	HT/VHT40 Beam Forming, M0 to M7	2	9	-63.7	-69.6			-53.7	-41.25	12.5
	HT/VHT40 Beam Forming, M8 to M15	2	6	-63.7	-69.6			-56.7	-41.25	15.5
	HT/VHT40 Beam Forming, M0 to M7	3	11	-63.7	-69.6	-69.5		-51.1	-41.25	9.8
	HT/VHT40 Beam Forming, M8 to M15	3	8	-63.7	-69.6	-69.5		-54.1	-41.25	12.8
	HT/VHT40 Beam Forming, M16 to M23	3	6	-63.7	-69.6	-69.5		-55.9	-41.25	14.6
	HT/VHT40 Beam Forming, M0 to M7	4	12	-63.7	-69.6	-69.5	-69.5	-49.2	-41.25	7.9
	HT/VHT40 Beam Forming, M8 to M15	4	9	-63.7	-69.6	-69.5	-69.5	-52.2	-41.25	10.9
	HT/VHT40 Beam Forming, M16 to M23	4	7	-63.7	-69.6	-69.5	-69.5	-54.0	-41.25	12.7
	HT/VHT40 STBC, M0 to M7	2	6	-63.7	-69.6			-56.7	-41.25	15.5
	HT/VHT40 STBC, M0 to M7	3	6	-63.7	-69.6	-69.5		-55.9	-41.25	14.6
	HT/VHT40 STBC, M0 to M7	4	6	-63.7	-69.6	-69.5	-69.5	-55.2	-41.25	13.9
5560	Non HT20, 6 to 54 Mbps	1	6	-63.6				-57.6	-41.25	16.4
	Non HT20, 6 to 54 Mbps	2	6	-63.6	-69.7			-56.6	-41.25	15.4
	Non HT20, 6 to 54 Mbps	3	6	-63.6	-69.7	-69.4		-55.8	-41.25	14.6
	Non HT20, 6 to 54 Mbps	4	6	-63.6	-69.7	-69.4	-69.6	-55.1	-41.25	13.9
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-63.6	-69.7			-53.6	-41.25	12.4
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-63.6	-69.7	-69.4		-51.0	-41.25	9.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-63.6	-69.7	-69.4	-69.6	-49.1	-41.25	7.9
	HT/VHT20, M0 to M7	1	6	-63.9				-57.9	-41.25	16.7
	HT/VHT20, M0 to M7	2	6	-63.9	-69.6			-56.9	-41.25	15.6
	HT/VHT20, M8 to M15	2	6	-63.9	-69.6			-56.9	-41.25	15.6
	HT/VHT20, M0 to M7	3	6	-63.9	-69.6	-69.4		-56.0	-41.25	14.7
	HT/VHT20, M8 to M15	3	6	-63.9	-69.6	-69.4		-56.0	-41.25	14.7
	HT/VHT20, M16 to M23	3	6	-63.9	-69.6	-69.4		-56.0	-41.25	14.7
	HT/VHT20, M0 to M7	4	6	-63.9	-69.6	-69.4	-69.7	-55.3	-41.25	14.1
	HT/VHT20, M8 to M15	4	6	-63.9	-69.6	-69.4	-69.7	-55.3	-41.25	14.1
	HT/VHT20, M16 to M23	4	6	-63.9	-69.6	-69.4	-69.7	-55.3	-41.25	14.1
	HT/VHT20 Beam Forming, M0 to M7	2	9	-63.9	-69.6			-53.9	-41.25	12.6
	HT/VHT20 Beam Forming, M8 to M15	2	6	-63.9	-69.6			-56.9	-41.25	15.6
	HT/VHT20 Beam Forming, M0 to M7	3	11	-63.9	-69.6	-69.4		-51.2	-41.25	9.9
	HT/VHT20 Beam Forming, M8 to M15	3	8	-63.9	-69.6	-69.4		-54.2	-41.25	12.9
	HT/VHT20 Beam Forming, M16 to M23	3	6	-63.9	-69.6	-69.4		-56.0	-41.25	14.7
	HT/VHT20 Beam Forming, M0 to M7	4	12	-63.9	-69.6	-69.4	-69.7	-49.3	-41.25	8.1
	HT/VHT20 Beam Forming, M8 to M15	4	9	-63.9	-69.6	-69.4	-69.7	-52.3	-41.25	11.1
	HT/VHT20 Beam Forming, M16 to M23	4	7	-63.9	-69.6	-69.4	-69.7	-54.1	-41.25	12.9
	HT/VHT20 STBC, M0 to M7	2	6	-63.9	-69.6			-56.9	-41.25	15.6
	HT/VHT20 STBC, M0 to M7	3	6	-63.9	-69.6	-69.4		-56.0	-41.25	14.7
	HT/VHT20 STBC, M0 to M7	4	6	-63.9	-69.6	-69.4	-69.7	-55.3	-41.25	14.1

5660	Non HT20, 6 to 54 Mbps	1	6	-63.9				-57.9	-41.25	16.7
	Non HT20, 6 to 54 Mbps	2	6	-63.9	-69.7			-56.9	-41.25	15.6
	Non HT20, 6 to 54 Mbps	3	6	-63.9	-69.7	-65.3		-54.9	-41.25	13.7
	Non HT20, 6 to 54 Mbps	4	6	-63.9	-69.7	-65.3	-69.7	-54.4	-41.25	13.1
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-63.9	-69.7			-53.9	-41.25	12.6
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-63.9	-69.7	-65.3		-50.1	-41.25	8.9
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-63.9	-69.7	-65.3	-69.7	-48.4	-41.25	7.1
	HT/VHT20, M0 to M7	1	6	-63.7				-57.7	-41.25	16.5
	HT/VHT20, M0 to M7	2	6	-63.7	-69.4			-56.7	-41.25	15.4
	HT/VHT20, M8 to M15	2	6	-63.7	-69.4			-56.7	-41.25	15.4
	HT/VHT20, M0 to M7	3	6	-63.7	-69.4	-65.4		-54.8	-41.25	13.6
	HT/VHT20, M8 to M15	3	6	-63.7	-69.4	-65.4		-54.8	-41.25	13.6
	HT/VHT20, M16 to M23	3	6	-63.7	-69.4	-65.4		-54.8	-41.25	13.6
	HT/VHT20, M0 to M7	4	6	-63.7	-69.4	-65.4	-69.7	-54.3	-41.25	13.0
	HT/VHT20, M8 to M15	4	6	-63.7	-69.4	-65.4	-69.7	-54.3	-41.25	13.0
	HT/VHT20, M16 to M23	4	6	-63.7	-69.4	-65.4	-69.7	-54.3	-41.25	13.0
	HT/VHT20 Beam Forming, M0 to M7	2	9	-63.7	-69.4			-53.7	-41.25	12.4
	HT/VHT20 Beam Forming, M8 to M15	2	6	-63.7	-69.4			-56.7	-41.25	15.4
	HT/VHT20 Beam Forming, M0 to M7	3	11	-63.7	-69.4	-65.4		-50.0	-41.25	8.8
	HT/VHT20 Beam Forming, M8 to M15	3	8	-63.7	-69.4	-65.4		-53.0	-41.25	11.8
	HT/VHT20 Beam Forming, M16 to M23	3	6	-63.7	-69.4	-65.4		-54.8	-41.25	13.6
	HT/VHT20 Beam Forming, M0 to M7	4	12	-63.7	-69.4	-65.4	-69.7	-48.3	-41.25	7.0
	HT/VHT20 Beam Forming, M8 to M15	4	9	-63.7	-69.4	-65.4	-69.7	-51.3	-41.25	10.0
	HT/VHT20 Beam Forming, M16 to M23	4	7	-63.7	-69.4	-65.4	-69.7	-53.1	-41.25	11.8
	HT/VHT20 STBC, M0 to M7	2	6	-63.7	-69.4			-56.7	-41.25	15.4
	HT/VHT20 STBC, M0 to M7	3	6	-63.7	-69.4	-65.4		-54.8	-41.25	13.6
	HT/VHT20 STBC, M0 to M7	4	6	-63.7	-69.4	-65.4	-69.7	-54.3	-41.25	13.0
5670	Non HT40, 6 to 54 Mbps	1	6	-62.2				-56.2	-41.25	15.0
	Non HT40, 6 to 54 Mbps	2	6	-62.2	-64.5			-54.2	-41.25	12.9
	Non HT40, 6 to 54 Mbps	3	6	-62.2	-64.5	-69.7		-53.7	-41.25	12.5
	Non HT40, 6 to 54 Mbps	4	6	-62.2	-64.5	-69.7	-69.5	-53.3	-41.25	12.0
	HT/VHT40, M0 to M7	1	6	-63.7				-57.7	-41.25	16.5
	HT/VHT40, M0 to M7	2	6	-63.7	-65.2			-55.4	-41.25	14.1
	HT/VHT40, M8 to M15	2	6	-63.7	-65.2			-55.4	-41.25	14.1
	HT/VHT40, M0 to M7	3	6	-63.7	-65.2	-69.7		-54.8	-41.25	13.5
	HT/VHT40, M8 to M15	3	6	-63.7	-65.2	-69.7		-54.8	-41.25	13.5
	HT/VHT40, M16 to M23	3	6	-63.7	-65.2	-69.7		-54.8	-41.25	13.5
	HT/VHT40, M0 to M7	4	6	-63.7	-65.2	-69.7	-69.6	-54.2	-41.25	13.0
	HT/VHT40, M8 to M15	4	6	-63.7	-65.2	-69.7	-69.6	-54.2	-41.25	13.0
	HT/VHT40, M16 to M23	4	6	-63.7	-65.2	-69.7	-69.6	-54.2	-41.25	13.0

	HT/VHT40 Beam Forming, M0 to M7	2	9	-63.7	-65.2			-52.4	-41.25	11.1
	HT/VHT40 Beam Forming, M8 to M15	2	6	-63.7	-65.2			-55.4	-41.25	14.1
	HT/VHT40 Beam Forming, M0 to M7	3	11	-63.7	-65.2	-69.7		-50.0	-41.25	8.7
	HT/VHT40 Beam Forming, M8 to M15	3	8	-63.7	-65.2	-69.7		-53.0	-41.25	11.7
	HT/VHT40 Beam Forming, M16 to M23	3	6	-63.7	-65.2	-69.7		-54.8	-41.25	13.5
	HT/VHT40 Beam Forming, M0 to M7	4	12	-63.7	-65.2	-69.7	-69.6	-48.2	-41.25	7.0
	HT/VHT40 Beam Forming, M8 to M15	4	9	-63.7	-65.2	-69.7	-69.6	-51.2	-41.25	10.0
	HT/VHT40 Beam Forming, M16 to M23	4	7	-63.7	-65.2	-69.7	-69.6	-53.0	-41.25	11.8
	HT/VHT40 STBC, M0 to M7	2	6	-63.7	-65.2			-55.4	-41.25	14.1
	HT/VHT40 STBC, M0 to M7	3	6	-63.7	-65.2	-69.7		-54.8	-41.25	13.5
	HT/VHT40 STBC, M0 to M7	4	6	-63.7	-65.2	-69.7	-69.6	-54.2	-41.25	13.0
5690	Non HT80, 6 to 54 Mbps	1	6	-62.2				-56.2	-41.25	15.0
	Non HT80, 6 to 54 Mbps	2	6	-62.2	-64.0			-54.0	-41.25	12.7
	Non HT80, 6 to 54 Mbps	3	6	-62.2	-64.0	-69.7		-53.6	-41.25	12.3
	Non HT80, 6 to 54 Mbps	4	6	-62.2	-64.0	-69.7	-69.7	-53.2	-41.25	11.9
	VHT80, M0.1 to M9.1	1	6	-63.9				-57.9	-41.25	16.7
	VHT80, M0.1 to M9.1	2	6	-63.9	-65.4			-55.6	-41.25	14.3
	VHT80, M0.2 to M9.2	2	6	-63.9	-65.4			-55.6	-41.25	14.3
	VHT80, M0.1 to M9.1	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80, M0.2 to M9.2	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80, M0.3 to M9.3	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80, M0.1 to M9.1	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1
	VHT80, M0.2 to M9.2	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1
	VHT80, M0.3 to M9.3	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1
	VHT80 Beam Forming, M0.1 to M9.1	2	6	-63.9	-65.4			-55.6	-41.25	14.3
	VHT80 Beam Forming, M0.2 to M9.2	2	6	-63.9	-65.4			-55.6	-41.25	14.3
	VHT80 Beam Forming, M0.1 to M9.1	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80 Beam Forming, M0.2 to M9.2	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80 Beam Forming, M0.3 to M9.3	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80 Beam Forming, M0.1 to M9.1	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1
	VHT80 Beam Forming, M0.2 to M9.2	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1
	VHT80 Beam Forming, M0.3 to M9.3	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1
	VHT80 STBC, M0.1 to M9.1	2	6	-63.9	-65.4			-55.6	-41.25	14.3
	VHT80 STBC, M0.1 to M9.1	3	6	-63.9	-65.4	-64.5		-53.8	-41.25	12.5
	VHT80 STBC, M0.1 to M9.1	4	6	-63.9	-65.4	-64.5	-69.7	-53.4	-41.25	12.1

5700	Non HT20, 6 to 54 Mbps	1	6	-64.1				-58.1	-41.25	16.9
	Non HT20, 6 to 54 Mbps	2	6	-64.1	-65.5			-55.7	-41.25	14.5
	Non HT20, 6 to 54 Mbps	3	6	-64.1	-65.5	-65.5		-54.2	-41.25	13.0
	Non HT20, 6 to 54 Mbps	4	6	-64.1	-65.5	-65.5	-68.8	-53.6	-41.25	12.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-64.1	-65.5			-52.7	-41.25	11.5
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-64.1	-65.5	-65.5		-49.4	-41.25	8.2
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-64.1	-65.5	-65.5	-68.8	-47.6	-41.25	6.4
	HT/VHT20, M0 to M7	1	6	-63.8				-57.8	-41.25	16.6
	HT/VHT20, M0 to M7	2	6	-63.8	-65.4			-55.5	-41.25	14.3
	HT/VHT20, M8 to M15	2	6	-63.8	-65.4			-55.5	-41.25	14.3
	HT/VHT20, M0 to M7	3	6	-63.8	-65.4	-69.0		-54.8	-41.25	13.6
	HT/VHT20, M8 to M15	3	6	-63.8	-65.4	-69.0		-54.8	-41.25	13.6
	HT/VHT20, M16 to M23	3	6	-63.8	-65.4	-69.0		-54.8	-41.25	13.6
	HT/VHT20, M0 to M7	4	6	-63.8	-65.4	-69.0	-68.9	-54.2	-41.25	12.9
	HT/VHT20, M8 to M15	4	6	-63.8	-65.4	-69.0	-68.9	-54.2	-41.25	12.9
	HT/VHT20, M16 to M23	4	6	-63.8	-65.4	-69.0	-68.9	-54.2	-41.25	12.9
	HT/VHT20 Beam Forming, M0 to M7	2	9	-63.8	-65.4			-52.5	-41.25	11.3
	HT/VHT20 Beam Forming, M8 to M15	2	6	-63.8	-65.4			-55.5	-41.25	14.3
	HT/VHT20 Beam Forming, M0 to M7	3	11	-63.8	-65.4	-69.0		-50.0	-41.25	8.8
	HT/VHT20 Beam Forming, M8 to M15	3	8	-63.8	-65.4	-69.0		-53.0	-41.25	11.8
	HT/VHT20 Beam Forming, M16 to M23	3	6	-63.8	-65.4	-69.0		-54.8	-41.25	13.6
	HT/VHT20 Beam Forming, M0 to M7	4	12	-63.8	-65.4	-69.0	-68.9	-48.2	-41.25	6.9
	HT/VHT20 Beam Forming, M8 to M15	4	9	-63.8	-65.4	-69.0	-68.9	-51.2	-41.25	9.9
	HT/VHT20 Beam Forming, M16 to M23	4	7	-63.8	-65.4	-69.0	-68.9	-53.0	-41.25	11.7
	HT/VHT20 STBC, M0 to M7	2	6	-63.8	-65.4			-55.5	-41.25	14.3
	HT/VHT20 STBC, M0 to M7	3	6	-63.8	-65.4	-69.0		-54.8	-41.25	13.6
	HT/VHT20 STBC, M0 to M7	4	6	-63.8	-65.4	-69.0	-68.9	-54.2	-41.25	12.9
5710	Non HT40, 6 to 54 Mbps	1	6	-61.9				-55.9	-41.25	14.7
	Non HT40, 6 to 54 Mbps	2	6	-61.9	-63.7			-53.7	-41.25	12.4
	Non HT40, 6 to 54 Mbps	3	6	-61.9	-63.7	-64.9		-52.6	-41.25	11.3
	Non HT40, 6 to 54 Mbps	4	6	-61.9	-63.7	-64.9	-69.1	-52.2	-41.25	10.9
	HT/VHT40, M0 to M7	1	6	-63.8				-57.8	-41.25	16.6
	HT/VHT40, M0 to M7	2	6	-63.8	-65.8			-55.7	-41.25	14.4
	HT/VHT40, M8 to M15	2	6	-63.8	-65.8			-55.7	-41.25	14.4
	HT/VHT40, M0 to M7	3	6	-63.8	-65.8	-69.0		-54.9	-41.25	13.7
	HT/VHT40, M8 to M15	3	6	-63.8	-65.8	-69.0		-54.9	-41.25	13.7
	HT/VHT40, M16 to M23	3	6	-63.8	-65.8	-69.0		-54.9	-41.25	13.7
	HT/VHT40, M0 to M7	4	6	-63.8	-65.8	-69.0	-69.0	-54.3	-41.25	13.1
	HT/VHT40, M8 to M15	4	6	-63.8	-65.8	-69.0	-69.0	-54.3	-41.25	13.1
	HT/VHT40, M16 to M23	4	6	-63.8	-65.8	-69.0	-69.0	-54.3	-41.25	13.1

	HT/VHT40 Beam Forming, M0 to M7	2	9	-63.8	-65.8			-52.7	-41.25	11.4
	HT/VHT40 Beam Forming, M8 to M15	2	6	-63.8	-65.8			-55.7	-41.25	14.4
	HT/VHT40 Beam Forming, M0 to M7	3	11	-63.8	-65.8	-69.0		-50.1	-41.25	8.9
	HT/VHT40 Beam Forming, M8 to M15	3	8	-63.8	-65.8	-69.0		-53.1	-41.25	11.9
	HT/VHT40 Beam Forming, M16 to M23	3	6	-63.8	-65.8	-69.0		-54.9	-41.25	13.7
	HT/VHT40 Beam Forming, M0 to M7	4	12	-63.8	-65.8	-69.0	-69.0	-48.3	-41.25	7.1
	HT/VHT40 Beam Forming, M8 to M15	4	9	-63.8	-65.8	-69.0	-69.0	-51.3	-41.25	10.1
	HT/VHT40 Beam Forming, M16 to M23	4	7	-63.8	-65.8	-69.0	-69.0	-53.1	-41.25	11.9
	HT/VHT40 STBC, M0 to M7	2	6	-63.8	-65.8			-55.7	-41.25	14.4
	HT/VHT40 STBC, M0 to M7	3	6	-63.8	-65.8	-69.0		-54.9	-41.25	13.7
	HT/VHT40 STBC, M0 to M7	4	6	-63.8	-65.8	-69.0	-69.0	-54.3	-41.25	13.1
5720	Non HT20, 6 to 54 Mbps	1	6	-63.7				-57.7	-41.25	16.5
	Non HT20, 6 to 54 Mbps	2	6	-63.7	-65.5			-55.5	-41.25	14.2
	Non HT20, 6 to 54 Mbps	3	6	-63.7	-65.5	-65.6		-54.1	-41.25	12.8
	Non HT20, 6 to 54 Mbps	4	6	-63.7	-65.5	-65.6	-66.6	-53.2	-41.25	11.9
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-63.7	-65.5			-52.5	-41.25	11.2
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-63.7	-65.5	-65.6		-49.3	-41.25	8.0
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-63.7	-65.5	-65.6	-66.6	-47.2	-41.25	5.9
	HT/VHT20, M0 to M7	1	6	-63.8				-57.8	-41.25	16.6
	HT/VHT20, M0 to M7	2	6	-63.8	-65.6			-55.6	-41.25	14.3
	HT/VHT20, M8 to M15	2	6	-63.8	-65.6			-55.6	-41.25	14.3
	HT/VHT20, M0 to M7	3	6	-63.8	-65.6	-65.7		-54.2	-41.25	12.9
	HT/VHT20, M8 to M15	3	6	-63.8	-65.6	-65.7		-54.2	-41.25	12.9
	HT/VHT20, M16 to M23	3	6	-63.8	-65.6	-65.7		-54.2	-41.25	12.9
	HT/VHT20, M0 to M7	4	6	-63.8	-65.6	-65.7	-69.0	-53.6	-41.25	12.4
	HT/VHT20, M8 to M15	4	6	-63.8	-65.6	-65.7	-69.0	-53.6	-41.25	12.4
	HT/VHT20, M16 to M23	4	6	-63.8	-65.6	-65.7	-69.0	-53.6	-41.25	12.4
	HT/VHT20 Beam Forming, M0 to M7	2	9	-63.8	-65.6			-52.6	-41.25	11.3
	HT/VHT20 Beam Forming, M8 to M15	2	6	-63.8	-65.6			-55.6	-41.25	14.3
	HT/VHT20 Beam Forming, M0 to M7	3	11	-63.8	-65.6	-65.7		-49.4	-41.25	8.1
	HT/VHT20 Beam Forming, M8 to M15	3	8	-63.8	-65.6	-65.7		-52.4	-41.25	11.1
	HT/VHT20 Beam Forming, M16 to M23	3	6	-63.8	-65.6	-65.7		-54.2	-41.25	12.9
	HT/VHT20 Beam Forming, M0 to M7	4	12	-63.8	-65.6	-65.7	-69.0	-47.6	-41.25	6.4
	HT/VHT20 Beam Forming, M8 to M15	4	9	-63.8	-65.6	-65.7	-69.0	-50.6	-41.25	9.4
	HT/VHT20 Beam Forming, M16 to M23	4	7	-63.8	-65.6	-65.7	-69.0	-52.4	-41.25	11.2
	HT/VHT20 STBC, M0 to M7	2	6	-63.8	-65.6			-55.6	-41.25	14.3
	HT/VHT20 STBC, M0 to M7	3	6	-63.8	-65.6	-65.7		-54.2	-41.25	12.9
	HT/VHT20 STBC, M0 to M7	4	6	-63.8	-65.6	-65.7	-69.0	-53.6	-41.25	12.4

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Spur Power (dBm)	Tx 2 Spur Power (dBm)	Tx 3 Spur Power (dBm)	Tx 4 Spur Power (dBm)	Total Conducted Spur (dBm)	Limit (dBm)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	6	-54.3				-48.3	-21.25	27.1
	Non HT20, 6 to 54 Mbps	2	6	-54.3	-55.1			-45.7	-21.25	24.4
	Non HT20, 6 to 54 Mbps	3	6	-54.3	-55.1	-54.5		-43.8	-21.25	22.6
	Non HT20, 6 to 54 Mbps	4	6	-54.3	-55.1	-54.5	-53.8	-42.4	-21.25	21.1
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-54.3	-55.1			-42.7	-21.25	21.4
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-54.3	-55.1	-54.5		-39.0	-21.25	17.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-54.3	-55.1	-54.5	-53.8	-36.4	-21.25	15.1
	HT/VHT20, M0 to M7	1	6	-54.7				-48.7	-21.25	27.5
	HT/VHT20, M0 to M7	2	6	-54.7	-54.3			-45.5	-21.25	24.2
	HT/VHT20, M8 to M15	2	6	-54.7	-54.3			-45.5	-21.25	24.2
	HT/VHT20, M0 to M7	3	6	-54.7	-54.3	-55.0		-43.9	-21.25	22.6
	HT/VHT20, M8 to M15	3	6	-54.7	-54.3	-55.0		-43.9	-21.25	22.6
	HT/VHT20, M16 to M23	3	6	-54.7	-54.3	-55.0		-43.9	-21.25	22.6
	HT/VHT20, M0 to M7	4	6	-54.7	-54.3	-55.0	-54.8	-42.7	-21.25	21.4
	HT/VHT20, M8 to M15	4	6	-54.7	-54.3	-55.0	-54.8	-42.7	-21.25	21.4
	HT/VHT20, M16 to M23	4	6	-54.7	-54.3	-55.0	-54.8	-42.7	-21.25	21.4
	HT/VHT20 Beam Forming, M0 to M7	2	9	-54.7	-54.3			-42.5	-21.25	21.2
	HT/VHT20 Beam Forming, M8 to M15	2	6	-54.7	-54.3			-45.5	-21.25	24.2
	HT/VHT20 Beam Forming, M0 to M7	3	11	-54.7	-54.3	-55.0		-39.1	-21.25	17.8
	HT/VHT20 Beam Forming, M8 to M15	3	8	-54.7	-54.3	-55.0		-42.1	-21.25	20.8
	HT/VHT20 Beam Forming, M16 to M23	3	6	-54.7	-54.3	-55.0		-43.9	-21.25	22.6
	HT/VHT20 Beam Forming, M0 to M7	4	12	-54.7	-54.3	-55.0	-54.8	-36.7	-21.25	15.4
	HT/VHT20 Beam Forming, M8 to M15	4	9	-54.7	-54.3	-55.0	-54.8	-39.7	-21.25	18.4
	HT/VHT20 Beam Forming, M16 to M23	4	7	-54.7	-54.3	-55.0	-54.8	-41.5	-21.25	20.2
	HT/VHT20 STBC, M0 to M7	2	6	-54.7	-54.3			-45.5	-21.25	24.2
	HT/VHT20 STBC, M0 to M7	3	6	-54.7	-54.3	-55.0		-43.9	-21.25	22.6
	HT/VHT20 STBC, M0 to M7	4	6	-54.7	-54.3	-55.0	-54.8	-42.7	-21.25	21.4
5510	Non HT40, 6 to 54 Mbps	1	6	-50.7				-44.7	-21.25	23.5
	Non HT40, 6 to 54 Mbps	2	6	-50.7	-51.5			-42.1	-21.25	20.8
	Non HT40, 6 to 54 Mbps	3	6	-50.7	-51.5	-53.3		-40.9	-21.25	19.7
	Non HT40, 6 to 54 Mbps	4	6	-50.7	-51.5	-53.3	-50.8	-39.4	-21.25	18.2
	HT/VHT40, M0 to M7	1	6	-53.8				-47.8	-21.25	26.6
	HT/VHT40, M0 to M7	2	6	-53.8	-55.1			-45.4	-21.25	24.1

	HT/VHT40, M8 to M15	2	6	-53.8	-55.1			-45.4	-21.25	24.1
	HT/VHT40, M0 to M7	3	6	-53.8	-55.1	-56.9		-44.3	-21.25	23.1
	HT/VHT40, M8 to M15	3	6	-53.8	-55.1	-56.9		-44.3	-21.25	23.1
	HT/VHT40, M16 to M23	3	6	-53.8	-55.1	-56.9		-44.3	-21.25	23.1
	HT/VHT40, M0 to M7	4	6	-53.8	-55.1	-56.9	-52.6	-42.3	-21.25	21.0
	HT/VHT40, M8 to M15	4	6	-53.8	-55.1	-56.9	-52.6	-42.3	-21.25	21.0
	HT/VHT40, M16 to M23	4	6	-53.8	-55.1	-56.9	-52.6	-42.3	-21.25	21.0
	HT/VHT40 Beam Forming, M0 to M7	2	9	-53.8	-55.1			-42.4	-21.25	21.1
	HT/VHT40 Beam Forming, M8 to M15	2	6	-53.8	-55.1			-45.4	-21.25	24.1
	HT/VHT40 Beam Forming, M0 to M7	3	11	-53.8	-55.1	-56.9		-39.5	-21.25	18.3
	HT/VHT40 Beam Forming, M8 to M15	3	8	-53.8	-55.1	-56.9		-42.5	-21.25	21.3
	HT/VHT40 Beam Forming, M16 to M23	3	6	-53.8	-55.1	-56.9		-44.3	-21.25	23.1
	HT/VHT40 Beam Forming, M0 to M7	4	12	-53.8	-55.1	-56.9	-52.6	-36.3	-21.25	15.0
	HT/VHT40 Beam Forming, M8 to M15	4	9	-53.8	-55.1	-56.9	-52.6	-39.3	-21.25	18.0
	HT/VHT40 Beam Forming, M16 to M23	4	7	-53.8	-55.1	-56.9	-52.6	-41.1	-21.25	19.8
	HT/VHT40 STBC, M0 to M7	2	6	-53.8	-55.1			-45.4	-21.25	24.1
	HT/VHT40 STBC, M0 to M7	3	6	-53.8	-55.1	-56.9		-44.3	-21.25	23.1
	HT/VHT40 STBC, M0 to M7	4	6	-53.8	-55.1	-56.9	-52.6	-42.3	-21.25	21.0
5530	Non HT80, 6 to 54 Mbps	1	6	-50.7				-44.7	-21.25	23.5
	Non HT80, 6 to 54 Mbps	2	6	-50.7	-53.1			-42.7	-21.25	21.5
	Non HT80, 6 to 54 Mbps	3	6	-50.7	-53.1	-52.4		-41.2	-21.25	19.9
	Non HT80, 6 to 54 Mbps	4	6	-50.7	-53.1	-52.4	-50.7	-39.6	-21.25	18.3
	VHT80, M0.1 to M9.1	1	6	-53.4				-47.4	-21.25	26.2
	VHT80, M0.1 to M9.1	2	6	-53.4	-54.8			-45.0	-21.25	23.8
	VHT80, M0.2 to M9.2	2	6	-53.4	-54.8			-45.0	-21.25	23.8
	VHT80, M0.1 to M9.1	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80, M0.2 to M9.2	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80, M0.3 to M9.3	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80, M0.1 to M9.1	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
	VHT80, M0.2 to M9.2	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
	VHT80, M0.3 to M9.3	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
	VHT80 Beam Forming, M0.1 to M9.1	2	6	-53.4	-54.8			-45.0	-21.25	23.8
	VHT80 Beam Forming, M0.2 to M9.2	2	6	-53.4	-54.8			-45.0	-21.25	23.8
	VHT80 Beam Forming, M0.1 to M9.1	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80 Beam Forming, M0.2 to M9.2	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80 Beam Forming, M0.3 to M9.3	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80 Beam Forming, M0.1 to M9.1	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
	VHT80 Beam Forming, M0.2 to M9.2	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
	VHT80 Beam Forming, M0.3 to M9.3	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
	VHT80 STBC, M0.1 to M9.1	2	6	-53.4	-54.8			-45.0	-21.25	23.8

	VHT80 STBC, M0.1 to M9.1	3	6	-53.4	-54.8	-55.5		-43.7	-21.25	22.5
	VHT80 STBC, M0.1 to M9.1	4	6	-53.4	-54.8	-55.5	-53.9	-42.3	-21.25	21.1
5570	Non HT160, 6 to 54 Mbps	1	6	-45.3				-39.3	-21.25	18.1
	Non HT160, 6 to 54 Mbps	2	6	-45.3	-45.8			-36.5	-21.25	15.3
	Non HT160, 6 to 54 Mbps	3	6	-45.3	-45.8	-47.9		-35.4	-21.25	14.2
	Non HT160, 6 to 54 Mbps	**4**	**6**	**-45.3**	**-45.8**	**-47.9**	**-46.2**	**-34.2**	**-21.25**	**12.9**
	VHT160, M0.1 to M9.1	1	6	-50.6				-44.6	-21.25	23.4
	VHT160, M0.1 to M9.1	2	6	-50.6	-46.8			-39.3	-21.25	18.0
	VHT160, M0.2 to M9.2	2	6	-50.6	-46.8			-39.3	-21.25	18.0
	VHT160, M0.1 to M9.1	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160, M0.2 to M9.2	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160, M0.3 to M9.3	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160, M0.1 to M9.1	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
	VHT160, M0.2 to M9.2	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
	VHT160, M0.3 to M9.3	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
	VHT160 Beam Forming, M0.1 to M9.1	2	6	-50.6	-46.8			-39.3	-21.25	18.0
	VHT160 Beam Forming, M0.2 to M9.2	2	6	-50.6	-46.8			-39.3	-21.25	18.0
	VHT160 Beam Forming, M0.1 to M9.1	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160 Beam Forming, M0.2 to M9.2	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160 Beam Forming, M0.3 to M9.3	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160 Beam Forming, M0.1 to M9.1	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
	VHT160 Beam Forming, M0.2 to M9.2	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
	VHT160 Beam Forming, M0.3 to M9.3	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
	VHT160 STBC, M0.1 to M9.1	2	6	-50.6	-46.8			-39.3	-21.25	18.0
	VHT160 STBC, M0.1 to M9.1	3	6	-50.6	-46.8	-51.8		-38.4	-21.25	17.2
	VHT160 STBC, M0.1 to M9.1	4	6	-50.6	-46.8	-51.8	-51.2	-37.6	-21.25	16.3
5550	Non HT40, 6 to 54 Mbps	1	6	-51.2				-45.2	-21.25	24.0
	Non HT40, 6 to 54 Mbps	2	6	-51.2	-53.8			-43.3	-21.25	22.0
	Non HT40, 6 to 54 Mbps	3	6	-51.2	-53.8	-53.8		-42.0	-21.25	20.7
	Non HT40, 6 to 54 Mbps	4	6	-51.2	-53.8	-53.8	-50.1	-39.9	-21.25	18.7
	HT/VHT40, M0 to M7	1	6	-55.0				-49.0	-21.25	27.8
	HT/VHT40, M0 to M7	2	6	-55.0	-55.5			-46.2	-21.25	25.0
	HT/VHT40, M8 to M15	2	6	-55.0	-55.5			-46.2	-21.25	25.0
	HT/VHT40, M0 to M7	3	6	-55.0	-55.5	-55.1		-44.4	-21.25	23.2
	HT/VHT40, M8 to M15	3	6	-55.0	-55.5	-55.1		-44.4	-21.25	23.2
	HT/VHT40, M16 to M23	3	6	-55.0	-55.5	-55.1		-44.4	-21.25	23.2
	HT/VHT40, M0 to M7	4	6	-55.0	-55.5	-55.1	-54.0	-42.8	-21.25	21.6
	HT/VHT40, M8 to M15	4	6	-55.0	-55.5	-55.1	-54.0	-42.8	-21.25	21.6
	HT/VHT40, M16 to M23	4	6	-55.0	-55.5	-55.1	-54.0	-42.8	-21.25	21.6

	HT/VHT40 Beam Forming, M0 to M7	2	9	-55.0	-55.5			-43.2	-21.25	22.0
	HT/VHT40 Beam Forming, M8 to M15	2	6	-55.0	-55.5			-46.2	-21.25	25.0
	HT/VHT40 Beam Forming, M0 to M7	3	11	-55.0	-55.5	-55.1		-39.6	-21.25	18.4
	HT/VHT40 Beam Forming, M8 to M15	3	8	-55.0	-55.5	-55.1		-42.6	-21.25	21.4
	HT/VHT40 Beam Forming, M16 to M23	3	6	-55.0	-55.5	-55.1		-44.4	-21.25	23.2
	HT/VHT40 Beam Forming, M0 to M7	4	12	-55.0	-55.5	-55.1	-54.0	-36.8	-21.25	15.6
	HT/VHT40 Beam Forming, M8 to M15	4	9	-55.0	-55.5	-55.1	-54.0	-39.8	-21.25	18.6
	HT/VHT40 Beam Forming, M16 to M23	4	7	-55.0	-55.5	-55.1	-54.0	-41.6	-21.25	20.4
	HT/VHT40 STBC, M0 to M7	2	6	-55.0	-55.5			-46.2	-21.25	25.0
	HT/VHT40 STBC, M0 to M7	3	6	-55.0	-55.5	-55.1		-44.4	-21.25	23.2
	HT/VHT40 STBC, M0 to M7	4	6	-55.0	-55.5	-55.1	-54.0	-42.8	-21.25	21.6
5560	Non HT20, 6 to 54 Mbps	1	6	-54.1				-48.1	-21.25	26.9
	Non HT20, 6 to 54 Mbps	2	6	-54.1	-55.3			-45.6	-21.25	24.4
	Non HT20, 6 to 54 Mbps	3	6	-54.1	-55.3	-54.6		-43.9	-21.25	22.6
	Non HT20, 6 to 54 Mbps	4	6	-54.1	-55.3	-54.6	-61.9	-43.6	-21.25	22.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-54.1	-55.3			-42.6	-21.25	21.4
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-54.1	-55.3	-54.6		-39.1	-21.25	17.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-54.1	-55.3	-54.6	-61.9	-37.6	-21.25	16.4
	HT/VHT20, M0 to M7	1	6	-59.5				-53.5	-21.25	32.3
	HT/VHT20, M0 to M7	2	6	-59.5	-59.1			-50.3	-21.25	29.0
	HT/VHT20, M8 to M15	2	6	-59.5	-59.1			-50.3	-21.25	29.0
	HT/VHT20, M0 to M7	3	6	-59.5	-59.1	-54.8		-46.5	-21.25	25.2
	HT/VHT20, M8 to M15	3	6	-59.5	-59.1	-54.8		-46.5	-21.25	25.2
	HT/VHT20, M16 to M23	3	6	-59.5	-59.1	-54.8		-46.5	-21.25	25.2
	HT/VHT20, M0 to M7	4	6	-59.5	-59.1	-54.8	-61.8	-46.0	-21.25	24.7
	HT/VHT20, M8 to M15	4	6	-59.5	-59.1	-54.8	-61.8	-46.0	-21.25	24.7
	HT/VHT20, M16 to M23	4	6	-59.5	-59.1	-54.8	-61.8	-46.0	-21.25	24.7
	HT/VHT20 Beam Forming, M0 to M7	2	9	-59.5	-59.1			-47.3	-21.25	26.0
	HT/VHT20 Beam Forming, M8 to M15	2	6	-59.5	-59.1			-50.3	-21.25	29.0
	HT/VHT20 Beam Forming, M0 to M7	3	11	-59.5	-59.1	-54.8		-41.7	-21.25	20.4
	HT/VHT20 Beam Forming, M8 to M15	3	8	-59.5	-59.1	-54.8		-44.7	-21.25	23.4
	HT/VHT20 Beam Forming, M16 to M23	3	6	-59.5	-59.1	-54.8		-46.5	-21.25	25.2
	HT/VHT20 Beam Forming, M0 to M7	4	12	-59.5	-59.1	-54.8	-61.8	-40.0	-21.25	18.7
	HT/VHT20 Beam Forming, M8 to M15	4	9	-59.5	-59.1	-54.8	-61.8	-43.0	-21.25	21.7
	HT/VHT20 Beam Forming, M16 to M23	4	7	-59.5	-59.1	-54.8	-61.8	-44.8	-21.25	23.5
	HT/VHT20 STBC, M0 to M7	2	6	-59.5	-59.1			-50.3	-21.25	29.0
	HT/VHT20 STBC, M0 to M7	3	6	-59.5	-59.1	-54.8		-46.5	-21.25	25.2
	HT/VHT20 STBC, M0 to M7	4	6	-59.5	-59.1	-54.8	-61.8	-46.0	-21.25	24.7

5660	Non HT20, 6 to 54 Mbps	1	6	-54.5				-48.5	-21.25	27.3
	Non HT20, 6 to 54 Mbps	2	6	-54.5	-55.4			-45.9	-21.25	24.7
	Non HT20, 6 to 54 Mbps	3	6	-54.5	-55.4	-55.3		-44.3	-21.25	23.0
	Non HT20, 6 to 54 Mbps	4	6	-54.5	-55.4	-55.3	-54.3	-42.8	-21.25	21.6
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-54.5	-55.4			-42.9	-21.25	21.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-54.5	-55.4	-55.3		-39.5	-21.25	18.2
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-54.5	-55.4	-55.3	-54.3	-36.8	-21.25	15.6
	HT/VHT20, M0 to M7	1	6	-55.9				-49.9	-21.25	28.7
	HT/VHT20, M0 to M7	2	6	-55.9	-54.7			-46.2	-21.25	25.0
	HT/VHT20, M8 to M15	2	6	-55.9	-54.7			-46.2	-21.25	25.0
	HT/VHT20, M0 to M7	3	6	-55.9	-54.7	-55.9		-44.7	-21.25	23.4
	HT/VHT20, M8 to M15	3	6	-55.9	-54.7	-55.9		-44.7	-21.25	23.4
	HT/VHT20, M16 to M23	3	6	-55.9	-54.7	-55.9		-44.7	-21.25	23.4
	HT/VHT20, M0 to M7	4	6	-55.9	-54.7	-55.9	-53.7	-42.9	-21.25	21.7
	HT/VHT20, M8 to M15	4	6	-55.9	-54.7	-55.9	-53.7	-42.9	-21.25	21.7
	HT/VHT20, M16 to M23	4	6	-55.9	-54.7	-55.9	-53.7	-42.9	-21.25	21.7
	HT/VHT20 Beam Forming, M0 to M7	2	9	-55.9	-54.7			-43.2	-21.25	22.0
	HT/VHT20 Beam Forming, M8 to M15	2	6	-55.9	-54.7			-46.2	-21.25	25.0
	HT/VHT20 Beam Forming, M0 to M7	3	11	-55.9	-54.7	-55.9		-39.9	-21.25	18.6
	HT/VHT20 Beam Forming, M8 to M15	3	8	-55.9	-54.7	-55.9		-42.9	-21.25	21.6
	HT/VHT20 Beam Forming, M16 to M23	3	6	-55.9	-54.7	-55.9		-44.7	-21.25	23.4
	HT/VHT20 Beam Forming, M0 to M7	4	12	-55.9	-54.7	-55.9	-53.7	-36.9	-21.25	15.7
	HT/VHT20 Beam Forming, M8 to M15	4	9	-55.9	-54.7	-55.9	-53.7	-39.9	-21.25	18.7
	HT/VHT20 Beam Forming, M16 to M23	4	7	-55.9	-54.7	-55.9	-53.7	-41.7	-21.25	20.5
	HT/VHT20 STBC, M0 to M7	2	6	-55.9	-54.7			-46.2	-21.25	25.0
	HT/VHT20 STBC, M0 to M7	3	6	-55.9	-54.7	-55.9		-44.7	-21.25	23.4
	HT/VHT20 STBC, M0 to M7	4	6	-55.9	-54.7	-55.9	-53.7	-42.9	-21.25	21.7
5670	Non HT40, 6 to 54 Mbps	1	6	-53.8				-47.8	-21.25	26.6
	Non HT40, 6 to 54 Mbps	2	6	-53.8	-54.7			-45.2	-21.25	24.0
	Non HT40, 6 to 54 Mbps	3	6	-53.8	-54.7	-55.0		-43.7	-21.25	22.4
	Non HT40, 6 to 54 Mbps	4	6	-53.8	-54.7	-55.0	-51.7	-41.6	-21.25	20.3
	HT/VHT40, M0 to M7	1	6	-55.4				-49.4	-21.25	28.2
	HT/VHT40, M0 to M7	2	6	-55.4	-55.8			-46.6	-21.25	25.3
	HT/VHT40, M8 to M15	2	6	-55.4	-55.8			-46.6	-21.25	25.3
	HT/VHT40, M0 to M7	3	6	-55.4	-55.8	-55.8		-44.9	-21.25	23.6
	HT/VHT40, M8 to M15	3	6	-55.4	-55.8	-55.8		-44.9	-21.25	23.6
	HT/VHT40, M16 to M23	3	6	-55.4	-55.8	-55.8		-44.9	-21.25	23.6
	HT/VHT40, M0 to M7	4	6	-55.4	-55.8	-55.8	-60.0	-44.4	-21.25	23.1
	HT/VHT40, M8 to M15	4	6	-55.4	-55.8	-55.8	-60.0	-44.4	-21.25	23.1
	HT/VHT40, M16 to M23	4	6	-55.4	-55.8	-55.8	-60.0	-44.4	-21.25	23.1

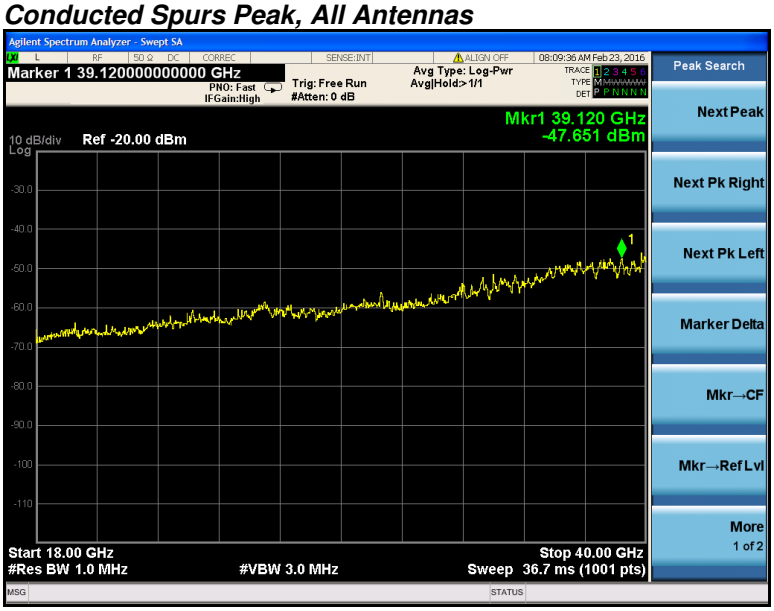
	HT/VHT40 Beam Forming, M0 to M7	2	9	-55.4	-55.8			-43.6	-21.25	22.3
	HT/VHT40 Beam Forming, M8 to M15	2	6	-55.4	-55.8			-46.6	-21.25	25.3
	HT/VHT40 Beam Forming, M0 to M7	3	11	-55.4	-55.8	-55.8		-40.1	-21.25	18.8
	HT/VHT40 Beam Forming, M8 to M15	3	8	-55.4	-55.8	-55.8		-43.1	-21.25	21.8
	HT/VHT40 Beam Forming, M16 to M23	3	6	-55.4	-55.8	-55.8		-44.9	-21.25	23.6
	HT/VHT40 Beam Forming, M0 to M7	4	12	-55.4	-55.8	-55.8	-60.0	-38.4	-21.25	17.1
	HT/VHT40 Beam Forming, M8 to M15	4	9	-55.4	-55.8	-55.8	-60.0	-41.4	-21.25	20.1
	HT/VHT40 Beam Forming, M16 to M23	4	7	-55.4	-55.8	-55.8	-60.0	-43.2	-21.25	21.9
	HT/VHT40 STBC, M0 to M7	2	6	-55.4	-55.8			-46.6	-21.25	25.3
	HT/VHT40 STBC, M0 to M7	3	6	-55.4	-55.8	-55.8		-44.9	-21.25	23.6
	HT/VHT40 STBC, M0 to M7	4	6	-55.4	-55.8	-55.8	-60.0	-44.4	-21.25	23.1
5690	Non HT80, 6 to 54 Mbps	1	6	-53.8				-47.8	-21.25	26.6
	Non HT80, 6 to 54 Mbps	2	6	-53.8	-54.7			-45.2	-21.25	24.0
	Non HT80, 6 to 54 Mbps	3	6	-53.8	-54.7	-54.6		-43.6	-21.25	22.3
	Non HT80, 6 to 54 Mbps	4	6	-53.8	-54.7	-54.6	-52.7	-41.9	-21.25	20.6
	VHT80, M0.1 to M9.1	1	6	-54.9				-48.9	-21.25	27.7
	VHT80, M0.1 to M9.1	2	6	-54.9	-55.8			-46.3	-21.25	25.1
	VHT80, M0.2 to M9.2	2	6	-54.9	-55.8			-46.3	-21.25	25.1
	VHT80, M0.1 to M9.1	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80, M0.2 to M9.2	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80, M0.3 to M9.3	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80, M0.1 to M9.1	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4
	VHT80, M0.2 to M9.2	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4
	VHT80, M0.3 to M9.3	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4
	VHT80 Beam Forming, M0.1 to M9.1	2	6	-54.9	-55.8			-46.3	-21.25	25.1
	VHT80 Beam Forming, M0.2 to M9.2	2	6	-54.9	-55.8			-46.3	-21.25	25.1
	VHT80 Beam Forming, M0.1 to M9.1	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80 Beam Forming, M0.2 to M9.2	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80 Beam Forming, M0.3 to M9.3	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80 Beam Forming, M0.1 to M9.1	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4
	VHT80 Beam Forming, M0.2 to M9.2	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4
	VHT80 Beam Forming, M0.3 to M9.3	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4
	VHT80 STBC, M0.1 to M9.1	2	6	-54.9	-55.8			-46.3	-21.25	25.1
	VHT80 STBC, M0.1 to M9.1	3	6	-54.9	-55.8	-60.6		-45.7	-21.25	24.5
	VHT80 STBC, M0.1 to M9.1	4	6	-54.9	-55.8	-60.6	-54.0	-43.7	-21.25	22.4

5700	Non HT20, 6 to 54 Mbps	1	6	-54.7				-48.7	-21.25	27.5
	Non HT20, 6 to 54 Mbps	2	6	-54.7	-58.3			-47.1	-21.25	25.9
	Non HT20, 6 to 54 Mbps	3	6	-54.7	-58.3	-55.4		-45.1	-21.25	23.9
	Non HT20, 6 to 54 Mbps	4	6	-54.7	-58.3	-55.4	-55.0	-43.6	-21.25	22.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-54.7	-58.3			-44.1	-21.25	22.9
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-54.7	-58.3	-55.4		-40.3	-21.25	19.1
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-54.7	-58.3	-55.4	-55.0	-37.6	-21.25	16.4
	HT/VHT20, M0 to M7	1	6	-56.4				-50.4	-21.25	29.2
	HT/VHT20, M0 to M7	2	6	-56.4	-57.9			-48.1	-21.25	26.8
	HT/VHT20, M8 to M15	2	6	-56.4	-57.9			-48.1	-21.25	26.8
	HT/VHT20, M0 to M7	3	6	-56.4	-57.9	-58.8		-46.8	-21.25	25.6
	HT/VHT20, M8 to M15	3	6	-56.4	-57.9	-58.8		-46.8	-21.25	25.6
	HT/VHT20, M16 to M23	3	6	-56.4	-57.9	-58.8		-46.8	-21.25	25.6
	HT/VHT20, M0 to M7	4	6	-56.4	-57.9	-58.8	-55.4	-44.9	-21.25	23.7
	HT/VHT20, M8 to M15	4	6	-56.4	-57.9	-58.8	-55.4	-44.9	-21.25	23.7
	HT/VHT20, M16 to M23	4	6	-56.4	-57.9	-58.8	-55.4	-44.9	-21.25	23.7
	HT/VHT20 Beam Forming, M0 to M7	2	9	-56.4	-57.9			-45.1	-21.25	23.8
	HT/VHT20 Beam Forming, M8 to M15	2	6	-56.4	-57.9			-48.1	-21.25	26.8
	HT/VHT20 Beam Forming, M0 to M7	3	11	-56.4	-57.9	-58.8		-42.0	-21.25	20.8
	HT/VHT20 Beam Forming, M8 to M15	3	8	-56.4	-57.9	-58.8		-45.0	-21.25	23.8
	HT/VHT20 Beam Forming, M16 to M23	3	6	-56.4	-57.9	-58.8		-46.8	-21.25	25.6
	HT/VHT20 Beam Forming, M0 to M7	4	12	-56.4	-57.9	-58.8	-55.4	-38.9	-21.25	17.7
	HT/VHT20 Beam Forming, M8 to M15	4	9	-56.4	-57.9	-58.8	-55.4	-41.9	-21.25	20.7
	HT/VHT20 Beam Forming, M16 to M23	4	7	-56.4	-57.9	-58.8	-55.4	-43.7	-21.25	22.5
	HT/VHT20 STBC, M0 to M7	2	6	-56.4	-57.9			-48.1	-21.25	26.8
	HT/VHT20 STBC, M0 to M7	3	6	-56.4	-57.9	-58.8		-46.8	-21.25	25.6
	HT/VHT20 STBC, M0 to M7	4	6	-56.4	-57.9	-58.8	-55.4	-44.9	-21.25	23.7
5710	Non HT40, 6 to 54 Mbps	1	6	-54.0				-48.0	-21.25	26.8
	Non HT40, 6 to 54 Mbps	2	6	-54.0	-54.5			-45.2	-21.25	24.0
	Non HT40, 6 to 54 Mbps	3	6	-54.0	-54.5	-55.0		-43.7	-21.25	22.5
	Non HT40, 6 to 54 Mbps	4	6	-54.0	-54.5	-55.0	-53.9	-42.3	-21.25	21.1
	HT/VHT40, M0 to M7	1	6	-59.6				-53.6	-21.25	32.4
	HT/VHT40, M0 to M7	2	6	-59.6	-58.3			-49.9	-21.25	28.6
	HT/VHT40, M8 to M15	2	6	-59.6	-58.3			-49.9	-21.25	28.6
	HT/VHT40, M0 to M7	3	6	-59.6	-58.3	-54.9		-46.4	-21.25	25.1
	HT/VHT40, M8 to M15	3	6	-59.6	-58.3	-54.9		-46.4	-21.25	25.1
	HT/VHT40, M16 to M23	3	6	-59.6	-58.3	-54.9		-46.4	-21.25	25.1
	HT/VHT40, M0 to M7	4	6	-59.6	-58.3	-54.9	-54.5	-44.3	-21.25	23.0
	HT/VHT40, M8 to M15	4	6	-59.6	-58.3	-54.9	-54.5	-44.3	-21.25	23.0
	HT/VHT40, M16 to M23	4	6	-59.6	-58.3	-54.9	-54.5	-44.3	-21.25	23.0

	HT/VHT40 Beam Forming, M0 to M7	2	9	-59.6	-58.3			-46.9	-21.25	25.6
	HT/VHT40 Beam Forming, M8 to M15	2	6	-59.6	-58.3			-49.9	-21.25	28.6
	HT/VHT40 Beam Forming, M0 to M7	3	11	-59.6	-58.3	-54.9		-41.6	-21.25	20.3
	HT/VHT40 Beam Forming, M8 to M15	3	8	-59.6	-58.3	-54.9		-44.6	-21.25	23.3
	HT/VHT40 Beam Forming, M16 to M23	3	6	-59.6	-58.3	-54.9		-46.4	-21.25	25.1
	HT/VHT40 Beam Forming, M0 to M7	4	12	-59.6	-58.3	-54.9	-54.5	-38.3	-21.25	17.0
	HT/VHT40 Beam Forming, M8 to M15	4	9	-59.6	-58.3	-54.9	-54.5	-41.3	-21.25	20.0
	HT/VHT40 Beam Forming, M16 to M23	4	7	-59.6	-58.3	-54.9	-54.5	-43.1	-21.25	21.8
	HT/VHT40 STBC, M0 to M7	2	6	-59.6	-58.3			-49.9	-21.25	28.6
	HT/VHT40 STBC, M0 to M7	3	6	-59.6	-58.3	-54.9		-46.4	-21.25	25.1
	HT/VHT40 STBC, M0 to M7	4	6	-59.6	-58.3	-54.9	-54.5	-44.3	-21.25	23.0
5720	Non HT20, 6 to 54 Mbps	1	6	-58.1				-52.1	-21.25	30.9
	Non HT20, 6 to 54 Mbps	2	6	-58.1	-57.8			-48.9	-21.25	27.7
	Non HT20, 6 to 54 Mbps	3	6	-58.1	-57.8	-59.6		-47.7	-21.25	26.4
	Non HT20, 6 to 54 Mbps	4	6	-58.1	-57.8	-59.6	-60.8	-46.9	-21.25	25.6
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-58.1	-57.8			-45.9	-21.25	24.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-58.1	-57.8	-59.6		-42.9	-21.25	21.6
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-58.1	-57.8	-59.6	-60.8	-40.9	-21.25	19.6
	HT/VHT20, M0 to M7	1	6	-59.6				-53.6	-21.25	32.4
	HT/VHT20, M0 to M7	2	6	-59.6	-59.9			-50.7	-21.25	29.5
	HT/VHT20, M8 to M15	2	6	-59.6	-59.9			-50.7	-21.25	29.5
	HT/VHT20, M0 to M7	3	6	-59.6	-59.9	-58.7		-48.6	-21.25	27.3
	HT/VHT20, M8 to M15	3	6	-59.6	-59.9	-58.7		-48.6	-21.25	27.3
	HT/VHT20, M16 to M23	3	6	-59.6	-59.9	-58.7		-48.6	-21.25	27.3
	HT/VHT20, M0 to M7	4	6	-59.6	-59.9	-58.7	-58.5	-47.1	-21.25	25.9
	HT/VHT20, M8 to M15	4	6	-59.6	-59.9	-58.7	-58.5	-47.1	-21.25	25.9
	HT/VHT20, M16 to M23	4	6	-59.6	-59.9	-58.7	-58.5	-47.1	-21.25	25.9
	HT/VHT20 Beam Forming, M0 to M7	2	9	-59.6	-59.9			-47.7	-21.25	26.5
	HT/VHT20 Beam Forming, M8 to M15	2	6	-59.6	-59.9			-50.7	-21.25	29.5
	HT/VHT20 Beam Forming, M0 to M7	3	11	-59.6	-59.9	-58.7		-43.8	-21.25	22.5
	HT/VHT20 Beam Forming, M8 to M15	3	8	-59.6	-59.9	-58.7		-46.8	-21.25	25.5
	HT/VHT20 Beam Forming, M16 to M23	3	6	-59.6	-59.9	-58.7		-48.6	-21.25	27.3
	HT/VHT20 Beam Forming, M0 to M7	4	12	-59.6	-59.9	-58.7	-58.5	-41.1	-21.25	19.9
	HT/VHT20 Beam Forming, M8 to M15	4	9	-59.6	-59.9	-58.7	-58.5	-44.1	-21.25	22.9
	HT/VHT20 Beam Forming, M16 to M23	4	7	-59.6	-59.9	-58.7	-58.5	-45.9	-21.25	24.7
	HT/VHT20 STBC, M0 to M7	2	6	-59.6	-59.9			-50.7	-21.25	29.5
	HT/VHT20 STBC, M0 to M7	3	6	-59.6	-59.9	-58.7		-48.6	-21.25	27.3
	HT/VHT20 STBC, M0 to M7	4	6	-59.6	-59.9	-58.7	-58.5	-47.1	-21.25	25.9

Conducted Spurs Average, All Antennas

Conducted Spurs Peak, All Antennas



Conducted Spurs Average, 5500 MHz, HT/VHT20 Beam Forming, M0 to M7

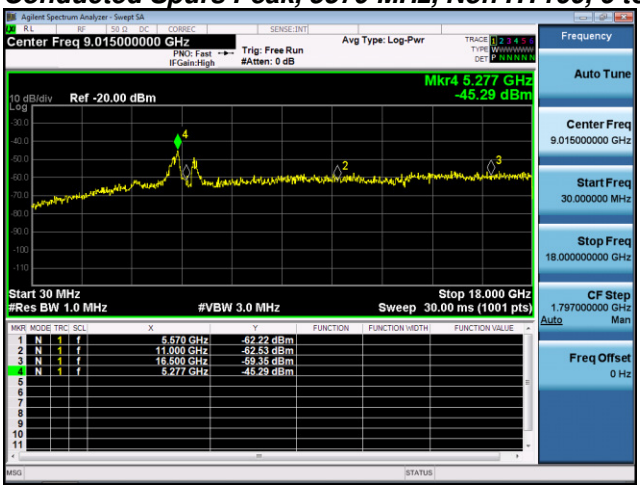
Antenna A

Antenna B

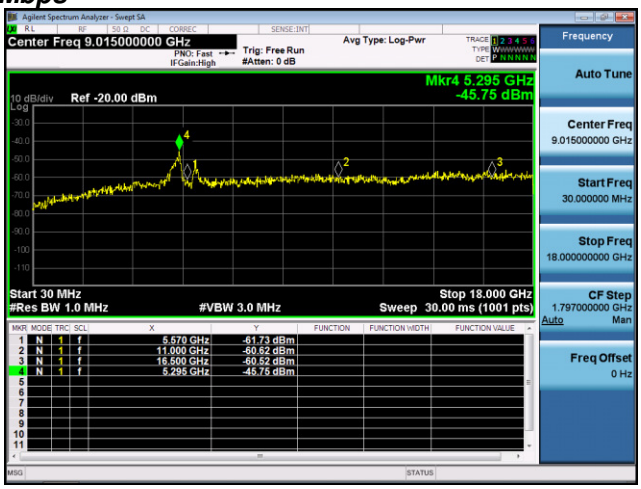
Antenna C

Antenna D

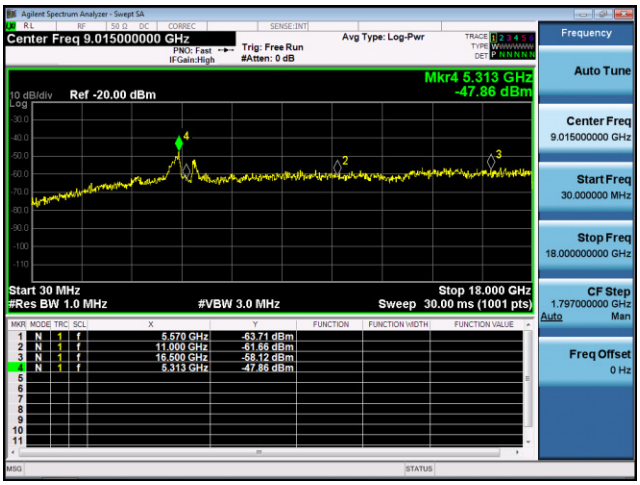
Conducted Spurs Peak, 5570 MHz, Non HT160, 6 to 54 Mbps



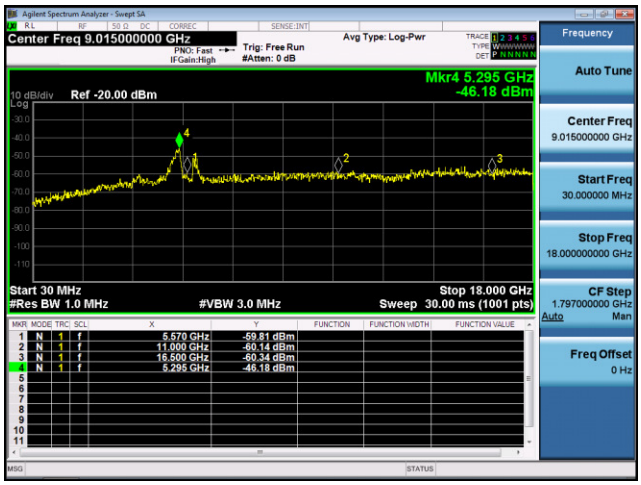
Antenna A



Antenna B



Antenna C



Antenna D

A.4 Conducted Bandedge

15.407 (b) *Undesirable emission limits.* Except as shown in paragraph (b) (7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(3) 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 e.i.r.p. of -27 dBm/MHz.
(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in 15.209.
(7) The provisions of §15.205 apply to intentional radiators operating under this section.
(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits

Test Procedure

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v01r01
ANSI C63.10: 2013

Conducted Bandedge Test Procedure
1. Connect the antenna port(s) to the spectrum analyzer input. 2. Place the radio in continuous transmit mode. Use the procedures in ANSI C63.10: 2013 to substitute conducted measurements in place of radiated measurements. 3. Configure Spectrum analyzer as per test parameters below (be sure to enter all losses between the transmitter output and the spectrum analyzer). 4. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. 5. The “measure-and-sum technique” is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units. The worst case output is recorded. 6. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands 7. Capture graphs and record pertinent measurement data.

Ref. ANSI C63.10: 2013 section 12.7.6 (peak) & 12.7.7.3 (average, Method VB-A (Alternative))

Conducted Bandedge Test parameters restricted Band
RBW = 1 MHz VBW ≥ 3 x RBW for Peak, 100Hz for Average Sweep = Auto couple Detector = Peak Trace = Max Hold.

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☑	☐
	Support	S02	☐	☑

Tested By :	**Date of testing:**
Jose Aguirre	01-Jan-16 - 22-Feb-16
Test Result : PASS	

See Appendix C for list of test equipment

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Bandedge Level (dBm)	Tx 2 Bandedge Level (dBm)	Tx 3 Bandedge Level (dBm)	Tx 4 Bandedge Level (dBm)	Total Tx Bandedge Level (dBm)	Limit (dBm)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	6	-56.7				-50.7	-41.25	9.5
	Non HT20, 6 to 54 Mbps	2	6	-56.7	-54.9			-46.7	-41.25	5.4
	Non HT20, 6 to 54 Mbps	3	6	-61.8	-61.6	-62.1		-51.1	-41.25	9.8
	Non HT20, 6 to 54 Mbps	4	6	-62.3	-62.4	-62.7	-61.4	-50.2	-41.25	8.9
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-57.8	-56.7			-45.2	-41.25	4.0
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-61.8	-61.6	-62.1		-46.3	-41.25	5.0
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-62.5	-62.7	-63.0	-61.7	-44.4	-41.25	3.2
	HT/VHT20, M0 to M7	1	6	-56.3				-50.3	-41.25	9.1
	HT/VHT20, M0 to M7	2	6	-56.3	-55.0			-46.6	-41.25	5.3
	HT/VHT20, M8 to M15	2	6	-56.3	-55.0			-46.6	-41.25	5.3
	HT/VHT20, M0 to M7	3	6	-61.7	-61.4	-61.9		-50.9	-41.25	9.6
	HT/VHT20, M8 to M15	3	6	-57.6	-56.7	-57.4		-46.4	-41.25	5.2
	HT/VHT20, M16 to M23	3	6	-56.3	-55.0	-56.0		-45.0	-41.25	3.7
	HT/VHT20, M0 to M7	4	6	-62.3	-62.3	-62.8	-61.0	-50.0	-41.25	8.8
	HT/VHT20, M8 to M15	4	6	-58.7	-58.5	-58.9	-60.1	-47.0	-41.25	5.7
	HT/VHT20, M16 to M23	4	6	-57.6	-56.7	-57.4	-56.9	-45.1	-41.25	3.9
	HT/VHT20 Beam Forming, M0 to M7	2	9	-57.6	-56.7			-45.1	-41.25	3.9
	HT/VHT20 Beam Forming, M8 to M15	2	6	-56.3	-55.0			-46.6	-41.25	5.3
	HT/VHT20 Beam Forming, M0 to M7	3	11	-61.7	-61.4	-61.9		-46.1	-41.25	4.8
	HT/VHT20 Beam Forming, M8 to M15	3	8	-58.4	-57.8	-58.2		-45.6	-41.25	4.3
	HT/VHT20 Beam Forming, M16 to M23	3	6	-56.3	-55.0	-56.0		-45.0	-41.25	3.7
	HT/VHT20 Beam Forming, M0 to M7	4	12	-62.5	-62.6	-63.0	-61.5	-44.3	-41.25	3.1
	HT/VHT20 Beam Forming, M8 to M15	4	9	-61.7	-61.4	-61.9	-60.3	-46.3	-41.25	5.0
	HT/VHT20 Beam Forming, M16 to M23	4	7	-58.4	-57.8	-58.2	-57.2	-44.7	-41.25	3.4
	HT/VHT20 STBC, M0 to M7	2	6	-56.3	-55.0			-46.6	-41.25	5.3
	HT/VHT20 STBC, M0 to M7	3	6	-57.6	-56.7	-57.4		-46.4	-41.25	5.2
	HT/VHT20 STBC, M0 to M7	4	6	-58.7	-58.5	-58.9	-60.1	-47.0	-41.25	5.7
5510	Non HT40, 6 to 54 Mbps	1	6	-56.6				-50.6	-41.25	9.4
	Non HT40, 6 to 54 Mbps	2	6	-61.6	-61.0			-52.3	-41.25	11.0
	Non HT40, 6 to 54 Mbps	3	6	-62.3	-62.1	-63.0		-51.7	-41.25	10.4
	Non HT40, 6 to 54 Mbps	4	6	-62.5	-62.6	-63.0	-61.9	-50.5	-41.25	9.2
	HT/VHT40, M0 to M7	1	6	-55.2				-49.2	-41.25	8.0
	HT/VHT40, M0 to M7	2	6	-56.5	-53.7			-45.9	-41.25	4.6

	HT/VHT40, M8 to M15	2	6	-56.5	-53.7			-45.9	-41.25	4.6
	HT/VHT40, M0 to M7	3	6	-58.2	-56.3	-57.8		-46.6	-41.25	5.3
	HT/VHT40, M8 to M15	3	6	-58.2	-56.3	-57.8		-46.6	-41.25	5.3
	HT/VHT40, M16 to M23	3	6	-58.2	-56.3	-57.8		-46.6	-41.25	5.3
	HT/VHT40, M0 to M7	4	6	-58.2	-56.3	-57.8	-56.5	-45.1	-41.25	3.9
	HT/VHT40, M8 to M15	4	6	-58.2	-56.3	-57.8	-56.5	-45.1	-41.25	3.9
	HT/VHT40, M16 to M23	4	6	-58.2	-56.3	-57.8	-56.5	-45.1	-41.25	3.9
	HT/VHT40 Beam Forming, M0 to M7	2	9	-58.2	-56.3			-45.1	-41.25	3.9
	HT/VHT40 Beam Forming, M8 to M15	2	6	-56.5	-53.7			-45.9	-41.25	4.6
	HT/VHT40 Beam Forming, M0 to M7	3	11	-62.1	-61.4	-62.3		-46.3	-41.25	5.1
	HT/VHT40 Beam Forming, M8 to M15	3	8	-58.2	-56.3	-57.8		-44.8	-41.25	3.5
	HT/VHT40 Beam Forming, M16 to M23	3	6	-58.2	-56.3	-57.8		-46.6	-41.25	5.3
	HT/VHT40 Beam Forming, M0 to M7	4	12	-64.3	-63.9	-64.3	-64.0	-46.1	-41.25	4.9
	HT/VHT40 Beam Forming, M8 to M15	4	9	-62.1	-61.4	-62.3	-61.1	-46.7	-41.25	5.4
	HT/VHT40 Beam Forming, M16 to M23	4	7	-61.2	-59.4	-61.3	-59.1	-46.9	-41.25	5.7
	HT/VHT40 STBC, M0 to M7	2	6	-56.5	-53.7			-45.9	-41.25	4.6
	HT/VHT40 STBC, M0 to M7	3	6	-58.2	-56.3	-57.8		-46.6	-41.25	5.3
	HT/VHT40 STBC, M0 to M7	4	6	-58.2	-56.3	-57.8	-56.5	-45.1	-41.25	3.9
5530	Non HT80, 6 to 54 Mbps	1	6	-51.4				-45.4	-41.25	4.2
	Non HT80, 6 to 54 Mbps	2	6	-52.2	-50.2			-42.1	-41.25	0.8
	Non HT80, 6 to 54 Mbps	3	6	-53.1	-51.6	-53.7		-41.9	-41.25	0.7
	Non HT80, 6 to 54 Mbps	**4**	**6**	**-53.8**	**-52.4**	**-53.8**	**-54.2**	**-41.5**	**-41.25**	**0.2**
	VHT80, M0.1 to M9.1	1	6	-52.3				-46.3	-41.25	5.1
	VHT80, M0.1 to M9.1	2	6	-53.8	-51.8			-43.7	-41.25	2.4
	VHT80, M0.2 to M9.2	2	6	-53.8	-51.8			-43.7	-41.25	2.4
	VHT80, M0.1 to M9.1	3	6	-53.8	-51.8	-51.8		-41.6	-41.25	0.3
	VHT80, M0.2 to M9.2	3	6	-53.8	-51.8	-51.8		-41.6	-41.25	0.3
	VHT80, M0.3 to M9.3	3	6	-53.8	-51.8	-51.8		-41.6	-41.25	0.3
	VHT80, M0.1 to M9.1	4	6	-55.0	-53.2	-54.0	-52.9	-41.7	-41.25	0.4
	VHT80, M0.2 to M9.2	4	6	-55.0	-53.2	-54.0	-52.9	-41.7	-41.25	0.4
	VHT80, M0.3 to M9.3	4	6	-55.0	-53.2	-54.0	-52.9	-41.7	-41.25	0.4
	VHT80 Beam Forming, M0.1 to M9.1	2	6	-53.8	-51.8			-43.7	-41.25	2.4
	VHT80 Beam Forming, M0.2 to M9.2	2	6	-53.8	-51.8			-43.7	-41.25	2.4
	VHT80 Beam Forming, M0.1 to M9.1	3	6	-56.0	-54.2	-55.7		-44.5	-41.25	3.2
	VHT80 Beam Forming, M0.2 to M9.2	3	6	-53.8	-51.8	-51.8		-41.6	-41.25	0.3
	VHT80 Beam Forming, M0.3 to M9.3	3	6	-53.8	-51.8	-51.8		-41.6	-41.25	0.3
	VHT80 Beam Forming, M0.1 to M9.1	4	6	-58.3	-56.5	-58.6	-57.0	-45.5	-41.25	4.2
	VHT80 Beam Forming, M0.2 to M9.2	4	6	-55.0	-53.2	-54.0	-52.9	-41.7	-41.25	0.4
	VHT80 Beam Forming, M0.3 to M9.3	4	6	-55.0	-53.2	-54.0	-52.9	-41.7	-41.25	0.4
	VHT80 STBC, M0.1 to M9.1	2	6	-53.8	-51.8			-43.7	-41.25	2.4

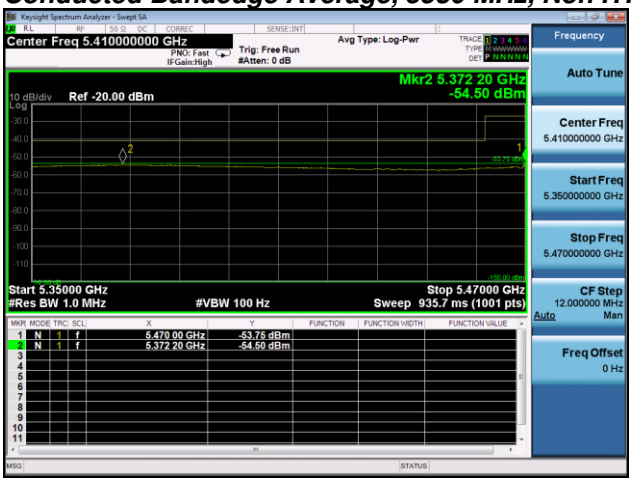
	VHT80 STBC, M0.1 to M9.1	3	6	-53.8	-51.8	-51.8		-41.6	-41.25	0.3
	VHT80 STBC, M0.1 to M9.1	4	6	-55.0	-53.2	-54.0	-52.9	-41.7	-41.25	0.4
5570	Non HT160, 6 to 54 Mbps	1	6	-48.2				-42.2	-41.25	1.0
	Non HT160, 6 to 54 Mbps	2	6	-56.7	-55.6			-47.1	-41.25	5.9
	Non HT160, 6 to 54 Mbps	3	6	-56.7	-55.6	-55.1		-45.0	-41.25	3.7
	Non HT160, 6 to 54 Mbps	4	6	-56.7	-55.6	-55.1	-54.0	-43.2	-41.25	2.0
	VHT160, M0.1 to M9.1	1	6	-52.1				-46.1	-41.25	4.9
	VHT160, M0.1 to M9.1	2	6	-52.1	-52.2			-43.1	-41.25	1.9
	VHT160, M0.2 to M9.2	2	6	-52.1	-52.2			-43.1	-41.25	1.9
	VHT160, M0.1 to M9.1	3	6	-53.8	-54.0	-50.7		-41.8	-41.25	0.5
	VHT160, M0.2 to M9.2	3	6	-53.8	-54.0	-50.7		-41.8	-41.25	0.5
	VHT160, M0.3 to M9.3	3	6	-53.8	-54.0	-50.7		-41.8	-41.25	0.5
	VHT160, M0.1 to M9.1	4	6	-55.4	-55.2	-52.9	-55.5	-42.6	-41.25	1.3
	VHT160, M0.2 to M9.2	4	6	-55.4	-55.2	-52.9	-55.5	-42.6	-41.25	1.3
	VHT160, M0.3 to M9.3	4	6	-55.4	-55.2	-52.9	-55.5	-42.6	-41.25	1.3
	VHT160 Beam Forming, M0.1 to M9.1	2	6	-52.1	-52.2			-43.1	-41.25	1.9
	VHT160 Beam Forming, M0.2 to M9.2	2	6	-52.1	-52.2			-43.1	-41.25	1.9
	VHT160 Beam Forming, M0.1 to M9.1	3	6	-55.4	-55.2	-52.9		-43.6	-41.25	2.3
	VHT160 Beam Forming, M0.2 to M9.2	3	6	-53.8	-54.0	-50.7		-41.8	-41.25	0.5
	VHT160 Beam Forming, M0.3 to M9.3	3	6	-53.8	-54.0	-50.7		-41.8	-41.25	0.5
	VHT160 Beam Forming, M0.1 to M9.1	4	6	-58.9	-58.1	-57.1	-58.1	-46.0	-41.25	4.7
	VHT160 Beam Forming, M0.2 to M9.2	4	6	-55.4	-55.2	-52.9	-55.5	-42.6	-41.25	1.3
	VHT160 Beam Forming, M0.3 to M9.3	4	6	-55.4	-55.2	-52.9	-55.5	-42.6	-41.25	1.3
	VHT160 STBC, M0.1 to M9.1	2	6	-52.1	-52.2			-43.1	-41.25	1.9
	VHT160 STBC, M0.1 to M9.1	3	6	-53.8	-54.0	-50.7		-41.8	-41.25	0.5
	VHT160 STBC, M0.1 to M9.1	4	6	-55.4	-55.2	-52.9	-55.5	-42.6	-41.25	1.3

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Bandedge Level (dBm)	Tx 2 Bandedge Level (dBm)	Tx 3 Bandedge Level (dBm)	Tx 4 Bandedge Level (dBm)	Total Tx Bandedge Level (dBm)	Limit (dBm)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	6	-33.7				-27.7	-21.25	6.5
	Non HT20, 6 to 54 Mbps	2	6	-33.7	-33.3			-24.5	-21.25	3.2
	Non HT20, 6 to 54 Mbps	3	6	-37.9	-37.3	-38.7		-27.2	-21.25	5.9
	Non HT20, 6 to 54 Mbps	4	6	-39.7	-38.9	-40.4	-40.3	-27.8	-21.25	6.5
	Non HT20 Beam Forming, 6 to 54 Mbps	2	9	-34.8	-34.4			-22.6	-21.25	1.3
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	-37.9	-37.3	-38.7		-22.4	-21.25	1.1
	Non HT20 Beam Forming, 6 to 54 Mbps	4	12	-41.0	-39.8	-41.0	-40.9	-22.6	-21.25	1.4
	HT/VHT20, M0 to M7	1	6	-34.1				-28.1	-21.25	6.9
	HT/VHT20, M0 to M7	2	6	-34.1	-31.5			-23.6	-21.25	2.3
	HT/VHT20, M8 to M15	2	6	-34.1	-31.5			-23.6	-21.25	2.3
	HT/VHT20, M0 to M7	3	6	-37.7	-37.1	-38.5		-27.0	-21.25	5.7
	HT/VHT20, M8 to M15	3	6	-35.2	-34.5	-35.6		-24.3	-21.25	3.1
	HT/VHT20, M16 to M23	3	6	-34.1	-31.5	-34.6		-22.4	-21.25	1.2
	HT/VHT20, M0 to M7	4	6	-39.9	-39.2	-40.3	-39.9	-27.8	-21.25	6.5
	HT/VHT20, M8 to M15	4	6	-36.9	-36.2	-37.6	-37.3	-24.9	-21.25	3.7
	HT/VHT20, M16 to M23	4	6	-35.2	-34.5	-35.6	-35.0	-23.0	-21.25	1.8
	HT/VHT20 Beam Forming, M0 to M7	2	9	-35.2	-34.5			-22.8	-21.25	1.6
	HT/VHT20 Beam Forming, M8 to M15	2	6	-34.1	-31.5			-23.6	-21.25	2.3
	HT/VHT20 Beam Forming, M0 to M7	3	11	-37.7	-37.1	-38.5		-22.2	-21.25	0.9
	HT/VHT20 Beam Forming, M8 to M15	3	8	-35.8	-35.4	-36.5		-23.3	-21.25	2.1
	HT/VHT20 Beam Forming, M16 to M23	3	6	-34.1	-31.5	-34.6		-22.4	-21.25	1.2
	HT/VHT20 Beam Forming, M0 to M7	4	12	-40.0	-40.1	-41.1	-40.8	-22.5	-21.25	1.2
	HT/VHT20 Beam Forming, M8 to M15	4	9	-37.7	-37.1	-38.5	-38.0	-22.8	-21.25	1.5
	HT/VHT20 Beam Forming, M16 to M23	4	7	-35.8	-35.4	-36.5	-36.3	-22.8	-21.25	1.5
	HT/VHT20 STBC, M0 to M7	2	6	-34.1	-31.5			-23.6	-21.25	2.3
	HT/VHT20 STBC, M0 to M7	3	6	-35.2	-34.5	-35.6		-24.3	-21.25	3.1
	HT/VHT20 STBC, M0 to M7	4	6	-36.9	-36.2	-37.6	-37.3	-24.9	-21.25	3.7
5510	Non HT40, 6 to 54 Mbps	1	6	-30.9				-24.9	-21.25	3.7
	Non HT40, 6 to 54 Mbps	2	6	-31.9	-31.4			-22.6	-21.25	1.4
	Non HT40, 6 to 54 Mbps	**3**	**6**	**-33.7**	**-33.2**	**-30.3**		**-21.4**	**-21.25**	**0.1**
	Non HT40, 6 to 54 Mbps	4	6	-31.1	-33.8	-34.4	-35.4	-21.3	-21.25	0.1
	HT/VHT40, M0 to M7	1	6	-27.7				-21.7	-21.25	0.5
	HT/VHT40, M0 to M7	2	6	-33.9	-31.3			-23.4	-21.25	2.1

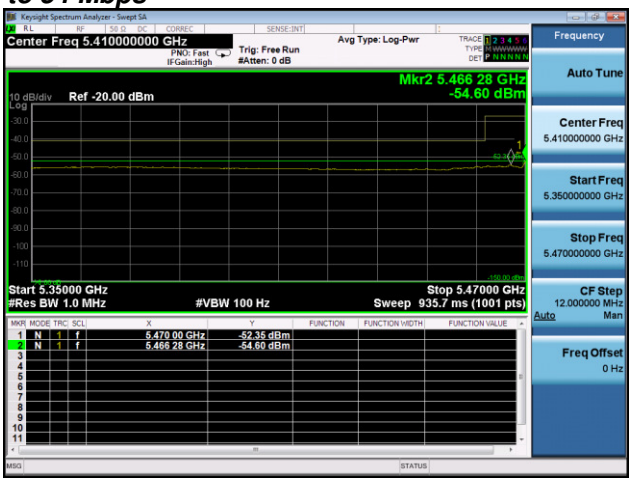
	HT/VHT40, M8 to M15	2	6	-33.9	-31.3			-23.4	-21.25	2.1
	HT/VHT40, M0 to M7	3	6	-33.5	-34.3	-34.5		-23.3	-21.25	2.1
	HT/VHT40, M8 to M15	3	6	-33.5	-34.3	-34.5		-23.3	-21.25	2.1
	HT/VHT40, M16 to M23	3	6	-33.5	-34.3	-34.5		-23.3	-21.25	2.1
	HT/VHT40, M0 to M7	4	6	-33.5	-34.3	-34.5	-32.4	-21.6	-21.25	0.3
	HT/VHT40, M8 to M15	4	6	-33.5	-34.3	-34.5	-32.4	-21.6	-21.25	0.3
	HT/VHT40, M16 to M23	4	6	-33.5	-34.3	-34.5	-32.4	-21.6	-21.25	0.3
	HT/VHT40 Beam Forming, M0 to M7	2	9	-33.5	-34.3			-21.9	-21.25	0.6
	HT/VHT40 Beam Forming, M8 to M15	2	6	-33.9	-31.3			-23.4	-21.25	2.1
	HT/VHT40 Beam Forming, M0 to M7	3	11	-37.2	-35.9	-38.0		-21.4	-21.25	0.1
	HT/VHT40 Beam Forming, M8 to M15	3	8	-33.5	-34.3	-34.5		-21.5	-21.25	0.3
	HT/VHT40 Beam Forming, M16 to M23	3	6	-33.5	-34.3	-34.5		-23.3	-21.25	2.1
	HT/VHT40 Beam Forming, M0 to M7	4	12	-39.5	-40.6	-38.6	-40.6	-21.7	-21.25	0.5
	HT/VHT40 Beam Forming, M8 to M15	4	9	-37.2	-35.9	-38.0	-37.4	-22.0	-21.25	0.8
	HT/VHT40 Beam Forming, M16 to M23	4	7	-37.6	-34.7	-35.4	-36.9	-22.8	-21.25	1.5
	HT/VHT40 STBC, M0 to M7	2	6	-33.9	-31.3			-23.4	-21.25	2.1
	HT/VHT40 STBC, M0 to M7	3	6	-33.5	-34.3	-34.5		-23.3	-21.25	2.1
	HT/VHT40 STBC, M0 to M7	4	6	-33.5	-34.3	-34.5	-32.4	-21.6	-21.25	0.3
5530	Non HT80, 6 to 54 Mbps	1	6	-29.9				-23.9	-21.25	2.7
	Non HT80, 6 to 54 Mbps	2	6	-34.4	-30.3			-22.9	-21.25	1.6
	Non HT80, 6 to 54 Mbps	3	6	-33.0	-35.6	-35.9		-23.9	-21.25	2.6
	Non HT80, 6 to 54 Mbps	4	6	-34.6	-32.9	-34.4	-36.9	-22.5	-21.25	1.2
	VHT80, M0.1 to M9.1	1	6	-29.3				-23.3	-21.25	2.1
	VHT80, M0.1 to M9.1	2	6	-37.3	-28.9			-22.3	-21.25	1.1
	VHT80, M0.2 to M9.2	2	6	-37.3	-28.9			-22.3	-21.25	1.1
	VHT80, M0.1 to M9.1	3	6	-37.3	-28.9	-34.8		-21.4	-21.25	0.2
	VHT80, M0.2 to M9.2	3	6	-37.3	-28.9	-34.8		-21.4	-21.25	0.2
	VHT80, M0.3 to M9.3	3	6	-37.3	-28.9	-34.8		-21.4	-21.25	0.2
	VHT80, M0.1 to M9.1	4	6	-37.8	-37.2	-36.3	-33.8	-24.0	-21.25	2.7
	VHT80, M0.2 to M9.2	4	6	-37.8	-37.2	-36.3	-33.8	-24.0	-21.25	2.7
	VHT80, M0.3 to M9.3	4	6	-37.8	-37.2	-36.3	-33.8	-24.0	-21.25	2.7
	VHT80 Beam Forming, M0.1 to M9.1	2	6	-37.3	-28.9			-22.3	-21.25	1.1
	VHT80 Beam Forming, M0.2 to M9.2	2	6	-37.3	-28.9			-22.3	-21.25	1.1
	VHT80 Beam Forming, M0.1 to M9.1	3	6	-38.7	-37.9	-38.3		-27.5	-21.25	6.3
	VHT80 Beam Forming, M0.2 to M9.2	3	6	-37.3	-28.9	-34.8		-21.4	-21.25	0.2
	VHT80 Beam Forming, M0.3 to M9.3	3	6	-37.3	-28.9	-34.8		-21.4	-21.25	0.2
	VHT80 Beam Forming, M0.1 to M9.1	4	6	-40.3	-38.0	-40.4	-40.4	-27.6	-21.25	6.4
	VHT80 Beam Forming, M0.2 to M9.2	4	6	-37.8	-37.2	-36.3	-33.8	-24.0	-21.25	2.7
	VHT80 Beam Forming, M0.3 to M9.3	4	6	-37.8	-37.2	-36.3	-33.8	-24.0	-21.25	2.7
	VHT80 STBC, M0.1 to M9.1	2	6	-37.3	-28.9			-22.3	-21.25	1.1

	VHT80 STBC, M0.1 to M9.1	3	6	-37.3	-28.9	-34.8		-21.4	-21.25	0.2
	VHT80 STBC, M0.1 to M9.1	4	6	-37.8	-37.2	-36.3	-33.8	-24.0	-21.25	2.7
5570	Non HT160, 6 to 54 Mbps	1	6	-27.3				-21.3	-21.25	0.1
	Non HT160, 6 to 54 Mbps	2	6	-44.1	-37.1			-30.3	-21.25	9.1
	Non HT160, 6 to 54 Mbps	3	6	-44.1	-37.1	-38.4		-28.2	-21.25	7.0
	Non HT160, 6 to 54 Mbps	4	6	-44.1	-37.1	-38.4	-44.6	-27.8	-21.25	6.6
	VHT160, M0.1 to M9.1	1	6	-32.4				-26.4	-21.25	5.2
	VHT160, M0.1 to M9.1	2	6	-32.4	-32.0			-23.2	-21.25	1.9
	VHT160, M0.2 to M9.2	2	6	-32.4	-32.0			-23.2	-21.25	1.9
	VHT160, M0.1 to M9.1	3	6	-34.6	-35.7	-30.3		-22.1	-21.25	0.8
	VHT160, M0.2 to M9.2	3	6	-34.6	-35.7	-30.3		-22.1	-21.25	0.8
	VHT160, M0.3 to M9.3	3	6	-34.6	-35.7	-30.3		-22.1	-21.25	0.8
	VHT160, M0.1 to M9.1	4	6	-36.4	-37.0	-31.7	-35.6	-22.6	-21.25	1.4
	VHT160, M0.2 to M9.2	4	6	-36.4	-37.0	-31.7	-35.6	-22.6	-21.25	1.4
	VHT160, M0.3 to M9.3	4	6	-36.4	-37.0	-31.7	-35.6	-22.6	-21.25	1.4
	VHT160 Beam Forming, M0.1 to M9.1	2	6	-32.4	-32.0			-23.2	-21.25	1.9
	VHT160 Beam Forming, M0.2 to M9.2	2	6	-32.4	-32.0			-23.2	-21.25	1.9
	VHT160 Beam Forming, M0.1 to M9.1	3	6	-36.4	-37.0	-31.7		-23.6	-21.25	2.3
	VHT160 Beam Forming, M0.2 to M9.2	3	6	-34.6	-35.7	-30.3		-22.1	-21.25	0.8
	VHT160 Beam Forming, M0.3 to M9.3	3	6	-34.6	-35.7	-30.3		-22.1	-21.25	0.8
	VHT160 Beam Forming, M0.1 to M9.1	4	6	-40.0	-40.6	-36.6	-40.5	-27.1	-21.25	5.8
	VHT160 Beam Forming, M0.2 to M9.2	4	6	-36.4	-37.0	-31.7	-35.6	-22.6	-21.25	1.4
	VHT160 Beam Forming, M0.3 to M9.3	4	6	-36.4	-37.0	-31.7	-35.6	-22.6	-21.25	1.4
	VHT160 STBC, M0.1 to M9.1	2	6	-32.4	-32.0			-23.2	-21.25	1.9
	VHT160 STBC, M0.1 to M9.1	3	6	-34.6	-35.7	-30.3		-22.1	-21.25	0.8
	VHT160 STBC, M0.1 to M9.1	4	6	-36.4	-37.0	-31.7	-35.6	-22.6	-21.25	1.4

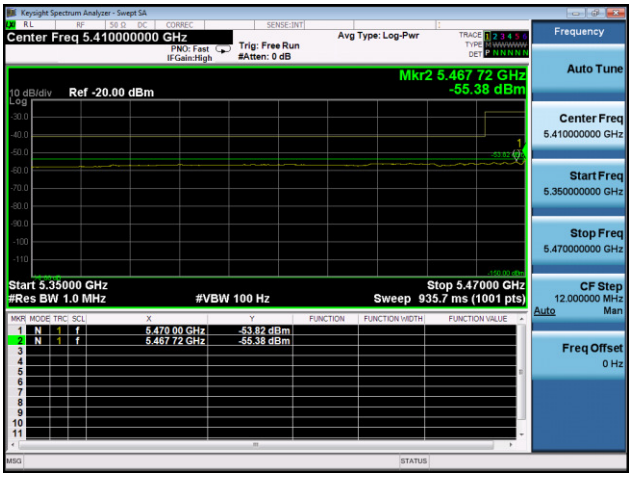
Conducted Bandedge Average, 5530 MHz, Non HT80, 6 to 54 Mbps



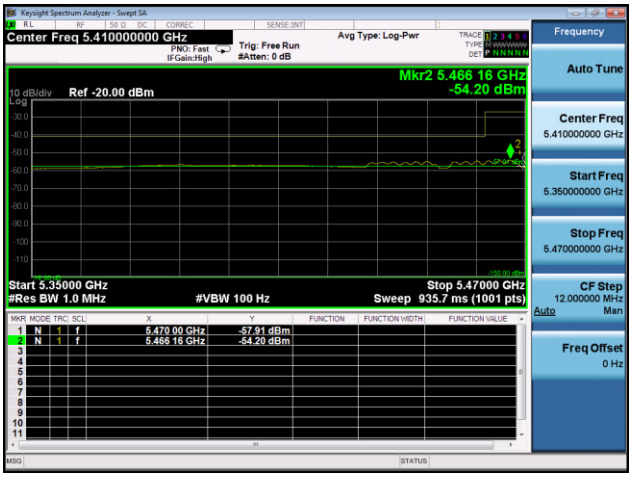
Antenna A



Antenna B

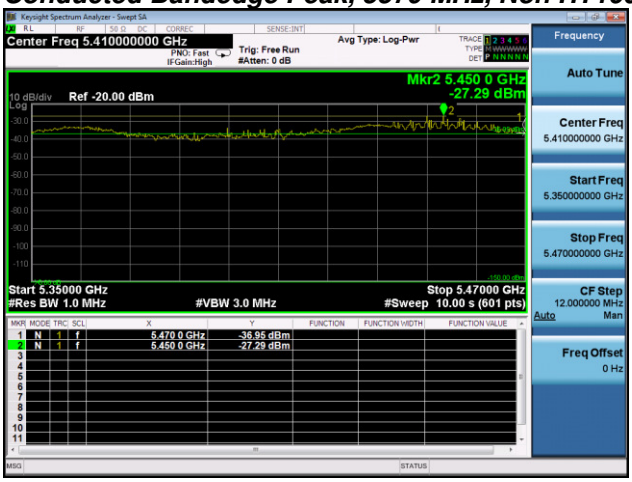


Antenna C



Antenna D

Conducted Bandedge Peak, 5570 MHz, Non HT160, 6 to 54 Mbps

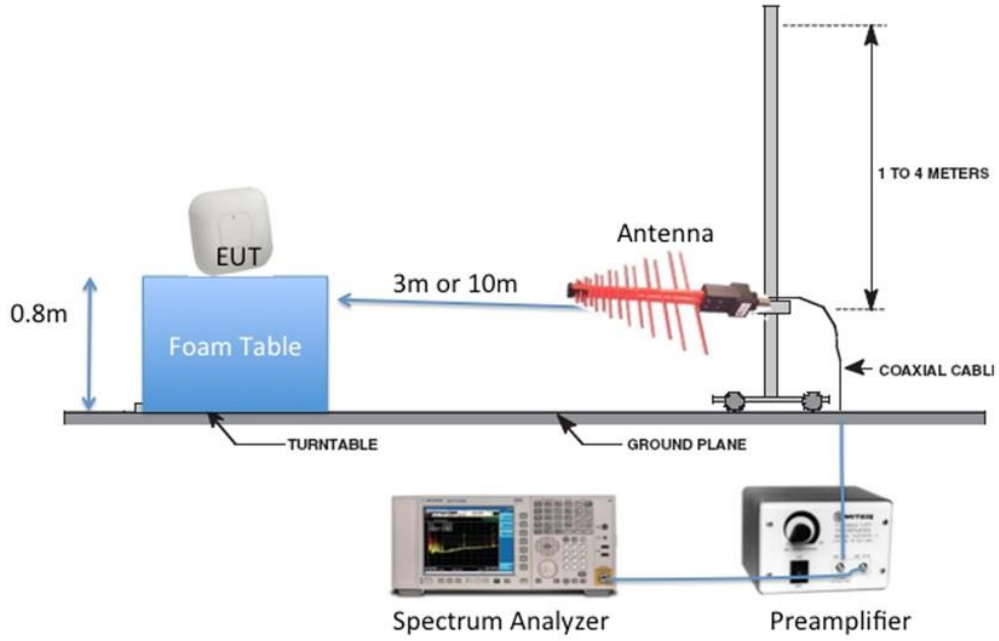


Antenna A

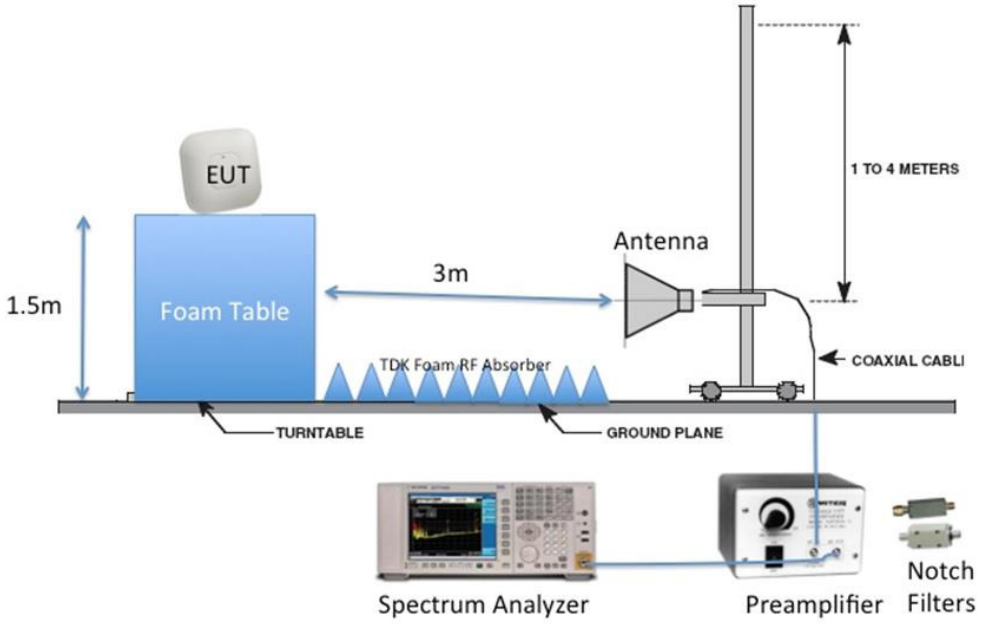
Appendix B: Emission Test Results

Testing Laboratory: Cisco Systems, Inc., 125 West Tasman Drive, San Jose, CA 95134, USA

Radiated Emission Setup Diagram-Below 1G



Radiated Emission Setup Diagram-Above 1G



B.1 Radiated Spurious Emissions

15.407 (b) *Undesirable emission limits.* Except as shown in paragraph (b) (7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(3) 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 e.i.r.p. of −27 dBm/MHz.

15.205 / **15.209**

(7) The provisions of 15.205 apply to intentional radiators operating under this section.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in 15.209.

Ref. ANSI C63.10: 2013 section 12.7.6 (peak) & 12.7.7.3 (average)

Using Vasona, configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer). Place the radio in continuous transmit mode.

Span:	1GHz – 18 GHz/18GHz-26G/26GHz-40GHz
Reference Level:	80 dBuV
Attenuation:	10 dB
Sweep Time:	Coupled
Resolution Bandwidth:	1MHz
Video Bandwidth:	3 MHz for peak, 1 KHz for average
Detector:	Peak

Terminate the access Point RF ports with 50 ohm loads.

Maximize Turntable (find worst case table angle), Maximize Antenna (find worst case height)

Save 2 plots: 1) Average plot (Vertical and Horizontal), Limit= 54dBuV/m @3m
2) Peak plot (Vertical and Horizontal), Limit = 74dBuV/m @3m

Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands.

This report represents the worst case data for all supported operating modes and antennas. There are no measurable emissions above 18 GHz.

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☑	☐
	Support	S02	☐	☑

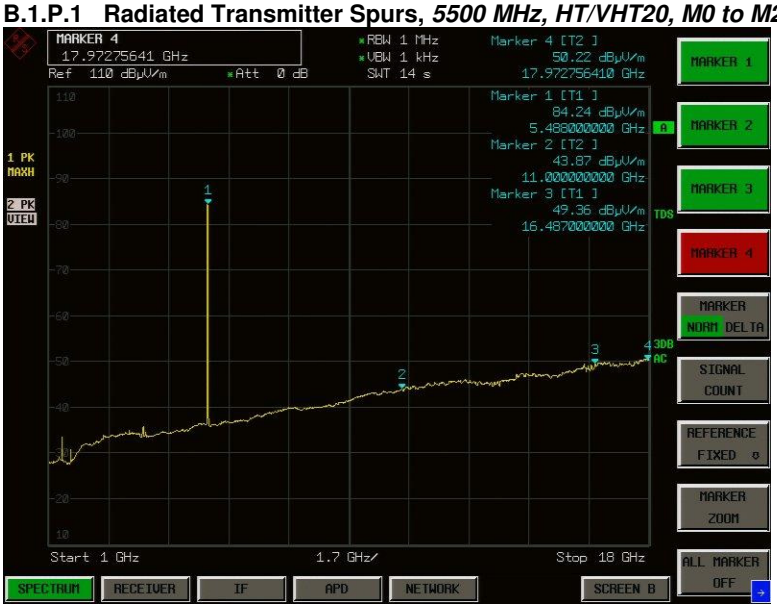
Tested By :	Date of testing:
Jose Aguirre	01-Jan-16 - 22-Feb-16
Test Result : PASS	

See Appendix C for list of test equipment

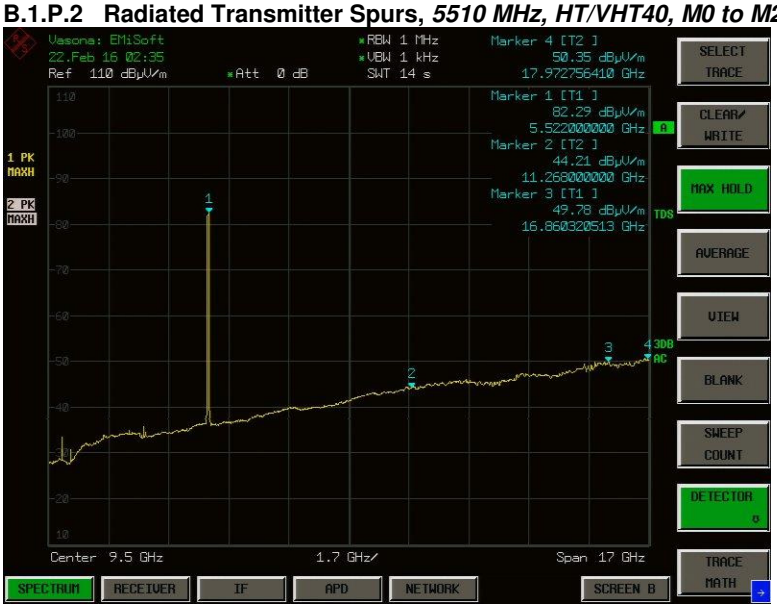
B.1.A Transmitter Radiated Spurious Emissions-Average Worst Case

Frequency (MHz)	Mode	Data Rate (Mbps)	Spurious Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (MHz)
5500	HT/VHT20, M0 to M23	M0	**50.2**	54.0	3.8
5510	HT/VHT40, M0 to M23	M0	**50.4**	54.0	3.6
5530	VHT80, M0.1 to M9.3	M0x1	**50.5**	54.0	3.5
5560	HT/VHT20, M0 to M23	M0	**50.3**	54.0	3.7
5570	VHT160, M0.1 to M9.3	M0x1	**50.5**	54.0	3.5
5670	HT/VHT20, M0 to M23	M0	**50.5**	54.0	3.5
5690	VHT80, M0.1 to M9.3	M0x1	**50.5**	54.0	3.5
5710	HT/VHT20, M0 to M23	M0	**50.4**	54.0	3.6
5720	HT/VHT20, M0 to M23	M0	**50.0**	54.0	4.0

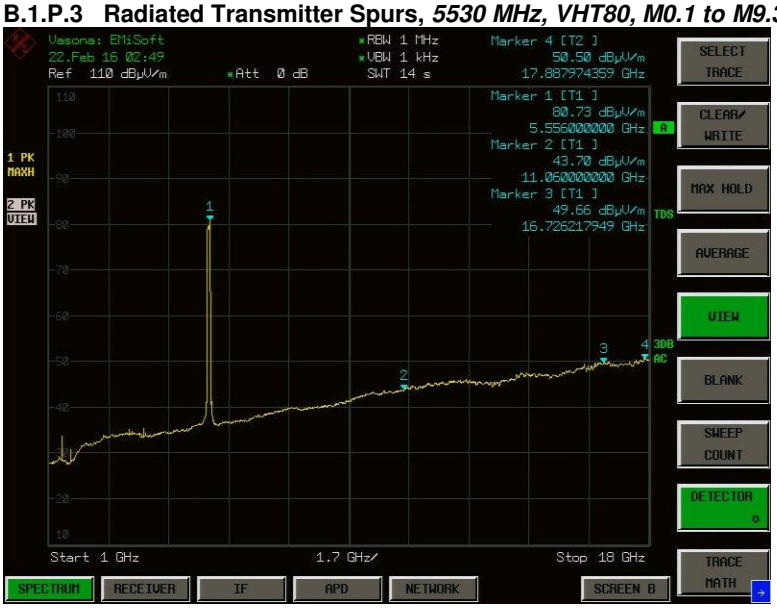
B.1.P.1 Radiated Transmitter Spurs, *5500 MHz, HT/VHT20, M0 to M23*, Average (1-18GHz)



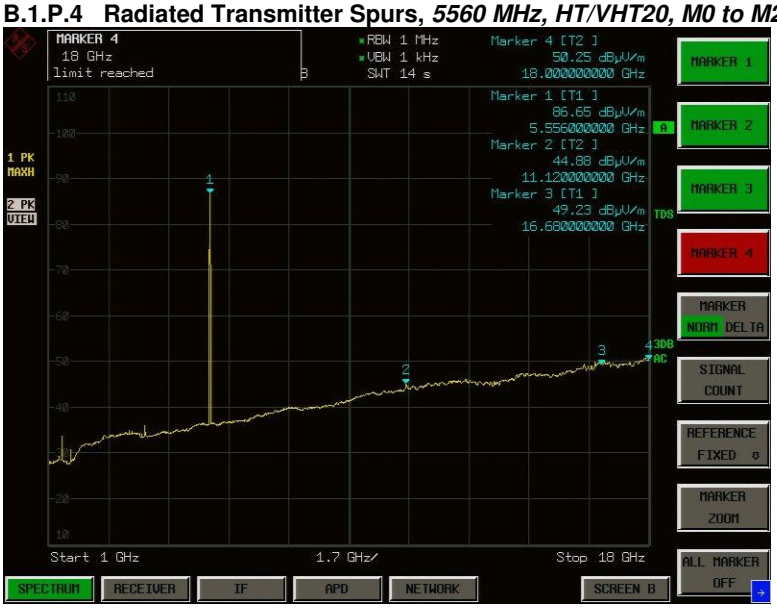
B.1.P.2 Radiated Transmitter Spurs, *5510 MHz, HT/VHT40, M0 to M23,* Average (1-18GHz)



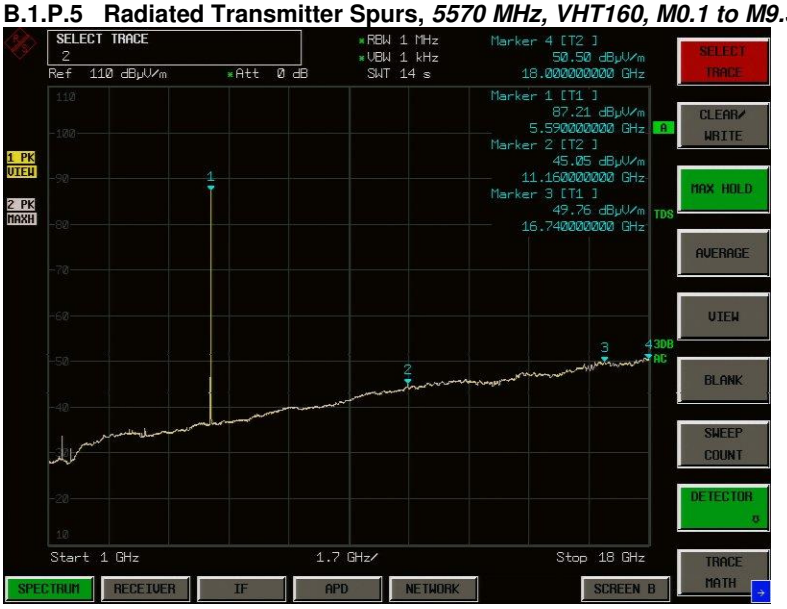
B.1.P.3 Radiated Transmitter Spurs, *5530 MHz, VHT80, M0.1 to M9.3*, Average (1-18GHz)



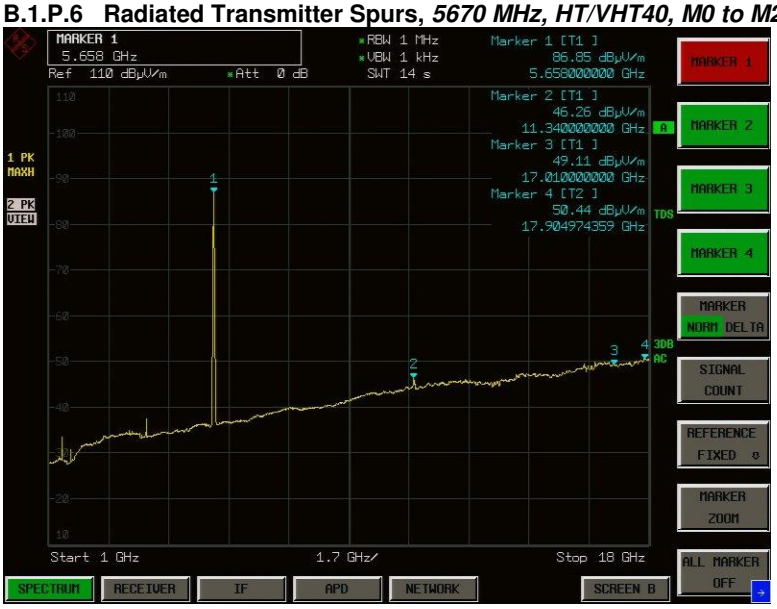
B.1.P.4 Radiated Transmitter Spurs, *5560 MHz, HT/VHT20, M0 to M23*, Average (1-18GHz)



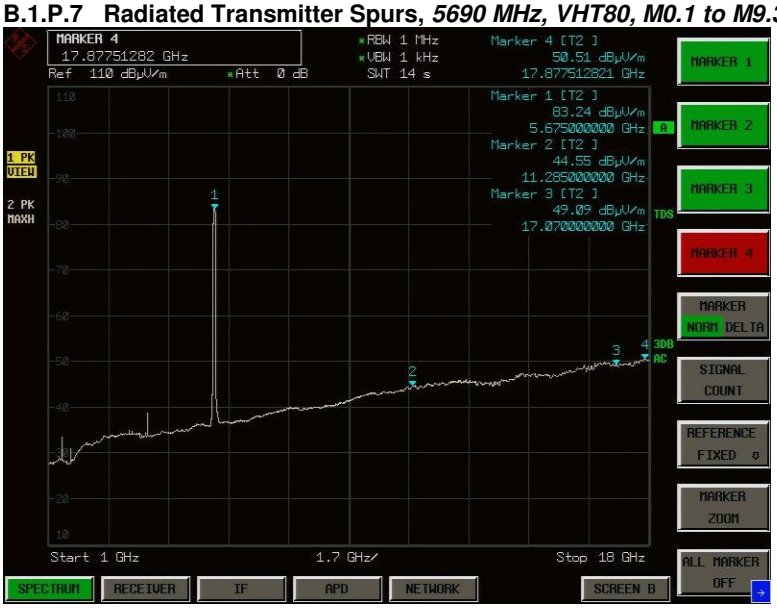
B.1.P.5 Radiated Transmitter Spurs, *5570 MHz, VHT160, M0.1 to M9.3*, Average (1-18GHz)



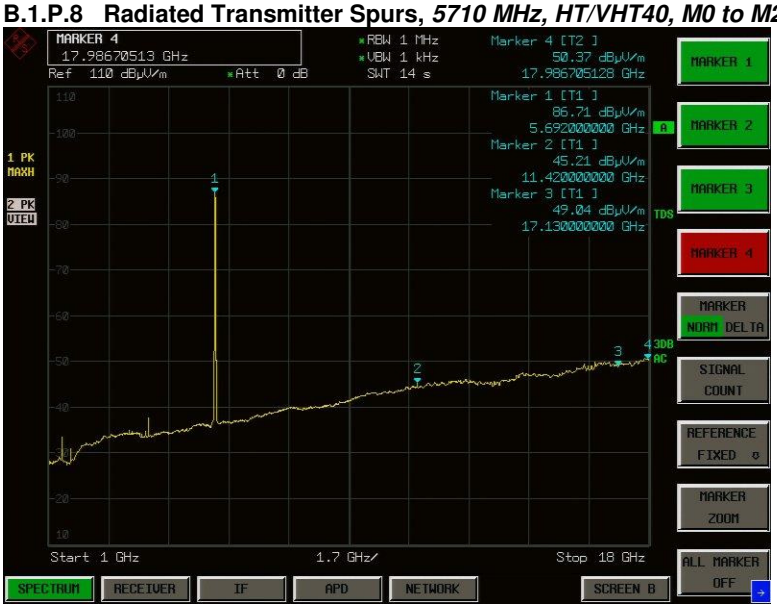
B.1.P.6 Radiated Transmitter Spurs, *5670 MHz, HT/VHT40, M0 to M23, M0.0 to M9.4*, Average (1-18GHz)



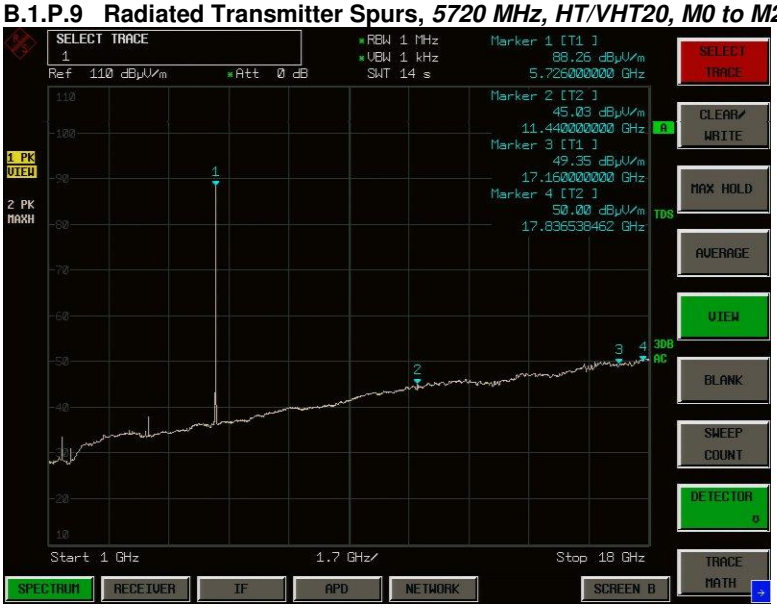
B.1.P.7 Radiated Transmitter Spurs, *5690 MHz, VHT80, M0.1 to M9.3*, Average (1-18GHz)



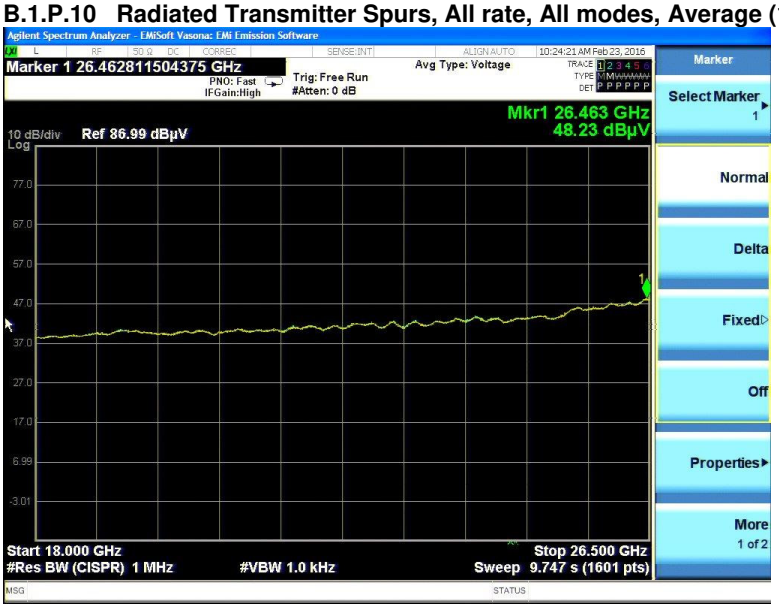
B.1.P.8 Radiated Transmitter Spurs, *5710 MHz, HT/VHT40, M0 to M23,* Average (1-18GHz)



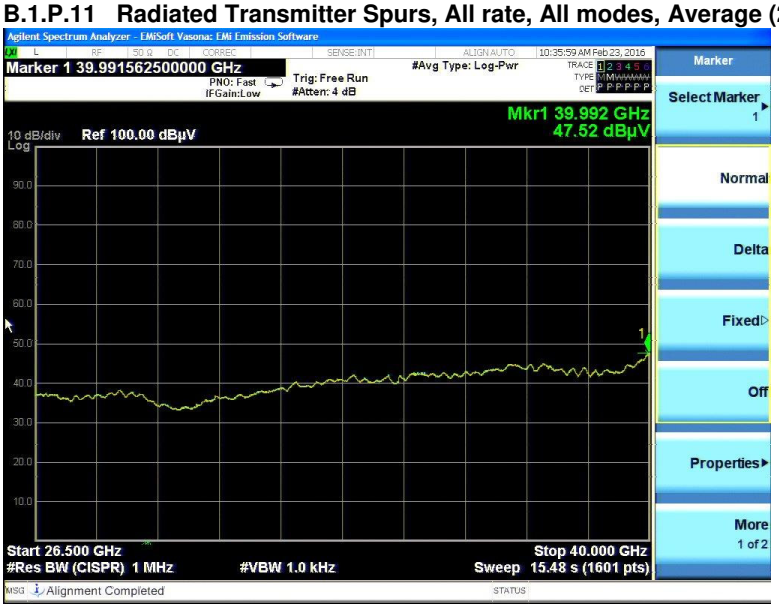
B.1.P.9 Radiated Transmitter Spurs, *5720 MHz, HT/VHT20, M0 to M23*, Average (1-18GHz)



B.1.P.10 Radiated Transmitter Spurs, All rate, All modes, Average (18-26.5GHz) Horizontal & Vertical



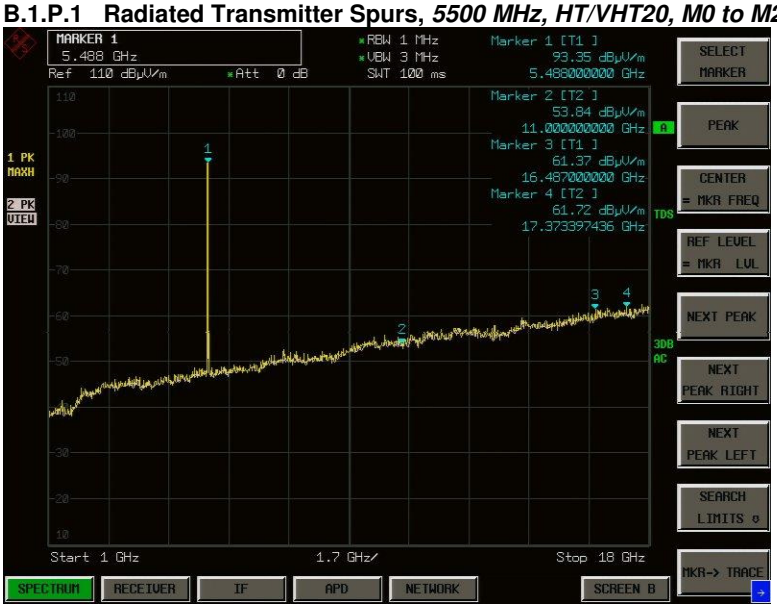
B.1.P.11 Radiated Transmitter Spurs, All rate, All modes, Average (26.5-40GHz) Horizontal & Vertical



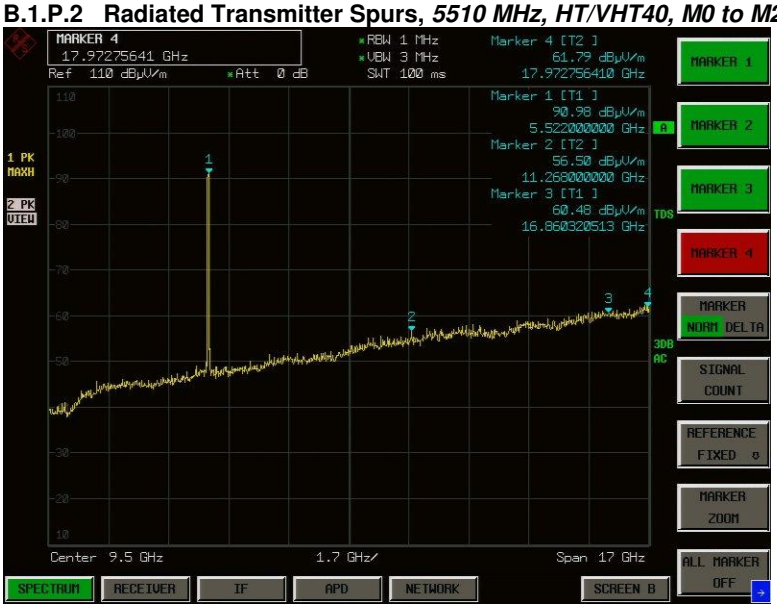
B.1.P Transmitter Radiated Spurious Emissions-Peak worst case

Frequency (MHz)	Mode	Data Rate (Mbps)	Spurious Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (MHz)
5500	HT/VHT20, M0 to M23	M0	**61.8**	74.0	12.2
5510	HT/VHT40, M0 to M23	M0	**61.8**	74.0	12.2
5530	VHT80, M0.1 to M9.3	M0x1	**62.2**	74.0	11.8
5560	HT/VHT20, M0 to M23	M0	**61.8**	74.0	12.2
5570	VHT160, M0.1 to M9.3	M0x1	**61.8**	74.0	12.2
5670	HT/VHT20, M0 to M23	M0	**62.4**	74.0	11.6
5690	VHT80, M0.1 to M9.3	M0x1	**61.8**	74.0	12.2
5710	HT/VHT20, M0 to M23	M0	**62.1**	74.0	11.9
5720	HT/VHT20, M0 to M23	M0	**62.7**	74.0	11.3

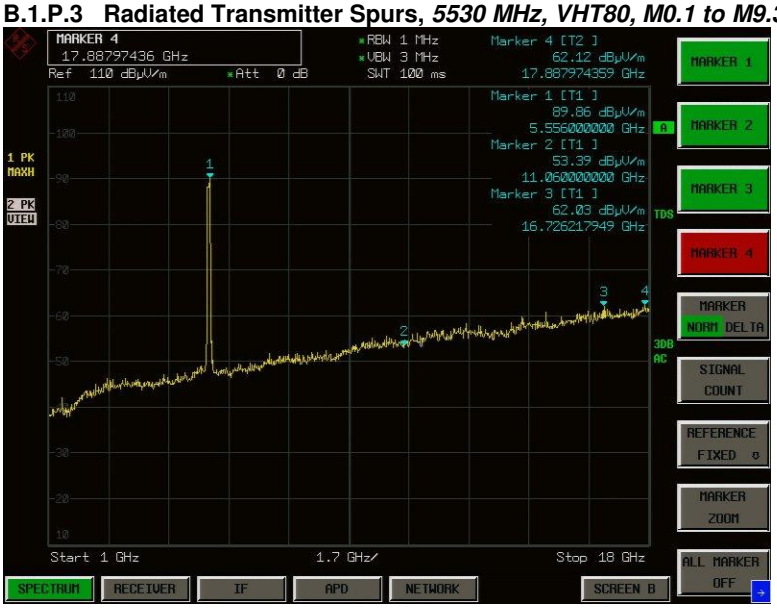
B.1.P.1 Radiated Transmitter Spurs, *5500 MHz, HT/VHT20, M0 to M23*, Peak (1-18GHz)



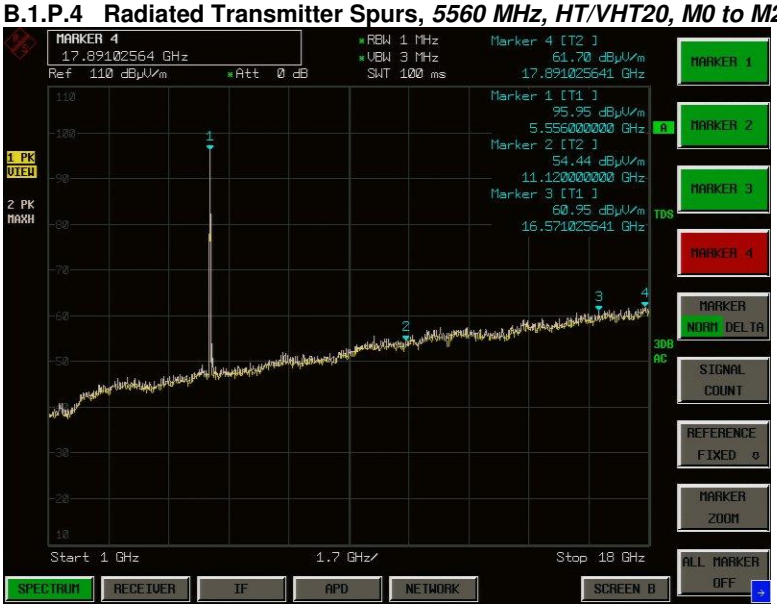
B.1.P.2 Radiated Transmitter Spurs, *5510 MHz, HT/VHT40, M0 to M23,* Peak (1-18GHz)



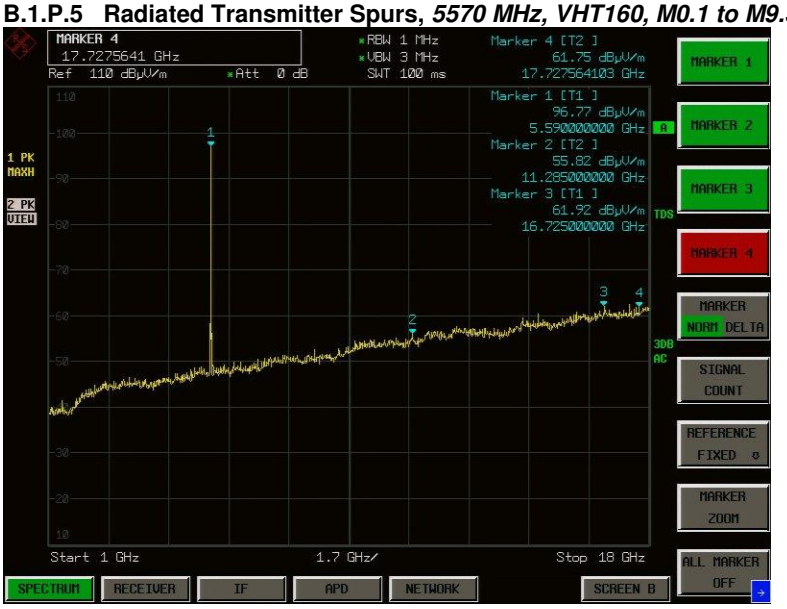
B.1.P.3 Radiated Transmitter Spurs, *5530 MHz, VHT80, M0.1 to M9.3*, Peak (1-18GHz)



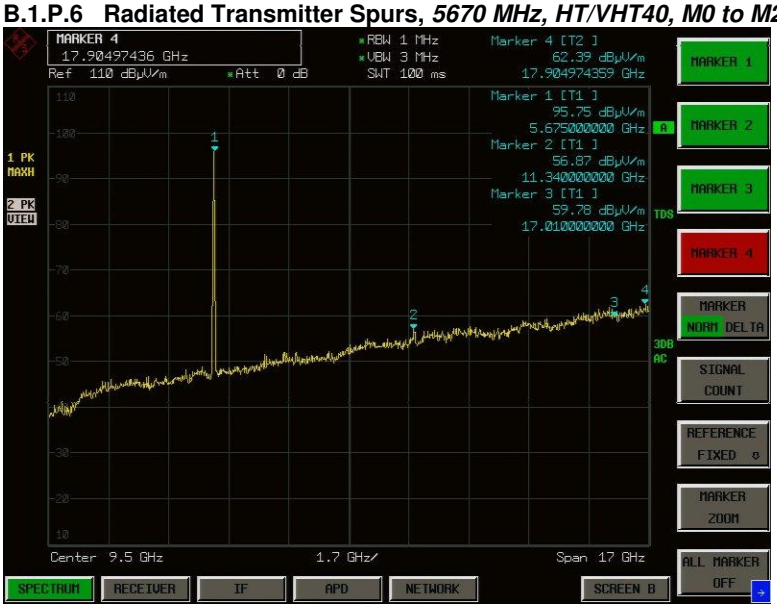
B.1.P.4 Radiated Transmitter Spurs, *5560 MHz, HT/VHT20, M0 to M23*, Peak (1-18GHz)



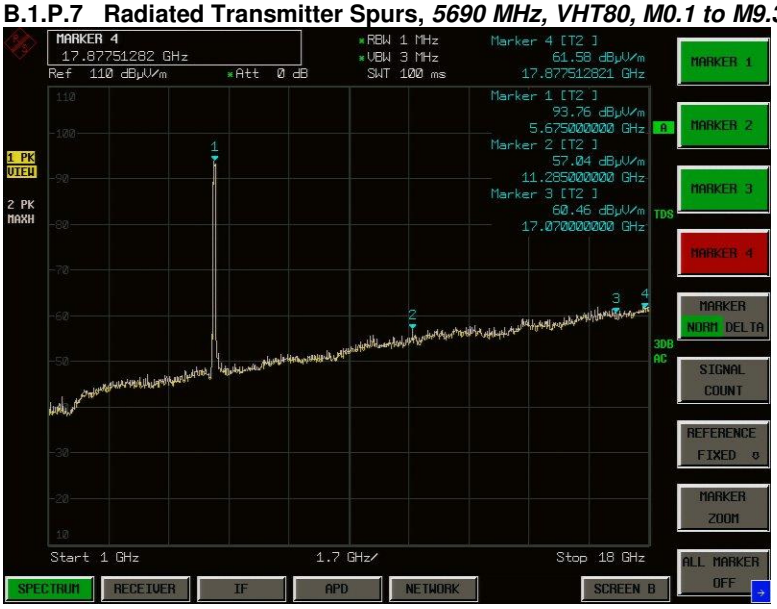
B.1.P.5 Radiated Transmitter Spurs, *5570 MHz, VHT160, M0.1 to M9.3*, Peak (1-18GHz)



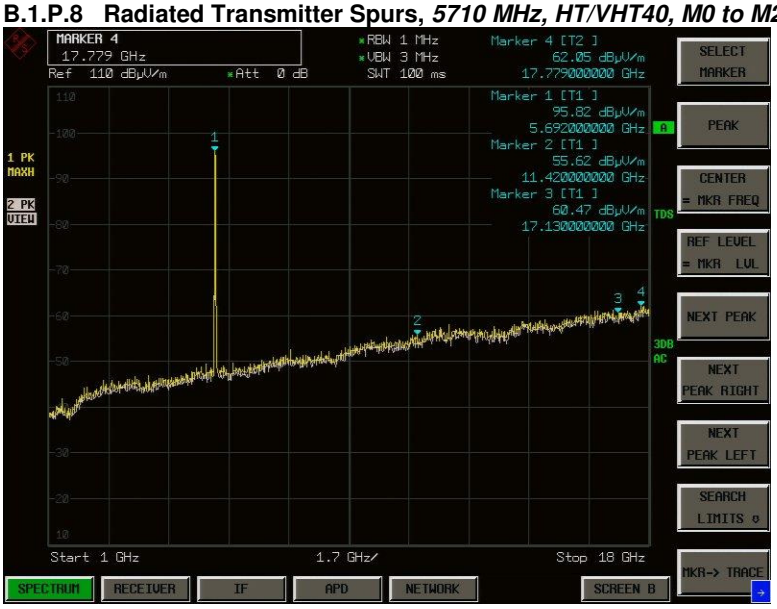
B.1.P.6 Radiated Transmitter Spurs, *5670 MHz, HT/VHT40, M0 to M23, M0.0 to M9.4*, Peak (1-18GHz)



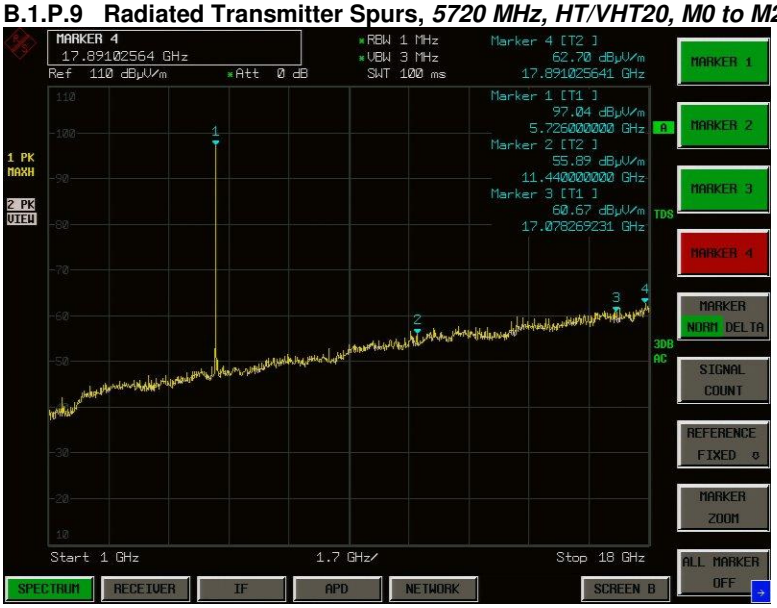
B.1.P.7 Radiated Transmitter Spurs, *5690 MHz, VHT80, M0.1 to M9.3*, Peak (1-18GHz)



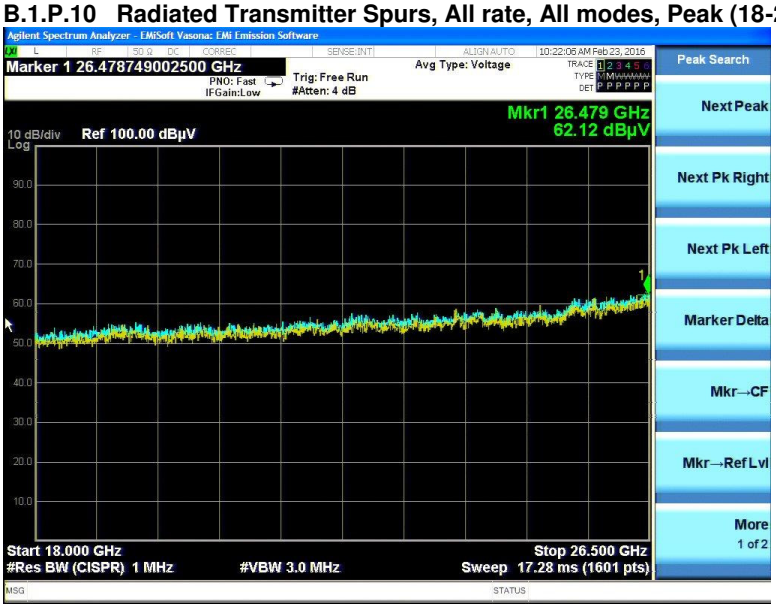
B.1.P.8 Radiated Transmitter Spurs, *5710 MHz, HT/VHT40, M0 to M23,* Peak (1-18GHz)



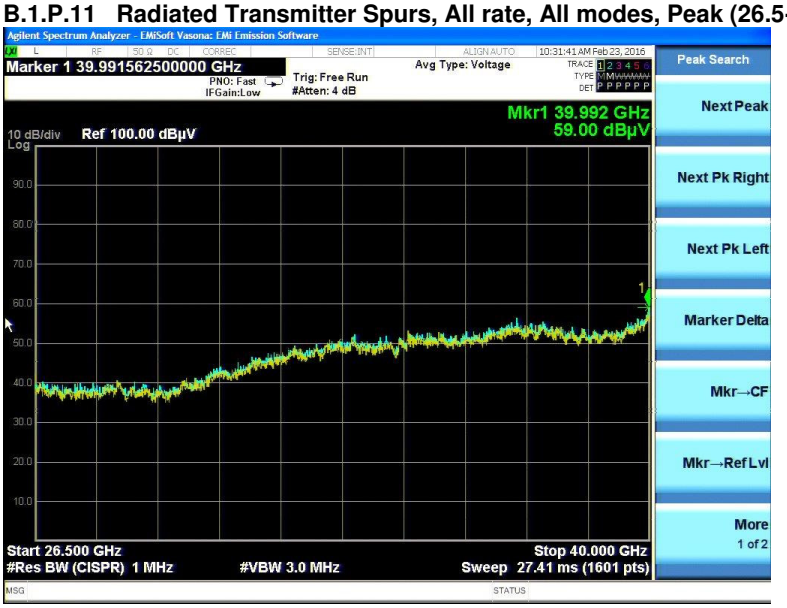
B.1.P.9 Radiated Transmitter Spurs, *5720 MHz, HT/VHT20, M0 to M23*, Peak (1-18GHz)



B.1.P.10 Radiated Transmitter Spurs, All rate, All modes, Peak (18-26.5GHz) Horizontal & Vertical



B.1.P.11 Radiated Transmitter Spurs, All rate, All modes, Peak (26.5-40GHz) Horizontal & Vertical



B.2 Radiated Emissions 30MHz to 1GHz

FCC 15.205 / 15.209

(7) The provisions of 15.205 apply to intentional radiators operating under this section.
(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in 15.209.

Ref. ANSI C63.10: 2013 section 6.5

Using Vasona, configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer). Place the radio in continuous transmit mode.

Span:	30MHz – 1GHz
Reference Level:	80 dBuV
Attenuation:	10 dB
Sweep Time:	Coupled
Resolution Bandwidth:	100kHz
Video Bandwidth:	300kHz
Detector:	Peak for Pre-scan, Quasi-Peak Compliance shall be determined using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

Terminate the access Point RF ports with 50 ohm loads.

Maximize Turntable (find worst case table angle), Maximize Antenna (find worst case height)

This report represents the worst case data for all supported operating modes and antennas.

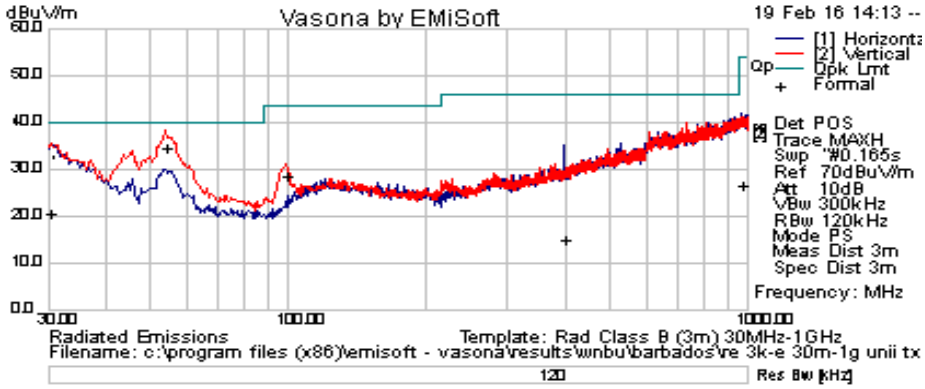
System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☑	☐
	Support	S02	☐	☑

Tested By :	Date of testing:
Jose Aguirre	01-Jan-16 - 22-Feb-16
Test Result : PASS	

See Appendix C for list of test equipment

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Result

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
967.505	0.54	2.96	23.1	26.6	Quasi Max	H	389	52	54	-27.4	Pass
53.998	26.59	0.7	7.35	34.65	Quasi Max	V	110	142	40	-5.35	Pass
98.87	18.09	0.93	9.89	28.92	Quasi Max	V	157	194	43.5	-14.58	Pass
398.115	-1.71	1.89	15.06	15.24	Quasi Max	H	326	200	46	-30.76	Pass
30.485	-0.96	0.49	21.27	20.81	Quasi Max	V	355	350	40	-19.19	Pass

B.3 AC Conducted Emissions

FCC 15.207 Except when the requirements applicable to a given device state otherwise, for any radio apparatus equipped to operate from the public utility AC power supply, either directly or indirectly (such as with a battery charger), the radio frequency voltage of emissions conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in the table in these sections. The more stringent limit applies at the frequency range boundaries.

Measurement Procedure
Accordance with ANSI C63.10:2013 section 6.2

Using Vasona, configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer). Place the radio in continuous transmit mode.

Span:	150 KHz – 30 MHz
Attenuation:	10 dB
Sweep Time:	Coupled
Resolution Bandwidth:	9 KHz
Video Bandwidth:	30 KHz
Detector:	Quasi-Peak / Average

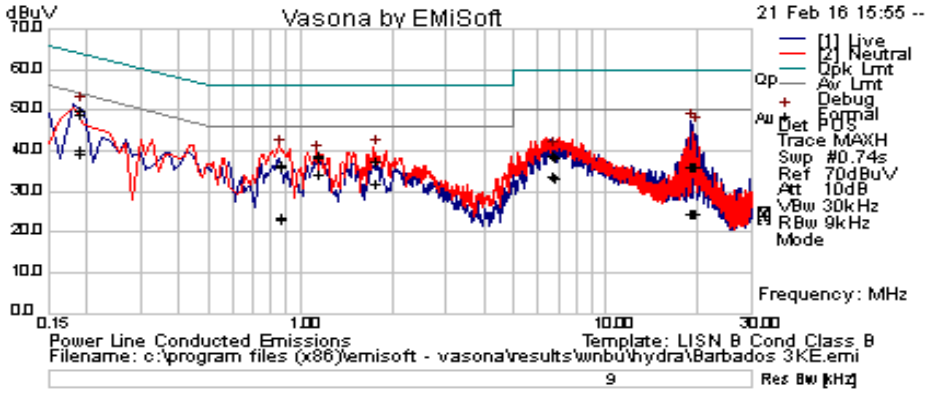
System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☑	☐
	Support	S02	☐	☑

Tested By :	**Date of testing:**
Jose Aguirre	01-Jan-16 - 22-Feb-16
Test Result : PASS	

See Appendix C for list of test equipment

Graphical Test Results

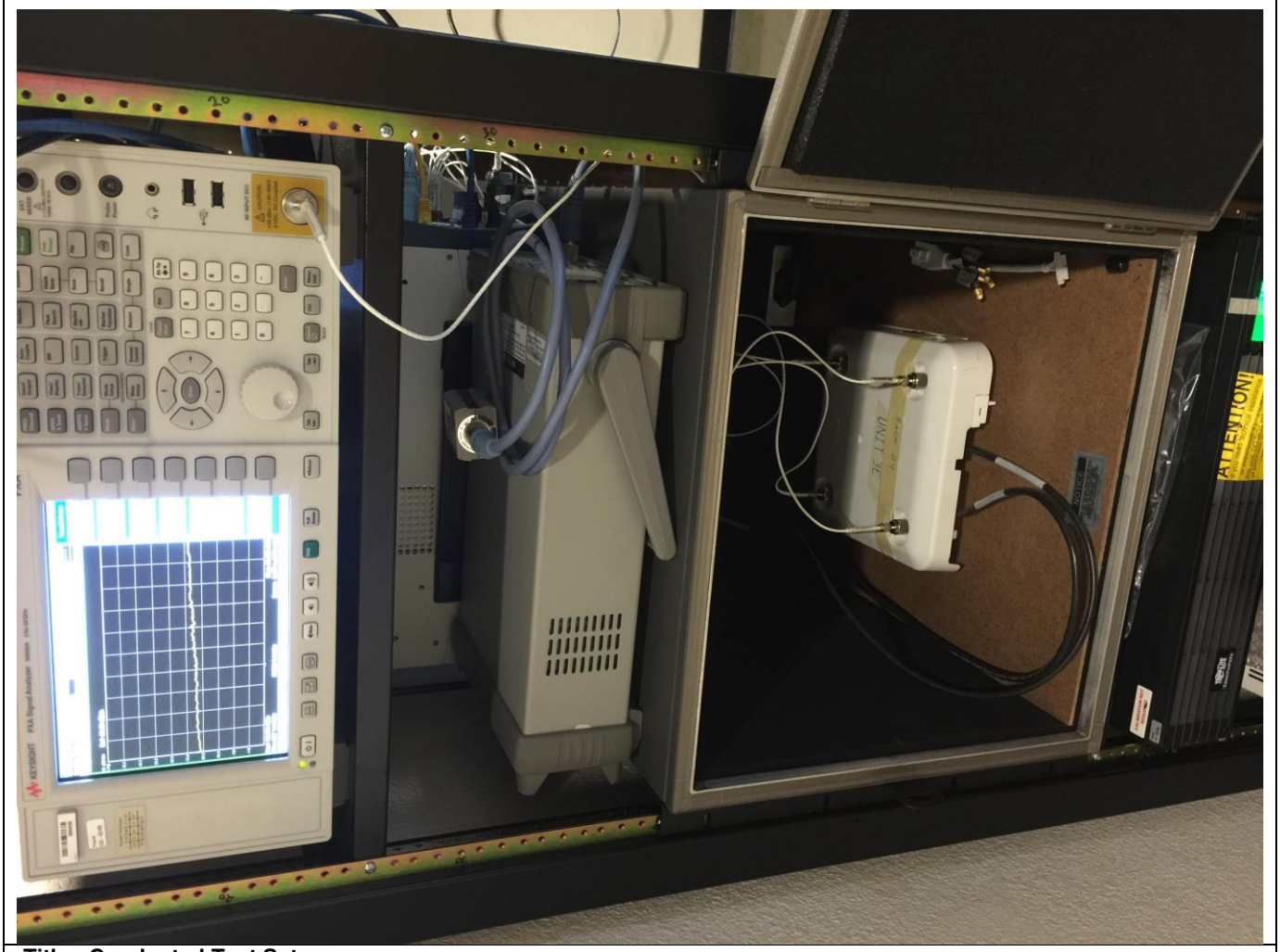
Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results

Frequency MHz	Raw dBuV	Cable Loss	Factors dB	Level dBuV	Measurement Type	Line	Limit dBuV	Margin dB	Pass /Fail
0.857757	16.19	19.91	0.03	36.14	Quasi Peak	Live	56	-19.86	Pass
0.187244	29.09	20.91	0.06	50.06	Quasi Peak	Live	64.16	-14.1	Pass
19.007406	15.87	20.3	0.2	36.37	Quasi Peak	Live	60	-23.63	Pass
1.755417	17.64	19.9	0.03	37.57	Quasi Peak	Live	56	-18.43	Pass
19.383573	15.92	20.3	0.2	36.42	Quasi Peak	Live	60	-23.58	Pass
6.724028	18.68	20.01	0.07	38.76	Quasi Peak	Live	60	-21.24	Pass
1.131699	18.77	19.9	0.04	38.71	Quasi Peak	Live	56	-17.29	Pass
19.029708	16	20.3	0.2	36.5	Quasi Peak	Neutral	60	-23.5	Pass
0.856911	16.86	19.91	0.03	36.81	Quasi Peak	Neutral	56	-19.19	Pass
19.384527	15.97	20.3	0.2	36.47	Quasi Peak	Neutral	60	-23.53	Pass
0.190178	28.11	20.9	0.06	49.06	Quasi Peak	Neutral	64.03	-14.97	Pass
1.133571	19.28	19.9	0.04	39.22	Quasi Peak	Neutral	56	-16.78	Pass
1.756893	17.73	19.9	0.03	37.66	Quasi Peak	Neutral	56	-18.34	Pass
6.712994	19.08	20.01	0.07	39.16	Quasi Peak	Neutral	60	-20.84	Pass
0.857757	4.02	19.91	0.03	23.97	Average	Live	46	-22.03	Pass
0.187244	19.33	20.91	0.06	40.3	Average	Live	54.16	-13.86	Pass
19.007406	4.14	20.3	0.2	24.65	Average	Live	50	-25.35	Pass
1.755417	12.41	19.9	0.03	32.34	Average	Live	46	-13.66	Pass
19.383573	4.45	20.3	0.2	24.95	Average	Live	50	-25.05	Pass
6.724028	13.39	20.01	0.07	33.47	Average	Live	50	-16.53	Pass
1.131699	14.43	19.9	0.04	34.37	Average	Live	46	-11.63	Pass
19.029708	4.05	20.3	0.2	24.55	Average	Neutral	50	-25.45	Pass
0.856911	3.62	19.91	0.03	23.57	Average	Neutral	46	-22.43	Pass
19.384527	4.22	20.3	0.2	24.72	Average	Neutral	50	-25.28	Pass
0.190178	18.8	20.9	0.06	39.75	Average	Neutral	54.03	-14.28	Pass
1.133571	14.69	19.9	0.04	34.63	Average	Neutral	46	-11.37	Pass
1.756893	12.41	19.9	0.03	32.34	Average	Neutral	46	-13.66	Pass
6.712994	13.86	20.01	0.07	33.94	Average	Neutral	50	-16.06	Pass

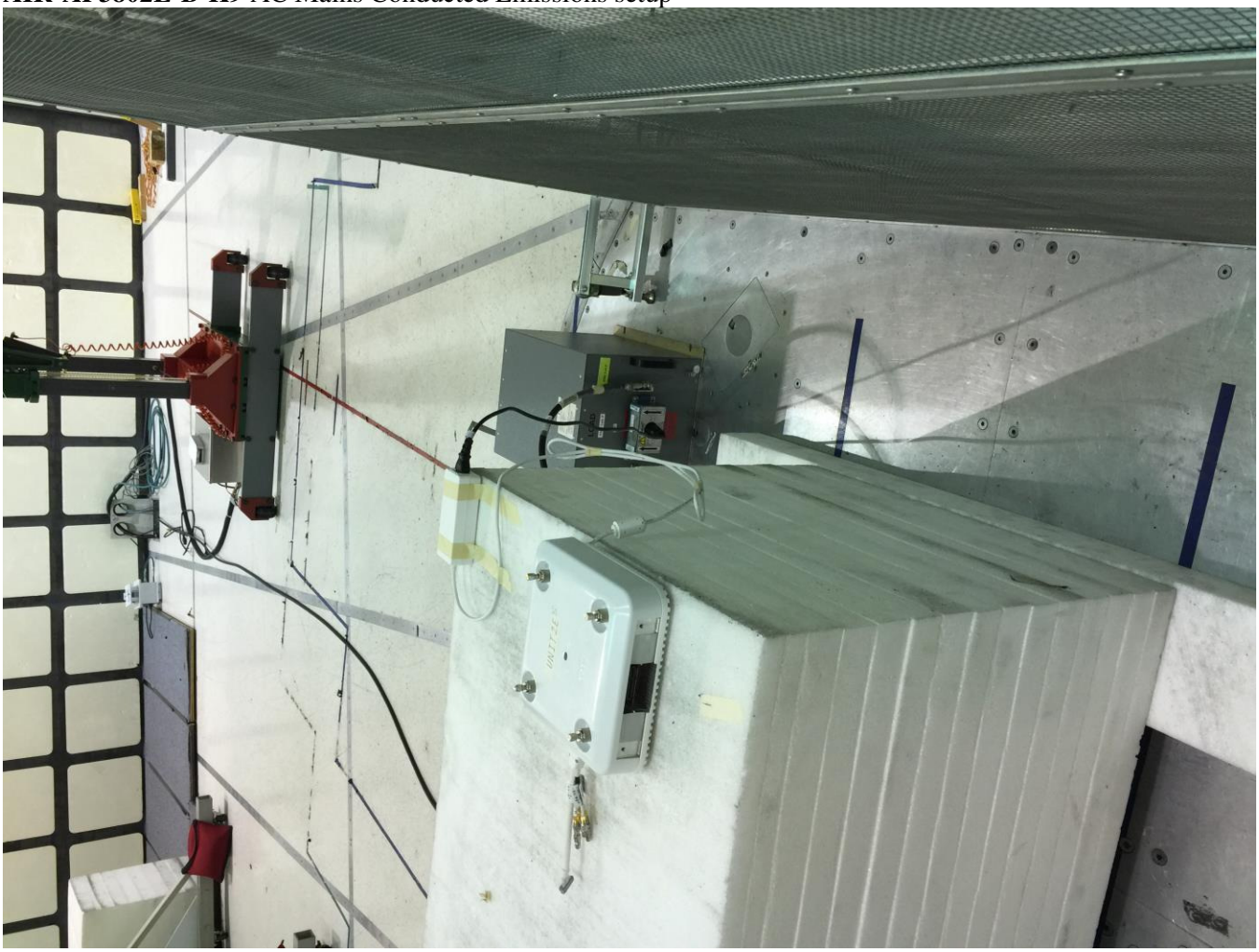
Photographs of setup



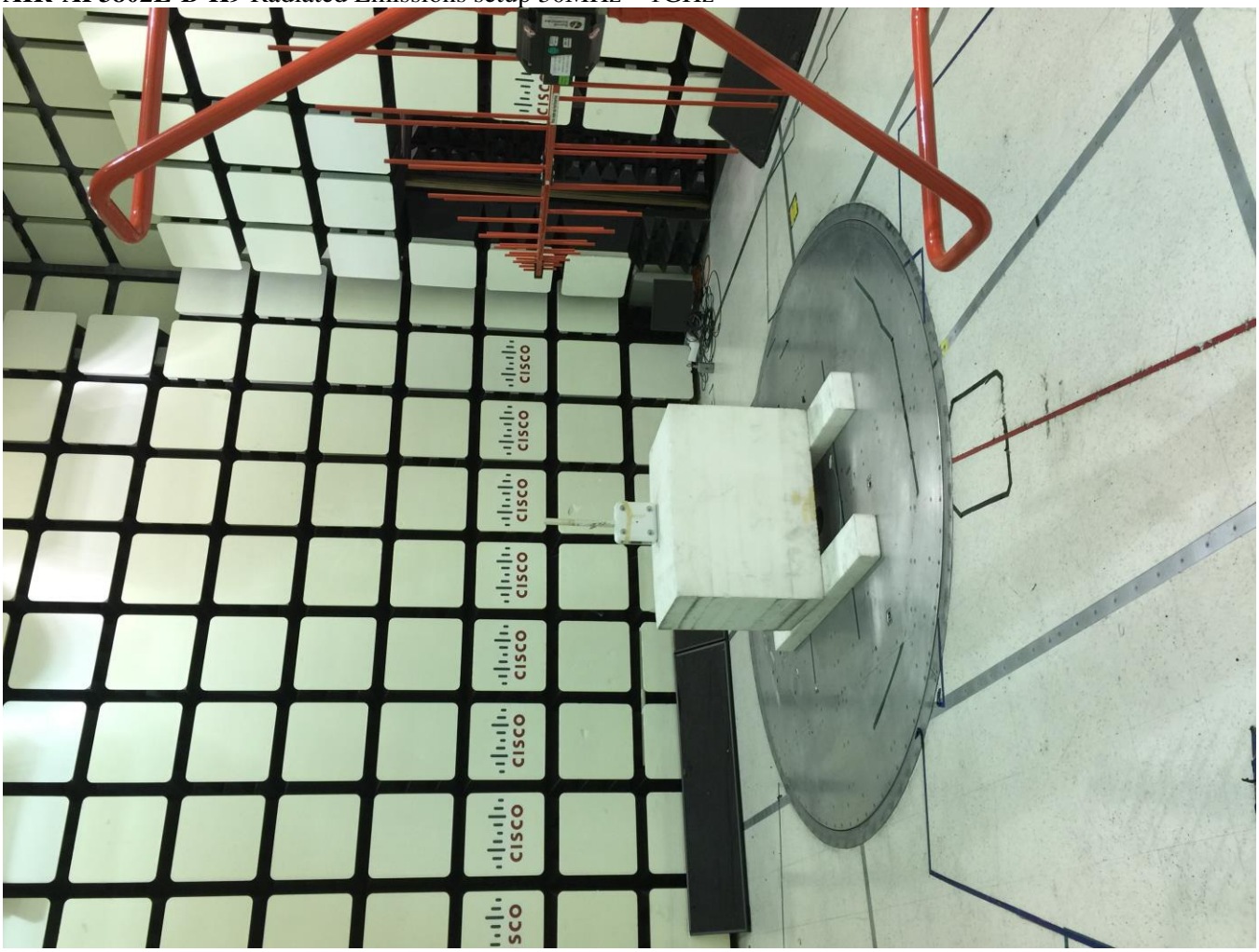
Title: Conducted Test Setup

This is a dual band 2.4GHz / 5GHz device. All ports in this test set up photo are connected as all testing is automated. Section 2.6 of this test report given an overview of the different Tx antenna combinations used by this device.

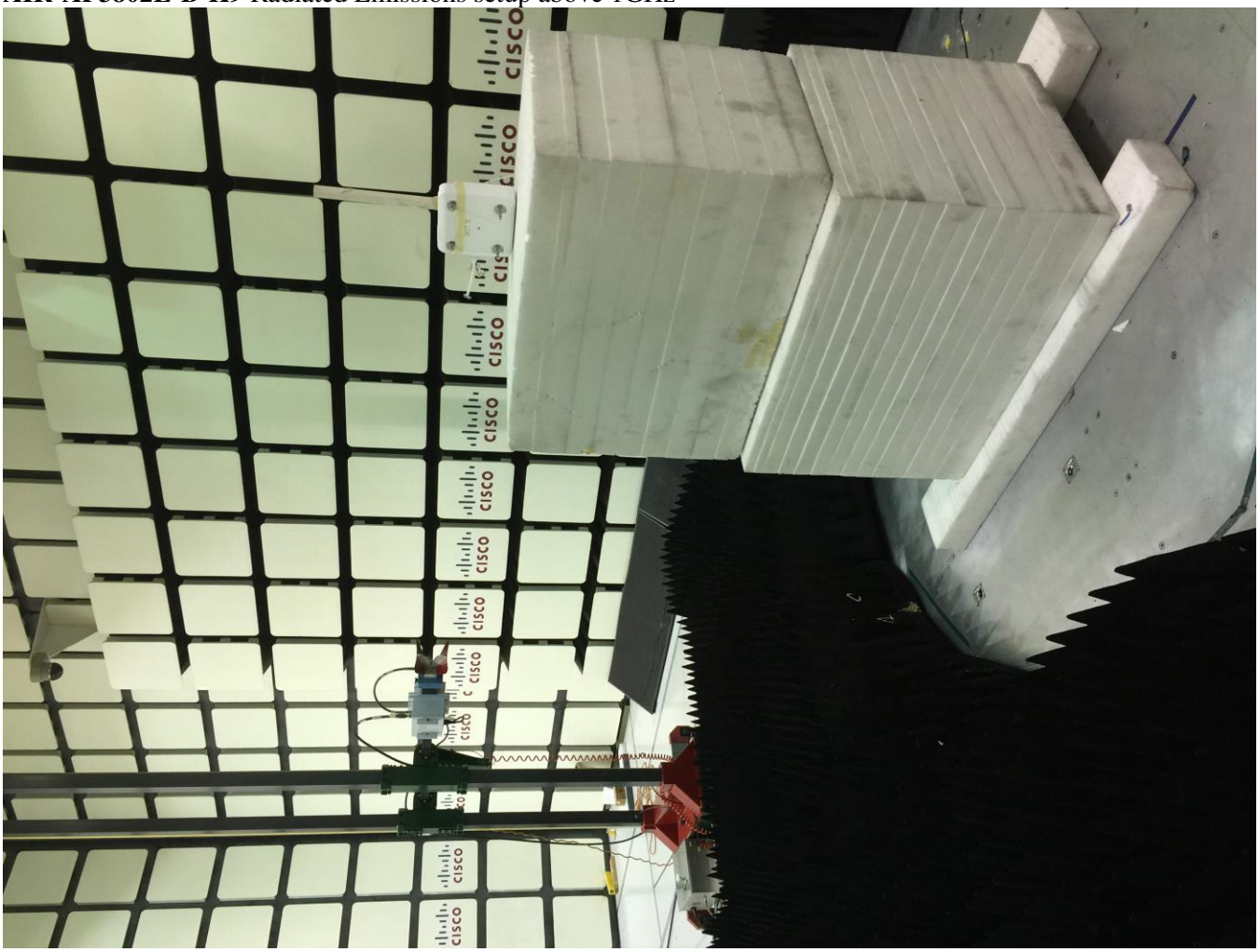
AIR-AP3802E-B-K9 AC Mains Conducted Emissions setup



AIR-AP3802E-B-K9 Radiated Emissions setup 30MHz – 1GHz



AIR-AP3802E-B-K9 Radiated Emissions setup above 1GHz



Appendix C: List of Test Equipment Used to perform the test

Equip#	Manufacturer/ Model	Description	Last Cal	Next Due	Test Item
Test Equipment used for Radiated Emissions					
CIS005691	NSP1800-25-S1 Miteq	Broadband Preamplifier (1-18GHz)	25-Jun-15	25-Jun-16	B.1
CIS008448	NSA 5m Chamber Cisco	NSA 5m Chamber	9-Oct-15	9-Oct-16	B.2
CIS021117	UFB311A-0-2484-520520 Micro-Coax	RF Coaxial Cable, to 18GHz, 248.4 in	24-Aug-15	24-Aug-16	B.1, B.2
CIS034075	RSG 2000 Schaffner	Reference Spectrum Generator, 1-18GHz	Cal Not Required	Cal Not Required	B.1
CIS035284	3117 ETS-Lindgren	Double Ridged Waveguide Horn Antenna	30-Sep-15	30-Sep-16	B.1
CIS037236	50CB-015 JFW	GPIB Control Box	Cal Not Required	Cal Not Required	B.1
CIS040597	Above 1GHz Site Cal Cisco	Above 1GHz Cispr Site Verification	25-Sep-15	25-Sep-16	B.1
CIS041979	1840 Cisco	18-40GHz EMI Test Head/Verification Fixture	13-Jul-15	13-Jul-16	B.1
CIS042266	JB1 Sunol Sciences	Combination Antenna	21-Apr-15	21-Apr-16	B.2
CIS044940	ESU40 Rohde & Schwarz	EMI Test Receiver, 20Hz-40GHz	2-Nov-15	2-Nov-16	B.1
CIS054230	iBTHP-5-DB9 Newport	5 inch Temp/RH/Press Sensor w/20ft cable	10-Feb-16	10-Feb-17	B.1, B.2

Test Equipment used for AC Mains Conducted Emissions					
Equip No	**Model Manufacturer**	**Description**	**Last Cal**	**Next Cal**	**Test Item**
CIS002464	FCC-801-M2-16 Fischer Custom Communications	CDN, 2-LINE, 16A	12-Mar-15	12-Mar-16	B.3
CIS049532	H785-150K-50-21378 TTE	High Pass Filter	8-May-15	8-May-16	B.3
CIS020913	FCC-LISN-PA-NEMA-5-15 Fischer Custom Communications	AC Adapter	8-May-15	8-May-16	B.3
CIS007704	FCC-LISN-50/250-50-2-01 Fischer Custom Communications	LISN	8-May-15	8-May-16	B.3
CIS008185	FCC-450B-2.4-N Fischer Custom Communications	Instrumentation Limiter	28-Jul-15	28-Jul-16	B.3
CIS051756	5-T-MB Bird	5W 50 Ohm BNC Termination 4GHz	6-Aug-15	6-Aug-16	B.3
CIS049563	Sucoflex 106A Huber + Suhner	N Type Cable 18GHz	24-Aug-15	24-Aug-16	B.3
CIS021117	UFB311A-0-2484-520520 Micro-Coax	RF Coaxial Cable, to 18GHz, 248.4 in	24-Aug-15	24-Aug-16	B.3
CIS044940	ESU40 Rohde & Schwarz	EMI Test Receiver, 20Hz-40GHz	2-Nov-15	2-Nov-16	B.3
CIS054647	33-605 Stanley	10meter Measuring Tape	Cal not required	Cal not required	B.3
CIS018963	CNE V York	Comparison Noise Emitter, 30 - 1000MHz	Cal not required	Cal not required	B.3

Test Equipment used for RF Conducted Tests					
Equip No	**Model Manufacturer**	**Description**	**Last Cal**	**Next Cal**	**Test Item**

CIS050721	N9030A Keysight	PXA Signal Analyzer	13-Apr-15	13-Apr-16	A1 thru A4
CIS054662	SF18-S1S1-36 MegaPhase	SMA 36" cable	24-Sep-15	24-Sep-16	A1 thru A4
CIS054663	F120-S1S1-48 MegaPhase	SMA 48" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054665	RA08-S1S1-24 MegaPhase	SMA 24" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054666	RA08-S1S1-18 MegaPhase	SMA 18" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054667	RA08-S1S1-18 MegaPhase	SMA 18" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054668	RA08-S1S1-18 MegaPhase	SMA 18" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054669	RA08-S1S1-18 MegaPhase	SMA 18" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054670	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054671	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054672	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054673	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054674	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054675	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054677	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054678	RA08-S1S1-12 MegaPhase	SMA 12" Cable	25-Sep-15	25-Sep-16	A1 thru A4
CIS054686	NI PXI-2796 National Instruments	Plug-in switch module	6-Oct-15	6-Oct-16	A1 thru A4
CIS055094	PXI-1042 National Instruments	Chassis	Cal Not Required	Cal Not Required	A1 thru A4
CIS055117	RFLT2WDC40G RF Lambda	2 Way 40GHz Splitter	11-Nov-15	11-Nov-16	A1 thru A4
CIS055166	RFLT4WDC40GK RF Lambda	4 Way Power Divider 40GHz	23-Nov-15	23-Nov-16	A1 thru A4
CIS054656	BRC50705-02 Micro-Tronics	Band Reject Filter	24-Sep-15	24-Sep-16	A1 thru A4
CIS054655	BRC50704-02 Micro-Tronics	Notch Filter, SB:5.470-5.725GHz, to 12GHz	24-Sep-15	24-Sep-16	A1 thru A4
CIS054654	BRC50703-02 Micro-Tronics	Notch Filter, SB:5.150-5.350GHz, to 11GHz	24-Sep-15	24-Sep-16	A1 thru A4
CIS054653	BRM50702-02 Micro-Tronics	Notch Filter, SB:2.400-2.500GHz, to 18GHz	24-Sep-15	24-Sep-16	A1 thru A4
CIS054637	BWS30-W2/ Aeroflex	SMA 30dB Attenuator	02-June-15	02-June-16	A1 thru A4
CIS054636	BWS20-W2/ Aeroflex	20dB SMA Attenuator	02-June-15	02-June-16	A1 thru A4

Appendix E: Abbreviation Key and Definitions

The following table defines abbreviations used within this test report.

Abbreviation	Description	Abbreviation	Description
EMC	Electro Magnetic Compatibility	°F	Degrees Fahrenheit
EMI	Electro Magnetic Interference	°C	Degrees Celsius
EUT	Equipment Under Test	Temp	Temperature
ITE	Information Technology Equipment	S/N	Serial Number
TAP	Test Assessment Schedule	Qty	Quantity
ESD	Electro Static Discharge	emf	Electromotive force
EFT	Electric Fast Transient	RMS	Root mean square
EDCS	Engineering Document Control System	Qp	Quasi Peak
Config	Configuration	Av	Average
CIS#	Cisco Number (unique identification number for Cisco test equipment)	Pk	Peak
Cal	Calibration	kHz	Kilohertz ($1x10^3$)
EN	European Norm	MHz	MegaHertz ($1x10^6$)
IEC	International Electro technical Commission	GHz	Gigahertz ($1x10^9$)
CISPR	International Special Committee on Radio Interference	H	Horizontal
CDN	Coupling/Decoupling Network	V	Vertical
LISN	Line Impedance Stabilization Network	dB	decibel
PE	Protective Earth	V	Volt
GND	Ground	kV	Kilovolt ($1x10^3$)
L1	Line 1	µV	Microvolt ($1x10^{-6}$)
L2	Line2	A	Amp
L3	Line 3	µA	Micro Amp ($1x10^{-6}$)
DC	Direct Current	mS	Milli Second ($1x10^{-3}$)
RAW	Uncorrected measurement value, as indicated by the measuring device	µS	Micro Second ($1x10^{-6}$)
RF	Radio Frequency	µS	Micro Second ($1x10^{-6}$)
SLCE	Signal Line Conducted Emissions	m	Meter
Meas dist	Measurement distance	Spec dist	Specification distance
N/A or NA	Not Applicable	SL	Signal Line (or Telecom Line)
P	Power Line	L	Live Line
N	Neutral Line	R	Return
S	Supply	AC	Alternating Current

End