



SPOT CHECK EVALUATION

FCC ID : PY322100558
Equipment : Netgear 5G MHS Travel Router
Brand Name : Netgear
Model Name : MR6400
Applicant : Netgear Inc
350 E. Plumeria Drive, San Jose, CA 95134, United States
Manufacturer : Netgear Inc
350 E. Plumeria Drive, San Jose, CA 95134, United States
Standard : 47 CFR Part 2, 22(H), 24(E), 27, 90(R), 96
FCC Part 15 Subpart C §15.247
FCC Part 15 Subpart E §15.407

The product was received on Mar. 31, 2022, and testing was started from Apr. 09, 2022 and completed on May 11, 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 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

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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1. Introduction Section

FCC ID: PY321100529 (parent model) and FCC ID: PY322100558 (variant model) use the same identical internal printed circuit board layouts, while the variant model depopulates mmWave related components, details are available in the operational description. Based on their similarity, the FCC Part 15C (equipment class: DTS) and FCC Part 15E (equipment class: NII, 6ID, 6XD) and FCC Part 22, 24, 27, 90, 96 (equipment class: PCB, CBE) reuse the original model's result and do spot-check, following the 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: PY322100558).



2. Model Difference Information

PY321100529 and PY322100558 use the identical internal printed circuit board layout, and the major differences which may relate to RF are listed below:

- Removal of FR2 related components.
- Software to enable different LTE and FR1 bands.

PY321100529 and PY322100558 use the same WLAN chipset, same WLAN firmware, and same DFS radar detection mechanism.

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	PY321100529 Parent Worst Result	PY322100558 Variant Check Result	Difference (dB)
Conducted Power (dBm)	WWAN LTE Band 2	23.48	22.89	-0.59
	WWAN LTE Band 4	23.16	23.07	-0.09
	WWAN LTE Band 5	23.27	22.84	-0.43
	WWAN LTE Band 7	22.95	22.51	-0.44
	WWAN LTE Band 12	23.12	23.11	-0.01
	WWAN LTE Band 14	23.09	23.03	-0.06
	WWAN LTE Band 30	21.97	22.12	0.15
	WWAN LTE Band 48	22.54	22.20	-0.34
	WWAN LTE Band 66	23.83	23.13	-0.7
	WWAN NR n2	23.84	23.75	-0.09
	WWAN NR n5	23.39	23.20	-0.19
	WWAN NR n12	23.41	23.49	0.08
	WWAN NR n14	23.07	23.18	0.11
	WWAN NR n30	22.37	22.20	-0.17
	WWAN NR n66	23.97	23.36	-0.61
	WWAN NR n77 (27O)	22.56	22.48	-0.08
	WWAN NR n77 (27Q)	22.33	22.46	0.13
Average Conducted Power (dBm)	WLAN 2.4G	12.86	12.72	-0.14
	WLAN 5G (5150~5250)	12.96	12.76	-0.2
	WLAN 5G (5250~5350)	12.86	12.76	-0.1
	WLAN 5G (5470~5725)	12.81	12.61	-0.2
	WLAN 5G (5725~5850)	12.96	12.57	-0.39
	WLAN 6G (5925~6425)	12.07	11.62	-0.45
	WLAN 6G (6425~6525)	10.93	10.91	-0.02
	WLAN 6G (6525~6875)	10.77	10.41	-0.36
	WLAN 6G (6875~7125)	11.71	11.47	-0.24



Test Item	Mode	ANT	PY321100529 Parent Worst Result	PY322100558 Variant Check Result	Difference (dB)
Radiated Spurious Emission (dBm)	WWAN LTE Band 7	2	-35.97	-36.01	-0.04
	WWAN LTE Band 48	1	-44.31	-48.19	-3.88
	WWAN LTE Band 66	2	-36.29	-40.60	-4.31
	WWAN NR n2 (EN-DC 66A_n2A)	1	-38.38	-39.63	-1.25
	WWAN NR n2 (SA mode)	2	-39.83	-37.63	2.2
	WWAN NR n5 (EN-DC 2A_n5A)	1	-33.52	-38.40	-4.88
	WWAN NR n5 (EN-DC 12A_n5A)	2	-33.24	-35.49	-2.25
	WWAN NR n12 (EN-DC 66A_n12A)	1	-30.94	-35.19	-4.25
	WWAN NR n14 (EN-DC 30A_n14A)	1	-48.25	-52.02	-3.77
	WWAN NR n30 (EN-DC 14A_n30A)	2	-43.10	-45.83	-2.73
	WWAN NR n77 (SA mode)	1	-32.84	-30.96	1.88
WWAN NR n77 (EN-DC 5A_n77A)	2	-31.25	-30.45	0.8	
Radiated Spurious Emission (Band Edge) (dBuV/m)	WLAN 2.4G	3+4	44.36	44.12	-0.24
	WLAN 5G	3+4	45.06	44.03	-1.03
	WLAN 6G	3+4	67.89	67.56	-0.33
Radiated Spurious Emission (Harmonic) (dBuV/m)	WLAN 2.4G	3+4	43.56	41.47	-2.09
	WLAN 5G	3+4	44.40	43.26	-1.14
	WLAN 6G	3+4	45.86	45.66	-0.2



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 margin to the limit is greater than 1.5dB, 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	LTE	2/4/5/7/12/14/ 30/48/66 ULCA 48C/66B/66C	PY321100529	Original Grant	FG190614A FG190614C FG190614E FG190614G FG190614J	PY322100558
		NR	n2/n5/n12/n14 /n30/n66/n77	PY321100529	Original Grant	FG190614B FG190614D FG190614F FG190614H FG190614I	PY322100558
15C	DTS	Wi-Fi	2400~2483.5	PY321100529	Original Grant	FR190614A	PY322100558
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY321100529	Original Grant	FR190614B FR190614C	PY322100558
		DFS	5250~5350 5470~5725	PY321100529	Original Grant	FZ190614A FZ190614B	PY322100558
	6ID 6XD	Wi-Fi	5925~6425 6425~6525 6525~6875 6875~7125	PY321100529	Original Grant	FR190614D	PY322100558



5. List of Measuring Equipment

<Radiation for FCC Part 22(H), 24(E), 27(D), 27(H), 27(L), 27(M), 90(R)>

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	Sep. 07, 2021	Apr. 26, 2022~ May 11, 2022	Sep. 06, 2022	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz-40GHz	Nov. 30, 2021	Apr. 26, 2022~ May 11, 2022	Nov. 29, 2022	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	BBHA917057 6	18GHz-40GHz	May. 21, 2021	Apr. 26, 2022~ May 11, 2022	May. 20, 2022	Radiation (03CH16-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 15, 2021	Apr. 26, 2022~ May 11, 2022	Oct. 14, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	Apr. 26, 2022~ May 11, 2022	Jun. 21, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804 012/2	18-40G	Jan. 04, 2022	Apr. 26, 2022~ May 11, 2022	Jan. 03, 2023	Radiation (03CH16-HY)
Signal Generator	Agilent	MG3694C	163401	0.1Hz~40GHz	Feb. 13, 2022	Apr. 26, 2022~ May 11, 2022	Feb. 12, 2023	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	41912 & 05	30MHz to 1GHz	Feb. 06, 2022	Apr. 26, 2022~ May 11, 2022	Feb. 05, 2023	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 09, 2021	Apr. 26, 2022~ May 11, 2022	Oct. 08, 2022	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1G~18GHz	Aug. 04, 2021	Apr. 26, 2022~ May 11, 2022	Aug. 03, 2022	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1G~18GHz	May. 18, 2021	Apr. 26, 2022~ May 11, 2022	May. 17, 2022	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Jul. 05, 2021	Apr. 26, 2022~ May 11, 2022	Jul. 04, 2022	Radiation (03CH16-HY)
Amplifier	Jet-Power	JPA0118-55-30 3	17100018000 54001	1-18GHz	Jun. 16, 2021	Apr. 26, 2022~ May 11, 2022	Jun. 15, 2022	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec.09.,2021	Apr. 26, 2022~ May 11, 2022	Dec.08.,2022	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A	MY57290111	3Hz~26.5GHz	Dec.15.,2021	Apr. 26, 2022~ May 11, 2022	Dec.14.,2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4P E	NA	Aug. 28, 2021	Apr. 26, 2022~ May 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4PE	NA	Aug. 28, 2021	Apr. 26, 2022~ May 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5757	NA	Aug. 28, 2021	Apr. 26, 2022~ May 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Apr. 26, 2022~ May 11, 2022	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Apr. 26, 2022~ May 11, 2022	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 26, 2022~ May 11, 2022	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 26, 2022~ May 11, 2022	N/A	Radiation (03CH16-HY)



<Radiation for FCC Part 27(O), 96 >

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	Sep. 07, 2021	Apr. 25, 2022~ Apr. 26, 2022	Sep. 06, 2022	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	37059 & 01	30MHz~1GHz	Oct. 09, 2021	Apr. 25, 2022~ Apr. 26, 2022	Oct. 08, 2022	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 09, 2021	Apr. 25, 2022~ Apr. 26, 2022	Oct. 08, 2022	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1328	1GHz~18GHz	Dec. 03, 2021	Apr. 25, 2022~ Apr. 26, 2022	Dec. 02, 2022	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz~18GHz	May 18, 2021	Apr. 25, 2022~ Apr. 26, 2022	May 17, 2022	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Apr. 25, 2022~ Apr. 26, 2022	Nov. 29, 2022	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170576	18GHz~40GHz	May 21, 2021	Apr. 25, 2022~ Apr. 26, 2022	May 20, 2022	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 23, 2022	Apr. 25, 2022~ Apr. 26, 2022	Mar. 22, 2023	Radiation (03CH12-HY)
Preamplifier	Aglient	8449B	3008A02375	1GHz~26.5GHz	May 25, 2021	Apr. 25, 2022~ Apr. 26, 2022	May 24, 2022	Radiation (03CH12-HY)
Preamplifier	E-INSTRUME NT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900270	1GHz-18GHz	Dec. 27, 2021	Apr. 25, 2022~ Apr. 26, 2022	Dec. 26, 2022	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Apr. 25, 2022~ Apr. 26, 2022	Dec. 23, 2022	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 15, 2021	Apr. 25, 2022~ Apr. 26, 2022	Oct. 14, 2022	Radiation (03CH12-HY)
Base Station	Anritsu	MT8821C	6201432816	2/3/4G/FDD/TD D with44)/LTE-3C C DLCA/2CC ULCA, CatM1/NB1/NB 2	May 10, 2021	Apr. 25, 2022~ Apr. 26, 2022	May 09, 2023	Radiation (03CH12-HY)
5G Wireless Test Platform	Anritsu	MT8000A	6262148275	FR1 (MT8821C SN:6262116725)	Aug 09, 2021	Apr. 25, 2022~ Apr. 26, 2022	Aug 08, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 10, 2022	Apr. 25, 2022~ Apr. 26, 2022	Mar. 09, 2023	Radiation (03CH12-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 10, 2021	Apr. 25, 2022~ Apr. 26, 2022	Dec. 09, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 21, 2022	Apr. 25, 2022~ Apr. 26, 2022	Feb. 20, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 21, 2022	Apr. 25, 2022~ Apr. 26, 2022	Feb. 20, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803953/2	30MHz~40GHz	Mar. 08, 2022	Apr. 25, 2022~ Apr. 26, 2022	Mar. 07, 2023	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12 SS	SN2	1.2GHz Low Pass Filter	Mar. 16, 2022	Apr. 25, 2022~ Apr. 26, 2022	Mar. 15, 2023	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN2	6.75GHz High Pass Filter	Mar. 16, 2022	Apr. 25, 2022~ Apr. 26, 2022	Mar. 15, 2023	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP140349	N/A	Sep. 30, 2021	Apr. 25, 2022~ Apr. 26, 2022	Sep. 29, 2022	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 25, 2022~ Apr. 26, 2022	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Apr. 25, 2022~ Apr. 26, 2022	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Apr. 25, 2022~ Apr. 26, 2022	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Apr. 25, 2022~ Apr. 26, 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
Radio Communication Analyzer	Anritsu	MT8821C	6201664755	2/3/4G/LTE FDD/TDD with44)/LTE-3CC DLCA/2CC ULCA, CatM1/NB1/NB2	Jul. 21, 2021	Apr. 09, 2022 ~ May 02, 2022	Jul. 20, 2022	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8821C	6261849015	LTE	Ocr. 06, 2021	Apr. 09, 2022 ~ May 02, 2022	Oct. 05, 2022	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	6261940327	FR1	Oct. 29, 2021	Apr. 29, 2022 ~ May 11, 2022	Oct. 28, 2022	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	Oct. 01, 2021	Apr. 09, 2022 ~ May 02, 2022	Sep. 30, 2022	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101049	10Hz~44GHz	Aug. 31, 2021	Apr. 29, 2022 ~ May 11, 2022	Aug. 30, 2022	Conducted (TH03-HY)
Hygrometer	Testo	608-H11	34893240	NA	Nov,17.,2021	Apr. 29, 2022 ~ May 11, 2022	Nov,16.,2022	Conducted (TH03-HY)



< FCC Part 15C >

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Apr. 27, 2022 ~ May 05, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Apr. 27, 2022 ~ May 05, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Apr. 27, 2022 ~ May 05, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Apr. 27, 2022 ~ May 05, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Apr. 27, 2022 ~ May 05, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Apr. 27, 2022 ~ May 05, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Apr. 27, 2022 ~ May 05, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Apr. 27, 2022 ~ May 05, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	Apr. 27, 2022 ~ May 05, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Attenuator	HONOVA	5910 SMA-50-005-19 -NE	ATT-36	N/A	Oct. 30, 2021	Apr. 27, 2022 ~ May 05, 2022	Oct. 29, 2022	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Apr. 27, 2022 ~ May 05, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)

<Conducted for FCC Part 15C>

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Apr. 15, 2022- Apr. 16, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Apr. 15, 2022- Apr. 16, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Apr. 15, 2022- Apr. 16, 2022	Aug. 29, 2022	Conducted (TH05-HY)

**<Radiation for FCC Part 15E UNII-1、UNII-3>**

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Apr. 27, 2022 ~ May 05, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Apr. 27, 2022 ~ May 05, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Apr. 27, 2022 ~ May 05, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Apr. 27, 2022 ~ May 05, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Apr. 27, 2022 ~ May 05, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Apr. 27, 2022 ~ May 05, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Apr. 27, 2022 ~ May 05, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Apr. 27, 2022 ~ May 05, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Apr. 27, 2022 ~ May 05, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	Apr. 27, 2022 ~ May 05, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Attenuator	HONOVA	5910 SMA-50-005-19 -NE	ATT-36	N/A	Oct. 30, 2021	Apr. 27, 2022 ~ May 05, 2022	Oct. 29, 2022	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Apr. 27, 2022 ~ May 05, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 27, 2022 ~ May 05, 2022	N/A	Radiation (03CH07-HY)



<Radiation for FCC Part 15E UNII-2A、UNII-2C>

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1G~18GHz	Aug. 04, 2021	Apr. 27, 2022 ~ May 11, 2022	Aug. 03, 2022	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00993	18GHz ~40GHz	Nov. 30, 2021	Apr. 27, 2022 ~ May 11, 2022	Nov. 29, 2022	Radiation (03CH16-HY)
Amplifier	EMCI	EMC051845SE	980729	1-18GHz	Jul. 09, 2021	Apr. 27, 2022 ~ May 11, 2022	Jul. 08, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	Apr. 27, 2022 ~ May 11, 2022	Jun. 21, 2022	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 09, 2021	Apr. 27, 2022 ~ May 11, 2022	Dec. 08, 2022	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec.15, 2021	Apr. 27, 2022 ~ May 11, 2022	Dec. 14, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4PE	NA	Aug. 28, 2021	Apr. 27, 2022 ~ May 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4PE	NA	Aug. 28, 2021	Apr. 27, 2022 ~ May 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-57 57	NA	Aug. 28, 2021	Apr. 27, 2022 ~ May 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Apr. 27, 2022 ~ May 11, 2022	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Apr. 27, 2022 ~ May 11, 2022	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 27, 2022 ~ May 11, 2022	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 27, 2022 ~ May 11, 2022	N/A	Radiation (03CH16-HY)



<Radiation for FCC Part 15E UNII-5 ~ UNII-8>

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Apr. 27, 2022 ~ Apr. 28, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Apr. 27, 2022 ~ Apr. 28, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Apr. 27, 2022 ~ Apr. 28, 2022	N/A	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Attenuator	HONOVA	5910 SMA-50-005-19 -NE	ATT-36	N/A	Oct. 30, 2021	Apr. 27, 2022 ~ Apr. 28, 2022	Oct. 29, 2022	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Apr. 27, 2022 ~ Apr. 28, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Apr. 27, 2022 ~ Apr. 28, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 27, 2022 ~ Apr. 28, 2022	N/A	Radiation (03CH07-HY)

<Conducted for FCC Part 15E>

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Apr. 15, 2022- Apr. 16, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Apr. 15, 2022- Apr. 16, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Apr. 15, 2022- Apr. 16, 2022	Aug. 29, 2022	Conducted (TH05-HY)

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

END of this report