

# FCC ID : NM8PB31200

## No simultaneous SAR justification

Per “648474 D01 SAR Handsets Multi Xmitter and Ant, v01r05”, Test mode of SAR is as below

Test mode	Test channel	Max sar value ( W/kg )	Remark
CDMA	Low ,middle, High	1.39	NA
11 b/g	Highest power	0.407	less than 0.8W/kg , other channels is unnecessary
Bluetooth	NA	NA	Distance between Bluetooth and CDMA antenna is 9.12 cm > 5cm and highest output power is 0.9 mW < 60/f(GHz) mW. Therefore, stand-alone SAR is unnecessary

## Max SAR value ( W/ kg ) of each mode :

Test mode	RIGHT HEAD		LEFT HEAD		BODY
	CHEEK	TILT	CHEEK	TILT	
CDMA 850	0.89	0.495	0.789	0.395	0.069
CDMA 1900	0.66	0.402	<b>1.390</b>	0.362	0.494
11 B/G	0.407	0.301	<b>0.268</b>	0.244	0.693
Bluetooth	0	0	0	0	0

## Co-transmit SAR

Co-transmit SAR					
Co-transmit mode	RIGHT HEAD		LEFT HEAD		BODY
	CHEEK	TILT	CHEEK	TILT	
CDMA 850+ 11B/G+BT	1.297	0.796	1.057	0.639	0.762
CDMA 1900+ 11B/G+BT	1.067	0.703	<b>1.658</b>	0.606	1.187

MAX SAR of co-transmit mode is 1.658 W/kg

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## Distance between antennas ( cm ) :

	CDMA	WLAN	BT
CDMA		9.12	9.12
WLAN	9.12		0
BT	9.12	0	

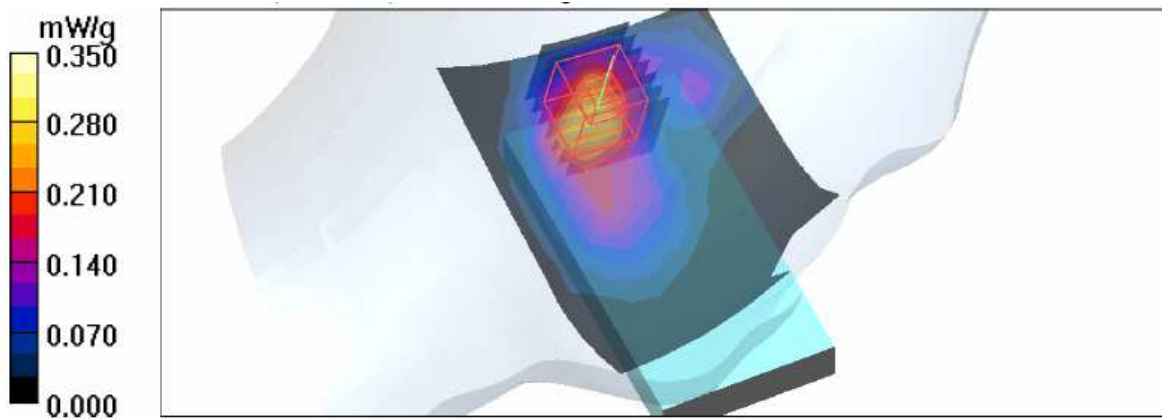
### Note

- 1) The EUT used the same antenna for Wireless LAN & Bluetooth function, but the two functions CAN NOT be used at the same time.
- 2) Please refer to " OpDes-Antenna\_ NM8PB31200 " for antenna separation distance

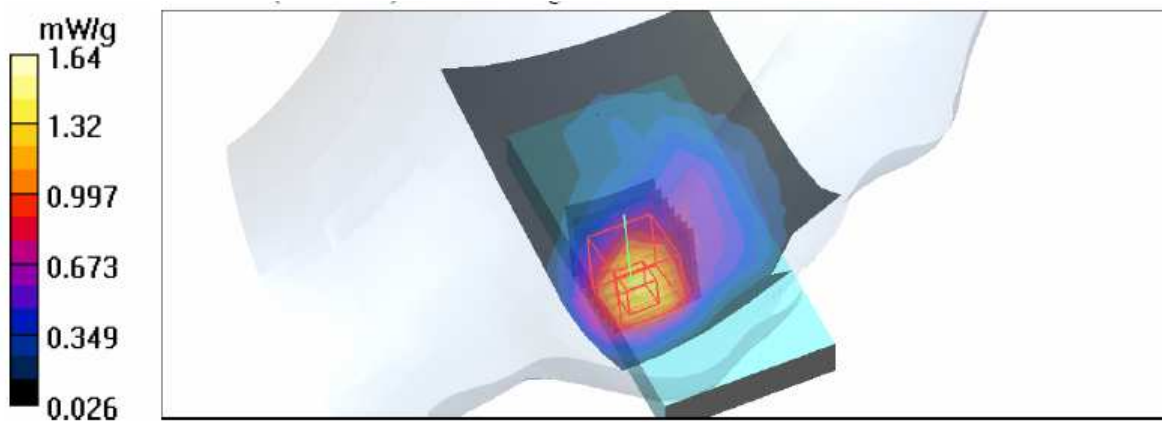
## Peak SAR location

PIC1 is the test plot of M03 of 15.247 SAR report. SAR value is 0.268 W/kg

**PIC1**

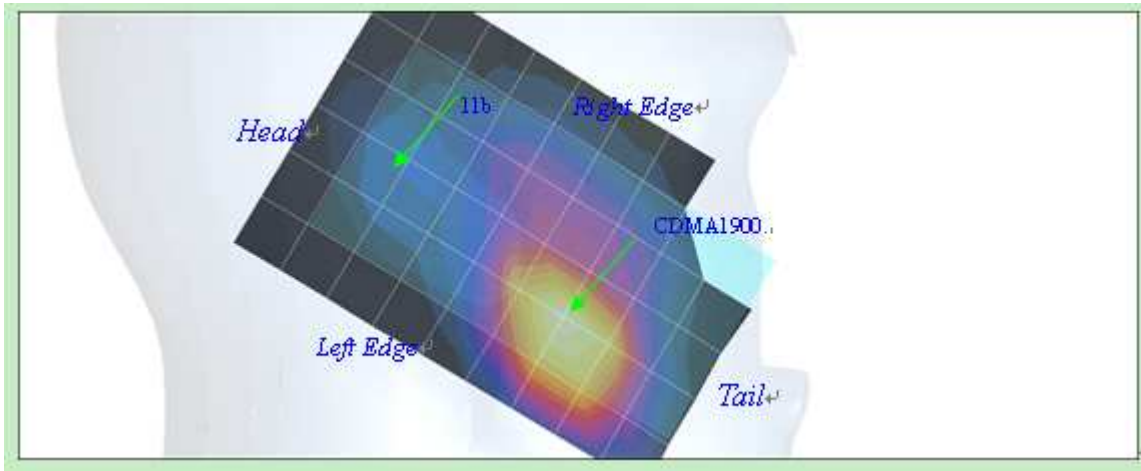


PIC 2 is the test plot of M09 of Part 22/24 SAR report. SAR value is 1.39 W/kg



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PIC 3 is combined with PIC1 and PIC 2. PIC3 is combined by DASY software  
PIC3



**DASY program has a reference point which can help to define the relative location of Peak SAR point. Therefore, distance between 2 PEAK SAR point can be calculated.**

Maxima found : CDMA1900 (68.83 , 252 , -170.5) ; 11b (19.92 , 297.4 , -171.2)

Maxima found:			
Value (mW/g)	X	Y	Z
1.66	68.83	252	-170.5

Maxima found:			
Val...	X	Y	Z
0.372	19.92	297.4	-171.2

Distance between PEAK SAR locations

$$= \sqrt{X^2 + Y^2}$$

$$= \sqrt{(68.83 - 19.92)^2 + (297.4 - 252)^2}$$

$$= 65.28 \text{ mm}$$

$$= 6.528 \text{ cm}$$

## Conclusion:

1. Antenna Separation is 9.12cm > 5cm
2. Sum of SAR is 1.39+0.268 = 1.658W / kg > 1.6 W / kg  
Peak SAR location = 6.528cm  
 $SPLSR = 1.658 / 6.528 = 0.253 < 0.3$

Accordingly, simultaneous Transmission SAR is not required for this EUT