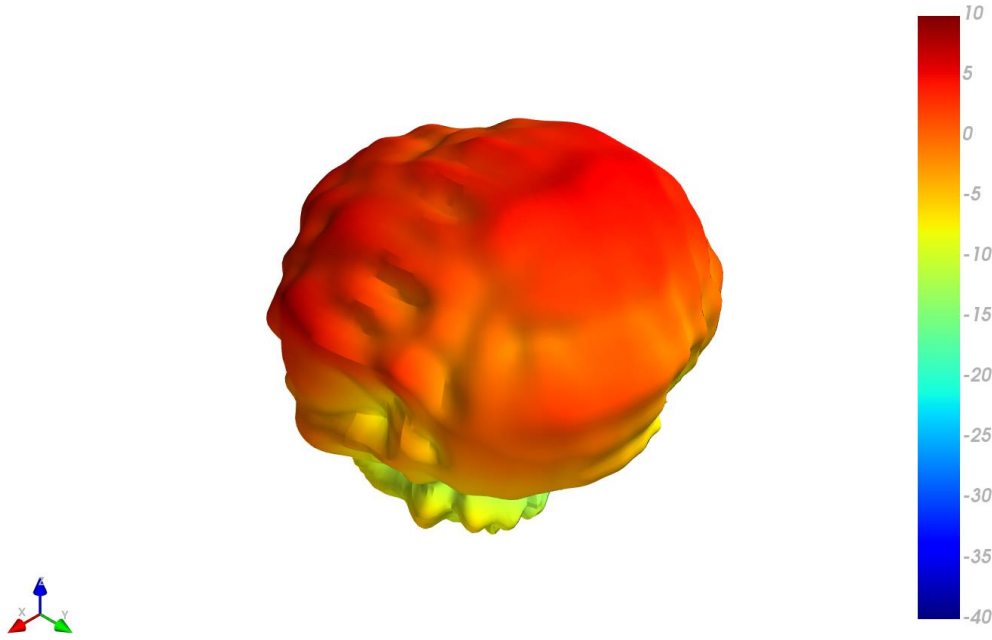
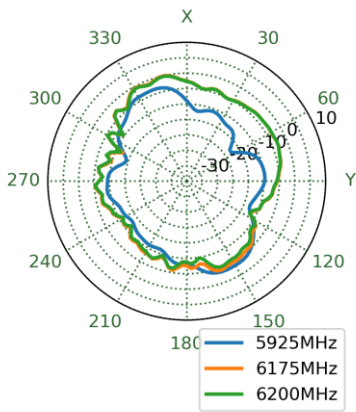


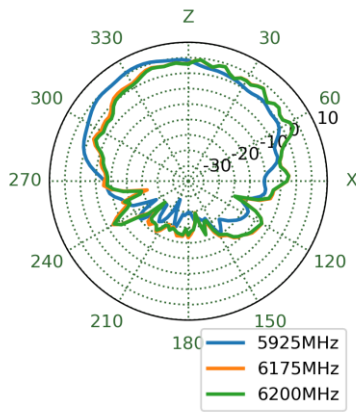
# 6175MHz



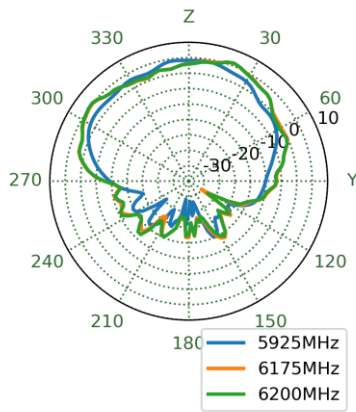
**XY Plane**



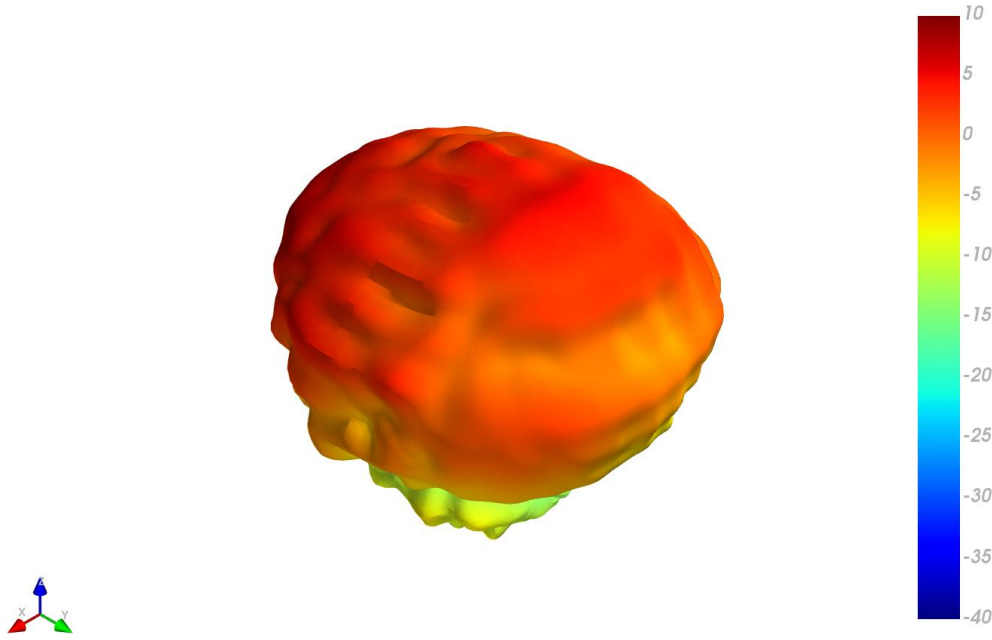
**XZ Plane**



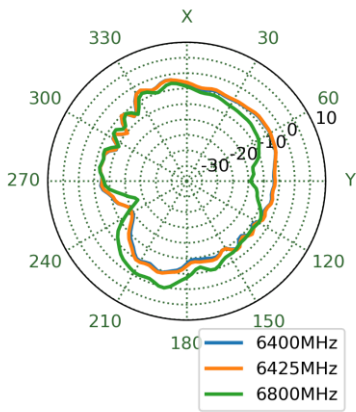
**YZ Plane**



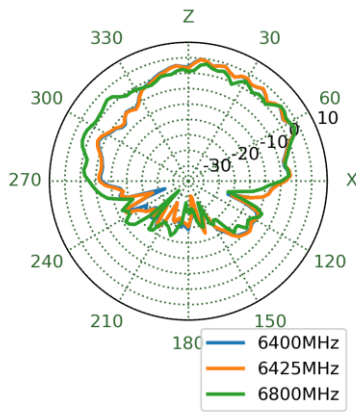
# 6425MHz



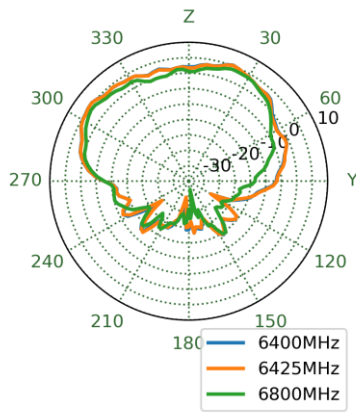
XY Plane



XZ Plane



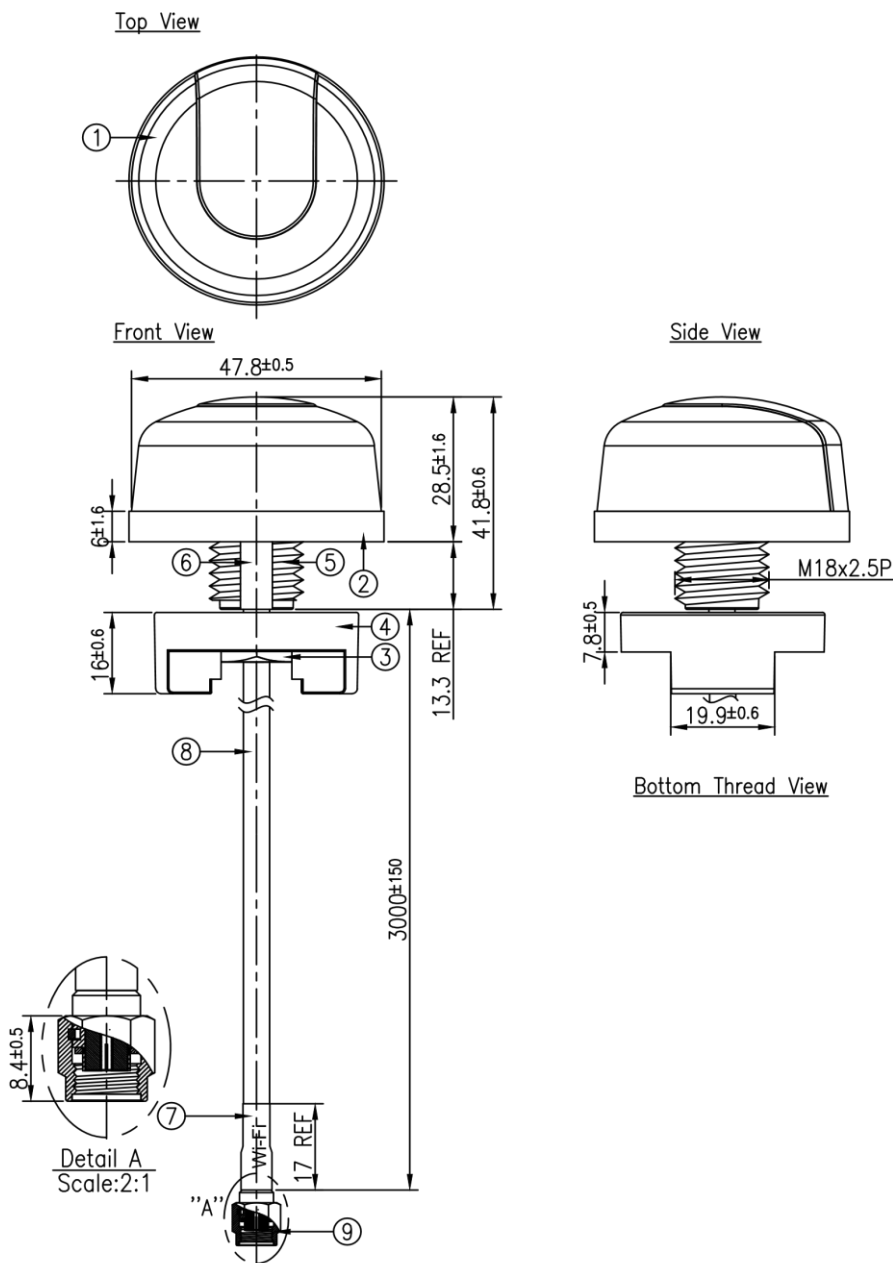
YZ Plane



# 5. Mechanical Drawing (Units: mm)

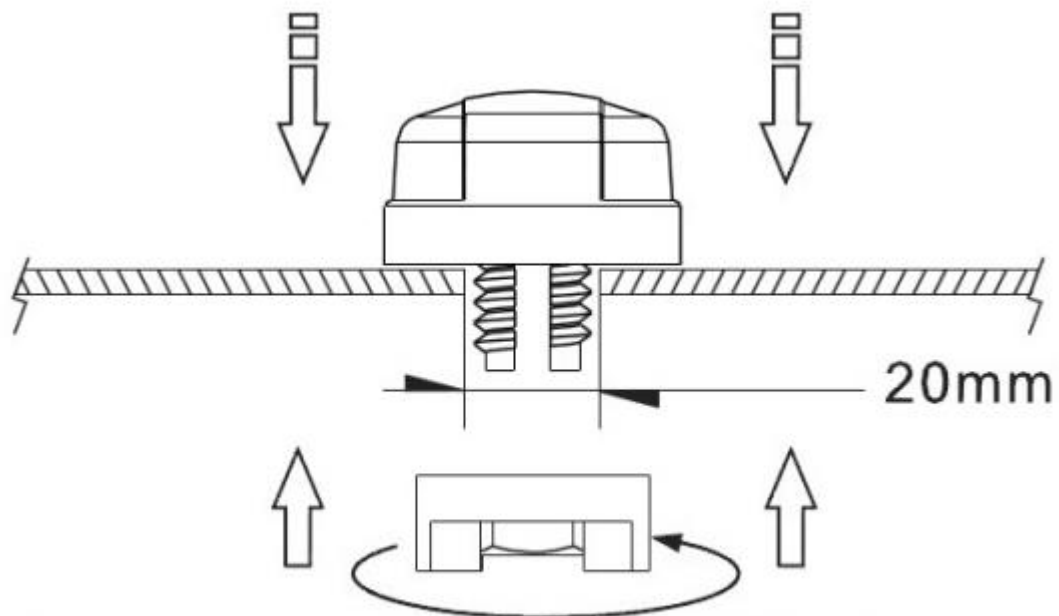
ISO NO.: EDW-21-8-0100  
 STATE: Release  
 NOTES:

REV.	DESCRIPTION	ENG.	APPROVED	DATE
001	Initial Design		Aaron	2021/01/21



APPROVED BY: Aaron	TW Design Centre <small>This drawing and its inherent design concepts are property of Taoglas. Not to be copied or given to third parties without the written consent of Taoglas.</small>
CHECK BY:	
DRAWN BY: Aaron	
DATE: 2021/01/21	TITLE : 2.4/5.1-7.2GHz Hercules Antenna with 3m TGC-200 RP-SMA(M)
UNLESS OTHERWISE SPECIFIED TOLERANCES ON: XX±0.5 X±0.3 X±0.2 XX±0.1 XXX±0.05	PART NO. : WS.03.B.305151
THIRD ANGLE PROJECTION	UNIT: mm SCALE: 1:1.25 PAGES: 1/1 REV. D01

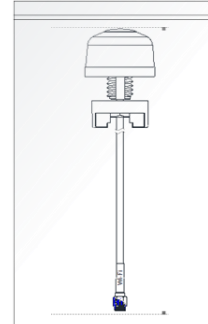
## 6. Installation Guidelines



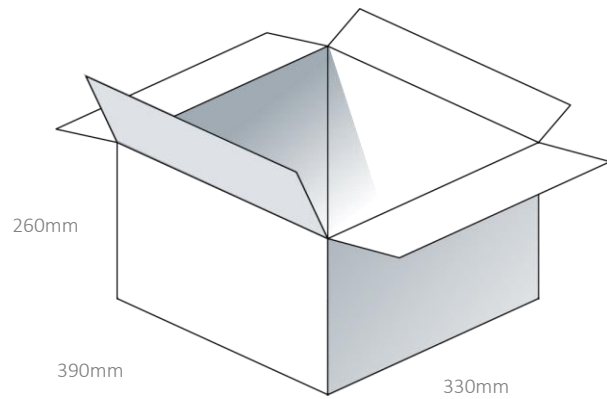
Recommended torque for Mounting is 24.5N·m  
 Maximum torque for mounting is 29.4N·m

## 7. Packaging

1pc WS.03.B.305151 per PE Bag  
 Weight - 130g



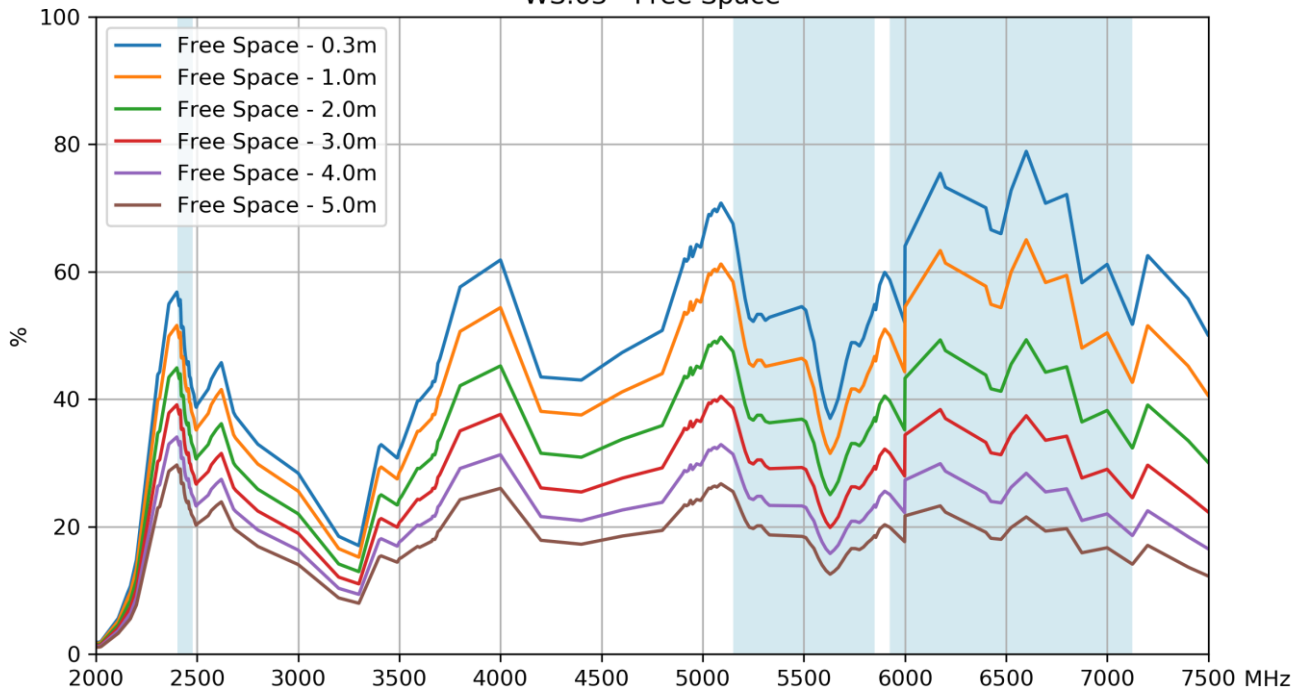
50pcs WS.03.B.305151 per carton  
 Dimensions - 390\*330\*260mm  
 Weight - 6.75Kg



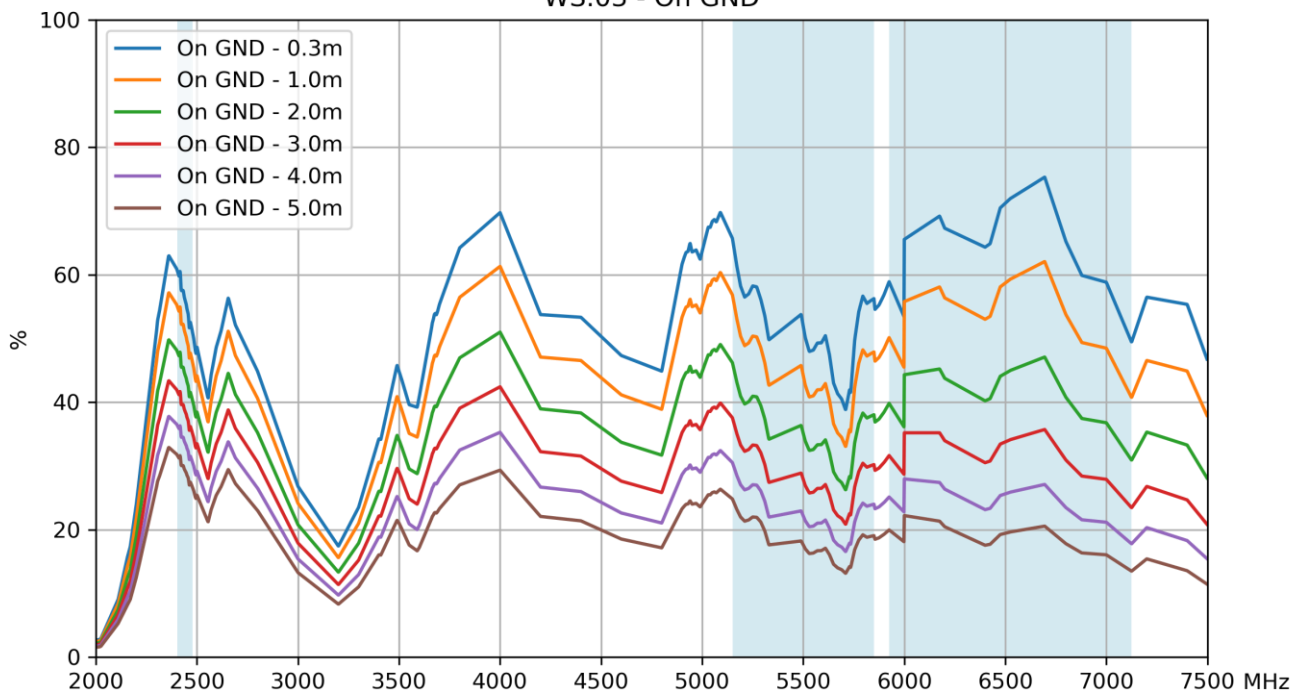
# 8. Application Note

## 8.1 Efficiency

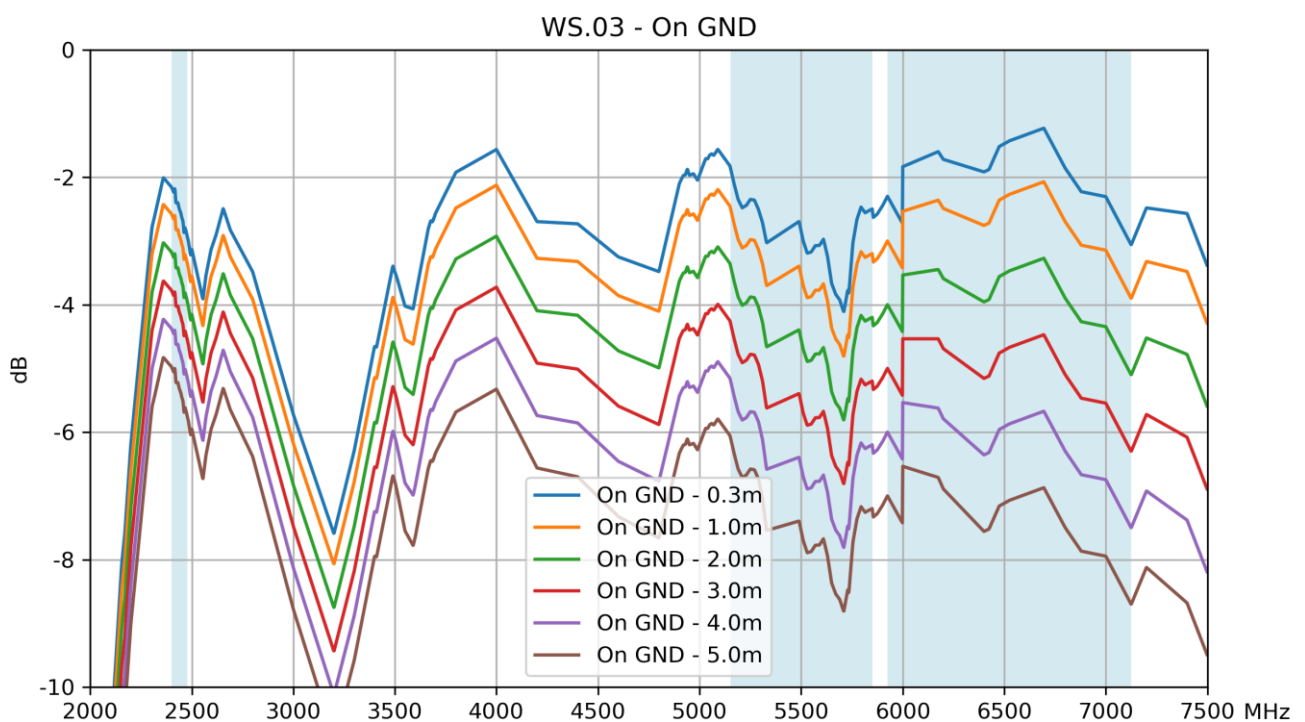
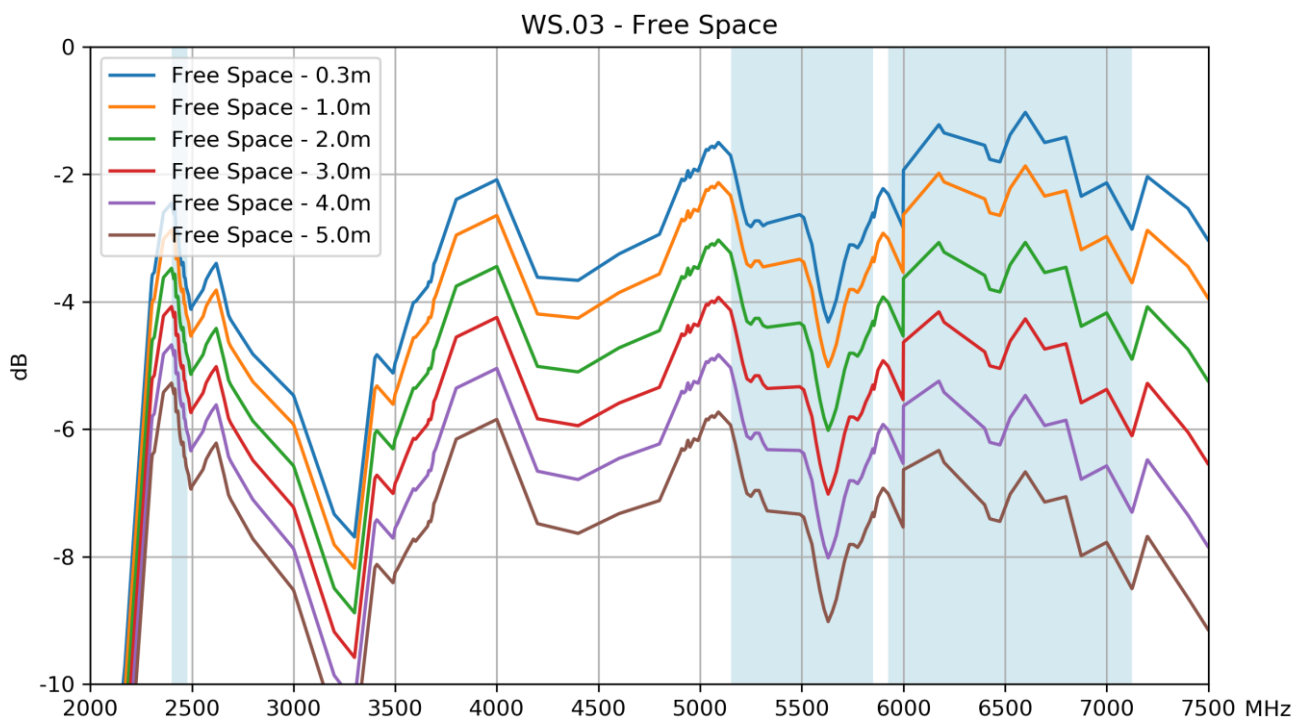
WS.03 - Free Space



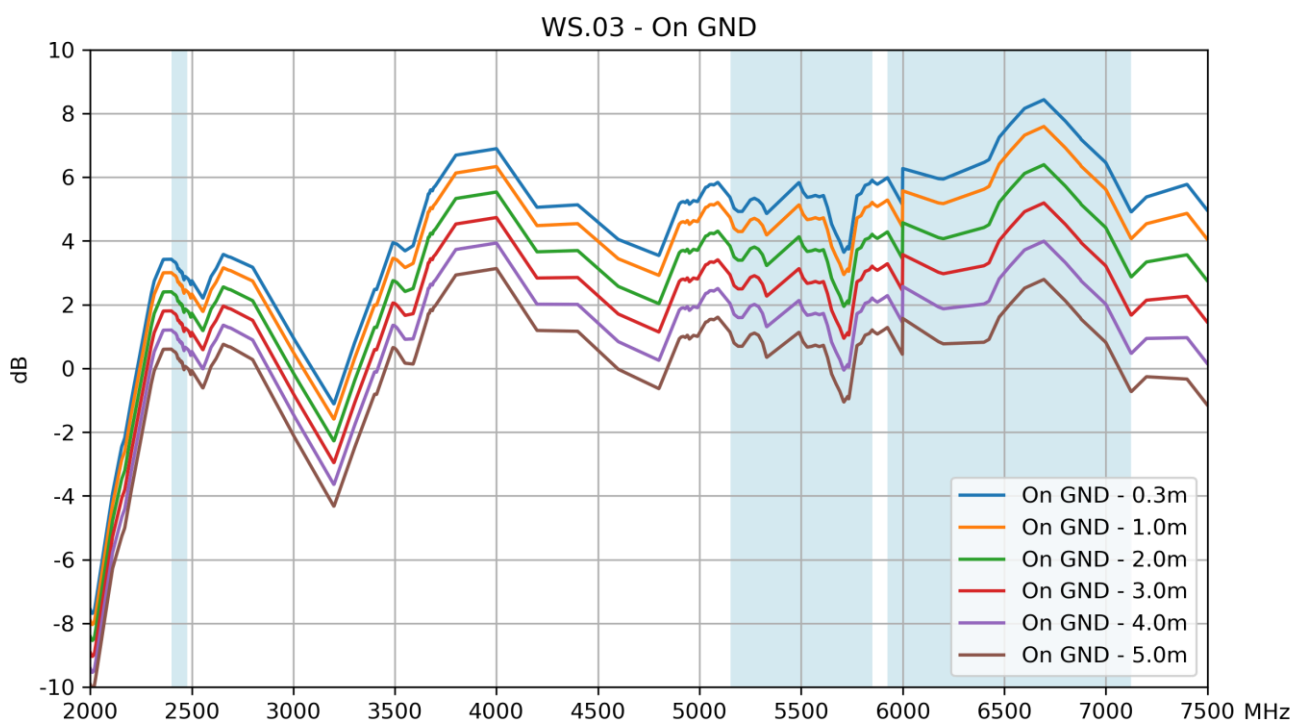
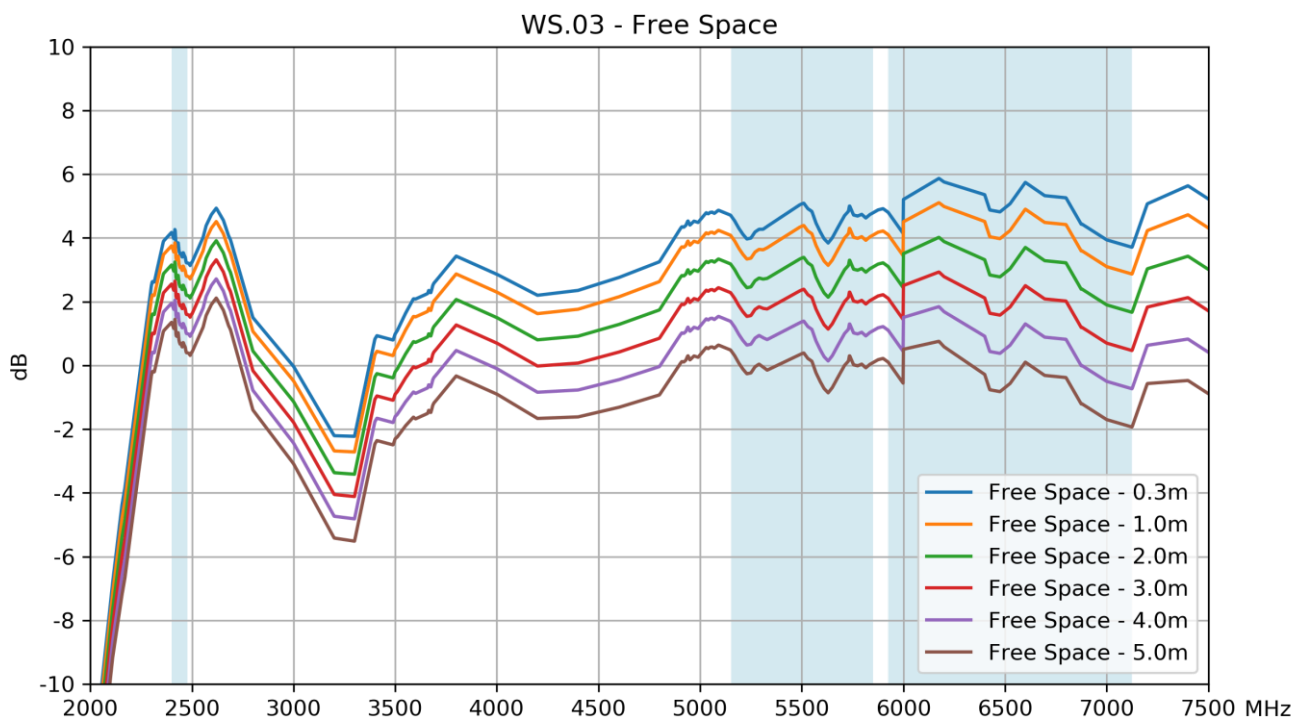
WS.03 - On GND



## 8.2 Average Gain



### 8.3 Peak Gain





## 8.4 Performance Table

WS.03.B.305151							
Frequency (MHz)		2.4GHz	5GHz	6.175GHz	6.475GHz	6.7GHz	7GHz
		2400-2480	5150-5850	5925-6425	6425-6525	6525-6875	6875-7125
Efficiency (%)							
Free Space	0.3m	48.5	50.1	65.7	68.4	70.5	57.3
	1.0m	44.0	42.9	55.1	56.4	58.1	47.3
	2.0m	38.3	34.4	42.9	42.8	44.1	35.9
	3.0m	33.4	27.5	33.4	32.5	33.5	27.2
	4.0m	29.1	22.0	26.0	24.6	25.4	20.6
	5.0m	25.3	17.7	20.3	18.7	19.3	15.6
On 30x30 cm GND Plane	0.3m	56.0	51.6	63.3	69.1	69.2	57.1
	1.0m	50.9	44.1	53.2	56.9	57.0	47.0
	2.0m	44.3	35.3	41.4	43.2	43.3	35.7
	3.0m	38.6	28.3	32.3	32.8	32.8	27.1
	4.0m	33.6	22.7	25.2	24.9	24.9	20.5
	5.0m	29.3	18.2	19.6	18.9	18.9	15.6
Average Gain (dB)							
Free Space	0.3m	-3.14	-3.00	-1.82	-1.65	-1.52	-2.41
	1.0m	-3.56	-3.67	-2.59	-2.49	-2.36	-3.25
	2.0m	-4.16	-4.64	-3.67	-3.69	-3.56	-4.45
	3.0m	-4.76	-5.60	-4.76	-4.89	-4.76	-5.65
	4.0m	-5.36	-6.57	-5.84	-6.09	-5.96	-6.85
	5.0m	-5.96	-7.53	-6.93	-7.29	-7.16	-8.05
On 30x30 cm GND Plane	0.3m	-2.52	-2.88	-1.98	-1.61	-1.60	-2.44
	1.0m	-2.94	-3.55	-2.74	-2.45	-2.44	-3.28
	2.0m	-3.54	-4.52	-3.83	-3.65	-3.64	-4.48
	3.0m	-4.14	-5.48	-4.91	-4.85	-4.84	-5.68
	4.0m	-4.74	-6.45	-5.99	-6.05	-6.04	-6.88
	5.0m	-5.34	-7.41	-7.08	-7.25	-7.24	-8.08
Peak Gain (dBi)							
Free Space	0.3m	4.33	5.09	5.87	5.07	5.74	4.44
	1.0m	3.91	4.39	5.11	4.23	4.90	3.60
	2.0m	3.31	3.39	4.02	3.03	3.70	2.40
	3.0m	2.71	2.39	2.93	1.83	2.50	1.20
	4.0m	2.11	1.39	1.84	0.63	1.30	-0.00
	5.0m	1.51	0.48	0.76	-0.57	0.10	-1.20
On 30x30 cm GND Plane	0.3m	3.42	5.91	6.55	7.63	8.43	7.23
	1.0m	3.00	5.21	5.71	6.79	7.59	6.39
	2.0m	2.40	4.21	4.57	5.59	6.39	5.19
	3.0m	1.80	3.21	3.57	4.39	5.19	3.99
	4.0m	1.20	2.21	2.57	3.19	3.99	2.79
	5.0m	0.60	1.21	1.57	1.99	2.79	1.59

Changelog for the datasheet

**SPE-21-8-022 – WS.03.B.305151**

Revision: A (Original First Release)	
Date:	2021-03-31
Notes:	
Author:	Jack Conroy

**Previous Revisions**




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