

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

## Exposure Conditions

Band	PCS 1900	TSL Permittivity	40.1
Frequency [MHz]   Channel Number	1880.000   661	TSL Conductivity [S/m]	1.44
Group   UID	GSM   10024-DAC	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	7.55	Test Distance [mm]	0.00

## Hardware Setup

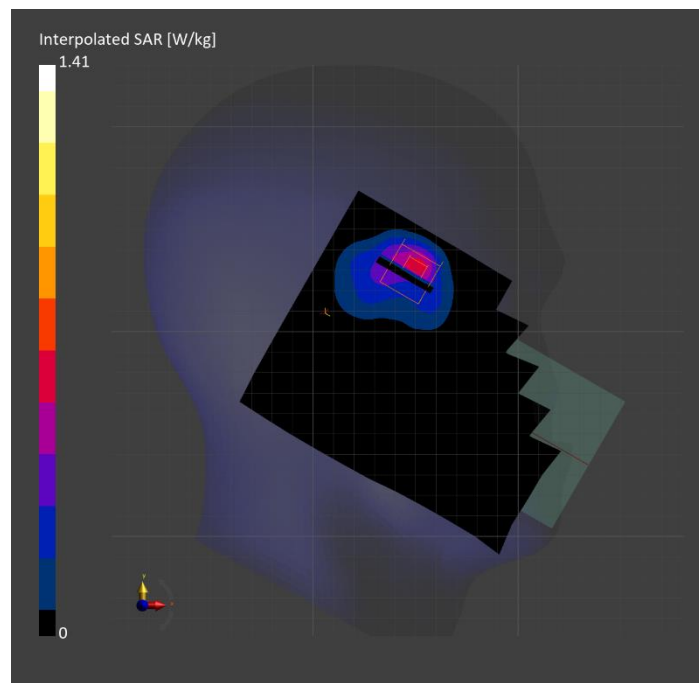
Probe   Calibration Date	EX3DV4 - SN7448   2024-02-07	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1784   2024-05-02	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## 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	3.8 x 3.8 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		76.5
Dist 3dB Peak [mm]		4.6
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.41   [50.2, 329.3, -176.2]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.486	<b>0.578</b>
psSAR10g [W/Kg]	0.253	<b>0.250</b>
Power Drift [dB]	N/A	-0.04



## 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

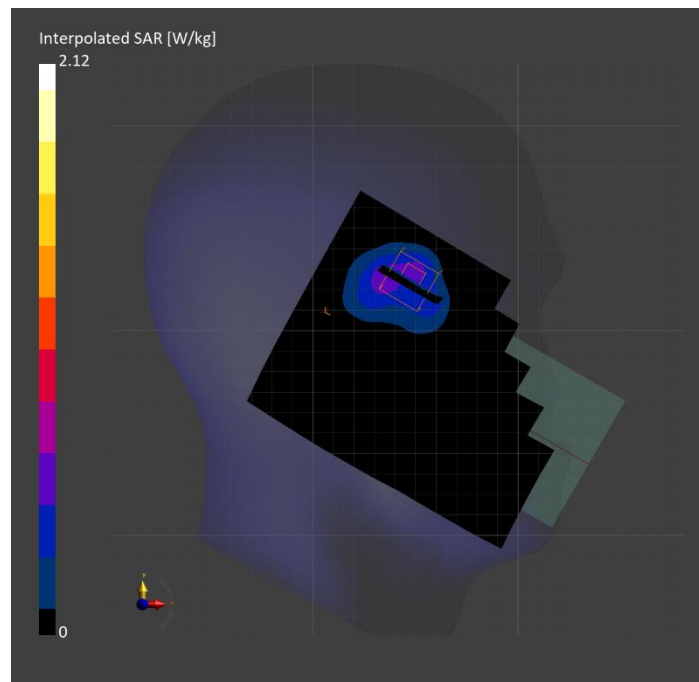
Probe   Calibration Date	EX3DV4 - SN7448   2024-02-07	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1784   2024-05-02	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

### 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	3.7 x 3.7 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		75.8
Dist 3dB Peak [mm]		4.6
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	2.12   [48.7, 326.4, -176.6]

### Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.520	<b>0.836</b>
psSAR10g [W/Kg]	0.292	<b>0.348</b>
Power Drift [dB]	N/A	-0.15



# Band 5: LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO, CHEEK

## Exposure Conditions

Band	Band 5	TSL Permittivity	39.5
Frequency [MHz]   Channel Number	836.500   20525	TSL Conductivity [S/m]	0.913
Group   UID	LTE-FDD   10154-CAH	Phantom Section   TSL	RightHead   HSL
Conversion Factor	9.5	Test Distance [mm]	0.00

## Hardware Setup

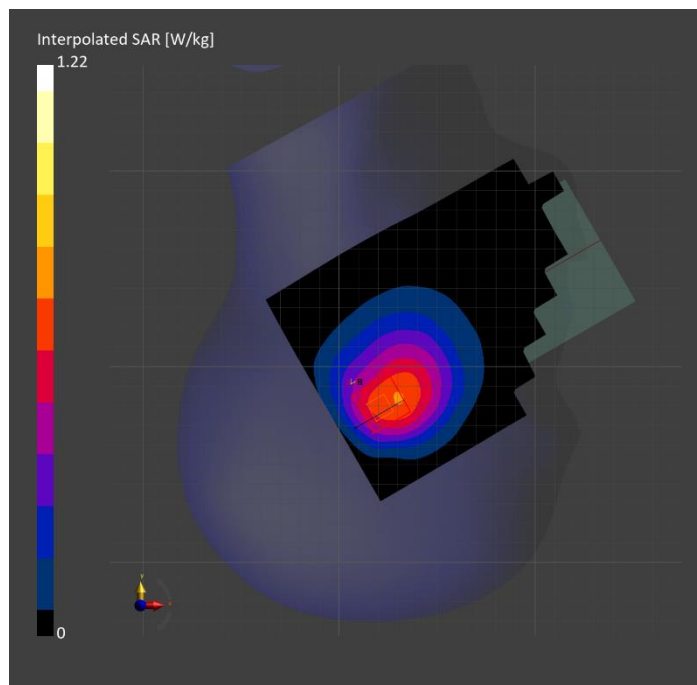
Probe   Calibration Date	EX3DV4 - SN7589   2024-04-15	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1798   2024-05-22	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## 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 [%]		84.3
Dist 3dB Peak [mm]		7.4
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.22   [17.8, -325.5, -174.4]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.625	<b>0.661</b>
psSAR10g [W/Kg]	0.422	<b>0.395</b>
Power Drift [dB]	N/A	0.00



# Band n30: 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) RBPosition:High AntennaCfg:SISO, CHEEK

## Exposure Conditions

Band	Band n30	TSL Permittivity	41.7
Frequency [MHz]   Channel Number	2310.000   462000	TSL Conductivity [S/m]	1.71
Group   UID	5G NR FR1 FDD   10929-AAD	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	7.29	Test Distance [mm]	0.00

## Hardware Setup

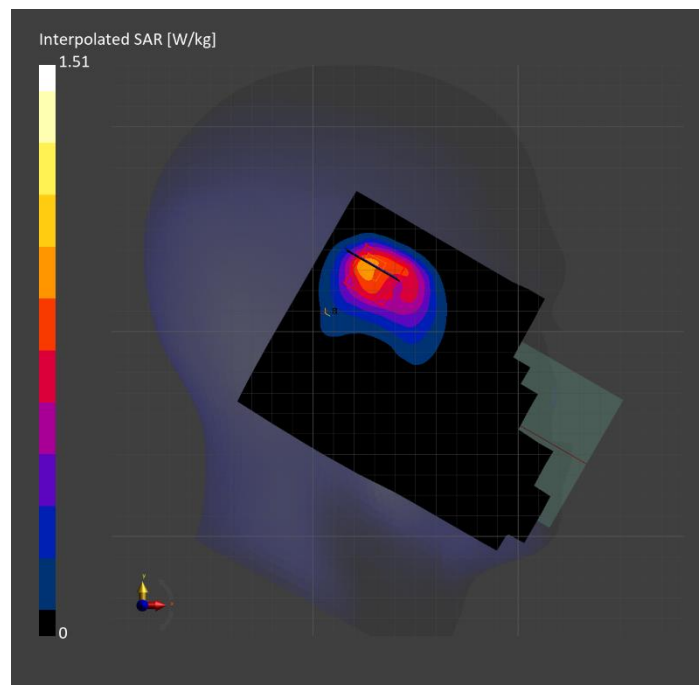
Probe   Calibration Date	EX3DV4 - SN7482   2024-04-15	Phantom	Twin-SAM V5.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1239   2024-03-06	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## 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	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		83.6
Dist 3dB Peak [mm]		8.6
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	1.51   [25.6, 335.5, -174.3]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.763	<b>0.814</b>
psSAR10g [W/Kg]	0.408	<b>0.421</b>
Power Drift [dB]	N/A	-0.03



# 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	40.9
Frequency [MHz]   Channel Number	2462.000   11	TSL Conductivity [S/m]	1.81
Group   UID	WLAN   10415-AAA	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	7.49	Test Distance [mm]	0.00

## Hardware Setup

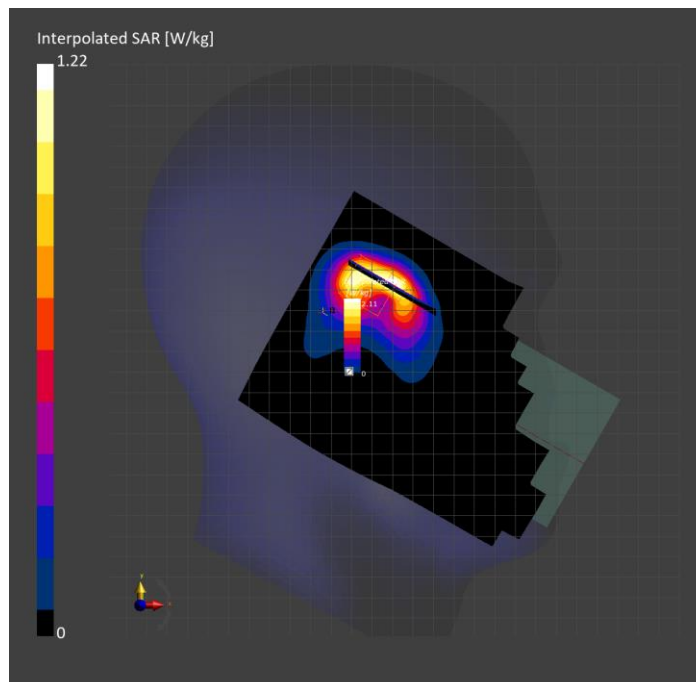
Probe   Calibration Date	EX3DV4 - SN7587   2024-04-15	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1797   2024-05-02	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan Setup

	Area Scan	Zoom Scan
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 [%]		75.8
Dist 3dB Peak [mm]		5.4
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	2.11   [43.4, 321.4, -175.5]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.845	<b>0.875</b>
psSAR10g [W/Kg]	0.431	<b>0.428</b>
Power Drift [dB]	N/A	-0.15



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

## 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

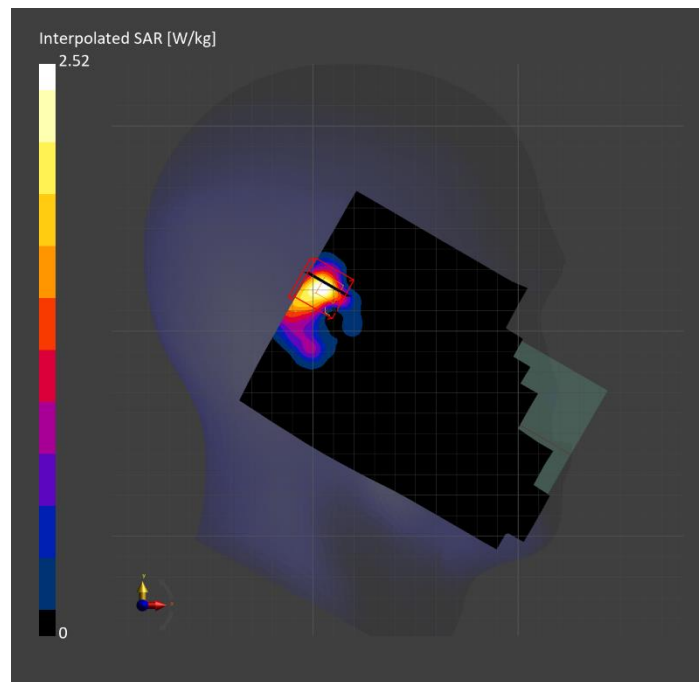
Probe   Calibration Date	EX3DV4 - SN7501   2024-03-14	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1357   2024-01-09	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
M2/M1 [%]		63.7
Dist 3dB Peak [mm]		5.2
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	2.52   [8.9, 320.8, -173.7]

## Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.558	<b>0.592</b>
psSAR10g [W/Kg]	0.177	<b>0.184</b>
Power Drift [dB]	N/A	0.11



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

## Exposure Conditions

Band	U-NII-5	TSL Permittivity	33.4
Frequency [MHz]   Channel Number	6025.000   15	TSL Conductivity [S/m]	5.27
Group   UID	WLAN   10755-AAC	Phantom Section   TSL	LeftHead   HSL
Conversion Factor	5.35	Test Distance [mm]	0.00

## Hardware Setup

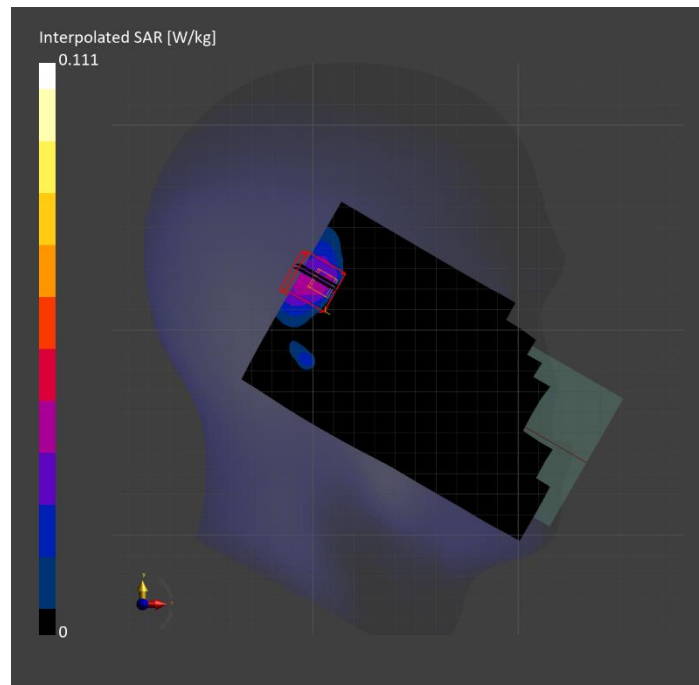
Probe   Calibration Date	EX3DV4 - SN7501   2024-03-14	Phantom	Twin-SAM V8.0 (30deg probe tilt)
DAE   Calibration Date	DAE4 Sn1357   2024-01-09	TSL Type	HBBL-600-10000
Software Version	16.2.4.2524		

## Scan Setup

	Area Scan	Zoom Scan 1	Zoom Scan 2
Grid Extents [mm]	102.0 x 187.0	23.8 x 23.8 x 22.0	23.8 x 23.8 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
M2/M1 [%]		55.7	43.0
Dist 3dB Peak [mm]		4.4	5.0
Peak SAR [W/kg]   SAR Peak Location [mm]	N/A	<b>0.111</b>   [7.2, 322.8, -173.5]	<b>0.106</b>   [6.7, 320.7, -173.5]

## Measurement Results

	Area Scan	Zoom Scan 1	Zoom Scan 2	APD 1	APD 2
psSAR1g [W/Kg]	0.032	<b>0.026</b>	<b>0.025</b>	N/A	N/A
psSAR8g [W/Kg]	0.013	<b>0.010</b>	<b>0.010</b>	N/A	N/A
psSAR10g [W/Kg]	0.011	<b>0.009</b>	<b>0.009</b>	N/A	N/A
psAPD (4.0cm <sup>2</sup> , sq.) [W/m <sup>2</sup> ]	N/A	N/A	N/A	<b>0.209</b>	<b>0.201</b>
Power Drift [dB]	N/A	1.24	-0.70	N/A	N/A



# U-NII-8: IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), EDGE BOTTOM

## Exposure Conditions

Band	U-NII-8	Phantom Section	5G
Frequency [MHz]   Channel Number	6985.0   207	Conversion Factor	1.0
Group   UID	WLAN, 10755-AAC	Position   Test Distance [mm]	EDGE BOTTOM   2.00

## Hardware Setup

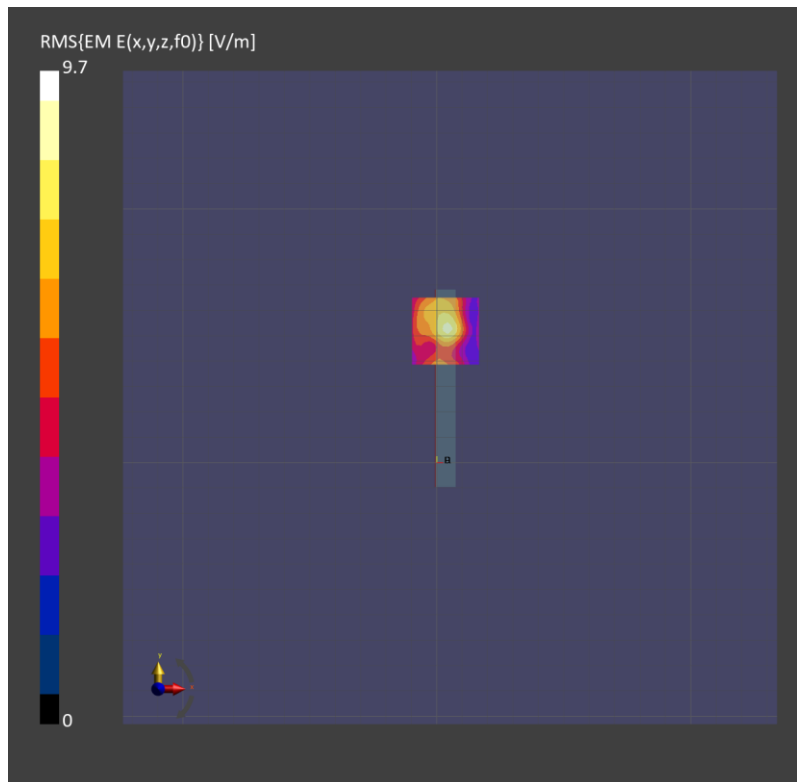
Probe   Calibration Date	EUmmWV4 - SN9619_F1-55GHz   2024-03-08	Phantom	mmWave   xxxx
DAE   Calibration Date	DAE4 Sn1472   2024-01-16	Medium	Air   -
Software Version	3.2.0.1840		

## 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> ]	0.077
psPDtot+ [W/m <sup>2</sup> ]	0.093
psPDmod+ [W/m <sup>2</sup> ]	0.109
E <sub>max</sub> [V/m]	8.39
H <sub>max</sub> [A/m]	0.028
Power Drift [dB]	-0.33





# FR2: CW, EDGE LEFT

## Exposure Conditions

Band	FR2	Phantom Section	5G
Frequency [MHz]   Channel Number	39950.0   2277500	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]	0.25 x 0.25	Sensor Surface [mm]	2.0

## Measurement Results

Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	0.457
psPDtot+ [W/m <sup>2</sup> ]	0.475
psPDmod+ [W/m <sup>2</sup> ]	0.484
E <sub>max</sub> [V/m]	21.1
H <sub>max</sub> [A/m]	0.054
Power Drift [dB]	0.07

