

RF EXPOSURE EVALUATION

KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

EUT Specification

EGO ID Solet Ambo	AND						
FCC ID	2ASCB-49MICDIG						
EUTek Anbote And	49inch Indoor Floor Standing Digital Sign With Camera & MIC, IR Touch						
Frequency band (Operating)	⊠ BLE: 2.402GHz ~ 2.480GHz						
Anbo, A Motek Anbo	⊠ WLAN: 2.412GHz ~ 2.462GHz						
Amboren Amb	☑ RLAN: 5.180GHz ~ 5.240GHz						
ak abotek Anbor A	⊠ RLAN: 5.260GHz ~ 5.320GHz						
All sotek Anboten	⊠ RLAN: 5.500GHz ~ 5.700GHz						
poten And	⊠ RLAN: 5.745GHz ~ 5.825GHz						
abotek Anbors An Lotek	☐ Others:						
Device category	☐ Portable (<20cm separation)						
And tek abotek Anbo	⊠ Mobile (>20cm separation)						
Anbo. Ak Abotek An	Others						
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm2)						
otek Anbotek Anbo	⊠ General Population/Uncontrolled exposure (S=1mW/cm2)						
Antenna diversity	⊠ Single antenna						
Anbore Anboren	☐ Multiple antennas						
Anboren And	☐ Tx diversity						
abotek Anbot A	☐ Rx diversity						
k hotek Anboten Ani	☐ Tx/Rx diversity						
Antenna gain (Max)	BLE: 5dBi						
otek Anbo. ok hotek	Wi-Fi 2.4G: 5dBi						
botek Anbote And	Wi-Fi 5.2G: 5dBi						
ntek Anbotek Anbo	Wi-Fi 5.3G: 5dBi						
Anbore Anbore	Wi-Fi 5.6G: 5dBi						
Anbore Ann	Wi-Fi 5.8G: 5dBi						
Evaluation applied	⊠ MPE Evaluation						
ek abotek Anbore	☐ SAR Evaluation						





Limits for Maximum Permissible Exposure(MPE)

Frequency	Electric Field	Magnetic Field	Power	Average	
Range(MHz)	Strength(V/m)	Strength(A/m)	Density(mW/cm²)	Time	
ek abotek	(A) Limits for	Occupational/Contr	ol Exposures	botek An	
300-1500	SK PILPOLES	And tele-	F/300	6	
1500-100000	stek -nbotek	hotek Anbo k hotek 5.hbore		6 ex	
Anbotek An	(B) Limits for Gene	eral Population/Und	control Exposures	Aupo	
300-1500	Anbore - An	ek anboten	F/1500	6,00,0	
1500-100000	Anbores Anbor	ek - shotek	Anbo, 1	ek 30 mbohe	

Friis transmission formula: Pd=(Pout*G)\(4*pi*R2)

Where

Pd= Power density in mW/cm²

Pout=output power to antenna in Mw

G= gain of antenna in linear scale

Pi=3.1416

R= distance between observation point and center of the radiator in cm Pd the limit of MPE, 1mW/cm2. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Max Measurement Result

Measured Power	Lok boy		Max. Tune Antenna up Power Gain		Power density at 20cm	Power density Limits
(dBm)	(dBr	n)	(dBm)	IBm) (dBi) (mW/ cm	(mW/ cm2)	(mW/cm2)
2.02	2.02	±1	3.02	5	0.0013	abbrek
19.29	19.29	±1	20.29	5,bote	0.0673	1 hotek
17.9	17.9	poten	18.90	5	0.0489	1 hotel
15.37	15.37	±1 ^{te}	16.37	5	0.0273	1 And
16.17	16.17	±1,0	17.17	5	0.0328	hboten 1 Anb
13.5	13.5	±1	14.50	inbolis 5	0.0177	Anbotek A
	Power (dBm) 2.02 19.29 17.9 15.37 16.17	Power toleral (dBm) (dBr 2.02 2.02 19.29 19.29 17.9 17.9 15.37 16.17 16.17	Power tolerance (dBm) (dBm) 2.02 2.02 ±1 19.29 19.29 ±1 17.9 17.9 ±1 15.37 15.37 ±1 16.17 16.17 ±1	Power tolerance up Power (dBm) (dBm) (dBm) 2.02 2.02 ±1 3.02 19.29 19.29 ±1 20.29 17.9 17.9 ±1 18.90 15.37 15.37 ±1 16.37 16.17 16.17 ±1 17.17	Power tolerance up Power Gain (dBm) (dBm) (dBm) (dBi) 2.02 ±1 3.02 5 19.29 ±1 20.29 5 17.9 17.9 ±1 18.90 5 15.37 15.37 ±1 16.37 5 16.17 16.17 ±1 17.17 5	Measured Power Tune up tolerance Max. Tune up Power Antenna Gain density at 20cm (dBm) (dBm) (dBm) (dBi) (mW/ cm2) 2.02 2.02 ±1 3.02 5 0.0013 19.29 19.29 ±1 20.29 5 0.0673 17.9 17.9 ±1 18.90 5 0.0489 15.37 15.37 ±1 16.37 5 0.0328 16.17 16.17 ±1 17.17 5 0.0328

Note: BT&WiFi cannot support simultaneous transmission.

Result: No Standalone SAR test is required.

