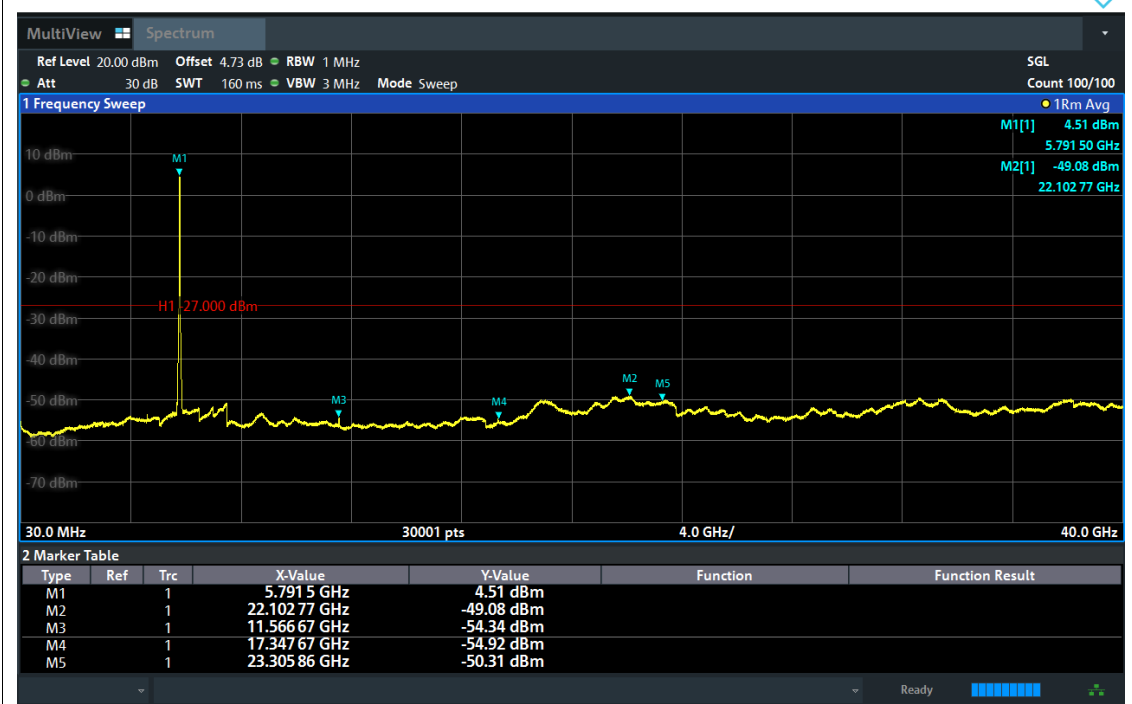
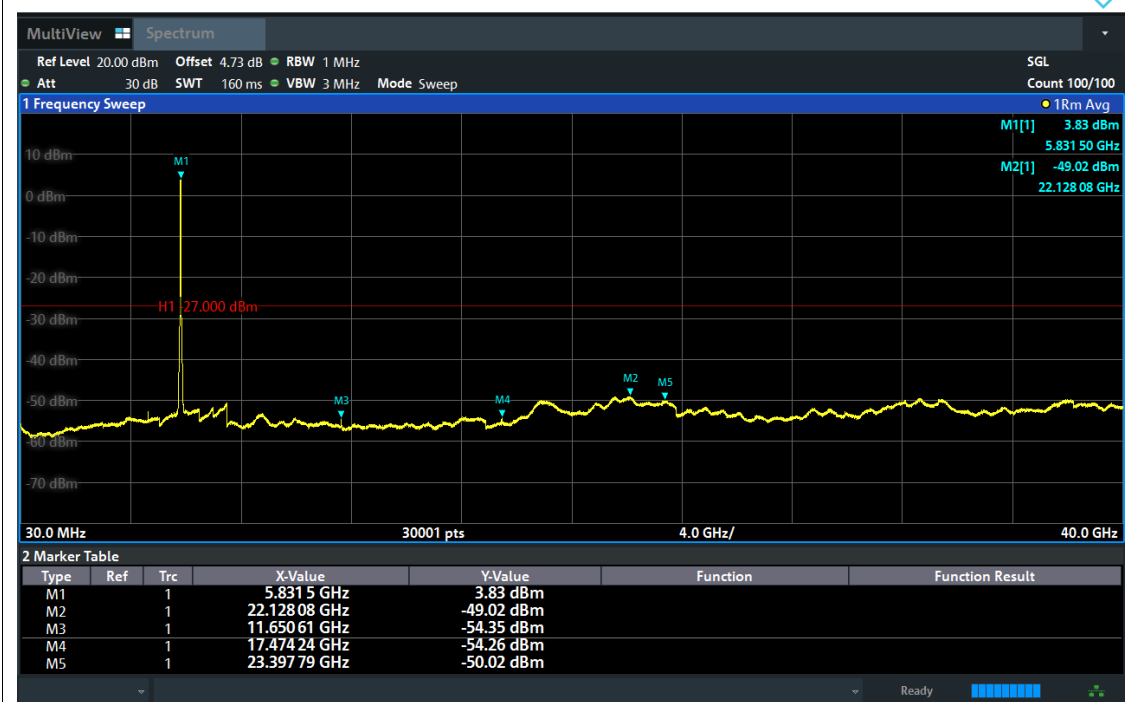


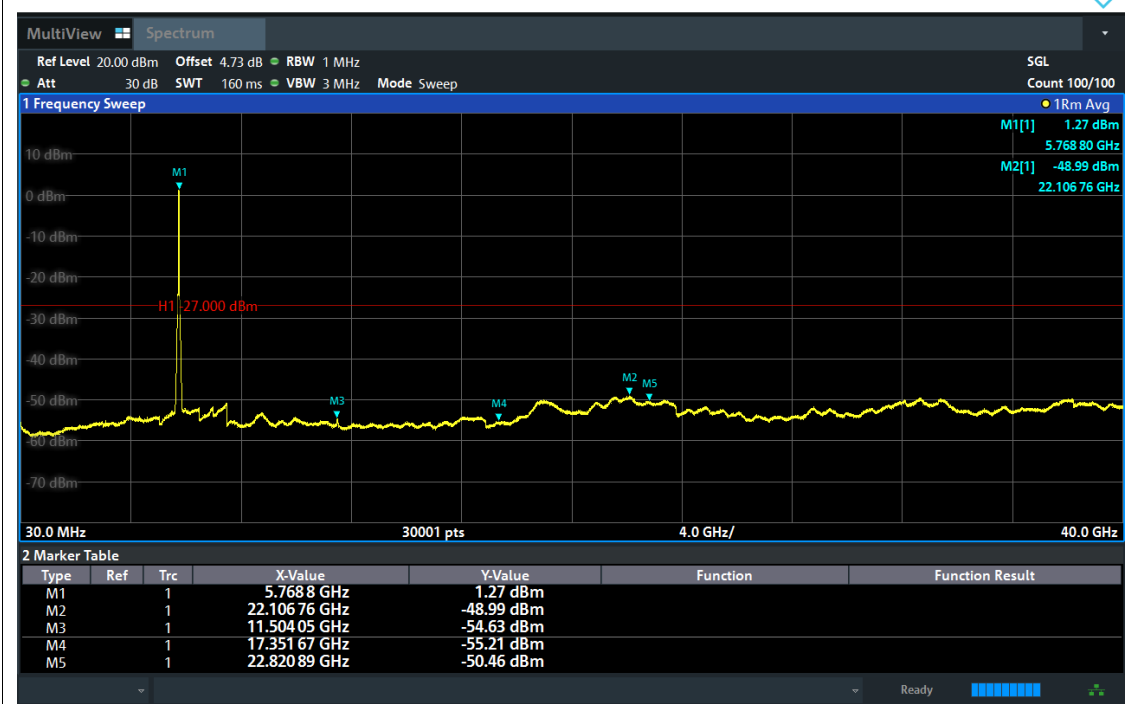
Tx. Spurious NVNT ax20 5785MHz Ant1 Emission



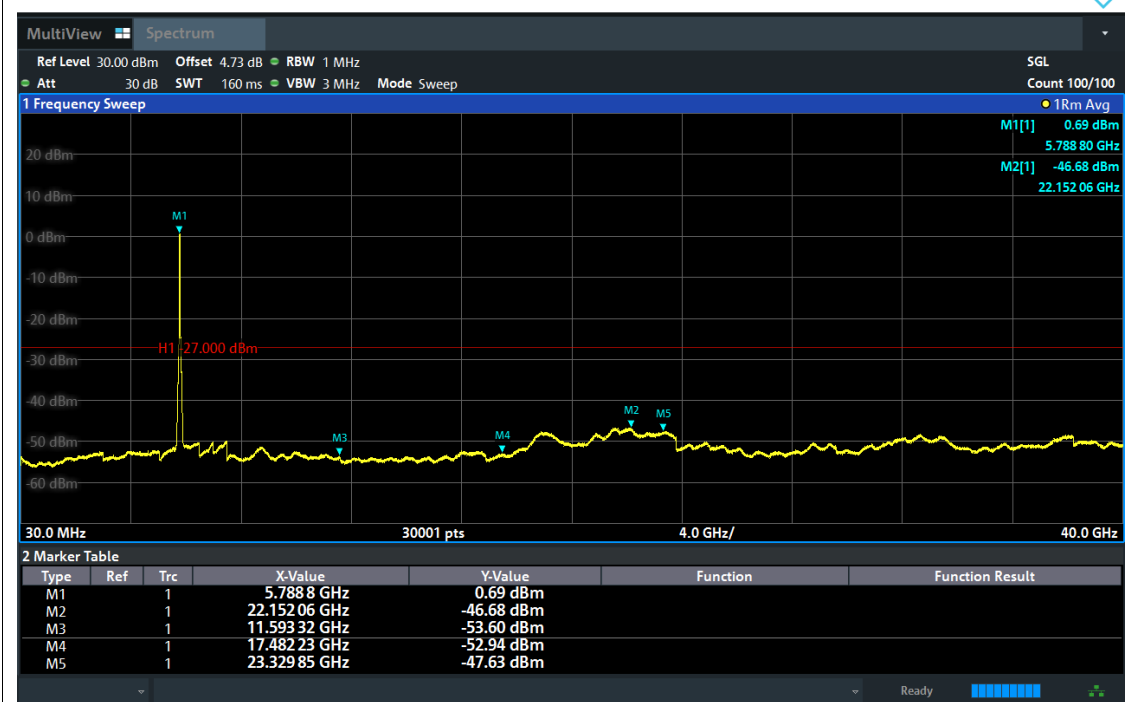
Tx. Spurious NVNT ax20 5825MHz Ant1 Emission



Tx. Spurious NVNT ax40 5755MHz Ant1 Emission



Tx. Spurious NVNT ax40 5795MHz Ant1 Emission



5.11 Frequency Stability

5.11.1 Limit

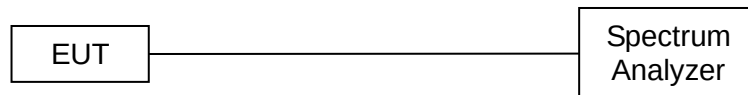
Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification).

5.11.2 Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. f_c is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f_c \times 10^6$ ppm and the limit is less than ± 20 ppm (IEEE 802.11n specification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$.

5.11.3 Test Setup



5.11.4 Test Results

EUT:	Video Baby Monitor	Model Name:	Baby 12Q
Test Mode:	TX Mode	Test Voltage:	DC 5V from adapter AC 120V/60Hz

Voltage vs. Frequency Stability

Test Conditions				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5180.013	5180	0.013	2.55
		V max (V)	5.5	5180.035	5180	0.035	6.69
		V min (V)	4.5	5180.046	5180	0.046	8.94
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5180.047	5180	0.047	9.01
		T (°C)	-10	5180.019	5180	0.019	3.75
		T (°C)	0	5180.031	5180	0.031	6.04
		T (°C)	10	5180.041	5180	0.041	7.85
		T (°C)	20	5180.014	5180	0.014	2.67
		T (°C)	30	5180.046	5180	0.046	8.82
		T (°C)	40	5180.007	5180	0.007	1.35
		T (°C)	50	5180.003	5180	0.003	0.57
		T (°C)	60	5180.048	5180	0.048	9.33
		T (°C)	70	5180.019	5180	0.019	3.62
Limits				± 20 ppm			
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)	5	5200.029	5200	0.029	5.62
		V max (V)	5.5	5200.002	5200	0.002	0.30
		V min (V)	4.5	5200.036	5200	0.036	6.95
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5200.037	5200	0.037	7.02
		T (°C)	-10	5200.021	5200	0.021	4.03
		T (°C)	0	5200.001	5200	0.001	0.18
		T (°C)	10	5200.036	5200	0.036	6.93
		T (°C)	20	5200.050	5200	0.050	9.53
		T (°C)	30	5200.025	5200	0.025	4.85
		T (°C)	40	5200.020	5200	0.020	3.76
		T (°C)	50	5200.042	5200	0.042	8.13
		T (°C)	60	5200.044	5200	0.044	8.48
		T (°C)	70	5200.002	5200	0.002	0.31
Limits				± 20 ppm			
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)	5	5240.032	5240	0.032	6.12
		V max (V)	5.5	5240.039	5240	0.039	7.43
		V min (V)	4.5	5240.032	5240	0.032	6.06
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5240.019	5240	0.019	3.61
		T (°C)	-10	5240.043	5240	0.043	8.26
		T (°C)	0	5240.035	5240	0.035	6.74
		T (°C)	10	5240.014	5240	0.014	2.73
		T (°C)	20	5240.022	5240	0.022	4.17
		T (°C)	30	5240.047	5240	0.047	9.00
		T (°C)	40	5240.015	5240	0.015	2.83
		T (°C)	50	5240.008	5240	0.008	1.62
		T (°C)	60	5240.012	5240	0.012	2.32
		T (°C)	70	5240.006	5240	0.006	1.13
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

Test Conditions				Reference Frequency: 5190MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5190.041	5190	0.041	7.90
		V max (V)	5.5	5190.027	5190	0.027	5.27
		V min (V)	4.5	5190.037	5190	0.037	7.17
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5190MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5190.043	5190	0.043	8.32
		T (°C)	-10	5190.004	5190	0.004	0.74
		T (°C)	0	5190.001	5190	0.001	0.27
		T (°C)	10	5190.012	5190	0.012	2.38
		T (°C)	20	5190.046	5190	0.046	8.86
		T (°C)	30	5190.046	5190	0.046	8.85
		T (°C)	40	5190.029	5190	0.029	5.50
		T (°C)	50	5190.013	5190	0.013	2.46
		T (°C)	60	5190.020	5190	0.020	3.86
		T (°C)	70	5190.010	5190	0.010	1.97
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

Test Conditions				Reference Frequency: 5230MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5230.003	5230	0.003	0.57
		V max (V)	5.5	5230.000	5230	0.000	0.00
		V min (V)	4.5	5230.035	5230	0.035	6.76
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5230MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5230.007	5230	0.007	1.25
		T (°C)	-10	5230.028	5230	0.028	5.37
		T (°C)	0	5230.003	5230	0.003	0.67
		T (°C)	10	5230.022	5230	0.022	4.22
		T (°C)	20	5230.049	5230	0.049	9.37
		T (°C)	30	5230.024	5230	0.024	4.67
		T (°C)	40	5230.045	5230	0.045	8.60
		T (°C)	50	5230.025	5230	0.025	4.74
		T (°C)	60	5230.026	5230	0.026	5.06
		T (°C)	70	5230.024	5230	0.024	4.51
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

Test Conditions				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5745.005	5745	0.005	0.84
		V max (V)	5.5	5745.033	5745	0.033	5.82
		V min (V)	4.5	5745.018	5745	0.018	3.15
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5745.027	5745	0.027	4.72
		T (°C)	-10	5745.005	5745	0.005	0.84
		T (°C)	0	5745.040	5745	0.040	6.95
		T (°C)	10	5745.003	5745	0.003	0.56
		T (°C)	20	5745.033	5745	0.033	5.77
		T (°C)	30	5745.041	5745	0.041	7.09
		T (°C)	40	5745.011	5745	0.011	1.95
		T (°C)	50	5745.005	5745	0.005	0.88
		T (°C)	60	5745.043	5745	0.043	7.42
		T (°C)	70	5745.008	5745	0.008	1.35
Limits				± 20 ppm			
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)	5	5785.043	5785	0.043	7.38
		V max (V)	5.5	5785.026	5785	0.026	4.57
		V min (V)	4.5	5785.038	5785	0.038	6.52
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5785.024	5785	0.024	4.07
		T (°C)	-10	5785.047	5785	0.047	8.08
		T (°C)	0	5785.047	5785	0.047	8.21
		T (°C)	10	5785.016	5785	0.016	2.85
		T (°C)	20	5785.032	5785	0.032	5.48
		T (°C)	30	5785.036	5785	0.036	6.28
		T (°C)	40	5785.032	5785	0.032	5.51
		T (°C)	50	5785.037	5785	0.037	6.45
		T (°C)	60	5785.028	5785	0.028	4.92
		T (°C)	70	5785.041	5785	0.041	7.12
Limits				± 20 ppm			
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)	5	5825.046	5825	0.046	7.88
		V max (V)	5.5	5825.018	5825	0.018	3.03
		V min (V)	4.5	5825.037	5825	0.037	6.43
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5825.026	5825	0.026	4.50
		T (°C)	-10	5825.015	5825	0.015	2.58
		T (°C)	0	5825.048	5825	0.048	8.31
		T (°C)	10	5825.015	5825	0.015	2.54
		T (°C)	20	5825.001	5825	0.001	0.19
		T (°C)	30	5825.012	5825	0.012	2.08
		T (°C)	40	5825.029	5825	0.029	4.99
		T (°C)	50	5825.037	5825	0.037	6.43
		T (°C)	60	5825.008	5825	0.008	1.37
		T (°C)	70	5825.047	5825	0.047	8.10
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

Test Conditions				Reference Frequency: 5755MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5755.009	5755	0.009	1.49
		V max (V)	5.5	5755.017	5755	0.017	2.96
		V min (V)	4.5	5755.035	5755	0.035	6.01
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5755MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5755.013	5755	0.013	2.32
		T (°C)	-10	5755.013	5755	0.013	2.21
		T (°C)	0	5755.020	5755	0.020	3.54
		T (°C)	10	5755.004	5755	0.004	0.70
		T (°C)	20	5755.049	5755	0.049	8.46
		T (°C)	30	5755.028	5755	0.028	4.95
		T (°C)	40	5755.024	5755	0.024	4.20
		T (°C)	50	5755.024	5755	0.024	4.18
		T (°C)	60	5755.041	5755	0.041	7.04
		T (°C)	70	5755.021	5755	0.021	3.57
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

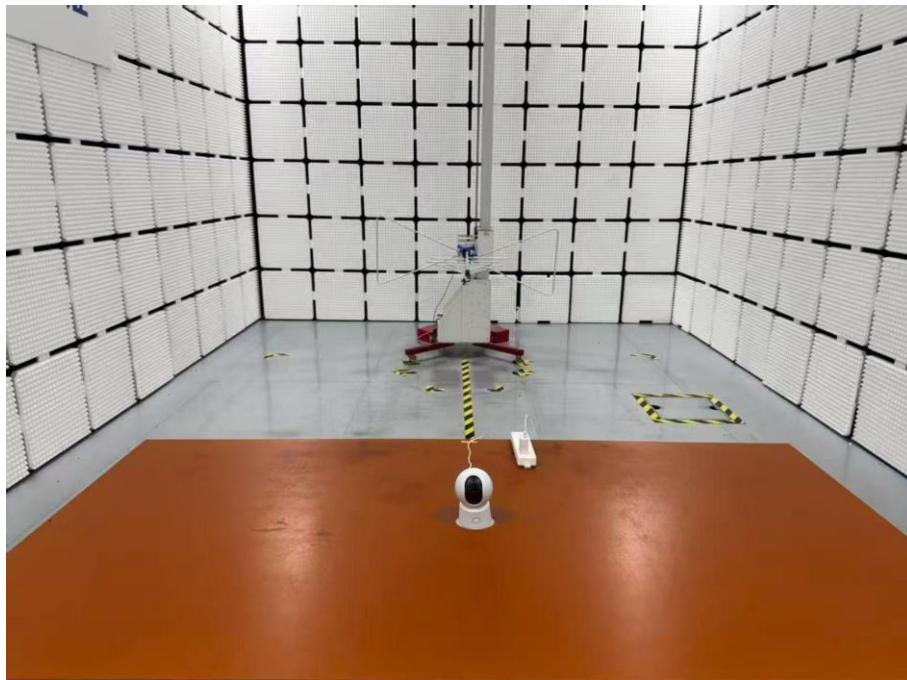
Test Conditions				Reference Frequency: 5795MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5795.043	5795	0.043	7.42
		V max (V)	5.5	5795.038	5795	0.038	6.63
		V min (V)	4.5	5795.026	5795	0.026	4.42
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5795MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5795.001	5795	0.001	0.23
		T (°C)	-10	5795.011	5795	0.011	1.96
		T (°C)	0	5795.048	5795	0.048	8.24
		T (°C)	10	5795.040	5795	0.040	6.92
		T (°C)	20	5795.049	5795	0.049	8.52
		T (°C)	30	5795.042	5795	0.042	7.30
		T (°C)	40	5795.030	5795	0.030	5.21
		T (°C)	50	5795.020	5795	0.020	3.40
		T (°C)	60	5795.022	5795	0.022	3.77
		T (°C)	70	5795.047	5795	0.047	8.17
Limits				± 20 ppm			
Result				Complies			

6 Photographs of the Test Setup

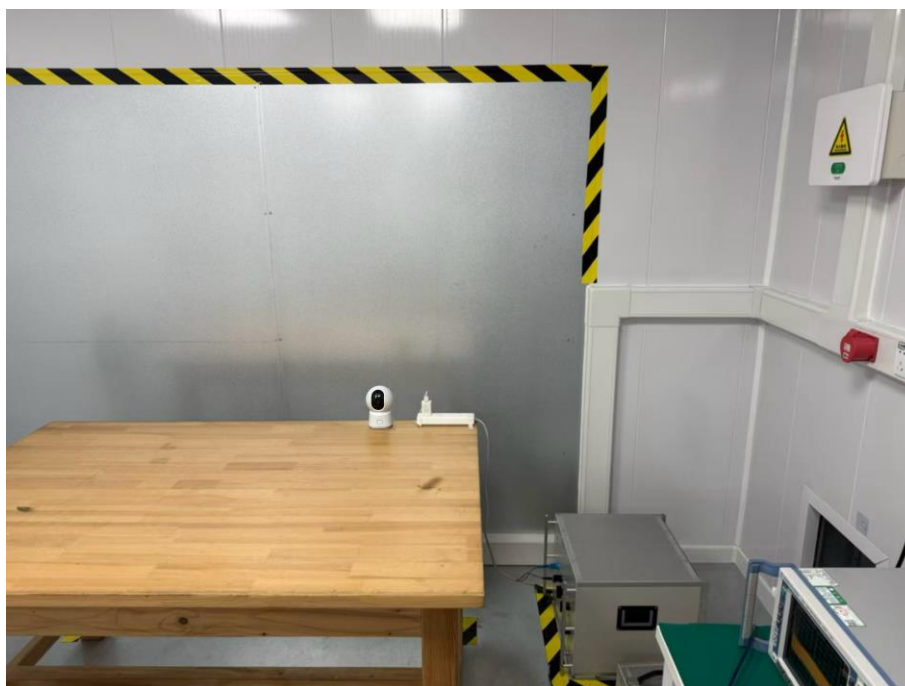
Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



Conducted emission



7 Photographs of the EUT

Please refer to report HB20260827002E-01 for product photos.

******* END OF REPORT *******