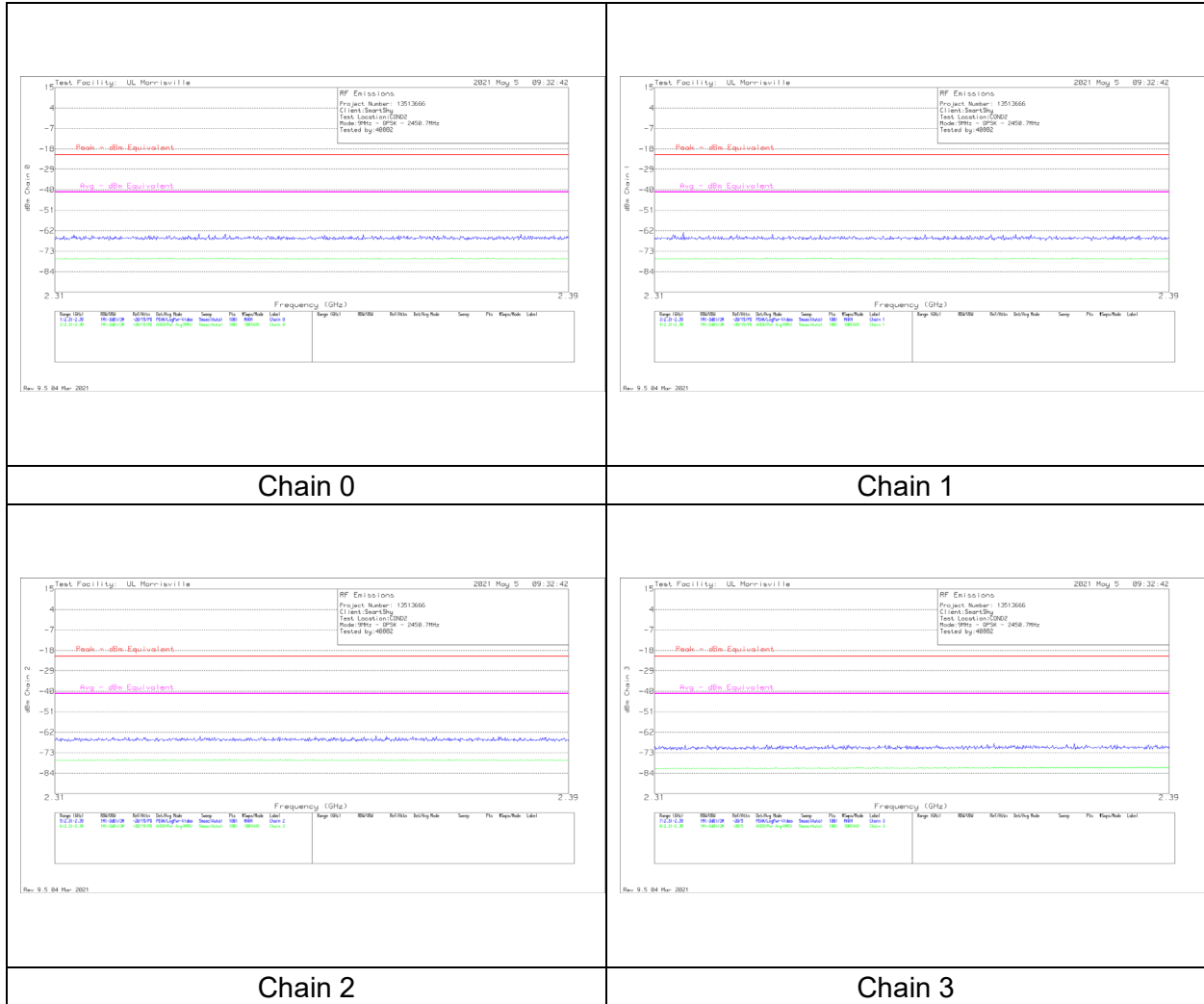
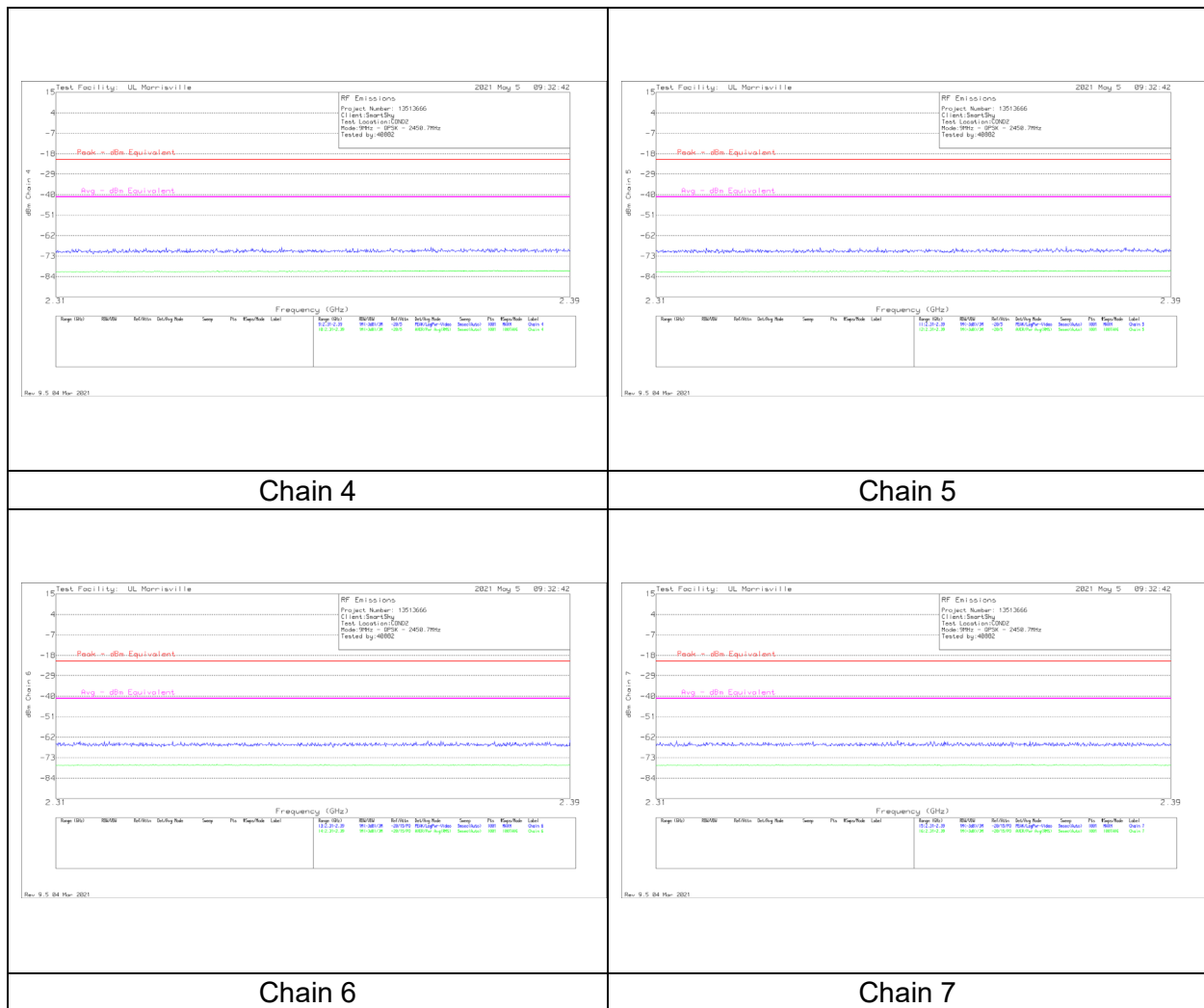


# 11.7. FRB, 9MHz BW, QPSK MODE, TX ABOVE 1 GHz IN THE 2.4 GHz BAND

## 11.7.1. LOW CHANNEL RESTRICTED BAND EDGE





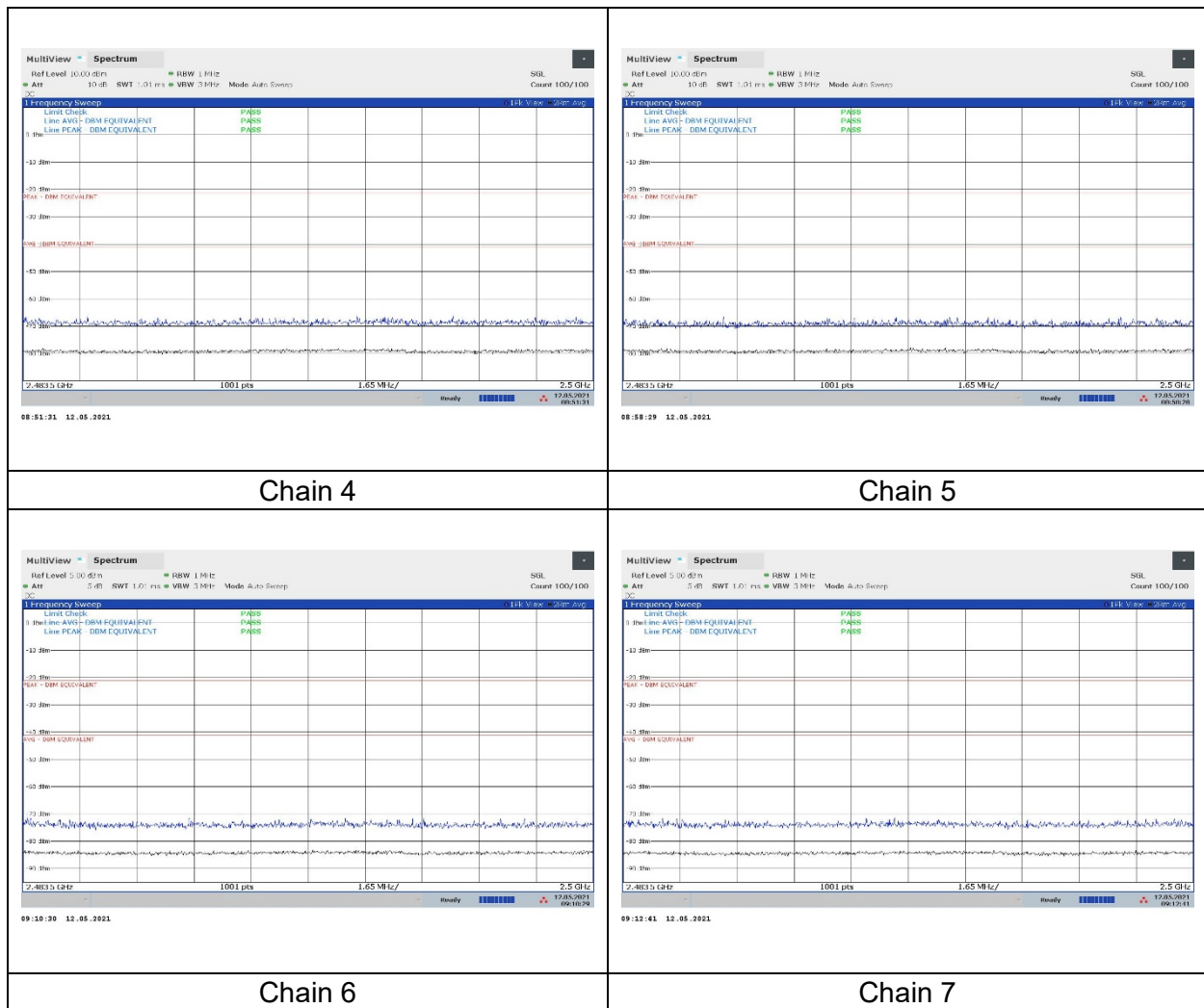
**Restricted Band (Low Channel) Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
2.39	-66	-65.34	-66.13	-69.06	-69.76	-69.97	-63.44	-65.98	-30.59	64.67	74	-9.33
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
2.36744	-76.8	-76.79	-77	-81.14	-81.28	-81.24	-76.67	-76.78	-42.16	53.09	54	-0.91

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2

### 11.7.2. HIGH CHANNEL RESTRICTED BAND EDGE



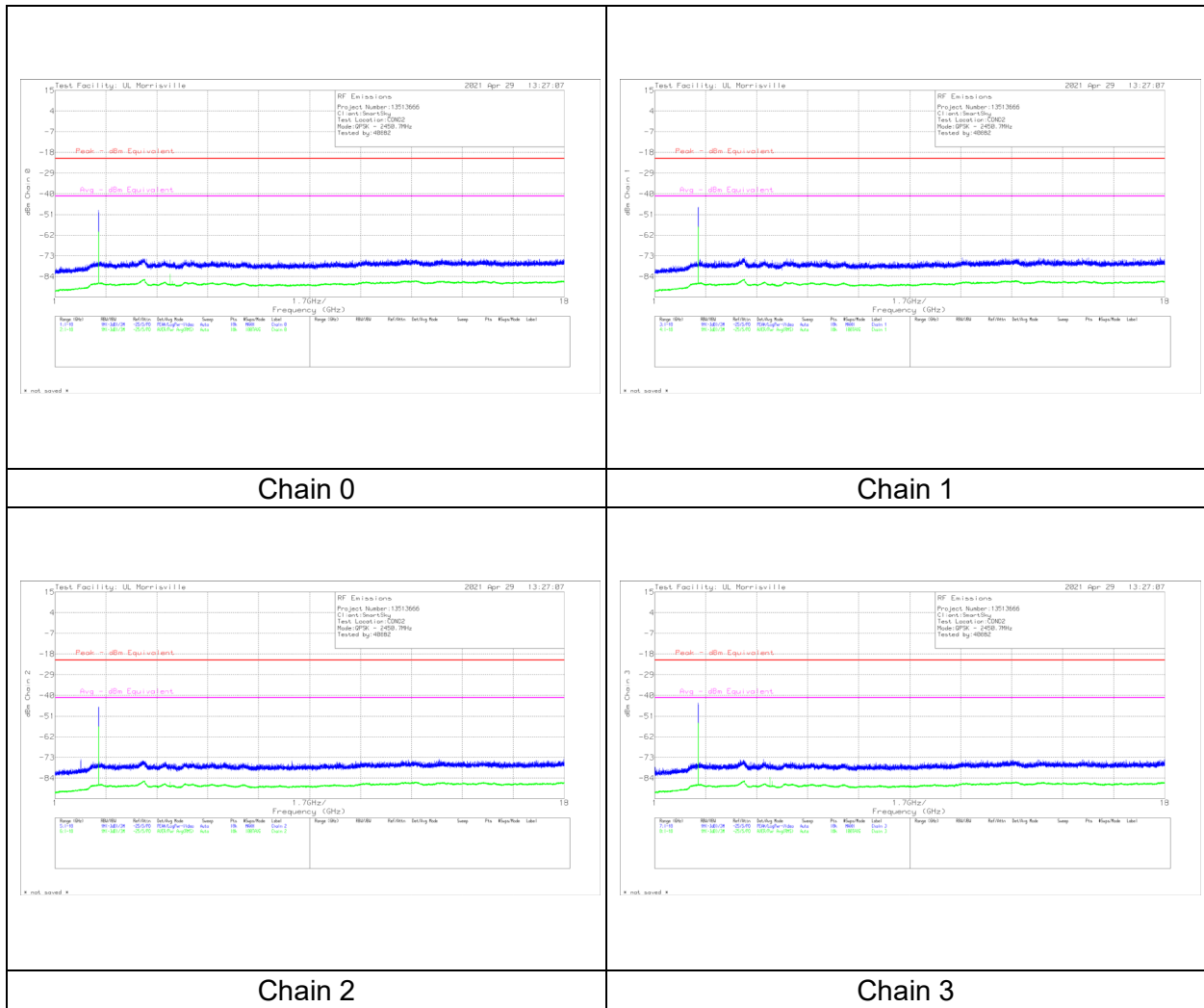


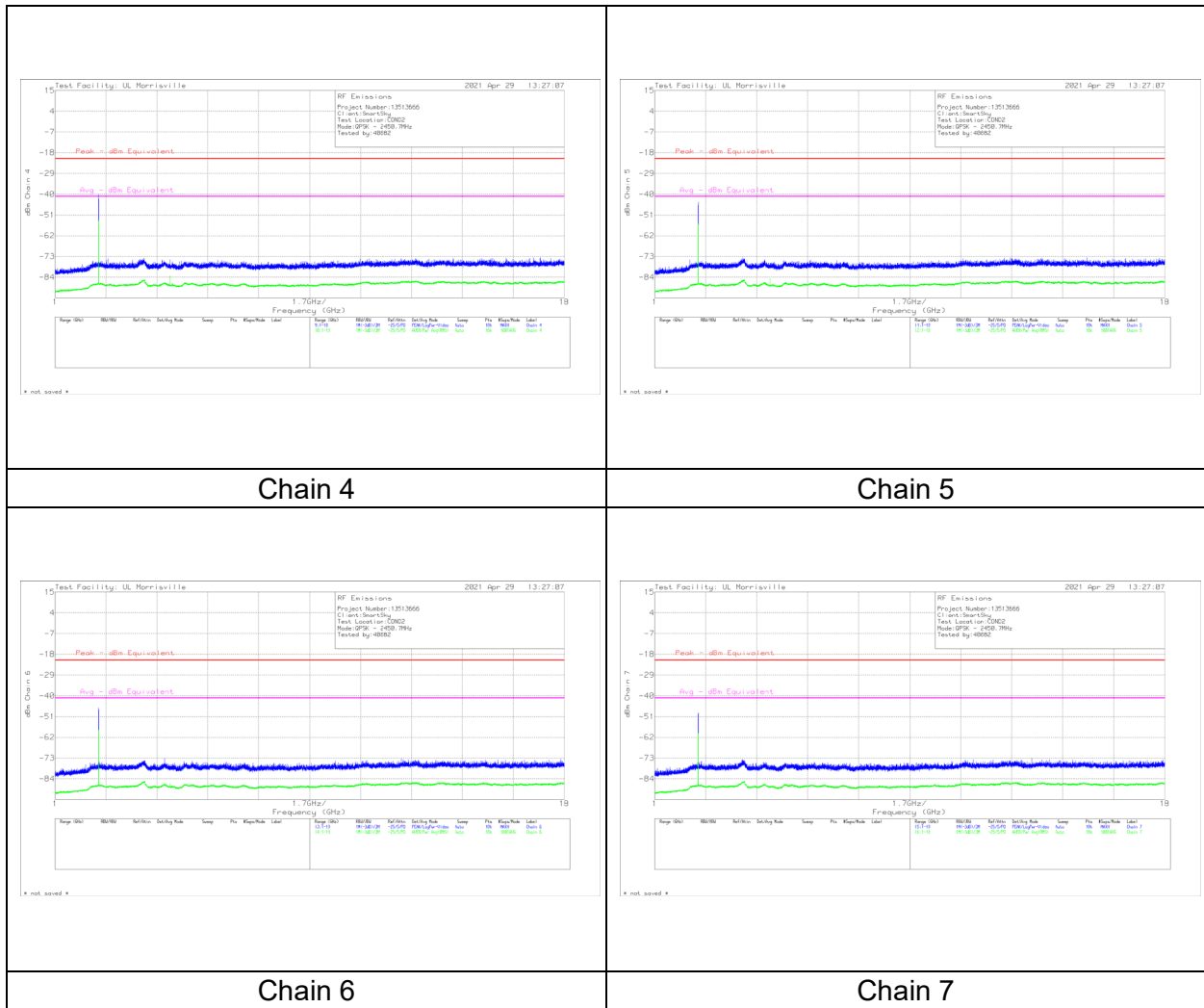
**Restricted Band (High Channel) Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
2483.5825	-78.07	-67.94	-71.98	-73.95	-66.80	-67.58	-72.28	-73.47	-34.35	60.91	74	-13.09
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
2491.552	-88.93	-78.53	-83.74	-83.70	-78.78	-78.35	-84.17	-83.61	-45.43	49.83	54	-4.17

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2

### 11.7.3. LOW CHANNEL SPURIOUS: 1-18 GHz



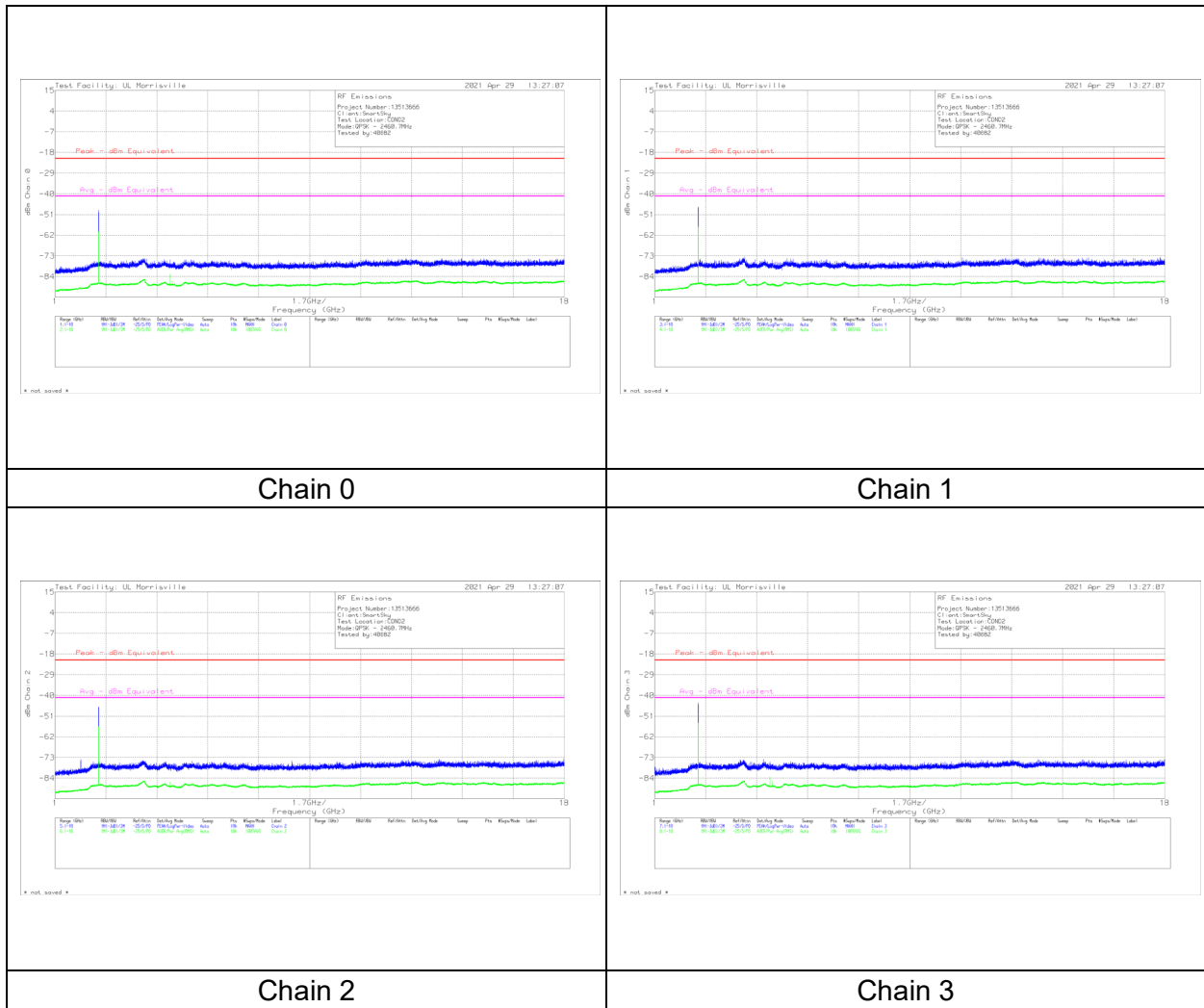


**Spurious Low Channel Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
3.959887	-75.94	-74.16	-74.88	-74.94	-75.28	-75.39	-74.88	-75.62	-39.27	55.98	74	-18.02
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
4.845776	-82.7	-88.26	-85.85	-83.54	-83.2	-84.75	-86.37	-87.94	-49.1	46.2	54	-7.80

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2. Fundamental emission not identified in tabular data.

### 11.7.4. MID CHANNEL SPURIOUS: 1-18 GHz

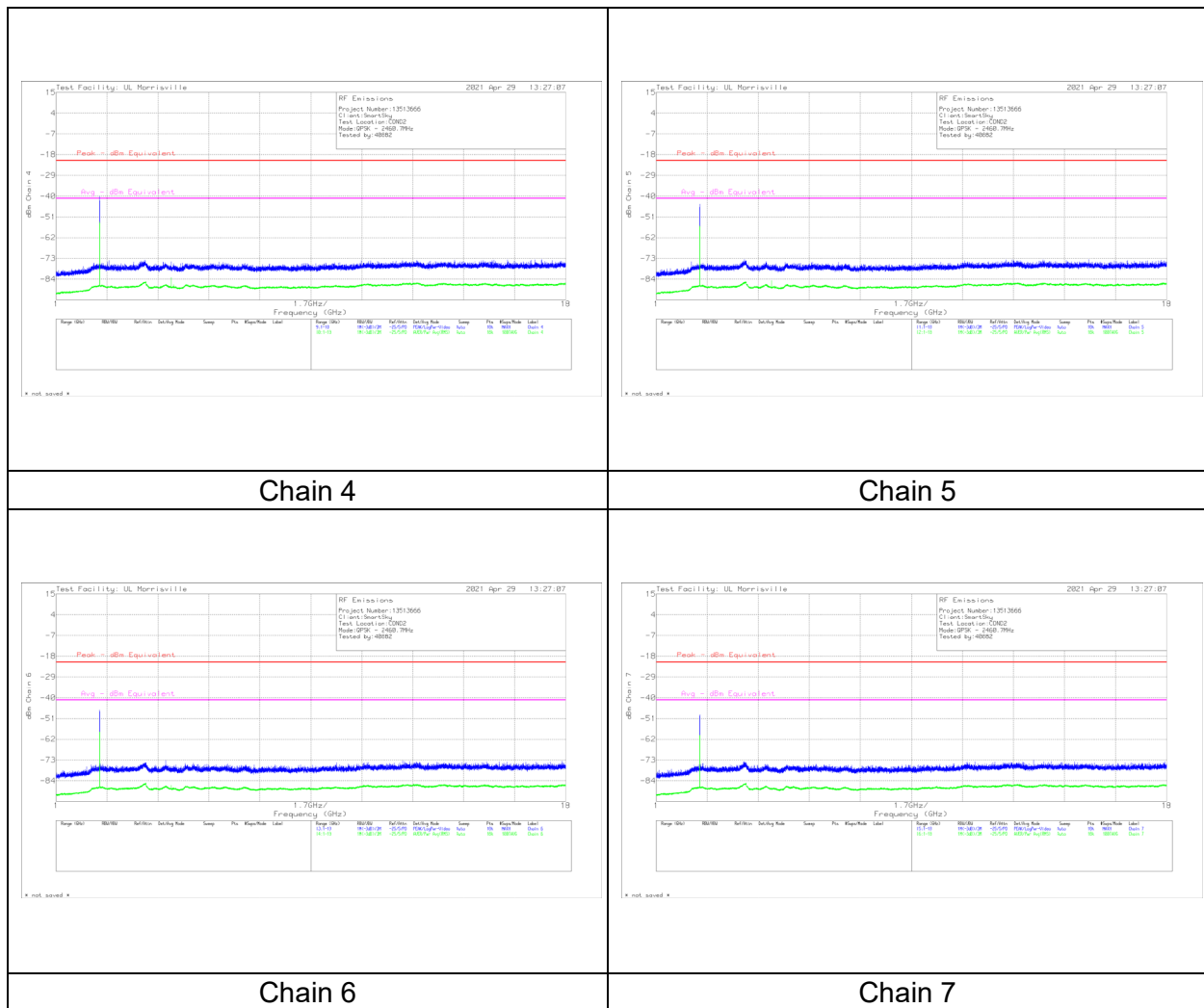


Chain 0

Chain 1

Chain 2

Chain 3



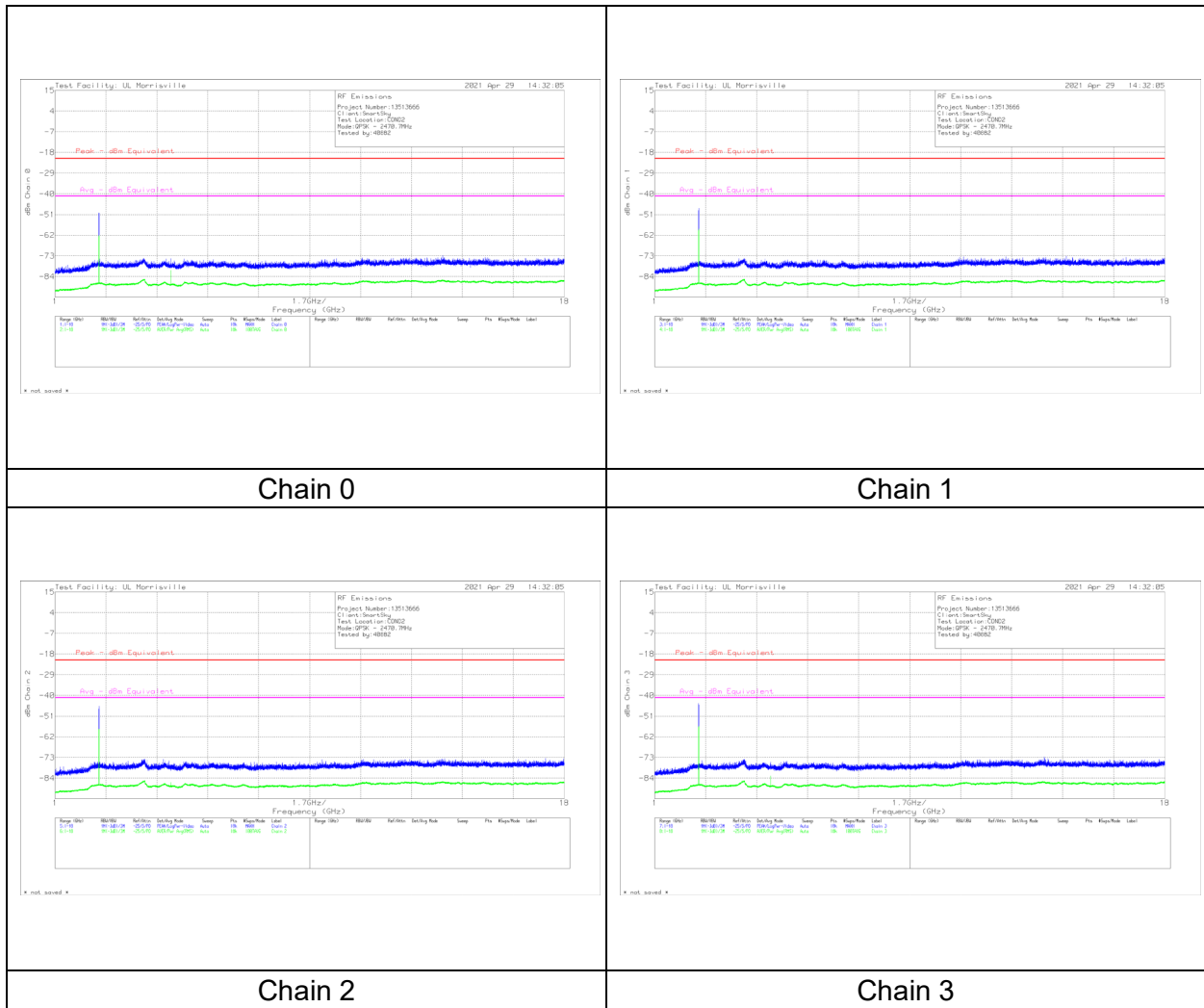
**Spurious Mid Channel Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
3.959887	-75.94	-74.16	-74.88	-74.94	-75.28	-75.39	-74.88	-75.62	-39.27	55.98	74	-18.02
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
4.845776	-82.7	-88.26	-85.85	-83.54	-83.2	-84.75	-86.37	-87.94	-49.1	46.2	54	-7.80

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2. Fundamental emission not identified in tabular data.



### 11.7.5. HIGH CHANNEL SPURIOUS: 1-18 GHz

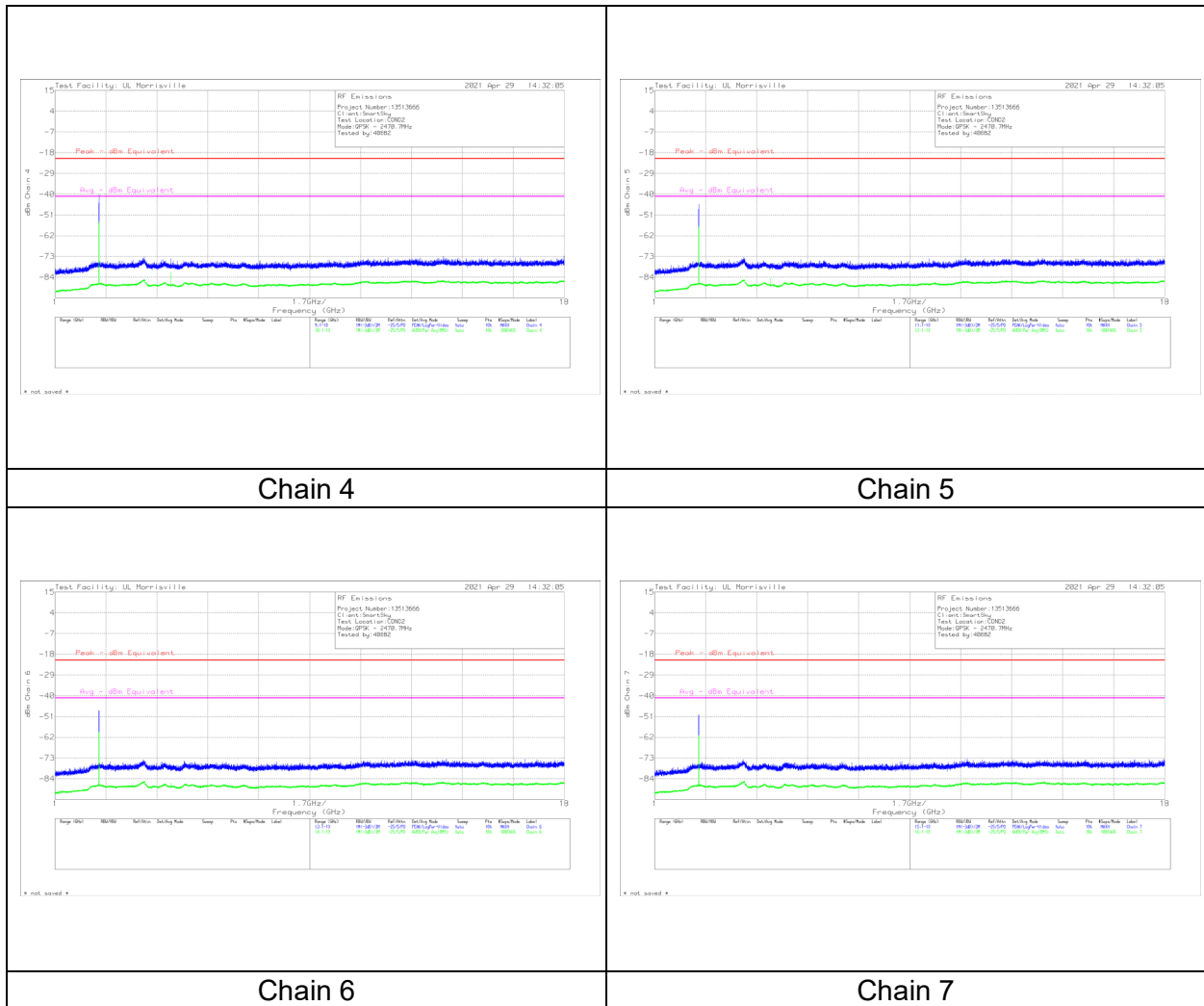


Chain 0

Chain 1

Chain 2

Chain 3

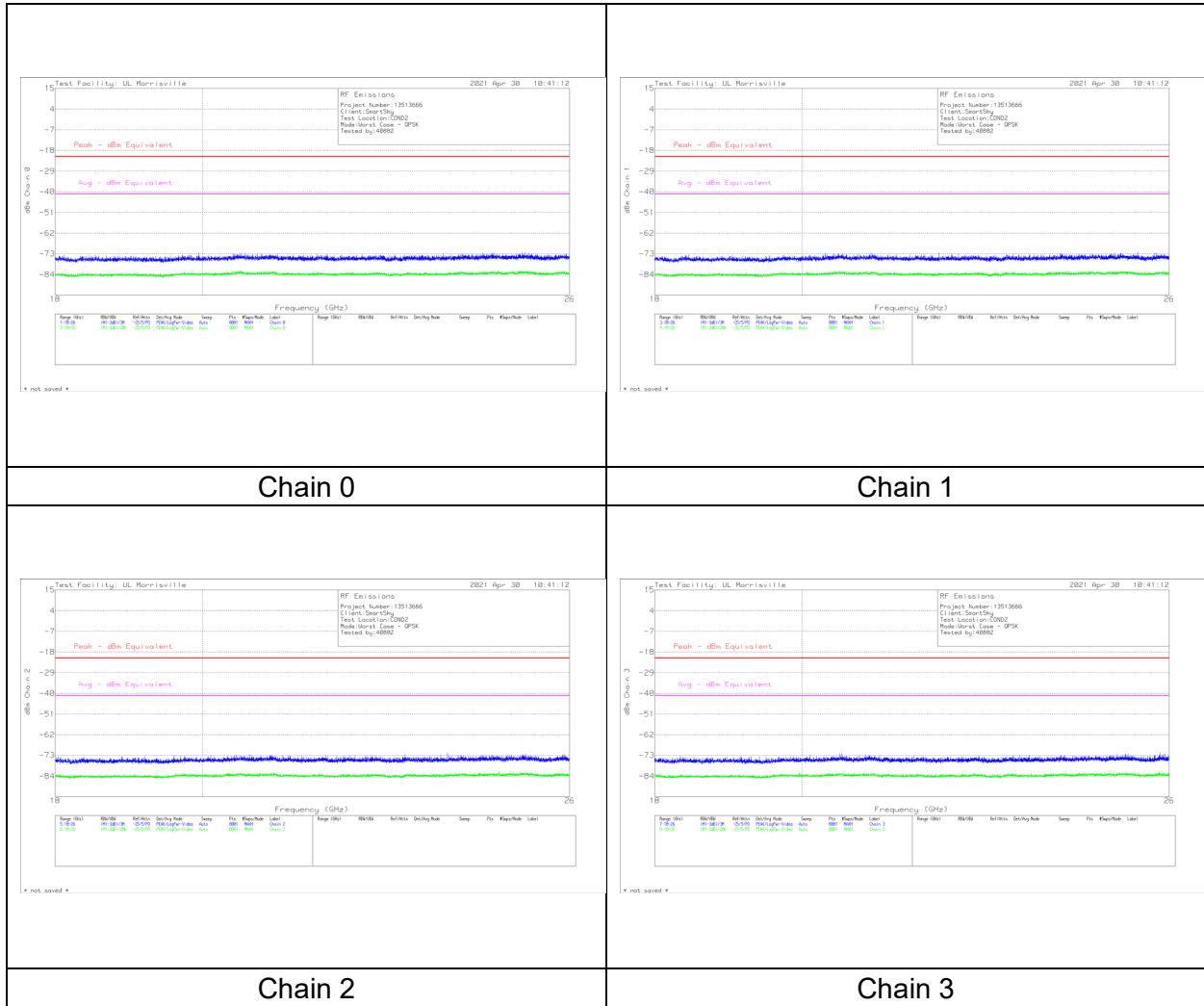


**Spurious High Channel Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
3.980665	-75.59	-74.37	-74.59	-74.39	-75.98	-75.29	-75.59	-75.16	-39.25	56.01	74	-17.99
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
4.865609	-80.59	-87.55	-86.24	-82.82	-81.39	-84.65	-86.24	-86.76	-47.98	47.28	54	-6.72

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2. Fundamental emission not identified in tabular data.

**11.7.6. WORSE-CASE CHANNEL SPURIOUS: 18-26 GHz**

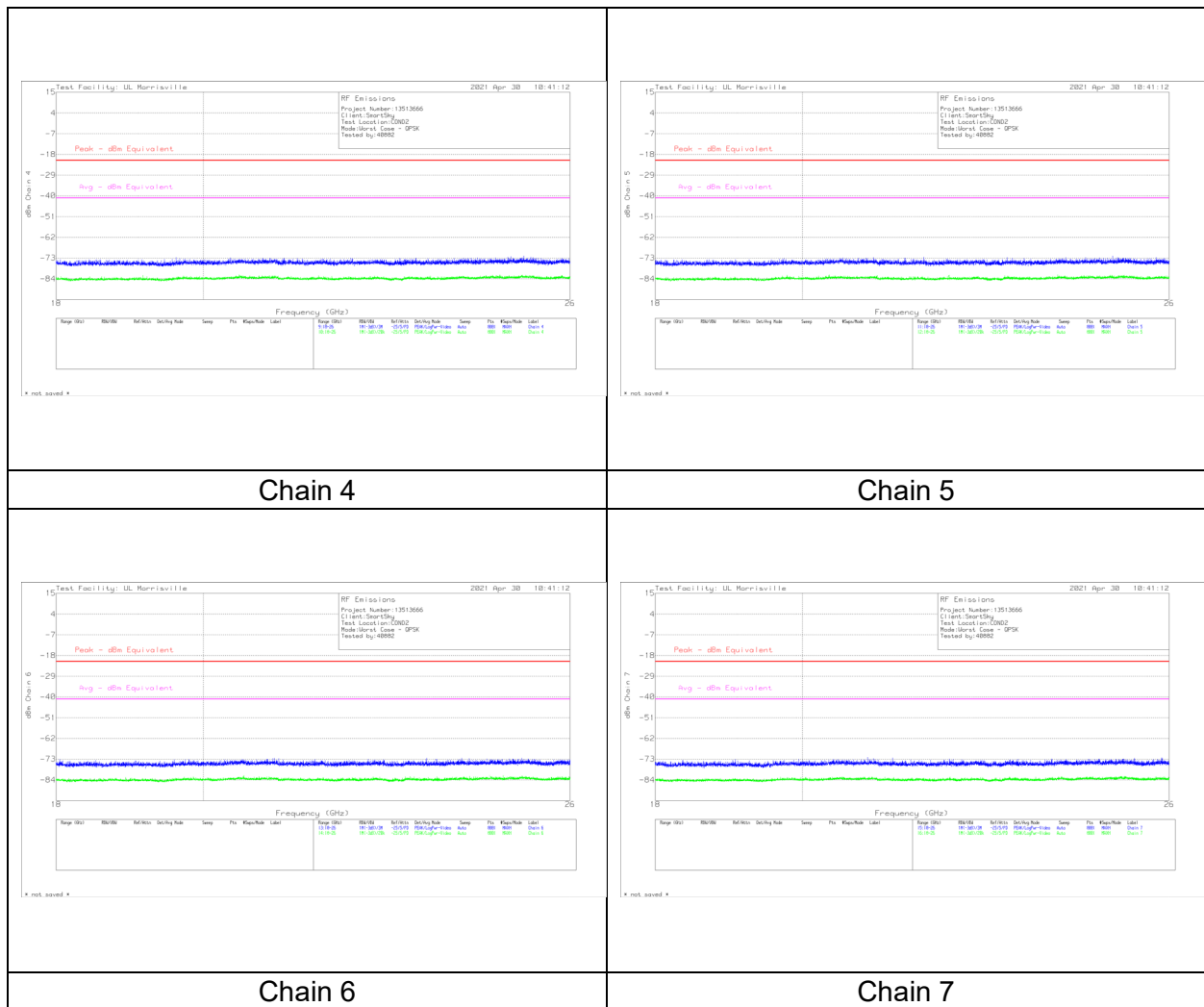


Chain 0

Chain 1

Chain 2

Chain 3

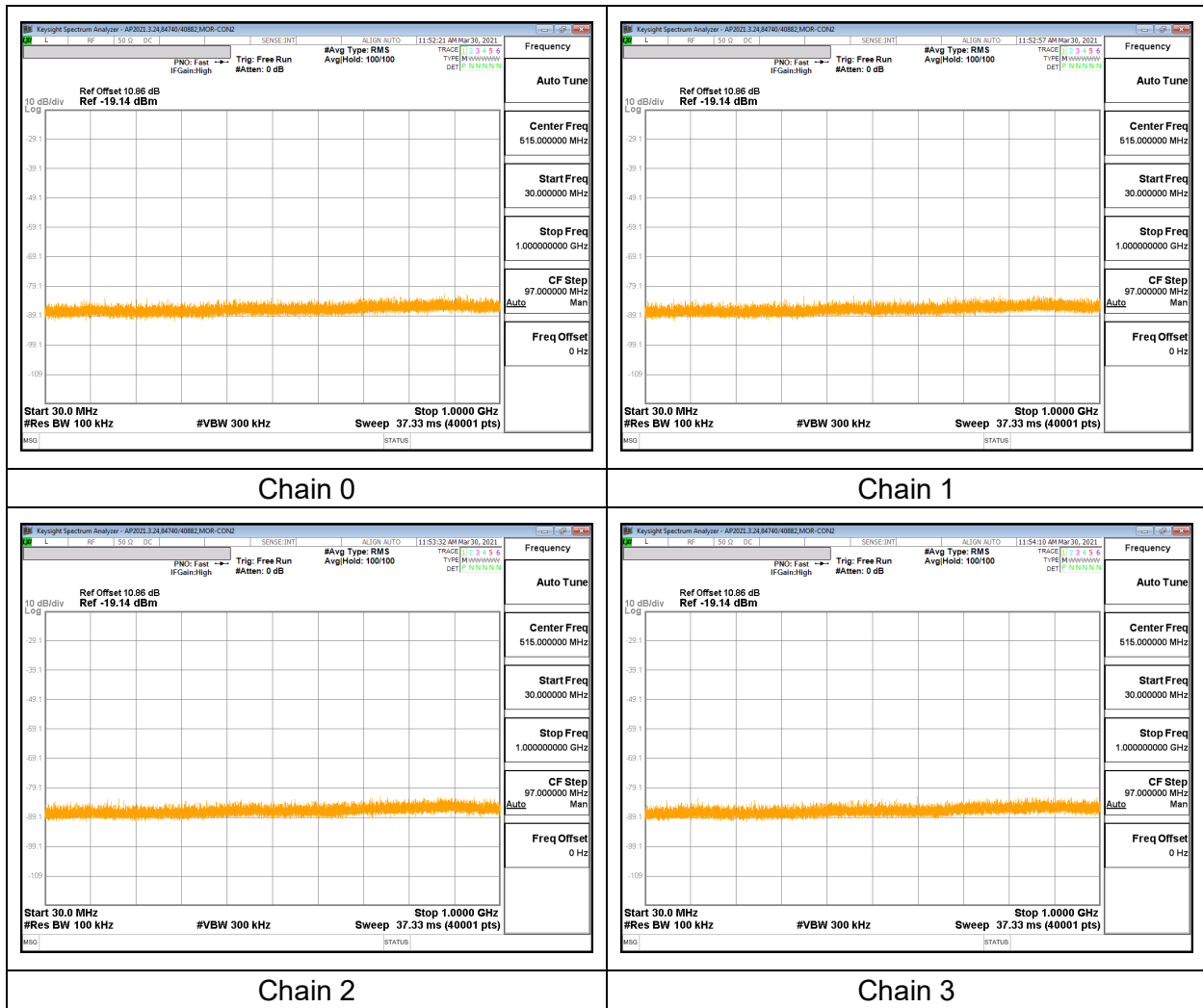


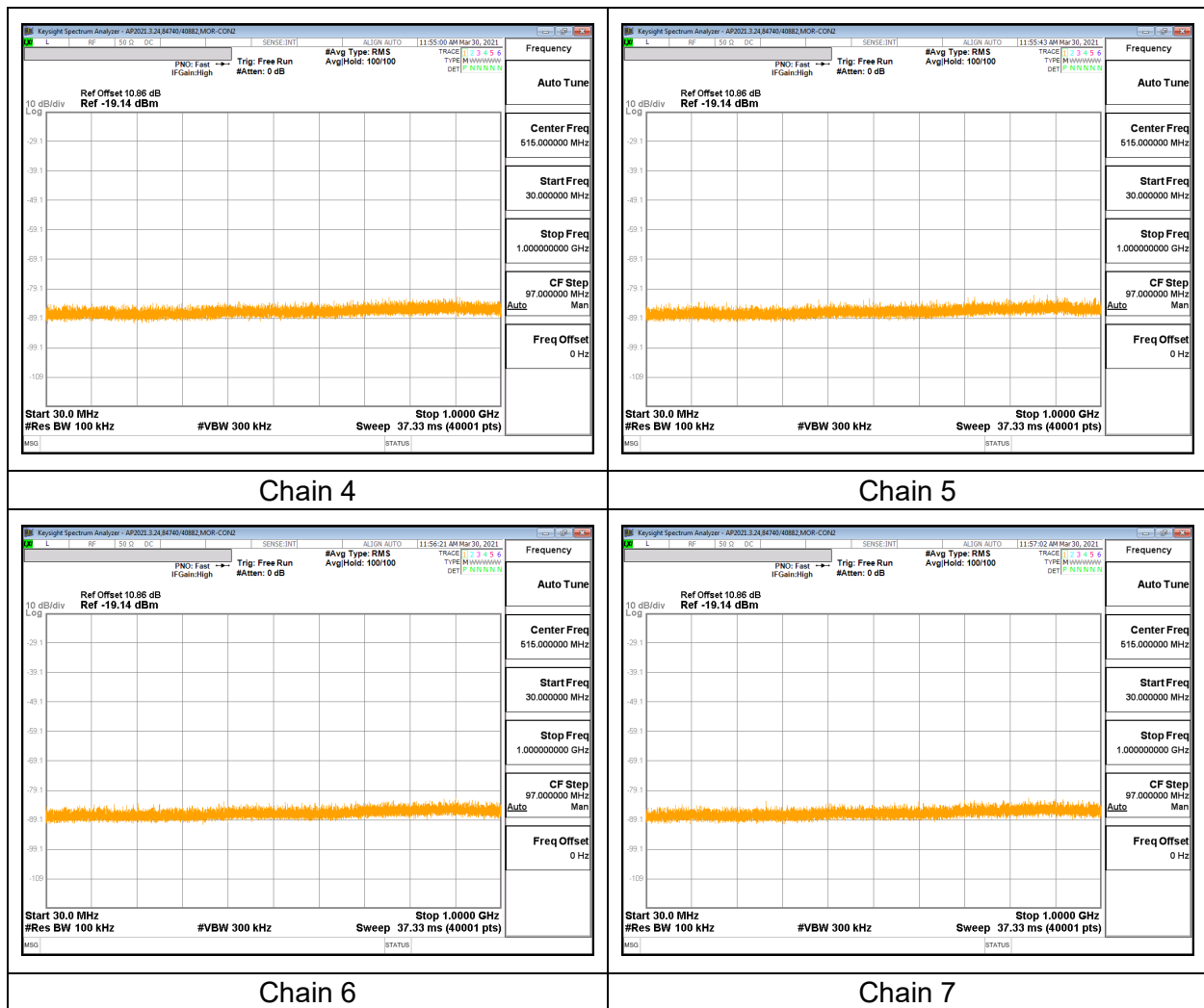
**Spurious Tabular Summed Data, Worst-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
25.194	-74.1	-74.35	-73.61	-72.49	-73.91	-74.21	-75.5	-73.79	-38.09	57.16	74	-16.84
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
25.121	-83.12	-82.88	-81.94	-82.58	-82.54	-83.28	-82.09	-82.04	-46.70	48.56	54	-5.44

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2

### 11.7.7. WORSE-CASE CHANNEL SPURIOUS: 30-1000 MHz



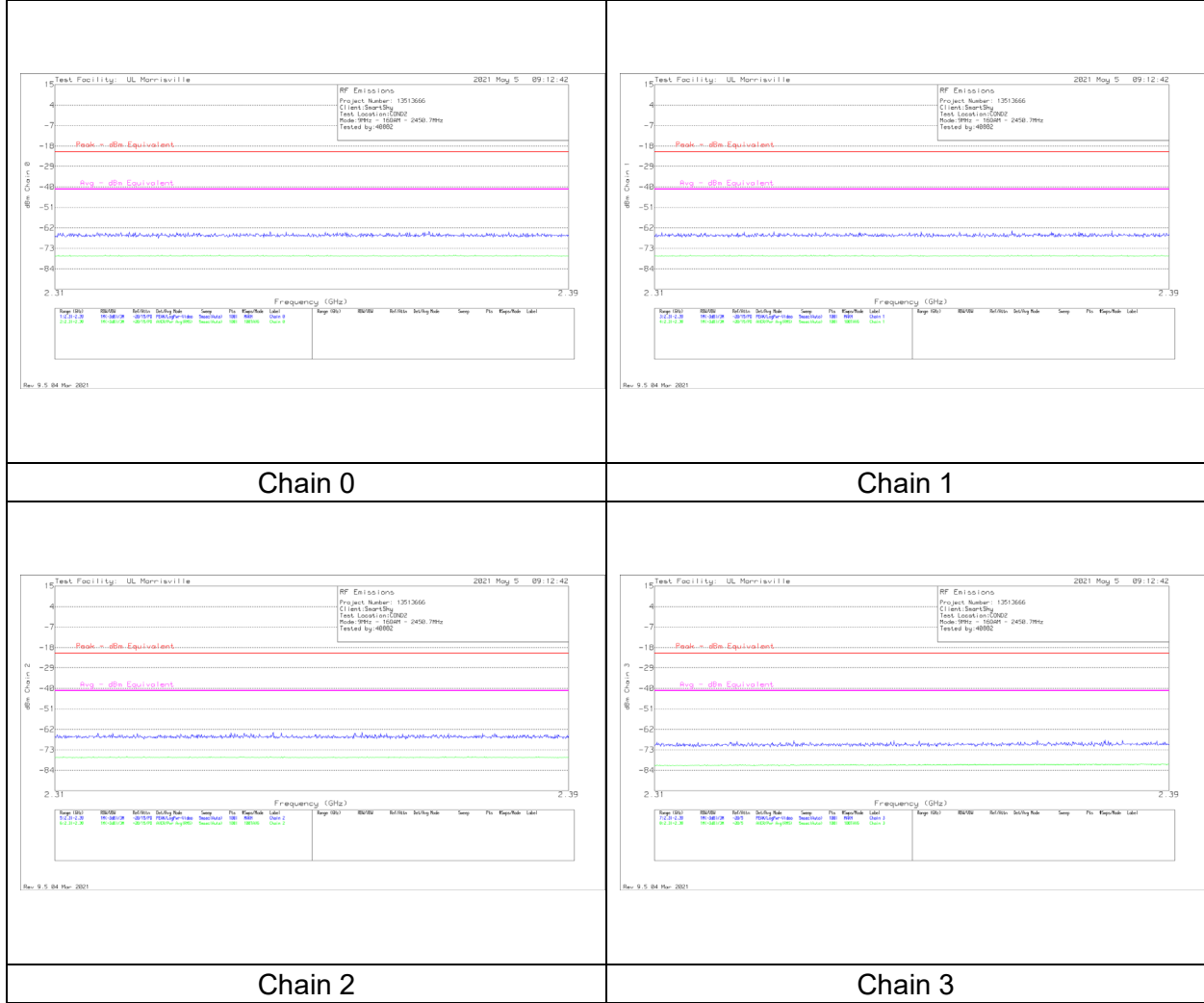


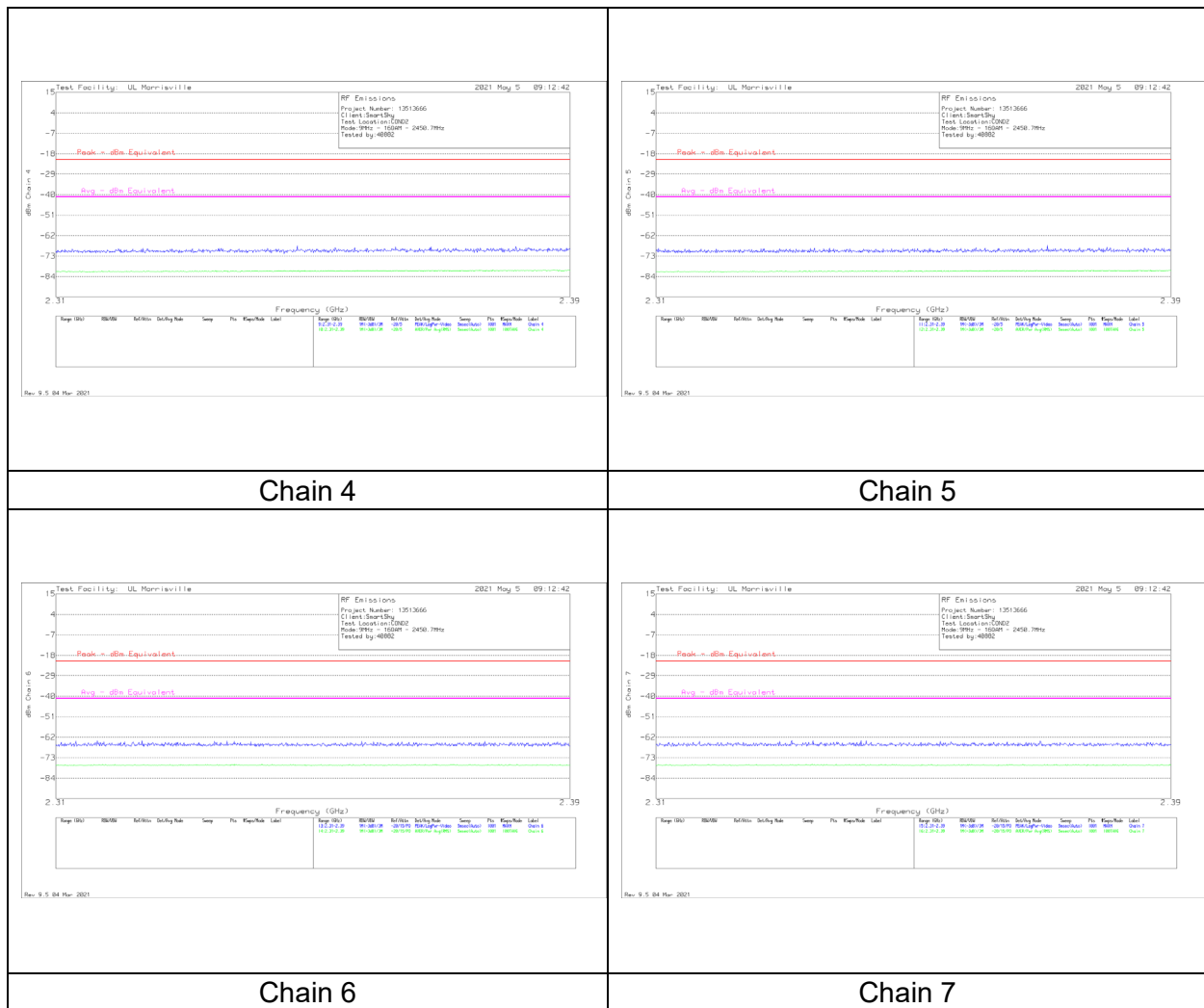
**Spurious Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	4.7	26.8	3	
Frequency (MHz)	QP Value Chain 0 (dBm)	QP Value Chain 1 (dBm)	QP Value Chain 2 (dBm)	QP Value Chain 3 (dBm)	QP Value Chain 4 (dBm)	QP Value Chain 5 (dBm)	QP Value Chain 6 (dBm)	QP Value Chain 7 (dBm)	QK EIRP (dBm)	QP E-field (dBuV/m)	QP E-field Limit (dBuV/m)	QP E-field Margin (dB)
399.4	-96.38	-96.32	-96.29	-96.37	-96.31	-96.37	-96.34	-96.33	-55.81	39.45	46	-6.55

# 11.8. FRB, 9MHz BW, 16QAM MODE, TX ABOVE 1 GHz IN THE 2.4 GHz BAND

## 11.8.1. LOW CHANNEL RESTRICTED BAND EDGE





**Restricted Band (Low Channel) Tabular Summed Data, Worse-case Frequency:**

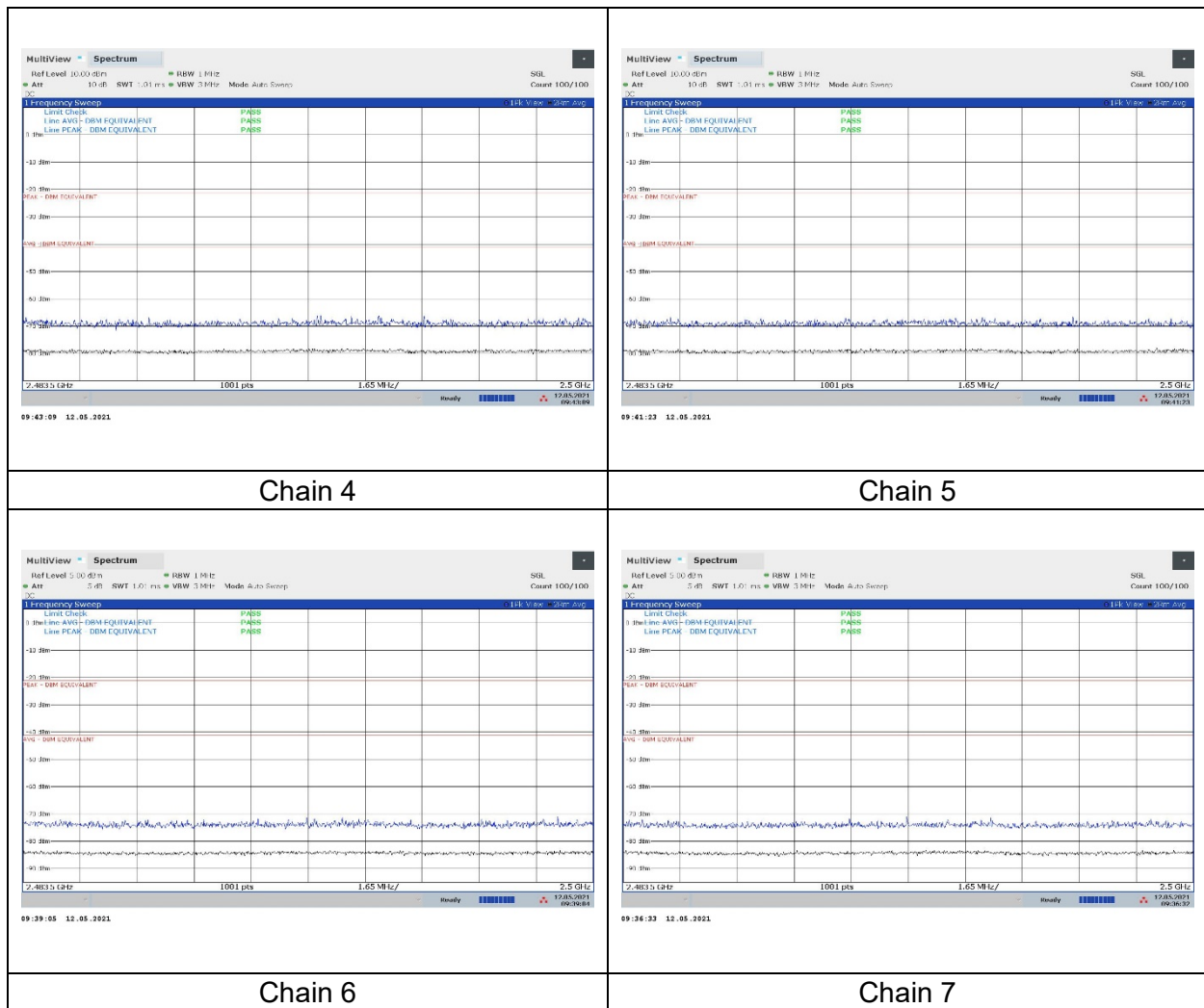
Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
2.36944	-65.32	-64.94	-66.59	-69.98	-70.11	-69.81	-65.24	-64.14	-30.60	64.66	74	-9.34
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
2.37216	-76.76	-76.88	-76.86	-80.89	-80.9	-80.94	-76.8	-76.98	-42.15	53.11	54	-0.89

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2



## 11.8.2. HIGH CHANNEL RESTRICTED BAND EDGE



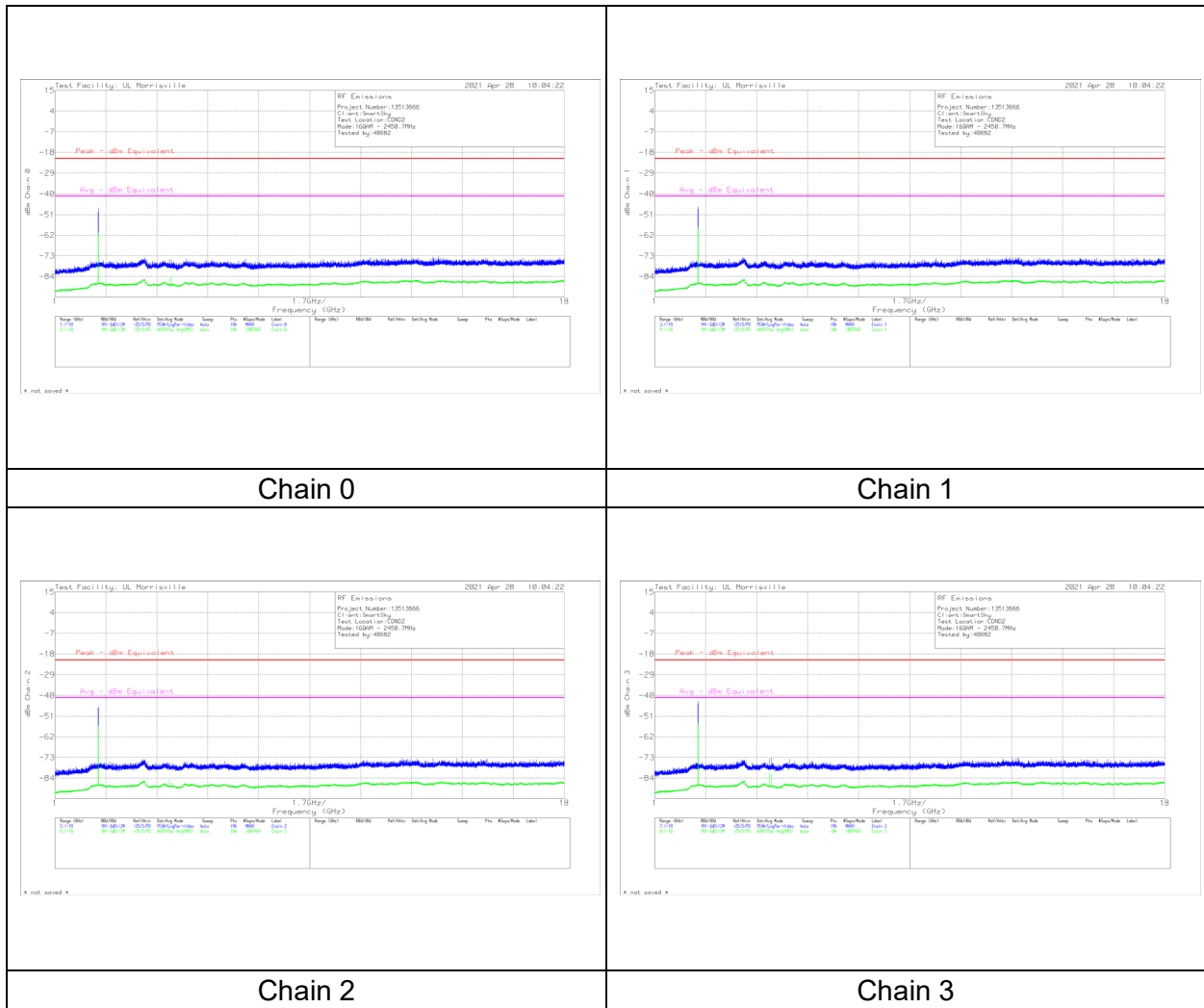


**Restricted Band (High Channel) Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
2492.113	-78.83	-72.94	-74.38	-68.77	-66.15	-68.03	-74.48	-74.27	-34.71	60.55	74	-13.45
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
2493.598	-90.22	-83.89	-83.64	-78.55	-78.35	-78.42	-84.07	-84.34	-45.42	49.83	54	-4.17

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2

### 11.8.3. LOW CHANNEL SPURIOUS: 1-18 GHz

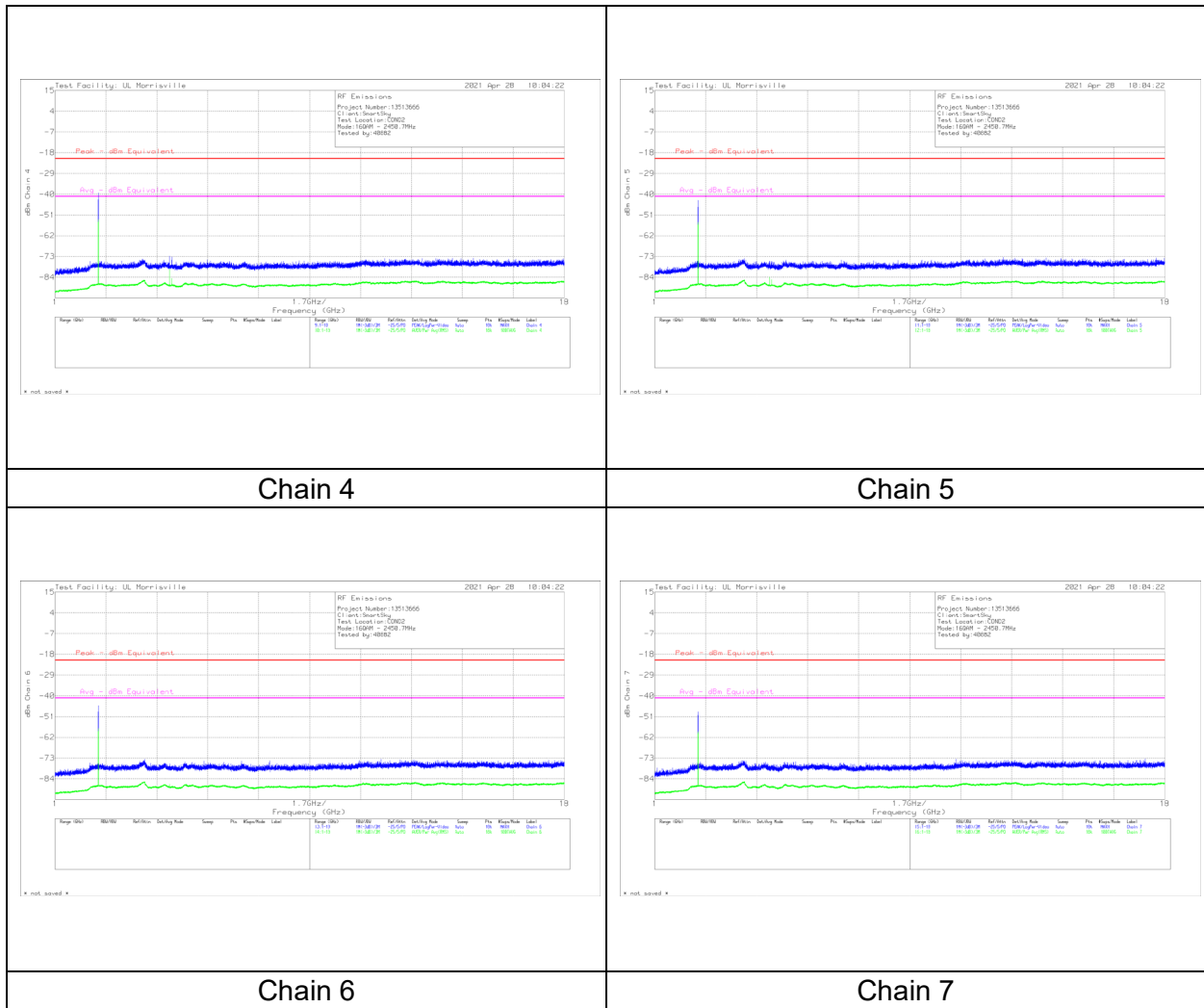


Chain 0

Chain 1

Chain 2

Chain 3

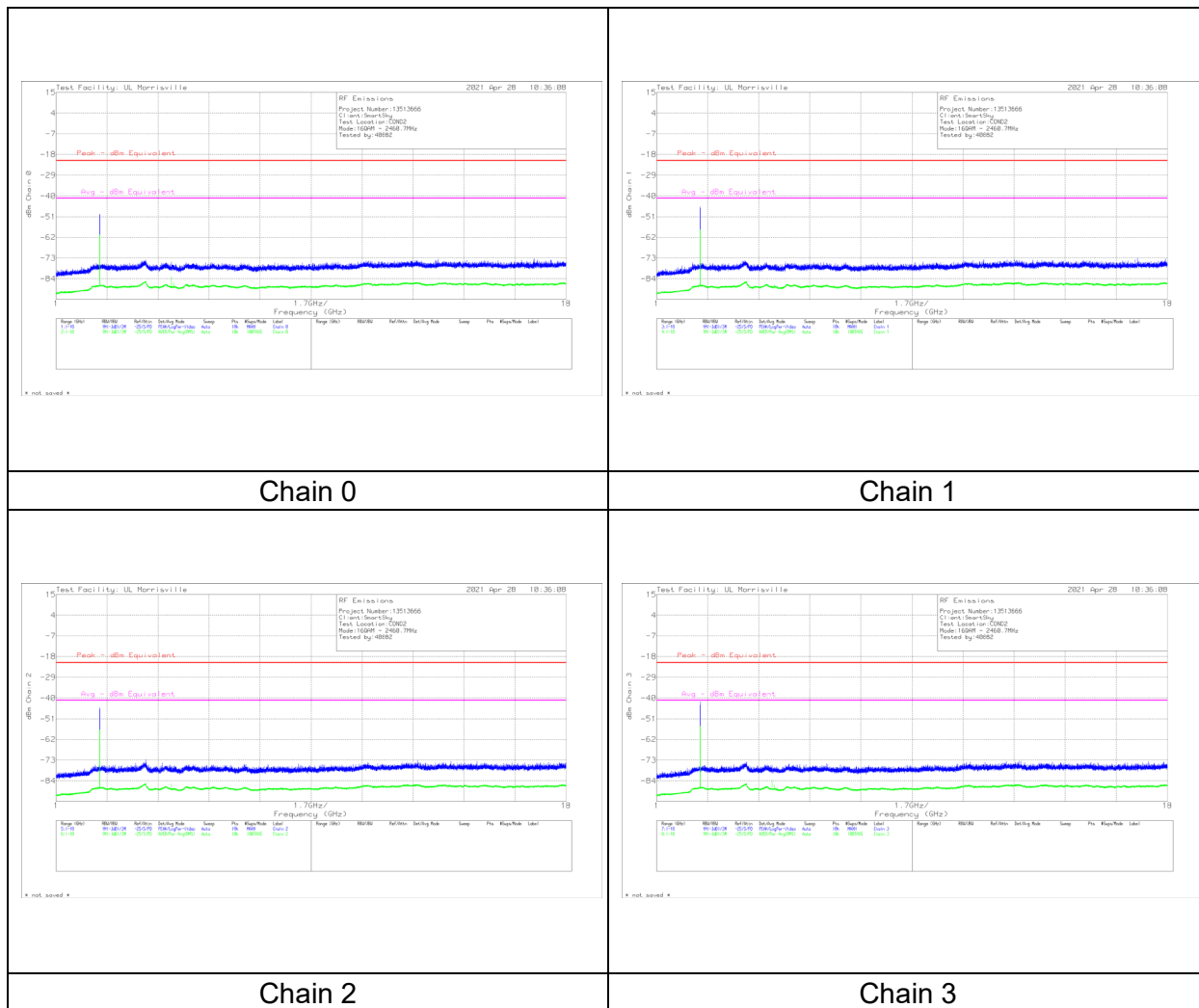


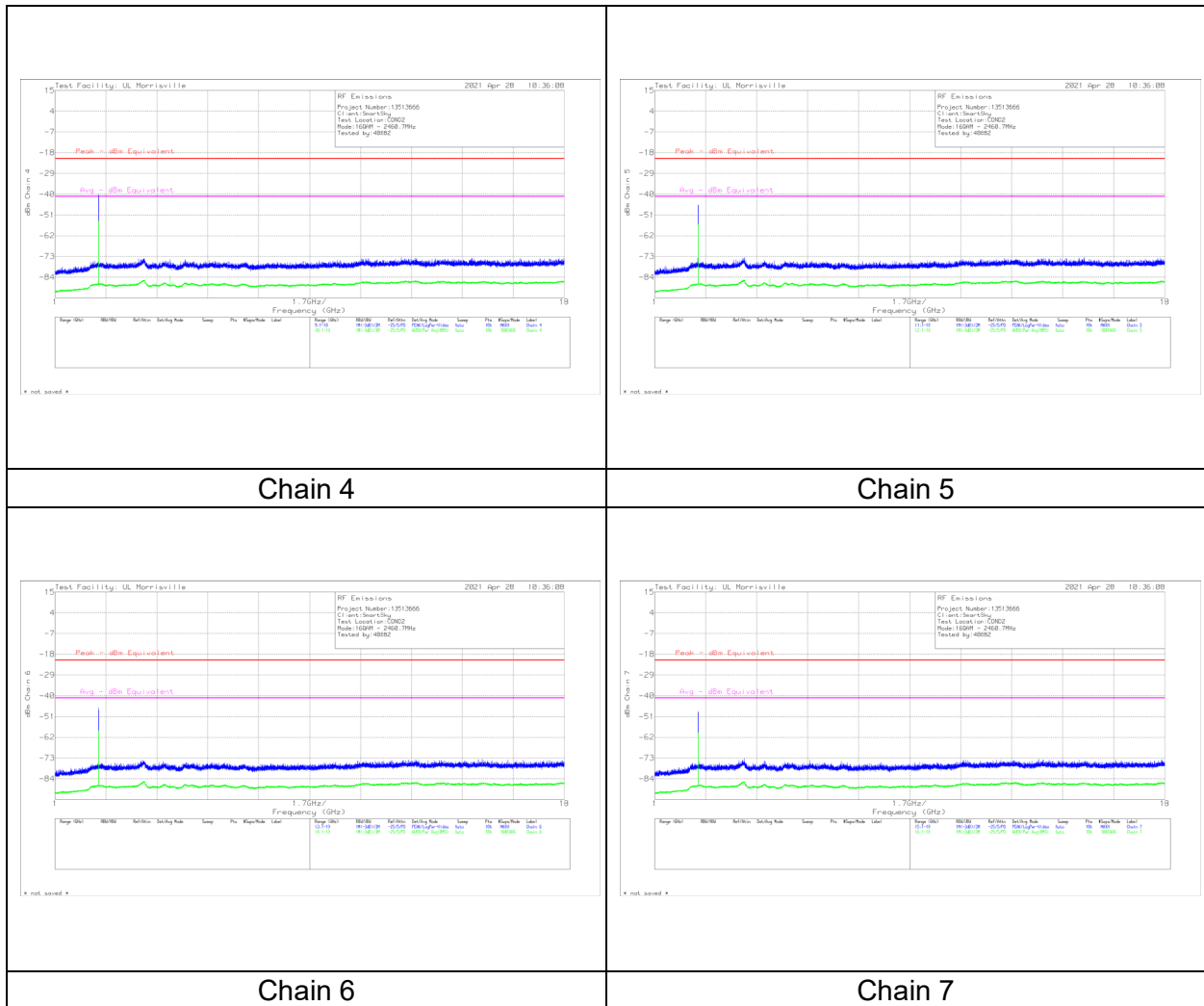
**Spurious Low Channel Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
3.982554	-75.43	-74.92	-76.08	-74.27	-76.2	-75.89	-76.23	-74.88	-39.6	55.7	74	-18.34
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
4.824998	-84.64	-87.06	-84.72	-80.99	-79.54	-83.98	-86.81	-88.22	-47.70	47.55	54	-6.45

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2. Fundamental emission not identified in tabular data.

### 11.8.4. MID CHANNEL SPURIOUS: 1-18 GHz





**Spurious Mid Channel Tabular Summed Data, Worse-case Frequency:**

Chain	0	1	2	3	4	5	6	7	GRF (dB)	Array Gain (dBi)	Meas. Dist (m)	
Gain (dBi)	-	-	-	-	-	-	-	-	0	26.8	3	
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
3.978776	-75.56	-74.74	-76.35	-75.11	-75.86	-75.65	-76.34	-75.14	-39.7	55.5	74	-18.47
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
4.825943	-85.23	-87.18	-85.32	-81.94	-80.48	-84.83	-86.9	-88.09	-48.42	46.84	54	-7.16

Note: GRF = Ground Reflection Factor per C63.10, Section 11.12.2.2. Fundamental emission not identified in tabular data.