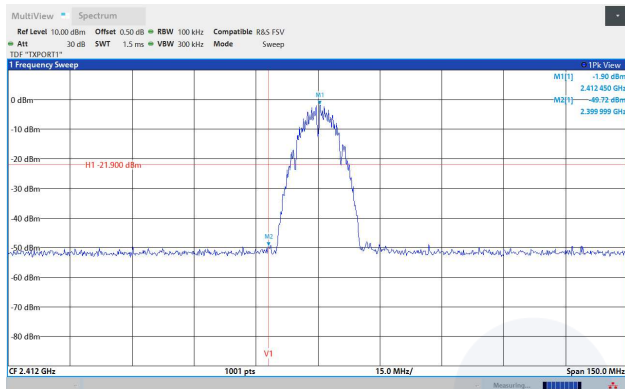


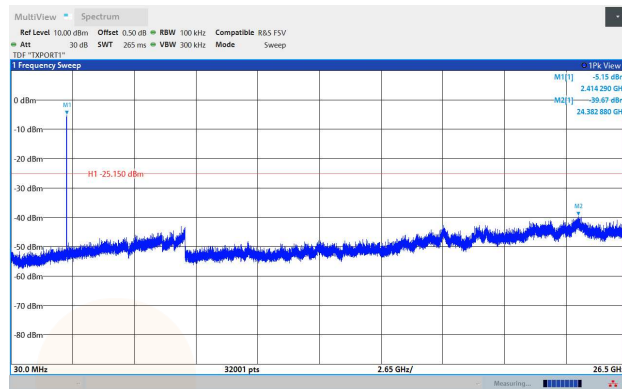
Test results

802.11b

Conducted band-edge / 2 412 MHz



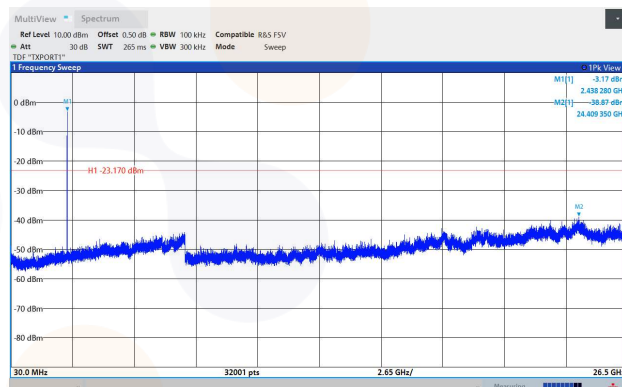
Conducted spurious / 2 412 MHz



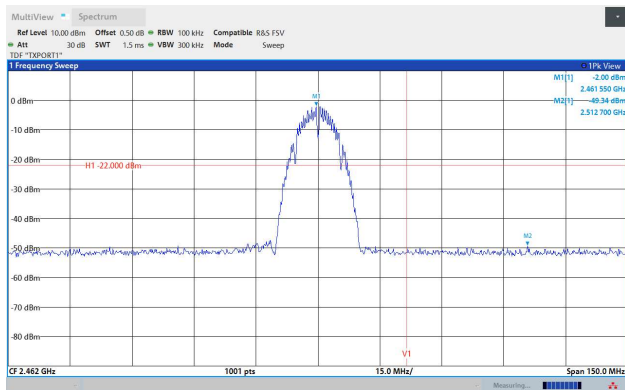
Conducted band-edge / 2 437 MHz

Blank

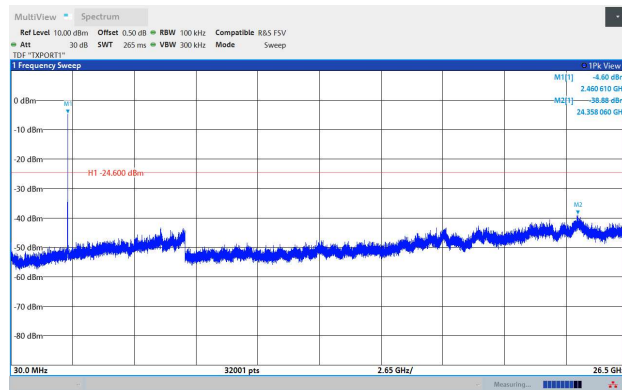
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

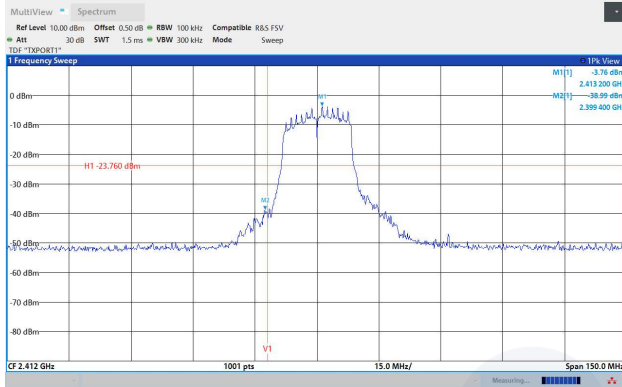


Conducted spurious / 2 462 MHz

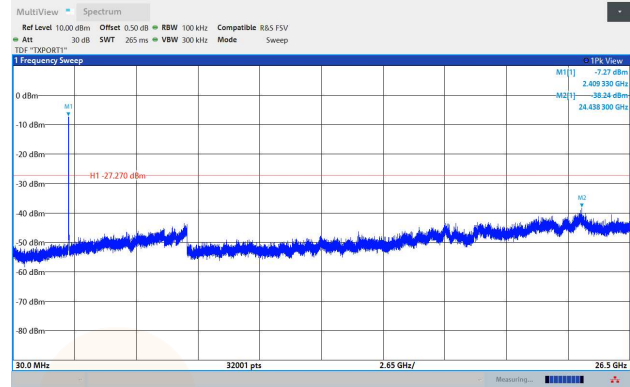


802.11g

Conducted band-edge / 2 412 MHz



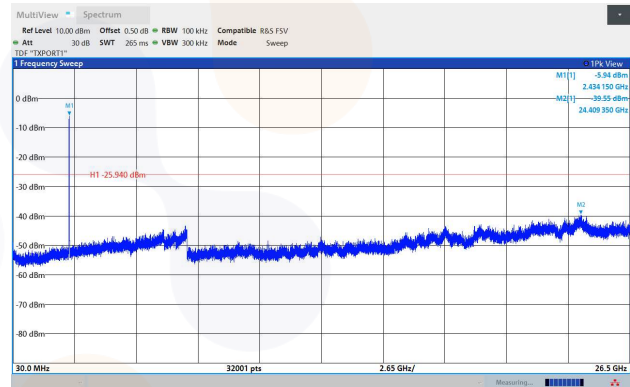
Conducted spurious / 2 412 MHz



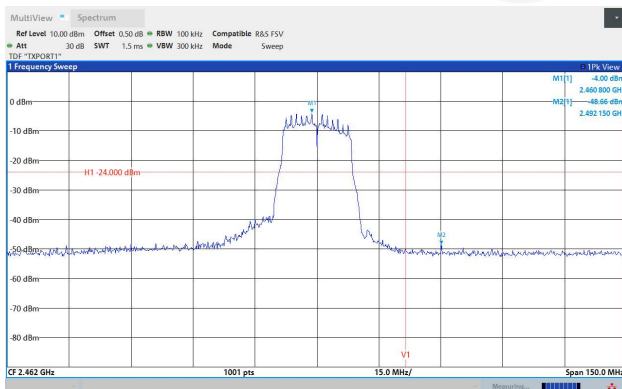
Conducted band-edge / 2 437 MHz

Blank

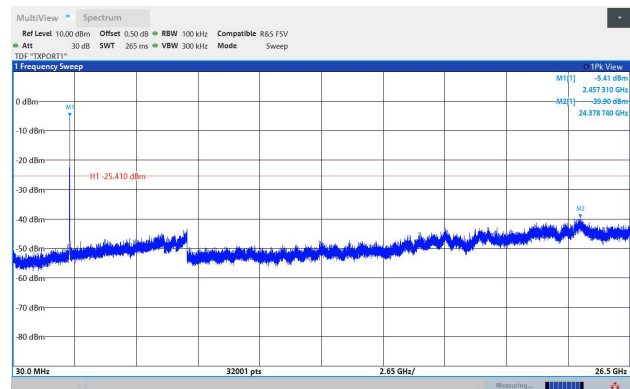
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

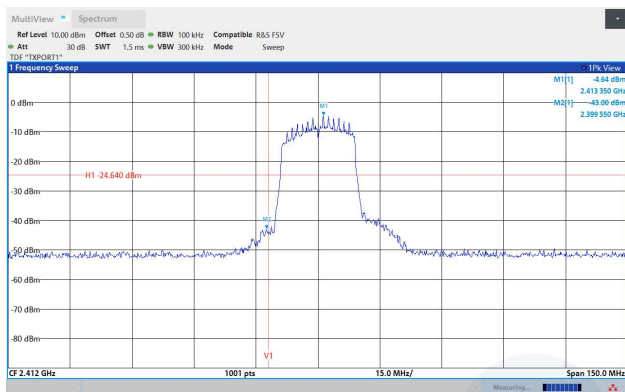


Conducted spurious / 2 462 MHz

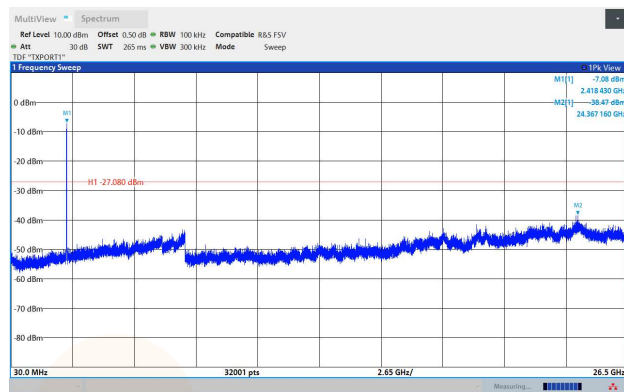


802.11n_HT20

Conducted band-edge / 2 412 MHz



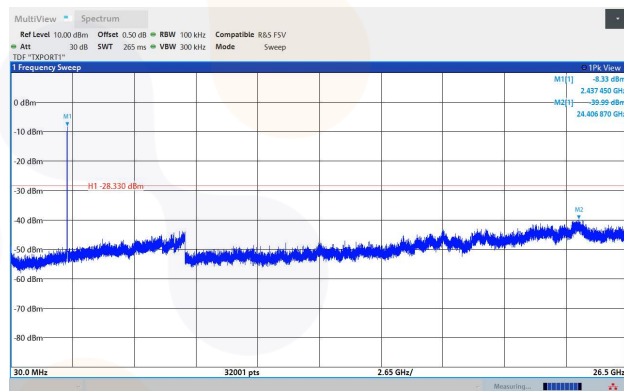
Conducted spurious / 2 412 MHz



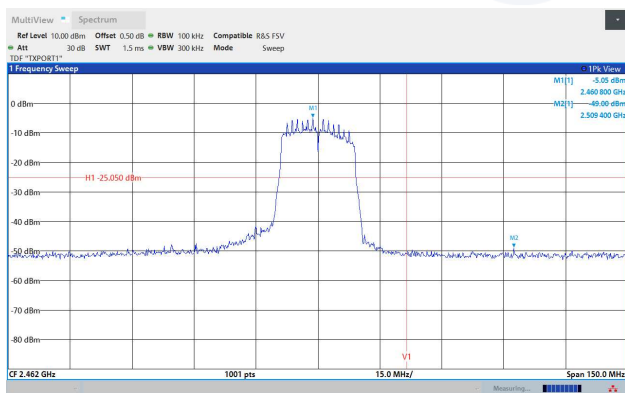
Conducted band-edge / 2 437 MHz

Blank

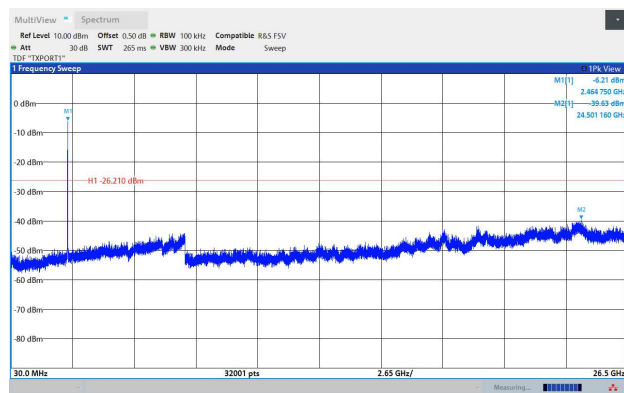
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

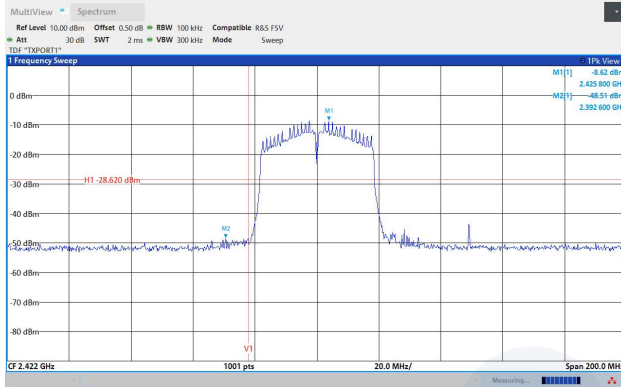


Conducted spurious / 2 462 MHz

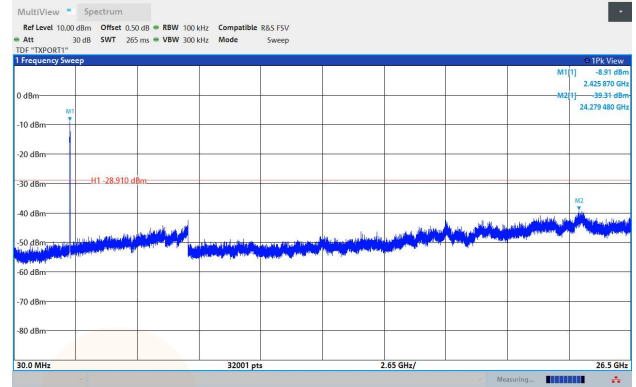


802.11n_HT40

Conducted band-edge / 2 422 MHz



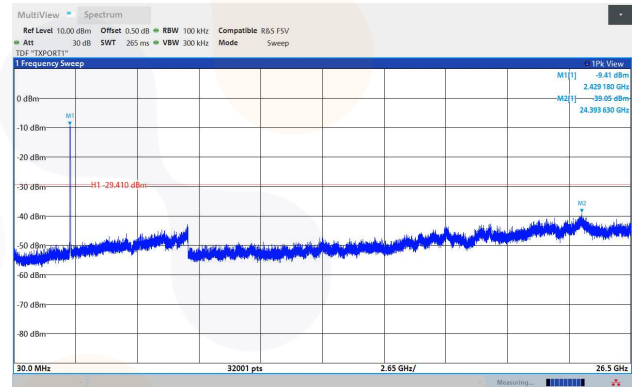
Conducted spurious / 2 422 MHz



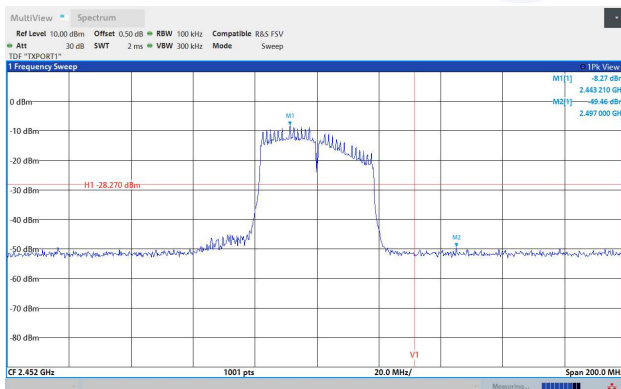
Conducted band-edge / 2 437 MHz

Blank

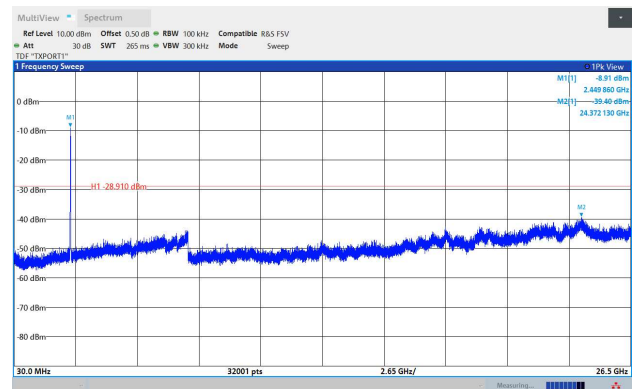
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 452 MHz

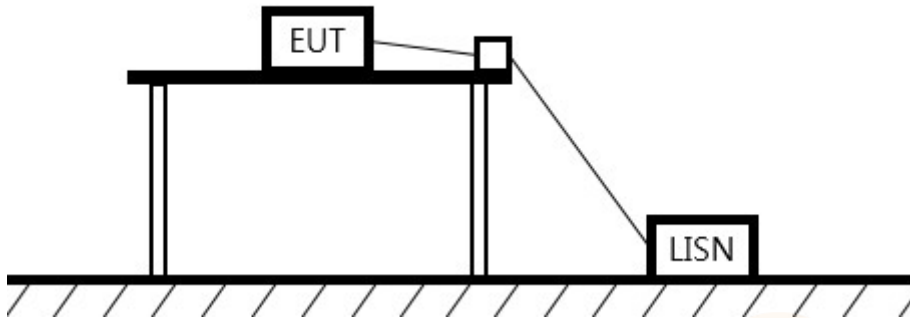


Conducted spurious / 2 452 MHz



7.6. AC Conducted emission

Test setup



Limit

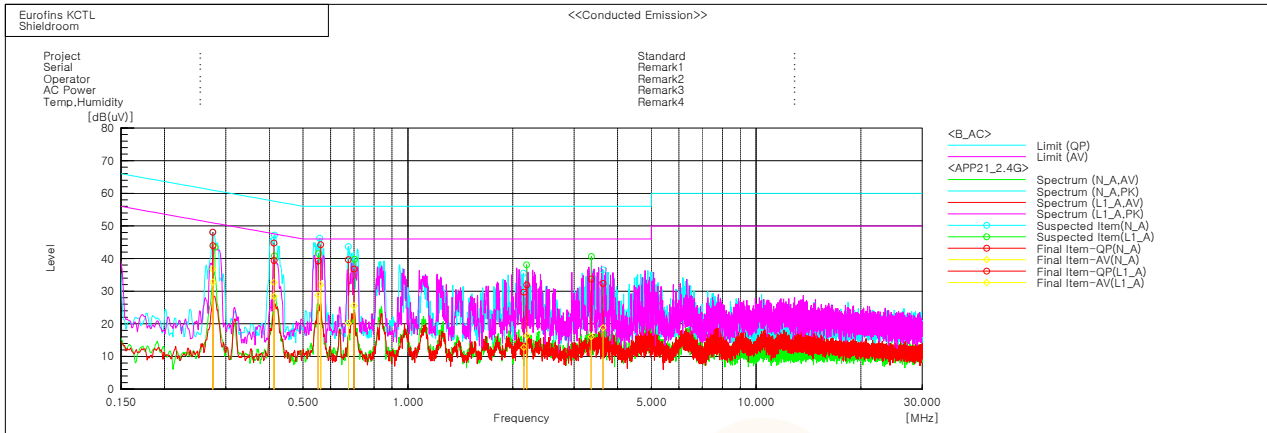
According to 15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohm line impedance stabilization network (LISN). Compliance with the provision of this paragraph shall be 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/m)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

Measurement procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω /50 μ H LISN, which is an input transducer to a spectrum analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to peak amplitude within a bandwidth of 10 kHz or to quasi-peak and average within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

Test results - Worst case: 802.11n HT20 mode / 2 462 MHz



Final Result

--- N_A Phase ---										
No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.27524	38.0	26.7	10.1	48.1	36.8	61.0	51.0	12.9	14.2
2	0.41226	34.4	22.4	10.3	44.7	32.7	57.6	47.6	12.9	14.9
3	0.5616	33.9	21.6	10.3	44.2	31.9	56.0	46.0	11.8	14.1
4	0.67446	29.5	10.0	10.2	39.7	20.2	56.0	46.0	16.3	25.8
5	2.15267	19.7	2.8	10.0	29.7	12.8	56.0	46.0	26.3	33.2
6	3.63229	22.3	8.8	10.0	32.3	18.8	56.0	46.0	23.7	27.2

--- L1_A Phase ---										
No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.27553	33.9	22.7	10.1	44.0	32.8	60.9	50.9	16.9	18.1
2	0.41284	29.1	18.2	10.3	39.4	28.5	57.6	47.6	18.2	19.1
3	0.55213	29.0	18.5	10.3	39.3	28.8	56.0	46.0	16.7	17.2
4	0.70038	26.7	15.4	10.1	36.8	25.5	56.0	46.0	19.2	20.5
5	2.1951	21.9	6.4	10.0	31.9	16.4	56.0	46.0	24.1	29.6
6	3.36216	23.7	6.1	10.0	33.7	16.1	56.0	46.0	22.3	29.9

8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV30	100732	24.07.03
DC Power Supply	AGILENT	E3632A	MY40008800	24.07.03
Attenuator	API Inmet	40AH2W-10	18	25.04.30
Power Sensor	R&S	NRP-Z81	1137.9009.02-106223-bB	25.04.24
Power Divider	Aeroflex/ Weinschel, Inc	1580-1	PE430	24.07.04
Attenuator	HUBER+SUHNER	6610_SK-50-1/199_NE	ATT01	24.10.16
Signal Generator	R&S	SMB100A	176206	25.01.18
Spectrum Analyzer	R&S	FSV40	100988	24.07.03
PSA Spectrum Analyzer	Agilent	E4440A	MY44303500	24.07.04
Amplifier	SONOMA INSTRUMENT	310N	421910	24.10.12
Bilog Antenna	Teseq GmbH	CBL 6112D	61521	24.11.17
Loop Antenna	R&S	HFH2-Z2	100355	24.08.10
Signal Generator	R&S	SMB100A	176206	25.01.18
Controller	INNCO SYSTEMS	CO3000	1441/54370322/P	-
Antenna Mast	INNCO SYSTEMS	MA4640-XP-ET	-	-
Turn Device	INNCO SYSTEMS	DS1200-S-1t	-	-
Broadband PreAmplifier	SCHWARZBECK	BBV9718D	57	25.01.19
Low Noise Amplifier	TESTEK	TK-PA18H	220124-L	24.10.12
Low Noise Amplifier	TESTEK	TK-PA1840H	220133-L	24.10.17
Horn Antenna	SCHWARZBECK	BBHA9120D	2763	24.10.18
Horn Antenna	SCHWARZBECK	BBHA9170	1267	24.10.16
High Pass Filter	Wainwright Instruments GmbH	WHKX12-2805-3000-18000-40SS	SN58	24.10.16
High Pass Filter	QOTANA TECHNOLOGIES	DBHF0508004000A	23041800061	24.07.10
TWO-LINE V - NETWORK	R&S	ENV216	101358	24.09.27
EMI TEST RECEIVER	R&S	ESCI3	101408	24.08.18

End of test report