



深圳市丰禾原电子科技有限公司 SUNITEC ENTERPRISE CO.,LTD.

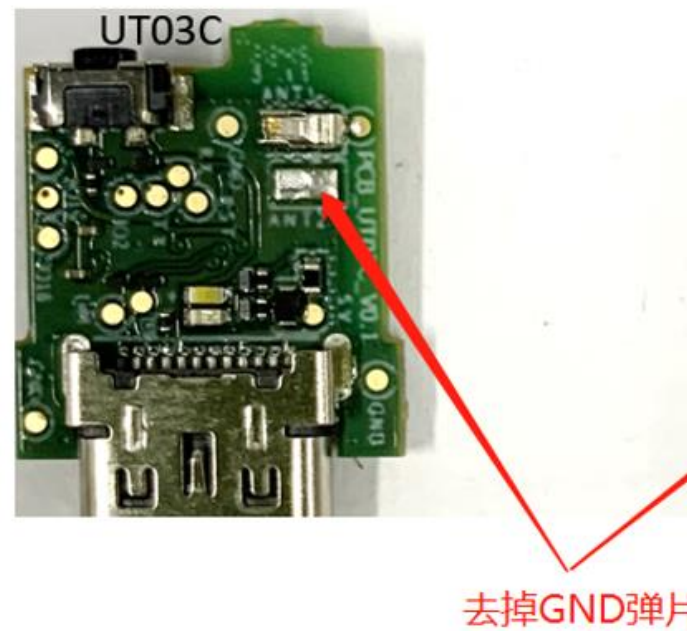


Lite Mo 2023.3.2

rd6@sunitec-cn.com

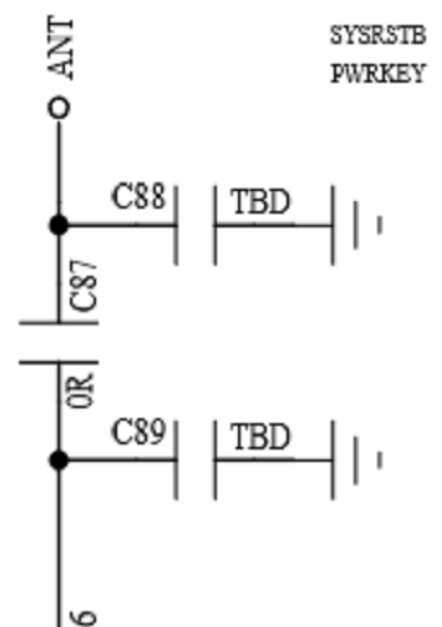
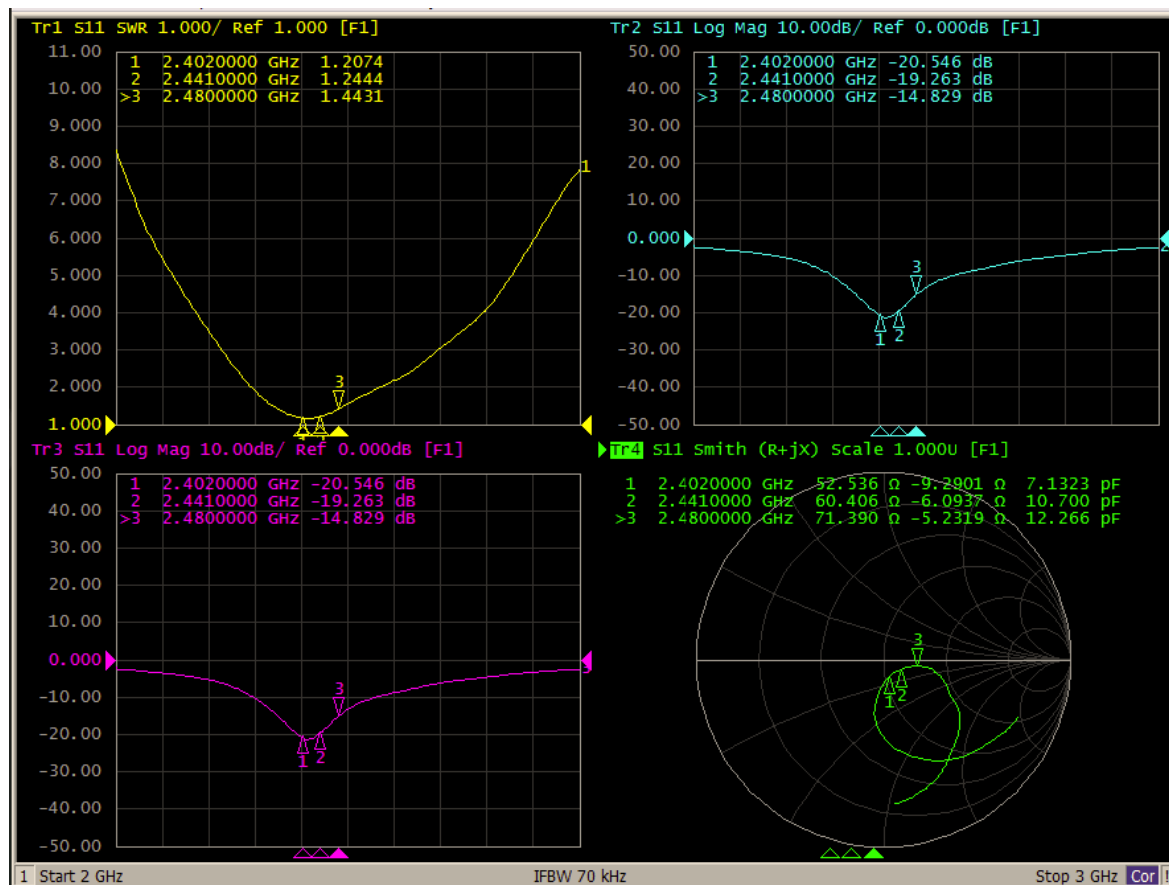


Product Appearance:





VSWR 、 Return loss and impedance (insert Samsung S8) :



Antenna matching:

C89=2PF, Walsin P/N: 0201N2R0B250CT

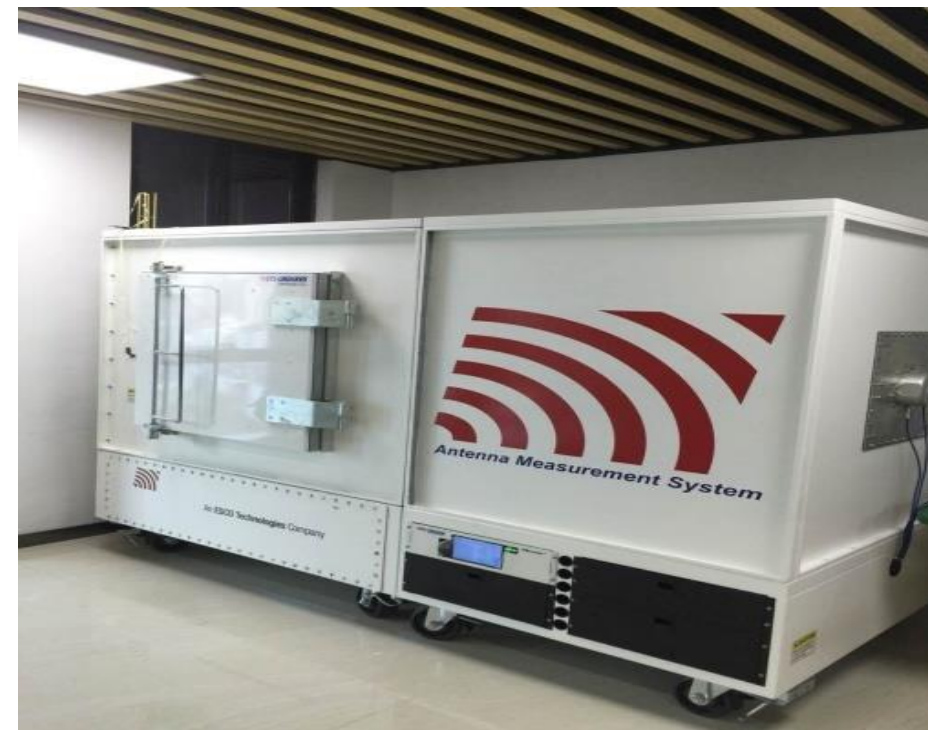
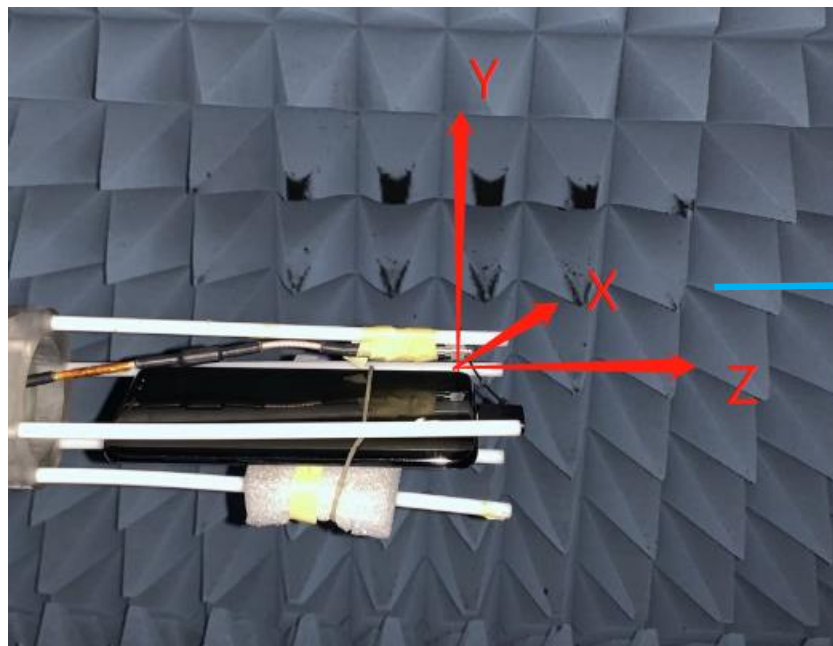
C87=2NH, Sunlord P/N: SDCL0603Q2N0BT02B03

C88=NC



UT03C RF Performance Test Report

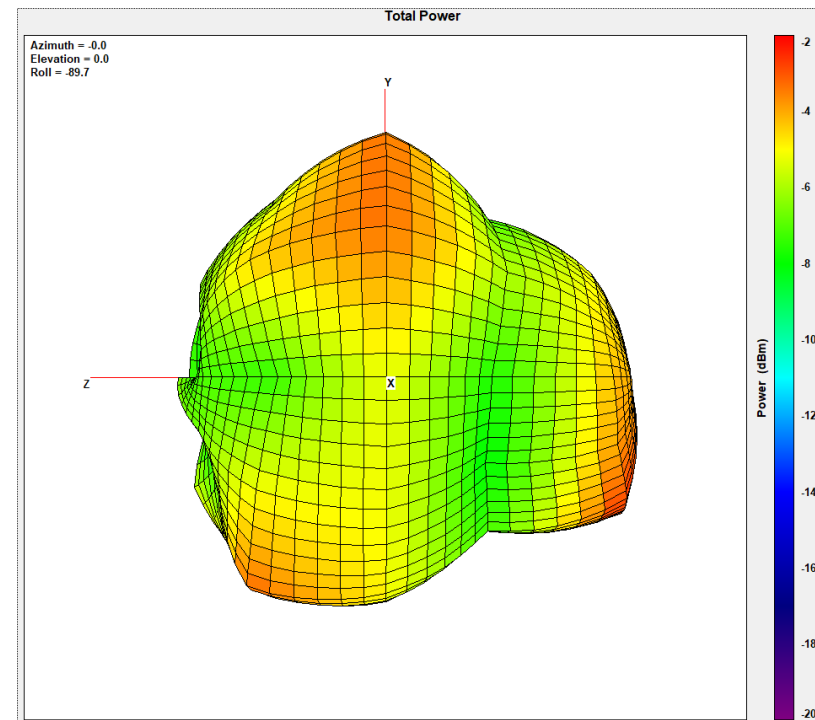
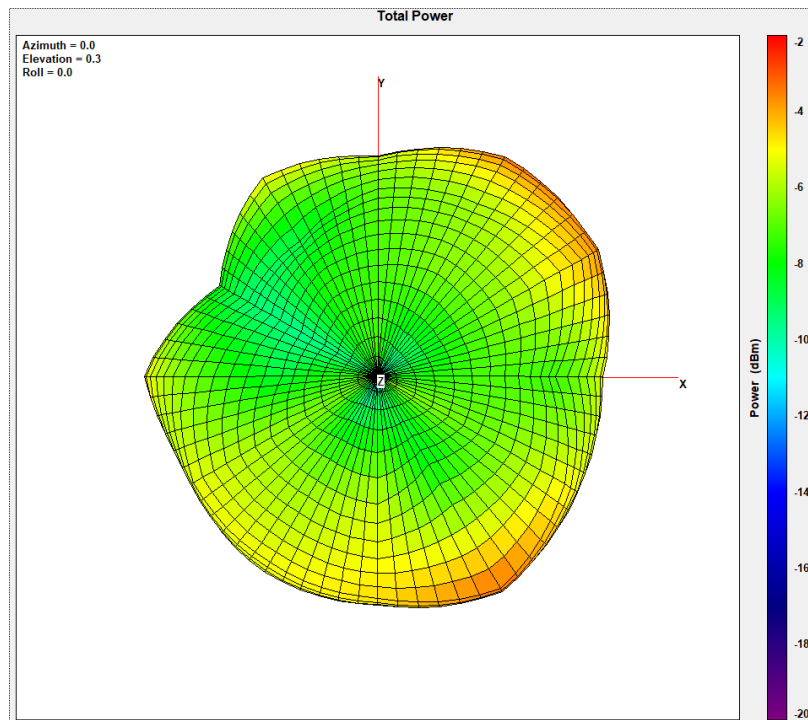
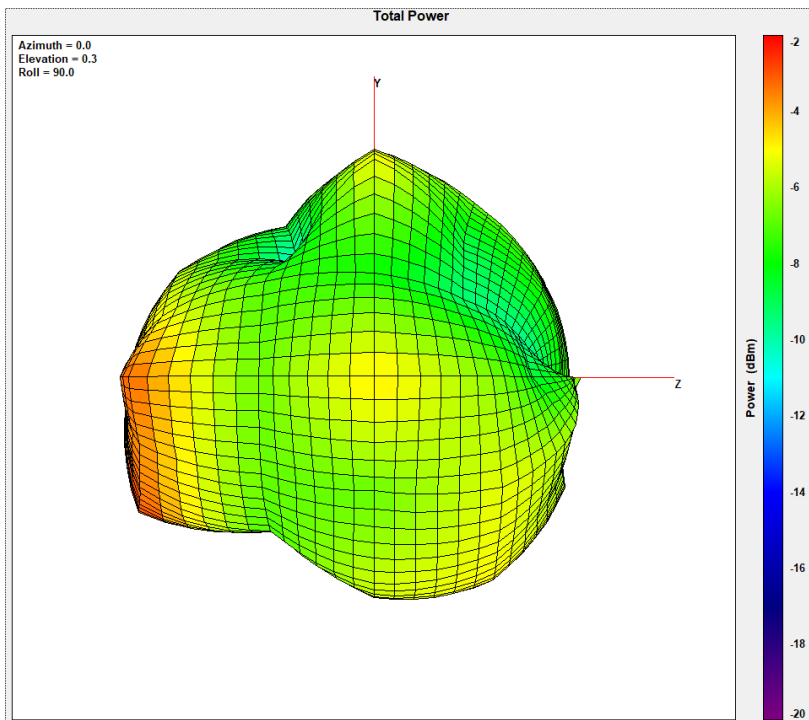
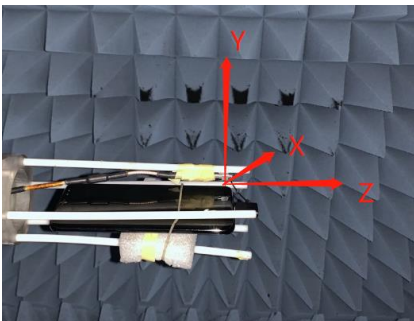
ANT/TRP/TIS Test Settings:





UT03C RF Performance Test Report

2441MHz ANT 3D Radiation Pattern:





UT03C RF Performance Test Report

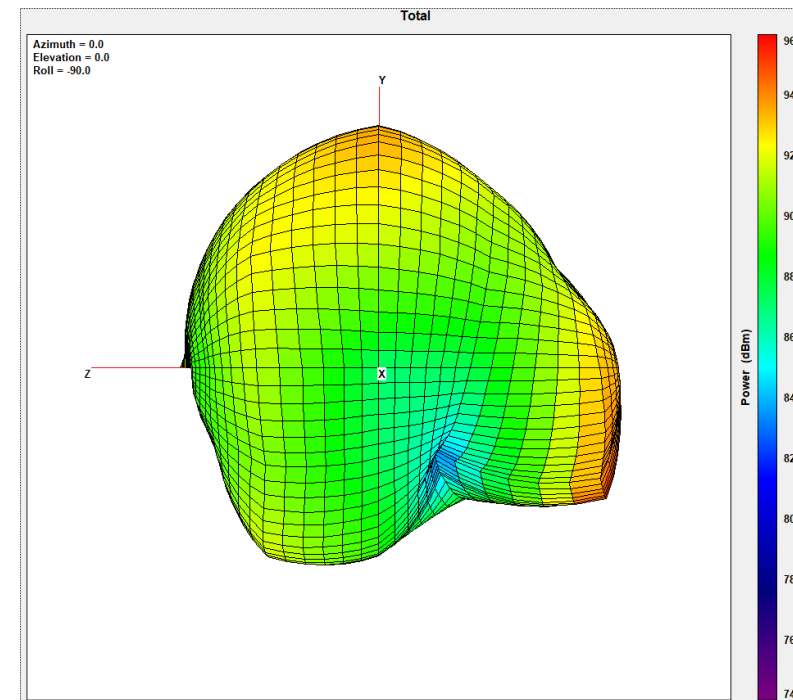
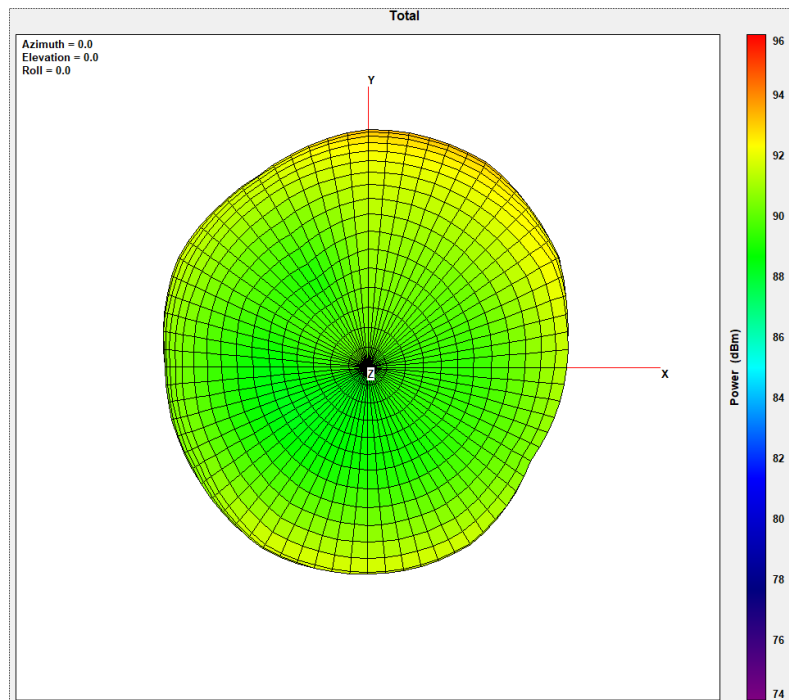
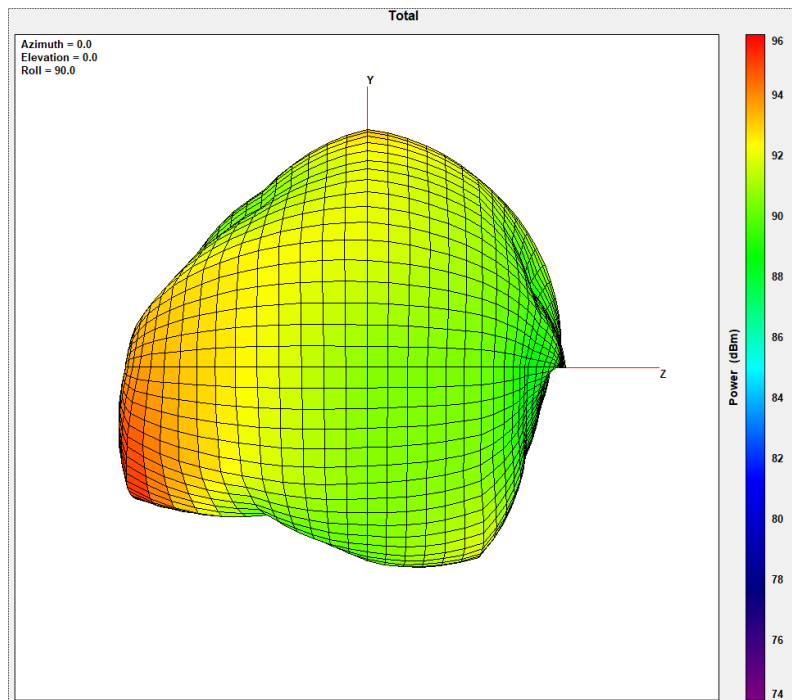
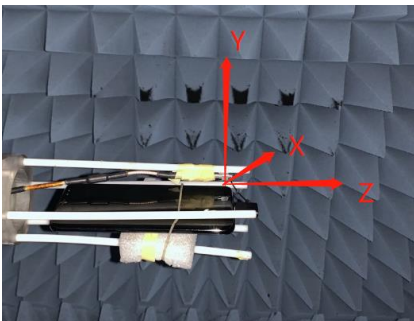
ANT DATA:

Total Attributes	Point Values	Ant. Port Input Pwr. (dBm)	Tot. Rad. Pwr. (dBm)	Peak EIRP (dBm)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	N
	Frequency (MHz)								
	2400	0	-5.83118	-2.11423	3.71695	-5.83118	26.1145	-2.11423	
	2401	0	-5.79374	-2.05636	3.73738	-5.79374	26.3406	-2.05636	
	2402	0	-5.75669	-2.00011	3.75658	-5.75669	26.5663	-2.00011	
	2403	0	-5.73496	-1.95403	3.78092	-5.73496	26.6996	-1.95403	
	2404	0	-5.70738	-1.91224	3.79515	-5.70738	26.8696	-1.91224	
	2405	0	-5.66271	-1.87628	3.78643	-5.66271	27.1474	-1.87628	
	2406	0	-5.60845	-1.83178	3.77667	-5.60845	27.4887	-1.83178	
	2407	0	-5.5715	-1.79881	3.77269	-5.5715	27.7236	-1.79881	
	2408	0	-5.53787	-1.76594	3.77192	-5.53787	27.9392	-1.76594	
	2409	0	-5.51155	-1.73132	3.78023	-5.51155	28.1089	-1.73132	
	2410	0	-5.48411	-1.69903	3.78509	-5.48411	28.2871	-1.69903	
	2411	0	-5.47331	-1.67303	3.80028	-5.47331	28.3576	-1.67303	
	2412	0	-5.45038	-1.64296	3.80742	-5.45038	28.5077	-1.64296	
	2413	0	-5.42293	-1.39492	4.028	-5.42293	28.6885	-1.39492	
	2414	0	-5.4037	-1.14819	4.25551	-5.4037	28.8158	-1.14819	
	2415	0	-5.39536	-1.13646	4.25891	-5.39536	28.8711	-1.13646	
	2416	0	-5.39339	-1.12887	4.26452	-5.39339	28.8842	-1.12887	
	2417	0	-5.39106	-1.12127	4.26979	-5.39106	28.8998	-1.12127	
	2418	0	-5.38464	-1.11793	4.26671	-5.38464	28.9425	-1.11793	
	2419	0	-5.37788	-1.11509	4.26279	-5.37788	28.9876	-1.11509	
	2420	0	-5.35622	-1.10732	4.2489	-5.35622	29.1325	-1.10732	
	2421	0	-5.34247	-1.11207	4.2304	-5.34247	29.2249	-1.11207	
	2422	0	-5.32516	-1.11568	4.20947	-5.32516	29.3416	-1.11568	
	2423	0	-5.29453	-1.12221	4.17232	-5.29453	29.5493	-1.12221	
	2424	0	-5.27977	-1.13092	4.14885	-5.27977	29.6499	-1.13092	
	2425	0	-5.261	-1.14172	4.11928	-5.261	29.7783	-1.14172	
	2426	0	-5.2365	-1.14365	4.09285	-5.2365	29.9468	-1.14365	
	2427	0	-5.20951	-1.14198	4.06752	-5.20951	30.1335	-1.14198	
	2428	0	-5.18165	-1.14084	4.04081	-5.18165	30.3274	-1.14084	
	2429	0	-5.16778	-1.14042	4.02736	-5.16778	30.4244	-1.14042	
	2430	0	-5.1393	-1.1354	4.0039	-5.1393	30.6246	-1.1354	
	2431	0	-5.12266	-1.1247	3.99796	-5.12266	30.7421	-1.1247	
	2432	0	-5.11652	-1.11699	3.99953	-5.11652	30.7856	-1.11699	
	2433	0	-5.12008	-1.10288	4.0172	-5.12008	30.7604	-1.10288	
	2434	0	-5.1114	-1.09016	4.02124	-5.1114	30.8219	-1.09016	
	2435	0	-5.08874	-1.07466	4.01408	-5.08874	30.9832	-1.07466	
	2436	0	-5.10697	-1.05674	4.05023	-5.10697	30.8534	-1.05674	
	2437	0	-5.09962	-1.04057	4.05905	-5.09962	30.9056	-1.04057	
	2438	0	-5.10948	-1.02413	4.08535	-5.10948	30.8356	-1.02413	
	2439	0	-5.10466	-1.0113	4.09336	-5.10466	30.8698	-1.0113	
	2440	0	-5.07262	-0.996473	4.07615	-5.07262	31.0984	-0.996473	
	2441	0	-5.04147	-0.981278	4.06019	-5.04147	31.3222	-0.981278	
	2442	0	-5.01586	-0.970291	4.04557	-5.01586	31.5075	-0.970291	
	2443	0	-4.98739	-0.958106	4.02928	-4.98739	31.7148	-0.958106	
	2444	0	-4.9793	-0.953934	4.02536	-4.9793	31.7739	-0.953934	
	2445	0	-4.96092	-0.945413	4.01551	-4.96092	31.9086	-0.945413	
	2446	0	-4.94522	-0.937407	4.00781	-4.94522	32.0242	-0.937407	
	2447	0	-4.91263	-0.921073	3.99155	-4.91263	32.2654	-0.921073	
	2448	0	-4.88629	-0.901219	3.98507	-4.88629	32.4617	-0.901219	
	2449	0	-4.87496	-0.876285	3.99868	-4.87496	32.5465	-0.876285	
	2450	0	-4.84334	-0.850347	3.993	-4.84334	32.7843	-0.850347	
	2451	0	-4.80145	-0.823917	3.97753	-4.80145	33.1021	-0.823917	
	2452	0	-4.79981	-0.799954	3.99986	-4.79981	33.1145	-0.799954	
	2453	0	-4.79717	-0.771065	4.02611	-4.79717	33.1347	-0.771065	
	2454	0	-4.79002	-0.753516	4.0365	-4.79002	33.1893	-0.753516	
	2455	0	-4.78536	-0.831056	3.95431	-4.78536	33.2249	-0.831056	
	2456	0	-4.76951	-0.895826	3.87369	-4.76951	33.3464	-0.895826	
	2457	0	-4.75854	-0.902888	3.85565	-4.75854	33.4307	-0.902888	
	2458	0	-4.75788	-0.904443	3.85344	-4.75788	33.4358	-0.904443	
	2459	0	-4.75638	-0.916945	3.83943	-4.75638	33.4474	-0.916945	
	2460	0	-4.74773	-0.933658	3.81407	-4.74773	33.5141	-0.933658	
	2461	0	-4.73754	-0.953114	3.78443	-4.73754	33.5928	-0.953114	
	2462	0	-4.72694	-0.968674	3.75826	-4.72694	33.6749	-0.968674	
	2463	0	-4.7151	-0.986701	3.7284	-4.7151	33.7668	-0.986701	
	2464	0	-4.7014	-1.00171	3.6997	-4.7014	33.8735	-1.00171	
	2465	0	-4.67926	-1.01814	3.66112	-4.67926	34.0466	-1.01814	
	2466	0	-4.65303	-1.02234	3.63069	-4.65303	34.2529	-1.02234	
	2467	0	-4.6668	-1.00441	3.66239	-4.6668	34.1445	-1.00441	
	2468	0	-4.63386	-0.990783	3.64307	-4.63386	34.4044	-0.990783	
	2469	0	-4.60996	-0.978758	3.63121	-4.60996	34.5942	-0.978758	
	2470	0	-4.58776	-0.976875	3.61089	-4.58776	34.7715	-0.976875	
	2471	0	-4.60202	-0.971315	3.63071	-4.60202	34.6575	-0.971315	
	2472	0	-4.5854	-0.968984	3.61642	-4.5854	34.7904	-0.968984	
	2473	0	-4.59163	-0.973036	3.6186	-4.59163	34.7405	-0.973036	
	2474	0	-4.55465	-0.98254	3.57211	-4.55465	35.0376	-0.98254	
	2475	0	-4.57003	-0.988722	3.5813	-4.57003	34.9138	-0.988722	
	2476	0	-4.59428	-1.00436	3.58991	-4.59428	34.7194	-1.00436	
	2477	0	-4.62199	-1.02704	3.59495	-4.62199	34.4986	-1.02704	
	2478	0	-4.65422	-1.05626	3.59796	-4.65422	34.2435	-1.05626	
	2479	0	-4.69338	-1.08934	3.60403	-4.69338	33.9361	-1.08934	
	2480	0	-4.7037	-1.12672	3.57699	-4.7037	33.8555	-1.12672	



UT03C RF Performance Test Report

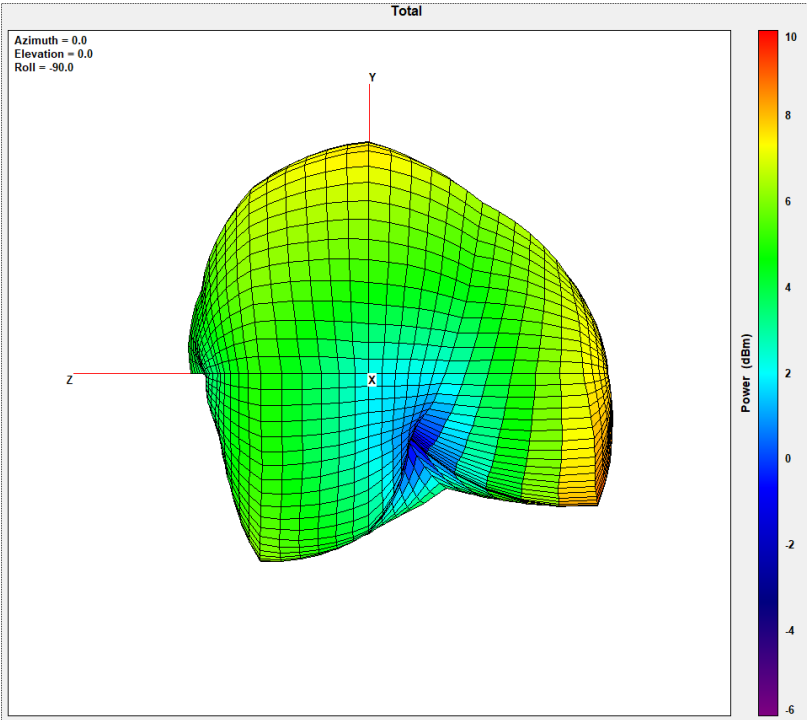
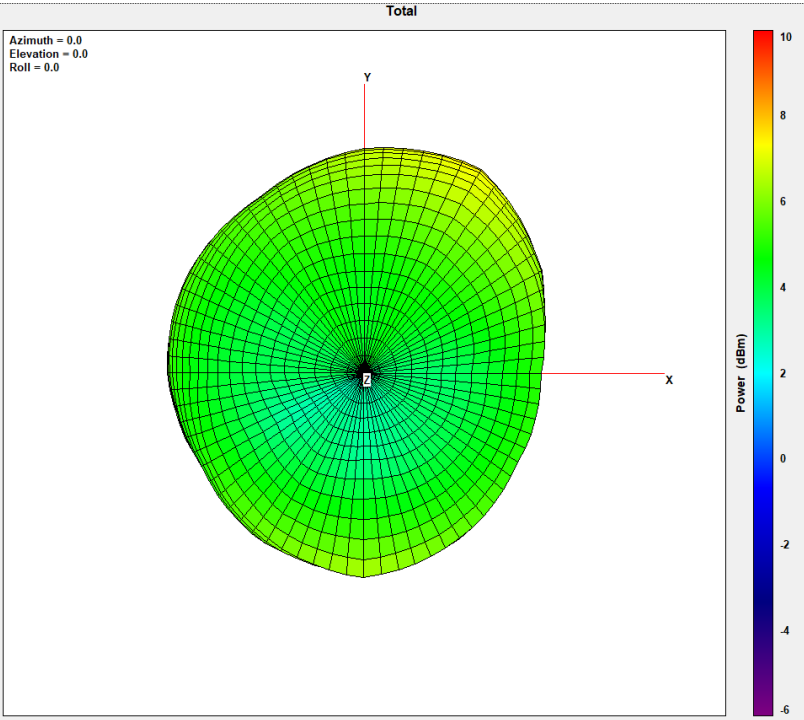
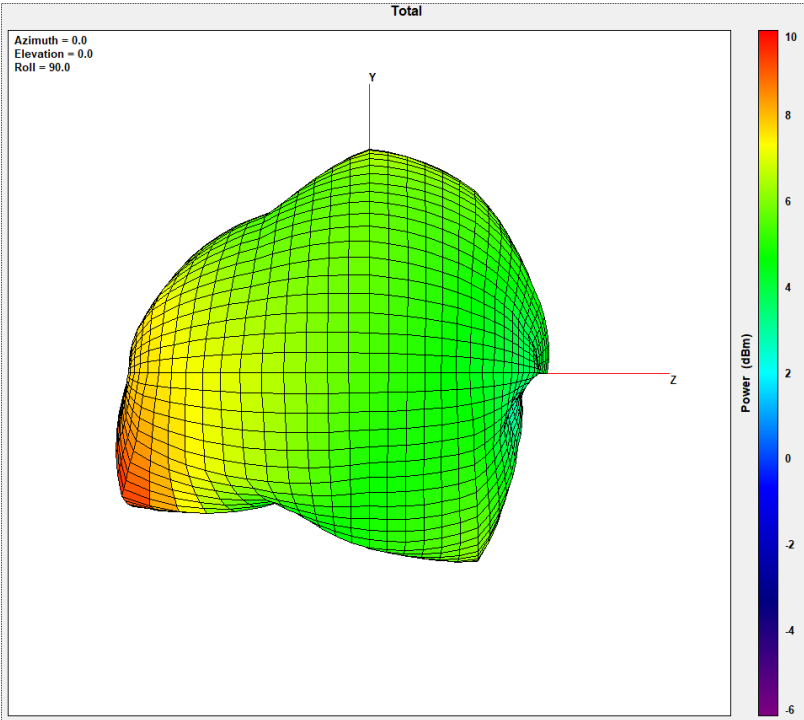
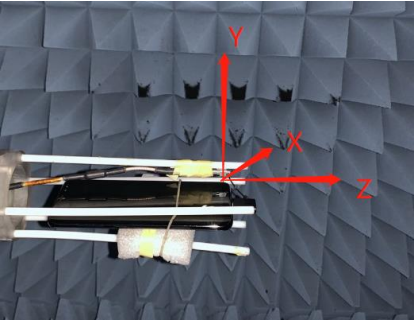
2441MHz TIS 3D Radiation Pattern:





UT03C RF Performance Test Report

2441MHz TRP 3D Radiation Pattern:





UT03C RF Performance Test Report

TIS DATA:

Total	Frequency (MHz)								
	2402	Theta Angle (?)	0	30	60	90	120	150	180
		Phi Angle (?)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
		0	89.56	89.65	90.79	87.29	87.14	93.52	93.50
		30	89.18	90.23	91.94	91.29	90.23	91.50	93.50
		60	89.24	89.50	92.43	92.56	91.25	91.62	93.50
		90	89.17	90.01	91.59	91.00	90.00	90.44	93.50
		120	88.96	90.06	91.38	91.84	89.48	92.39	93.50
		150	89.46	89.28	90.59	91.70	90.98	91.02	93.50
		180	89.49	88.86	90.37	90.29	92.47	93.58	93.50
		210	88.24	87.94	90.28	90.79	91.24	94.41	93.50
		240	88.26	87.49	91.80	89.33	88.95	94.94	93.50
		270	87.67	88.85	92.39	89.37	83.76	95.48	93.50
		300	88.45	89.08	91.57	88.57	82.81	95.10	93.50
		330	88.09	89.29	90.81	87.52	85.30	94.30	93.50
		360	89.56	89.65	90.79	87.29	87.14	93.52	93.50
	2441	Theta Angle (?)	0	30	60	90	120	150	180
		Phi Angle (?)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
		0	89.36	89.31	91.45	86.97	87.45	93.21	93.54
		30	89.36	89.93	92.52	91.59	90.13	92.27	93.54
		60	89.73	90.50	92.11	93.61	91.67	90.47	93.54
		90	89.85	90.96	92.06	93.70	90.85	90.66	93.54
		120	90.36	88.86	91.36	92.11	90.38	90.71	93.54
		150	89.92	89.58	90.86	92.07	92.49	93.03	93.54
		180	89.77	88.30	90.38	90.56	92.58	93.74	93.54
		210	88.55	88.28	90.59	90.56	92.10	94.95	93.54
		240	88.35	88.64	91.99	90.29	89.27	95.75	93.54
		270	88.38	89.00	91.98	89.58	84.05	95.70	93.54
		300	89.18	88.93	91.88	89.09	82.55	94.17	93.54
		330	89.16	89.48	90.58	87.38	84.93	93.94	93.54
		360	89.36	89.31	91.45	86.97	87.45	93.21	93.54

	2480	Theta Angle (?)	0	30	60	90	120	150	180
		Phi Angle (?)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
		0	89.44	89.89	91.19	87.88	87.18	93.49	93.66
		30	90.07	90.77	92.49	91.79	90.77	93.28	93.66
		60	89.94	91.15	93.57	94.04	91.55	91.68	93.66
		90	90.88	90.63	92.97	93.26	90.80	91.50	93.66
		120	90.20	90.69	91.60	92.71	89.99	90.86	93.66
		150	89.59	90.29	90.97	91.37	91.49	92.44	93.66
		180	89.07	89.21	90.75	91.38	92.89	93.84	93.66
		210	88.66	87.16	91.21	90.67	91.68	94.40	93.66
		240	88.33	88.13	91.04	90.69	89.48	95.22	93.66
		270	89.38	89.37	92.64	89.70	84.33	95.24	93.66
		300	88.91	89.30	92.00	89.23	83.03	94.88	93.66
		330	89.44	88.40	90.68	87.22	84.99	94.51	93.66
		360	89.44	89.89	91.19	87.88	87.18	93.49	93.66
Total	Point Values	Cond. Sensitivity (dBm)	TIS (dBm)	Min. EIS (dBm)	Directivity (dBi)	Efficiency (dB)	Gain (dBi)	NHPIS 盤 i/4 (dBm)	NHPIS 盤 i/6 (dBm)
	Frequency (MHz)								
	2402	0	-90.8118	-95.4797	4.66784	90.8118	95.4797	-89.0189	-87.3685
	2441	0	-91.1416	-95.7476	4.60605	91.1416	95.7476	-89.4457	-87.8738
	2480	0	-91.3009	-95.2391	3.93822	91.3009	95.2391	-89.6012	-88.0301



UT03C RF Performance Test Report

TRP DATA:

Total	Frequency (MHz)								
	2402	Theta Angle (?)	0	30	60	90	120	150	180
		Phi Angle (?)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
		0	3.48	3.81	5.01	1.15	2.52	7.80	7.94
		30	3.87	4.37	6.74	4.96	5.23	6.63	7.94
		60	3.24	4.59	7.52	8.01	5.83	6.40	7.94
		90	3.80	4.20	6.27	7.44	4.32	6.08	7.94
		120	3.45	4.22	5.59	6.11	4.69	6.62	7.94
		150	3.23	3.58	4.41	5.42	6.36	7.10	7.94
		180	3.07	2.97	4.54	5.07	6.05	8.20	7.94
		210	2.39	2.17	5.03	4.94	5.93	9.27	7.94
		240	1.88	3.41	5.63	4.56	3.44	9.14	7.94
		270	2.13	2.44	6.95	4.22	-1.19	8.88	7.94
		300	2.65	3.42	5.48	3.34	-2.90	9.00	7.94
		330	3.60	3.05	4.87	1.27	-0.21	8.50	7.94
		360	3.48	3.81	5.01	1.15	2.52	7.80	7.94
	2441	Theta Angle (?)	0	30	60	90	120	150	180
		Phi Angle (?)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
		0	3.46	3.55	5.15	1.90	2.06	7.25	7.89
		30	3.59	4.54	6.27	5.59	4.59	7.07	7.89
		60	4.41	4.88	6.99	7.71	6.37	6.79	7.89
		90	4.17	4.47	6.28	7.09	4.32	6.29	7.89
		120	4.42	4.79	5.66	5.83	5.38	6.56	7.89
		150	3.75	3.84	4.76	5.81	5.98	7.55	7.89
		180	3.95	3.78	4.41	5.41	6.99	7.64	7.89
		210	2.70	2.85	5.08	4.70	6.63	8.47	7.89
		240	2.53	3.74	5.95	4.98	3.36	9.87	7.89
		270	2.92	3.04	6.73	3.00	-2.35	9.50	7.89
		300	2.62	3.54	5.91	3.73	-1.82	8.59	7.89
		330	3.29	3.81	5.16	2.01	-0.29	8.06	7.89
		360	3.46	3.55	5.15	1.90	2.06	7.25	7.89

	2480	Theta Angle (?)	0	30	60	90	120	150	180
		Phi Angle (?)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
		0	4.10	4.39	5.71	1.90	2.22	8.30	8.11
		30	4.23	4.91	6.81	5.83	5.16	6.73	8.11
		60	3.73	4.95	7.44	7.74	5.58	6.57	8.11
		90	4.27	4.76	7.32	7.09	4.53	6.33	8.11
		120	4.10	4.41	5.40	6.06	5.64	6.88	8.11
		150	3.94	3.61	5.29	5.92	5.54	7.18	8.11
		180	3.71	3.55	4.53	5.19	7.04	7.43	8.11
		210	2.80	3.31	5.32	5.37	5.44	9.28	8.11
		240	2.52	3.41	6.57	4.06	3.50	9.84	8.11
		270	3.38	4.44	6.57	4.20	-1.76	9.47	8.11
		300	3.44	4.29	5.81	3.12	-3.07	8.74	8.11
		330	3.03	3.42	5.27	1.68	-0.40	8.43	8.11
		360	4.10	4.39	5.71	1.90	2.22	8.30	8.11
Total	Point Values	Ant. Port Input Pwr. (dBm)	Tot. Rad. Pwr. (dBm)	Peak EIRP (dBm)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	NHPRP 盤 i/4 (dBm)
	Frequency (MHz)								
	2402	0	5.3392	9.26793	3.92873	5.3392	341.917	9.26793	3.59343
	2441	0	5.40889	9.87373	4.46484	5.40889	347.447	9.87373	3.6507
	2480	0	5.52827	9.83615	4.30789	5.52827	357.13	9.83615	3.74962

RF data

Frequency (MHz)	UT03C+Samsung S8			
	Efficiency (%)	Gain (dBi)	TIS(dBm)	TRP(dBm)
2402	26.56	-2.0	-90.81	5.39
2441	31.32	-0.98	-91.14	5.40
2480	33.85	-1.12	-91.30	5.52

MAX Gain:-0.75dBi

Thanks