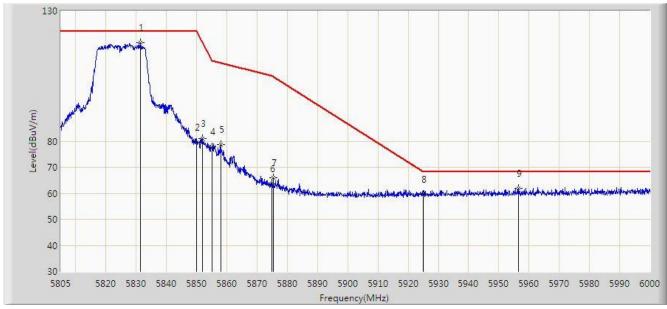
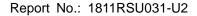


SSite: AC1	Time: 2018/12/09 - 14:14				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 2					

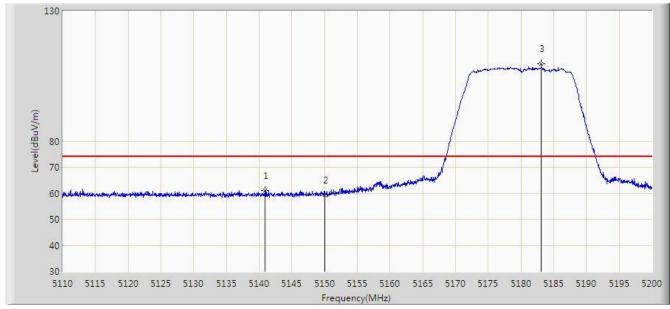


No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5831.325	117.704	110.012	N/A	N/A	7.691	PK
2			5850.000	79.631	71.858	-42.569	122.200	7.774	PK
3			5851.897	80.870	73.096	-37.003	117.874	7.775	PK
4			5855.000	77.710	69.934	-33.090	110.800	7.775	PK
5			5857.942	78.588	70.810	-31.387	109.975	7.778	PK
6			5875.000	63.481	55.663	-41.719	105.200	7.818	PK
7			5875.395	66.039	58.220	-38.867	104.906	7.819	PK
8			5925.000	59.603	51.784	-8.597	68.200	7.819	PK
9			5956.515	61.765	53.914	-6.435	68.200	7.852	PK





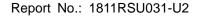
Site: AC1	Time: 2018/12/09 - 14:28					
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong					
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal					
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11a at Channel 5180MHz	Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5140.915	60.908	54.308	-13.092	74.000	6.600	PK
2			5150.000	59.345	52.783	-14.655	74.000	6.562	PK
3		*	5183.080	109.740	103.318	N/A	N/A	6.421	PK

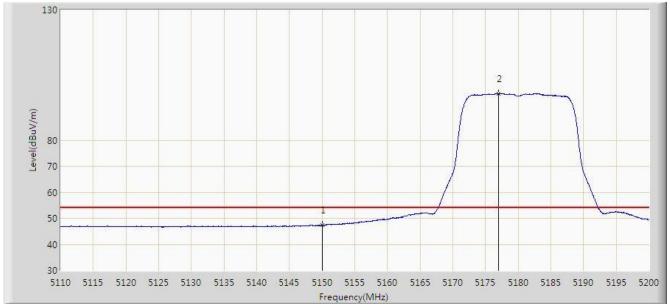
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 156 of 214





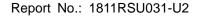
Site: AC1	Time: 2018/12/09 - 14:31				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	47.277	40.715	-6.723	54.000	6.562	AV
2		*	5177.005	97.898	91.430	N/A	N/A	6.467	AV

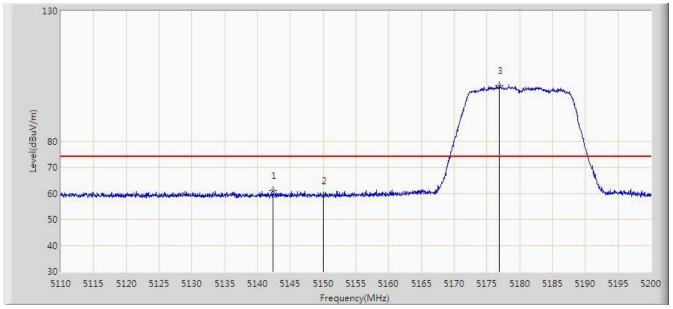
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 157 of 214





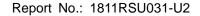
Site: AC1	Time: 2018/12/09 - 14:33				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5142.355	60.904	54.313	-13.096	74.000	6.592	PK
2			5150.000	58.916	52.354	-15.084	74.000	6.562	PK
3		*	5176.870	101.276	94.807	N/A	N/A	6.470	PK

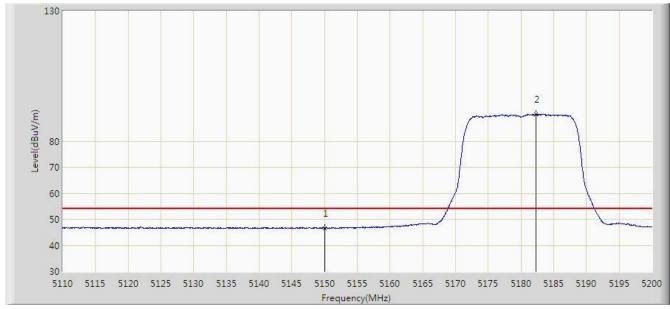
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 158 of 214





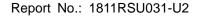
Site: AC1	Time: 2018/12/09 - 14:36				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	46.542	39.980	-7.458	54.000	6.562	AV
2		*	5182.270	90.405	83.978	N/A	N/A	6.427	AV

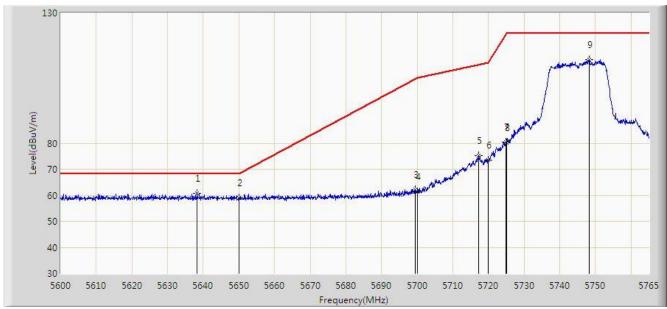
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 159 of 214





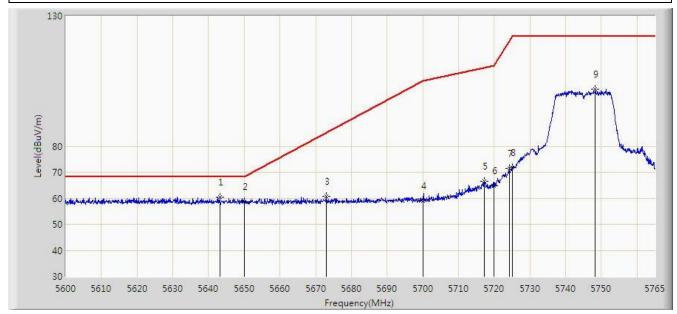
Site: AC1	Time: 2018/12/09 - 14:58				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5638.280	60.727	53.737	-7.473	68.200	6.990	PK
2			5650.000	59.009	52.004	-9.191	68.200	7.005	PK
3			5699.413	62.244	55.083	-42.523	104.768	7.161	PK
4			5700.000	61.328	54.163	-43.872	105.200	7.165	PK
5			5717.232	75.189	67.905	-34.837	110.026	7.284	PK
6			5720.000	73.358	66.059	-37.442	110.800	7.299	PK
7			5724.905	80.323	72.996	-41.660	121.983	7.327	PK
8			5725.000	80.093	72.765	-42.107	122.200	7.328	PK
9			5748.335	112.055	104.648	N/A	N/A	7.407	PK



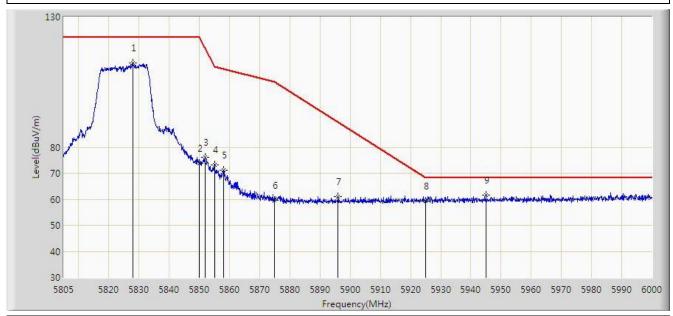
Site: AC1	Time: 2018/12/09 - 15:04				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5643.147	60.432	53.442	-7.768	68.200	6.990	PK
2			5650.000	58.583	51.578	-9.617	68.200	7.005	PK
3			5672.930	60.628	53.576	-24.580	85.209	7.053	PK
4			5700.000	59.057	51.892	-46.143	105.200	7.165	PK
5			5717.232	66.382	59.098	-43.644	110.026	7.284	PK
6			5720.000	64.750	57.451	-46.050	110.800	7.299	PK
7			5724.245	71.492	64.168	-48.988	120.479	7.324	PK
8			5725.000	71.616	64.288	-50.584	122.200	7.328	PK
9			5748.335	101.902	94.495	N/A	N/A	7.407	PK



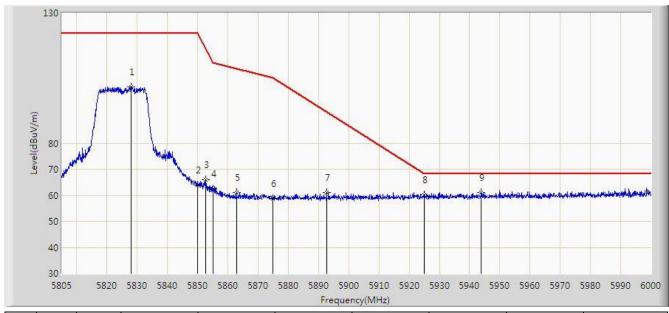
Site: AC1	Time: 2018/12/09 - 15:07				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 3					



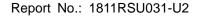
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5827.913	112.364	104.692	N/A	N/A	7.672	PK
2			5850.000	73.884	66.111	-48.316	122.200	7.774	PK
3			5851.800	76.023	68.249	-42.071	118.095	7.775	PK
4			5855.000	73.173	65.397	-37.627	110.800	7.775	PK
5			5857.942	71.033	63.255	-38.942	109.975	7.778	PK
6			5875.000	59.647	51.829	-45.553	105.200	7.818	PK
7			5895.967	61.106	53.272	-28.540	89.646	7.834	PK
8			5925.000	59.226	51.407	-8.974	68.200	7.819	PK
9		*	5945.010	61.708	53.866	-6.492	68.200	7.842	PK



Site: AC1	Time: 2018/12/09 - 15:08				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 3					

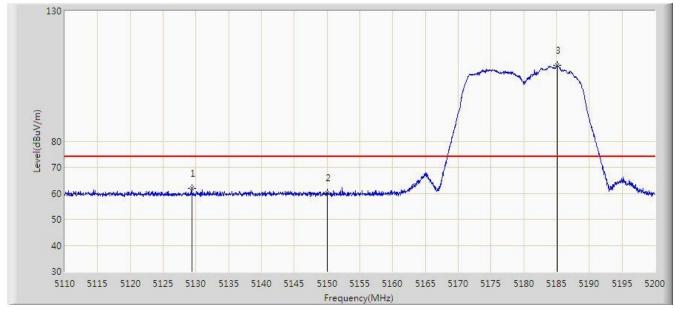


No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5827.913	101.645	93.973	N/A	N/A	7.672	PK
2			5850.000	63.998	56.225	-58.202	122.200	7.774	PK
3			5852.580	65.952	58.177	-50.365	116.316	7.774	PK
4			5855.000	62.481	54.705	-48.319	110.800	7.775	PK
5			5862.915	60.933	53.150	-47.649	108.582	7.783	PK
6			5875.000	58.693	50.875	-46.507	105.200	7.818	PK
7			5892.750	60.938	53.104	-31.092	92.029	7.834	PK
8			5925.000	60.047	52.228	-8.153	68.200	7.819	PK
9		*	5943.840	61.092	53.251	-7.108	68.200	7.841	PK





Site: AC1	Time: 2018/12/09 - 15:23				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5129.350	61.897	55.245	-12.103	74.000	6.652	PK
2			5150.000	60.041	53.479	-13.959	74.000	6.562	PK
3		*	5185.150	109.156	102.746	N/A	N/A	6.409	PK

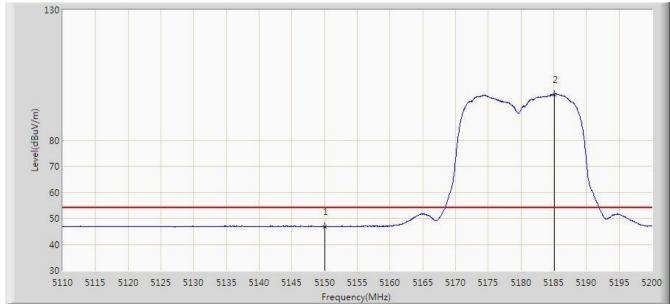
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 164 of 214





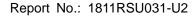
Site: AC1	Time: 2018/12/09 - 15:45				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	46.742	40.180	-7.258	54.000	6.562	AV
2		*	5185.105	97.594	91.184	N/A	N/A	6.409	AV

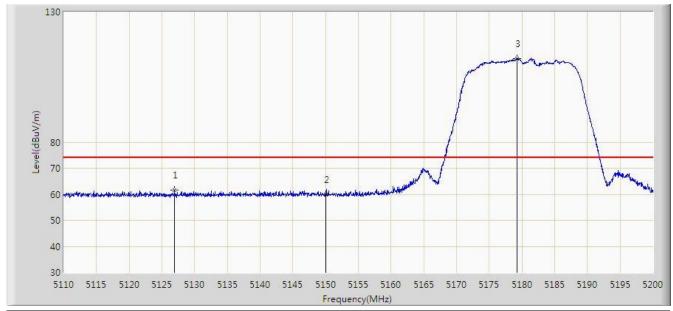
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 165 of 214





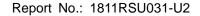
Site: AC1	Time: 2018/12/09 - 15:46				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5126.920	61.658	55.007	-12.342	74.000	6.652	PK
2			5150.000	59.924	53.362	-14.076	74.000	6.562	PK
3		*	5179.210	112.160	105.710	N/A	N/A	6.451	PK

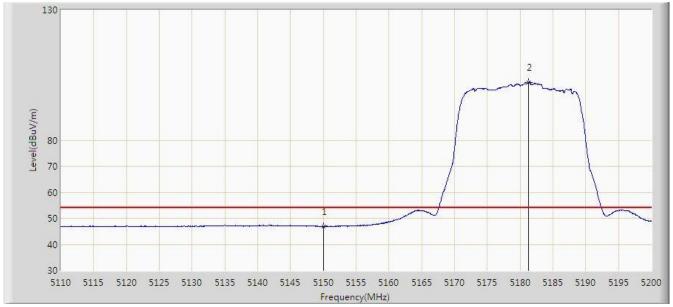
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 166 of 214





Site: AC1	Time: 2018/12/09 - 15:50				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0+1+2+3					



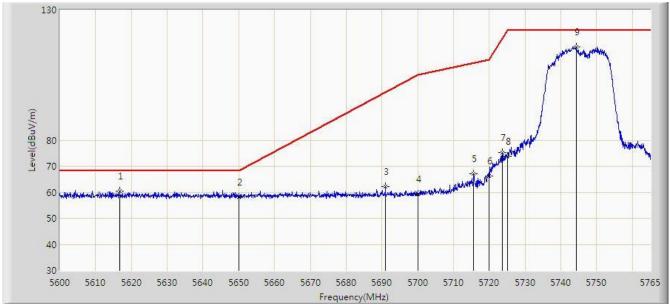
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	46.915	40.353	-7.085	54.000	6.562	AV
2		*	5181.325	102.261	95.827	N/A	N/A	6.434	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 167 of 214



Site: AC1	Time: 2018/12/09 - 16:19				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant 0+1+2+3					



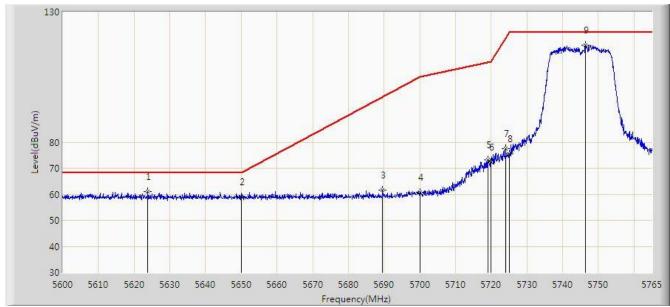
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5616.830	60.431	53.432	-7.769	68.200	6.998	PK
2			5650.000	58.236	51.231	-9.964	68.200	7.005	PK
3			5690.998	62.071	54.963	-36.492	98.563	7.107	PK
4			5700.000	59.220	52.055	-45.980	105.200	7.165	PK
5			5715.665	67.110	59.835	-42.478	109.588	7.274	PK
6			5720.000	66.163	58.864	-44.637	110.800	7.299	PK
7			5723.667	75.324	68.004	-43.837	119.162	7.321	PK
8			5725.000	73.683	66.355	-48.517	122.200	7.328	PK
9		*	5744.292	115.936	108.532	N/A	N/A	7.405	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 168 of 214



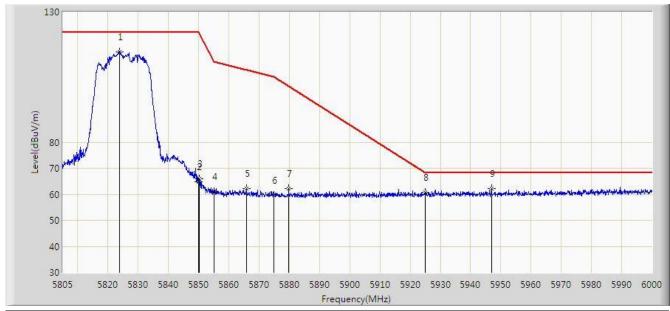
Ţ 					
Site: AC1	Time: 2018/12/09 - 16:17				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5623.842	60.990	53.976	-7.210	68.200	7.015	PK
2			5650.000	59.129	52.124	-9.071	68.200	7.005	PK
3			5689.595	61.618	54.515	-35.909	97.527	7.103	PK
4			5700.000	60.648	53.483	-44.552	105.200	7.165	PK
5			5719.130	73.332	66.037	-37.225	110.557	7.294	PK
6			5720.000	72.376	65.077	-38.424	110.800	7.299	PK
7			5724.080	77.407	70.084	-42.696	120.103	7.323	PK
8			5725.000	75.580	68.252	-46.620	122.200	7.328	PK
9		*	5746.355	117.257	109.851	N/A	N/A	7.406	PK



Site: AC1	Time: 2018/12/09 - 16:23				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant 0+1+2+3					



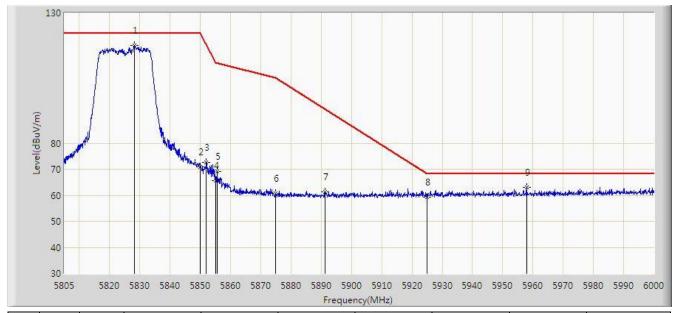
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5823.720	114.728	107.075	N/A	N/A	7.652	PK
2			5850.000	64.844	57.071	-57.356	122.200	7.774	PK
3			5850.240	65.876	58.102	-55.777	121.653	7.774	PK
4			5855.000	60.933	53.157	-49.867	110.800	7.775	PK
5			5865.840	62.184	54.393	-45.578	107.762	7.791	PK
6			5875.000	59.680	51.862	-45.520	105.200	7.818	PK
7			5879.783	62.211	54.381	-39.436	101.647	7.831	PK
8			5925.000	60.599	52.780	-7.601	68.200	7.819	PK
9		*	5946.862	62.127	54.282	-6.073	68.200	7.845	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

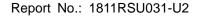
FCC ID: TYLFSE2200 Page Number: 170 of 214



Site: AC1	Time: 2018/12/09 - 16:20				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant 0+1+2+3					

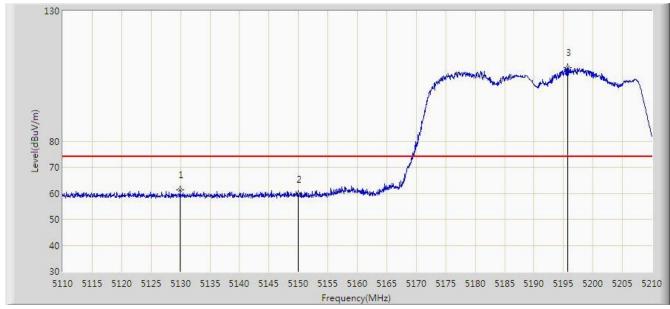


No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5828.107	117.470	109.797	N/A	N/A	7.672	PK
2			5850.000	70.889	63.116	-51.311	122.200	7.774	PK
3			5851.897	72.694	64.920	-45.179	117.874	7.775	PK
4			5855.000	65.742	57.966	-45.058	110.800	7.775	PK
5			5855.505	69.243	61.467	-41.415	110.658	7.776	PK
6			5875.000	60.722	52.904	-44.478	105.200	7.818	PK
7			5891.190	61.358	53.525	-31.827	93.185	7.833	PK
8			5925.000	59.396	51.577	-8.804	68.200	7.819	PK
9			5957.880	63.019	55.166	-5.181	68.200	7.853	PK





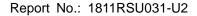
Site: AC1	Time: 2018/12/09 - 16:30				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5129.950	61.246	54.593	N/A	N/A	6.653	PK
2			5150.000	59.679	53.117	-14.321	74.000	6.562	PK
3		*	5195.700	108.392	102.043	34.392	74.000	6.349	PK

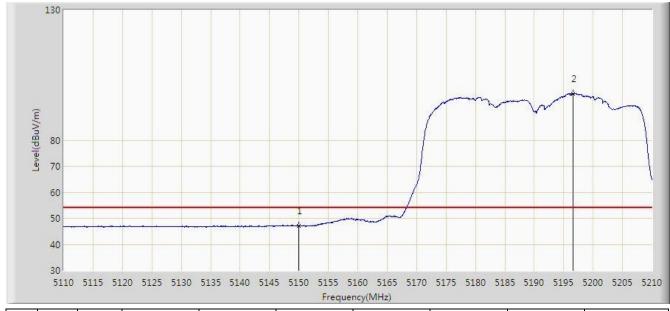
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 172 of 214





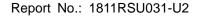
Site: AC1	Time: 2018/12/09 - 16:29				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	47.134	40.572	N/A	N/A	6.562	AV
2		*	5196.650	97.902	91.558	43.902	54.000	6.344	AV

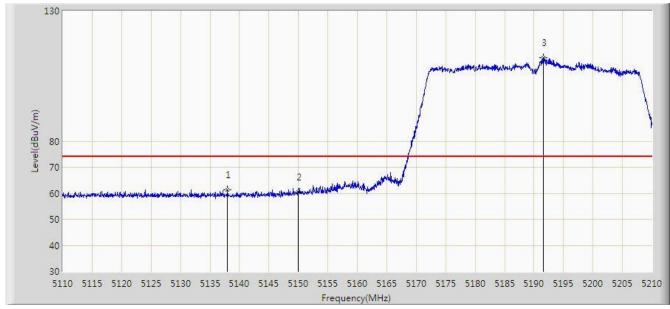
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 173 of 214





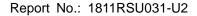
Site: AC1	Time: 2018/12/09 - 16:26				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5138.000	61.296	54.680	-12.704	74.000	6.616	PK
2			5150.000	60.446	53.884	-13.554	74.000	6.562	PK
3		*	5191.550	111.945	105.572	N/A	N/A	6.373	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 174 of 214





Site: AC1	Time: 2018/12/09 - 16:28				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0+1+2+3					



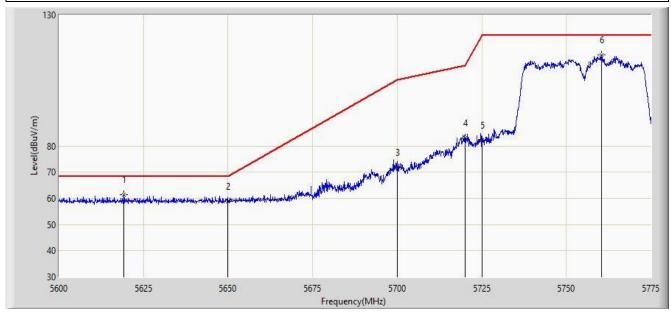
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	48.347	41.785	-5.653	54.000	6.562	AV
2		*	5191.600	100.986	94.614	N/A	N/A	6.373	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 175 of 214



Site: AC1	Time: 2018/12/11 - 04:44				
Limit: FCC_Part15.407_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant 0+1+2+3					



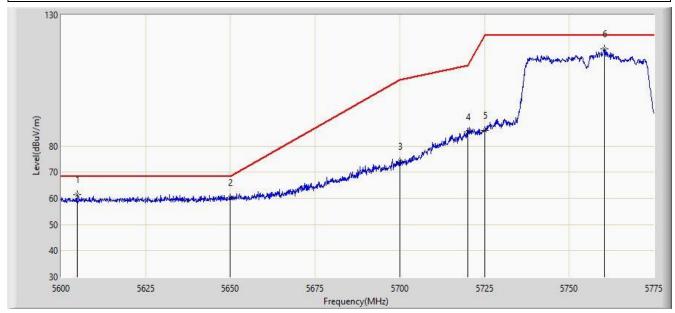
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5619.163	61.377	54.373	-6.823	68.200	7.004	PK
2			5650.000	58.841	51.836	-9.359	68.200	7.005	PK
3			5700.000	71.732	64.567	-33.468	105.200	7.165	PK
4			5720.000	82.971	75.672	-27.829	110.800	7.299	PK
5			5725.000	82.213	74.885	-39.987	122.200	7.328	PK
6			5760.300	114.834	107.420	-7.366	122.200	7.414	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 176 of 214



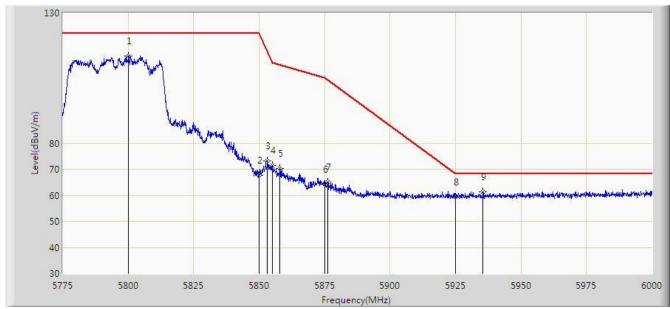
Site: AC1	Time: 2018/12/11 - 04:46				
Limit: FCC_Part15.407_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5604.725	61.317	54.338	-6.883	68.200	6.980	PK
2			5650.000	60.247	53.242	-7.953	68.200	7.005	PK
3			5700.000	74.231	67.066	-30.969	105.200	7.165	PK
4			5720.000	85.336	78.037	-25.464	110.800	7.299	PK
5			5725.000	85.915	78.587	-36.285	122.200	7.328	PK
6		*	5760.300	116.923	109.509	-5.277	122.200	7.414	PK



Site: AC1	Time: 2018/12/09 - 17:01				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5795MHz Ant 0+1+2+3					



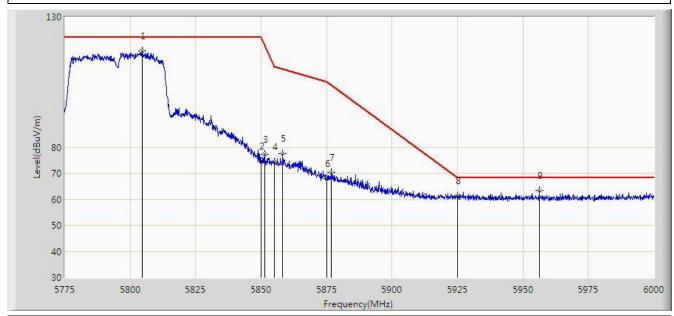
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5800.087	113.428	105.871	N/A	N/A	7.557	PK
2			5850.000	67.665	59.892	-54.535	122.200	7.774	PK
3			5853.187	73.070	65.295	-41.862	114.933	7.775	PK
4			5855.000	71.363	63.587	-39.437	110.800	7.775	PK
5			5858.025	70.425	62.647	-39.527	109.952	7.778	PK
6			5875.000	64.239	56.421	-40.961	105.200	7.818	PK
7			5876.362	64.936	57.114	-39.252	104.188	7.822	PK
8			5925.000	59.141	51.322	-9.059	68.200	7.819	PK
9		*	5935.538	61.328	53.498	-6.872	68.200	7.830	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

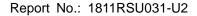
FCC ID: TYLFSE2200 Page Number: 178 of 214



Site: AC1	Time: 2018/12/09 - 16:59				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5795MHz Ant 0+1+2+3					

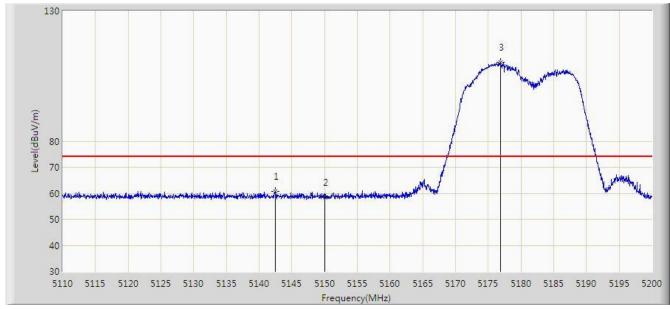


No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5804.587	117.062	109.490	N/A	N/A	7.572	PK
2			5850.000	74.506	66.733	-47.694	122.200	7.774	PK
3			5851.388	77.132	69.358	-41.902	119.034	7.774	PK
4			5855.000	74.439	66.663	-36.361	110.800	7.775	PK
5			5858.250	77.489	69.711	-32.400	109.889	7.778	PK
6			5875.000	67.859	60.041	-37.341	105.200	7.818	PK
7			5876.925	70.239	62.415	-33.531	103.770	7.824	PK
8			5925.000	61.389	53.570	-6.811	68.200	7.819	PK
9		*	5956.237	63.263	55.412	-4.937	68.200	7.850	PK





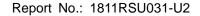
Site: AC1	Time: 2018/12/11 - 04:56				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5142.535	60.760	54.170	-13.240	74.000	6.590	PK
2			5150.000	58.398	51.836	-15.602	74.000	6.562	PK
3		*	5176.825	110.203	103.734	N/A	N/A	6.470	PK

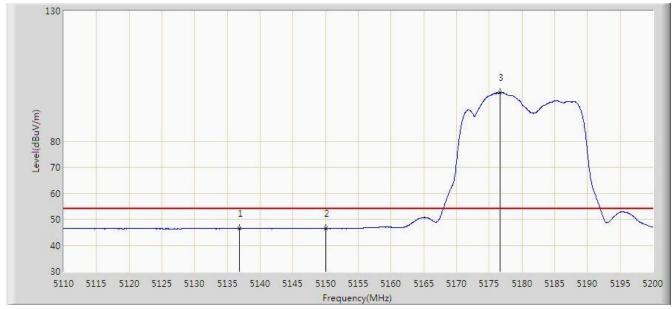
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 180 of 214





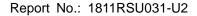
Site: AC1	Time: 2018/12/11 - 05:00				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5136.820	46.637	40.014	-7.363	54.000	6.623	AV
2			5150.000	46.420	39.858	-7.580	54.000	6.562	AV
3		*	5176.600	98.627	92.156	N/A	N/A	6.471	AV

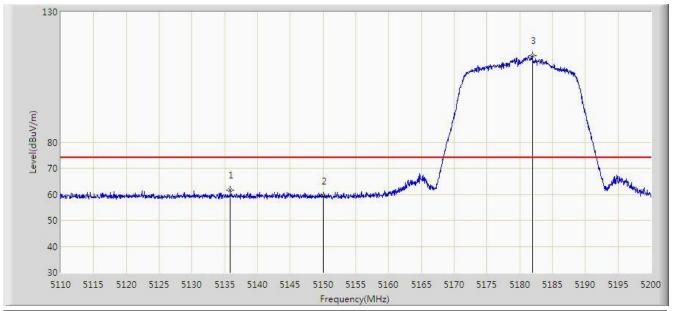
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 181 of 214





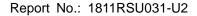
Site: AC1	Time: 2018/12/11 - 05:04				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5135.830	61.475	54.846	-12.525	74.000	6.629	PK
2			5150.000	59.263	52.701	-14.737	74.000	6.562	PK
3		*	5181.910	113.308	106.879	N/A	N/A	6.429	PK

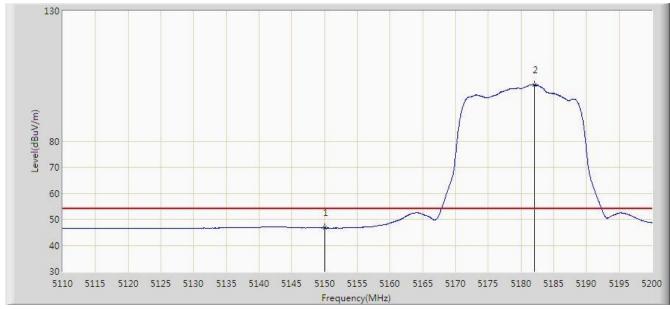
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 182 of 214





Site: AC1	Time: 2018/12/11 - 05:07				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0+1+2+3					



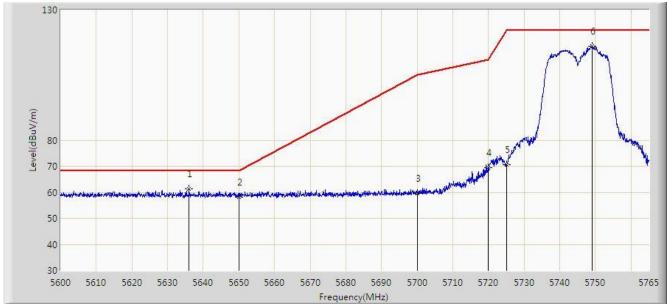
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	46.701	40.139	-7.299	54.000	6.562	AV
2		*	5182.090	101.590	95.162	N/A	N/A	6.428	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 183 of 214



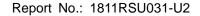
Site: AC1	Time: 2018/12/11 - 05:28				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5636.053	61.262	54.268	-6.938	68.200	6.993	PK
2			5650.000	57.988	50.983	-10.212	68.200	7.005	PK
3			5700.000	59.668	52.503	-45.532	105.200	7.165	PK
4			5720.000	69.456	62.157	-41.344	110.800	7.299	PK
5			5725.000	70.629	63.301	-51.571	122.200	7.328	PK
6		*	5749.078	116.022	108.614	N/A	N/A	7.407	PK

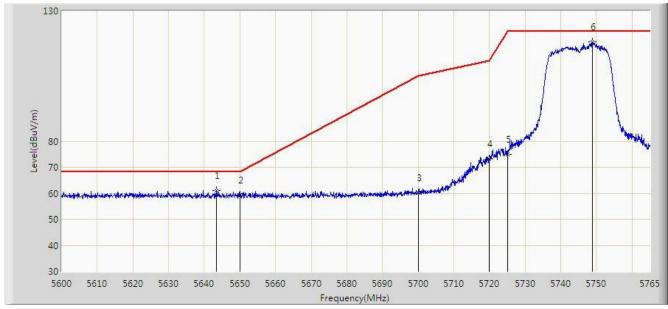
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 184 of 214





Site: AC1	Time: 2018/12/11 - 05:31				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant 0+1+2+3					



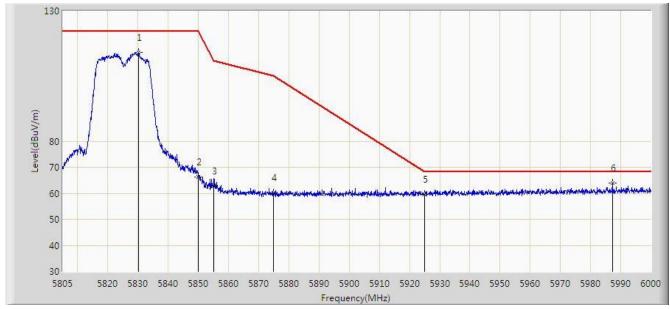
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5643.395	60.962	53.972	-7.238	68.200	6.990	PK
2			5650.000	59.392	52.387	-8.808	68.200	7.005	PK
3			5700.000	60.041	52.876	-45.159	105.200	7.165	PK
4			5720.000	73.110	65.811	-37.690	110.800	7.299	PK
5			5725.000	74.852	67.524	-47.348	122.200	7.328	PK
6		*	5748.830	118.043	110.635	N/A	N/A	7.407	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 185 of 214



Site: AC1	Time: 2018/12/11 - 05:33				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant 0+1+2+3					



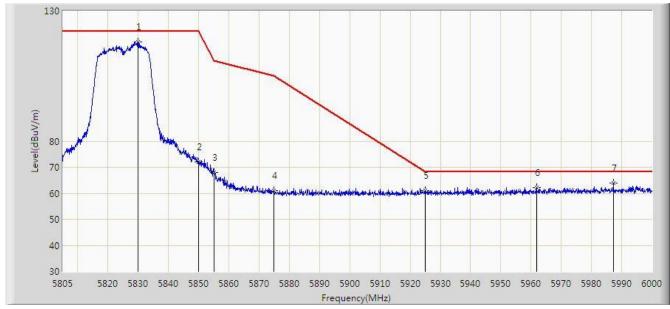
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5830.058	113.999	106.315	N/A	N/A	7.684	PK
2			5850.000	66.275	58.502	-55.925	122.200	7.774	PK
3			5855.000	62.848	55.072	-47.952	110.800	7.775	PK
4			5875.000	60.092	52.274	-45.108	105.200	7.818	PK
5			5925.000	59.432	51.613	-8.768	68.200	7.819	PK
6		*	5987.228	63.782	55.863	-4.418	68.200	7.920	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

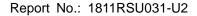
FCC ID: TYLFSE2200 Page Number: 186 of 214



Site: AC1	Time: 2018/12/11 - 05:35				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant 0+1+2+3					

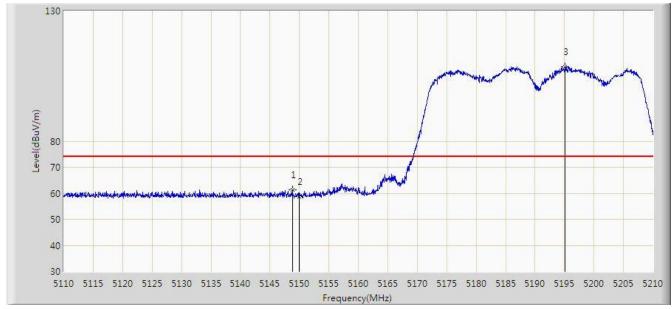


No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5829.960	118.088	110.404	N/A	N/A	7.684	PK
2			5850.000	71.927	64.154	-50.273	122.200	7.774	PK
3			5855.000	68.021	60.245	-42.779	110.800	7.775	PK
4			5875.000	60.955	53.137	-44.245	105.200	7.818	PK
5			5925.000	60.878	53.059	-7.322	68.200	7.819	PK
6			5961.780	62.216	54.357	-5.984	68.200	7.859	PK
7			5987.228	63.782	55.863	-4.418	68.200	7.920	PK





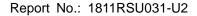
Site: AC1	Time: 2018/12/11 - 05:38				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5148.800	61.396	54.836	-12.604	74.000	6.560	PK
2			5150.000	58.795	52.233	-15.205	74.000	6.562	PK
3		*	5195.150	108.673	102.321	N/A	N/A	6.352	PK

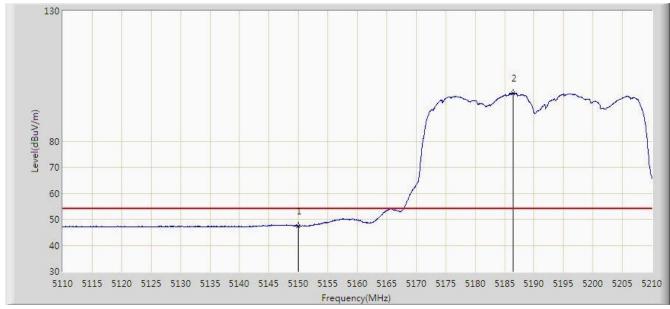
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 188 of 214





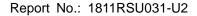
Site: AC1	Time: 2018/12/11 - 05:40				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	47.466	40.904	-6.534	54.000	6.562	AV
2		*	5186.500	98.500	92.098	N/A	N/A	6.402	AV

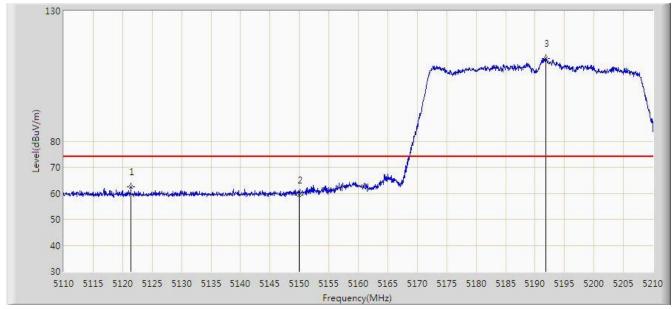
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 189 of 214





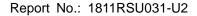
Site: AC1	Time: 2018/12/11 - 05:44				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5121.400	62.410	55.762	-11.590	74.000	6.648	PK
2			5150.000	59.218	52.656	-14.782	74.000	6.562	PK
3		*	5191.800	111.865	105.494	N/A	N/A	6.371	PK

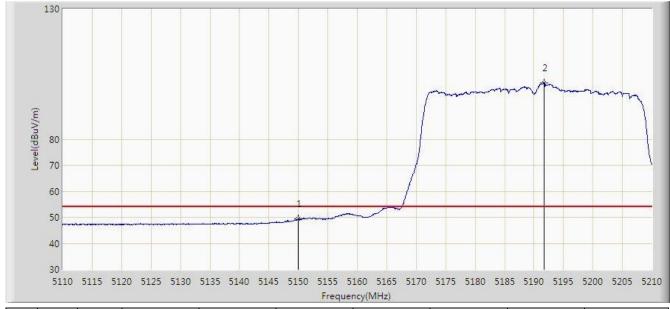
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 190 of 214





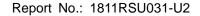
Site: AC1	Time: 2018/12/11 - 05:46				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	49.288	42.726	-4.712	54.000	6.562	AV
2		*	5191.750	101.619	95.247	N/A	N/A	6.372	AV

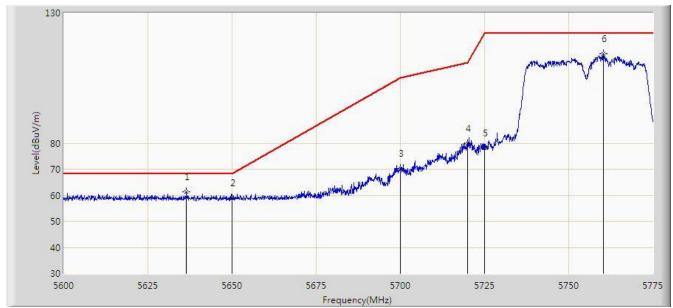
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 191 of 214





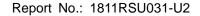
Site: AC1	Time: 2018/12/11 - 06:08				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5636.400	61.281	54.288	-6.919	68.200	6.993	PK
2			5650.000	58.884	51.879	-9.316	68.200	7.005	PK
3			5700.000	70.243	63.078	-34.957	105.200	7.165	PK
4			5720.000	79.742	72.443	-31.058	110.800	7.299	PK
5			5725.000	77.985	70.657	-44.215	122.200	7.328	PK
6			5760.212	114.275	106.861	N/A	N/A	7.415	PK

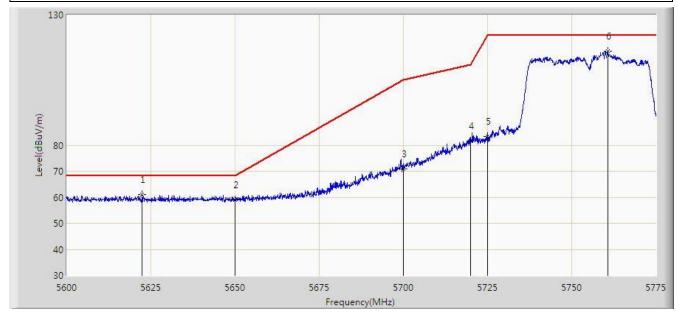
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 192 of 214





Site: AC1	Time: 2018/12/11 - 06:10				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant 0+1+2+3					



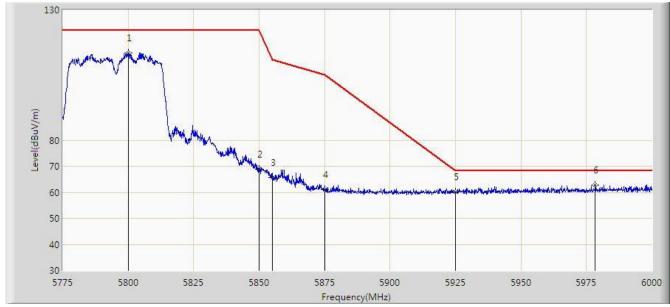
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5622.400	61.031	54.020	-7.169	68.200	7.011	PK
2			5650.000	59.040	52.035	-9.160	68.200	7.005	PK
3			5700.000	70.848	63.683	-34.352	105.200	7.165	PK
4			5720.000	81.594	74.295	-29.206	110.800	7.299	PK
5			5725.000	83.231	75.903	-38.969	122.200	7.328	PK
6		*	5760.737	115.993	108.577	N/A	N/A	7.415	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 193 of 214



Site: AC1	Time: 2018/12/11 - 06:12				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant 0+1+2+3					



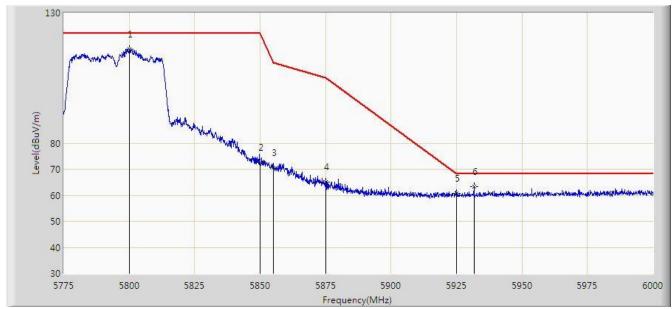
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5800.087	113.608	106.051	N/A	N/A	7.557	PK
2			5850.000	68.764	60.991	-53.436	122.200	7.774	PK
3			5855.000	65.692	57.916	-45.108	110.800	7.775	PK
4			5875.000	60.885	53.067	-44.315	105.200	7.818	PK
5			5925.000	60.004	52.185	-8.196	68.200	7.819	PK
6		*	5978.288	62.805	54.920	-5.395	68.200	7.885	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 194 of 214



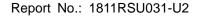
Site: AC1	Time: 2018/12/11 - 06:15				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5800.087	116.229	108.672	N/A	N/A	7.557	PK
2			5850.000	72.543	64.770	-49.657	122.200	7.774	PK
3			5855.000	70.522	62.746	-40.278	110.800	7.775	PK
4			5875.000	65.031	57.213	-40.169	105.200	7.818	PK
5			5925.000	60.735	52.916	-7.465	68.200	7.819	PK
6		*	5931.712	63.458	55.633	-4.742	68.200	7.825	PK

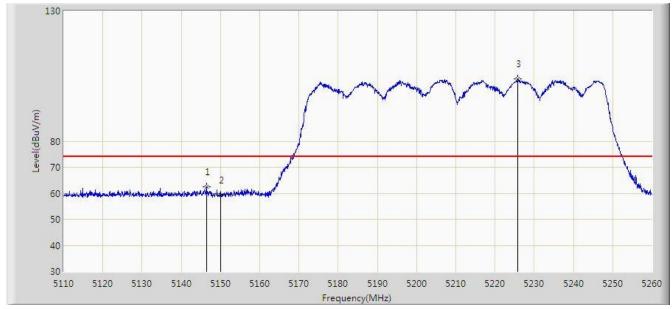
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 195 of 214





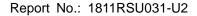
Site: AC1	Time: 2018/12/11 - 06:18				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5146.375	62.564	55.996	-11.436	74.000	6.568	PK
2			5150.000	59.288	52.726	-14.712	74.000	6.562	PK
3		*	5225.875	104.016	97.615	N/A	N/A	6.400	PK

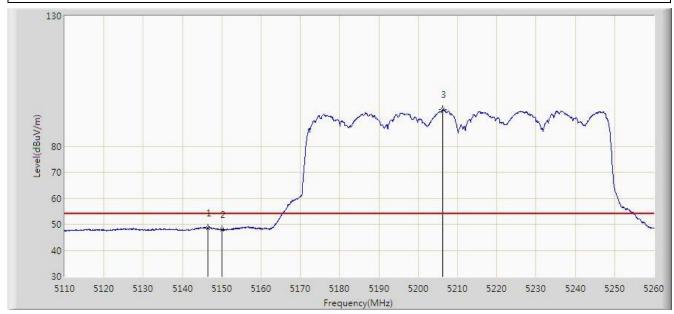
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 196 of 214





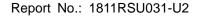
Site: AC1	Time: 2018/12/11 - 06:21				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5146.525	48.530	41.963	-5.470	54.000	6.567	AV
2			5150.000	47.867	41.305	-6.133	54.000	6.562	AV
3		*	5206.300	94.132	87.777	N/A	N/A	6.355	AV

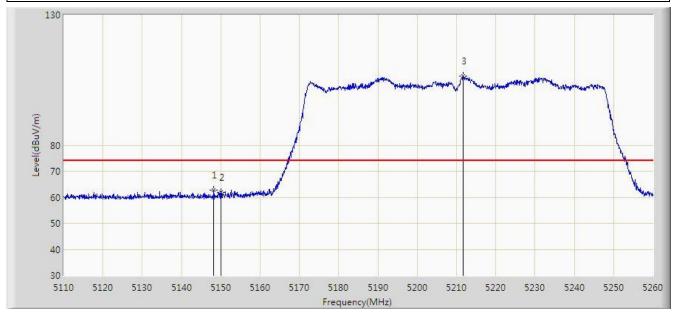
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 197 of 214





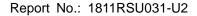
Site: AC1	Time: 2018/12/11 - 06:23				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5148.250	62.801	56.242	-11.199	74.000	6.558	PK
2			5150.000	62.003	55.441	-11.997	74.000	6.562	PK
3		*	5211.700	106.381	100.007	N/A	N/A	6.375	PK

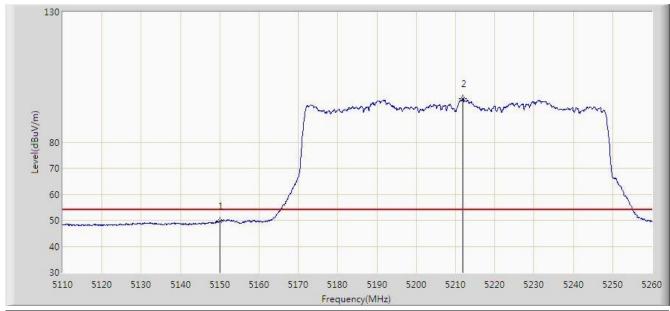
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 198 of 214





Site: AC1	Time: 2018/12/11 - 06:26				
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0+1+2+3					



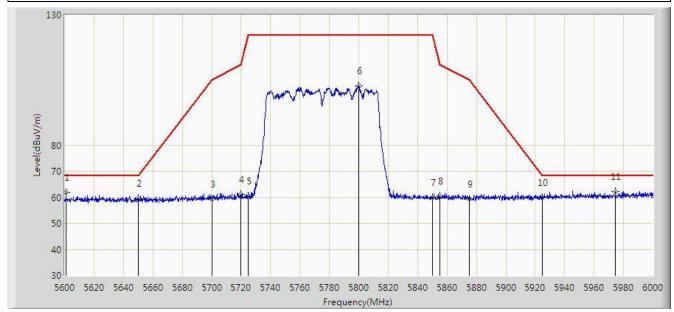
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	49.568	43.006	-4.432	54.000	6.562	AV
2		*	5211.850	96.637	90.262	N/A	N/A	6.375	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 199 of 214



Site: AC1	Time: 2018/12/11 - 06:49				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 0+1+2+3					

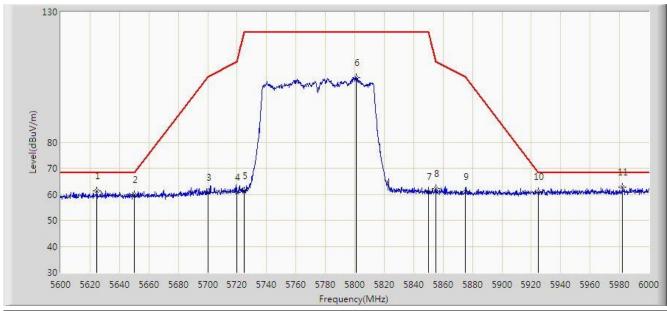


No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5601.000	61.983	55.003	-6.217	68.200	6.980	PK
2			5650.000	59.635	52.630	-8.565	68.200	7.005	PK
3			5700.000	59.222	52.057	-45.978	105.200	7.165	PK
4			5720.000	61.013	53.714	-49.787	110.800	7.299	PK
5			5725.000	60.557	53.229	-61.643	122.200	7.328	PK
6			5800.200	102.725	95.167	N/A	N/A	7.557	PK
7			5850.000	59.792	52.019	-62.408	122.200	7.774	PK
8			5855.000	60.395	52.619	-50.405	110.800	7.775	PK
9			5875.000	59.344	51.526	-45.856	105.200	7.818	PK
10			5925.000	59.956	52.137	-8.244	68.200	7.819	PK
11		*	5974.400	62.198	54.319	-6.002	68.200	7.878	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

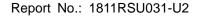


Site: AC1	Time: 2018/12/11 - 06:52				
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong				
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 0+1+2+3					



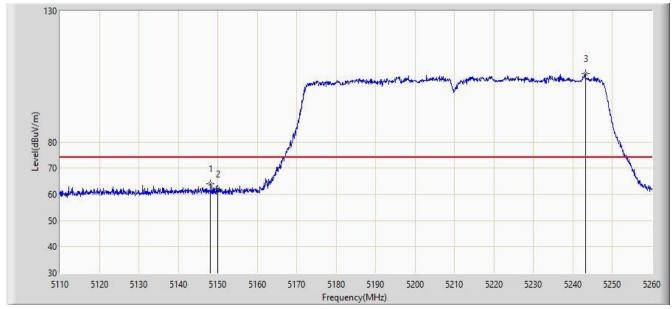
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5624.800	61.343	54.330	-6.857	68.200	7.013	PK
2			5650.000	59.805	52.800	-8.395	68.200	7.005	PK
3			5700.000	60.812	53.647	-44.388	105.200	7.165	PK
4			5720.000	60.775	53.476	-50.025	110.800	7.299	PK
5			5725.000	61.301	53.973	-60.899	122.200	7.328	PK
6			5801.000	104.706	97.146	N/A	N/A	7.560	PK
7			5850.000	60.965	53.192	-61.235	122.200	7.774	PK
8			5855.000	62.059	54.283	-48.741	110.800	7.775	PK
9			5875.000	61.016	53.198	-44.184	105.200	7.818	PK
10			5925.000	60.928	53.109	-7.272	68.200	7.819	PK
11		*	5982.000	62.818	54.923	-5.382	68.200	7.895	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)





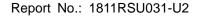
Site: AC1	Time: 2018/12/11 - 06:57				
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11acVHT80+80 at Channel 5210MHz Ant 0+1+2+3					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5148.100	64.122	57.563	-9.878	74.000	6.560	PK
2			5150.000	61.867	55.305	-12.133	74.000	6.562	PK
3		*	5243.200	106.004	99.609	32.004	74.000	6.394	PK

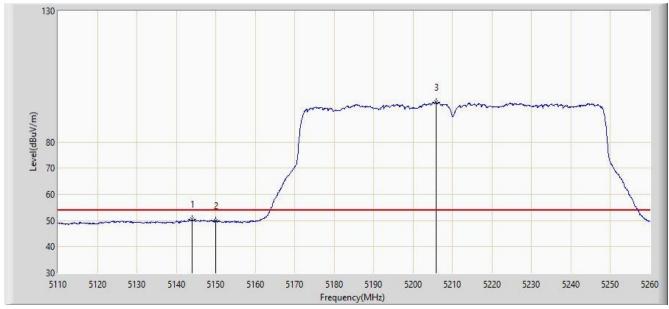
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 202 of 214





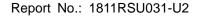
Site: AC1	Time: 2018/12/11 - 07:18			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11acVHT80+80 at Channel 5210MHz Ant 0+1+2+3				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5143.975	50.361	43.779	-3.639	54.000	6.581	AV
2			5150.000	49.848	43.286	-4.152	54.000	6.562	AV
3		*	5205.775	95.162	88.808	41.162	54.000	6.354	AV

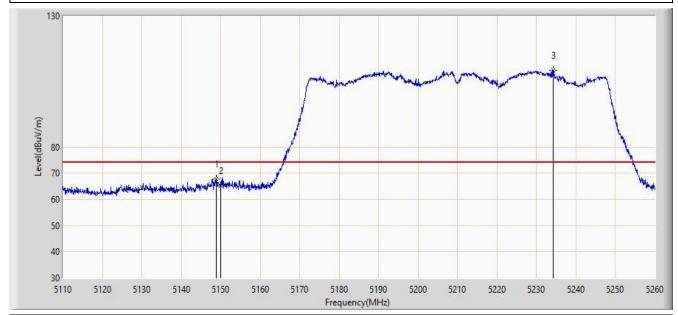
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 203 of 214





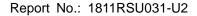
Site: AC1	Time: 2018/12/11 - 07:21			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11acVHT80+80 at Channel 5210MHz Ant 0+1+2+3				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5148.775	67.640	61.080	-6.360	74.000	6.560	PK
2			5150.000	65.283	58.721	-8.717	74.000	6.562	PK
3		*	5234.200	109.237	102.830	35.237	74.000	6.407	PK

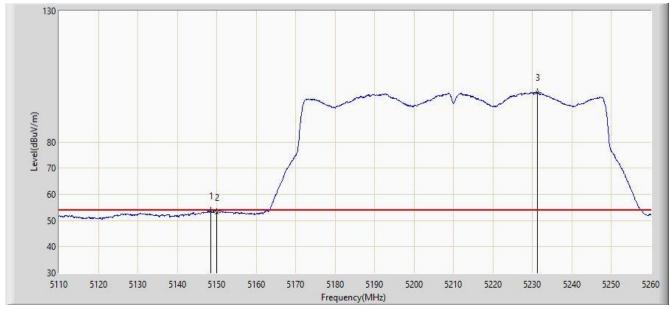
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 204 of 214





Site: AC1	Time: 2018/12/11 - 07:23			
Limit: FCC_Part15.209_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11acVHT80+80 at Channel 5210MHz Ant 0+1+2+3				



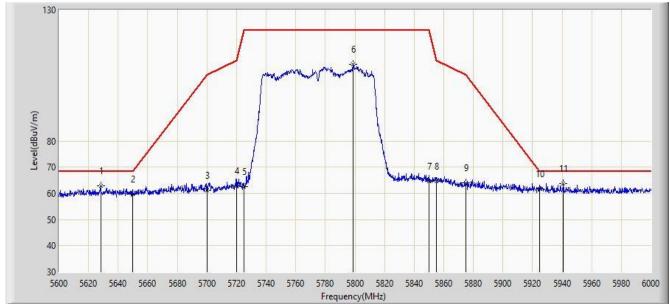
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5148.400	53.623	47.064	-0.377	54.000	6.559	AV
2			5150.000	52.926	46.364	-1.074	54.000	6.562	AV
3		*	5231.200	98.915	92.508	44.915	54.000	6.407	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 205 of 214



Site: AC1	Time: 2018/12/11 - 08:15			
Limit: FCC_Part15.407_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11acVHT80+80 at Channel 5775MHz Ant 0+1+2+3				



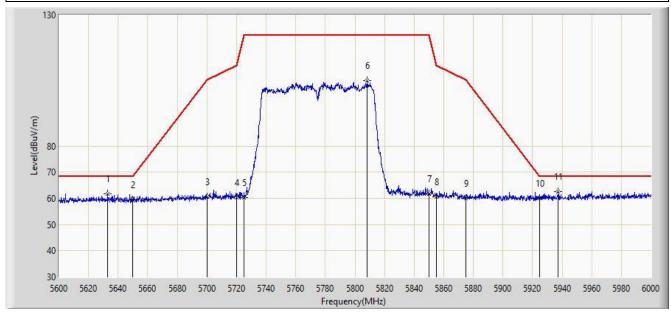
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5628.200	62.833	55.826	-5.367	68.200	7.007	PK
2			5650.000	59.662	52.657	-8.538	68.200	7.005	PK
3			5700.000	61.151	53.986	-44.049	105.200	7.165	PK
4			5720.000	62.830	55.531	-47.970	110.800	7.299	PK
5			5725.000	62.656	55.328	-59.544	122.200	7.328	PK
6			5798.800	109.201	101.648	-12.999	122.200	7.553	PK
7			5850.000	64.720	56.947	-57.480	122.200	7.774	PK
8			5855.000	64.446	56.670	-46.354	110.800	7.775	PK
9			5875.000	63.868	56.050	-41.332	105.200	7.818	PK
10			5925.000	61.572	53.753	-6.628	68.200	7.819	PK
11		*	5940.800	63.695	55.858	-4.505	68.200	7.837	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

FCC ID: TYLFSE2200 Page Number: 206 of 214



Site: AC1	Time: 2018/12/11 - 08:18			
Limit: FCC_Part15.407_RE(3m)	Engineer: Max Wang			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
Flobe. BBHA9120D_1-10GHZ	Folanty. Honzontal			
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz			
LOT. 7 Signal Sapprille Lye	F 0We1. AC 120 7/00/12			
Test Mode: Transmit by 802.11acVHT80+80 at Channel 5775MHz Ant 0+1+2+3				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5633.000	61.624	54.625	-6.576	68.200	6.999	PK
2			5650.000	59.346	52.341	-8.854	68.200	7.005	PK
3			5700.000	60.645	53.480	-44.555	105.200	7.165	PK
4			5720.000	60.144	52.845	-50.656	110.800	7.299	PK
5			5725.000	60.318	52.990	-61.882	122.200	7.328	PK
6			5808.400	104.900	97.315	-17.300	122.200	7.586	PK
7			5850.000	61.804	54.031	-60.396	122.200	7.774	PK
8			5855.000	60.559	52.783	-50.241	110.800	7.775	PK
9			5875.000	59.923	52.105	-45.277	105.200	7.818	PK
10			5925.000	59.935	52.116	-8.265	68.200	7.819	PK
11		*	5937.400	62.506	54.674	-5.694	68.200	7.832	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)



7.9. AC Conducted Emissions Measurement

7.9.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits							
Frequency (MHz)	QP (dBuV)	AV (dBuV)					
0.15 ~ 0.50	66 ~ 56	56 ~ 46					
0.50 ~ 5.0	56	46					
5.0 ~ 30	60	50					

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.9.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

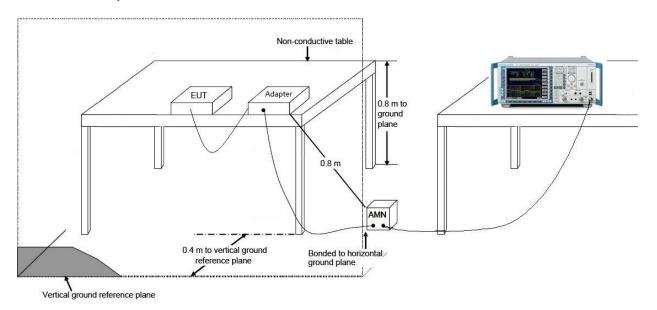
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

FCC ID: TYLFSE2200 Page Number: 208 of 214



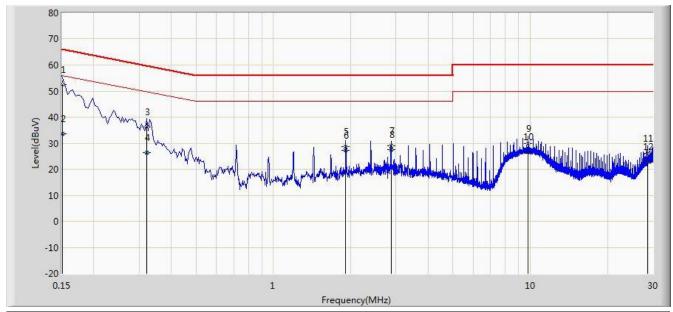
7.9.3. Test Setup





7.9.4.Test Result

Site: SR2	Time: 2019/01/03 - 09:10
Limit: FCC_Part15.207_CE_AC Power	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode 1	



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1		*	0.151	52.348	41.312	-13.584	65.932	11.036	QP
2			0.151	33.729	22.693	-22.203	55.932	11.036	AV
3			0.322	36.093	26.071	-23.562	59.655	10.022	QP
4			0.322	26.347	16.325	-23.308	49.655	10.022	AV
5			1.914	28.693	18.819	-27.307	56.000	9.875	QP
6			1.914	27.244	17.369	-18.756	46.000	9.875	AV
7			2.870	28.995	19.148	-27.005	56.000	9.847	QP
8			2.870	27.532	17.685	-18.468	46.000	9.847	AV
9			9.806	29.724	19.583	-30.276	60.000	10.141	QP
10			9.806	26.764	16.623	-23.236	50.000	10.141	AV
11			28.702	26.014	15.749	-33.986	60.000	10.266	QP
12			28.702	22.967	12.701	-27.033	50.000	10.266	AV

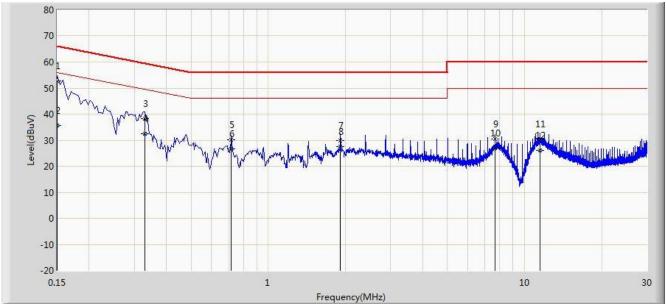
Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

FCC ID: TYLFSE2200 Page Number: 210 of 214



Site: SR2	Time: 2019/01/03 - 09:15				
Limit: FCC_Part15.207_CE_AC Power	Engineer: Liz Yuan				
Probe: ENV216_101683_Filter On	Polarity: Neutral				
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz				
Test Mode 1					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1		*	0.150	52.747	41.605	-13.253	66.000	11.142	QP
2			0.150	35.683	24.541	-20.317	56.000	11.142	AV
3			0.330	38.353	28.293	-21.098	59.451	10.060	QP
4			0.330	32.451	22.392	-17.000	49.451	10.060	AV
5			0.718	30.005	19.941	-25.995	56.000	10.065	QP
6			0.718	26.702	16.638	-19.298	46.000	10.065	AV
7			1.914	29.999	20.122	-26.001	56.000	9.877	QP
8			1.914	27.496	17.620	-18.504	46.000	9.877	AV
9			7.654	30.334	20.159	-29.666	60.000	10.175	QP
10			7.654	27.069	16.894	-22.931	50.000	10.175	AV
11			11.482	30.475	20.348	-29.525	60.000	10.127	QP
12			11.482	26.007	15.880	-23.993	50.000	10.127	AV

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Page Number: 212 of 214



FCC ID: TYLFSE2200

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **7Signal Sapphire Eye** is in compliance with Part 15E of the FCC Rules.

———— The End ————



Appendix A - Test Setup Photograph

Refer to "1811RSU031-UT" file.

FCC ID: TYLFSE2200 Page Number: 213 of 214



Appendix B - EUT Photograph

Refer to "1811RSU031-UE" file.

FCC ID: TYLFSE2200 Page Number: 214 of 214