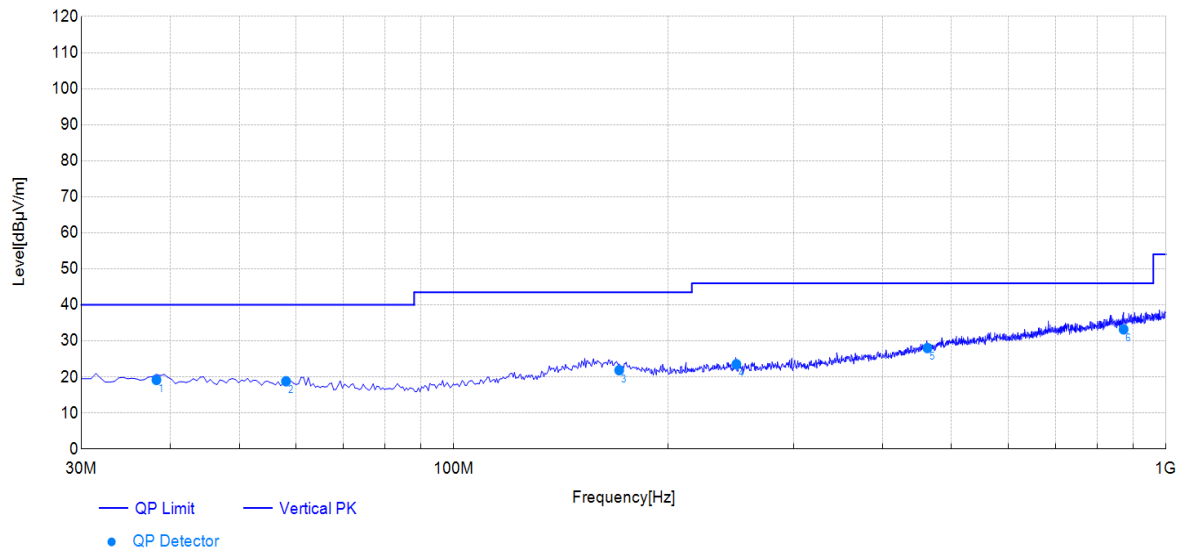


EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 11	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



Final Data List										
NO.	Frequency [MHz]	Factor [dB/m]	QP Reading [dBμV]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	38.25	13.05	6.13	19.18	40.00	20.82	100	179	Vertical	PASS
2	58.14	12.85	5.97	18.82	40.00	21.18	100	209	Vertical	PASS
3	170.72	17.49	4.38	21.87	43.50	21.63	100	98	Vertical	PASS
4	249.33	16.08	7.46	23.54	46.00	22.46	100	340	Vertical	PASS
5	462.35	20.94	7.09	28.03	46.00	17.97	100	173	Vertical	PASS
6	871.90	27.83	5.39	33.22	46.00	12.78	100	65	Vertical	PASS

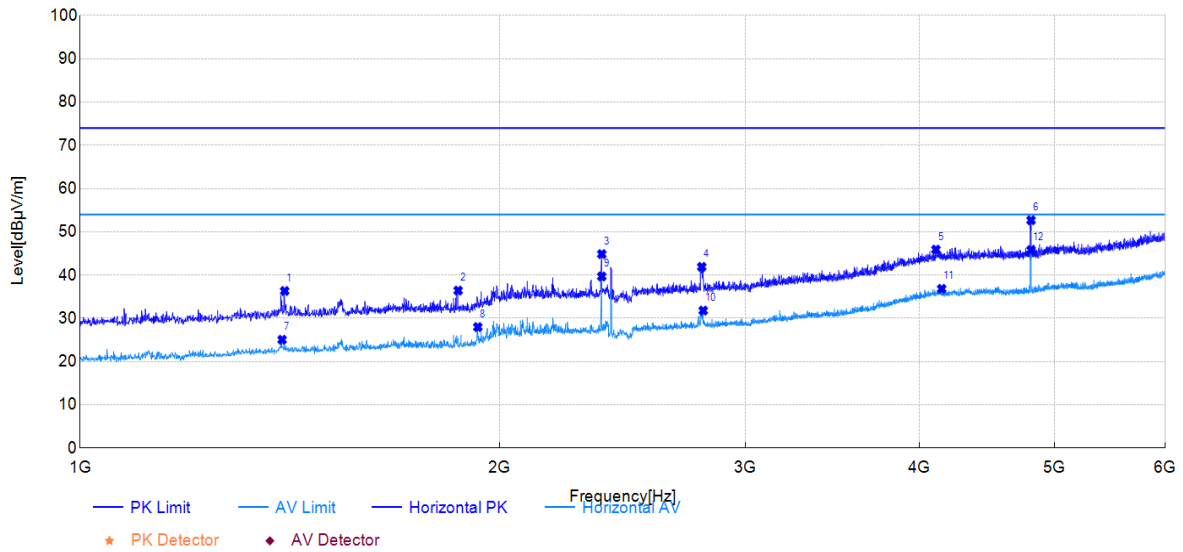
Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

The worst case of Radiated Emission above 1GHz:

1GHz – 6GHz Test Data

EUT:	Multi-State Sensor P100	Polarity:	Horizontal
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 11	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



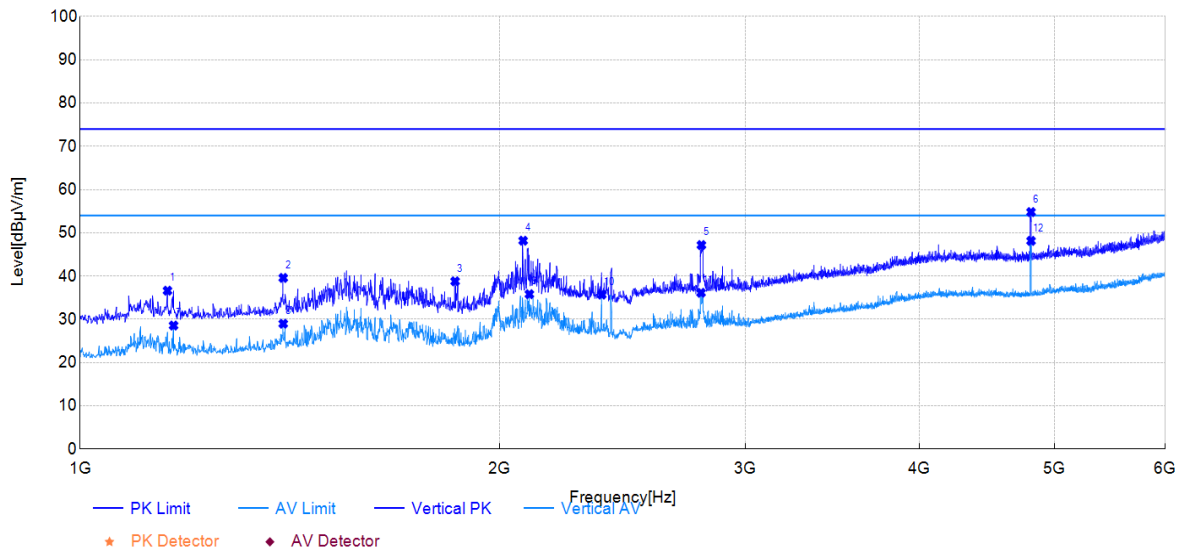
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	1401.67	58.43	36.31	-22.12	74.00	37.69	150	38	PK	Horizontal	PASS
2	1866.67	55.44	36.42	-19.02	74.00	37.58	150	120	PK	Horizontal	PASS
3	2366.67	61.50	44.85	-16.65	74.00	29.15	150	180	PK	Horizontal	PASS
4	2791.67	57.13	41.89	-15.24	74.00	32.11	150	123	PK	Horizontal	PASS
5	4110.00	54.01	45.89	-8.12	74.00	28.11	150	299	PK	Horizontal	PASS
6	4809.17	59.58	52.68	-6.90	74.00	21.32	150	139	PK	Horizontal	PASS
7	1395.83	47.20	25.04	-22.16	54.00	28.96	150	100	AV	Horizontal	PASS
8	1928.33	46.58	27.98	-18.60	54.00	26.02	150	116	AV	Horizontal	PASS
9	2366.67	56.33	39.68	-16.65	54.00	14.32	150	180	AV	Horizontal	PASS
10	2798.33	47.02	31.79	-15.23	54.00	22.21	150	130	AV	Horizontal	PASS
11	4149.17	44.91	36.81	-8.10	54.00	17.19	150	1	AV	Horizontal	PASS
12	4809.17	52.68	45.78	-6.90	54.00	8.22	150	139	AV	Horizontal	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 11	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



Suspected Data List

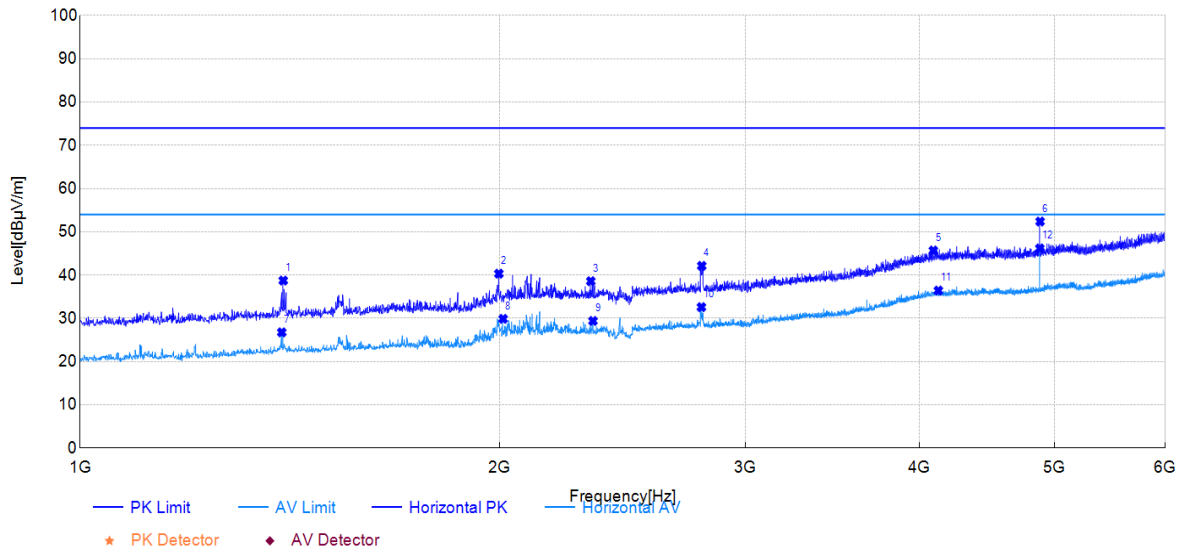
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	1155.00	59.42	36.62	-22.80	74.00	37.38	150	94	PK	Vertical	PASS
2	1398.33	60.89	39.57	-21.32	74.00	34.43	150	106	PK	Vertical	PASS
3	1857.50	57.69	38.79	-18.90	74.00	35.21	150	109	PK	Vertical	PASS
4	2078.33	65.89	48.18	-17.71	74.00	25.82	150	94	PK	Vertical	PASS
5	2790.00	62.25	47.17	-15.08	74.00	26.83	150	106	PK	Vertical	PASS
6	4809.17	62.15	54.80	-7.35	74.00	19.20	150	150	PK	Vertical	PASS
7	1166.67	51.31	28.56	-22.75	54.00	25.44	150	90	AV	Vertical	PASS
8	1398.33	50.30	28.98	-21.32	54.00	25.02	150	106	AV	Vertical	PASS
9	2100.00	53.42	35.81	-17.61	54.00	18.19	150	79	AV	Vertical	PASS
10	2366.67	52.31	35.71	-16.60	54.00	18.29	150	147	AV	Vertical	PASS
11	2788.33	51.22	36.13	-15.09	54.00	17.87	150	106	AV	Vertical	PASS
12	4809.17	55.49	48.14	-7.35	54.00	5.86	150	150	AV	Vertical	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

1GHz – 6GHz Test Data

EUT:	Multi-State Sensor P100	Polarity:	Horizontal
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 18	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



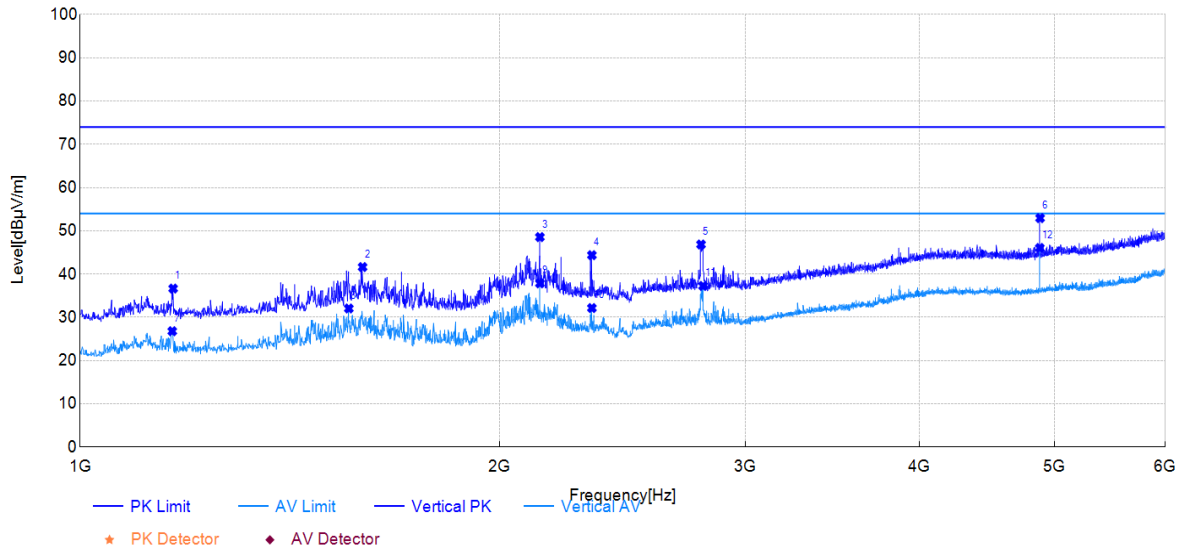
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	1398.33	60.87	38.73	-22.14	74.00	35.27	150	94	PK	Horizontal	PASS
2	1996.67	58.31	40.32	-17.99	74.00	33.68	150	64	PK	Horizontal	PASS
3	2324.17	55.42	38.58	-16.84	74.00	35.42	150	41	PK	Horizontal	PASS
4	2791.67	57.37	42.13	-15.24	74.00	31.87	150	126	PK	Horizontal	PASS
5	4092.50	53.84	45.68	-8.16	74.00	28.32	150	164	PK	Horizontal	PASS
6	4881.67	59.06	52.38	-6.68	74.00	21.62	150	141	PK	Horizontal	PASS
7	1395.00	48.92	26.75	-22.17	54.00	27.25	150	133	AV	Horizontal	PASS
8	2010.83	47.78	29.87	-17.91	54.00	24.13	150	53	AV	Horizontal	PASS
9	2332.50	46.18	29.39	-16.79	54.00	24.61	150	38	AV	Horizontal	PASS
10	2790.00	47.82	32.58	-15.24	54.00	21.42	150	126	AV	Horizontal	PASS
11	4126.67	44.52	36.41	-8.11	54.00	17.59	150	167	AV	Horizontal	PASS
12	4879.17	52.85	46.16	-6.69	54.00	7.84	150	136	AV	Horizontal	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 18	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



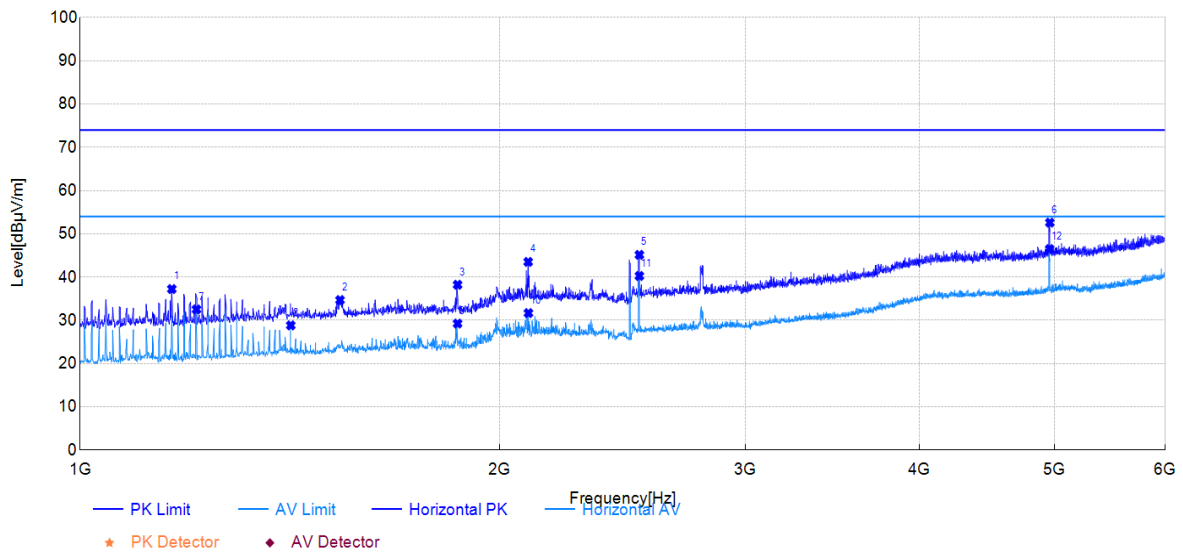
Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	1165.83	59.40	36.65	-22.75	74.00	37.35	150	86	PK	Vertical	PASS
2	1594.17	62.00	41.62	-20.38	74.00	32.38	150	109	PK	Vertical	PASS
3	2136.67	66.02	48.55	-17.47	74.00	25.45	150	102	PK	Vertical	PASS
4	2328.33	61.16	44.37	-16.79	74.00	29.63	150	18	PK	Vertical	PASS
5	2788.33	61.93	46.84	-15.09	74.00	27.16	150	106	PK	Vertical	PASS
6	4881.67	60.13	52.94	-7.19	74.00	21.06	150	83	PK	Vertical	PASS
7	1164.17	49.54	26.79	-22.75	54.00	27.21	150	90	AV	Vertical	PASS
8	1558.33	52.60	32.04	-20.56	54.00	21.96	150	98	AV	Vertical	PASS
9	2136.67	55.32	37.85	-17.47	54.00	16.15	150	102	AV	Vertical	PASS
10	2328.33	48.93	32.14	-16.79	54.00	21.86	150	18	AV	Vertical	PASS
11	2797.50	52.33	37.25	-15.08	54.00	16.75	150	106	AV	Vertical	PASS
12	4879.17	53.23	46.04	-7.19	54.00	7.96	150	83	AV	Vertical	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

1GHz – 6GHz Test Data

EUT:	Multi-State Sensor P100	Polarity:	Horizontal
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 26	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



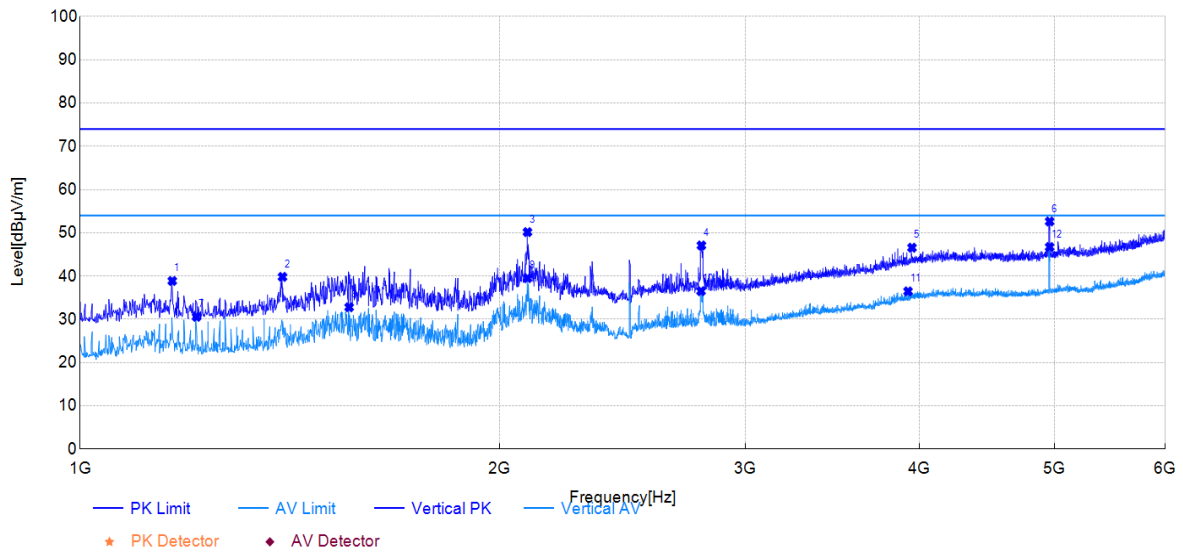
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	1163.33	60.85	37.23	-23.62	74.00	36.77	150	139	PK	Horizontal	PASS
2	1535.83	56.09	34.68	-21.41	74.00	39.32	150	0	PK	Horizontal	PASS
3	1865.00	57.24	38.22	-19.02	74.00	35.78	150	287	PK	Horizontal	PASS
4	2095.83	61.08	43.51	-17.57	74.00	30.49	150	132	PK	Horizontal	PASS
5	2518.33	61.17	45.14	-16.03	74.00	28.86	150	176	PK	Horizontal	PASS
6	4960.83	58.91	52.59	-6.32	74.00	21.41	150	0	PK	Horizontal	PASS
7	1211.67	55.92	32.52	-23.40	54.00	21.48	150	135	AV	Horizontal	PASS
8	1415.83	50.88	28.83	-22.05	54.00	25.17	150	124	AV	Horizontal	PASS
9	1865.00	48.27	29.25	-19.02	54.00	24.75	150	287	AV	Horizontal	PASS
10	2096.67	49.23	31.67	-17.56	54.00	22.33	150	132	AV	Horizontal	PASS
11	2518.33	56.28	40.25	-16.03	54.00	13.75	150	176	AV	Horizontal	PASS
12	4959.17	52.79	46.47	-6.32	54.00	7.53	150	153	AV	Horizontal	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 26	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



Suspected Data List

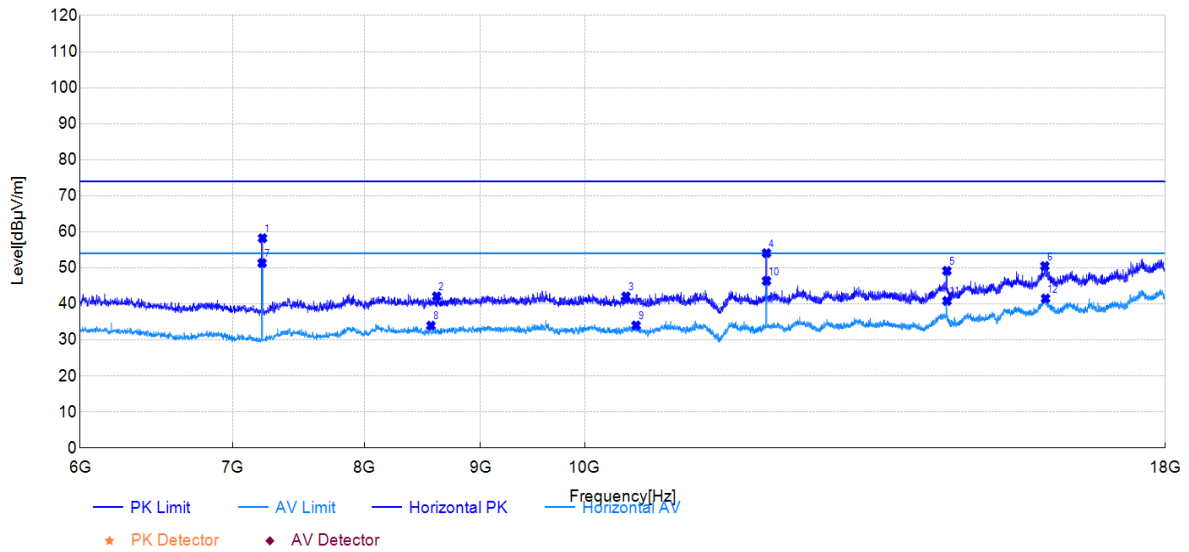
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	1164.17	61.62	38.87	-22.75	74.00	35.13	150	87	PK	Vertical	PASS
2	1396.67	61.15	39.81	-21.34	74.00	34.19	150	87	PK	Vertical	PASS
3	2093.33	67.80	50.16	-17.64	74.00	23.84	150	94	PK	Vertical	PASS
4	2790.00	62.16	47.08	-15.08	74.00	26.92	150	106	PK	Vertical	PASS
5	3950.83	55.20	46.56	-8.64	74.00	27.44	150	42	PK	Vertical	PASS
6	4959.17	59.52	52.63	-6.89	74.00	21.37	150	340	PK	Vertical	PASS
7	1211.67	53.12	30.58	-22.54	54.00	23.42	150	98	AV	Vertical	PASS
8	1559.17	53.34	32.79	-20.55	54.00	21.21	150	101	AV	Vertical	PASS
9	2093.33	57.16	39.52	-17.64	54.00	14.48	150	94	AV	Vertical	PASS
10	2788.33	51.60	36.51	-15.09	54.00	17.49	150	106	AV	Vertical	PASS
11	3925.00	45.23	36.46	-8.77	54.00	17.54	150	110	AV	Vertical	PASS
12	4959.17	53.61	46.72	-6.89	54.00	7.28	150	340	AV	Vertical	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

6GHz – 18GHz Test Data

EUT:	Multi-State Sensor P100	Polarity:	Horizontal
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 11	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



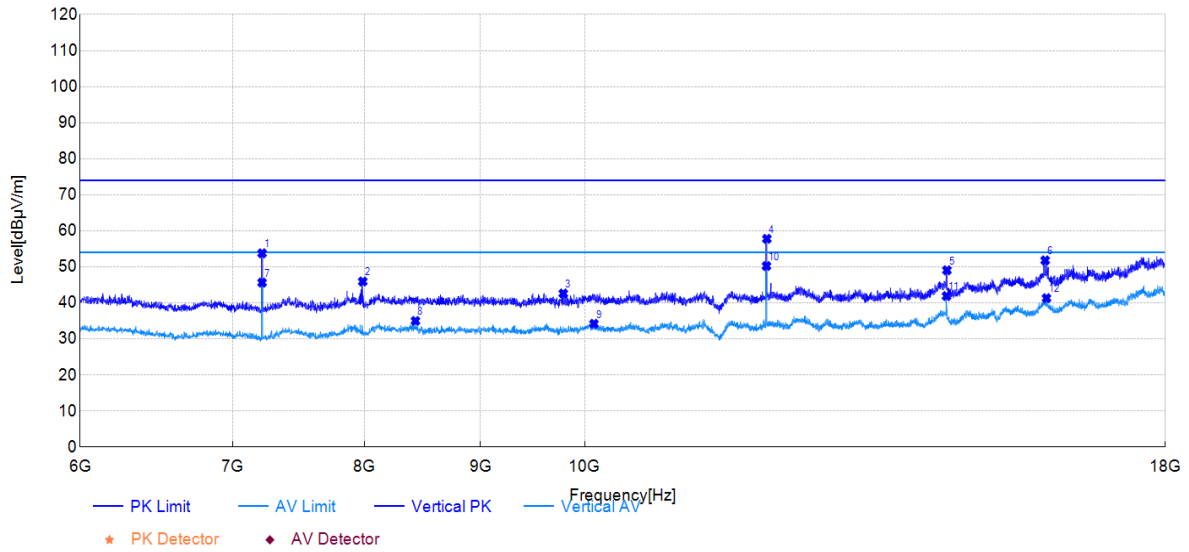
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	7216.50	62.37	58.23	-4.14	74.00	15.77	150	334	PK	Horizontal	PASS
2	8608.50	43.39	42.09	-1.30	74.00	31.91	150	252	PK	Horizontal	PASS
3	10428.00	41.92	42.07	0.15	74.00	31.93	150	214	PK	Horizontal	PASS
4	12022.50	52.56	54.08	1.52	74.00	19.92	150	30	PK	Horizontal	PASS
5	14433.00	44.37	49.17	4.80	74.00	24.83	150	334	PK	Horizontal	PASS
6	15937.50	40.89	50.51	9.62	74.00	23.49	150	341	PK	Horizontal	PASS
7	7213.50	55.48	51.32	-4.16	54.00	2.68	150	337	AV	Horizontal	PASS
8	8559.00	35.45	33.97	-1.48	54.00	20.03	150	252	AV	Horizontal	PASS
9	10534.50	33.45	34.02	0.57	54.00	19.98	150	198	AV	Horizontal	PASS
10	12022.50	44.85	46.37	1.52	54.00	7.63	150	18	AV	Horizontal	PASS
11	14433.00	36.02	40.82	4.80	54.00	13.18	150	360	AV	Horizontal	PASS
12	15949.50	31.89	41.50	9.61	54.00	12.50	150	341	AV	Horizontal	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 11	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



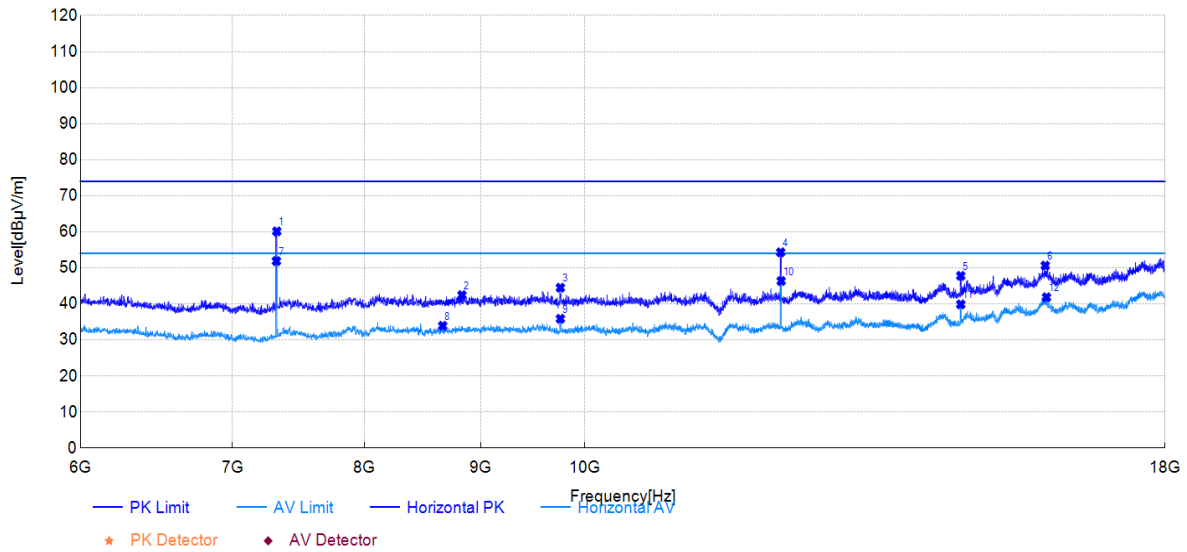
Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	7213.50	57.75	53.77	-3.98	74.00	20.23	150	104	PK	Vertical	PASS
2	7987.50	47.57	45.93	-1.64	74.00	28.07	150	80	PK	Vertical	PASS
3	9786.00	42.99	42.61	-0.38	74.00	31.39	150	96	PK	Vertical	PASS
4	12027.00	56.06	57.79	1.73	74.00	16.21	150	29	PK	Vertical	PASS
5	14433.00	43.89	49.05	5.16	74.00	24.95	150	61	PK	Vertical	PASS
6	15943.50	42.73	51.79	9.06	74.00	22.21	150	127	PK	Vertical	PASS
7	7213.50	49.61	45.63	-3.98	54.00	8.37	150	108	AV	Vertical	PASS
8	8425.50	36.17	35.00	-1.17	54.00	19.00	150	104	AV	Vertical	PASS
9	10095.00	34.08	34.20	0.12	54.00	19.80	150	174	AV	Vertical	PASS
10	12022.50	48.50	50.23	1.73	54.00	3.77	150	37	AV	Vertical	PASS
11	14427.00	36.67	41.89	5.22	54.00	12.11	150	53	AV	Vertical	PASS
12	15964.50	32.28	41.31	9.03	54.00	12.69	150	147	AV	Vertical	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

6GHz – 18GHz Test Data

EUT:	Multi-State Sensor P100	Polarity:	Horizontal
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 18	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



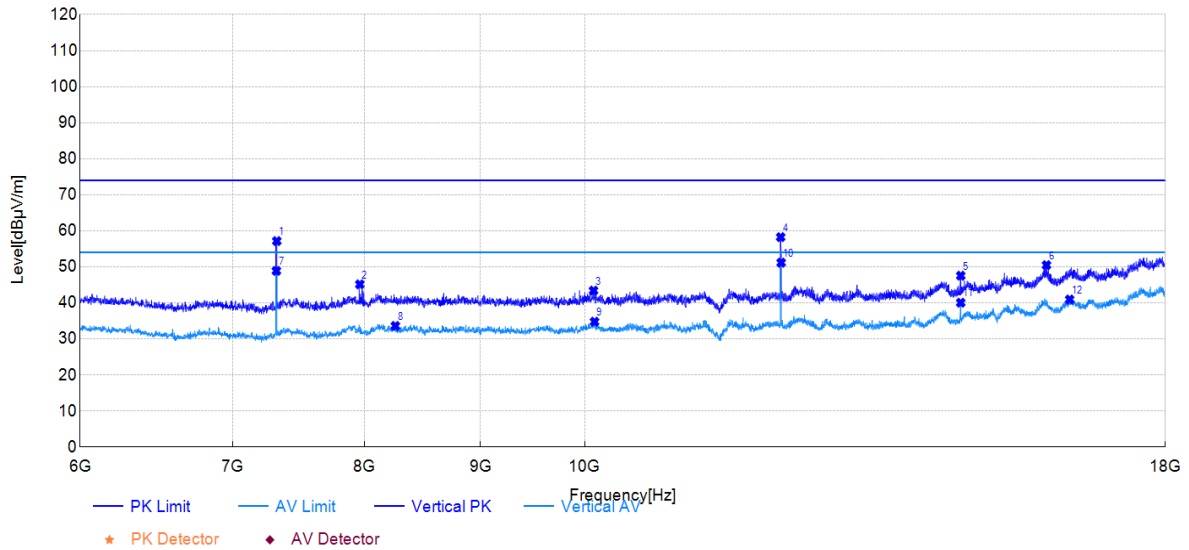
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	7321.50	63.42	60.13	-3.29	74.00	13.87	150	337	PK	Horizontal	PASS
2	8832.00	43.42	42.43	-0.99	74.00	31.57	150	161	PK	Horizontal	PASS
3	9757.50	44.88	44.48	-0.40	74.00	29.52	150	244	PK	Horizontal	PASS
4	12196.50	52.61	54.32	1.71	74.00	19.68	150	30	PK	Horizontal	PASS
5	14637.00	43.19	47.78	4.59	74.00	26.22	150	328	PK	Horizontal	PASS
6	15945.00	41.02	50.63	9.61	74.00	23.37	150	359	PK	Horizontal	PASS
7	7318.50	55.19	51.87	-3.32	54.00	2.13	150	158	AV	Horizontal	PASS
8	8661.00	35.11	33.92	-1.19	54.00	20.08	150	337	AV	Horizontal	PASS
9	9757.50	36.27	35.87	-0.40	54.00	18.13	150	360	AV	Horizontal	PASS
10	12202.50	44.63	46.35	1.72	54.00	7.65	150	27	AV	Horizontal	PASS
11	14637.00	35.28	39.87	4.59	54.00	14.13	150	340	AV	Horizontal	PASS
12	15964.50	32.23	41.83	9.60	54.00	12.17	150	337	AV	Horizontal	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 18	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



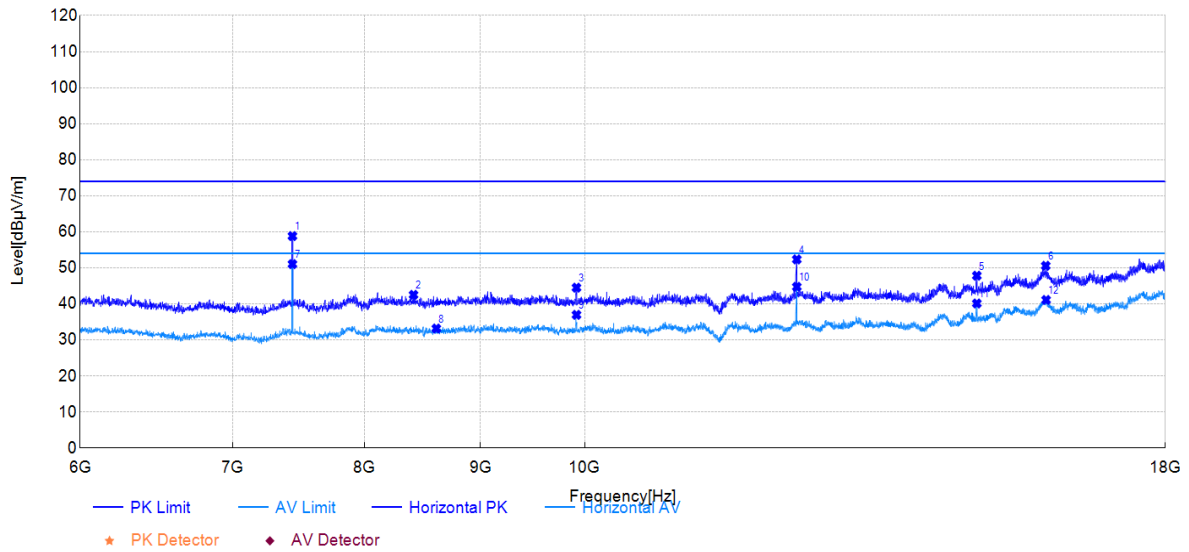
Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	7321.50	60.38	57.16	-3.22	74.00	16.84	150	257	PK	Vertical	PASS
2	7963.50	46.63	45.15	-1.48	74.00	28.85	150	75	PK	Vertical	PASS
3	10090.50	43.30	43.41	0.11	74.00	30.59	150	306	PK	Vertical	PASS
4	12196.50	56.22	58.25	2.03	74.00	15.75	150	44	PK	Vertical	PASS
5	14637.00	42.66	47.55	4.89	74.00	26.45	150	51	PK	Vertical	PASS
6	15964.50	41.45	50.48	9.03	74.00	23.52	150	37	PK	Vertical	PASS
7	7318.50	52.12	48.88	-3.24	54.00	5.12	150	215	AV	Vertical	PASS
8	8256.00	35.00	33.61	-1.39	54.00	20.39	150	261	AV	Vertical	PASS
9	10101.00	34.67	34.78	0.11	54.00	19.22	150	28	AV	Vertical	PASS
10	12202.50	49.12	51.16	2.04	54.00	2.84	150	44	AV	Vertical	PASS
11	14637.00	35.16	40.05	4.89	54.00	13.95	150	44	AV	Vertical	PASS
12	16344.00	31.43	40.95	9.52	54.00	13.05	150	341	AV	Vertical	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

6GHz – 18GHz Test Data

EUT:	Multi-State Sensor P100	Polarity:	Horizontal
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 26	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



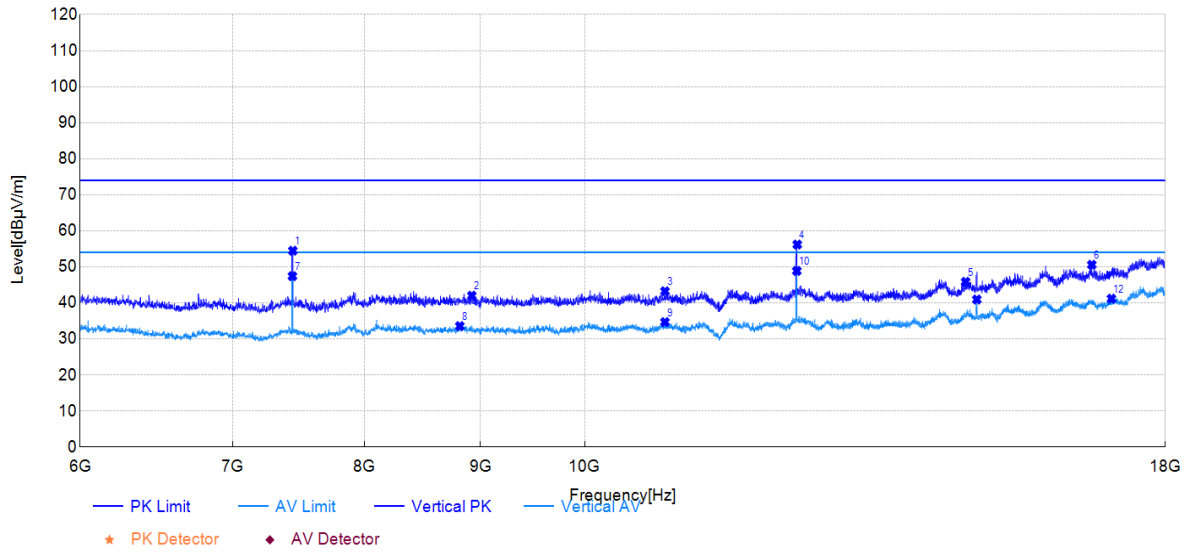
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	7438.50	61.52	58.82	-2.70	74.00	15.18	150	167	PK	Horizontal	PASS
2	8409.00	43.67	42.51	-1.16	74.00	31.49	150	164	PK	Horizontal	PASS
3	9918.00	44.65	44.50	-0.15	74.00	29.50	150	18	PK	Horizontal	PASS
4	12397.50	50.15	52.34	2.19	74.00	21.66	150	29	PK	Horizontal	PASS
5	14877.00	43.03	47.83	4.80	74.00	26.17	150	347	PK	Horizontal	PASS
6	15952.50	40.96	50.57	9.61	74.00	23.43	150	301	PK	Horizontal	PASS
7	7438.50	53.74	51.04	-2.70	54.00	2.96	150	167	AV	Horizontal	PASS
8	8605.50	34.46	33.16	-1.30	54.00	20.84	150	144	AV	Horizontal	PASS
9	9918.00	37.11	36.96	-0.15	54.00	17.04	150	15	AV	Horizontal	PASS
10	12397.50	42.55	44.74	2.19	54.00	9.26	150	294	AV	Horizontal	PASS
11	14877.00	35.32	40.12	4.80	54.00	13.88	150	357	AV	Horizontal	PASS
12	15958.50	31.49	41.10	9.61	54.00	12.90	150	329	AV	Horizontal	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Multi-State Sensor P100	Polarity:	Vertical
Model:	VB-S03E	Test Engineer:	Stone Zhang
Mode:	Transmit at Thread Channel 26	Voltage:	DC 3.3V
Environment:	Temp: 21.8~29.6°C; Humi:	Test Date:	2025-11-18 ~ 2025-11-25

Test Graph



Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	7441.50	57.23	54.48	-2.75	74.00	19.52	150	224	PK	Vertical	PASS
2	8920.50	43.36	42.00	-1.36	74.00	32.00	150	294	PK	Vertical	PASS
3	10848.00	42.48	43.23	0.75	74.00	30.77	150	310	PK	Vertical	PASS
4	12403.50	53.53	56.19	2.66	74.00	17.81	150	314	PK	Vertical	PASS
5	14709.00	40.30	45.85	5.55	74.00	28.15	150	115	PK	Vertical	PASS
6	16714.50	40.11	50.58	10.47	74.00	23.42	150	123	PK	Vertical	PASS
7	7438.50	50.15	47.41	-2.74	54.00	6.59	150	220	AV	Vertical	PASS
8	8812.50	34.81	33.56	-1.25	54.00	20.44	150	236	AV	Vertical	PASS
9	10848.00	33.93	34.68	0.75	54.00	19.32	150	310	AV	Vertical	PASS
10	12397.50	46.24	48.87	2.63	54.00	5.13	150	45	AV	Vertical	PASS
11	14877.00	35.84	40.94	5.10	54.00	13.06	150	21	AV	Vertical	PASS
12	17050.50	30.54	41.17	10.63	54.00	12.83	150	24	AV	Vertical	PASS

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

7.7. Restricted Band Edge Measurement

7.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52480 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.7.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.7.3. Test Setting

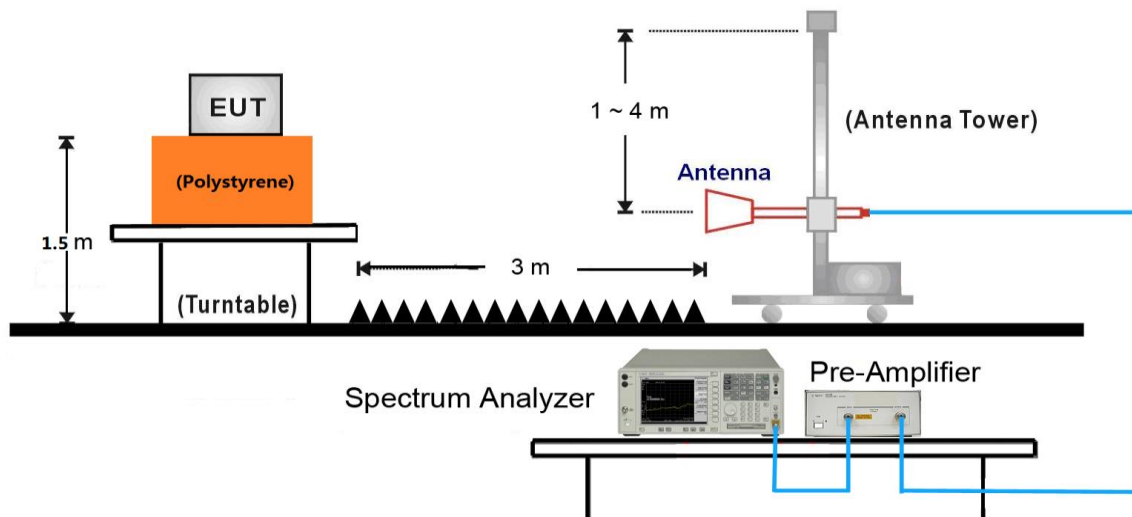
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Power Average (RMS)
5. Number of sweep point = 2001 (Number of sweep points must be $\geq 2 \times \text{span} / \text{RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

7.7.4. Test Setup

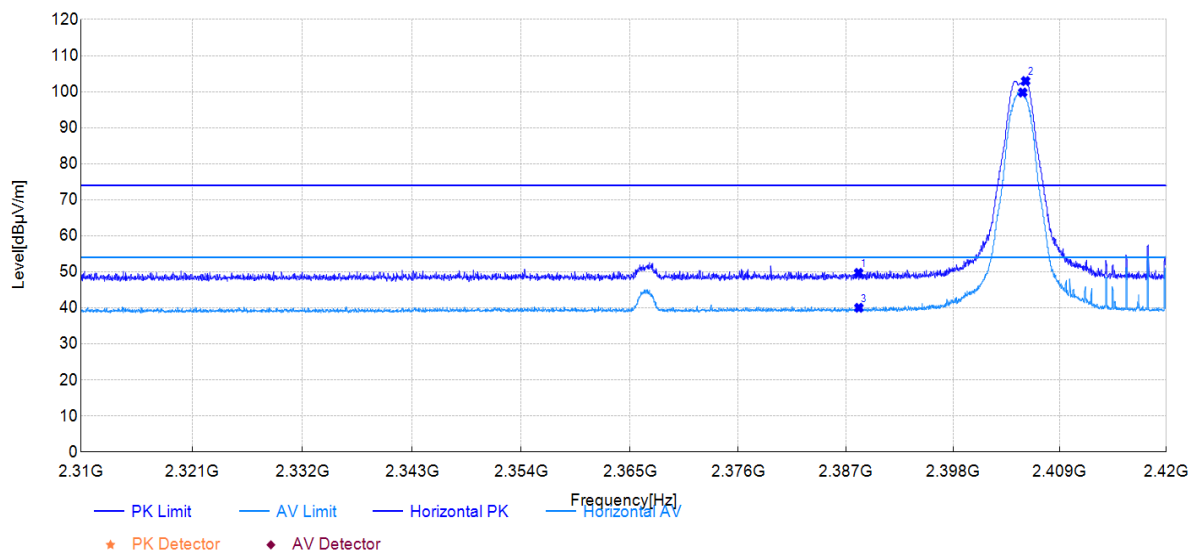


7.7.5. Test Result

Thread

Test Mode:	Thread	Test Date:	2025-11-18 ~ 2025-11-25
Test Channel:	2405	Test Engineer:	Stone Zhang
Remark:	/		

Test Graph

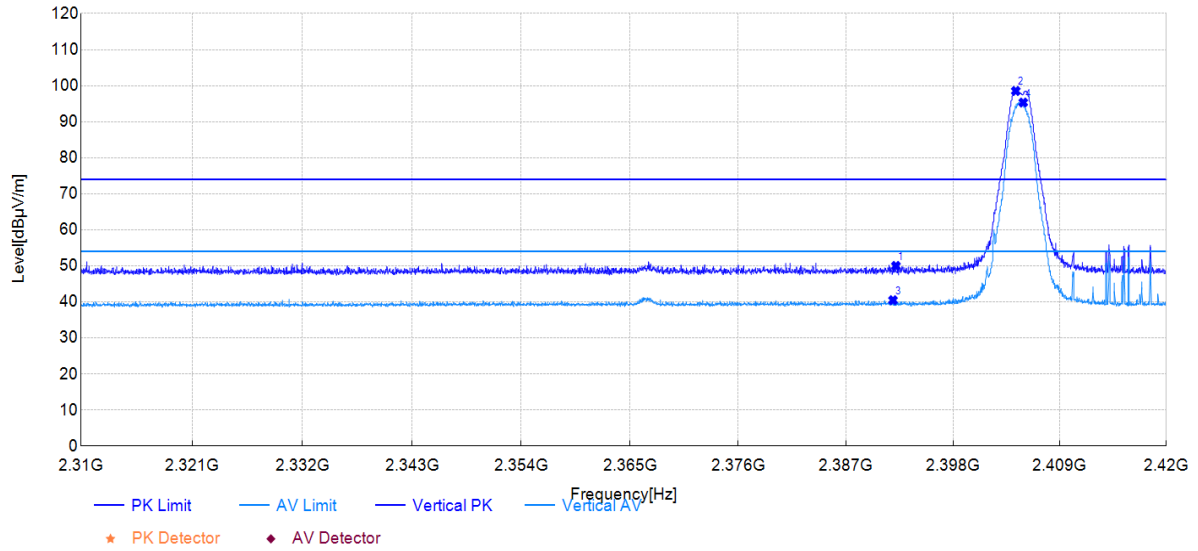


Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	2388.31	14.43	49.72	35.29	74.00	24.28	150	7	PK	Horizontal	PASS
2	2405.48	67.64	102.95	35.31	/	/	150	220	PK	Horizontal	PASS
3	2388.34	4.74	40.03	35.29	54.00	13.97	150	32	AV	Horizontal	PASS
4	2405.17	64.46	99.77	35.31	/	/	150	220	AV	Horizontal	PASS

Test Mode:	Thread	Test Date:	2025-11-18 ~ 2025-11-25
Test Channel:	2405	Test Engineer:	Stone Zhang
Remark:	/		

Test Graph

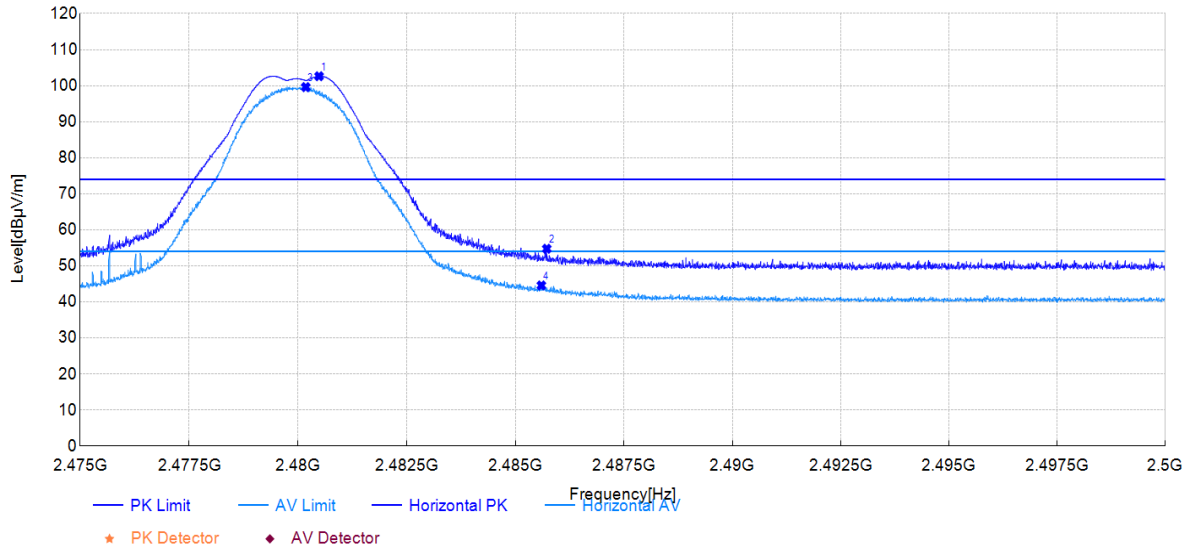


Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	2392.14	14.63	49.98	35.35	74.00	24.02	150	50	PK	Vertical	PASS
2	2404.46	63.17	98.53	35.36	/	/	150	144	PK	Vertical	PASS
3	2391.83	5.12	40.47	35.35	54.00	13.53	150	268	AV	Vertical	PASS
4	2405.23	59.95	95.32	35.37	/	/	150	144	AV	Vertical	PASS

Test Mode:	Thread	Test Date:	2025-11-18 ~ 2025-11-25
Test Channel:	2480	Test Engineer:	Stone Zhang
Remark:	/		

Test Graph

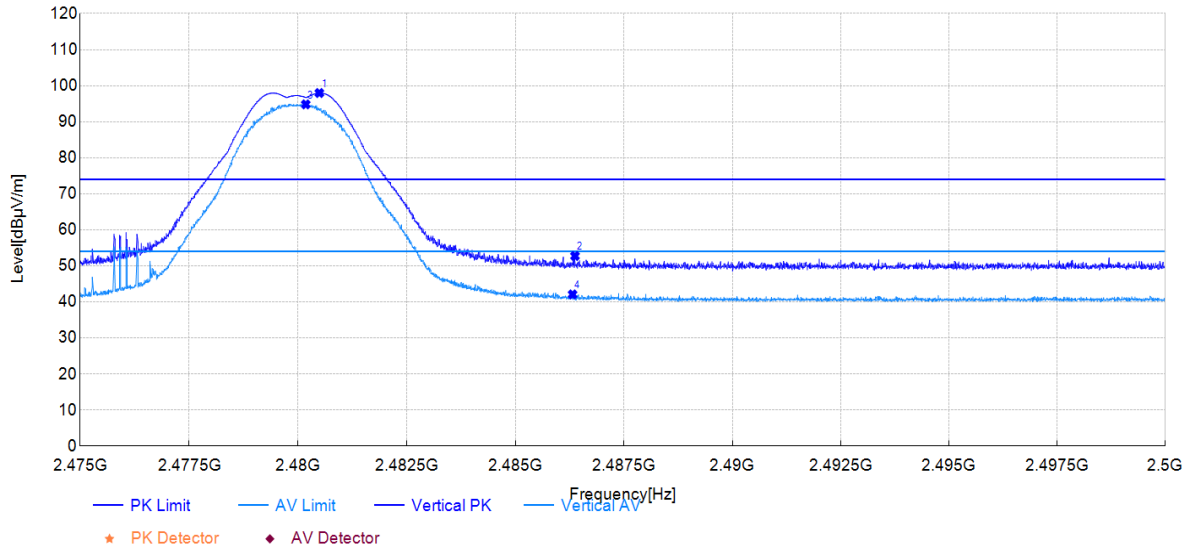


Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	2480.48	66.64	102.62	35.98	/	/	150	214	PK	Horizontal	PASS
2	2485.72	18.72	54.75	36.03	74.00	19.25	150	214	PK	Horizontal	PASS
3	2480.18	63.62	99.60	35.98	/	/	150	214	AV	Horizontal	PASS
4	2485.60	8.54	44.57	36.03	54.00	9.43	150	218	AV	Horizontal	PASS

Test Mode:	Thread	Test Date:	2025-11-18 ~ 2025-11-25
Test Channel:	2480	Test Engineer:	Stone Zhang
Remark:	/		

Test Graph



Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Polarity	Verdict
1	2480.49	61.89	97.96	36.07	/	/	150	327	PK	Vertical	PASS
2	2486.37	16.60	52.74	36.14	74.00	21.26	150	181	PK	Vertical	PASS
3	2480.18	58.74	94.81	36.07	/	/	150	327	AV	Vertical	PASS
4	2486.32	5.93	42.07	36.14	54.00	11.93	150	331	AV	Vertical	PASS

7.8. AC Conducted Emissions Measurement

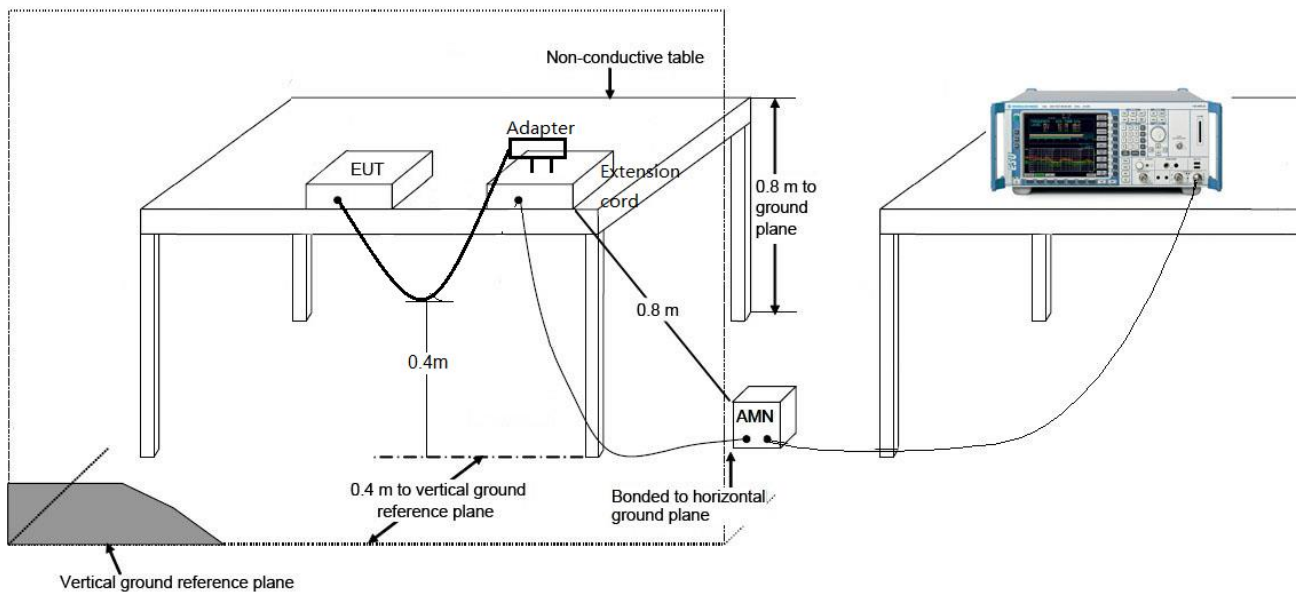
7.8.1. Test Limit

AC power-line conducted emissions limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

The EUT is DC supply, this item only for the EUT is designed to be connected to the public utility (AC) power line. Not applicable.

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Multi-State Sensor P100 (Model: VB-S03E)** is in compliance with Part 15C of the FCC Rules.

Statement

1. This report is invalid for the following states: without the special inspection and testing stamp or the official stamp of our institution; without the signature of the report authorized officer; if the report is altered.
2. It is forbidden to copy partial contents of the report except in full without the approval of our institution.
3. The client shall provide the test sample(s) and commission information and be responsible for their authenticity.
4. The report content is only applicable to the tested sample(s) this time.
5. If there are any objections to the report content, please submit them to our company in writing within 15 days from the date of receiving the report.
6. If the reports include both Chinese and English versions, when there are any inconsistencies caused by language, the Chinese version shall prevail.
7. Information about laboratory sites involved in our company:

No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China

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