

Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Accreditation No.: SCS 0108

Client

TÜV SÜD

Fareham, United Kingdom

Certificate No.

EX-7809 May23

CALIBRATION CERTIFICATE

Object EX3DV4 - SN:7809

Calibration procedure(s) QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6,

QA CAL-25.v8

Calibration procedure for dosimetric E-field probes

Calibration date May 03, 2023

This callbration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	30-Mar-23 (No. 217-03804/03805)	Mar-24
Power sensor NRP-Z91	SN: 103244	30-Mar-23 (No. 217-03804)	Mar-24
OCP DAK-3.5 (weighted)	SN: 1249	20-Oct-22 (OCP-DAK3.5-1249 Oct22)	Oct-23
OCP DAK-12	SN: 1016	20-Oct-22 (OCP-DAK12-1016 Oct22)	Oct-23
Reference 20 dB Attenuator	SN: CC2552 (20x)	30-Mar-23 (No. 217-03809)	Mar-24
DAE4	SN: 660	16-Mar-23 (No. DAE4-660_Mar23)	Mar-24
Reference Probe ES3DV2	SN: 3013	06-Jan-23 (No. ES3-3013 Jan23)	Jan-24

		Scheduled Check
SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24
SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24
	SN: MY41498087 SN: 000110210 SN: US3642U01700	SN: MY41498087 06-Apr-16 (in house check Jun-22) SN: 000110210 06-Apr-16 (in house check Jun-22) SN: US3642U01700 04-Aug-99 (in house check Jun-22)

Name Function

Calibrated by Aldonia Georgiadou Laboratory Technician

Approved by Sven Kühn Technical Manager

Issued: May 03, 2023

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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Document Number: 75958013-48 Issue: 01 COMMERCIAL-IN-CONFIDENCE



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Glossary

TSL tissue simulating liquid
NORMx,y,z sensitivity in free space
ConvF sensitivity in TSL / NORMx,y,z
DCP diode compression point

CF crest factor (1/duty_cycle) of the RF signal A, B, C, D modulation dependent linearization parameters

Polarization φ φ rotation around probe axis

Polarization θ or rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is

normal to probe axis

Connector Angle Information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- . PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of
 power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum
 calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ±50 MHz to ±100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis).
 No tolerance required.
- · Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

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EX30V4 - \$N:7809 May 03, 2023

Parameters of Probe: EX3DV4 - SN:7809

Basic Calibration Parameters

	Sensor X	Sonsor Y	Sensor Z	Une (k = 2)
Norm $(\mu V/(V/r^2)^2)^{-K}$	0.66	0,71	3.67	£10.1%
_nos(wΛI _B	104.0	103.0	104.0	14.7%

Calibration Results for Modulation Response

UID	Communication System Name		ΔB	B dB√μV	. C	D dB	VR mV	Max dev.	Max Unc ^E <i>k</i> = 2
0	CW	· X	0.00	0.00	1.00	5,05	131.0	±2.9%	±4.7%
	:	. Y	0.00	0.00	100		T133.3	•	
	i	ż	0.00	0.00	1.00		131.9	-	
10352	Polse Waveform (200Hz, 10%)	' <u>X</u>	1.38	60.00	5 86	10.00	GC 0	±3.0%	-9.6%
		Y	.60	61 03	6.53		60.0		
	.]	[7]	:.38	GO 30	6.01		60.0		
10353	Pulse Wavelorm (200Hz, 20%)] X [0.83	60 00	4.66	6.99	80.0	±3.2%	±9.6%
	•	[97]	Đ.84	60 00	5.02		0.08	•	
		z	0.83	60.DD	4.87		80.0	-	
10354	Pulse Wavelorm (2001z, 40%)	[X]	0.01	127.88	[0.11]	3.98	95.0	₹2.7%	±9.6%
		į Υ'	0.47	60.00	3.95		95.D	1	
			0.08	131 99	0.02		95 Ú	i	
10355	Pulse Waveform (200Hz, 60%)	х	4.14	759 99	3.87	2.22	120.0	÷1.5%	±9.6%
	:	Υ .	0.32	50 .00	3.21		120 0	į	
		Z:		159.97	11.62		120 D	i	
10387	OPSK Wavetorm, 1 MHz	×.		63.91	12.59	1.00	T50 D	±3.5%	±9.6%
	:	-γ.	0.67	6B.Q1	15.32		150.0	i	
		. Z	0.48	63.21	11.95		1 50°0		
10358	QPSK Waveform, 10 MHz	Χ,	1.32	56 35	14,15	0.00	150.0	±0.9%	£9.6%
		Υ.	1.53	68.70	15.44		150.D	1	
		7	1.27	65.78	13.79		650.U	i	
10336	64-OAM Waveform, 100 kHz	Х.	1.66	64.51	15.95	3.01	#S0.0	÷1.1%	±9.6%
		Υ.	1.84	86 07	16 64		150.0	ì	
		-z-i	1.67	64.56	15.96		150 0	i	
10399	64-QAM Wavelorm, 40 MHz	X	2.77	66.29	15.14	0.00	150 0	=1.9%	19.6%
		Υ:		67.16	15.65		150.0	:	_
		2.3	2.74	56 10	14.99		150.0		
104:4	WLAN CCOF, 64-QAM, 40 MHz	` x	3.86	66 5 1	15.53	0.00	150.0	3.3%	±9.6%
		Y	3.81	ББ.54	15.58		150.0	1	
		Z	3.84	66.37	15.43		150.0	1	

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement on the log by the coverage. factor k=2, which for a normal distribution corresponds to a deverage probability of approximately 95%.

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^{*} The uncertainties at Norm X YZ do not affect the E² if ele uncertainty inside TSU (see Pages 5 and 6).

Uncertainty in parameter uncertainty for maximum specified field strength.

Eitheoriality is determined using the max, decipion from Insian response applying regrangular distribution and is expressed for the equate of the hald value.

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Parameters of Probe: EX3DV4 - SN:7809

Sensor Model Parameters

 j.	C1 1F	* C2	φ-1	T1 ms V ⁻²	* #2 mgV-1	T3 "	T4 V ⁻²	Τ5 V· 1	T6
_ *	94	67 60	33.41	3.89	םט.ט	4.90	0.41	0.02	1.00
Уİ	R R	52.63	32.67	5.10	0.00	4.90	0.71	0.00	1.00
z į	9.5	68.58	33.23	4.33	0.00	4.93	. 0.52	0.01	1.00

Other Probe Parameters

Sensor Arrangement	- Triangular
Connector Angle	R3.81
Mechanical Surface Defection Mode	cnabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mir
Probe Body Diameter	. 10mm
Tip Length	9mit
Tip D'arroler	2.5mm
Probe To to Sensor X Call pration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tro to Sensor Z Calibration Point	1 mit
Recommended Measurement Distance from Surface	1.4mm

Note: Measurement distance from surface can be increased to 3–4 mm for an Arma Sono yan



EX3DV4 - SN:/809 May 03, 2023-

Parameters of Probe: EX3DV4 - SN:7809

Calibration Parameter Determined in Head Tissue Simulating Media

f (MMz) ^C	Relative Permit(ivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depih ^G (mm)	Unc (k = 2)
128	\$2.8	0.76	12.88	12.88	12.88	0 00	1.25	:13.39
450	43.5	0.87	11,04	11.04	11.04	0.16	1.3G	±13.3%
750	41.9	0.89	9.50	9.61	9.18	0.36	1.27	±12.0%
835	41.5	0.90	934	9.35	9.18	0.36	1.27	±12.0%
900	41,5	0.97	9.41	9.53	9.29	0.36	1.27	±12.0%
1300	40.8	1.14	8.2\$	8.18	8 09	0.48	1.2/	±12.03
1450	40.5	1.20	8.10	8.01	7.88	0.46	1.27	±12.09
1640	40.2	1.31	8.05	5.02	7.78	0.43	1.27	±12.03
1750	40.1	1 37	8.53	8.47	8.28	0.26	1.27	+12.03
1810	40.0	1 40	8.30	\$.28	8.12	0 59	1.27	+12.0%
1900	40.0	1 40	8.17	8.11	7.99	0.29	1 27	+12.0%
2000	4C.0	: 1.40	7.90	7.85	7.74	D.28	1 27	±12.0%
2100	. 39.8	1.49	7.81	7.77	7.63	0.29	1.27	±12 0%
5300	39.5	1.67	7.53	7.48	7.38	0.30	12/	±12.00
2450	39 2	1.80	7.22	7.17	7.03	0.29	1.27	=12.0%
2500	39.0	1.98	7.33	7 29	7.20	0.27	1 27	±1201
3300	38.2	2.71	ŝ. 99	7.03	6.87	0.33	1 27	+14 0°
3500	37.9	2.91	6.85	6.88	573	0.34	1.27	±14.09
3700	37.7	3.12	8.74	6./6	5.63	0.34	1 27	±14.0%
4100	37.2	3.53	6.57	6.57	6.48	0.35	1 27	±14.0%
5200	35.0	4.66	5.53	5.48	5.43	5.34	1 60	3.14.09
5300	35.9	4.75	5.27	5.27	5.27	9.36	1 55	±14.09
5500	35.6	4.96	4.84	4.82	4.84	0.39	151	±14-0%
5600	35.5	5.07	4.75	471	4.62	0.39	1 67	±14.03
5800	35.3	5.27	4.63	4 79	4.71	0.38	1 78	±140%

C Prequency volidity above 300 MHz of ±100 MHz only applies for DASY V4.4 and higher (see Page 2), eisert is restricted to ±50 MHz. The uncertainty is the RSS of the ConvP uncertainty at dail bration frequency and the uncertainty for the indicated frequency band. Frequency varidity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvP assessed at 5 MHz is 4-9 MHz, and ConvP assessed at 13 MHz is 8-19 MHz. Above 5 Ghz frequency or thy can be extended to ±110 MHz.

The profession do stricted using listue simulating rounds (132) that deviate for a 2nd in by Rss (hun ±5% from the target values (typically better than ±3%) and are valid for TSU with deviations from the target of less than ±5% are used, the calibration uncertainties are 1.1 1% for 3 -6.5-42.

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Alpha/Depth are determined during calibration. SPEAG warrants that the tempining doviation due to the boundary offect after compensation is always less. than 11% for frequencies below 3 GHz and below 4.2% for frequencies between 3-6 GHz all any distance larger (han has the probatile dremater from the boundary.



Parameters of Probe: EX3DV4 - SN:7809

Calibration Parameter Determined in Head Tissue Simulating Media

r (MHz) ^G	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	CanvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (F = 2)
8500	34.5	6.07	5.11	5.97	5.03	0.20	2.00	±18.6%

G Frequency validity at 6.5 GHz K +600/4700 MHz, and ±700 MHz at or above 7 GHz. The uncortainty is the RSS of the ConvE uncertainty at catheabon

Vecucency and the innertainty for the indicated fraucierry band.

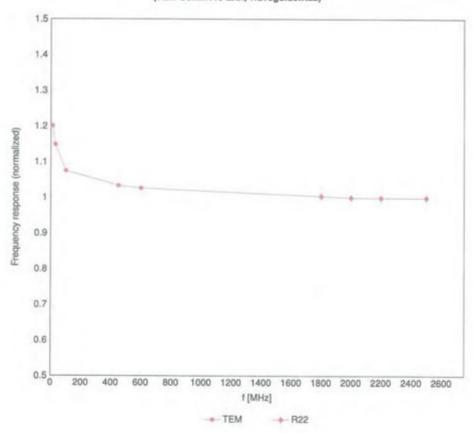
The process are dailbrated using lissue simulating inputs (TSL) that demand for a said or by less than ±10ts from the target values (typically better than ±6%) and are valid for TSL with devalions of up to ±10ts.

G Alpha/Depth are determined during so bration. SPEAG warrants that the remaining deviation due to the boundary affect other compensation is always loss. than a 1% for frequencies below 3 GHz; below 22% for frequences between 3-6 GHz, and below ±4% for frequencies between 6-10 GHz at any cistance larger than half the probe tip drameter from the boundary



Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide:R22)



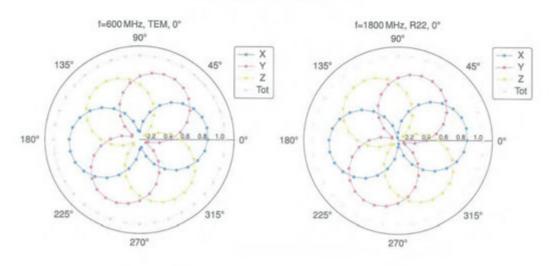
Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

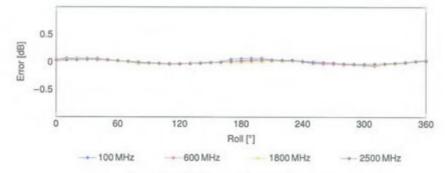
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Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$



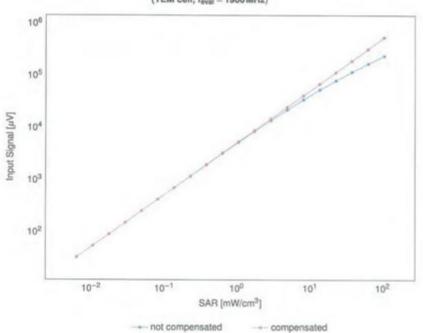


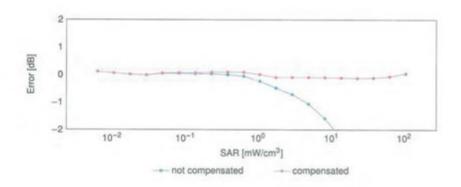
Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)



Dynamic Range f(SAR_{head})

(TEM cell, f_{eval} = 1900 MHz)





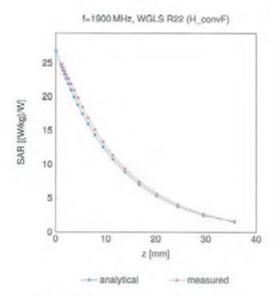
Uncertainty of Linearity Assessment: ±0.6% (k=2)

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Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ) , f = 900 MHz0.8 0.6 0.4 0.2 50 -0.2 -0.440 -0.630 -0.8 -6 Y [deg] 45 135 10 180 225 3600 X [deg] Uncertainty of Spherical Isotropy Assessment: ±2.6% (k=2)

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Appendix: Modulation Calibration Parameters

UIO R	v Communication System Name	Стоир	PAR (dB)	Unc∈ k −2
0	CW	CM.	0.00	47
Tigate (ca	S SAR Validation (Square, ICO ms. 10 ms)	Test	10.00	. <u>=4.</u>
10011 04		WCDMA	2 91	196
10012 (2	6 1888 802 : 16 WiFi 2.4 GMz (DSSS-1 Mbps)	WLAN	1.97	≟96
10013 C/	9 1565 802.11g With 2.4 GHz (0555-QFQM, 6 Mayor	WIAN	9.46	<u> </u>
10021 07		G-Stat	9.39	=96
19823 DA	C GPAS FOD (TOMA GMSK, TN ()	35M	9.57	-9 .6
10026 : 19	C GPRS-FOD (TDMA, GMSK-1N C I)	GSM .	6 56	±9.6
19025 10	C EDSS FOR (FOMA, 8PSX, TMIC)	5sM	12.62	:9.6
10028 D	C EDGE-FOD (TOMA, 8PSK TNICI)	3 SM	3 55	=9.6
10027 CV	C GPHS FDD (TOMA, GMSK, TN (-1-2)	589	4.80	<u>-</u> 9.6
10028 : C/	C GPRS FOD (YOMA, GMSK TN C-1-2-3)	254	3 55	=9.6
10028 CV	C FDRE-FDD (TOMA, 8PSK, TN 04-2)	G5M	7.78	<u>-96</u>
10000 CA		Bluetsoith	5.90	=9.6
10031 CA	A FIEEE 802 15 1 Bluzhoolk (GFSK, DRO)	Bloe!path	1.97	±9.6 —
1003Z C/		Buetoolb	1,16	±9.6
10033 CA	A TEEE 602 15.1 8 Getouts (PP4-DOPSK, CHT)	Blue!palh	7.74	-96
10034 CA	A + IEEE 802.15.3 Bill#toolb (PP4-DQPSK, OH9)	Buesooph	4.53	±9.6
. 10 0 35 CA	A : IEEE 802.15.1 & vetoolt (PP4-DOPSK, DHS)	Blue!aalh	3.93	±96
10035 C/	A + IEEE 802 15 : Siletoojh (8-DPSK, Q(I))	Bueboth	8.31	±9.6
-10037 CA		Bluetasth	4.77	±9.6
10039 67	100 1 1 10000	Blue tooll:	4.10	±9.6
:0039 C/	B COMA2000 (WANT, ACI)	SDMA2000	4 57	±9.6
:0042 CA		AMPS	7.79	9 €
100#4 C/		AMPS	0.53	+9.E
10048 7 04		DECT	13.80	±9.6
:CC49 CA		авст"	10.79	±9.6
10056 CA		TO SCOMA	11 01	±9.6
10058 94		GSM:	5 5Z	£9.6
10059 CA	B IBEE 802 116 Wilhi 2 4 GHz (DSSS, 2Mops)	W. AN	212	=9.6
10060 C/		W.AN	2.83	±9.6
1000° C4		W.AN	360	±9.6
10062 CA		WLAN	869	±9.6
19663 CA		W.AN	8 6 9	÷9.6
10064 CA		W_AN	900	±9.6
Tables CA		W. AN	900	₹9.5
19066 CA		WLAN	9.3R	±9.6
10067 G/		W. AN	10.12	-9.6
10066 CA		WEAN	10.24	=9.6
INCES GA		W, AM	10.55	-9.6
13371 CA		W. AN	9.83	±9.6
. 13372 GA	- <u> </u>	WLAN	9.52	±9.6
10073 CO		W. AN	994	=9.6
10074 CA		WLAN	10.33	29.6
10 375 ÇA		W,A9	10 77	±9.6
13378 CA	1	WLAN	10.94	
10 377 CA		W.M.	1193	₹9.6
10091 C/		C0MA2003	397	±9.6
10082 CA	<u> </u>	AMPS	477	195
10093 DA 10097 CA	<u> </u>	GSM	6 55	±9.6
10097 ; CA		WCDMA	398	±2.5
10099 CA		AMEON	398	+95
10099 CA	· · · · · · · · · · · · · · · · · · ·	GSM	9.55	15 g
10101 CA		LTE-FDD	567	t96
10.03 CV		LIE 900	6.42	≥9.6
10103 CA		LTE-FDO	660	t96
10'04 CA		LIE-TOD	929	_ ±96 .
10.02 CV		LTE-TOD	·I	<u>.96</u>
10.08 CV	- L		:0 01	
10.09 CV	1	LTE-FOO	560	196
10:10 CA		LTE-FCD	. 643 575	+9.6
IC:11 GA		LTF-FCO		196
1 ::-:::	The second secon		. 644	:aé _

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UID Rev	. Commun calion System Name	Group	PAR (dB) U	1.0E k = 2
10112 CAH	TTF-FDQ (SC-FDMA, 100% RB, TOMHZ, B4 GAM)	CTE-FOD	639	<u> </u>
10113 CA4	L(E FDO (SC FDMA, 100% RB, 5MHz, 64-QAM)	LTF FDD	662	±9.6
10114 (2/2	TEEE 602 11/ (ITT Green/ext. 13.5 Mbps, BPSK)	WLAN	8.13	:9.E
10115 · CAD	TEEE BOZ 11n (HT (Steenfeld, 81 Mbgs, 16-CAM)	WLAN	845	±9.6
. 10118 CAD	ISEE 802 17 iv (I/T Green lefd: 135 Mbps; 64 ØAM)	WEAR	815	29.6
10117 ; CAO	IEEE RC2 1 In (HT Model, 19 5 Maps, 6 PSK)	WLAN	807	±9.6
:0118 CAO	. IEEE 802 114 (47 Mixed, 81 Mbps, 16 DAM)	WLAN	8 69	19.6
'0119 CAD	IEEE 802 110 (HT Mired, 135 Mbps, 64-QAM)	VA AV	8 13	±9.6
:0140 CAF	LTE-FDD (SC-FDMA 100% RB, 15 MHz 16-QAM)	LTE-F00	649	196
:0141 CAF	TTF-FDD (SC-FDMA, 100% RB, 15NHz, 64-QAM)	TTF-FDD	6 53	±9.5
10 142 GAF	LYE-FOD (SC-FOMA, 100% RB, 3MHz, QPSK)	LYE RED	5.73	195
10343 CAF	LTE-F00 (SC-F0MA, 100% RB, 9MHz, 16-QAM);	LTE-FDD	635	19.5
10 544 GAF	LTE-F00 (SC-F0MA, 103% RB, 3MF2, 64-QAM);	LTE-F00	6.65	196
10345 CAG	LTE-FDD (SC-FDMA, 100% RB. 1.4 MHz, CPSK)	LTE-FDO	576	19.5
10146 CAG	LTE-FDD (SC-FDMA 100% RB, 1.4NS47, 16-QAM)	LYE-FOO	6.41	198
10147 CAG	LTE-FDD (SC-FDMA, 100% 9B, 1.4MHz, 64-GAM)	LTE-FOD .	6 72	±9.5
ID549 CAF	LTE-FOD (SC-FOMA BOTH RB, 20 NHZ, 16-QAM)	LIE FDD	6.42	196
10350 CAF	LTE-FDD (SC-FDMA, 50% 9B, 20MHz, 64 DAM)	LTE-FOD	660	±9.6
10:51 CAH	LTE-TOD (SC-FDMA, 50% RB, 20NHz, QPSK)	LTF-TDD	925	±9.6
	I/TE-TDB (SC-FOMA 50% 98 20MHz, 16-DAM)	LTE-YOU	992	±9.6
10154 GAM	TE-TOD (SC-FOMA, 50% RB 20MHz, 64-QAM) LTE-FOD (SC-FOMA, 50% RB 10 MHz, QPSK)	LTE-TOD	10 05	19.5
ICISS GAH	LTE-FOD (SC-FOMA, SON-RB 10MHz, 16-QAM)	L'IE FOO	S.75	196
10156 CAH	LTÉ FOD (SC FOMA, 50% RB, 5MHZ, GPSK)	LTE-FOO	640 	+9.6
10157 - CAH	LTE-FDD (SC-FOWA, 50% RB 5 Mirz, 16-QAVII)	LTE-FOD	649	±96
10158 CAR	LTE-FOR (SC FOMA, SON AB 10 MHz, 64-QAM)	LIE-FOO	662	±9.6
10159 CAH	LTE-FOD (SC-FOMA, SO% RB DMH2, 64 DAVI)	LTE-FOD	672	19.6
TITIES GAF	I.TE-FOD (SC-FOMA, SON R8 15MA2, QPSK)	LTE-FOD	582	±9.G
10161 DAF	LTS-FOD (SC-FOWA, 501) RS 15 MHz, 16-QAM;	LTE-FOD	643	19.8
10162 CAF	LTE-FOD (80-FOMA, 50% FQ8, 15 MHz, 64-QAM);	LTE-FDD	6 58	19.6
10/EG 043	LTS-FOD (SC-FDMA, 50% RB 1,4 MHz, CPSK)	CIE-FDB		196 -
10167 CAS	LTE-FOD (SC-FOMA, 50% PB, 14 MHz, 16-QAM)	LTE-FÖ0	621	+9.5
19168 CAG	LES-FOU (SC-FDMA, 50% RB, 14 MHz, 64-QAM;	LIE FOO	679	196 :
10169 CAF	LTE-FOD (SC-FDMA, 1 RB, 23MHz GPSK)	LTE-FOD	573	195
10170 CAF	CTE-POD (SC-PDMA, 1 RB, 20MHz, 16-CIAM)	LŤE-FOD	652	19.6
1717' AA=	CTE-FOD (50-FOMA, II RB, 20NHz 64-QAM)	LTE-FDD	649	#9 G
10172 CAH	UT9-T00 (80-FDMA, 1 R8.20MHz GPSK)	LTE-TOD	9 21	19.6
10170 CAH	LTE-TOD (SC-FDMA, 1-78, 20 MHz, 16-QAM)	LTE-TOD	948	+94i
10174 CALL	UTS-TOD (SC-F0MA, 1 RS, 20MHz, 64-DAM)	CTETOO	10.25	±9.5
10175 CAH	LTE-FOD (SC-FDMA, 1 RB, 10MHz, GPSK)	LTE-FD0	5.72	±9.5
1017B CAH	CLE FOO (SCI-DMA, LRB, 10MH), 16-QAM)	LTE-FOD	652	19.6
(10177 CA)	CTE-FOD (SC-FDMA, 1 RB. 5 MHz. GPSK)	I.TE-FDD	5.73	19.6
10178 СЛН	Ura FDD (SD FDMA, I RB, 5MR), "6-QAM"	LTE-FOD	6.52	196
10178 CAII	LTE-FOD (SC/FDMA, 1 RB, 13MHz 64-QAM)	IJE-FOD	655	,9 E
10193 CAH	UT6 FDD (SG/FDMA, 1 RS, 5 MHz, 64-QAM)	LIE-FD0	650	±9'6 -
10181 CAF	LTE-FOD (SC-FOMA, I RB 15MHz, GPSK)	LTE-FOD	5.72	19.5
10182 GAF	LTE-FOD (SC-FDMA, 1 RB 15MHz, 16-QAM; LTE-FOD (SC-FDMA, 1 RB 15MHz, 64-QAM;	LTE FOO	6 52	196
10184 CAF	LTE-FOD (SC-FDMA, 1 RB 3 MHz, QPSK)	CTE-FOD LTE-FOD	6 50	19.5
10184 CAF	LTE-FOD (SC-FOMA, 1 RB 3 MHz, 16-QAM)	LTE-FOD	5.73	19.6
10188 AAF	LTE-FOD ISC-FDMA, 1 R8 3 MMz, 84-QAM;	LTE-FD0	- 6 51	±95
10187 CAG	LIE FDD (\$G/FDMA, I RB 14W+2, QPSK)	LYE FOD	5.73	19.6
10198 CAG	CTC-FDD (SC-FDMA, 1 RB 1,4 MHz, 16-GAM)	LTE-FOD	6 52	+9.5
GIAA EBIOI	LIE-FDD (SC-FDMA, 1 RB, 14 MHz, 64-QAM)	LTE FOU	5 50	±9.8
10193 CAD	(CEC 802.11) (IIT Greenleid 6.5Mbps 8°SK)	WOAN	9.09	19.6
10194 CAD	IEFE 602 11c (HT Graenles) 39 Mbps, 16-QAM;	VAAV	B 12	±9.6
10195 CAD	IESE BOZ.11n (H" Greente & 65 Mbps, 64-QAM)	WLAN	821	19.5
10198 CAD	IEEE 802 110 (HT Mired, 8.5 Maps, BPSK)	WLAN	5 10	+9.6
10°9/ GAD	(EEE 802 11n (H1 Mired, 39 Mbgs, 16-QAM)	WFV4	813	196
10199 CAD	IEEE 802 11n (HT Mined, 65 Maps, 64-GAM)	WLAV	5 27	±94i
T0219 GAD	IEEE RCZ 11n (HT Mined, 7.2 Mbps, 5P5K)	WEAN	203	196
10220 CAD	IEEE 802 110 (HT Mired, 43.8 Mags, 18-QAM)	WAY	313	19 li
10221 CAD	IEEE 802 11n (HT Mixed, 72.2 Mbps, 84-QAM)	MEVA	9.27	196
	IEEC 802 111 (4T Mixed, 15Mbps, 8PSK)	WOLAN	806	196
10223 EAD	IEEE 802 111 (HT Missol 90 Mbps, 16-QAM)	WLAV	949	±9.6
16224 J CAO	IEEE 002 111 HT MIXES 153Mbps 64-CAM)	WLAN	<u>808</u>	196

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IND Rev Communication System Name	Group	PAR (dR)	Unct h = 2
10225 CAC UMTS-FDD (HSPA+)	WCOMA	5.97	±9.6
10226 CAD 118-TOD (SC-FOMA, 1 RB, 1,4 MHz, 16-CAM)	LTE-TOD	9.49	±9.6
13227 CAC [175-TDD (SC-FOMA, 1 RB, 1.4 MHz 64-QAM)	TTF/TRD	: C.26	<u> -</u> 96
1322B GAG 1:TF-TDD (50-FOMA, 1:RB, 1,4 MMZ OPSK)	LIZE LIND	9.28	=9.6
10228 CAE 175-YOU (SC-FDMA, 188, 8M-Fr, 16-QAM)	LTE-TOO	5.48	73.6
13230 GAF 415-TDD (50-FOMA, 1 RB, 8MHz, 64 DAM)	LTE-TOD	10.25	±9.6
19231 CAE LITE TOD (SC-FOMA, LRB, 3MHz, CPSK)	LTE-TOD	9.15	<u>₹</u> 96
19232 CAH LTE-TOD (SC-FOMA, I RS, 5 MHz, 16 DAM)	LTE-TOD	9 48	±9.6
10233 CAH LITE TOD (SC-FEMA, LIRR, SMHz, 64-QAM)	LTE-7DD	13.25	±9.6
10234 - CAH LTE-TCD (SC-FDMA, 1.88 4MHz, DPSR)	LIE-TOD	92;	<u> 1</u> 9.6
10235 CAH LTE-TCD ISC-FIMA, 1 RB, 10MHz, 16-QAM; 10235 CAH LTE-TCD ISC-FIMA, 1 RB, 10MHz, 64-GAM;	200120	3.4R	±96
10238 CAH LTE-TDD SC-FDMA, 1 HB, 10 MHz, 64 (GAM) 10237 CAH LTE-TDD SC-FDMA, 1 RB, 10 MHz, QPSKI	.T9.T3D	10.25	-9.6
10238 CAG LTC-TCD (SC-FDMA, 1 HB, 15MHz, 16-QAIV)	.TE-TOG .TE-TOG	9.21	
10239 CAG TTF-TRD (SG-FDMA, 1 RB, 15MHz, 84-QAM)	_TE-T00	9.68	<u>∓</u> 9.5
10240 CAG LTE-TDO (SC-FUNA 1 AB, 'SMHz, GPS4)	TE-TOB -	10.25	<u>19.8</u>
10241 CAC UTS-TOD (SC-FONA, 50% RB, 1,4 MHz, 16 CAM)	0C131	9.21	. <u>x9.5</u> -
10242 : CAC LYE 100 (SC FOMA, \$0% RR, 1.4MH), 84-CAR)		9.95	49.6
10243 CAC LTE-TDD (SC-FD)/A, 50% RB, 1.4 MHz (0°5K)	179-1700	9.46	±9.5
10244 CAE LTE-TOD (SC-FOMA, SM; RR, 3 MHz, 16-QAM)	TE-TOD	10.36	196
10745 CAR UTE-TOD (SC-FOWALSON, AB, 3 MM2 64-QAM)	001 31L	10,06	±9.5
18246 CAE LITE-TID (SC-FOMA, 50% RB, 3MA), QPSK)	TE-TOD	9.30	- 19.6
10247 - CAH I.TE-TDD (SC-FDMA, 50% HB, 5MHz, 16-QAM)	TE-TOD	9 91	120
18248 CAH - LTE-TOD (SC-FOMA, 50% RB, 5MHz, 64-QAM)	LTE-TOD	17.79	198
10249 CAN (LYE-TOD (SC-FOMA, SON RB, 5MHz), QPSK)	DCT-ET.	3,29	+95
10250 GAH 1 (EF-TID) (5C-FDMA, 50% AB, 10 MHz 16-GAM)	_TE-TOD	9.91	19'6
10251 CAH LTE-TUD (SC-FOMA, 50% RB, 10 NH), 64-QAM;	TEITOD	19.17	t95 ·
10252 CAH LTE-TOG (SC-FOMA, 56% RB, 13MHz CPSK)	Lîë-TOC	924	±96
10253 CAS LITE FOD (SC FDMA, 50% RB, 15NH); 16-QAM;	TE-TOD	9.30	±95 °
10.754 CAG LTE-TOD (SC-FOMA, SO% RS, 15 MHz, 64-DAM)	_TE-TOD	10 14	±9-6
1925S CAG LYS TOD (SC-FDMA, 50% RB, 15 MHz, QPSK)	TE-TOD	9 20	196
10256 CAC LTS-TOD (80-FOWA, 100% RB, 1.4MHz, 15-QAM)	TE-TOC	996	196
19257 CAG LIE-TOR (SC-FDMA, 190% RB, 1,4 MHz, 64-QAM)	CTC-TOD	10 38	±96
19258 CAC LTE-TOD (SC FCMA, 100% RB 1.4 MHz, CPSK) 19259 CAE LTE-TOD (SC-FCMA, 100% RB 3MHz, 16-04MH	LTF-TOS	934	:96
	CTE-ID0	909	70.6
10260	LTE-TD9	997	:96
10262 CAH LIE-IDO (SC-FOMA, 100% R8, 5 MHz, 16 QAM)	נונל זטט	224	- =96 .
10269 CAH LTC-TDD ISC-FDMA, 10014 RB, SMH2, 64-QAM	LTE-TOD	9.83	<u> 15 6</u>
10264 , CAN LITE TDD (SC FDMA, 1004) FB, SMILZ, QPSK)	LTE-TDD	923	±56
10265 CAN UTE-TED ISC-FDMA 100% RB, 10MHz, 16 DAMI	LIE-TOD	992	<u>.96</u>
19265 CAH LTF-TCD (SC-FDMA 100% RB, 10MHz, 64-200M)	LTE-TOD	1 1007	- <u>=5 G</u> :
10267 CAH LTE-TCO (SCHOMA, 198% RB, 10 MHz, QP5K)	LTE-TOD	935	-56
TC268 CAG ! LTE-TCD (SC-FDMA 199% RB, 15 MHz, IB DAM)	UTE-TOD	. 10.06	<u> 48 6</u>
10269 CAG : LTE-TCD (SC FDMA 100% FB, 35 MHz, 64-QAM)	LITE-TOD	10.13	:5.6
10270 CAG : LTE-TOD (SC-FDMA 100% AB, 75 MHz, GPSK)	LTE/YOU	958	±9.6
10274 CAC LIVIYS FCD (MSUPA Subject 5, 35PP Res 10)	, MCDNY	4.57	15.6
10275 CAC LMTS-FDD (HSUPA Subles) 5, SGPP Re 8 4)	MCDNV	396	±9.G
10277 CAA PHS (QP6X)	PHS	11.81	4.8±
10278 CAA PHS (QPSK 8W 884 WHz, RolleMOS)	PF5	1 1181 [±9.6
10279 GJA PHS (DPSK, 5W 984 MHz, Rottoff 0.39)	' PhS	12,18	±9.6
19290 AAB COMA2000 RC1, SOSS, F.I. Pain	CDMA2000	391	=9.6
1025' AAB COMAPOCO, RCG, SOSS, Fu Pale	GDMA2600	246	<u>-9.6</u>
19292 AAS - COMM2000, RCQ, SC02, Ful Page - 19250 AAS - COMM2000, RCQ, SC0, Ful Page	COMA2000	3 39	-9.6
	COMA2000	3.50	±9.6
10285 AAB COMA2000, RCT, SQ0, 16th Rate 25.5 19297 AAB LTE-F00 (SC-F0MA, 50th RB, 2010Hz, CPSK)	CDMA2000	. '2 49	<u> </u>
10298 AAE CTS-FOR (SG-FDMA, SON, RR, 3 MHz, QPSK)	LTE-FUD	<u>. 561</u>	
10299 AAE CTE-FOD (SC-FOMA, 50% RB 3MF2, 16-QAM)	LTE-FED	. 2/2	
10330 AAS 1/8-F00 (5C-F0MA, 50% RB, 3 MHz, 64-QAM)	LTE FCO	6.50	-8.6 -0.6
10301 AAA - LESE 802.18c WMAX (29:19, 5 ms, 10 MHz, CPSK, PUSC)	WMAX	12.03	<u></u>
10332 AAA 3556 807 166 WIMAX (29 18, 5-75, 10 MHz, CPSK, PUSC, 3 CTFL symbols)	: WiMAX	18.57	±9.E
10300 AAA 1656 802.166 WIMAX (31.15, 5ms, 10 MHz, 64QAM, PUSC)	WAXAX	12.52	±9.6
10304 AAA : .FFF 809.166 WIMAX (29.18, 5ms, 10MHz, 640/AM, PUSC)	W44AX	11.86	<u></u>
10305 AAA (SEEE BOZITSC WIMAX (31:15, 10 ms, 10 MHz, 64 QAM, PUSC, 15 symbols)	WARAX	15.24	±9.5
10595 AAA IEEE 802 180 WMAX (25 18, 10ms, 10MHz, 640/6M, PUSC, 19 symbols;	WASAX	14.67	19.6

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UID	Aev	Communication System Hame	Group	PAR (dB) U	net k = 2
10307	AAA	1868 802.166 WMAX (29.18, 10 ms, 10 MHz, OPSK, PUSC, 18 symbols)	WWA);	14.49	±9.6
10008	AAA	TEE E 802.15e WMAX (29 18, 10 ms, 10 MHz, 16 OAM, PUSC)	WWWW	14.46	±96
10009	AAA	IEEE 802 1Ge VAMAX (29.18, 10ms, 10 MHz, 16/0AM, AMC 240, 19 symbols)	WHAX	14.58	+9 Fi
10340	AAA	IFFF R02.16c WiMAX (29.16, 10 ms, 10 MHz, OPSK, AMC 2x3, 18 symbols)	WAMAX	14 57	±9.6
103:1	ňňΕ	LTE-FDD (SC-FDMA, 100% AB, 15MHz, DPSX)	LTE-FOD	6 36	196
103:3	AAA	i0FN 1 3	IDEN	10 51	198
10314	644	IGEN 1:6	IDEN	i 1348	±9.5
103:5	AAB		WLAV	171	
133'6	AAB				196
		IEEE BOZ 11g WiFi 2 4 SHz [FRP-QFDM, 6 Nbps, 95pc duly cycle)	WEAR	8 36	#9 F
133!7	AAC	ISSE 602 11a WiFi 5/3Nz (OFOM, 67/90s, 98pc duty cycle)	VA AN	336	±9.6
10052		Philse Wavelorm (200Hz, 10%)	Gane/ic	10 03	195
10053		Pulse Wavelorm (200Kr, 20%)	Ger e zio	6 99	±9.6
10354	AAA	• Pulse Wavelorm (200Hz, 40%)	Generic	3 38	±95
10.255	. AAA	Pulse Wavelorm (200) (z. 60%)	Generio	2 22	+9.6
10356	ЛАА	Polse Wavelorm (200Hz, 80ta)	Generic	0.97	196
10387	AAA	QPSK Wavelorm, ! MHz	Genevic	j 51U	t9.6
10386	444	QP5K Wavokim, :0 MHz	Genesia	5 22	196
10356	AAA	E4 DAM Wavelorm, 100 kHz		_:	
i 10399	AAA	64-QAM Warelorn, 40 MHz	Generic	6 27	±9.5
			Genevie	527	196
10 400	AAE	IEEE 802 11ab W Fr (20 MHz), 64 - DAM, 59pb duty byele)	MEAN	8 37	196
10401	AAE	IEEE 802 11ab W Fr (40 MHz, 64-QAM, 9Spc duty cycle)	WLAN	8 60	19.6
10482	AAE	IEEE 802 11ab W Fi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	, 853	196
10403	AAB	COMA2000 (1xEV-DO, Rev. b)	CDM42000	3.76	+9.6
10404	AAB	COMAZCCC (1xEV-DO, Rev. A)	CDM/(2011	3.77	196
10408	AAB	COMA2000, RCQ, SCGZ, SCHQ, Fell Rate	CDM/(2000)	5 22	+9.6
10410	АЛН	TTF-TDD (SC-FDMA, 1 RB, 18MHz, OPSM, UC Subtrame-2 3.4,7,8.9; Systrame Cent. 4)	LTE-TOC	7 82	196
10414	AAA	WLAN CCU'S 64-DAM, 40 MHz	Generic	852	19.5
10415	AAA	IEEE 802 116 Wiri 2 4 GHz (DSSS, 1 Maps, 99pc duty cyclo)			
			W.AN	1 54	±95
10416	AAA	IEEE 802 11g Wei 2.4 GHz JERP DFDM, 6 Mhps, 93pp duly cyclei	W_AN	8 2 3	±9.6
10417	AAC	IEEE 802 118/1 Wifi 5 GHz (OFDM, 6 Vitops, 98pc duty sycto)	W. AN	8 23	±96
1041B	AAA	IBBB RC2 11g WFi 2.4 GHz (D555-DFCM, 6Mbpt, \$\$palouty cycle (Long preuirbale)	WLAN	8.14	±95
10418	AAA	IEEE 802 11g WiFi 2.4 GHz (CSSS OHUM, 5 Mbps, 95pc duty cycle, 5 ton preamoue)	W, AN	9.19	±9 li
10422	AAC	IEEE 802 11n (HT Greenlield, 7.2 Mops, BPSK)	W_AN	9.32	19.6
10422	AAC	IEEE 802 11n JHT Greenfield, 43 3 Mops, 18 OAM)	WLAN	0,67	+96
10424	AAC	IEEE 802 110 JHT Greenlield, 72 2 Moos, 64-OAM)	W.AN	9.40	±9 6
10 425	AAC	IEEE 802 110 JHT Greenhold, ISWhps, 8PSK)	WJAN	9.41	±96
10476	AAC	IEEE 802 11n (NT Greenheld, 804/Jups, 10-QAM)	W. AN		
10427	AAG			8 45	±9.6
		IEEE 802.11n (FT Greenleid, 150 Mbps, 64-QAM)	WLAN	8.41	195
10430	AAC	LTE-FDD (OFDMA, SMHz, E-TM 3-1)	JTE-FOR	8 28	±9.6
10431	AAE	LTE-FOD (OFDMA, 10 MHz, E-TM.3.1)	TE FOR	9.38	19.6
10432	CAA	LTE-FDD (OFDMA, 15 MHz, E-TM 5 1)	TF-FOR	9.84	+9.6
10433	AAD	TTE-FDD (DEDMA, 20MHx, E-TN 3.1)	DC4-311	9 34	196
10434	AAB	W-COMA (BS Rest Model 1, 64 OPCH)	WCCMA	9.60	t96
10435	'AAR	UTE-TOD (SC-FCMA, 1 FB, 20 MHz, QPSK, UL Subtrame=2.3.4,7,8.9)	UCT:31.	7 82	196
10447	AAE	LTE-FDB (OFDMA, SMHz, E-TM 3.1, Clpp.ng 44%)	TE FOR	7.56	+96
10448	AAE	LTE-FDD (OFCMA, 10 MHz, C-TM 3.1, Clopm 44 W)	TE-FOR	7 53	±9.6
10443	دمم	LYS-F50 (OPENA, 15MHz, F-TM 3.1, Cliping 44%)	LTE-FOD	(2)	. ±95
	AAD	LTE-FDD (OFDMA, 20MHz, E-TM 3.1, Cloping 44%)	ine-Fög	7,46	
10451		W-CDMA (BS Tost Model 1, 64 OPCH, Capping 44%)			±9.6
			WCDAM	7.59	19.5
10453		Validation (Souare, 10 ms, 1 ms)	Teau	10.39	+9.6
10456	AAÇ	IEEE 802.11ac Wiffi (160.MHz, 64-QAM, 99pc duty byole)	W_AN	8.53	19.5
10457	AAB	UMTS-FDC (CC-HSDPA)	WODMA	6.62	+9.6
1045R	AAA	SDM42900 (1xFV-DQ, Rev. R, 2 painters)	DDMA2300	6.55	±9.6
10459	MM	CDMAZ200 (NEVIDO, Rev. 5, 3 carrors)	CDMA2300	8.25	-9.6
10460	AAB	UMTS-FDC (WCDMA, AMR)	WCDMA	2.30	19.6
10451	AAC	UFS FDD (SÖ FDMA, 1 RB, 1.4 MHz, DP\$4, UI, Spb///me=2 3,4,7,8 9)	TE-TOD	7.92	_9.h
10452	AAC	LTE-TOD (SC-FDMA, 1 P.B. 1,47/4z, 19-C/VA, OL Subtrame+2,3,4,7,6.9)	TF-EDG	830 :	=9.6
10453	AAC	15-TDD (SD-FDMA, 1 R5, 1-4N Hz, 84-QAN, UL Sabkrang-2-2,4,7,6.9)	175-100	8.56	
:0464	AAO	LTB-TOD (SO-FDMA, 1 PB 3 MHz, CPSK, UL Subtrame-2 3.4,7,8,6)			±95
I I			TE-TOC	7.82	=9.li
10465	AAD	LTE-TOD (SQ-FDMA, 1 FB, 2 MHz, 16-QAM, UL Soblid tre-2 3.4,7,8.9)	TE-YOU	B.32	19.6
10466	AAD ,	_TC-TDD (SC-FDMA, 1 RB, 3 MHz, 64 GAM, UL Subtramqu2 3,4,7,8,9)	CTE-TOD	8.57	-9.6
10467	AAG	.TB-TDD (5G-FDMA, 1 FB, 5MHz, GPSK, UL Subtrame#2 3.4,7.8,9)	CTE-150	7.82	19.6
10468	AAG .	LTS-TOD (SC-F0MA, 1 PB, 5 MHz, 16-DAM, U.: Subtrative2 3.4,7,8,9)	TE-TOD	8.32	-9.6
10469	AAG	.TF-TDD (5C-FRMA, 1 PB, 5 MHz, 64-QAM, UL Sublizamen2 3.4,7,8 9)	TLE-LOG	8.56	±9 6
10470	MG	TE TD0 (SCFDM0, 1 FB, 10 NHz, CPSK, UE 508)(270642/3,4,7,6,9)	JEHIOD	7.82	.:9.6
10471	AAC		_LF-LDB	8 32 ·	<u> </u>
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:C472 AAG	LTG-TDD (SC FLIMA), 1 HB, 10 MHz, 64 QAN, UL Subtrame 2.3,47,8.9)	116 100	8 57 196
10473 AAF	LTE-TDD (SC-FDMA in RB, 15 MHz, QPSK, UL Subtrame=2 3.4.7 R.9)	: LTE-TCD	7.82 19.6
10474 AVE	LTE-TOD (SC-FDMX) 1 RR, (5 MHz, 16-QAM, UL Sptirs == 2.5,6,7,8,9)	LTE-TDD	832 19.5
10475 AAF	LTF-TDD (SC-FDMA, 1 RB, 15 MHz, 64-OAM, UL Subtramen2,3,4,7,6,9)	I.TE-TDO	85/ 19.6
10477 AAG	LTE-TOO (SC-FOMA, 1 RR, 20 MHz, 16-QAN, UL Sabirame=2.3,4,7,8.9)	L16-700	832 ±9.6
10478 AAG	TTF-T00 (SC/FDMA, 1 RB, 20 MHz, 64 CAM, UL Sabirame, 2 3,4,7,8,9)	(COTCOT)	8.57 ±9.5
10479 AAG	LTE TDD (SG-FDMA, 50% RB, 1 6MHz, OPSK, CL Subhame=2,3 4,7,8,5)	LTF-TGD	774 ±96
10480 AAC	LT6-T00 (SC-FDMA, 50% RB, 1.4N Hz, 16 GAM, LR, Subliame+2,3.4.7.6.9)	CTECTED	8.18 ±9.6
IC481 AAC	LTF-TDD (SG-FDMA, 50%, RB, 1,4MHz, 64-QAM, UL Subtrame=2,3.4,7,8,5)	LTF-TCD	3.45 196
TC462 AAC	LTE-TOO (SC-FDMA 56% AB, 3 MHz, GPSK, UL Sutytanie • 2,3,4 7,8,9)	COTECTOR	7.71 196
ID483 AAD	I,TF-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Bu Subtrame+2,3,4.7,8,9)	I.TE-TOD	339 19.5
10484 AAD	LTE-TOO (SC-FDMA, 50% 98, 3 MHz, 64-QAM, UL Subhame-2,0,4 7,8,9)	ניםד-סדו	847 196
IC46\$ AAG	LTE-TCD (SC-F0MA, 50%, RB, 51/44), QPSK, UL Sub/amie=2,3,4 7,8,9)	LTF-TCD	7 59 . +96 _
10406 AAG	LTE-TCO (SC-FDMA, SOSE RB, 5MHz, 16-QAM, UL Subfaire=2.3.4.7.0.9)	LYE-YOS	839 196
10487 AAS	LTF-TCD (SC-F0NA, S0% RB, 5),U4;, 64-QAU, UL Subhame=2,3,4.7,8,9)	COT-ALI	860 ±96
10489 AAS	LTE-TCD (SC-FOMA, 50% RB, 10 MHz, QPSK, UL SUF-arre-2.3.4.7,8,9)	LIE 100	7.70 196
1049E . AAG	LITE-TCD (SC-FDMA, 50% RB, 10 NHz, 16-QAM, CL Subrame+2,3,4,7,8,9) LITE 10D (SC-FDMA, 50% RB, 10 NHz, 64-QAM, CL Subrame+2,3,4,7,8,9)	LTE-TCO	8.31 +9.5
13 69° AAF	LTE-TDD (SC-FOMA, 50% RB, 15 MHz, 0PSK, UL Subrame+2,3,4,7,8,9)	TE-TDD	854196
19452 AAF	TEF-TED (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe+2,8 4,7,9,9)	LTE-TRO	7.74 +96
10492 AAF	LTE-TDD (SC FOMA, 50% RS 15 MHz, 64-DAM, I)L Subhame 2,3,4,7,8,9)	UTE-TOO	
19494 AAG	LTE-700 (SC-FDMA, 50% RB, 20MHz, QPSK, CL Subhame-2,3,4 7,8,9)	(TE-TDD	1 655 196
10 495 AAG	LTE-TDD (SC-FDMA, 50% PB 20MHz, 16-QAM, UL Subhaire-2.0.4.7.8.9)	LTE-TDO	- 172 8 37 196
19496 AAS	UTE-TDD (SC-FOMA, SON RB, 201/92, 64-QAM, UL Subrame-2,3.4,7,8,9)	LTF-TOD	854 +96
10497 AAC	LTE-TDD (SC FOMA, 100% RB, 1.4 NHz, CPSK, UL 5.5% ame=2.3.4.7.8.9)	LTE-TCD	767 196
10 498 AAC	LTE-TDD (SC-FOWA, 100% RB 1.4MHz 16-Q4M, UL 8-bliame=2.3.4.7.8.9)	IJE-7DO	8.43 :96
10 495 AAG	LTE-TDD/(SD-FDMA, 100% RB, 1.4MH; 64-QAV), UC 8-bliame=2:3.4.7,8,5)	LIE TOD	869 196
1050C AAD	LTE-TDD (SC-FOWA, 100% RB, 3MHz, CHSK, UL Subhame-2,3,4,7,6,9)	LTC-TCO	767 -96
10501 7000	LTE-TUD (SC-FOMA, 100% RB, 9MHz, 16-QAM, UL Sceffame+2,3.4.7,8,9)	LTE-TDD	844 196
10502 AAD	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-DAM, UL Sut/18/Fe-2,3.4,7.8.9)	CTE-TCO	852 ±96
10 503 AAA3] TTF-TDD (SC-FDMA, 100% RB, 5MHz, QPSK, UL Subhame+2,3,4 7,8,9)	LTF-TCD	7.72 ±9.6
10504 AAG	LTE-TDD (SC FDMA, ID0% RB, 5MHz, 16-DAM, UL Subhame - 2.3 4.7.8.9)	LTE/TCO	8 31 19 6
10.505 AAG	UTE-TOD (5C-FDMA, 100% RB, 5MHz, 64-0AM, UL Subramesz, 3.4.7,8,9)	TTE-TÖD	354 +96
10 Sag AAG	LTE TOD (SD FDMA, 100% RB, 10 MHz, CPSK, U., Subharre 2.3.4.7.0.9)	LTE-TUD	7.74 ±9.6
10507 AAG	LTE-TDD (SC-FDMA, 100% RB, 131/49), 16-QAM, UL Subimme=2,5,4,7,8,9)	ј итғатар"	836 796
10508 AAG 10508 AAF	LTE-TDD (SG FDMA, 100% RB, 10 MHz, 64-QAM, UL Subhame-2.3.4.7,8.9)	LIE-100	8.55 ±9.5
	LTE-TDD (8C-FDMA, (CON RB. 15MMs, CHSK, LT. Siabrigma+2,5,4,7,8,9)	COT-311	799 796
10511 AAF	LTF-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subhame=2.3.4.7,8.9) LTF-TDD (SC-FDMA, 100% RB, 15MHz, 64 DAM, UL Subhame (2.3.4.7.8.9)	LTE-TDD	843 ±96
10.512 AAG	LTR-TDD (SC-FOMA, 100% RB, 20 V/M), QPSK, U1 Subhame=2,3,4,7,8,9)	LTF-TDD	8.51 ±96
10513 AAG	LES-TOD (SC-FONIA, 1004; AB, 23MHz, 46-0AM, HL Subherre-2,3,4,7,8,9)	CTE-TCO	
10514 AAG	LTE-TÖÜ (5C-FOMA, 100% AB, 20 MHz, 64-QAM, UL Subhama-2,8.4.7,8.9)	LTE-TCO	8.62 x96
10515 AAA	IEEE 802.15b W.F. 2.4 GHz (DSSS, 2 Moos, 99cc duly cycle)	WLAN	158 196
10516 AAA	IEEE 802.116 WiF 2.4 GHz (DSSS, 5.5 Maps, 99pc duty cycle)	WLAN	157 -96
10517 ; AAA	ISSS 838.116 WiF 2.4 GHz (DSSS, 11 Moos, 98cc duty cycle)	WLAN	158 196
1051B AAC	(EEE 802.11 ath W F) SIGHz (OFDM, 9 Mbps, 99pc duty cyclin)	WLAN	823 :96
10519 AAG	1989 \$00.11@NW Fr.5 GHz (OFDM, 12 Nbps, 99pp duty cycle)	WLAN	839 ±96
10523 AAC	1999 802.11 ath WiFt 5 GHz (DFDM, 18 Mighs, 9900 dusy cycle)	WLAN	8.12 196
10521 AAC	IEEE 802 11 wh W.F. 5 GHz (OFOM, 24 Mbps, 99pt duty cycle)	WLAN	797 ±98
10522 AAC	ISSS 302.11ath W.515 GHz (DFDM, 36 Mbps, 99pc duty cycle)	WUM	8.45 196
10523 AAC	IEEE 802 11 WHW.FI 5 GHZ (OFDM, 40 Mbps, 995c Z.Ay cycle)	M W	508 =96
10524 AAC	1556 802.11 Ah W.Fr S GHz (OFFIM, 54 Mbps, 9950 didy eyele)	WLAN	8 27 29 6
:0525 AAC	(EEE 802.11ac WiFi (20MHz, MCS0, 99ac duly cycle)	WIJAN	836 ±96
10525 AAC	3656 802.11ac WiFi (20MHz, MC\$1, 9900 duly cycle)	WLAN	8.62 196
10527 AAC	IEEE 802.11ac Wiff (20 Mrtz, MCSZ 995c duty cycle)	WLAN	521 +96
10528 AAC 10529 AAC	TEEE \$07.11ac WiFt (20 MHz, MCS3, 99cc duty cycle)	WLAN WLAN	: 835 ±96
10529 AAC	FEEE 802.11ac Wiffi (20 MHz, MCS4, 99pa duty cycle) LEFE 802.11ac Wiffi (20 MHz, MCS6, 99ac duty cycle)	WLAN	806 ±96
10532 AAC	1ESS 802.11ac WiFi (20MHz, MCS7, 99pc d.sy cycle)	WEAN	. 070 . 290
10533 AAC	IEEE 802 11ac Wift (20 MHz, MCSS, 9950 duty cycle)	WLAN	839
10534 AAC	*ESE 802.11at Wift (40 MHz, MCSO 990cd.rg/cyce)	WLAN	8.45 :96
10535 AAC	:25E 892 11ag WiFi (40 MAz, MCS1, 995; duty cycle)	WAAN	\$45
10536 AAC	'E'EE BOZ.11nc W-Fr (40 MHz, MCS2, 995c duty cycle)	WLAN	8 32 z96
10537 AAC	-EEE 892 1186 W Fi (40 NHz, MCS3, 9955 duly cycle)	WEAN	844 =96
QAA BEZQI	"EEE 802.11ac W Fr (40 MHz, MCS1, 9900 duty by cie)	WLAN	6.54 19.5
10540 ; AAC	(CEE 602 1180 W F) (40 MHz, MCSG, 9900 60ty cycle)	WI'AN	839 +96
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Certificate No: FX-7809_May23

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1954] ACC IMPR 600 TISE WIT (INC WITE, INCS), SIDE SUBY CARDON VILAN 6.56 3.6	UID Rev	Communication System Name	Graup	PAR (dB)	Unce k - 2
1954] ACC EREC BOT 128 WF 196 Mart, NOSS, 1960 part synchol WLAN			WLAN	6.46	-96
19354 AV. BREE BOOT 100 WF. 2004HE, MOSS, 1950 auty cycles WLAN 6.5 5.6			WLAN	6.62	196
1995				6.65	-96
1945 ACC BEEE BOX 1115 W.F. (BOMAN, MCSP. 1990; duty rocket W.A.M. 9.55 3.95 3.					18.6
19547 AAC EEE BOX 1112 WFF, GRANIA, MCSSL 9890 day grefet WAAR 8.27 396 395					
1948 ANC BEER DOT 1916 WF-196 AMP MICRAE 1990 day gorder WAA					
1955 AAC					
1615 AAC				L	
1955 ACC IEEE REV Tax WF-(RETMIN, MCSR, 1990 ally cycled VILAN 645 2.96			·I		
19552 ADD					
1955 AAD IEEE REQ 110 WH-(150 MH, MCS3) 800 cm/s ye/led WLAN 5-67 29-6				<u> </u>	
4955 AAD					
18555 AAD	·		1		
1955 AAD			l		
1955 AAD			i		
MATERIAN			L		
1955 AAD					
1958 AAD IECE 002 10 WF-12 GOM 10 COS 30 c day pele					
Marks AAD	10562 AAD				
10585 AAA					
10.555 AAA	10564 AAA				
10050 AAA	10.565 AAA				
10557 AAA	10555 7004		· · · ·		
10580 AAA	10557 J AAA		WLAN	8 90	
19679 AAA	1055B NAA	· IEEE 902 (1g W.F. 2.4 GHz (0555-OFOM 38 Mbps, 8Spc duty cycle)	WEAN	8.37	196 T
10571 AAA	10589 AAA		WIJAN	3 10	÷96
10573 AAA IFFE 902 110 WF 24 GHz (0585 217 bb. 90pc duly cycle)			WLAN	830	195
10579 AAA			WEAK	199	:9.6
1957 AAA IFFE F02 TID WFI 24 GHZ (DSSS CFDM 5 Mbps, 90pc day open)			VA RV		76.0
1905/2 AAA IEEE 802 11g WF-24 GHz (DSSS-OFDM 5 Mbps, 80pc out; cycle) WILAN \$-95 19-6 1957 AAA IEEE 802 11g WF-24 GHz (DSSS-OFDM 19 Mbps, 80pc out; cycle) WILAN \$-70 49-6 1957 AAA IEEE 802 11g WF-24 GHz (DSSS-OFDM 18 Mbps, 80pc out; cycle) WILAN \$-70 49-6 1957 AAA IEEE 802 11g WF-24 GHz (DSSS-OFDM 18 Mbps, 50pc out; cycle) WILAN \$-36 19-6 1957 AAA IEEE 802 11g WF-24 GHz (DSSS-OFDM 18 Mbps, 50pc out; cycle) WILAN \$-36 19-6 1957 AAA IEEE 802 11g WF-24 GHz (DSSS-OFDM 18 Mbps, 50pc out; cycle) WILAN \$-36 19-6			MUAN		196
10576 AAA			<u> </u>	<u> </u>	
10577 AAA	L		i		196
10.578					
10579 AAA					
10580 AAA IFEF 802 110 WF12 4 GHz (DSSS-OFDJ, 38 Mbps, 500c duty cycle)					
10591 AAA	· · · — — —			4 .	
10582 AAA				+ 	
1958 AAC					
10594 AAC				d	
10.985 AAC IEEE 802.11a*n W F15GHz (DFCM, 12 Mbgs 90cc duly cycle) WLAN \$70 \$19.5	L L			1	
10588 AAC					
10587 AAC IEEE 802.1527 W F15 GHz (OFFM, 24Mbps 90pc duly cycle) WLAN 8.36 49.6 10588 AAC IEEE 802.1527 W F15 GHz (OFDM, 36Mbps 90pc duly cycle) WLAN 8.35 19.6 10590 AAC IEEE 802.1527 W F15 GHz (OFDM, 46Mbps 90pc duly cycle) WLAN 8.35 19.6 10590 AAC IEEE 802.1527 W F15 GHz (OFDM, 54Mbps 90pc duly cycle) WLAN 8.67 49.6 10590 AAC IEEE 802.1127 W F15 GHz (OFDM, 54Mbps 90pc duly cycle) WLAN 8.67 49.6 10590 AAC IEEE 802.1127 W F15 GHz (OFDM, 54Mbps 90pc duly cycle) WLAN 8.63 49.6 10590 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS2 90pc duly cycle) WLAN 8.64 49.8 10590 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS2 90pc duly cycle) WLAN 8.64 49.8 10590 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS2 90pc duly cycle) WLAN 8.74 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS2 90pc duly cycle) WLAN 8.74 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS3 90pc duly cycle) WLAN 8.77 19.5 10597 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS3 90pc duly cycle) WLAN 8.77 19.5 10599 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS3 90pc duly cycle) WLAN 8.79 19.6 10599 AAC IEEE 802.1111 (HT Mixed, 20MHz, MGS3 90pc duly cycle) WLAN 8.79 19.6 10599 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.79 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed, 40MHz, MGS3 90pc duly cycle) WLAN 8.94 19.6 10590 AAC IEEE 802.1111 (HT Mixed,					
19688 AAC					
10590 AAC				.1	
10593 AAC IEEE 802.11m T Mored. 20 MHz. MG30. 90pc duty cycle YAAN 8.67 49.8 10594 AAC IEEE 802.11m T Mored. 20 MHz. MG30. 90pc duty cycle YAAN 8.63 29.6 10595 AAC IEEE 802.11m HT Mored. 20 MHz. MG30. 90pc duty cycle YAAN 8.63 29.6 10595 AAC IEEE 802.11m HT Mored. 20 MHz. MG32. 90pc duty cycle YAAN 8.64 29.8 10595 AAC IEEE 802.11m HT Mored. 20 MHz. MG35. 90pc duty cycle YAAN 8.74 19.6 10595 AAC IEEE 802.11m HT Mored. 20 MHz. MG35. 90pc duty cycle YAAN 8.74 29.6 10595 AAC IEEE 802.11m HT Mored. 20 MHz. MG35. 90pc duty cycle YAAN 8.71 29.6 10595 AAC IEEE 802.11m HT Mored. 20 MHz. MG35. 90pc duty cycle YAAN 8.71 29.5 10596 AAC IEEE 802.11m HT Mored. 20 MHz. MG35. 90pc duty cycle YAAN 9.72 29.6 10598 AAC IEEE 802.11m HT Mored. 20 MHz. MG37. 90pc duty cycle YAAN 9.70 29.6 10599 AAC IEEE 802.11m HT Mored. 40 MHz. MG37. 90pc duty cycle YAAN 9.79 29.6 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG37. 90pc duty cycle YAAN 9.78 29.6 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG37. 90pc duty cycle YAAN 9.78 29.6 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG37. 90pc duty cycle YAAN 9.78 29.6 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG37. 90pc duty cycle YAAN 9.78 29.6 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35. 90pc duty cycle YAAN 9.76 29.8 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35. 90pc duty cycle YAAN 9.76 29.8 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35. 90pc duty cycle YAAN 9.76 29.8 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35. 90pc duty cycle YAAN 9.76 29.8 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35. 90pc duty cycle YAAN 9.76 29.8 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35. 90pc duty cycle YAAN 9.76 29.8 10590 AAC IEEE 802.11m HT Mored. 40 MHz. MG35			!	 :	
10591 AAC	10593 AAC			J · -	
19692 AAC 1898 902.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle) WLAN 3,78 19,6 19594 AAC 1888 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle) WLAN 3,64 29,8 19594 AAC 1898 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) WLAN 3,74 29,6 19595 AAC 1898 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) WLAN 3,74 29,6 19595 AAC 1898 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) WLAN 3,71 19,5 19597 AAC 1898 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) WLAN 3,72 49,6 19598 AAC 1898 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) WLAN 3,70 29,6 19599 AAC 1898 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) WLAN 9,79 29,6 19599 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) WLAN 9,879 29,6 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) WLAN 9,88 19,6 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) WLAN 9,89 29,6 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) WLAN 9,89 29,6 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) WLAN 9,90 29,6 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) WLAN 9,76 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,76 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,76 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,76 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,76 29,8 19,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,76 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,84 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,84 29,8 19600 AAC 1898 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) WLAN 9,84 29,8 19600 AAC	10591 AAC			• •	
10593 AAC IEEE 802.11 n (HT Mixed, 20 MHz, MCS2 93pc duty cycle)	10592 AAC				
D594 AAC	10593 AAC		"WI,AN		
IES96 AAC IEEE 802.11r (HT Mired, 20 MHz, MCS5 90pc duly cycle)			, MITW		
10597 AAC SEEE \$02.11r (IT Mosed, 20 MHz, MCSS 93 pc duly cycle)			WIAN		
10598 AAC 1666 S02.110 (HT Mined, 20 MHz, MCS0, 90gc duly cycle)				a71 '	19.5
10599 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WiLAN 9.79 19.0 10600 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WiLAN 9.88 19.6 10601 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WiLAN 9.82 19.0 10600 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WILAN 8.94 19.0 10600 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WILAN 9.03 19.5 10600 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WILAN 9.76 19.0 10600 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WILAN 9.97 19.5 10600 AAC 1656 802.11r (HT Mixed, 40.MHz, MCSO 90pp duly cycle) WILAN 9.60 19.0			WEAN	5.72	±94i
1960 AAC 1656 802 Tr (HT Mined, 40 MMr. MCS7 90 pc duty cycle) YILAN 9 88 19 8 19 8 19 6					136
CS01 AAC RESE 802.11r (H* Mixed, A3N0Hz, MCS9 93pc duty cycle) Mi(AN 9.82 19.6 10602 AAC RESE 802.11r (H* Mixed, A3N2Hz, MCS3 93pc duty cycle) VI(AN 8.94 49.6 10603 AAC RESE 802.11r (H* Mixed, A3N0Hz, MCS4 93pc duty cycle) WLAN 9.93 19.6 10604 AAC RESE 802.11r (H* Mixed, A3N0Hz, MCS5 93pc duty cycle) WLAN 9.76 49.6 10605 AAC RESE 802.11r (H* Mixed, A3N0Hz, MCS5, 93pc duty cycle) WLAN 9.97 29.6 10605 AAC RESE 802.11r (H* Mixed, A3N0Hz, MCS7, 93pc duty cycle) VI(AN 9.62 19.6 19.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607 AAC RESE 802.11ra WAH (20NHz, MCS7, 93pc duty cycle) WLAN 9.64 28.6 10607	1.				
10669 AAC 1555 802 11r (HT Mined, 40 MHz, MCS3 90 pc duty cycle)		IEEE 802 11# (HT Mired, 40 Mats, MCS* 90pc duty cycle)			
10603 AAC 10605 107 (HT Mined, 40 NMHz, MCS4 90pc duty cycle) WILAN 9.03 29.5 10604 AAC 10605 107 (HT Mined, 40 NMHz, MCS5 90pc duty cycle) WILAN 9.76 49.8 10605 AAC 10605 AAC 10605 107 (HT Mined, 40 NMHz, MCS5, 90pc duty cycle) WILAN 9.97 49.5 10605 AAC 10605 107 (HT Mined, 40 NMHz, MCS7, 90pc duty cycle) WILAN 9.62 49.6 10607 AAC 10605 107 (HT Mined, 40 NMHz, MCS7, 90pc duty cycle) WILAN 9.64 29.6 10607 AAC 10605 107 (HT Mined, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 10607 107 (HT Mined, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle) WILAN 9.64 29.6 107 (HT MINED, 40 NMHz, MCS0, 90pc duty cycle)					
10 604 AAC 17 FF 309 1 17 (HT Mined, 40 MHz, MCS5 90pc duty cycle; WLAN 9.76 ±9.8 10 605 AAC 15 5 22.11 r (HT Mined, 40 MHz, MCS6, 90pc duty cycle; WLAN 9.97 ±9.5 10 605 AAC 15 5 22.11 r (HT Mined, 40 MHz, MCS7 90pc duty cycle; WLAN 8.62 ±9.6 10 607 AAC 15 5 32.11 ac WAH (20 MHz, MCS0, 90pc duty cycle) WLAN 9.54 ±9.6					
ICB05 AAC RESE 827.11r (HT Mined, 43 MHz, MCS6, 930e duty cycle) WLAN 9.97 29.5 ICB05 AAC ICEE 832.11r (HT Mined, 43 M34z, MCS7, 93pc duty cycle) WLAN 8.62 2.9.6 ICB07 AAC ICEE 832.11rc With (20 MHz, MCS0, 93cc duty cycle) WLAN 9.64 2.8.6		FEEE BART (AUT DOWN A DEBT. DOSE NO.			
10605 AAC (EEE 502 11) (IT Mined, 43 M34z, MCS7, 93pc duty cycle) WLAN 8 62 2 8 10607 AAC (E66 502.11ac With (20 MHz), MCS0, 90cc duty cycle) WLAN 9.64 28.6		MILE 400 HE UNITED MILEO, 40 NATZ, MICSO 9000 duty Cycle;			
10607 - AAC Tees 632,11ac With (20 MHz, MCS0, 90cc daily cycle) WLAN 9,64 ±9,6					
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QIU]	Rev	Communication System Name		1 8/8	
10609	AAC	IEEE 802.1 Tad WIF (20 MHz MG\$2, 90pp (bity cyde)	Group WLAN	PAR (dB)	Unc
10610	AAC			8.7B	_ _
10611	AAC	*CGE 802.11 ac Wif- (20 MHz - MCS4 50pc duty cycle)	WLAN	870	_9.6
10612	WE	AFR 807 I : sc WiFi (201/Hz, MOSS, 90pc duty cycle)	WAAN	8.77	-0.6
:0613	AAC	SSE 802.11 ac Wife, (20 MHz, MCSE, 90pp duty cycle)	WLAN	5,94	=9.6
10614	AAC.	FFF 808 1 : ac WiFt (20 MHz, MOS7, 90pc duty cycle)	Wi_AV	8.55	 9.6
:0615	AAC	556 802.11 ac With (20 MHz, MC58, 90pc ducy cycle)	WLAN	9 82 "	±9.6
10616	AAC	ESS 802 11:30 Wiff (40 MHz, MGSC, 90pc duty cycle)	WLAN	8.82	+9.F.
:0617	AAC	"SSS add.1" az WAFI (40 MF2, MOS1, 90ga duly cycle)	WLAN	58:	±8.6
10648	AAC	ISES 802,1 (ac WiFi (40 MHz, MCS2, 90pc duty cycln)	WAN	8.58	. ±9.6
10819	AAC	ISES 602.11 Ac WiFi (40 MHz, MC53, 90pc duty cycle)	WLAN	8 86	+9.6
10820	AAC	1566 802.11ac WiFi (40 MHz, MCS4, 90pc duty cyclo)	WLAN	8.87	<u>⊁</u> 9.6
10622	AAC.	TEBS 602.11ac WiFt (40 MHz, MOSS, 90pc duty cycle) TECC 602.11ac WiFt (40 MHz, MOSS, 90pc duty, cycle)	WLAN	9 77	-96 -
10 622	MAS	15ES 802.11ar WiFi (40 MFz, MCS7, 90pc duty cycle)	WLAN	9.58 9.82	±9.6 ±9.6
10624	AAC	1556 602.11ac WiFi (40 MHz, M/2S8, 90pc duty cycle)	WLAN	8.96	<u> </u>
1CE25	AAC.	TERS S02.114c Wife (40 MHz, MCS9, 90pc duty cycle)	WAS	D 96	:9.6
10026	. AAC	ISSE ed.2.1 (ac WiFi iso MHz, MOSB, Sope duty cycle)	WOAN	B.B2	- <u>-9.6</u>
10627	AAC	ISBS 602 11gg WiFi (60 MHz, MCS1, 90pc duty cycle)	VA 20	8 03	±9.E
10628	AAC	ISSE BOZ.1 (no WiFi (SQ MHz), M.552, SQpp duty cycle)	WLAN	87.	=9.6
10629	AAS	TFRE 602 11au WiFi (80 MHz, MOS0, 90pc duty cycle)	VAZAV	8.85	_9.6
10820	AAC	TEBS BOZ. Had W.5 (80 MHz, MOS4, 90pc duty cycle)	WLAN	872	=9.G
10801	CAA	TEEE 802,11ac W Fr (80 MHz, MOSS, 90pc duty cysto)	WLAN	9.2	±9.6
10632	AAC		VA AV	8,74	÷9.6
19 633	AAC	IECE 802.11ac W Fi (80 MHz, MCS7, 50pc ducy cycle)	WEAN	B.B3	±9.6
10634	AAG	IFFF 802 1100 W.F. (80 WHz. MCS9, 90pc duty cycle)	VA,AV	8.80	±9.6
19635	AAC	IEEE 807 11ac W Fr (80 VHz, MGS3, 50pc 642y cycle)	WUAN	8.8	±9.6
10636	AAD	TEEE 802 11ac W.F. (160 MRs, MCS0, 90pc duty cycle) TEEE 802 11ac W.F. (160 MRs, MCS1, 90pc duty cycle)	WLAN	9.83	±9.6
10698	AAD	IEEE 802 1136 WF1 (160 MHz, MGS1, 3006 0.5) 63600; IEEE 802 1136 WF1 (160 MHz, MGS2, 5006 0.5) 63600;	WLAN WLAN	9 79	±9.6
10535	. AAD	IEEE 802 11ag W.F. (160 MHz, MCSS, 90pc duty cycle)	WIAN	8.86	±9.6
10,840	AAD	IEEE 802 11ac W.H. (180 MHz, MGS4, 80pc 6/c) 6/cio)	. WLAN	8.08	29.6
1954:	AAJ	IEEE 802 11ab W.F. (160 MHz, MCS5, 80pc duty cycle)	WLAN	9.36	±3.E
10,942	AAD	IEEE 802 11a: W.F. (160 MHz, MCS5, 50pc (4.1) cycle)	WEAR	9.36	296
10543	ֹ כאא ֹ	IEEE 802 11ac W.F.: (160.14Hz, 15087, 90pc cuty cycle)	WLAY "	8.89	±9.6
18844	CAA	ICEE 902 11ab Wiff (IBOMHA, MCSS, 50pt duty cycle)	WEAR	9.05	198
19545	CAA	IEEE 802 1140 WIE. (1604thiz, MCS9, 90pc cuty cycle)	WEAN	9.11	+9.6
10,546	AA4	LTE-TOD (SC FOMA, LRB. 5 MHz, QPSK, UL Subhane-2 7)	LIE 100	11.96	≥9.8
10347	AAG	CTE-TOD (SC-FOMA, 1 RB 201/14z, DPSA UL Subtrames2 7)	LTE-TOD	11.96	+ 9.6-
10548	w	GDMA2000 (1x Artvanced)	GBM/(2000)	3 45	. 29.6
10852	AAF	LTE-TDD (OFOMA, SMHz, E-TM 2.1, Cipping 44%)	UF-TOD	û.5'	±96
10.654	AAE	TTF-TRD (OFDMA, 10MHz, E-TM 3.1, Clipping 64W)	1TE-TOD	7 42	_ <u>+9.6</u> _
19555	AA=	LTE-TDD (OFOMA, 15 MHz, E-TMIS.1, Clipping 44%) LTE-TOD (OFOMA, 20 MHz, E-TMIS.1, Clipping 44%)	LTE-TOD	G.56	196
10 659	MA3	Pulse Wavelann (200Hz, 18%)	Test	13.66	19.E -
10559		Pu'se Wavelorn (2001)z, 2014;	Tosi	6.99	±9.6 ±9.6
10650	EAA.	Pulse Wavelorm (200Hz, 40%)	lesi	358	196 -
10661	AAB.	Pulse Wavelorm (2004z, 88tv)	Tesi	2.22	
10662	AAB	Pulso Wavelorn (200Hz, 90°v)	iesl	97	±9.6
10670	ΛΛΛ	Suctoall Low Energy	8 ue/po?h	2.15	
10671	AAC	IRER 907 Litax (20 MHz, MCS0, 90pc duty cycle)	WA AW	9.09	± 9.6
10672	DAA	ISSS 802.1 Nav (2017 Hz, MCS1, 90pc duty cyclo)	WOAN	8.57	196
10673	AAC	IFFF 802 Talk (20 MHz, MCS2, 90pc duty cycle)	" WEAR	8.76	±9.6
10874	AAG	FEEE 802.11ax (20MHz, MCS3, 90pc duty cycle)	WEAN	8 74	±9.6
10675		EEE 802 Fax (20MHz, MCS4, 90pc duby cycle)	WUAN	0.90	+9.5
106/6		IEEE 807.11ax (79 MHz, MCS5, 90pc duly cycle)	WLAN	8 77	29.6
10677	AAC	TEEE 802.11ax (20 MHz. MCS6, 93pc duty cycle)	Wt.A4	8.73	. <u>-9.5</u> _]
10679	AAC AAC	IESE 807.11ax (20 MHz, MCS7, 90pp duty cycle) (ESE 802.11ax (20 MHz, MCS8, 90pp duty cycle)	WLAN	978	<u></u> ±9.6
10679	AAC	FEEE 802 TTax 120 MHz, MCS9, 90pc duly cycle; IEEE 802 TTax (20 MHz, MCS9, 90pc duly cycle;	WLAN	8.89	<u>-9.5</u>
10681	AAC	1696 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	9.62	=9.6
10562	AAC	iERE 807.11ex (20 MHz. MCS11, 90pc duty cycle)	WLAN	8.62	<u> </u>
10683	AAC	IEEE 802.11ax (20 MHz, MCSD, 99pc disty sycto)	- WIAN -	8.42	29.6
10.684	AAC	IEEE 892.11ex (20 MHz MCS1, 99ac duly byc'e)	WLAN	- 0 26	29.li
10,685	AAC	IEEE 802.11ax (20 MHz, MCS2, 99pc duty cycle)	WEAV.	B.33	±96
10666		IEEE 692 11gx (20 MH); MCSQ, 99pc duty cycle;	WA MV	0 28	19.6
			<u>_</u>		

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UIO Rev Communication System Name			
10687 AAC IEEE BOZ 11ax (20 MHz, MC\$4, 99pc 0c/y cycle)	Group WUAN	9AR (4B)	Ulice A = 2
10688 AAC IEEE 802 11av (20 MHz, MCS5, 99pc puty cycla)	WLAN .	8 29	196
10669 AAC IEEE 802 11ax (20 MHz, MCS6, 98pc duty cycle)	WAN	8 55	—.±96 —
10693 AAC IFFF 802 11a+ (20 MHz, MCS7, 99pc duby cycle)	WLAN	829	+9.6
10891 ; AAC (SES 802 11ax (20MHz, MCS8, 99pp duly byole)	WIAN	B 25	±9.6
(0692 AAC JEFF 802 : 1a+ (20MHz, MCS9, 99pc duty cycle)	WLAN	678	=9.6
10893 AAC	WLAN	825	±9.6
10694 AAC FEEE 802 Than (2017/17, MCS1 1, 98pc duty cycle)	WLAN	857	±9.6
10695 AAC IESS 802, \$1ax (40 MHz, MCSC, 90ap duty byets)	WLÁN	B.78	
10,006 AAC IESE 802,11as (40 MHz. MCS1, 90pc duty cycle)	WARN	183	19.ti
10697 AAC 1686 802.11.tu (49 MHz, MCS2, 90pc duty cycle)	WLAN	8 61	
10.698 AAC IEE6 802.1 \ax (43 MHz ANDS3, 50pc daily cycle)	AN IW	885	+ 9.6
18659 AAC IEEE 802.15ax (40 MHz MC54, 90pc duly cycle)	WLAN	Baz	±9.6 · —
10700 AAC IEEE 802.11 ax (40 MHz MCSS, 50pc duty cycle)	WLAN	6.73	±9.6
10701 AAG IFFF 807.11gx (49 MA); MCS8, 90pc duty cycle)	MUAN	B.65	£9.6
10702 AAC 1666 802.11ax (40 MHz MCS7, 90) o duly cycle)	WLAN	6 70	±9.5
10703 AAG IFEE 808 IT & (401/241), MCS8, 90pc duty cycle)	WLAN	8.87	29.6
16794 AAC 1666 802.11ax (49 MHz, M.559, 90pc duly &c'e) 16795 AAC 1 IFFE 632 11ac (40 MHz, M.CS16, 90pc duly cycle)	WLAN	8.59	⊼ 9.6
	WLW	8.69	±9.6
10706 AAC IEEE BOZ Hax (40 MHz, MC51 !, 90pc duty sycle; 10707 AAC IEEE 602 11ax (40 MHz, MC50, 89pc duty cycle)	WLAN	8.66	29.6
1878B AAC : IEEE 602.11ax 140 MHz, MCS1, 99pc duty cycle)	WLAN	8 32	+9.6
10709 AAC IEEE 802.11ax H0 MHz, MCS2, 55pc duly cycle)	WLAN	B 55	±9.6
19710 AAC IEEE 602.11ax (40 MHz, MCS0, 99pc duty cyclo)	WLAN	8 33	<u>+9.6</u>
10711 AAC IEEE 002.11ax 40 MHz, MCS4, 99pc duly cycle!	WIAN	8.29	±9.6
13712 AAG IFFF 600 110x (40 MHz. MCSS, 99pc duty cycle)	WLAN	 867	::9.5 ::9.6
10718 AAC IEEE 802.11ax (40 MHz, MC55, 98pc duly cycle)	WI,AN	0.33	196 .
10714 : AAC IEEE 802 11ax (40 MHz, MCS7, 95pt buty byce)	WLAN	7 8 26 7	
10715 AAC IEEE 802 11ax (40 MHz, MC58, 88pc duty cycle)	WLAN	8.45	±96 j
:0716 AAC IEEE 802 1184 (40 MHz, MCS9, 99pc ptby cycle)	WLAN	6 30	±96
10717 AAC (IEEE 902 11av (40 MHz, MCS 10, 99pc (Juty cycle)	WLAN	H.48	196
. 10718 AAC SEE 902 \11ax (40 MHz, MCS\1, 99pc duty cycle)	WLAN	0.24	— <u></u>
10719 AAC BEE 803 1au (80 MH), MCSO, 90pc duty cycle)	WLAN	8.81	±96
10720 AAC SEE 802 15ax (80 MHz, MCS1, 90pc duty cycle)	WI AN	8.87	196
10721 AAC .EEE 802 11 at (80 MHz, MCS2 90pc duty cycle)	WLAN	R.76	±96
10722 AAC 1565 802.11av (80 MHz, MCS3, 90 politiky dyste)	'WJAN '	9.55	-56
(B725 AAC 1FFF 802 as (80 MHz, MCS4, 90pc duty cycle)	WLAN	870	<u> -96</u>
10724 AAC 1555 802.11Ax (50 MHz, MCS5, 90cc dicty cycle)	WLAN	9.50	±9.6 °
10725 AAC IEEE 802 : 'ax (90 MHz. MCSt. 9000 dury cycle)	WEAN	874	196
10726 AAC : 12EE \$02.11 as (80 N Hz, MCS7, 90cc duty cycle)	WEAR .	9,72	<u>.</u> 96
10727 AAC 1866 802.7 ax (90 MHz, MCSB, 90ec duly rycle)	WLAN	966	- 25.6
: 10728 AAG	WLAN	8.65	196
The state of the s	WLAN	9.64	-56 :
19720 AAG IEEE 802.11ax (80 MHz, MCS11), 90sc duty cycle) 1973: AAC IEEE 802.11ax (83 MHz, MCS0, 99pc duty cycle)	WUAN	9.67	±9.6
10 /22 AAG IEEE 802 11 at (20 V/42, MCS1, 99cc duly cyclo)	W. AN	B.42	-5.6
19733 AAC IEEE BOZ.TTax (83MHz MC57, 97cc duty cycle)	WLAN WLAN	8.46	<u> 196</u>
10794 AAC IEEE 602,11ax (80 MMz MCS3, 990c duly cycle)	WLAN	9.40 8.25	<u>=5.6</u> .
13735 AAC IEEE BOZ.HAX (63 MHz, MGS4, 9900 daily sycle)	WLAN	i-4.25	
13736 AAC IEEE 802.11ax (63 MHz, MCSu, 590c duty cycle)	WLAN	8.27	<u>≠</u> 9.6 =9.6
10737 AAG TEEB 807.1192 (80 MR7, MC56, 9900 daily cycle)	WLAN	8.35	9.6
19738 - AAC IEEE 802.11ax S0MHz, MCS7, 59pc duly cycle}	WLAN	B 42 "	=9.6
19739 AAG IFFF 802.11ax (80 MHz. NOS8, SSpc duly cycle)	WLAN	8 25	<u>-96</u>
10749 AAC IEEE BOZ.1 (ax IBO MHz, MC59, 09pc duly bycle;	WLAN	9 60	:9.6
10741 AAC IEEE 802 118x (80 MHz. MCS13, 95pc duty syclo)	WUNN	8.40	±9.6
10742 AAC IEEE 802 11ax (802/Hz, MC511, 99pc doly cycle)	W. AN	843	-3.6
10743 : AAC IEEE 802 11uz (180M) z. MCS3, Sopo duly cyclol	WUAN	394	= 9.G
10744 AAC IEEE 802 11av (160 MHz, MCS1, 90pc duty cycle)	WLAN	9.16	196
10745 AAC (EBE 802,116) (180 VHz, MCSZ, 90pc duty cycle)	: WLAN	899	±9.6
10746 AAC 888 902 9124 (160 WH7, MC\$3, 90pc duty cycle)	WLAN	9.11	19.6
10747 AAC 856 852.1 Tax (166 MHz, MCS4, 95pc duty cycle)	WLAN	906	t9.5
10 M8 AAC 288 809.1 tall (160 MHz, MCS5, 90pc duty cycle)	WLAN	893	198
10749 ; AAC :EEE 802.1 au (160 MHz, MOS6, fingo dudy cycle)	WLAN	590	+9.5
10:750 AAC 1596 802.11 as (160 MHz, MCS7, 90pc pt/ty cycle) 10:751 AAC 1666 802.11 as (160 MHz, MCS8, 90pc pt/ty cycle)	WL/M	8.73	±9.6
10751 AAC 1666 802.11ax (160 MHz, MC58, 90pc duty cycle) 10752 AAC 1666 802.11ax (160 MHz, MC59, 90pc duty cycle)	WLAN	. 802	19.5
10.00 stock obe : as (100 mme, nices) super body byset	WLAN	881	±9.6

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UJD Rav	Communication System Name	Group	PAR (dB)	UncE A = 2
13753 AAC	IEEE 802.11ax (163 MHz, MC510, 90pc duty cycle)	WLAN	907	-9.6
13/54 AAC	IEEE 802 11ex (153 MHz, MCS11, 90pc duty cycle)	WLAN	894	±9.6
10755 AAC 10755 AAC	IEEE 802.11ax (163 MHz, MC50, 89pc duty cycle)	MENN	B 64	196
10757 AAC	IEEE 802 119x (160 MHz, MCS1, 98pc duty cycle)	WLAN	6.77	9.6
10758 AAC		WLAN	B 77	128
10759 AAC	IFFF 802 11/1x (160 MHz, MCS3, 89pc buby cycle)	WLAN	8 69	÷9.ti
10763 AAC	EEE 802:11ax (160 MHz, MCS4, 99pc duty cycle; JEEE 802:11ax (160 MHz, MCS5, 99pc duty cycle;	WLAN	B 58	±9.8
10761 AAC	1585 802 11ax (160 MHz, MCS6, 98pc duty sycte)	WLAN	8 49	=9.6
10762 AAC	IESE 802 That (1804MHz, MCS7, 99pc duty bycle)	WLAN	8.58	. 19.6
10763 AAC	IEEE 802.11as (160MHz, MCS6, 99pt duty cycle)	WLAN	8 49	19.5
10764 AAC	IEEE 802.1129 (180MHz, MDG5, 99pp duty bytte;	WLAN	R.53	196
10765 AAC	IEEE 802.13ax (160MHz, MC310, 99pp duty cycle)	WIAN	8.54	+9.5
10766 AAC		WIAN	8.54 8.51	196
10767 AAS	5G NR (CP-OFCM, 1 RB, 5 MHz, OPSK, 15kHz)	SG NA FAY 100	7.99	196
10768 AAD	5G NR (CP-OFCM, 1 AB, 10 MHz, QP5K, 15kHz)	50 NR FRY TOD	8.01	196
10/69 AAD	5G NR (GP-OFCM, 1 RB, 15MHz, QPSK, 15kHz)	SG NA FAT TOO	B.D1	196
19770 1 AAD	SG NR (CP OHJM, 1 HB, 20 MHz, QPSK, 15kHz)	SO NO SOLUTION		. 190 196
10775 AAD	50 NR (CP-OFDM, 1 NB, 25MHz, QPSK, 15kHz)	SG NR PA' TOO	8.02	
10772 AAD	5G NR (CP-CFDV, 1 RR, 30 MHz, QPSK, 15kHz)	SG NR FR' TOO	8.23	
10773 AAD	50 NR (CP-CFDM, 1 RB, 40 MHz, GPSK, 15 kHz)	SG NR FR' TOO"	8.03	196
18774 AAD	5G NR (CP-CFOM 1 RB, 50 MHz, QPSK, 15kHz)	SG NR FR' TOD	9.02	— 196·—
10775 AAO		SG NR SR' TCO	8.31	-96
10776 AAD	5G NR (CP-CFDM, 50% RB, 10 MMz, ORSK, 15 kHz)	SG NR FR' TCD	8.30	196
10777 A4C	5G NR ICP-CFDM 50% AB 15 MHz CPSK 15 NHzI	SG NR SR' TCO	9.30	290
10778 AAD	5G NR (CP-CFDM, 50% RB, 20MHz, CPSK, 15 kHz)	" SG NA 2H" 100	8 34	
10779 AAC	SG NR ICP-CHUM, SON RB 25 MHz, QPSK, 15 KHZI	SGINESH: TED		296
10780 AAD	56 NR (CP-0F0M, 50% RS, 30 MHz, QMSK, 15 KHz)	SG NA #R' TOO		-96.
10781 AAO	SG NR JCP OF 9M, 50% RB, 40 MP2, CPSK, 15 MIZE	SG NR FR: TOO	9.38	:56
10792 AAD	5G NR (CP-0F0M, 50% A8, 50MHz, GPSK, 15 kHz)	SS NR FR' TOO	8.43	=96
10783 AAE	4G NR (CP-0FDM, 100% RR, 5MHz, QPSK, 15kHz)	SG NR FRY TOO	8.31	.56
10784 - AAO	5G NR (CP-0F0M, 100M, HB, 10 MHz, CRSK, 15 kHz)	SO NR FR' TOO	8 29	-56
10785 AAD	55 NR (CP-0F0M, 100% RB, 15MHz, 0PSK, 15 kHz)	SGNA FR' TOD	8.40	±9.6
10786 AAD	5G NR (CP-OFCVA, 100% RB, 20 MHz, CPSK, 15 vHz)	55 NR FR: TDD	8 35	:5.6
10787 AAC	56 NR (CP-DFDM, 100% PB, 25 MHz, CPSK, 15 cHz)	SG NA FACTOR	- a44	±9.6
10788 AAD	SGINR (CP-OFDM, IDDM RR, 30 MHz, QPSK, 15 (Hz)	50 NR FR: 100	8.39	:5.6
10788 AAD	55 NR (CP-OFOM, 100% RB, 40 MHz, GPSK, (5 -Hz)	SGINB PHI TOD	- 837	- 298
10790 AAB	5G NH (CP-OFDM, 100% RB, 50 MHz, QPSK, 15NHz)	SG AR FRETDD	8.39	_9.6
10791 : AAE		SGINA FRUTOD	7.53	±9.6
10792 : AAB	5G NH (CP-QFCM, 1 RB, 10MHz, QPSK, 30 Mz)	5G NR FRI TDD	7.92	=36
10793 : AAD	50 ND (CP-OFDM, 1 AB, 15 MHz, CPSK, 30 NHz)	SANH PHI TOD	795	±9.6
:D794 AAD	SGINB (CP-CFDM, 1 RB, 20MHz, QPSK, 30 kHz)	5G AR FRI TOD	7 92	
10785 AAD	5G NR (CP-OFUM 1 HB, 25 MHz, QP5K, 30 AHz)	SG NR FRI TOD	786	-9.U
IC756 AAD	5G NR (CP-CFGM, 1 RB, 30MHz, QPSK, 30MHz)	5G NR CR1 **30	7 a2	±96 ⁻
10797 AAD	SG NR (CP-OFDM-1 HB, 40MHz, QPSK, 30MHz)	SG NA FRI TOD	801	-3.6
10798 AAD	5G NR (CP-OFDM, 1 RB, SOMHZ, QPSK, 30XHZ)	SGINB FHT 70B	780 1	±9 0
10799 AAD	SG NR (CP-OFDM, 1 RB, 60MHz, QPSK, 30%Hz)	. 55 NR FR1 700	793	₹3.E
10801 AAD	50 NR (CP-OFDIA, 1 RB, 80MHz, CIPSK, 30MHz)	5G NR FRI 190	780	=9 G
CAV ZOBBIL.	SG NH (CP-CFUM 1 RR, 90 MHz, QPSK, 30 kHz)	<u>155 NA FALTOD</u>	7.87	+3.6
10803 AAD	SG NR ICP-OFDM, 1 RB, IED MHz, QPSK, 30kHz)	SG NR FR1 TOD	793 ~	±9.0
IDBES AAD	5(5 N.H. (GP-GF0M, 50% RB, 10 MHz, QPSK, 30 kHz)	50 NR FR1 TOD	634	±36 '
10808 AAD	SG NR ICP-GFDM, 50% RB, 15MHz, QP5X, 30kHz}	\$GINA FA1 TOD	637	±3.E
1888 AAD	55 NR (CP-CEDM, 50% RB, 30 MHz, OPSK, 30 kHz)	5G NA FRI TOD	834	<u>.</u> 96 .
19815 AAD	95 NR (CP-CHUM, 50% RB, 40 MHz, QPSK, 30 kHz)	. SG NR FR1 TOC	836	+9.5
19912 AAD	5C NR ICP-OFDM, 50% AB 60 MHz, OPSK (30 kHz)	56 NR 681 TOC	e 35 j	±96
10917 AAE	SG NR (CP OFDM, 100% RB, 5MH), QPSK, 30kHz	SGINR FRI TOD	e.35 '	±9.5
10918 AAD	SG NR (GP-OFOM, 100% RB 10 MHz, OPSK, 30 kHz)	SGINR FREITOU	634	₹9.5
10819 AAD	55 NR (CP-DFDM, 100% RB, 15 MHz, QPS C 30 kHz)	50 NR FR1 TOD	B 33	±9.5
10820 AAD	5G NP (CP-OFOU, 100% HB, 20 MHz 10P\$K, 30 KHz;	5G NR FR1 TOD	e 30	≟9.5
10821 AAD	59 NR (CP-DFD9), 100% PB, 25 MHs, OPSK, 30 kHz)	SCINA PRI TOD	B.41	±9.5
10622 AAC	5G NR (CP-DFDM, 100% PB, 30 MHz, CPSK, 30 kHz)	SG NR FR1 TDD	8,41	195
10823 AAD	5G NR (CP-OFDW, 100% R8, 40 MFg, CPSK, SOKHZ)	SG NR PRI TOD	8.26	198
:0824 AAD	SGINA (CP-OFCM, IRRW RB, 50 MF), CPSK, 30 MHz	50 NR FRI TOD	8.39	±96
10625 AAD	5G NR (CP-CFRM, 100% R8, 80 MHz, CPSK, 30XHz)	SG NA FATTOU	8.4%	195
10827 AAC	SG NH (CHICK 190%) RB, 80 WHZ, QFSK, 30x4z)	5G NR FR1 TOD	0.42	196
TUEZO ; NAO	SCINR (CP-OF022 1001), RB, S0 MHz, CPSK, 30KHz)	SG NA FAT TOD	R.43	±96

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URD R	ev Communication System Name	_{ацо:}	PAR (dB)	Ünct + - Z
	AD 5G NR (CP-OFOM, 100% RB, 100 MHz, EIPSK, 30 kHz)	50 NR FRY YOU	8.43	-96
10830 A	AD SIGNE (CP-QFDM, 1 RB, 10 MHz, QPSK, 80 kHz)	SGINH FRY TDO	7 63	19.6
::- : ::	AD 1 SGINR (CP-OFOM, I RS, 15 MHz, OPSK, RIKHZ)	SGINA FA! TOO	7.73	±96 [—]
	AD SGINR (CP-OFDM, 1 RS, 20 MHz, QPSK, 80 kHz)	SS NR FR: TOO	7.76	±9.6
	AD 5G NR (CP-OFDM, 1 P3, 25 MHz, DP5K, 58 kHz)	28 AH EH, 10D	7.70	
	AC SGINR (CAIOFOM, 1 PB, 30 MHz, QPSK, 88kHz)	5G NR FR: TDD	7.75	: 9.6
	AD 5G NR (CP OFDM, 1 PB, 40 MHz, QP5K, 60 kHz)	55 NR FR: 100	7.73	±96
	AD 5G NR (CP-DFDM, 1 PB, 50 MRz, QPSK, 00 kHz) AD 5G NR (CP-DFDM, 1 PB, 60 MHz, OPSK, 50 kHz)	55 NR FR: 700	766	-9.6
	AD 5G NR (CP OFEM, 1 PR, 60MHz, OP5X, 50KHz) AD 5G NR (CP-OFEM, 1 PR, 60AHz, OP5X, 60KHz)	53 NR FRI TOD 53 NR FRI TOD	7.68	<u> </u>
	40 : SG MA (CP-CPCM, 1 RB, 90 MHz, CPSM, 60 kHz)	35 VH FRI TOD	· 767	±9.E ±9.€
	AU 56 NR (CP-0FDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FRI *DD	7.71	. +9.6
10843 A	AD 5G KH (CH CHUM, 50% RB, 15 MHz, C78K, 60 (112)	SS NR FRI TOD	*** 849 .	±9 B
10844 TA		5G NR FRI YOU	331	=9.6
10846 A	AD SG N.9 (CP-C=DM, 50% R6, 30 MH);	55 NR FR: TOD	841	9.6
10854 A		5G NR FR: YOU	834	. ±9 €
'DBSS A	1	SG NA FAL TOO	836	=9.6
	AD SG NR (CP-OFDM, 100% RB, 20MHz, CPSK, 6) kHz;	SGINE FRUTDO	8 37	
	AD 5G NR (CP-OFGW, 100% RB, 25)01(2, OPSX, 60 kHz)	55 NR FR: TDD	835	-9.E
	AD SG NR (CP-OFEN), 100% RR, 30MHz, QPSX, 60MHz;	55 NA PA1 100	8 35	-96
	AD 5G NR (CP-OFDM, 100% RB, 40MHz OPSK 60MHz; AD 5G NR (GP-OFDM, 100% RB, 50MHz OPSK 60MHz;	55 NR FR: 700	834	79.6
	AD 5G NR (CP-CRDM, 100% RB, 50 MH; CPSK, 60 kHz; AD 5G NR (CP-CRDM, 100% RB, 60 MHz CPSK, 60 kHz;	55 NH FH: TCO	841	-9 0
	AD 5G NR (GP-CFDM, 100% RB, S0 MR) OPSK () kitz:	50 NR FR' TCO	. 840 841	-:9.E
	AD 50 NR (CP-C7DM, 100% RB 90 NHz 0°5K 60 KHz)	SGARFRITED	- 841 837	±9.6 -9.6
	AB 5G NR (GP-GEDM , 100% AB, 100 MHz, GPSX, 60 kHz)	35 NR FR' 100	341	±9.6
	AD SG NR (DFT # OFDW 1 RB, (COMHz, CIPSK, 3CRHz)	SGINE FRY TOO	568	- 70 E
icese A	AD 59 NR (OFT-s-OFCM, 100% RB, 100/4Hz, QPSK, 30kHz)	55 NR FR: TDD	5.89	±9.6
10869 /	AB SG MR (DFT-s-OFDM 1 HB, (20 MHz, GPSK, (20 MHz))	SG NA FAZ YCO	5.75	70 6
	48 50 NR (OFTIS-OFDM, 100% RB, 100MHz, OPSK, (2004b)	153 NR FR2 TDO	5.89	-9.6
	45 SG MR (OPES) OF GM, 1 RR, 100 MHz, 160AN, 120 kHz;	5S NA HAR TOO	5.75	±9 €
	AE 5G NR (OFT)s-OFDM, 100% RB, 100MHz, 16GAM, 120 kHz)	50 NR FR2 TDO	6 52	=9.6
	AE 5G NH (DFTs-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	SS NH FH2 TCO	5.61	=9.6
	AS 15G NR (DETO: OFDM 100W RB, 100MHz, 64GAM, 120KH2) AS 15G NR (CP-QEDM 17B, 100MHz, OPSK 120KH2)	5G NR FR2 TDO	6 55	<u>-</u> n.€
	AS 1. 5G NR (CP-0FDM, 178, 100 MHz, 0PSK) 120 MHz; AS 1. 5G NR (CP-0FDM, 100 NRS, 100 MHz, 0PSK, 120 kHz;	55 NR FR2 TCD	778	=9.E
	AF 56 NR (CP-0FDM, 188, 100 MHz, 180AM, 120 AHz)	56 NR FR2 T00 56 NR FR2 T00	8 39 7 95	±9.6
	05 SG NR (CP-CH-DM, 100%-RB, 100/MHz, 16/DAM, 120%-Hz)	56 NH FHZ 100	841	29.6
	45 55 NR (CP-0F0M, 188, 1001/94z, 64QAM, 120 kHz)	55 NR FR2 TDO	S 12	:9.E
	AB SG MR (CP CEDM, 100% RB 100 MR), 640 AM, 120 AM2)	5G VR FR2 TCD	838	-96
1088: A	46 - 5G NR (DTR's C7DM, 1 RD, 50MHz, GPSK, 129kHz)	5G NR FR2 TDD	575	! -9.6 ·
1992 A	AE 55 NR (DET 8-07/04), 100%, AB, 50 MHz, OPS K, 120 kHz)	5G NR FR2 TCD	5 9 6	=9.6
	4E SG NR (OPT-s CFDM 1 RB, SIMHZ 180AM, "20kHz;	50 NR FR2 700	657	
	4E 55 NR (CFT); CFDM, 100% RB 50 MHz, 100AM, 120 (Hz)	SG NR FR2 TOD	6.53	=96
	NE SG NP (DET s-CEDM 1 AB, SOMHZ 64DAM, 120 kHz)	FG NR CR2 TDD	661	THE
	4E 55 NR (DFTs-CFDM, 100ts RB 50MMz, 04QAM, 520 kHz)	55 NR FR2 TCD	6 65	9.6
	AE 56 NR (CP-OFOM, 183,50 MHz, CPSK, 120 kHz) 4F 56 NR (CP-OFOM, 1001, P3,50 MHz, CPSK, 120 kHz)	5G NR FR2 TCO 5G NR FR2 TCO	. 778	:9.6
	AF, SG MP (CP-OFOM, 100%) PB, 50 MP2, CPSK, 120 kHz; NE DS NP (CP-OFOM, 1783, 50 MHz) 160 AM, 120 AHz)	56 NR FR2 100	835	9.6
	4E 5G NR/CP-OFOM, 1 45, 50 MHz, 160 AM, 180 HHz)	SG NR FR2 TDO	849	<u>±9.6</u>
-	NE SS NR (CP DEDM, 1 RR, 50 MHz, 64QAM, 120 NHz)	53 NA FH2 TCO	8.13	78.6
	4E 5G NP (CP-OFOIA, 100% AB, 50 MHz, 64 DAM, 120 NHz)	5G NA FR2 TDO	8,41	<u>-9.6</u>
	NO SSLNE (CFT); CFDM, 1 RR, 5 MHz; CPSK 30 kHz;	SS NR FR' TCO	5 56	-9 6 ·
10898 A	9B SSINR (DFT-5-OFDM, 1 RB 19MHz OF\$K, 33kHz)	SGINA FRY TCO	5.57	=9.E
ั เดืออก โล	AR SSINR (CFT&-CFOM, I RB. 15MM); OPSK 30 kHz;	SS NR FR" TCO	5 67	<u>−</u> 9 6
. – .1 .	4B 5G NA (DFY's CHOM, 1 8B, ZDMHz, CPSK, 30 kHz)	5G NA FA1 TDO	5.5R	29.6
	AR 53 NR (DFT-s-OFDM, 1 RB, 25 NAVA, OPSK, 30 KHz)	SGINR FR' TOO	5.68	\$.6
	48 SG NR (CFTs-CFDM, 1 RB, 30 MAY, QFSM, 30 kHz)	COL THE HIV SK	5.68	196
	48 SGINB (CFT-s-OFOM, 19B, 40 MHz, OPSK, GDRHz)	SG AR FR: TCO	5.08	-9.6
	AB (SG NH (DET s-DEDM, 1 RB, S0 MEZ, QF 5K, 30 kHz)	96 NH FH: 100	5.58	-96 :
	-B 53 NR (DFT-s-OFOM, 1 RB, 60 MHz) OPSK, 30 kHz; NB 5G NR (DPT-s-OFOM, 1 RB, 80 MHz, GPSK, 30 kHz;	50 NR FRETED	5.58	:96 :
	AC SG NR (DFT's OFDM, TRS, 80 MHz, CPSK, 80 MHz)	50 NR FR: TCO	5 68 5 / B	=9.6
	MB 50 NB (DET-S-OFDM, 50% BB, 10MHz, CPSK, 30 (4z)	SG NA FAT TOO	593	<u>±9.6</u> ±9.0
	AB 5G NA (0FT's OHDM, 50% HB, 15MHz, CPSK, 50%HZ)	56 N9 FRI 700	9 <u>99</u>	
	18 50 NR (DFT-s-OFDM, 50% RB, 20MPz, QPSK, 20 44z)	SGNA FALTOD		=96

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ÚID F	Aev	Communication System Hame		ELD CO	
: 1	AAB	SG NA (DFT-s-OFDM, 50% HB, 25MHz, QPSK, 30 kHz)	GIOUP SG NR FRI TOD	PAR (68) 5 93	
	$\overline{}$	5G NH (DFTs-CF0M, 50% RB, 307/8(z, QPSK, 30 kHz)	SG NR FRI TOD	5 84	— ±9.6
		SG NA (DFT-s-OFOM, 50% RB, 40MHz, QPSK, 30kHz)	SG NR FRI TOD	5.84	÷5.6 ±9.0
		5G NR (CFT-s-OFOM, 50'4 RB, 50MHz, QPSK, 30 kHz)	50 NR FRI TOD	5 85	<u></u>
		SG NR (CFT's-OFDM, SCN/ RB, 60MHz, QPSK, 30kHz)	SG NR FR1 TDD	563—	=9.6
		50 NR (DFT-s-OFDM, 50% RB, 80MNz, QPSK, 30kHz)	50 NR FR1 T00	5 67	-9.6
10917 : 4		SG NR (DET & OFDM, 50% RB, 100 MHz, QPSK, 20MHz)	SG NR FRI TOO	594	±9.0
10918		50 NR (DFT-s-OFOM, 100/4 RB, SMITZ, QPSK, 30KHz)	50 NR FR1 TOD	5 86	- 19.6
(69:9)			SG NR FR1 TOD	586 1	±9.6
C920 A		56 NR (DFT-s-OFOM, 100% RB, 15 MHz, GPSK, 30KHz)	5G NR FR1 TOD !	587	±9.6 —
10521 4	aag	5G NA (DFT& OFDM, 100% RR, 20 MHz, QPSK, 30kHz)	5G NR FR1 TOD	5 84	29.6
:0922 A	SAA	5G NA (OFT-s-OFOM, 100% RB, 25 MHz, CIPSK, 90kHz)	5G NR FR1 TOD	5.BZ	±9.6
10923 /	MB.	5G NR (DFTs-DFDM, 100% RB, 90 MHz, QPSK, 30kAg)	5G NR FR1 TOD	5 64 .	±9.6
_ : :	AAB	5G SR (OFT-s-OFCM, 199% RB, 40MHz, DP5K, 30MHz)	SG NR FR1 TOD	5.64	±9 € —
· i — — — — —	AA3	55 NR (DFT-4-OFFM, 100% RB, 50 MHz, QPSK, 30 kHz)	50 NR FR1 TOT	595	±9 E
	AAR [5G NR (DFT-s OFCM, 1905- AB, 60 MHz, QPSK, 30 kHz)	SG NR FR1 TOD	5. 8 4	19 B
		55 NR (DFT-8-OFDM, 100% RB, 80 AHz, QPSK, 36 kHz)	50 NR FR1 TOD	5.94	t 9.6
		SG NA IDEX's OFEM, 1 HB, SMHz, OPSK, 15kHz)	SG NR FR1 FDD	5 52	±9.6
		56 NR (DET/8-DEDM, 1 RB, 10 MHz, QPSK, (BkHz)	5G NR FR1 FOD	5 52	
	₩	5G NF, (DFTs, OFDM, 1 RR, 15 MHz, QPSK, 154Hz)	SG NR FR1 FDQ	5 52	± 8.G
		SG NR (DFT/s-OFDM, 1 RB, 20 MHz, QPSK, (5kHz)	5G NR FR1 FOD	5 51	<u>+</u> 9.€
	MAC -	50; NF, (DF3-8-OFDM, 1 RB, 26 MHz, QPSK, 15 kHz)	5G NR FR1 FDC	5.51	± 9.6
		5G NR (DFT-s-OFDM, 1 RB, 20 MHz, GPSK, (5MHz)	SG NR FRI FOD	5.51	£9.6
		5G NR (DFT-8-OFDM, 1 RB, 40 MHz, QPSK, 15kHz)	5G NR FR1 FOR	5.51	+ 9.E
		5G NR (DET-s-OFOM, 1 AB, 50 MHz, OPSK, 15XHz)	SG KR FRI FOC	5.51	19 f
		55 NR (DFT/8-070M, \$3% RB, 5%4/2, OPSK, 15kHz)	50 NR FR1 FOC	590	± 9.E
	AAC ,	SS NP. (DERS-OFDM, \$3% RB, 10MHz, QP5K, 15kHz)	SG NR FRI FOU	5.77	_96
		5G NR (DFT-3-OFDM, 50% RB, 15MHz, QPSK, 15KHz)	50 NA FREE FOR	5,90	+ 9.6
		5G 4R (DF4's OF0M, 59% RB, 20MH/, QP5K, 15kHz)	SG NR FRI FOC	5.62	±06
		5G NR (DFFs-OFDM, 59t) RD, 25MHz, DPSK, (5kHz)	5G NR FRI FOC.	589	£9.6
	AAC AAC	5G NR (DRTA-CERM, 59% RR, 30 MHz, QPSK, 15 M/2)	5G NR FR1 FD0	. 583	±9.€
		SG NA (DETIS OFDIA, SON HB, 40 MHz, QPSK, 15 MHz)	SG NA FAI FOC	5.85	49 6
		55 NF (DF7:s-CF0M, 50% RB, 50 MHz, QPSK, 15 kHz) 56 NP (DF7:s-CF0M, 1884 HB, 5 MHz, QPSK, 15 kHz)	SG NR FR1 FOC SG NR FR1 FOC	5 95 ",	*.9.E
		55 NR (DETIS CEDM, 100% RB, 10 MHz, QPSK, 15KHz)	50 NR FRI FOC	581	296
		38 NR (0575-G20M, 19014 RB, 15MHz, QPSK, 15MHz)	SG NR FRI FOD	 583 ·	\$ 9.E
		55 MR (CFT-8-OFDM, 100% RB, 20 MHz, QPSK, (SRHz)	SG NA FRI FOR	587	· 196
		59 NH (C+1s-OFDM 100% RB, 25MHz, QPSK, 15kHz)	SG NR FRI FOC		196
		50 NR (DITTIS OF DW 100% AB, 30 MHz, DPSK, (5 MHz)	50 NR FRI FOD	5.57	± 9.0 + 9.0
		5G NH (DFT-s-CFDM 100% RB, 40MHz, QPSK, 15HHz)	SG NR FRI FOR	594	29.6
		5G NIT (DITT's OFDM: 1001% RB, SOMHY, OPSK; (5AHY)	SG NR FRI FOC	592	±9.6
10952 4		55 NR DL (CP-OFCM, TM 3.1, 5 MHz. 84-QAM, 15 kHz)	50 NR FR1 FDC *	8 25	29.6
10953 8		3G NR OL (CP-OFICM, TM 3.1, TC MHz, 64 DAM, 15 kHz)	SG NA FAT FOC	8 15	
10954 ‡ A	AAA	5G NR DL (CP-0FDM, TM 3.1, 15MHz, 64 QAM, 15KHz)	50 NR FR1 FDC	823	t 9.0
. 10955 A		5G NH DL (GP OFDM, 1M 3.1, 20 MHz, 64-QAM, 15 κHz)	SG NA FRI FOU	B 42 '	19 6 —
10956 A	AAA	SCINDIOL (CP-OFDM, TM \$.1, SIMHz, 64-QAM, BDMHz)	50 NR FRI FOD	8.14	± 9.E
		5G NRIDL (GP-CFCM, TM 3.1, 10 MHz, 64-0 AM, 30 kHz)	SG NR FHI FOU	831	196
1		SGINRIOL (CP-OFDM, TM 3.1, 15 MHz, 64 (04M, 30 KHz)	50 NR FRI FOO	8.61	± 9.€
		5G NR DL (CP-OFOM, TM 3.1, 20 MHz, 84-QAM, 30kHz)	SG NA FA1 FOD	833	±9.6
		SGINRIOL (CP-OFDM, TM3.1, SMHz, 64 DAM, (5kHz)	SG FR FR1 TOD	932	±9.E
		SGINRIDI. (CP-OFDM, TM3 1, 10MUz, 84-QAM, 15kHz)	5G NEI FRI TOD	935	29.6
		SGINA DETCP-CADRA, TMISJA, 15MHV, 64 DAM, 15KHN	ַ טעל וויים הא פּצ	943	±3.6
		5G NR DL (CP-CFDM, TM3.1, 2014)z, 84-OAM, 15KHz)	50 NR FR1 TOD	9.55	±9.6
		3G NH DL (GP-GPBM, TM 3.1, 5 MHz, 64-QAM, 30MHz)	SG NA FHI TOD	9.20	±9.6
10955 : A		5G NR DL (CP-C70M, TM 3.1, 10 MP1z, 64-QAM, 30K-47)	SG NA FRI TOD	937	+ 9.E
		5G NH CL (CP CRUM, TM 3 1, 15 MH); 64-QAM, 30 HHz	SG NR FRI TOD	9.55	±9.6
		5G NR CL (CP-CFDN, TM 3.1, 20 Agriz, 64 QAM, 20 KHz)	5G NR FRI TOD	942	+9.6
		50 NR C. (GP-GEON, TM 3.1, 100/MHz, 64-QAN, 363/Hz)	SG NR FRI FOD	943	
		SGINR (CP-OFEM, 1 A.S. ZUMP2, OPSK, 15KH2)	SC NR FR1 TOD	1159	±9.6
		5G NR (3FT-S-0F0M, 1 RB, 100 MHz, QPSK, 30 v4z) 5G NR (CP-0F0M, 150% HB, 100 MHz, 256-0AM, 30 MHz)	SG NA FRI 70D	9 95	±9.6
		LICA BOR	SG NA FAT TOD	1 18	<u> </u>
		LLEA HOR4	U.SA U.SA		<u> </u>
		LLLA HDR6	10.0A	9 59	±9.6 ±9.6
		LLLA HDHp4	ULLA	3 19	19.6
		LULA HORDE	ULLA	343	+9.6
				·	

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	Hev .	Communication System Name	Group	PAR (dB)	Unct k = 2
10983	AAA	5G NR Du (CP-CFDM, TM 3.1, 40 MHz, 64 QAM, 15 NHz)	SG NA FREEDO	9.91	198
10984	AAA .	SGINH DE (CP-CFDM, TM 8 3, 50 MHz, 64-QAM, 154Hz)	56 NR FR1 TOD	9 62	195
10995	AAA	SGINRIDL JCP-CSDM, TM 3.1 40 MHz, 64 DAM, 30 MHz)	SG NR FAT TOO	3.54	±9.6
10985	AAA .	5G NR D. (CP-CFDM TM 3 : 50 MHz, 84-QAM, 30 MHz)	56 NR FR1 TOO I	9.50	196 ·
10997	AAA	SGINRIDU (CP-CFUM ITM 3.1, 60 MHz, 64-QAM, 30 MHz)	5G NR F31 1D0	0.59	±96
10988	AAA	5G NR IX (GP-GFRM, TM 3 1, 70 MHz, 84-QAM, 20 RHz)	50 NR FR1 TOD	9.38	+96
0989	ትትA	SGING DUICH OF DM, TM 3.1, SQIMH2, 64-QAM, QCMH2)	SG NR FR1 TOD	2 33	196
10990	AAA	5G MAIDL (CP-OFDM, TM 3 : 90 MHz, 64-QAM, 30 kHz)	50 NR FR: 100	9.52	19.6
:1003	AAA	SGING DC (CP/OFDM, TMID.), SOMH2, 64-QAM, (SWH2)	SG NR FR1 TOO	10.24	±9,6
:1004	AAA	5G NRIDU (CP-OFDM, TM 0.1, 30 MHz, 84-OAM, 30 kHz)	5G NR FR1 TOD	10.73	19.5
:1005	448	SGINR CH. (CP-OFDM, TM 3 1, 25 MHz, 64-QAM, 15 kHz)	SG NR FR1 FDD	8.7C	±96
:1006	AAA	56 NR DL (CP-OFDM, TM 3.1, 30 MHz, 64 QAM, 15 MHz)	5G NR FRI FOD	9.56	±96
:1007	AAA	5G KRIDL (CP CHDM, TM 3 1, 40 MHz, 64 QAM, 15 kHz)	5G NR FR1 FD0	9 46	496
:1009	AAA	SG NR DU (CP-OFDM, TM 8.1. SOMHA, 64 GAM, 15kHz)	SG NA FR1 FOO	9.61	±95
11009	AM	5G NR DL (CP-OFDM, TM 3 1, 25 MHz, 64-QAM, 20 MHz)	5G NR FR1 FDD	9 76	196
11010	AAA	SG NAIDU (CP-OFDM, 1M 3.1, 20MHz, 64 (DAM, 30MHz)	SG N9 FR1 FOU	9.05	196
11,011	AAA	5G NR OL (CP-OFOM, TM 3 : , 40 MHz, 64-OAM, 30 HHz)	5G NR FR1 FOD	8 96	19.6
11012	даа	SG NR UL (CP OFOM, 1M 3.1, 50 MF2, 64 (QAM, 30 MF2)	SG NA FRI FOR	9 68	±96
013	AAA	IEEF 802 11be (320 MHz, MC 51, 99ps duly cycle)	WI AN	8 67	19.6
31,014	AAA !	10 00 00 1 10 00 00 00 00 00 00 00 00 00	WLAN	9 45	±9.6
11015	AAA	IEEE 802 11be (320 Mhz. MCS3, 99pc duty cycle)	WLAN	9,68	19-6
11016	AVA	IEEE 802 11bg (320 MHz, MCS4, 99pc duty cycle)	WLAN	8 64	:96
110:7	AAA	IEEE 802 11be (320-MHz, MCS5, 99pc duty cycle)	WLAN	94;	<u>-</u> 296'
1:0:8	w	IEEE 802 1156 (320 MHz, MCS6, 99pc duty cycle)	WLAN	8 4 C	-96
110:9	AAA	IEEE 802 11be (320MHz, MCS7, 99pc duty cyclo)	WLAN	9 29	794. —
11,650	w.	IFFF 802 1156 (320/AHs, MCS3, 99pt duty syste)	WLAN 15	8.27	±96
11 021	A44	IEEE 802 11be (320 MHz, MCS9, 99pp duty cycle)	WLAN	9.4Ę	195
11022	NAA 1	IEEE 802 1106 (320MHz, MC\$10, 99ps duly cycle)	WLAN	8.26	+96
11-023	AAA	IEEE 802 1100 (320 MHz, MCS11, 99pc duly cycle)	WLAN	9.09	. ±95
11 024	۸۸۸	IEEE 802 1100 (320MHz, MCS12, 99pc duly cycln)	WLAN	9.52	
11025	ΛΛα	ISSE 802 11hn (320 MHz, MCS13, 99pp duty cycle)	WLAN	9 97	±9.6
11 026	W.	IEEE 802 11th (320 MHz, MCSO 19955 duly cycle)	WEAN	9.35	196

 $^{^{\}circ}$ Uncertainty is determined using the max, deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Certificate No: I-X-7809_May23

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ANNEX B

DIPOLE CALIBRATION REPORTS



Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Servizio svizzero di taratura
Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client TÜV SÜD

Fareham, United Kingdom

Certificate No. D2450V2-1026 Jun23

CALIBRATION CERTIFICATE

Object

D2450V2 - SN:1026

Calibration procedure(s)

QA CAL-05.v12

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

June 05, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).

The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	30-Mar-23 (No. 217-03804/03805)	Mar-24
Power sensor NRP-Z91	SN: 103244	30-Mar-23 (No. 217-03804)	Mar-24
Power sensor NRP-Z91	SN: 103245	30-Mar-23 (No. 217-03805)	Mar-24
Reference 20 dB Attenuator	SN: BH9394 (20k)	30-Mar-23 (No. 217-03809)	Mar-24
Type-N mismatch combination	SN: 310982 / 06327	30-Mar-23 (No. 217-03810)	Mar-24
Reference Probe EX3DV4	SN: 7349	10-Jan-23 (No. EX3-7349_Jan23)	Jan-24
DAE4	SN: 601	19-Dec-22 (No. DAE4-601_Dec22)	Dec-23
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-22)	In house check: Oct-24
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-22)	In house check: Oct-24
Power sensor HP 8481A	SN: MY41093315	07-Oct-15 (in house check Oct-22)	In house check: Oct-24
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-22)	In house check: Oct-24
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24
	Name	Function	Signature
Calibrated by:	Krešimir Franjić	Laboratory Technician	M
Approved by:	Sven Kühn	Technical Manager . 4	11111

Issued: June 5, 2023

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Certificate No: D2450V2-1026_Jun23

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Document Number: 75958013-48 Issue: 01 COMMERCIAL-IN-CONFIDENCE



Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service

Accreditation No.: SCS 0108

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Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORM x,y,z N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52 10.4
Extrapolation	Advanced Extrapolation	<u>-</u> '
Phantom	Modular Flot Phontom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx. dy. dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	, -

Head TSL parameters
The following polameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	72.0 °C	39.2	1.80 mno/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.7 ± 6 %	1 84 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm² (1 g) of Head TSL	Cardition	· · · · · · · · · · · · · · · · · · ·
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.2 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.21 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.5 W/kg ± 16.5 % (k=2)

Certificate No: D2450V2-1028_Jun23

Document Number: 75958013-48 Issue: 01 COMMERCIAL-IN-CONFIDENCE



Appandix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.1 Ω + 1.9 μΩ
Resum Loss	- 27.2 dB

General Antenna Parameters and Design

	
Electrical Detay (one direction)	1.157 ns

After long term use with 100W radiated power, only a slight warming of the dipple near the feedpoint can be measured.

The dipole is made of standard semirigid coax, at cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-directited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

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Manufactured by	SPEAG	

Certificate No: D2450V2-1026_Jun23

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DASY5 Validation Report for Head TSL

Date: 05.06.2023

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:1026

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.84 \text{ S/m}$; $\varepsilon_r = 37.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(7.9, 7.9, 7.9) @ 2450 MHz; Calibrated: 10.01.2023

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 19.12.2022

Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

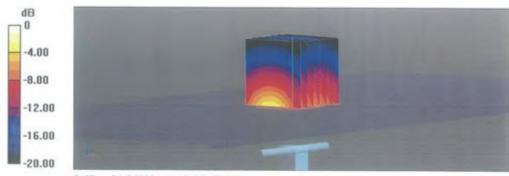
Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 116.4 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 25.9 W/kg SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.21 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 51.3%

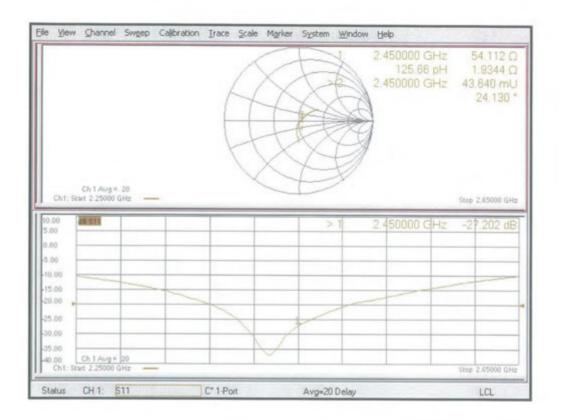
Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg = 13.26 dBW/kg



Impedance Measurement Plot for Head TSL





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Client TÜV SÜD

Fareham, United Kingdom

Certificate No. D5GHzV2-1291 Jun23

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Object

D5GHzV2 - SN:1291

Calibration procedure(s)

QA CAL-22.v7

Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date:

June 06, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	30-Mar-23 (No. 217-03804/03805)	Mar-24
Power sensor NRP-Z91	SN: 103244	30-Mar-23 (No. 217-03804)	Mar-24
Power sensor NRP-Z91	SN: 103245	30-Mar-23 (No. 217-03805)	Mar-24
Reference 20 dB Attenuator	SN: BH9394 (20k)	30-Mar-23 (No. 217-03809)	Mar-24
Type-N mismatch combination	SN: 310982 / 06327	30-Mar-23 (No. 217-03810)	Mar-24
Reference Probe EX3DV4	SN: 3503	07-Mar-23 (No. EX3-3503_Mar23)	Mar-24
DAE4	SN: 601	19-Dec-22 (No. DAE4-601_Dec22)	Dec-23
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-22)	In house check: Oct-24
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-22)	In house check: Oct-24
Power sensor HP 8481A	SN: MY41093315	07-Oct-15 (in house check Oct-22)	In house check: Oct-24
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-22)	In house check: Oct-24
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24
	Name	Function	Signature
Calibrated by:	Krešimir Franjić	Laboratory Technician	ng

Issued: June 7, 2023

Certificate No: D5GHzV2-1291_Jun23

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Accreditation No.: SCS 0108

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Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORM x,y,z N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- · SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

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Document Number: 75958013-48 Issue: 01

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4.0 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5200 MHz ± 1 MHz 5300 MHz ± 1 MHz 5500 MHz ± 1 MHz 5600 MHz ± 1 MHz 5800 MHz ± 1 MHz	

Head TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	36.0	4.66 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.5 ± 6 %	4.53 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5200 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.66 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	76.3 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.20 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	21.9 W/kg ± 19.5 % (k=2)



Head TSL parameters at 5300 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.76 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.5 ± 6 %	4.67 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5300 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.02 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.30 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.9 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5500 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.6	4.96 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.4 ± 6 %	4.89 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5500 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.18 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	81.7 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.3 W/kg ± 19.5 % (k=2)



Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.3 ± 6 %	4.97 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.20 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	81.8 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.34 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.3 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.3	5.27 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.0 ± 6 %	5.11 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5800 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.93 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.24 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.4 W/kg ± 19.5 % (k=2)

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Document Number: 75958013-48 Issue: 01 COMMERCIAL-IN-CONFIDENCE



Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 5200 MHz

Impedance, transformed to feed point	47.9 Ω - 9.2 jΩ
Return Loss	- 20.4 dB

Antenna Parameters with Head TSL at 5300 MHz

Impedance, transformed to feed point	48.7 Ω - 4.6 jΩ
Return Loss	- 26.3 dB

Antenna Parameters with Head TSL at 5500 MHz

Impedance, transformed to feed point	47.5 Ω - 5.2 jΩ
Return Loss	- 24.6 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	52.1 Ω - 5.3 jΩ
Return Loss	- 25.0 dB

Antenna Parameters with Head TSL at 5800 MHz

Impedance, transformed to feed point	51.8 Ω - 4.2 jΩ
Return Loss	- 27.0 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.185 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG

Certificate No: D5GHzV2-1291_Jun23

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DASY5 Validation Report for Head TSL

Date: 06.06.2023

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1291

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5300 MHz, Frequency: 5500

MHz, Frequency: 5600 MHz, Frequency: 5800 MHz

Medium parameters used: f = 5200 MHz; $\sigma = 4.53$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³,

Medium parameters used: f = 5300 MHz; $\sigma = 4.67$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³,

Medium parameters used: f = 5500 MHz; $\sigma = 4.89 \text{ S/m}$; $\varepsilon_r = 35.4$; $\rho = 1000 \text{ kg/m}^3$,

Medium parameters used: f = 5600 MHz; $\sigma = 4.97 \text{ S/m}$; $\varepsilon_r = 35.3$; $\rho = 1000 \text{ kg/m}^3$,

Medium parameters used: f = 5800 MHz; $\sigma = 5.11$ S/m; $\epsilon_r = 35$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.8, 5.8, 5.8) @ 5200 MHz, ConvF(5.49, 5.49, 5.49) @ 5300 MHz, ConvF(5.25, 5.25, 5.25) @ 5500 MHz, ConvF(5.1, 5.1, 5.1) @ 5600 MHz, ConvF(5.01, 5.01, 5.01) @ 5800 MHz; Calibrated: 07.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 19.12.2022
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 73.94 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 26.6 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.2 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 70.7%

Maximum value of SAR (measured) = 17.2 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5300 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 74.72 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 27.8 W/kg

SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.3 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 70.8%

Maximum value of SAR (measured) = 18.1 W/kg

Certificate No: D5GHzV2-1291 Jun23



Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5500 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 74.08 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 30.7 W/kg

SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.33 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 68.1%

Maximum value of SAR (measured) = 18.9 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 75.16 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 29.8 W/kg

SAR(1 g) = 8.2 W/kg; SAR(10 g) = 2.34 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 69%

Maximum value of SAR (measured) = 19.0 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 72.36 V/m; Power Drift = 0.03 dB

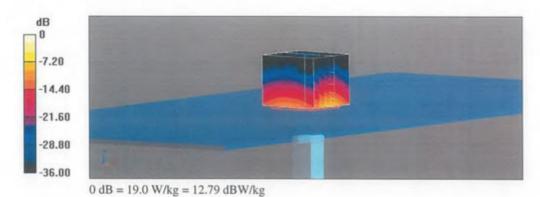
Peak SAR (extrapolated) = 30.8 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.24 W/kg

Smallest distance from peaks to all points 3 dB below = 7.5 mm

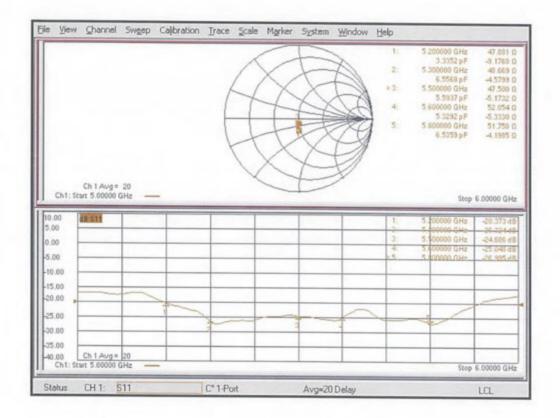
Ratio of SAR at M2 to SAR at M1 = 67%

Maximum value of SAR (measured) = 18.8 W/kg





Impedance Measurement Plot for Head TSL





Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Multilateral Agreement for the recognition of calibration certificates

Client TÜV SÜD

Fareham, United Kingdom

Certificate No. D6.5GHzV2-1071_Jul23

Accreditation No.: SCS 0108

CALIBRATION CERTIFICATE

Object D6.5GHzV2 - SN:1071

Calibration procedure(s) QA CAL-22.v7

Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date: July 06, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power sensor R&S NRP33T	SN: 100967	03-Apr-23 (No. 217-03806)	Apr-24
Reference 20 dB Attenuator	SN: BH9394 (20k)	30-Mar-23 (No. 217-03809)	Mar-24
Mismatch combination	SN: 84224 / 360D	03-Apr-23 (No. 217-03812)	Apr-24
Reference Probe EX3DV4	SN: 7405	12-Jun-23 (No. EX3-7405_Jun23)	Jun-24
DAE4	SN: 908	03-Jul-23 (No. DAE4-908_Jul23)	Jul-24

Secondary Standards	ID#	Check Date (in house)	Scheduled Check
RF generator Anapico APSIN20G	SN: 827	18-Dec-18 (in house check Dec-21)	In house check: Dec-23
Power sensor NRP-Z23	SN: 100169	10-Jan-19 (in house check Nov-22)	In house check: Nov-23
Power sensor NRP-18T	SN: 100950	28-Sep-22 (in house check Nov-22)	In house check: Nov-23
Network Analyzer Keysight E5063A	SN:MY54504221	31-Oct-19 (in house check Oct-22)	In house check: Oct-25

Calibrated by: Jeton Kastrati Laboratory Technician

Name

Sven Kühn Technical Manager

Issued: July 10, 2023

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D6.5GHzV2-1071_Jul23

Approved by:



Calibration Laboratory of Schmid & Partner Engineering AG Zoughausstrasse 43, 8004 Zurich, Switzerland





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Swiss Calibration Service

Accreditation No.: SCS 0108

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Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORM x,y,z N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range Of 4 MHz To 10 GHz)", October 2020.

Additional Documentation:

b) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point
 exactly below the center marking of the flat phantom section, with the arms oriented parallel to the
 body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned
 under the liquid filled phantom. The impedance stated is transformed from the measurement at the
 SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty
 required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.
- The absorbed power density (APD): The absorbed power density is evaluated according to Samaras T, Christ A, Kuster N, "Compliance assessment of the epithelial or absorbed power density above 6 GHz using SAR measurement systems", Bioelectromagnetics, 2021 (submitted). The additional evaluation uncertainty of 0.55 dB (rectangular distribution) is considered.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: D6.5GHzV2-1071 Jul23

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Measurement Conditions

DASY system configuration, as totias not given on page 1.

DASY Version	DASYG	V*6.2
Extrapolation	Advanced Extrapolation	·
Phantom	Vodular F/at Phaniem	
Distance Dipole Center - TSL	5 mm	with Spacer
Zoom Scan Resolution	ox, dy = 3.4 mm, dz = 1.4 mm	Graded Rotio = 1.4 (Z direction)
Frequency	6500 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied

<u> </u>	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	34.5	6.07 mhc/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	33.5 ± € %	5.88 mna/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm ³ {1 g} of Head TSL	Condition	
SAR measured	190 mW input power	29.4 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	292 W/kg ± 24.7 % (k=2)
SAR averaged over 8 cm² (8 g) of Hoad TSL	Condition	
SAR averaged over 8 cm ² (8 g) of Hoad TSL SAR measured	Condition 100 mW input power	6 56 W/kg

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	5.46 W/kg
SAR for nominal Head TSL parameters	normatized to 1W	54.2 W/kg ± 24.4 % (k=2)



44	n	-	a	•	
А	×	w	=	14	

Antenna	Parameters	writh	Head T	œ1
7	i aranceters	777 11	пиаст.	э.

Impedance, transfermed to feed point	_· ·_ · _		49.00 + 7.0	
Return Loss	<u> </u>		$\frac{48.0}{2} \frac{\Omega_{-1}.7_{1}\Omega_{-1}}{\Omega_{-1}} = \frac{1}{2} \frac{1}{12} \frac{1}$	_
	:_		-31 5 cB	

APD (Absorbed Power Density)

APD averaged over 1 cm²	Condition	
APD measured	100 mW input powe;	292 W/m²
APD measured	normalized to 1W	2920 W/m² ± 29.2 % (k=2)
APD averaged over 4 cm²	condition	-

APD averaged over 4 cm²
 condition

 APD measured
 100 mW input power
 133 W/m²

 APD measured
 compliced to tW
 1330 W/m² ± 28.9 % (k=2)

General Antenna Parameters and Design

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirig.d coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of their dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipore arms, because they might bend or the soldered connections near the feedpoint may be darriaged.

Additional EUT Data

Maria de la companio	 		_	
Manufactured by			SPEAG	
		-	·	

Certificate No: D6.5GHzV2-1071_Ju:23

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[&]quot;The reported APD values have been derived using the psSAR1g and psSAR8g.



DASY6 Validation Report for Head TSL

Measurement Report for D6.5GHz-1071, UID 0 -, Channel 6500 (6500.0MHz)

Device ur	nder 1	rest	Prope	erties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
D6.5GHz	100-100-100		DOT Type
DOIDGITE	10.0 x 10.0 x 10.0	SN: 1029	4

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Cond. [S/m]	TSL Permittivity
Flat, HSL	5.00	Band	CW,	6500	5.50	5.88	33.5

nardware Setup			
Phantom	TSL	Probe, Calibration Date	DAE, Calibration Date
MED VO Conton 1103	LIBBLEDS COOKERS	riose, compration pate	DAC, Calibration Date
MFP V8.0 Center - 1182	HBBL600-10000V6	EX3DV4 - SN7405, 2023-06-12	DAF4 Sn908 2022-07 02

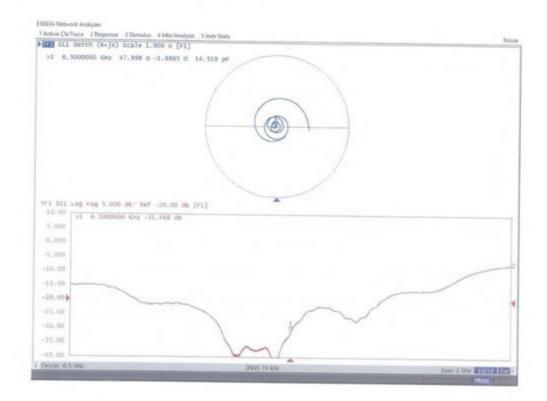
Scan Setun

ocan setup		Measurement Results	
Grid Extents [mm] Grid Steps [mm] Sensor Surface [mm] Graded Grid Grading Ratio MAIA Surface Detection Scan Method	Zoom Scan 22.0 x 22.0 x 22.0 3.4 x 3.4 x 1.4 1.4 Yes 1.4 N/A VMS + 6p Measured	Date psSAR1g [W/Kg] psSAR8g [W/Kg] psSAR10g [W/Kg] Power Drift [dB] Power Scaling Scaling Factor [dB] TSL Correction	Zoom Scan 2023-07-20, 13:28 29.4 6.66 5.46 0.01 Disabled
		M2/M1 [%] Dist 3dB Peak [mm]	51.3 4.8





Impedance Measurement Plot for Head TSL





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Client

TÜV SÜD

Fareham, United Kingdom

Certificate No. 5G-Veri10-1053_Oct23

CALIBRATION CERTIFICATE

Object 5G Verification Source 10 GHz - SN: 1053

Calibration procedure(s) QA CAL-45.v4

Calibration procedure for sources in air above 6 GHz

Calibration date: October 27, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility; environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Reference Probe EUmmWV3	SN: 9374	22-May-23 (No. EUmm-9374_May23)	May-24
DAE4ip	SN: 1602	05-Jul-23 (No. DAE4ip-1602_Jul23)	Jul-24

Secondary Standards	ID#	Check Date (in house)	Scheduled Check
RF generator R&S SMF100A	SN: 100184	19-May-22 (in house check Nov-22)	In house check: Nov-23
Power sensor R&S NRP18S-10	SN: 101258	31-May-22 (in house check Nov-22)	In house check: Nov-23
Network Analyzer Keysight E5063A	SN: MY54504221	31-Oct-19 (in house check Oct-22)	In house check: Oct-25

Calibrated by:

Name Joanna Lleshal Function Laboratory Technician

Signature

Approved by:

Sven Kühn

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Technical Manager

Issued: October 27, 2023

Certificate No: 5G-Veri10-1053_Oct23

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Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Glossary
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CW

Continuous wave

Calibration is Performed According to the Following Standards

- Internal procedure QA CAL-45, Calibration procedure for sources in air above 6 GHz.
- IEC/IEEE 63195-1, "Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz)", May 2022

Methods Applied and Interpretation of Parameters

- Coordinate System: z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- Measurement Conditions: (1) 10 GHz: The radiated power is the forward power to the horn antenna minus ohmic and mismatch loss. The forward power is measured prior and after the measurement with a power sensor. During the measurements, the horn is directly connected to the cable and the antenna ohmic and mismatch losses are determined by farfield measurements. (2) 30, 45, 60 and 90 GHz. The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cub and at the ceiling to minimize reflections.
- Horn Positioning: The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- E- field distribution: E field is measured in two x-y-plane (10mm, 10mm + λ/4) with a vectorial E-field probe. The E-field value stated as calibration value represents the E-field-maxima and the averaged (1cm² and 4cm²) power density values at 10mm in front of the horn.
- Field polarization: Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

Calibrated Quantity

 Local peak E-field (V/m) and average of peak spatial components of the poynting vector (W/m²) averaged over the surface area of 1 cm² and 4cm² at the nominal operational frequency of the verification source. Both square and circular averaging results are listed.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: 5G-Veri10-1053_Oct23

Page 2 of 8



Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module mmWave	V3.2
Phantom	5G Phantom	
Distance Horn Aperture - plane	10 mm	
Number of measured planes	2 (10mm, 10mm + 1/4)	
Frequency	10 GHz ± 10 MHz	

Calibration Parameters, 10 GHz

Circular Averaging

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Power Density Avg (psPDn+, psPDiot+, psPDmod+) (W/m²)		Uncertainty (k = 2)
		1 cm ²	4 cm ²			
10 mm	93.3	155	1.27 dB	62.1	57.8	1.28 dB

Distance Horn Aperture to Measured Plane	Pradi (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m²)		Uncertainty (k = 2)
			1 cm ²	4 cm ²		
10 mm	93.3	155	1.27 dB	61.9, 62.0, 62.3	57.5, 57.8, 58.1	1.28 dB

Square Averaging

Distance Horn Prad¹ Aperture to (mW) Measured Plane			Uncertainty (k = 2)	Avg Power Density Avg (psPDn+, psPDiot+, psPDmod+) (W/m²)		Uncertainty (k = 2)
		1 cm ²		4 cm ²		
10 mm	93.3	155	1.27 dB	62.0	57.7	1.28 dB

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m²)		Uncertainty (k = 2)
				1 cm ²	4 cm ²	
10 mm	93.3	155	1.27 dB	61.8, 62.0, 62.3	57.4, 57.7, 58.0	1.28 dB

Max Power Density

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Max Power Density Sn, Stot, Stot (W/m²)	Uncertainty (k = 2)
10 mm	93.3	155	1.27 dB	63.5, 63.6, 63.6	1.28 dB

Certificate No: 5G-Veri10-1053_Oct23

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¹ Assessed ohmic and mismatch loss plus numerical offset: 0.30 dB

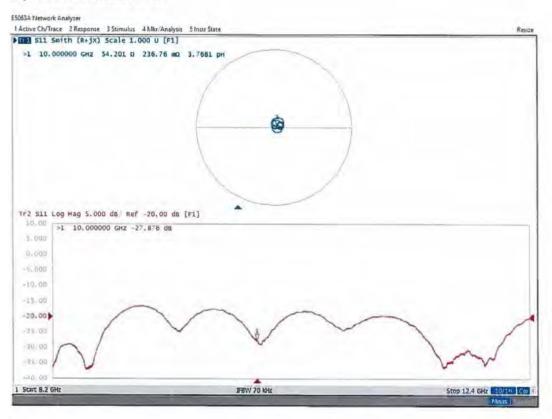


Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters

Impedance, transformed to feed point	54.2 Ω + 0.24 jΩ	
Return Loss	- 27.9 dB	

Impedance Measurement Plot



Certificate No: 5G-Veri10-1053_Oct23

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Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Davidas	and allow	Took	Propertie	_

Dimensions [mm] 100.0 x 100.0 x 172.0 Name, Manufacturer 5G Verification Source 10 GHz

10.0 mm

IMEI SN: 1053 **DUT Type**

Exposure Conditions

Phantom Section Position, Test Distance [mm]

Group, Validation band CW

Frequency [MHz], Channel Number 10000.0,

Conversion Factor

10000

Hardware Setup

5G -

Phantom mmWave Phantom - 1002 Medlum Air

Probe, Calibration Date EUmmWV3 - SN9374_F1-55GHz, 2023-05-22

Measurement Results

DAE, Calibration Date DAE4ip Sn1602, 2023-07-05

Scan Setup

Sensor Surface [mm] MAIA

5G Scan 10.0 MAIA not used

Date Date
Avg. Area [cm²]
Avg. Type
psPDn+ [W/m²]
psPDtot+ [W/m²]
psPDmod+ [W/m²]
Max(Sn) [W/m²]
Max(Stot) [W/m²] Max(|Stot|) [W/m²] E_{max} [V/m] Power Drift [dB]

5G Scan 2023-10-27, 09:25 1.00 Circular Averaging 61.9 62.0 62.3 63.5 63.6 63.6 155 -0.02





Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Pro	martine

Dimensions [mm] 100.0 x 100.0 x 172.0 Name, Manufacturer IMEI 5G Verification Source 10 GHz SN: 1053

DUT Type

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group,	Frequency (MHz), Channel Number	Conversion Factor
5G -	10.0 mm	Validation band	cw	10000.0,	1.0

Hardware Setup

Probe, Calibration Date EUmmWV3 - SN9374_F1-55GHz, 2023-05-22 DAE, Calibration Date DAE4ip Sn1602, 2023-07-05 Phantom mmWave Phantom - 1002 Medium Air

10.0

Scan Setup

5G Scan Sensor Surface [mm] MAIA MAIA not used

5G Scan
2023-10-27, 09:25
4.00
Circular Averaging
57.5
57.8
58.1
63.5
63.6
63.6
155
-0.02





Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

Name, Manufacturer 5G Verification Source 10 GHz

Dimensions [mm] 100.0 x 100.0 x 172.0

IMEI SN: 1053

DUT Type

Exposure Conditions

Phantom Section [mm]

Position, Test Distance

Frequency [MHz], Channel Number

Conversion Factor

5G -

10.0 mm

Validation band

10000.0,

1.0

10000

Hardware Setup

Phantom mmWave Phantom - 1002

Medium Air

Probe, Calibration Date EUmmWV3 - SN9374_F1-55GHz,

DAE4ip Sn1602, 2023-07-05

DAE, Calibration Date

2023-05-22

Scan Setup

Sensor Surface [mm] MAIA

5G Scan 10.0 MAIA not used

Date

Avg. Area [cm²] Avg. Type psPDn+ [W/m²] psPDtot+ [W/m²] psPDmod+ [W/m²] Max[Sn] [W/m²] Max(Stot) [W/m³] Max(|Stot|) [W/m²] E_{max} [V/m] Power Drift [dB]

	5G Scan
-	2023-10-27, 09:25
	1.00
	Square Averaging
	61.8
	62.0
	62.3
	63.5
	63.6
	63.6
	155
	-0.02





Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device	under	Test	Proper	ties

Name, Manufacturer 5G Verification Source 10 GHz Dimensions [mm] 100.0 x 100.0 x 172.0 IMEI SN: 1053 DUT Type

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group,	Frequency [MHz], Channel Number	Conversion Factor
5G -	10.0 mm	Validation band	cw	10000 O, 10000	1.0

Hardware Setup

Probe, Calibration Date EUmmWV3 - SN9374_F1-55GHz, Phantom Medium DAE, Calibration Date mmWave Phantom - 1002 DAE4ip Sn1602, Air 2023-05-22 2023-07-05

Measurement Results

Scan Setup

5G Scan Sensor Surface [mm] MAIA 10.0 MAIA not used Date

Date

Avg. Area [cm²]

Avg. Type
psPDn+ [W/m²]
psPDtot+ [W/m²]
psPDmod+ [W/m²]

Max[Stot] [W/m²]

Max(Stot) [W/m²]

Max(Stot) [W/m²]

Emac [V/m]

Power Drift [dB] 2023-10-27, 09:25 4.00 Square Averaging 57.4 57.7 58.0 63.5 63.6 63.6 155 -0.02

5G Scan





ANNEX C

TEST RESULTS



Measurement Report for A3114, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 78 (2480.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2480.0, 78	7.22	1.86	39.5

Hardware Setup

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2102	HBBL-600-10000 DAK 3.5 Head 20.76 deg.C 2023-Oct-25 SYS3 B3.pm, 2023-Oct-25	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1785, 2023- 04-03

Scans Setup

	Area Scan	Zoom Scan			
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0			
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5			
Sensor Surface [mm]	3.0	1.4			
Graded Grid	n/a	Yes			
Grading Ratio	n/a	1.5			
MAIA	N/A	N/A			
Surface Detection	VMS + 6p	VMS + 6p			
Scan Method	Measured	Measured			

	Area Scan	Zoom Scan
Date	2023-10-26, 11:39	2023-10-26, 11:51
psSAR1g [W/Kg]	0.407	0.430
psSAR10g [W/Kg]	0.188	0.192
Power Drift [dB]	0.03	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		7.3



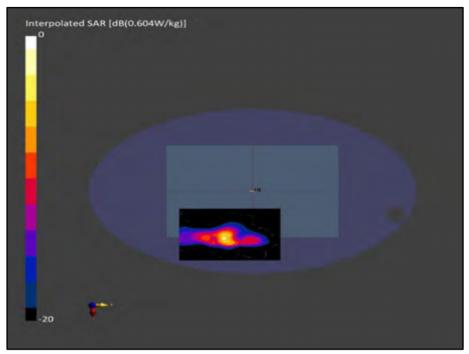


Figure C.1: SAR Testing Results for the A3114 at 2480 MHz Core 0



Measurement Report for A3114, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 0 (2402.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.22	1.80	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2102	HBBL-600-10000 DAK 3.5 Head 20.76 deg.C 2023-Oct-25 SYS3 B3.pm, 2023-Oct-25	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1785, 2023- 04-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-26, 12:41	2023-10-26, 12:52
psSAR1g [W/Kg]	0.332	0.368
psSAR10g [W/Kg]	0.154	0.161
Power Drift [dB]	0.09	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.8
Dist 3dB Peak [mm]		8.0



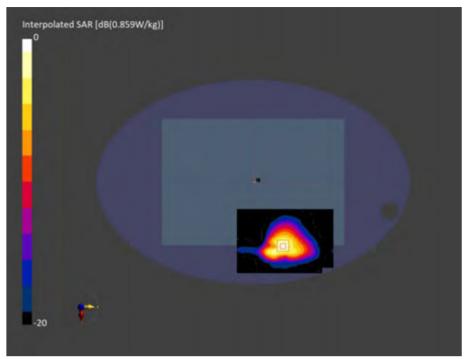


Figure C.2: SAR Testing Results for the A3114 at 2402 MHz Core 1



Measurement Report for A3114, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 78 (2480.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2480.0, 78	7.22	1.86	39.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2102	HBBL-600-10000 DAK 3.5 Head 20.76 deg.C 2023-Oct-25 SYS3 B3.prn, 2023-Oct-25	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1785, 2023- 04-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-26, 11:39	2023-10-26, 11:51
psSAR1g [W/Kg]	0.407	0.430
psSAR10g [W/Kg]	0.188	0.192
Power Drift [dB]	0.03	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		7.3



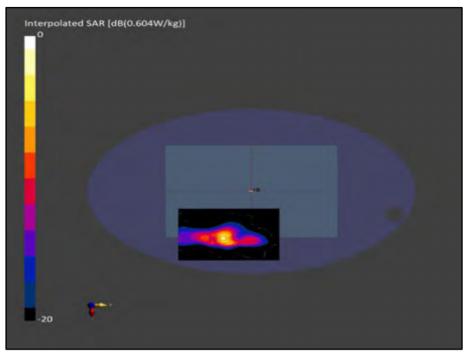


Figure C.3: SAR Testing Results for the A3114 at 2480 MHz Core 0



Measurement Report for A3114, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 0 (2402.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.22	1.80	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2102	HBBL-600-10000 DAK 3.5 Head 20.76 deg.C 2023-Oct-25 SYS3 B3.pm, 2023-Oct-25	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1785, 2023- 04-03

Scans Setup

	Area Scan	Zoom Scan		
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.5		
MAIA	N/A	N/A		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

	Area Scan	Zoom Scan
Date	2023-10-26, 12:41	2023-10-26, 12:52
psSAR1g [W/Kg]	0.332	0.368
psSAR10g [W/Kg]	0.154	0.161
Power Drift [dB]	0.09	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.8
Dist 3dB Peak [mm]		8.0



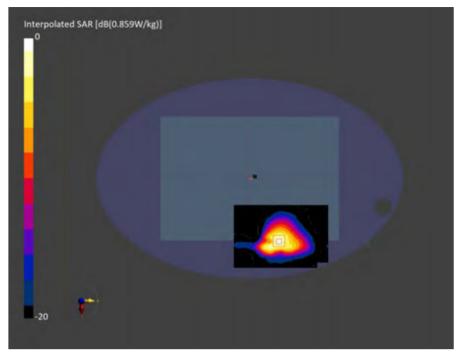


Figure C.4: SAR Testing Results for the A3114 at 2402 MHz Core 1



Measurement Report for A3114, BACK, Custom Band, CW, Channel 5250000 (5250.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	5250.0, 5250000	5.53	4.47	33.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.06 deg.C 2023-Oct-27 SYS6 B6.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans octup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-27, 13:38	2023-10-27, 13:45
psSAR1g [W/Kg]	0.155	0.171
psSAR10g [W/Kg]	0.057	0.058
Power Drift [dB]	-0.00	0.15
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		61.1
Dist 3dB Peak [mm]		7.9



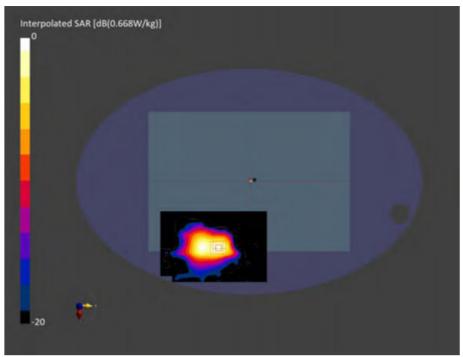


Figure C.5: SAR Testing Results for the A3114 at 5250 MHz Core 0



Measurement Report for A3114, BACK, Custom Band, CW, Channel 5150000 (5150.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	5150.0, 5150000	5.53	4.36	33.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.06 deg.C 2023-Oct-27 SYS6 B6.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Υ	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-27, 13:59	2023-10-27, 14:08
psSAR1g [W/Kg]	0.186	0.202
psSAR10g [W/Kg]	0.073	0.075
Power Drift [dB]	-0.05	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		63.2
Dist 3dB Peak [mm]		8.0



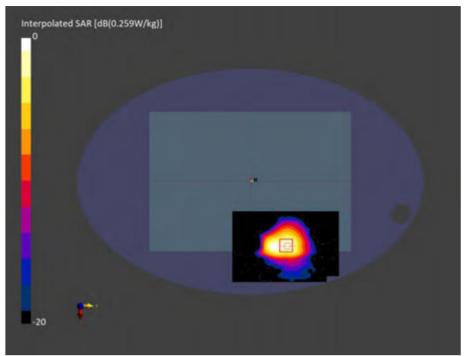


Figure C.6: SAR Testing Results for the A3114 at 5150 MHz Core 1



Measurement Report for A3114, BACK, Custom Band, CW, Channel 5850000 (5850.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	5850.0, 5850000	4.83	5.13	32.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.06 deg.C 2023-Oct-27 SYS6 B6.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Υ	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-28, 02:12	2023-10-28, 02:21
psSAR1g [W/Kg]	0.473	0.482
psSAR10g [W/Kg]	0.160	0.157
Power Drift [dB]	0.05	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		58.4
Dist 3dB Peak [mm]		7.2



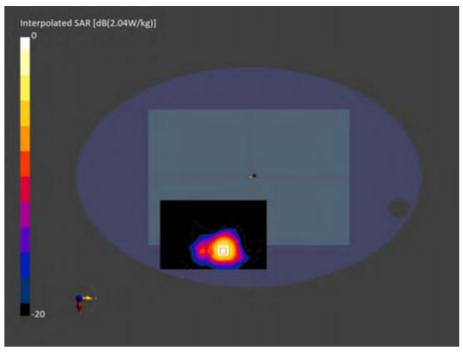


Figure C.7: SAR Testing Results for the A3114 at 5850 MHz Core 0



Measurement Report for A3114, BACK, Custom Band, CW, Channel 5850000 (5850.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	5850.0, 5850000	4.83	5.13	32.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.06 deg.C 2023-Oct-27 SYS6 B6.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans octup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-28, 03:20	2023-10-28, 03:31
psSAR1g [W/Kg]	0.484	0.495
psSAR10g [W/Kg]	0.171	0.165
Power Drift [dB]	-0.10	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		58.9
Dist 3dB Peak [mm]		7.9



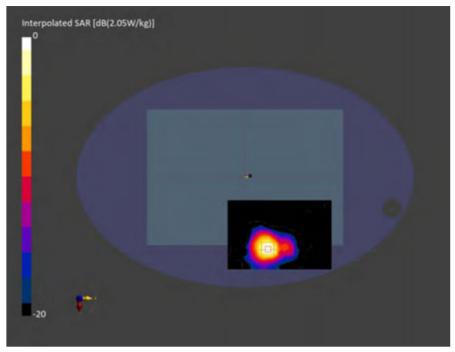


Figure C.8: SAR Testing Results for the A3114 at 5850 MHz Core 1



Measurement Report for A3114, BACK, Custom Band, CW, Channel 5850000 (5850.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	5850.0, 5850000	4.83	5.13	32.7

Hardware Setup

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.06 deg.C 2023-Oct-27 SYS6 B6.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

cans octup				
	Area Scan	Zoom Scan		
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.4		
MAIA	Y	Y		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

	Area Scan	Zoom Scan
Date	2023-10-28, 05:23	2023-10-28, 05:31
psSAR1g [W/Kg]	0.299	0.329
psSAR10g [W/Kg]	0.106	0.106
Power Drift [dB]	0.19	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		57.1
Dist 3dB Peak [mm]		7.2



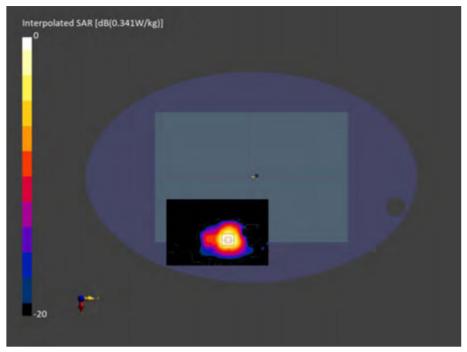


Figure C.9: SAR Testing Results for the A3114 at 5850 MHz Core 0



Measurement Report for A3114, BACK, Custom Band, CW, Channel 5850000 (5850.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	5850.0, 5850000	4.83	5.13	32.7

Hardware Setup

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date	
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.06 deg.C 2023-Oct-27 SYS6 B6.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02	

Scans Setup

cans Setup				
Area Scan	Zoom Scan			
120.0 x 180.0	22.0 x 22.0 x 22.0			
10.0 x 10.0	4.0 x 4.0 x 1.4			
3.0	1.4			
n/a	Yes			
n/a	1.4			
Υ	Y			
VMS + 6p	VMS + 6p			
Measured	Measured			
	120.0 x 180.0 10.0 x 10.0 3.0 n/a n/a Y VMS + 6p			

	Area Scan	Zoom Scan
Date	2023-10-28, 07:03	2023-10-28, 07:12
psSAR1g [W/Kg]	0.292	0.329
psSAR10g [W/Kg]	0.103	0.107
Power Drift [dB]	-0.07	0.14
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		57.4
Dist 3dB Peak [mm]		7.2



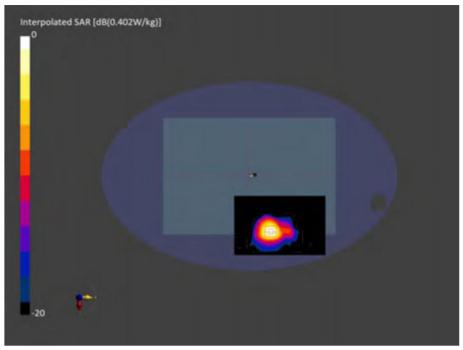


Figure C.10: SAR Testing Results for the A3114 at 5850 MHz Core 1



Measurement Report for A3114, BACK, Custom Band, CW, Channel 2405000 (2405.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	2405.0, 2405000	7.22	1.81	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) -	HBBL-600-10000 DAK 3.5 Head 20.76 deg.C 2023-Oct-25 SYS3 B3.pm, 2023-Oct-25	EX3DV4 - SN7809, 2023-	DAE4ip Sn1785, 2023-
2102		05-03	04-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-26, 15:26	2023-10-26, 15:38
psSAR1g [W/Kg]	0.281	0.295
psSAR10g [W/Kg]	0.129	0.130
Power Drift [dB]	0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.2
Dist 3dB Peak [mm]		7.7



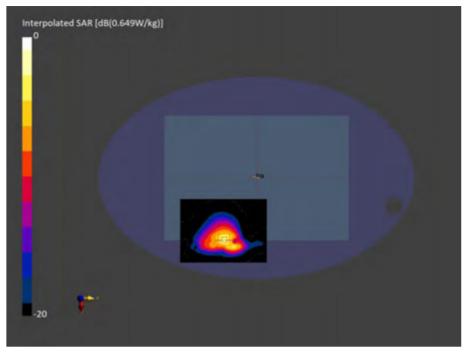


Figure C.11: SAR Testing Results for the A3114 at 2405 MHz Core 0



Measurement Report for A3114, BACK, Custom Band, CW, Channel 2440000 (2440.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	2440.0, 2440000	7.22	1.80	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) -	HBBL-600-10000 DAK 3.5 Head 21.08 deg.C 2023-Oct-27 SYS3 B3.prn, 2023-Oct-27	EX3DV4 - SN7809, 2023-	DAE4ip Sn1785, 2023-
2102		05-03	04-03

Scans Setup

ocans Setup	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-27, 18:31	2023-10-27, 18:42
psSAR1g [W/Kg]	0.241	0.254
psSAR10g [W/Kg]	0.112	0.114
Power Drift [dB]	-0.08	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.5
Dist 3dB Peak [mm]		8.0



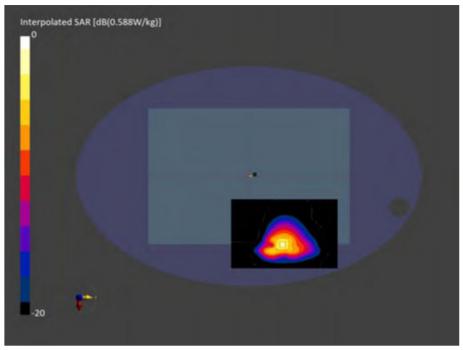


Figure C.12: SAR Testing Results for the A3114 at 2440 MHz Core 1



Measurement Report for A3114, BACK, Custom Band, CW, Channel 2440000 (2440.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	2440.0, 2440000	7.22	1.80	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2102	HBBL-600-10000 DAK 3.5 Head 21.08 deg.C 2023-Oct-27 SYS3 B3.pm, 2023-Oct-27	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1785, 2023- 04-03

Scans Setup

Journal Collaboration of the C			
	Area Scan	Zoom Scan	
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0	
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	
Sensor Surface [mm]	3.0	1.4	
Graded Grid	n/a	Yes	
Grading Ratio	n/a	1.5	
MAIA	Y	N/A	
Surface Detection	VMS + 6p	VMS + 6p	
Scan Method	Measured	Measured	

	Area Scan	Zoom Scan
Date	2023-10-27, 21:00	2023-10-27, 21:12
psSAR1g [W/Kg]	0.192	0.204
psSAR10g [W/Kg]	0.090	0.090
Power Drift [dB]	0.02	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.5
Dist 3dB Peak [mm]		7.1



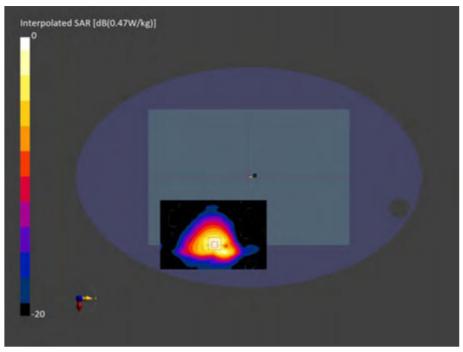


Figure C.13: SAR Testing Results for the A3114 at 2440 MHz Core 0



Measurement Report for A3114, BACK, Custom Band, CW, Channel 2440000 (2440.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0	2440.0, 2440000	7.22	1.80	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) -	HBBL-600-10000 DAK 3.5 Head 21.08 deg.C 2023-Oct-27 SYS3 B3.pm, 2023-Oct-27	EX3DV4 - SN7809, 2023-	DAE4ip Sn1785, 2023-
2102		05-03	04-03

Scans Setup

out to the contract of the con				
	Area Scan	Zoom Scan		
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.5		
MAIA	N/A	N/A		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

	Area Scan	Zoom Scan
Date	2023-10-27, 19:48	2023-10-27, 19:59
psSAR1g [W/Kg]	0.181	0.192
psSAR10g [W/Kg]	0.084	0.086
Power Drift [dB]	-0.02	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		78.2
Dist 3dB Peak [mm]		8.0



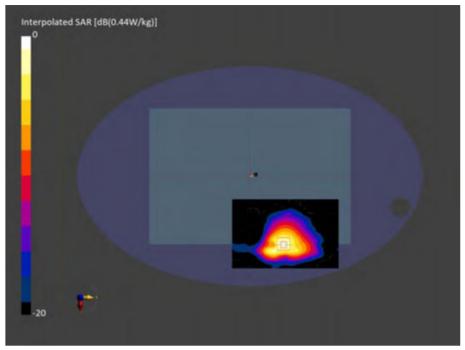


Figure C.14: SAR Testing Results for the A3114 at 2440 MHz Core 1



Measurement Report for A3114, BACK, WLAN 2.4GHz, IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle), Channel 6 (2437.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10416- AAA	2437.0, 6	7.22	1.80	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) -	HBBL-600-10000 DAK 3.5 Head 21.08 deg.C 2023-Oct-27 SYS3 B3.pm, 2023-Oct-27	EX3DV4 - SN7809, 2023-	DAE4ip Sn1785, 2023-
2102		05-03	04-03

Scans Setup

ocaris octup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Micasurement Nesulis		
	Area Scan	Zoom Scan
Date	2023-10-28, 11:45	2023-10-28, 11:56
psSAR1g [W/Kg]	0.694	0.731
psSAR10g [W/Kg]	0.322	0.326
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		76.9
Dist 3dB Peak [mm]		7.3



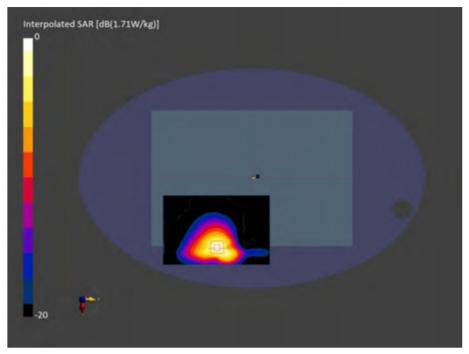


Figure C.15: SAR Testing Results for the A3114 at 2437 MHz Core 0



Measurement Report for A3114, BACK, WLAN 2.4GHz, IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle), Channel 10 (2457.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10416- AAA	2457.0, 10	7.22	1.81	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) -	HBBL-600-10000 DAK 3.5 Head 21.08 deg.C 2023-Oct-27 SYS3 B3.pm, 2023-Oct-27	EX3DV4 - SN7809, 2023-	DAE4ip Sn1785, 2023-
2102		05-03	04-03

Scans Setup

Scaris Setup	1	
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Micasurement Nesulis		
	Area Scan	Zoom Scan
Date	2023-10-28, 13:49	2023-10-28, 14:01
psSAR1g [W/Kg]	0.651	0.720
psSAR10g [W/Kg]	0.316	0.323
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		76.6
Dist 3dB Peak [mm]		7.0



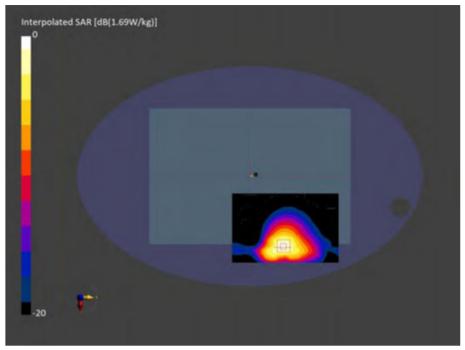


Figure C.16: SAR Testing Results for the A3114 at 2457 MHz Core 1



Measurement Report for A3114, BACK, WLAN 2.4GHz, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK), Channel 6 (2437.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10193- CAD	, 6	7.22	1.80	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) -	HBBL-600-10000 DAK 3.5 Head 21.08 deg.C 2023-Oct-27 SYS3 B3.pm, 2023-Oct-27	EX3DV4 - SN7809, 2023-	DAE4ip Sn1785, 2023-
2102		05-03	04-03

Scans Setup

Area Scan	Zoom Scan	Zoom Scan
x 260.0	30.0 x 30.0 x 30.0	30.0 x 30.0 x 30.0
10.0 x 10.0	5.0 x 5.0 x 1.5	5.0 x 5.0 x 1.5
3.0	1.4	1.4
n/a	Yes	Yes
n/a	1.5	1.5
N/A	N/A	N/A
VMS + 6p	VMS + 6p	VMS + 6p
Measured	Measured	Measured
	x 260.0 10.0 x 10.0 3.0 n/a n/a N/A VMS + 6p	x 260.0 30.0 x 3

measurement results			
	Area Scan	Zoom Scan	Zoom Scan
Date	2023-10-28, 19:50	2023-10-28, 20:02	2023-10-28, 20:13
psSAR1g [W/Kg]	0.578	0.604	0.626
psSAR10g [W/Kg]	0.275	0.272	0.281
Power Drift [dB]	0.01	0.02	0.03
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	Positive only	Positive only	Positive only
M2/M1 [%]		77.7	78.0
Dist 3dB Peak [mm]		7.3	8.0



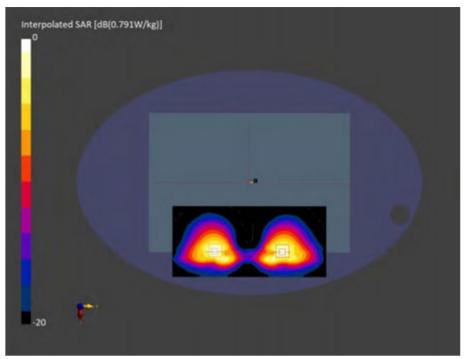


Figure C.17: SAR Testing Results for the A3113 at 2437 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, WLAN 5GHz, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 46 (5230.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5GHz	WLAN, 10114- CAD	5230.0, 46	5.53	4.50	33.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 18.97 deg.C 2023-Nov-28 SYS6 B6.pm, 2023-Nov-28	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

Scans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Micasurement Nesults		
	Area Scan	Zoom Scan
Date	2023-11-29, 09:29	2023-11-29, 09:41
psSAR1g [W/Kg]	0.504	0.548
psSAR10g [W/Kg]	0.190	0.192
Power Drift [dB]	-0.01	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		61.6
Dist 3dB Peak [mm]		7.4



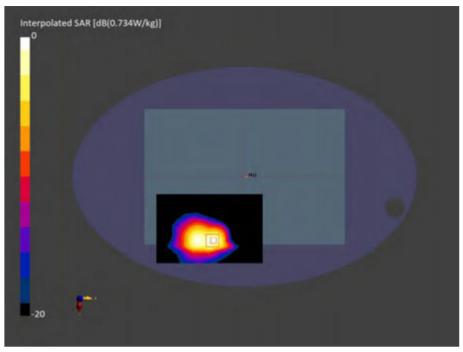


Figure C.18: SAR Testing Results for the A3114 at 5230 MHz Core 0



Measurement Report for A3114, BACK, WLAN 5GHz, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 46 (5230.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5GHz	WLAN, 10114- CAD	5230.0, 46	5.53	4.50	33.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 18.97 deg.C 2023-Nov-28 SYS6 B6.pm, 2023-Nov-28	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-11-29, 10:16	2023-11-29, 10:25
psSAR1g [W/Kg]	0.536	0.565
psSAR10g [W/Kg]	0.192	0.196
Power Drift [dB]	-0.08	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		61.1
Dist 3dB Peak [mm]		7.2



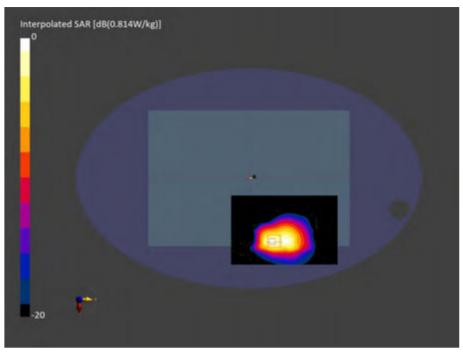


Figure C.19: SAR Testing Results for the A3114 at 5230 MHz Core 1



Measurement Report for A3114, BACK, WLAN 5 GHz, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 46 (5230.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5 GHz	WLAN, 10114- CAD	, 46	5.53	4.47	34.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.7 deg.C 2023-Oct-31 SYS5 B5.pm, 2023-Oct-31	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocalis Setup				
	Area Scan	Zoom Scan	Zoom Scan	
Grid Extents [mm]	x 260.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0	
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	4.0 x 4.0 x 1.4	
Sensor Surface [mm]	3.0	1.4	1.4	
Graded Grid	n/a	Yes	Yes	
Grading Ratio	n/a	1.4	1.4	
MAIA	Y	N/A	N/A	
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p	
Scan Method	Measured	Measured	Measured	

	Area Scan	Zoom Scan	Zoom Scan
Date	2023-10-31, 20:44	2023-10-31, 20:53	2023-10-31, 21:05
psSAR1g [W/Kg]	0.538	0.580	0.570
psSAR10g [W/Kg]	0.205	0.202	0.200
Power Drift [dB]	-0.01	-0.03	-0.03
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	Positive only	Positive only	Positive only
M2/M1 [%]		61.6	62.1
Dist 3dB Peak [mm]		7.3	7.6



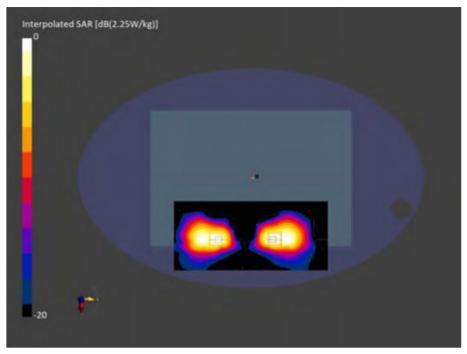


Figure C.20: SAR Testing Results for the A3114 at 5230 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, U-NII-1, U-NII-2A, IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK), Channel 54 (5270.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-1, U- NII-2A	WLAN, 10117- CAD	5270.0, 54	5.27	4.45	33.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

scans Setup				
	Area Scan	Zoom Scan		
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.4		
MAIA	Υ	N/A		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

weasurement itesuits				
	Area Scan	Zoom Scan		
Date	2023-10-29, 11:15	2023-10-29, 11:24		
psSAR1g [W/Kg]	0.510	0.568		
psSAR10g [W/Kg]	0.195	0.198		
Power Drift [dB]	-0.01	-0.03		
Power Scaling	Disabled	Disabled		
Scaling Factor [dB]				
TSL Correction	Positive only	Positive only		
M2/M1 [%]		61.5		
Dist 3dB Peak [mm]		7.3		



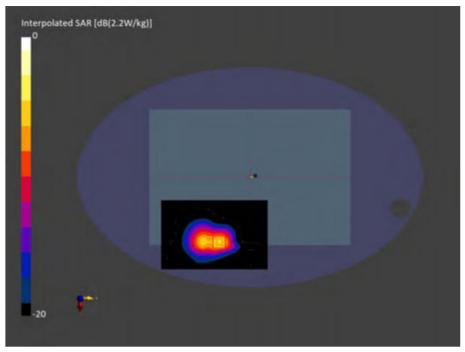


Figure C.21: SAR Testing Results for the A3114 at 5270 MHz Core 0



Measurement Report for A3114, BACK, U-NII-1, U-NII-2A, IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK), Channel 54 (5270.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-1, U- NII-2A	WLAN, 10117- CAD	5270.0, 54	5.27	4.45	33.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans Setup				
	Area Scan	Zoom Scan		
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.4		
MAIA	Y	N/A		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

Measurement Nesures		
	Area Scan	Zoom Scan
Date	2023-10-29, 12:24	2023-10-29, 12:34
psSAR1g [W/Kg]	0.399	0.445
psSAR10g [W/Kg]	0.147	0.154
Power Drift [dB]	0.05	0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		61.6
Dist 3dB Peak [mm]		7.2



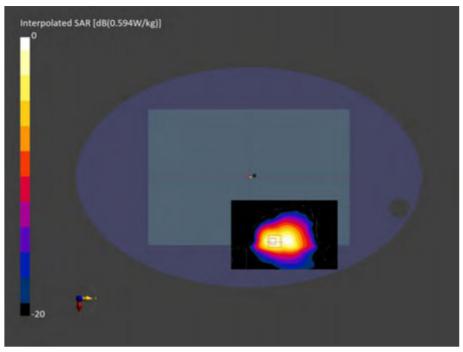


Figure C.22: SAR Testing Results for the A3114 at 5270 MHz Core 1



Measurement Report for A3114, BACK, WLAN 5 GHz, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 54 (5270.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5 GHz	WLAN, 10114- CAD	, 54	5.27	4.51	34.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.7 deg.C 2023-Oct-31 SYS5 B5.pm, 2023-Oct-31	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

cans setup					
	Area Scan	Zoom Scan	Zoom Scan		
Grid Extents [mm]	x 260.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	4.0 x 4.0 x 1.4		
Sensor Surface [mm]	3.0	1.4	1.4		
Graded Grid	n/a	Yes	Yes		
Grading Ratio	n/a	1.4	1.4		
MAIA	Y	N/A	N/A		
Surface Detection	All points	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured	Measured		

readulement reducts					
	Area Scan	Zoom Scan	Zoom Scan		
Date	2023-10-31, 21:39	2023-10-31, 21:51	2023-10-31, 22:00		
psSAR1g [W/Kg]	0.544	0.632	0.549		
psSAR10g [W/Kg]	0.203	0.216	0.188		
Power Drift [dB]	-0.02	-0.03	-0.04		
Power Scaling	Disabled	Disabled	Disabled		
Scaling Factor [dB]					
TSL Correction	Positive only	Positive only	Positive only		
M2/M1 [%]		62.4	61.5		
Dist 3dB Peak [mm]		7.4	7.4		



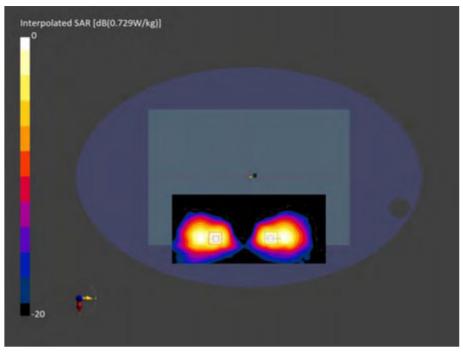


Figure C.23: SAR Testing Results for the A3114 at 5270 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, U-NII-1, U-NII-2A, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle), Channel 64 (5320.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-1, U- NII-2A	WLAN, 10417- AAC	5320.0, 64	5.27	4.50	33.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans octup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

leasurement itesuits					
	Area Scan	Zoom Scan			
Date	2023-10-29, 11:55	2023-10-29, 12:03			
psSAR1g [W/Kg]	0.631	0.717			
psSAR10g [W/Kg]	0.237	0.248			
Power Drift [dB]	0.04	-0.07			
Power Scaling	Disabled	Disabled			
Scaling Factor [dB]					
TSL Correction	Positive only	Positive only			
M2/M1 [%]		61.8			
Dist 3dB Peak [mm]		8.1			



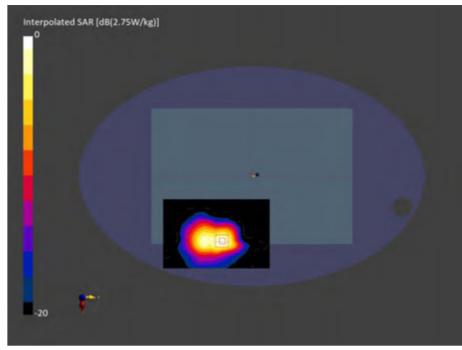


Figure C.24: SAR Testing Results for the A3114 at 5320 MHz Core 0



Measurement Report for A3114, BACK, U-NII-1, U-NII-2A, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle), Channel 64 (5320.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-1, U- NII-2A	WLAN, 10417- AAC	5320.0, 64	5.27	4.50	33.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans Setup				
	Area Scan	Zoom Scan		
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.4		
MAIA	Y	N/A		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

	Area Scan	Zoom Scan
Date	2023-10-29, 13:02	2023-10-29, 13:10
psSAR1g [W/Kg]	0.467	0.509
psSAR10g [W/Kg]	0.169	0.176
Power Drift [dB]	-0.01	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		61.4
Dist 3dB Peak [mm]		7.3



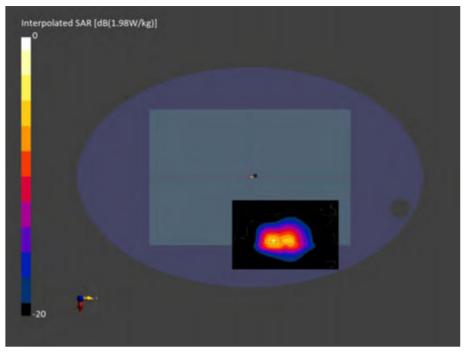


Figure C.25: SAR Testing Results for the A3114 at 5320 MHz Core 1



Measurement Report for A3114, BACK, WLAN 5 GHz, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 64 (5320.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5 GHz	WLAN, 10114- CAD	5320.000, 64	5.27	4.56	34.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.7 deg.C 2023-Oct-31 SYS5 B5.pm, 2023-Oct-31	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

Scans Setup			
	Area Scan	Zoom Scan	Zoom Scan
Grid Extents [mm]	x 260.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4	1.4
Graded Grid	N/A	Yes	Yes
Grading Ratio	N/A	1.4	1.4
MAIA	Y	N/A	N/A
Surface Detection	All points	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured	Measured

Wicasurement Nesults			
	Area Scan	Zoom Scan	Zoom Scan
Date	2023-10-31, 23:38	2023-10-31, 23:46	2023-10-31, 23:55
psSAR1g [W/Kg]	0.522	0.594	0.469
psSAR10g [W/Kg]	0.191	0.201	0.160
Power Drift [dB]	0.00	0.01	0.00
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction	No correction	No correction
M2/M1 [%]		62.3	61.8
Dist 3dB Peak [mm]		7.3	7.2



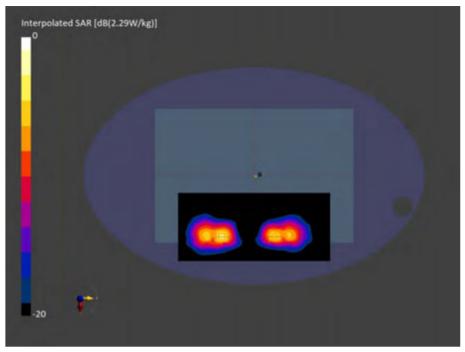


Figure C.26: SAR Testing Results for the A3114 at 5320 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, U-NII-2C < 5.65 GHz, IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle), Channel 122 (5610.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-2C < 5.65 GHz	WLAN, 10544- AAC	5610.000, 122	4.75	4.81	33.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

Scans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Υ	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2023-10-30, 01:42	2023-10-30, 01:49
psSAR1g [W/Kg]	0.621	0.686
psSAR10g [W/Kg]	0.226	0.236
Power Drift [dB]	0.02	-0.10
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.9
Dist 3dB Peak [mm]		7.3



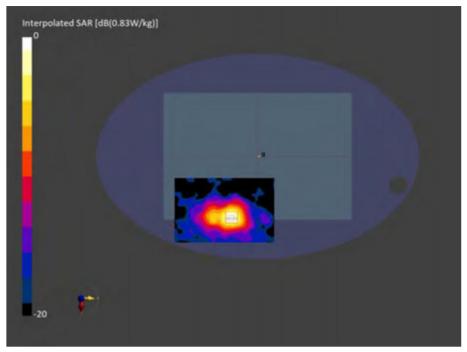


Figure C.27: SAR Testing Results for the A3114 at 5610 MHz Core 0



Measurement Report for A3114, BACK, U-NII-2C, U-NII-3, IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle), Channel 138 (5690.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-2C, U- NII-3	WLAN, 10544- AAC	5690.0, 138	4.75	4.90	33.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

measurement itesuits				
	Area Scan	Zoom Scan		
Date	2023-10-30, 03:19	2023-10-30, 03:27		
psSAR1g [W/Kg]	0.498	0.564		
psSAR10g [W/Kg]	0.180	0.200		
Power Drift [dB]	0.01	-0.14		
Power Scaling	Disabled	Disabled		
Scaling Factor [dB]				
TSL Correction	Positive only	Positive only		
M2/M1 [%]		59.0		
Dist 3dB Peak [mm]		8.0		



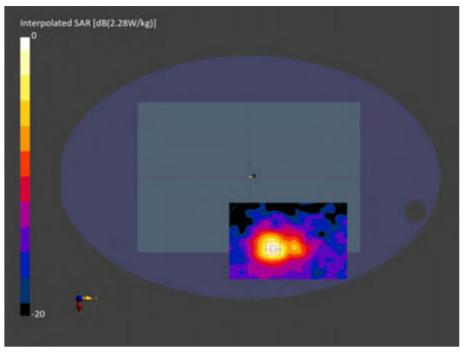


Figure C.28: SAR Testing Results for the A3114 at 5690 MHz Core 1



Measurement Report for A3114, BACK, U-NII-2C, U-NII-3, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 134 (5670.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-2C, U- NII-3	WLAN, 10114- CAD	, 134	4.75	4.95	33.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.7 deg.C 2023-Oct-31 SYS5 B5.pm, 2023-Oct-31	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans Setup					
	Area Scan	Zoom Scan	Zoom Scan		
Grid Extents [mm]	x 240.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	4.0 x 4.0 x 1.4		
Sensor Surface [mm]	3.0	1.4	1.4		
Graded Grid	n/a	Yes	Yes		
Grading Ratio	n/a	1.4	1.4		
MAIA	Y	N/A	N/A		
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured	Measured		

	Area Scan	Zoom Scan	Zoom Scan
Date	2023-11-01, 05:29	2023-11-01, 05:38	2023-11-01, 05:47
psSAR1g [W/Kg]	0.575	0.615	0.605
psSAR10g [W/Kg]	0.208	0.204	0.203
Power Drift [dB]	0.12	0.10	0.13
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction	No correction	No correction
M2/M1 [%]		59.0	60.2
Dist 3dB Peak [mm]		7.3	8.0



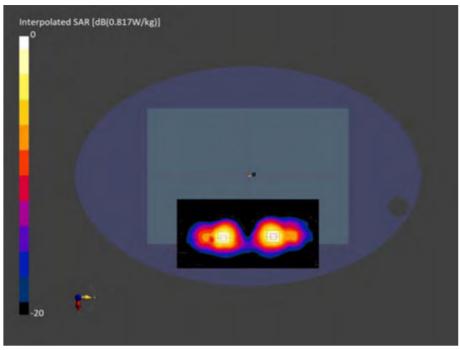


Figure C.29: SAR Testing Results for the A3114 at 5670 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, WLAN 5 GHz, IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle), Channel 155 (5775.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5 GHz	WLAN, 10544- AAC	5775.0, 155	4.83	4.99	33.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans oetup		
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Nesurs		
	Area Scan	Zoom Scan
Date	2023-10-30, 04:39	2023-10-30, 04:46
psSAR1g [W/Kg]	0.654	0.695
psSAR10g [W/Kg]	0.233	0.227
Power Drift [dB]	0.07	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		59.7
Dist 3dB Peak [mm]		7.3



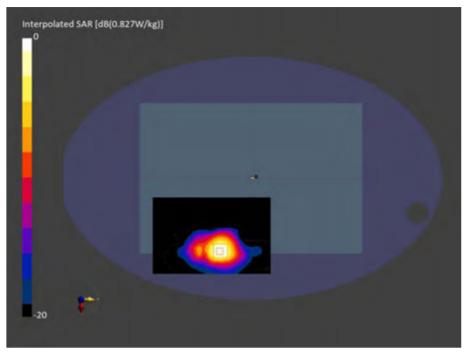


Figure C.30: SAR Testing Results for the A3114 at 5775 MHz Core 0



Measurement Report for A3114, BACK, WLAN 5 GHz, IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle), Channel 155 (5775.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5 GHz	WLAN, 10544- AAC	5775.0, 155	4.83	4.99	33.0

Hardware Setup

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 20.95 deg.C 2023-Oct-29 SYS6 B6.pm, 2023-Oct-29	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

Scalls Selup		T
	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Υ	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Nesulis		
	Area Scan	Zoom Scan
Date	2023-10-30, 03:48	2023-10-30, 03:58
psSAR1g [W/Kg]	0.538	0.588
psSAR10g [W/Kg]	0.192	0.203
Power Drift [dB]	-0.14	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		58.9
Dist 3dB Peak [mm]		7.9



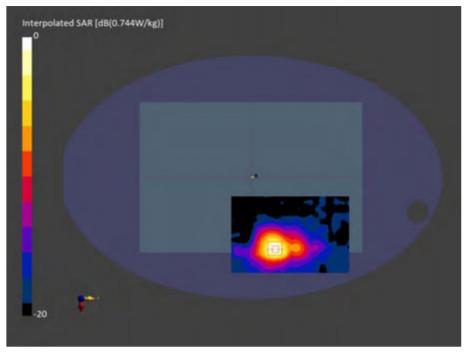


Figure C.31: SAR Testing Results for the A3114 at 5775 MHz Core 1



Measurement Report for A3114, BACK, WLAN 5 GHz, IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle), Channel 155 (5775.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5 GHz	WLAN, 10544- AAC	, 155	4.83	5.06	33.4

Hardware Setup

Phantom	Phantom TSL, Measured Date		DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head 21.7 deg.C 2023-Oct-31 SYS5 B5.pm, 2023-Oct-31	EX3DV4 - SN7809, 2023- 05-03	DAE4ip Sn1789, 2023- 05-02

Scans Setup

ocans octup			
	Area Scan	Zoom Scan	Zoom Scan
Grid Extents [mm]	x 240.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4	1.4
Graded Grid	n/a	Yes	Yes
Grading Ratio	n/a	1.4	1.4
MAIA	Y	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured	Measured

	Area Scan	Zoom Scan	Zoom Scan
Date	2023-11-01, 06:33	2023-11-01, 06:42	2023-11-01, 06:50
psSAR1g [W/Kg]	0.553	0.579	0.583
psSAR10g [W/Kg]	0.197	0.191	0.192
Power Drift [dB]	0.01	-0.06	-0.08
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	Positive only	Positive only	Positive only
M2/M1 [%]		58.4	59.2
Dist 3dB Peak [mm]		7.3	8.0



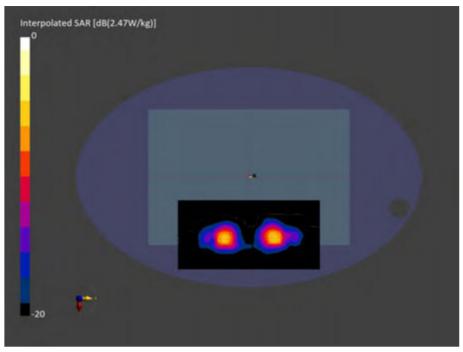


Figure C.32: SAR Testing Results for the A3114 at 5775 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, U-NII-5, IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle), Channel 15 (6025.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII- 5	WLAN, 10755- AAC	6025.0, 15	5.07	5.22	32.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 21.41 deg.C 2023-Oct-29 SYS5 B5.pm, 2023-Oct-29	EX3DV4 - SN7805, 2023- 04-06	DAE4ip Sn1786, 2023- 04-03

Scans Setup

ocans octup				
	Area Scan	Zoom Scan		
Grid Extents [mm]	136.0 x 187.0	22.0 x 22.0 x 22.0		
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4		
Sensor Surface [mm]	3.0	1.4		
Graded Grid	n/a	Yes		
Grading Ratio	n/a	1.4		
MAIA	Y	N/A		
Surface Detection	VMS + 6p	VMS + 6p		
Scan Method	Measured	Measured		

Measurement Nesures		
	Area Scan	Zoom Scan
Date	2023-10-30, 01:13	2023-10-30, 01:22
psSAR1g [W/Kg]	0.491	0.520
psSAR10g [W/Kg]	0.161	0.169
Power Drift [dB]	-0.16	0.10
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		53.5
Dist 3dB Peak [mm]		7.5



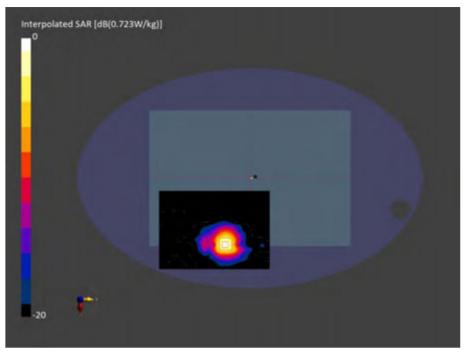


Figure C.33: SAR Testing Results for the A3114 at 6025 MHz Core 0



Measurement Report for A3114, BACK, U-NII-7, IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle), Channel 143 (6665.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII- 7	WLAN, 10755- AAC	6665.0, 143	5.07	5.95	31.6

Hardware Setup

Phantom	TSL, Measured Date		DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 21.41 deg.C 2023-Oct-29 SYS5 B5.pm, 2023-Oct-29	EX3DV4 - SN7805, 2023- 04-06	DAE4ip Sn1786, 2023- 04-03

Scans Setup

ocans oetup		
	Area Scan	Zoom Scan
Grid Extents [mm]	136.0 x 187.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Υ	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Micasurement Nesulis		
	Area Scan	Zoom Scan
Date	2023-10-30, 05:16	2023-10-30, 05:30
psSAR1g [W/Kg]	0.701	0.714
psSAR10g [W/Kg]	0.226	0.223
Power Drift [dB]	-0.01	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		49.9
Dist 3dB Peak [mm]		7.5



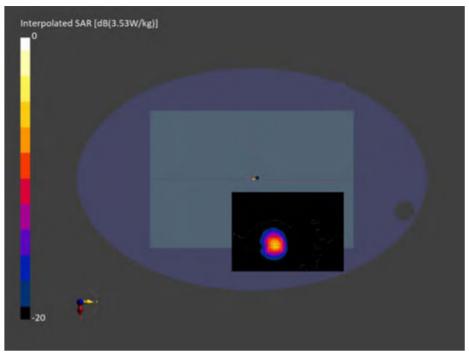


Figure C.34: SAR Testing Results for the A3114 at 6665 MHz Core 1



Measurement Report for A3114, BACK, U-NII-7, IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle), Channel 143 (6665.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	340.0 x 236.0 x 10.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII- 7	WLAN, 10755- AAC	, 143	5.07	5.95	31.6

Hardware Setup

Phantom	TSL, Measured Date		DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 21.41 deg.C 2023-Oct-29 SYS5 B5.pm, 2023-Oct-29	EX3DV4 - SN7805, 2023- 04-06	DAE4ip Sn1786, 2023- 04-03

Scans Setup

ocario octup			
	Area Scan	Zoom Scan	Zoom Scan
Grid Extents [mm]	x 255.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4	1.4
Graded Grid	n/a	Yes	Yes
Grading Ratio	n/a	1.4	1.4
MAIA	Y	N/A	Y
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured	Measured

Wedsurement Results			
	Area Scan	Zoom Scan	Zoom Scan
Date	2023-10-30, 11:14	2023-10-30, 11:27	2023-10-30, 11:41
psSAR1g [W/Kg]	0.611	0.655	0.479
psSAR10g [W/Kg]	0.202	0.205	0.148
Power Drift [dB]	0.18	-0.01	0.05
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction	No correction	No correction
M2/M1 [%]		49.4	49.7
Dist 3dB Peak [mm]		7.8	7.4



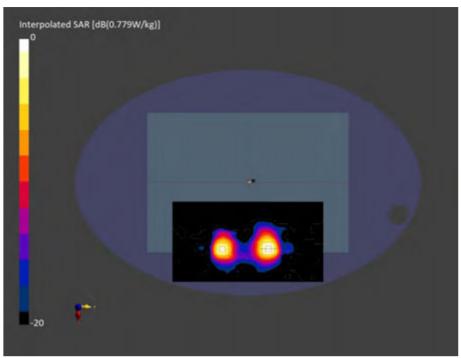


Figure C.36: SAR Testing Results for the A3114 at 6665 MHz Core 0 & Core 1



Measurement Report for A3114, BACK, U-NII-7, IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle), Channel 143 (6665.0 MHz)

Device Under Test Properties

• • • • • • • • • • • • • • • • • • •			
Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3114	314.0 x 236.0 x 10.0		Laptop

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	BACK, 2.00	U-NII-7	WLAN, 10755-AAC	6665.0, 143	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - 1112	Air -	EUmmWV4 - SN9641_F1-55 GHz, 2022-10-25	DAE4ip Sn1785, 2023-04-03

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.04538097579395488 x 0.04538097579395488
Sensor Surface [mm]	2.0
MAIA	Y

Scan Type	5G Scan
Date	2023-11-10, 11:27
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	3.00
psPDtot+ [W/m²]	6.24
psPDmod+ [W/m²]	8.45
E _{max} [V/m]	93.9
Power Drift [dB]	-0.09



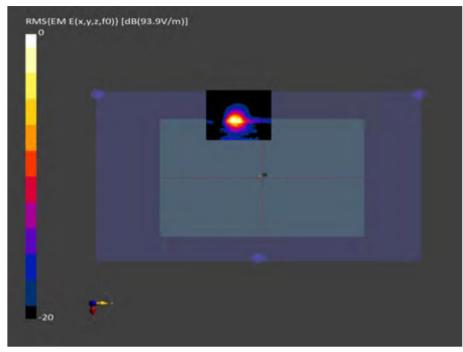


Figure C.37: iPD Testing Results for the A3114 at 6665 MHz



ANNEX D

THREAD TECHNOLOGY DUTY FACTOR CORRECTION



A3114 Thread Scaling Rationale

The measured SAR Results for the Thread technology, as detailed in this document, are scaled down to 59.68% to adjust for the normal operating conditions of this technology as shown in figure 10. With the measured SAR Results having been taken with the device operating in a test mode, on a fixed channel with 100% duty cycle, as shown below in figure 9.

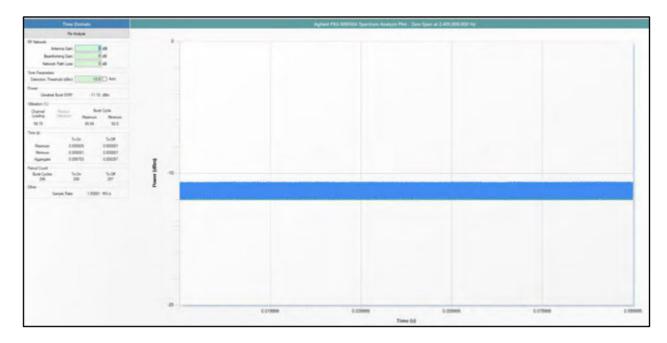


Figure 8 - Thread ePA - Frequency of 2405MHz (100% Duty Cycle)

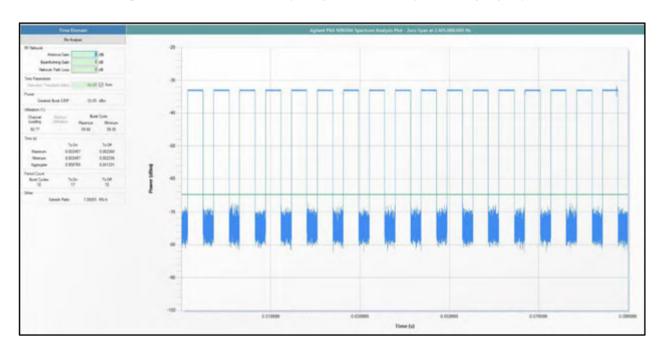


Figure 9 - Thread ePA - Frequency of 2405MHz (59.68% Duty Cycle)