APPENDIX B: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity ε can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\varepsilon_r\varepsilon_0}{\left[\ln(b/a)\right]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp\left[-j\omega r(\mu_0\varepsilon_r\varepsilon_0)^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

where Y is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to

source and observation points, respectively, $r^2 = \rho^2 + {\rho'}^2 - 2\rho\rho' \cos\phi'$, ω is the angular frequency, and $j = \sqrt{-1}$.

3 Composition / Information on ingredients

3.2 Mixtures

©

Description: Aqueous solution with surfactants and inhibitors eclarable, or hazardous components:

Declarable, of flazardous components.								
CAS: 107-21-1	Ethanediol	>1.0-4.9%						
EINECS: 203-473-3	STOT RE 2, H373;							
Reg.nr.: 01-2119456816-28-0000	Acute Tox. 4, H302							
CAS: 68608-26-4	Sodium petroleum sulfonate	< 2.9%						
EINECS: 271-781-5	Eye Irrit. 2, H319							
Reg.nr.: 01-2119527859-22-0000								
CAS: 107-41-5	Hexylene Glycol / 2-Methyl-pentane-2,4-diol	< 2.9%						
EINECS: 203-489-0	Skin Irrit. 2, H315; Eye Irrit. 2, H319							
Reg.nr.: 01-2119539582-35-0000								
CAS: 68920-66-1	Alkoxylated alcohol, > C ₁₆	< 2.0%						
NLP: 500-236-9	Aquatic Chronic 2, H411;							
Reg.nr.: 01-2119489407-26-0000	Skin Irrit. 2, H315; Eye Irrit. 2, H319							
	· · · · ·							

Additional information:

For the wording of the listed risk phrases refer to section 16. Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential. The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

Figure B -1

Note: Liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

	FCC ID: A3LSMG996U	PRT 2 RF EXPOSURE EVALUATION REPORT	SAMSUNG	Approved by: Quality Manager
	Test Dates:	DUT Type:		APPENDIX B:
	10/22/2020 - 12/05/2020	Portable Handset		Page 1 of 3
9202	0 PCTEST			REV 1.0 04/06/2020

Schmid & Partner Engineering AG S peag

Zeughausstrasse 43, 8004 Zurich, Switzerland Phone +41 44 245 9700, Fax +41 44 245 9779 info@speag.com, http://www.speag.com

Measurement Certificate / Material Test

Item Name	Body Tissue Simulating Liquid (MBBL600-6000V6)
Product No.	SL AAM U16 BC (Batch: 181029-1)
Manufacturer	SPEAG

Measurement Method TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters Target parameters as defined in the KDB 865664 compliance standard.

Ambient Condi	ion 22°C ; 30% humidity	
TSL Temperate	ire 22°C	
Test Date	30-Oct-18	
Operator	CL	
Additional Info	ormation	
TSL Density	No.	
TSL Heat-capa		

5500

5500

-0.4 -8.8 -0.5 -8.8 -1.8 -0.6 -1.9 -2.0 -0.4 -0.2 -2.2 0.8 -2.3 1.3 -2.5 1.8

-2.6

Results

Т

	Measu	ured		Targe	et	Diff.to Tar	get [%]	1000					
[MHz]	e'	e"	sigma	eps	sigma	∆-eps	∆-sigma	15.0	1000		55 510	States 1.2	125
800	55.1	21.3	0.95	55.3	0.97	-0.4	-2.1	10.0		100	200		Constant.
825	55.1	20.8	0.96	55.2	0.98	-0.3	-2.0		120.00				
835	55.1	20.6	0.96	55.1	0.99	0.0	-2.5	≈ 5.0					
850	55.1	20.4	0.96	55.2	0.99	-0.1	-3.0	tivit) 0.0	-	-	E SPI	1	1
900	55.0	19.7	0.98	55.0	1.05	0.0	-6.7	0.0 Fermittivity					
1400	54.2	15.6	1.22	54.1	1.28	0.2	-4.7	a -5.0					
1450	54.1	15.4	1.24	54.0	1.30	0.2	-4.6	a -10.0					
1500	54.1	15.3	1.27	53.9	1.33	0.3	-4.5		18.20				
1550	54.0	15.1	1.30	53.9	1.36	0.2	-4.4	-15.0	500	1500	2500	3500	4500
1600	53.9	15.0	1.33	53.8	1.39	0.2	-4.3		000	1000		ency MHz	4500
1625	53.9	14.9	1.35	53.8	1.41	0.3	-4.3						
1640	53.9	14.9	1.36	53.7	1.42	0.3	-4.2						
1650	53.8	14.9	1.36	53.7	1.43	0.2	-4.9	15.0					
1700	53.8	14.8	1.40	53.6	1.46	0.4	-4.1	10.0	1000				
1750	53.7	14.7	1.43	53.4	1.49	0.5	-4.0	20 - 0	100	S. Piay			
1800	53.7	14.6	1.46	53.3	1.52	0.8	-3.9	6 5.0	1200		1		
1810	53.7	14.6	1.47	53.3	1.52	0.8	-3.3	0.0 0.0 0.0 0.0-5.0	1100	- 1	1		
1825	53.7	14.6	1.48	53.3	1.52	0.8	-2.6	Con co	Λ	2	1		1
1850	53.6	14.5	1.50	53.3	1.52	0.6	-1.3	05.0	16	/	•		/
1900	53.5	14.5	1.53	53.3	1.52	0.4	0.7	-10.0	-		10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	~	
1950	53.5	14.5	1.57	53.3	1.52	0.4	3.3	45.0					
2000	53.4	14.4	1.60	53.3	1.52	0.2	5.3	-15.0	500	1500	2500	3500	4500
2050	53.4	14.4	1.64	53.2	1.57	0.3	4.5			Conservation of Conservation o	Frequer	ncy MHz	
2100	53.3	14.4	1.68	53.2	1.62	0.2	3.7						
2150	53.3	14.4	1.72	53.1	1.66	0.4	3.6						
2200	53.2	14.4	1.76	53.0	1.71	0.3	2.9	3500	51.1	15.5	3.02	51.3	3.31
2250	53.1	14.4	1.81	53.0	1.76	0.2	2.8	3700	50.8	15.7	3.24	51.1	3.55
2300	53.1	14.4	1.85	52.9	1.81	0.4	2.2	5200	48.1	18.2	5.27	49.0	5.30
2350	53.0	14.5	1.89	52.8	1.85	0.3	2.2	5250	48.0	18.3	5.34	49.0	5.36
2400	52.9	14.5	1.94	52.8	1.90	0.2	2.1	5300	47.9	18.4	5.41	48.9	5.42
2450	52.9	14.5	1.98	52.7	1.95	0.4	1.5	5500	47.5	18.6	5.70	48.6	5.65
2500	52.8	14.6	2.03	52.6	2.02	0.3	0.5	5600	47.3	18.8	5.84	48.5	5.77
	52.7	14.6	2.07	52.6	2.09	0.2	-1.0	5700	47.1	18.9	5.99	48.3	5.88
2550													

TSL Dielectric Parameters

Figure B-2 600 – 5800 MHz Body Tissue Equivalent Matter

	FCC ID: A3LSMG996U	PCTEST: PART 2 RF EXPOSURE EVALUATION REPORT	SAMSUNG	Approved by: Quality Manager
	Test Dates:	DUT Type:		APPENDIX B:
	10/22/2020 - 12/05/2020	Portable Handset		Page 2 of 3
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	<u> </u>	<u>s p</u>	<u>spe</u>	<u>spea</u>

Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HBBL600-10000V6)	
Product No.	SL AAH U16 BC (Batch: 181031-2)	
Manufacturer	SPEAG	

Measurement Method TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition		
Ambient Condition	22°C ; 30% humidity	
TSL Temperature		
Test Date	31-Oct-18	
Operator	CL	
Additional Inform	ation	
TSL Density		
TSL Heat-capacity		

Results

	Meas	ured		Targe	t	Diff.to Targ	get [%]	15.0							
f [MHz]	e'	e"	sigma	eps	sigma	∆-eps	∆-sigma	15.0		11952					10
800	43.8	20.5	0.91	41.7	0.90	5.1	1.4	10.0)				Di se la		
825	43.8	20.1	0.92	41.6	0.91	5.3	1.5	× 5.0		-					
835	43.8	19.9	0.93	41.5	0.91	5.4	2.0	11 0.0	,			~			
850	43.7	19.7	0.93	41.5	0.92	5.3	1.5	E	200						
900	43.5	18.9	0.95	41.5	0.97	4.8	-2.1	a5.0 0-10.0							-
1400	42.5	15.0	1.17	40.6	1.18	4.7	-0.8	<u>0</u> 10.0							-
1450	42.5	14.8	1.19	40.5	1.20	4.9	-0.8	-15.0		13.511	1	1			1
1600	42.2	14.3	1.27	40.3	1.28	4.7	-1.1		500 15	00 2500	3500 4 Freque	500 5500 ancy MHz	6500 7500	0 8500 9	9500
1625	42.2	14.2	1.29	40.3	1.30	4.8	-0.7	45.0							-
1640	42.2	14.2	1.30	40.3	1.31	4.8	-0.5	15.0			45.24			1	
1650	42.1	14.2	1.30	40.2	1.31	4.6	-1.0	10.0	195001						
1700	42.1	14.0	1.33	40.2	1.34	4.8	-0.9		-	Λ					
1750	42.0	13.9	1.36	40.1	1.37	4.8	-0.8	0.0 Inctiv		$\boldsymbol{\Lambda}$		-	-	-	_
1800	41.9	13.9	1.39	40.0	1.40	4.7	-0.7	0.0 0.0 0.0 0.0	p	- /		/			1
							0.0		100000		~				
1810	41.9	13.8	1.40	40.0	1.40	4.7	0.0	8	A CONTRACTOR OF						1990
1810 1825	41.9 41.9	13.8 13.8	1.40 1.41	40.0	1.40 1.40	4.7	0.0	a10.0							
1825 1850	41.9 41.8	1000	1000000				12,122,11	-15.0		0.0500	0500.45				
	41.9	13.8	1.41	40.0	1.40	4.7	0.7	-15.0	500 150	10 2500	3500 45 Freque	00 5500 e	3500 7500	8500 9	500
1825 1850 1900 1950	41.9 41.8	13.8 13.8	1.41 1.42	40.0 40.0	1.40 1.40	4.7 4.5	0.7 1.4	-15.0	500 150 36.3	0 2500 15.8	3500 45 Freque	00 5500 6 ancy MHz 36.0	3500 7500 4.66	8500 9	
1825 1850 1900 1950 2000	41.9 41.8 41.8 41.7 41.6	13.8 13.8 13.7	1.41 1.42 1.45	40.0 40.0 40.0	1.40 1.40 1.40	4.7 4.5 4.5	0.7 1.4 3.6	-15.0 £			Freque	ancy MHz			-1
1825 1850 1900 1950 2000 2050	41.9 41.8 41.8 41.7	13.8 13.8 13.7 13.7	1.41 1.42 1.45 1.48	40.0 40.0 40.0 40.0	1.40 1.40 1.40 1.40	4.7 4.5 4.5 4.3	0.7 1.4 3.6 5.7	-15.0 5200	36.3	15.8	4.57	36.0	4.66	0.9	500 -1 -1.
1825 1850 1900 1950 2000 2050	41.9 41.8 41.8 41.7 41.6	13.8 13.8 13.7 13.7 13.6	1.41 1.42 1.45 1.48 1.51	40.0 40.0 40.0 40.0 40.0	1.40 1.40 1.40 1.40 1.40	4.7 4.5 4.3 4.0	0.7 1.4 3.6 5.7 7.9	-15.0 5200 5250	36.3 36.2	15.8 15.9	4.57 4.63	36.0 35.9	4.66 4.71	0.9 0.8	-1 -1 -1
1825 1850 1900 1950 2000 2050 2100 2150	41.9 41.8 41.7 41.6 41.6	13.8 13.8 13.7 13.7 13.6 13.6	1.41 1.42 1.45 1.48 1.51 1.55	40.0 40.0 40.0 40.0 40.0 39.9	1.40 1.40 1.40 1.40 1.40 1.44	4.7 4.5 4.3 4.0 4.2	0.7 1.4 3.6 5.7 7.9 7.3	-15.0 5200 5250 5300	36.3 36.2 36.1	15.8 15.9 15.9	4.57 4.63 4.69	36.0 35.9 35.9	4.66 4.71 4.76	0.9 0.8 0.7	-1 -1 -1 -0
1825 1850 1900 2000 2000 2100 2100 2150 2200	41.9 41.8 41.7 41.6 41.6 41.6 41.5	13.8 13.7 13.7 13.6 13.6 13.5	1.41 1.42 1.45 1.48 1.51 1.55 1.58	40.0 40.0 40.0 40.0 39.9 39.8	1.40 1.40 1.40 1.40 1.40 1.44 1.49	4.7 4.5 4.3 4.0 4.2 4.2	0.7 1.4 3.6 5.7 7.9 7.3 6.1	-15.0 5200 5250 5300 5500	36.3 36.2 36.1 35.8	15.8 15.9 15.9 16.1	4.57 4.63 4.69 4.92	36.0 35.9 35.9 35.6	4.66 4.71 4.76 4.96	0.9 0.8 0.7 0.3	-1 -1 -1 -0 -0
1825 1850 1900 2000 2000 2100 2100 2150 2200 2250	41.9 41.8 41.8 41.7 41.6 41.6 41.5 41.4	13.8 13.7 13.7 13.6 13.6 13.5 13.5	1.41 1.42 1.45 1.48 1.51 1.55 1.58 1.62	40.0 40.0 40.0 40.0 39.9 39.8 39.7	1.40 1.40 1.40 1.40 1.40 1.44 1.49 1.53	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7	-15.0 5200 5250 5300 5500 5600	36.3 36.2 36.1 35.8 35.6	15.8 15.9 15.9 16.1 16.2	4.57 4.63 4.69 4.92 5.04	36.0 35.9 35.9 35.6 35.5	4.66 4.71 4.76 4.96 5.07	0.9 0.8 0.7 0.3 0.1	-1 -1 -1
1825 1850 1900 2000 2050 2100 2150 2200 2250 2250	41.9 41.8 41.7 41.6 41.6 41.5 41.4 41.4 41.3 41.2	13.8 13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.48 1.51 1.55 1.58 1.62 1.65 1.69 1.72	40.0 40.0 40.0 40.0 39.9 39.8 39.7 39.6	1.40 1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6	-15.0 5200 5250 5300 5500 5600 5700	36.3 36.2 36.1 35.8 35.6 35.4	15.8 15.9 15.9 16.1 16.2 16.2	Freque 4.57 4.63 4.69 4.92 5.04 5.15	36.0 35.9 35.9 35.6 35.5 35.4	4.66 4.71 4.76 4.96 5.07 5.17	0.9 0.8 0.7 0.3 0.1 0.0	-1 -1 -0 -0 -0
1825 1850 1900 2000 2050 2100 2150 2200 2250 2300 2350	41.9 41.8 41.7 41.6 41.6 41.5 41.4 41.4 41.4 41.3 41.2 41.1	13.8 13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.51 1.55 1.58 1.62 1.65 1.69 1.72 1.76	40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.6 39.5 39.4	1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67 1.71	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.2 4.4 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2	-15.0 5200 5250 5300 5500 5600 5700 5800	36.3 36.2 36.1 35.8 35.6 35.4 35.2	15.8 15.9 15.9 16.1 16.2 16.2 16.3	Freque 4.57 4.63 4.69 4.92 5.04 5.15 5.27	36.0 35.9 35.9 35.6 35.5 35.4 35.3	4.66 4.71 4.76 4.96 5.07 5.17 5.27	0.9 0.8 0.7 0.3 0.1 0.0 -0.2	-1 -1 -0 -0 -0 0. 0.
1825 1850 1900 2000 2050 2150 2250 2250 2350 2350 2400	41.9 41.8 41.7 41.6 41.6 41.5 41.4 41.4 41.3 41.2	13.8 13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.48 1.51 1.55 1.58 1.62 1.65 1.69 1.72	40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.6 39.5	1.40 1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.4 4.4 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2 3.2	-15.0 g 5200 5250 5300 5500 5500 5600 5700 5800 6000	36.3 36.2 36.1 35.8 35.6 35.4 35.2 34.9	15.8 15.9 15.9 16.1 16.2 16.2 16.3 16.5	4.57 4.63 4.69 4.92 5.04 5.15 5.27 5.50	36.0 35.9 35.9 35.6 35.5 35.4 35.3 35.1	4.66 4.71 4.76 4.96 5.07 5.17 5.27 5.48	0.9 0.8 0.7 0.3 0.1 0.0 -0.2 -0.6	-1 -1 -0 -0 -0 0. 0. 0.
1825 1850 1900 2000 2000 2100 2150 2200 2250 2300 2350 2400 2450	41.9 41.8 41.7 41.6 41.6 41.5 41.4 41.4 41.4 41.3 41.2 41.1 41.1 41.1	13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.51 1.55 1.58 1.62 1.65 1.69 1.72 1.76	40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.6 39.5 39.4	1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67 1.71	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.4 4.4 4.4 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2 3.2 2.9	-15.0 5 5200 5250 5300 5500 5600 5700 5800 6000 6500	36.3 36.2 36.1 35.8 35.6 35.4 35.2 34.9 34.0	15.8 15.9 15.9 16.1 16.2 16.2 16.3 16.5 16.9	Freque 4.57 4.63 4.69 4.92 5.04 5.15 5.27 5.50 6.12	36.0 35.9 35.9 35.6 35.5 35.4 35.3 35.1 34.5	4.66 4.71 4.76 4.96 5.07 5.17 5.27 5.48 6.07	0.9 0.8 0.7 0.3 0.1 0.0 -0.2 -0.6 -1.4	-1 -1 -0 -0 -0 0. 0. 0. 0. 1.
1825 1850 1900 2000 2050 2100 2150 2200 2250 2300 2350 2400 2400 2450	41.9 41.8 41.7 41.6 41.6 41.5 41.4 41.4 41.3 41.2 41.1 41.1 41.0 40.9	13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.48 1.51 1.55 1.58 1.62 1.65 1.69 1.72 1.76 1.80	40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.6 39.6 39.5 39.4 39.3	1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67 1.71 1.76	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.4 4.4 4.4 4.4 4.6	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2 3.2 2.9 2.5	-15.0 g 5200 5250 5300 5500 5500 5500 5500 5600 6000 6500 7000	36.3 36.2 36.1 35.8 35.6 35.4 35.2 34.9 34.0 33.1	15.8 15.9 16.1 16.2 16.3 16.5 16.9	4.57 4.63 4.69 4.92 5.04 5.15 5.27 5.50 6.12 6.74	ancy MHz 36.0 35.9 35.9 35.6 35.5 35.4 35.3 35.1 34.5 33.9	4.66 4.71 4.76 5.07 5.17 5.27 5.48 6.07 6.65	0.9 0.8 0.7 0.3 0.1 0.0 -0.2 -0.6 -1.4 -2.3	-1 -1 -0 -0 -0 -0 .0 .0 .0 .0 .1 .1.
1825 1850 1900 1950 2000 2010 2100 2100 2200 2300 2300 2400 2500	41.9 41.8 41.7 41.6 41.5 41.4 41.5 41.4 41.3 41.2 41.1 41.1 41.0 40.9 40.8	13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.51 1.55 1.58 1.62 1.65 1.69 1.72 1.76 1.80 1.84 1.88	40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.6 39.6 39.5 39.4 39.3 39.2	1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67 1.71 1.76 1.80	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.2 4.4 4.4 4.4 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2 3.2 2.9 2.5 2.2	-15.0 5200 5250 5300 5600 5600 5700 5800 6000 6500 7000 7500	36.3 36.2 36.1 35.8 35.6 35.4 35.2 34.9 34.0 33.1 32.2	15.8 15.9 16.1 16.2 16.3 16.5 16.9 17.3 17.6	Freque 4.57 4.63 4.69 4.92 5.04 5.15 5.27 5.50 6.12 6.74 7.36	36.0 35.9 35.9 35.6 35.5 35.4 35.3 35.1 34.5 33.9 33.3	4.66 4.71 4.76 5.07 5.17 5.27 5.48 6.07 6.65 7.24	0.9 0.8 0.7 0.3 0.1 0.0 -0.2 -0.6 -1.4 -2.3 -3.2	-1 -1 -0 -0 -0 0. 0. 0. 1. 1. 1.
1825 1850 1900 1950 2000 2010 2100 2100 2200 2300 2300 2400 2500	41.9 41.8 41.7 41.6 41.6 41.5 41.4 41.4 41.3 41.2 41.1 41.1 41.0 40.9	13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.48 1.51 1.55 1.58 1.62 1.65 1.69 1.72 1.76 1.80 1.84 1.88 1.92	40.0 40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.6 39.5 39.4 39.3 39.2 39.2	1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67 1.71 1.76 1.80 1.85	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.4 4.4 4.4 4.4 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2 3.2 2.9 2.5 2.2 2.2 1.4	-15.0 5200 5250 5300 5500 5600 5700 5800 6000 6500 7000 7500 8000	36.3 36.2 36.1 35.8 35.6 35.4 35.2 34.9 34.0 33.1 32.2 31.4	15.8 15.9 15.9 16.1 16.2 16.2 16.3 16.5 16.9 17.3 17.6 17.9	Freque 4.57 4.63 4.92 5.04 5.15 5.27 5.50 6.12 6.74 7.36 7.97	36.0 35.9 35.9 35.6 35.5 35.4 35.3 35.1 34.5 33.9 33.3 32.7	4.66 4.71 4.76 5.07 5.17 5.27 5.48 6.07 6.65 7.24 7.84	0.9 0.8 0.7 0.3 0.1 0.0 -0.2 -0.6 -1.4 -2.3 -3.2 -4.1	-1 -1 -0 -0 -0 -0 0. 0. 1. 1. 1. 1.
1825 1850 1900 2000 2000 2100 2100 2150 2200 2250	41.9 41.8 41.7 41.6 41.5 41.4 41.5 41.4 41.3 41.2 41.1 41.1 41.0 40.9 40.8	13.8 13.7 13.7 13.6 13.6 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	1.41 1.42 1.45 1.45 1.45 1.51 1.55 1.58 1.62 1.65 1.69 1.72 1.76 1.84 1.84 1.92 1.92	40.0 40.0 40.0 40.0 39.9 39.8 39.7 39.6 39.7 39.6 39.5 39.4 39.3 39.2 39.2 39.2	1.40 1.40 1.40 1.40 1.44 1.49 1.53 1.58 1.62 1.67 1.71 1.76 1.80 1.85 1.91	4.7 4.5 4.3 4.0 4.2 4.2 4.2 4.2 4.2 4.4 4.4 4.4 4.4 4.6 4.6 4.5 4.4	0.7 1.4 3.6 5.7 7.9 7.3 6.1 5.7 4.6 4.2 3.2 2.9 2.5 2.2 1.4 0.6	-15.0 5250 5300 5500 5500 5500 5500 6000 6500 7000 7500 8000 8500	36.3 36.2 36.1 35.8 35.6 35.4 35.2 34.9 34.0 33.1 32.2 31.4 30.5	15.8 15.9 15.9 16.1 16.2 16.2 16.3 16.5 16.9 17.3 17.6 17.9 18.2	Freque 4.57 4.63 4.69 5.04 5.15 5.27 5.50 6.12 6.74 7.36 7.97 8.59	36.0 35.9 35.9 35.6 35.5 35.4 35.3 35.1 34.5 33.9 33.3 32.7 32.1	4.66 4.71 4.76 4.96 5.07 5.17 5.27 5.48 6.07 6.65 7.24 7.84 8.45	0.9 0.8 0.7 0.3 0.1 0.0 -0.2 -0.6 -1.4 -2.3 -3.2 -4.1 -5.0	-1 -1 -0 -0 -0 0.

TSL Dielectric Parameters

Figure B-3 600 – 5800 MHz Head Tissue Equivalent Matter

	FCC ID: A3LSMG996U	PRT 2 RF EXPOSURE EVALUATION REPORT	SAMSUNG	Approved by: Quality Manager
	Test Dates:	DUT Type:		APPENDIX B:
	10/22/2020 - 12/05/2020	Portable Handset		Page 3 of 3
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