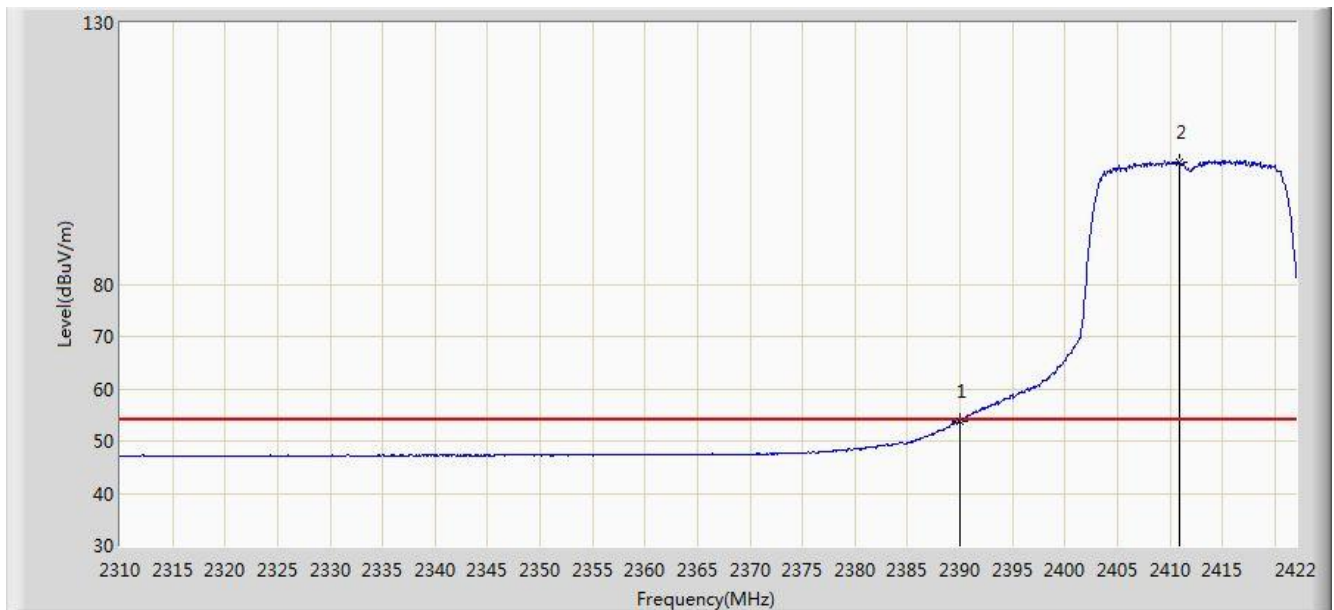


Site: AC1	Time: 2019/11/26 - 21:24
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz (Non Beam-Forming Mode)	

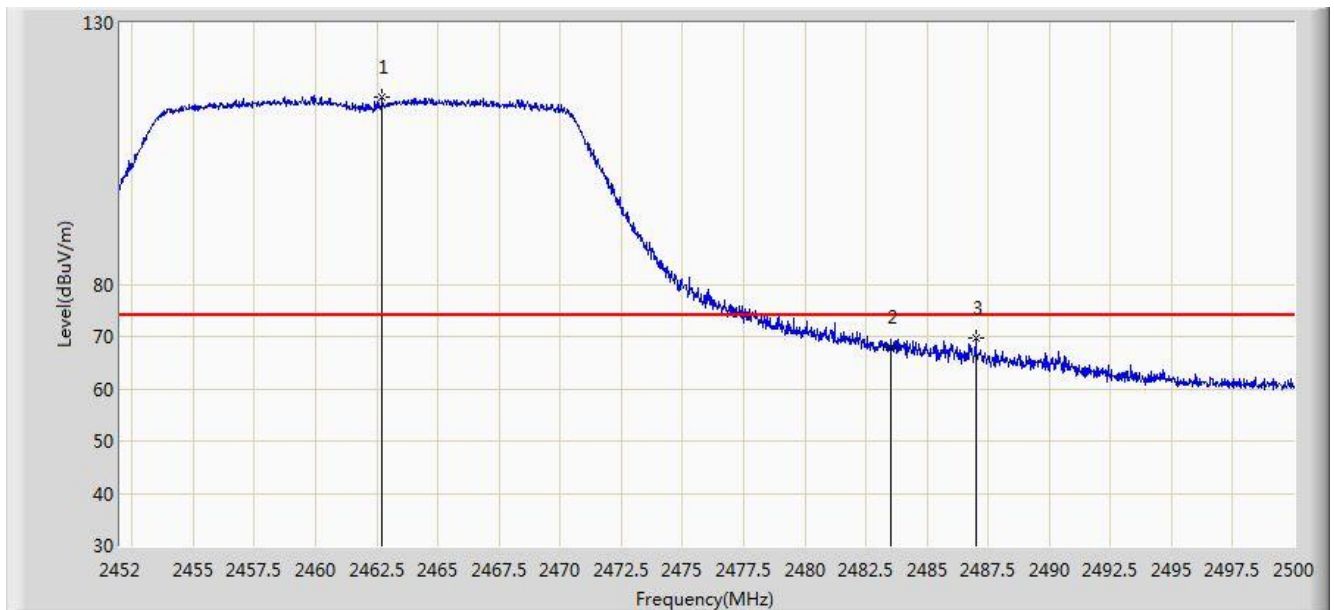


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.801	21.729	-0.199	54.000	32.072	AV
2		*	2410.912	103.449	71.368	N/A	N/A	32.081	AV

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

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

Site: AC1	Time: 2019/11/26 - 21:32
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz (Non Beam-Forming Mode)	

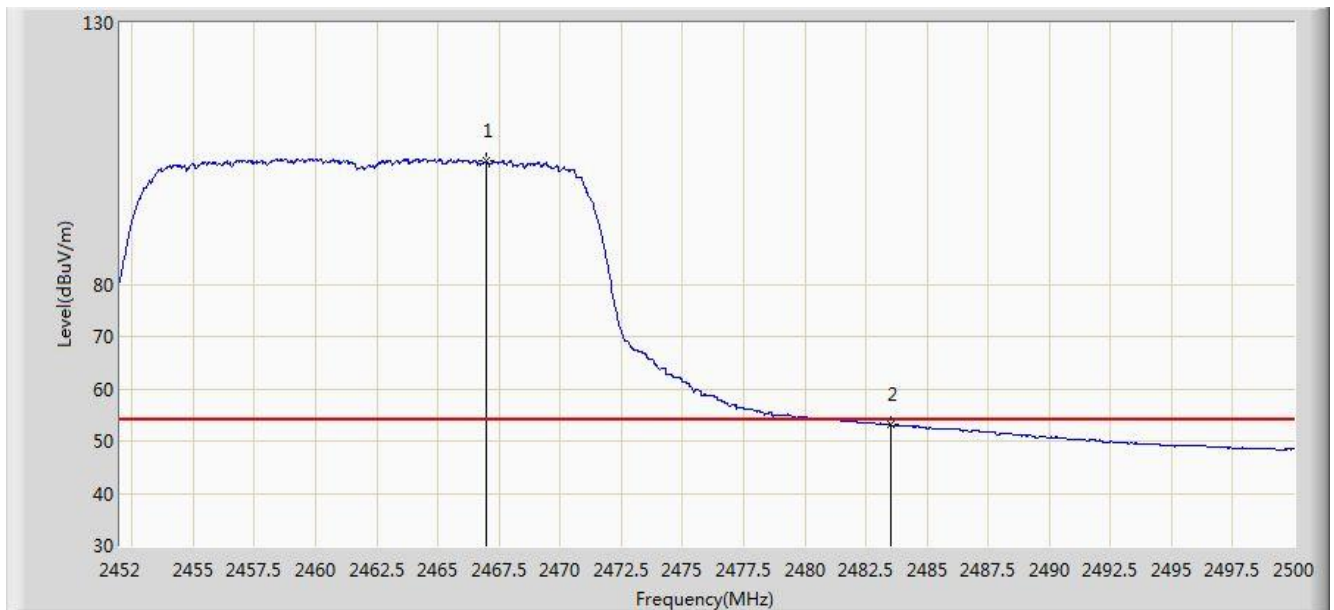


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.728	115.659	83.580	N/A	N/A	32.079	PK
2			2483.500	67.915	35.878	-6.085	74.000	32.037	PK
3			2486.992	69.629	37.599	-4.371	74.000	32.031	PK

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

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

Site: AC1	Time: 2019/11/26 - 21:33
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz (Non Beam-Forming Mode)	

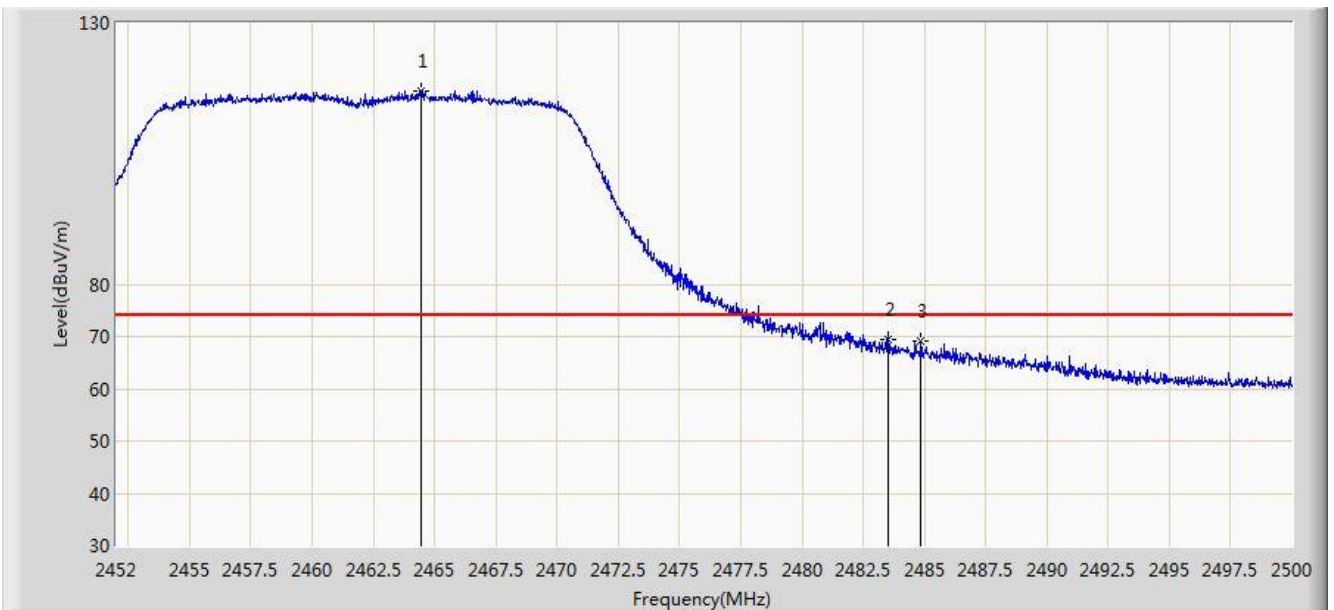


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.952	103.486	71.416	N/A	N/A	32.070	AV
2			2483.500	53.214	21.177	-0.786	54.000	32.037	AV

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

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

Site: AC1	Time: 2019/11/26 - 21:27
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz (Non Beam-Forming Mode)	

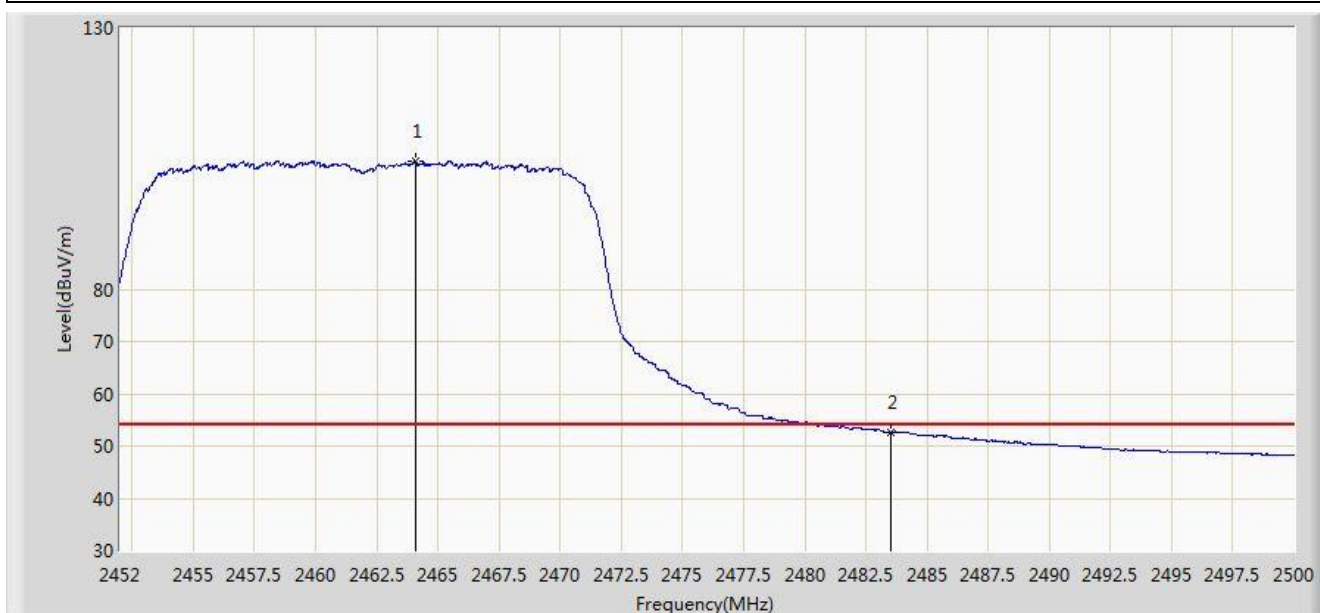


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.480	116.935	84.860	N/A	N/A	32.075	PK
2			2483.500	69.473	37.436	-4.527	74.000	32.037	PK
3			2484.856	69.015	36.981	-4.985	74.000	32.035	PK

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

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

Site: AC1	Time: 2019/11/26 - 21:30
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz (Non Beam-Forming Mode)	

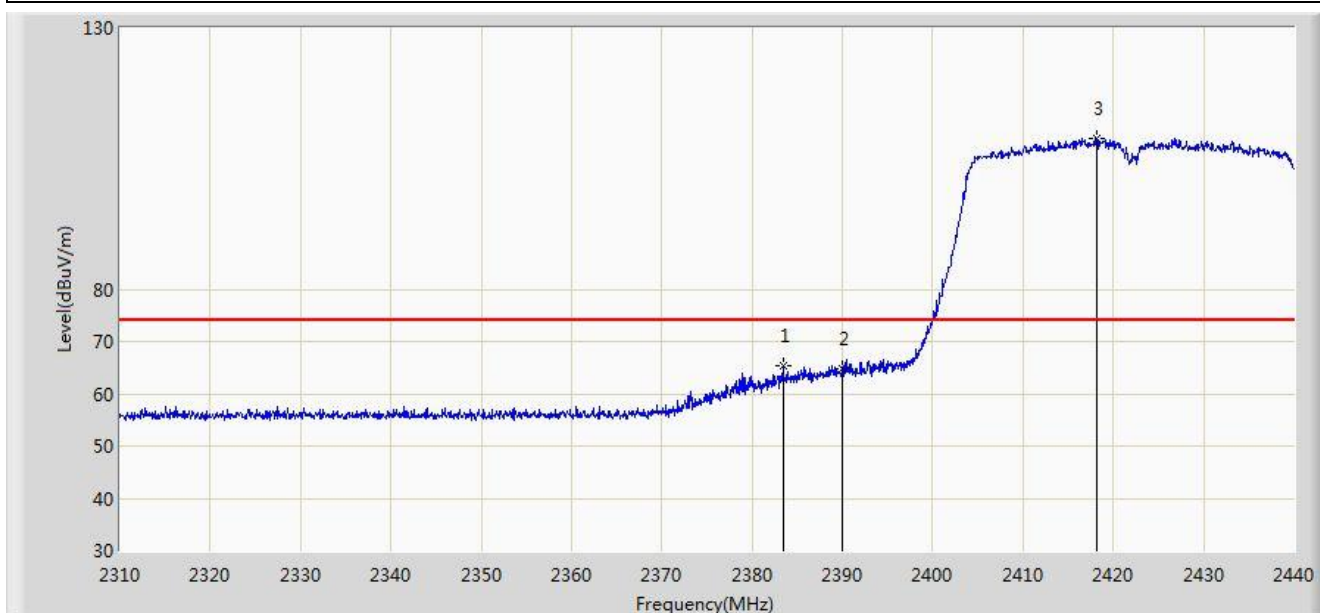


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.072	104.532	72.456	N/A	N/A	32.076	AV
2			2483.500	52.701	20.664	-1.299	54.000	32.037	AV

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

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

Site: AC2	Time: 2019/12/12 - 01:07
Limit: FCC_Part15_RSE(3m)	Engineer: Dillon Diao
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz (Non Beam-Forming Mode)	

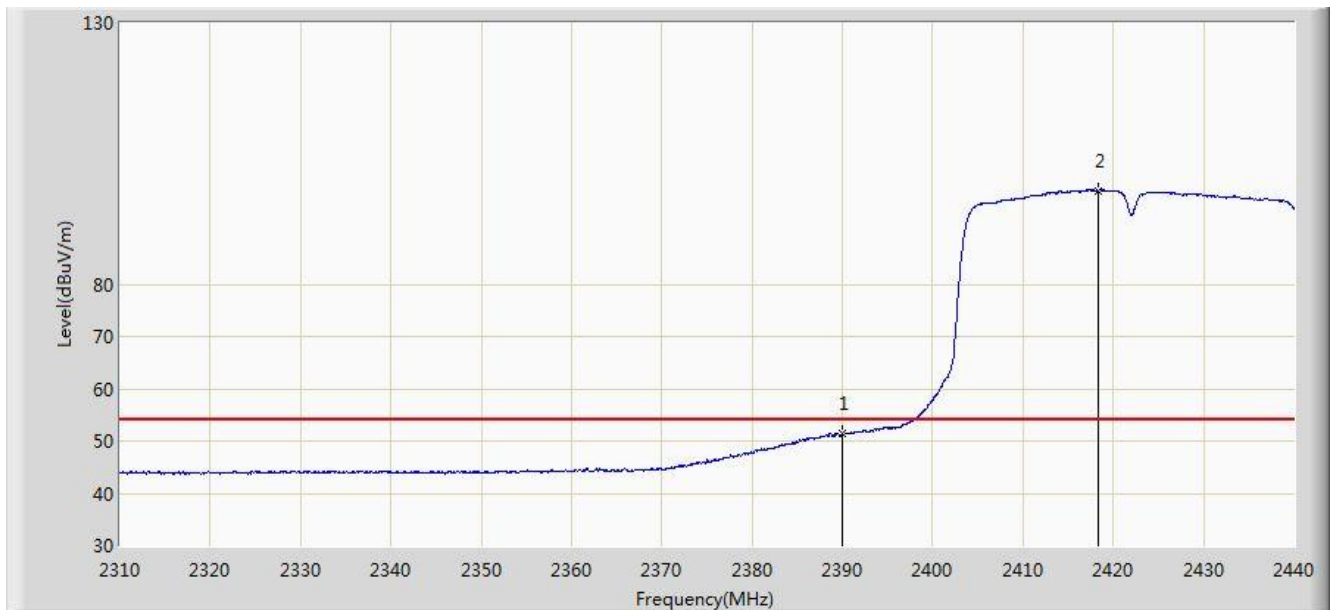


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2383.450	65.292	66.607	-8.708	74.000	-1.316	PK
2			2390.000	64.836	66.171	-9.164	74.000	-1.335	PK
3		*	2418.225	108.841	110.236	N/A	N/A	-1.395	PK

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

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

Site: AC2	Time: 2019/12/12 - 01:09
Limit: FCC_Part15_RSE(3m)	Engineer: Dillon Diao
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz (Non Beam-Forming Mode)	

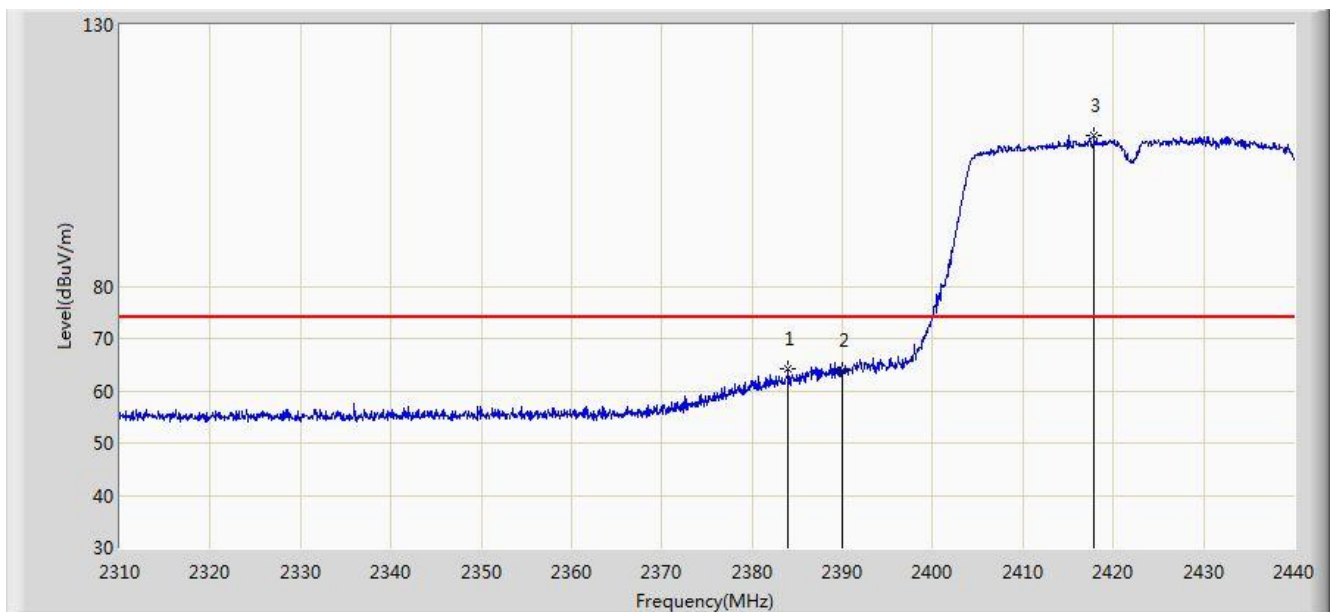


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.395	52.730	-2.605	54.000	-1.335	AV
2		*	2418.355	97.964	99.360	N/A	N/A	-1.396	AV

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

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

Site: AC2	Time: 2019/12/12 - 01:07
Limit: FCC_Part15_RSE(3m)	Engineer: Dillon Diao
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz (Non Beam-Forming Mode)	

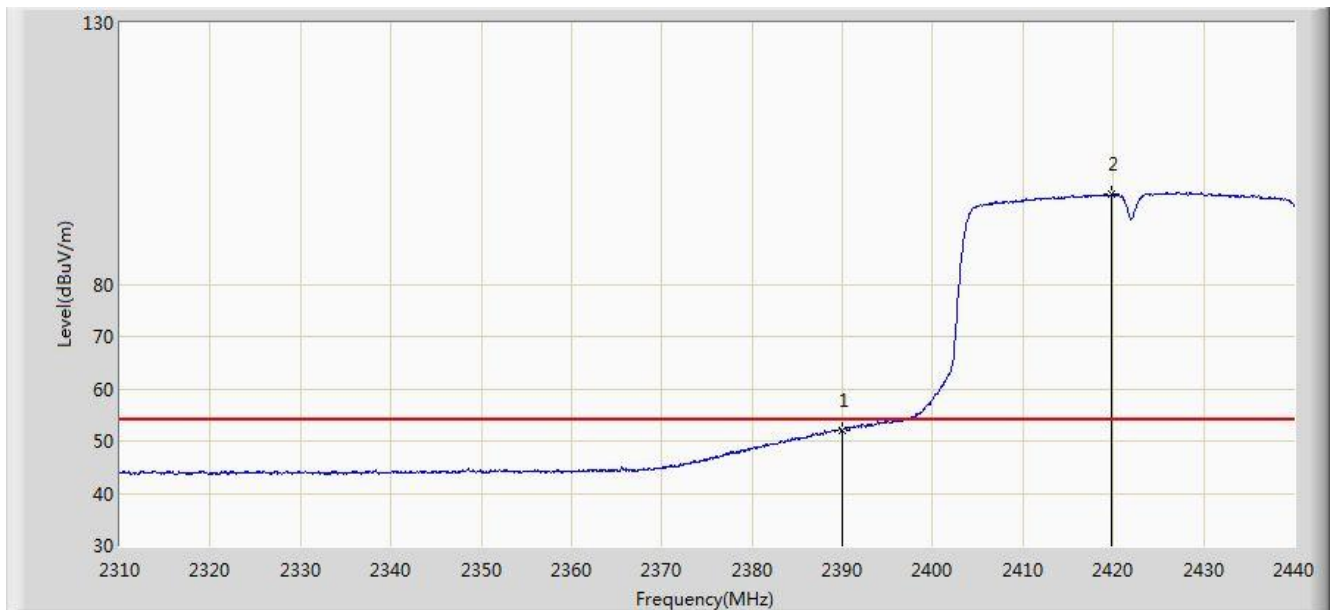


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2384.035	64.076	65.393	-9.924	74.000	-1.317	PK
2			2390.000	63.774	65.109	-10.226	74.000	-1.335	PK
3		*	2417.900	108.970	110.362	N/A	N/A	-1.392	PK

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

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

Site: AC2	Time: 2019/12/12 - 01:06
Limit: FCC_Part15_RSE(3m)	Engineer: Dillon Diao
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz (Non Beam-Forming Mode)	

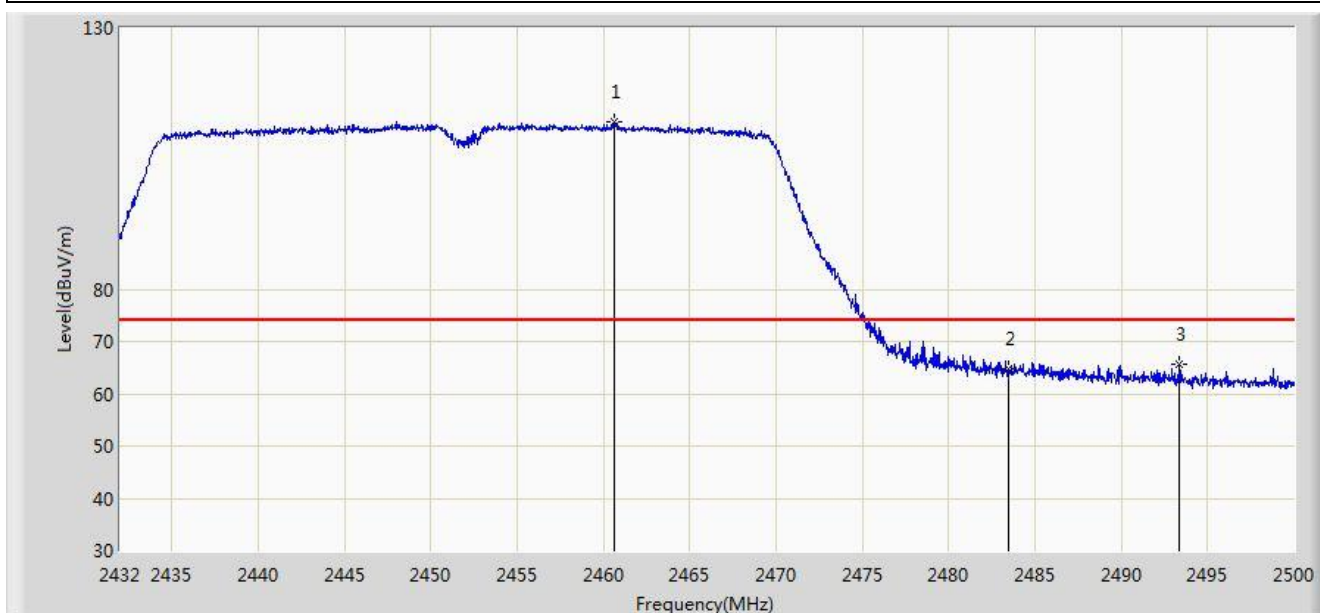


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.123	53.458	-1.877	54.000	-1.335	AV
2		*	2419.785	97.243	98.651	N/A	N/A	-1.409	AV

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

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

Site: AC1	Time: 2019/11/26 - 22:39
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz (Non Beam-Forming Mode)	

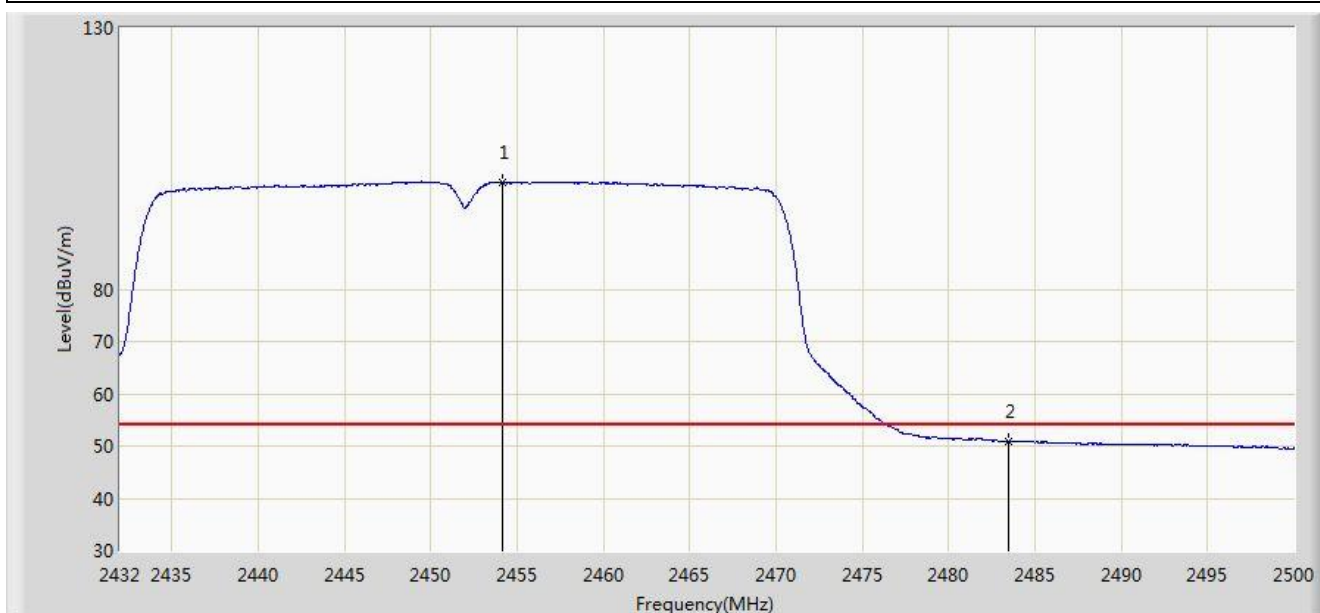


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.628	112.101	80.021	N/A	N/A	32.080	PK
2			2483.500	64.796	32.759	-9.204	74.000	32.037	PK
3			2493.370	65.786	33.768	-8.214	74.000	32.019	PK

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

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

Site: AC1	Time: 2019/11/26 - 22:36
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz (Non Beam-Forming Mode)	

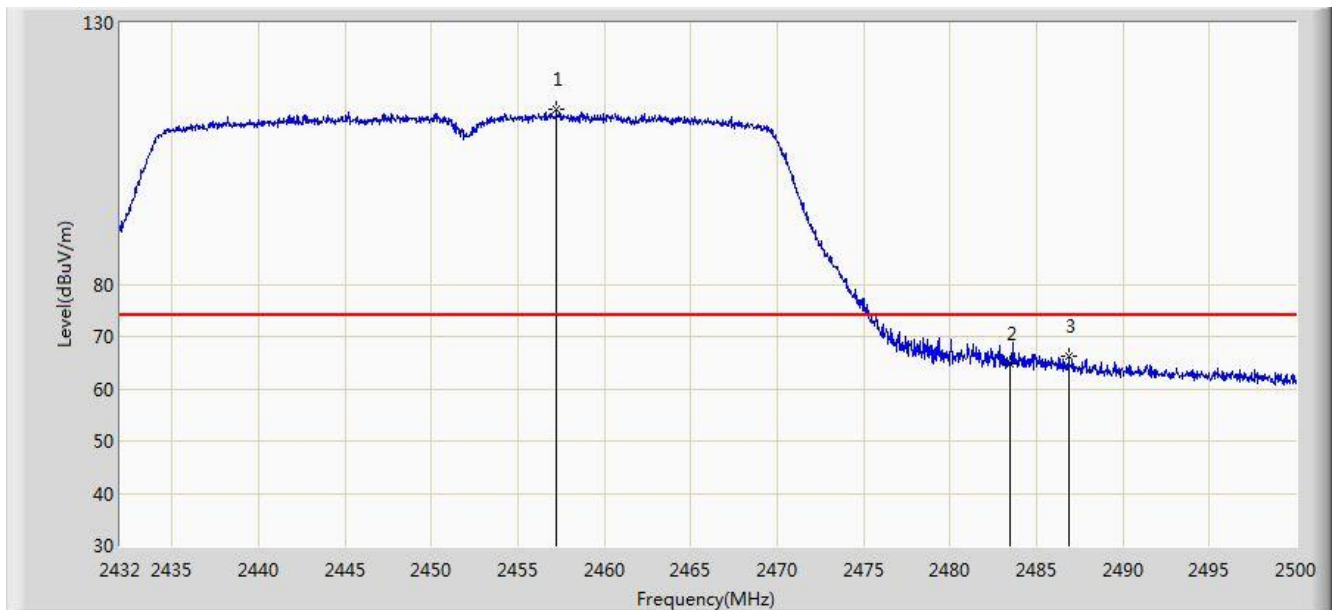


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.168	100.368	68.291	N/A	N/A	32.078	AV
2			2483.500	50.844	18.807	-3.156	54.000	32.037	AV

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

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

Site: AC1	Time: 2019/11/26 - 22:40
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz (Non Beam-Forming Mode)	

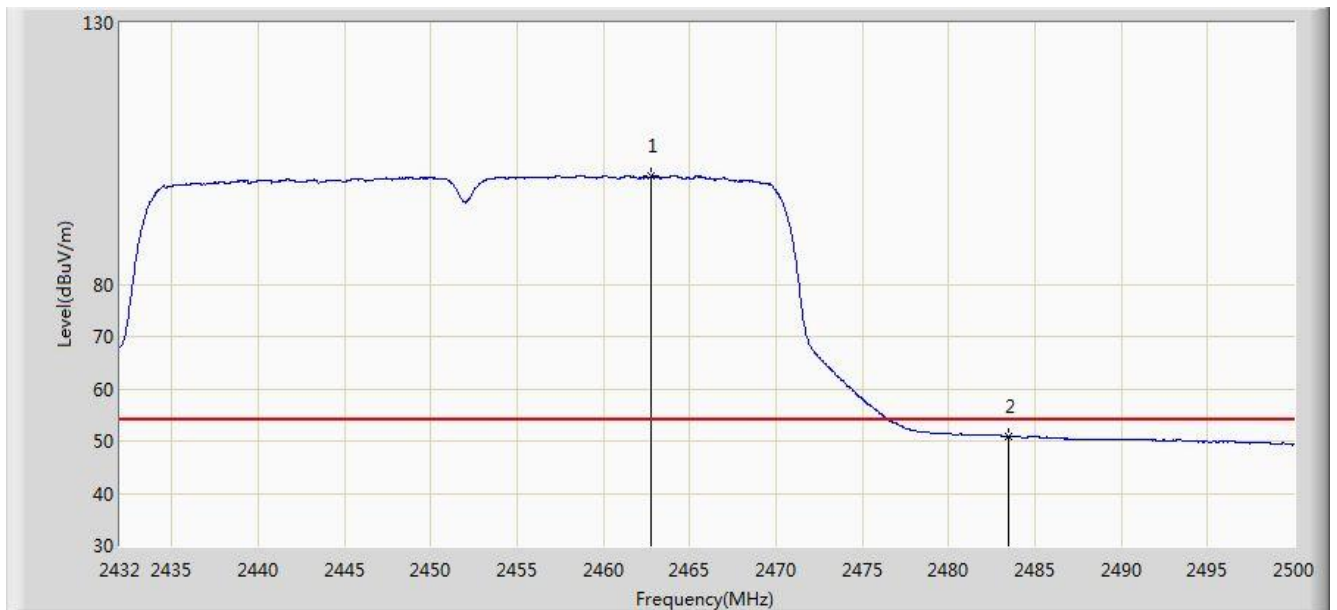


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2457.228	113.381	81.302	N/A	N/A	32.079	PK
2			2483.500	64.776	32.739	-9.224	74.000	32.037	PK
3			2486.842	66.254	34.223	-7.746	74.000	32.031	PK

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

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

Site: AC1	Time: 2019/11/26 - 22:41
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz (Non Beam-Forming Mode)	

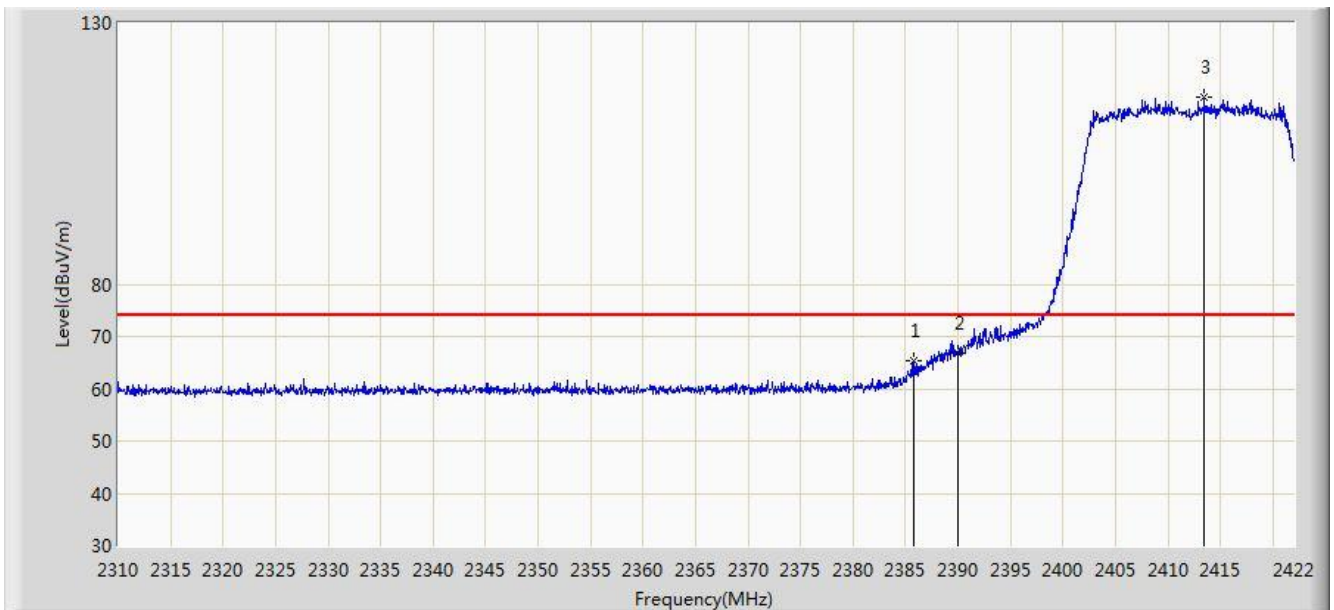


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.804	100.661	68.582	N/A	N/A	32.079	AV
2			2483.500	50.953	18.916	-3.047	54.000	32.037	AV

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

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

Site: AC1	Time: 2019/11/26 - 23:55
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Non Beam-Forming Mode)	

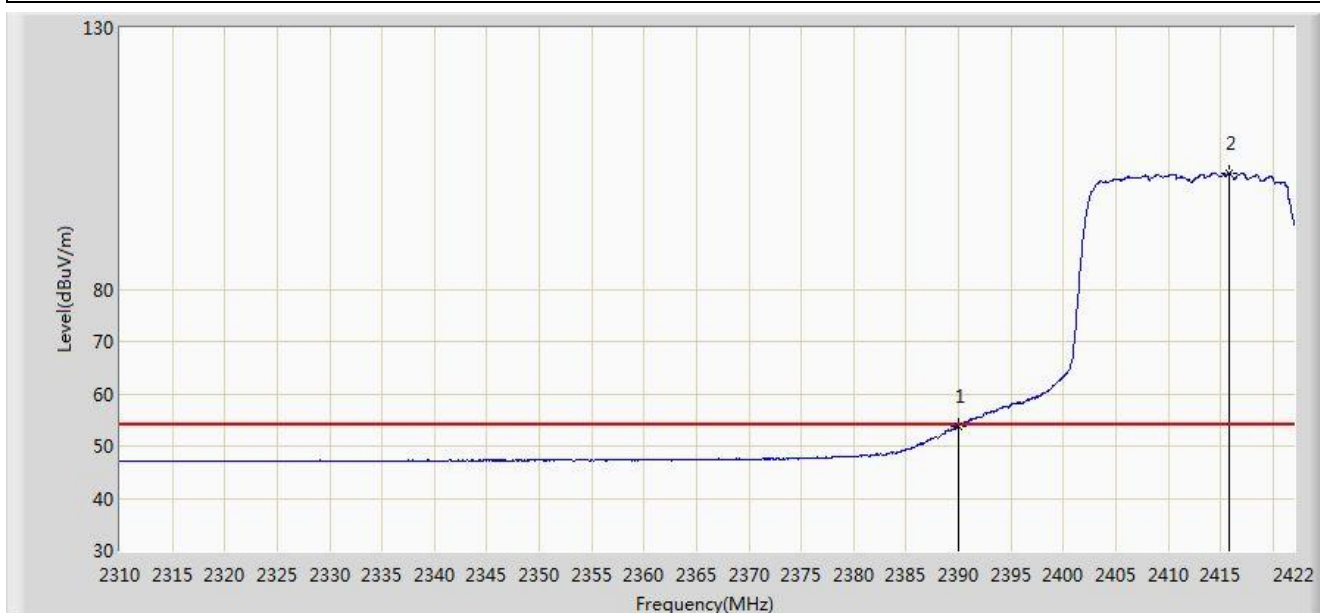


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2385.768	65.272	33.199	-8.728	74.000	32.073	PK
2			2390.000	66.801	34.729	-7.199	74.000	32.072	PK
3		*	2413.488	115.891	83.804	N/A	N/A	32.087	PK

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

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

Site: AC1	Time: 2019/11/26 - 23:53
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Non Beam-Forming Mode)	

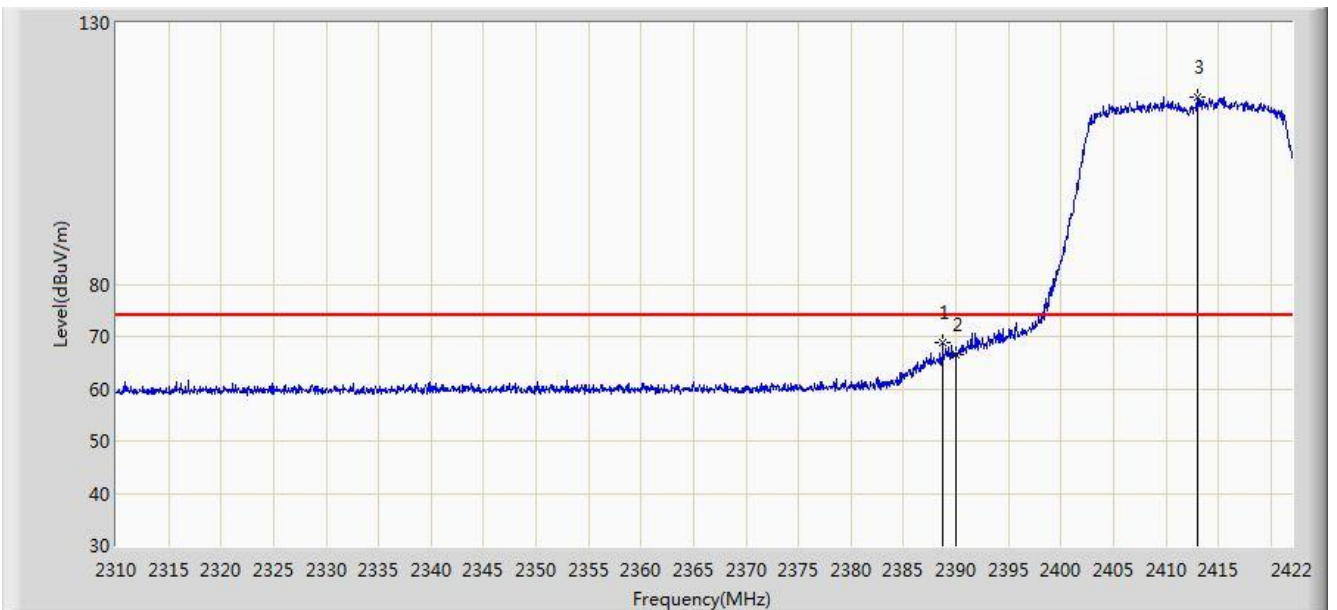


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.903	21.831	-0.097	54.000	32.072	AV
2		*	2415.840	102.206	70.112	N/A	N/A	32.094	AV

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

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

Site: AC1	Time: 2019/11/26 - 23:58
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Non Beam-Forming Mode)	

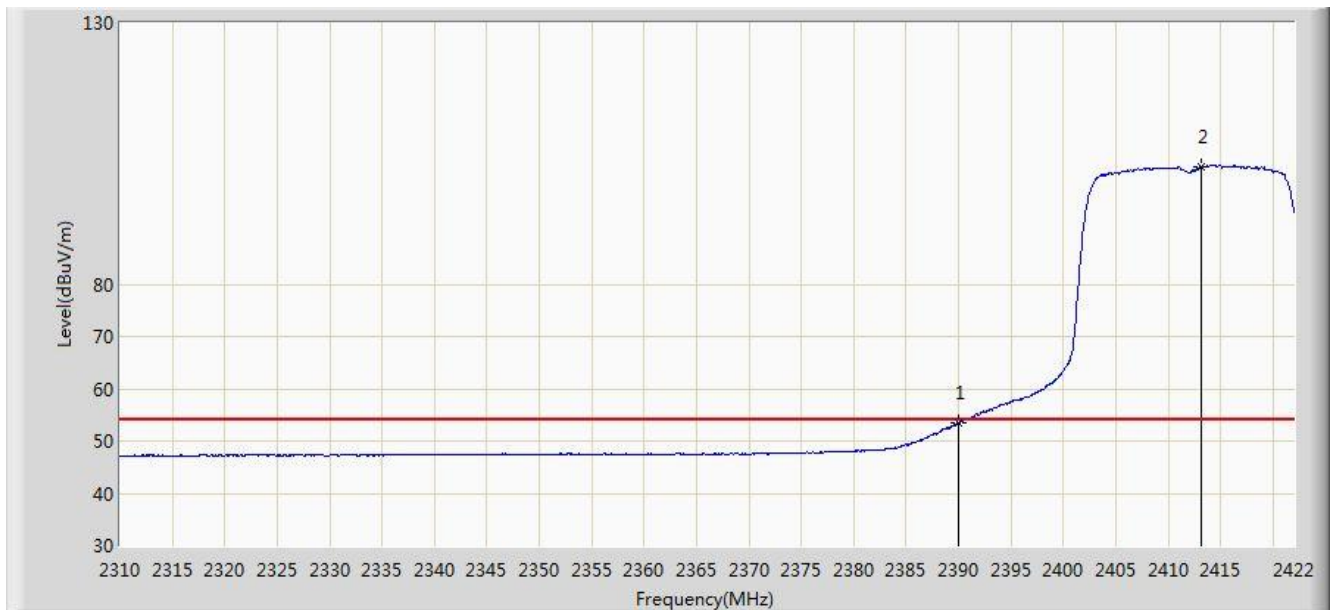


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.736	68.758	36.686	-5.242	74.000	32.073	PK
2			2390.000	66.640	34.568	-7.360	74.000	32.072	PK
3		*	2412.984	115.725	83.639	N/A	N/A	32.086	PK

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

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

Site: AC1	Time: 2019/11/26 - 23:59
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Non Beam-Forming Mode)	

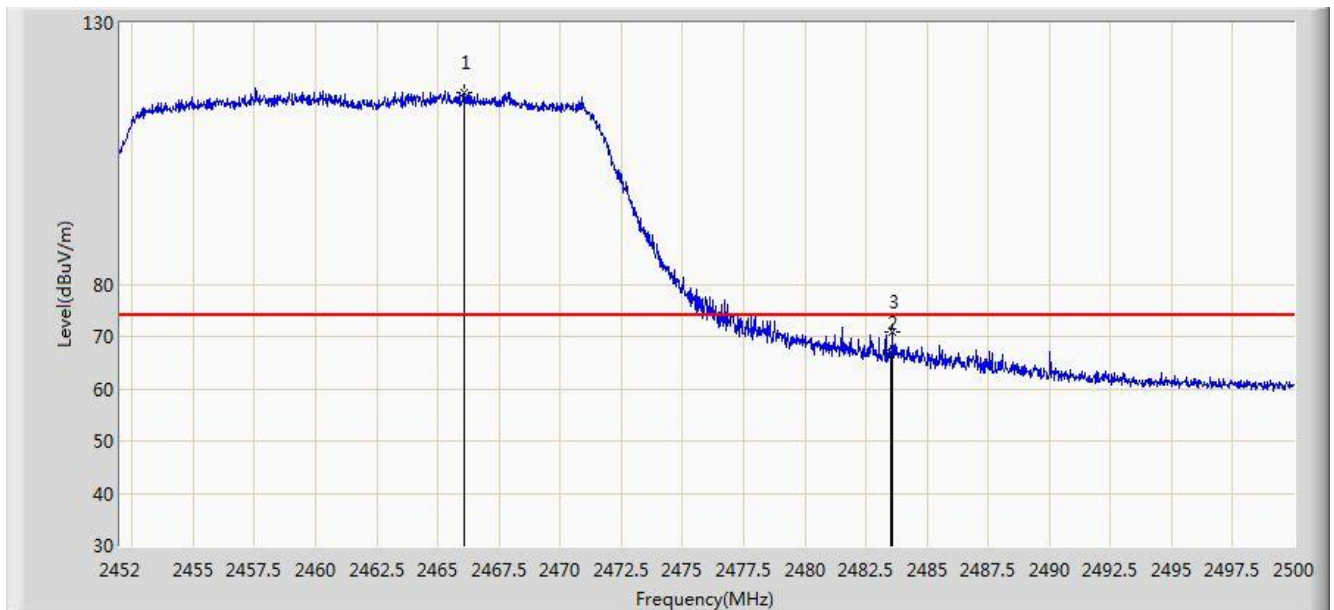


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.447	21.375	-0.553	54.000	32.072	AV
2		*	2413.096	102.530	70.444	N/A	N/A	32.086	AV

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

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

Site: AC1	Time: 2019/11/27 - 00:18
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Non Beam-Forming Mode)	

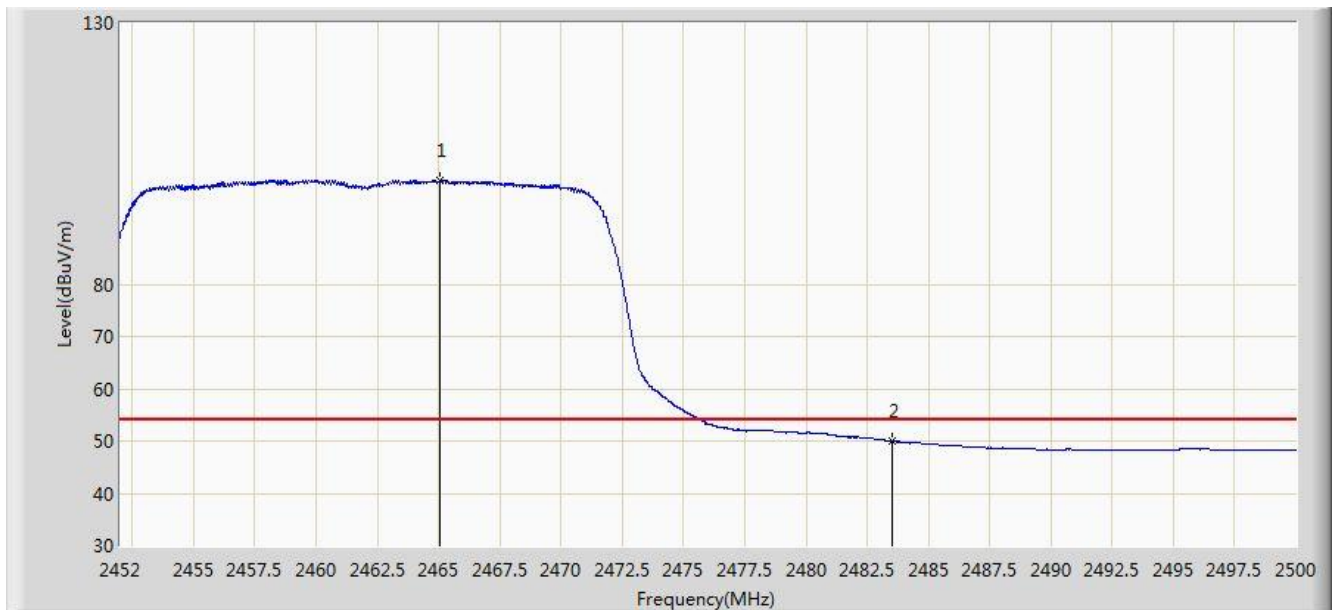


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.064	116.750	84.678	N/A	N/A	32.072	PK
2			2483.500	66.802	34.765	-7.198	74.000	32.037	PK
3			2483.608	70.773	38.736	-3.227	74.000	32.036	PK

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

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

Site: AC1	Time: 2019/11/27 - 00:20
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Non Beam-Forming Mode)	

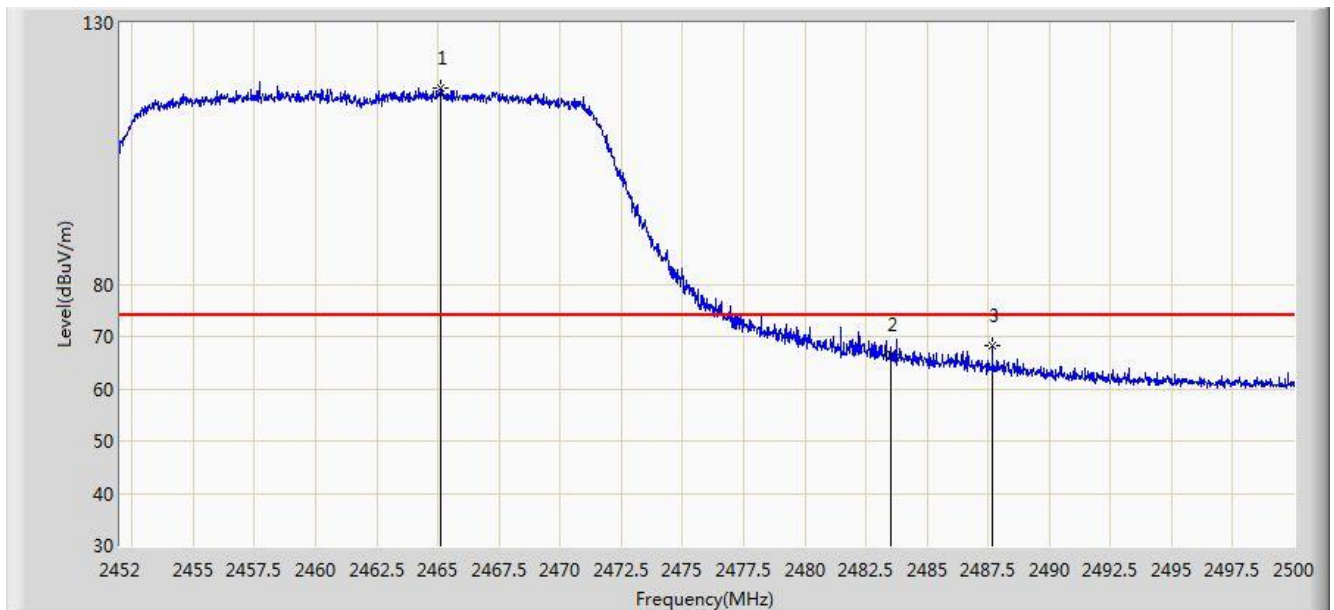


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.056	99.776	67.702	N/A	N/A	32.075	AV
2			2483.500	50.019	17.982	-3.981	54.000	32.037	AV

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

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

Site: AC1	Time: 2019/11/27 - 00:46
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Non Beam-Forming Mode)	

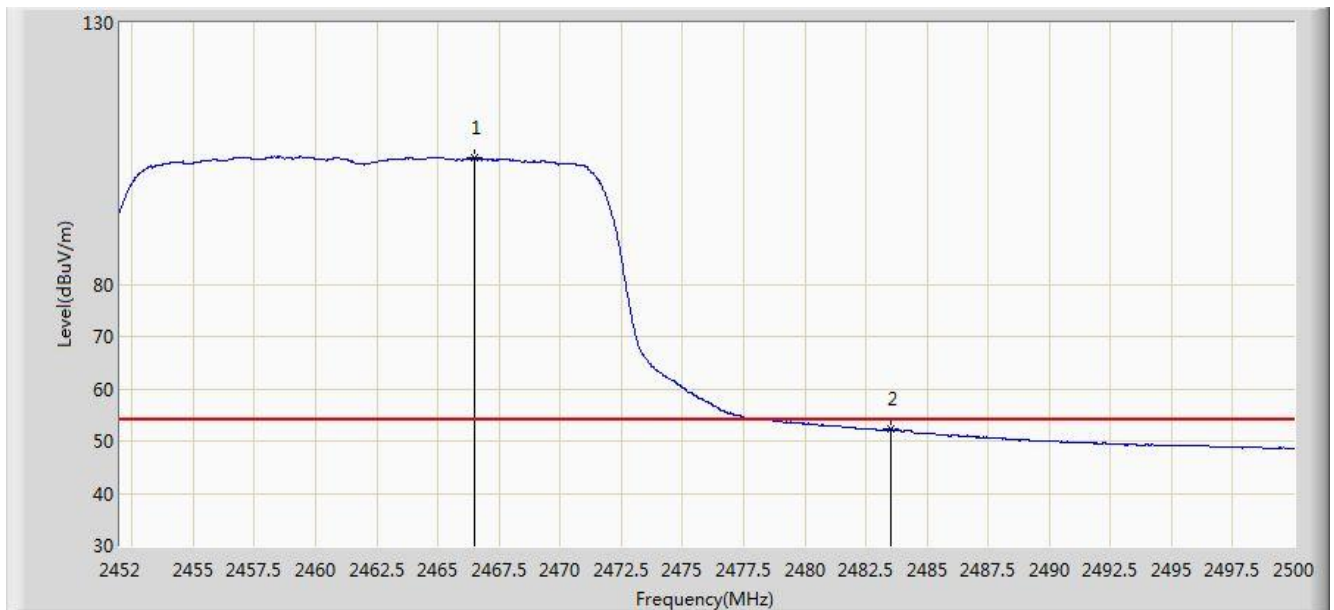


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.104	117.443	85.369	N/A	N/A	32.075	PK
2			2483.500	66.384	34.347	-7.616	74.000	32.037	PK
3			2487.664	68.313	36.284	-5.687	74.000	32.029	PK

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

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

Site: AC1	Time: 2019/11/27 - 00:48
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Non Beam-Forming Mode)	

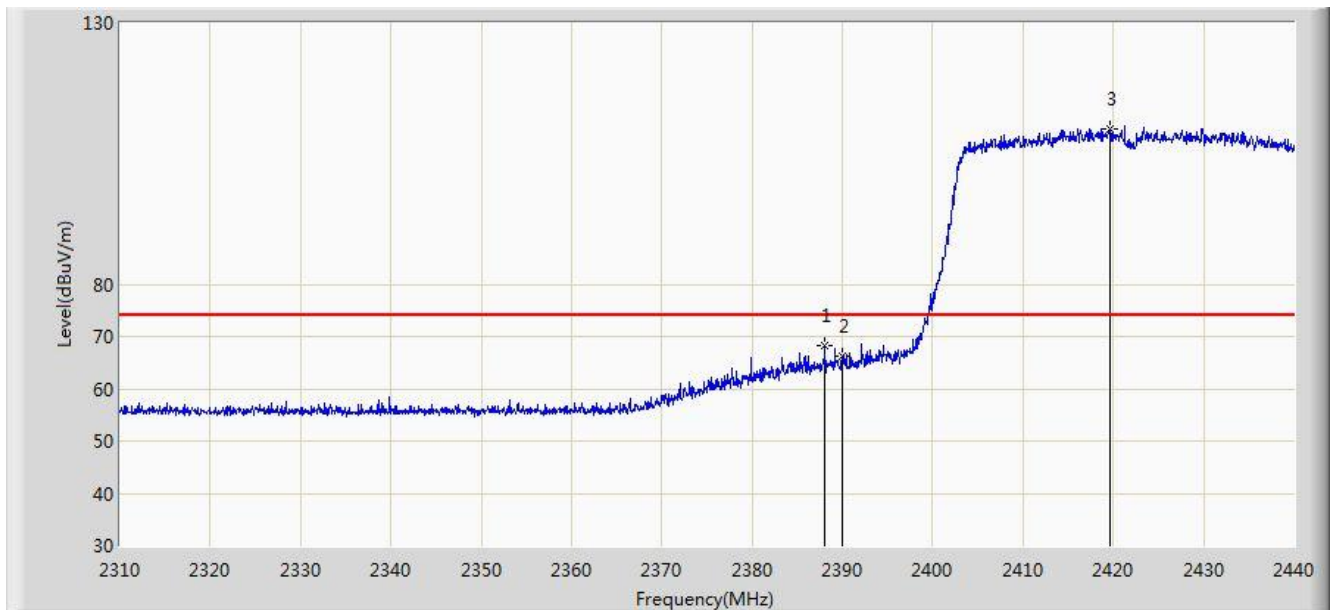


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.520	104.095	72.024	N/A	N/A	32.071	AV
2			2483.500	52.183	20.146	-1.817	54.000	32.037	AV

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

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

Site: AC2	Time: 2019/12/12 - 01:14
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Non Beam-Forming Mode)	

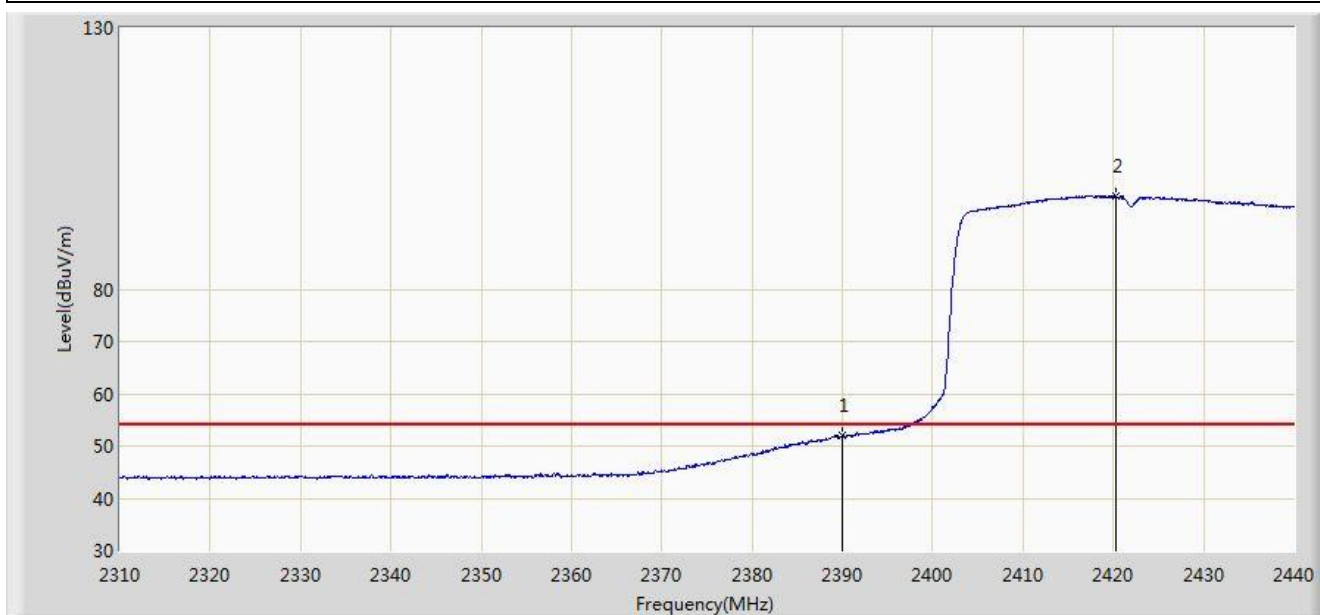


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.065	68.190	69.519	-5.810	74.000	-1.329	PK
2			2390.000	66.243	67.578	-7.757	74.000	-1.335	PK
3		*	2419.590	109.670	111.077	N/A	N/A	-1.407	PK

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

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

Site: AC2	Time: 2019/12/12 - 01:15
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Non Beam-Forming Mode)	

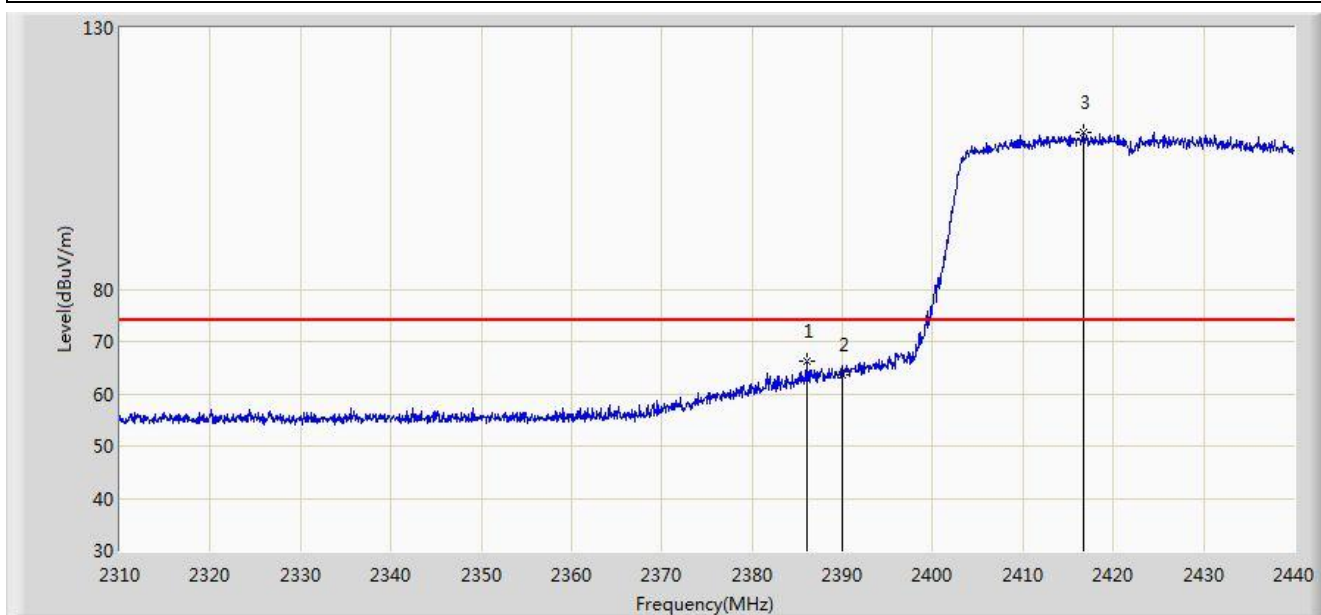


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.107	53.442	-1.893	54.000	-1.335	AV
2		*	2420.305	97.824	99.237	N/A	N/A	-1.413	AV

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

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

Site: AC2	Time: 2019/12/12 - 01:13
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Non Beam-Forming Mode)	

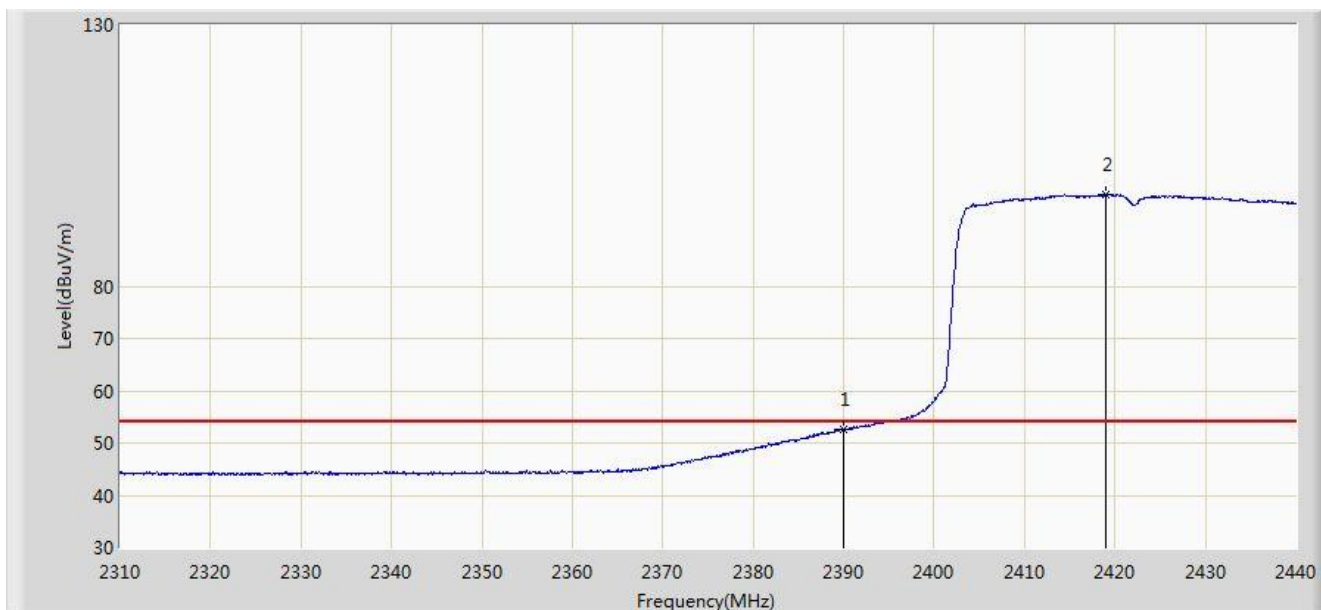


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2386.050	66.347	67.670	-7.653	74.000	-1.323	PK
2			2390.000	63.542	64.877	-10.458	74.000	-1.335	PK
3		*	2416.730	110.003	111.386	N/A	N/A	-1.383	PK

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

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

Site: AC2	Time: 2019/12/12 - 01:13
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Non Beam-Forming Mode)	

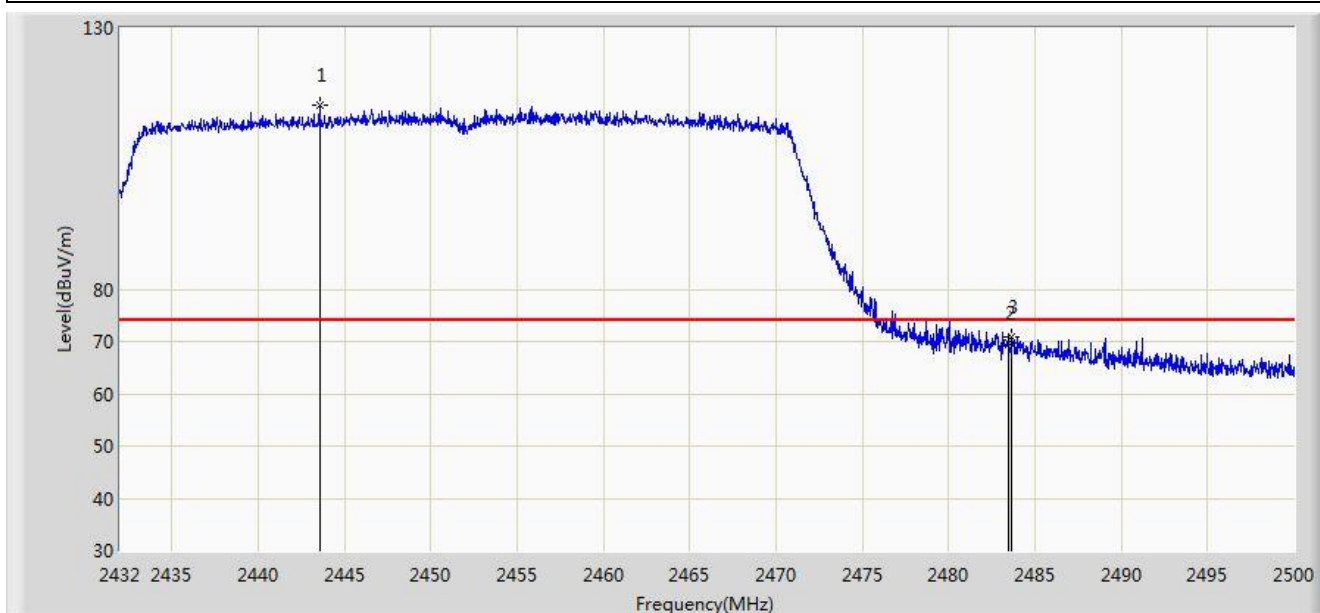


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.630	53.965	-1.370	54.000	-1.335	AV
2		*	2419.005	97.576	98.978	N/A	N/A	-1.402	AV

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

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

Site: AC1	Time: 2019/11/27 - 01:48
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Non Beam-Forming Mode)	

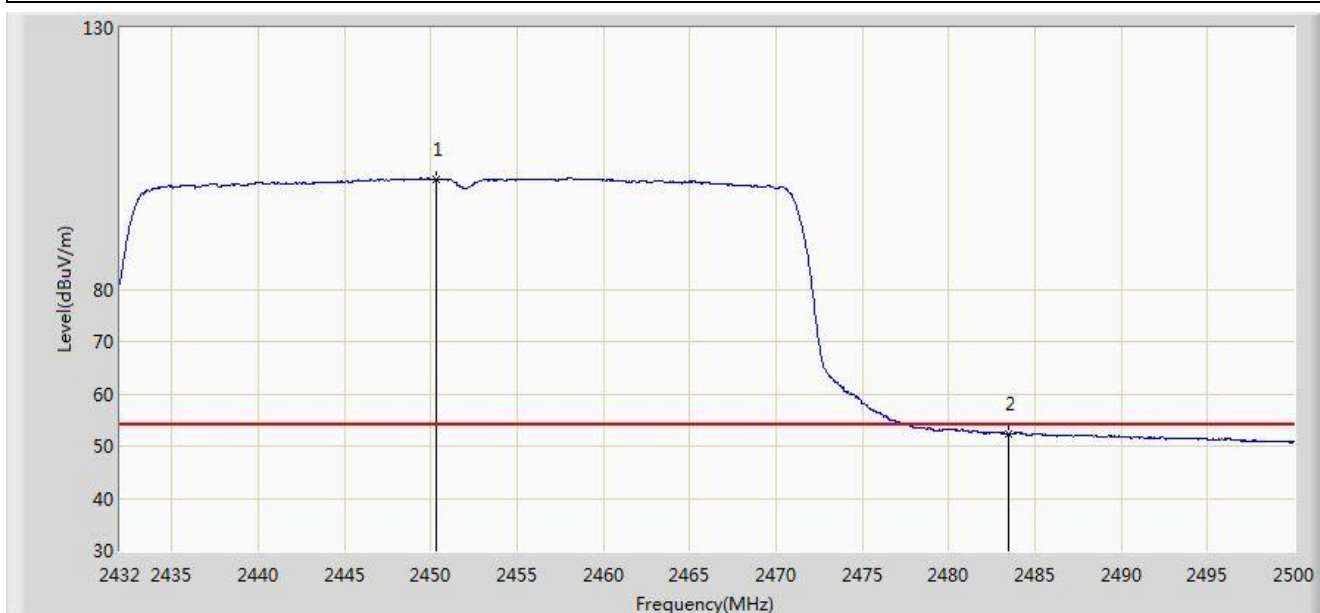


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2443.560	115.236	83.158	N/A	N/A	32.078	PK
2			2483.500	69.737	37.700	-4.263	74.000	32.037	PK
3			2483.680	70.997	38.960	-3.003	74.000	32.036	PK

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

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

Site: AC1	Time: 2019/11/27 - 01:49
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Non Beam-Forming Mode)	

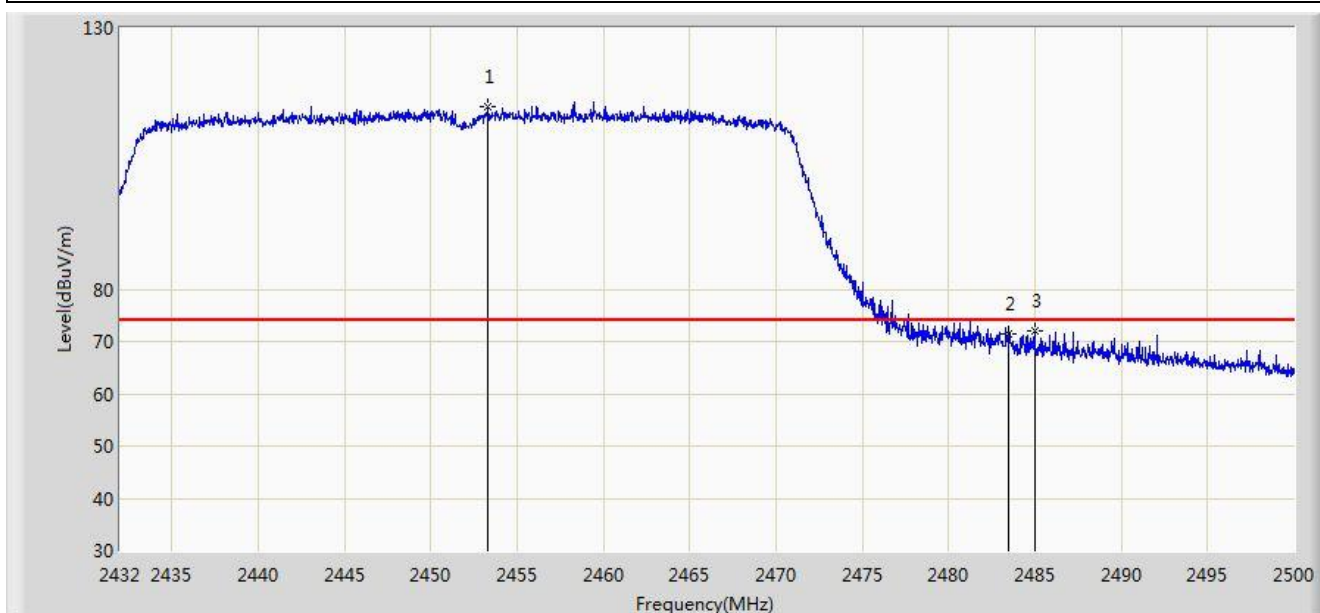


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2450.360	101.138	69.062	N/A	N/A	32.075	AV
2			2483.500	52.263	20.226	-1.737	54.000	32.037	AV

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

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

Site: AC1	Time: 2019/11/27 - 01:51
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Non Beam-Forming Mode)	

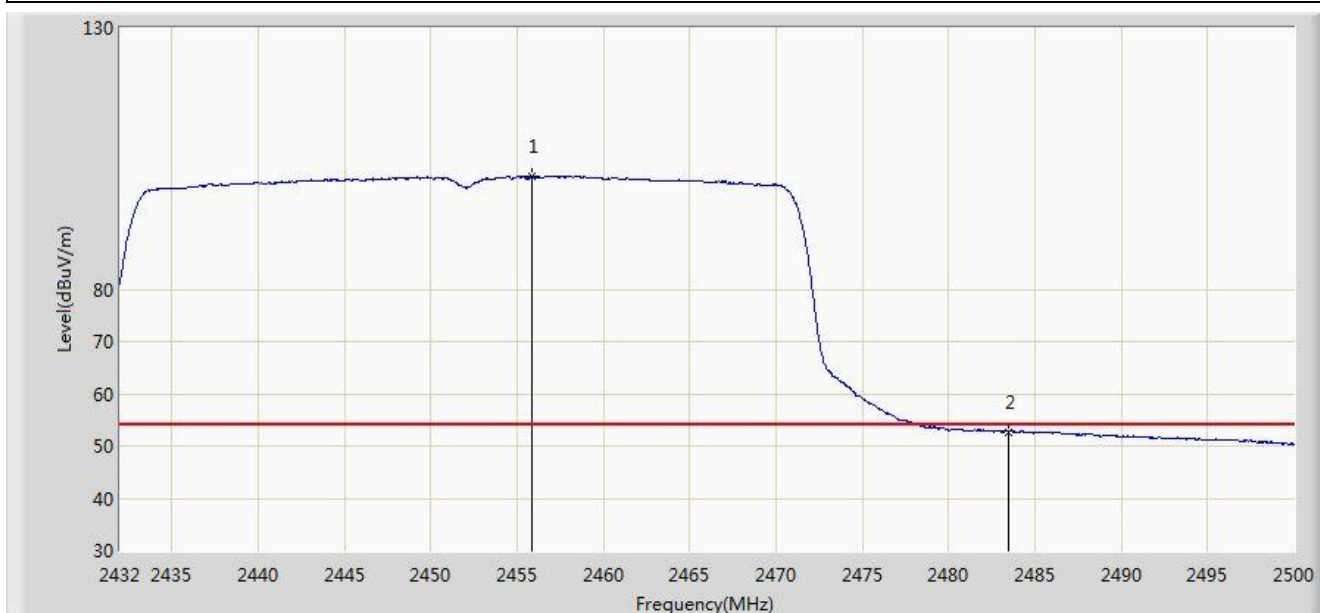


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2453.318	114.952	82.875	N/A	N/A	32.077	PK
2			2483.500	71.496	39.459	-2.504	74.000	32.037	PK
3			2484.972	72.142	40.108	-1.858	74.000	32.035	PK

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

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

Site: AC1	Time: 2019/11/27 - 01:54
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Non Beam-Forming Mode)	

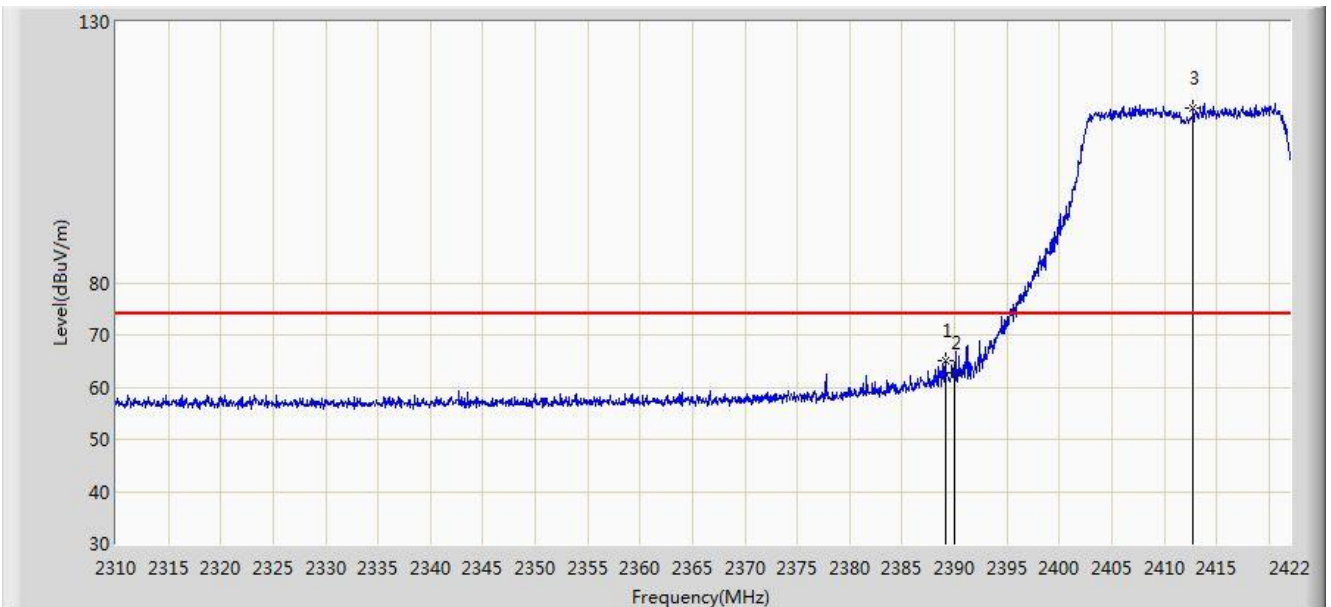


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.868	101.613	69.535	N/A	N/A	32.078	AV
2			2483.500	52.712	20.675	-1.288	54.000	32.037	AV

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

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

Site: AC1	Time: 2019/12/14 - 04:26
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Beam-Forming Mode)	

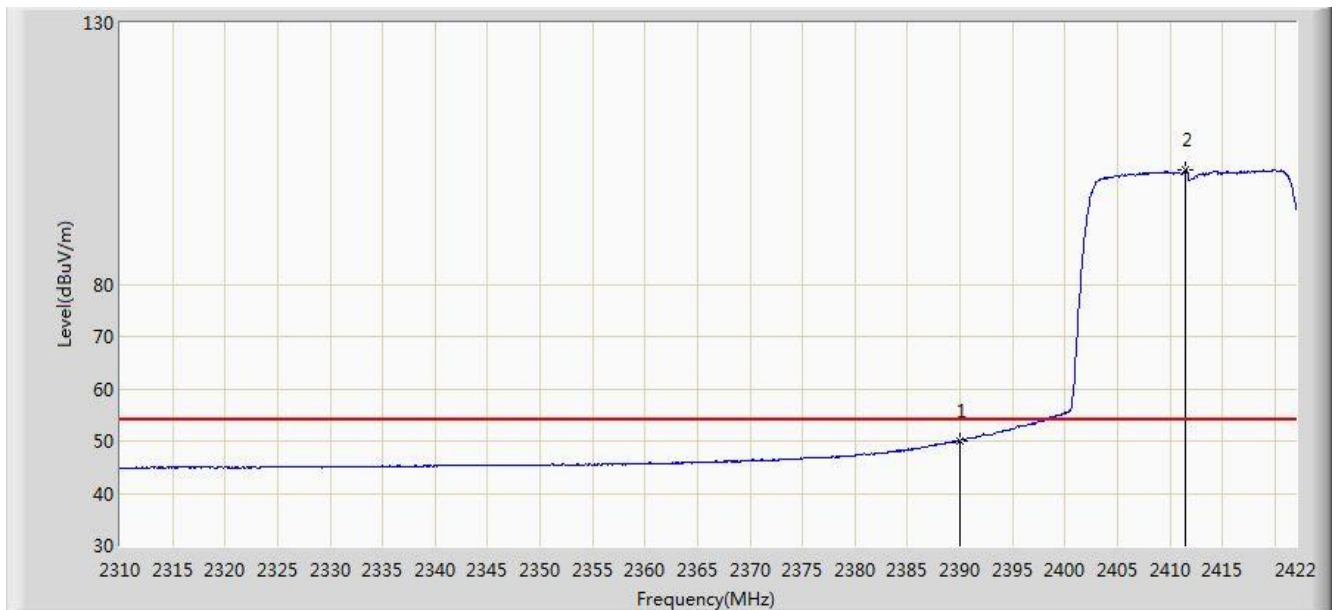


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.128	65.179	66.263	-8.821	74.000	-1.084	PK
2			2390.000	62.802	63.883	-11.198	74.000	-1.081	PK
3		*	2412.760	113.470	114.490	N/A	N/A	-1.020	PK

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

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

Site: AC1	Time: 2019/12/14 - 04:28
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Beam-Forming Mode)	

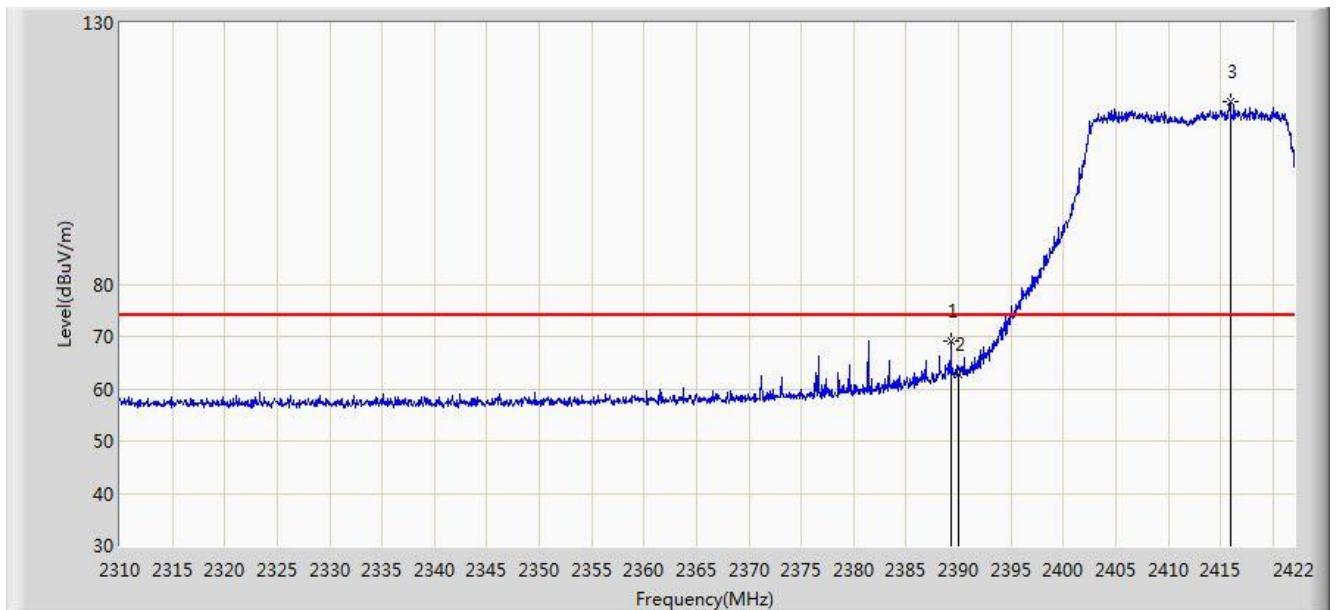


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.076	51.157	-3.924	54.000	-1.081	AV
2		*	2411.472	101.913	102.937	N/A	N/A	-1.024	AV

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

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

Site: AC1	Time: 2019/12/14 - 04:24
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Beam-Forming Mode)	

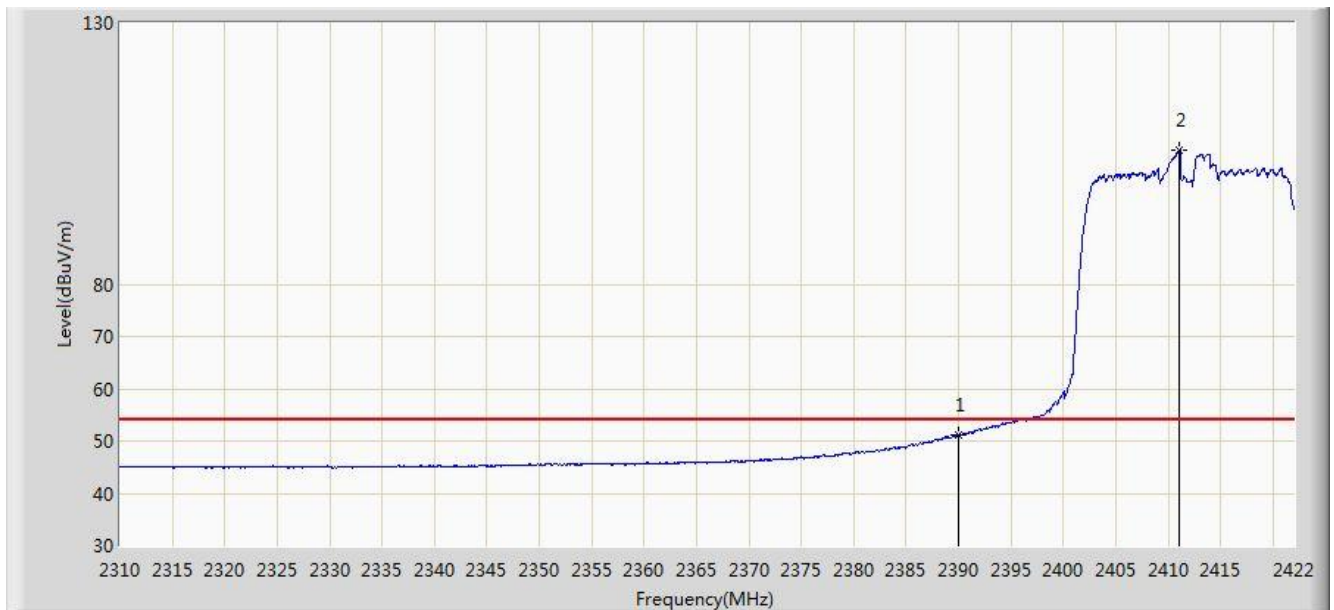


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.296	69.074	70.157	-4.926	74.000	-1.082	PK
2			2390.000	62.636	63.717	-11.364	74.000	-1.081	PK
3		*	2415.896	115.022	116.034	N/A	N/A	-1.011	PK

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

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

Site: AC1	Time: 2019/12/14 - 04:25
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2412MHz (Beam-Forming Mode)	

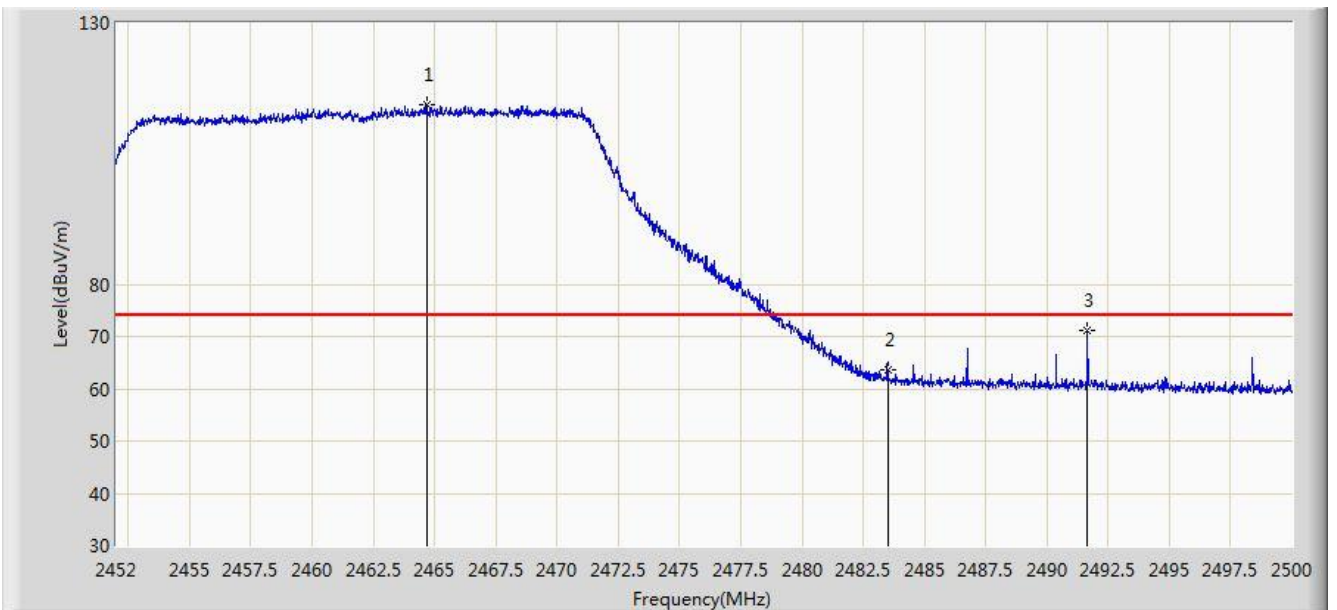


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.060	52.141	-2.940	54.000	-1.081	AV
2		*	2411.080	105.750	106.775	N/A	N/A	-1.025	AV

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

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

Site: AC1	Time: 2019/12/14 - 05:12
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Beam-Forming Mode)	

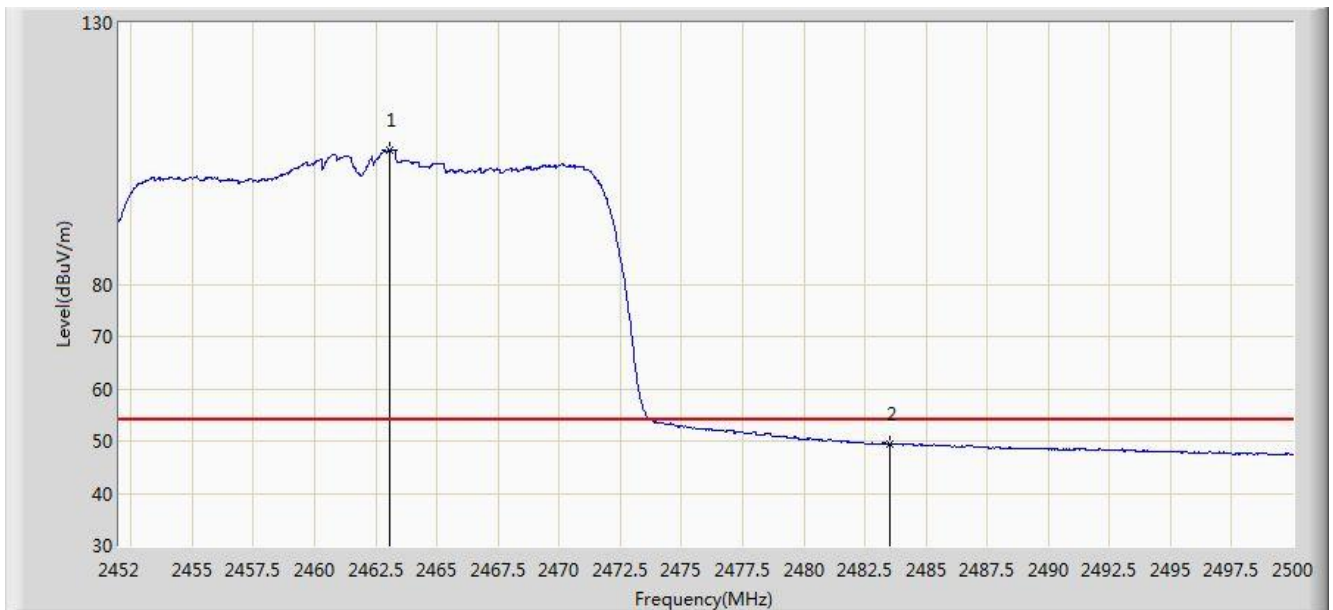


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.696	114.488	115.465	N/A	N/A	-0.977	PK
2			2483.500	63.659	64.690	-10.341	74.000	-1.031	PK
3			2491.648	71.025	72.026	-2.975	74.000	-1.002	PK

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

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

Site: AC1	Time: 2019/12/14 - 05:03
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Beam-Forming Mode)	

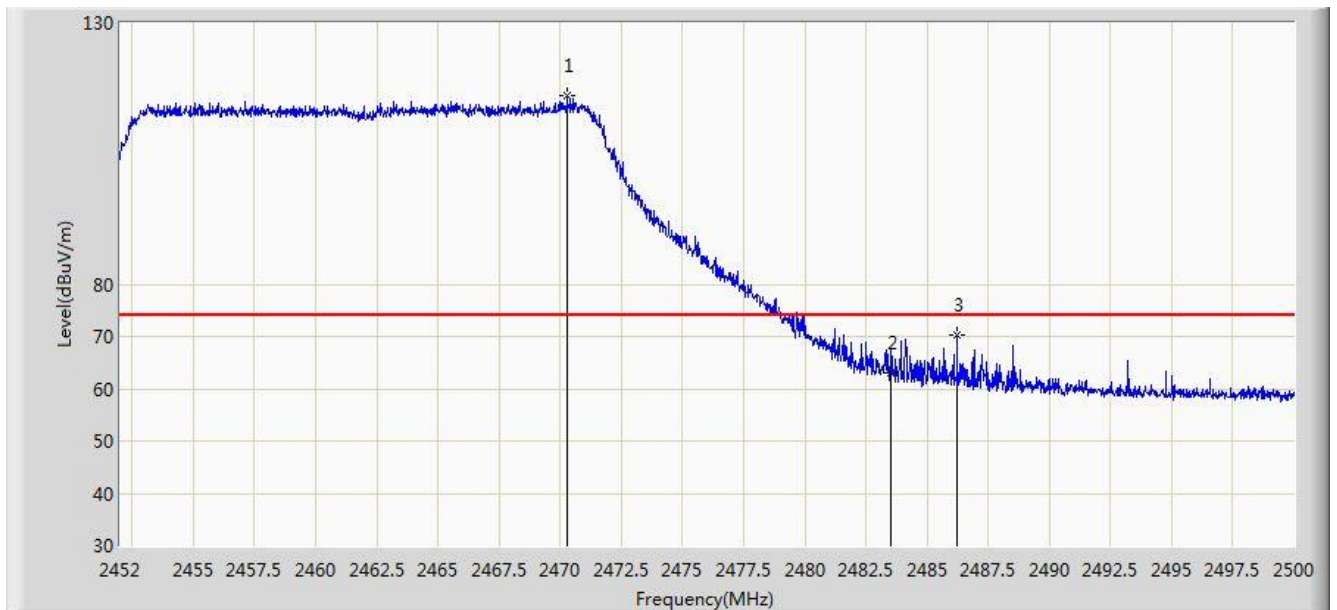


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.088	105.633	106.602	N/A	N/A	-0.969	AV
2			2483.500	49.463	50.494	-4.537	54.000	-1.031	AV

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

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

Site: AC1	Time: 2019/12/14 - 05:00
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Beam-Forming Mode)	

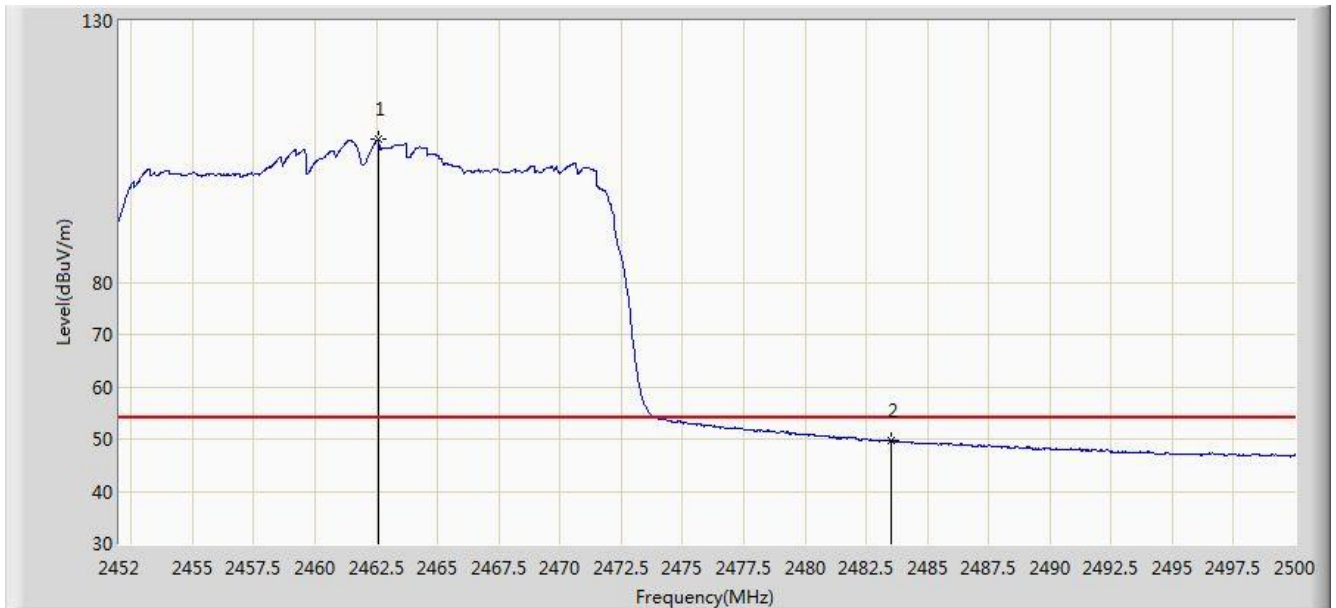


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2470.288	115.993	116.998	N/A	N/A	-1.005	PK
2			2483.500	63.017	64.048	-10.983	74.000	-1.031	PK
3			2486.224	70.230	71.251	-3.770	74.000	-1.021	PK

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

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

Site: AC1	Time: 2019/12/14 - 05:02
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at Channel 2462MHz (Beam-Forming Mode)	

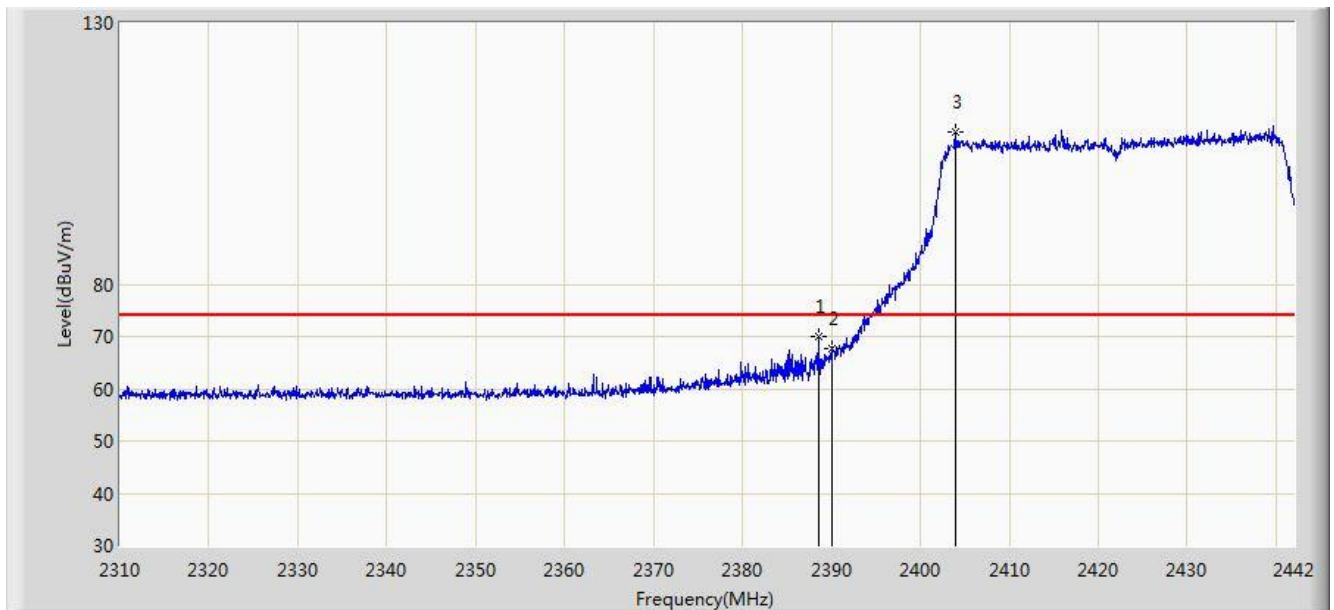


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.608	107.514	108.480	N/A	N/A	-0.966	AV
2			2483.500	49.817	50.848	-4.183	54.000	-1.031	AV

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

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

Site: AC1	Time: 2019/12/10 - 02:40
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Beam-Forming Mode)	

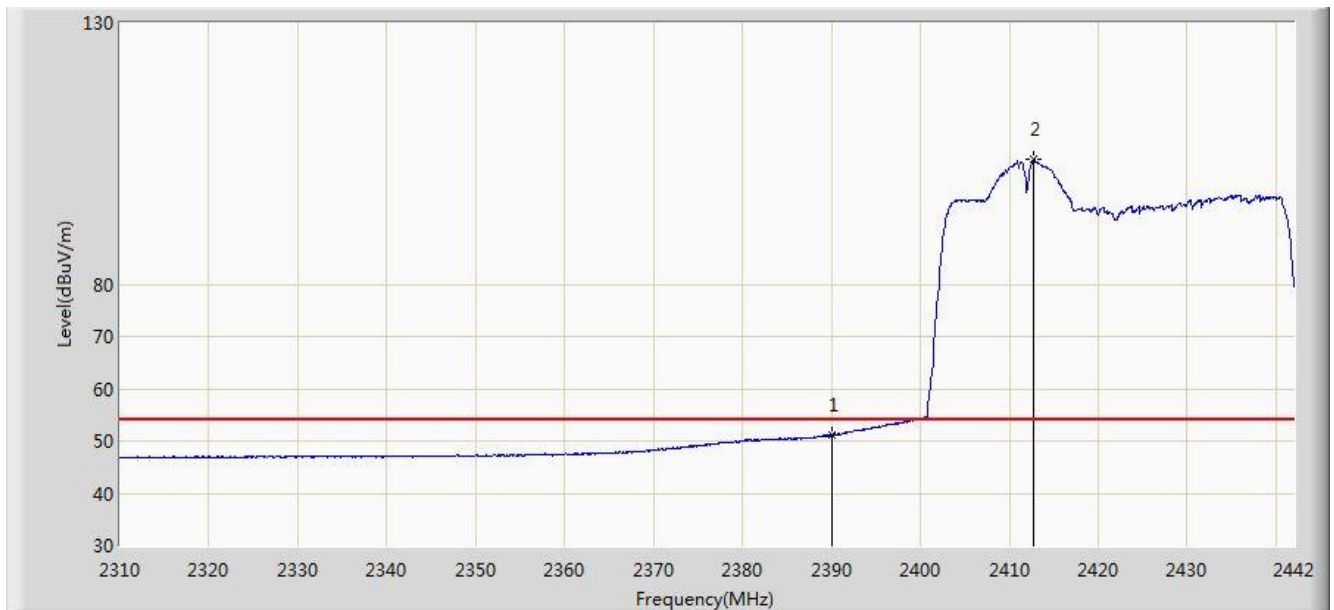


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.540	69.973	71.059	-4.027	74.000	-1.086	PK
2			2390.000	67.698	68.779	-6.302	74.000	-1.081	PK
3		*	2403.918	109.148	110.192	N/A	N/A	-1.043	PK

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

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

Site: AC1	Time: 2019/12/10 - 02:41
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Beam-Forming Mode)	

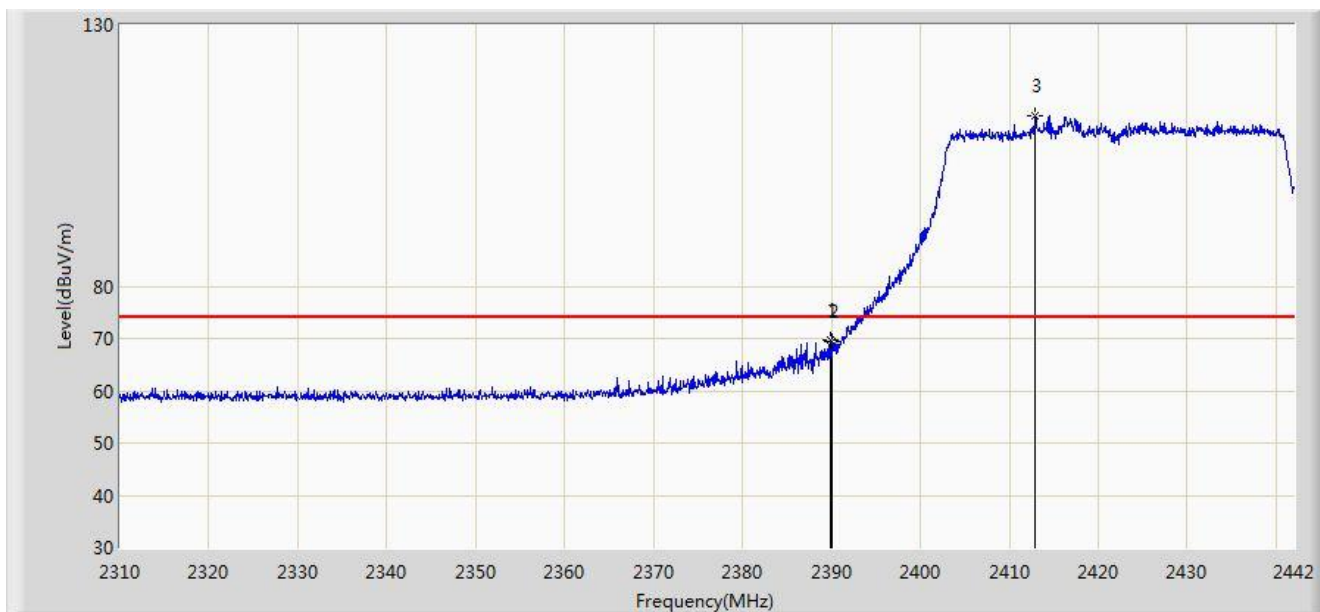


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.182	52.263	-2.818	54.000	-1.081	AV
2		*	2412.696	103.784	104.804	N/A	N/A	-1.021	AV

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

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

Site: AC1	Time: 2019/12/10 - 02:37
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Beam-Forming Mode)	

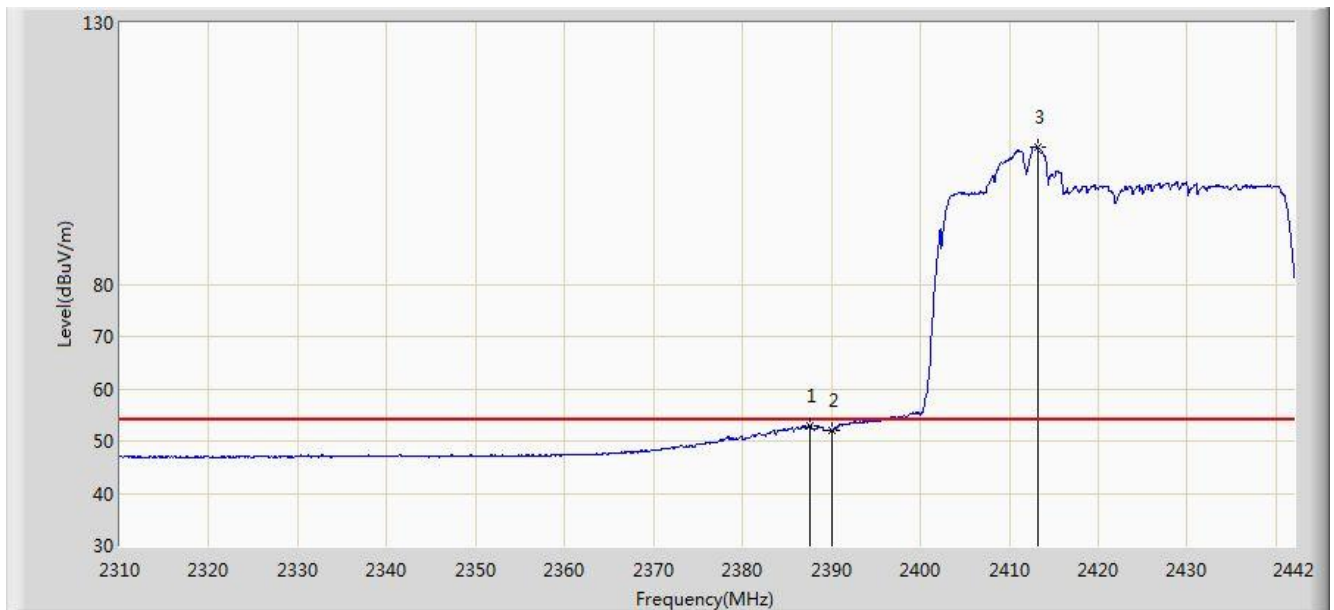


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.860	69.745	70.827	-4.255	74.000	-1.082	PK
2			2390.000	69.404	70.485	-4.596	74.000	-1.081	PK
3		*	2412.960	112.545	113.565	N/A	N/A	-1.020	PK

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

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

Site: AC1	Time: 2019/12/10 - 02:38
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2422MHz (Beam-Forming Mode)	

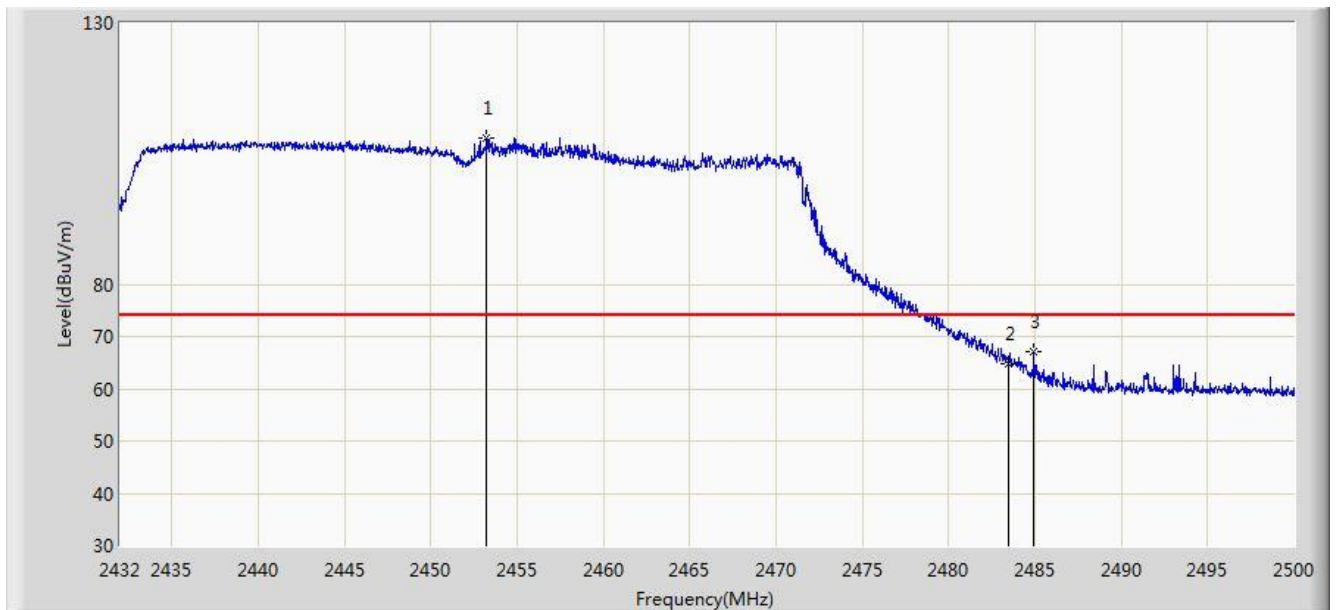


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.550	52.834	53.922	-1.166	54.000	-1.089	AV
2			2390.000	52.025	53.106	-1.975	54.000	-1.081	AV
3		*	2413.158	106.189	107.208	N/A	N/A	-1.020	AV

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

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

Site: AC1	Time: 2019/12/10 - 02:46
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Beam-Forming Mode)	

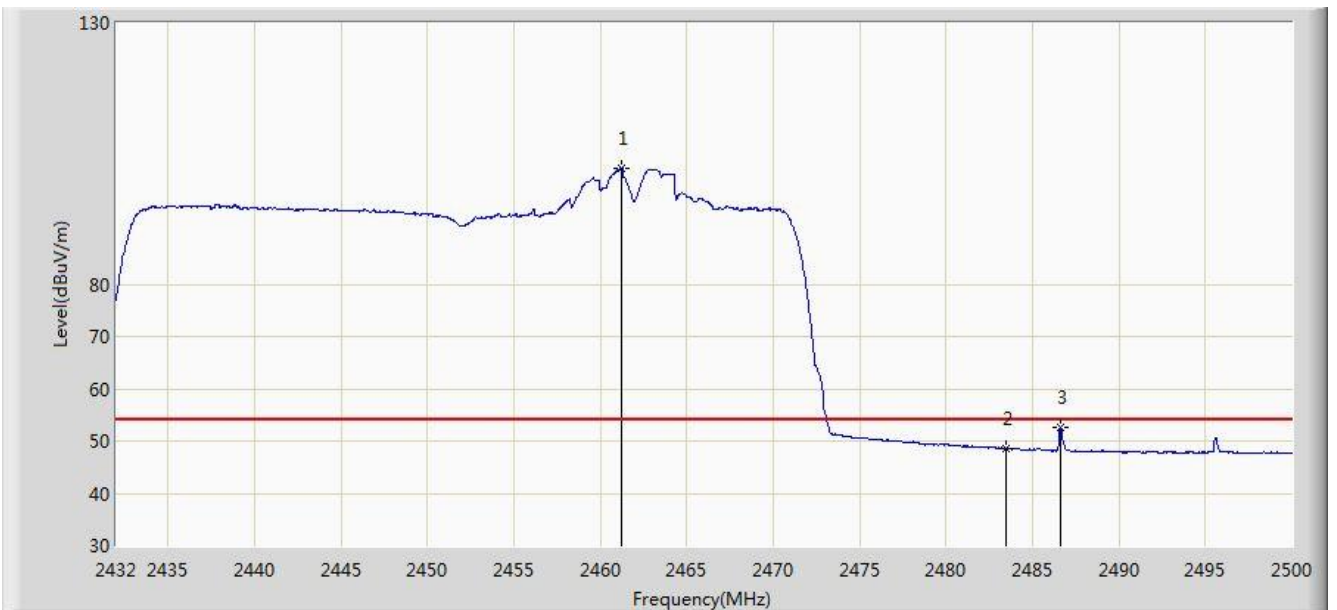


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2453.250	107.985	109.021	N/A	N/A	-1.037	PK
2			2483.500	64.789	65.820	-9.211	74.000	-1.031	PK
3			2484.938	67.124	68.150	-6.876	74.000	-1.025	PK

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

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

Site: AC1	Time: 2019/12/10 - 02:47
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Beam-Forming Mode)	

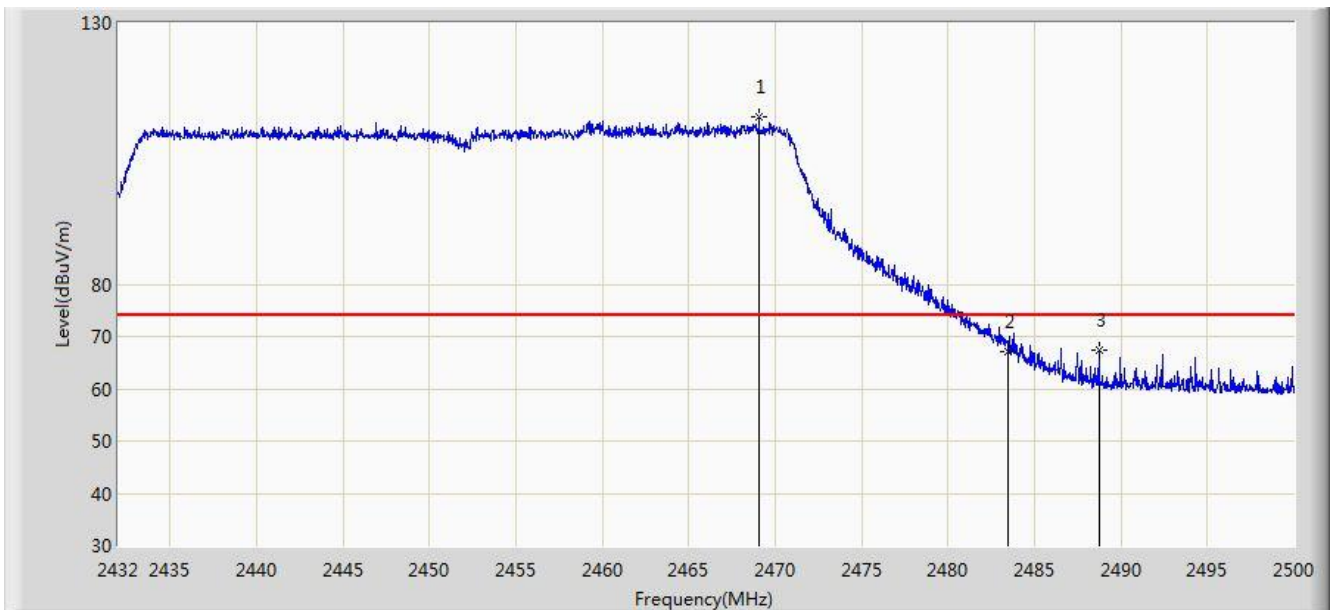


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	102.213	103.183	N/A	N/A	-0.969	AV
2			2483.500	48.604	49.635	-5.396	54.000	-1.031	AV
3			2486.638	52.744	53.764	-1.256	54.000	-1.020	AV

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

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

Site: AC1	Time: 2019/12/10 - 02:45
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Beam-Forming Mode)	

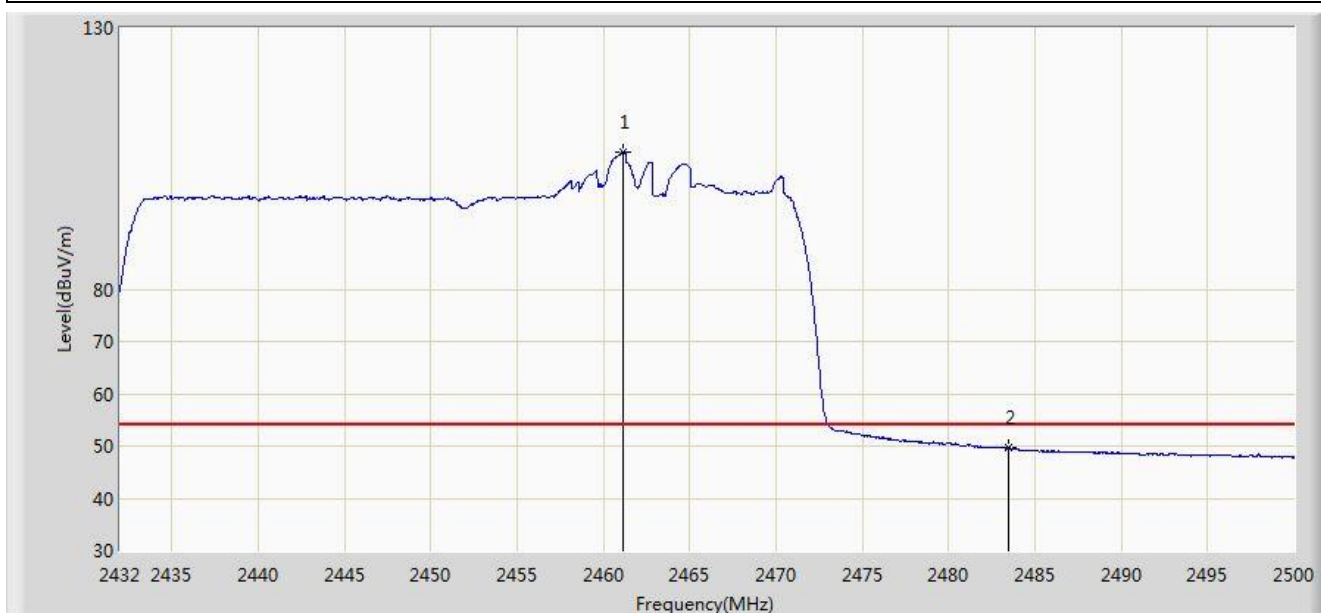


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2469.060	112.074	113.072	N/A	N/A	-0.998	PK
2			2483.500	67.189	68.220	-6.811	74.000	-1.031	PK
3			2488.712	67.280	68.292	-6.720	74.000	-1.012	PK

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

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

Site: AC1	Time: 2019/12/10 - 02:45
Limit: FCC_Part15_RSE(3m)	Engineer: Cloud Guo
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at Channel 2452MHz (Beam-Forming Mode)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.138	106.246	107.217	N/A	N/A	-0.970	AV
2			2483.500	49.585	50.616	-4.415	54.000	-1.031	AV

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

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

7.8. AC Conducted Emissions Measurement

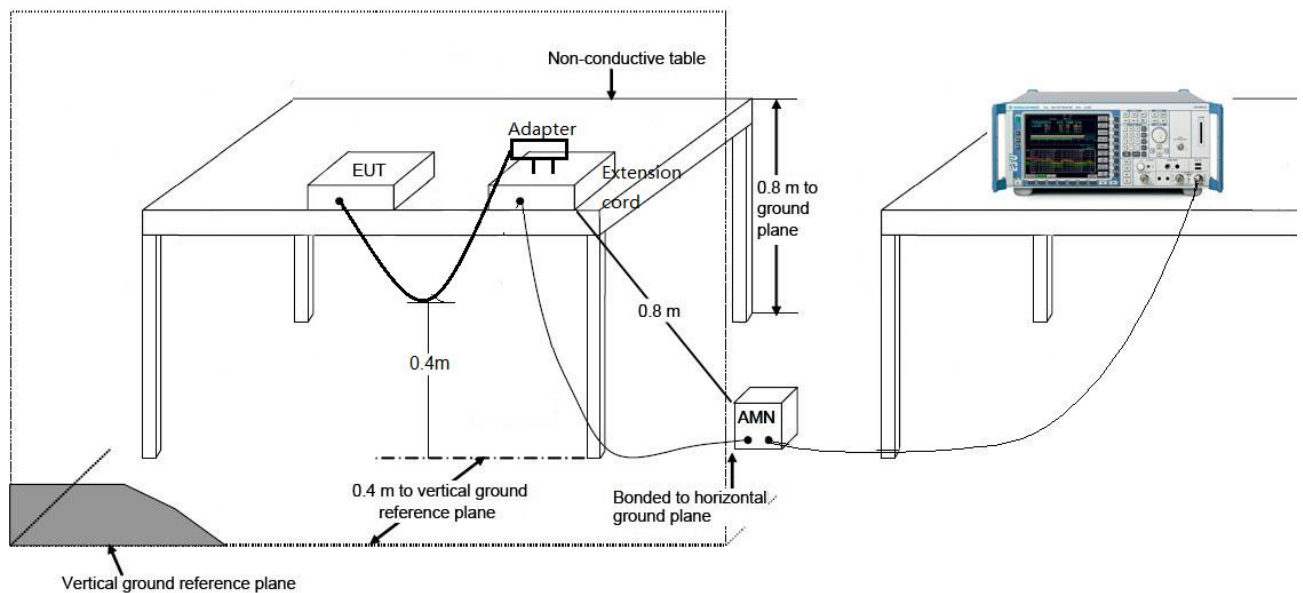
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 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.

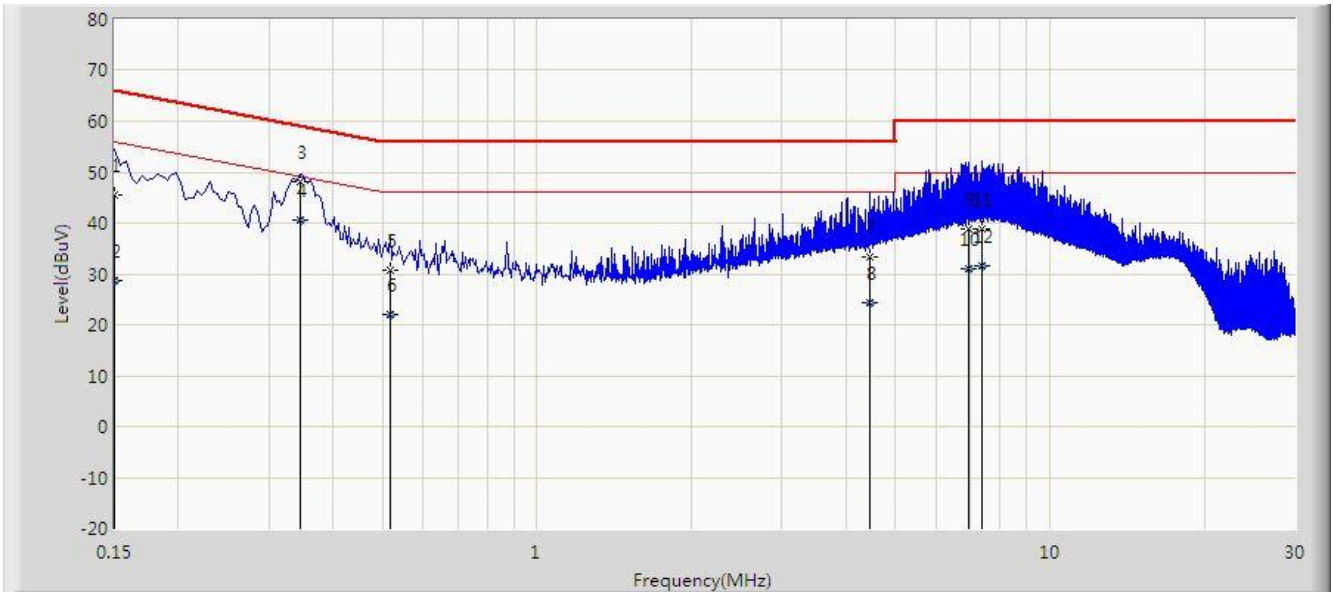
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3.Test Result

Site: SR2	Time: 2019/12/05 - 16:02
Limit: FCC_Part15.207_CE_AC Power	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode 1	

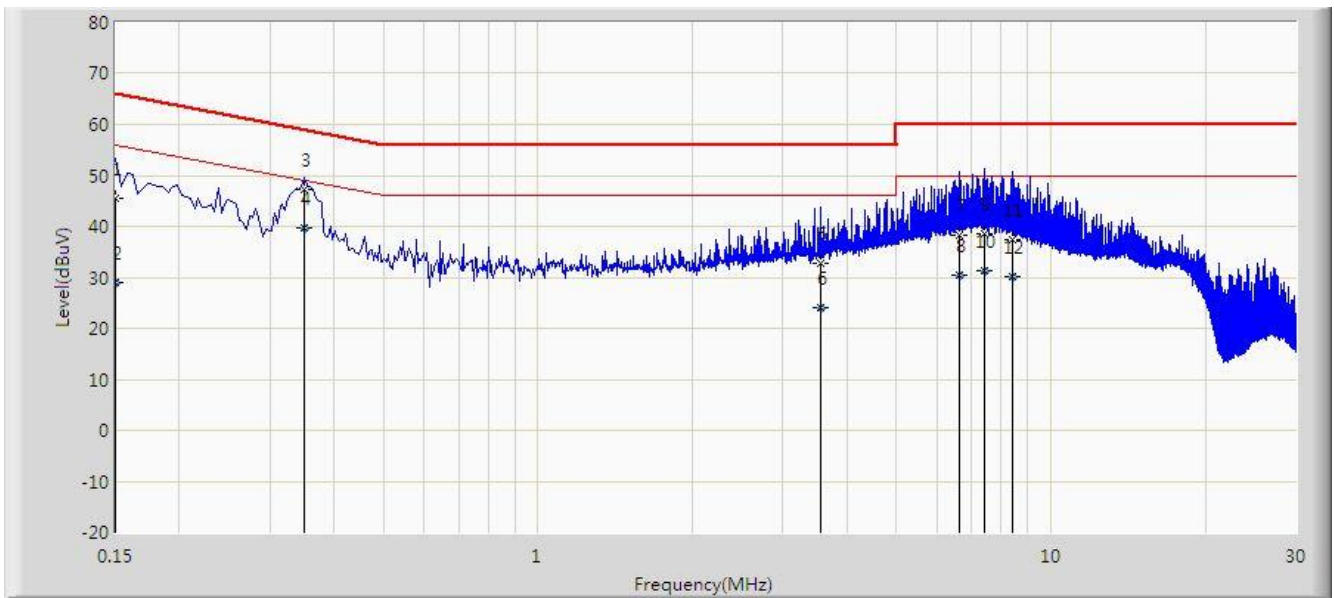


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	45.546	34.378	-20.454	66.000	11.168	QP
2			0.150	28.830	17.662	-27.170	56.000	11.168	AV
3			0.346	48.011	37.970	-11.047	59.058	10.041	QP
4		*	0.346	40.451	30.410	-8.607	49.058	10.041	AV
5			0.518	30.824	20.668	-25.176	56.000	10.156	QP
6			0.518	21.944	11.788	-24.056	46.000	10.156	AV
7			4.450	33.379	23.393	-22.621	56.000	9.986	QP
8			4.450	24.448	14.462	-21.552	46.000	9.986	AV
9			6.930	38.764	28.610	-21.236	60.000	10.154	QP
10			6.930	31.152	20.998	-18.848	50.000	10.154	AV
11			7.382	38.960	28.793	-21.040	60.000	10.167	QP
12			7.382	31.557	21.390	-18.443	50.000	10.167	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SR2	Time: 2019/12/05 - 16:15
Limit: FCC_Part15.207_CE_AC Power	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	45.383	34.241	-20.617	66.000	11.142	QP
2			0.150	28.900	17.758	-27.100	56.000	11.142	AV
3			0.350	47.305	37.230	-11.658	58.962	10.074	QP
4		*	0.350	39.838	29.763	-9.124	48.962	10.074	AV
5			3.546	32.647	22.729	-23.353	56.000	9.919	QP
6			3.546	24.136	14.217	-21.864	46.000	9.919	AV
7			6.626	38.127	27.964	-21.873	60.000	10.163	QP
8			6.626	30.578	20.415	-19.422	50.000	10.163	AV
9			7.426	38.638	28.455	-21.362	60.000	10.183	QP
10			7.426	31.239	21.056	-18.761	50.000	10.183	AV
11			8.386	37.343	27.157	-22.657	60.000	10.187	QP
12			8.386	30.204	20.018	-19.796	50.000	10.187	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

8. CONCLUSION

The data collected relate only the item(s) tested and show that the device is in compliance with Part 15C of the FCC Rules.

The End

Appendix A - Test Setup Photograph

Refer to “1911RSU033-UT” file.

Appendix B - EUT Photograph

Refer to “ 1911RSU033-UE” file.