

Maximum Permissible Exposure

FCC ID: VRSHSD-0015-Q

Product Name: LCD Monitor

Model No: (1)HSD-0015-Q (2)OMEN X 65 (3)Omen X Emperium 65 Display (4)OMEN X Emperium 65 with NVIDIA G-SYNC HDR (5)OMEN X Emperium 65 Big Format Gaming Display with NVIDIA G-SYNC HDR

1. According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits For Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	...	...	f/300	6
1500-100,000	...	...	5.0	6
(B) Limits For General Population / Uncontrolled Exposure (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

Qisda Corporation declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

2. MPE Calculation

WIFI 2.4G MPE

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.875Numerical**, and the highest power output (P) is **501.187mW**, the power density (S) is **0.186952mW/cm²**.

RF Exposure Calculations:

$$S = (P * G) / (4 * \pi * r^2) \text{ or } r = \sqrt{(P * G) / (4 * \pi * S)}$$

Where :

Based on safety distance (r)=	20 cm	
Highest Power Output (P)=	27 dBm =	501.187 mW
Antenna Gain (G)=	2.73 dBi =	1.875 Numerical
MPE (S) = (P*G) / (4*π*r ²) =	= (501.187*1.875)/(4*π*20²)= 0.186952 mW/cm²	

WIFI 5G MPE

Based on safety distance (r) **20cm**, the antenna gain (G) is **2.432Numerical**, and the highest power output (P) is **158.489mW**, the power density (S) is **0.276682mW/cm²**.

RF Exposure Calculations:

$$S = (P * G) / (4 * \pi * r^2) \text{ or } r = \sqrt{(P * G) / (4 * \pi * S)}$$

Where :

Based on safety distance (r)=	20 cm		
Highest Power Output (P)=	22 dBm =	158.489 mW	
Antenna Gain (G)=	3.86 dBi =	2.432 Numerical	
MPE (S) = (P*G) / (4*π*r ²) =	= (158.489*2.432)/(4*π*20²)=		0.076682 mW/cm²

BT MPE

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.875Numerical**, and the highest power output (P) is **10.000mW**, the power density (S) is **0.003730mW/cm²**.

RF Exposure Calculations:

$$S = (P * G) / (4 * \pi * r^2) \text{ or } r = \sqrt{(P * G) / (4 * \pi * S)}$$

Where :

Based on safety distance (r)=	20 cm		
Highest Power Output (P)=	10 dBm =	10.000 mW	
Antenna Gain (G)=	2.73 dBi =	1.875 Numerical	
MPE (S) = (P*G) / (4*π*r ²) =	= (10.000*1.875)/(4*π*20²)=		0.003730 mW/cm²

MPE			
WIFI 2.4G (mW/cm ²)	BT (mW/cm ²)	Total (mW/cm ²)	Limit (mW/cm ²)
0.186952	0.003730	0.190682	≤ 1

Sincerely Yours,



Mr. Ben Cheng
 Manager
 AUDIX Technology Corporation