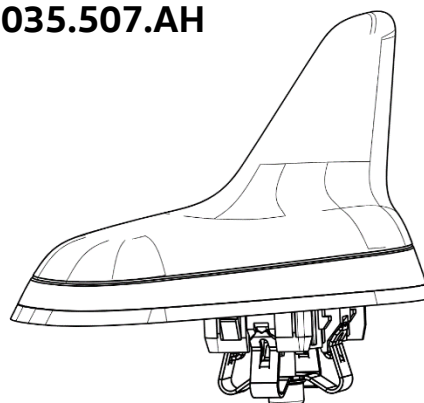




Datenblatt Antenne / *Data sheet antenna*

VW-Teilenummer / *VW part number*: 5Q0.035.507.AH

Montage auf Metaldach / *Mounting on metal roof*

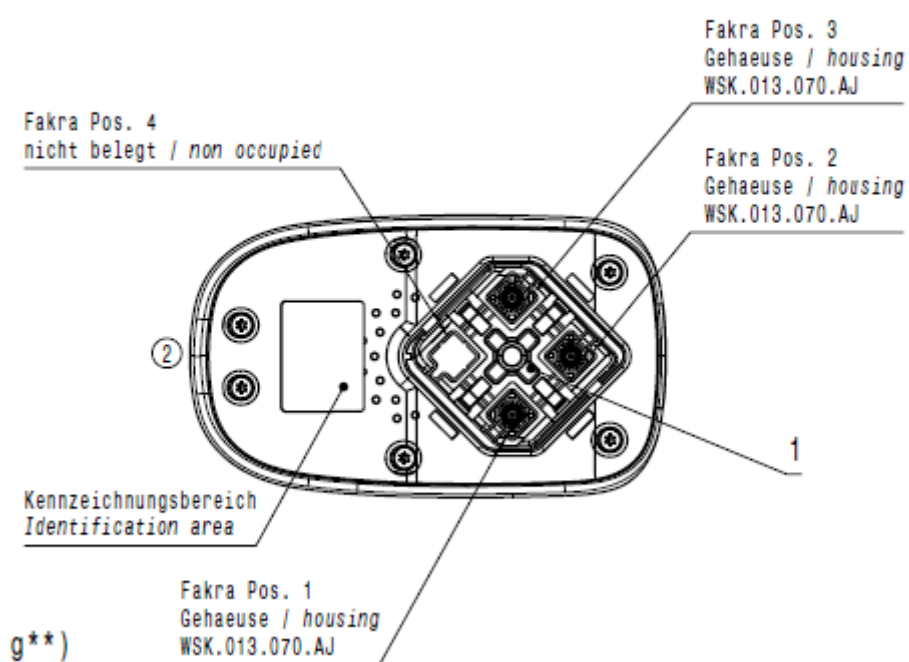


Technische Daten / *Technical data*

Impedanz / <i>Impedance</i>	50 Ohm
Dienst mit Frequenzbändern / <i>Function with frequency bands</i>	GNSS: 1559 – 1605 MHz
	TEL: 703 – 960 MHz / 1452 – 1496 MHz / 1710 – 2170 MHz / 2300 – 2400 MHz / 2500 – 2690 MHz
Anschluss / <i>Input</i>	2 x FAKRA Kodierung C, D male
Gewicht / <i>Weight</i>	148 g
Abmessungen / <i>Dimensions</i>	101,3 X 58,8 X 68mm
Mechanische Befestigung / <i>Mechanical interface</i>	1 X Torx 30, Schraube M5 mit Befestigungsfeder
	Befestigung an Dach, Blechdicke: 0,5-1,2 mm inkl.
	Lack
Hersteller / <i>Manufacturer</i>	Molex CVS Hildesheim GmbH Daimlerring 31, D-31135 Hildesheim
Existierende Zertifizierungen	CE, Ukraine



Steckerbelegung / Connectors





Antennengewinn / Antenna gain

Werte wurden auf 1m Massefläche direkt am FAKRA-Anschluss der Dachantenne gemessen. / *Mounted on 1m groundplane measured direct at FAKRA connector.*

frequency band in MHz		partial average gain of freq. band in dBi (Theta=[60-90]°)		max. gain in partial area (Theta=[60-90]°)	absolut maximum gain (Theta=[0-180]°)
begin	end	in freq. band in dBi	maximum	in freq. band in dBi	in freq. band in dBi
703	960	0,14	0,55	2,73	3,44
1452	1496	1,90	2,09	4,94	4,97
1710	2170	2,60	3,33	5,62	5,62
2300	2400	2,35	2,64	5,19	5,19
2500	2690	1,30	1,90	4,88	4,88

Im montierten Zustand auf dem Fahrzeugdach sind Abweichungen zu erwarten. / *In mounting position at the car roof deviations are expected.*



Horizontale Richtdiagramme / *Horizontal radiation pattern*

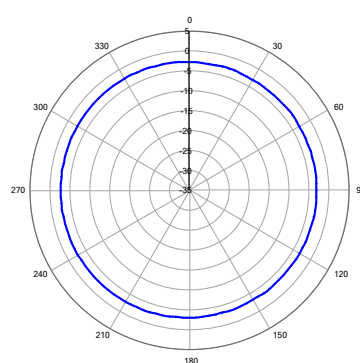
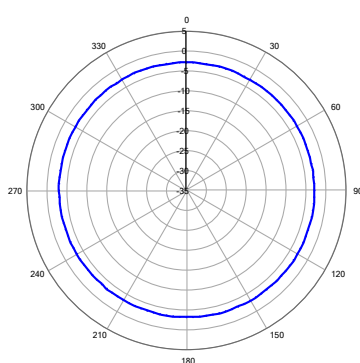
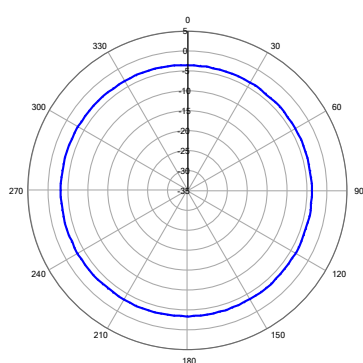
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

SQ0.035.507.AH_LTE_1m_groundplane f=710MHz

SQ0.035.507.AH_LTE_1m_groundplane f=810MHz

SQ0.035.507.AH_LTE_1m_groundplane f=960MHz



Copyright Molex - LASET V4.9.3

29.09.2022

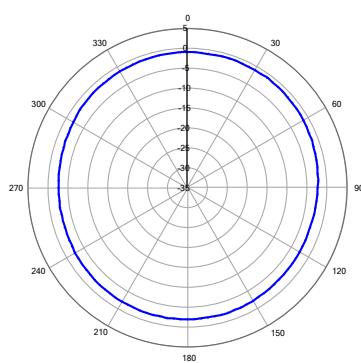
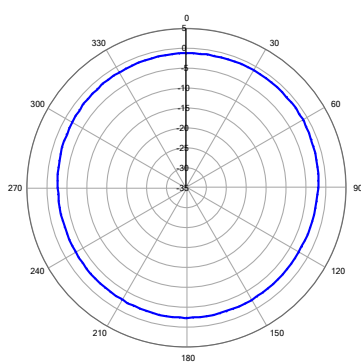
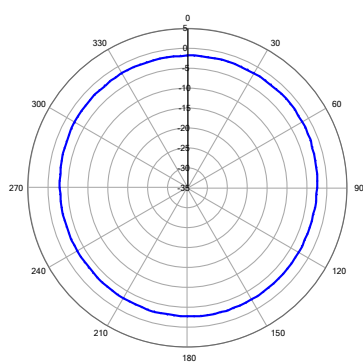
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

SQ0.035.507.AH_LTE_1m_groundplane f=1452MHz

SQ0.035.507.AH_LTE_1m_groundplane f=1470MHz

SQ0.035.507.AH_LTE_1m_groundplane f=1492MHz



Copyright Molex - LASET V4.9.3

29.09.2022



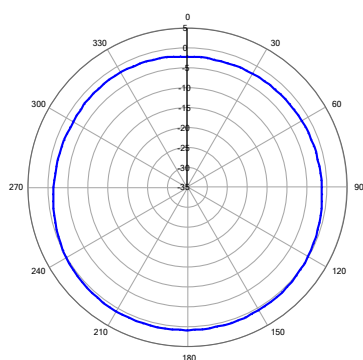
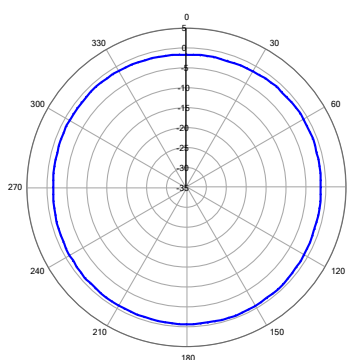
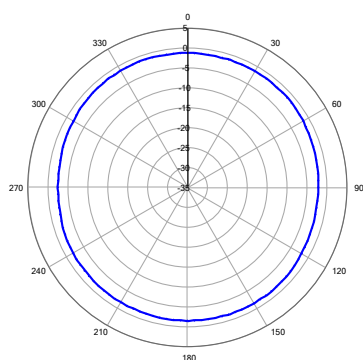
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

5Q0.035.507.AH_LTE_1m_groundplane f=1710MHz

5Q0.035.507.AH_LTE_1m_groundplane f=1990MHz

5Q0.035.507.AH_LTE_1m_groundplane f=2170MHz



Copyright Molex - LASET V4.9.3

29.09.2022

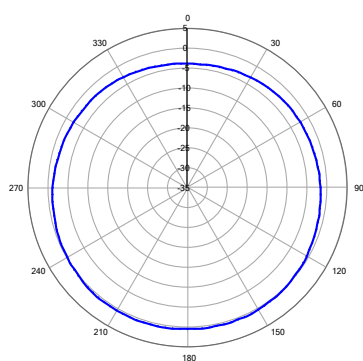
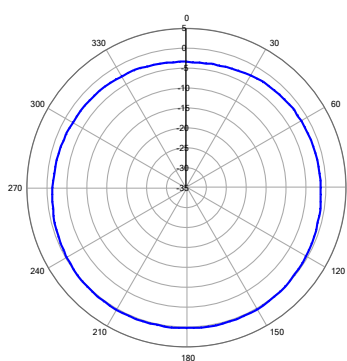
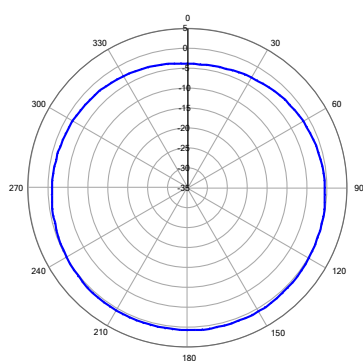
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

5Q0.035.507.AH_LTE_1m_groundplane f=2300MHz

5Q0.035.507.AH_LTE_1m_groundplane f=2350MHz

5Q0.035.507.AH_LTE_1m_groundplane f=2400MHz



Copyright Molex - LASET V4.9.3

29.09.2022



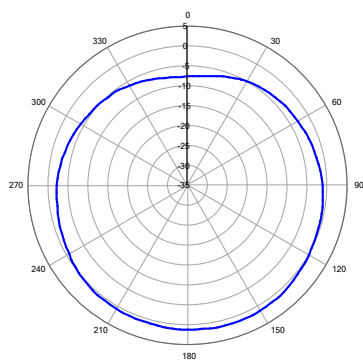
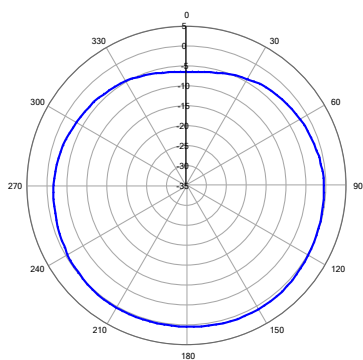
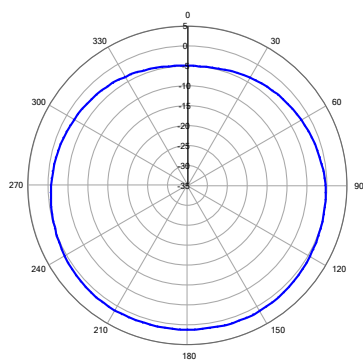
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

5Q0.035.507.AH_LTE_1m_groundplane f=2500MHz

5Q0.035.507.AH_LTE_1m_groundplane f=2500MHz

5Q0.035.507.AH_LTE_1m_groundplane f=2500MHz



Copyright Molex - LASET V4.9.3

29.09.2022



Vertikale Richtdiagramme / *Vertical radiation pattern*

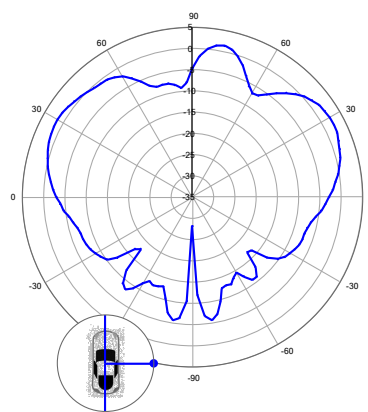
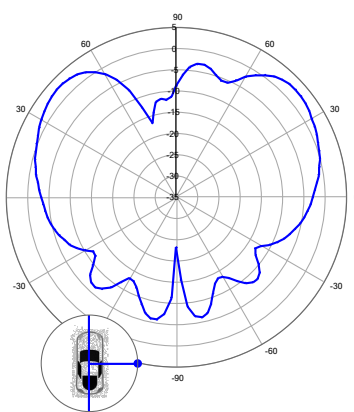
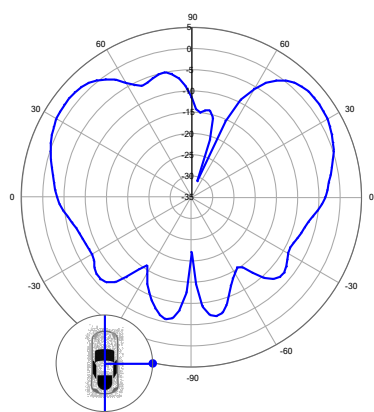
Polar Plot Vertical Cut

Polarisation: V

SQ0.035.507.AH_LTE_1m_groundplane f=710MHz 000°

SQ0.035.507.AH_LTE_1m_groundplane f=810MHz 000°

SQ0.035.507.AH_LTE_1m_groundplane f=960MHz 000°



Copyright Molex - LASET V4.9.3

29.09.2022

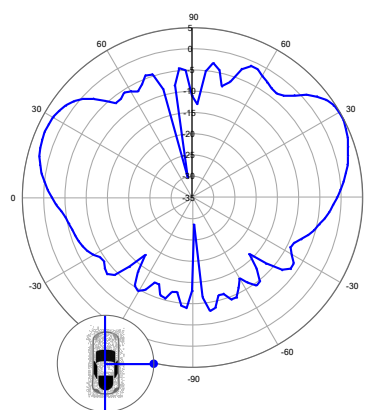
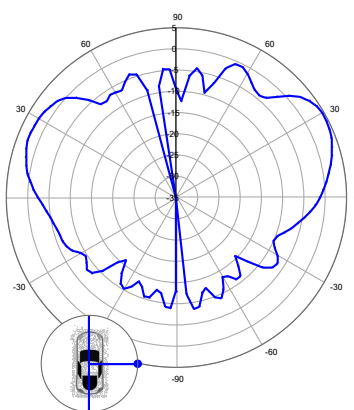
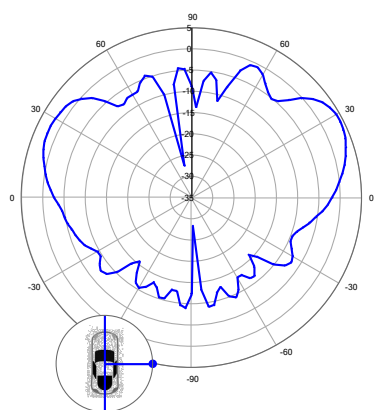
Polar Plot Vertical Cut

Polarisation: V

SQ0.035.507.AH_LTE_1m_groundplane f=1452MHz 000°

SQ0.035.507.AH_LTE_1m_groundplane f=1470MHz 000°

SQ0.035.507.AH_LTE_1m_groundplane f=1492MHz 000°



Copyright Molex - LASET V4.9.3

29.09.2022



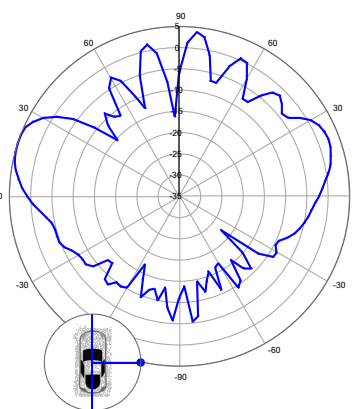
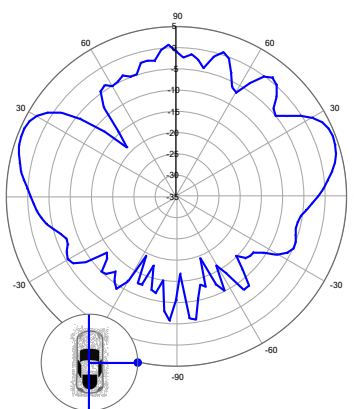
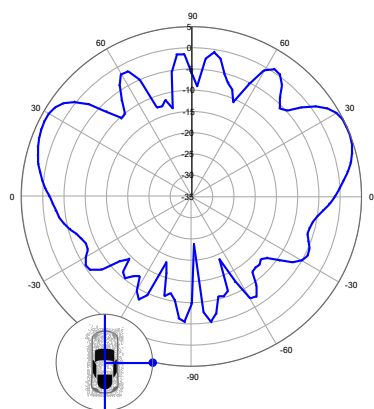
Polar Plot Vertical Cut

Polarisation: V

5Q0.035.507.AH_LTE_1m_groundplane f=1710MHz 000"

5Q0.035.507.AH_LTE_1m_groundplane f=1990MHz 000"

5Q0.035.507.AH_LTE_1m_groundplane f=2170MHz 000"



Copyright Molex - LASET V4.9.3

29.09.2022

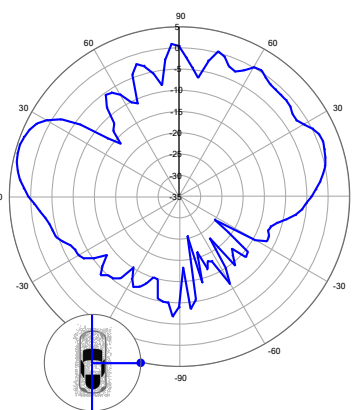
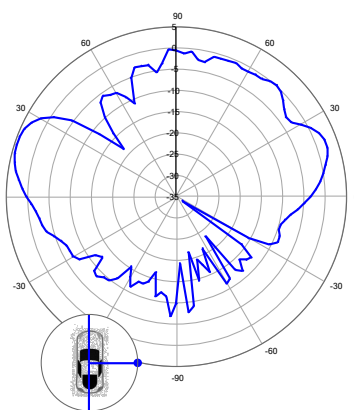
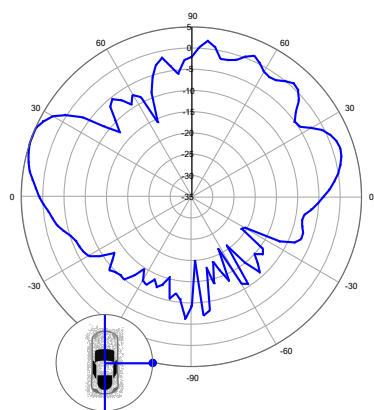
Polar Plot Vertical Cut

Polarisation: V

5Q0.035.507.AH_LTE_1m_groundplane f=2300MHz 000"

5Q0.035.507.AH_LTE_1m_groundplane f=2350MHz 000"

5Q0.035.507.AH_LTE_1m_groundplane f=2400MHz 000"



Copyright Molex - LASET V4.9.3

29.09.2022



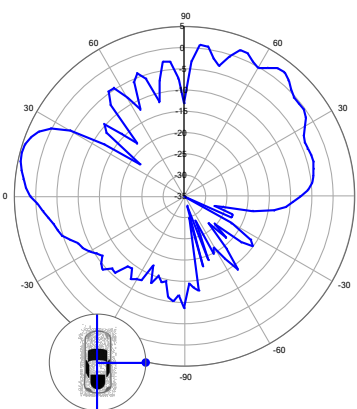
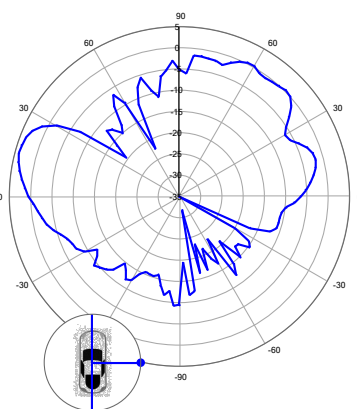
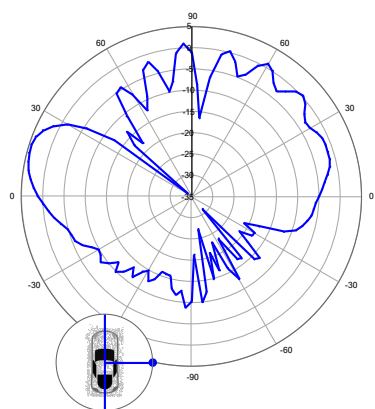
Polar Plot Vertical Cut

Polarisation: V

SQ0.035.507.AH_LTE_1m_groundplane f=2500MHz 000°

SQ0.035.507.AH_LTE_1m_groundplane f=2500MHz 000°

SQ0.035.507.AH_LTE_1m_groundplane f=2500MHz 000°



Copyright Molex - LASET V4.9.3

29.09.2022

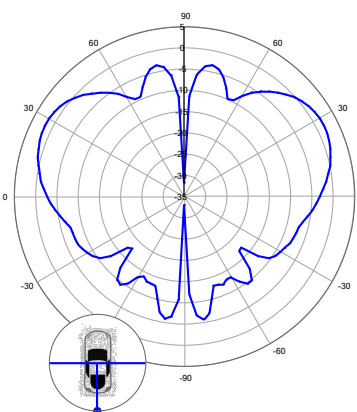
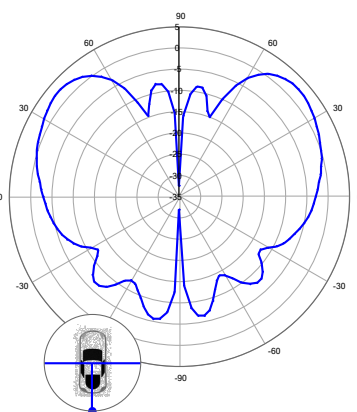
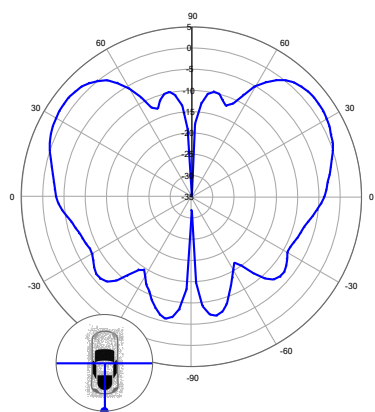
Polar Plot Vertical Cut

Polarisation: V

SQ0.035.507.AH_LTE_1m_groundplane f=710MHz 090°

SQ0.035.507.AH_LTE_1m_groundplane f=810MHz 090°

SQ0.035.507.AH_LTE_1m_groundplane f=950MHz 090°



Copyright Molex - LASET V4.9.3

29.09.2022



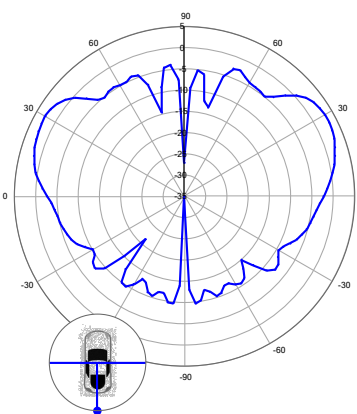
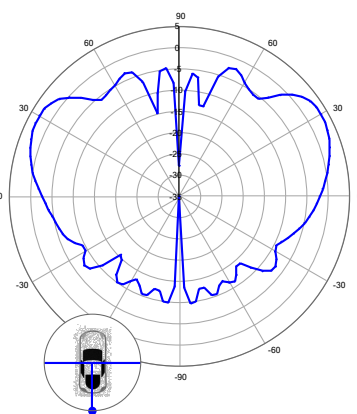
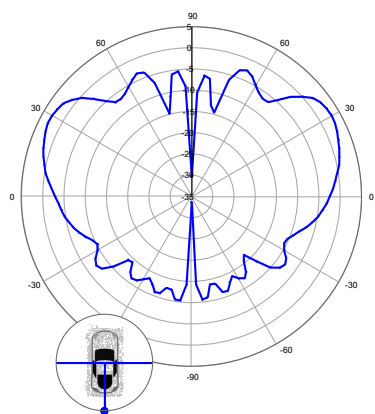
Polar Plot Vertical Cut

Polarisation: V

SQ0.035.507.AH_LTE_1m_groundplane f=1452MHz 090°

SQ0.035.507.AH_LTE_1m_groundplane f=1470MHz 090°

SQ0.035.507.AH_LTE_1m_groundplane f=1492MHz 090°



Copyright Molex - LASET V4.9.3

29.09.2022

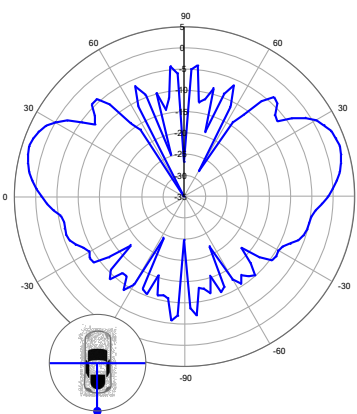
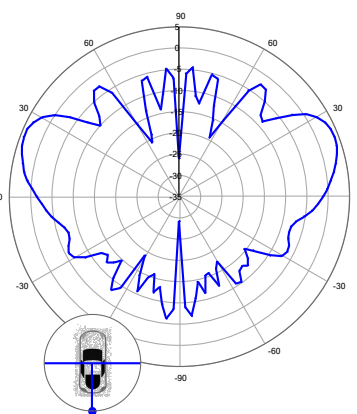
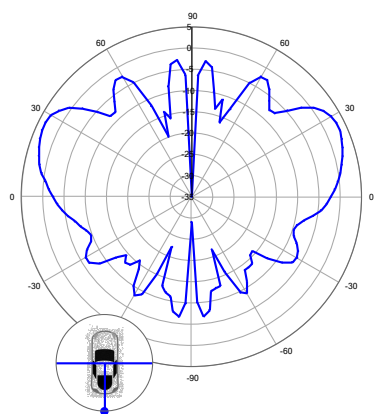
Polar Plot Vertical Cut

Polarisation: V

SQ0.035.507.AH_LTE_1m_groundplane f=1710MHz 090°

SQ0.035.507.AH_LTE_1m_groundplane f=1990MHz 090°

SQ0.035.507.AH_LTE_1m_groundplane f=2170MHz 090°



Copyright Molex - LASET V4.9.3

29.09.2022



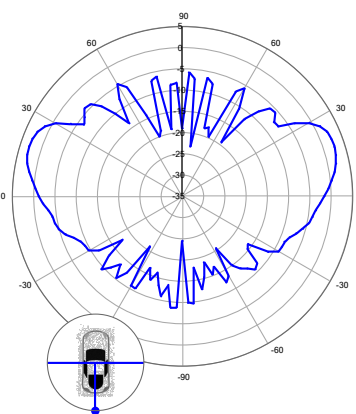
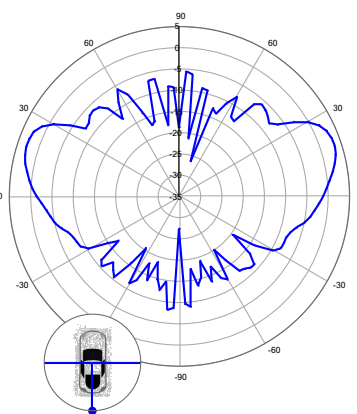
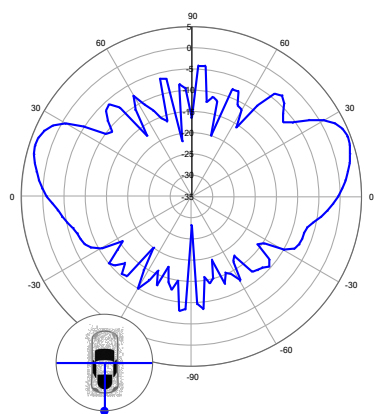
Polar Plot Vertical Cut

Polarisation:V

5Q0.035.507.AH_LTE_1m_groundplane f=2300MHz 090°

5Q0.035.507.AH_LTE_1m_groundplane f=2350MHz 090°

5Q0.035.507.AH_LTE_1m_groundplane f=2400MHz 090°



Copyright Molex - LASET V4.9.3

29.09.2022

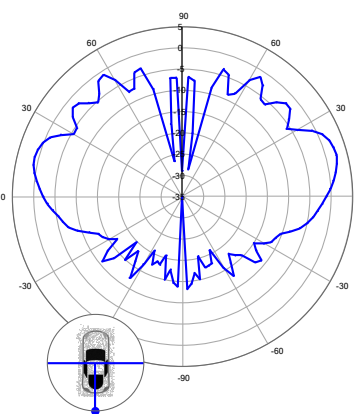
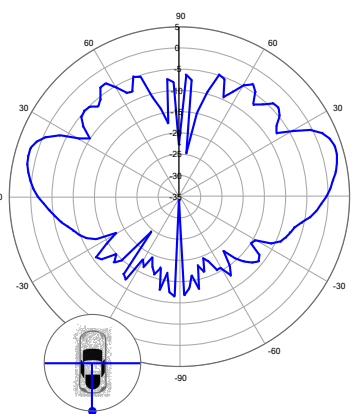
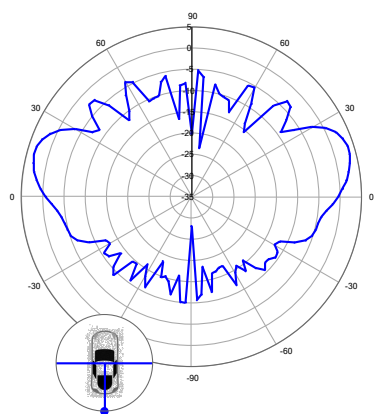
Polar Plot Vertical Cut

Polarisation:V

5Q0.035.507.AH_LTE_1m_groundplane f=2500MHz 090°

5Q0.035.507.AH_LTE_1m_groundplane f=2600MHz 090°

5Q0.035.507.AH_LTE_1m_groundplane f=2690MHz 090°

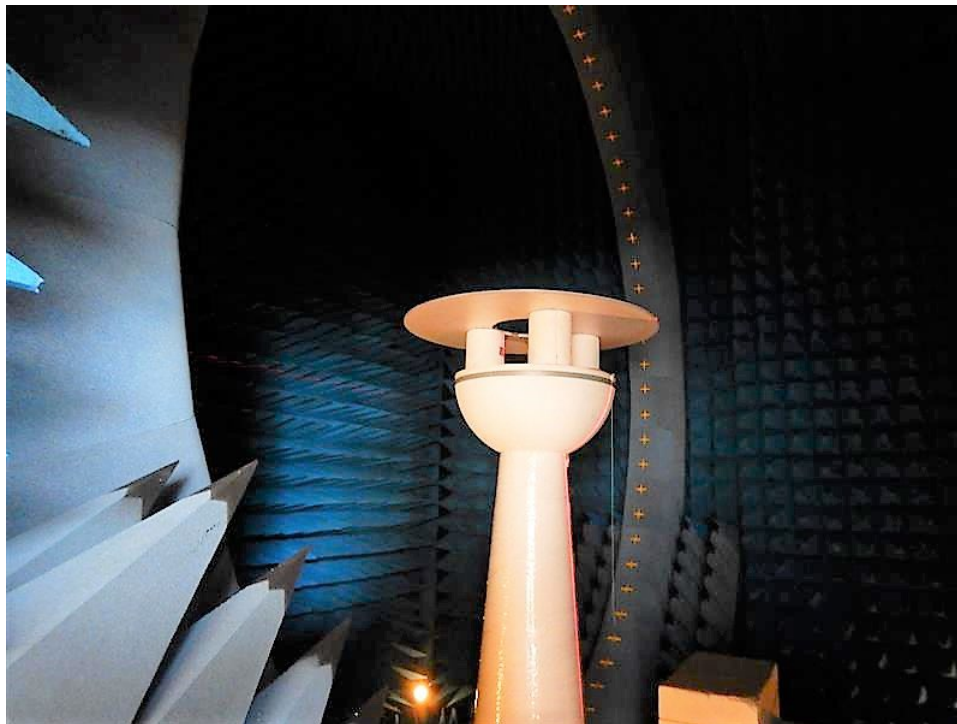


Copyright Molex - LASET V4.9.3

29.09.2022



Messaufbau / *Measurement setup*



1m groundplane inside Satimo SG64 anechoic chamber