

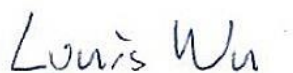


SPOT CHECK EVALUATION

FCC ID : RI7FN990A28
Equipment : 5G NR Module
Brand Name : 
Model Name : FN990A28
Marketing Name : FN990A28
Applicant : Telit Communications S.p.A.
Viale Stazione di Prosecco 5/b, Trieste 34010, Italy
Manufacturer : Telit Communications S.p.A.
Viale Stazione di Prosecco 5/b, Trieste 34010, Italy
Standard : 47 CFR Part 2, 22(H), 24(E), 27, 90(R), 90(S), 96

The product was received on Jul. 07, 2022 and testing was performed from Sep. 02, 2022 to Dec. 14, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this spot check report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.



Approved by: Louis Wu

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History of this test report

Version	Description	Issue Date
01	Initial issue of report	Dec. 15, 2022



1. Introduction Section

FCC ID: RI7FN990A40 and FCC ID: RI7FN990A28 (variant model) use the same identical internal printed circuit board layouts, and based on their similarity, spot check and data referencing for the FCC Part 22, 24, 27, 90, 96 (equipment class: PCB, CBE) has been used following FCC KDB 484596 D01 v01. The spot check data in this report is used to justify the data reuse.

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: RI7FN990A28).

2. Model Difference Information

RI7FN990A40 and RI7FN990A28 use the identical internal printed circuit board layout, and the major differences which may relate to RF are listed below:

Item_#1	FN990A40	FN990A28
Main chip	SDX65	SDX62
Note	20L LTE, 5G-NR Sub-6 only (200 MHz)	16L LTE, 5G-NR Sub-6 only (120 MHz)

Item_#2	FN990A40	FN990A28
RF Transceiver	2 x SDR735	1 x SDR735
Note	- Compared to the FN990A40, the FN990A28 is not mounted with one RF transceiver and surrounding passive components. - The RF transceiver 2 (SDR735 #2) that is not mounted on the FN990A28 is used only for Rx downlink, and the mounted RF transceiver 1 (SDR735 #1) has the same circuit configuration as the FN990A40, and the Tx outputs only from the RF transceiver 1 (SDR735 #1). - Single SDR735 have less CA/ENDC capability than dual SDR735. Therefore the supported CA/ENDC combo for 1x SDR and 2x SDR are different as below. - FN990A40 : CA 1565 ea / EN-DC 3153 ea - FN990A28 : CA 1070 ea / EN-DC 1121 ea - All controls related to TX are connected to SDR735 #1. Therefore, there is no difference in TX performance between FN990A28(Single SDR #1) and FN990A40(Dual SDR #1, SDR #2).	

The detail of similarity and difference is illustrated in the operational description. Based on the information, spot check of conducted power and emission level was performed and presented in this report to justify the data referencing.



3. Spot Check Verification Data Section

Conducted power test and radiated spurious emission test configurations were selected from the worst cases identified in the parent model and tested to demonstrate the test data from original model remains representative for the variant model.

Summary for power and RSE spot check for each rule entry and technology is listed as below:

Test Item	Mode	RI7FN990A40 Parent Worst Result	RI7FN990A28 Variant Check Result	Difference (dB)
Conducted Power (dBm)	WWAN 3G Band 2	23.04	22.96	-0.08
	WWAN 3G Band 4	23.02	22.75	-0.27
	WWAN 3G Band 5	23.32	23.14	-0.18
	WWAN LTE Band 2	22.97	22.70	-0.27
	WWAN LTE Band 4	23.05	22.60	-0.45
	WWAN LTE Band 5	22.98	22.83	-0.15
	WWAN LTE Band 7	23.37	23.08	-0.29
	WWAN LTE Band 12	23.30	23.15	-0.15
	WWAN LTE Band 13	23.06	22.89	-0.17
	WWAN LTE Band 14	23.00	22.88	-0.12
	WWAN LTE Band 17	23.24	23.15	-0.09
	WWAN LTE Band 25	22.98	22.65	-0.33
	WWAN LTE Band 26	23.03	22.75	-0.28
	WWAN LTE Band 30	22.76	22.35	-0.41
	WWAN LTE Band 38	23.20	23.06	-0.14
	WWAN LTE Band 41	25.48	25.51	0.03
	WWAN LTE Band 42 (3450~3550MHz)	21.50	21.46	-0.04
	WWAN LTE Band 42 (3550~3600MHz)	21.42	21.44	0.02
	WWAN LTE Band 43 (3600~3700MHz)	21.36	21.27	-0.09
	WWAN LTE Band 48 (3550~3700MHz)	21.43	21.76	0.33
	WWAN LTE Band 66	23.09	22.75	-0.34
	WWAN LTE Band 71	23.31	23.20	-0.11
	WWAN NR n2	23.83	23.42	-0.41
	WWAN NR n5	23.78	23.19	-0.59
	WWAN NR n7	23.65	23.19	-0.46
	WWAN NR n25	23.81	23.76	-0.05
	WWAN NR n30	22.97	22.49	-0.48
	WWAN NR n38	24.12	23.86	-0.26
	WWAN NR n41	26.73	26.35	-0.38
	WWAN NR n48	21.59	21.32	-0.27
	WWAN NR n66	23.50	23.49	-0.01
	WWAN NR n71	23.48	23.37	-0.11
	WWAN NR n77 (3450~3550MHz)	26.97	26.42	-0.55
	WWAN NR n77 (3700~3980MHz)	26.86	26.40	-0.46
	WWAN NR n78 (3450~3550MHz)	26.98	26.65	-0.33
	WWAN NR n78 (3700~3800MHz)	26.89	26.31	-0.58



Test Item	Mode	RI7FN990A40 Parent Worst Result	RI7FN990A28 Variant Check Result	Difference (dB)
Conducted Power (dBm)	WWAN LTE CA 2C	24.82	24.28	-0.54
	WWAN LTE CA 5B	24.51	24.17	-0.34
	WWAN LTE CA 7C	24.82	24.16	-0.66
	WWAN LTE CA 38C	23.64	23.84	0.20
	WWAN LTE CA 41C	26.24	26.19	-0.05
	WWAN LTE CA 42C (3450~3550MHz)	22.79	22.33	-0.46
	WWAN LTE CA 42C (3550~3600MHz)	11.34	11.22	-0.62
	WWAN LTE CA 43C (3600~3700MHz)	11.26	11.17	-0.59
	WWAN LTE CA 48C (3550~3700MHz)	11.10	11.08	-0.02
	WWAN LTE CA 66B	24.00	23.68	-0.32
	WWAN LTE CA 66C	24.19	24.08	-0.11
	WWAN NR n38 UL MIMO	22.23	22.22	-0.01
	WWAN NR n41 UL MIMO	25.32	25.12	-0.2
	WWAN NR n48 UL MIMO (3550~3700MHz)	21.17	21.09	-0.08
	WWAN NR n77 UL MIMO (3450~3550MHz)	24.92	24.83	-0.09
	WWAN NR n77 UL MIMO (3700~3980MHz)	25.09	24.71	-0.38
	WWAN NR n78 UL MIMO (3450~3550MHz)	24.67	24.47	-0.2
	WWAN NR n78 UL MIMO (3700~3800MHz)	24.85	24.67	-0.18



Test Item	Mode	ANT	RI7FN990A40 Parent Worst Result	RI7FN990A28 Variant Check Result	Difference (dB)
Radiated Spurious Emission (dBm)	WWAN 3G Band 2	0	-45.53	-46.07	-0.54
	WWAN 3G Band 4	0	-47.21	-48.48	-1.27
	WWAN 3G Band 5	0	-56.22	-56.10	0.12
	WWAN LTE CA 5B	0	-55.88	-56.22	-0.34
	WWAN LTE CA 7C	0	-42.42	-42.81	-0.39
	WWAN LTE Band 13	0	-59.99	-59.71	0.28
	WWAN LTE Band 14	0	-60.04	-59.78	0.26
	WWAN LTE Band 25	0	-46.13	-46.19	-0.06
	WWAN LTE Band 26 (Part 90S)	0	-56.32	-56.23	0.09
	WWAN LTE Band 30	0	-58.86	-58.08	0.78
	WWAN LTE Band 41	0	-58.42	-58.48	-0.06
	WWAN LTE Band 42 (Part 27Q)	3	-48.21	-48.53	-0.32
	WWAN LTE Band 48	3	-47.04	-49.47	-2.43
	WWAN LTE CA 66C	0	-46.85	-47.32	-0.47
	WWAN LTE Band 71	0	-57.67	-57.50	0.17
	WWAN NR n5 (EN-DC 2A-n5A)	0	-56.60	-56.35	0.25
	WWAN NR n7 (SA)	0	-51.30	-49.07	2.23
	WWAN NR n25 (EN-DC 48A-n25A)	0	-52.68	-52.92	-0.24
	WWAN NR n25 (EN-DC 12A-n25A)	2	-52.82	-52.84	-0.02
	WWAN NR n30 (EN-DC 5A-n30A)	0	-50.71	-50.53	0.18
	WWAN NR n41 (EN-DC 25A-n41A)	2	-48.65	-48.59	0.06
	WWAN NR n41 UL MIMO	2+0	-50.12	-47.76	2.36
	WWAN NR n48 (SA)	3	-47.44	-48.52	-1.08
	WWAN NR n48 UL MIMO	3+1	-48.10	-48.76	-0.66
	WWAN NR n66 (SA)	0	-54.38	-53.72	0.66
	WWAN NR n66 (EN-DC 5A-n66A)	2	-54.15	-53.02	1.13
	WWAN NR n71 (EN-DC 66A-n71A)	0	-59.13	-56.83	2.3
	WWAN NR n77 (SA)	3	-27.41	-27.53	-0.12
	WWAN NR n77 (EN-DC 5A-n77A)	1	-27.99	-27.04	0.95
	WWAN NR n77 UL MIMO	3+1	-27.67	-27.75	-0.08

Conclusion:

Radiated spurious emission test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

The spot check emission level is not degraded more than 3dB, and the emission level is compliant, data referencing is justified according to the guidance in the KDB inquiry



4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID (Parent)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)
22, 24, 27, 90, 96	PCB CBE	3G	2/4/5	RI7FN990A40	Original Grant	FG270608A	RI7FN990A28
		LTE	2/4/5/7/12/13/14/17/25/ 26/30/38/41/42/43/48/ 66/71 UL CA 2C/5B/7C/38C/41C/ 42C/43C/48C/66B/66C	RI7FN990A40	Original Grant	FG270608B FG270608D FG270608E FG270608G FG270608J FG270608K FG270608M	RI7FN990A28
		NR	n2/n5/n7/n25/n30/n38/ n41/n48/n66/n71/n77/ n78 UL MIMO n38/n41/n48/n77/n78	RI7FN990A40	Original Grant	FG270608C FG270608F FG270608H FG270608I FG270608L FG220821001	RI7FN990A28



5. List of Measuring Equipment

<Radiation for FCC Part 22, 24, 27, 90>

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	May 13, 2022	Sep. 28, 2022~ Sep. 29, 2022	May 12, 2023	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Sep. 28, 2022~ Sep. 29, 2022	Dec. 23, 2022	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz~40GHz	Nov. 30, 2021	Sep. 28, 2022~ Sep. 29, 2022	Nov. 29, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 21, 2022	Sep. 28, 2022~ Sep. 29, 2022	Feb. 20, 2023	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz~40GHz	May 14, 2022	Sep. 28, 2022~ Sep. 29, 2022	May 13, 2023	Radiation (03CH13-HY)
Amplifier	SONOMA	310N	187282	9kHz~1GHz	Dec. 15, 2021	Sep. 28, 2022~ Sep. 29, 2022	Dec. 14, 2022	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	40103 & 07	30MHz~1GHz	Apr. 24, 2022	Sep. 28, 2022~ Sep. 29, 2022	Apr. 23, 2023	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	41912 & 05	30MHz~1GHz	Feb. 06, 2022	Sep. 28, 2022~ Sep. 29, 2022	Feb. 05, 2023	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP140325	N/A	Aug. 15, 2022	Sep. 28, 2022~ Sep. 29, 2022	Aug. 14, 2023	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 17, 2022	Sep. 28, 2022~ Sep. 29, 2022	May 16, 2023	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 26, 2021	Sep. 28, 2022~ Sep. 29, 2022	Oct. 25, 2022	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 18, 2022	Sep. 28, 2022~ Sep. 29, 2022	Mar. 17, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30MHz~18GHz	Feb. 09, 2022	Sep. 28, 2022~ Sep. 29, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30MHz~18GHz	Feb. 09, 2022	Sep. 28, 2022~ Sep. 29, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9 kHz~30 MHz	Mar. 10, 2022	Sep. 28, 2022~ Sep. 29, 2022	Mar. 09, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30MHz~18GHz	Feb. 09, 2022	Sep. 28, 2022~ Sep. 29, 2022	Feb. 08, 2023	Radiation (03CH13-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Sep. 28, 2022~ Sep. 29, 2022	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Sep. 28, 2022~ Sep. 29, 2022	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Sep. 28, 2022~ Sep. 29, 2022	N/A	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1-18GHz	Jul. 25, 2022	Sep. 28, 2022~ Sep. 29, 2022	Jul. 24, 2023	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz~18GHz	Mar. 10, 2022	Sep. 28, 2022~ Sep. 29, 2022	Mar. 09, 2023	Radiation (03CH13-HY)

**<Radiation for Part 22, 24, 27>**

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	Sep. 28, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Sep. 28, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Sep. 28, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Sep. 28, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Sep. 28, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 21, 2022	Sep. 28, 2022	Jul. 20, 2023	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2022	Sep. 28, 2022	Jul. 21, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Sep. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Sep. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Sep. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Sep. 28, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Sep. 28, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Sep. 28, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Sep. 28, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Sep. 28, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Sep. 28, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
Horn Antenna	ETS-Lindgren	3117	00143261	1GHz~18GHz	Feb. 11, 2022	Sep. 28, 2022	Feb. 10, 2023	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Sep. 28, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
Signal Generator	Anritsu	MG3710A	6261943042	2G / 3G / LTE / 5G FR1	May 23, 2022	Sep. 28, 2022	May 22, 2023	Radiation (03CH07-HY)



<Radiation for FCC Part 27, 96 >

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Oct. 09, 2021	Sep. 02, 2022~ Sep. 08, 2022	Oct. 08, 2022	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	40103 & 07	30MHz~1GHz	Apr. 24, 2022	Dec. 13, 2022	Apr. 23, 2023	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 09, 2021	Sep. 02, 2022~ Sep. 08, 2022	Oct. 08, 2022	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 08, 2022	Dec. 13, 2022	Oct. 07, 2023	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1328	1GHz~18GHz	Dec. 03, 2021	Sep. 02, 2022~ Sep. 08, 2022	Dec. 02, 2022	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1GHz~18GHz	Aug. 09, 2022	Dec. 13, 2022	Aug. 08, 2023	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz~18GHz	Mar. 10, 2022	Sep. 02, 2022~ Dec. 13, 2022	Mar. 09, 2023	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Sep. 02, 2022~ Sep. 08, 2022	Nov. 29, 2022	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 24, 2022	Dec. 13, 2022	Nov. 23, 2023	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz~40GHz	May 14, 2022	Sep. 02, 2022~ Dec. 13, 2022	May 13, 2023	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 23, 2022	Sep. 02, 2022~ Dec. 13, 2022	Mar. 22, 2023	Radiation (03CH12-HY)
Preamplifier	Aglient	8449B	3008A02375	1GHz~26.5GHz	May 24, 2022	Sep. 02, 2022~ Dec. 13, 2022	May 23, 2023	Radiation (03CH12-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900270	1GHz~18GHz	Dec. 27, 2021	Sep. 02, 2022~ Dec. 13, 2022	Dec. 26, 2022	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Sep. 02, 2022~ Dec. 13, 2022	Dec. 23, 2022	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY53470118	10Hz~44GHz	Jan. 12, 2022	Sep. 02, 2022~ Dec. 13, 2022	Jan. 11, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 10, 2022	Sep. 02, 2022~ Dec. 13, 2022	Mar. 09, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 10, 2021	Sep. 02, 2022~ Sep. 08, 2022	Dec. 09, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30MHz~18GHz	Feb. 09, 2022	Dec. 13, 2022	Feb. 08, 2023	Radiation (03CH12-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 21, 2022	Sep. 02, 2022~ Dec. 13, 2022	Feb. 20, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803953/2	30MHz~40GHz	Mar. 08, 2022	Sep. 02, 2022~ Dec. 13, 2022	Mar. 07, 2023	Radiation (03CH12-HY)
Hygrometer	TECEPIL	DTM-303B	TP140349	N/A	Sep. 30, 2021	Sep. 02, 2022~ Sep. 08, 2022	Sep. 29, 2022	Radiation (03CH12-HY)
Hygrometer	TECEPIL	DTM-303B	TP140325	N/A	Nov. 07, 2022	Dec. 13, 2022	Nov. 06, 2023	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Sep. 02, 2022~ Dec. 13, 2022	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Sep. 02, 2022~ Dec. 13, 2022	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Sep. 02, 2022~ Dec. 13, 2022	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Sep. 02, 2022~ Dec. 13, 2022	N/A	Radiation (03CH12-HY)

<Conducted for FCC Part 22, 24, 27, 90, 96>

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 02, 2022	Sep. 14, 2022~ Dec. 14, 2022	Aug. 01, 2023	Conducted (TH03-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025280	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 29, 2021	Sep. 14, 2022~ Oct. 27, 2022	Oct. 28, 2022	Conducted (TH03-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 13, 2022	Oct. 28, 2022~ Dec. 14, 2022	Oct. 12, 2023	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8821C	6262116730	LTE	Jun. 15, 2022	Sep. 14, 2022~ Dec. 14, 2022	Jun. 14, 2023	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	6262134933	FR1	Jun. 13, 2022	Sep. 14, 2022~ Dec. 14, 2022	Jun. 12, 2023	Conducted (TH03-HY)
Hygrometer	Testo	608-H11	34893241	NA	Mar. 18, 2022	Sep. 14, 2022~ Dec. 14, 2022	Mar. 17, 2023	Conducted (TH03-HY)

Note: Test equipment calibration is traceable to the procedure of ISO17025.