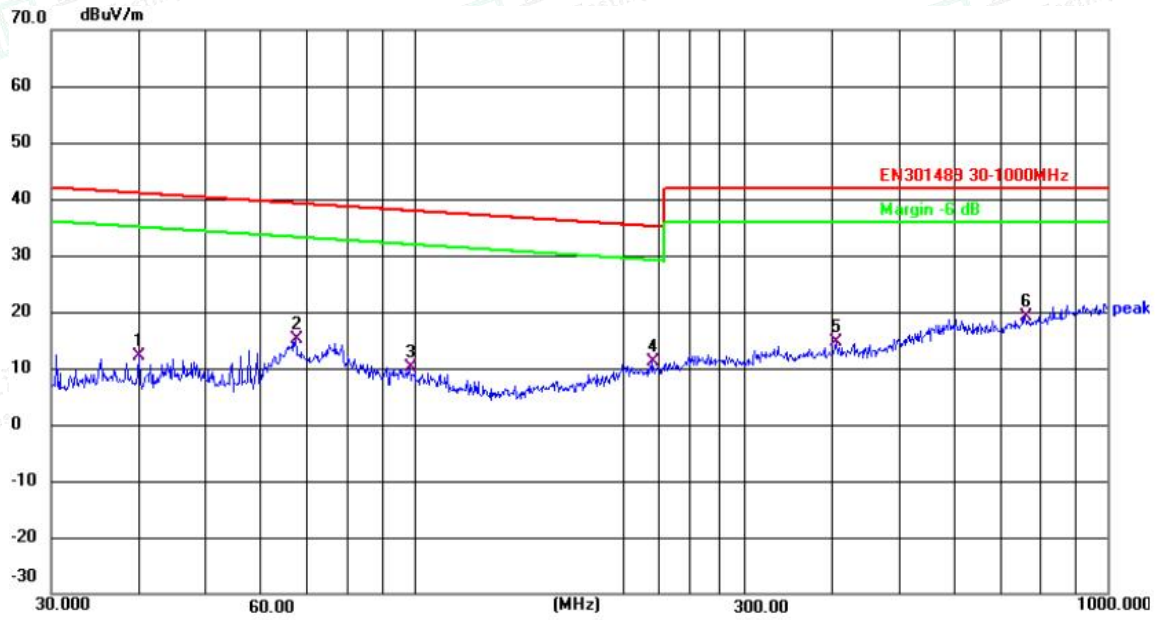
Appendix A for Emission and Immunity test results

Product Name: Zigbee LCD Smart Temperature Humidity Sensor

Test Model: SNZB-02D

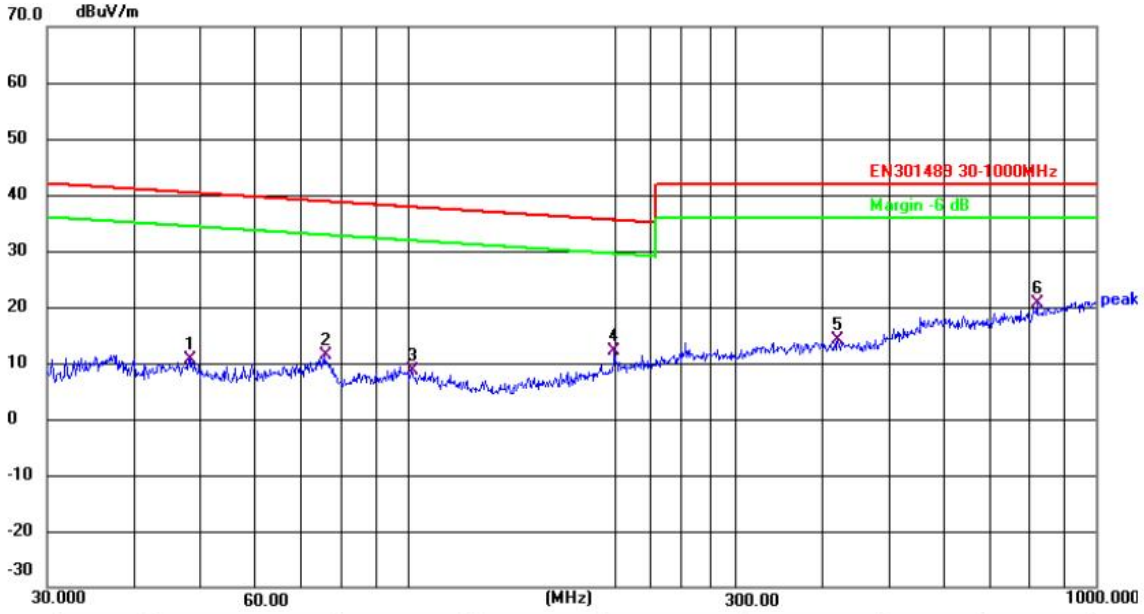
A.1 Radiated Disturbance

Test Model	SNZB-02D	**Test Mode**	TM1
Environmental Conditions	23.9℃, 52.1% RH	**Test Engineer**	Nick Peng
Pol.	Horizontal	**Detector Function**	Quasi-peak
Distance	3m	**Test Voltage**	AC 230V/50Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	40.1347	29.57	-17.52	12.05	41.00	-28.95	QP
2	67.4382	34.43	-19.32	15.11	39.22	-24.11	QP
3	98.4866	28.30	-18.29	10.01	37.91	-27.90	QP
4	220.6171	28.00	-16.86	11.14	35.14	-24.00	QP
5	406.0880	28.91	-14.21	14.70	42.00	-27.30	QP
6	760.7035	29.38	-10.14	19.24	42.00	-22.76	QP

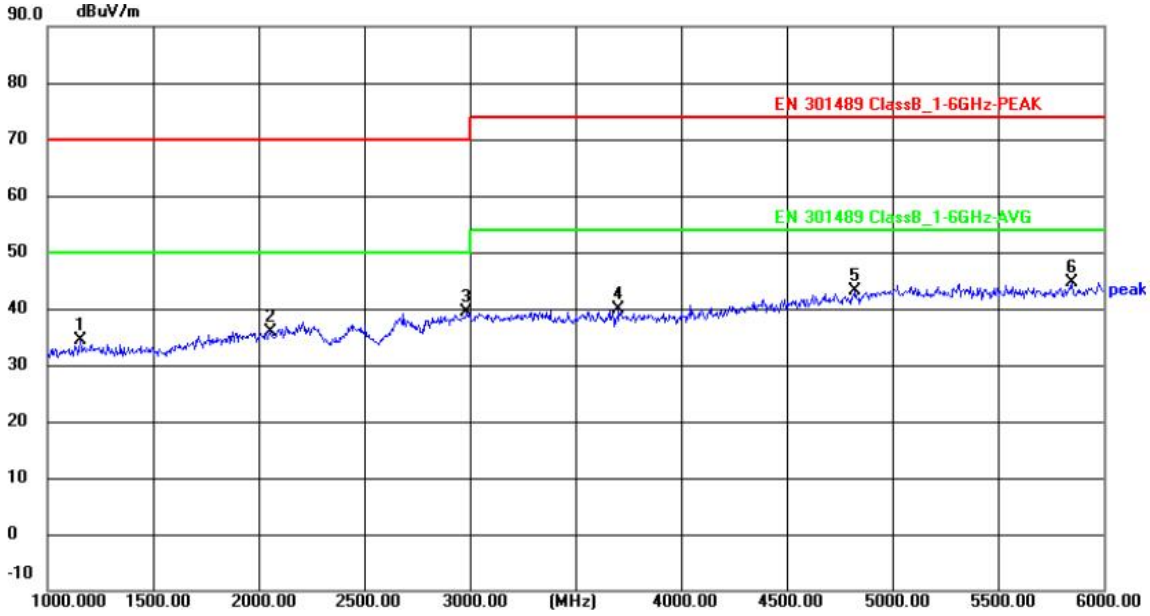
Test Model	SNZB-02D	Test Mode	TM1
Environmental Conditions	23.9℃, 52.1% RH	Test Engineer	Nick Peng
Pol.	Vertical	Detector Function	Quasi-peak
Distance	3m	Test Voltage	AC 230V/50Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	48.5015	27.69	-16.99	10.70	40.35	-29.65	QP
2	75.9773	31.04	-19.72	11.32	38.81	-27.49	QP
3	101.2885	26.99	-18.30	8.69	37.82	-29.13	QP
4	199.9855	29.51	-17.39	12.12	35.48	-23.36	QP
5	422.0577	28.63	-14.43	14.20	42.00	-27.80	QP
6	821.7103	29.85	-9.18	20.67	42.00	-21.33	QP

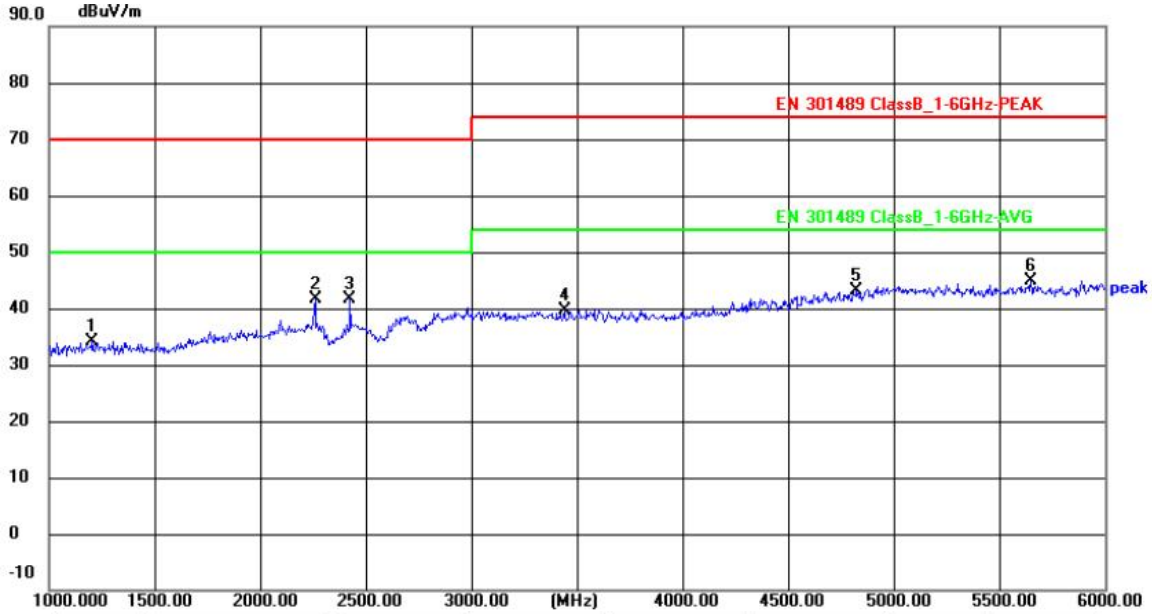
Note: Margin= Reading level + Correct factor – Limit
Correct Factor=Antenna Factor+Cable Factor- Pre-amplifier Factor

Test Model	SNZB-02D	Test Mode	TM1 (Above 1GHz)
Environmental Conditions	23.9℃, 52.1% RH	Test Engineer	Nick Peng
Pol.	Horizontal	Detector Function	Peak+Average
Distance	3m	Test Voltage	AC 230V/50Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1155.000	49.60	-15.26	34.34	70.00	-35.66	peak
2	2055.000	48.87	-12.91	35.96	70.00	-34.04	peak
3	2985.000	49.01	-9.64	39.37	70.00	-30.63	peak
4	3705.000	48.87	-9.06	39.81	74.00	-34.19	peak
5	4825.000	48.09	-4.98	43.11	74.00	-30.89	peak
6	5850.000	48.26	-3.54	44.72	74.00	-29.28	peak

Test Model	SNZB-02D	Test Mode	TM1 (Above 1GHz)
Environmental Conditions	23.9℃, 52.1% RH	Test Engineer	Nick Peng
Pol.	Vertical	Detector Function	Peak+Average
Distance	3m	Test Voltage	AC 230V/50Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1205.000	49.45	-15.20	34.25	70.00	-35.75	peak
2	2260.000	53.94	-12.19	41.75	70.00	-28.25	peak
3	2425.000	53.34	-11.61	41.73	70.00	-28.27	peak
4	3440.000	48.96	-9.43	39.53	74.00	-34.47	peak
5	4825.000	48.09	-4.98	43.11	74.00	-30.89	peak
6	5650.000	48.24	-3.35	44.89	74.00	-29.11	peak

Note:
1. Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
2. Measurements above show only up to 6 maximum emissions noted.
3. Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. Factor = Antenna Factor + Cable Loss + Amplifier Factor
   Emission Level = Reading level + Factor
   Margin = Emission Level - Limit

A.2 RF Electromagnetic Field (80 MHz - 6000 MHz)

Test Model	SNZB-02D	**Test Engineer**	Nick Peng
Environmental Conditions	23.5℃, 52.4% RH	**Test Voltage**	AC 230V/50Hz

TM1 Test Result:

EUT Working Mode	Antenna Polarity	Frequency (MHz)	Fielded Strength (V/m)	Observation	Position	Conclusion
Operating Mode	Vertical	80-6000	3	CT, CR	Front, Right, Left, Back	Pass
	Horizontal	80-6000	3	CT, CR	Front, Right, Left, Back	Pass

TM2 Test Result:

EUT Working Mode	Antenna Polarity	Frequency (MHz)	Fielded Strength (V/m)	Observation	Position	Conclusion
Idle	Vertical	80-6000	3	See Note	Front, Right, Left, Back	Pass
	Horizontal	80-6000	3	See Note	Front, Right, Left, Back	Pass

A.3 Electrostatic Discharge

Electrostatic Discharge Test Results			
Standard	☐ IEC 61000-4-2 ☑ EN 61000-4-2		
Applicant	Shenzhen Sonoff Technologies Co.,Ltd.		
EUT	Zigbee LCD Smart Temperature Humidity Sensor	**Temperature**	24.1℃
M/N	SNZB-02D	**Humidity**	53.5%
Criterion	B	**Pressure**	1021mbar
Test Mode	TM1-TM2	**Test Engineer**	Nick Peng

TEST RESULT OF TM1

Test Voltage	Coupling	Observation	Result (Pass/Fail)
±2KV, ±4kV	Contact Discharge	TT, TR	Pass
±2KV, ±4kV, ±8kV	Air Discharge	TT, TR	Pass
±2KV, ±4kV	Indirect Discharge HCP	TT, TR	Pass
±2KV, ±4kV	Indirect Discharge VCP	TT, TR	Pass

TEST RESULT OF TM2

Test Voltage	Coupling	Result (Pass/Fail)
±2KV, ±4kV	Contact Discharge	Pass
±2KV, ±4kV, ±8kV	Air Discharge	Pass
±2KV, ±4kV	Indirect Discharge HCP	Pass
±2KV, ±4kV	Indirect Discharge VCP	Pass

Note: The EUT performance complied with performance criteria for TT&TR Function and there is no any degradation of performance and function.