









Maximum Permissible Exposure (MPE) & Exposure evaluation

Report identification number: 1-0599/20-07-04 MPE (FCC)

Certification numbers and labeling requirements			
FCC ID	2ASKB-HIRES55V3P1		

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Report no.: 1-0599/20-07-0



EUT technologies:

Technologies:	Technologies: Max. power measured EIRP [dBm]	
77 GHz VRD	15.41	20 dBm

NOTE: Test results taken from CTC Advanced report 1-0599/20-07-02

Prediction of MPE limit at given distance - FCC

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

where: S = Power density

P = Power input to the antenna

G = Antenna gain

R = Distance to the center of radiation of the antenna

PG = Output Power including antenna gain

The table below is excerpted from Table 1B of 47 CFR 1.1310 titled "Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure"

Frequency Range (MHz)	Power Density (mW/cm ²)	ower Density (mW/cm²) Averaging Time (minutes)	
300 -1500	f/1500	30	
1500 - 100000	1.0	30	

where f = Frequency (MHz)

Prediction: worst case

	Technologies:	VRD	
	Frequency (MHz)	77000	
PG	Declared max power (EIRP)	20	dBm
R	Distance	20	cm
S	MPE limit for uncontrolled exposure	1	mW/cm ²
	Calculated Power density:	0.0199	mW/cm ²
	Calculated percentage of Limit:	1.99%	

This prediction demonstrates the following:

The power density levels for FCC at a distance of 20 cm are below the maximum levels allowed by regulations.