



TEST REPORT

KCTL Inc. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea TEL: 82-31-285-0894 FAX: 82-505-299-8311 www.kctl.co.kr	Report No.: KR19-SRF0198-A Page (1) of (7)				
1. Client ◦ Name : Samsung Electronics Co., Ltd. ◦ Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea ◦ Date of Receipt : 2019-10-18 2. Use of Report : Class II Permissive change 3. Name of Product and Model : Smart Wearable / SM-R835F 4. Manufacturer and Country of Origin : Samsung Electronics Co., Ltd. / Korea 5. FCC ID : A3LSMR835 6. Date of Test : 2019-12-05 7. Test Standards : FCC Part 2 FCC Part 24 subpart E 8. Test Results : Refer to the test result in the test report					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center; vertical-align: middle;">Affirmation</td> <td style="width: 40%; padding: 5px;"> Tested by Name : Heesu Ahn (Signature) </td> <td style="width: 45%; padding: 5px;"> Technical Manager Name : Jaehyong Lee (Signature) </td> </tr> </table>			Affirmation	Tested by Name : Heesu Ahn (Signature)	Technical Manager Name : Jaehyong Lee (Signature)
Affirmation	Tested by Name : Heesu Ahn (Signature)	Technical Manager Name : Jaehyong Lee (Signature)			
2019-12-06					
KCTL Inc.					
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Report revision history

Date	Revision	Page No
2019-12-05	Initial report	-
2019-12-06	Updated	1, 4

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1. General information

Client : Samsung Electronics Co., Ltd.
 Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
 Manufacturer : Samsung Electronics Co., Ltd.
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 Accreditations : FCC Site Designation No: KR0040, FCC Site Registration No: 687132
 VCCI Registration No. : R-20080, G-20078, C-20059, T-20056
 Industry Canada Registration No. : 8035A
 KOLAS No.: KT231

2. Spot-check information

This report referenced from the FCC ID : A3LSMR835.

Reference FCC ID	Equipment class	Spot check bands	Report title
A3LSMR835	PCT	LTE Band 2	LTE(Part 24) report

Notes:

- For FCC ID: A3LSMR835 has been verified the performance as for LTE Band2.
- Comparison of two models, upper deviation is within 3 dB range and all test results are under FCC technical limits.
- The test procedure(s) in this report were performed in accordance as following.
 - ♦ KDB 178919 D01 v06

3. Spot-check verification data

3.1. Radiated power (EIRP) & spurious emissions

Test results

3.1.1. Radiated power (EIRP) for licensed bands

Test band	Test item	Worst mode	Measured frequency (MHz)	SM-R835U (dBm)	SM-R835F (dBm)	Deviation (dB)
LTE 2	EIRP	QPSK 1.4 MHz	1 909.30	20.72	17.82	2.90

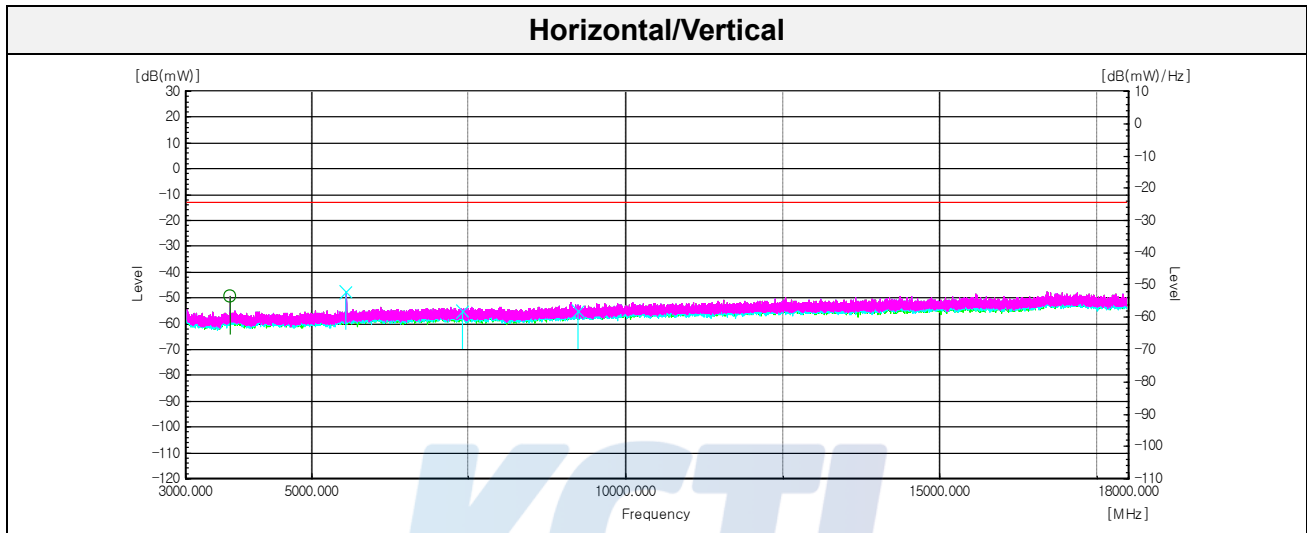
3.1.2. Spurious emissions for licensed bands

Test band	Test item	Worst mode	Measured frequency (MHz)	SM-R835U (dBm)	SM-R835F (dBm)	Deviation (dB)
LTE 2	RSE	QPSK 1.4 MHz	5 550.75	-45.80	-47.80	2.00

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3.2. Test results**3.2.1 Licensed bands**

Test mode : LTE Band 2
 Frequency (MHz) : 1 909.3
 Bandwidth (MHz) : 1.4



Mode	Frequency	Pol.	Antenna Gain	Cable loss	Substitute Level	Level	Limit	Margin
	[MHz]	[V/H]	[dBi]	[dB]	[dBm]	[dBm]	[dBm]	[dB]
QPSK	5 552.50	V	10.60	10.05	-48.35	-47.80	-13.00	34.80

Note.

1. Limit Calculation(dBm)= 43 + 10log(P_{Watts})
2. Result level(dBm) = Substitute Level(dBm) + Antenna gain(dBi) – Cable loss (dB)

4. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Horn Antenna	ETS.lindgren	3117	00161083	20.09.18
Horn Antenna	ETS.lindgren	3117	161225	20.05.22
High pass Filter	Wainwright Instruments GmbH	WHKX3.0/18G-12SS	44	20.01.25
Attenuator	API Inmet	40AH2W-10	12	20.05.15
Amplifier	L-3 Narda-MITEQ	AMF-7D-01001800-22-10P	2031196	20.02.21
Spectrum Analyzer	AGILENT	N9040B	MY57010132	20.07.31
Signal Generator	R&S	SMB100A	176206	20.01.25
Wideband Radio Communication Tester	R & S	CMW500	141780	20.04.18
Antenna Mast	MATURO	EAS 1.5	042/8941211	N/A
Antenna Mast	MATURO	EAS 1.5	043/8941211	N/A
Turn Table	MATURO	TT 0.8 PF	041/8941211	N/A
Cable Assembly	Radiall	R286303620	1649.241	-
Cable Assembly	Radiall	TESTPRO 3	-	-

End of test report