1.1 Applicable Standard

KDB 447498 D01 General RF Exposure Guidance v05

1.2 Specification Limits

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f2)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/150	30
1500-100,000	--	--	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

NOTE: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The limit value 1.0mW/cm^2 is available for this EUT.

1.3 MPE Calculation Method

$$S = PG/(4 \pi R^2)$$

$$R = [PG/(4 \pi S)]^{0.5}$$

where: S = power density (in appropriate units, e.g. mW/ cm^2)
P = power input to the antenna (in appropriate units, e.g., mW)
(the measured power value see Report: F12124 Section 6.6)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

1.4 Calculated Result

2.4.1 Radio Frequency Radiation Exposure Evaluation

DH1

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm
2402	1.33	2.54	1.79	0.000474	1
2441	1.41	2.54	1.79	0.000502	1
2480	1.40	2.54	1.79	0.000499	1

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm
2402	1.33	2.54	1.79	1.0	0.4354
2441	1.41	2.54	1.79	1.0	0.4483
2480	1.40	2.54	1.79	1.0	0.4467

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.4354cm from all persons.

DH5

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2402	1.36	2.54	1.79	0.000485	1.
2441	1.41	2.54	1.79	0.000502	1.
2480	1.38	2.54	1.79	0.000492	1.

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm
2402	1.36	2.54	1.79	1.0	0.4402
2441	1.41	2.54	1.79	1.0	0.4483
2480	1.38	2.54	1.79	1.0	0.4435

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.4402cm from all persons.

3DH1

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2402	0.97	2.54	1.79	0.000345	1.
2441	1.01	2.54	1.79	0.000360	1.
2480	1.00	2.54	1.79	0.000356	1.

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm
2402	0.97	2.54	1.79	1.0	0.3718
2441	1.01	2.54	1.79	1.0	0.3794
2480	1.00	2.54	1.79	1.0	0.3775

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.3718cm from all persons.

3DH5

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2402	0.97	2.54	1.79	0.000346	1.
2441	1.02	2.54	1.79	0.000363	1.
2480	1.01	2.54	1.79	0.000360	1.

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm
2402	0.97	2.54	1.79	1.0	0.3718
2441	1.02	2.54	1.79	1.0	0.3813
2480	1.01	2.54	1.79	1.0	0.3794

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.3718cm from all persons.