

APPENDIX 1

SAR Measurement Data

TABLE OF CONTENTS

EXHIBIT 1. SYSTEM VERIFICATION 3

EXHIBIT 2. PRESCAN 6

EXHIBIT 3. HEAD SAR MEASUREMENT 19

EXHIBIT 4. BODY SAR MEASUREMENT 9

EXHIBIT 1. SYSTEM VERIFICATION

Type	Frequency (MHz)	SAR1g			SAR10g		
		Reference (W/kg)	Measured	Delta %	Reference (W/kg)	Measured	Delta %
Head	450	1.16	1.16	0.00%	0.771	0.776	0.65%
Body	450	1.16	1.18	1.72%	0.779	0.78	0.13%

File Name: [Head verification for 645QR2 at 450 Mhz 3208 probe 9Jul26.da52:0](#)

DUT: D450V3 - SN1063; Type: D450V3; Serial: SN1063

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.902$ S/m; $\epsilon_r = 44.223$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

**System verification Head Icom 645 at 450 Mhz 3208 probe 26Jun26/d=15mm,
Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (61x81x1):** Interpolated grid: dx=1.500 mm,
dy=1.500 mm

Maximum value of SAR (interpolated) = 1.38 W/kg

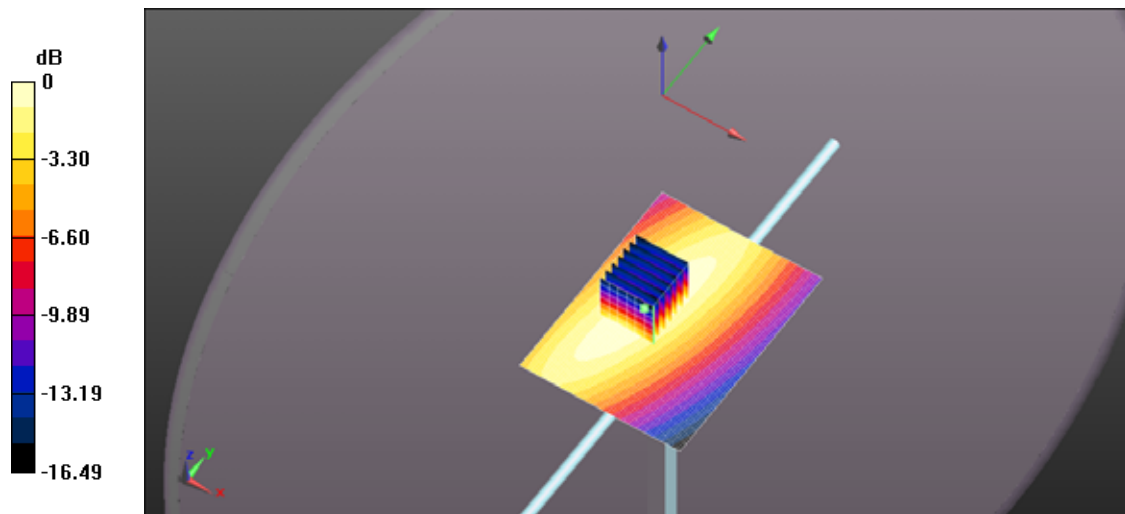
**System verification Head Icom 645 at 450 Mhz 3208 probe 26Jun26/d=15mm,
Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.83 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.776 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.37 W/kg



0 dB = 1.38 W/kg = 1.41 dBW/kg

File Name: Body verification for 645QR2 at 450 Mhz 3208 probe 26Jun26.da52:0

DUT: D450V3 - SN1063; Type: D450V3; Serial: SN1063

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.963$ S/m; $\epsilon_r = 54.219$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

System verification Body Icom 645 at 450 Mhz 3208 probe 26Jun26/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.42 W/kg

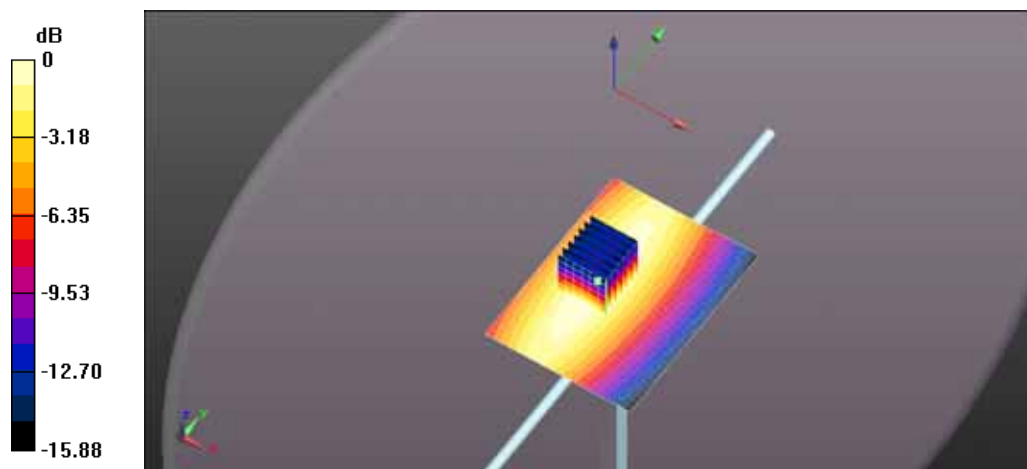
System verification Body Icom 645 at 450 Mhz 3208 probe 26Jun26/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.59 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.780 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

EXHIBIT 2. PRESCAN

Body

Battery BP-320EX	Antenna	Power (W)	CH	CH. Freq	HEAD SAR1g (W/Kg)	HEAD SAR10g (W/Kg)	Power Drift
				(MHz)			(dB)
MB133EX	FA-S88UG	1.3	4	452.5	2.03	1.46	-0.07
LC208		1.3	4	452.5	2.52	1.84	0.05
MB133EX+LC208		1.3	4	452.5	1.51	1.11	-0.06

File Name: [ICOM-645 BP320EX S88UG 452.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.983$ S/m; $\epsilon_r = 54.946$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 452.5 MHz Body Prescan BP320EX MB 133EX/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 2.30 W/kg

ICOM 645Q 452.5 MHz Body Prescan BP320EX MB 133EX/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

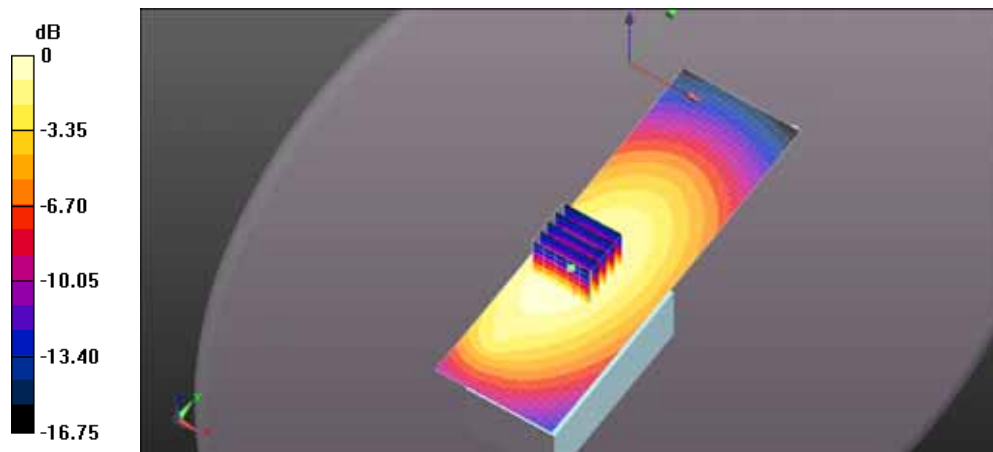
Reference Value = 42.65 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.46 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.29 W/kg



0 dB = 2.30 W/kg = 3.62 dBW/kg

File Name: [ICOM-645 BP320EX S88UG 452.5MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.983$ S/m; $\epsilon_r = 54.946$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 452.5 MHz Body Prescan BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 2.86 W/kg

ICOM 645Q 452.5 MHz Body Prescan BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

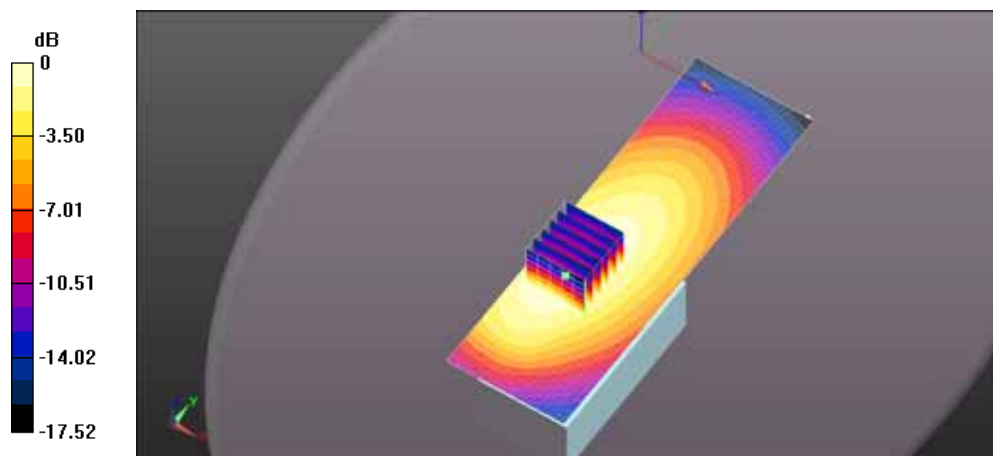
Reference Value = 46.43 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.56 W/kg

SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.84 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.84 W/kg



0 dB = 2.86 W/kg = 4.56 dBW/kg

File Name: [ICOM-645 BP320EX S88UG 452.5MHz MB133EX LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.983$ S/m; $\epsilon_r = 54.946$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q prescan452.5 MHz Body BP320EX LC208 Mb 133/Body - Belt Clip

Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.72 W/kg

ICOM 645Q prescan452.5 MHz Body BP320EX LC208 Mb 133/Body - Belt Clip

Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

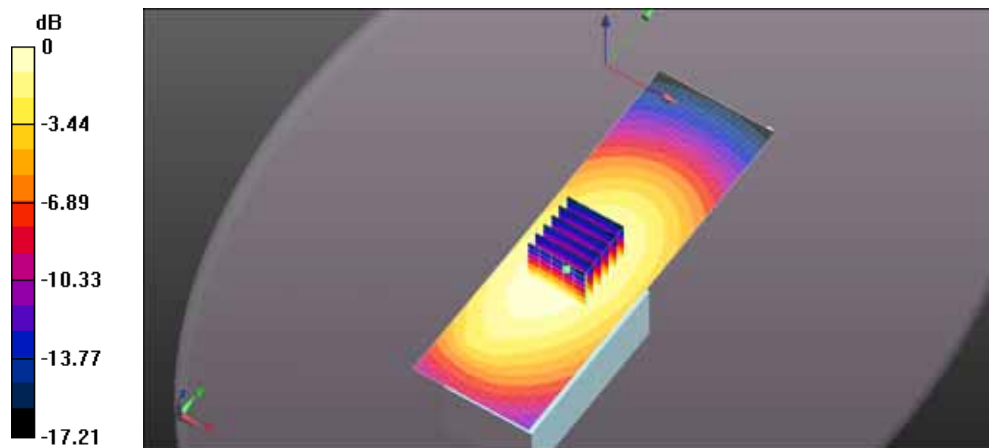
Reference Value = 40.08 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 1.51 W/kg; SAR(10 g) = 1.11 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.69 W/kg



0 dB = 1.72 W/kg = 2.36 dBW/kg

EXHIBIT 3. BODY SAR MEASUREMENT

BODY (BP-320EX AND LC208)						
Antenna	Power (W)	Channel	MHz	1g	10g	Power Drift (dB)
FA-S87UG	1.27	1	400.0			
	1.27	2	417.5	2.62	1.92	0.1
	1.2	3	435.0			
	1.3	4	452.5	1.98	1.44	-0.01
	1.2	5	470.0			
FA-S88UG	1.27	1	400.0	0.783	0.574	0
	1.27	2	417.5			
	1.2	3	435.0	2.98	2.18	-0.12
	1.3	4	452.5			
	1.2	5	470.0	2.28	1.65	-0.2
FA-S89UGS	1.27	1	400.0	0.539	0.395	-0.2
	1.27	2	417.5			
	1.2	3	435.0	2.87	2.09	-0.17
	1.3	4	452.5			
	1.2	5	470.0	2.62	1.9	-0.45

File Name: [ICOM-645 BP320EX S88UG 400MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 400 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 400$ MHz; $\sigma = 0.932$ S/m; $\epsilon_r = 55.67$; $\rho = 1000$ kg/m³; Phantom section: Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 400 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.877 W/kg

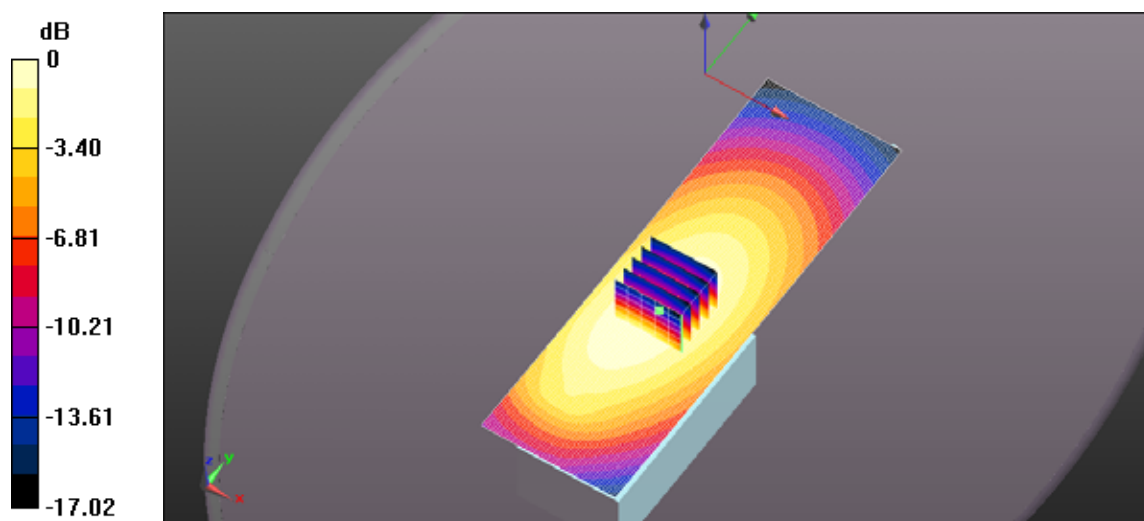
ICOM 645Q 400 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 29.00 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.783 W/kg; SAR(10 g) = 0.574 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.878 W/kg



0 dB = 0.877 W/kg = -0.57 dBW/kg

File Name: [ICOM-645 BP320EX S88UG 435MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 435 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 435 \text{ MHz}$; $\sigma = 0.967 \text{ S/m}$; $\epsilon_r = 55.268$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 435 MHz Body BP320EX LC208/Body - Belt Clip Touching, $d=0\text{mm}$, $P_{in}=1.2\text{W}$ (ES-Probe)/Area Scan (51x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 3.35 W/kg

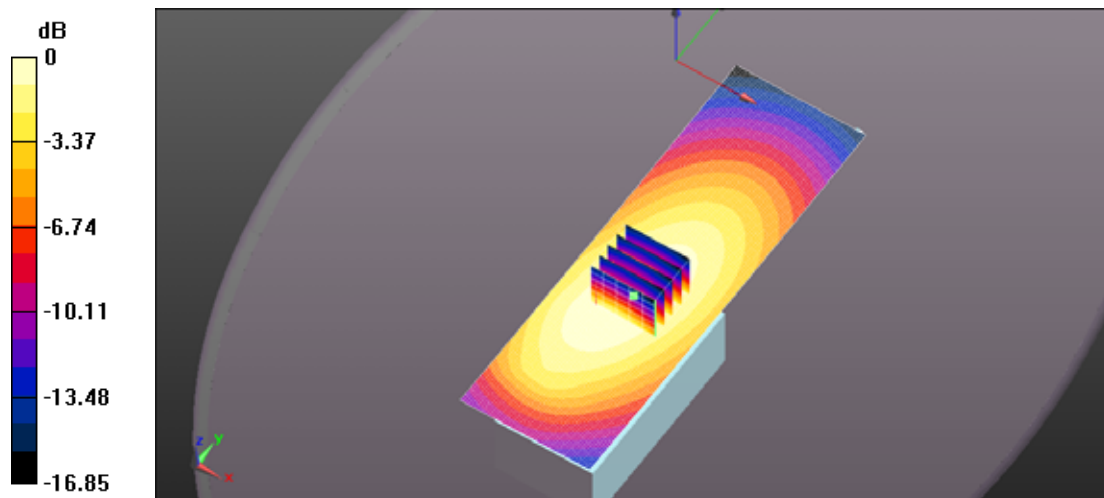
ICOM 645Q 435 MHz Body BP320EX LC208/Body - Belt Clip Touching, $d=0\text{mm}$, $P_{in}=1.2\text{W}$ (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.98 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 4.21 W/kg

SAR(1 g) = 2.98 W/kg ; SAR(10 g) = 2.18 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.36 W/kg



0 dB = 3.35 W/kg = 5.25 dBW/kg

File Name: [ICOM-645 BP320EX S88UG 470MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470$ MHz; $\sigma = 0.996$ S/m; $\epsilon_r = 54.714$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 470 MHz Body BP320EX LC208/Body - Belt Clip Touching, $d=0$ mm, $P_{in}=1.2$ W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 2.56 W/kg

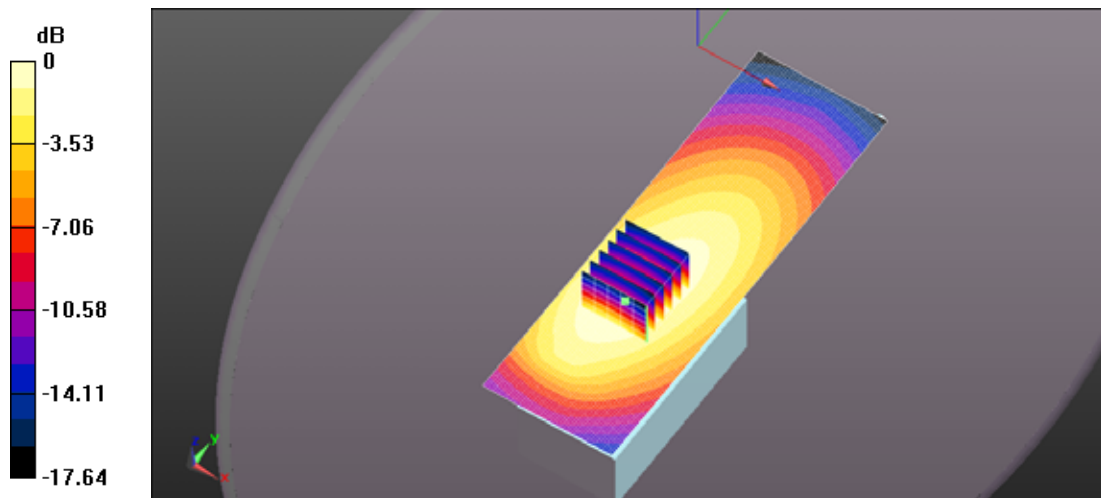
ICOM 645Q 470 MHz Body BP320EX LC208/Body - Belt Clip Touching, $d=0$ mm, $P_{in}=1.2$ W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 46.73 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 3.25 W/kg

SAR(1 g) = 2.28 W/kg; SAR(10 g) = 1.65 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.59 W/kg



0 dB = 2.56 W/kg = 4.08 dBW/kg

File Name: [ICOM-645 BP320EX S87UG 452.5MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.983$ S/m; $\epsilon_r = 54.946$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 452.5 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 2.25 W/kg

ICOM 645Q 452.5 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

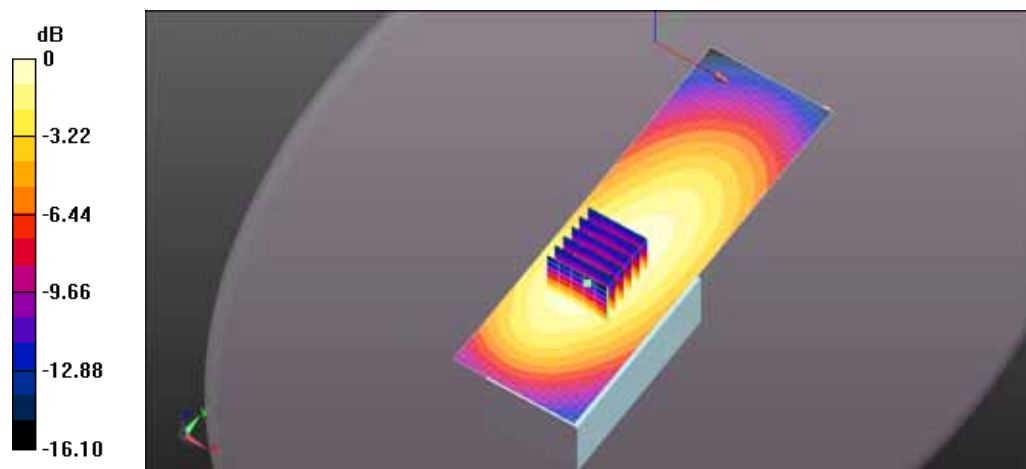
Reference Value = 45.75 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.82 W/kg

SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.44 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.25 W/kg = 3.51 dBW/kg

File Name: [ICOM-645 BP320EX S87UG 417.5MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 417.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 417.5$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 55.532$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 417.5 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 2.95 W/kg

ICOM 645Q 417.5 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

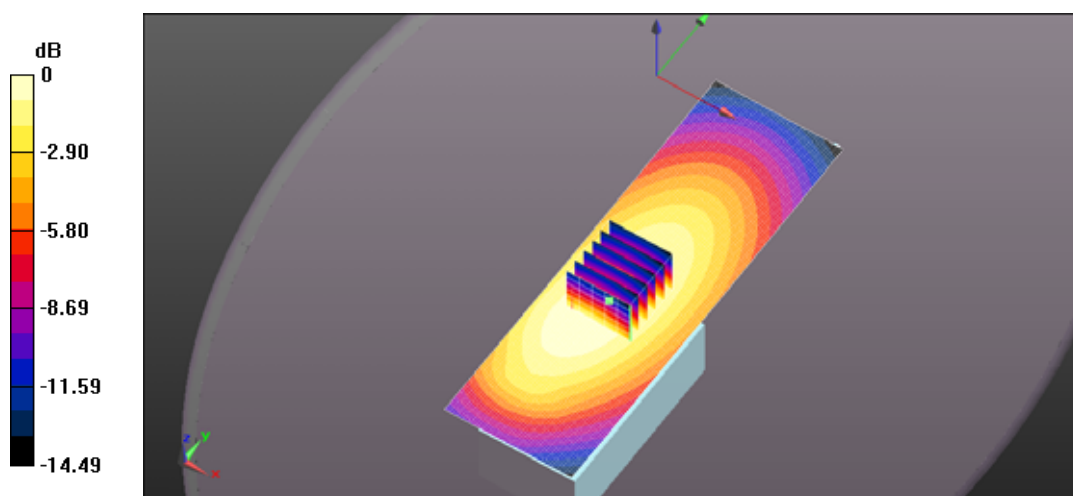
Reference Value = 52.22 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 3.70 W/kg

SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.92 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.94 W/kg



0 dB = 2.95 W/kg = 4.70 dBW/kg

File Name: [ICOM-645 BP320EX S89UGS 400MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 400 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 400$ MHz; $\sigma = 0.932$ S/m; $\epsilon_r = 55.67$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 400 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.612 W/kg

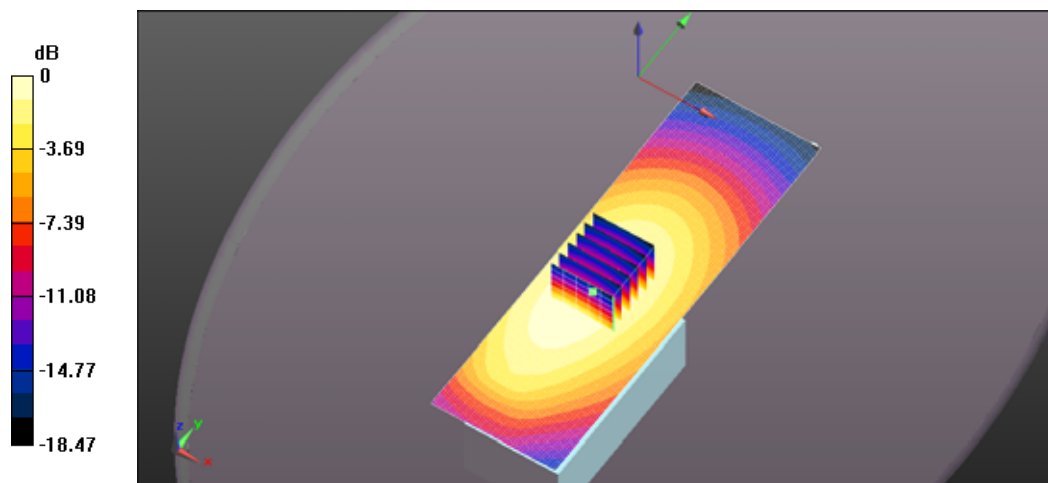
ICOM 645Q 400 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 23.86 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 0.763 W/kg

SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.395 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.606 W/kg



0 dB = 0.612 W/kg = -2.14 dBW/kg

File Name: [ICOM-645 BP320EX S89UGS 435MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 435 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 435 \text{ MHz}$; $\sigma = 0.967 \text{ S/m}$; $\epsilon_r = 55.268$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 435 MHz Body BP320EX LC208/Body - Belt Clip Touching, $d=0\text{mm}$, $P_{in}=1.2\text{W}$ (ES-Probe)/Area Scan (51x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 3.25 W/kg

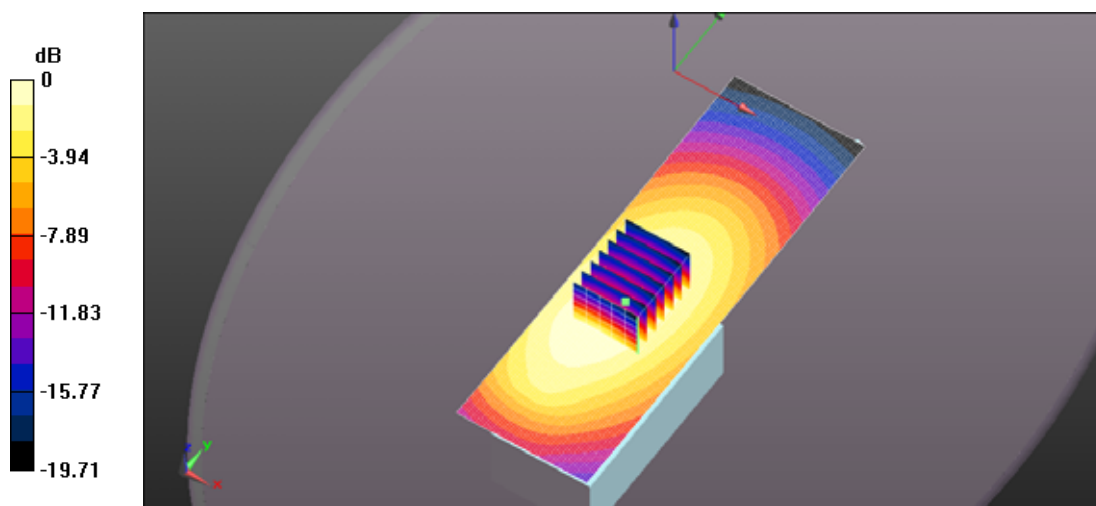
ICOM 645Q 435 MHz Body BP320EX LC208/Body - Belt Clip Touching, $d=0\text{mm}$, $P_{in}=1.2\text{W}$ (ES-Probe)/Zoom Scan (5x5x7) (6x7x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.61 V/m ; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 4.07 W/kg

SAR(1 g) = 2.87 W/kg ; SAR(10 g) = 2.09 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.22 W/kg



0 dB = 3.25 W/kg = 5.12 dBW/kg

File Name: [ICOM-645 BP320EX S89UGS 470MHz LC208.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470$ MHz; $\sigma = 0.996$ S/m; $\epsilon_r = 54.714$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.96, 6.96, 6.96); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q 470 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.96 W/kg

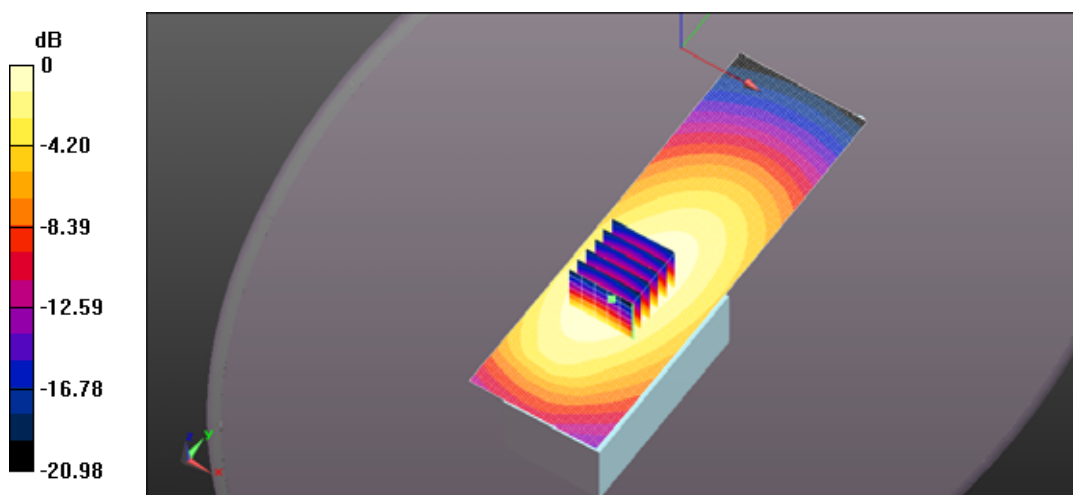
ICOM 645Q 470 MHz Body BP320EX LC208/Body - Belt Clip Touching, d=0mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 51.76 V/m; Power Drift = -0.45 dB

Peak SAR (extrapolated) = 3.75 W/kg

SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.9 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.98 W/kg



0 dB = 2.96 W/kg = 4.71 dBW/kg

EXHIBIT 4. HEAD SAR MEASUREMENT

HEAD (BP-320EX)						
Antenna	Power (W)	Channel	MHz	1g	10g	Power Drift (dB)
FA-S87UG	1.27	1	400.0			
	1.27	2	417.5	2.22	1.64	-0.1
	1.2	3	435.0			
	1.3	4	452.5	1.38	1.01	0.05
	1.2	5	470.0			
FA-S88UG	1.27	1	400.0			
	1.27	2	417.5	1.16	0.854	-0.2
	1.2	3	435.0			
	1.3	4	452.5	1.62	1.19	-0.04
	1.2	5	470.0			
FA-S89UGS	1.27	1	400.0			
	1.27	2	417.5	0.791	0.582	0.15
	1.2	3	435.0			
	1.3	4	452.5	0.771	0.57	-0.02
	1.2	5	470.0			

File Name: [ICOM-645 Head BP320EX S87UG 417.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 417.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 417.5$ MHz; $\sigma = 0.804$ S/m; $\epsilon_r = 44.18$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q S87UG 417.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 2.51 W/kg

ICOM 645Q S87UG 417.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

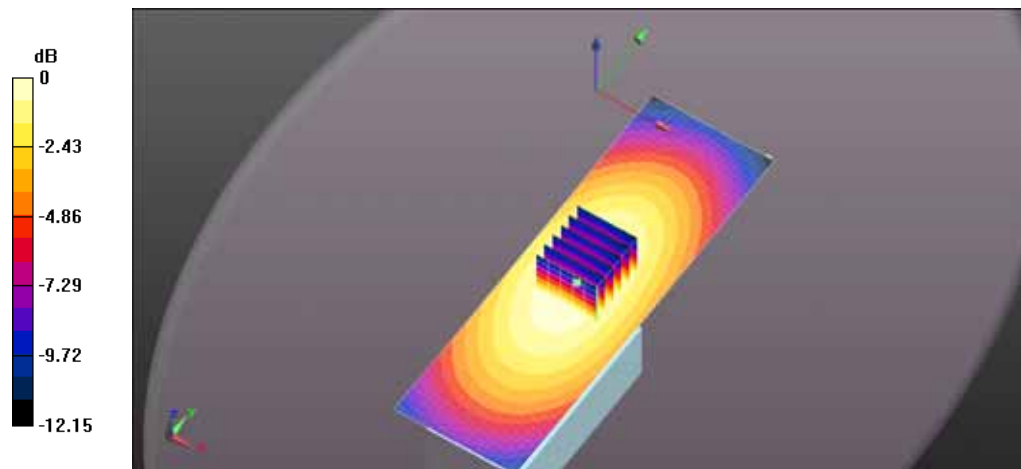
Reference Value = 55.18 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 3.10 W/kg

SAR(1 g) = 2.22 W/kg; SAR(10 g) = 1.64 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.49 W/kg



0 dB = 2.51 W/kg = 3.99 dBW/kg

File Name: [ICOM-645 Head BP320EX S87UG 452.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.836$ S/m; $\epsilon_r = 43.566$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q S87UG 452.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.55 W/kg

ICOM 645Q S87UG 452.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

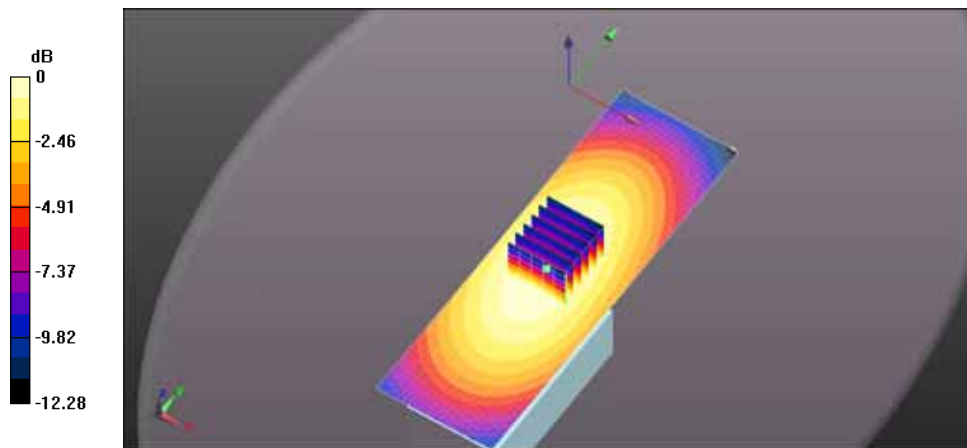
Reference Value = 41.64 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 1.38 W/kg; SAR(10 g) = 1.01 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.55 W/kg



0 dB = 1.55 W/kg = 1.90 dBW/kg

File Name: [ICOM-645 Head BP320EX S88UG 452.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.836$ S/m; $\epsilon_r = 43.566$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q S88UG 452.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.84 W/kg

ICOM 645Q S88UG 452.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

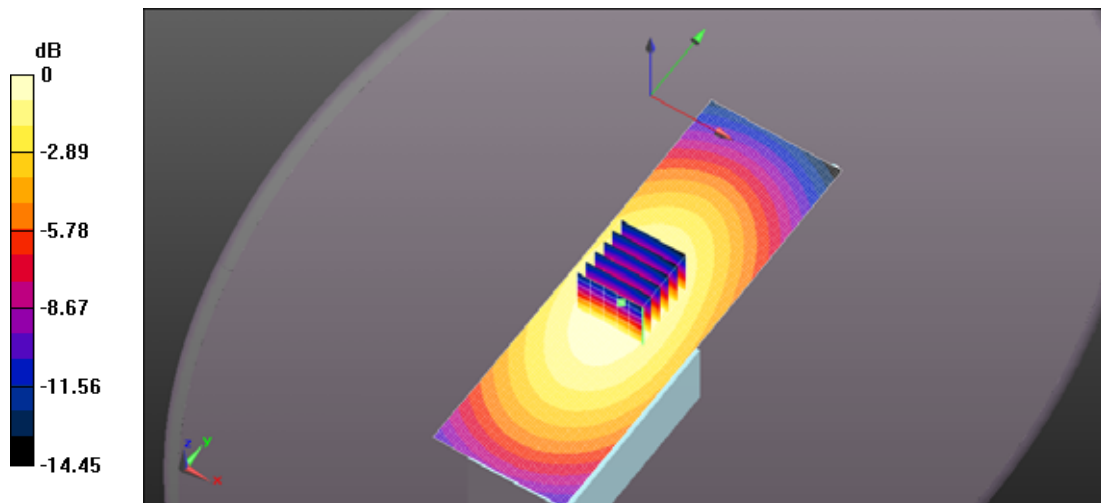
Reference Value = 45.33 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.27 W/kg

SAR(1 g) = 1.62 W/kg; SAR(10 g) = 1.19 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.82 W/kg



0 dB = 1.84 W/kg = 2.64 dBW/kg

File Name: [ICOM-645 Head BP320EX S88UG 417.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 417.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 417.5$ MHz; $\sigma = 0.804$ S/m; $\epsilon_r = 44.18$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q S88UG 417.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.30 W/kg

ICOM 645Q S88UG 417.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

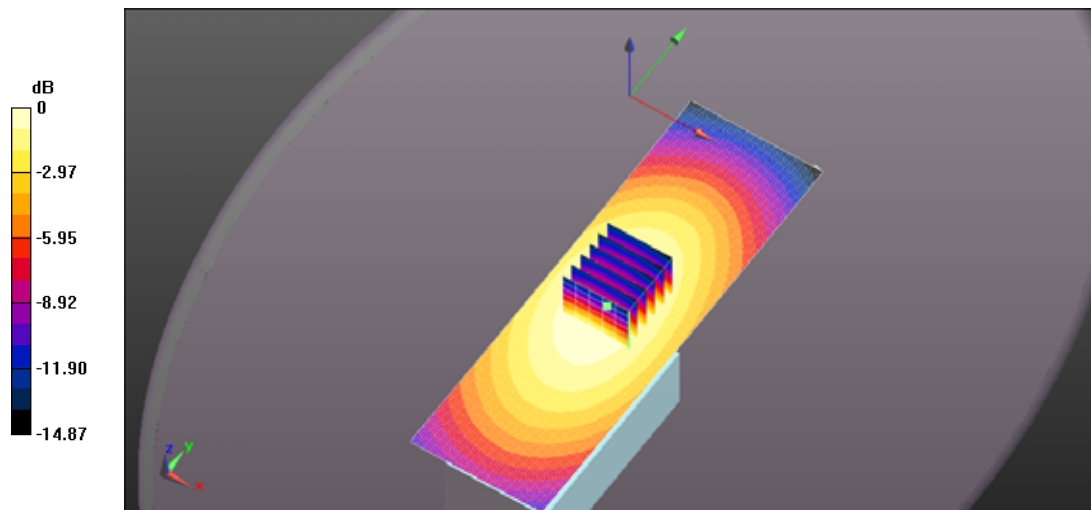
Reference Value = 39.21 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.854 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.30 W/kg = 1.14 dBW/kg

File Name: [ICOM-645 Head BP320EX S89UGS 417.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 417.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 417.5$ MHz; $\sigma = 0.804$ S/m; $\epsilon_r = 44.18$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q S89UGS 417.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.890 W/kg

ICOM 645Q S89UGS 417.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

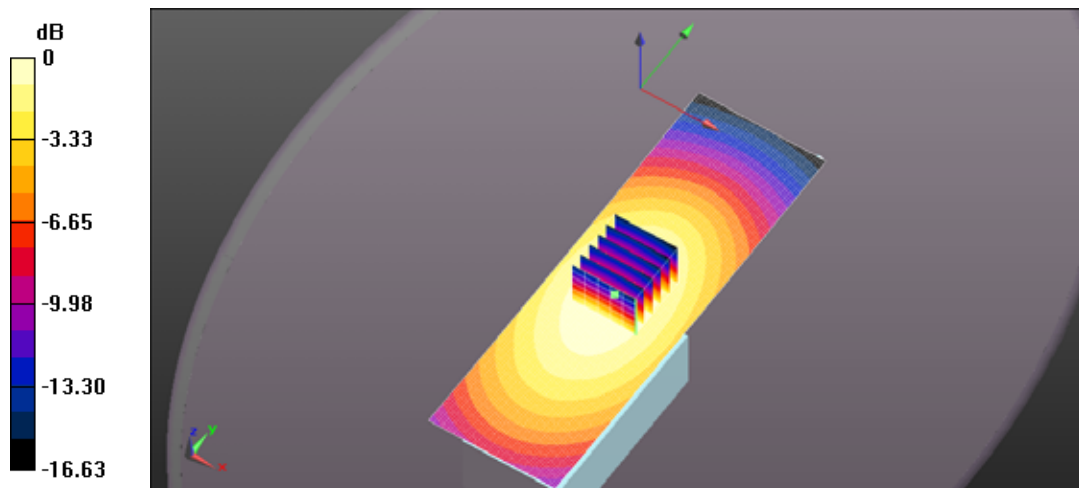
Reference Value = 32.48 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.791 W/kg; SAR(10 g) = 0.582 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.886 W/kg



0 dB = 0.890 W/kg = -0.51 dBW/kg

File Name: [ICOM-645 Head BP320EX S89UGS 452.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number

Communication System: UID 10000, CW; Frequency: 452.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 452.5$ MHz; $\sigma = 0.836$ S/m; $\epsilon_r = 43.566$; $\rho = 1000$ kg/m³; Phantom section: Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3208; ConvF(6.8, 6.8, 6.8); Calibrated: 3/20/2026;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 7/29/2025
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

ICOM 645Q S89UGS 452.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.856 W/kg

ICOM 645Q S89UGS 452.5 MHz Head BP320EX/Head, d=25mm, Pin=1.2W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

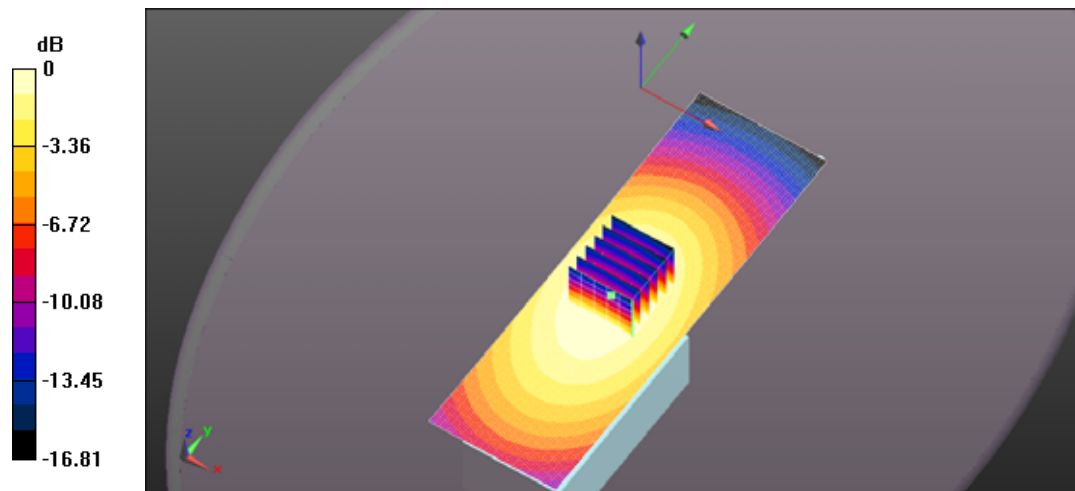
Reference Value = 30.71 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.771 W/kg; SAR(10 g) = 0.570 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.862 W/kg



0 dB = 0.856 W/kg = -0.68 dBW/kg