802.11n(HT40) UNII 2C Band

802.11n(HT40) UNII 3 Band

802.11ac(VHT40) UNII 2C Band

802.11ac(VHT40) UNII 3 Band

802.11ac(VHT80) UNII 2C Band

802.11ac(VHT80) UNII 3 Band

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10.8 RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	A.F+D.F+C.L	POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]
No Critical peaks found						

Note:

1. The Measured Value of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor = 40log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dBμV) + Distance extrapolation factor

Frequency Range : Below 1 GHz

Frequency	Measured Value	A.F+C.L	POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]
No Critical peaks found						

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode

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Frequency Range : Above 1 GHz

[MIMO_CDD(Ant.1+Ant.2)]

Band :	UNII 1		Operation Mode : 802.11a				
CH.36	5180MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10360	48.56	5.85	V	54.41	68.20	13.79	PK
15540	48.55	7.31	V	55.86	73.98	18.12	PK
15540	35.16	7.31	V	42.47	53.98	11.51	AV
10360	48.29	5.85	H	54.14	68.20	14.06	PK
15540	49.04	7.31	H	56.35	73.98	17.63	PK
15540	35.51	7.31	H	42.82	53.98	11.16	AV

Band :	UNII 1		Operation Mode : 802.11a				
CH.40	5200MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10400	48.32	5.47	V	53.79	68.20	14.41	PK
15600	48.99	7.10	V	56.09	73.98	17.89	PK
15600	35.26	7.10	V	42.36	53.98	11.62	AV
10400	48.02	5.47	H	53.49	68.20	14.71	PK
15600	50.43	7.10	H	57.53	73.98	16.45	PK
15600	35.82	7.10	H	42.92	53.98	11.06	AV

Band :	UNII 1		Operation Mode : 802.11a				
CH.48	5240MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10480	49.01	6.24	V	55.25	68.20	12.95	PK
15720	49.96	6.52	V	56.48	73.98	17.50	PK
15720	35.92	6.52	V	42.44	53.98	11.54	AV
10480	48.82	6.24	H	55.06	68.20	13.14	PK
15720	50.87	6.52	H	57.39	73.98	16.59	PK
15720	36.84	6.52	H	43.36	53.98	10.62	AV

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Band :	UNII 2A		Operation Mode : 802.11a				
CH.52	5260MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10520	48.20	5.77	V	53.97	68.20	14.23	PK
15780	51.24	6.51	V	57.75	73.98	16.23	PK
15780	37.16	6.51	V	43.67	53.98	10.31	AV
10520	47.93	5.77	H	53.70	68.20	14.50	PK
15780	52.69	6.51	H	59.20	73.98	14.78	PK
15780	37.94	6.51	H	44.45	53.98	9.53	AV

Band :	UNII 2A		Operation Mode : 802.11a				
CH.60	5300MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10600	48.54	5.94	V	54.48	73.98	19.50	PK
10600	35.27	5.94	V	41.21	53.98	12.77	AV
15900	50.14	7.95	V	58.09	73.98	15.89	PK
15900	35.27	7.95	V	43.22	53.98	10.76	AV
10600	47.31	5.94	H	53.25	73.98	20.73	PK
10600	34.96	5.94	H	40.90	53.98	13.08	AV
15900	50.55	7.95	H	58.50	73.98	15.48	PK
15900	35.91	7.95	H	43.86	53.98	10.12	AV

Band :	UNII 2A		Operation Mode : 802.11a				
CH.64	5320MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10640	49.06	6.45	V	55.51	73.98	18.47	PK
10640	35.68	6.45	V	42.13	53.98	11.85	AV
15960	51.93	7.28	V	59.21	73.98	14.77	PK
15960	37.59	7.28	V	44.87	53.98	9.11	AV
10640	48.17	6.45	H	54.62	73.98	19.36	PK
10640	34.92	6.45	H	41.37	53.98	12.61	AV
15960	52.66	7.28	H	59.94	73.98	14.04	PK
15960	38.41	7.28	H	45.69	53.98	8.29	AV

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Band :	UNII 2C		Operation Mode : 802.11a				
CH.100	5500MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11000	48.15	6.55	V	54.70	73.98	19.28	PK
11000	34.81	6.55	V	41.36	53.98	12.62	AV
16500	54.93	8.63	V	63.56	68.20	4.64	PK
11000	47.50	6.55	H	54.05	73.98	19.93	PK
11000	34.53	6.55	H	41.08	53.98	12.90	AV
16500	56.06	8.63	H	64.69	68.20	3.51	PK

Band :	UNII 2C		Operation Mode : 802.11a				
CH.116	5580MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11160	48.26	5.59	V	53.85	73.98	20.13	PK
11160	35.07	5.59	V	40.66	53.98	13.32	AV
16740	54.91	9.89	V	64.80	68.20	3.40	PK
11160	47.93	5.59	H	53.52	73.98	20.46	PK
11160	34.72	5.59	H	40.31	53.98	13.67	AV
16740	55.12	9.89	H	65.01	68.20	3.19	PK

Band :	UNII 2C		Operation Mode : 802.11a				
CH.144	5720MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11440	48.27	6.05	V	54.32	73.98	19.66	PK
11440	34.65	6.05	V	40.70	53.98	13.28	AV
17160	52.16	9.62	V	61.78	68.20	6.42	PK
11440	47.62	6.05	H	53.67	73.98	20.31	PK
11440	34.19	6.05	H	40.24	53.98	13.74	AV
17160	52.52	9.62	H	62.14	68.20	6.06	PK

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Band :	UNII 3		Operation Mode : 802.11a				
CH.149	5745MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11490	48.47	6.03	V	54.50	73.98	19.48	PK
11490	34.96	6.03	V	40.99	53.98	12.99	AV
17235	52.86	10.50	V	63.36	68.20	4.84	PK
11490	48.25	6.03	H	54.28	73.98	19.70	PK
11490	34.56	6.03	H	40.59	53.98	13.39	AV
17235	53.61	10.50	H	64.11	68.20	4.09	PK

Band :	UNII 3		Operation Mode : 802.11a				
CH.157	5785MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11570	48.21	6.52	V	54.73	73.98	19.25	PK
11570	34.76	6.52	V	41.28	53.98	12.70	AV
17355	52.65	11.30	V	63.95	68.20	4.25	PK
11570	47.14	6.52	H	53.66	73.98	20.32	PK
11570	34.28	6.52	H	40.80	53.98	13.18	AV
17355	53.05	11.30	H	64.35	68.20	3.85	PK

Band :	UNII 3		Operation Mode : 802.11a				
CH.165	5825MHz		Transfer Rate : 6Mbps				
Frequency [MHz]	Measured value [dBμV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11650	48.07	6.10	V	54.17	73.98	19.81	PK
11650	35.02	6.10	V	41.12	53.98	12.86	AV
17475	50.06	11.71	V	61.77	68.20	6.43	PK
11650	47.15	6.10	H	53.25	73.98	20.73	PK
11650	34.62	6.10	H	40.72	53.98	13.26	AV
17475	51.03	11.71	H	62.74	68.20	5.46	PK

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[RSDB]

Scenario 2

Bluetooth 8DPSK _Ch.0 + MIMO(CDD) 5 GHz 802.11a_Ch.116

Frequency	Measured value	CL+AF+DF-AG	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
11160	48.32	5.59	V	53.91	73.98	20.07	PK
11160	35.10	5.59	V	40.69	53.98	13.29	AV
16740	54.46	9.89	V	64.35	68.20	3.85	PK
11160	48.16	5.59	H	53.75	73.98	20.23	PK
11160	34.91	5.59	H	40.50	53.98	13.48	AV
16740	54.80	9.89	H	64.69	68.20	3.51	PK

Note : BT RSDB Data refer to [BT] Test Report

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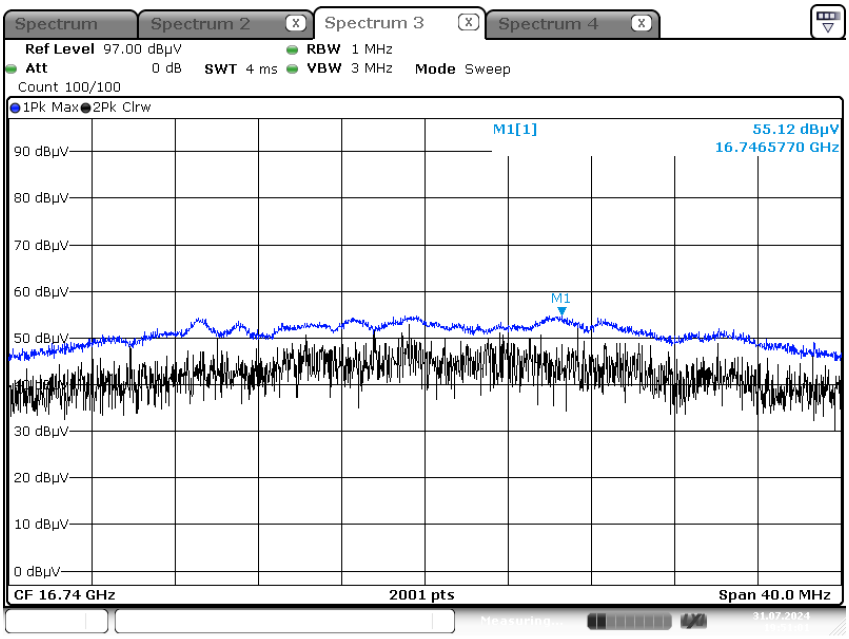
▣ Test Plots

Note: Only the worst case plots for Radiated Spurious Emissions.

[MIMO_CDD(Ant.1+Ant.2)]

Radiated Spurious Emissions plot – Peak Result (802. 11a, Ch.116 Spurious Emissions, 3rd, Z-H)



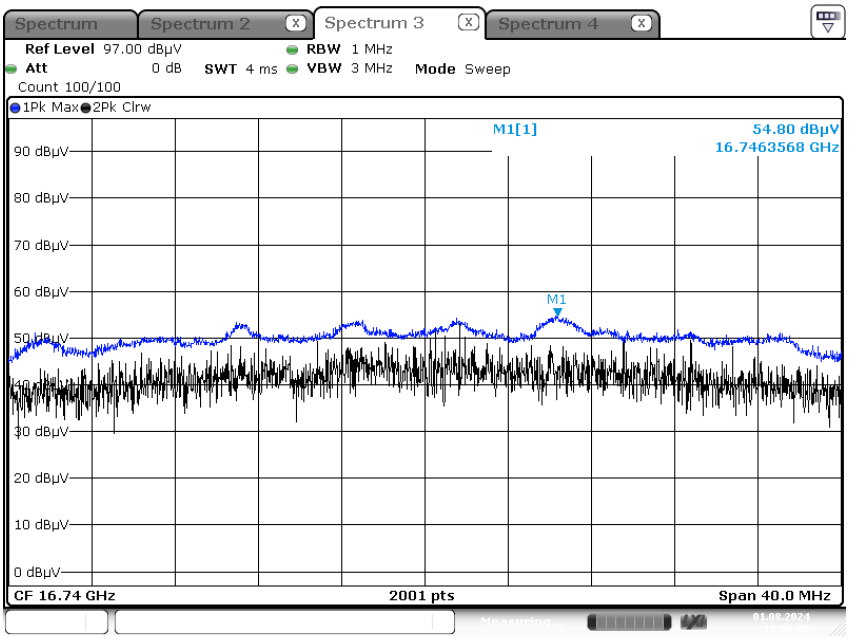
Date: 31.JUL.2024 19:51:01

[RSDB]

Scenario 2

Bluetooth 8DPSK _Ch.0 + MIMO(CDD) 5 GHz 802.11a_Ch.116

Radiated Spurious Emissions plot – Peak Result (Spurious Emissions, 3rd, Z-H)



Date: 1.AUG.2024 18:06:07

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10.9 RADIATED RESTRICTED BAND EDGE

[MIMO_CDD(Ant.1+Ant.2)]

Operation Mode: 802.11a

Band	UNII 1
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	62.19	H	62.19	73.98	11.79	PK
5150	44.08	H	44.08	53.98	9.90	AV
5150	62.72	V	62.72	73.98	11.26	PK
5150	44.76	V	44.76	53.98	9.22	AV

Band	UNII 2A
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	61.09	H	61.09	73.98	12.89	PK
5350	44.98	H	44.98	53.98	9.00	AV
5350	63.10	V	63.10	73.98	10.88	PK
5350	45.84	V	45.84	53.98	8.14	AV

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Band	UNII 2C
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	56.07	H	56.07	73.98	17.91	PK
5460	42.96	H	42.96	53.98	11.02	AV
5470	59.19	H	59.19	68.20	9.01	PK
5460	56.23	V	56.23	73.98	17.75	PK
5460	43.14	V	43.14	53.98	10.84	AV
5470	60.02	V	60.02	68.20	8.18	PK

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Operation Mode: 802.11n (HT20)

Band	UNII 1
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	61.08	H	61.08	73.98	12.90	PK
5150	44.08	H	44.08	53.98	9.90	AV
5150	61.34	V	61.34	73.98	12.64	PK
5150	44.36	V	44.36	53.98	9.62	AV

Band	UNII 2A
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	59.41	H	59.41	73.98	14.57	PK
5350	43.33	H	43.33	53.98	10.65	AV
5350	60.57	V	60.57	73.98	13.41	PK
5350	43.70	V	43.70	53.98	10.28	AV

Band	UNII 2C
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	55.06	H	55.06	73.98	18.92	PK
5460	42.16	H	42.16	53.98	11.82	AV
5470	59.05	H	59.05	68.20	9.15	PK
5460	55.39	V	55.39	73.98	18.59	PK
5460	42.68	V	42.68	53.98	11.30	AV
5470	59.85	V	59.85	68.20	8.35	PK

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Operation Mode: 802.11ac (VHT20)

Band	UNII 1
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	61.29	H	61.29	73.98	12.69	PK
5150	44.19	H	44.19	53.98	9.79	AV
5150	62.10	V	62.10	73.98	11.88	PK
5150	44.76	V	44.76	53.98	9.22	AV

Band	UNII 2A
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	59.91	H	59.91	73.98	14.07	PK
5350	43.29	H	43.29	53.98	10.69	AV
5350	60.09	V	60.09	73.98	13.89	PK
5350	43.53	V	43.53	53.98	10.45	AV

Band	UNII 2C
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	54.59	H	54.59	73.98	19.39	PK
5460	41.56	H	41.56	53.98	12.42	AV
5470	54.67	H	54.67	68.20	13.53	PK
5460	56.00	V	56.00	73.98	17.98	PK
5460	42.81	V	42.81	53.98	11.17	AV
5470	59.00	V	59.00	68.20	9.20	PK

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Operation Mode: 802.11n (HT40)

Band	UNII 1
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	63.91	H	63.91	73.98	10.07	PK
5150	49.98	H	49.98	53.98	4.00	AV
5150	64.64	V	64.64	73.98	9.34	PK
5150	50.16	V	50.16	53.98	3.82	AV

Band	UNII 2A
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	67.06	H	67.06	73.98	6.92	PK
5350	49.26	H	49.26	53.98	4.72	AV
5350	67.98	V	67.98	73.98	6.00	PK
5350	50.56	V	50.56	53.98	3.42	AV

Band	UNII 2C
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	61.65	H	61.65	73.98	12.33	PK
5460	46.88	H	46.88	53.98	7.10	AV
#5470	62.56	H	62.56	68.20	5.64	PK
5460	61.41	V	61.41	73.98	12.57	PK
5460	47.20	V	47.20	53.98	6.78	AV
#5470	63.35	V	63.35	68.20	4.85	PK

Note : # Integration method Used (KDB 789033 D02 v02r01 Section 3) d) (ii)

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Operation Mode: 802.11ac (VHT40)

Band	UNII 1
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	64.18	H	64.18	73.98	9.80	PK
5150	50.19	H	50.19	53.98	3.79	AV
5150	64.44	V	64.44	73.98	9.54	PK
5150	50.56	V	50.56	53.98	3.42	AV

Band	UNII 2A
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	66.98	H	66.98	73.98	7.00	PK
5350	49.92	H	49.92	53.98	4.06	AV
5350	67.32	V	67.32	73.98	6.66	PK
5350	50.20	V	50.20	53.98	3.78	AV

Band	UNII 2C
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	62.53	H	62.53	73.98	11.45	PK
5460	47.18	H	47.18	53.98	6.80	AV
#5470	62.92	H	62.92	68.20	5.28	PK
5460	61.58	V	61.58	73.98	12.40	PK
5460	47.12	V	47.12	53.98	6.86	AV
#5470	63.72	V	63.72	68.20	4.48	PK

Note : # Integration method Used (KDB 789033 D02 v02r01 Section 3) d) (ii)

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Operation Mode: 802.11ac (VHT80) (MCS0)

Band	UNII 1
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	65.71	H	65.71	73.98	8.27	PK
5150	50.62	H	50.62	53.98	3.36	AV
5150	65.17	V	65.17	73.98	8.81	PK
5150	50.92	V	50.92	53.98	3.06	AV

Band	UNII 2A
Operating Frequency	5290 MHz
Channel No.	58 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	64.28	H	64.28	73.98	9.70	PK
5350	49.25	H	49.25	53.98	4.73	AV
5350	66.68	V	66.68	73.98	7.30	PK
5350	50.96	V	50.96	53.98	3.02	AV

Band	UNII 2C
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Measured Value [dBμV]	Ant. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	64.16	H	64.16	73.98	9.82	PK
5460	49.25	H	49.25	53.98	4.73	AV
#5470	59.99	H	59.99	68.20	8.21	PK
5460	66.49	V	66.49	73.98	7.49	PK
5460	50.61	V	50.61	53.98	3.37	AV
#5470	64.27	V	64.27	68.20	3.93	PK

Note : # Integration method Used (KDB 789033 D02 v02r01 Section 3) d) (ii)

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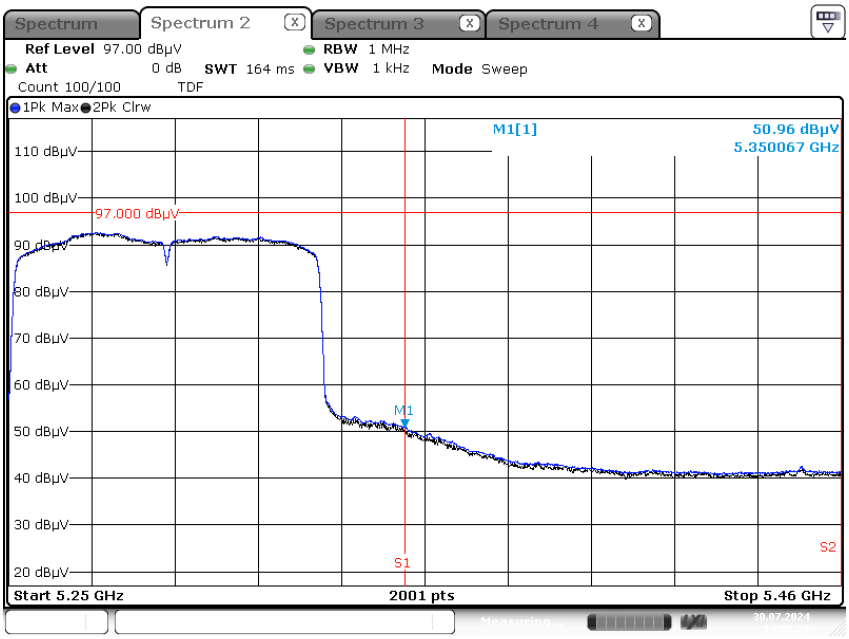
▣ Test Plots(UNII 1, 2A, 2C)

Note: Only the worst case plots for Radiated Restricted Band Edge.

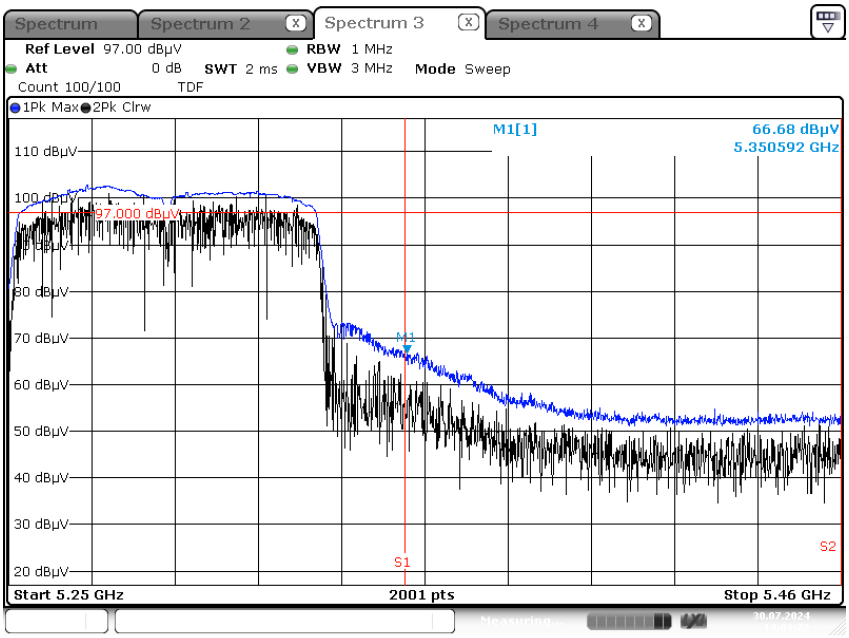
[MIMO_CDD(Ant.1+Ant.2)]

Average Result (802.11 ac_VHT80_ MCS0, Ch.58, Y-V)



Date: 30.JUL.2024 14:00:28

Peak Result (802.11 ac_VHT80_ MCS0, Ch.58, Y-V)



Date: 30.JUL.2024 14:01:22

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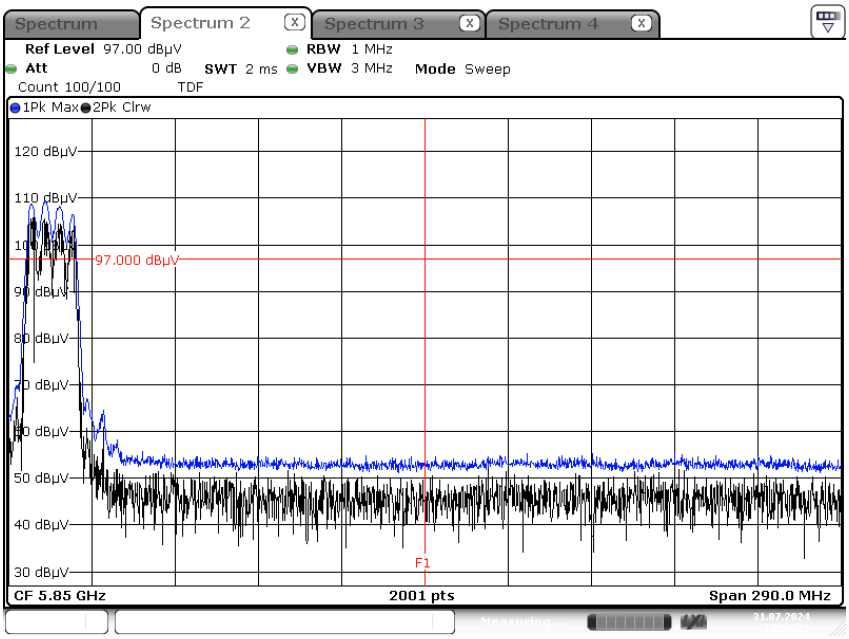
▣ Test Plots(Straddle Channel)

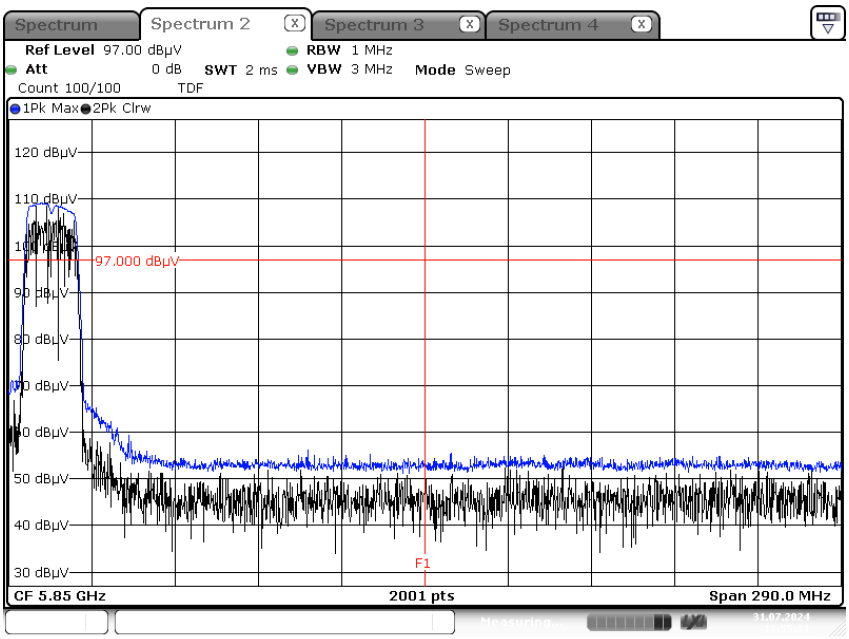
[MIMO_CDD(Ant.1+Ant.2)]

Peak Result (802.11a, Ch.144, Y-V)



Date: 31.JUL.2024 13:58:22

Peak Result (802.11n_HT20, Ch.144, Y-V)



Date: 31.JUL.2024 13:55:31

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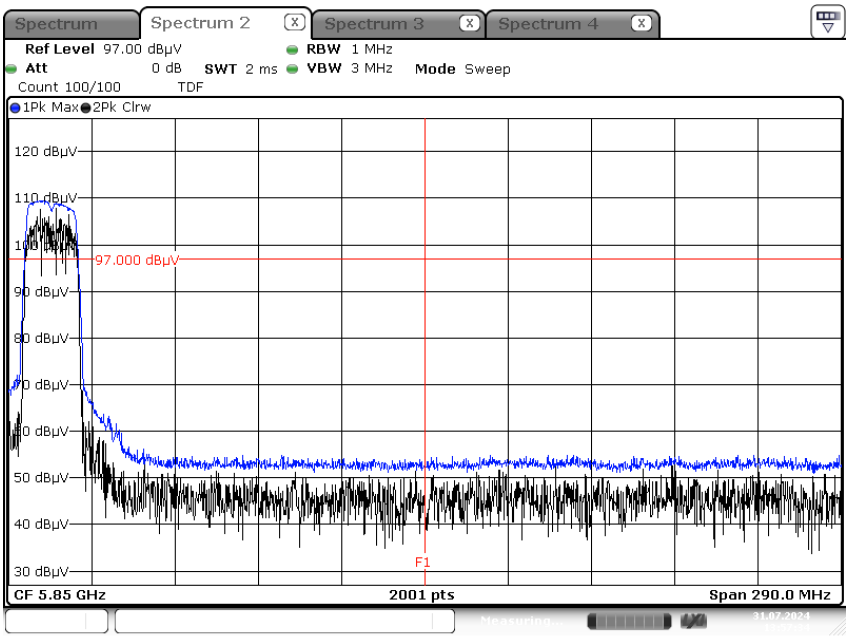
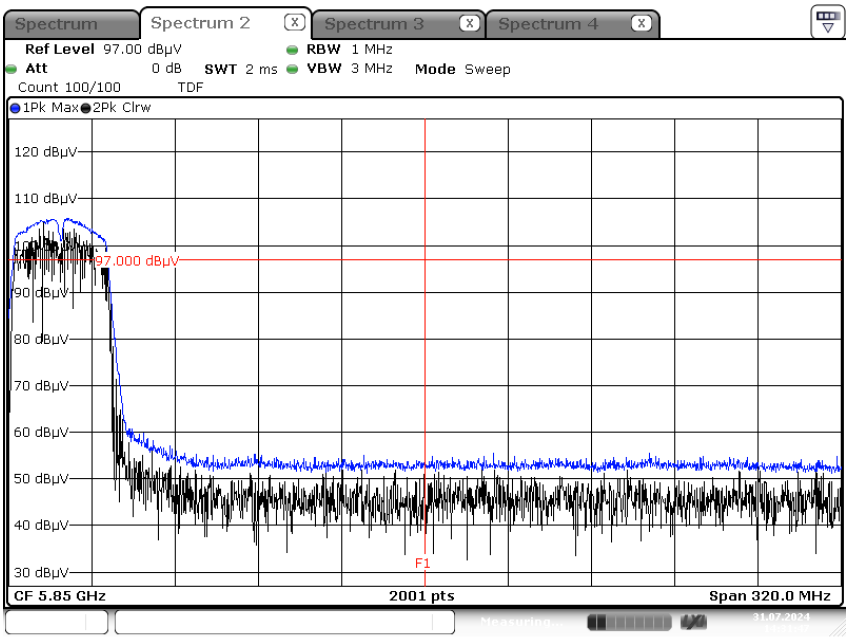
Peak Result (802.11ac_VHT20, Ch.144, Y-V)



Date: 31.JUL.2024 13:57:34

Peak Result (802.11n_HT40, Ch.142, Y-V)



Date: 31.JUL.2024 14:31:47

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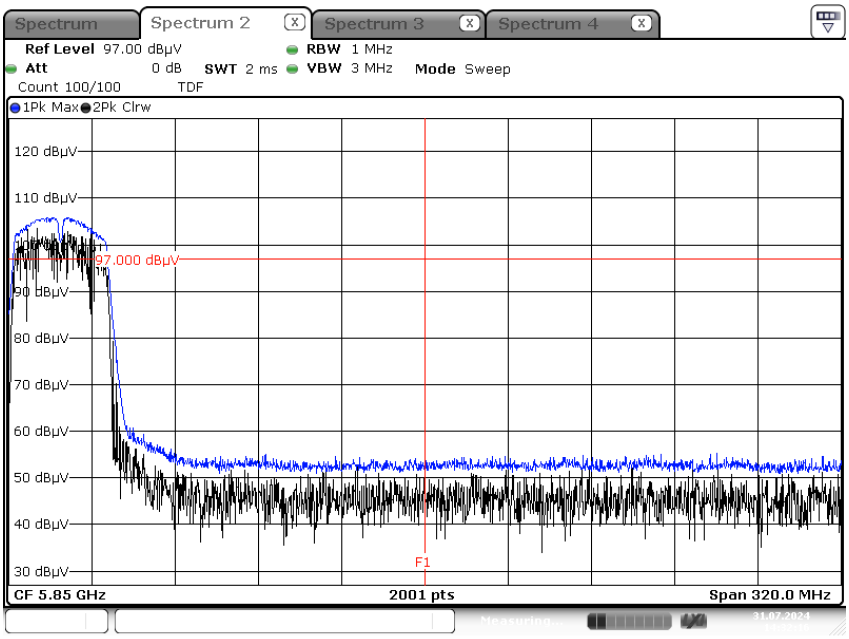
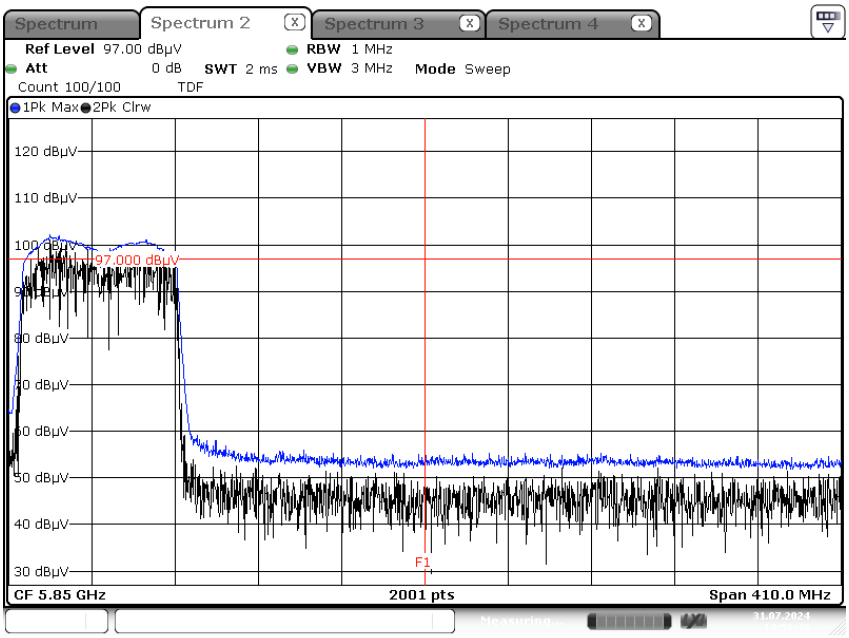
Peak Result (802.11ac_VHT40, Ch.142, Y-V)



Date: 31.JUL.2024 14:32:16

Peak Result (802.11ac_VHT80, Ch.138, Y-V)



Date: 31.JUL.2024 14:53:48

Note :

1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5 850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

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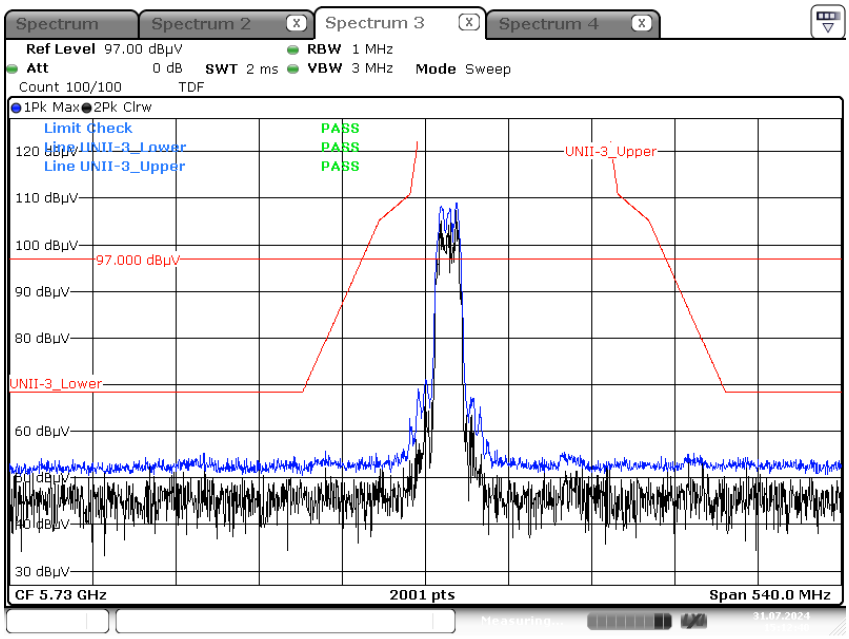
▣ Test Plots(UNII 3)

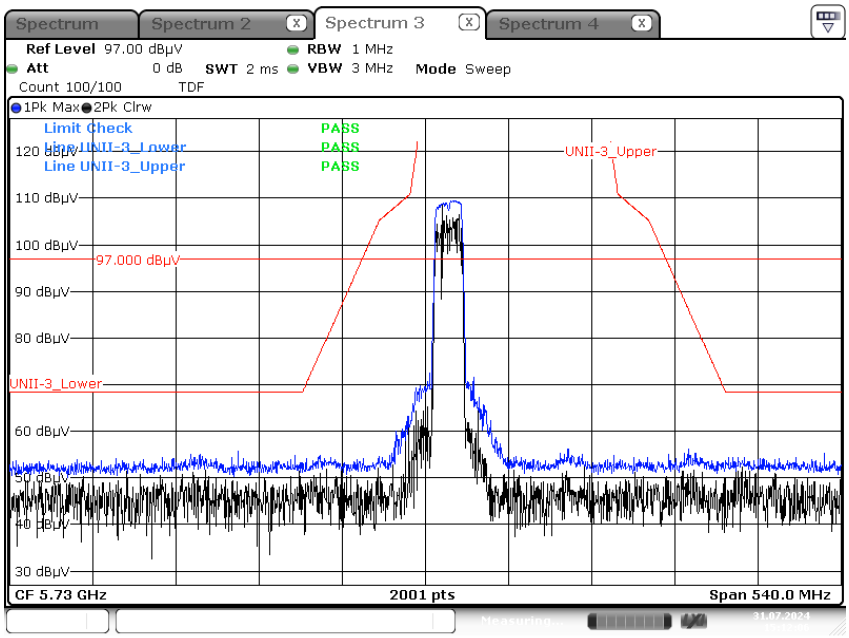
[MIMO_CDD(Ant.1+Ant.2)]

Peak Result (802.11a, Ch.149, Y-V)



Date: 31.JUL.2024 15:12:40

Peak Result (802.11n_HT20, Ch.149, Y-V)



Date: 31.JUL.2024 15:12:06

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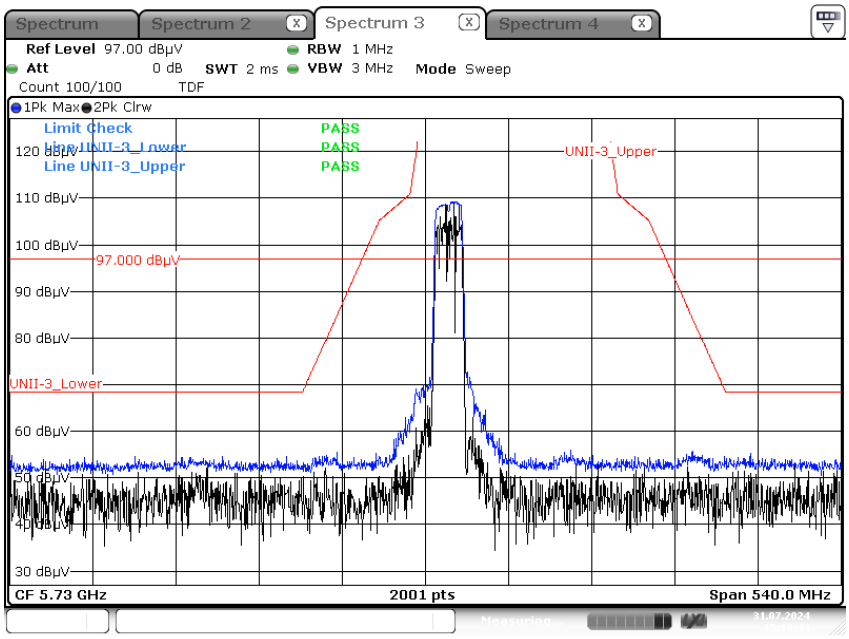
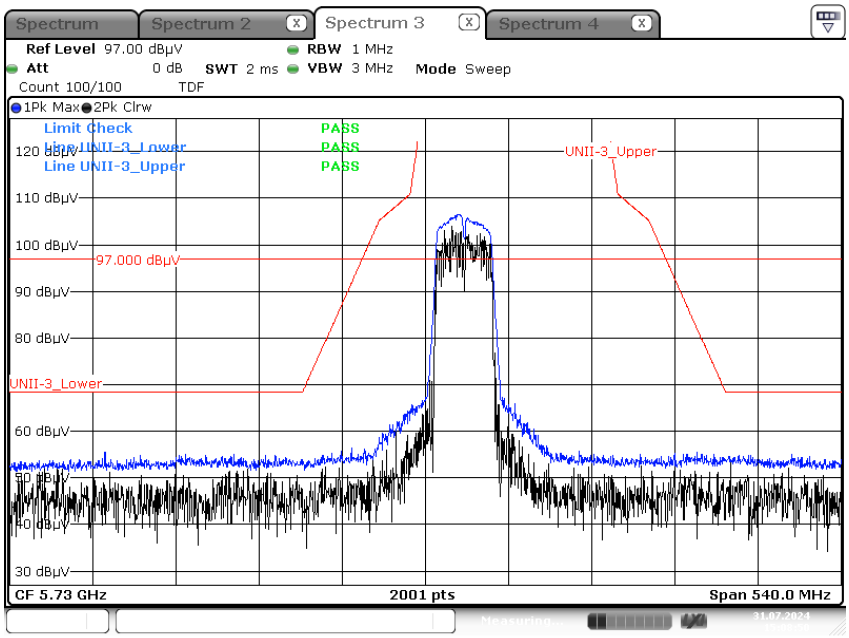
Peak Result (802.11ac_VHT20, Ch.149, Y-V)



Date: 31.JUL.2024 15:10:44

Peak Result (802.11n_HT40, Ch.151, Y-V)



Date: 31.JUL.2024 15:08:50

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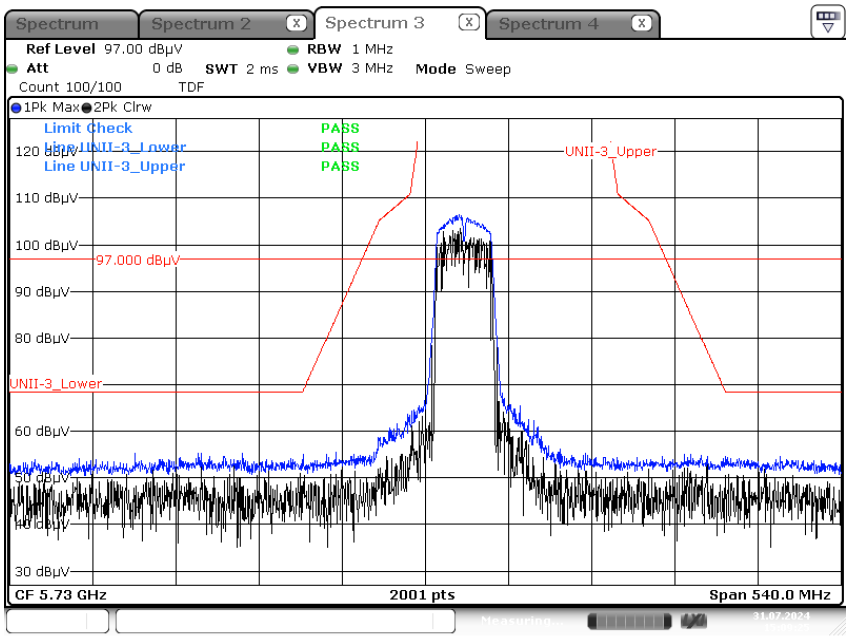
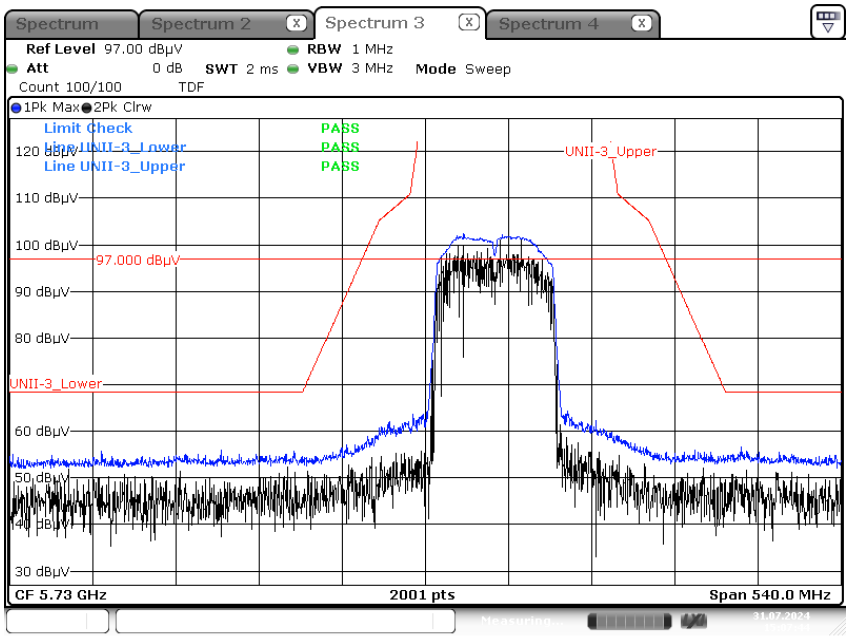
Peak Result (802.11ac_VHT40, Ch.151, Y-V)



Date: 31.JUL.2024 15:09:25

Peak Result (802.11ac_VHT80, Ch.155, Y-V)



Date: 31.JUL.2024 15:07:44

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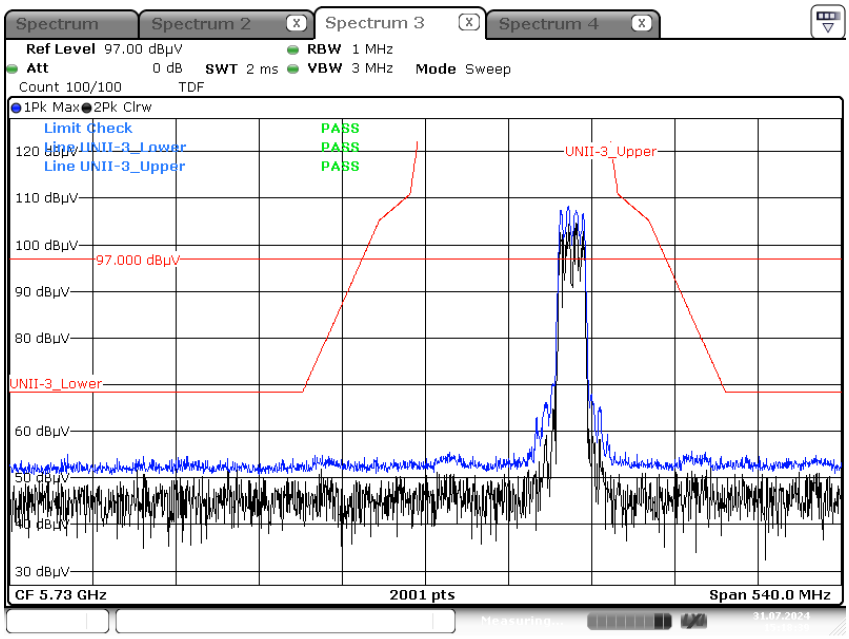
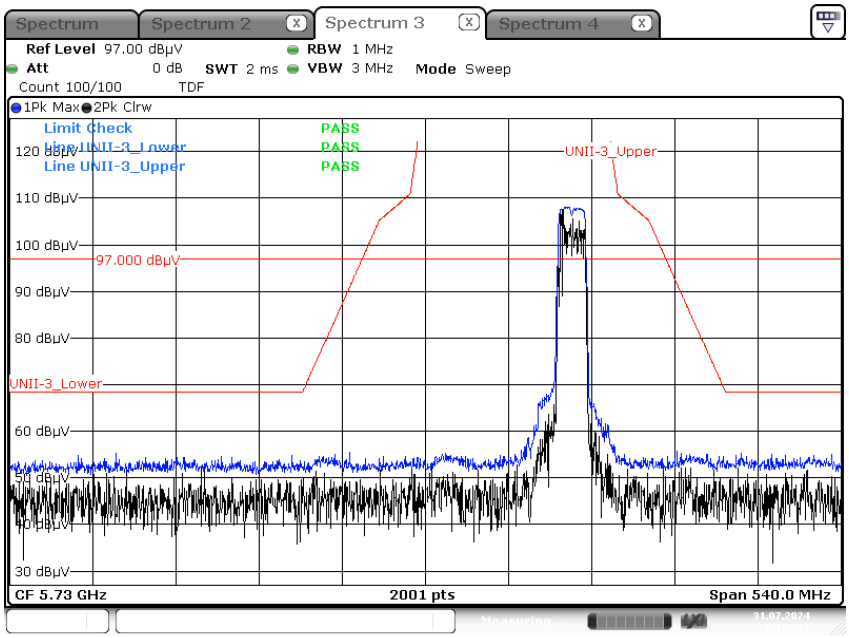
Peak Result (802.11a, Ch.165, Y-V)



Date: 31.JUL.2024 15:18:39

Peak Result (802.11n_HT20, Ch.165, Y-V)



Date: 31.JUL.2024 15:17:19

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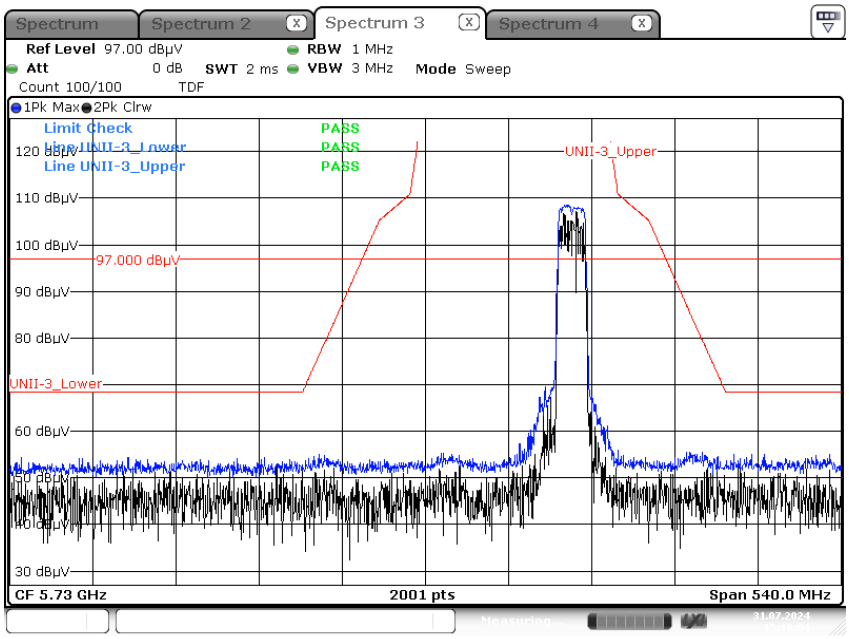
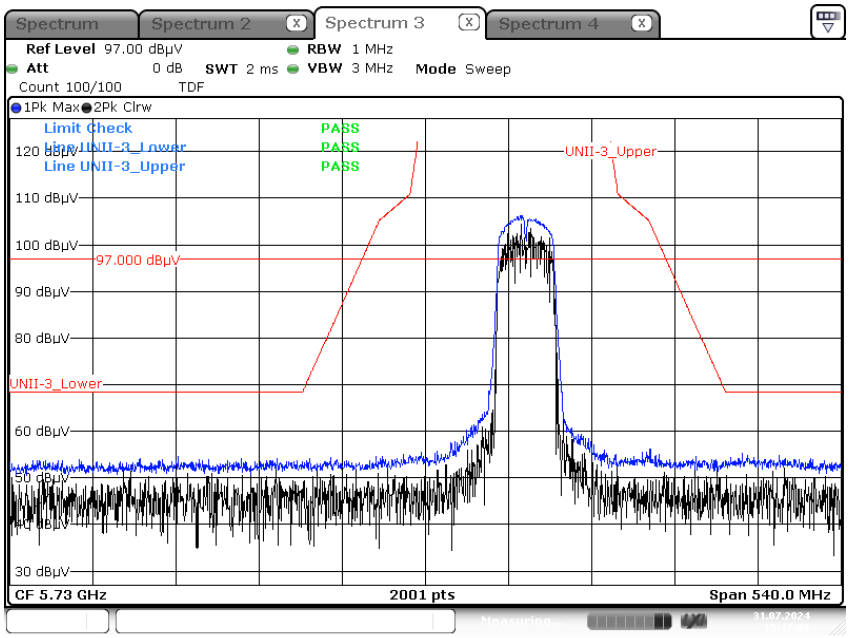
Peak Result (802.11ac_VHT20, Ch.165, Y-V)



Date: 31.JUL.2024 15:18:04

Peak Result (802.11n_HT40, Ch.159, Y-V)



Date: 31.JUL.2024 15:37:08

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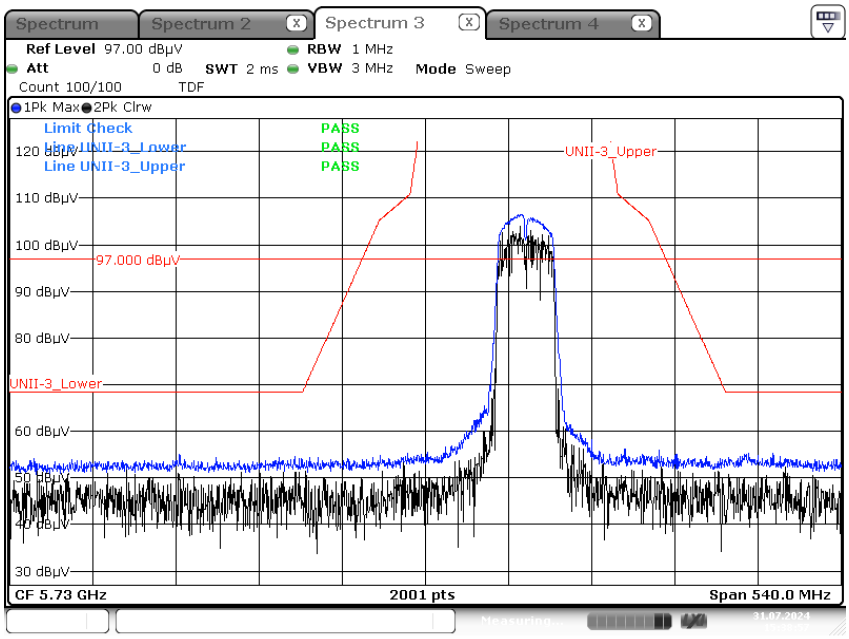
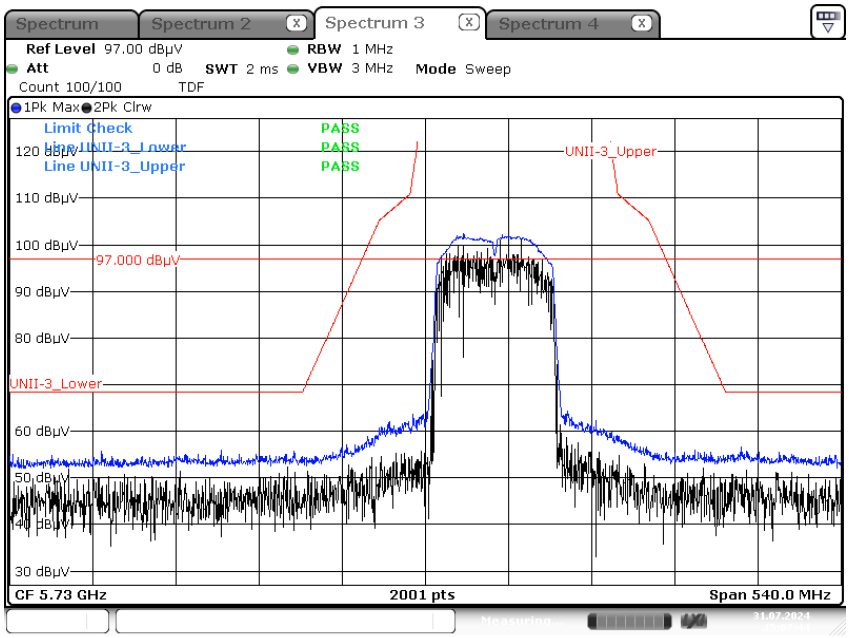
Peak Result (802.11ac_VHT40, Ch.159, Y-V)



Date: 31.JUL.2024 15:38:57

Peak Result (802.11ac_VHT80, Ch.155, Y-V)



Date: 31.JUL.2024 15:07:44

Note :

1. Only the worst case plots for U-NII-3 Out of Band e.i.r.p Emission.
2. U-NII-3 Low & High Band Edge RedLine is Final Test Limit about factor value compensation.

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10.10 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions

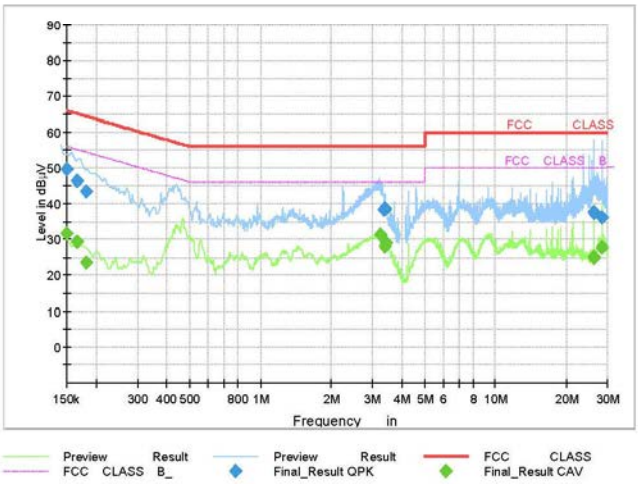
Test 1 / 1

Test Report

Common Information

EUT : LGSBWAC24
Operating Conditions : 5G WLAN Mode
Comment :

Full Spectrum



Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1500	49.54	66.00	16.46	9.000	L1	9.6
0.1660	46.38	65.16	18.78	9.000	L1	9.6
0.1820	43.42	64.39	20.98	9.000	L1	9.6
3.3480	38.53	56.00	17.47	9.000	L1	9.7
3.3880	38.34	56.00	17.66	9.000	N	9.7
3.3960	38.65	56.00	17.35	9.000	L1	9.7
26.1120	37.66	60.00	22.34	9.000	L1	9.9
26.1200	37.37	60.00	22.63	9.000	L1	9.9
28.3720	36.30	60.00	23.70	9.000	N	9.9

Final_Result_CAV

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1500	31.74	56.00	24.26	9.000	L1	9.6
0.1660	29.41	55.16	25.74	9.000	L1	9.6
0.1820	23.65	54.39	30.74	9.000	N	9.5
3.2400	31.44	46.00	14.56	9.000	N	9.6
3.3880	28.18	46.00	17.82	9.000	N	9.7
3.4120	29.22	46.00	16.78	9.000	L1	9.7
26.1120	25.06	50.00	24.94	9.000	L1	9.9
26.1200	25.25	50.00	24.75	9.000	L1	9.9
28.3720	27.77	50.00	22.23	9.000	N	9.9

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11. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	07/17/2025	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	07/02/2025	Annual
Temperature Chamber	SU-642	ESPEC	93008124	02/19/2025	Annual
Signal Analyzer	N9030A	Keysight	MY55410508	09/04/2024	Annual
Power Meter	N1911A	Agilent	MY45100523	02/28/2025	Annual
Power Sensor	N1921A	Agilent	MY57820067	02/22/2025	Annual
Directional Coupler	87300B	Agilent	3116A03621	10/30/2024	Annual
Power Splitter	11667B	Hewlett Packard	10545	02/06/2025	Annual
DC Power Supply	E3632A	Agilent	KR75305528	01/02/2025	Annual
Attenuator(10 dB)(DC-26.5 GHz)	8493C-010	Agilent	08285	05/28/2025	Annual
Attenuator(20 dB)	18N-20dB	Rohde & Schwarz	8	02/20/2025	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	HCT CO., LTD.	N/A	N/A	N/A
Bluetooth Tester	CBT	Rohde & Schwarz	100808	02/15/2025	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

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Radiated Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Controller(Antenna mast)	CO3000	Innco system	CO3000-4p	N/A	N/A
Antenna Position Tower	MA4640/800-XP-EP	Innco system	S3AM	07/30/2025	Annual
Controller	EM2090	Emco	060520	N/A	N/A
Turn Table	N/A	Ets	N/A	N/A	N/A
Amp & Filter Bank Switch Controller	FBSM-01A	TNM system	0	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/07/2026	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	08/16/2024	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1191	11/07/2025	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170124	03/28/2025	Biennial
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/02/2025	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/04/2025	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/04/2025	Annual
Band Reject Filter	WRCJV5100/5850-40/50-8EEK	Wainwright Instruments	1	02/14/2025	Annual
RF Switching System	FBSR-03A (3G HPF+LNA)	T&M SYSTEM	S3L1	11/17/2024	Annual
RF Switching System	FBSR-03A (10dB ATT+LNA)	T&M SYSTEM	S3L2	11/17/2024	Annual
RF Switching System	FBSR-03A (7G HPF+LNA)	T&M SYSTEM	S3L3	11/17/2024	Annual
RF Switching System	FBSR-03A (3dB ATT+LNA)	T&M SYSTEM	S3L4	11/17/2024	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/17/2024	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/26/2025	Annual
Bluetooth Tester	TC-3000C	TESCOM	3000C000175	03/19/2025	Annual
Spectrum Analyzer	FSV40 (9 kHz ~ 40 GHz)	Rohde & Schwarz	100900	12/06/2024	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
3. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5(Version : 2017).

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12. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2408-FC004-P

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