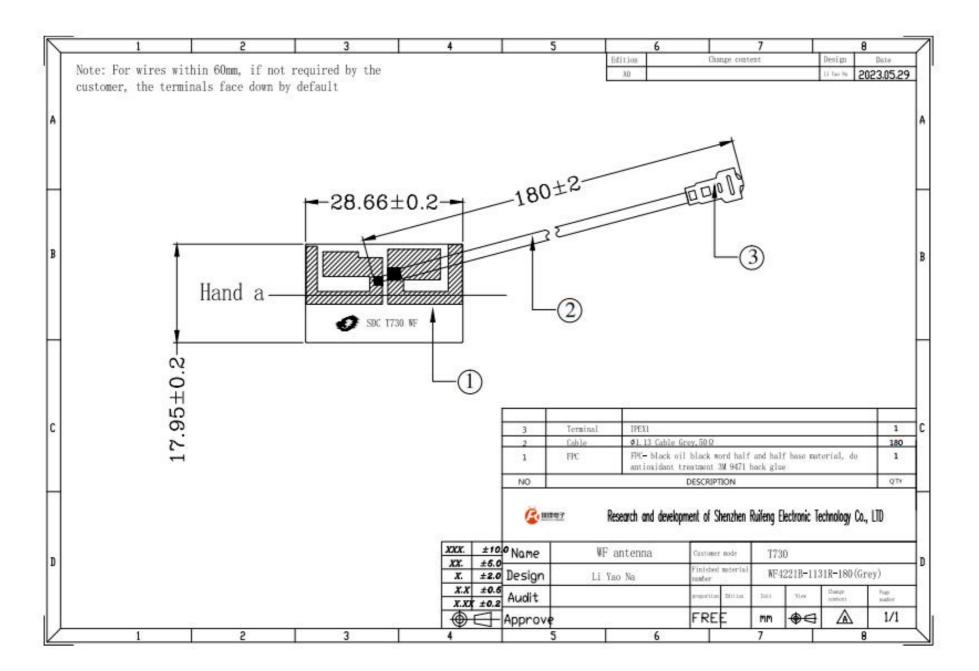
# **Product Specifications for Approval**

Customer name:ValueHD Corporation Model:T730 Antenna frequency band: WIFI2.4G/5.8G/BT Revision: <u>R-A</u> Production date: <u>2023-01-12</u>



# **1. Project information and Electrical Specification**

Those specifications were specially defined for ValueHD Corporation **T730**, *WIFI2.4G/5.8G/BT*, and all characteristics were measured under the model's handset testing jig.

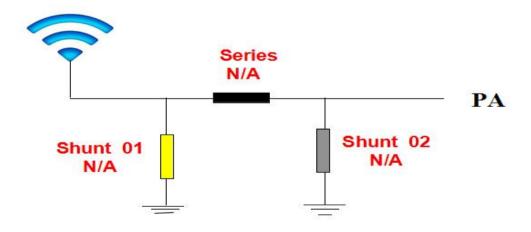
1-1 Antenna picture (See the drawings from page 2-4)

1-2 Frequency Band:

Frequency Band	MHz
WIF12.4G/5.8G/BT	2400-5850 (MHz)

#### 1-3 Impedance matching

Antenna



2.VSWR

## **Measuring Method:**

1. A 50  $\Omega$  coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,

2. Keeping this jig away from metal at least 20cm. VSWR parameter value



MHZ		2400 <sup>2</sup>		2450 2		2500	5150		5350	5550	5750	5850	
Ω		35. 9		42.6		51.5	67.8	67.8		55.6	54. 2	56.4	
MHZ 2		400	2450		2	2500	5150	Ę	5350	5550	5750	5850	
VSWR 1.		. 41	1.19		1	. 21	1.37	1.17		1.11	1.22	1.13	
MHZ 2400		45	0	25	00 5	5150	5	350	5550	5750	5850		
Return loss	-15.	. 25 -	-21	. 24	-2	0.6	15.97		21.74	-25. 34	-20. 01	-24. 01	

MHZ		2400		2450		2500		5150		5350	5550	5750	5850
Ω		29.48	3	34. 43	}	46. 56		55.31	ļ	53.26	47.55	39.5	39. 29
MHZ	24	400	24	450	2	500	5	150	5	350	5550	5750	5850
VSWR	1.	. 78	1.	. 46	1.	. 13	1	. 1	1	. 09	1.2	1.23	1.28
MHZ	240	0	245	0	250	00	51	50	53	50 5	5550	5750	5850
Return loss	-11.	. 02	-14	. 69	-24	. 79	-2!	5.94	-2	6. 78 -	-20. 77	-18.61	-18. 17

## 3. Efficiency and Gain\*measuring and test instruments:

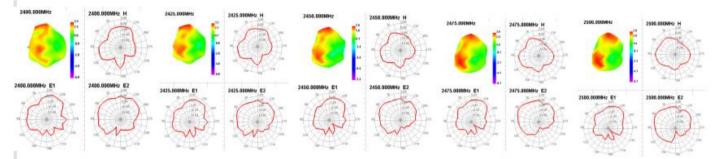
Microwave anechoic chamber, Agilent network analyzer, Agilent spectrum analyzer, 8960 comprehensive tester, standard antenna \*test method:

The equipment is fixed on the center of the turntable with the H surface on the same horizontal line as the center of the horn antenna.

WIFI2. 4G/5. 8G/BT

Efficiency/Gain-

	Passive Test For 2.4G													
Freq	Effi	Effi	Gain	Gain	UHIS	DHIS	Max	Min	irectivit	Beanwidth	AttH	AttV		
(MHz)	(%)	(dB)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)	(dBi)	(3dB)	(dB)	(dB)		
2400	57.93	-2.37	3.14	0.99	41.66	16.268	3.14	-20.86	5.52	45	48.93	49.09		
2425	57.93	-2.37	3.19	1.04	42.882	15.047	3.19	-17.77	5.56	45	49.1	49.23		
2450	46.61	-3.32	2.6	0.45	35.563	11.046	2.6	-18.09	5.92	45	49.24	49.26		
2475	58.55	-2.32	3.89	1.74	45.782	12.766	3.89	-21.98	6.22	45	49.98	49.91		
2500	61.38	-2.12	3.94	1.79	48.037	13.342	3.94	-19.47	6.06	45	49.71	49.62		



	Passive Test For 5.8G													
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)		
5150	44.06	-3.56	3.22	1.07	21.838	22.221	3.22	-21.24	6.78	15	61.1	60.72		
5250	51.42	-2.89	3.5	1.35	26.132	25.285	3.5	-17.17	6.39	15	61	60.69		
5350	46.11	-3.36	2.93	0.78	24.225	21.883	2.93	-25.7	6.29	45	60.61	59.93		
5450	58.08	-2.36	4.18	2.03	31.164	26.92	4.18	-15.68	6.54	45	62.77	61.52		
5550	51.35	-2.89	3.82	1.67	25.862	25.487	3.82	-19.29	6.71	60	62.14	60.69		
5650	55.81	-2.53	3.61	1.46	28.331	27.477	3.61	-30.26	6.15	75	64.09	62.89		
5750	53.73	-2.7	3.75	1.6	28.387	25.344	3.75	-17.68	6.44	60	63.14	62.22		
5850	61.39	-2.12	4.83	2.68	33.896	27.491	4.83	-21.75	6.95	60	64.81	63.97		

