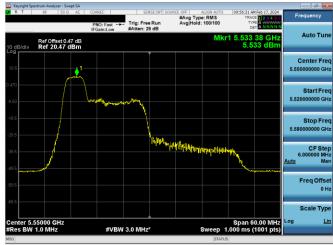


Plot 7-587. PSD CDD Diversity Antenna WF7 (20MHz BW 11ax-RU242 - Ch.116)



Plot 7-585. PSD CDD Diversity Antenna WF7 (20MHz BW 11ax Index 40 - RU52 - Ch.116)



Plot 7-588. PSD CDD Diversity Antenna WF5B (40MHz BW 11ax Index 37 - RU52 - Ch.110)



Plot 7-586. PSD CDD Diversity Antenna WF5B (20MHz BW 11ax- RU242 - Ch.116)

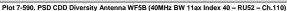


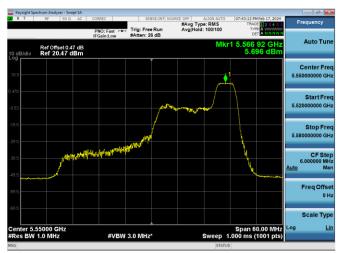
Plot 7-589. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax Index 37 - RU52 - Ch.110)

FCC ID: BCGA2836 IC: 579C-A2836	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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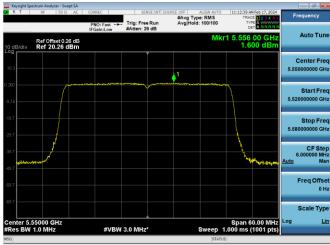




Plot 7-593. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax Index 44 - RU52 - Ch.110)



Plot 7-591. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax Index 40 - RU52 - Ch.110)



Plot 7-594. PSD CDD Diversity Antenna WF5B (40MHz BW 11ax - RU484 - Ch.110)



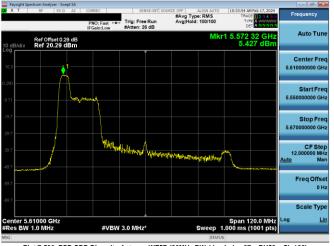
Plot 7-592. PSD CDD Diversity Antenna WF5B (40MHz BW 11ax Index 44 - RU52 - Ch.110)

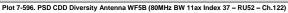


Plot 7-595. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax - RU484 - Ch.110)

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)	
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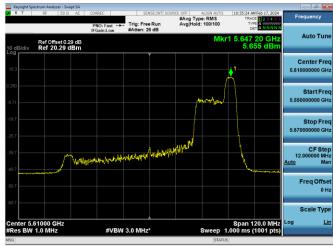




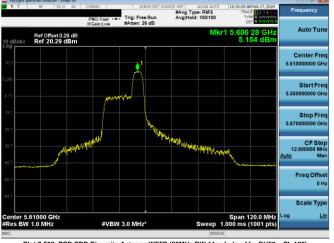
Plot 7-599. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax Index 44 - RU52 - Ch.122)



Plot 7-597. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax Index 37 - RU52 - Ch.122)



Plot 7-600. PSD CDD Diversity Antenna WF5B (80MHz BW 11ax Index 52 - RU52 - Ch.122)



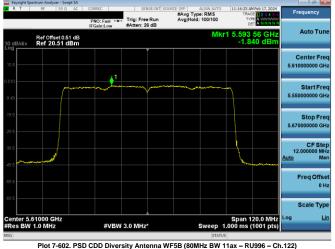
Plot 7-598. PSD CDD Diversity Antenna WF5B (80MHz BW 11ax Index 44 - RU52 - Ch.122)



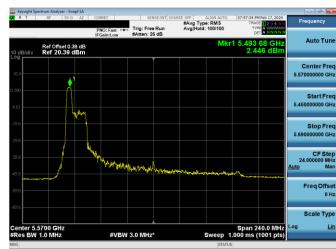
Plot 7-601. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax Index 52 - RU52 - Ch.122)

FCC ID: BCGA2836 IC: 579C-A2836	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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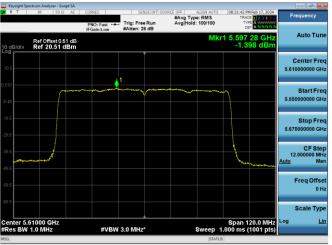




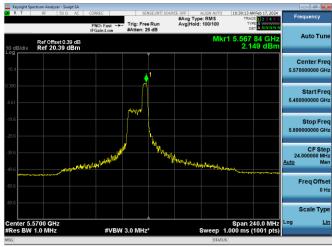




Plot 7-605. PSD CDD Diversity Antenna WF7 (160MHz BW 11ax Index 37 - RU52 - Ch.114 (L))



Plot 7-603. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax - RU996 - Ch.122)



Plot 7-606. PSD CDD Diversity Antenna WF5B (160MHz BW 11ax Index 52 - RU52 - Ch.114 (L))



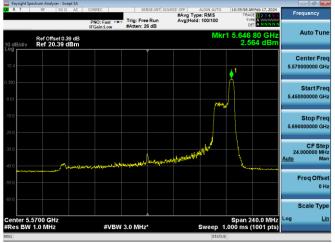
Plot 7-604. PSD CDD Diversity Antenna WF5B (160MHz BW 11ax Index 37 - RU52 - Ch.114 (L))



Plot 7-607. PSD CDD Diversity Antenna WF7 (160MHz BW 11ax Index 52 - RU52 - Ch.114 (L))

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)		
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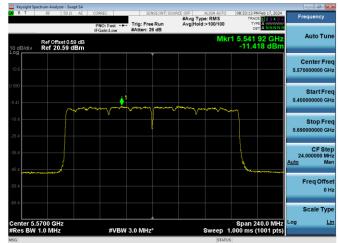


Plot 7-608. PSD CDD Diversity Antenna WF5B (160MHz BW 11ax Index 52 - RU52 - Ch.114 (U)) Plot 7-610. P.

Plot 7-610. PSD CDD Diversity Antenna WF5B (160MHz BW 11ax - RU996x2 - Ch.114)



Plot 7-609. PSD CDD Diversity Antenna WF7 (160MHz BW 11ax Index 52 - RU52 - Ch.114 (U))



Plot 7-611. PSD CDD Diversity Antenna WF7 (160MHz BW 11ax - RU996x2 - Ch.114)

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)		
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	Frequency [MHz]	Channel No.	802.11 MODE	Mode	RU Size	RU Index	Data Rate [Mbps]	Antenna WF8 Power Density [dBm/500kHz]	Antenna WF7 Power Density [dBm/500kHz]	Summed Power Density [dBm/500kHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]		
					26	0	25/29.4 (MCS11)	4.47	4.60	7.54	30.0	-25.40		
	5745	149	ax (20MHz)	CDD	26	4	25/29.4 (MCS11)	4.54	4.52	7.54	30.0	-25.48		
					26	8	25/29.4 (MCS11)	4.58	4.41	7.50	30.0	-25.59		
					26	0	25/29.4 (MCS11)	4.47	3.96	7.23	30.0	-26.04		
	5785	157	ax (20MHz)	CDD	26	4	25/29.4 (MCS11)	3.93	4.46	7.21	30.0	-25.55		
					26	8	25/29.4 (MCS11)	4.48	4.27	7.38	30.0	-25.73		
							26	0	25/29.4 (MCS11)	4.91	4.64	7.79	30.0	-25.36
က	5825	165	ax (20MHz)	CDD	26	4	25/29.4 (MCS11)	4.20	5.37	7.84	30.0	-24.63		
					26	8	25/29.4 (MCS11)	4.45	5.06	7.77	30.0	-24.94		
Band					26	0	25/29.4 (MCS11)	3.68	3.79	6.74	30.0	-26.21		
_	5755	151	ax (40MHz)	CDD	26	8	25/29.4 (MCS11)	4.59	4.83	7.72	30.0	-25.17		
							26	17	25/29.4 (MCS11)	3.65	4.20	6.94	30.0	-25.80
	5795 159 ax (40)					26	0	25/29.4 (MCS11)	3.89	3.64	6.77	30.0	-26.36	
		159	ax (40MHz)	CDD	26	8	25/29.4 (MCS11)	4.65	4.30	7.49	30.0	-25.70		
					26	17	25/29.4 (MCS11)	4.52	4.17	7.36	30.0	-25.83		
					26	0	25/29.4 (MCS11)	4.16	4.44	7.31	30.0	-25.56		
	5775	155	ax (80MHz)	CDD	26	18	25/29.4 (MCS11)	3.65	3.77	6.72	30.0	-26.23		
					•		26	36	25/29.4 (MCS11)	4.23	4.27	7.26	30.0	-25.73

Table 7-198. Band 3 Power Spectral Density Measurements CDD Diversity (RU26)

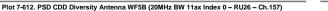
	Frequency [MHz]	Channel	802.11 MODE	Mode	RU Size	RU Index	Data Rate [Mbps]	Antenna WF8 Power Density [dBm/500kHz]	Antenna WF7 Power Density [dBm/500kHz]	Summed Power Density [dBm/500kHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	ax (20MHz)	CDD	242	61	243.8/286.8 (MCS11)	5.06	4.71	7.89	30.0	-25.30
m	5785	157	ax (20MHz)	CDD	242	61	243.8/286.8 (MCS11)	4.85	4.88	7.88	30.0	-25.12
ğ	5825	165	ax (20MHz)	CDD	242	61	243.8/286.8 (MCS11)	4.85	4.96	7.92	30.0	-25.04
Ba	5755	151	ax (40MHz)	CDD	484	65	487.5/573.5 (MCS11)	0.62	0.89	3.77	30.0	-29.11
_	5795	159	ax (40MHz)	CDD	484	65	487.5/573.5 (MCS11)	1.67	2.04	4.87	30.0	-27.96
	5775	155	ax (80MHz)	CDD	996	67	1020.8/1201 (MCS11)	-4.96	-4.35	-1.63	30.0	-34.35

Table 7-199. Band 3 Power Spectral Density Measurements CDD Diversity (Fully-loaded RU)

FCC ID: BCGA2836 IC: 579C-A2836	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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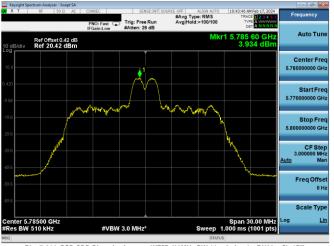
Plot 7-615. PSD CDD Diversity Antenna WF7 (20MHz BW 11ax Index 4 - RU26 - Ch.157)



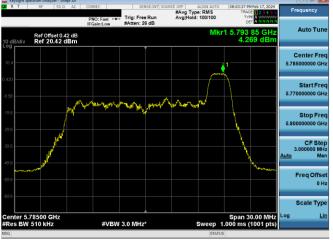
Plot 7-613. PSD CDD Diversity Antenna WF7 (20MHz BW 11ax Index 0 - RU26 - Ch.157)



Plot 7-616. PSD CDD Diversity Antenna WF5B (20MHz BW 11ax Index 8 – RU26 – Ch.157)



Plot 7-614. PSD CDD Diversity Antenna WF5B (20MHz BW 11ax Index 4 - RU26 - Ch.157)



Plot 7-617. PSD CDD Diversity Antenna WF7 (20MHz BW 11ax Index 8 - RU26 - Ch.157)

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)	
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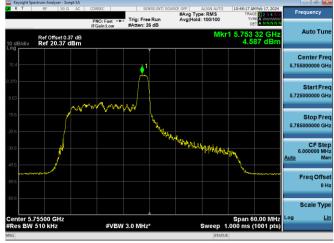




Plot 7-618. PSD CDD Diversity Antenna WF5B (20MHz BW 11ax - RU242 - Ch.157)

Plot 7-621. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax Index 0 - RU26 - Ch.151)

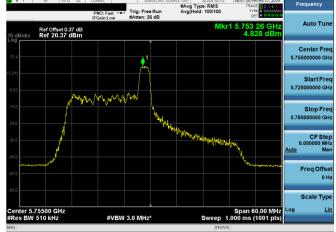




Plot 7-619. PSD CDD Diversity Antenna WF7 (20MHz BW 11ax - RU242 - Ch.157)

Plot 7-622. PSD CDD Diversity Antenna WF5B (40MHz BW 11ax Index 8 - RU26 - Ch.151)





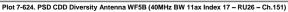
Plot 7-620. PSD CDD Diversity Antenna WF5B (40MHz BW 11ax Index 0 - RU26 - Ch.151)

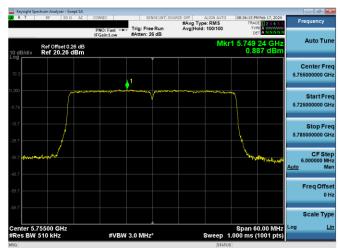
Plot 7-623. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax Index 8 - RU26 - Ch.151)

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)		
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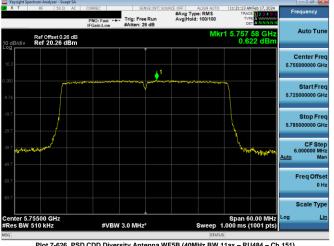
Plot 7-627. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax - RU484 - Ch.151)



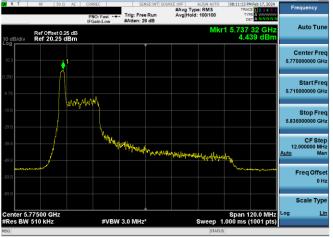
Plot 7-625. PSD CDD Diversity Antenna WF7 (40MHz BW 11ax Index 17 - RU26 - Ch.151)



Plot 7-628. PSD CDD Diversity Antenna WF5B (80MHz BW 11ax Index 0 - RU26 - Ch.155)



Plot 7-626. PSD CDD Diversity Antenna WF5B (40MHz BW 11ax - RU484 - Ch.151)



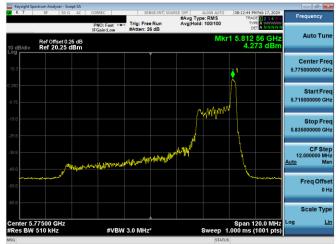
Plot 7-629. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax Index 0 - RU26 - Ch.155)

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)		
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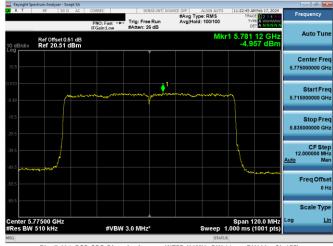
Plot 7-630. PSD CDD Diversity Antenna WF5B (80MHz BW 11ax Index 18 - RU26 - Ch.155)



Plot 7-633. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax Index 36 - RU26 - Ch.155)



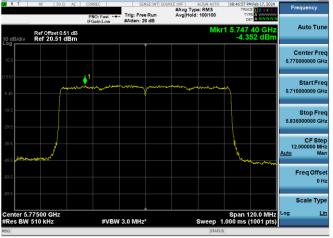
Plot 7-631. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax Index 18 - RU26 - Ch.155)



Plot 7-634. PSD CDD Diversity Antenna WF5B (80MHz BW 11ax - RU996 - Ch.155)



Plot 7-632. PSD CDD Diversity Antenna WF5B (80MHz BW 11ax Index 36 – RU26 – Ch.155)



Plot 7-635. PSD CDD Diversity Antenna WF7 (80MHz BW 11ax - RU996 - Ch.155)

FCC ID: BCGA2836 IC: 579C-A2836	element	element MEASUREMENT REPORT (CERTIFICATION)	
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	Frequency [MHz]	Channel No.	802.11 MODE	Mode	RU Size	RU Index	Data Rate [Mbps]	Antenna WF8 Power Density [dBm/MHz]	Antenna WF7 Power Density [dBm/MHz]	Summed Power Density [dBm/MHz]	Directoinal Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]															
					26	0	25/29.4 (MCS11)	2.71	2.37	5.55	0.85	6.41	10.0	-3.59															
	5180	36	ax (20MHz)	SDM	26	4	25/29.4 (MCS11)	1.87	1.25	4.58	0.85	5.43	10.0	-4.57															
					26	8	25/29.4 (MCS11)	2.41	1.77	5.11	0.85	5.97	10.0	-4.03															
					26	0	25/29.4 (MCS11)	2.69	2.32	5.52	0.85	6.37	10.0	-3.63															
	5200	40	ax (20MHz)	SDM	26	4	25/29.4 (MCS11)	1.99	1.02	4.54	0.85	5.40	10.0	-4.60															
						,			26	8	25/29.4 (MCS11)	2.89	2.38	5.65	0.85	6.51	10.0	-3.49											
										26	0	25/29.4 (MCS11)	2.87	1.67	5.32	0.85	6.17	10.0	-3.83										
	5240	5240 48 ax (20MHz)	ax (20MHz)	SDM	26	4	25/29.4 (MCS11)	1.43	1.49	4.47	0.85	5.33	10.0	-4.67															
<u> </u>									26	8	25/29.4 (MCS11)	1.94	1.95	4.96	0.85	5.81	10.0	-4.19											
Band							26	0	25/29.4 (MCS11)	1.98	2.90	5.47	0.85	6.33	10.0	-3.67													
_	5190	38	ax (40MHz)	SDM	26	8	25/29.4 (MCS11)	3.00	2.57	5.80	0.85	6.66	10.0	-3.34															
			· ·											1				•		26	17	25/29.4 (MCS11)	2.95	2.39	5.69	0.85	6.54	10.0	-3.46
											26	0	25/29.4 (MCS11)	3.14	2.45	5.82	0.85	6.68	10.0	-3.32									
	5230	46	ax (40MHz)	SDM	26	8	25/29.4 (MCS11)	3.06	2.91	5.99	0.85	6.85	10.0	-3.15															
					26	17	25/29.4 (MCS11)	3.18	3.07	6.13	0.85	6.99	10.0	-3.01															
					26	0	25/29.4 (MCS11)	2.96	3.09	6.03	0.85	6.89	10.0	-3.11															
	5210	42	ax (80MHz)	SDM	26	18	25/29.4 (MCS11)	1.79	1.85	4.83	0.85	5.68	10.0	-4.32															
								26	36	25/29.4 (MCS11)	2.65	2.85	5.76	0.85	6.61	10.0	-3.39												
Band 1/2A	5050	50 (1)	(4 COM II I=)	CDM	52	37	50/58.8 (MCS11)	2.58	2.94	5.78	0.85	6.63	10.0	-3.37															
Ba 1/2	5250	50 (L)	ax (160MHz)	SDM	52	52	50/58.8 (MCS11)	2.26	2.92	5.61	0.85	6.47	10.0	-3.53															

Table 7-200. ISED Band 1 e.i.r.p. Power Spectral Density Measurements SDM Diversity (RU26/RU52)

	Frequency [MHz]	Channel	802.11 MODE	Mode	RU Size	RU Index	Data Rate [Mbps]	Antenna WF8 Power Density [dBm/MHz]	Antenna WF7 Power Density [dBm/MHz]	Summed Power Density [dBm/MHz]	Directoinal Antenna Gain [dBi]		ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	SDM	242	61	243.8/286.8 (MCS11)	1.96	1.72	4.85	0.85	5.70	10.0	-4.30
-	5200	40	ax (20MHz)	SDM	242	61	243.8/286.8 (MCS11)	2.05	1.65	4.87	0.85	5.72	10.0	-4.28
<u>5</u>	5240	48	ax (20MHz)	SDM	242	61	243.8/286.8 (MCS11)	1.92	1.90	4.92	0.85	5.77	10.0	-4.23
Bar	5190	38	ax (40MHz)	CDD	484	65	487.5/573.5 (MCS11)	-1.02	-1.19	1.90	3.81	5.72	10.0	-4.28
_	5230	46	ax (40MHz)	SDM	484	65	487.5/573.5 (MCS11)	2.43	2.17	5.31	0.85	6.16	10.0	-3.84
	5210	42	ax (80MHz)	CDD	996	67	1020.8/1201 (MCS11)	-5.16	-5.04	-2.09	3.81	1.72	10.0	-8.28
Band 1/2A	5250	50	ax (160MHz)	CDD	996x2	68	2041.6/2402 (MCS11)	-9.53	-9.99	-6.74	3.81	-2.93	10.0	-12.93

Table 7-201. ISED Band 1 e.i.r.p. Power Spectral Density Measurements SDM Diversity (Fully-loaded RU)

FCC ID: BCGA2836 IC: 579C-A2836	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-636. ISED PSD SDM Diversity Antenna WF5B (20MHz BW 11ax Index 0 - RU26 - Ch.40)



Plot 7-639. ISED PSD SDM Diversity Antenna WF7 (20MHz BW 11ax Index 4 - RU26 - Ch.40)



Plot 7-637. ISED PSD SDM Diversity Antenna WF7 (20MHz BW 11ax Index 0 – RU26 – Ch.40)



Plot 7-640. ISED PSD SDM Diversity Antenna WF5B (20MHz BW 11ax Index 8- RU26 - Ch.40)



Plot 7-638. ISED PSD SDM Diversity Antenna WF5B (20MHz BW 11ax Index 4 - RU26 - Ch.40)



Plot 7-641. ISED PSD SDM Diversity Antenna WF7 (20MHz BW 11ax Index 8- RU26 - Ch.40)

FCC ID: BCGA2836 IC: 579C-A2836	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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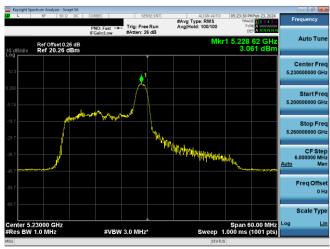
Plot 7-642. ISED PSD SDM Diversity Antenna WF5B (20MHz BW 11ax- RU242 - Ch.40)



Plot 7-645. ISED PSD SDM Diversity Antenna WF7 (40MHz BW 11ax Index 0 - RU26 - Ch.46)



Plot 7-643. ISED PSD SDM Diversity Antenna WF7 (20MHz BW 11ax-RU242 - Ch.40)



Plot 7-646. ISED PSD SDM Diversity Antenna WF5B (40MHz BW 11ax Index 8 - RU26 - Ch.46)



Plot 7-644. ISED PSD SDM Diversity Antenna WF5B (40MHz BW 11ax Index 0 – RU26 – Ch.46)



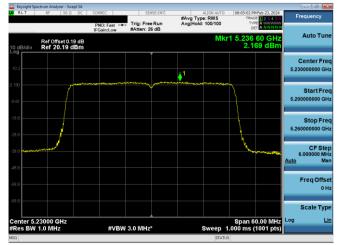
Plot 7-647. ISED PSD SDM Diversity Antenna WF7 (40MHz BW 11ax Index 8 - RU26 - Ch.46)

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Plot 7-648. ISED PSD SDM Diversity Antenna WF5B (40MHz BW 11ax Index 17 - RU26 - Ch.46)



Plot 7-651. ISED PSD SDM Diversity Antenna WF7 (40MHz BW 11ax - RU484 - Ch.46)



Plot 7-649. ISED PSD SDM Diversity Antenna WF7 (40MHz BW 11ax Index 17 - RU26 - Ch.46)



Plot 7-652. ISED PSD SDM Diversity Antenna WF5B (80MHz BW 11ax Index 0 - RU26 - Ch.42)



Plot 7-650. ISED PSD SDM Diversity Antenna WF5B (40MHz BW 11ax - RU484 - Ch.46)



Plot 7-653. ISED PSD SDM Diversity Antenna WF7 (80MHz BW 11ax Index 0 - RU26 - Ch.42)

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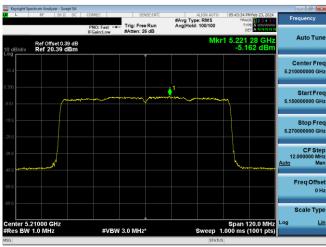
Plot 7-654. ISED PSD SDM Diversity Antenna WF5B (80MHz BW 11ax Index 18 - RU26 - Ch.42)



Plot 7-657. ISED PSD SDM Diversity Antenna WF7 (80MHz BW 11ax Index 36 - RU26 - Ch.42)



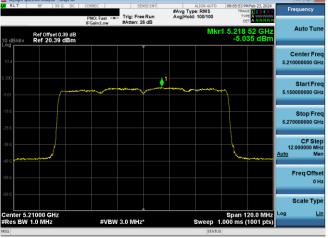
Plot 7-655. ISED PSD SDM Diversity Antenna WF7 (80MHz BW 11ax Index 18 - RU26 - Ch.42)



Plot 7-658. ISED PSD SDM Diversity Antenna WF5B (80MHz BW 11ax - RU996 - Ch.42)



Plot 7-656. ISED PSD SDM Diversity Antenna WF5B (80MHz BW 11ax Index 36 - RU26 - Ch.42)



Plot 7-659. ISED PSD SDM Diversity Antenna WF7 (80MHz BW 11ax - RU996 - Ch.42)

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Plot 7-660. ISED PSD SDM Diversity Antenna WF5B (160MHz BW 11ax Index 37 - RU52 - Ch.50(L))



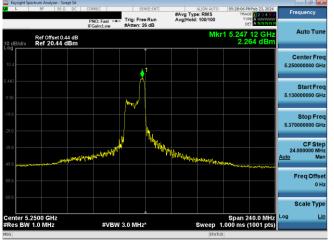
Plot 7-663. ISED PSD SDM Diversity Antenna WF7 (160MHz BW 11ax Index 52 - RU52 - Ch.50(L))



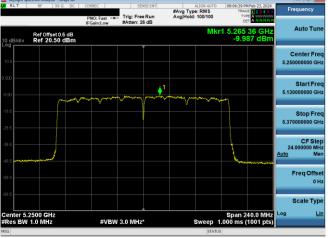
Plot 7-661. ISED PSD SDM Diversity Antenna WF7 (160MHz BW 11ax Index 37 – RU52 – Ch.50(L))



Plot 7-664. ISED PSD SDM Diversity Antenna WF5B (160MHz BW 11ax - RU996x2 - Ch.50)



Plot 7-662. ISED PSD SDM Diversity Antenna WF5B (160MHz BW 11ax Index 52 - RU52 - Ch.50(L))



Plot 7-665. ISED PSD SDM Diversity Antenna WF7 (160MHz BW 11ax - RU996x2 - Ch.50)

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Note:

Per ANSI C63.10-2013 Subclause 14.3.2.2 and KDB 662911 v02r01 Section E)2), the power spectral density at Antenna WF5B and Antenna WF8 were first measured separately during CDD/SDM transmission as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Sample Directional Gain Calculation:

For correlated signals, assuming the antenna gain is 1.5 dBi for Antenna WF5B and 1.7 dBi for Antenna WF8.

Directional gain =
$$10 \log[(10^{G_1/20} + 10^{G_2/20} + ... + 10^{G_N/20})^2 / N_{ANT}] dBi$$

= $10 \log[(10^{1.5/20} + 10^{1.7/20} / 2] dBi$
= $4.61 dBi$

For uncorrelated signals, assuming the antenna gain is 1.5 dBi for Antenna WF5B and 1.7 dBi for Antenna WF8.

Directional gain =
$$10 \log[(10^{G_1/10} + 10^{G_2/10} + ... + 10^{G_N/10}) / N_{ANT}] dBi$$

= $10 \log[(10^{1.5/10} + 10^{1.7/10} / 2] dBi$
= $1.60 dBi$

Sample CDD/SDM Calculation:

Assuming the average conducted power spectral density was measured to be 2.26 dBm for Antenna WF5B and 2.71 dBm for Antenna WF8.

Antenna WF5B + Antenna WF8 = SDM
$$(2.26 \text{ dBm} + 2.71 \text{ dBm}) = (1.68 \text{ mW} + 1.87 \text{ mW}) = 3.55 \text{ mW} = 5.50 \text{ dBm}$$

Sample e.i.r.p Power Spectral Density Calculation:

Assuming the average CDD/SDM power density was calculated to be 5.50 dBm with directional gain of 1.60 dBi.

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7.6 Radiated Spurious Emission – Above 1GHz §15.407(b) §15.205 §15.209; RSS-Gen [8.9]

Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. All channels, modes (e.g. RU26, 52 Tones, RU106, RU242, RU484 and RU996), and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

For transmitters operating in the 5.15-5.25 GHz and 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 7 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-202 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [µV/m]	Measured Distance [Meters]
Above 960.0 MHz	500	3

Table 7-202. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Subclauses 12.7.7.2, 12.7.6, 12.7.5 KDB 789033 D02 v02r01 – Section G

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Test Settings

Average Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = power average (RMS)
- Number of measurement points = 1001 (Number of points must be ≥ 2 x span/RBW)
- 6. Averaging type = power (RMS)
- 7. Sweep time = auto couple
- 8. Trace was averaged over 100 sweeps

Peak Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

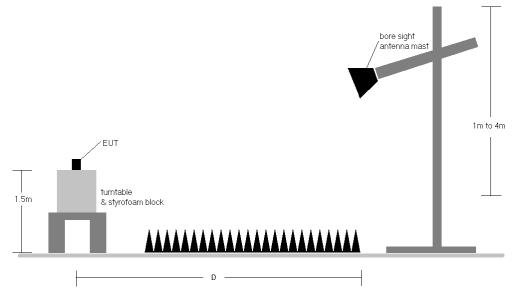


Figure 7-5. Test Instrument & Measurement Setup

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Test Notes

- 1. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-202.
- 2. All spurious emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-202. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.
- 3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- 4. This unit was tested with its standard battery.
- 5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas.
- 6. D is the measurement test distance and emissions 1-18GHz were measured at a 3 meters test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 7. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
- 8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 9. Per RSS-247 Section 6.2.3, transmission on channels which overlap the 5600-5650 MHz is prohibited. This device operates under these frequencies only under the control of a certified master device and does not support active scanning on these channels. This device does not transmit any beacons or initiate any transmissions in UNII Bands 2A or 2C.
- 10. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported.

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Sample Calculations

Determining Spurious Emissions Levels

- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- O AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB] Preamplifier Gain [dB]
- $\hspace{1cm} \circ \hspace{1cm} \text{Margin} \hspace{0.1cm} _{[dB]} = \text{Field Strength Level} \hspace{0.1cm} _{[dB\mu V/m]} \text{Limit} \hspace{0.1cm} _{[dB\mu V/m]}$

Radiated Band Edge Measurement Offset

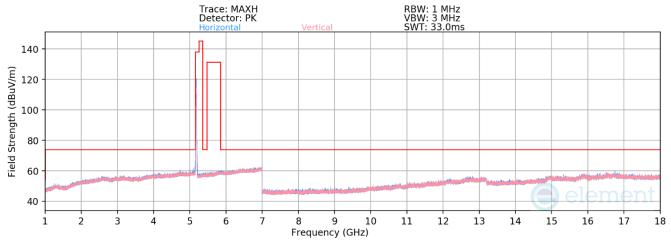
- The amplitude offset shown in the radiated restricted band edge plots in Section 7.6.6-7.6.25 was calculated using the formula:
 - Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) Preamplifier Gain

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7.6.1 Antenna WF5B Radiated Spurious Emission

RU26/RU52



Plot 7-666. RSE above 1GHz Antenna WF5B (11ax - Ch.36 - RU26)

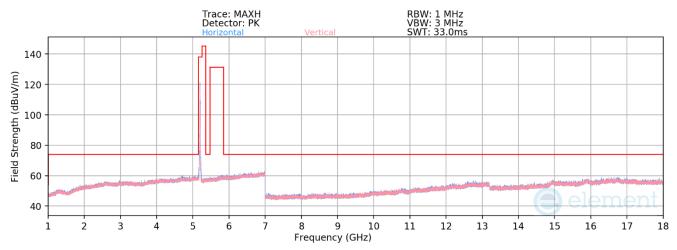
Mode: 802.11ax (20MHz BW)
Data Rate: MCS0
RU Index: 4
Distance of Measurements: 3 Meters
Operating Frequency: 5180MHz
Channel: 36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	V	-	-	-71.04	11.14	47.10	68.20	-21.10
*	15540.00	Average	V	-	-	-85.13	17.36	39.23	53.98	-14.75
*	15540.00	Peak	V	-	•	-73.85	17.36	50.51	73.98	-23.47

Table 7-203. Radiated Measurements Antenna WF5B (RU26)

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Plot 7-667. RSE above 1GHz Antenna WF5B (11ax - Ch.40 - RU26)

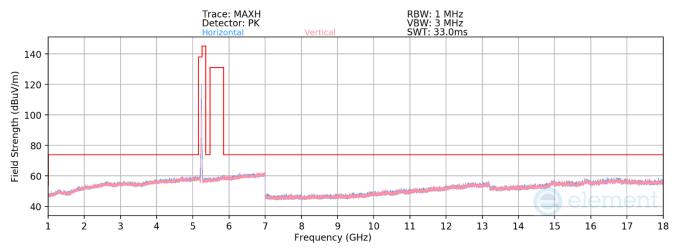
Mode:802.11ax (20MHz BW)Data Rate:MCS0RU Index:4Distance of Measurements:3 MetersOperating Frequency:5200MHzChannel:40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	V	-	-	-71.62	11.20	46.58	68.20	-21.62
*	15600.00	Average	V	-	-	-84.91	17.11	39.20	53.98	-14.78
*	15600.00	Peak	V	-	-	-73.24	17.11	50.87	73.98	-23.11

Table 7-204. Radiated Measurements Antenna WF5B (RU26)

FCC ID: BCGA2836 IC: 579C-A2836	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
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Plot 7-668. RSE above 1GHz Antenna WF5B (11ax - Ch.48 - RU26)

Mode:802.11ax (20MHz BW)Data Rate:MCS0RU Index:4Distance of Measurements:3 MetersOperating Frequency:5240MHzChannel:48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	V	-	-	-71.58	11.30	46.72	68.20	-21.48
*	15720.00	Average	V	-	-	-84.87	16.73	38.86	53.98	-15.12
*	15720.00	Peak	V	-	-	-74.12	16.73	49.61	73.98	-24.37

Table 7-205. Radiated Measurements Antenna WF5B (RU26)

FCC ID: BCGA2836 IC: 579C-A2836	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
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