Report No.: ER/2018/90026 Page: 313 of 385

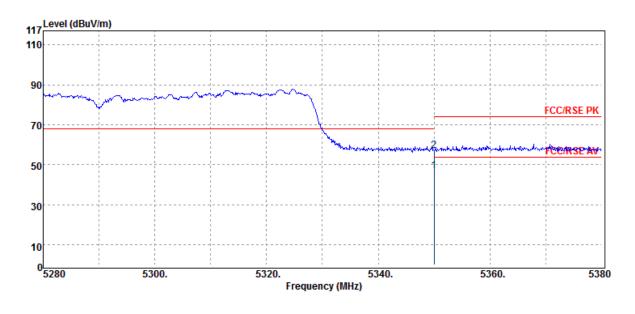


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B2 :5290 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin	
	Mode	Reading Level		FS	@3m		
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5350.00	Average	38.45	8.63	47.08	54.00	-6.92	
5350.00	Peak	48.43	8.63	57.06	74.00	-16.94	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 314 of 385

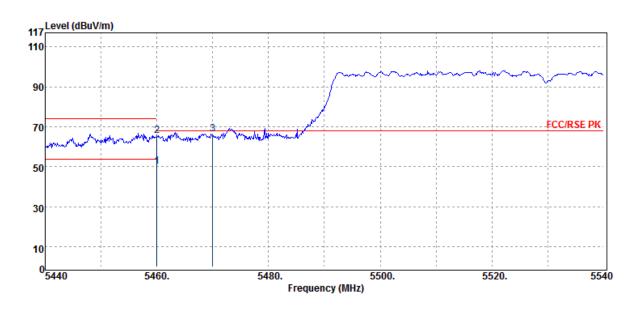


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	41.44	8.75	50.19	54.00	-3.81
5460.00	Peak	56.81	8.75	65.56	74.00	-8.44
5470.00	Peak	57.65	8.74	66.39	68.20	-1.81

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 315 of 385

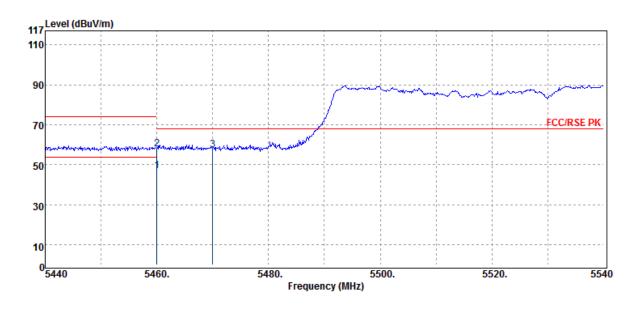


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	38.30	8.75	47.05	54.00	-6.95
5460.00	Peak	48.98	8.75	57.73	74.00	-16.27
5470.00	Peak	48.92	8.74	57.66	68.20	-10.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 316 of 385

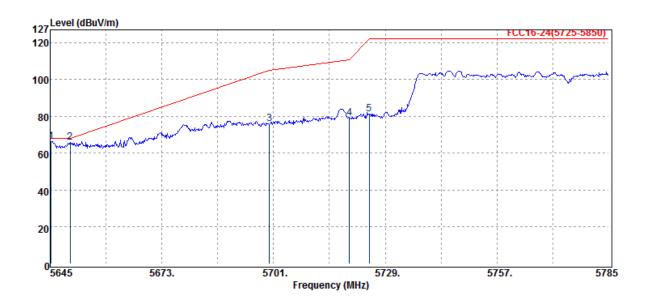


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5645.28	Peak	57.38	9.19	66.57	68.23	-1.66
5650.00	Peak	56.55	9.20	65.75	68.23	-2.48
5700.00	Peak	66.60	9.35	75.95	105.23	-29.28
5720.00	Peak	69.46	9.43	78.89	110.83	-31.94
5725.00	Peak	71.69	9.44	81.13	122.23	-41.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 317 of 385

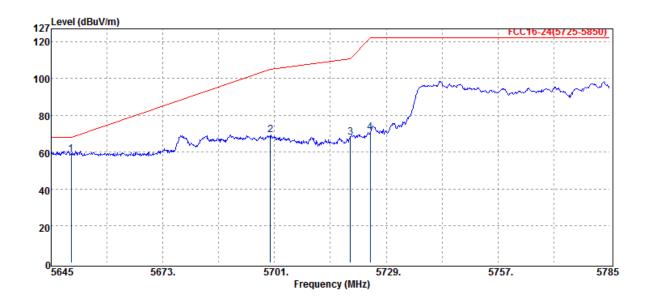


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBuV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	49.67	9.20	58.87	<u>68.23</u>	-9.36
5700.00	Peak	59.92	9.35	69.27	105.23	-35.96
5720.00	Peak	58.63	9.33 9.43	68.06	110.83	-42.77
5725.00	Peak	61.18	9.43 9.44	70.62	122.23	-42.77 -51.61
5725.00	reak	01.10	9.44	70.02	122.23	-51.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 318 of 385

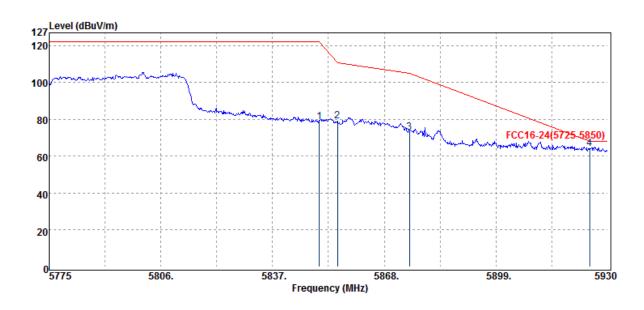


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	68.78	9.77	78.55	122.23	-43.68
5855.00	Peak	69.20	9.78	78.98	110.83	-31.85
5875.00	Peak	63.34	9.82	73.16	105.23	-32.07
5925.00	Peak	54.34	9.98	64.32	68.23	-3.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 319 of 385

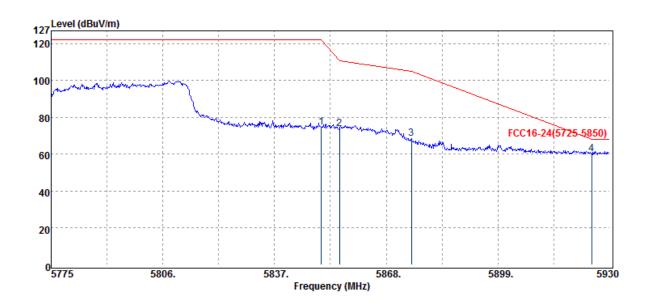


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-19 :23 deg_C / 62 RH :Wei :HORIZONTAL



Detector	Spectrum	Factor	Actual	Limit	Margin
Mode	Reading Level		FS	@3m	
PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
Peak	65.02	9.77	74.79	122.23	-47.44
Peak	64.08	9.78	73.86	110.83	-36.97
Peak	58.63	9.82	68.45	105.23	-36.78
Peak	50.43	9.98	60.41	68.23	-7.82
	Mode PK/QP/AV Peak Peak Peak	ModeReading LevelPK/QP/AVdBµVPeak65.02Peak64.08Peak58.63	Mode Reading Level PK/QP/AV dBµV dB Peak 65.02 9.77 Peak 64.08 9.78 Peak 58.63 9.82	Mode Reading Level FS PK/QP/AV dBµV dB dBµV/m Peak 65.02 9.77 74.79 Peak 64.08 9.78 73.86 Peak 58.63 9.82 68.45	Mode Reading Level FS @3m PK/QP/AV dBμV dB dBμV/m dBμV/m Peak 65.02 9.77 74.79 122.23 Peak 64.08 9.78 73.86 110.83 Peak 58.63 9.82 68.45 105.23

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.



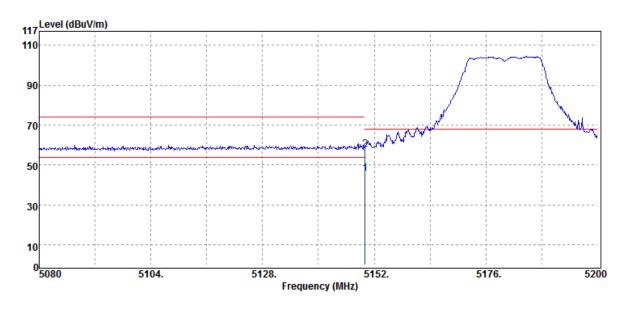
Internal Antenna (Type: Printed antenna, Model no: N/A)

802.11a mode

Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB1 :5180 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol. :2018-09-26 :23 deg_C / 62 RH :Wei :VERTICAL



Detector	Spectrum	Factor	Actual	Limit	Margin	
Mode	Reading Level		FS	@3m		
PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
Average	37.63	8.32	45.95	54.00	-8.05	
Peak	49.74	8.32	58.06	74.00	-15.94	
	Mode PK/QP/AV Average	ModeReading LevelPK/QP/AVdBµVAverage37.63	ModeReading LevelPK/QP/AVdBµVdBAverage37.638.32	ModeReading LevelFSPK/QP/AVdBµVdBdBµV/mAverage37.638.3245.95	Mode Reading Level FS @3m PK/QP/AV dBμV dB dBμV/m dBμV/m Average 37.63 8.32 45.95 54.00	Mode Reading Level FS @3m PK/QP/AV dBμV dB dBμV/m dBμV/m dB Average 37.63 8.32 45.95 54.00 -8.05

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Re非另有說明,此報告結果僅對測試之樣品員,同時此樣品僅保留的方。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format This document is issued by the Company subject to its General Conditions of service printed overlear, available on request of accessible at <u>www.sgc.com/terms and conditions</u> for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgc.com/terms e-document.htm</u>. 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.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

Report No.: ER/2018/90026 Page: 321 of 385

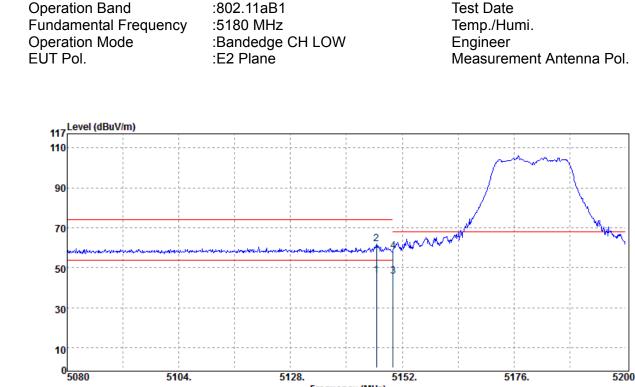
:2018-09-26

:HORIZONTAL

:Wei

:23 deg_C / 62 RH





Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5146.48	Average	37.84	8.30	46.14	54.00	-7.86
5146.48	Peak	53.46	8.30	61.76	74.00	-12.24
5150.00	Average	37.52	8.32	45.84	54.00	-8.16
5150.00	Peak	49.79	8.32	58.11	74.00	-15.89

Frequency (MHz)

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

Report No.: ER/2018/90026 Page: 322 of 385

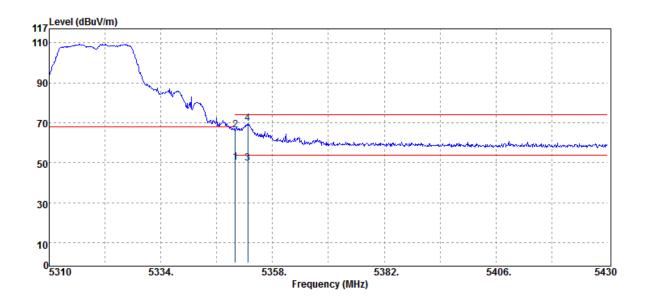


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB2 :5320 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	41.74	8.63	50.37	54.00	-3.63
5350.00	Peak	57.76	8.63	66.39	74.00	-7.61
5352.72	Average	41.33	8.65	49.98	54.00	-4.02
5352.72	Peak	60.90	8.65	69.55	74.00	-4.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 323 of 385

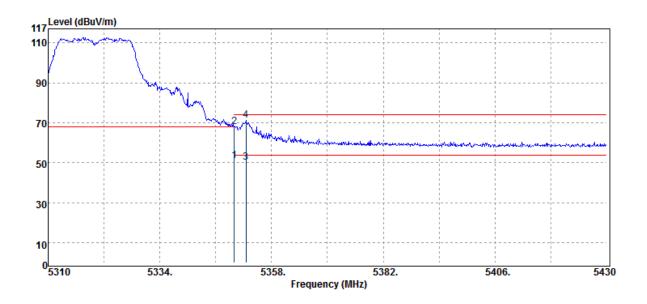


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB2 :5320 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :23 deg_C / 62 RH :Wei :HORIZONTAL



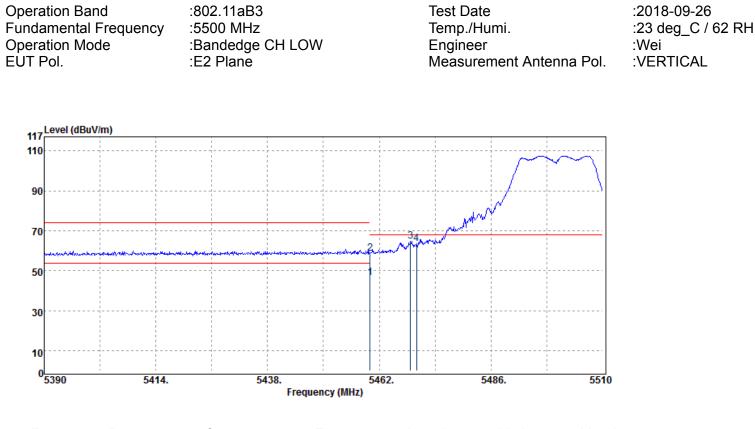
Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	42.47	8.63	51.10	54.00	-2.90
5350.00	Peak	59.46	8.63	68.09	74.00	-5.91
5352.48	Average	41.66	8.65	50.31	54.00	-3.69
5352.48	Peak	62.52	8.65	71.17	74.00	-2.83

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 324 of 385





Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	37.88	8.75	46.63	54.00	-7.37
5460.00	Peak	49.93	8.75	58.68	74.00	-15.32
5468.72	Peak	56.20	8.74	64.94	68.20	-3.26
5470.00	Peak	54.73	8.74	63.47	68.20	-4.73

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 325 of 385



Operation Band :802.11aB3 Test Date :2018-09-26 **Fundamental Frequency** :5500 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Bandedge CH LOW Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL evel (dBuV/m) 117 110 90 70 50 30 10 0 5390 5414. 5510 5438 5462. 5486. Frequency (MHz)

	Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
_	MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
_	5460.00	Average	38.24	8.75	46.99	54.00	-7.01	-
	5460.00	Peak	50.45	8.75	59.20	74.00	-14.80	
	5466.92	Peak	56.67	8.74	65.41	68.20	-2.79	
	5470.00	Peak	55.21	8.74	63.95	68.20	-4.25	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 326 of 385



Operation Band :802.11aB3 Test Date :2018-09-28 **Fundamental Frequency** :5700 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Bandedge CH HIGH Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL Level (dBuV/m) 117 110 90 70 50 30 10 0 5690 5714. 5738 5810 5762. 5786. Frequency (MHz) Freq. Detector Spectrum Factor Actual Limit Margin **Reading Level** Mode FS @3m MHz PK/QP/AV dBµV dB dBµV/m dBµV/m dB 5725.00 Peak 53.07 9.44 62.51 68.20 -5.69

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 327 of 385



Operation Band :802.11aB3 Test Date :2018-09-28 **Fundamental Frequency** :5700 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Wei :Bandedge CH HIGH Engineer EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL Level (dBuV/m) 117 110 90 70 50 30 10 0 5690 5714. 5810 5738 5762. 5786. Frequency (MHz) Freq. Detector Spectrum Factor Actual Limit Margin **Reading Level** Mode FS @3m MHz PK/QP/AV dBµV dB dBµV/m dBµV/m dB 5725.00 Peak 57.07 9.44 66.51 68.20 -1.69

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 328 of 385

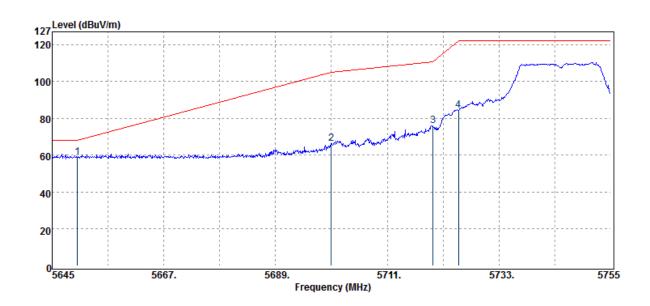


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB4 :5745 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	49.83	9.20	59.03	68.23	-9.20
5700.00	Peak	56.96	9.35	66.31	105.23	-38.92
5720.00	Peak	66.64	9.43	76.07	110.83	-34.76
5725.00	Peak	75.03	9.44	84.47	122.23	-37.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 329 of 385

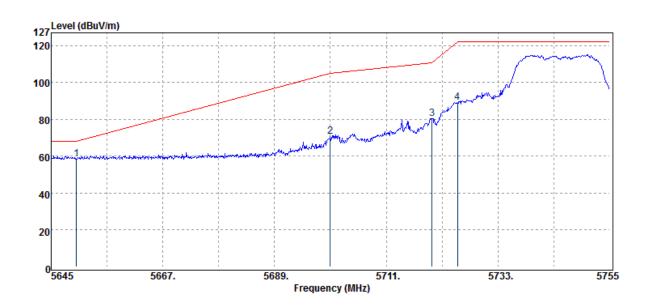


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB4 :5745 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	49.39	9.20	58.59	68.23	-9.64
5700.00	Peak	61.29	9.35	70.64	105.23	-34.59
5720.00	Peak	70.87	9.43	80.30	110.83	-30.53
5725.00	Peak	79.66	9.44	89.10	122.23	-33.13

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 330 of 385

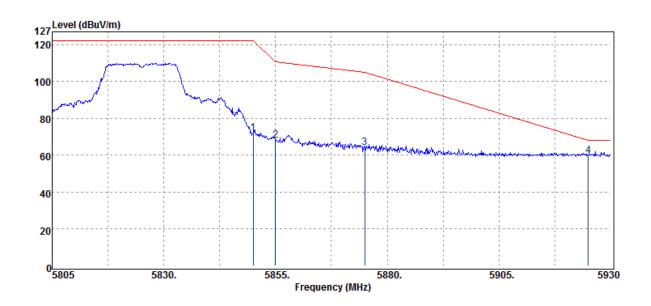


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB4 :5825 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	62.45	9.77	72.22	122.23	-50.01
5855.00	Peak	58.48	9.78	68.26	110.83	-42.57
5875.00	Peak	54.41	9.82	64.23	105.23	-41.00
5925.00	Peak	49.67	9.98	59.65	68.23	-8.58

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 331 of 385

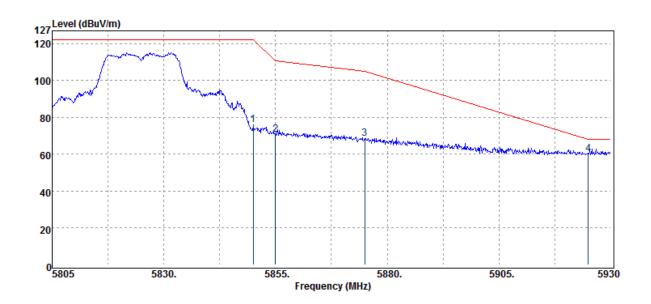


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB4 :5825 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	66.21	9.77	75.98	122.23	-46.25
5855.00	Peak	61.19	9.78	70.97	110.83	-39.86
5875.00	Peak	58.75	9.82	68.57	105.23	-36.66
5925.00	Peak	50.18	9.98	60.16	68.23	-8.07

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.



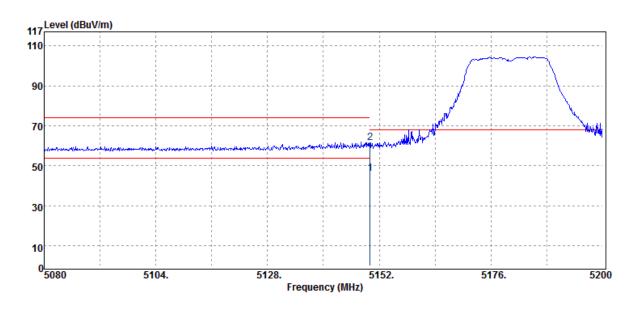
802.11n20 HT mode

Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B1 :5180 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	Average	37.95	8.32	46.27	54.00	-7.73
5150.00	Peak	53.31	8.32	61.63	74.00	-12.37

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

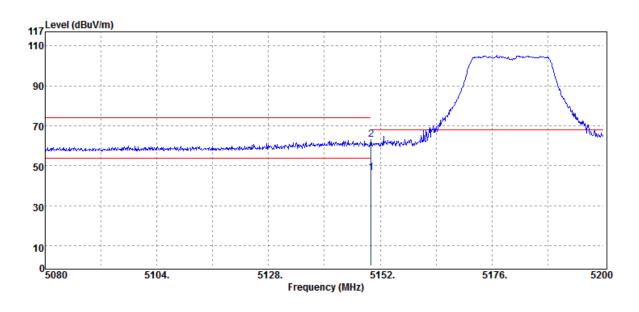
Report No.: ER/2018/90026 Page: 333 of 385



Operation Band :802.11n20B1 **Fundamental Frequency** :5180 MHz **Operation Mode** :Bandedge CH LOW EUT Pol. :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	Average	38.04	8.32	46.36	54.00	-7.64
5150.00	Peak	54.84	8.32	63.16	74.00	-10.84

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 334 of 385

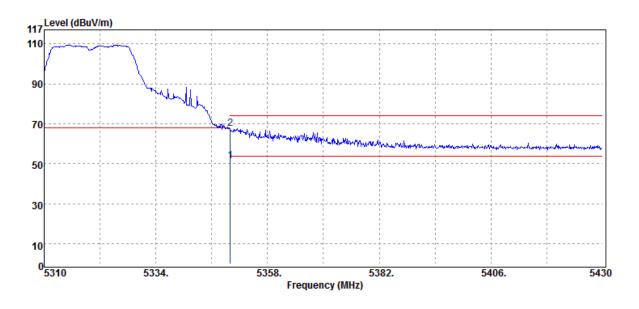


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B2 :5320 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	42.64	8.63	51.27	54.00	-2.73
5350.00	Peak	58.80	8.63	67.43	74.00	-6.57

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 335 of 385

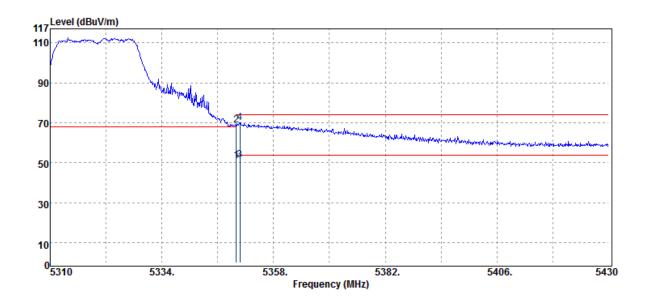


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B2 :5320 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	42.49	8.63	51.12	54.00	-2.88
5350.00	Peak	60.13	8.63	68.76	74.00	-5.24
5350.80	Average	42.72	8.64	51.36	54.00	-2.64
5350.80	Peak	61.37	8.64	70.01	74.00	-3.99

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 336 of 385

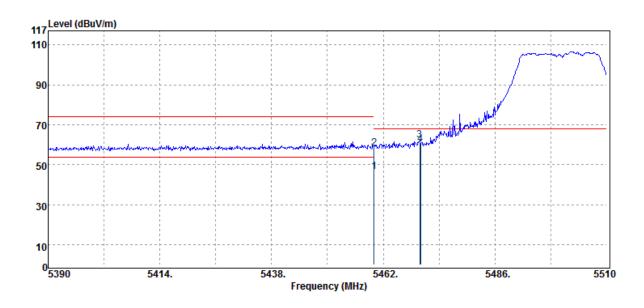


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B3 :5500 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	37.94	8.75	46.69	54.00	-7.31
5460.00	Peak	49.35	8.75	58.10	74.00	-15.90
5469.80	Peak	53.44	8.74	62.18	68.20	-6.02
5470.00	Peak	51.55	8.74	60.29	68.20	-7.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 337 of 385

5510

:2018-09-28

:HORIZONTAL

:Wei

:23 deg_C / 62 RH

Test Date

5486.



5414.

Operation Band Fundamental Frequency :5500 MHz Temp./Humi. **Operation Mode** :Bandedge CH LOW Engineer EUT Pol. :E2 Plane Measurement Antenna Pol. evel (dBuV/m) 117 110 90 70 50 30 10 0 5390

5438

:802.11n20B3

Frequency (MHz)

5462.

Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	38.36	8.75	47.11	54.00	-6.89
5460.00	Peak	55.76	8.75	64.51	74.00	-9.49
5468.84	Peak	58.42	8.74	67.16	68.20	-1.04
5470.00	Peak	57.28	8.74	66.02	68.20	-2.18

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 338 of 385

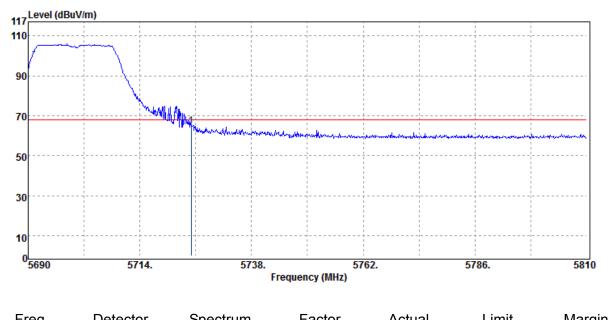


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B3 :5700 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



TTEQ.	Mode	Reading Level		FS	@3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	Peak	55.37	9.44	64.81	68.20	-3.39

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 339 of 385

-1.80

:2018-09-28

Test Date



Operation Band

5725.00

Peak

Fundamental Frequency :5700 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Bandedge CH HIGH :Wei Engineer EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL ,Level (dBuV/m) 117 110 90 70 50 30 10 0 5690 5714. 5738 5786. 5810 5762. Frequency (MHz) Freq. Detector Spectrum Factor Actual Limit Margin **Reading Level** Mode FS @3m MHz PK/QP/AV dBµV dB dBµV/m dBµV/m dB 56.96 66.40 68.20

9.44

:802.11n20B3

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 340 of 385

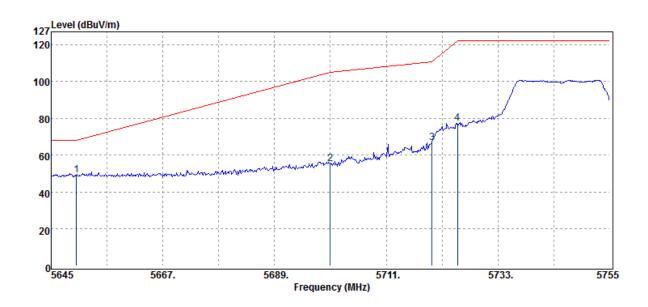


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B4 :5745 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	40.19	9.20	49.39	68.23	-18.84
5700.00	Peak	45.89	9.35	55.24	105.23	-49.99
5720.00	Peak	57.53	9.43	66.96	110.83	-43.87
5725.00	Peak	67.93	9.44	77.37	122.23	-44.86

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 341 of 385

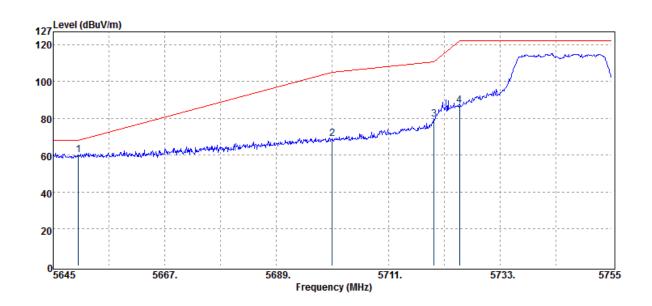


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B4 :5745 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBuV	dB	dBµV/m	dBµV/m	dB
	- 1					-
5650.00	Peak	51.12	9.20	60.32	68.23	-7.91
5700.00	Peak	59.44	9.35	68.79	105.23	-36.44
5720.00	Peak	69.96	9.43	79.39	110.83	-31.44
5725.00	Peak	77.41	9.44	86.85	122.23	-35.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 342 of 385

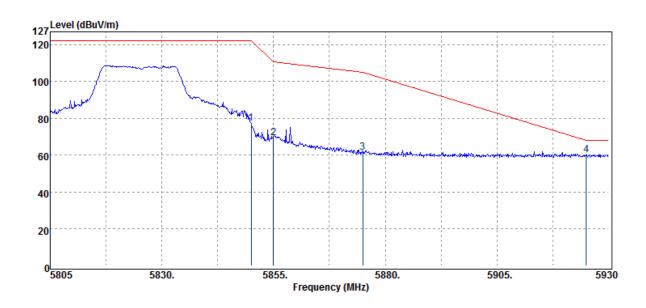


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B4 :5825 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	67.77	9.77	77.54	122.23	-44.69
5855.00	Peak	59.76	9.78	69.54	110.83	-41.29
5875.00	Peak	51.90	9.82	61.72	105.23	-43.51
5925.00	Peak	50.43	9.98	60.41	68.23	-7.82

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 343 of 385

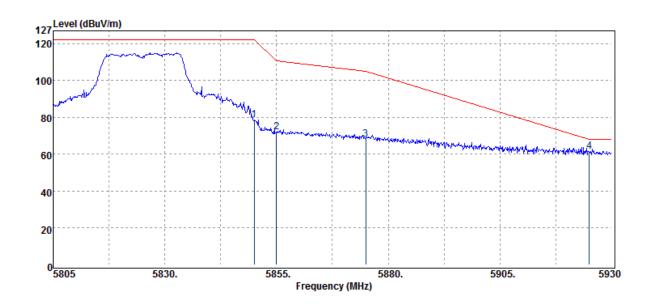


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B4 :5825 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-10-05 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	69.03	9.77	78.80	122.23	-43.43
5855.00	Peak	62.34	9.78	72.12	110.83	-38.71
5875.00	Peak	58.48	9.82	68.30	105.23	-36.93
5925.00	Peak	51.34	9.98	61.32	68.23	-6.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.



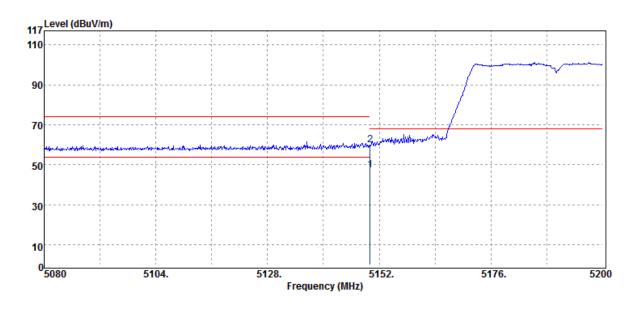
802.11n40 HT mode

Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B1 :5190 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin	
	Mode	Reading Level		FS	@3m		
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5150.00	Average	38.91	8.32	47.23	54.00	-6.77	-
5150.00	Peak	51.73	8.32	60.05	74.00	-13.95	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

Report No.: ER/2018/90026 Page: 345 of 385

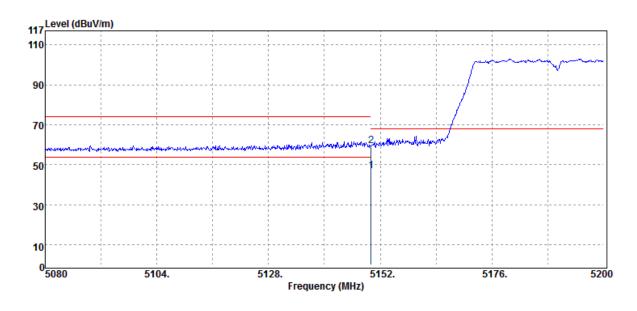


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B1 :5190 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	Average	38.76	8.32	47.08	54.00	-6.92
5150.00	Peak	51.37	8.32	59.69	74.00	-14.31

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

Report No.: ER/2018/90026 Page: 346 of 385

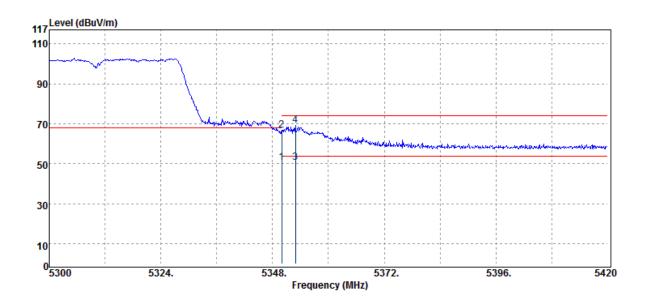


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B2 :5310 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	41.78	8.63	50.41	54.00	-3.59
5350.00	Peak	58.10	8.63	66.73	74.00	-7.27
5352.92	Average	42.14	8.65	50.79	54.00	-3.21
5352.92	Peak	60.55	8.65	69.20	74.00	-4.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 347 of 385

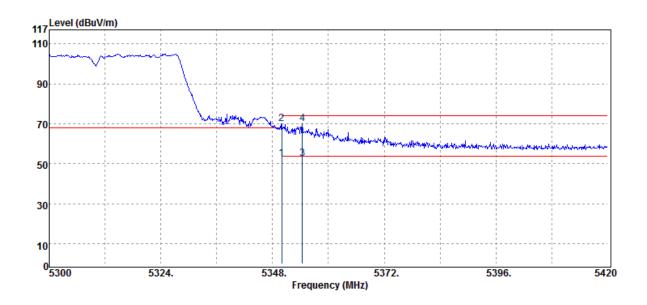


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B2 :5310 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	43.93	8.63	52.56	54.00	-1.44
5350.00	Peak	61.60	8.63	70.23	74.00	-3.77
5354.36	Average	44.05	8.65	52.70	54.00	-1.30
5354.36	Peak	61.21	8.65	69.86	74.00	-4.14

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Report No.: ER/2018/90026 Page: 348 of 385

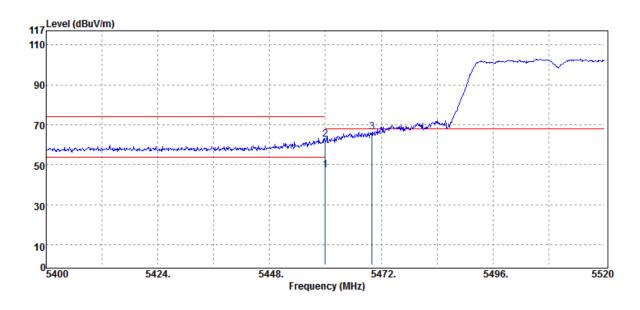


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B3 :5510 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	38.60	8.75	47.35	54.00	-6.65
5460.00	Peak	53.85	8.75	62.60	74.00	-11.40
5470.00	Peak	57.76	8.74	66.50	68.20	-1.70

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 349 of 385

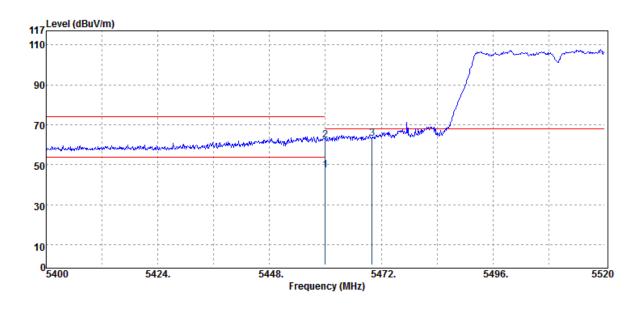


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B3 :5510 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	38.58	8.75	47.33	54.00	-6.67
5460.00	Peak	53.75	8.75	62.50	74.00	-11.50
5470.00	Peak	54.54	8.74	63.28	68.20	-4.92

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 350 of 385

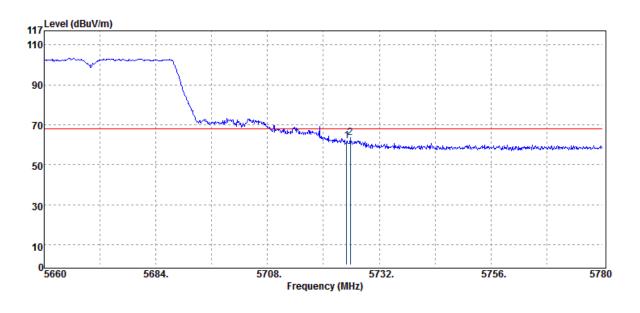


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B3 :5670 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	Peak	52.36	9.44	61.80	68.20	-6.40
5725.76	Peak	53.92	9.44	63.36	68.20	-4.84

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 351 of 385

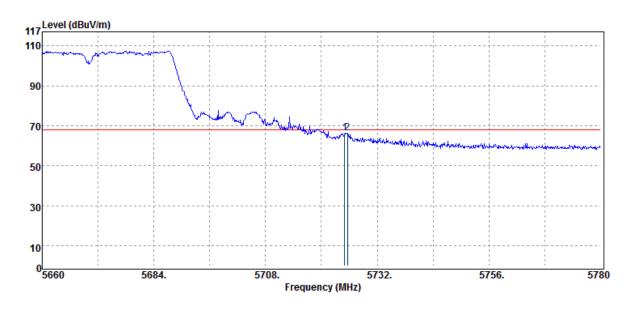


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B3 :5670 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Margin
dB
-1.93
-1.82

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 352 of 385

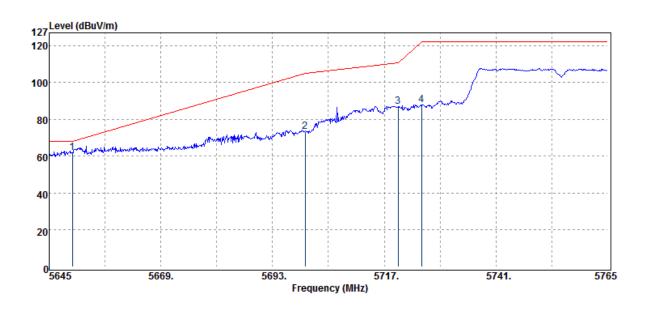


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B4 :5755 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	52.58	9.20	61.78	68.23	-6.45
5700.00	Peak	64.05	9.35	73.40	105.23	-31.83
5720.00	Peak	77.70	9.43	87.13	110.83	-23.70
5725.00	Peak	78.41	9.44	87.85	122.23	-34.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 353 of 385

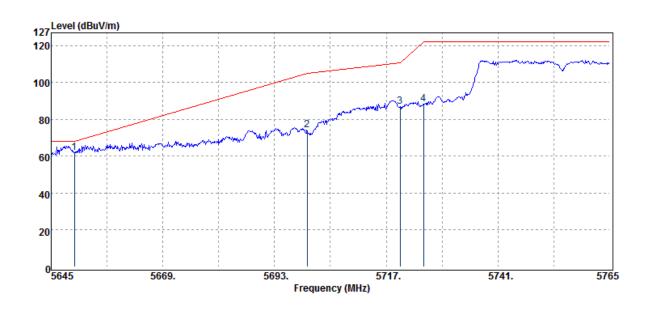


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B4 :5755 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	52.71	9.20	61.91	68.23	-6.32
5700.00	Peak	65.00	9.35	74.35	105.23	-30.88
5720.00	Peak	77.76	9.43	87.19	110.83	-23.64
5725.00	Peak	78.74	9.44	88.18	122.23	-34.05

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 354 of 385

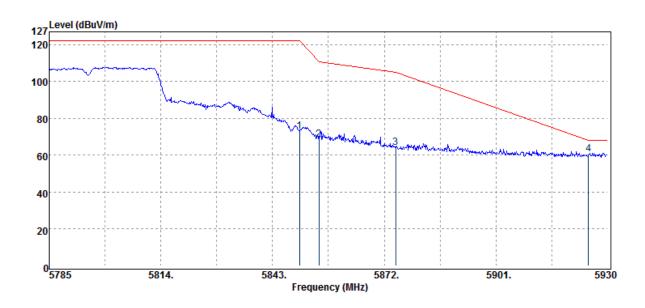


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B4 :5795 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	63.29	9.77	73.06	122.23	-49.17
5855.00	Peak	58.66	9.78	68.44	110.83	-42.39
5875.00	Peak	54.43	9.82	64.25	105.23	-40.98
5925.00	Peak	50.51	9.98	60.49	68.23	-7.74

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 355 of 385

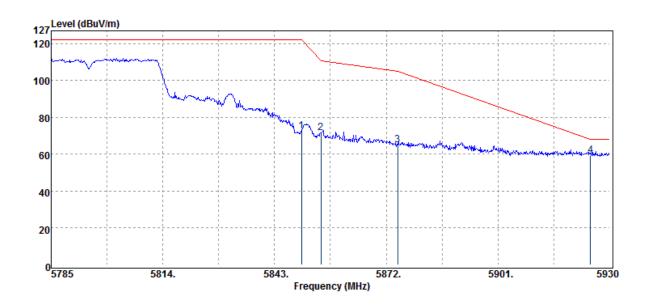


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B4 :5795 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-10-05 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	62.62	9.77	72.39	122.23	-49.84
5855.00	Peak	61.79	9.78	71.57	110.83	-39.26
5875.00	Peak	55.16	9.82	64.98	105.23	-40.25
5925.00	Peak	49.27	9.98	59.25	68.23	-8.98

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.



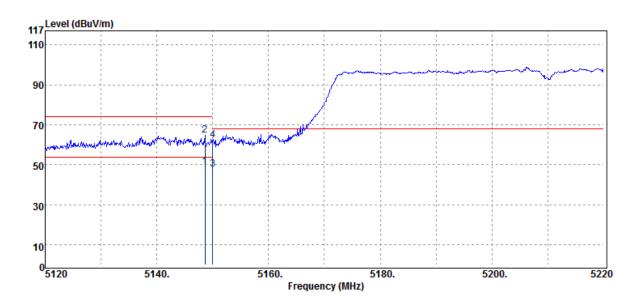
802.11ac80 VHT mode

Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B1 :5210 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5148.60	Average	40.81	8.30	49.11	54.00	-4.89
5148.60	Peak	56.45	8.30	64.75	74.00	-9.25
5150.00	Average	39.52	8.32	47.84	54.00	-6.16
5150.00	Peak	53.90	8.32	62.22	74.00	-11.78

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 357 of 385

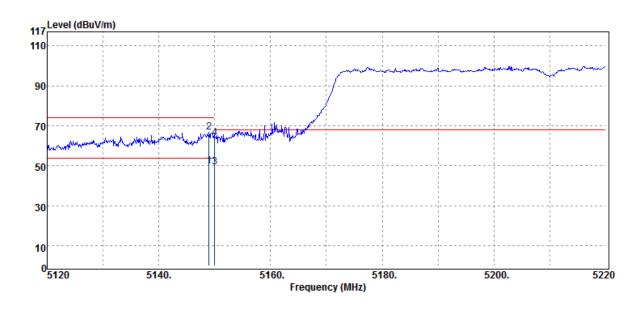


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B1 :5210 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5149.00	Average	41.43	8.30	49.73	54.00	-4.27
5149.00	Peak	58.53	8.30	66.83	74.00	-7.17
5150.00	Average	41.01	8.32	49.33	54.00	-4.67
5150.00	Peak	55.71	8.32	64.03	74.00	-9.97

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 358 of 385

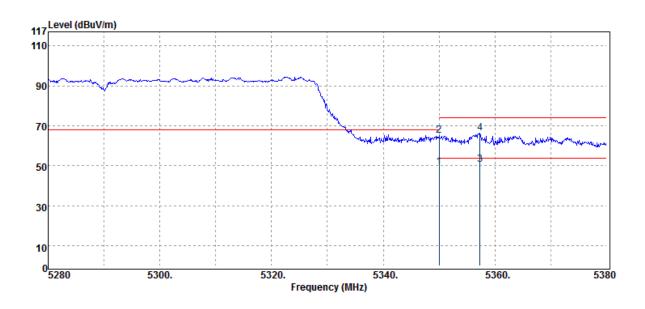


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B2 :5290 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	40.91	8.63	49.54	54.00	-4.46
5350.00	Peak	56.42	8.63	65.05	74.00	-8.95
5357.30	Average	42.05	8.65	50.70	54.00	-3.30
5357.30	Peak	57.72	8.65	66.37	74.00	-7.63

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 359 of 385

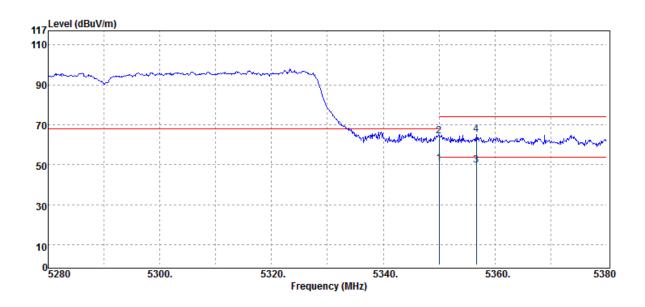


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B2 :5290 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Average	41.86	8.63	50.49	54.00	-3.51
5350.00	Peak	55.82	8.63	64.45	74.00	-9.55
5356.70	Average	41.15	8.65	49.80	54.00	-4.20
5356.70	Peak	56.56	8.65	65.21	74.00	-8.79

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

Member of SGS Group

Report No.: ER/2018/90026 Page: 360 of 385

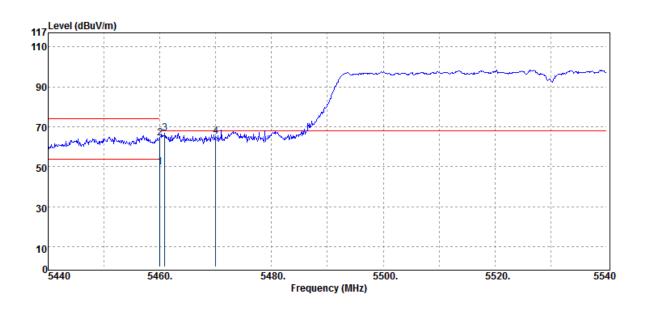


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	41.15	8.75	49.90	54.00	-4.10
5460.00	Peak	55.69	8.75	64.44	74.00	-9.56
5460.90	Peak	58.21	8.75	66.96	68.20	-1.24
5470.00	Peak	56.53	8.74	65.27	68.20	-2.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 361 of 385

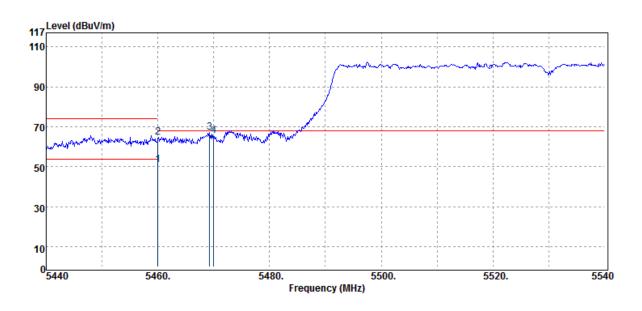


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Average	42.13	8.75	50.88	54.00	-3.12
5460.00	Peak	56.01	8.75	64.76	74.00	-9.24
5469.30	Peak	58.28	8.74	67.02	68.20	-1.18
5470.00	Peak	56.74	8.74	65.48	68.20	-2.72

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 362 of 385

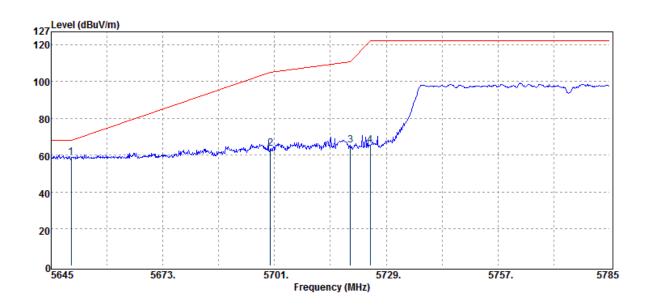


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	49.56	9.20	58.76	68.23	-9.47
5700.00	Peak	54.21	9.35	63.56	105.23	-41.67
5720.00	Peak	56.13	9.43	65.56	110.83	-45.27
5725.00	Peak	55.91	9.44	65.35	122.23	-56.88

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 363 of 385

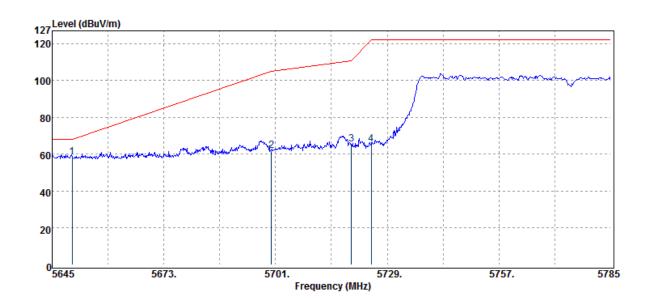


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5650.00	Peak	49.09	9.20	58.29	68.23	-9.94
5700.00	Peak	52.75	9.35	62.10	105.23	-43.13
5720.00	Peak	55.84	9.43	65.27	110.83	-45.56
5725.00	Peak	55.89	9.44	65.33	122.23	-56.90

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 364 of 385

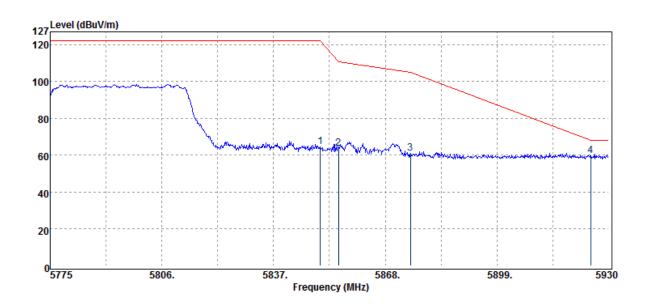


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	54.98	9.77	64.75	122.23	-57.48
5855.00	Peak	54.05	9.78	63.83	110.83	-47.00
5875.00	Peak	51.11	9.82	60.93	105.23	-44.30
5925.00	Peak	49.82	9.98	59.80	68.23	-8.43

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.

Report No.: ER/2018/90026 Page: 365 of 385

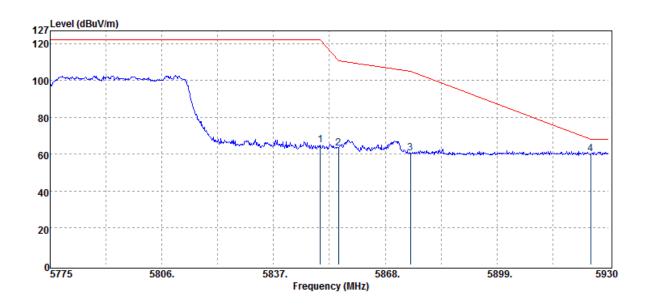


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz :Bandedge CH HIGH :E2 Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-28 :23 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	Peak	55.39	9.77	65.16	122.23	-57.07
5855.00	Peak	53.50	9.78	63.28	110.83	-47.55
5875.00	Peak	50.65	9.82	60.47	105.23	-44.76
5925.00	Peak	50.32	9.98	60.30	68.23	-7.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對测试之樣品負責,同時此樣品僅保留的長。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms a-document.htm</u>. 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 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 is unlawful and offenders may 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 fulles event of the law. may be prosecuted to the fullest extent of the law.



12 TRANSMISSION IN THE ABSENCE OF DATA

12.1 **Standard Applicable**

According to §15.407(c)

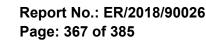
The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

12.2 Result

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

Re非另有説明,此報告結果僅對測試之様品負責。同時此様品僅保留的人で。本報告未經本公司書面許可,不可能份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms e-document.htm</u>. 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.





13 FREQUENCY STABILITY

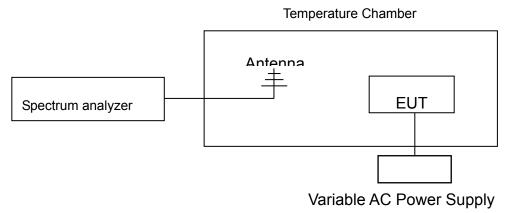
13.1 Standard Applicable

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

13.2 Measurement Procedure

- 1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
- 2. Set EUT as normal operation.
- 3. Turn the EUT on and couple its output to spectrum.
- 4. Turn the EUT off and set the chamber to the highest temperature specified.
- 5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
- 6. Repeat step with the temperature chamber set to the lowest temperature.

13.3 Test SET-UP



13.4 **Measurement Equipment Used:**

SGS Conducted Room								
Name of Equipment	Manufacturer	Model	Serial Num- ber	Calibration Date	Calibration Due			
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	05/03/2018	05/02/2019			
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019			
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2018	01/01/2019			
Coaxial Cables	N/A	WK CE Cable	N/A	01/02/2018	01/01/2019			
Power Meter	Anritsu	ML2496A	1804001	02/01/2018	01/31/2019			
Power Sensor	Anritsu	MA2411B	1726104	02/01/2018	01/31/2019			
Power Sensor	Anritsu	MA2411B	1726107	02/01/2018	01/31/2019			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

Re非另有説明,此報告結果僅對測試之様品負責。同時此様品僅保留的人で。本報告未經本公司書面許可,不可能份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.com/terms e-document.htm. 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.

488 www.tw.sgs.com
0



13.5 **Measurement Result**

Startup:

Operation Mode	802.11 a	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		36	5180	5,179.99011	0.00000191
		44	5220	5,219.99256	0.00000143
		48	5240	5,239.97128	0.00000548
		52	5260	5,260.02424	-0.00000461
		60	5300	5,299.98334	0.00000314
	13.283V	64	5320	5,320.00588	-0.00000110
		100	5500	5,499.99733	0.00000049
		116	5580	5,579.97505	0.00000447
		140	5700	5,699.97888	0.00000371
		149	5745	5,744.98152	0.00000322
		157	5785	5,784.98750	0.00000216
		165	5825	5,824.99326	0.00000116
-10		36	5180	5,179.97717	0.00000441
		44	5220	5,219.98090	0.00000366
		48	5240	5,239.98000	0.0000382
		52	5260	5,260.00507	-0.0000096
		60	5300	5,299.98998	0.00000189
	10.1V	64	5320	5,319.98825	0.00000221
		100	5500	5,500.00149	-0.0000027
		116	5580	5,579.99929	0.00000013
		140	5700	5,700.00424	-0.0000074
		149	5745	5,744.96969	0.00000528
		157	5785	5,784.98909	0.00000189
		165	5825	5,824.98775	0.00000210

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This documents issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. 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 sole responsibility is to its 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. may be prosecuted to the fullest extent of the law.



		36	5180	5,179.97656	0.00000453
		44	5220	5,219.99391	0.00000117
		48	5240	5,239.98359	0.00000313
		52	5260	5,260.01341	-0.00000255
		60	5300	5,299.98365	0.00000309
25	11.55V	64	5320	5,319.97515	0.00000467
		100	5500	5,499.98448	0.00000282
		116	5580	5,579.98587	0.00000253
		140	5700	5,699.99483	0.00000091
		149	5745	5,744.99399	0.00000105
		157	5785	5,784.99706	0.00000051
		165	5825	5,824.97465	0.00000435
		36	5180	5,180.01681	-0.00000324
		44	5220	5,219.98908	0.00000209
		48	5240	5,239.98273	0.00000330
		52	5260	5,260.00441	-0.0000084
		60	5300	5,299.99633	0.0000069
		64	5320	5,319.99346	0.00000123
	13.283V	100	5500	5,499.96843	0.00000574
		116	5580	5,579.98648	0.00000242
		140	5700	5,699.98431	0.00000275
		149	5745	5,744.99805	0.0000034
		157	5785	5,784.97885	0.00000366
		165	5825	5,825.00043	-0.00000007
40		36	5180	5,179.98476	0.00000294
		44	5220	5,219.97156	0.00000545
		48	5240	5,240.01199	-0.00000229
		52	5260	5,259.99461	0.00000103
	L	60	5300	5,300.01065	-0.00000201
	10.1V	64	5320	5,320.01303	-0.00000245
		100	5500	5,500.01538	-0.00000280
		116	5580	5,579.99541	0.0000082
		140	5700	5,699.99773	0.00000040
		149	5745	5,744.98639	0.00000237
		157	5785	5,784.98954	0.00000181
		165	5825	5,824.98171	0.00000314



Operation Mode	802.11 n_HT40	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.99373	0.00000121
		46	5230	5,229.99569	0.0000083
		54	5270	5,269.99983	0.0000003
		62	5310	5,310.00602	-0.00000113
	13.283V	102	5510	5,509.99367	0.00000115
		110	5550	5,549.99497	0.00000091
		134	5670	5,669.99229	0.00000136
		151	5755	5,754.98555	0.00000251
-10		159	5795	5,794.98616	0.00000239
		38	5190	5,190.01106	-0.00000213
		46	5230	5,229.99810	0.0000036
		54	5270	5,270.00142	-0.00000027
		62	5310	5,309.99961	0.0000007
	10.1V	102	5510	5,509.96740	0.00000592
		110	5550	5,549.98701	0.00000234
		134	5670	5,670.00965	-0.00000170
		151	5755	5,754.98767	0.00000214
		159	5795	5,794.99512	0.0000084



		38	5190	5,190.00312	-0.0000060
		46	5230	5,230.00249	-0.00000048
		54	5270	5,270.00236	-0.00000045
		62	5310	5,309.99166	0.00000157
25	11.55V	102	5510	5,509.98864	0.0000206
		110	5550	5,550.00606	-0.00000109
		134	5670	5,670.00485	-0.0000086
		151	5755	5,754.97263	0.00000476
		159	5795	5,794.98807	0.00000206
		38	5190	5,190.00361	-0.00000070
		46	5230	5,229.99885	0.00000022
		54	5270	5,270.01005	-0.00000191
		62	5310	5,309.98419	0.0000298
	13.283V	102	5510	5,510.00548	-0.00000099
		110	5550	5,549.98398	0.0000289
		134	5670	5,669.99631	0.00000065
		151	5755	5,754.96641	0.00000584
		159	5795	5,794.98503	0.00000258
40		38	5190	5,190.00277	-0.00000053
		46	5230	5,230.01594	-0.00000305
		54	5270	5,269.99136	0.00000164
		62	5310	5,310.00281	-0.00000053
	10.1V	102	5510	5,510.00703	-0.00000128
		110	5550	5,549.99803	0.0000035
		134	5670	5,670.01671	-0.00000295
		151	5755	5,754.99488	0.0000089
		159	5795	5,795.00627	-0.00000108



Operation Mode	802.11 ac_VHT80	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,209.99896	0.0000020
		58	5290	5,290.00646	-0.00000122
	13.283V	106	5530	5,530.00907	-0.00000164
		122	5610	5,609.99608	0.00000070
-10		155	5775	5,774.99091	0.00000157
		42	5210	5,210.00488	-0.00000094
		58	5290	5,290.00892	-0.00000169
	10.1V	106	5530	5,529.99904	0.00000017
		122	5610	5,609.99658	0.00000061
		155	5775	5,774.99892	0.00000019
		42	5210	5,210.00286	-0.00000055
		58	5290	5,290.00260	-0.00000049
25	11.55V	106	5530	5,530.00171	-0.00000031
		122	5610	5,609.99857	0.00000025
		155	5775	5,774.99932	0.00000012
		42	5210	5,209.99932	0.00000013
		58	5290	5,289.99692	0.0000058
	13.283V	106	5530	5,529.99964	0.0000007
		122	5610	5,610.00573	-0.00000102
40		155	5775	5,775.00866	-0.00000150
		42	5210	5,210.00313	-0.0000060
		58	5290	5,289.99008	0.00000187
	10.1V	106	5530	5,530.00500	-0.0000090
		122	5610	5,609.99413	0.00000105
		155	5775	5,775.00391	-0.00000068



2 Minutes:

Operation Mode	802.11 a	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		36	5180	5,179.98503	0.00000289
		44	5220	5,219.99610	0.00000075
		48	5240	5,239.96941	0.00000584
		52	5260	5,260.03073	-0.00000584
		60	5300	5,299.97014	0.00000563
	13.283V	64	5320	5,320.00570	-0.00000107
		100	5500	5,499.99012	0.00000180
		116	5580	5,579.98231	0.00000317
		140	5700	5,699.97539	0.00000432
		149	5745	5,744.99530	0.0000082
		157	5785	5,784.98878	0.00000194
		165	5825	5,824.98561	0.00000247
-10		36	5180	5,179.97416	0.00000499
		44	5220	5,219.96719	0.00000629
		48	5240	5,239.98377	0.00000310
		52	5260	5,259.98833	0.00000222
	10.1V	60	5300	5,299.97973	0.00000382
		64	5320	5,319.98657	0.00000252
		100	5500	5,499.98949	0.00000191
		116	5580	5,580.00916	-0.00000164
		140	5700	5,700.01358	-0.00000238
		149	5745	5,744.97661	0.00000407
		157	5785	5,784.99866	0.0000023
		165	5825	5,824.98691	0.00000225

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. 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 is unlawful and offenders may be prosecuted to the fulles extent of the law. may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

SGS	

		36	5180	5,179.98759	0.00000240
		44	5220	5,220.00216	-0.00000041
		48	5240	5,239.97706	0.00000438
		52	5260	5,260.01787	-0.00000340
		60	5300	5,299.99447	0.00000104
25	11.55V	64	5320	5,319.97967	0.00000382
20	11001	100	5500	5,499.97868	0.00000388
		116	5580	5,579.99807	0.00000035
		140	5700	5,699.99458	0.00000095
		149	5745	5,744.99655	0.00000060
		157	5785	5,784.99821	0.00000031
		165	5825	5,824.97673	0.00000399
		36	5180	5,180.00807	-0.00000156
		44	5220	5,220.00409	-0.0000078
		48	5240	5,239.98943	0.0000202
		52	5260	5,260.00806	-0.00000153
		60	5300	5,300.00732	-0.00000138
		64	5320	5,319.99390	0.00000115
	13.283V	100	5500	5,499.97709	0.00000416
		116	5580	5,579.99852	0.0000027
		140	5700	5,699.98206	0.00000315
		149	5745	5,745.00345	-0.0000060
		157	5785	5,784.97455	0.00000440
		165	5825	5,824.98537	0.00000251
40		36	5180	5,179.99430	0.00000110
		44	5220	5,219.97263	0.00000524
		48	5240	5,240.00026	-0.00000005
		52	5260	5,259.99253	0.00000142
		60	5300	5,299.99727	0.00000052
	10.1V	64	5320	5,320.01087	-0.00000204
		100	5500	5,500.00726	-0.00000132
		116	5580	5,579.99793	0.0000037
		140	5700	5,700.00600	-0.00000105
		149	5745	5,744.97458	0.00000442
		157	5785	5,784.98038	0.00000339
		165	5825	5,824.98937	0.00000182



Operation Mode	802.11 n_HT40	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %	·	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.99251	0.00000144
		46	5230	5,230.01109	-0.00000212
		54	5270	5,269.99026	0.00000185
		62	5310	5,309.99128	0.00000164
	13.283V	102	5510	5,509.99746	0.00000046
		110	5550	5,550.00441	-0.00000079
		134	5670	5,670.00538	-0.0000095
		151	5755	5,754.97539	0.00000428
-10		159	5795	5,794.98438	0.00000270
		38	5190	5,190.01175	-0.00000226
		46	5230	5,229.99612	0.0000074
		54	5270	5,270.00013	-0.0000002
		62	5310	5,310.00807	-0.00000152
	10.1V	102	5510	5,509.96488	0.00000637
		110	5550	5,549.98617	0.00000249
		134	5670	5,669.99757	0.0000043
		151	5755	5,754.98341	0.0000288
		159	5795	5,794.98998	0.00000173
		38	5190	5,190.00633	-0.00000122
		46	5230	5,229.99113	0.00000170
		54	5270	5,270.01607	-0.00000305
		62	5310	5,310.01017	-0.00000192
25	11.55V	102	5510	5,509.99066	0.00000169
		110	5550	5,550.01143	-0.0000206
		134	5670	5,669.99950	0.0000009
		151	5755	5,754.96292	0.00000644
		159	5795	5,794.99902	0.00000017
		38	5190	5,190.00976	-0.00000188
		46	5230	5,229.99408	0.00000113
		54	5270	5,269.99981	0.00000004
		62	5310	5,309.98649	0.00000254
	13.283V	102	5510	5,510.01420	-0.0000258
		110	5550	5,549.97817	0.00000393
		134	5670	5,670.00308	-0.0000054
		151	5755	5,754.95971	0.00000700
		159	5795	5,794.99148	0.00000147
40		38	5190	5,190.00503	-0.00000097
		46	5230	5,230.00752	-0.00000144
		54	5270	5,269.99955	0.0000009
		62	5310	5,310.00409	-0.00000077
	10.1V	102	5510	5,510.00633	-0.00000115
		110	5550	5,550.01042	-0.00000188
		134	5670	5,669.99794	0.0000036
		151	5755	5,754.99084	0.00000159
		159	5795	5,794.99672	0.0000057

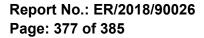
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



Operation Mode	802.11 ac_VHT80	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,210.00550	-0.00000106
		58	5290	5,290.00506	-0.00000096
	13.283V	106	5530	5,529.99011	0.00000179
		122	5610	5,609.99602	0.00000071
-10		155	5775	5,775.00528	-0.00000091
		42	5210	5,210.00111	-0.00000021
		58	5290	5,290.00413	-0.00000078
	10.1V	106	5530	5,530.00291	-0.00000053
		122	5610	5,609.99918	0.00000015
		155	5775	5,774.99430	0.00000099
		42	5210	5,210.00744	-0.00000143
		58	5290	5,290.00913	-0.00000173
25	11.55V	106	5530	5,530.00149	-0.00000027
		122	5610	5,609.99336	0.00000118
		155	5775	5,774.99895	0.00000018
		42	5210	5,210.00107	-0.00000020
		58	5290	5,290.00387	-0.00000073
	13.283V	106	5530	5,529.99937	0.00000011
		122	5610	5,609.99908	0.00000016
40		155	5775	5,775.00903	-0.00000156
		42	5210	5,210.00411	-0.00000079
		58	5290	5,290.00343	-0.00000065
	10.1V	106	5530	5,529.99469	0.0000096
		122	5610	5,609.99095	0.00000161
		155	5775	5,775.00118	-0.0000020





5 Minutes:

Operation Mode	802.11 a	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

		.	Measured	Spectrum	ΔFrequency
Test Temp.	Test Voltage	Channel	Frequency	Frequency	(MHz)
			(MHz)	(MHz)	· · /
		36	5180	5,179.99761	0.00000046
		44	5220	5,219.99489	0.0000098
		48	5240	5,239.97201	0.00000534
		52	5260	5,260.02177	-0.00000414
		60	5300	5,299.97513	0.00000469
	13.283V	64	5320	5,319.99533	0.0000088
		100	5500	5,499.99898	0.00000019
		116	5580	5,579.97777	0.00000398
		140	5700	5,699.98315	0.00000296
		149	5745	5,744.97894	0.00000367
		157	5785	5,784.99121	0.00000152
		165	5825	5,824.98826	0.00000202
-10		36	5180	5,179.98272	0.00000334
		44	5220	5,219.97319	0.00000514
	10.1V	48	5240	5,239.97662	0.00000446
		52	5260	5,260.00461	-0.0000088
		60	5300	5,299.98134	0.00000352
		64	5320	5,320.00199	-0.0000037
		100	5500	5,500.00219	-0.00000040
		116	5580	5,579.99564	0.0000078
		140	5700	5,700.00994	-0.00000174
		149	5745	5,744.97617	0.00000415
		157	5785	5,785.00133	-0.0000023
		165	5825	5,824.98469	0.00000263

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. 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 is unlawful and offenders may be prosecuted to the fulles extent of the law. may be prosecuted to the fullest extent of the law.



		36	5180	5,179.99355	0.00000125
		44	5220	5,219.99184	0.00000156
		48	5240	5,239.97405	0.00000495
		52	5260	5,260.01457	-0.00000277
		60	5300	5,299.98541	0.00000275
25	11.55V	64	5320	5,319.97631	0.00000445
		100	5500	5,499.98321	0.00000305
		116	5580	5,579.98712	0.00000231
		140	5700	5,699.99846	0.0000027
		149	5745	5,744.99520	0.0000084
		157	5785	5,784.98629	0.00000237
		165	5825	5,824.97594	0.00000413
		36	5180	5,180.00617	-0.00000119
		44	5220	5,219.99666	0.00000064
		48	5240	5,239.98422	0.00000301
		52	5260	5,260.00693	-0.00000132
		60	5300	5,300.00951	-0.00000179
		64	5320	5,319.98851	0.00000216
	13.283V	100	5500	5,499.97086	0.00000530
		116	5580	5,579.99486	0.00000092
		140	5700	5,699.98348	0.00000290
		149	5745	5,745.01122	-0.00000195
		157	5785	5,784.97641	0.00000408
		165	5825	5,824.98859	0.00000196
40		36	5180	5,179.98947	0.0000203
		44	5220	5,219.96917	0.00000591
		48	5240	5,240.01568	-0.00000299
		52	5260	5,259.99916	0.00000016
		60	5300	5,300.00685	-0.00000129
	10.1V	64	5320	5,320.01739	-0.00000327
		100	5500	5,500.00628	-0.00000114
		116	5580	5,579.99819	0.0000032
		140	5700	5,700.01011	-0.00000177
		149	5745	5,744.98473	0.00000266
		157	5785	5,784.98563	0.00000248
		165	5825	5,824.98789	0.0000208



Operation Mode	802.11 n_HT40	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %	,	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.98178	0.00000351
		46	5230	5,230.01242	-0.0000237
		54	5270	5,269.99552	0.0000085
		62	5310	5,310.00813	-0.00000153
	13.283V	102	5510	5,509.99309	0.00000125
		110	5550	5,549.98968	0.00000186
		134	5670	5,669.99462	0.0000095
		151	5755	5,754.98342	0.0000288
-10		159	5795	5,794.97741	0.0000390
		38	5190	5,190.01054	-0.0000203
		46	5230	5,229.99651	0.0000067
		54	5270	5,269.99365	0.00000120
		62	5310	5,310.00190	-0.0000036
	10.1V	102	5510	5,509.97508	0.00000452
		110	5550	5,549.99626	0.0000067
		134	5670	5,669.99972	0.0000005
	-	151	5755	5,754.99909	0.00000016
		159	5795	5,795.00387	-0.00000067
		38	5190	5,189.99572	0.0000082
		46	5230	5,229.99191	0.00000155
		54	5270	5,270.00642	-0.00000122
		62	5310	5,310.00178	-0.0000033
25	11.55V	102	5510	5,509.98623	0.00000250
		110	5550	5,550.00613	-0.00000111
	-	134	5670	5,669.99844	0.0000027
	-	151	5755	5,754.96221	0.00000657
	-	159	5795	5,795.00553	-0.00000095
		38	5190	5,190.00846	-0.00000163
		46	5230	5,229.98474	0.00000292
		54	5270	5,270.00977	-0.00000185
		62	5310	5,309.99353	0.00000122
	13.283V	102	5510	5,510.01271	-0.00000231
		110	5550	5,549.97297	0.00000487
		134	5670	5,670.00261	-0.00000046
		151	5755	5,754.96474	0.00000613
		159	5795	5,794.99402	0.00000103
40		38	5190	5,189.99818	0.0000035
		46	5230	5,230.00681	-0.00000130
		54	5270	5,269.98930	0.0000203
		62	5310	5,309.99958	0.0000008
	10.1V	102	5510	5,509.99936	0.00000012
		110	5550	5,550.00812	-0.00000146
		134	5670	5,670.01553	-0.00000274
		151	5755	5,754.99592	0.00000071
		159	5795	5,794.99672	0.00000057

t (886-2) 2299-3279

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明, 比報告結果僅對測試之樣品負責, 同時此樣品僅保留90天。本報告未經本公司書面許可, 不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. 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 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 is unlawful and offenders may 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.



Operation Mode	802.11 ac_VHT80	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,209.99455	0.00000105
		58	5290	5,289.99857	0.0000027
	13.283V	106	5530	5,530.00727	-0.00000131
		122	5610	5,609.99557	0.00000079
-10		155	5775	5,775.00483	-0.0000084
		42	5210	5,209.99541	0.0000088
		58	5290	5,290.00898	-0.00000170
	10.1V	106	5530	5,530.00883	-0.00000160
		122	5610	5,609.99436	0.00000101
		155	5775	5,775.00405	-0.00000070
		42	5210	5,209.99678	0.00000062
		58	5290	5,289.99926	0.00000014
25	11.55V	106	5530	5,530.00785	-0.00000142
		122	5610	5,609.99864	0.0000024
		155	5775	5,774.99530	0.0000081
		42	5210	5,209.99860	0.0000027
		58	5290	5,289.99672	0.00000062
	13.283V	106	5530	5,530.00918	-0.00000166
		122	5610	5,610.00436	-0.00000078
40		155	5775	5,774.99105	0.00000155
		42	5210	5,209.99128	0.00000167
		58	5290	5,290.00872	-0.00000165
	10.1V	106	5530	5,529.99444	0.00000101
		122	5610	5,610.00495	-0.0000088
		155	5775	5,774.99425	0.00000100

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

www.tw.sgs.com



10 Minutes:

Operation Mode	802.11 a	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

			Measured	Spectrum	ΔFrequency
Test Temp.	Test Voltage	Channel	Frequency	Frequency	(MHz)
			(MHz)	(MHz)	
		36	5180	5,179.99964	0.00000007
		44	5220	5,219.99525	0.00000091
		48	5240	5,239.98400	0.00000305
		52	5260	5,260.02486	-0.00000473
		60	5300	5,299.98245	0.00000331
	13.283V	64	5320	5,319.99415	0.00000110
		100	5500	5,499.99686	0.00000057
		116	5580	5,579.97073	0.00000525
		140	5700	5,699.97373	0.00000461
		149	5745	5,744.98793	0.00000210
		157	5785	5,784.97927	0.00000358
		165	5825	5,824.98063	0.00000332
-10	10.1V	36	5180	5,179.98457	0.00000298
		44	5220	5,219.97136	0.00000549
		48	5240	5,239.97255	0.00000524
		52	5260	5,260.00020	-0.00000004
		60	5300	5,299.97860	0.00000404
		64	5320	5,319.99731	0.00000051
		100	5500	5,499.98701	0.0000236
		116	5580	5,580.00627	-0.00000112
		140	5700	5,700.00104	-0.00000018
		149	5745	5,744.97051	0.00000513
		157	5785	5,785.00552	-0.00000095
		165	5825	5,824.97697	0.00000395

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. 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 is unlawful and offenders may be prosecuted to the fulles extent of the law. may be prosecuted to the fullest extent of the law.



		36	5180	5,179.98411	0.0000307
		44	5220	5,220.00818	-0.00000157
		48	5240	5,239.97545	0.00000469
		52	5260	5,260.01722	-0.00000327
		60	5300	5,299.98343	0.00000313
25	11.55V	64	5320	5,319.97602	0.00000451
		100	5500	5,499.97515	0.00000452
		116	5580	5,579.98417	0.0000284
		140	5700	5,699.99337	0.00000116
		149	5745	5,744.99024	0.00000170
		157	5785	5,784.99250	0.00000130
		165	5825	5,824.98833	0.00000200
		36	5180	5,180.00244	-0.00000047
		44	5220	5,220.00450	-0.0000086
		48	5240	5,239.97702	0.00000438
		52	5260	5,259.99959	0.0000008
		60	5300	5,299.99452	0.00000103
		64	5320	5,319.99011	0.00000186
	13.283V	100	5500	5,499.97202	0.00000509
		116	5580	5,579.99512	0.0000088
		140	5700	5,699.97616	0.00000418
		149	5745	5,745.00340	-0.00000059
		157	5785	5,784.97702	0.00000397
		165	5825	5,824.98918	0.00000186
40		36	5180	5,179.98405	0.00000308
		44	5220	5,219.97256	0.00000526
		48	5240	5,240.00293	-0.00000056
		52	5260	5,259.99687	0.00000060
		60	5300	5,300.00060	-0.00000011
	10.1V	64	5320	5,320.00838	-0.00000158
		100	5500	5,499.99976	0.00000004
		116	5580	5,580.00087	-0.00000016
		140	5700	5,699.99482	0.0000091
		149	5745	5,744.98135	0.00000325
		157	5785	5,784.97851	0.00000371
		165	5825	5,824.97480	0.00000433



Operation Mode	802.11 n_HT40	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %	·	-

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.98380	0.00000312
		46	5230	5,229.99669	0.0000063
		54	5270	5,269.98755	0.0000236
		62	5310	5,310.00278	-0.0000052
	13.283V	102	5510	5,509.99696	0.0000055
		110	5550	5,550.00178	-0.0000032
		134	5670	5,669.99251	0.00000132
		151	5755	5,754.98771	0.00000214
-10		159	5795	5,794.98017	0.00000342
		38	5190	5,190.00972	-0.00000187
		46	5230	5,229.99458	0.00000104
		54	5270	5,270.00483	-0.0000092
		62	5310	5,309.99862	0.0000026
	10.1V	102	5510	5,509.97553	0.00000444
		110	5550	5,550.00307	-0.0000055
		134	5670	5,669.99885	0.0000020
		151	5755	5,754.98519	0.0000257
		159	5795	5,794.99556	0.0000077
		38	5190	5,190.00754	-0.00000145
		46	5230	5,230.00362	-0.0000069
		54	5270	5,270.00405	-0.0000077
		62	5310	5,310.01015	-0.00000191
25	11.55V	102	5510	5,509.98168	0.00000333
		110	5550	5,549.99908	0.00000017
		134	5670	5,670.00308	-0.00000054
		151	5755	5,754.95637	0.00000758
		159	5795	5,794.99976	0.00000004
		38	5190	5,190.01697	-0.00000327
		46	5230	5,229.98290	0.00000327
		54	5270	5,269.99969	0.0000006
		62	5310	5,309.99530	0.0000089
	13.283V	102	5510	5,510.00400	-0.00000073
		110	5550	5,549.98111	0.00000340
		134	5670	5,669.99792	0.0000037
		151	5755	5,754.97154	0.00000495
		159	5795	5,794.99107	0.00000154
40		38	5190	5,189.99787	0.00000041
		46	5230	5,230.01129	-0.00000216
		54	5270	5,269.99542	0.0000087
		62	5310	5,310.00012	-0.00000002
	10.1V	102	5510	5,510.00701	-0.00000127
	[110	5550	5,549.99524	0.0000086
		134	5670	5,670.00450	-0.00000079
	[151	5755	5,755.00431	-0.00000075
		159	5795	5,794.99485	0.0000089

f (886-2) 2298-0488



Operation Mode	802.11 ac_VHT80	Test Date	2018.09.25
Temperature	:23	Test By	Tom
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
-10	13.283V	42	5210	5,210.00538	-0.00000103
		58	5290	5,290.00244	-0.00000046
		106	5530	5,530.00715	-0.00000129
		122	5610	5,609.99428	0.00000102
		155	5775	5,774.99873	0.0000022
	10.1V	42	5210	5,209.99816	0.0000035
		58	5290	5,289.99879	0.0000023
		106	5530	5,529.99365	0.00000115
		122	5610	5,610.00425	-0.00000076
		155	5775	5,775.00620	-0.00000107
25	11.55V	42	5210	5,210.00119	-0.00000023
		58	5290	5,289.99733	0.00000050
		106	5530	5,530.00105	-0.00000019
		122	5610	5,609.99555	0.0000079
		155	5775	5,775.00853	-0.00000148
40	13.283V	42	5210	5,209.99499	0.00000096
		58	5290	5,290.00341	-0.00000065
		106	5530	5,530.00952	-0.00000172
		122	5610	5,609.99378	0.00000111
		155	5775	5,774.99854	0.0000025
	10.1V	42	5210	5,210.00862	-0.00000165
		58	5290	5,289.99939	0.00000012
		106	5530	5,530.00302	-0.00000055
		122	5610	5,610.00843	-0.00000150
		155	5775	5,774.99599	0.00000069



14 ANTENNA REQUIREMENT

14.1 **Standard Applicable**

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than furnished by the responsible party shall be used with the device. According to §15.407, If transmitting antennas of directional gain greater than 6 dBi are used,

both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connected Construction 14.2

The antenna is designed with unique RF connector and no consideration of replacement. Please see EUT photo for details.

~ End of Report ~

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Re非另有説明,此報告結果僅對測試之様品負責。同時此様品僅保留的人で。本報告未經本公司書面許可,不可能份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms e-document.htm</u>. 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.