

Appendix C SAR System Check Plots

20210215 2450MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.999$ S/m; $\epsilon_r = 51.721$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

Probe: EX3DV4 - SN3922; ConvF(7.7, 7.7, 7.7) @ 2450 MHz; Calibrated: 2020/08/17

Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/2450MHz/Area Scan (71x101x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 22.0 W/kg

Pin=250mW/2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 109.1 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 27.7 W/kg

SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.06 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 48.6%

Maximum value of SAR (measured) = 22.3 W/kg

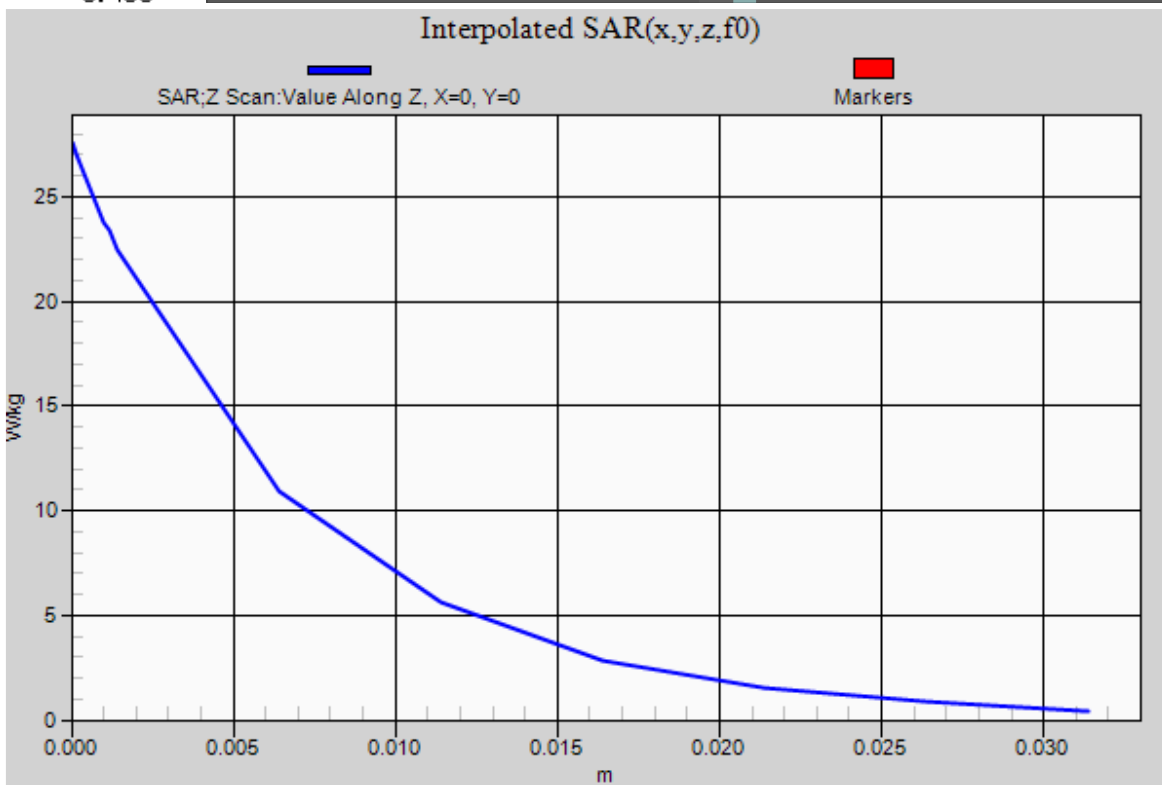
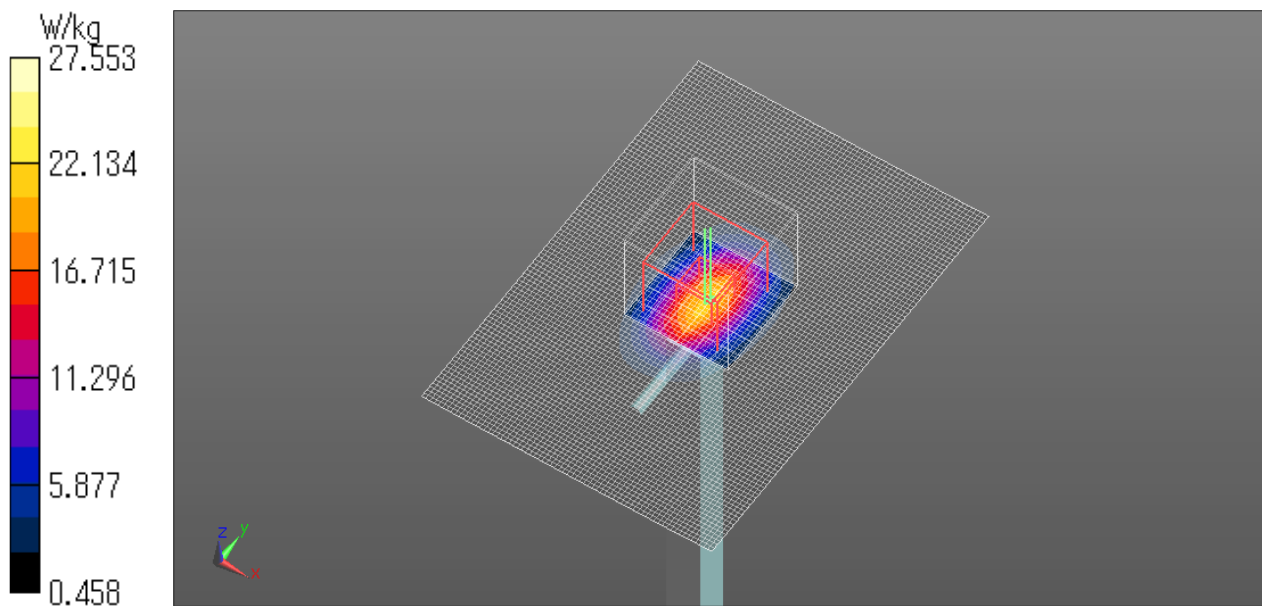
Pin=250mW/2450MHz/Z Scan (1x1x18): Measurement grid: $dx=20$ mm, $dy=20$ mm, $dz=5$ mm

Maximum value of SAR (interpolated) = 27.6 W/kg

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/02/15



20210217 5250MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 5.502$ S/m; $\epsilon_r = 46.729$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

Probe: EX3DV4 - SN3922; ConvF(4.8, 4.8, 4.8) @ 5250 MHz; Calibrated: 2020/08/17

Sensor-Surface: 1.4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=100mW/5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 18.4 W/kg

Pin=100mW/5250MHz/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 66.09 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 7.12 W/kg; SAR(10 g) = 2 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 66.3%

Maximum value of SAR (measured) = 16.9 W/kg

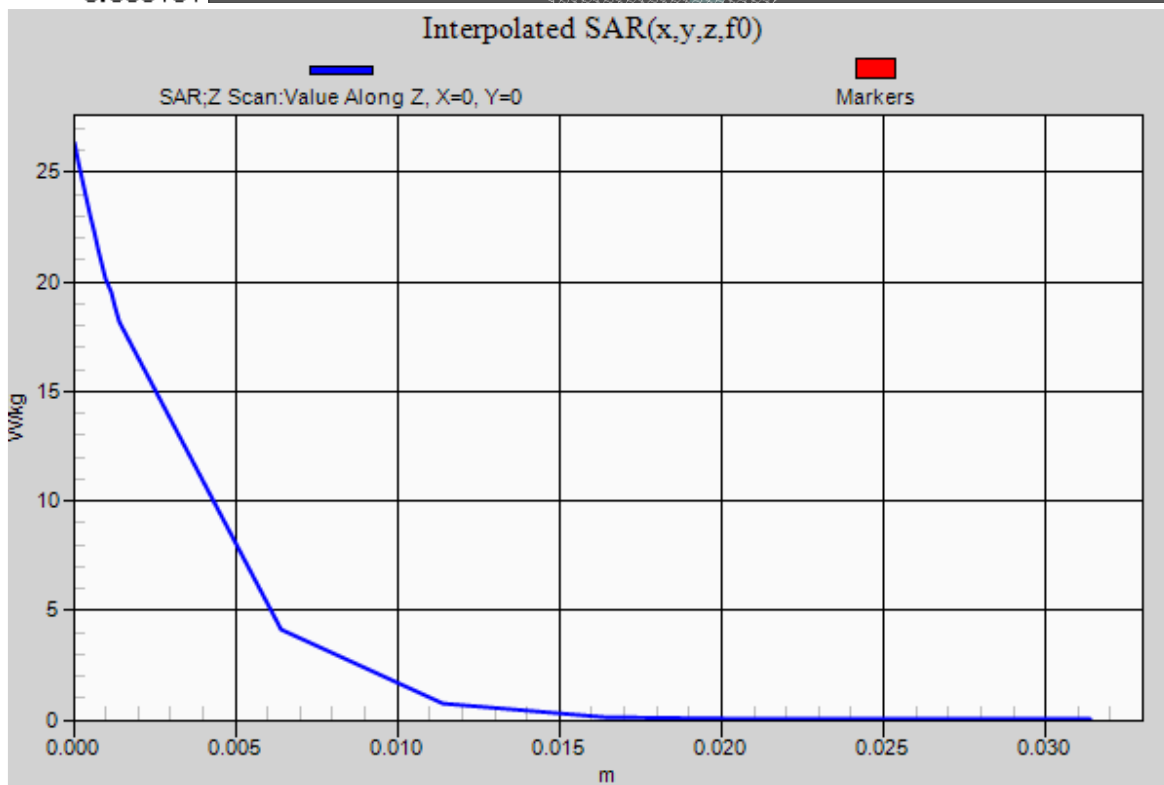
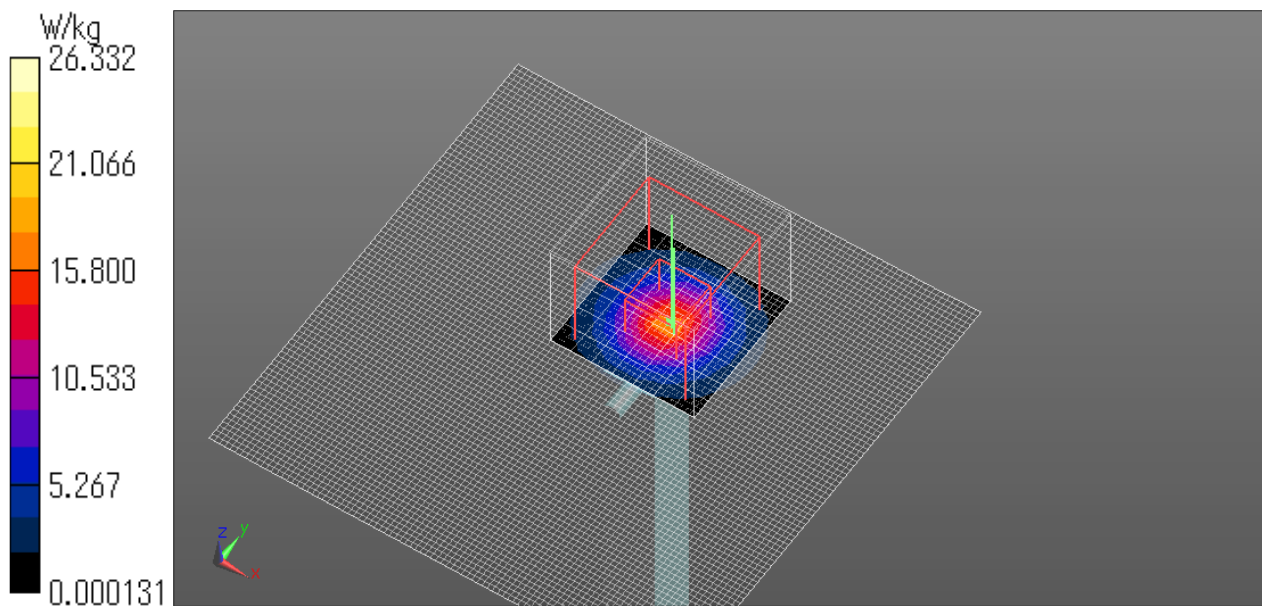
Pin=100mW/5250MHz/Z Scan (1x1x18): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (interpolated) = 26.3 W/kg

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/02/17



20210222 5600MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.92$ S/m; $\epsilon_r = 46.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

Probe: EX3DV4 - SN3922; ConvF(4.07, 4.07, 4.07) @ 5600 MHz; Calibrated: 2020/08/17

Sensor-Surface: 1.4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 1.4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=100mW/5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 21.4 W/kg

Pin=100mW/5600MHz/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.04 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 34.0 W/kg

SAR(1 g) = 7.81 W/kg; SAR(10 g) = 2.14 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%

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

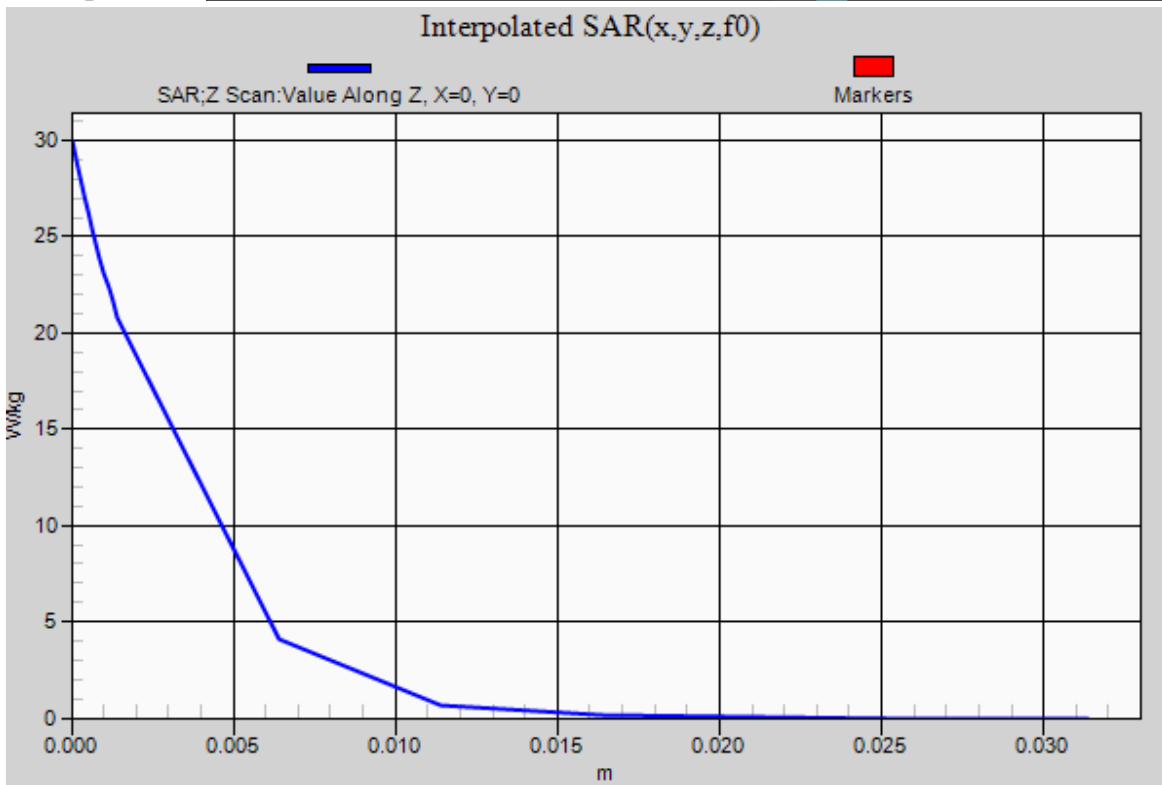
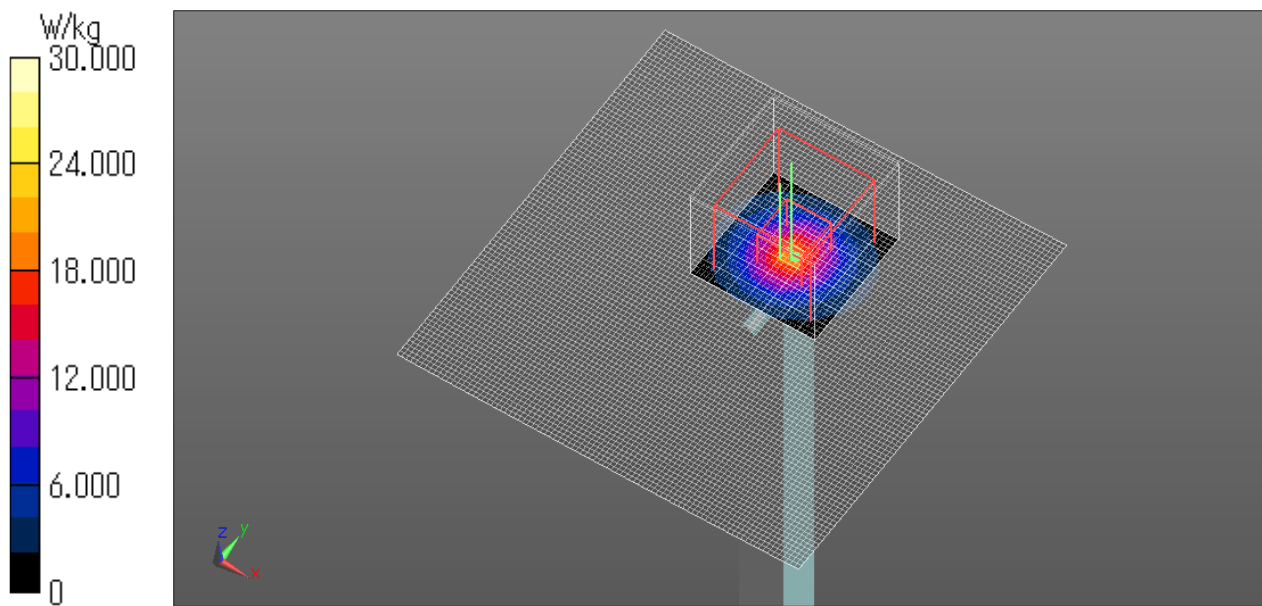
Pin=100mW/5600MHz/Z Scan (1x1x18): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (interpolated) = 30.0 W/kg

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/02/22



20210224 5800MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.262$ S/m; $\epsilon_r = 45.862$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

Probe: EX3DV4 - SN3922; ConvF(4.14, 4.14, 4.14) @ 5800 MHz; Calibrated: 2020/08/17

Sensor-Surface: 1.4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=100mW/5800MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

Pin=100mW/5800MHz/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 63.41 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 32.6 W/kg

SAR(1 g) = 7.11 W/kg; SAR(10 g) = 1.96 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.3%

Maximum value of SAR (measured) = 17.7 W/kg

Pin=100mW/5800MHz/Z Scan (1x1x18): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (interpolated) = 27.8 W/kg

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/02/24

