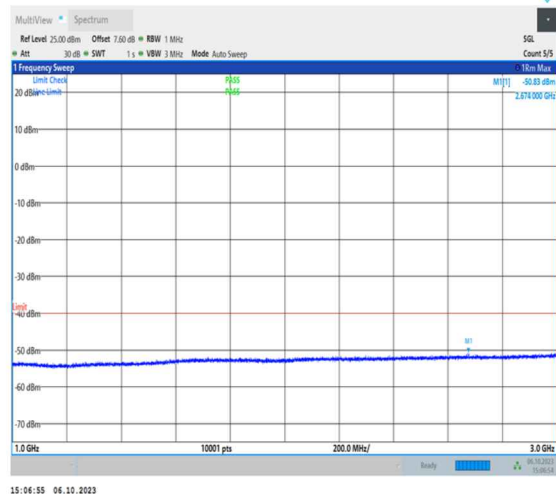


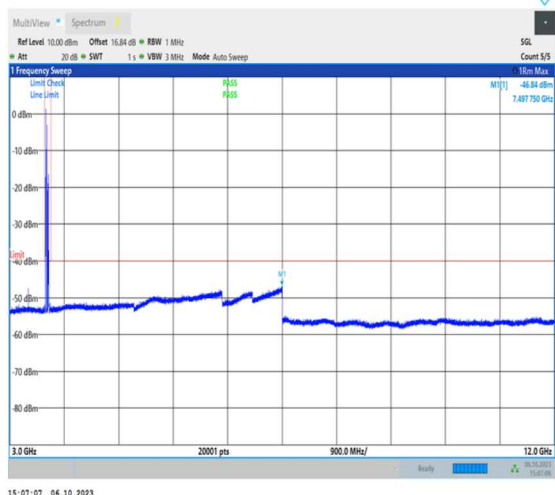
15:06:44 06.10.2023

1-N48-PC3-30-30-M-1-DFT-QPSK-
Edge_1RB_Left-1@0-30-1000-Ant2-35.63--
59.30--50-PASS



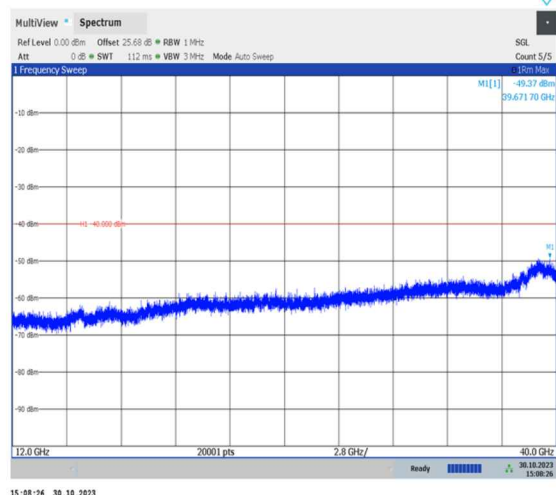
15:06:55 06.10.2023

1-N48-PC3-30-30-M-1-DFT-QPSK-
Edge_1RB_Left-1@0-1000-3000-Ant2-2674.00--
50.83--40-PASS



15:07:07 06.10.2023

1-N48-PC3-30-30-M-1-DFT-QPSK-
Edge_1RB_Left-1@0-3000-12000-Ant2-7497.75--
46.84--40-PASS



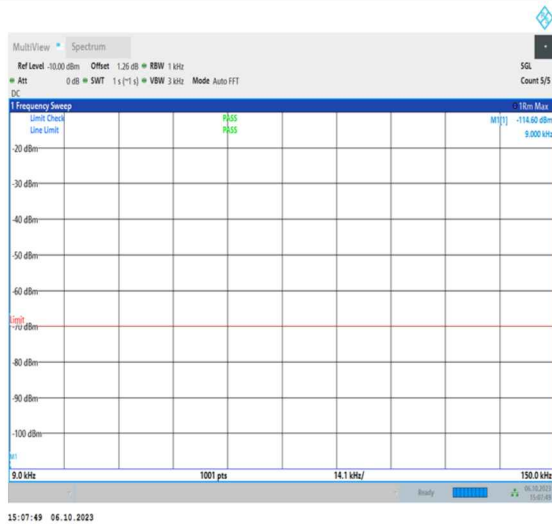
15:08:26 06.10.2023

1-N48-PC3-30-30-M-1-DFT-QPSK-
Edge_1RB_Left-1@0-12000-40000-Ant2-
17041.20--51.12--40-PASS

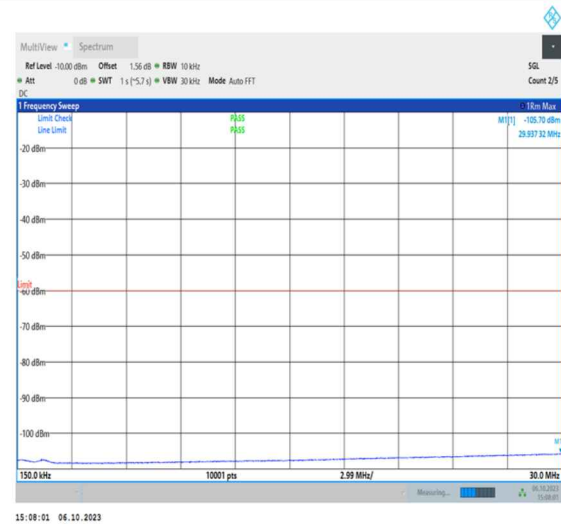


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

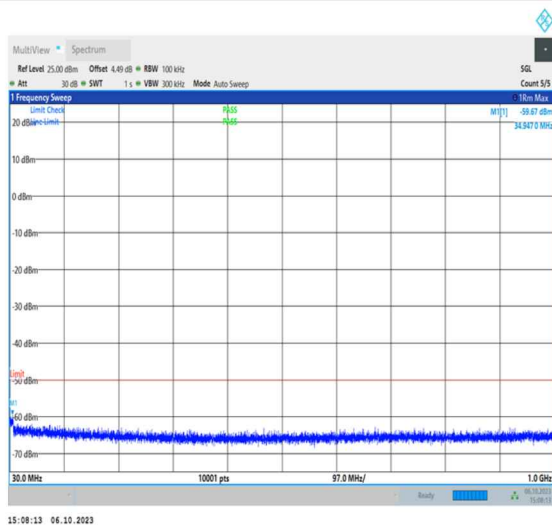
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



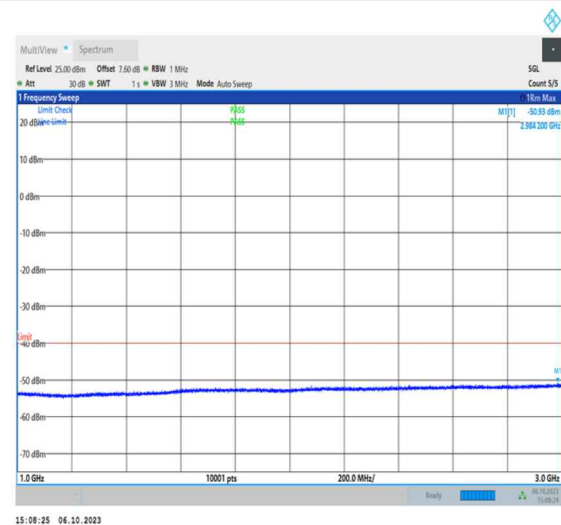
1-N48-PC3-30-30-H-1-DFT-QPSK-
Edge_1RB_Left-1@0-0.009-0.15-Ant2-0.01--
114.60--70-PASS



1-N48-PC3-30-30-H-1-DFT-QPSK-
Edge_1RB_Left-1@0-0.15-30-Ant2-29.94--105.70-
-60-PASS



1-N48-PC3-30-30-H-1-DFT-QPSK-
Edge_1RB_Left-1@0-30-1000-Ant2-34.95--
59.67--50-PASS



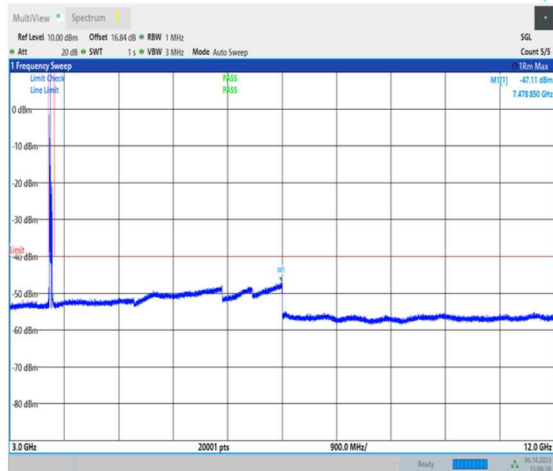
1-N48-PC3-30-30-H-1-DFT-QPSK-
Edge_1RB_Left-1@0-1000-3000-Ant2-2984.20--
50.93--40-PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.

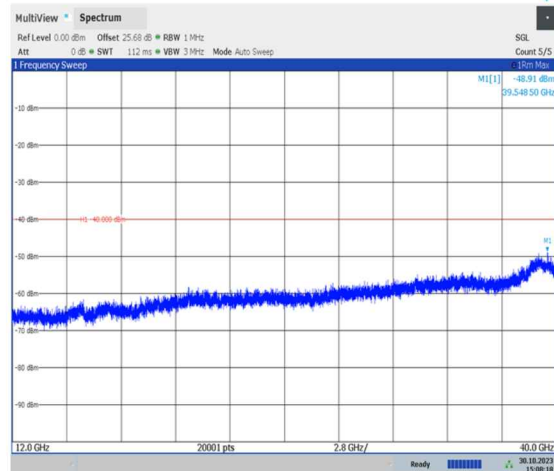
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



15:08:37 06.10.2023

1-N48-PC3-30-30-H-1-DFT-QPSK-
Edge_1RB_Left-1@0-3000-12000-Ant2-7478.85-
-47.11--40-PASS



15:08:18 06.10.2023

1-N48-PC3-30-30-H-1-DFT-QPSK-
Edge_1RB_Left-1@0-12000-40000-Ant2-
16866.80--50.98--40-PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Field Strength of Spurious Radiation

Test Band = NR SA Band 48_ TM1

Test Channel = Low Channel

Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	7241.2708	40.75	-43.40	35.88	-62.03	-40.00	22.03	Horizontal
2	8409.9583	37.55	-41.55	36.60	-62.66	-40.00	22.66	Horizontal
3	9633.75	33.78	-39.13	37.50	-63.11	-40.00	23.11	Horizontal
4	11457.4583	28.54	-37.04	38.75	-65.01	-40.00	25.01	Horizontal
5	13850.8958	27.23	-35.70	40.63	-63.10	-40.00	23.10	Horizontal
6	16492.0625	27.73	-33.41	40.73	-60.22	-40.00	20.22	Horizontal

Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	7241.2708	42.29	-43.40	35.88	-60.49	-40.00	20.49	Vertical
2	8411.875	38.06	-41.55	36.59	-62.16	-40.00	22.16	Vertical
3	10088.4792	32.09	-39.10	38.24	-64.03	-40.00	24.03	Vertical
4	12219.3333	28.07	-37.11	38.87	-65.44	-40.00	25.44	Vertical
5	13847.0625	27.74	-35.74	40.62	-62.63	-40.00	22.63	Vertical
6	15400.0417	25.21	-33.80	40.46	-63.39	-40.00	23.39	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057
中国·广东·深圳市南山区科技园中区M-10栋1号厂房

t (86-755) 26012053 www.sgsgroup.com.cn
t (86-755) 26012053 sgs.china@sgs.com



Test Band = NR SA Band 48_ TM1

Test Channel = Mid Channel

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	7654.3125	39.08	-42.95	36.66	-62.47	-40.00	22.47	Horizontal
2	9045.8125	35.42	-40.56	36.39	-64.01	-40.00	24.01	Horizontal
3	11329.5208	29.23	-37.44	38.73	-64.73	-40.00	24.73	Horizontal
4	13671.6875	27.19	-36.00	40.31	-63.76	-40.00	23.76	Horizontal
5	15393.3333	25.49	-33.81	40.47	-63.11	-40.00	23.11	Horizontal
6	17161.9375	27.33	-34.91	43.03	-59.81	-40.00	19.81	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	7863.2292	39.05	-42.64	36.75	-62.10	-40.00	22.10	Vertical
2	9588.7083	34.87	-39.16	37.42	-62.13	-40.00	22.13	Vertical
3	11148.3958	29.25	-37.62	38.71	-64.91	-40.00	24.91	Vertical
4	13370.2917	26.23	-36.71	39.77	-65.97	-40.00	25.97	Vertical
5	15155.1875	25.86	-34.60	40.97	-63.03	-40.00	23.03	Vertical
6	16464.2708	27.97	-33.59	40.64	-60.24	-40.00	20.24	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Test Band = NR SA Band 48_ TM1

Test Channel = High Channel

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	7241.2708	40.96	-43.40	35.88	-61.82	-40.00	21.82	Horizontal
2	8401.8125	37.95	-41.55	36.60	-62.26	-40.00	22.26	Horizontal
3	9592.5417	34.19	-39.12	37.43	-62.76	-40.00	22.76	Horizontal
4	11143.125	29.70	-37.62	38.71	-64.47	-40.00	24.47	Horizontal
5	12869.0833	27.40	-36.96	39.06	-65.76	-40.00	25.76	Horizontal
6	16487.2708	27.36	-33.44	40.71	-60.63	-40.00	20.63	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	7241.2708	40.53	-43.40	35.88	-62.25	-40.00	22.25	Vertical
2	8409.4792	37.86	-41.55	36.60	-62.35	-40.00	22.35	Vertical
3	9646.2083	33.94	-39.17	37.53	-62.97	-40.00	22.97	Vertical
4	11380.7917	28.64	-37.08	38.74	-64.96	-40.00	24.96	Vertical
5	13855.6875	27.43	-35.66	40.64	-62.85	-40.00	22.85	Vertical
6	16510.2708	27.45	-33.49	40.78	-60.52	-40.00	20.52	Vertical

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level





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	30	30	DFT-PI2BPSK	M	Outer_Full	VL	NT	-10.100000	-0.002786	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	VN	NT	-8.500000	-0.002345	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	VH	NT	-3.200000	-0.000883	PASS
N48	30	30	CP-QPSK	M	Outer_Full	VL	NT	-15.500000	-0.004276	PASS
N48	30	30	CP-QPSK	M	Outer_Full	VN	NT	-6.300000	-0.001738	PASS
N48	30	30	CP-QPSK	M	Outer_Full	VH	NT	-9.800000	-0.002703	PASS



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Wireless Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Frequency Error VS. Temperature

Temperature										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	-30	-2.600000	-0.000717	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	-20	-3.300000	-0.000910	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	-10	-6.000000	-0.001655	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	0	-0.200000	-0.000055	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	10	-7.400000	-0.002041	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	20	-7.800000	-0.002152	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	30	-3.500000	-0.000966	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	40	-5.300000	-0.001462	PASS
N48	30	30	DFT-PI2BPSK	M	Outer_Full	NV	50	-4.800000	-0.001324	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	-30	-6.100000	-0.001683	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	-20	4.200000	0.001159	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	-10	-1.500000	-0.000414	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	0	-5.600000	-0.001545	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	10	-6.000000	-0.001655	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com



Report No.: ZEWA2310000147RG02

Page: 37 of 37

N48	30	30	CP-QPSK	M	Outer_Full	NV	20	0.000000	0.000000	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	30	-5.000000	-0.001379	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	40	-9.000000	-0.002483	PASS
N48	30	30	CP-QPSK	M	Outer_Full	NV	50	-3.600000	-0.000993	PASS

---End of Attachment---



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 sgs.china@sgs.com