

Prüfbericht-Nr.: <i>Test Report No.:</i>	50307090 001	Auftrags-Nr.: <i>Order No.:</i>	244177215	Seite 1 von 26 <i>Page 1 of 26</i>	
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	60051577	Auftragsdatum: <i>Order date.:</i>	10.10.2019		
Auftraggeber: <i>Client:</i>	IKEA of Sweden AB Box 702, SE-343 81 Älmhult, Sweden				
Prüfgegenstand: <i>Test item:</i>	Power Supply				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	ICPSW5-18-BI-1				
Auftrags-Inhalt: <i>Order content:</i>	EMC test				
Prüfgrundlage: <i>Test specification:</i>	FCC 47 CFR Part 15, Subpart B:2018 Class B ICES-003:2016				
Wareneingangsdatum: <i>Date of receipt:</i>	25.10.2019	Refer to the EUT photos file			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A001050649-001				
Prüfzeitraum: <i>Testing period:</i>	Refer to test report				
Ort der Prüfung: <i>Place of testing:</i>	EMC laboratory				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shanghai) Co., Ltd.				
Prüfergebnis*: <i>Test result*:</i>	Pass				
geprüft von / tested by:		kontrolliert von / reviewed by:			
<i>Jessie Xu</i>		<i>Hexiong Liu</i>			
08.01.2020	Jessie Xu/Senior project engineer	08.01.2020	Hexiong Liu/Department manager		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
Sonstiges / Other:					
FCC ID: FHO-ICPSW5-18BI-1 Test Firm Registration Number: 958801					
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>			Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested					
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

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TEST SUMMARY

4.1.1 CONDUCTED EMISSION

Result:

Passed

4.2.1 RADIATED EMISSION

Result:

Passed

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1 Test Sites

1.1 Test Facilities

Laboratory: TÜV Rheinland (Shanghai) Co., Ltd.

Address: No.177, 178, Lane 777 West Guangzhong Road, Jing'an District, Shanghai, China

The used test equipment is in accordance with CISPR 16-1 series standards for measurement of radio interference.

Refer to Clause 6 for test and measurement instruments.

2 General Product Information

2.1 Product Function and Intended Use

The EUT (equipment under test) is an ordinary power supply for household and similar use. For the further information, refer to the user's manual.

2.2 Ratings and System Details

System input : AC 100 – 240 V, 50/60 Hz, Max. 0.5 A
Output : DC 5 V 3 A, DC 9 V 2 A,
DC 12 V 1.5 A, DC 15 V 1.2 A
Protection class : II

2.3 Independent Operation Modess

The basic operation modes are: "ON" and "OFF" etc.

The test modes are following:

Mode 1	Power On with USB-C: 5 VDC 3 A
Mode 2	Power On with USB-C: 12 VDC 1.5 A
Mode 3	Power On with USB-C: 15 VDC 1.2 A

2.4 Description of interconnecting cables

None.

2.5 Noise Generating and Noise Suppressing Parts

Refer to the circuit diagram for further information.

2.6 Highest frequency generated or used in the device or on which the device operates or tunes

The highest frequency used in the EUT is less than 108 MHz.

2.7 Submitted Documents

Circuit diagram, user's manual and rating label.

3 Test Set-up and Operation Modes

3.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible emission level. The test conditions were adapted accordingly in reference to the instructions for use.

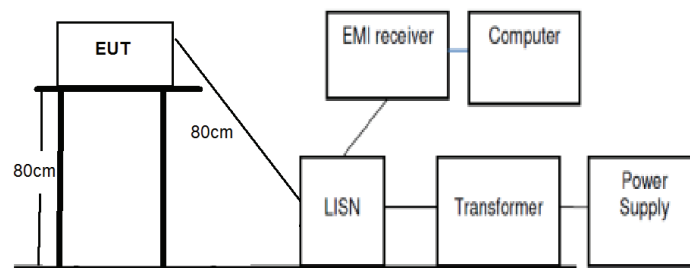
Refer to the related paragraph of this report.

The sequence of testing:

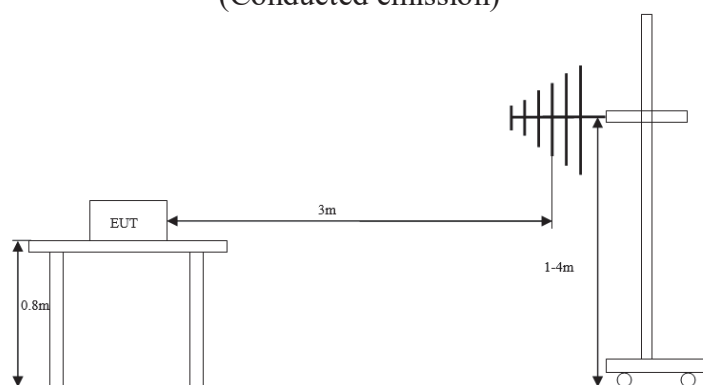
1. Radiated emission tests were performed on 24.12.2019;
2. Conducted emission tests were performed on 23.12.2019.

3.2 Equipment and cable arrangement

Block diagram for both conducted emission and radiated emission tests is as follows:



(Conducted emission)



(Radiated emission)

Also refer to photographs on clause 5 for test setups for both conducted emission test and radiated emission test.

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3.3 Test Software

No special test software was used during the tests.

3.4 Special Accessories and Auxiliary Equipment

During the tests, the matched resistor was used as load.

3.5 Countermeasures to achieve EMC Compliance

No other special measure is employed to achieve the requirement.

4 Test Results EMISSION

4.1 Emission in the Frequency Range up to 30 MHz

4.1.1 Conducted emission

Result:	Passed
Date of testing	: 23.12.2019
Test procedure	: FCC 47 CFR Part 15, Subpart B:2018, ICES-003:2016, ANSI C63.4-2014 and CISPR 16-1 series standards
Frequency range	: 0.15 – 30 MHz
Limits	: Quasi-peak limit: 0.15 - 0.5 MHz, 66 to 56 dB μ V (decrease with the logarithm of frequency); 0.5 - 5 MHz, 56 dB μ V; 5 - 30 MHz, 60 dB μ V Average limit: 0.15 - 0.5 MHz, 56 to 46 dB μ V (decrease with the logarithm of frequency); 0.5 – 5 MHz, 46 dB μ V; 5 – 30 MHz, 50 dB μ V
Bandwidth of EMI receiver for final measurement	: 9 kHz
Measurement time for final measurement	: 1 s
Kind of test site	: Shielded room
Input voltage	: AC 120 V, 60 Hz
Operational mode	: Mode 1, Mode 2 & Mode 3 as defined in clause 2.3
Ambient condition	: Temperature: 20.0 °C; Relative humidity: 47.5 %
Expanded measurement uncertainty ($k=2$)	: 3.39 dB

The measurement setup was made according to ANSI C63.4-2014 in a shielded room.

The measurement equipment like test receivers, quasi-peak detector and artificial mains network (AMN) are in compliance with CISPR 16-1 series standards.

The tested object was set-up on a wooden support. The EUT was set 0.8 m away from the AMN. The cord longer than necessary to be connected to the AMN was folded forth and back parallel so as to form a bundle with a length between 0.3 m and 0.4 m.

The disturbance voltage test was performed on the neutral line and phase line of the power supply of the EUT respectively.

The following figures and tables were those measured by an automatic measuring system. Both quasi-peak and average measurements were performed. In the following spectral diagram, Blue “◆” means Quasi-Peak Value and green “◆” means Average Value results.

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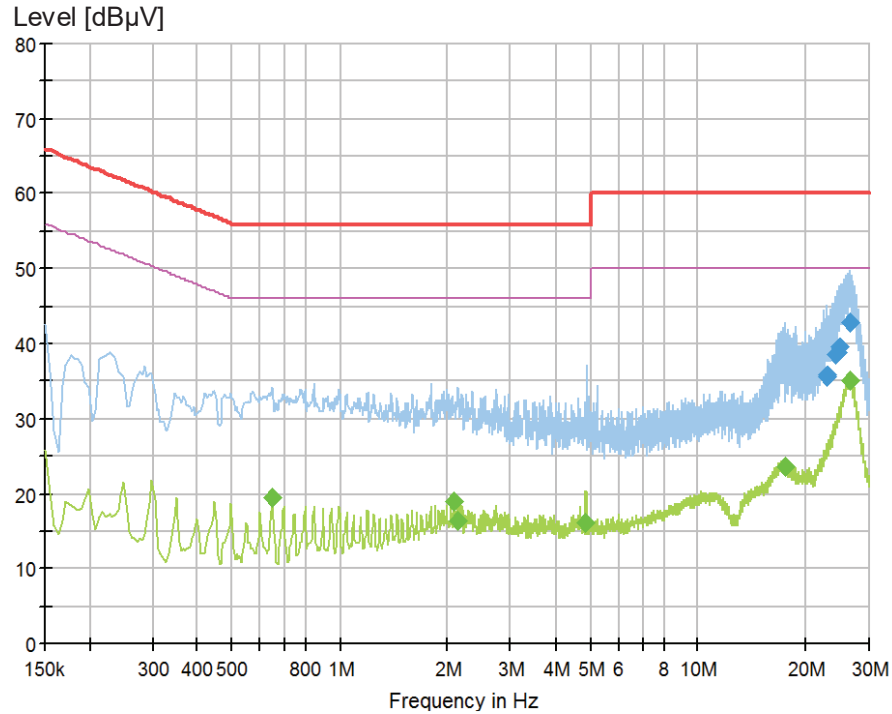
Notes on following tables of conducted emission results and conversions:

Level (dB μ V): final measurement results by using quasi-peak detector and average detector

Transd (dB): transducer factor including cable loss, insertion loss of artificial mains network and gain of pre-amplifier (if used)

Margin: Limit (dB μ V) - Level (dB μ V)

Figure 1: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L for Mode 1



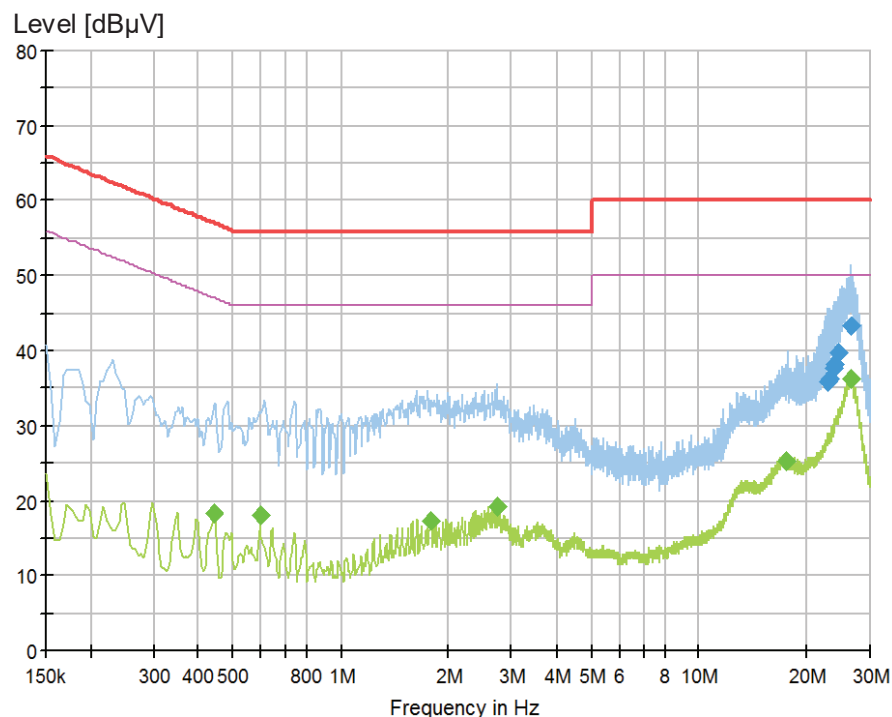
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
22.915500	35.60	60.00	24.40	1000.0	9.000	L1	ON	10.1
23.010000	35.86	60.00	24.14	1000.0	9.000	L1	ON	10.1
24.243000	38.50	60.00	21.50	1000.0	9.000	L1	ON	10.1
24.427500	38.80	60.00	21.20	1000.0	9.000	L1	ON	10.1
24.747000	39.63	60.00	20.37	1000.0	9.000	L1	ON	10.1
26.592000	42.92	60.00	17.08	1000.0	9.000	L1	ON	10.1

Final Average measurement result:

Frequency (MHz)	CAverage (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.645000	19.42	46.00	26.58	1000.0	9.000	L1	ON	9.6
2.094000	19.05	46.00	26.95	1000.0	9.000	L1	ON	9.7
2.143500	16.34	46.00	29.66	1000.0	9.000	L1	ON	9.7
4.875000	16.18	46.00	29.82	1000.0	9.000	L1	ON	9.7
17.398500	23.70	50.00	26.30	1000.0	9.000	L1	ON	10.2
26.493000	35.12	50.00	14.88	1000.0	9.000	L1	ON	10.1

Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N for Mode 1



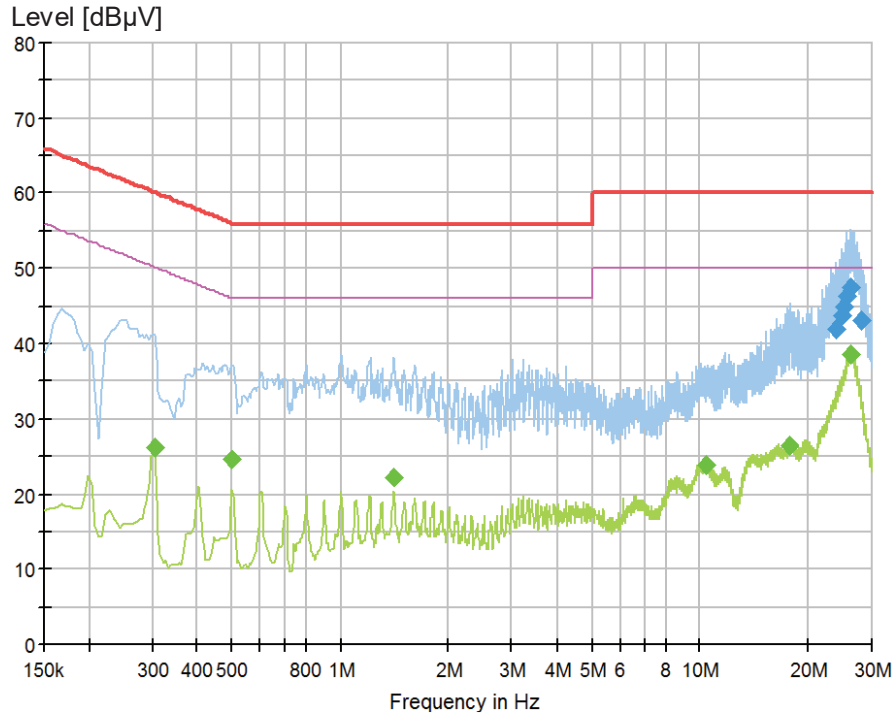
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
23.028000	35.87	60.00	24.13	1000.0	9.000	N	ON	10.2
23.145000	36.28	60.00	23.72	1000.0	9.000	N	ON	10.2
23.622000	37.58	60.00	22.42	1000.0	9.000	N	ON	10.2
23.824500	38.09	60.00	21.91	1000.0	9.000	N	ON	10.2
24.553500	39.83	60.00	20.17	1000.0	9.000	N	ON	10.2
26.556000	43.32	60.00	16.68	1000.0	9.000	N	ON	10.2

Final Average measurement result:

Frequency (MHz)	CAverage (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.442500	18.31	47.02	28.70	1000.0	9.000	N	ON	9.6
0.595500	17.98	46.00	28.02	1000.0	9.000	N	ON	9.6
1.783500	17.26	46.00	28.74	1000.0	9.000	N	ON	9.6
2.724000	19.15	46.00	26.85	1000.0	9.000	N	ON	9.6
17.520000	25.32	50.00	24.68	1000.0	9.000	N	ON	10.1
26.646000	36.18	50.00	13.82	1000.0	9.000	N	ON	10.2

Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L for Mode 2



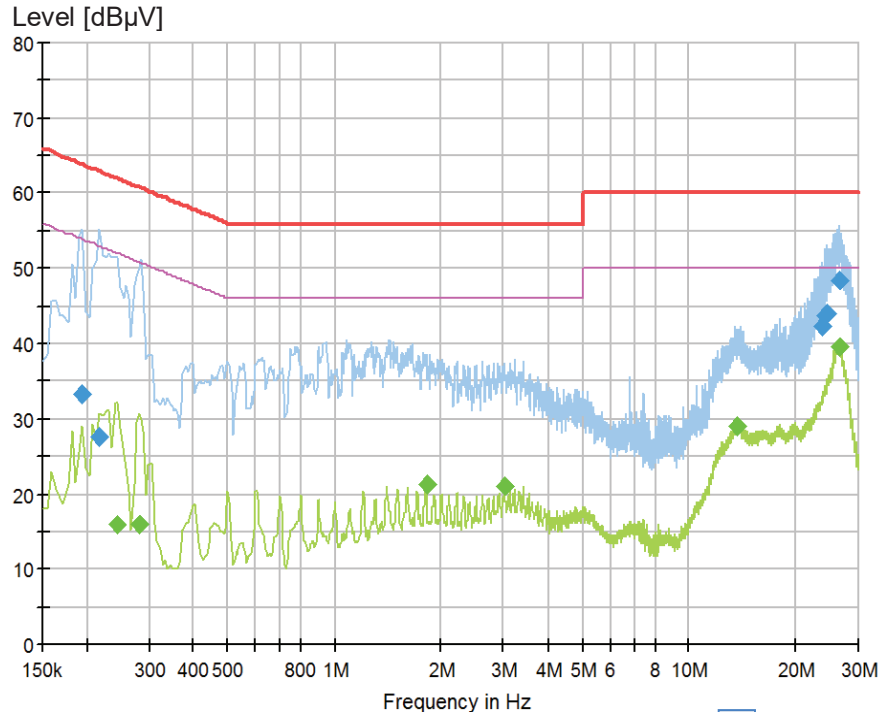
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
24.018000	41.84	60.00	18.16	1000.0	9.000	L1	ON	10.1
24.693000	43.71	60.00	16.29	1000.0	9.000	L1	ON	10.1
25.089000	45.00	60.00	15.00	1000.0	9.000	L1	ON	10.1
25.750500	46.27	60.00	13.73	1000.0	9.000	L1	ON	10.1
26.232000	47.42	60.00	12.58	1000.0	9.000	L1	ON	10.1
28.153500	43.05	60.00	16.95	1000.0	9.000	L1	ON	10.1

Final Average measurement result:

Frequency (MHz)	CAverage (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.303000	26.20	50.16	23.96	1000.0	9.000	L1	ON	9.6
0.501000	24.67	46.00	21.33	1000.0	9.000	L1	ON	9.6
1.414500	22.33	46.00	23.67	1000.0	9.000	L1	ON	9.6
10.378500	23.90	50.00	26.10	1000.0	9.000	L1	ON	9.9
17.632500	26.48	50.00	23.52	1000.0	9.000	L1	ON	10.2
26.268000	38.54	50.00	11.46	1000.0	9.000	L1	ON	10.1

Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N for Mode 2



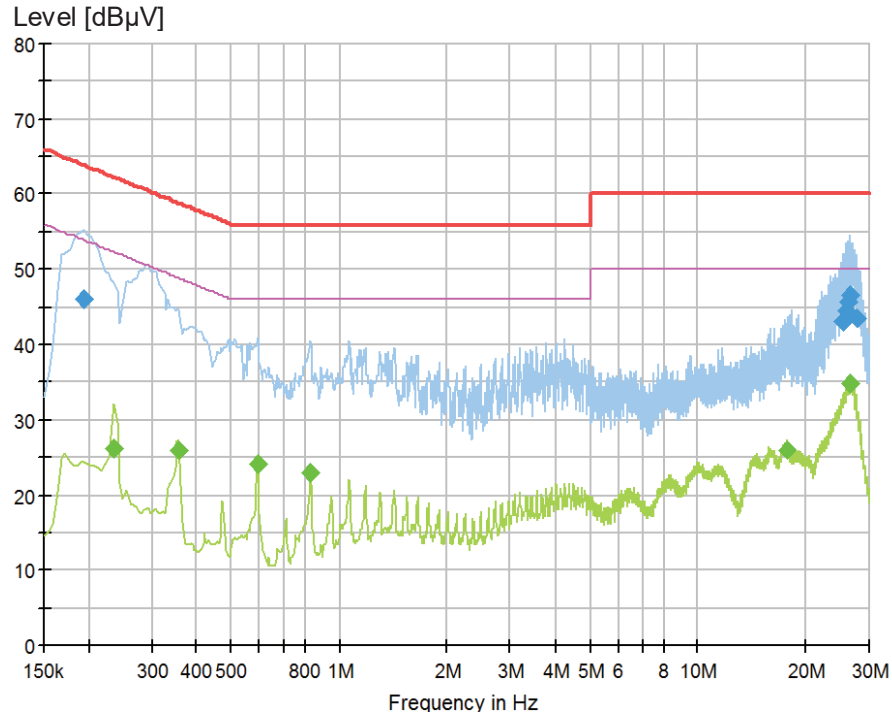
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.195000	33.22	63.82	30.60	1000.0	9.000	N	ON	9.5
0.217500	27.50	62.91	35.42	1000.0	9.000	N	ON	9.5
23.766000	42.36	60.00	17.65	1000.0	9.000	N	ON	10.2
24.333000	43.72	60.00	16.28	1000.0	9.000	N	ON	10.2
24.535500	43.98	60.00	16.02	1000.0	9.000	N	ON	10.2
26.421000	48.50	60.00	11.50	1000.0	9.000	N	ON	10.2

Final Average measurement result:

Frequency (MHz)	CAverage (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.244500	16.02	51.94	35.92	1000.0	9.000	N	ON	9.5
0.280500	16.02	50.80	34.78	1000.0	9.000	N	ON	9.5
1.815000	21.27	46.00	24.73	1000.0	9.000	N	ON	9.6
3.021000	21.07	46.00	24.93	1000.0	9.000	N	ON	9.6
13.713000	28.94	50.00	21.06	1000.0	9.000	N	ON	9.9
26.362500	39.55	50.00	10.45	1000.0	9.000	N	ON	10.2

Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L for Mode 3



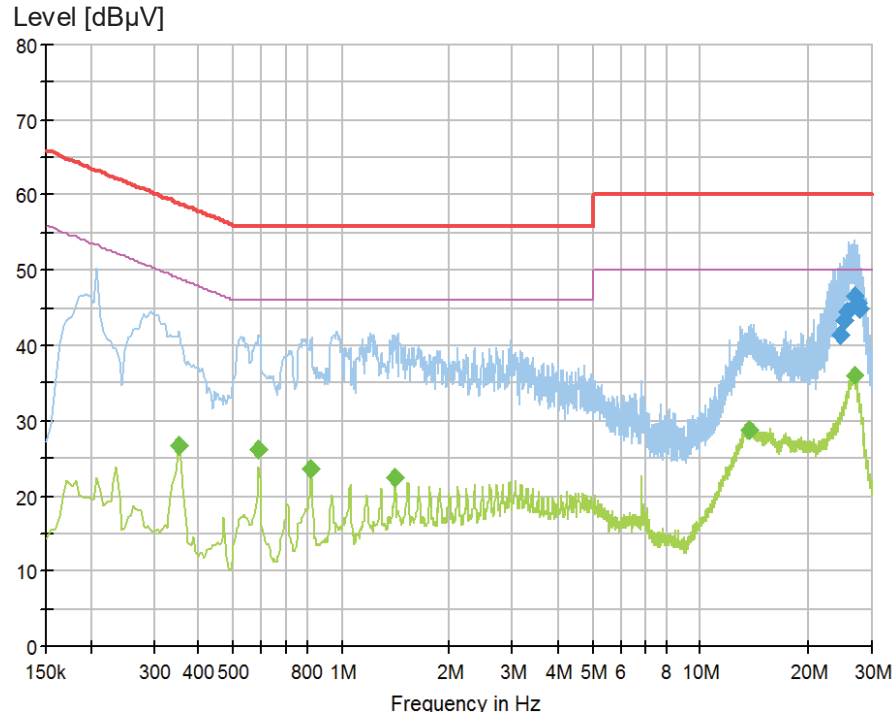
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.195000	46.18	63.82	17.64	1000.0	9.000	L1	ON	9.5
25.305000	43.16	60.00	16.84	1000.0	9.000	L1	ON	10.1
25.836000	44.42	60.00	15.58	1000.0	9.000	L1	ON	10.1
26.299500	45.70	60.00	14.30	1000.0	9.000	L1	ON	10.1
26.623500	46.47	60.00	13.53	1000.0	9.000	L1	ON	10.1
27.712500	43.50	60.00	16.50	1000.0	9.000	L1	ON	10.1

Final Average measurement result:

Frequency (MHz)	CAverage (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.235500	26.19	52.25	26.06	1000.0	9.000	L1	ON	9.5
0.357000	26.00	48.80	22.80	1000.0	9.000	L1	ON	9.6
0.591000	24.18	46.00	21.82	1000.0	9.000	L1	ON	9.6
0.829500	22.90	46.00	23.10	1000.0	9.000	L1	ON	9.6
17.592000	26.05	50.00	23.95	1000.0	9.000	L1	ON	10.2
26.403000	34.88	50.00	15.12	1000.0	9.000	L1	ON	10.1

Figure 6: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N for Mode 3



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
24.382500	41.33	60.00	18.67	1000.0	9.000	N	ON	10.2
25.165500	43.39	60.00	16.61	1000.0	9.000	N	ON	10.2
25.579500	44.51	60.00	15.49	1000.0	9.000	N	ON	10.2
26.920500	46.51	60.00	13.49	1000.0	9.000	N	ON	10.2
27.397500	45.55	60.00	14.45	1000.0	9.000	N	ON	10.2
27.672000	44.91	60.00	15.09	1000.0	9.000	N	ON	10.2

Final Average measurement result:

Frequency (MHz)	CAverage (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.352500	26.72	48.90	22.18	1000.0	9.000	N	ON	9.6
0.586500	26.28	46.00	19.72	1000.0	9.000	N	ON	9.6
0.820500	23.65	46.00	22.35	1000.0	9.000	N	ON	9.6
1.410000	22.49	46.00	23.51	1000.0	9.000	N	ON	9.6
13.708500	28.89	50.00	21.11	1000.0	9.000	N	ON	9.9
26.659500	36.07	50.00	13.93	1000.0	9.000	N	ON	10.2

4.2 Emission in the Frequency Range above 30 MHz

4.2.1 Radiated emission

Result:	Passed
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Date of testing	: 24.12.2019
Test procedure	: FCC 47 CFR Part 15, Subpart B:2018, ICES-003:2016, ANSI C63.4-2014 and CISPR 16-1 series standards
Frequency range	: 30 – 1000 MHz Note: The highest frequency in the EUT is 125 kHz. According to FCC Part 15 subpart B §15.33 (b) (1), the upper frequency for radiated emission measurement is 1000 MHz.
Limits	: Quasi-peak limits (3 m distance): 30 – 88 MHz, 40 dB μ V/m; 88 – 216 MHz, 43.5 dB μ V/m; 216 – 960 MHz, 46 dB μ V/m; Above 960 MHz, 54 dB μ V/m.
Bandwidth of EMI receiver for final measurement	: 120 kHz
Measurement time for final measurement	: 1 s
Kind of test site	: Semi-anechoic chamber
Operational mode	: Mode 1, Mode 2 & Mode 3 as defined in clause 2.3
Ambient condition	: Temperature: 20.2 °C; Relative humidity: 47.9 %
Expanded measurement uncertainty ($k=2$)	: 5.49 dB

The radiated disturbance test was carried out in a semi-anechoic chamber. The test distance from the receiving antenna to the EUT is 3 m. The normalized site attenuation of the semi-anechoic chamber is regularly calibrated to ensure the radiated disturbance test results are valid. During the test, the EUT was placed on a 0.8 m high wooden table above the reference ground plane. The wooden table was rotated 360° around and the height of the antenna was varied from 1 m to 4 m to find the maximum disturbance. The test was performed with the antenna both in its horizontal and vertical polarizations.

The following figures and tables were those measured by an automatic measurement system. A preview test was firstly performed with peak detector. The final test was performed with quasi-peak at those critical frequencies during the preview test. In the following spectral diagram, “x” means quasi-peak test results.

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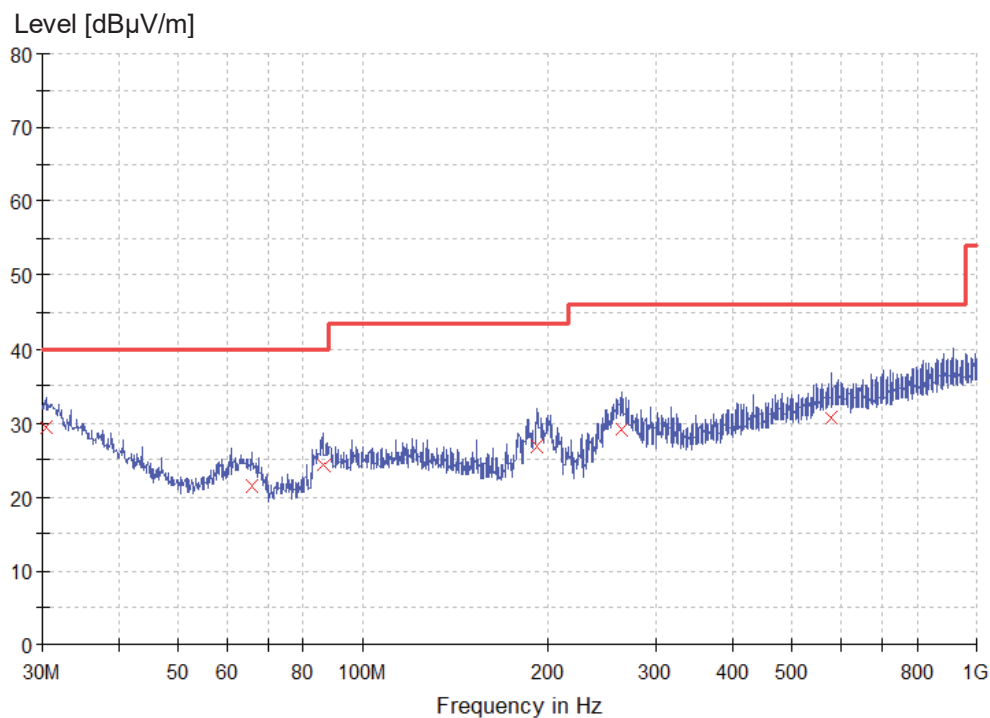
Notes on following tables of radiated emission results and conversions:

QuasiPeak (dB μ V/m): final measurement results by using quasi-peak detector

Corr. (dB): correction factor including: antenna factor, cable loss, and gain of pre-amplifier (if used)

Margin: Limit (dB μ V/m) - QuasiPeak (dB μ V/m)

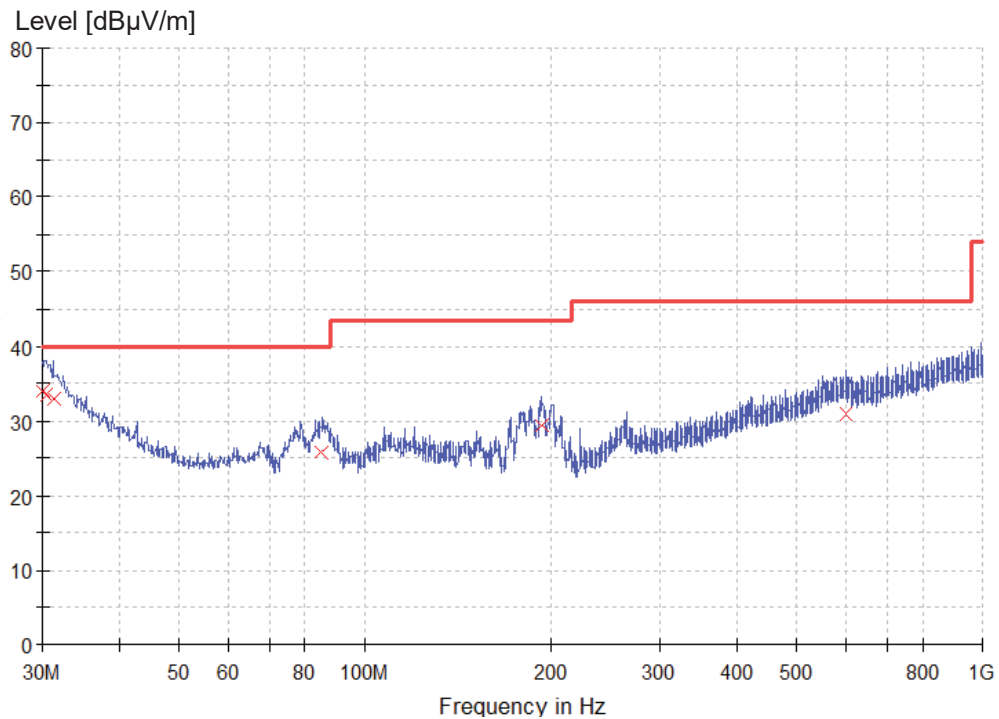
Figure 7: Spectral Diagrams and measurement results, horizontal polarization (30 MHz to 1 GHz) for Mode 1



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB µ V/m)
30.360000	29.3	1000.0	120.000	120.0	H	90.0	25.2	10.7	40.0
65.880000	21.6	1000.0	120.000	100.0	H	-135.0	12.7	18.4	40.0
86.120000	24.2	1000.0	120.000	150.0	H	180.0	15.1	15.8	40.0
192.600000	26.8	1000.0	120.000	100.0	H	0.0	15.8	16.7	43.5
263.160000	29.1	1000.0	120.000	150.0	H	-45.0	21.5	16.9	46.0
581.080000	30.6	1000.0	120.000	100.0	H	135.0	26.6	15.4	46.0

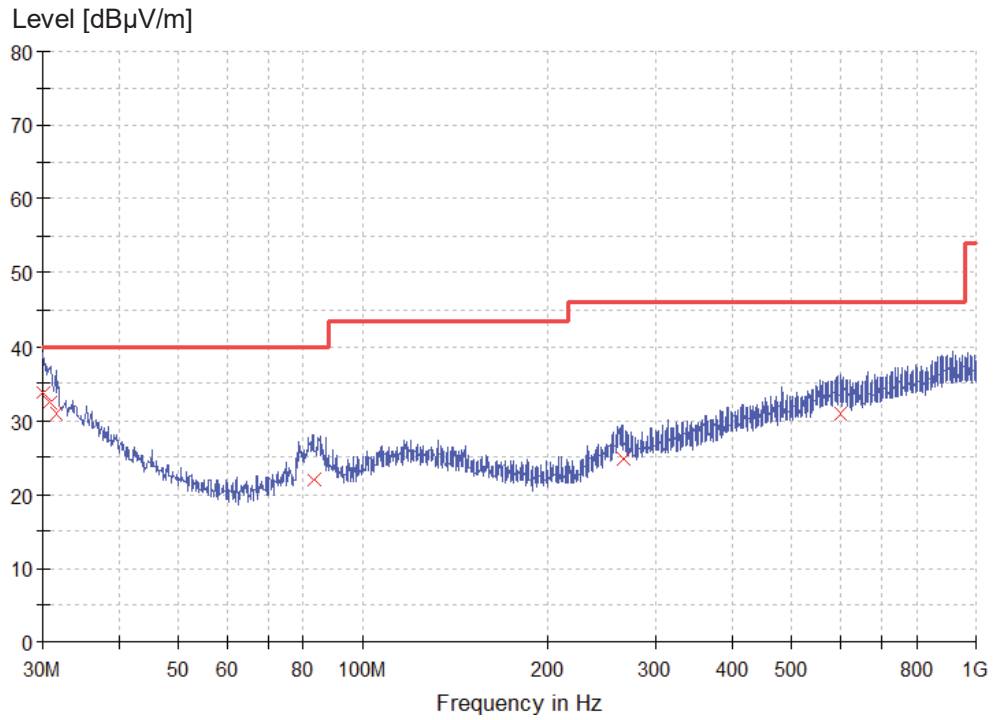
Figure 8: Spectral Diagrams and measurement results, vertical polarization (30 MHz to 1 GHz) for Mode 1



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB µ V/m)
30.000000	33.9	1000.0	120.000	115.0	V	39.0	25.4	6.1	40.0
30.480000	33.5	1000.0	120.000	100.0	V	-168.0	25.1	6.5	40.0
31.200000	32.9	1000.0	120.000	120.0	V	42.0	24.7	7.1	40.0
84.920000	25.8	1000.0	120.000	100.0	V	-90.0	14.7	14.2	40.0
193.320000	29.4	1000.0	120.000	200.0	V	135.0	15.8	14.1	43.5
599.400000	31.1	1000.0	120.000	100.0	V	0.0	26.8	15.0	46.0

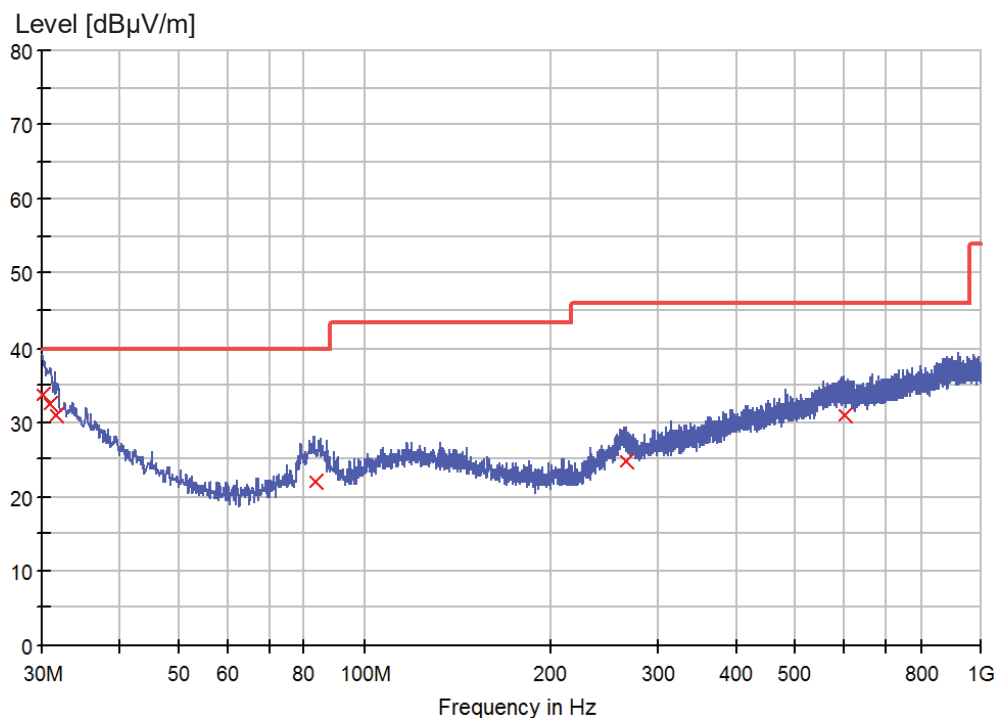
Figure 9: Spectral Diagrams and measurement results, horizontal polarization (30 MHz to 1 GHz) for Mode 2



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB µ V/m)
30.363750	29.3	1000.0	120.000	115.0	H	45.0	25.2	10.7	40.0
32.425000	28.2	1000.0	120.000	120.0	H	-90.0	24.1	11.9	40.0
86.138750	21.6	1000.0	120.000	100.0	H	135.0	15.1	18.4	40.0
203.145000	24.8	1000.0	120.000	150.0	H	-180.0	16.6	18.7	43.5
317.120000	28.1	1000.0	120.000	100.0	H	0.0	20.7	17.9	46.0
574.897500	31.0	1000.0	120.000	200.0	H	180.0	26.6	15.0	46.0

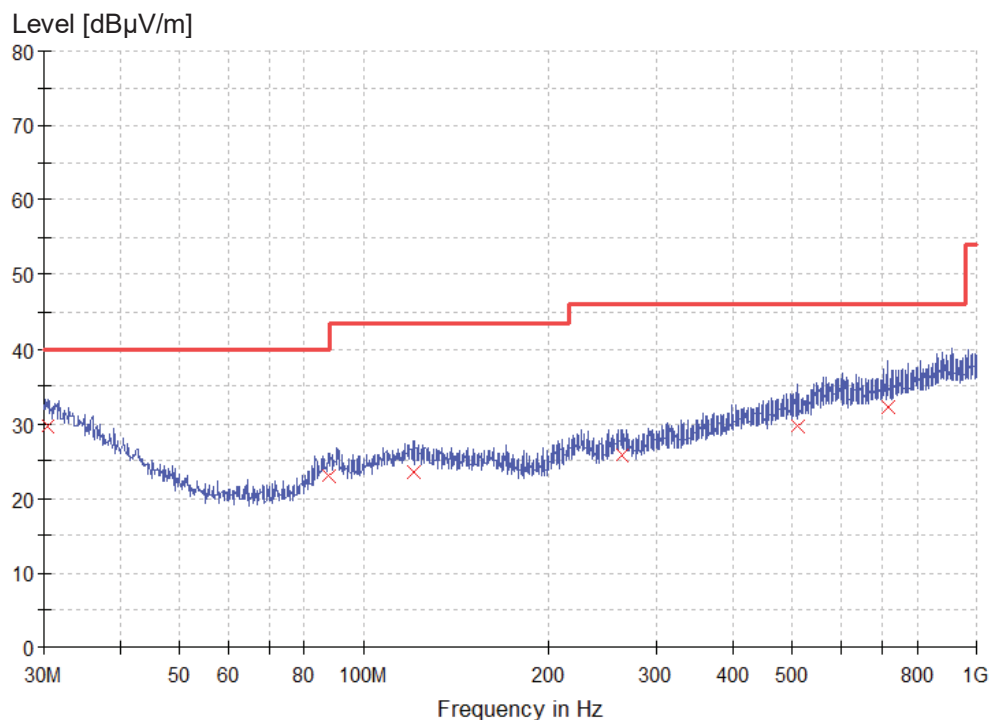
Figure 10: Spectral Diagrams and measurement results, vertical polarization (30 MHz to 1 GHz) for Mode 2



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB µ V/m)
30.000000	33.8	1000.0	120.000	120.0	V	-96.0	25.4	6.2	40.0
30.840000	32.3	1000.0	120.000	115.0	V	117.0	24.9	7.7	40.0
31.440000	30.9	1000.0	120.000	100.0	V	-172.0	24.6	9.1	40.0
83.000000	22.0	1000.0	120.000	150.0	V	45.0	14.3	18.1	40.0
265.840000	24.9	1000.0	120.000	200.0	V	-90.0	21.2	21.1	46.0
599.280000	31.0	1000.0	120.000	100.0	V	180.0	26.8	15.0	46.0

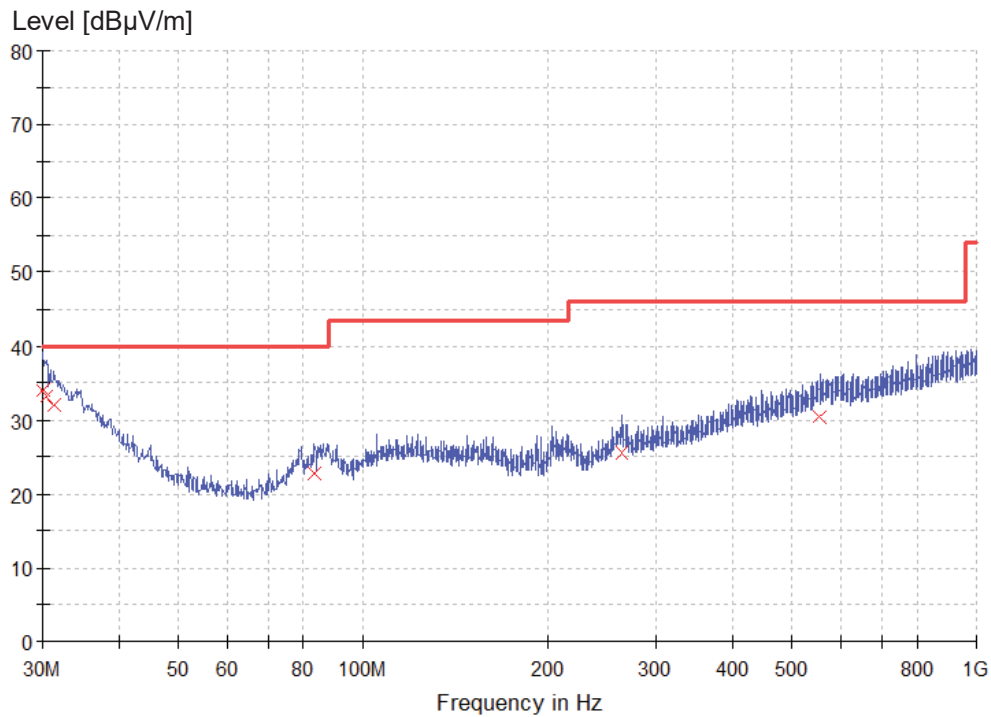
Figure 11: Spectral Diagrams and measurement results, horizontal polarization (30 MHz to 1 GHz) for Mode 3



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB µ V/m)
30.363750	29.7	1000.0	120.000	100.0	H	45.0	25.2	10.3	40.0
87.593750	22.9	1000.0	120.000	120.0	H	-135.0	15.3	17.1	40.0
120.331250	23.5	1000.0	120.000	100.0	H	0.0	19.3	20.0	43.5
264.255000	25.8	1000.0	120.000	115.0	H	90.0	21.4	20.2	46.0
510.513750	29.7	1000.0	120.000	100.0	H	-180.0	25.2	16.3	46.0
716.517500	32.2	1000.0	120.000	150.0	H	135.0	27.3	13.8	46.0

Figure 12: Spectral Diagrams and measurement results, vertical polarization (30 MHz to 1 GHz) for Mode 3



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dB µ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB µ V/m)
30.000000	33.9	1000.0	120.000	100.0	V	79.0	25.4	6.1	40.0
30.360000	33.2	1000.0	120.000	115.0	V	-115.0	25.2	6.8	40.0
31.320000	32.1	1000.0	120.000	120.0	V	135.0	24.7	7.9	40.0
83.480000	22.7	1000.0	120.000	100.0	V	0.0	14.5	17.3	40.0
264.880000	25.7	1000.0	120.000	150.0	V	-90.0	21.3	20.3	46.0
554.160000	30.4	1000.0	120.000	200.0	V	180.0	26.6	15.6	46.0

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5 Photographs of the Test Set-Up

Refer to the test setup file

6 List of Test and Measurement Instruments

Equip.	Description	Model	Manufacturer	Due Date DD.MM.YYYY	Cal. interval
1811380	EMI test receiver	ESIB26	Rohde&Schwarz	19.04.2020	1 year
1811403	Artificial mains network	ENV216	Rohde&Schwarz	17.09.2020	1 year
1824845	EMC measurement software	EMC32 (Ver 10.20.01)	Rohde&Schwarz	N/A	N/A
1811378	3m modified semi-anechoic chamber	SAC3	Frankonia	14.05.2022	3 years
1811391	EMI test receiver	ESCI	Rohde&Schwarz	01.11.2020	1 year
1811425	Bilog antenna	CBL 6112D	Teseq	14.02.2020	3 years

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End of test report