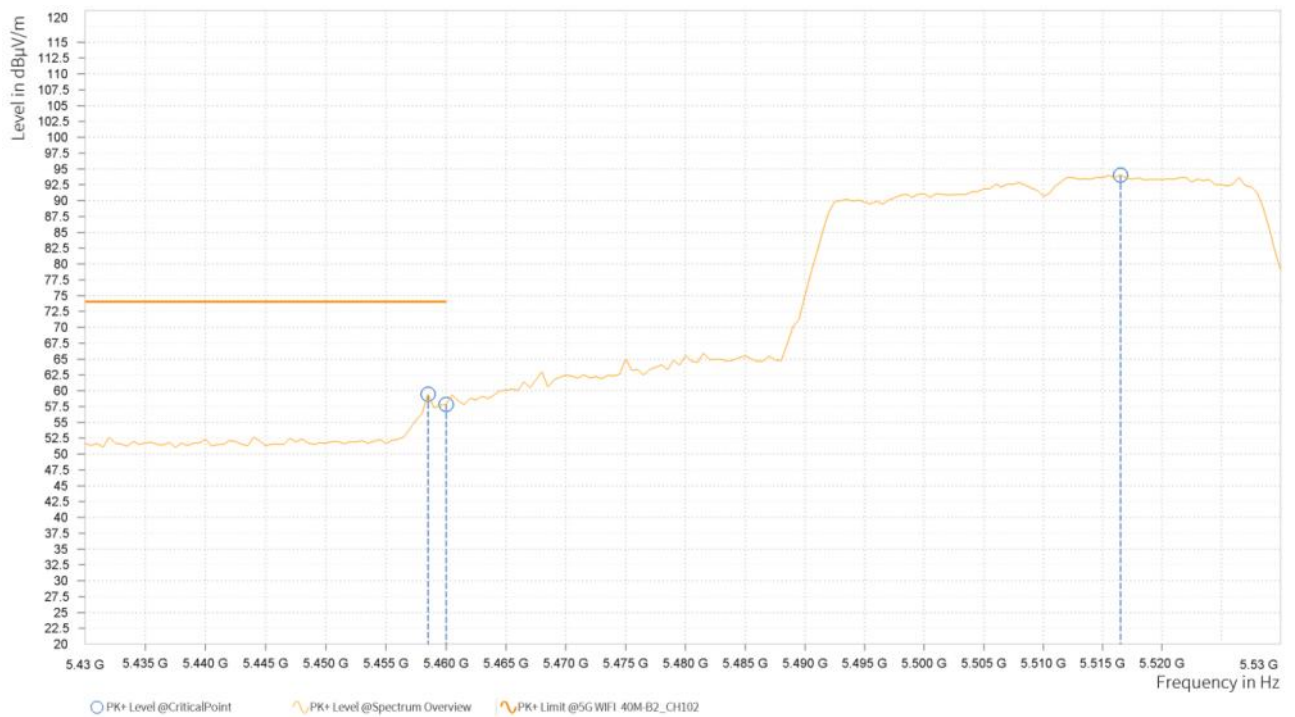


ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	5,458.500	59.45	74.00	14.55	3.76	V	204.8	1.00
5	5,460.000	57.83	74.00	16.17	3.77	V	204.8	1.00
5	5,516.500	94.04			3.90	V	204.8	1.00



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	5,459.500	40.38	54.00	13.62	3.76	V	335.4	2.00
5	5,460.000	40.64	54.00	13.36	3.77	V	335.4	2.00
5	5,507.500	79.98			3.88	V	310.5	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5510MHz: Fundamental frequency.
- #: Out of restricted band.



CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

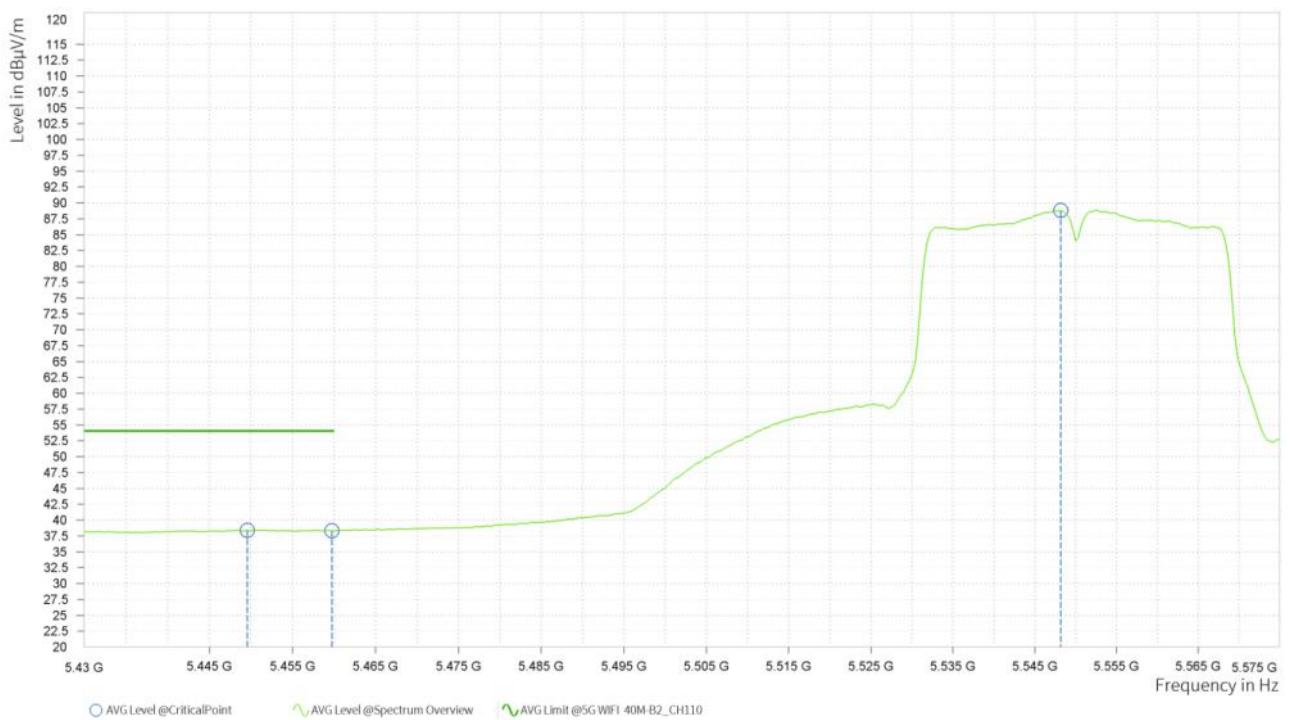
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	5,442.688	51.41	74.00	22.59	3.73	H	360	1.00
6	5,460.000	50.90	74.00	23.10	3.76	H	320.7	1.00
6	5,547.810	100.16			3.98	H	320.7	1.00



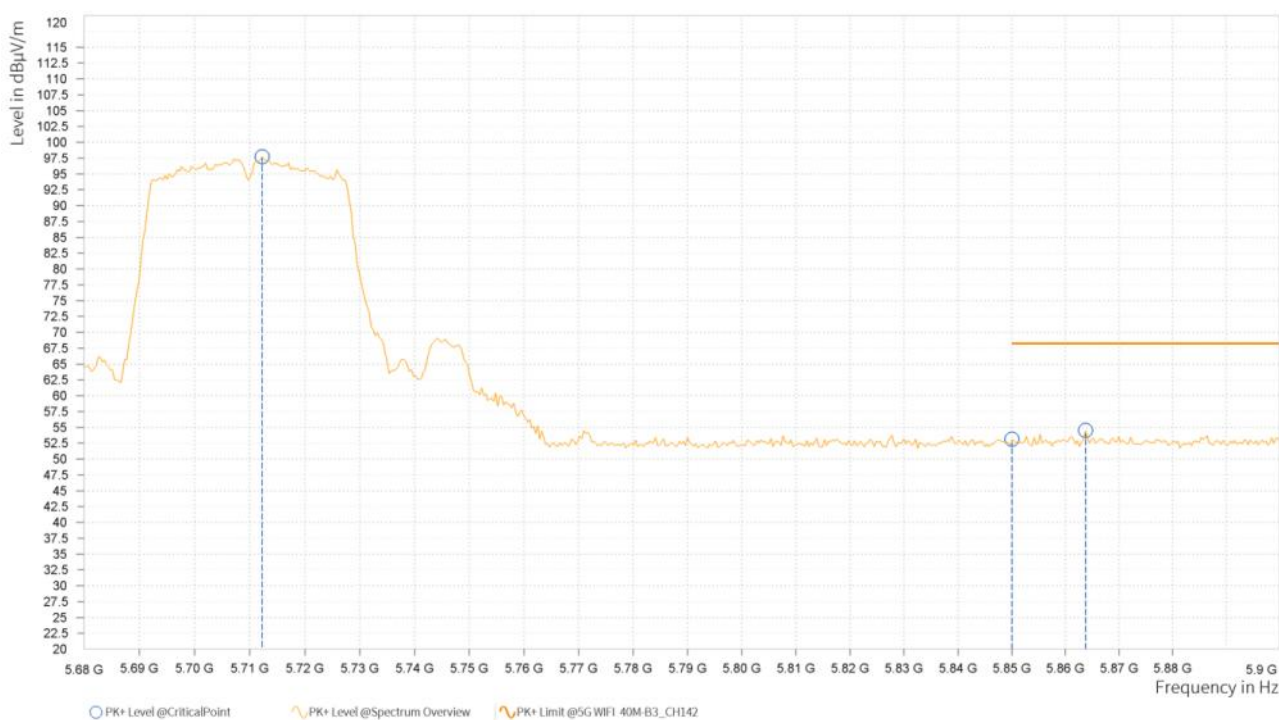


Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	5,449.575	38.38	54.00	15.62	3.74	H	4.2	1.00
6	5,460.000	38.35	54.00	15.65	3.76	H	338.6	1.00
6	5,548.175	88.81			3.98	H	360	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
8	5,712.267	97.73			4.49	V	190.6	1.00
8	5,850.000	53.10	68.20	15.10	5.37	V	228	2.00
8	5,863.700	54.52	68.20	13.68	5.40	V	0.1	2.00



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	5,444.500	37.57	54.00	16.43	3.73	V	334.2	2.00
6	5,460.000	37.52	54.00	16.48	3.76	V	285.5	1.00
6	5,547.813	81.39			3.98	V	185.6	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.



CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

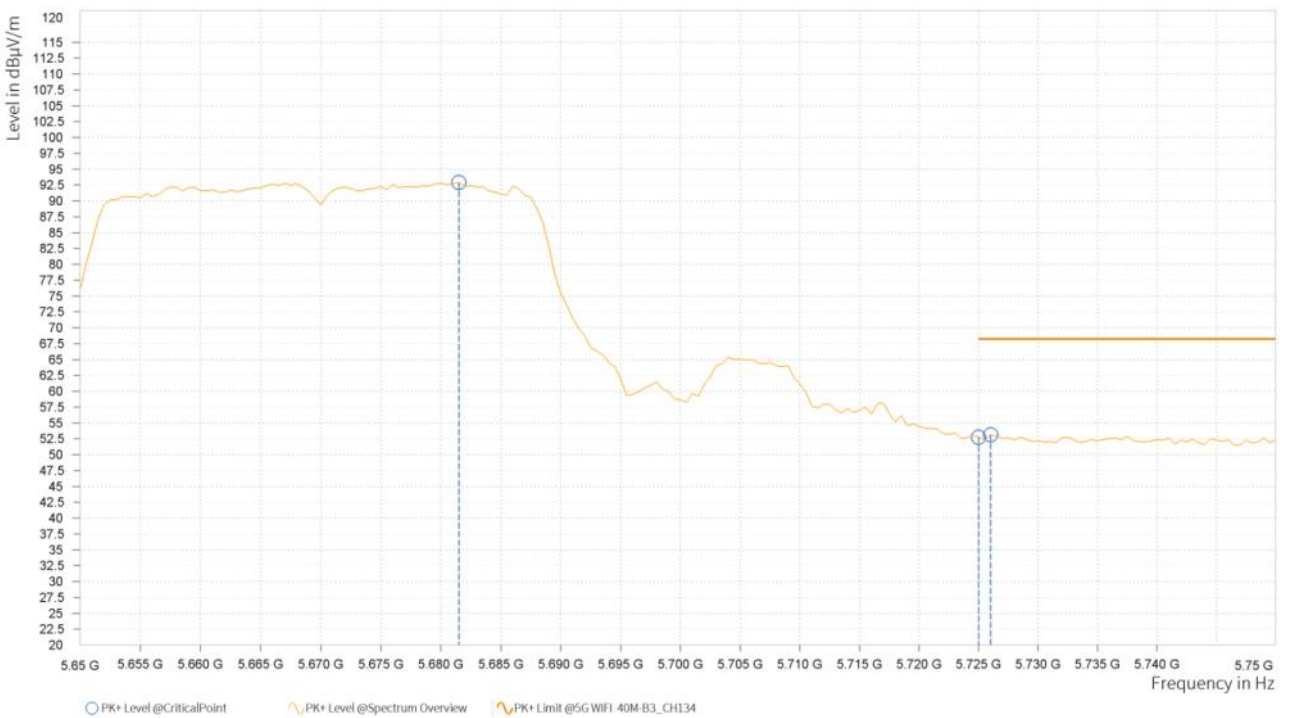
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
7	5,671.500	99.76			4.42	H	4.2	1.00
7	5,725.000	55.21	68.20	12.99	4.49	H	0.1	1.00
7	5,731.000	56.70	68.20	11.50	4.49	H	0.1	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
7	5,681.500	92.92			4.44	V	191.1	1.00
7	5,725.000	52.76	68.20	15.44	4.49	V	75.1	2.00
7	5,726.000	53.16	68.20	15.04	4.49	V	351.6	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.



CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

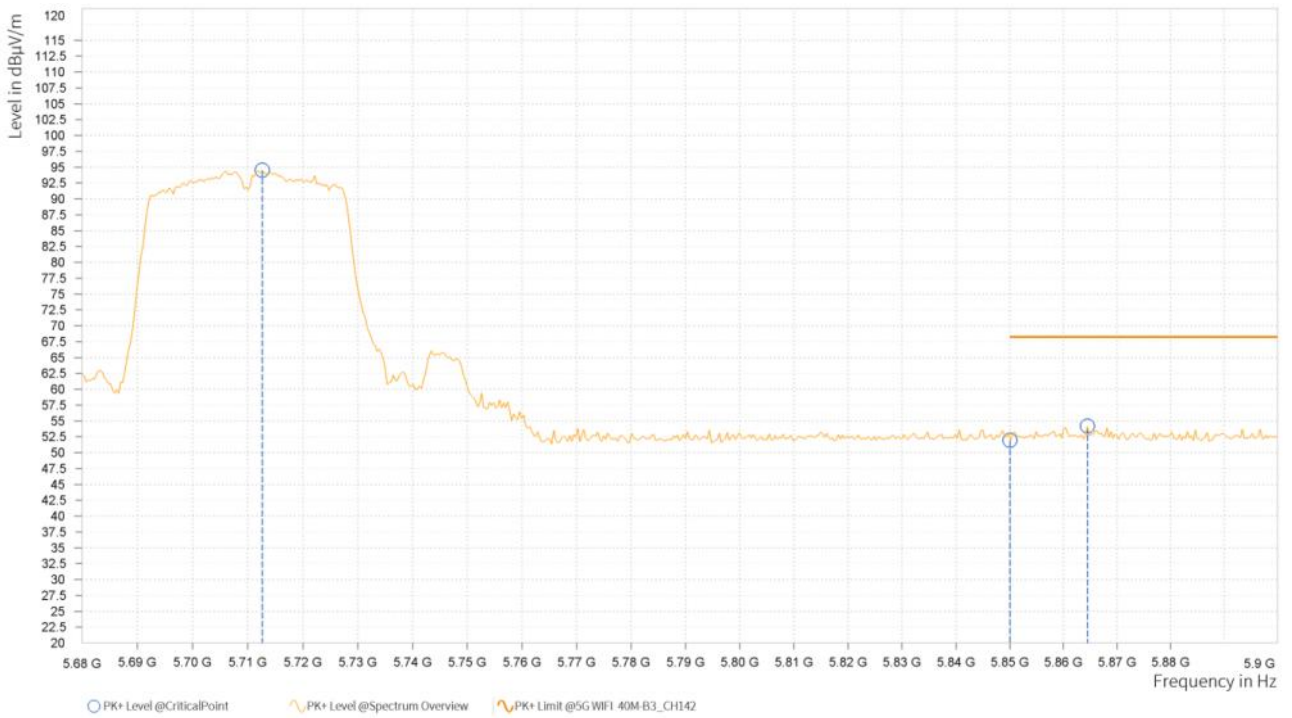
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
8	5,707.870	100.68			4.49	H	0.1	1.00
8	5,850.133	52.52	68.20	15.68	5.37	H	359.9	2.00
8	5,881.667	54.08	68.20	14.12	5.44	H	135.4	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
8	5,712.633	94.53			4.49	V	188.7	1.00
8	5,850.000	51.95	68.20	16.25	5.37	V	121	2.00
8	5,864.433	54.17	68.20	14.03	5.41	V	332	1.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.

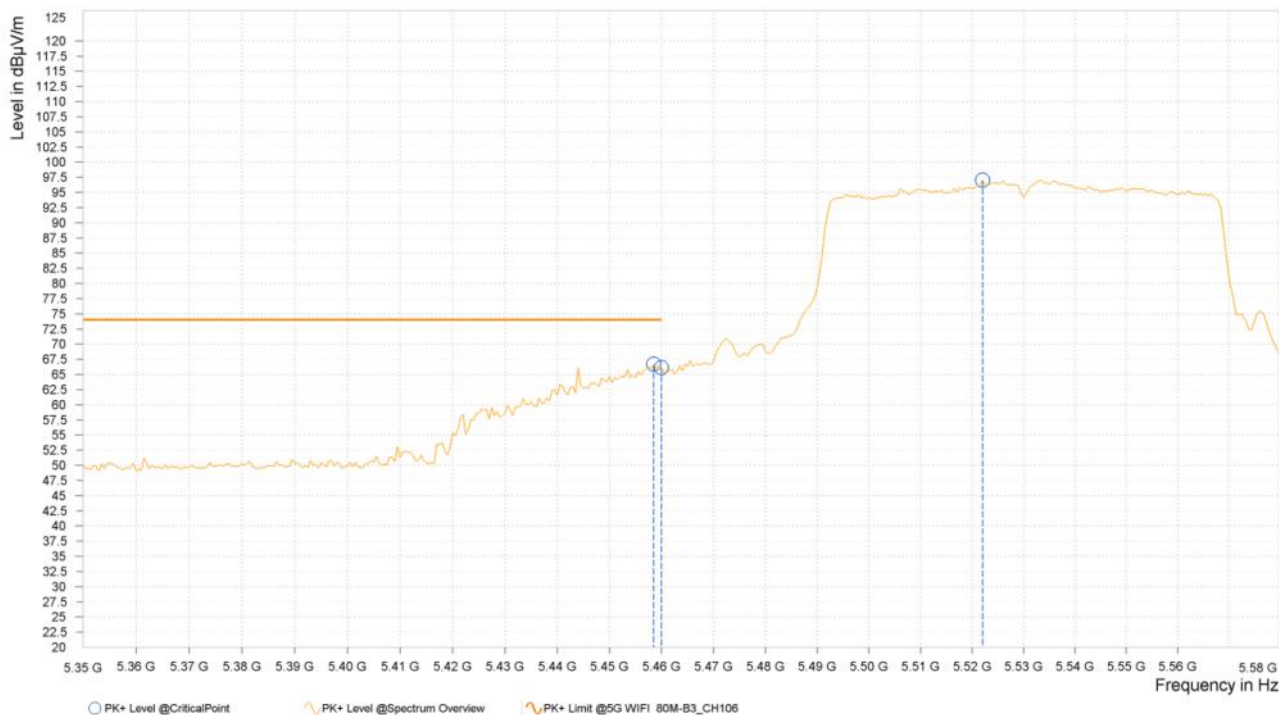


802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,458.500	66.68	74.00	7.32	13.28	H	359	1.00
3	5,460.000	66.13	74.00	7.87	13.28	H	305.4	1.00
3	5,522.000	97.06			13.34	H	1	1.00

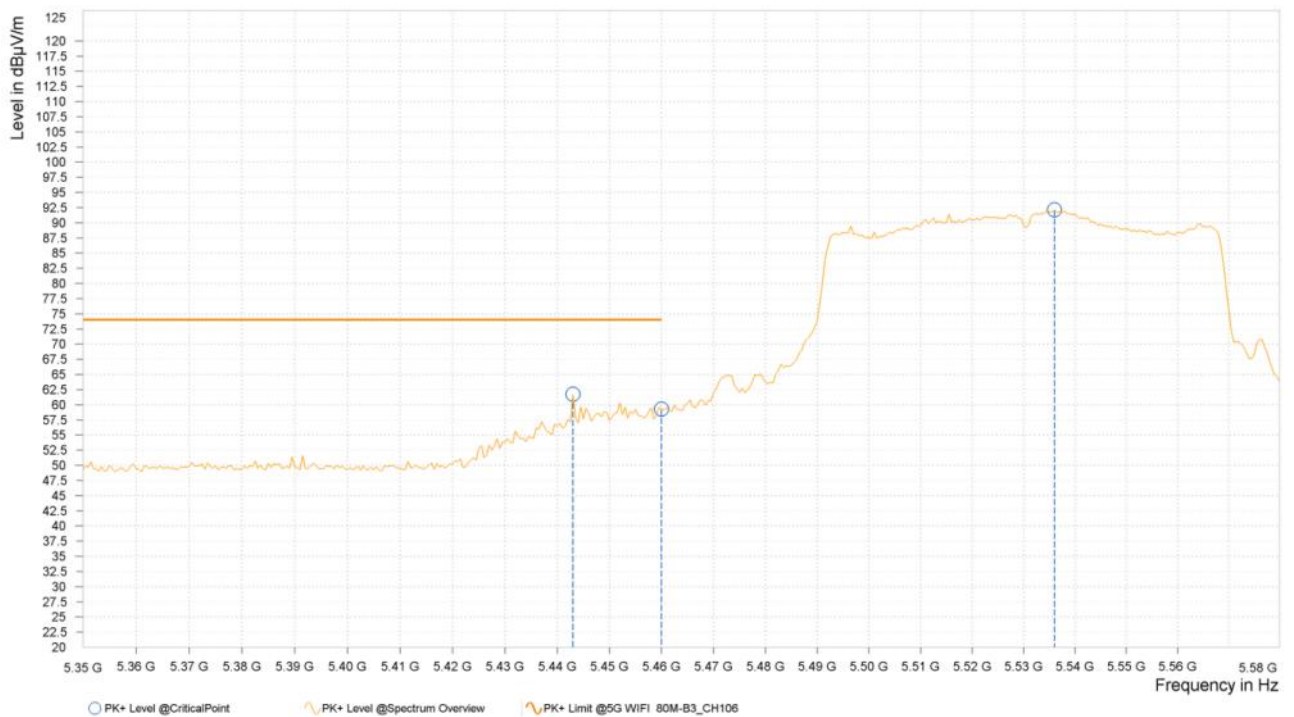


Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,459.000	50.46	54.00	3.54	13.28	H	359.1	1.00
3	5,460.000	50.26	54.00	3.74	13.28	H	357.7	1.00
3	5,523.500	82.99			13.34	H	357.7	1.00

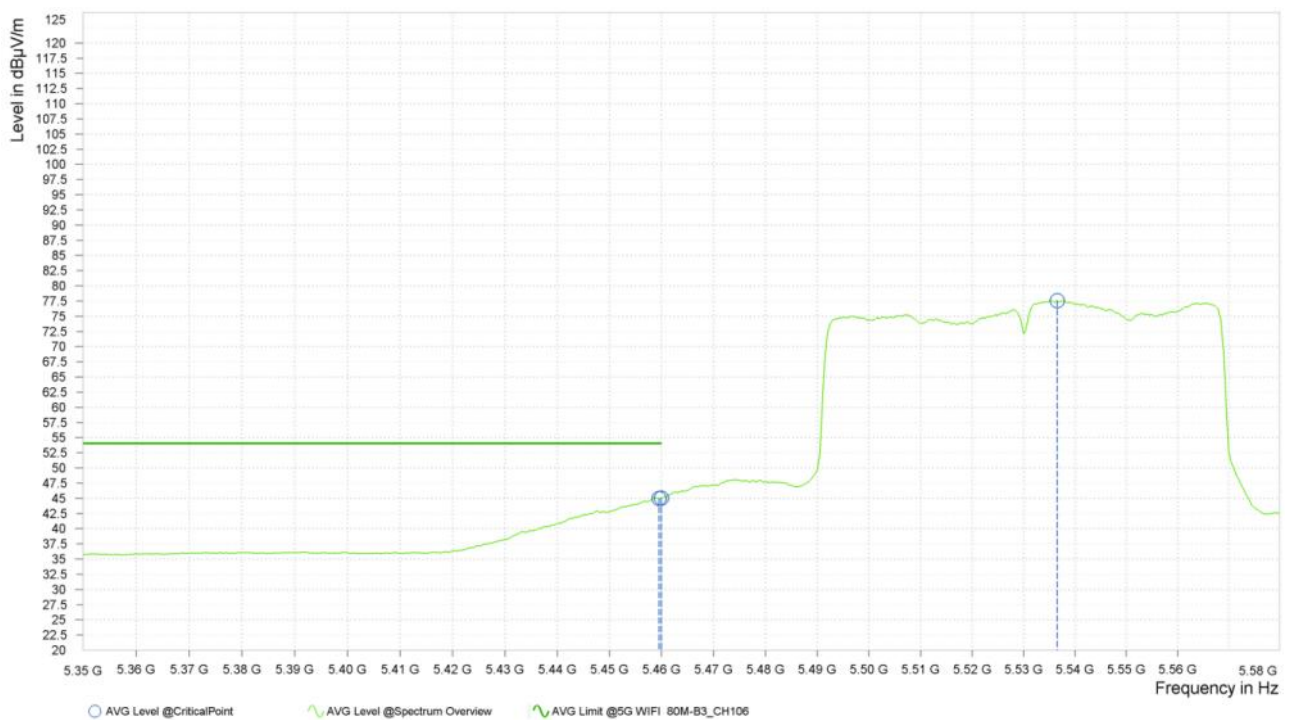


ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,443.000	61.72	74.00	12.28	13.28	V	215.7	1.00
3	5,460.000	59.28	74.00	14.72	13.28	V	56.7	1.00
3	5,536.000	92.12			13.36	V	215.7	1.00



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,459.500	44.99	54.00	9.01	13.28	V	202.6	1.00
3	5,460.000	45.03	54.00	8.97	13.28	V	202.6	1.00
3	5,536.500	77.56			13.36	V	202.6	1.00



REMARKS:

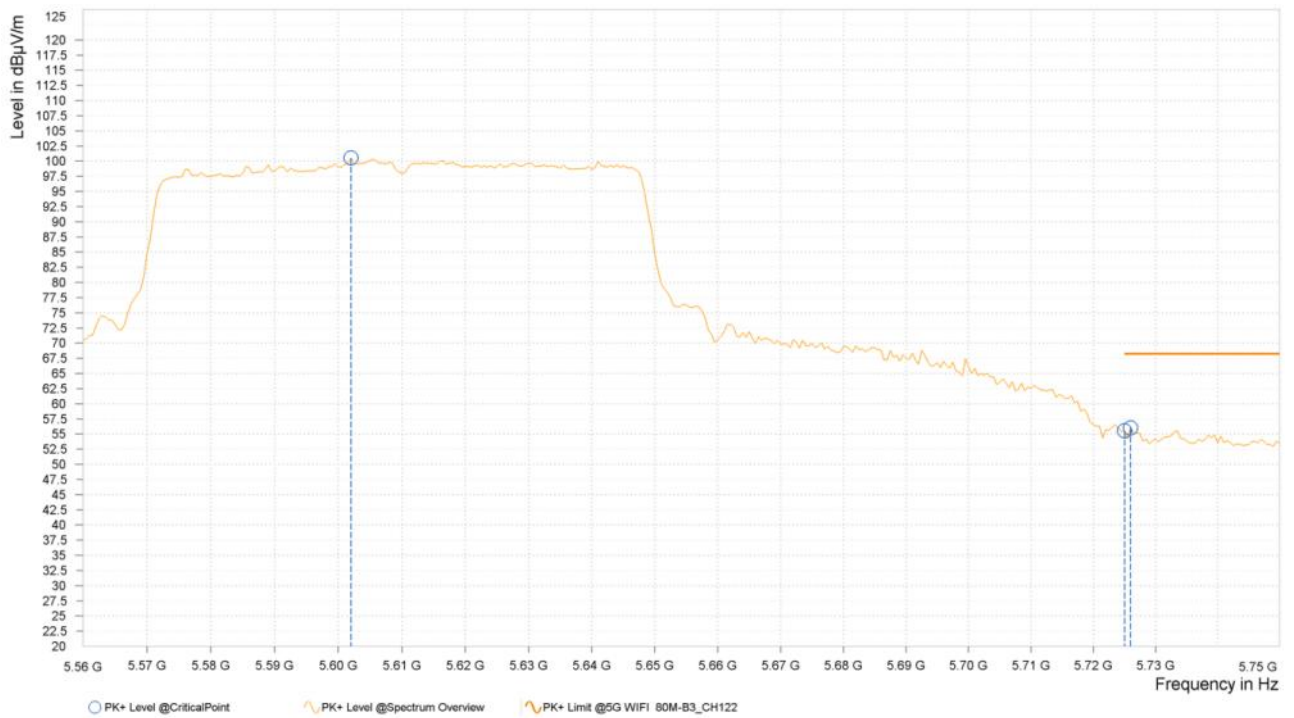
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5530MHz: Fundamental frequency.
3. #: Out of restricted band.



CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

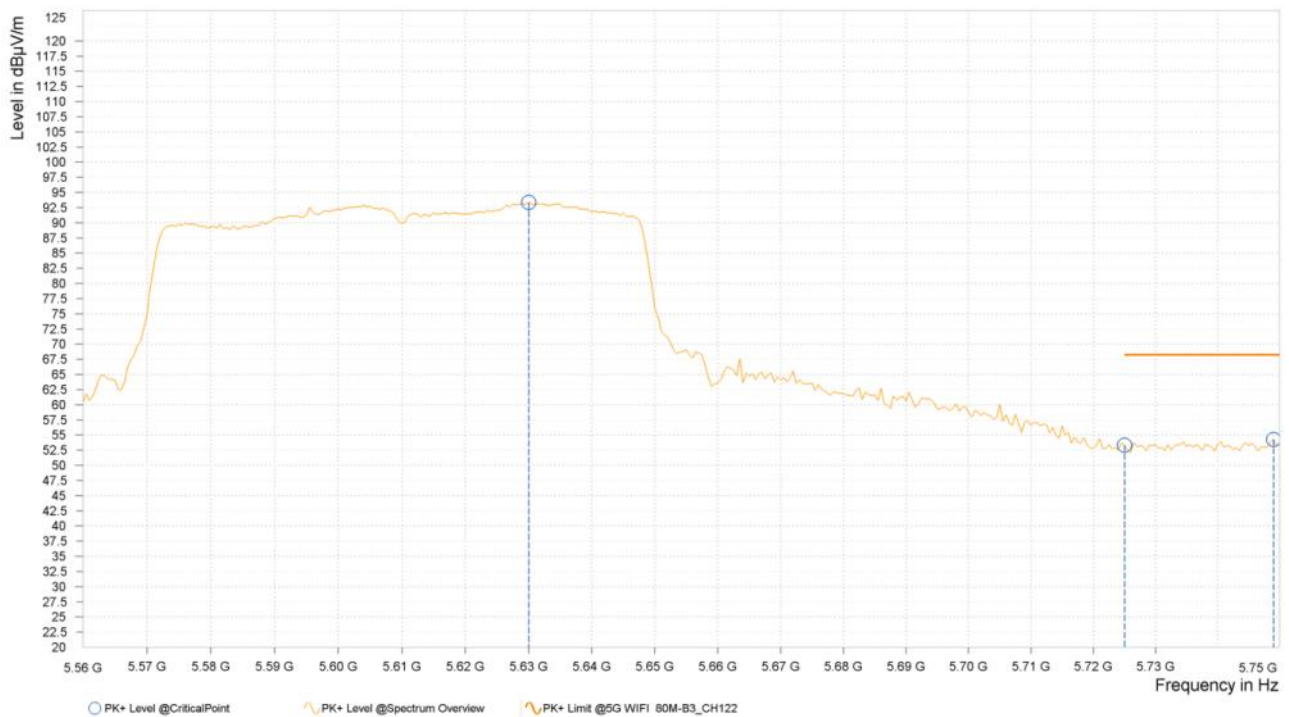
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,602.000	100.52			13.47	H	359.1	1.00
4	5,725.000	55.54	68.20	12.66	14.01	H	356.4	1.00
4	5,726.000	56.03	68.20	12.17	14.01	H	356.4	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,630.000	93.36			13.62	V	102.1	1.00
4	5,725.000	53.33	68.20	14.87	14.01	V	157.1	1.00
4	5,749.000	54.26	68.20	13.94	14.03	V	157.1	1.00



REMARKS:

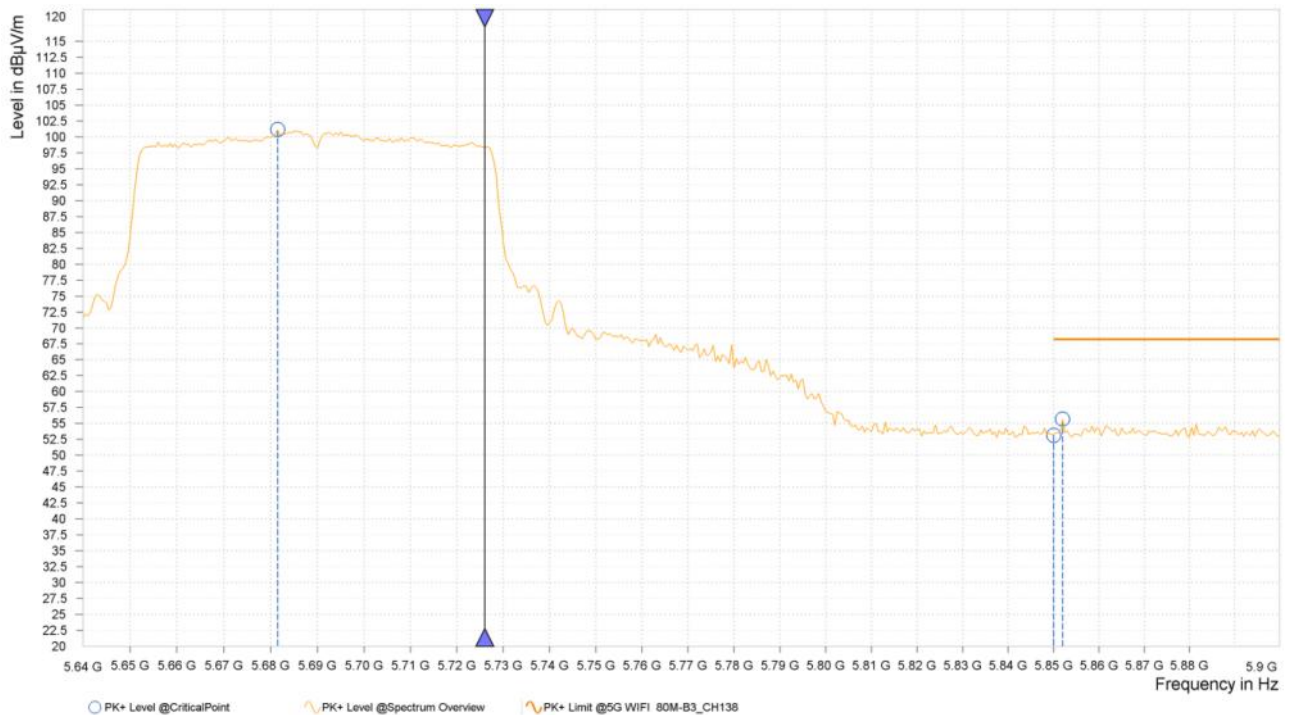
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5610MHz: Fundamental frequency.
- #: Out of restricted band.



CHANNEL	TX Channel 138	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	5,681.500	101.14			13.89	H	359	1.00
5	5,850.000	53.15	68.20	15.05	14.28	H	263.5	1.00
5	5,852.000	55.67	68.20	12.53	14.29	H	4.7	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	5,696.000	94.46			13.96	V	194.6	2.00
5	5,850.000	53.75	68.20	14.45	14.28	V	1	2.00
5	5,851.500	54.47	68.20	13.73	14.28	V	1	1.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5690MHz: Fundamental frequency.
3. #: Out of restricted band.

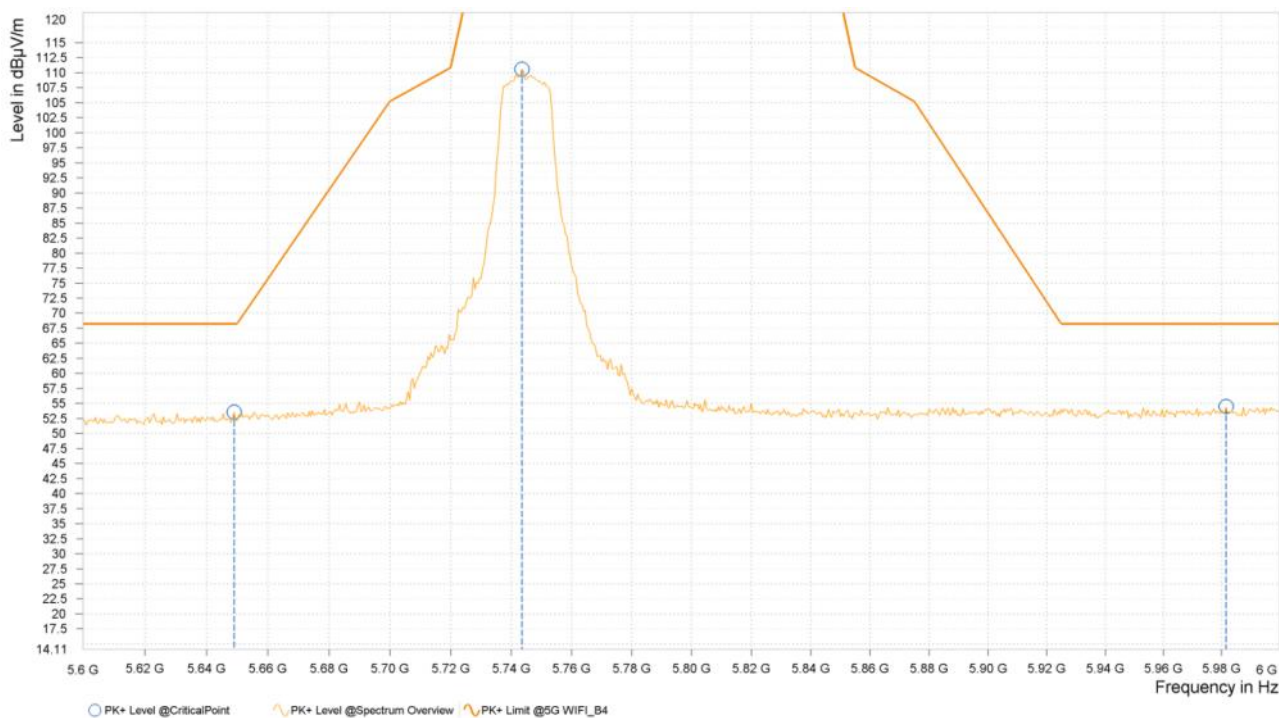
Band 4:

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

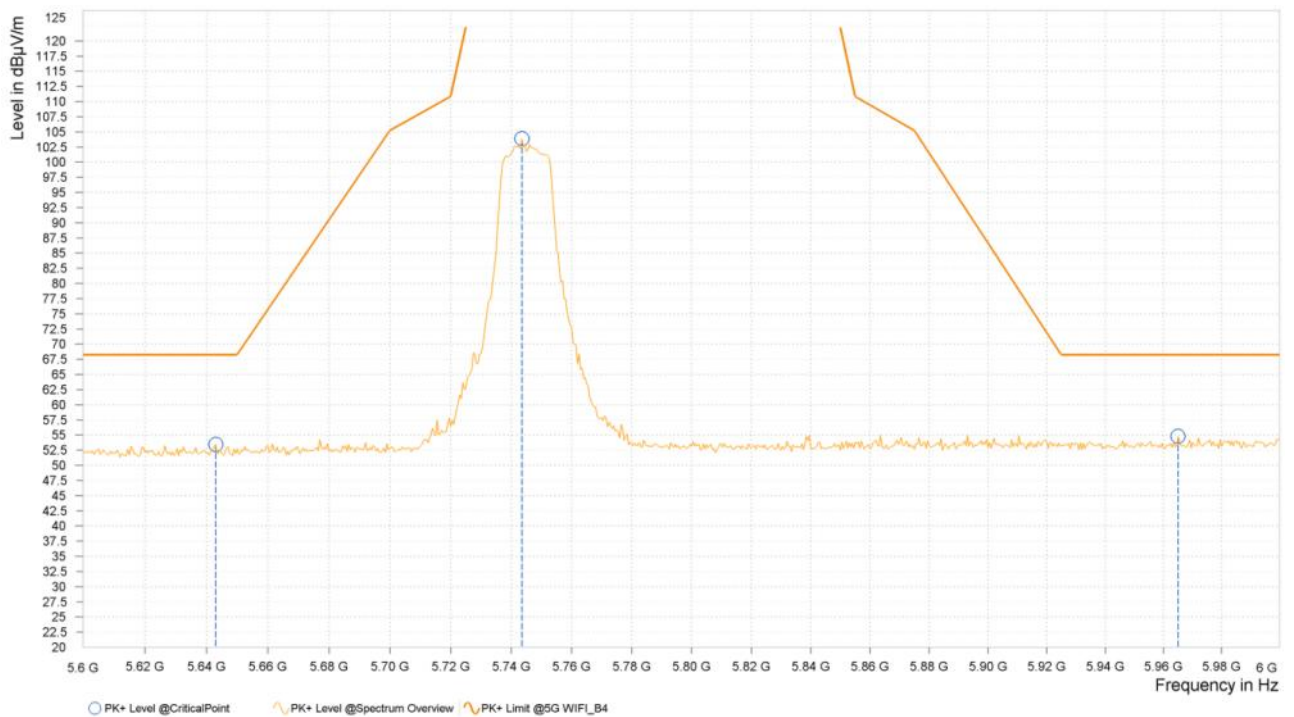
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,649.000	53.55	68.20	14.65	13.73	H	264.7	1.00
12	5,743.500	110.61			14.03	H	1	1.00
12	5,981.500	54.49	68.20	13.71	14.60	H	2.8	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,643.000	53.46	68.20	14.74	13.70	V	3.6	2.00
12	5,743.500	103.87			14.03	V	103.3	1.00
12	5,965.000	54.78	68.20	13.42	14.55	V	355	2.00



REMARKS:

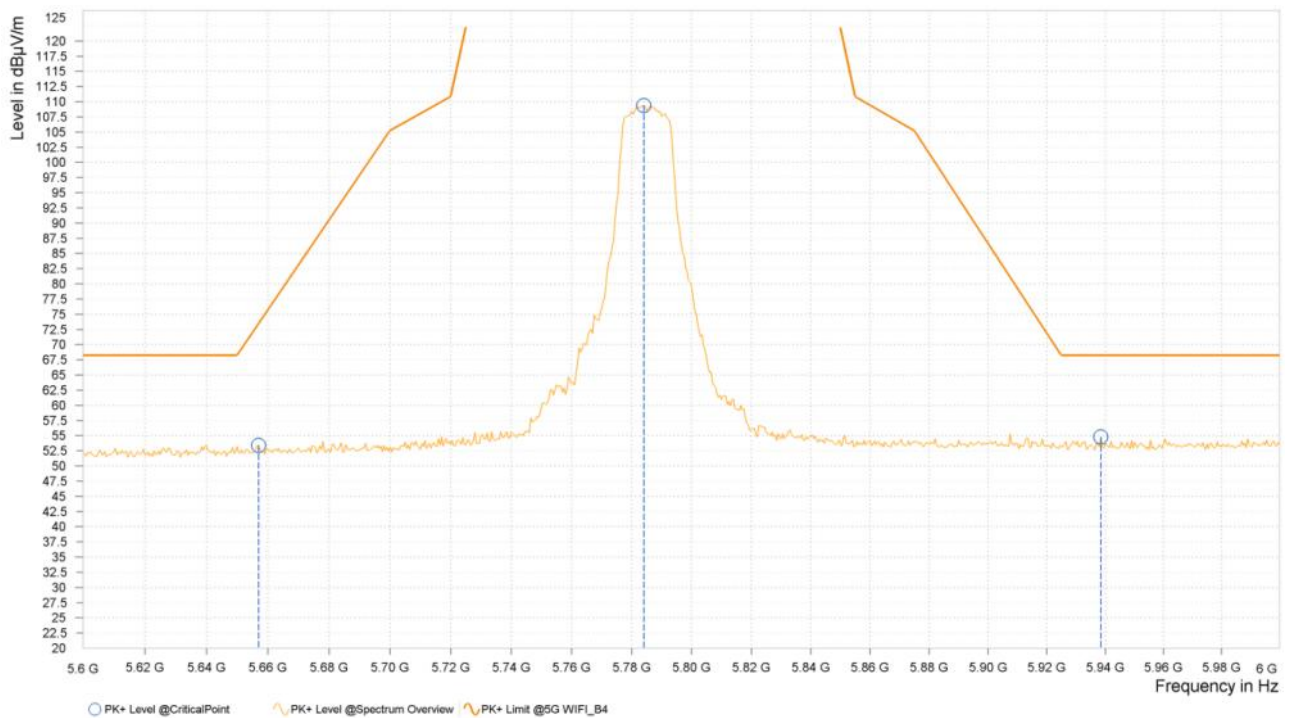
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5745MHz: Fundamental frequency.



CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

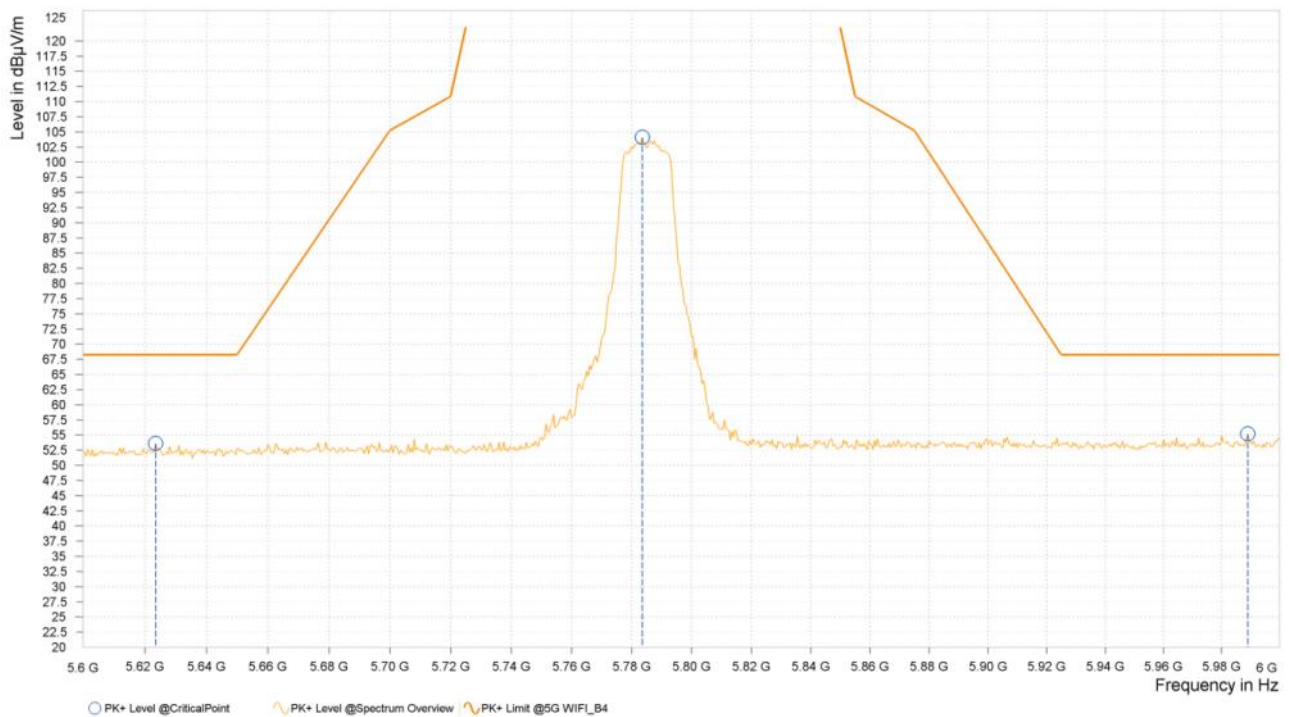
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,657.000	53.40	73.40	20.00	13.77	H	2.8	2.00
12	5,784.000	109.38			14.15	H	1	1.00
12	5,938.500	54.79	68.20	13.41	14.48	H	359	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,623.500	53.61	68.20	14.59	13.59	V	325.6	1.00
12	5,783.500	104.10			14.15	V	200.6	2.00
12	5,989.000	55.19	68.20	13.01	14.62	V	91.7	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5785MHz: Fundamental frequency.



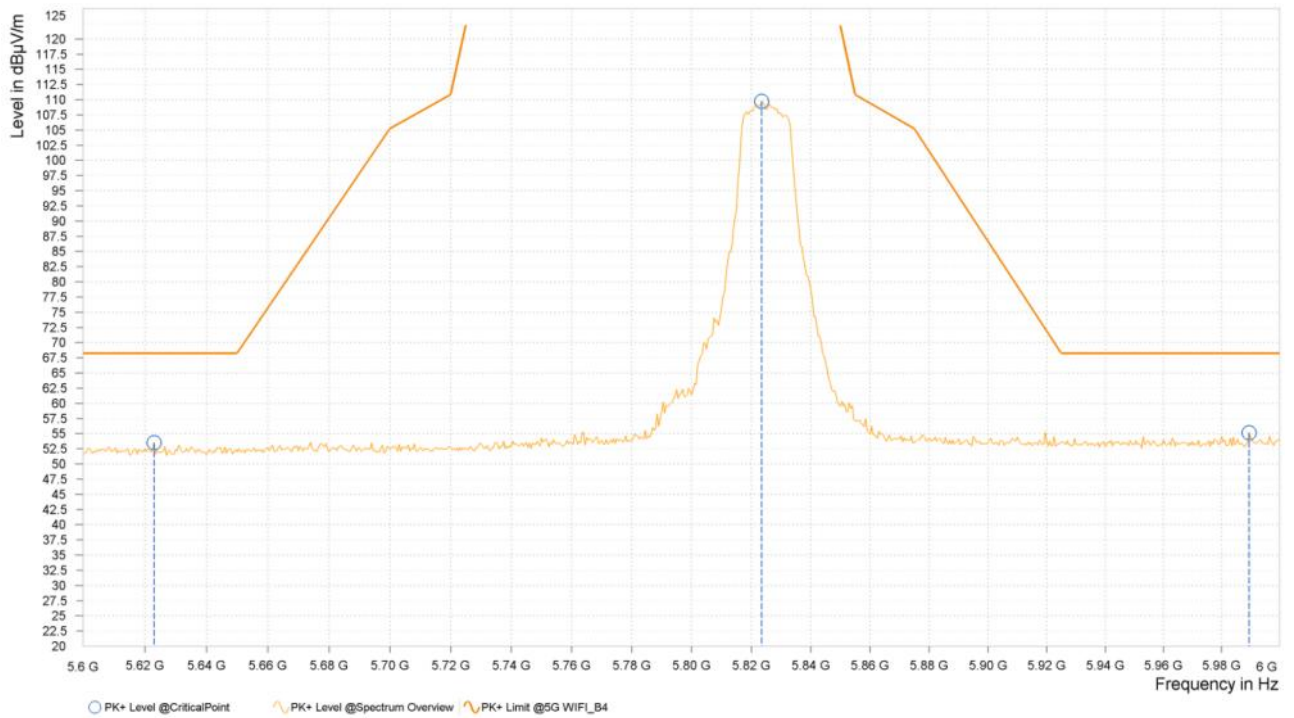
**BUREAU
VERITAS**

Test Report No.: PSU-NQN2402040109RF07

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

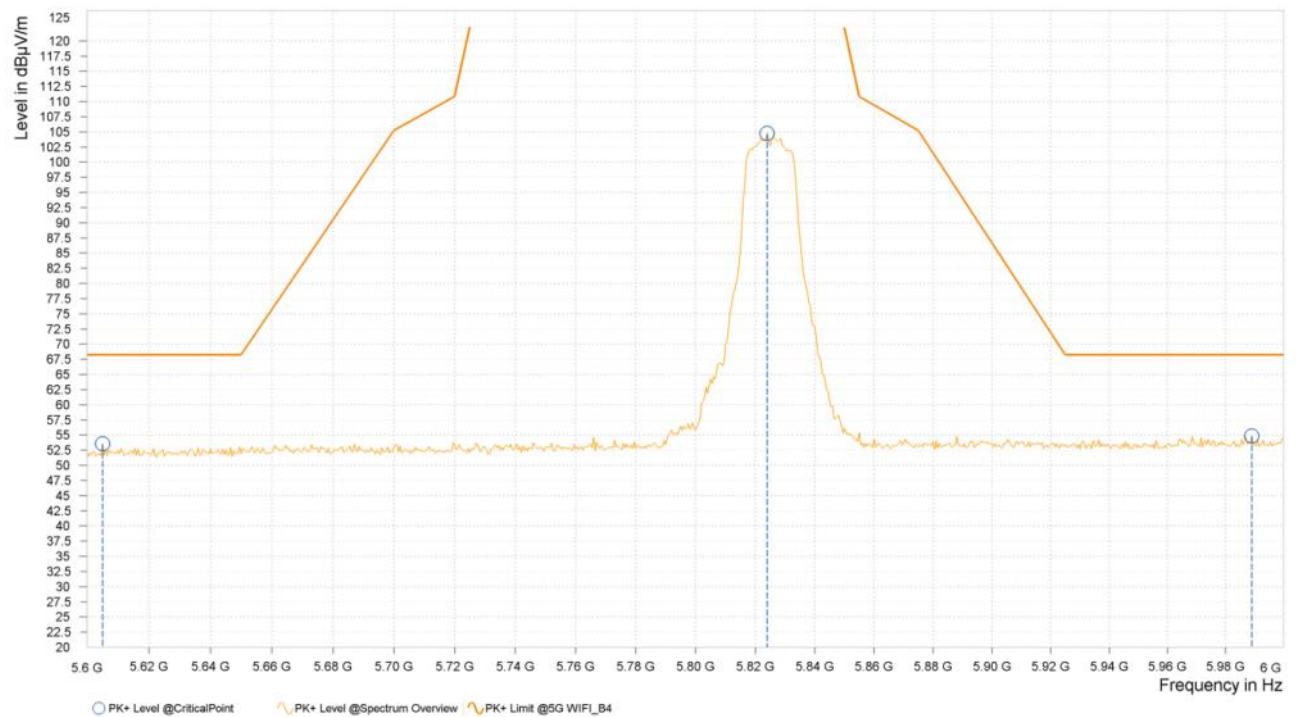
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,623.000	53.50	68.20	14.70	13.58	H	359.1	1.00
12	5,823.500	109.72			14.25	H	1	1.00
12	5,989.500	55.14	68.20	13.06	14.62	H	0.9	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,605.000	53.53	68.20	14.67	13.48	V	92.9	2.00
12	5,824.000	104.75			14.25	V	201.8	2.00
12	5,989.000	54.84	68.20	13.36	14.62	V	146.7	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5825MHz: Fundamental frequency.



**BUREAU
VERITAS**

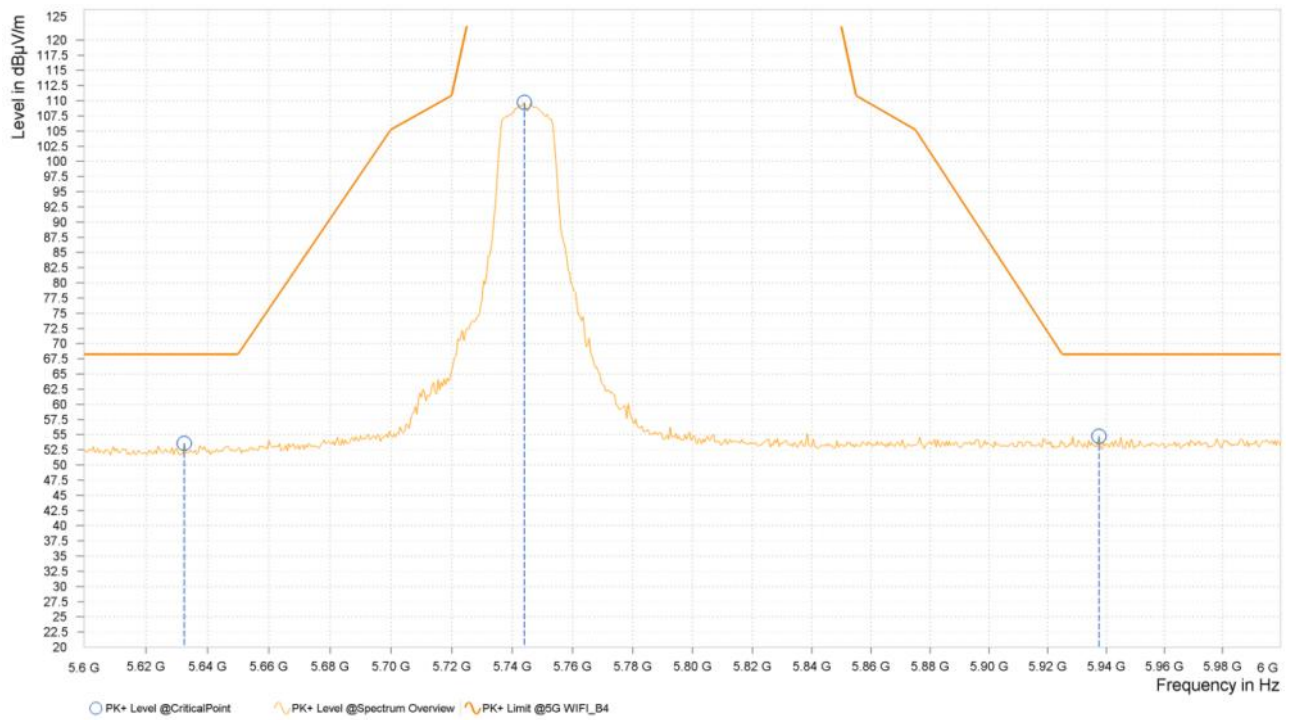
Test Report No.: PSU-NQN2402040109RF07

802.11n (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

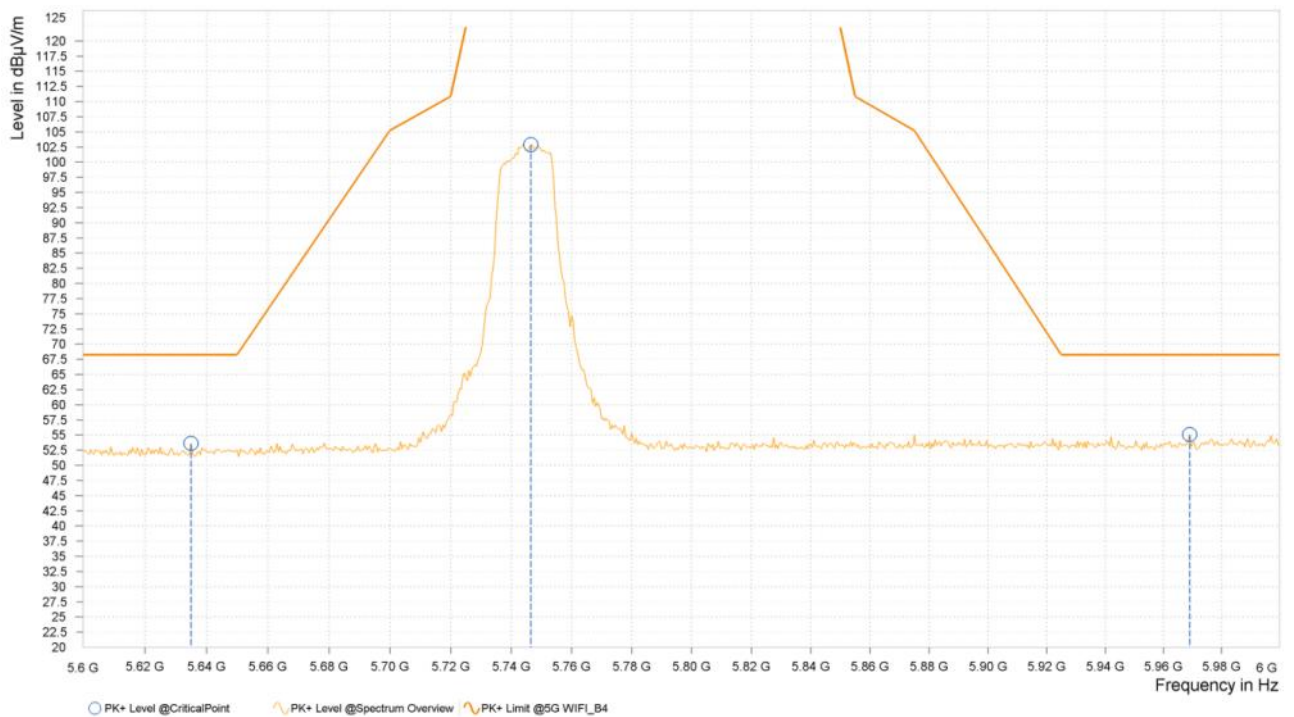
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,632.500	53.57	68.20	14.63	13.64	H	7.8	1.00
12	5,744.000	109.70			14.03	H	1	1.00
12	5,937.500	54.74	68.20	13.46	14.48	H	348	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,635.000	53.62	68.20	14.58	13.65	V	215.7	1.00
12	5,746.500	102.88			14.03	V	201.8	2.00
12	5,969.000	55.06	68.20	13.14	14.56	V	215.7	1.00



REMARKS:

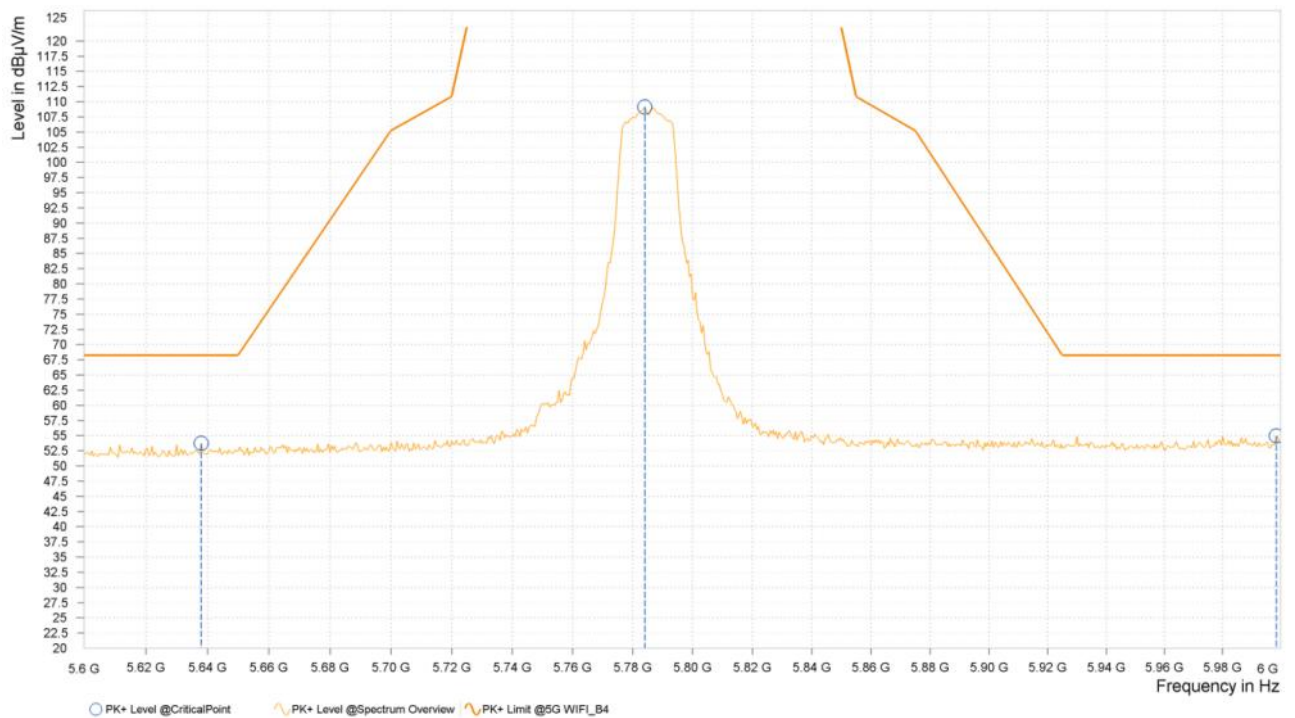
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5745MHz: Fundamental frequency.



CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

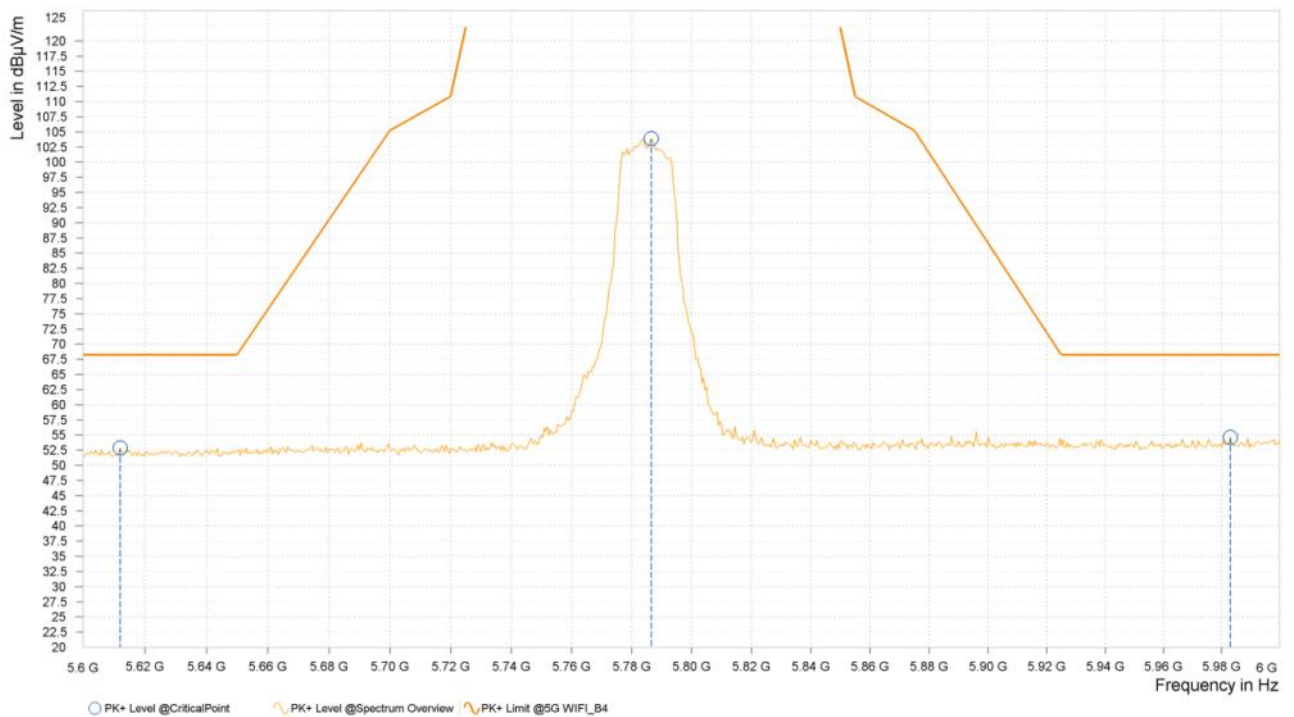
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,638.000	53.73	68.20	14.47	13.67	H	359.1	1.00
12	5,784.000	109.15			14.15	H	1	1.00
12	5,998.500	54.96	68.20	13.24	14.67	H	1	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,612.000	52.86	68.20	15.34	13.52	V	359.1	1.00
12	5,786.500	103.90			14.16	V	199.4	2.00
12	5,983.000	54.63	68.20	13.57	14.60	V	50.7	1.00



REMARKS:

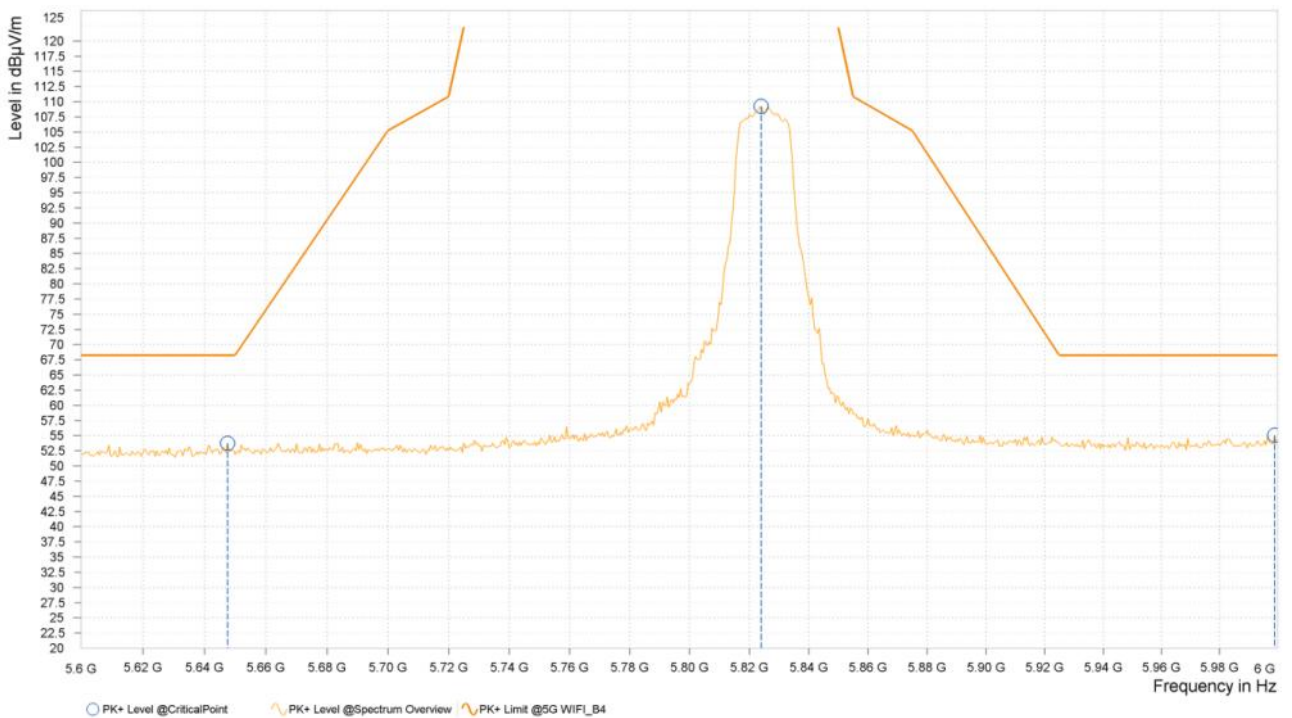
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5785MHz: Fundamental frequency.



CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

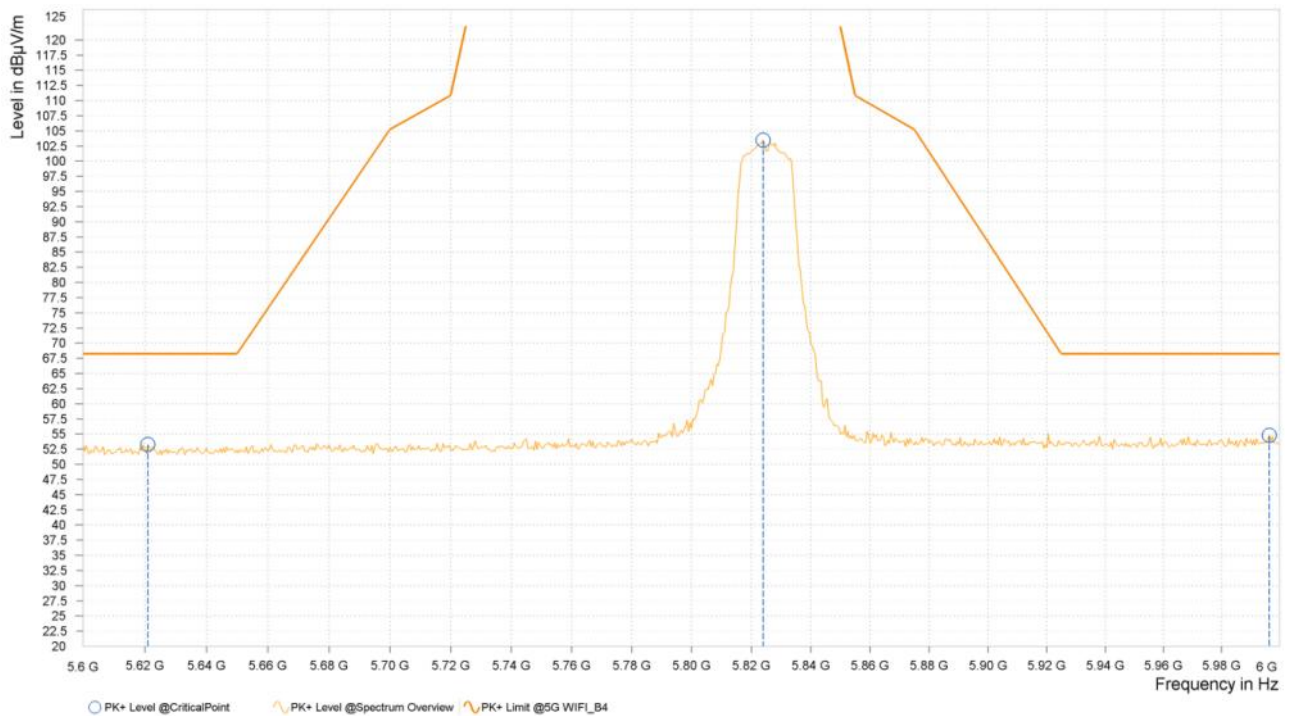
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,647.500	53.76	68.20	14.44	13.72	H	0.9	2.00
12	5,824.000	109.22			14.25	H	1	1.00
12	5,999.000	55.07	68.20	13.14	14.67	H	309.2	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,621.000	53.27	68.20	14.93	13.57	V	254.2	2.00
12	5,824.000	103.46			14.25	V	199.3	2.00
12	5,996.500	54.76	68.20	13.44	14.65	V	359	1.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5825MHz: Fundamental frequency.

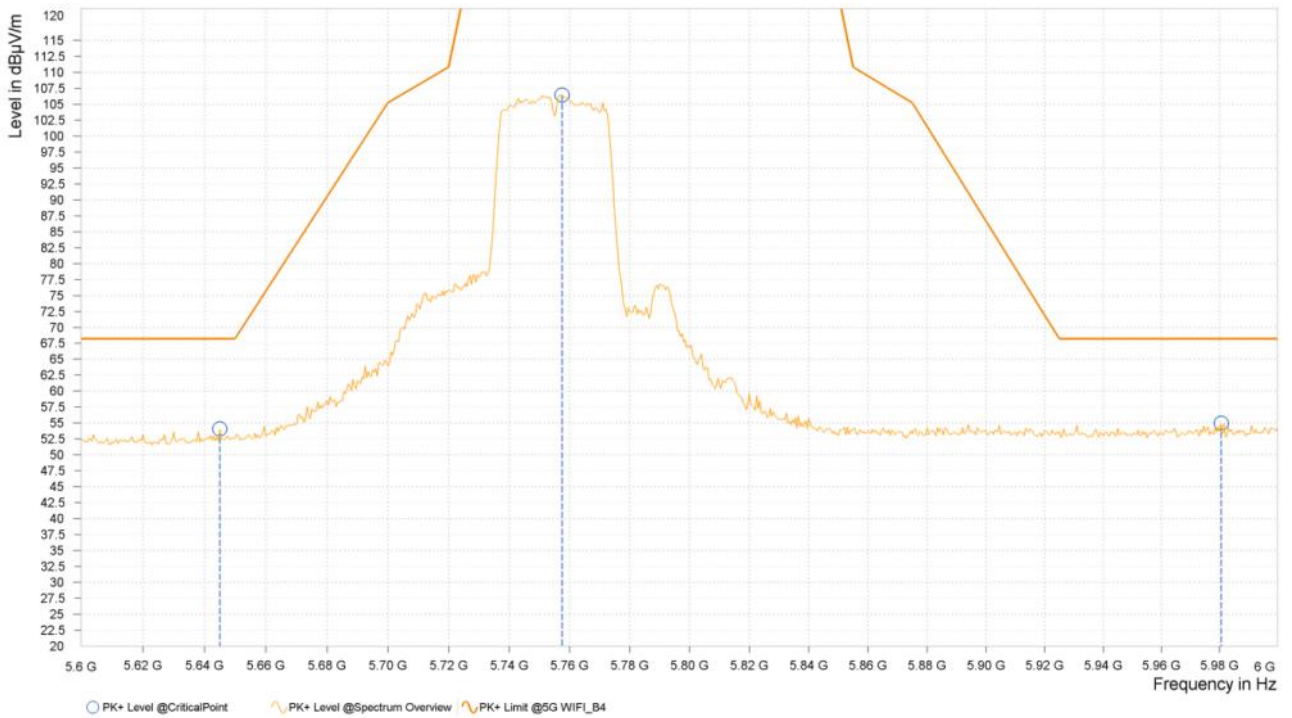


802.11n (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

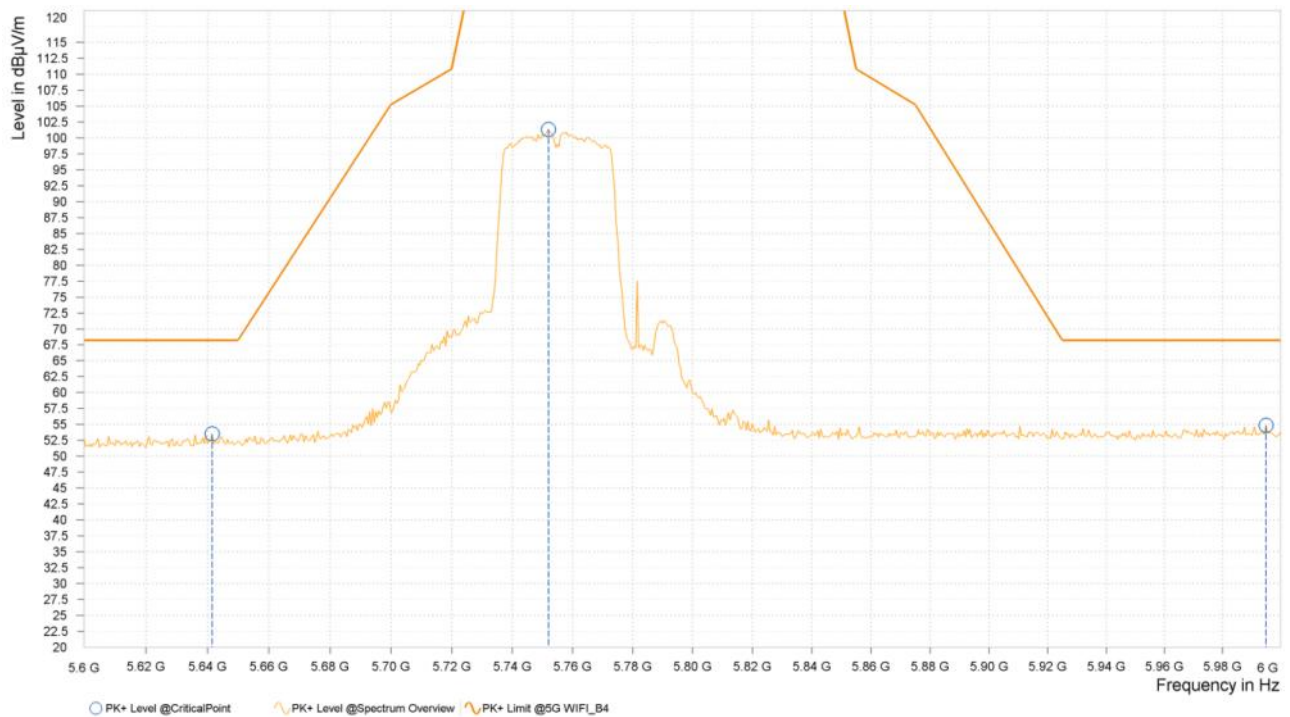
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,645.000	54.05	68.20	14.15	13.71	H	116.4	1.00
9	5,757.500	106.46			14.05	H	359.1	1.00
9	5,980.500	54.96	68.20	13.24	14.59	H	140.8	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,641.500	53.51	68.20	14.69	13.69	V	359.1	1.00
9	5,752.000	101.35			14.04	V	199.4	2.00
9	5,995.000	54.85	68.20	13.35	14.64	V	50.7	1.00



REMARKS:

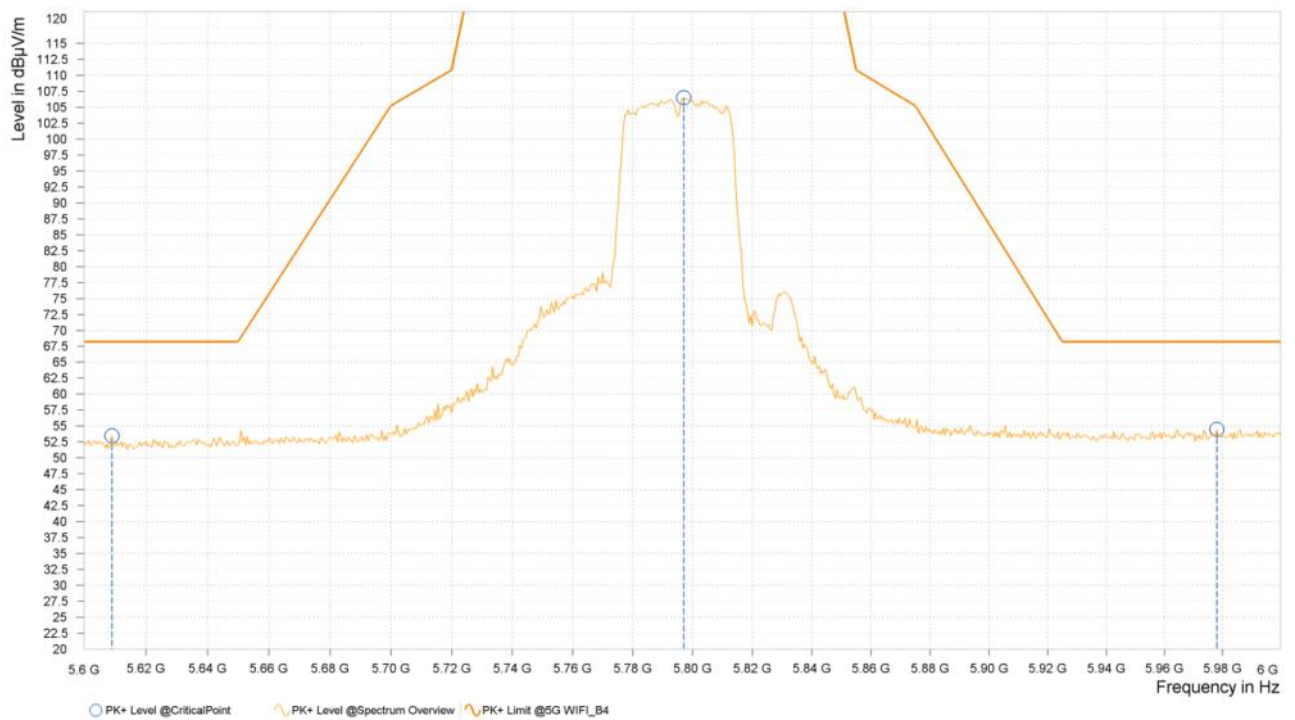
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5755MHz: Fundamental frequency.



CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

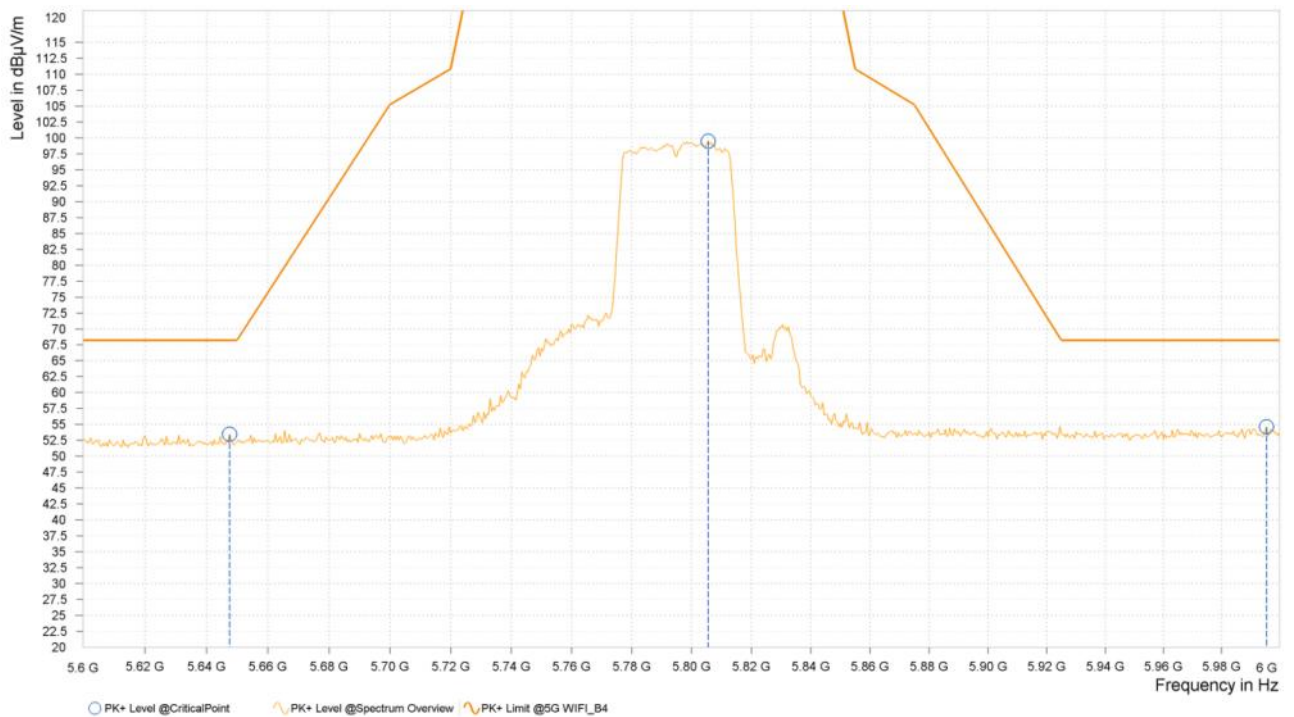
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,609.000	53.49	68.20	14.71	13.51	H	187.3	2.00
9	5,797.000	106.48			14.20	H	1	1.00
9	5,978.000	54.47	68.20	13.73	14.59	H	0.9	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,647.500	53.45	68.20	14.75	13.72	V	224	1.00
9	5,805.500	99.50			14.22	V	224	1.00
9	5,995.500	54.61	68.20	13.59	14.65	V	251.8	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5795MHz: Fundamental frequency.



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VERITAS**

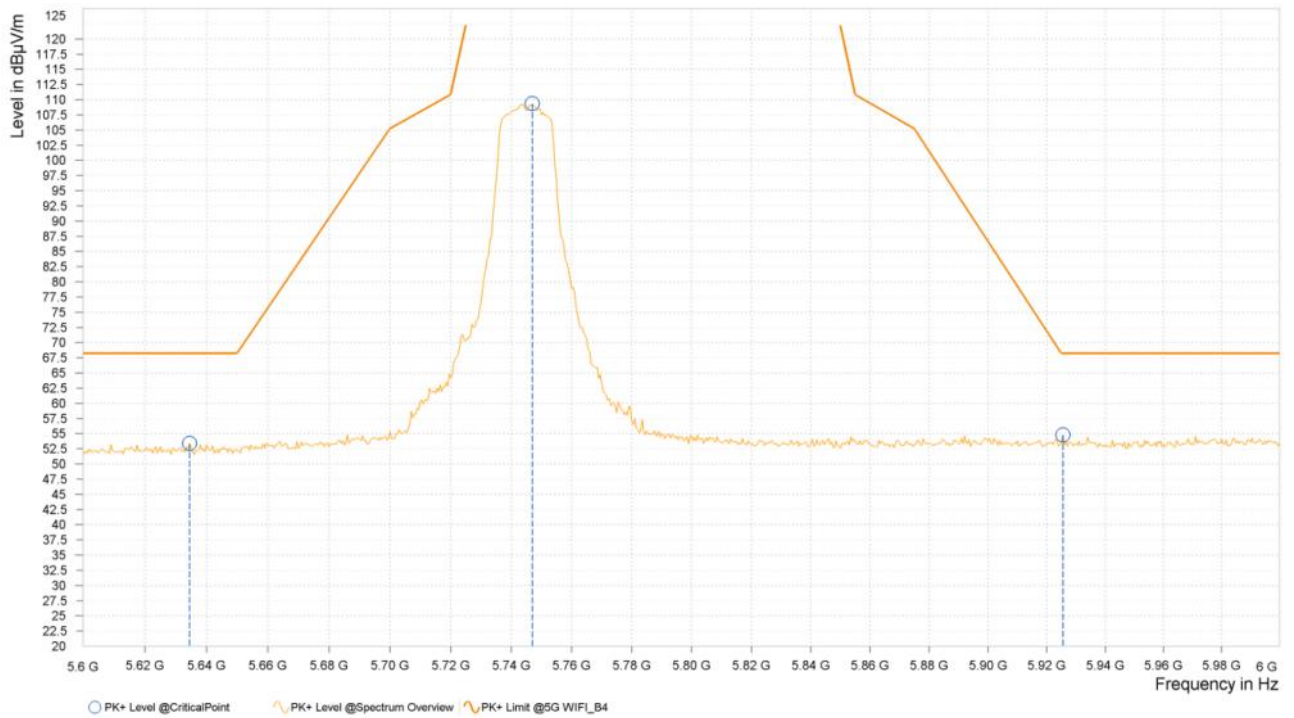
Test Report No.: PSU-NQN2402040109RF07

802.11ac (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

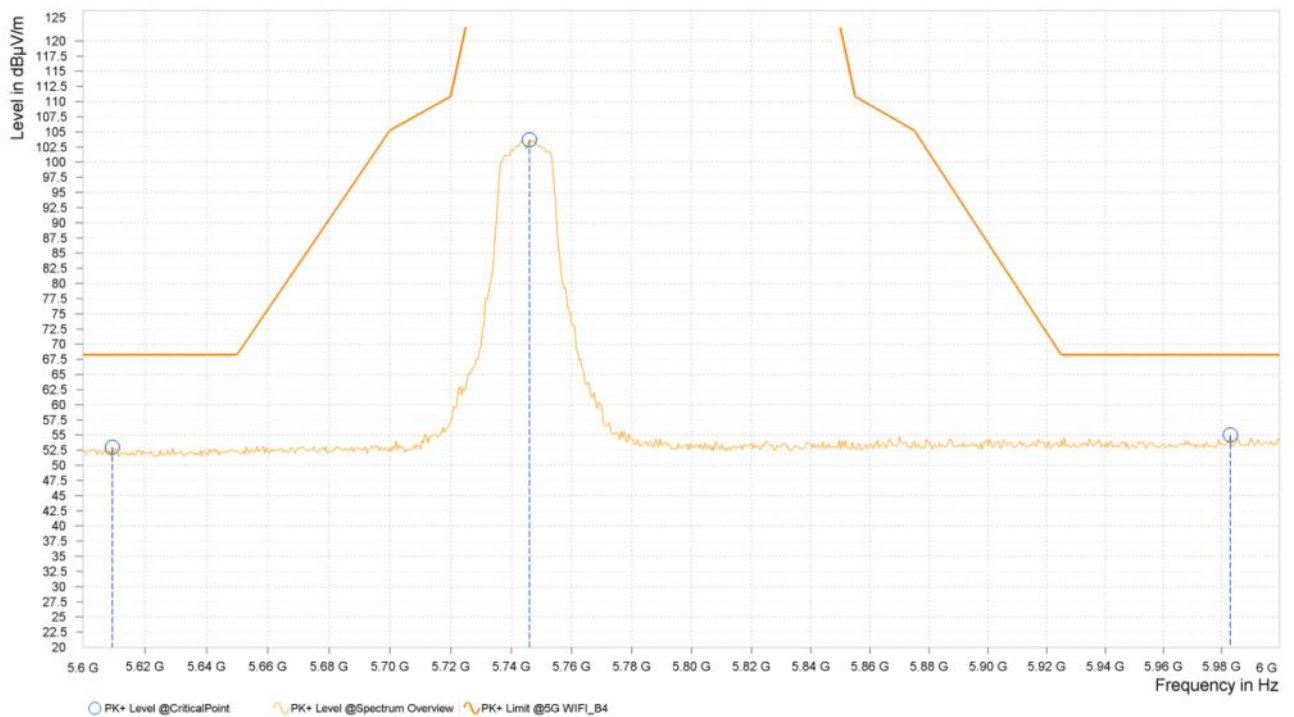
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,634.500	53.38	68.20	14.82	13.65	H	200.5	2.00
12	5,747.000	109.33			14.03	H	357.4	1.00
12	5,925.500	54.77	68.20	13.43	14.48	H	355.7	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,609.500	53.00	68.20	15.20	13.51	V	160.6	1.00
12	5,746.000	103.69			14.03	V	200.6	2.00
12	5,983.000	55.04	68.20	13.16	14.60	V	357.6	1.00



REMARKS:

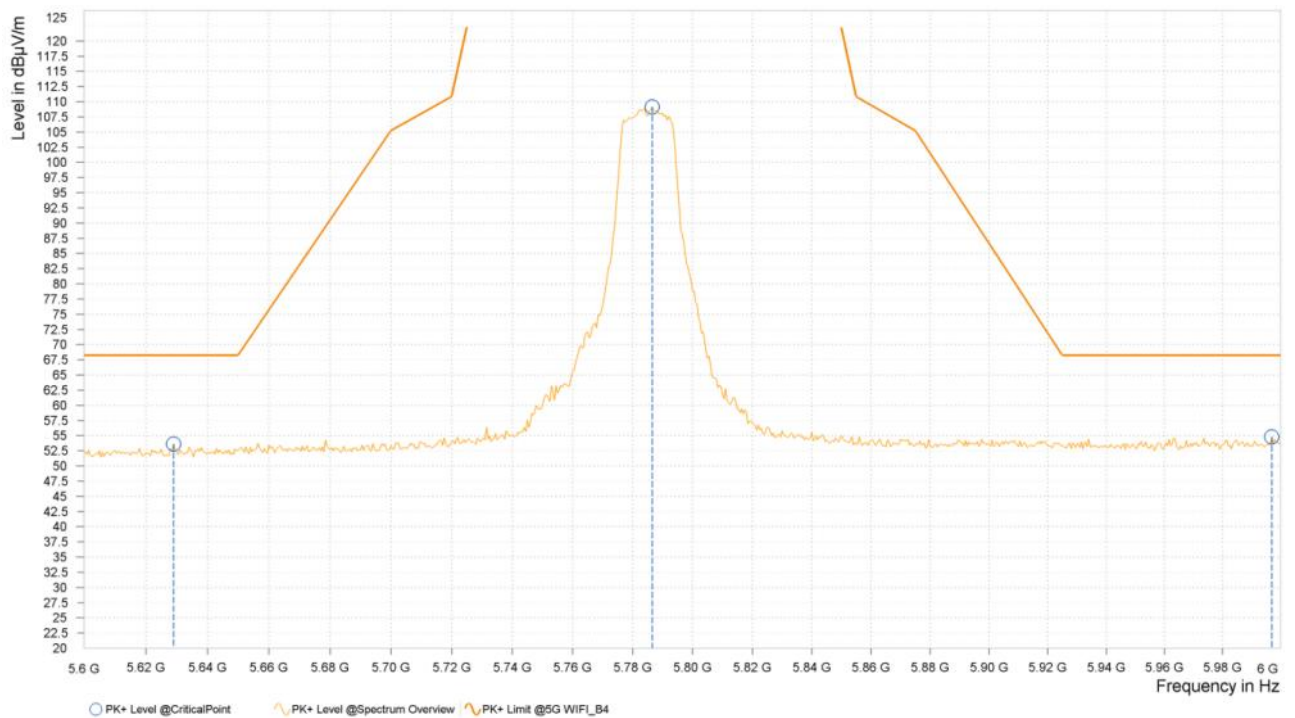
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5745MHz: Fundamental frequency.



CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

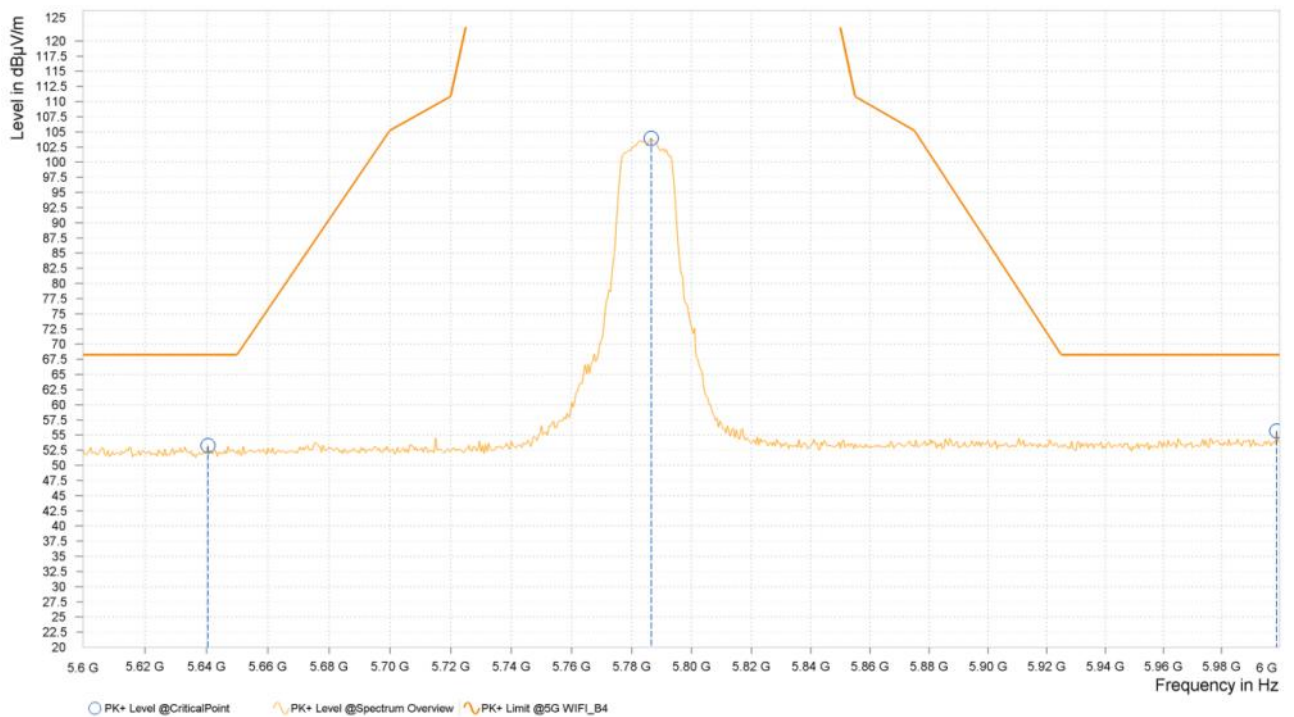
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,629.000	53.64	68.20	14.56	13.62	H	344.5	1.00
12	5,786.500	109.15			14.16	H	1	1.00
12	5,997.000	54.80	68.20	13.40	14.66	H	1	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,640.500	53.24	68.20	14.96	13.68	V	325.7	1.00
12	5,786.500	103.94			14.16	V	105.8	1.00
12	5,999.000	55.68	68.20	12.52	14.67	V	33.1	2.00



REMARKS:

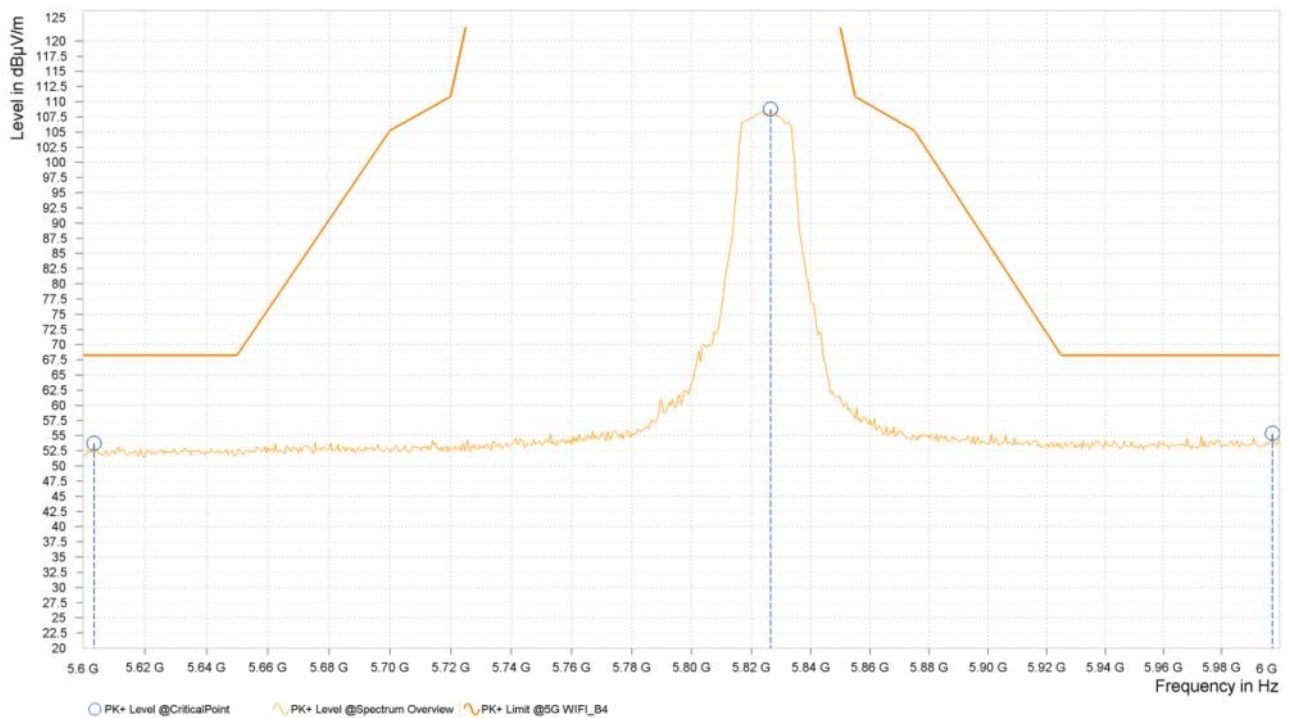
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5785MHz: Fundamental frequency.



CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

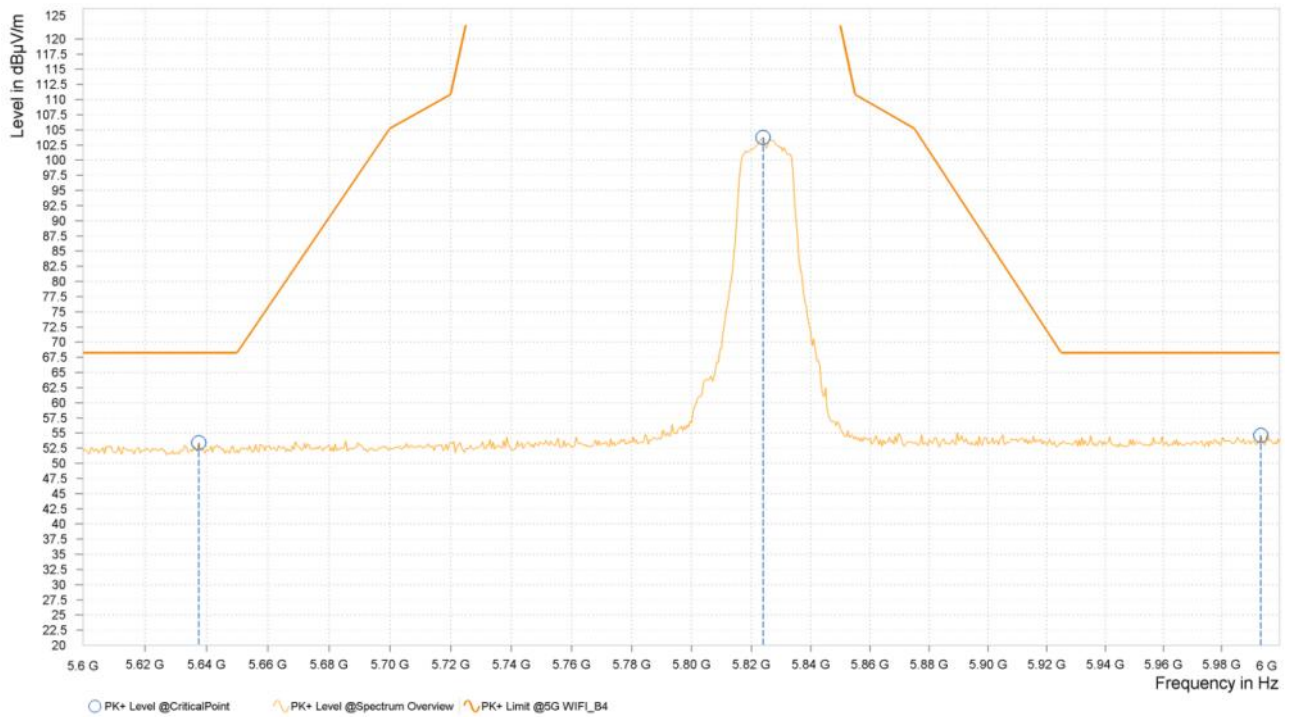
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,603.500	53.76	68.20	14.44	13.47	H	29.5	2.00
12	5,826.500	108.76			14.25	H	1	1.00
12	5,997.500	55.35	68.20	12.85	14.66	H	310.4	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
12	5,637.500	53.41	68.20	14.79	13.67	V	198.2	2.00
12	5,824.000	103.78			14.25	V	50.6	1.00
12	5,993.500	54.63	68.20	13.57	14.64	V	309.3	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5825MHz: Fundamental frequency.

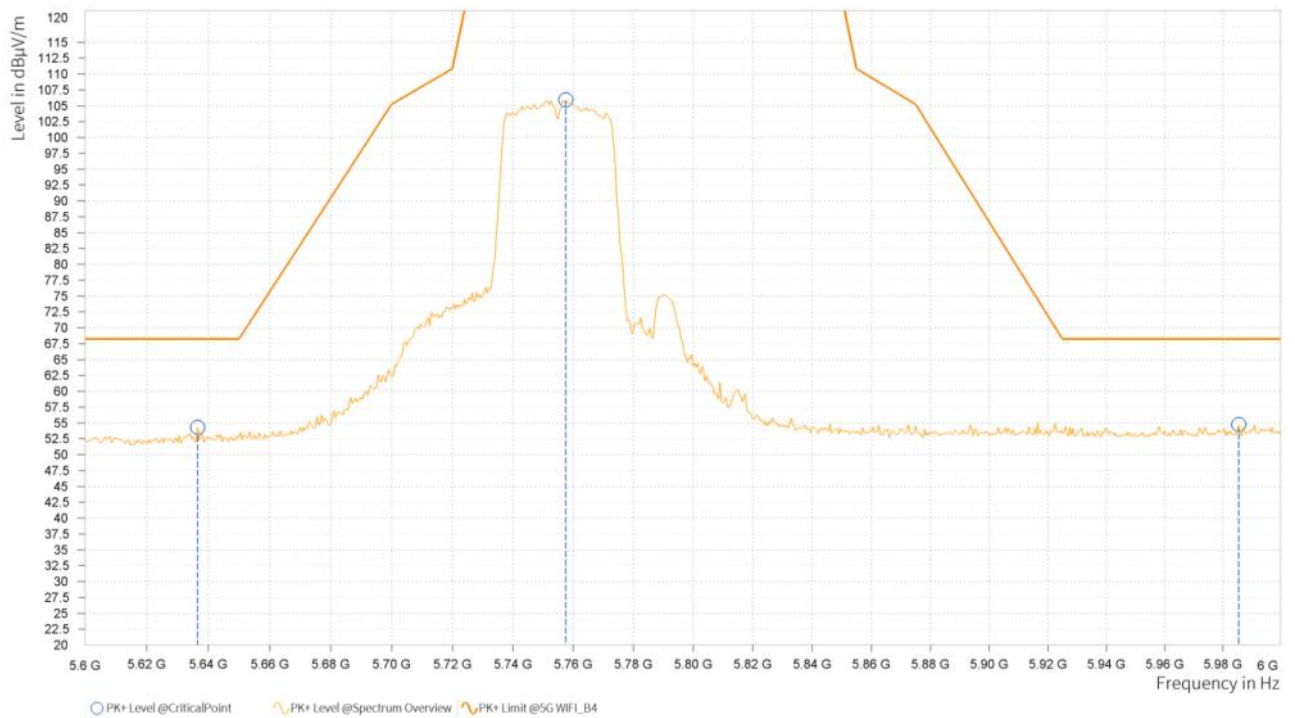


802.11ac (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

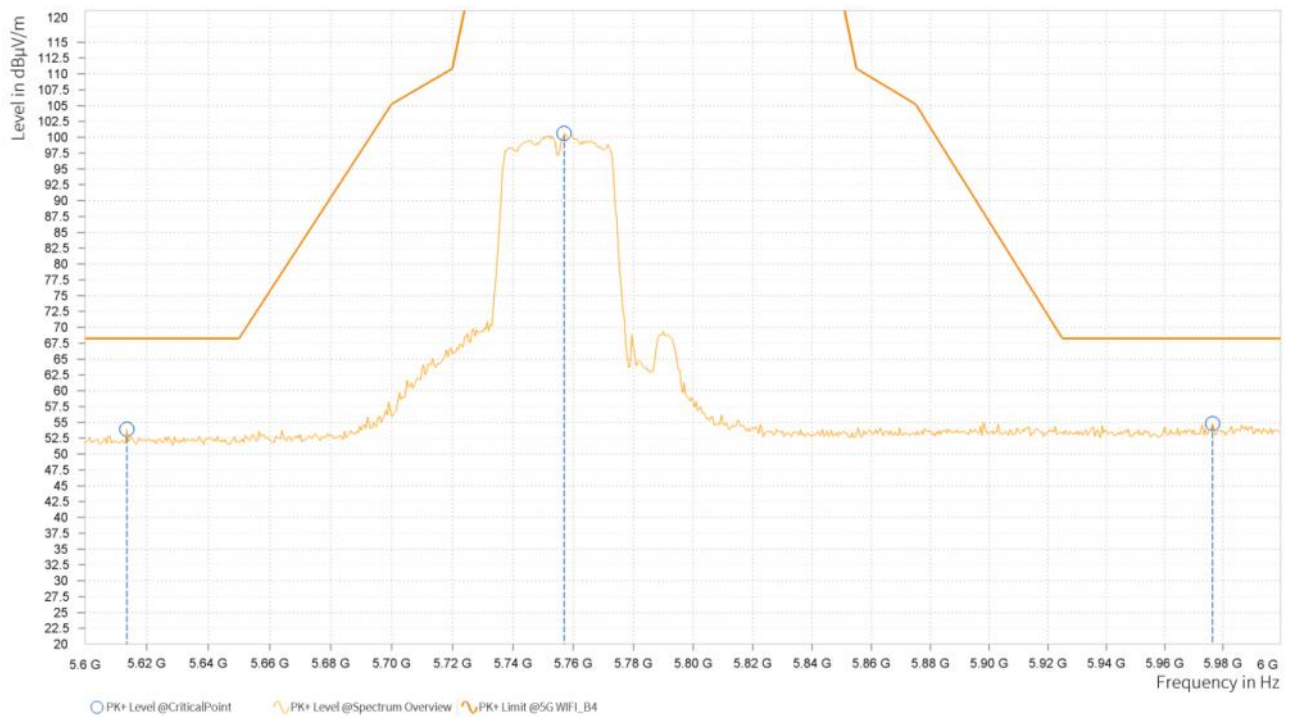
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,636.500	54.32	68.20	13.88	13.66	H	1	1.00
9	5,757.500	105.91			14.05	H	1	1.00
9	5,985.500	54.73	68.20	13.47	14.61	H	357.8	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,613.500	53.93	68.20	14.27	13.53	V	86.9	2.00
9	5,757.000	100.60			14.05	V	198.2	2.00
9	5,976.500	54.83	68.20	13.37	14.58	V	355.7	2.00



REMARKS:

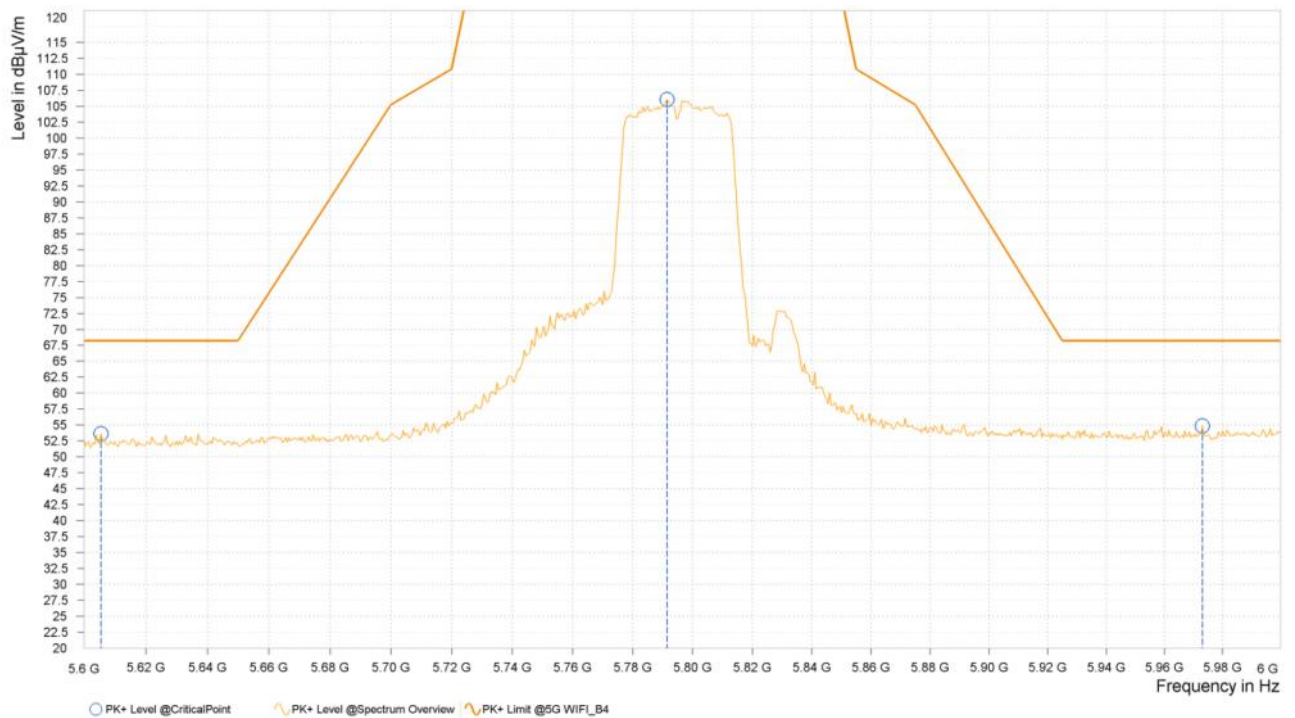
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5755MHz: Fundamental frequency.



CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

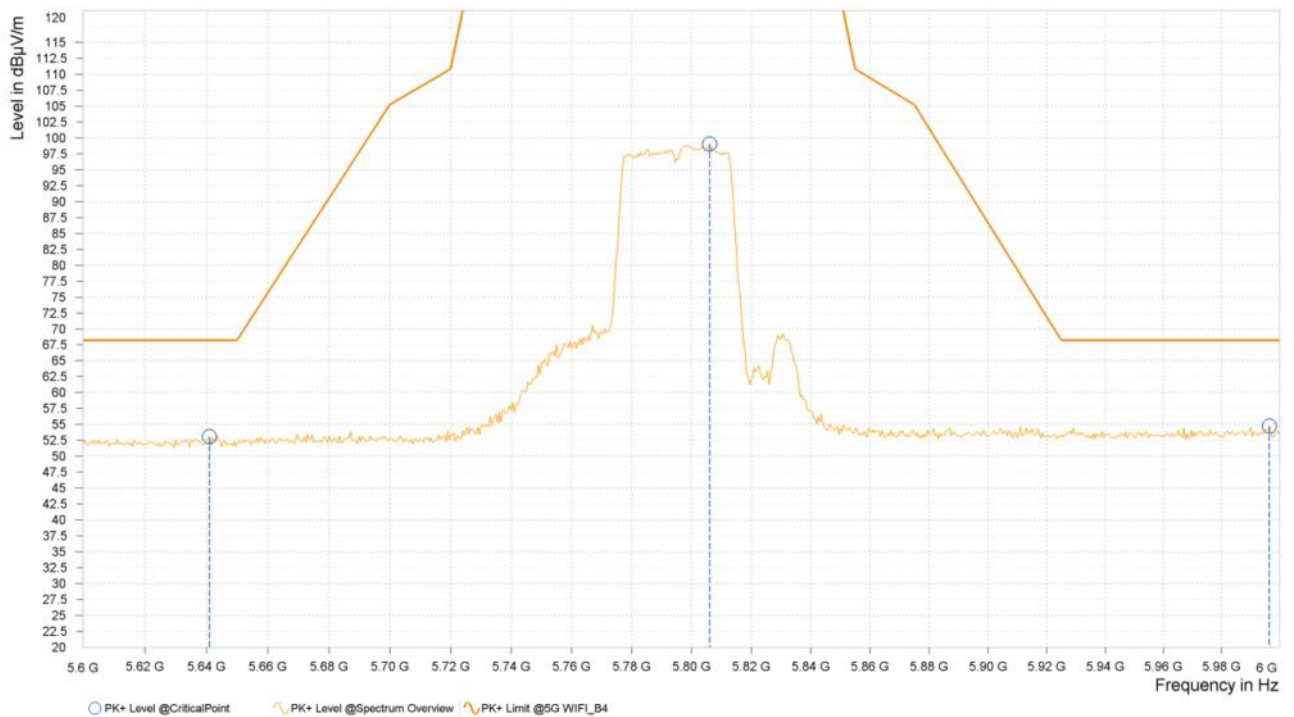
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,605.500	53.64	68.20	14.56	13.49	H	313.7	1.00
9	5,791.500	106.05			14.18	H	1	1.00
9	5,973.000	54.86	68.20	13.34	14.57	H	1	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
9	5,641.000	53.06	68.20	15.14	13.69	V	359	2.00
9	5,806.000	99.05			14.22	V	51.8	1.00
9	5,996.500	54.73	68.20	13.47	14.65	V	0.9	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5795MHz: Fundamental frequency.



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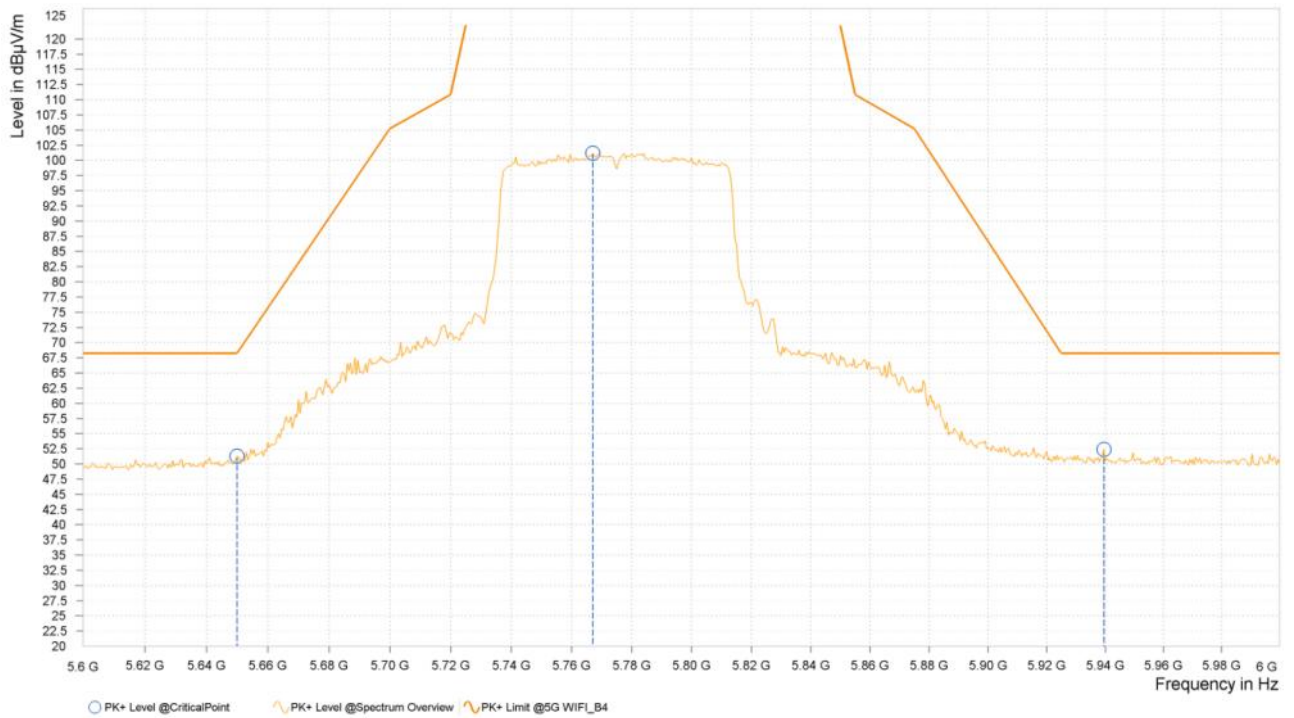
Test Report No.: PSU-NQN2402040109RF07

802.11ac (80MHz)

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

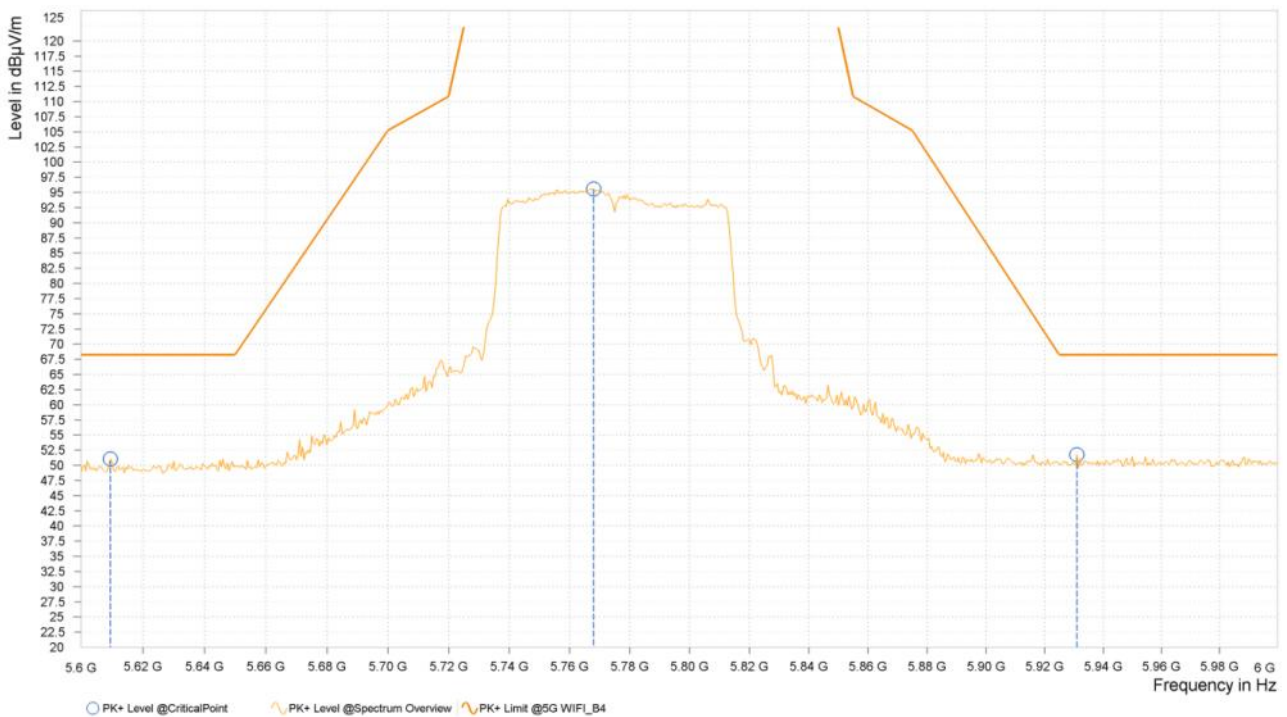
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	5,650.000	51.30	68.20	16.90	13.73	H	359.1	1.00
6	5,767.000	101.21			14.09	H	330.4	1.00
6	5,939.500	52.40	68.20	15.80	14.48	H	28.3	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	5,609.500	51.06	68.20	17.14	13.51	V	5	1.00
6	5,768.000	95.58			14.09	V	197	2.00
6	5,931.000	51.78	68.20	16.42	14.48	V	326.9	1.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5775MHz: Fundamental frequency.



RADIATED EMISSION MEASUREMENT

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

Band 3

802.11ac (80MHz):

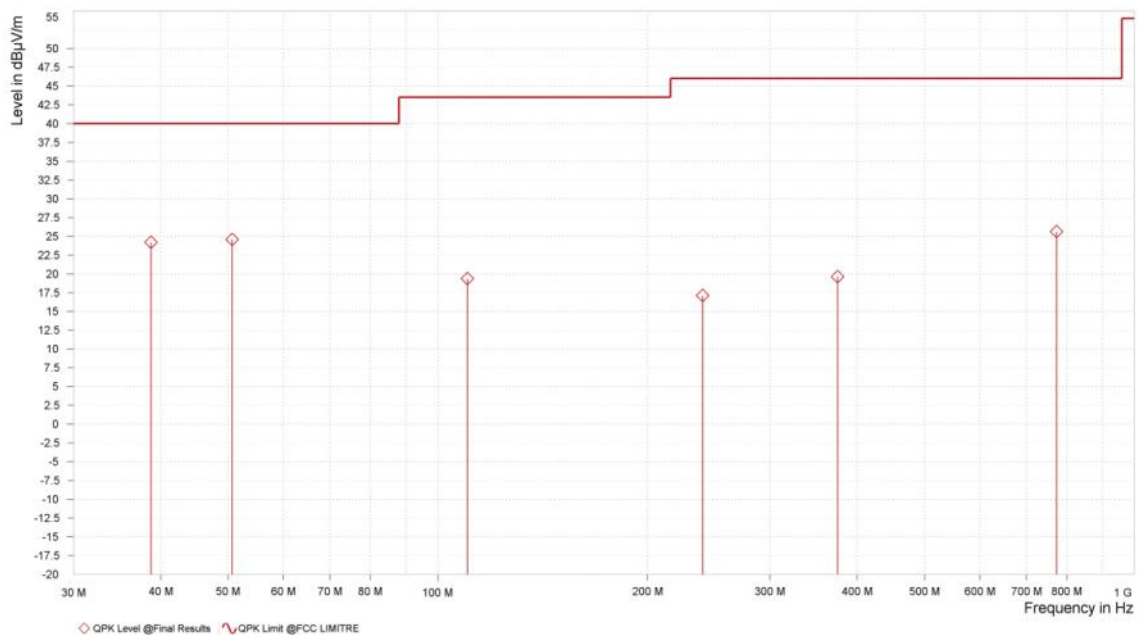
CHANNEL	TX Channel 106	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	38.730	24.17	40.00	15.83	-11.07	H	65.4	2.00	120.000
1	50.661	24.58	40.00	15.42	-9.51	H	1	1.00	120.000
1	110.219	19.34	43.50	24.16	-11.97	H	292.2	1.00	120.000
1	240.005	17.09	46.00	28.91	-8.76	H	4.3	1.00	120.000
1	375.029	19.63	46.00	26.37	-3.82	H	4.3	1.00	120.000
1	773.602	25.60	46.00	20.40	-0.05	H	214.9	2.00	120.000

REMARKS:

1. Emission level (dBμV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Limit value- Emission level.





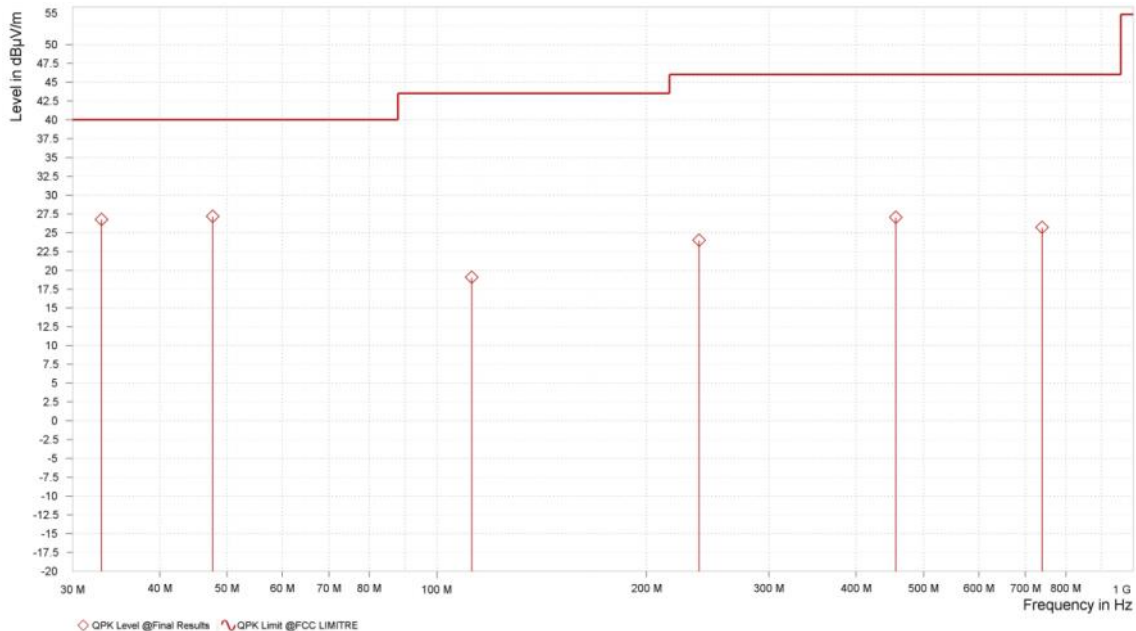
CHANNEL	Channel 106	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	33.007	26.75	40.00	13.25	-14.56	V	359.1	1.00	120.000
1	47.654	27.13	40.00	12.87	-10.47	V	295.8	1.00	120.000
1	112.208	19.05	43.50	24.45	-11.96	V	355.1	2.00	120.000
1	237.920	23.98	46.00	22.02	-9.51	V	66.6	2.00	120.000
1	455.976	27.02	46.00	18.98	-2.93	V	295.8	1.00	120.000
1	739.846	25.69	46.00	20.31	-0.77	V	359.1	1.00	120.000

REMARKS:

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Limit value- Emission level.





ABOVE 1GHz WORST-CASE DATA:

Note: For higher frequency, the emission is too low to be detected.

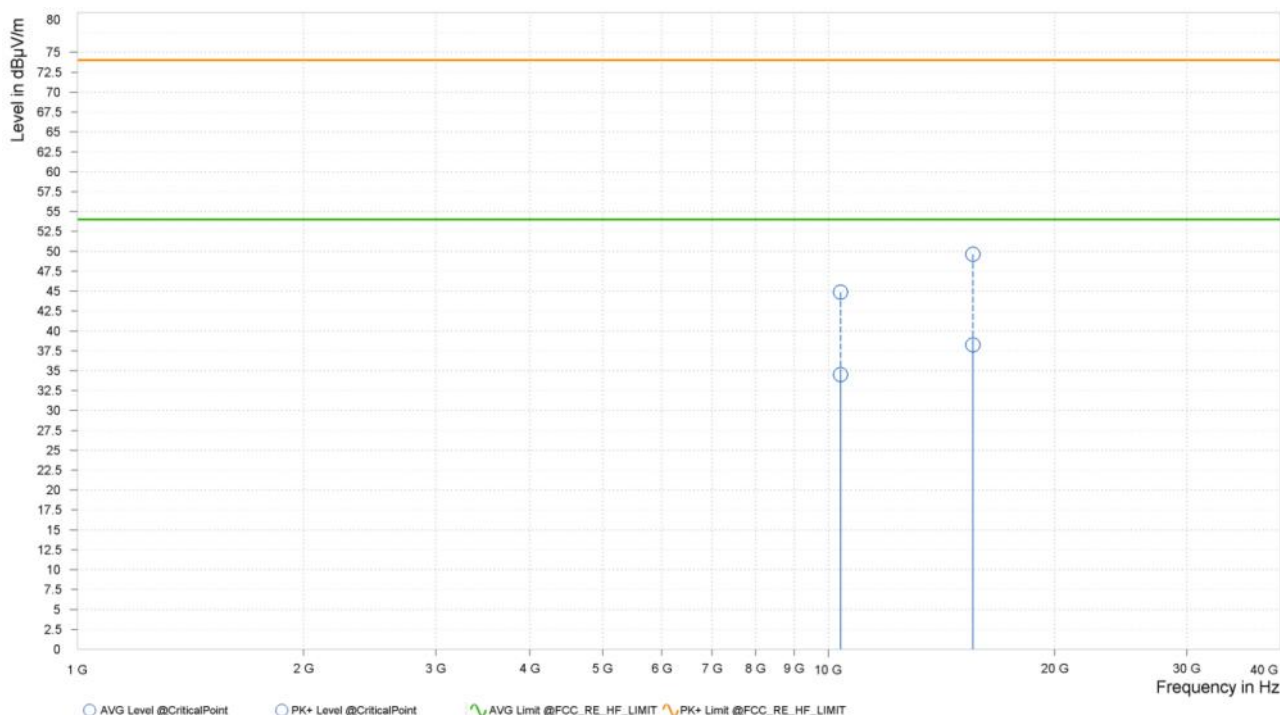
Band 1

802.11ac (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

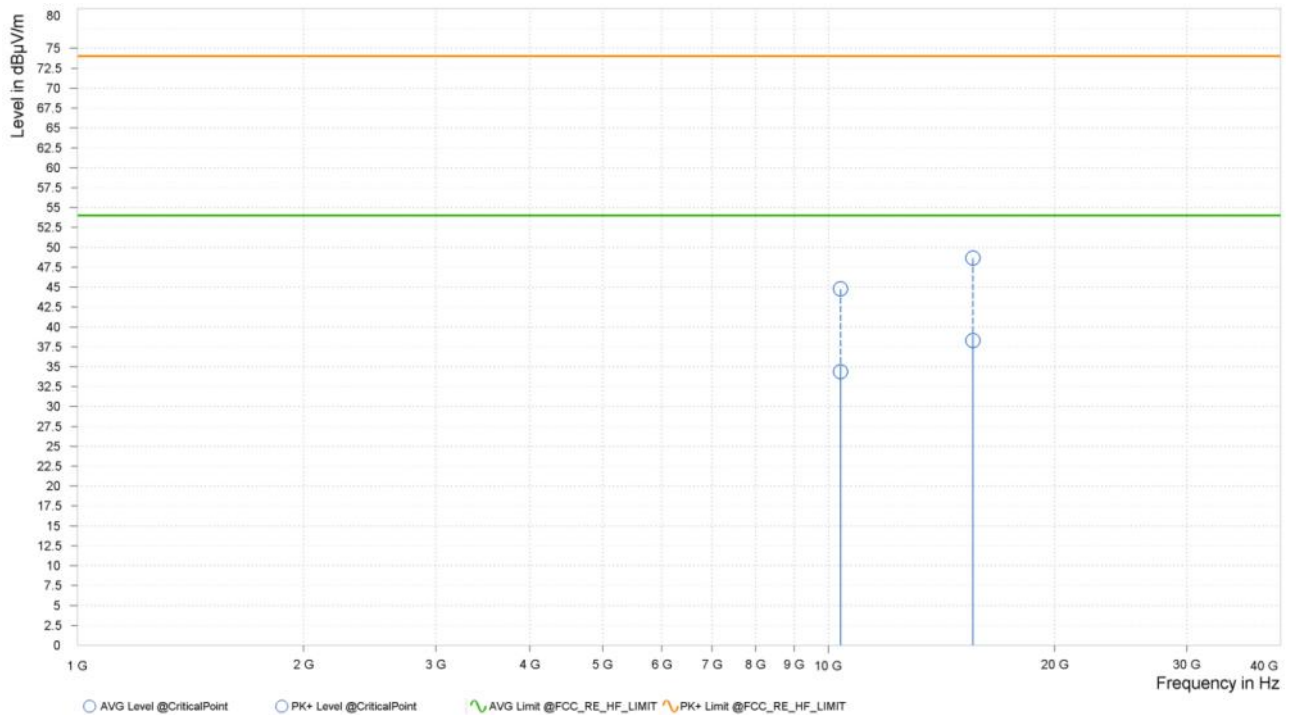
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	10,380.000	44.86	74.00	29.14	34.52	54.00	19.48	6.67	H	2.4	2.00
2	15,570.000	49.64	74.00	24.36	38.24	54.00	15.76	11.17	H	126.3	2.00





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	10,380.000	44.77	74.00	29.23	34.40	54.00	19.60	6.67	V	0.9	2.00
2	15,570.000	48.63	74.00	25.37	38.29	54.00	15.71	11.17	V	2.3	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5180MHz: Fundamental frequency.



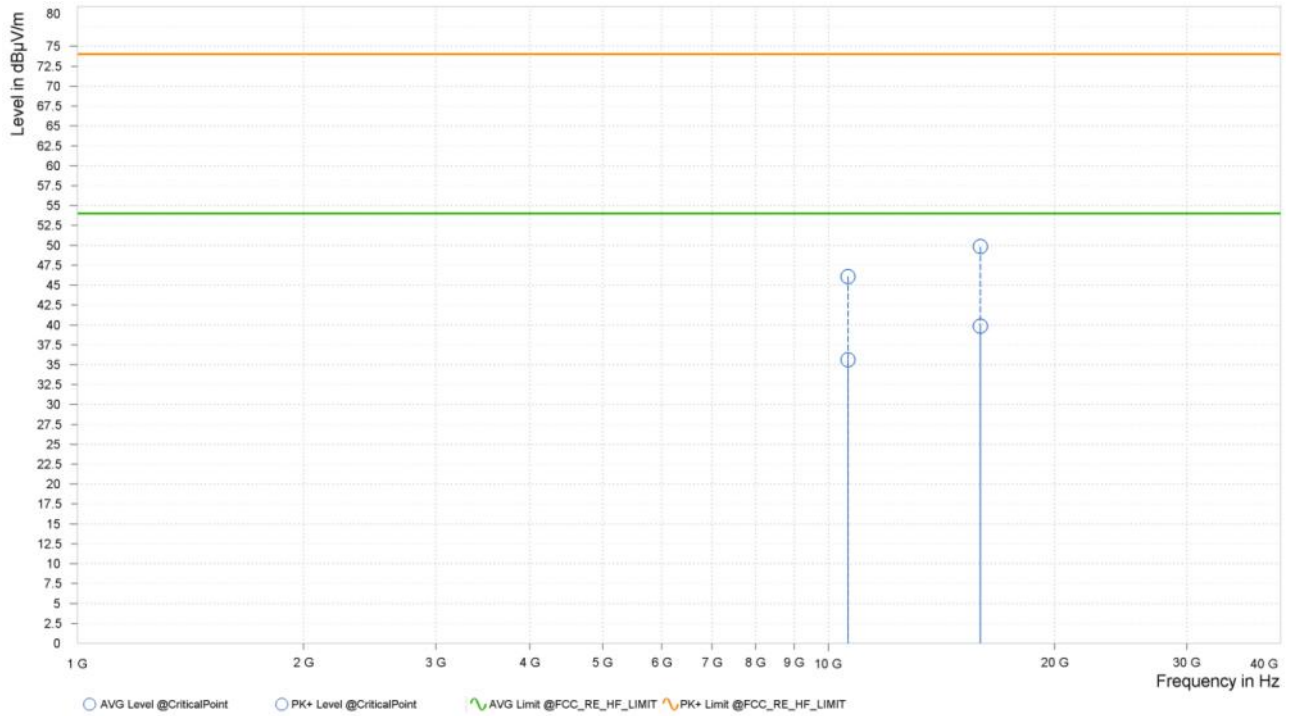
Test Report No.: PSU-NQN2402040109RF07

Band 2:
802.11ac (40MHz)

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

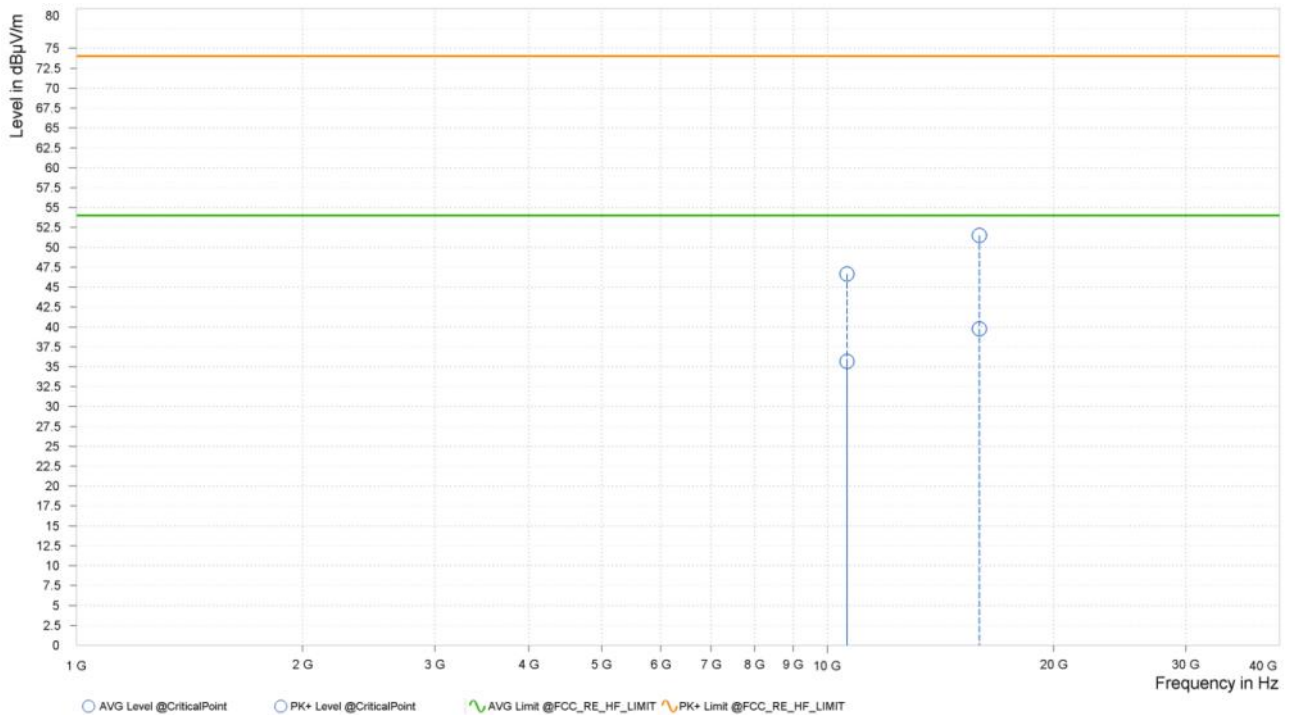
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	10,620.000	46.08	74.00	27.92	35.63	54.00	18.37	7.55	H	93.8	1.00
2	15,930.000	49.83	74.00	24.17	39.82	54.00	14.18	12.22	H	357.7	1.00





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	10,620.000	46.66	74.00	27.34	35.68	54.00	18.32	7.55	V	359	1.00
2	15,930.000	51.50	74.00	22.50	39.78	54.00	14.22	12.22	V	0.9	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 5260MHz: Fundamental frequency.

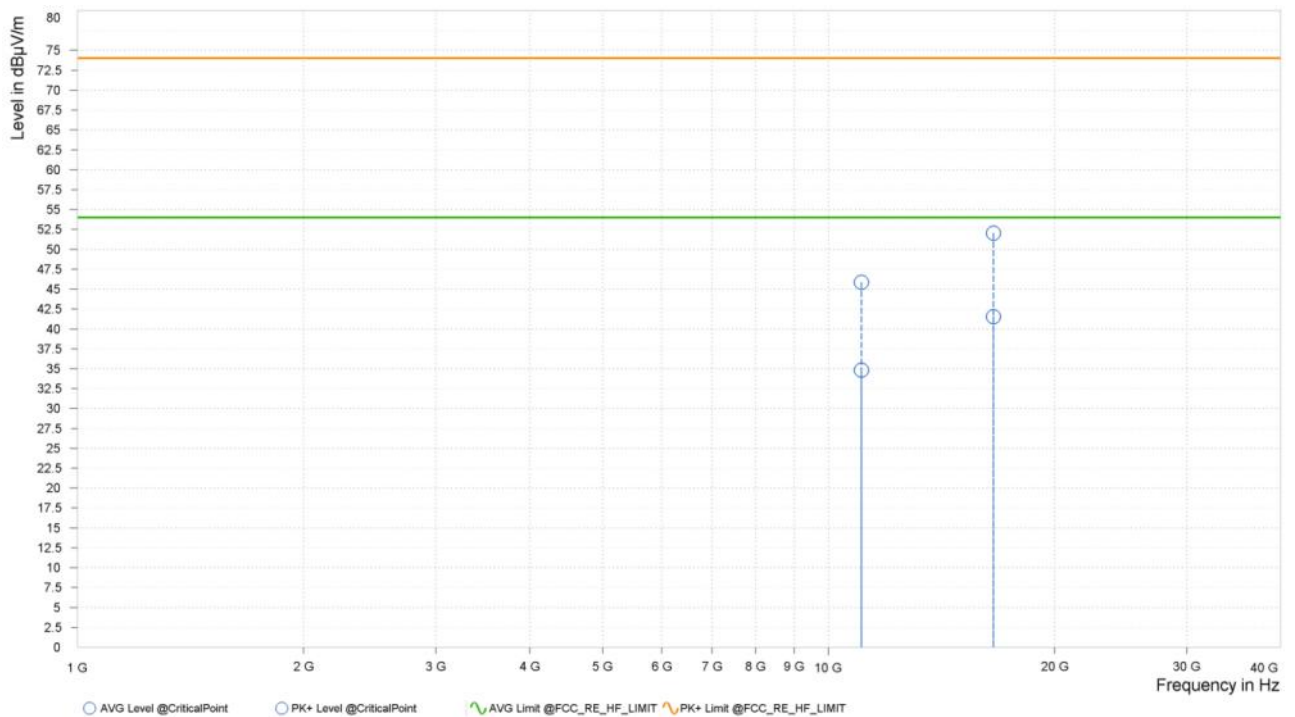


Band 3
802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

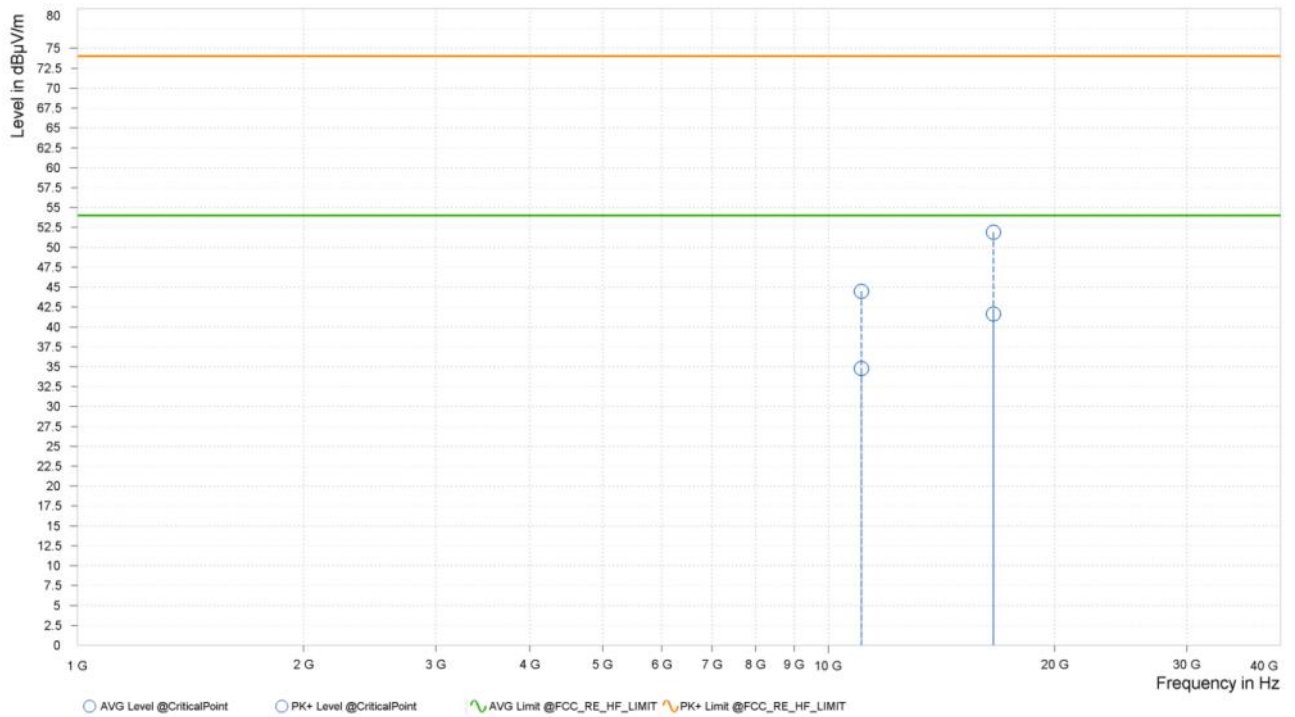
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	11,060.000	45.85	74.00	28.15	34.81	54.00	19.19	7.15	H	2.2	2.00
2	16,590.000	52.03	74.00	21.97	41.54	54.00	12.46	14.19	H	265	2.00





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	11,060.000	44.48	74.00	29.52	34.76	54.00	19.24	7.15	V	357.8	1.00
2	16,590.000	51.91	74.00	22.09	41.64	54.00	12.36	14.19	V	92.6	1.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.



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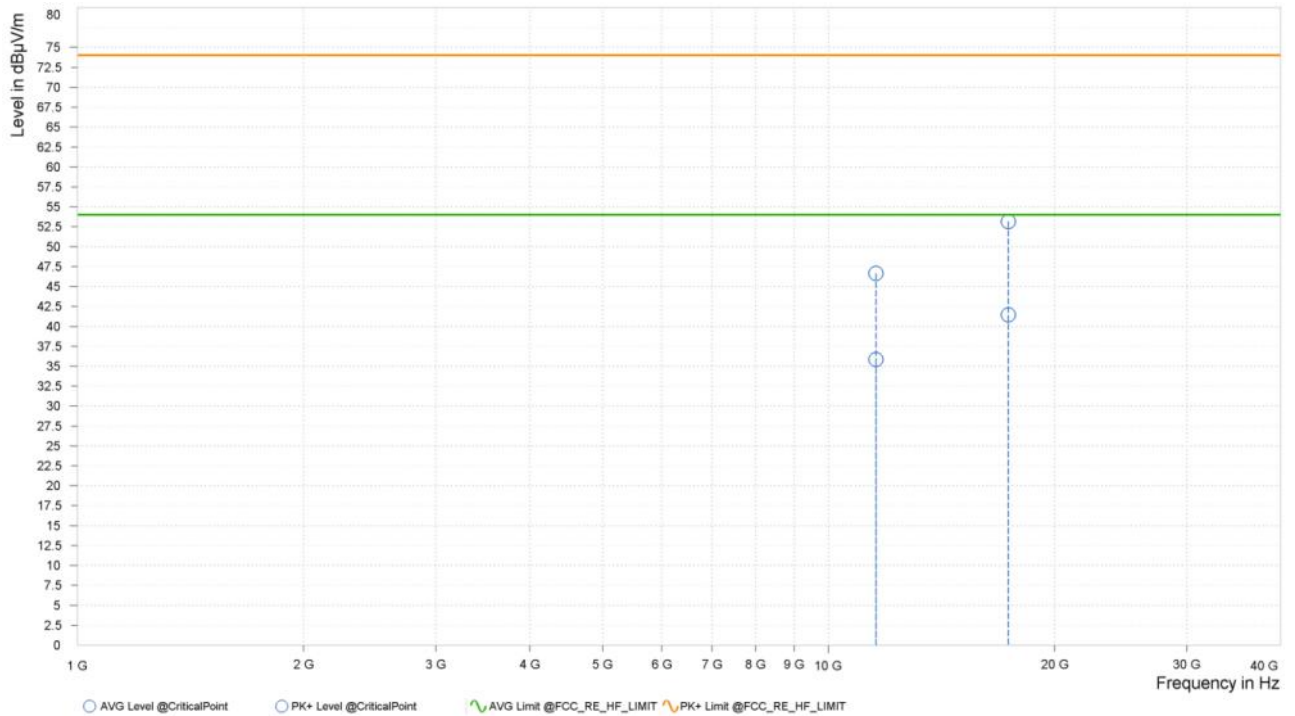
Band 4:

802.11ac (20MHz)

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

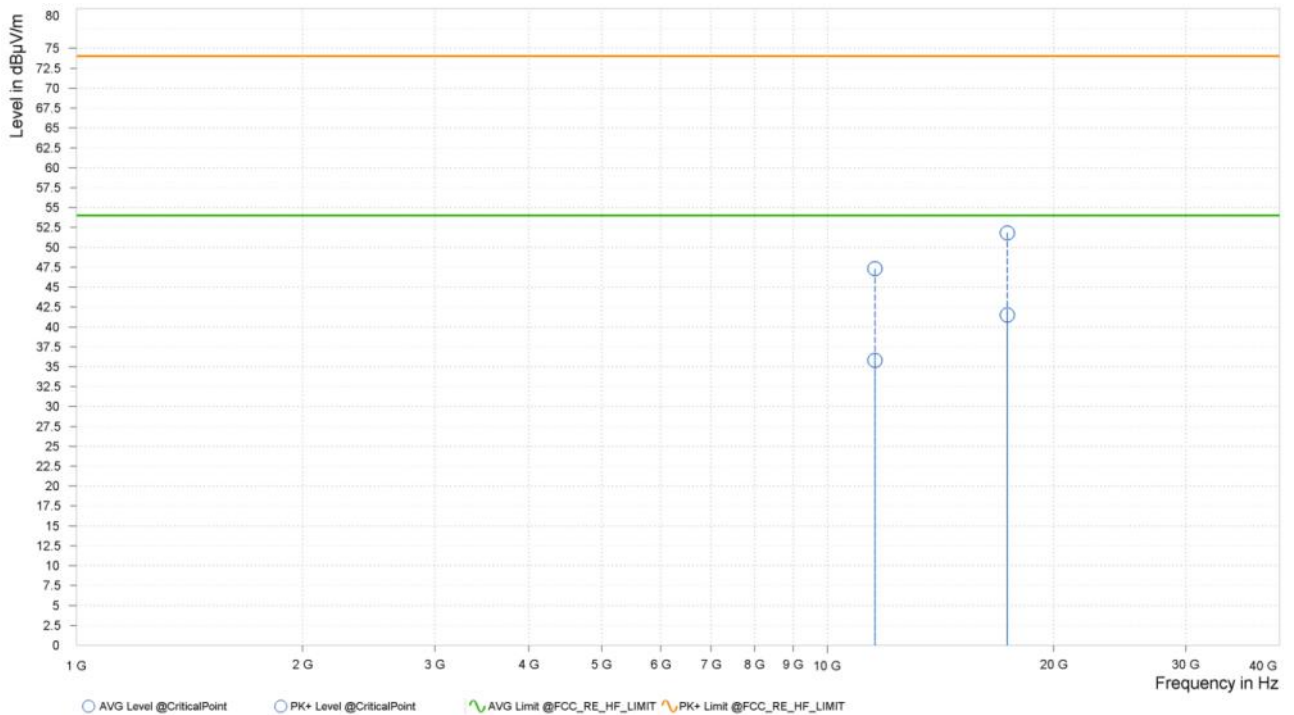
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	11,570.000	46.65	74.00	27.35	35.86	54.00	18.14	8.37	H	359	2.00
2	17,355.000	53.16	74.00	20.84	41.42	54.00	12.58	15.45	H	265	2.00





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	11,570.000	47.30	74.00	26.70	35.78	54.00	18.22	8.37	V	359	2.00
2	17,355.000	51.82	74.00	22.18	41.48	54.00	12.52	15.45	V	266.2	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
2. 5745MHz: Fundamental frequency.

3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	102749	Feb.25,22	Feb.24,24
ELEKTRA test software	Rohde&Schwarz	ELEKTRA	NA	N/A	N/A
LISN network	Rohde&Schwarz	ENV216	102640	Feb.17,22	Feb.16,24
LISN network	Rohde&Schwarz	ENV216	102640	Feb.16,24	Feb.15,26
CABLE	Rohde&Schwarz	W61.01	N/A	Apr.28,23	Apr.27,24
CABLE	Rohde&Schwarz	W601	N/A	Apr.28,23	Apr.27,24

NOTE:

1. The test was performed in the CE shielded room.
2. The calibration interval of the above test instruments is 12 months or 24 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA, and NIM/CHINA.

3.2.3 TEST PROCEDURES

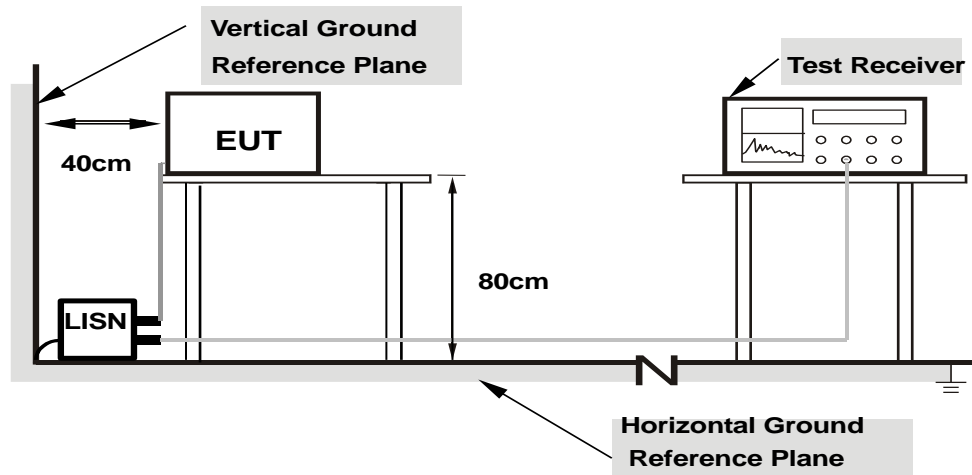
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

NOTE: All modes of operation were investigated, and the worst-case emissions are reported.

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



- Note: 1.Support units were connected to second LISN.**
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7.

3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA:

Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	26deg. C, 51%RH
Tested By	Hanwen Xu		

Rg	Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	CAV Level [dBμV]	CAV: AVG Limit [dBμV]	CAV Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]
1	0.168	52.90	65.06	12.15	35.30	55.06	19.76	12.36	L1	9.000
1	0.533	38.16	56.00	17.84	21.55	46.00	24.45	11.75	L1	9.000
1	1.284	35.31	56.00	20.69	24.87	46.00	21.13	11.75	L1	9.000
1	3.966	28.33	56.00	27.67	20.35	46.00	25.65	11.78	L1	9.000
1	11.670	33.11	60.00	26.89	22.83	50.00	27.17	11.83	L1	9.000
1	18.461	32.42	60.00	27.58	21.81	50.00	28.19	11.86	L1	9.000

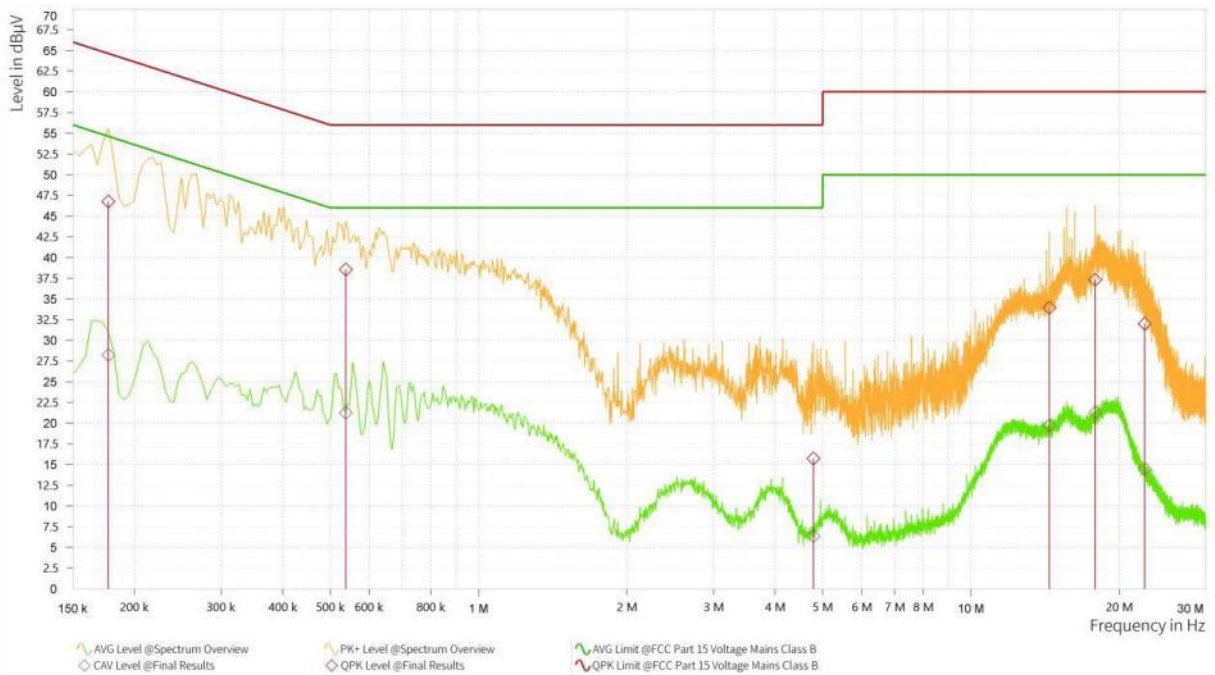
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Limit value - Emission level
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	26deg. C, 51%RH
Tested By	Hanwen Xu		

Rg	Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	CAV Level [dBμV]	CAV: AVG Limit [dBμV]	CAV Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]
1	0.177	46.76	64.63	17.87	28.22	54.63	26.41	12.22	N	9.000
1	0.537	38.55	56.00	17.45	21.27	46.00	24.74	12.77	N	9.000
1	4.790	15.73	56.00	40.27	6.34	46.00	39.66	12.76	N	9.000
1	14.442	33.93	60.00	26.07	19.71	50.00	30.29	12.82	N	9.000
1	17.889	37.31	60.00	22.69	21.27	50.00	28.73	12.84	N	9.000
1	22.538	31.99	60.00	28.01	14.42	50.00	35.58	12.86	N	9.000

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Limit value - Emission level
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

3.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

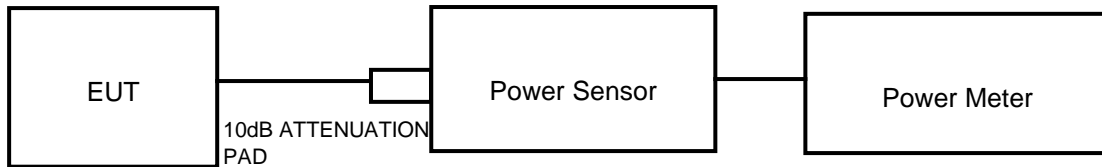
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p \leq 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

NOTE: Where B is the 26dB emission bandwidth in MHz

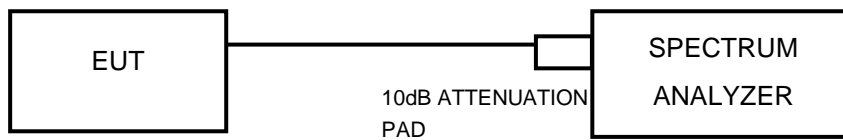
3.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

802.11a, 802.11n/ac (20MHz), 802.11 n/ac (40MHz), 802.11ac (80MHz) TEST CONFIGURATION



FOR 26dB BANDWIDTH



3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	R&S	ESW 44	101973	Feb.25,22	Feb.24,24
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Feb.16,22	Feb.15,24
Vector Signal Generator	R&S	SMBV100B	102176	Feb.15,24	Feb.14,26
Signal Generator	R&S	SMB100A03	182185	Feb.16,22	Feb.15,24
Signal Generator	R&S	SMB100A03	182185	Feb.15,24	Feb.14,26
Wideband Radio Communication	R&S	CMW500	169399	Jun.26,22	Jun.25,24
Hygrothermograph	DELI	20210528	SZ015	Sep.06,22	Sep.05,24
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.28,23	Apr.27,24
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.28,23	Apr.27,24
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	58566078100050	May.31,22	May.30,24

NOTE:

1. The calibration interval of the above test instruments is 12 months or 24 months, and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in the RF Oven room.



3.3.4 TEST PROCEDURE

FOR POWER MEASUREMENT

For 802.11a, 802.11 n/ac (20MHz), 802.11 n/ac (40MHz) , 802.11ac (80MHz)

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 99 PERCENT OCCUPIED BANDWIDTH

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

FOR 6dB BANDWIDTH



1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 EUT OPERATING CONDITIONS

The software provided by the client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

3.3.7 TEST RESULTS

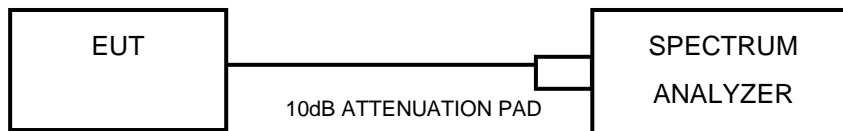
Please Refer to Appendix Of this test report.

3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Client devices	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information about the above instrument.

3.4.4 TEST PROCEDURES

Using method SA-2(Band1/2/3)

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz, Set VBW \geq 3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
- 7) Record the max value

Using method SA-2 (Band4)

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 KHz, Set VBW \geq 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Add $10 \log(500\text{kHz}/\text{RBW})$ to the test result. $10 \log(500\text{kHz}/300\text{KHZ}) = 2.22\text{dBm}$
- 7) Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
- 8) Record the max value

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.1.7.



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3.4.7 TEST RESULTS

Please Refer to Appendix Of this test report.



3.5 AUTOMATICALLY DISCONTINUE TRANSMISSION

3.5.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

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.

3.5.2 TEST INSTRUMENTS

Refer to section 3.3.3 to get information about the above instrument.

3.5.3 TEST RESULT

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



3.6 ANTENNA REQUIREMENTS

3.6.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmits power, and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.6.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.6.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit.



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4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.



6 APPENDIX: RLAN EMISSION BANDWIDTH

TEST RESULT

TestMode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5180	23.058	5168.521	5191.579	---	---
	Ant0	5200	23.158	5188.622	5211.780	---	---
	Ant0	5240	23.759	5227.920	5251.679	---	---
	Ant0	5260	23.258	5248.521	5271.779	---	---
	Ant0	5300	22.957	5288.421	5311.378	---	---
	Ant0	5320	23.559	5308.020	5331.579	---	---
	Ant0	5500	23.058	5488.521	5511.579	---	---
	Ant0	5580	22.256	5569.223	5591.479	---	---
	Ant0	5700	22.556	5688.922	5711.478	---	---
	Ant0	5720	22.857	5708.622	5731.479	---	---
	Ant0	5745	22.957	5733.622	5756.579	---	---
	Ant0	5785	22.857	5773.521	5796.378	---	---
Ant0	5825	22.757	5813.622	5836.379	---	---	
11N20-SISO	Ant0	5180	24.261	5168.120	5192.381	---	---
	Ant0	5200	24.060	5188.020	5212.080	---	---
	Ant0	5240	24.160	5227.920	5252.080	---	---
	Ant0	5260	24.160	5248.020	5272.180	---	---
	Ant0	5300	23.659	5288.120	5311.779	---	---
	Ant0	5320	23.759	5308.221	5331.980	---	---
	Ant0	5500	23.960	5488.020	5511.980	---	---
	Ant0	5580	23.158	5568.822	5591.980	---	---
	Ant0	5700	23.358	5688.521	5711.879	---	---
	Ant0	5720	23.759	5708.321	5732.080	---	---
	Ant0	5745	23.559	5733.421	5756.980	---	---
	Ant0	5785	22.957	5773.321	5796.278	---	---
Ant0	5825	23.860	5813.020	5836.880	---	---	
11N40-SISO	Ant0	5190	41.504	5169.398	5210.902	---	---
	Ant0	5230	41.504	5209.248	5250.752	---	---
	Ant0	5270	41.654	5249.398	5291.052	---	---
	Ant0	5310	41.654	5289.098	5330.752	---	---
	Ant0	5510	41.654	5489.248	5530.902	---	---

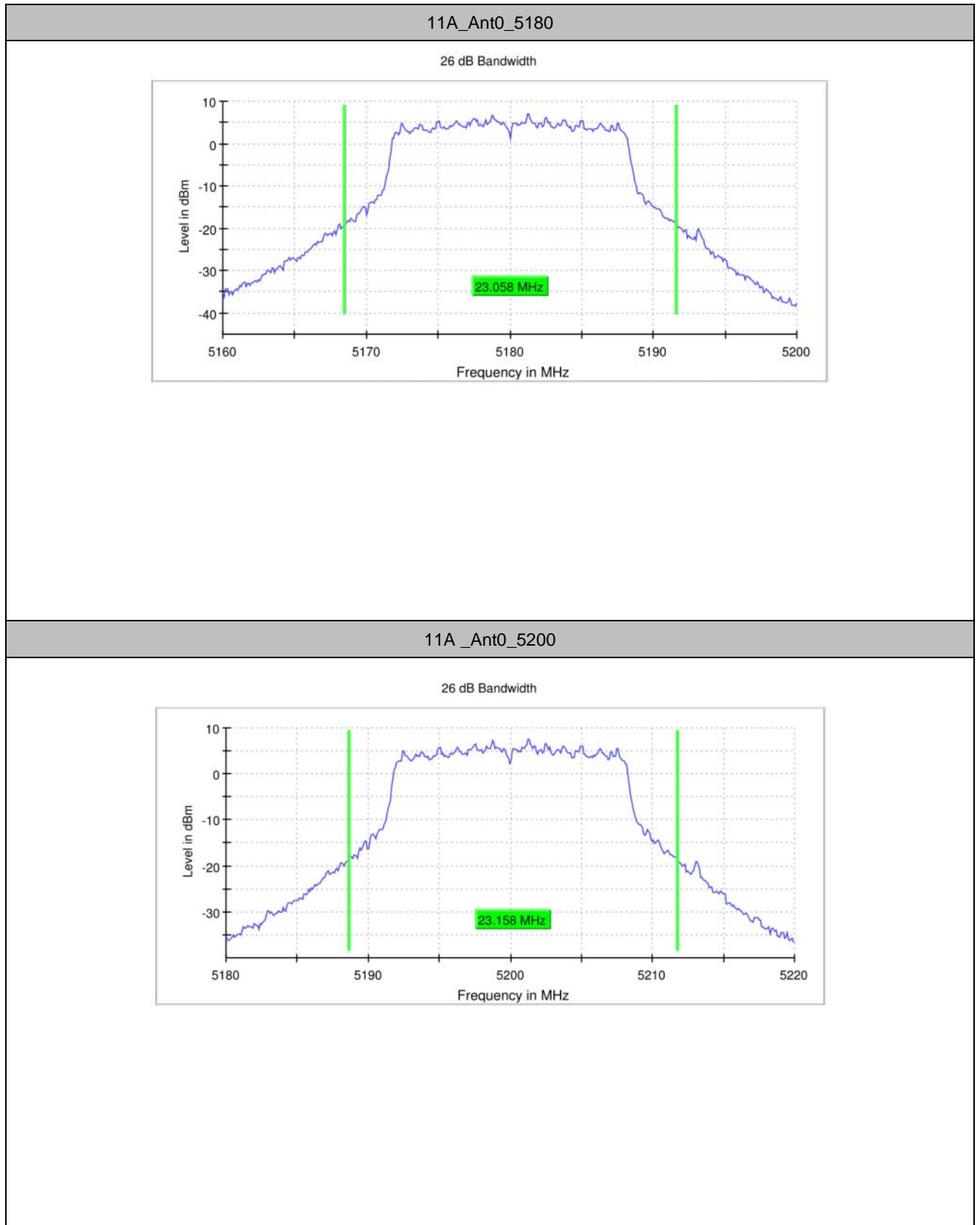


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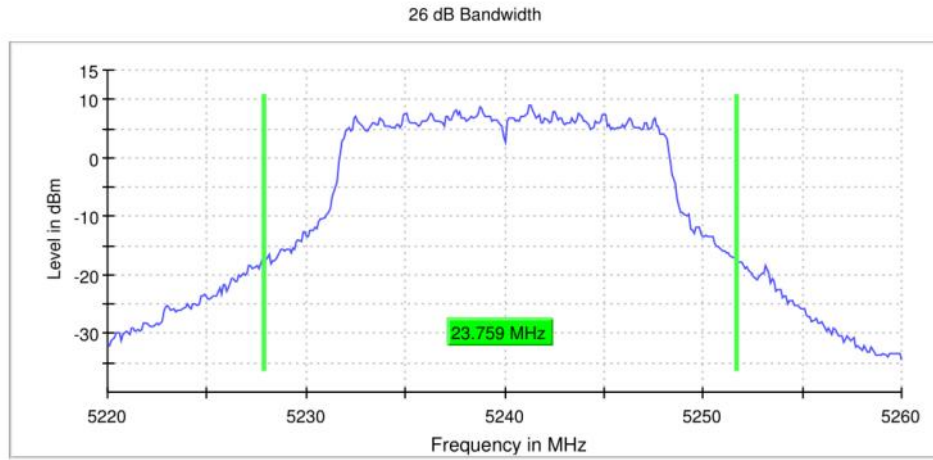
	Ant0	5550	41.353	5529.248	5570.601	---	---
	Ant0	5670	41.805	5649.248	5691.053	---	---
	Ant0	5710	41.353	5689.398	5730.751	---	---
	Ant0	5755	41.353	5734.398	5775.751	---	---
	Ant0	5795	41.654	5774.098	5815.752	---	---
11AC80-SISO	Ant0	5210	91.787	5162.100	5253.887	---	---
	Ant0	5290	87.273	5246.614	5333.887	---	---
	Ant0	5530	109.843	5482.602	5592.445	---	---
	Ant0	5610	98.307	5562.100	5660.407	---	---
	Ant0	5690	98.809	5641.599	5740.408	---	---
	Ant0	5775	96.803	5726.599	5823.402	---	---

TEST GRAPHS

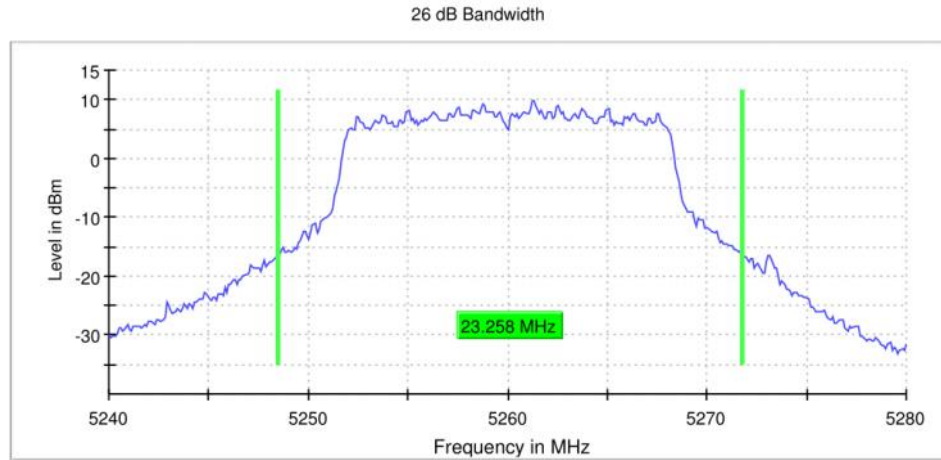




11A_Ant0_5240

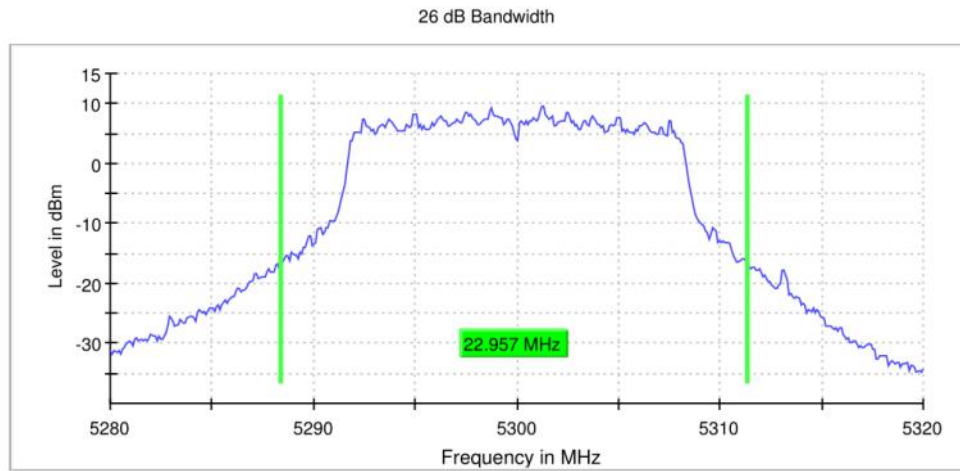


11A_Ant0_5260

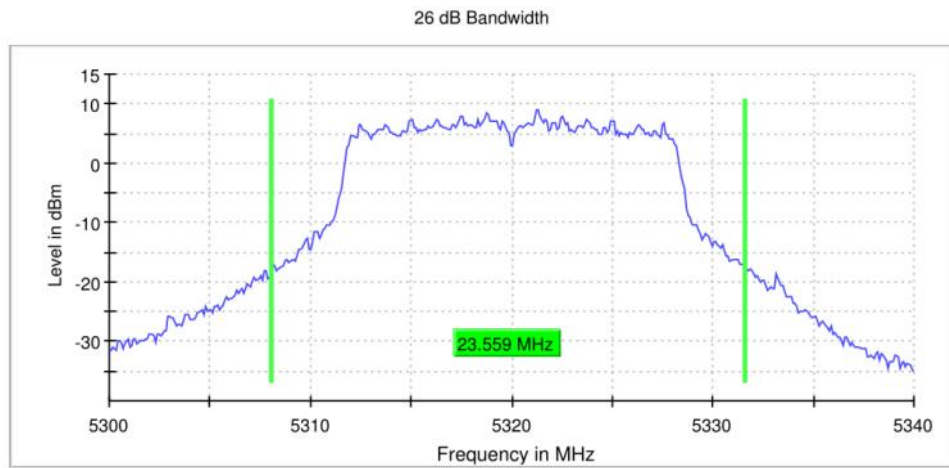




11A_Ant0_5300

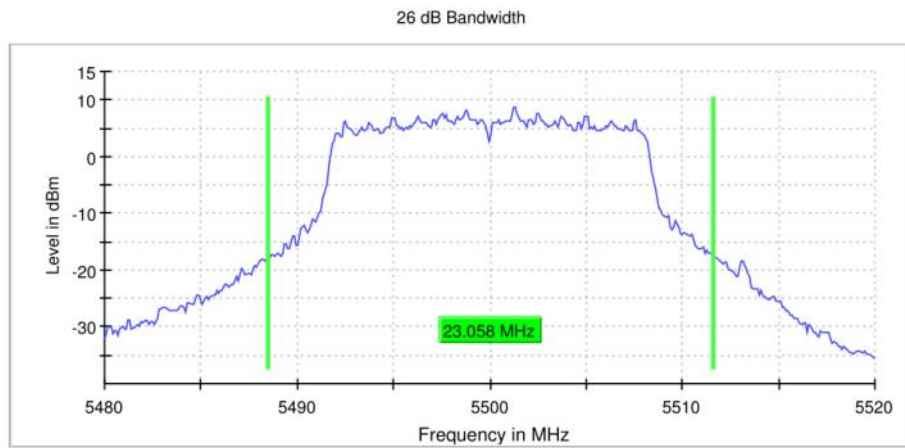


11A_Ant0_5320

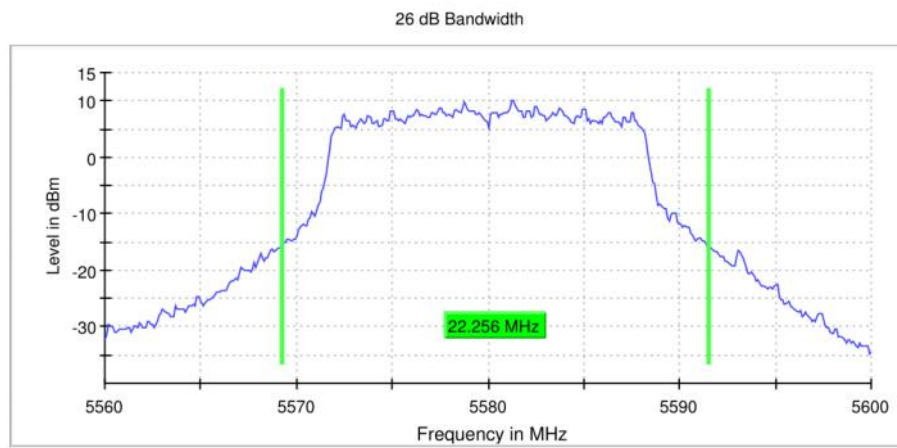




11A_Ant0_5500



11A_Ant0_5580

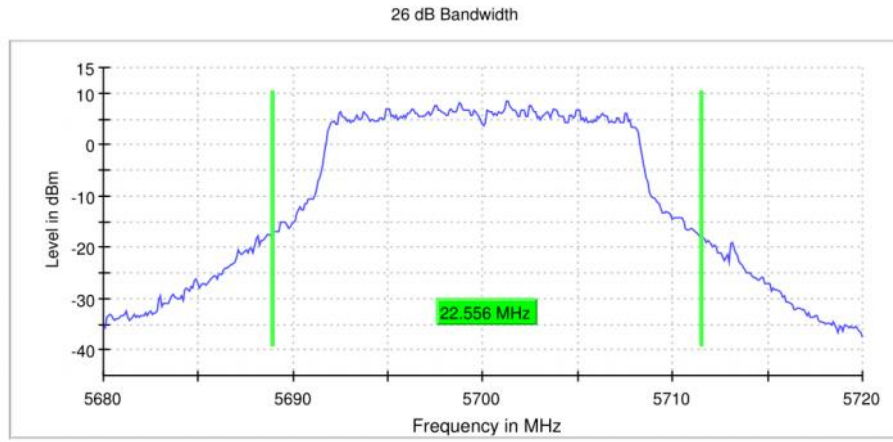




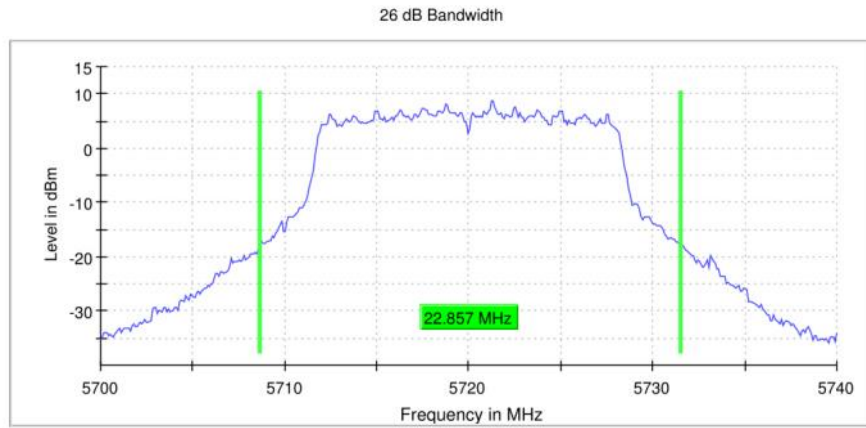
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11A_Ant0_5700



11A_Ant0_5720



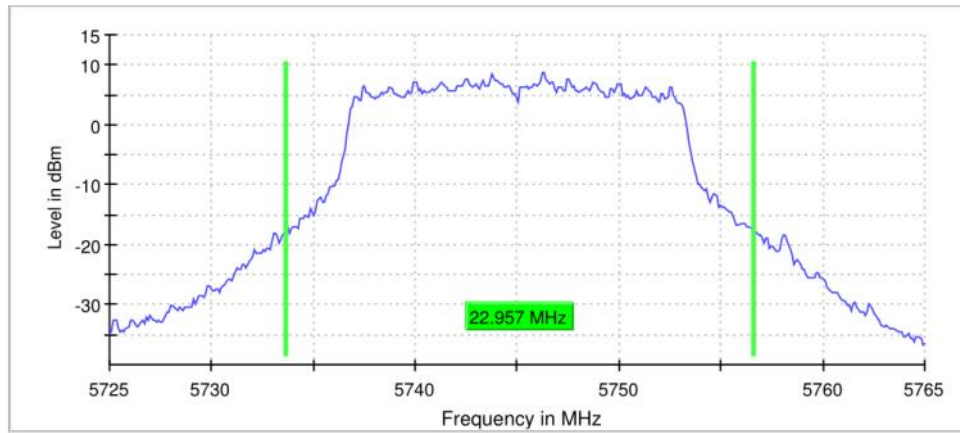


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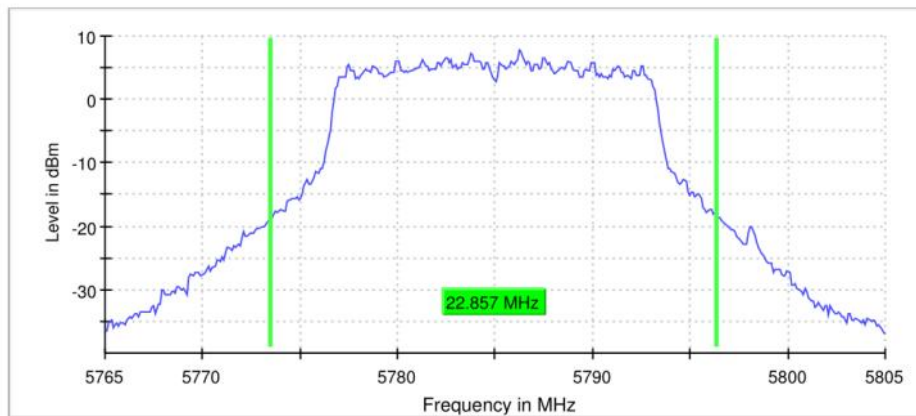
11A _Ant0_5745

26 dB Bandwidth



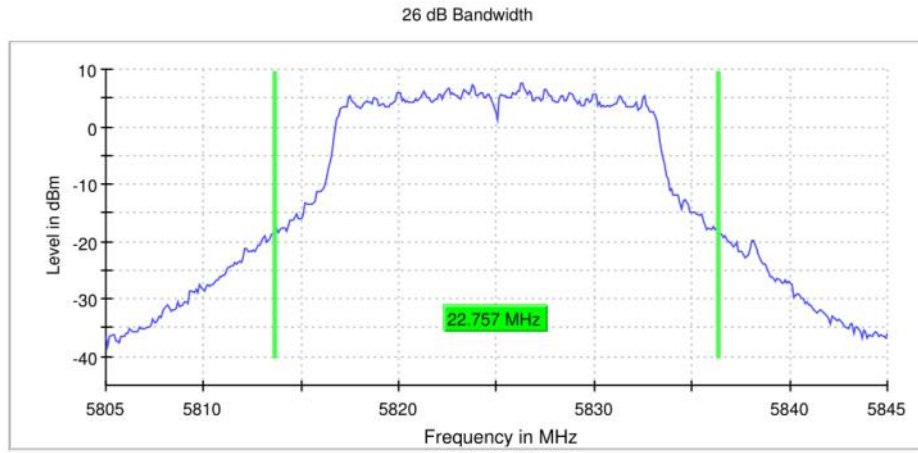
11A _Ant0_5785

26 dB Bandwidth

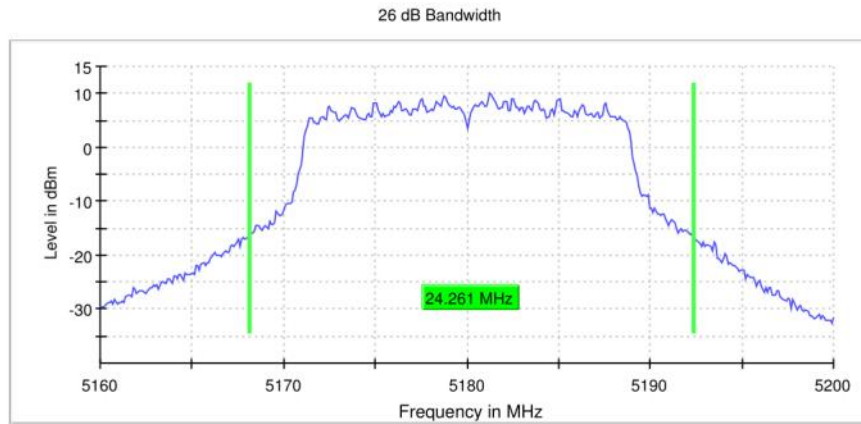




11A_Ant0_5825



11N20_Ant0_5180



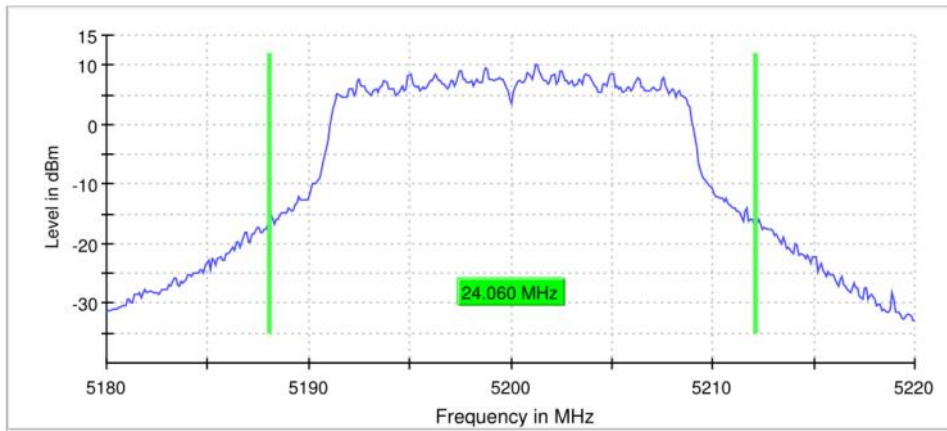


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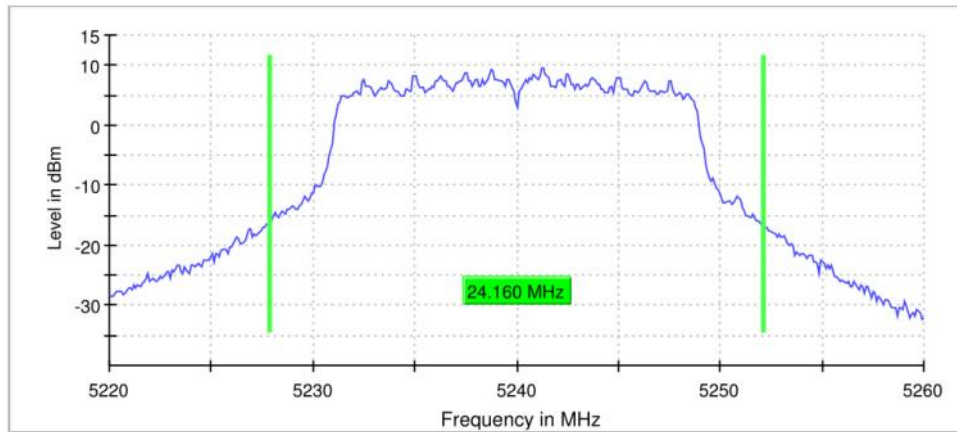
11N20_Ant0_5200

26 dB Bandwidth



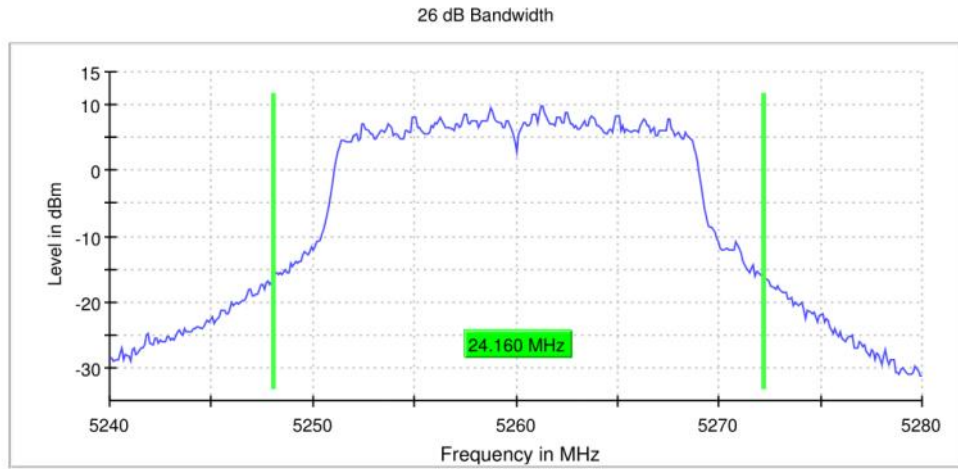
11N20_Ant0_5240

26 dB Bandwidth

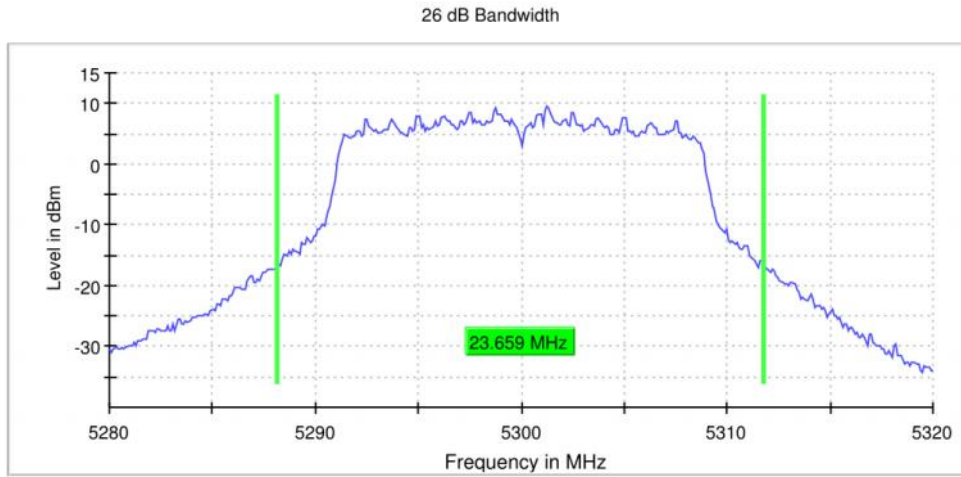




11N20_Ant0_5260



11N20_Ant0_5300

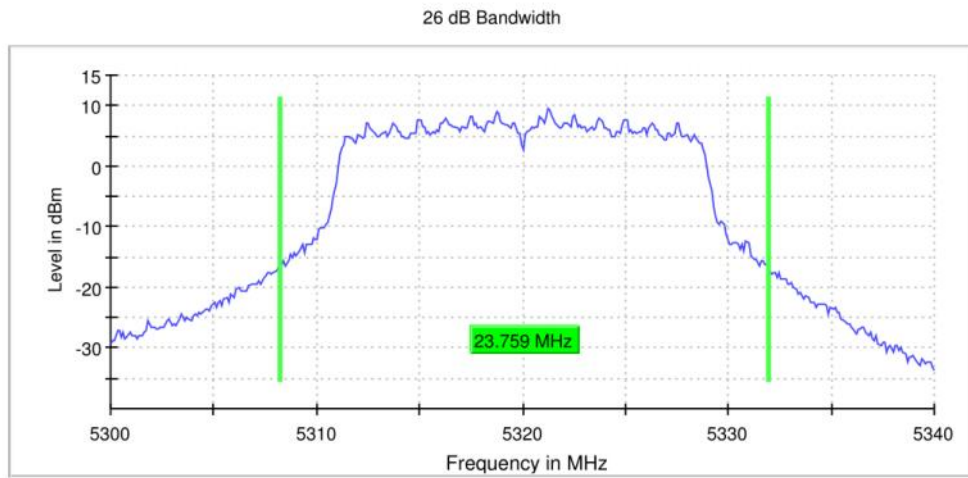




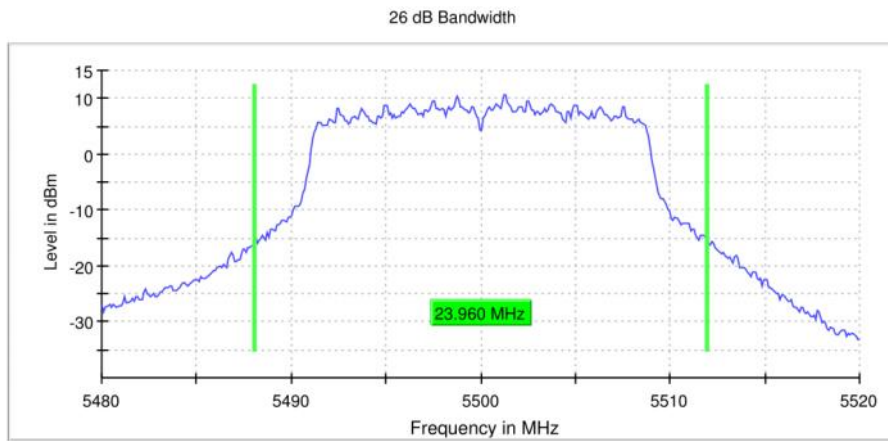
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VERITAS

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11N20_Ant0_5320



11N20_Ant0_5500



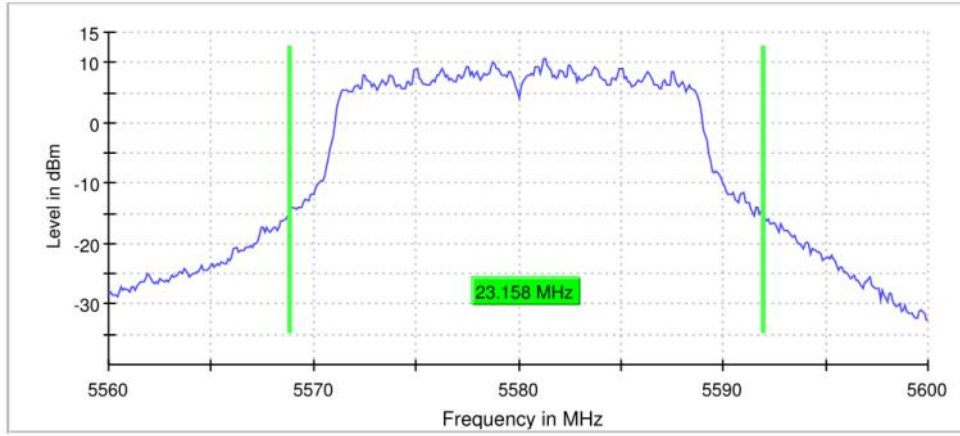


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Test Report No.: PSU-NQN2402040109RF07

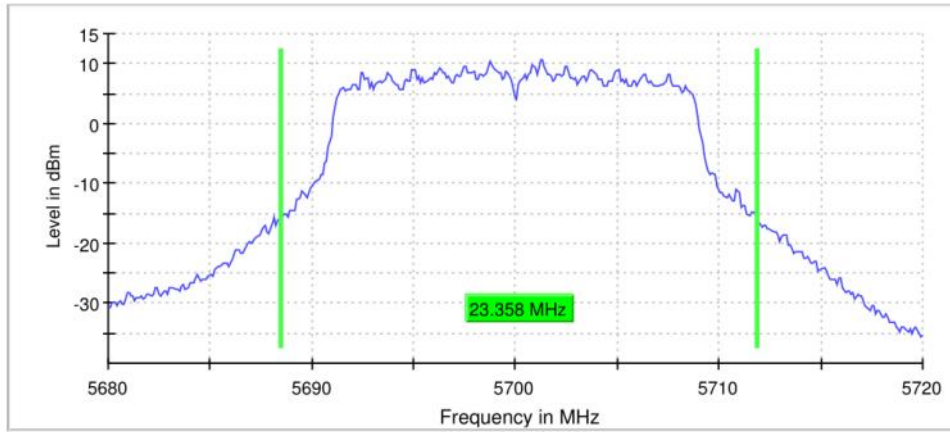
11N20_Ant0_5580

26 dB Bandwidth



11N20_Ant0_5700

26 dB Bandwidth

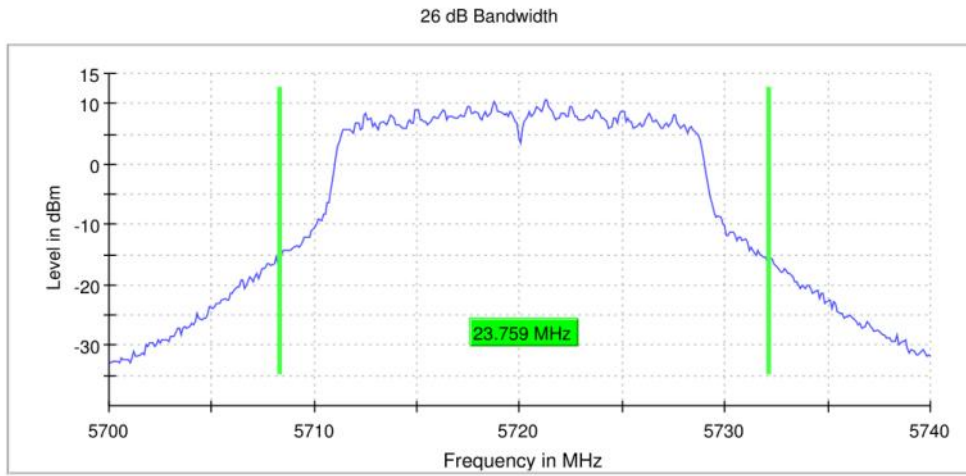




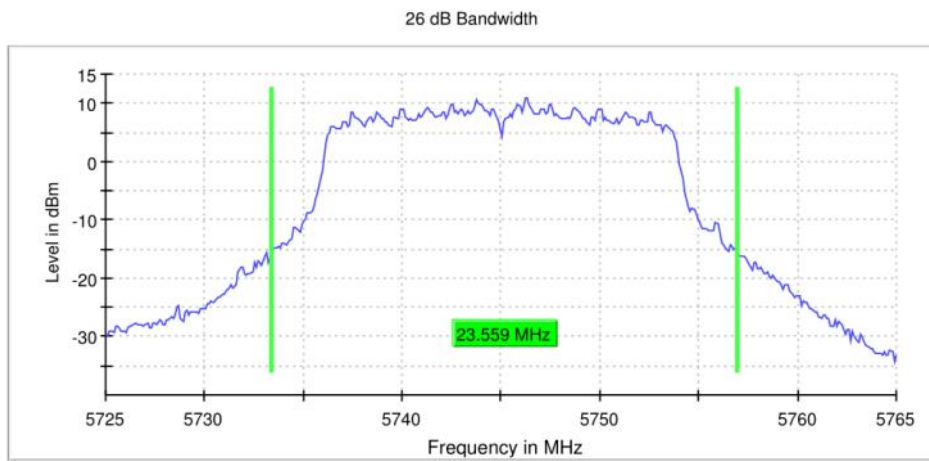
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11N20_Ant0_5720

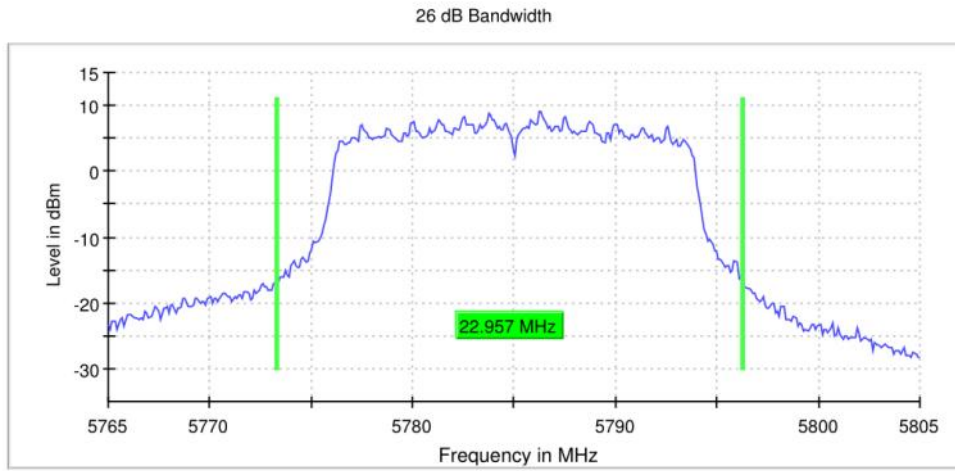


11N20_Ant0_5745

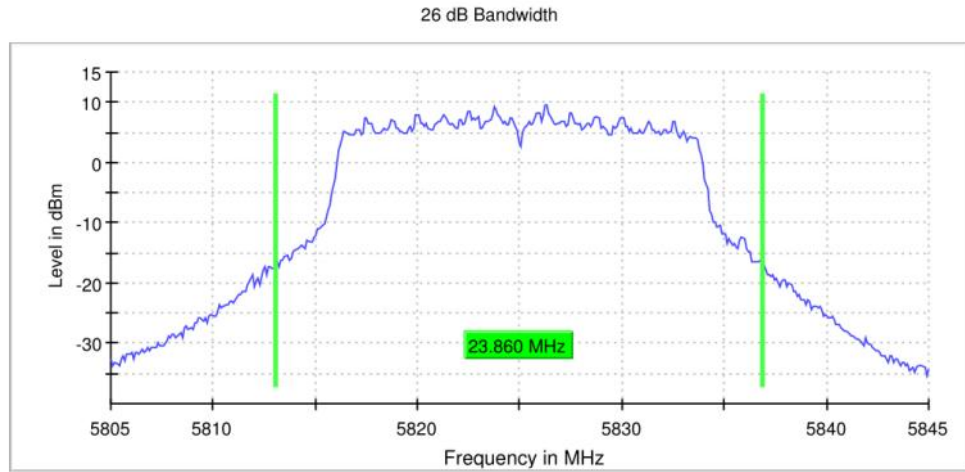




11N20_Ant0_5785

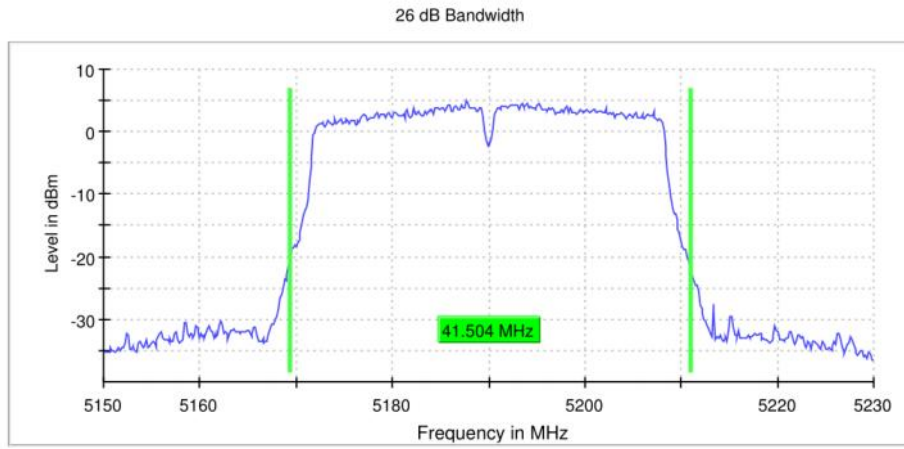


11N20_Ant0_5825

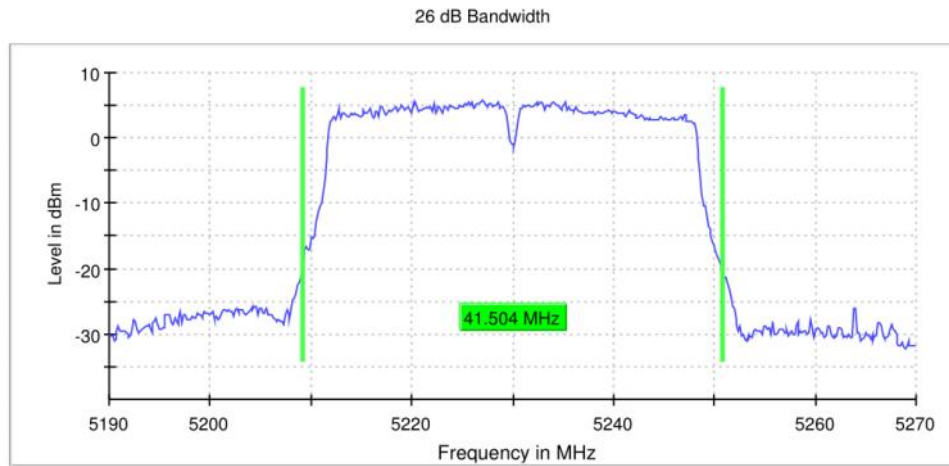




11N40_Ant0_5190

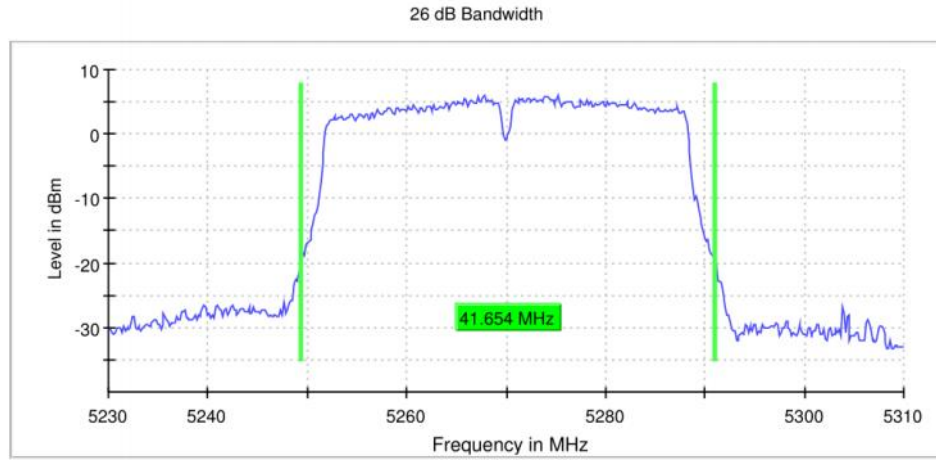


11N40_Ant0_5230

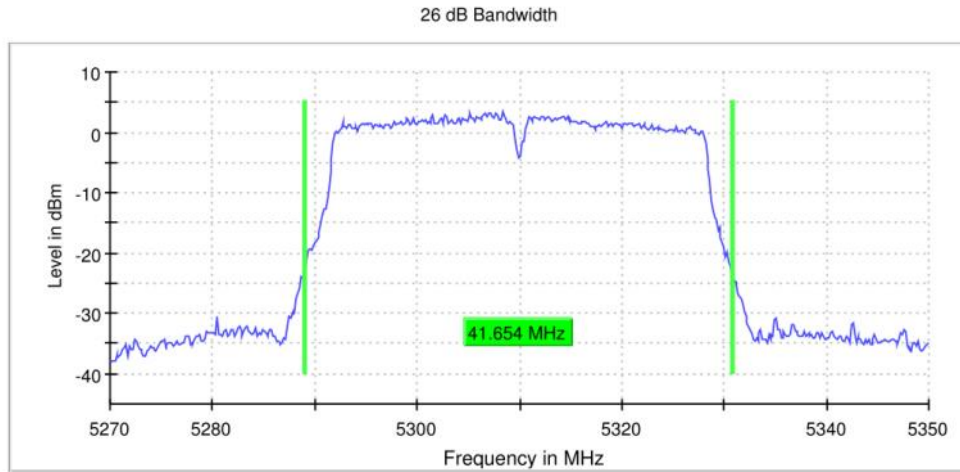




11N40_Ant0_5270

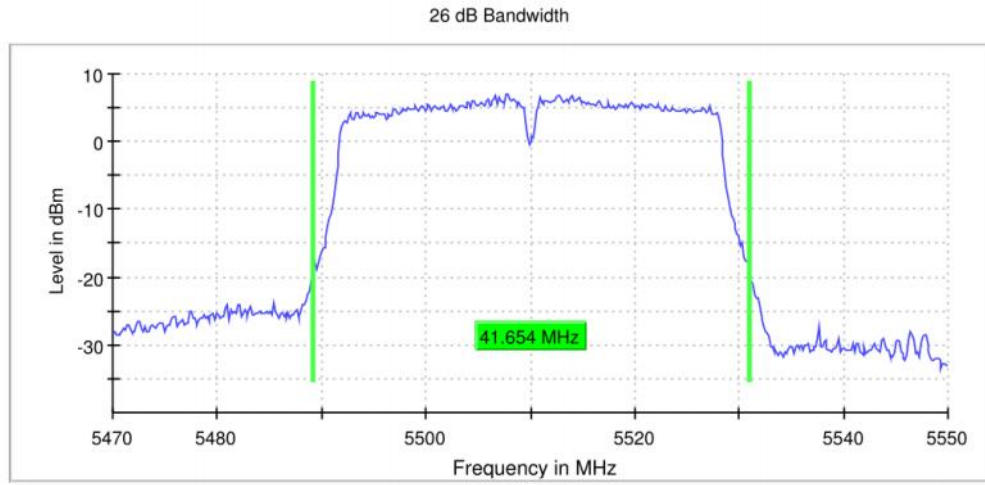


11N40_Ant0_5310

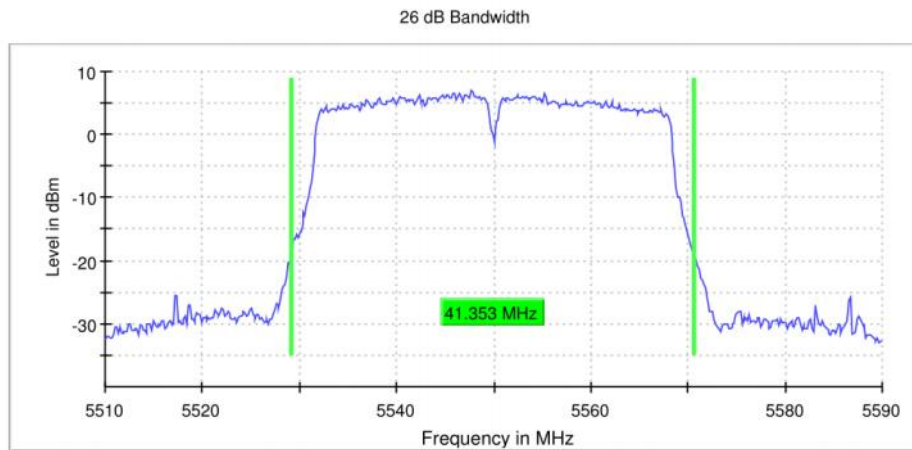




11N40_Ant0_5510



11N40_Ant0_5550

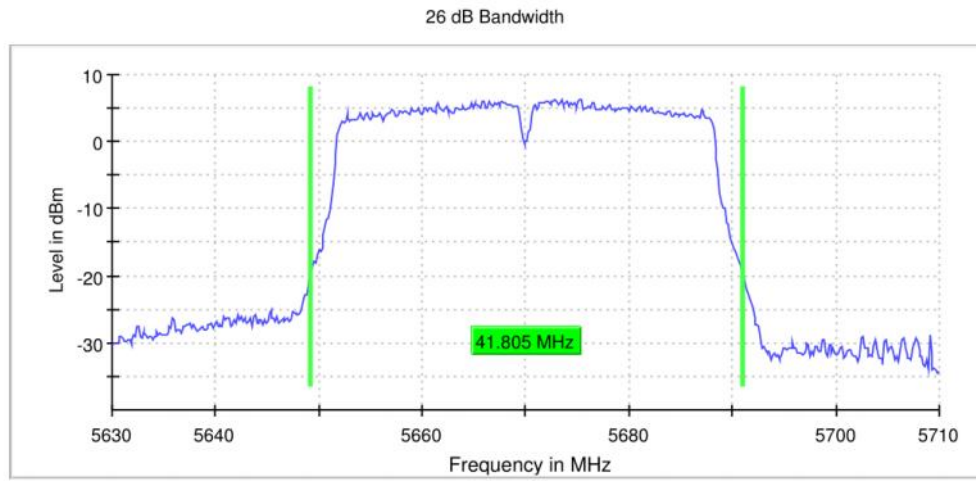




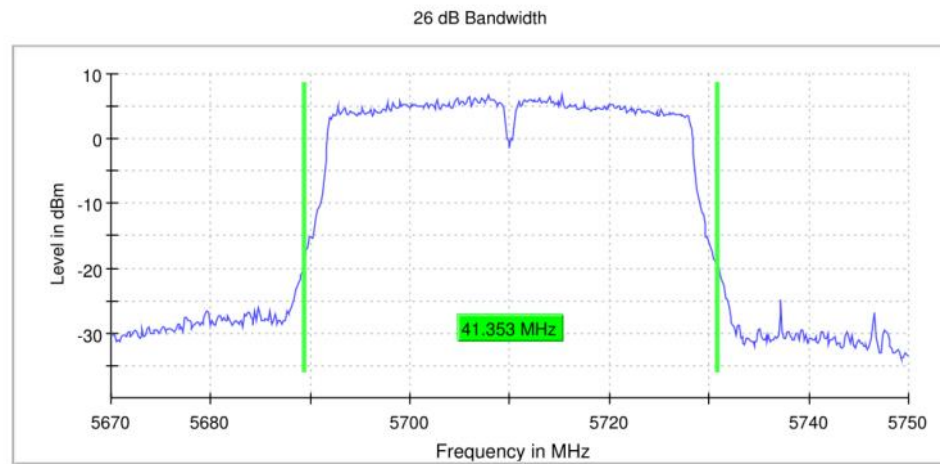
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11N40_Ant0_5670



11N40_Ant0_5710

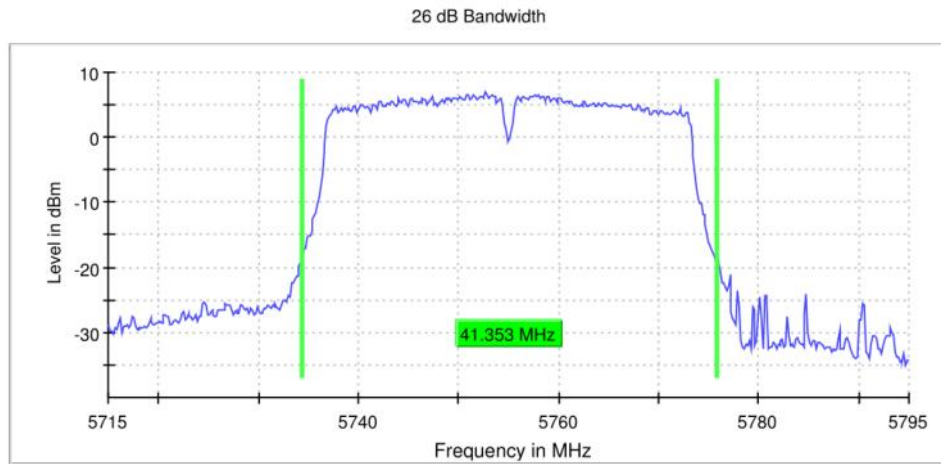




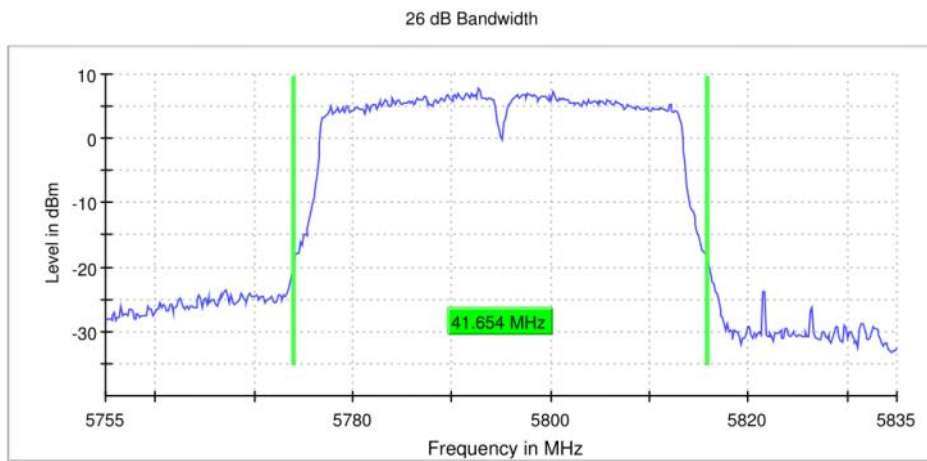
BUREAU
VERITAS

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11N40_Ant0_5755

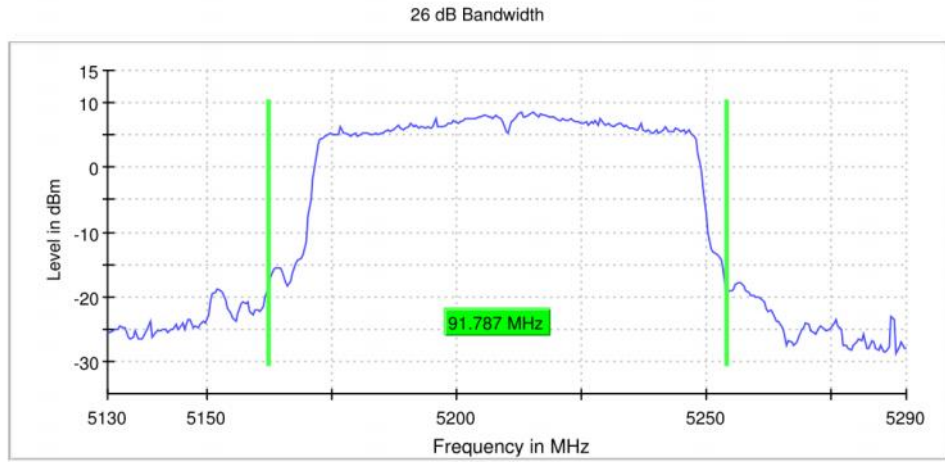


11N40_Ant0_5795

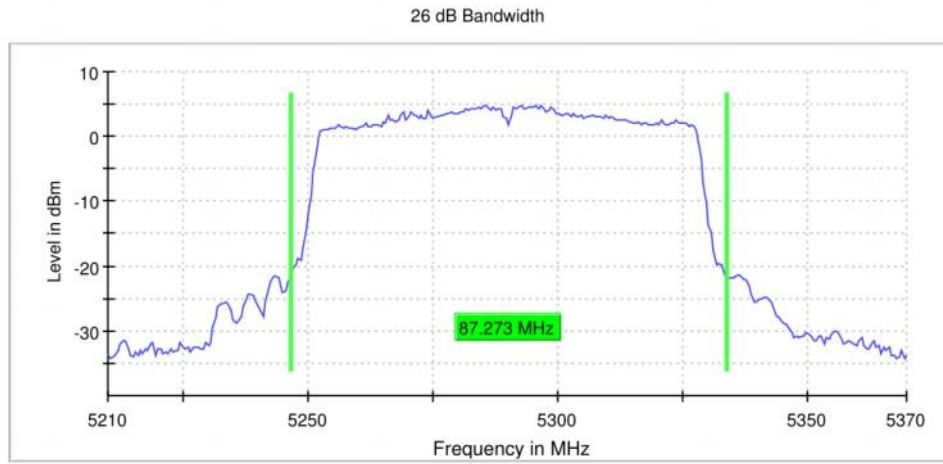




11AC80_Ant0_5210



11AC80_Ant0_5290



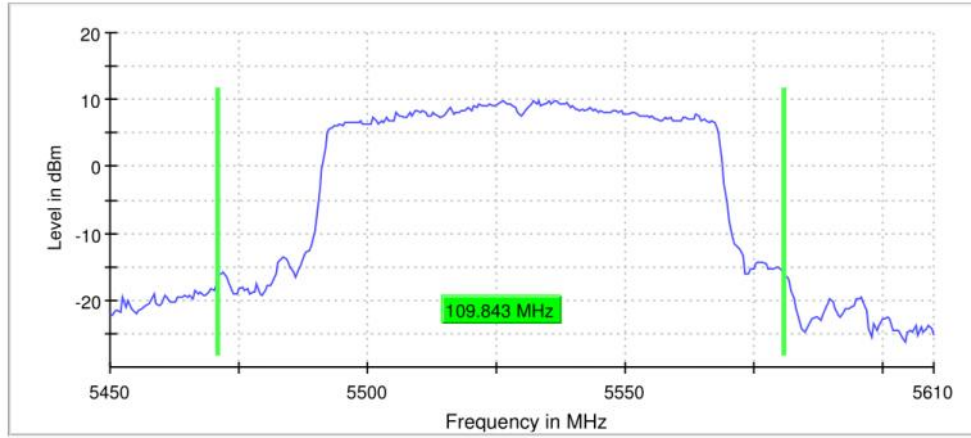


BUREAU
VERITAS

Test Report No.: PSU-NQN2402040109RF07

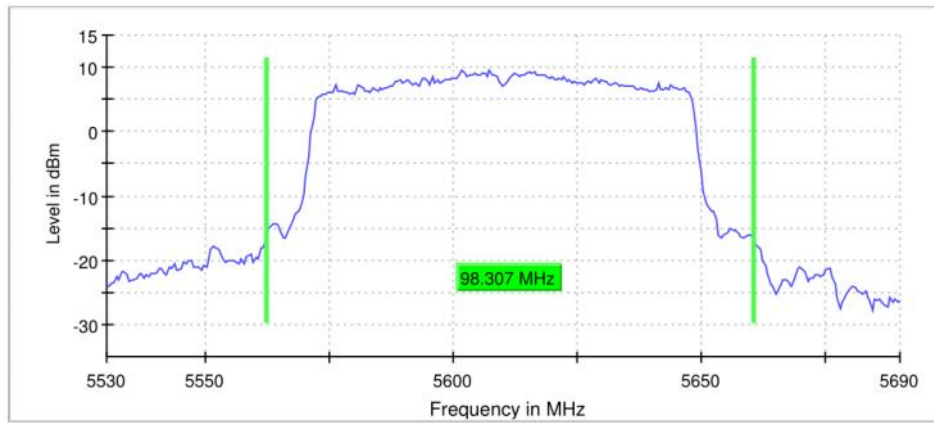
11AC80_Ant0_5530

26 dB Bandwidth



11AC80_Ant0_5610

26 dB Bandwidth



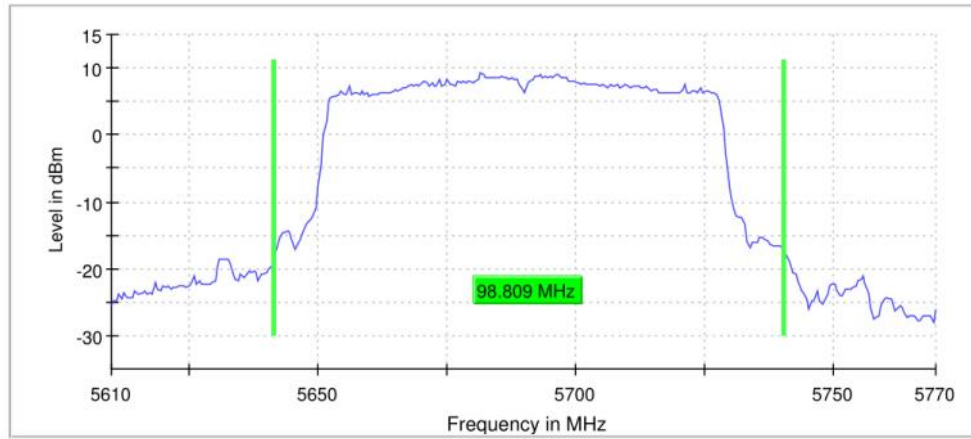


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VERITAS

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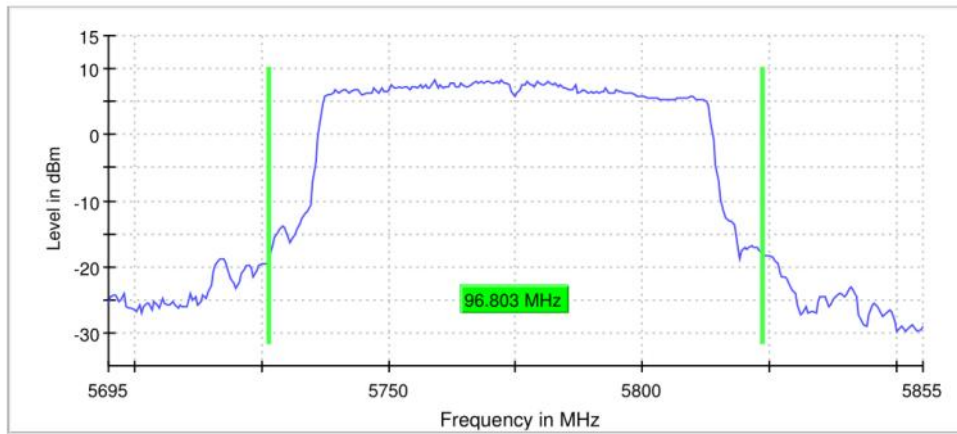
11AC80_Ant0_5690

26 dB Bandwidth



11AC80_Ant0_5775

26 dB Bandwidth





OCCUPIED CHANNEL BANDWIDTH

TEST RESULT

TestMode	Antenna	Frequency [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5180	16.742	5171.629	5188.371	---	---
	Ant0	5200	16.642	5191.729	5208.371	---	---
	Ant0	5240	16.742	5231.629	5248.371	---	---
	Ant0	5260	16.642	5251.729	5268.371	---	---
	Ant0	5300	16.742	5291.629	5308.371	---	---
	Ant0	5320	16.742	5311.629	5328.371	---	---
	Ant0	5500	16.642	5491.729	5508.371		
	Ant0	5580	16.642	5571.729	5588.371		
	Ant0	5700	16.642	5691.729	5708.371		
	Ant0	5720	16.642	5711.729	5728.371		
	Ant0	5745	16.642	5736.729	5753.371	---	---
	Ant0	5785	16.742	5776.629	5793.371	---	---
Ant0	5825	16.642	5816.729	5833.371	---	---	
11N20-SISO	Ant0	5180	17.845	5171.128	5188.973		
	Ant0	5200	17.845	5191.128	5208.973		
	Ant0	5240	17.945	5231.028	5248.973		
	Ant0	5260	17.845	5251.128	5268.973		
	Ant0	5300	17.945	5291.028	5308.973		
	Ant0	5320	17.945	5311.028	5328.973		
	Ant0	5500	17.845	5491.128	5508.973		
	Ant0	5580	17.845	5571.128	5588.973		
	Ant0	5700	17.744	5691.128	5708.872		
	Ant0	5720	17.845	5711.128	5728.973		
	Ant0	5745	17.845	5736.128	5753.973		
	Ant0	5785	17.845	5776.028	5793.873		
Ant0	5825	17.744	5816.128	5833.872			
11N40-SISO	Ant0	5190	36.614	5171.818	5208.432		
	Ant0	5230	36.865	5211.567	5248.432		
	Ant0	5270	36.614	5251.818	5288.432		
	Ant0	5310	36.865	5291.567	5328.432		
	Ant0	5510	36.614	5491.818	5528.432		

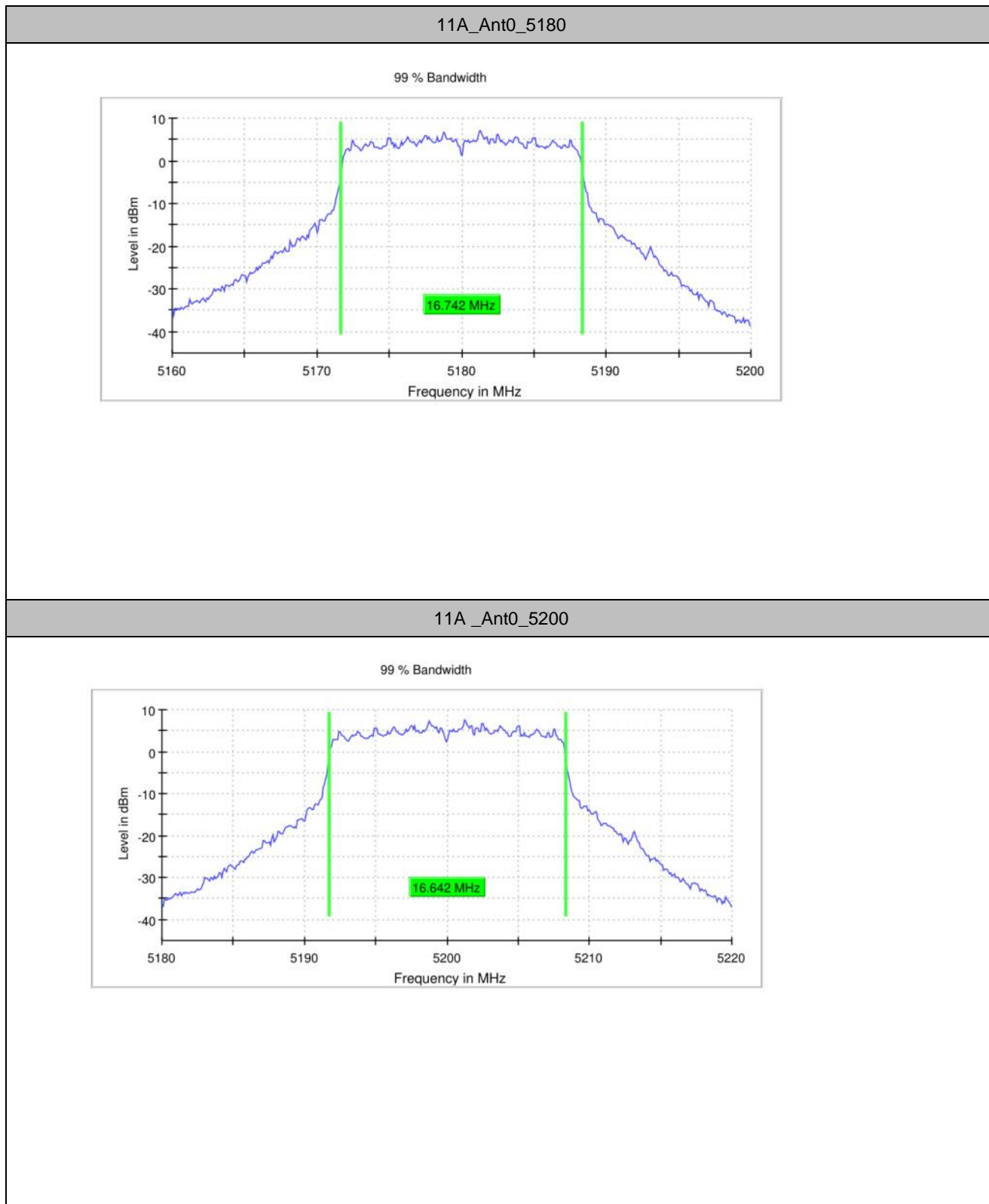


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	Ant0	5550	36.614	5531.567	5568.181		
	Ant0	5670	36.614	5651.818	5688.432		
	Ant0	5710	36.614	5691.818	5728.432		
	Ant0	5755	36.364	5736.818	5773.182		
	Ant0	5795	36.364	5776.818	5813.182		
11AC80-SISO	Ant0	5210	76.238	5172.132	5248.370		
	Ant0	5290	76.740	5252.132	5328.872		
	Ant0	5530	76.740	5492.132	5568.872		
	Ant0	5610	76.238	5572.132	5648.370		
	Ant0	5690	76.740	5651.630	5728.370		
	Ant0	5775	76.740	5736.630	5813.370		

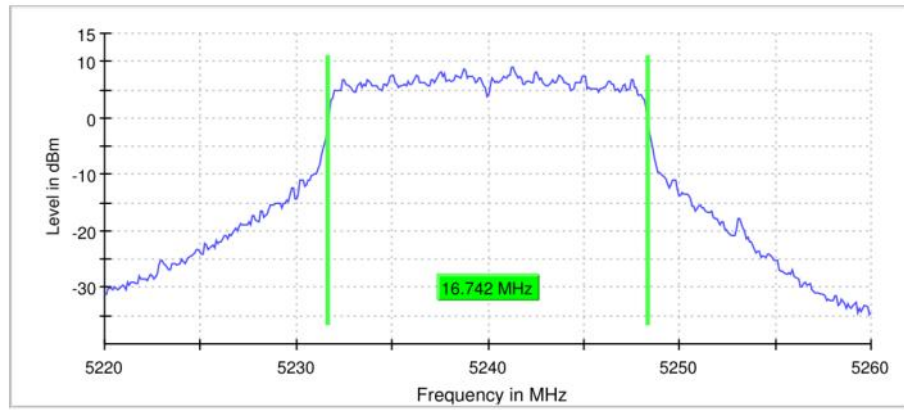
TEST GRAPHS





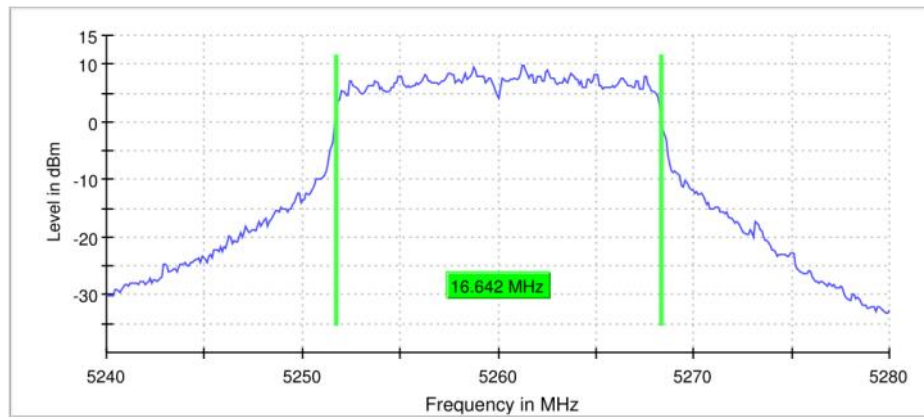
11A_Ant0_5240

99 % Bandwidth



11A_Ant0_5260

99 % Bandwidth

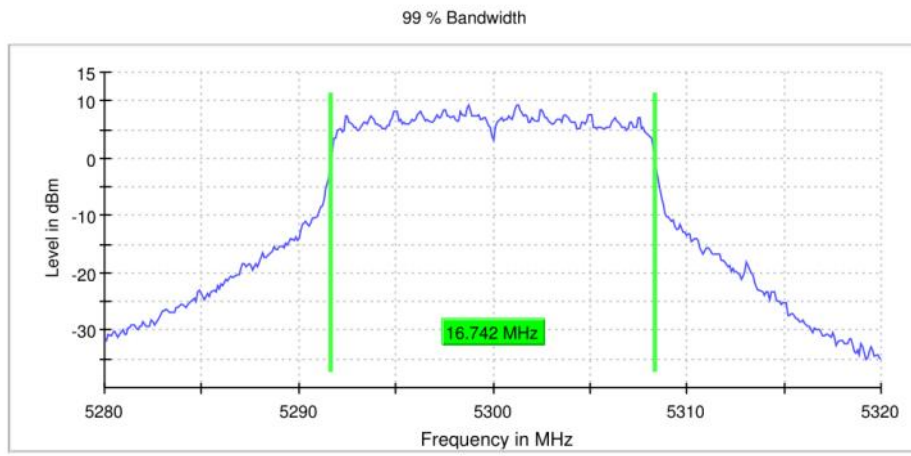




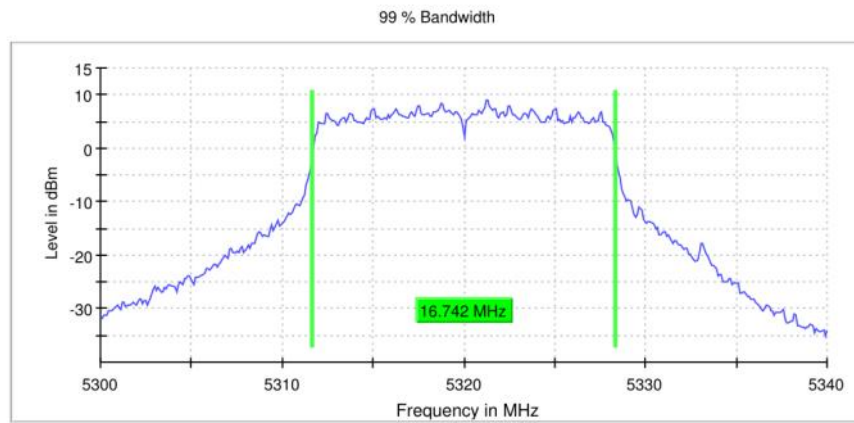
BUREAU
VERITAS

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11A_Ant0_5300



11A_Ant0_5320

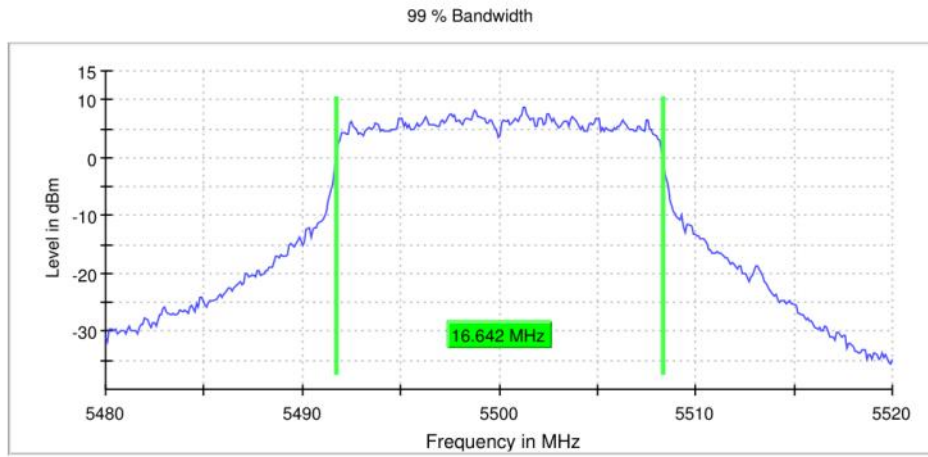




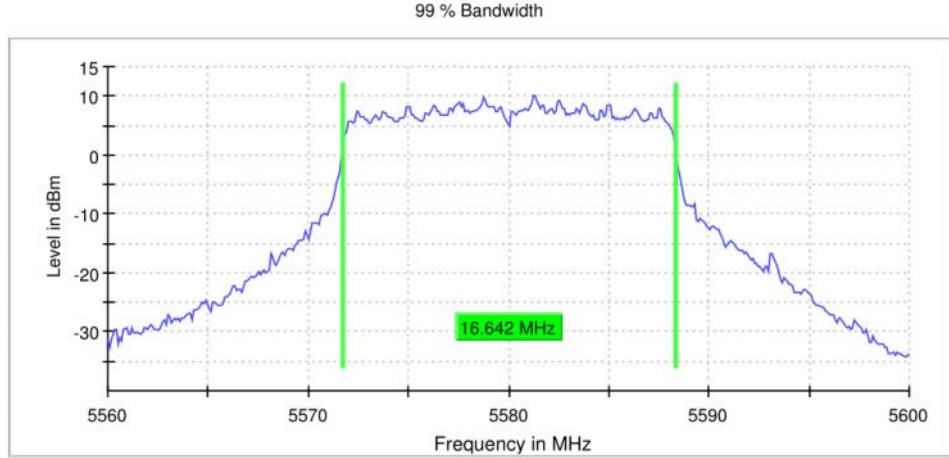
BUREAU
VERITAS

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11A_Ant0_5500



11A_Ant0_5580

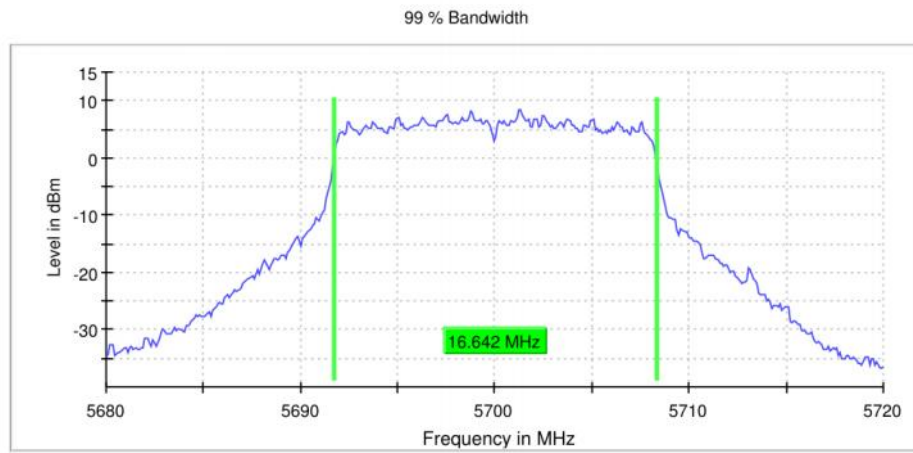




BUREAU
VERITAS

Test Report No.: PSU-NQN2402040109RF07

11A _Ant0_5700



11A _Ant0_5720

