

Class II Permissive Change Request

Date: May 27, 2020

Federal Communications Commission
7435 Oakland Mills Road
Columbia MD 21046

FCC ID: UIDW31
Model: W31, W30
Original Grant Date: July 26, 2018 (last updated July 12, 2019)

To Whom It May Concern:

Pursuant to CFR 2.1043, ARRIS hereby requests a Class II Permissive Change for the following product modifications:

1. Change the antenna and antenna models (all internal)
2. Change antenna locations (Ant. 2/5/6/7/8/9/10)


The following table shows a high-level comparison of the output power levels before/after the antenna changes. As shown, the output power after the requested modifications is within the power levels previously granted. Further details are provided on the following pages and the included reports.

Maximum RF Power Output

Frequency Band (MHz)	Original Granted Antennas Maximum Power (Watts)	New Antennas Maximum Power (Watts)
2400-2483.5 Wi-Fi	0.993	0.993
2400-2483.5 Bluetooth	0.002	0.002
5150-5250	0.957	0.955
5250-5350	0.249	0.246
5470-5725	0.248	0.247
5725-5850	0.984	0.977

If you should have any questions regarding this modification, please don't hesitate to contact us. Thank you!

Sincerely,
Applicant : ARRIS
Address : 3871 Lakefield Drive, Suwanee, Georgia, 30024 USA

Signature : 
Name and Title : Thomas Kelleher / Compliance Engineer
E-Mail : thomas.kelleher@commscope.com
Telephone : 215-323-2257

Antenna Model Changes

Ant#	Function	Brand	Old Antenna PCB p/n	Old Antenna Assembly p/n	New Antenna Assembly p/n
1	Wi-Fi 2.4GHz & 5GHz Bands 1-2	Pegatron	RFPCA2620-01_Rev02	1415-06WF000	1415-07GT000
2	Wi-Fi 2.4GHz & 5GHz Bands 1-2	Pegatron	RFPCA2620-02_Rev02	1415-06WG000	1415-07GS000
3	Wi-Fi 2.4GHz & 5GHz Bands 1-2	Pegatron	RFPCA2620-03_Rev01	1415-06WH000	1415-06WH000
4	Wi-Fi 2.4GHz & 5GHz Bands 1-2	Pegatron	RFPCA2620-04_Rev02	1415-06WJ000	1415-07GW000
5	Wi-Fi 5GHz Bands 3-4	Pegatron	RFPCA2307-02 Rev02	1415-06WK000	1415-07GU000
6	Wi-Fi 5GHz Bands 3-4	Pegatron	RFPCA2211-03 Rev01	1415-06WB000	1415-07JP000
7	Wi-Fi 5GHz Bands 3-4	Pegatron	RFPCA2211-04 Rev02	1415-06WC000	1415-07JN000
8	Wi-Fi 5GHz Bands 3-4	Pegatron	RFPCA1806-03 Rev01	1415-077R000	1415-07GX000
9	Bluetooth	Pegatron	RFPCA3508-05_Rev02	1415-06WE000	1415-07JQ000
10	Wi-Fi 5GHz Rx only	Pegatron	RFPCA1806-03 Rev01	1415-06MM000	1415-06MM000

Antenna Gain Change, Uncorrelated

Ant#	Original Antennas (dBi)				New Antennas (dBi)			
	2.4GHz	5GHz Bands 1-2	5GHz Bands 3-4	Bluetooth	2.4GHz	5GHz Bands 1-2	5GHz Bands 3-4	Bluetooth
1	4.22	5.71			4.73	4.35		
2	4.22	5.71			4.73	4.35		
3	4.22	5.71			4.73	4.35		
4	4.22	5.71			4.73	4.35		
5			5.82				5.11	
6			5.82				5.11	
7			5.82				5.11	
8			5.82				5.11	
9				4.12				4.03
10		5.23	5.23			5.00	5.00	

Antenna Gain Change, Correlated

Ant#	Original Antennas (dBi)			New Antennas (dBi)		
	2.4GHz	5GHz Bands 1-2	5GHz Bands 3-4	2.4GHz	5GHz Bands 1-2	5GHz Bands 3-4
1	5.35	6.23		6.55	6.83	
2	5.35	6.23		6.55	6.83	
3	5.35	6.23		6.55	6.83	
4	5.35	6.23		6.55	6.83	
5			6.93			7.15
6			6.93			7.15
7			6.93			7.15
8			6.93			7.15