

ANT SB B1 with sensor, Free Space

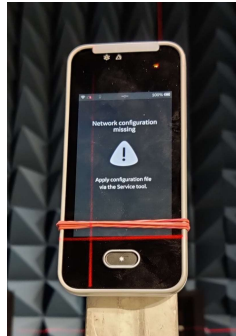


ANT SB with sensor, Body Normal

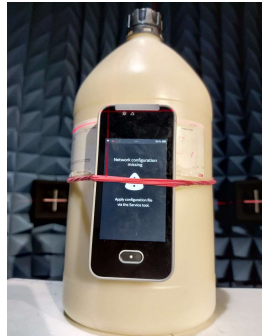
(Old picture, same setup but without cable in this measurement)



ANT HUB A1, Free Space



ANT HUB A1, Body Normal



Instrument name: OTA 4 9.11.2020 9:33:47

	Minimum	Maximum	Mean value	Limit values
OTA 4 [°C]	19,1	23,9	21,068	10,0/30,0
OTA 4 [%RH]	22,7	52,3	34,416	10,0/70,0

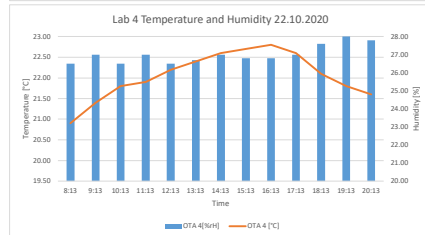
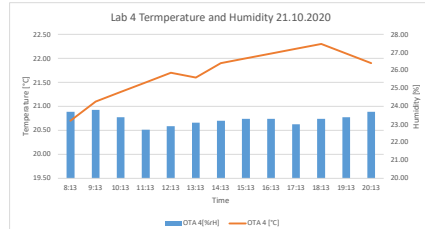
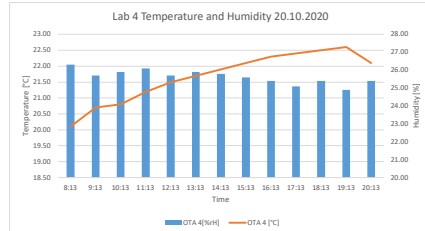
37307382

OTA 4 chamber temperature & humidity logger

id	Date	Time	OTA 4 [°C]	OTA 4[%RH]
309	20.10.2020	08:13:00	20.10	26.30
310	20.10.2020	09:13:00	20.70	25.70
311	20.10.2020	10:13:00	20.80	25.90
312	20.10.2020	11:13:00	21.20	26.10
313	20.10.2020	12:13:00	21.50	25.70
314	20.10.2020	13:13:00	21.70	25.90
315	20.10.2020	14:13:00	21.90	25.80
316	20.10.2020	15:13:00	22.10	25.60
317	20.10.2020	16:13:00	22.30	25.40
318	20.10.2020	17:13:00	22.40	25.10
319	20.10.2020	18:13:00	22.50	25.40
320	20.10.2020	19:13:00	22.60	24.90
321	20.10.2020	20:13:00	22.10	25.40
Average			21.68	25.63

	OTA 4 [°C]	OTA 4[%RH]
333	21.10.2020 08:13:00	20.70
334	21.10.2020 09:13:00	21.10
335	21.10.2020 10:13:00	21.30
336	21.10.2020 11:13:00	21.50
337	21.10.2020 12:13:00	21.70
338	21.10.2020 13:13:00	21.60
339	21.10.2020 14:13:00	21.90
340	21.10.2020 15:13:00	22.00
341	21.10.2020 16:13:00	22.10
342	21.10.2020 17:13:00	22.20
343	21.10.2020 18:13:00	22.30
344	21.10.2020 19:13:00	22.10
345	21.10.2020 20:13:00	21.90
Average		21.72

	OTA 4 [°C]	OTA 4[%RH]
357	22.10.2020 08:13:00	20.90
358	22.10.2020 09:13:00	21.40
359	22.10.2020 10:13:00	21.80
360	22.10.2020 11:13:00	21.90
361	22.10.2020 12:13:00	22.20
362	22.10.2020 13:13:00	22.40
363	22.10.2020 14:13:00	22.60
364	22.10.2020 15:13:00	22.70
365	22.10.2020 16:13:00	22.80
366	22.10.2020 17:13:00	22.60
367	22.10.2020 18:13:00	22.10
368	22.10.2020 19:13:00	21.80
369	22.10.2020 20:13:00	21.60
Average		22.06



Test Equipment

Main used test equipment are listed below. For full equipment list and calibration intervals, please contact the testing laboratory.

Type of Equipment	Type	Manufacturer
Diagonal Dual Polarized Horn Measurement Antenna	114960	ETS
Positioning Controller	2090	EMCO
3D Positioner	Custom Made	ETS-Lindgren
Switching System	MSN-6TD-06-DEC-SP	American Microwave
Switching System	SW6AD-A61	Pulsar
Anechoic Chamber	4	ETS-Lindgren
Power meter	NRP-221	Rohde & Schwarz
Signal Analyzer	MS2692A	Anritsu

Two polarizations (Hor&Ver) measured

Measured MBAN Channels:

Channel 0	2362 MHz
Channel 11	2390.2 MHz
Channel 13	2395.4 MHz
Channel 15	2402 MHz
Channel 31	2443 MHz
Channel 46	2481.5 MHz
Channel 47	2485.5 MHz
Channel 52	2498 MHz

Measured WLAN Channels:

WLAN 2.4 GHz	Channel 1	2412 MHz
	Channel 6	2437 MHz
	Channel 11	2462 MHz
	Channel 13	2472 MHz
WLAN 5 GHz	Channel 36	5180 MHz
	Channel 48	5240 MHz
	Channel 64	5320 MHz
	Channel 100	5500 MHz
	Channel 108	5540 MHz
	Channel 116	5580 MHz
	Channel 128	5640 MHz
	Channel 140	5700 MHz
	Channel 153	5765 MHz
	Channel 165	5825 MHz

20.10

ANT S0 S1 May FA						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	12.20	10.99	9.78	8.22	4.73	
ERP U	11.80	10.67	9.76	8.04	4.82	
ERP V	10.43	10.55	9.75	8.31	4.03	
TRP	3.84	3.04	1.64	-0.01	-1.50	

ANT S0 S1 May FA						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	11.82	11.86	11.81	8.80	6.32	
ERP U	11.30	10.68	9.75	8.04	4.76	
ERP V	10.56	11.63	13.72	8.54	6.15	
TRP	3.65	4.23	3.39	1.72	0.75	

ANT S0 S1 May FA						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	13.10	13.17	10.63	8.64	4.42	
ERP U	11.63	13.46	8.82	8.04	3.84	
ERP V	13.05	13.13	10.56	9.37	4.38	
TRP	3.80	5.05	1.63	-0.80	-1.34	

ANT S0 S1 May FA						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	11.20	12.50	12.20	8.20	6.30	
ERP U	11.00	12.50	12.50	8.80	6.30	
ERP V	10.00	11.82	12.11	8.07	5.94	
TRP	3.75	5.38	4.57	1.89	0.48	

ANT S0 S2 May FA						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	13.48	13.43	13.31	10.40	10.40	
ERP U	13.07	13.17	9.37	9.80	9.80	
ERP V	13.65	14.10	13.37	9.30	8.80	
TRP	4.32	5.59	4.73	1.05	0.54	

ANT S0 S2 May FA						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	11.30	10.89	10.00	7.43	5.07	
ERP U	10.50	10.18	7.50	5.54	5.00	
ERP V	9.90	10.89	10.00	7.38	4.90	
TRP	3.39	3.79	2.46	0.54	-0.07	

ANT S0 S2 May IC						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	5.55	5.38	3.80	-0.83	-1.20	
ERP U	5.14	5.17	3.79	-0.29	-1.33	
ERP V	6.86	5.09	3.79	0.27	-1.29	
TRP	-3.13	-3.02	-5.11	-0.74	-7.02	

ANT S0 S2 MCAL 0										
Channel	CH 0	CH 11	CH 13	CH 15	CH 21	CH 46	CH 47	CH 52		
Frequency	2400MHz	2400MHz	2404MHz	2404MHz	2406MHz	2406MHz	2408MHz	2408MHz		
ERP Tot	-0.81	-0.51	-0.51	-0.39	-0.39	-0.39	-0.39	-0.39	-0.39	-0.39
ERP U	-1.05	-1.54	-10.21	-10.32	8.30	5.76	8.31	-8.96		
ERP V	-1.08	-1.00	-12.02	-11.39	12.27	8.71	-4.24	-7.79		
TRP	0.78	0.57	3.32	3.32	3.97	3.30	-13.00	-13.18		

ANT S0 S2 MCAL 1						
Channel	CH 15	CH 31	CH 46	CH 52		
Frequency	2400MHz	2404MHz	2406MHz	2408MHz		
ERP Tot	-0.76	-0.76	-0.65	-0.70		
ERP U	-7.10	4.98	3.53	3.01		
ERP V	-0.20	9.26	-4.38	-4.26		
TRP	0.07	0.17	-0.94	-2.04		

ANT S0 S2 May FA, Body Normal						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	8.23	8.23	8.23	8.23	8.23	
ERP U	7.88	9.26	6.44	5.22	4.38	
ERP V	8.24	8.24	-2.64	-2.06	-1.86	
TRP	0.32	1.42	-0.30	-2.04	-2.86	

ANT S0 S2 May FA, Body Flipped						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	8.04	7.77	7.80	6.39	5.36	
ERP U	7.68	7.55	6.20	5.80	4.80	
ERP V	8.44	4.60	6.20	7.09	10.00	
TRP	-1.10	-2.03	-1.38	-0.87	-1.52	

ANT S0 S1 May FA, Body Normal						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	6.00	7.03	-	4.74	-	
ERP U	5.78	6.78	-	4.61	-	
ERP V	5.68	1.61	-	-0.42	-	
TRP	-1.25	-0.45	-	-2.13	-	

ANT S0 S1 May IC						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	4.92	2.11	0.66	-3.06	-2.30	
ERP U	3.74	1.40	0.55	-2.89	-2.53	
ERP V	1.80	0.78	0.55	-1.89	-2.88	
TRP	-4.50	-5.77	-7.54	-7.72	-8.13	

21.10

ANT H0 B1 May FA Bottom Antenna						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	13.52	13.39	12.38	12.42	11.30	
ERP U	12.70	12.74	12.74	10.60	9.80	
ERP V	13.52	12.69	12.82	12.21	10.05	
TRP	9.27	9.50	8.63	7.80	7.00	

ANT H0 B1 May FA Top Antenna						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	15.40	15.40	15.83	15.12	15.17	
ERP U	15.20	15.40	15.74	15.08	15.08	
ERP V	13.98	14.67	15.63	14.96	15.05	
TRP	8.90	9.41	9.10	8.69	8.42	

ANT H0 B1 May IC Top Antenna						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	6.31	6.83	7.13	6.40	6.80	
ERP U	5.86	6.16	6.30	5.91	6.38	
ERP V	5.92	5.74	6.93	6.20	6.38	
TRP	-0.00	0.36	0.44	0.07	0.12	

ANT H0 B1 May IC Bottom Antenna						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	4.92	4.98	4.96	3.20	2.75	
ERP U	3.80	3.94	2.95	3.00	2.88	
ERP V	3.95	3.85	4.35	3.17	1.84	
TRP	0.55	0.60	-0.13	-1.11	-2.89	

ANT H0 B2 May FA Top Antenna						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	13.20	13.20	13.20	13.20	13.20	
ERP U	14.37	13.76	13.76	13.20	13.20	
ERP V	13.92	13.26	13.26	13.20	13.20	
TRP	9.17	9.32	8.76			

ANT H0 B2 May FA Bottom Antenna						
Channel	CH 0	CH 15	CH 31	CH 46	CH 52	
Frequency	2400MHz	2402MHz	2404MHz	2406MHz	2408MHz	
ERP Tot	13.52	13.52	13.52	13.52	13.52	
ERP U	12.90	13.68	13.68	13.68	13.68	
ERP V	13.90	13.90	13.90	13.90	13.90	
TRP	9.74	8.51				

ANT H0 B1 MCAL 0 Top Antenna										
Channel	CH 0	CH 11	CH 13	CH 15	CH 21	CH 46	CH 47	CH 52		
Frequency	2400MHz	2400MHz	2404MHz	2404MHz	2406MHz	2406MHz	2408MHz	2408MHz		
ERP Tot	-3.12	-0.93	11.00	-14.12	14.00	13.28	-0.14	-8.42		
ERP U	5.14	-2.17	11.00	13.13	9.73	9.68	-3.32	-1.43		
ERP V	-2.78	-1.29	13.12	13.28	13.68	13.54	-0.82	-0.58		
TRP	-7.70	-7.21	5.00	6.04	6.00	6.47	-0.55	-0.86		

ANT H0 B1 MCAL 0 Bottom Antenna										
Channel	CH 0	CH 11	CH 13	CH 15	CH 21	CH 46	CH 47	CH 52		
Frequency	2400MHz	2400MHz	2404MHz	2404MHz	2406MHz	2406MHz	2408MHz	2408MHz		
ERP Tot	-2.62	-2.76	10.24	-10.47	10.11	9.73	-2.73	-3.74		
ERP U	-3.00	-2.81	10.40	-10.40	10.11	10.21	-3.20	-3.90		
TRP	6.12	5.67	7.12	7.10	6.92	6.92	-0.87	-0.61		

ANT H0 B1 MCAL 1 Bottom Antenna						
Channel	CH 15	CH 31	CH 46	CH 52		
Frequency	2400MHz	2404MHz	2406MHz	2408MHz		
ERP Tot	-0.70	-0.70	-0.68	-0.68		
ERP U	-7.41	6.79	7.00	6.67		
ERP V	-7.31	7.97	4.66	7.42		
TRP	0.99	3.75	4.01	3.80		

ANT H0 B1 MCAL 1 Top Antenna						
Channel	CH 15	CH 31	CH 46	CH 52		
Frequency	2400MHz	2404MHz	2406MHz	2408MHz		
ERP Tot	8.10	8.10	8.10	8.10		
ERP U	7.41	6.61	6.71	7.06		
ERP V	8.10	8.10	8.10	8.10		
TRP	2.97	3.01	3.29	3.53		

ANT HUB A1, Max PA, Body Normal, Top Antenna					
Channel	CH 0	CH 15	CH 31	CH 46	CH 52
Frequency	2362MHz	2402MHz	2443MHz	2481.5MHz	2488MHz
ERP Tot	12.28	13.48	13.37	13.27	13.10
ERP U	11.09	12.85	12.87	12.89	12.64
ERP V	8.01	8.57	8.16	6.29	6.77
TRP	4.19	5.18	5.11	4.60	4.47

22.10.

WLAN 2.4GHz

ANT HUB A1, Top Antenna

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
ERP Tot	14.45	18.29	15.27	18.03
ERP H	13.14	16.41	11.49	14.75
ERP V	14.00	17.72	15.16	17.95
TRP	9.66	11.89	9.44	11.99

ANT HUB A2, Top Antenna

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
ERP Tot	11.93	-	-	15.59
ERP H	10.81	-	-	12.54
ERP V	11.03	-	-	15.56
TRP	4.10	-	-	8.66

ANT HUB A1, Top Antenna, Body Normal

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
ERP Tot	12.48	-	-	16.75
ERP H	9.97	-	-	15.73
ERP V	8.91	-	-	12.04
TRP	6.18	-	-	9.08

ANT HUB A1, Top Antenna, Body Flipped

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
ERP Tot	12.88	-	-	15.79
ERP H	11.44	-	-	14.00
ERP V	9.42	-	-	12.84
TRP	6.42	-	-	9.18

WLAN 5GHz

ANT HUB A1, Top Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	12.48	13.80	-	12.77	16.50	18.76	18.64	-	17.90	-	14.78	20.34	16.20
ERP H	9.20	10.28	-	8.72	12.28	14.46	14.50	-	13.96	-	11.68	17.72	14.20
ERP V	11.05	12.05	-	11.00	14.81	17.05	16.83	-	16.00	-	12.72	18.22	13.08
TRP	6.77	7.59	-	6.10	8.81	10.8	10.46	-	9.96	-	6.63	11.97	8.19

ANT HUB A2, Top Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	12.03	-	-	-	-	-	-	-	-	-	-	-	15.61
ERP H	8.34	-	-	-	-	-	-	-	-	-	-	-	13.41
ERP V	11.22	-	-	-	-	-	-	-	-	-	-	-	15.61
TRP	6.27	-	-	-	-	-	-	-	-	-	-	-	8.11

ANT HUB A1, Bottom Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	13.87	13.63	-	11.36	13.83	15.33	14.71	-	15.16	-	10.63	17.30	13.34
ERP H	11.87	12.78	-	11.00	13.66	14.90	14.56	-	15.05	-	10.34	17.22	13.16
ERP V	12.68	12.68	-	9.01	11.24	14.02	13.30	-	14.46	-	9.63	15.18	11.73
TRP	8.63	9.00	-	6.41	8.65	10.70	10.16	-	10.17	-	5.86	11.14	7.62

ANT HUB A2, Bottom Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	12.62	-	-	-	-	-	-	-	-	-	-	-	12.26
ERP H	11.45	-	-	-	-	-	-	-	-	-	-	-	12.09
ERP V	11.79	-	-	-	-	-	-	-	-	-	-	-	10.32
TRP	7.72	-	-	-	-	-	-	-	-	-	-	-	6.85

ANT HUB A1, Top Antenna, Body Normal

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	11.44	-	-	-	13.93	-	-	-	-	-	-	-	13.89
ERP H	10.69	-	-	-	12.63	-	-	-	-	-	-	-	13.52
ERP V	9.71	-	-	-	11.77	-	-	-	-	-	-	-	11.49
TRP	4.88	-	-	-	6.95	-	-	-	-	-	-	-	6.25

ANT HUB A1, Top Antenna, Body Flipped

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	13.52	-	-	-	16.21	-	-	-	-	-	-	-	15.12
ERP H	9.69	-	-	-	13.50	-	-	-	-	-	-	-	14.44
ERP V	11.91	-	-	-	13.38	-	-	-	-	-	-	-	13.70
TRP	4.90	-	-	-	7.22	-	-	-	-	-	-	-	6.17

ANT HUB A1, Bottom Antenna, Body Normal

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	14.31	-	-	-	12.30	-	-	-	-	-	-	-	12.96
ERP H	13.52	-	-	-	11.94	-	-	-	-	-	-	-	11.80
ERP V	10.58	-	-	-	8.61	-	-	-	-	-	-	-	10.97
TRP	7.24	-	-	-	6.31	-	-	-	-	-	-	-	5.90

ANT HUB A1, Bottom Antenna, Body Flipped

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
ERP Tot	14.21	-	-	-	13.41	-	-	-	-	-	-	-	13.97
ERP H	11.77	-	-	-	12.75	-	-	-	-	-	-	-	13.36
ERP V	11.69	-	-	-	10.03	-	-	-	-	-	-	-	10.61
TRP	6.66	-	-	-	7.07	-	-	-	-	-	-	-	5.95

Duty cycle

On	0	5.47 ms	5.47
Off	5.47	5.711 ms	0.241
			5.711
			0.957801
			0.94
			-0.187 dB
			-0.269

WLAN 2.4GHz

ANT HUB A1, Top Antenna

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
Channel Frequency	14.64	18.48	15.46	18.22
ERP Tot	13.33	16.60	11.68	14.94
ERP H	14.19	17.91	15.35	18.14
ERP V				
TRP	9.85	12.08	9.63	12.18

ANT HUB A2, Top Antenna

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
Channel Frequency	12.12	-	-	15.78
ERP Tot	10.50	-	-	12.73
ERP H	11.22	-	-	15.75
ERP V				
TRP	4.29	-	-	8.85

ANT HUB A1, Bottom Antenna

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
Channel Frequency	12.67	-	-	16.94
ERP Tot	10.16	-	-	15.92
ERP H	9.10	-	-	12.23
ERP V				
TRP	6.367	-	-	9.27

ANT HUB A1, Top Antenna, Body Flipped

Channel Frequency	CH 1 2412MHz	CH 6 2437MHz	CH 11 2462MHz	CH 13 2472MHz
Channel Frequency	13.07	-	-	15.98
ERP Tot	11.63	-	-	14.19
ERP H	9.61	-	-	13.027
ERP V				
TRP	6.61	-	-	9.37

WLAN 5GHz

ANT HUB A1, Top Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	12.67	13.99	-	12.96	16.69	18.95	18.83	-	18.09	-	14.97	20.53	16.39
ERP Tot	9.39	10.47	-	8.91	12.47	14.65	14.69	-	14.15	-	11.87	17.91	14.39
ERP H	11.24	12.24	-	11.19	15.00	17.24	17.60	-	16.19	-	12.91	18.41	13.27
ERP V													
TRP	6.96	7.78	-	6.29	9.00	10.99	10.65	-	10.15	-	6.82	12.16	8.38

ANT HUB A2, Top Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	12.22	-	-	-	-	-	-	-	-	-	-	-	15.80
ERP Tot	8.53	-	-	-	-	-	-	-	-	-	-	-	13.60
ERP H	11.41	-	-	-	-	-	-	-	-	-	-	-	15.80
ERP V													
TRP	6.46	-	-	-	-	-	-	-	-	-	-	-	8.30

ANT HUB A1, Bottom Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	14.06	13.82	-	11.55	14.02	15.52	14.90	-	15.35	-	10.82	17.49	13.53
ERP Tot	12.06	12.97	-	11.19	13.85	15.09	14.75	-	15.24	-	10.53	17.41	13.35
ERP H	12.87	12.87	-	9.20	11.43	14.21	13.58	-	14.65	-	9.82	15.37	11.92
ERP V													
TRP	8.82	9.19	-	6.60	8.84	10.89	10.35	-	10.36	-	6.05	11.33	7.81

ANT HUB A2, Bottom Antenna

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	12.81	-	-	-	-	-	-	-	-	-	-	-	12.45
ERP Tot	11.64	-	-	-	-	-	-	-	-	-	-	-	12.26
ERP H	11.98	-	-	-	-	-	-	-	-	-	-	-	10.51
ERP V													
TRP	7.91	-	-	-	-	-	-	-	-	-	-	-	7.04

ANT HUB A1, Top Antenna, Body Normal

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	11.63	-	-	-	14.12	-	-	-	-	-	-	-	14.08
ERP Tot	10.88	-	-	-	12.82	-	-	-	-	-	-	-	13.71
ERP H	9.90	-	-	-	11.96	-	-	-	-	-	-	-	11.68
ERP V													
TRP	5.07	-	-	-	7.14	-	-	-	-	-	-	-	6.44

ANT HUB A1, Top Antenna, Body Flipped

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	13.71	-	-	-	16.40	-	-	-	-	-	-	-	15.31
ERP Tot	9.88	-	-	-	13.69	-	-	-	-	-	-	-	14.63
ERP H	12.10	-	-	-	13.57	-	-	-	-	-	-	-	13.89
ERP V													
TRP	5.09	-	-	-	7.41	-	-	-	-	-	-	-	6.36

ANT HUB A1, Bottom Antenna, Body Normal

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	14.50	-	-	-	12.49	-	-	-	-	-	-	-	13.15
ERP Tot	13.71	-	-	-	12.13	-	-	-	-	-	-	-	11.99
ERP H	10.77	-	-	-	8.80	-	-	-	-	-	-	-	11.16
ERP V													
TRP	7.43	-	-	-	6.50	-	-	-	-	-	-	-	6.09

ANT HUB A1, Bottom Antenna, Body Flipped

Channel Frequency	CH 36 5180MHz	CH 48 5240MHz	CH 56 5280MHz	CH 64 5320MHz	CH 100 5500MHz	CH 108 5540MHz	CH 116 5580MHz	CH 124 5620MHz	CH 128 5640 MHz	CH 132 5660MHz	CH 140 5700MHz	CH 153 5765MHz	CH 165 5825MHz
Channel Frequency	14.40	-	-	-	13.60	-	-	-	-	-	-	-	14.16
ERP Tot	11.96	-	-	-	12.94	-	-	-	-	-	-	-	13.55
ERP H	11.88	-	-	-	10.22	-	-	-	-	-	-	-	10.80
ERP V													
TRP	6.85	-	-	-	7.26	-	-	-	-	-	-	-	6.14

Duty cycle

On	0	5.47 ms	5.47
Off	5.47	5.711 ms	0.241
			5.711
			0.957801
			0.94
			-0.187 dB
			-0.269