



CSE_Pine R2_Antenna set 10 (Harmonic 8GHz ~ 40GHz)_P to M Appendix E.15

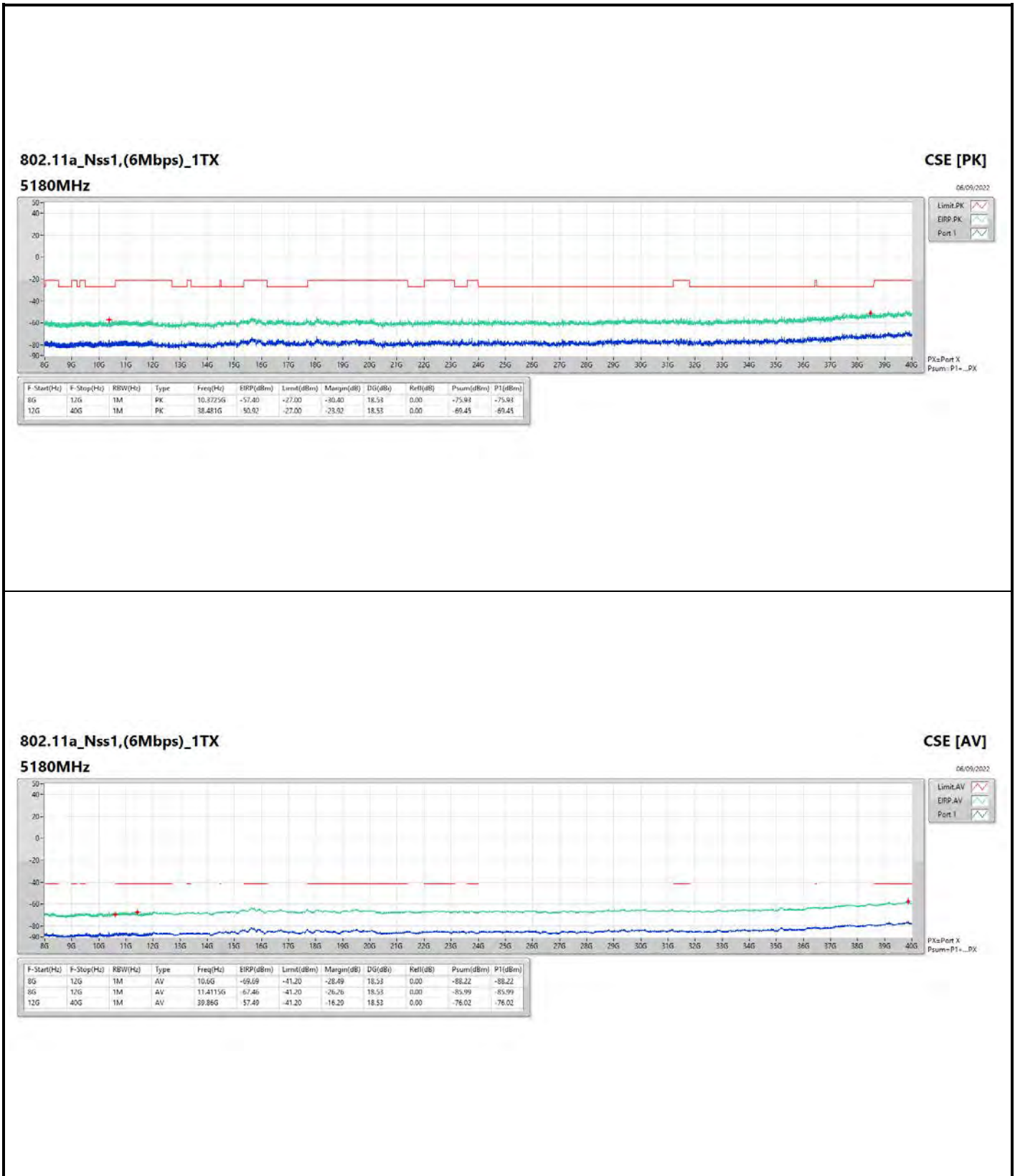
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5785MHz	Pass	12G	40G	AV	39.8145G	18.53	-76.27	-76.97	-76.70	-76.55	-70.59	-52.06	-41.20	-10.86
5785MHz	Pass	8G	12G	PK	10.558G	18.53	-78.15	-77.04	-79.55	-77.61	-71.97	-53.44	-27.00	-26.44
5785MHz	Pass	8G	12G	PK	11.5725G	18.53	-75.15	-73.88	-78.49	-72.65	-68.54	-50.01	-21.20	-28.81
5785MHz	Pass	12G	40G	PK	38.397G	18.53	-69.61	-69.56	-70.85	-73.14	-64.55	-46.02	-27.00	-19.02
5825MHz	Pass	8G	12G	AV	11.65G	18.53	-88.41	-84.66	-83.72	-84.86	-79.07	-60.54	-41.20	-19.34
5825MHz	Pass	12G	40G	AV	39.8215G	18.53	-76.87	-76.46	-76.60	-76.95	-70.69	-52.16	-41.20	-10.96
5825MHz	Pass	8G	12G	PK	8.0135G	18.53	-79.33	-78.28	-79.12	-75.77	-71.85	-53.32	-27.00	-26.32
5825MHz	Pass	8G	12G	PK	11.6525G	18.53	-80.01	-74.71	-73.44	-77.05	-69.63	-51.10	-21.20	-29.90
5825MHz	Pass	12G	40G	PK	38.4215G	18.53	-71.77	-69.42	-72.11	-69.08	-64.37	-45.84	-27.00	-18.84
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	8G	12G	AV	10.6G	18.53	-87.59	-88.25	-88.57	-88.33	-82.15	-63.62	-41.20	-22.42
5180MHz	Pass	8G	12G	AV	10.9315G	18.53	-86.00	-87.13	-87.09	-87.47	-80.87	-62.34	-41.20	-21.14
5180MHz	Pass	12G	40G	AV	39.804G	18.53	-76.35	-76.63	-76.60	-76.76	-70.56	-52.03	-41.20	-10.83
5180MHz	Pass	8G	12G	PK	10.349G	18.53	-79.04	-78.06	-80.73	-77.66	-72.70	-54.17	-27.00	-27.17
5180MHz	Pass	8G	12G	PK	10.5825G	18.53	-78.71	-76.55	-77.61	-78.21	-71.67	-53.14	-27.00	-26.14
5180MHz	Pass	12G	40G	PK	37.809G	18.53	-73.50	-71.70	-70.02	-68.91	-64.68	-46.15	-27.00	-19.15
5200MHz	Pass	8G	12G	AV	10.6G	18.53	-88.47	-87.96	-87.99	-87.45	-81.93	-63.40	-41.20	-22.20
5200MHz	Pass	8G	12G	AV	10.977G	18.53	-87.39	-86.15	-86.66	-87.04	-80.76	-62.23	-41.20	-21.03
5200MHz	Pass	12G	40G	AV	39.853G	18.53	-76.54	-76.77	-76.82	-76.52	-70.64	-52.11	-41.20	-10.91
5200MHz	Pass	8G	12G	PK	10.404G	18.53	-77.15	-77.95	-75.40	-79.14	-71.17	-52.64	-27.00	-25.64
5200MHz	Pass	12G	40G	PK	38.481G	18.53	-71.19	-70.71	-71.76	-69.17	-64.58	-46.05	-27.00	-19.05
5240MHz	Pass	8G	12G	AV	10.6G	18.53	-87.82	-87.75	-87.83	-87.72	-81.76	-63.23	-41.20	-22.03
5240MHz	Pass	8G	12G	AV	11.9745G	18.53	-86.60	-86.97	-86.97	-86.91	-80.84	-62.31	-41.20	-21.11
5240MHz	Pass	12G	40G	AV	39.8215G	18.53	-76.79	-76.38	-76.90	-76.52	-70.62	-52.09	-41.20	-10.89
5240MHz	Pass	8G	12G	PK	10.0015G	18.53	-78.77	-76.39	-78.36	-78.99	-71.98	-53.45	-27.00	-26.45
5240MHz	Pass	8G	12G	PK	10.482G	18.53	-78.41	-77.69	-78.34	-78.26	-72.14	-53.61	-27.00	-26.61
5240MHz	Pass	12G	40G	PK	38.404G	18.53	-69.99	-71.03	-71.43	-70.11	-64.58	-46.05	-27.00	-19.05
5745MHz	Pass	8G	12G	AV	11.4885G	18.53	-81.68	-81.39	-83.45	-84.48	-76.55	-58.02	-41.20	-16.82
5745MHz	Pass	8G	40G	AV	39.8285G	18.53	-75.68	-76.77	-76.90	-76.70	-70.46	-51.93	-41.20	-10.73
5745MHz	Pass	8G	12G	PK	10.5755G	18.53	-79.64	-75.85	-77.97	-79.04	-71.85	-53.32	-27.00	-26.32
5745MHz	Pass	8G	12G	PK	11.4945G	18.53	-72.75	-73.45	-73.88	-76.24	-67.88	-49.35	-21.20	-28.15
5745MHz	Pass	12G	40G	PK	38.4495G	18.53	-72.19	-69.98	-73.59	-70.62	-65.36	-46.83	-27.00	-19.83
5785MHz	Pass	8G	12G	AV	11.57G	18.53	-85.08	-83.87	-85.67	-82.41	-78.05	-59.52	-41.20	-18.32
5785MHz	Pass	12G	40G	AV	39.825G	18.53	-76.93	-77.01	-75.89	-76.71	-70.59	-52.06	-41.20	-10.86
5785MHz	Pass	8G	12G	PK	10.0655G	18.53	-78.01	-79.19	-78.51	-76.08	-71.76	-53.23	-27.00	-26.23
5785MHz	Pass	8G	12G	PK	11.579G	18.53	-75.90	-70.65	-79.54	-75.04	-68.12	-49.59	-21.20	-28.39
5785MHz	Pass	12G	40G	PK	38.397G	18.53	-71.32	-68.23	-70.67	-70.94	-64.09	-45.56	-27.00	-18.56
5825MHz	Pass	8G	12G	AV	11.6515G	18.53	-88.27	-85.00	-84.69	-84.67	-79.41	-60.88	-41.20	-19.68
5825MHz	Pass	12G	40G	AV	39.8075G	18.53	-77.32	-76.93	-76.90	-75.62	-70.62	-52.09	-41.20	-10.89
5825MHz	Pass	8G	12G	PK	10.012G	18.53	-77.77	-78.32	-77.53	-77.61	-71.78	-53.25	-27.00	-26.25
5825MHz	Pass	8G	12G	PK	11.6415G	18.53	-79.49	-78.71	-72.65	-77.95	-70.22	-51.69	-21.20	-30.49
5825MHz	Pass	12G	40G	PK	37.718G	18.53	-70.27	-71.23	-69.62	-73.06	-64.84	-46.31	-27.00	-19.31
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	8G	12G	AV	10.6G	18.53	-88.23	-87.57	-88.37	-88.15	-82.05	-63.52	-41.20	-22.32
5190MHz	Pass	8G	12G	AV	10.9865G	18.53	-86.79	-86.53	-86.92	-86.74	-80.72	-62.19	-41.20	-20.99
5190MHz	Pass	12G	40G	AV	39.8145G	18.53	-76.77	-76.66	-75.57	-77.33	-70.51	-51.98	-41.20	-10.78
5190MHz	Pass	8G	12G	PK	10.3885G	18.53	-79.49	-78.23	-80.21	-79.18	-73.20	-54.67	-27.00	-27.67
5190MHz	Pass	8G	12G	PK	10.583G	18.53	-78.85	-78.04	-79.01	-76.05	-71.80	-53.27	-27.00	-26.27
5190MHz	Pass	12G	40G	PK	38.4215G	18.53	-71.50	-68.19	-70.59	-71.62	-64.22	-45.69	-27.00	-18.69
5230MHz	Pass	8G	12G	AV	10.6G	18.53	-88.35	-88.54	-88.65	-87.50	-82.22	-63.69	-41.20	-22.49
5230MHz	Pass	8G	12G	AV	11.998G	18.53	-87.16	-86.71	-86.18	-86.84	-80.69	-62.16	-41.20	-20.96
5230MHz	Pass	12G	40G	AV	39.846G	18.53	-75.42	-76.55	-76.28	-76.98	-70.25	-51.72	-41.20	-10.52
5230MHz	Pass	8G	12G	PK	10.0245G	18.53	-77.41	-79.28	-77.48	-76.09	-71.40	-52.87	-27.00	-25.87
5230MHz	Pass	8G	12G	PK	10.454G	18.53	-77.68	-77.67	-79.64	-79.35	-72.47	-53.94	-27.00	-26.94
5230MHz	Pass	12G	40G	PK	38.3935G	18.53	-70.54	-69.97	-70.07	-72.71	-64.67	-46.14	-27.00	-19.14
5755MHz	Pass	8G	12G	AV	11.5045G	18.53	-86.14	-85.10	-82.98	-86.20	-78.88	-60.35	-41.20	-19.15
5755MHz	Pass	12G	40G	AV	39.797G	18.53	-76.67	-76.53	-76.26	-76.99	-70.58	-52.05	-41.20	-10.85
5755MHz	Pass	8G	12G	PK	10.025G	18.53	-76.69	-77.37	-78.58	-78.74	-71.74	-53.21	-27.00	-26.21
5755MHz	Pass	8G	12G	PK	11.5005G	18.53	-75.69	-75.41	-75.82	-75.71	-69.63	-51.10	-21.20	-29.90
5755MHz	Pass	12G	40G	PK	38.383G	18.53	-71.68	-71.05	-69.29	-71.85	-64.82	-46.29	-27.00	-19.29
5795MHz	Pass	8G	12G	AV	11.5965G	18.53	-83.34	-83.59	-84.99	-84.73	-78.08	-59.55	-41.20	-18.35
5795MHz	Pass	12G	40G	AV	39.804G	18.53	-76.50	-75.78	-76.72	-76.15	-70.25	-51.72	-41.20	-10.52
5795MHz	Pass	8G	12G	PK	10.039G	18.53	-78.81	-76.49	-78.76	-78.08	-71.91	-53.38	-27.00	-26.38
5795MHz	Pass	8G	12G	PK	11.599G	18.53	-72.89	-75.07	-76.41	-77.06	-69.03	-50.50	-21.20	-29.30
5795MHz	Pass	12G	40G	PK	38.439G	18.53	-71.78	-69.07	-72.15	-69.26	-64.32	-45.79	-27.00	-18.79
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	8G	12G	AV	10.6G	18.53	-87.52	-87.78	-88.08	-88.39	-81.91	-63.38	-41.20	-22.18
5210MHz	Pass	8G	12G	AV	10.973G	18.53	-86.37	-87.59	-86.19	-86.72	-80.66	-62.13	-41.20	-20.93
5210MHz	Pass	12G	40G	AV	39.846G	18.53	-76.45	-76.70	-76.54	-76.72	-70.58	-52.05	-41.20	-10.85
5210MHz	Pass	8G	12G	PK	10.064G	18.53	-76.75	-78.91	-78.85	-76.23	-71.50	-52.97	-27.00	-25.97

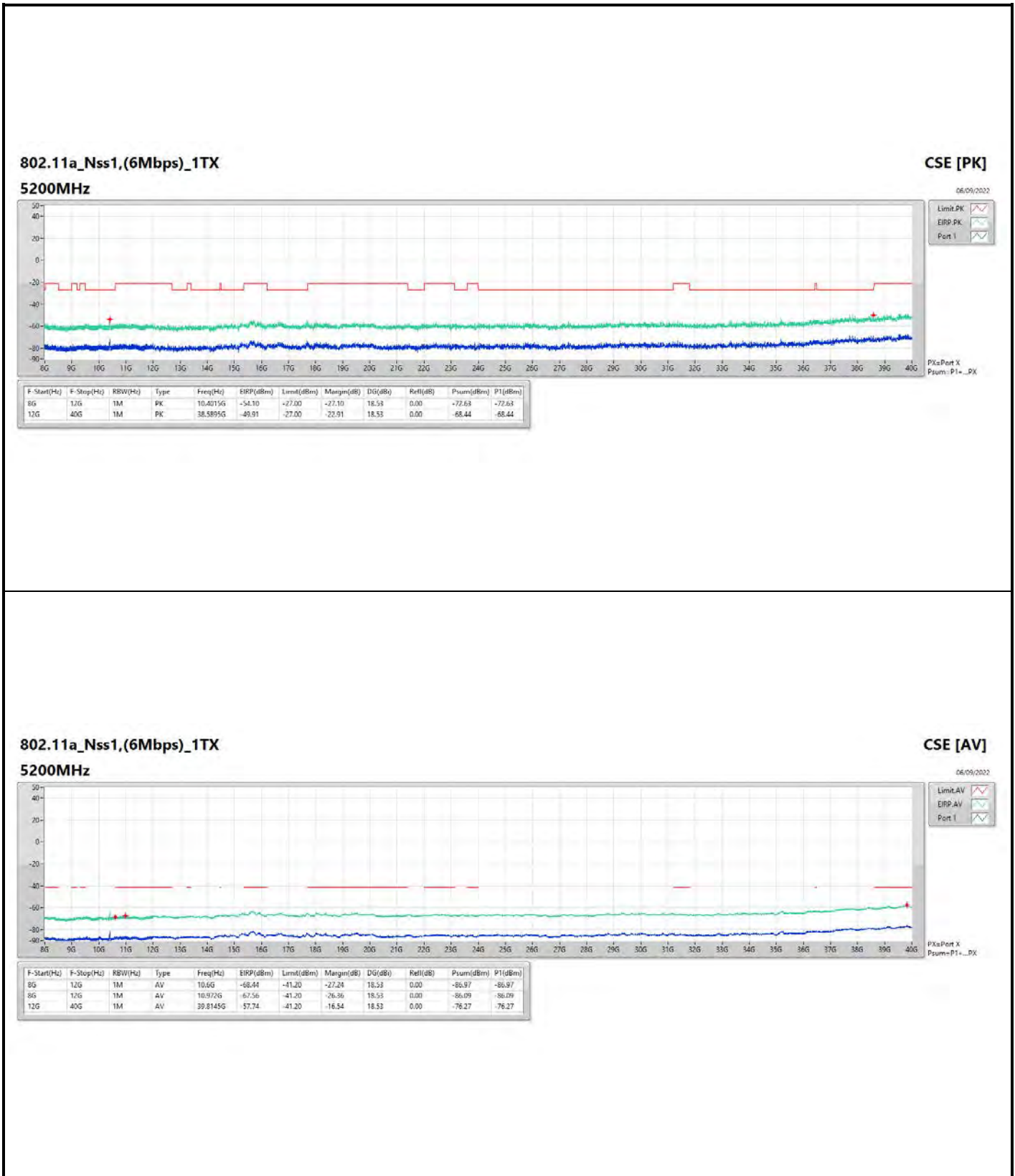


CSE_Pine R2_Antenna set 10 (Harmonic 8GHz ~ 40GHz)_P to M Appendix E.15

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5210MHz	Pass	8G	12G	PK	10.452G	18.53	-78.21	-77.85	-79.69	-80.20	-72.86	-54.33	-27.00	-27.33
5210MHz	Pass	12G	40G	PK	38.446G	18.53	-69.86	-69.96	-71.83	-71.99	-64.77	-46.24	-27.00	-19.24
5775MHz	Pass	8G	12G	AV	11.5405G	18.53	-87.11	-85.12	-86.83	-86.08	-80.19	-61.66	-41.20	-20.46
5775MHz	Pass	12G	40G	AV	39.804G	18.53	-76.51	-76.39	-76.13	-77.03	-70.48	-51.95	-41.20	-10.75
5775MHz	Pass	8G	12G	PK	10.019G	18.53	-76.78	-79.34	-77.48	-77.87	-71.75	-53.22	-27.00	-26.22
5775MHz	Pass	8G	12G	PK	11.556G	18.53	-76.70	-77.23	-75.23	-77.54	-70.56	-52.03	-21.20	-30.83
5775MHz	Pass	12G	40G	PK	38.488G	18.53	-72.62	-70.02	-71.67	-70.62	-65.10	-46.57	-27.00	-19.57

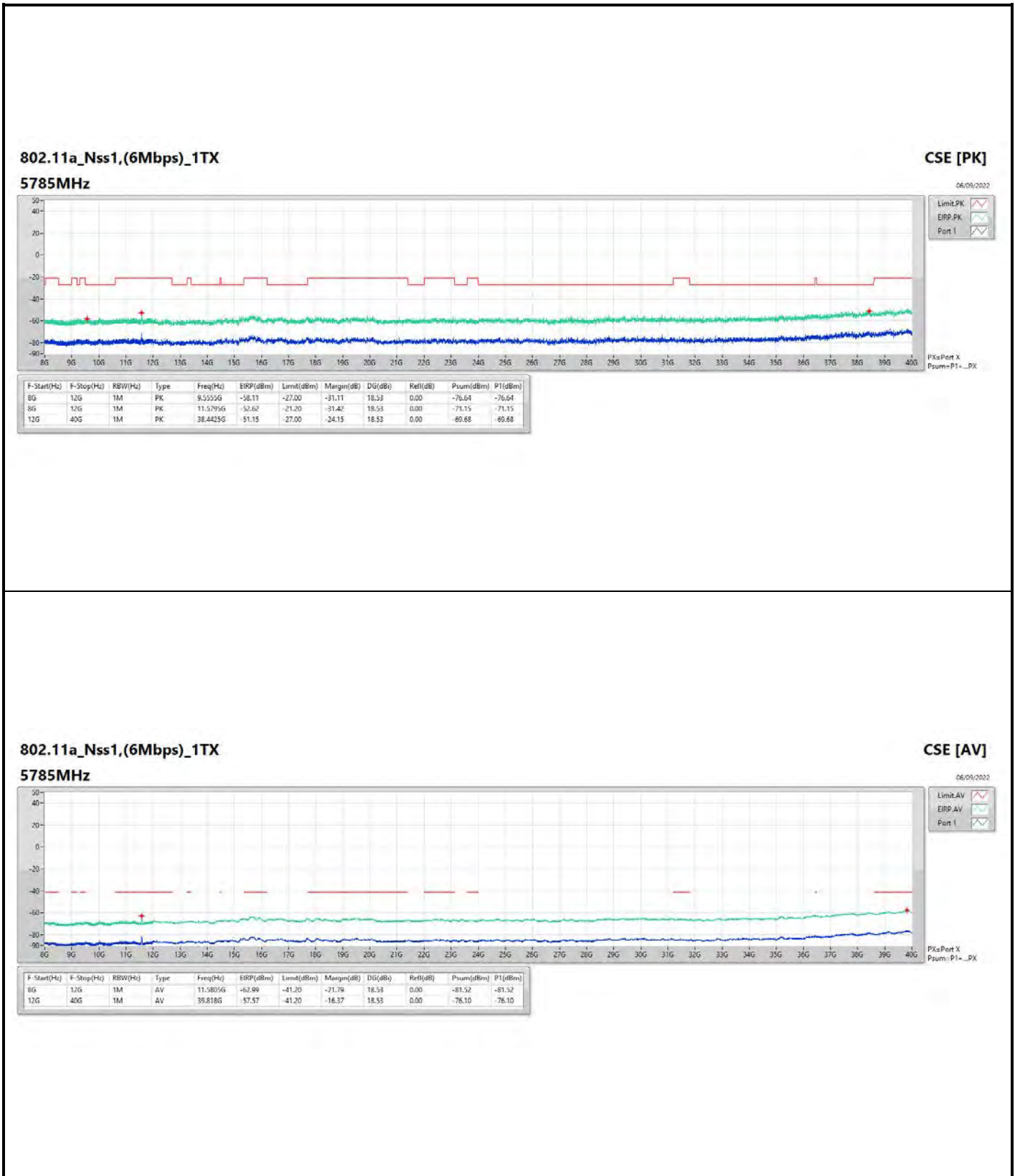
DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX



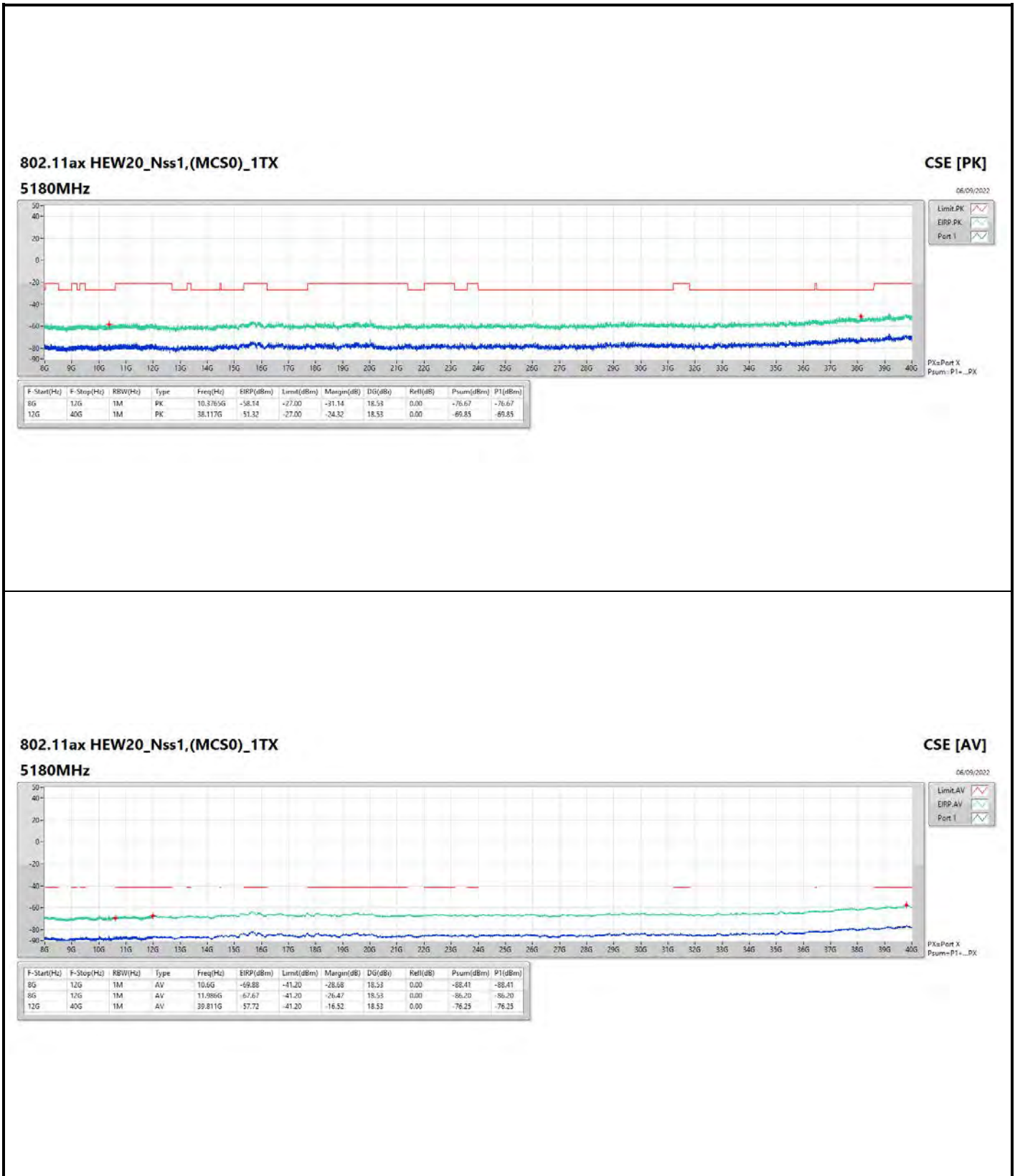


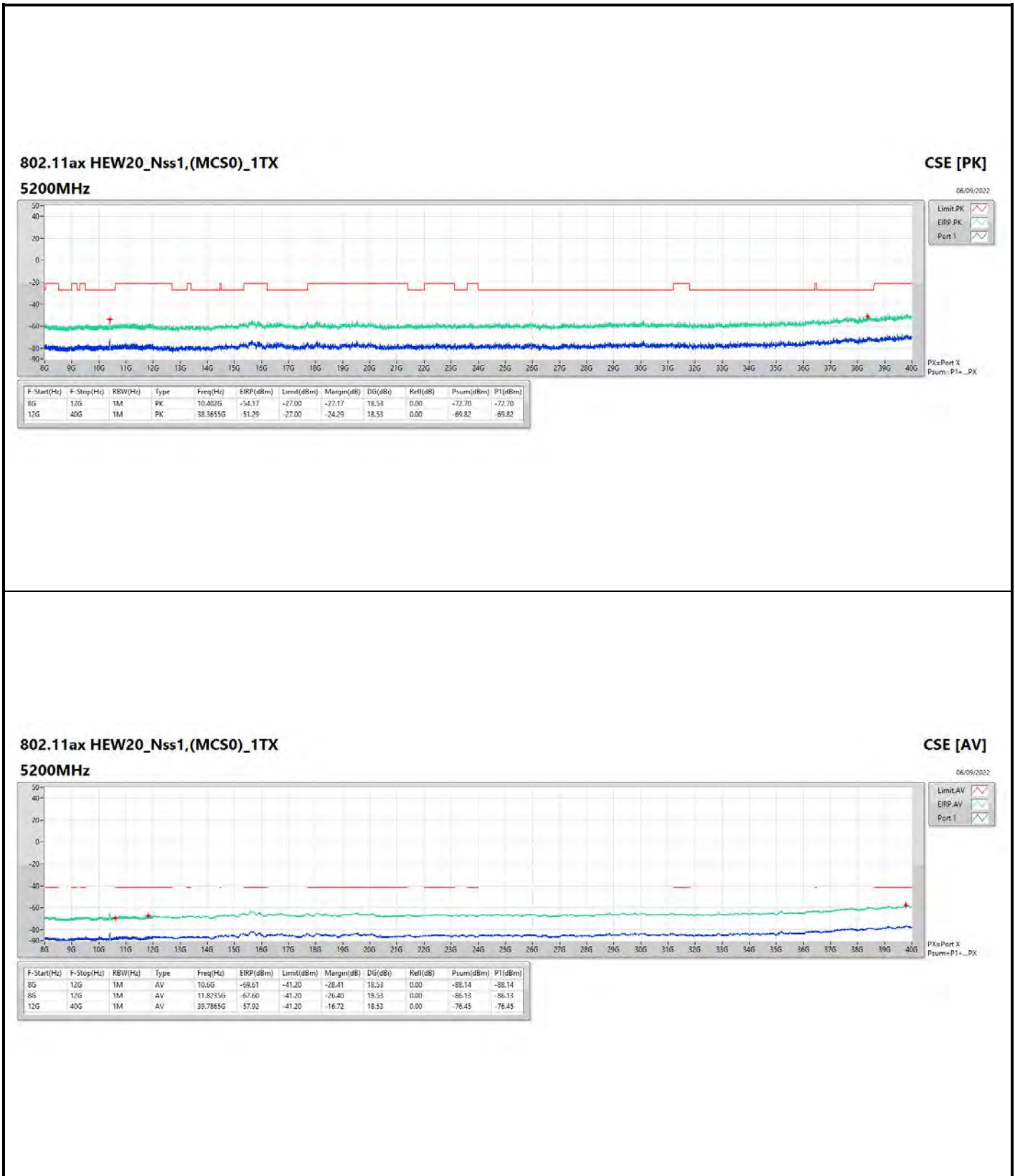


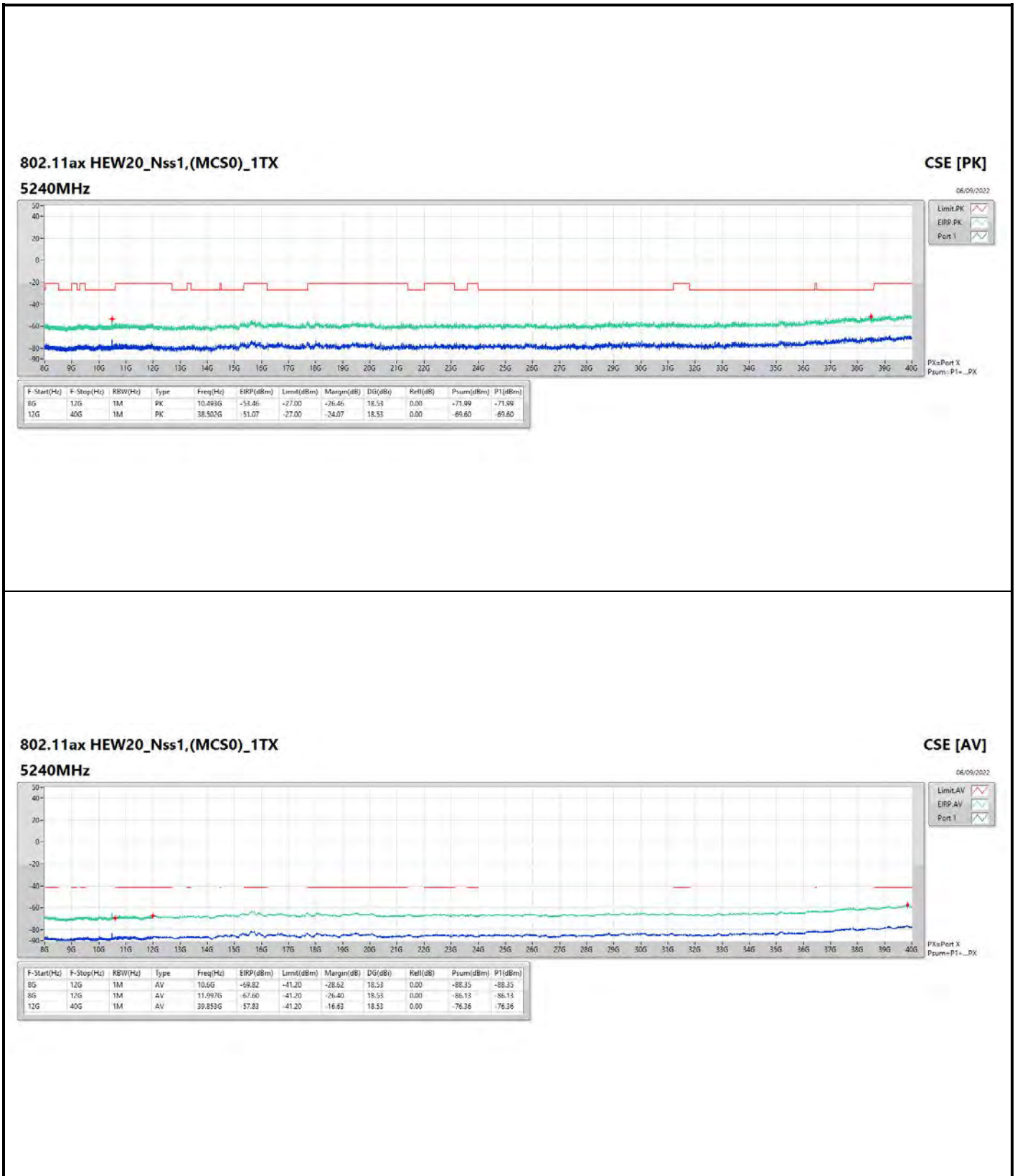




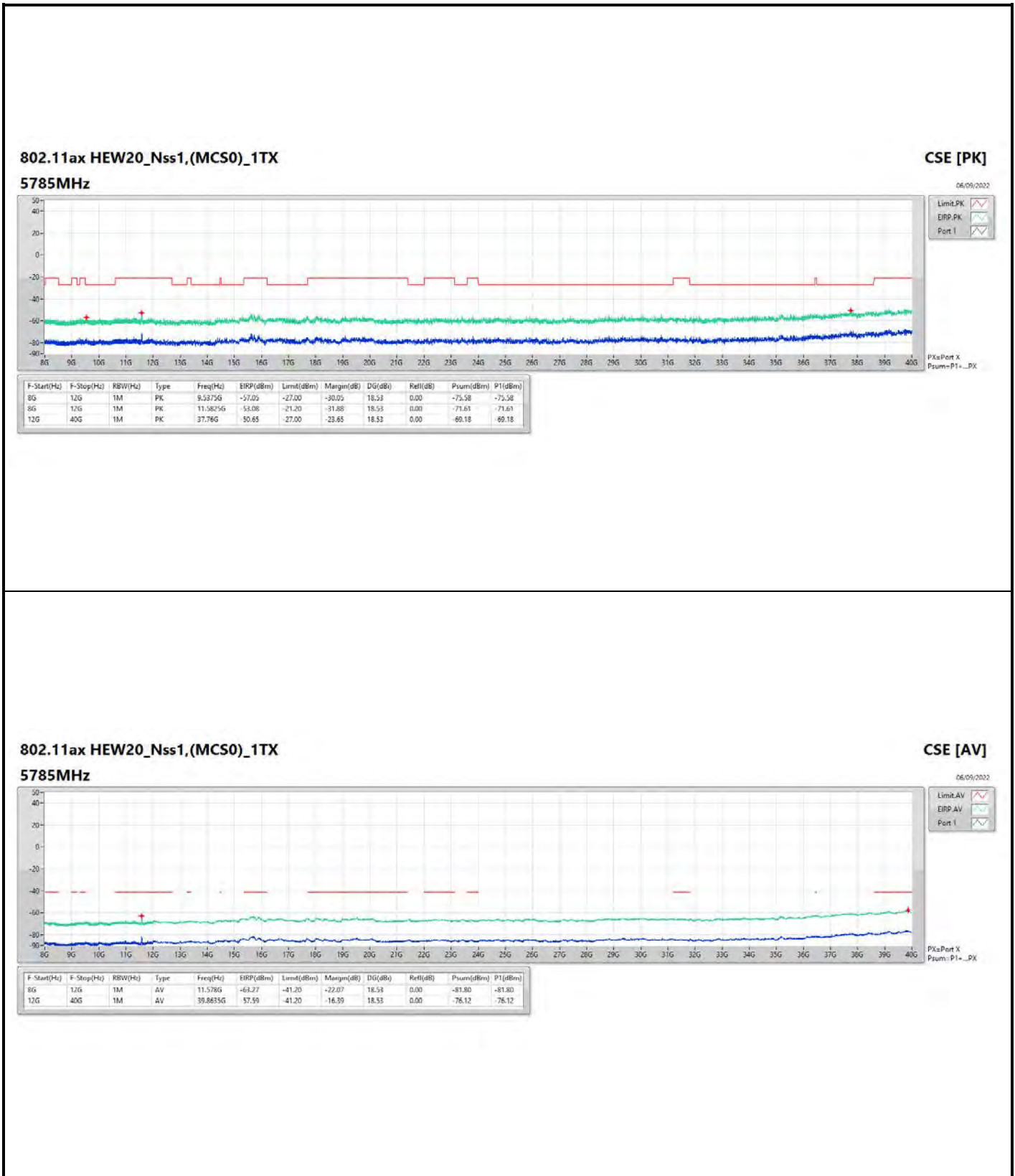


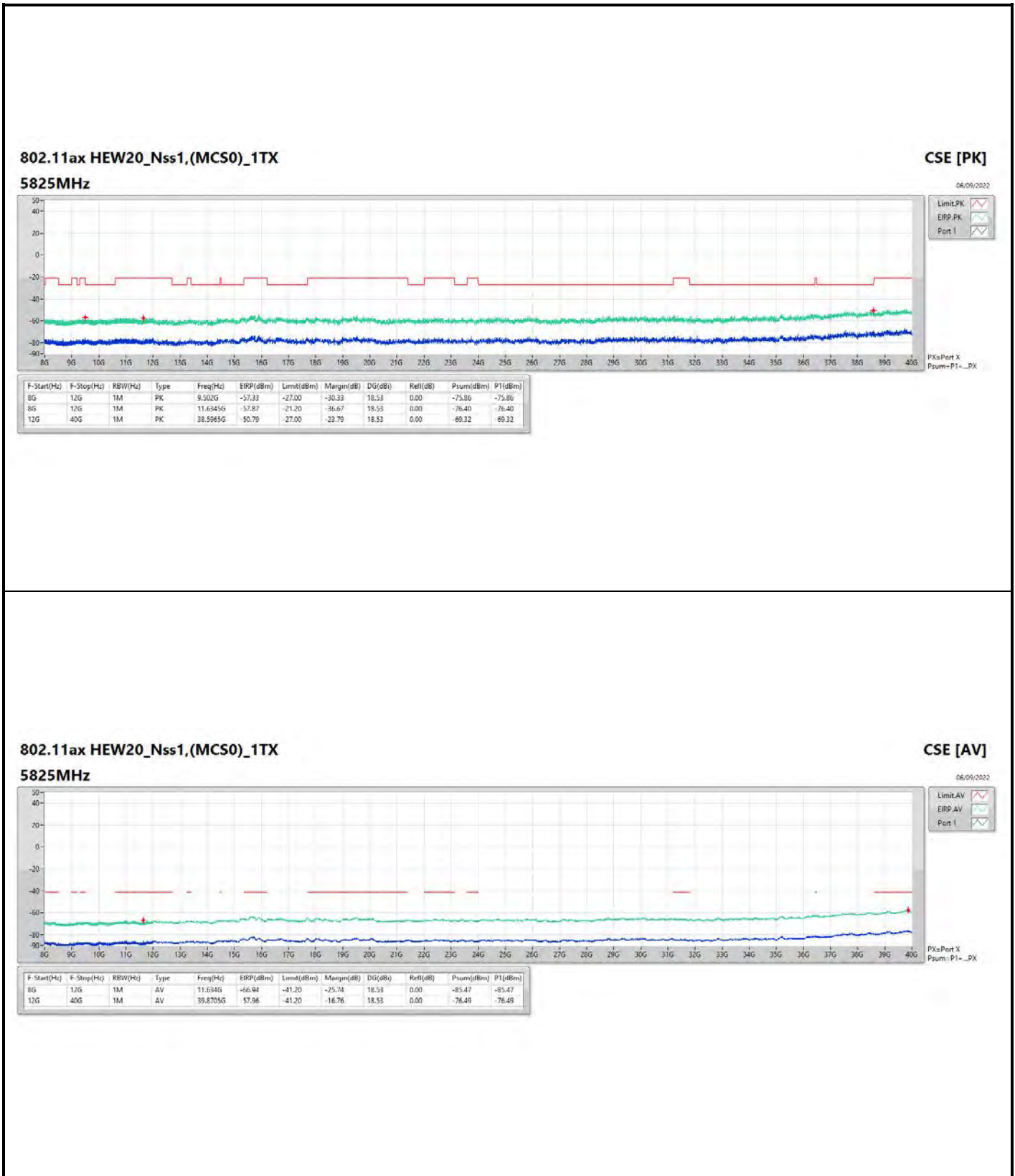


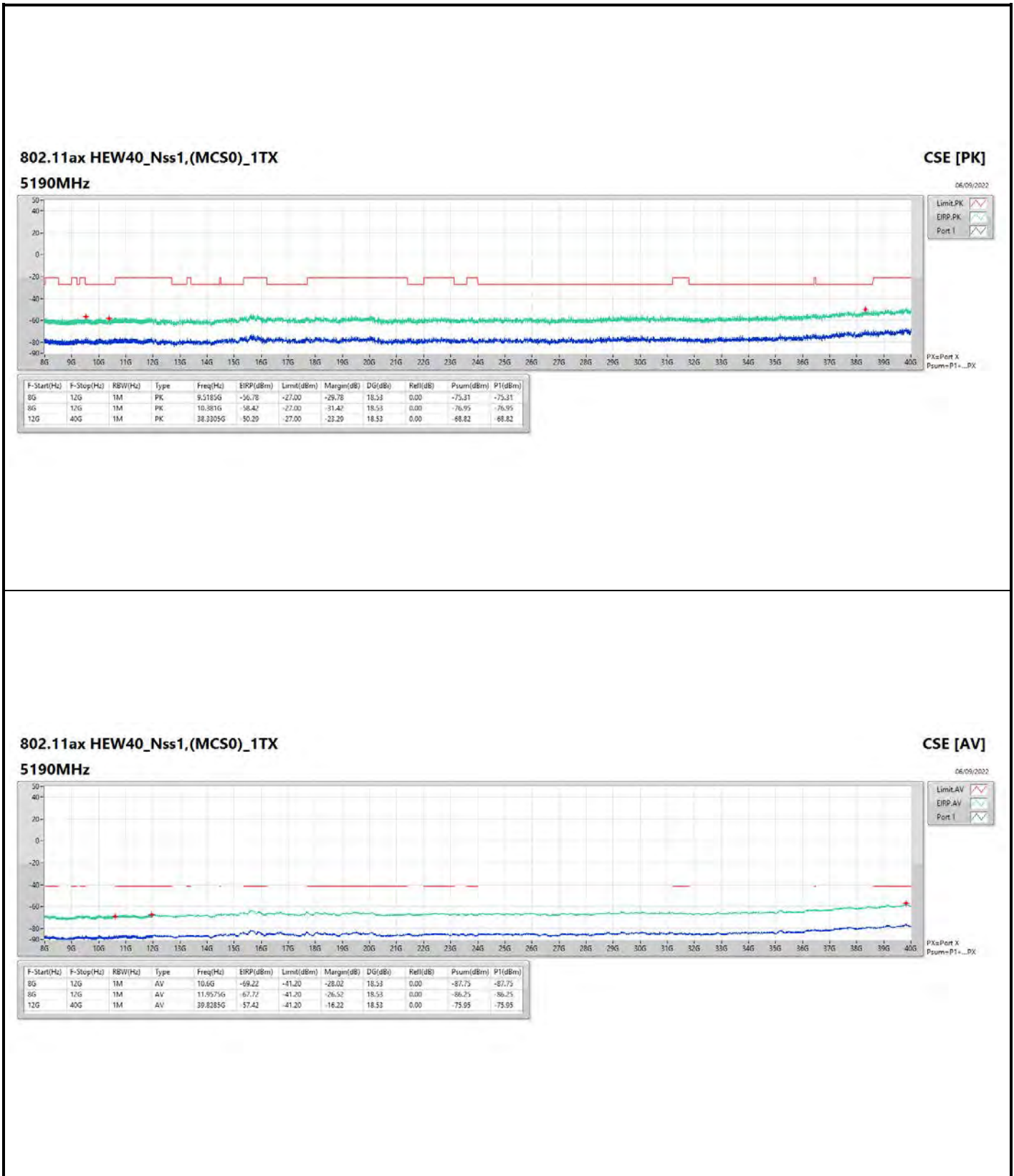






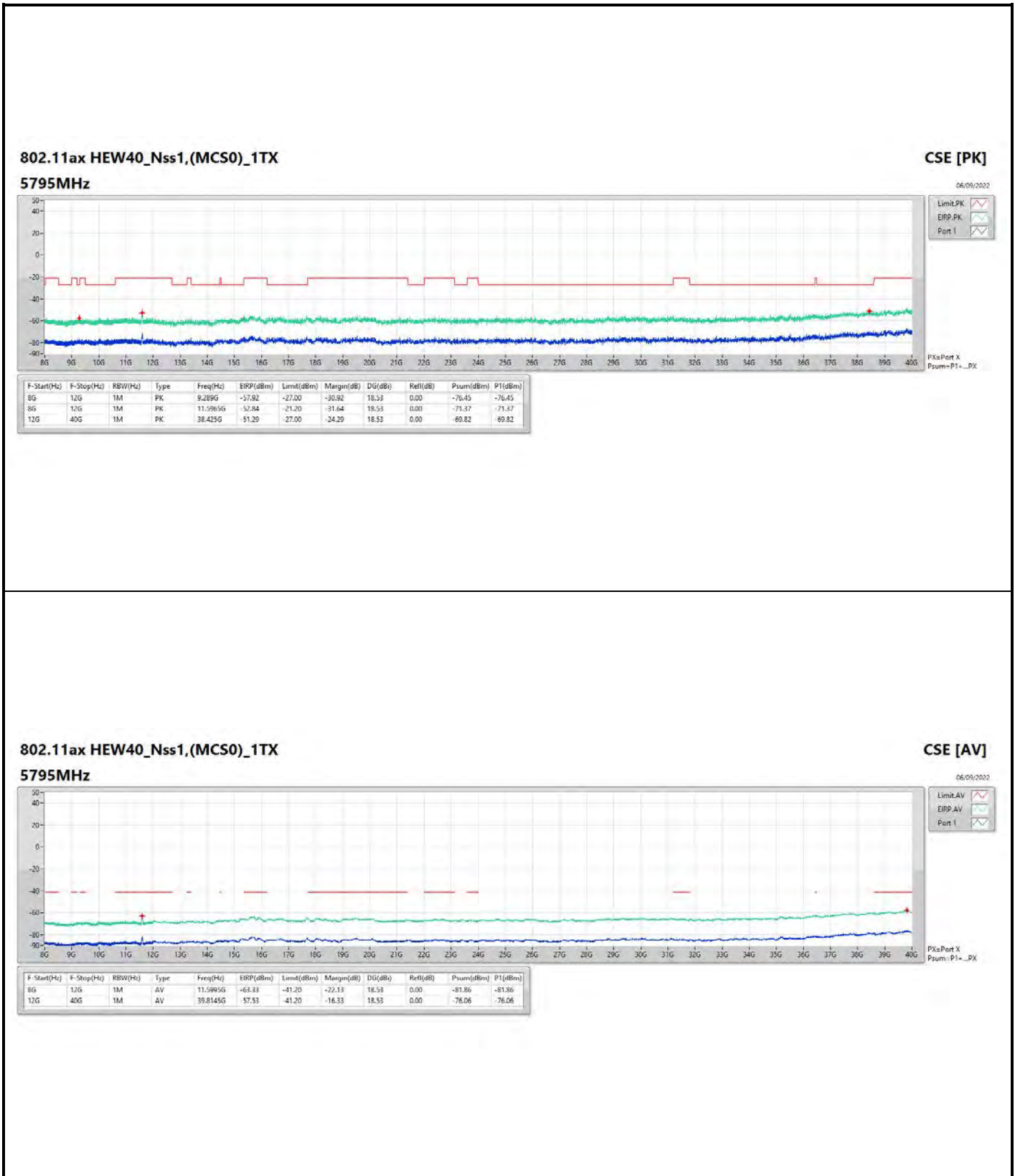


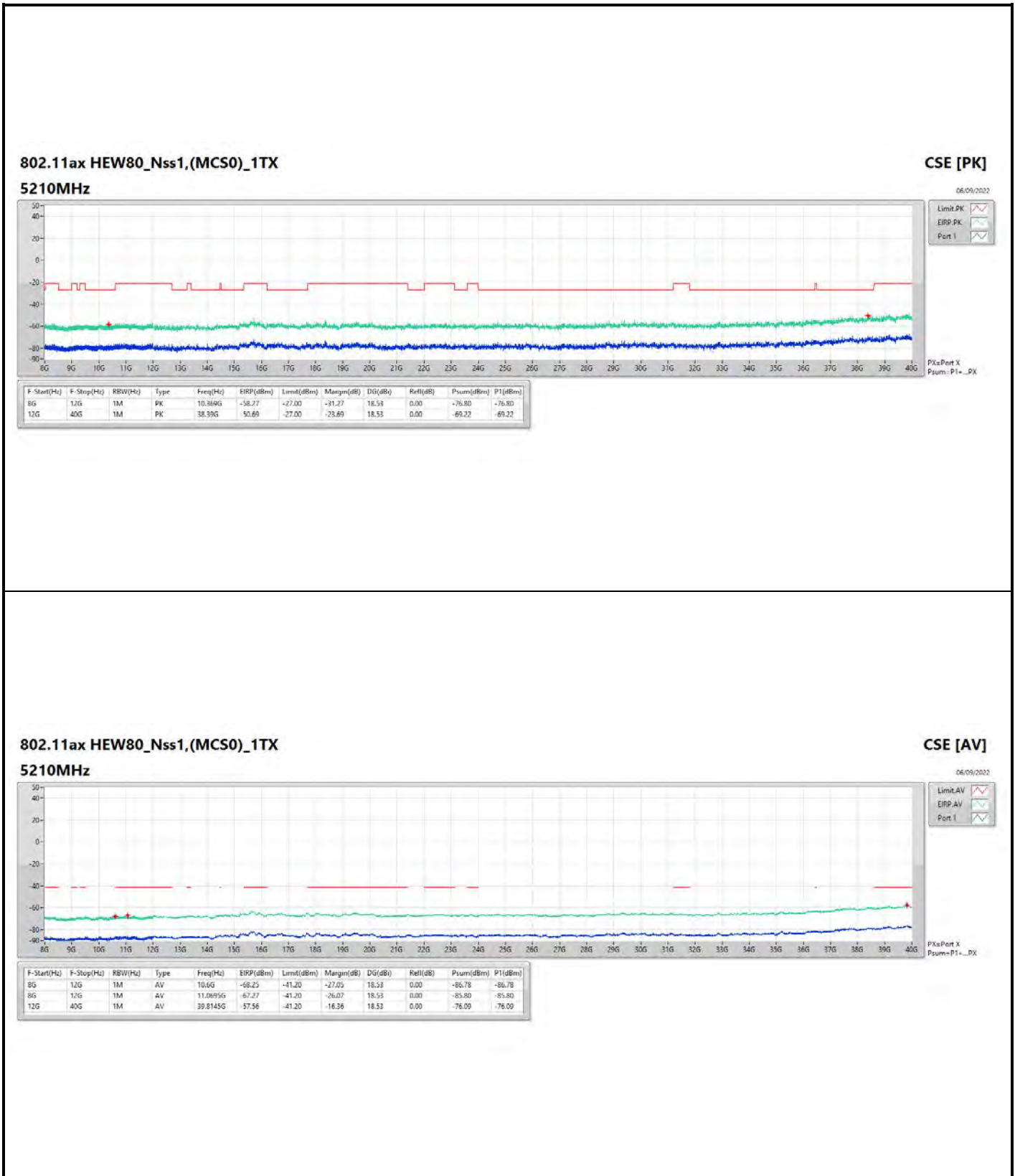


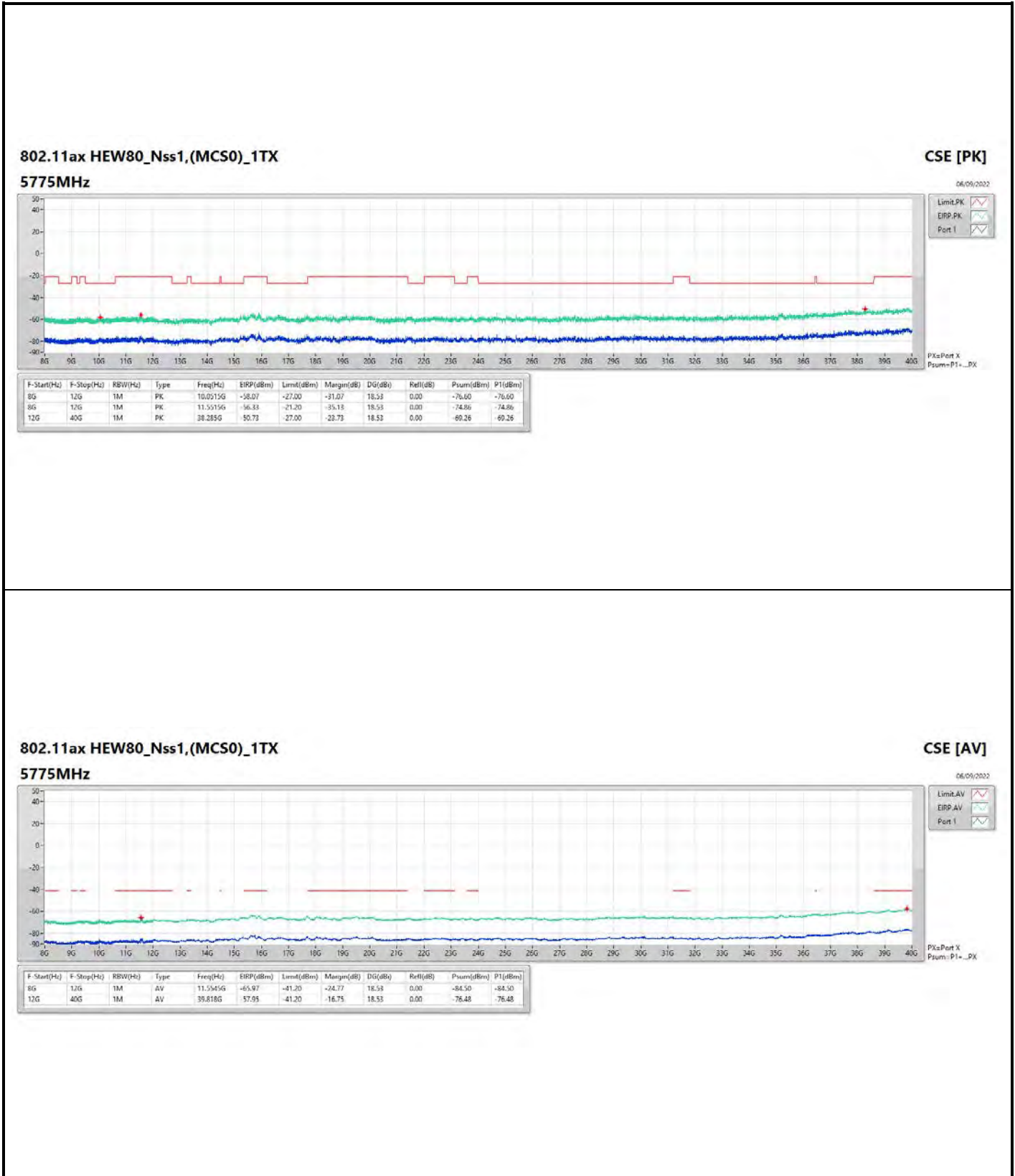


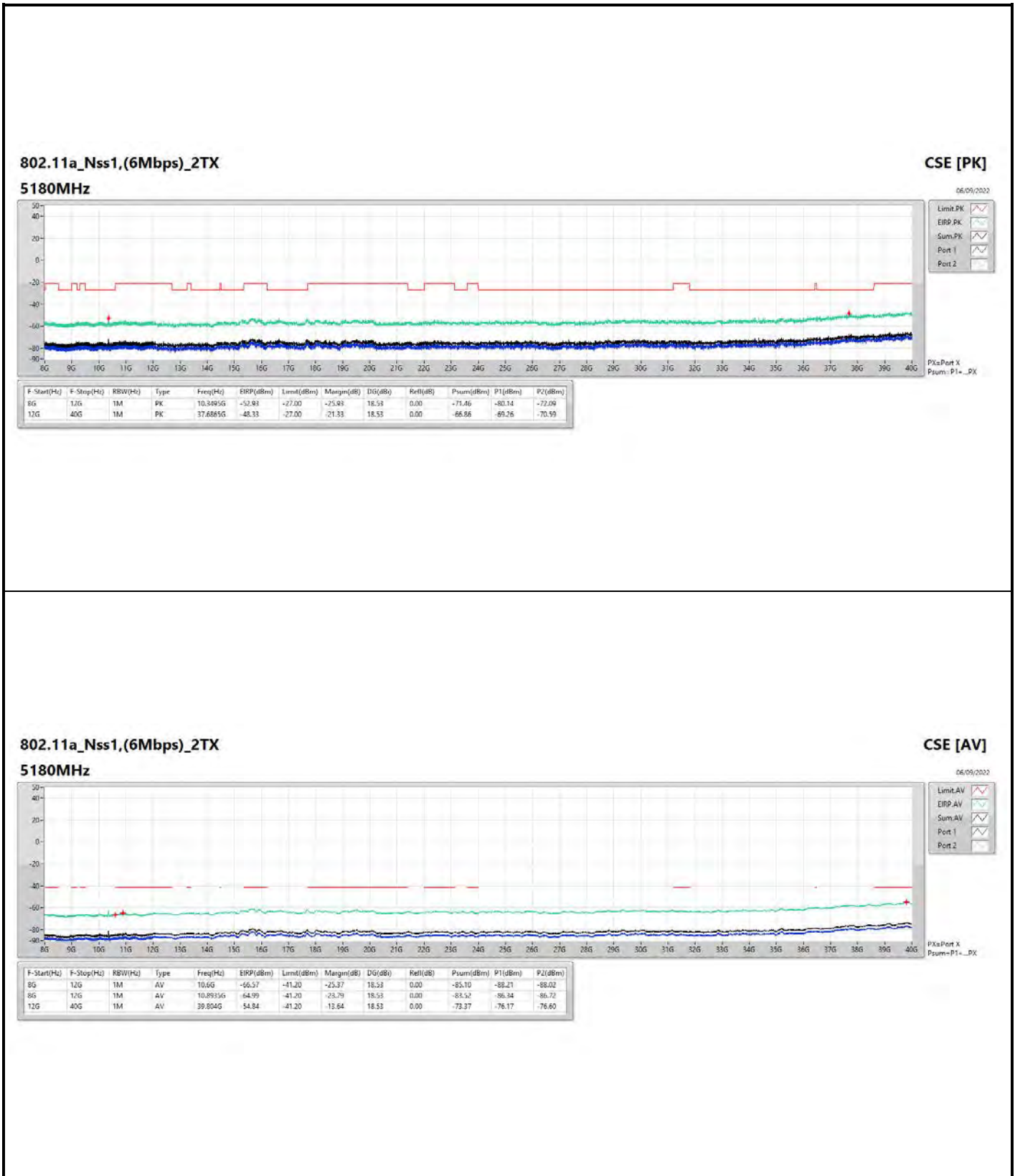


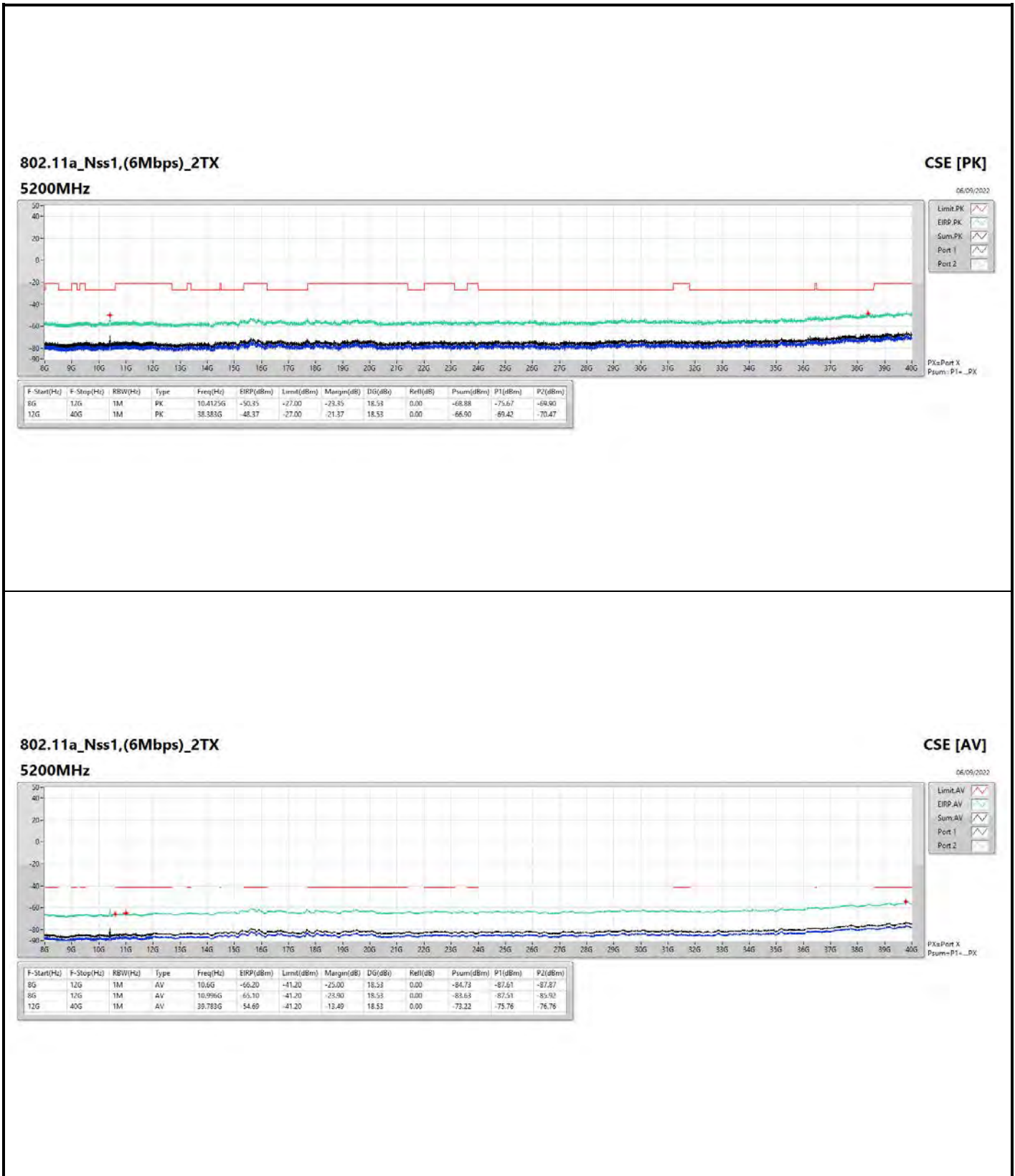


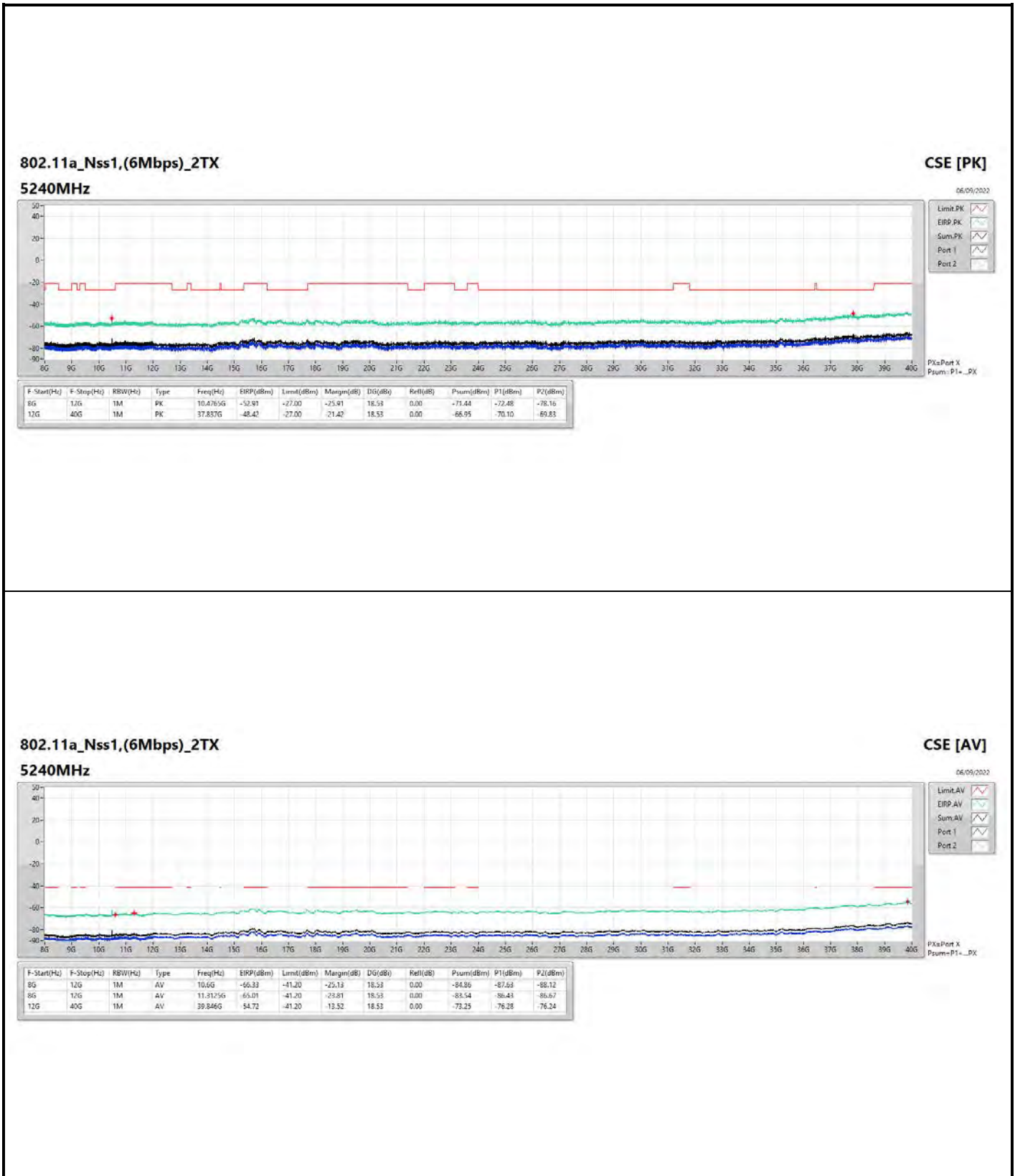


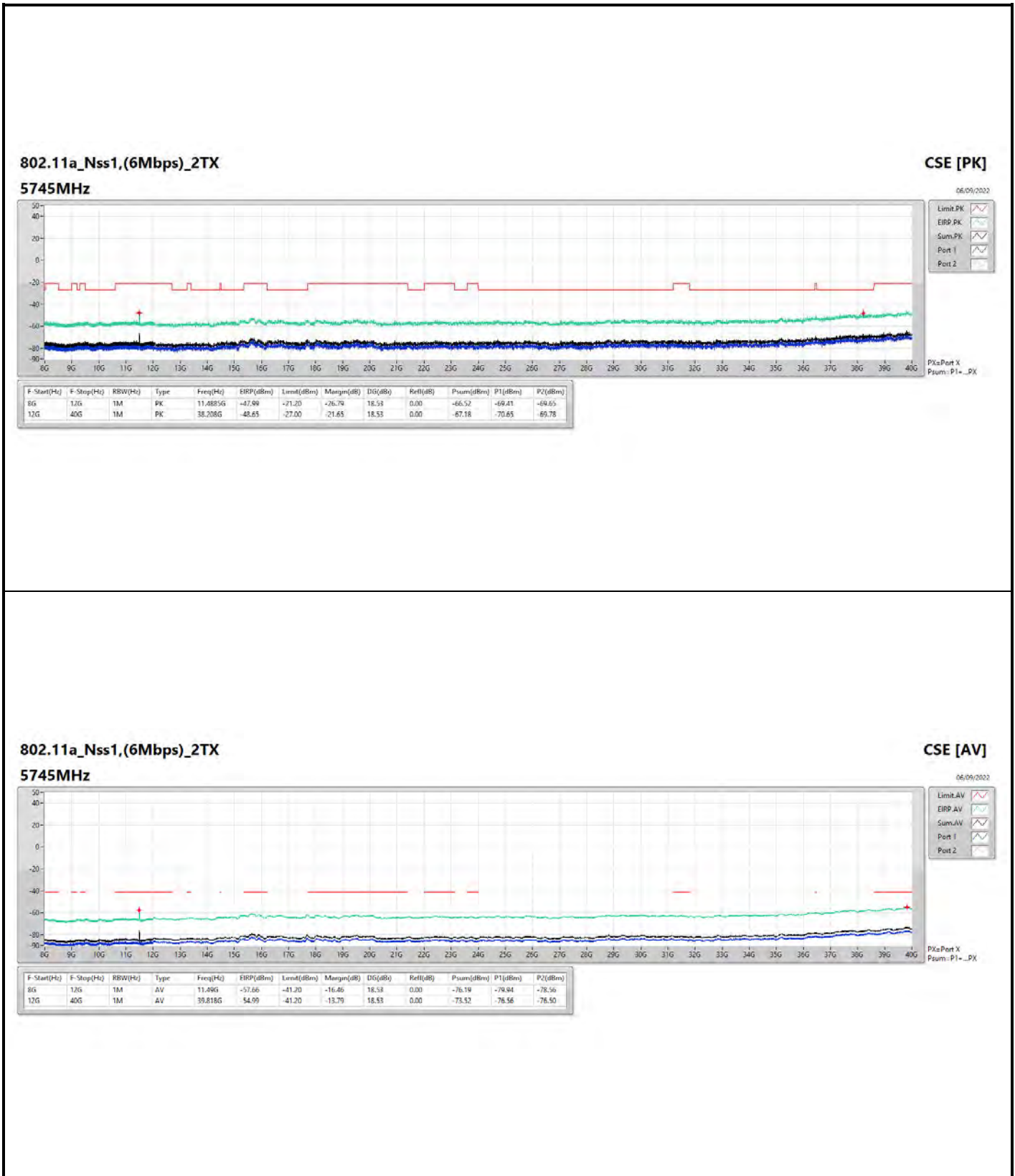




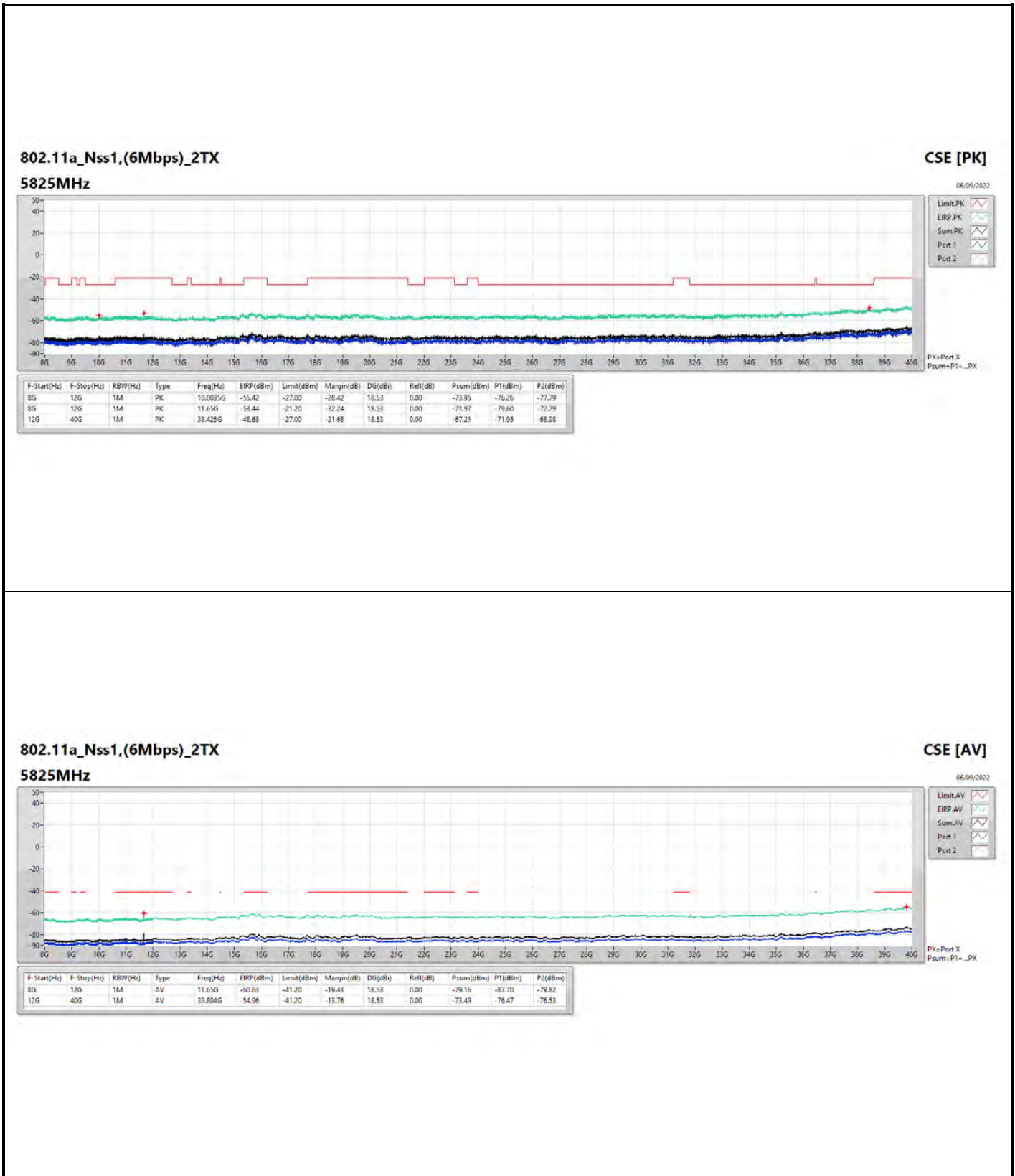


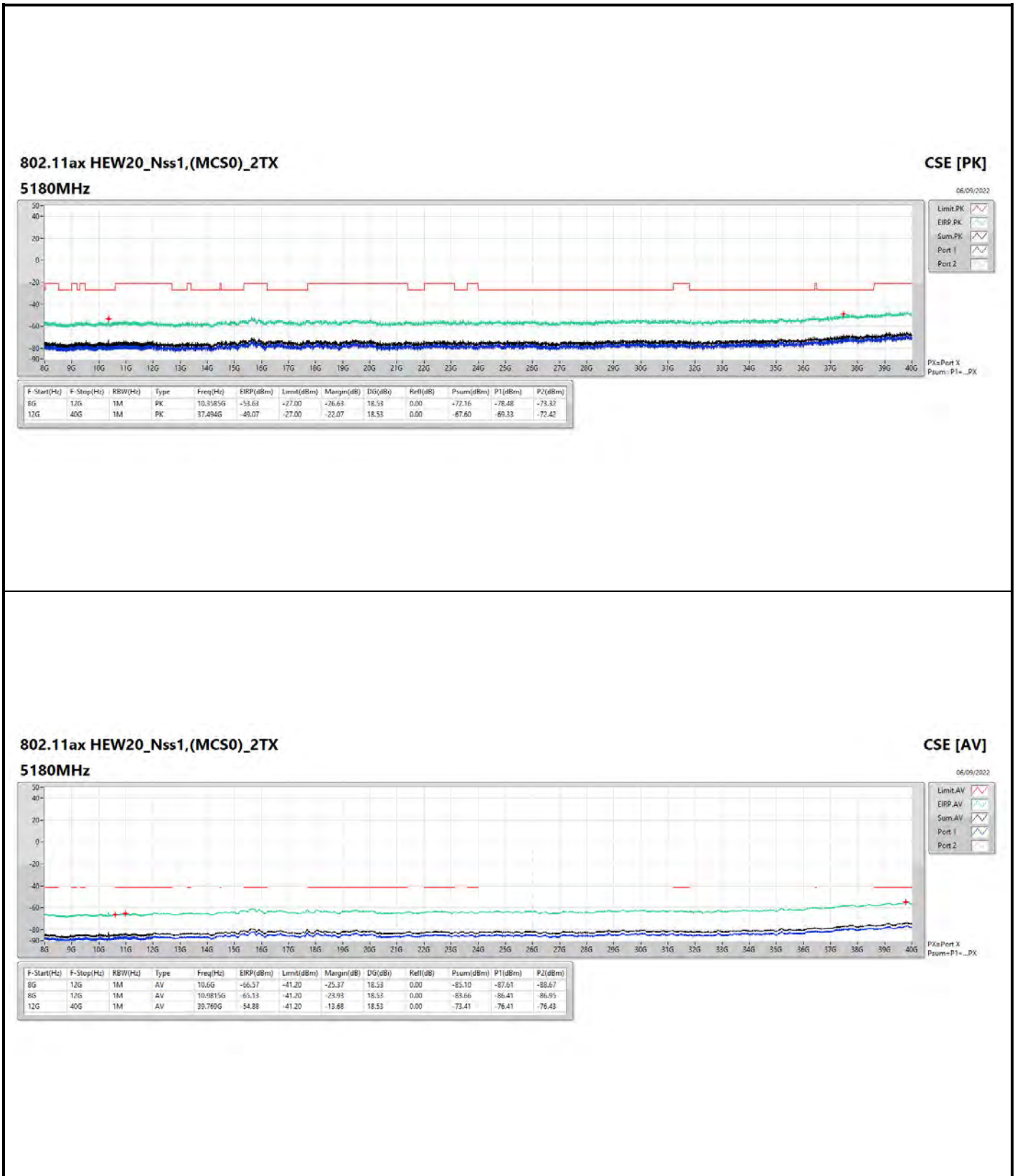


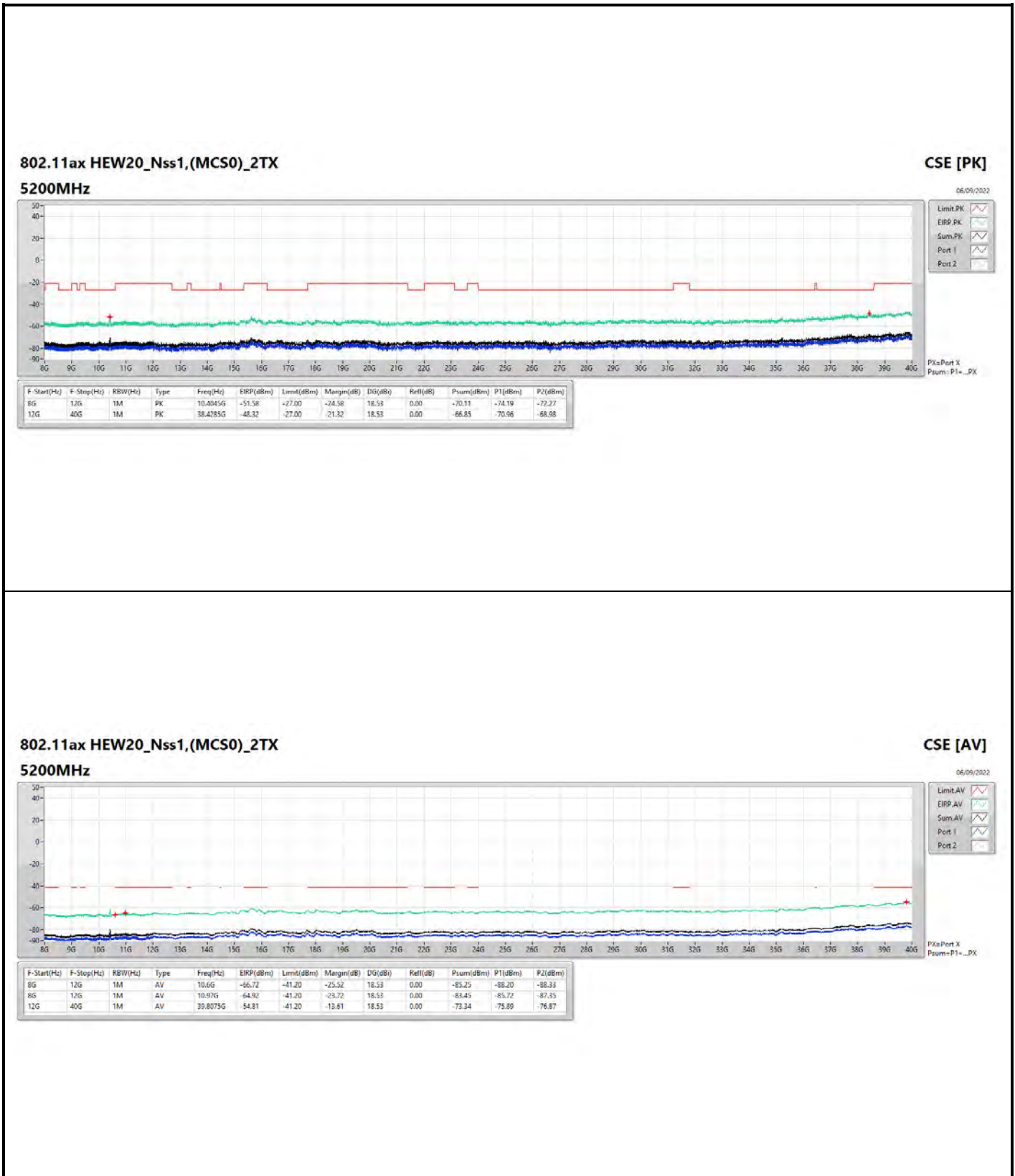


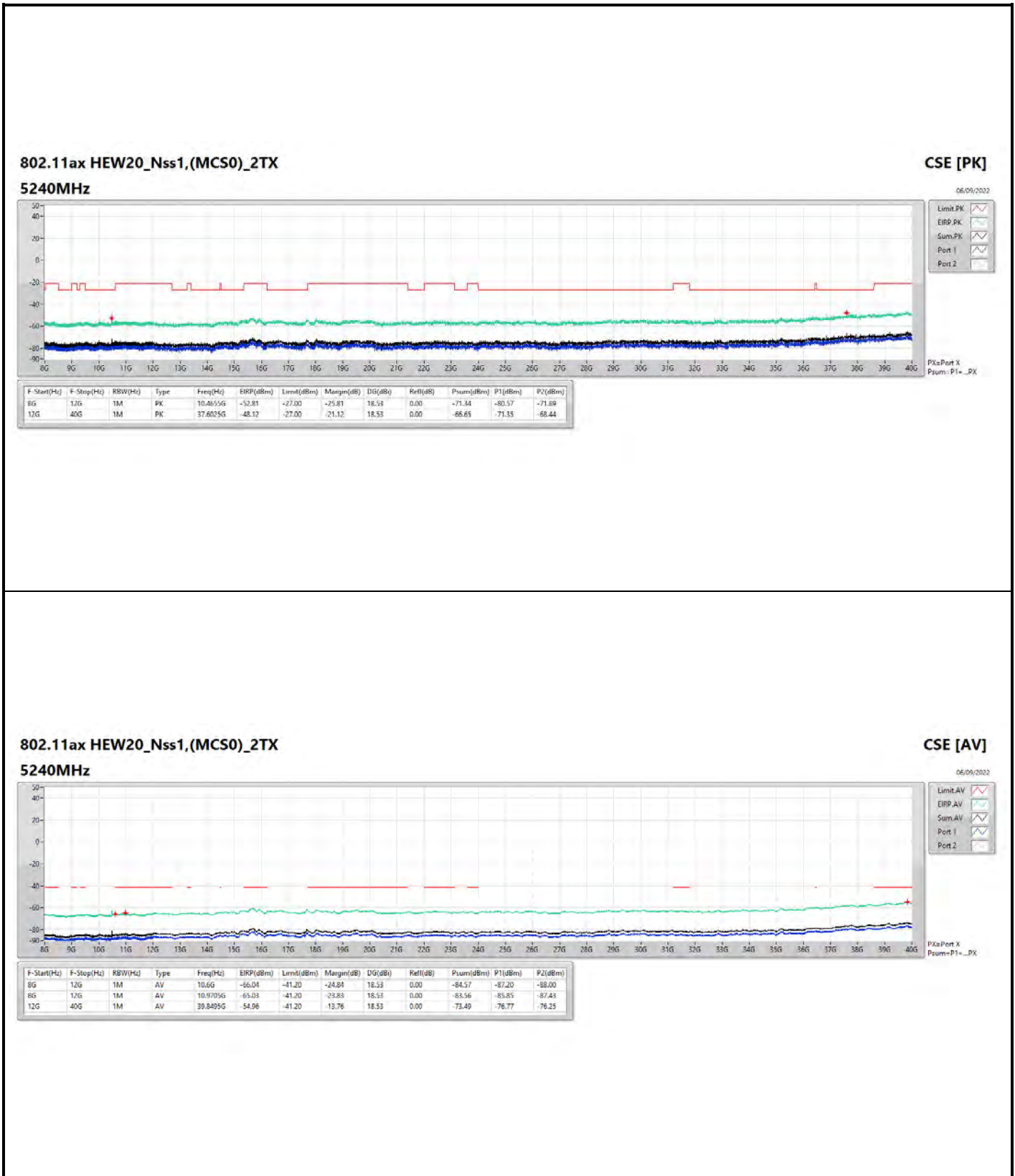










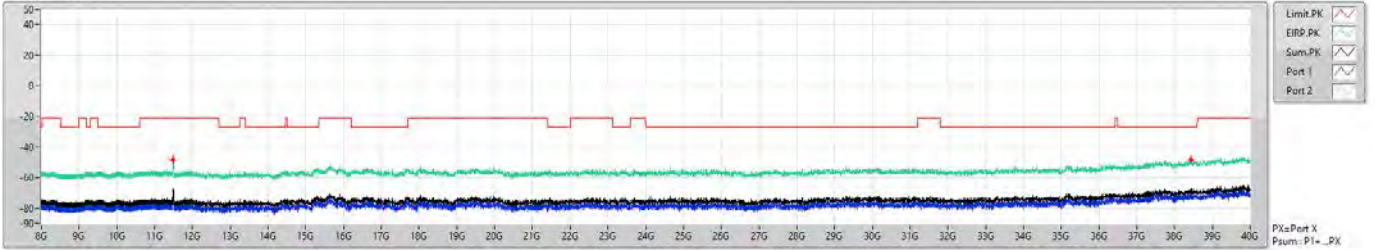


802.11ax HEW20_Nss1,(MCS0)_2TX

CSE [PK]

5745MHz

06/09/2022



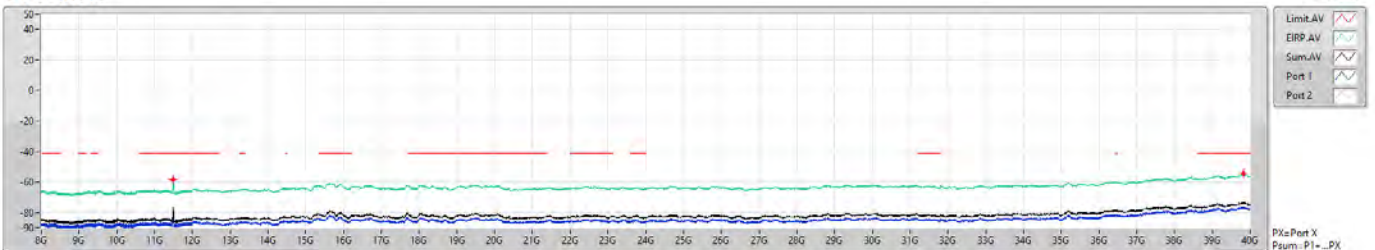
F_Start(Hz)	F_Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.4875G	-48.25	-21.20	-27.05	18.53	0.00	-66.78	-68.55	-71.57
12G	40G	1M	PK	38.4425G	-48.34	-27.00	-21.34	18.53	0.00	-66.87	-70.44	-69.38

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE [AV]

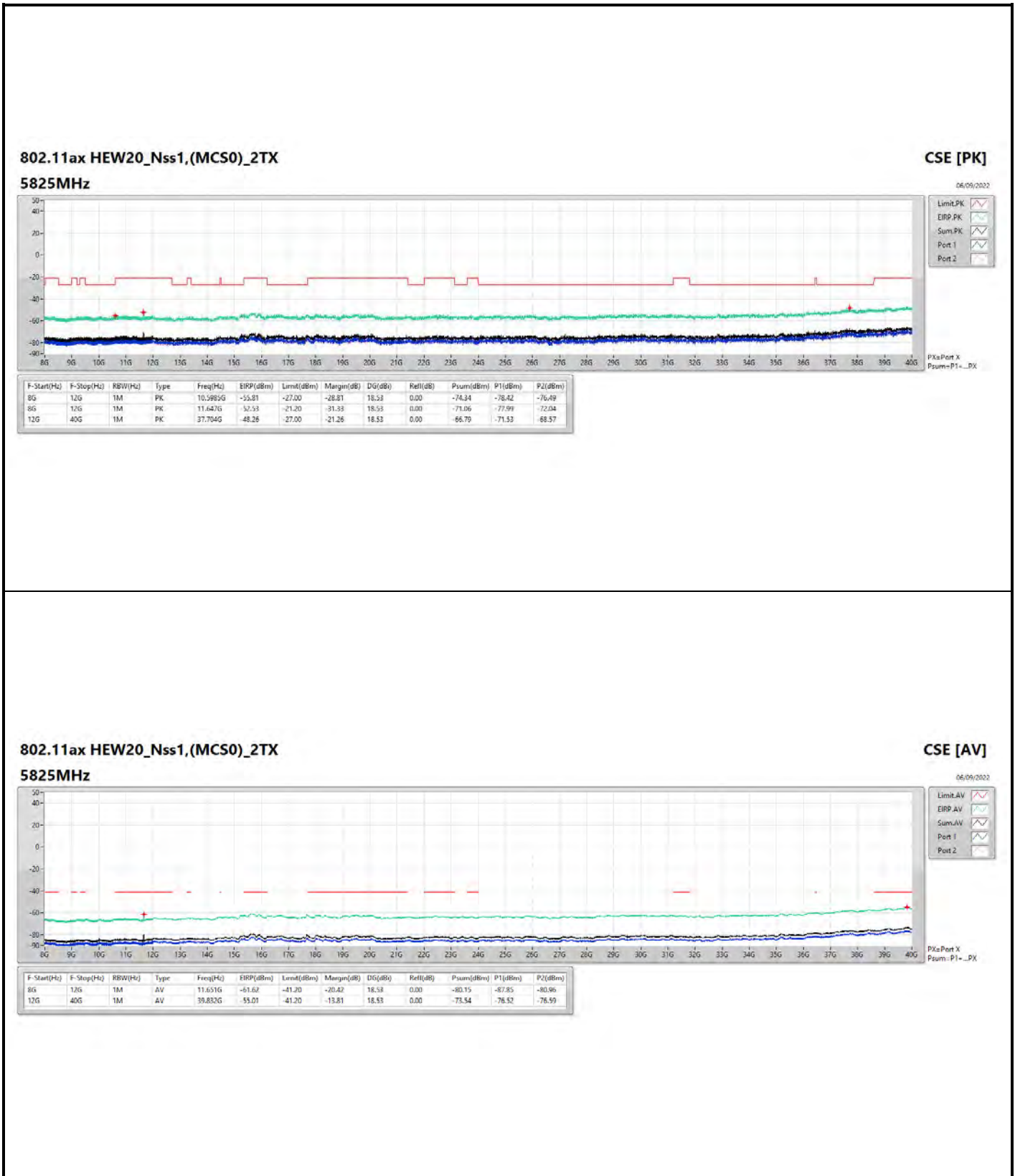
5745MHz

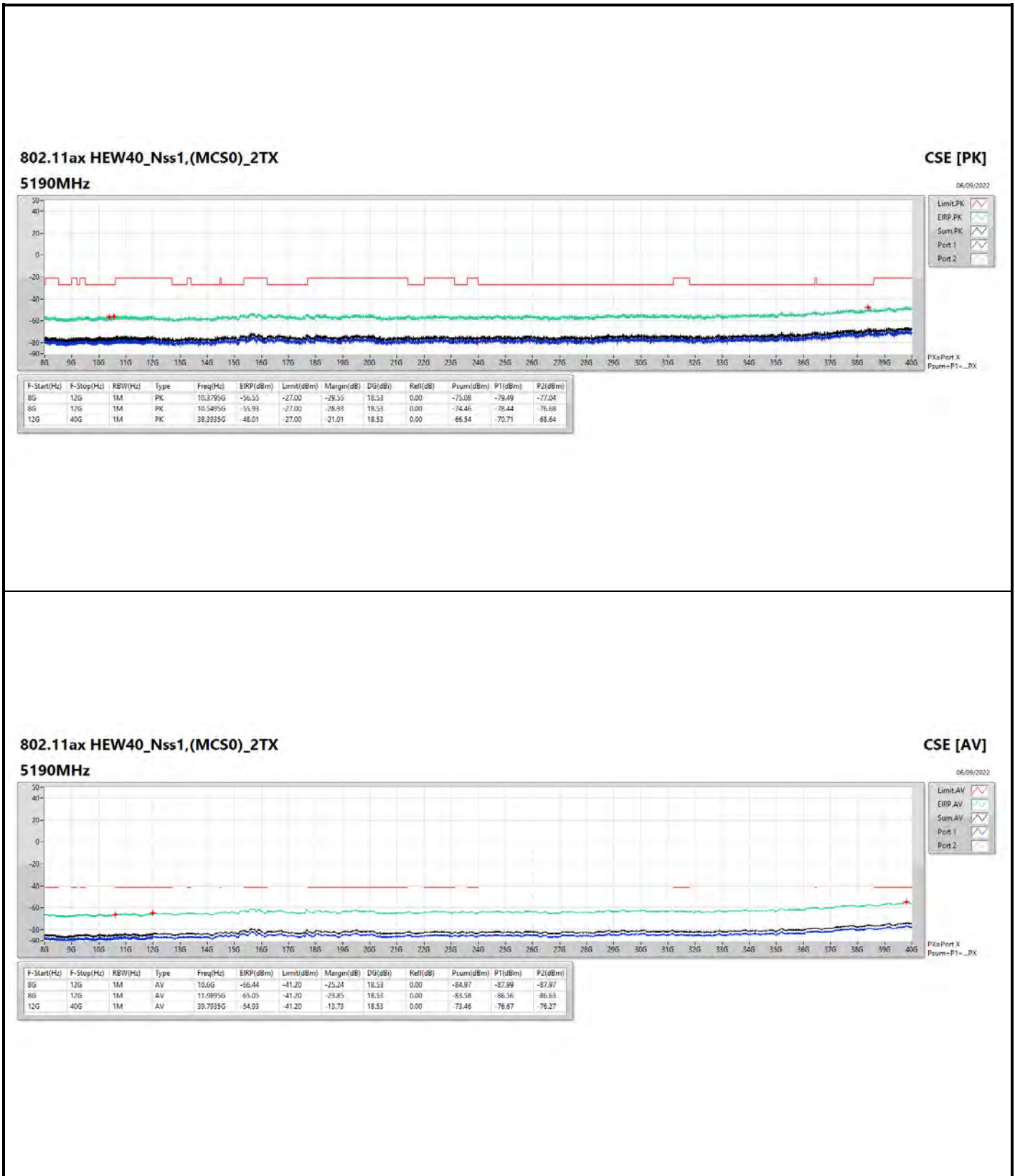
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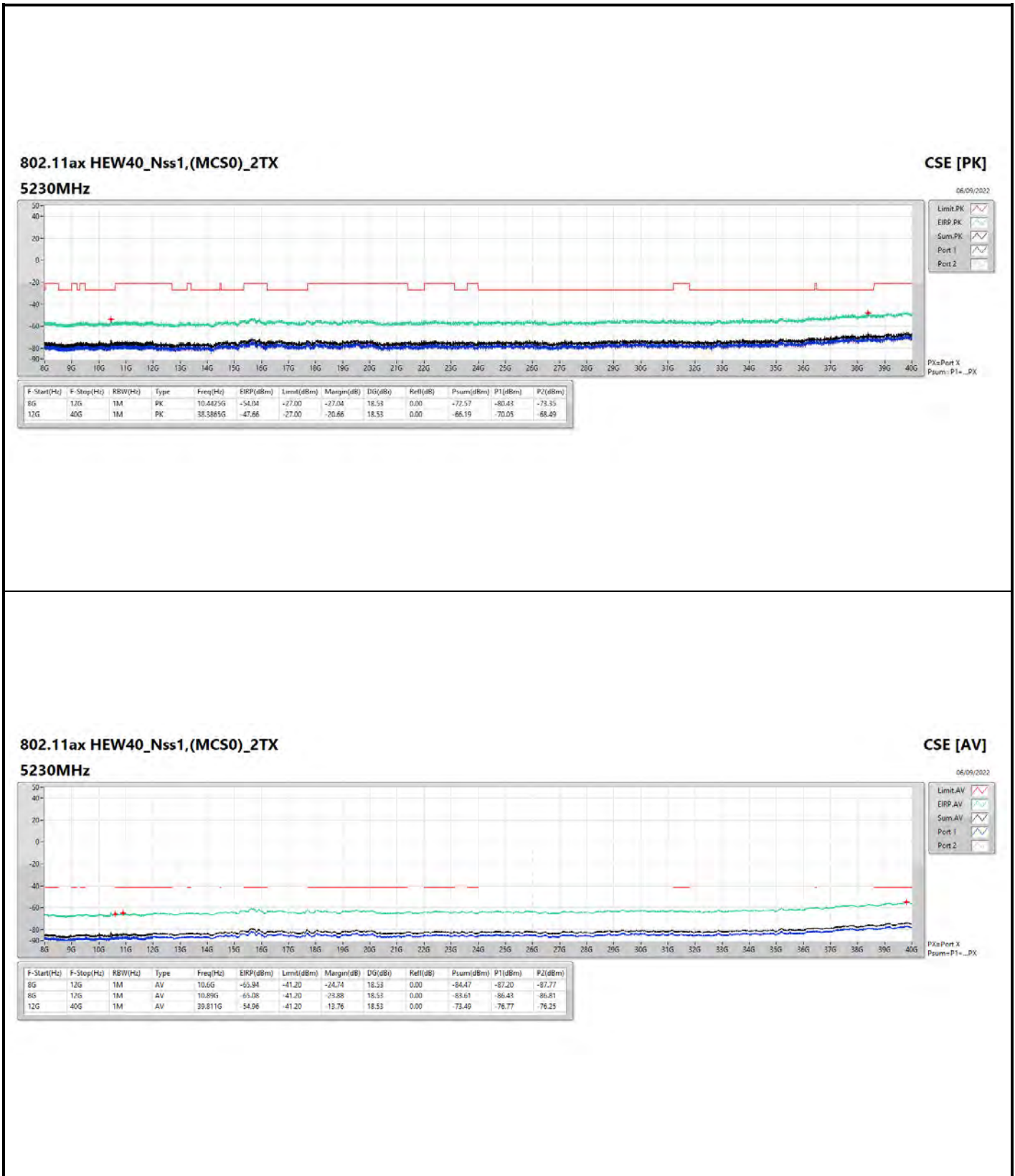


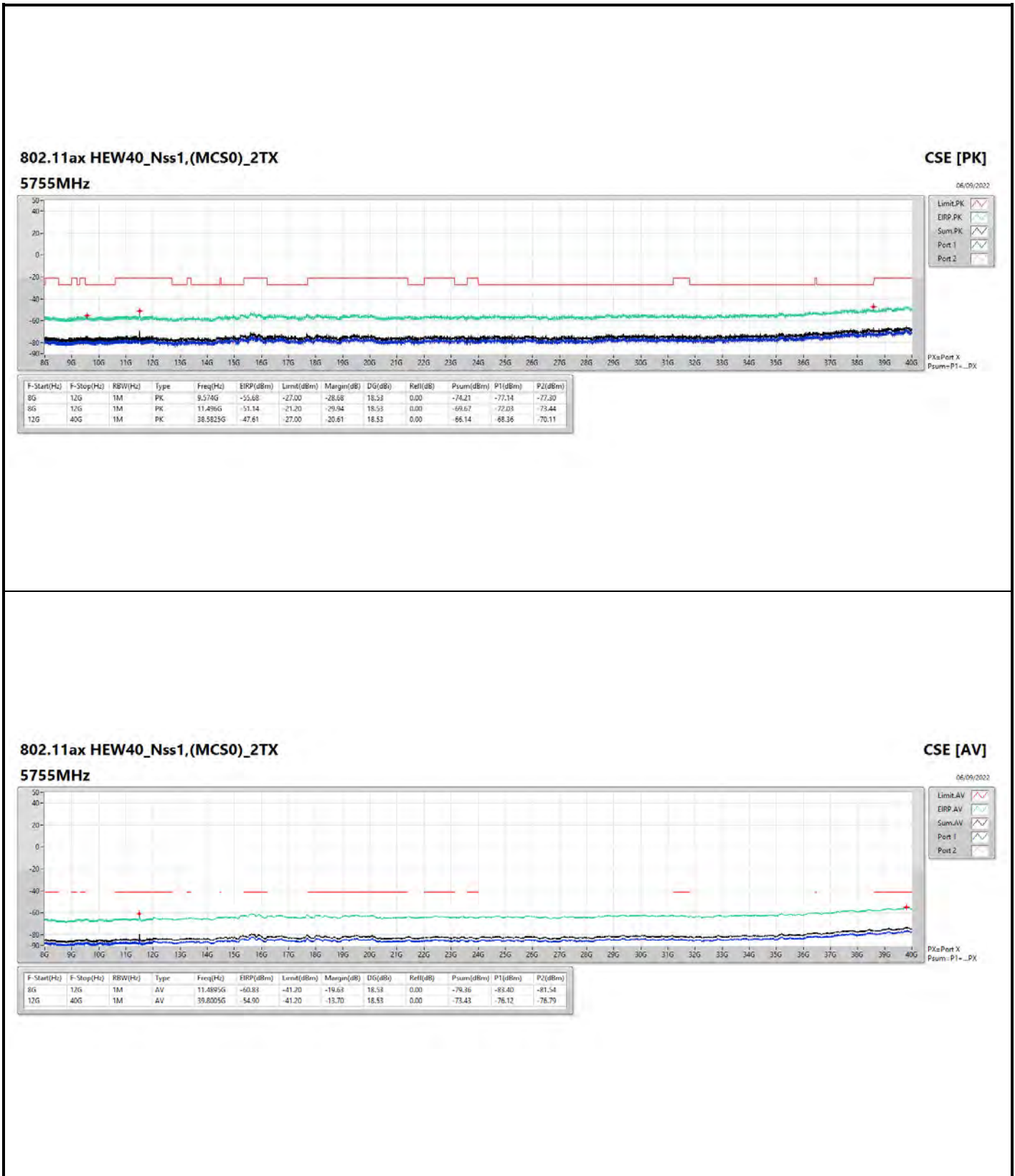
F_Start(Hz)	F_Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.488G	-58.55	-41.20	-17.35	18.53	0.00	-77.08	-80.01	-80.17
12G	40G	1M	AV	38.8145G	-54.72	-41.20	-13.52	18.53	0.00	-73.25	-76.29	-76.23

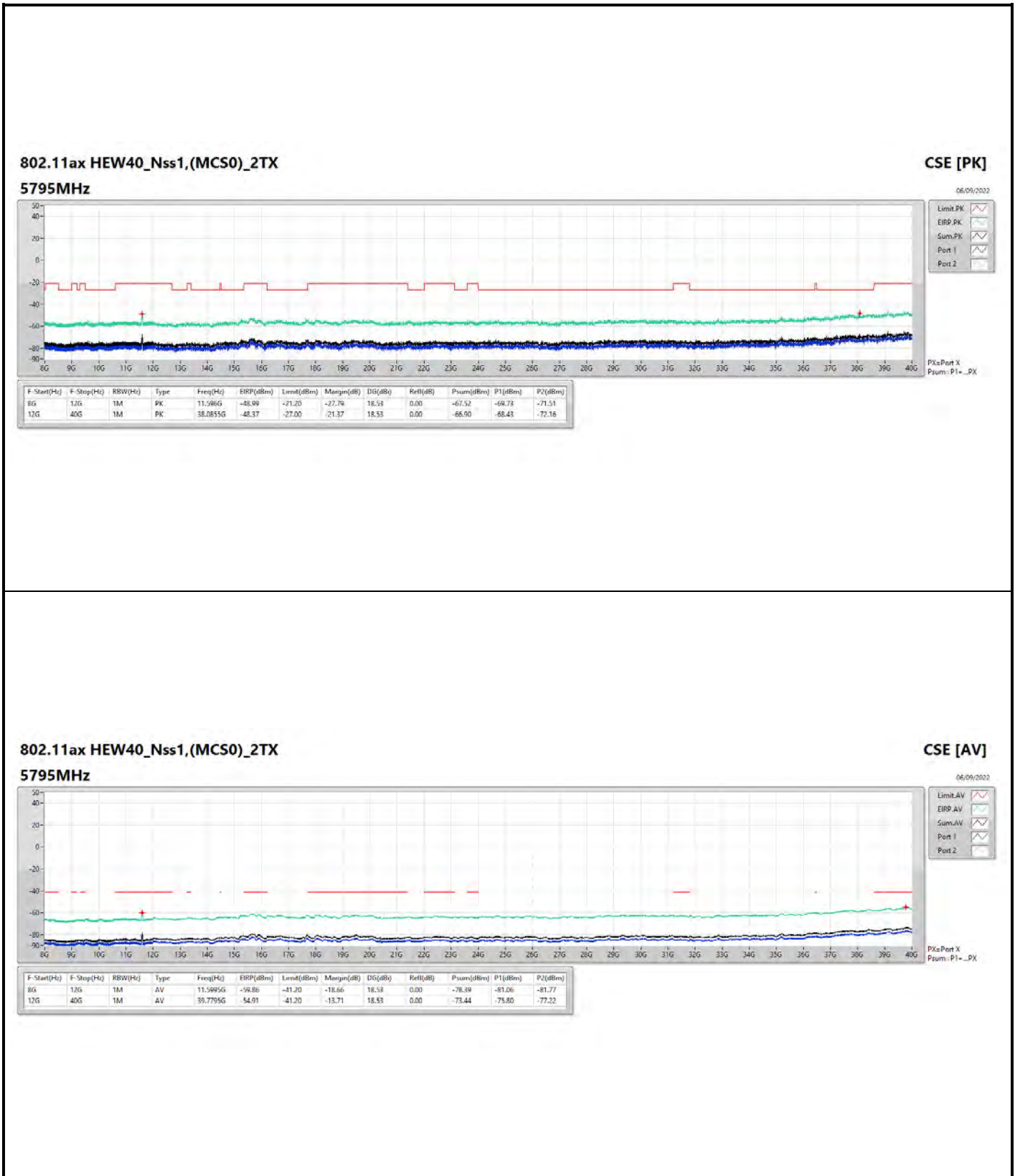


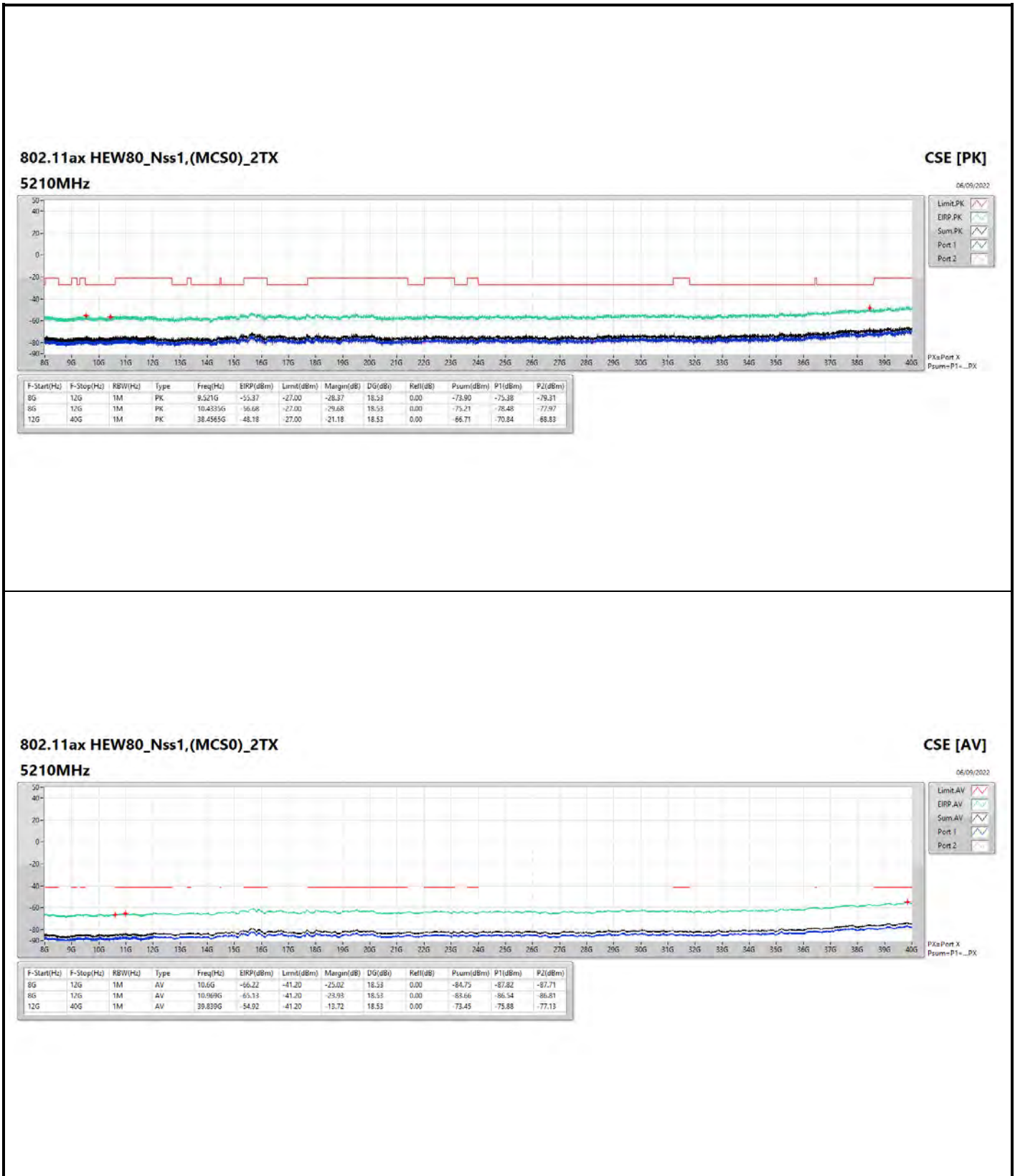


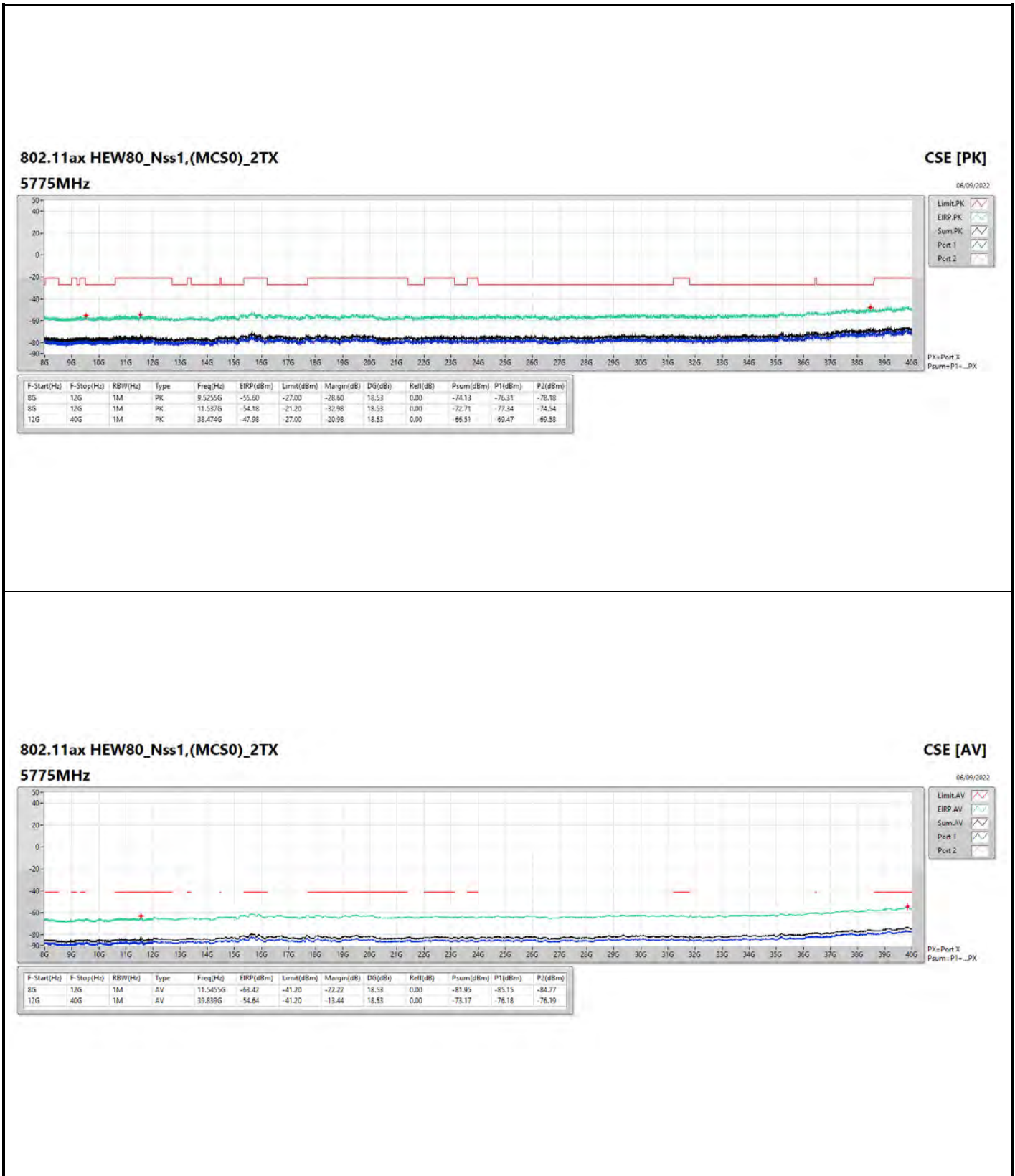




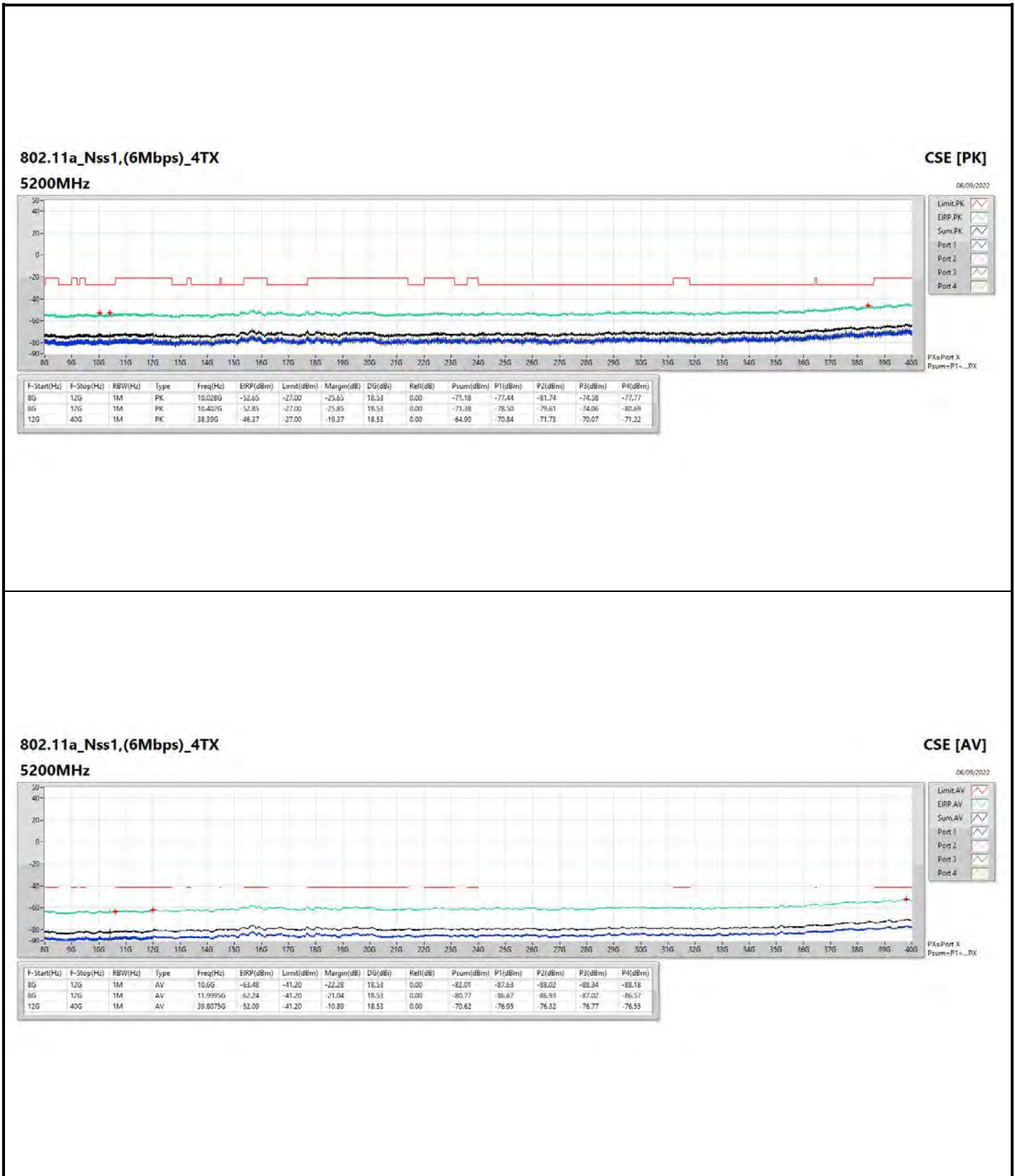


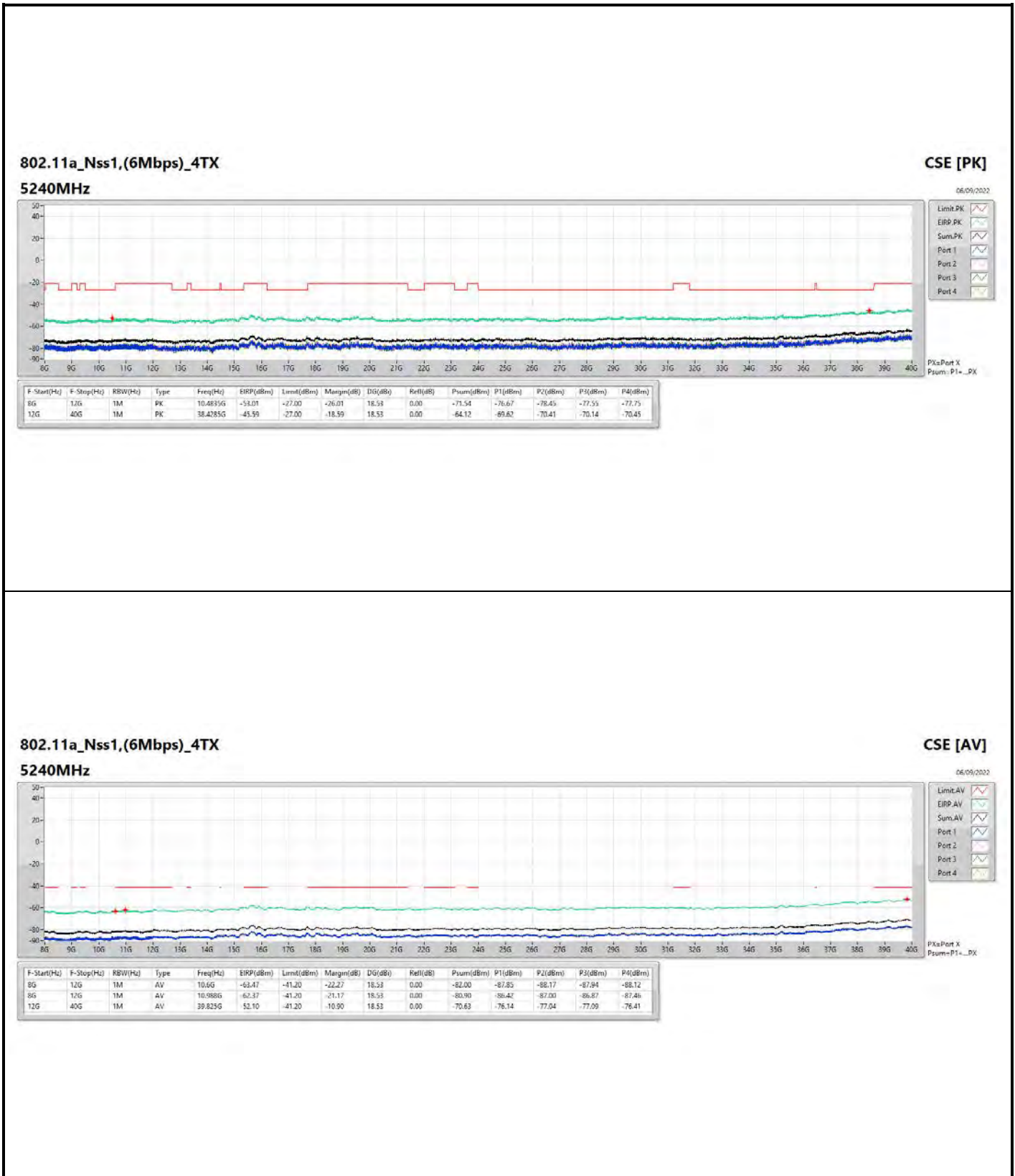


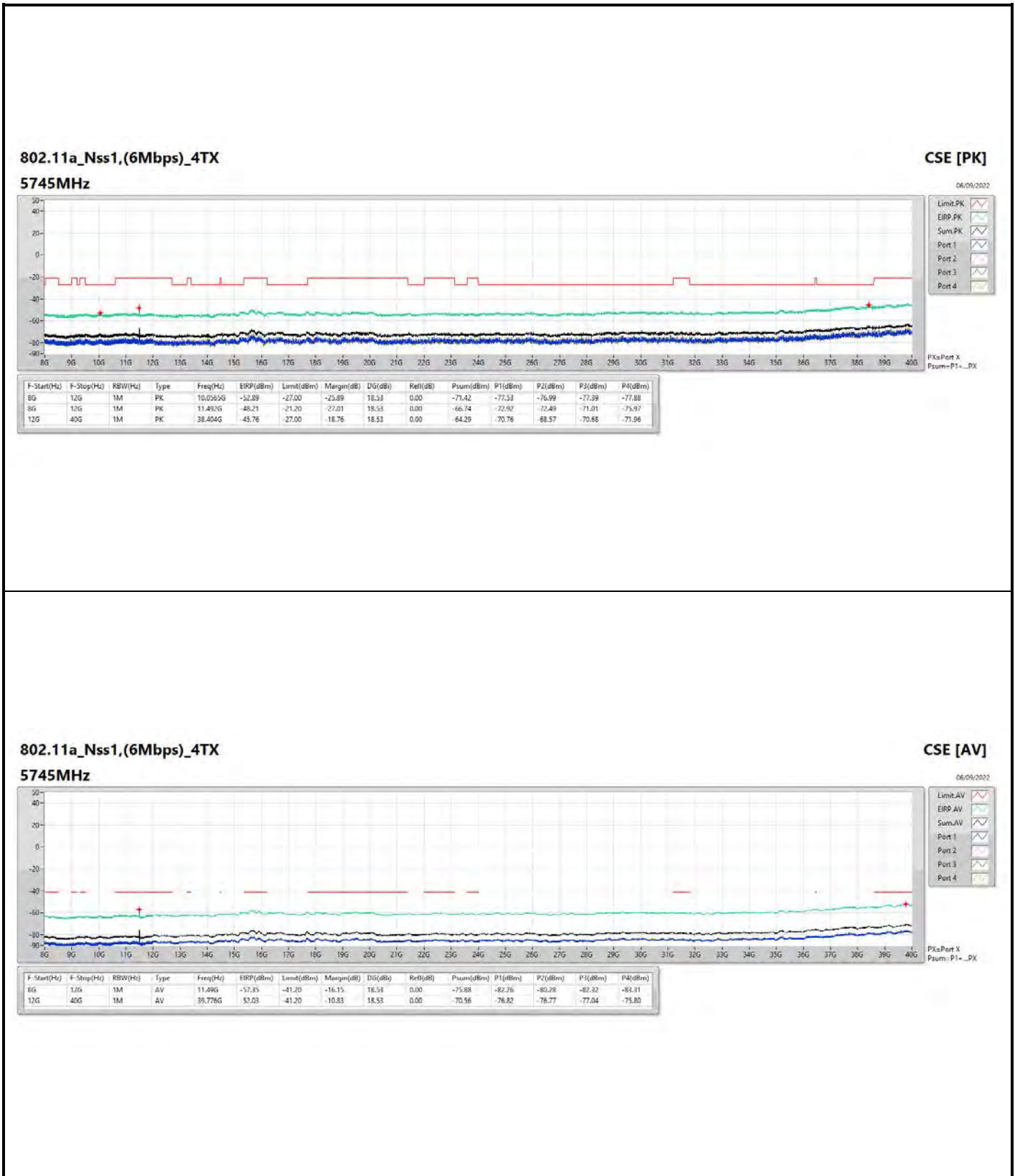


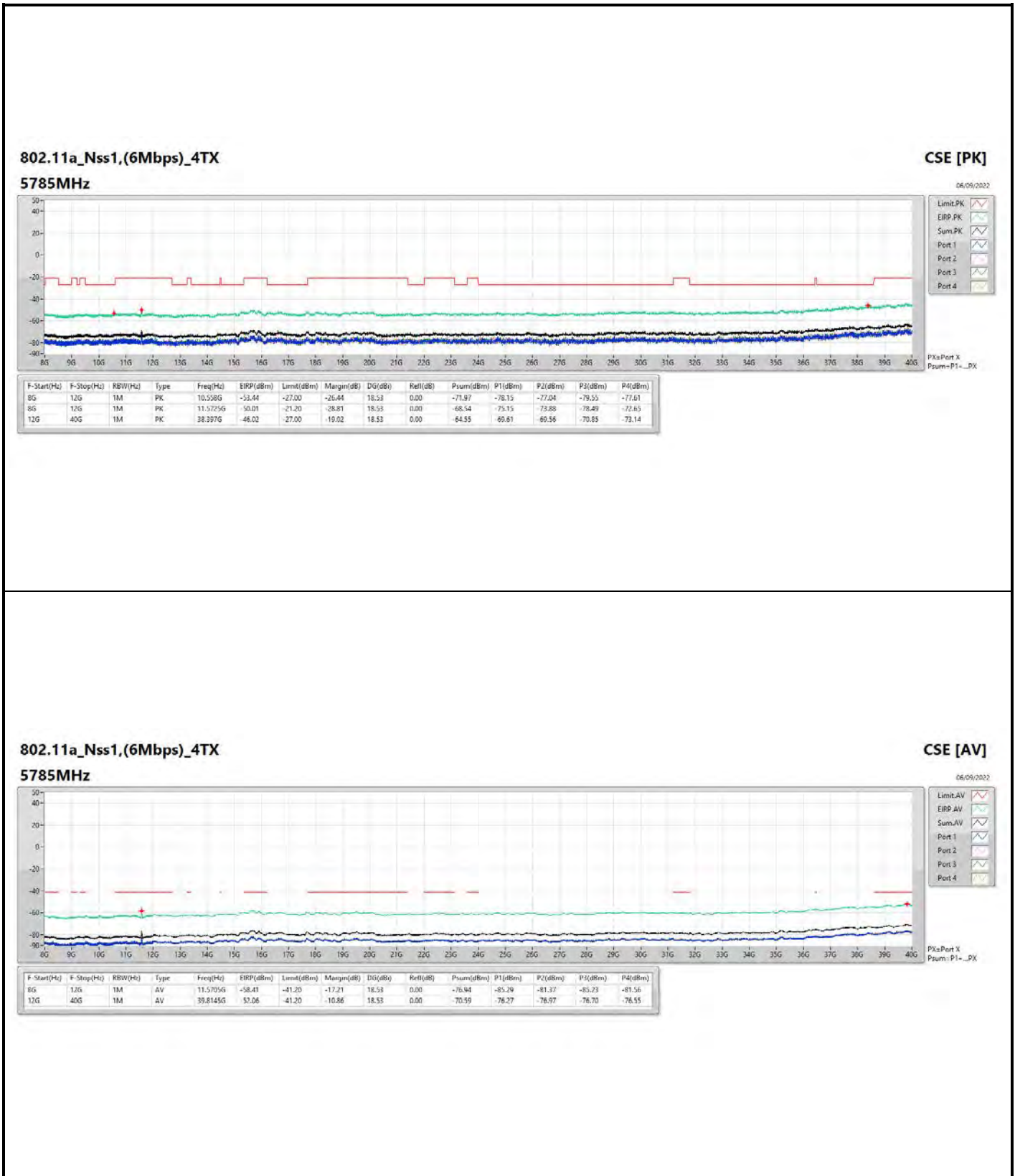




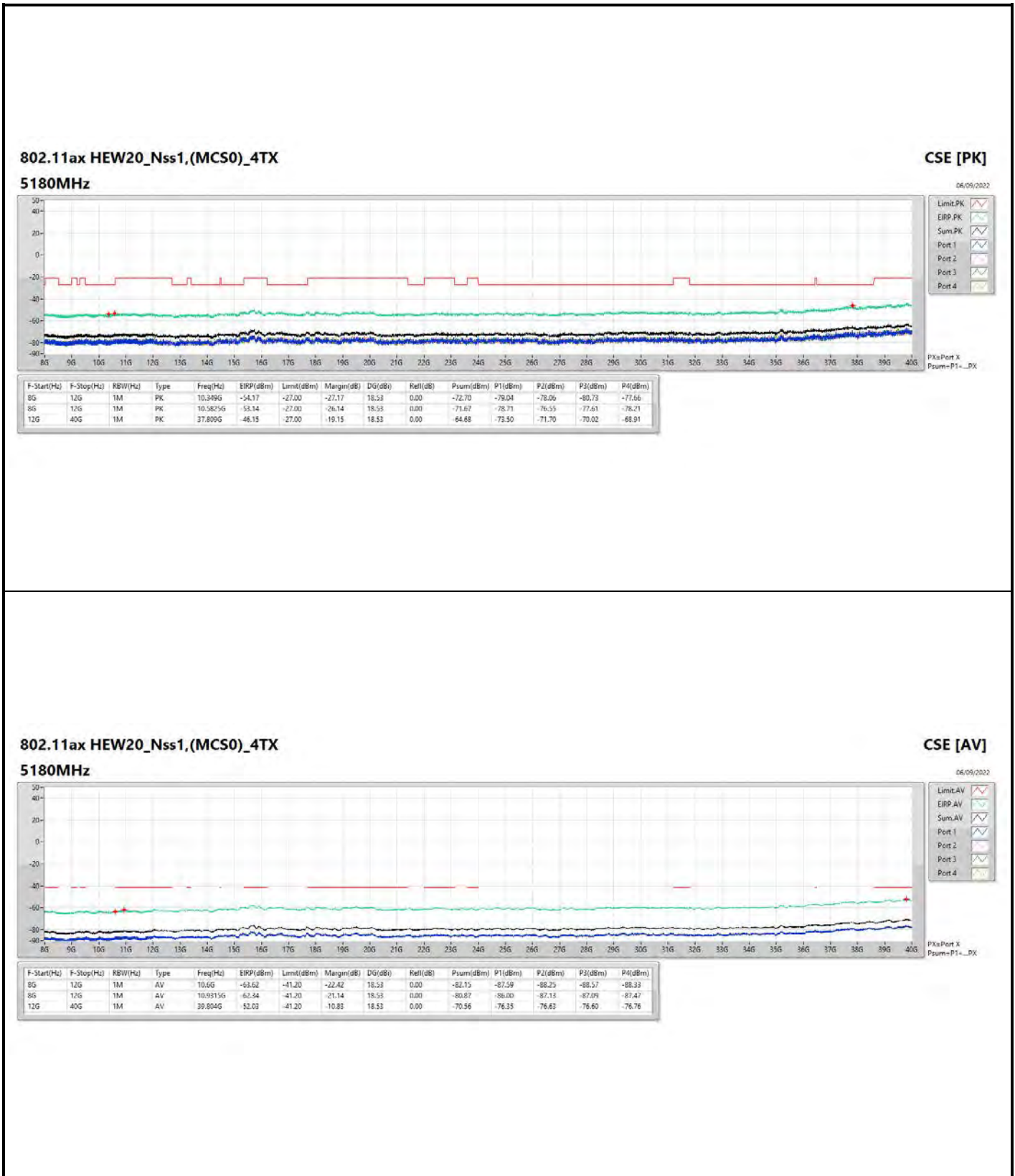


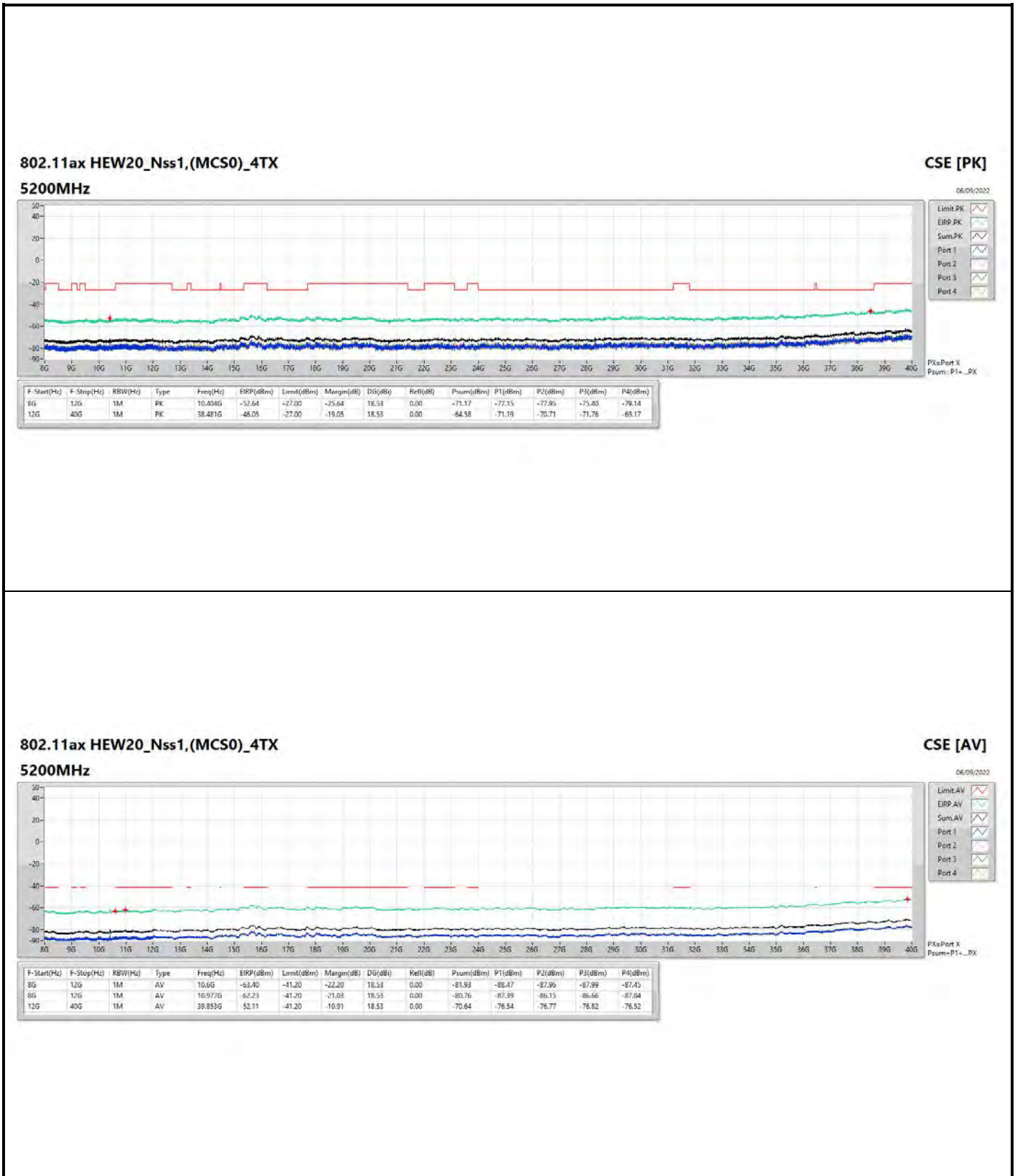


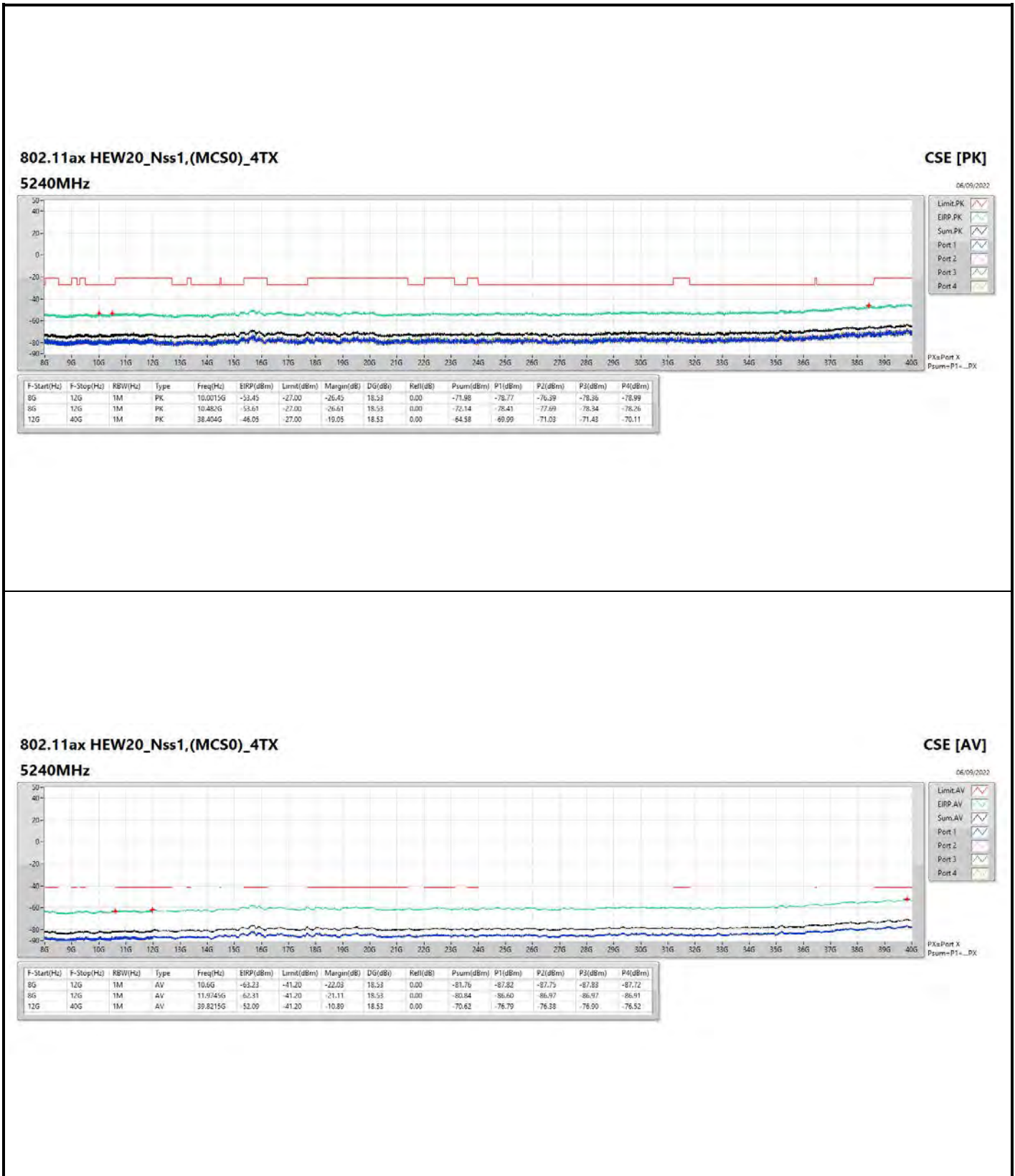


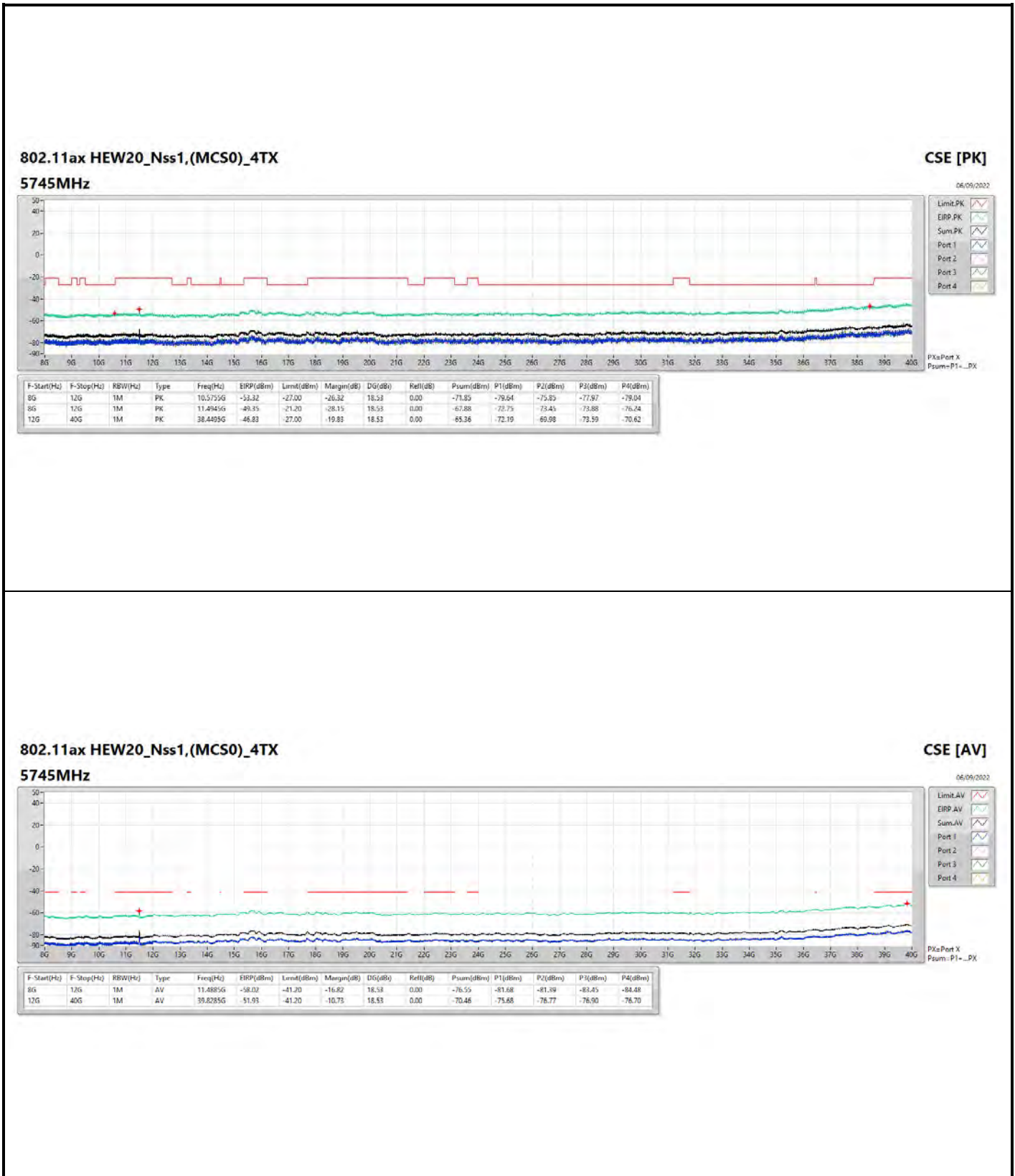


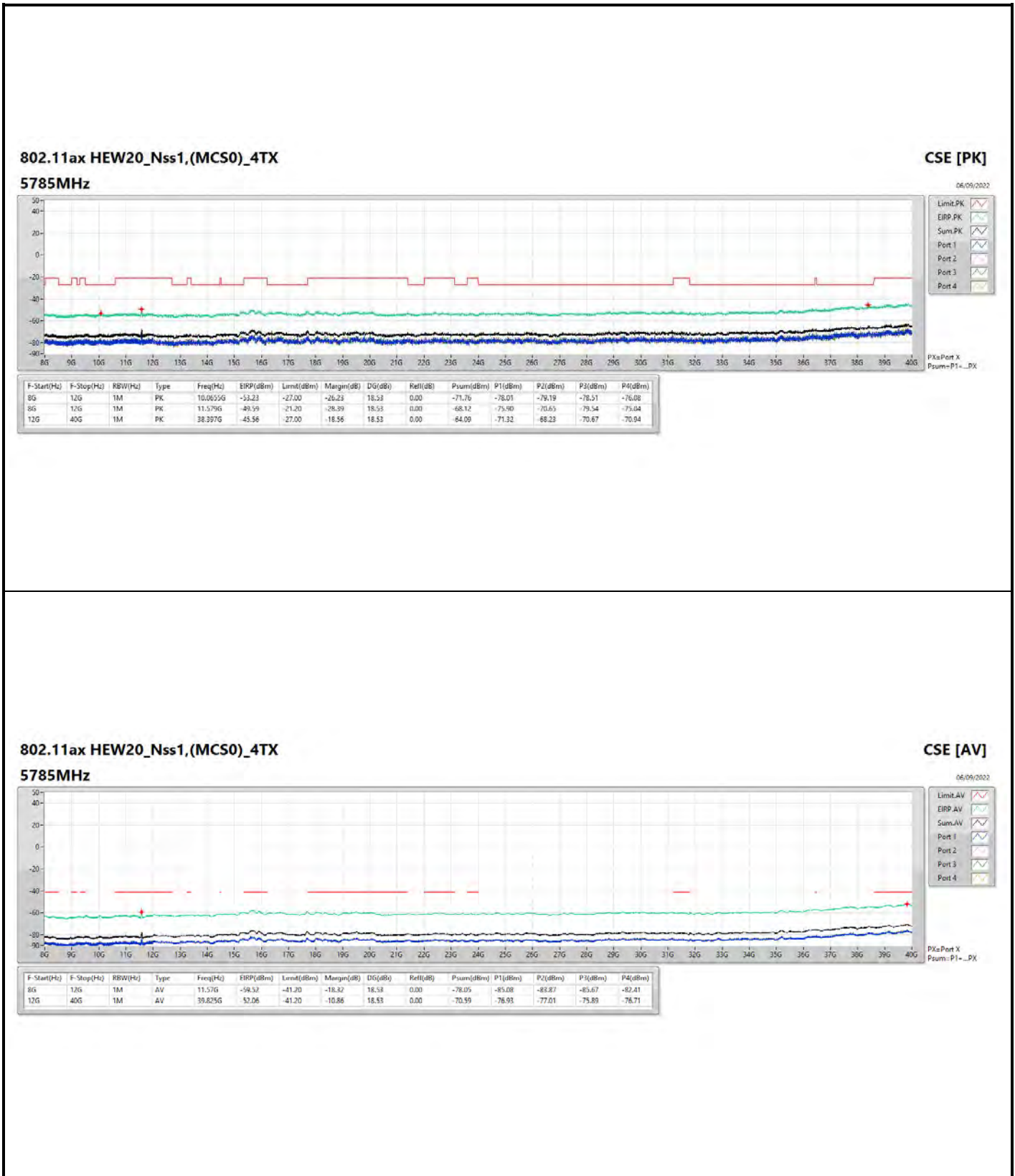


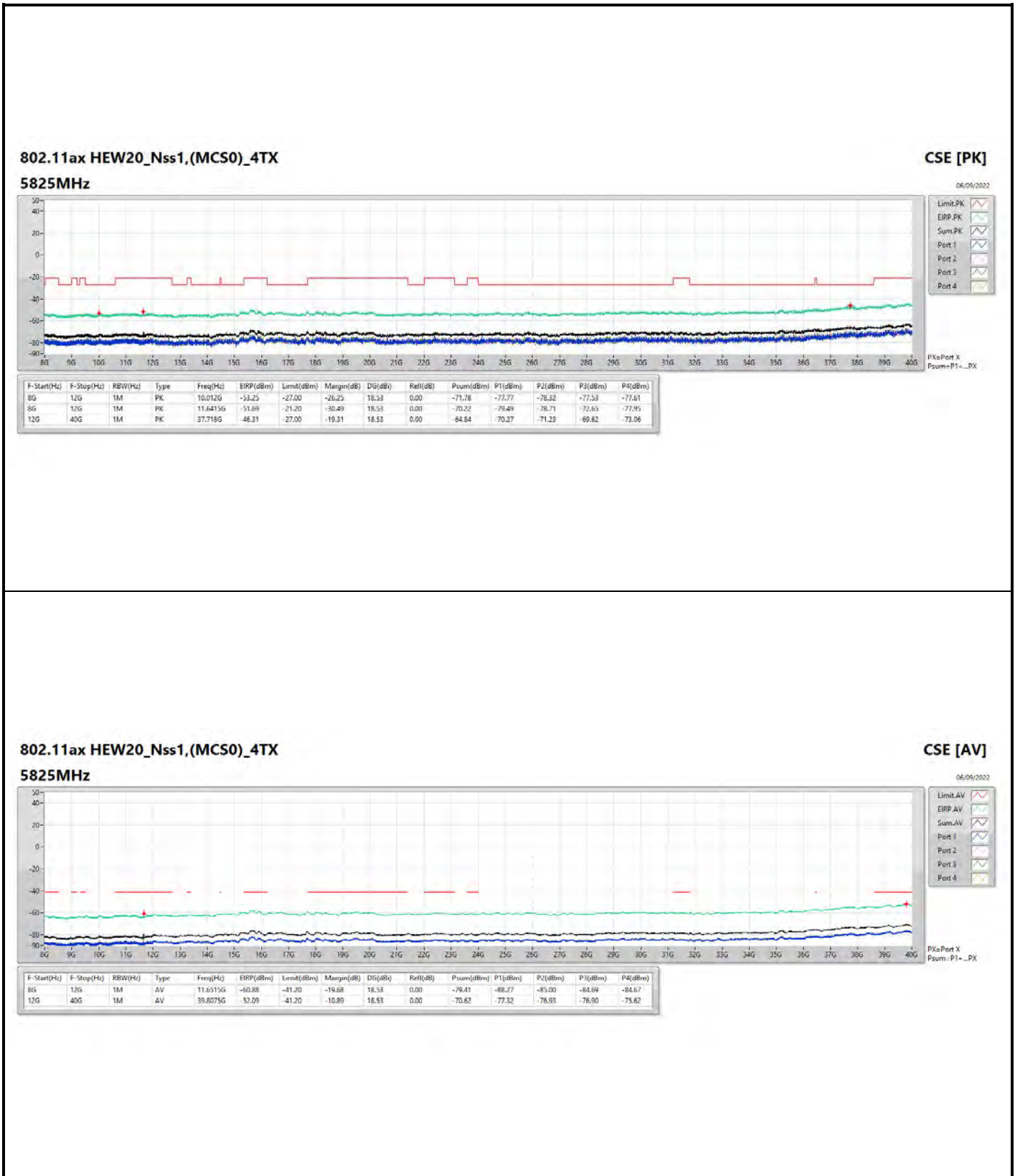




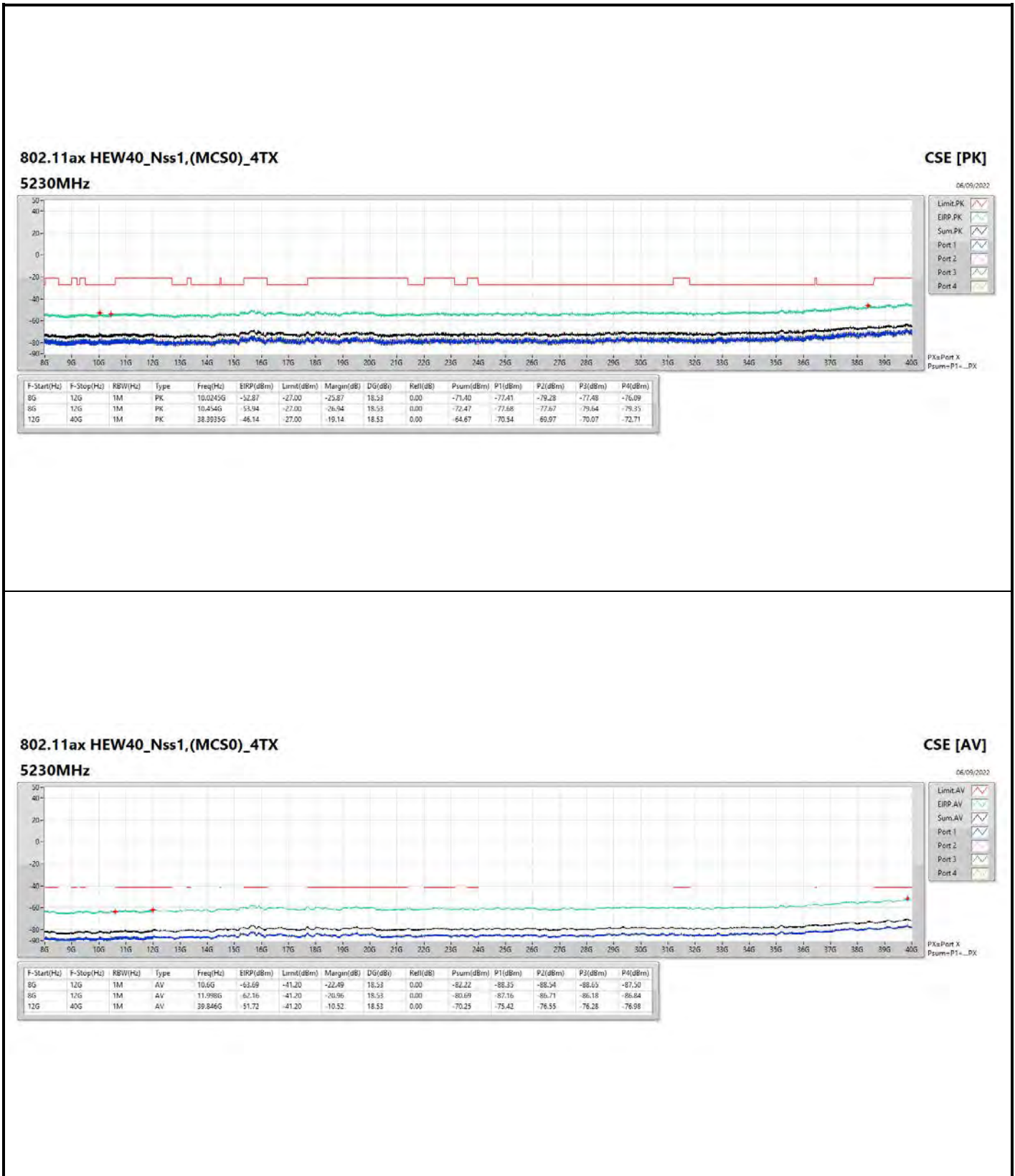


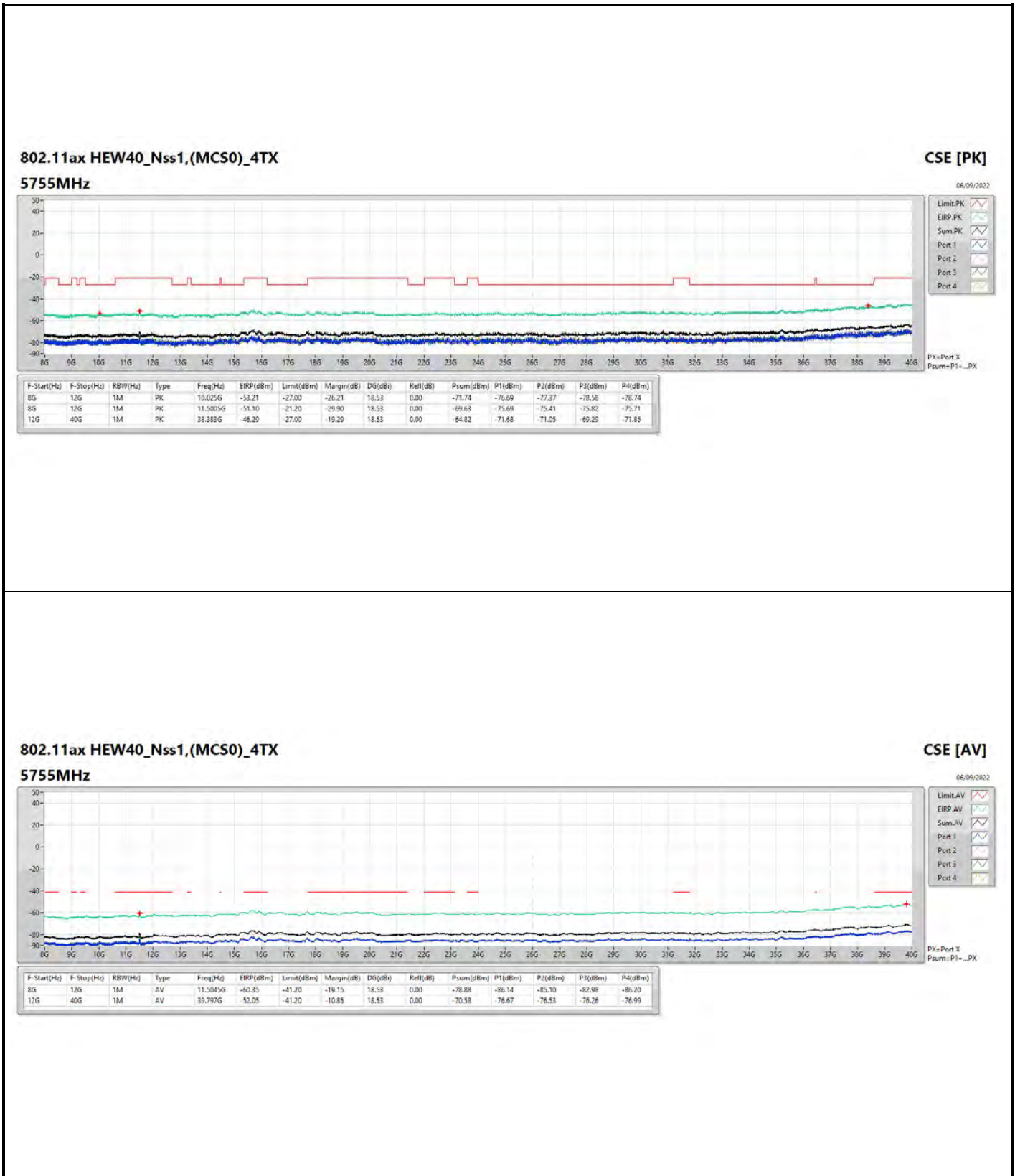


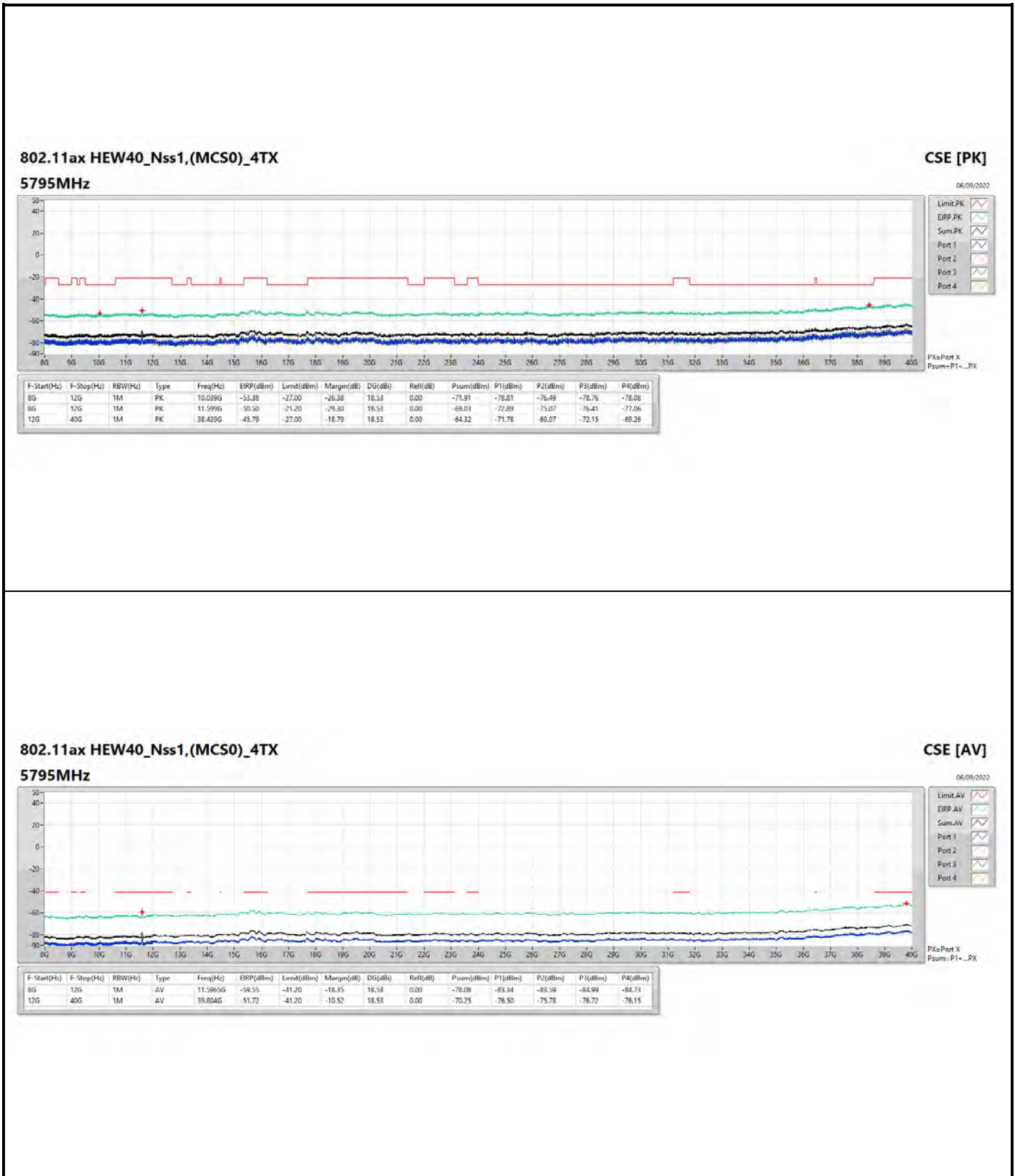


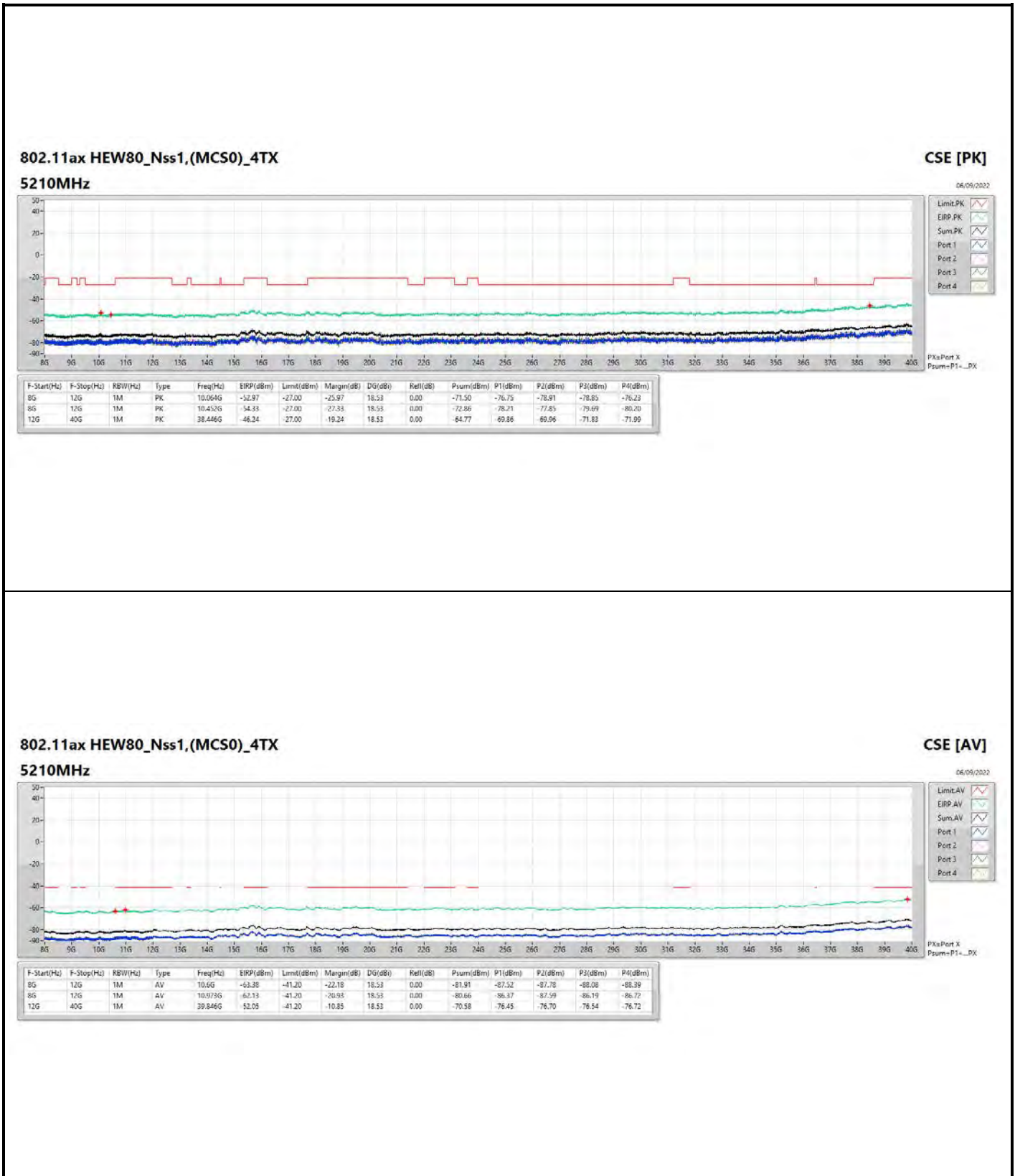


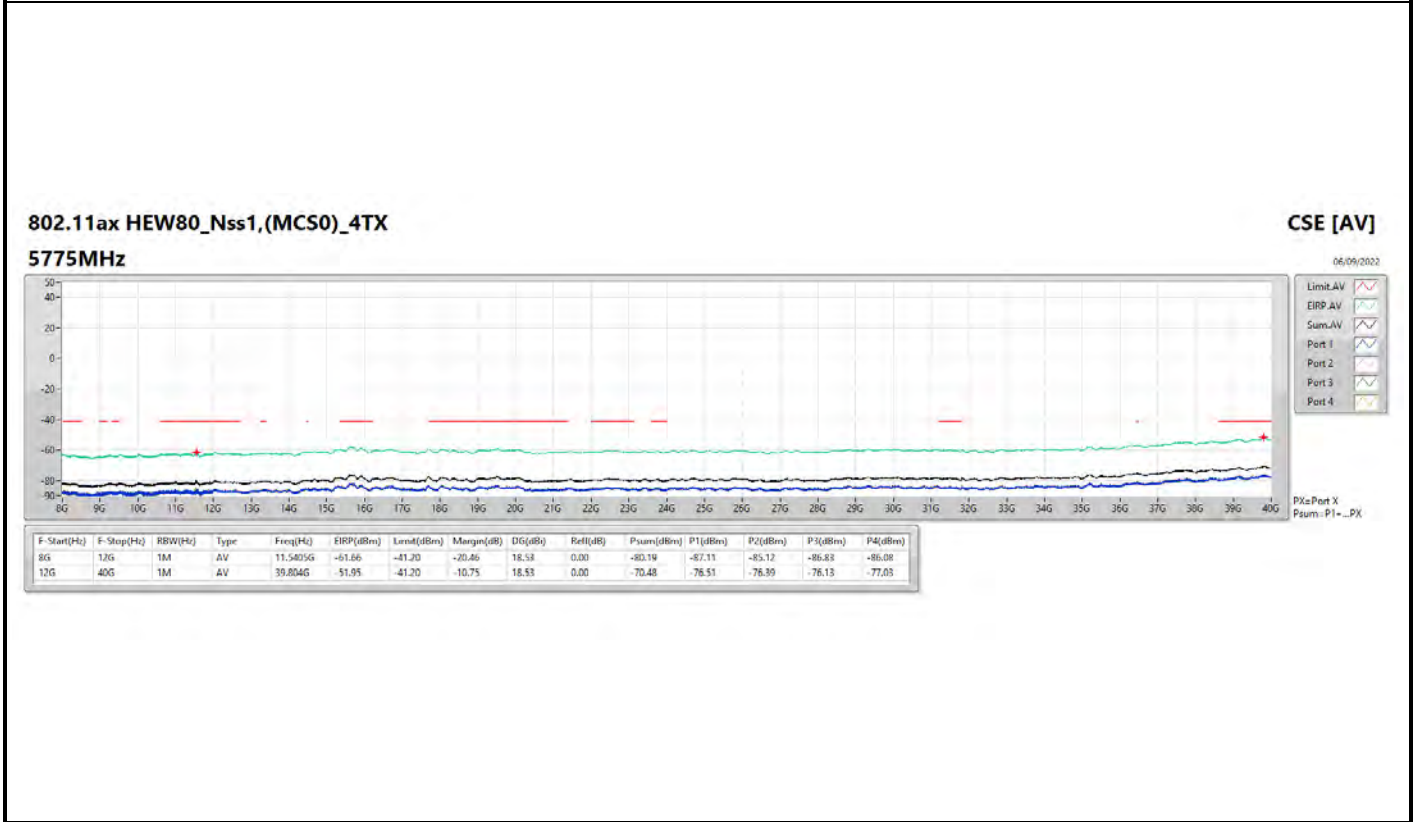
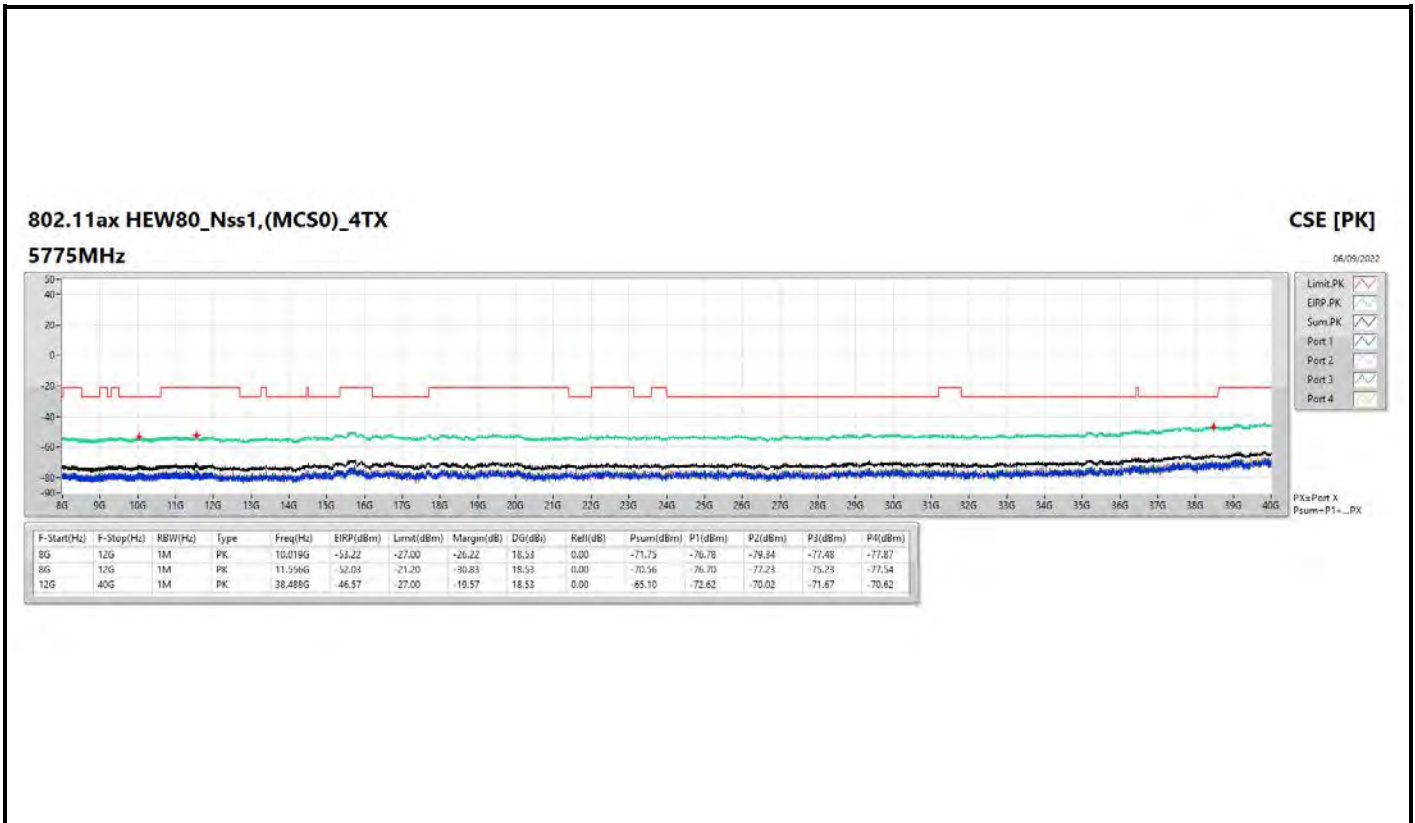














Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	Pass	4.9G	5.31G	AV	5.15G	18.53	-61.89				-61.89	-43.36	-41.20	-2.16
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	4.9G	5.31G	AV	5.15G	18.53	-59.94				-59.94	-41.41	-41.20	-0.21
802.11ax HEW40_Nss1,(MCS0)_1TX	Pass	4.9G	5.31G	AV	5.14954G	18.53	-60.82				-60.82	-42.29	-41.20	-1.09
802.11ax HEW80_Nss1,(MCS0)_1TX	Pass	4.9G	5.31G	AV	5.14503G	18.53	-61.10				-61.10	-42.57	-41.20	-1.37
802.11a_Nss1,(6Mbps)_2TX	Pass	4.9G	5.31G	AV	5.14964G	18.53	-63.50	-62.24			-59.81	-41.28	-41.20	-0.08
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	4.9G	5.31G	AV	5.15G	18.53	-64.12	-61.95			-59.89	-41.36	-41.20	-0.16
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	4.9G	5.31G	AV	5.14897G	18.53	-67.72	-61.17			-60.30	-41.77	-41.20	-0.57
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	4.9G	5.31G	AV	5.14831G	18.53	-67.46	-60.56			-59.75	-41.22	-41.20	-0.02
802.11a_Nss1,(6Mbps)_4TX	Pass	4.9G	5.31G	AV	5.14964G	18.53	-69.94	-68.70	-69.44	-68.59	-63.11	-44.58	-41.20	-3.38
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	4.9G	5.31G	AV	5.14856G	18.53	-70.73	-69.04	-68.23	-68.72	-63.06	-44.53	-41.20	-3.33
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	4.9G	5.31G	AV	5.15G	18.53	-71.34	-67.69	-68.89	-68.12	-62.78	-44.25	-41.20	-3.05
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	4.9G	5.31G	AV	5.1499G	18.53	-71.11	-66.57	-69.57	-69.99	-62.94	-44.41	-41.20	-3.21
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	Pass	5.31G	5.47G	AV	5.44632G	18.53	-69.35				-69.35	-50.82	-41.20	-9.62
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	5.31G	5.47G	AV	5.44568G	18.53	-69.45				-69.45	-50.92	-41.20	-9.72
802.11ax HEW40_Nss1,(MCS0)_1TX	Pass	5.31G	5.47G	AV	5.45848G	18.53	-69.55				-69.55	-51.02	-41.20	-9.82
802.11ax HEW80_Nss1,(MCS0)_1TX	Pass	5.47G	5.85G	PK	5.64822G	18.53	-47.85				-47.85	-29.32	-27.00	-2.32
802.11a_Nss1,(6Mbps)_2TX	Pass	5.31G	5.47G	AV	5.40664G	18.53	-70.27	-67.37			-65.57	-47.04	-41.20	-5.84
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	5.31G	5.47G	AV	5.43288G	18.53	-70.07	-67.24			-65.42	-46.89	-41.20	-5.69
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	5.31G	5.47G	AV	5.3644G	18.53	-70.30	-67.68			-65.79	-47.26	-41.20	-6.06
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	5.47G	5.85G	PK	5.64746G	18.53	-57.03	-46.53			-46.16	-27.63	-27.00	-0.63
802.11a_Nss1,(6Mbps)_4TX	Pass	5.31G	5.47G	AV	5.35512G	18.53	-70.41	-68.45	-67.61	-69.23	-62.78	-44.25	-41.20	-3.05
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	5.31G	5.47G	AV	5.40952G	18.53	-70.54	-68.63	-68.49	-68.49	-62.94	-44.41	-41.20	-3.21
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	5.31G	5.47G	AV	5.37432G	18.53	-70.44	-68.45	-68.23	-68.62	-62.83	-44.30	-41.20	-3.10
802.11ax HEW80_Nss1,(MCS0)_4TX	Pass	5.31G	5.47G	AV	5.45112G	18.53	-70.33	-69.60	-68.89	-68.45	-63.24	-44.71	-41.20	-3.51

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.9G	5.31G	AV	5.15G	18.53	-61.89				-61.89	-43.36	-41.20	-2.16
5180MHz	Pass	5.31G	5.47G	AV	5.35704G	18.53	-68.68				-68.68	-50.15	-41.20	-8.95
5180MHz	Pass	4.9G	5.31G	PK	5.148G	18.53	-52.11				-52.11	-33.58	-21.20	-12.38
5180MHz	Pass	5.31G	5.47G	PK	5.46872G	18.53	-60.70				-60.70	-42.17	-27.00	-15.17
5180MHz	Pass	5.47G	5.85G	PK	5.57412G	18.53	-58.31				-58.31	-39.78	-27.00	-12.78
5180MHz	Pass	5.85G	6.01G	PK	5.96584G	18.53	-58.75				-58.75	-40.22	-27.00	-13.22
5180MHz	Pass	6.01G	6.5G	PK	6.17476G	18.53	-58.03				-58.03	-39.50	-27.00	-12.50
5200MHz	Pass	4.9G	5.31G	AV	5.14928G	18.53	-65.31				-65.31	-46.78	-41.20	-5.58
5200MHz	Pass	5.31G	5.47G	AV	5.36504G	18.53	-68.55				-68.55	-50.02	-41.20	-8.82
5200MHz	Pass	4.9G	5.31G	PK	5.14692G	18.53	-55.66				-55.66	-37.13	-21.20	-15.93
5200MHz	Pass	5.31G	5.47G	PK	5.462G	18.53	-60.47				-60.47	-41.94	-27.00	-14.94
5200MHz	Pass	5.47G	5.85G	PK	5.79756G	18.53	-58.39				-58.39	-39.86	-27.00	-12.86
5200MHz	Pass	5.85G	6.01G	PK	5.978G	18.53	-58.80				-58.80	-40.27	-27.00	-13.27
5200MHz	Pass	6.01G	6.5G	PK	6.07658G	18.53	-59.02				-59.02	-40.49	-27.00	-13.49
5240MHz	Pass	4.9G	5.31G	AV	5.09542G	18.53	-68.92				-68.92	-50.39	-41.20	-9.19
5240MHz	Pass	5.31G	5.47G	AV	5.39576G	18.53	-68.80				-68.80	-50.27	-41.20	-9.07
5240MHz	Pass	4.9G	5.31G	PK	5.10357G	18.53	-58.46				-58.46	-39.93	-21.20	-18.73
5240MHz	Pass	5.31G	5.47G	PK	5.46328G	18.53	-59.07				-59.07	-40.54	-27.00	-13.54
5240MHz	Pass	5.47G	5.85G	PK	5.61326G	18.53	-58.86				-58.86	-40.33	-27.00	-13.33
5240MHz	Pass	5.85G	6.01G	PK	5.85992G	18.53	-58.29				-58.29	-39.76	-27.00	-12.76
5240MHz	Pass	6.01G	6.5G	PK	6.03585G	18.53	-58.09				-58.09	-39.56	-27.00	-12.56
5745MHz	Pass	4.9G	5.31G	AV	4.97421G	18.53	-69.71				-69.71	-51.18	-41.20	-9.98
5745MHz	Pass	5.31G	5.47G	AV	5.36472G	18.53	-69.76				-69.76	-51.23	-41.20	-10.03
5745MHz	Pass	4.9G	5.31G	PK	5.27981G	18.53	-59.50				-59.50	-40.97	-27.00	-13.97
5745MHz	Pass	5.31G	5.47G	PK	5.46552G	18.53	-60.25				-60.25	-41.72	-27.00	-14.72
5745MHz	Pass	5.47G	5.85G	PK	5.61972G	18.53	-58.92				-58.92	-40.39	-27.00	-13.39
5745MHz	Pass	5.85G	6.01G	PK	5.97448G	18.53	-56.38				-56.38	-37.85	-27.00	-10.85
5745MHz	Pass	6.01G	6.5G	PK	6.0179G	18.53	-57.97				-57.97	-39.44	-27.00	-12.44
5785MHz	Pass	4.9G	5.31G	AV	5.00927G	18.53	-70.06				-70.06	-51.53	-41.20	-10.33
5785MHz	Pass	5.31G	5.47G	AV	5.40728G	18.53	-69.76				-69.76	-51.23	-41.20	-10.03
5785MHz	Pass	4.9G	5.31G	PK	5.30687G	18.53	-59.86				-59.86	-41.33	-27.00	-14.33
5785MHz	Pass	5.31G	5.47G	PK	5.32568G	18.53	-59.80				-59.80	-41.27	-27.00	-14.27
5785MHz	Pass	5.47G	5.85G	PK	5.61326G	18.53	-58.18				-58.18	-39.65	-27.00	-12.65
5785MHz	Pass	5.85G	6.01G	PK	5.96136G	18.53	-56.68				-56.68	-38.15	-27.00	-11.15
5785MHz	Pass	6.01G	6.5G	PK	6.0639G	18.53	-57.14				-57.14	-38.61	-27.00	-11.61
5825MHz	Pass	4.9G	5.31G	AV	5.03966G	18.53	-70.37				-70.37	-51.84	-41.20	-10.64
5825MHz	Pass	5.31G	5.47G	AV	5.44632G	18.53	-69.35				-69.35	-50.82	-41.20	-9.62
5825MHz	Pass	4.9G	5.31G	PK	5.28417G	18.53	-59.51				-59.51	-40.98	-27.00	-13.98
5825MHz	Pass	5.31G	5.47G	PK	5.46328G	18.53	-60.46				-60.46	-41.93	-27.00	-14.93
5825MHz	Pass	5.47G	5.85G	PK	5.64936G	18.53	-58.86				-58.86	-40.33	-27.00	-13.33
5825MHz	Pass	5.85G	6.01G	PK	5.95496G	18.53	-56.64				-56.64	-38.11	-27.00	-11.11
5825MHz	Pass	6.01G	6.5G	PK	6.21978G	18.53	-57.57				-57.57	-39.04	-27.00	-12.04
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.9G	5.31G	AV	5.1499G	18.53	-60.34				-60.34	-41.81	-41.20	-0.61
5180MHz	Pass	5.31G	5.47G	AV	5.358G	18.53	-69.44				-69.44	-50.91	-41.20	-9.71
5180MHz	Pass	4.9G	5.31G	PK	5.14984G	18.53	-49.92				-49.92	-31.39	-21.20	-10.19
5180MHz	Pass	5.31G	5.47G	PK	5.46296G	18.53	-61.05				-61.05	-42.52	-27.00	-15.52
5180MHz	Pass	5.47G	5.85G	PK	5.82036G	18.53	-59.19				-59.19	-40.66	-27.00	-13.66
5180MHz	Pass	5.85G	6.01G	PK	5.94664G	18.53	-57.88				-57.88	-39.35	-27.00	-12.35
5180MHz	Pass	6.01G	6.5G	PK	6.06359G	18.53	-57.85				-57.85	-39.32	-27.00	-12.32
5200MHz	Pass	4.9G	5.31G	AV	5.15G	18.53	-59.94				-59.94	-41.41	-41.20	-0.21
5200MHz	Pass	5.31G	5.47G	AV	5.366G	18.53	-68.52				-68.52	-49.99	-41.20	-8.79
5200MHz	Pass	4.9G	5.31G	PK	5.14954G	18.53	-48.77				-48.77	-30.24	-21.20	-9.04
5200MHz	Pass	5.31G	5.47G	PK	5.46744G	18.53	-60.57				-60.57	-42.04	-27.00	-15.04
5200MHz	Pass	5.47G	5.85G	PK	5.78616G	18.53	-58.85				-58.85	-40.32	-27.00	-13.32
5200MHz	Pass	5.85G	6.01G	PK	6.00264G	18.53	-57.59				-57.59	-39.06	-27.00	-12.06
5200MHz	Pass	6.01G	6.5G	PK	6.36225G	18.53	-58.81				-58.81	-40.28	-27.00	-13.28
5240MHz	Pass	4.9G	5.31G	AV	5.08793G	18.53	-68.71				-68.71	-50.18	-41.20	-8.98
5240MHz	Pass	5.31G	5.47G	AV	5.39704G	18.53	-68.74				-68.74	-50.21	-41.20	-9.01
5240MHz	Pass	4.9G	5.31G	PK	5.12017G	18.53	-55.92				-55.92	-37.39	-21.20	-16.19
5240MHz	Pass	5.31G	5.47G	PK	5.46264G	18.53	-59.77				-59.77	-41.24	-27.00	-14.24
5240MHz	Pass	5.47G	5.85G	PK	5.72118G	18.53	-58.54				-58.54	-40.01	-27.00	-13.01
5240MHz	Pass	5.85G	6.01G	PK	5.95464G	18.53	-58.80				-58.80	-40.27	-27.00	-13.27
5240MHz	Pass	6.01G	6.5G	PK	6.39042G	18.53	-58.64				-58.64	-40.11	-27.00	-13.11
5745MHz	Pass	4.9G	5.31G	AV	4.97319G	18.53	-70.05				-70.05	-51.52	-41.20	-10.32
5745MHz	Pass	5.31G	5.47G	AV	5.42872G	18.53	-69.66				-69.66	-51.13	-41.20	-9.93
5745MHz	Pass	4.9G	5.31G	PK	5.15876G	18.53	-59.72				-59.72	-41.19	-27.00	-14.19
5745MHz	Pass	5.31G	5.47G	PK	5.33208G	18.53	-60.41				-60.41	-41.88	-27.00	-14.88



CSE_Pine R2_Antenna set 10 (Bandedge)_P to M

Appendix E.16

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5745MHz	Pass	5.47G	5.85G	PK	5.60566G	18.53	-57.66				-57.66	-39.13	-27.00	-12.13
5745MHz	Pass	5.85G	6.01G	PK	5.95112G	18.53	-58.57				-58.57	-40.04	-27.00	-13.04
5745MHz	Pass	6.01G	6.5G	PK	6.01276G	18.53	-58.29				-58.29	-39.76	-27.00	-12.76
5785MHz	Pass	4.9G	5.31G	AV	5.00993G	18.53	-70.04				-70.04	-51.51	-41.20	-10.31
5785MHz	Pass	5.31G	5.47G	AV	5.43928G	18.53	-69.77				-69.77	-51.24	-41.20	-10.04
5785MHz	Pass	4.9G	5.31G	PK	5.27413G	18.53	-59.51				-59.51	-40.98	-27.00	-13.98
5785MHz	Pass	5.31G	5.47G	PK	5.462G	18.53	-59.74				-59.74	-41.21	-27.00	-14.21
5785MHz	Pass	5.47G	5.85G	PK	5.63036G	18.53	-58.92				-58.92	-40.39	-27.00	-13.39
5785MHz	Pass	5.85G	6.01G	PK	5.94472G	18.53	-56.40				-56.40	-37.87	-27.00	-10.87
5785MHz	Pass	6.01G	6.5G	PK	6.03524G	18.53	-58.26				-58.26	-39.73	-27.00	-12.73
5825MHz	Pass	4.9G	5.31G	AV	5.08296G	18.53	-70.14				-70.14	-51.61	-41.20	-10.41
5825MHz	Pass	5.31G	5.47G	AV	5.44568G	18.53	-69.45				-69.45	-50.92	-41.20	-9.72
5825MHz	Pass	4.9G	5.31G	PK	5.29416G	18.53	-60.06				-60.06	-41.53	-27.00	-14.53
5825MHz	Pass	5.31G	5.47G	PK	5.46008G	18.53	-59.17				-59.17	-40.64	-27.00	-13.64
5825MHz	Pass	5.47G	5.85G	PK	5.63188G	18.53	-58.85				-58.85	-40.32	-27.00	-13.32
5825MHz	Pass	5.85G	6.01G	PK	5.94824G	18.53	-57.59				-57.59	-39.06	-27.00	-12.06
5825MHz	Pass	6.01G	6.5G	PK	6.02305G	18.53	-57.65				-57.65	-39.12	-27.00	-12.12
802.11ax HEW40_Nss1,(MCS0)_1TX														
5190MHz	Pass	4.9G	5.31G	AV	5.14979G	18.53	-61.14				-61.14	-42.61	-41.20	-1.41
5190MHz	Pass	5.31G	5.47G	AV	5.35736G	18.53	-69.02				-69.02	-50.49	-41.20	-9.29
5190MHz	Pass	4.9G	5.31G	PK	5.14103G	18.53	-48.89				-48.89	-30.36	-21.20	-9.16
5190MHz	Pass	5.31G	5.47G	PK	5.4684G	18.53	-59.55				-59.55	-41.02	-27.00	-14.02
5190MHz	Pass	5.47G	5.85G	PK	5.7588G	18.53	-58.87				-58.87	-40.34	-27.00	-13.34
5190MHz	Pass	5.85G	6.01G	PK	5.9924G	18.53	-58.57				-58.57	-40.04	-27.00	-13.04
5190MHz	Pass	6.01G	6.5G	PK	6.42656G	18.53	-59.40				-59.40	-40.87	-27.00	-13.87
5230MHz	Pass	4.9G	5.31G	AV	5.14954G	18.53	-60.82				-60.82	-42.29	-41.20	-1.09
5230MHz	Pass	5.31G	5.47G	AV	5.39352G	18.53	-66.95				-66.95	-48.42	-41.20	-7.22
5230MHz	Pass	4.9G	5.31G	PK	5.14969G	18.53	-48.32				-48.32	-29.79	-21.20	-8.59
5230MHz	Pass	5.31G	5.47G	PK	5.46648G	18.53	-59.84				-59.84	-41.31	-27.00	-14.31
5230MHz	Pass	5.47G	5.85G	PK	5.62162G	18.53	-57.94				-57.94	-39.41	-27.00	-12.41
5230MHz	Pass	5.85G	6.01G	PK	5.946G	18.53	-58.48				-58.48	-39.95	-27.00	-12.95
5230MHz	Pass	6.01G	6.5G	PK	6.23785G	18.53	-57.85				-57.85	-39.32	-27.00	-12.32
5755MHz	Pass	4.9G	5.31G	AV	4.9943G	18.53	-70.19				-70.19	-51.66	-41.20	-10.46
5755MHz	Pass	5.31G	5.47G	AV	5.44408G	18.53	-69.64				-69.64	-51.11	-41.20	-9.91
5755MHz	Pass	4.9G	5.31G	PK	5.17706G	18.53	-59.03				-59.03	-40.50	-27.00	-13.50
5755MHz	Pass	5.31G	5.47G	PK	5.33656G	18.53	-59.86				-59.86	-41.33	-27.00	-14.33
5755MHz	Pass	5.47G	5.85G	PK	5.64138G	18.53	-57.42				-57.42	-38.89	-27.00	-11.89
5755MHz	Pass	5.85G	6.01G	PK	5.9524G	18.53	-56.05				-56.05	-37.52	-27.00	-10.52
5755MHz	Pass	6.01G	6.5G	PK	6.14457G	18.53	-58.39				-58.39	-39.86	-27.00	-12.86
5795MHz	Pass	4.9G	5.31G	AV	4.93957G	18.53	-70.38				-70.38	-51.85	-41.20	-10.65
5795MHz	Pass	5.31G	5.47G	AV	5.45848G	18.53	-69.55				-69.55	-51.02	-41.20	-9.82
5795MHz	Pass	4.9G	5.31G	PK	5.28233G	18.53	-59.09				-59.09	-40.56	-27.00	-13.56
5795MHz	Pass	5.31G	5.47G	PK	5.46808G	18.53	-59.22				-59.22	-40.69	-27.00	-13.69
5795MHz	Pass	5.47G	5.85G	PK	5.61744G	18.53	-57.81				-57.81	-39.28	-27.00	-12.28
5795MHz	Pass	5.85G	6.01G	PK	5.94152G	18.53	-56.27				-56.27	-37.74	-27.00	-10.74
5795MHz	Pass	6.01G	6.5G	PK	6.23044G	18.53	-57.72				-57.72	-39.19	-27.00	-12.19
802.11ax HEW80_Nss1,(MCS0)_1TX														
5210MHz	Pass	4.9G	5.31G	AV	5.14503G	18.53	-61.10				-61.10	-42.57	-41.20	-1.37
5210MHz	Pass	5.31G	5.47G	AV	5.3612G	18.53	-68.95				-68.95	-50.42	-41.20	-9.22
5210MHz	Pass	4.9G	5.31G	PK	5.14882G	18.53	-50.07				-50.07	-31.54	-21.20	-10.34
5210MHz	Pass	5.31G	5.47G	PK	5.4684G	18.53	-60.23				-60.23	-41.70	-27.00	-14.70
5210MHz	Pass	5.47G	5.85G	PK	5.7607G	18.53	-58.39				-58.39	-39.86	-27.00	-12.86
5210MHz	Pass	5.85G	6.01G	PK	5.96232G	18.53	-58.41				-58.41	-39.88	-27.00	-12.88
5210MHz	Pass	6.01G	6.5G	PK	6.39637G	18.53	-58.51				-58.51	-39.98	-27.00	-12.98
5775MHz	Pass	4.9G	5.31G	AV	5.03258G	18.53	-70.12				-70.12	-51.59	-41.20	-10.39
5775MHz	Pass	5.31G	5.47G	AV	5.4572G	18.53	-69.67				-69.67	-51.14	-41.20	-9.94
5775MHz	Pass	4.9G	5.31G	PK	5.29821G	18.53	-58.80				-58.80	-40.27	-27.00	-13.27
5775MHz	Pass	5.31G	5.47G	PK	5.47G	18.53	-59.64				-59.64	-41.11	-27.00	-14.11
5775MHz	Pass	5.47G	5.85G	PK	5.64822G	18.53	-47.85				-47.85	-29.32	-27.00	-2.32
5775MHz	Pass	5.85G	6.01G	PK	5.92488G	18.53	-50.75				-50.75	-32.22	-26.91	-5.31
5775MHz	Pass	6.01G	6.5G	PK	6.06917G	18.53	-57.45				-57.45	-38.92	-27.00	-11.92
802.11a_Nss1,(6Mbps)_2TX														
5180MHz	Pass	4.9G	5.31G	AV	5.14964G	18.53	-63.50	-62.24			-59.81	-41.28	-41.20	-0.08
5180MHz	Pass	5.31G	5.47G	AV	5.35352G	18.53	-69.98	-68.06			-65.90	-47.37	-41.20	-6.17
5180MHz	Pass	4.9G	5.31G	PK	5.14892G	18.53	-54.79	-53.47			-51.07	-32.54	-21.20	-11.34
5180MHz	Pass	5.31G	5.47G	PK	5.46264G	18.53	-60.90	-63.47			-58.99	-40.46	-27.00	-13.46
5180MHz	Pass	5.47G	5.85G	PK	5.82074G	18.53	-60.48	-59.96			-57.20	-38.67	-27.00	-11.67
5180MHz	Pass	5.85G	6.01G	PK	5.90696G	18.53	-58.40	-61.67			-56.72	-38.19	-27.00	-11.19
5180MHz	Pass	6.01G	6.5G	PK	6.05275G	18.53	-62.88	-57.44			-56.35	-37.82	-27.00	-10.82
5200MHz	Pass	4.9G	5.31G	AV	5.14918G	18.53	-64.76	-61.80			-60.02	-41.49	-41.20	-0.29



CSE_Pine R2_Antenna set 10 (Bandedge)_P to M

Appendix E.16

Table with 15 columns: Mode, Result, F-Start (Hz), F-Stop (Hz), Type, Freq (Hz), DG (dBi), P1 (dBm), P2 (dBm), P3 (dBm), P4 (dBm), Psum (dBm), EIRP (dBm), Limit (dBm), Margin (dB). Rows include various frequency bands (5200MHz to 5825MHz) and a section for 802.11ax HEW20_Nss1,(MCS0)_2TX.

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5825MHz	Pass	4.9G	5.31G	AV	5.05124G	18.53	-70.53	-68.97			-66.67	-48.14	-41.20	-6.94
5825MHz	Pass	5.31G	5.47G	AV	5.43288G	18.53	-70.07	-67.24			-65.42	-46.89	-41.20	-5.69
5825MHz	Pass	4.9G	5.31G	PK	5.27208G	18.53	-57.64	-63.29			-56.59	-38.06	-27.00	-11.06
5825MHz	Pass	5.31G	5.47G	PK	5.34232G	18.53	-62.90	-57.98			-56.77	-38.24	-27.00	-11.24
5825MHz	Pass	5.47G	5.85G	PK	5.52054G	18.53	-63.08	-57.49			-56.43	-37.90	-27.00	-10.90
5825MHz	Pass	5.85G	6.01G	PK	6.0068G	18.53	-59.47	-55.36			-53.94	-35.41	-27.00	-8.41
5825MHz	Pass	6.01G	6.5G	PK	6.04712G	18.53	-59.95	-57.35			-55.45	-36.92	-27.00	-9.92
802.11ax HEW40_Nss1,(MCS0)_2TX														
5190MHz	Pass	4.9G	5.31G	AV	5.14897G	18.53	-67.72	-61.17			-60.30	-41.77	-41.20	-0.57
5190MHz	Pass	5.31G	5.47G	AV	5.35768G	18.53	-69.95	-69.07			-66.48	-47.95	-41.20	-6.75
5190MHz	Pass	4.9G	5.31G	PK	5.14334G	18.53	-64.86	-51.09			-50.91	-32.38	-21.20	-11.18
5190MHz	Pass	5.31G	5.47G	PK	5.46232G	18.53	-60.49	-63.63			-58.77	-40.24	-27.00	-13.24
5190MHz	Pass	5.47G	5.85G	PK	5.83632G	18.53	-59.86	-60.39			-57.11	-38.58	-27.00	-11.58
5190MHz	Pass	5.85G	6.01G	PK	5.89288G	18.53	-58.46	-59.84			-56.09	-37.56	-27.00	-10.56
5190MHz	Pass	6.01G	6.5G	PK	6.11639G	18.53	-57.79	-61.58			-56.27	-37.74	-27.00	-10.74
5230MHz	Pass	4.9G	5.31G	AV	5.14841G	18.53	-66.32	-63.21			-61.48	-42.95	-41.20	-1.75
5230MHz	Pass	5.31G	5.47G	AV	5.39672G	18.53	-68.54	-66.10			-64.14	-45.61	-41.20	-4.41
5230MHz	Pass	4.9G	5.31G	PK	5.14103G	18.53	-50.07	-56.83			-49.24	-30.71	-21.20	-9.51
5230MHz	Pass	5.31G	5.47G	PK	5.46456G	18.53	-61.74	-57.92			-56.41	-37.88	-27.00	-10.88
5230MHz	Pass	5.47G	5.85G	PK	5.79756G	18.53	-63.48	-56.11			-55.38	-36.85	-27.00	-9.85
5230MHz	Pass	5.85G	6.01G	PK	6.00776G	18.53	-61.69	-58.18			-56.58	-38.05	-27.00	-11.05
5230MHz	Pass	6.01G	6.5G	PK	6.04804G	18.53	-61.93	-57.93			-56.47	-37.94	-27.00	-10.94
5755MHz	Pass	4.9G	5.31G	AV	5.00281G	18.53	-70.93	-68.66			-66.64	-48.11	-41.20	-6.91
5755MHz	Pass	5.31G	5.47G	AV	5.3644G	18.53	-70.30	-67.68			-65.79	-47.26	-41.20	-6.06
5755MHz	Pass	4.9G	5.31G	PK	5.2197G	18.53	-61.29	-57.60			-56.05	-37.52	-27.00	-10.52
5755MHz	Pass	5.31G	5.47G	PK	5.33432G	18.53	-62.19	-59.09			-57.36	-38.83	-27.00	-11.83
5755MHz	Pass	5.47G	5.85G	PK	5.65202G	18.53	-60.11	-51.56			-50.99	-32.46	-25.51	-6.95
5755MHz	Pass	5.85G	6.01G	PK	5.92584G	18.53	-57.54	-54.45			-52.72	-34.19	-27.00	-7.19
5755MHz	Pass	6.01G	6.5G	PK	6.02544G	18.53	-58.22	-59.15			-55.65	-37.12	-27.00	-10.12
5795MHz	Pass	4.9G	5.31G	AV	5.03079G	18.53	-71.34	-68.56			-66.72	-48.19	-41.20	-6.99
5795MHz	Pass	5.31G	5.47G	AV	5.4124G	18.53	-70.25	-67.75			-65.81	-47.28	-41.20	-6.08
5795MHz	Pass	4.9G	5.31G	PK	5.15579G	18.53	-61.35	-57.72			-56.16	-37.63	-27.00	-10.63
5795MHz	Pass	5.31G	5.47G	PK	5.31672G	18.53	-64.71	-57.64			-56.86	-38.33	-27.00	-11.33
5795MHz	Pass	5.47G	5.85G	PK	5.6448G	18.53	-61.14	-55.74			-54.64	-36.11	-27.00	-9.11
5795MHz	Pass	5.85G	6.01G	PK	5.96616G	18.53	-58.24	-54.76			-53.15	-34.62	-27.00	-7.62
5795MHz	Pass	6.01G	6.5G	PK	6.08509G	18.53	-60.83	-56.35			-55.03	-36.50	-27.00	-9.50
802.11ax HEW80_Nss1,(MCS0)_2TX														
5210MHz	Pass	4.9G	5.31G	AV	5.14831G	18.53	-67.46	-60.56			-59.75	-41.22	-41.20	-0.02
5210MHz	Pass	5.31G	5.47G	AV	5.35352G	18.53	-70.51	-69.27			-66.84	-48.31	-41.20	-7.11
5210MHz	Pass	4.9G	5.31G	PK	5.14195G	18.53	-62.82	-50.52			-50.27	-31.74	-21.20	-10.54
5210MHz	Pass	5.31G	5.47G	PK	5.46776G	18.53	-63.90	-60.19			-58.65	-40.12	-27.00	-13.12
5210MHz	Pass	5.47G	5.85G	PK	5.79224G	18.53	-61.40	-58.54			-56.73	-38.20	-27.00	-11.20
5210MHz	Pass	5.85G	6.01G	PK	5.88648G	18.53	-60.72	-58.60			-56.52	-37.99	-27.00	-10.99
5210MHz	Pass	6.01G	6.5G	PK	6.08711G	18.53	-58.53	-61.37			-56.71	-38.18	-27.00	-11.18
5775MHz	Pass	4.9G	5.31G	AV	5.07999G	18.53	-71.42	-69.32			-67.23	-48.70	-41.20	-7.50
5775MHz	Pass	5.31G	5.47G	AV	5.4588G	18.53	-70.58	-68.88			-66.64	-48.11	-41.20	-6.91
5775MHz	Pass	4.9G	5.31G	PK	5.16004G	18.53	-62.54	-59.26			-57.59	-39.06	-27.00	-12.06
5775MHz	Pass	5.31G	5.47G	PK	5.34872G	18.53	-61.74	-59.02			-57.16	-38.63	-27.00	-11.63
5775MHz	Pass	5.47G	5.85G	PK	5.64746G	18.53	-57.03	-46.53			-46.16	-27.63	-27.00	-0.63
5775MHz	Pass	5.85G	6.01G	PK	5.92456G	18.53	-59.65	-50.14			-49.68	-31.15	-26.67	-4.48
5775MHz	Pass	6.01G	6.5G	PK	6.02721G	18.53	-60.49	-57.64			-55.82	-37.29	-27.00	-10.29
802.11a_Nss1,(6Mbps)_4TX														
5180MHz	Pass	4.9G	5.31G	AV	5.14964G	18.53	-69.94	-68.70	-69.44	-68.59	-63.11	-44.58	-41.20	-3.38
5180MHz	Pass	5.31G	5.47G	AV	5.41688G	18.53	-69.88	-68.96	-70.87	-69.57	-63.75	-45.22	-41.20	-4.02
5180MHz	Pass	4.9G	5.31G	PK	5.13688G	18.53	-58.44	-59.66	-61.64	-61.93	-54.16	-35.63	-21.20	-14.43
5180MHz	Pass	5.31G	5.47G	PK	5.46232G	18.53	-63.92	-59.82	-62.41	-61.98	-55.76	-37.23	-27.00	-10.23
5180MHz	Pass	5.47G	5.85G	PK	5.83404G	18.53	-61.53	-61.55	-58.94	-60.47	-54.47	-35.94	-27.00	-8.94
5180MHz	Pass	5.85G	6.01G	PK	5.93768G	18.53	-63.00	-62.43	-62.17	-56.84	-54.26	-35.73	-27.00	-8.73
5180MHz	Pass	6.01G	6.5G	PK	6.31037G	18.53	-62.30	-64.72	-58.11	-58.82	-54.22	-35.69	-27.00	-8.69
5200MHz	Pass	4.9G	5.31G	AV	5.14979G	18.53	-71.23	-68.73	-68.69	-69.26	-63.34	-44.81	-41.20	-3.61
5200MHz	Pass	5.31G	5.47G	AV	5.3548G	18.53	-70.69	-69.20	-68.87	-68.36	-63.18	-44.65	-41.20	-3.45
5200MHz	Pass	4.9G	5.31G	PK	5.13124G	18.53	-64.55	-63.98	-56.47	-62.11	-54.41	-35.88	-21.20	-14.68
5200MHz	Pass	5.31G	5.47G	PK	5.46488G	18.53	-63.77	-63.52	-58.96	-63.92	-55.95	-37.42	-27.00	-10.42
5200MHz	Pass	5.47G	5.85G	PK	5.7892G	18.53	-63.98	-63.67	-58.37	-57.64	-53.97	-35.44	-27.00	-8.44
5200MHz	Pass	5.85G	6.01G	PK	5.86536G	18.53	-61.45	-62.77	-56.63	-60.86	-53.73	-35.20	-27.00	-8.20
5200MHz	Pass	6.01G	6.5G	PK	6.3354G	18.53	-63.33	-59.78	-60.85	-58.09	-54.10	-35.57	-27.00	-8.57
5240MHz	Pass	4.9G	5.31G	AV	5.08665G	18.53	-70.67	-68.95	-68.74	-69.10	-63.28	-44.75	-41.20	-3.55
5240MHz	Pass	5.31G	5.47G	AV	5.3996G	18.53	-70.52	-69.14	-68.60	-68.60	-63.13	-44.60	-41.20	-3.40
5240MHz	Pass	4.9G	5.31G	PK	5.13165G	18.53	-63.08	-62.77	-57.86	-60.44	-54.48	-35.95	-21.20	-14.75
5240MHz	Pass	5.31G	5.47G	PK	5.4652G	18.53	-63.33	-62.00	-61.69	-58.85	-55.12	-36.59	-27.00	-9.59



CSE_Pine R2_Antenna set 10 (Bandedge) P to M

Appendix E.16

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5240MHz	Pass	5.47G	5.85G	PK	5.84126G	18.53	-62.08	-61.35	-59.67	-58.79	-54.26	-35.73	-27.00	-8.73
5240MHz	Pass	5.85G	6.01G	PK	5.90216G	18.53	-62.10	-60.14	-59.08	-60.39	-54.28	-35.75	-27.00	-8.75
5240MHz	Pass	6.01G	6.5G	PK	6.02194G	18.53	-60.43	-62.10	-59.96	-60.52	-54.66	-36.13	-27.00	-9.13
5745MHz	Pass	4.9G	5.31G	AV	5.1009G	18.53	-71.08	-69.33	-69.51	-69.18	-63.69	-45.16	-41.20	-3.96
5745MHz	Pass	5.31G	5.47G	AV	5.35512G	18.53	-70.41	-68.45	-67.61	-69.23	-62.78	-44.25	-41.20	-3.05
5745MHz	Pass	4.9G	5.31G	PK	5.30349G	18.53	-65.06	-59.07	-59.93	-62.10	-54.97	-36.44	-27.00	-9.44
5745MHz	Pass	5.31G	5.47G	PK	5.46552G	18.53	-61.96	-65.44	-56.82	-62.89	-54.54	-36.01	-27.00	-9.01
5745MHz	Pass	5.47G	5.85G	PK	5.60604G	18.53	-64.85	-61.12	-56.23	-59.30	-53.32	-34.79	-27.00	-7.79
5745MHz	Pass	5.85G	6.01G	PK	5.9364G	18.53	-60.36	-60.32	-56.58	-60.62	-53.09	-34.56	-27.00	-7.56
5745MHz	Pass	6.01G	6.5G	PK	6.16809G	18.53	-62.09	-63.07	-59.00	-57.74	-53.92	-35.39	-27.00	-8.39
5785MHz	Pass	4.9G	5.31G	AV	5.14123G	18.53	-71.82	-69.15	-69.70	-69.68	-63.96	-45.43	-41.20	-4.23
5785MHz	Pass	5.31G	5.47G	AV	5.39512G	18.53	-71.03	-68.70	-68.37	-68.91	-63.12	-44.59	-41.20	-3.39
5785MHz	Pass	4.9G	5.31G	PK	5.15266G	18.53	-60.52	-62.86	-58.64	-63.47	-54.92	-36.39	-27.00	-9.39
5785MHz	Pass	5.31G	5.47G	PK	5.34808G	18.53	-63.94	-59.86	-59.95	-61.42	-54.99	-36.46	-27.00	-9.46
5785MHz	Pass	5.47G	5.85G	PK	5.6372G	18.53	-62.55	-61.79	-58.94	-57.60	-53.73	-35.20	-27.00	-8.20
5785MHz	Pass	5.85G	6.01G	PK	5.95272G	18.53	-62.63	-58.57	-59.47	-56.20	-52.62	-34.09	-27.00	-7.09
5785MHz	Pass	6.01G	6.5G	PK	6.17464G	18.53	-67.03	-57.88	-56.72	-62.13	-53.40	-34.87	-27.00	-7.87
5825MHz	Pass	4.9G	5.31G	AV	5.10377G	18.53	-71.80	-70.34	-68.75	-69.87	-64.03	-45.50	-41.20	-4.30
5825MHz	Pass	5.31G	5.47G	AV	5.43608G	18.53	-70.89	-68.89	-68.61	-68.16	-63.00	-44.47	-41.20	-3.27
5825MHz	Pass	4.9G	5.31G	PK	5.15476G	18.53	-65.48	-59.28	-59.80	-64.38	-55.41	-36.88	-27.00	-9.88
5825MHz	Pass	5.31G	5.47G	PK	5.462G	18.53	-61.25	-62.35	-60.63	-61.16	-55.28	-36.75	-27.00	-9.75
5825MHz	Pass	5.47G	5.85G	PK	5.6391G	18.53	-62.76	-58.75	-60.87	-58.93	-54.02	-35.49	-27.00	-8.49
5825MHz	Pass	5.85G	6.01G	PK	5.9844G	18.53	-59.83	-57.47	-59.10	-58.09	-52.51	-33.98	-27.00	-6.98
5825MHz	Pass	6.01G	6.5G	PK	6.17384G	18.53	-64.04	-56.87	-59.46	-61.75	-53.71	-35.18	-27.00	-8.18
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.9G	5.31G	AV	5.14826G	18.53	-70.65	-68.98	-69.31	-68.34	-63.22	-44.69	-41.20	-3.49
5180MHz	Pass	5.31G	5.47G	AV	5.4588G	18.53	-70.07	-69.74	-70.95	-69.73	-64.07	-45.54	-41.20	-4.34
5180MHz	Pass	4.9G	5.31G	PK	5.14738G	18.53	-65.22	-56.66	-60.17	-61.89	-53.91	-35.38	-21.20	-14.18
5180MHz	Pass	5.31G	5.47G	PK	5.462G	18.53	-58.46	-62.69	-62.28	-62.04	-54.97	-36.44	-27.00	-9.44
5180MHz	Pass	5.47G	5.85G	PK	5.75006G	18.53	-63.52	-61.22	-62.49	-57.59	-54.55	-36.02	-27.00	-9.02
5180MHz	Pass	5.85G	6.01G	PK	5.91368G	18.53	-62.59	-60.49	-63.30	-57.29	-54.23	-35.70	-27.00	-8.70
5180MHz	Pass	6.01G	6.5G	PK	6.08191G	18.53	-63.66	-61.50	-62.81	-57.94	-54.86	-36.33	-27.00	-9.33
5200MHz	Pass	4.9G	5.31G	AV	5.14856G	18.53	-70.73	-69.04	-68.23	-68.72	-63.06	-44.53	-41.20	-3.33
5200MHz	Pass	5.31G	5.47G	AV	5.3564G	18.53	-70.72	-68.74	-69.18	-68.91	-63.30	-44.77	-41.20	-3.57
5200MHz	Pass	4.9G	5.31G	PK	5.14897G	18.53	-63.88	-61.39	-60.12	-56.69	-53.72	-35.19	-21.20	-13.99
5200MHz	Pass	5.31G	5.47G	PK	5.46968G	18.53	-62.72	-61.30	-60.91	-63.42	-55.95	-37.42	-27.00	-10.42
5200MHz	Pass	5.47G	5.85G	PK	5.812G	18.53	-60.68	-62.04	-58.93	-63.24	-54.90	-36.37	-27.00	-9.37
5200MHz	Pass	5.85G	6.01G	PK	5.96744G	18.53	-63.94	-60.14	-59.11	-59.23	-54.21	-35.68	-27.00	-8.68
5200MHz	Pass	6.01G	6.5G	PK	6.29708G	18.53	-65.40	-58.84	-61.23	-58.42	-54.22	-35.69	-27.00	-8.69
5240MHz	Pass	4.9G	5.31G	AV	5.08332G	18.53	-70.65	-68.97	-69.27	-68.83	-63.35	-44.82	-41.20	-3.62
5240MHz	Pass	5.31G	5.47G	AV	5.40248G	18.53	-70.03	-69.14	-69.13	-68.34	-63.10	-44.57	-41.20	-3.37
5240MHz	Pass	4.9G	5.31G	PK	5.13421G	18.53	-62.83	-62.63	-59.82	-58.66	-54.60	-36.07	-21.20	-14.87
5240MHz	Pass	5.31G	5.47G	PK	5.46392G	18.53	-64.01	-61.29	-62.67	-59.94	-55.69	-37.16	-27.00	-10.16
5240MHz	Pass	5.47G	5.85G	PK	5.79832G	18.53	-61.19	-59.37	-58.94	-61.61	-54.11	-35.58	-27.00	-8.58
5240MHz	Pass	5.85G	6.01G	PK	5.9172G	18.53	-58.86	-61.31	-62.03	-57.60	-53.56	-35.03	-27.00	-8.03
5240MHz	Pass	6.01G	6.5G	PK	6.09765G	18.53	-61.13	-58.62	-59.13	-64.48	-54.29	-35.76	-27.00	-8.76
5745MHz	Pass	4.9G	5.31G	AV	5.09906G	18.53	-71.98	-70.14	-69.53	-69.30	-64.10	-45.57	-41.20	-4.37
5745MHz	Pass	5.31G	5.47G	AV	5.3548G	18.53	-70.86	-68.18	-68.48	-69.08	-63.01	-44.48	-41.20	-3.28
5745MHz	Pass	4.9G	5.31G	PK	5.20402G	18.53	-65.39	-59.43	-58.83	-62.09	-54.74	-36.21	-27.00	-9.21
5745MHz	Pass	5.31G	5.47G	PK	5.31352G	18.53	-64.27	-58.21	-64.87	-62.59	-55.59	-37.06	-27.00	-10.06
5745MHz	Pass	5.47G	5.85G	PK	5.58742G	18.53	-66.86	-63.12	-57.84	-55.91	-53.10	-34.57	-27.00	-7.57
5745MHz	Pass	5.85G	6.01G	PK	5.94152G	18.53	-61.60	-62.53	-56.79	-61.07	-53.84	-35.31	-27.00	-8.31
5745MHz	Pass	6.01G	6.5G	PK	6.12301G	18.53	-63.50	-61.02	-57.83	-60.04	-54.12	-35.59	-27.00	-8.59
5785MHz	Pass	4.9G	5.31G	AV	5.14262G	18.53	-71.48	-69.89	-69.06	-69.96	-63.99	-45.46	-41.20	-4.26
5785MHz	Pass	5.31G	5.47G	AV	5.40952G	18.53	-70.54	-68.63	-68.49	-68.49	-62.94	-44.41	-41.20	-3.21
5785MHz	Pass	4.9G	5.31G	PK	5.22467G	18.53	-61.86	-62.16	-59.40	-61.47	-55.06	-36.53	-27.00	-9.53
5785MHz	Pass	5.31G	5.47G	PK	5.3276G	18.53	-64.29	-61.50	-59.88	-59.13	-54.78	-36.25	-27.00	-9.25
5785MHz	Pass	5.47G	5.85G	PK	5.61174G	18.53	-64.87	-60.24	-58.06	-58.15	-53.60	-35.07	-27.00	-8.07
5785MHz	Pass	5.85G	6.01G	PK	5.95144G	18.53	-64.12	-59.93	-57.07	-57.09	-52.74	-34.21	-27.00	-7.21
5785MHz	Pass	6.01G	6.5G	PK	6.03181G	18.53	-62.53	-60.19	-58.80	-58.68	-53.78	-35.25	-27.00	-8.25
5825MHz	Pass	4.9G	5.31G	AV	5.11535G	18.53	-71.59	-69.83	-69.08	-69.54	-63.89	-45.36	-41.20	-4.16
5825MHz	Pass	5.31G	5.47G	AV	5.44984G	18.53	-70.75	-68.99	-68.12	-68.94	-63.08	-44.55	-41.20	-3.35
5825MHz	Pass	4.9G	5.31G	PK	5.28007G	18.53	-60.50	-60.88	-65.58	-58.91	-54.85	-36.32	-27.00	-9.32
5825MHz	Pass	5.31G	5.47G	PK	5.34168G	18.53	-65.11	-59.87	-60.32	-60.86	-55.10	-36.57	-27.00	-9.57
5825MHz	Pass	5.47G	5.85G	PK	5.63758G	18.53	-65.27	-65.15	-56.48	-61.36	-54.46	-35.93	-27.00	-8.93
5825MHz	Pass	5.85G	6.01G	PK	5.99464G	18.53	-58.93	-60.85	-60.75	-56.71	-52.94	-34.41	-27.00	-7.41
5825MHz	Pass	6.01G	6.5G	PK	6.01153G	18.53	-62.17	-59.17	-61.34	-56.43	-53.16	-34.63	-27.00	-7.63
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.9G	5.31G	AV	5.15G	18.53	-71.34	-67.69	-68.89	-68.12	-62.78	-44.25	-41.20	-3.05
5190MHz	Pass	5.31G	5.47G	AV	5.35832G	18.53	-71.60	-70.37	-70.64	-69.93	-64.57	-46.04	-41.20	-4.84



CSE_Pine R2_Antenna set 10 (Bandedge)_P to M

Appendix E.16

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5190MHz	Pass	4.9G	5.31G	PK	5.14636G	18.53	-65.31	-58.40	-63.97	-57.78	-54.19	-35.66	-21.20	-14.46
5190MHz	Pass	5.31G	5.47G	PK	5.4684G	18.53	-63.65	-62.51	-60.83	-60.20	-55.57	-37.04	-27.00	-10.04
5190MHz	Pass	5.47G	5.85G	PK	5.81162G	18.53	-61.58	-60.52	-61.32	-62.68	-55.44	-36.91	-27.00	-9.91
5190MHz	Pass	5.85G	6.01G	PK	5.86088G	18.53	-60.68	-59.97	-61.97	-58.40	-54.04	-35.51	-27.00	-8.51
5190MHz	Pass	6.01G	6.5G	PK	6.05049G	18.53	-60.79	-60.68	-66.09	-59.62	-55.19	-36.66	-27.00	-9.66
5230MHz	Pass	4.9G	5.31G	AV	5.06087G	18.53	-71.50	-69.19	-68.26	-67.94	-63.00	-44.47	-41.20	-3.27
5230MHz	Pass	5.31G	5.47G	AV	5.38712G	18.53	-70.51	-68.99	-68.20	-67.98	-62.79	-44.26	-41.20	-3.06
5230MHz	Pass	4.9G	5.31G	PK	5.07169G	18.53	-63.81	-61.79	-59.34	-58.29	-54.29	-35.76	-21.20	-14.56
5230MHz	Pass	5.31G	5.47G	PK	5.46264G	18.53	-60.82	-63.92	-59.97	-61.50	-55.30	-36.77	-27.00	-9.77
5230MHz	Pass	5.47G	5.85G	PK	5.7037G	18.53	-62.02	-66.91	-57.73	-59.68	-54.44	-35.91	-27.00	-8.91
5230MHz	Pass	5.85G	6.01G	PK	5.97032G	18.53	-64.09	-61.93	-57.10	-61.73	-54.37	-35.84	-27.00	-8.84
5230MHz	Pass	6.01G	6.5G	PK	6.22554G	18.53	-64.39	-61.40	-61.92	-56.16	-53.82	-35.29	-27.00	-8.29
5755MHz	Pass	4.9G	5.31G	AV	5.10362G	18.53	-71.15	-69.22	-69.13	-69.74	-63.72	-45.19	-41.20	-3.99
5755MHz	Pass	5.31G	5.47G	AV	5.37432G	18.53	-70.44	-68.45	-68.23	-68.62	-62.83	-44.30	-41.20	-3.10
5755MHz	Pass	4.9G	5.31G	PK	5.16189G	18.53	-58.96	-61.87	-59.66	-62.95	-54.55	-36.02	-27.00	-9.02
5755MHz	Pass	5.31G	5.47G	PK	5.46648G	18.53	-63.47	-61.85	-62.39	-55.71	-53.60	-35.07	-27.00	-8.07
5755MHz	Pass	5.47G	5.85G	PK	5.57146G	18.53	-63.85	-60.35	-53.78	-59.25	-51.73	-33.20	-27.00	-6.20
5755MHz	Pass	5.85G	6.01G	PK	5.92712G	18.53	-59.74	-57.11	-58.88	-54.14	-50.89	-32.36	-27.00	-5.36
5755MHz	Pass	6.01G	6.5G	PK	6.05698G	18.53	-58.76	-56.98	-59.78	-61.62	-52.95	-34.42	-27.00	-7.42
5795MHz	Pass	4.9G	5.31G	AV	5.10828G	18.53	-71.99	-69.02	-68.91	-70.00	-63.80	-45.27	-41.20	-4.07
5795MHz	Pass	5.31G	5.47G	AV	5.42552G	18.53	-70.66	-68.88	-68.09	-68.96	-63.03	-44.50	-41.20	-3.30
5795MHz	Pass	4.9G	5.31G	PK	5.19254G	18.53	-60.71	-58.24	-60.37	-65.41	-54.49	-35.96	-27.00	-8.96
5795MHz	Pass	5.31G	5.47G	PK	5.46264G	18.53	-61.67	-65.92	-57.96	-60.57	-54.67	-36.14	-27.00	-9.14
5795MHz	Pass	5.47G	5.85G	PK	5.63986G	18.53	-61.04	-59.98	-58.22	-54.21	-51.49	-32.96	-27.00	-5.96
5795MHz	Pass	5.85G	6.01G	PK	5.96776G	18.53	-59.66	-58.21	-58.80	-52.94	-50.46	-31.93	-27.00	-4.93
5795MHz	Pass	6.01G	6.5G	PK	6.07266G	18.53	-62.30	-63.38	-56.51	-59.42	-53.54	-35.01	-27.00	-8.01
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.9G	5.31G	AV	5.1499G	18.53	-71.11	-66.57	-69.57	-69.99	-62.94	-44.41	-41.20	-3.21
5210MHz	Pass	5.31G	5.47G	AV	5.4492G	18.53	-71.17	-70.53	-71.16	-71.04	-64.95	-46.42	-41.20	-5.22
5210MHz	Pass	4.9G	5.31G	PK	5.14006G	18.53	-65.49	-55.89	-62.75	-63.79	-54.19	-35.66	-21.20	-14.46
5210MHz	Pass	5.31G	5.47G	PK	5.46072G	18.53	-64.41	-60.06	-63.23	-63.88	-56.51	-37.98	-27.00	-10.98
5210MHz	Pass	5.47G	5.85G	PK	5.75994G	18.53	-60.24	-58.42	-64.10	-63.69	-54.95	-36.42	-27.00	-9.42
5210MHz	Pass	5.85G	6.01G	PK	5.97384G	18.53	-60.89	-59.64	-62.11	-62.80	-55.17	-36.64	-27.00	-9.64
5210MHz	Pass	6.01G	6.5G	PK	6.33322G	18.53	-65.91	-61.62	-60.16	-61.43	-55.80	-37.27	-27.00	-10.27
5775MHz	Pass	4.9G	5.31G	AV	5.13447G	18.53	-71.58	-69.99	-68.59	-70.13	-63.92	-45.39	-41.20	-4.19
5775MHz	Pass	5.31G	5.47G	AV	5.45112G	18.53	-70.33	-69.60	-68.89	-68.45	-63.24	-44.71	-41.20	-3.51
5775MHz	Pass	4.9G	5.31G	PK	5.18326G	18.53	-64.56	-58.27	-61.89	-61.65	-54.99	-36.46	-27.00	-9.46
5775MHz	Pass	5.31G	5.47G	PK	5.46936G	18.53	-62.15	-59.67	-58.18	-63.49	-54.37	-35.84	-27.00	-8.84
5775MHz	Pass	5.47G	5.85G	PK	5.64214G	18.53	-59.52	-54.47	-54.05	-54.46	-49.13	-30.60	-27.00	-3.60
5775MHz	Pass	5.85G	6.01G	PK	5.93256G	18.53	-58.74	-55.23	-58.27	-53.84	-50.02	-31.49	-27.00	-4.49
5775MHz	Pass	6.01G	6.5G	PK	6.07211G	18.53	-62.04	-59.09	-58.00	-60.69	-53.67	-35.14	-27.00	-8.14

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX

