4.66	60.69	68.20	-7.51 Horizontal
5	5637.975	66.00	-4.68	61.32	68.20	-6.88 Horizontal
6 PP	5644.330	66.56	-4.71	61.85	68.20	-6.35 Horizontal

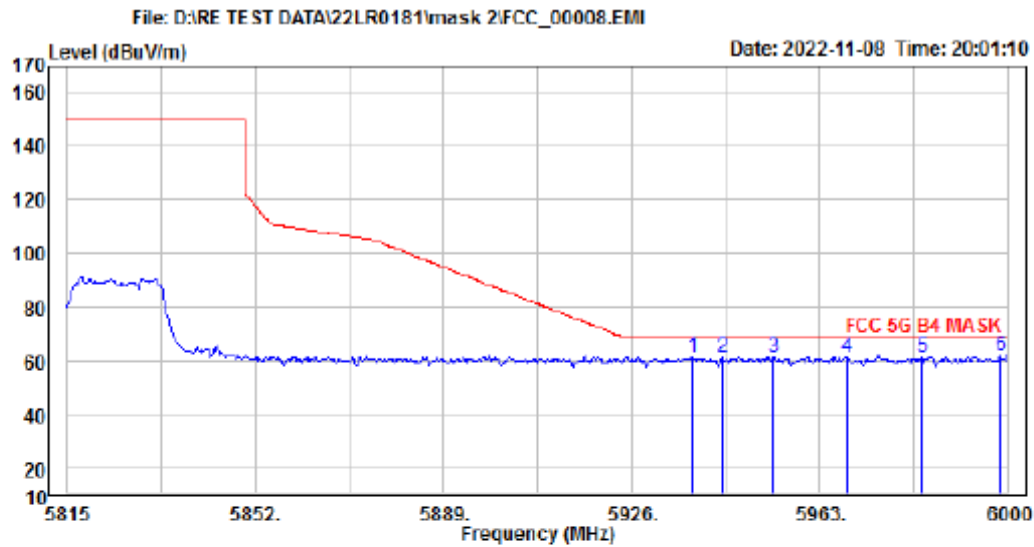
Operation Mode TX CH High
Channel Number 5825 MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 n20 Mode High Ch
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5936.360	64.81	-3.87	60.94	68.20	-7.26 Vertical
2	5945.055	64.77	-3.87	60.90	68.20	-7.30 Vertical
3	5959.670	65.11	-3.84	61.27	68.20	-6.93 Vertical
4	5967.625	64.52	-3.81	60.71	68.20	-7.49 Vertical
5	5983.350	65.20	-3.75	61.45	68.20	-6.75 Vertical
6 PP	6000.000	67.45	-3.69	63.76	68.20	-4.44 Vertical



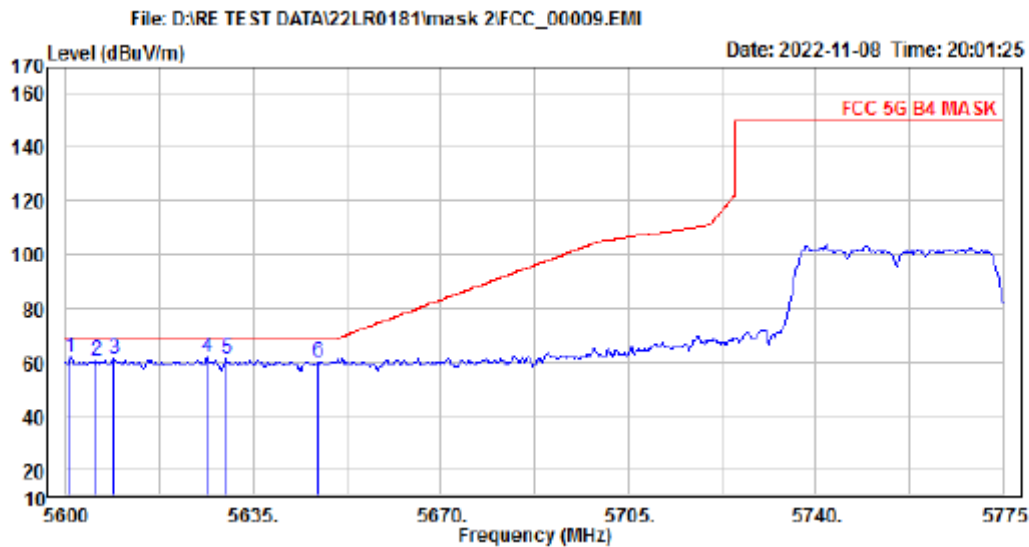
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT : 22LR0181
 Mode : 5G Mask B4 n20 Mode High Ch
 Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5938.025	65.14	-3.88	61.26	68.20	-6.94 Horizontal
2	5943.760	64.84	-3.88	60.96	68.20	-7.24 Horizontal
3	5953.935	65.00	-3.87	61.13	68.20	-7.07 Horizontal
4	5968.180	64.96	-3.80	61.16	68.20	-7.04 Horizontal
5	5983.165	64.92	-3.75	61.17	68.20	-7.03 Horizontal
6 PP	5998.520	65.26	-3.69	61.57	68.20	-6.63 Horizontal

Band Edges test (Band UNII-3, 802.11n HT40 mode) –Radiated

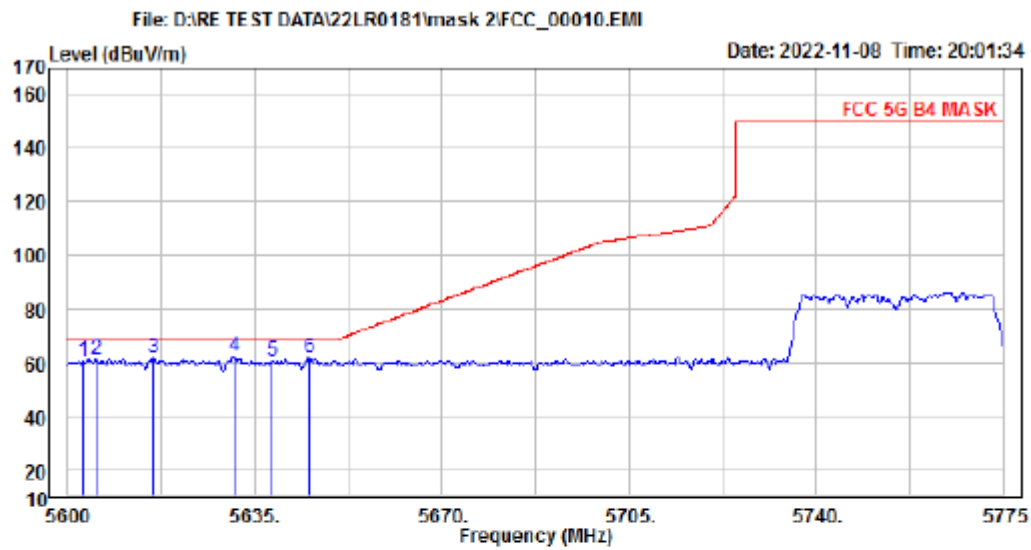
Operation Mode TX CH Low
Channel Number 5755 MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 n40 Mode Low Ch
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5600.875	66.32	-4.60	61.72	68.20	-6.48 Vertical
2	5605.600	64.88	-4.61	60.27	68.20	-7.93 Vertical
3	5609.100	65.55	-4.62	60.93	68.20	-7.27 Vertical
4 PP	5626.425	66.39	-4.66	61.73	68.20	-6.47 Vertical
5	5629.925	65.89	-4.67	61.22	68.20	-6.98 Vertical
6	5647.075	64.59	-4.71	59.88	68.20	-8.32 Vertical

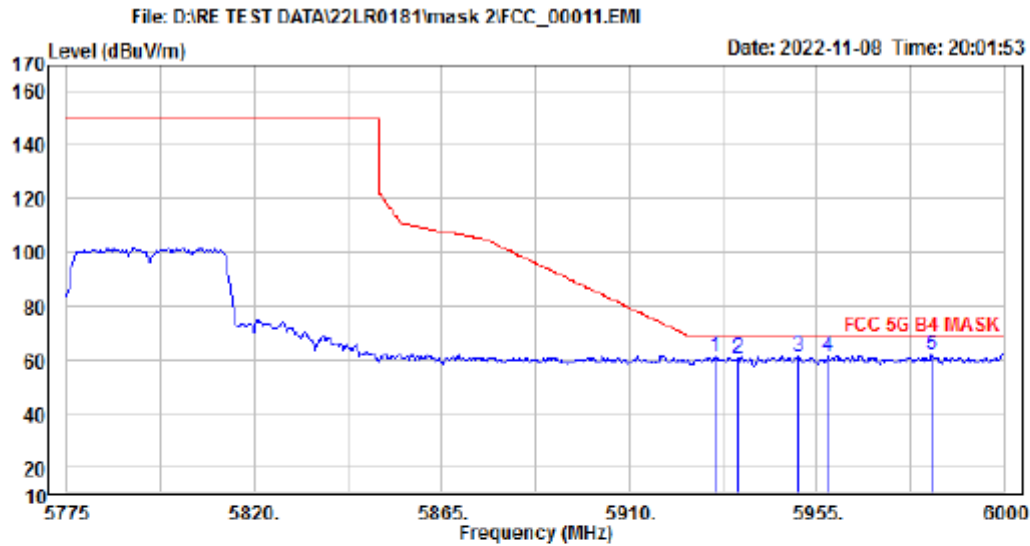


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT : 22LR0181
 Mode : 5G Mask B4 n40 Mode Low Ch
 Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5602.975	64.98	-4.61	60.37	68.20	-7.83 Horizontal
2	5605.250	65.58	-4.61	60.97	68.20	-7.23 Horizontal
3	5616.100	66.22	-4.63	61.59	68.20	-6.61 Horizontal
4 PP	5631.150	67.07	-4.67	62.40	68.20	-5.80 Horizontal
5	5638.325	65.30	-4.68	60.62	68.20	-7.58 Horizontal
6	5645.150	66.59	-4.70	61.89	68.20	-6.31 Horizontal

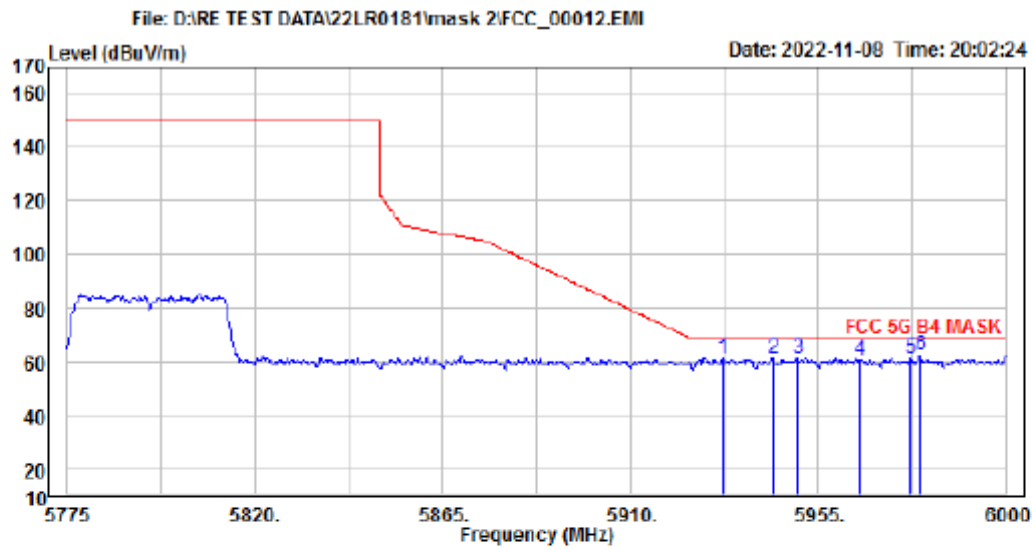
Operation Mode TX CH High
Channel Number 5795MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 n40 Mode High Ch
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5930.475	64.87	-3.87	61.00	68.20	-7.20 Vertical
2	5936.100	64.62	-3.87	60.75	68.20	-7.45 Vertical
3	5950.500	64.81	-3.88	60.93	68.20	-7.27 Vertical
4	5957.700	65.18	-3.84	61.34	68.20	-6.86 Vertical
5	5982.450	65.49	-3.76	61.73	68.20	-6.47 Vertical
6 PP	6000.000	66.71	-3.69	63.02	68.20	-5.18 Vertical
7	6000.000	66.71	-3.69	63.02	68.20	-5.18 Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive

EUT : 22LR0181

Mode : 5G Mask B4 n40 Mode High Ch

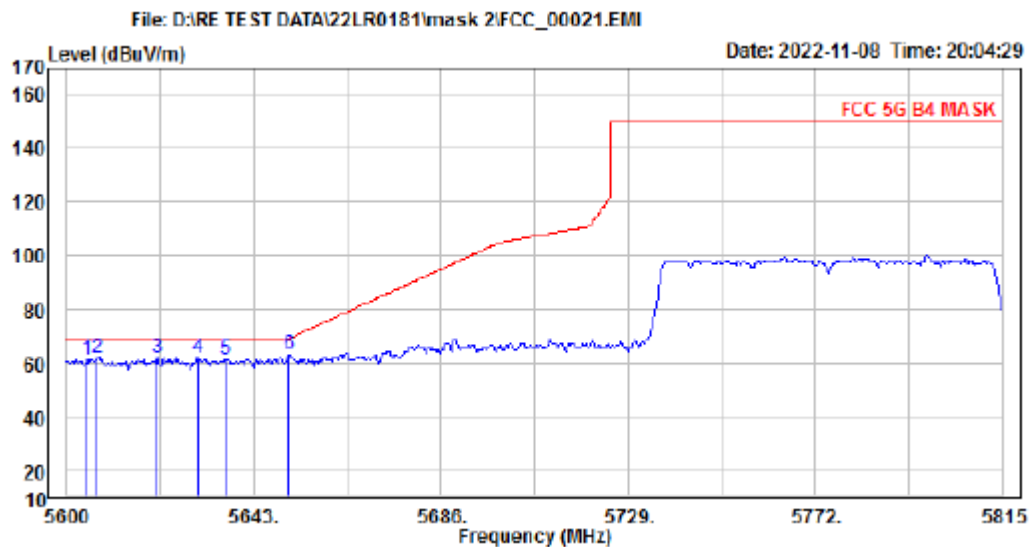
Note :

	Freq	Read Level	Factor	Level	Limit	Over	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5932.050	65.03	-3.87	61.16	68.20	-7.04	Horizontal
2	5944.200	64.85	-3.88	60.97	68.20	-7.23	Horizontal
3	5950.050	65.04	-3.88	61.16	68.20	-7.04	Horizontal
4	5965.125	64.29	-3.82	60.47	68.20	-7.73	Horizontal
5	5977.275	64.71	-3.78	60.93	68.20	-7.27	Horizontal
6	5979.300	66.02	-3.77	62.25	68.20	-5.95	Horizontal
7 PP	6000.000	66.79	-3.69	63.10	68.20	-5.10	Horizontal

Band Edges test (Band UNII-3, 802.11ac VHT80 mode) –Radiated

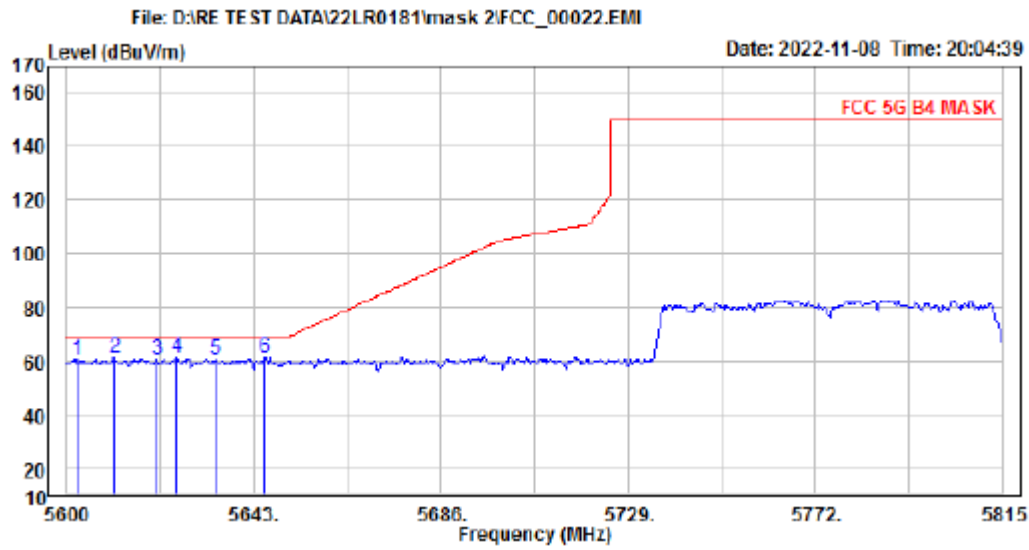
Operation Mode TX CH Low
Channel Number 5775 MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 ac80 Mode Low Ch
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5604.730	65.52	-4.62	60.90	68.20	-7.30	Vertical
2	5607.095	66.52	-4.62	61.90	68.20	-6.30	Vertical
3	5620.855	66.60	-4.65	61.95	68.20	-6.25	Vertical
4	5630.100	66.21	-4.67	61.54	68.20	-6.66	Vertical
5	5636.335	65.95	-4.68	61.27	68.20	-6.93	Vertical
6 PP	5651.170	67.55	-4.71	62.84	69.07	-6.23	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive

EUT : 22LR0181

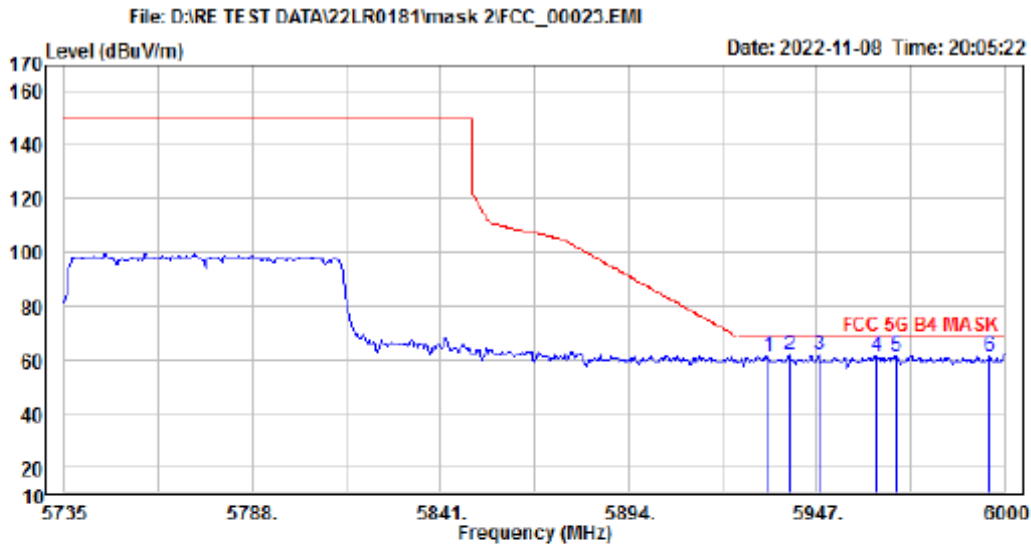
Mode : 5G Mask B4 ac80 Mode Low Ch

Note :

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5602.365	65.11	-4.61	60.50	68.20	-7.70	Horizontal
2	5610.965	65.59	-4.62	60.97	68.20	-7.23	Horizontal
3	5620.640	65.06	-4.65	60.41	68.20	-7.79	Horizontal
4	5625.370	65.56	-4.65	60.91	68.20	-7.29	Horizontal
5	5634.400	65.07	-4.69	60.38	68.20	-7.82	Horizontal
6 PP	5645.580	65.96	-4.70	61.26	68.20	-6.94	Horizontal

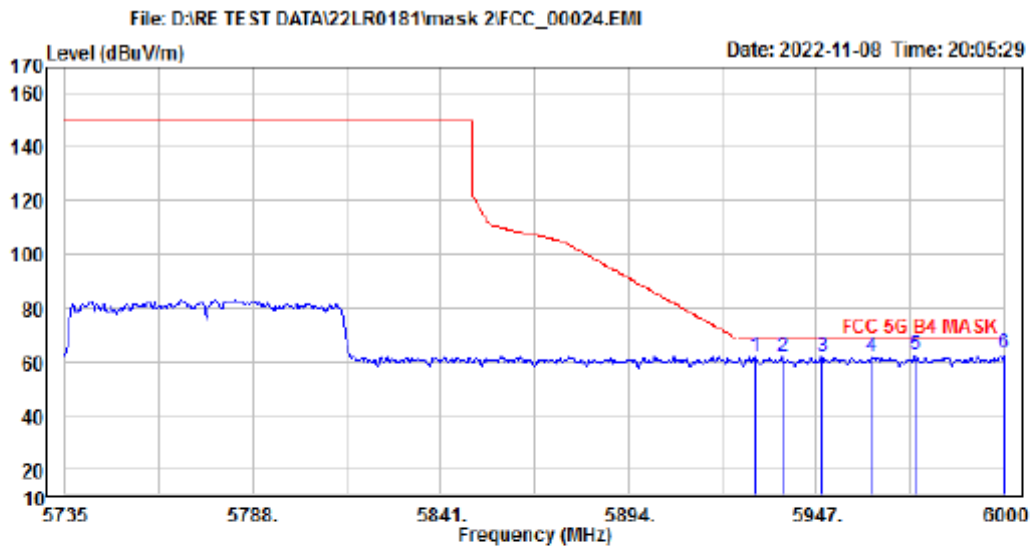
Operation Mode TX CH High
Channel Number 5775MHz
Temperature 25 °C

Test Date 2022/11/08
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT : 22LR0181
Mode : 5G Mask B4 ac80 Mode Low Ch
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5933.220	65.09	-3.88	61.21	68.20	-6.99 Vertical
2 PP	5939.315	65.33	-3.88	61.45	68.20	-6.75 Vertical
3	5947.530	65.33	-3.88	61.45	68.20	-6.75 Vertical
4	5963.695	64.83	-3.83	61.00	68.20	-7.20 Vertical
5	5969.260	65.15	-3.80	61.35	68.20	-6.85 Vertical
6	5995.760	64.59	-3.70	60.89	68.20	-7.31 Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT : 22LR0181
 Mode : 5G Mask B4 ac80 Mode Low Ch
 Note :

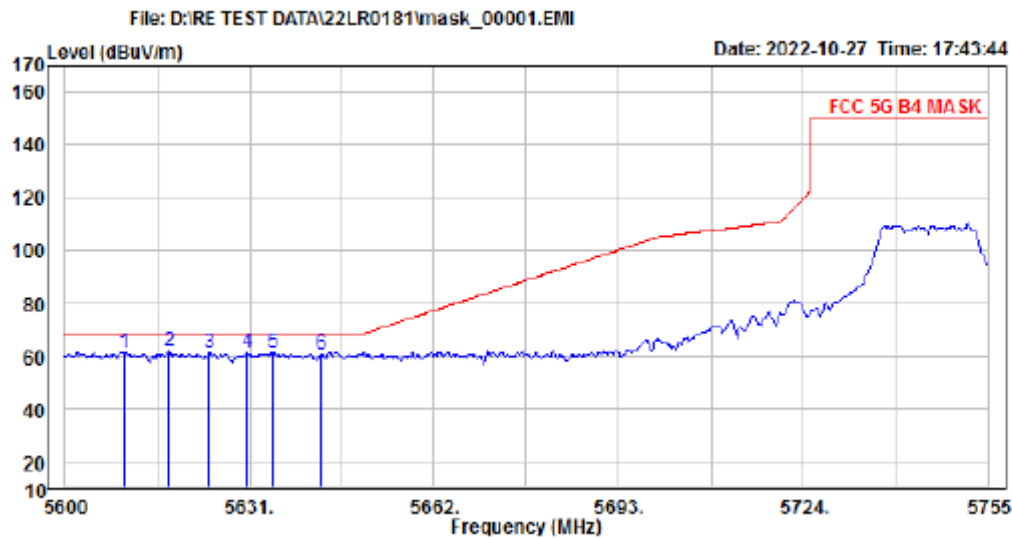
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5929.775	65.81	-3.87	61.94	68.20	-6.26	Horizontal
2	5937.460	65.74	-3.87	61.87	68.20	-6.33	Horizontal
3	5948.590	65.68	-3.88	61.80	68.20	-6.40	Horizontal
4	5962.635	65.30	-3.83	61.47	68.20	-6.73	Horizontal
5	5974.825	66.05	-3.79	62.26	68.20	-5.94	Horizontal
6 PP	6000.000	66.66	-3.69	62.97	68.20	-5.23	Horizontal

Dipole Ant.

Band Edges test (Band UNII-3, 802.11a mode) –Radiated

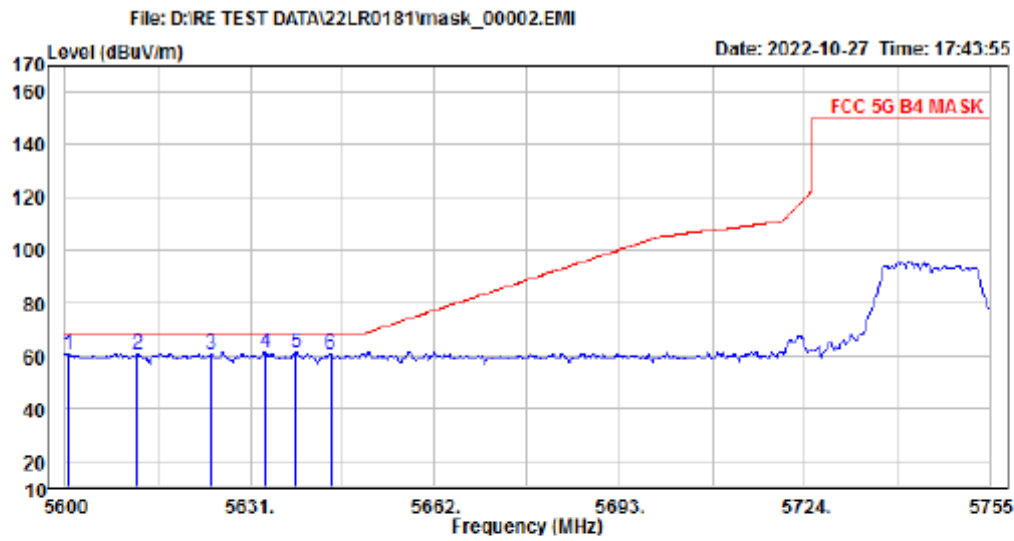
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 a Mode Low Ch
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5609.765	65.67	-4.62	61.05	68.20	-7.15 Vertical
2 PP	5617.360	66.31	-4.64	61.67	68.20	-6.53 Vertical
3	5624.180	65.55	-4.66	60.89	68.20	-7.31 Vertical
4	5630.690	65.48	-4.67	60.81	68.20	-7.39 Vertical
5	5635.030	66.02	-4.67	61.35	68.20	-6.85 Vertical
6	5643.090	65.12	-4.70	60.42	68.20	-7.78 Vertical

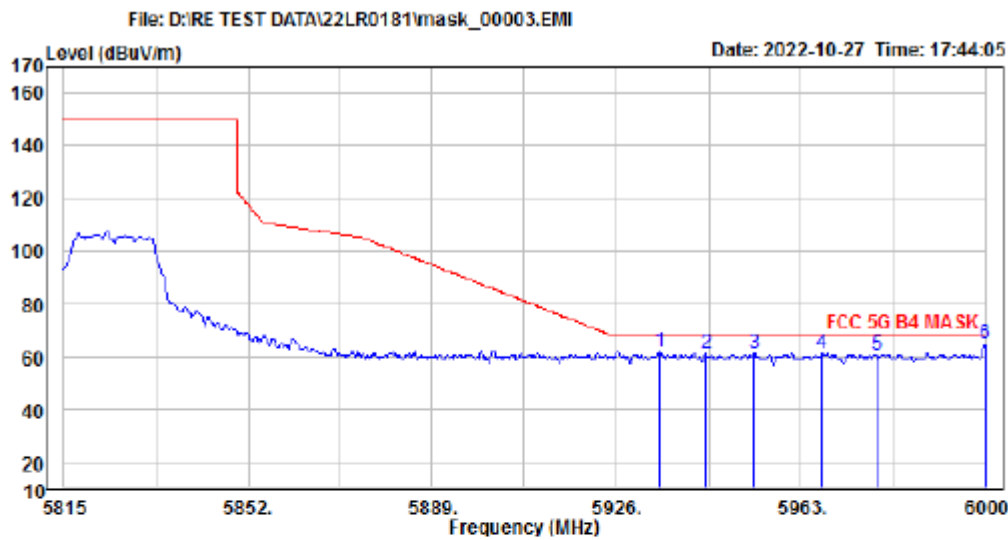


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT :
 Mode : 5G Mask B4 a Mode Low Ch
 Note :

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5600.310	65.27	-4.60	60.67	68.20	-7.53	Horizontal
2	5612.090	65.09	-4.63	60.46	68.20	-7.74	Horizontal
3	5624.490	65.26	-4.66	60.60	68.20	-7.60	Horizontal
4	5633.480	65.77	-4.68	61.09	68.20	-7.11	Horizontal
5 PP	5638.750	65.91	-4.68	61.23	68.20	-6.97	Horizontal
6	5644.485	64.92	-4.71	60.21	68.20	-7.99	Horizontal

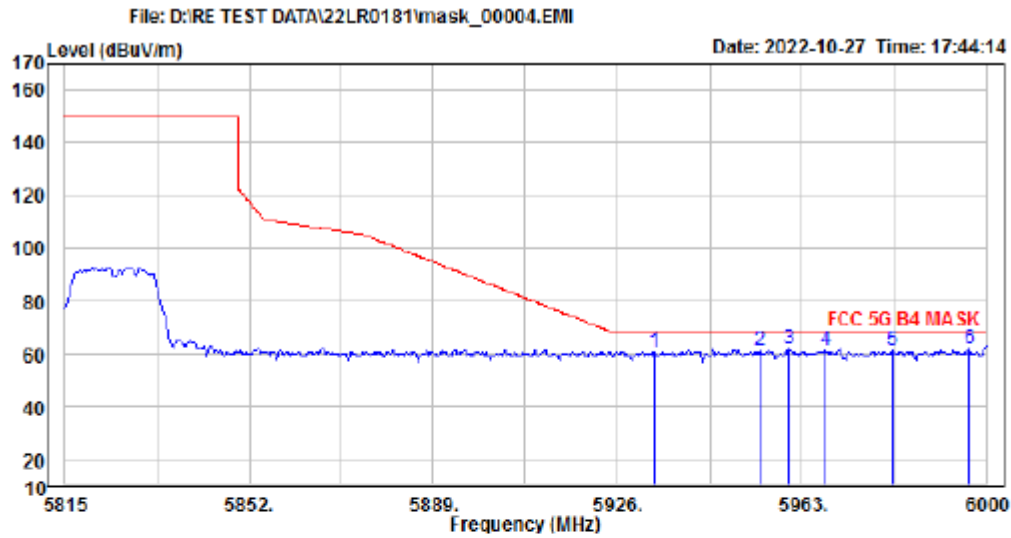
Operation Mode TX CH High
Channel Number 5825MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 a Mode High Ch
Note :

	Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5934.880	65.51	-3.88	61.63	68.20	-6.57 Vertical
2	5943.760	65.10	-3.88	61.22	68.20	-6.98 Vertical
3	5953.565	65.28	-3.87	61.41	68.20	-6.79 Vertical
4	5967.070	65.14	-3.82	61.32	68.20	-6.88 Vertical
5	5978.170	64.51	-3.77	60.74	68.20	-7.46 Vertical
6 PP	6000.000	68.17	-3.69	64.48	68.20	-3.72 Vertical



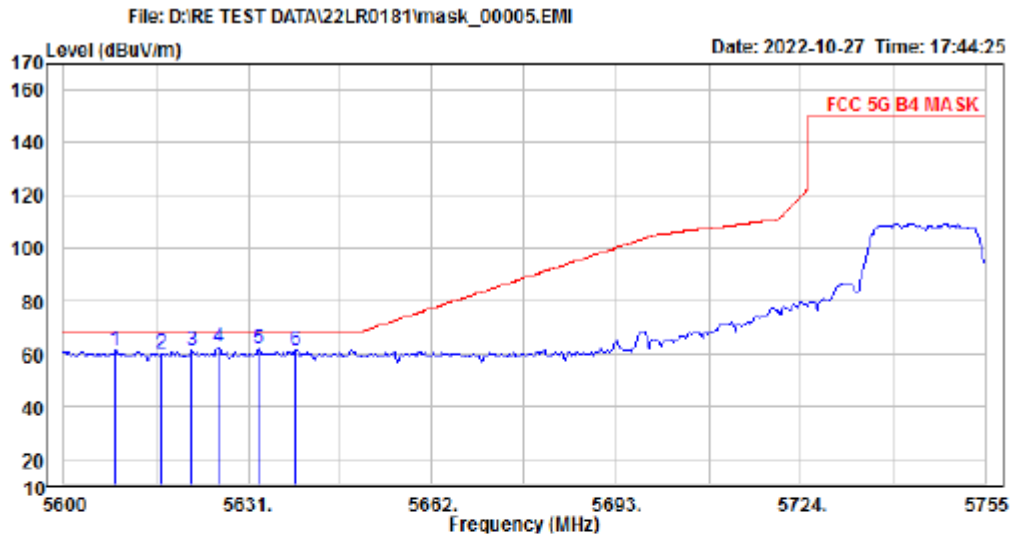
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT :
 Mode : 5G Mask B4 a Mode High Ch
 Note :

	Read Freq	Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5933.585	64.35	-3.88	60.47	68.20	-7.73	Horizontal
2	5954.490	64.68	-3.87	60.81	68.20	-7.39	Horizontal
3 PP	5960.225	65.76	-3.84	61.92	68.20	-6.28	Horizontal
4	5967.625	64.86	-3.81	61.05	68.20	-7.15	Horizontal
5	5981.130	64.69	-3.76	60.93	68.20	-7.27	Horizontal
6	5996.485	65.21	-3.70	61.51	68.20	-6.69	Horizontal

Band Edges test (Band UNII-3, 802.11n HT20 mode) –Radiated

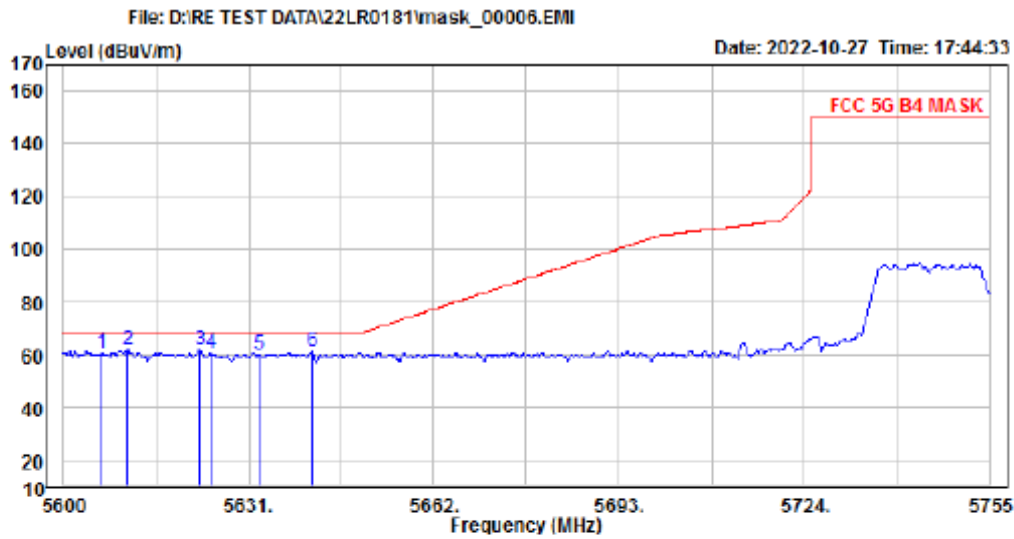
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n20 Mode Low Ch
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 5608.525	65.60	-4.62	60.98	68.20	-7.22	Vertical
2 5616.430	64.72	-4.64	60.08	68.20	-8.12	Vertical
3 5621.545	65.49	-4.66	60.83	68.20	-7.37	Vertical
4 PP 5626.040	66.79	-4.65	62.14	68.20	-6.06	Vertical
5 5632.860	66.67	-4.68	61.99	68.20	-6.21	Vertical
6 5639.060	65.90	-4.69	61.21	68.20	-6.99	Vertical

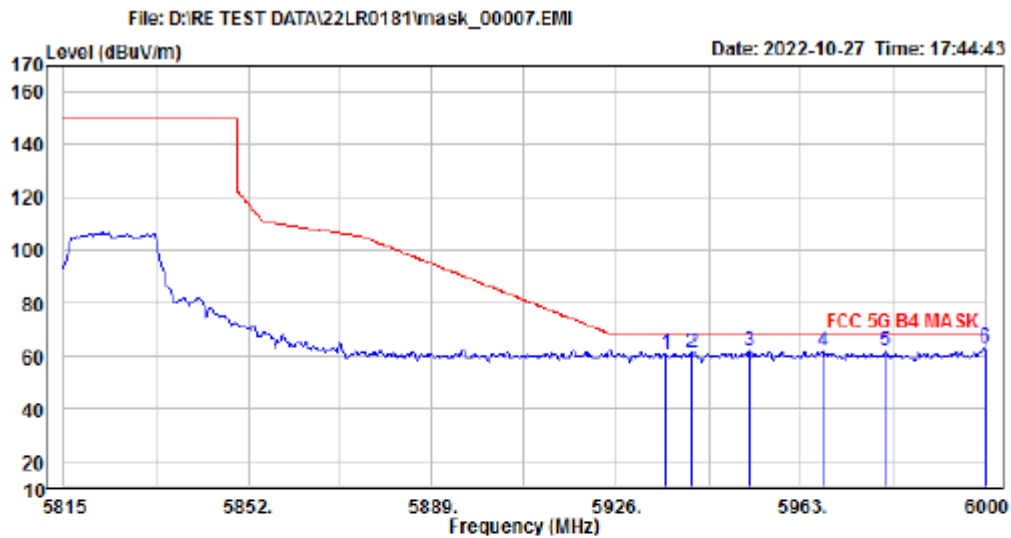


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT :
 Mode : 5G Mask B4 n20 Mode Low Ch
 Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5606.355	65.28	-4.62	60.66	68.20	-7.54 Horizontal
2 PP	5618.695	66.63	-4.62	62.01	68.20	-6.19 Horizontal
3	5622.785	66.17	-4.65	61.52	68.20	-6.68 Horizontal
4	5624.645	65.05	-4.66	60.39	68.20	-7.81 Horizontal
5	5632.860	64.73	-4.68	60.05	68.20	-8.15 Horizontal
6	5641.540	65.79	-4.70	61.09	68.20	-7.11 Horizontal

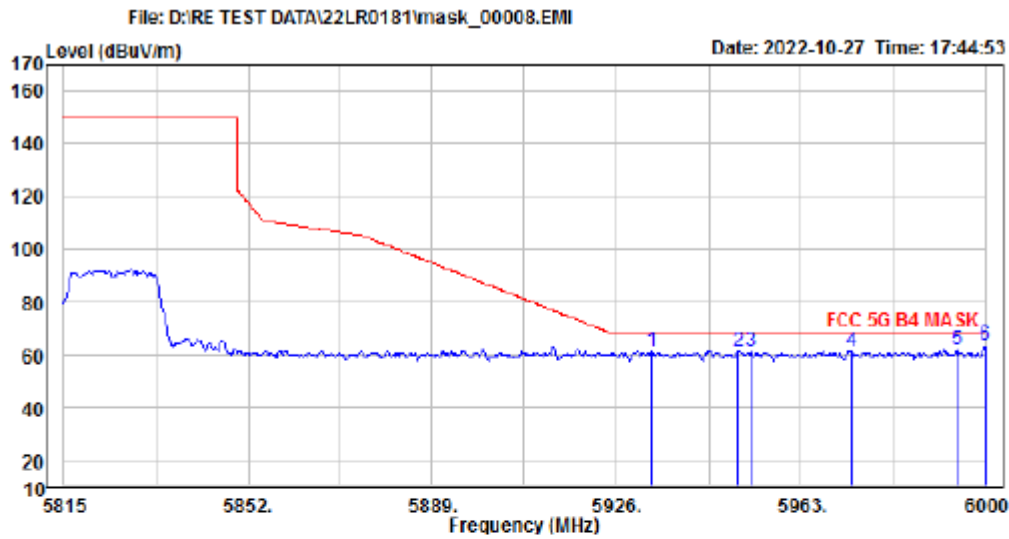
Operation Mode TX CH High
Channel Number 5825 MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n20 Mode High Ch
Note :

	Read Freq	Level	Factor	Level	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Pol/Phase
1	5935.990	64.36	-3.87	60.49	68.20	-7.71	Vertical
2	5941.355	65.07	-3.88	61.19	68.20	-7.01	Vertical
3	5952.455	65.31	-3.88	61.43	68.20	-6.77	Vertical
4	5967.440	65.66	-3.82	61.84	68.20	-6.36	Vertical
5	5980.020	65.22	-3.77	61.45	68.20	-6.75	Vertical
6 PP	6000.000	66.79	-3.69	63.10	68.20	-5.10	Vertical



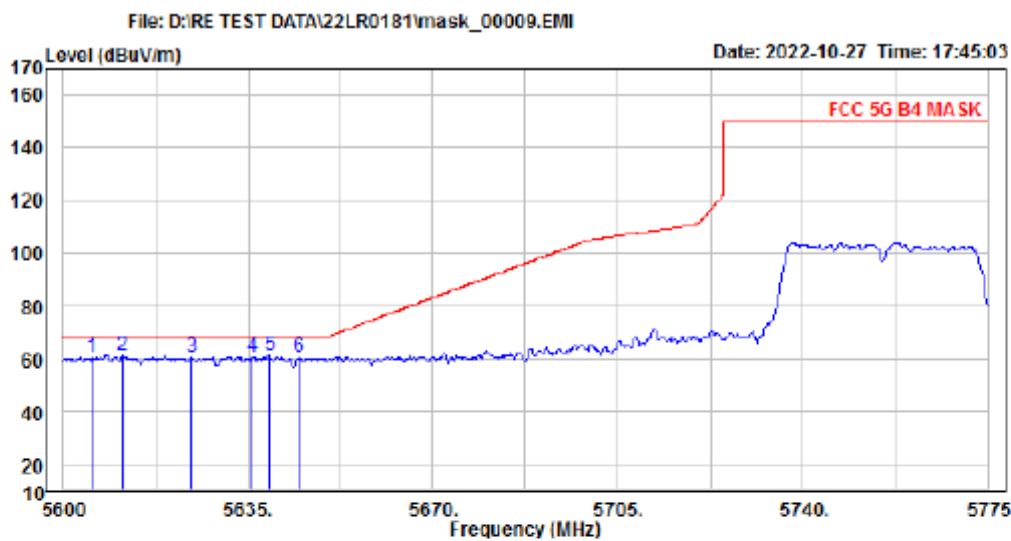
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT :
 Mode : 5G Mask B4 n20 Mode High Ch
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5933.400	65.12	-3.88	61.24	68.20	-6.96	Horizontal
2	5950.420	65.14	-3.88	61.26	68.20	-6.94	Horizontal
3	5953.010	64.99	-3.87	61.12	68.20	-7.08	Horizontal
4	5972.990	64.81	-3.79	61.02	68.20	-7.18	Horizontal
5	5994.265	65.51	-3.71	61.80	68.20	-6.40	Horizontal
6 PP	6000.000	67.48	-3.69	63.79	68.20	-4.41	Horizontal

Band Edges test (Band UNII-3, 802.11n HT40 mode) –Radiated

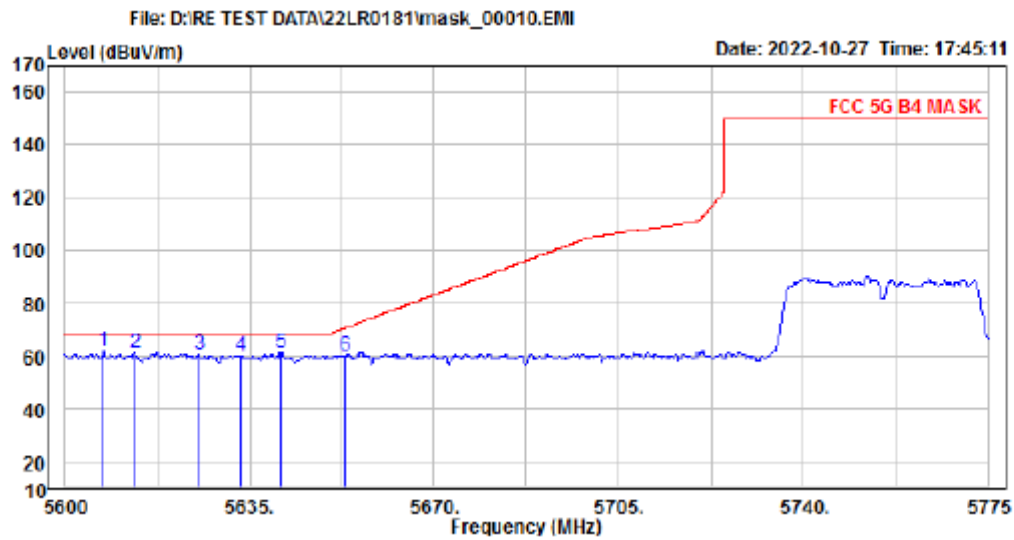
Operation Mode TX CH Low
Channel Number 5755 MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n40 Mode Low Ch
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5605.425	64.91	-4.61	60.30	68.20	-7.90 Vertical
2	5611.200	65.73	-4.62	61.11	68.20	-7.09 Vertical
3	5624.325	64.89	-4.66	60.23	68.20	-7.97 Vertical
4	5635.875	65.25	-4.67	60.58	68.20	-7.62 Vertical
5 PP	5639.025	66.03	-4.69	61.34	68.20	-6.86 Vertical
6	5644.450	64.91	-4.71	60.20	68.20	-8.00 Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal:
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive

EUT :

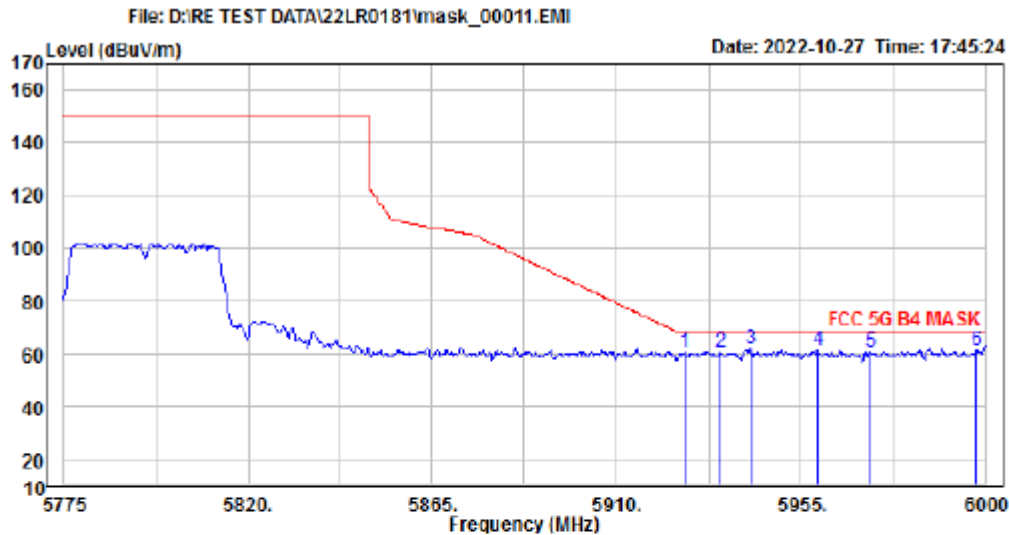
Mode : 5G Mask B4 n40 Mode Low Ch

Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	PP 5607.175	66.06	-4.62	61.44	68.20	-6.76 Horizontal
2	5613.125	65.95	-4.63	61.32	68.20	-6.88 Horizontal
3	5625.375	65.15	-4.65	60.50	68.20	-7.70 Horizontal
4	5633.250	64.85	-4.68	60.17	68.20	-8.03 Horizontal
5	5640.950	66.06	-4.69	61.37	68.20	-6.83 Horizontal
6	5653.025	64.72	-4.70	60.02	70.45	-10.43 Horizontal

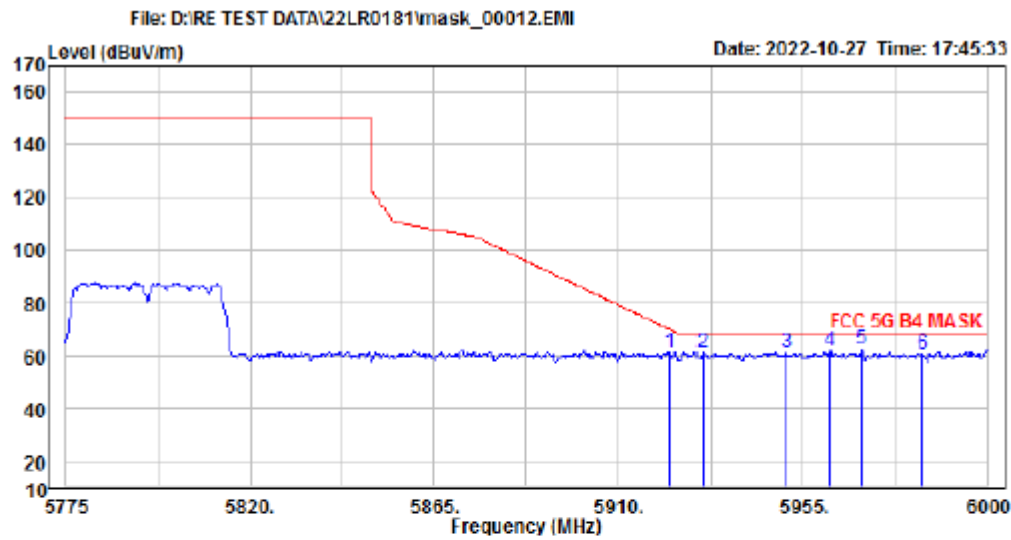
Operation Mode TX CH High
Channel Number 5795MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n40 Mode High Ch
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5926.875	64.54	-3.87	60.67	68.20	-7.53 Vertical
2	5935.425	64.40	-3.87	60.53	68.20	-7.67 Vertical
3 PP	5942.625	65.45	-3.88	61.57	68.20	-6.63 Vertical
4	5959.050	64.87	-3.84	61.03	68.20	-7.17 Vertical
5	5971.875	64.32	-3.80	60.52	68.20	-7.68 Vertical
6	5997.975	64.81	-3.69	61.12	68.20	-7.08 Vertical



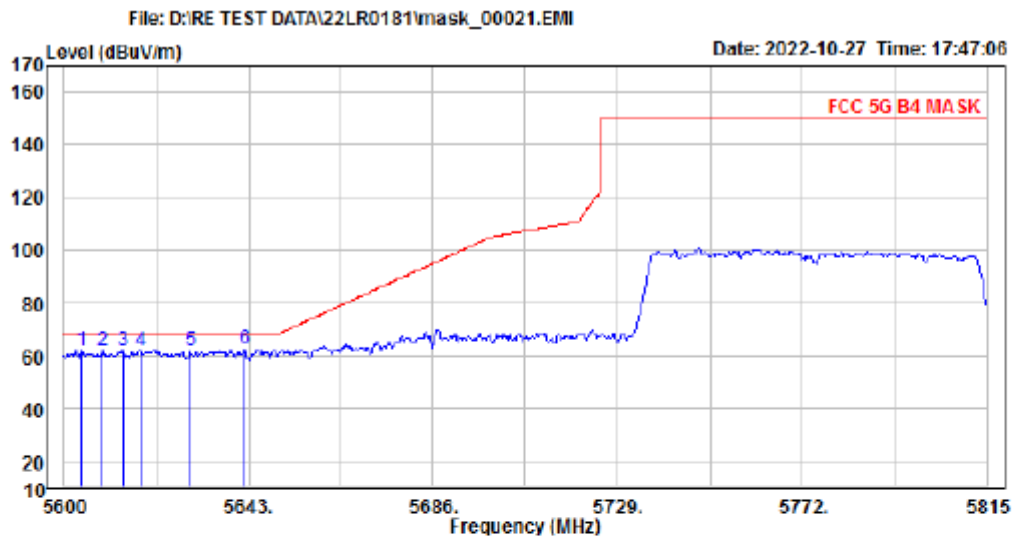
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT :
 Mode : 5G Mask B4 n40 Mode High Ch
 Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5922.600	65.22	-3.88	61.34	69.97	-8.63 Horizontal
2	5930.700	64.67	-3.87	60.80	68.20	-7.40 Horizontal
3	5950.725	64.78	-3.88	60.90	68.20	-7.30 Horizontal
4	5961.525	65.77	-3.84	61.93	68.20	-6.27 Horizontal
5 PP	5969.400	65.89	-3.80	62.09	68.20	-6.11 Horizontal
6	5984.025	64.49	-3.75	60.74	68.20	-7.46 Horizontal

Band Edges test (Band UNII-3, 802.11ac VHT80 mode) –Radiated

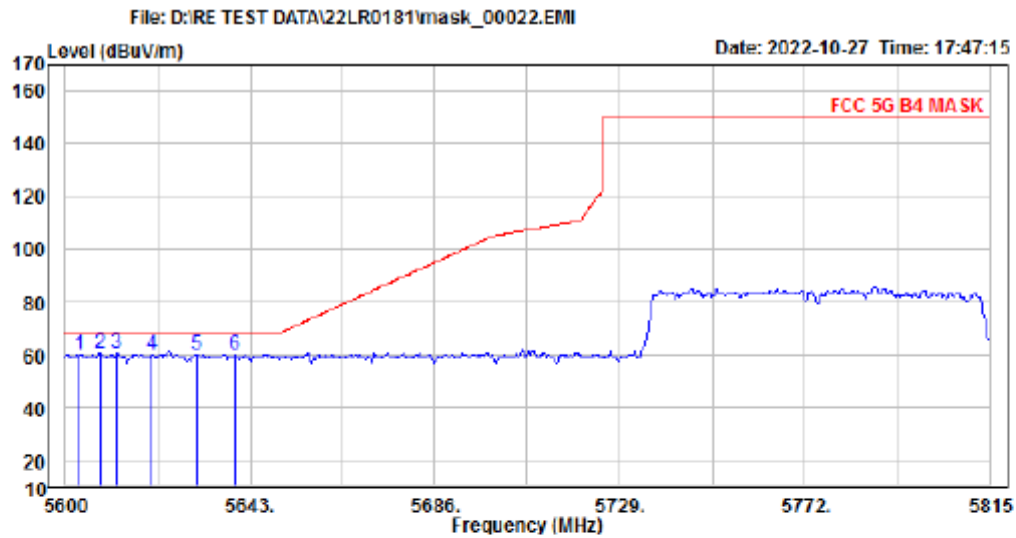
Operation Mode TX CH Low
Channel Number 5775 MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 ac80 Mode Low Ch
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5604.085	66.23	-4.62	61.61	68.20	-6.59 Vertical
2	5608.815	66.50	-4.63	61.87	68.20	-6.33 Vertical
3	5613.545	66.21	-4.63	61.58	68.20	-6.62 Vertical
4	5617.630	66.36	-4.64	61.72	68.20	-6.48 Vertical
5	5629.240	66.30	-4.67	61.63	68.20	-6.57 Vertical
6 PP	5642.140	67.08	-4.70	62.38	68.20	-5.82 Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal:
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive

EUT :

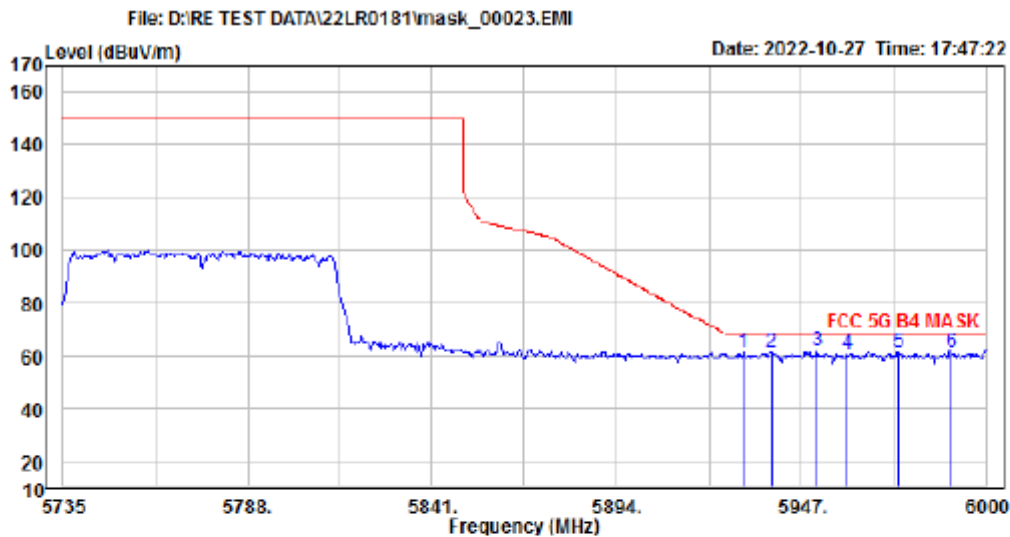
Mode : 5G Mask B4 ac80 Mode Low Ch

Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5603.225	64.58	-4.61	59.97	68.20	-8.23 Horizontal
2	PP 5607.955	65.26	-4.62	60.64	68.20	-7.56 Horizontal
3	5611.825	65.04	-4.63	60.41	68.20	-7.79 Horizontal
4	5619.995	64.63	-4.65	59.98	68.20	-8.22 Horizontal
5	5630.315	64.74	-4.67	60.07	68.20	-8.13 Horizontal
6	5639.345	64.35	-4.69	59.66	68.20	-8.54 Horizontal

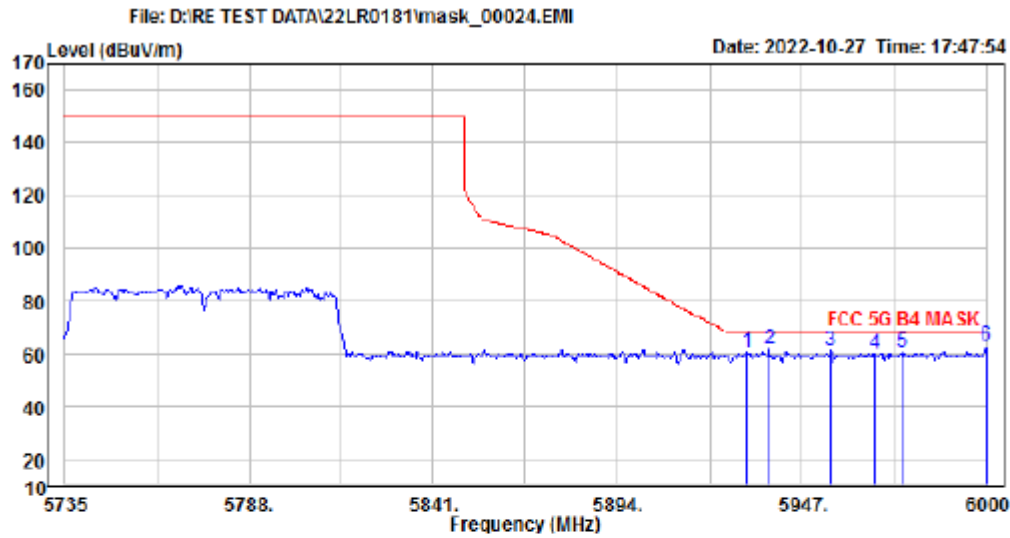
Operation Mode TX CH High
Channel Number 5775MHz
Temperature 25 °C

Test Date 2022/10/27
Test By Barry
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 ac80 Mode High Ch
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 5930.305	64.97	-3.87	61.10	68.20	-7.10	Vertical
2 5938.255	64.73	-3.88	60.85	68.20	-7.35	Vertical
3 PP 5951.240	65.49	-3.88	61.61	68.20	-6.59	Vertical
4 5960.250	64.07	-3.84	60.23	68.20	-7.97	Vertical
5 5974.825	65.06	-3.79	61.27	68.20	-6.93	Vertical
6 5990.195	64.53	-3.73	60.80	68.20	-7.40	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
 EUT :
 Mode : 5G Mask B4 ac80 Mode High Ch
 Note :

	Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5931.100	64.21	-3.87	60.34	68.20	-7.86 Horizontal
2	5937.460	65.88	-3.87	62.01	68.20	-6.19 Horizontal
3	5955.215	65.13	-3.85	61.28	68.20	-6.92 Horizontal
4	5967.935	63.93	-3.81	60.12	68.20	-8.08 Horizontal
5	5975.620	64.44	-3.78	60.66	68.20	-7.54 Horizontal
6 PP	6000.000	66.35	-3.69	62.66	68.20	-5.54 Horizontal

10. Transmission in the Absence of Data

10.1. Standard Applicable

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

10.2. Result:

Pass, the device is compliance with 802.11 a/ b/g/n ac standard, the short control signal is appear during no transmission period.

11. Antenna Requirement

11.1. Standard Applicable

According to §15.203, Antenna requirement.

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

11.2. Antenna Connected Construction

The directional gains of antenna used for transmitting is below table, and the antenna connector is designed with unique type RF connector and no consideration of replacement. Please see EUT photo and antenna spec. for details.

Antenna Designation:

	Antenna Type	Brand	Model	Peak Gain (dBi)	Frequency Range	Connector Type
1	PIFA	anjil	AJDF1J-B0005	2400~2500MHz :2.46 5150~5350(MHz):4.93 5500~5700(MHz):4.57 5745~5825(MHz):4.66	2.4G&5G	i-pex
2	PIFA	ing 聯慶科技股份有限公司	T-543-9291042-1	2400~2500MHz : -1.65 5150~5350(MHz):-1.14 5500~5700(MHz):-1.46 5745~5825(MHz):-1.73	2.4G&5G	i-pex
3	PIFA	ing 聯慶科技股份有限公司	T-543-9291152-11	2400~2500MHz :-1.65 5150~5350(MHz):-1.14 5500~5700(MHz):-1.46 5745~5825(MHz):-1.73	2.4G&5G	i-pex
4	PIFA	TSKY CO., LTD.	A8-A006-00541	2400~2500MHz :1.47 5150~5350(MHz):4.83 5500~5700(MHz):4.45 5745~5825(MHz):4.5	2.4G&5G	i-pex

5	PIFA	TSKY CO., LTD.	A8-A006-00509	2400~2500MHz :2.7 5150~5350(MHz):6.63 5500~5700(MHz):5.78 5745~5825(MHz):5.55	2.4G&5G	i-pex
6	PIFA	TSKY CO., LTD.	A8-A006-00543	2400~2500MHz :4.37 5150~5350(MHz):3.26 5500~5700(MHz):4.62 5745~5825(MHz):4.17	2.4G&5G	i-pex
7	PIFA	TSKY CO., LTD	A8-A003-00185	2400~2500MHz :2.33 5150~5350(MHz):4.56 5500~5700(MHz):4.33 5745~5825(MHz):3.18	2.4G&5G	i-pex
8	Dipole	亞驪	RFA-25-T42-U-M70	2400~2500MHz :2.9 5150~5350(MHz):4.5 5500~5700(MHz):4.5 5745~5825(MHz):4.5	2.4G&5G	SMA
9	Dipole	TSKY CO., LTD	A8-A003-00178	2400~2500MHz :4.25 5150~5350(MHz):3.64 5500~5700(MHz):3.91 5745~5825(MHz):2.06	2.4G&5G	SMA
10	Dipole	TSKY CO., LTD	A8-A006-00522	2400~2500MHz :5.56 5150~5350(MHz):4.36 5500~5700(MHz):4.66 5745~5825(MHz):4.36	2.4G&5G	SMA
11	PIFA	anjil	AJDF1J-B0003	2400~2500MHz :2.78 5150~5350(MHz):2.47 5500~5700(MHz):2.18 5745~5825(MHz):1.98	2.4G&5G	i-pex
12	PIFA	ing 聯慶科技股份有限公司	T-543-9291048-1	2400~2500MHz :-1.16 5150~5350(MHz):-1.37 5500~5700(MHz):-1.04 5745~5825(MHz):-1.68	2.4G&5G	i-pex

12. TPC and DFS Measurement

12.1. TPC: Standard Applicable

According to §15.407(h)(1), Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

12.2. DFS: Standard Applicable

According to §15.407(h)(2), Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection.

13.2.1. Limit

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Slave	Client(without radar detection)	Client(with radar detection)
Non-occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required
U-NII Detection Band-width	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Slave	Client(without radar detection)	Client(with radar detection)
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

Refer to KDB Number: 905462 APPENDIX B COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5.25-5.35 GHz AND 5.47-5.725 GHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION.

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.	

Table 4: DFS Response requirement values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 80% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: The instant that the <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> begins is as follows: - For the Short Pulse Radar Test Signals this instant is the end of the <i>Burst</i>. - For the Frequency Hopping radar Test Signal, this instant is the end of the last radar <i>Burst</i> generated. - For the Long Pulse Radar Test Signal this instant is the end of the 12 second period defining the <i>Radar Waveform</i>. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel move</i> (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5: Radar Test Waveforms
Short Pulse Radar

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. For Short Pulse Radar Type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms

Long Pulse Radar

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.

Frequency Hopping Radar

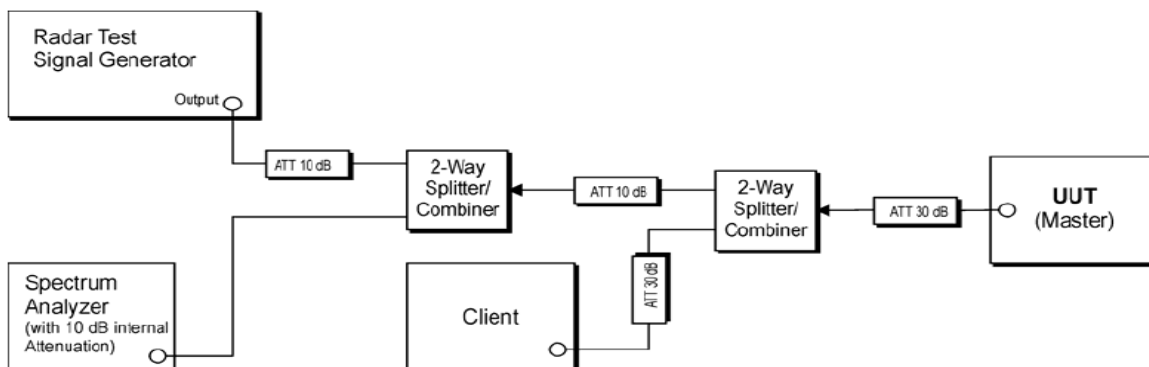
Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	.333	300	70%	30

For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm: 3

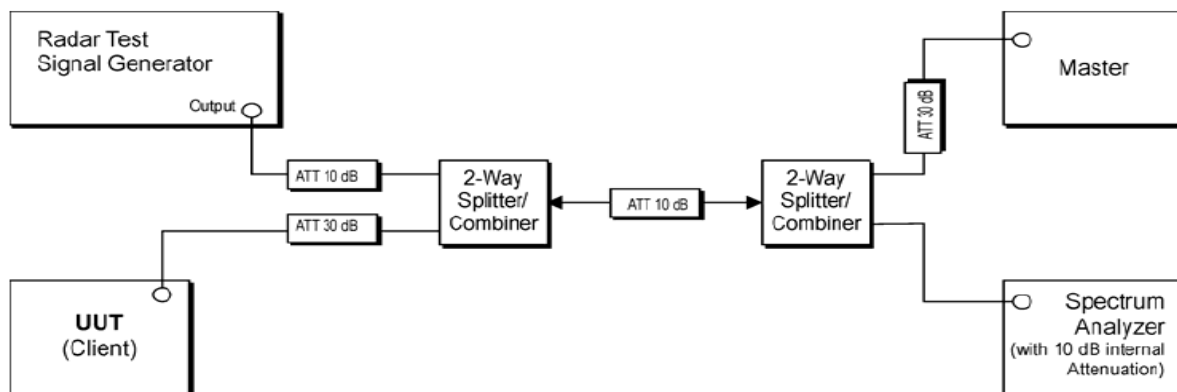
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

13.2.2. Test Setup

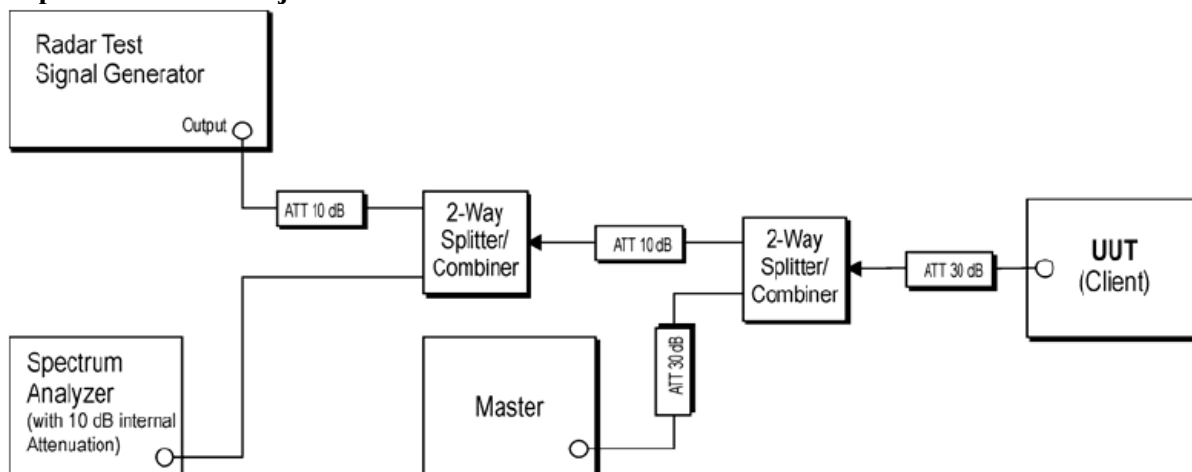
Setup for Master with injection at the Master



Setup for Client with injection at the Master



Setup for Client with injection at the Client



Note: device under test are configured with AP as IP based by streaming MPEG video, 30 frames per seconds

12.3. Test Equipment Used:

Location Conducted	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conducted (DFS)	Signal Generator	Agilent	E4438C	MY49071550	12/29/2021	12/29/2022
Conducted (DFS)	Signal Generator	Keysight	N5182B	MY53052399	12/29/2021	12/29/2022
Conducted (DFS)	Spectrum analyzer	Keysight	N9010A	MY56070257	09/28/2022	09/28/2023
Conducted (DFS)	AP Router	Synology	RT1900ac	15B0N3N369502	NA	NA
Conducted (DFS)	USB Adapter	D-Link	DWA-182	QBYS1D8000073	NA	NA
Conducted (DFS)	Direction Coupler	Krytar	1821S	1461	NA	NA
Conducted (DFS)	Splitter	Mini-Circuits	ZN2PD-63-S	UU97201111	NA	NA
Conducted (DFS)	Attenuator	Woken	Watt-65m3502	11051601	NA	NA
Conducted (DFS)	Cable	Draka	NA	NA	NA	NA
Conducted (TS8997)	Wideband Radio Communication Tester	R&S	CMW500	168811	09/22/2022	09/22/2023
Conducted (TS8997)	Signal Generator	R&S	SMB100B	101085	09/21/2022	09/21/2023
Conducted (TS8997)	Vector Signal Generator	R&S	SMBV100A	263246	09/21/2022	09/21/2023
Conducted (TS8997)	Signal analyzer 40GHz	R&S	FSV40	101884	09/22/2022	09/22/2023
Conducted (TS8997)	OSP150 extension unit CAM-BUS	R&S	OSP150	101107	09/21/2022	09/21/2023
Conducted (TS8997)	Test Software	R&S	EMC32 Ver:11.10.00	NA	NA	NA

12.3.1. Description of EUT :

EUT operates over the 5250-5350MHz and 5470-5725MHz ranges and EUT is a slave device (client equipment) w/o radar detection and DFS capability.

The EUT utilizes the 802.11n architecture, with a nominal channel bandwidth of 80MHz WLAN traffic is generated by streaming the mpeg file from the master to slave in full monitor video mode using the media player.

The rated output power of the master unit is >23dBm(EIRP).therefore the required interference threshold level is -64dBm. The master device as employed for the applicable DFS test is router whose FCC ID= YOR-RT1900AC for Synology

12.4. Test results

Applicability of DFS requirements during normal operation

Requirement	Operational Mode: Client(without radar detection)	
	Test Result	Remark
Non-occupancy Period	No transmission in 30mins. (test results), pass (Remark)	Pass
DFS Detection Threshold	N/A	N/A
Channel Closing Transmission Time	Less than 200ms, Refer to next page for plots.	Pass
Channel Move Time	Less than 10s, Refer to next page for plots.	Pass
U-NII Detection Bandwidth	N/A	N/A

Input Level to Master AP= -64dBm

DFS In-Service Monitoring (5290 MHz; 80 MHz)

Measurement Summary

DUT Frequency (MHz)	Radar Type No.	Type of Measurement value	Overall Result
5290.000000	0	First of all Transmitt Test	---
5290.000000	0	Channel Move Time	PASS
5290.000000	0	Channel Closing Transmission Time	PASS
5290.000000	0	Non-occupancy period	PASS

(continuation of the "Measurement Summary" table from column 4 ...)

Channel Move Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CMT Tx Time (s)	CMT Limit (s)	CMT Result	CMT Comment
5290.000000	0	4.197	10.000	PASS	Tx Time value is last trailing edge found within sweep. See Note 1.

Channel Closing Transmission Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CCTT Type of Value	CCTT No. of Pulses found	CCTT Tx Time (ms)
5290.000000	0	first 200 ms	701	25.964
5290.000000	0	remaining 10.0 second(s) period	86	22.588

(continuation of the "Channel Closing Transmission Time Detailed Results" table from column 5 ...)

DUT Frequency (MHz)	CCTT Tx Time Limit (ms)	CCTT Result	CCTT Comment
5290.000000	200.000	PASS	See Note 1.
5290.000000	60.000	PASS	See Note 1.

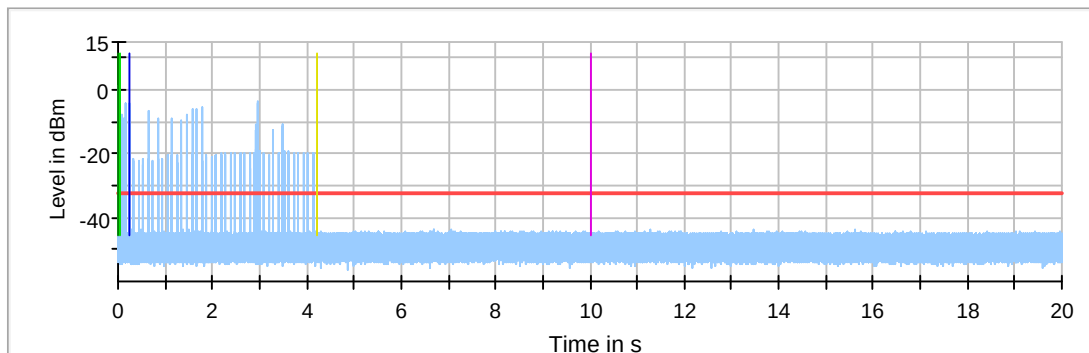
Non-occupancy period Detailed Results

DUT Frequency (MHz)	Radar Type No.	NOP No. of Pulses found	NOP No. of Pulses Limit	NOP Tx Time (s)	NOP Tx Time Limit (s)	NOP Result
5290.000000	0	0	0	0.000	0.000	PASS

Transmitting Test Detailed Results

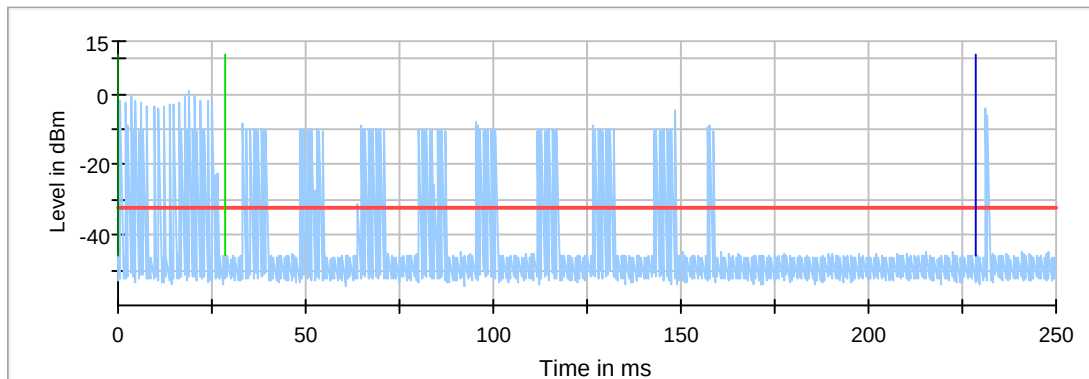
DUT Frequency (MHz)	Tx-Test Result	Tx-Test Comment
5290.000000	---	not performed / not finished

Channel Move Time



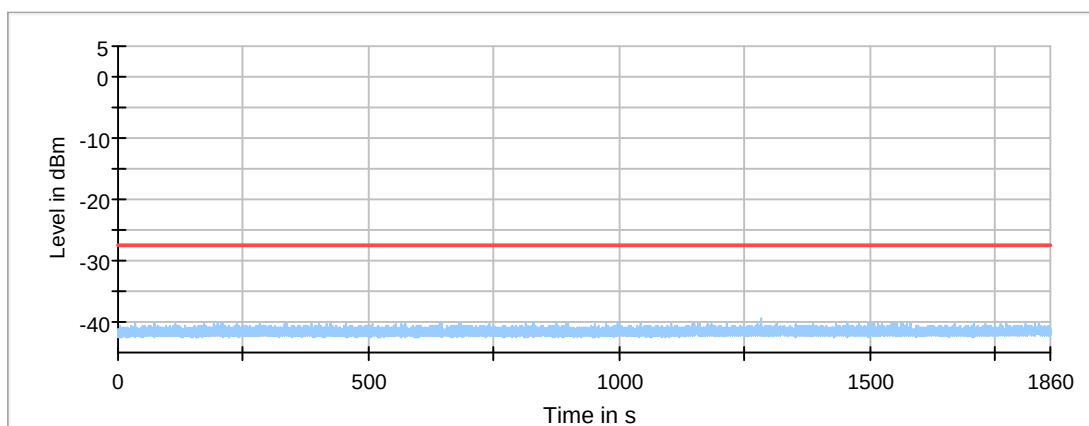
- Channel Move Time
- Start of Radar
- First 200ms of Channel Closing Tx Time
- Last measured edge of Channel Closing Tx Time
- Threshold
- Trigger at end of Radar
- 10sec Channel Move Time Limit

Channel Move Time first 200ms



- Channel Move Time first 200ms
- Start of Radar
- First 200ms of Channel Closing Tx Time
- Threshold
- Trigger at end of Radar

Non-occupancy period



- Non-occupancy period
- Threshold

DFS In-Service Monitoring (5530 MHz; 80 MHz)

Measurement Summary

DUT Frequency (MHz)	Radar Type No.	Type of Measurement value	Overall Result
5530.000000	0	First of all Transmitt Test	---
5530.000000	0	Channel Move Time	PASS
5530.000000	0	Channel Closing Transmission Time	PASS
5530.000000	0	Non-occupancy period	PASS

Channel Move Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CMT Tx Time (s)	CMT Limit (s)	CMT Result	CMT Comment
5530.000000	0	4.125	10.000	PASS	Tx Time value is last trailing edge found within sweep. See Note 1.

Channel Closing Transmission Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CCTT Type of Value	CCTT No. of Pulses found	CCTT Tx Time (ms)
5530.000000	0	first 200 ms	135	11.056
5530.000000	0	remaining 10.0 second(s) period	237	28.276

(continuation of the "Channel Closing Transmission Time Detailed Results" table from column 5 ...)

DUT Frequency (MHz)	CCTT Tx Time Limit (ms)	CCTT Result	CCTT Comment
5530.000000	200.000	PASS	See Note 1.
5530.000000	60.000	PASS	See Note 1.

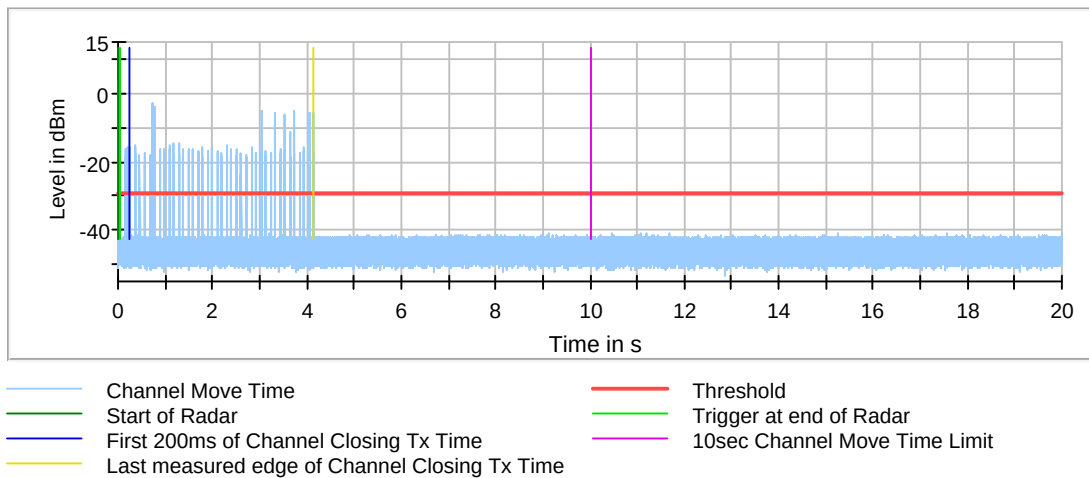
Non-occupancy period Detailed Results

DUT Frequency (MHz)	Radar Type No.	NOP No. of Pulses found	NOP No. of Pulses Limit	NOP Tx Time (s)	NOP Tx Time Limit (s)	NOP Result
5530.000000	0	0	0	0.000	0.000	PASS

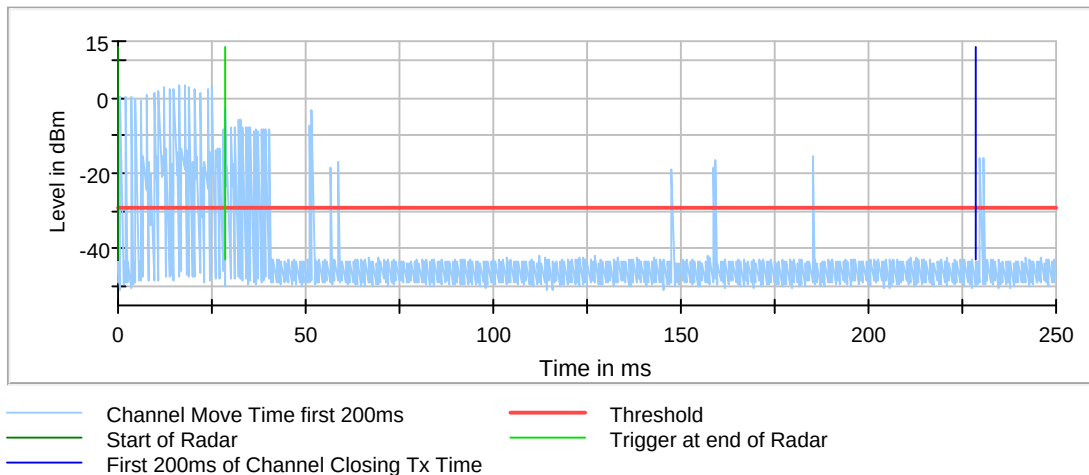
Transmitting Test Detailed Results

DUT Frequency (MHz)	Tx-Test Result	Tx-Test Comment
5530.000000	---	not performed / not finished

Channel Move Time



Channel Move Time first 200ms



Non-occupancy period

