

Appendix C: Test Results of Wi-Fi operation for U-NII-3 Band and Conducted Emission on AC Mains

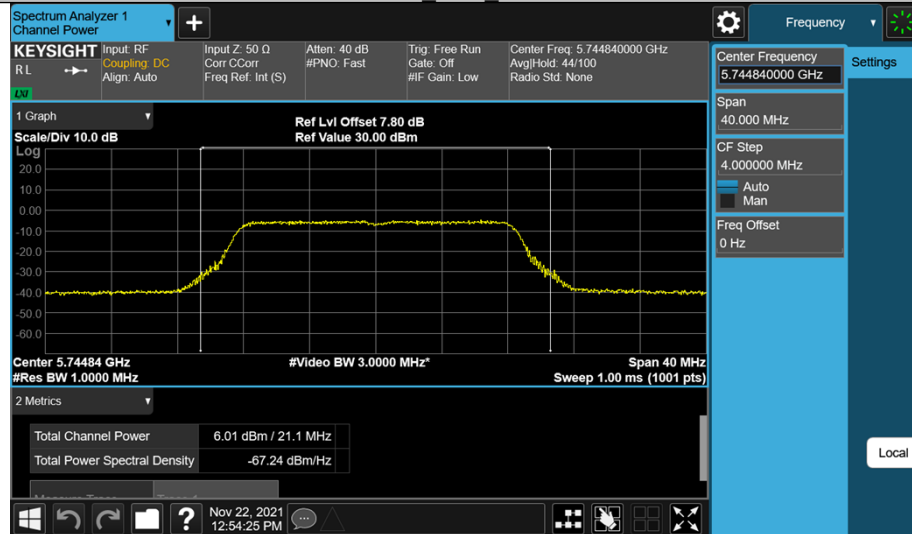
APPENDIX C: TEST RESULTS OF WI-FI OPERATION FOR U-NII-3 BAND AND CONDUCTED EMISSION ON AC MAINS	1
APPENDIX C.1: TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	2
APPENDIX C.2: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	5
APPENDIX C.3: TEST RESULTS OF FREQUENCY STABILITY	8
APPENDIX C.4: TEST RESULTS OF 6dB BANDWIDTH	9
APPENDIX C.5: TEST RESULTS OF 99% BANDWIDTH	12
APPENDIX C.6: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	15
30MHz - 1GHz (Worst case)	15
1GHz - 18GHz	17
APPENDIX C.7: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS	41
Wi-Fi 802.11 a mode	41
Wi-Fi 802.11 n(HT20) mode	45
APPENDIX C.8: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS	49

Appendix C.1: Test Results of Maximum Conducted Output Power

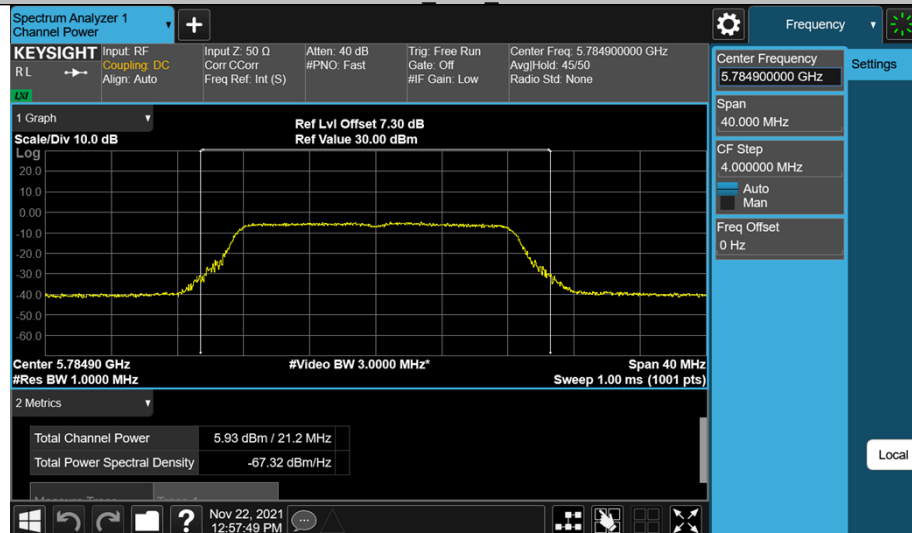
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	6.01	≤30	PASS
		5785	5.93	≤30	PASS
		5825	6.27	≤30	PASS
11N20SISO	Ant1	5745	4.99	≤30	PASS
		5785	4.98	≤30	PASS
		5825	5.10	≤30	PASS

Note: The Duty Cycle Factor is compensated in the graph.

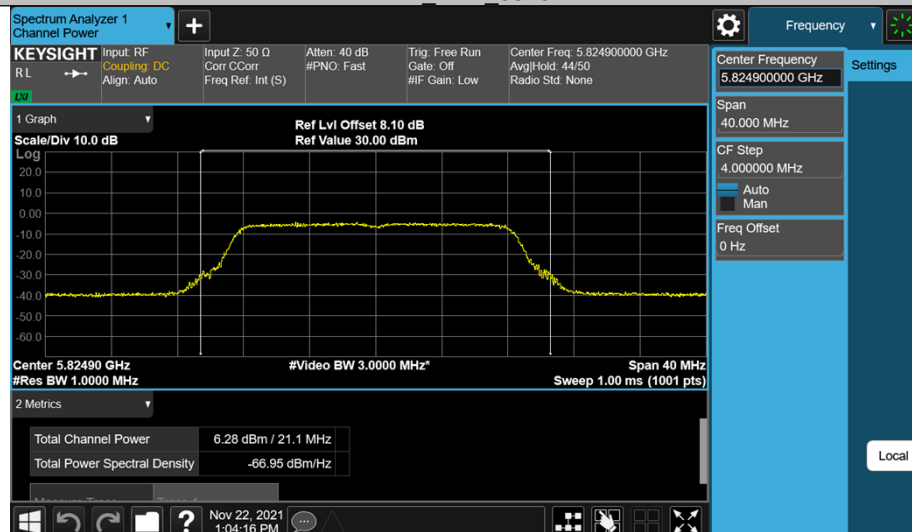
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825





Appendix C.2: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-6.73	≤30	PASS
		5785	-6.66	≤30	PASS
		5825	-5.96	≤30	PASS
11N20SISO	Ant1	5745	-7.98	≤30	PASS
		5785	-8.02	≤30	PASS
		5825	-7.74	≤30	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.





Appendix C.3: Test Results of Frequency Stability

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	NT	-79000	-13.751088	20	PASS
		5785	NV	NT	-86000	-14.866033	20	PASS
		5825	NV	NT	-88000	-15.107296	20	PASS
11N20SISO	Ant1	5180	NV	NT	-84000	-16.216216	20	PASS
		5745	NV	NT	-85000	-14.795474	20	PASS
		5785	NV	NT	-88000	-15.211755	20	PASS
		5825	NV	NT	-89000	-15.27897	20	PASS

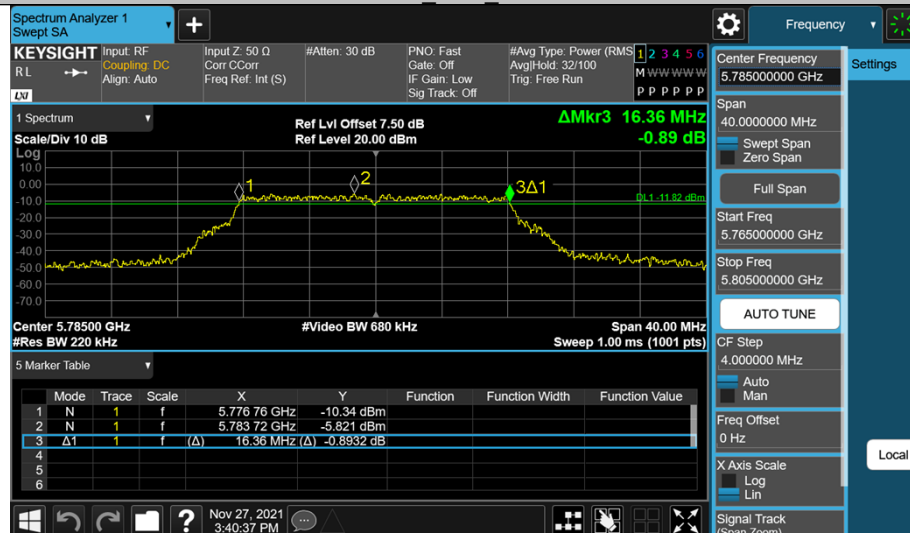
Appendix C.4: Test Results of 6dB Bandwidth

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.480	5736.760	5753.240	---	PASS
		5785	16.360	5737.720	5754.160	---	PASS
		5825	16.360	5814.360	5835.440	---	PASS
11N20SISO	Ant1	5745	17.720	5734.240	5755.560	---	PASS
		5785	17.520	5774.360	5795.600	---	PASS
		5825	17.560	5814.440	5835.720	---	PASS

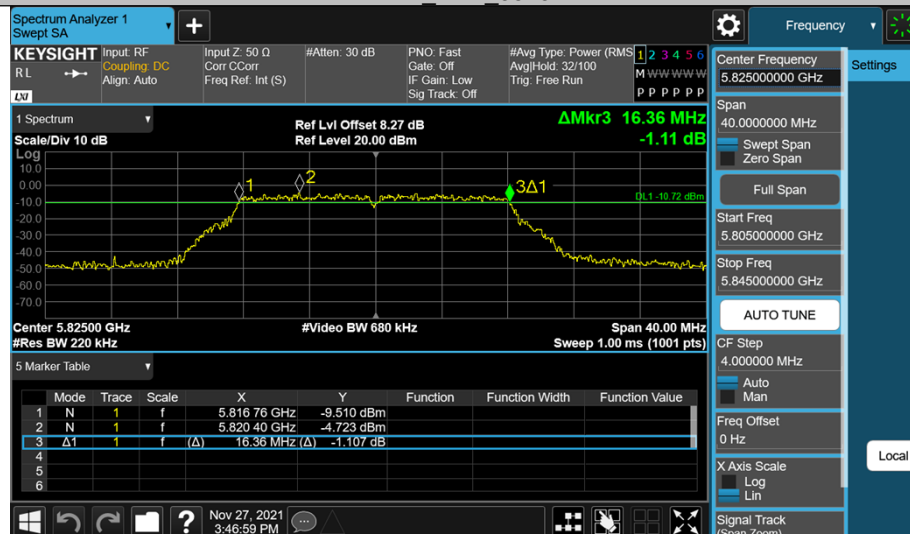
11A_Ant1_5745



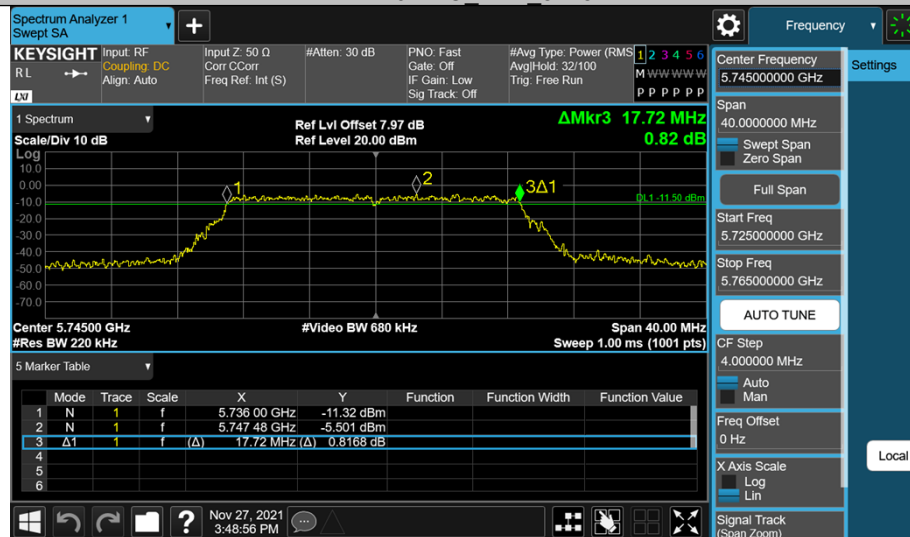
11A_Ant1_5785



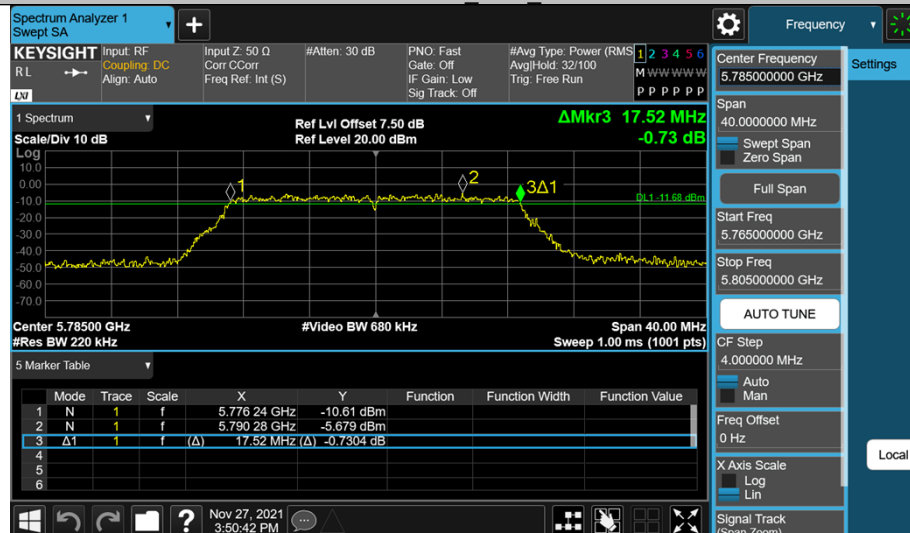
11A_Ant1_5825



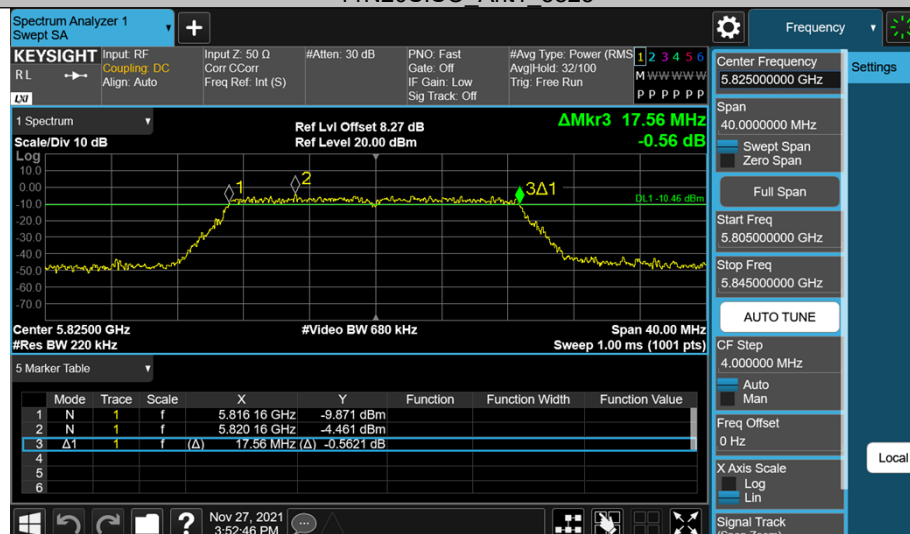
11N20SISO Ant1 5745



11N20SISO Ant1 5785

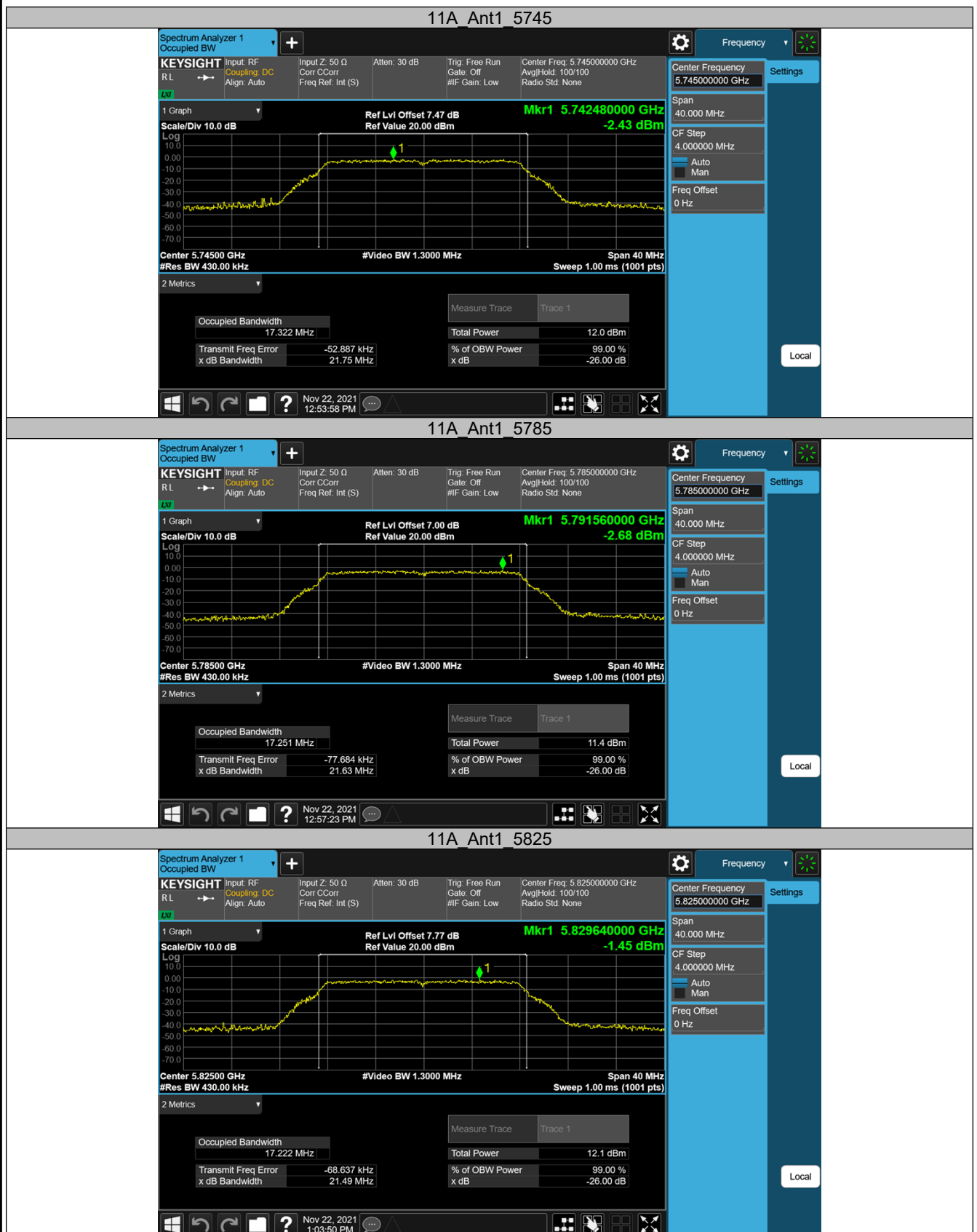


11N20SISO Ant1 5825

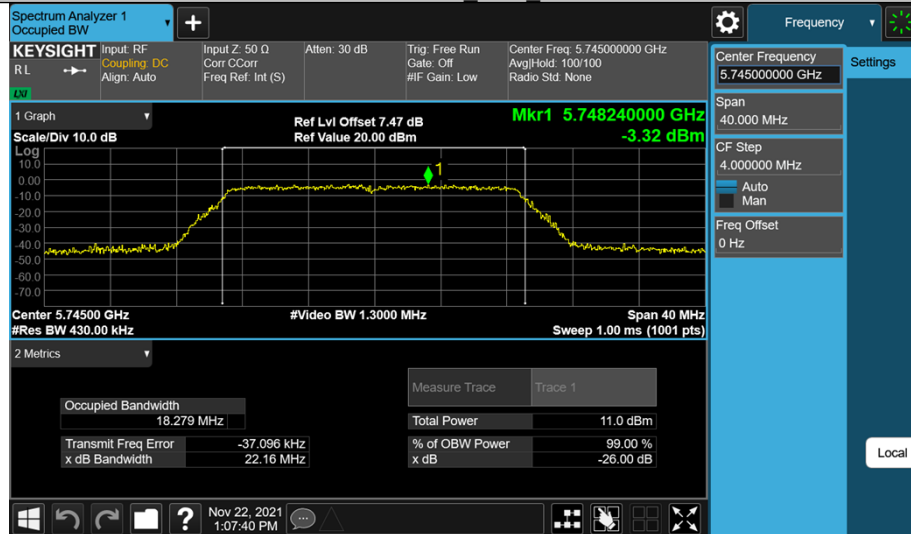


Appendix C.5: Test Results of 99% Bandwidth

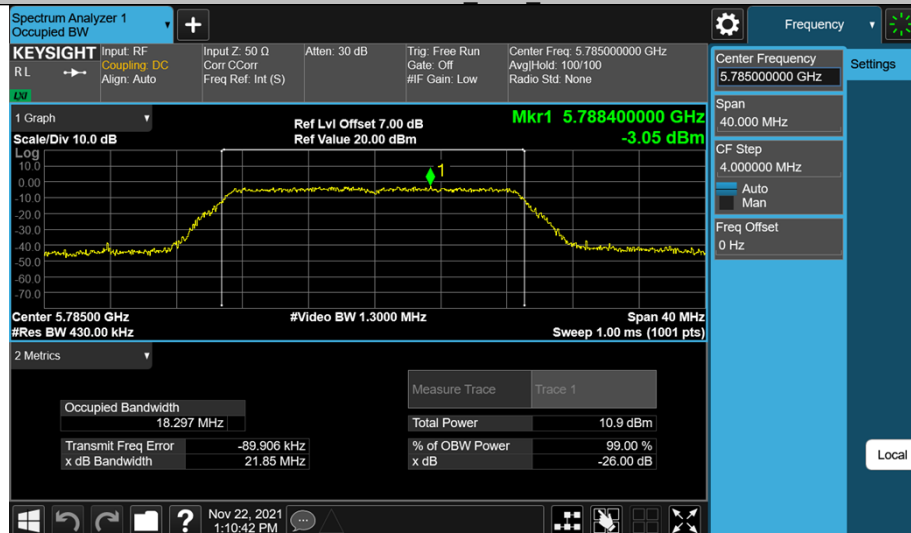
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.322	5736.286	5753.608	---	PASS
		5785	17.251	5776.297	5793.548	---	PASS
		5825	17.222	5816.320	5833.542	---	PASS
11N20SISO	Ant1	5745	18.279	5735.823	5754.102	---	PASS
		5785	18.297	5775.762	5794.059	---	PASS
		5825	18.362	5815.732	5834.094	---	PASS



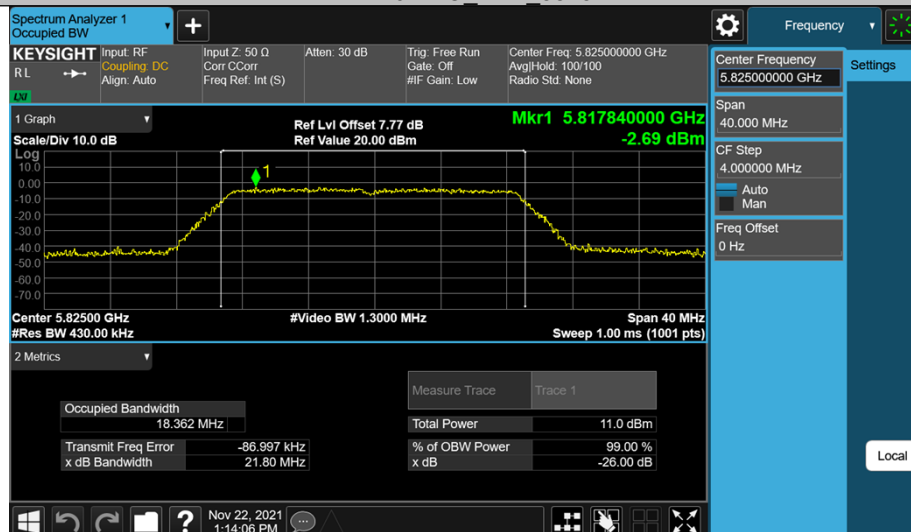
11N20SISO Ant1 5745



11N20SISO Ant1 5785



11N20SISO Ant1 5825

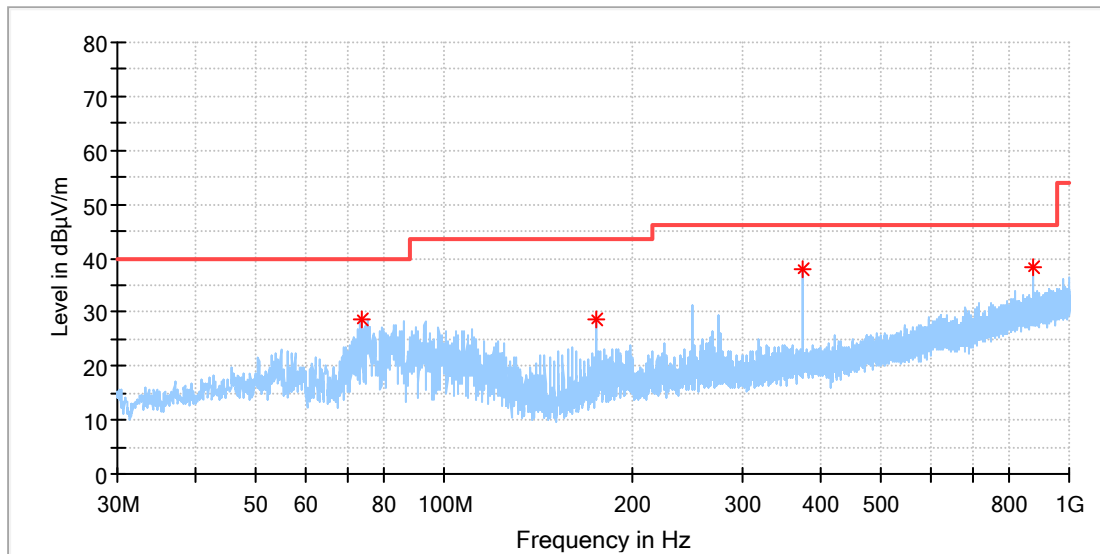


Note: Testing was carried out within frequency range 9 kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix C.6: Test Results of Radiated Spurious Emissions 30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

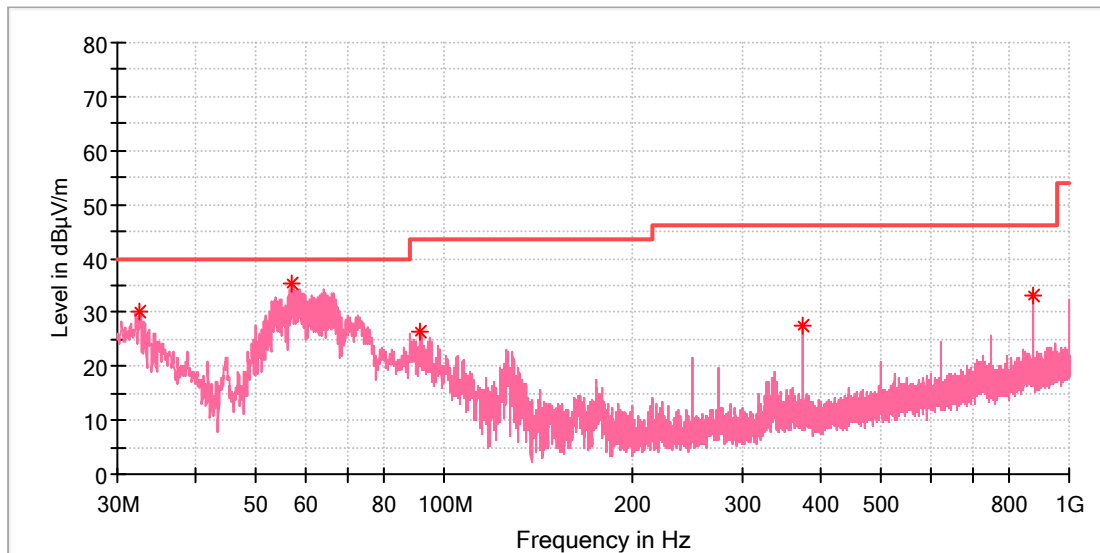
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
73.601500	28.79	40.00	11.21	100.0	H	75.0	-23.0
174.966500	28.50	43.50	15.00	100.0	H	19.0	-20.9
374.980500	38.12	46.00	7.88	100.0	H	340.0	-14.3
875.064000	38.28	46.00	7.72	100.0	H	109.0	-5.2

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.648846	30.07	40.00	9.93	100.0	V	356.0	-22.9
56.973462	35.17	40.00	4.83	100.0	V	65.0	-19.0
91.781539	26.30	43.50	17.20	100.0	V	0.0	-20.8
374.984231	27.48	46.00	18.52	100.0	V	177.0	-14.7
874.981923	33.19	46.00	12.81	100.0	V	209.0	-5.6

Final Result

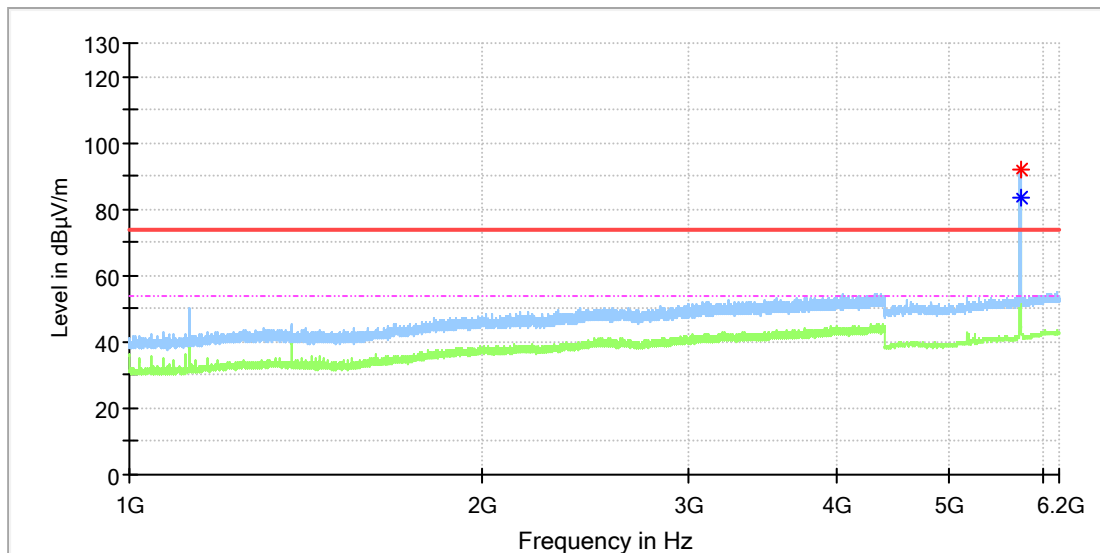
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Wi-Fi Fundamental.

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

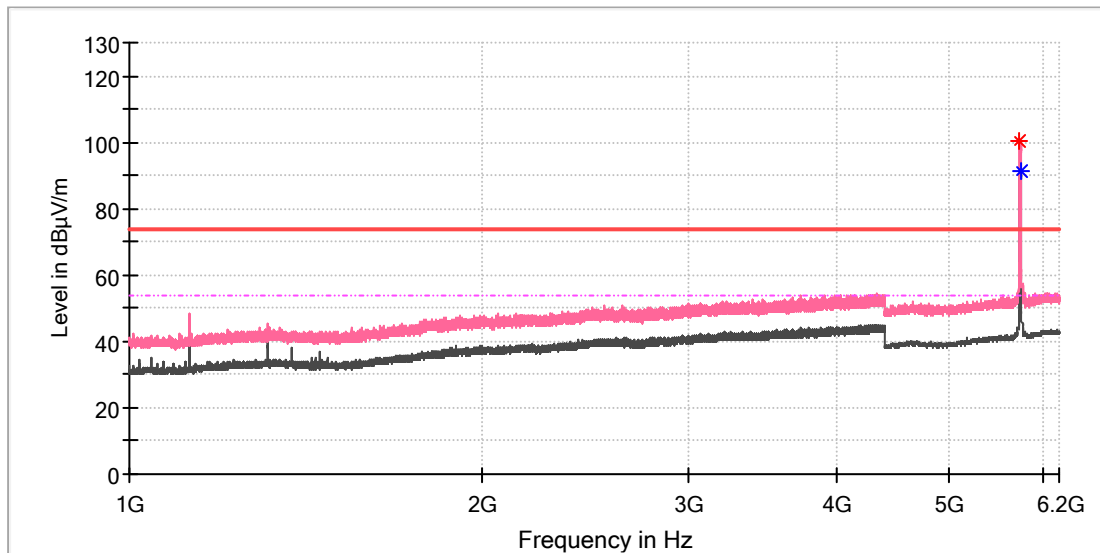
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5744.000000	92.16	---			100.0	H	119.0	13.9
5747.500000	---	83.27			100.0	H	278.0	13.9

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

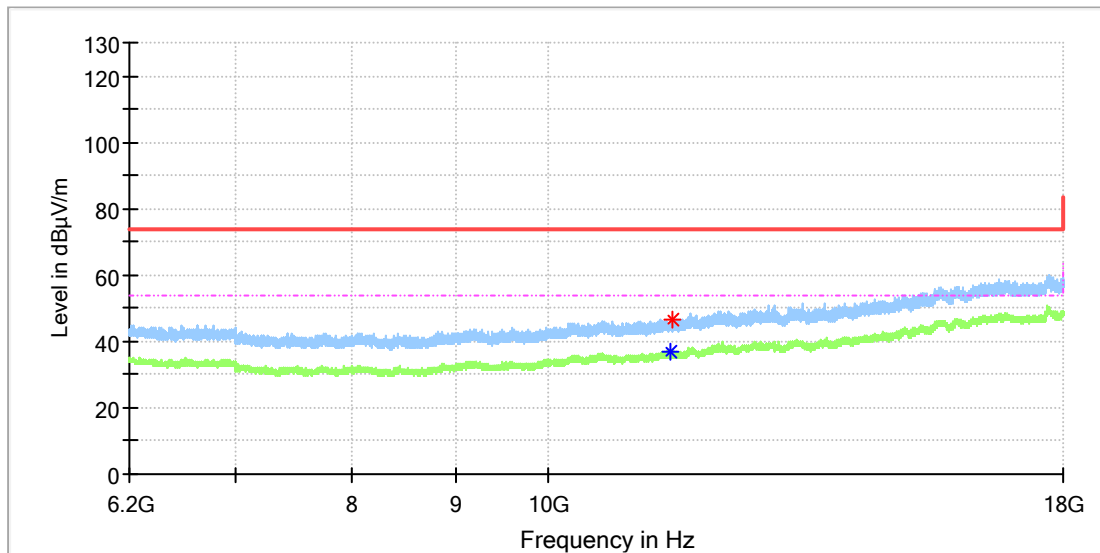
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5742.000000	100.22	---			100.0	V	60.0	13.9
5743.500000	---	91.29			100.0	V	60.0	13.9

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

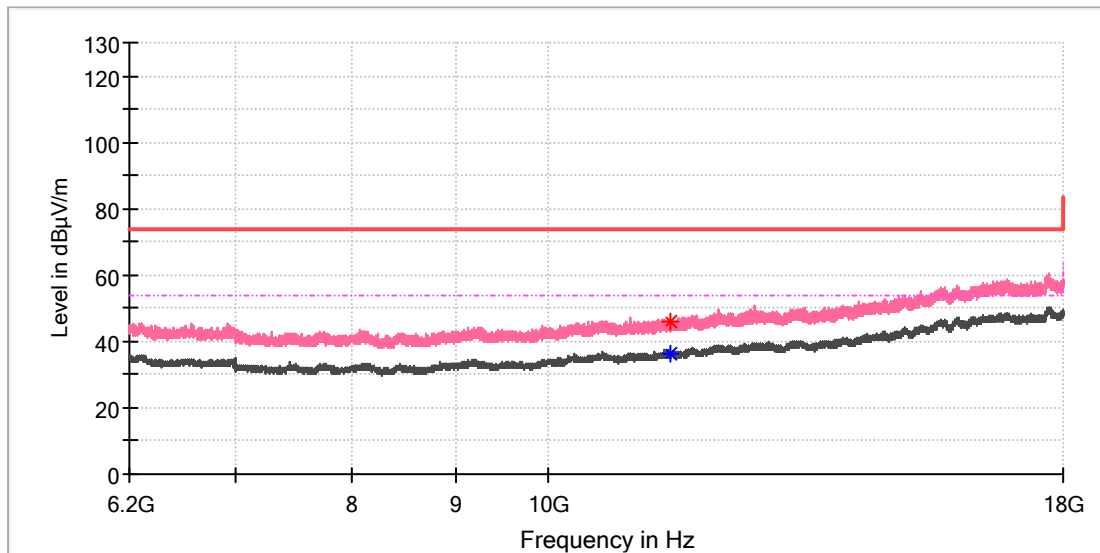
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11498.691667	---	36.86	54.00	17.14	100.0	H	107.0	13.7
11515.900000	46.86	---	74.00	27.14	100.0	H	36.0	13.6

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

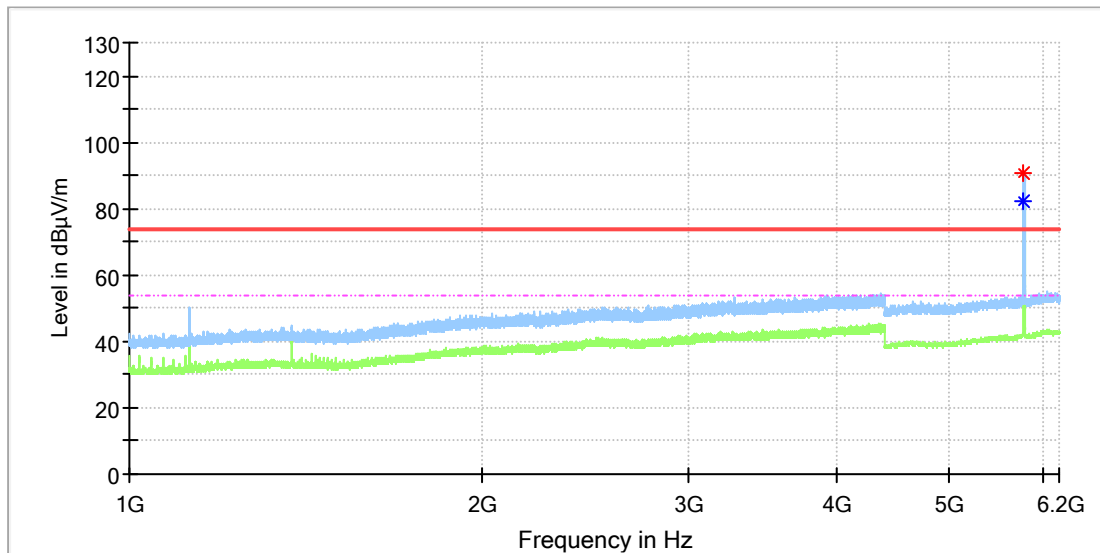
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11491.808333	---	36.32	54.00	17.68	100.0	V	82.0	13.7
11500.166667	46.01	---	74.00	27.99	100.0	V	298.0	13.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

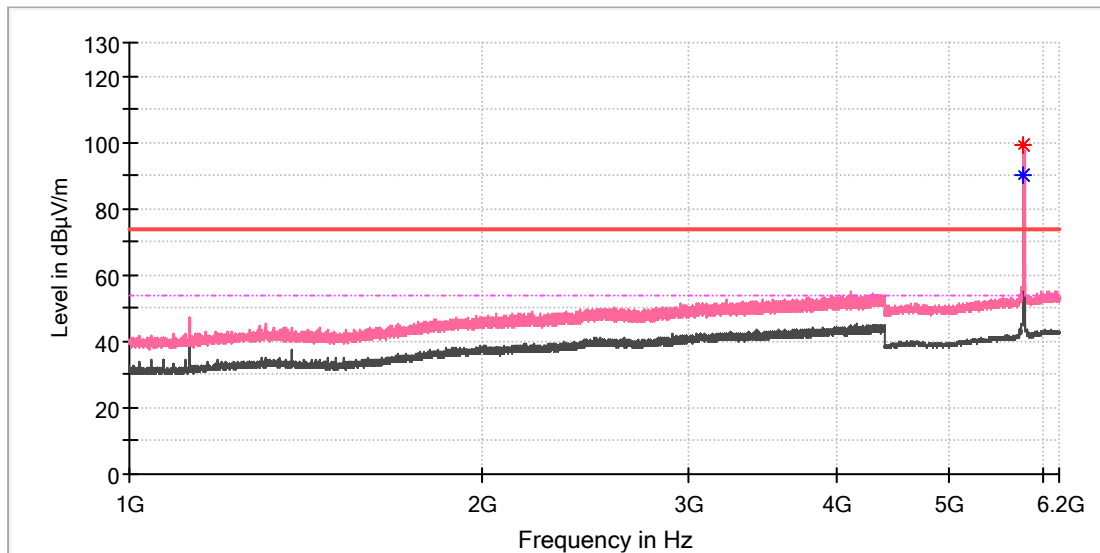
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5780.500000	---	81.94			100.0	H	135.0	14.0
5783.000000	90.93	---			100.0	H	135.0	14.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

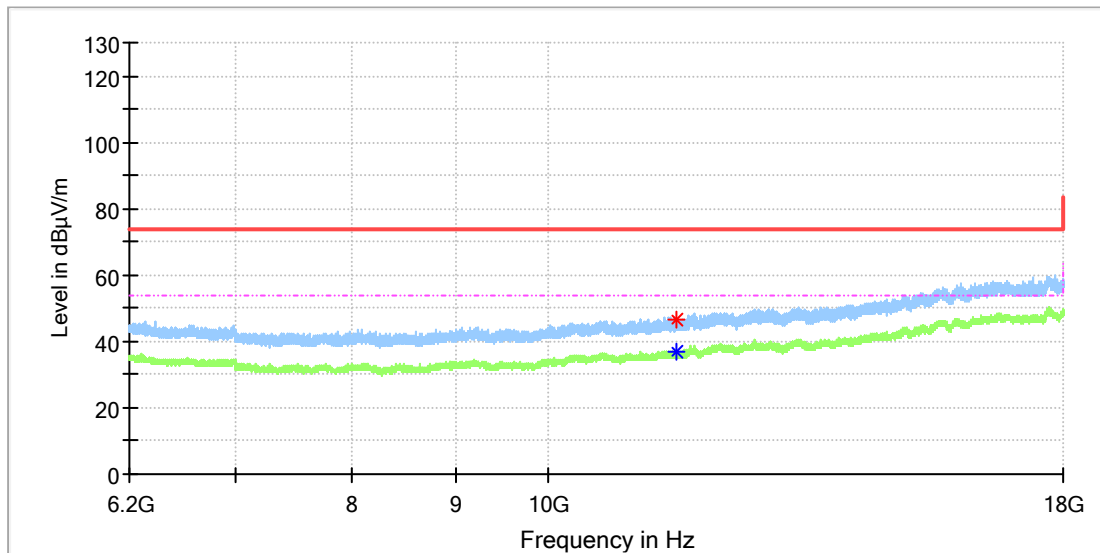
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5779.500000	---	90.17			100.0	V	55.0	14.0
5781.000000	99.30	---			100.0	V	55.0	14.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

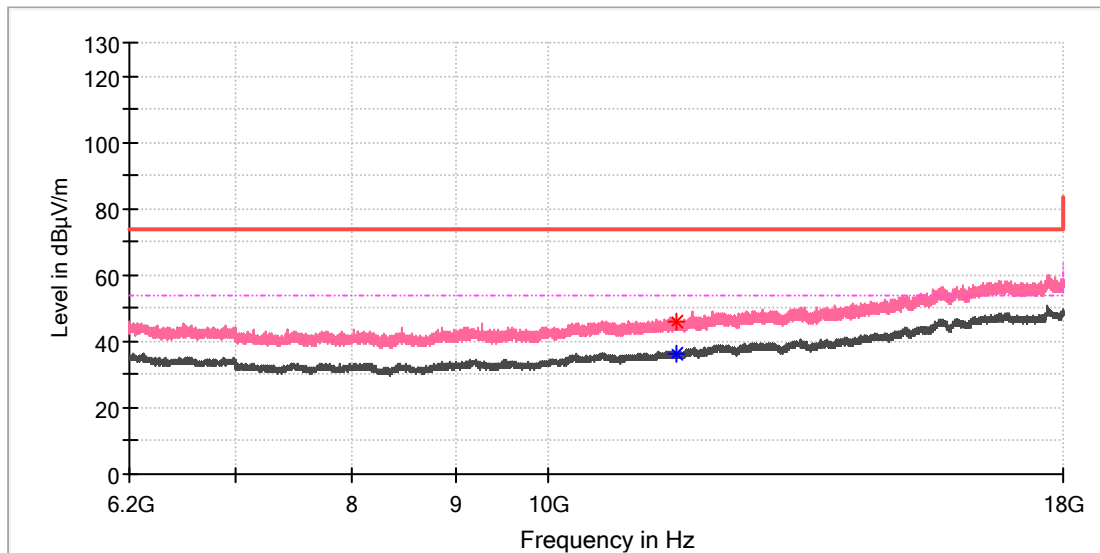
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11564.575000	---	36.67	54.00	17.33	100.0	H	171.0	13.4
11578.341667	46.79	---	74.00	27.21	100.0	H	0.0	13.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

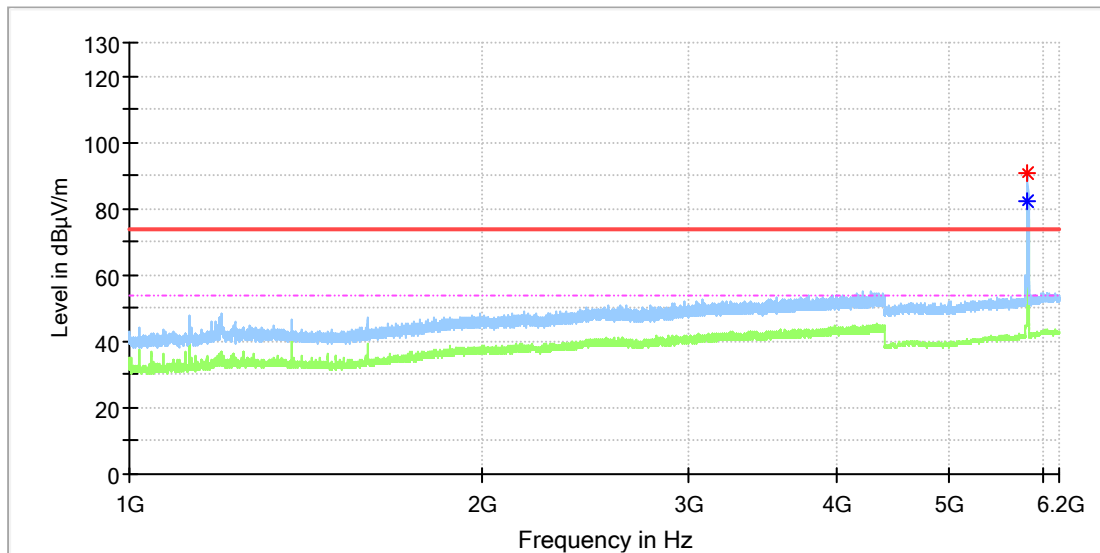
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11575.883333	---	36.46	54.00	17.54	100.0	V	198.0	13.4
11576.866667	45.96	---	74.00	28.04	100.0	V	97.0	13.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

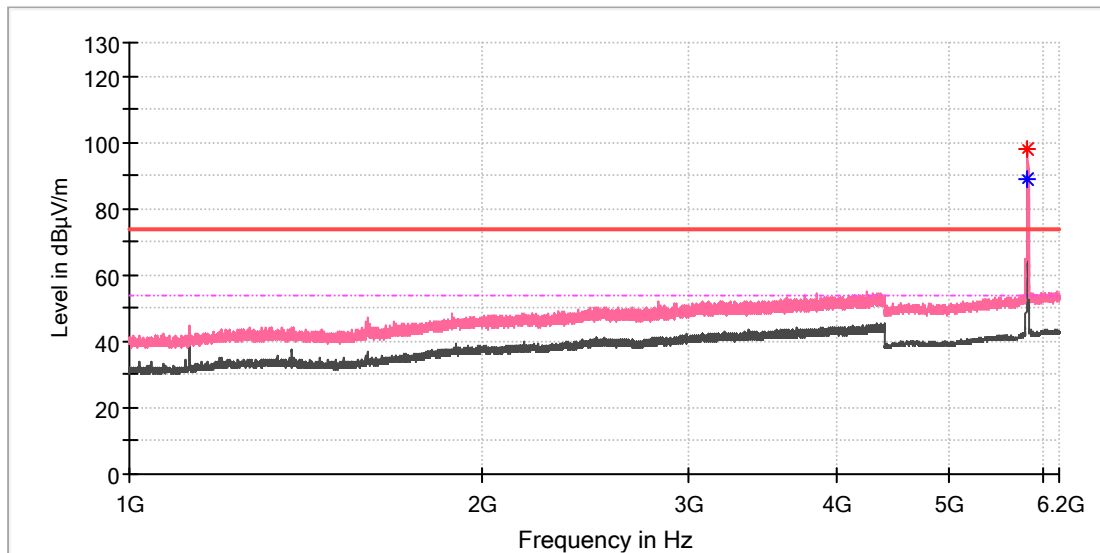
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5819.000000	90.67	---			100.0	H	288.0	14.1
5827.000000	---	82.20			100.0	H	288.0	14.1

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

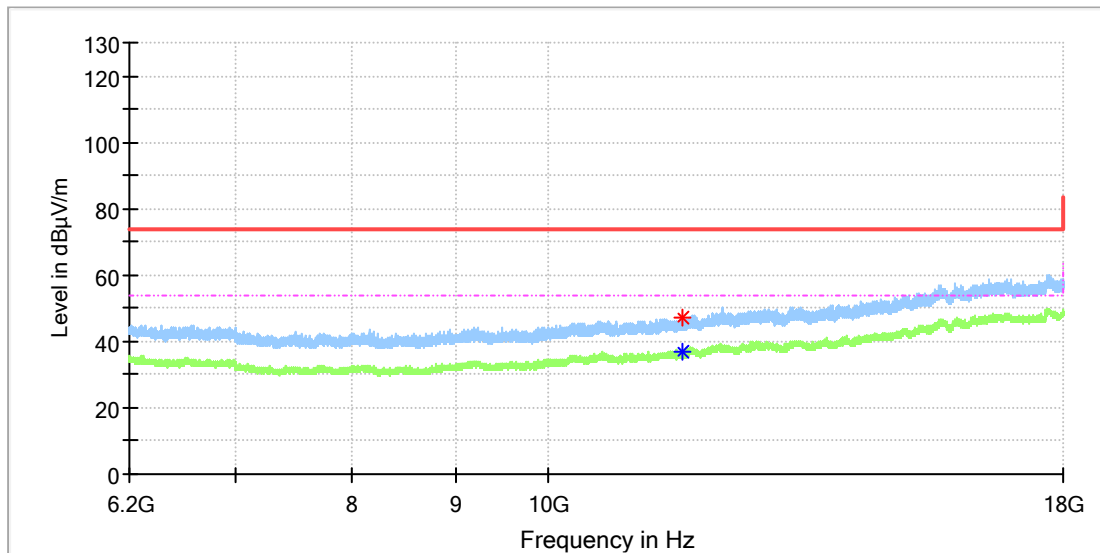
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5830.000000	97.80	---			100.0	V	45.0	14.1
5830.500000	---	88.98			100.0	V	355.0	14.1

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

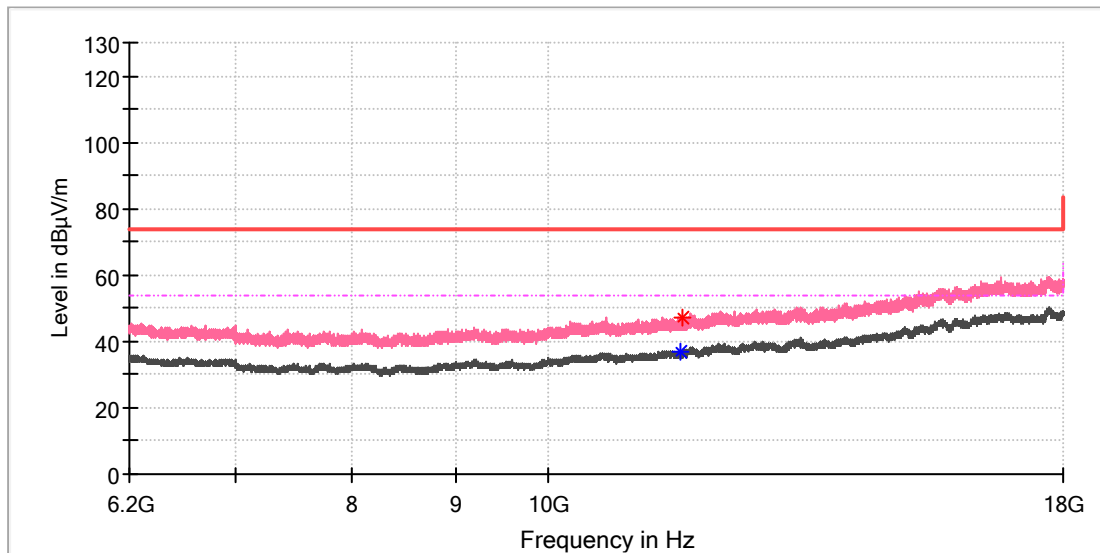
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11657.991667	---	36.88	54.00	17.12	100.0	H	40.0	13.3
11661.433333	46.94	---	74.00	27.06	100.0	H	0.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

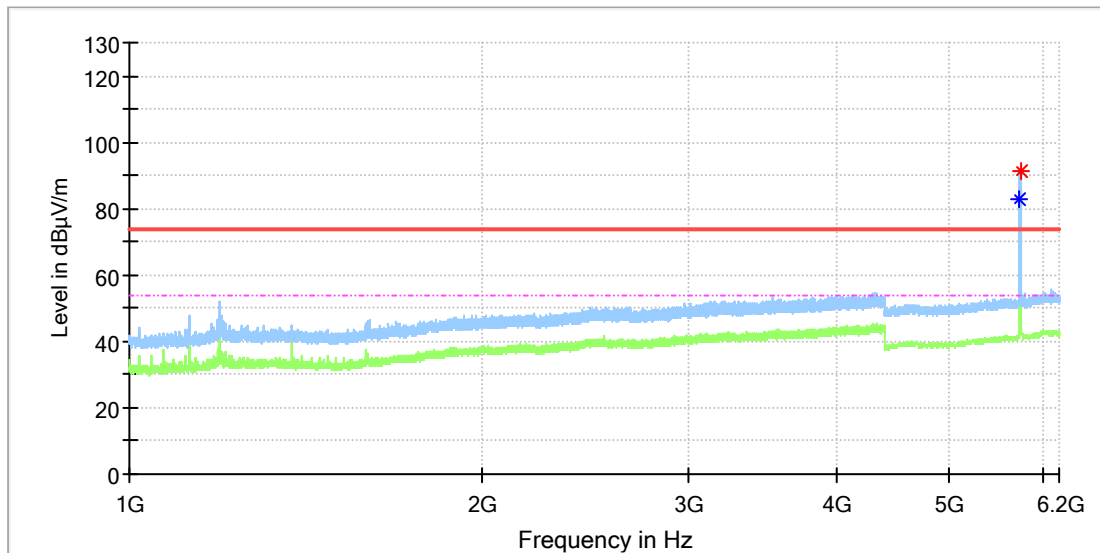
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11637.833333	---	36.73	54.00	17.27	100.0	V	79.0	13.3
11648.158333	46.97	---	74.00	27.03	100.0	V	64.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

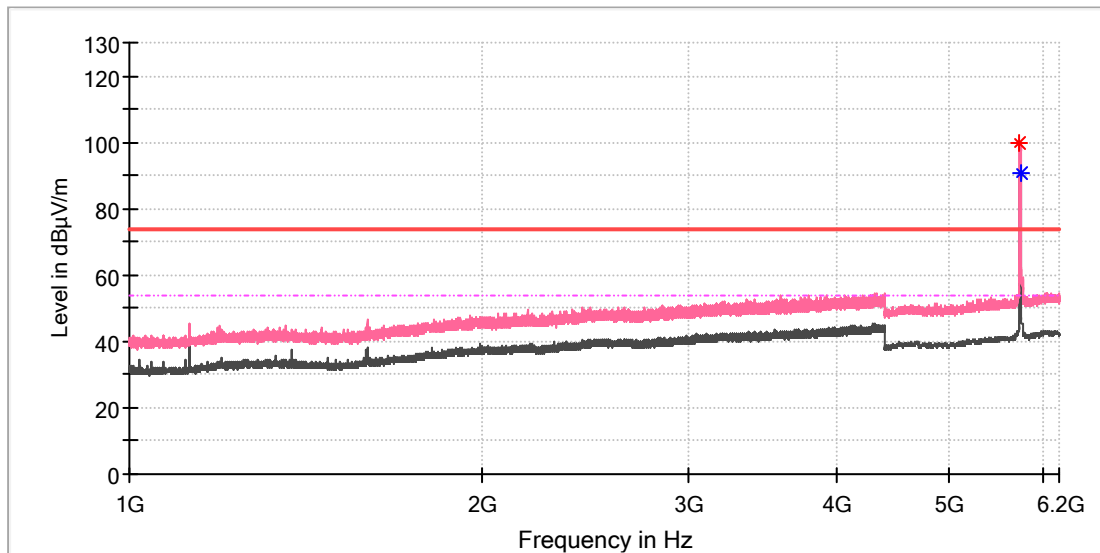
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5741.500000	---	82.65			100.0	H	270.0	13.9
5747.000000	91.36	---			100.0	H	270.0	13.9

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

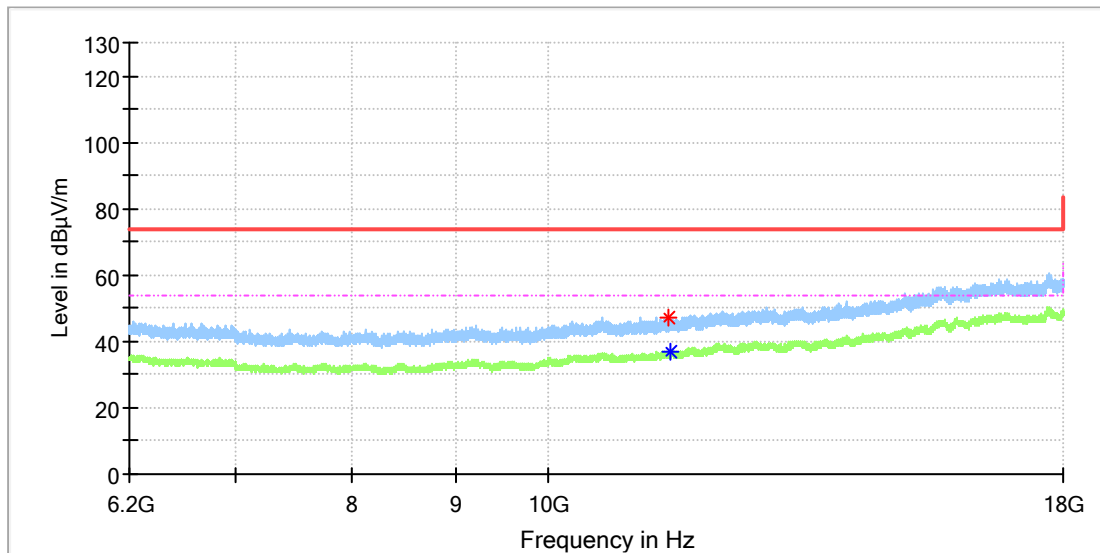
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5742.000000	100.03	---			100.0	V	47.0	13.9
5744.000000	---	90.70			100.0	V	47.0	13.9

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

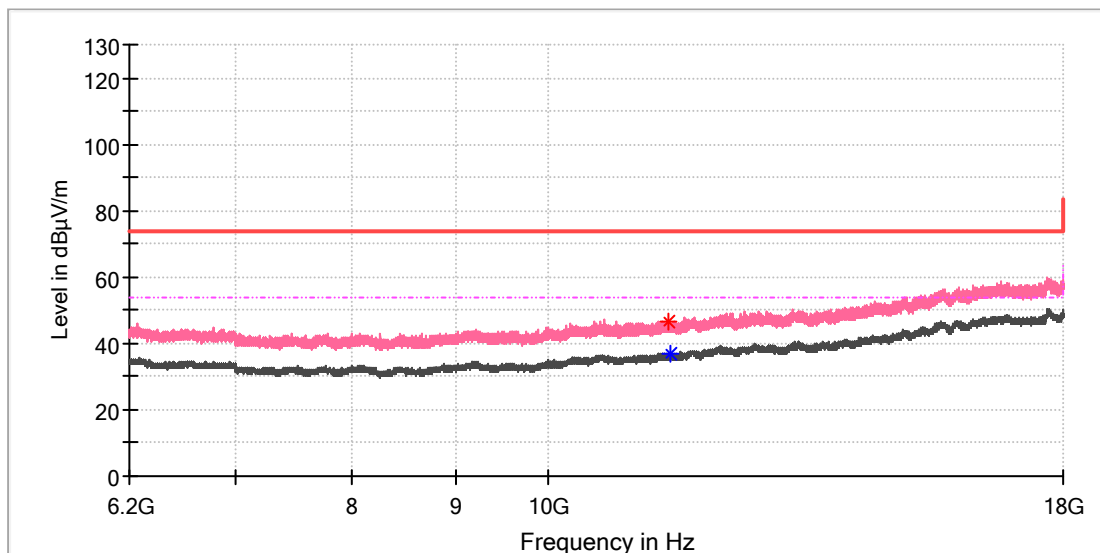
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11472.141667	47.35	---	74.00	26.65	100.0	H	127.0	13.6
11502.625000	---	37.00	54.00	17.00	100.0	H	34.0	13.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

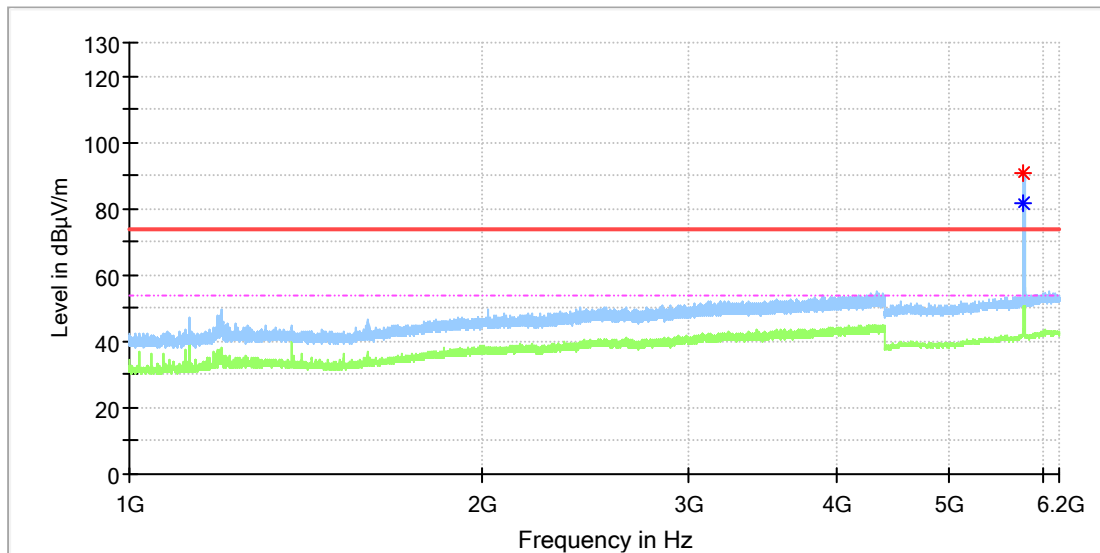
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11474.108333	46.78	---	74.00	27.22	100.0	V	176.0	13.6
11503.116667	---	36.89	54.00	17.11	100.0	V	204.0	13.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

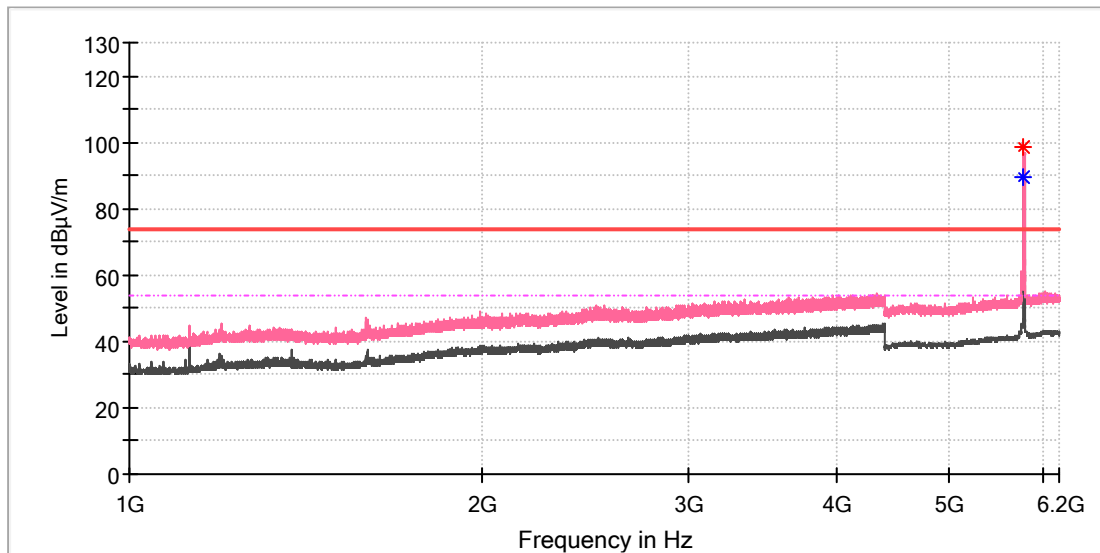
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5783.000000	90.41	---			100.0	H	140.0	14.0
5778.000000	---	81.75			100.0	H	286.0	14.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

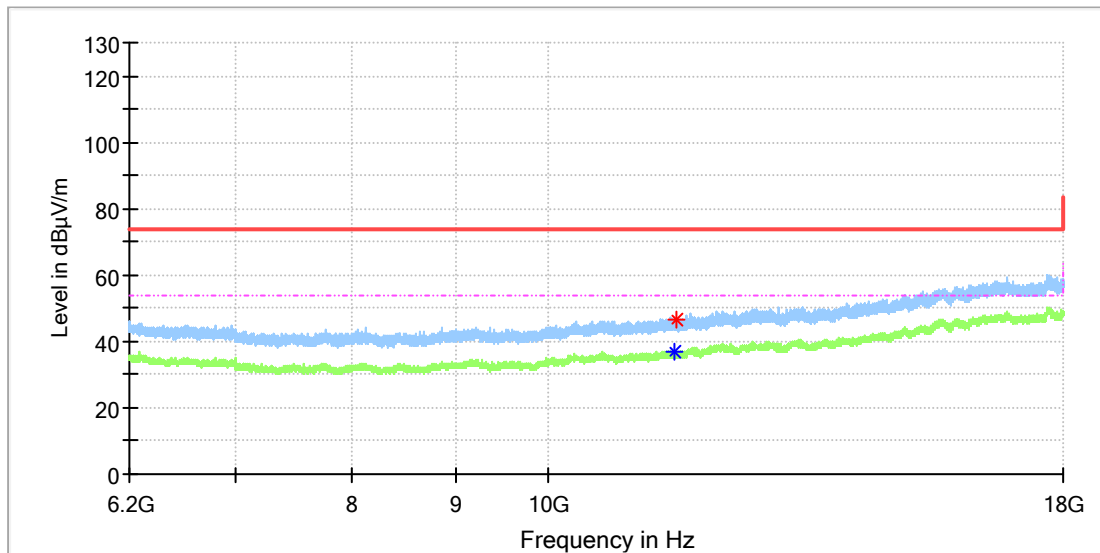
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5778.500000	98.29	---			100.0	V	63.0	14.0
5782.000000	---	89.74			100.0	V	63.0	14.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

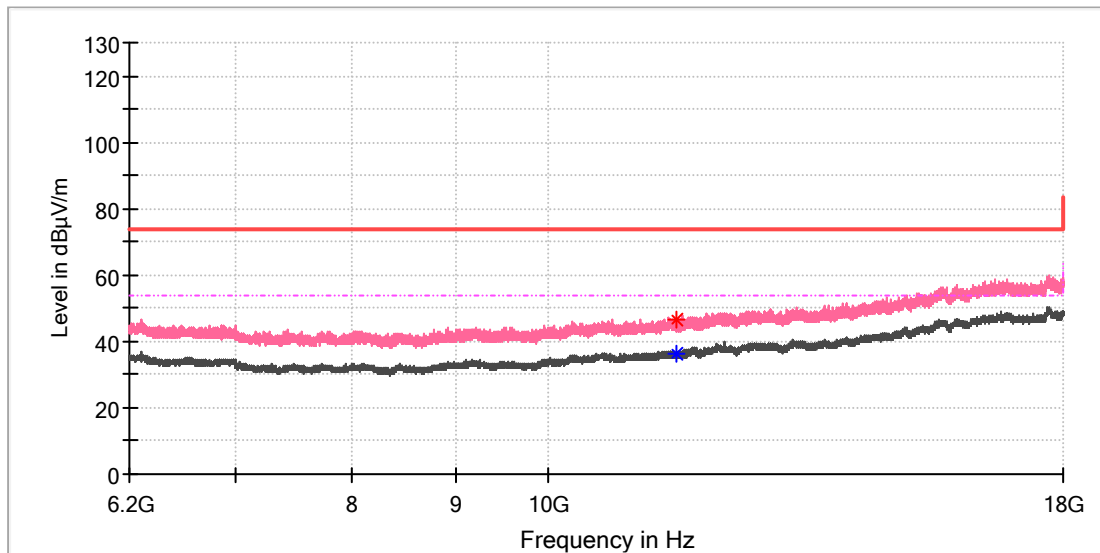
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11562.608333	---	36.77	54.00	17.23	100.0	H	93.0	13.4
11578.341667	46.34	---	74.00	27.66	100.0	H	4.0	13.4

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch157
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

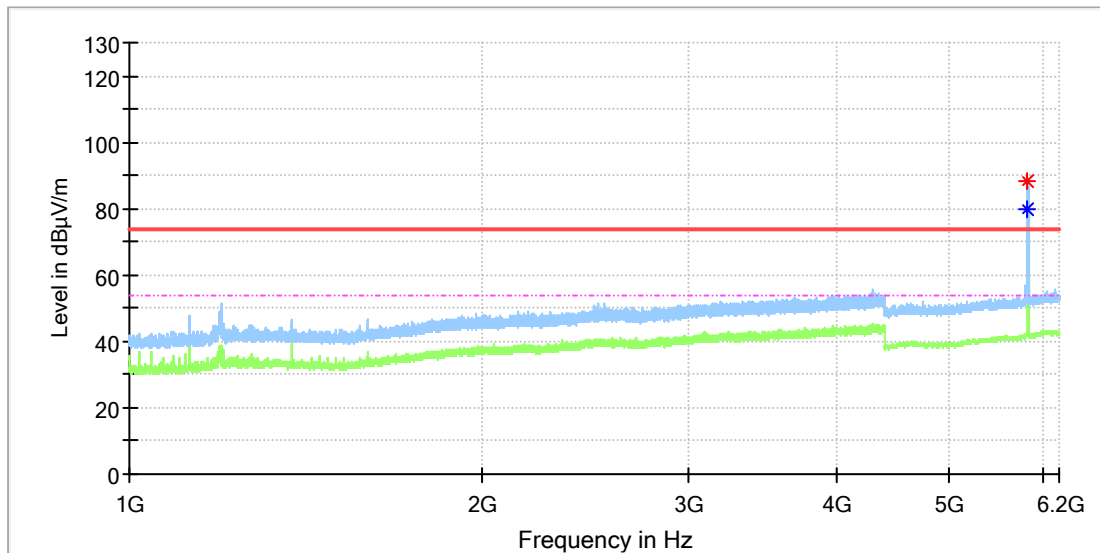
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11568.016667	46.54	---	74.00	27.46	100.0	V	0.0	13.4
11574.900000	---	36.19	54.00	17.81	100.0	V	0.0	13.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

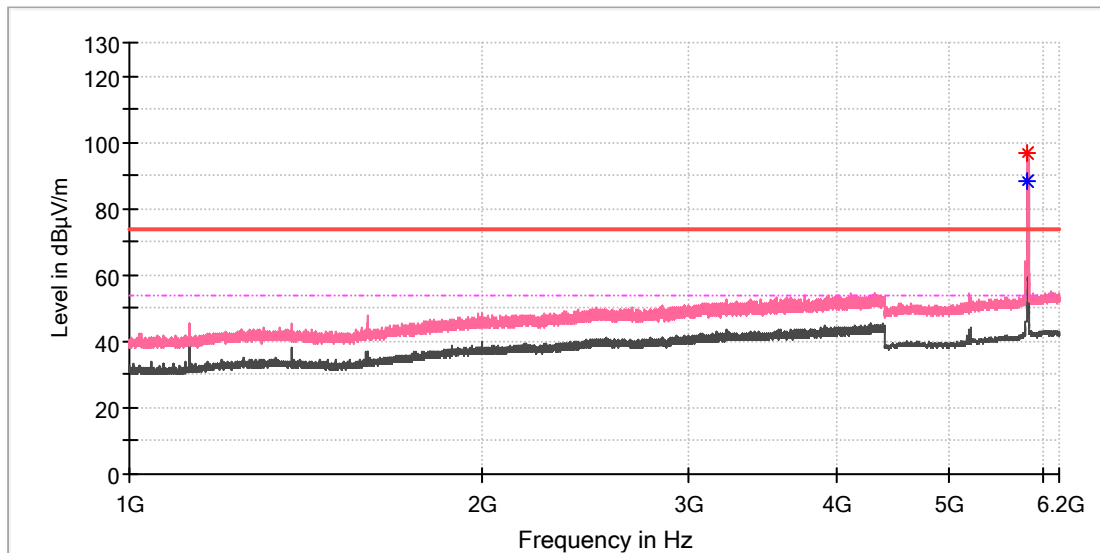
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5827.500000	88.44	---			100.0	H	143.0	14.1
5826.000000	---	79.83			100.0	H	289.0	14.1

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

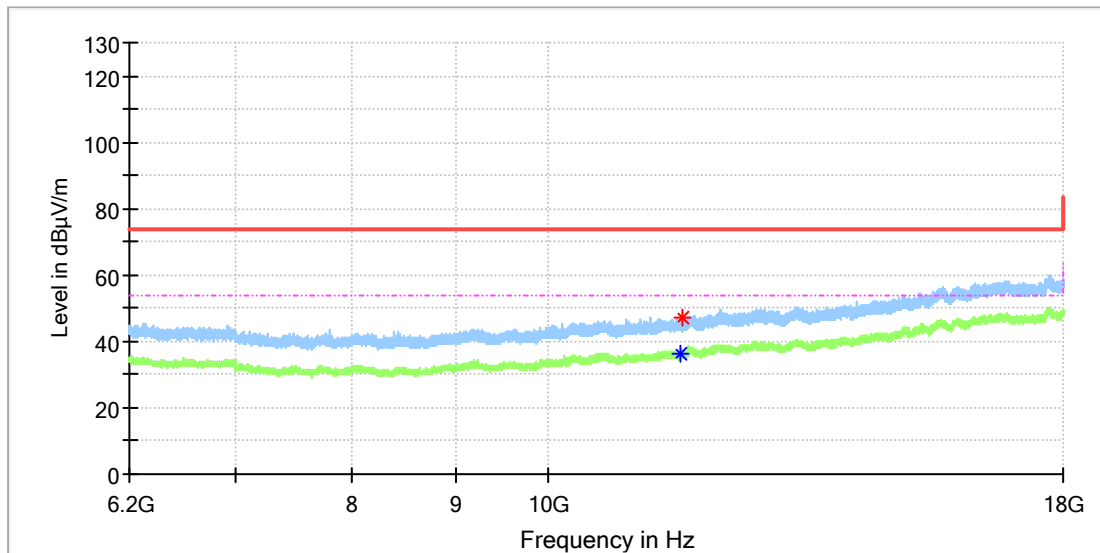
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5828.500000	---	87.98			100.0	V	41.0	14.1
5829.000000	96.87	---			100.0	V	354.0	14.1

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

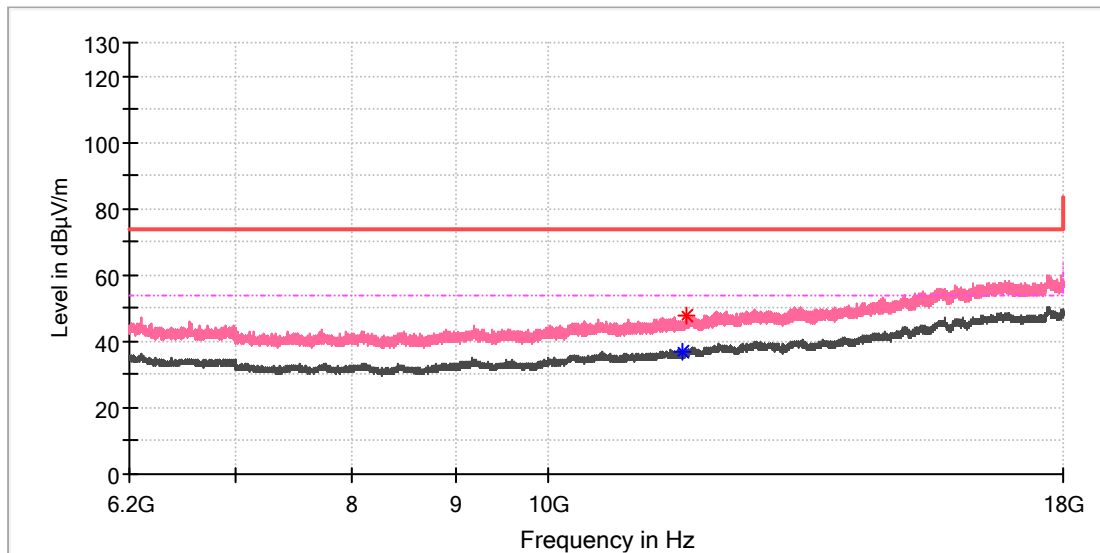
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11640.291667	---	36.33	54.00	17.67	100.0	H	229.0	13.3
11659.466667	47.01	---	74.00	26.99	100.0	H	85.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11645.208333	---	36.86	54.00	17.14	100.0	V	23.0	13.3
11701.750000	47.85	---	74.00	26.15	100.0	V	0.0	13.3

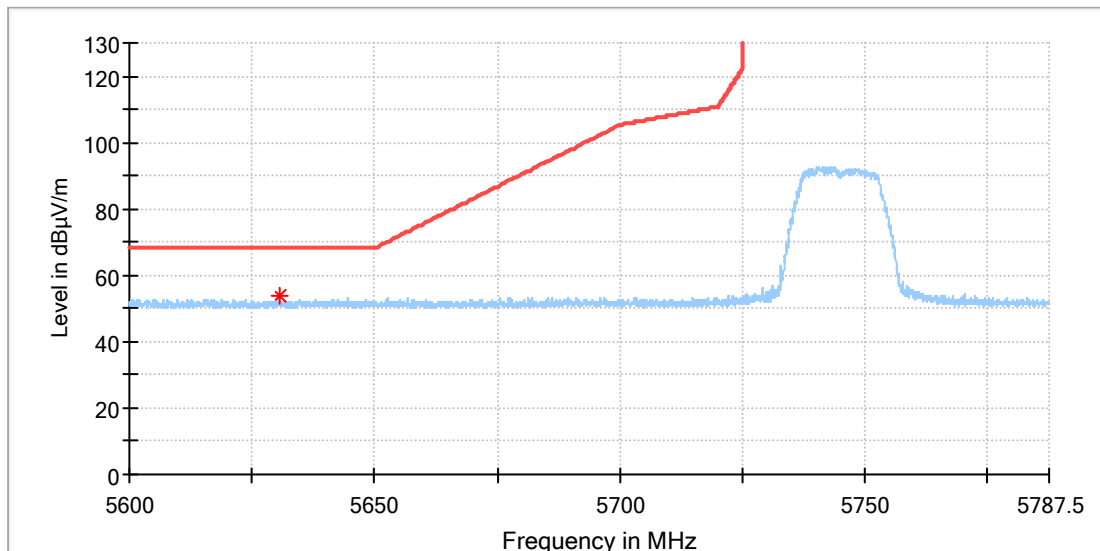
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix C.7: Test Results of Radiated Emissions in Restricted Bands Wi-Fi 802.11 a mode

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No./Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

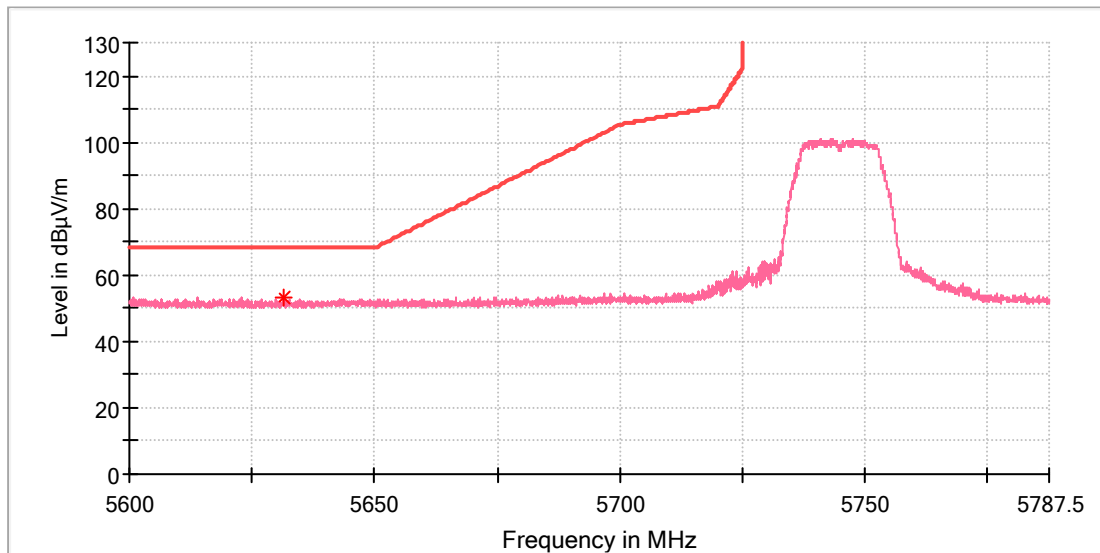
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5630.468750	53.98	68.20	14.22	100.0	H	126.0	13.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

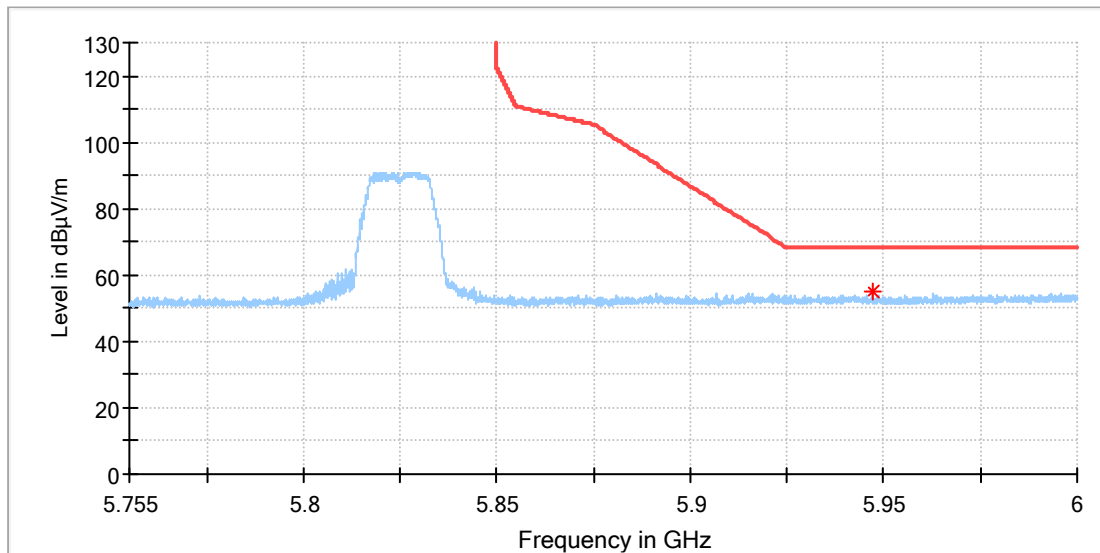
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5631.614583	53.22	68.20	14.98	100.0	V	268.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

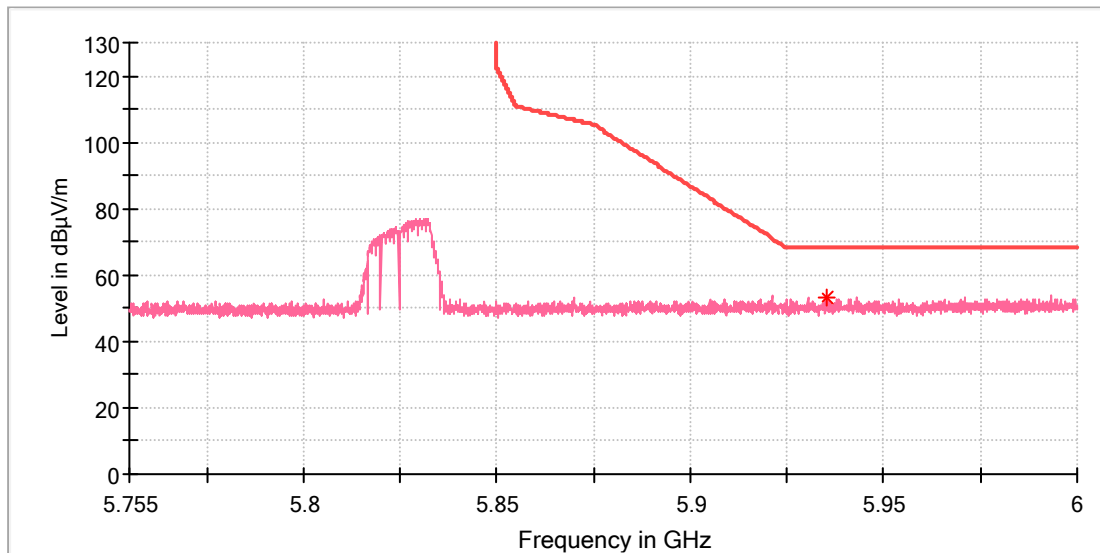
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5946.916667	54.96	68.20	13.24	100.0	H	224.0	14.8

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11a_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5935.347222	53.30	68.20	14.90	100.0	V	0.0	14.7

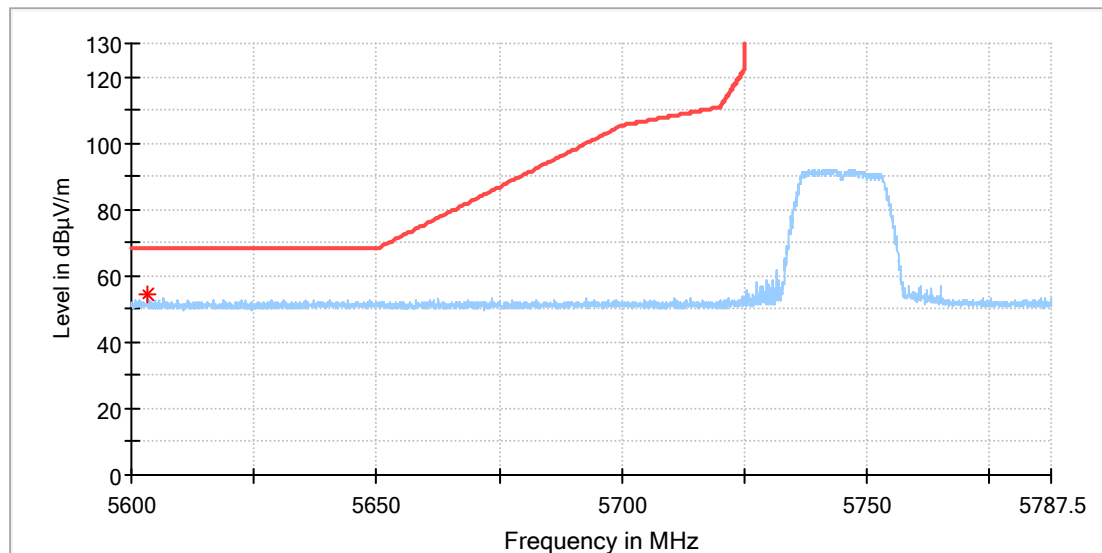
Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Wi-Fi 802.11 n(HT20) mode

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

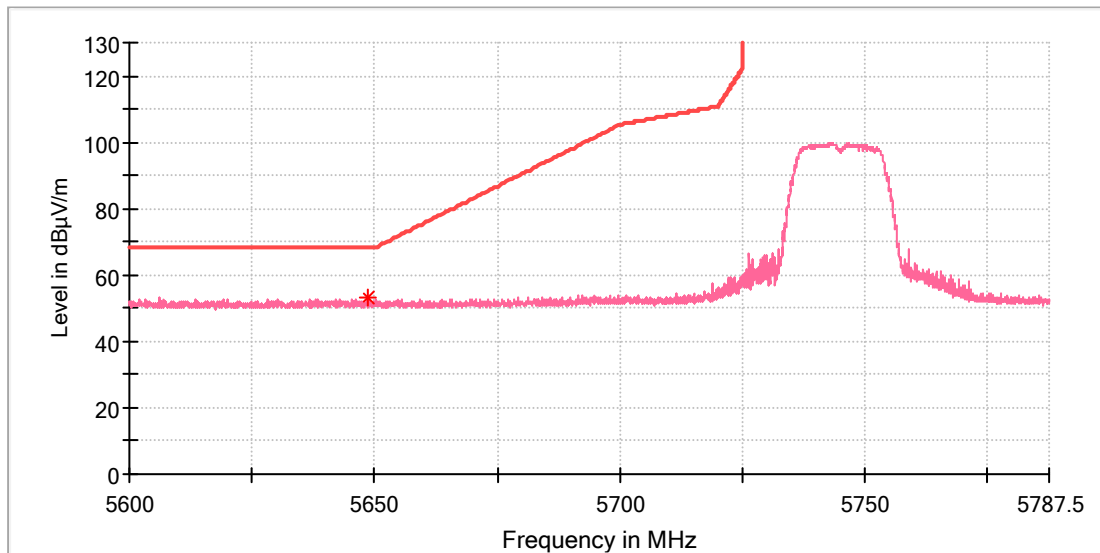
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5603.281250	54.21	68.20	13.99	100.0	H	17.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch149
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

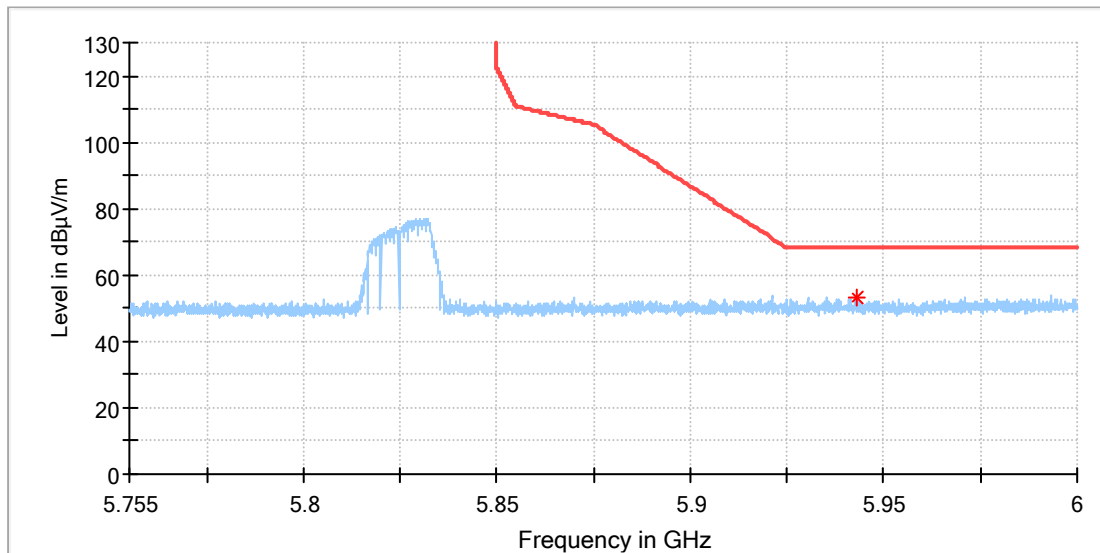
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5648.437500	53.29	68.20	14.91	100.0	V	176.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

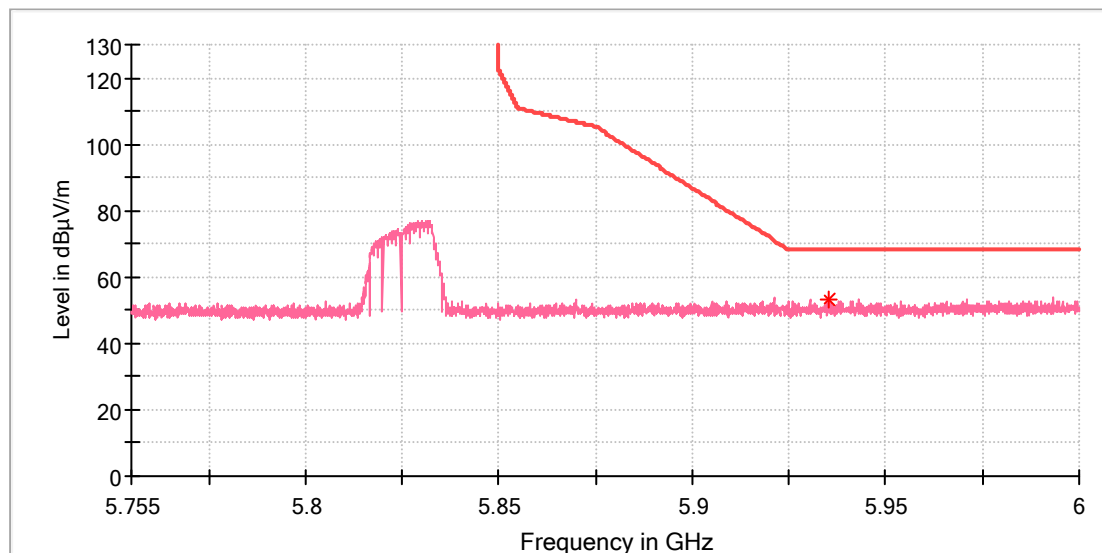
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5943.037500	53.25	68.20	14.95	100.0	H	0.0	14.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	System Controller
Model:	EL-SC-300
Test Mode:	WIFI 5G_11n_Ch165
Order No/Sample No:	168339134/A003148741-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:54%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5935.347222	53.30	68.20	14.90	100.0	V	0.0	14.7

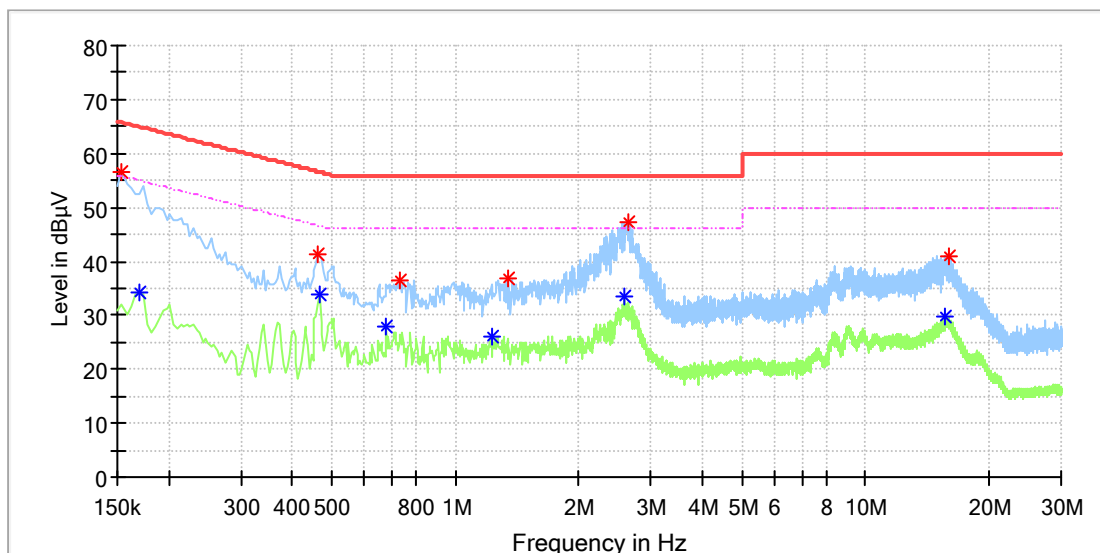
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Appendix C.8: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name:	System Controller
Order No:	168339134 100
Model:	EL-SC-300
Test Mode:	WIFI Connecting
Test Voltage:	AC 120V/60Hz
Test By:	Shower Dai
Review By:	Gary Chen
Remark:	SR1

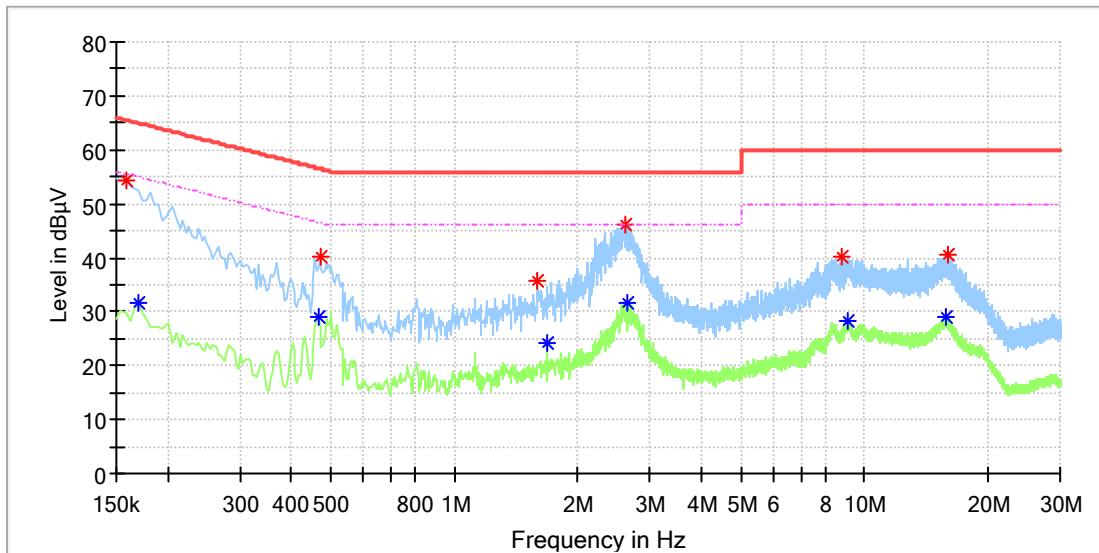


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.154000	56.68	---	65.78	9.10	L1	9.6
0.170000	---	34.41	54.96	20.55	L1	9.6
0.462000	41.27	---	56.66	15.38	L1	9.7
0.466000	---	33.70	46.59	12.88	L1	9.7
0.680000	---	27.89	46.00	18.11	L1	9.7
0.736000	36.51	---	56.00	19.49	L1	9.7
1.224000	---	26.13	46.00	19.87	L1	9.7
1.340000	37.02	---	56.00	18.98	L1	9.7
2.588000	---	33.58	46.00	12.42	L1	9.9
2.648000	47.35	---	56.00	8.65	L1	9.9
15.696000	---	29.74	50.00	20.26	L1	10.2
15.908000	41.02	---	60.00	18.98	L1	10.2

EUT Information

EUT Name:	System Controller
Order No:	168339134 100
Model:	EL-SC-300
Test Mode:	WIFI Connecting
Test Voltage:	AC 120V/60Hz
Test By:	Shower Dai
Review By:	Gary Chen
Remark:	SR1



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.158000	54.25	---	65.57	11.31	N	9.6
0.170000	---	31.46	54.96	23.50	N	9.6
0.466000	---	29.10	46.59	17.49	N	9.7
0.470000	40.03	---	56.51	16.48	N	9.7
1.596000	35.87	---	56.00	20.13	N	9.7
1.684000	---	24.37	46.00	21.63	N	9.7
2.616000	46.26	---	56.00	9.74	N	9.9
2.632000	---	31.59	46.00	14.41	N	9.9
8.852000	40.19	---	60.00	19.81	N	10.0
9.132000	---	28.18	50.00	21.82	N	10.0
15.880000	---	29.10	50.00	20.90	N	10.2
16.000000	40.69	---	60.00	19.31	N	10.2