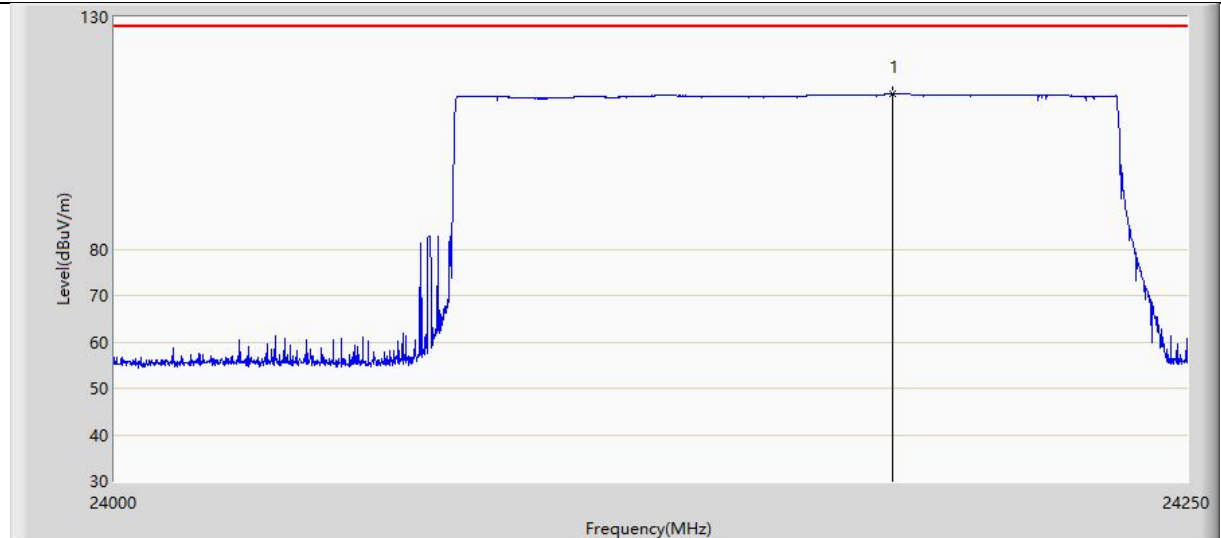


Appendix A: Test Results

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Appendix A.1: Test Results of Field strength of fundamental & harmonics

Site: SIP-AC3	Time: 2023/08/02 - 17:19
Limit: FCC Part15.249_Fundamental(3m)_24G-24.25G	Engineer: Arvin Ding
Probe: BBHA 9170_00935_18-40GHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



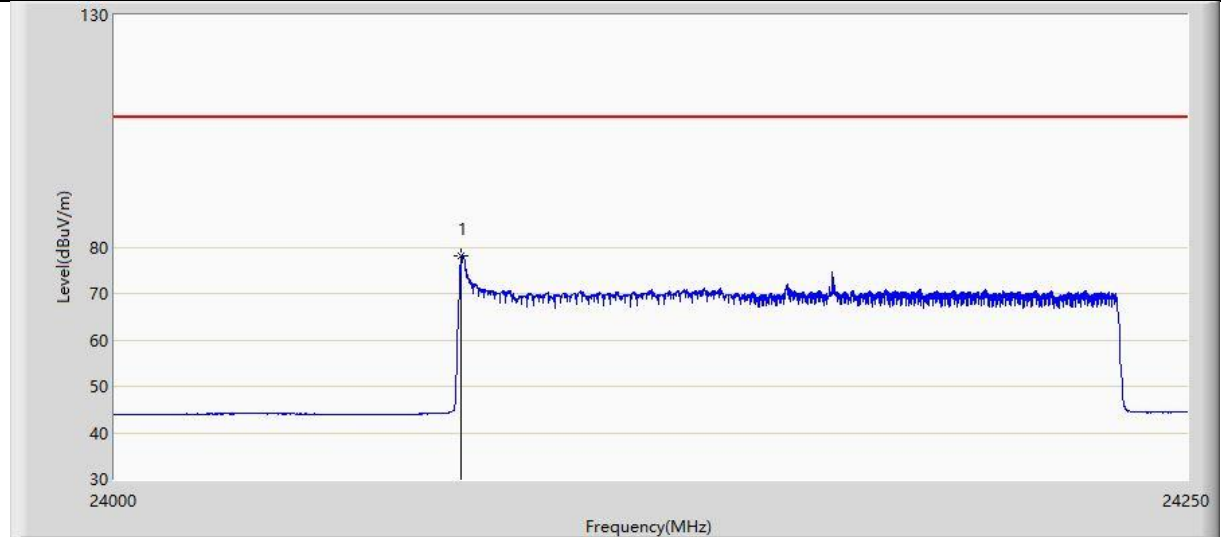
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1	*	24181.250	113.387	121.741	-14.572	127.959	-8.354	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Time: 2023/08/02 - 17:23
Limit: FCC Part15.249_Fundamental(3m)_24G-24.25G	Engineer: Arvin Ding
Probe: BBHA 9170_00935_18-40GHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



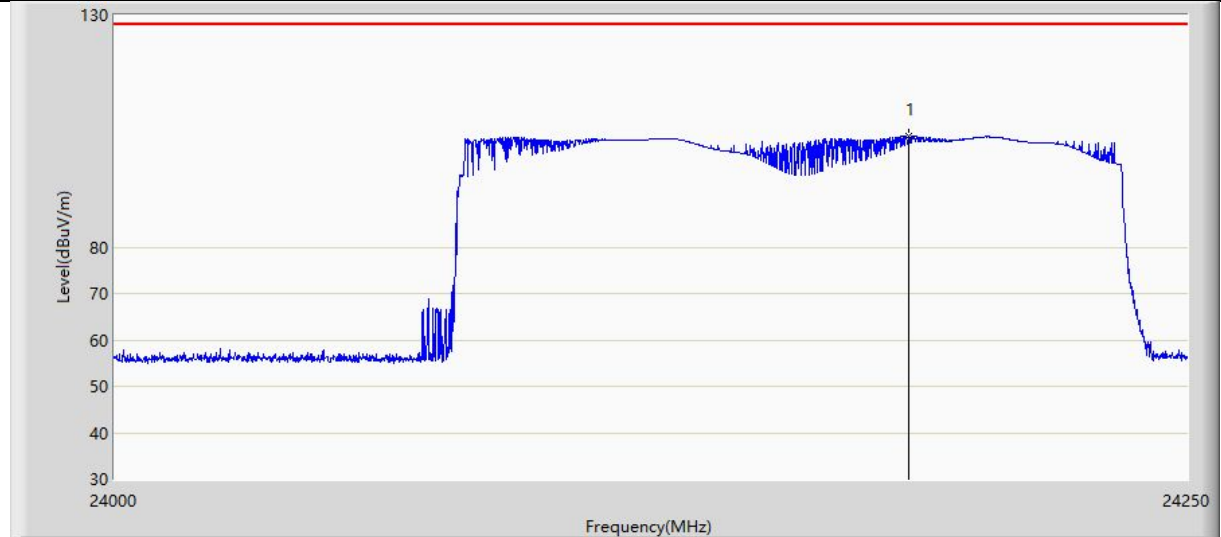
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	24080.625	78.070	86.691	-29.889	107.959	-8.621	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Time: 2023/08/02 - 17:27
Limit: FCC Part15.249_Fundamental(3m)_24G-24.25G	Engineer: Arvin Ding
Probe: BBHA 9170_00935_18-40GHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



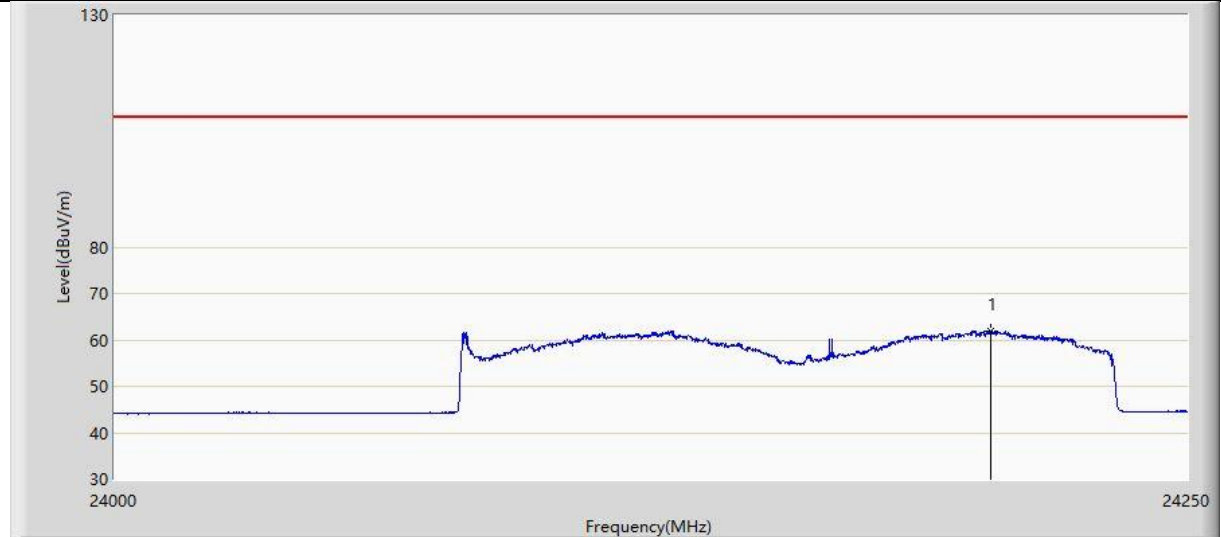
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	24184.750	103.842	112.208	-24.117	127.959	-8.366	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Time: 2023/08/02 - 17:32
Limit: FCC Part15.249_Fundamental(3m)_24G-24.25G	Engineer: Arvin Ding
Probe: BBHA 9170_00935_18-40GHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	24204.125	61.926	70.397	-46.033	107.959	-8.471	AV

Note 1: " * ", means this data is the worst emission level.

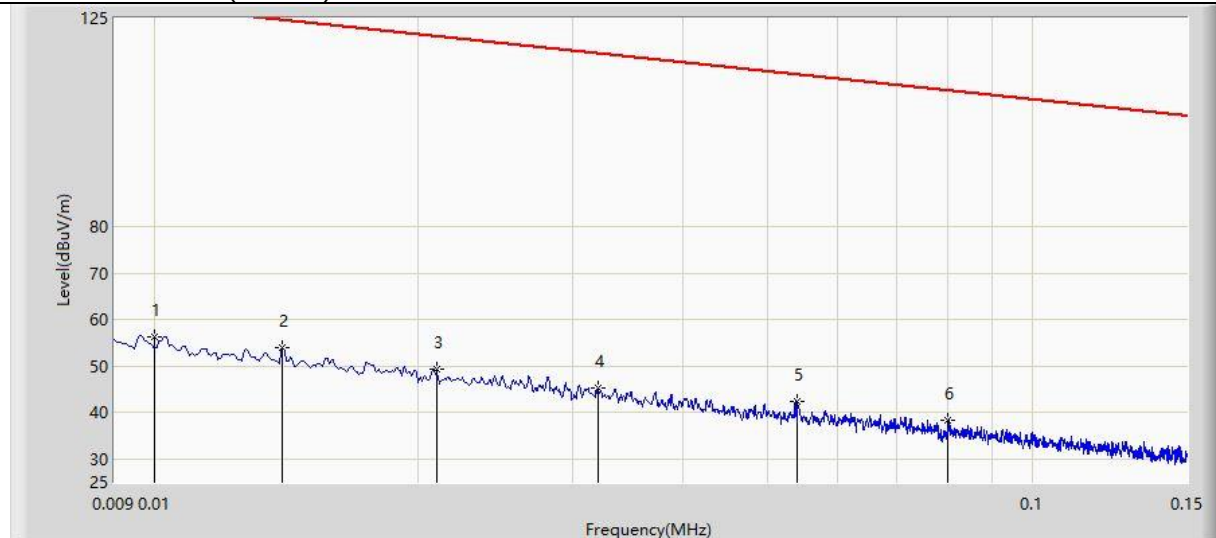
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Appendix A.2: Test Results of Radiated spurious emissions

9KHz - 30MHz

Site: SIP-AC1	Time: 2023/08/03 - 23:21
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: FMZB1519B 9kHz-30MHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G(face off)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		0.010	56.244	35.763	-71.341	127.585	20.481	PK
2		0.014	53.914	33.595	-70.751	124.664	20.319	PK
3		0.021	49.256	29.222	-71.888	121.145	20.034	PK
4		0.032	45.391	25.804	-72.097	117.488	19.587	PK
5	*	0.054	42.367	23.133	-70.578	112.946	19.234	PK
6		0.080	38.334	19.193	-71.199	109.533	19.141	PK

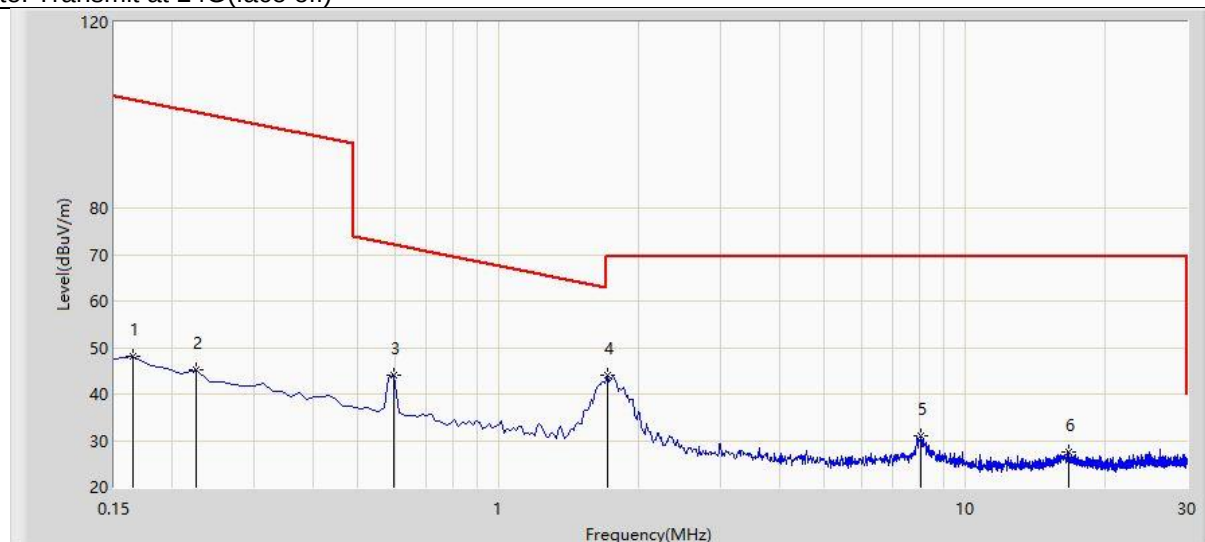
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC1	Time: 2023/08/03 - 23:23
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: FMZB1519B 9kHz-30MHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G(face off)	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		0.165	48.115	29.075	-55.134	103.249	19.040	PK
2		0.225	45.126	26.583	-55.431	100.557	18.542	PK
3		0.598	44.079	26.069	-27.995	72.075	18.010	PK
4	*	1.717	44.125	25.790	-25.375	69.500	18.335	PK
5		8.060	30.945	12.202	-38.555	69.500	18.743	PK
6		16.762	27.609	8.916	-41.891	69.500	18.693	PK

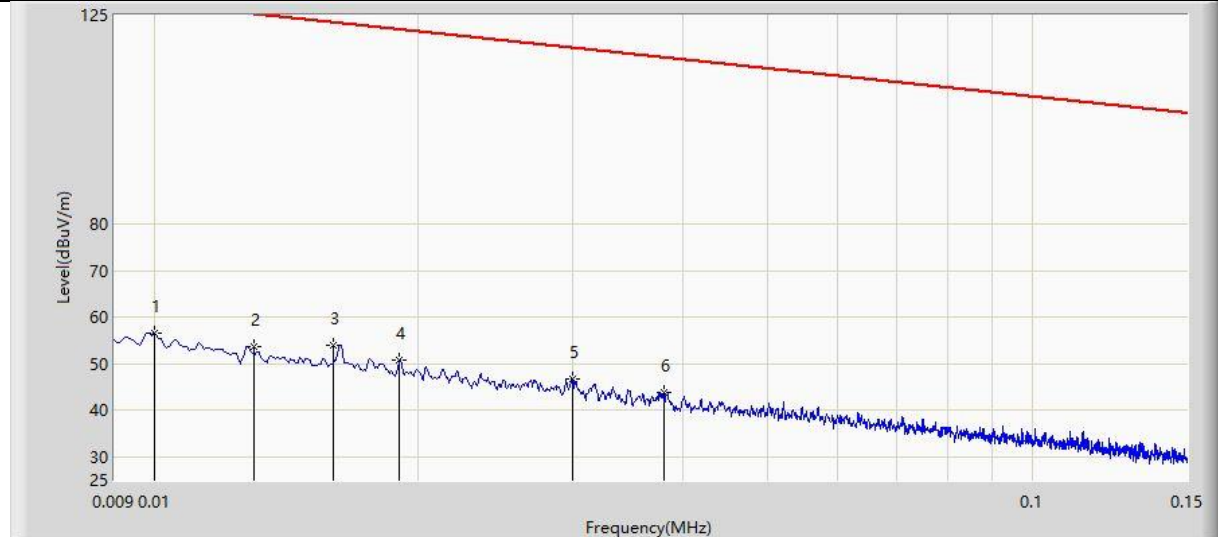
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC1	Time: 2023/08/03 - 23:28
Limit: FCC_Part15.249_RSE(3m)	Engineer: Wayne Wang
Probe: FMZB1519B_9kHz-30MHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G(face on)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		0.010	56.578	36.097	-71.007	127.585	20.481	PK
2		0.013	53.657	33.298	-71.650	125.308	20.359	PK
3	*	0.016	54.011	33.774	-69.494	123.505	20.237	PK
4		0.019	50.744	30.628	-71.270	122.013	20.116	PK
5		0.030	46.876	27.208	-71.172	118.048	19.668	PK
6		0.038	43.899	24.556	-72.097	115.996	19.343	PK

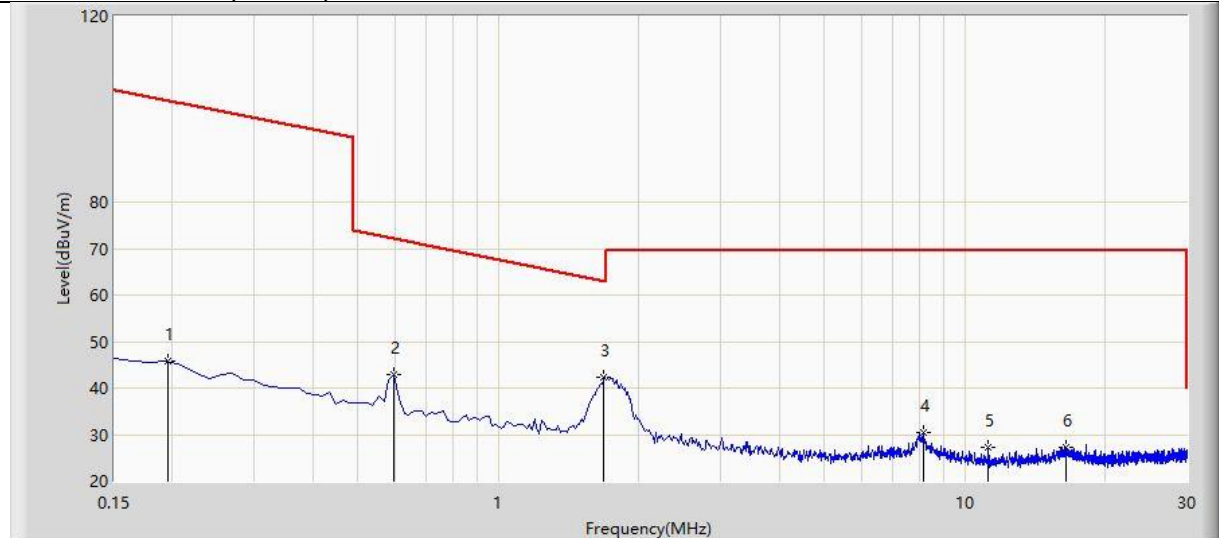
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC1	Time: 2023/08/03 - 23:26
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: FMZB1519B 9kHz-30MHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G(face on)	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		0.195	45.670	26.728	-56.128	101.799	18.942	PK
2		0.598	43.035	25.025	-29.039	72.075	18.010	PK
3	*	1.687	42.390	24.060	-20.702	63.092	18.330	PK
4		8.150	30.380	11.652	-39.120	69.500	18.727	PK
5		11.224	27.127	8.583	-42.373	69.500	18.544	PK
6		16.463	27.346	8.695	-42.154	69.500	18.652	PK

Note 1: " * ", means this data is the worst emission level.

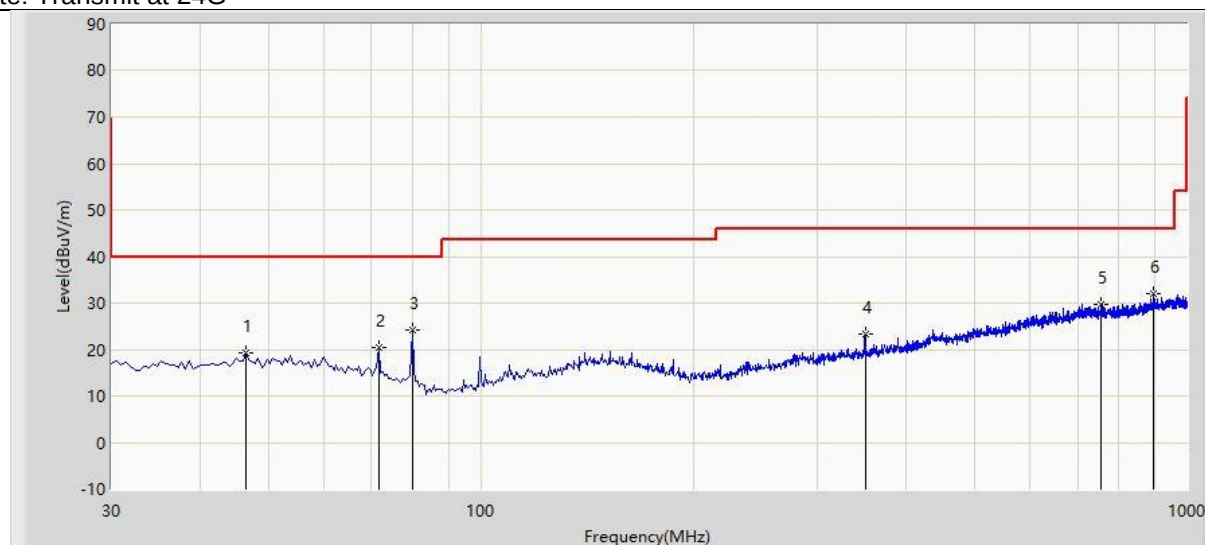
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

30MHz - 1GHz

Site: SIP-AC1	Time: 2023/08/03 - 23:10
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: VULB 9168 00998 25-2000MHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		46.490	19.319	1.244	-20.681	40.000	18.075	PK
2		71.710	20.301	4.885	-19.699	40.000	15.416	PK
3		79.955	24.227	10.767	-15.773	40.000	13.460	PK
4		350.100	23.440	4.040	-22.560	46.000	19.400	PK
5		756.530	29.783	1.636	-16.217	46.000	28.147	PK
6	*	895.240	32.077	2.437	-13.923	46.000	29.640	PK

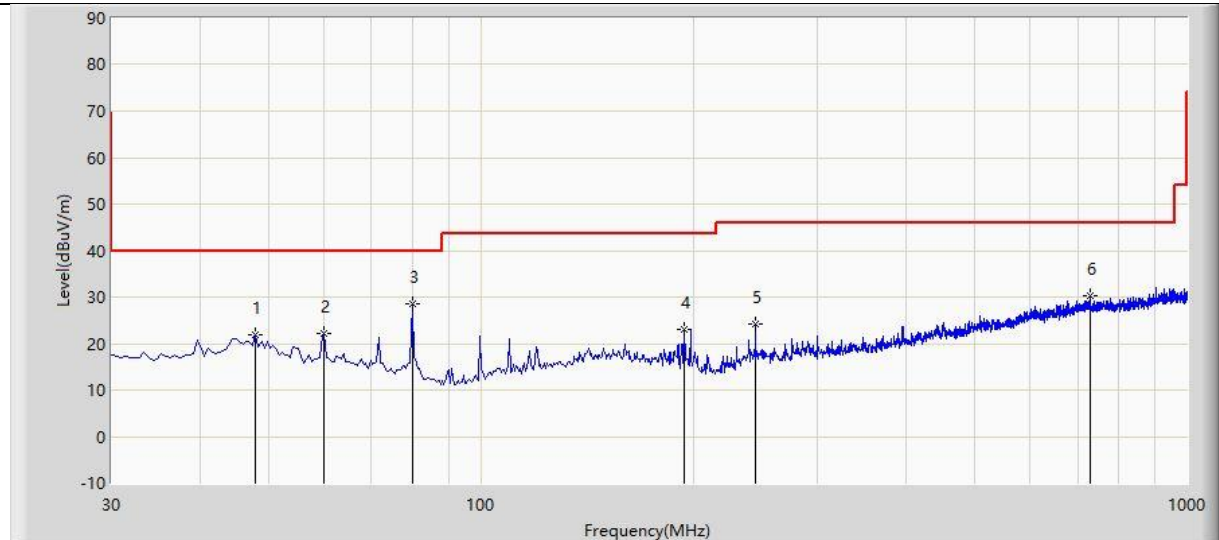
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Site: SIP-AC1	Time: 2023/08/03 - 23:13
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: VULB 9168 00998 25-2000MHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		47.945	21.847	3.802	-18.153	40.000	18.045	PK
2		60.070	22.048	4.600	-17.952	40.000	17.448	PK
3	*	79.955	28.646	15.186	-11.354	40.000	13.460	PK
4		194.415	23.113	8.421	-20.387	43.500	14.692	PK
5		244.855	24.104	7.868	-21.896	46.000	16.236	PK
6		728.400	30.345	2.926	-15.655	46.000	27.419	PK

Note 1: " * ", means this data is the worst emission level.

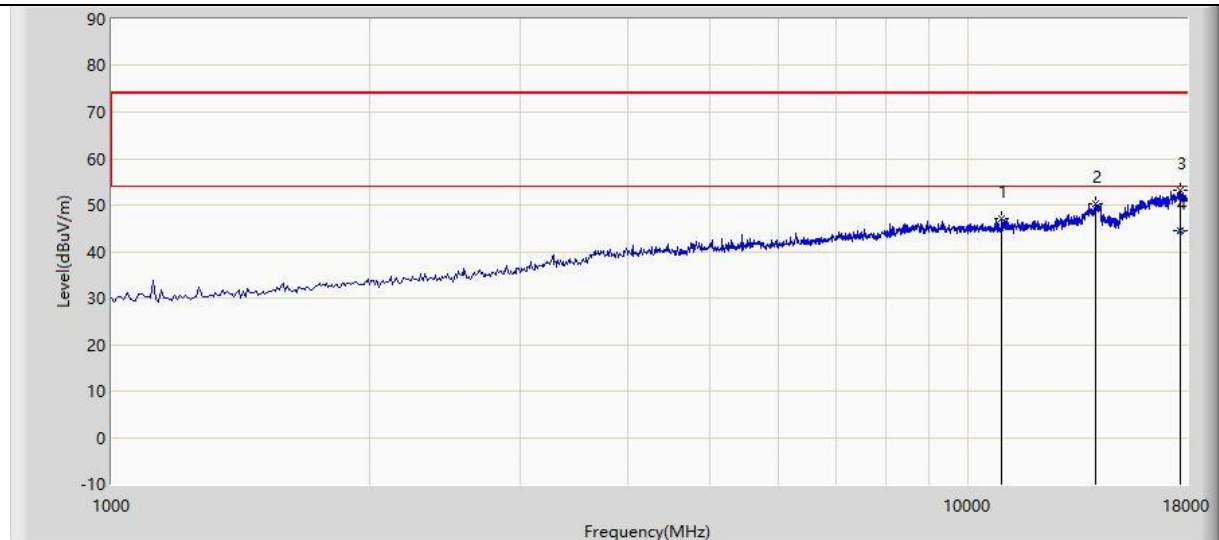
Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

1GHz - 18GHz

Site: SIP-AC3	Time: 2023/08/04 - 00:54
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		10936.500	46.991	48.535	-27.009	74.000	-1.545	PK
2		14090.000	50.255	47.136	-23.745	74.000	3.119	PK
3		17694.000	53.061	45.656	-20.939	74.000	7.405	PK
4	*	17694.000	44.535	37.130	-9.465	54.000	7.405	AV

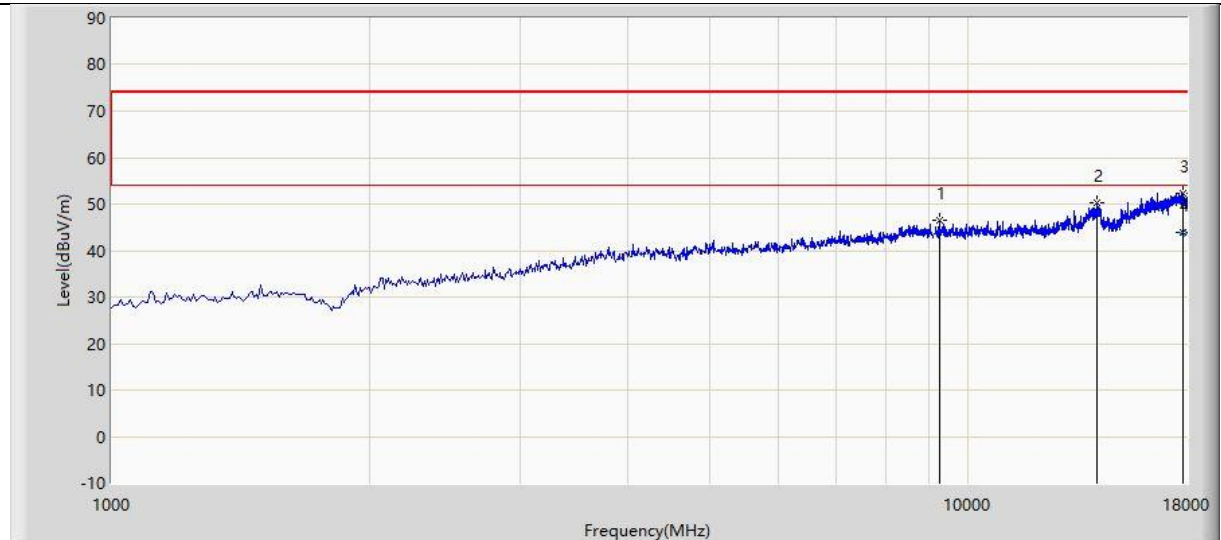
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Site: SIP-AC3	Time: 2023/08/04 - 00:55
Limit: FCC Part15.249 RSE(3m)	Engineer: Wayne Wang
Probe: HF907 102861 1-18GHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		9245.000	46.383	48.374	-27.617	74.000	-1.991	PK
2		14149.500	50.397	47.303	-23.603	74.000	3.094	PK
3		17804.500	52.338	44.675	-21.662	74.000	7.664	PK
4	*	17804.500	43.954	36.290	-10.046	54.000	7.664	AV

Note 1: " * ", means this data is the worst emission level.

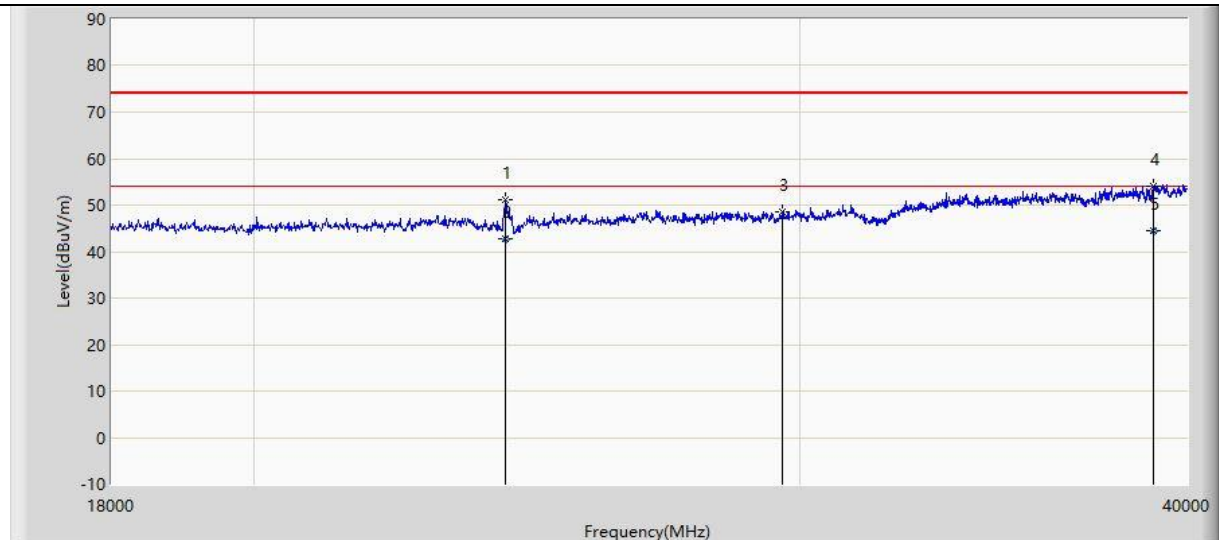
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

18GHz - 40GHz

Site: SIP-AC3	Time: 2023/08/02 - 17:38
Limit: FCC Part15.249 RSE(3m)	Engineer: Arvin Ding
Probe: BBHA 9170 00935 18-40GHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		24116.000	51.049	59.691	-22.951	74.000	-8.642	PK
2		24116.000	42.738	51.380	-11.262	54.000	-8.642	AV
3		29616.000	48.588	57.320	-25.412	74.000	-8.732	PK
4		39032.000	54.160	55.037	-19.840	74.000	-0.877	PK
5	*	39032.000	44.403	45.280	-9.597	54.000	-0.877	AV

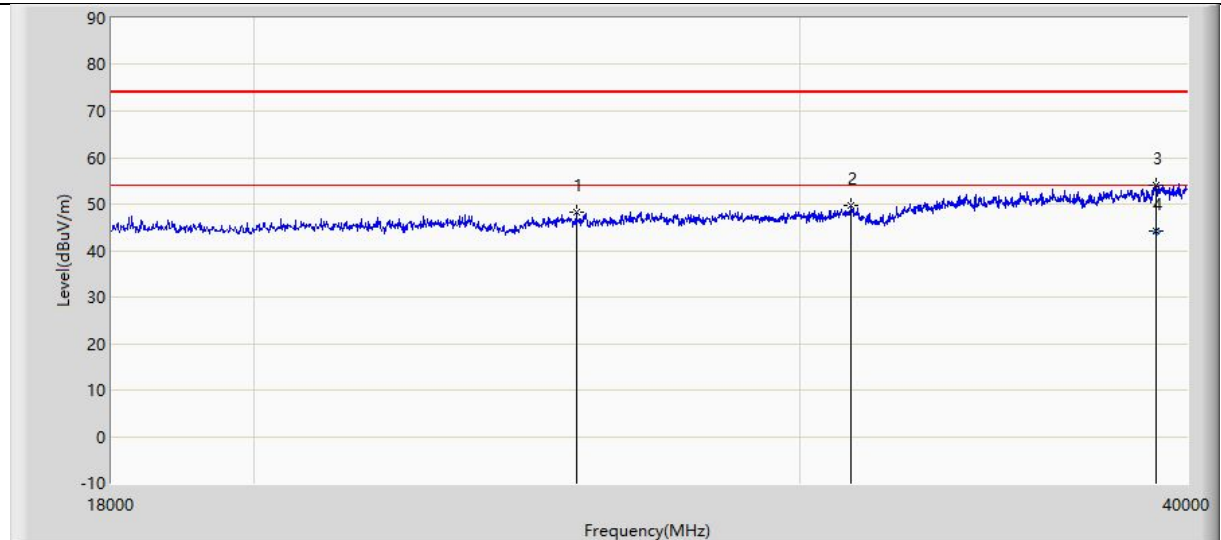
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Site: SIP-AC3	Time: 2023/08/02 - 17:55
Limit: FCC Part15.249 RSE(3m)	Engineer: Arvin Ding
Probe: BBHA 9170 00935 18-40GHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Note: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		25425.000	48.298	56.167	-25.702	74.000	-7.868	PK
2		31178.000	49.601	57.408	-24.399	74.000	-7.807	PK
3		39109.000	54.011	54.585	-19.989	74.000	-0.573	PK
4	*	39109.000	44.296	44.870	-9.704	54.000	-0.573	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

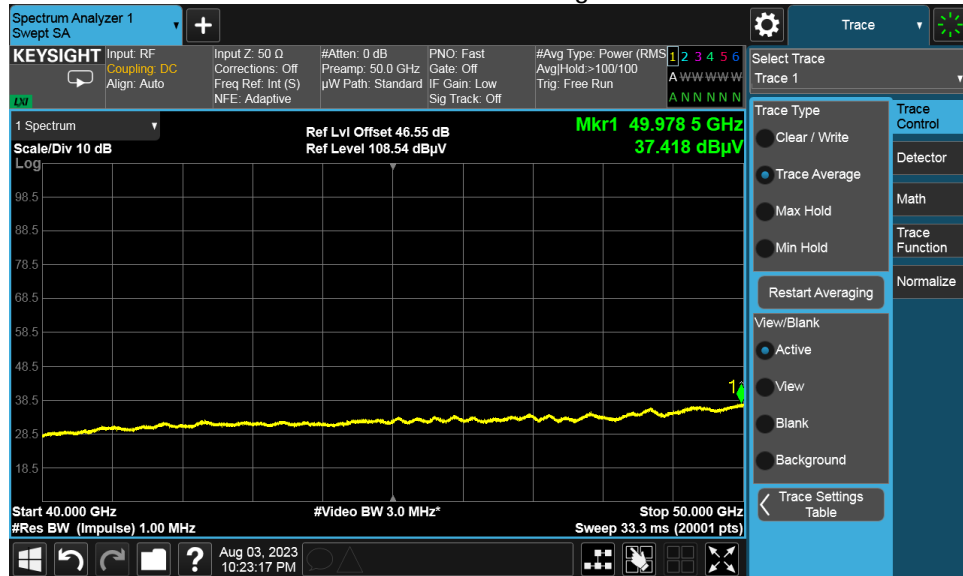
Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

40GHz - 50GHz

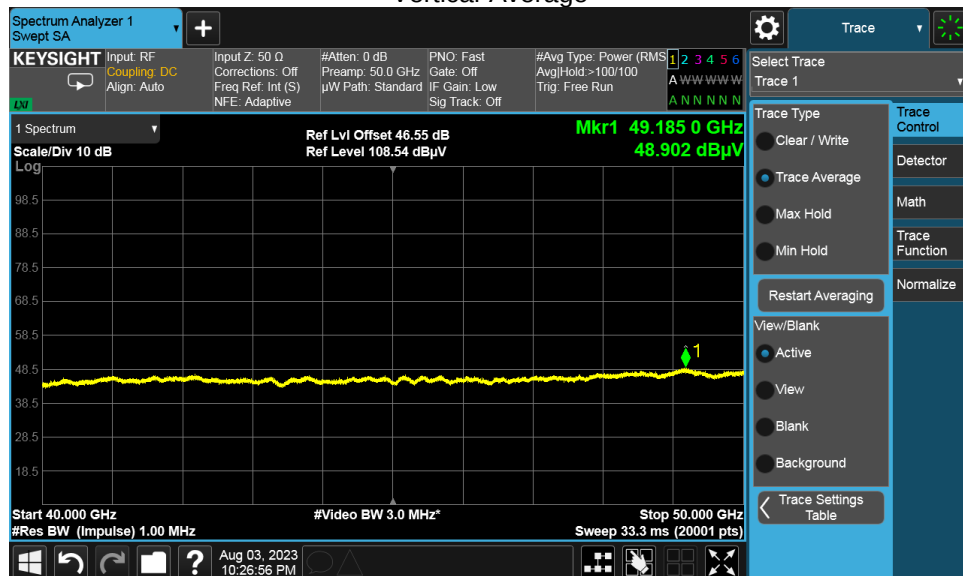
PK Limit: 97.45 dBµV/m at 1m

AV Limit: 77.45 dBµV/m at 1m

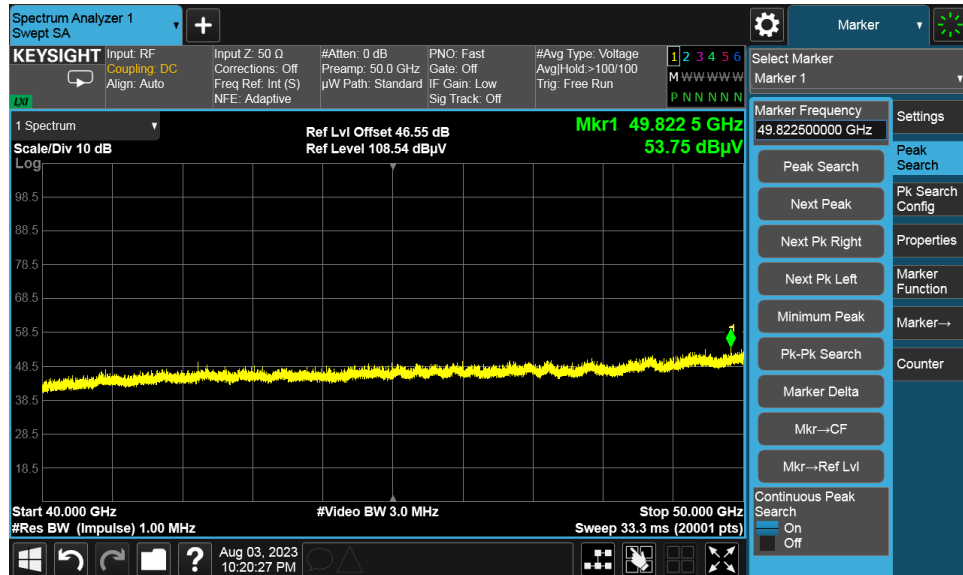
Horizontal-Average



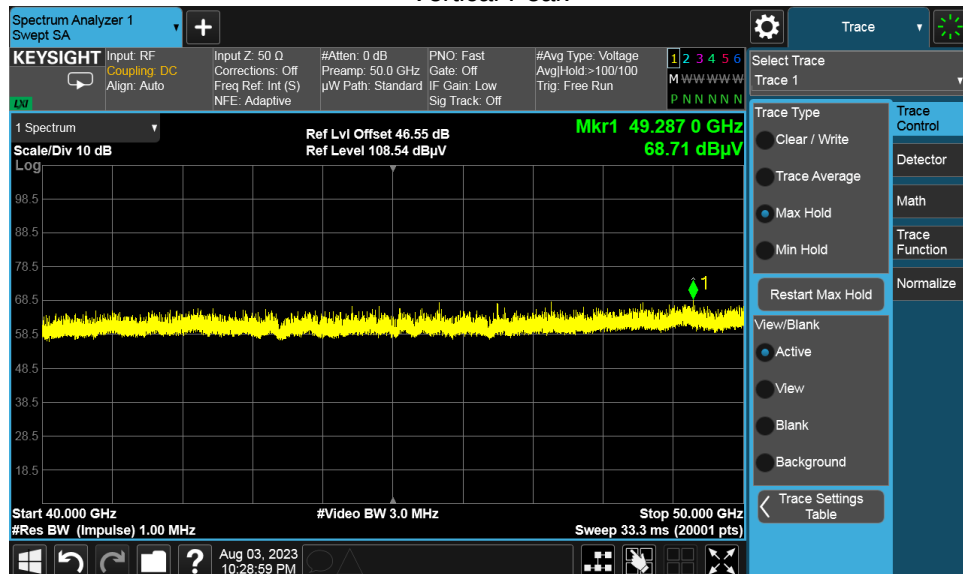
Vertical-Average



Horizontal-Peak



Vertical-Peak

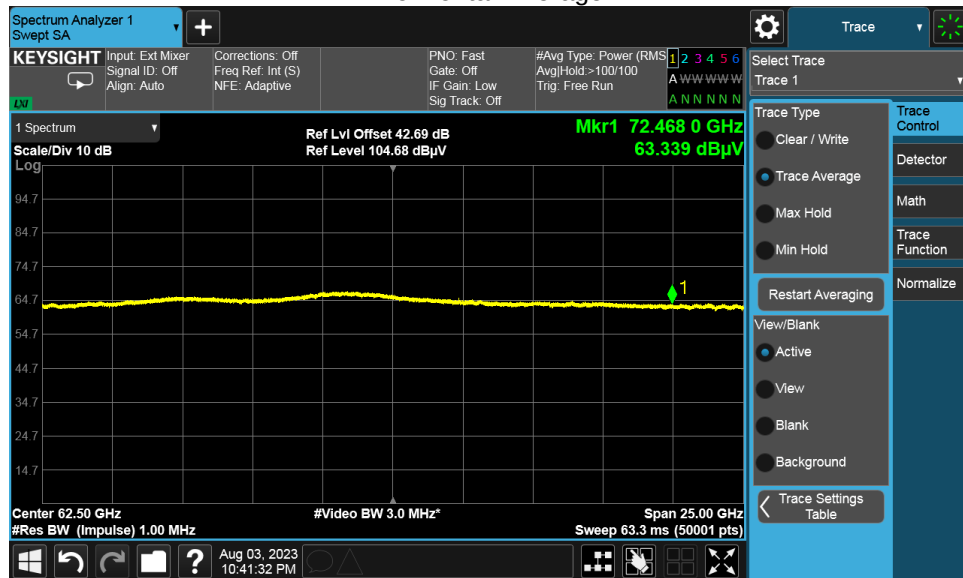


50GHz - 75GHz

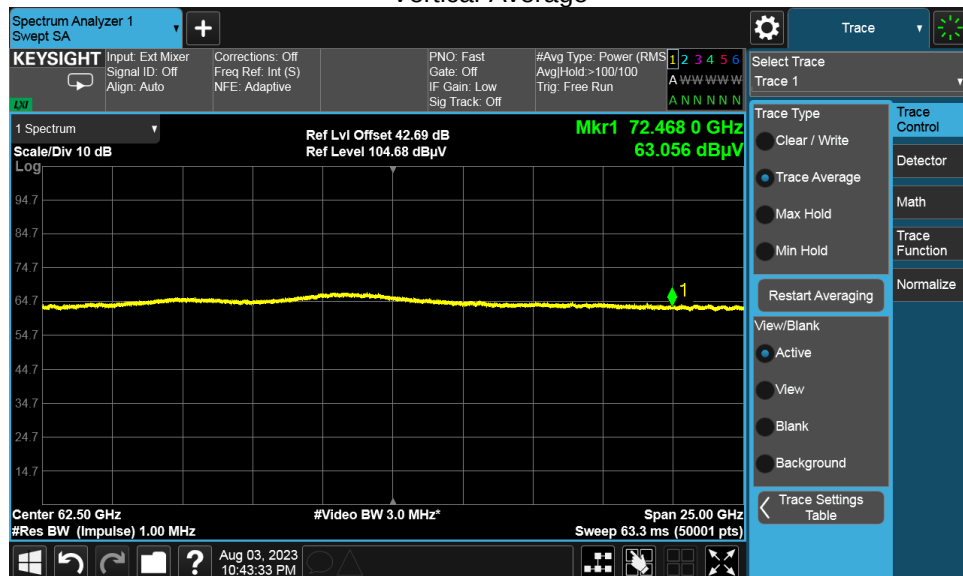
PK Limit: 97.45 dBµV/m at 1m

AV Limit: 77.45 dBµV/m at 1m

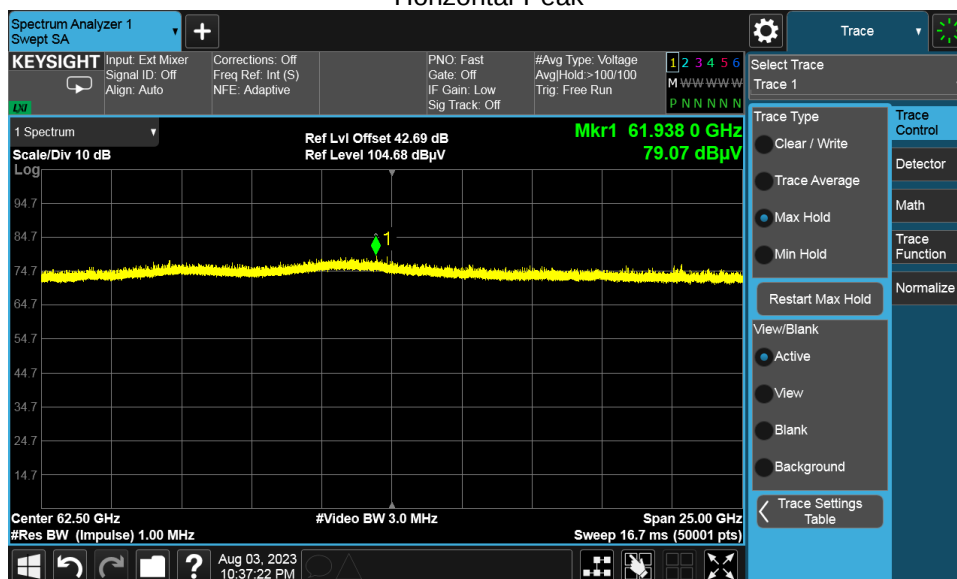
Horizontal-Average



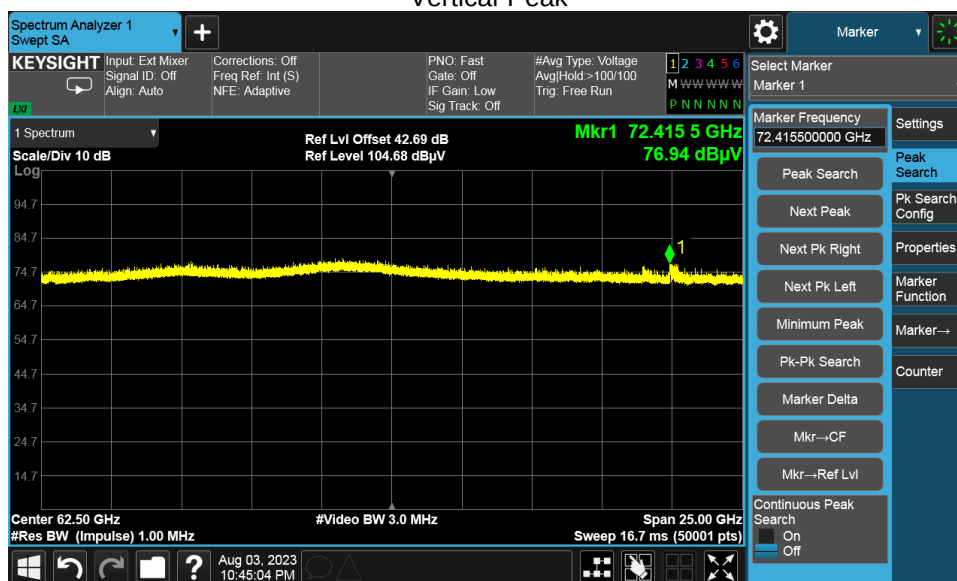
Vertical-Average



Horizontal-Peak



Vertical-Peak

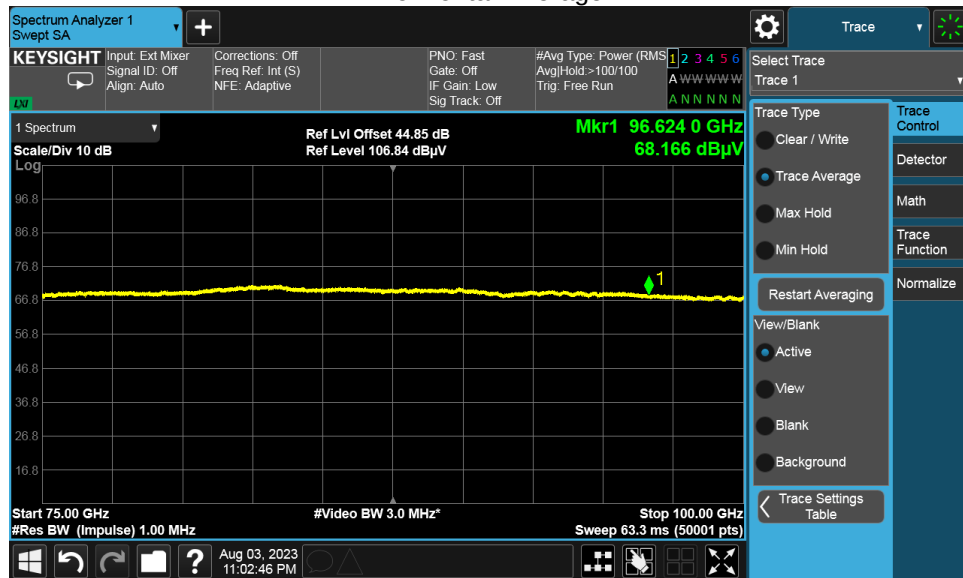


75GHz - 100GHz

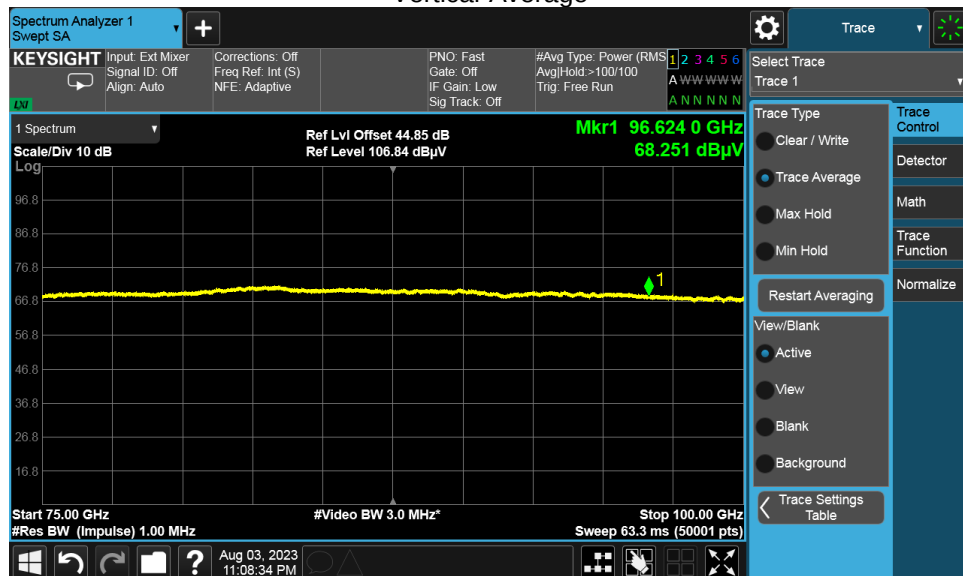
PK Limit: 97.45 dBµV/m at 1m

AV Limit: 77.45 dBµV/m at 1m

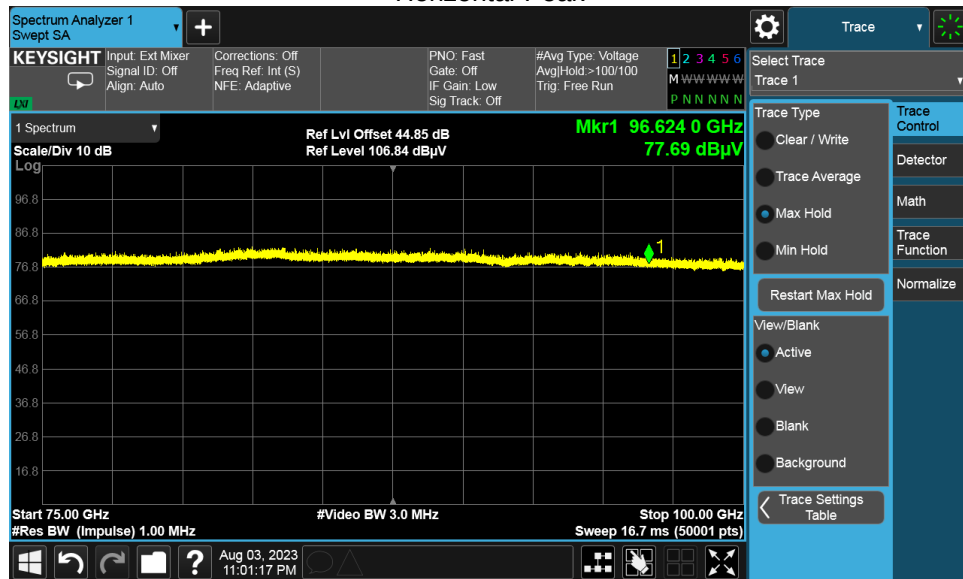
Horizontal-Average



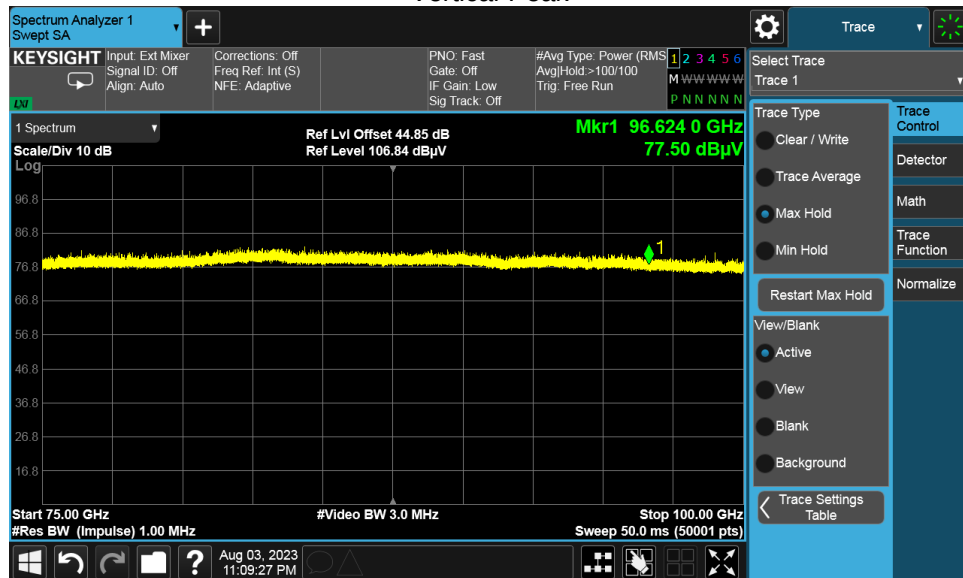
Vertical-Average



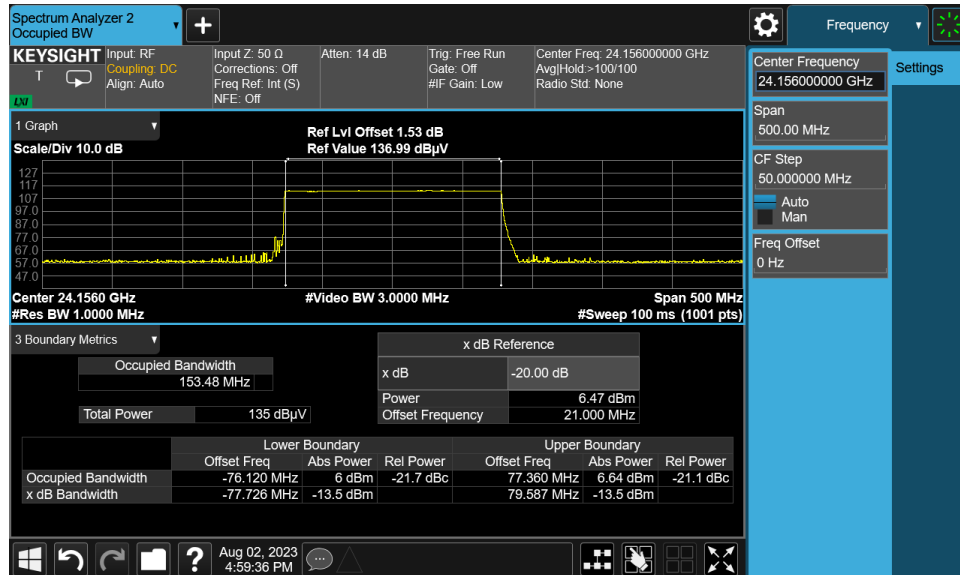
Horizontal-Peak



Vertical-Peak

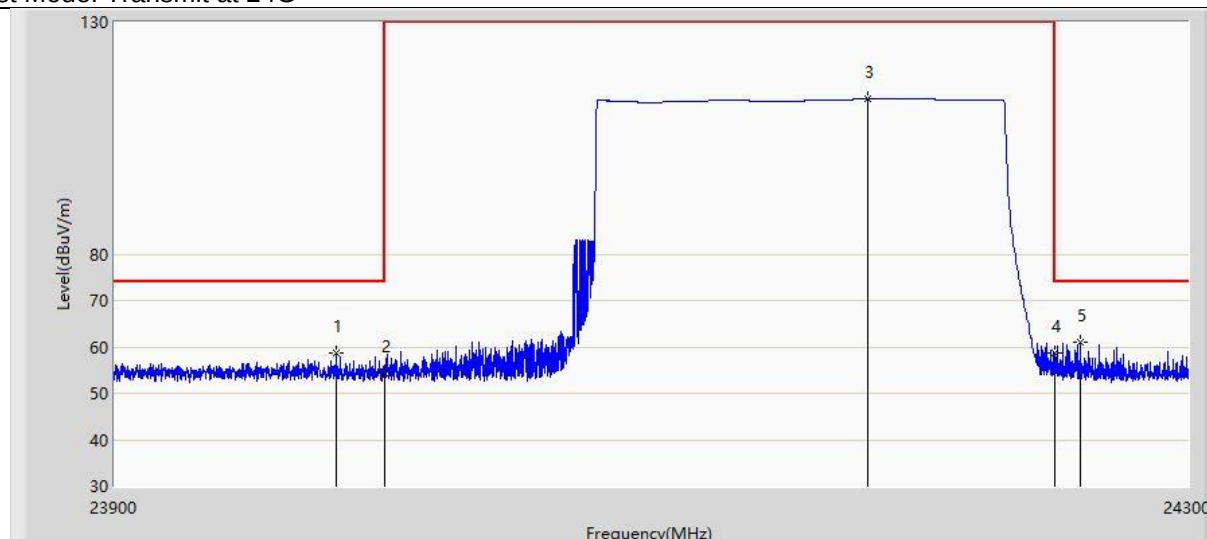


Appendix A.3: Test Results of 20dB and 99% Bandwidth



Appendix A.4: Test Results of Band Edge

Site: SIP-AC3	Time: 2023/08/02 - 16:06
Limit: FCC Part15.249 BandEdge(3m)-24G	Engineer: Arvin Ding
Probe: BBHA 9170 00935 18-40GHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Test Mode: Transmit at 24G	



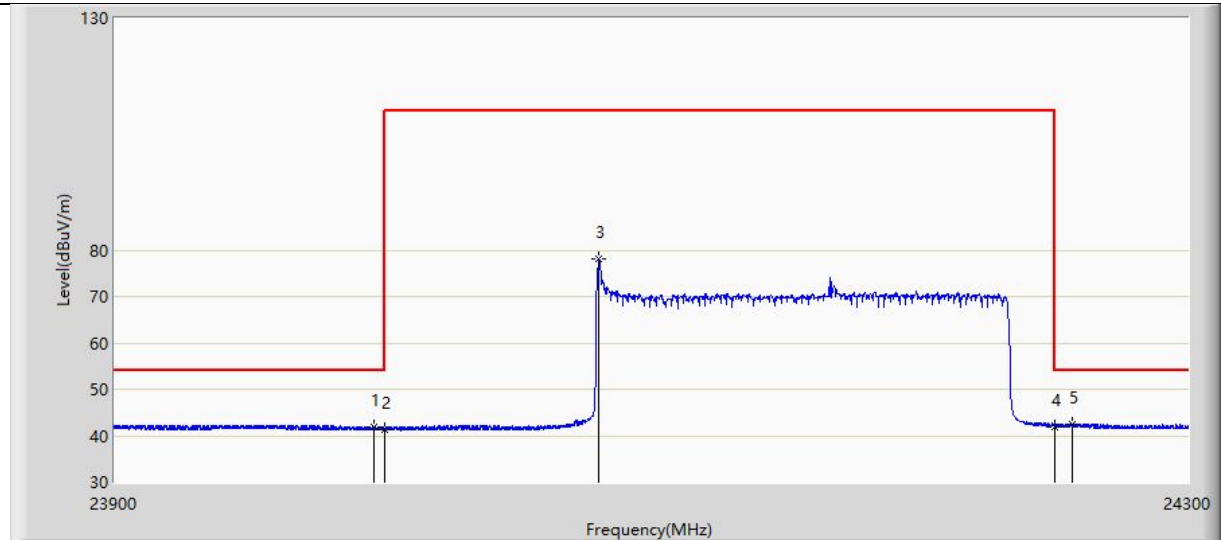
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		23982.000	58.590	67.265	-15.410	74.000	-8.675	PK
2		24000.000	54.322	63.085	-19.678	74.000	-8.763	PK
3		24180.199	113.520	121.878	N/A	N/A	-8.359	PK
4		24250.000	58.627	66.984	-15.373	74.000	-8.356	PK
5	*	24259.600	61.067	69.393	-12.933	74.000	-8.326	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Time: 2023/08/02 - 16:17
Limit: FCC Part15.249 BandEdge(3m)-24G	Engineer: Arvin Ding
Probe: BBHA 9170 00935 18-40GHz	Polarity: Horizontal
EUT: Microwave sensor	Power: DC 5V
Test Mode: Transmit at 24G	



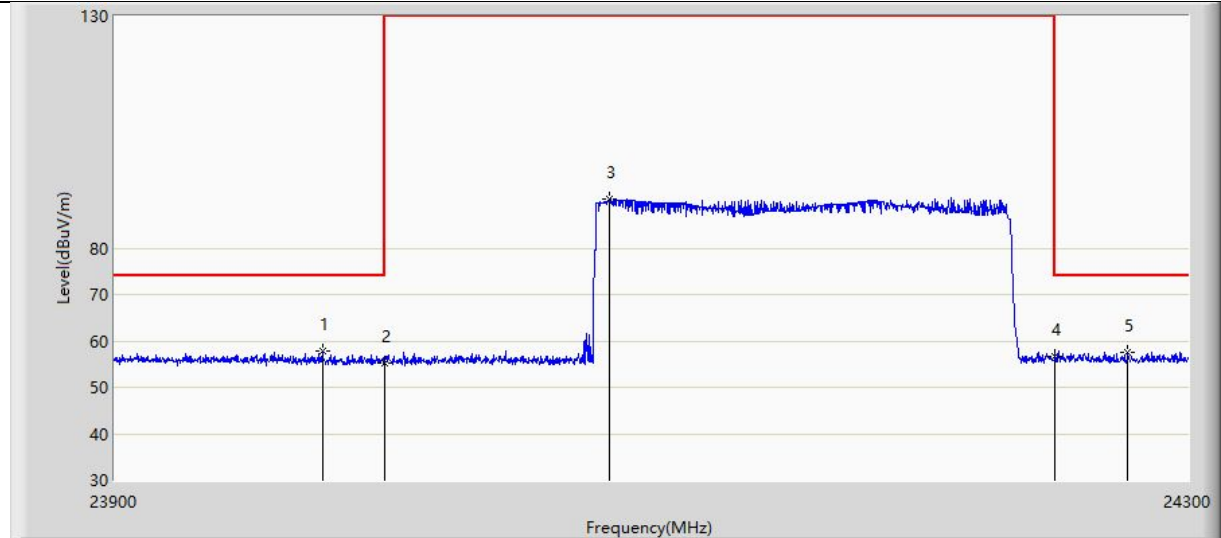
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		23996.000	41.970	50.711	-12.030	54.000	-8.741	AV
2		24000.000	41.204	49.967	-12.796	54.000	-8.763	AV
3		24079.400	78.139	86.765	N/A	N/A	-8.626	AV
4		24250.000	42.000	50.357	-12.000	54.000	-8.356	AV
5	*	24256.801	42.504	50.839	-11.496	54.000	-8.335	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Time: 2023/08/02 - 16:20
Limit: FCC Part15.249 BandEdge(3m)-24G	Engineer: Arvin Ding
Probe: BBHA 9170 00935 18-40GHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Test Mode: Transmit at 24G	



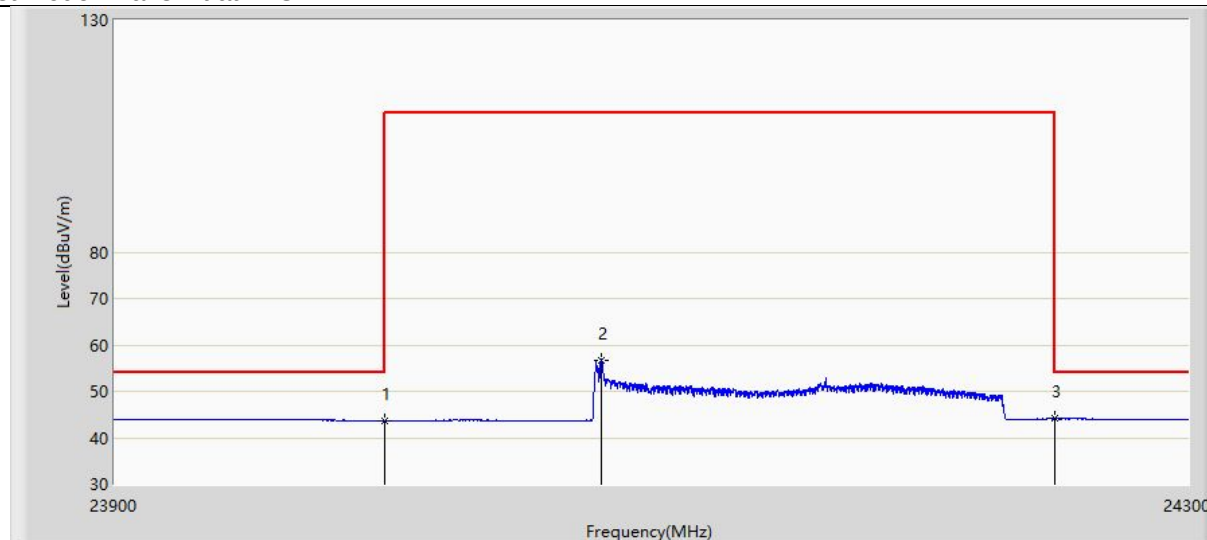
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	23977.000	57.871	66.543	-16.129	74.000	-8.672	PK
2		24000.000	55.342	64.105	-18.658	74.000	-8.763	PK
3		24083.801	90.447	99.057	N/A	N/A	-8.610	PK
4		24250.000	56.575	64.932	-17.425	74.000	-8.356	PK
5		24277.400	57.512	65.801	-16.488	74.000	-8.289	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: SIP-AC3	Time: 2023/08/02 - 16:36
Limit: FCC Part15.249 BandEdge(3m)-24G	Engineer: Arvin Ding
Probe: BBHA 9170 00935 18-40GHz	Polarity: Vertical
EUT: Microwave sensor	Power: DC 5V
Test Mode: Transmit at 24G	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		24000.000	43.614	52.377	-10.386	54.000	-8.763	AV
2		24080.801	56.610	65.231	N/A	N/A	-8.621	AV
3	*	24250.000	44.083	52.440	-9.917	54.000	-8.356	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).