

1 GENERAL INFORMATION

1.1 Product Description

General:

Product Name of Host:	AC2600 Wireless Router	
Brand Name of Host:	COMTREND	
Model No of Host.:	WR-5931	
Model Difference:	N/A	
Hardware Version:	N/A	
Software Version:	N/A	
Power Supply:	12V from DC Power Supply	
	Adapter:	Model No.: WB-18D12FU, Supplier: Asian Power Devices Inc.

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

WLAN 5Hz:

Wi-Fi 802.11	Frequency Range	Channels	Modulation Technology
a	5150~5250	4	OFDM
	5250~5350	4	
	5470~5725	12	
	5725-5850	5	
n_HT ac_VHT 20M	5150~5250	4	OFDM
	5250~5350	4	
	5470~5725	12	
	5725-5850	5	
n_HT ac_VHT 40M	5150~5250	2	OFDM
	5250~5350	2	
	5470~5725	5	
	5725-5850	2	
ac_VHT 80M	5150~5250	1	OFDM
	5250~5350	1	
	5470~5725	2	
	5725-5850	1	
Modulation type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 802.11ac only		
Transition Rate:	802.11 a: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 – 144.4Mbps 802.11 n_40MHz: 13.5 – 300.0Mbps 802.11 ac_20MHz: 6.5 –173.3Mbps 802.11 ac_40MHz: 13.5 –400.0Mbps 802.11 ac_80MHz: 29.3 – 866.7Mbps		
Antenna Designation	PCB Antenna; 1. Part No.: ALA140-091023-000011 5GHz Gain: 5.08dBi (5150MHz-5850MHz) 2. Part No.: ALA140-091023-000010 5GHz Gain: 4.76dBi (5150MHz-5850MHz) 3. Part No.: ALA140-091023-000012 5GHz Gain: 4.47dBi (5150MHz-5850MHz)		

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

2 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1 Standard Applicable:

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1093 RF exposure is calculated.

Limits for Maximum Permissive Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	F/1500	30
1500-15000	/	/	1.0	30

F = frequency in MHz

* = Plane-wave equipment power density

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = Power density

P = Power input to antenna

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

802.11a Max. output power

802.11a_MIMO

CH	Frequency (MHz)	Data Rate	AVERAGE POWER (dBm)				TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
			CH 0	CH 1	CH 2	CH 3				
36	5180	6	11.68	12.06	11.07	11.41	17.59	57.422	23.98	PASS
44	5220	6	12.14	12.42	11.62	12.14	18.11	64.716	23.98	PASS
48	5240	6	12.06	12.53	11.65	12.21	18.14	65.231	23.98	PASS
149	5745	6	12.22	13.04	11.64	11.89	18.25	66.850	30	PASS
157	5785	6	12.34	13.06	11.51	11.69	18.21	66.285	30	PASS
165	5825	6	12.45	13.02	11.28	11.42	18.12	64.919	30	PASS

MPE Prediction (802.11a 5150~5250)

Max. output power including tune-up tolerancel:	18.14	(dBm)
Max. output power including tune-up tolerancel:	65.162839	(mW)
Duty cycle:	81.92	(%)
Maximum Pav :	53.381398	(mW)
Peak Antenna gain (Maximum):	5.08	(dBi)
Peak Antenna gain (linear):	3.2210688	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5240	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 (cm) distance	0.034	(mW/cm^2)
Measurement Result		
The predicted power density level at 20 cm is 0.034 mW/cm2.		
This is below the uncontrolled exposure limit of 1 mW/cm2 at 5240MHz.		

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

MPE Prediction (802.11a 5725~5850)

Max. output power including tune-up tolerancel:	18.25	(dBm)
Max. output power including tune-up tolerancel:	66.834392	(mW)
Duty cycle:	80.54	(%)
Maximum Pav :	53.828419	(mW)
Peak Antenna gain (Maximum):	5.08	(dBi)
Peak Antenna gain (linear):	3.2210688	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5825	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 (cm) distance:	0.035	(mW/cm^2)
Measurement Result The predicted power density level at 20 cm is 0.035 mW/cm2. This is below the uncontrolled exposure limit of 1 mW/cm2 at 5825MHz.		

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

802.11n_HT20M Max. output power

802.11n_HT20_MIMO

CH	Frequency (MHz)	Data Rate	AVERAGE POWER (dBm)				TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
			CH 0	CH 1	CH 2	CH3				
36	5180	MCS24	12.55	12.23	12.21	12.74	18.46	70.127	21.71	PASS
44	5220	MCS24	12.23	11.75	11.86	12.52	18.12	64.884	21.71	PASS
48	5240	MCS24	12.25	11.85	11.93	12.56	18.18	65.725	21.71	PASS
149	5745	MCS24	12.47	12.22	11.59	12.67	18.28	67.247	27.16	PASS
157	5785	MCS24	12.25	12.35	11.71	12.58	18.25	66.906	27.16	PASS
165	5825	MCS24	12.3	12.26	11.75	12.42	18.21	66.230	27.16	PASS

MPE Prediction (802.11n_HT20 5150~5250)

MIMO gain= Directional gain = $10 \log [(10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(GN/20)})^2 / N_{ANT}] = 10.88\text{dBi}$

Max. output power including tune-up tolerancel:	18.46	(dBm)
Max. output power including tune-up tolerancel:	70.14553	(mW)
Duty cycle:	80.54	(%)
Maximum Pav :	56.49521	(mW)
Peak Antenna gain (Maximum):	10.88	(dBi)
Peak Antenna gain (linear):	12.246162	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5180	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 (cm) distance:	0.138	(mW/cm^2)
Measurement Result The predicted power density level at 20 cm is 0.138 mW/cm2. This is below the uncontrolled exposure limit of 1 mW/cm2 at 5180MHz.		

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

MPE Prediction (802.11n_HT20 5725~5850)

MIMO gain= Directional gain = $10 \log [(10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(GN/20)})^2 / N_{ANT}] = 10.88 \text{dBi}$

Max. output power including tune-up tolerancel:	8.00	(dBm)
Max. output power including tune-up tolerancel:	6.3095734	(mW)
Duty cycle:	80.54	(%)
Maximum Pav :	5.0817305	(mW)
Peak Antenna gain (Maximum):	10.88	(dBi)
Peak Antenna gain (linear):	12.246162	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5745	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 cm distance:	0.012	(mW/cm^2)

Measurement Result

The predicted power density level at 20 cm is 0.012 mW/cm2.

This is below the uncontrolled exposure limit of 1 mW/cm2 at 5745MHz.

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

802.11n_HT40M Max. output power

802.11n_HT40_MIMO

CH	Frequency (MHz)	Data Rate	AVERAGE POWER (dBm)				TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
			CH 0	CH 1	CH 2	CH 3				
38	5190	MCS24	12.56	11.91	12.02	12.84	18.37	68.707	21.71	PASS
46	5230	MCS24	12.62	12.14	12.09	12.88	18.47	70.239	21.71	PASS
151	5755	MCS24	12.25	12.01	11.43	12.59	18.11	64.728	27.16	PASS
159	5795	MCS24	12.1	12.17	11.42	12.5	18.09	64.350	27.16	PASS

MPE Prediction (802.11n_HT40 5150~5250)

MIMO gain= Directional gain = $10 \log [(10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(GN/20)})^2 / N_{ANT}] = 10.88\text{dBi}$

Max. output power including tune-up tolerancel:	18.47	(dBm)
Max. output power including tune-up tolerancel:	70.307232	(mW)
Duty cycle:	67.78	(%)
Maximum Pav :	47.654242	(mW)
Peak Antenna gain (Maximum):	10.88	(dBi)
Peak Antenna gain (linear):	12.246162	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5230	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 (cm) distance:	0.116	(mW/cm^2)
Measurement Result		
The predicted power density level at 20 cm is 0.116 mW/cm2.		
This is below the uncontrolled exposure limit of 1 mW/cm2 at 5230MHz.		

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

MPE Prediction (802.11n_HT40 5725~5850)

MIMO gain= Directional gain = $10 \log [(10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(GN/20)})^2 / N_{ANT}] = 10.88\text{dBi}$

Average output power at antenna input terminal:	18.11	(dBm)
Average output power at antenna input terminal:	64.714262	(mW)
Duty cycle:	67.78	(%)
Maximum Pav :	43.863326	(mW)
Peak Antenna gain (Maximum):	10.88	(dBi)
Peak Antenna gain (linear):	12.246162	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5755	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 cm distance	0.107	(mW/cm^2)

Measurement Result

The predicted power density level at 20 cm is 0.107 mW/cm2.

This is below the uncontrolled exposure limit of 1 mW/cm2 at 5755MHz.

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

802.11ac VHT80M Max. output power

802.11ac_VHT80_MIMO

CH	Frequency (MHz)	Data Rate	AVERAGE POWER (dBm)				TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
			CH 0	CH 1	CH 2	CH 3				
42	5210	MCS0	11.36	10.76	10.85	11.91	17.27	53.275	21.71	PASS
155	5775	MCS0	11.33	11.38	10.54	11.82	17.31	53.853	27.16	PASS

MPE Prediction (802.11ac_VHT80 5150~5250)

MIMO gain= Directional gain = $10 \log [(10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(GN/20)})^2 / N_{ANT}] = 10.88\text{dBi}$

Average output power at antenna input terminal:	17.27	(dBm)
Average output power at antenna input terminal:	53.33349	(mW)
Duty cycle:	50.55	(%)
Maximum Pav :	26.960079	(mW)
Peak Antenna gain (Maximum):	10.88	(dBi)
Peak Antenna gain (linear):	12.246162	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5210	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 cm distance	0.066	(mW/cm^2)
Measurement Result		
The predicted power density level at 20 cm is 0.066 mW/cm2.		
This is below the uncontrolled exposure limit of 1 mW/cm2 at 5210MHz.		

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

MPE Prediction (802.11ac_VHT80 5725~5850)

MIMO gain= Directional gain = $10 \log [(10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(GN/20)})^2 / N_{ANT}] = 10.88 \text{dBi}$

Average output power at antenna input terminal:	17.31	(dBm)
Average output power at antenna input terminal:	53.826978	(mW)
Duty cycle:	50.55	(%)
Maximum Pav :	27.209538	(mW)
Peak Antenna gain (Maximum):	10.88	(dBi)
Peak Antenna gain (linear):	12.246162	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5775	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm2)
Power density at predication frequency at 20 cm distance	0.066	(mW/cm^2)

Measurement Result

The predicted power density level at 20 cm is 0.066 mW/cm2.

This is below the uncontrolled exposure limit of 1 mW/cm2 at 5775MHz.

~ 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.

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.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.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group