



Report No.: KSCR250200029205

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SPOT CHECK REPORT

Application No.: KSCR2502000292AT
FCC ID: ROR2001
Applicant: Blinq Networks Inc.
Address of Applicant: 140 Renfrew Drive, Suite 200, Markham, L3R 6B3, Canada
Manufacturer: Blinq Networks Inc.
Address of Manufacturer: 140 Renfrew Drive, Suite 200, Markham, L3R 6B3, Canada
Factory: VVDN Technologies Private Limited
Address of Factory: Plot No: CP-07, Sector 8, IMT Manesar, Gurugram, Haryana
Equipment Under Test (EUT):
EUT Name: PC-400i
Model No.: PC-400i
Standard(s) : 47 CFR Part 2
47 CFR Part 27
47 CFR Part 96
Date of Receipt: 2025-02-24
Date of Test: 2025-03-07 to 2025-03-25
Date of Issue: 2025-04-08

Test Result:	Pass
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* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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Revision Record			
Version	Description	Date	Remark
00	Original	2025-04-08	/

Authorized for issue by:			
Tested By			
		Eric Liu /Project Engineer	
Approved By			
		Terry Hou /Reviewer	



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2 Test Summary

Test Item	FCC Rule No.	Verdict	Test Lab
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(k) §27.50(J) §96.41	PASS	A
Spurious emissions at antenna terminals	§2.1051 §27.53(l) §27.53(n) §96.41	PASS	B
Remark: This base station supports N48, N77 and N78, and the frequency range is 3450-3980MHz. So we evaluated and tested all the band of Power and PSD, and the rest of the test items were tested based on the maximum power. EUT: In this whole report EUT means Equipment Under Test. Tx: In this whole report Tx (or tx) means Transmitter. Rx: In this whole report Rx (or rx) means Receiver.			



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4 General Information

4.1 Details of E.U.T.

Product Name:	PC-400i
Model No.:	PC-400i
Antenna Type:	Sector Antenna (Uncorrelated)
Antenna Gain:	8.0 dBi (Provided by manufacturer)
Power Supply:	44-57V DC By POE
Test Voltage:	120V, 60Hz
Sample Type:	Category A CBSD
Support Bandwidth:	10MHz,20MHz,30MHz,40MHz,50MHz,60MHz,70MHz,80MHz,90MHz,100MHz
Type of Modulation	5G NR: CP-OFDM: QPSK, 256QAM
Frequency Band:	5GNR N48, N77, N78
Frequency Range:	3450MHz-3980MHz
Normal Output Power:	30dBm
Antenna Delivery:	4T4R MIMO

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	ThinkPad	K27	EB24537645
POE	PROCET	PT-PSE106GBR-10	--

4.3 Power level setting using in test

	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
5G NR (3450-3550MHz)	30kHz	1CC	10	23.0	23.0	23.0
	30kHz	1CC	20	23.0	23.0	23.0
	30kHz	1CC	30	23.0	23.0	23.0
	30kHz	1CC	40	23.0	23.0	22.5
	30kHz	1CC	60	23.0	23.0	23.0
	30kHz	1CC	100	/	22.0	/
	30kHz	1CC	100	/	22.0	/
5G NR (3450-3550MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	2CC	CC1:10 CC2:10	23.0	23.0	23.0
	30kHz	2CC	CC1:20 CC2:20	22.5	23.0	23.0
	30kHz	2CC	CC1:30 CC2:10	22.0	23.0	23.0
	30kHz	2CC	CC1:30 CC2:20	22.0	23.0	23.0
	30kHz	2CC	CC1:40 CC2:20	22.5	23.0	23.0

	30kHz	2CC	CC1:40 CC2:40	23.0	23.0	23.0
	30kHz	2CC	CC1:60 CC2:20	23.0	23.0	23.0
5G NR (3450-3550MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	3CC	CC1:10 CC2:10 CC3:10	23.0	23.0	23.0
	30kHz	3CC	CC1:20 CC2:20 CC3:20	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:20 CC3:10	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:30 CC3:20	22.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:20 CC3:20	22.5	23.0	23.0
5G NR (3450-3550MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	4CC	CC1:20 CC2:20 CC3:20 CC4:20	22.5	23.0	23.0
	30kHz	4CC	CC1:40 CC2:30 CC3:20 CC4:10	23.0	23.0	23.0

5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	1CC	10	22.0	22.0	22.0
	30kHz	1CC	20	23.0	23.0	23.0
	30kHz	1CC	30	23.0	23.0	23.0
	30kHz	1CC	40	22.5	23.0	22.5
	30kHz	1CC	60	22.5	23.0	22.5
5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	2CC	CC1:10 CC2:10	23.0	23.0	23.0
	30kHz	2CC	CC1:20 CC2:20	22.5	23.0	22.5
	30kHz	2CC	CC1:30 CC2:10	23.0	23.0	23.0
	30kHz	2CC	CC1:30 CC2:20	23.0	23.0	23.0
	30kHz	2CC	CC1:40	22.5	23.0	22.5

			CC2:20			
	30kHz	2CC	CC1:40 CC2:40	22.5	23.0	22.5
	30kHz	2CC	CC1:60 CC2:20	23.0	23.0	23.0
5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	3CC	CC1:10 CC2:10 CC3:10	22.0	23.0	22.5
	30kHz	3CC	CC1:20 CC2:20 CC3:20	22.5	23.0	22.5
	30kHz	3CC	CC1:40 CC2:20 CC3:10	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:30 CC3:20	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:20 CC3:20	23.0	23.0	23.0
5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	4CC	CC1:20 CC2:20 CC3:20 CC4:20	23.0	23.0	23.0
	30kHz	4CC	CC1:40 CC2:30 CC3:20 CC4:10	23.0	23.0	23.0

5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	1CC	10	23.0	23.0	23.0
	30kHz	1CC	20	23.0	23.0	23.0
	30kHz	1CC	30	23.0	23.0	23.0
	30kHz	1CC	40	23.0	23.0	23.0
	30kHz	1CC	60	23.0	23.0	23.0
5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	2CC	CC1:10 CC2:10	23.0	23.0	23.0
	30kHz	2CC	CC1:20 CC2:20	23.0	23.0	23.0
	30kHz	2CC	CC1:30 CC2:10	23.0	23.0	23.0
	30kHz	2CC	CC1:30 CC2:20	23.0	23.0	23.0



	30kHz	2CC	CC1:40 CC2:20	23.0	23.0	23.0
	30kHz	2CC	CC1:40 CC2:40	23.0	23.0	23.0
	30kHz	2CC	CC1:60 CC2:20	23.0	23.0	23.0
5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	3CC	CC1:10 CC2:10 CC3:10	23.0	23.0	23.0
	30kHz	3CC	CC1:20 CC2:20 CC3:20	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:20 CC3:10	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:30 CC3:20	23.0	23.0	23.0
	30kHz	3CC	CC1:40 CC2:20 CC3:20	23.0	23.0	23.0
5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	4CC	CC1:20 CC2:20 CC3:20 CC4:20	23.0	23.0	23.0
	30kHz	4CC	CC1:40 CC2:30 CC3:20 CC4:10	23.0	23.0	23.0

4.4 Test Frequency

	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
5G NR (3450-3550MHz)	30kHz	1CC	10	3454.98	3499.98	3544.98
	30kHz	1CC	20	3459.99	3499.98	3540
	30kHz	1CC	30	3465	3500.01	3534.99
	30kHz	1CC	40	3469.98	3499.98	3529.98
	30kHz	1CC	60	3480	3499.98	3519.99
	30kHz	1CC	100	/	3499.98	/
5G NR (3450-3550MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	2CC	CC1:10 CC2:10	CC1:3454.98 CC2:3464.97	CC1:3495 CC2:3504.99	CC1:3534.99 CC2:3544.98
	30kHz	2CC	CC1:20 CC2:20	CC1:3459.99 CC2:3479.97	CC1:3489.99 CC2:3509.97	CC1:3520.02 CC2:3540
	30kHz	2CC	CC1:30 CC2:10	CC1:3465 CC2:3484.71	CC1:3495.12 CC2:3514.83	CC1:3525.27 CC2:3544.98
	30kHz	2CC	CC1:30 CC2:20	CC1:3465 CC2:3489.96	CC1:3490.02 CC2:3514.98	CC1:3515.04 CC2:3540
	30kHz	2CC	CC1:40 CC2:20	CC1:3469.98 CC2:3499.68	CC1:3490.14 CC2:3519.84	CC1:3510.3 CC2:3540
	30kHz	2CC	CC1:40 CC2:40	CC1:3469.98 CC2:3509.97	CC1:3480 CC2:3519.99	CC1:3489.99 CC2:3529.98
	30kHz	2CC	CC1:60 CC2:20	CC1:3480 CC2:3519.78	CC1:3490.11 CC2:3529.89	CC1:3500.22 CC2:3540
5G NR (3450-3550MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	3CC	CC1:10 CC2:10 CC3:10	CC1:3454.98 CC2:3464.97 CC3:3474.96	CC1:3489.99 CC2:3499.98 CC3:3509.97	CC1:3525 CC2:3534.99 CC3:3544.98
	30kHz	3CC	CC1:20 CC2:20 CC3:20	CC1:3459.99 CC2:3479.97 CC3:3499.95	CC1:3480 CC2:3499.98 CC3:3519.96	CC1:3500.04 CC2:3520.02 CC3:3540
	30kHz	3CC	CC1:40 CC2:20 CC3:10	CC1:3470.01 CC2:3499.71 CC3:3514.38	CC1:3485.31 CC2:3515.01 CC3:3529.68	CC1:3500.61 CC2:3530.31 CC3:3544.98
	30kHz	3CC	CC1:40 CC2:30 CC3:20	CC1:3470.01 CC2:3504.69 CC3:3529.65	CC1:3475.17 CC2:3509.85 CC3:3534.81	CC1:3480.36 CC2:3515.04 CC3:3540
	30kHz	3CC	CC1:40 CC2:20 CC3:20	CC1:3469.98 CC2:3499.68 CC3:3519.66	CC1:3480.15 CC2:3509.85 CC3:3529.83	CC1:3490.32 CC2:3520.02 CC3:3540
5G NR (3450-3550MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	4CC	CC1:20 CC2:20 CC3:20 CC4:20	CC1:3459.99 CC2:3479.97 CC3:3499.95 CC4:3519.93	CC1:3470.01 CC2:3489.99 CC3:3509.97 CC4:3529.95	CC1:3480.06 CC2:3500.04 CC3:3520.02 CC4:3540
	30kHz	4CC	CC1:40 CC2:30	CC1:3470.01 CC2:3504.69	CC1:3470.34 CC2:3505.02	CC1:3470.67 CC2:3505.35



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			CC3:20 CC4:10	CC3:3529.65 CC4:3544.32	CC3:3529.98 CC4:3544.65	CC3:3530.31 CC4:3544.98
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	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
5G NR (3550-3700MHz)	30kHz	1CC	10	3555	3624.99	3694.98
	30kHz	1CC	20	3560.01	3624.99	3690
	30kHz	1CC	30	3565.02	3624.99	3684.99
	30kHz	1CC	40	3570	3624.99	3679.98
	30kHz	1CC	60	3580.02	3624.99	3669.99
	30kHz	1CC	100	3600	3624.99	3649.98
5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	2CC	CC1:10 CC2:10	CC1:3555 CC2:3564.99	CC1:3619.98 CC2:3629.97	CC1:3684.99 CC2:3694.98
	30kHz	2CC	CC1:20 CC2:20	CC1:3559.98 CC2:3579.96	CC1:3615 CC2:3634.98	CC1:3670.02 CC2:3690
	30kHz	2CC	CC1:30 CC2:10	CC1:3565.02 CC2:3584.73	CC1:3620.13 CC2:3639.84	CC1:3675.27 CC2:3694.98
	30kHz	2CC	CC1:30 CC2:20	CC1:3565.02 CC2:3589.98	CC1:3615 CC2:3639.96	CC1:3665.04 CC2:3690
	30kHz	2CC	CC1:40 CC2:20	CC1:3570 CC2:3599.7	CC1:3615.12 CC2:3644.82	CC1:3660.3 CC2:3690
	30kHz	2CC	CC1:40 CC2:40	CC1:3570 CC2:3609.99	CC1:3604.98 CC2:3644.97	CC1:3639.99 CC2:3679.98
	30kHz	2CC	CC1:60 CC2:20	CC1:3579.99 CC2:3619.77	CC1:3615.09 CC2:3654.87	CC1:3650.22 CC2:3690
5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	3CC	CC1:10 CC2:10 CC3:10	CC1:3555 CC2:3564.99 CC3:3574.98	CC1:3615 CC2:3624.99 CC3:3634.98	CC1:3675 CC2:3684.99 CC3:3694.98
	30kHz	3CC	CC1:20 CC2:20 CC3:20	CC1:3560.01 CC2:3579.99 CC3:3599.97	CC1:3605.01 CC2:3624.99 CC3:3644.97	CC1:3650.04 CC2:3670.02 CC3:3690
	30kHz	3CC	CC1:40 CC2:20 CC3:10	CC1:3570 CC2:3599.7 CC3:3614.37	CC1:3610.29 CC2:3639.99 CC3:3654.66	CC1:3650.61 CC2:3680.31 CC3:3694.98
	30kHz	3CC	CC1:40 CC2:30 CC3:20	CC1:3570 CC2:3604.68 CC3:3629.64	CC1:3600.18 CC2:3634.86 CC3:3659.82	CC1:3630.36 CC2:3665.04 CC3:3690
	30kHz	3CC	CC1:40 CC2:20 CC3:20	CC1:3570 CC2:3599.7 CC3:3619.68	CC1:3605.16 CC2:3634.86 CC3:3654.84	CC1:3640.32 CC2:3670.02 CC3:3690
5G NR (3550-3700MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	4CC	CC1:20 CC2:20 CC3:20 CC4:20	CC1:3560.01 CC2:3579.99 CC3:3599.97 CC4:3619.95	CC1:3595.02 CC2:3615 CC3:3634.98 CC4:3654.96	CC1:3630.06 CC2:3650.04 CC3:3670.02 CC4:3690



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	30kHz	4CC	CC1:40 CC2:30 CC3:20 CC4:10	CC1:3570 CC2:3604.68 CC3:3629.64 CC4:3644.31	CC1:3595.32 CC2:3630 CC3:3654.96 CC4:3669.63	CC1:3620.67 CC2:3655.35 CC3:3680.31 CC4:3694.98
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5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
5G NR (3700-3980MHz)	30kHz	1CC	10	3705	3839.97	3974.97
	30kHz	1CC	20	3710.01	3839.97	3969.96
	30kHz	1CC	30	3715.02	3840	3964.98
	30kHz	1CC	40	3720	3839.97	3959.97
	30kHz	1CC	60	3729.99	3839.97	3949.98
	30kHz	1CC	100	3750	3839.97	3929.97
5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	2CC	CC1:10 CC2:10	CC1:3705 CC2:3714.99	CC1:3834.99 CC2:3844.98	CC1:3965.01 CC2:3975
	30kHz	2CC	CC1:20 CC2:20	CC1:3710.01 CC2:3729.99	CC1:3830.01 CC2:3849.99	CC1:3949.98 CC2:3969.99
	30kHz	2CC	CC1:30 CC2:10	CC1:3715.02 CC2:3734.73	CC1:3835.14 CC2:3854.85	CC1:3955.29 CC2:3975
	30kHz	2CC	CC1:30 CC2:20	CC1:3715.02 CC2:3739.98	CC1:3830.01 CC2:3854.97	CC1:3945 CC2:3969.99
	30kHz	2CC	CC1:40 CC2:20	CC1:3720 CC2:3749.7	CC1:3830.13 CC2:3859.83	CC1:3940.29 CC2:3969.99
	30kHz	2CC	CC1:40 CC2:40	CC1:3720 CC2:3759.99	CC1:3819.99 CC2:3859.98	CC1:3920.01 CC2:3960
5G NR (3700-3980MHz)	30kHz	2CC	CC1:60 CC2:20	CC1:3729.99 CC2:3769.77	CC1:3830.1 CC2:3869.88	CC1:3930.18 CC2:3969.99
5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	3CC	CC1:10 CC2:10 CC3:10	CC1:3705 CC2:3714.99 CC3:3724.98	CC1:3830.01 CC2:3840 CC3:3849.99	CC1:3955.02 CC2:3965.01 CC3:3975
	30kHz	3CC	CC1:20 CC2:20 CC3:20	CC1:3710.01 CC2:3729.99 CC3:3749.97	CC1:3820.02 CC2:3840 CC3:3859.98	CC1:3930 CC2:3949.98 CC3:3969.99
	30kHz	3CC	CC1:40 CC2:20 CC3:10	CC1:3720 CC2:3749.7 CC3:3764.37	CC1:3825.3 CC2:3855 CC3:3869.67	CC1:3930.63 CC2:3960.33 CC3:3975
	30kHz	3CC	CC1:40 CC2:30 CC3:20	CC1:3720 CC2:3754.68 CC3:3779.64	CC1:3815.16 CC2:3849.84 CC3:3874.8	CC1:3910.32 CC2:3945 CC3:3969.99
	30kHz	3CC	CC1:40 CC2:20 CC3:20	CC1:3720 CC2:3749.7 CC3:3769.68	CC1:3820.14 CC2:3849.84 CC3:3869.82	CC1:3920.28 CC2:3949.98 CC3:3969.99
5G NR (3700-3980MHz)	SCS	Carrier	Bandwidth (MHz)	Channel		
				Low	Middle	High
	30kHz	4CC	CC1:20 CC2:20 CC3:20	CC1:3710.01 CC2:3729.99 CC3:3749.97	CC1:3810.03 CC2:3830.01 CC3:3849.99	CC1:3910.02 CC2:3930 CC3:3949.98



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			CC4:20	CC4:3769.95	CC4:3869.97	CC4:3969.99
	30kHz	4CC	CC1:40	CC1:3720	CC1:3810.33	CC1:3900.69
			CC2:30	CC2:3754.68	CC2:3845.01	CC2:3935.37
			CC3:20	CC3:3779.64	CC3:3869.97	CC3:3960.33
			CC4:10	CC4:3794.31	CC4:3884.64	CC4:3975



4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

4.6 Test Location

Lab A:

Compliance Certification Services (Kunshan) Inc.

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Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

Lab B:

Conducted Emissions at AC Power Line (150kHz-30MHz); Radiated Emissions; Radiated Emissions which fall in the restricted bands test at:

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

No.2, Tongsheng Road, Wuzhong District, Suzhou, Jiangsu, China

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Lab A:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

Lab B:

• A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 6336.01.

• Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• FCC –Designation Number: CN1312



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SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None



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5 Equipment List

Lab A

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/01/2024	07/31/2025
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/01/2024	07/31/2025
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/15/2025	01/14/2026
4	Signal Generator	R&S	SMBV100B	KSEM032	02/19/2025	02/18/2026
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/02/2024	08/01/2025
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/01/2024	07/31/2025
7	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/01/2024	07/31/2025
8	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	02/19/2025	02/18/2026
9	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/13/2024	08/12/2025
10	Switcher	TST	FY562	KUS2001M001-4	01/15/2025	01/14/2026
11	AC Power Source	EXTECH	6605	KS301178	N.C.R	N.C.R
12	DC Power Supply	Aglient	E3632A	KS301180	N.C.R	N.C.R
13	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/14/2025	01/13/2026
14	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KSES104904	09/02/2024	09/01/2025
15	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	02/26/2025	02/25/2026
16	Software	BST	TST-PASS	/	NCR	NCR

Lab B

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-02	11/25/2024	11/24/2027
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-13	2/13/2025	2/12/2026
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	5/8/2024	5/7/2025
Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-06	11/21/2024	11/20/2025
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2/1/2024	1/31/2025
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	11/25/2023	11/24/2025
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	11/25/2023	11/24/2025
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/12/2023	5/11/2025
Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/13/2023	5/12/2025
Amplifier	Tonscend	TAP9K3G32	SUWI-01-14-06	11/19/2024	11/24/2025



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Amplifier	Tonscend	TAP01018050	SUWI-01-14-04	11/19/2024	11/24/2025
Amplifier	Tonscend	TAP30M7G30	SUWI-01-14-05	11/19/2024	11/24/2025
Measurement Software	Tonscend	JS32-RE	SUWI-02-09-04	NCR	NCR
		V4.0.0.0			
Measurement Software	Tonscend	JS32-RSE	SUWI-02-09-06	NCR	NCR
		4.0.0.1			



6 Re-use of Measured Data

6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: PC-400i, FCC ID: ROR2001) is electrically identical to the reference device (Model: PCW-400i, FCC ID: ROR2002) for the portions of the circuitry corresponding to the data being re-used. Based on their similarity, the FCC Part 27, 96 (equipment class: BS) referencing the original model's result and do spot-check, following the FCC KDB 484596 D01 Referencing Test Data v03. The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: ROR2001.

6.2 Model Difference Information

The main difference between FCC ID: ROR2002 and FCC ID: ROR2001 is as below:

- Remove WIFI 2.4GHz, 5GHz, 6GHz.

6.3 Reference detail Section

Rule Part	Equipment Class	Frequency Band (MHz)	Reference FCC ID (Parent)	Type Grant/Permissive Change	Reference Title	FCC ID Filling (Variant)	Report Title/Section
27,96	TNB, CBD	n48/n77/n78	ROR2002	Original Grant	KSCR240700144901	ROR2001	All sections applicable

6.4 Spot Check Verification Data Section

Conducted power test and 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.

All test procedures follow the related section of parent report. Spot-check measurements, while being always compliant with the applicable rule part(s) for the test under consideration, may show a deviation ddB from the reference data no larger than 3 dB (applicable for both field and power quantities):

$$ddB = |VdB - RdB| \leq 3 \text{ dB}$$

where VdB is the variant spot-check level in dB, and RdB is the corresponding measurement level in dB for the reference model.

An alternative to the limit of eq. (1) is available, and is based on considering how far the reference data RdB is from the compliance threshold CdB (also expressed in dB), for the particular test under consideration. In this case, if $MdB = |CdB - RdB|$ is the margin in dB from the compliance limit, a spot check may be considered acceptable when the deviation ddB from the reference data satisfies the following condition:

$$ddB = |VdB - RdB| \leq (3 + MdB / 20) \text{ dB}, \text{ for } 0 \leq MdB \leq 60 \text{ dB}$$

$$ddB = |VdB - RdB| = 6 \text{ dB}, \text{ for } MdB > 60 \text{ dB}$$

When using the option in eq. (2), ddB increases linearly from 3 dB to 6 dB -for $MdB = 0$ dB, then $ddB = 3$ dB, that is when RdB is right at the compliance threshold CdB , thus the margin $MdB = 0$ and the variant can only be allowed to go lower than RdB);-for $MdB = 60$ dB, then $ddB = 6$ dB, i.e., the reference model data is 60 dB below the compliance threshold MdB .

For RF Exposure, the spot-check measurements that meet the following criteria:

$$dTER = |TER_V - TER_R| / TER_R$$

and the acceptance criterion for the spot-check on the variant will be:

$$dTER \leq dTER_{max}$$

The value of $dTER_{max}$, the maximum $dTER$ allowed for the spot-check to be deemed acceptable, is

established based on the compliance margin M corresponding to the worst-case test scenario (i.e., the most challenging from the compliance perspective) for the parent model. The margin M is defined as

$$M = TERT - TER_R = 1 - TER_R$$

where $TERT$ is the TER corresponding to the compliance threshold, which is always $TERT = 1$. For instance, for a general population evaluation, $SAR \leq 1.6 \text{ W/kg}$, as required for any compliant measurement. Thus, since $TER = SAR/1.6$, and $0 \leq TER \leq 1$, then M in eq. (7) will always be a positive number because TER_R cannot be larger than 1 for the parent model to be compliant.

The threshold d_{TERmax} is defined as function of the margin M to provide values between 25% and 50%, linearly increasing between $M = 0.5$ (50% of the compliance limit) and $M = 0.75$ (75% of the compliance limit), in accordance with the following expression:

$$d_{TERmax}(M) = \begin{cases} 0.25 & , \text{ for } 0 \leq M < 0.5 \\ M - 0.25 & , \text{ for } 0.5 \leq M < 0.75 \\ 0.5 & , \text{ for } 0.75 \leq M \end{cases}$$

7 Radio Spectrum Matter Test Results

7.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: §2.1046, §27.50(k), §27.50(J), §96.41

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: EIRP ≤ 62.15dBm/10MHz (3450-3550MHz, 3700-3980MHz)

EIRP ≤ 30dBm/10MHz, PSD ≤ 20dBm/MHz (3550-3700MHz)

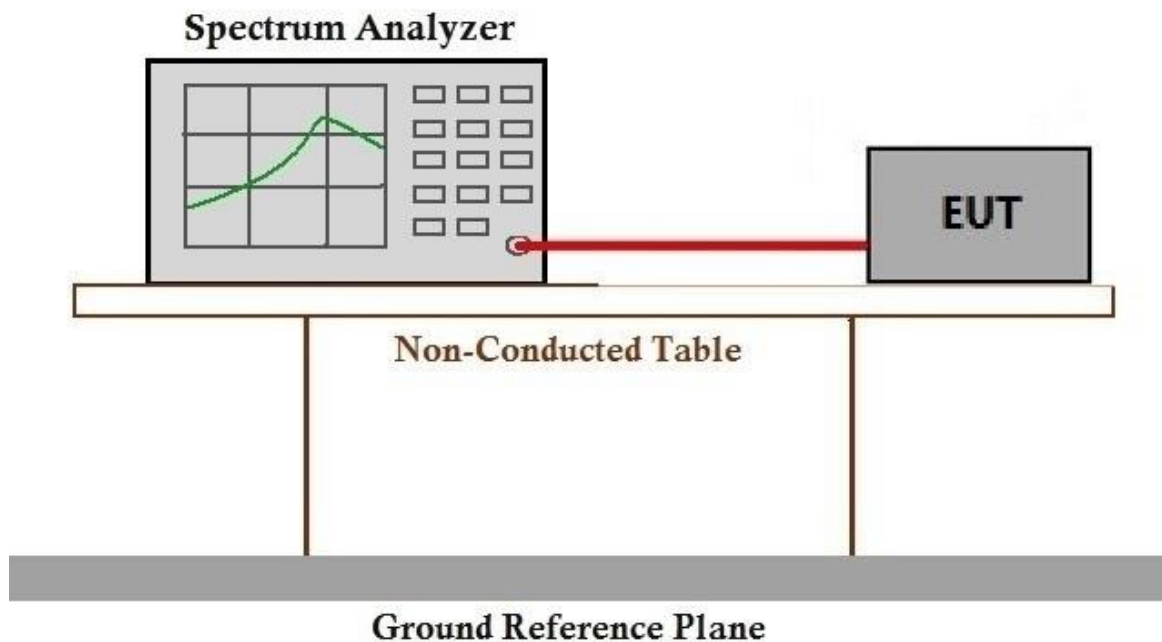
7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 56.4 % RH Atmospheric Pressure: 1030 mbar

Test mode: 00: Tx mode, Keep the EUT in transmitting mode.

7.1.2 Test Setup Diagram



7.1.3 Measurement Data

Please refer to Appendix



Spot Check Data

Test Item	Frequency Range (MHz)	ROR2002 Parent Worst mode Test Result	ROR2001 Variant Check Test Result	Deviation (dB)	Limit (dB)
Conducted Power	3450-3550	29.78	29.96	0.14	3
		21.04	21.30	0.26	3
	3550-3700	29.96	29.36	0.60	3
		19.50	20.12	0.62	3
		28.96	28.50	0.46	3
	3700-3980	29.96	29.20	0.54	3
		20.10	20.84	0.74	3

7.2 Field strength of spurious radiation

Test Requirement: §2.1051, §96.41

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: Except as otherwise specified in paragraph (e)(2) of this section, for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any CBSD emission outside the fundamental emission bandwidth as specified in paragraph (e)(3) of this section (whether the emission is inside or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed -25 dBm/MHz. The upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

Additional protection levels. Notwithstanding paragraph (e)(1) of this section, for CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

Note: For MIMO mode, the conducted Bandedge/Spurious are tested at single antenna port and add $10 \cdot \log(\text{NANT})$ according to KDB 662911 D01, only the worst MIMO Ant is shown in the report.

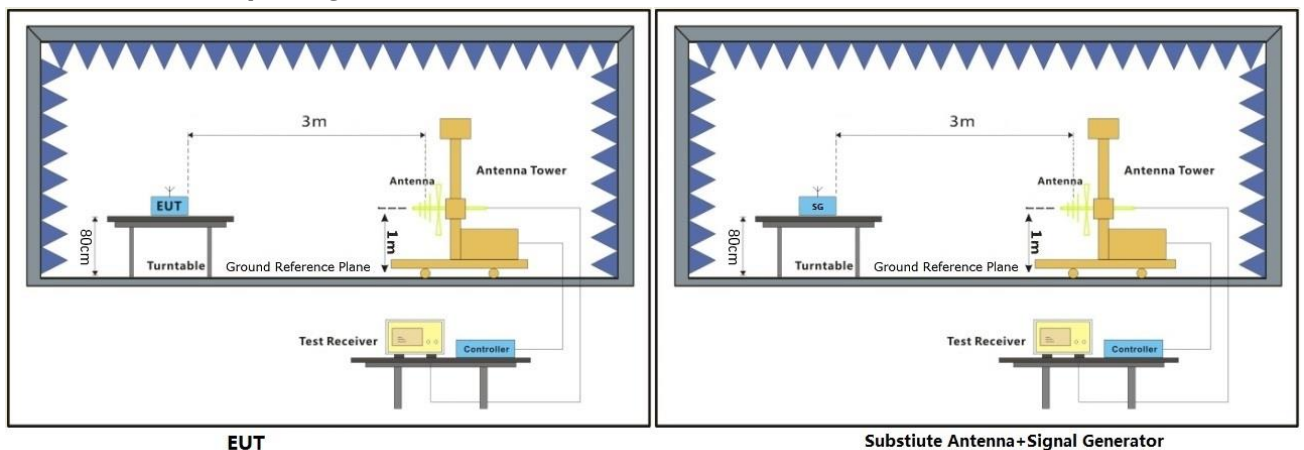
7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 56.4 % RH Atmospheric Pressure: 1030 mbar

Test mode: 00: Tx mode, Keep the EUT in transmitting mode.

7.2.2 Test Setup Diagram



7.2.3 Measurement Procedure and Data

Test Procedure:

- (1) On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- (2) The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- (3) The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- (4) The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- (5) The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- (6) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7) The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9) The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15) The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17) The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.



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Spot Check Data

Test Item	Frequency Range (MHz)	ROR2002 Parent Worst mode Test Result	ROR2001 Variant Check Test Result	Deviation (dB)	Limit (dB)
Radiated Spurious Emission (dBm)	3450-3550	-43.24	-44.61	1.37	3
	3550-3700	-43.78	-45.30	1.52	3
	3700-3980	-41.54	-43.05	1.51	3

Test Item	Frequency Range (MHz)	ROR2002 Parent Worst mode Test Result	ROR2001 Variant Check Test Result	Deviation (%)	Limit (%)
MPE	3450-3980	0.047	0.047	0	25

- End of the Report -