

RFDPA191900SF5B801

Specification

Part Series	WIFI DAS Antennas
Part No.	RFDPA191900SF5B801
Version	V0.1

Contents

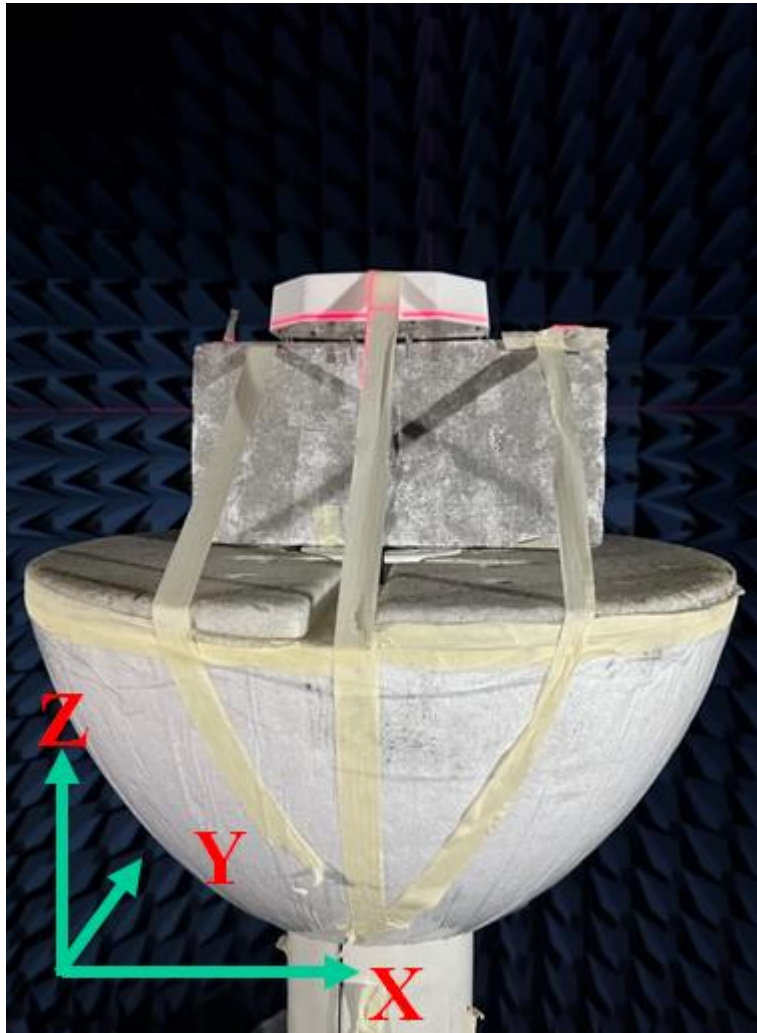
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1. Performance

1.1 Antenna Performance

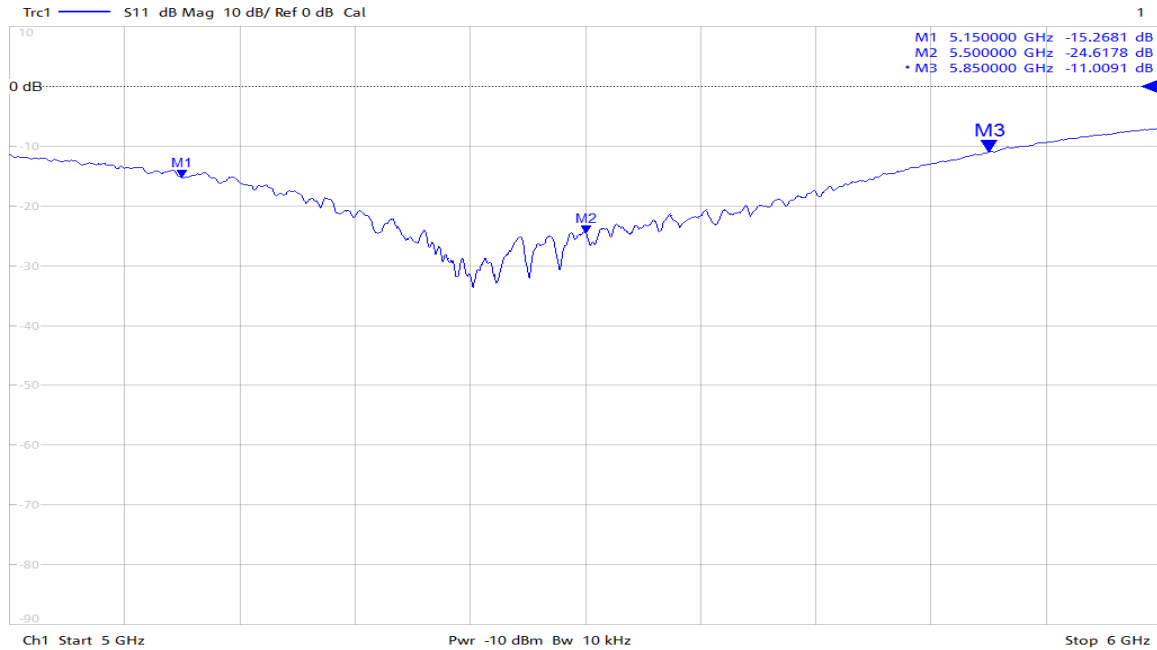
Item	Specification
Frequency Range	5150 ~ 5850 MHz
Impedance	50 Ohm Nominal
VSWR	2.0 (Max)
Return Loss	-10dB(Max)
Peak Gain	17.99 dBi
Radiation	directional
Polarization	Linear Vertical
Operation Temperature	-20°C ~ +65°C

1.2 Experimental Setup



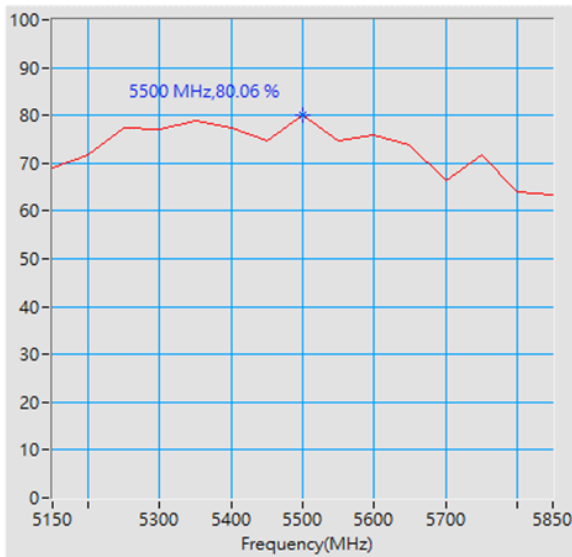
1.3 Antenna S-Parameter and Matching Factor

Return Loss & Isolation

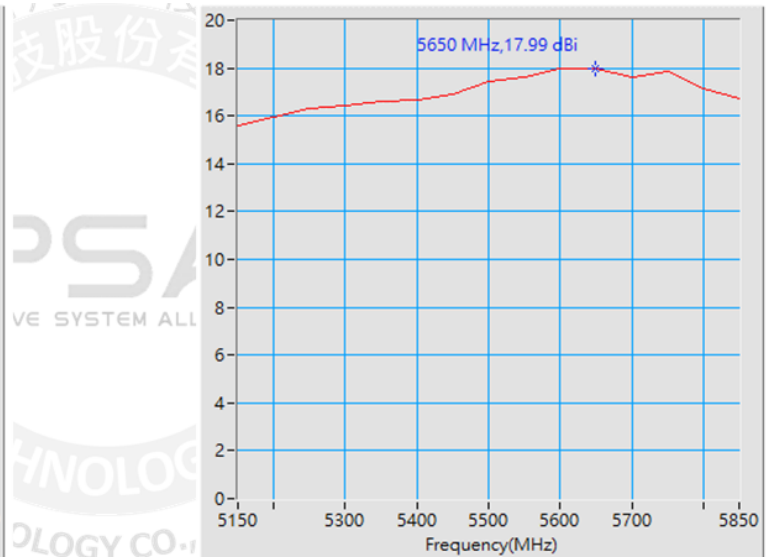


1.4 Antenna Efficiency & Peak Gain

5150-5850 MHz



Maximum Efficiency at 5500 MHz : 80 %

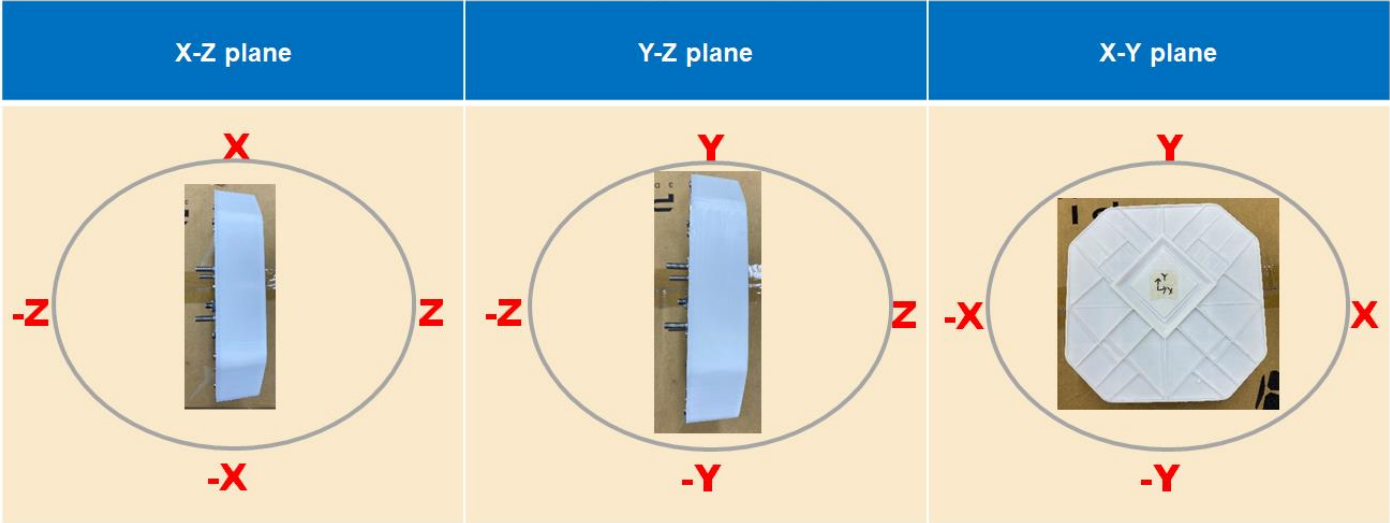


Maximum Peak Gain at 5650 MHz : 17.99 dBi

	Port1	
Frequency (MHz)	Efficiency (%)	Peak gain (dBi)
5150	68.9	15.57
5500	80.1	17.46
5850	63.4	16.73

1.5 Radiation Pattern

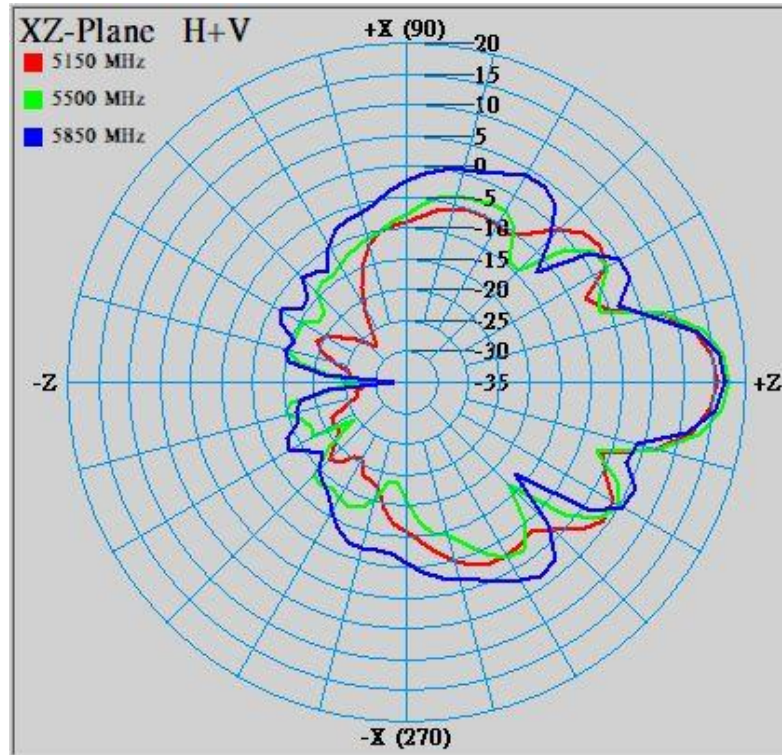
3 views of antenna



X-Z Plane

Phi=0.00deg

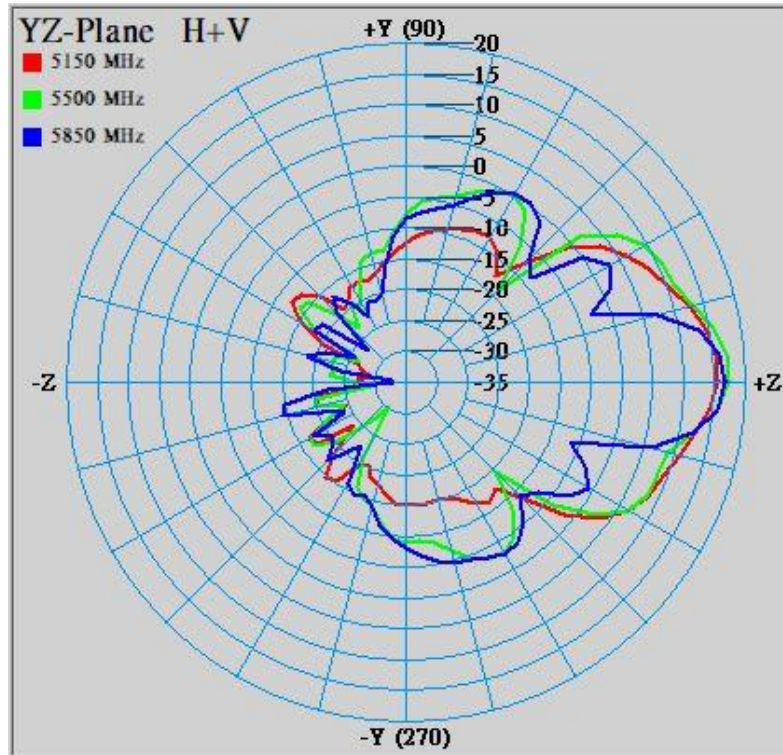
Gain . dB



Y-Z Plane

Phi=90.00deg

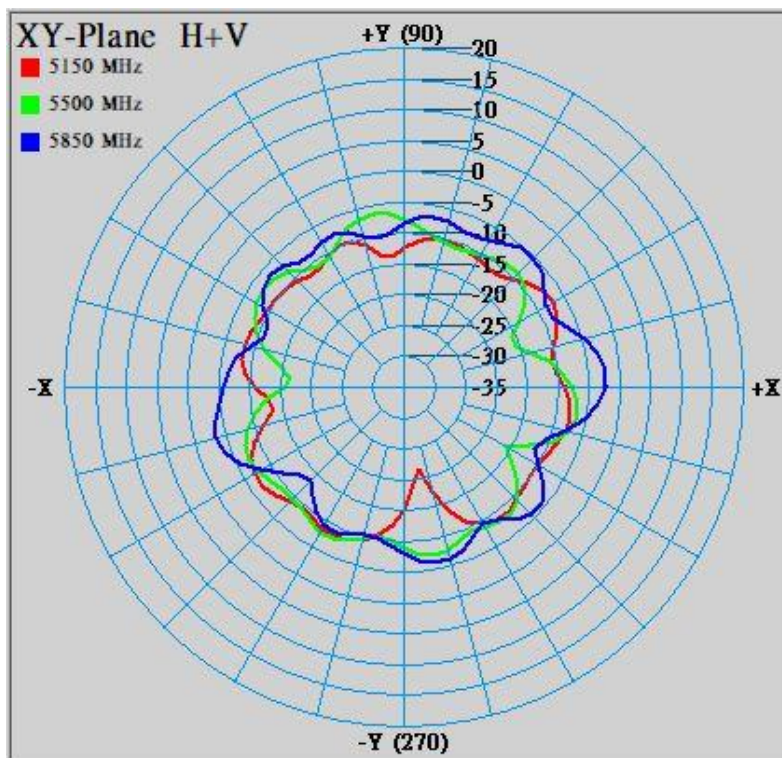
Gain . dB



X-Y Plane

Theta=90.00deg

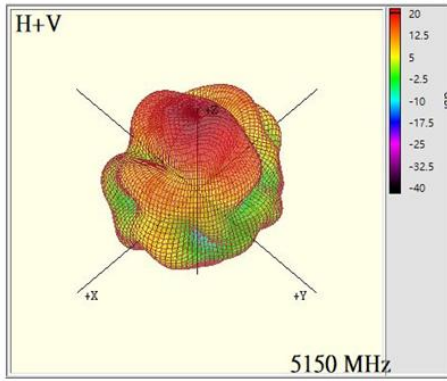
Gain . dB



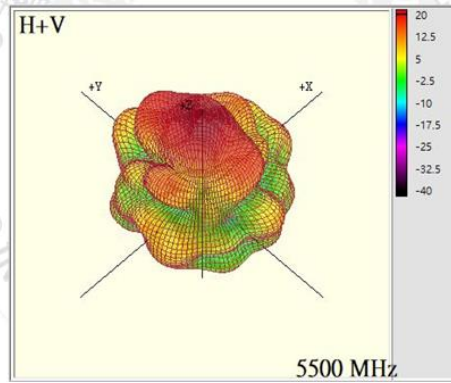
	ZX plane		ZY plane		XY plane	
Frequency [MHz]	3dB BW [deg]	Max Value [dB]	3dB BW [deg]	Max Value [dB]	Max Value [dB]	Average [dB]
5150	19.13	15.45	25.21	15.57	-6.94	-9.76
5500	17.71	17.27	19.67	17.46	-6.54	-9.19
5850	16.14	16.73	17.47	16.73	-2.28	-7.06

Port1

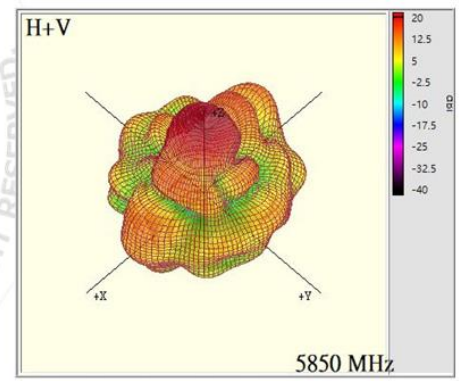
5150MHz



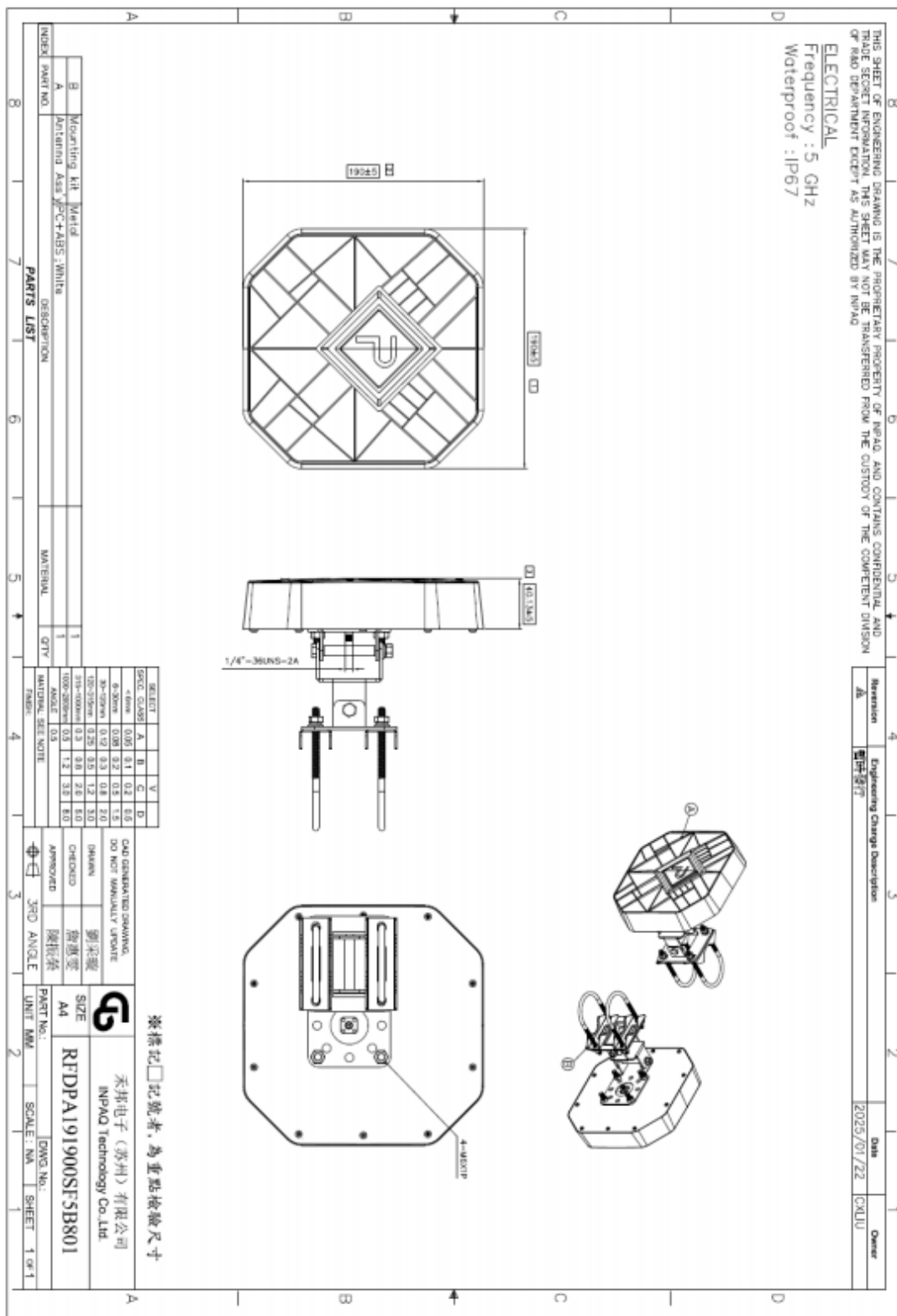
5500MHz



5850MHz



2. Mechanical Specification



3. Ordering Information

RF	DPA	1919	00	S	F	5	B	8	01
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 1919 Length 190mm, Width 190mm	2 digits for cable length e.g.: 00 None Cable	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band M:LTE+Sub 6G+5G N: NFC T: LTE band W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 6:RG316 7:Ø1.37 8:RG178	01~99 series number

4. Version

版本 REV.	修訂者 EDITOR	修訂頁次 PAGE	修訂內容 ITEMS OF CHANGE	申請日期 DATE	生效日期 VALID DATE	ECN 編號 ECN NO.
P0	CXLIU	ALL	Temporary Release	2025/01/22	According to the date of PLM Release	N/A