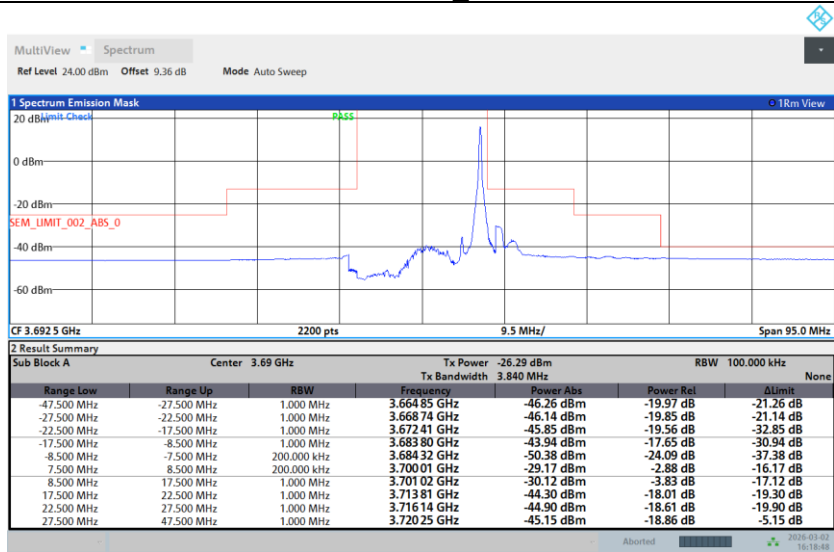




Test Report No.: RF260714B012

Graph53 HIGH BAND EDGE BLOCK-1RB-HIGH_offset



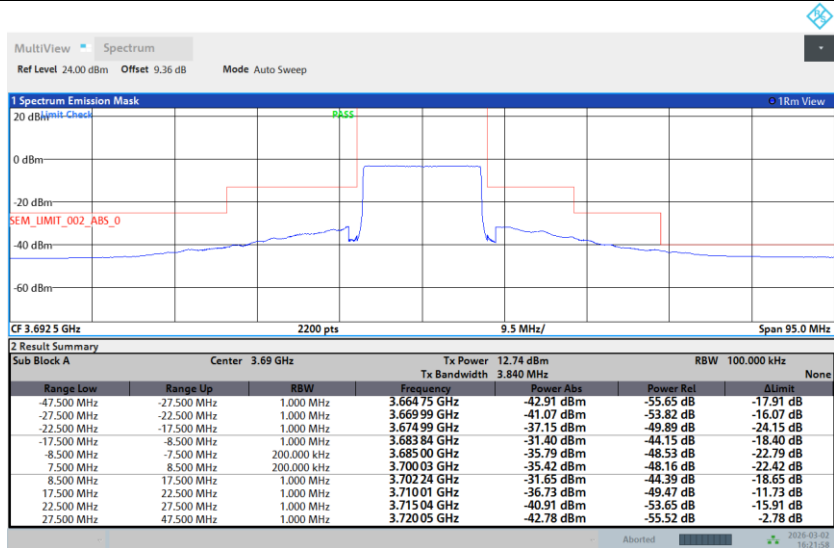
Graph53 ACLR



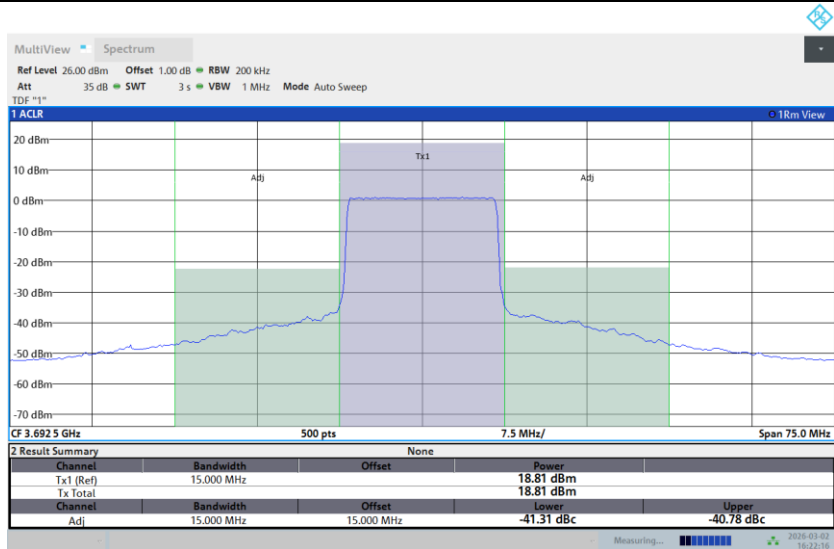
Graph54 HIGH BAND EDGE BLOCK-15MHz-100%RB



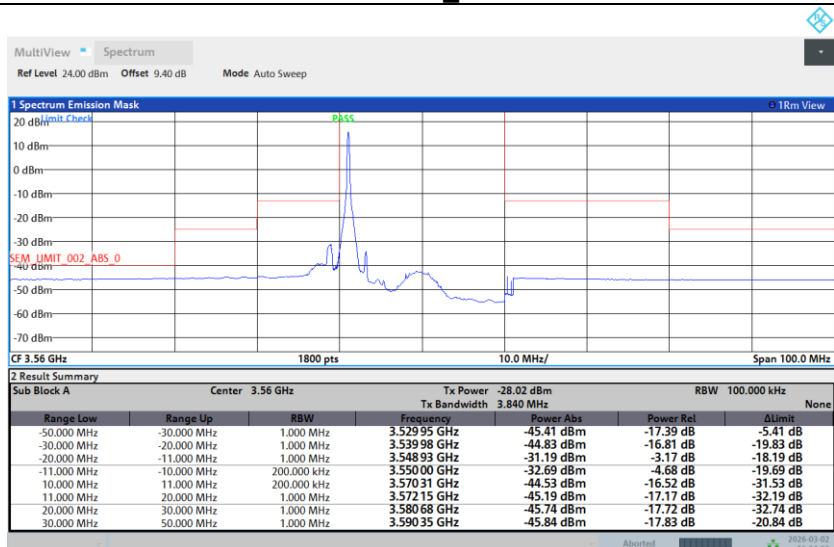
Test Report No.: RF260714B012



Graph54 ACLR



Graph55 LOW BAND EDGE BLOCK-1RB-LOW_offset



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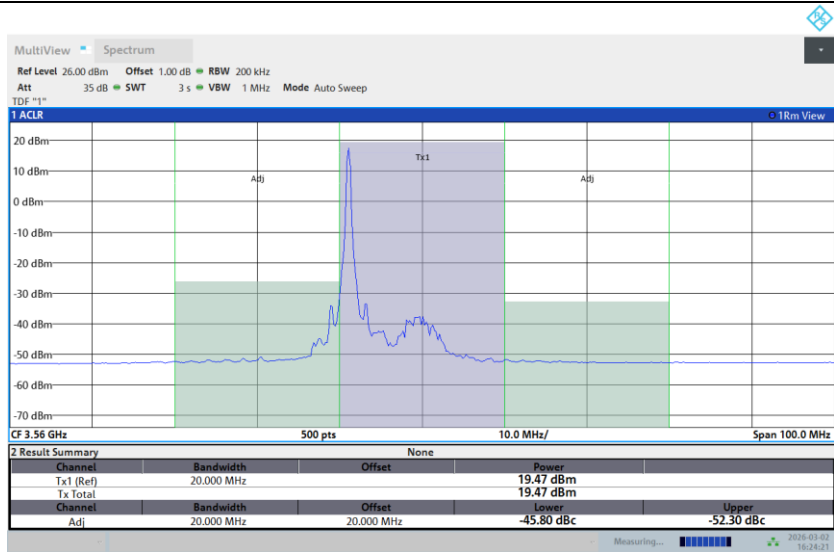
Room B38, Warehouse A5(Chiwan No.1), No.3 Chiwan
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Nanshan District, Shenzhen, Guangdong, P.R. CHINA

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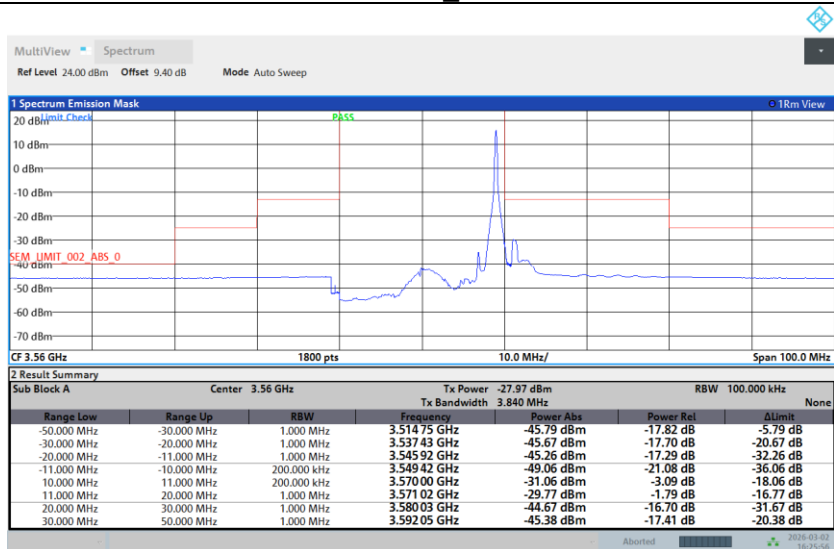


Test Report No.: RF260714B012

Graph55 ACLR



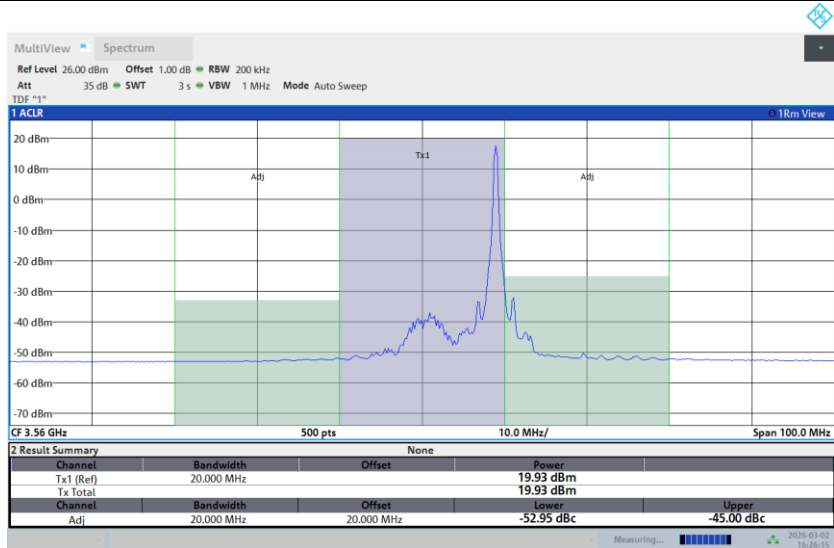
Graph56 LOW BAND EDGE BLOCK-1RB-LOW_offset



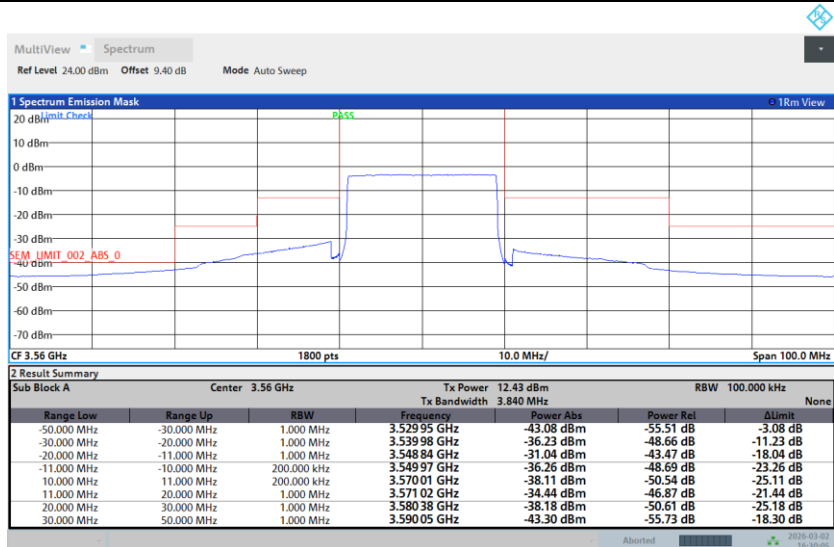
Graph56 ACLR



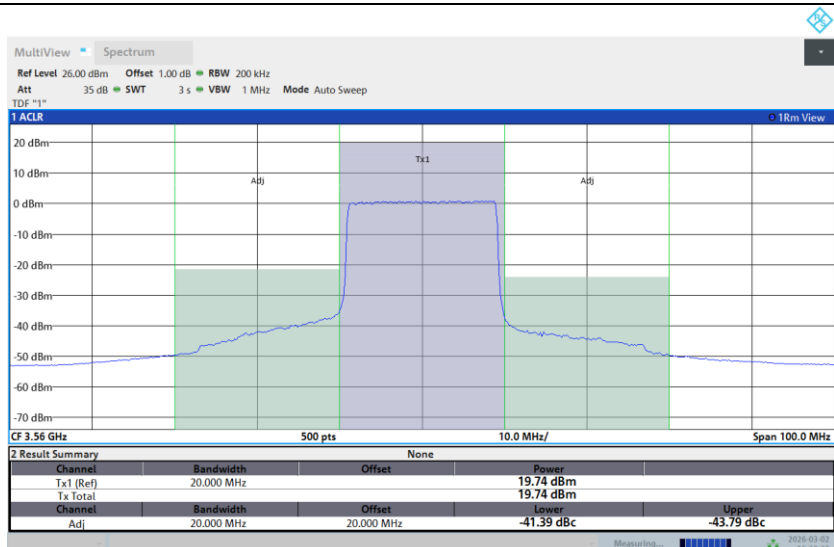
Test Report No.: RF260714B012



Graph57 LOW BAND EDGE BLOCK-20MHz-100%RB



Graph57 ACLR



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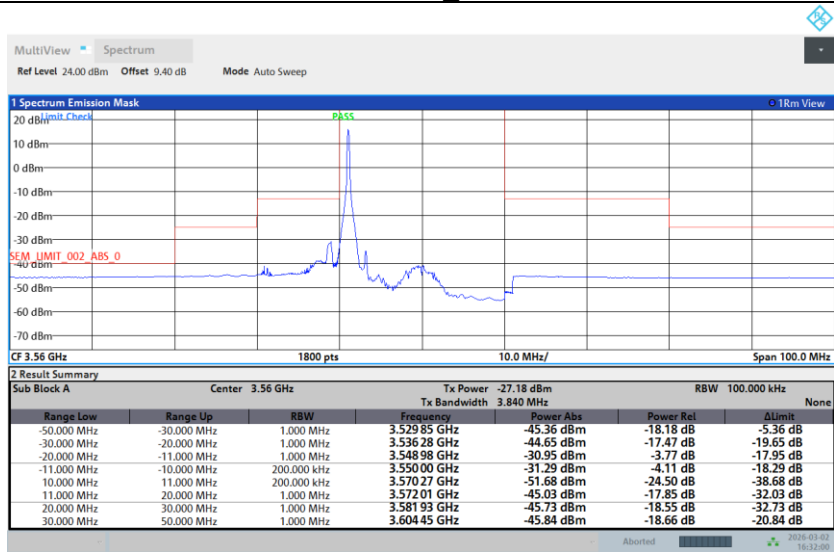
Room B38, Warehouse A5(Chiwan No.1), No.3 Chiwan
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Nanshan District, Shenzhen, Guangdong, P.R. CHINA

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Test Report No.: RF260714B012

Graph58 LOW BAND EDGE BLOCK-1RB-LOW_offset



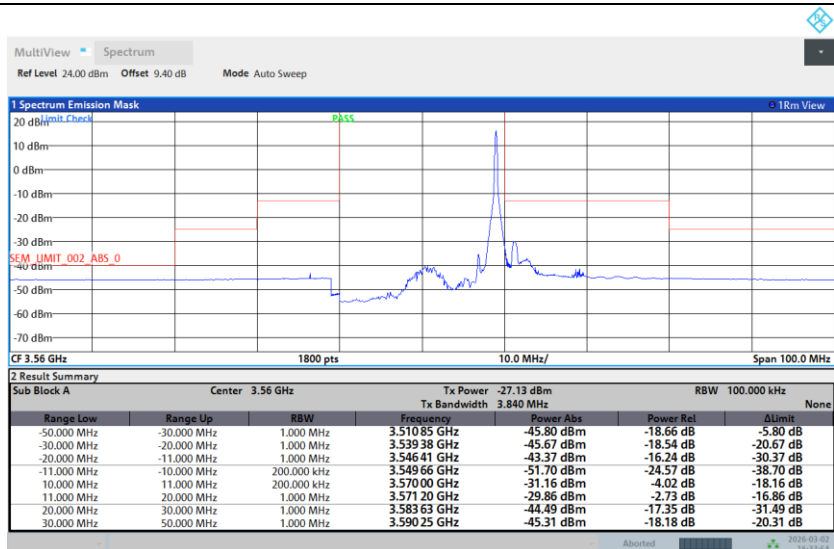
Graph58 ACLR



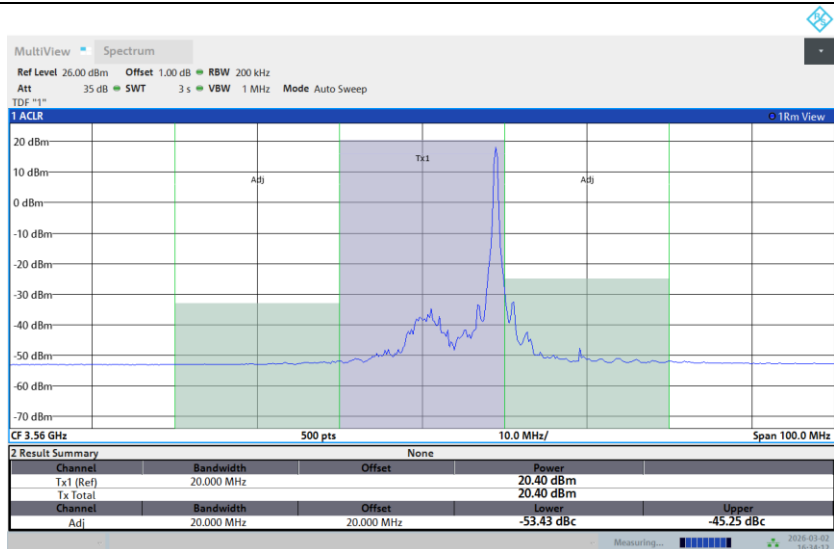
Graph59 LOW BAND EDGE BLOCK-1RB-LOW_offset



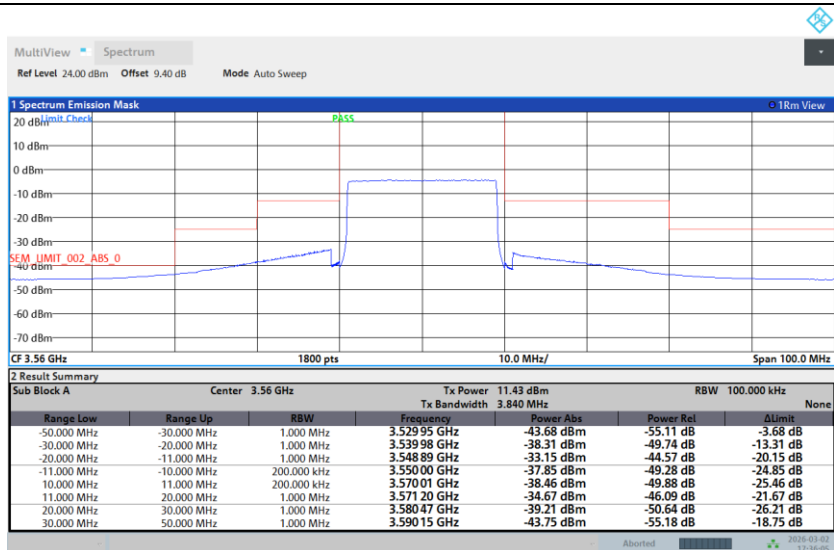
Test Report No.: RF260714B012



Graph59 ACLR



Graph60 LOW BAND EDGE BLOCK-20MHz-100%RB



BOOMWAVE TEST (SHENZHEN)
CO., LTD.

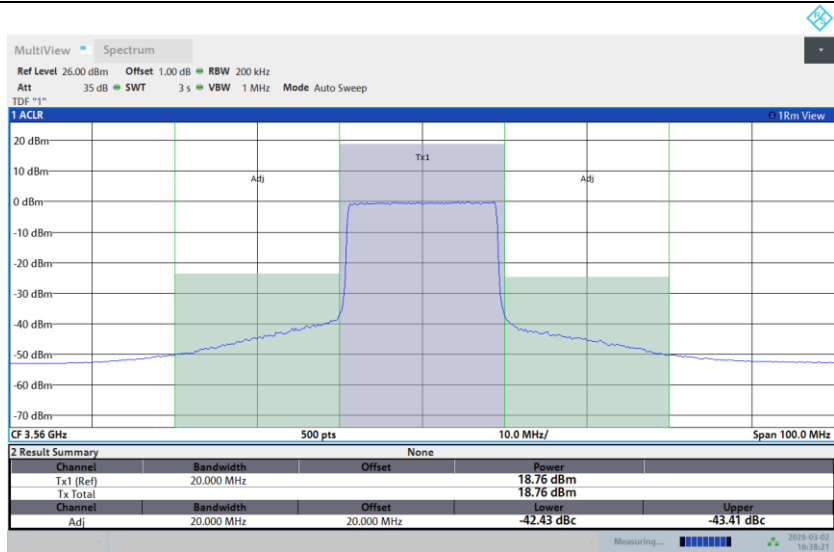
Room B38, Warehouse A5(Chiwan No.1), No.3 Chiwan
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Nanshan District, Shenzhen, Guangdong, P.R. CHINA

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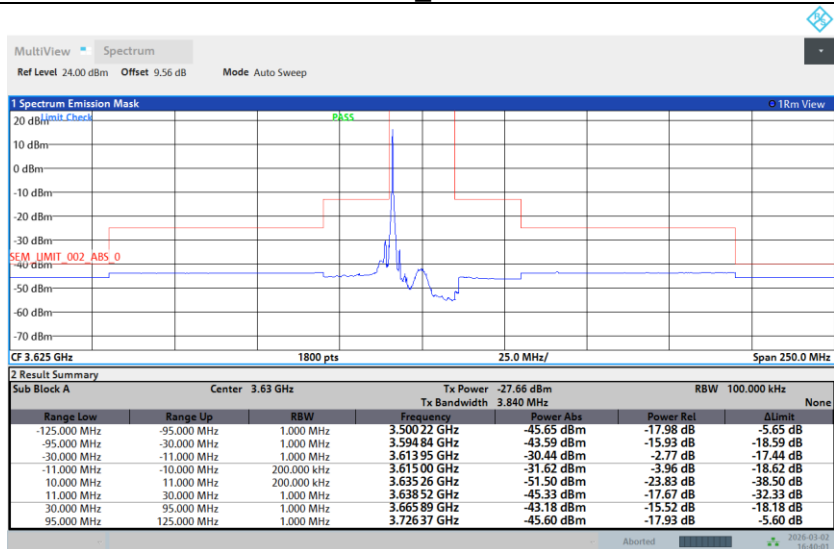


Test Report No.: RF260714B012

Graph60 ACLR



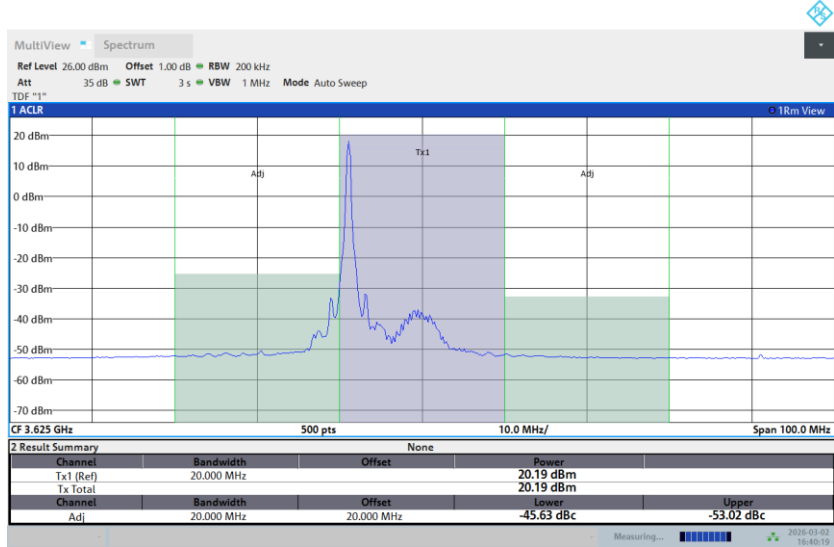
Graph61 MID BAND EDGE BLOCK-1RB-MID_offset



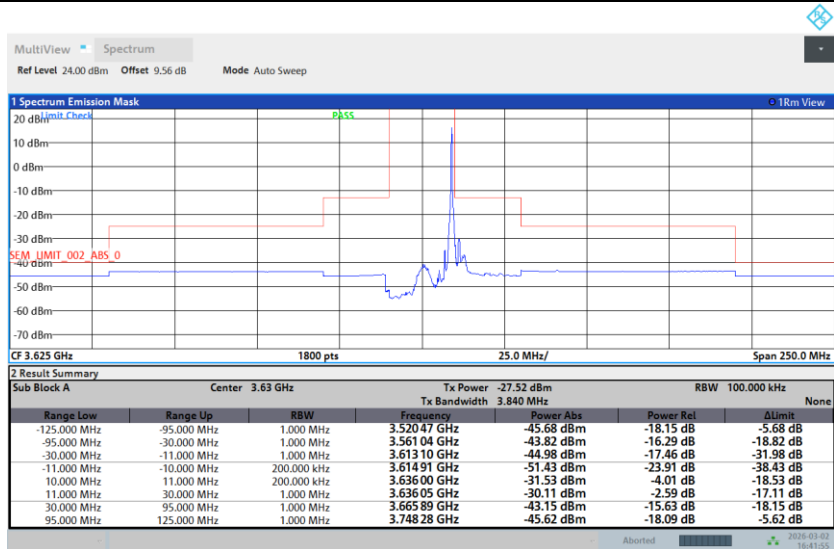
Graph61 ACLR



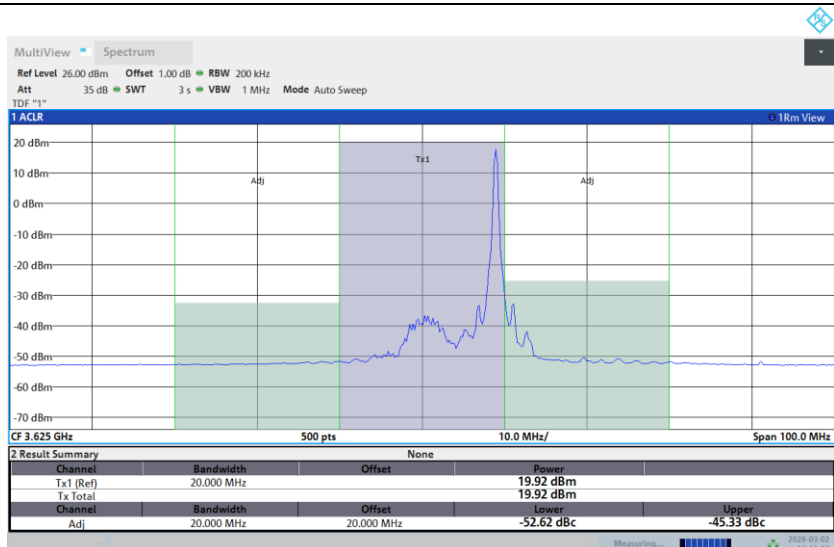
Test Report No.: RF260714B012



Graph62 MID BAND EDGE BLOCK-1RB-MID_offset



Graph62 ACLR



BOOMWAVE TEST (SHENZHEN)
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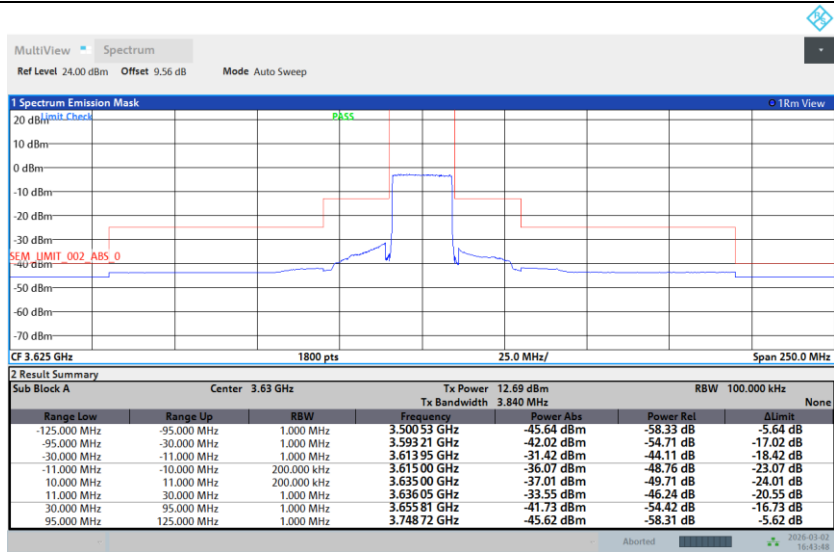
Room B38, Warehouse A5(Chiwan No.1), No.3 Chiwan
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Nanshan District, Shenzhen, Guangdong, P.R. CHINA

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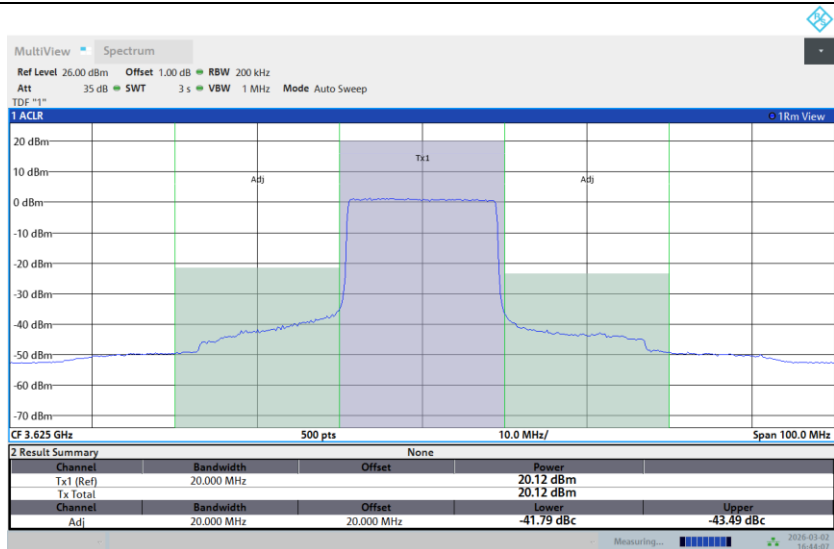


Test Report No.: RF260714B012

Graph63 MID BAND EDGE BLOCK-20MHz-100%RB



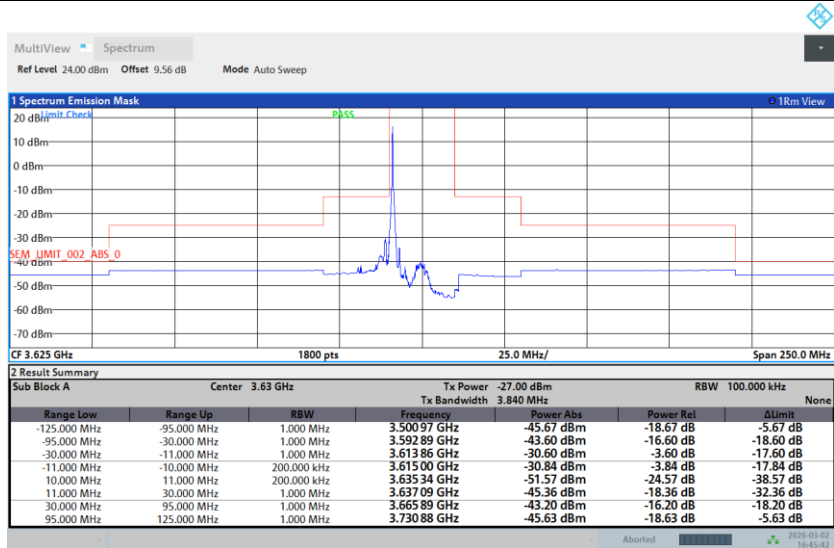
Graph63 ACLR



Graph64 MID BAND EDGE BLOCK-1RB-MID_offset



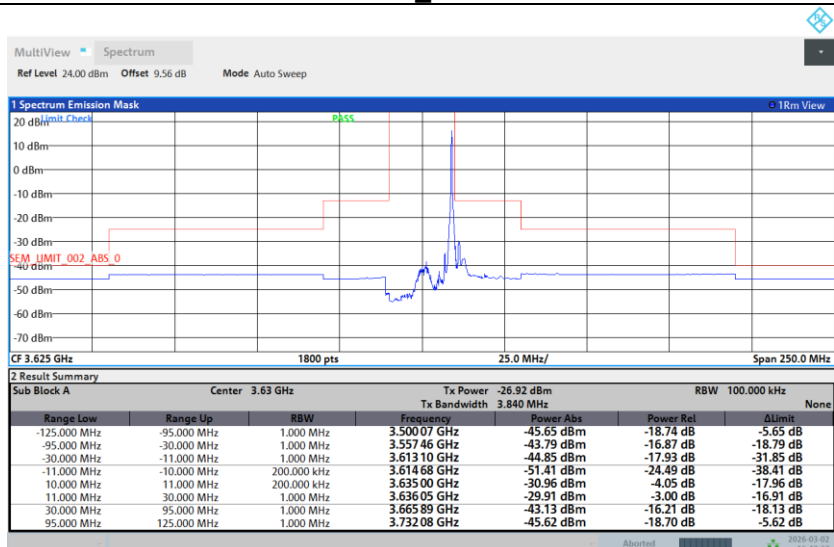
Test Report No.: RF260714B012



Graph64 ACLR



Graph65 MID BAND EDGE BLOCK-1RB-MID_offset



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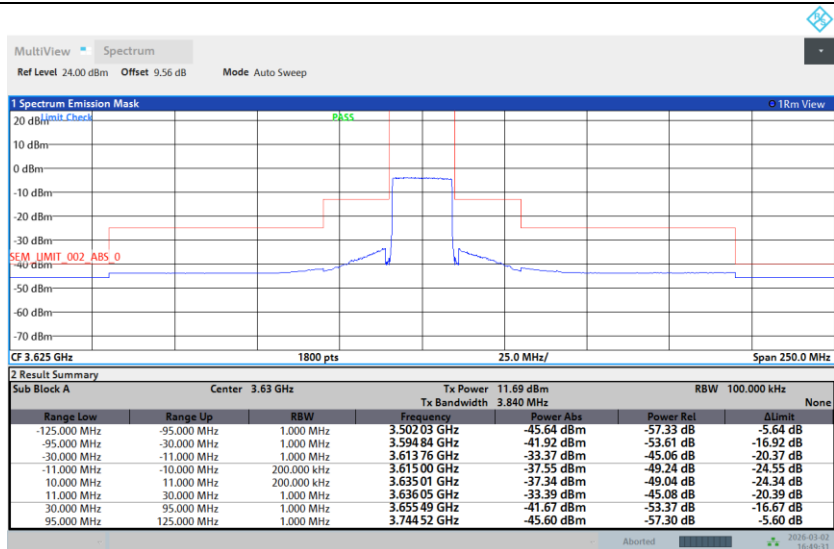


Test Report No.: RF260714B012

Graph65 ACLR



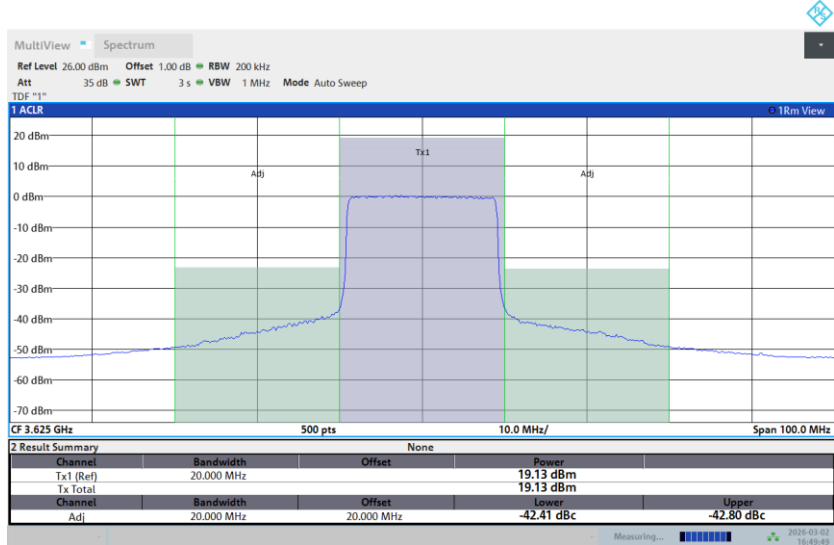
Graph66 MID BAND EDGE BLOCK-20MHz-100%RB



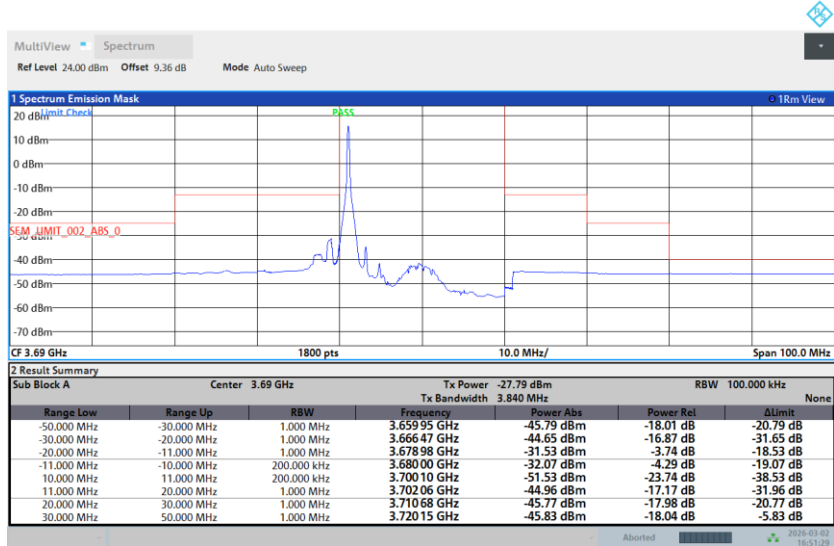
Graph66 ACLR



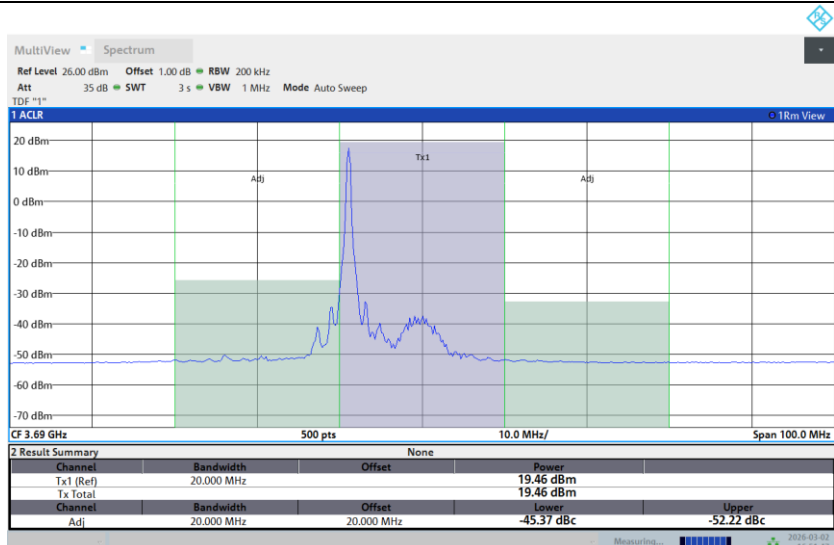
Test Report No.: RF260714B012



Graph67 HIGH BAND EDGE BLOCK-1RB-HIGH_offset



Graph67 ACLR



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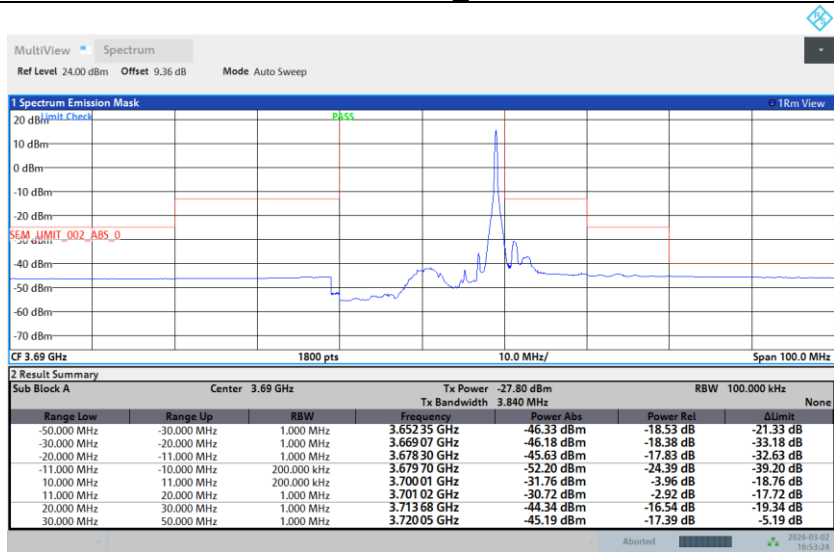
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Nanshan District, Shenzhen, Guangdong, P.R. CHINA

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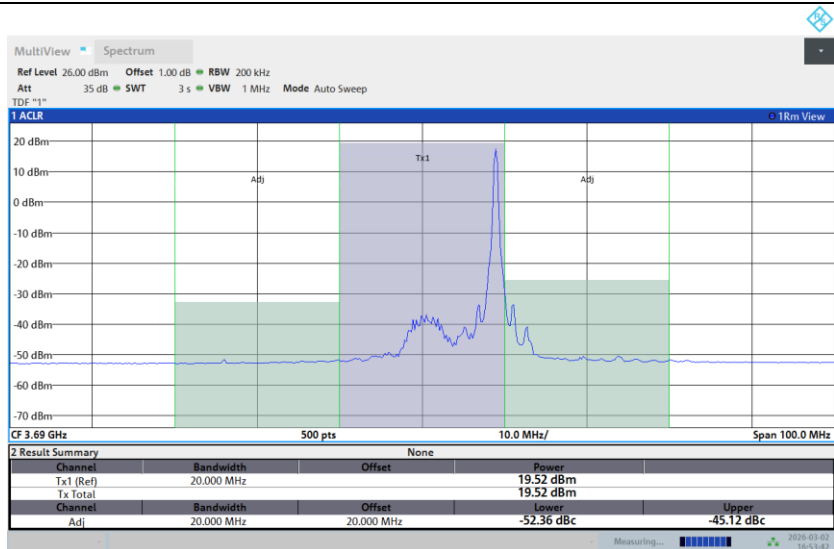


Test Report No.: RF260714B012

Graph68 HIGH BAND EDGE BLOCK-1RB-HIGH_offset



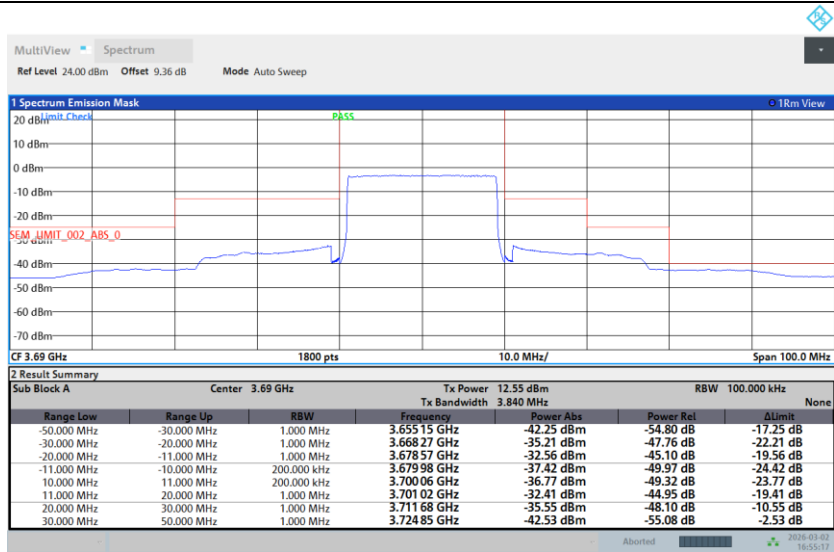
Graph68 ACLR



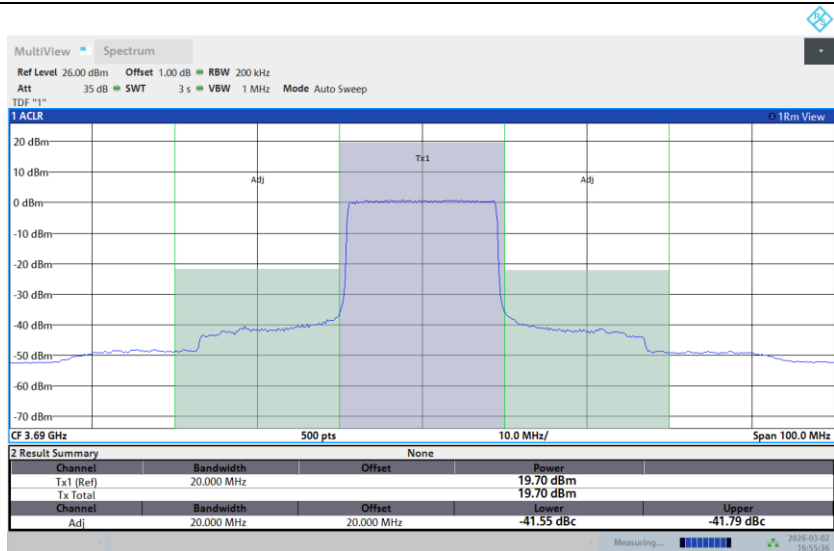
Graph69 HIGH BAND EDGE BLOCK-20MHz-100%RB



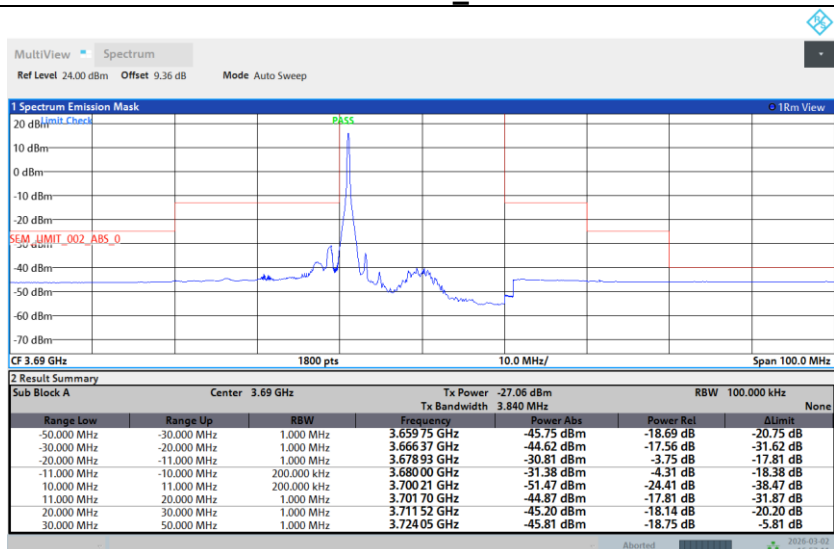
Test Report No.: RF260714B012



Graph69 ACLR



Graph70 HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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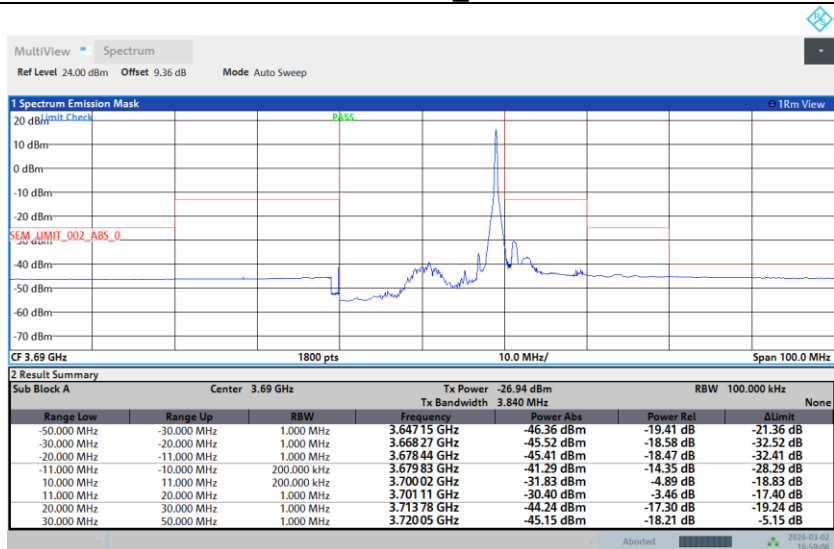


Test Report No.: RF260714B012

Graph70 ACLR



Graph71 HIGH BAND EDGE BLOCK-1RB-HIGH_offset



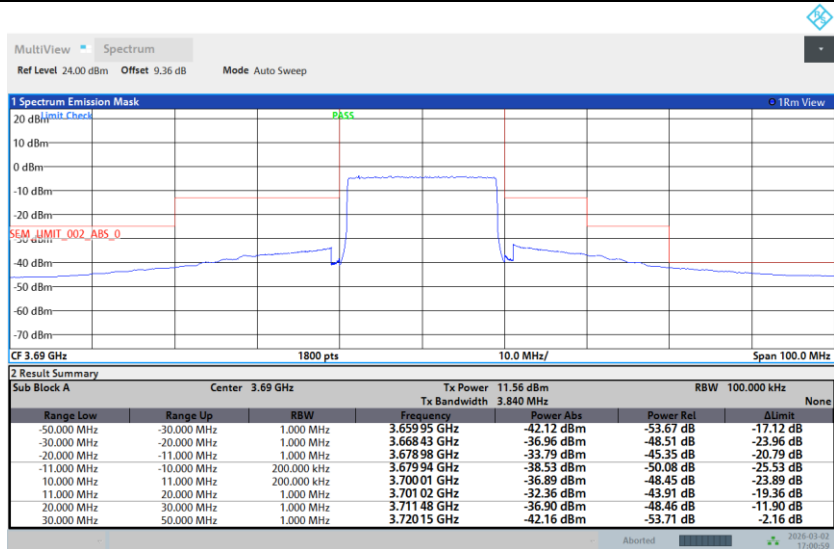
Graph71 ACLR



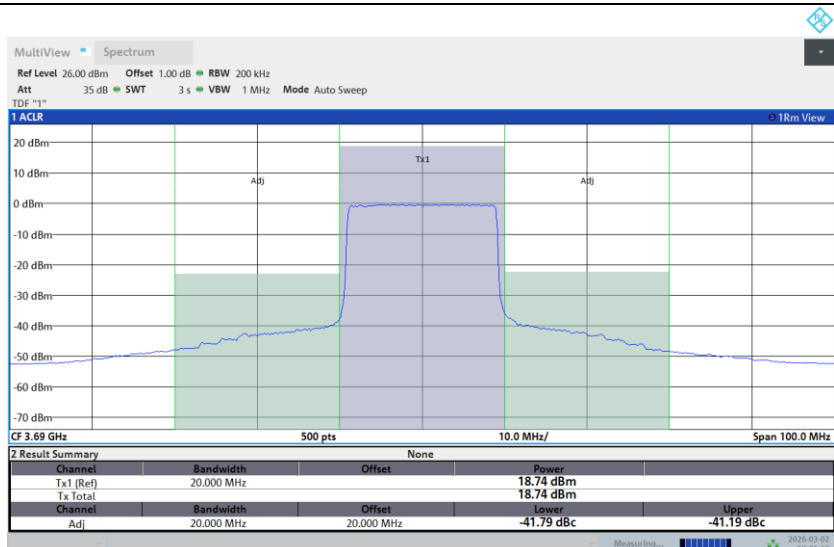
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Graph72 HIGH BAND EDGE BLOCK-20MHz-100%RB



Graph72 ACLR



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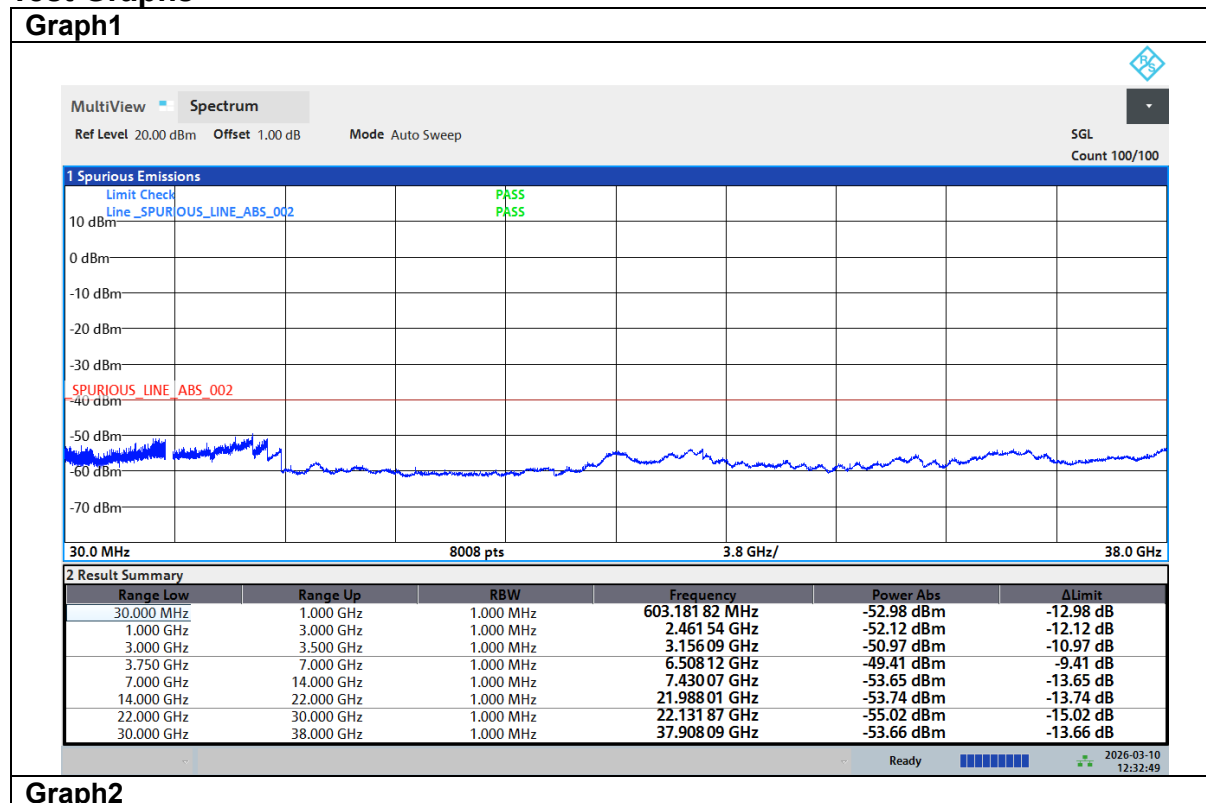
CONDUCTED SPURIOUS EMISSION TEST RESULT

LTE band 48

Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
5MHz	QPSK	55265	1RB Low	See Graph1	PASS
5MHz	QPSK	55990	1RB Low	See Graph2	PASS
5MHz	QPSK	56715	1RB Low	See Graph3	PASS
10MHz	QPSK	55290	1RB Low	See Graph4	PASS
10MHz	QPSK	55990	1RB Low	See Graph5	PASS
10MHz	QPSK	56690	1RB Low	See Graph6	PASS
15MHz	QPSK	55315	1RB Low	See Graph7	PASS
15MHz	QPSK	55990	1RB Low	See Graph8	PASS
15MHz	QPSK	56665	1RB Low	See Graph9	PASS
20MHz	QPSK	55340	1RB Low	See Graph10	PASS
20MHz	QPSK	55990	1RB Low	See Graph11	PASS
20MHz	QPSK	56640	1RB Low	See Graph12	PASS

Test Graphs

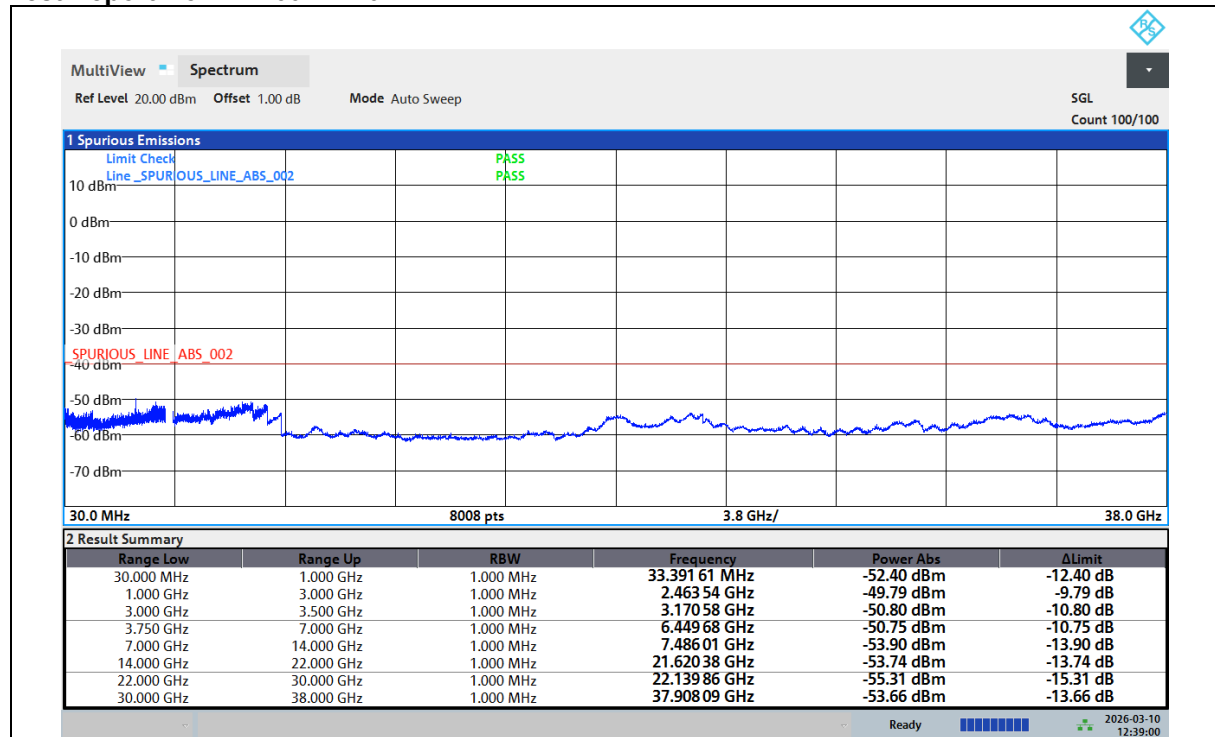
Graph1



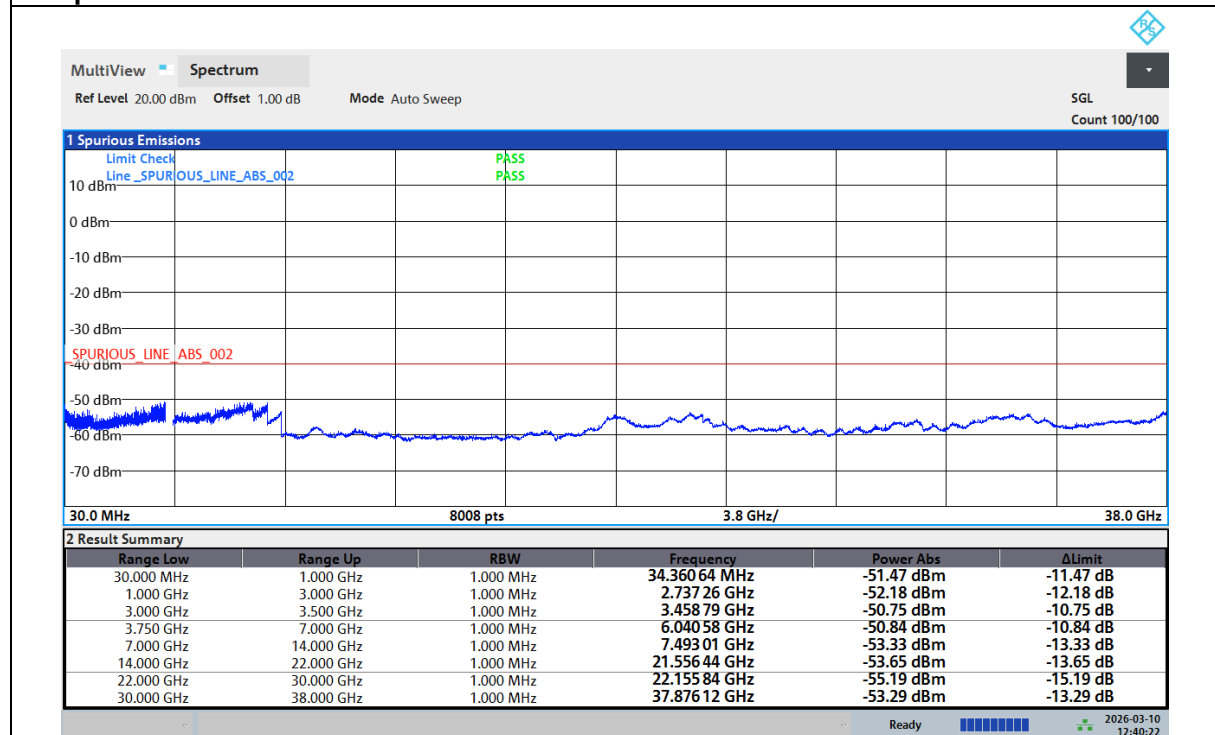
Graph2



Test Report No.: RF260714B012



Graph3



Graph4

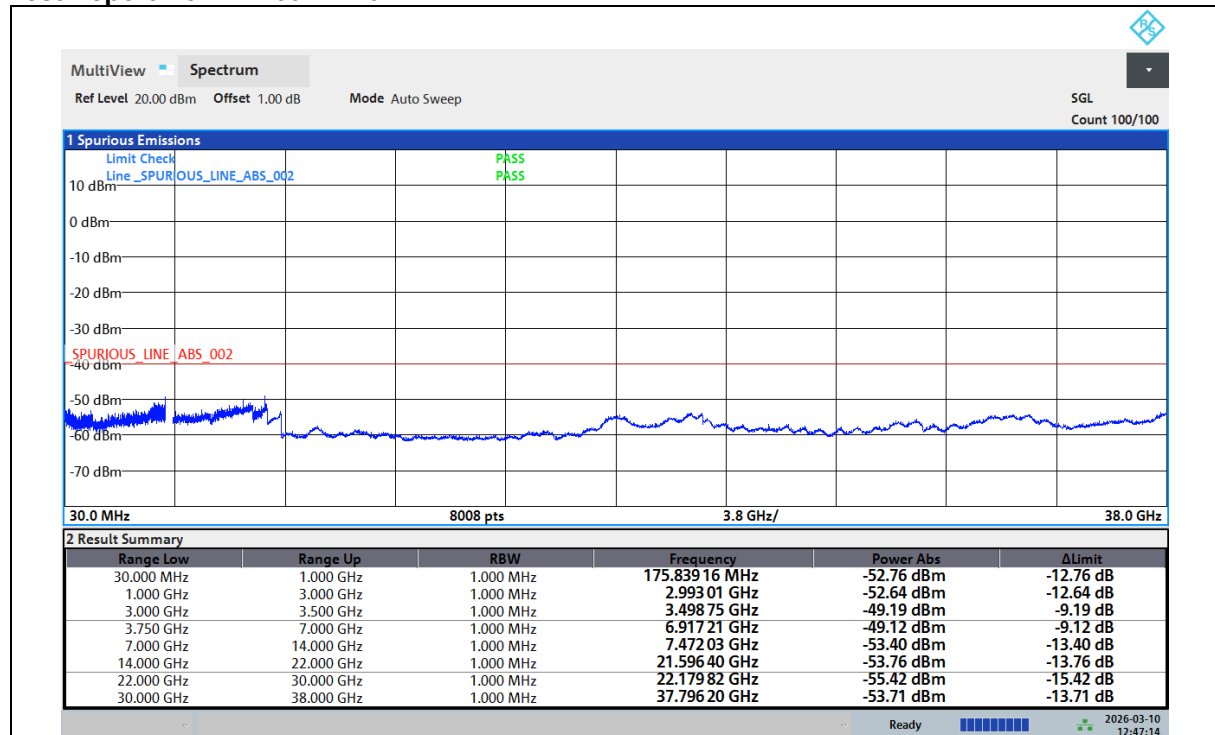
BOOMWAVE TEST (SHENZHEN)
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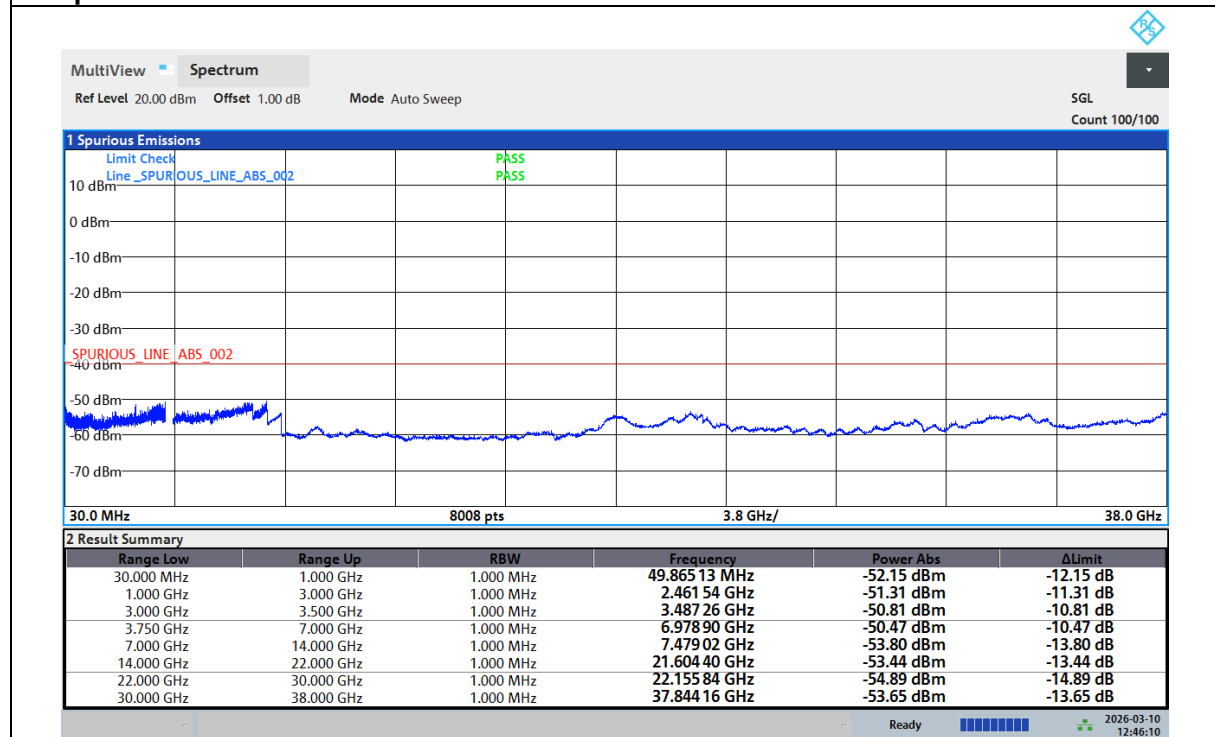
Mobile: +86 15118052731
Email:shimin.wang@boomwavelab.com



Test Report No.: RF260714B012



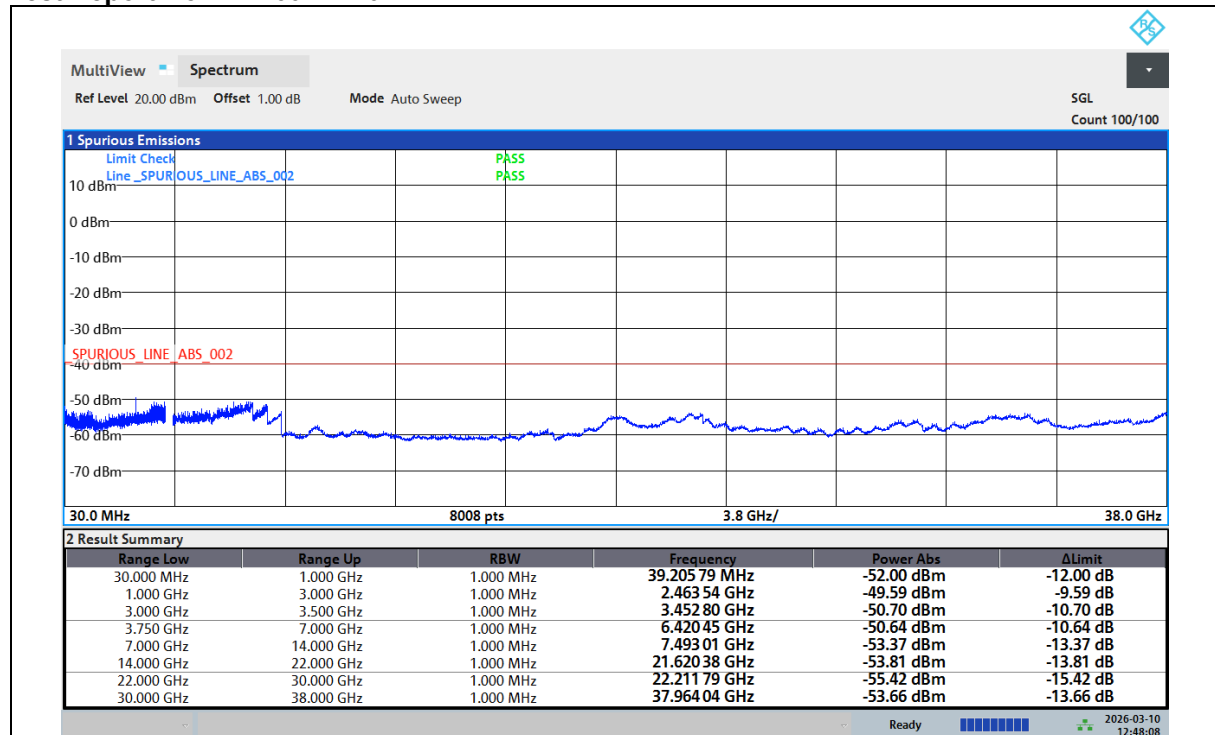
Graph5



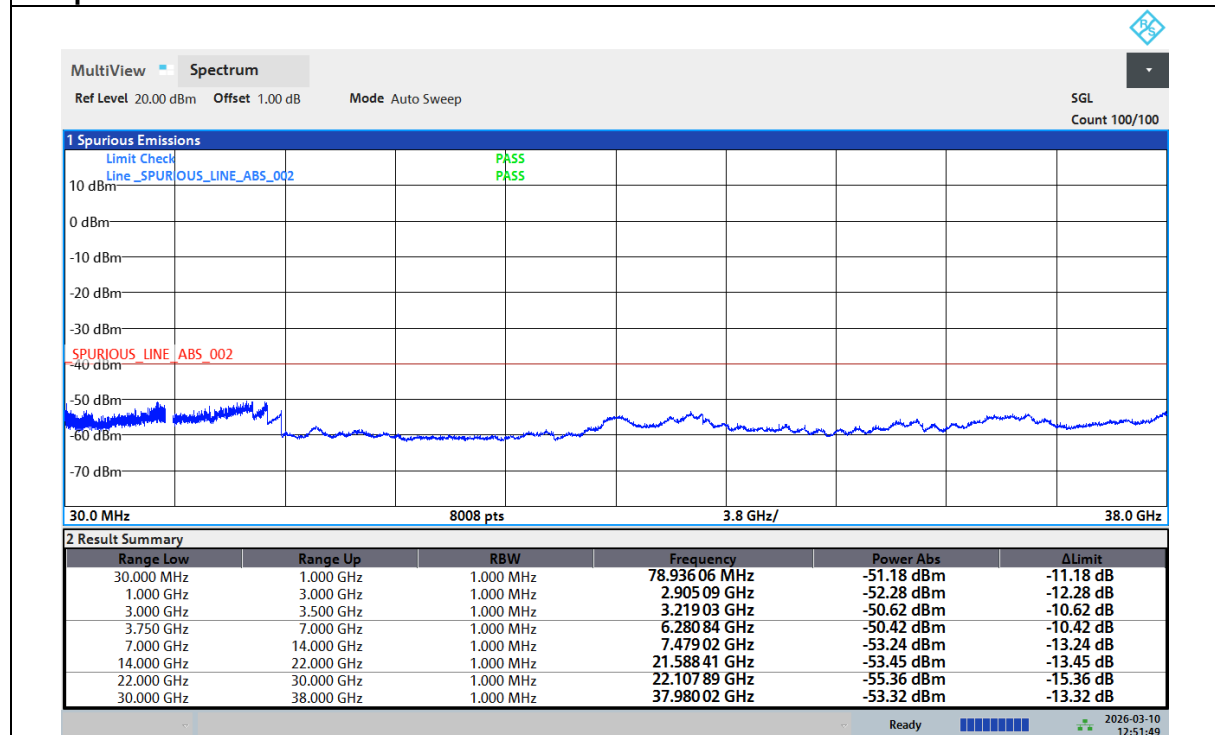
Graph6



Test Report No.: RF260714B012



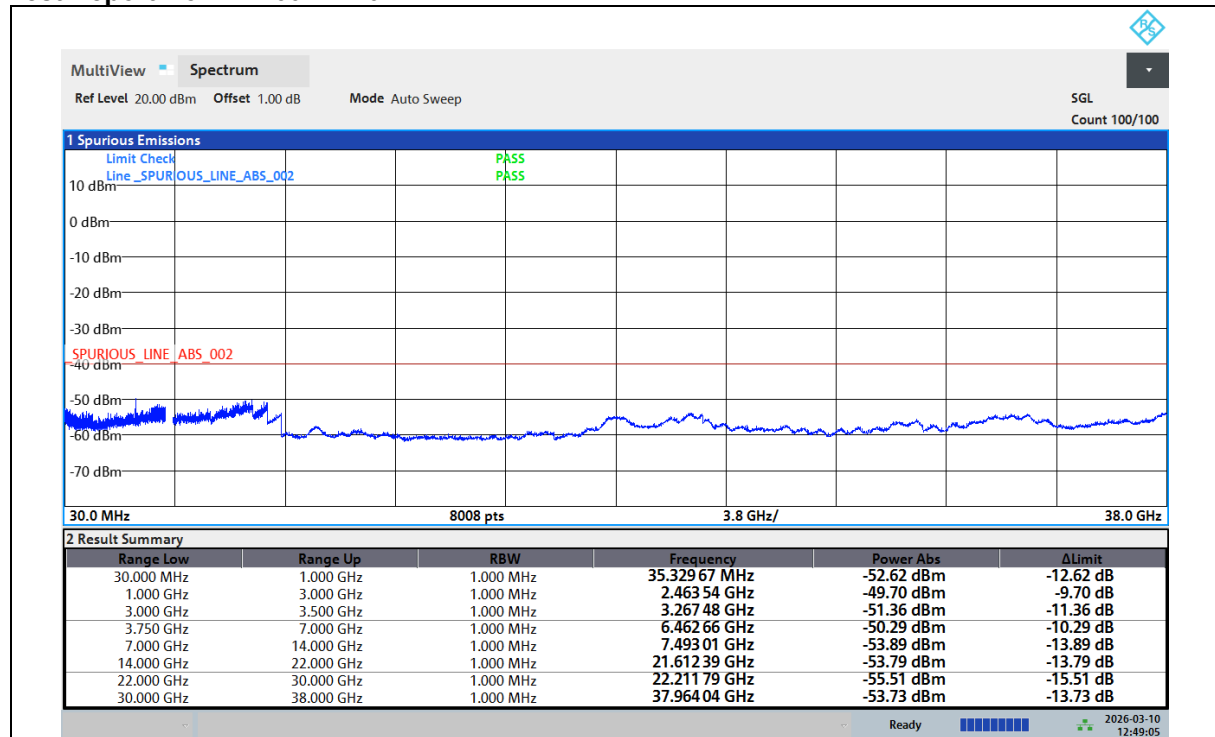
Graph7



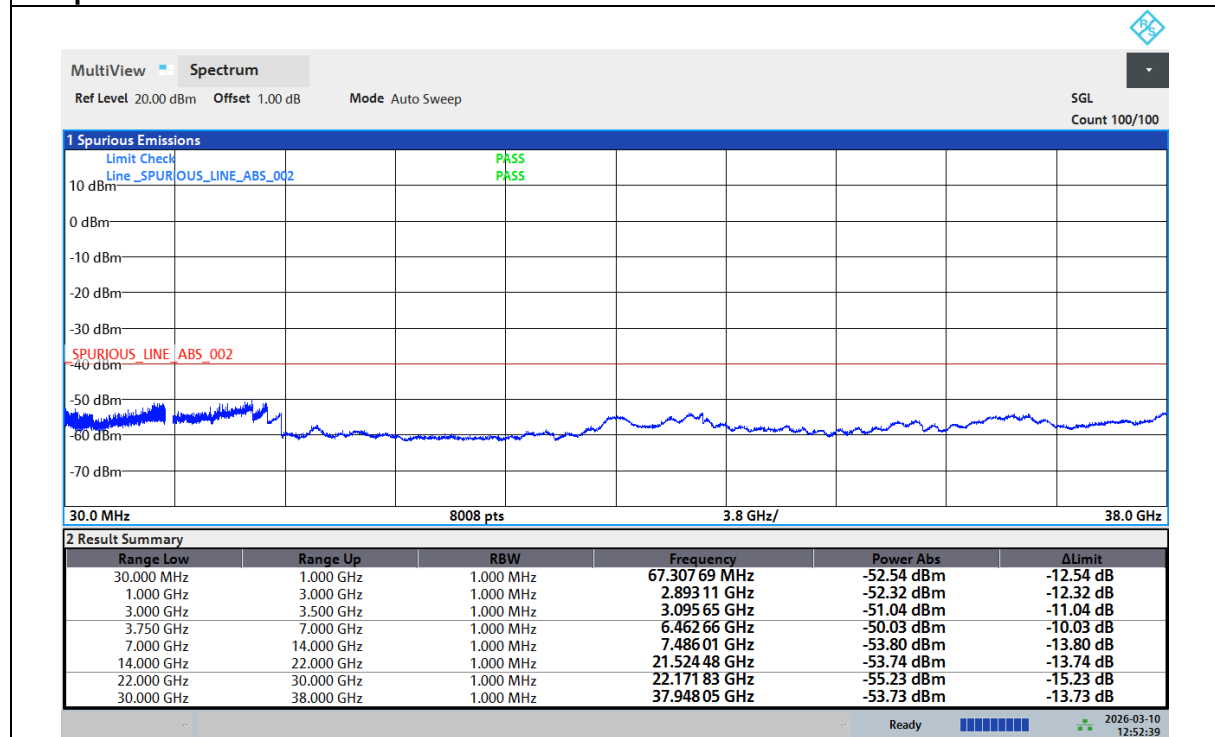
Graph8



Test Report No.: RF260714B012



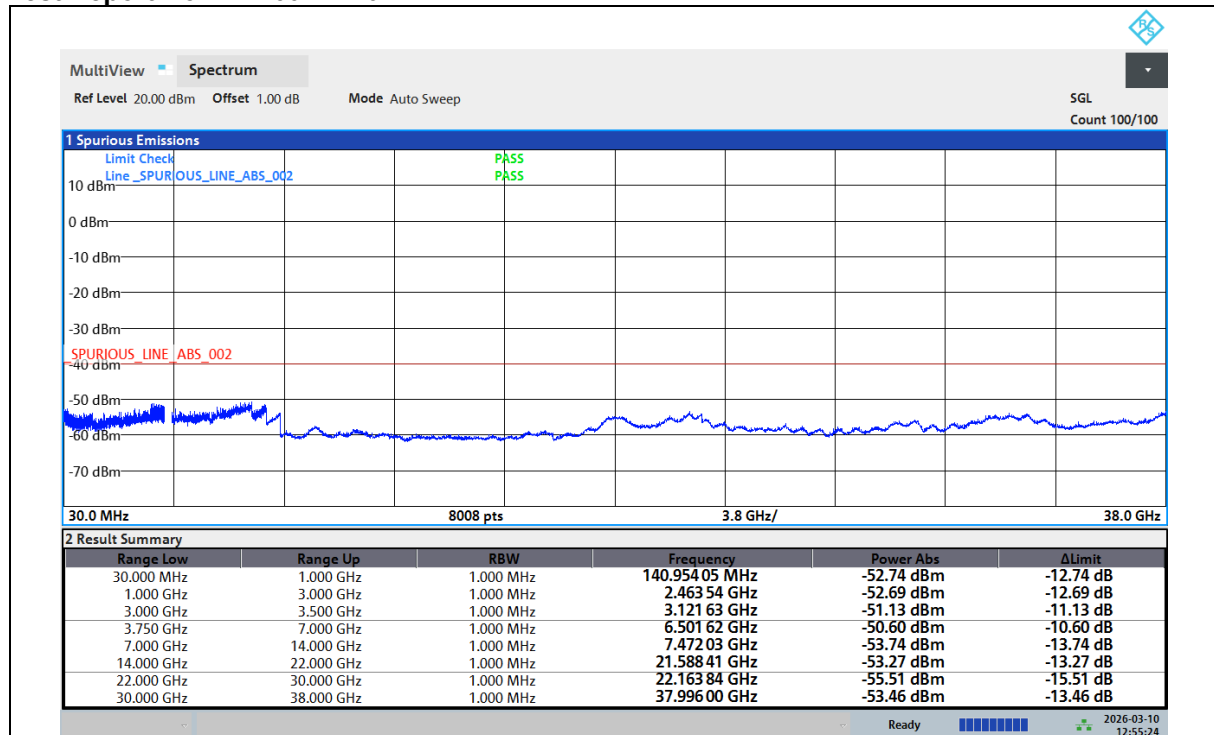
Graph9



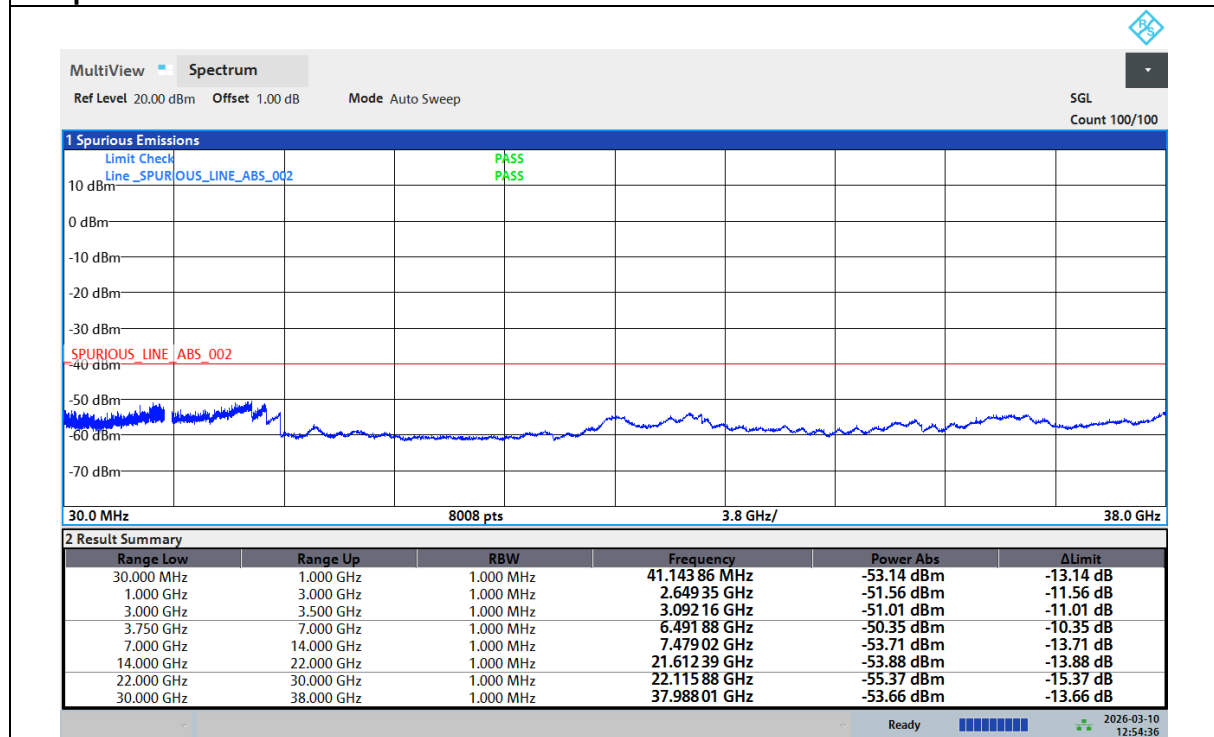
Graph10



Test Report No.: RF260714B012



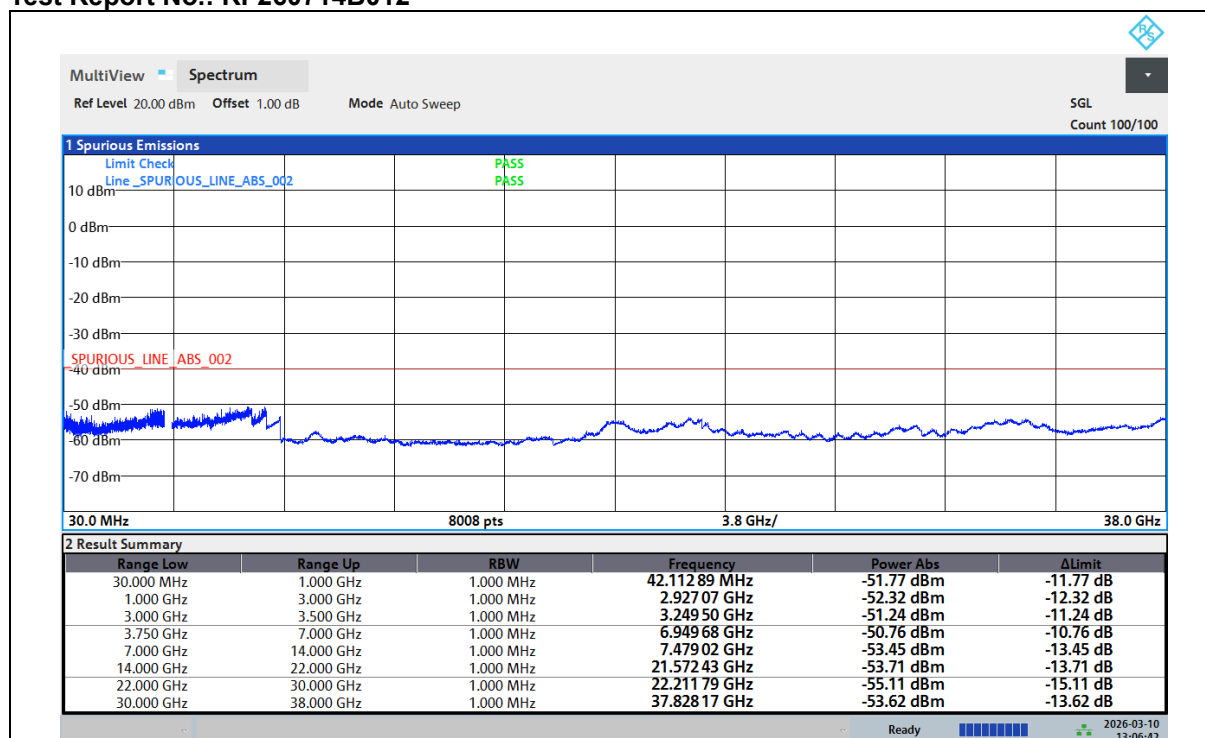
Graph11



Graph12



Test Report No.: RF260714B012





Test Report No.: RF260714B012
FREQUENCY STABILITY
TEST RESULT

Voltage												
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage[Vdc]	Temperature(℃)	Deviation(Hz)	Deviation(ppm)	FL(MHz)	FH(MHz)	Limit(MHz)	Verdict
Band48	20MHz	QPSK	55340	100RB#0	VL	NT	6.9	0.0019	3551.037007	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	VN	NT	4.1	0.0012	3551.037004	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	VH	NT	-21.3	-0.0060	3551.036979	---	3550-3700	PASS
Band48	20MHz	QPSK	56640	100RB#0	VL	NT	12.5	0.0034	---	3698.951513	3550-3700	PASS
Band48	20MHz	QPSK	56640	100RB#0	VN	NT	-4.1	-0.0011	---	3698.951496	3550-3700	PASS
Band48	20MHz	QPSK	56640	100RB#0	VH	NT	11.5	0.0031	---	3698.951512	3550-3700	PASS

Temperature												
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage[Vdc]	Temperature(℃)	Deviation(Hz)	Deviation(ppm)	FL(MHz)	FH(MHz)	Limit(MHz)	Verdict
Band48	20MHz	QPSK	55340	100RB#0	NV	-30	-27	-0.0076	3551.036973	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	-20	-20.6	-0.0058	3551.036979	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	-10	0.5	0.0001	3551.037001	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	0	7.9	0.0022	3551.037008	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	10	14.4	0.0040	3551.037014	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	20	21.6	0.0061	3551.037022	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	30	-19	-0.0053	3551.036981	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	40	14.1	0.0040	3551.037014	---	3550-3700	PASS
Band48	20MHz	QPSK	55340	100RB#0	NV	50	0.6	0.0002	3551.037001	---	3550-3700	PASS
Band48	20MHz	QPSK	56640	100RB#0	NV	-30	-23.9	-0.0065	---	3698.951476	3550-3700	PASS
Band48	20MHz	QPSK	56640	100RB#0	NV	-20	-3.9	-0.0011	---	3698.951496	3550-3700	PASS



Test Report No.: RF260714B012

Band48	20MHz	QPSK	56640	100RB#0	NV	-10	16.3	0.0044	---	3698.951516	3550-3700	PAS S
Band48	20MHz	QPSK	56640	100RB#0	NV	0	-17.4	-0.0047	---	3698.951483	3550-3700	PAS S
Band48	20MHz	QPSK	56640	100RB#0	NV	10	23.4	0.0063	---	3698.951523	3550-3700	PAS S
Band48	20MHz	QPSK	56640	100RB#0	NV	20	-28.1	-0.0076	---	3698.951472	3550-3700	PAS S
Band48	20MHz	QPSK	56640	100RB#0	NV	30	19.8	0.0054	---	3698.951520	3550-3700	PAS S
Band48	20MHz	QPSK	56640	100RB#0	NV	40	3.7	0.0010	---	3698.951504	3550-3700	PAS S
Band48	20MHz	QPSK	56640	100RB#0	NV	50	0	0.0000	---	3698.951500	3550-3700	PAS S



Test Report No.: RF260714B012
N48

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

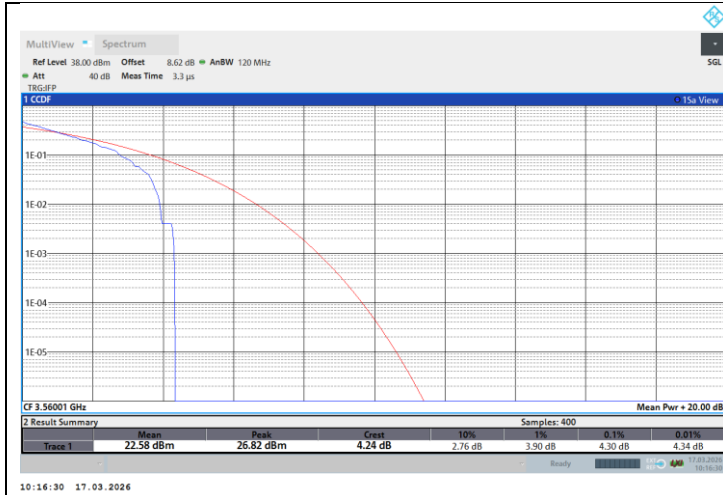
TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
N48	20MHz	DFT-QPSK	L	Outer_Full	4.30	13	Pass
N48	20MHz	DFT-QPSK	L	Edge_1RB_Left	2.04	13	Pass
N48	20MHz	DFT-QPSK	M	Outer_Full	3.24	13	Pass
N48	20MHz	DFT-QPSK	M	Edge_1RB_Left	2.08	13	Pass
N48	20MHz	DFT-QPSK	H	Outer_Full	3.16	13	Pass
N48	20MHz	DFT-QPSK	H	Edge_1RB_Left	1.96	13	Pass
N48	30MHz	DFT-QPSK	L	Outer_Full	2.96	13	Pass
N48	30MHz	DFT-QPSK	L	Edge_1RB_Left	2.06	13	Pass
N48	30MHz	DFT-QPSK	M	Outer_Full	4.76	13	Pass
N48	30MHz	DFT-QPSK	M	Edge_1RB_Left	1.98	13	Pass
N48	30MHz	DFT-QPSK	H	Outer_Full	5.06	13	Pass
N48	30MHz	DFT-QPSK	H	Edge_1RB_Left	1.98	13	Pass
N48	40MHz	DFT-QPSK	L	Outer_Full	4.30	13	Pass
N48	40MHz	DFT-QPSK	L	Edge_1RB_Left	2.16	13	Pass
N48	40MHz	DFT-QPSK	M	Outer_Full	4.96	13	Pass
N48	40MHz	DFT-QPSK	M	Edge_1RB_Left	2.08	13	Pass
N48	40MHz	DFT-QPSK	H	Outer_Full	4.76	13	Pass
N48	40MHz	DFT-QPSK	H	Edge_1RB_Left	1.98	13	Pass

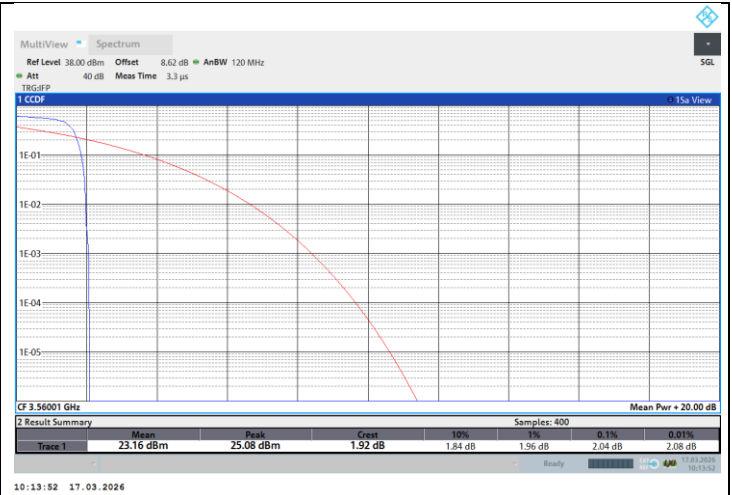


Test Report No.: RF260714B012

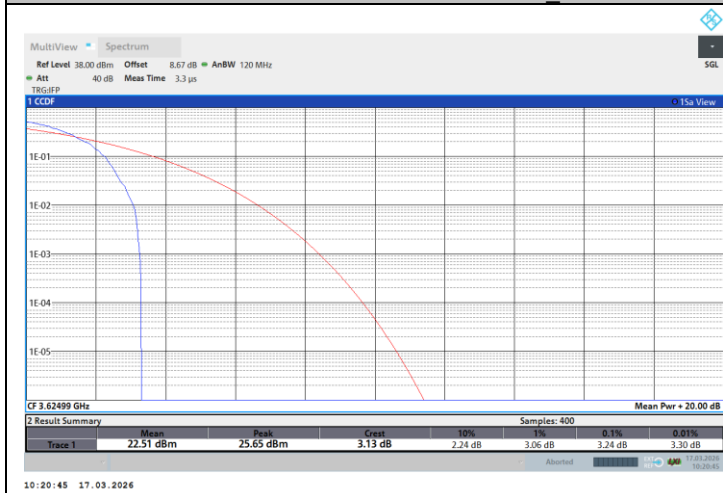
TEST GRAPHS



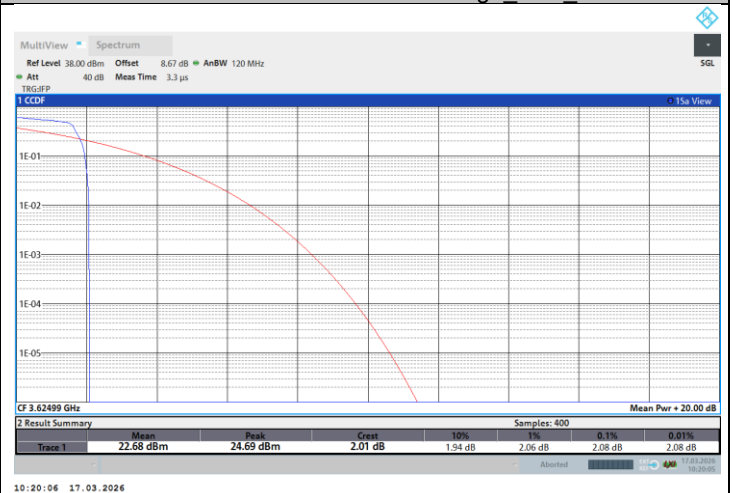
NTNV-N48--PC3-30-20-L-DFT-QPSK-Outer_Full-PASS



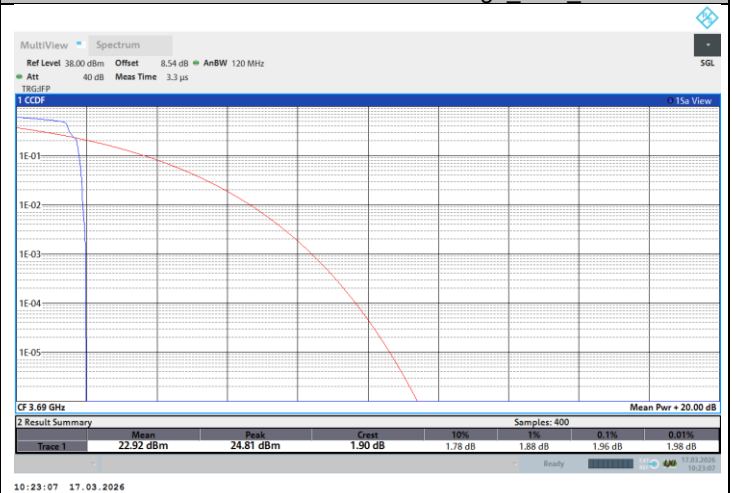
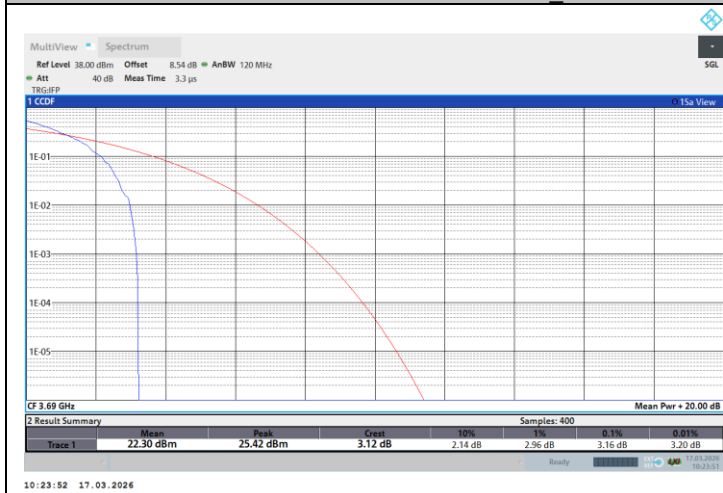
NTNV-N48--PC3-30-20-L-DFT-QPSK-Edge_1RB_Left-PASS



NTNV-N48--PC3-30-20-M-DFT-QPSK-Outer_Full-PASS



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



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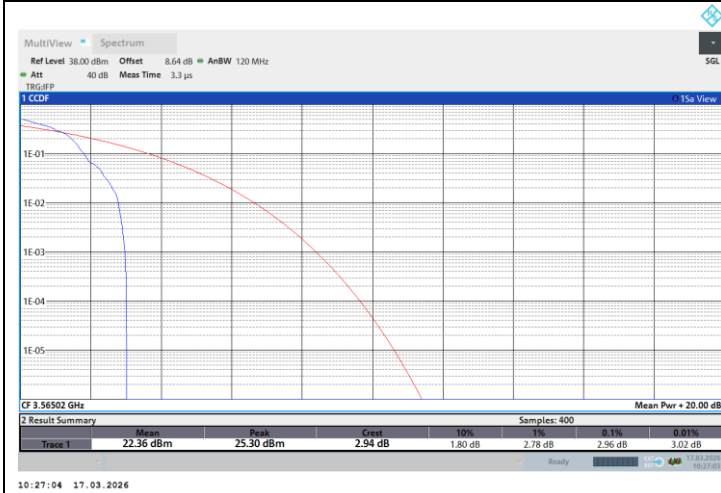
Room B38, Warehouse A5(Chiwan No.1), No.3 Chiwan
4th Road, Chiwan Community, Zhaoshang Street,
Nanshan District, Shenzhen, Guangdong, P.R. CHINA

Mobile: +86 15118052731
Email:shimin.wang@boomwavelab.com

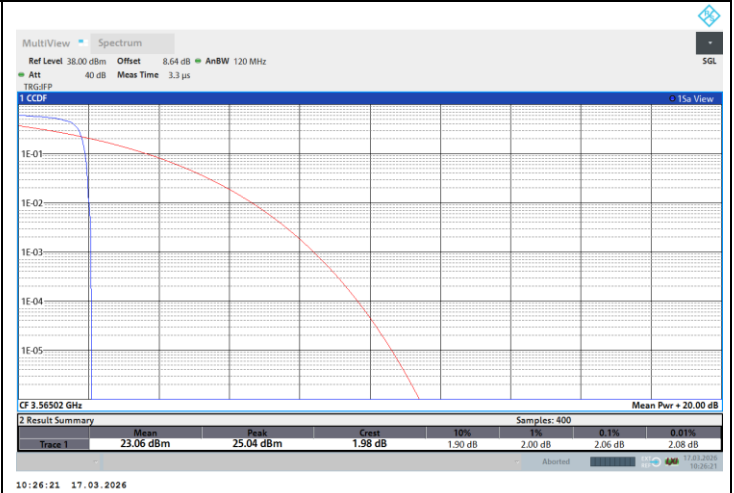


Test Report No.: RF260714B012

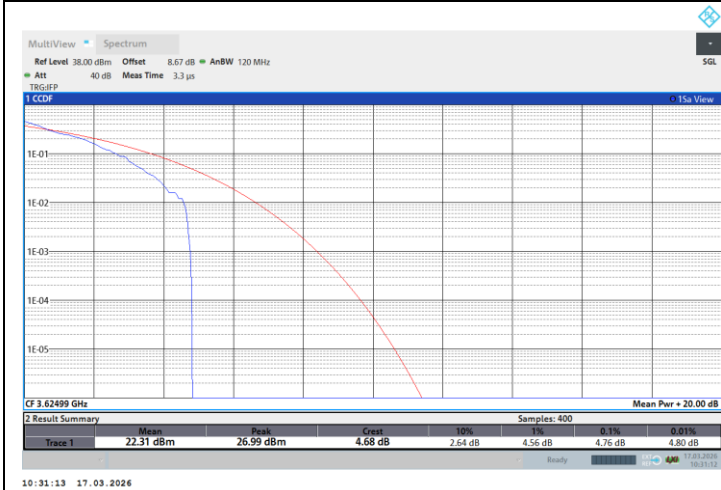
NTNV-N48--PC3-30-20-H-DFT-QPSK-Outer Full-PASS



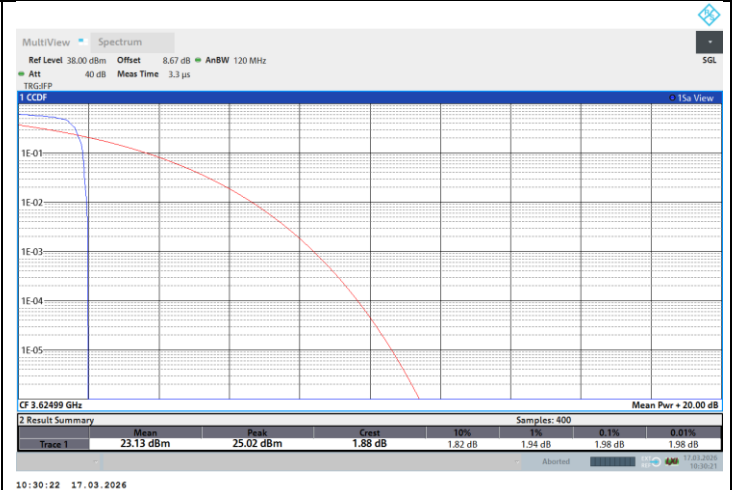
NTNV-N48--PC3-30-20-H-DFT-QPSK-Edge 1RB Left-PASS



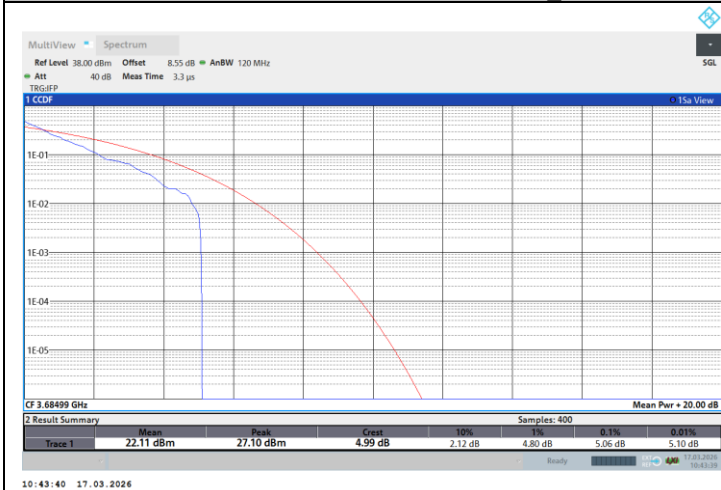
NTNV-N48--PC3-30-30-L-DFT-QPSK-Outer Full-PASS



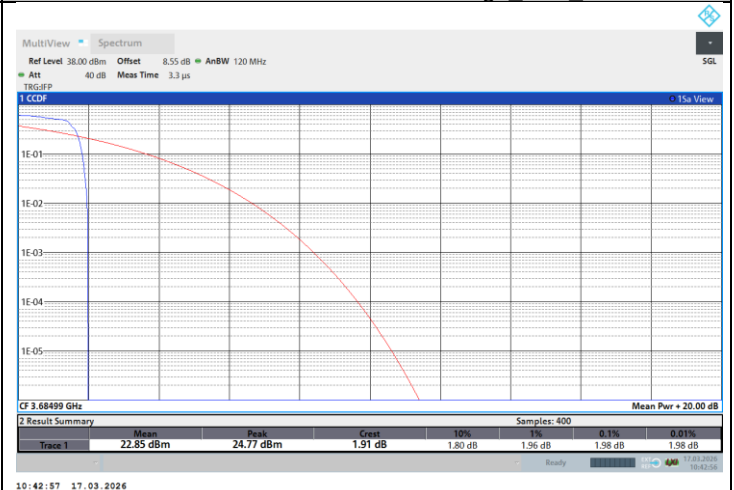
NTNV-N48--PC3-30-30-L-DFT-QPSK-Edge 1RB Left-PASS



NTNV-N48--PC3-30-30-M-DFT-QPSK-Outer Full-PASS



NTNV-N48--PC3-30-30-M-DFT-QPSK-Edge 1RB Left-PASS

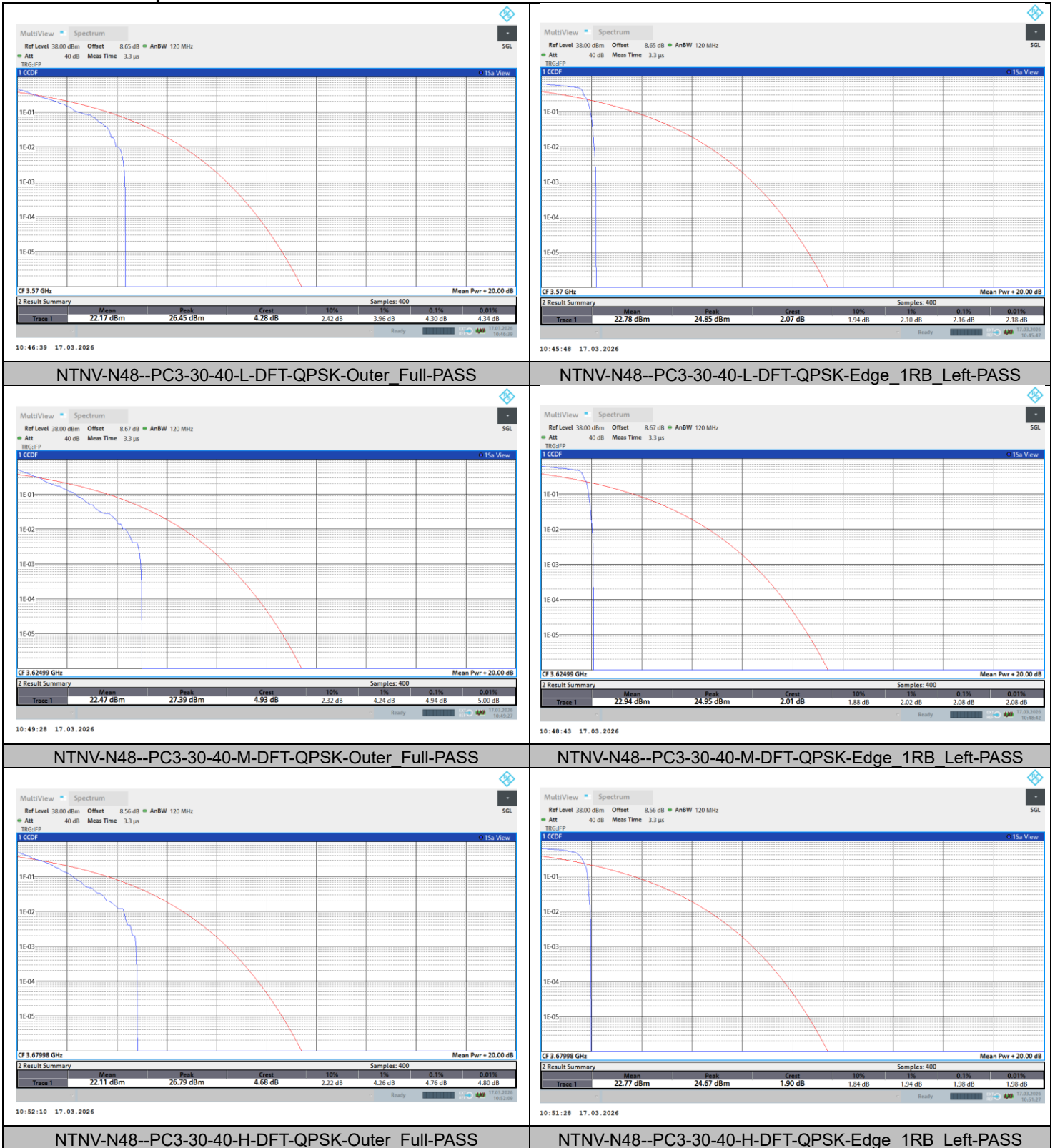


NTNV-N48--PC3-30-30-H-DFT-QPSK-Outer Full-PASS

NTNV-N48--PC3-30-30-H-DFT-QPSK-Edge 1RB Left-PASS



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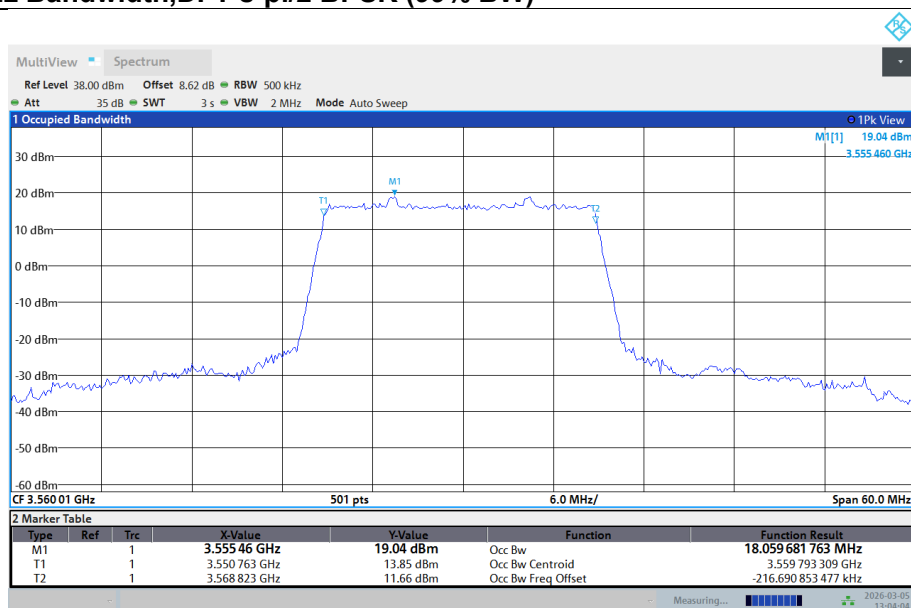
Test Report No.: RF260714B012

26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA TEST RESULT

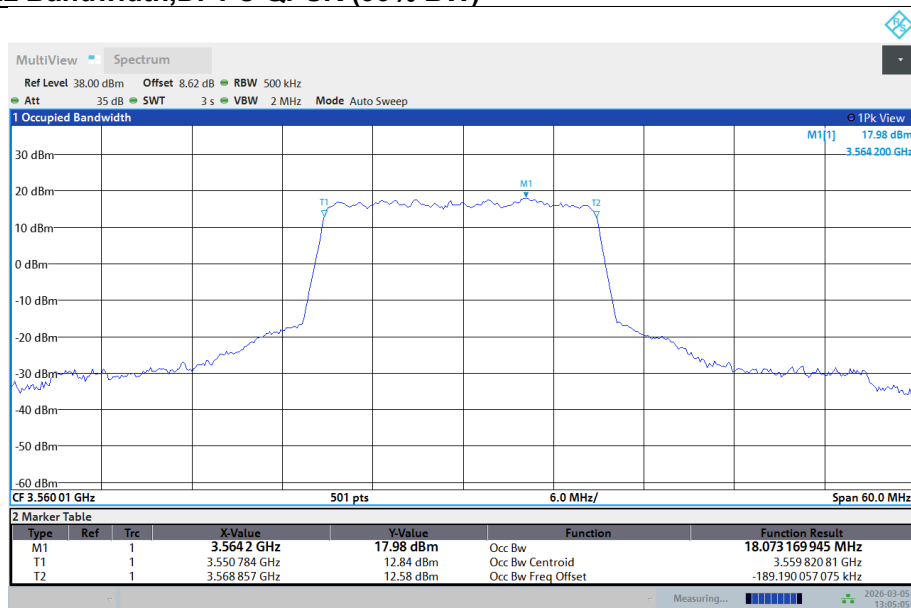
n48,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3560.01	18.060	18.073	18.059
3624.99	18.101	18.099	18.075
3690	18.055	18.088	18.044

n48,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n48,20MHz Bandwidth,DFT-s-QPSK (99% BW)



n48,20MHz Bandwidth,DFT-s-16QAM (99% BW)