



BUREAU VERITAS

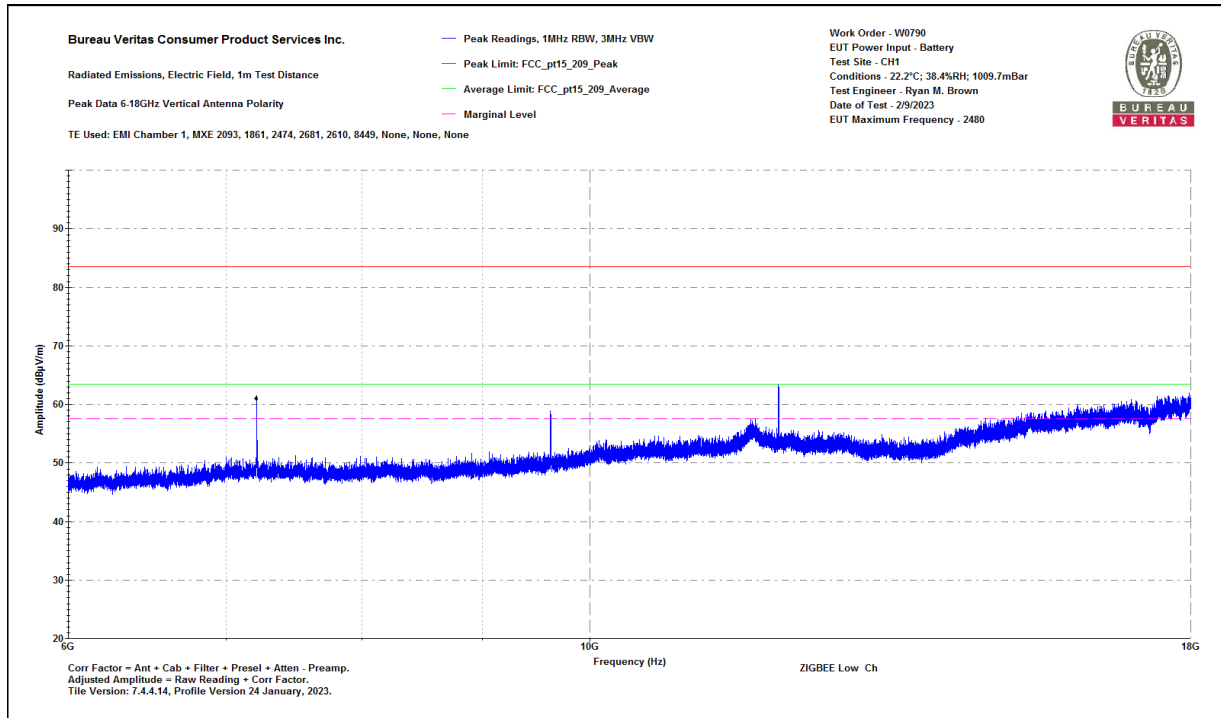
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 1m Distance Top Peaks Vertical 6-18GHz Notes: ZIGBEE Low Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/9/2023
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Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
12022.5	54.7	49.1	8.7	63.4	57.8	83.5	-20.1	PASS	-20.1	63.5	-5.7	PASS	-5.7	150	70
17972.4	46.6	35.3	15.4	62	50.7	83.5	-21.5	PASS	--	63.5	-12.8	PASS	--	150	70

## 6-18GHz Vertical



## 6-18GHz Vertical



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

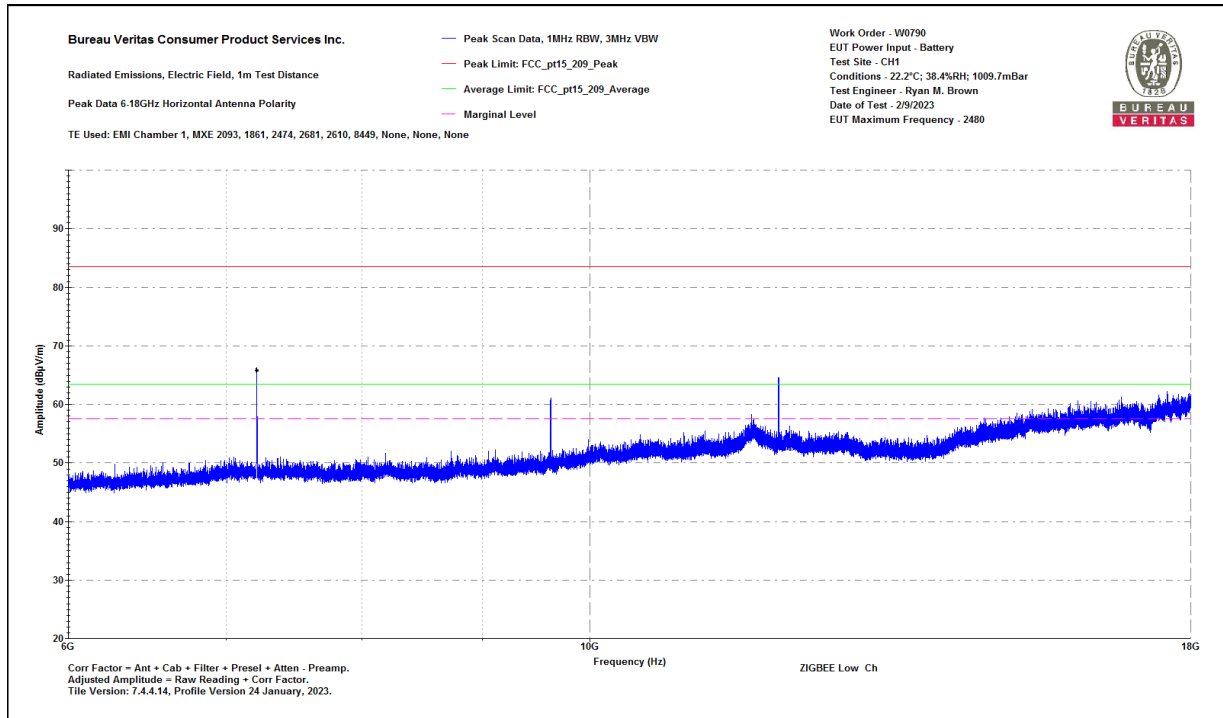


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 1m Distance  
Top Peaks Horizontal 6-18GHz  
Notes:  
ZIGBEE Low Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.2°C; 38.4%RH; 1009.7mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/9/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
11706.9	49.4	37.5	8.8	58.2	46.3	83.5	-25.3	PASS	--	63.5	-17.2	PASS	--	200	258
12027.6	55.9	49.5	8.7	64.6	58.2	83.5	-18.9	PASS	-18.9	63.5	-5.3	PASS	-5.3	150	69
17591.7	47.1	34.9	15.1	62.2	50.0	83.5	-21.3	PASS	--	63.5	-13.5	PASS	--	175	246

## 6-18GHz Horizontal



## 6-18GHz Horizontal

Bureau Veritas Consumer Product Services Inc.

One Distribution Center Circle, #1  
Littleton, MA

Tel.: (978) 486-8880  
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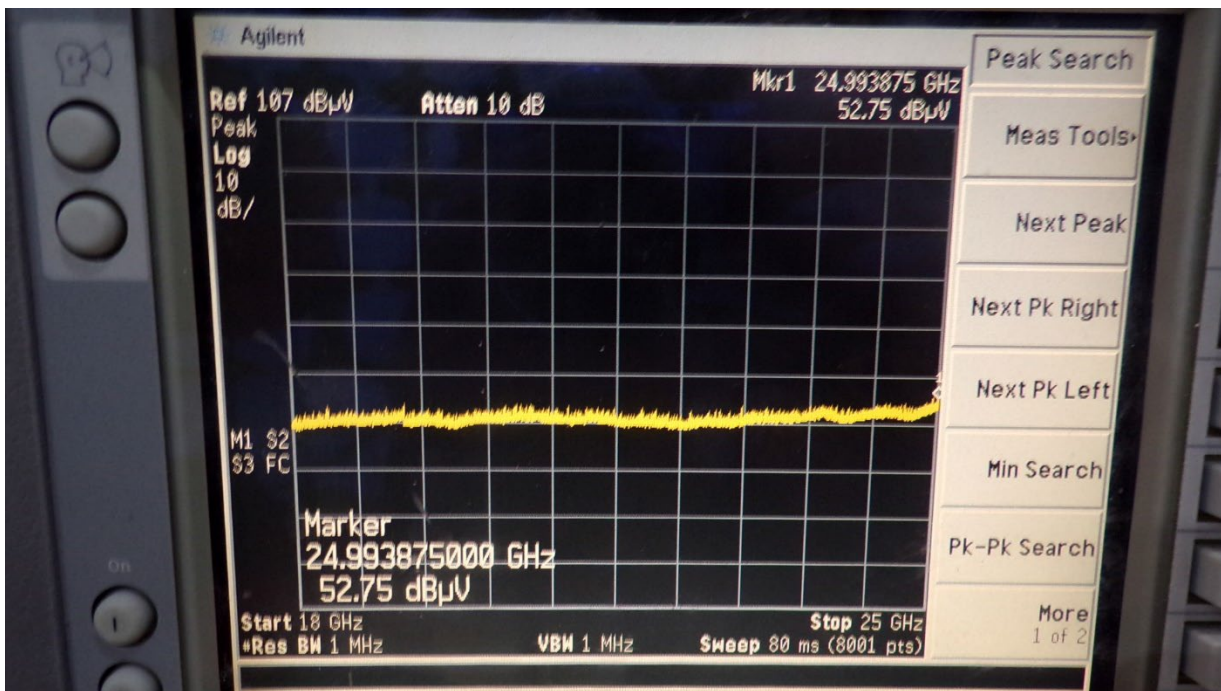
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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Radiated Emissions Table															
Date: 29-Mar-23 Engineer: Ryan M. Brown Temp: 21				Company: Assa Abloy EUT Desc: CEM100 Humidity: 43%				Work Order: W0790 EUT Operating Voltage/Frequency: Battery Pressure: 1005 Measurement Distance: 0.1 m EUT Max Freq: 2480MHz							
Notes: Zigbee Low															
Antenna Polarization (H/V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Avg Reading (dBµV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average			
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	
Noise Floor	24993.8	52.75	52.8	40.8	40.3	9.2	61.5	61.5	103.5	-42.0	Pass	83.5	-22.0	Pass	
<b>Table Result:</b> Pass by -22.0 dB <b>Worst Freq:</b> 24993.8 MHz															
Test Site: EMI Chamber 1 Analyzer: Gold				Cable 1: Asset #2323 Preamp: 18-26.5GHz				Cable 2: --- Antenna: 18-26.5GHz Horn				Cable 3: --- Preselector: ---			
CSsoft Radiated Emissions Calculator v 1.017.225 Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															

## 18-25GHz



## 18-25GHz



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



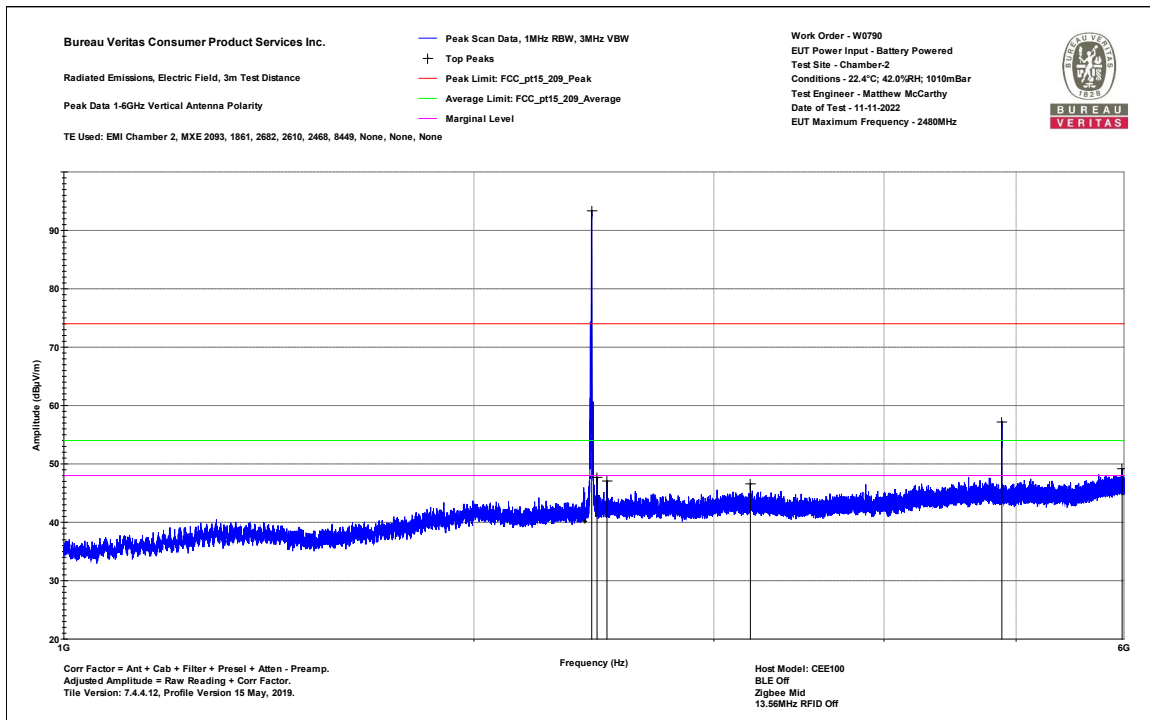
## Channel 18

## Host Model CEE100

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance Top Peaks Vertical 1-6GHz Notes: Host Model: CEE100 BLE Off Zigbee Mid	Work Order - W0790 EUT Power Input - Battery Powered Test Site - Chamber-2 Conditions - 22.4°C; 42.0%RH; 1010mBar Test Engineer - Matthew McCarthy Date of Test - 11-11-2022
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Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)	
2440.5	FUNDAMENTAL															
2462.63	49.9	35.1	-2.2	47.7	32.9	74	-26.3	PASS	--	54	-21.1	PASS	--	200	33	
2504.25	48.9	35.2	-1.9	47	33.3	74	-27	PASS	--	54	-20.7	PASS	--	100	56	
3191	47.9	35.3	-1.3	46.6	34	74	-27.4	PASS	--	54	-20	PASS	--	300	93	
4881	55.8	50.1	1.4	57.2	51.5	74	-16.8	PASS	-16.8	54	-2.5	PASS	-2.5	200	51	
5981.75	46	33.6	3.1	49.1	36.7	74	-24.9	PASS	--	54	-17.3	PASS	--	300	36	

## 1-6GHz Vertical



## 1-6GHz Vertical



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

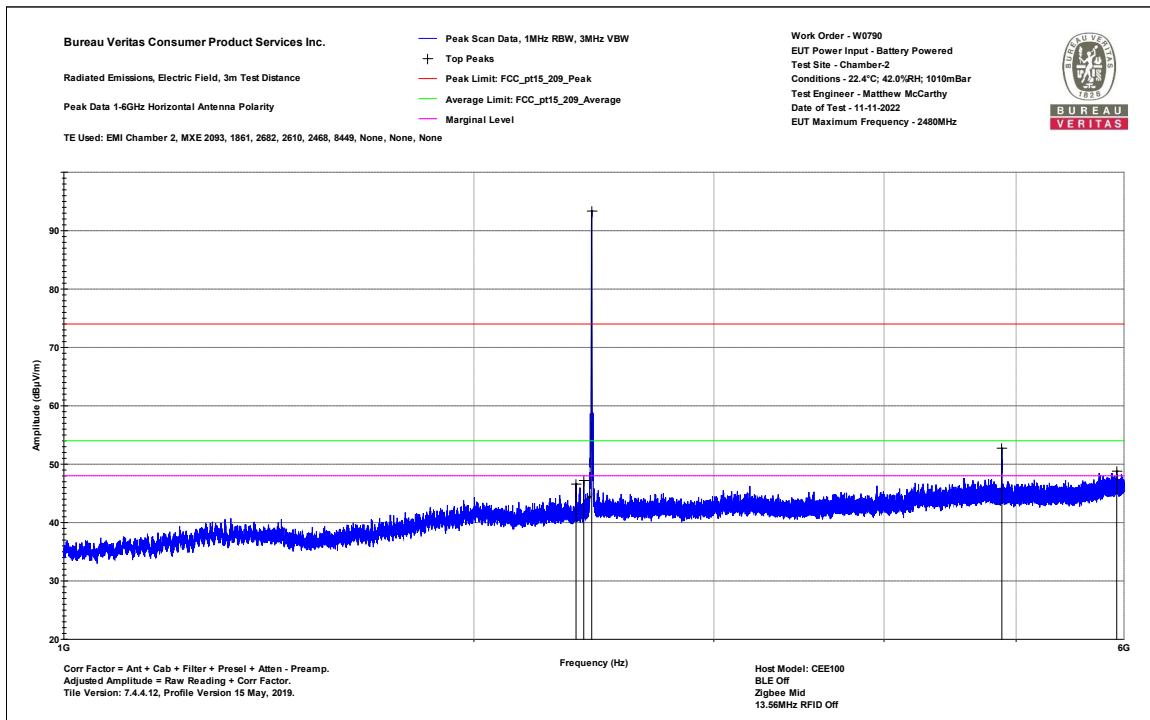


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
Top Peaks Horizontal 1-6GHz  
Notes:  
Host Model: CEE100  
BLE Off  
Zigbee Mid

Work Order - W0790  
EUT Power Input - Battery Powered  
Test Site - Chamber-2  
Conditions - 22.4°C; 42.0%RH; 1010mBar  
Test Engineer - Matthew McCarthy  
Date of Test - 11-11-2022

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2376.63	49.6	35.8	-3	46.6	32.8	74	-27.4	PASS	--	54	-21.2	PASS	--	200	145
2407.75	49.9	35.2	-2.8	47.1	32.4	74	-26.9	PASS	--	54	-21.6	PASS	--	300	286
2440.5 FUNDAMENTAL															
4880.88	51.4	46.8	1.4	52.8	48.2	74	-21.2	PASS	-21.2	54	-5.8	PASS	-5.8	300	18
5927	45.8	33.8	3	48.8	36.8	74	-25.2	PASS	--	54	-17.2	PASS	--	300	248

## 1-6GHz Horizontal



## 1-6GHz Horizontal



BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

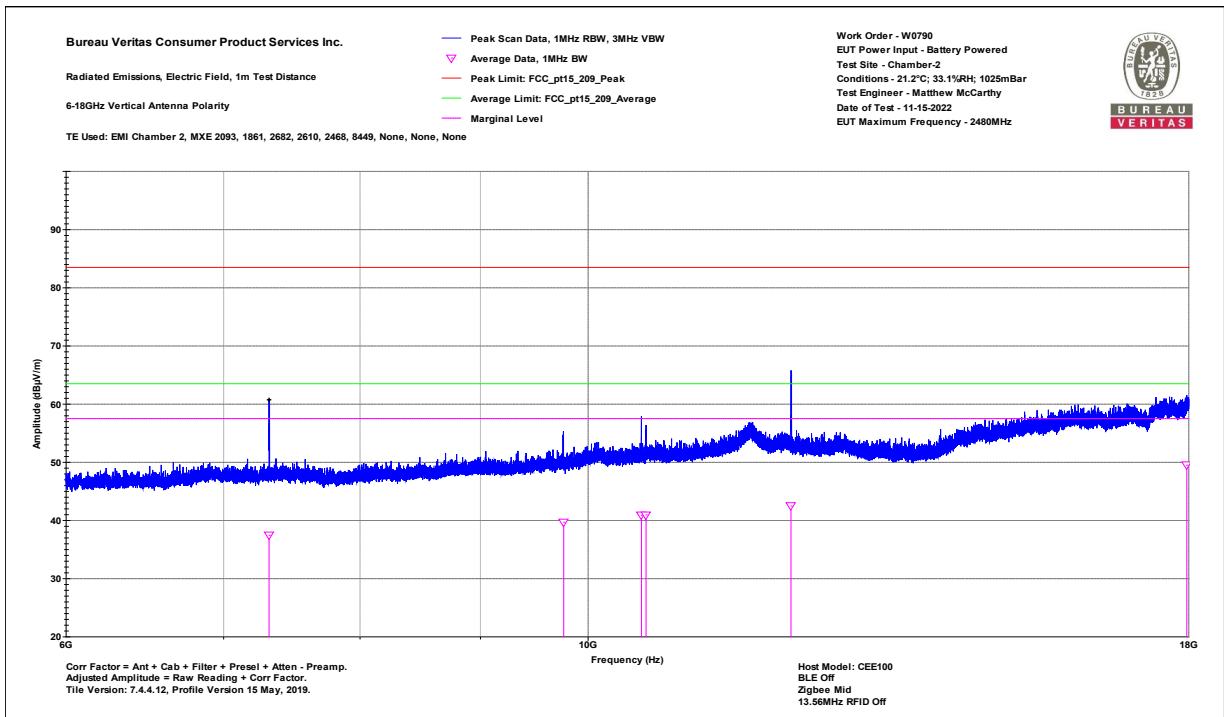


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
Vertical 6-18GHz  
Notes:  
Host Model: CEE100  
BLE Off  
Zigbee Mid

Work Order - W0790  
EUT Power Input - Battery Powered  
Test Site - Chamber-2  
Conditions - 21.2°C; 33.1%RH; 1025mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 03-09-2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7318.8	56.6	46.78	4.2	60.8	50.98	83.5	-22.7	PASS	--	63.5	-12.52	PASS	--	175	32
9762	49.6	43.58	5.7	55.3	49.28	83.5	-28.2	PASS	--	63.5	-14.22	PASS	--	150	302
10535.7	50.8	36.67	7.1	57.9	43.77	83.5	-25.6	PASS	--	63.5	-19.73	PASS	--	100	131
10584	49	36.46	7.4	56.4	43.86	83.5	-27.1	PASS	--	63.5	-19.64	PASS	--	150	112
12197.7	57.2	49.83	8.6	65.8	58.43	83.5	-17.7	PASS	-17.7	63.5	-5.07	PASS	-5.07	150	55
17965.8	46.2	39.82	15.3	61.5	55.12	83.5	-22	PASS	--	63.5	-8.38	PASS	--	200	17

## 6-18GHz Vertical



## 6-18GHz Vertical



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

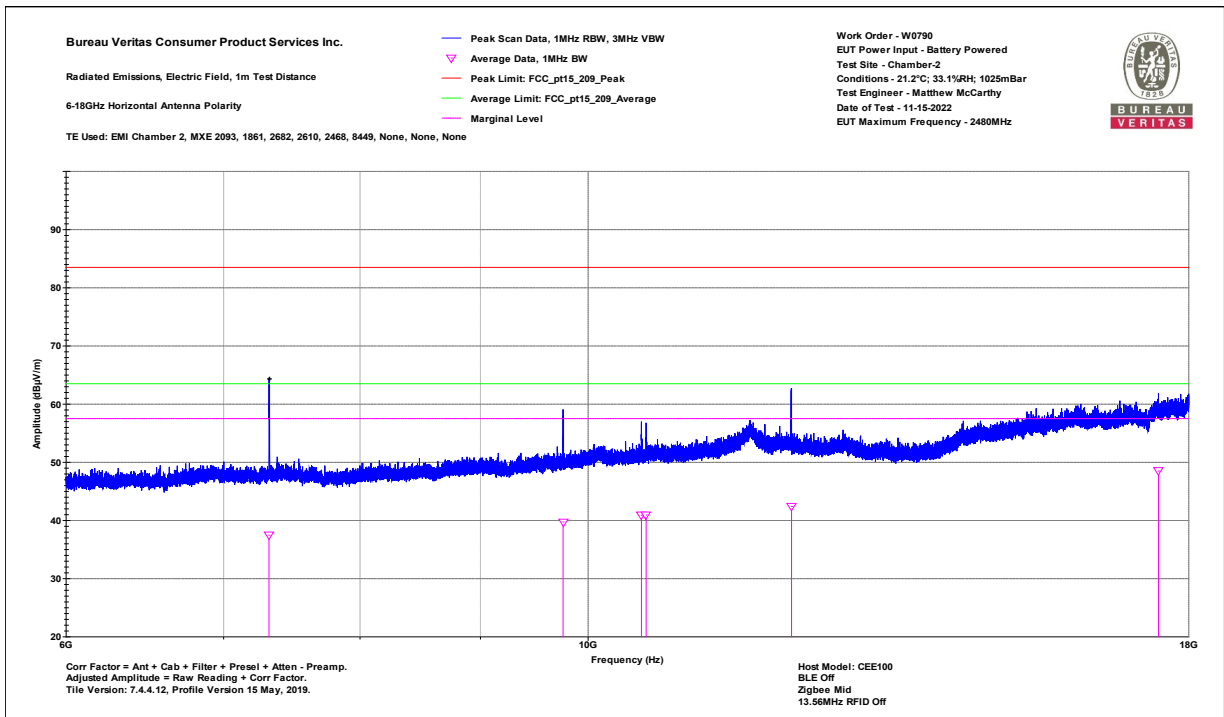


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
Horizontal 6-18GHz  
Notes:  
Host Model: CEE100  
BLE Off  
Zigbee Mid

Work Order - W0790  
EUT Power Input - Battery Powered  
Test Site - Chamber-2  
Conditions - 21.2°C; 33.1%RH; 1025mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 03-09-2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7317.6	60.2	54.85	4.2	64.4	59.05	83.5	-19.1	PASS	-19.1	63.5	-4.45	PASS	-4.45	150	1
9758.2	53.4	40.59	5.7	59.1	46.29	83.5	-24.4	PASS	--	63.5	-17.21	PASS	--	175	56
10535.9	49.9	36.37	7.1	57	43.47	83.5	-26.5	PASS	--	63.5	-20.03	PASS	--	143	119
10584.6	49.4	36.51	7.4	56.8	43.91	83.5	-26.7	PASS	--	63.5	-19.59	PASS	--	178	139
12203	54.1	44.28	8.6	62.7	52.88	83.5	-20.8	PASS	--	63.5	-10.62	PASS	--	161	25
17476.5	47.4	39.83	14.5	61.9	54.33	83.5	-21.6	PASS	--	63.5	-9.17	PASS	--	121	215

## 6-18GHz Horizontal



## 6-18GHz Horizontal



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

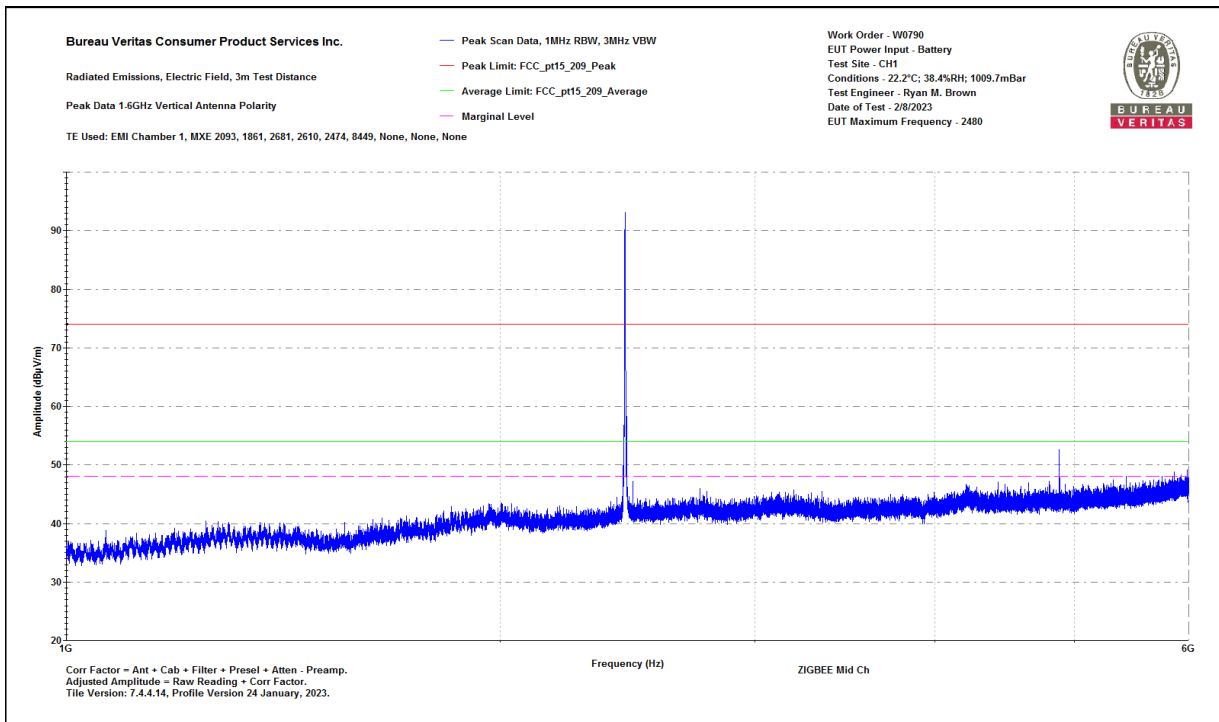


## Host Model CEB100

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-6GHz Vertical Data Notes: ZIGBEE Mid Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/8/2023
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Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2439.5	Fundamental														
2471.5	49.7	49.7	-2.5	47.2	47.2	74	-26.8	PASS	--	54	-6.8	PASS	--	100	57
2750.75	47.6	47.6	-1.6	46	46	74	-28	PASS	--	54	-8	PASS	--	201	260
4879	55.28	48.38	0.6	55.88	48.98	74	-18.12	PASS	-18.12	54	-5.02	PASS	-5.02	220	38
5987.63	46.2	36.36	3	49.2	39.36	74	-24.8	PASS	--	54	-14.64	PASS	--	283	270

## 1-6GHz Vertical



## 1-6GHz Vertical





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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

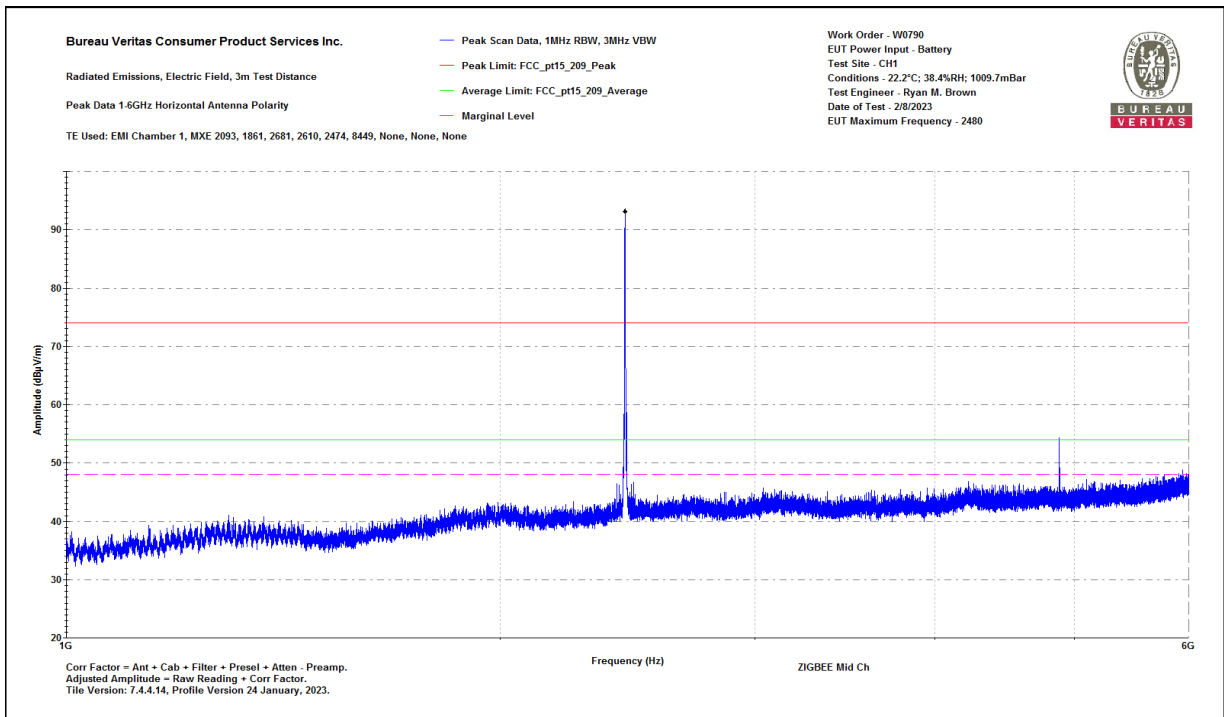


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
1-6GHz Horizontal Data  
Notes:  
ZIGBEE Mid Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.2°C; 38.4%RH; 1009.7mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/8/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
1296.75	48.6	48.6	-7.5	41.1	41.1	74	-32.9	PASS	--	54	-12.9	PASS	--	175	219
2408.13	49.3	49.3	-2.8	46.5	46.5	74	-27.5	PASS	--	54	-7.5	PASS	--	291	320
2439.5	Fundamental														
2472.63	49.2	49.2	-2.5	46.7	46.7	74	-27.3	PASS	--	54	-7.3	PASS	--	208	155
4879	53.8	49.22	0.6	54.4	49.82	74	-19.6	PASS	-19.6	54	-4.18	PASS	-4.18	275	104
5940.25	45.8	36.07	3	48.8	39.07	74	-25.2	PASS	--	54	-14.93	PASS	--	203	111

## 1-6GHz Horizontal



## 1-6GHz Horizontal



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

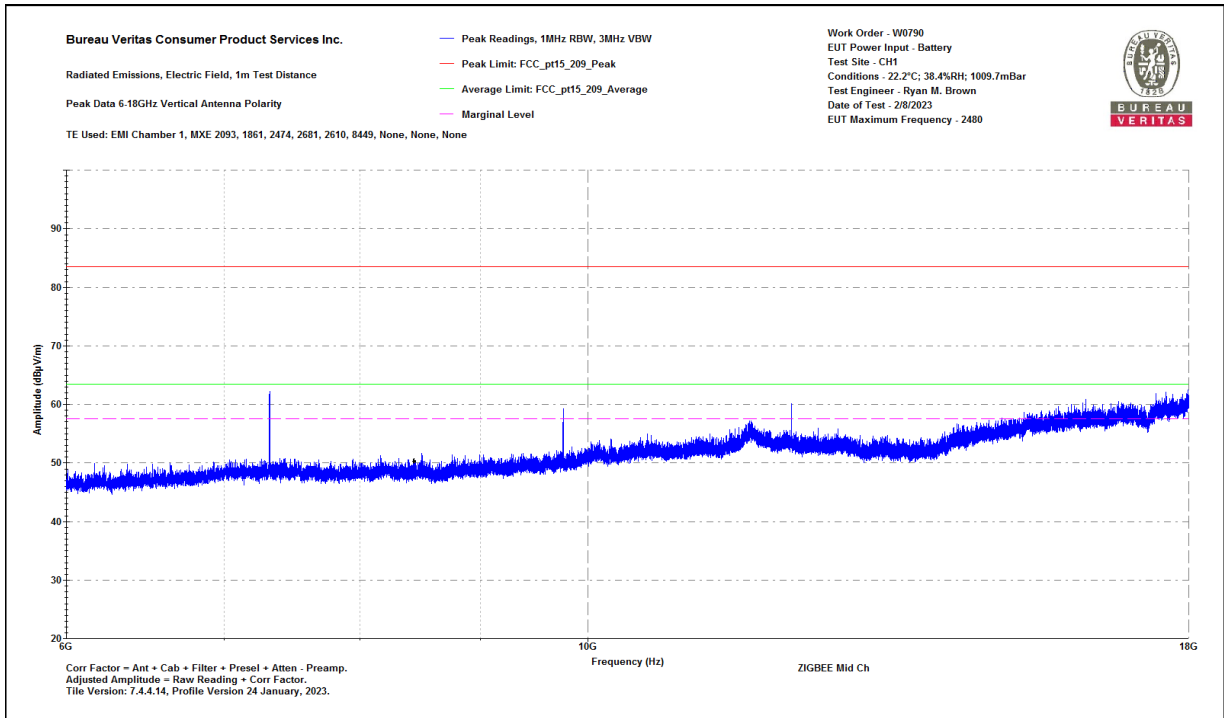


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 1m Distance  
Top Peaks Vertical 6-18GHz  
Notes:  
ZIGBEE Mid Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.2°C; 38.4%RH; 1009.7mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/8/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7321.5	57.3	51.03	4.8	62.1	55.83	83.5	-21.4	PASS	--	63.5	-7.67	PASS	--	200	0
12197.7	50.9	48.14	9.2	60.1	57.34	83.5	-23.4	PASS	--	63.5	-6.16	PASS	-6.16	150	69
17991.3	46.8	35.81	15.6	62.4	51.41	83.5	-21.1	PASS	-21.1	63.5	-12.09	PASS	--	125	170

## 6-18GHz Vertical



## 6-18GHz Vertical



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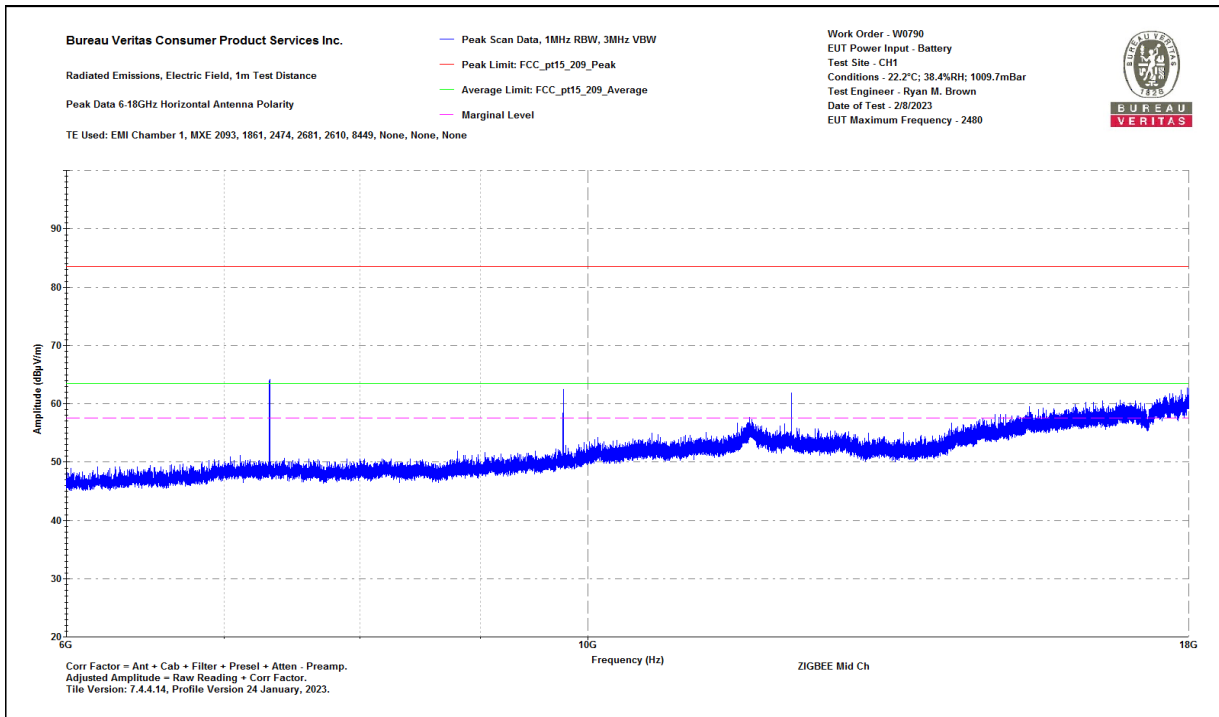
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 1m Distance Top Peaks Horizontal 6-18GHz Notes: ZIGBEE Mid Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/8/2023
--	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7321.5	59.3	53.79	4.8	64.1	58.59	83.5	-19.4	PASS	-19.4	63.5	-4.91	PASS	-4.91	175	22
11708.7	48.9	37.74	8.8	57.7	46.54	83.5	-25.8	PASS	--	63.5	-16.96	PASS	--	150	0
12202.5	52.7	47.93	9.2	61.9	57.13	83.5	-21.6	PASS	--	63.5	-6.37	PASS	--	150	0
17978.4	47.2	35.94	15.5	62.7	51.44	83.5	-20.8	PASS	--	63.5	-12.06	PASS	--	100	181

## 6-18GHz Horizontal



## 6-18GHz Horizontal



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

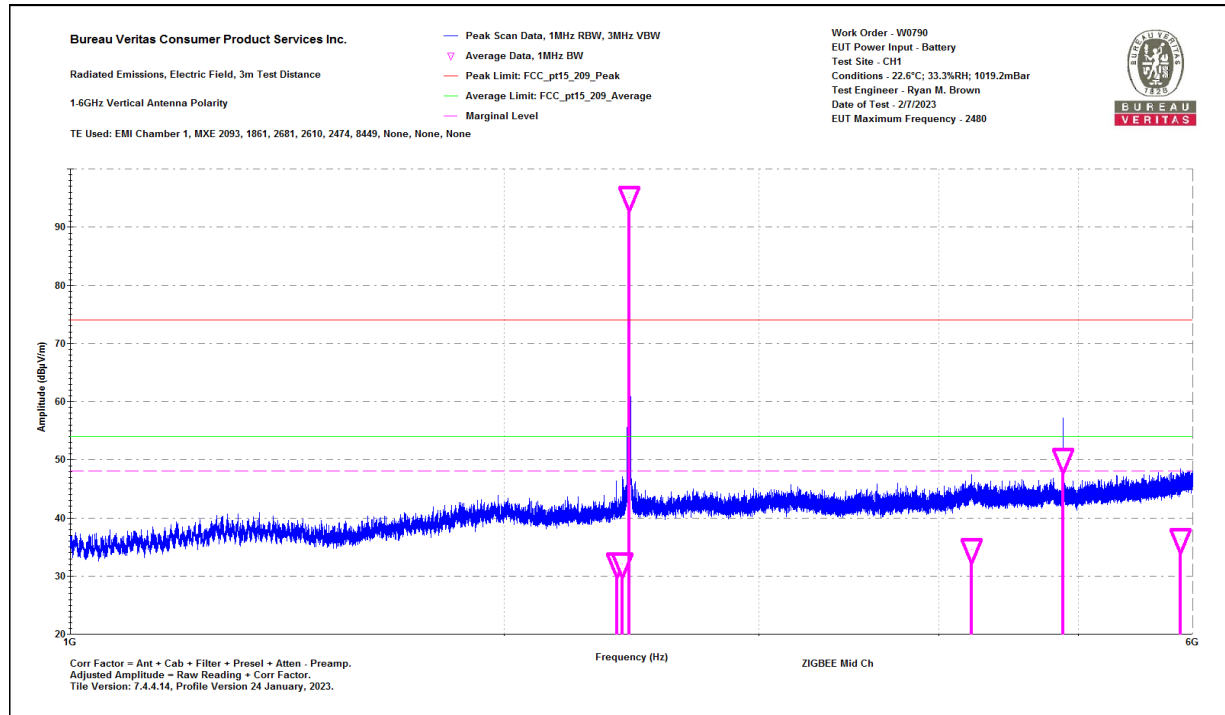


## Host Model CEM100

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-6GHz Vertical Data Notes: ZIGBEE Mid Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.6°C; 33.3%RH; 1019.2mBar Test Engineer - Ryan M. Brown Date of Test - 2/7/2023
--	--

Frequency (MHz)	Raw Peak (dBμV)	Raw RMS Average (dBμV)	Correction Factor (dB/m)	Adjusted Peak (dBμV/m)	Adjusted RMS Average (dBμV/m)	Peak Limit FCC 15.209 (dBμV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBμV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2393.9	44.3	44.3	-3	41.3	41.3	74	-32.7	PASS	--	54	-12.7	PASS	--	181	47
2415.5	44.1	44.1	-2.8	41.3	41.3	74	-32.7	PASS	--	54	-12.7	PASS	--	206	81
2439.5	Fundamental														
4216.8	42.1	42.1	1	43.1	43.1	74	-30.9	PASS	--	54	-10.9	PASS	--	275	0
4881.1	56.1	51.5	0.6	56.7	52.1	74	-17.3	PASS	-17.3	54	-1.9	PASS	-1.9	211	42
5882	42.6	42.6	2.8	45.4	45.4	74	-28.6	PASS	--	54	-8.6	PASS	--	216	296

## 1-6GHz Vertical



## 1-6GHz Vertical



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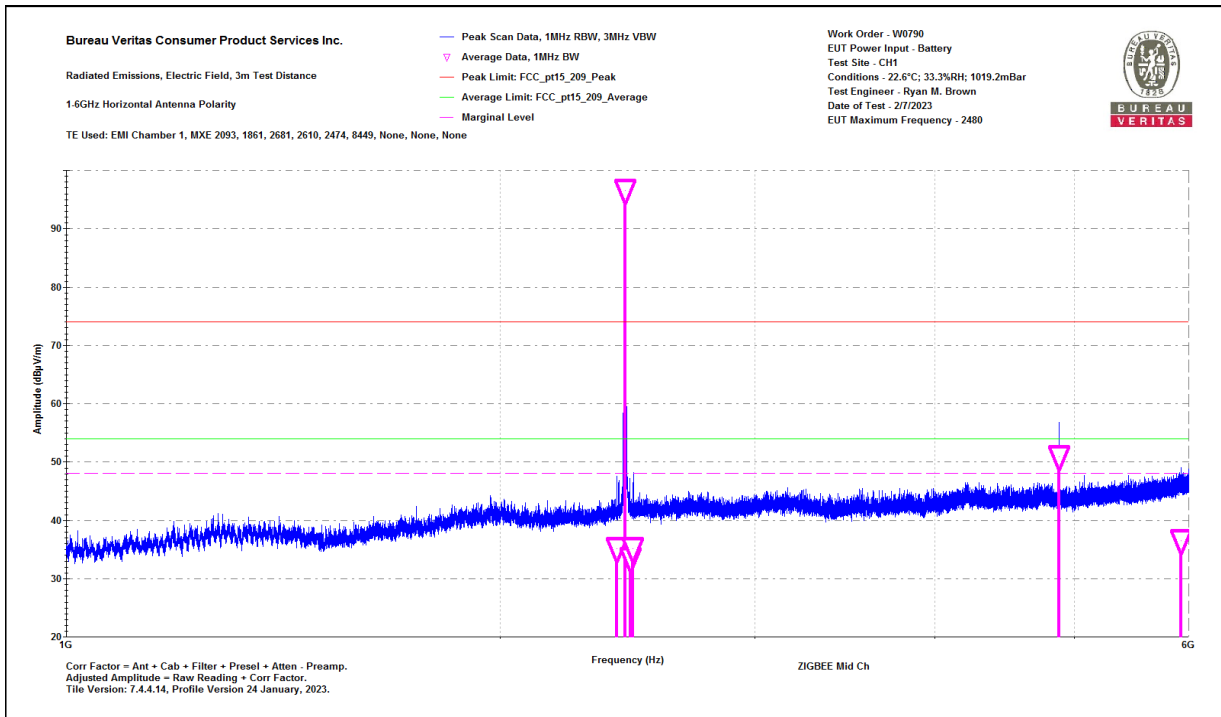
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-6GHz Horizontal Data Notes: ZIGBEE Mid Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.6°C; 33.3%RH; 1019.2mBar Test Engineer - Ryan M. Brown Date of Test - 2/7/2023
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Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2408.9	46.2	46.2	-2.8	43.4	43.4	74	-30.6	PASS	--	54	-10.6	PASS	--	275	288
2439.5	Fundamental														
2461.7	45.6	45.6	-2.5	43.1	43.1	74	-30.9	PASS	--	54	-10.9	PASS	--	299	283
2471.3	44.8	44.8	-2.5	42.3	42.3	74	-31.7	PASS	--	54	-11.7	PASS	--	275	305
4881	57	51.6	0.6	57.6	52.2	74	-16.4	PASS	-16.4	54	-1.8	PASS	-1.8	300	285
5930.1	42	42	3	45	45	74	-29	PASS	--	54	-9	PASS	--	188	109

## 1-6GHz Horizontal



## 1-6GHz Horizontal

Bureau Veritas Consumer Product Services Inc.

One Distribution Center Circle, #1 Littleton, MA

Tel.: (978) 486-8880  
Fax: (978) 486-8828



BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

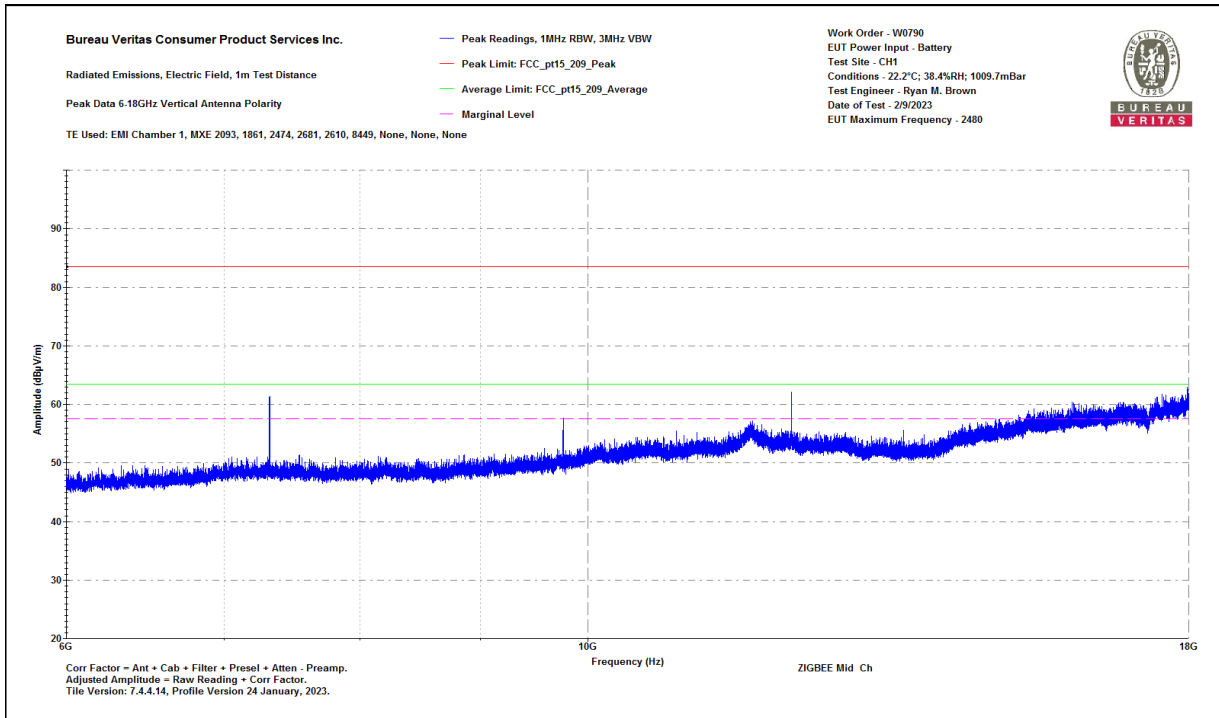


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 1m Distance  
Top Peaks Vertical 6-18GHz  
Notes:  
ZIGBEE Mid Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.2°C; 38.4%RH; 1009.7mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/9/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7321.5	56.5	51.36	4.8	61.3	56.16	83.5	-22.2	PASS	--	63.5	-7.34	PASS	--	200	295
12197.7	52.9	48.37	9.2	62.1	57.57	83.5	-21.4	PASS	--	63.5	-5.93	PASS	-5.93	150	70
17968.5	47.5	35.51	15.4	62.9	50.91	83.5	-20.6	PASS	-20.6	63.5	-12.59	PASS	--	200	69

## 6-18GHz Vertical



## 6-18GHz Vertical



BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

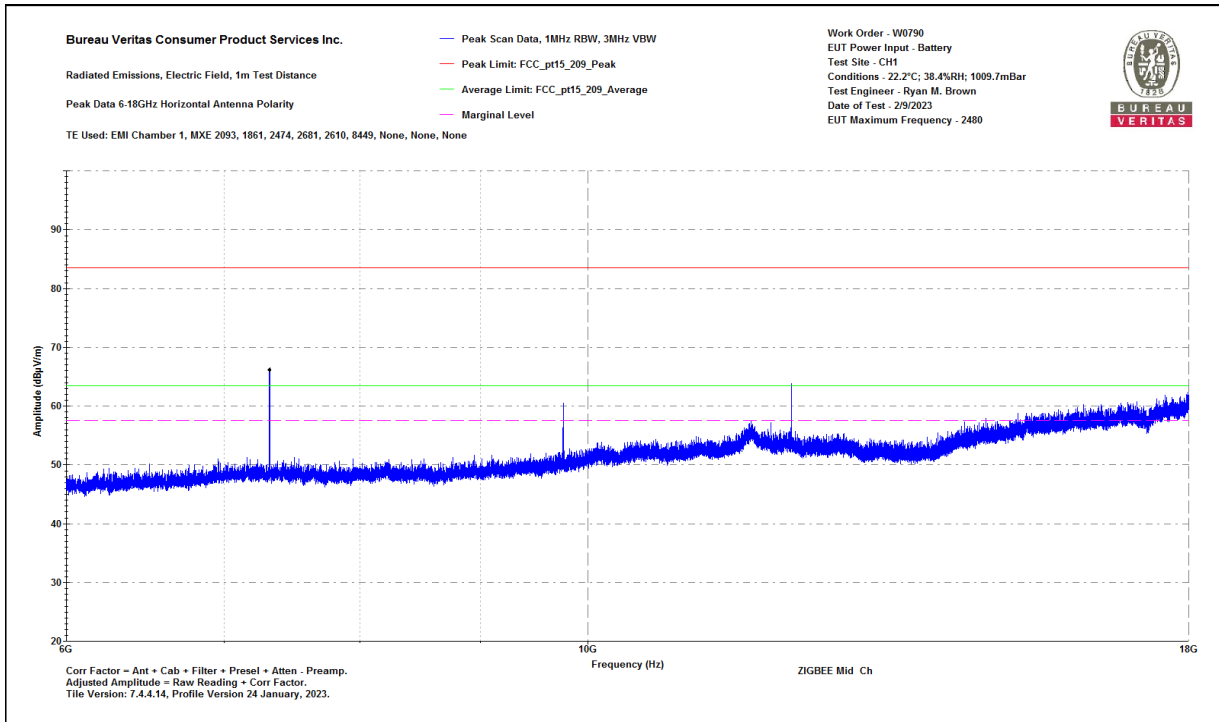


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 1m Distance  
Top Peaks Horizontal 6-18GHz  
Notes:  
ZIGBEE Mid Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.2°C; 38.4%RH; 1009.7mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/9/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7321.5	61.3	57.47	4.8	66.1	62.27	83.5	-17.4	PASS	-17.4	63.5	-1.23	PASS	-1.23	150	32
12197.4	54.6	48.97	9.2	63.8	58.17	83.5	-19.7	PASS	--	63.5	-5.33	PASS	--	175	58
17983.5	46.7	35.61	15.6	62.3	51.21	83.5	-21.2	PASS	--	63.5	-12.29	PASS	--	100	295

## 6-18GHz Horizontal



## 6-18GHz Horizontal



BUREAU VERITAS

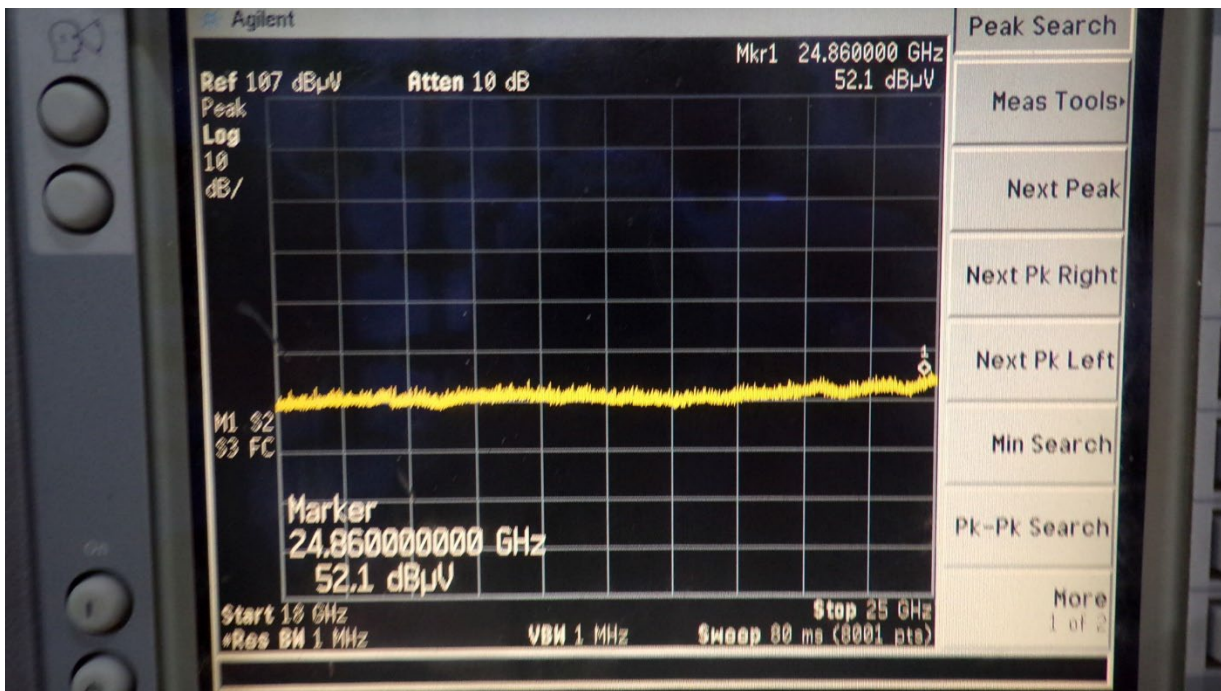
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



## Radiated Emissions Table

Date: 29-Mar-23		Company: Assa Abloy		Work Order: W0790											
Engineer: Ryan M. Brown		EUT Desc: CEM100		EUT Operating Voltage/Frequency: Battery											
Temp: 21		Humidity: 43%		Pressure: 1005											
Frequency Range: 18-25GHz				Measurement Distance: 0.1 m											
Notes: ZigBee Mid				EUT Max Freq: 2480MHz											
Antenna Polarization (H/V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Avg Reading (dBµV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average			
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	
Noise Floor	24860.0	52.1	52.1	41.4	40.2	9.1	60.0	60.0	103.5	-43.5	Pass	83.5	-23.5	Pass	
<b>Table Result:</b>		Pass		by		-23.5 dB						<b>Worst Freq:</b>		24860.0 MHz	
Test Site: EMI Chamber 1		Cable 1: Asset #2323		Cable 2: ---		Cable 3: ---									
Analyzer: Gold		Preamp: 18-26.5GHz		Antenna: 18-26.5GHz Horn		Preselector: ---									
CSsoft Radiated Emissions Calculator v 1.017.225														Copyright Curtis-Straus LLC 2008	
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															

### 18-25GHz



### 18-25GHz





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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



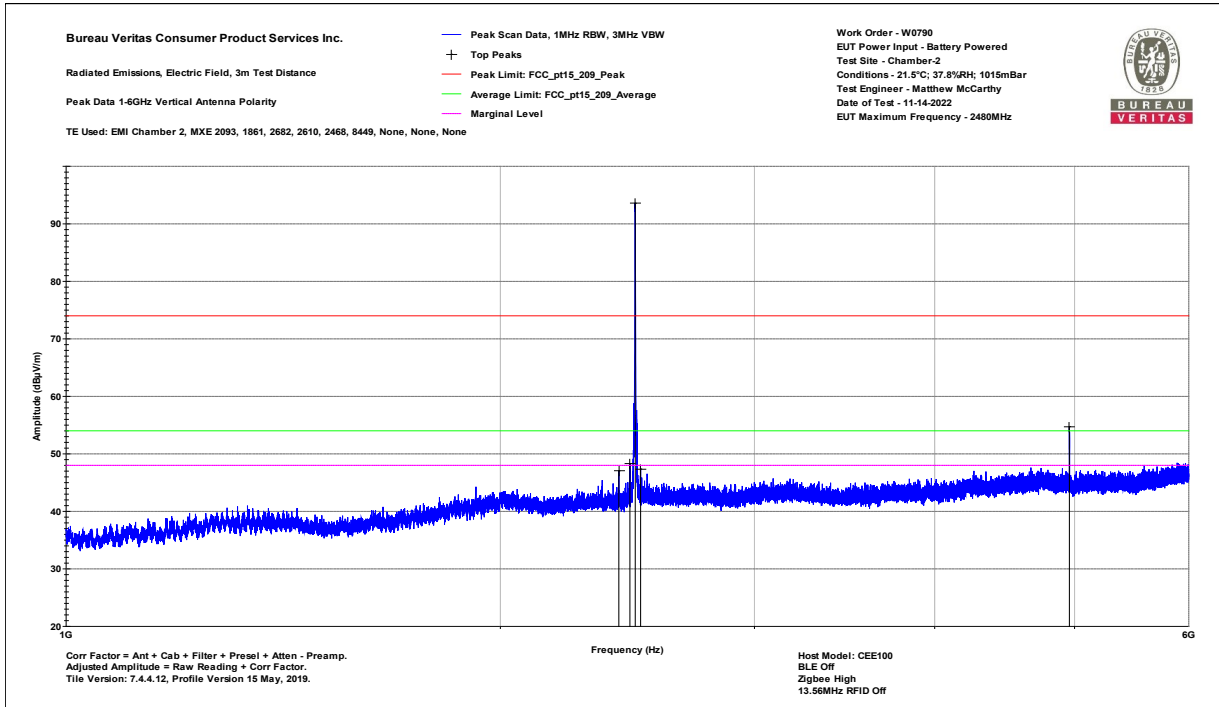
## Channel 26

## Host Model CEE100

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance Top Peaks Vertical 1-6GHz Notes: Host Model: CEE100 BLE Off Zigbee High	Work Order - W0790 EUT Power Input - Battery Powered Test Site - Chamber-2 Conditions - 21.5°C; 37.8%RH; 1015mBar Test Engineer - Matthew McCarthy Date of Test - 11-14-2022
---	---

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2416.13	49.7	34.8	-2.7	47	32.1	74	-27	PASS	--	54	-21.9	PASS	--	200	51
2459.25	50.5	34.9	-2.2	48.3	32.7	74	-25.7	PASS	--	54	-21.3	PASS	--	200	32
2480.5	FUNDAMENTAL														
2501.5	49.3	35.1	-1.9	47.4	33.2	74	-26.6	PASS	--	54	-20.8	PASS	--	200	32
4959	53	45.2	1.8	54.8	47	74	-19.2	PASS	-19.2	54	-7	PASS	-7	200	51

## 1-6GHz Vertical



## 1-6GHz Vertical



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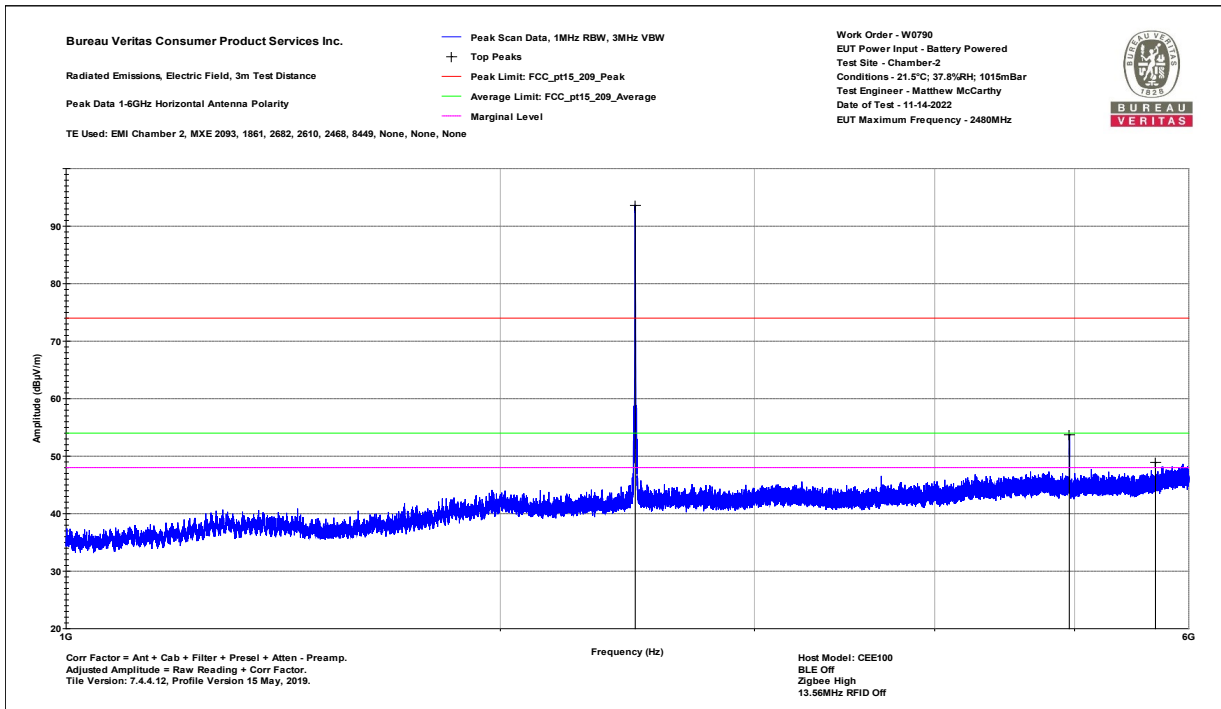
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance Top Peaks Horizontal 1-6GHz Notes: Host Model: CEE100 BLE Off Zigbee High	Work Order - W0790 EUT Power Input - Battery Powered Test Site - Chamber-2 Conditions - 21.5°C; 37.8%RH; 1015mBar Test Engineer - Matthew McCarthy Date of Test - 11-14-2022
---	---

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2473.13	52.7	35.8	-2	50.7	33.8	74	-23.3	PASS	--	54	-20.2	PASS	--	200	51
2480.5	FUNDAMENTAL														
4958.88	52	33.8	1.8	53.8	35.6	74	-20.2	PASS	-20.2	54	-18.4	PASS	-18.4	200	51
5689.75	46.7	33	2.2	48.9	35.2	74	-25.1	PASS	--	54	-18.8	PASS	--	300	93

## 1-6GHz Horizontal



## 1-6GHz Horizontal



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

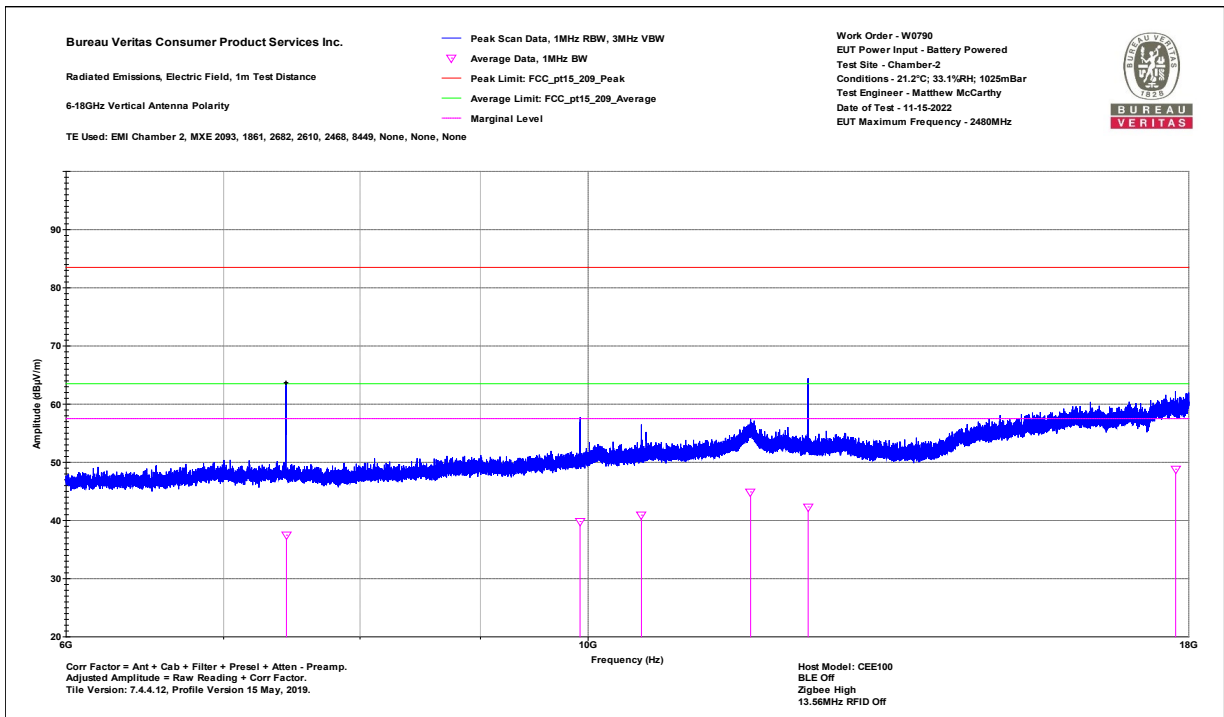


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
Vertical 6-18GHz  
Notes:  
Host Model: CEE100  
BLE Off  
Zigbee High

Work Order - W0790  
EUT Power Input - Battery Powered  
Test Site - Chamber-2  
Conditions - 21.2°C; 33.1%RH; 1025mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 03-09-2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7443.8	59.6	45.42	4.1	63.7	49.52	83.5	-19.8	PASS	--	63.5	-13.98	PASS	--	100	25
9921.7	51.9	39.15	5.8	57.7	44.95	83.5	-25.8	PASS	--	63.5	-18.55	PASS	--	200	338
10536.2	49.4	36.48	7.1	56.5	43.58	83.5	-27	PASS	--	63.5	-19.92	PASS	--	200	301
11724.4	48.9	37	8.6	57.5	45.6	83.5	-26	PASS	--	63.5	-17.9	PASS	--	200	216
12403	56	36.8	8.4	64.4	45.2	83.5	-19.1	PASS	-19.1	63.5	-18.3	PASS	--	100	31
17770.6	47.6	38.97	14.6	62.2	53.57	83.5	-21.3	PASS	--	63.5	-9.93	PASS	-9.93	134	156

## 6-18GHz Vertical



## 6-18GHz Vertical



BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

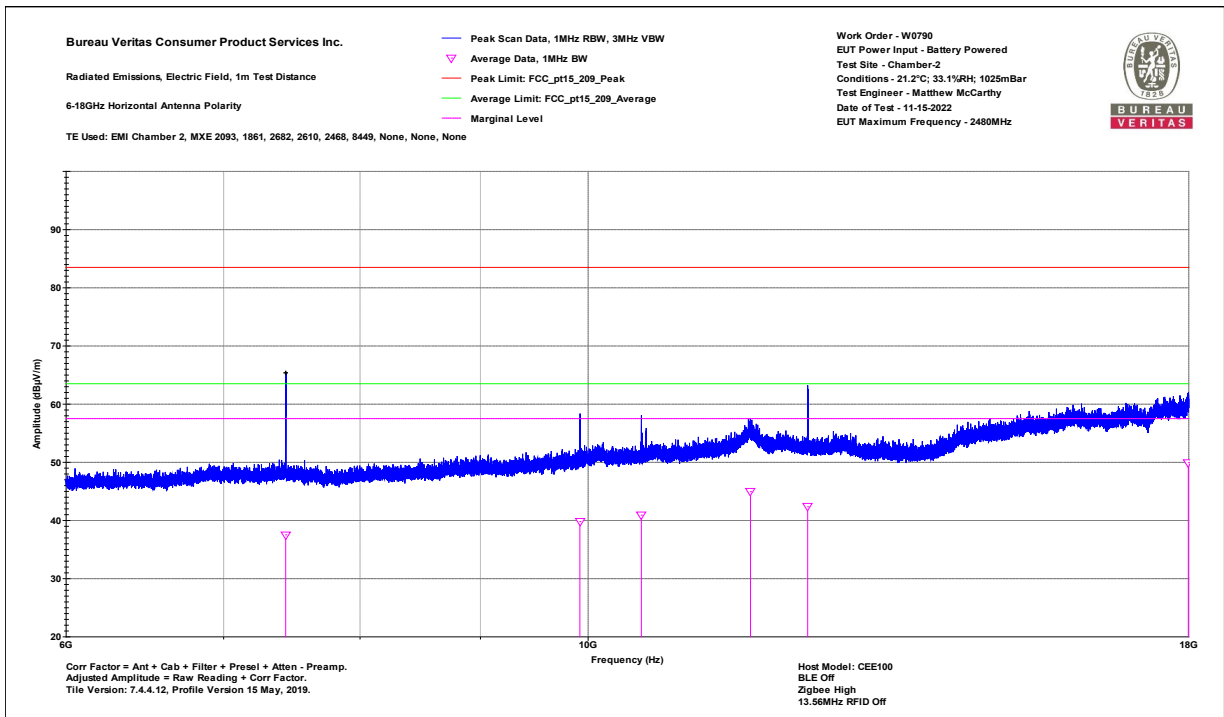


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
Horizontal 6-18GHz  
Notes:  
Host Model: CEE100  
BLE Off  
Zigbee High

Work Order - W0790  
EUT Power Input - Battery Powered  
Test Site - Chamber-2  
Conditions - 21.2°C; 33.1%RH; 1025mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 03-09-2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7438.7	61.3	56.95	4.1	65.4	61.05	83.5	-18.1	PASS	-18.1	63.5	-2.45	PASS	-2.45	152	8
9920.2	52.6	45.4	5.8	58.4	51.2	83.5	-25.1	PASS	--	63.5	-12.3	PASS	--	161	37
10535.3	51	36.45	7.1	58.1	43.55	83.5	-25.4	PASS	--	63.5	-19.95	PASS	--	108	339
11722.6	49	36.84	8.6	57.6	45.44	83.5	-25.9	PASS	--	63.5	-18.06	PASS	--	199	81
12396.9	54.8	43.09	8.4	63.2	51.49	83.5	-20.3	PASS	--	63.5	-12.01	PASS	--	157	3
17992.9	46.3	39.98	15.6	61.9	55.58	83.5	-21.6	PASS	--	63.5	-7.92	PASS	--	150	24

## 6-18GHz Horizontal



## 6-18GHz Horizontal



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

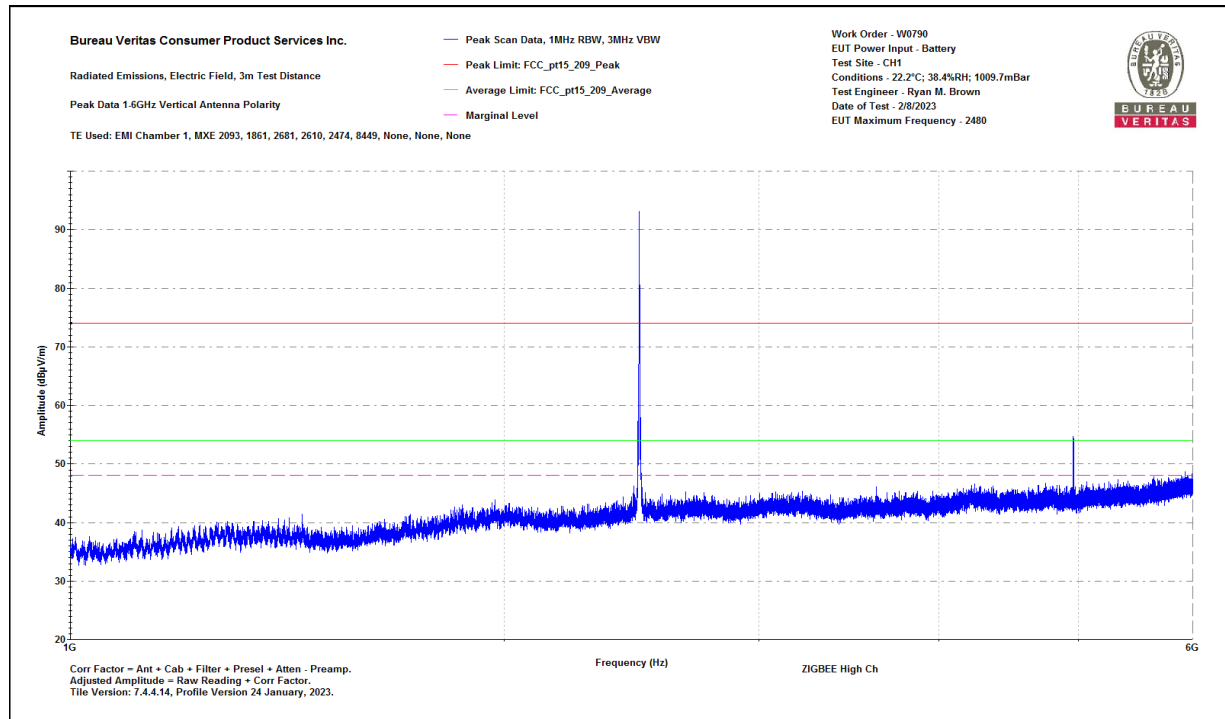


## Host Model CEB100

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-6GHz Vertical Data Notes: ZIGBEE High Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/8/2023
---	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
1448.25	48.9	48.9	-7.6	41.3	41.3	74	-32.7	PASS	--	54	-12.7	PASS	--	125	282
2480.5	Fundamental														
4959	54.9	48.55	1	55.9	49.55	74	-18.1	PASS	-18.1	54	-4.45	PASS	-4.45	175	38
5928.5	45.7	36.25	3	48.7	39.25	74	-25.3	PASS	--	54	-14.75	PASS	--	112	95

## 1-6GHz Vertical



## 1-6GHz Vertical



BUREAU VERITAS

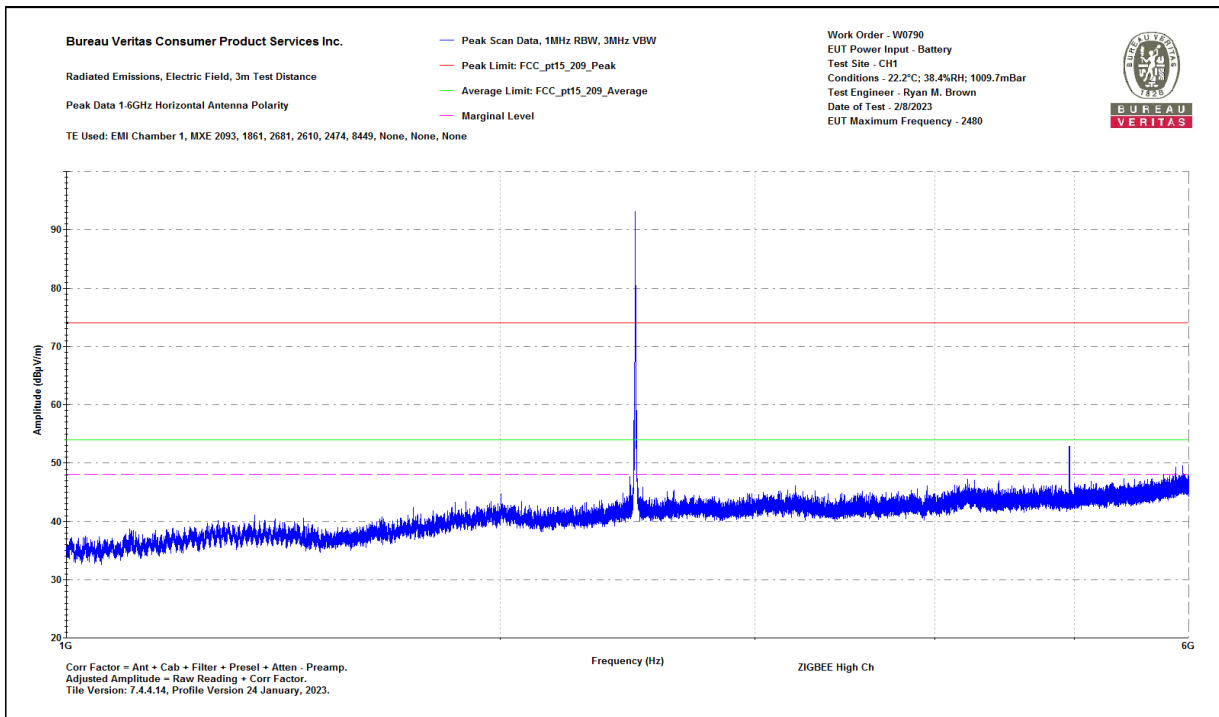
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-6GHz Horizontal Data Notes: ZIGBEE High Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/8/2023
---	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2002	47.9	47.9	-3.3	44.6	44.6	74	-29.4	PASS	--	54	-9.4	PASS	--	175	196
2457.5	50.3	50.3	-2.6	47.7	47.7	74	-26.3	PASS	--	54	-6.3	PASS	--	287	115
2480.63	Fundamental														
3202.25	47.3	47.3	-1.2	46.1	46.1	74	-27.9	PASS	--	54	-7.9	PASS	--	275	200
4958.88	51.9	48.37	1	52.9	49.37	74	-21.1	PASS	-21.1	54	-4.63	PASS	-4.63	290	1
5940.25	46.6	36.52	3	49.6	39.52	74	-24.4	PASS	--	54	-14.48	PASS	--	300	2

## 1-6GHz Horizontal



## 1-6GHz Horizontal



BUREAU VERITAS

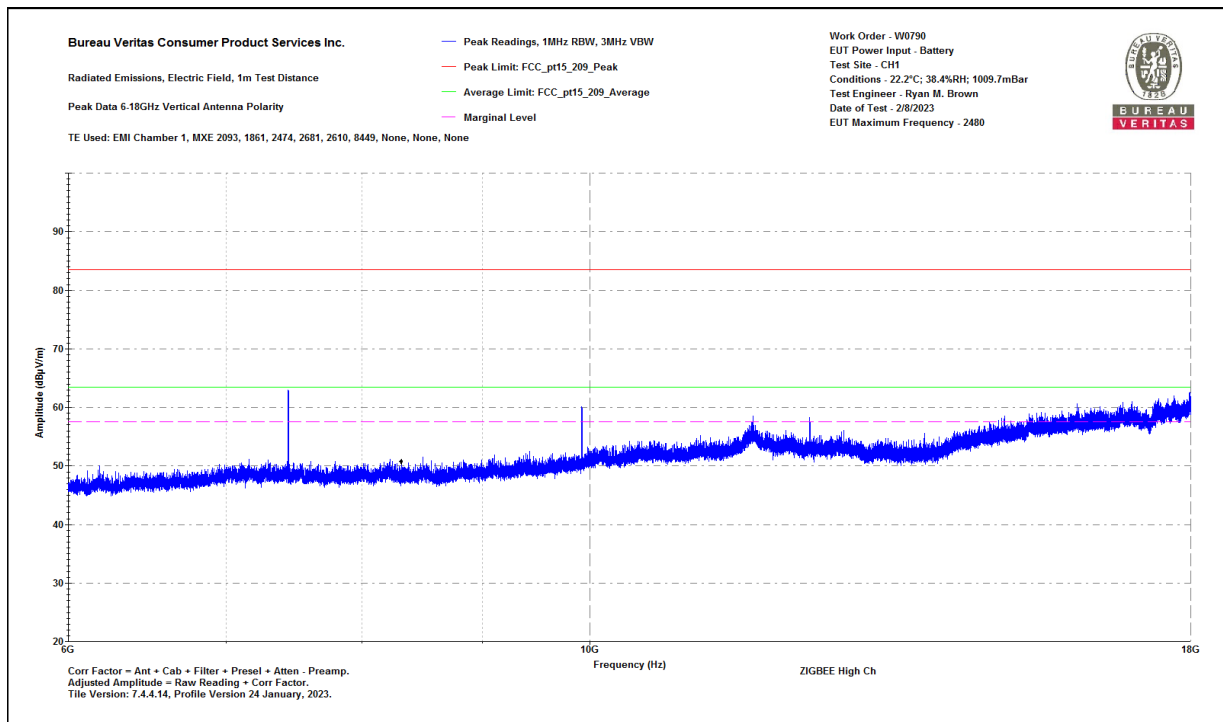
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 1m Distance Top Peaks Vertical 6-18GHz Notes: ZIGBEE High Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/8/2023
---	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7441.5	58.4	54.25	4.6	63	58.85	83.5	-20.5	PASS	-20.5	63.5	-4.65	PASS	-4.65	150	0
11724.3	49.8	37.27	8.7	58.5	45.97	83.5	-25	PASS	--	63.5	-17.53	PASS	--	175	283
12397.5	52.95	45.39	8.7	61.65	54.09	83.5	-21.85	PASS	--	63.5	-9.41	PASS	--	196	333
17993.1	46.9	35.48	15.7	62.6	51.18	83.5	-20.9	PASS	--	63.5	-12.32	PASS	--	125	130

## 6-18GHz Vertical



## 6-18GHz Vertical



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# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

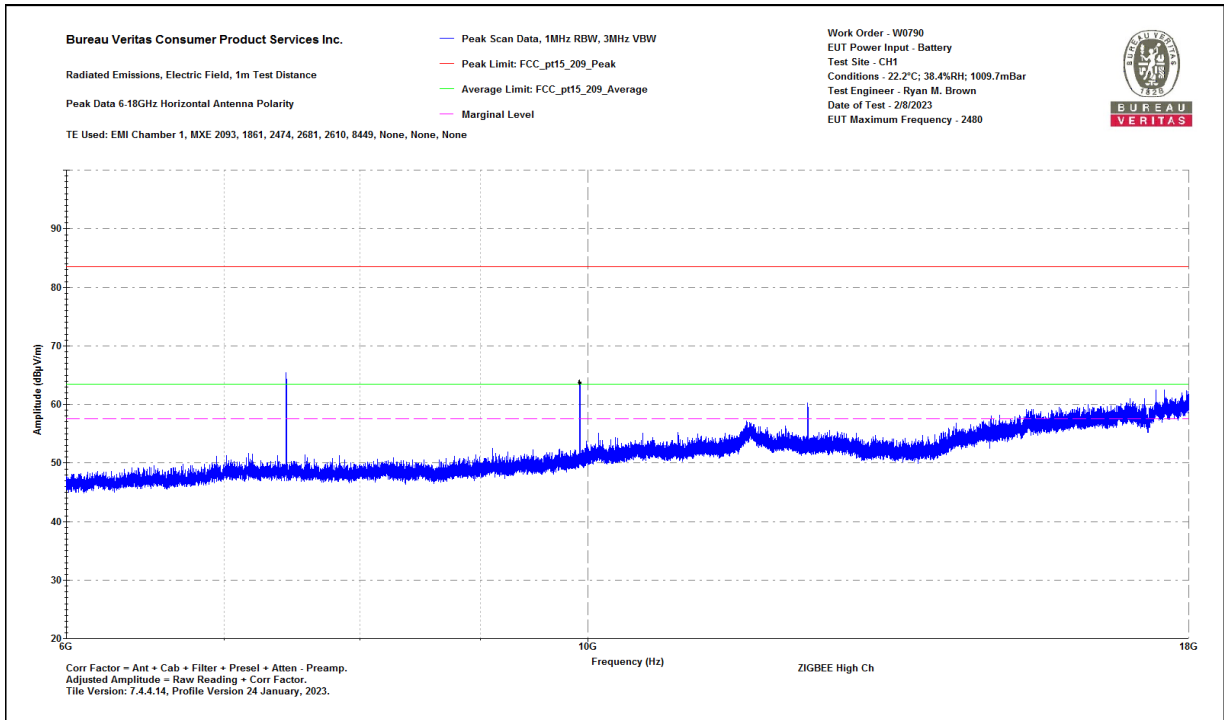


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 1m Distance  
Top Peaks Horizontal 6-18GHz  
Notes:  
ZIGBEE High Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.2°C; 38.4%RH; 1009.7mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/8/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7438.5	60.8	57.34	4.6	65.4	61.94	83.5	-18.1	PASS	-18.1	63.5	-1.56	PASS	-1.56	150	0
12397.5	51.5	46.06	8.7	60.2	54.76	83.5	-23.3	PASS	--	63.5	-8.74	PASS	--	200	0
17572.5	47.6	35.42	14.9	62.5	50.32	83.5	-21	PASS	--	63.5	-13.18	PASS	--	150	33

## 6-18GHz Horizontal



## 6-18GHz Horizontal





BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

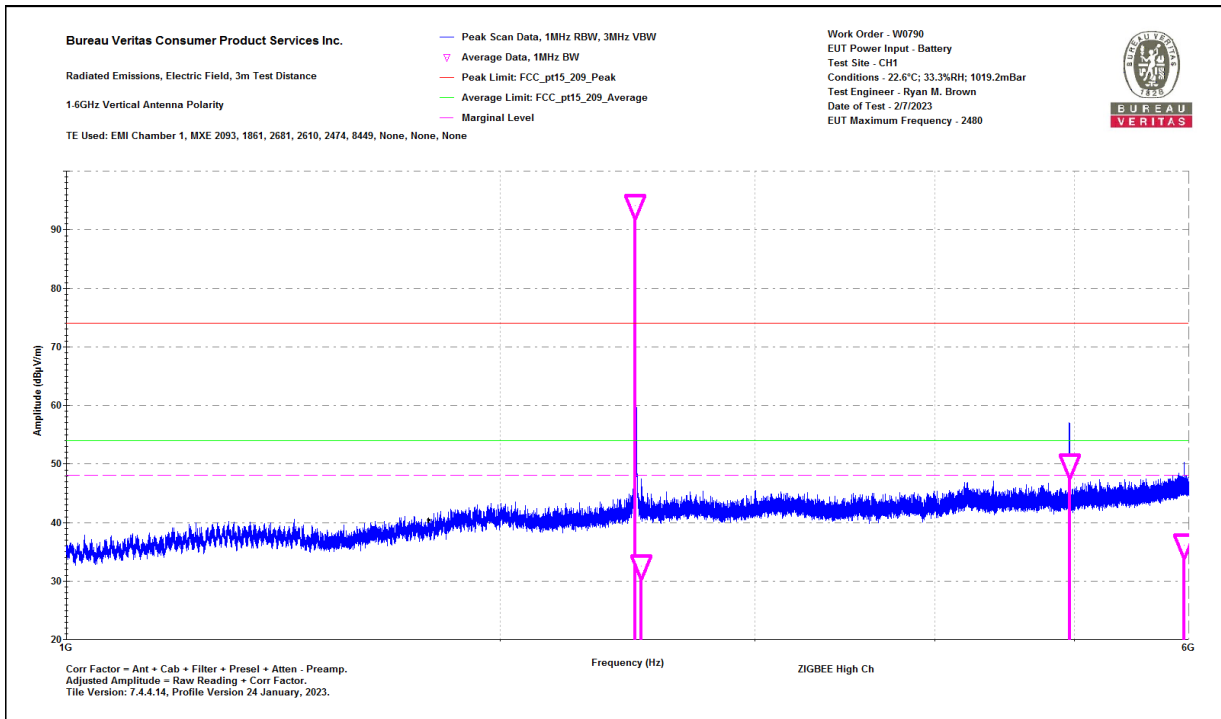


## Host Model CEM100

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-6GHz Vertical Data Notes: ZIGBEE High Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.6°C; 33.3%RH; 1019.2mBar Test Engineer - Ryan M. Brown Date of Test - 2/7/2023
---	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2479.5	Fundamental														
2504.1	49.8	35.3	-2.4	47.4	32.9	74	-26.6	PASS	--	54	-21.1	PASS	--	175	0
4961.1	56	51.294	1	57	52.294	74	-17	PASS	-17	54	-1.706	PASS	-1.706	202	34
5959.9	47.3	36.5	3	50.3	39.5	74	-23.7	PASS	--	54	-14.5	PASS	--	175	275

## 1-6GHz Vertical



## 1-6GHz Vertical



BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3

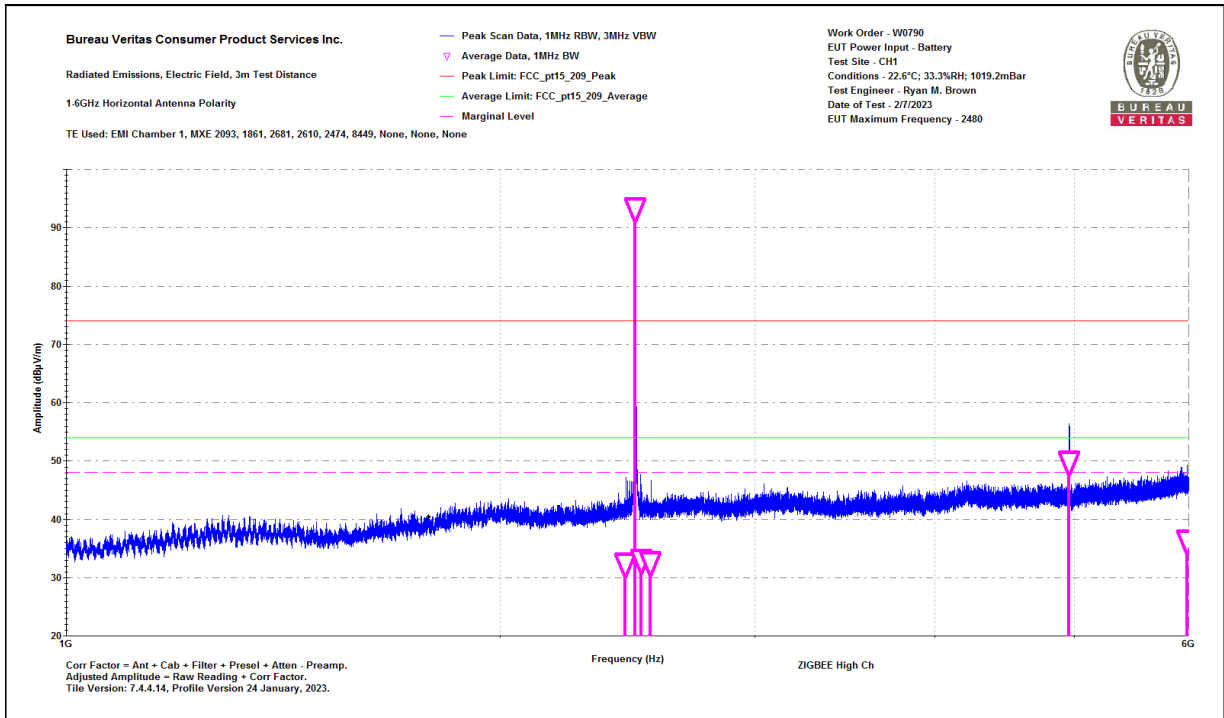


Bureau Veritas Consumer Product Services Inc.  
Radiated Emissions Electric Field 3m Distance  
1-6GHz Horizontal Data  
Notes:  
ZIGBEE High Ch  
0

Work Order - W0790  
EUT Power Input - Battery  
Test Site - CH1  
Conditions - 22.6°C; 33.3%RH; 1019.2mBar  
Test Engineer - Ryan M. Brown  
Date of Test - 2/7/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2441.5	49.9	34.2	-2.6	47.3	31.6	74	-26.7	PASS	--	54	-22.4	PASS	--	275	270
2479.5	Fundamental														
2503.7	50.1	22.2	-2.4	47.7	19.8	74	-26.3	PASS	--	54	-34.2	PASS	--	300	256
2541.1	49	41.7	-2.3	46.7	39.4	74	-27.3	PASS	--	54	-14.6	PASS	--	284	262
4959.1	55.4	48.878	1	56.4	49.878	74	-17.6	PASS	-17.6	54	-4.122	PASS	-4.122	284	304
5985	46.2	31.8	3	49.2	34.8	74	-24.8	PASS	--	54	-19.2	PASS	--	287	169

## 1-6GHz Horizontal



## 1-6GHz Horizontal



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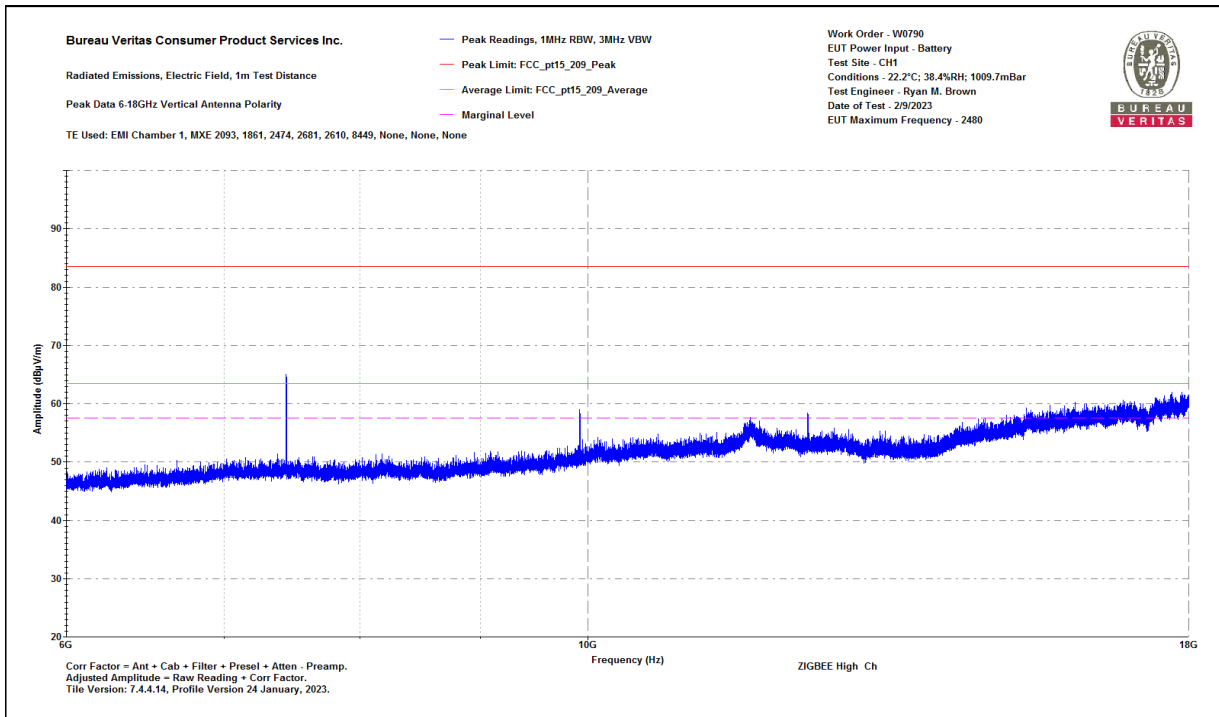
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 1m Distance Top Peaks Vertical 6-18GHz Notes: ZIGBEE High Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/9/2023
---	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7441.5	60.4	55.31	4.6	65	59.91	83.5	-18.5	PASS	-18.5	63.5	-3.59	PASS	-3.59	200	0
11716.8	48.9	37.5	8.8	57.7	46.3	83.5	-25.8	PASS	--	63.5	-17.2	PASS	--	125	245
12397.8	49.7	42.25	8.7	58.4	50.95	83.5	-25.1	PASS	--	63.5	-12.55	PASS	--	175	19
17880.3	47.1	34.95	14.9	62	49.85	83.5	-21.5	PASS	--	63.5	-13.65	PASS	--	100	146

## 6-18GHz Vertical



## 6-18GHz Vertical



BUREAU VERITAS

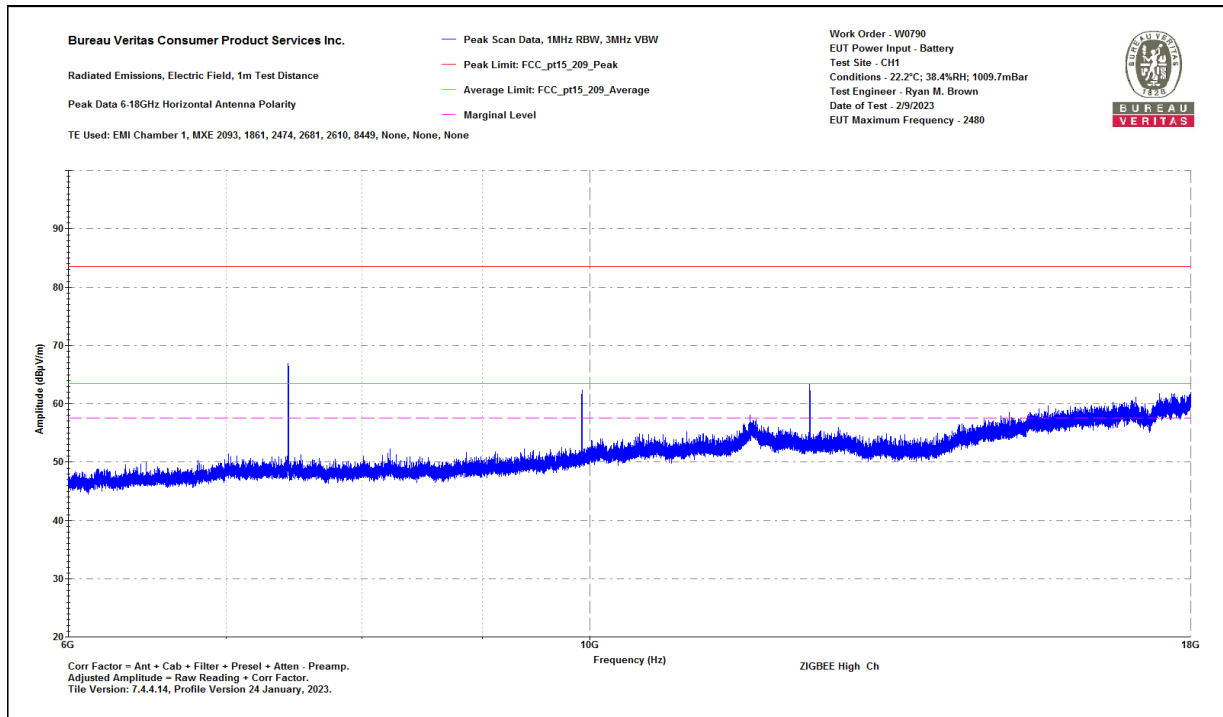
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 1m Distance Top Peaks Horizontal 6-18GHz Notes: ZIGBEE High Ch 0	Work Order - W0790 EUT Power Input - Battery Test Site - CH1 Conditions - 22.2°C; 38.4%RH; 1009.7mBar Test Engineer - Ryan M. Brown Date of Test - 2/9/2023
---	--

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7438.5	62.2	57.98	4.6	66.8	62.58	83.5	-16.7	PASS	-16.7	63.5	-0.92	PASS	-0.92	150	32
11697	49.3	36.82	8.8	58.1	45.62	83.5	-25.4	PASS	--	63.5	-17.88	PASS	--	200	106
12397.5	54.8	48.83	8.7	63.5	57.53	83.5	-20	PASS	--	63.5	-5.97	PASS	--	175	19
17997.9	46.3	35.92	15.7	62	51.62	83.5	-21.5	PASS	--	63.5	-11.88	PASS	--	100	221

## 6-18GHz Horizontal



## 6-18GHz Horizontal



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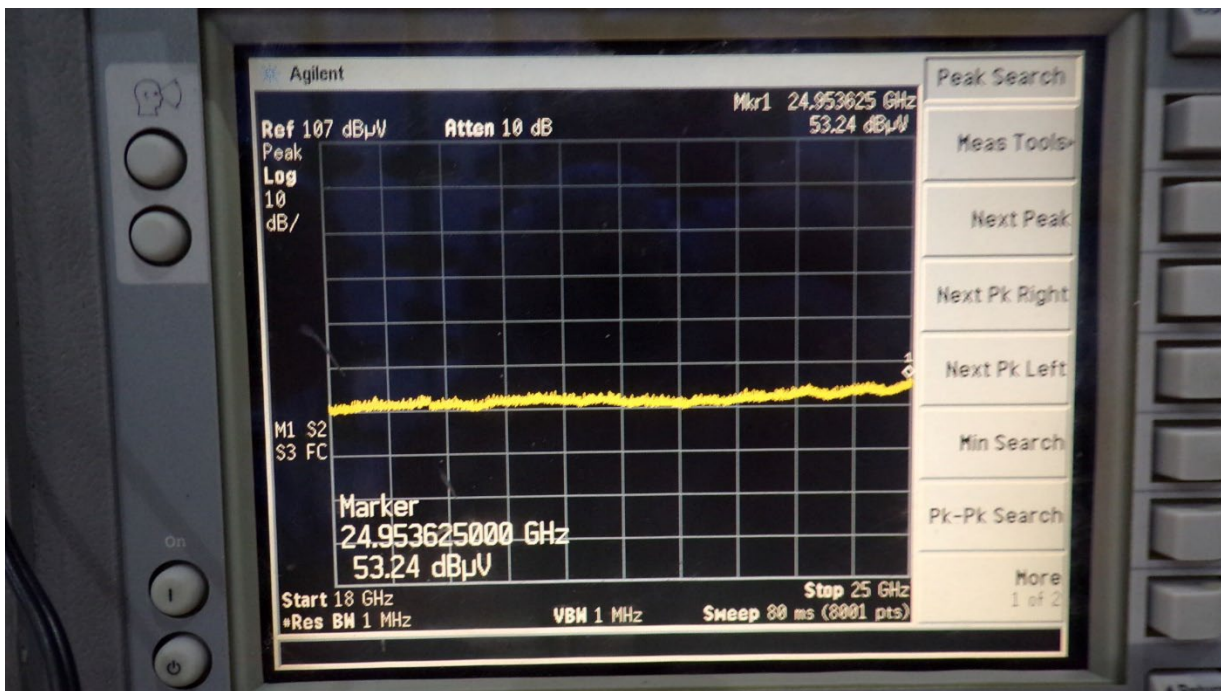
# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



## Radiated Emissions Table

Date: 29-Mar-23		Company: Assa Abloy		Work Order: W0790										
Engineer: Ryan M. Brown		EUT Desc: CEM100		EUT Operating Voltage/Frequency: Battery										
Temp: 21		Humidity: 43%		Pressure: 1005										
Frequency Range: 18-25GHz				Measurement Distance: 0.1 m										
Notes: Zigbee High				EUT Max Freq: 2480MHz										
Antenna Polarization (H/V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Avg Reading (dBµV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average		
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)
Noise Floor	24953.6	53.24	53.2	---	---	---	61.6	61.6	103.5	-41.9	Pass	83.5	-21.9	Pass
<b>Table Result:</b>		Pass by -21.9 dB				<b>Worst Freq:</b> 24953.6 MHz								
Test Site: EMI Chamber 1		Cable 1: Asset #2323		Cable 2: ---		Cable 3: ---								
Analyzer: Gold		Preamp: 18-26.5GHz		Antenna: 18-26.5GHz Horn		Preselector: ---								
CSsoft Radiated Emissions Calculator v 1.017.225								Copyright Curtis-Straus LLC 2008						
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor														

### 18-25GHz



### 18-25GHz



BUREAU VERITAS

Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



Radiated Band-edges:

Host Model CEE100

Radiated Emissions Table for Host Model CEE100. Includes test parameters (Date: 16-Feb-23, Company: Assa Abloy, EUT Desc: CEE 100), test site info, and a detailed table of results for FCC Class B High Frequency - Peak and Average across various frequencies and polarizations.

Host Model CEB100

Radiated Emissions Table for Host Model CEB100. Includes test parameters (Date: 09-Feb-23, Company: Assa Abloy, EUT Desc: CEB 100), test site info, and a detailed table of results for FCC Class B High Frequency - Peak and Average across various frequencies and polarizations.

Host Model CEM100

Radiated Emissions Table for Host Model CEM100. Includes test parameters (Date: 10-Feb-23, Company: Assa Abloy, EUT Desc: CEM 100), test site info, and a detailed table of results for FCC Class B High Frequency - Peak and Average across various frequencies and polarizations.

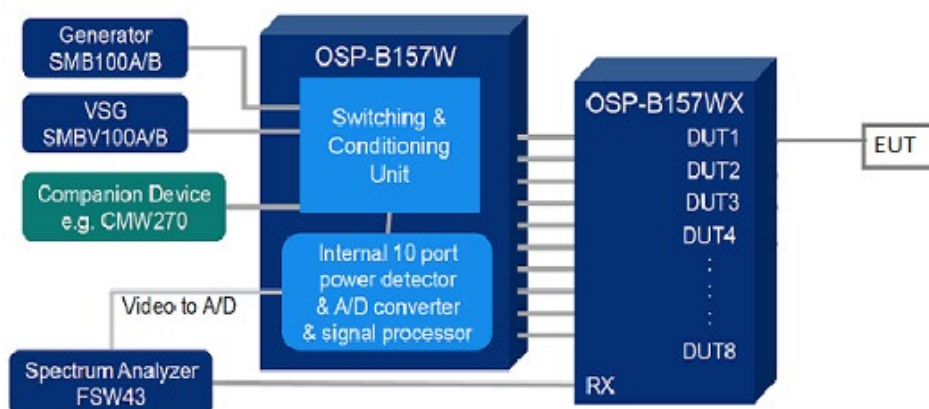
### 4.3 6dB CHANNEL BANDWIDTH & 99% OBW

#### 4.3.1 LIMIT OF 6dB CHANNEL BANDWIDTH

The minimum 6 dB bandwidth shall be 500 kHz.

#### 4.3.2 TEST SETUP

##### SCHEMATIC RF-CABLING



#### 4.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Asset No.	Model No.	Serial No.	Last Cal.	Next Cal.
Cable	Carlisle	2595	UTIFLEX	None	1/21/2022	1/21/2023
Signal Analyzer	Rohde-Schwarz	2200	FSV 40	101551	10/26/2021	10/26/2022
OSP-B157W8	Rohde-Schwarz	2558	OSP_B157W8	100955	8/26/2021	8/26/2023

Test equipment used for all conducted antenna port tests (Test Date: 7/7/2022) except for Conducted Peak Output Power

Equipment	Manufacturer	Asset No.	Model No.	Serial No.	Last Cal.	Next Cal.
Cable	Carlisle	2595	UTIFLEX	None	1/17/2023	1/17/2024
Signal Analyzer	Rohde-Schwarz	2200	FSV 40	101551	10/11/2022	10/11/2023
OSP-B157W8	Rohde-Schwarz	2558	OSP_B157W8	100955	8/26/2021	8/26/2023

Test equipment used for Conducted Peak Output Power (Test Date: 3/9/2023)



#### 4.3.4 TEST PROCEDURE

##### 6dB CHANNEL BANDWIDTH

- a. Set RBW = 100 kHz.
- b. Set the video bandwidth (VBW)  $\geq 3$  RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Sweep = auto couple.
- f. Allow the trace to stabilize.
- g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

##### 99% OBW

- a. The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b. The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c. Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than  $[10 \log (OBW/RBW)]$  below the reference level. Specific guidance is given in 4.1.5.2.
- d. Step a) through step c) might require iteration to adjust within the specified range.
- e. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f. Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

#### 4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.3.6 EUT OPERATING CONDITIONS

EUT was operated according to manufacturer's specifications.





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Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3



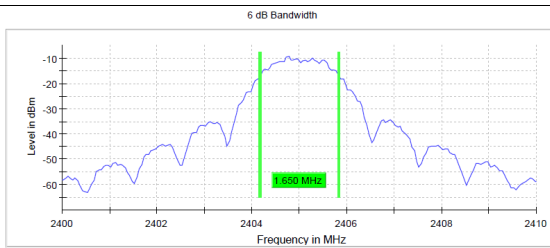
4.3.7 TEST RESULTS

Test date: 7/7/2022

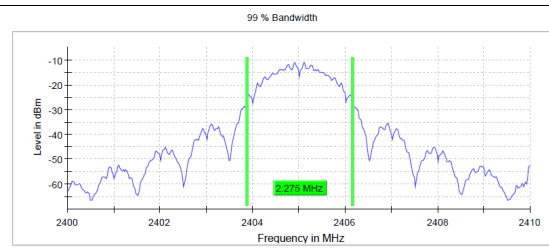
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	99% OBW (MHz)	PASS / FAIL
11	2405	1.650	2.275	Pass
18	2440	1.650	2.300	Pass
26	2480	1.650	2.300	Pass

CH11

6dB Bandwidth



99% OBW



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.41000 GHz	2.41000 GHz
Span	10.000 MHz	10.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	200	~ 200
Sweeptime	18.945 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.50 dB

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.41000 GHz	2.41000 GHz
Span	10.000 MHz	10.000 MHz
RBW	50.000 kHz	>= 50.000 kHz
VBW	200.000 kHz	>= 150.000 kHz
SweepPoints	400	~ 400
Sweeptime	37.930 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	23 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.30 dB



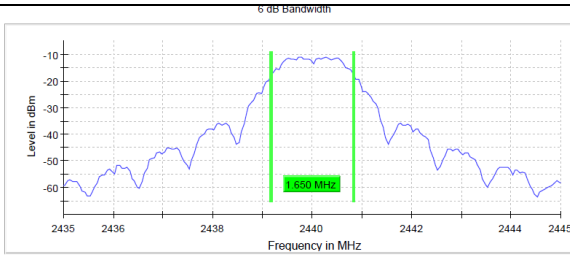
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**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**

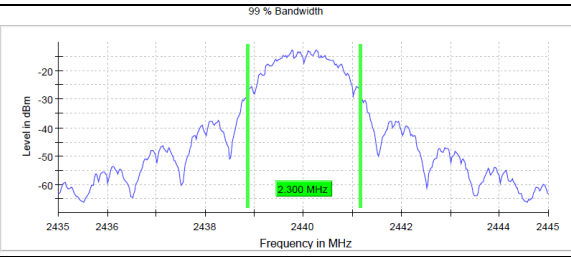


**CH18**

**6dB Bandwidth**



**99% OBW**



**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.43500 GHz	2.43500 GHz
Stop Frequency	2.44500 GHz	2.44500 GHz
Span	10.000 MHz	10.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	200	~ 200
Sweeptime	18.945 $\mu$ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.02 dB	0.50 dB

**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.43500 GHz	2.43500 GHz
Stop Frequency	2.44500 GHz	2.44500 GHz
Span	10.000 MHz	10.000 MHz
RBW	50.000 kHz	>= 50.000 kHz
VBW	200.000 kHz	>= 150.000 kHz
SweepPoints	400	~ 400
Sweeptime	37.930 $\mu$ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	20 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.07 dB	0.30 dB



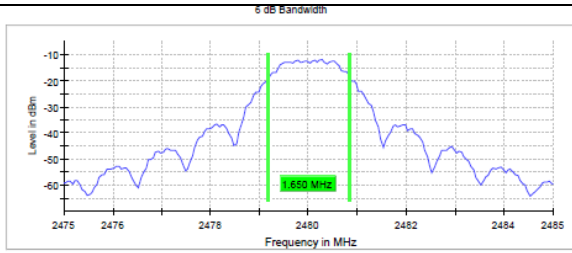
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**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**

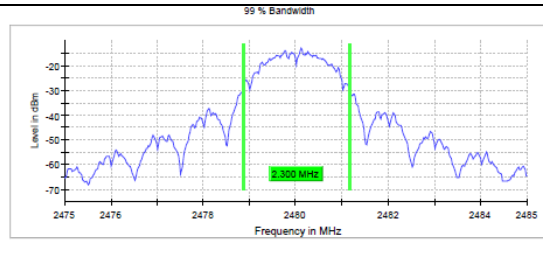


**CH26**

**6dB Bandwidth**



**99% OBW**



**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.47500 GHz	2.47500 GHz
Stop Frequency	2.48500 GHz	2.48500 GHz
Span	10.000 MHz	10.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	200	~ 200
Sweeptime	18.945 $\mu$ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.50 dB

**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.47500 GHz	2.47500 GHz
Stop Frequency	2.48500 GHz	2.48500 GHz
Span	10.000 MHz	10.000 MHz
RBW	50.000 kHz	>= 50.000 kHz
VBW	200.000 kHz	>= 150.000 kHz
SweepPoints	400	~ 400
Sweeptime	37.930 $\mu$ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	12 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.25 dB	0.30 dB



#### 4.4 CONDUCTED OUTPUT POWER

##### 4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

##### 4.4.2 TEST SETUP

Refer to section 4.3.2.

##### 4.4.3 TEST INSTRUMENTS

Refer to section 4.3.3.

##### 4.4.4 TEST PROCEDURES

Peak conducted output power was measured in accordance with ANSI C63.10 - 2013 Section 11.9.1.1 (RBW  $\geq$  DTS bandwidth).

##### 4.4.5 DEVIATION FROM TEST STANDARD

No deviations from the standard.

##### 4.4.6 EUT OPERATING CONDITIONS

EUT was operated according to manufacturer's specifications.



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**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**

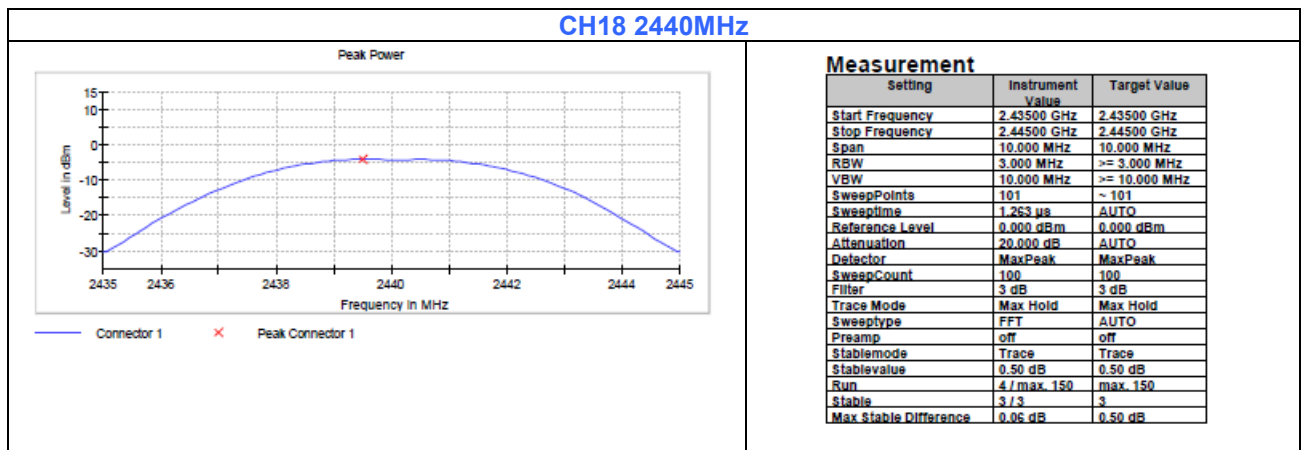
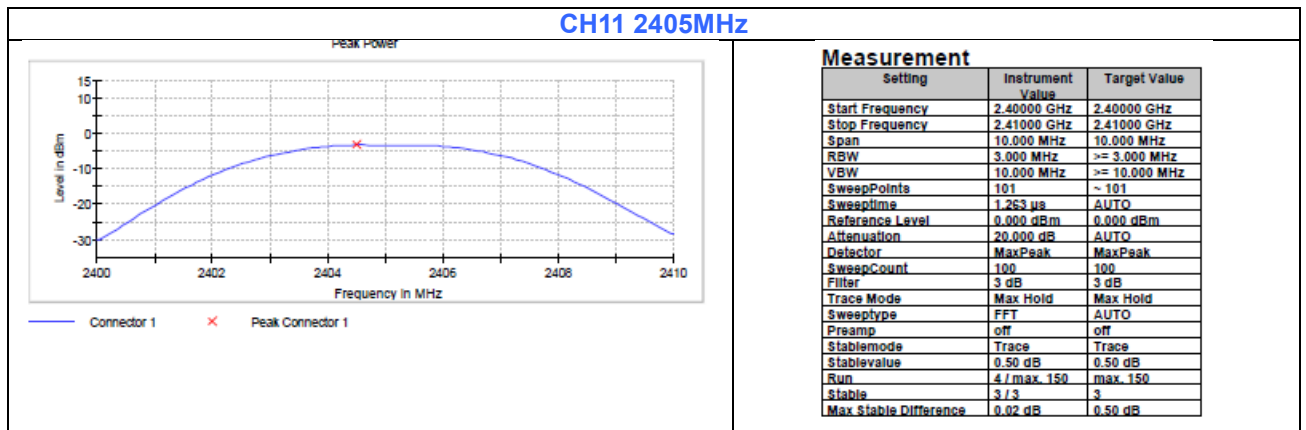


**4.4.7 TEST RESULTS**

**4.4.7.1 MAXIMUM PEAK OUTPUT POWER**

Test date: 3/9/2023

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
11	2405	-3.3	0.47	1	PASS
18	2440	-4.1	0.39	1	PASS
26	2480	-4.7	0.34	1	PASS



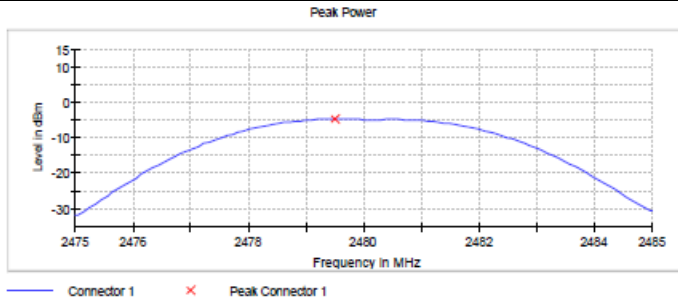


BUREAU VERITAS

# Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



## CH26 2480MHz



### Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47500 GHz	2.47500 GHz
Stop Frequency	2.48500 GHz	2.48500 GHz
Span	10.000 MHz	10.000 MHz
RBW	3.000 MHz	>= 3.000 MHz
VBW	10.000 MHz	>= 10.000 MHz
SweepPoints	101	~ 101
SweepTime	1.263 $\mu$ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.02 dB	0.50 dB



## 4.5 POWER SPECTRAL DENSITY MEASUREMENT

### 4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The limit for Power Spectral Density is 8dBm/3KHz.

### 4.5.2 TEST SETUP

Refer to section 4.3.2.

### 4.5.3 TEST INSTRUMENTS

Refer to section 4.3.3.

### 4.5.4 TEST PROCEDURE

1. Set the span to 1.5 times the DTS bandwidth
2. Set the RBW = 10 kHz, VBW  $\geq$  3 x RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

### 4.5.5 DEVIATION FROM TEST STANDARD

No deviations from the standard.

### 4.5.6 EUT OPERATING CONDITION

EUT was operated according to manufacturer's specifications.



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**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**



**4.5.7 TEST RESULTS**

Test date: 7/7/2022

Channel	FREQ. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
0	2405	-16.048	8	PASS
19	2440	-16.873	8	PASS
39	2480	-17.951	8	PASS

**CH11 2405MHz**

Setting	Instrument Value	Target Value
Start Frequency	2.40125 GHz	2.40125 GHz
Stop Frequency	2.40875 GHz	2.40875 GHz
Span	7.500 MHz	7.500 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	1500	~ 1500
SweepTime	7.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.34 dB	0.50 dB

**CH18 2440MHz**

Setting	Instrument Value	Target Value
Start Frequency	2.43625 GHz	2.43625 GHz
Stop Frequency	2.44375 GHz	2.44375 GHz
Span	7.500 MHz	7.500 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	1500	~ 1500
SweepTime	7.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.49 dB	0.50 dB



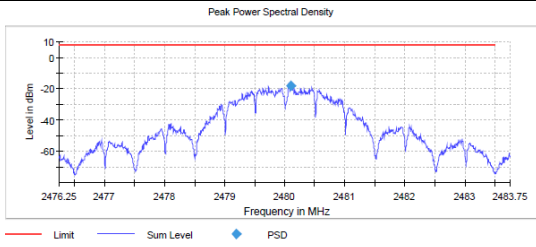


BUREAU VERITAS

Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3



CH26 2480MHz



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47625 GHz	2.47625 GHz
Stop Frequency	2.48375 GHz	2.48375 GHz
Span	7.500 MHz	7.500 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	1500	~ 1500
Sweptime	7.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.50 dB	0.50 dB



## 4.6 OUT OF BAND EMISSION MEASUREMENT

### 4.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

20dB below the highest emission level in the operating band (in 100kHz RBW).

### 4.6.2 TEST SETUP

Refer to section 4.3.2.

### 4.6.3 TEST INSTRUMENTS

Refer to section 4.3.3.

### 4.6.4 TEST PROCEDURE

#### MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW  $\geq$  300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.



## MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW  $\geq$  300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

### 4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

### 4.6.6 EUT OPERATING CONDITION

EUT was operated according to manufacturer's specifications.



**BUREAU  
VERITAS**

**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**



**4.6.7 TEST RESULTS**

Test date: 7/7/2022

**CH 11**

**Pre Measurements**

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4807.166065	-47.7	19.7	-27.9
9624.406659	-52.9	24.9	-27.9
9614.406396	-54.1	26.2	-27.9
12023.023693	-54.5	26.6	-27.9
2395.021008	-54.8	26.9	-27.9
911.281513	-56.3	28.4	-27.9
901.323529	-56.4	28.5	-27.9
12033.017956	-62.6	34.7	-27.9
2385.063025	-66.6	38.7	-27.9
2215.777311	-67.6	39.7	-27.9
4817.160327	-67.7	39.8	-27.9
2275.525210	-68.1	40.2	-27.9
14431.640990	-69.0	41.0	-27.9
2375.105042	-70.8	42.9	-27.9
2185.903361	-70.9	43.0	-27.9

**Pre Measurement 1**

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	238	~ 238
SweepTime	23.700 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	1.00 dB	1.00 dB
Run	5 / max. 40	max. 40
Stable	2 / 2	2
Max Stable Difference	0.00 dB	1.00 dB

**CH 18**

**Pre Measurements**

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
9764.320336	-47.8	18.2	-29.7
9754.326073	-48.5	18.9	-29.7
4877.125903	-49.6	20.0	-29.7
911.281513	-55.3	25.6	-29.7
12192.926158	-57.8	28.1	-29.7
12202.920421	-59.2	29.5	-29.7
2156.029412	-63.1	33.4	-29.7
2245.651261	-66.3	36.6	-29.7
2395.021008	-66.8	37.1	-29.7
1897.121849	-69.0	39.4	-29.7
2215.777311	-69.4	39.8	-29.7
2036.533613	-69.6	39.9	-29.7
2185.903361	-70.4	40.7	-29.7
2315.357143	-70.9	41.2	-29.7
4887.120166	-71.1	41.4	-29.7



BUREAU VERITAS

### Test Report for Assa Abloy Inc. Report No. EW0790-3 Issue 3



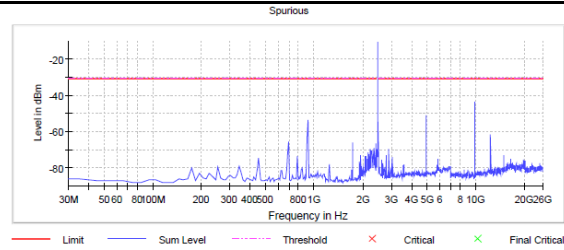
#### Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	238	~ 238
SweepTime	23.700 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	1.00 dB	1.00 dB
Run	3 / max. 40	max. 40
Stable	2 / 2	2
Max Stable Difference	0.00 dB	1.00 dB

#### CH 26

#### Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
9914.234275	-43.5	12.9	-30.6
9924.228538	-44.1	13.5	-30.6
4957.080004	-51.0	20.5	-30.6
2488.497131	-52.5	21.9	-30.6
911.281513	-53.4	22.9	-30.6
12392.811411	-61.3	30.7	-30.6
12402.805674	-62.0	31.5	-30.6
901.323529	-62.8	32.2	-30.6
692.205882	-65.7	35.2	-30.6
1727.836134	-65.8	35.2	-30.6
2335.273109	-68.9	38.3	-30.6
2225.735294	-69.3	38.7	-30.6
2898.261900	-69.5	39.0	-30.6
2355.189076	-69.7	39.1	-30.6
2275.525210	-70.3	39.7	-30.6



#### Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	238	~ 238
SweepTime	23.700 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	1.00 dB	1.00 dB
Run	5 / max. 40	max. 40
Stable	2 / 2	2
Max Stable Difference	0.00 dB	1.00 dB



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VERITAS

Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3



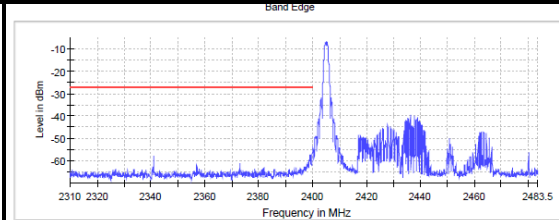
Conducted Band-edges:

Test date: 7/7/2022

CH 11

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.925000	-54.5	27.7	-26.8	PASS
2399.875000	-54.8	28.0	-26.8	PASS
2399.975000	-55.7	28.9	-26.8	PASS
2399.825000	-56.3	29.5	-26.8	PASS
2399.125000	-57.5	30.7	-26.8	PASS
2399.075000	-57.6	30.8	-26.8	PASS
2399.775000	-57.6	30.8	-26.8	PASS
2399.725000	-57.8	31.0	-26.8	PASS
2340.925000	-57.9	31.1	-26.8	PASS
2399.175000	-58.5	31.7	-26.8	PASS
2340.875000	-58.6	31.7	-26.8	PASS
2398.925000	-58.9	32.1	-26.8	PASS
2399.025000	-59.0	32.2	-26.8	PASS
2399.275000	-59.1	32.3	-26.8	PASS
2340.975000	-59.2	32.3	-26.8	PASS



— Limit — Sum Level × Fail

Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.23 dB	0.50 dB



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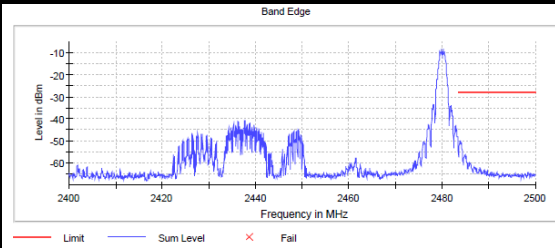
Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3



CH 26

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.925000	-50.0	21.7	-28.3	PASS
2483.875000	-50.1	21.9	-28.3	PASS
2483.975000	-50.3	22.1	-28.3	PASS
2484.125000	-50.7	22.4	-28.3	PASS
2484.075000	-50.7	22.5	-28.3	PASS
2483.725000	-51.0	22.7	-28.3	PASS
2483.775000	-51.0	22.7	-28.3	PASS
2483.825000	-51.4	23.1	-28.3	PASS
2484.025000	-51.9	23.6	-28.3	PASS
2484.175000	-52.5	24.2	-28.3	PASS
2483.675000	-52.7	24.5	-28.3	PASS
2484.275000	-53.2	24.9	-28.3	PASS
2484.225000	-53.3	25.1	-28.3	PASS
2483.625000	-53.9	25.6	-28.3	PASS
2484.325000	-54.6	26.3	-28.3	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweptime	94.727 $\mu$ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.03 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	2.48350 GHz	2.48350 GHz
Stop Frequency	2.50000 GHz	2.50000 GHz
Span	16.500 MHz	16.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweptime	18.945 $\mu$ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.49 dB	0.50 dB



**BUREAU  
VERITAS**

**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**



## **5 PHOTOGRAPHS OF THE TEST CONFIGURATION**

Please refer to the Test Setup Photos exhibit.





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**Test Report for Assa Abloy Inc.  
Report No. EW0790-3 Issue 3**



## **6 APPENDIX A – MODIFICATIONS**

No modifications were made to the EUT during testing.

**---END OF REPORT---**