



FCC ID: BEJEVA030SLPN

According to KDB 447498 D01 General RF Exposure Guidance v06, section 4.3.1

SAR Test Exclusion Threshold for < 100 MHz and < 200 mm as per Appendix C

SAR exclusion for 100 MHz at 50 mm is 237 mW.

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):³³

1) For *test separation distances* > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f_{\text{(MHz)}})]$

$$237 * [1 + \log(100/f_{(13.56)})] = 422 \text{ mW}$$

2) For *test separation distances* ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by 1/2

$$422 * (1/2) = 221 \text{ mW}$$

1. SAR test exclusion threshold

Frequency: 13.56MHz, test separation distances ≤ 50 mm.

Max. Tune-up Tolerance (mW)	SAR Test Exclusion Thresholds (mW)
0.000036	422

Remark:

-Based on field strength 10.78 dBuV/m at 30m, so 50.78 dBuV/m at 3m transmit power(eirp) of the device was calculated as 0.000036 mW(3m) using free space formula.

<Collocated analysis>

Condition	Technology (NFC)	Technology (Module BEJ24EM060KGL)	Technology (Module 2AC7Z- ESPS3WROOM1U)		Support (YES/NO)
1	NFC	WWAN	/	/	YES
2	NFC	/	BLE	/	YES
3	NFC	/	/	2.4G WIFI	YES

General Note:

1. $\Sigma(\text{Power Density} / \text{Limit})$: This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)]
2. Considering the WWAN module collocation with the other transmitters of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 4 collocated transmitters is compliant.

For Single RF Source (worst case)					
Operation Band	Antenna Gain (dBi)	Tune-up Limit (dBm)	Power Density at R = 20 cm (mW/m ²)	FCC Limit (mW/m ²)	Power Density / Limit
LTE B41	3.6	23.5	0.102	1.0	0.102
WLAN2.4G	2.33	18	0.021	1.0	0.021
BLE	2.33	12	0.005	1.0	0.005
NFC	0	-44.42	0.00000	0.98	0

Collocated Operations (worst case)		
Max NFC Power Density / Limit	Max WWAN Power Density / Limit	$\Sigma(\text{Power Density} / \text{Limit})$ Of WWAN + NFC
0	0.102	0.102

Collocated Operations (worst case)		
Max NFC Power Density / Limit	Max WIFI2.4G Power Density / Limit	$\Sigma(\text{Power Density} / \text{Limit})$ Of WIFI2.4G + NFC
0	0.021	0.021

Collocated Operations (worst case)		
Max NFC Power Density / Limit	Max BLE Power Density / Limit	$\Sigma(\text{Power Density} / \text{Limit})$ Of BLE + NFC
0	0.005	0.005



0	0.005	0.005
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Data Reference :

Operation Band	FCC ID	Report number
LTE module	BEJ24EM060KGL	4791423656.1-RF-2
WIFI/BLE module	2AC7Z-ESPS3WROOM1U	FD1D1609

2. Conclusion: No SAR is required.