Mode:	DC 24 V_802.11g (6 Mbps)
Distance of measurement:	3 meter
Channel:	11

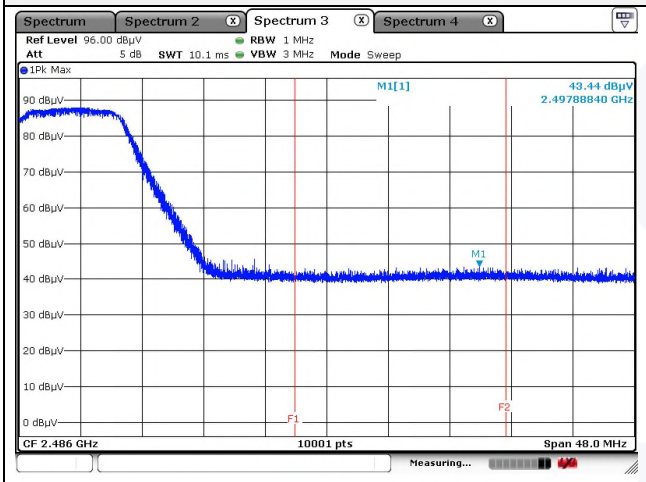
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 044.90	44.06	Peak	H	-7.64	-	36.42	74.00	37.58
1 361.66	44.82	Peak	V	-5.91	-	38.91	74.00	35.09

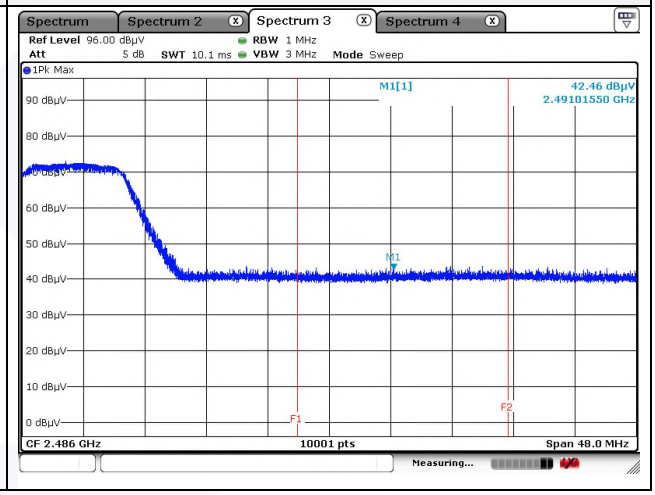
- **Band edge**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 497.89	43.44	Peak	H	-1.88	-	41.56	74.00	32.44
2 491.02	42.46	Peak	V	-1.89	-	40.57	74.00	33.43

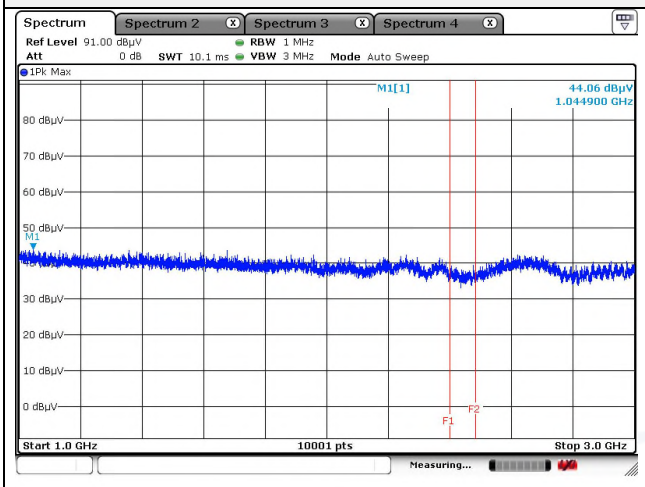
Restricted band // Horizontal // Peak



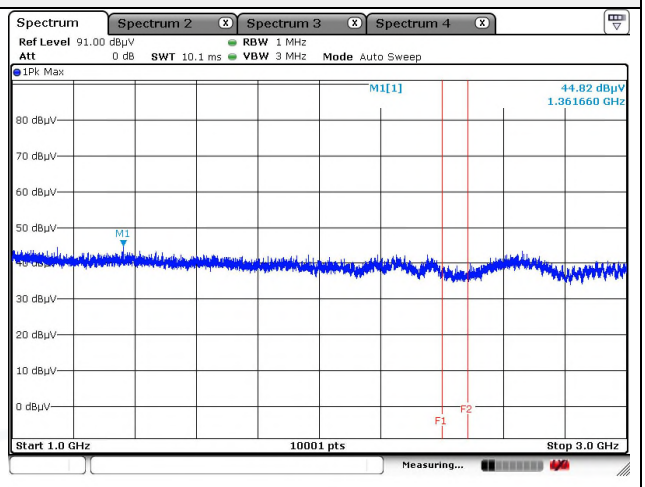
Restricted band // Vertical // Peak



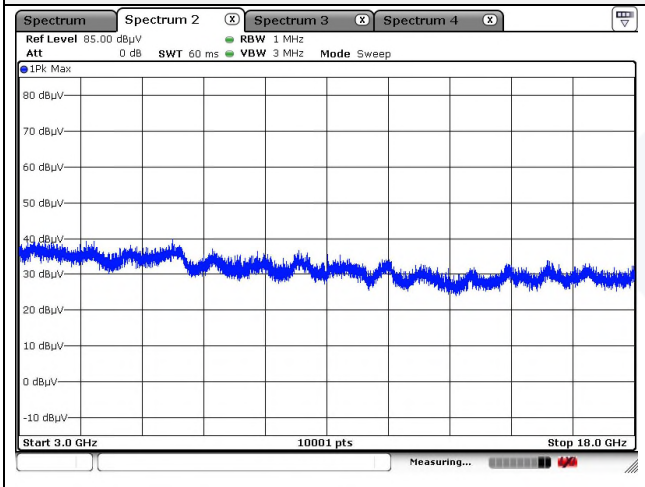
Horizontal // Peak for 1 ㎓ to 3 ㎓



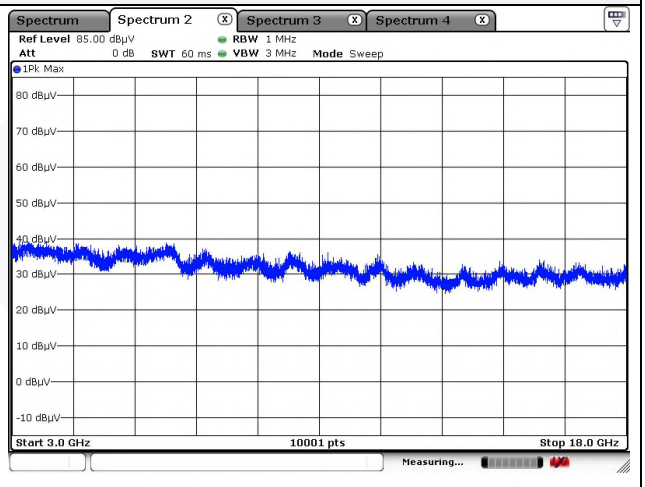
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 12 V_802.11n_HT20 (MCS0)
Distance of measurement:	3 meter
Channel:	1

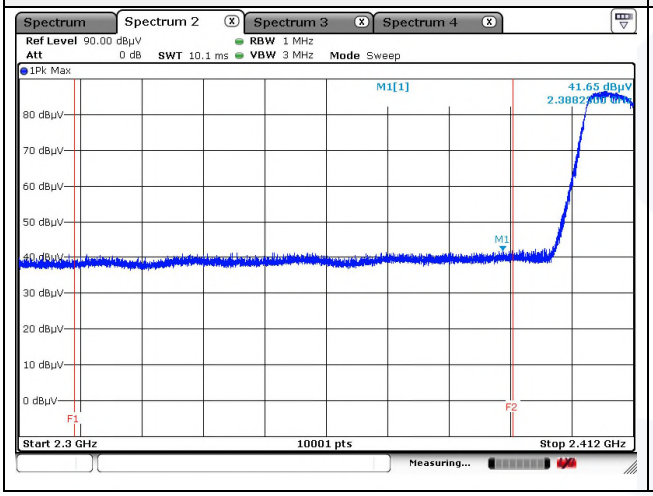
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 013.90	45.95	Peak	H	-7.81	-	38.14	74.00	35.86
1 054.29	44.21	Peak	V	-7.59	-	36.62	74.00	37.38

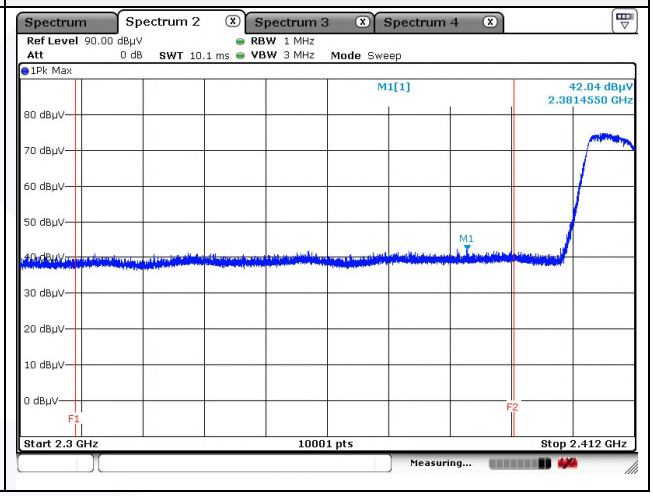
- **Band edge**

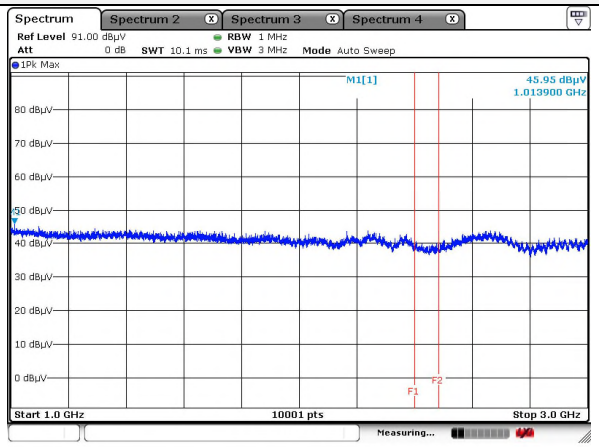
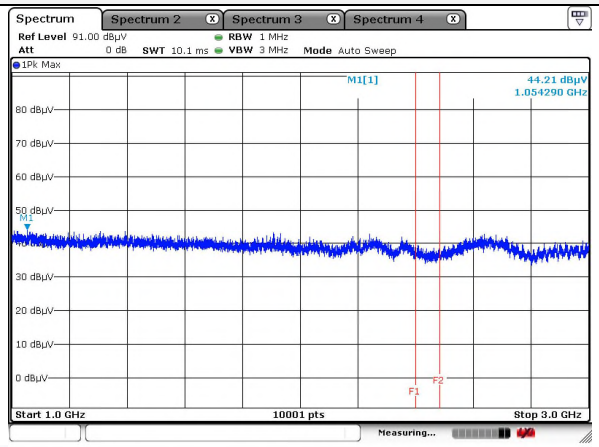
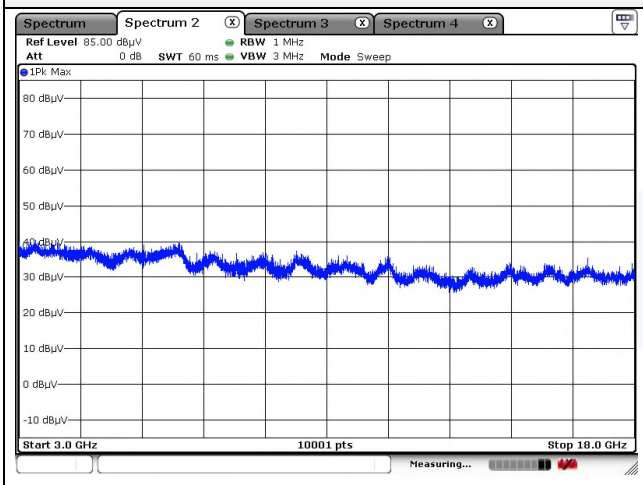
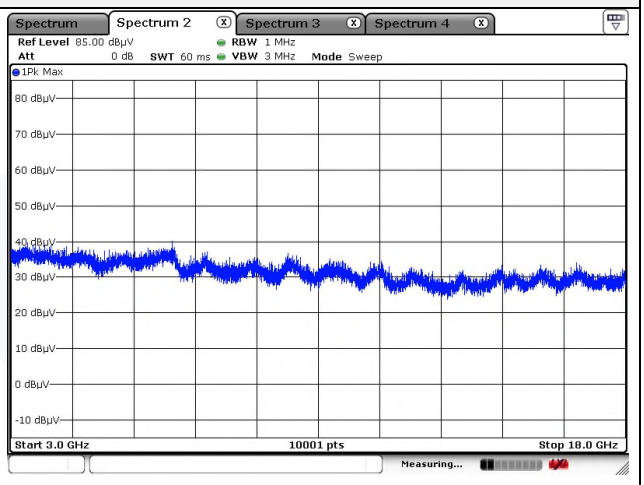
Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 381.46	42.04	Peak	V	-2.13	-	39.91	74.00	34.09
2 388.23	41.65	Peak	H	-2.11	-	39.54	74.00	34.46

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak



Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.

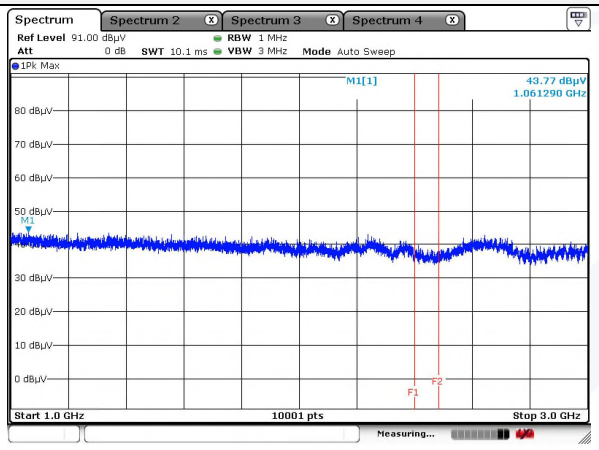
1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 12 V_802.11n_HT20 (MCS0)
Distance of measurement:	3 meter
Channel:	6

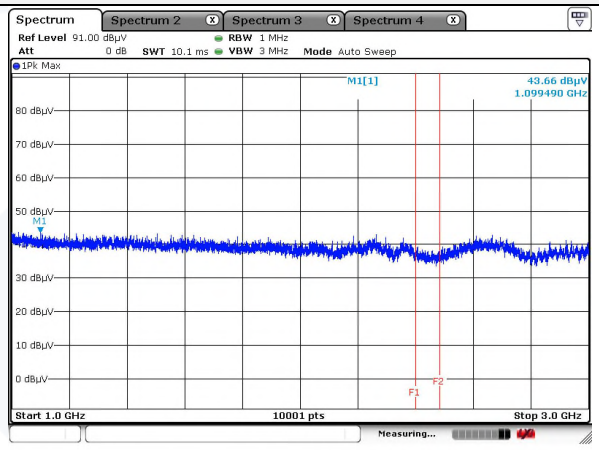
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 061.29	43.77	Peak	H	-7.56	-	36.21	74.00	37.79
1 099.49	43.66	Peak	H	-7.36	-	36.30	74.00	37.70

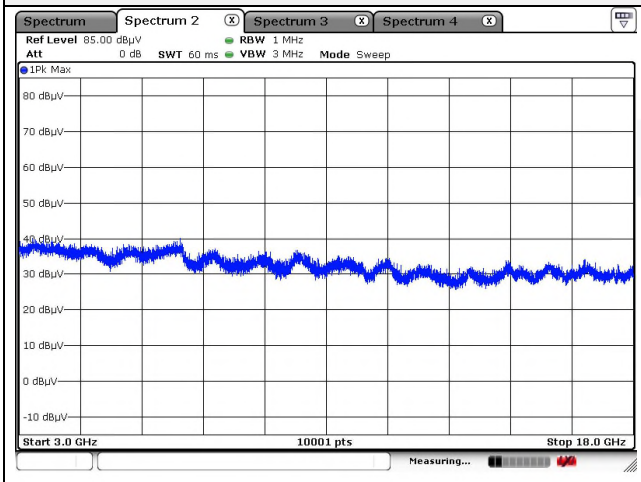
Horizontal // Peak for 1 ㎓ to 3 ㎓



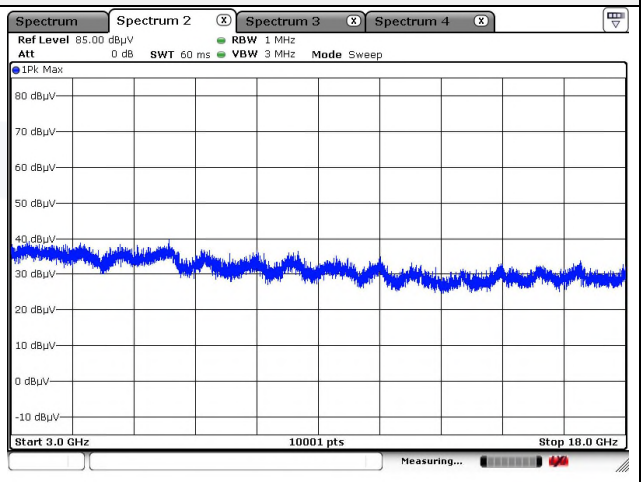
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 12 V_802.11n_HT20 (MCS0)
Distance of measurement:	3 meter
Channel:	11

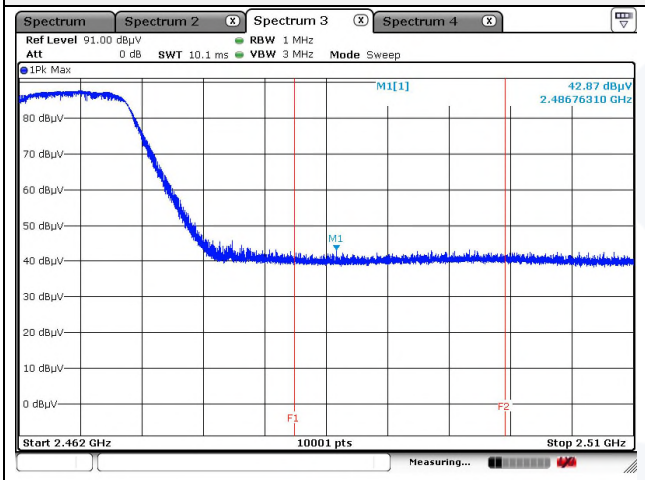
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 012.90	43.92	Peak	V	-7.81	-	36.11	74.00	37.89
1 286.27	43.52	Peak	H	-6.34	-	37.18	74.00	36.82

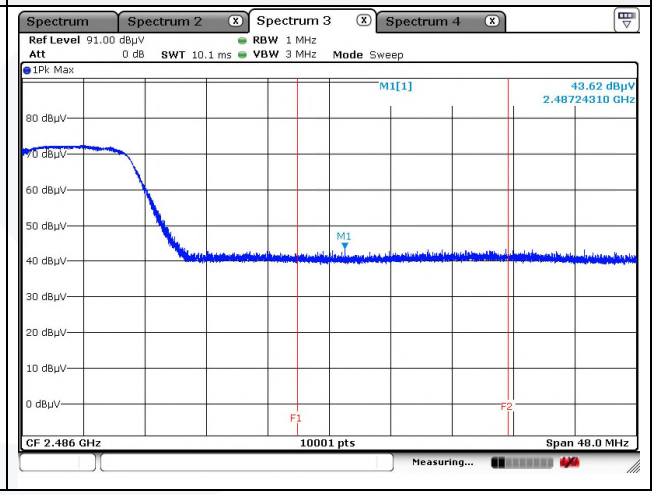
- **Band edge**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 486.76	42.87	Peak	H	-1.90	-	40.97	74.00	33.03
2 487.24	43.62	Peak	V	-1.90	-	42.39	74.00	31.61

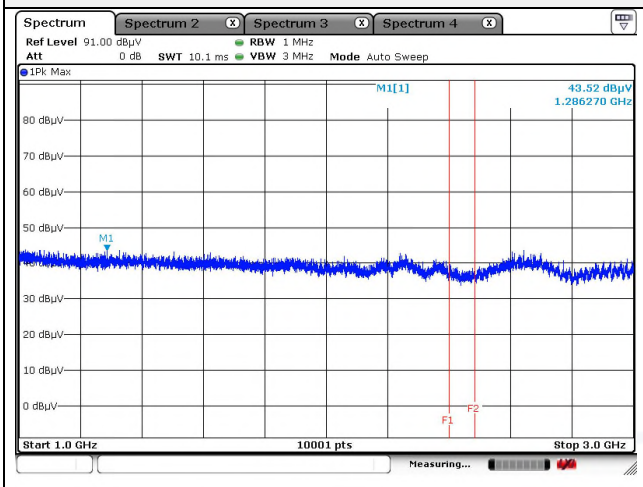
Restricted band // Horizontal // Peak



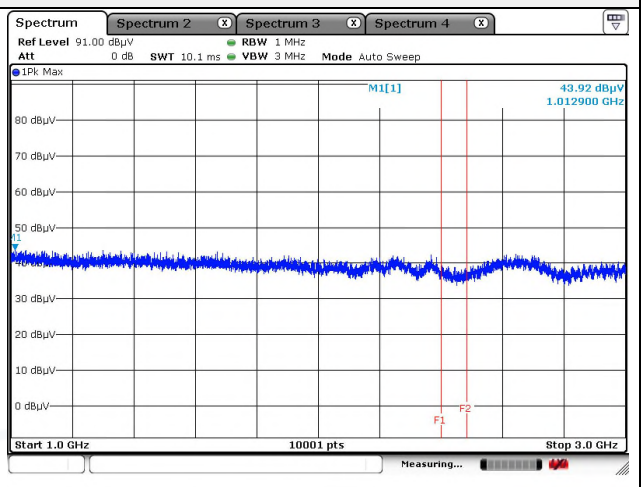
Restricted band // Vertical // Peak



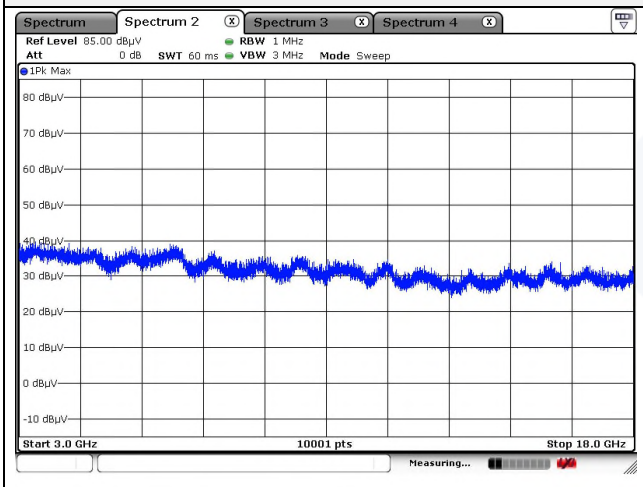
Horizontal // Peak for 1 ㎓ to 3 ㎓



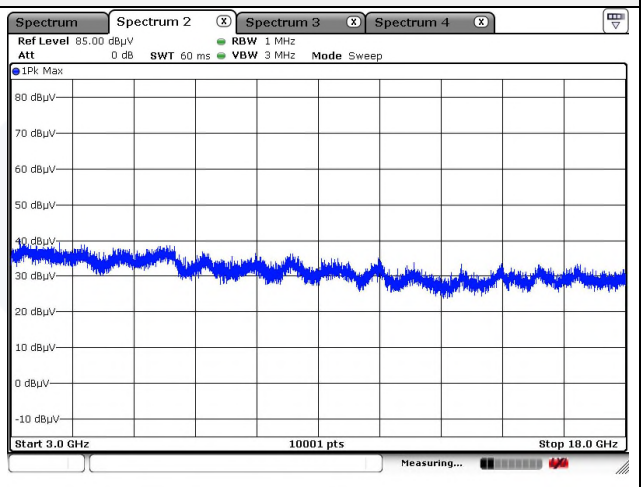
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode: DC 24 V_802.11n_HT20 (MCS0)

Distance of measurement: 3 meter

Channel: 1

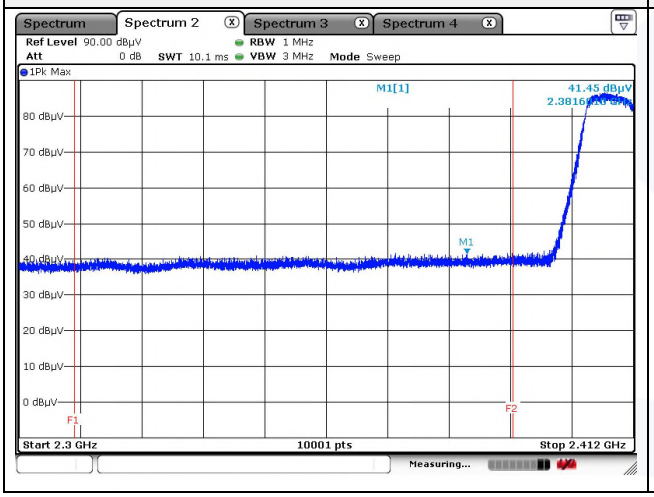
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 037.70	43.76	Peak	H	-7.68	-	36.08	74.00	37.92
1 101.09	44.66	Peak	V	-7.35	-	37.31	74.00	36.69

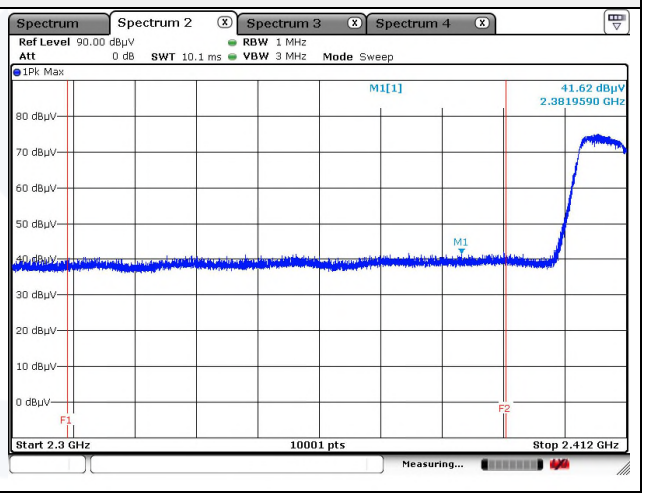
- **Band edge**

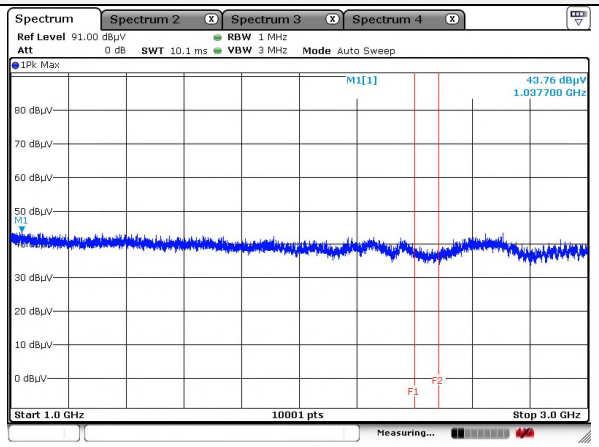
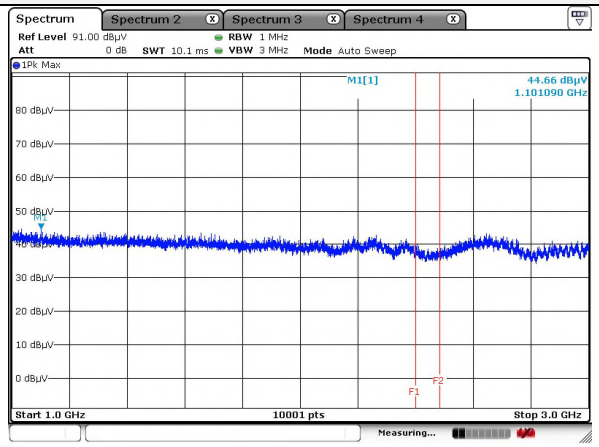
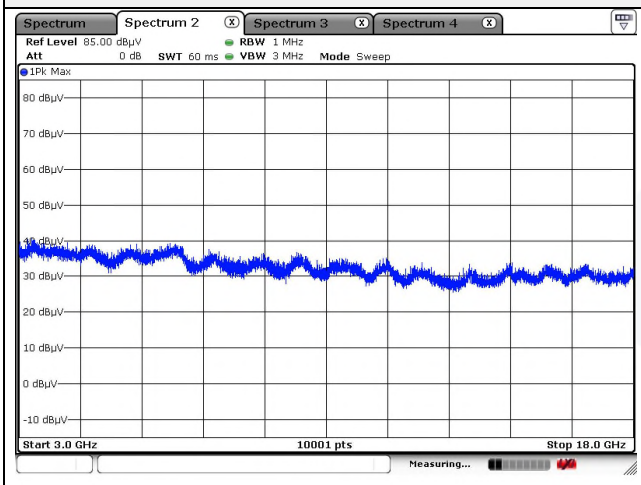
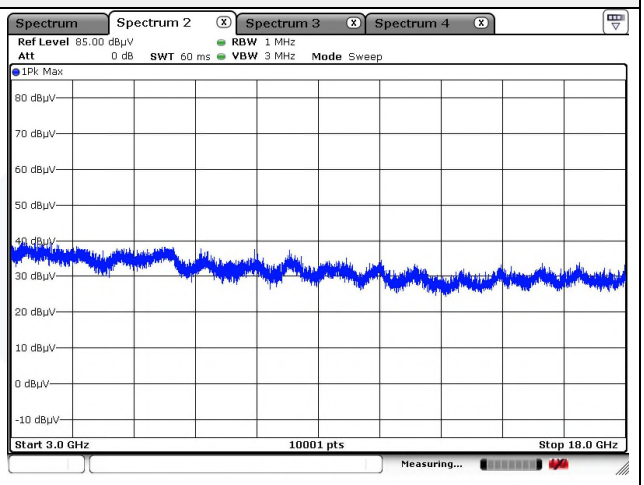
Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 381.60	41.45	Peak	H	-2.13	-	39.32	74.00	34.68
2 381.96	41.62	Peak	V	-2.13	-	39.49	74.00	34.51

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak



Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.

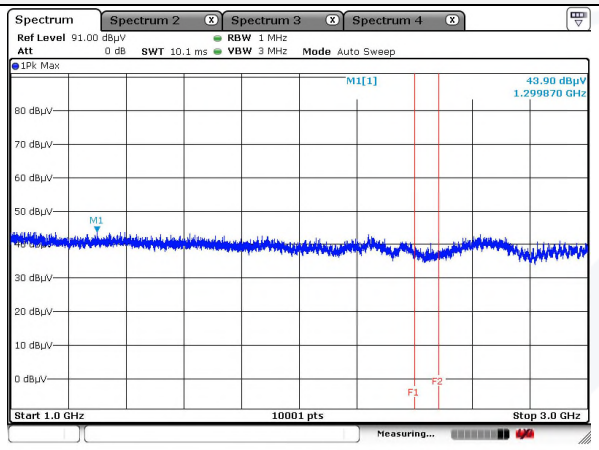
1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 24 V_802.11n_HT20 (MCS0)
Distance of measurement:	3 meter
Channel:	6

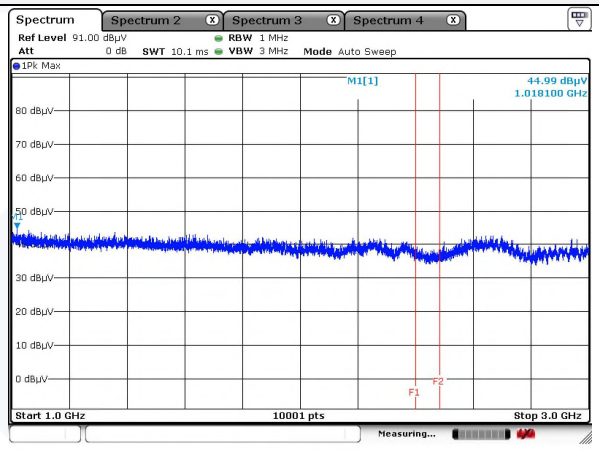
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 018.10	44.99	Peak	V	-7.78	-	37.21	74.00	36.79
1 299.87	43.90	Peak	H	-6.26	-	37.64	74.00	36.36

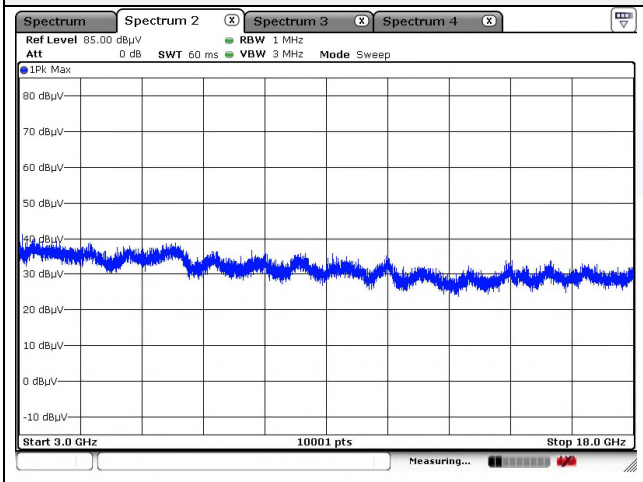
Horizontal // Peak for 1 ㎓ to 3 ㎓



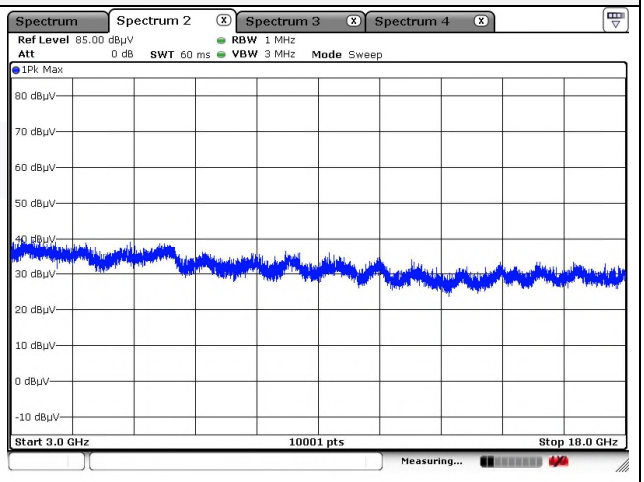
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 24 V_802.11n_HT20 (MCS0)
Distance of measurement:	3 meter
Channel:	11

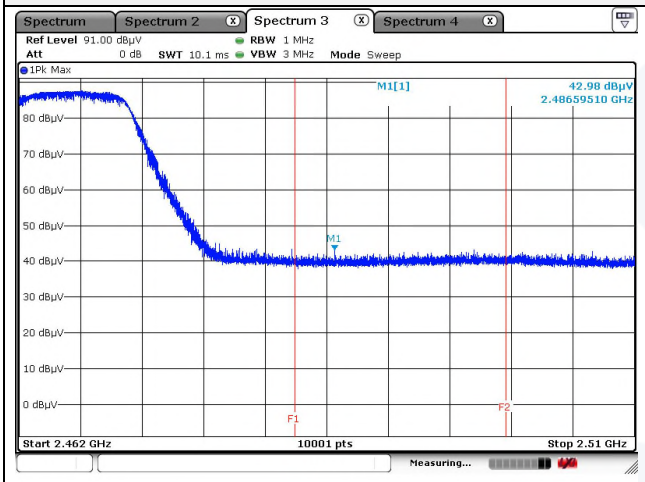
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 021.90	44.54	Peak	V	-7.76	-	36.78	74.00	37.22
1 476.85	44.43	Peak	H	-5.26	-	39.17	74.00	34.83

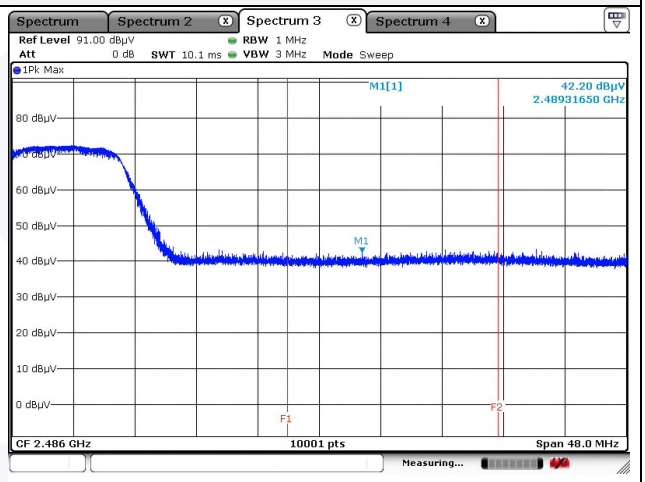
- **Band edge**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 486.60	42.98	Peak	H	-1.90	-	41.08	74.00	32.92
2 489.32	42.20	Peak	V	-1.90	-	40.30	74.00	33.70

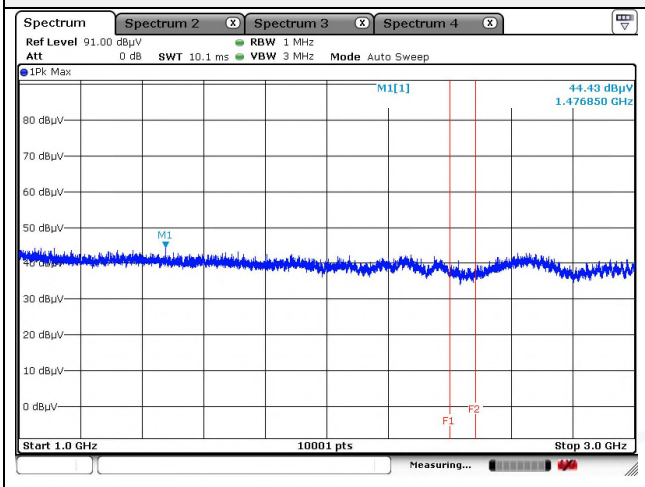
Restricted band // Horizontal // Peak



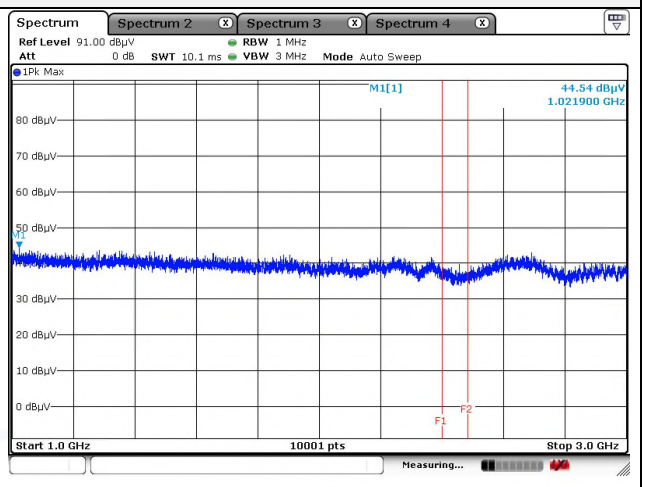
Restricted band // Vertical // Peak



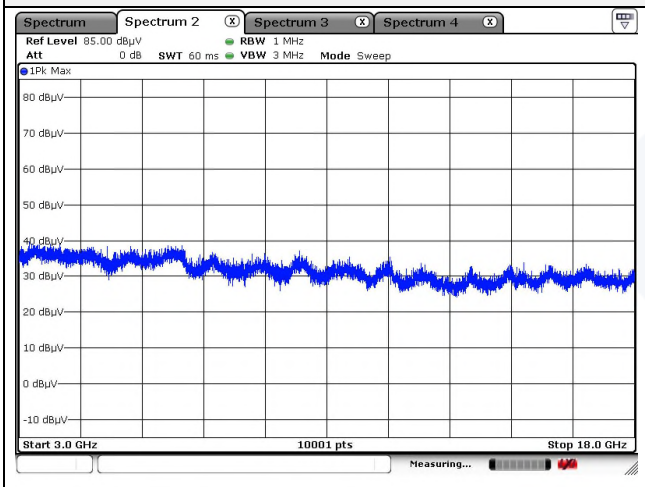
Horizontal // Peak for 1 ㎓ to 3 ㎓



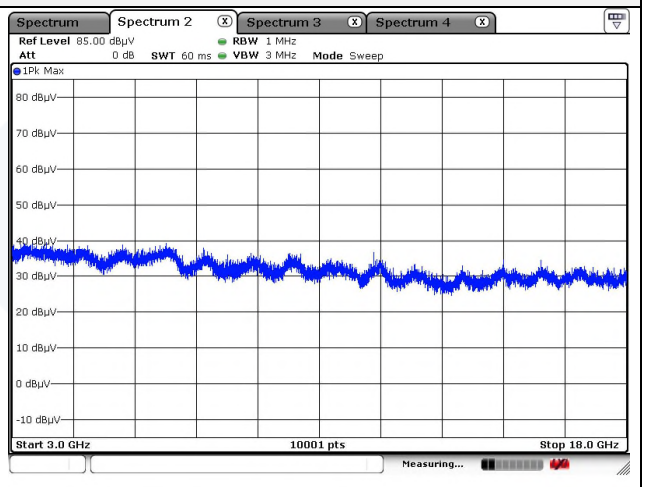
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 12 V_802.11n_HT40 (MCS0)
Distance of measurement:	3 meter
Channel:	3

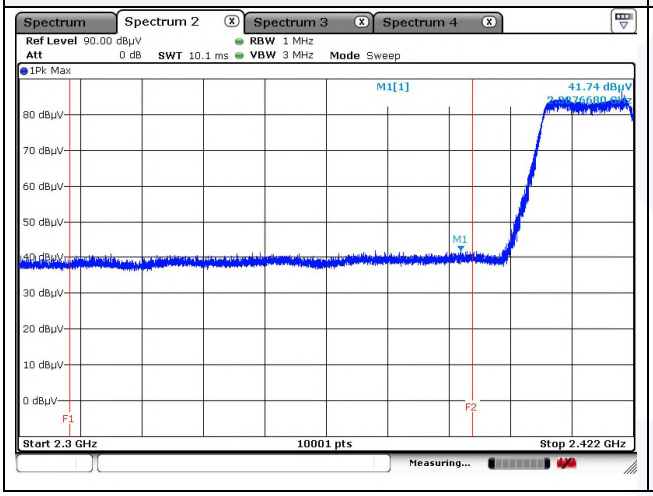
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 003.70	43.98	Peak	H	-7.86	-	36.12	74.00	37.88
1 029.10	43.69	Peak	V	-7.73	-	35.96	74.00	38.04

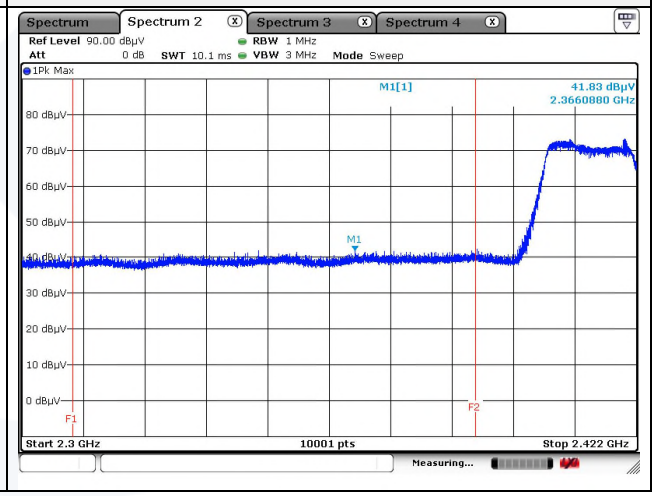
- **Band edge**

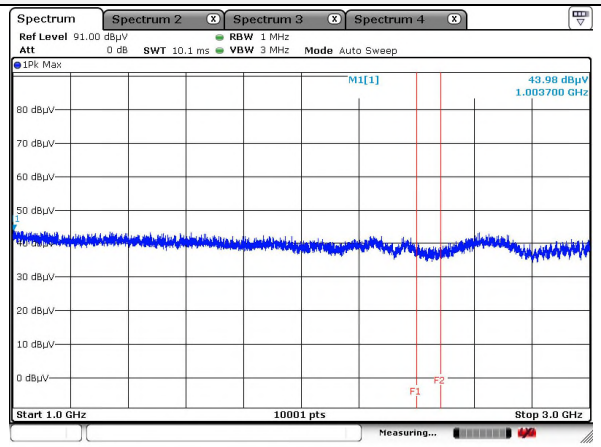
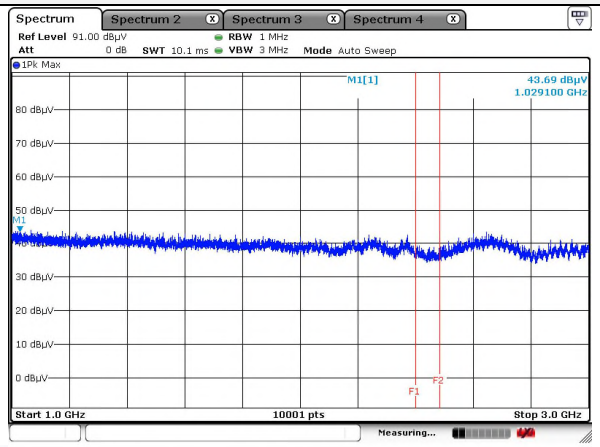
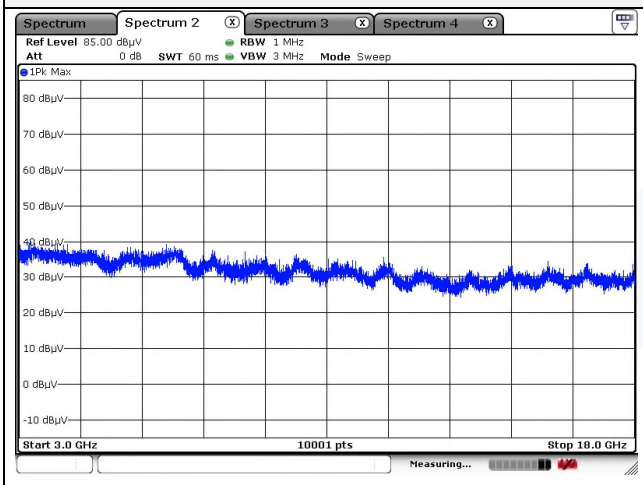
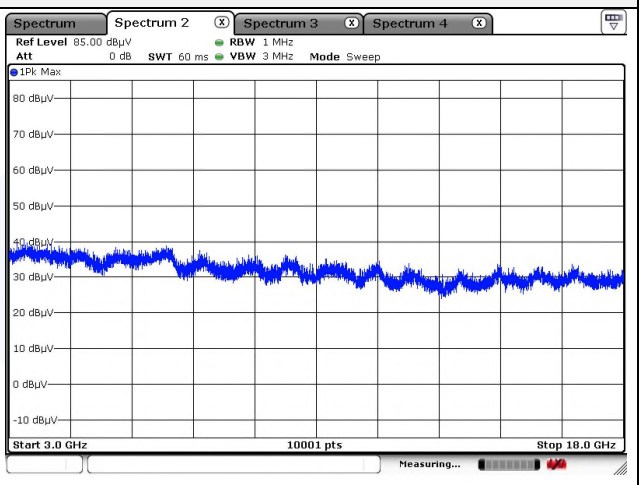
Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 366.09	41.83	Peak	V	-2.17	-	39.66	74.00	34.34
2 387.67	41.74	Peak	H	-2.11	-	39.63	74.00	34.37

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak



Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.

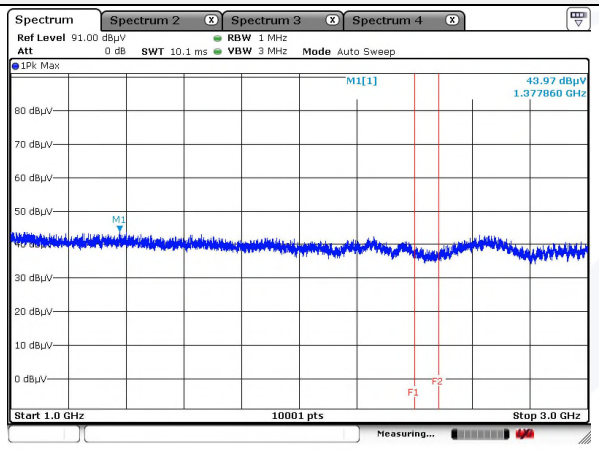
1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 12 V_802.11n_HT40 (MCS0)
Distance of measurement:	3 meter
Channel:	6

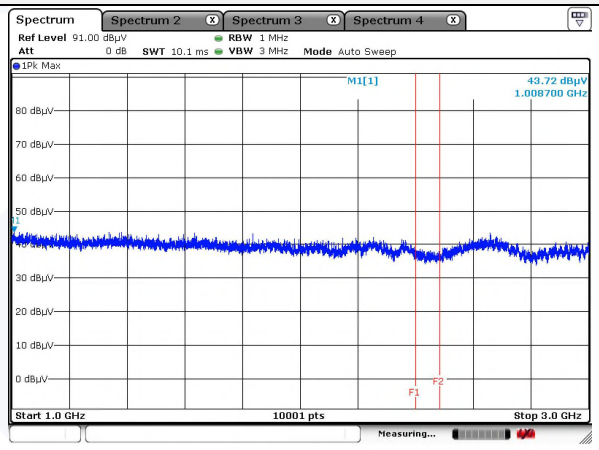
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 008.70	43.72	Peak	V	-7.83	-	35.89	74.00	38.11
1 377.86	43.97	Peak	H	-5.82	-	38.15	74.00	35.85

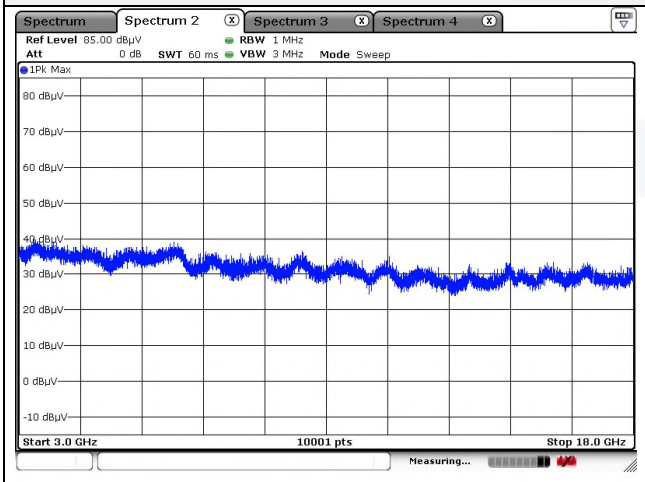
Horizontal // Peak for 1 ㎓ to 3 ㎓



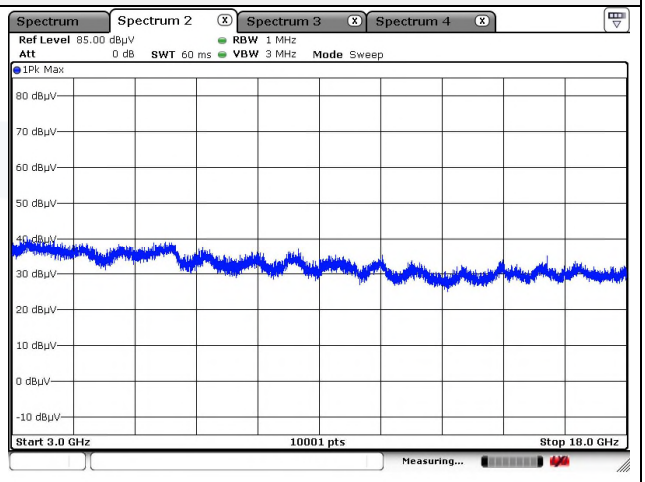
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 12 V_802.11n_HT40 (MCS0)
Distance of measurement:	3 meter
Channel:	9

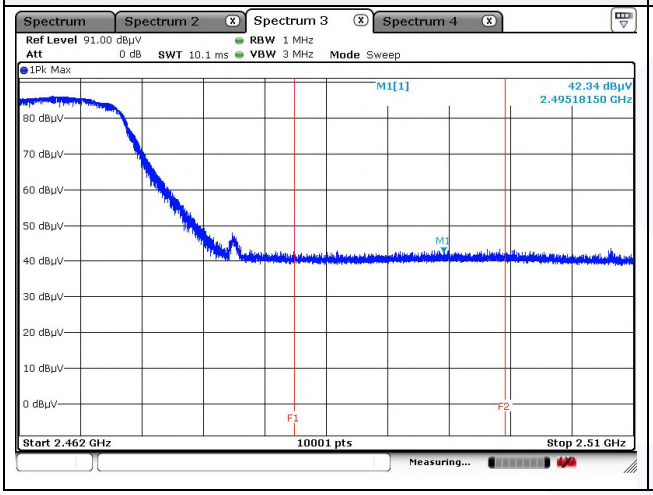
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 012.10	43.77	Peak	V	-7.81	-	35.96	74.00	38.04
1 315.27	44.18	Peak	H	-6.17	-	38.01	74.00	35.99

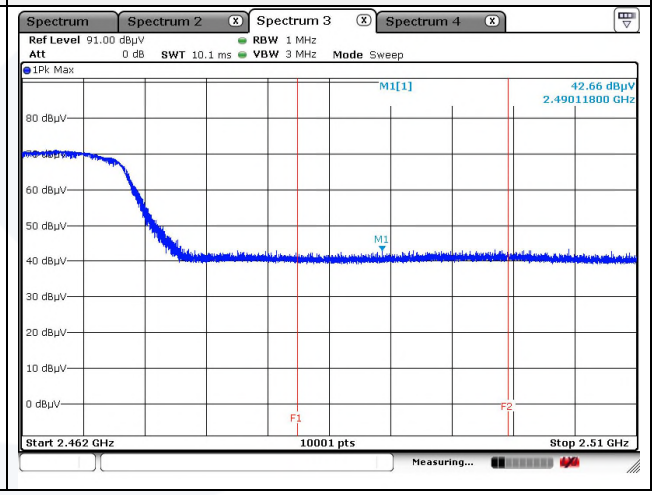
- **Band edge**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 490.12	42.66	Peak	V	-1.89	-	40.77	74.00	33.23
2 495.18	42.34	Peak	H	-1.88	-	40.46	74.00	33.54

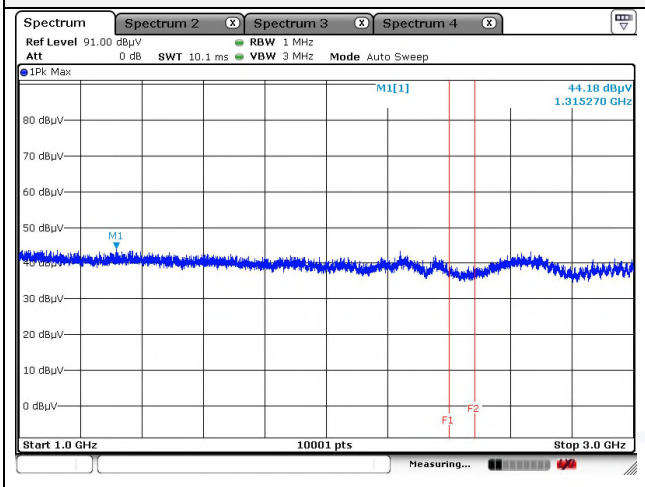
Restricted band // Horizontal // Peak



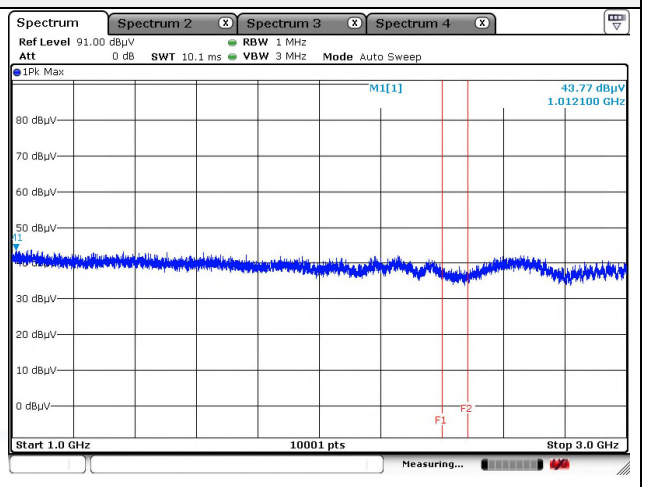
Restricted band // Vertical // Peak



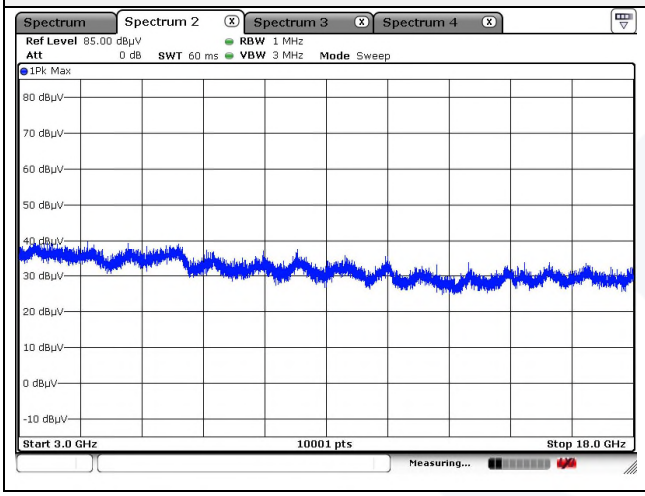
Horizontal // Peak for 1 ㎓ to 3 ㎓



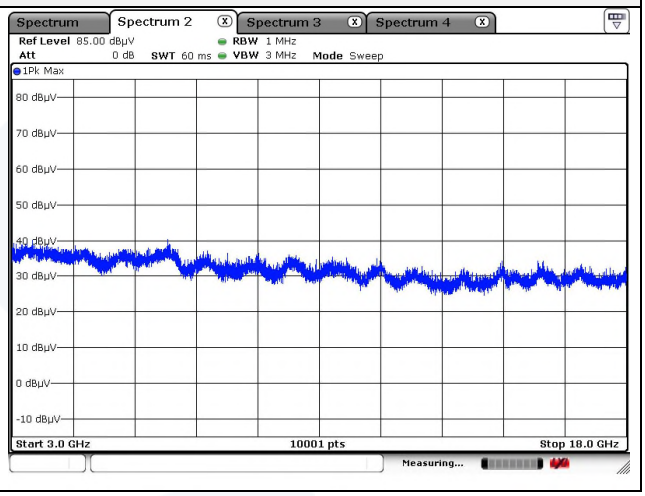
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 24 V_802.11n_HT40 (MCS0)
Distance of measurement:	3 meter
Channel:	3

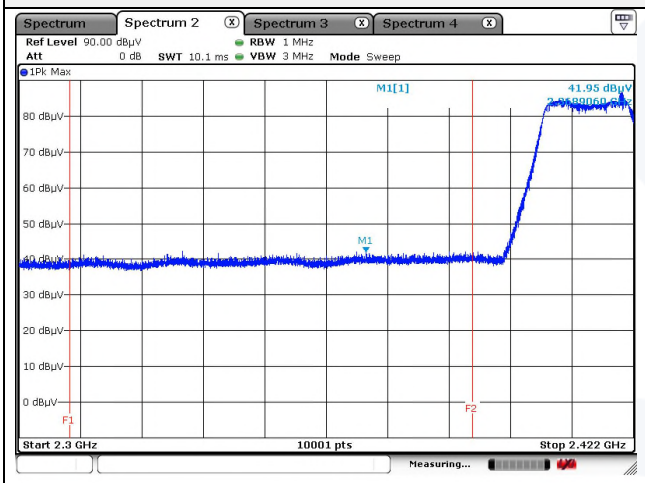
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 068.89	44.17	Peak	V	-7.52	-	36.65	74.00	37.35
1 303.87	43.64	Peak	H	-6.24	-	37.40	74.00	36.60

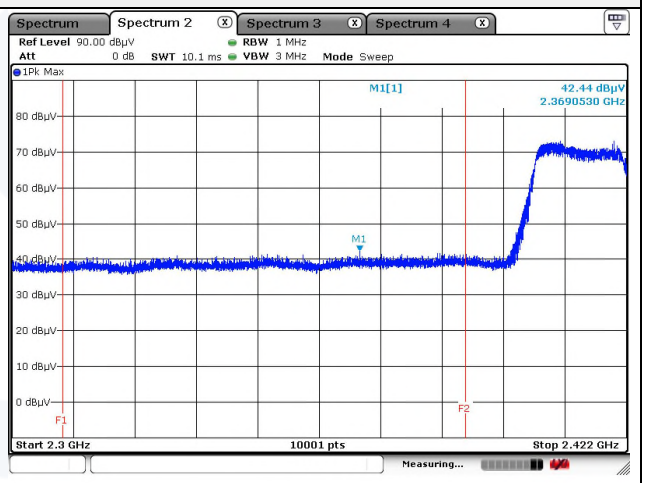
- **Band edge**

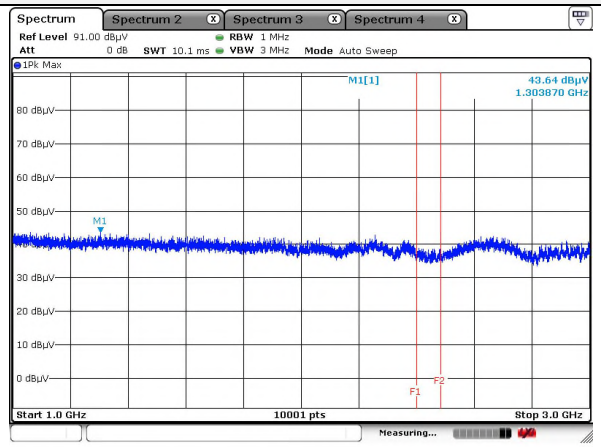
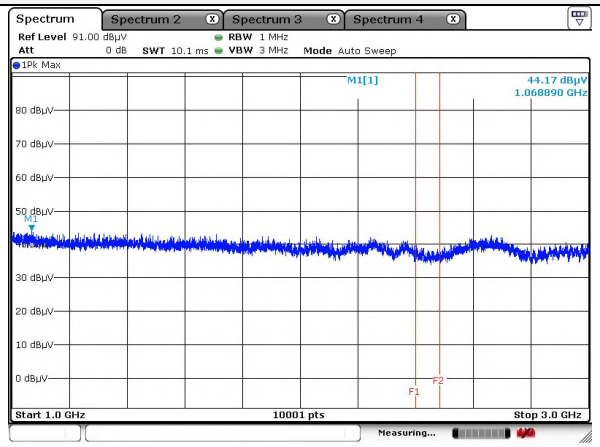
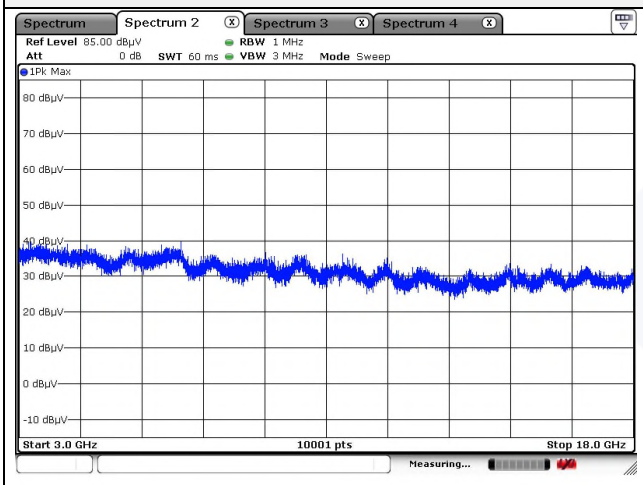
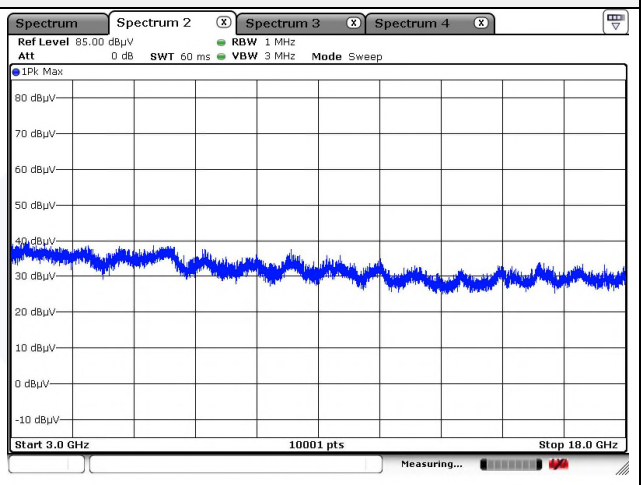
Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 368.91	41.95	Peak	H	-2.16	-	39.79	74.00	34.21
2 369.05	42.44	Peak	V	-2.16	-	40.28	74.00	33.72

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak



Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.

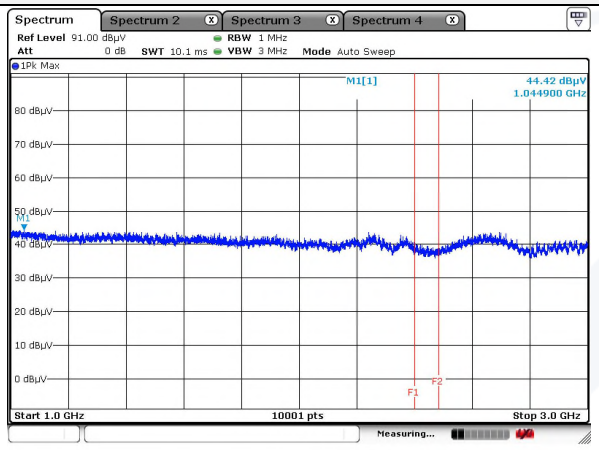
1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 24 V_802.11n_HT40 (MCS0)
Distance of measurement:	3 meter
Channel:	6

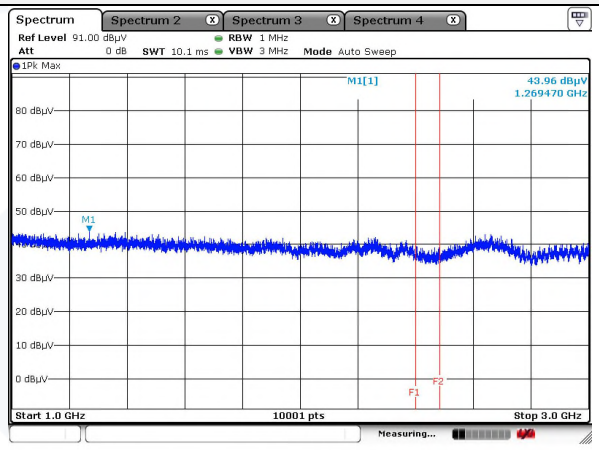
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 044.90	44.42	Peak	H	-7.64	-	36.78	74.00	37.22
1 269.47	43.96	Peak	V	-6.43	-	37.53	74.00	36.47

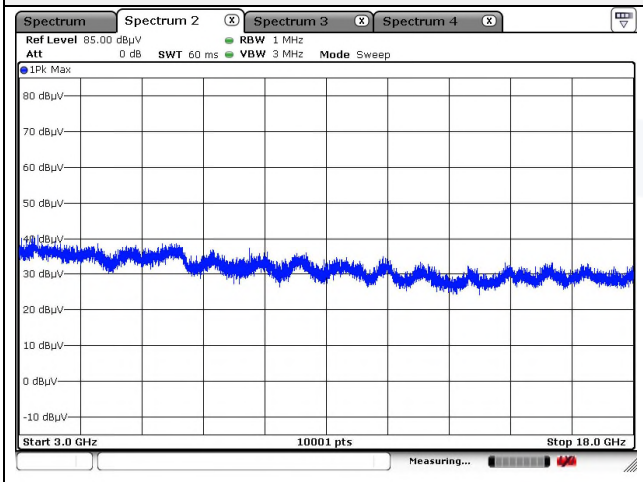
Horizontal // Peak for 1 ㎓ to 3 ㎓



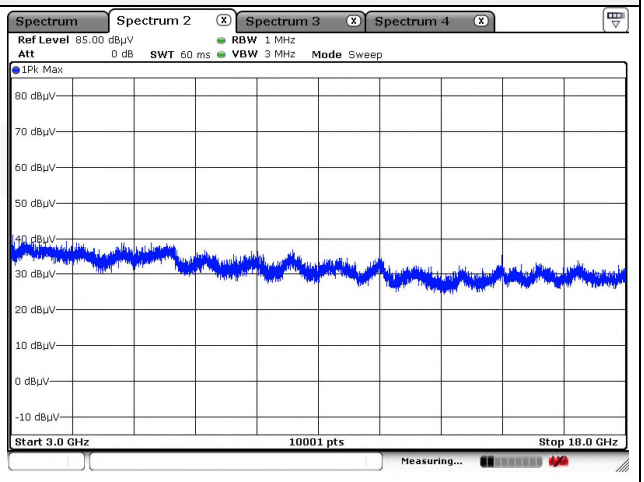
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

Mode:	DC 24 V_802.11n_HT40 (MCS0)
Distance of measurement:	3 meter
Channel:	9

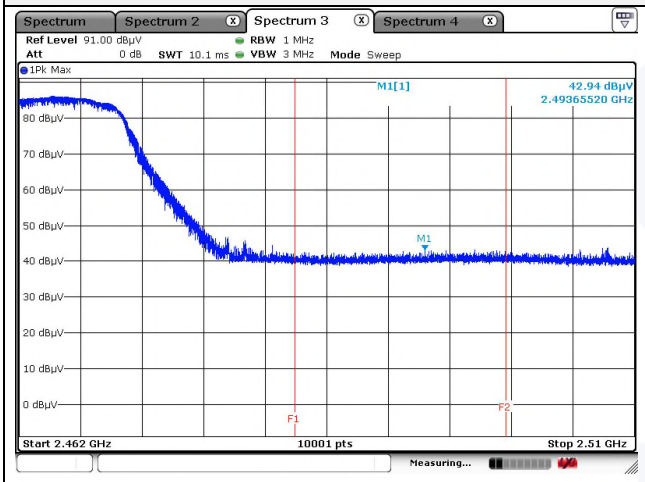
- **Spurious**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
1 036.30	44.25	Peak	H	-7.69	-	36.56	74.00	37.44
1 059.29	43.81	Peak	V	-7.57	-	36.24	74.00	37.76

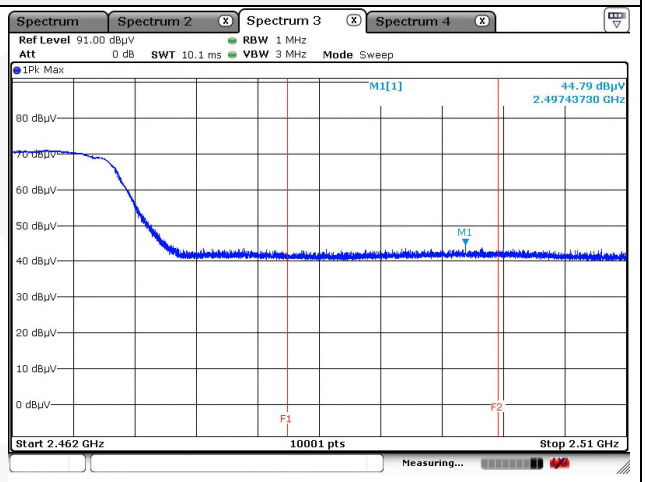
- **Band edge**

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2 493.66	42.94	Peak	H	-1.89	-	41.05	74.00	32.95
2 497.44	44.79	Peak	V	-1.88	-	42.91	74.00	31.09

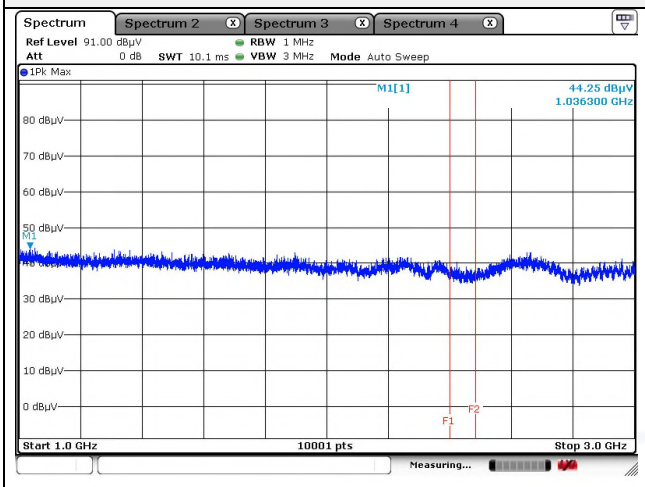
Restricted band // Horizontal // Peak



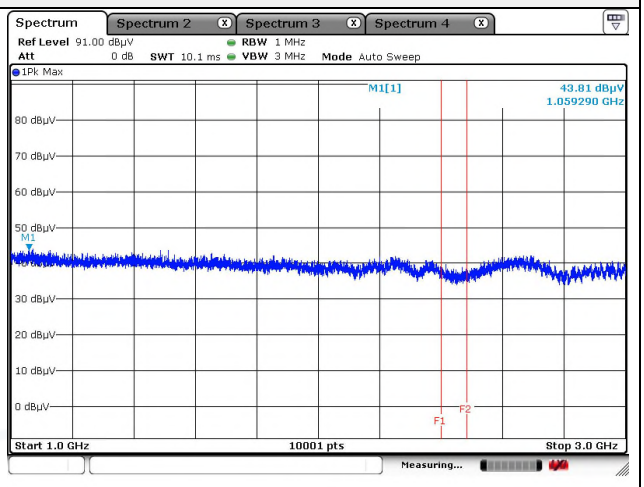
Restricted band // Vertical // Peak



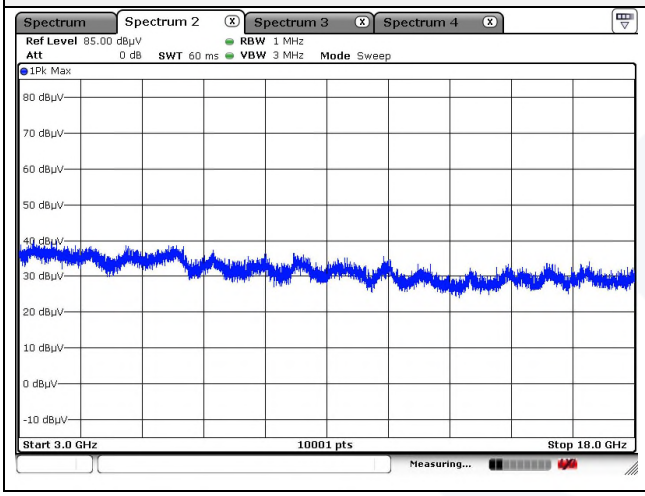
Horizontal // Peak for 1 ㎓ to 3 ㎓



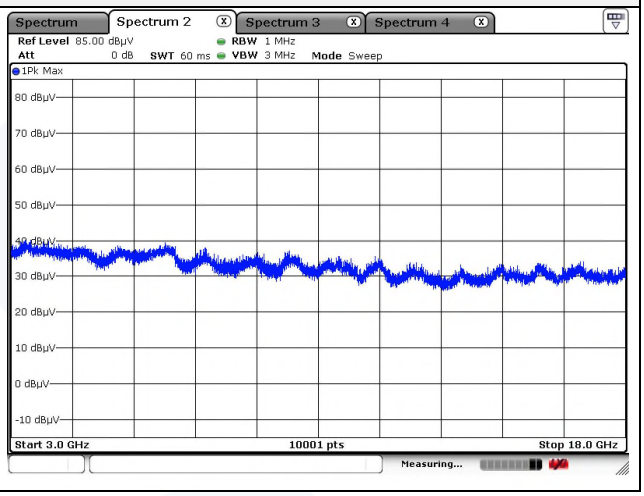
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓

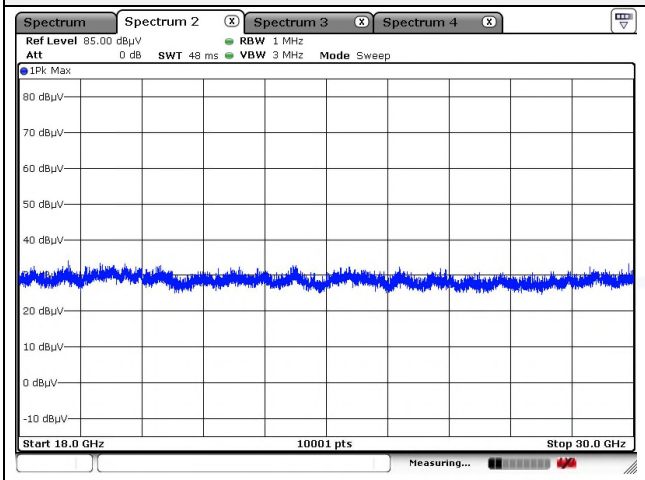
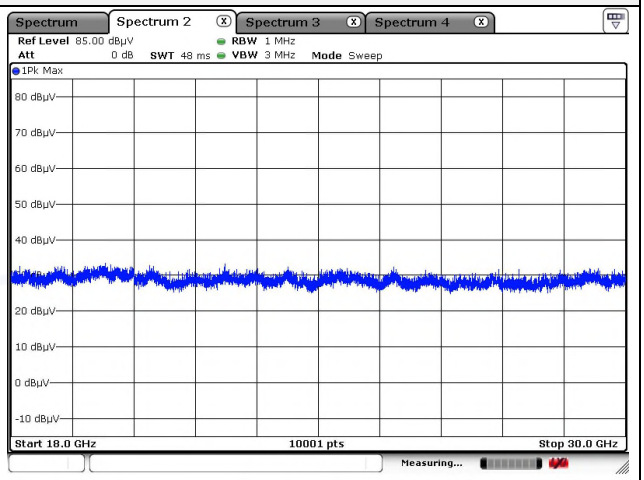


Note.

1. No spurious emission were detected above 3 ㎓.
2. Average test would be performed if the peak result were greater than the average limit.

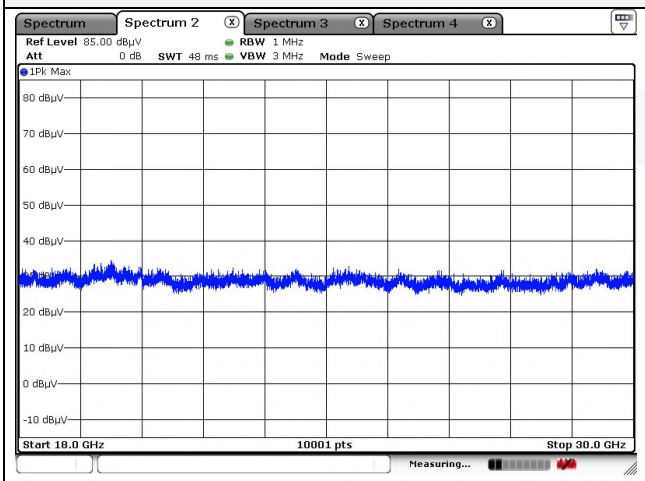
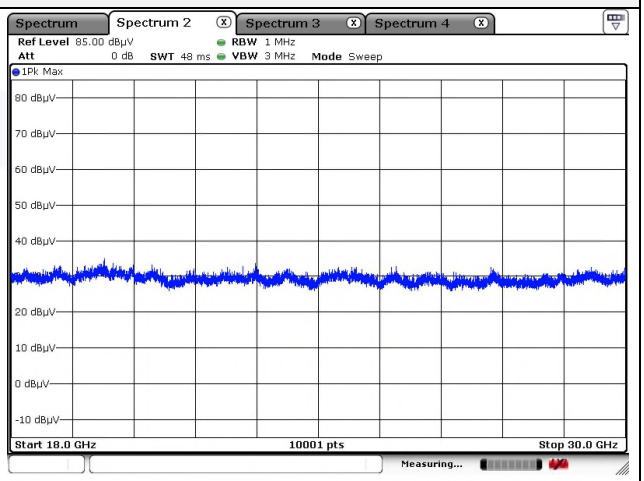
Test results (18 ㎓ to 30 ㎓) – Worst case

Mode:	LE 1 Mbps_DC 12 V
Distance of measurement:	3 meter
Channel:	00 (Worst case)

Horizontal // Peak	Vertical // Peak
	

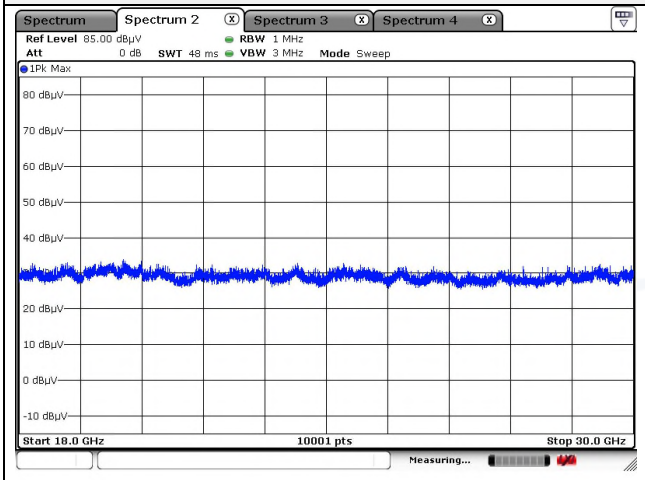
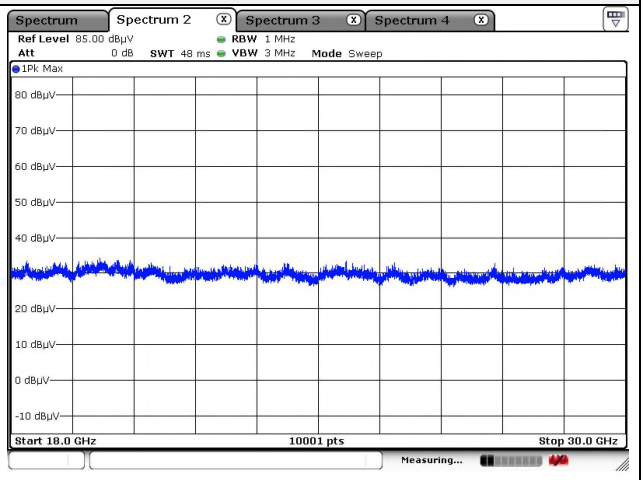
Note.
1. No spurious emission were detected above 18 ㎓.

Mode:	LE 1 Mbps_DC 24 V
Distance of measurement:	3 meter
Channel:	00 (Worst case)

Horizontal // Peak	Vertical // Peak
	

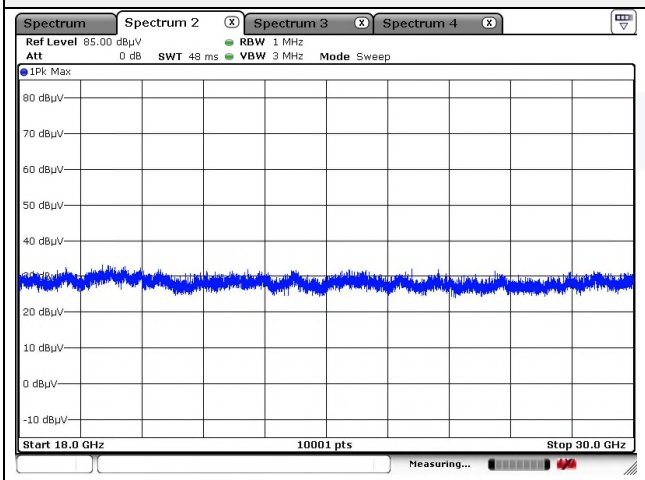
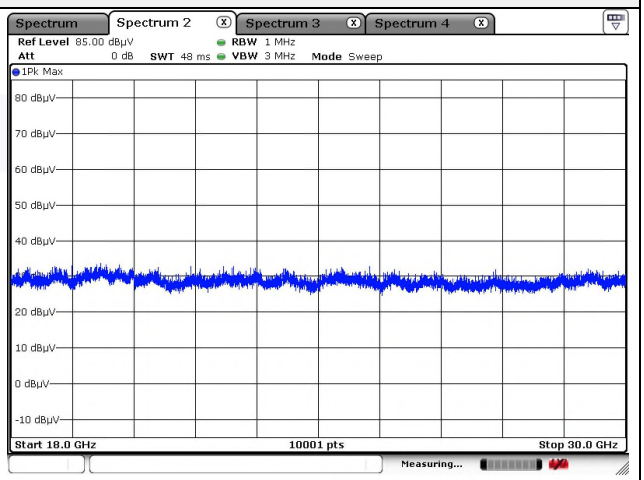
Note.
1. No spurious emission were detected above 18 ㎓.

Mode:	802.11b (Worst case)_DC 12 V
Distance of measurement:	3 meter
Channel:	06 (Worst case)

Horizontal // Peak	Vertical // Peak
	

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

Mode:	802.11b (Worst case)_DC 12 V
Distance of measurement:	3 meter
Channel:	06 (Worst case)

Horizontal // Peak	Vertical // Peak
	

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

3.3. Antenna Requirement

According to 15.207(a), An intentional radiator shall be designed to ensure that no antenna other than that fu rnished by the responsible party shall be used with the device. The use of a permanently attached antenna o r 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 r eplaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This require ment does not apply to carrier current devices or to devices operated under the provisions of Sections 15.21 1, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that mu st 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 si te. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the li mits in this Part are not exceeded.

Appendix A. Measurement equipment

Equipment	Manufacturer	Model	Serial No.	Calibration interval	Calibration due.
Spectrum analyzer	R&S	FSV40	101725	1 year	2025.06.12
SIGNAL GENERATOR	KEYSIGHT	N5182B	MY59100115	1 year	2025.04.15
SIGNAL GENERATOR	Anritsu	68369B	002118	1 year	2025.04.15
Power Meter	Anritsu	ML2495A	2010001	1 year	2025.04.15
Pulse Power Sensor	Anritsu	MA2411B	1911111	1 year	2025.04.15
Attenuator	Mini-Circuits	BW-S20-2W263A+	Y1	1 year	2026.02.10
BAND REJECT FILTER	MICRO-TRONICS	BRM50702	G272	1 year	2026.01.08
LOOP ANTENNA	TESEQ	HLA6121	66547	2 years	2026.01.22
TRILOG-BROADBAND ANTENNA	Schwarzbeck	VULB 9163	714	2 years	2026.04.19
Attenuator	HUBER+SHHNER	6806.17.A	NONE	1 year	2026.02.13
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1802	1 year	2025.11.04
ATTENUATOR	HP	8491B	23094	1 year	2026.02.13
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA 9170550	1 year	2026.01.13
Amplifier	SONOMA INSTRUMENT	310N	401123	1 year	2026.02.13
PREAMPLIFIER	HP	8449B	3008A00538	1 year	2025.04.30
BROADBAND AMPLIFIER	SCHWARZBECK	BBV9721	PS9721-003	1 year	2026.01.09
DC POWER SUPPLY	SORENSEN	DCS40-75E	1408A02745	1 year	2026.01.08
EMI Test Receiver	R & S	ESR7	101190	1 year	2025.07.29
Cable	-	-	#5	1 year	2025.11.01
Cable (SAC #5)	SUCOFLEX106	HUBER_SUHNER	-	0.5 year	2025.07.25
	SUCOFLEX106	HUBER_SUHNER	-		
	LH21D/2xSMA	OSI Cable	-		
Cable (SAC #6)	TCLH21D-SMSM-2.5M 0222	OSI Cable	-	0.5 year	2025.07.25
	TCLH21D-NMNM-10.0M 0222	OSI Cable	-		
	TCLH21D-SMSM-7.0M 0222	OSI Cable	-		

* 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.,	LGS53	306QCZP560949
Test Jig Board	N/A	N/A	N/A

The End.