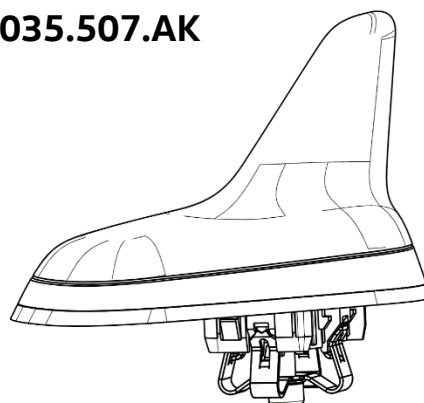




Datenblatt Antenne / *Data sheet antenna*

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

Montage auf Metaldach / *Mounting on metal roof*

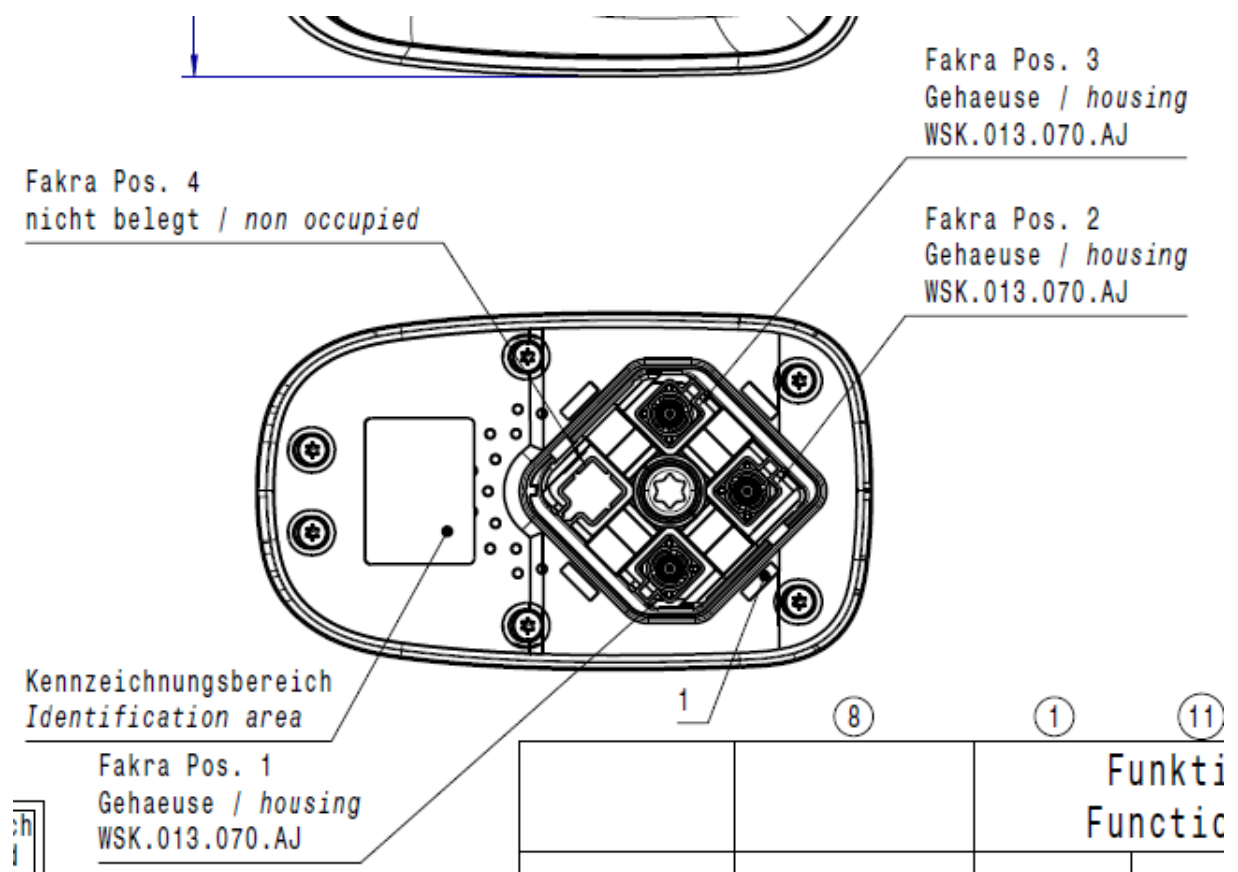


Technische Daten / *Technical data*

Impedanz / <i>Impedance</i>	50 Ohm
Dienst mit Frequenzbändern / <i>Function with frequency bands</i>	GNSS: 1559 – 1605 MHz TEL: 699 – 894 MHz / 1710 – 2170 MHz / 2500 – 2690 MHz SDARS: 2320 – 2345 MHz
Anschluss / <i>Input</i>	3 x FAKRA Kodierung C, F und E male
Gewicht / <i>Weight</i>	159 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	



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
699	894	0,24	1,04	3,19	3,58
1710	2170	2,00	2,49	5,21	5,21
2500	2690	1,49	2,33	5,64	5,64

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*

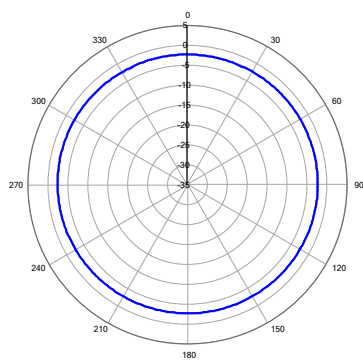
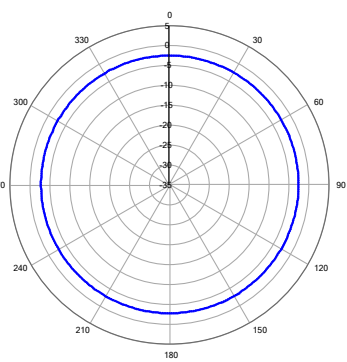
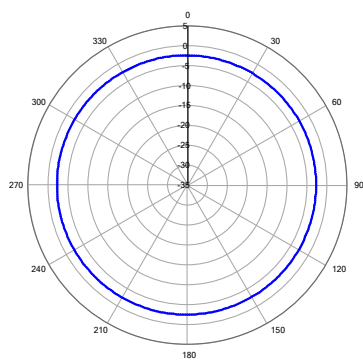
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=705MHz

SQ0.035.507.AK_LTE_1m_groundplane f=810MHz

SQ0.035.507.AK_LTE_1m_groundplane f=892.5MHz



Copyright Moxel - LASET V4.9.3

29.09.2022



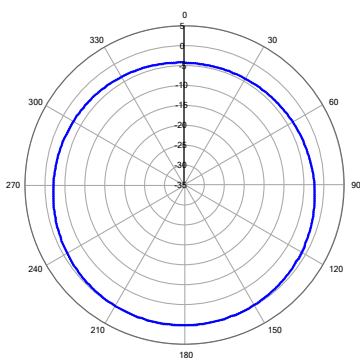
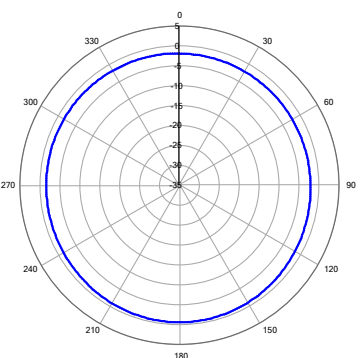
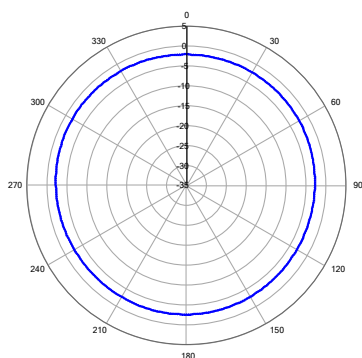
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

5Q0.035.507.AK.LTE_1m_groundplane f=1715MHz

5Q0.035.507.AK.LTE_1m_groundplane f=1910MHz

5Q0.035.507.AK.LTE_1m_groundplane f=2165MHz



Copyright Molex - LASET V4.9.3

29.09.2022

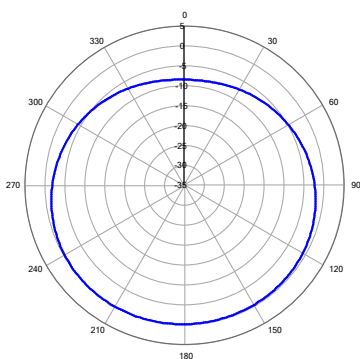
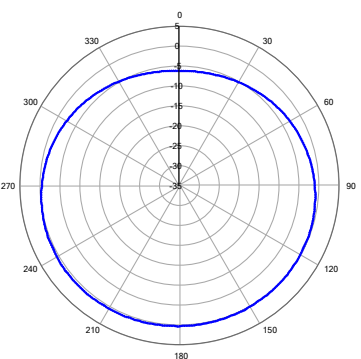
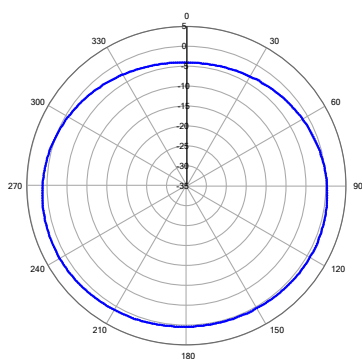
Polar Plot Horizontal Cut

Elevation:0 Polarisation:V

5Q0.035.507.AK.LTE_1m_groundplane f=2502.5MHz

5Q0.035.507.AK.LTE_1m_groundplane f=2600MHz

5Q0.035.507.AK.LTE_1m_groundplane f=2690MHz



Copyright Molex - LASET V4.9.3

29.09.2022



Vertikale Richtdiagramme / Vertical radiation pattern

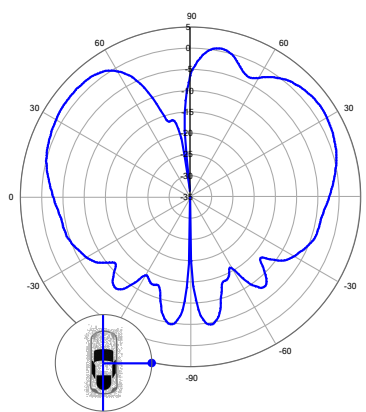
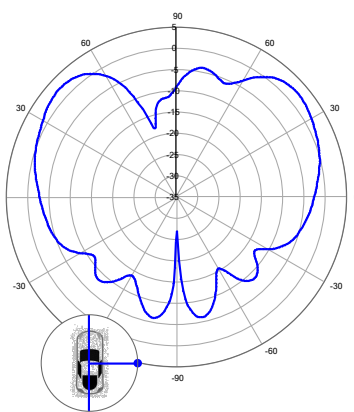
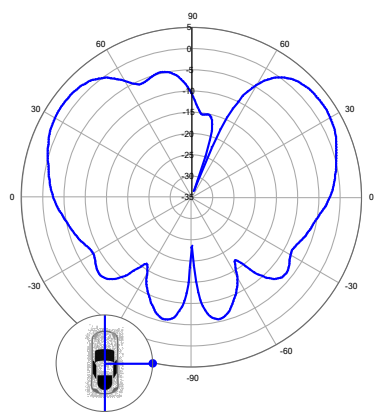
Polar Plot Vertical Cut

Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=705MHz 000°

SQ0.035.507.AK_LTE_1m_groundplane f=810MHz 000°

SQ0.035.507.AK_LTE_1m_groundplane f=892.5MHz 000°



Copyright Molex - LASET V4.9.3

29.09.2022

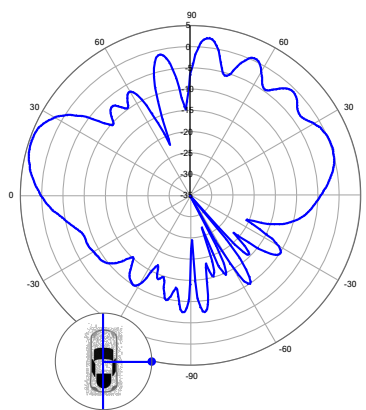
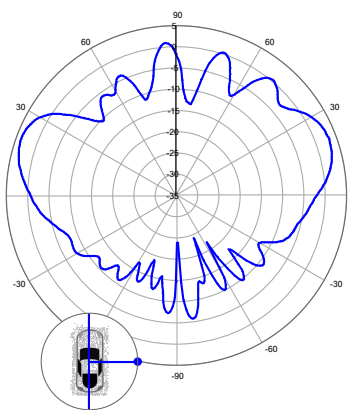
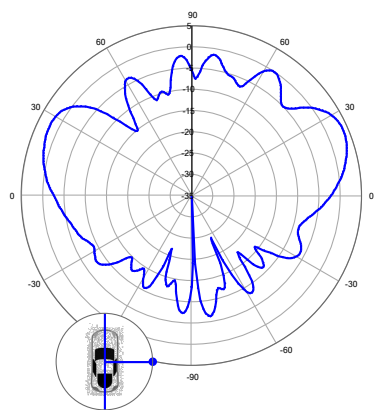
Polar Plot Vertical Cut

Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=1715MHz 000°

SQ0.035.507.AK_LTE_1m_groundplane f=1910MHz 000°

SQ0.035.507.AK_LTE_1m_groundplane f=2165MHz 000°



Copyright Molex - LASET V4.9.3

29.09.2022



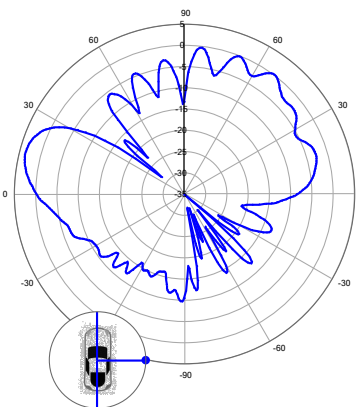
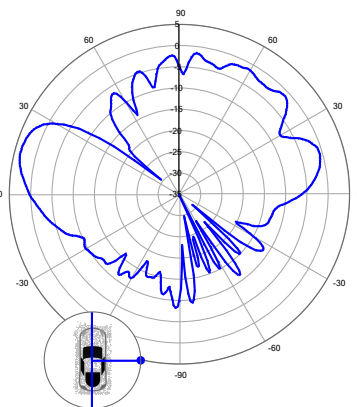
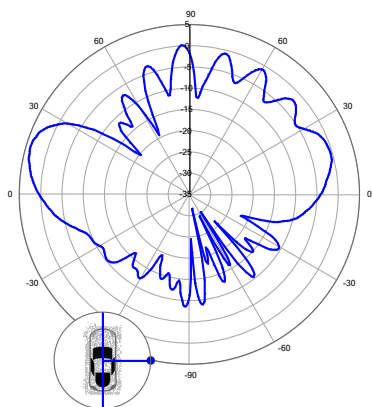
Polar Plot Vertical Cut

Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=2502.5MHz 000°

SQ0.035.507.AK_LTE_1m_groundplane f=2600MHz 000°

SQ0.035.507.AK_LTE_1m_groundplane f=2690MHz 000°



Copyright Molex - LASET V4.9.3

29.09.2022

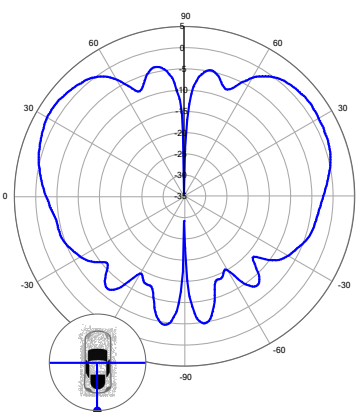
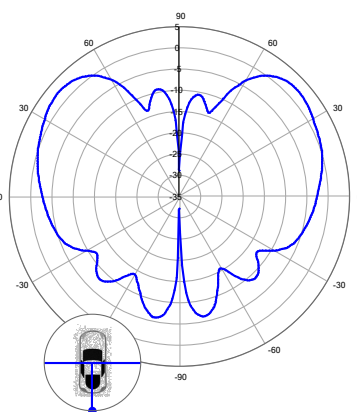
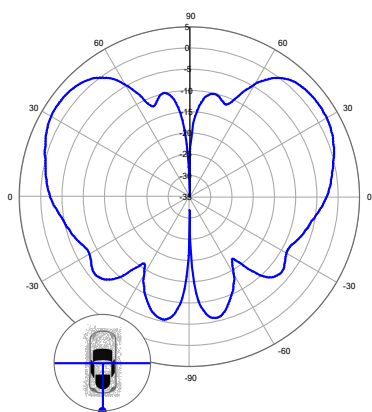
Polar Plot Vertical Cut

Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=705MHz 090°

SQ0.035.507.AK_LTE_1m_groundplane f=810MHz 090°

SQ0.035.507.AK_LTE_1m_groundplane f=892.5MHz 090°



Copyright Molex - LASET V4.9.3

29.09.2022



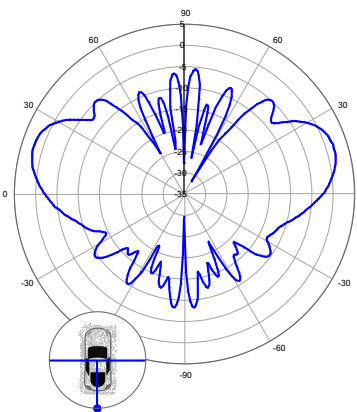
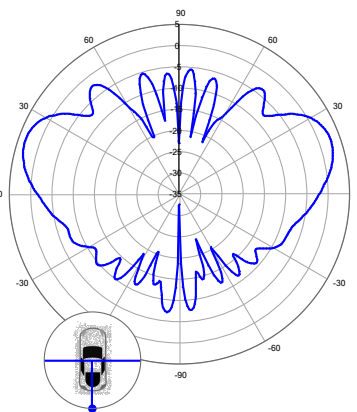
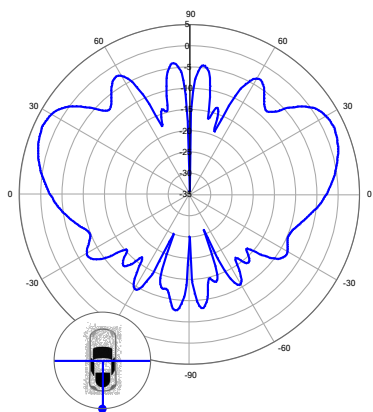
Polar Plot Vertical Cut

Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=1715MHz 090°

SQ0.035.507.AK_LTE_1m_groundplane f=1910MHz 090°

SQ0.035.507.AK_LTE_1m_groundplane f=2165MHz 090°



Copyright Molex - LASET V4.9.3

29.09.2022

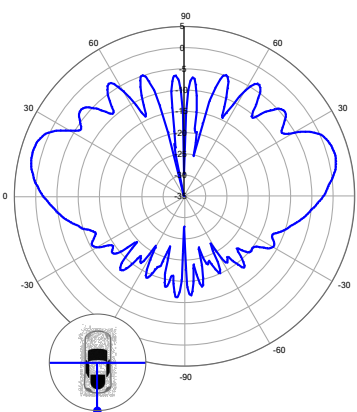
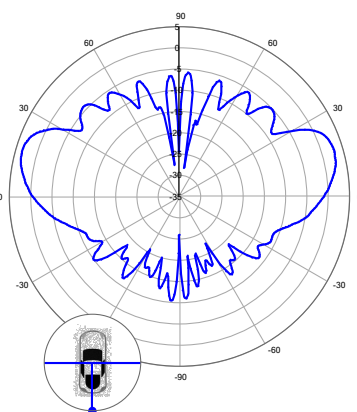
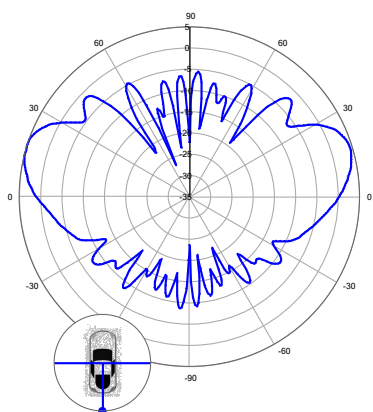
Polar Plot Vertical Cut

Polarisation:V

SQ0.035.507.AK_LTE_1m_groundplane f=2502.5MHz 090°

SQ0.035.507.AK_LTE_1m_groundplane f=2600MHz 090°

SQ0.035.507.AK_LTE_1m_groundplane f=2690MHz 090°

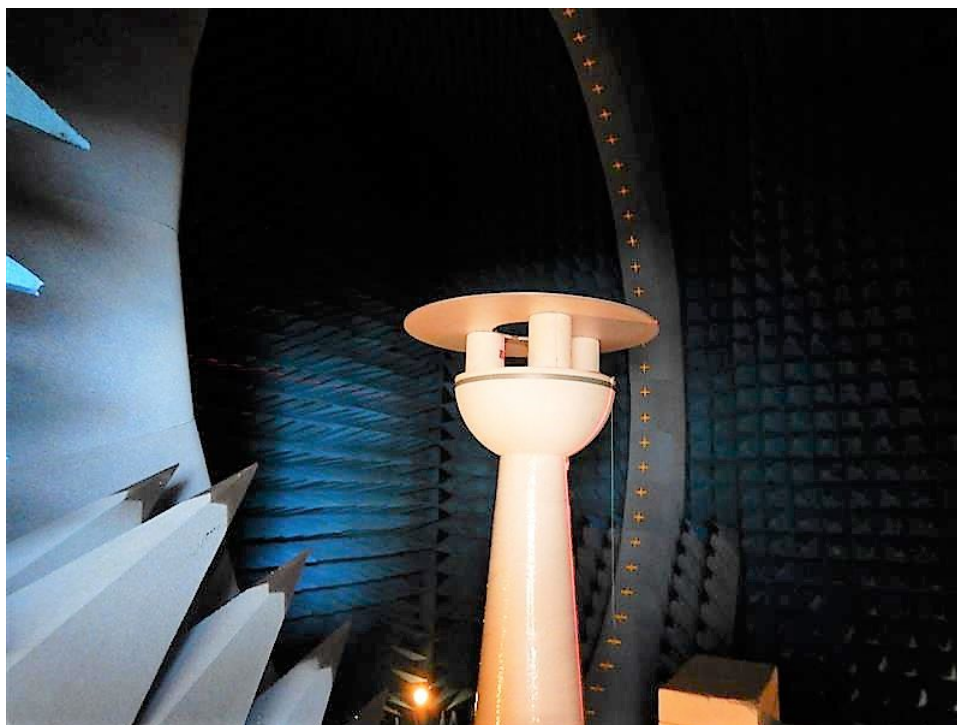


Copyright Molex - LASET V4.9.3

29.09.2022



Messaufbau / Measurement setup



1m groundplane inside Satimo SG64 anechoic chamber