

Page 1 / 183 Report No.: TCWA24050010104

# Appendix A- 5GWi-Fi(U-NII-2C&U-NII-3)

### 5470 ~ 5725MHz

### **Emission Bandwidth**

#### **Test Result**

TestMode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11a-CDD	Ant1	5500	21.280	5489.400	5510.680		
11a-CDD	Ant2	5500	21.560	5488.960	5510.520		
11a CDD	Ant1	5580	22.320	5568.880	5591.200		
11a-CDD	Ant2	5580	22.040	5568.960	5591.000		
11a-CDD	Ant1	5700	21.640	5689.200	5710.840		
11a-CDD	Ant2	5700	22.280	5688.560	5710.840		
11n20MIMO	Ant1	5500	21.800	5489.280	5511.080		
11n20MIMO	Ant2	5500	22.360	5488.840	5511.200		
11n20MIMO	Ant1	5580	22.640	5568.640	5591.280		
11n20MIMO	Ant2	5580	22.400	5568.720	5591.120		
11n20MIMO	Ant1	5700	21.280	5689.400	5710.680		
11n20MIMO	Ant2	5700	21.880	5688.760	5710.640		
11n40MIMO	Ant1	5510	40.960	5489.440	5530.400		
11n40MIMO	Ant2	5510	42.320	5489.120	5531.440		
11n40MIMO	Ant1	5590	41.920	5569.760	5611.680		
11n40MIMO	Ant2	5590	40.720	5569.040	5609.760		
11n40MIMO	Ant1	5670	41.280	5649.280	5690.560		
11n40MIMO	Ant2	5670	40.960	5649.360	5690.320		
11ac20MIMO	Ant1	5500	22.560	5488.800	5511.360		
11ac20MIMO	Ant2	5500	22.480	5488.640	5511.120		
11ac20MIMO	Ant1	5580	22.960	5568.560	5591.520		
11ac20MIMO	Ant2	5580	22.880	5568.440	5591.320		
11ac20MIMO	Ant1	5700	22.120	5688.720	5710.840		
11ac20MIMO	Ant2	5700	21.840	5689.080	5710.920		
11ac40MIMO	Ant1	5510	42.160	5488.960	5531.120		
11ac40MIMO	Ant2	5510	40.880	5489.520	5530.400		
11ac40MIMO	Ant1	5590	41.280	5569.760	5611.040		
11ac40MIMO	Ant2	5590	40.320	5569.440	5609.760		
11ac40MIMO	Ant1	5670	41.360	5648.960	5690.320		
11ac40MIMO	Ant2	5670	40.240	5649.920	5690.160		
11ac80MIMO	Ant1	5530	83.680	5488.560	5572.240		
11ac80MIMO	Ant2	5530	83.840	5487.760	5571.600		
11ac80MIMO	Ant1	5610	83.840	5568.240	5652.080		
11ac80MIMO	Ant2	5610	82.240	5569.840	5652.080		
11ac160MIMO	Ant1	5570	169.600	5486.160	5655.760		
11ac160MIMO	Ant2	5570	168.960	5485.520	5654.480		

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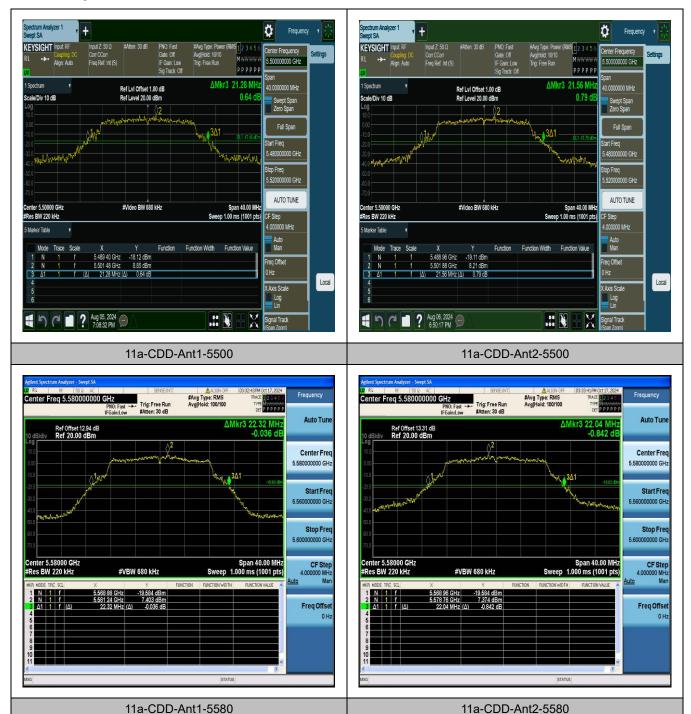
Page 2 / 183 Report No.: TCWA24050010104

				Г	epon no	TCVVAZ4050	010104
11ax20MIMO	Ant1	5500	21.880	5488.920	5510.800		
11ax20MIMO	Ant2	5500	21.880	5488.640	5510.520		
11ax20MIMO	Ant1	5580	22.040	5568.920	5590.960		
11ax20MIMO	Ant2	5580	21.880	5569.040	5590.920		
11ax20MIMO	Ant1	5700	22.440	5688.960	5711.400		
11ax20MIMO	Ant2	5700	21.360	5689.400	5710.760		
11ax40MIMO	Ant1	5510	41.280	5488.960	5530.240		
11ax40MIMO	Ant2	5510	41.040	5489.360	5530.400		
11ax40MIMO	Ant1	5590	41.680	5568.800	5610.480		
11ax40MIMO	Ant2	5590	41.120	5569.520	5610.640		
11ax40MIMO	Ant1	5670	42.080	5648.800	5690.880		
11ax40MIMO	Ant2	5670	41.120	5649.360	5690.480		
11ax80MIMO	Ant1	5530	80.640	5490.160	5570.800		
11ax80MIMO	Ant2	5530	83.040	5489.520	5572.560		
11ax80MIMO	Ant1	5610	82.080	5568.880	5650.960		
11ax80MIMO	Ant2	5610	80.800	5570.000	5650.800		
11ax160MIMO	Ant1	5570	167.680	5488.080	5655.760		
11ax160MIMO	Ant2	5570	167.680	5486.160	5653.840		
11be20MIMO	Ant1	5500	21.760	5489.280	5511.040		
11be20MIMO	Ant2	5500	21.600	5489.160	5510.760		
11be20MIMO	Ant1	5580	22.360	5568.760	5591.120		
11be20MIMO	Ant2	5580	21.840	5568.960	5590.800		
11be20MIMO	Ant1	5700	21.200	5689.520	5710.720		
11be20MIMO	Ant2	5700	20.560	5689.720	5710.280		
11be40MIMO	Ant1	5510	41.520	5488.800	5530.320		
11be40MIMO	Ant2	5510	42.880	5488.080	5530.960		
11be40MIMO	Ant1	5590	41.360	5569.760	5611.120		
11be40MIMO	Ant2	5590	40.960	5569.600	5610.560		
11be40MIMO	Ant1	5670	41.600	5649.200	5690.800		
11be40MIMO	Ant2	5670	41.600	5648.800	5690.400		
11be80MIMO	Ant1	5530	81.440	5490.000	5571.440		
11be80MIMO	Ant2	5530	82.720	5490.000	5572.720		
11be80MIMO	Ant1	5610	82.240	5570.160	5652.400		
11be80MIMO	Ant2	5610	80.960	5569.520	5650.480		
11be160MIMO	Ant1	5570	166.720	5488.400	5655.120		
11be160MIMO	Ant2	5570	166.080	5487.760	5653.840		

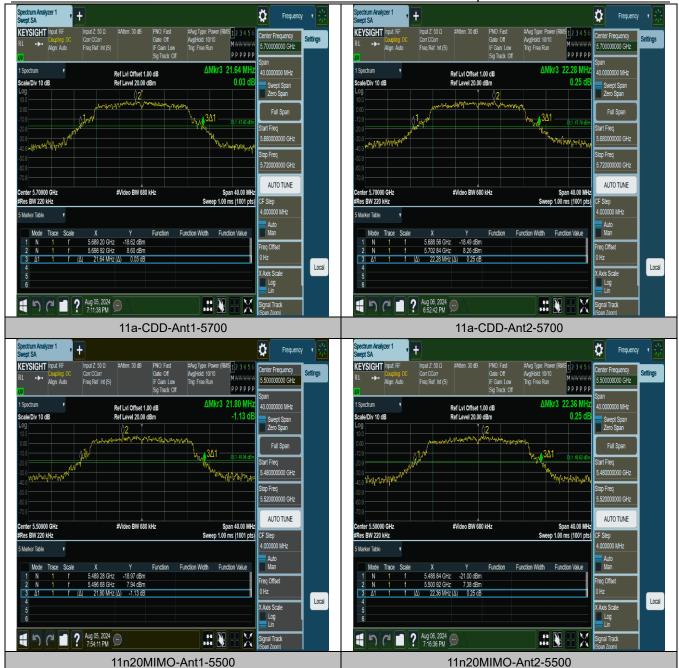




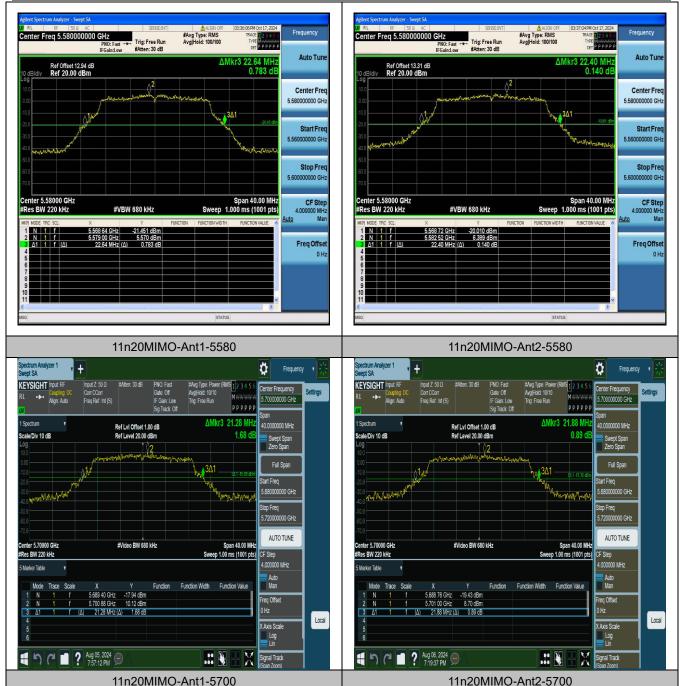
### **Test Graphs**



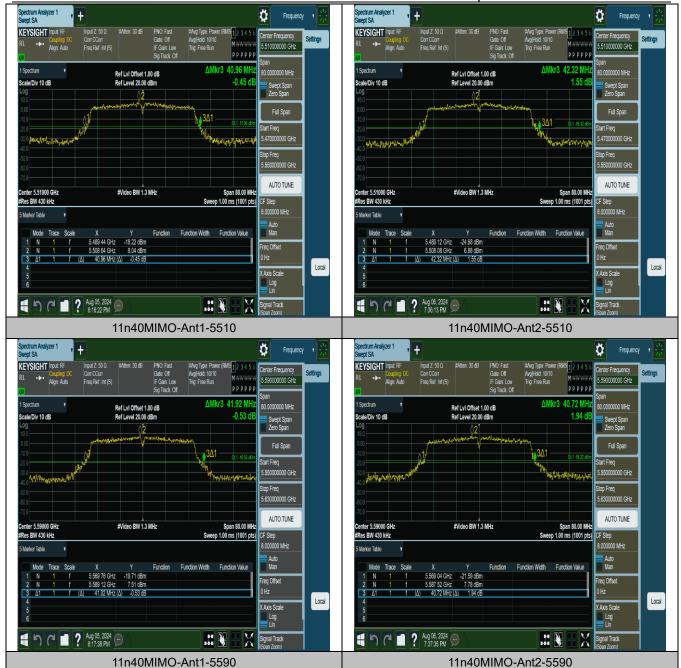
Page 4 / 183 Report No.: TCWA24050010104



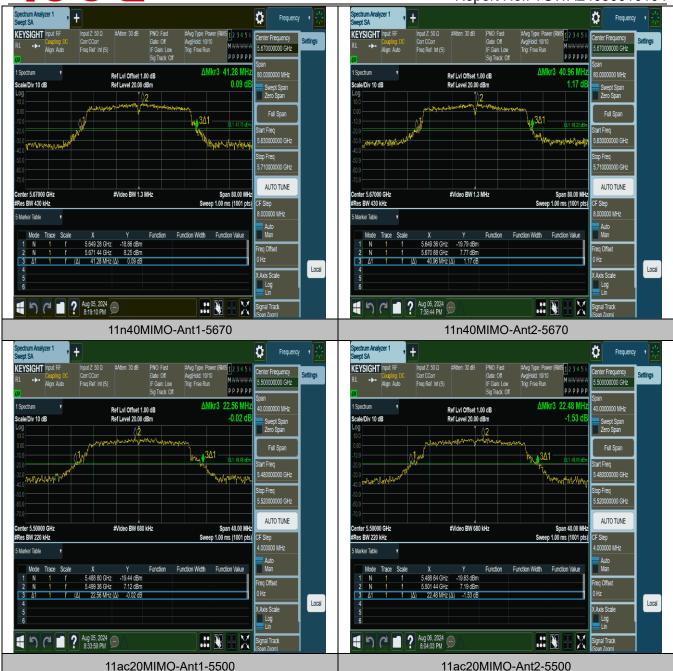




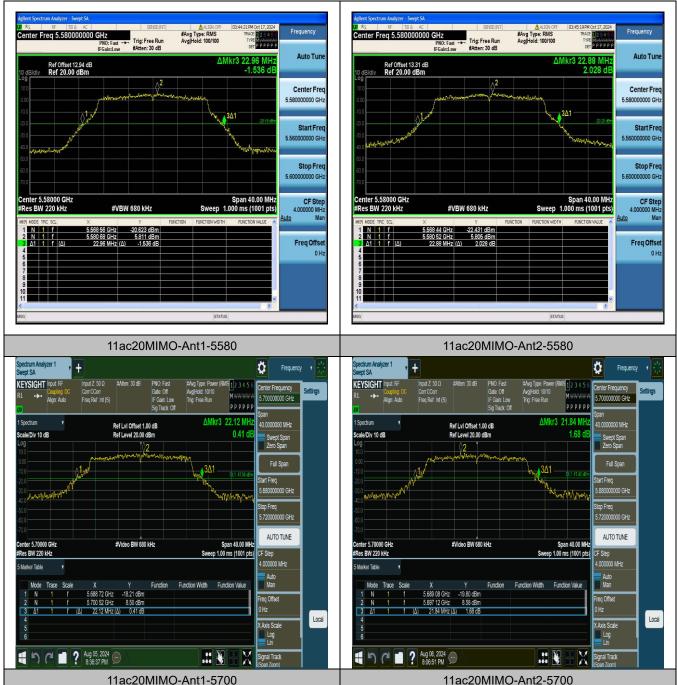
Page 6 / 183 Report No.: TCWA24050010104



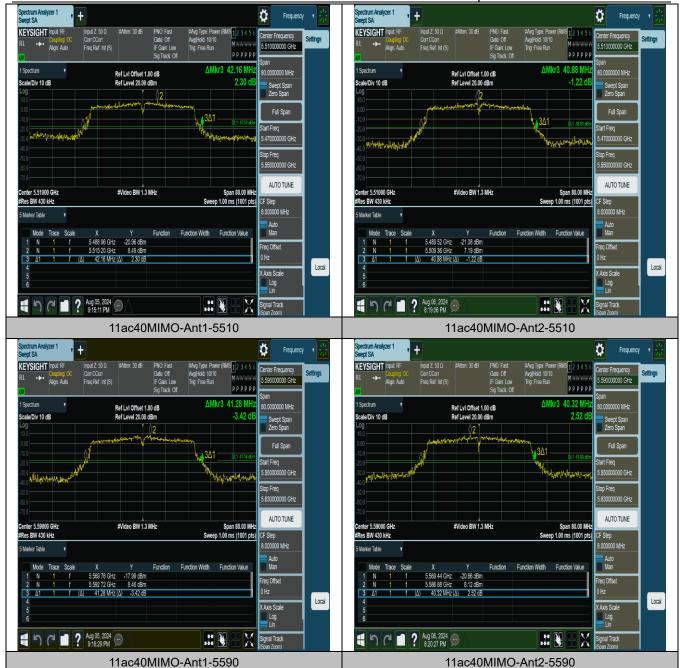
Page 7 / 183 Report No.: TCWA24050010104







Page 9 / 183 Report No.: TCWA24050010104

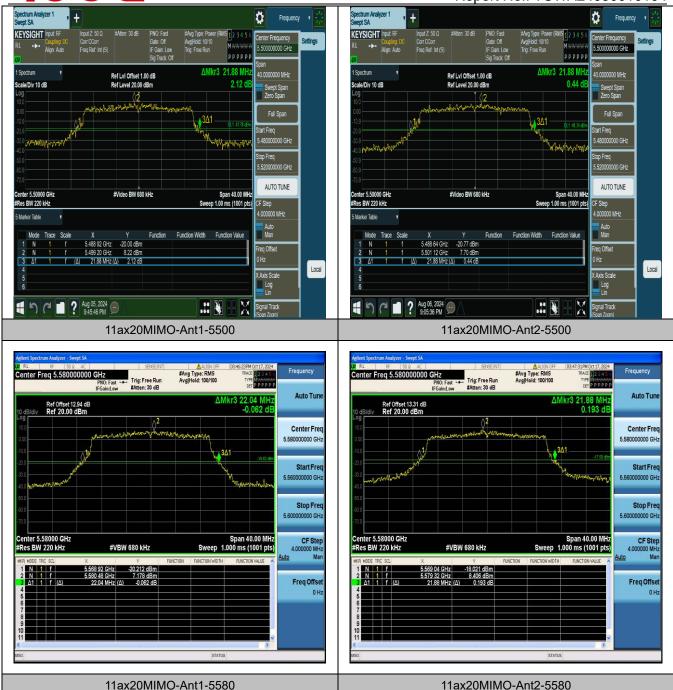




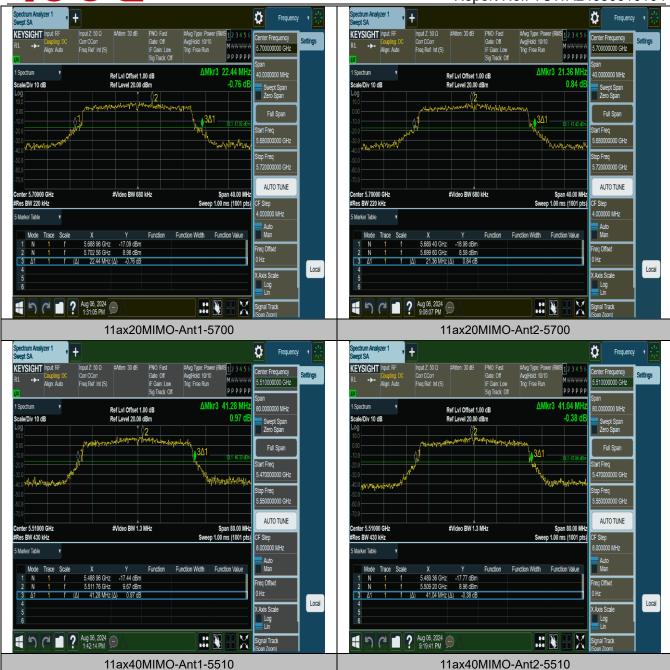
Page 10 / 183



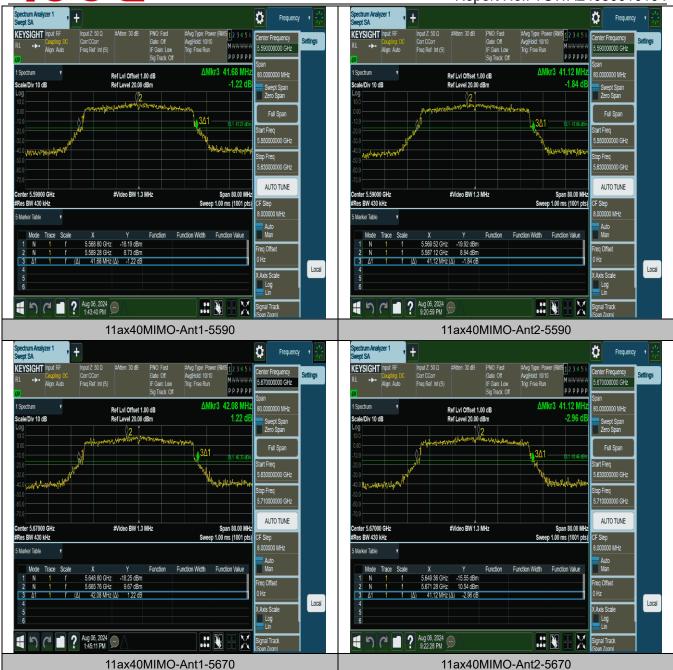
Page 12 / 183 Report No.: TCWA24050010104



Page 13 / 183 Report No.: TCWA24050010104



Page 14 / 183 Report No.: TCWA24050010104



Page 15 / 183 Report No.: TCWA24050010104



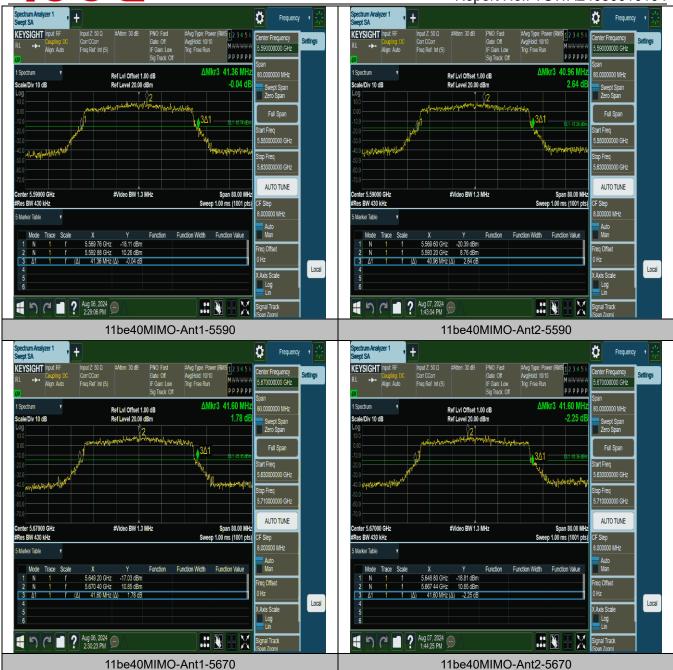
Page 16 / 183 Report No.: TCWA24050010104



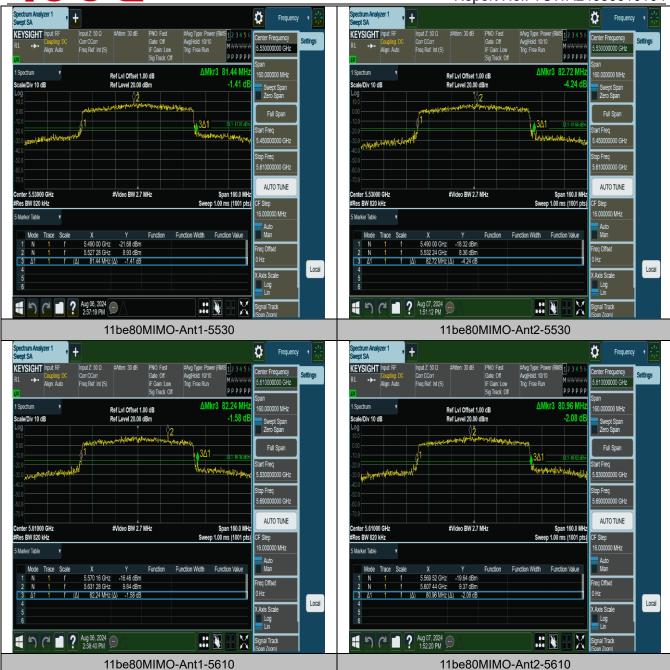
Page 17 / 183 Report No.: TCWA24050010104



Page 18 / 183 Report No.: TCWA24050010104



Page 19 / 183 Report No.: TCWA24050010104



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Page 20 / 183 Report No.: TCWA24050010104





Page 21 / 183 Report No.: TCWA24050010104

# Occupied channel bandwidth

## **Test Result**

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11a-CDD	Ant1	5500	17.137	5491.4236	5508.5606		
11a-CDD	Ant2	5500	17.023	5491.5235	5508.5465		
11a-CDD	Ant1	5580	17.364	5571.2463	5588.6103		
11a-CDD	Ant2	5580	17.189	5571.4454	5588.6344		
11a-CDD	Ant1	5700	17.167	5691.4204	5708.5874		
11a-CDD	Ant2	5700	16.977	5691.4808	5708.4578		
11n20MIMO	Ant1	5500	18.187	5490.9080	5509.0950		
11n20MIMO	Ant2	5500	18.001	5490.9830	5508.9840		
11n20MIMO	Ant1	5580	18.214	5570.8846	5589.0986		
11n20MIMO	Ant2	5580	18.126	5570.9517	5589.0777		
11n20MIMO	Ant1	5700	18.058	5690.9612	5709.0192		
11n20MIMO	Ant2	5700	18.118	5690.9603	5709.0783		
11n40MIMO	Ant1	5510	36.373	5491.8103	5528.1833		
11n40MIMO	Ant2	5510	36.298	5491.8435	5528.1415		
11n40MIMO	Ant1	5590	36.329	5571.8568	5608.1858		
11n40MIMO	Ant2	5590	36.318	5571.8305	5608.1485		
11n40MIMO	Ant1	5670	36.251	5651.8955	5688.1465		
11n40MIMO	Ant2	5670	36.385	5651.8133	5688.1983		
11ac20MIMO	Ant1	5500	18.158	5490.8886	5509.0466		
11ac20MIMO	Ant2	5500	18.008	5490.9532	5508.9612		
11ac20MIMO	Ant1	5580	18.199	5570.8647	5589.0637		
11ac20MIMO	Ant2	5580	18.136	5570.9413	5589.0773		
11ac20MIMO	Ant1	5700	18.131	5690.8940	5709.0250		
11ac20MIMO	Ant2	5700	18.070	5690.9429	5709.0129		
11ac40MIMO	Ant1	5510	36.446	5491.8043	5528.2503		
11ac40MIMO	Ant2	5510	36.378	5491.7914	5528.1694		
11ac40MIMO	Ant1	5590	36.276	5571.8423	5608.1183		
11ac40MIMO	Ant2	5590	36.277	5571.9001	5608.1771		
11ac40MIMO	Ant1	5670	36.256	5651.8740	5688.1300		
11ac40MIMO	Ant2	5670	36.332	5651.8539	5688.1859		
11ac80MIMO	Ant1	5530	75.631	5492.4250	5568.0560		
11ac80MIMO	Ant2	5530	75.530	5492.3538	5567.8838		
11ac80MIMO	Ant1	5610	75.444	5572.4411	5647.8851		
11ac80MIMO	Ant2	5610	75.556	5572.3592	5647.9152		
11ac160MIMO	Ant1	5570	156.10	5492.3490	5648.4490		
11ac160MIMO	Ant2	5570	156.08	5492.3201	5648.4001		
11ax20MIMO	Ant1	5500	19.123	5490.3870	5509.5100		
11ax20MIMO	Ant2	5500	19.073	5490.4325	5509.5055		
11ax20MIMO	Ant1	5580	19.107	5570.4284	5589.5354		
11ax20MIMO	Ant2	5580	19.122	5570.4323	5589.5543		
11ax20MIMO	Ant1	5700	19.084	5690.4314	5709.5154		

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Page 22 / 183 Report No.: TCWA24050010104

11ax20MIMO					<u> </u>	toport 140	1011/12-1000	<del></del>
11ax40MIMO  Ant2  5510  37.811  5491.0691  5528.8801     11ax40MIMO  Ant1  5590  37.715  5571.1382  5608.8532     11ax40MIMO  Ant2  5590  37.791  5571.0840  5608.8750     11ax40MIMO  Ant1  5670  37.857  5651.0668  5688.9238     11ax40MIMO  Ant2  5670  37.826  5651.0900  5688.9160     11ax80MIMO  Ant1  5530  77.153  5491.5088  5568.6618     11ax80MIMO  Ant2  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11be20MIMO  Ant1  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5580  19.053  5490.4464 <td< td=""><td>11ax20MIMO</td><td>Ant2</td><td>5700</td><td>19.106</td><td>5690.4312</td><td>5709.5372</td><td></td><td></td></td<>	11ax20MIMO	Ant2	5700	19.106	5690.4312	5709.5372		
11ax40MIMO  Ant1  5590  37.715  5571.1382  5608.8532     11ax40MIMO  Ant2  5590  37.791  5571.0840  5608.8750     11ax40MIMO  Ant1  5670  37.857  5651.0668  5688.9238     11ax40MIMO  Ant2  5670  37.826  5651.0900  5688.9160     11ax80MIMO  Ant1  5530  77.153  5491.5088  5568.6618     11ax80MIMO  Ant2  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax80MIMO  Ant2  5610  76.897  5571.6445  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5580  19.076  5490.4353	11ax40MIMO	Ant1	5510	37.742	5491.1095	5528.8515		
11ax40MIMO  Ant2  5590  37.791  5571.0840  5608.8750     11ax40MIMO  Ant1  5670  37.857  5651.0668  5688.9238     11ax40MIMO  Ant2  5670  37.826  5651.0900  5688.9160     11ax80MIMO  Ant1  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax160MIMO  Ant2  5610  76.897  5571.6358  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant1  5580  19.053  5490.4464  5509.5913     11be20MIMO  Ant2  5580  19.076  5490.4353	11ax40MIMO	Ant2	5510	37.811	5491.0691	5528.8801		
11ax40MIMO  Ant1  5670  37.857  5651.0668  5688.9238     11ax40MIMO  Ant2  5670  37.826  5651.0900  5688.9160     11ax80MIMO  Ant1  5530  77.153  5491.5088  5568.6618     11ax80MIMO  Ant2  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax80MIMO  Ant2  5610  76.897  5571.6345  5648.5415     11ax160MIMO  Ant1  5570  157.67  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant2  5580  19.095  5570.4468 <t< td=""><td>11ax40MIMO</td><td>Ant1</td><td>5590</td><td>37.715</td><td>5571.1382</td><td>5608.8532</td><td></td><td></td></t<>	11ax40MIMO	Ant1	5590	37.715	5571.1382	5608.8532		
11ax40MIMO  Ant2  5670  37.826  5651.0900  5688.9160     11ax80MIMO  Ant1  5530  77.153  5491.5088  5568.6618     11ax80MIMO  Ant2  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax160MIMO  Ant2  5610  76.897  5571.6445  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  <	11ax40MIMO	Ant2	5590	37.791	5571.0840	5608.8750		
11ax80MIMO  Ant1  5530  77.153  5491.5088  5568.6618     11ax80MIMO  Ant2  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax80MIMO  Ant2  5610  76.897  5571.6345  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.091  5690.4363 <t< td=""><td>11ax40MIMO</td><td>Ant1</td><td>5670</td><td>37.857</td><td>5651.0668</td><td>5688.9238</td><td></td><td></td></t<>	11ax40MIMO	Ant1	5670	37.857	5651.0668	5688.9238		
11ax80MIMO  Ant2  5530  76.928  5491.6576  5568.5856     11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax80MIMO  Ant2  5610  76.897  5571.6445  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be40MIMO  Ant1  5510  37.821  5491.0574 <t< td=""><td>11ax40MIMO</td><td>Ant2</td><td>5670</td><td>37.826</td><td>5651.0900</td><td>5688.9160</td><td></td><td></td></t<>	11ax40MIMO	Ant2	5670	37.826	5651.0900	5688.9160		
11ax80MIMO  Ant1  5610  76.974  5571.6358  5648.6098     11ax80MIMO  Ant2  5610  76.897  5571.6445  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5321     11be20MIMO  Ant1  5700  19.095  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574 <t< td=""><td>11ax80MIMO</td><td>Ant1</td><td>5530</td><td>77.153</td><td>5491.5088</td><td>5568.6618</td><td></td><td></td></t<>	11ax80MIMO	Ant1	5530	77.153	5491.5088	5568.6618		
11ax80MIMO  Ant2  5610  76.897  5571.6445  5648.5415     11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858 <t< td=""><td>11ax80MIMO</td><td>Ant2</td><td>5530</td><td>76.928</td><td>5491.6576</td><td>5568.5856</td><td></td><td></td></t<>	11ax80MIMO	Ant2	5530	76.928	5491.6576	5568.5856		
11ax160MIMO  Ant1  5570  157.57  5491.6263  5649.1963     11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.095  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant2  5590  37.875  5571.0385 <t< td=""><td>11ax80MIMO</td><td>Ant1</td><td>5610</td><td>76.974</td><td>5571.6358</td><td>5648.6098</td><td></td><td></td></t<>	11ax80MIMO	Ant1	5610	76.974	5571.6358	5648.6098		
11ax160MIMO  Ant2  5570  157.63  5491.2369  5648.8669     11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.875  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385 <td< td=""><td>11ax80MIMO</td><td>Ant2</td><td>5610</td><td>76.897</td><td>5571.6445</td><td>5648.5415</td><td></td><td></td></td<>	11ax80MIMO	Ant2	5610	76.897	5571.6445	5648.5415		
11be20MIMO  Ant1  5500  19.053  5490.4464  5509.4994     11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.816  5651.0643	1ax160MIMO	Ant1	5570	157.57	5491.6263	5649.1963		
11be20MIMO  Ant2  5500  19.076  5490.4353  5509.5113     11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.816  5651.0643  5688.8597     11be80MIMO  Ant2  5530  76.939  5491.7039	1ax160MIMO	Ant2	5570	157.63	5491.2369	5648.8669		
11be20MIMO  Ant1  5580  19.120  5570.4121  5589.5321     11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.816  5651.1327  5688.8597     11be80MIMO  Ant2  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985	11be20MIMO	Ant1	5500	19.053	5490.4464	5509.4994		
11be20MIMO  Ant2  5580  19.095  5570.4468  5589.5418     11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985	11be20MIMO	Ant2	5500	19.076	5490.4353	5509.5113		
11be20MIMO  Ant1  5700  19.029  5690.4494  5709.4784     11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be20MIMO	Ant1	5580	19.120	5570.4121	5589.5321		
11be20MIMO  Ant2  5700  19.091  5690.4363  5709.5273     11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be20MIMO	Ant2	5580	19.095	5570.4468	5589.5418		
11be40MIMO  Ant1  5510  37.821  5491.0574  5528.8784     11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be20MIMO	Ant1	5700	19.029	5690.4494	5709.4784		
11be40MIMO  Ant2  5510  37.894  5491.0858  5528.9798     11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be20MIMO	Ant2	5700	19.091	5690.4363	5709.5273		
11be40MIMO  Ant1  5590  37.734  5571.0963  5608.8303     11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be40MIMO	Ant1	5510	37.821	5491.0574	5528.8784		
11be40MIMO  Ant2  5590  37.875  5571.0385  5608.9135     11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be40MIMO	Ant2	5510	37.894	5491.0858	5528.9798		
11be40MIMO  Ant1  5670  37.727  5651.1327  5688.8597     11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be40MIMO	Ant1	5590	37.734	5571.0963	5608.8303		
11be40MIMO  Ant2  5670  37.816  5651.0643  5688.8803     11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be40MIMO	Ant2	5590	37.875	5571.0385	5608.9135		
11be80MIMO  Ant1  5530  76.939  5491.7039  5568.6429     11be80MIMO  Ant2  5530  77.001  5491.6985  5568.6995	11be40MIMO	Ant1	5670	37.727	5651.1327	5688.8597		
11be80MIMO Ant2 5530 77.001 5491.6985 5568.6995	11be40MIMO	Ant2	5670	37.816	5651.0643	5688.8803		
	11be80MIMO	Ant1	5530	76.939	5491.7039	5568.6429		
11be80MIMO Ant1 5610 76.950 5571.5803 5648.5303	11be80MIMO	Ant2	5530	77.001	5491.6985	5568.6995		
	11be80MIMO	Ant1	5610	76.950	5571.5803	5648.5303		
11be80MIMO Ant2 5610 76.987 5571.5253 5648.5123	11be80MIMO	Ant2	5610	76.987	5571.5253	5648.5123		
11be160MIMO Ant1 5570 157.64 5491.4891 5649.1291	1be160MIMO	Ant1	5570	157.64	5491.4891	5649.1291		
11be160MIMO Ant2 5570 157.48 5491.5750 5649.0550	1be160MIMO	Ant2	5570	157.48	5491.5750	5649.0550		

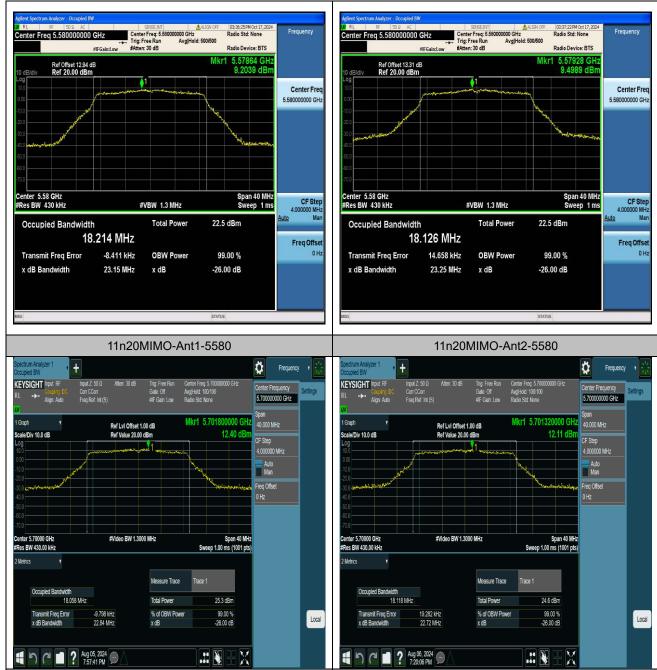


### **Test Graphs**





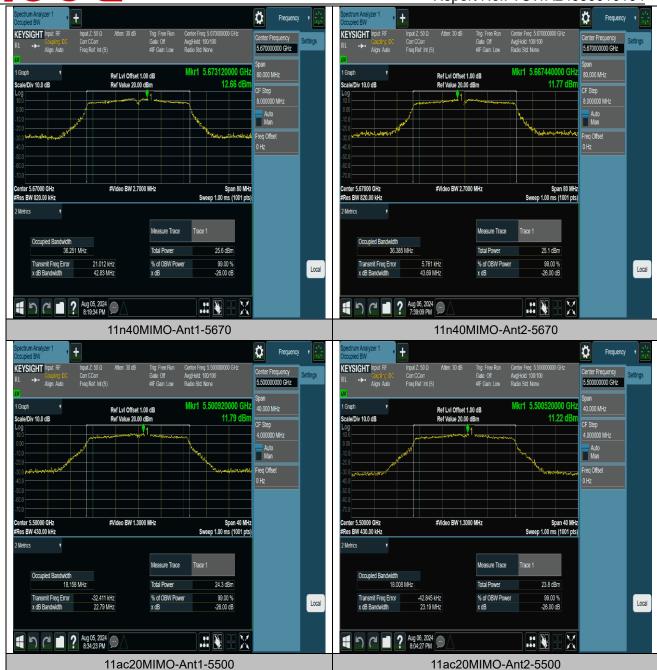




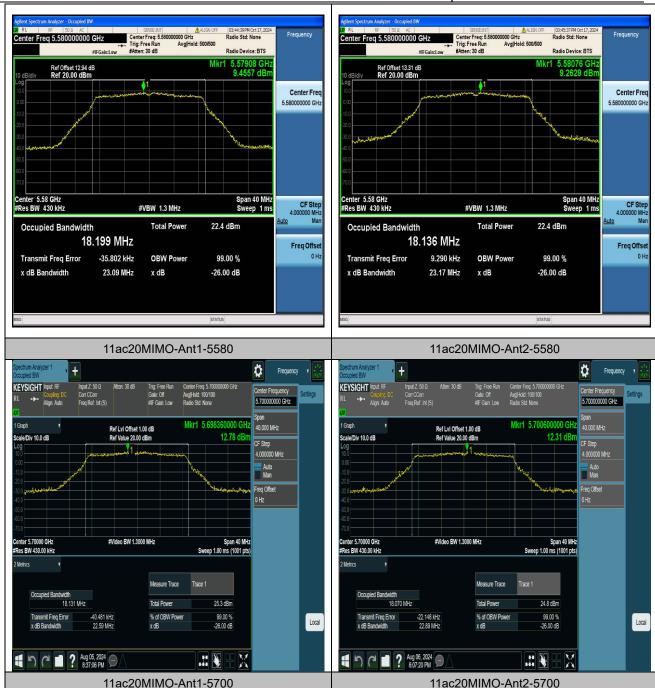
11n20MIMO-Ant1-5700

11n20MIMO-Ant2-5700



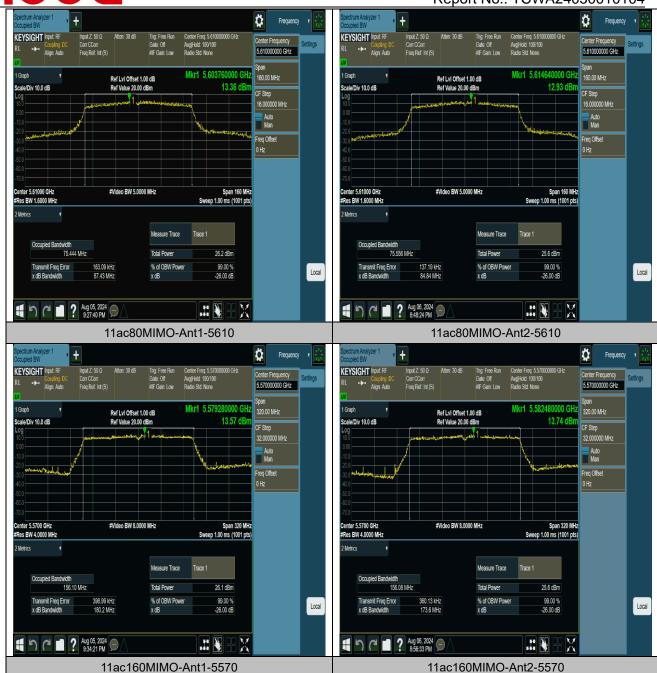




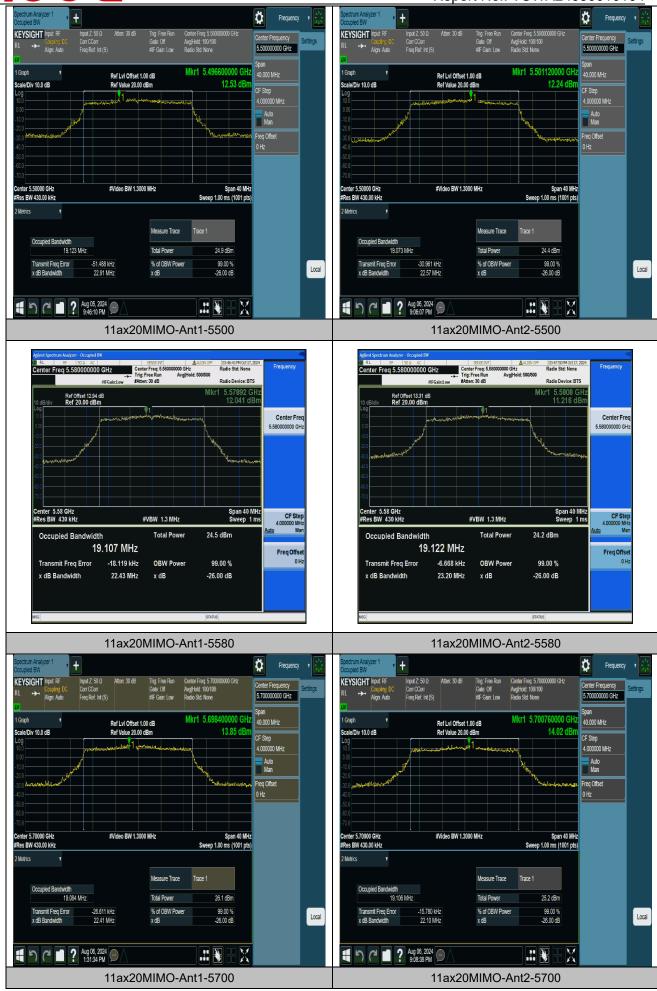








Page 32 / 183 Report No.: TCWA24050010104









Page 36 / 183 Report No.: TCWA24050010104

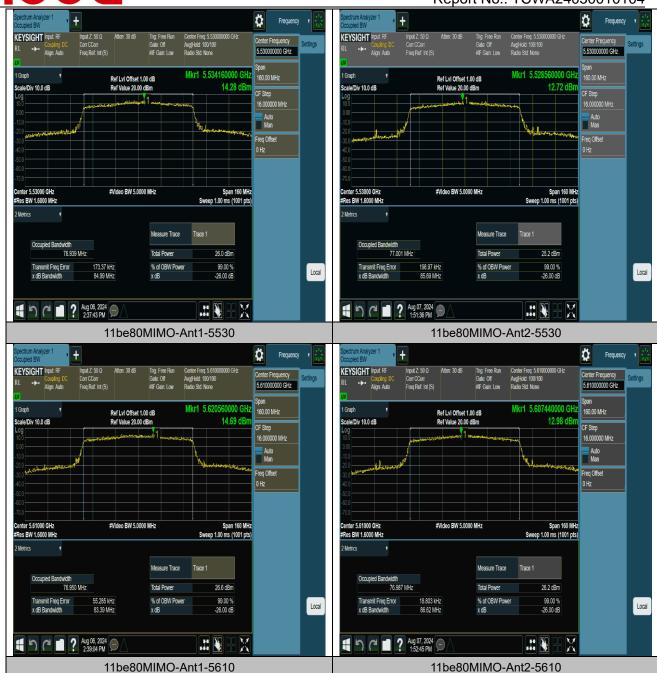




Page 38 / 183 Report No.: TCWA24050010104 ₿ + Ö Input Z: 50 Ω KEYSIGHT Input RE KEYSIGHT Input R Corr CCorr Freq Ref: Int (S) Corr CCorr Freq Ref: Int (S) Gate: Off Avg|Hold: 100/100 #IF Gain: Low Radio Std: None → Align: Auto → Align: Auto 5.590000000 GHz 5.590000000 GHz #IF Gain: Low Ref Lvl Offset 1.00 dB Ref Value 20.00 dBm Ref Lvl Offset 1.00 dB Ref Value 20.00 dBm 14.51 dB 13.30 dBi cale/Div 10.0 dB ale/Div 10.0 dB CF Step Auto Man Auto Man Freq Offset Fren Offset 0 Hz Center 5.59000 GHz #Res BW 820.00 kHz #Video BW 2.7000 MHz Span 80 MHz Sweep 1.00 ms (1001 pts) #Video BW 2.7000 MHz Span 80 MHz Sweep 1.00 ms (1001 pts) nter 5.59000 GHz Res BW 820.00 kHz Measure Trace Occupied Bandwidth 25.8 dBm 25.7 dBm Transmit Freq Error x dB Bandwidth -36.677 kHz 42.60 MHz % of OBW Power x dB 99.00 % -26.00 dB Transmit Freq Error x dB Bandwidth -23.959 kHz 43.20 MHz % of OBW Power x dB 99.00 % -26.00 dB Local Local 4 S C 2 Aug 07, 2024 (m) X 4 9 C ? Aug 06, 2024 9 2:29:31 PM ### # # 11be40MIMO-Ant1-5590 11be40MIMO-Ant2-5590 Ö Ü Frequency Center Freq: 5.670000000 GHz Avg|Hold: 100/100 Radio Std: None Center Freq: 5.6700 Avg|Hold: 100/100 Radio Std: None Trig: Free Run Gate: Off #IF Gain: Low Input Z: 50 Ω Corr CCorr Trig: Free Run Gate: Off KEYSIGHT Input RF KEYSIGHT Input RI Center Frequency 5.670000000 GHz → Align: Auto Alian: Auto 5.670000000 GHz Fren Ref: Int (S) Mkr1 5.6735 Mkr1 5.666 80.000 MHz Ref Lvi Offset 1.00 dB Ref Value 20.00 dBm 80.000 MHz Ref Lvi Offset 1.00 dB Ref Value 20.00 dBm 13.82 dE 14.00 dBi ale/Div 10.0 dB 8.000000 MHz 8.000000 MHz Auto Man Auto Man Freq Offsei 0 Hz Freq Offset 0 Hz Center 5.67000 GHz #Res BW 820.00 kHz Span 80 MHz Sweep 1.00 ms (1001 pts) enter 5.67000 GHz les BW 820.00 kHz Span 80 MHz Sweep 1.00 ms (1001 pts) #Video BW 2.7000 MHz #Video BW 2.7000 MHz Measure Trace idwidth 37.727 MHz 37.816 MHz 26.4 dBm 26.0 dBm Total Power Total Power Transmit Freq Error x dB Bandwidth -3.824 kHz 44.64 MHz % of OBW Pox x dB 99.00 % -26.00 dB 99.00 % -26.00 dB Local Local M 4 9 PM 2024 (mg 07, 2024 (mg 07 4 S C 230:52 PM II 🔻 # ₩

11be40MIMO-Ant1-5670

11be40MIMO-Ant2-5670



TUVE

Page 40 / 183 Report No.: TCWA24050010104





Page 41 / 183 Report No.: TCWA24050010104

# **Duty Cycle**

## **Test Result**

			Transmission	Transmission Period	<b>5</b> . <b>6</b> . <b>1</b> . <b>1</b> . <b>1</b> . <b>1</b>
TestMode	Antenna	Frequency[MHz]	Duration [ms]	[ms]	Duty Cycle [%]
11a-CDD	Ant1	5500	2.10	2.11	99.53
11a-CDD	Ant2	5500	2.10	2.12	99.06
11a-CDD	Ant1	5580	2.09	2.11	99.05
11a-CDD	Ant2	5580	2.10	2.12	99.06
11a-CDD	Ant1	5700	2.09	2.11	99.05
11a-CDD	Ant2	5700	2.09	2.11	99.05
11n20MIMO	Ant1	5500	5.36	5.38	99.63
11n20MIMO	Ant2	5500	5.36	5.37	99.81
11n20MIMO	Ant1	5580	5.36	5.38	99.63
11n20MIMO	Ant2	5580	5.36	5.38	99.63
11n20MIMO	Ant1	5700	5.36	5.38	99.63
11n20MIMO	Ant2	5700	5.36	5.38	99.63
11n40MIMO	Ant1	5510	5.38	5.40	99.63
11n40MIMO	Ant2	5510	5.38	5.40	99.63
11n40MIMO	Ant1	5590	5.38	5.39	99.81
11n40MIMO	Ant2	5590	5.38	5.40	99.63
11n40MIMO	Ant1	5670	5.38	5.40	99.63
11n40MIMO	Ant2	5670	5.38	5.40	99.63
11ac20MIMO	Ant1	5500	5.36	5.38	99.63
11ac20MIMO	Ant2	5500	5.36	5.37	99.81
11ac20MIMO	Ant1	5580	5.36	5.38	99.63
11ac20MIMO	Ant2	5580	5.36	5.38	99.63
11ac20MIMO	Ant1	5700	5.36	5.38	99.63
11ac20MIMO	Ant2	5700	5.36	5.38	99.63
11ac40MIMO	Ant1	5510	5.41	5.43	99.63
11ac40MIMO	Ant2	5510	5.42	5.43	99.82
11ac40MIMO	Ant1	5590	5.41	5.43	99.63
11ac40MIMO	Ant2	5590	5.42	5.44	99.63
11ac40MIMO	Ant1	5670	5.42	5.44	99.63
11ac40MIMO	Ant2	5670	5.42	5.44	99.63
11ac80MIMO	Ant1	5530	4.24	4.25	99.76
11ac80MIMO	Ant2	5530	4.24	4.25	99.76
11ac80MIMO	Ant1	5610	4.24	4.26	99.53
11ac80MIMO	Ant2	5610	4.24	4.26	99.53
11ac160MIMO	Ant1	5570	2.34	2.36	99.15
11ac160MIMO	Ant2	5570	2.35	2.37	99.16
11ax20MIMO	Ant1	5500	5.34	5.36	99.63
11ax20MIMO	Ant2	5500	5.35	5.36	99.81
11ax20MIMO	Ant1	5580	5.35	5.37	99.63
11ax20MIMO	Ant2	5580	5.35	5.37	99.63

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Page 42 / 183 Report No.: TCWA24050010104

				Report No.: 101	VA24030010104
11ax20MIMO	Ant1	5700	5.35	5.37	99.63
11ax20MIMO	Ant2	5700	5.35	5.37	99.63
11ax40MIMO	Ant1	5510	5.37	5.39	99.63
11ax40MIMO	Ant2	5510	5.38	5.39	99.81
11ax40MIMO	Ant1	5590	5.37	5.39	99.63
11ax40MIMO	Ant2	5590	5.37	5.39	99.63
11ax40MIMO	Ant1	5670	5.37	5.39	99.63
11ax40MIMO	Ant2	5670	5.38	5.39	99.81
11ax80MIMO	Ant1	5530	5.40	5.42	99.63
11ax80MIMO	Ant2	5530	5.40	5.42	99.63
11ax80MIMO	Ant1	5610	5.40	5.41	99.82
11ax80MIMO	Ant2	5610	5.40	5.42	99.63
11ax160MIMO	Ant1	5570	5.03	5.05	99.60
11ax160MIMO	Ant2	5570	5.03	5.05	99.60
11be20MIMO	Ant1	5500	5.35	5.37	99.63
11be20MIMO	Ant2	5500	5.36	5.38	99.63
11be20MIMO	Ant1	5580	5.36	5.38	99.63
11be20MIMO	Ant2	5580	5.35	5.37	99.63
11be20MIMO	Ant1	5700	5.36	5.38	99.63
11be20MIMO	Ant2	5700	5.36	5.38	99.63
11be40MIMO	Ant1	5510	5.38	5.40	99.63
11be40MIMO	Ant2	5510	5.38	5.40	99.63
11be40MIMO	Ant1	5590	5.38	5.39	99.81
11be40MIMO	Ant2	5590	5.38	5.40	99.63
11be40MIMO	Ant1	5670	5.38	5.40	99.63
11be40MIMO	Ant2	5670	5.38	5.40	99.63
11be80MIMO	Ant1	5530	5.41	5.43	99.63
11be80MIMO	Ant2	5530	5.41	5.42	99.82
11be80MIMO	Ant1	5610	5.41	5.42	99.82
11be80MIMO	Ant2	5610	5.41	5.43	99.63
11be160MIMO	Ant1	5570	5.04	5.06	99.60
11be160MIMO	Ant2	5570	5.04	5.06	99.60