



## FCC RF EXPOSURE REPORT

FCC ID: Y3H306020180409

Project No. : 1801C044

Equipment : Wireless Video Transmission System

Model Name

Applicant : Shenzhen Crystal Video Technology Co.,LTD.

: F13, F518 Idea Land, Baoyuan Road, Baoan Central Address

Area, Shen Zhen, China

According: : FCC Guidelines for Human Exposure IEEE

C95.1 & FCC Part 2.1091

# BTL INC.

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### MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

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

### Table for Filed Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Dipole	R-SMA	4.5
2	N/A N/A		Dipole	R-SMA	4.5
3	N/A	N/A	Dipole	R-SMA	4.5
4	N/A	N/A	Dipole	R-SMA	4.5

#### Note:

The EUT incorporates a MIMO function. Physically, the EUT provides four transmitters (4T), all transmit signals are completely uncorrelated, then, **Direction gain = Gant**, that is Directional gain=4.5.





# **TEST RESULTS**

EUT:	Wireless Video Transmission System	Model Name :	3060
Temperature:	<b>25</b> ℃	Relative Humidity:	55 %
Test Voltage:	AC 120V/60Hz		

#### 5G Band UNII-1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
4.5	2.8184	23.28	213.025	0.11950	1	Complies

### 5G Band UNII-3

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
4.5	2.8184	24.04	253.797	0.14238	1	Complies

Note: the calculated distance is 20 cm.