



Spot Check Evaluation

FCC ID : PY7-04605Z
Equipment : GSM/WCDMA/LTE Phone+Bluetooth,
DTS/UNII a/b/g/n/ac and NFC
Brand Name : Sony
Applicant : Sony Mobile Communications Inc.
4-12-3 Higashi-Shinagawa, Shinagawa-ku,
Tokyo, 140-0002, Japan
Manufacturer : Sony Mobile Communications Inc.
4-12-3 Higashi-Shinagawa, Shinagawa-ku,
Tokyo, 140-0002, Japan
Standard : 47 CFR Part 2, 22(H), 24(E), 27(L)
FCC Part 15 Subpart C §15.247
FCC Part 15 Subpart E §15.407

The product was received on Feb. 11, 2019 and testing was started from Apr. 11, 2019 and completed on Apr. 17, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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: Jones Tsai / Manager



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History of this test report

Version	Description	Issued Date
01	Initial issue of report	May 08, 2019
02	Remove Appendix A & Update description	May 15, 2019
03	Update section 3 description	May 20, 2019



1. Introduction Section

FCC ID: PY7-54264H and FCC ID: PY7-04605Z are HW identical except for UMTS Band4 and LTE Band4/41. And UMTS Band4 and LTE Band4/41 are fully tested. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS) and FCC Part 15E (equipment class : NII) and FCC Part 22, 24, 27 (equipment class: PCE) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v01.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-04605Z).



2. Difference Section

The difference between PY7-04605Z and PY7-54264H is related only to the UMTS Band4 and LTE Band4/41, UMTS Band4 and LTE Band4/41 are fully tested.

The details of similarity and difference can be found in the Appendix B of Operating Description.



3. Spot Check Verification Data Section

Conducted power test and 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.

Detail spot check test result can be found in the variant model report

Summary of the spot check:

Test Item	Mode	PY7-54264H Worst Result	PY7-04605Z Worst Result	Difference (dB)	PY7-04605Z Report No.
Average Conducted Power (dBm)	802.11b	15.20	14.90	0.3	FR921116-01C
	802.11g	15.08	14.90	0.18	
	11n HT20	15.01	14.90	0.11	
	BT (1Mbps)	11.33	11.04	0.29	FR921116-01A
	BT (2Mbps)	9.07	8.99	0.08	
	BT (3Mbps)	9.14	9.05	0.09	
	BT-LE(1Mbps)	7.14	7.00	0.14	FR921116-01B
	BT-LE(2Mbps)	7.15	7.00	0.15	
	11a, 5.2GHz	16.65	16.50	0.15	
	11n HT20, 5.2GHz	16.72	16.70	0.02	FR921116-01E
	11n HT40, 5.2GHz	16.77	16.70	0.07	
	11ac VHT20, 5.2GHz	16.72	16.60	0.12	
	11ac VHT40, 5.2GHz	16.67	16.60	0.07	
	11ac VHT80, 5.2GHz	11.53	11.50	0.03	
	11a, 5.3GHz	16.09	15.80	0.29	
	11n HT20, 5.3GHz	16.18	16.10	0.08	
	11n HT40, 5.3GHz	15.82	15.50	0.32	
	11ac VHT20, 5.3GHz	16.16	16.00	0.16	
	11ac VHT40, 5.3GHz	15.80	15.40	0.4	
	11ac VHT80, 5.3GHz	11.12	11.00	0.12	
	11a, 5.5GHz	17.01	16.90	0.11	
	11n HT20, 5.5GHz	17.05	17.00	0.05	
	11n HT40, 5.5GHz	17.09	16.80	0.29	
	11ac VHT20, 5.5GHz	17.00	16.90	0.1	
	11ac VHT40, 5.5GHz	17.05	16.70	0.35	
	11ac VHT80, 5.5GHz	15.96	15.80	0.16	
	11a, 5.8GHz	16.67	16.50	0.17	FR921116-01F
	11n HT20, 5.8GHz	16.79	16.60	0.19	
	11n HT40, 5.8GHz	16.54	16.50	0.04	
	11ac VHT20, 5.8GHz	16.77	16.50	0.27	
	11ac VHT40, 5.8GHz	16.48	16.40	0.08	
	11ac VHT80, 5.8GHz	13.15	12.90	0.25	
	S/N of test sample	BH9400S3E8	BH92008BGE		
	Test date	2018/11/21~2018/12/11	2019/04/11~2019/04/16		
	GSM 850 (GPRS)	33.16	33.13	0.03	FG921116-01A
	GSM 850 (EDGE)	27.32	26.95	0.37	
	GSM1900(GPRS)	28.96	28.80	0.16	
	GSM1900(EDGE)	26.41	25.96	0.45	
	UMTS B5 (RMC 12.2Kbps)	23.20	22.68	0.52	
	LTE B5 (FDD - QPSK)	23.19	23.12	0.07	FG921116-01B
	LTE B12 (FDD - QPSK)	23.32	22.63	0.69	
	LTE B17 (FDD - QPSK)	22.93	22.71	0.22	
	S/N of test sample	BH9400B9E7	BH9200DGGE		
	Test date	2018/11/27	2019/04/12		



Test Item	Mode	PY7-54264H Worst Result	PY7-04605Z Worst Result	Difference (dB)	PY7-04605Z Report No.
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	58.92	59.21	-0.29	FR921116-01C
	802.11n HT20	63.05	61.91	1.14	
	BT (1Mbps)	54.23	55.85	-1.62	FR921116-01A
	BT-LE(1Mbps)	55.67	56.21	-0.54	FR921116-01B
	802.11n HT40 5.2GHz	59.02	57.45	1.57	FR921116-01E
	802.11ac VHT80, 5.3GHz	62.12	59.18	2.94	
	802.11a, 5.5GHz	65.18	63.27	1.91	
	802.11n HT20, 5.8GHz	55.93	57.82	-1.89	FR921116-01F
	S/N of test sample	BH9400SVE8 BH9400RQE8	BH92003PGE BH92005LGE		
	Test date	2018/11/30~2018/12/19	2019/04/15~2019/04/17		
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	50.83	49.12	1.71	FR921116-01C
	802.11n HT20	51.85	49.01	2.84	
	BT (1Mbps)	29.44	31.09	-1.65	FR921116-01A
	BT-LE(1Mbps)	45.37	45.52	-0.15	FR921116-01B
	802.11n HT40 5.2GHz	50.47	47.56	2.91	FR921116-01E
	802.11ac VHT80, 5.3GHz	50.95	50.84	0.11	
	S/N of test sample	BH9400SVE8 BH9400RQE8	BH92003PGE BH92005LGE		
	Test date	2018/11/30~2018/12/19	2019/04/15~2019/04/17		
Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	43.26	42.74	0.52	FR921116-01C
	802.11n HT20	43.79	43.18	0.61	
	BT (1Mbps)	44.83	43.46	1.37	FR921116-01A
	BT-LE(1Mbps)	44.32	44.00	0.32	FR921116-01B
	802.11n HT40 5.2GHz	47.25	44.64	2.61	FR921116-01E
	802.11ac VHT80, 5.3GHz	47.95	45.14	2.81	
	802.11a, 5.5GHz	49.35	47.26	2.09	
	802.11n HT20, 5.8GHz	50.94	51.09	-0.15	FR921116-01F
	S/N of test sample	BH9400SVE8 BH9400RQE8	BH92003PGE BH92005LGE		
	Test date	2018/11/30~2018/12/19	2019/04/15~2019/04/17		
WWAN					
Radiated Spurious Emission (Harmonic) (dBuV/m)	GSM 850 (GPRS)	-49.14	-47.54	-1.6	FG921116-01A
	GSM 850 (EDGE)	-51.49	-49.41	-2.08	
	GSM1900(GPRS)	-50.06	-48.27	-1.79	
	GSM1900(EDGE)	-49.98	-47.41	-2.57	
	UMTS B5 (RMC 12.2Kbps)	-54.58	-56.02	1.44	
	LTE B5 (FDD - QPSK)	-57.71	-58.28	0.57	FG921116-01B
	LTE B12 (FDD - QPSK)	-58.61	-55.71	-2.90	
	LTE B17 (FDD - QPSK)	-57.06	-59.31	2.25	
	S/N of test sample	BH9400JGE8	BH920022GE		
	Test date	2018/11/27~2018/11/28	2019/04/12~2019/04/13		



4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID	Type Grant/Permissive Change	Reference Report Title	Reference Application	Reference Report Sections
15C	DTS	Bluetooth – LE Wii-Fi	2400~2483.5	PY7-54264H	Original Grant	FCC RF Test Report	PY7-04605Z	Part 15C (FR8O2416-02B, FR8O2416-02C)
	DSS	Bluetooth	2400~2483.5	PY7-54264H	Original Grant	FCC RF Test Report	PY7-04605Z	Part 15C (FR8O2416-02A)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-54264H	Original Grant	FCC RF Test Report	PY7-04605Z	Part 15E (FR8O2416-02E, FR8O2416-02F)
Part 22.24.27	PCE	GSM /WCDMA	GSM 850/1900 WCDMA B5	PY7-54264H	Original Grant	FCC RF Test Report	PY7-04605Z	Part 22.24.27 (FG8O2416-02A)
		LTE	LTE B5/12/17	PY7-54264H	Original Grant	FCC RF Test Report	PY7-04605Z	Part 22.24.27 (FG8O2416-02B)

END of this report