

# PCS 1900: GPRS-FDD (TDMA, GMSK, TN 0-1), CHEEK

## Exposure Conditions

Band	PCS 1900	TSL Permittivity	40.1
Frequency [MHz]   Channel Number	1909.800   810	TSL Conductivity [S/m]	1.46
Group   UID	GSM   10024-DAC	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	7.55	Test Distance [mm]	0.00

## Hardware Setup

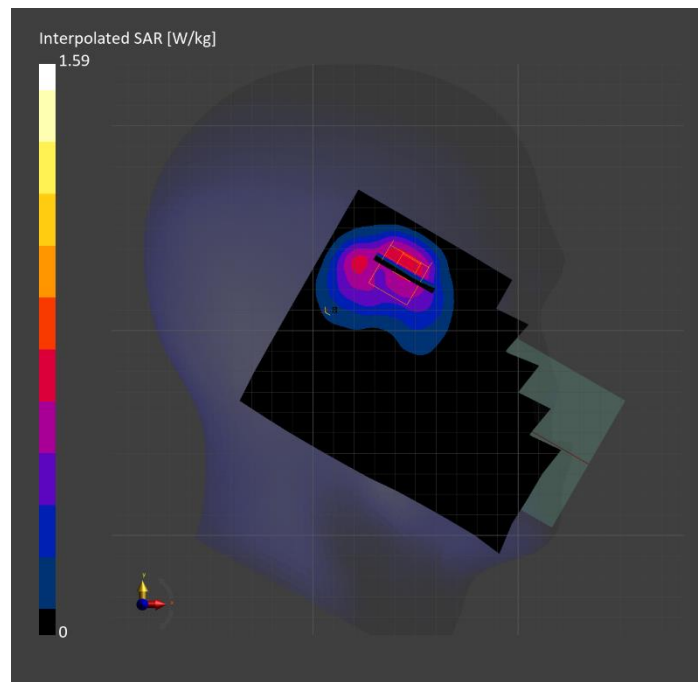
Probe   Calibration Date	EX3DV4 - SN7448   2024-02-07	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1784   2024-05-02	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.5 x 5.5 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		79.0
Dist 3dB Peak [mm]		6.6
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.59   [46.6, 331.0, -176.4]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.614	<b>0.737</b>
psSAR10g [W/Kg]	0.353	<b>0.376</b>
Power Drift [dB]	N/A	-0.05



## Band 2: UMTS-FDD (WCDMA), CHEEK

### Exposure Conditions

Band	Band 2	TSL Permittivity	40.1
Frequency [MHz]   Channel Number	1907.600   9538	TSL Conductivity [S/m]	1.46
Group   UID	WCDMA   10011-CAC	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	7.55	Test Distance [mm]	0.00

### Hardware Setup

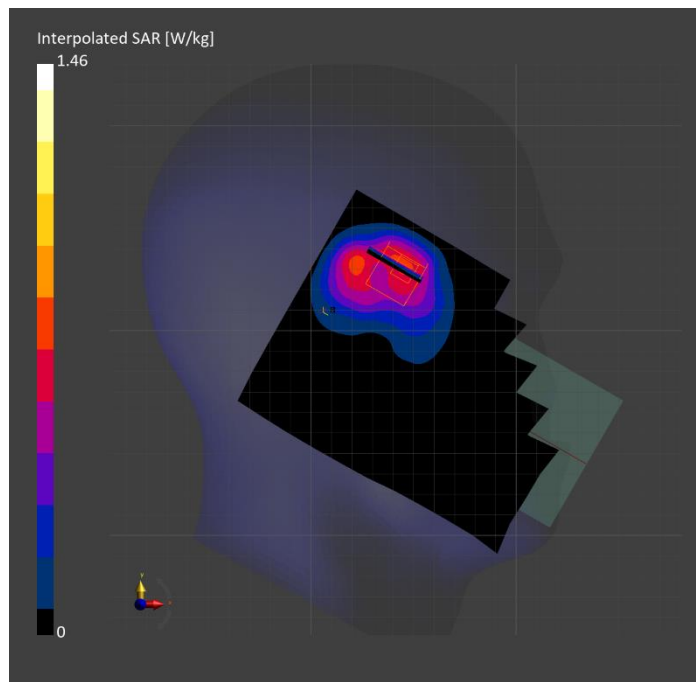
Probe   Calibration Date	EX3DV4 - SN7448   2024-02-07	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1784   2024-05-02	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

### Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		81.8
Dist 3dB Peak [mm]		7.2
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.46   [44.6, 333.3, -176.2]

### Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.618	<b>0.754</b>
psSAR10g [W/Kg]	0.364	<b>0.395</b>
Power Drift [dB]	N/A	-0.02



**Band 30: LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) RBPosition:Low**  
**AntennaCfg:SISO, CHEEK**

**Exposure Conditions**

Band	Band 30	TSL Permittivity	41.7
Frequency [MHz]   Channel Number	2310.000   27710	TSL Conductivity [S/m]	1.71
Group   UID	LTE-FDD   10154-CAH	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	7.29	Test Distance [mm]	0.00

**Hardware Setup**

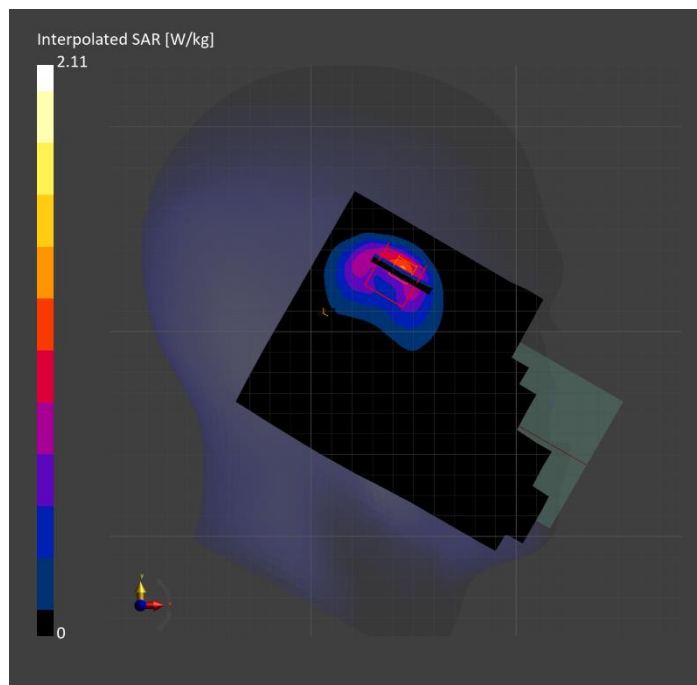
Probe   Calibration Date	EX3DV4 - SN7482   2024-04-15	Phantom	Twin-SAM V5.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1239   2024-03-06	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

**Scan 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	4.7 x 4.7 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		75.5
Dist 3dB Peak [mm]		4.8
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	2.11   [44.0, 332.0, -174.2]

**Measurement Results**

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.861	<b>0.885</b>
psSAR10g [W/Kg]	0.405	<b>0.415</b>
Power Drift [dB]	N/A	-0.05



**Band n53: 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) RBPosition:Mid  
AntennaCfg:SISO, CHEEK**

**Exposure Conditions**

Band	Band n53	TSL Permittivity	38.5
Frequency [MHz]   Channel Number	2489.300   497860	TSL Conductivity [S/m]	1.83
Group   UID	5G NR FR1 TDD   10908-AAC	Phantom Section   TSL	RightHead   HSL
Conversion Factor	7.3	Test Distance [mm]	0.00

**Hardware Setup**

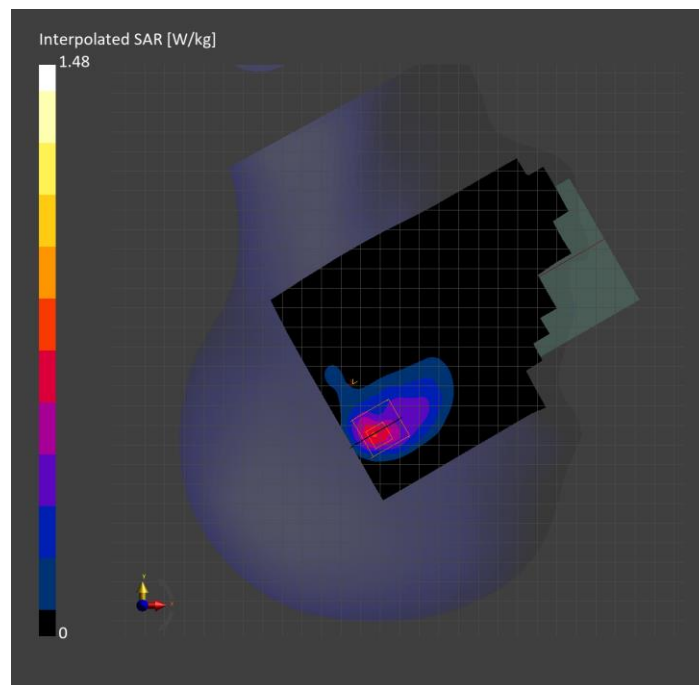
Probe   Calibration Date	EX3DV4 - SN7850   2023-10-27	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1673   2024-05-13	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

**Scan 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
M2/M1 [%]		72.6
Dist 3dB Peak [mm]		6.5
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.48   [17.1, -334.6, -174.0]

**Measurement Results**

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.548	<b>0.578</b>
psSAR10g [W/Kg]	0.261	<b>0.250</b>
Power Drift [dB]	N/A	-0.08



# WLAN 2.4GHz: IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), CHEEK

## Exposure Conditions

Band	WLAN 2.4GHz	TSL Permittivity	39.8
Frequency [MHz]   Channel Number	2437.000   6	TSL Conductivity [S/m]	1.80
Group   UID	WLAN   10415-AAA	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	6.96	Test Distance [mm]	0.00

## Hardware Setup

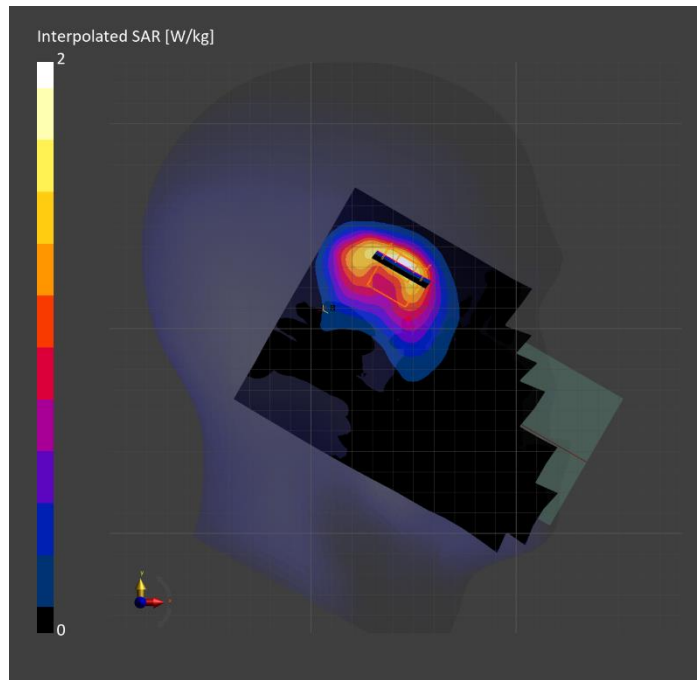
Probe   Calibration Date	EX3DV4 - SN7779   2024-05-10	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1439   2024-04-24	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan 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
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		7.3
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	2.00   [45.7, 331.2, -177.7]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.874	<b>0.883</b>
psSAR10g [W/Kg]	0.428	<b>0.440</b>
Power Drift [dB]	N/A	0.01



# WLAN 5GHz: IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), CHEEK

## Exposure Conditions

Band	WLAN 5GHz	TSL Permittivity	33.8
Frequency [MHz]   Channel Number	5775.000   155	TSL Conductivity [S/m]	5.07
Group   UID	WLAN   10544-AAD	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	5.23	Test Distance [mm]	0.00

## Hardware Setup

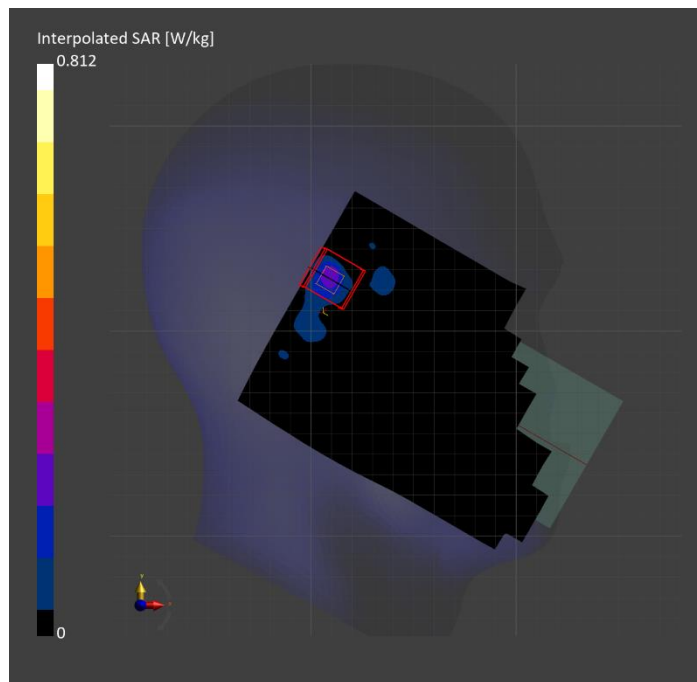
Probe   Calibration Date	EX3DV4 - SN7501   2024-03-14	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1357   2024-01-09	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan Setup

	Area Scan	Zoom Scan	Secondary Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0	24.0 x 24.0 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
M2/M1 [%]		62.6	64.5
Dist 3dB Peak [mm]		5.7	5.4
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	0.812   [9.1, 325.1, -173.7]	0.764   [9.1, 325.1, -173.7]

## Measurement Results

	Area Scan	Zoom Scan	Secondary Zoom Scan
psSAR1g [W/Kg]	0.169	<b>0.176</b>	<b>0.173</b>
psSAR10g [W/Kg]	0.049	<b>0.039</b>	<b>0.037</b>
Power Drift [dB]	N/A	0.28	0.35



# U-NII-5: IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), CHEEK

## Exposure Conditions

Band	U-NII-5	TSL Permittivity	34.5
Frequency [MHz]   Channel Number	6025.000   15	TSL Conductivity [S/m]	5.59
Group   UID	WLAN   10755-AAC	Phantom Section   TSL	RightHead   HSL
Conversion Factor	4.63	Test Distance [mm]	0.00

## Hardware Setup

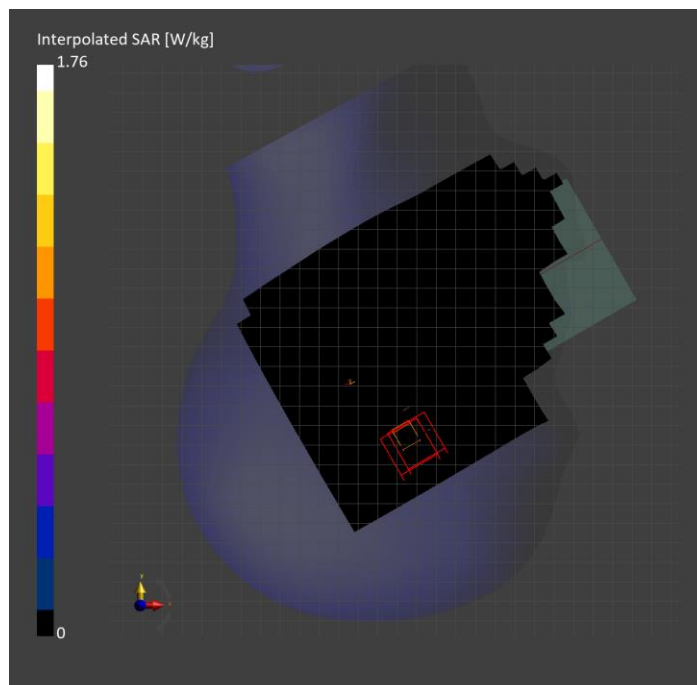
Probe   Calibration Date	EX3DV4 - SN7587   2024-04-15	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1797   2024-05-02	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan Setup

	Area Scan	Zoom Scan 1	Zoom Scan 2
Grid Extents [mm]	102.0 x 187.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	2.3 x 2.3 x 1.2	2.0 x 2.0 x 1.2
Sensor Surface [mm]	3.0	1.4	1.4
Graded Grid	N/A	Yes	Yes
M2/M1 [%]		69.8	49.8
Dist 3dB Peak [mm]		1.9	1.6
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.49   [36.3, -333.8, -174.5]	1.76   [36.7, -334.3, -174.4]

## Measurement Results

	Area Scan	Zoom Scan 1	Zoom Scan 2	APD 1	APD 2
psSAR1g [W/Kg]	0.027	0.004	0.004	N/A	N/A
psSAR8g [W/Kg]	0.003	0	0	N/A	N/A
psSAR10g [W/Kg]	0.002	0	0	N/A	N/A
psAPD (4.0cm <sup>2</sup> , sq.) [W/m <sup>2</sup> ]	N/A	N/A	N/A	0.016	0.016
Power Drift [dB]	N/A	0.60	-1.47	N/A	N/A



# U-NII-7: IEEE 802.11ax (80MHz, MCS0, 99pc duty cycle), EDGE BOTTOM

## Exposure Conditions

Band	U-NII-7	Phantom Section	5G
Frequency [MHz]   Channel Number	6545.0   119	Conversion Factor	1.0
Group   UID	WLAN, 10731-AAC	Position   Test Distance [mm]	EDGE BOTTOM   2.00

## Hardware Setup

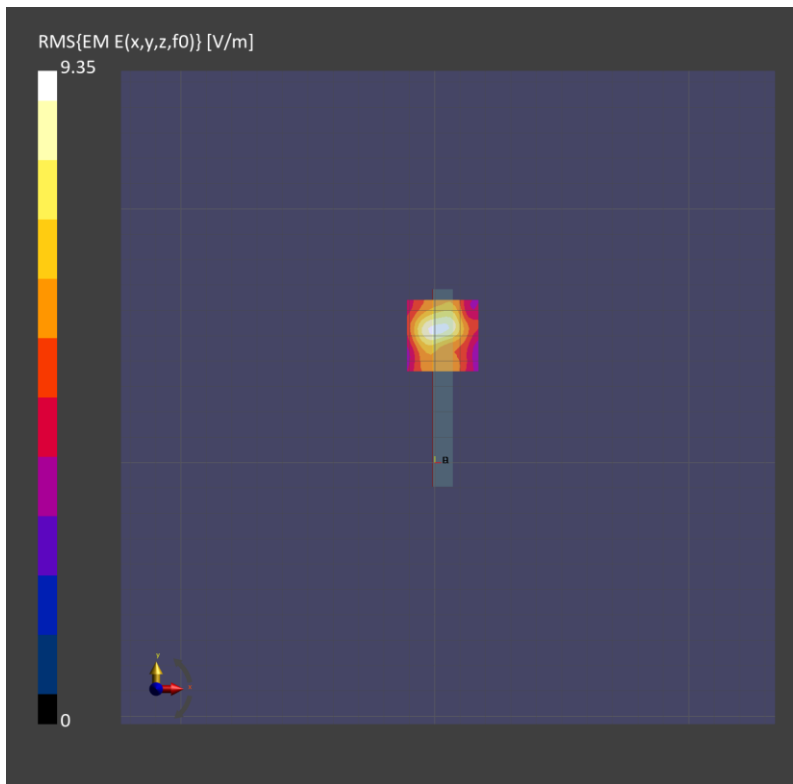
Probe   Calibration Date	EUmmWV4 - SN9619_F1-55GHz   2024-03-08	Phantom	mmWave   xxxx
DAE   Calibration Date	DAE4 Sn1472   2024-01-16	Medium	Air   -
Software Version	3.2.0.1840		

## Scan Setup

Scan Type	5G Scan	Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.041 x 0.041	Sensor Surface [mm]	2.0

## Measurement Results

Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	0.098
psPDtot+ [W/m <sup>2</sup> ]	0.102
psPDmod+ [W/m <sup>2</sup> ]	0.118
E <sub>max</sub> [V/m]	8.88
H <sub>max</sub> [A/m]	0.032
Power Drift [dB]	2.39





# FR2 Band n258: CW, EDGE LEFT

## Exposure Conditions

Band	Custom Band	Phantom Section	5G
Frequency [MHz]   Channel Number	24800.0   2025833	Conversion Factor	1.0
Group   UID	CW, 0--	Position   Test Distance [mm]	EDGE LEFT   2.00

## Hardware Setup

Probe   Calibration Date	EUmmWV4 - SN9589_F1-55GHz   2023-09-05	Phantom	mmWave   xxxx
DAE   Calibration Date	DAE4ip Sn1621   2024-04-12	Medium	Air   -
Software Version	3.2.0.1840		

## Scan Setup

Scan Type	5G Scan	Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.19269041484905072 x 0.19269041484905072	Sensor Surface [mm]	2.0

## Measurement Results

Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	0.597
psPDtot+ [W/m <sup>2</sup> ]	0.618
psPDmod+ [W/m <sup>2</sup> ]	0.637
E <sub>max</sub> [V/m]	25.8
H <sub>max</sub> [A/m]	0.056
Power Drift [dB]	0.02

