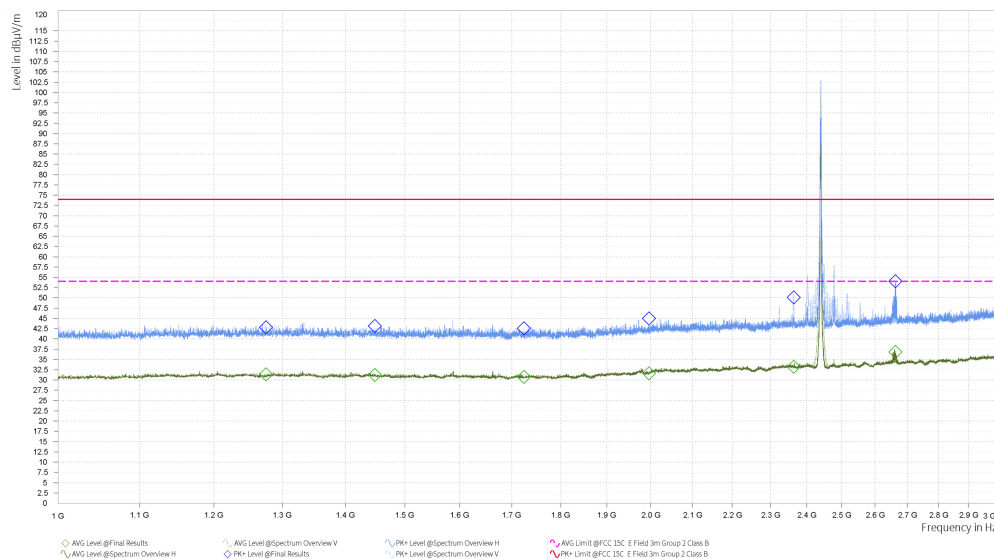


Frequency (MHz)	MaxPeak (dBμV/m)	MaxPeak Limit (dBμV/m)	MaxPeak Margin (dB)	Average (dBμV/m)	Average Limit (dBμV/m)	Average Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Height (m)	Corr. (dB/m)
1,335.250	43.10	74.00	30.90	31.40	54.00	22.60	1.000	V	78.1	1.00	-3.37
1,505.250	42.76	74.00	31.24	30.87	54.00	23.13	1.000	H	51.1	2.00	-3.29
1,664.000	46.04	74.00	27.96	32.47	54.00	21.53	1.000	H	232.2	1.00	-2.78
1,972.250	43.58	74.00	30.42	31.95	54.00	22.05	1.000	V	139.8	1.00	-1.04
2,325.000	45.17	74.00	28.83	32.97	54.00	21.03	1.000	V	167.6	1.00	0.31
2,656.000	56.84	74.00	17.16	37.77	54.00	16.23	1.000	H	329.9	1.00	1.51
16,811.250	56.64	74.00	17.36	48.56	54.00	5.44	1.000	V	87.5	2.00	5.40

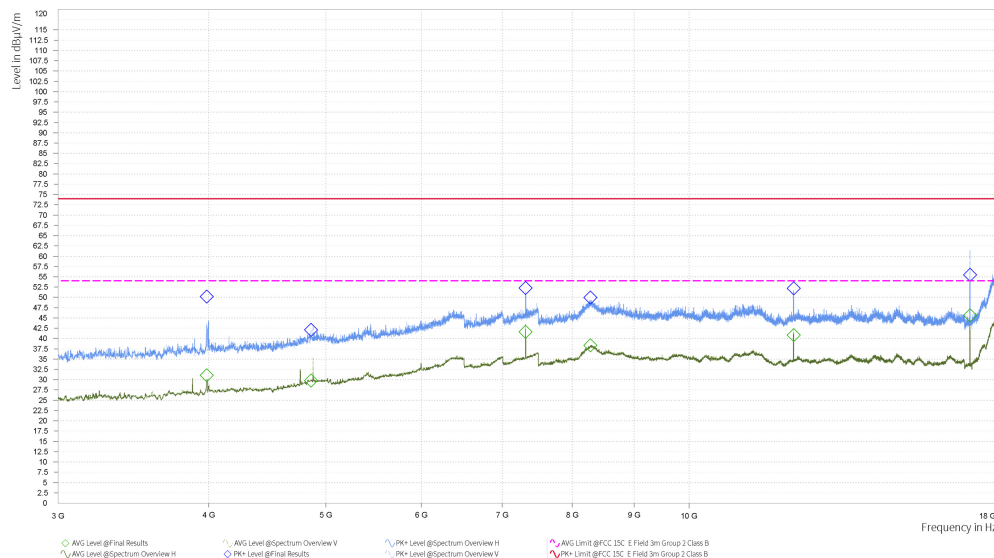
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 19



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



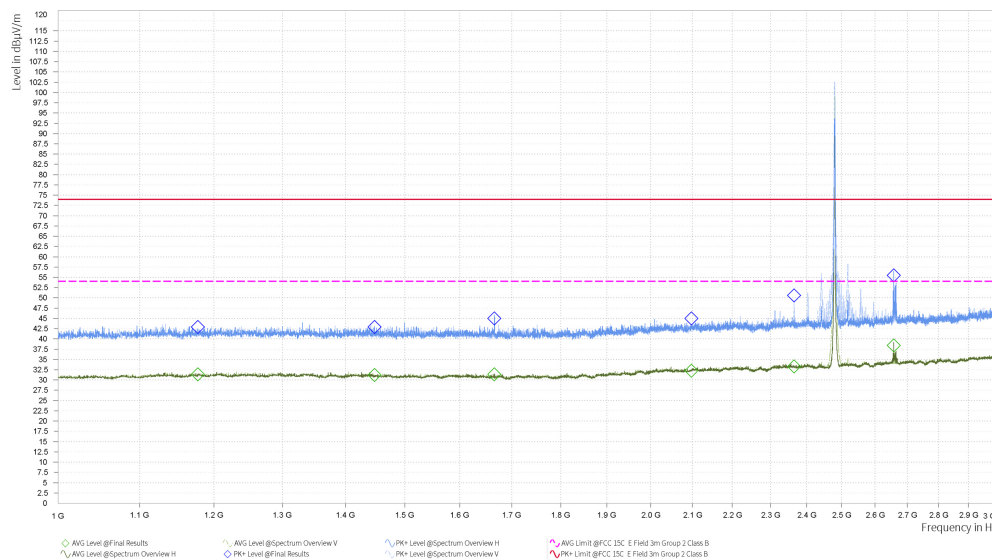
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	MaxPeak Limit (dBμV/m)	MaxPeak Margin (dB)	Average (dBμV/m)	Average Limit (dBμV/m)	Average Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Height (m)	Corr. (dB/m)
1,275.500	42.79	74.00	31.21	31.37	54.00	22.63	1.000	H	170.9	1.00	-3.62
1,448.750	43.18	74.00	30.82	31.25	54.00	22.75	1.000	V	230.4	1.00	-3.20
1,724.500	42.55	74.00	31.45	30.78	54.00	23.22	1.000	V	121	1.00	-2.83
1,996.250	44.95	74.00	29.05	31.66	54.00	22.34	1.000	V	264.8	1.00	-0.93
2,364.250	50.11	74.00	23.89	33.23	54.00	20.77	1.000	V	216.8	1.00	0.38
2,663.000	54.02	74.00	19.98	36.84	54.00	17.16	1.000	H	340.1	2.00	1.51
17,081.250	55.47	74.00	18.53	45.63	54.00	8.37	1.000	V	87.7	2.00	6.52

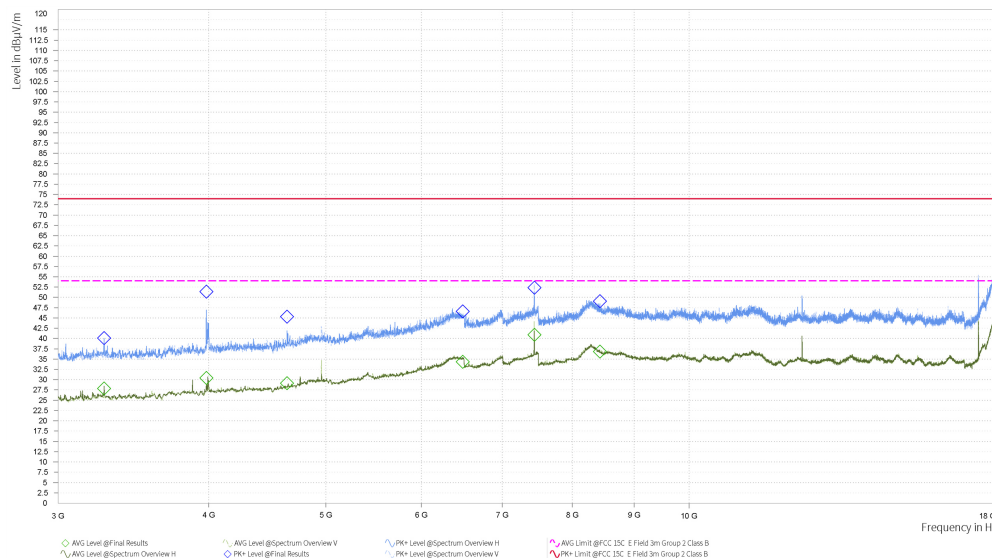
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 39



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



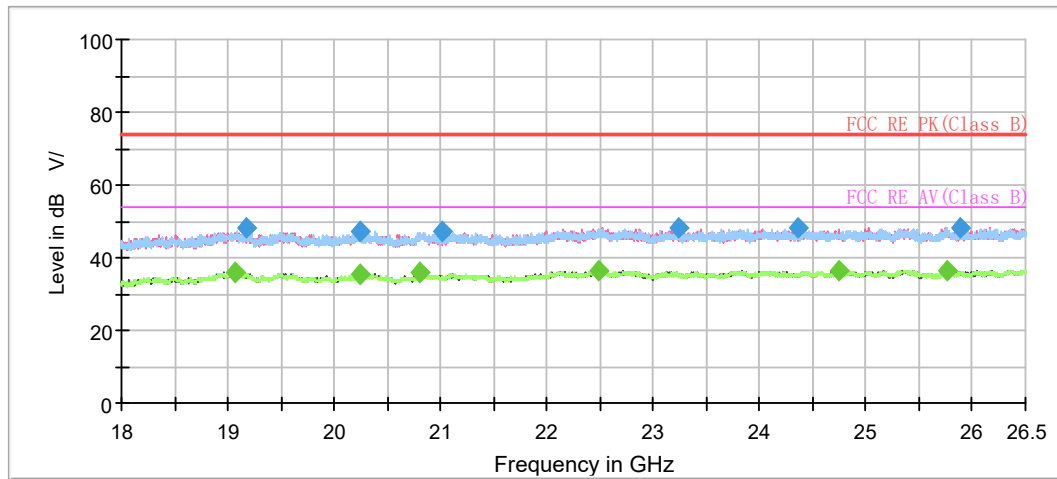
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	MaxPeak Limit (dBμV/m)	MaxPeak Margin (dB)	Average (dBμV/m)	Average Limit (dBμV/m)	Average Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Height (m)	Corr. (dB/m)
1,177.750	42.92	74.00	31.08	31.37	54.00	22.63	1.000	V	0	1.00	-3.72
1,447.750	42.90	74.00	31.10	31.22	54.00	22.78	1.000	H	212.5	1.00	-3.19
1,666.000	44.97	74.00	29.03	31.39	54.00	22.61	1.000	H	231.2	2.00	-2.80
2,097.250	45.02	74.00	28.98	32.29	54.00	21.71	1.000	H	36.3	2.00	-0.57
2,365.500	50.60	74.00	23.40	33.34	54.00	20.66	1.000	V	93.4	1.00	0.37
2,657.500	55.49	74.00	18.51	38.43	54.00	15.57	1.000	H	329.1	1.00	1.51
1,177.750	42.92	74.00	31.08	31.37	54.00	22.63	1.000	V	0	1.00	-3.72

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 26.5GHz was performed in all modes with all channels, Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19069.937500	---	35.82	54.00	18.18	500.0	100.0	H	170.0	-3.8
19170.875000	48.01	---	74.00	25.99	500.0	100.0	V	4.0	-4.0
20242.937500	---	35.54	54.00	18.46	500.0	100.0	H	110.0	-4.0
20247.187500	47.22	---	74.00	26.78	500.0	200.0	H	160.0	-3.9
20801.812500	---	35.85	54.00	18.15	500.0	100.0	H	235.0	-3.9
21005.812500	47.00	---	74.00	27.00	500.0	100.0	H	208.0	-3.8
22491.187500	---	36.58	54.00	17.42	500.0	200.0	H	85.0	-2.5
23234.937500	48.20	---	74.00	25.80	500.0	100.0	H	336.0	-2.4
24363.312500	48.02	---	74.00	25.98	500.0	100.0	H	97.0	-1.9
24749.000000	---	36.28	54.00	17.72	500.0	200.0	H	294.0	-1.7
25756.250000	---	36.65	54.00	17.35	500.0	200.0	H	49.0	-1.0
25894.375000	48.36	---	74.00	25.64	500.0	200.0	H	112.0	-1.1

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

5.7. Conducted Emission

Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	20% ~ 80%

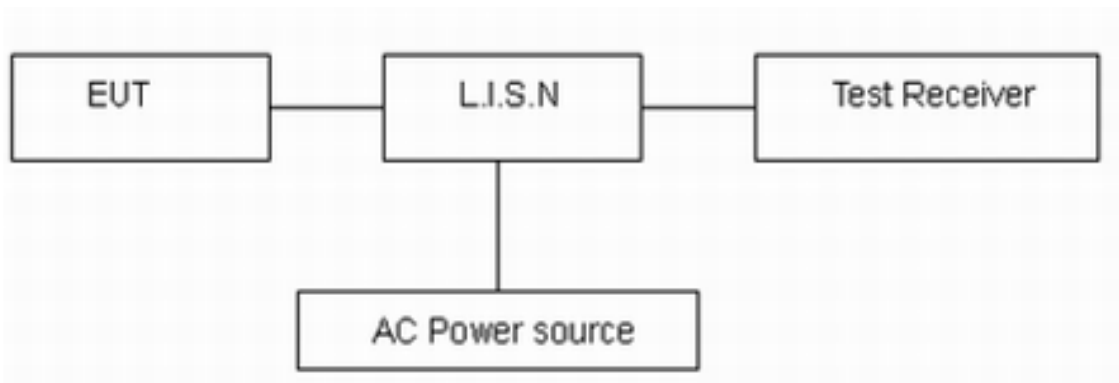
Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz.

The measurement result should include both L line and N line.

The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 120V/60Hz.

Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

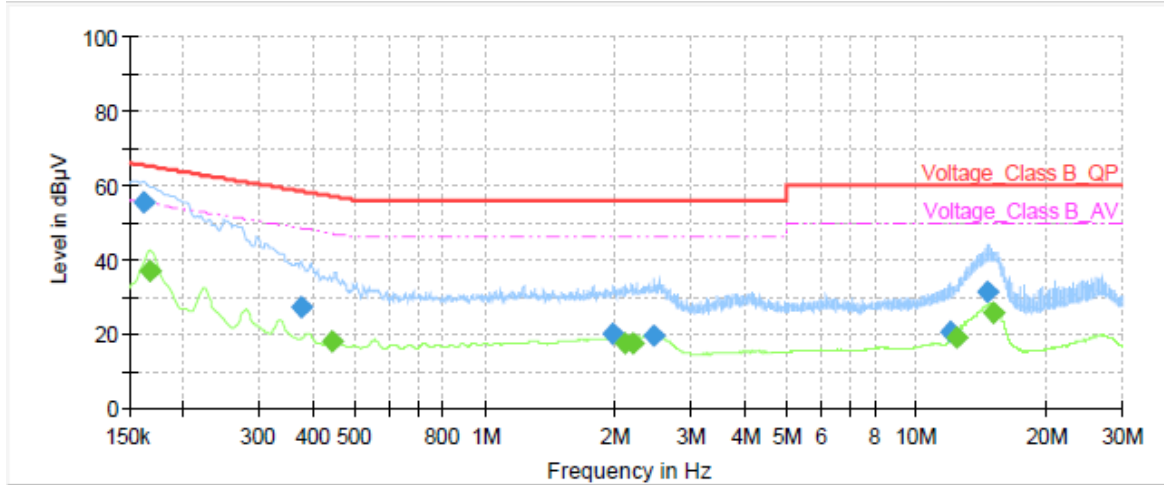
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

Test Results:

Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

Bluetooth LE

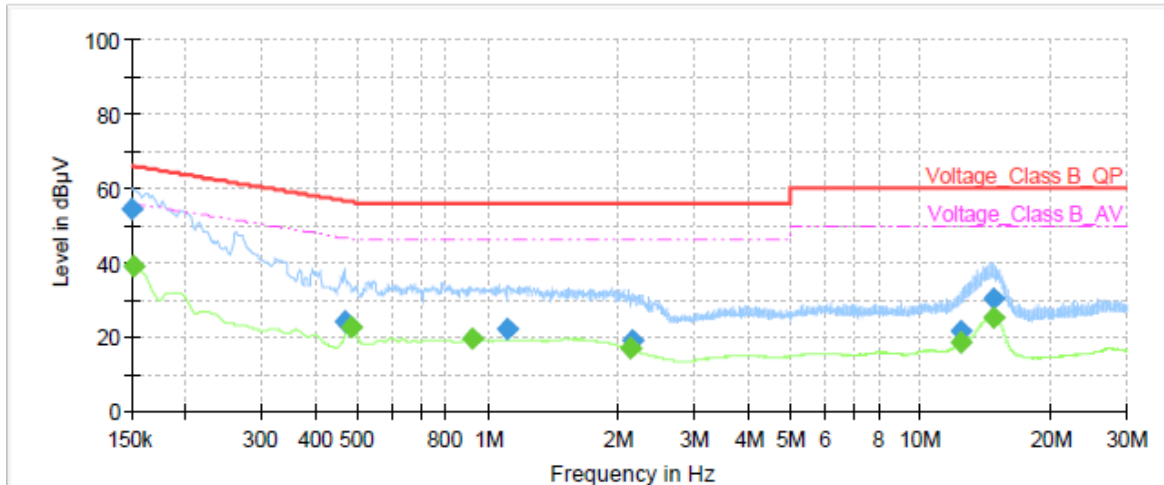
During the test, the Conducted Emission was performed in all modes with all channels, Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	55.18	---	65.40	10.22	1000.0	9.000	L1	ON	21.0
0.17	---	36.68	55.06	18.38	1000.0	9.000	L1	ON	21.0
0.38	27.30	---	58.39	31.09	1000.0	9.000	L1	ON	21.0
0.44	---	17.88	46.97	29.09	1000.0	9.000	L1	ON	20.9
1.99	20.00	---	56.00	36.00	1000.0	9.000	L1	ON	19.7
2.11	---	17.38	46.00	28.62	1000.0	9.000	L1	ON	19.7
2.20	---	17.38	46.00	28.62	1000.0	9.000	L1	ON	19.7
2.47	19.33	---	56.00	36.67	1000.0	9.000	L1	ON	19.6
11.98	20.61	---	60.00	39.39	1000.0	9.000	L1	ON	19.6
12.39	---	18.99	50.00	31.01	1000.0	9.000	L1	ON	19.6
14.58	31.27	---	60.00	28.73	1000.0	9.000	L1	ON	19.6
15.01	---	25.52	50.00	24.48	1000.0	9.000	L1	ON	19.6

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	54.31	---	66.00	11.69	1000.0	9.000	N	ON	21.0
0.15	---	38.87	55.88	17.01	1000.0	9.000	N	ON	21.0
0.47	23.89	---	56.60	32.71	1000.0	9.000	N	ON	20.9
0.48	---	22.78	46.33	23.55	1000.0	9.000	N	ON	20.9
0.92	---	19.38	46.00	26.62	1000.0	9.000	N	ON	20.3
1.11	22.08	---	56.00	33.92	1000.0	9.000	N	ON	20.2
2.12	---	16.93	46.00	29.07	1000.0	9.000	N	ON	19.7
2.16	18.74	---	56.00	37.26	1000.0	9.000	N	ON	19.7
12.36	21.29	---	60.00	38.71	1000.0	9.000	N	ON	19.6
12.40	---	18.57	50.00	31.43	1000.0	9.000	N	ON	19.6
14.75	---	25.11	50.00	24.89	1000.0	9.000	N	ON	19.6
14.77	30.02	---	60.00	29.98	1000.0	9.000	N	ON	19.6

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Power sensor	R&S	NRP18S	101954	2024-05-07	2025-05-06
Spectrum Analyzer	KEYSIGHT	N9020A	MY51330870	2024-05-07	2025-05-06
Unwanted Emission					
EMI Test Receiver	R&S	ESCI3	100948	2024-05-07	2025-05-06
EMI Test Receiver	R&S	ESR	102720	2024-05-07	2025-05-06
EMI Test Receiver	R&S	ESR	102721	2024-05-07	2025-05-06
Signal Analyzer	R&S	FSV3044	103495	2024-05-07	2025-05-06
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2023-07-14	2026-07-13
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	01111	2022-10-25	2025-10-24
Horn Antenna	R&S	BBHA9120D	02728	2023-09-19	2026-09-18
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Software	R&S	EMC32	9.26.01	/	/
Software	R&S	ELEKTRA	5.00.2	/	/
Conducted Emission					
Artificial main network	R&S	ENV216	102191	2022-12-10	2024-12-09
EMI Test Receiver	R&S	ESR	101667	2024-05-07	2025-05-06
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

***** END OF REPORT *****