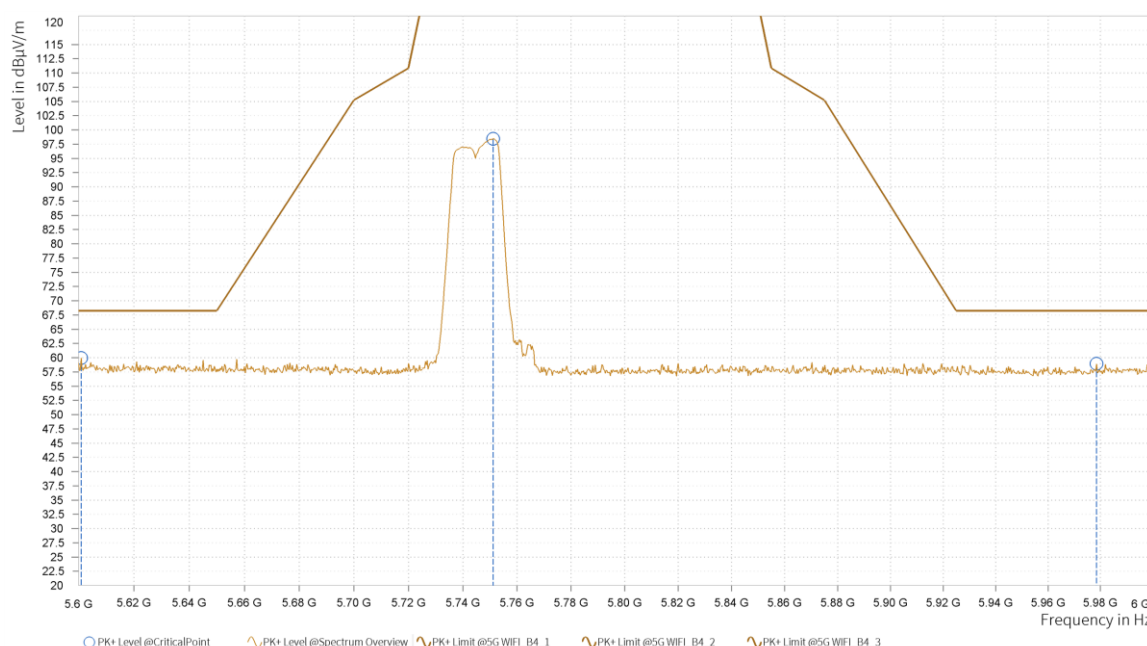


**802.11ac (20MHz)**

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

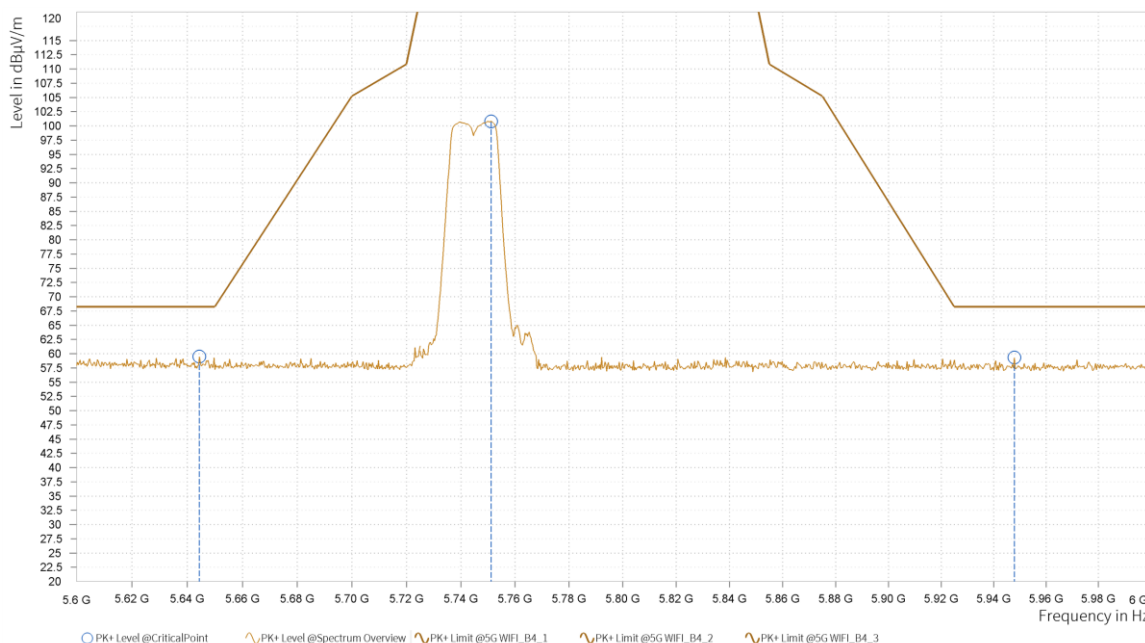
Rg	Frequency [MHz]	PK+ Level [dB μ V/m]	PK+ Limit [dB μ V/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
11	5,600.938	59.95	68.20	8.25	44.38	H	287.5	1.00
12	5,751.250	98.43			44.52	H	334.2	1.00
13	5,978.625	58.92	68.20	9.28	44.33	H	1	1.00





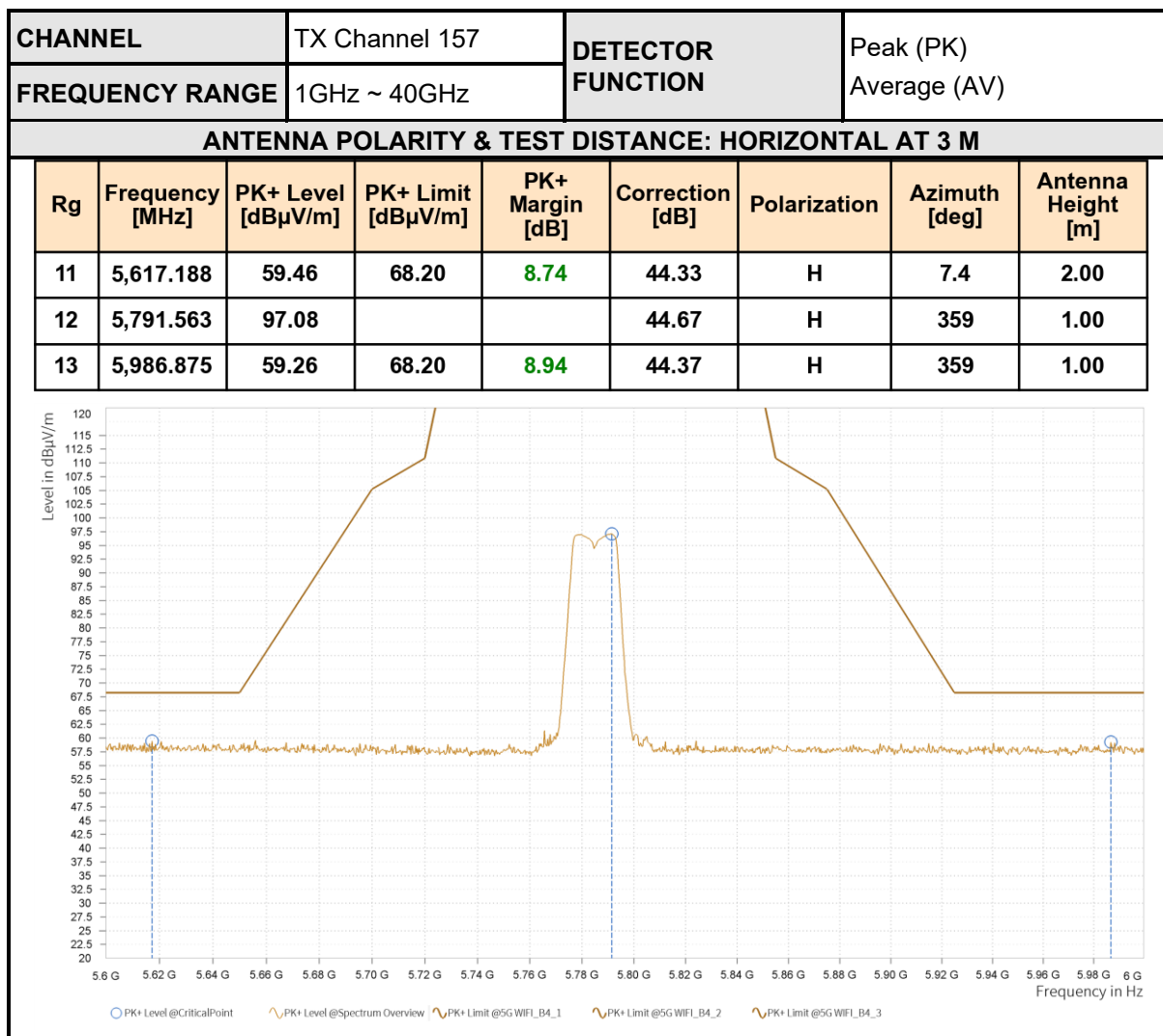
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
11	5,644.375	59.48	68.20	8.72	44.37	V	215.8	1.00
12	5,751.250	100.78			44.52	V	1	1.00
13	5,947.875	59.32	68.20	8.88	44.29	V	311.5	1.00



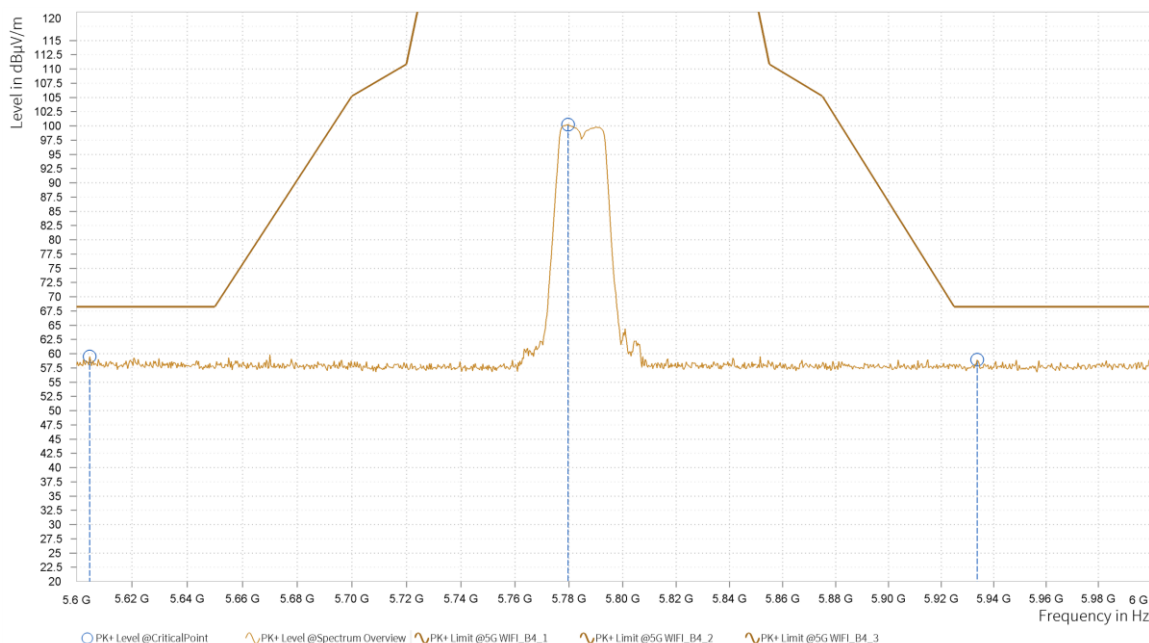
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5745MHz: Fundamental frequency.

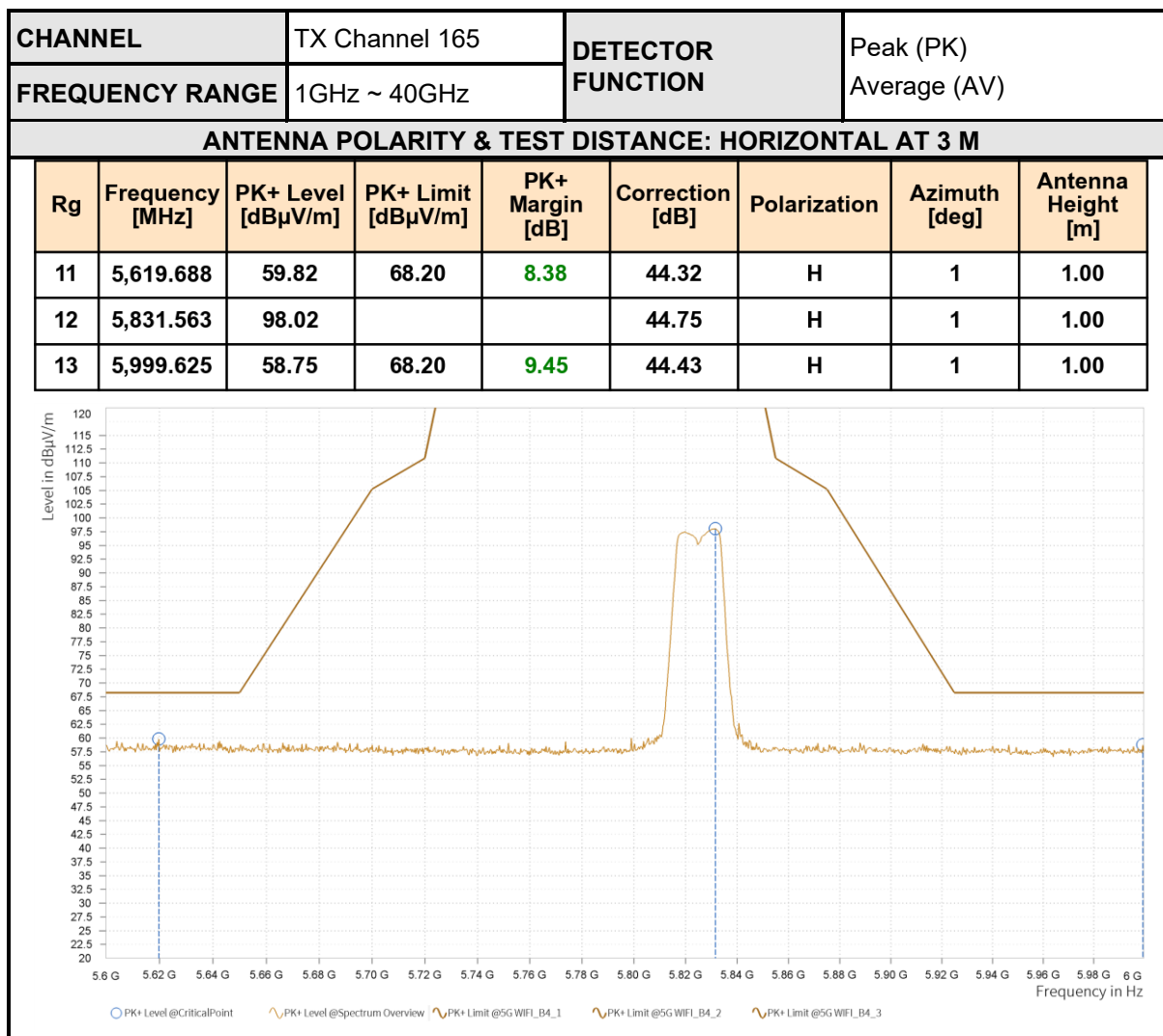


**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
11	5,604.688	59.51	68.20	8.69	44.37	V	5.1	1.00
12	5,779.690	100.20			44.62	V	1	1.00
13	5,933.625	58.94	68.20	9.26	44.36	V	359.1	1.00

**REMARKS:**

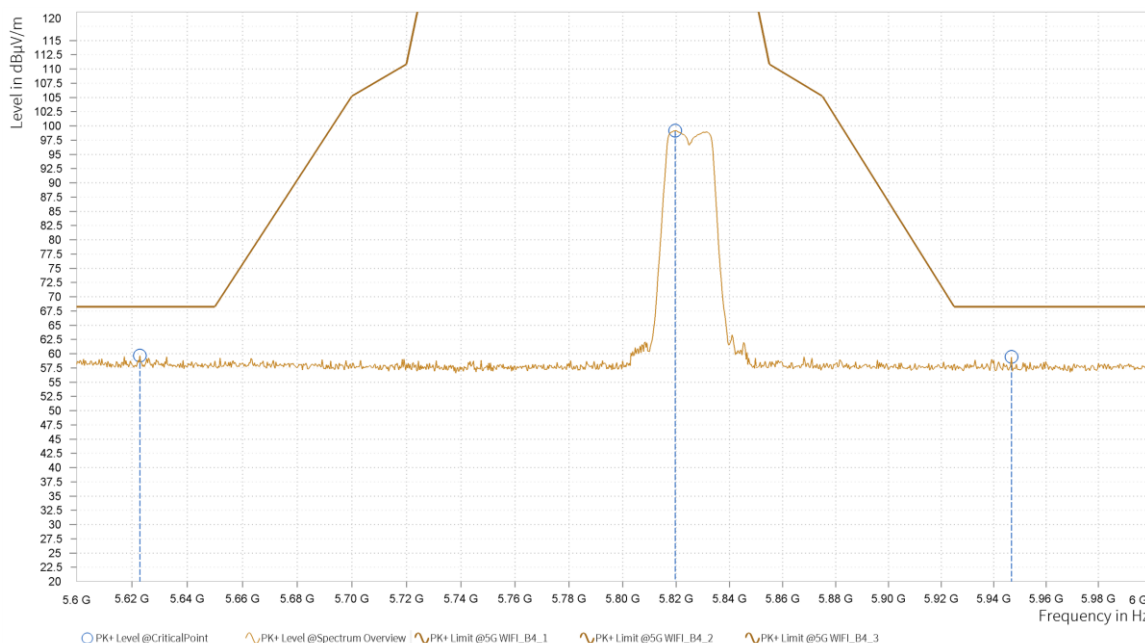
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5785MHz: Fundamental frequency.





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]
11	5,622.813	59.69	68.20	8.51	44.32	V	206.3	1.00
12	5,819.688	99.16			44.73	V	357.9	1.00
13	5,946.750	59.42	68.20	8.78	44.29	V	194.4	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5825MHz: Fundamental frequency.

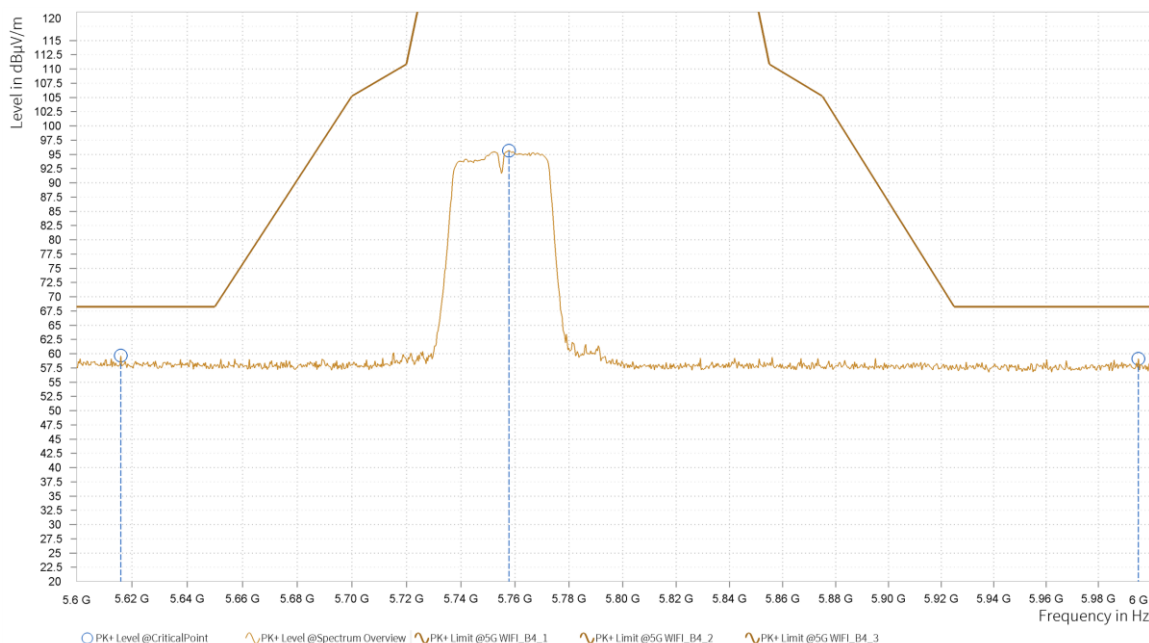


802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

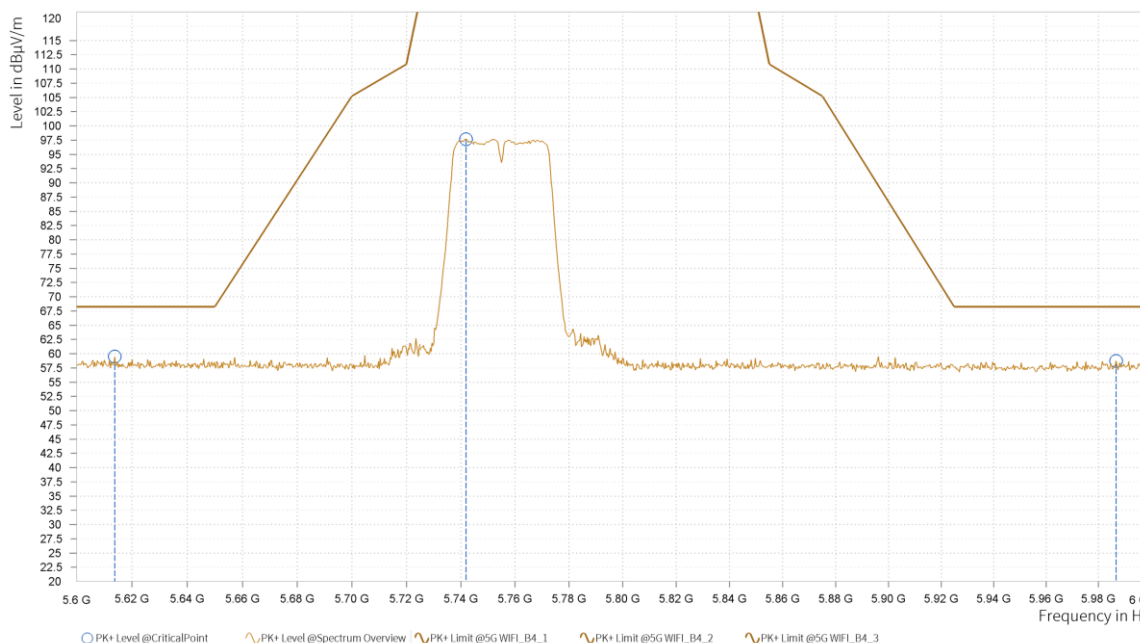
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
10	5,615.938	59.64	68.20	8.56	44.33	H	0.9	2.00
11	5,757.813	95.63			44.54	H	358.8	1.00
12	5,995.500	59.11	68.20	9.09	44.41	H	359	1.00





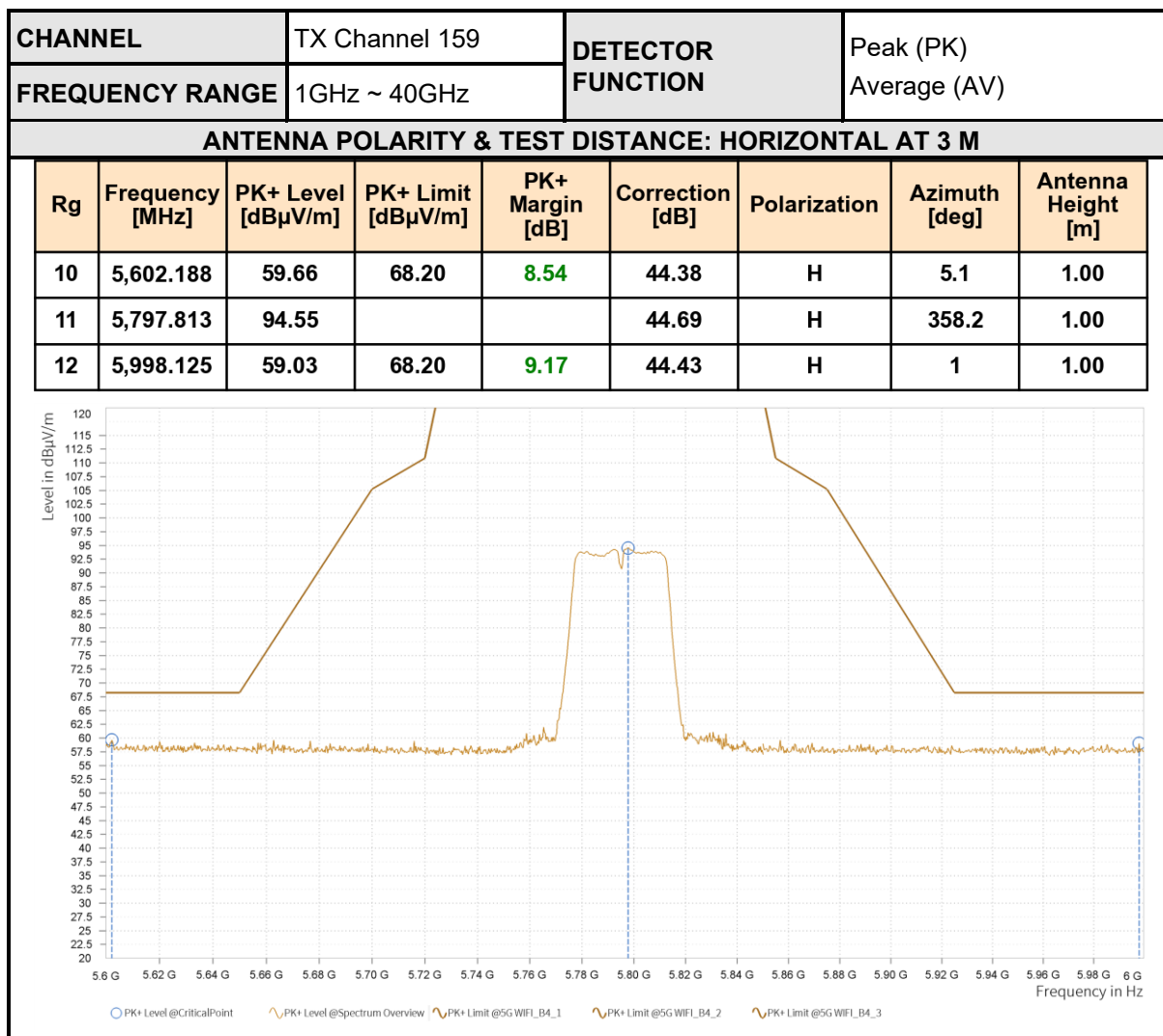
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
10	5,613.750	59.48	68.20	8.72	44.34	V	137	2.00
11	5,741.875	97.67			44.50	V	1	1.00
12	5,986.875	58.73	68.20	9.47	44.37	V	168.1	1.00



REMARKS:

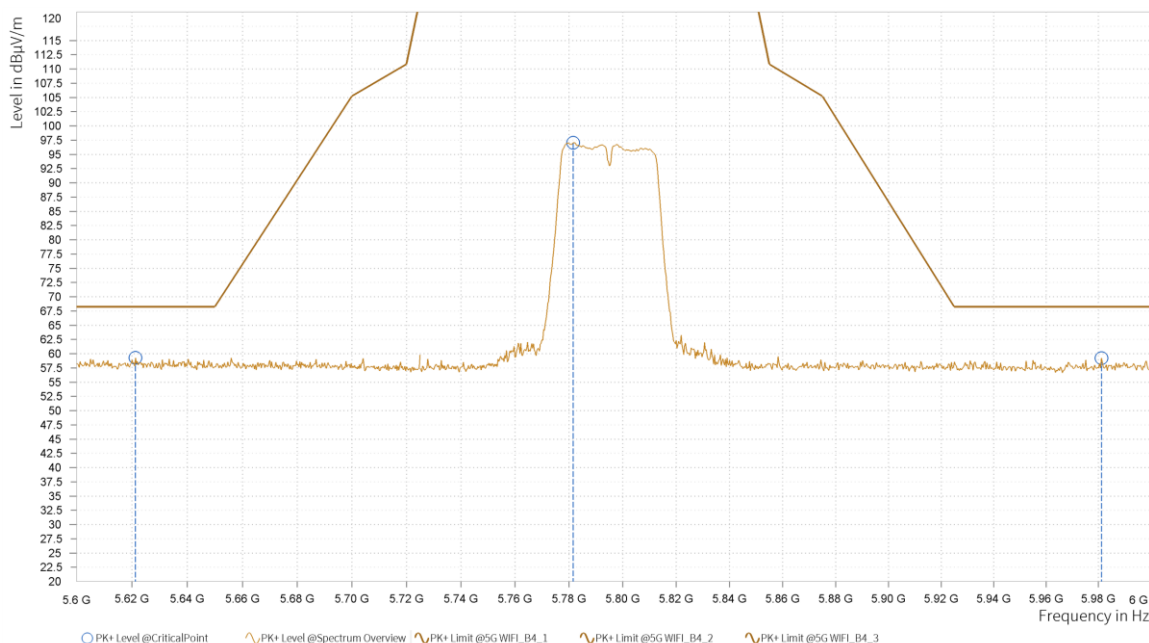
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5755MHz: Fundamental frequency.





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]
10	5,621.250	59.26	68.20	8.94	44.32	V	73.6	2.00
11	5,781.563	97.02			44.63	V	1	1.00
12	5,981.250	59.24	68.20	8.96	44.34	V	0.9	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5795MHz: Fundamental frequency.

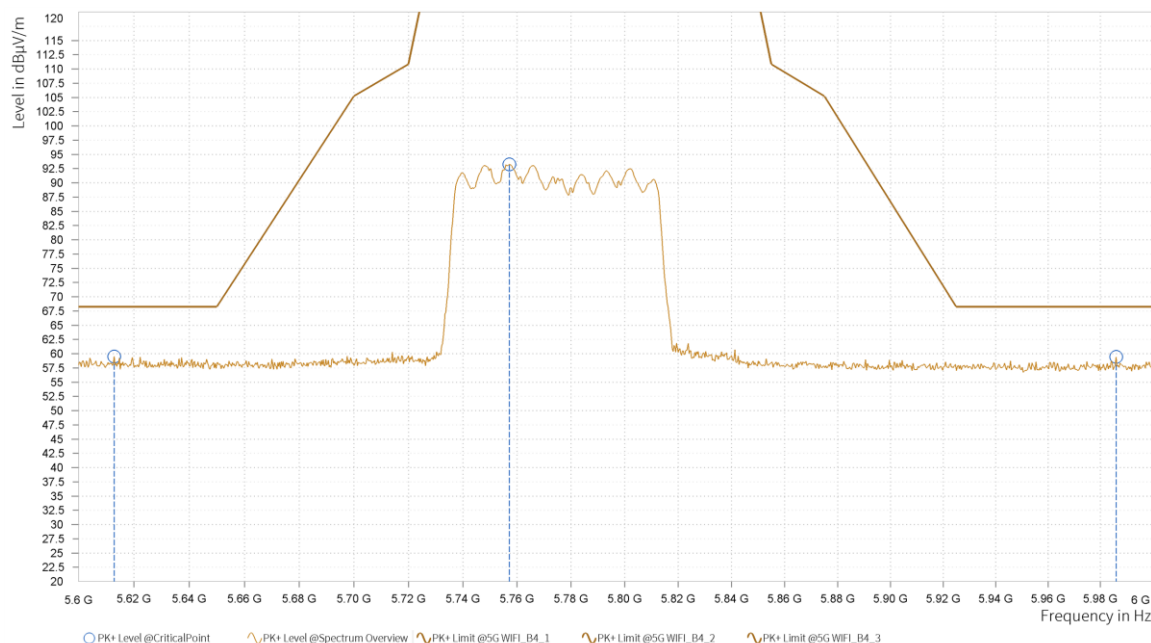


802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

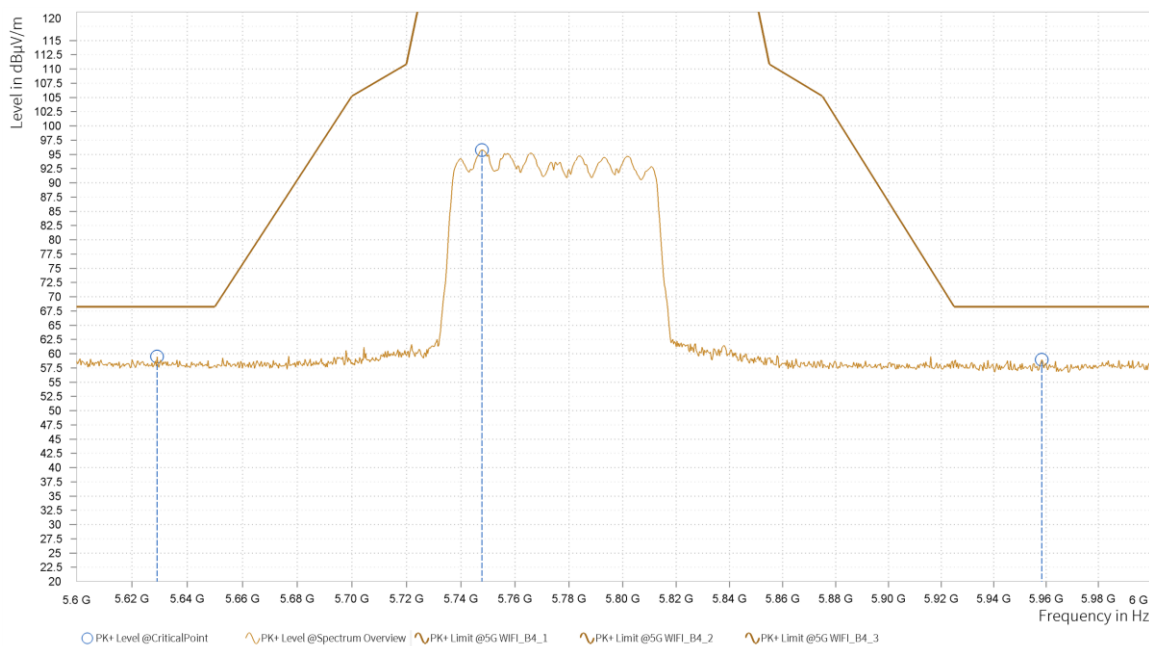
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	5,612.813	59.52	68.20	8.68	44.34	H	1	1.00
6	5,757.188	93.23			44.54	H	359.1	1.00
7	5,986.125	59.41	68.20	8.79	44.37	H	171.7	1.00





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]
5	5,629.063	59.48	68.20	8.72	44.34	V	355	2.00
6	5,747.813	95.75			44.51	V	1	1.00
7	5,958.375	58.96	68.20	9.24	44.25	V	303.2	1.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5775MHz: Fundamental frequency.



RADIATED EMISSION

BELOW 1GHz WORST-CASE DATA

Band

802.11AC (80MHz)

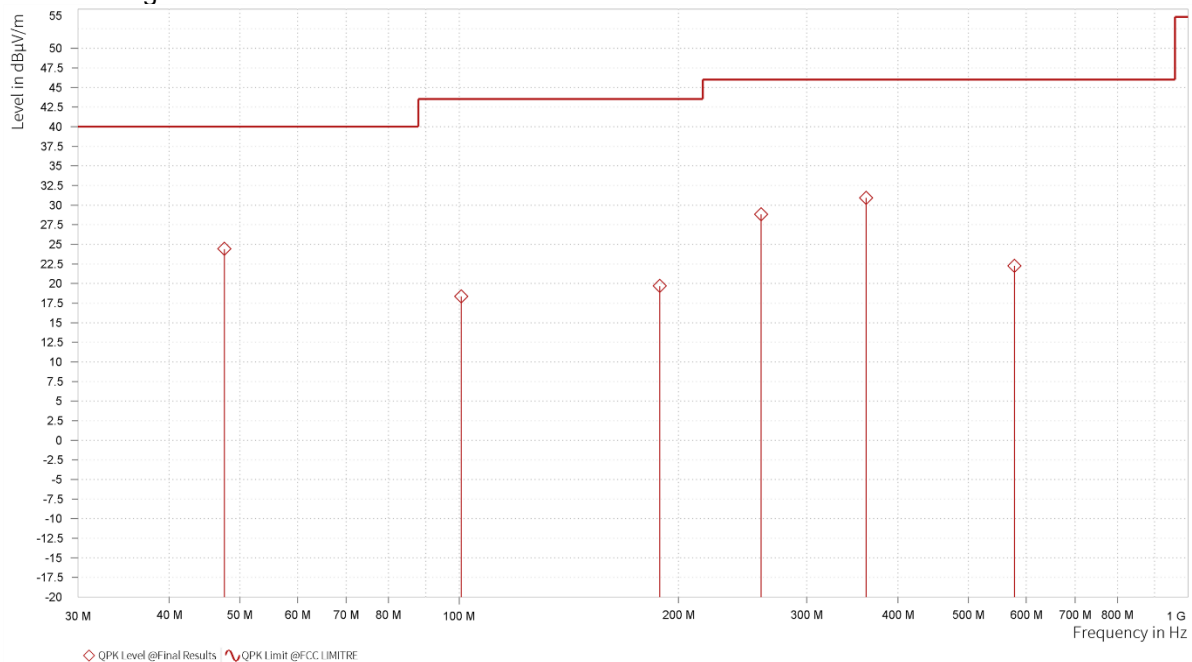
CHANNEL	TX Channel 106	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	47.654	24.41	40.00	15.59	-8.64	H	305.2	2.00	120.000
1	100.713	18.34	43.50	25.16	-11.05	H	305.2	1.00	120.000
1	188.547	19.67	43.50	23.83	-11.47	H	4.9	1.00	120.000
1	259.599	28.83	46.00	17.17	-7.58	H	4.9	2.00	120.000
1	361.886	30.92	46.00	15.08	-4.10	H	151	1.00	120.000
1	577.905	22.26	46.00	23.74	-2.46	H	4.9	1.00	120.000

REMARKS:

1. Emission level (dBμV/m) = Read level (dBμV) + 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.





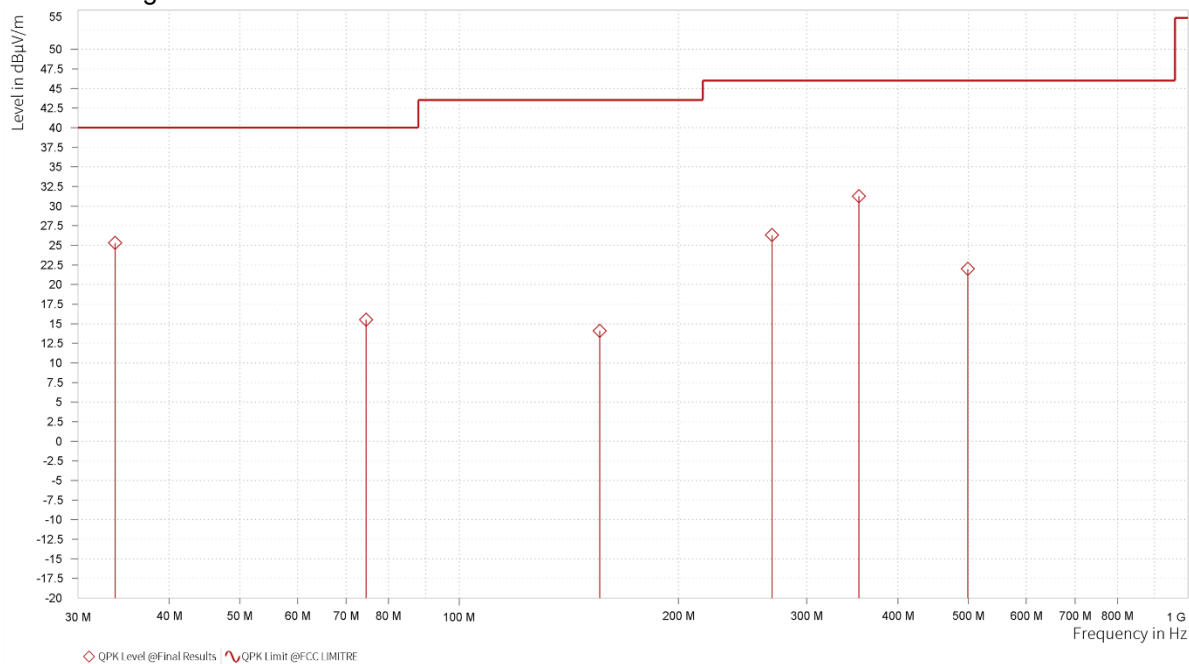
CHANNEL	Channel 138	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	33.735	25.30	40.00	14.70	-13.72	V	359	1.00	120.000
1	74.572	15.50	40.00	24.50	-16.47	V	359	2.00	120.000
1	155.955	14.08	43.50	29.42	-13.37	V	148.6	2.00	120.000
1	268.766	26.30	46.00	19.70	-7.87	V	148.6	1.00	120.000
1	353.592	31.26	46.00	14.74	-4.15	V	4.8	1.00	120.000
1	498.704	21.98	46.00	24.02	-3.11	V	148.6	1.00	120.000

REMARKS:

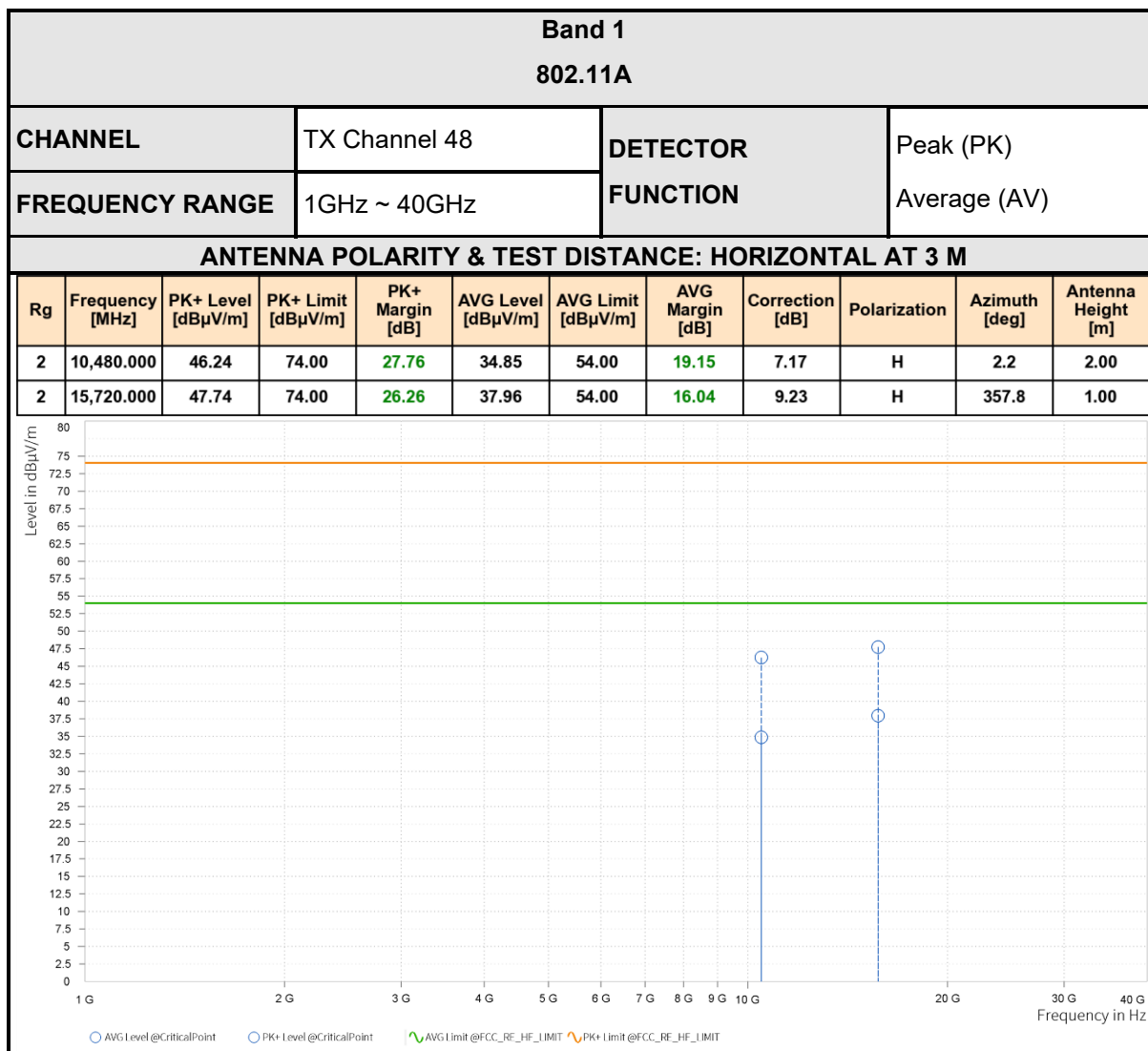
1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Limit value- Emission level.



**ABOVE 1GHz WORST-CASE DATA**

Note: 1. For higher frequency, the emission is too low to be detected.

2. For radiated emission testing, all supported channels, bandwidths and modes have been tested, the report only shown the worst-case data of each sub-band.





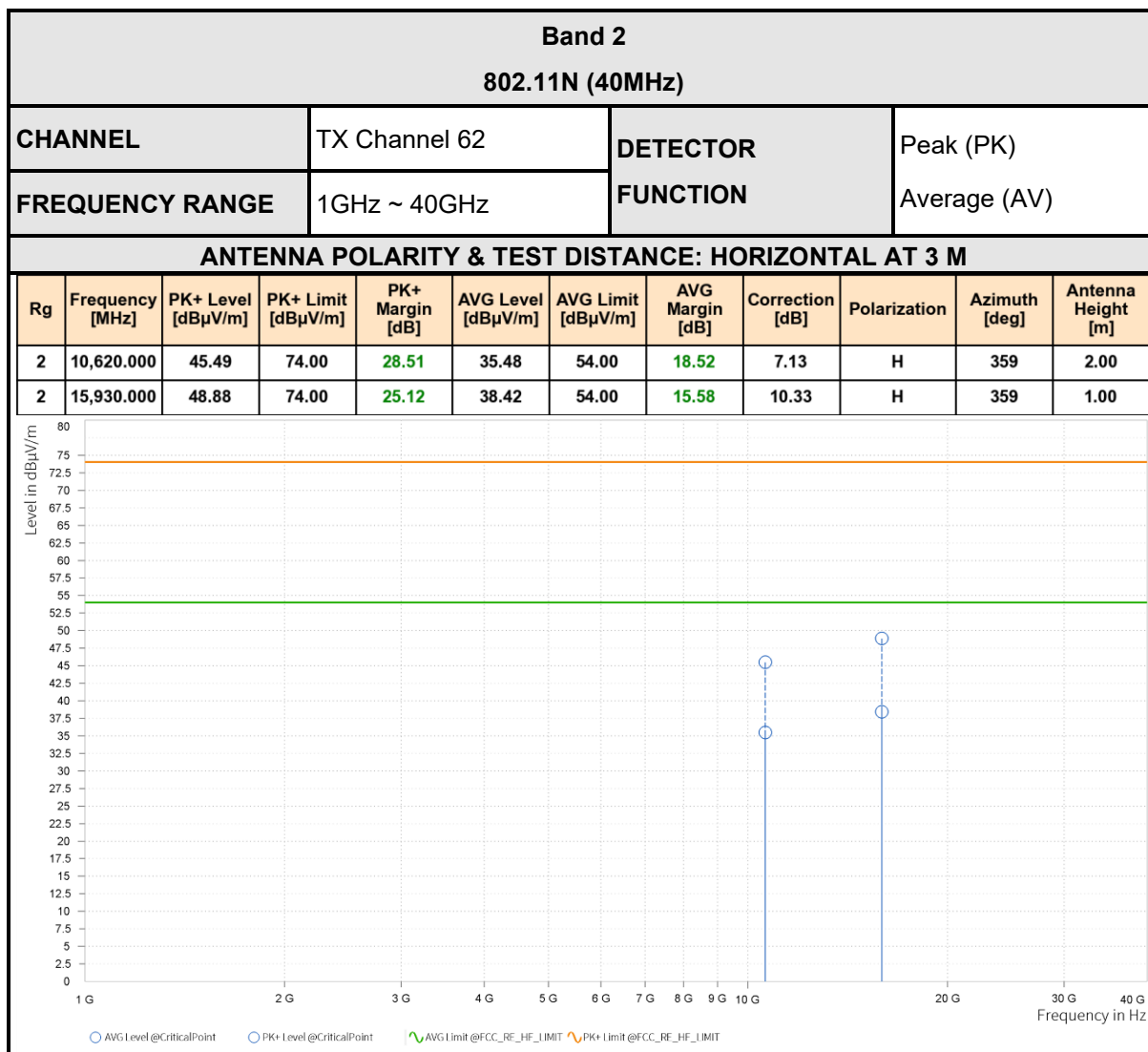
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

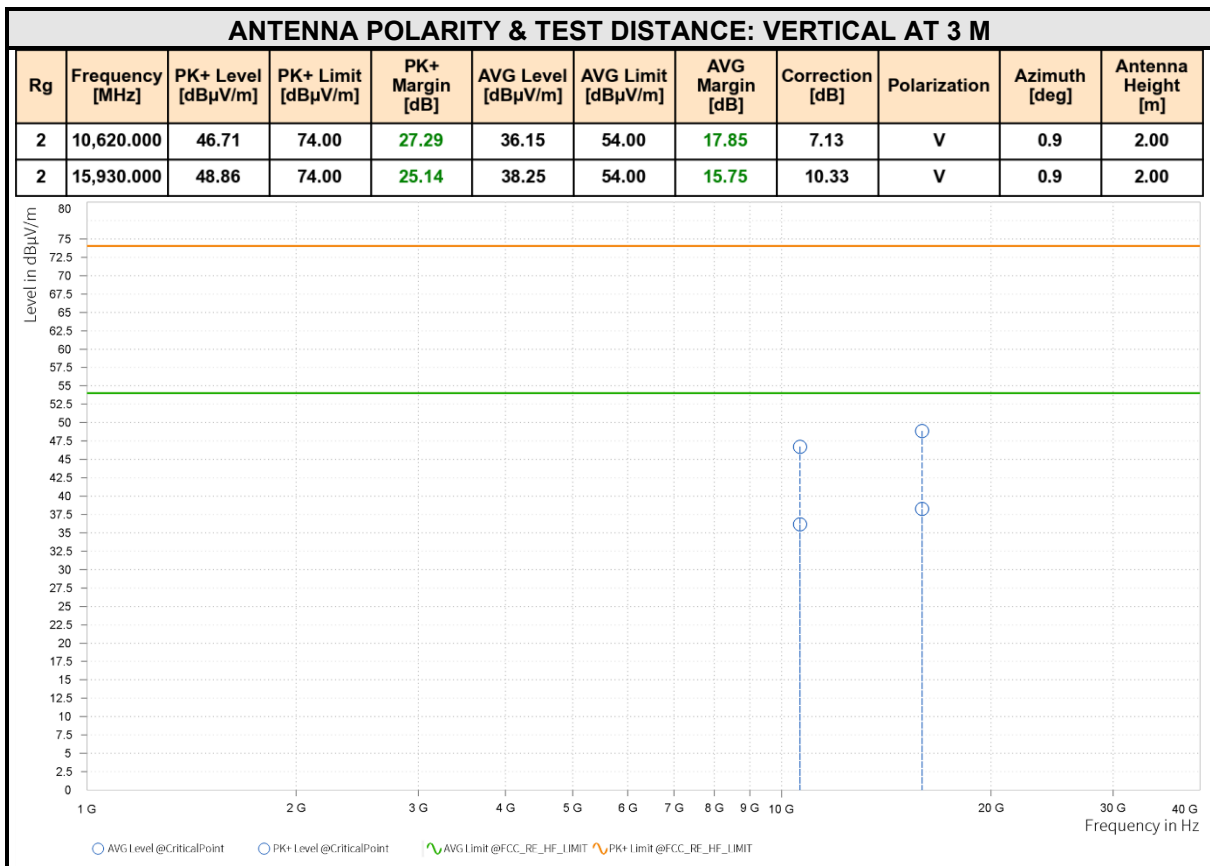
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	10,480.000	45.49	74.00	28.51	35.55	54.00	18.45	7.17	V	1	2.00
2	15,720.000	49.11	74.00	24.89	38.04	54.00	15.96	9.23	V	114.5	2.00



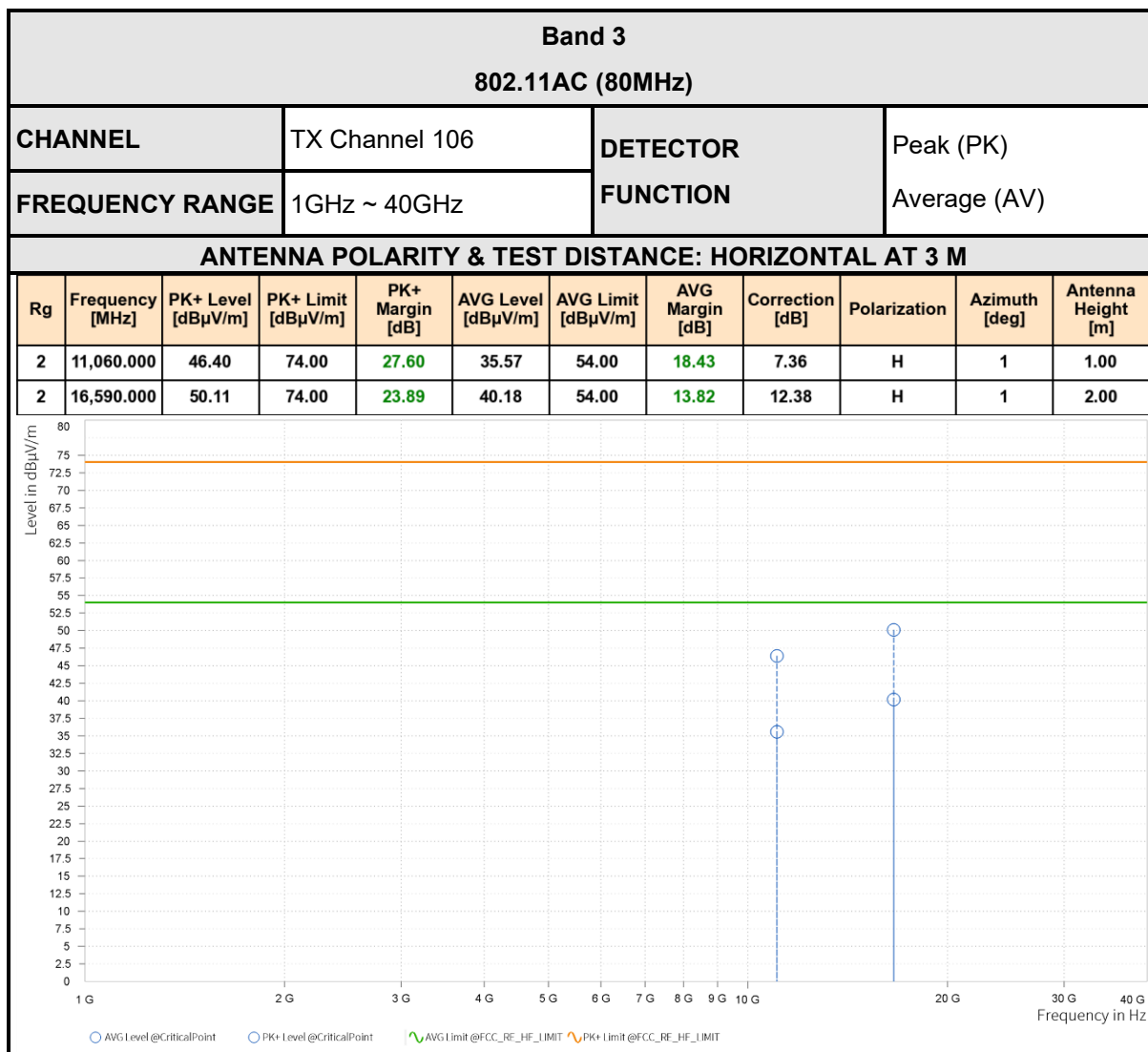
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5210MHz: Fundamental frequency.





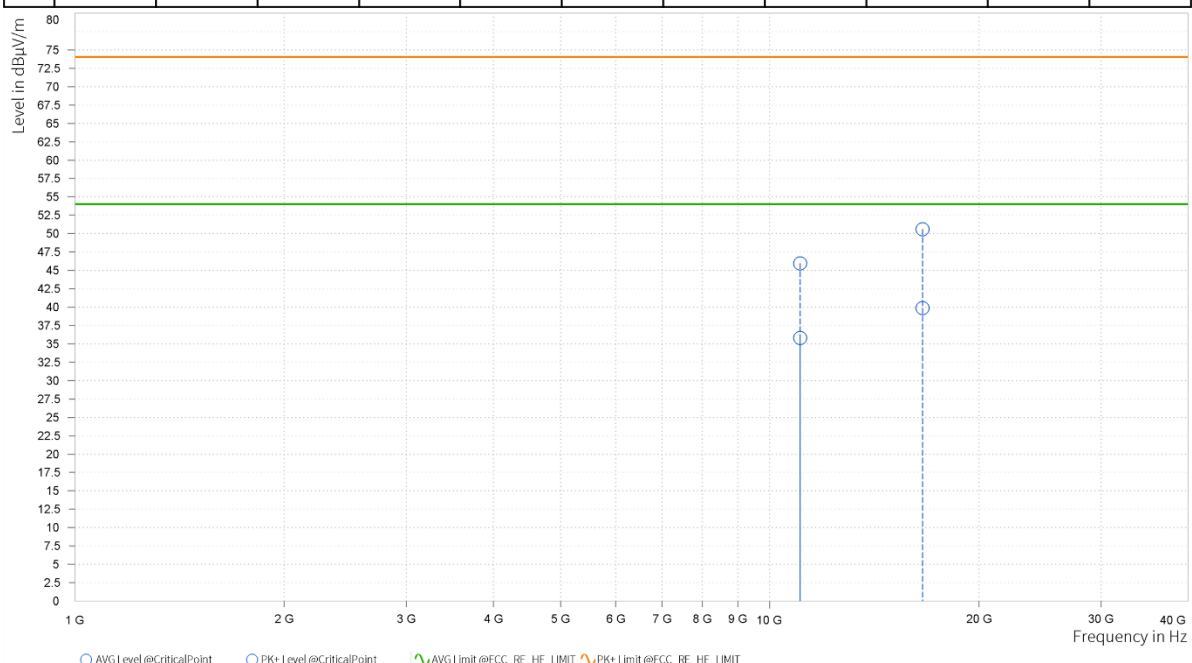
- REMARKS:**
- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
 - 2. Margin value = Limit value- Emission level.
 - 3. 5290MHz: Fundamental frequency.





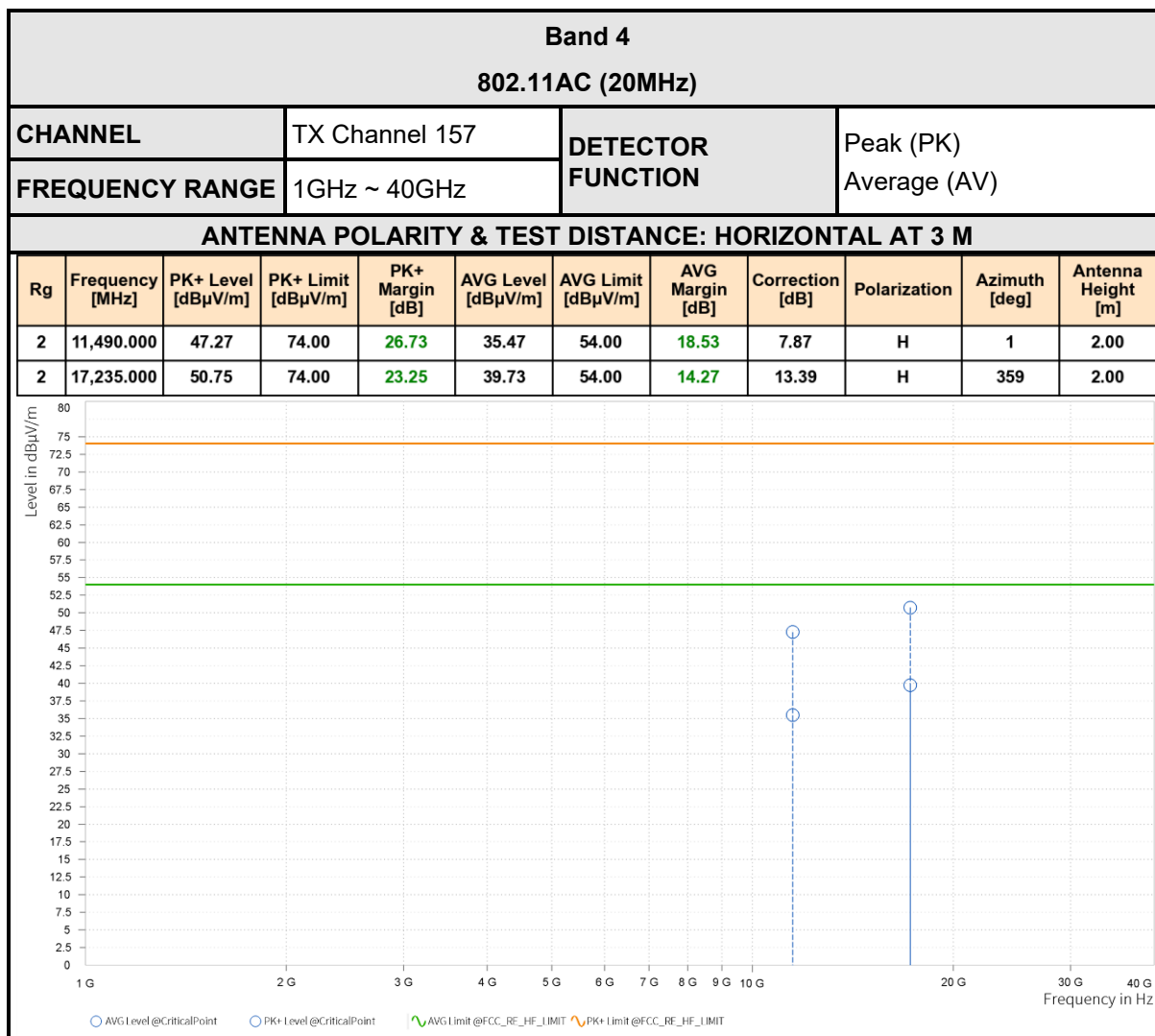
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

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	45.96	74.00	28.04	35.81	54.00	18.19	7.36	V	34.4	2.00
2	16,590.000	50.60	74.00	23.40	39.87	54.00	14.13	12.38	V	359	2.00



REMARKS:

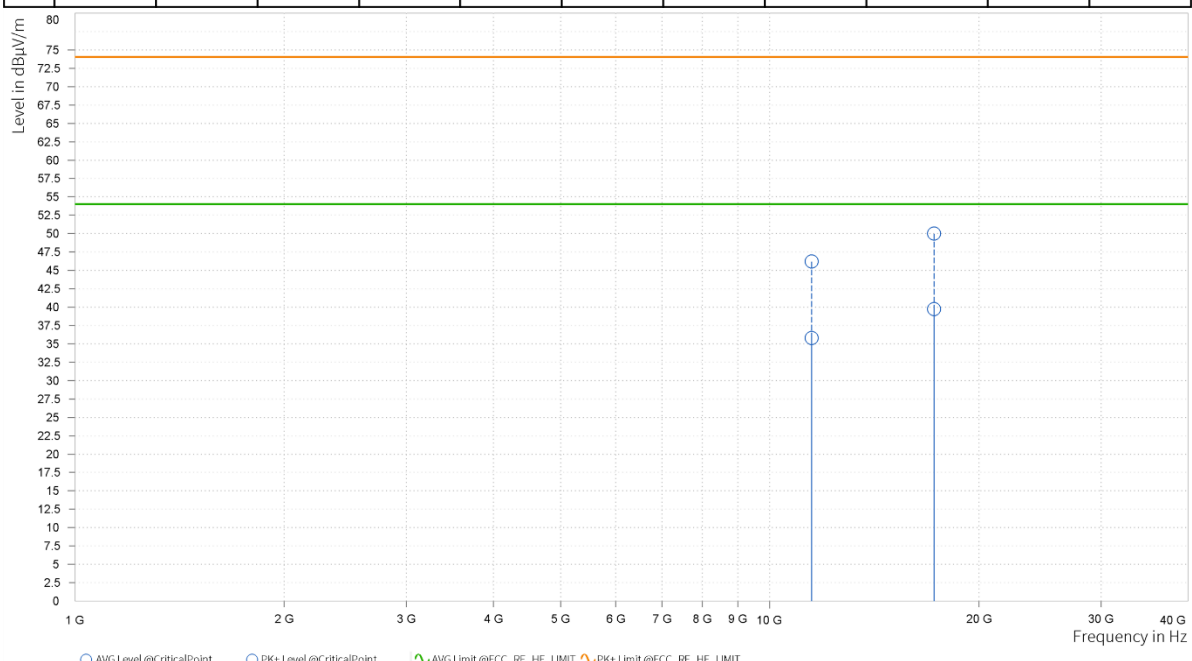
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5530MHz: Fundamental frequency.
4. #: Out of restricted band.





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	11,490.000	46.20	74.00	27.80	35.81	54.00	18.19	7.87	V	89.3	2.00
2	17,235.000	50.01	74.00	23.99	39.73	54.00	14.27	13.39	V	359	1.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value- Emission level.
3. 5785MHz: 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	Mar.28,24	Mar.27,26
ELEKTRA test software	Rohde&Schwarz	ELEKTRA	NA	N/A	N/A
LISN network	Rohde&Schwarz	ENV216	102640	Mar.28,24	Mar.27,26
CABLE	Rohde&Schwarz	W61.01	N/A	Apr.26,25	Apr.25,26
CABLE	Rohde&Schwarz	W601	N/A	Apr.26,25	Apr.25,26

NOTE:

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12/24 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) was not recorded.

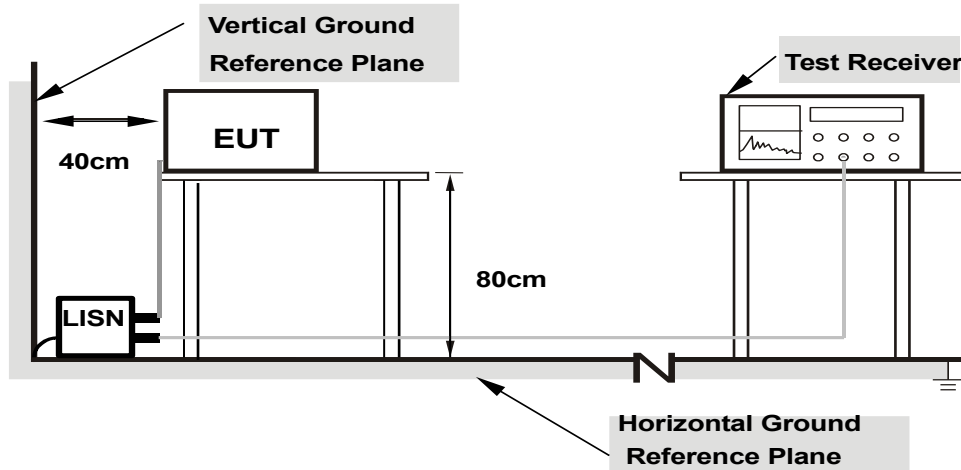
NOTE: All modes of operation were investigated and the worst-case emissions are reported.



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.

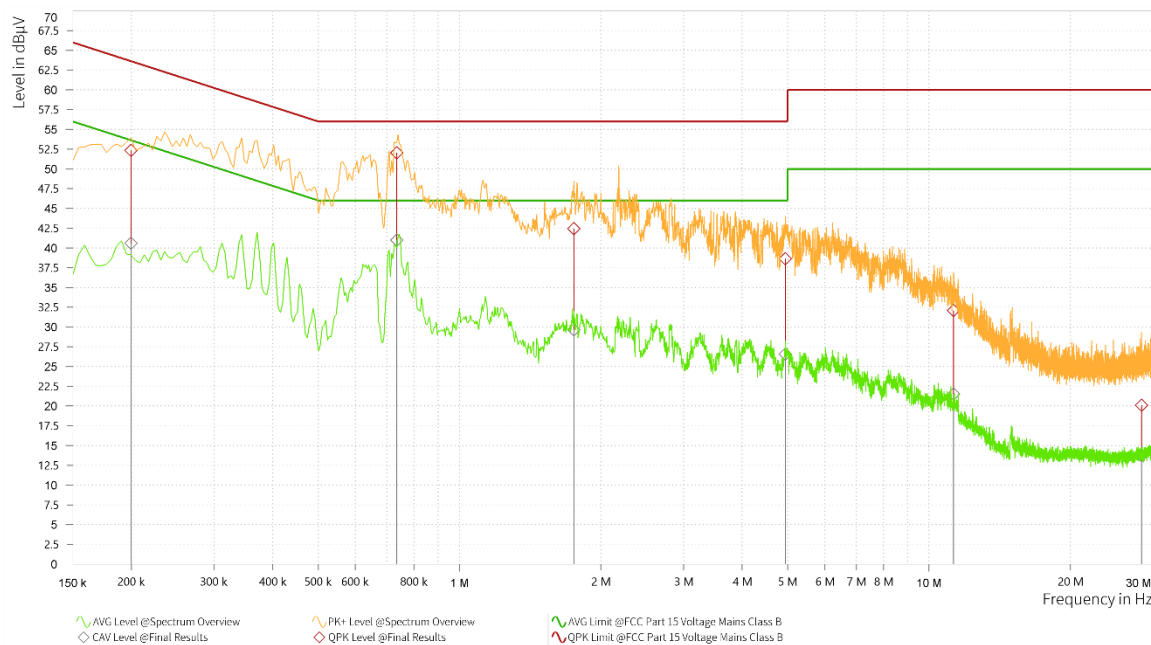


3.2.7 TEST RESULTS

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	0.200	52.34	63.63	11.29	40.60	53.63	13.03	9.78	L1	9.000
1	0.735	52.03	56.00	3.97	40.99	46.00	5.01	9.75	L1	9.000
1	1.752	42.43	56.00	13.57	29.65	46.00	16.35	9.80	L1	9.000
1	4.943	38.64	56.00	17.36	26.58	46.00	19.42	10.12	L1	9.000
1	11.283	32.09	60.00	27.91	21.51	50.00	28.49	11.32	L1	9.000
1	28.374	20.11	60.00	39.89	13.74	50.00	36.26	14.61	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
3. measurement with the average detector is unnecessary.
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Limit value - Emission level
6. Correction factor = Insertion loss + Cable loss
7. Emission Level = Correction Factor + Reading Value.

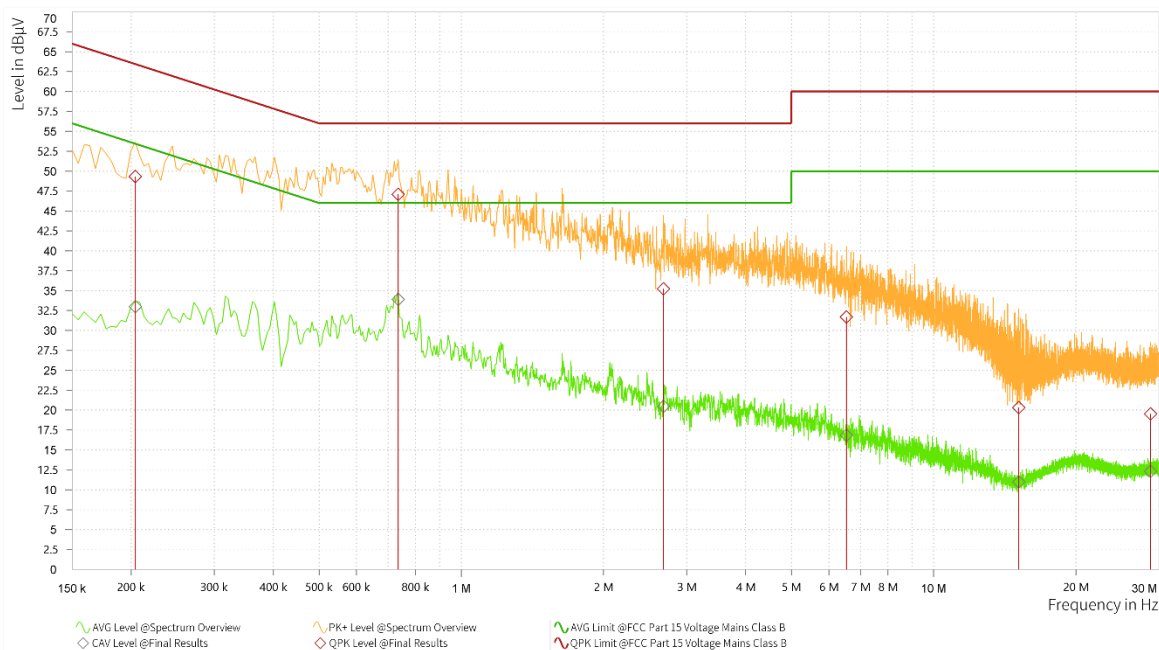




FREQUENCY RANGE		150KHz ~ 30MHz			DETECTOR FUNCTION & RESOLUTION BANDWIDTH			Quasi-Peak (QP) / Average (AV), 9 kHz		
INPUT POWER		120Vac, 60Hz			ENVIRONMENTAL CONDITIONS			26deg. C, 51%RH		
TESTED BY		Hanwen Xu								
Rg	Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	CAV Level [dBμV]	CAV: AVG Limit [dBμV]	CAV Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]
1	0.204	49.34	63.45	14.11	32.98	53.45	20.47	9.80	N	9.000
1	0.735	47.10	56.00	8.90	33.89	46.00	12.11	9.76	N	9.000
1	2.679	35.22	56.00	20.78	20.46	46.00	25.54	9.93	N	9.000
1	6.540	31.70	60.00	28.30	16.85	50.00	33.15	10.41	N	9.000
1	15.140	20.31	60.00	39.69	10.97	50.00	39.03	12.25	N	9.000
1	28.806	19.54	60.00	40.46	12.31	50.00	37.69	14.51	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)
	B	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)

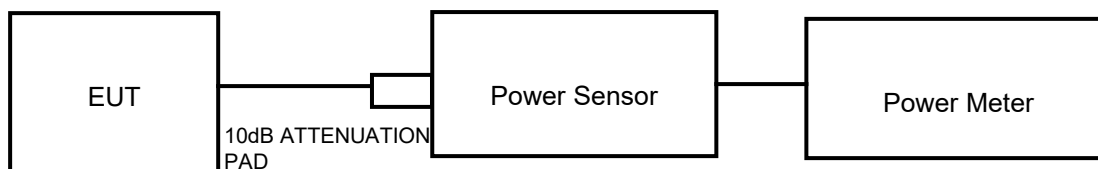
NOTE: Where B is the 26dB emission bandwidth in MHz.



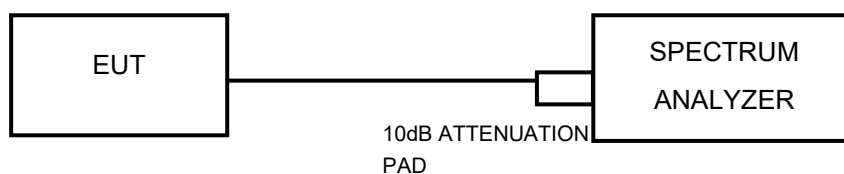
3.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

802.11a, 802.11n/ac/ax (20MHz), 802.11 n/ac/ax (40MHz) ,802.11 ac/ax (160MHz) 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	Mar.28,24	Mar.27,26
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A03	182185	Mar.29,24	Mar.28,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Hygrothermograph	DELI	20210528	SZ015	Mar.18,25	Mar.17,27
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.26,25	Apr.25,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26
Power Meter	R&S	NRX	102380	Mar.28,24	Mar.27,26
Power Meter probe	R&S	NRP6A	102942	Mar.28,24	Mar.27,26

NOTE:

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



3.3.4 TEST PROCEDURE

FOR POWER MEASUREMENT

For 802.11a, 802.11n/ac/ax (20MHz), 802.11 n/ac/ax (40MHz) ,802.11 ac/ax (160MHz)

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 = shall be in the range of 1% to 5% 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 in the range of 1% to 5%.



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 client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



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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 of 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.



BUREAU VERITAS Test Report No.: PSU-QSU2504300317RF03

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 of 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.



4. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



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

EMISSION BANDWIDTH

TEST RESULT

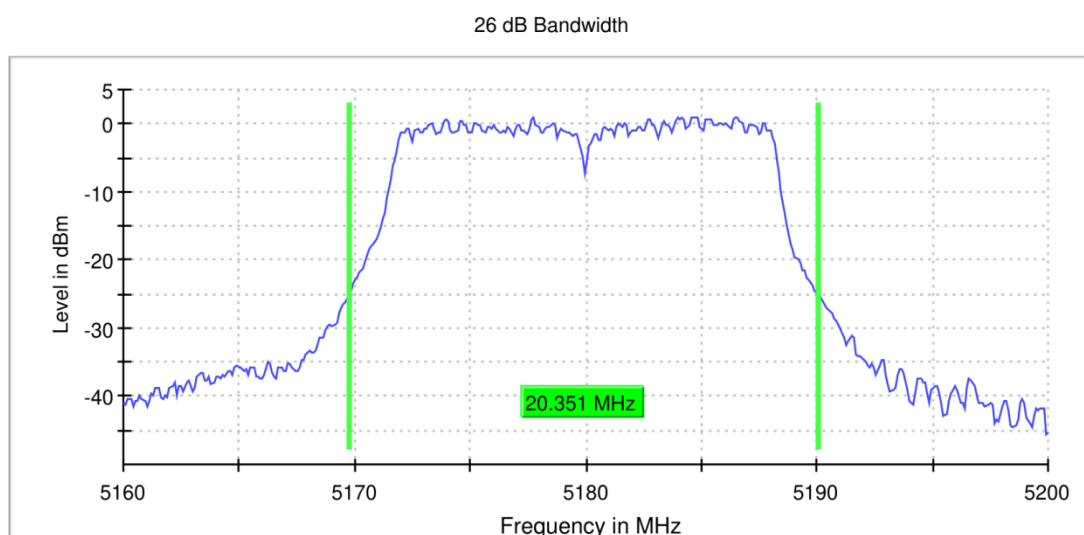
TestMode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	ANT6	5180	20.351	5169.724	5190.075	---	---
	ANT6	5200	20.150	5189.925	5210.075	---	---
	ANT6	5240	20.451	5229.624	5250.075	---	---
	ANT6	5260	21.153	5249.524	5270.677	---	---
	ANT6	5300	20.150	5289.724	5309.875	---	---
	ANT6	5320	20.952	5309.524	5330.476	---	---
	ANT6	5500	20.351	5489.624	5509.975	---	---
	ANT6	5580	20.351	5569.624	5589.975	---	---
	ANT6	5700	20.351	5689.624	5709.975	---	---
	ANT6	5720	20.752	5709.624	5730.376	---	---
11N20SISO	ANT6	5180	21.053	5169.424	5190.476	---	---
	ANT6	5200	21.253	5189.223	5210.476	---	---
	ANT6	5240	21.153	5229.323	5250.476	---	---
	ANT6	5260	21.053	5249.524	5270.576	---	---
	ANT6	5300	21.053	5289.323	5310.376	---	---
	ANT6	5320	21.053	5309.323	5330.376	---	---
	ANT6	5500	21.153	5489.323	5510.476	---	---
	ANT6	5580	21.353	5569.323	5590.677	---	---
	ANT6	5700	21.554	5689.223	5710.777	---	---
	ANT6	5720	21.754	5709.023	5730.777	---	---
11N40SISO	ANT6	5190	41.053	5169.549	5210.602	---	---
	ANT6	5230	41.504	5209.098	5250.602	---	---
	ANT6	5270	40.902	5249.699	5290.602	---	---
	ANT6	5310	41.504	5289.098	5330.602	---	---
	ANT6	5510	41.203	5489.398	5530.602	---	---
	ANT6	5550	41.504	5529.248	5570.752	---	---
	ANT6	5670	41.504	5649.248	5690.752	---	---
	ANT6	5710	41.504	5689.248	5730.752	---	---
11AC80SISO	ANT6	5210	82.759	5168.621	5251.379	---	---
	ANT6	5290	82.257	5249.122	5331.379	---	---



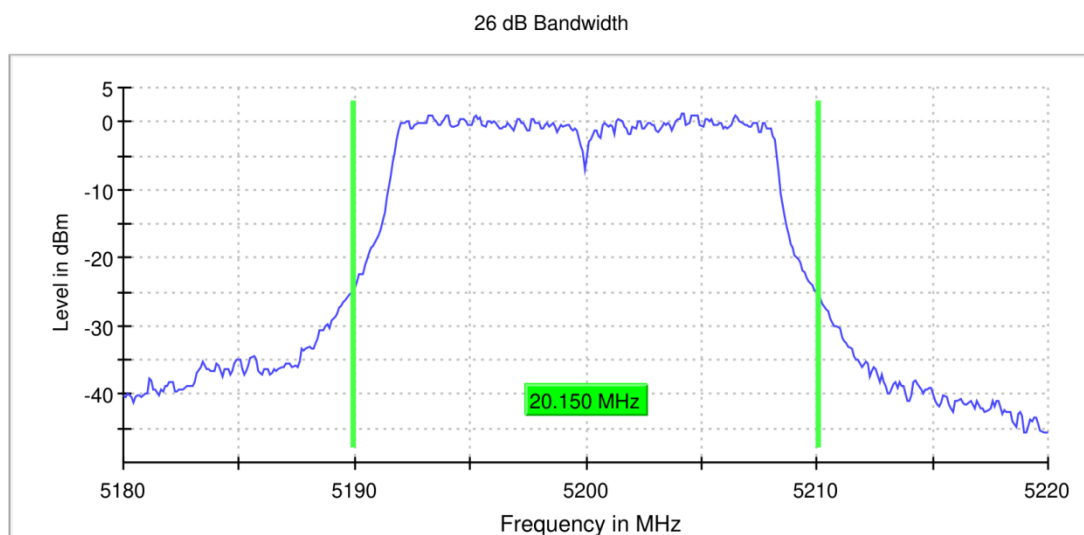
	ANT6	5530	82.759	5488.621	5571.379	---	---
	ANT6	5610	82.759	5568.621	5651.379	---	---
	ANT6	5690				---	---

TEST GRAPHS

11A_ANT6_5180



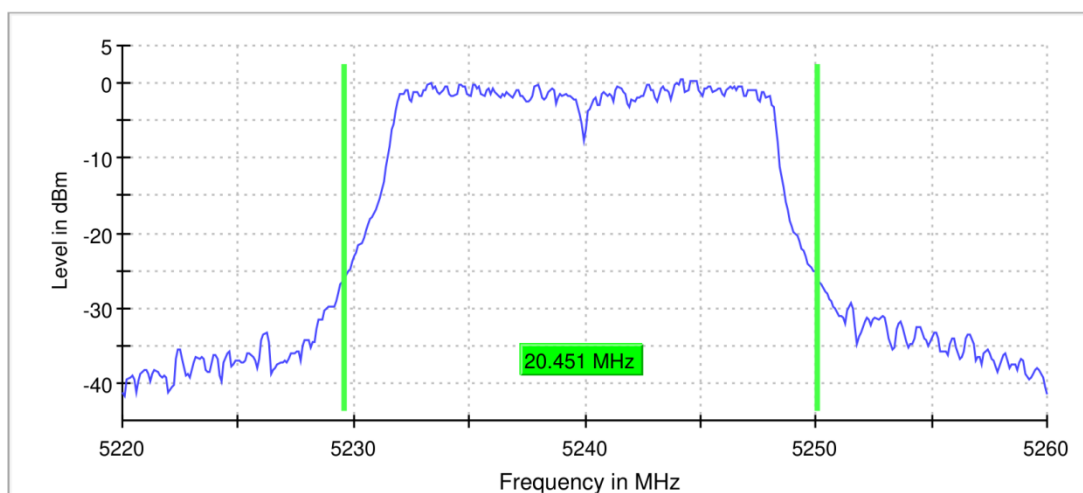
11A _ANT6_5200



11A _ANT6_5240

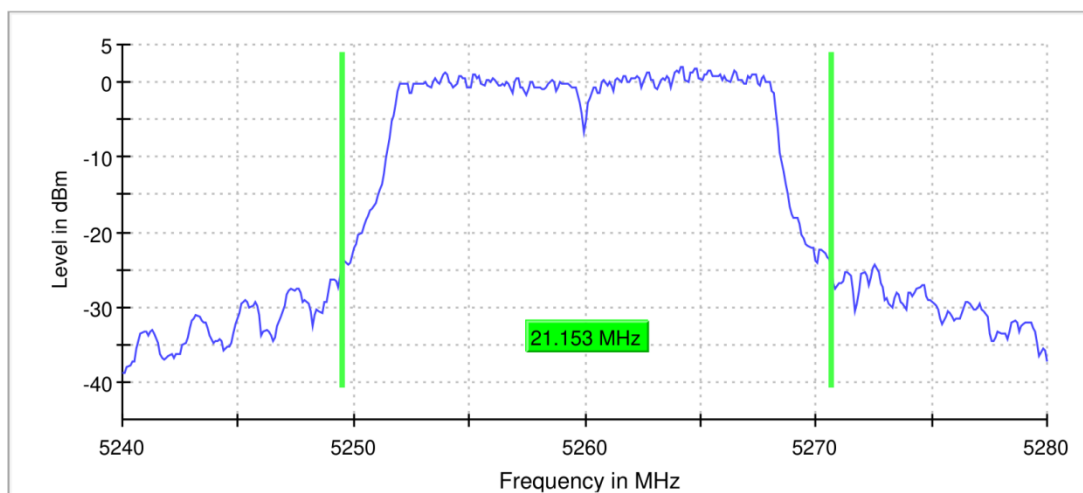


26 dB Bandwidth



11A _ANT6_5260

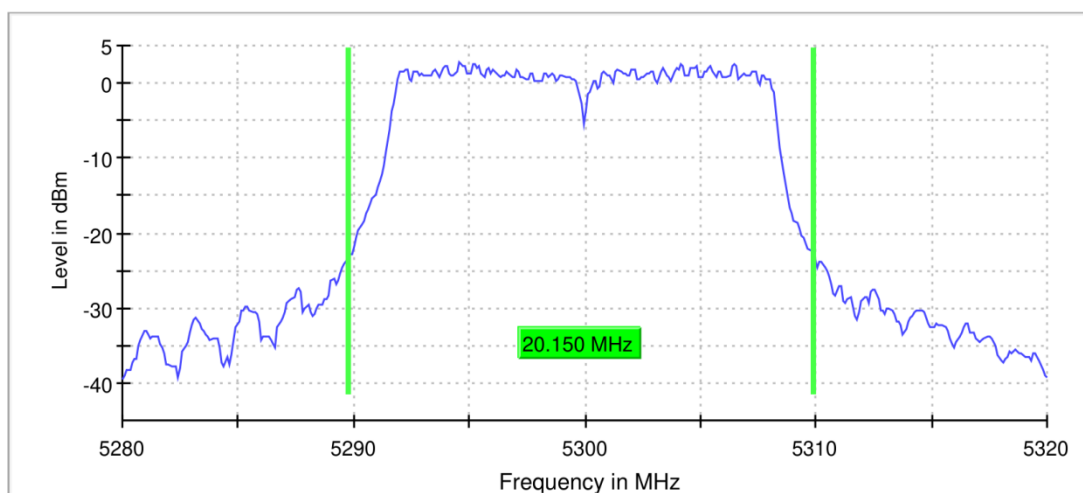
26 dB Bandwidth



11A _ANT6_5300

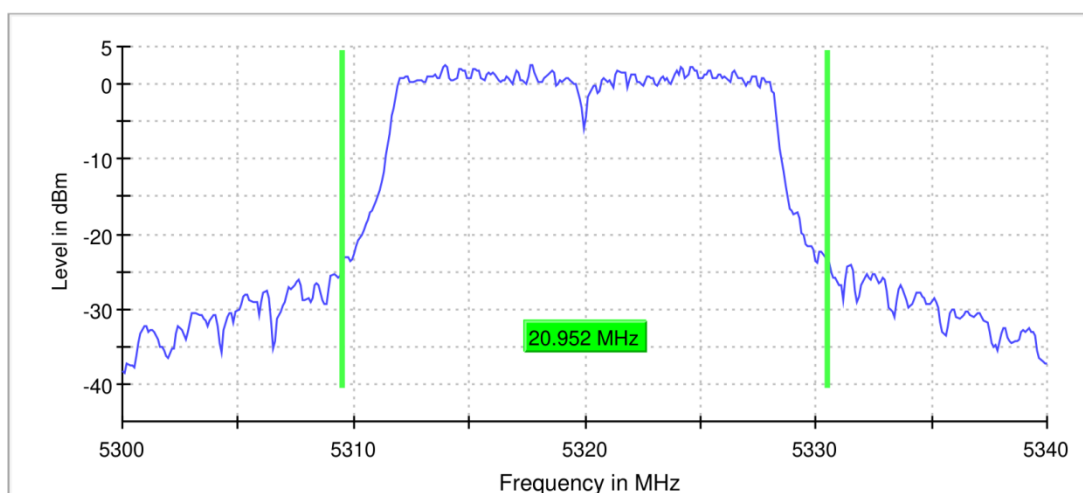


26 dB Bandwidth



11A _ANT6_5320

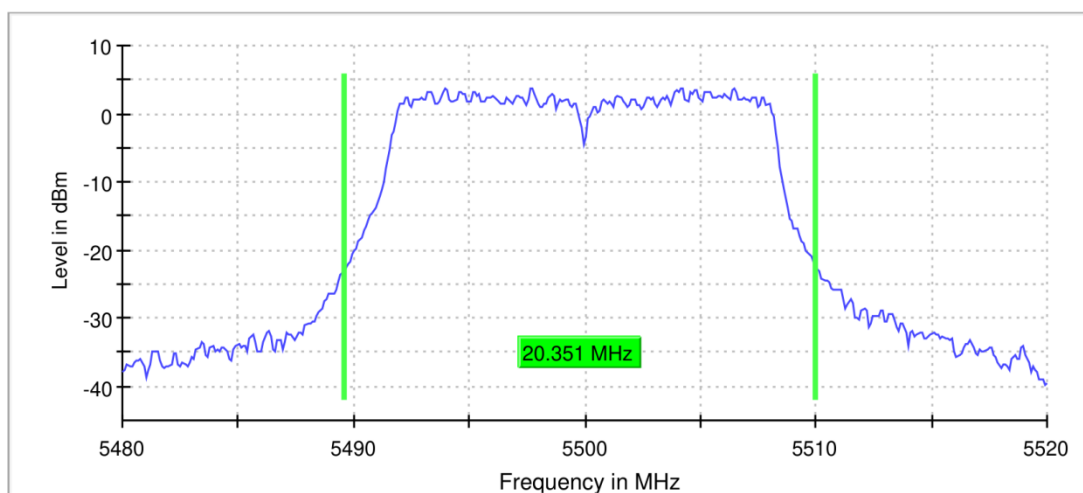
26 dB Bandwidth



11A _ANT6_5500

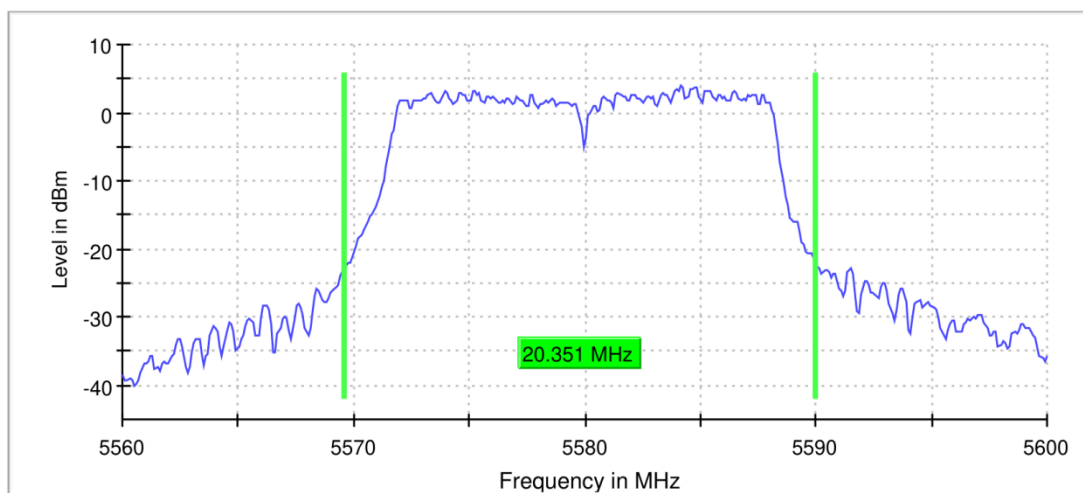


26 dB Bandwidth



11A _ANT6_5580

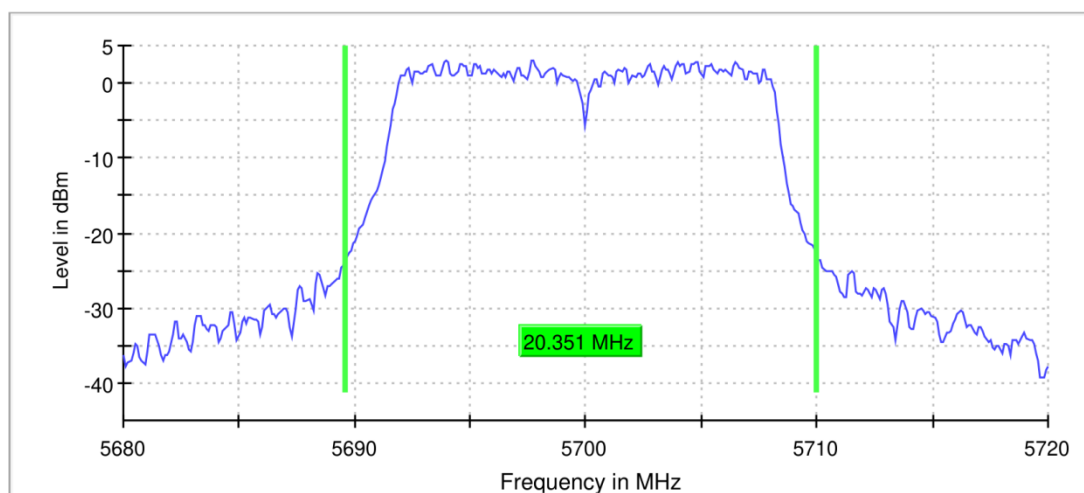
26 dB Bandwidth



11A _ANT6_5700

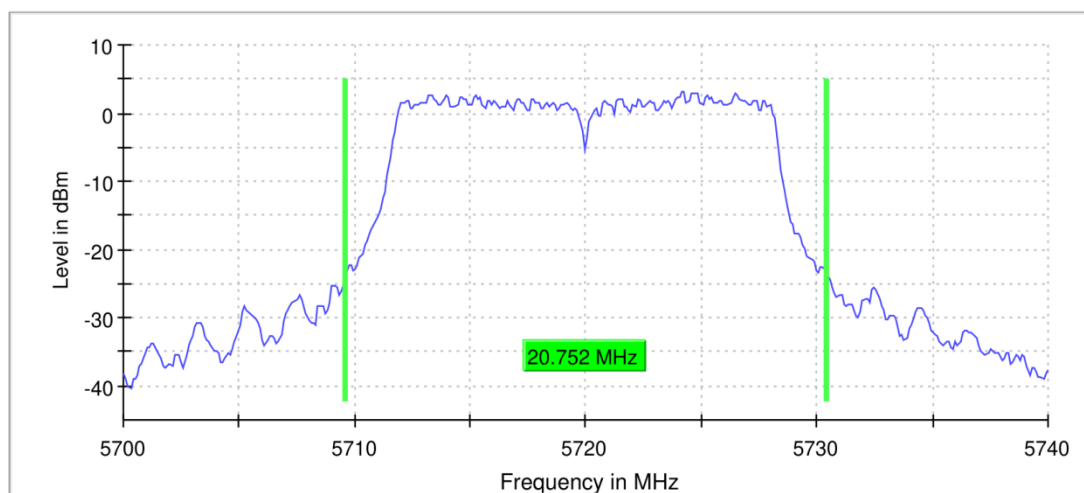


26 dB Bandwidth



11A _ANT6_5720

26 dB Bandwidth



11N20_ANT6_5180