

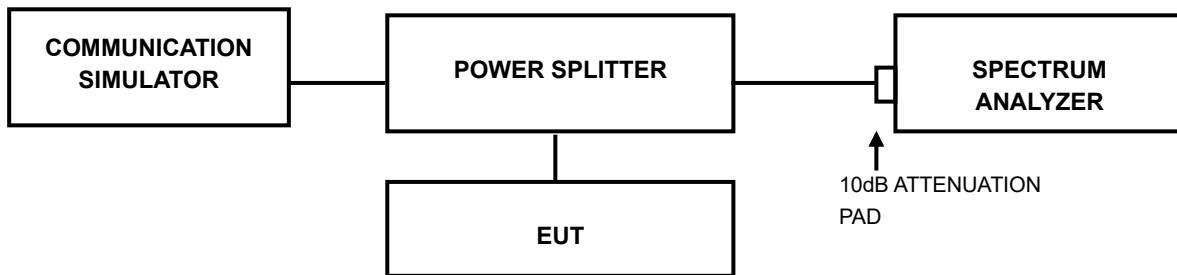


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.



**BUREAU
VERITAS**

Test Report No.: W7L-240618W001RF13

3.7.4 TEST RESULTS

Please Refer to Appendix Of this test report.



**BUREAU
VERITAS**

Test Report No.: W7L-240618W001RF13

4 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Shenzhen EMC/RF Lab:

Tel: +86-755-88696566

Fax: +86-755-88696577

Email: customerservice.sw@cn.bureauveritas.com

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.



**BUREAU
VERITAS**

Test Report No.: W7L-240618W001RF13

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



6 APPENDIX

N48

SCS 15K

PEAK-TO-AVERAGE RATIO(CCDF)

TEST RESULT

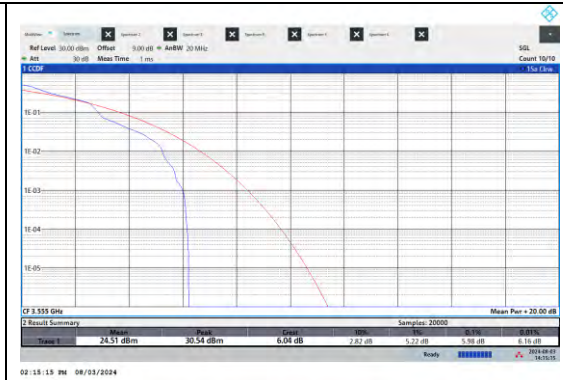
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N48	15	20	DFT-QPSK	L	Outer_Full	6.38	≤13	PASS
N48	15	20	DFT-QPSK	L	Edge_1RB_Left	5.98	≤13	PASS
N48	15	20	DFT-QPSK	M	Outer_Full	6.62	≤13	PASS
N48	15	20	DFT-QPSK	M	Edge_1RB_Left	7.16	≤13	PASS
N48	15	20	DFT-QPSK	H	Outer_Full	6.98	≤13	PASS
N48	15	20	DFT-QPSK	H	Edge_1RB_Left	5.76	≤13	PASS



TEST GRAPHS



NTNV-N48-PC3-15-20-L-DFT-QPSK-Outer_Full-P ASS



NTNV-N48-PC3-15-20-L-DFT-QPSK-Edge_1RB_Left-PASS



NTNV-N48-PC3-15-20-M-DFT-QPSK-Outer_Full-P ASS



NTNV-N48-PC3-15-20-M-DFT-QPSK-Edge_1RB_Left-PASS



NTNV-N48-PC3-15-20-H-DFT-QPSK-Outer_Full-P ASS



NTNV-N48-PC3-15-20-H-DFT-QPSK-Edge_1RB_Left-PASS



26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA TEST RESULT

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
N48	15	10	DFT-PI2BPSK	M	Outer_Full	8.932	9.73	PASS
N48	15	10	DFT-QPSK	M	Outer_Full	8.923	9.51	PASS
N48	15	10	DFT-16QAM	M	Outer_Full	8.914	9.45	PASS
N48	15	10	DFT-64QAM	M	Outer_Full	8.905	9.47	PASS
N48	15	10	DFT-256QAM	M	Outer_Full	8.944	9.45	PASS
N48	15	15	DFT-PI2BPSK	M	Outer_Full	13.435	14.33	PASS
N48	15	15	DFT-QPSK	M	Outer_Full	13.432	14.27	PASS
N48	15	15	DFT-16QAM	M	Outer_Full	13.404	14.27	PASS
N48	15	15	DFT-64QAM	M	Outer_Full	13.446	14.24	PASS
N48	15	15	DFT-256QAM	M	Outer_Full	13.424	14.24	PASS
N48	15	20	DFT-PI2BPSK	M	Outer_Full	17.866	18.90	PASS
N48	15	20	DFT-QPSK	M	Outer_Full	17.868	19.06	PASS
N48	15	20	DFT-16QAM	M	Outer_Full	17.871	18.90	PASS
N48	15	20	DFT-64QAM	M	Outer_Full	17.863	18.94	PASS
N48	15	20	DFT-256QAM	M	Outer_Full	17.840	18.98	PASS
N48	15	40	DFT-PI2BPSK	M	Outer_Full	38.548	40.84	PASS
N48	15	40	DFT-QPSK	M	Outer_Full	38.579	41.00	PASS
N48	15	40	DFT-16QAM	M	Outer_Full	38.575	40.60	PASS
N48	15	40	DFT-64QAM	M	Outer_Full	38.502	41.24	PASS
N48	15	40	DFT-256QAM	M	Outer_Full	38.541	40.20	PASS
N48	15	50	DFT-PI2BPSK	M	Outer_Full	48.107	50.25	PASS
N48	15	50	DFT-QPSK	M	Outer_Full	48.174	50.15	PASS
N48	15	50	DFT-16QAM	M	Outer_Full	48.146	50.35	PASS
N48	15	50	DFT-64QAM	M	Outer_Full	48.212	50.05	PASS
N48	15	50	DFT-256QAM	M	Outer_Full	48.224	50.15	PASS

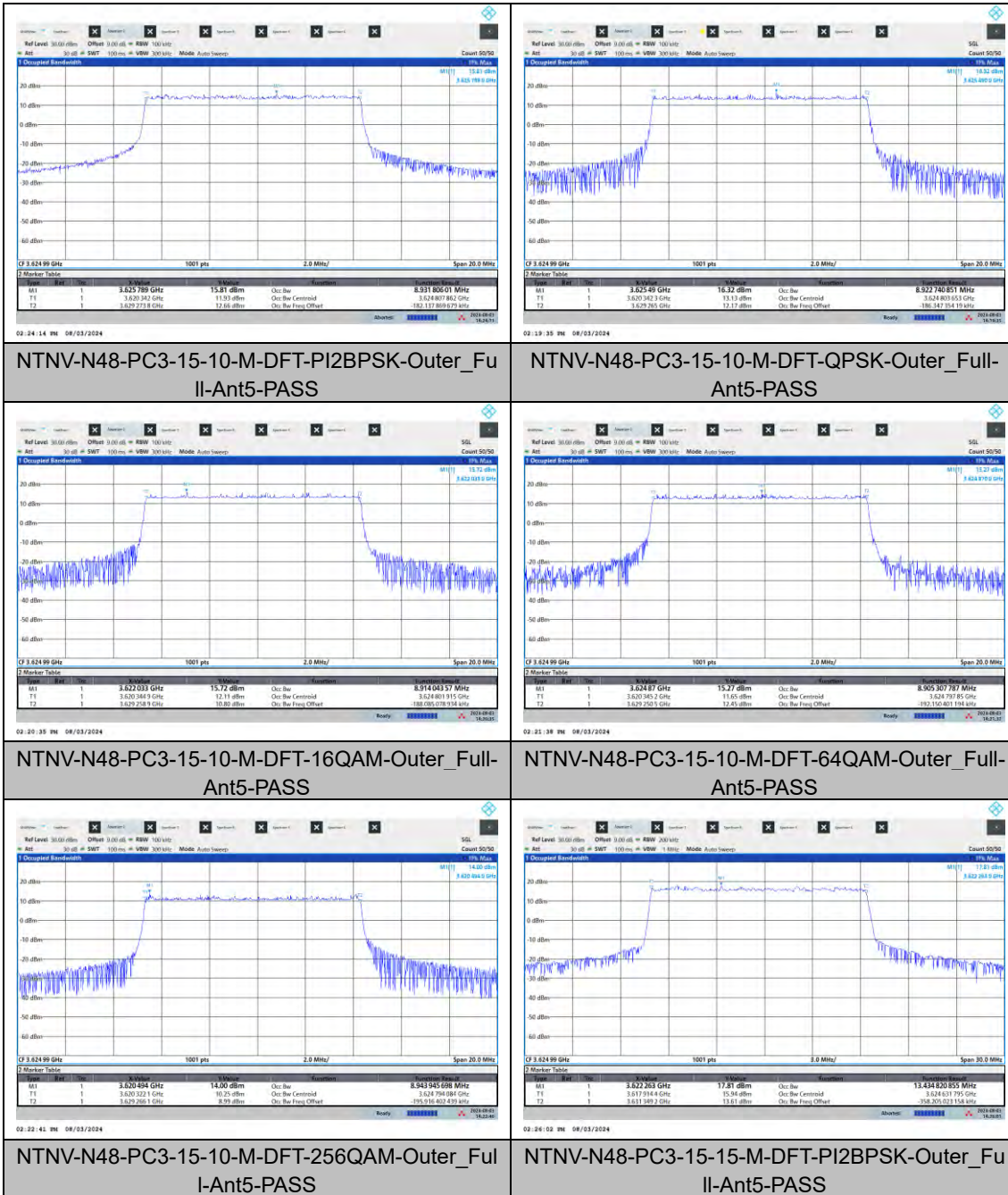


BUREAU VERITAS

Test Report No.: W7L-240618W001RF13

TEST GRAPHS

OCCUPIED BANDWIDTH



BV 7Layers Communications Technology (Shenzhen) Co., Ltd

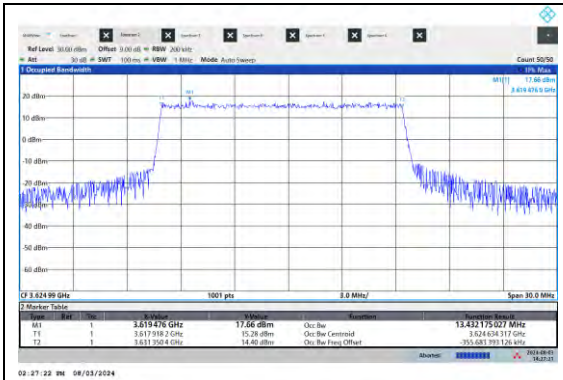
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

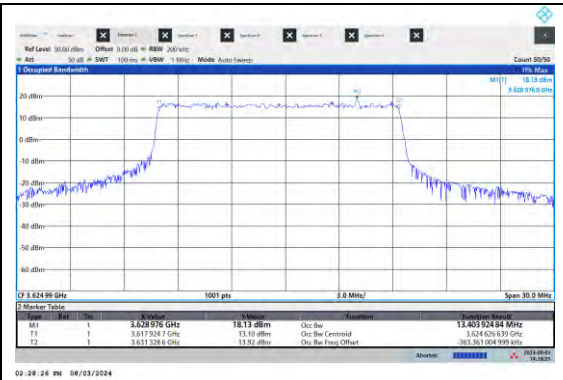


BUREAU VERITAS

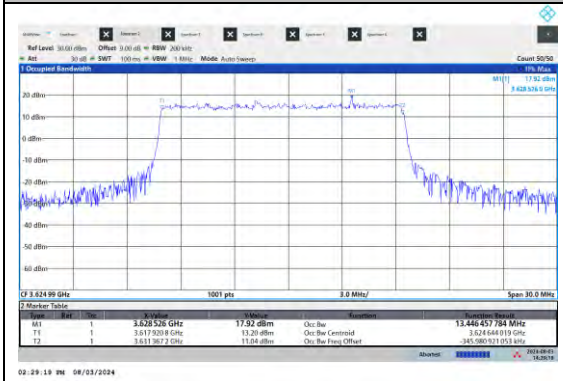
Test Report No.: W7L-240618W001RF13



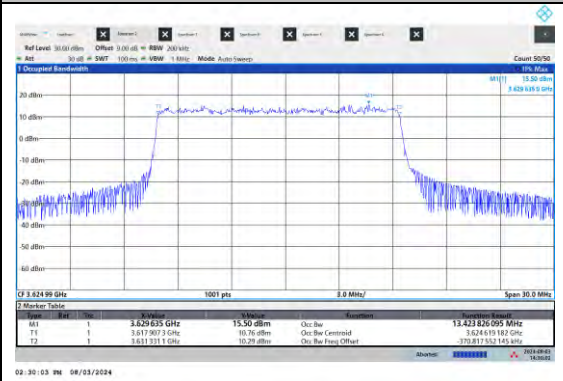
NTVN-N48-PC3-15-15-M-DFT-QPSK-Outer_Full-Ant5-PASS



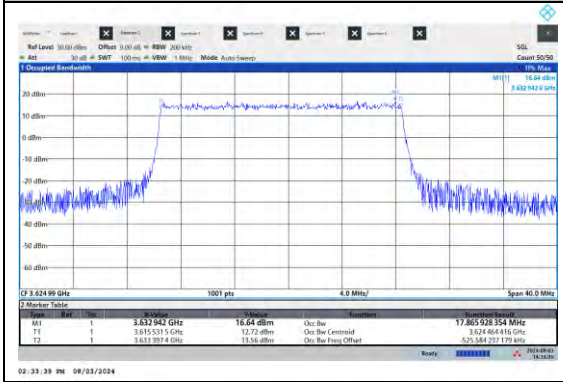
NTVN-N48-PC3-15-15-M-DFT-16QAM-Outer_Full-Ant5-PASS



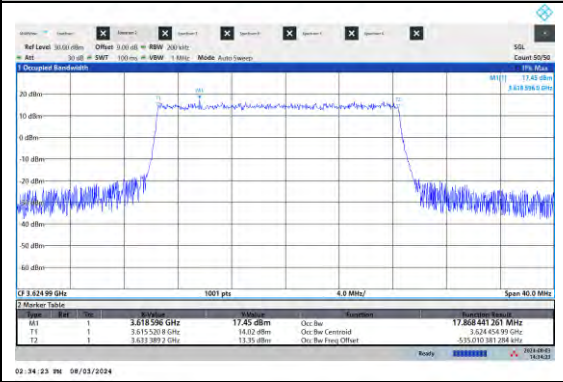
NTVN-N48-PC3-15-15-M-DFT-64QAM-Outer_Full-Ant5-PASS



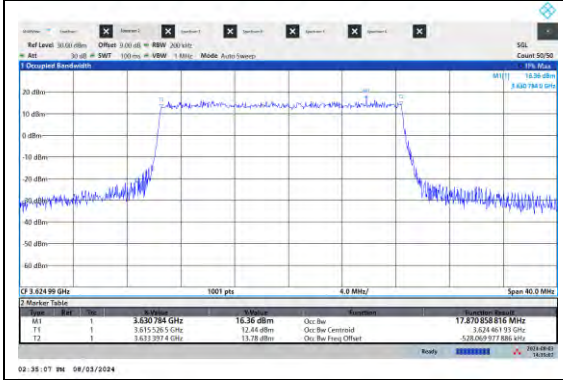
NTVN-N48-PC3-15-15-M-DFT-256QAM-Outer_Full-Ant5-PASS



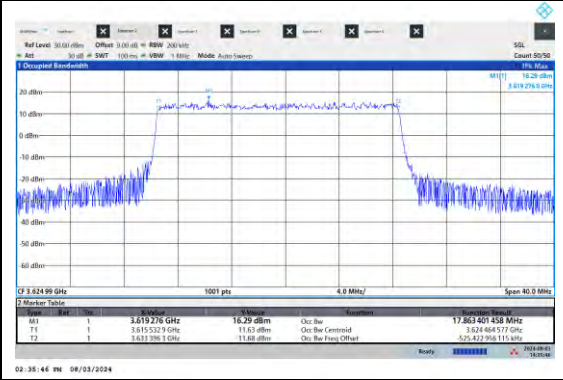
NTVN-N48-PC3-15-20-M-DFT-PI2BPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-20-M-DFT-QPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-20-M-DFT-16QAM-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-20-M-DFT-64QAM-Outer_Full-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

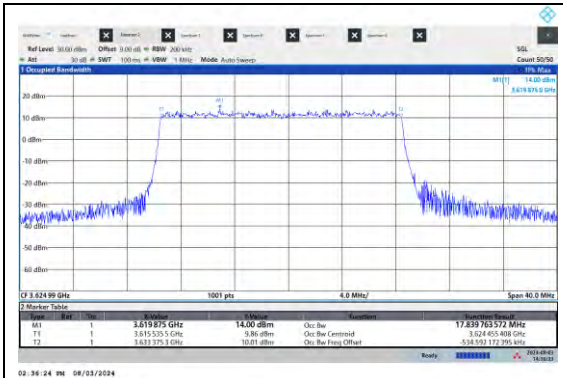
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

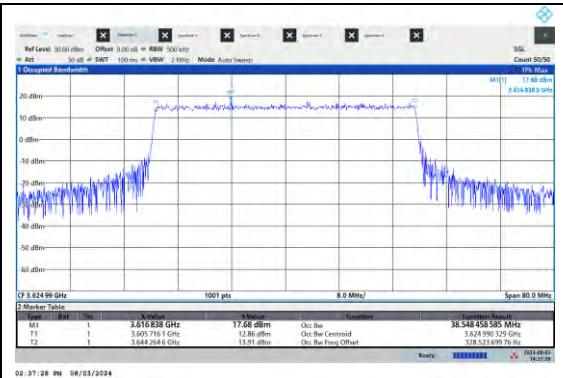


BUREAU VERITAS

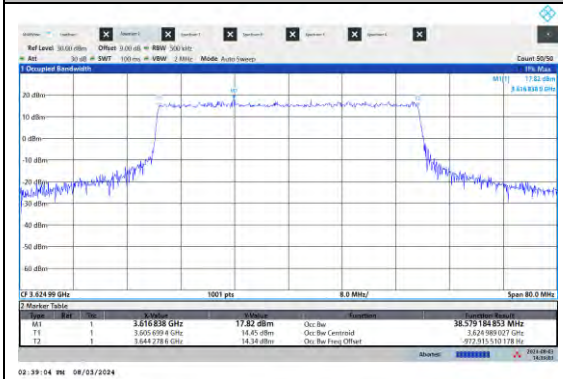
Test Report No.: W7L-240618W001RF13



NTVN-N48-PC3-15-20-M-DFT-256QAM-Outer_Ful I-Ant5-PASS



NTVN-N48-PC3-40-M-DFT-PI2BPSK-Outer_Full-A nt5-PASS



NTVN-N48-PC3-15-40-M-DFT-QPSK-Outer_Full-Ant5-PASS



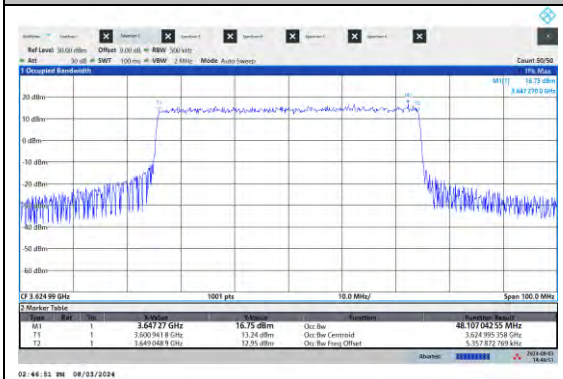
NTVN-N48-PC3-15-40-M-DFT-16QAM-Outer_Full-Ant5-PASS



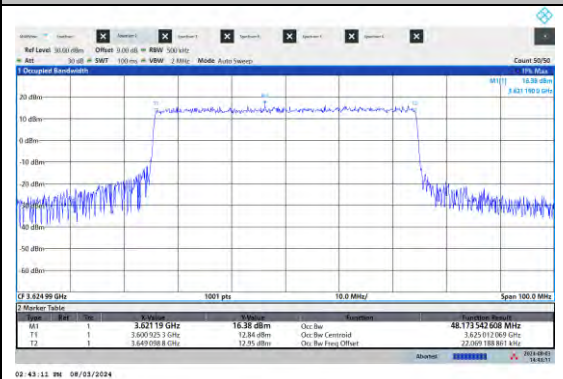
NTVN-N48-PC3-15-40-M-DFT-64QAM-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-40-M-DFT-256QAM-Outer_Ful I-Ant5-PASS



NTVN-N48-PC3-15-50-M-DFT-PI2BPSK-Outer_Fu II-Ant5-PASS



NTVN-N48-PC3-50-M-DFT-PI2BPSK-Outer_Full-A nt5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

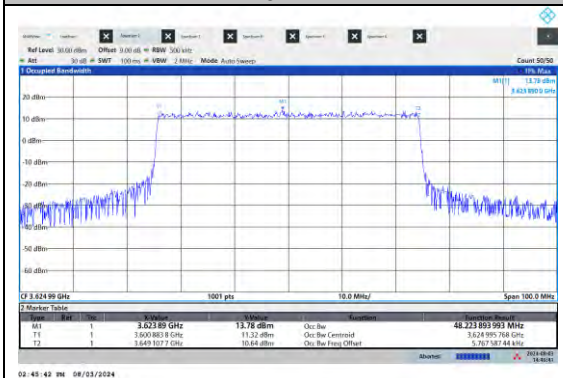
Test Report No.: W7L-240618W001RF13



NTNV-N48-PC3-15-50-M-DFT-QPSK-Outer_Full-Ant5-PASS

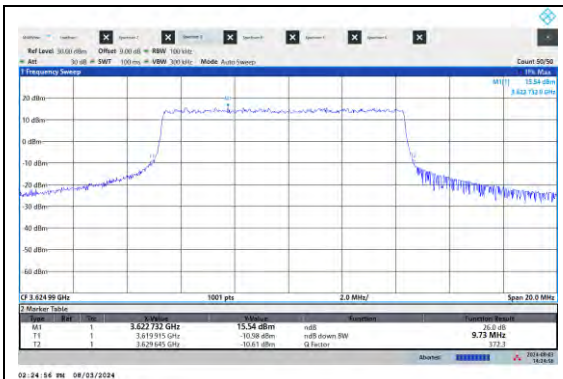


NTNV-N48-PC3-50-M-DFT-PI2BPSK-Outer_Full-Ant5-PASS

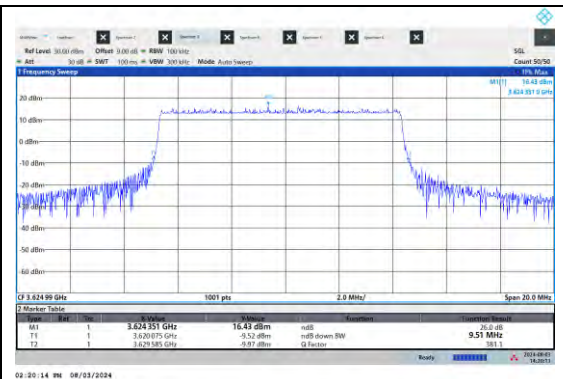


NTNV-N48-PC3-15-50-M-DFT-QPSK-Outer_Full-Ant5-PASS

26DB BANDWIDTH



NTNV-N48-PC3-15-10-M-DFT-PI2BPSK-Outer_Full-Ant5-PASS



NTNV-N48-PC3-15-10-M-DFT-QPSK-Outer_Full-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

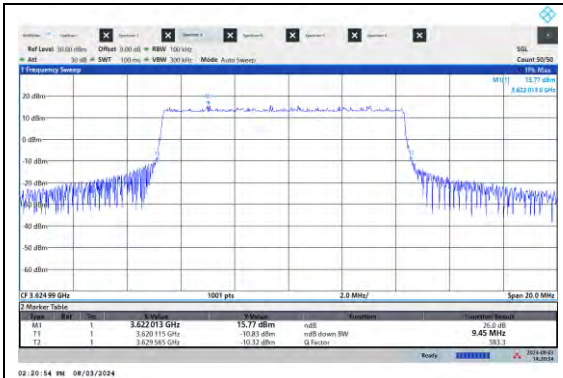
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

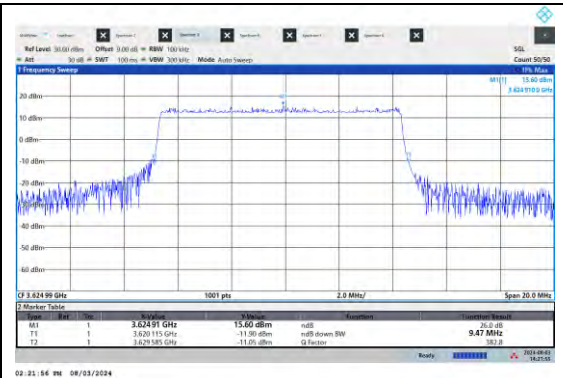


**BUREAU
VERITAS**

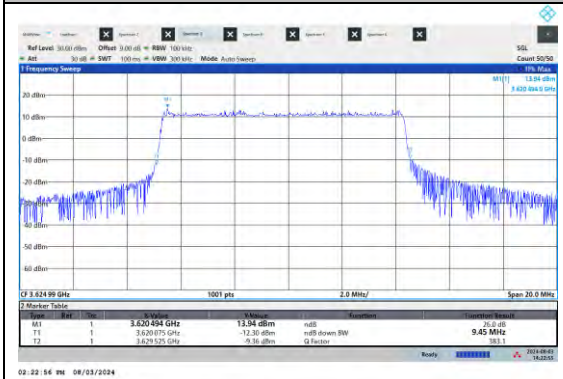
Test Report No.: W7L-240618W001RF13



NTVN-N48-PC3-15-10-M-DFT-16QAM-Outer_Full-Ant5-PASS



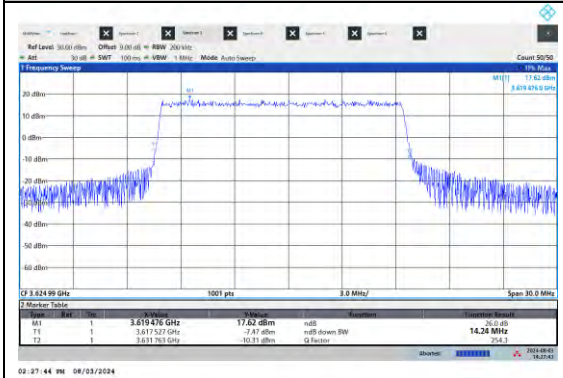
NTVN-N48-PC3-15-10-M-DFT-64QAM-Outer_Full-Ant5-PASS



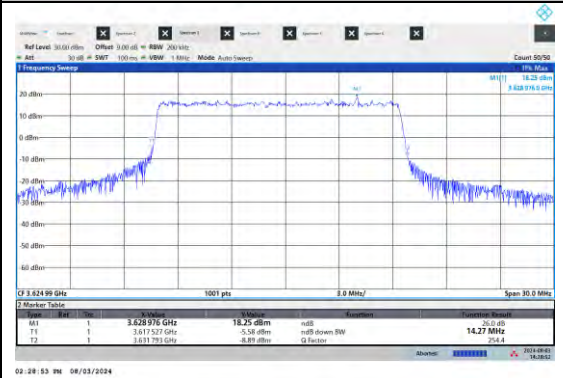
NTVN-N48-PC3-15-10-M-DFT-256QAM-Outer_Ful I-Ant5-PASS



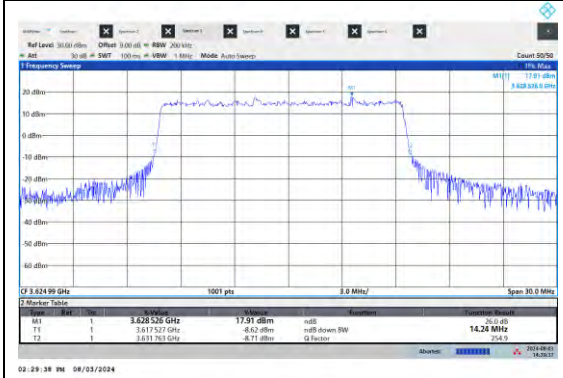
NTVN-N48-PC3-15-15-M-DFT-PI2BPSK-Outer_Fu II-Ant5-PASS



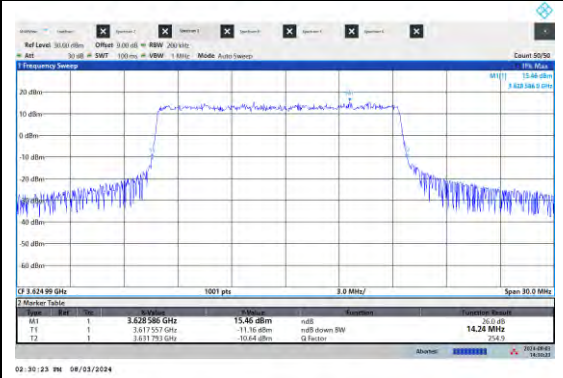
NTVN-N48-PC3-15-15-M-DFT-QPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-15-M-DFT-16QAM-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-15-M-DFT-64QAM-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-15-M-DFT-256QAM-Outer_Ful I-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

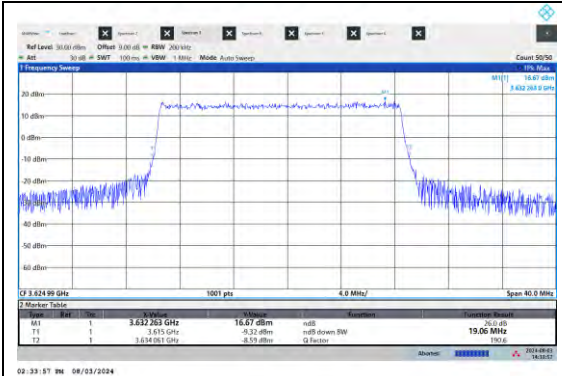
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

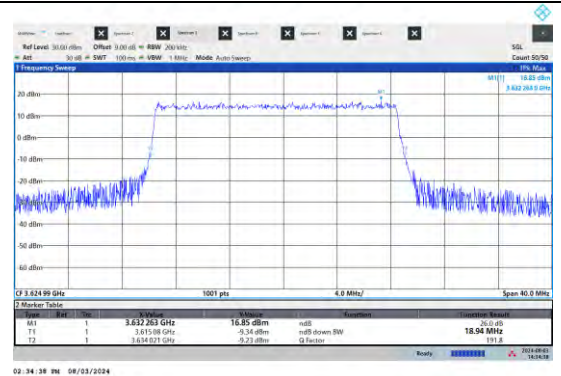


BUREAU VERITAS

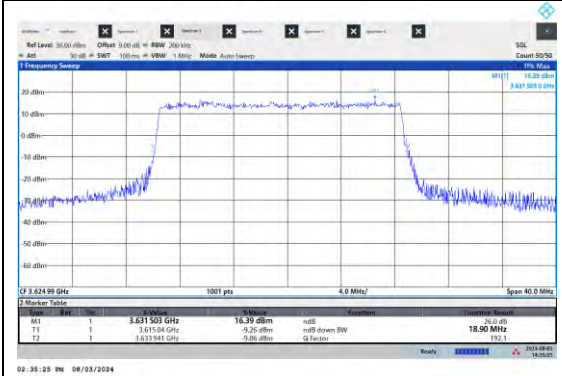
Test Report No.: W7L-240618W001RF13



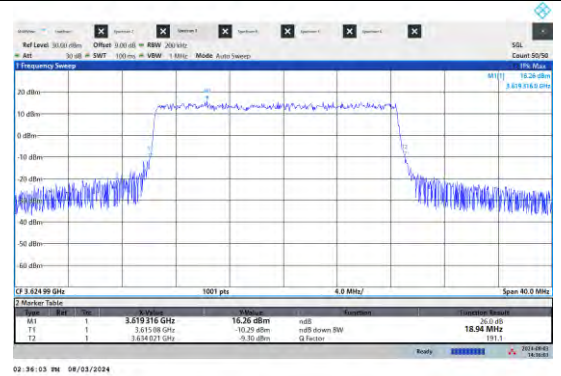
NTVN-N48-PC3-15-20-M-DFT-PI2BPSK-Outer_Fu II-Ant5-PASS



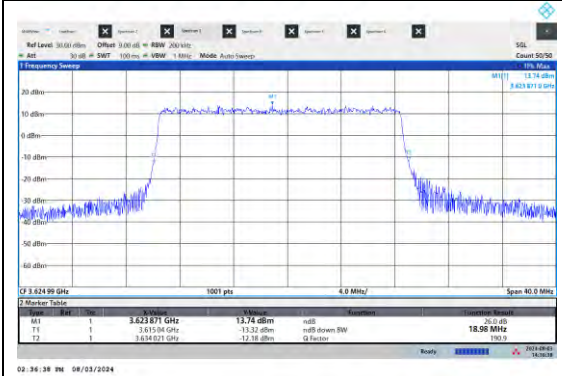
NTVN-N48-PC3-15-20-M-DFT-QPSK-Outer_Full-Ant5-PASS



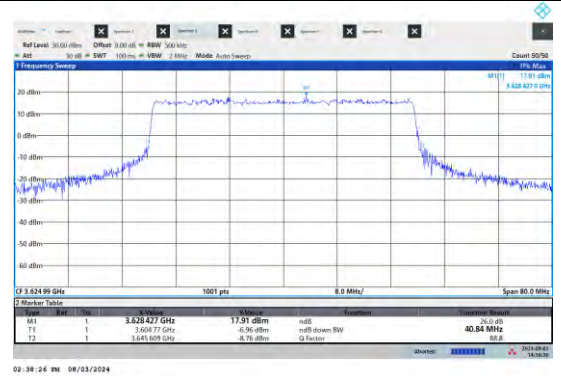
NTVN-N48-PC3-15-20-M-DFT-16QAM-Outer_Full-Ant5-PASS



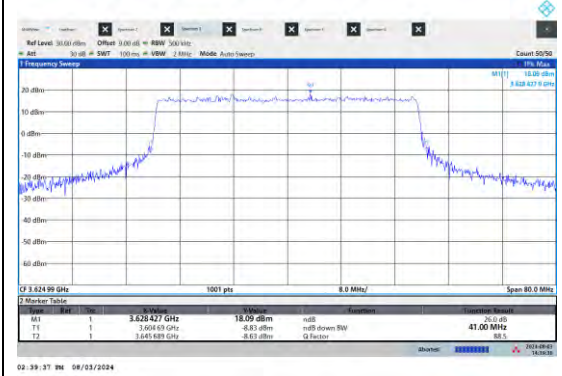
NTVN-N48-PC3-15-20-M-DFT-64QAM-Outer_Full-Ant5-PASS



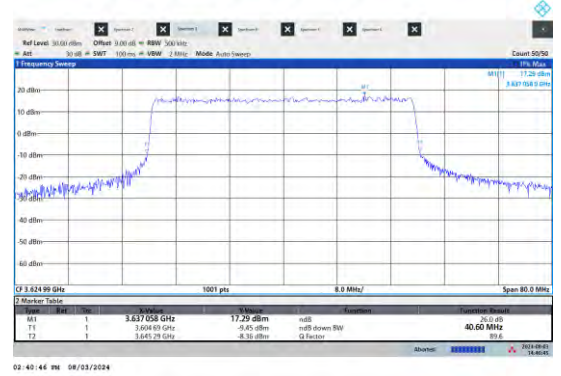
NTVN-N48-PC3-15-20-M-DFT-256QAM-Outer_Fu I-Ant5-PASS



NTVN-N48-PC3-40-M-DFT-PI2BPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-40-M-DFT-QPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-40-M-DFT-16QAM-Outer_Full-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

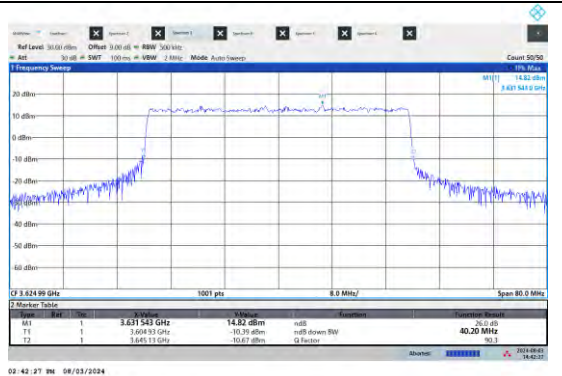


BUREAU VERITAS

Test Report No.: W7L-240618W001RF13



NTV-N48-PC3-15-40-M-DFT-64QAM-Outer_Full-Ant5-PASS



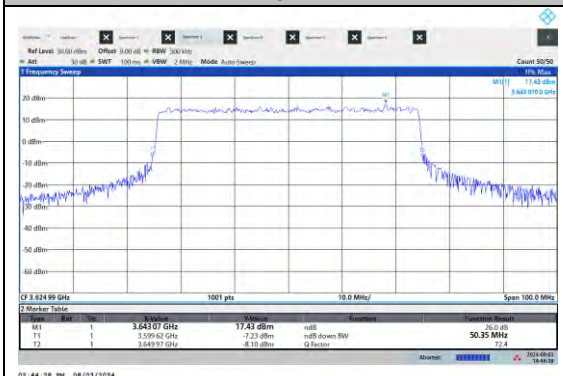
NTV-N48-PC3-15-40-M-DFT-256QAM-Outer_Ful-I-Ant5-PASS



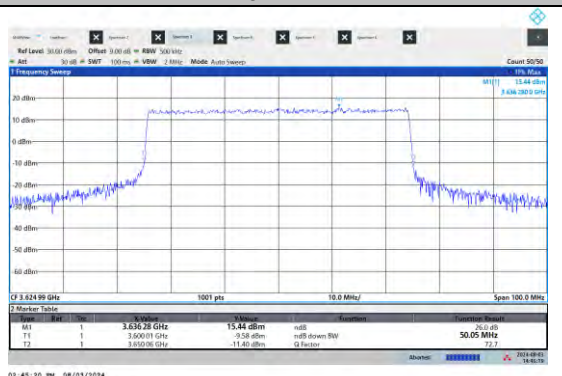
NTV-N48-PC3-15-50-M-DFT-PI2BPSK-Outer_Fu-II-Ant5-PASS



NTV-N48-PC3-50-M-DFT-PI2BPSK-Outer_Full-Ant5-PASS



NTV-N48-PC3-15-50-M-DFT-QPSK-Outer_Full-Ant5-PASS



NTV-N48-PC3-50-M-DFT-PI2BPSK-Outer_Full-Ant5-PASS



NTV-N48-PC3-15-50-M-DFT-QPSK-Outer_Full-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

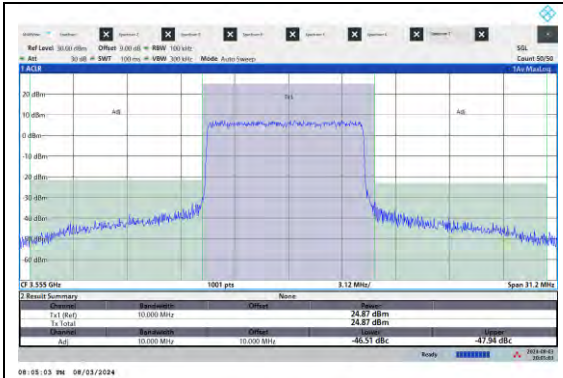


ACLR FOR SA TEST RESULT

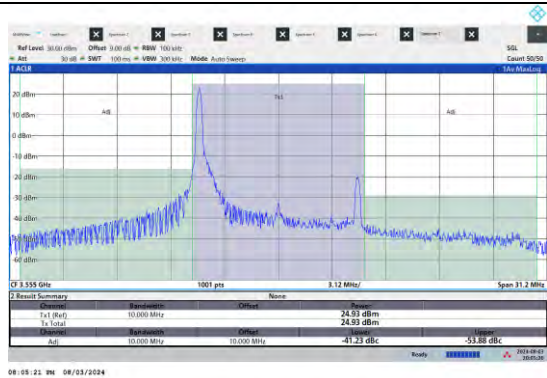
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
N48	15	10	DFT-QPSK	L	Outer_Full	≤-30	PASS
N48	15	10	DFT-QPSK	L	Edge_1RB_Left	≤-30	PASS
N48	15	10	DFT-QPSK	L	Edge_1RB_Right	≤-30	PASS
N48	15	10	DFT-QPSK	M	Outer_Full	≤-30	PASS
N48	15	10	DFT-QPSK	M	Edge_1RB_Left	≤-30	PASS
N48	15	10	DFT-QPSK	M	Edge_1RB_Right	≤-30	PASS
N48	15	10	DFT-QPSK	H	Outer_Full	≤-30	PASS
N48	15	10	DFT-QPSK	H	Edge_1RB_Left	≤-30	PASS
N48	15	10	DFT-QPSK	H	Edge_1RB_Right	≤-30	PASS
N48	15	20	DFT-QPSK	L	Outer_Full	≤-30	PASS
N48	15	20	DFT-QPSK	L	Edge_1RB_Left	≤-30	PASS
N48	15	20	DFT-QPSK	L	Edge_1RB_Right	≤-30	PASS
N48	15	20	DFT-QPSK	M	Outer_Full	≤-30	PASS
N48	15	20	DFT-QPSK	M	Edge_1RB_Left	≤-30	PASS
N48	15	20	DFT-QPSK	M	Edge_1RB_Right	≤-30	PASS
N48	15	20	DFT-QPSK	H	Outer_Full	≤-30	PASS
N48	15	20	DFT-QPSK	H	Edge_1RB_Left	≤-30	PASS
N48	15	20	DFT-QPSK	H	Edge_1RB_Right	≤-30	PASS
N48	15	50	DFT-QPSK	L	Outer_Full	≤-30	PASS
N48	15	50	DFT-QPSK	L	Edge_1RB_Left	≤-30	PASS
N48	15	50	DFT-QPSK	L	Edge_1RB_Right	≤-30	PASS
N48	15	50	DFT-QPSK	M	Outer_Full	≤-30	PASS
N48	15	50	DFT-QPSK	M	Edge_1RB_Left	≤-30	PASS
N48	15	50	DFT-QPSK	M	Edge_1RB_Right	≤-30	PASS
N48	15	50	DFT-QPSK	H	Outer_Full	≤-30	PASS
N48	15	50	DFT-QPSK	H	Edge_1RB_Left	≤-30	PASS
N48	15	50	DFT-QPSK	H	Edge_1RB_Right	≤-30	PASS



TEST GRAPHS



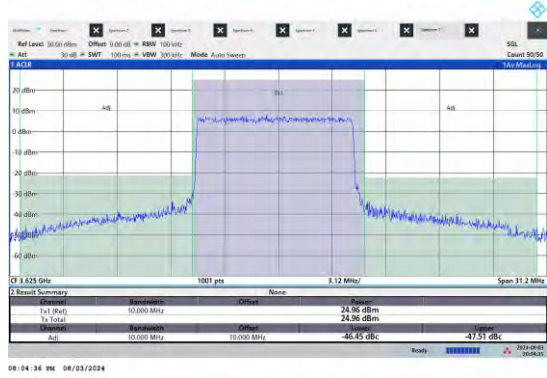
NTV-N48-PC3-15-10-L-DFT-QPSK-Outer_Full-Ant5-PASS



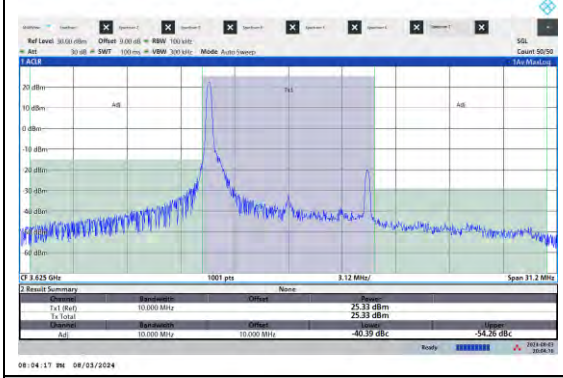
NTV-N48-PC3-15-10-L-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



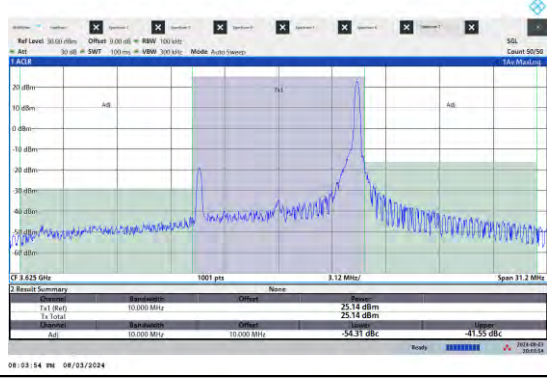
NTV-N48-PC3-15-10-L-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



NTV-N48-PC3-15-10-M-DFT-QPSK-Outer_Full-Ant5-PASS



NTV-N48-PC3-15-10-M-DFT-QPSK-Edge_1RB_Left-Ant5-PASS

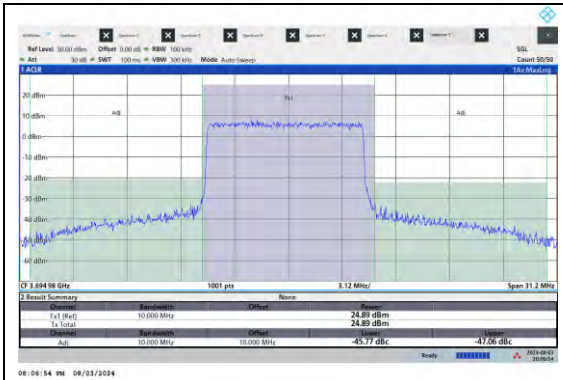


NTV-N48-PC3-15-10-M-DFT-QPSK-Edge_1RB_Right-Ant5-PASS

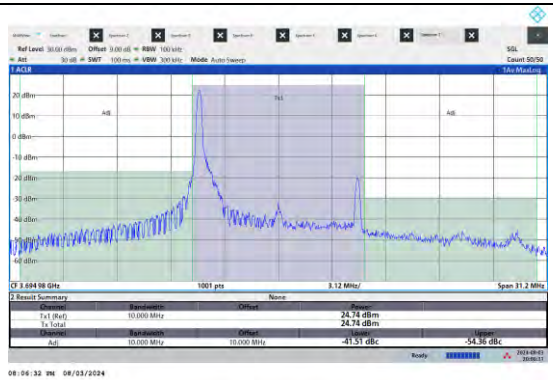


BUREAU VERITAS

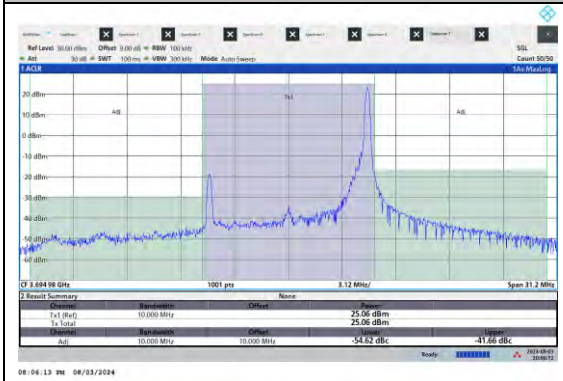
Test Report No.: W7L-240618W001RF13



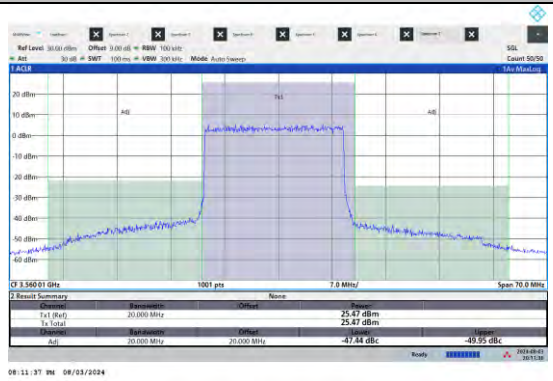
NTNV-N48-PC3-15-10-H-DFT-QPSK-Outer_Full-Ant5-PASS



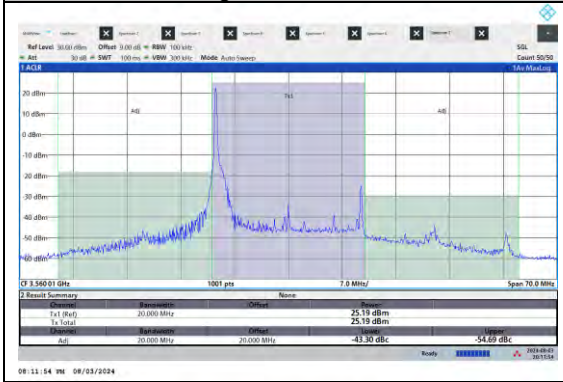
NTNV-N48-PC3-15-10-H-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



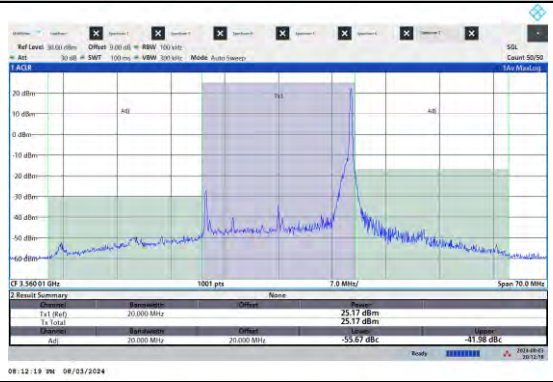
NTNV-N48-PC3-15-10-H-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



NTNV-N48-PC3-15-20-L-DFT-QPSK-Outer_Full-Ant5-PASS



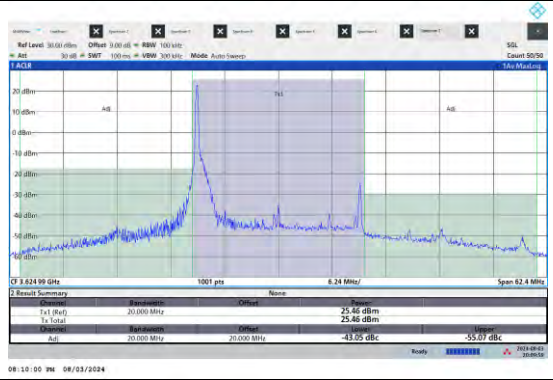
NTNV-N48-PC3-15-20-L-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



NTNV-N48-PC3-15-20-L-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



NTNV-N48-PC3-15-20-M-DFT-QPSK-Outer_Full-Ant5-PASS



NTNV-N48-PC3-15-20-M-DFT-QPSK-Edge_1RB_Left-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



BUREAU VERITAS

Test Report No.: W7L-240618W001RF13



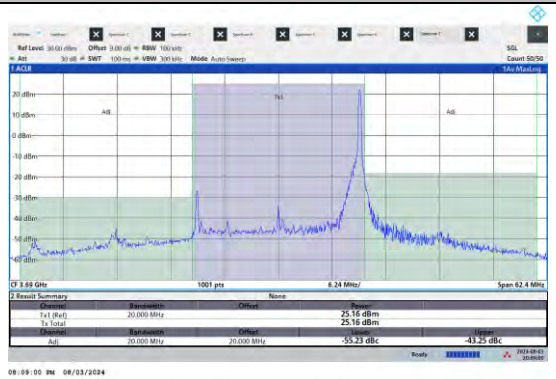
NTVN-N48-PC3-15-20-M-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



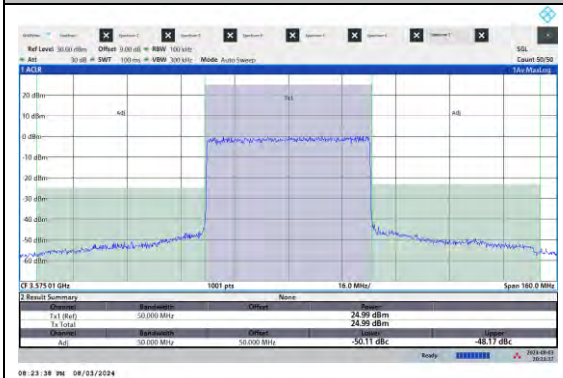
NTVN-N48-PC3-15-20-H-DFT-QPSK-Outer_Full-Ant5-PASS



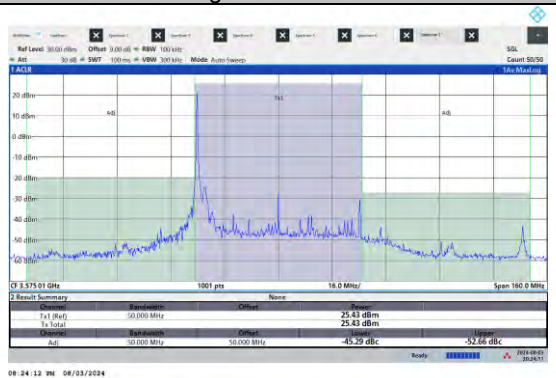
NTVN-N48-PC3-15-20-H-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



NTVN-N48-PC3-15-20-H-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



NTVN-N48-PC3-15-50-L-DFT-QPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-50-L-DFT-QPSK-Outer_Full-Ant5-PASS



NTVN-N48-PC3-15-50-L-DFT-QPSK-Edge_1RB_Reft-Ant5-PASS



NTVN-N48-PC3-15-50-M-DFT-QPSK-Outer_Full-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



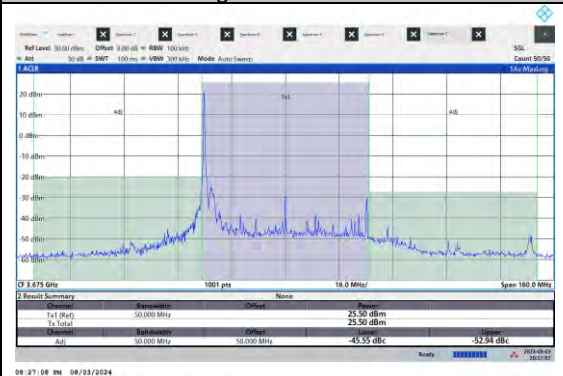
NTNV-N48-PC3-15-50-M-DFT-QPSK-Edge_1RB_
Left-Ant5-PASS



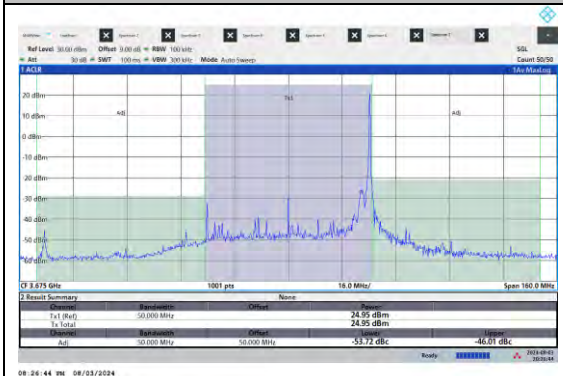
NTNV-N48-PC3-15-50-M-DFT-QPSK-Edge_1RB_
Right-Ant5-PASS



NTNV-N48-PC3-15-50-H-DFT-QPSK-Outer_Full-A
nt5-PASS



NTNV-N48-PC3-15-50-H-DFT-QPSK-Edge_1RB_
Left-Ant5-PASS



NTNV-N48-PC3-15-50-H-DFT-QPSK-Edge_1RB_
Right-Ant5-PASS



BAND EDGE FOR SA TEST RESULT

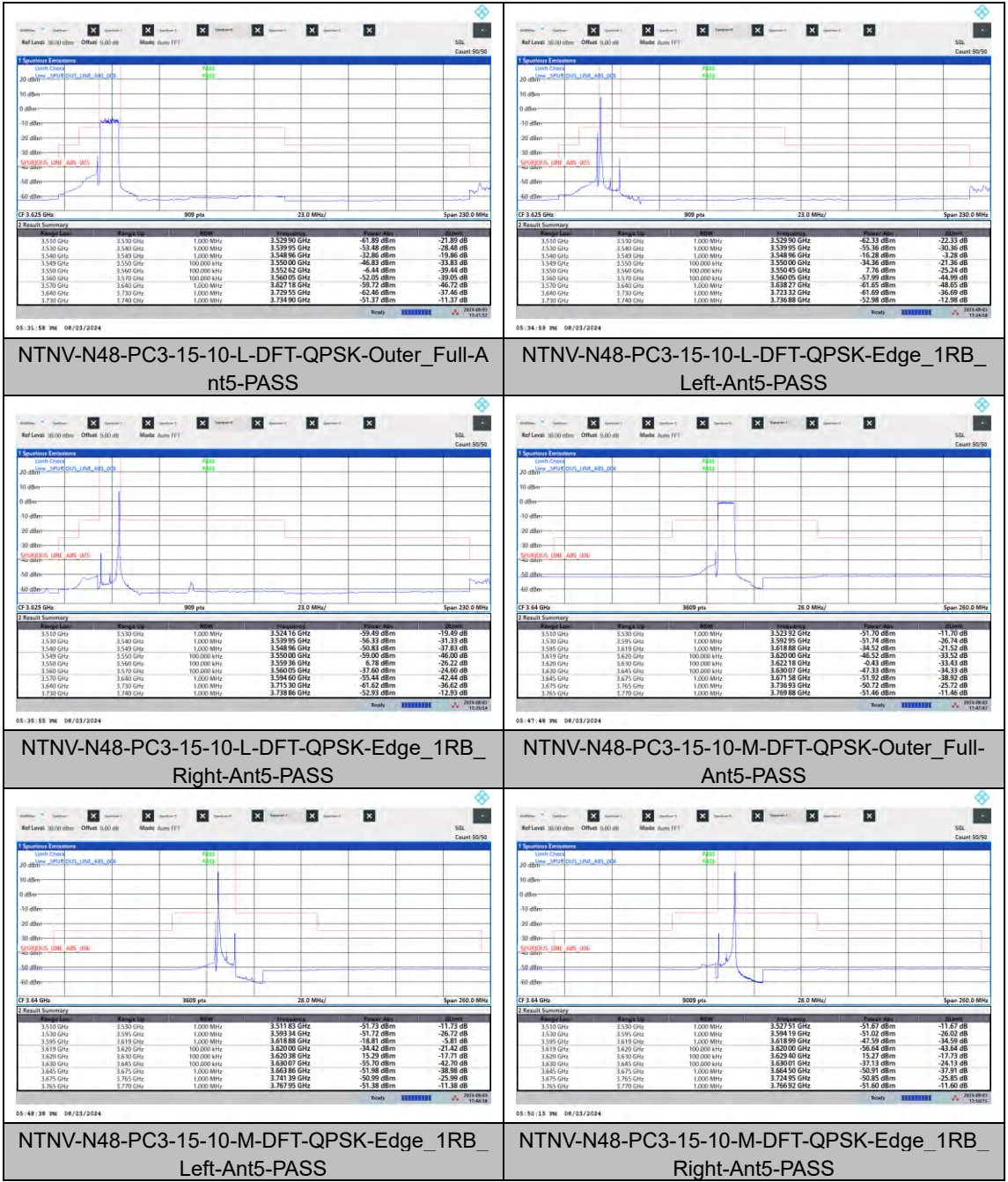
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
N48	15	10	DFT-QPSK	L	Outer_Full	See Graph	PASS
N48	15	10	DFT-QPSK	L	Edge_1RB_Left	See Graph	PASS
N48	15	10	DFT-QPSK	L	Edge_1RB_Right	See Graph	PASS
N48	15	10	DFT-QPSK	M	Outer_Full	See Graph	PASS
N48	15	10	DFT-QPSK	M	Edge_1RB_Left	See Graph	PASS
N48	15	10	DFT-QPSK	M	Edge_1RB_Right	See Graph	PASS
N48	15	10	DFT-QPSK	H	Outer_Full	See Graph	PASS
N48	15	10	DFT-QPSK	H	Edge_1RB_Left	See Graph	PASS
N48	15	10	DFT-QPSK	H	Edge_1RB_Right	See Graph	PASS
N48	15	20	DFT-QPSK	L	Outer_Full	See Graph	PASS
N48	15	20	DFT-QPSK	L	Edge_1RB_Left	See Graph	PASS
N48	15	20	DFT-QPSK	L	Edge_1RB_Right	See Graph	PASS
N48	15	20	DFT-QPSK	M	Outer_Full	See Graph	PASS
N48	15	20	DFT-QPSK	M	Edge_1RB_Left	See Graph	PASS
N48	15	20	DFT-QPSK	M	Edge_1RB_Right	See Graph	PASS
N48	15	20	DFT-QPSK	H	Outer_Full	See Graph	PASS
N48	15	20	DFT-QPSK	H	Edge_1RB_Left	See Graph	PASS
N48	15	20	DFT-QPSK	H	Edge_1RB_Right	See Graph	PASS
N48	15	50	DFT-QPSK	L	Outer_Full	See Graph	PASS
N48	15	50	DFT-QPSK	L	Edge_1RB_Left	See Graph	PASS
N48	15	50	DFT-QPSK	L	Edge_1RB_Right	See Graph	PASS
N48	15	50	DFT-QPSK	M	Outer_Full	See Graph	PASS
N48	15	50	DFT-QPSK	M	Edge_1RB_Left	See Graph	PASS
N48	15	50	DFT-QPSK	M	Edge_1RB_Right	See Graph	PASS
N48	15	50	DFT-QPSK	H	Outer_Full	See Graph	PASS
N48	15	50	DFT-QPSK	H	Edge_1RB_Left	See Graph	PASS
N48	15	50	DFT-QPSK	H	Edge_1RB_Right	See Graph	PASS



BUREAU VERITAS

Test Report No.: W7L-240618W001RF13

TEST GRAPHS



BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566

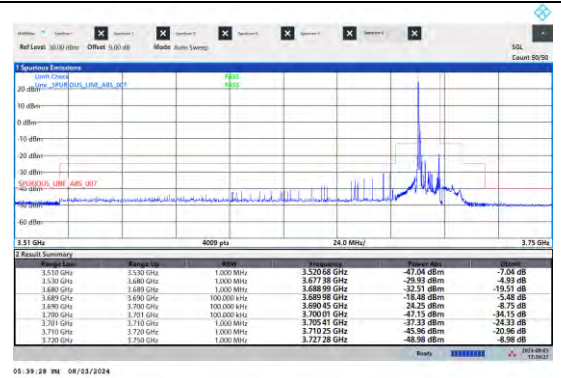
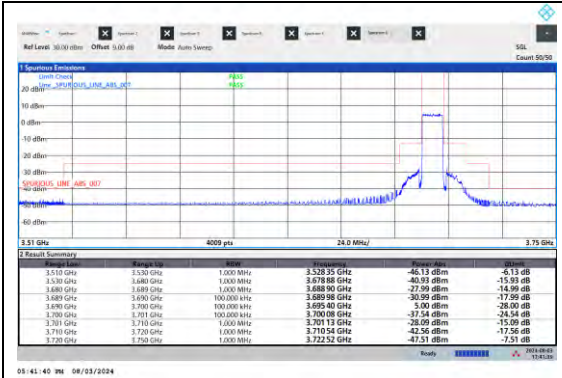
Fax: +86 755 8869 6577

Email: customerservice.sw@bureauveritas.com



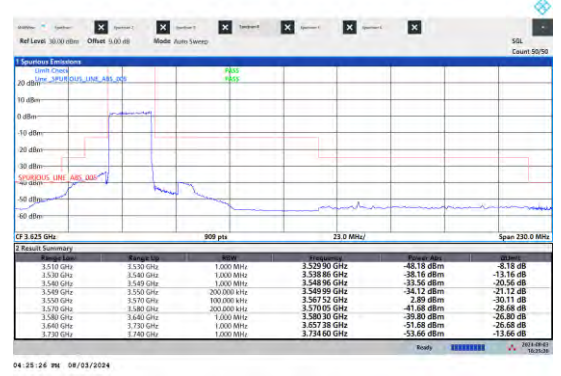
BUREAU VERITAS

Test Report No.: W7L-240618W001RF13



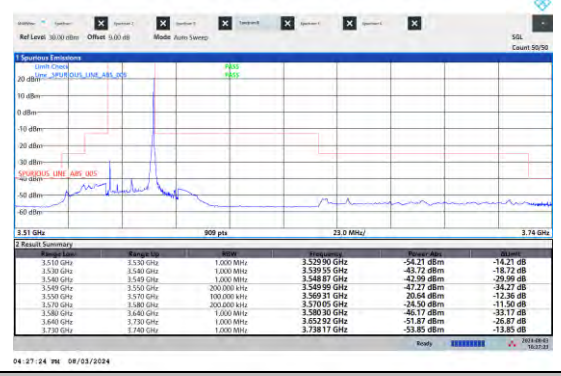
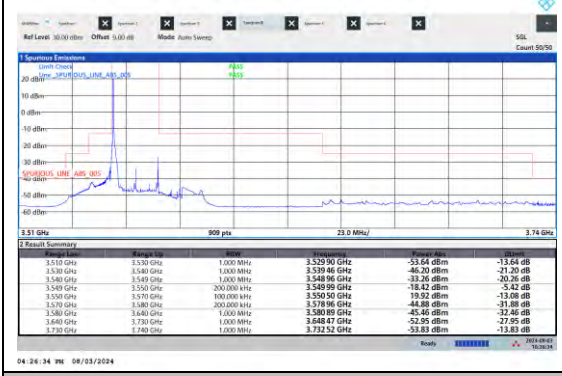
NTVN-N48-PC3-15-10-H-DFT-QPSK-Outer_Full-A nt5-PASS

NTVN-N48-PC3-15-10-H-DFT-QPSK-Edge_1RB Left-Ant5-PASS



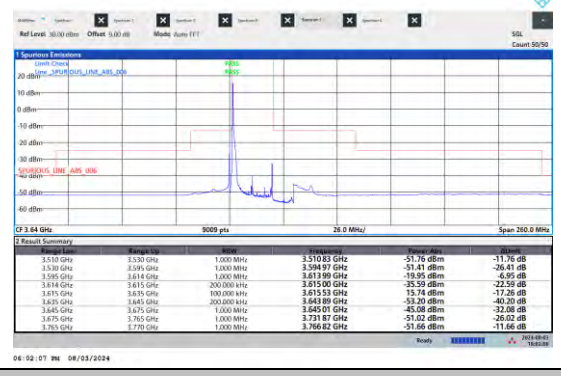
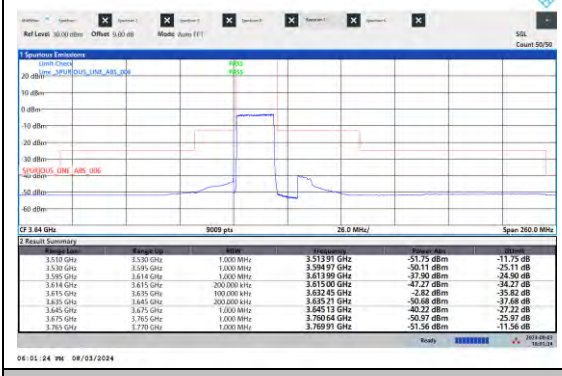
NTVN-N48-PC3-15-10-H-DFT-QPSK-Edge_1RB Right-Ant5-PASS

NTVN-N48-PC3-15-20-L-DFT-QPSK-Outer_Full-A nt5-PASS



NTVN-N48-PC3-15-20-L-DFT-QPSK-Edge_1RB Left-Ant5-PASS

NTVN-N48-PC3-15-20-L-DFT-QPSK-Edge_1RB Right-Ant5-PASS



NTVN-N48-PC3-15-20-M-DFT-QPSK-Outer_Full-Ant5-PASS

NTVN-N48-PC3-15-20-M-DFT-QPSK-Edge_1RB Left-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

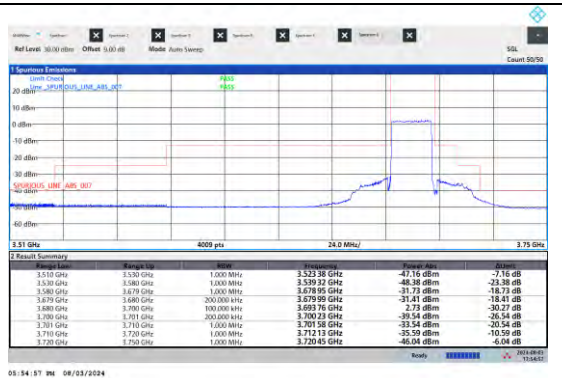
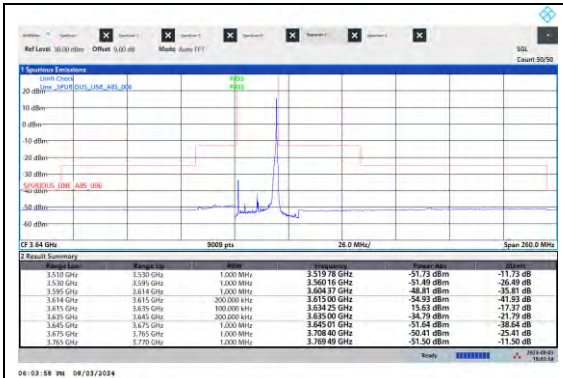
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566 Fax: +86 755 8869 6577 Email: customerservice.sw@bureauveritas.com



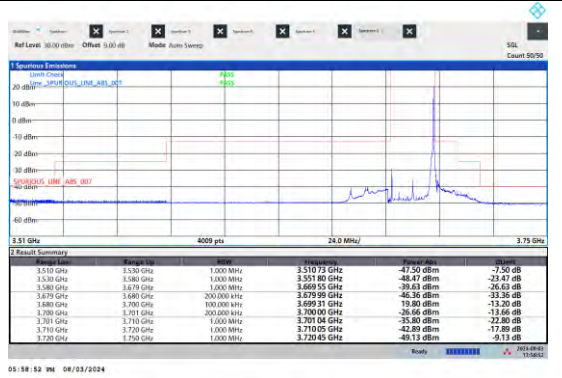
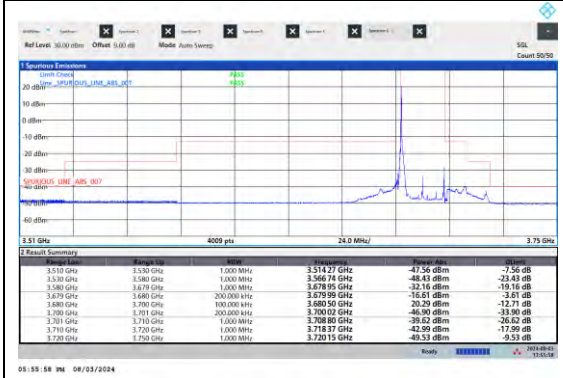
BUREAU VERITAS

Test Report No.: W7L-240618W001RF13



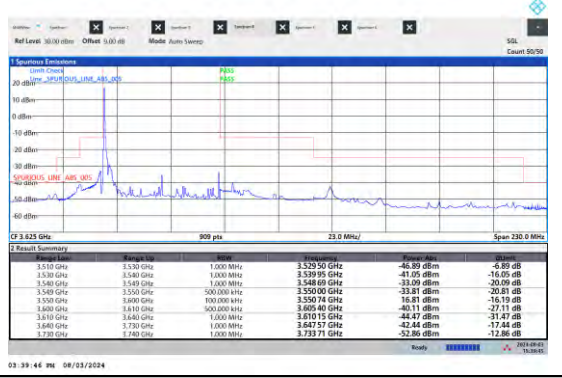
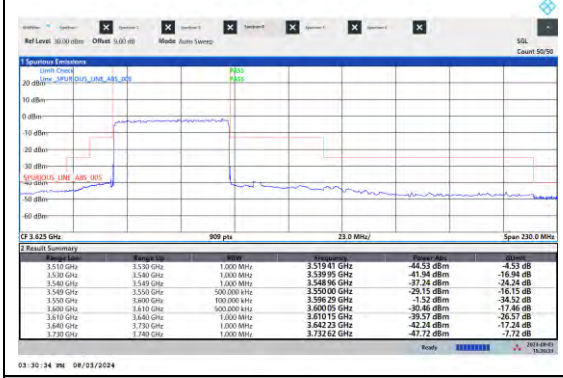
NTNV-N48-PC3-15-20-M-DFT-QPSK-Edge_1RB_Right-Ant5-PASS

NTNV-N48-PC3-15-20-H-DFT-QPSK-Outer_Full-Ant5-PASS



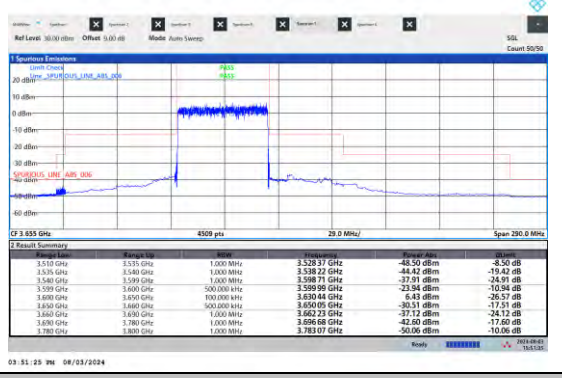
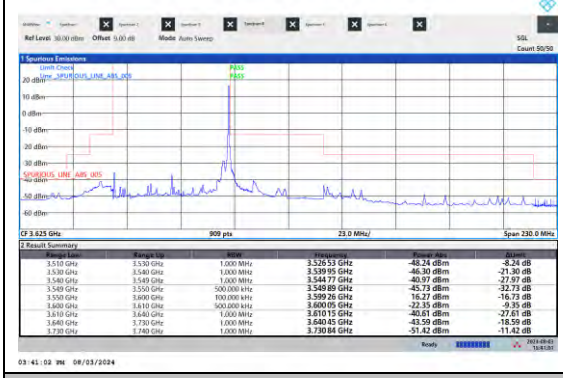
NTNV-N48-PC3-15-20-H-DFT-QPSK-Edge_1RB_Left-Ant5-PASS

NTNV-N48-PC3-15-20-H-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



NTNV-N48-PC3-15-50-L-DFT-QPSK-Outer_Full-Ant5-PASS

NTNV-N48-PC3-15-50-L-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



NTNV-N48-PC3-15-50-L-DFT-QPSK-Edge_1RB_Right-Ant5-PASS

NTNV-N48-PC3-15-50-M-DFT-QPSK-Outer_Full-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

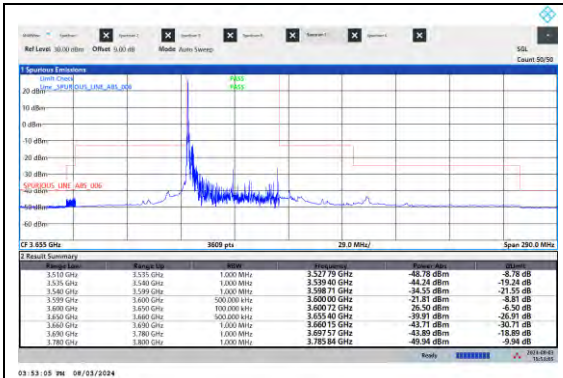
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566 Fax: +86 755 8869 6577 Email: customerservice.sw@bureauveritas.com

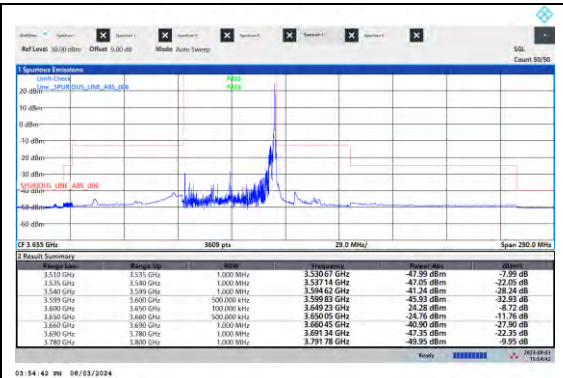


BUREAU VERITAS

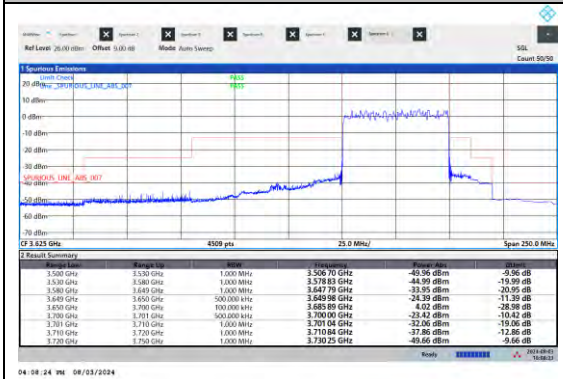
Test Report No.: W7L-240618W001RF13



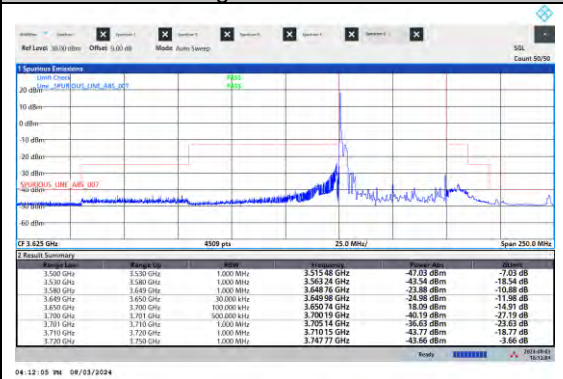
NTNV-N48-PC3-15-50-M-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



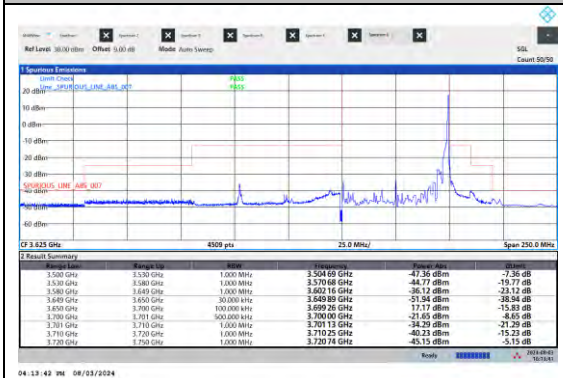
NTNV-N48-PC3-15-50-M-DFT-QPSK-Edge_1RB_Right-Ant5-PASS



NTNV-N48-PC3-15-50-H-DFT-QPSK-Outer_Full-Ant5-PASS



NTNV-N48-PC3-15-50-H-DFT-QPSK-Edge_1RB_Left-Ant5-PASS



NTNV-N48-PC3-15-50-H-DFT-QPSK-Edge_1RB_Right-Ant5-PASS

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



CONDUCTED SPURIOUS EMISSION FOR SA TEST RESULT

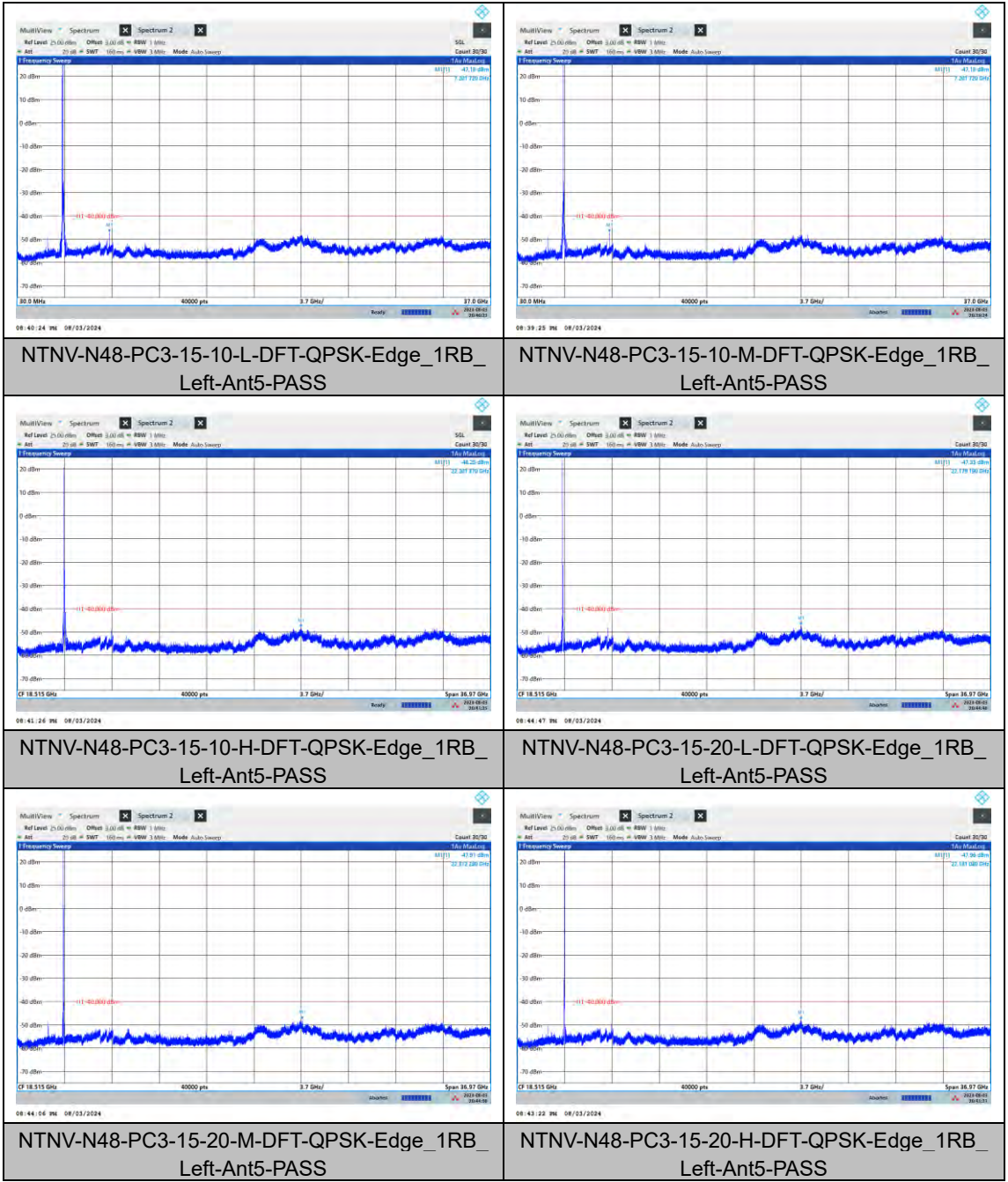
Band	SCS	Bandwidth	Modulation	Channel	RB Config	StartFreq	StopFreq	Result	Limit	Verdict
N48	15	10	DFT-QPSK	L	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	10	DFT-QPSK	M	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	10	DFT-QPSK	H	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	20	DFT-QPSK	L	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	20	DFT-QPSK	M	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	20	DFT-QPSK	H	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	40	DFT-QPSK	L	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	40	DFT-QPSK	M	Edge_1RB_Left	30	40000	See Graph	-40	PASS
N48	15	40	DFT-QPSK	H	Edge_1RB_Left	30	40000	See Graph	-40	PASS



**BUREAU
VERITAS**

Test Report No.: W7L-240618W001RF13

TEST GRAPHS



BV 7Layers Communications Technology (Shenzhen) Co., Ltd

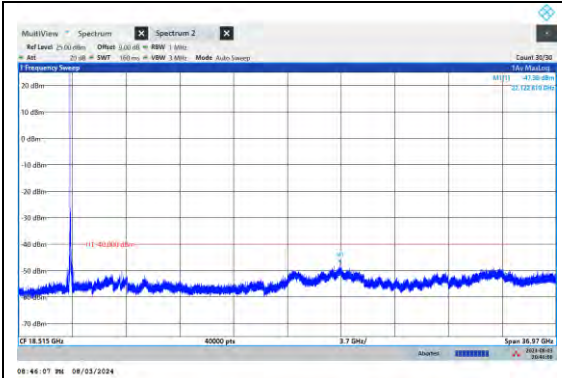
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

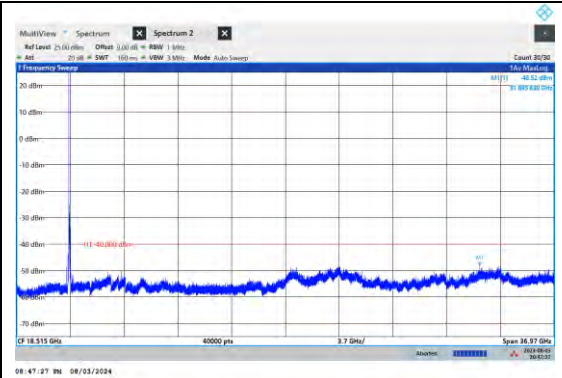


**BUREAU
VERITAS**

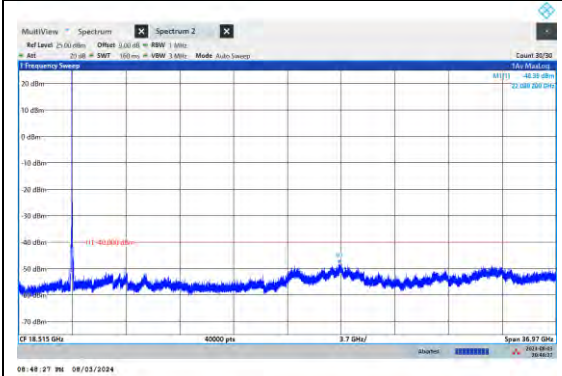
Test Report No.: W7L-240618W001RF13



**NTVN-N48-PC3-15-50-L-DFT-QPSK-Edge_1RB_
Left-Ant5-PASS**



**NTVN-N48-PC3-15-50-M-DFT-QPSK-Edge_1RB_
Left-Ant5-PASS**



**NTVN-N48-PC3-15-50-H-DFT-QPSK-Edge_1RB_
Left-Ant5-PASS**

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



FREQUENCY STABILITY FOR SA TEST RESULT

Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N48	15	20	DFT-QPSK	L	Outer Full	VL	NT	5.000000	0.000008	PASS
N48	15	20	DFT-QPSK	L	Outer Full	VN	NT	14.000000	0.000021	PASS
N48	15	20	DFT-QPSK	L	Outer Full	VH	NT	-9.000000	-0.000014	PASS
N48	15	20	DFT-QPSK	M	Outer Full	VL	NT	-6.000000	-0.000009	PASS
N48	15	20	DFT-QPSK	M	Outer Full	VN	NT	-21.000000	-0.000032	PASS
N48	15	20	DFT-QPSK	M	Outer Full	VH	NT	19.000000	0.000029	PASS
N48	15	20	DFT-QPSK	H	Outer Full	VL	NT	6.000000	0.000009	PASS
N48	15	20	DFT-QPSK	H	Outer Full	VN	NT	-15.000000	-0.000023	PASS
N48	15	20	DFT-QPSK	H	Outer Full	VH	NT	-31.000000	-0.000047	PASS

Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N48	15	20	DFT-QPSK	L	Outer Full	NV	-30	17.000000	0.000026	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	-20	14.000000	0.000021	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	-10	-28.000000	-0.000042	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	0	-22.000000	-0.000033	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	10	-24.000000	-0.000036	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	20	-7.000000	-0.000011	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	30	30.000000	0.000045	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	40	30.000000	0.000045	PASS
N48	15	20	DFT-QPSK	L	Outer Full	NV	50	12.000000	0.000018	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	-30	-17.000000	-0.000026	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	-20	26.000000	0.000039	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	-10	-3.000000	-0.000005	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	0	-2.000000	-0.000003	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	10	24.000000	0.000036	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	20	-2.000000	-0.000003	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	30	-31.000000	-0.000047	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	40	17.000000	0.000026	PASS
N48	15	20	DFT-QPSK	M	Outer Full	NV	50	31.000000	0.000047	PASS
N48	15	20	DFT-QPSK	H	Outer Full	NV	-30	-3.000000	-0.000005	PASS
N48	15	20	DFT-QPSK	H	Outer Full	NV	-20	19.000000	0.000029	PASS
N48	15	20	DFT-QPSK	H	Outer Full	NV	-10	-34.000000	-0.000051	PASS
N48	15	20	DFT-QPSK	H	Outer Full	NV	0	30.000000	0.000045	PASS
N48	15	20	DFT-QPSK	H	Outer Full	NV	10	24.000000	0.000036	PASS



**BUREAU
VERITAS**

Test Report No.: W7L-240618W001RF13

N48	15	20	DFT-QPSK	H	Outer_Full	NV	20	-25.000000	-0.000038	PASS
N48	15	20	DFT-QPSK	H	Outer_Full	NV	30	-34.000000	-0.000051	PASS
N48	15	20	DFT-QPSK	H	Outer_Full	NV	40	16.000000	0.000024	PASS
N48	15	20	DFT-QPSK	H	Outer_Full	NV	50	-15.000000	-0.000023	PASS



SCS 30K

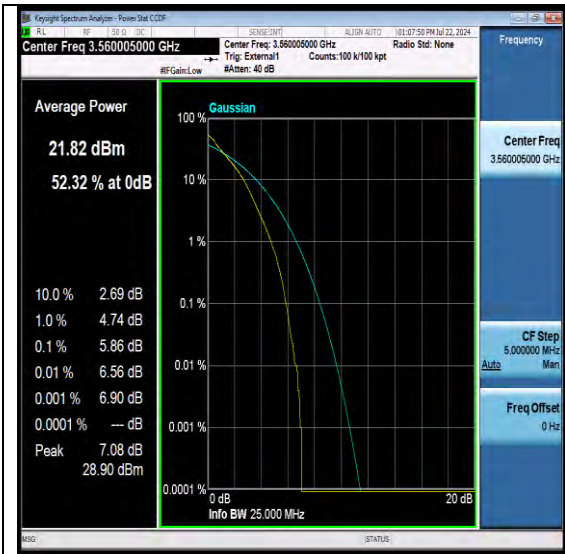
PEAK-TO-AVERAGE RATIO FOR SA PEAK-TO-AVERAGE RATIO(CCDF)

TEST RESULT

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N48	30	20	DFT-QPSK	L	Outer_Full	5.86	≤13	PASS
N48	30	20	DFT-QPSK	M	Outer_Full	5.79	≤13	PASS
N48	30	20	DFT-QPSK	H	Outer_Full	5.79	≤13	PASS
N48	30	20	DFT-QPSK	L	Edge_1RB_Left	6.10	≤13	PASS
N48	30	20	DFT-QPSK	M	Edge_1RB_Left	6.07	≤13	PASS
N48	30	20	DFT-QPSK	H	Edge_1RB_Left	6.13	≤13	PASS



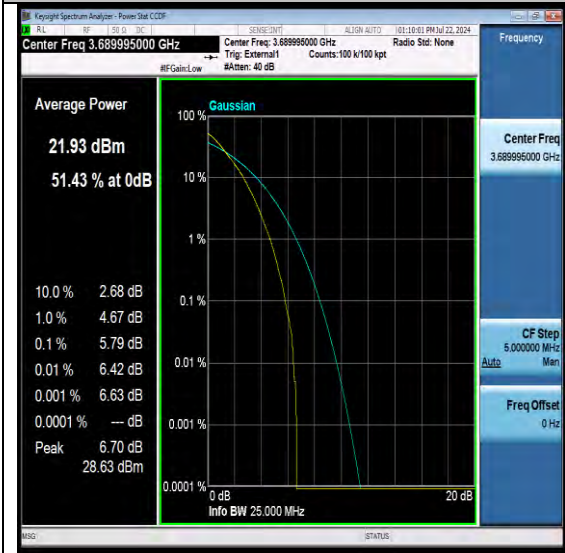
TEST GRAPHS



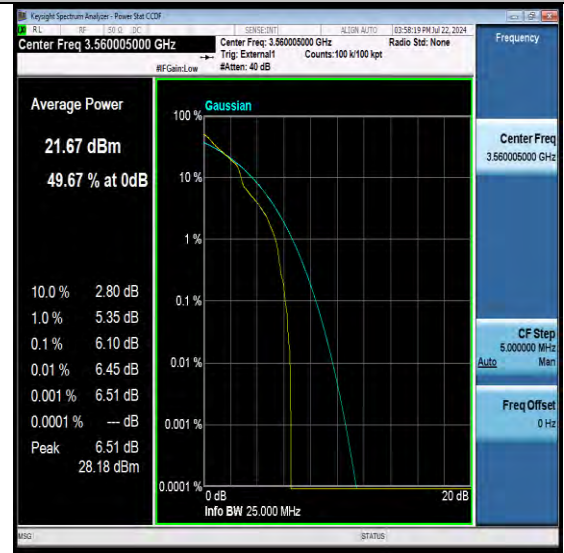
NTNV-N48-PC3-30-20-L-DFT-QPSK-Outer_Full-P ASS



NTNV-N48-PC3-30-20-M-DFT-QPSK-Outer_Full-P ASS



NTNV-N48-PC3-30-20-H-DFT-QPSK-Outer_Full-P ASS



NTNV-N48-PC3-30-20-L-DFT-QPSK-Edge_1RB_Left-PASS



**BUREAU
VERITAS**

Test Report No.: W7L-240618W001RF13



BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com