

## Appendix B. – Power Density Test Plots

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Ambient Temperature: 19.0 °C  
 Test Date: 04/12/2024  
 Plot No.: 1

**Measurement Report for Device, EDGE LEFT, Custom Band, CW, Channel 25200000 (25200.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	NR n258	CW, 0--	25200.0, 25200000	1.0

**Hardware Setup**

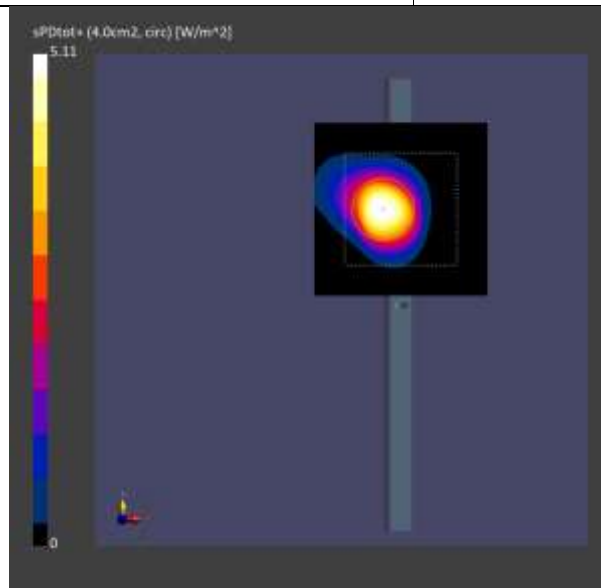
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.17158298424721127 x 0.17158298424721127
Sensor Surface [mm]	2.0

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	3.28
psPDtot+ [W/m <sup>2</sup> ]	5.11
E <sub>max</sub> [V/m]	91.2
Power Drift [dB]	-0.01



Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Ambient Temperature: 19.4 °C  
 Test Date: 04/16/2024  
 Plot No.: 2

**Measurement Report for Device, EDGE LEFT, Custom Band, CW, Channel 28300000 (28300.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	NR n261	CW, 0--	28300.0, 28300000	1.0

**Hardware Setup**

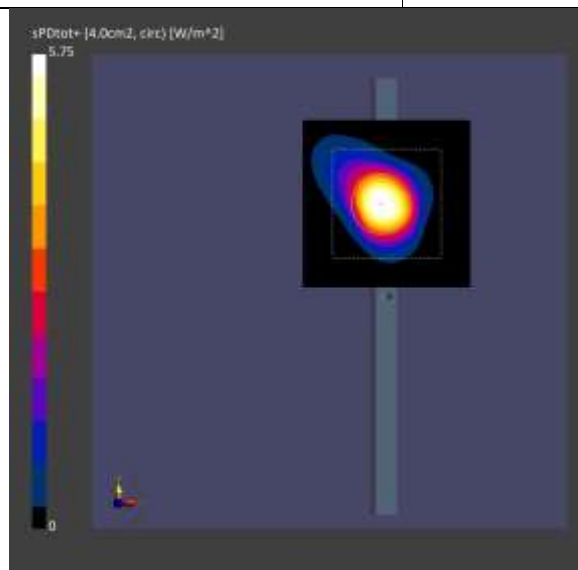
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.19269041484905072 x 0.19269041484905072
Sensor Surface [mm]	2.0

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	2.90
psPDtot+ [W/m <sup>2</sup> ]	5.75
E <sub>max</sub> [V/m]	102
Power Drift [dB]	0.12



Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Ambient Temperature: 19.7 °C  
 Test Date: 04/15/2024  
 Plot No.: 3

**Measurement Report for Device, EDGE LEFT, Custom Band, CW, Channel 37050000 (37050.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	NR n260	CW, 0--	37050.0, 37050000	1.0

**Hardware Setup**

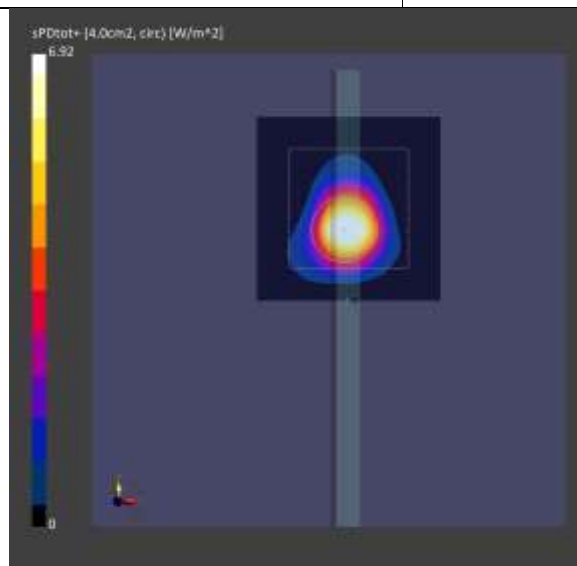
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	4.70
psPDtot+ [W/m <sup>2</sup> ]	6.92
E <sub>max</sub> [V/m]	131
Power Drift [dB]	-0.18



Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Ambient Temperature: 20.7 °C  
 Test Date: 04/17/2024  
 Plot No.: 4

**Measurement Report for Device, EDGE LEFT, Custom Band, CW, Channel 25200000 (25200.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	NR n258	CW, 0--	25200.0, 25200000	1.0

**Hardware Setup**

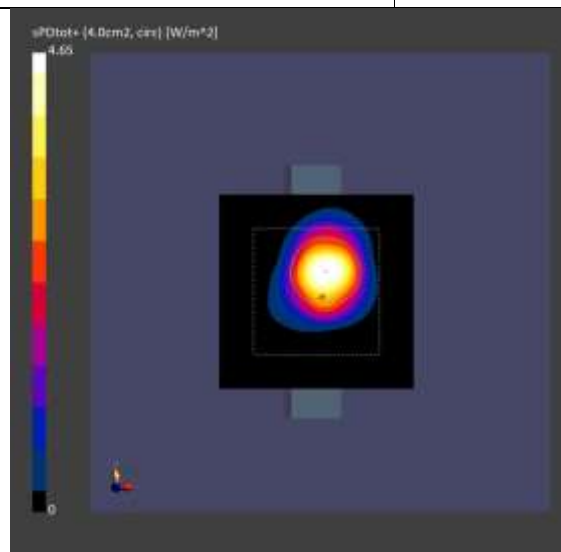
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.17158298424721127 x 0.17158298424721127
Sensor Surface [mm]	2.0

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	3.19
psPDtot+ [W/m <sup>2</sup> ]	4.65
E <sub>max</sub> [V/m]	92.3
Power Drift [dB]	0.13



Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Ambient Temperature: 19.3 °C  
 Test Date: 04/19/2024  
 Plot No.: 5

**Measurement Report for Device, EDGE LEFT, Custom Band, CW, Channel 28300000 (28300.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	NR n261	CW, 0--	28300.0, 28300000	1.0

**Hardware Setup**

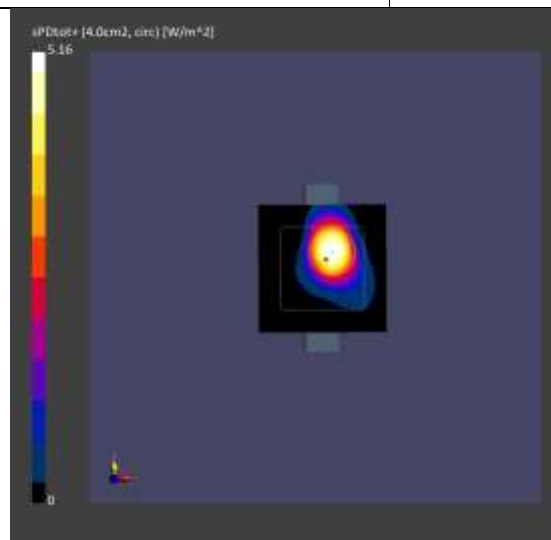
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.19269041484905072 x 0.19269041484905072
Sensor Surface [mm]	2.0

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	2.78
psPDtot+ [W/m <sup>2</sup> ]	5.16
E <sub>max</sub> [V/m]	108
Power Drift [dB]	0.06



Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Ambient Temperature: 20.2 °C  
 Test Date: 04/18/2024  
 Plot No.: 6

**Measurement Report for Device, EDGE LEFT, Custom Band, CW, Channel 37050000 (37050.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	NR n260	CW, 0--	37050.0, 37050000	1.0

**Hardware Setup**

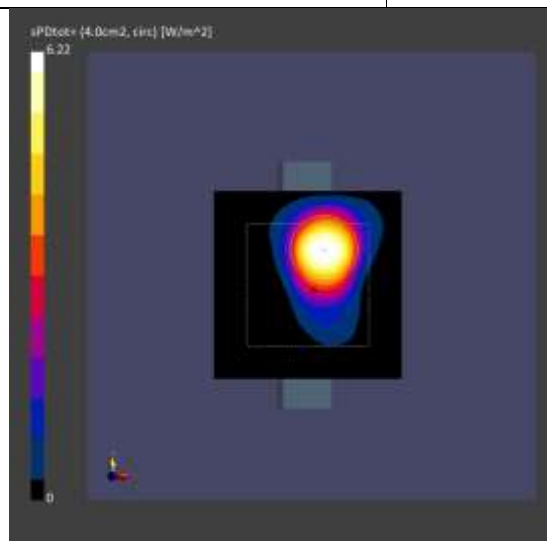
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	4.02
psPDtot+ [W/m <sup>2</sup> ]	6.22
E <sub>max</sub> [V/m]	102
Power Drift [dB]	0.02



## Appendix C. – System Check Plots



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 19.0 °C  
 Test Date: 04/12/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

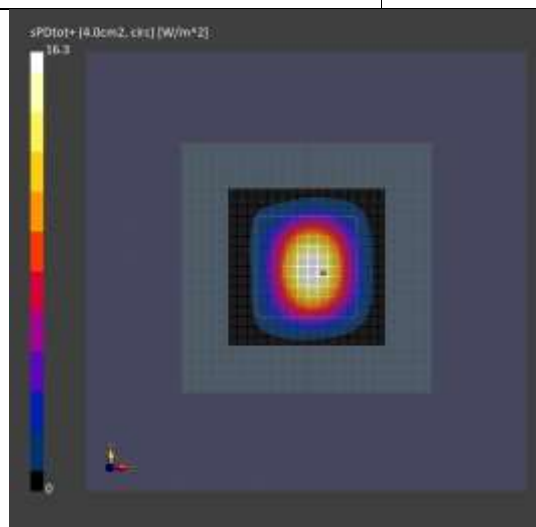
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	16.0
psPDtot+ [W/m <sup>2</sup> ]	16.3
E <sub>max</sub> [V/m]	93.9
Power Drift [dB]	0.06



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 19.7 °C  
 Test Date: 04/15/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

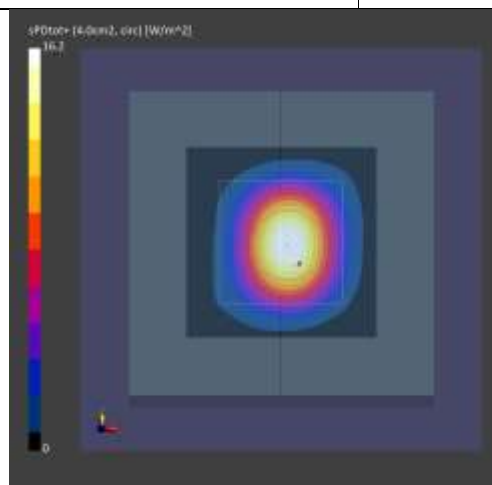
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.9
psPDtot+ [W/m <sup>2</sup> ]	16.2
E <sub>max</sub> [V/m]	93.9
Power Drift [dB]	0.12



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 19.4 °C  
 Test Date: 04/16/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

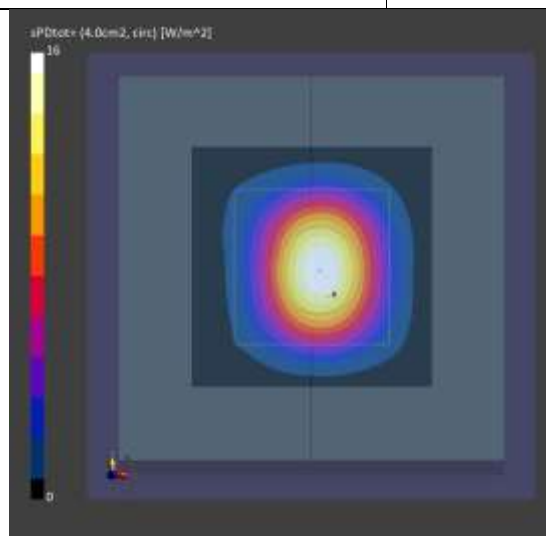
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.8
psPDtot+ [W/m <sup>2</sup> ]	16.0
E <sub>max</sub> [V/m]	93.4
Power Drift [dB]	0.03



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 20.7 °C  
 Test Date: 04/17/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

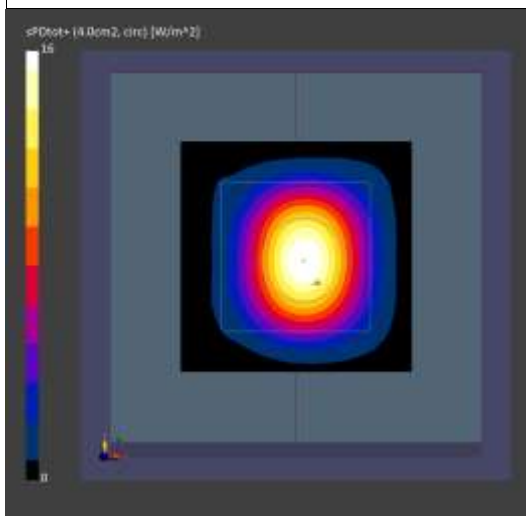
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.7
psPDtot+ [W/m <sup>2</sup> ]	16.0
E <sub>max</sub> [V/m]	93.5
Power Drift [dB]	0.08



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 20.2 °C  
 Test Date: 04/18/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

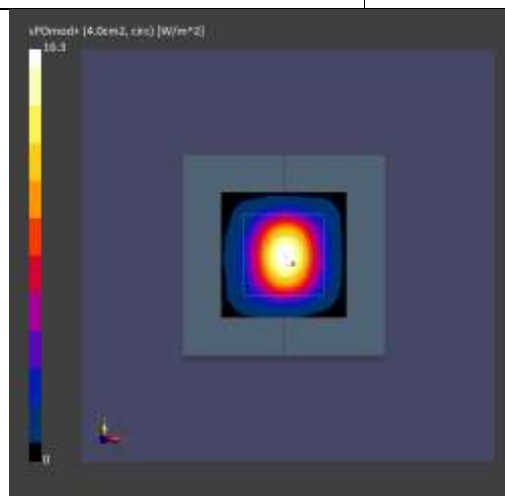
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	14.7
psPDtot+ [W/m <sup>2</sup> ]	15.0
E <sub>max</sub> [V/m]	94.0
Power Drift [dB]	0.02



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 19.3 °C  
 Test Date: 04/19/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

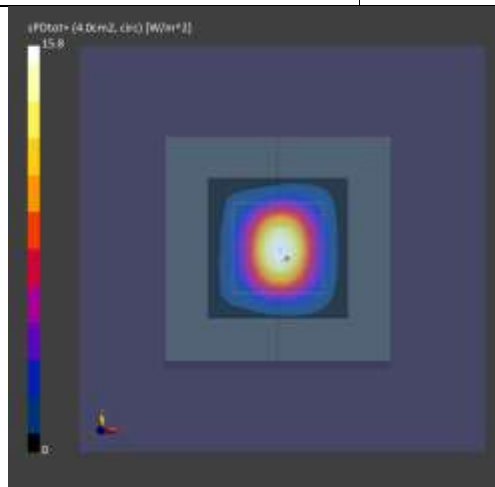
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.6
psPDtot+ [W/m <sup>2</sup> ]	15.9
E <sub>max</sub> [V/m]	94.3
Power Drift [dB]	0.06



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 20.5 °C  
 Test Date: 04/20/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

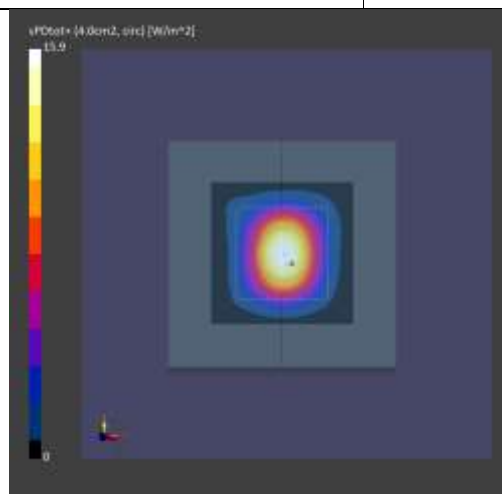
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.7
psPDtot+ [W/m <sup>2</sup> ]	15.9
E <sub>max</sub> [V/m]	94.2
Power Drift [dB]	0.00



■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 19.7 °C  
 Test Date: 04/22/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

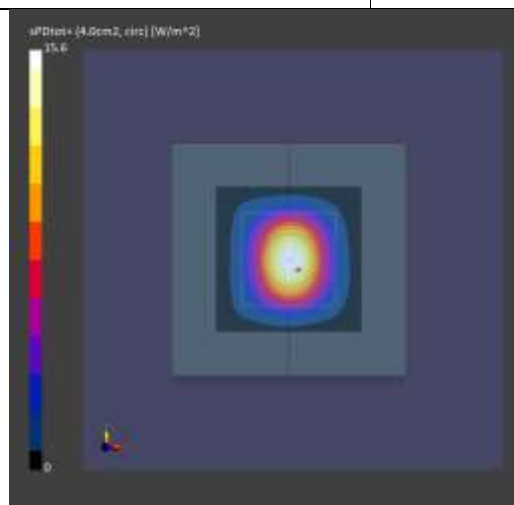
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.4
psPDtot+ [W/m <sup>2</sup> ]	15.6
E <sub>max</sub> [V/m]	93.6
Power Drift [dB]	0.02





■ **Verification Data (30 GHz)**

Test Laboratory: HCT CO., LTD  
 Ambient Temp.: 19.9 °C  
 Test Date: 04/23/2024

**Measurement Report for Device, FRONT, Validation band, CW, Channel 30000 (30000.0 MHz)**

**Exposure Conditions**

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

**Hardware Setup**

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9486_F1-55GHz, 2023-06-19	DAE4 Sn1687, 2023-07-18

**Scans Setup**

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

**Measurement Results**

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	15.4
psPDtot+ [W/m <sup>2</sup> ]	15.7
E <sub>max</sub> [V/m]	93.6
Power Drift [dB]	0.04

