



SPECIFICATION

Shenzhen DreamLNK Technology Co., Ltd.
深圳市骏晔科技有限公司

Umbrella-shaped 5.8Ghz Antenna

Product Specification

Client Name		Frequency Band	5.15-5.85GHz
Wire Name		Version	A1
Customer's Part Number		DreamLNK's Part Number	DL-ANT-G58F02
RF Designer	Tom Lee	RF Manager	Knight Ai
Structural Designer		Structural Design Manager	
Technical Director		Date	2020-06-20

Client confirmation:

Whether the product meets your requirements? OK NG

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1. Photo

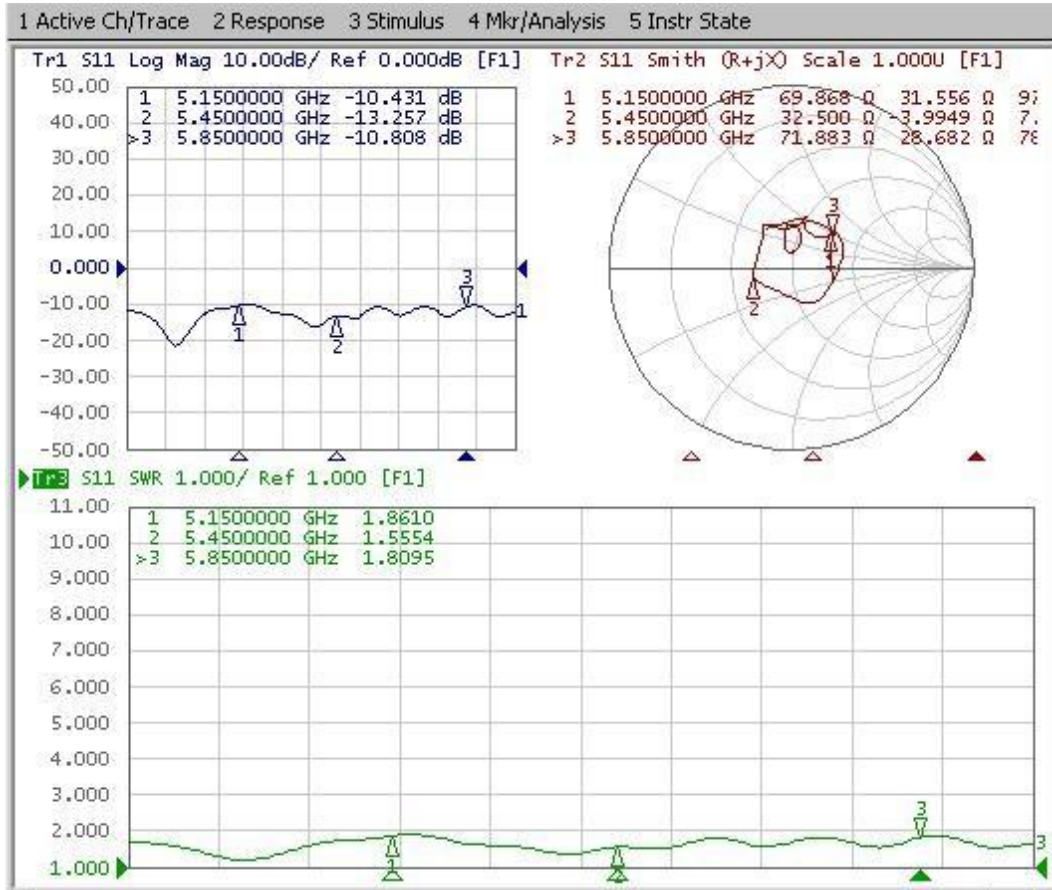


2. Parameters

Test parameters			
Product Name	5.8G Umbrella-shaped Antenna	Model No	DL-ANT-G58F02
Electrical Specifications			
Frequency Range	5.15~5.85GHz	Polarization	Vertical
Input Impedance	50Ω	Radiation direction	Omni-directional
VSWR	≦2.0	Max Power	10W
Gain	3.5 dBi	Return Loss	-8.0dB MAX
Mechanical Specifications			
Dimensions	104.5*35mm	Color	Black
Connector Model	RP-SMA-J	Cable Length	RG141, L=78mm
Antenna Material	ABS + Copper	Storage Temp.	-40℃ ~ +85℃
Working Temperature	-40℃ ~ +80℃	Relative Humidity	40~85%

3. S11 Data (VSWR, Return loss, Smith)

V.S.W.R & Return Loss

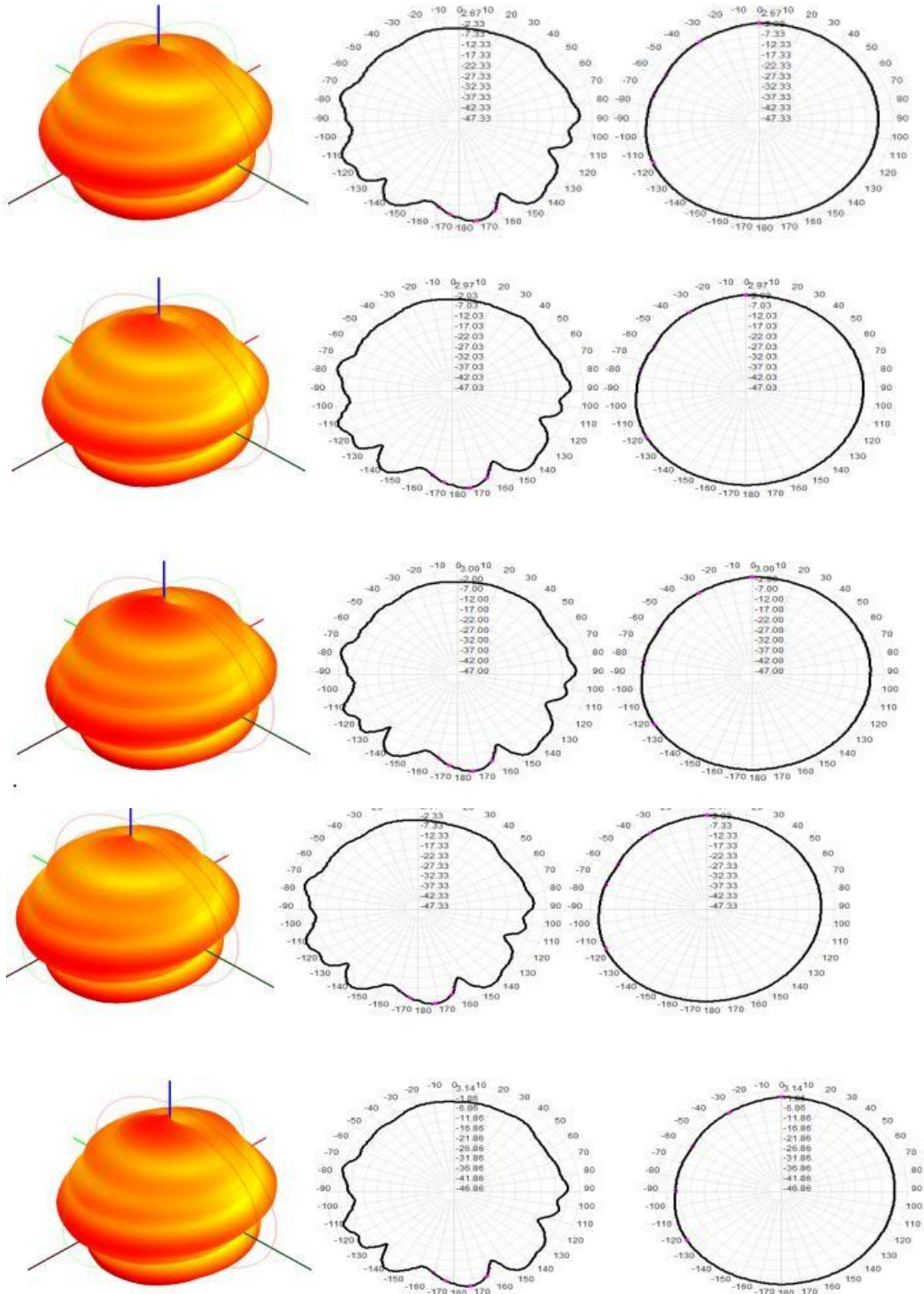


Gain & efficiency

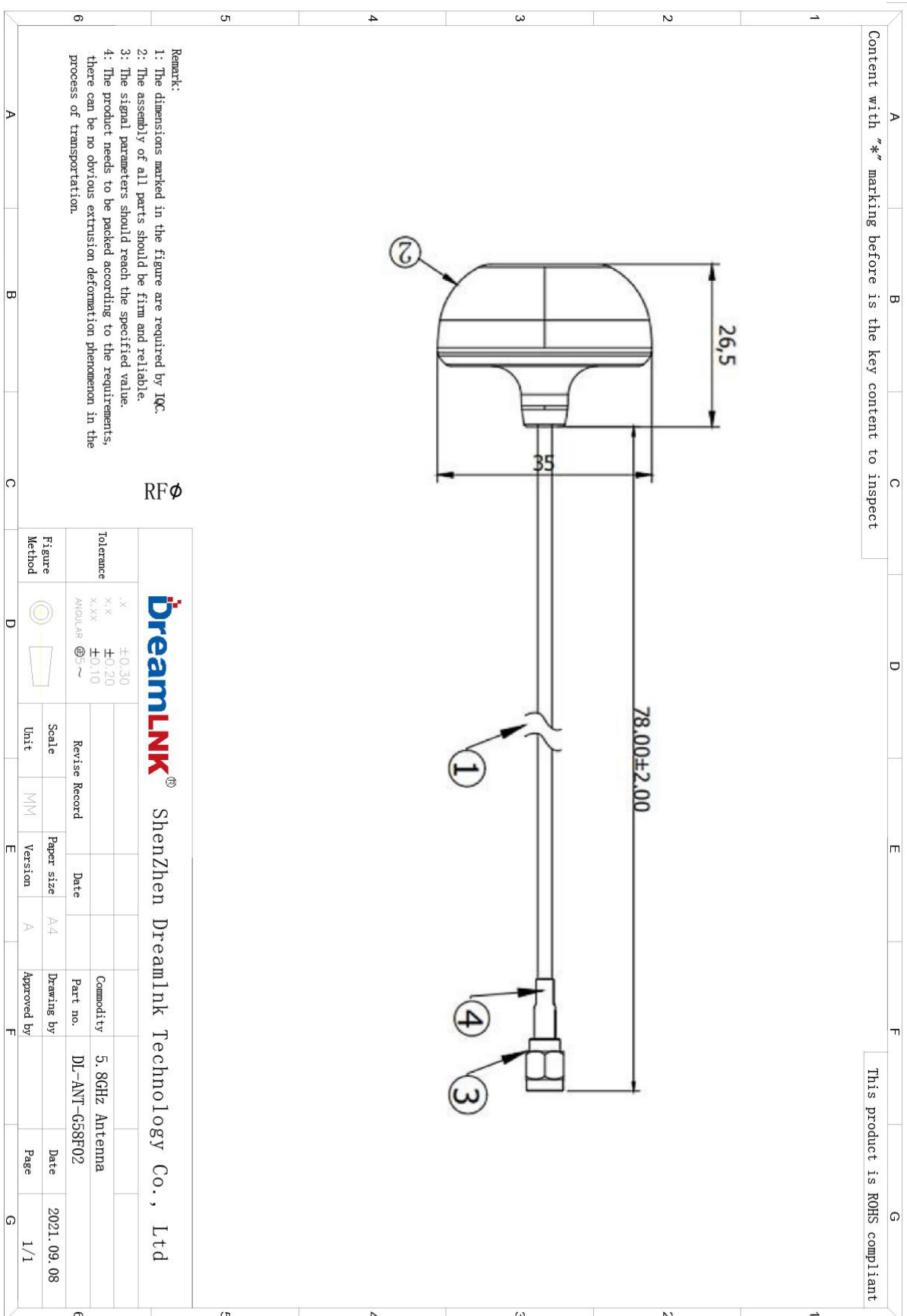
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Frequency (MHz)	5100	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	2.67	3.37	3.41	3.48	3.15	3.24	2.95	3.02	3.07	2.83	2.73	2.92	2.71	2.63	2.58	2.67
Efficiency (%)	51.62	56.84	57.86	55.94	56.07	54.51	55.43	51.87	57.26	51.98	56.86	52.07	55.07	53.65	52.47	52.34

The information provided by us should be kept strictly confidential, and it is not allowed to disclose to anyone else or other companies, without prior written consent

Radiation pattern



4. Structure diagram



5. Environmental reliability test report

5.1 Environmental Testing

High and low temperature humidity test report									
Project Name	High temperature, low temperature and constant humidity test								
Product Name	5.8G Umbrella-shaped Antenna	Testing Date	2020-05-21						
Testing Equipment	Constant temperature and humidity test chamber network analyzer	Test QTY.	5PCS						
Inspection Standard	Metal surface coating: no shedding, no crack, no wrinkle or other defects; Non-metallic parts: no discoloration, no rupture, no deformation, no degumming or other defects. Electrical test should meet design requirements; VSWR test qualified.								
Name of Test	Testing Project	Requirement	Standard	Data	Testing Result				
					Sample	Result			
High Temperature Test	Temperature (°C)	+85±3	Industry standard	+85	1	Pass			
	Recovery time (h)	1		1	2	Pass			
					3	Pass			
					4	Pass			
					5	Pass			
Low Temperature Test	Temperature (°C)	-40±3	Industry standard	-40	1	Pass			
	Temperature stability time (h)	1		1.2	2	Pass			
					3	Pass			
					4	Pass			
					5	Pass			
Constant Damp Heat Test	Duration of experiment (h)	2	Industry standard	2.4	4	Pass			
	Recovery time (h)	1		1.1	5	Pass			
					Temperature (°C)	+40±2	+42	1	Pass
					Relative humidity (%)	90-95	92	2	Pass
Duration of experiment (h)	21	22	3	Pass					
Recovery time (h)	1	1.1							

5.2 Salt Spray Testing

Salt Spray Testing Report				
Project Name	Salt Spray Testing			
Product Name	5.8G Umbrella-shaped Antenna	Testing Date	2020-05-21	
Testing Equipment	Salt spray corrosion test chamber	Test QTY.	5PCS	
Testing Method	Put the test sample into the prepared salt solution test box and salt spray corrosion box for continuous spray test			
Salt Solution Concentration	52g/L	PH value of salt solution: 6.5-7.2	Test period: 24h	
Actual Test Data	55g/L	PH value of salt solution: 6.8	Test period: 26h	
Test standard	Test the samples, according to GB/T10125 "artificial atmosphere corrosion test, salt spray test"; Results according to GB/T6461-2002 "Test specimens and test specimens of metal and other inorganic coatings on metal Substrates after corrosion testing".			
Testing Result				
Item No.	Corrosion resistance grade	Actual test data	Evaluation result	Remark
1	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	Pass	
2	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	Pass	
3	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	Pass	
4	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	Pass	
5	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	Pass	

6. Contact us

Shenzhen DreamLnk Technology Co., Ltd

★ Data collection, Smart home, Internet of Things applications, Wireless remote control technology, Remote active RFID, Antennas ★

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