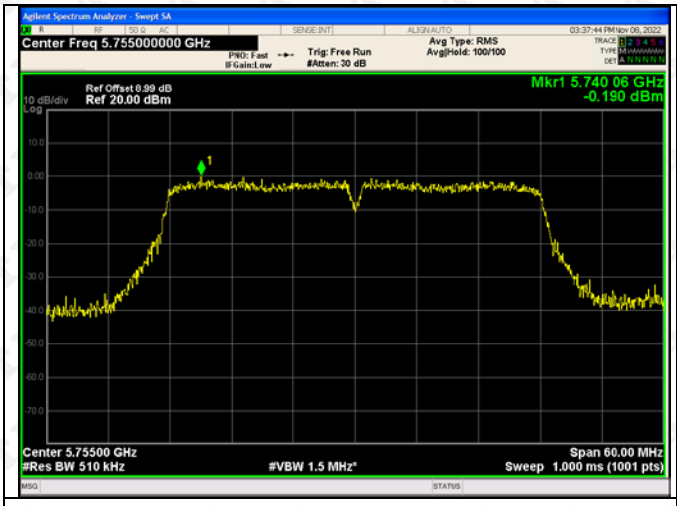
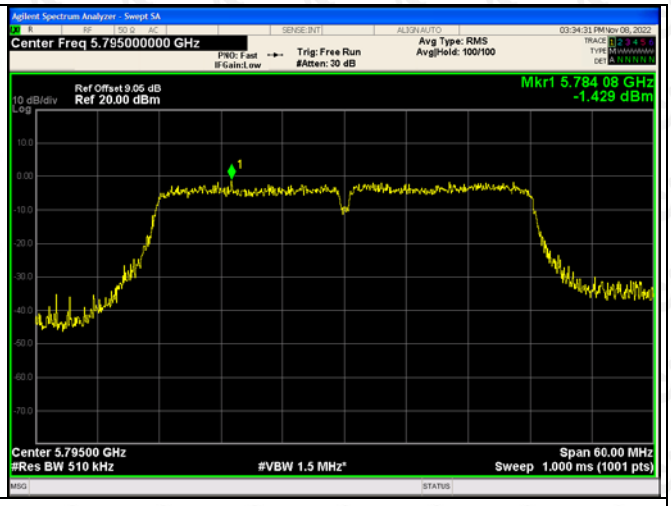
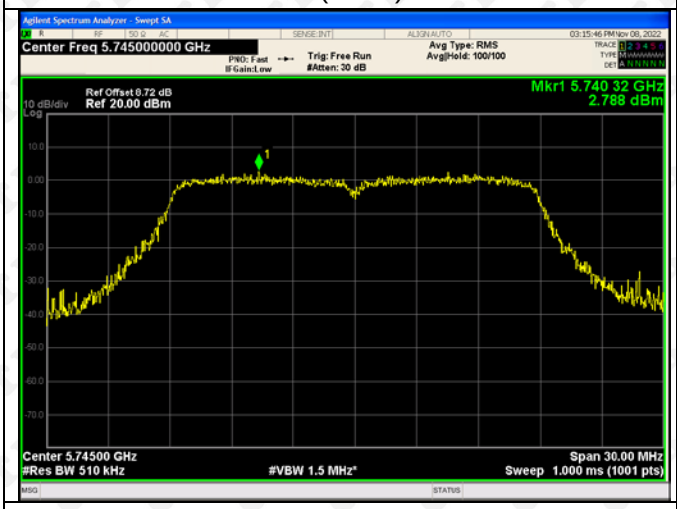


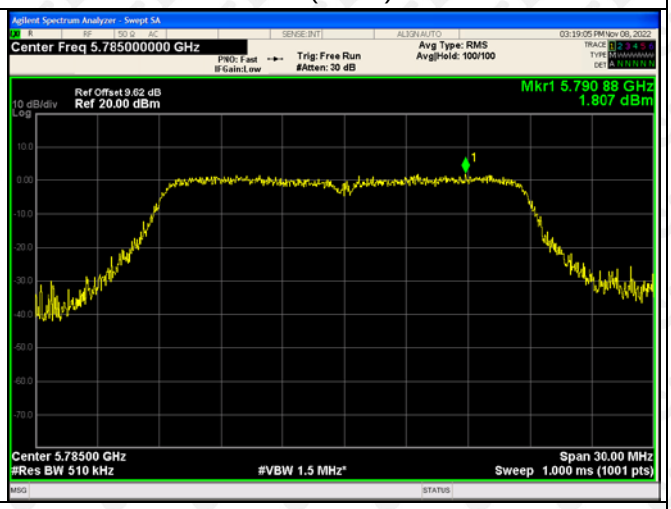
802.11ac(VH20)-5745



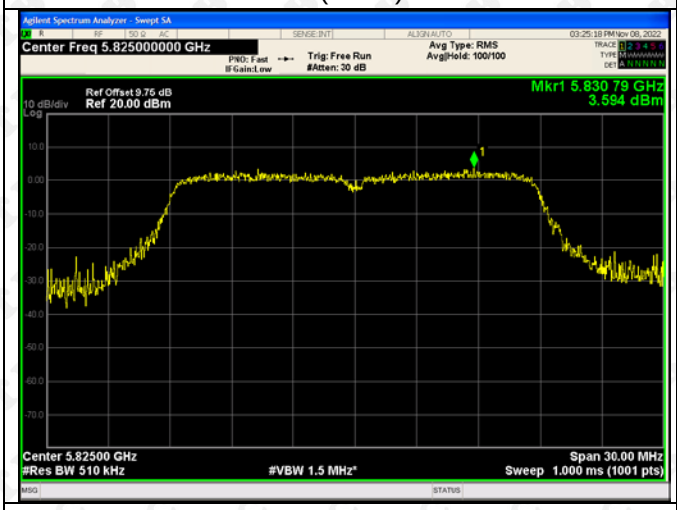
802.11ac(VH20)-5785



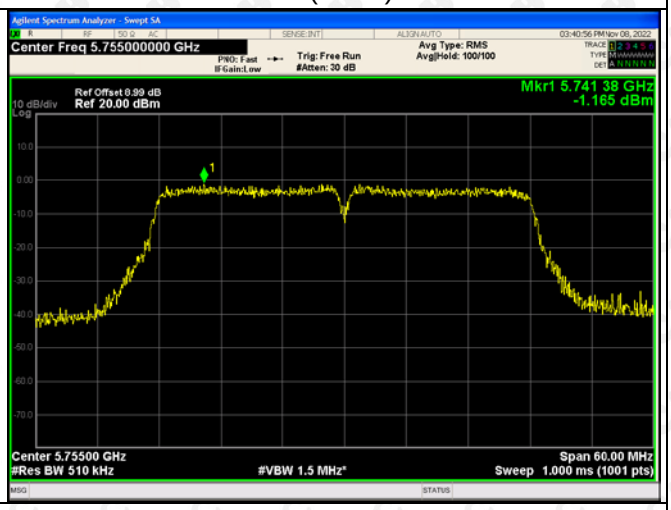
802.11ac(VH20)-5825



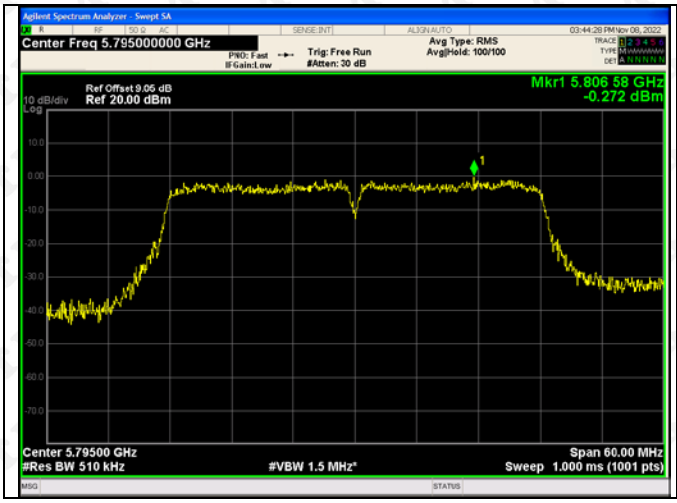
802.11ac(VH40)-5755

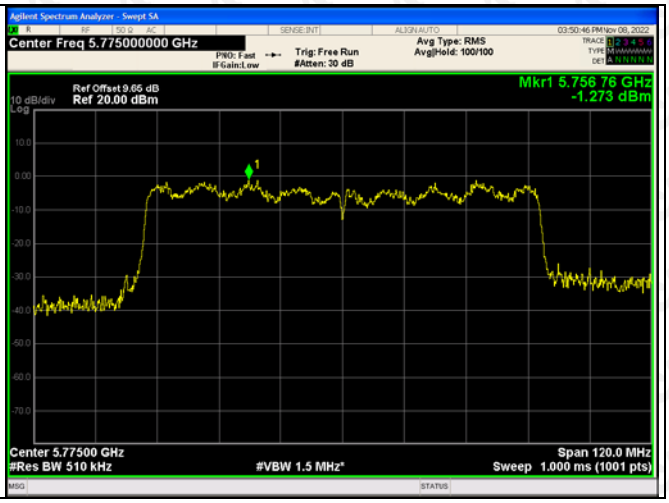


802.11ac(VH40)-5795



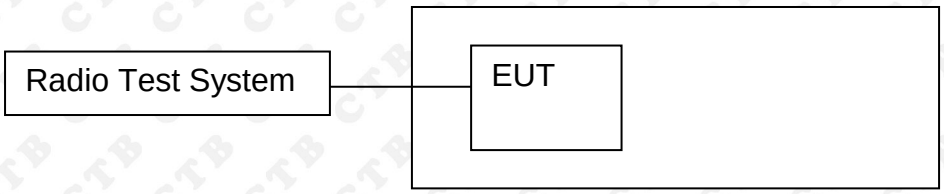
802.11ac(VH80)-5775


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.05 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.806 58 GHz
-0.272 dBm
Center 5.79500 GHz
#Res BW 510 kHz
#VBW 1.5 MHz*
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.05 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.756 76 GHz
-1.273 dBm
Center 5.77500 GHz
#Res BW 510 kHz
#VBW 1.5 MHz*
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

12. FREQUENCY STABILITY

12.1 Block Diagram Of Test Setup



12.2 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

12.3 Test procedure

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.

2. Set EUT as normal operation.

3. Turn the EUT on and couple its output to spectrum.

4. Turn the EUT off and set the chamber to the highest temperature specified.

5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.

6. Repeat step with the temperature chamber set to the lowest temperature.

12.4 Test Result

TX Frequency (5150-5250MHz)

ANT1

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5180.0925	5180	0.0925	17.8636
		V max (V)	132	5180.0444	5180	0.0444	8.5624
		V min (V)	108	5180.1174	5180	0.1174	22.6697
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5180.0133	5180	0.0133	2.5630
		T (°C)	10	5180.0457	5180	0.0457	8.8263
		T (°C)	20	5180.0016	5180	0.0016	0.3111
		T (°C)	30	5180.0520	5180	0.0520	10.0304
		T (°C)	40	5180.0268	5180	0.0268	5.1654
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5200.0452	5200	0.0452	8.7004
		V max (V)	132	5200.0223	5200	0.0223	4.2802
		V min (V)	108	5200.0062	5200	0.0062	1.2002
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5200.0019	5200	0.0019	0.3623
		T (°C)	10	5200.0210	5200	0.0210	4.0331
		T (°C)	20	5200.0354	5200	0.0354	6.8005
		T (°C)	30	5200.0120	5200	0.0120	2.3122
		T (°C)	40	5200.0045	5200	0.0045	0.8656
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5240.0317	5240	0.0317	6.0541
		V max (V)	132	5240.0323	5240	0.0323	6.1672
		V min (V)	108	5240.0216	5240	0.0216	4.1284
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5240.0497	5240	0.0497	9.4788
		T (°C)	10	5240.0327	5240	0.0327	6.2400
		T (°C)	20	5240.0138	5240	0.0138	2.6372
		T (°C)	30	5240.0515	5240	0.0515	9.8369
		T (°C)	40	5240.0326	5240	0.0326	6.2242
Limits				±20ppm			
Result				Complies			

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5260.0079	5260	0.0079	1.4963
		V max (V)	132	5260.0307	5260	0.0307	5.8294
		V min (V)	108	5260.0246	5260	0.0246	4.6700
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5260.0209	5260	0.0209	3.9758
		T (°C)	10	5260.0000	5260	0.0000	0.0016
		T (°C)	20	5260.0088	5260	0.0088	1.6788
		T (°C)	30	5260.0503	5260	0.0503	9.5678
		T (°C)	40	5260.0888	5260	0.0888	16.8774
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5280.0193	5280	0.0193	3.6494
		V max (V)	132	5280.0422	5280	0.0422	7.9836
		V min (V)	108	5280.0449	5280	0.0449	8.5120
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5280.0878	5280	0.0878	16.6307
		T (°C)	10	5280.0176	5280	0.0176	3.3308
		T (°C)	20	5280.0270	5280	0.0270	5.1060
		T (°C)	30	5280.0812	5280	0.0812	15.3764
		T (°C)	40	5280.0581	5280	0.0581	10.9960
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5320.0862	5320	0.0862	16.2032
		V max (V)	132	5320.0058	5320	0.0058	1.0832
		V min (V)	108	5320.0746	5320	0.0746	14.0292
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5320.0494	5320	0.0494	9.2819
		T (°C)	10	5320.0153	5320	0.0153	2.8722
		T (°C)	20	5320.0678	5320	0.0678	12.7355
		T (°C)	30	5320.0697	5320	0.0697	13.0947
		T (°C)	40	5320.0632	5320	0.0632	11.8830
Limits				±20ppm			
Result				Complies			

TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5550.0390	5500	50.0390	9097.9924
		V max (V)	132	5550.0378	5500	50.0378	9097.7741
		V min (V)	108	5550.0912	5500	50.0912	9107.4821
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5500.0327	5500	0.0327	5.9393
		T (°C)	10	5500.0521	5500	0.0521	9.4696
		T (°C)	20	5500.0759	5500	0.0759	13.8027
		T (°C)	30	5500.0565	5500	0.0565	10.2677
		T (°C)	40	5500.0827	5500	0.0827	15.0421
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5580.0274	5580	0.0274	4.9019
		V max (V)	132	5580.0470	5580	0.0470	8.4283
		V min (V)	108	5580.0327	5580	0.0327	5.8627
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5580.0342	5580	0.0342	6.1317
		T (°C)	10	5580.0198	5580	0.0198	3.5397
		T (°C)	20	5580.0367	5580	0.0367	6.5794
		T (°C)	30	5580.0833	5580	0.0833	14.9342
		T (°C)	40	5580.0542	5580	0.0542	9.7065
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5700.0518	5700	0.0518	9.0840
		V max (V)	132	5700.0183	5700	0.0183	3.2188
		V min (V)	108	5700.0128	5700	0.0128	2.2500
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5700.0302	5700	0.0302	5.3063
		T (°C)	10	5700.0117	5700	0.0117	2.0540
		T (°C)	20	5700.0012	5700	0.0012	0.2139
		T (°C)	30	5700.0221	5700	0.0221	3.8748
		T (°C)	40	5700.0097	5700	0.0097	1.6987
Limits				±20ppm			
Result				Complies			

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5745.0905	5745	0.0905	15.7564
		V max (V)	132	5745.0000	5745	0.0000	0.0031
		V min (V)	108	5745.0905	5745	0.0905	15.7564
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5745.0603	5745	0.0603	10.4992
		T (°C)	10	5745.0365	5745	0.0365	6.3464
		T (°C)	20	5745.0543	5745	0.0543	9.4598
		T (°C)	30	5745.0589	5745	0.0589	10.2488
		T (°C)	40	5745.0802	5745	0.0802	13.9548
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5785.0077	5785	0.0077	1.3287
		V max (V)	132	5785.0427	5785	0.0427	7.3815
		V min (V)	108	5785.0312	5785	0.0312	5.3969
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5785.0152	5785	0.0152	2.6224
		T (°C)	10	5785.0299	5785	0.0299	5.1722
		T (°C)	20	5785.0060	5785	0.0060	1.0346
		T (°C)	30	5785.0747	5785	0.0747	12.9206
		T (°C)	40	5785.0447	5785	0.0447	7.7322
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5825.0124	5825	0.0124	2.1254
		V max (V)	132	5825.0683	5825	0.0683	11.7189
		V min (V)	108	5825.0296	5825	0.0296	5.0780
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5825.0072	5825	0.0072	1.2426
		T (°C)	10	5825.0686	5825	0.0686	11.7750
		T (°C)	20	5825.0779	5825	0.0779	13.3768
		T (°C)	30	5825.0709	5825	0.0709	12.1666
		T (°C)	40	5825.0385	5825	0.0385	6.6037
Limits				±20ppm			
Result				Complies			

ANT2:

TX Frequency (5150-5250MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5180.0226	5180	0.0226	4.3658
		V max (V)	132	5180.0075	5180	0.0075	1.4496
		V min (V)	108	5180.0913	5180	0.0913	17.6185
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5180.0913	5180	0.0913	17.6266
		T (°C)	10	5180.0452	5180	0.0452	8.7233
		T (°C)	20	5180.0161	5180	0.0161	3.1099
		T (°C)	30	5180.0086	5180	0.0086	1.6601
		T (°C)	40	5180.0143	5180	0.0143	2.7697
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5200.0109	5200	0.0109	2.0926
		V max (V)	132	5200.0464	5200	0.0464	8.9203
		V min (V)	108	5200.0740	5200	0.0740	14.2277
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5200.0809	5200	0.0809	15.5493
		T (°C)	10	5200.0621	5200	0.0621	11.9488
		T (°C)	20	5200.0028	5200	0.0028	0.5458
		T (°C)	30	5200.0228	5200	0.0228	4.3839
		T (°C)	40	5200.0644	5200	0.0644	12.3889
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5240.0139	5240	0.0139	2.6616
		V max (V)	132	5240.0800	5240	0.0800	15.2707
		V min (V)	108	5240.0728	5240	0.0728	13.8947
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5240.0276	5240	0.0276	5.2706
		T (°C)	10	5240.0552	5240	0.0552	10.5387
		T (°C)	20	5240.0842	5240	0.0842	16.0699
		T (°C)	30	5240.0386	5240	0.0386	7.3718
		T (°C)	40	5240.0537	5240	0.0537	10.2476
Limits				±20ppm			
Result				Complies			

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5260.0240	5260	0.0240	4.5589
		V max (V)	132	5260.0897	5260	0.0897	17.0441
		V min (V)	108	5260.0232	5260	0.0232	4.4085
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5260.0481	5260	0.0481	9.1454
		T (°C)	10	5260.0020	5260	0.0020	0.3839
		T (°C)	20	5260.0441	5260	0.0441	8.3780
		T (°C)	30	5260.0380	5260	0.0380	7.2247
		T (°C)	40	5260.0521	5260	0.0521	9.9103
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5280.0493	5280	0.0493	9.3399
		V max (V)	132	5280.0753	5280	0.0753	14.2597
		V min (V)	108	5280.0814	5280	0.0814	15.4072
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5280.0102	5280	0.0102	1.9375
		T (°C)	10	5280.0913	5280	0.0913	17.2833
		T (°C)	20	5280.0113	5280	0.0113	2.1460
		T (°C)	30	5280.0053	5280	0.0053	1.0099
		T (°C)	40	5280.0353	5280	0.0353	6.6890
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5320.0074	5320	0.0074	1.3902
		V max (V)	132	5320.0692	5320	0.0692	13.0112
		V min (V)	108	5320.0525	5320	0.0525	9.8712
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5320.0871	5320	0.0871	16.3718
		T (°C)	-10	5320.0132	5320	0.0132	2.4854
		T (°C)	0	5320.0358	5320	0.0358	6.7376
		T (°C)	10	5320.0328	5320	0.0328	6.1636
		T (°C)	20	5320.0585	5320	0.0585	10.9882
		T (°C)	30	5320.0206	5320	0.0206	3.8631
		T (°C)	40	5320.0925	5320	0.0925	17.3939
		T (°C)	50	5320.0386	5320	0.0386	7.2577
		T (°C)	60	5320.0154	5320	0.0154	2.8998
		T (°C)	70	5320.0777	5320	0.0777	14.6014
Limits				±20ppm			
Result				Complies			

TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5500.0925	5500	0.0925	16.8215
		V max (V)	132	5500.0322	5500	0.0322	5.8476
		V min (V)	108	5500.0242	5500	0.0242	4.3943
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5500.0599	5500	0.0599	10.8865
		T (°C)	10	5500.0017	5500	0.0017	0.3150
		T (°C)	20	5500.0533	5500	0.0533	9.6903
		T (°C)	30	5500.0900	5500	0.0900	16.3721
		T (°C)	40	5500.0809	5500	0.0809	14.7088
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5580.0246	5580	0.0246	4.4116
		V max (V)	132	5580.0228	5580	0.0228	4.0831
		V min (V)	108	5580.0864	5580	0.0864	15.4920
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5580.0685	5580	0.0685	12.2683
		T (°C)	10	5580.0883	5580	0.0883	15.8200
		T (°C)	20	5580.0545	5580	0.0545	9.7727
		T (°C)	30	5580.0448	5580	0.0448	8.0337
		T (°C)	40	5580.0405	5580	0.0405	7.2586
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5700.0824	5700	0.0824	14.4484
		V max (V)	132	5700.0719	5700	0.0719	12.6060
		V min (V)	108	5700.0171	5700	0.0171	3.0079
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5700.0857	5700	0.0857	15.0267
		T (°C)	10	5700.0023	5700	0.0023	0.4098
		T (°C)	20	5700.0108	5700	0.0108	1.9034
		T (°C)	30	5700.0018	5700	0.0018	0.3155
		T (°C)	40	5700.0096	5700	0.0096	1.6814
Limits				±20ppm			
Result				Complies			

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5745.0188	5745	0.0188	3.2781
		V max (V)	132	5745.0849	5745	0.0849	14.7736
		V min (V)	108	5745.0543	5745	0.0543	9.4551
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5745.0123	5745	0.0123	2.1370
		T (°C)	10	5745.0905	5745	0.0905	15.7551
		T (°C)	20	5745.0166	5745	0.0166	2.8868
		T (°C)	30	5745.0087	5745	0.0087	1.5147
		T (°C)	40	5745.0834	5745	0.0834	14.5164
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5785.0876	5785	0.0876	15.1416
		V max (V)	132	5785.0442	5785	0.0442	7.6373
		V min (V)	108	5785.0760	5785	0.0760	13.1307
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5785.0609	5785	0.0609	10.5269
		T (°C)	10	5785.0464	5785	0.0464	8.0157
		T (°C)	20	5785.0897	5785	0.0897	15.5071
		T (°C)	30	5785.0810	5785	0.0810	14.0004
		T (°C)	40	5785.0642	5785	0.0642	11.1037
		T (°C)	50	5785.0904	5785	0.0904	15.6217
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5825.0765	5825	0.0765	13.1285
		V max (V)	132	5825.0761	5825	0.0761	13.0655
		V min (V)	108	5825.0920	5825	0.0920	15.7993
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5825.0666	5825	0.0666	11.4263
		T (°C)	10	5825.0024	5825	0.0024	0.4107
		T (°C)	20	5825.0127	5825	0.0127	2.1749
		T (°C)	30	5825.0760	5825	0.0760	13.0461
		T (°C)	40	5825.0496	5825	0.0496	8.5145
Limits				±20ppm			
Result				Complies			

13. OPERATION IN THE ABSENCE OF INFORMATION TO THE TRANSMIT

13.1 Requirement

15.407(c) requirement:
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 signal ling 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.

13.2 Test Results

Operation in the absence of information to the transmit:

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
signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

14. ANTENNA REQUIREMENT

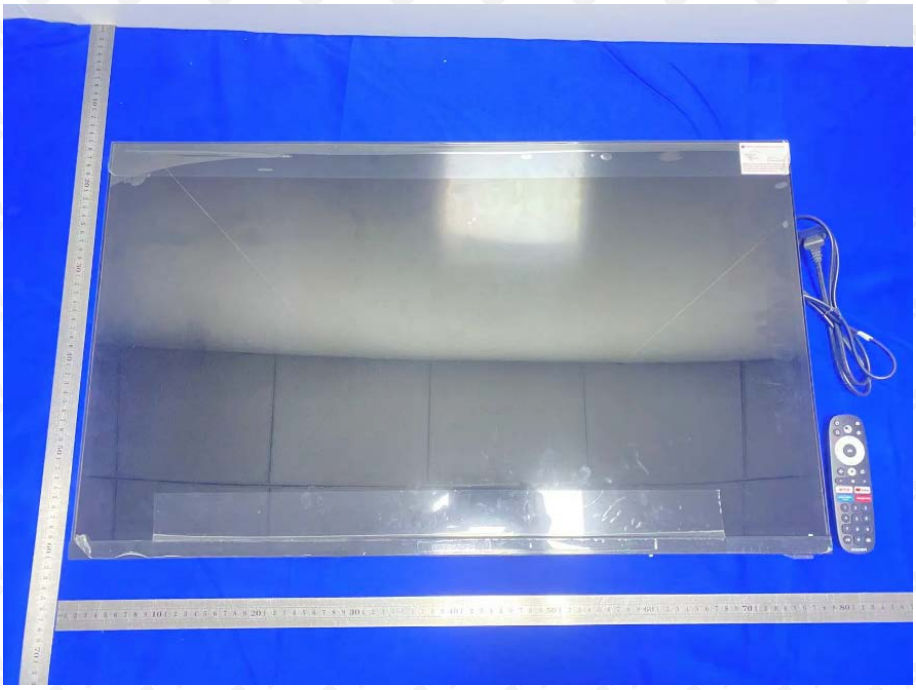
15.203 requirement:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
15.247(b) (4) requirement:
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

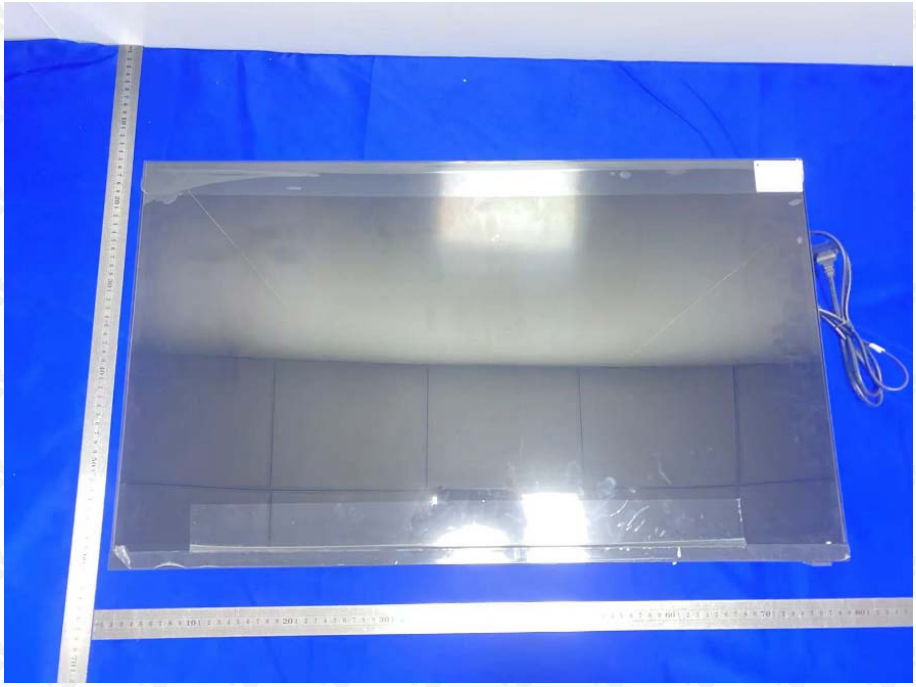
The antenna is PIFA antenna and no consideration of replacement. The best case gain of the antenna is 5.2G:2.88dBi, 5.3G:3.13dBi, 5.6G:3.36dBi, 5.8G:3.14dBi.

15. EUT PHOTOGRAPHS

EUT Photo 1



EUT Photo 2



16. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz

Above 1GHz

Conducted Emission

※※※※※ **END OF REPORT** ※※※※※