



TÜVRheinland®



LAB N° 1356

Report No. 28112975 002

11.8 TEST: RF Exposure Requirements

PASS

Parameters required prior to the test	Laboratory Ambient Temperature (°C)	15 to 35 °C
	Relative Humidity (%)	30 to 60 %
Parameters recorded during the test	Laboratory Ambient Temperature (°C)	---
	Relative Humidity (%)	---
	Air pressure (hPa)	1020
---	Power Supply / Frequency	Application Point
Fully configured sample tested at the power line frequency	24V ac / 60Hz	---
Equipment mode:	Operation mode	#1
FCC Standard	47 CFR 2.1093	
Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines 47 CFR 2.1093 - Radiofrequency radiation exposure evaluation: portable devices		
EUT classification (fixed, mobile or portable devices)	Fixed equipment	
Limits Freq. Range 2402+2480MHz	See next table	



Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

MHz	30	35	40	45	50	mm
150	232	271	310	349	387	SAR Test Exclusion Threshold (mW)
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.



Operating Condition #1

Frequency	Max Conducted Output Power (P)	Numeric Antenna Gain (G)	Max Radiated Output Power (P)	Max Radiated Output Power (P)	Separation distance	Exemption Limit (obtained by linear interpolation) (mW)
(MHz)	(dBm)	/	(dBm)	(mW)	(mm)	
2402	9,77	1,24	11,01	12,61	≥10	19,26
2440	9,66	1,24	10,90	12,30	≥10	19,05
2480	9,25	1,24	10,49	11,19	≥10	18,92

VERDICT

SAR evaluation is not required because the output power value is less than exemption limit (**separation distance ≥10mm**)

Note:

G = Numeric Gain ($10^{(dB/10)}$)