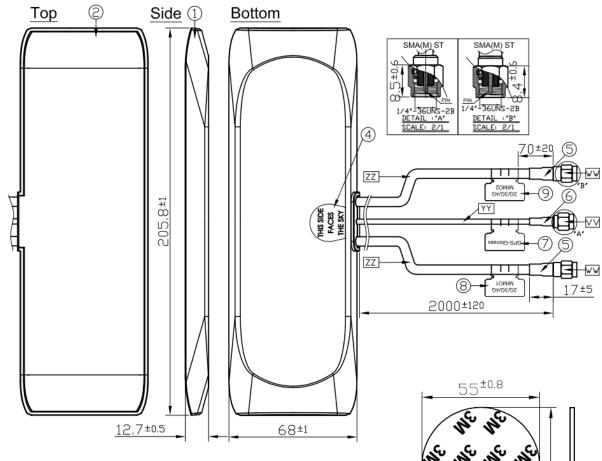


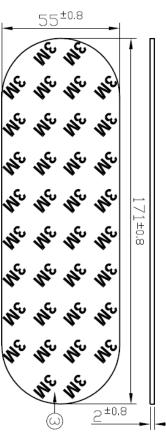


# 4.Drawing



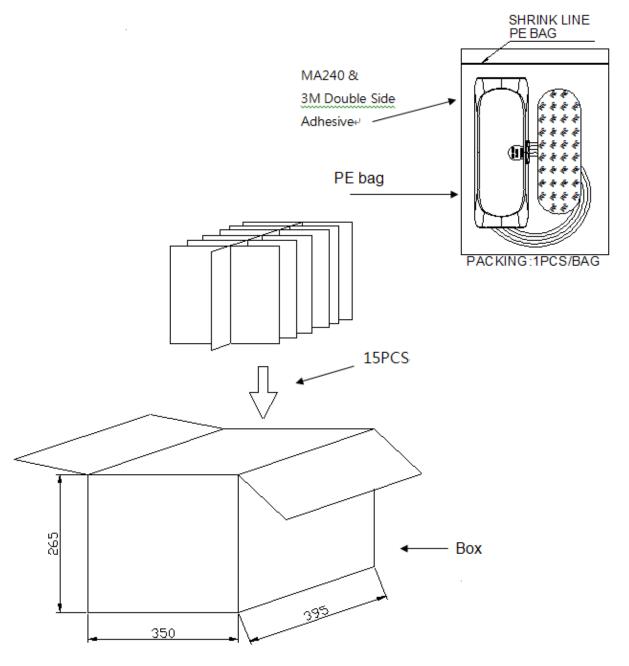
	Name	Material	Finish	QTY		
1	Housing Top MA240	ABS	Black	1		
2	Housing Bottom MA240	ABS	Black	1		
3	3M Double Sided Adhesive With Foam	3M9448+CR4305	Black	1		
4	Clear Label	PET	White	1		
5	Heat Shrink Tube (CFD 200)	PE	Black	2		
6	Heat Shrink Tube (RG 174)	PE	Black	1		
7	GPS-Glonass Label (48*30)	Coated Paper	Orange	1		
8	2G/3G/4G MIMO1 Label (48*30)	Coated Paper	Gray	1		
9	2G/3G/4G MIMO2 Label (48*30)	Coated Paper	White	1		
	Name	Spec	Finish	QTY		

	Name	Spec	Finish	QTY
VV	Connector Type	SMA(M) ST	Gold	1
ww	Connector Type	SMA(M) ST	Gold	2
YY	Cable Type	RG 174	Black	1
ZZ	Cable Type	NFC 200	Black	2





# 5.Packaging



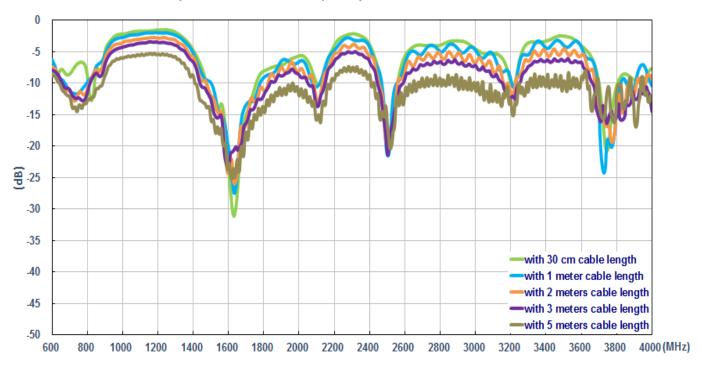


# 6. Application Note (LTE MIMO Antenna)

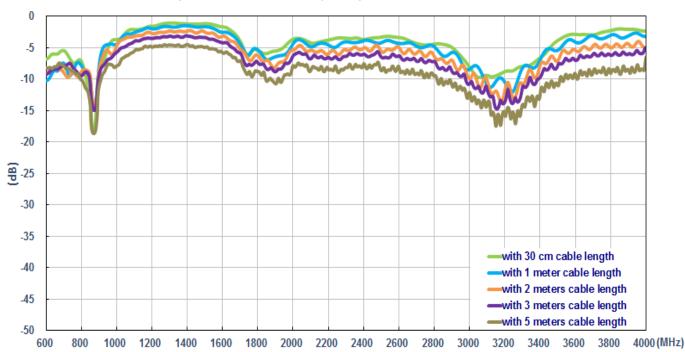
The MA240 antenna measurement with difference cable length and difference environments, the performance is shown as below,

## 6.1 In free Space

### 6.1.1 Return loss(MIMO\_1 in free space)



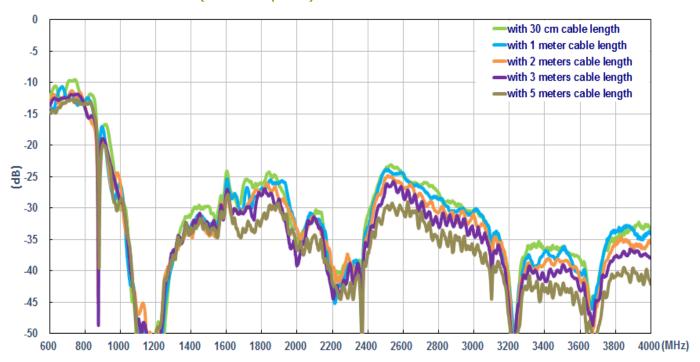
#### 6.1.2 Return loss (MIMO\_2 in free space)



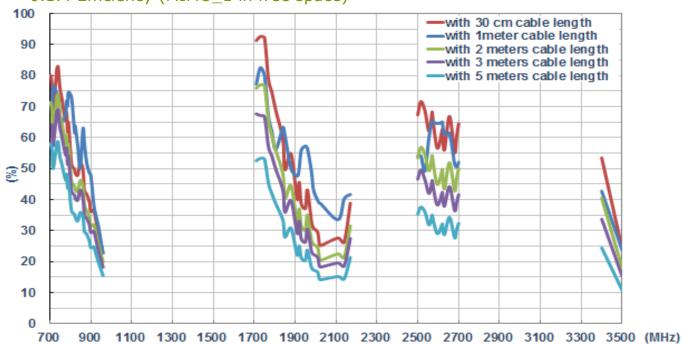
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## 6.1.3 Insertion loss (in free space)

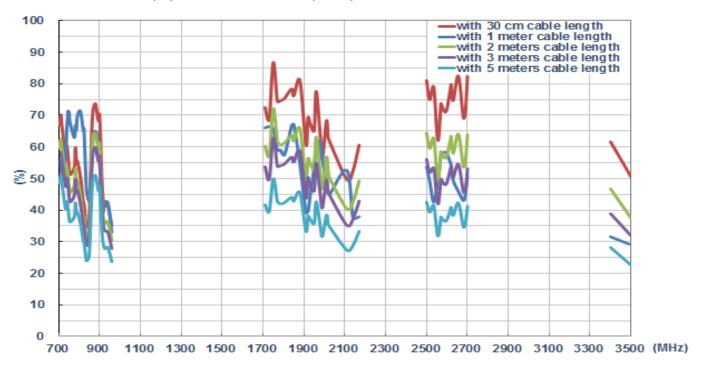


#### 6.1.4 Efficiency (MIMO\_1 in free space)

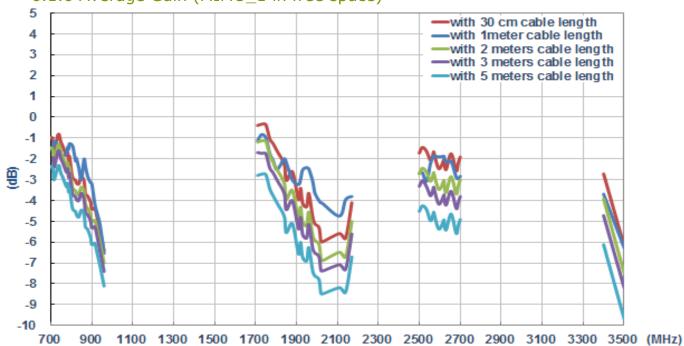




## 6.1.5 Efficiency (MIMO\_2 in free space)

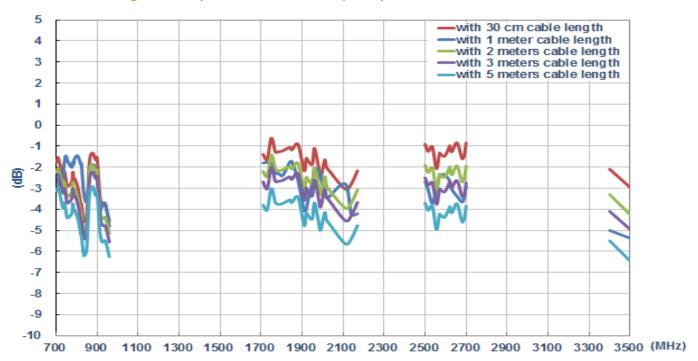


#### 6.1.6 Average Gain (MIMO\_1 in free space)

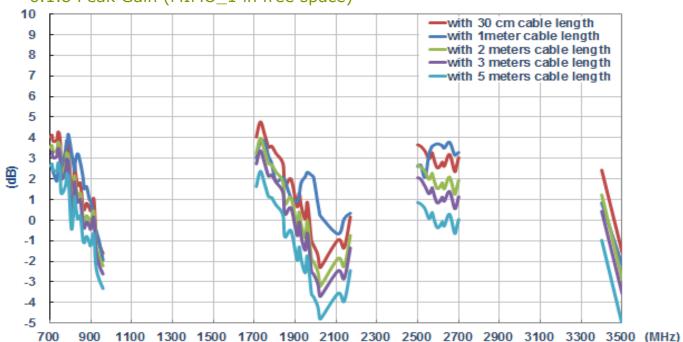




#### 6.1.7 Average Gain (MIMO\_2 in free space)

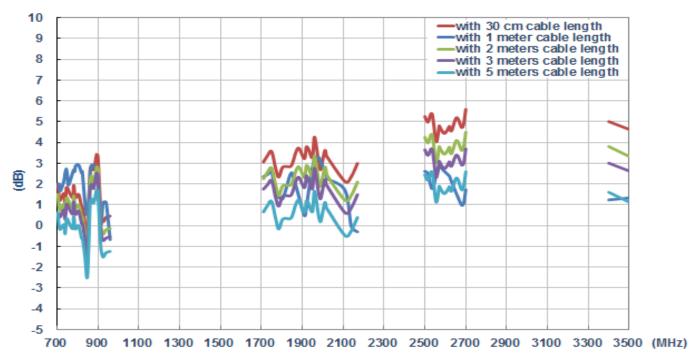


## 6.1.8 Peak Gain (MIMO\_1 in free space)



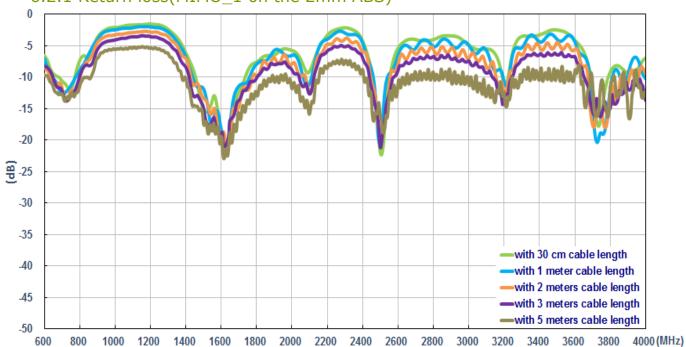


## 6.1.9 Peak Gain (MIMO\_2 in free space)



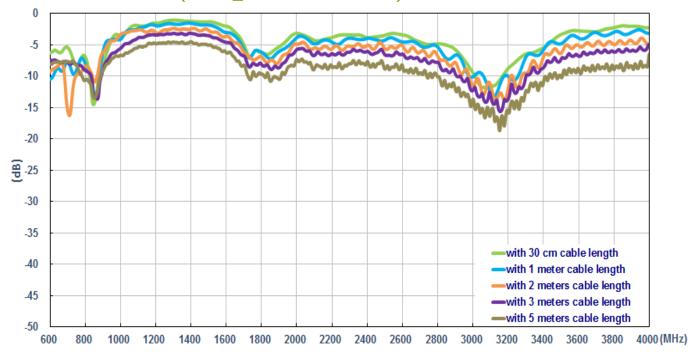
## 6.2 On 2mm ABS Base

## 6.2.1 Return loss(MIMO\_1 on the 2mm ABS)

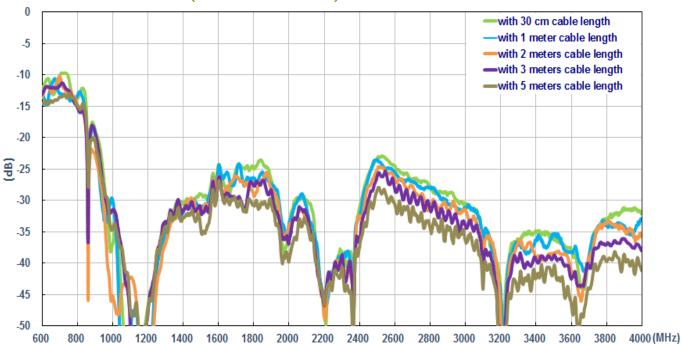




## 6.2.2 Return loss (MIMO\_2 on the 2mm ABS)

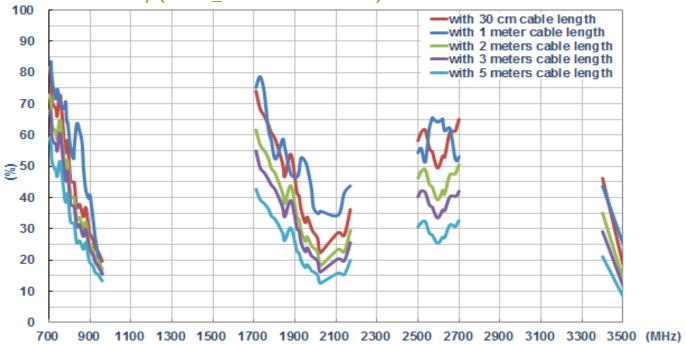


## 6.2.3 Insertion loss (on the 2mm ABS)

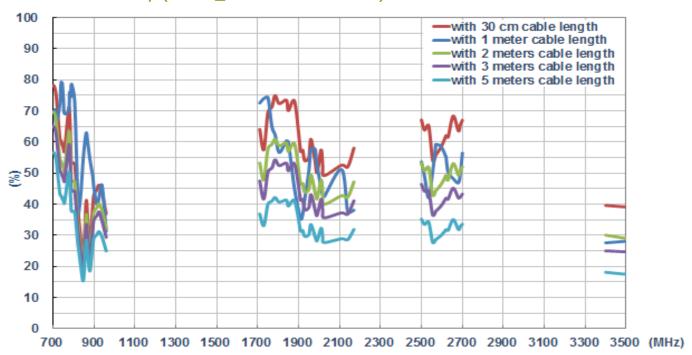




#### 6.2.4 Efficiency (MIMO\_1 on the 2mm ABS)

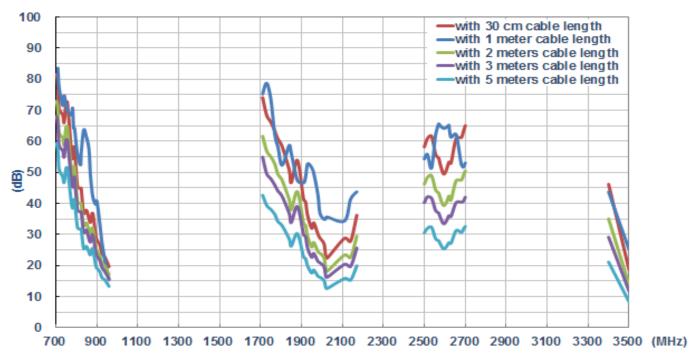


### 6.2.5 Efficiency (MIMO\_2 on the 2mm ABS)

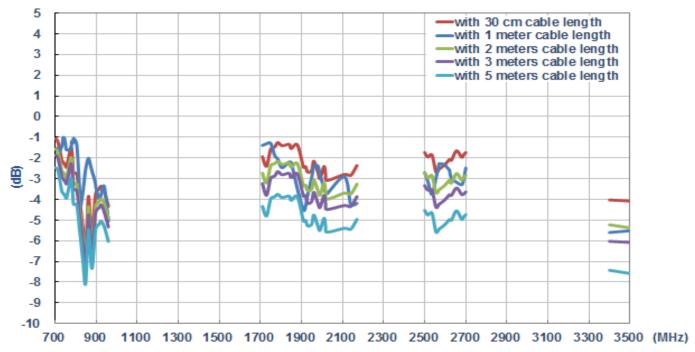


## 6.2.6 Average Gain (MIMO\_ on the 2mm ABS)



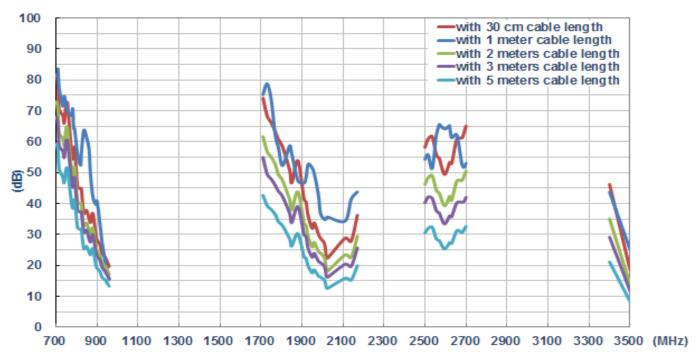


## 6.2.7 Average Gain (MIMO\_2 on the 2mm ABS)



## 6.2.8 Peak Gain (MIMO\_1 on the 2mm ABS)





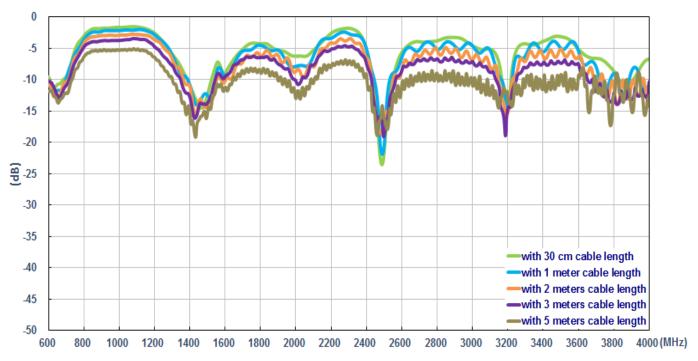
## 6.2.9 Peak Gain (MIMO\_2 on the 2mm ABS)



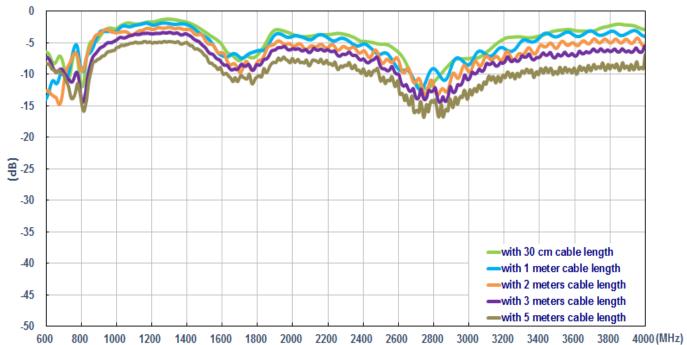
## 6.3 On the glass base

6.3.1 Return loss(MIMO\_1 on the glass)



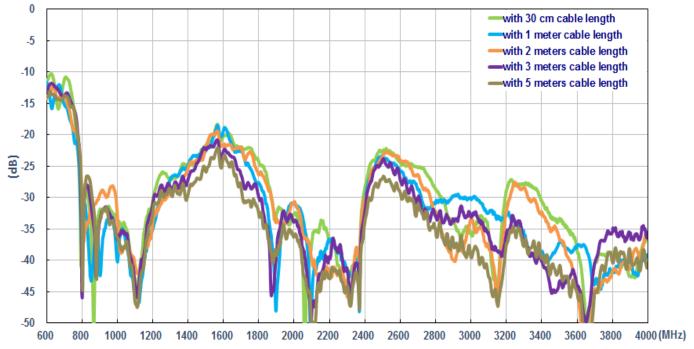


## 6.3.2 Return loss (MIMO\_2 on the glass)

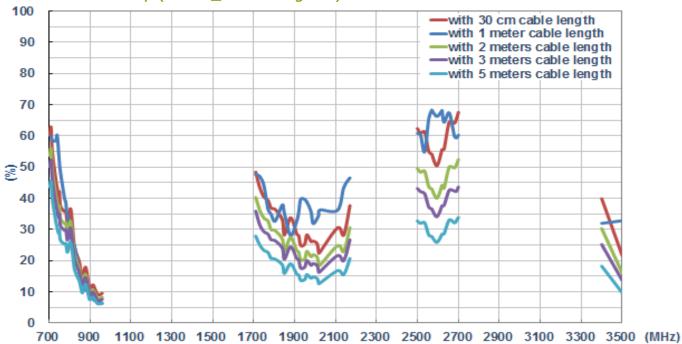




## 6.3.3 Insertion loss (on the glass)

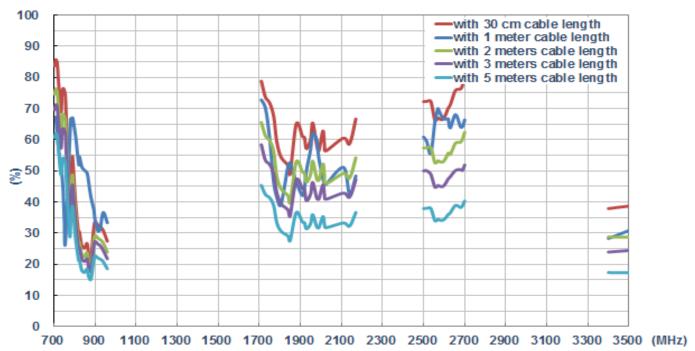


## 6.3.4 Efficiency (MIMO\_1 on the glass)





## 6.3.5 Efficiency (MIMO\_2 in on the glass)

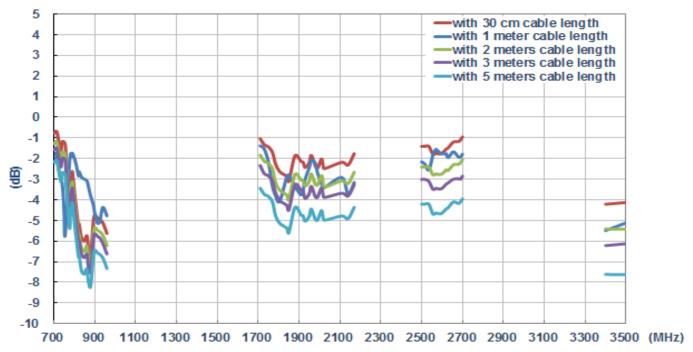


## 6.3.6 Average Gain (MIMO\_1 on the glass)

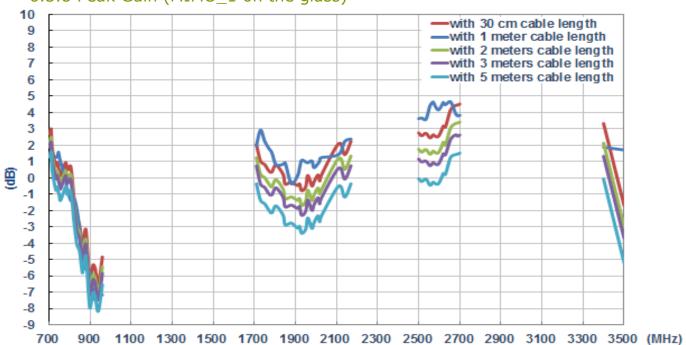




## 6.3.7 Average Gain (MIMO\_2 on the glass)



## 6.3.8 Peak Gain (MIMO\_1 on the glass)





## 6.3.9 Peak Gain (MIMO\_2 on the glass)

