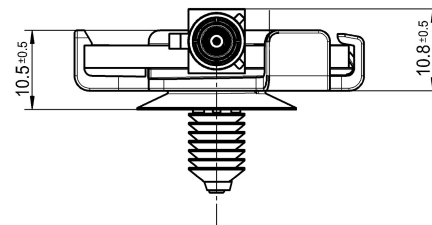
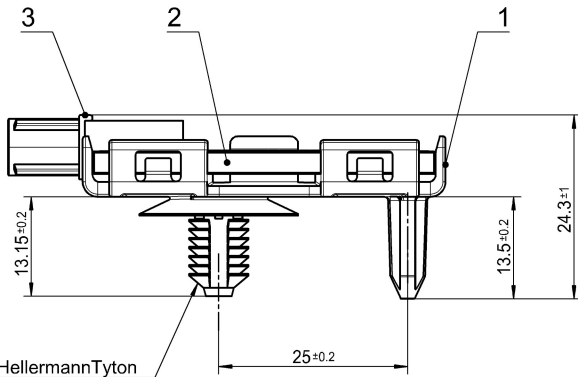
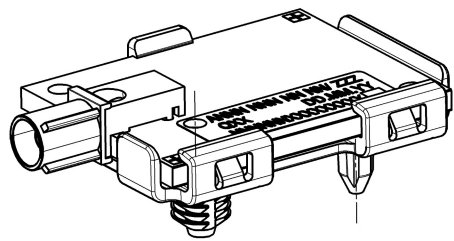
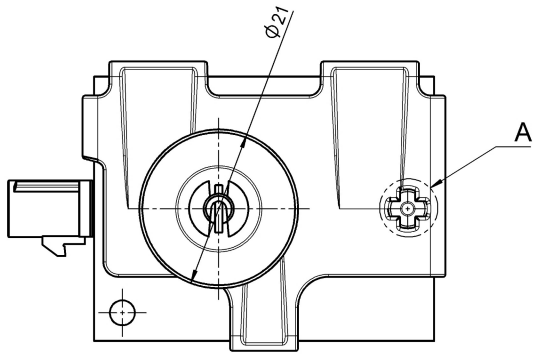
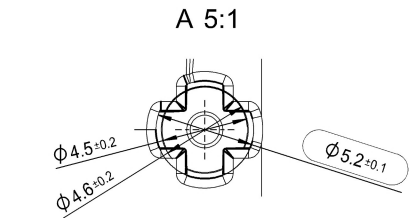
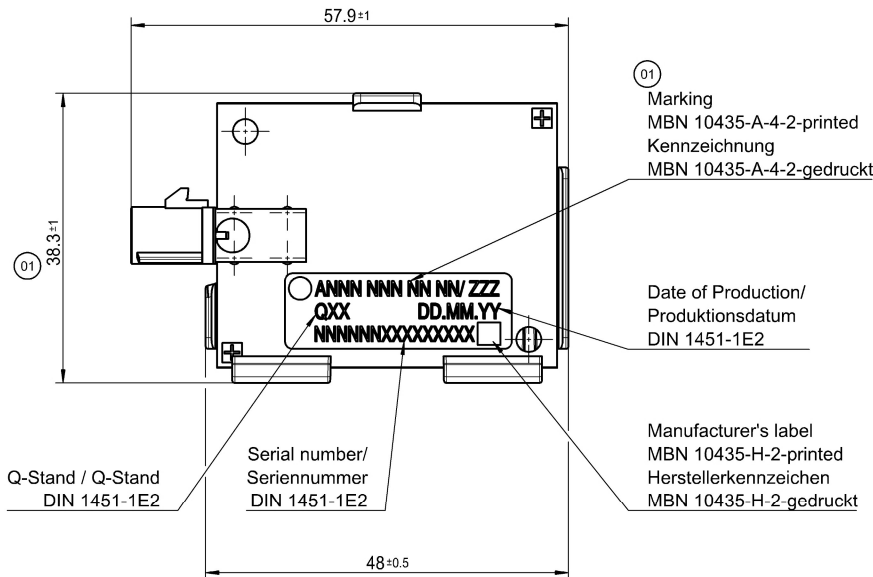


Pos.	Title/ Benennung	Description/ Beschreibung
1	Clip frame / Cliprahmen	PA 6.6
2	PCB / Leiterplatte	FR4
3	FAKRA Connector / FAKRA Stecker	ISO 20860 Kod.K

Änderungsnummer / alteration number	Anzahl / number	Änderungsbeschreibung / description of alteration	Datum / date	Bearb./Freig. erstellt / released
00		Drawing creation/ Zeichnung neu erstellt	31.03.17	AG/DS
01		Views updated; /E3/ Dim. 38.3±1 w. 38.3±0.5; /D5-F6/ Marking description corrected Ansichten aktualisiert; /E3/ Mass 38.3±1 w. 38.3±0.5; /D5-F6/ Beschreibungsspezifikation berichtigt	20.10.17	AG/DS



Temperature range/ Temperaturbereich	-40 °C bis +85°C
Input matching/ Eingangsanpassung S11	<= -10 dB
Impedance/ Anschlussimpedanz	50 Ohm
Diagnosis resistor/ Diagnosewiderstand	51 kOhm – +/- 5%
WLAN 5GHz	Frequency/ Frequenz 5.18 - 5.825 GHz Antenna gain in main beam direction / Antennengewinn in Hauptstrahlrichtung 5dBi
Bluetooth / WLAN	Frequency/ Frequenz 2.4 - 2.5GHz Antenna gain in main beam direction / Antennengewinn in Hauptstrahlrichtung 2dBi
Function/ parameter Funktion/ Parameter	Value/ Wert



Stammdaten/ masterdata	D-Pflicht/required	MBN 10317	VeDoc-Relevanz/relevance	MBN 10385	ESD-Kennzeichen/code	A0598030	
Smaragd	Art/ type	Anzahl Merkmale/ number of features	Anzahl/number of VPD-Ident-Nr./no.	MBN 10385	Farbe/color	N	
DS	0	0	0				
DZ	0	0					
Lf.Änd./Suppl.rev.	01	Lieferant/supplier	Hirschmann	Datum/date	2017-11-14	Name/name	Schauffe
ZGS	Aufr.-Nr./order no.	federt./Abt./resp.dep.	RD/UKR	Norm./stand.	Freig./rel.	siehe	Smaragd
002	YAP4234517					siehe	Smaragd
Mercedes-Benz Benennung/titel							
ZB ANTENNA WLAN							
ZB ANTENNA WLAN							
Mercedes-Benz Sach-Nr./basic number			Masse/mass (kg)	System/system	Format/size	Blatt/sheet	
A 177 905 29 02			0.020	NX 11.0	A2		
Keine Änderung ohne Zustimmung der federführenden Konstruktion. / Any alternations are subject to the approval of the design department.							

Prüfvorschriften/ test instructions	Rohzustand / crude state		Werkstoff / material	Fertigzustand / final state	Rohgewicht / gross weight	Fertigge- / final weight
					je	je
					x	
Material - Nr. / material - No.	Toleranzen / tolerances		Oberfläche / surface	dm <sup>2</sup> /100	Abfall / scrap	%
gezeichnet/ drawn	Datum / date	Name / name	Maßstab/scale	Makr. werden bei Abnahme besonders geprüft / Dimensions especially checked for acceptance		
	30.03.2017	Gelmann	2:1	Oberfl.-Güte / finish quality		
freigegeben/ released	20.10.2017	Silva	Werkstückarten/ Teilgr. DIN 13712 / Item- and signifier/number / geometric tolerances DIN ISO 1101			
Typ - Benennung / typ - title			CAD System/ Version			
ZB BT WLAN Antenne			NX			
ASM BT WLAN Antenna			DIN A2 E D M			
Hirschmann Car Communication			Blatt / sheet			
Hirschmann Car Communication GmbH Stuttgarter Strasse 45 - 51 D - 72654 Neckartenzlingen			0 von/for 1			
Ursprung / origin			Zeichnungs - Nr. / Drawing - No.			Doc-ID: 000133560DNR
			920-584-841			
Ersatz für / replacement for						

Diese Unterlage ist unser Eigentum. Jede Vervielfältigung, Verwendung, Mitteilung bzw. Weitergabe an Dritte ohne unsere vorherige Zustimmung ist untersagt.   
 This document is our property. Any duplication, exploitation, transmission to a third party without our prior agreement is not allowed. In case of contravention we claim damages. All rights reserved for patent application, use or design samples based on.   
 Lieferung nur von freigegebenen Lieferanten nach Zeichnung neu erstellt und erproben. Freigegebenen Mustern.   
 Delivery by approved suppliers only in accordance to the technical drawing, data sheets, tested and released samples. No change without prior written permission of Hirschmann Car Communication GmbH.   
 Kehler/ Änderungen ohne vorherige schriftliche Freigabe der Hirschmann Car Communication GmbH.   
 Delivery by approved suppliers only in accordance to the technical drawing, data sheets, tested and released samples. No change without prior written permission of Hirschmann Car Communication GmbH.



# A177 905 29 02 920584002 BT/WLAN Fakra Measurement Results

04.12.2019



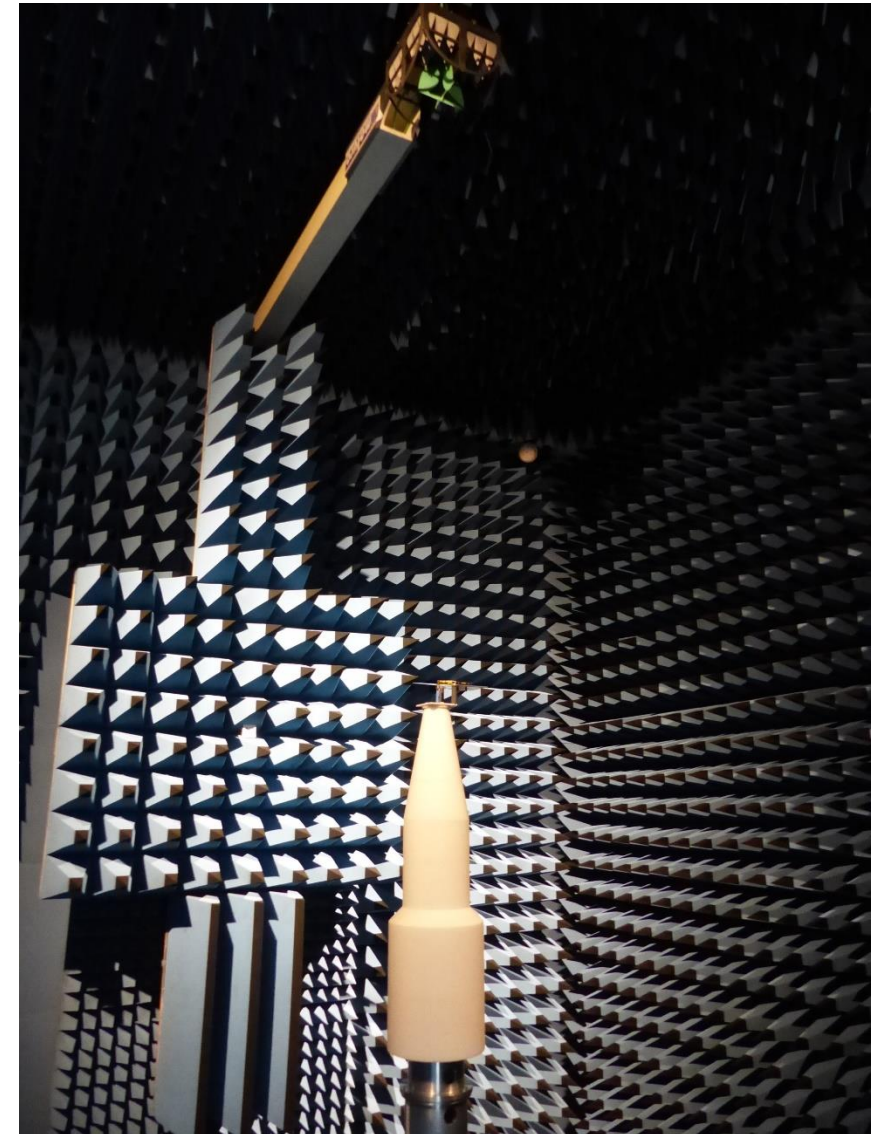
EVERY CONNECTION COUNTS



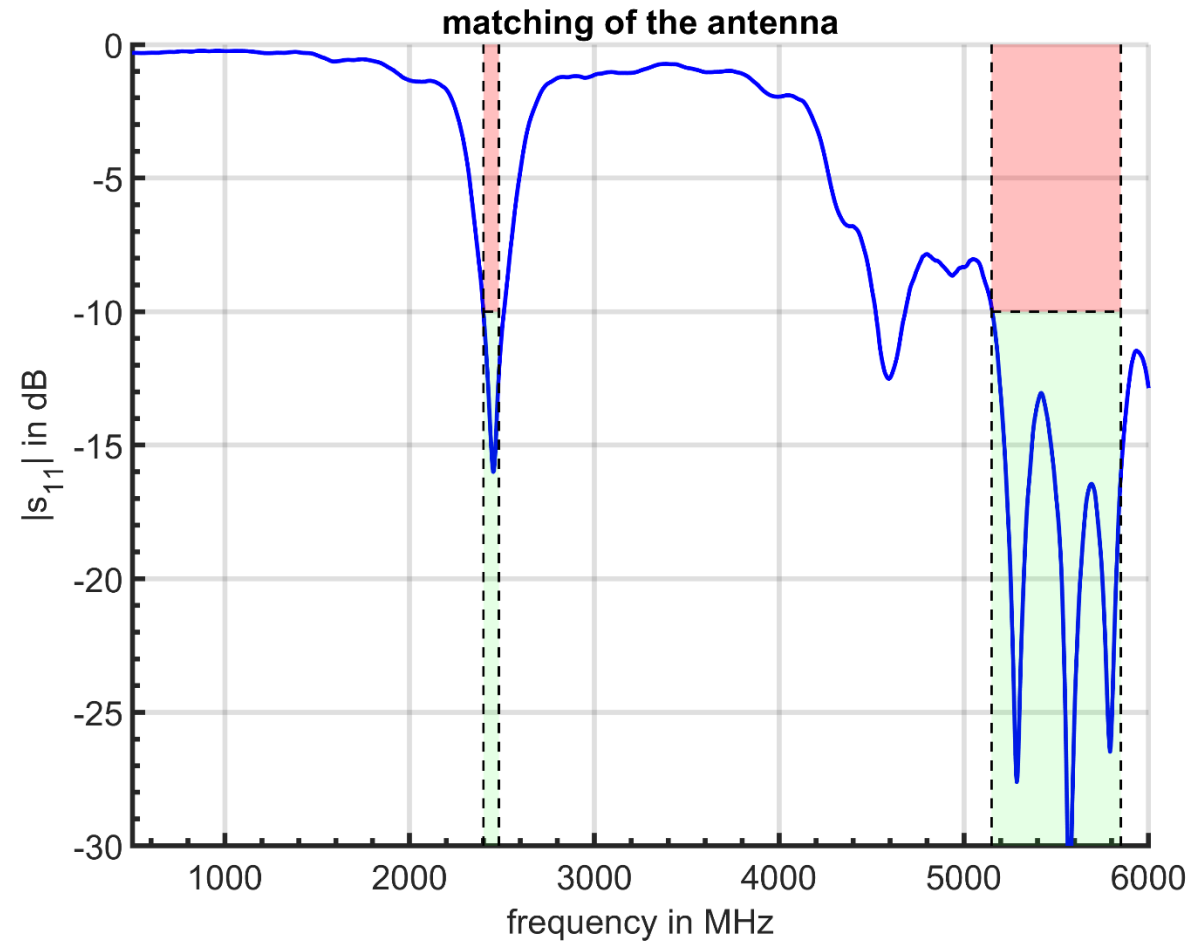
# Measurement Setup

DAG Part Number: A177 905 29 02

HCC Part Number: 920584002



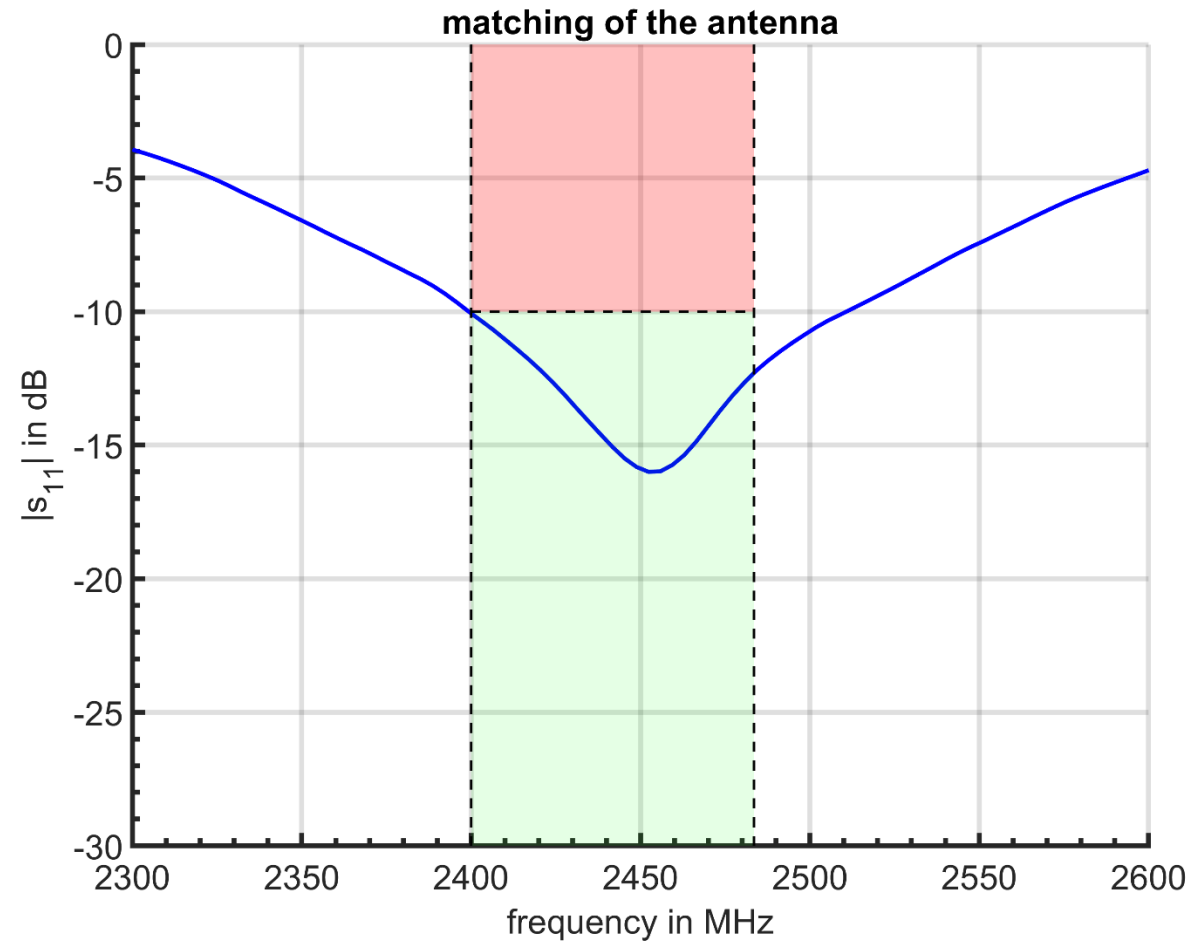
# S11 - Parameter



DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

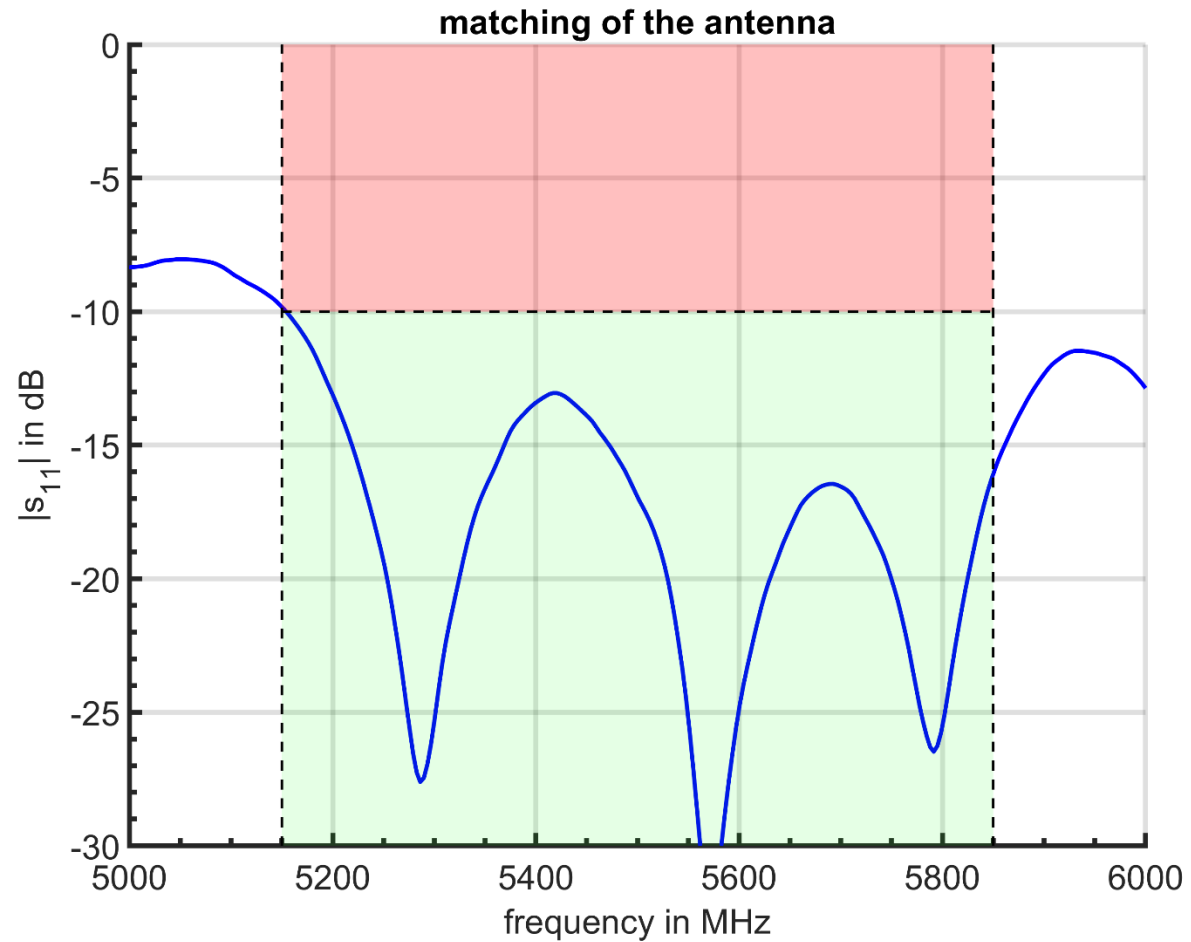
# S11 - Parameter



DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# S11 - Parameter

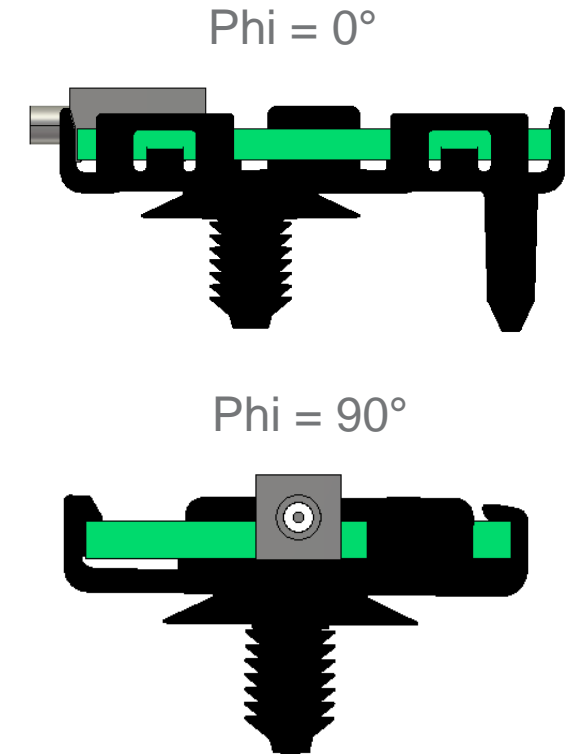
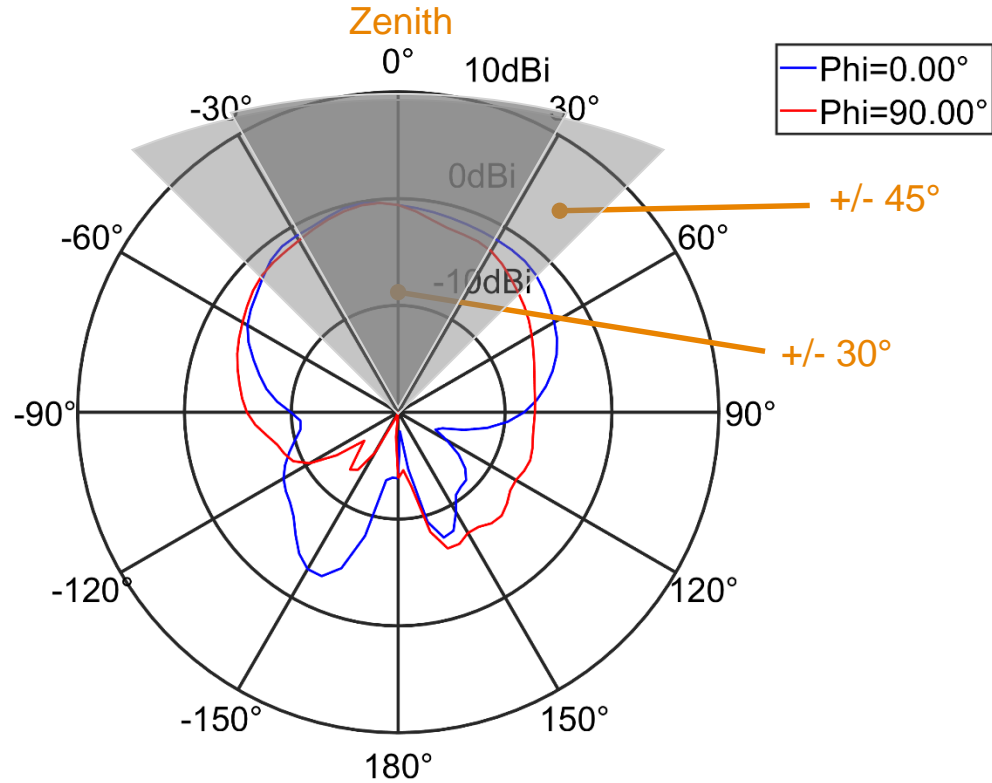


DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# Polar Plots | 2400 MHz

radiation pattern of the antenna (elevation cut)  
realized gain (E\_Total, Freq = 2400.00 MHz)

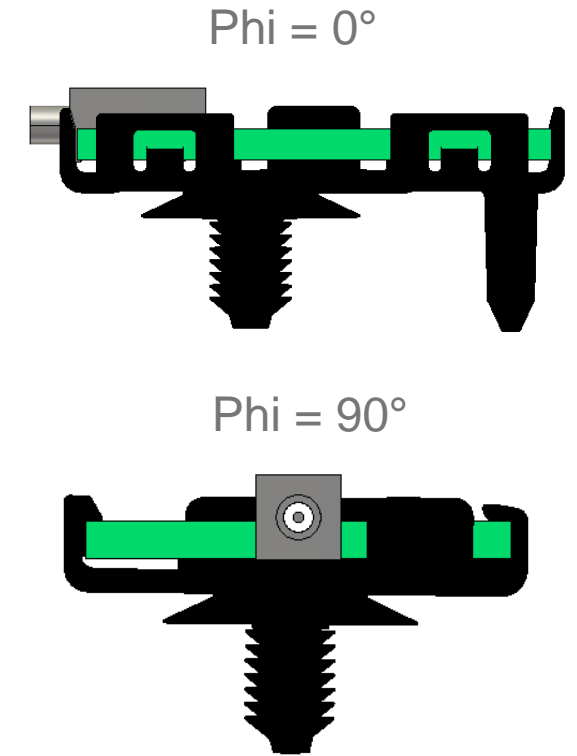
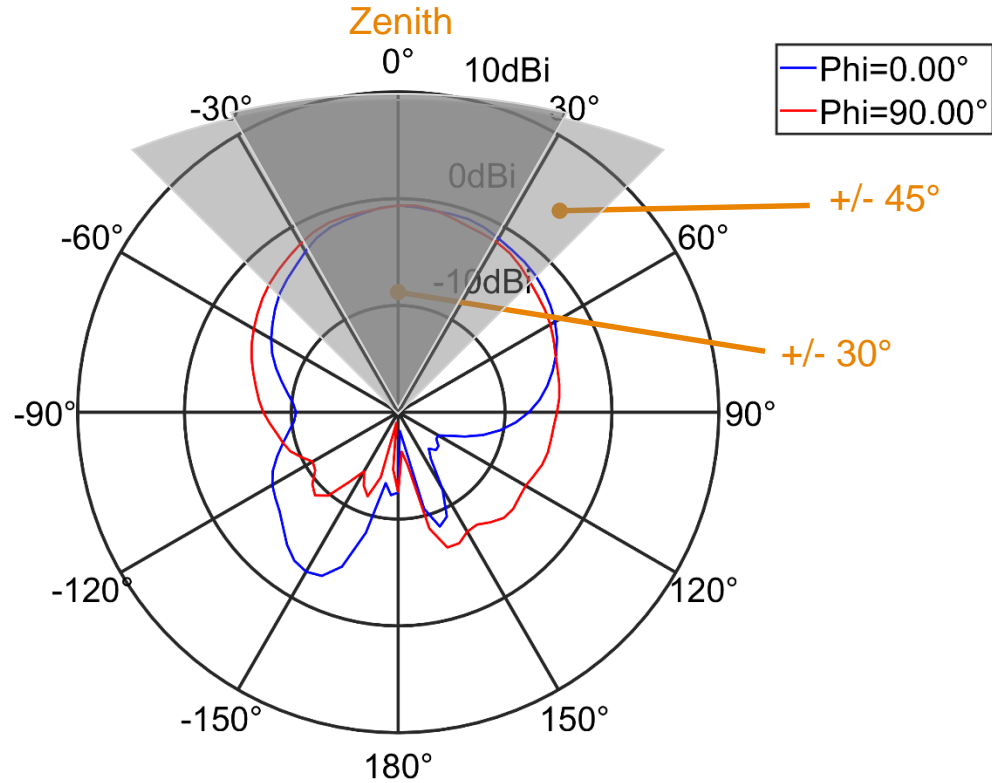


DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# Polar Plots | 2440 MHz

radiation pattern of the antenna (elevation cut)  
realized gain (E\_Total, Freq = 2440.00 MHz)



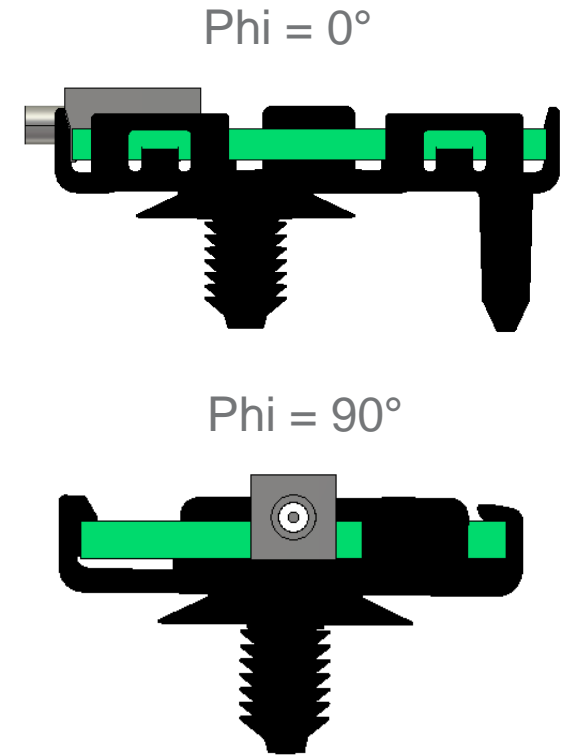
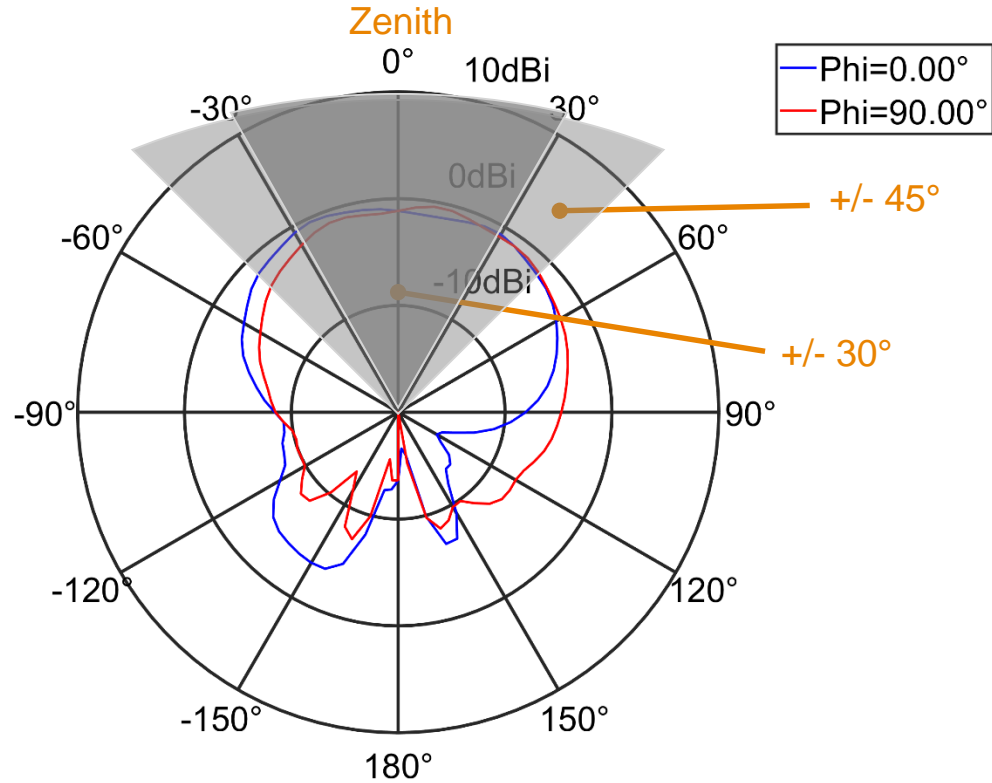
DAG Part Number: A177 905 29 02

HCC Part Number: 920584002



# Polar Plots | 2480 MHz

radiation pattern of the antenna (elevation cut)  
realized gain (E\_Total, Freq = 2480.00 MHz)

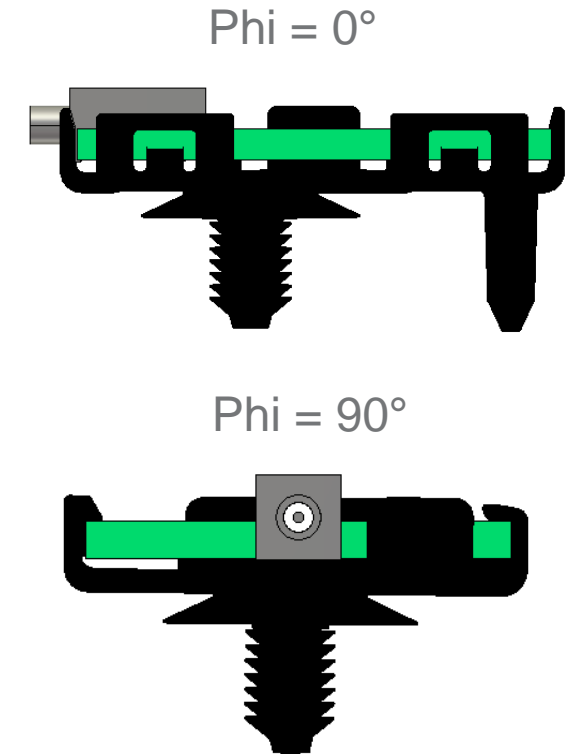
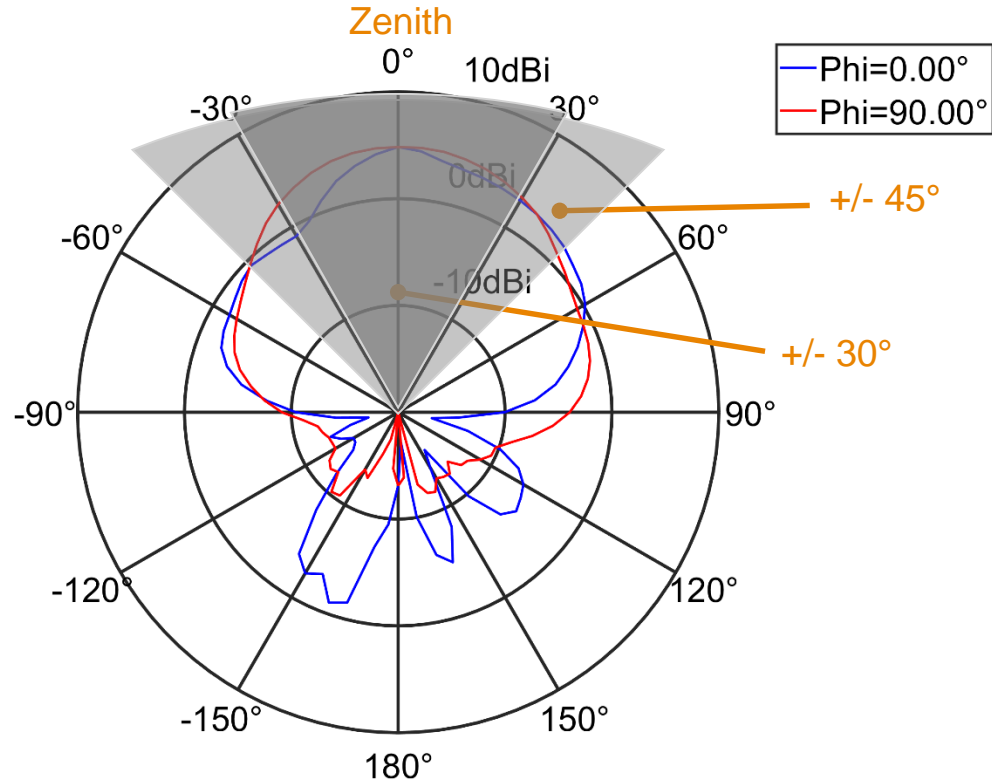


DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# Polar Plots | 5150 MHz

radiation pattern of the antenna (elevation cut)  
realized gain (E\_Total, Freq = 5150.00 MHz)

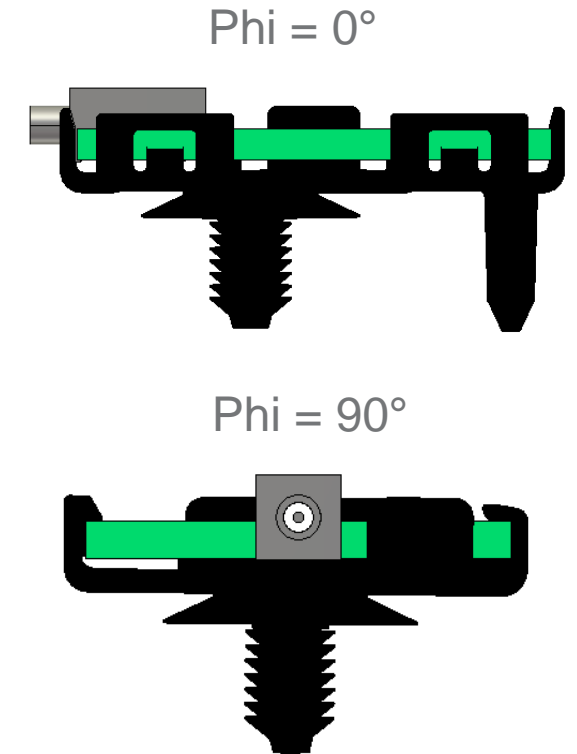
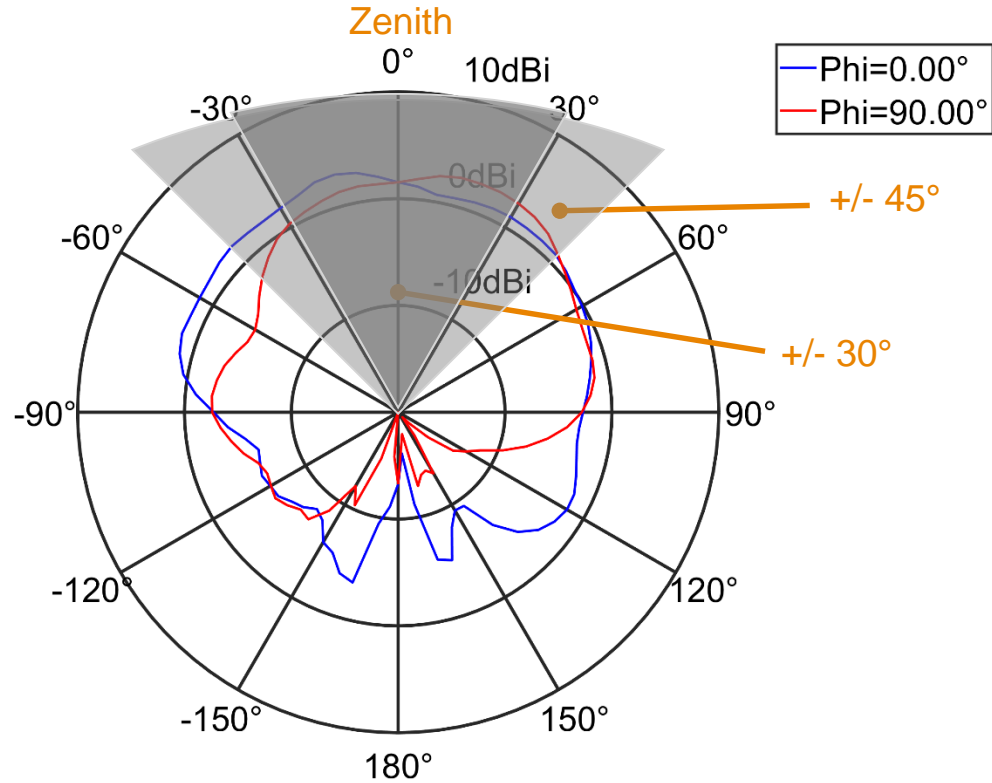


DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# Polar Plots | 5500 MHz

radiation pattern of the antenna (elevation cut)  
realized gain (E\_Total, Freq = 5500.00 MHz)

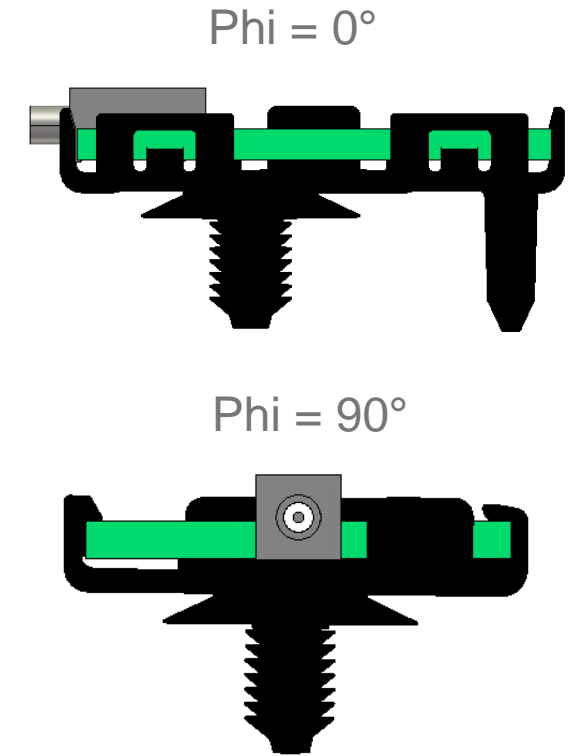
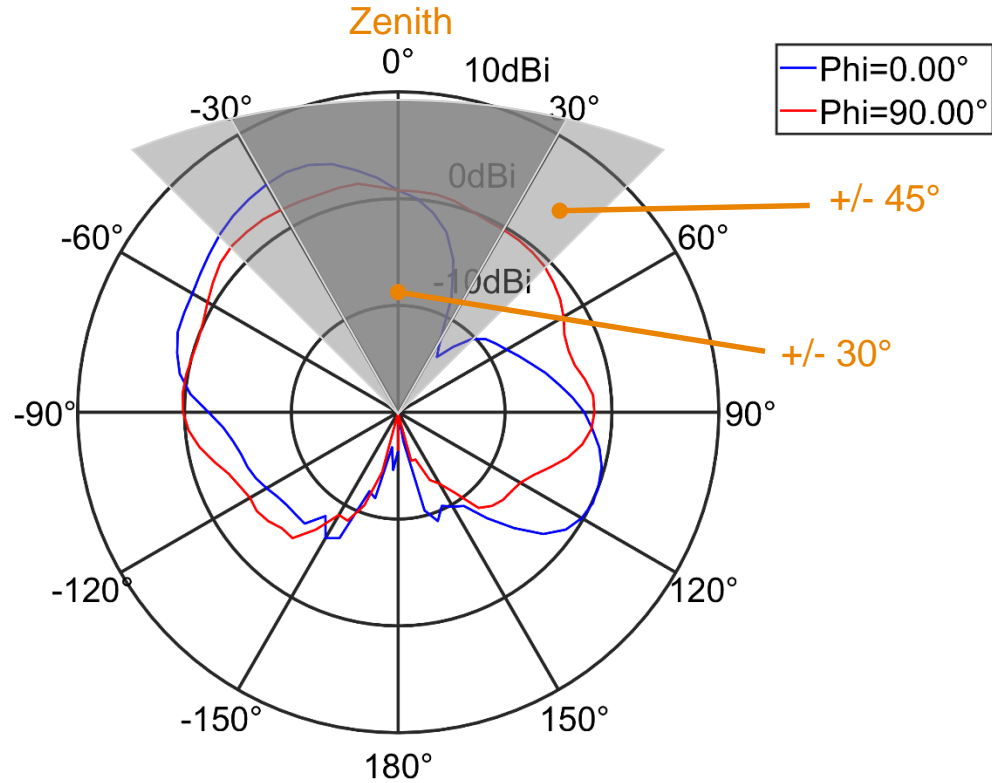


DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# Polar Plots | 5850 MHz

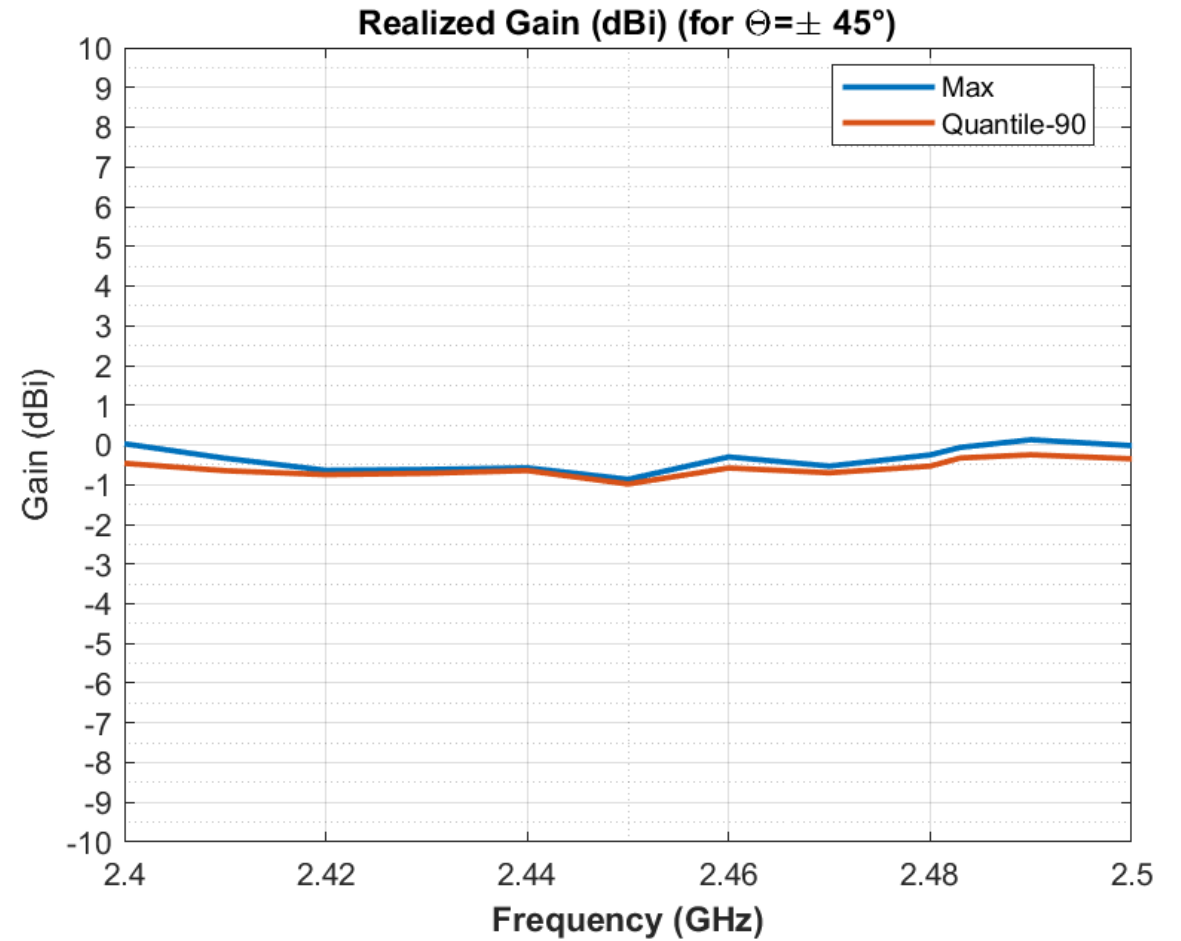
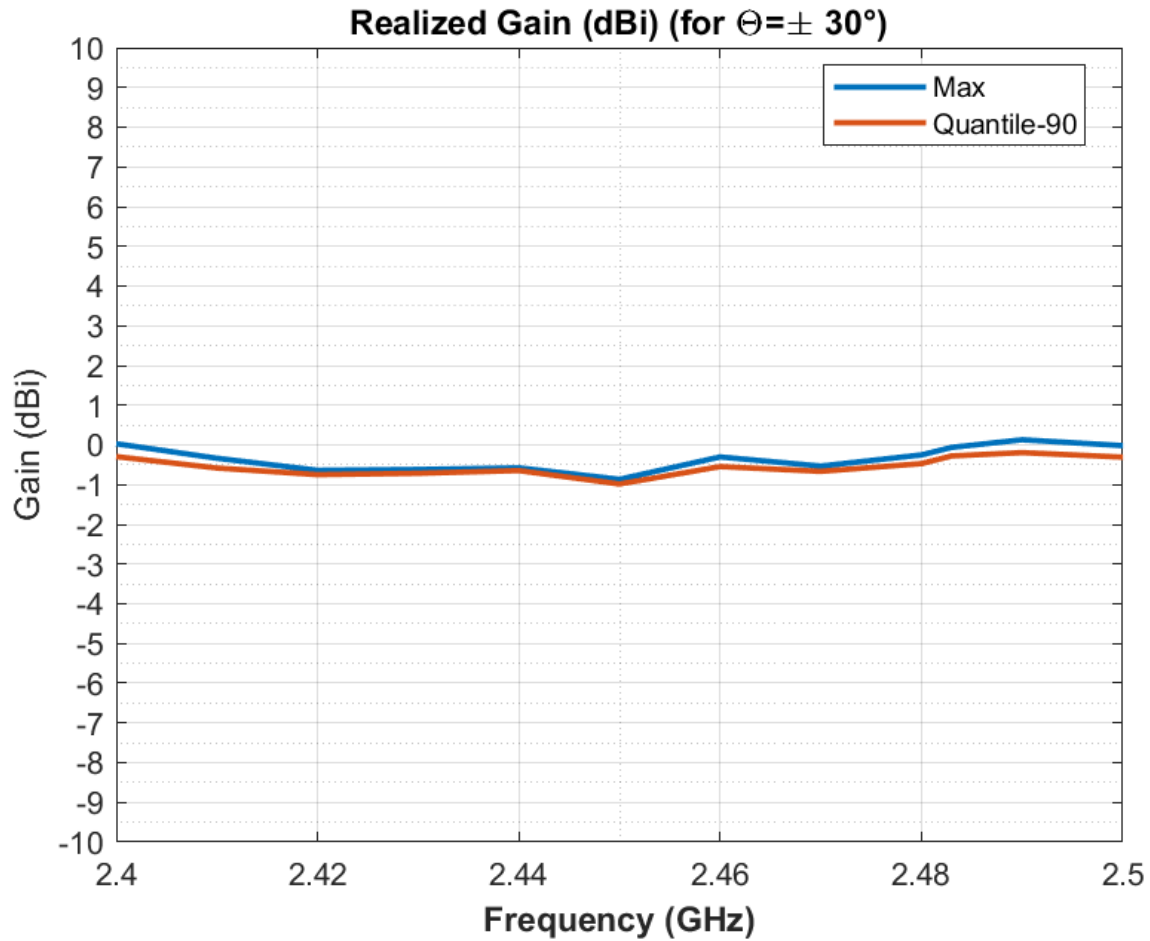
radiation pattern of the antenna (elevation cut)  
realized gain (E\_Total, Freq = 5850.00 MHz)



DAG Part Number: A177 905 29 02

HCC Part Number: 920584002

# Gain over Frequency



# Gain over Frequency

