



RF EXPOSURE

SPOT CHECK REPORT

FCC ID : A4RG4S1M
Equipment : Phone
Model Name : GR0M2, G4S1M
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part2 (2.1093)

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Cona Huang / Deputy Manager



Sporton International Inc. EMC & Wireless Communications Laboratory
No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan



TABLE OF CONTENTS

History of this test report.....	3
1. Introduction Section	4
2. Model Difference Information	5
3. Reference detail Section	6
4. Spot Check Verification Data Section	7



History of this test report

Version	Description	Issued Date
01	Initial issue of report	Apr. 07, 2021
02	Initial issue of report	Apr. 21, 2021



1. Introduction Section

FCC ID: A4RG1F8F (original model: G1F8F) and FCC ID: A4RG4S1M (variant model: GR0M2, G4S1M) are HW identical except components depopulated for FR1 n41. Besides, the LTE band 38 HPUE and 7C enabled by software are tested in SAR test report No: FA001508-01.

Other than these two items listed above, the RF and antenna design is the same.

Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS, DXX) and FCC Part 15E (equipment class: NII) and FCC Part 22, 24, 27, 90, 96 (equipment class: PCE, CBE) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v01.

The applicant shall take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: A4RG4S1M as described in KDB 484596 D01 v01.



2. Model Difference Information

The difference between FCC ID: A4RG1F8F and FCC ID: A4RG4S1M is as below:

- NR band n41 component is depopulated.
- NR band n2, n12, n25, n66, n71 are disabled by software.
- CDMA function is disabled by software
- LTE band 38 HPUE and band 7C is enabled by software.

Other than items listed above, all the RF and antenna design is the same.

The details of similarity and difference can be found in the confidential documents.



3. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID (Parent)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)
Part 2.1093 SAR	DSS	Bluetooth	2400~2483.5	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
	DTS	BLE Wi-Fi	2400~2483.5	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
	DXX	NFC	13.56	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
	PCE CBE	GSM	GSM 850/1900	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
		WCDMA	Band II, IV, V	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
		CDMA	BC0, 1, 10	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
		LTE	B2/ 4/ 5/ 7/ 12/ 13/ 14/ 17/ 25/ 26/ 30/ 38/ 41/ 48/ 66/ 71	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M
		5G FR1	n2/ 5/ 12/ 25/ 41/ 66/ 71/ 77/ 78	A4RG1F8F	Original Grant	FA0O1507-01A	A4RG4S1M



4. Spot Check Verification Data Section

SAR spot check verification on the worst cases from the original model was performed to demonstrate the test data from original model remains representative for the variant model

Test Item	Wireless technology/band	Exposure Position	A4RG1F8F Parent Worst Result	A4RG4S1M Variant Check Result	Difference (%)
Head SAR	Bluetooth	Left Check	0.134	0.134	0.00
	2.4GHz WLAN	Right Tilted	0.620	0.706	13.87
	5.2/5.3GHz WLAN	Left Tilted	0.679	0.702	3.39
	5.5GHz WLAN	Left Check	0.735	0.552	-24.90
	5.8GHz WLAN	Left Check	0.594	0.552	-7.07
	GSM 850	Right Check	0.826	0.660	-20.1
	GSM 1900	Left Check	0.188	0.218	15.96
	WCDMA Band II	Left Check	0.380	0.452	18.95
	WCDMA Band IV	Left Check	0.595	0.516	-13.28
	WCDMA Band V	Right Check	0.967	0.828	-14.37
	LTE Band 7	Right Check	0.519	0.428	-17.53
	LTE Band 12/17	Right Check	0.820	0.896	9.27
	LTE Band 13	Right Check	0.749	0.821	9.61
	LTE Band 14	Right Check	0.643	0.766	19.13
	LTE Band 2/25	Left Check	0.532	0.253	-55.83
	LTE Band 5/26	Right Check	0.857	0.893	4.20
	LTE Band 30	Left Check	0.391	0.261	-21.15
	LTE Band 38/41	Right Check	0.309	0.283	-8.41
	LTE Band 48	Left Check	0.417	0.364	-22.72
	LTE Band 4/66	Left Check	0.487	0.428	-12.11
	LTE Band 71	Right Check	0.480	0.562	17.08
	5G NR n5	Right Check	0.836	0.765	-8.49
	5G NR n77	NA	NA	Full test	NA
	5G NR n78	NA	NA	Full test	NA



Test Item	Wireless technology/band	Exposure Position	A4RG1F8F Parent Worst Result	A4RG4S1M Variant Check Result	Difference (%)
Hotspot	Bluetooth	Back	0.102	0.119	16.67
	2.4GHz WLAN	Back	0.401	0.469	16.96
	5.2Hz WLAN	Right Side	0.359	0.300	-16.43
	5.8GHz WLAN	Top Side	0.806	0.677	-16.00
	GSM 850	Left Side	0.551	0.276	-49.91
	GSM 1900	Bottom Side	0.786	0.604	-23.16
	WCDMA Band II	Back	0.817	0.839	2.69
	WCDMA Band IV	Bottom Side	0.679	0.725	6.77
	WCDMA Band V	Back	0.398	0.345	-13.32
	LTE Band 7	Bottom Side	0.731	0.795	8.76
	LTE Band 12/17	Left Side	0.441	0.464	0.522
	LTE Band 13	Back	0.375	0.413	10.13
	LTE Band 14	Back	0.362	0.431	19.06
	LTE Band 2/25	Left Side	0.987	0.929	-5.88
	LTE Band 5/26	Left Side	0.411	0.447	8.76
	LTE Band 30	Back	0.774	0.871	12.53
	LTE Band 38/41	Back	0.907	0.726	-19.96
	LTE Band 48	Back	0.903	0.791	-12.41
	LTE Band 4/66	Bottom Side	0.889	0.809	-9.00
	LTE Band 71	Back	0.390	0.448	14.87
	5G NR n5	Back	0.319	0.359	12.54
	5G NR n77	NA	NA	Full test	NA
	5G NR n78	NA	NA	Full test	NA



Test Item	Wireless technology/band	Exposure Position	A4RG1F8F Parent Worst Result	A4RG4S1M Variant Check Result	Difference (%)
Body-worn	Bluetooth	Back	0.102	0.119	16.67
	2.4GHz WLAN	Back	0.401	0.469	16.96
	5.2/5.3GHz WLAN	Back	0.250	0.143	-42.80
	5.5GHz WLAN	Back	0.237	0.167	-4.02
	5.8GHz WLAN	Back	0.371	0.299	-19.41
	GSM 850	Back	0.528	0.452	-14.39
	GSM 1900	Back	0.595	0.580	-2.52
	WCDMA Band II	Back	1.025	0.998	-2.63
	WCDMA Band IV	Back	0.816	0.770	-5.64
	WCDMA Band V	Back	0.468	0.366	-21.79
	LTE Band 7	Back	0.845	0.921	8.99
	LTE Band 12/17	Back	0.346	0.273	-21.10
	LTE Band 13	Back	0.375	0.413	10.13
	LTE Band 14	Back	0.362	0.431	19.06
	LTE Band 2/25	Back	0.862	0.800	-7.19
	LTE Band 5/26	Back	0.403	0.470	16.63
	LTE Band 30	Back	0.774	0.871	12.53
	LTE Band 38/41	Back	0.907	0.726	-19.96
	LTE Band 48	Back	1.085	0.959	-11.61
	LTE Band 4/66	Back	0.973	0.774	-20.45
	LTE Band 71	Back	0.390	0.448	14.87
	5G NR n5	Back	0.319	0.359	12.54
	5G NR n77	NA	NA	Full test	NA
	5G NR n78	NA	NA	Full test	NA

Test Item	Wireless technology/band	Exposure Position	A4RG1F8F Parent Worst Result	A4RG4S1M Variant Check Result	Difference (%)
Extremity SAR	5.3GHz WLAN	Top Side	0.886	0.859	-3.05
	5.5GHz WLAN	Top Side	0.865	0.986	13.99

Conclusion:

Regarding to SAR testing, the data reuse evaluation test data is provided in the spot check test report No: FA001508-01.

END of this report