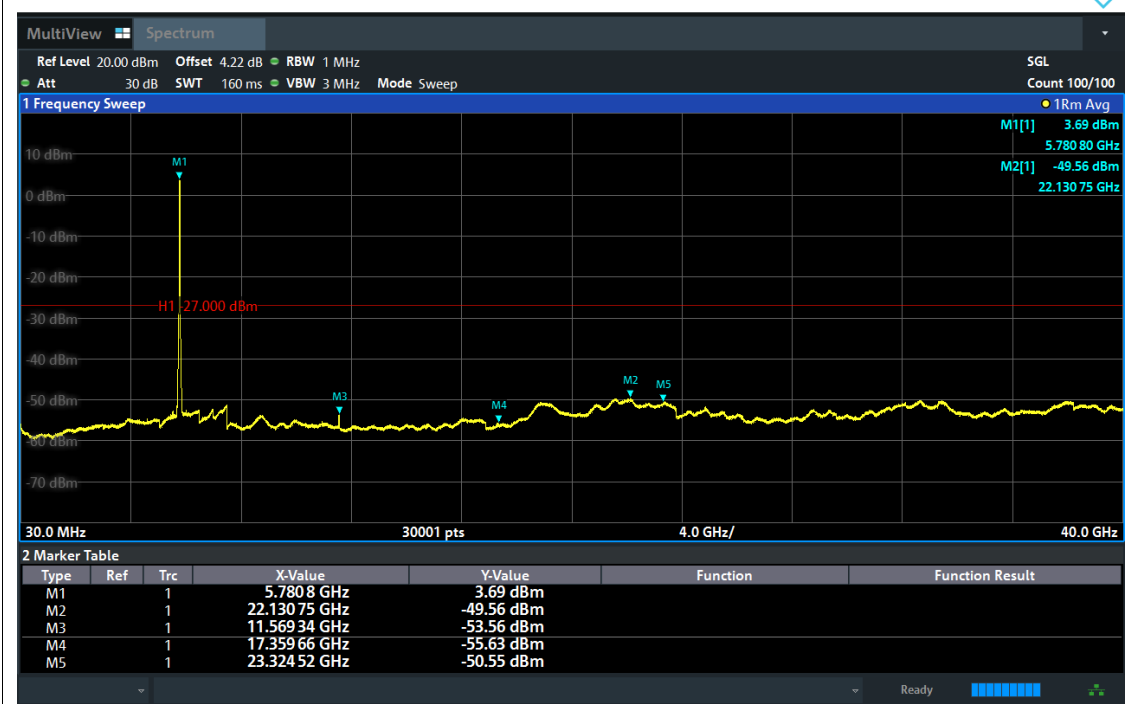
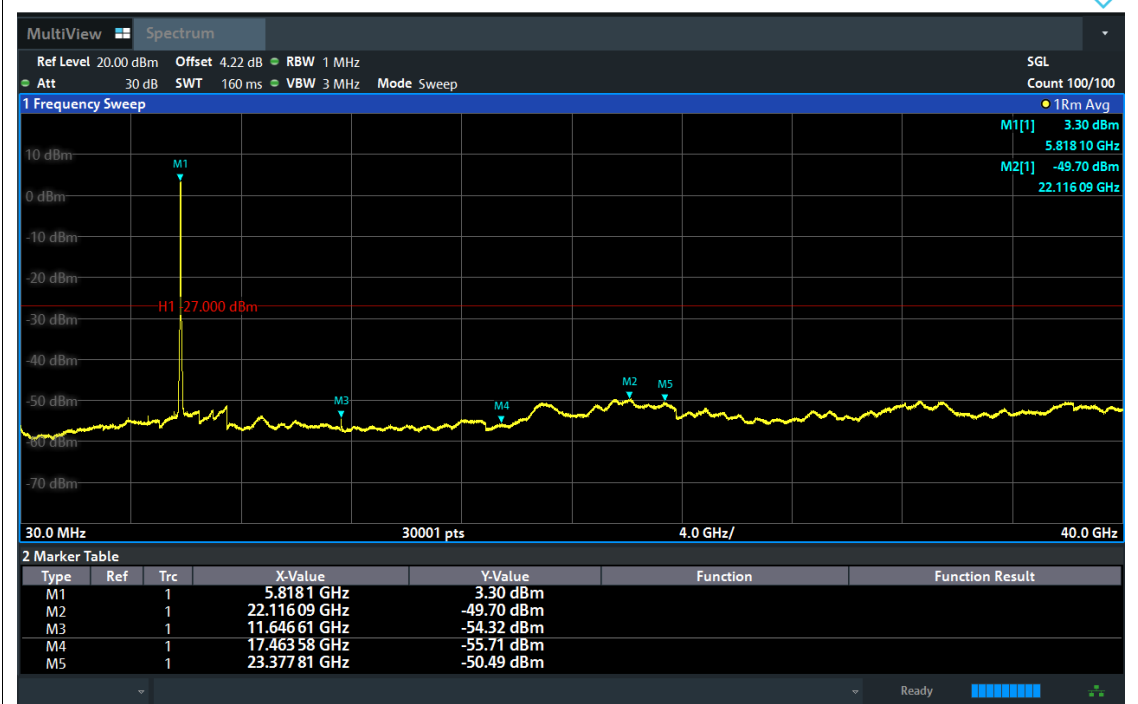


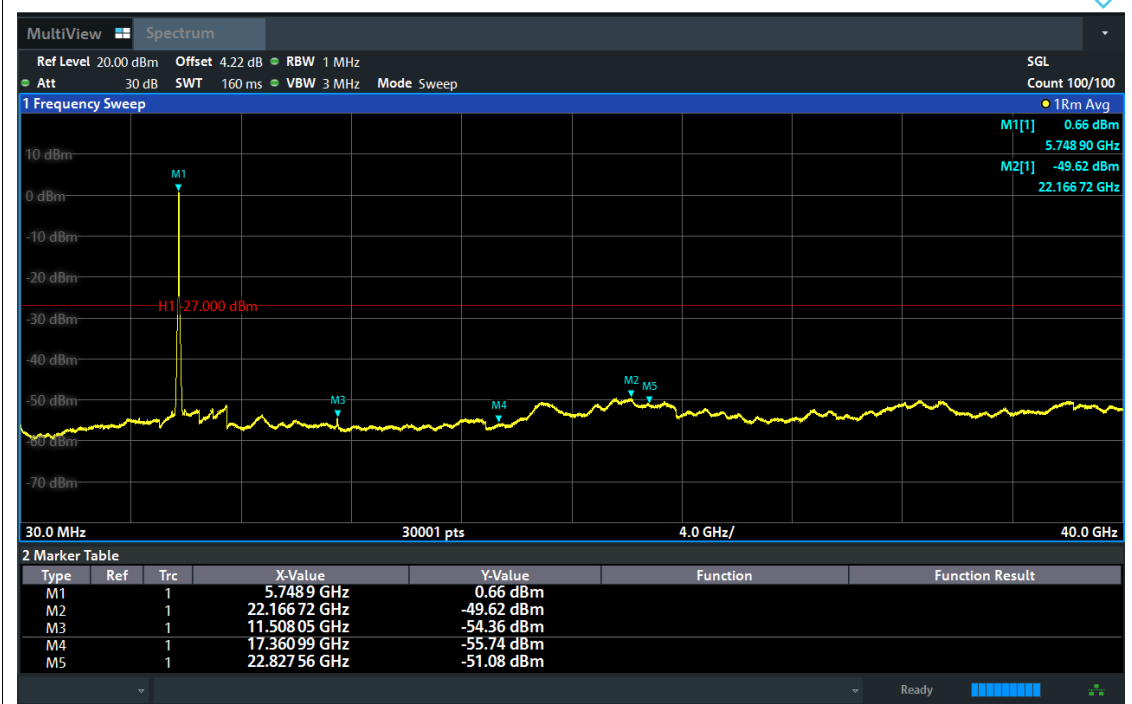
Tx. Spurious NVNT ax20 5785MHz Ant1 Emission



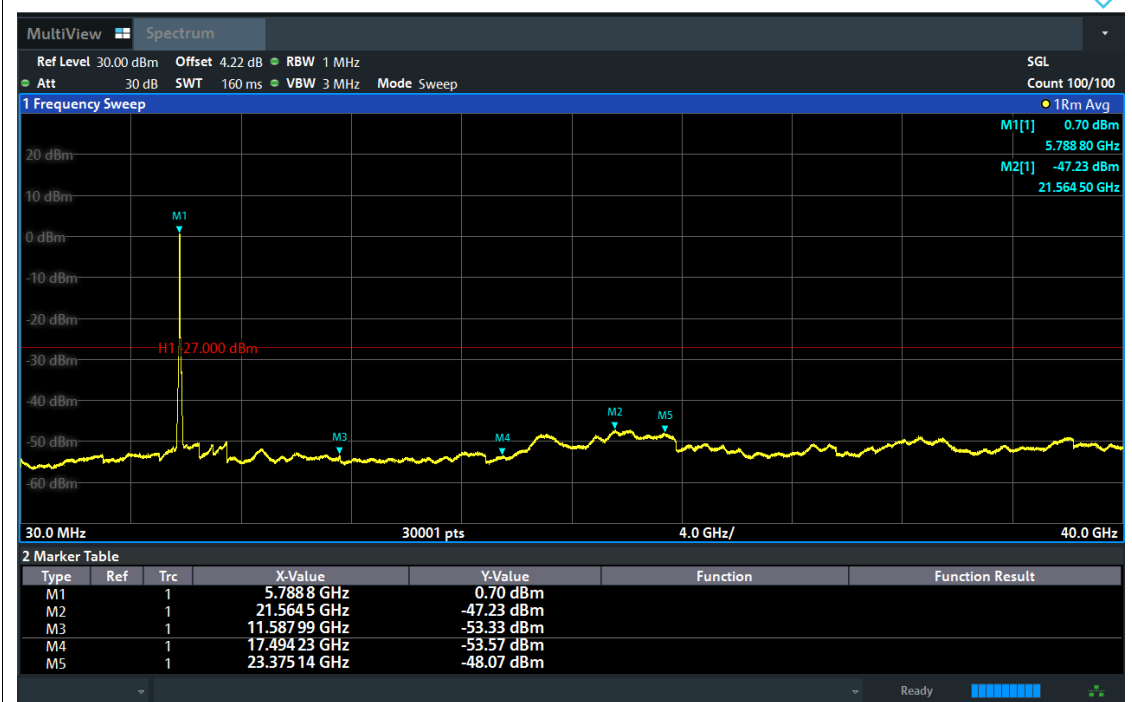
Tx. Spurious NVNT ax20 5825MHz Ant1 Emission



Tx. Spurious NVNT ax40 5755MHz Ant1 Emission



Tx. Spurious NVNT ax40 5795MHz Ant1 Emission



5.11 Frequency Stability

5.11.1 Limit

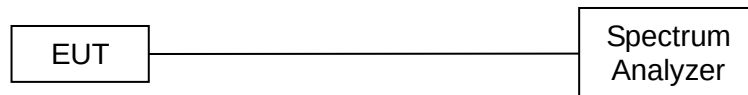
Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

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:	Baby Monitor	Model Name:	Baby 2Q
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	5180.022	5180	0.022	4.30
		V max (V)	5.5	5180.024	5180	0.024	4.58
		V min (V)	4.5	5180.034	5180	0.034	6.51
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	5180.026	5180	0.026	4.96
		T (°C)	-10	5180.047	5180	0.047	9.13
		T (°C)	0	5180.003	5180	0.003	0.64
		T (°C)	10	5180.033	5180	0.033	6.28
		T (°C)	20	5180.042	5180	0.042	8.20
		T (°C)	30	5180.016	5180	0.016	3.05
		T (°C)	40	5180.045	5180	0.045	8.78
		T (°C)	50	5180.016	5180	0.016	3.07
		T (°C)	60	5180.020	5180	0.020	3.78
		T (°C)	70	5180.041	5180	0.041	7.83
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	5200.032	5200	0.032	6.16
		V max (V)	5.5	5200.029	5200	0.029	5.50
		V min (V)	4.5	5200.010	5200	0.010	1.94
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	5200.021	5200	0.021	4.11
		T (°C)	-10	5200.044	5200	0.044	8.39
		T (°C)	0	5200.042	5200	0.042	8.01
		T (°C)	10	5200.045	5200	0.045	8.65
		T (°C)	20	5200.018	5200	0.018	3.54
		T (°C)	30	5200.027	5200	0.027	5.13
		T (°C)	40	5200.010	5200	0.010	1.87
		T (°C)	50	5200.007	5200	0.007	1.36
		T (°C)	60	5200.034	5200	0.034	6.63
		T (°C)	70	5200.010	5200	0.010	1.92
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	5240.035	5240	0.035	6.67
		V max (V)	5.5	5240.048	5240	0.048	9.08
		V min (V)	4.5	5240.044	5240	0.044	8.39
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	5240.017	5240	0.017	3.33
		T (°C)	-10	5240.032	5240	0.032	6.13
		T (°C)	0	5240.033	5240	0.033	6.23
		T (°C)	10	5240.022	5240	0.022	4.24
		T (°C)	20	5240.029	5240	0.029	5.57
		T (°C)	30	5240.032	5240	0.032	6.12
		T (°C)	40	5240.022	5240	0.022	4.28
		T (°C)	50	5240.041	5240	0.041	7.88
		T (°C)	60	5240.042	5240	0.042	7.97
		T (°C)	70	5240.031	5240	0.031	5.83
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	5190.026	5190	0.026	4.93
		V max (V)	5.5	5190.036	5190	0.036	6.87
		V min (V)	4.5	5190.017	5190	0.017	3.25
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	5190.025	5190	0.025	4.73
		T (°C)	-10	5190.009	5190	0.009	1.70
		T (°C)	0	5190.010	5190	0.010	1.95
		T (°C)	10	5190.004	5190	0.004	0.71
		T (°C)	20	5190.035	5190	0.035	6.80
		T (°C)	30	5190.020	5190	0.020	3.91
		T (°C)	40	5190.011	5190	0.011	2.15
		T (°C)	50	5190.035	5190	0.035	6.84
		T (°C)	60	5190.015	5190	0.015	2.91
		T (°C)	70	5190.040	5190	0.040	7.71
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	5230.042	5230	0.042	8.05
		V max (V)	5.5	5230.010	5230	0.010	1.92
		V min (V)	4.5	5230.019	5230	0.019	3.69
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	5230.027	5230	0.027	5.09
		T (°C)	-10	5230.005	5230	0.005	0.93
		T (°C)	0	5230.009	5230	0.009	1.67
		T (°C)	10	5230.012	5230	0.012	2.24
		T (°C)	20	5230.034	5230	0.034	6.53
		T (°C)	30	5230.016	5230	0.016	3.01
		T (°C)	40	5230.007	5230	0.007	1.28
		T (°C)	50	5230.035	5230	0.035	6.75
		T (°C)	60	5230.042	5230	0.042	8.05
		T (°C)	70	5230.003	5230	0.003	0.61
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	5745.010	5745	0.010	1.74
		V max (V)	5.5	5745.015	5745	0.015	2.69
		V min (V)	4.5	5745.038	5745	0.038	6.58
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	5745.001	5745	0.001	0.15
		T (°C)	-10	5745.028	5745	0.028	4.79
		T (°C)	0	5745.025	5745	0.025	4.38
		T (°C)	10	5745.027	5745	0.027	4.72
		T (°C)	20	5745.002	5745	0.002	0.32
		T (°C)	30	5745.033	5745	0.033	5.67
		T (°C)	40	5745.026	5745	0.026	4.50
		T (°C)	50	5745.025	5745	0.025	4.42
		T (°C)	60	5745.032	5745	0.032	5.54
		T (°C)	70	5745.012	5745	0.012	2.04
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	5785.040	5785	0.040	6.99
		V max (V)	5.5	5785.037	5785	0.037	6.39
		V min (V)	4.5	5785.004	5785	0.004	0.61
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	5785.041	5785	0.041	7.12
		T (°C)	-10	5785.015	5785	0.015	2.58
		T (°C)	0	5785.030	5785	0.030	5.18
		T (°C)	10	5785.001	5785	0.001	0.26
		T (°C)	20	5785.047	5785	0.047	8.12
		T (°C)	30	5785.042	5785	0.042	7.20
		T (°C)	40	5785.011	5785	0.011	1.85
		T (°C)	50	5785.004	5785	0.004	0.73
		T (°C)	60	5785.004	5785	0.004	0.76
		T (°C)	70	5785.046	5785	0.046	7.88
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	5825.039	5825	0.039	6.66
		V max (V)	5.5	5825.019	5825	0.019	3.22
		V min (V)	4.5	5825.018	5825	0.018	3.03
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	5825.015	5825	0.015	2.58
		T (°C)	-10	5825.038	5825	0.038	6.58
		T (°C)	0	5825.001	5825	0.001	0.19
		T (°C)	10	5825.014	5825	0.014	2.44
		T (°C)	20	5825.003	5825	0.003	0.51
		T (°C)	30	5825.049	5825	0.049	8.34
		T (°C)	40	5825.023	5825	0.023	3.96
		T (°C)	50	5825.006	5825	0.006	1.10
		T (°C)	60	5825.003	5825	0.003	0.47
		T (°C)	70	5825.032	5825	0.032	5.53
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	5755.004	5755	0.004	0.75
		V max (V)	5.5	5755.009	5755	0.009	1.49
		V min (V)	4.5	5755.006	5755	0.006	0.98
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	5755.015	5755	0.015	2.64
		T (°C)	-10	5755.010	5755	0.010	1.82
		T (°C)	0	5755.025	5755	0.025	4.31
		T (°C)	10	5755.025	5755	0.025	4.34
		T (°C)	20	5755.039	5755	0.039	6.82
		T (°C)	30	5755.049	5755	0.049	8.47
		T (°C)	40	5755.008	5755	0.008	1.41
		T (°C)	50	5755.018	5755	0.018	3.16
		T (°C)	60	5755.046	5755	0.046	8.07
		T (°C)	70	5755.030	5755	0.030	5.22
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

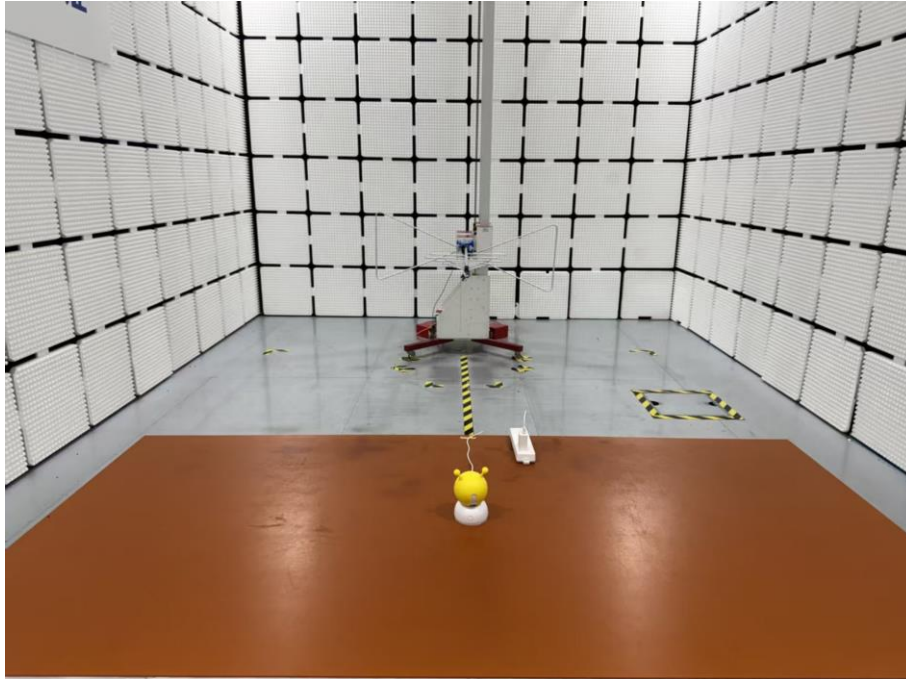
Test Conditions				Reference Frequency: 5795MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5	5795.042	5795	0.042	7.31
		V max (V)	5.5	5795.041	5795	0.041	7.00
		V min (V)	4.5	5795.005	5795	0.005	0.90
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

Test Conditions				Reference Frequency: 5795MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (V)	120	T (°C)	-20	5795.004	5795	0.004	0.68
		T (°C)	-10	5795.029	5795	0.029	5.04
		T (°C)	0	5795.038	5795	0.038	6.58
		T (°C)	10	5795.041	5795	0.041	6.99
		T (°C)	20	5795.036	5795	0.036	6.24
		T (°C)	30	5795.039	5795	0.039	6.77
		T (°C)	40	5795.011	5795	0.011	1.84
		T (°C)	50	5795.017	5795	0.017	2.90
		T (°C)	60	5795.018	5795	0.018	3.11
		T (°C)	70	5795.031	5795	0.031	5.32
Limits				± 20 ppm			
Result				Complies			

6 Photographs of the Test Setup

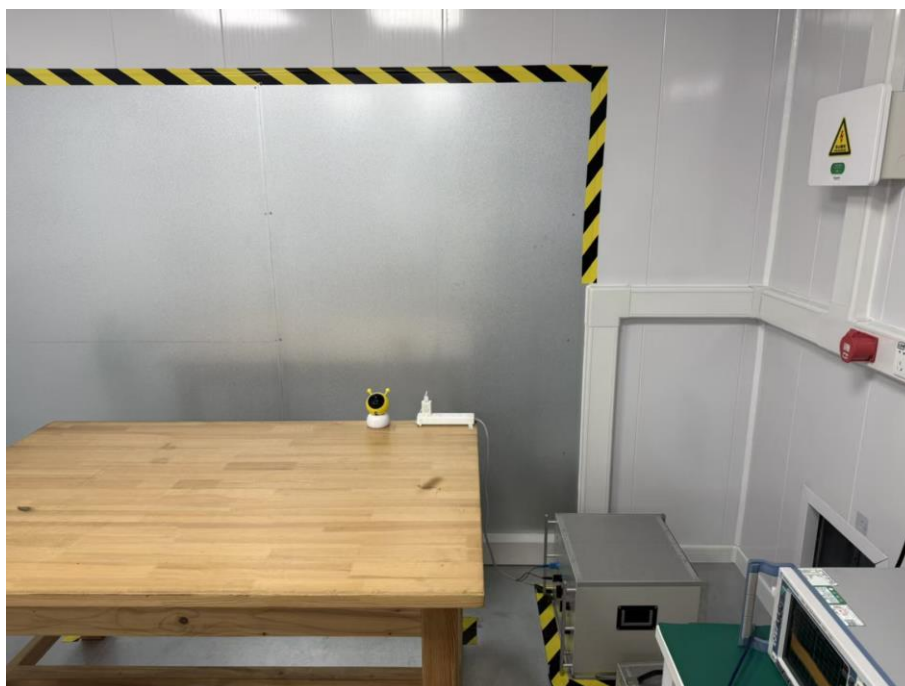
Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



Conducted emission



7 Photographs of the EUT

Please refer to report HB20260827006E-01 for product photos.

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