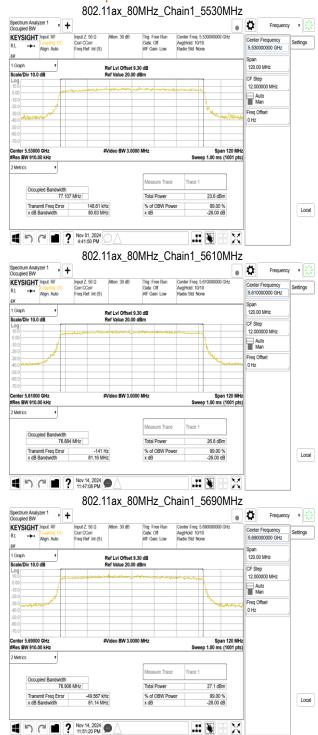


Page: 63 of 603





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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 64 of 603

# 9 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

# 9.1 Standard Applicable

# 9.1.1 Duty Cycle

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

## 9.1.2 FCC

				e-CRF Title	47 §15.407	
Band		EUT CATEGORY	Conducted Output Power	EIRP	TPC	Antenna Directional Gain Requirements
		Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	23dBi
U-NII-1	V	Outdoor AP	1 Watt(30dBm)	Elevation angle above 30 degrees 125mW (21dBm)	Not required	6dBi
O-IVII-1		Indoor AP	1 Watt(30dBm)	Not required	Not required	6dBi
		Other	250mW(23.98dB m)	Not required	Not required	6dBi
U-NII-2A	V	Other	250mW(23.98dB m) or 11dBm+10 log B	Not required	When EIRP >500mW At least 6dB below	6dBi
U-NII-2C	٧	Other	250mW(23.98dB m) or 11dBm+10 log B	Not required	EIRP 1W (30dBm)	6dBi
U-NII-3	٧	Other	1 Watt(30dBm)	Not required	Not required	6dBi
O-IIII-O		Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	Not required
U-NII-4		Indoor AP (a channel spans 5725~5850 and 5850~5895MHz)	Not required	36dBm	Not required	Not required
0 1411 4		Indoor client (a channel spans 5725~5850 and 5850~5895MHz)	Not required	30dBm	Not required	Not required
		Subordinate device	Not required	36dBm	Not required	Not required

If transmitting antennas of directional gain greater than the antenna requirements column, the Maximum transmit power shall be reduced by the amount in dB that the direction-al gain of the antenna.

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. 除非只有验明,此起华廷田萨勒斯建立薛卫台等,同既此锋卫萨尼尔的主,未起华王德大公司事富兹可,不可如公海制。

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.

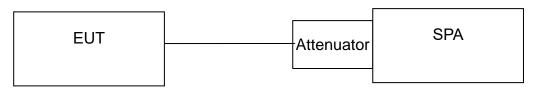
<sup>2.</sup> For the 10 log B, B is the 26 dB emission bandwidth.



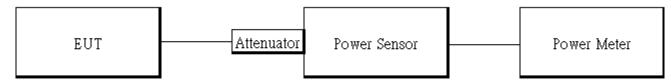
Page: 65 of 603

# 9.2 Test Setup

## 9.2.1 Duty Cycle



# 9.2.2 Output Power



#### 9.3 Measurement Procedure

# 9.3.1 Duty Cycle Measurements

- 1. Set span = Zero
- 2. RBW = 8MHz
- VBW = 8MHz.
- 4. Detector = Peak

# 9.3.2 Output Power Measurements

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter
- Power Meter is used as the auxiliary test equipment to conduct the output power measurement.
- Record the max. reading and add 10 log(1/duty cycle).
- 6. Repeat above procedures until all frequency (low, middle, and high channel) measured were complete.
- 7. MIMO mode: offset is set with "measure and add 10 Log (N)" to measurement for MIMO mode. Offset = cable loss + 10 log (N), where N is number of transmitting antenna, cable loss is specified below.

## Note:

For U-NII1, 2A, 2C and 3 Bands, when the antenna gain is greater than 6 dBi, the power limit attenuated accordingly.

As per section F. 2). e). (ii) of FCC KDB 662911 D01

If antenna gains are not equal and each transmit antenna is driven by only one spatial stream, directional gain may be calculated by either of the following formulas.

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. 除非只有的时,此起此结用陈彤测过了薛里看来,同时此锋里陈尼阿四手。大起先生便大人司皇帝统可,不可如以强制。

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.

台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

www.sgs.com.tw



Page: 66 of 603

• Directional Gain = 
$$10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^{2}}{N_{ANT}} \right]$$

#### where

Each antenna is driven by no more than one spatial stream;

NSS = the number of independent spatial streams of data;

NANT = the total number of antennas

 $g_{j,k}$  = / 20 10Gk if the kth antenna is being fed by spatial stream j, or zero if it is not;  $G_k$  is the gain in dBi of the kth antenna.

#### 9.4 **Duty Cycle Measurement Result**

	Mode	Duty Cycle (%) =Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
	802.11a	96.11	0.17	0.51	1.00
8	02.11n_20	80.30	0.95	0.18	1.00
80	02.11ac_20	80.30	0.95	0.18	1.00
8	02.11n_40	80.20	0.96	0.18	1.00
80	02.11ac_40	80.32	0.95	0.18	1.00
80	02.11ac_80	80.14	0.96	0.18	1.00
Mode	RU Config	Duty Cycle (%) =Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11ax_20	Full	80.37	0.95	0.18	1.00
802.11ax_40	Full	80.15	0.96	0.18	1.00
802.11ax_80	Full	80.15	0.96	0.18	1.00

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 67 of 603



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. 除非只有的用,他都是好用属對個對文學具有書,同時他學具屬是例的子。本都學主德本公司書面對面,不可可以推翻。

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.

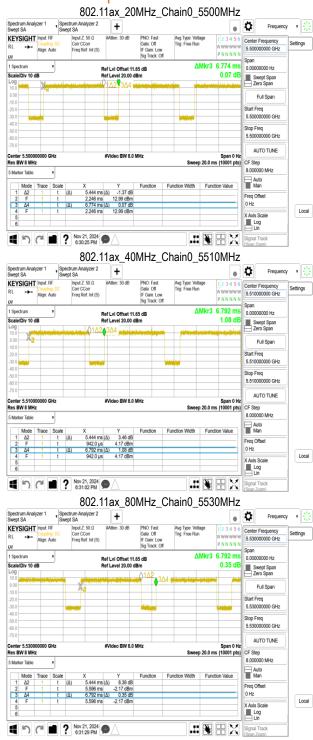
SGS Taiwan Ltd.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路  $134 \,$ 號

www.sqs.com.tw



Page: 68 of 603



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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 69 of 603

#### 9.5 **Output Power Measurement Result**

#### 9.5.1 **FCC Output power**

802.11a Ch0

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	13	16.041	12.05	30	PASS
44	5220	6	12	16.567	12.19	30	PASS
48	5240	6	11.5	17.387	12.40	30	PASS
52	5260	6	16.5	43.474	16.38	23.97	PASS
60	5300	6	17.5	53.117	17.25	23.98	PASS
64	5320	6	17.5	47.559	16.77	23.91	PASS
100	5500	6	19	72.649	18.61	23.98	PASS
116	5580	6	19	72.316	18.59	23.9	PASS
140	5700	6	18	58.780	17.69	23.92	PASS
144	5720(U-NII 2C)	6	17.5	40.280	16.05	22.71	PASS
144	5720 (U-NII 3)	6	17.5	13.082	11.17	30	PASS
149	5745	6	23	156.038	21.93	30	PASS
157	5785	6	23	153.190	21.85	30	PASS
165	5825	6	23	155.679	21.92	30	PASS

802.11a Ch1

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	13	15.179	11.81	30	PASS
44	5220	6	12	14.529	11.62	30	PASS
48	5240	6	11.5	12.949	11.12	30	PASS
52	5260	6	16.5	47.340	16.75	23.89	PASS
60	5300	6	17.5	52.509	17.20	23.86	PASS
64	5320	6	17.5	52.147	17.17	23.84	PASS
100	5500	6	19	75.202	18.76	23.98	PASS
116	5580	6	19	74.000	18.69	23.92	PASS
140	5700	6	18	58.376	17.66	23.82	PASS
144	5720(U-NII 2C)	6	17.5	40.262	16.05	22.73	PASS
144	5720 (U-NII 3)	6	17.5	13.223	11.21	30	PASS
149	5745	6	23	156.398	21.94	30	PASS
157	5785	6	23	149.359	21.74	30	PASS
165	5825	6	23	147.990	21.70	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.

台灣檢驗科技股份有限公司



Page: 70 of 603

802.11a\_2TX

СН	Frequency (MHz)	Data Rate	Power Setting	Avg. POW	/ER (dBm)	TOTAL POWER	TOTAL POWER	REQUIRED LIMIT	RESULT
	(IVITIZ)	Rate	Seming	Ch0	Ch1	(mW)	(dBm)	(dBm)	
36	5180	6	13	12.09	11.86	31.544	14.99	30	PASS
44	5220	6	12	12.22	11.64	31.277	14.95	30	PASS
48	5240	6	11.5	12.45	11.17	30.687	14.87	30	PASS
52	5260	6	16.5	16.44	16.79	91.857	19.63	23.89	PASS
60	5300	6	17.5	17.32	17.25	107.097	20.30	23.86	PASS
64	5320	6	17.5	16.80	17.23	100.761	20.03	23.84	PASS
100	5500	6	19	18.68	18.80	149.728	21.75	23.98	PASS
116	5580	6	19	18.62	18.75	147.846	21.70	23.9	PASS
140	5700	6	18	17.74	17.72	118.649	20.74	23.82	PASS
144	5720(U-NII 2C)	6	17.5	16.11	16.12	81.757	19.13	22.71	PASS
144	5720 (U-NII 3)	6	17.5	11.23	11.28	26.701	14.27	30	PASS
149	5745	6	23	21.99	21.97	315.691	24.99	30	PASS
157	5785	6	23	21.88	21.79	305.341	24.85	30	PASS
165	5825	6	23	21.98	21.77	308.240	24.89	30	PASS

## 802.11n\_HT20\_Ch0

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	13	15.896	12.01	30	PASS
44	5220	MCS0	12	15.714	11.96	30	PASS
48	5240	MCS0	12	17.754	12.49	30	PASS
52	5260	MCS0	17	43.479	16.38	23.98	PASS
60	5300	MCS0	18.5	59.468	17.74	23.98	PASS
64	5320	MCS0	18	49.806	16.97	23.98	PASS
100	5500	MCS0	18	57.185	17.57	23.98	PASS
116	5580	MCS0	17	43.983	16.43	23.98	PASS
140	5700	MCS0	17	43.280	16.36	23.98	PASS
144	5720(U-NII 2C)	MCS0	17	32.776	15.16	23.98	PASS
144	5720 (U-NII 3)	MCS0	17	11.410	10.57	30	PASS
149	5745	MCS0	23	147.667	21.69	30	PASS
157	5785	MCS0	23.5	155.340	21.91	30	PASS
165	5825	MCS0	23	157.139	21.96	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 71 of 603

## 802.11n HT20 Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	13	14.531	11.62	30	PASS
44	5220	MCS0	12	13.686	11.36	30	PASS
48	5240	MCS0	12	13.406	11.27	30	PASS
52	5260	MCS0	17	49.463	16.94	23.98	PASS
60	5300	MCS0	18.5	60.295	17.80	23.98	PASS
64	5320	MCS0	18	55.244	17.42	23.98	PASS
100	5500	MCS0	18	58.114	17.64	23.98	PASS
116	5580	MCS0	17	42.883	16.32	23.98	PASS
140	5700	MCS0	17	43.081	16.34	23.98	PASS
144	5720(U-NII 2C)	MCS0	17	32.512	15.12	23.98	PASS
144	5720 (U-NII 3)	MCS0	17	11.269	10.52	30	PASS
149	5745	MCS0	23	145.641	21.63	30	PASS
157	5785	MCS0	23.5	143.313	21.56	30	PASS
165	5825	MCS0	23	136.548	21.35	30	PASS

#### 802.11n\_HT20\_2TX

CH	Frequency (MHz)	) Data Rate	Power Setting	Avg. POV	Avg. POWER (dBm)		TOTAL POWER	REQUIRED LIMIT	RESULT
	(WIT1Z)	Nate	Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
36	5180	MCS0	13	12.05	11.68	30.776	14.88	30	PASS
44	5220	MCS0	12	12.01	11.39	29.677	14.72	30	PASS
48	5240	MCS0	12	12.54	11.30	31.458	14.98	30	PASS
52	5260	MCS0	17	16.46	16.98	94.209	19.74	23.98	PASS
60	5300	MCS0	18.5	17.78	17.82	120.592	20.81	23.98	PASS
64	5320	MCS0	18	17.04	17.47	106.499	20.27	23.98	PASS
100	5500	MCS0	18	17.63	17.68	116.633	20.67	23.98	PASS
116	5580	MCS0	17	16.49	16.37	87.974	19.44	23.98	PASS
140	5700	MCS0	17	16.41	16.37	87.160	19.40	23.98	PASS
144	5720(U-NII 2C)	MCS0	17	15.22	15.17	66.120	18.20	22.85	PASS
144	5720 (U-NII 3)	MCS0	17	10.63	10.57	22.968	13.61	30	PASS
149	5745	MCS0	23	21.73	21.68	296.361	24.72	30	PASS
157	5785	MCS0	23.5	21.98	21.64	303.841	24.83	30	PASS
165	5825	MCS0	23	21.99	21.40	296.357	24.72	30	PASS

## 802.11n\_HT40\_Ch0

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	12	14.717	11.68	30	PASS
46	5230	MCS0	11.5	17.331	12.39	30	PASS
54	5270	MCS0	19.5	92.433	19.66	23.98	PASS
62	5310	MCS0	19.5	78.492	18.95	23.98	PASS
102	5510	MCS0	19	80.691	19.07	23.98	PASS
110	5550	MCS0	20	94.368	19.75	23.98	PASS
134	5670	MCS0	19	75.479	18.78	23.98	PASS
142	5710(U-NII 2C)	MCS0	19	67.074	18.27	23.98	PASS
142	5710 (U-NII 3)	MCS0	19	9.631	9.84	30	PASS
151	5755	MCS0	22	140.548	21.48	30	PASS
159	5795	MCS0	22	147.851	21.70	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 72 of 603

## 802.11n HT40 Ch1

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	12	14.683	11.67	30	PASS
46	5230	MCS0	11.5	13.862	11.42	30	PASS
54	5270	MCS0	19.5	98.135	19.92	23.98	PASS
62	5310	MCS0	19.5	90.537	19.57	23.98	PASS
102	5510	MCS0	19	87.867	19.44	23.98	PASS
110	5550	MCS0	20	98.816	19.95	23.98	PASS
134	5670	MCS0	19	82.952	19.19	23.98	PASS
142	5710(U-NII 2C)	MCS0	19	72.297	18.59	23.98	PASS
142	5710 (U-NII 3)	MCS0	19	10.846	10.35	30	PASS
151	5755	MCS0	22	145.487	21.63	30	PASS
159	5795	MCS0	22	143.491	21.57	30	PASS

#### 802.11n HT40 2TX

СН	Frequency (MHz)	Data	Power Setting	Avg. POV	Avg. POWER (dBm)		TOTAL POWER	REQUIRED LIMIT	RESULT
	(IVITZ)	Rate	Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
38	5190	MCS0	12	11.72	11.70	29.639	14.72	30	PASS
46	5230	MCS0	11.5	12.43	11.46	31.482	14.98	30	PASS
54	5270	MCS0	19.5	19.71	19.98	193.004	22.86	23.98	PASS
62	5310	MCS0	19.5	18.98	19.63	170.833	22.33	23.98	PASS
102	5510	MCS0	19	19.10	19.49	170.135	22.31	23.98	PASS
110	5550	MCS0	20	19.80	19.98	194.962	22.90	23.98	PASS
134	5670	MCS0	19	18.81	19.22	159.529	22.03	23.98	PASS
142	5710(U-NII 2C)	MCS0	19	18.31	18.63	140.661	21.48	23.98	PASS
142	5710 (U-NII 3)	MCS0	19	9.88	10.39	20.667	13.15	30	PASS
151	5755	MCS0	22	21.54	21.69	290.015	24.62	30	PASS
159	5795	MCS0	22	21.74	21.62	294.372	24.69	30	PASS

# 802 11ac VHT20 Ch0

802.11ac_VI	1120_0110			1	1	T	1
СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	13	15.714	11.963	30	PASS
44	5220	MCS0	12	15.570	11.923	30	PASS
48	5240	MCS0	12	17.591	12.453	30	PASS
52	5260	MCS0	17	43.280	16.363	23.98	PASS
60	5300	MCS0	18.5	58.923	17.703	23.98	PASS
64	5320	MCS0	18	49.236	16.923	23.98	PASS
100	5500	MCS0	18	56.661	17.533	23.98	PASS
116	5580	MCS0	17	43.379	16.373	23.98	PASS
140	5700	MCS0	17	42.784	16.313	23.98	PASS
144	5720(U-NII 2C)	MCS0	17	32.401	15.106	23.98	PASS
144	5720 (U-NII 3)	MCS0	17	11.279	10.523	30	PASS
149	5745	MCS0	23	146.651	21.663	30	PASS
157	5785	MCS0	23.5	153.916	21.873	30	PASS
165	5825	MCS0	23	154.983	21.903	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 73 of 603

## 802.11ac VHT20 Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	13	14.397	11.58	30	PASS
44	5220	MCS0	12	13.592	11.33	30	PASS
48	5240	MCS0	12	13.283	11.23	30	PASS
52	5260	MCS0	17	48.897	16.89	23.98	PASS
60	5300	MCS0	18.5	59.605	17.75	23.98	PASS
64	5320	MCS0	18	54.486	17.36	23.98	PASS
100	5500	MCS0	18	57.317	17.58	23.98	PASS
116	5580	MCS0	17	42.490	16.28	23.98	PASS
140	5700	MCS0	17	42.686	16.30	23.98	PASS
144	5720(U-NII 2C)	MCS0	17	32.214	15.08	23.98	PASS
144	5720 (U-NII 3)	MCS0	17	11.166	10.48	30	PASS
149	5745	MCS0	23	144.972	21.61	30	PASS
157	5785	MCS0	23.5	141.999	21.52	30	PASS
165	5825	MCS0	23	134.985	21.30	30	PASS

#### 802.11ac VHT20 2TX

СН	Frequency (MHz)	Data Rate	Power Setting	Avg. POV	Avg. POWER (dBm)		TOTAL POWER	REQUIRED LIMIT	RESULT
	(WIT1Z)	Nate	Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
36	5180	MCS0	13	12.02	11.64	30.530	14.85	30	PASS
44	5220	MCS0	12	11.96	11.37	29.432	14.69	30	PASS
48	5240	MCS0	12	12.48	11.26	31.087	14.93	30	PASS
52	5260	MCS0	17	16.40	17.92	105.665	20.24	23.98	PASS
60	5300	MCS0	18.5	17.72	17.77	119.075	20.76	23.98	PASS
64	5320	MCS0	18	17.00	17.39	105.015	20.21	23.98	PASS
100	5500	MCS0	18	17.58	17.66	115.700	20.63	23.98	PASS
116	5580	MCS0	17	16.45	16.31	86.970	19.39	23.98	PASS
140	5700	MCS0	17	16.37	16.32	86.262	19.36	23.98	PASS
144	5720(U-NII 2C)	MCS0	17	15.19	15.14	65.665	18.17	22.85	PASS
144	5720 (U-NII 3)	MCS0	17	10.60	10.54	22.810	13.58	30	PASS
149	5745	MCS0	23	21.69	21.64	293.644	24.68	30	PASS
157	5785	MCS0	23.5	21.92	21.61	300.671	24.78	30	PASS
165	5825	MCS0	23	21.96	21.37	294.317	24.69	30	PASS

## 802.11ac\_VHT40\_Ch0

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	12	14.527	11.62	30	PASS
46	5230	MCS0	11.5	17.186	12.35	30	PASS
54	5270	MCS0	19.5	91.448	19.61	23.98	PASS
62	5310	MCS0	19.5	77.656	18.90	23.98	PASS
102	5510	MCS0	19	79.465	19.00	23.98	PASS
110	5550	MCS0	20	93.149	19.69	23.98	PASS
134	5670	MCS0	19	93.579	19.71	23.98	PASS
142	5710(U-NII 2C)	MCS0	19	66.055	18.20	23.98	PASS
142	5710 (U-NII 3)	MCS0	19	9.485	9.77	30	PASS
151	5755	MCS0	22	139.372	21.44	30	PASS
159	5795	MCS0	22	146.277	21.65	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 74 of 603

## 802.11ac VHT40 Ch1

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	12	14.494	11.61	30	PASS
46	5230	MCS0	11.5	13.746	11.38	30	PASS
54	5270	MCS0	19.5	97.539	19.89	23.98	PASS
62	5310	MCS0	19.5	89.779	19.53	23.98	PASS
102	5510	MCS0	19	86.532	19.37	23.98	PASS
110	5550	MCS0	20	97.989	19.91	23.98	PASS
134	5670	MCS0	19	81.691	19.12	23.98	PASS
142	5710(U-NII 2C)	MCS0	19	71.692	18.55	23.98	PASS
142	5710 (U-NII 3)	MCS0	19	10.755	10.32	30	PASS
151	5755	MCS0	22	143.607	21.57	30	PASS
159	5795	MCS0	22	141.963	21.52	30	PASS

#### 802.11ac VHT40 2TX

СН	Frequency	Data Rate	Power Setting	Avg. POW	Avg. POWER (dBm)		TOTAL POWER	REQUIRED LIMIT	RESULT
	(MHz)	Rate	Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
38	5190	MCS0	12	11.67	11.63	29.256	14.66	30	PASS
46	5230	MCS0	11.5	12.38	11.42	31.178	14.94	30	PASS
54	5270	MCS0	19.5	19.66	19.94	191.175	22.81	23.98	PASS
62	5310	MCS0	19.5	18.93	19.60	169.433	22.29	23.98	PASS
102	5510	MCS0	19	19.06	19.45	168.711	22.27	23.98	PASS
110	5550	MCS0	20	19.76	19.92	192.877	22.85	23.98	PASS
134	5670	MCS0	19	18.77	19.14	157.435	21.97	23.98	PASS
142	5710(U-NII 2C)	MCS0	19	18.27	18.57	139.151	21.43	23.98	PASS
142	5710 (U-NII 3)	MCS0	19	9.84	10.34	20.444	13.11	30	PASS
151	5755	MCS0	22	21.50	21.62	286.581	24.57	30	PASS
159	5795	MCS0	22	21.68	21.57	290.898	24.64	30	PASS

## 802.11ac VHT80 Ch0

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	12	15.529	11.91	30	PASS
58	5290	MCS0	18.5	57.432	17.59	23.98	PASS
106	5530	MCS0	18	56.513	17.52	23.98	PASS
122	5610	MCS0	20	84.557	19.27	23.98	PASS
138	5690(U-NII 2C)	MCS0	20.5	87.239	19.41	23.98	PASS
138	5690 (U-NII 3)	MCS0	20.5	6.766	8.30	30	PASS
155	5775	MCS0	21	105.962	20.25	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.

台灣檢驗科技股份有限公司



Page: 75 of 603

## 802.11ac VHT80 Ch1

СН	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	12	15.458	11.89	30	PASS
58	5290	MCS0	18.5	66.550	18.23	23.98	PASS
106	5530	MCS0	18	62.828	17.98	23.98	PASS
122	5610	MCS0	20	92.715	19.67	23.98	PASS
138	5690(U-NII 2C)	MCS0	20.5	91.926	19.63	23.98	PASS
138	5690 (U-NII 3)	MCS0	20.5	6.736	8.28	30	PASS
155	5775	MCS0	21	107.436	20.31	30	PASS

#### 802.11ac VHT80 2TX

СН	Frequency (MHz)	Data Rate	Power Setting	Avg. POV	Avg. POWER (dBm)		TOTAL POWER	REQUIRED LIMIT	RESULT
	(IVITIZ)	Rate	Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
42	5210	MCS0	12	11.94	11.91	31.166	14.94	30	PASS
58	5290	MCS0	18.5	17.65	18.28	125.552	20.99	23.98	PASS
106	5530	MCS0	18	17.57	18.01	120.431	20.81	23.98	PASS
122	5610	MCS0	20	19.30	19.71	178.716	22.52	23.98	PASS
138	5690(U-NII 2C)	MCS0	20.5	19.44	19.66	180.407	22.56	23.98	PASS
138	5690 (U-NII 3)	MCS0	20.5	8.33	8.31	13.595	11.33	30	PASS
155	5775	MCS0	21	20.28	20.37	215.627	23.34	30	PASS

#### 802.11ax HE20 Ch0

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	full	13	15.132	11.80	30	PASS
44	5220	MCS0	full	12.5	16.402	12.15	30	PASS
48	5240	MCS0	full	12	16.979	12.30	30	PASS
52	5260	MCS0	full	17.5	47.633	16.78	23.98	PASS
60	5300	MCS0	full	18	52.712	17.22	23.98	PASS
64	5320	MCS0	full	18	47.088	16.73	23.98	PASS
100	5500	MCS0	full	18	53.199	17.26	23.98	PASS
116	5580	MCS0	full	18	50.688	17.05	23.98	PASS
140	5700	MCS0	full	17	42.551	16.29	23.98	PASS
144	5720(U-NII 2C)	MCS0	full	17	31.090	14.93	22.89	PASS
144	5720 (U-NII 3)	MCS0	full	17	10.974	10.40	30	PASS
149	5745	MCS0	full	23.5	155.922	21.93	30	PASS
157	5785	MCS0	full	23.5	154.848	21.90	30	PASS
165	5825	MCS0	full	23	157.002	21.96	30	PASS

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. 除非只有的时,他都是结果做到到这个概念,因此他并是成是2000年。太祖生主领太公司事而统可,从可以必须则。

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

www.sgs.com.tw



Page: 76 of 603

## 802.11ax HE20 Ch1

СН	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	full	13	14.485	11.61	30	PASS
44	5220	MCS0	full	12.5	14.890	11.73	30	PASS
48	5240	MCS0	full	12	13.363	11.26	30	PASS
52	5260	MCS0	full	17.5	54.064	17.33	23.98	PASS
60	5300	MCS0	full	18	53.568	17.29	23.98	PASS
64	5320	MCS0	full	18	53.445	17.28	23.98	PASS
100	5500	MCS0	full	18	55.835	17.47	23.98	PASS
116	5580	MCS0	full	18	52.712	17.22	23.98	PASS
140	5700	MCS0	full	17	41.296	16.16	23.98	PASS
144	5720(U-NII 2C)	MCS0	full	17	31.697	15.01	22.92	PASS
144	5720 (U-NII 3)	MCS0	full	17	11.346	10.55	30	PASS
149	5745	MCS0	full	23.5	153.782	21.87	30	PASS
157	5785	MCS0	full	23.5	141.223	21.50	30	PASS
165	5825	MCS0	full	23	129.690	21.13	30	PASS

#### 802.11ax HE20 2TX

СН	Frequency (MHz)	Data Rate	RU config.	Power Setting	Avg. POV	ÆR (dBm)	TOTAL POWER	TOTAL POWER	REQUIRED LIMIT	RESULT
	(IVITZ)	Rate		Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
36	5180	MCS0	full	13	11.83	11.65	29.856	14.75	30	PASS
44	5220	MCS0	full	12.5	12.17	11.78	31.541	14.99	30	PASS
48	5240	MCS0	full	12	12.34	11.31	30.654	14.86	30	PASS
52	5260	MCS0	full	17.5	16.81	17.36	102.401	20.10	23.98	PASS
60	5300	MCS0	full	18	17.27	17.33	107.386	20.31	23.98	PASS
64	5320	MCS0	full	18	16.77	17.31	101.339	20.06	23.98	PASS
100	5500	MCS0	full	18	17.32	17.53	110.551	20.44	23.98	PASS
116	5580	MCS0	full	18	17.09	17.25	104.234	20.18	23.98	PASS
140	5700	MCS0	full	17	16.31	16.20	84.425	19.26	23.98	PASS
144	5720(U-NII 2C)	MCS0	full	17	14.97	15.05	63.368	18.02	22.89	PASS
144	5720 (U-NII 3)	MCS0	full	17	10.44	10.59	22.526	13.53	30	PASS
149	5745	MCS0	full	23.5	21.97	21.89	311.856	24.94	30	PASS
157	5785	MCS0	full	23.5	21.93	21.53	298.124	24.74	30	PASS
165	5825	MCS0	full	23	21.99	21.17	288.980	24.61	30	PASS

## 802.11ax HE40 Ch0

СН	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	full	12.5	14.897	11.73	30	PASS
46	5230	MCS0	full	12	17.025	12.31	30	PASS
54	5270	MCS0	full	20	95.741	19.81	23.98	PASS
62	5310	MCS0	full	19.5	73.807	18.68	23.98	PASS
102	5510	MCS0	full	19.5	78.904	18.97	23.98	PASS
110	5550	MCS0	full	20	78.904	19.52	23.98	PASS
134	5670	MCS0	full	20	86.317	19.36	23.98	PASS
142	5710(U-NII 2C)	MCS0	full	19.5	65.388	18.15	23.98	PASS
142	5710 (U-NII 3)	MCS0	full	19.5	10.138	10.06	30	PASS
151	5755	MCS0	full	22.5	144.244	21.59	30	PASS
159	5795	MCS0	full	22.5	147.944	21.70	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 77 of 603

## 802.11ax HE40 Ch1

СН	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	full	12.5	15.350	11.86	30	PASS
46	5230	MCS0	full	12	14.292	11.55	30	PASS
54	5270	MCS0	full	20	98.650	19.94	23.98	PASS
62	5310	MCS0	full	19.5	83.579	19.22	23.98	PASS
102	5510	MCS0	full	19.5	89.350	19.51	23.98	PASS
110	5550	MCS0	full	20	89.350	19.68	23.98	PASS
134	5670	MCS0	full	20	91.854	19.63	23.98	PASS
142	5710(U-NII 2C)	MCS0	full	19.5	72.047	18.58	23.98	PASS
142	5710 (U-NII 3)	MCS0	full	19.5	10.765	10.32	30	PASS
151	5755	MCS0	full	22.5	145.914	21.64	30	PASS
159	5795	MCS0	full	22.5	144.909	21.61	30	PASS

#### 802.11ax HE40 2TX

СН	Frequency (MHz)	Data Rate	RU config.	Power	Avg. POWER (dBm)		TOTAL POWER	TOTAL POWER	REQUIRED LIMIT	RESULT
	(IVITIZ)	Rate		Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
38	5190	MCS0	full	12.5	11.75	11.90	30.457	14.84	30	PASS
46	5230	MCS0	full	12	12.35	11.58	31.574	14.99	30	PASS
54	5270	MCS0	full	20	19.83	19.98	195.745	22.92	23.98	PASS
62	5310	MCS0	full	19.5	18.70	19.24	158.112	21.99	23.98	PASS
102	5510	MCS0	full	19.5	19.01	19.54	169.603	22.29	23.98	PASS
110	5550	MCS0	full	20	19.57	19.71	169.603	22.65	23.98	PASS
134	5670	MCS0	full	20	19.39	19.68	179.833	22.55	23.98	PASS
142	5710(U-NII 2C)	MCS0	full	19.5	18.19	18.65	139.211	21.44	23.98	PASS
142	5710 (U-NII 3)	MCS0	full	19.5	10.10	10.39	21.172	13.26	30	PASS
151	5755	MCS0	full	22.5	21.64	21.68	293.178	24.67	30	PASS
159	5795	MCS0	full	22.5	21.74	21.65	295.563	24.71	30	PASS

## 802.11ax HE80 Ch0

СН	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	full	12.5	16.036	12.05	30	PASS
58	5290	MCS0	full	18.5	55.603	17.45	23.98	PASS
106	5530	MCS0	full	18	47.984	16.81	23.98	PASS
122	5610	MCS0	full	20.5	86.317	19.36	23.98	PASS
138	5690(U-NII 2C)	MCS0	full	21	87.210	19.41	23.98	PASS
138	5690 (U-NII 3)	MCS0	full	21	6.567	8.17	30	PASS
155	5775	MCS0	full	21	93.131	19.69	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.

台灣檢驗科技股份有限公司



Page: 78 of 603

## 802.11ax HE80 Ch1

СН	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	full	12.5	15.174	11.81	30	PASS
58	5290	MCS0	full	18.5	62.675	17.97	23.98	PASS
106	5530	MCS0	full	18	73.977	18.69	23.98	PASS
122	5610	MCS0	full	20.5	93.561	19.71	23.98	PASS
138	5690(U-NII 2C)	MCS0	full	21	91.667	19.62	23.98	PASS
138	5690 (U-NII 3)	MCS0	full	21	6.756	8.30	30	PASS
155	5775	MCS0	full	21	101.647	20.07	30	PASS

# 802.11ax\_HE80\_2TX

CH Frequency (MHz)	Data Rate	RU config.	Power Avg. POW		/ER (dBm)	TOTAL POWER	TOTAL POWER	REQUIRED LIMIT	RESULT	
	(WITZ)	Nate		Setting	Ch0	Ch1	(mW)	(dBm)	(dBm)	
42	5210	MCS0	full	12.5	12.08	11.85	31.461	14.98	30	PASS
58	5290	MCS0	full	18.5	17.48	18.01	119.243	20.76	23.98	PASS
106	5530	MCS0	full	18	16.83	18.72	122.695	20.89	23.98	PASS
122	5610	MCS0	full	20.5	19.40	19.75	181.543	22.59	23.98	PASS
138	5690(U-NII 2C)	MCS0	full	21	19.47	19.65	180.726	22.57	23.98	PASS
138	5690 (U-NII 3)	MCS0	full	21	8.23	8.33	13.461	11.29	30	PASS
155	5775	MCS0	full	21	19.73	20.10	196.345	22.93	30	PASS

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 79 of 603

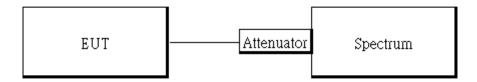
## 10 MAXIMUM POWER SPECTRAL DENSITY

## 10.1 FCC Standard

Operation Bands	E	EUT CATEGORY	e-CRF Title 47 §15.407 Power Spectral Density	Antenna Directional Gain Requirements
	V	Outdoor Access Point (Master)	1. 17dBm/ MHz 2. EIRP<=125mW(21dBm) at any elevation angle > 30°	6dBi
U-NII-1		Indoor Access Point (Master)	17dBm / MHz	6dBi
		Fixed point-to-point Access Ponit	17dBm / MHz	23dBi
		Client device	11dBm / MHz	6dBi
U-NII-2A	٧	All	11dBm / MHz	6dBi
U-NII-2C	V	All	11dBm / MHz	6dBi
U-NII-3	٧	All	30dBm / 500kHz	6dBi
		Indoor AP	20dBm / MHz e.i.r.p.	Not required
U-NII-4		Indoor client	14dBm / MHz e.i.r.p.	Not required
		Subordinate device	20dBm / MHz e.i.r.p.	Not required

If transmitting antennas of directional gain greater than the antenna requirements column, the Maximum transmit power shall be reduced by the amount in dB that the direction-al gain of the antenna.

## 10.2 Test Setup



## 10.3 Measurement Procedure

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules .
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
- 4. **For U-NII1, U-NII-2A, U-NII-2C Band**:
  Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (1001 pts), Detector = power averaging (rms), if available. Otherwise, use sample detector mode, traces

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. 除非只有验证,他就是结果成果的证明,不可能以推翻。

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 80 of 603

100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)

## For U-NII-3 Band:

Set RBW=300kHz, VBW=1MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = RMS or sample, traces 100 sweeps of video averaging.

In addition, measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/RBW) to the measured result.

- 5. User the cursor on spectrum to peak search the highest level of trace
- 6. (1)Duty cycle ≥ 98%: Record the max. reading.(2)Duty cycle < 98%: Record the max. reading and add 10 log(1/duty cycle).</li>
- 7. Repeat above procedures until all default test channel (low, middle, and high) was complete.

Note: For the test of PSD at MIMO mode, the highest emission of worst case employing Measure and add 10 log (N) technical is reported after the comparison between Main Antenna at single transmitting mode and Aux that yields the higher value. The MIMO transmitting mode produces higher value of outcome.

#### Note:

For U-NII1, 2A, 2C and 3 Bands, when the antenna gain is greater than 6 dBi, the power spectral density limit attenuated accordingly.

As per section F. 2). e). (ii) of FCC KDB 662911 D01

If antenna gains are not equal and each transmit antenna is driven by only one spatial stream, directional gain may be calculated by either of the following formulas.

• Directional Gain = 
$$10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^{2}}{N_{ANT}} \right]$$

# where

Each antenna is driven by no more than one spatial stream;

NSS = the number of independent spatial streams of data;

NANT = the total number of antennas

 $g_{j,k}$  = / 20 10Gk if the kth antenna is being fed by spatial stream j, or zero if it is not;  $G_k$  is the gain in dBi of the kth antenna.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 81 of 603

## Measurement Result

		POWER DEI	NSITY 802.11a M	ODE			
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd I	PSD(dBm/MHz)	Limit	Margin (dB)
5180	0.439	-0.043	0.17	3.	.38	13.99 dBm/MHz	-10.61
5220	-0.248	-0.702	0.17	2	.71	13.99 dBm/MHz	-11.28
5240	0.636	-1.252	0.17	2	.97	13.99 dBm/MHz	-11.02
5260	4.445	4.510	0.17	7.	.66	7.99 dBm/MHz	-0.33
5300	4.237	4.447	0.17	7.	.52	7.99 dBm/MHz	-0.47
5320	4.588	4.556	0.17	7.	.75	7.99 dBm/MHz	-0.24
5500	4.692	4.750	0.17	7.	.90	7.99 dBm/MHz	-0.09
5580	4.736	4.475	0.17	7.	.79	7.99 dBm/MHz	-0.20
5700	4.740	4.500	0.17	7.	.80	7.99 dBm/MHz	-0.19
5720 (U-NII 2C)	4.470	4.670	0.17	7.	.75	7.99 dBm/MHz	-0.24
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB) Total Corr'd PSD (dBm/500kHz)		Limit	Margin (dB)
5720 (U-NII 3)	-1.290	-0.900	0.17	2.22	4.31	26.99 dBm/500kHz	-22.68
5745	6.155	5.761	0.17	2.22	11.36	26.99 dBm/500kHz	-15.63
5785	5.810	5.882	0.17	2.22	11.25	26.99 dBm/500kHz	-15.74
5825	5.607	5.589	0.17	2.22	11.00	26.99 dBm/500kHz	-15.99
		POWER DENSI	TY 802.11n HT20	MODE			
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd I	PSD(dBm/MHz)	Limit	Margin (dB)
5180	-0.655	-0.602	0.95	3.	.33	13.99 dBm/MHz	-10.66
5220	-1.377	-1.350	0.95	_	.60	13.99 dBm/MHz	-11.39
5240	-0.412	-2.018	0.95	2	.82	13.99 dBm/MHz	-11.17
5260	3.282	4.344	0.95	7.	.81	7.99 dBm/MHz	-0.18
5300	3.867	3.876	0.95	7.	.83	7.99 dBm/MHz	-0.16
5320	3.329	3.602	0.95	7.	.43	7.99 dBm/MHz	-0.56
5500	3.995	3.869	0.95		.89	7.99 dBm/MHz	-0.10
5580	3.640	4.064	0.95	7	.82	7.99 dBm/MHz	-0.17
5700	3.851	4.114	0.95		.94	7.99 dBm/MHz	-0.05
5720 (U-NII 2C)	3.600	3.900	0.95	7.71		7.99 dBm/MHz	-0.28
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB) Total Corr'd PSD (dBm/500kHz)		Limit	Margin (dB)
5720 (U-NII 3)	-1.370	-1.820	0.95	2.22	4.59	26.99 dBm/500kHz	-22.40
5745	5.543	6.061	0.95	2.22	11.99	26.99 dBm/500kHz	-15.00
5785	6.368	5.632	0.95	2.22	12.20	26.99 dBm/500kHz	-14.79
0.00	0.000	0.002	5.50	2.22 12.20		23.00 GDIII/000KIIZ	17.75

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 82 of 603

			POWER DENS	TY 802.11n HT40 I	MODE			
Fi	requency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd F	PSD(dBm/MHz)	Limit	Margin (dB)
	5190	-3.830	-3.465	0.96	0.	33	13.99 dBm/MHz	-13.66
	5230	-3.868	-4.952	0.96	-0.		13.99 dBm/MHz	-14.40
	5270	3.237	3.934	0.96	7.	57	7.99 dBm/MHz	-0.42
	5310	3.459	3.717	0.96	7.	56	7.99 dBm/MHz	-0.43
	5510	2.944	3.601	0.96	7.	26	7.99 dBm/MHz	-0.73
	5550	3.580	3.969	0.96		75	7.99 dBm/MHz	-0.24
	5670	3.514	4.046	0.96	7.	-	7.99 dBm/MHz	-0.23
571	0 (U-NII 2C)	3.470	3.720	0.96	7.		7.99 dBm/MHz	-0.42
	Frequency (MHz)		Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
57	10 (U-NII 3)	-3.800	-3.070	0.96	2.22	2.77	26.99 dBm/500kHz	-24.22
	5755	1.792	1.924	0.96	2.22	8.05	26.99 dBm/500kHz	-18.94
	5795		3.193	0.96	2.22	9.32	26.99 dBm/500kHz	-17.67
				Y 802.11ac VHT80	MODE			
Fi	Frequency (MHz)		Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
	5210	-7.119	-6.431	0.96	-2.	79	13.99 dBm/MHz	-16.78
	5290	-0.831	-0.825	0.96	3.14		7.99 dBm/MHz	-4.85
	5530	-1.559	-0.980	0.96	2.71		7.99 dBm/MHz	-5.28
	5610	1.027	1.181	0.96	5.	07	7.99 dBm/MHz	-2.92
569	0 (U-NII 2C)	2.060	2.230	0.96	6.	12	7.99 dBm/MHz	-1.87
	requency (MHz) 90 (U-NII 3)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	<b>Limit</b> 26.99 dBm/500kHz	Margin (dB)
	5775	-2.992	-3.172	0.96	2.22	3.11	26.99 dBm/500kHz	-23.88
			POWER DENSI	TY 802.11ax HE20	MODE			
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)		PSD(dBm/MHz)	Limit	Margin (dB)
5180	full	-1.179	-1.137	0.95		80	13.99 dBm/MHz	-11.19
5220	full	-1.829	-1.626	0.95	2.		13.99 dBm/MHz	-11.76
5240	full	-0.921	-2.329	0.95		39	13.99 dBm/MHz	-11.60
5260	full	4.054	3.920	0.95		95	7.99 dBm/MHz	-0.04
5300	full	3.980	3.369	0.95		65	7.99 dBm/MHz	-0.34
5320	full	3.411	3.730	0.95		53	7.99 dBm/MHz	-0.46
5500	full	3.803	3.667	0.95		70	7.99 dBm/MHz	-0.29
5580	full	3.974	3.597	0.95		75	7.99 dBm/MHz	-0.24
5700	full	3.670	3.796	0.95	7.69		7.99 dBm/MHz	-0.30
5720 (U-NII 2C)  Frequency (MHz)	full  RU config.	3.500 Ch0 meas PSD (dBm/300kHz)	3.550  Ch1  meas PSD (dBm/300kHz)	0.95  Duty Factor (dB)	7.49  10log (500kHz/RBW) Factor(dB)  7.49  Total Corr'd PSD (dBm/500kHz)		7.99 dBm/MHz Limit	-0.50 Margin (dB)
5720 (U-NII 3)	full	-2.310	-2.380	0.95	2.22	3.84	26.99 dBm/500kHz	-23.15
5745	full	5.510	5.545	0.95	2.22	11.71	26.99 dBm/500kHz	-15.28
5785	full	5.881	5.309	0.95	2.22	11.78	26.99 dBm/500kHz	-15.21
3703								

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 83 of 603

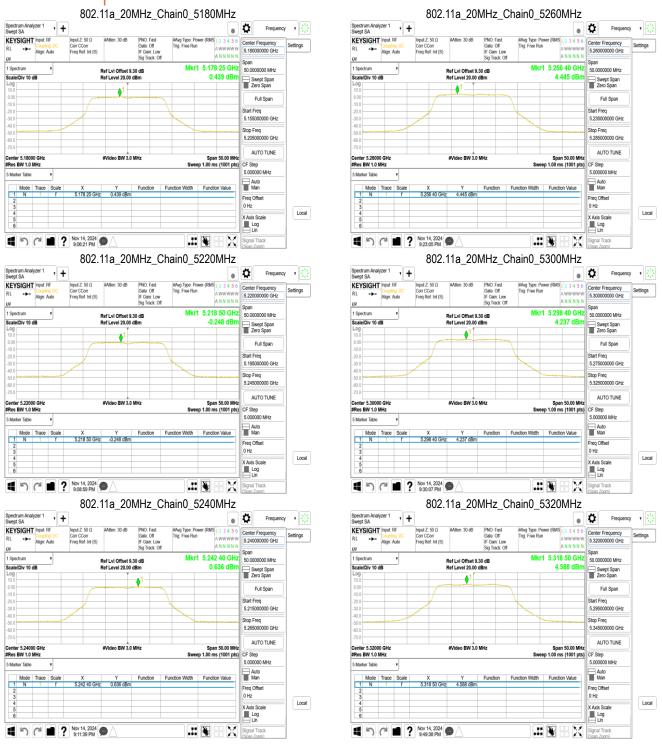
			POWER DENSI	TY 802.11ax HE40	MODE			
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd F	PSD(dBm/MHz)	Limit	Margin (dB)
5190	full	-3.921	-3.834	0.96	0.	09	13.99 dBm/MHz	-13.90
5230	full	-3.878	-4.481	0.96	-0	20	13.99 dBm/MHz	-14.19
5270	full	3.288	3.849	0.96	7.	55	7.99 dBm/MHz	-0.44
5310	full	2.792	2.761	0.96	6.	75	7.99 dBm/MHz	-1.24
5510	full	2.855	2.738	0.96	6.	77	7.99 dBm/MHz	-1.22
5550	full	3.825	3.932	0.96	7.	85	7.99 dBm/MHz	-0.14
5670	full	3.862	3.976	0.96	7.	89	7.99 dBm/MHz	-0.10
5710 (U-NII 2C)	full	3.520	3.790	0.96	7.	63	7.99 dBm/MHz	-0.36
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5710 (U-NII 3)	full	-3.360	-3.690	0.96	2.22	2.67	26.99 dBm/500kHz	-24.32
5755	full	1.332	1.688	0.96	2.22	7.70	26.99 dBm/500kHz	-19.29
5795	full	3.137	3.019	0.96	2.22	9.27	26.99 dBm/500kHz	-17.72
			POWER DENSI	TY 802.11ax HE80	MODE			
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd F	PSD(dBm/MHz)	Limit	Margin (dB)
5210	full	-7.136	-5.824	0.96	-2	46	13.99 dBm/MHz	-16.45
5290	full	-1.372	-1.112	0.96	2.	73	7.99 dBm/MHz	-5.26
5530	full	-1.575	-1.269	0.96	2.	55	7.99 dBm/MHz	-5.44
5610	full	1.005	1.844	0.96	5.	42	7.99 dBm/MHz	-2.57
5690 (U-NII 2C)	full	1.510	2.410	0.96	5.	5.95		-2.04
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB) Total Corr'd PSD (dBm/500kHz)		Limit	Margin (dB)
5690 (U-NII 3)	full	-5.940	-5.530	0.96	2.22	0.46	26.99 dBm/500kHz	-26.53
5775	full	-3.182	-3.484	0.96	2.22	2.86	26.99 dBm/500kHz	-24.13

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.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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.



Page: 84 of 603



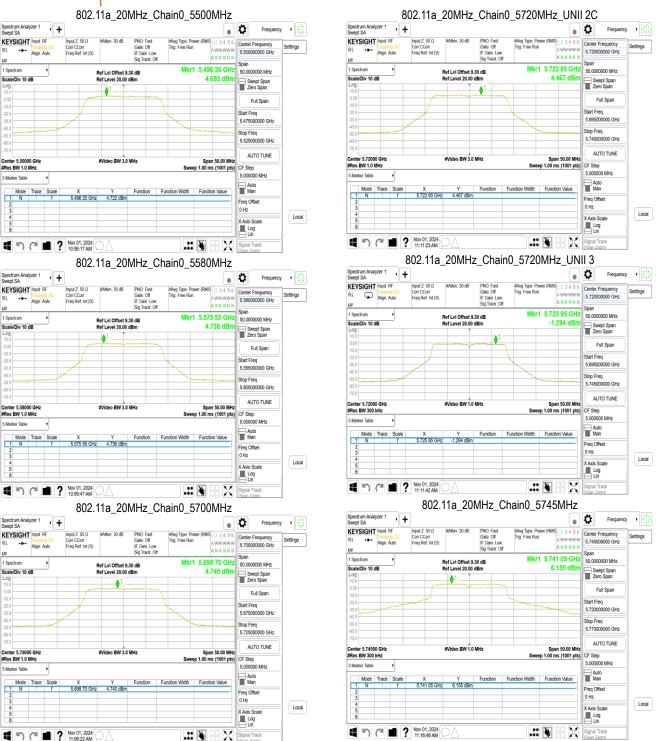
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 85 of 603



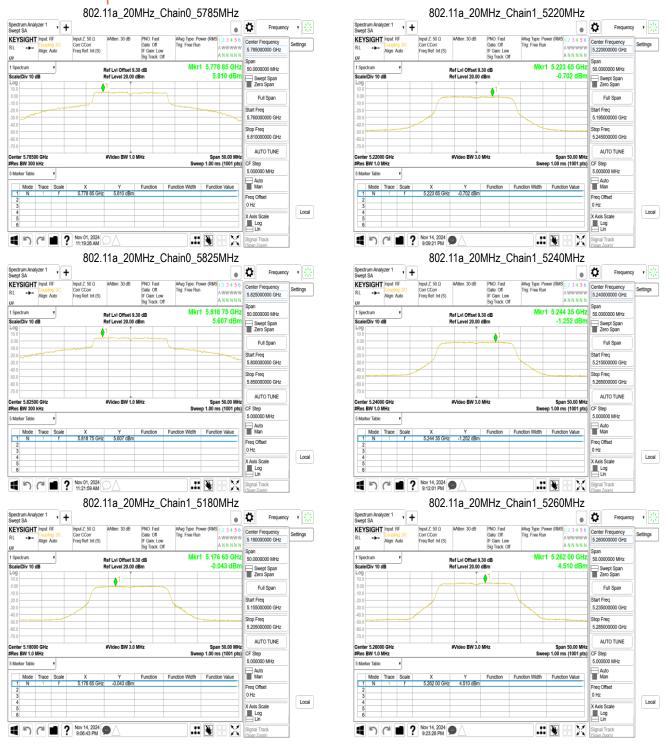
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 86 of 603



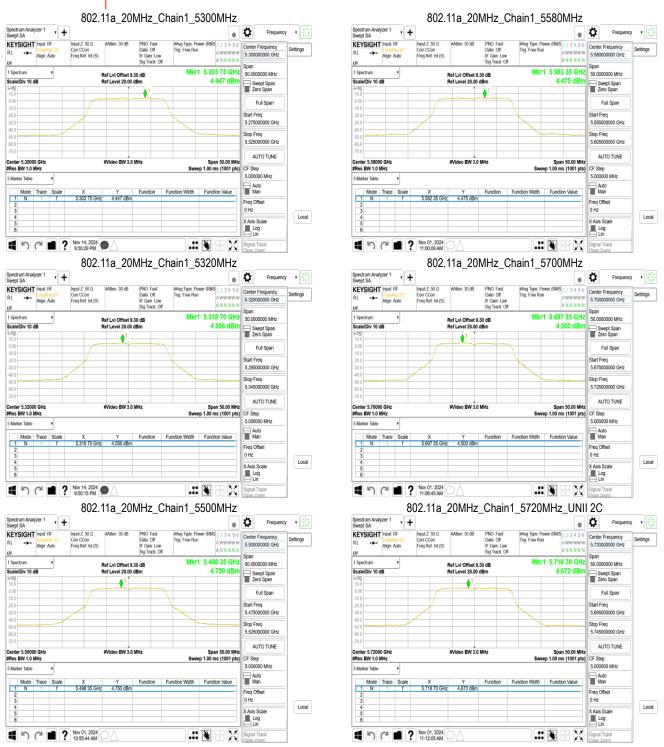
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 87 of 603



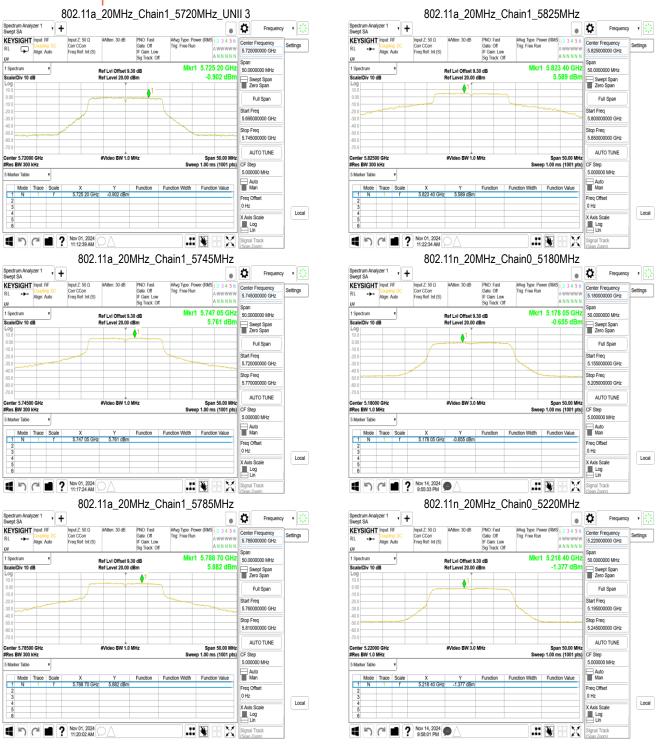
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 88 of 603



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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 89 of 603



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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 90 of 603



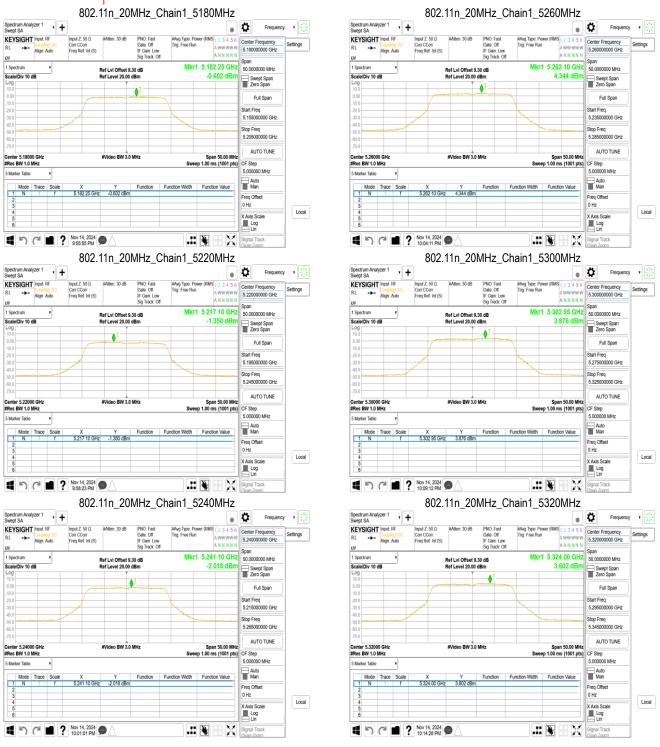
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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



Page: 91 of 603



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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. 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