

Appendix C. Co-location

FCC ID: TX2-RTL8821AE Page No. : C1 of C13

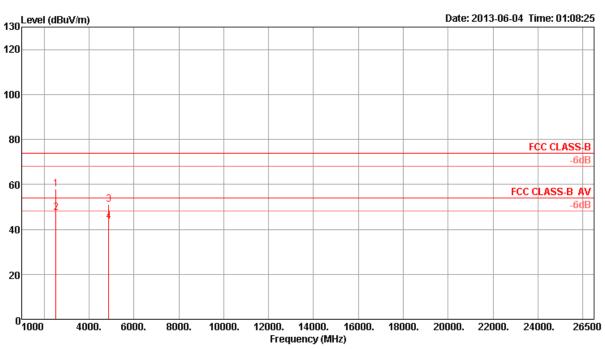




1. Results of Radiated Emissions for Co-located

Temperature	23 ℃	Humidity	62%					
Test Engineer	Kenneth Huang	Configurations	CTX					
Toot Made	Mode 1. NGFF + PCI-E + Diversity + SLOT antenna (I-PEX MHF4 connector) /							
Test Mode	2.4GHz WLAN + Bluetoot	h						

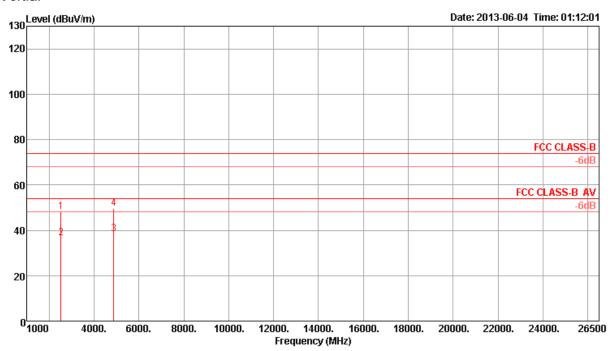
Horizontal



	Freq	Level	Limit Line		Read Level					A/Pos		Pol/Phase	
-	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			deg		
1	2520.00	58.08	74.00	-15.92	60.49	4.19	28.41	35.01	Peak	175	279	HORIZONTAL	
2	2520.40	47.31	54.00	-6.69	49.72	4.19	28.41	35.01	Average	175	279	HORIZONTAL	
3	4873.88	51.09	74.00	-22.91	46.89	5.92	33.48	35.20	Peak	109	225	HORIZONTAL	
4	4873.96	43.42	54.00	-10.58	39.22	5.92	33.48	35.20	Average	109	225	HORIZONTAL	

FCC ID: TX2-RTL8821AE Page No. : C2 of C13



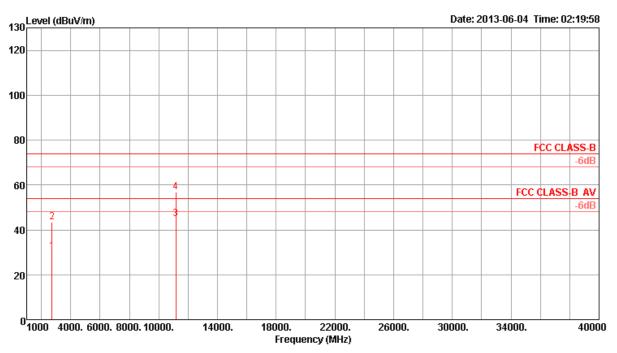


	Freq	Level		Over Limit						A/Pos	T/Pos Pol/Phase	<u>:</u>
-	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg —	-
1	2520.20	48.19	74.00	-25.81	50.60	4.19	28.41	35.01	Peak	123	314 VERTICAL	
2	2520.30	36.49	54.00	-17.51	38.90	4.19	28.41	35.01	Average	123	314 VERTICAL	
3	4874.02	38.53	54.00	-15.47	34.33	5.92	33.48	35.20	Average	110	239 VERTICAL	
4	4874.13	49.73	74.00	-24.27	45.53	5.92	33.48	35.20	Peak	110	239 VERTICAL	

FCC ID: TX2-RTL8821AE Page No. : C3 of C13



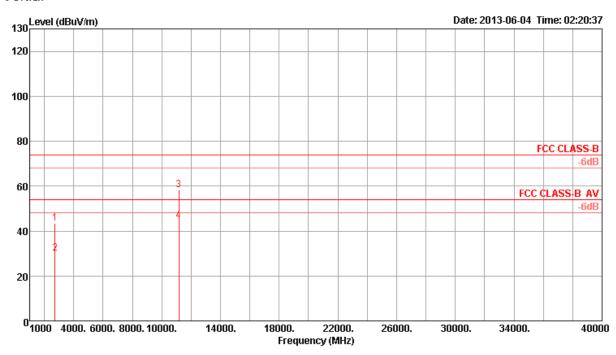
Temperature	23°C	Humidity	62%					
Test Engineer	Kenneth Huang	Configurations	CTX					
Toot Made	Mode 2. NGFF + PCI-E + Diversity + SLOT antenna (I-PEX MHF4 connector) /							
Test Mode	5GHz WLAN + Bluetooth							



	Freq	Level		Over Limit						A/Pos	T/P o s	Pol/Phase
,	MHz	dBuV/m	dBu∀/m	dB	dBu∀	dB	dB/m	——dB		cm	deg	
1	2720.58	30.58	54.00	-23.42	32.28	4.40	28.99	35.09	Average	100	4	HORIZONTAL
2	2725.24	43.29	74.00	-30.71	44.93	4.40	29.05	35.09	Peak	100	4	HORIZONTAL
3	11157.94	44.99	54.00	-9.01	31.34	9.04	39.50	34.89	Average	113	235	HORIZONTAL
4	11162.12	56, 99	74.00	-17.01	43.34	9.04	39.50	34.89	Peak	113	235	HORTZONTAL

FCC ID: TX2-RTL8821AE Page No. : C4 of C13



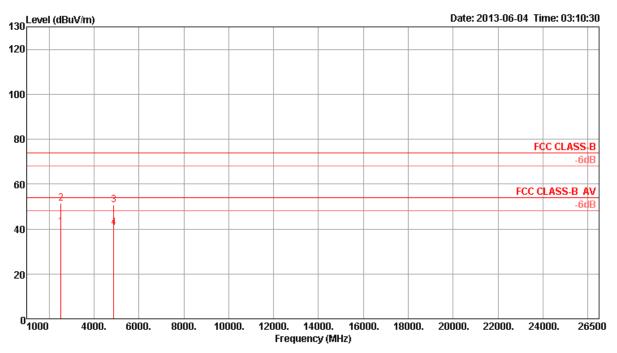


	Freq	Level		Over Limit						A/P o s		Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	2718.98	43.59	74.00	-30.41	45.29	4.40	28.99	35.09	Peak	109	228	VERTICAL
2	2721.90	30.02	54.00	-23.98	31.72	4.40	28.99	35.09	Average	109	228	VERTICAL
3	11158.33	58.42	74.00	-15.58	44.77	9.04	39.50	34.89	Peak _	100	221	VERTICAL
4	11160.06	44.64	54.00	-9.36	30.99	9.04	39.50	34.89	Average	100	221	VERTICAL

FCC ID: TX2-RTL8821AE Page No. : C5 of C13



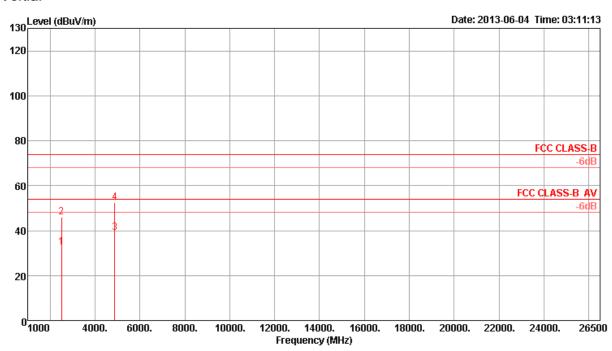
Temperature	23°C	Humidity	62%					
Test Engineer	Kenneth Huang	Configurations	CTX					
Toot Made	Mode 3. NGFF + PCI-E + Diversity + PIFA antenna (I-PEX MHF4 connector) /							
Test Mode	2.4GHz WLAN + Bluetoot	h						



			Limit	Over	Read	Cable	Antenna	Preamp		A/Pos	T/Pos	
	Freq	Level	Line	Limit	Level	Loss	Factor	Factor	Remark			P o l/Phase
	MHz	dBuV/m	dBuV/m	dB	dBu√	dB	dB/m	dB		cm	deg	
1	2520.17	40.95	54.00	-13.05	43.36	4.19	28.41	35.01	Average	145	336	HORIZONTAL
2	2520.34	51.29	74.00	-22.71	53.70	4.19	28.41	35.01	Peak	145	336	HORIZONTAL
3	4873.83	50.66	74.00	-23.34	46.46	5.92	33.48	35.20	Peak	124	279	HORIZONTAL
4	4873.93	40.48	54.00	-13.52	36.28	5.92	33.48	35.20	Average	124	279	HORIZONIAL

FCC ID: TX2-RTL8821AE Page No. : C6 of C13



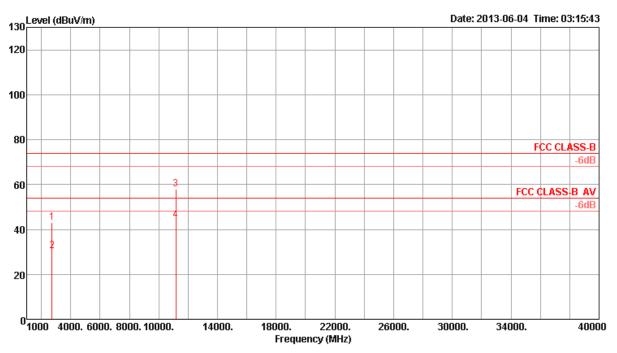


	Freq	Level		Over Limit						A/Pos	-	Pol/Phase
-	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	2518.17	32.45	54.00	-21.55	34.92	4.19	28.35	35.01	Average	100	240	VERTICAL
2	2518.26	46.00	74.00	-28.00	48.47	4.19	28.35	35.01	Peak _	100	240	VERTICAL
3	4873.94	39.02	54.00	-14.98	34.82	5.92	33.48	35.20	Average	107	310	VERTICAL
4	4874.08	52.46	74.00	-21.54	48.26	5.92	33.48	35.20	Peak	107	310	VERTICAL

FCC ID: TX2-RTL8821AE Page No. : C7 of C13



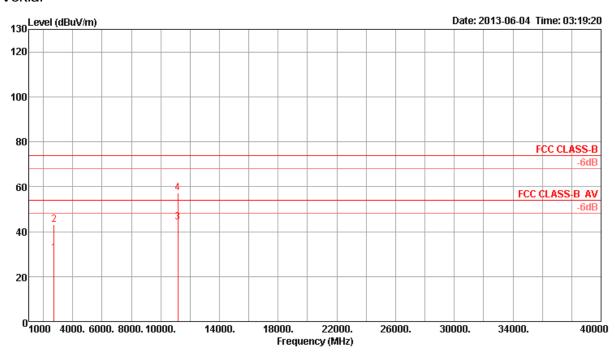
Temperature	23°C	Humidity	62%					
Test Engineer	Kenneth Huang	Configurations	CTX					
Test Mode	Mode 4. NGFF + PCI-E + Diversity + PIFA antenna (I-PEX MHF4 connector) /							
rest Mode	5GHz WLAN + Bluetooth							



			Limit	Over	Read	CableA	Antenna	Preamp		A/Pos	T/Pos	
	Freq	Level	Line	Limit	Level	Loss	Factor	Factor	Remark			P o l/Phase
	MHz	dBuV/m	dBuV/m	dB	dBu∀	dB	dB/m	——dB			deg	
1	2718.41	43.12	74.00	-30.88	44.82	4.40	28.99	35.09	Peak	100	98	HORIZONTAL
2	2719.68	30.41	54.00	-23.59	32.11	4.40	28.99	35.09	Average	100	98	HORIZONTAL
3	11157.94	57.78	74.00	-16.22	44.13	9.04	39.50	34.89	Peak	100	264	HORIZONTAL
4	11161.27	44.07	54.00	-9.93	30.42	9.04	39.50	34.89	Average	100	264	HORIZONTAL

FCC ID: TX2-RTL8821AE Page No. : C8 of C13



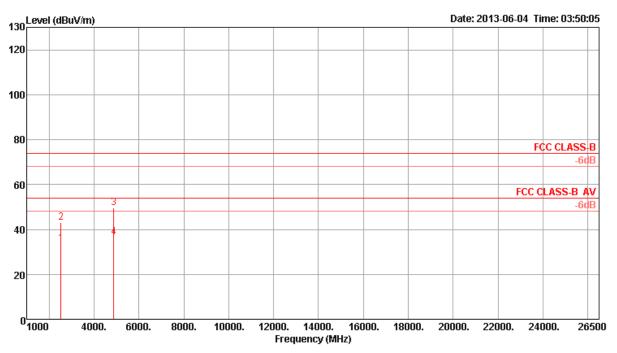


	Freq	Level		Over Limit						A/Pos	-	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	2716.14	30.30	54.00	-23.70	32.00	4.40	28.99	35.09	Average	100	274 \	/ERTICAL
2	2716.92	43.18	74.00	-30.82	44.88	4.40	28.99	35.09	Peak _	100	274 \	/ERTICAL
3	11158.18	44.25	54.00	-9.75	30.60	9.04	39.50	34.89	Average	100	162 \	/ERTICAL
4	11161.51	57.14	74.00	-16.86	43.49	9.04	39.50	34.89	Peak	100	162 \	/ERTICAL

FCC ID: TX2-RTL8821AE Page No. : C9 of C13



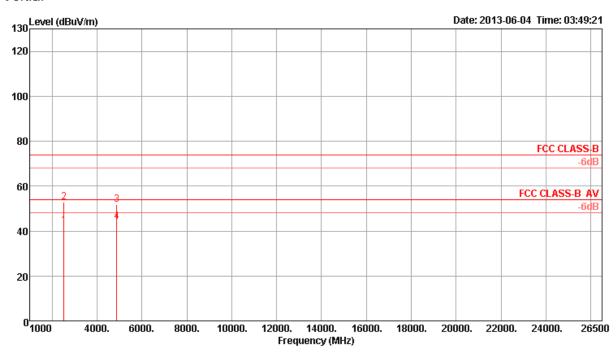
Temperature	23°C	Humidity	62%						
Test Engineer	Kenneth Huang	Configurations	CTX						
Test Mode	Mode 5. HMC + PCI-E + Diversity + Dipole antenna (I-PEX connector) /								
	2.4GHz WLAN + Bluetoot	2.4GHz WLAN + Bluetooth							



			Limit	Over	Read	CableA	Antenna	Preamp		A/Pos	T/Pos	
	Freq	Level	Line	Limit	Level	Loss	Factor	Factor	Remark			P o l/Phase
-	MHz	dBuV/m	dBuV/m	dB	dBu∀	dB	dB/m	——dB			deg	
1	2519.68	33.58	54.00	-20.42	35.99	4.19	28.41	35.01	Average	100	4	HORIZONTAL
2	2522.28	43.08	74.00	-30.92	45.47	4.21	28.41	35.01	Peak _	100	4	HORIZONTAL
3	4872.89	49.54	74.00	-24.46	45.34	5.92	33.48	35.20	Peak	100	156	HORIZONTAL
4	4873.89	36.50	54.00	-17.50	32.30	5.92	33.48	35.20	Average	100	156	HORIZONTAL

FCC ID: TX2-RTL8821AE Page No. : C10 of C13



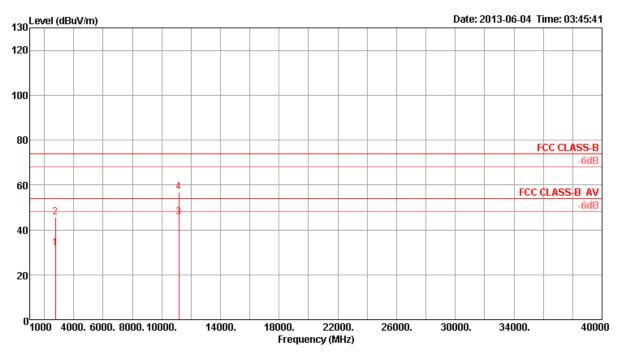


	Freq	Level	Limit Line	Over Limit						A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	2520.00	42.28	54.00	-11.72	44.69	4.19	28.41	35.01	Average	100	282	VERTICAL
2	2520.20	52.77	74.00	-21.23	55.18	4.19	28.41	35.01	Peak	100	282	VERTICAL
3	4873.92	51.83	74.00	-22.17	47.63	5.92	33.48	35.20	Peak	129	174	VERTICAL
4	4873.94	44.32	54.00	-9.68	40.12	5.92	33.48	35.20	Average	129	174	VERTICAL

FCC ID: TX2-RTL8821AE Page No. : C11 of C13



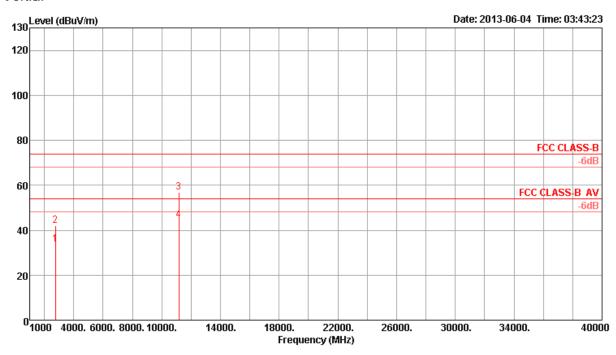
Temperature	23°C	Humidity	62%						
Test Engineer	Kenneth Huang	Configurations	CTX						
Test Mode	Mode 6. HMC + PCI-E + Diversity + Dipole antenna (I-PEX connector) /								
	5GHz WLAN + Bluetooth								



	Freq	Level		Over Limit						A/Pos	T/P o s	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	——dB			deg	
1	2748.11	31.97	54.00	-22.03	33.54	4.43	29.10	35.10	Average	100	113	HORIZONTAL
2	2748.11	45.76	74.00	-28.24	47.33	4.43	29.10	35.10	Peak	100	113	HORIZONTAL
3	11158.19	45.73	54.00	-8.27	32.08	9.04	39.50	34.89	Average	100	11	HORIZONTAL
4	11158.19	56.87	74.00	-17,13	43.22	9.04	39.50	34.89	Peak	100	11	HORTZONTAL

FCC ID: TX2-RTL8821AE Page No. : C12 of C13





	Freq	Level		Over Limit						A/Pos		Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	2750.00	33.55	54.00	-20.45	35.12	4.43	29.10	35.10	Average	100	107 1	VERTICAL
2	2750.00	42.14	74.00	-31.86	43.71	4.43	29.10	35.10	Peak _	100	107 \	VERTICAL
3	11159.74	56.90	74.00	-17.10	43.25	9.04	39.50	34.89	Peak	132	30 1	VERTICAL
4	11160.18	44.59	54.00	-9.41	30.94	9.04	39.50	34.89	Average	132	30 1	VERTICAL

FCC ID: TX2-RTL8821AE Page No. : C13 of C13