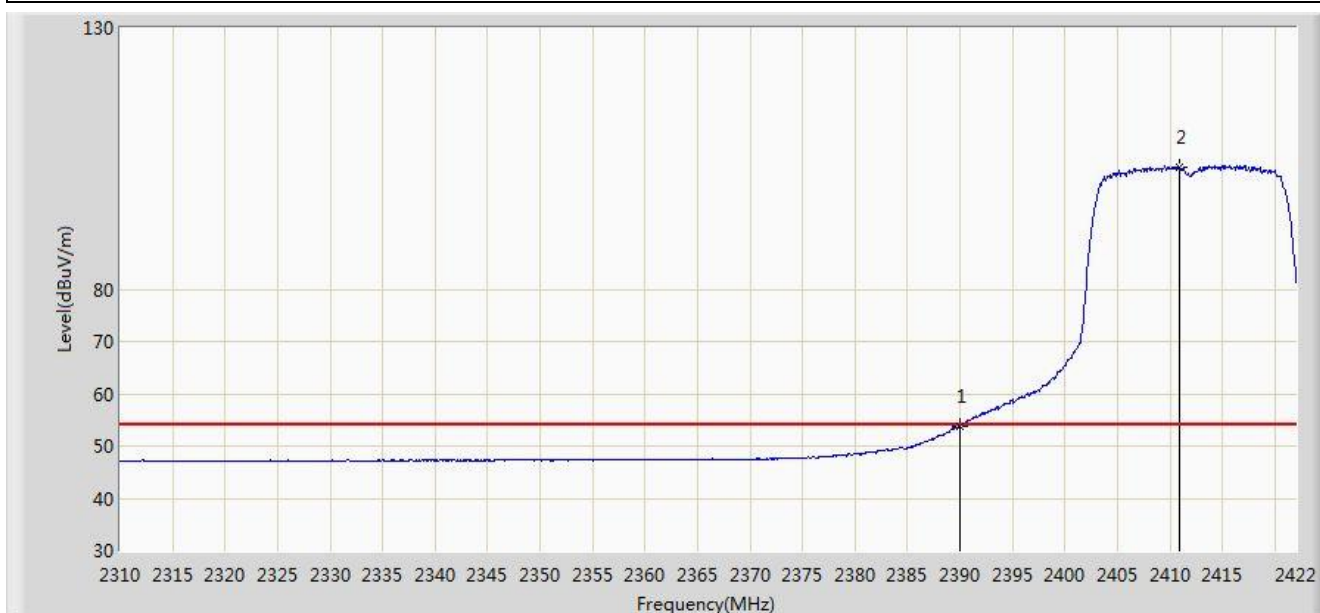


Site: AC1	Time: 2019/11/26 - 21:24
Limit: FCC_Part15_RSE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: GigaSpire	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz (Non Beam-Forming Mode)	

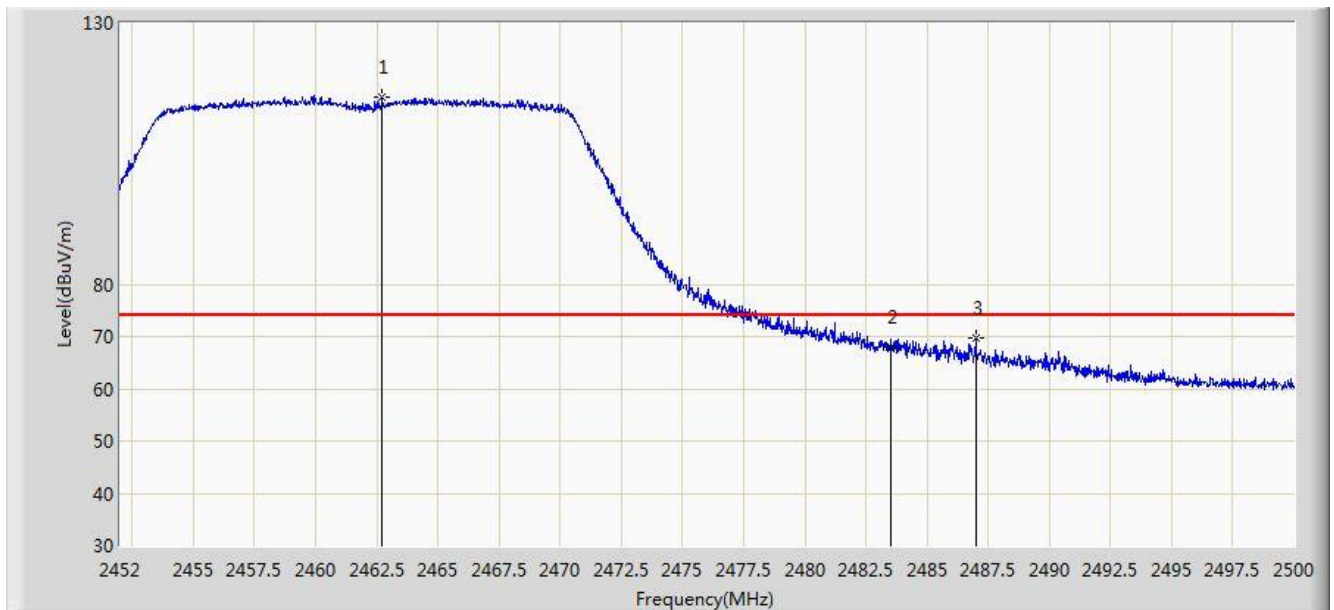


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.801	21.729	-0.199	54.000	32.072	AV
2		*	2410.912	103.449	71.368	N/A	N/A	32.081	AV

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)	

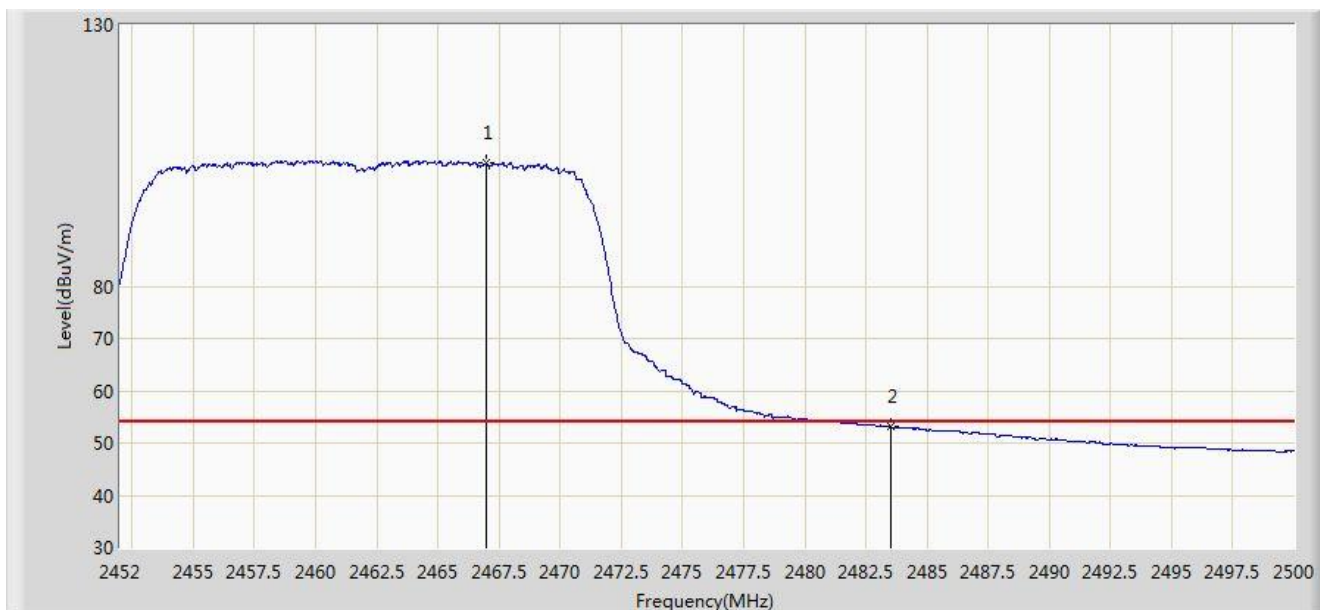


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.728	115.659	83.580	N/A	N/A	32.079	PK
2			2483.500	67.915	35.878	-6.085	74.000	32.037	PK
3			2486.992	69.629	37.599	-4.371	74.000	32.031	PK

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)	

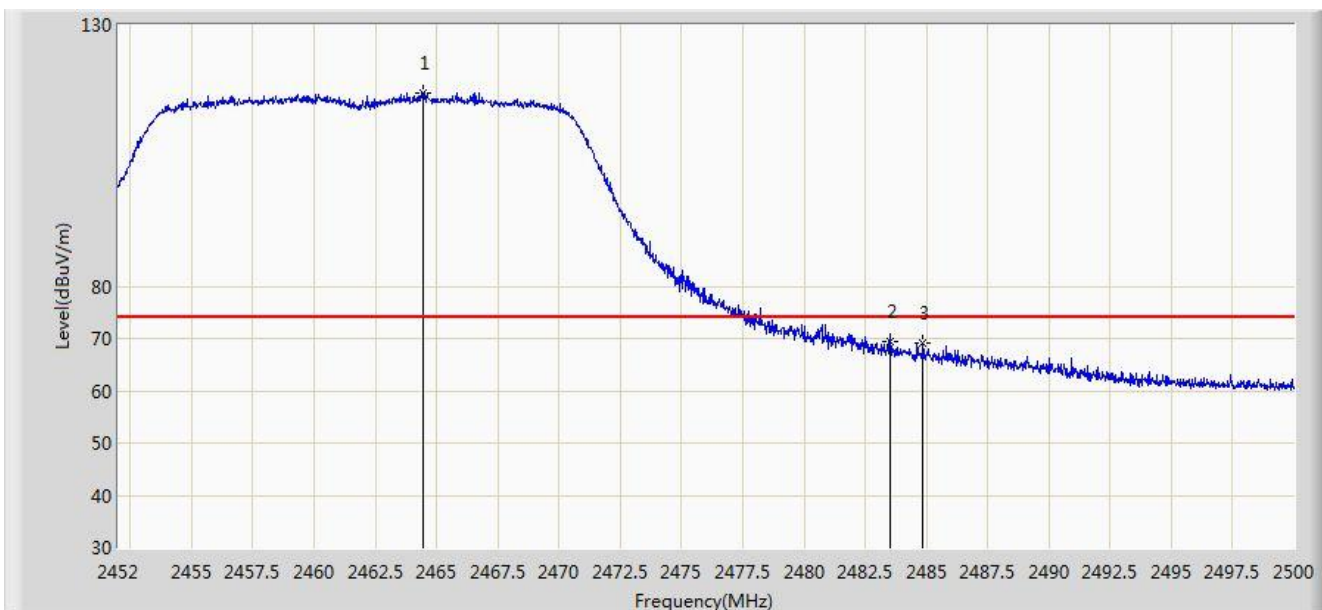


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.952	103.486	71.416	N/A	N/A	32.070	AV
2			2483.500	53.214	21.177	-0.786	54.000	32.037	AV

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)	

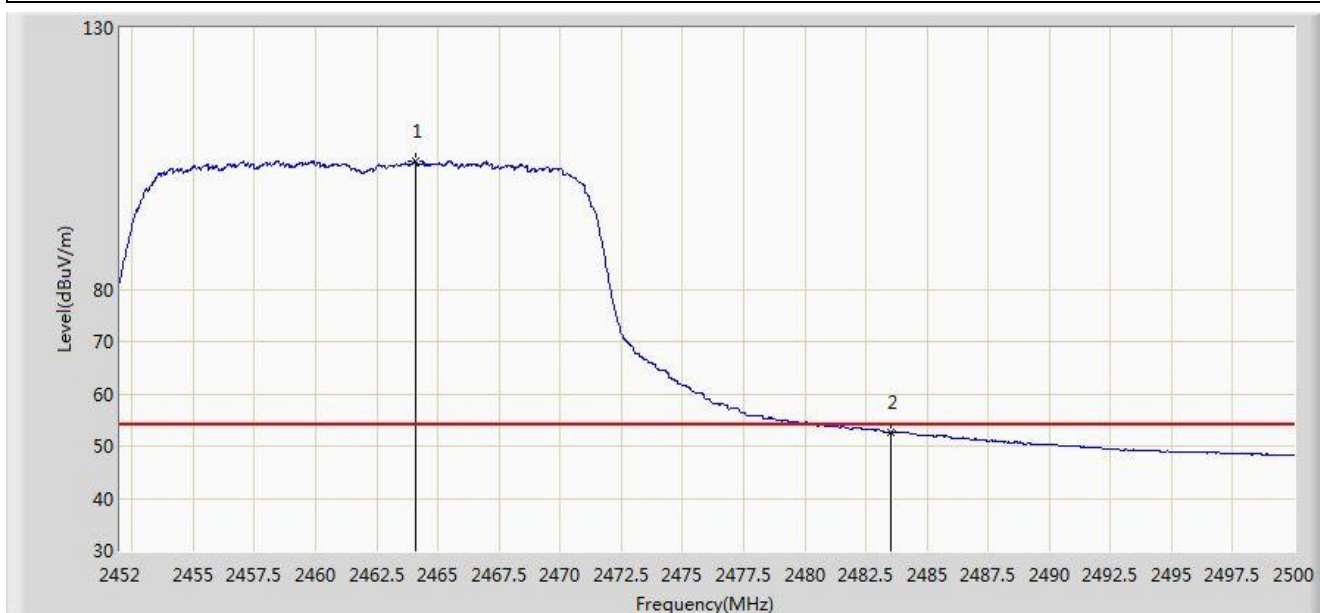


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.480	116.935	84.860	N/A	N/A	32.075	PK
2			2483.500	69.473	37.436	-4.527	74.000	32.037	PK
3			2484.856	69.015	36.981	-4.985	74.000	32.035	PK

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)	

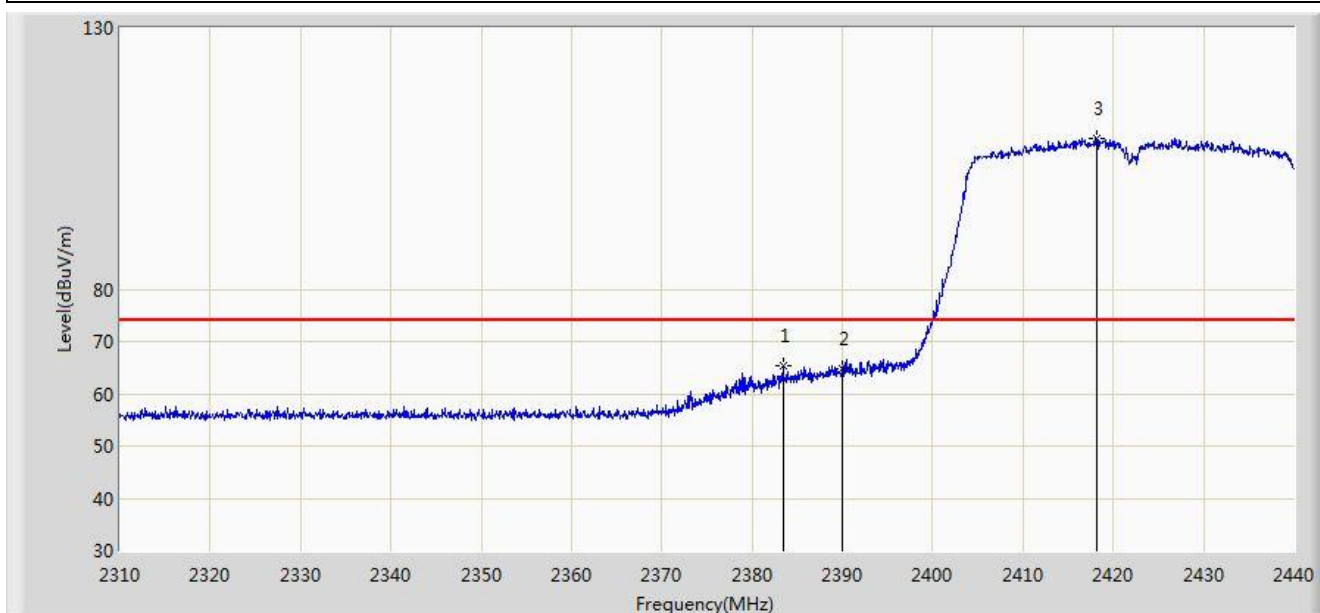


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.072	104.532	72.456	N/A	N/A	32.076	AV
2			2483.500	52.701	20.664	-1.299	54.000	32.037	AV

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)	

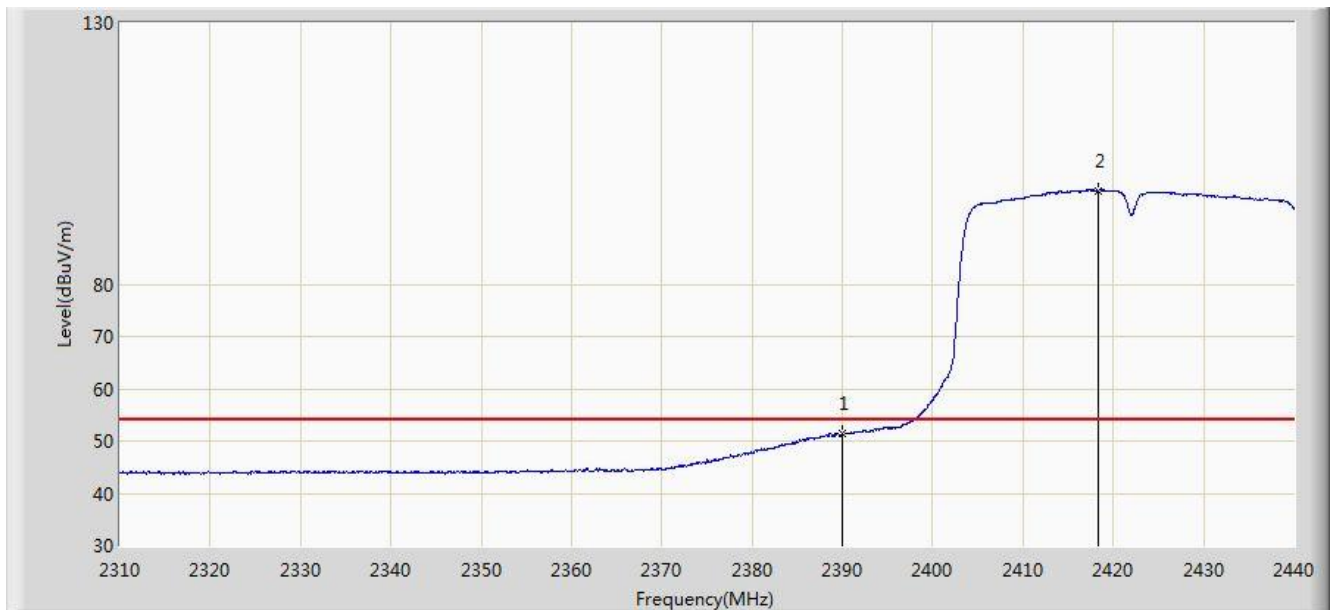


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2383.450	65.292	66.607	-8.708	74.000	-1.316	PK
2			2390.000	64.836	66.171	-9.164	74.000	-1.335	PK
3		*	2418.225	108.841	110.236	N/A	N/A	-1.395	PK

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)	

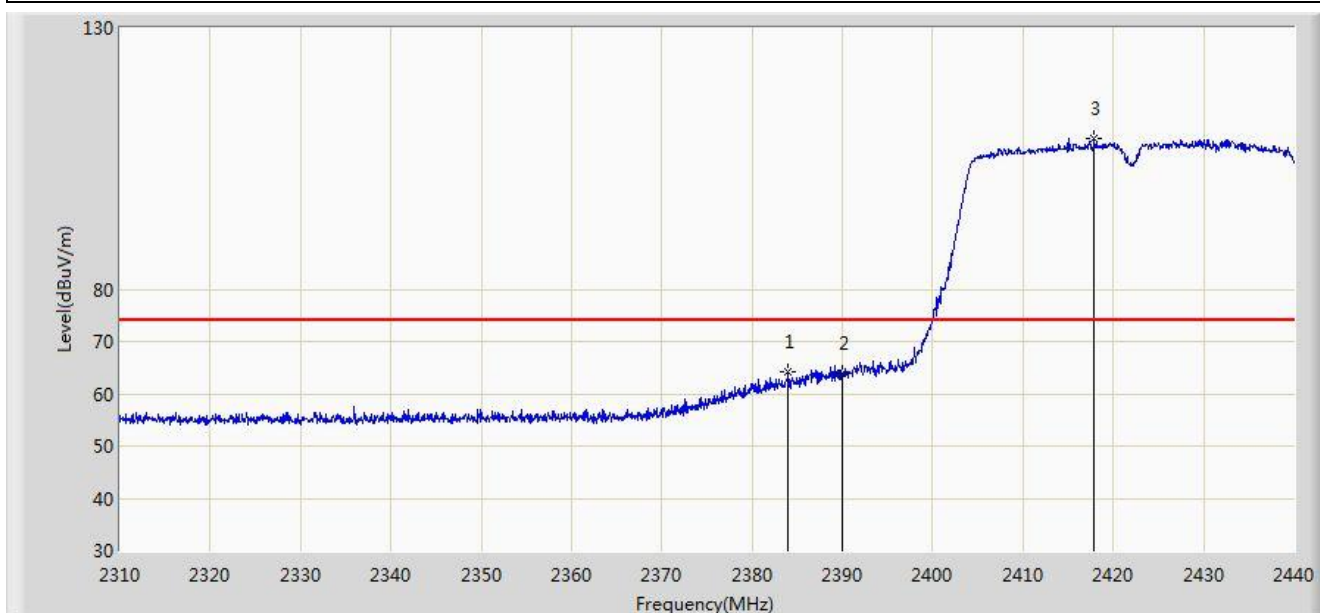


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.395	52.730	-2.605	54.000	-1.335	AV
2		*	2418.355	97.964	99.360	N/A	N/A	-1.396	AV

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)	

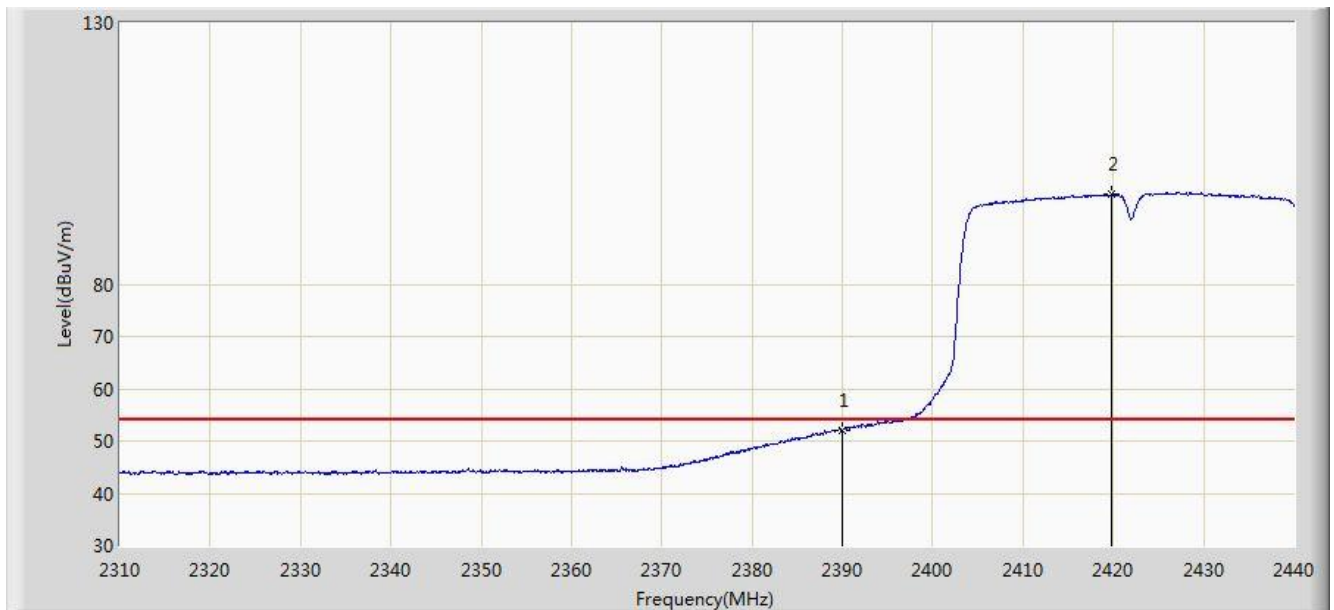


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2384.035	64.076	65.393	-9.924	74.000	-1.317	PK
2			2390.000	63.774	65.109	-10.226	74.000	-1.335	PK
3		*	2417.900	108.970	110.362	N/A	N/A	-1.392	PK

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)	

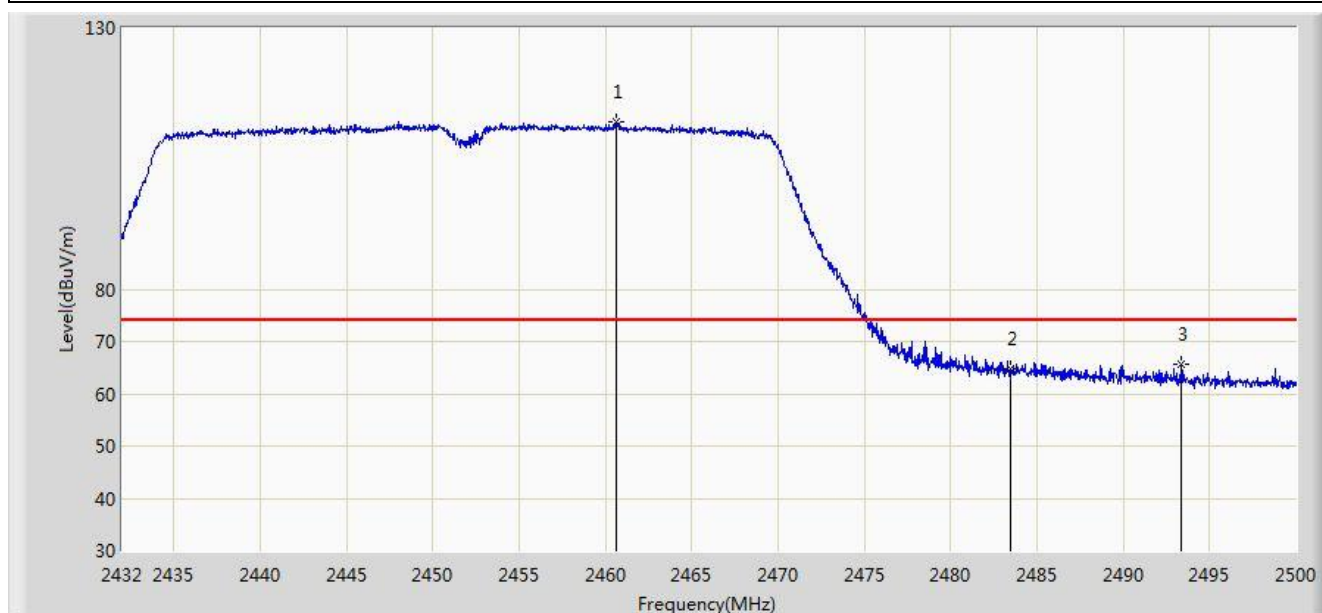


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.123	53.458	-1.877	54.000	-1.335	AV
2		*	2419.785	97.243	98.651	N/A	N/A	-1.409	AV

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)	

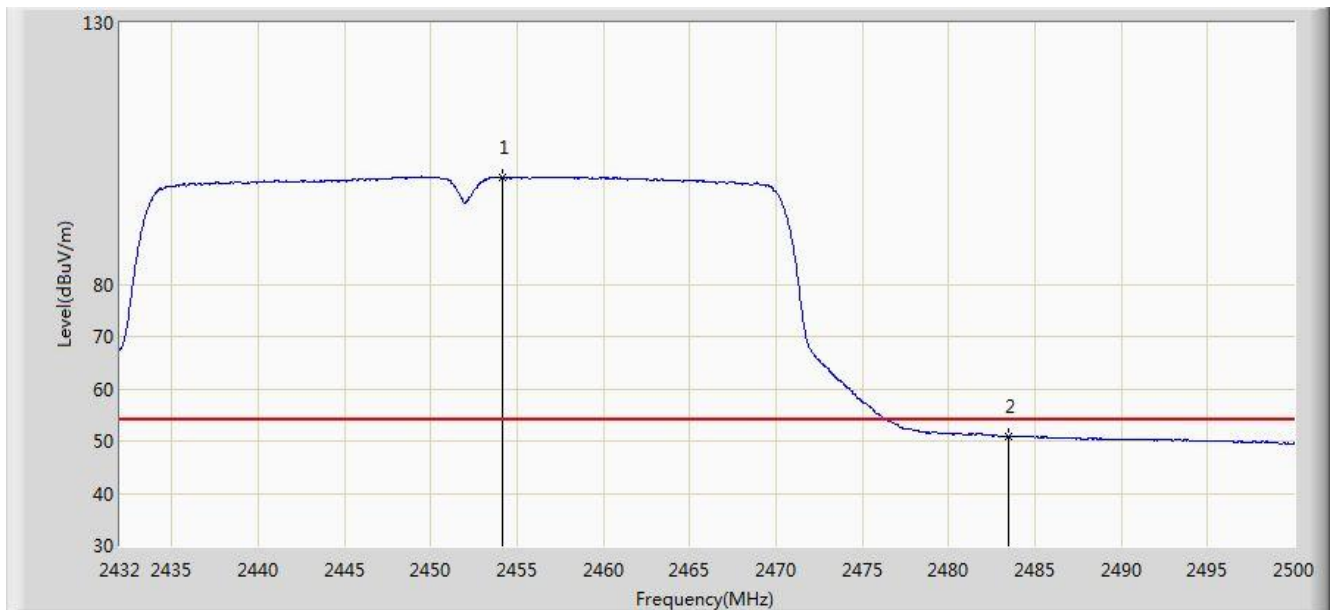


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.628	112.101	80.021	N/A	N/A	32.080	PK
2			2483.500	64.796	32.759	-9.204	74.000	32.037	PK
3			2493.370	65.786	33.768	-8.214	74.000	32.019	PK

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)	

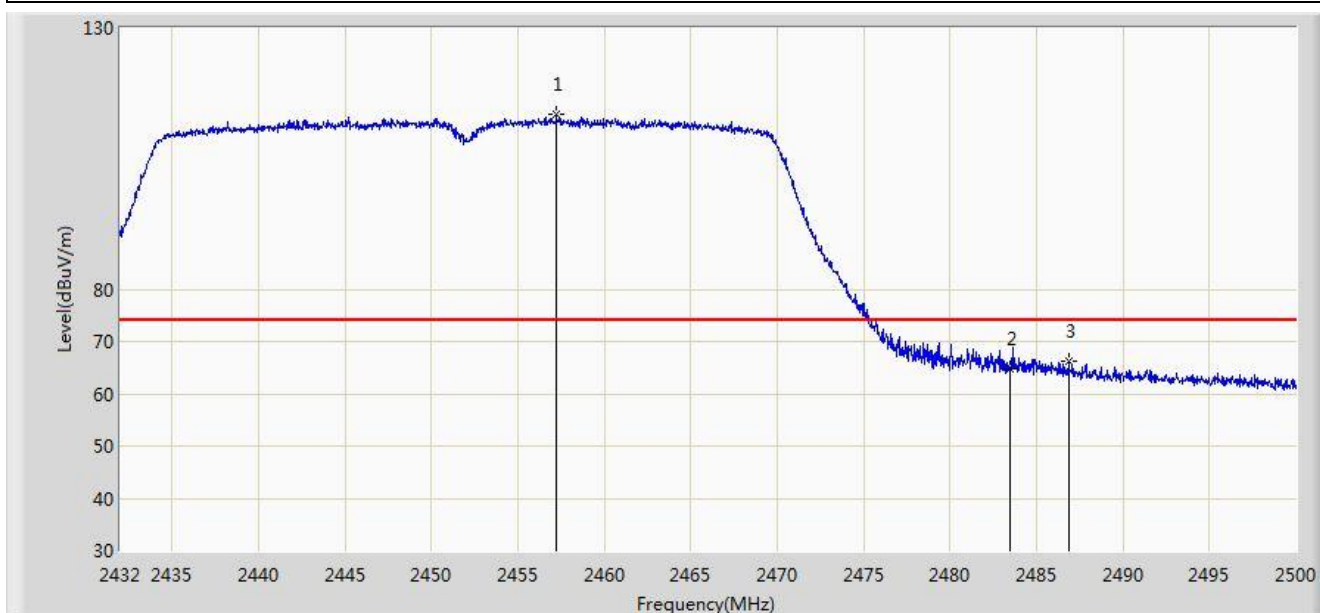


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.168	100.368	68.291	N/A	N/A	32.078	AV
2			2483.500	50.844	18.807	-3.156	54.000	32.037	AV

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)	

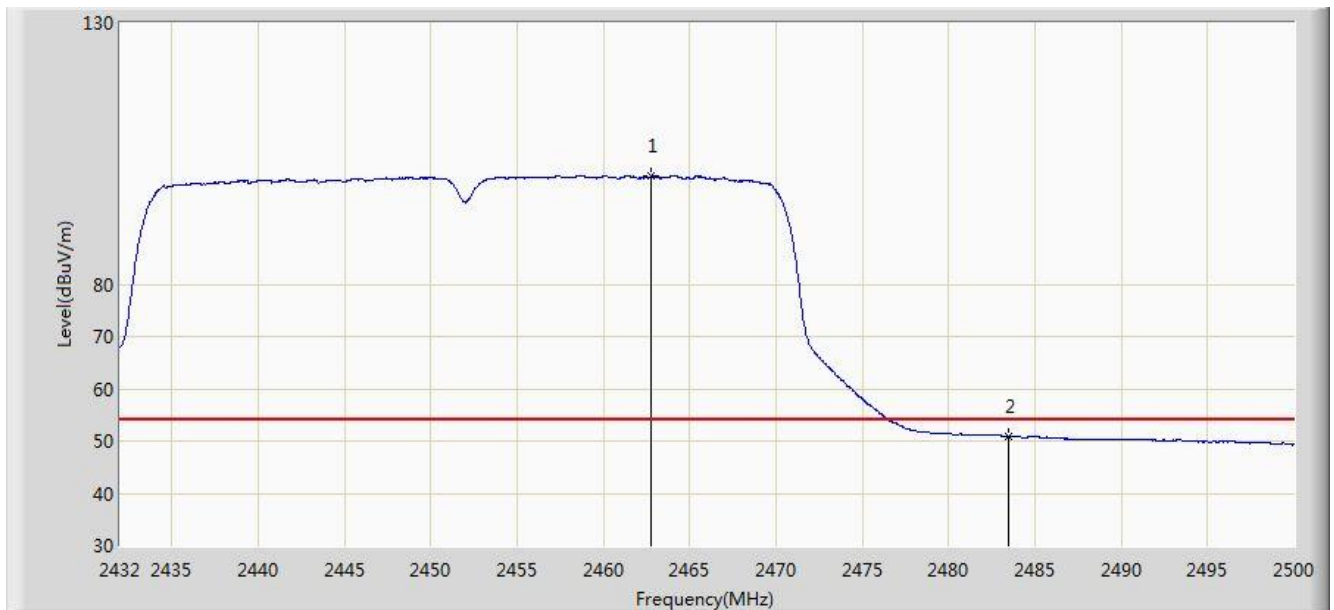


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2457.228	113.381	81.302	N/A	N/A	32.079	PK
2			2483.500	64.776	32.739	-9.224	74.000	32.037	PK
3			2486.842	66.254	34.223	-7.746	74.000	32.031	PK

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)	

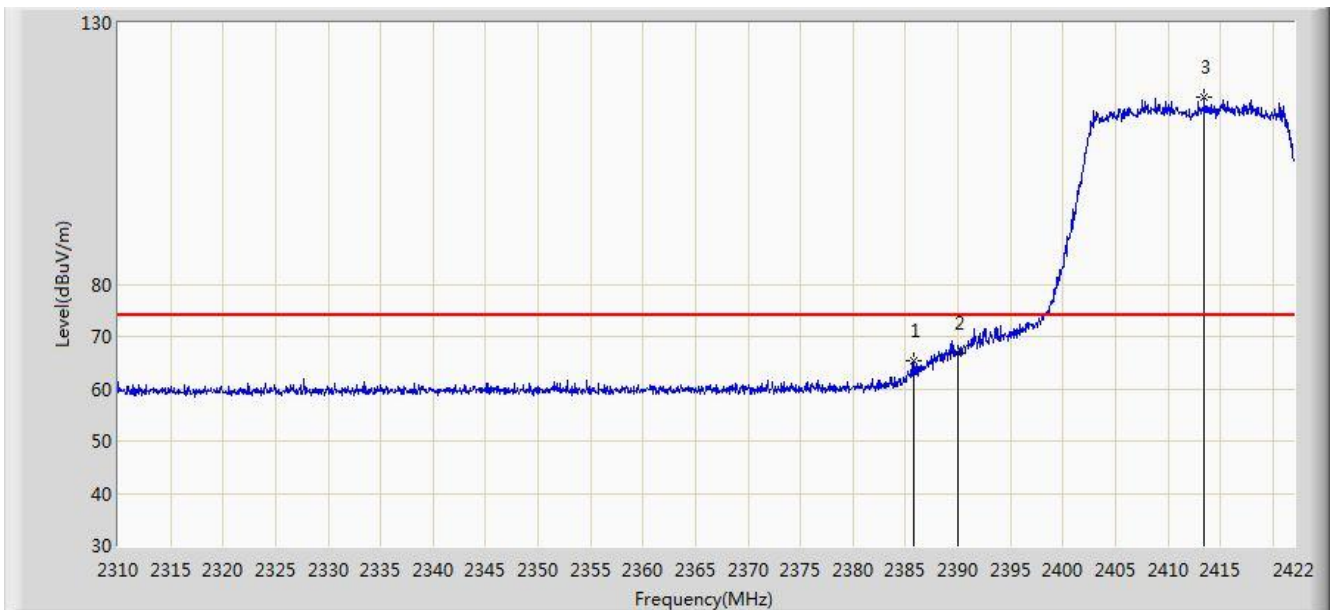


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.804	100.661	68.582	N/A	N/A	32.079	AV
2			2483.500	50.953	18.916	-3.047	54.000	32.037	AV

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)	

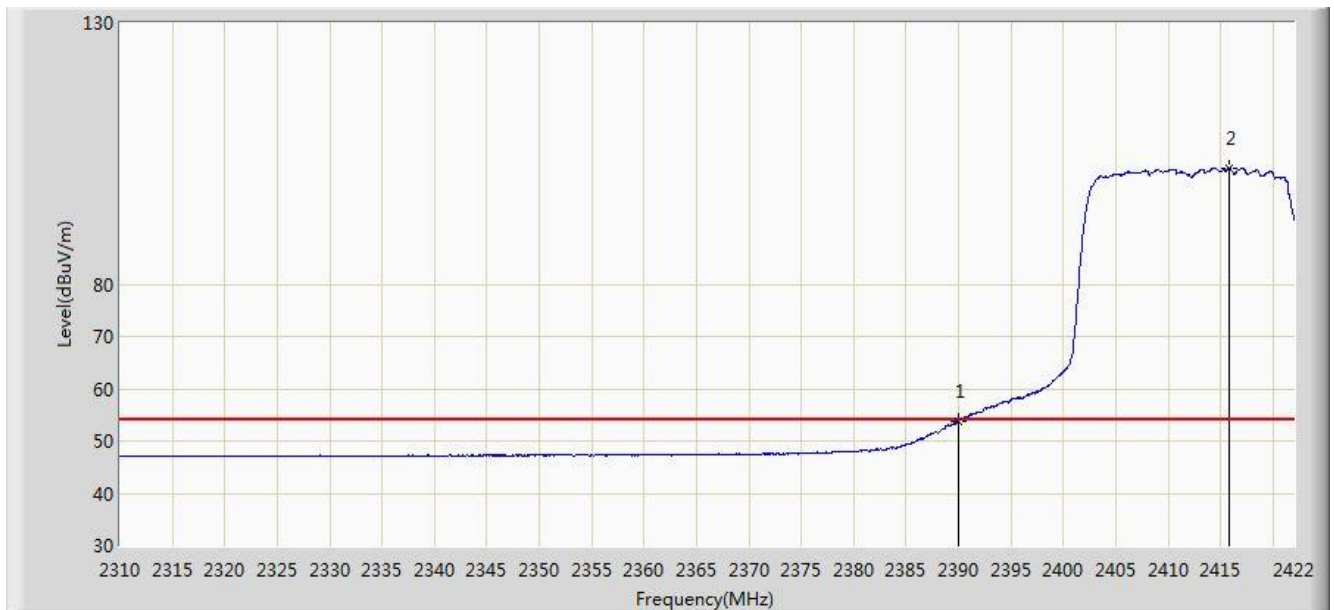


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2385.768	65.272	33.199	-8.728	74.000	32.073	PK
2			2390.000	66.801	34.729	-7.199	74.000	32.072	PK
3		*	2413.488	115.891	83.804	N/A	N/A	32.087	PK

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)	

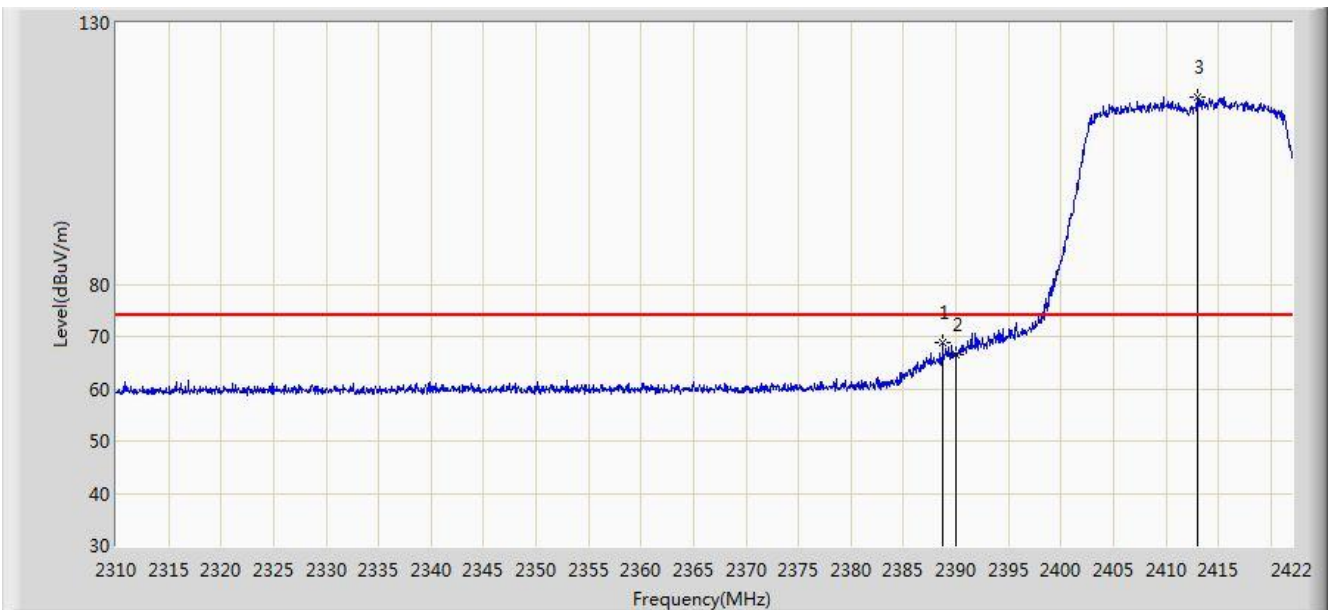


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.903	21.831	-0.097	54.000	32.072	AV
2		*	2415.840	102.206	70.112	N/A	N/A	32.094	AV

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

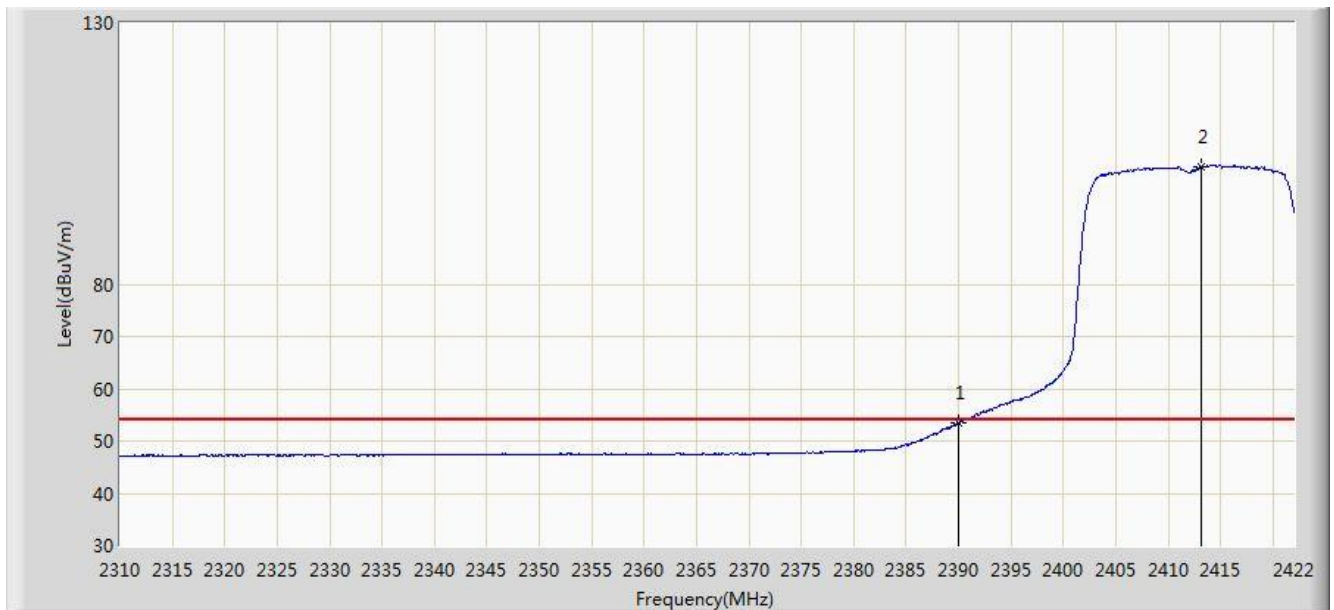


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.736	68.758	36.686	-5.242	74.000	32.073	PK
2			2390.000	66.640	34.568	-7.360	74.000	32.072	PK
3		*	2412.984	115.725	83.639	N/A	N/A	32.086	PK

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)	

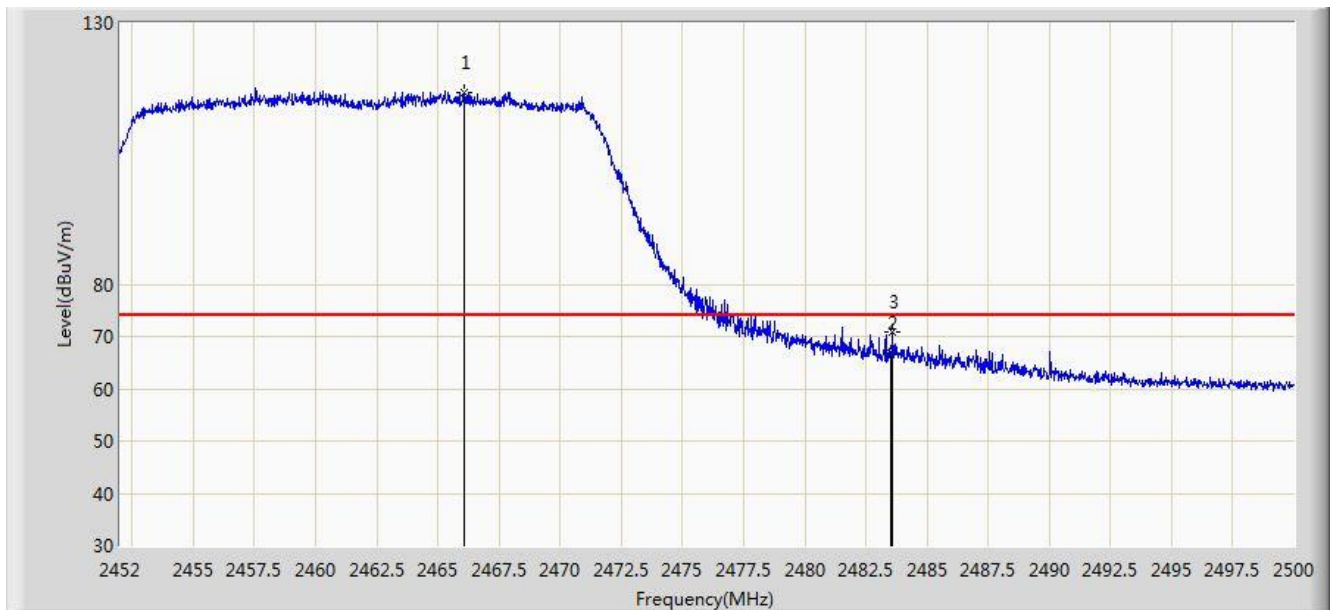


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.447	21.375	-0.553	54.000	32.072	AV
2		*	2413.096	102.530	70.444	N/A	N/A	32.086	AV

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)	

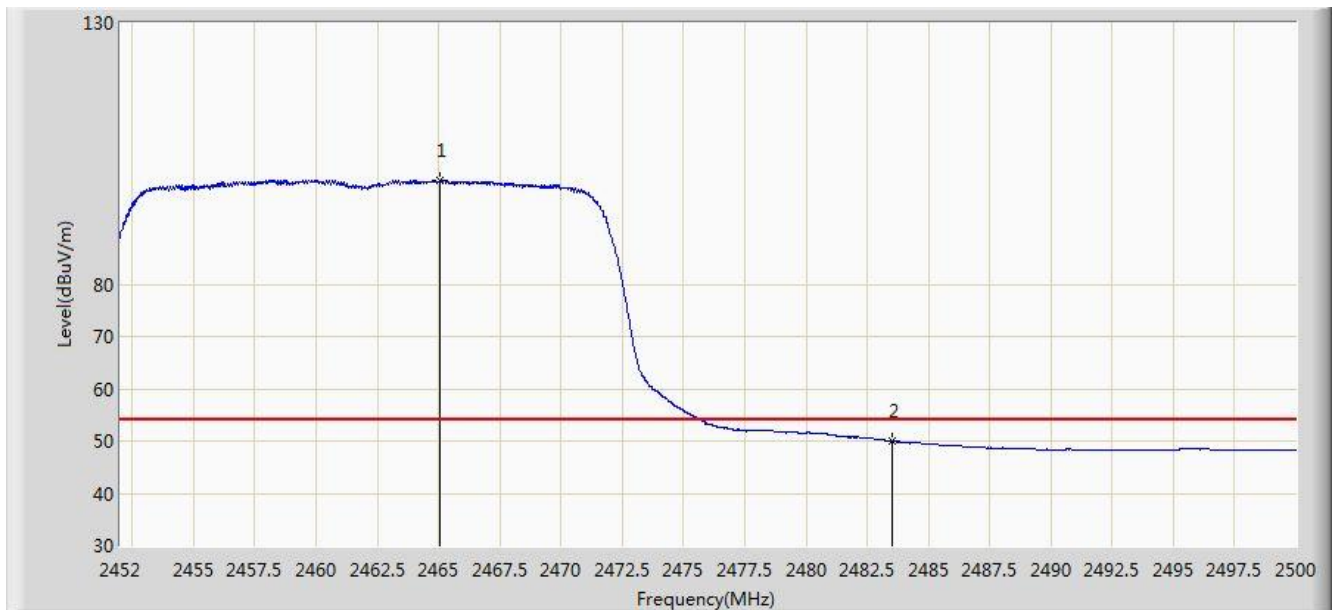


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.064	116.750	84.678	N/A	N/A	32.072	PK
2			2483.500	66.802	34.765	-7.198	74.000	32.037	PK
3			2483.608	70.773	38.736	-3.227	74.000	32.036	PK

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)	

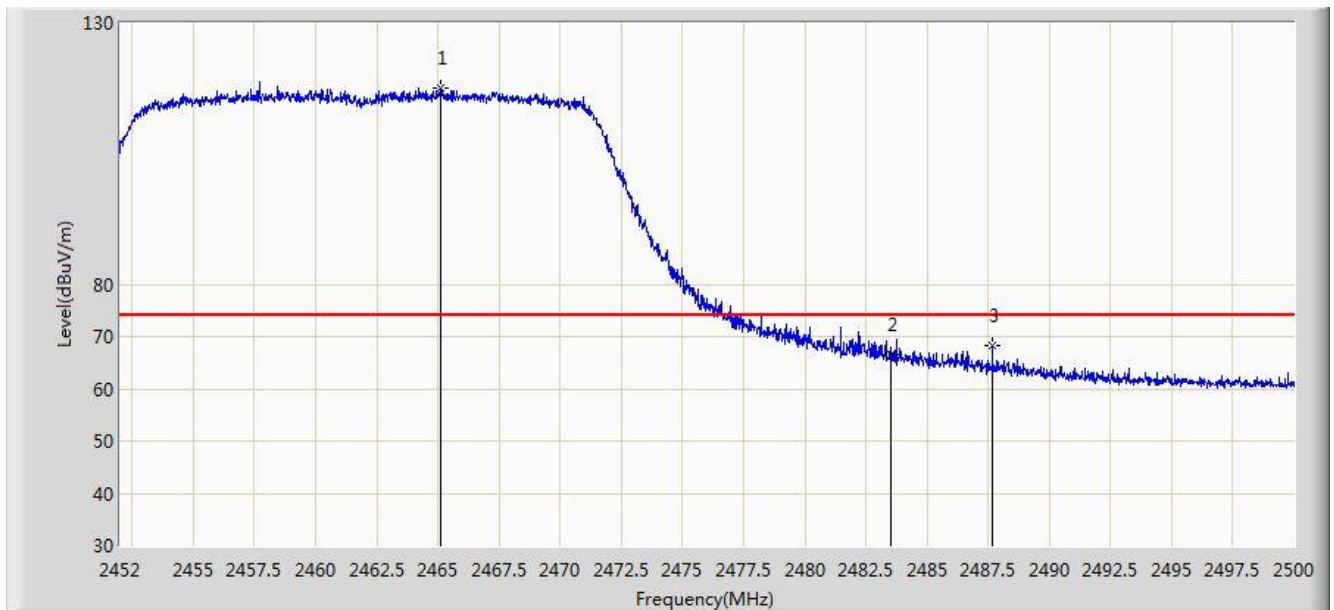


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.056	99.776	67.702	N/A	N/A	32.075	AV
2			2483.500	50.019	17.982	-3.981	54.000	32.037	AV

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)	

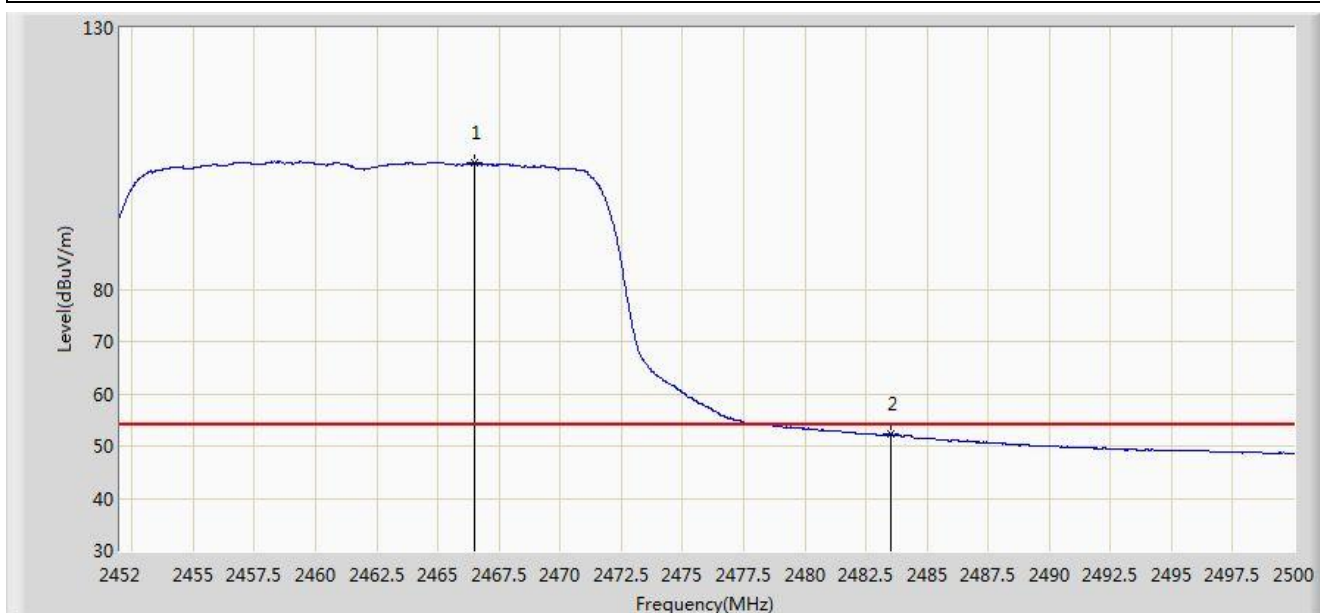


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.104	117.443	85.369	N/A	N/A	32.075	PK
2			2483.500	66.384	34.347	-7.616	74.000	32.037	PK
3			2487.664	68.313	36.284	-5.687	74.000	32.029	PK

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)	

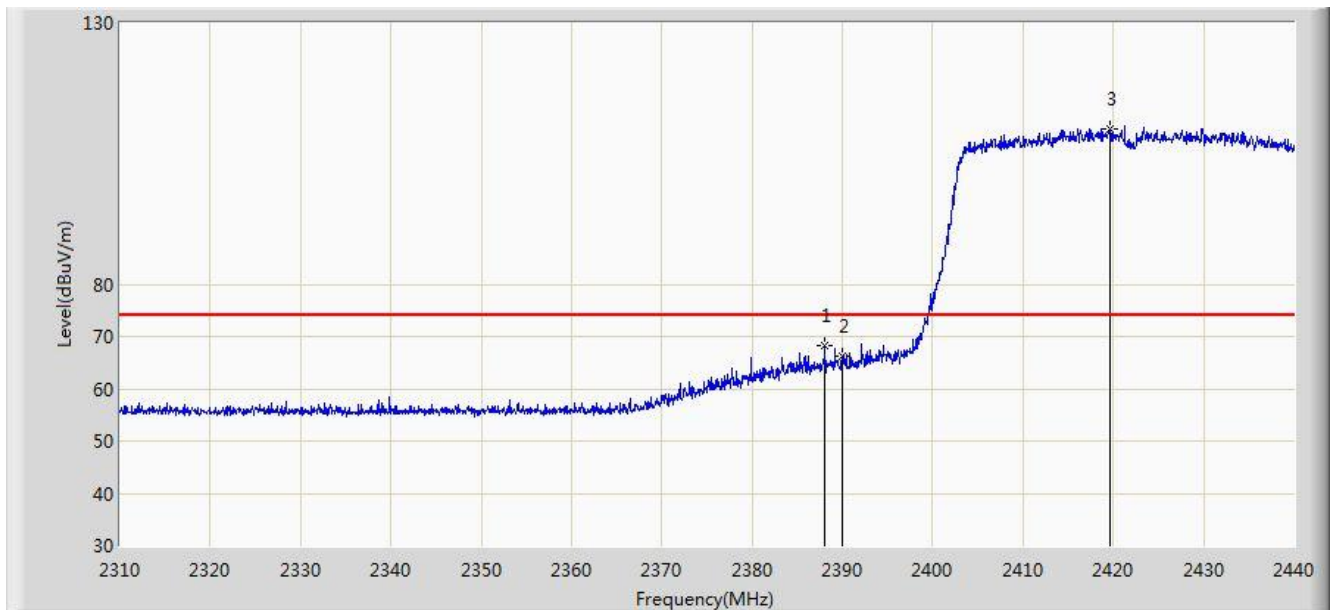


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.520	104.095	72.024	N/A	N/A	32.071	AV
2			2483.500	52.183	20.146	-1.817	54.000	32.037	AV

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)	

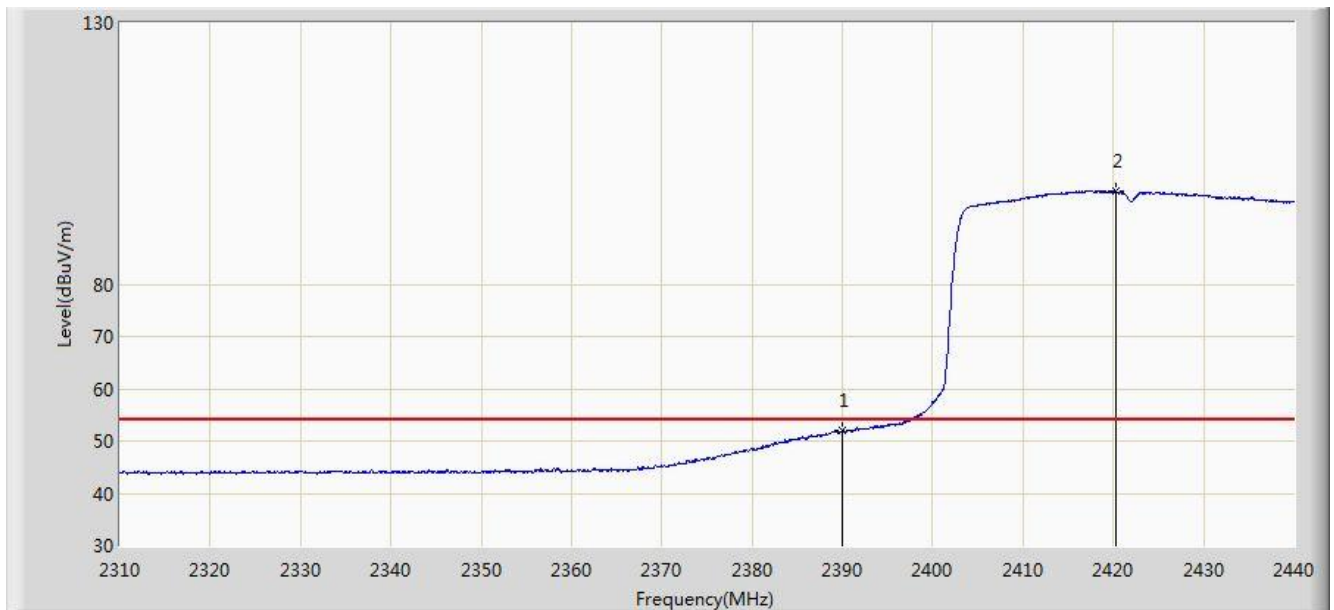


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.065	68.190	69.519	-5.810	74.000	-1.329	PK
2			2390.000	66.243	67.578	-7.757	74.000	-1.335	PK
3		*	2419.590	109.670	111.077	N/A	N/A	-1.407	PK

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)	

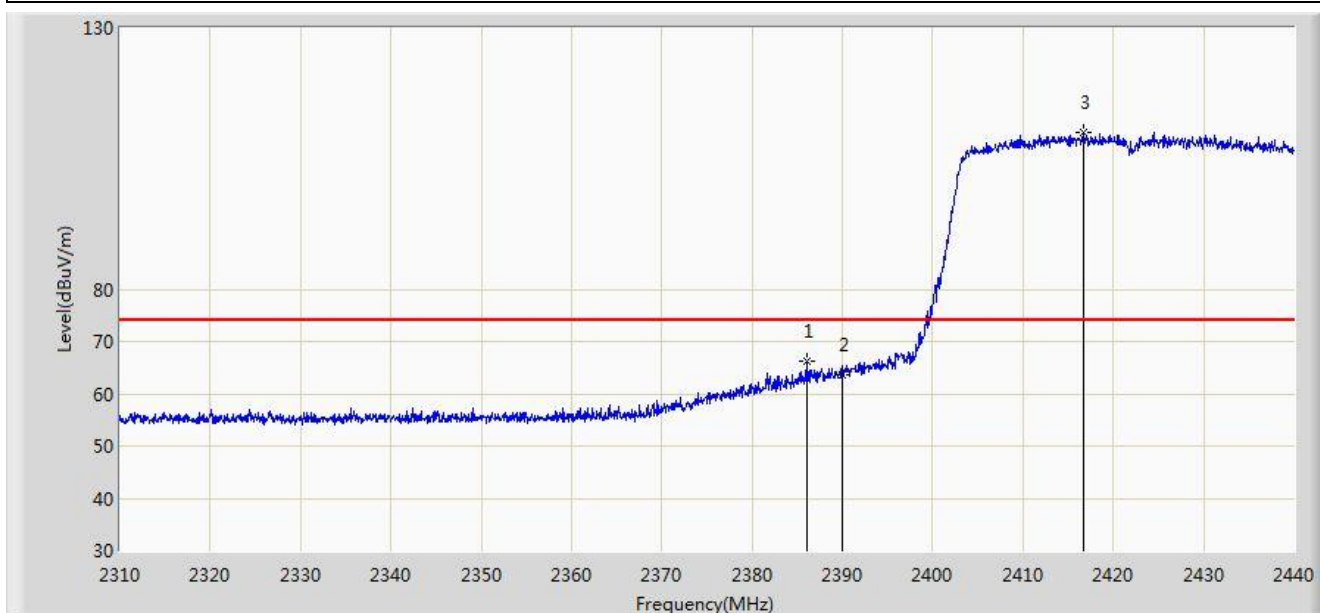


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.107	53.442	-1.893	54.000	-1.335	AV
2		*	2420.305	97.824	99.237	N/A	N/A	-1.413	AV

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)	

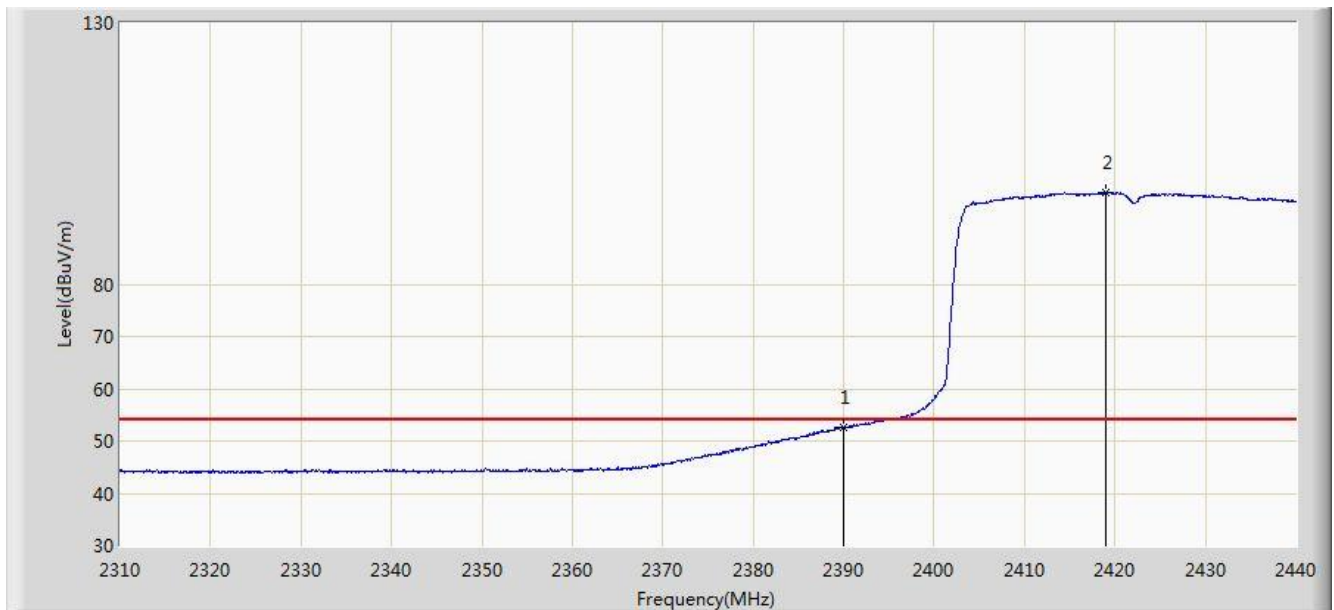


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2386.050	66.347	67.670	-7.653	74.000	-1.323	PK
2			2390.000	63.542	64.877	-10.458	74.000	-1.335	PK
3		*	2416.730	110.003	111.386	N/A	N/A	-1.383	PK

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)	

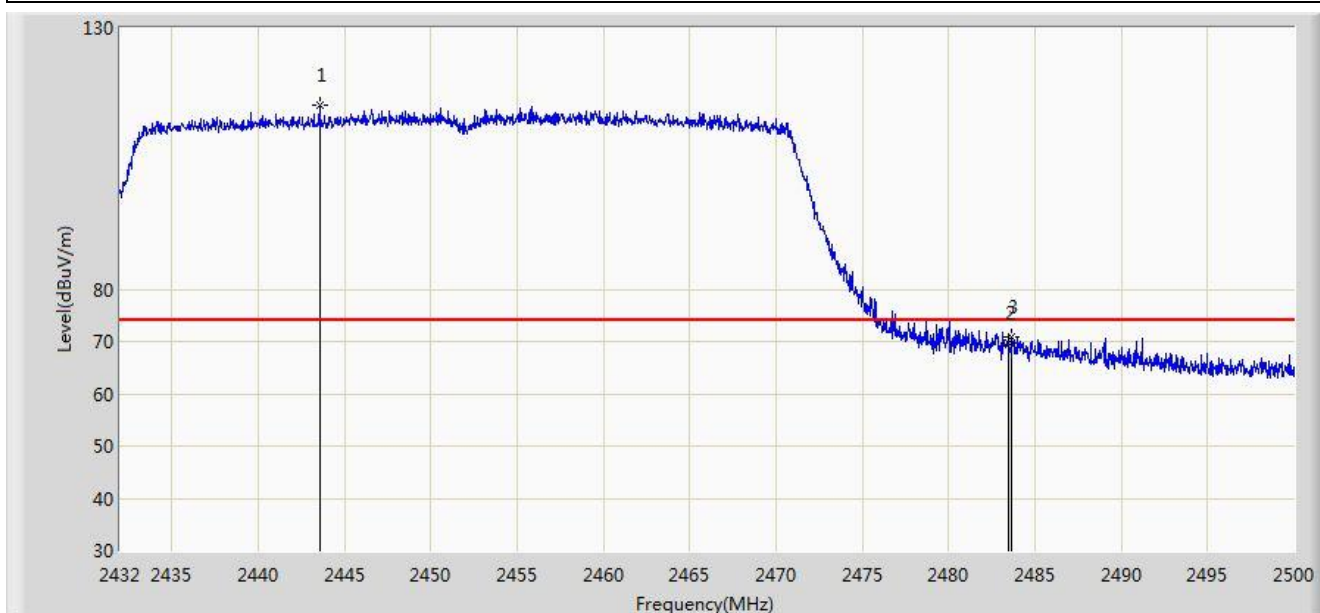


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.630	53.965	-1.370	54.000	-1.335	AV
2		*	2419.005	97.576	98.978	N/A	N/A	-1.402	AV

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)	

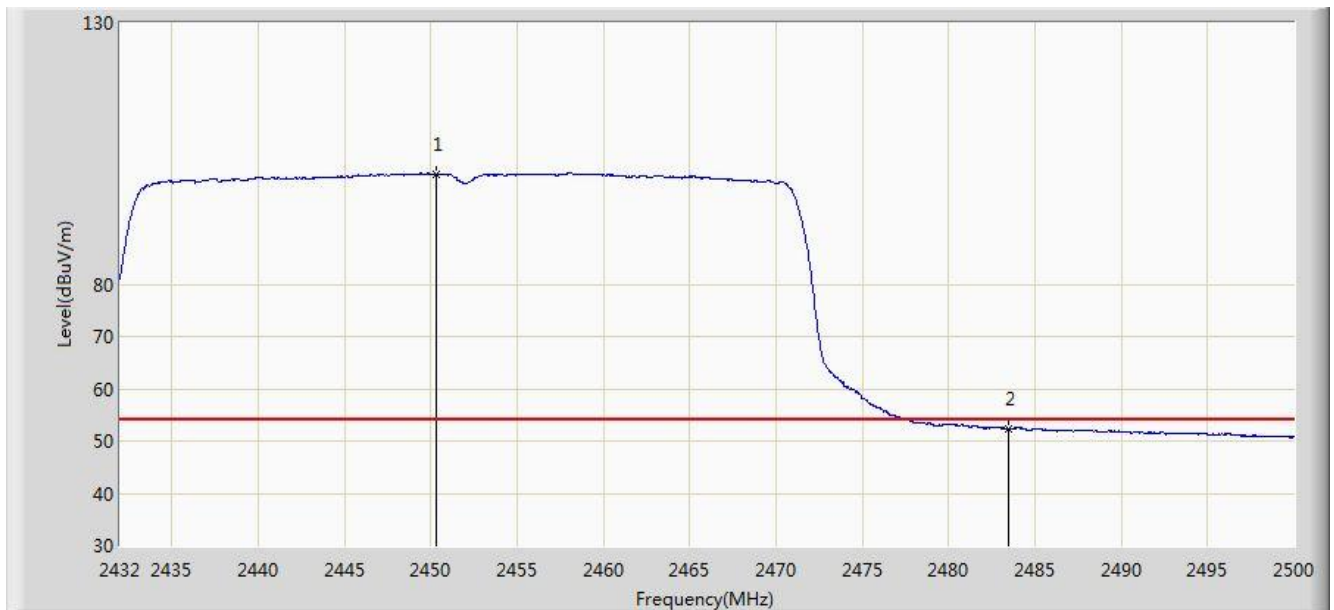


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2443.560	115.236	83.158	N/A	N/A	32.078	PK
2			2483.500	69.737	37.700	-4.263	74.000	32.037	PK
3			2483.680	70.997	38.960	-3.003	74.000	32.036	PK

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)	

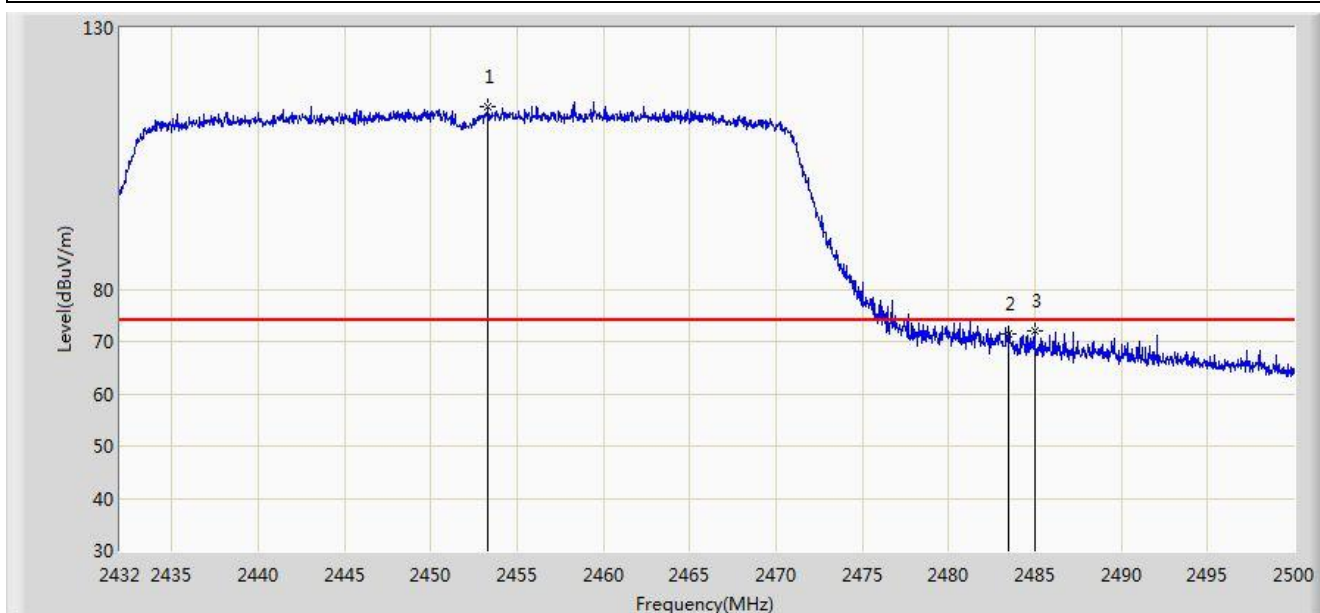


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2450.360	101.138	69.062	N/A	N/A	32.075	AV
2			2483.500	52.263	20.226	-1.737	54.000	32.037	AV

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)	

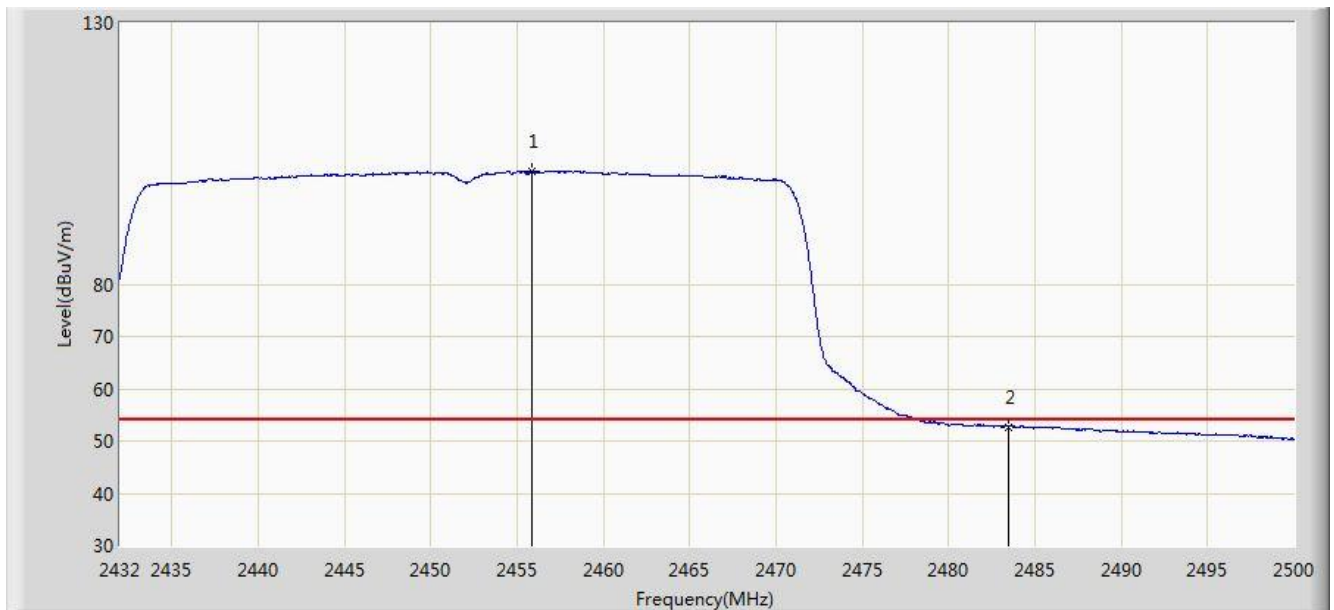


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2453.318	114.952	82.875	N/A	N/A	32.077	PK
2			2483.500	71.496	39.459	-2.504	74.000	32.037	PK
3			2484.972	72.142	40.108	-1.858	74.000	32.035	PK

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)	

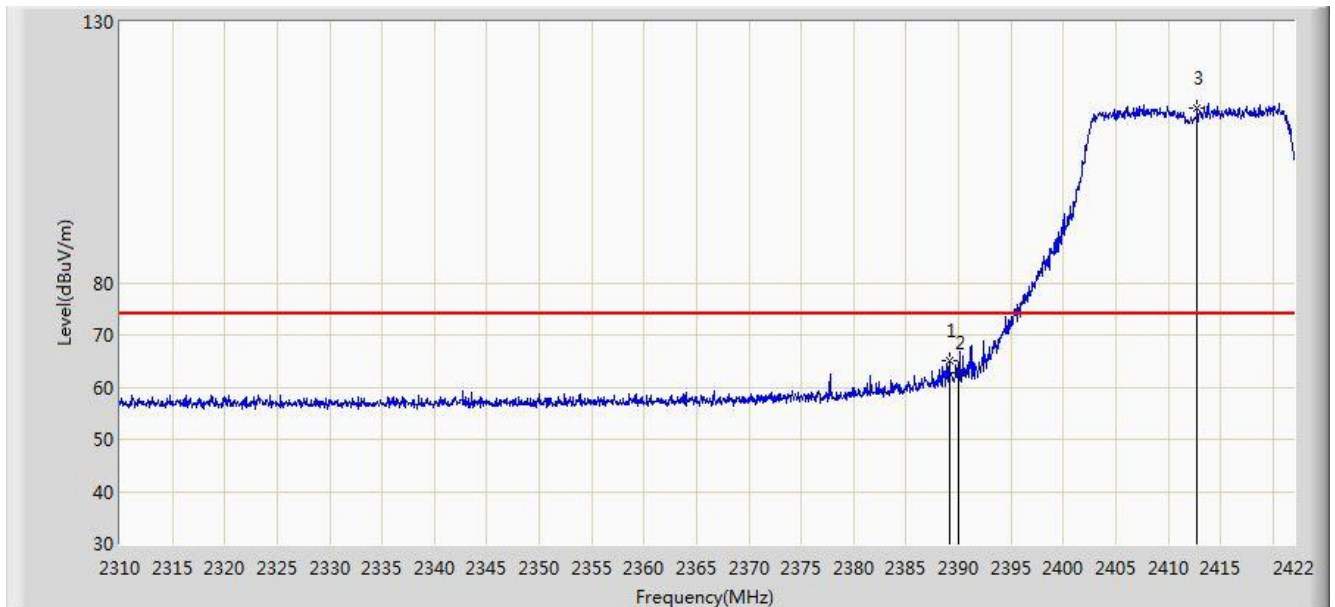


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.868	101.613	69.535	N/A	N/A	32.078	AV
2			2483.500	52.712	20.675	-1.288	54.000	32.037	AV

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)	

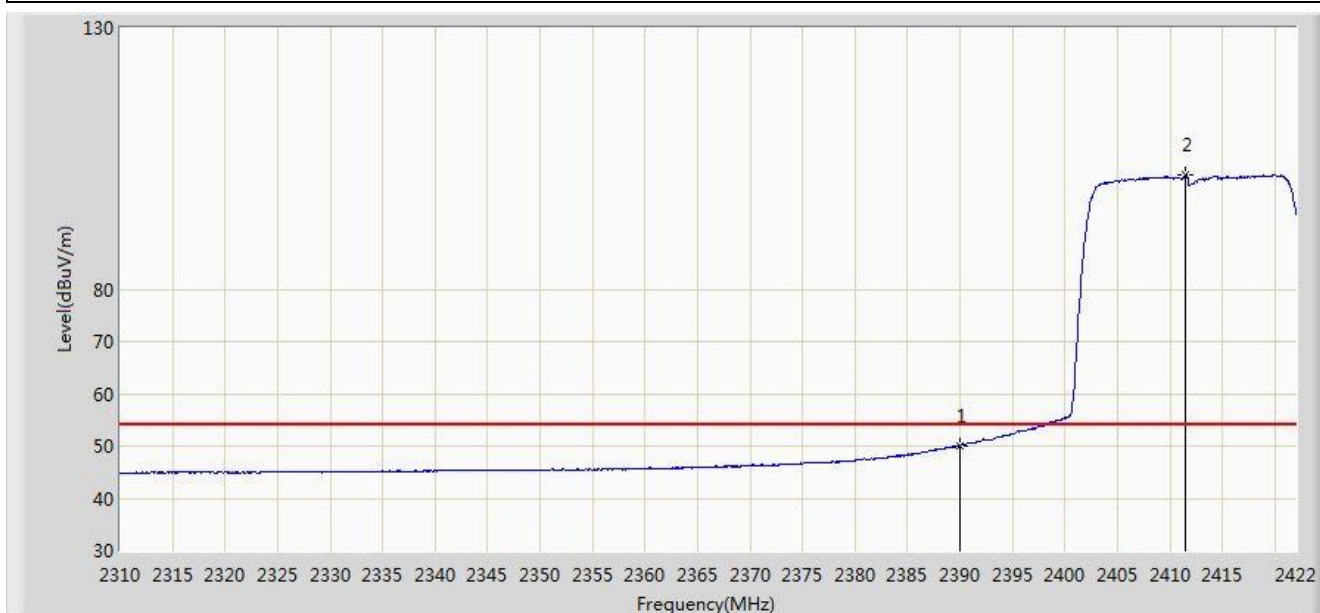


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.128	65.179	66.263	-8.821	74.000	-1.084	PK
2			2390.000	62.802	63.883	-11.198	74.000	-1.081	PK
3		*	2412.760	113.470	114.490	N/A	N/A	-1.020	PK

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)	

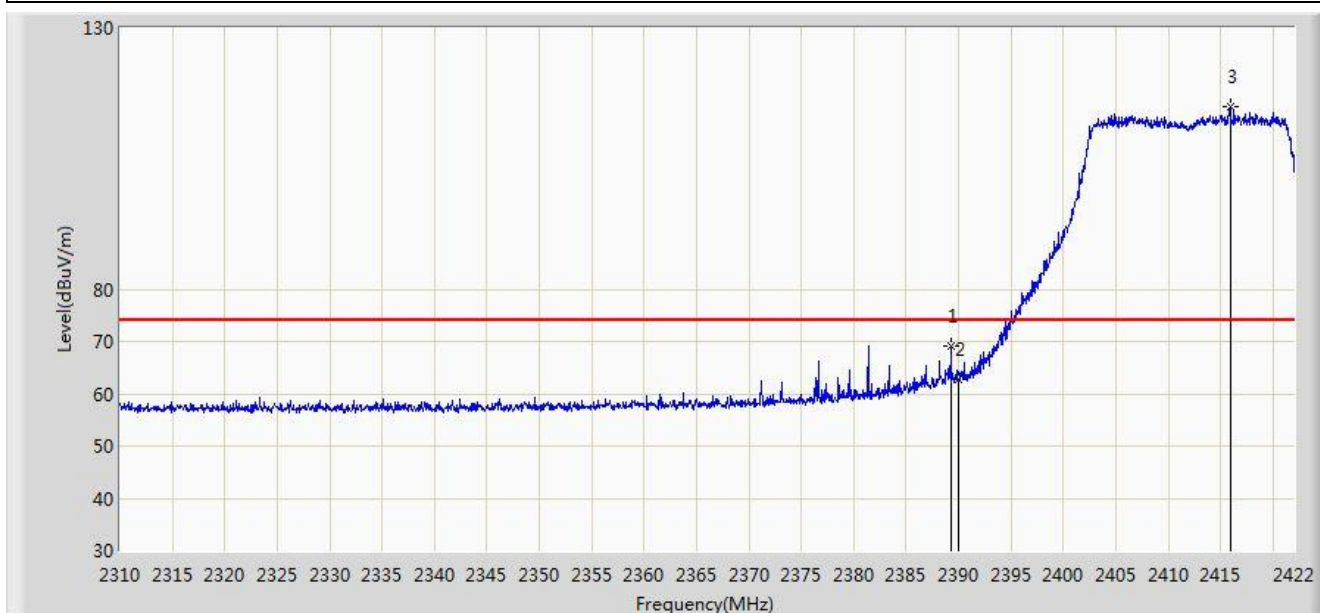


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.076	51.157	-3.924	54.000	-1.081	AV
2		*	2411.472	101.913	102.937	N/A	N/A	-1.024	AV

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)	

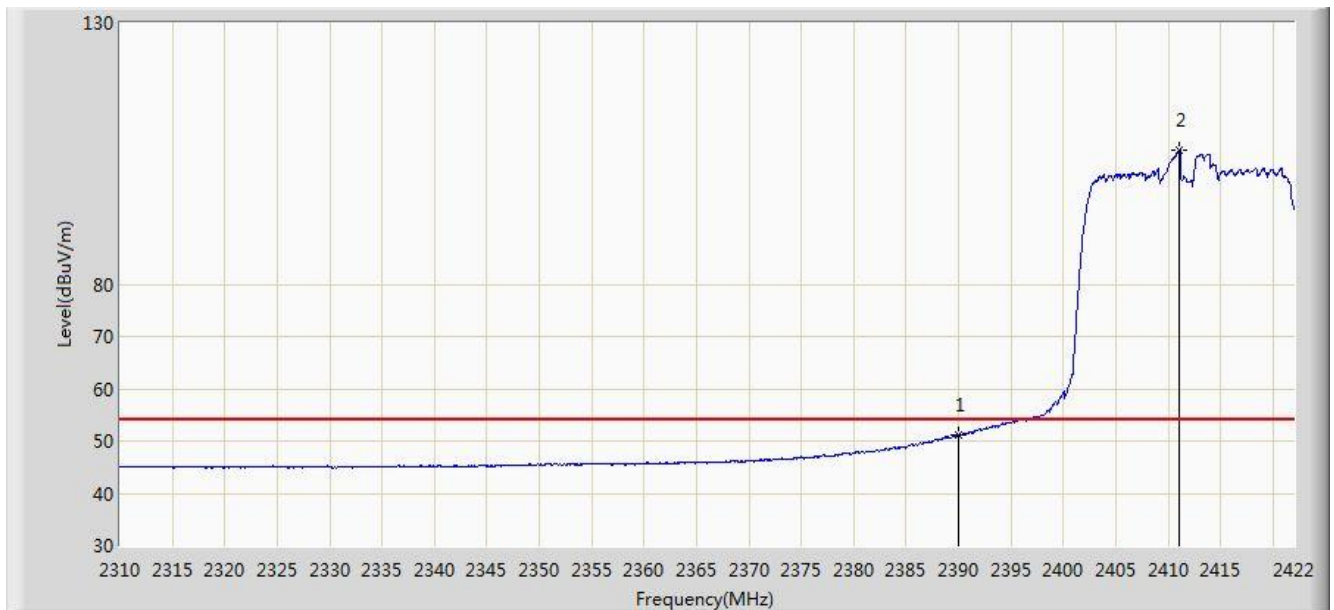


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.296	69.074	70.157	-4.926	74.000	-1.082	PK
2			2390.000	62.636	63.717	-11.364	74.000	-1.081	PK
3		*	2415.896	115.022	116.034	N/A	N/A	-1.011	PK

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)	

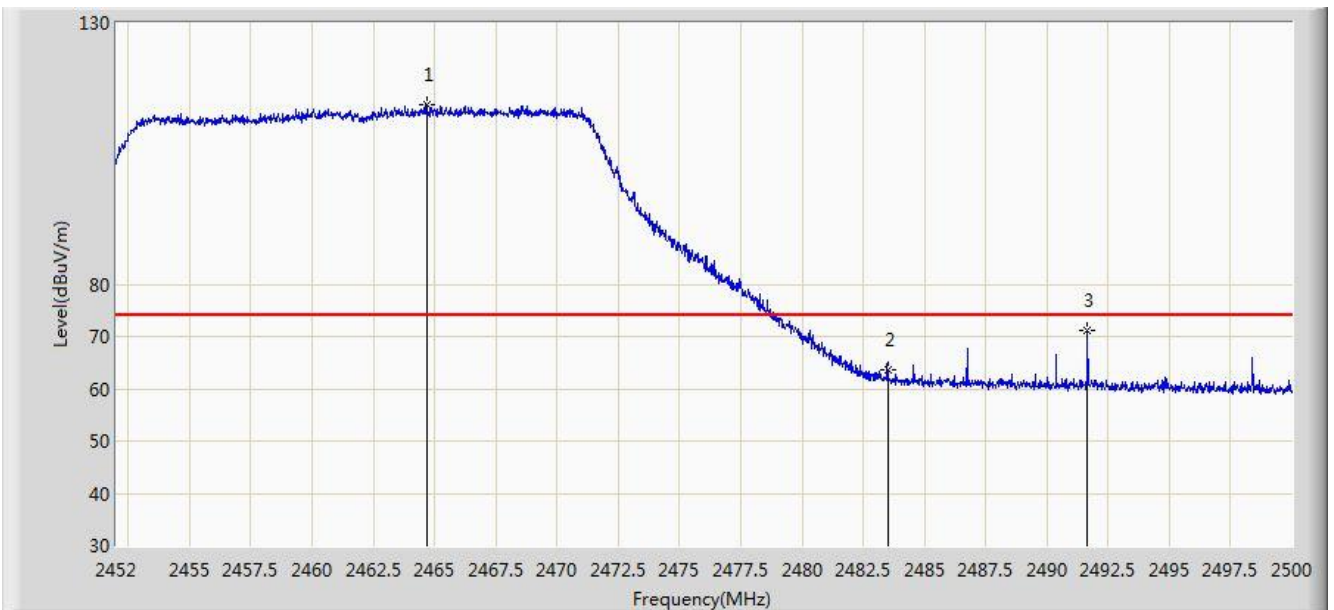


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.060	52.141	-2.940	54.000	-1.081	AV
2		*	2411.080	105.750	106.775	N/A	N/A	-1.025	AV

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)	

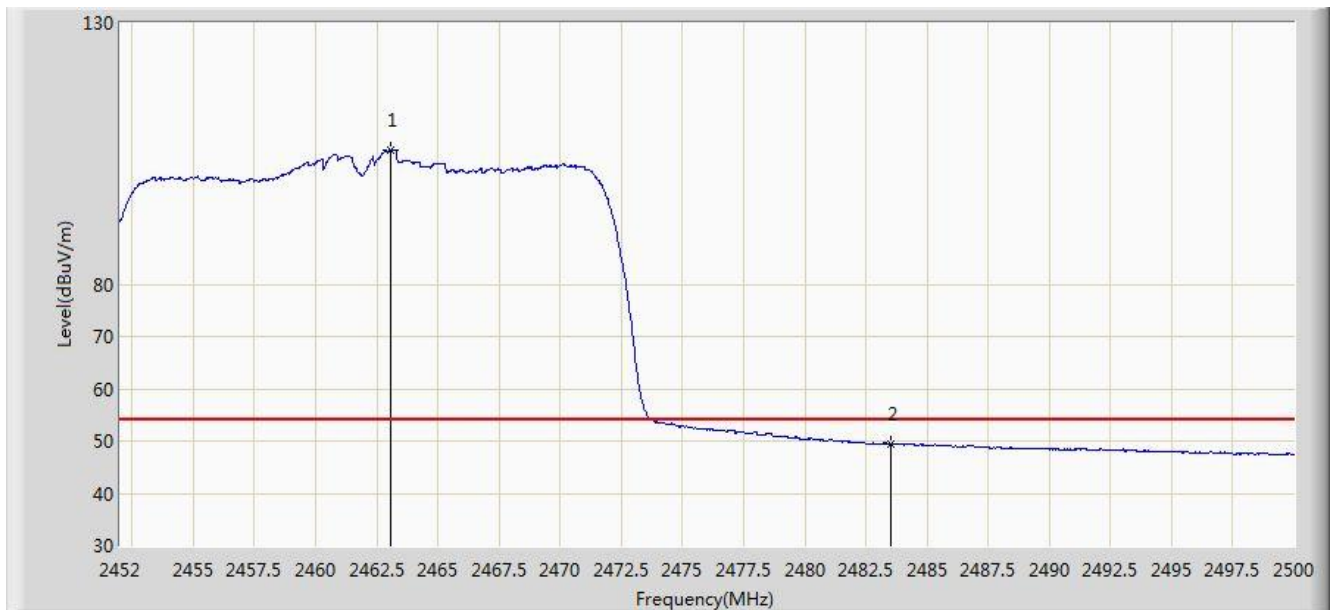


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.696	114.488	115.465	N/A	N/A	-0.977	PK
2			2483.500	63.659	64.690	-10.341	74.000	-1.031	PK
3			2491.648	71.025	72.026	-2.975	74.000	-1.002	PK

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)	

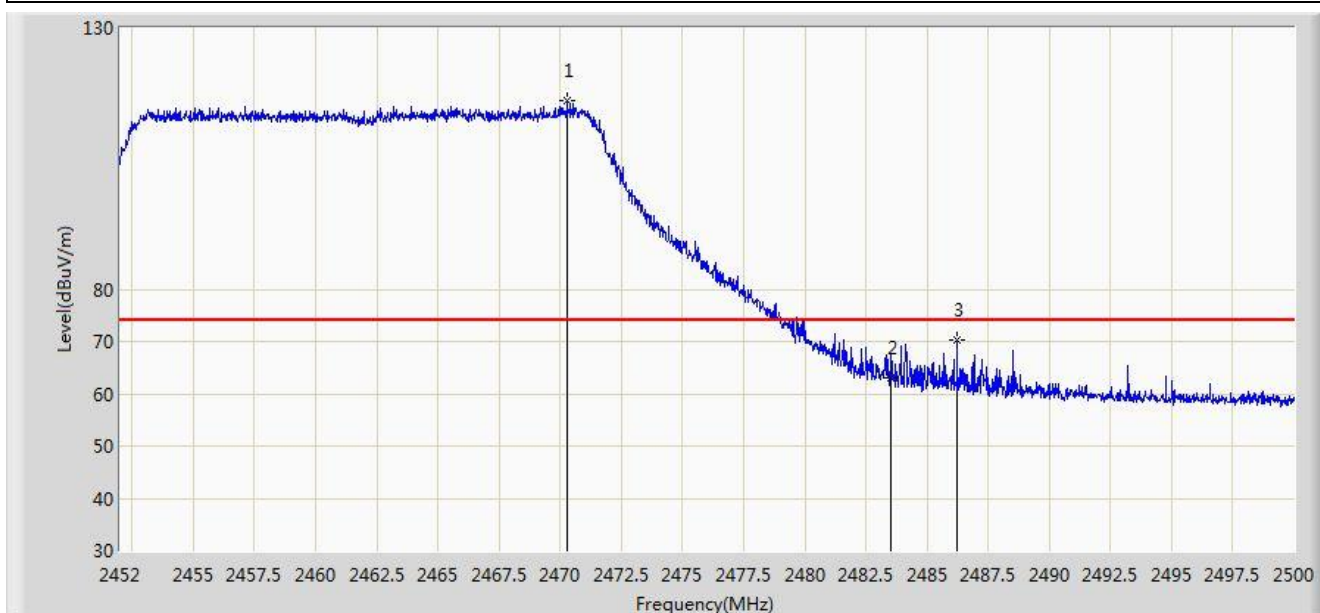


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.088	105.633	106.602	N/A	N/A	-0.969	AV
2			2483.500	49.463	50.494	-4.537	54.000	-1.031	AV

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)	

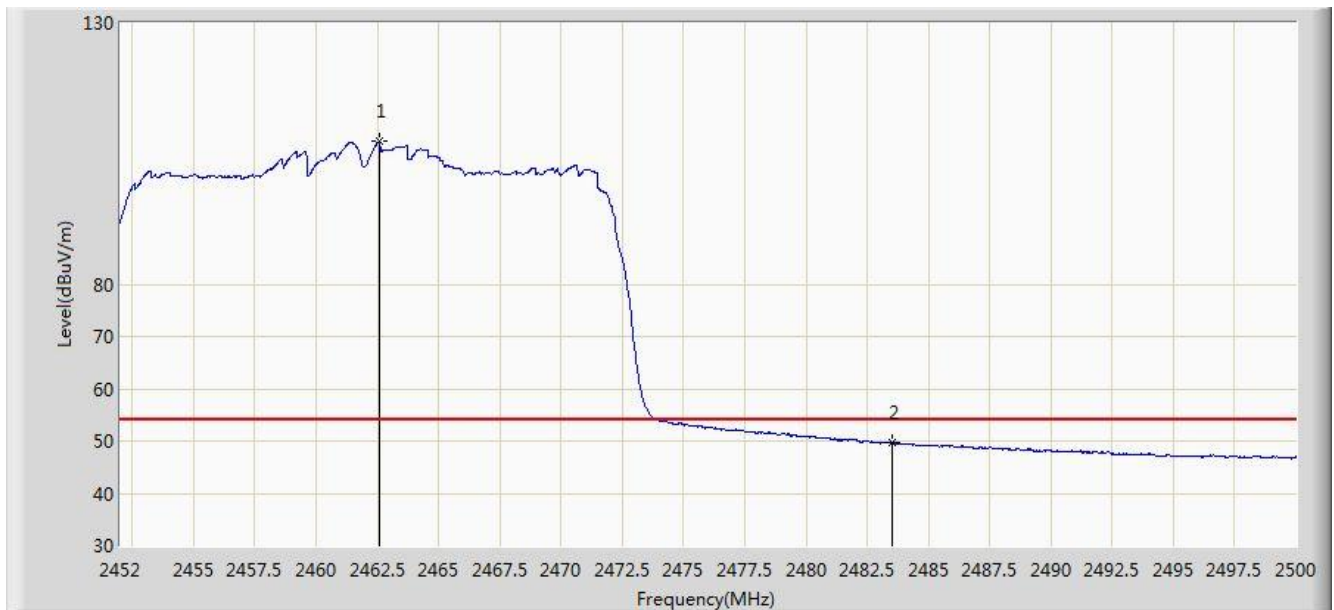


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2470.288	115.993	116.998	N/A	N/A	-1.005	PK
2			2483.500	63.017	64.048	-10.983	74.000	-1.031	PK
3			2486.224	70.230	71.251	-3.770	74.000	-1.021	PK

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)	

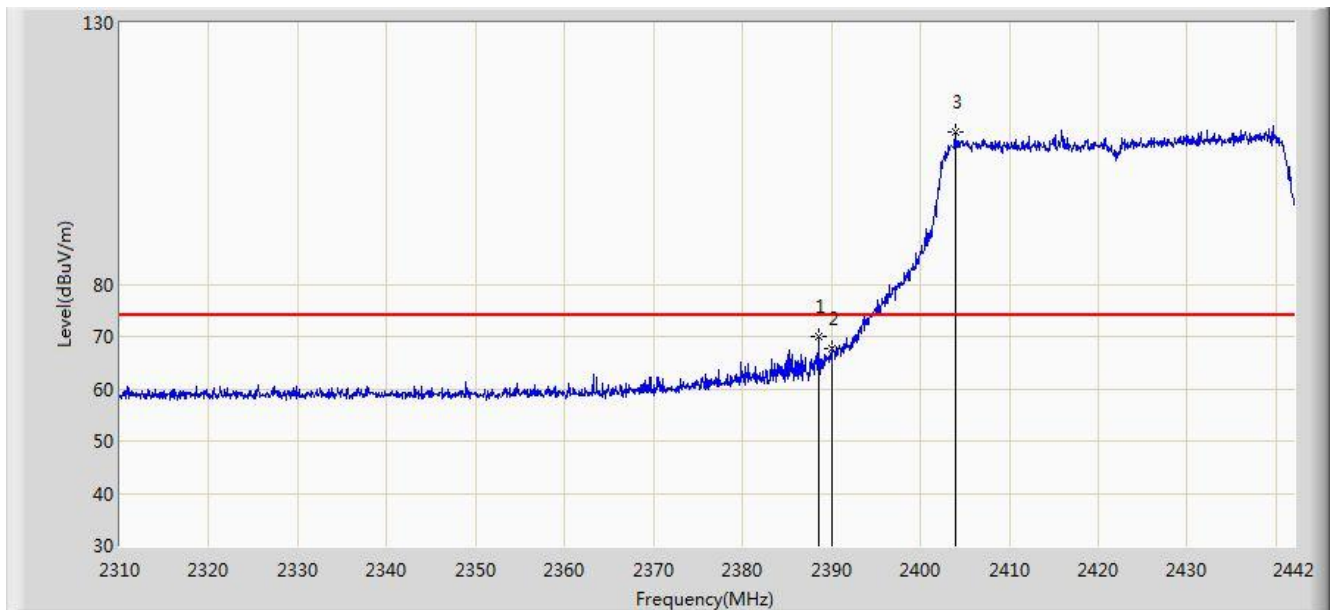


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.608	107.514	108.480	N/A	N/A	-0.966	AV
2			2483.500	49.817	50.848	-4.183	54.000	-1.031	AV

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)	

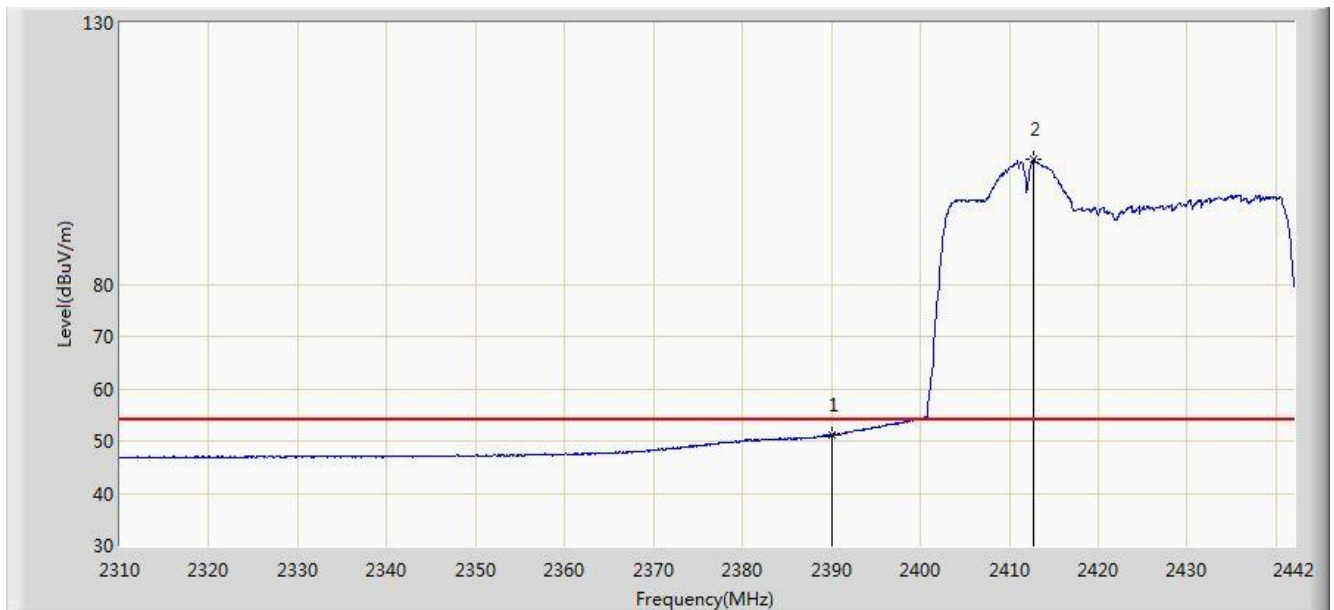


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.540	69.973	71.059	-4.027	74.000	-1.086	PK
2			2390.000	67.698	68.779	-6.302	74.000	-1.081	PK
3		*	2403.918	109.148	110.192	N/A	N/A	-1.043	PK

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)	

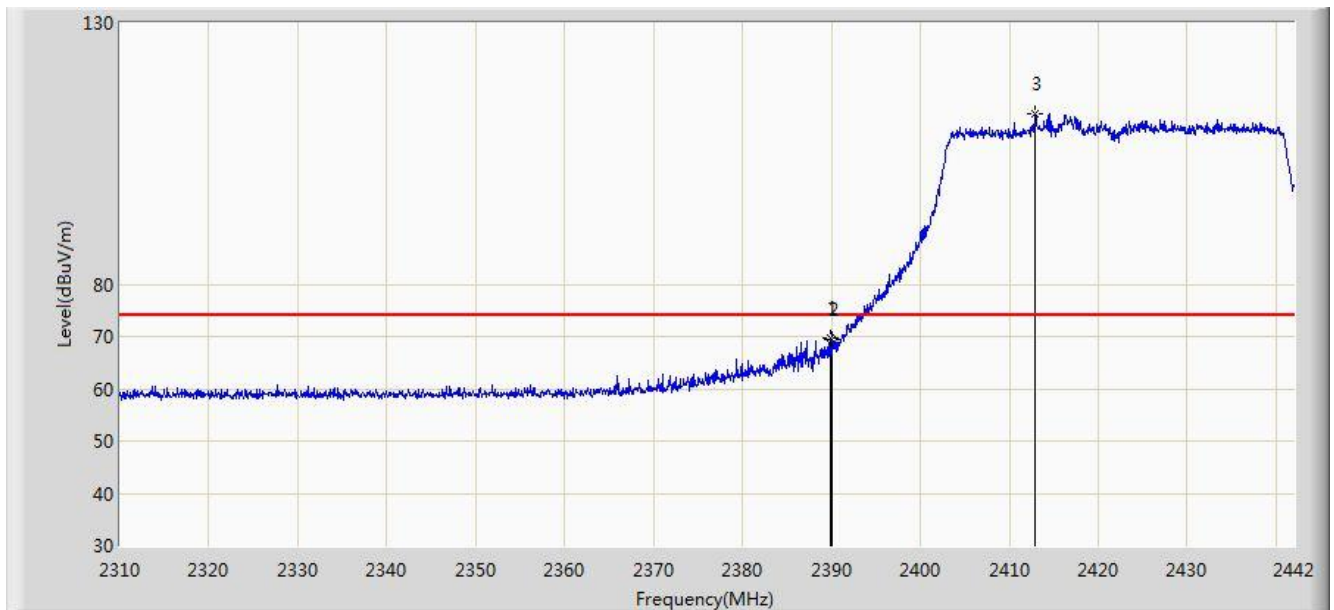


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.182	52.263	-2.818	54.000	-1.081	AV
2		*	2412.696	103.784	104.804	N/A	N/A	-1.021	AV

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)	

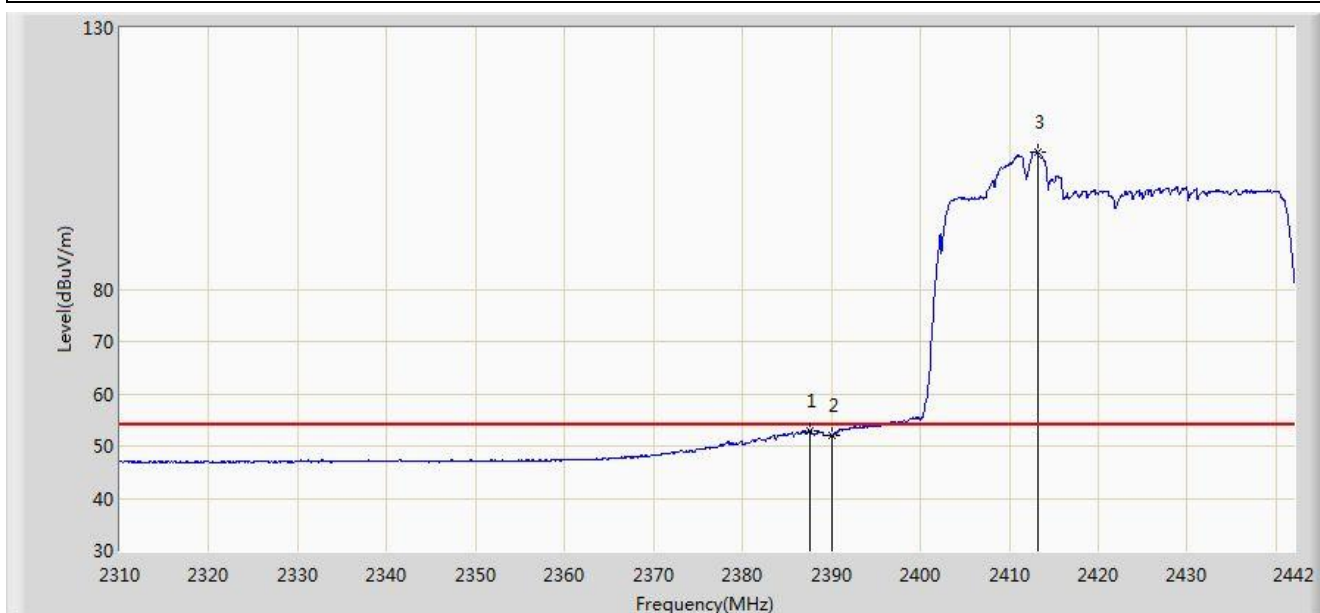


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.860	69.745	70.827	-4.255	74.000	-1.082	PK
2			2390.000	69.404	70.485	-4.596	74.000	-1.081	PK
3		*	2412.960	112.545	113.565	N/A	N/A	-1.020	PK

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)	

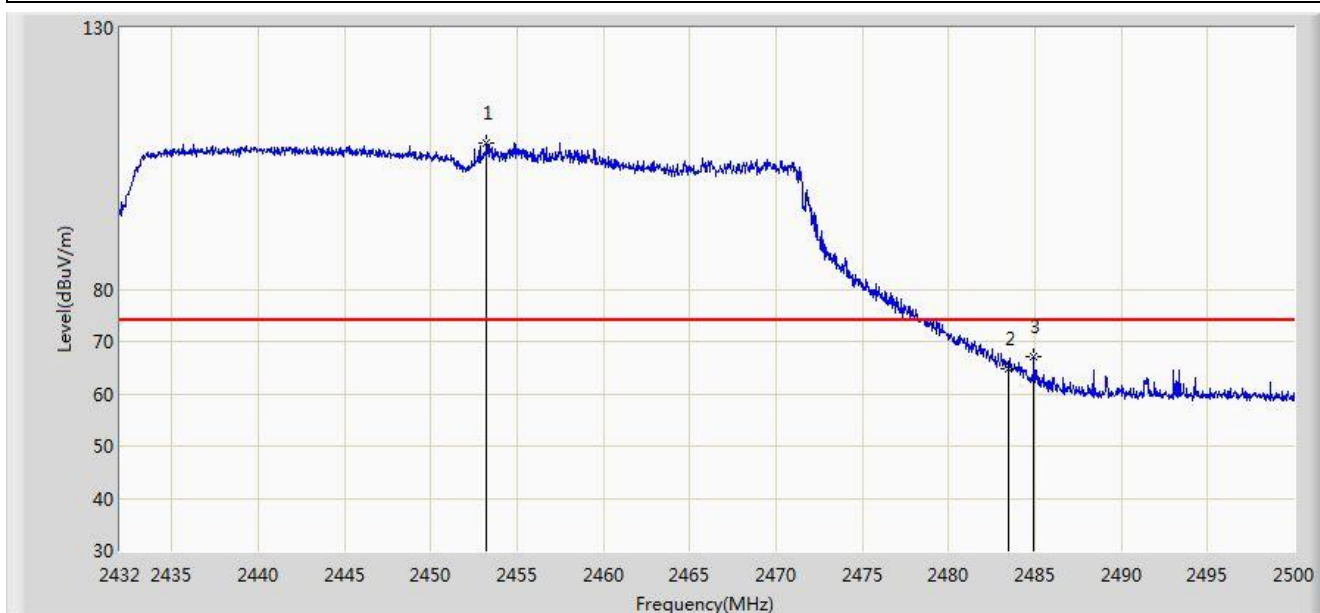


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.550	52.834	53.922	-1.166	54.000	-1.089	AV
2			2390.000	52.025	53.106	-1.975	54.000	-1.081	AV
3		*	2413.158	106.189	107.208	N/A	N/A	-1.020	AV

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)	

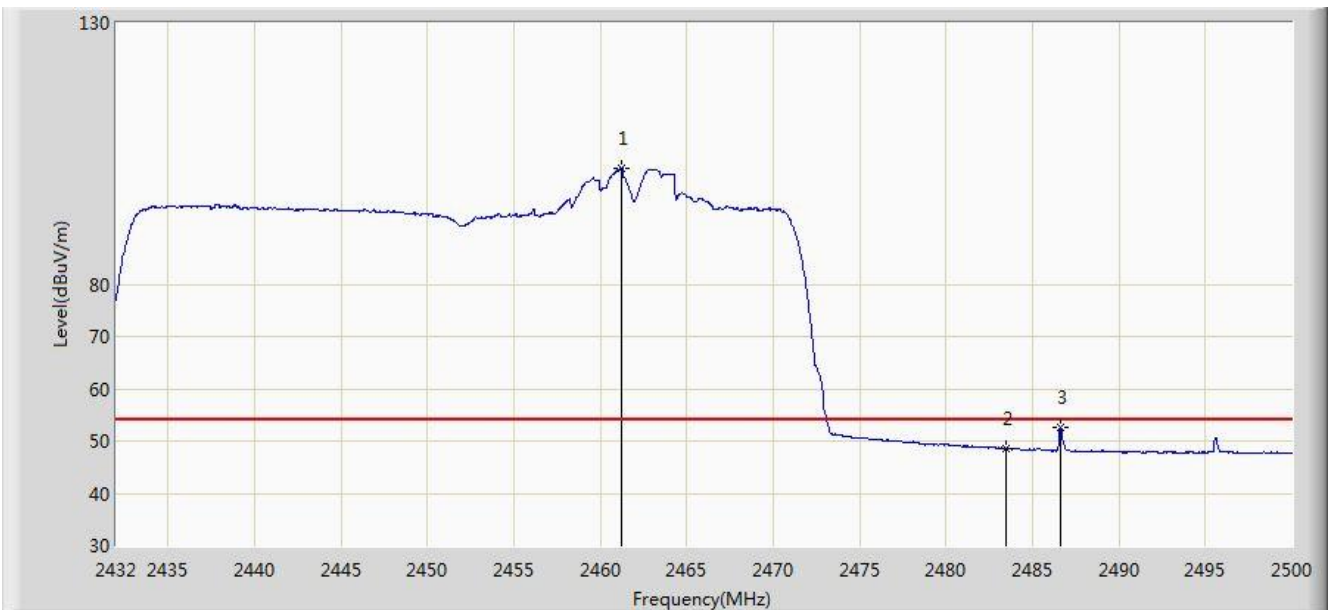


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2453.250	107.985	109.021	N/A	N/A	-1.037	PK
2			2483.500	64.789	65.820	-9.211	74.000	-1.031	PK
3			2484.938	67.124	68.150	-6.876	74.000	-1.025	PK

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)	

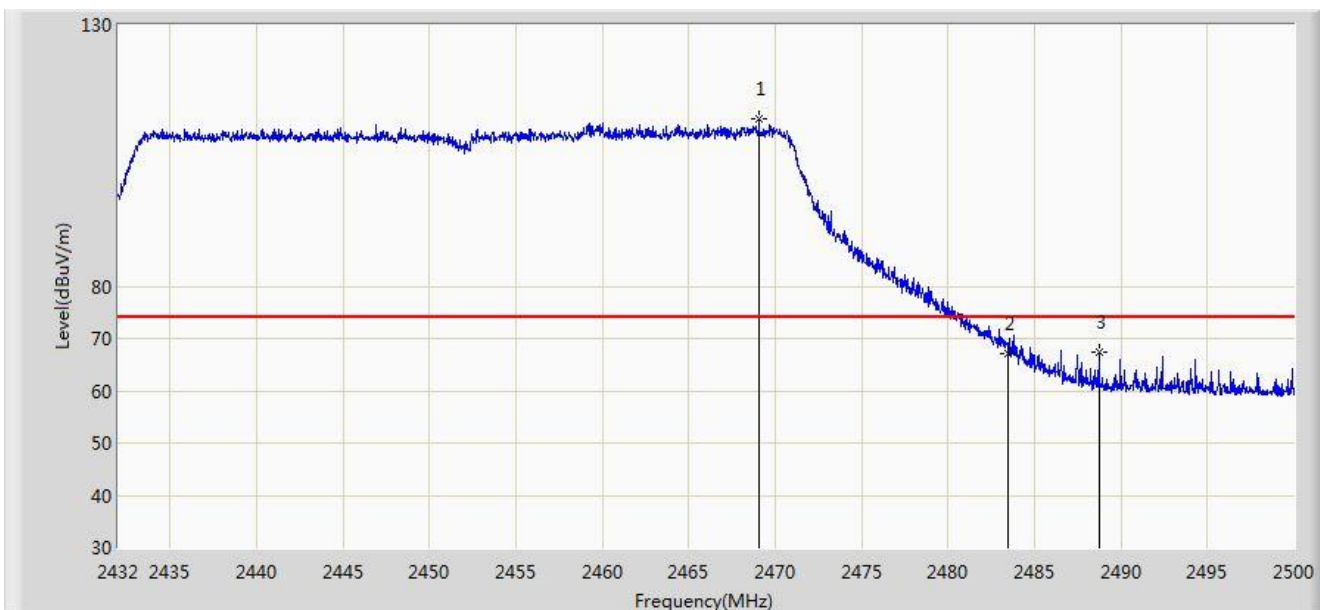


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	102.213	103.183	N/A	N/A	-0.969	AV
2			2483.500	48.604	49.635	-5.396	54.000	-1.031	AV
3			2486.638	52.744	53.764	-1.256	54.000	-1.020	AV

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

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

Site: AC1	Time: 2019/12/10 - 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)	

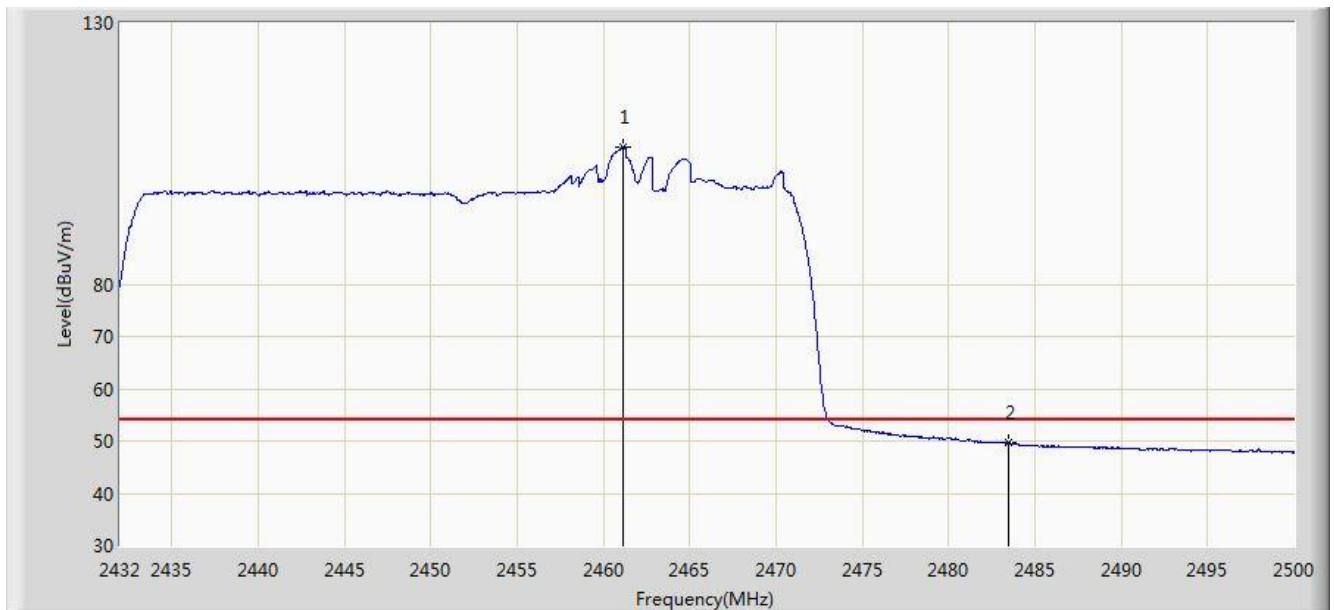


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2469.060	112.074	113.072	N/A	N/A	-0.998	PK
2			2483.500	67.189	68.220	-6.811	74.000	-1.031	PK
3			2488.712	67.280	68.292	-6.720	74.000	-1.012	PK

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

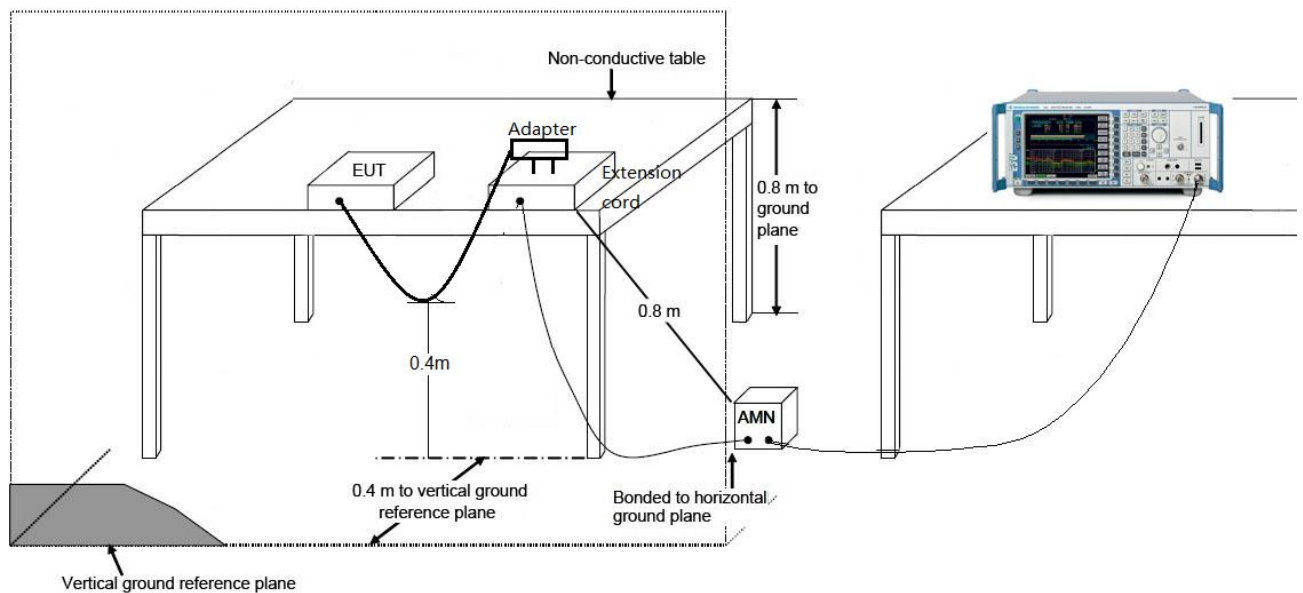
7.8.1. Test Limit

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.

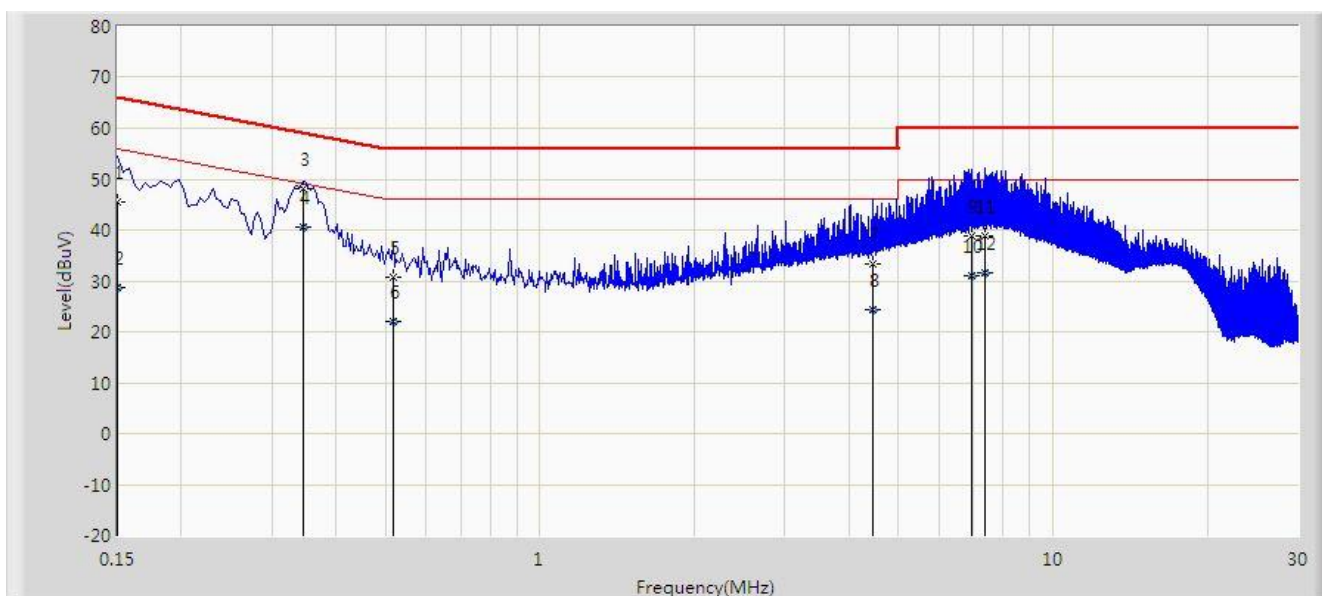
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

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	

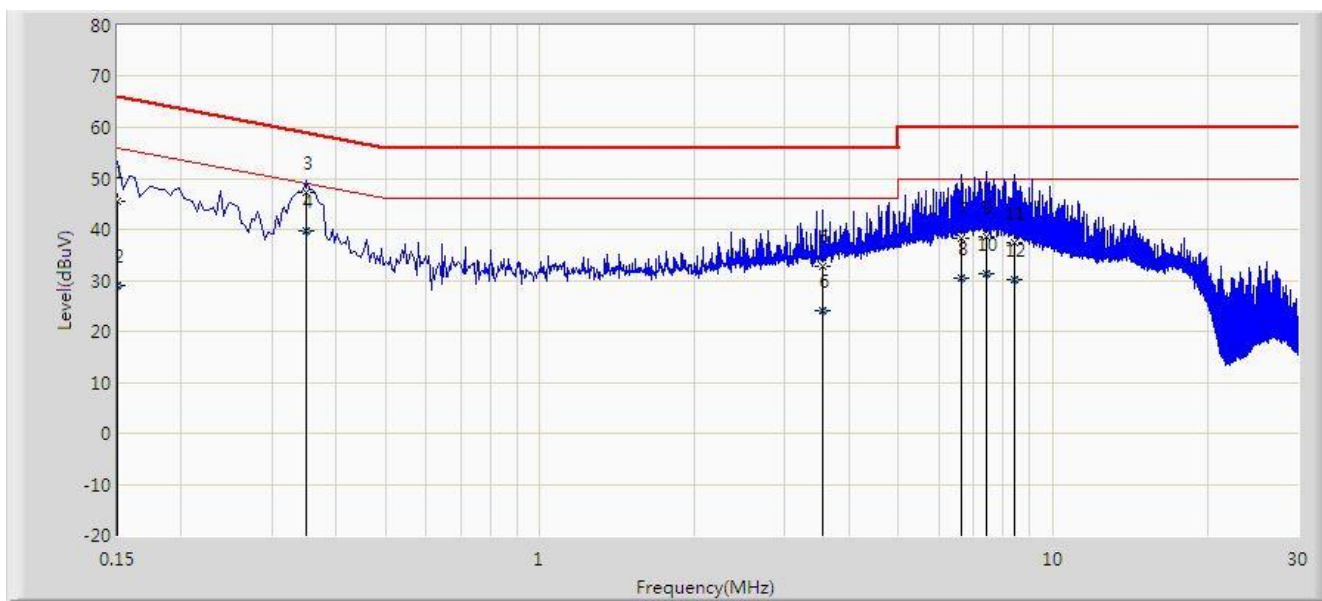


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	45.546	34.378	-20.454	66.000	11.168	QP
2			0.150	28.830	17.662	-27.170	56.000	11.168	AV
3			0.346	48.011	37.970	-11.047	59.058	10.041	QP
4		*	0.346	40.451	30.410	-8.607	49.058	10.041	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.