



SPOT CHECK EVALUATION

FCC ID : A4RGLU0G
Equipment : Phone
Model Name : GLU0G
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : 47 CFR Part 2, 22(H), 24(E), 27(D), 27(L) , 90(R), 90(S), 96
FCC Part 15 Subpart C §15.209
FCC Part 15 Subpart C §15.225
FCC Part 15 Subpart C §15.247
FCC Part 15 Subpart E §15.407
FCC Part 15 Subpart F §15.519

We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

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History of this test report

Version	Description	Issued Date
01	Initial issue of report	Aug. 18, 2021



1. Introduction Section

FCC ID: A4RG8V0U (parent model) and FCC ID: A4RGLU0G (variant model) use the same identical internal printed circuit board layouts, while the variant model depopulates mmWave related components, details are available in the operational description. Based on their similarity, the FCC Part 15C (equipment class: DCD, DTS, DSS, DXX) and FCC Part 15E (equipment class: NII, 6XD) and FCC Part 15F (equipment class: UWB) 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 spot check data in this report is used to justify the data reuse

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: A4RGLU0G.



2. Model Difference Information

A4RG8V0U and A4RGLU0G use the identical internal printed circuit board layout, and the difference in the components population:

- A4RGLU0G: 5G NR FR2 mmWave related components are depopulated.

The detail of similarity and difference is illustrated in the operational description, and based on the information spot check on conducted power and emission was performed for ensure compliance



3. Spot Check Verification Data Section

Conducted power test and radiated spurious emission test configurations were selected from the worst cases identified in the parent model and tested to demonstrate the test data from original model remains representative for the variant model.

Summary for power and RSE spot check for each rule entry and technology is listed as below:

Test Item	Mode	A4RG8V0U Parent Worst Result	A4RGLU0G Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT-3DH1	20.95	20.82	0.13
	BLE	20.15	19.99	0.16
	WLAN 2.4GHz	25.76	25.70	0.06
	WLAN 5GHz	22.99	22.91	0.08
	WLAN 6GHz	18.88	18.73	0.15
	WWAN GPRS 850	32.92	32.89	0.03
	WWAN GPRS 1900	29.57	29.30	0.27
	WWAN WCDMA Band V	23.99	23.93	0.06
	WWAN WCDMA Band II	24.03	23.90	0.13
	WWAN WCDMA Band IV	23.95	23.75	0.20
	WWAN LTE Band 2	24.04	23.95	0.09
	WWAN LTE Band 4	24.11	24.10	0.01
	WWAN LTE Band 5	24.33	24.30	0.03
	WWAN LTE Band 7	24.16	23.88	0.28
	WWAN LTE Band 12	24.31	24.16	0.15
	WWAN LTE Band 13	24.47	24.29	0.18
	WWAN LTE Band 14	24.30	24.08	0.22
	WWAN LTE Band 17	24.24	24.00	0.24
	WWAN LTE Band 25	24.21	23.92	0.29
	WWAN LTE Band 26	24.25	24.08	0.17
	WWAN LTE Band 30	24.11	23.89	0.22
	WWAN LTE Band 38 HPUE	25.64	25.55	0.09
	WWAN LTE Band 41 HPUE	26.28	26.13	0.15
	WWAN LTE Band 48	23.89	23.63	0.26
	WWAN LTE Band 66	24.23	23.98	0.25
	WWAN LTE Band 71	24.19	24.02	0.17
	WWAN NR n5	24.93	24.68	0.25
	WWAN NR n7	25.14	24.99	0.15
	WWAN NR n12	24.96	24.78	0.18
	WWAN NR n25	24.81	24.57	0.24
	WWAN NR n41 HPUE	26.31	26.12	0.19
	WWAN NR n66	24.84	24.64	0.20
WWAN NR n71	24.96	24.80	0.16	
WWAN NR n77 (27O)	26.57	26.33	0.24	
WWAN NR n77 (27Q)	26.80	26.64	0.16	



Test Item	Mode	ANT	A4RG8V0U Parent Worst Result	A4RGLU0G Variant Check Result	Difference (dB)
Field Strength (dBuV/m)	NFC 13.56MHz	-	21.60	21.16	0.44
	WPT 148kHz	-	9.74	7.02	2.72
	UWB	2	53.78	52.99	0.79
Radiated Spurious Emission (dBuV/m)	BT	3	47.73	43.31	4.42
	BLE	4	49.01	46.63	2.38
	WLAN 2.4GHz	4+3	52.05	51.29	0.76
	WLAN 5GHz	7+3	52.47	52.35	0.12
	WLAN 6GHz	7+3	50.76	50.67	0.09
	NFC 13.56MHz	-	36.81	33.84	2.97
	WPT 148.5kHz	-	25.49	24.67	0.82
	UWB	2	35.55	33.58	1.97
Radiated Spurious Emission (dBm)	WWAN GPRS 850	0	-24.32	-28.58	4.26
	WWAN GPRS 850	1	-56.81	-57.22	0.41
	WWAN GPRS 1900	0	-30.04	-32.97	2.93
	WWAN WCDMA Band V	0	-45.29	-47.36	2.07
	WWAN WCDMA Band II	0	-39.06	-43.59	4.53
	WWAN WCDMA Band IV	0	-47.32	-47.84	0.52
	WWAN LTE Band 7	0	-35.21	-36.99	1.78
	WWAN LTE Band 12	0	-40.98	-41.97	0.99
	WWAN LTE Band 13	0	-38.58	-40.25	1.67
	WWAN LTE Band 14	0	-37.59	-42.22	4.63
	WWAN LTE Band 25	0	-31.16	-33.79	2.63
	WWAN LTE Band 26	0	-27.62	-27.66	0.04
	WWAN LTE Band 30	2	-43.07	-47.89	4.82
	WWAN LTE Band 41	2	-33.60	-37.88	4.28
	WWAN LTE Band 48	6	-43.10	-43.87	0.77
	WWAN LTE Band 66	2	-32.97	-33.33	0.36
	WWAN LTE Band 71	0	-43.98	-47.72	3.74
	WWAN NR n5	0	-31.62	-35.61	3.99
	WWAN NR n7	0	-39.25	-42.81	3.56
	WWAN NR n12	0	-34.83	-35.13	0.30
	WWAN NR n25	0	-26.78	-30.76	3.98
	WWAN NR n41 HPUE	5	-29.29	-32.32	3.03
	WWAN NR n66	0	-36.12	-37.72	1.60
WWAN NR n71	0	-35.58	-37.81	2.23	
WWAN NR n77 (27O)	6	-41.18	-45.71	4.53	
WWAN NR n77 (27Q)	6	-41.78	-45.13	3.35	



Conclusion:

Radiated spurious emission test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

The spot check emission level is not degraded more than 3dB, and the margin to the limit is greater than 1.5dB, data referencing is justified according to the guidance in the KDB inquiry



4. 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)
15C	DSS	Bluetooth	2400~2483.5	A4RG8V0U	Original Grant	FR121931-04A	A4RGLU0G
	DTS	BLE Wi-Fi	2400~2483.5	A4RG8V0U	Original Grant	FR121931-04B FR121931-04C	A4RGLU0G
	DXX	NFC	13.56	A4RG8V0U	Original Grant	FR121931-04D	A4RGLU0G
	DCD	WPT	0.11~0.148	A4RG8V0U	Original Grant	FR121931-04H	A4RGLU0G
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	A4RG8V0U	Original Grant	FR121931-04E FR121931-04F FR121931-04G	A4RGLU0G
		DFS	5250~5350 5470~5725	A4RG8V0U	Original Grant	FZ121931-04	A4RGLU0G
	6XD	WiFi	5925~7125	A4RG8V0U	Original Grant	FR121931-04I	A4RGLU0G
15F	UWB	UWB	CH5: 6489.6 CH9: 7987.2	A4RG8V0U	Original Grant	FR121931-04J	A4RGLU0G
22, 24, 27, 90, 96	PCE CBE	GSM	GSM 850/1900	A4RG8V0U	Original Grant	FG121931-04A	A4RGLU0G
		WCDMA	Band II, IV, V	A4RG8V0U	Original Grant	FG121931-04A	A4RGLU0G
		LTE	2/4/5/7/12/13 /14/17/25/26 /30/38/41 /48/66/71 ULCA 5B/7C/ 41C/66B/66C	A4RG8V0U	Original Grant	FG121931-04B FG121931-04D FG121931-04E FG121931-04F FG121931-04G FG121931-04L	A4RGLU0G
		NR	n2/n5/n7/ n12/n25/n30/ n38/n41/n66/ n71/n77	A4RG8V0U	Original Grant	FG121931-04C FG121931-04H FG121931-04I FG121931-04J	A4RGLU0G

END of this report