



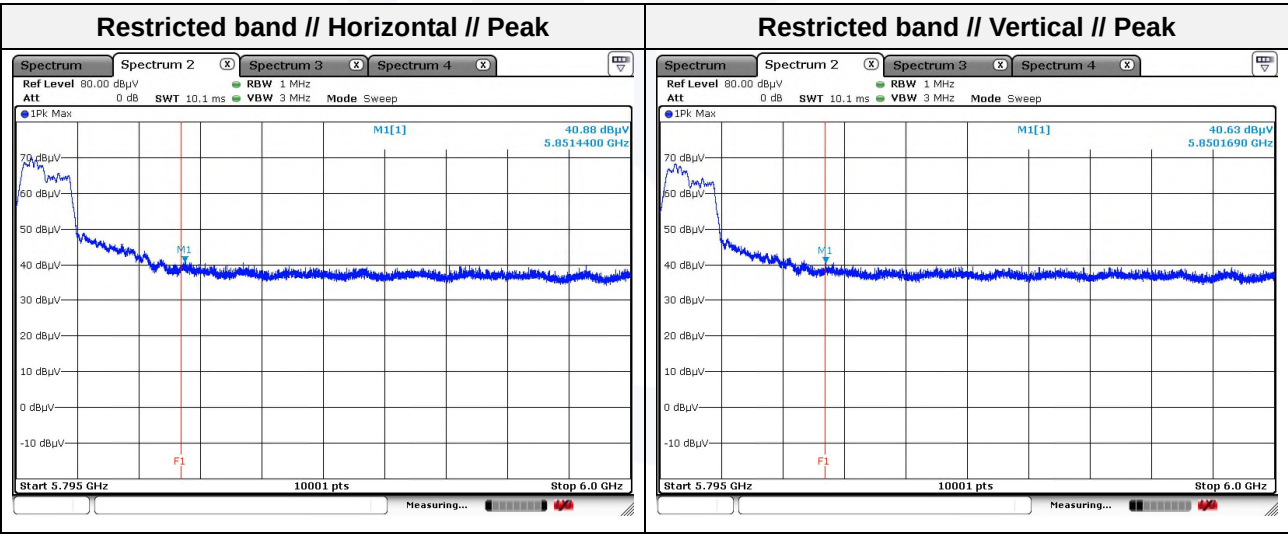
Mode: 802.11ac_VHT40 (MCS0)
Power: DC 11.1 V
Band: UNII-3
Distance of measurement: 3 meter
Channel: 159

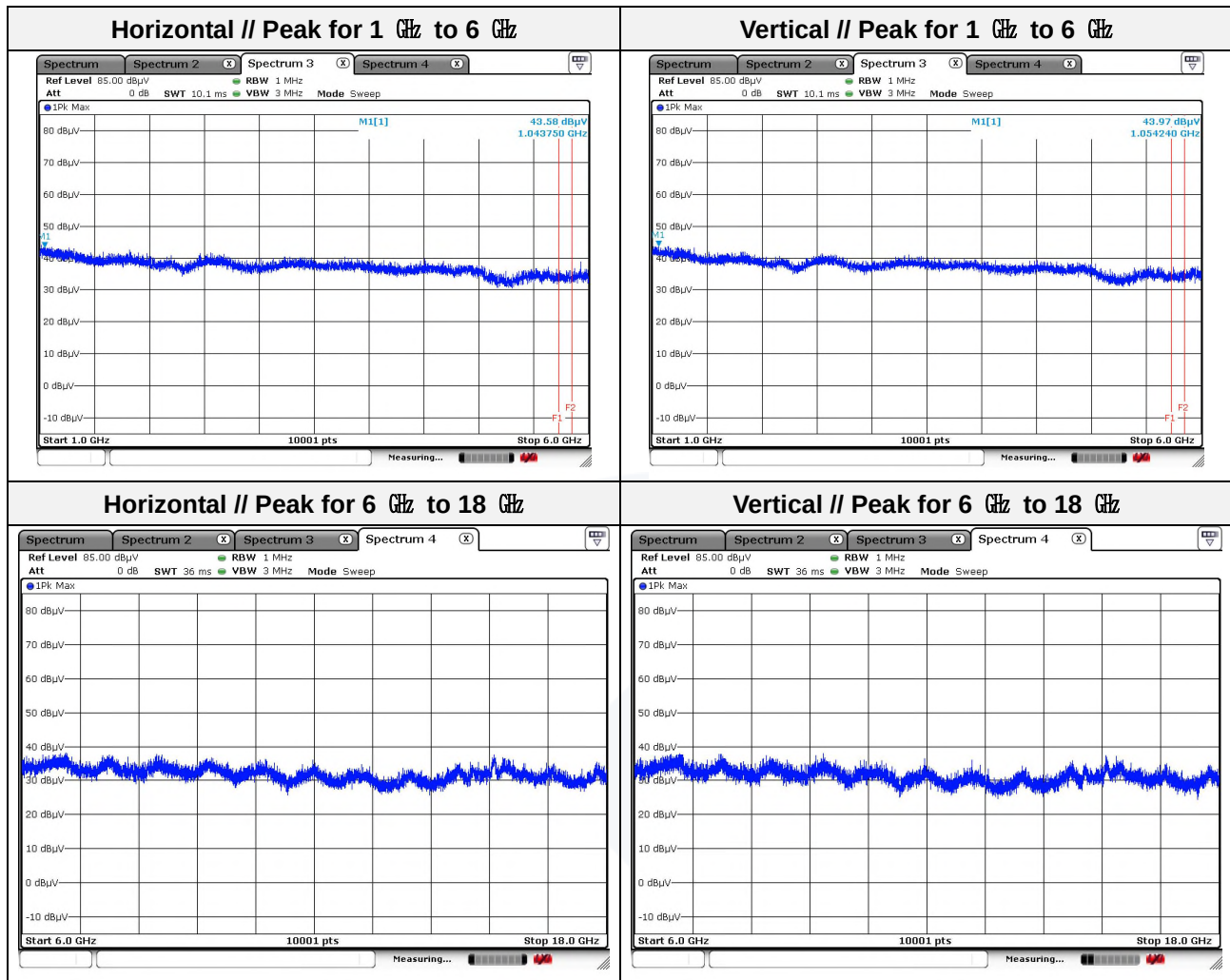
- Spurious

Frequency (MHz)	Level (dBμV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
1 043.75	43.58	Peak	H	-7.65	-	35.93	74.00	38.07
1 054.24	43.97	Peak	V	-7.59	-	36.38	74.00	37.62

- Band edge

Frequency (MHz)	Level (dBμV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 850.17	40.63	Peak	H	7.88	-	48.51	74.00	25.49
5 851.44	40.88	Peak	V	7.88	-	48.76	74.00	25.24





Note.

1. No spurious emission were detected above 6 GHz.
2. Average test would be performed if the peak result were greater than the average limit.



Mode: 802.11ac_VHT80 (MCS0)
Power: DC 11.1 V
Band: UNII-3
Distance of measurement: 3 meter
Channel: 155

- Spurious

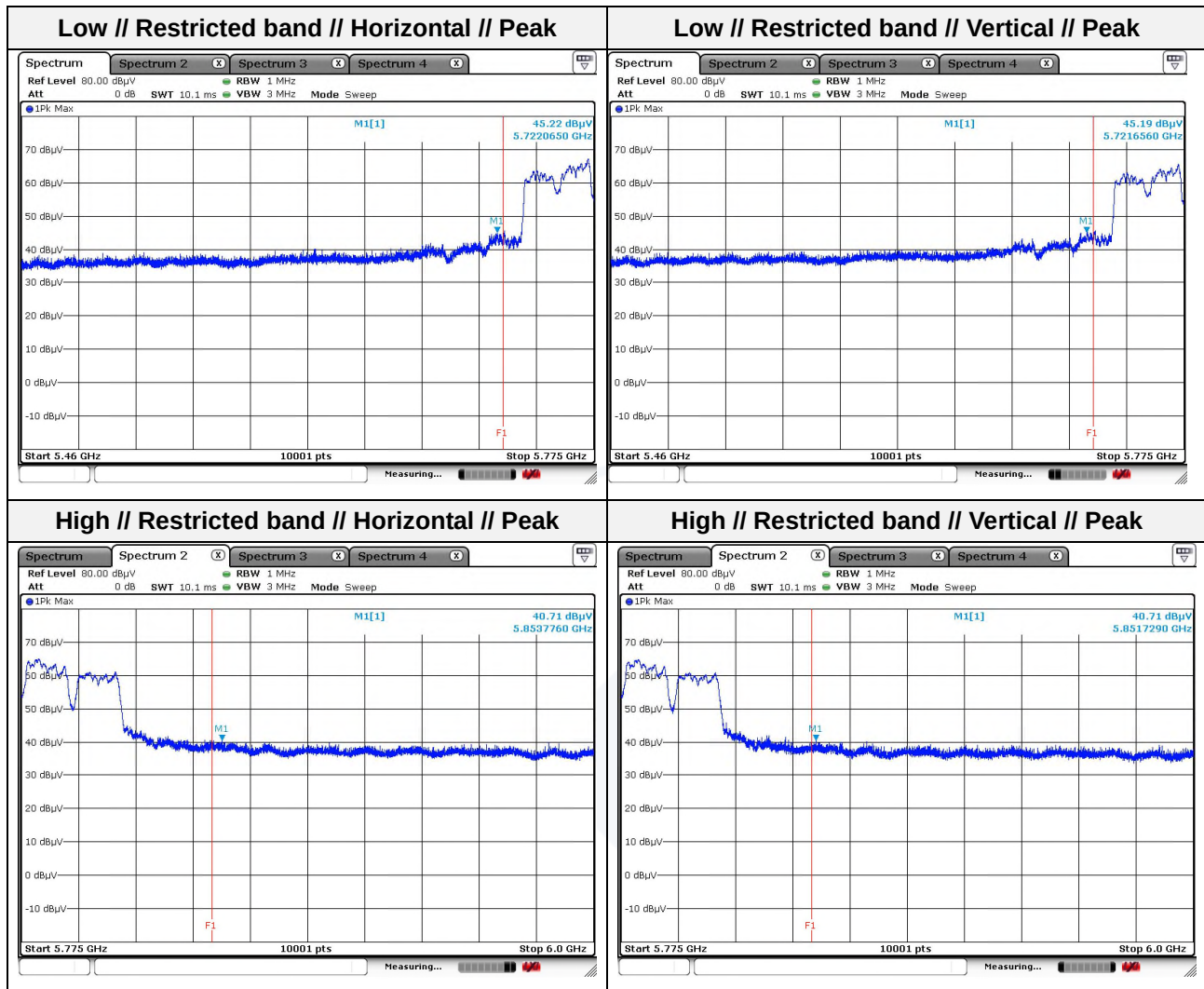
Frequency (MHz)	Level (dBμV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
1 001.75	45.05	Peak	V	-7.87	-	37.18	74.00	36.82
1 162.73	45.42	Peak	H	-7.03	-	38.39	74.00	35.61

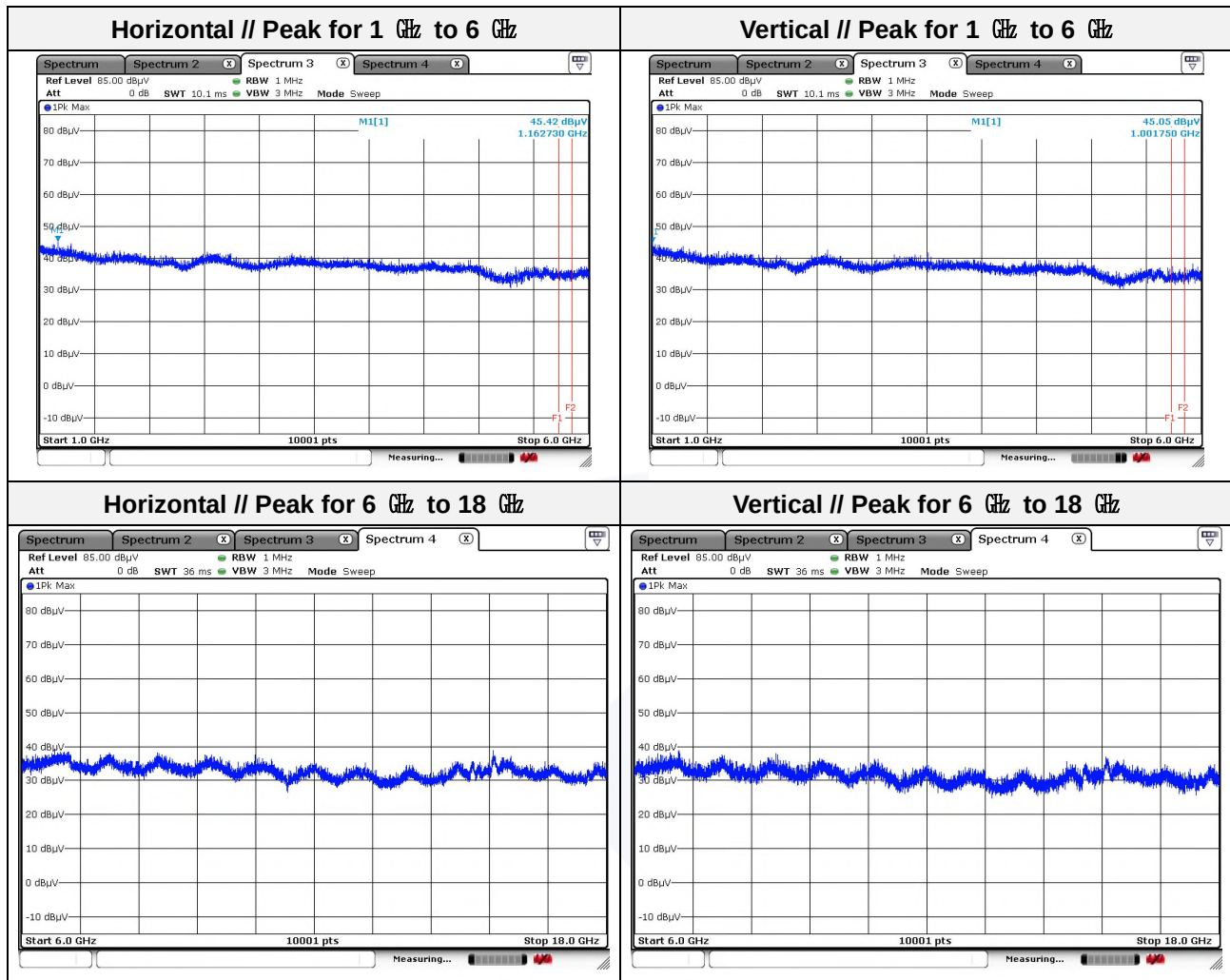
- Band edge (Lower)

Frequency (MHz)	Level (dBμV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 721.66	45.19	Peak	V	7.39	-	52.58	74.00	21.42
5 722.07	45.22	Peak	H	7.39	-	52.61	74.00	21.39

- Band edge (Higher)

Frequency (MHz)	Level (dBμV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 851.73	40.71	Peak	V	7.88	-	48.59	74.00	25.41
5 853.78	40.71	Peak	H	7.89	-	48.60	74.00	25.40





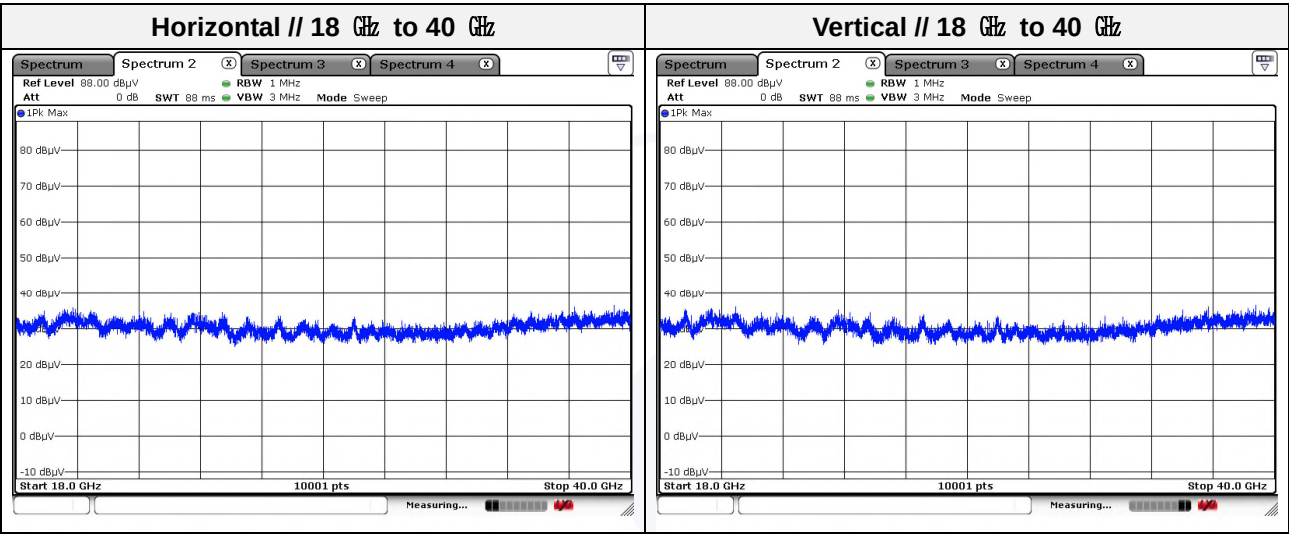
Note.

1. No spurious emission were detected above 6 GHz.
2. Average test would be performed if the peak result were greater than the average limit.



Test results (18 GHz to 40 GHz)

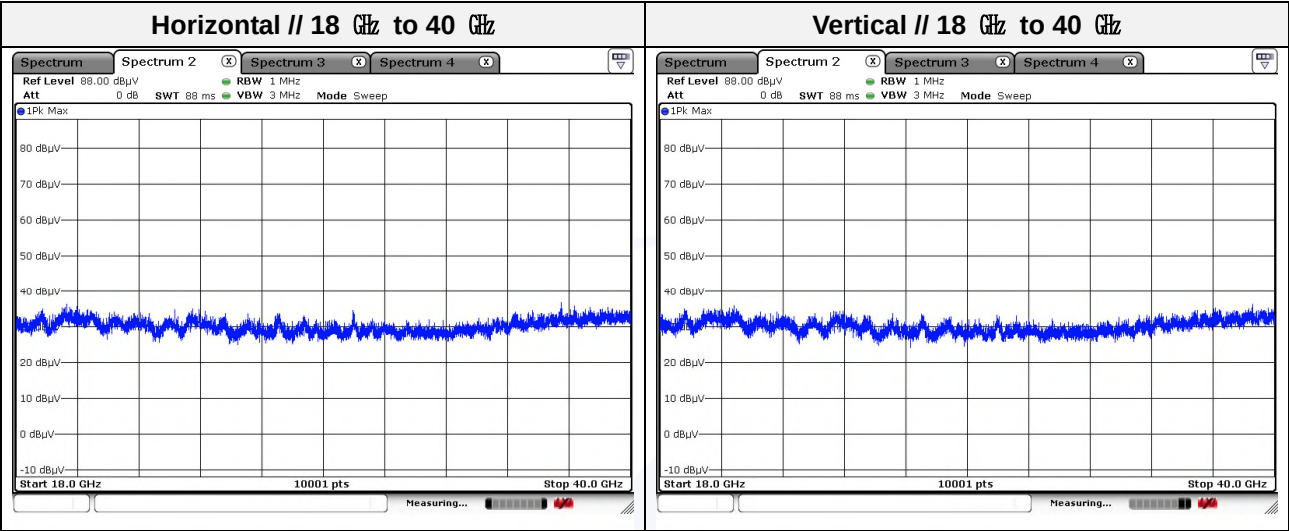
Mode: 802.11a (6 Mbps) (Worst Case)
Power: AC 120 V
Band: UNII-1
Distance of measurement: 3 meter
Channel 36 (Worst Case)



- Note.
1. No spurious emission were detected above 18 GHz.



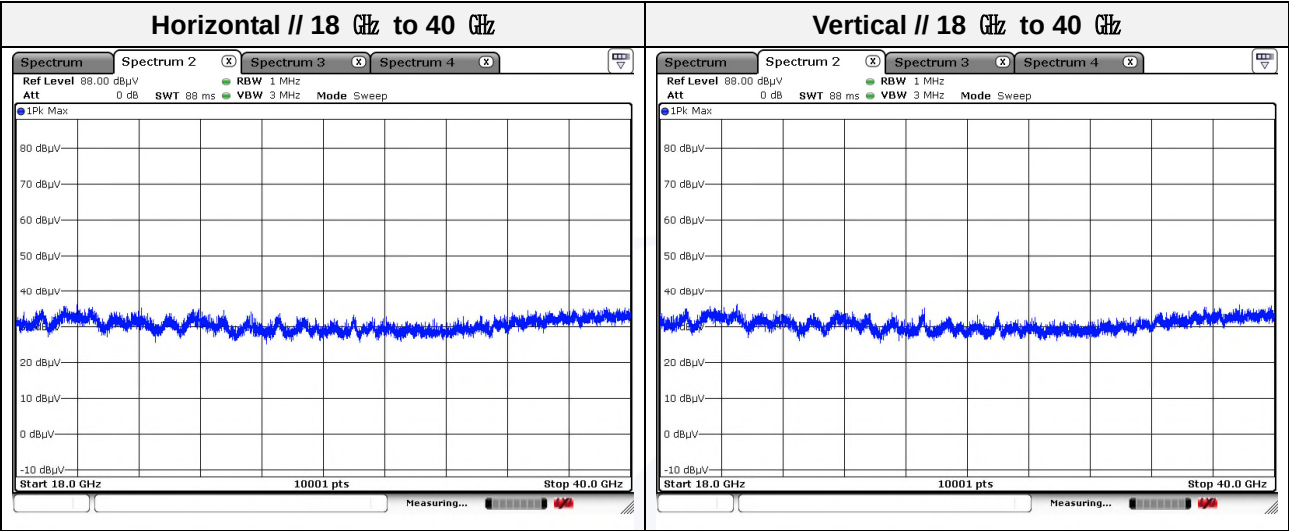
Mode: 802.11a (6 Mbps) (Worst Case)
Power DC 11.1 V
Band: UNII-1
Distance of measurement: 3 meter
Channel 149 (Worst Case)



- Note.
1. No spurious emission were detected above 18 GHz.



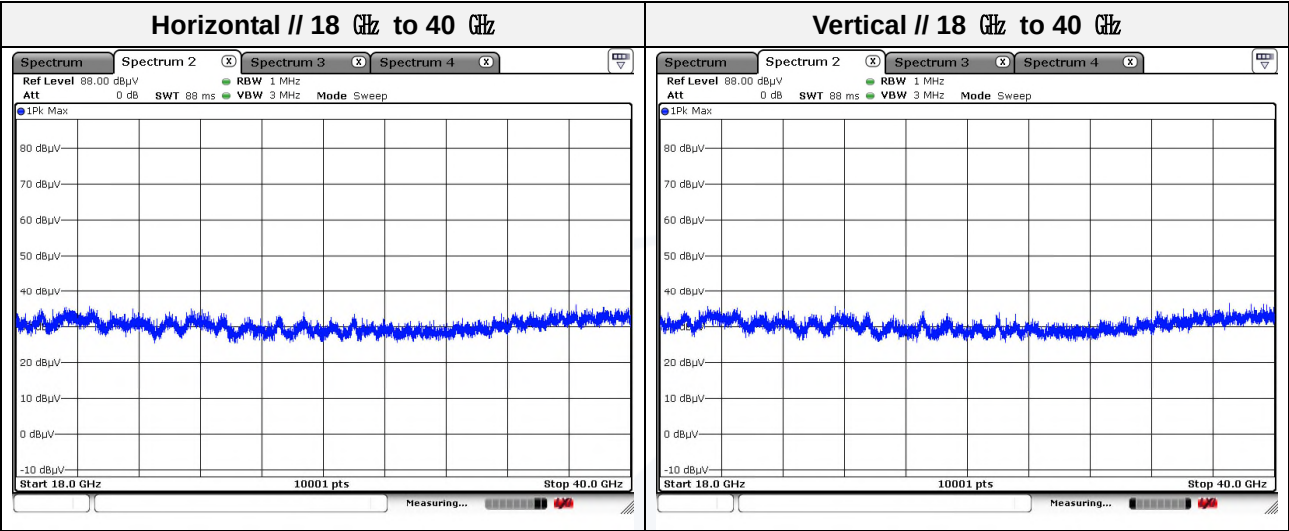
Mode: 802.11a (6 Mbps) (Worst Case)
Power DC 11.1 V
Band: UNII-3
Distance of measurement: 3 meter
Channel 36 (Worst Case)



- Note.
1. No spurious emission were detected above 18 GHz.



Mode: 802.11a (6 Mbps) (Worst Case)
Power DC 11.1 V
Band: UNII-3
Distance of measurement: 3 meter
Channel 149 (Worst Case)



- Note.
1. No spurious emission were detected above 18 GHz.



3.7. AC conducted emissions

FCC Limit

According to 15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohm line impedance stabilization network (LISN). Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequencies ranges.

Frequency of Emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

IC Limit

According to RSS-Gen 8.8, Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μ H / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Frequency of Emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

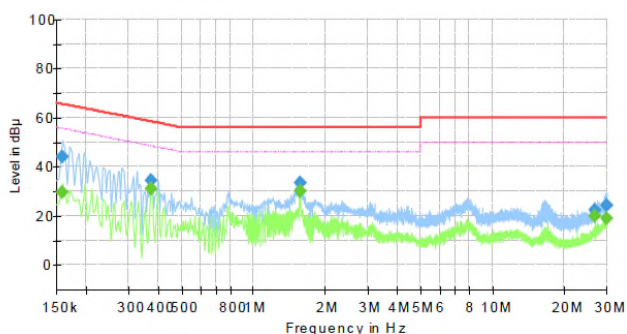
**Test results**

Mode: 802.11a (6 Mbps) (Worst Case)

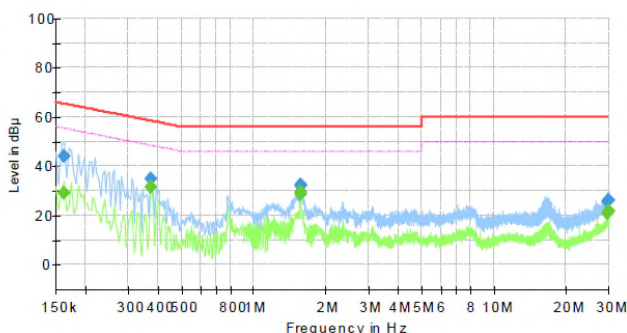
Power: AC 120 V

Band: UNII-1

Channel: 36 (Worst Case)

Hot Line**Final Result**

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.158000	---	29.56	55.57	26.01	1000.0	9.000	L1	19.5
0.158000	43.93	---	65.57	21.64	1000.0	9.000	L1	19.5
0.374000	---	31.11	48.41	17.30	1000.0	9.000	L1	19.6
0.374000	34.57	---	58.41	23.84	1000.0	9.000	L1	19.6
1.562000	---	30.01	46.00	15.99	1000.0	9.000	L1	19.6
1.562000	33.43	---	56.00	22.57	1000.0	9.000	L1	19.6
26.626000	---	20.05	50.00	29.95	1000.0	9.000	L1	20.5
26.626000	22.48	---	60.00	37.52	1000.0	9.000	L1	20.5
30.000000	---	19.06	50.00	30.94	1000.0	9.000	L1	20.7
30.000000	24.26	---	60.00	35.74	1000.0	9.000	L1	20.7

Neutral Line**Final Result**

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.162000	---	29.18	55.36	26.18	1000.0	9.000	N	19.5
0.162000	43.84	---	65.36	21.52	1000.0	9.000	N	19.5
0.374000	---	31.58	48.41	16.83	1000.0	9.000	N	19.5
0.374000	34.82	---	58.41	23.59	1000.0	9.000	N	19.5
1.562000	---	29.66	46.00	16.34	1000.0	9.000	N	19.6
1.562000	32.69	---	56.00	23.31	1000.0	9.000	N	19.6
1.566000	---	28.46	46.00	17.54	1000.0	9.000	N	19.6
1.566000	31.87	---	56.00	24.13	1000.0	9.000	N	19.6
29.606000	---	20.92	50.00	29.08	1000.0	9.000	N	20.6
29.606000	25.86	---	60.00	34.14	1000.0	9.000	N	20.6
30.000000	---	21.66	50.00	28.34	1000.0	9.000	N	20.6
30.000000	26.36	---	60.00	33.64	1000.0	9.000	N	20.6



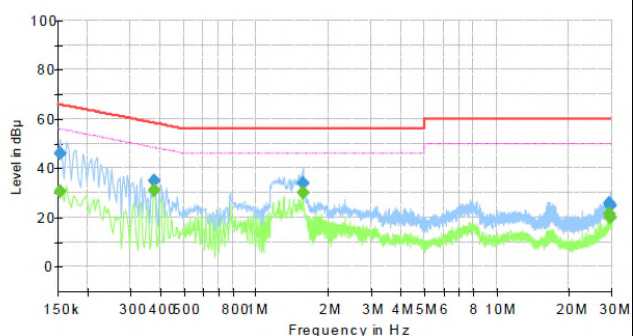
Mode: 802.11a (6 Mbps) (Worst Case)

Power: AC 120 V

Band: UNII-3

Channel: 149 (Worst Case)

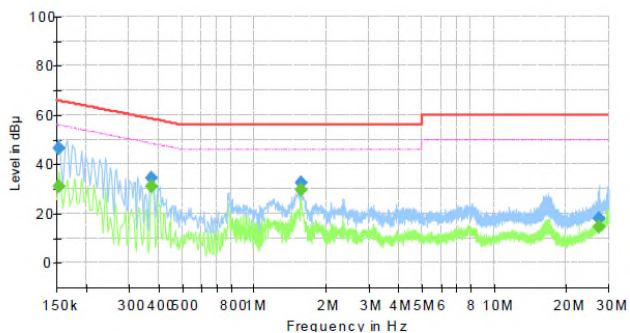
Hot Line



Final Result

Frequency (Hz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.154000	—	30.72	55.78	25.06	1000.0	9.000	L1	19.5
0.154000	46.10	—	55.78	19.68	1000.0	9.000	L1	19.5
0.378000	—	31.22	48.32	17.10	1000.0	9.000	L1	19.6
0.378000	34.94	—	58.32	23.38	1000.0	9.000	L1	19.6
1.582000	—	30.08	46.00	15.92	1000.0	9.000	L1	19.6
1.582000	33.67	—	56.00	22.33	1000.0	9.000	L1	19.6
29.202000	—	21.49	50.00	28.51	1000.0	9.000	L1	20.6
29.202000	25.61	—	60.00	34.39	1000.0	9.000	L1	20.6
29.598000	—	20.08	50.00	29.92	1000.0	9.000	L1	20.6
29.598000	24.81	—	60.00	35.19	1000.0	9.000	L1	20.6

Neutral Line



Final Result

Frequency (Hz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.154000	—	30.93	55.78	24.85	1000.0	9.000	N	19.5
0.154000	46.56	—	55.78	19.22	1000.0	9.000	N	19.5
0.374000	—	31.15	48.41	17.26	1000.0	9.000	N	19.5
0.374000	34.62	—	58.41	23.79	1000.0	9.000	N	19.5
1.582000	—	29.55	46.00	16.45	1000.0	9.000	N	19.6
1.582000	32.60	—	56.00	23.40	1000.0	9.000	N	19.6
27.254000	—	14.45	50.00	35.55	1000.0	9.000	N	20.5
27.254000	17.97	—	60.00	42.03	1000.0	9.000	N	20.5



3.8. Antenna Requirement

According to 15.203, An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

**Appendix A. Measurement equipment**

Equipment	Manufacturer	Model	Serial No.	Calibration interval	Calibration due.
SPECTRUM ANALYZER	R&S	FSV30	101389	1 year	2025.04.16 2026.04.18
Spectrum analyzer	R&S	FSV40	101725	1 year	2025.06.12 2026.06.10
SIGNAL GENERATOR	KEYSIGHT	N5182B	MY59100115	1 year	2025.04.15 2026.04.16
SIGNAL GENERATOR	Anritsu	68369B	002118	1 year	2025.04.15 2026.04.21
Power Meter	Anritsu	ML2495A	2010001	1 year	2025.04.15 2026.04.16
Pulse Power Sensor	Anritsu	MA2411B	1911111	1 year	2025.04.15 2026.04.16
ATTENUATOR	KEYSIGHT	8493C	82506	1 year	2026.01.13 2027.01.06
BAND REJECT FILTER	MICRO-TRONICS	BRM50702	G272	1 year	2026.01.08 2027.01.08
BAND REJECT FILTER	MICRO-TRONICS	BRM50716	G199	1 year	2026.01.08 2027.01.08
LOOP ANTENNA	TESEQ	HLA6121	66547	2 years	2026.01.22 2028.01.13
TRILOG-BROADBAND ANTENNA	Schwarzbeck	VULB 9163	714	2 years	2026.04.19
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1802	1 year	2025.11.04 2026.11.05
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA 9170550	1 year	2026.01.13 2027.01.12
Amplifier	SONOMA INSTRUMENT	310N	401123	1 year	2026.02.13 2027.02.12
PREAMPLIFIER	HP	8449B	3008A00538	1 year	2025.04.30 2026.04.30
BROADBAND AMPLIFIER	SCHWARZBECK	BBV9721	PS9721-003	1 year	2026.01.09 2027.01.12
DC POWER SUPPLY	SORENSEN	DCS40-75E	1408A02745	1 year	2026.01.08 2027.01.08
EMI Test Receiver	R & S	ESR7	101190	1 year	2025.07.29 2026.04.30
EMI Test SW	TOYO Corporation	ES10/RE	2022.01.000	-	-
EMI Test Receiver	R&S	ESR3	101783	1 year	2026.11.03
EMI Test SW	R&S	EMC32	9.12.00	-	-
PULSE LIMITER	R&S	ESH2-Z2	101915	1 year	2026.11.03
LISN	R&S	ENV216	101786	1 year	2026.01.09 2027.01.08



Equipment	Manufacturer	Model	Serial No.	Calibration interval	Calibration due.
Cable	-	-	#A-5	1 year	2026.01.20 2027.01.18
Cable (SR #6)	RG 400	-	-	0.5 year	2025.07.25 2026.01.25 2026.07.25
Cable (SAC #5)	SUCOFLEX106	HUBER_SUHNER	-	0.5 year	2025.07.25 2026.01.25 2026.07.25
	SUCOFLEX106	HUBER_SUHNER	-		2025.07.25 2026.01.25 2026.07.25
	LH21D/2xSMA	OSI Cable	-		2025.07.25 2026.01.25 2026.07.25
Cable (SAC #6)	TCLH21D-SMSM-2.5M 0222	OSI Cable	-	0.5 year	2025.07.25 2026.01.25 2026.07.25
	TCLH21D-NMNM-10.0M 0222	OSI Cable	-		2025.07.25 2026.01.25 2026.07.25
	TCLH21D-SMSM-7.0M 0222	OSI Cable	-		2025.07.25 2026.01.25 2026.07.25

* Statement of Traceability: KES Co., Ltd. attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Peripheral devices

Device	Manufacturer	Model No.	Serial No.
Notebook computer	LG Electronics Inc.,	15U480	901QCCV558723

The End.