

Date:	Revision:	Updates and changes:	Issued by:
2026-06-024	A	First	Raoul.RAO

Customer	Company name	Viture
	Project name	S2-VONDER Intelligence Eyewear
Antenna manufacturer	Company name	Quectel Wireless Solutions Co., Ltd.
	Address	Hefei R&D Center: Building 1-C, China Speech Valley Area A, 3335 Xiyou Road, High-tech Zone, Hefei, Anhui 230088, China
Test location	Company name	Quectel Wireless Solutions Co., Ltd.
	Address	Hefei R&D Center: Building 1-C, China Speech Valley Area A, 3335 Xiyou Road, High-tech Zone, Hefei, Anhui 230088, China
Test Personnel	Name(Full name)	Raoul.RAO
	E-mail	Raoul.rao@quectel.com
	Tel/Mobile	18028787963
Testing date		20260624
SAR minimum separation(mm)	FCC (1g)	0.85
Wireless Type		Bluetooth (2400MHz~2500MHz)
Product Model		V1269
Antenna Type		PIFA

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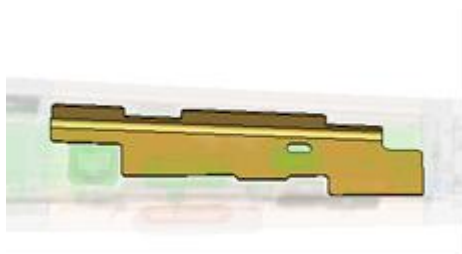
1 Descriptions of Antennas

S2-VONDER Intelligence Eyewear contains 2 antennas: One antenna on the left temple and one on the right temple.
Both antennas are internal FPC antennas.

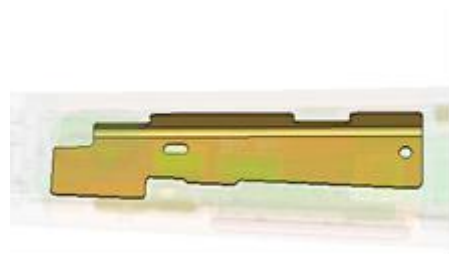
1.1 Part number

BT Antenna_L part number is **Y0CEA0CH8AA**.
BT Antenna_R part number is **Y0CEA0CH8BA**.

1.3 Structures of antennas



VSWR of BT Antenna_L



VSWR of BT Antenna_R

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2 Electrical Performance

2.1 Measurement Set-up

2.1.1 VSWR and return loss

VSWR measurements (S_{11}) were performed using an Agilent ENA Aeries Network Analyzer E5071C and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

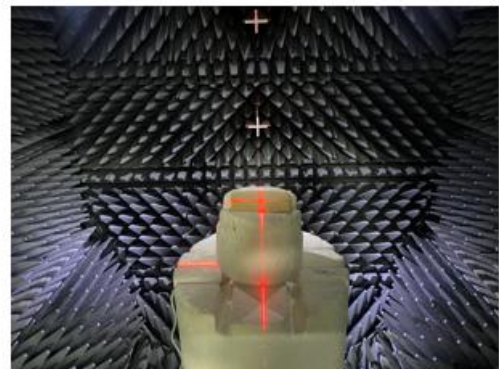
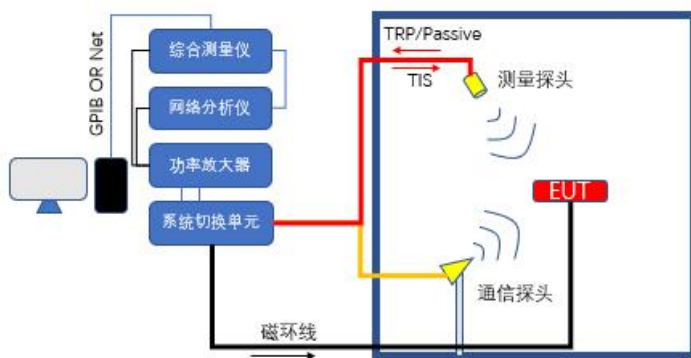
2.1.1 Efficiency

The OTA of the antenna was measured in Quectel's 3D anechoic chamber in hefei, China. The chamber is an GTS2800 system capable of doing tests from 400MHz to 6GHz. The efficiency of the antenna was measured in Quectel's 3D anechoic chamber in hefei, China. The chamber is an SY-68 system capable of doing tests from 400MHz to 8.5GHz. Coaxial chokes on the feed cable were used to mitigate surface currents during passive tests. The measurement results are calibrated using dipole standards.

2.1.2 Equipment list

Radiated Setup

ID#	Device	Type/Model	Manufacturer	Cal.Date	Cal.Due Date
1	Anechoic Chamber	GTS Rayzone 2800	GTS	16-Mar-2026	7-Mar-2027
2	Network Analyzer	E5071C	Keysight	25-Dec-2025	26-Dec-2026
3	Anechoic Chamber	SY-68	SUNYIELD	20-Apr-2026	21-Apr-2027
4	Network Analyzer	ZND	ROHED&SCHWARZ	20-Mar-2026	21-Sep-2027



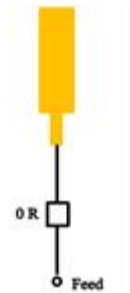
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2.2 Reference measurement data

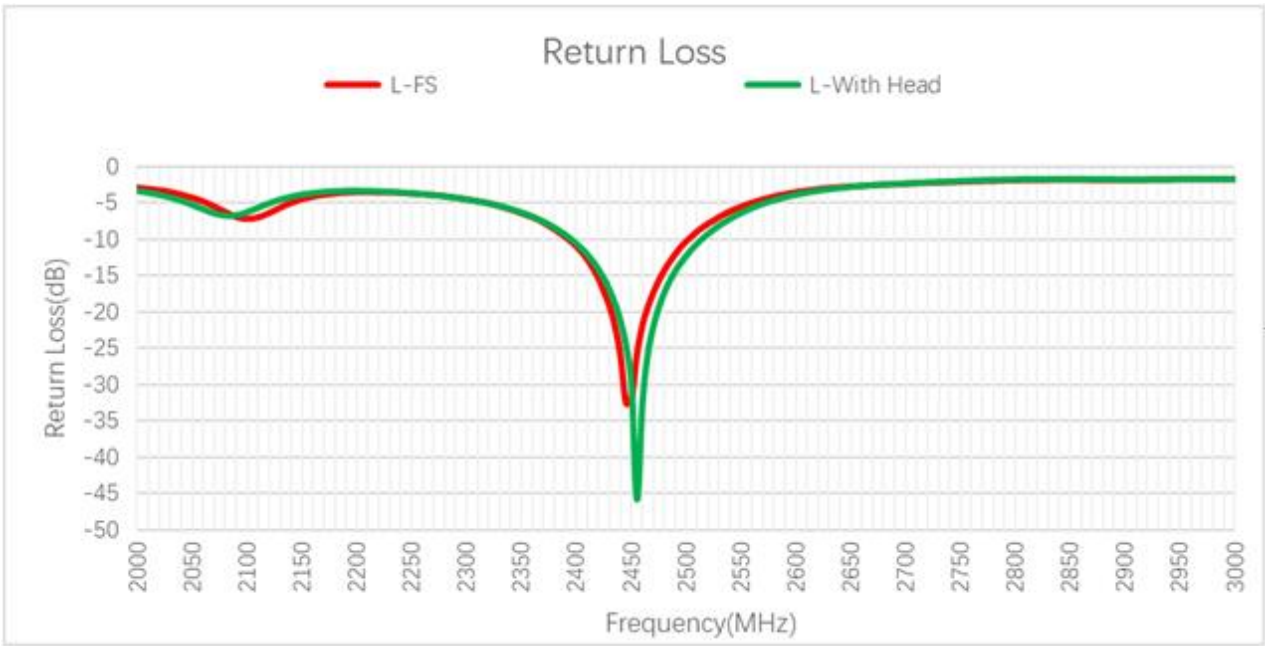
2.2.1 BT Antenna_L



BT Antenna_L



Matching Circuit for BT Antenna_L

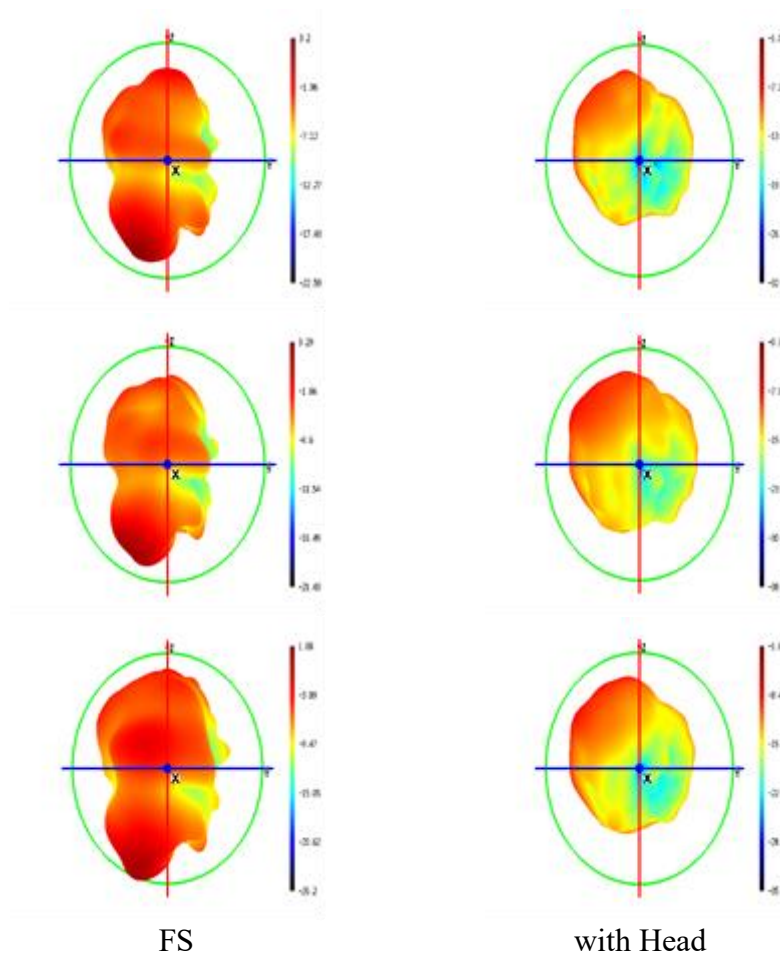


S11 of BT Antenna_L

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Left Temple				
Frequency(MHz)	Efficiency_dB		Gain_dBi	
	FS	with head	FS	with head
2400	-3.28	-7.68	2.4	-1.55
2410	-3.28	-7.64	2.56	-1.72
2420	-3.22	-7.43	2.42	-1.72
2430	-3.05	-7.1	2.39	-1.51
2440	-2.92	-6.87	2.54	-1.22
2450	-2.96	-6.81	2.79	-0.86
2460	-3.2	-6.86	2.75	-0.67
2470	-3.65	-7.05	2.35	-0.81
2480	-4.01	-7.26	1.62	-1.53
2490	-4.05	-7.28	1.5	-1.8
2500	-3.95	-7.11	1.18	-2.15

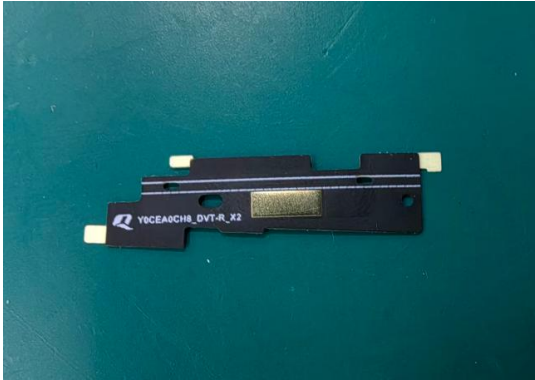
Efficiency of BT Antenna_L



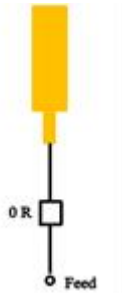
Radiation Pattern

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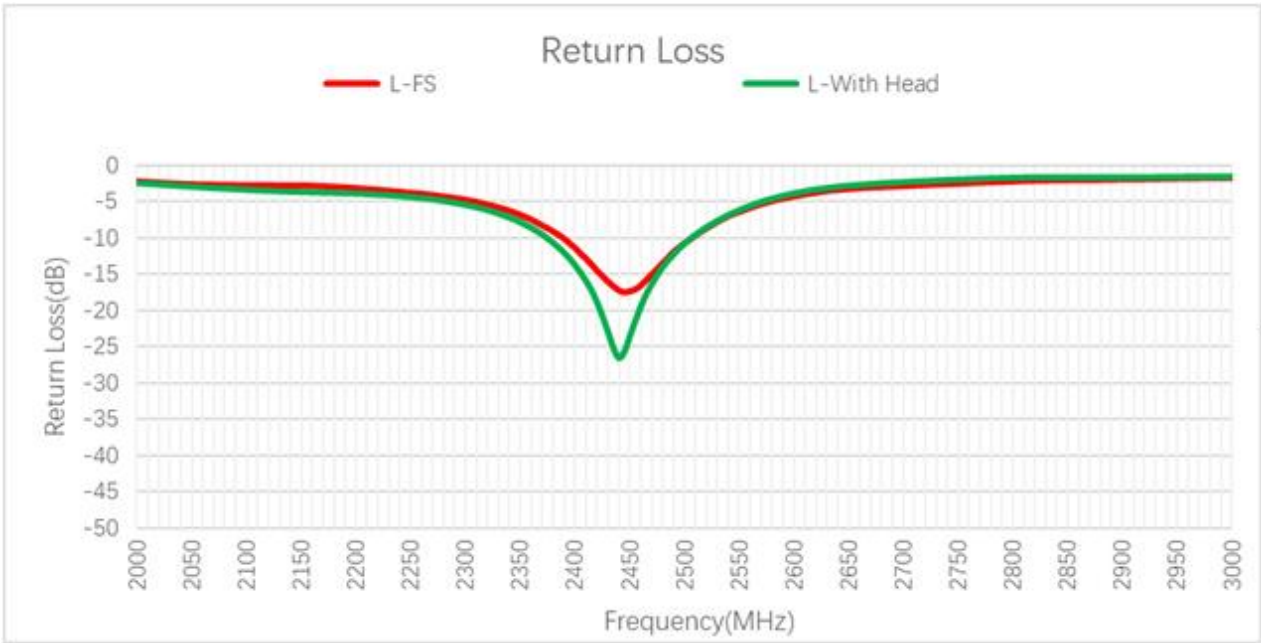
2.2.2 BT Antenna_R



BT Antenna_R



Matching Circuit for BT Antenna_R

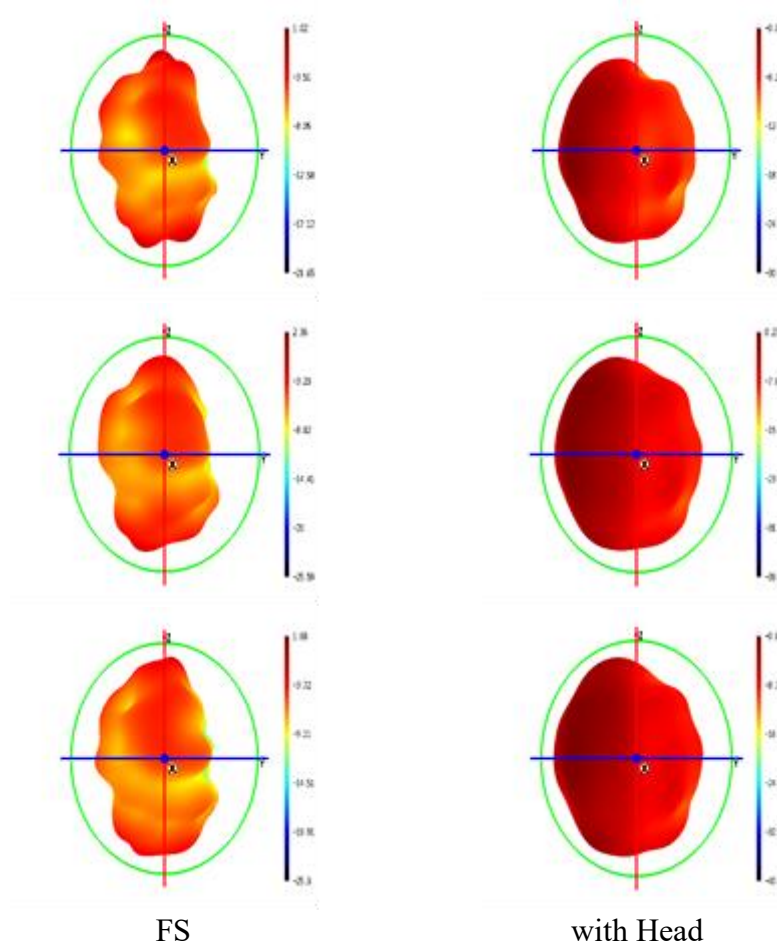


S11 of BT Antenna_R

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Right Temple				
Frequency(MHz)	Efficiency_dB		Gain_dBi	
	FS	with head	FS	with head
2400	-4.33	-7.1	1.02	-0.09
2410	-4.34	-7.06	1.28	-0.32
2420	-4.2	-6.83	1.31	-0.35
2430	-3.85	-6.46	1.67	-0.17
2440	-3.62	-6.2	2.07	0.04
2450	-3.62	-6.13	2.36	0.27
2460	-3.7	-6.19	2.3	0.37
2470	-3.8	-6.4	1.92	0.18
2480	-3.84	-6.62	1.63	-0.47
2490	-3.82	-6.67	1.57	-0.64
2500	-3.62	-6.56	1.68	-0.88

Efficiency of BT Antenna_R



Radiation Pattern

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2.2.3 Active

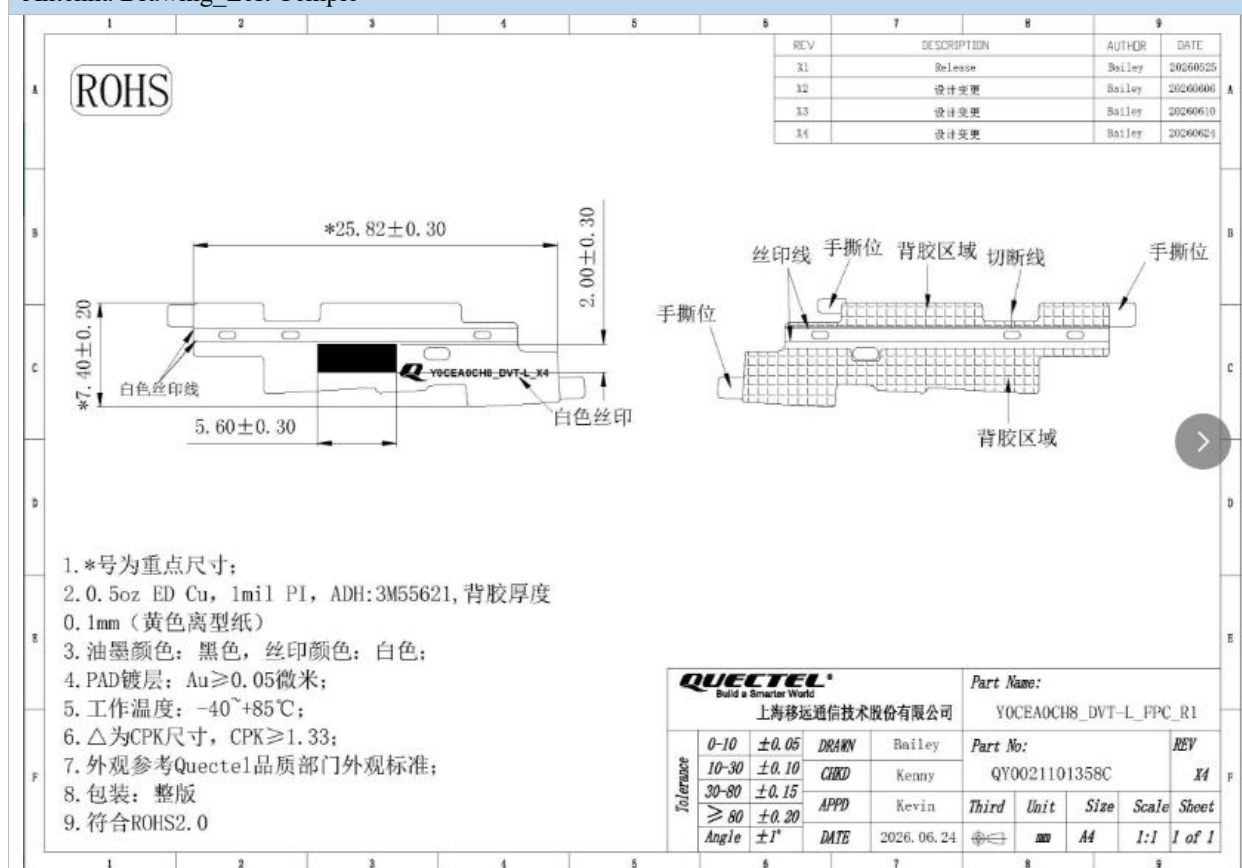
Right Temple								
Mode	Channel	Frequency/MHz	FS_R	Conducted Tx power	FS_R	Conducted Rx Sensitivity	FS_R	Unit
			TRP		TIS		EIRP	
BR	CH0	2402	7	9.41	-91.2	-95	9.5	dBm
	CH39	2441	7.3	9.58	-91.4	-95	9.8	dBm
	CH78	2480	6.4	9.42	-91	-95	8.9	dBm
Mode	Channel	Frequency/MHz	Head_R	Conducted Tx power	Head_R	Conducted Rx Sensitivity	Unit	
			TRP		TIS			
BR	CH0	2402	3.3	9.41	-86.5	-95	dBm	
	CH39	2441	3	9.58	-87.2	-95	dBm	
	CH78	2480	2.6	9.42	-86.1	-95	dBm	

Left Temple								
Mode	Channel	Frequency/MHz	FS_L	Conducted Tx power	FS_L	Conducted Rx Sensitivity	FS_L	Unit
			TRP		TIS		EIRP	
BR	CH0	2402	7.2	9.78	-85.8	-95	10.2	dBm
	CH39	2441	7	9.77	-87.8	-95	10	dBm
	CH78	2480	6.5	9.68	-86.6	-95	9.5	dBm
Mode	Channel	Frequency/MHz	Head_L	Conducted Tx power	Head_L	Conducted Rx Sensitivity	Unit	
			TRP		TIS			
BR	CH0	2402	3.4	9.78	-81.6	-95	dBm	
	CH39	2441	2.8	9.77	-83.5	-95	dBm	
	CH78	2480	2.2	9.68	-82.7	-95	dBm	

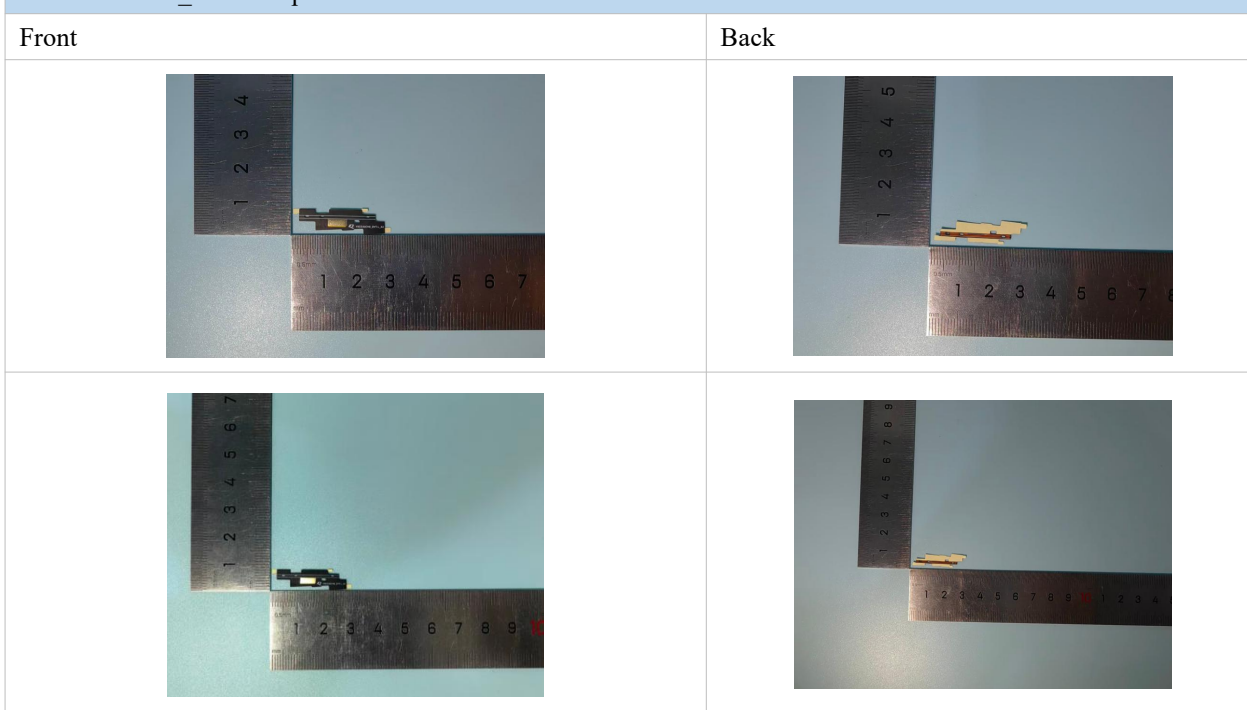
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3 Antenna Photographs

Antenna Drawing Left Temple

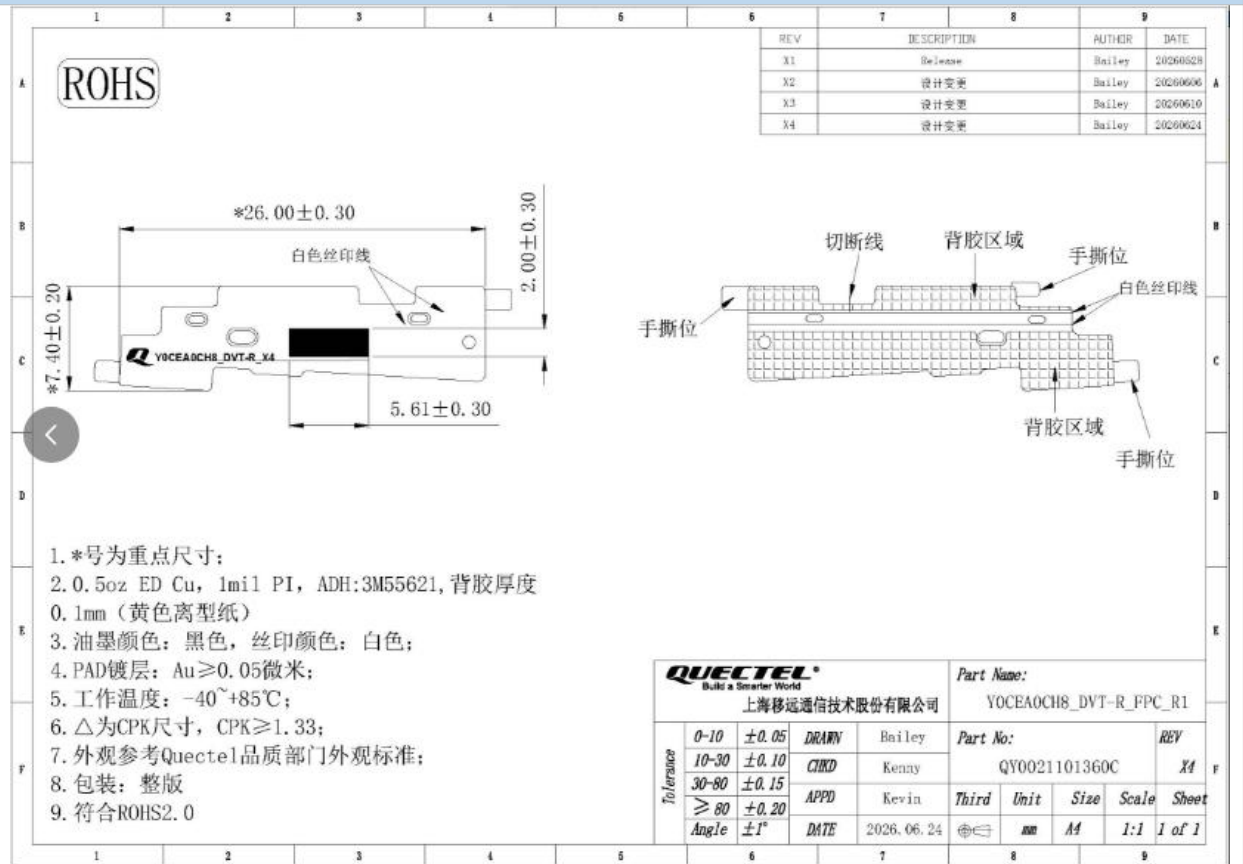


Antenna Photo_Left Temple



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Antenna Drawing_Right Temple



Antenna Photo_Right Temple



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