

APPENDIX E
DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.209

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

CW Mode - Antenna X-Axis

Battery Powered

Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	93.563	13.56	X	25.05	-11.49	Peak	1.00	180.00	See Note #1 Below
268.40	63.098	-16.90	X	19.03	-35.93	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna X-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	102.91	22.91	Y	25.05	-2.14	Peak	1.00	180.00	See Note #1 Below
268.40	53.923	-26.08	Y	19.03	-45.11	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna X-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	103.74	23.74	Z	25.05	-1.31	Peak	1.00	180.00	See Note #1 Below
268.40	53.34	-26.66	Z	19.03	-45.69	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

CW Mode - Antenna Y-Axis

Battery Powered

Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	74.34	-5.66	X	25.05	-30.71	Peak	1.00	180.00	See Note #1 Below
268.40	53.25	-26.75	X	19.03	-45.78	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Y-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	96.35	16.35	Y	25.05	-8.70	Peak	1.00	0.00	See Note #1 Below
268.40	55.26	-24.74	Y	19.03	-43.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
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Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Y-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	98.82	18.82	Z	25.05	-6.23	Peak	1.00	180.00	See Note #1 Below
268.40	54.06	-25.94	Z	19.03	-44.97	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Z-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	69.91	-10.09	X	25.05	-35.14	Peak	1.00	180.00	See Note #1 Below
268.40	52.81	-27.19	X	19.03	-24.86	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Z-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	98.03	18.03	Y	25.05	-7.02	Peak	1.00	0.00	See Note #1 Below
268.40	53.14	-26.86	Y	19.03	-24.86	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Z-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	97.31	17.31	Z	25.05	-7.74	Peak	1.00	180.00	See Note #1 Below
268.40	53.07	-26.93	Z	19.03	-24.86	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
Avid Identification Systems, Inc.
RFID Reader
Model: AVID1050Date: 05/16/2023
Lab: A
Tested By: Kyle FujimotoModulated Mode - Antenna X-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 10 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	87.61	7.61	X	25.05	-17.44	Peak	1.00	180.00	See Note #1 Below
268.40	53.26	-26.74	X	19.03	-45.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
Avid Identification Systems, Inc.
RFID Reader
Model: AVID1050Date: 05/16/2023
Lab: A
Tested By: Kyle FujimotoModulated Mode - Antenna X-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 10 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	97.61	17.61	Y	25.05	-7.44	Peak	1.00	180.00	See Note #1 Below
268.40	53.68	-26.32	Y	19.03	-45.35	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209Avid Identification Systems, Inc.
RFID Reader
Model: AVID1050

Date: 05/16/2023

Lab: A

Tested By: Kyle Fujimoto

Modulated Mode - Antenna X-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 10 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	98.54	18.54	Z	25.05	-6.51	Peak	1.00	180.00	See Note #1 Below
268.40	55.24	-24.76	Z	19.03	-43.79	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Detected
536.80									No Emission Detected
671.00									No Emission Detected
805.20									No Emission Detected
939.40									No Emission Detected
1073.60									No Emission Detected
1207.80									No Emission Detected
1342.00									No Emission Detected

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna Y-Axis**USB Powered****Test Distance: 3 Meters**

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	87.04	7.04	X	25.05	-18.01	Peak	1.00	180.00	See Note #1 Below
268.40	55.66	-24.34	X	19.03	-43.37	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz

Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHzLimit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHzdBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna Y-Axis

USB Powered

Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance*	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	83.87	3.87	Y	25.05	-21.18	Peak	1.00	0.00	See Note #1 Below
268.40	54.26	-25.74	Y	19.03	-44.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz

Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHzLimit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHzdBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
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Lab: D
Tested By: Kyle FujimotoModulated Mode - Antenna Y-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	88.54	8.54	Z	25.05	-16.51	Peak	1.00	180.00	See Note #1 Below
268.40	55.11	-24.89	Z	19.03	-43.92	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoModulated Mode - Antenna Z-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	95.49	15.49	X	25.05	-9.56	Peak	1.00	180.00	See Note #1 Below
268.40	53.26	-26.74	X	19.03	-45.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
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Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \text{ Log } (\text{uV/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna Z-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	91.24	11.24	Y	25.05	-13.81	Peak	1.00	0.00	See Note #1 Below
268.40	51.24	-28.76	Y	19.03	-47.79	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/13/2024
Lab: D
Tested By: Kyle Fujimoto

Modulated Mode - Antenna Z-Axis
Battery Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	97.94	17.94	Z	25.05	-7.11	Peak	1.00	180.00	See Note #1 Below
268.40	52.24	-27.76	Z	19.03	-46.79	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/12/2024
Lab: D
Tested By: Kyle Fujimoto

CW Mode - Antenna X-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	94.58	14.58	X	25.05	-10.47	Peak	1.00	180.00	See Note #1 Below
268.40	53.25	-26.75	X	19.03	-45.78	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/12/2024
Lab: D
Tested By: Kyle Fujimoto

CW Mode - Antenna X-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	103.55	23.55	Y	25.05	-1.50	Peak	1.00	180.00	See Note #1 Below
268.40	54.69	-25.31	Y	19.03	-44.34	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 12/23/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna X-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	104.93	24.93	Z	25.05	-0.12	Peak	1.00	180.00	See Note #1 Below
268.40	54.02	-25.98	Z	19.03	-45.01	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Y-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	74.31	-5.69	X	25.05	-30.74	Peak	1.00	110.58	See Note #1 Below
268.40	53.24	-26.76	X	19.03	-45.79	Peak	1.00	110.58	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/12/2024
Lab: D
Tested By: Kyle Fujimoto

CW Mode - Antenna Y-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	97.39	17.39	Y	25.05	-7.66	Peak	1.00	180.00	See Note #1 Below
268.40	53.26	-26.74	Y	19.03	-45.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Y-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	86.36	6.36	Z	25.05	-18.69	Peak	1.00	180.00	See Note #1 Below
268.40	53.26	-26.74	Z	19.03	-45.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Z-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	90.17	10.17	X	25.05	-14.88	Peak	1.00	180.00	See Note #1 Below
268.40	52.56	-27.44	X	19.03	-46.47	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoCW Mode - Antenna Z-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	57.33	-22.67	Y	25.05	-47.72	Peak	1.00	180.00	See Note #1 Below
268.40	54.21	-25.79	Y	19.03	-44.82	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/12/2024
Lab: D
Tested By: Kyle Fujimoto

CW Mode - Antenna Z-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	92.81	12.81	Z	25.05	-12.24	Peak	1.00	180.00	See Note #1 Below
268.40	53.26	-26.74	Z	19.03	-45.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoModulated Mode - Antenna X-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	87.84	7.84	X	25.05	-17.21	Peak	1.00	150.00	See Note #1 Below
268.40	54.75	-25.25	X	19.03	-44.28	Peak	1.00	150.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/12/2024

Lab: D

Tested By: Kyle Fujimoto

Transmit Mode - Antenna X-Axis
Modulated Mode - USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	98.59	18.59	Y	25.05	-6.46	Peak	1.00	180.00	See Note #1 Below
268.40	52.26	-27.74	Y	19.03	-46.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoTransmit Mode - Antenna X-Axis
Modulated Mode - USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	98.18	18.18	Z	25.05	-6.87	Peak	1.00	293.50	See Note #1 Below
268.40	55.15	-24.85	Z	19.03	-43.88	Peak	1.00	293.50	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/12/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna X-Axis

USB Powered

Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	87.84	7.84	X	25.05	-17.21	Peak	1.00	150.00	See Note #1 Below
268.40	54.75	-25.25	X	19.03	-44.28	Peak	1.00	150.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz

Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz

Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz

dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 12/23/2024
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - Antenna X-Axis
Modulated Mode - USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	99.37	19.37	Y	25.05	-5.68	Peak	1.00	180.00	See Note #1 Below
268.40	52.26	-27.74	Y	19.03	-46.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/12/2024
Lab: D
Tested By: Kyle FujimotoTransmit Mode - Antenna X-Axis
Modulated Mode - USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	98.18	18.18	Z	25.05	-6.87	Peak	1.00	293.50	See Note #1 Below
268.40	55.15	-24.85	Z	19.03	-43.88	Peak	1.00	293.50	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna Y-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	61.31	-18.69	X	25.05	-43.74	Peak	1.00	180.00	See Note #1 Below
268.40	54.31	-25.69	X	19.03	-44.72	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz

Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHzLimit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHzdBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209
AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoModulated Mode - Antenna Y-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	92.57	12.57	Y	25.05	-12.48	Peak	1.00	0.00	See Note #1 Below
268.40	24.26	-55.74	Y	19.03	-74.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
 $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna Y-Axis

USB Powered

Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	91.61	11.61	Z	25.05	-13.44	Peak	1.00	180.00	See Note #1 Below
268.40	53.21	-26.79	Z	19.03	-45.82	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz

Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHzLimit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz $\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/13/2024
Lab: D
Tested By: Kyle FujimotoModulated Mode - Antenna Z-Axis
USB Powered
Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	87.04	7.04	X	25.05	-18.01	Peak	1.00	180.00	See Note #1 Below
268.40	55.66	-24.34	X	19.03	-43.37	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = $2400/F$ (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = $24000/F$ (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = $20 \log(uV/m)$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/13/2024

Lab: D

Tested By: Kyle Fujimoto

Modulated Mode - Antenna Z-Axis

USB Powered

Test Distance: 3 Meters

Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	83.87	3.87	Y	25.05	-21.18	Peak	1.00	0.00	See Note #1 Below
268.40	54.26	-25.74	Y	19.03	-44.77	Peak	1.00	180.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz

Limit in $\mu\text{V/m}$ = $2400/\text{F}$ (kHz) at 300 Meters from 9 kHz to 490 kHz

Limit in $\mu\text{V/m}$ = $24000/\text{F}$ (kHz) at 30 Meters from 490 kHz to 1705 kHz

$\text{dBuV/m} = 20 \text{ Log } (\mu\text{V/m})$

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters

FCC 15.209

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

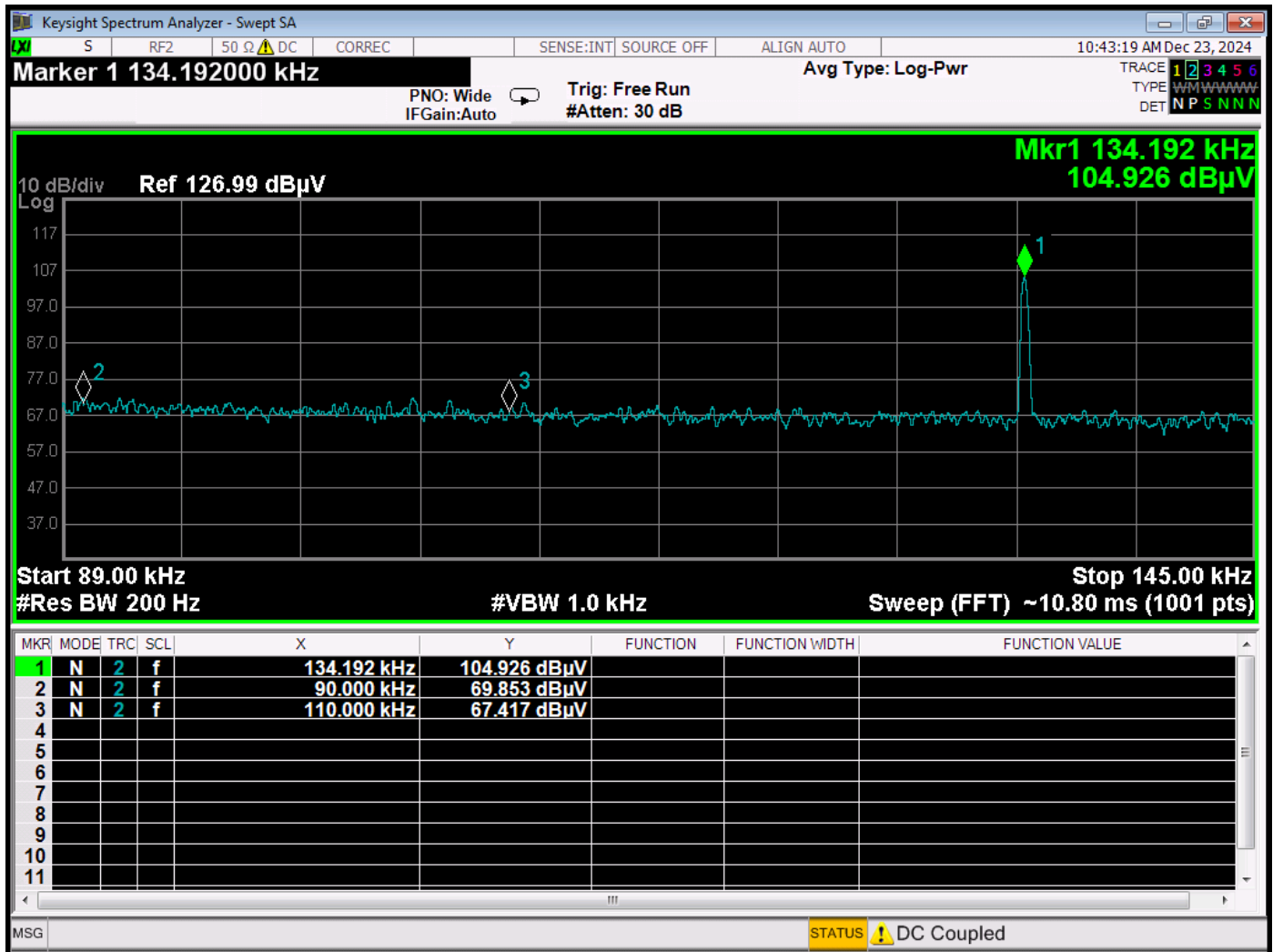
Date: 08/13/2024
Lab: D
Tested By: Kyle Fujimoto

Modulated Mode - Antenna Z-Axis
USB Powered
Test Distance: 3 Meters

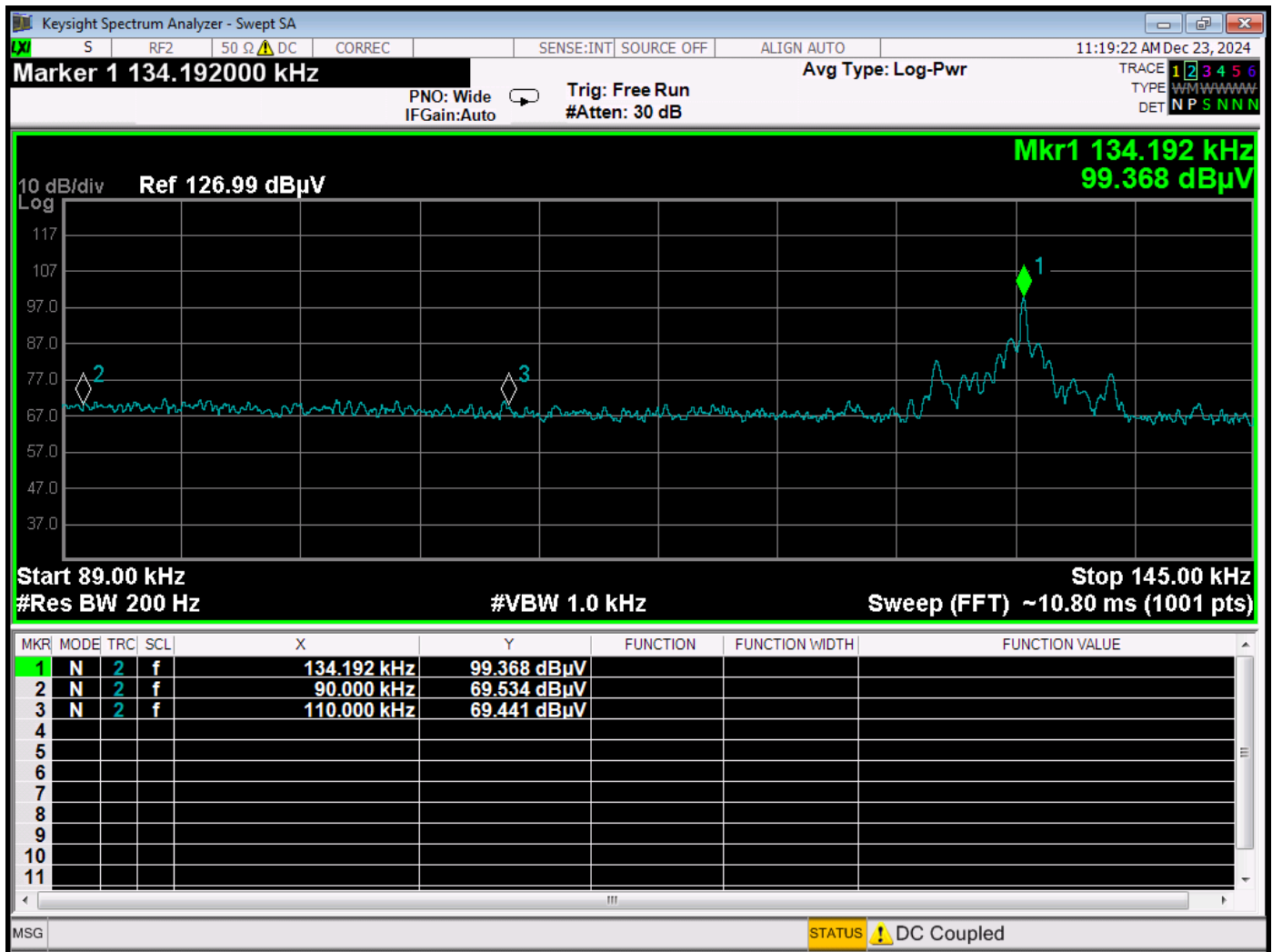
Freq. (kHz)	Level at 3 Meters (dBuV/m)	Corrected Level at Limit Distance* (dBuV/m)	EUT Axis (x/y/z)	Spec Limit per FCC 15.209	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
134.20	88.54	8.54	Z	25.05	-16.51	Peak	1.00	180.00	See Note #1 Below
268.40	55.11	-24.89	Z	19.03	-43.92	Peak	1.00	0.00	See Note #1 Below
402.60									No Emission Found
536.80									No Emission Found
671.00									No Emission Found
805.20									No Emission Found
939.40									No Emission Found
1073.60									No Emission Found
1207.80									No Emission Found
1342.00									No Emission Found

*300 Meters from 9 kHz to 490 kHz and 30 Meters above 490 kHz
Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
dBuV/m = 20 Log (uV/m)

Note #1: Equation (4) of ANSI C63.10: 2013 was used to obtain the corrected level at 300 Meters



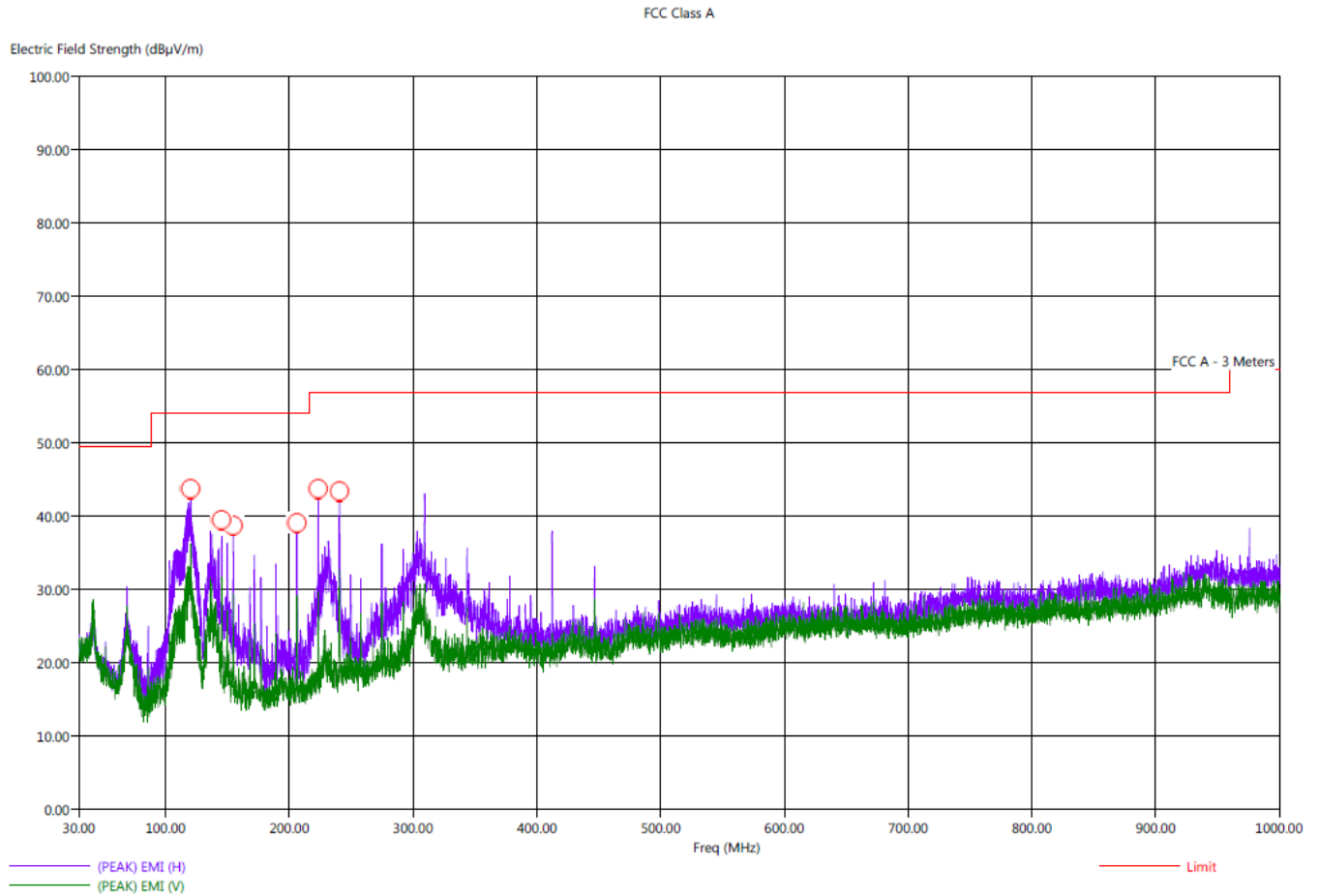
Band Edges at 90 kHz and 110 kHz – CW Mode – X-Axis – USB Mode – Worst Case



Band Edges at 90 kHz and 110 kHz – Modulated Mode – X-Axis – USB Mode – Worst Case

Title: Pre-Scan - FCC Class A
File: 1 - LF - Pre-Scan - Battery Mode - X-Axis - CW and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: Avid Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis (Worst Case) - Battery Mode

8/16/2024 12:10:29 PM
Sequence: Preliminary Scan



Title: Radiated Final - FCC Class A
File: 1 - LF - Final Scan - Battery Mode - X-Axis - CW and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - Battery Mode

8/16/2024 12:21:46 PM
Sequence: Final Measurements

FCC Class A

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (deg)	Twr Ht (cm)
120.30	H	45.36	45.14	-8.61	-8.83	53.97	15.90	0.70	291.50	270.70
145.30	H	39.93	37.79	-14.04	-16.18	53.97	14.60	0.70	286.75	143.29
154.60	H	39.78	38.49	-14.19	-15.48	53.97	14.80	0.73	92.25	111.41
206.20	H	39.45	38.94	-14.52	-15.03	53.97	16.00	0.89	82.75	127.77
223.40	H	45.15	44.47	-11.74	-12.42	56.89	16.63	0.89	86.25	111.17
240.50	H	44.94	43.66	-11.95	-13.23	56.89	17.45	0.97	84.50	111.71



Title: Radiated Final - FCC Class A
File: 1 - LF - Final Scan - Battery Mode - X-Axis - CW and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker4 Wand
S/N: Unit 1
X-Axis - Battery Mode

11/22/2024 3:17:52 PM
Sequence: Final Measurements

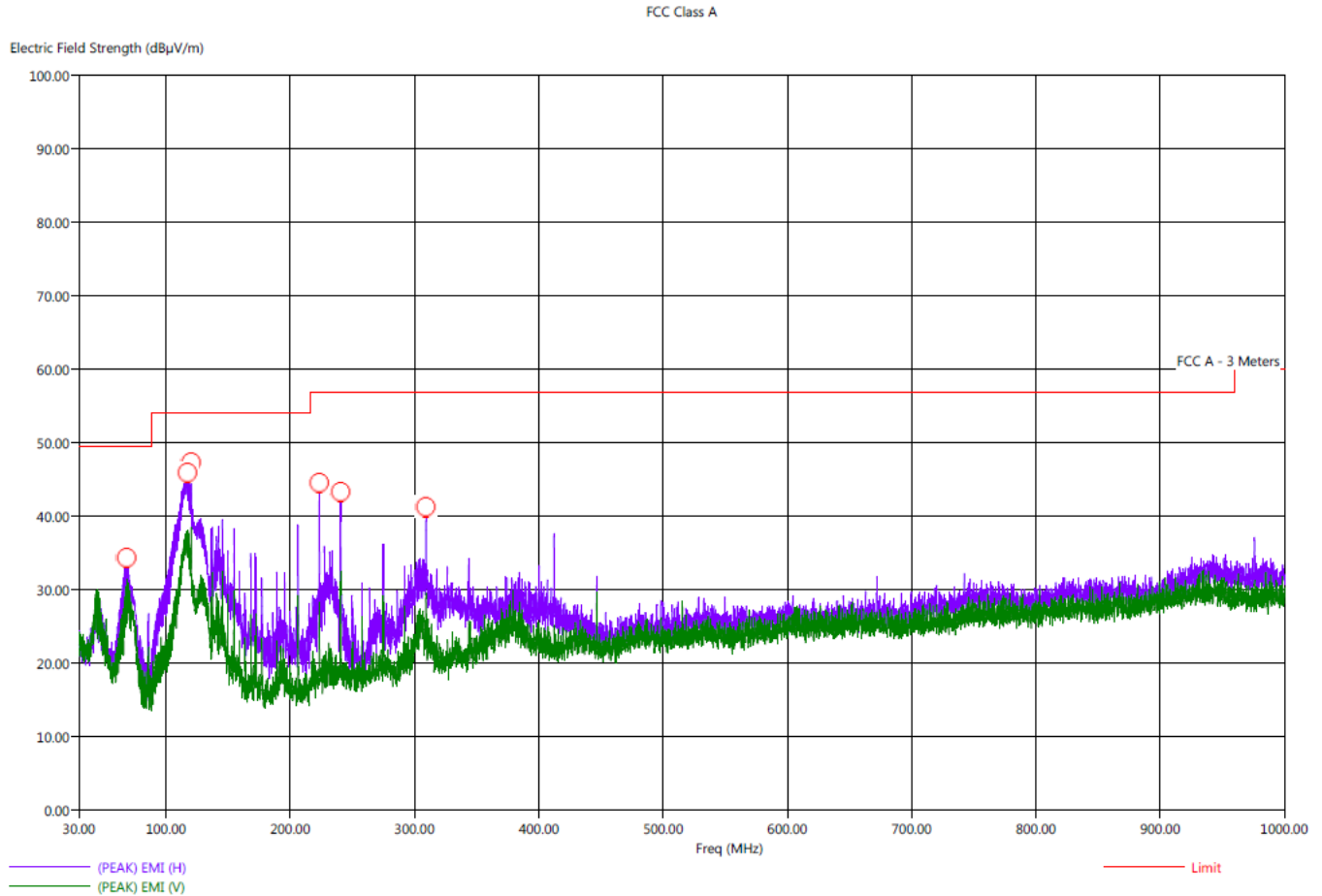
FCC Class A										
Freq (MHz)	Pol	(PEAK) EMI (dBμV/m)	(QP) EMI (dBμV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBμV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
120.30	H	45.59	45.45	-8.38	-8.52	53.97	15.90	0.70	25.75	111.82

Emission at 120.30 MHz when the digital portion of the EUT is operating only and the transmitter is not operating.



Title: Pre-Scan - FCC Class A
File: 1 - LF - Pre-Scan - Battery Mode - X-Axis - Modulated and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in Modulated Mode and BLE at 2480 MHz
Comments: Company: Avid Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis (Worst Case) - Battery Mode

8/16/2024 11:18:40 AM
Sequence: Preliminary Scan



Title: Radiated Final - FCC Class A
File: 1 - LF - Final Scan - Battery Mode - X-Axis - Modulated and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in Modulated Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - Battery Mode

8/16/2024 11:36:05 AM
Sequence: Final Measurements

FCC Class A

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
68.40	H	34.47	33.27	-15.06	-16.26	49.53	12.71	0.38	244.25	334.52
117.30	H	46.64	45.96	-7.33	-8.01	53.97	15.80	0.69	284.25	255.05
120.20	H	46.15	44.51	-7.82	-9.46	53.97	15.90	0.70	98.00	302.70
223.30	H	45.18	44.45	-11.71	-12.44	56.89	16.63	0.89	90.25	111.17
240.50	H	44.69	43.15	-12.20	-13.74	56.89	17.45	0.97	85.25	111.47
309.20	H	39.13	37.16	-17.76	-19.73	56.89	19.48	1.14	101.50	399.41



Title: Radiated Final - FCC Class A
File: 1 - LF - Final Scan - Battery Mode - X-Axis - Modulated and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in Modulated Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - Battery Mode

11/22/2024 5:57:54 PM
Sequence: Final Measurements

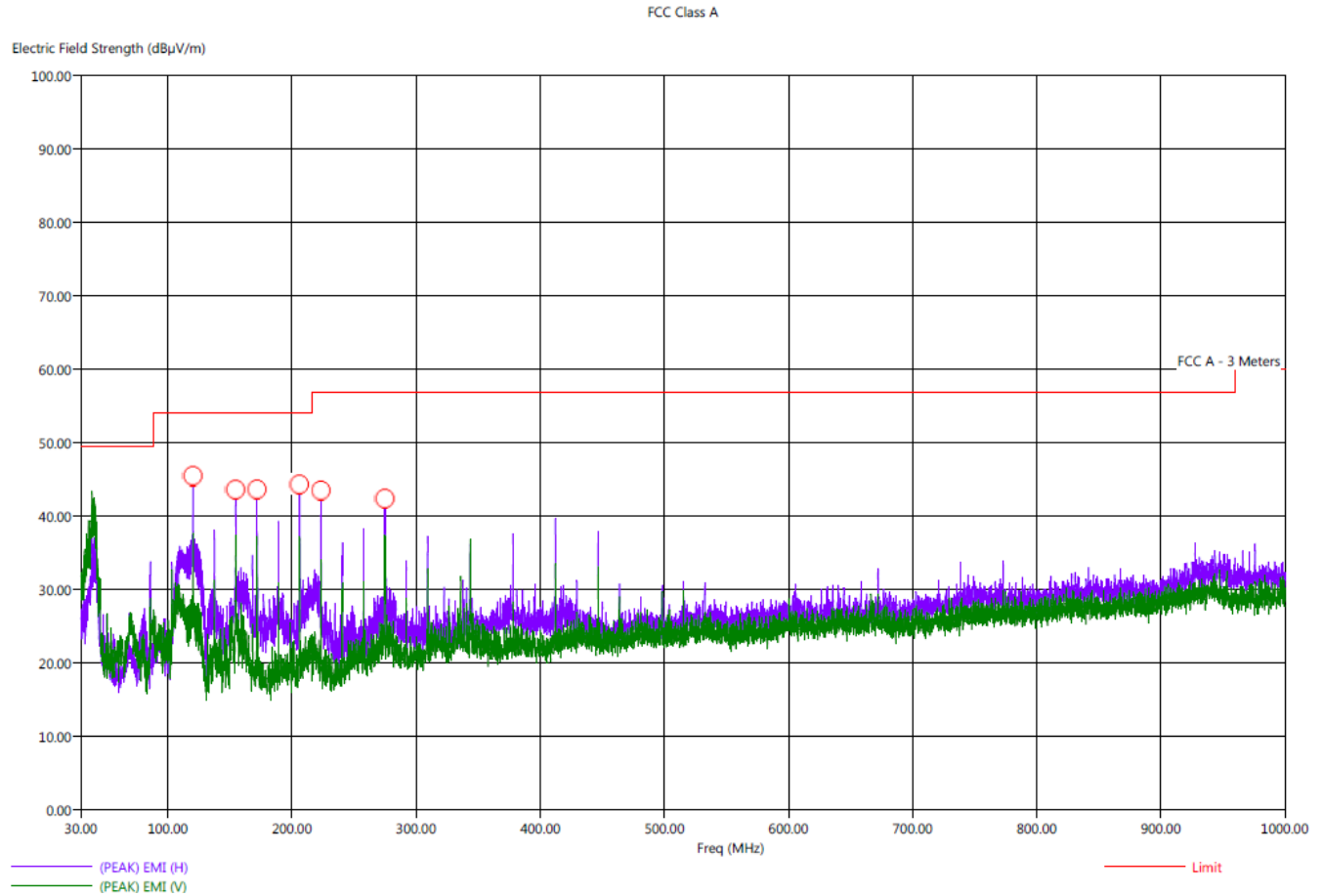
FCC Class A										
Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
117.30	H	46.24	46.02	-7.73	-7.95	53.97	15.80	0.69	67.00	287.16
120.20	H	46.13	44.53	-7.84	-9.44	53.97	15.90	0.70	24.75	111.34

Emission at 117.30 MHz and 120.30 MHz when the digital portion of the EUT is operating only and the transmitter is not operating.



Title: Pre-Scan - FCC Class A
File: 2 - LF - Pre-Scan - USB Mode - X-Axis - CW and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: Avid Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis (Worst Case) - USB Mode

8/16/2024 9:34:55 AM
Sequence: Preliminary Scan



Title: Radiated Final - FCC Class A
File: 2 - LF - Final Scan - USB Mode - X-Axis - CW and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - USB Mode

8/16/2024 9:45:46 AM
Sequence: Final Measurements

FCC Class A

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
120.30	H	48.21	47.98	-5.76	-5.99	53.97	15.90	0.70	119.75	271.41
154.60	H	44.09	43.35	-9.88	-10.62	53.97	14.80	0.73	63.50	191.47
171.80	H	45.50	44.09	-8.47	-9.88	53.97	15.93	0.82	73.25	143.00
206.10	H	46.61	45.17	-7.36	-8.80	53.97	16.00	0.89	60.25	111.59
223.30	H	45.11	44.32	-11.78	-12.57	56.89	16.63	0.89	296.25	111.59
274.90	H	44.85	44.06	-12.04	-12.83	56.89	19.10	1.14	308.00	111.41



Title: Radiated Final - FCC Class A
File: 2 - LF - Final Scan - USB Mode - X-Axis - CW and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - USB Mode

11/22/2024 6:15:18 PM
Sequence: Final Measurements

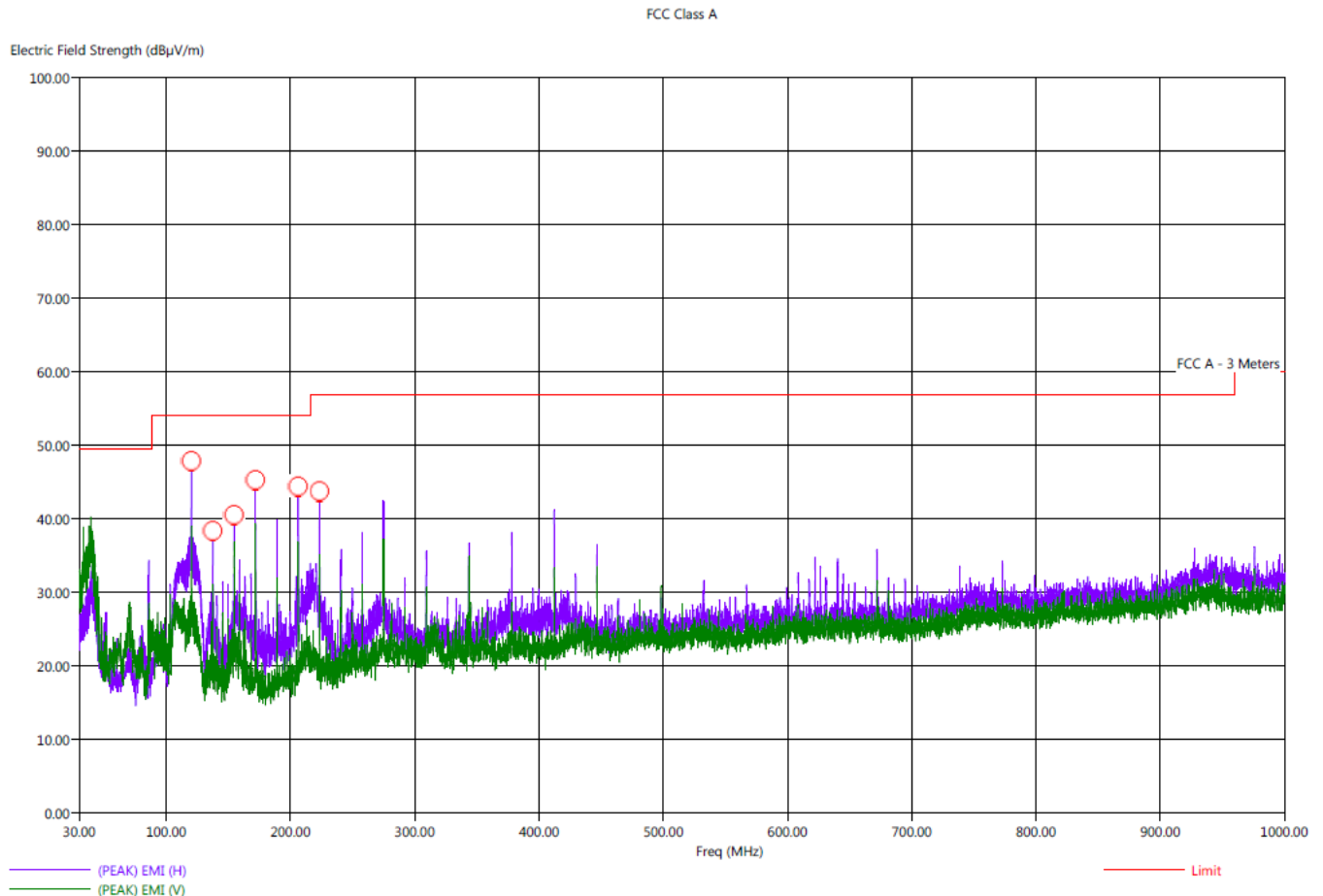
FCC Class A										
Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbt Agl (deg)	Twr Ht (cm)
120.30	H	48.59	47.62	-5.38	-6.35	53.97	15.90	0.70	30.50	127.58
154.60	H	44.20	43.23	-9.77	-10.74	53.97	14.80	0.73	313.25	110.68
171.80	H	45.48	44.01	-8.49	-9.96	53.97	15.94	0.82	150.75	159.82
206.10	H	46.58	45.13	-7.39	-8.84	53.97	16.00	0.89	52.00	111.40

Emission at 120.30 MHz, 154.60 MHz, 171.80 MHz, and 206.10 MHz when the digital portion of the EUT is operating only and the transmitter is not operating.



Title: Pre-Scan - FCC Class A
File: 2 - LF - Pre-Scan - USB Mode - X-Axis - Modulated and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in Modulated Mode and BLE
Comments: Company: Avid Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis (Worst Case) - USB Mode

8/16/2024 10:21:30 AM
Sequence: Preliminary Scan



Title: Radiated Final - FCC Class A
File: 2 - LF - Final Scan - USB Mode - X-Axis - Modulated and BLE - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - USB Mode

8/16/2024 10:33:53 AM
Sequence: Final Measurements

FCC Class A

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	TtBl Agl (deg)	Twr Ht (cm)
120.30	H	49.46	49.24	-4.51	-4.73	53.97	15.90	0.70	119.75	270.76
137.50	H	41.26	40.47	-12.71	-13.50	53.97	15.16	0.71	282.00	143.11
154.60	H	44.79	43.79	-9.18	-10.18	53.97	14.80	0.73	57.75	111.53
171.80	H	45.50	44.99	-8.47	-8.98	53.97	15.93	0.82	77.00	175.47
206.20	H	46.53	45.90	-7.44	-8.07	53.97	16.00	0.89	65.75	111.47
223.30	H	45.44	44.66	-11.45	-12.23	56.89	16.63	0.89	282.00	111.59



Title: Radiated Final - FCC Class A
File: 2 - LF - Final Scan - USB Mode - X-Axis - Modulated and BLE - John Flood - FCC Class A - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: RFID Reader
EUT Condition: The EUT is continuously transmitting at 134.2 kHz in CW Mode and BLE
Comments: Company: AVID Identification Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1
X-Axis - USB Mode

11/22/2024 6:26:19 PM
Sequence: Final Measurements

FCC Class A										
Freq (MHz)	Pol	(PEAK) EMI (dBμV/m)	(QP) EMI (dBμV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBμV/m)	Transducer (dB)	Cable (dB)	Ttbt Agl (deg)	Twr Ht (cm)
120.20	H	49.47	49.35	-4.50	-4.62	53.97	15.90	0.70	37.75	127.94
154.60	H	41.28	40.35	-12.69	-13.62	53.97	14.80	0.73	332.75	223.76
171.80	H	45.63	44.91	-8.34	-9.06	53.97	15.94	0.82	162.75	159.22
206.20	H	46.52	45.87	-9.73	-10.96	53.97	16.00	0.89	48.50	111.40

Emission at 120.30 MHz, 154.60 MHz, 171.80 MHz, and 206.10 MHz when the digital portion of the EUT is operating only and the transmitter is not operating.



FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

**Harmonics Low Channel - X-Axis
USB Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	47.46	V	73.97	-26.51	Peak	318.75	127.11	
4804.00	39.31	V	53.97	-14.66	Avg	318.75	127.11	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	50.23	V	73.97	-23.74	Peak	103.50	175.29	
12010.00	38.12	V	53.97	-15.85	Avg	103.50	175.29	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

Harmonics Low Channel - Y-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	59.27	V	73.97	-14.70	Peak	354.00	111.17	
4804.00	52.63	V	53.97	-1.34	Avg	354.00	111.17	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	49.64	V	73.97	-24.33	Peak	335.75	143.29	
12010.00	38.27	V	53.97	-15.70	Avg	335.75	143.29	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics Low Channel - Z-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	54.59	V	73.97	-19.38	Peak	4.75	127.00	
4804.00	46.85	V	53.97	-7.12	Avg	4.75	127.00	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	50.11	V	73.97	-23.86	Peak	59.00	249.91	
12010.00	38.14	V	53.97	-15.83	Avg	59.00	249.91	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics Low Channel - X-Axis

USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	55.08	H	73.97	-18.89	Peak	309.00	111.41	
4804.00	47.72	H	53.97	-6.25	Avg	309.00	111.41	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	50.11	H	73.97	-23.86	Peak	306.50	249.95	
12010.00	38.16	H	53.97	-15.81	Avg	306.50	249.95	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto**Harmonics Low Channel - Y-Axis
USB Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	56.83	H	73.97	-17.14	Peak	171.00	109.92	
4804.00	49.91	H	53.97	-4.06	Avg	171.00	109.92	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	50.27	H	73.97	-23.70	Peak	194.25	191.59	
12010.00	38.15	H	53.97	-15.82	Avg	194.25	191.59	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

Harmonics Low Channel - Z-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	47.43	H	73.97	-26.54	Peak	111.00	111.23	
4804.00	38.52	H	53.97	-15.45	Avg	111.00	111.23	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	49.56	H	73.97	-24.41	Peak	227.75	249.19	
12010.00	38.15	H	53.97	-15.82	Avg	227.75	249.19	
14412.00								No Emission Detected
14412.00								
16814.00								No Emission Detected
16814.00								
19216.00								No Emission Detected
19216.00								
21618.00								No Emission Detected
21618.00								
24020.00								No Emission Detected
24020.00								

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics Middle Channel - X-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	49.63	V	73.97	-24.34	Peak	37.00	143.11	
4880.00	41.74	V	53.97	-12.23	Avg	37.00	143.11	
7320.00	51.33	V	73.97	-22.64	Peak	293.25	111.23	
7320.00	39.44	V	53.97	-14.53	Avg	293.25	111.23	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.49	V	73.97	-23.48	Peak	151.25	249.04	
12200.00	38.41	V	53.97	-15.56	Avg	151.25	249.04	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics Middle Channel - Y-Axis

USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	58.92	V	73.97	-15.05	Peak	15.00	111.29	
4880.00	51.82	V	53.97	-2.15	Avg	15.50	111.29	
7320.00	54.04	V	73.97	-19.93	Peak	56.00	127.71	
7320.00	44.87	V	53.97	-9.10	Avg	56.00	127.71	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.45	V	73.97	-23.52	Peak	350.50	249.07	
12200.00	38.50	V	53.97	-15.47	Avg	350.50	249.07	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - Z-Axis
USB Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	54.73	V	73.97	-19.24	Peak	299.75	110.76	
4880.00	46.75	V	53.97	-7.22	Avg	299.75	110.76	
7320.00	45.92	V	73.97	-28.05	Peak	10.00	111.23	
7320.00	33.46	V	53.97	-20.51	Avg	10.00	111.23	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.38	V	73.97	-23.59	Peak	343.75	249.98	
12200.00	38.40	V	53.97	-15.57	Avg	343.75	249.98	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

Harmonics Middle Channel - X-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	54.90	H	73.97	-19.07	Peak	299.50	111.17	
4880.00	47.47	H	53.97	-6.50	Avg	299.50	111.17	
7320.00	48.83	H	73.97	-25.14	Peak	4.75	111.71	
7320.00	38.82	H	53.97	-15.15	Avg	4.75	111.71	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.08	H	73.97	-23.89	Peak	291.00	223.23	
12200.00	38.30	H	53.97	-15.67	Avg	291.00	223.23	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics Middle Channel - Y-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	53.00	H	73.97	-20.97	Peak	335.50	111.59	
4880.00	46.09	H	53.97	-7.88	Avg	335.50	111.59	
7320.00	51.61	H	73.97	-22.36	Peak	322.25	111.23	
7320.00	42.42	H	53.97	-11.55	Avg	322.25	111.23	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.98	H	73.97	-22.99	Peak	77.25	207.47	
12200.00	38.32	H	53.97	-15.65	Avg	77.25	207.47	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - Z-Axis
USB Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	48.68	H	73.97	-25.29	Peak	29.50	111.29	
4880.00	36.87	H	53.97	-17.10	Avg	29.50	111.29	
7320.00	51.05	H	73.97	-22.92	Peak	282.75	143.23	
7320.00	40.50	H	53.97	-13.47	Avg	282.75	143.23	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.11	H	73.97	-23.86	Peak	159.50	143.00	
12200.00	38.56	H	53.97	-15.41	Avg	159.50	143.00	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

Harmonics High Channel - X-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	48.79	V	73.97	-25.18	Peak	39.75	111.23	
4960.00	40.69	V	53.97	-13.28	Avg	39.75	111.23	
7440.00	52.15	V	73.97	-21.82	Peak	291.25	111.29	
7440.00	41.77	V	53.97	-12.20	Avg	291.25	111.29	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.48	V	73.97	-23.49	Peak	21.75	127.23	
12400.00	38.83	V	73.97	-35.14	Avg	21.75	127.23	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics High Channel - Y-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	56.08	V	73.97	-17.89	Peak	195.25	111.29	
4960.00	47.67	V	53.97	-6.30	Avg	195.25	111.29	
7440.00	52.06	V	73.97	-21.91	Peak	167.50	127.53	
7440.00	42.04	V	53.97	-11.93	Avg	167.50	127.53	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	51.17	V	73.97	-22.80	Peak	104.75	249.98	
12400.00	38.82	V	73.97	-35.15	Avg	104.75	249.98	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics High Channel - Z-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	53.39	V	73.97	-20.58	Peak	344.50	111.11	
4960.00	46.53	V	53.97	-7.44	Avg	344.50	111.11	
7440.00	49.73	V	73.97	-24.24	Peak	275.50	207.17	
7440.00	39.29	V	53.97	-14.68	Avg	275.50	207.17	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.42	V	73.97	-23.55	Peak	49.75	191.23	
12400.00	38.78	V	73.97	-35.19	Avg	49.75	191.23	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

**Harmonics High Channel - X-Axis
USB Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	51.19	H	73.97	-22.78	Peak	298.00	110.88	
4960.00	44.13	H	53.97	-9.84	Avg	298.00	110.88	
7440.00	49.31	H	73.97	-24.66	Peak	5.50	111.59	
7440.00	38.70	H	53.97	-15.27	Avg	5.50	111.59	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.34	H	73.97	-23.63	Peak	191.75	127.35	
12400.00	38.89	H	73.97	-35.08	Avg	191.75	127.35	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

**Harmonics High Channel - Y-Axis
USB Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	54.35	H	73.97	-19.62	Peak	162.00	111.05	
4960.00	47.58	H	53.97	-6.39	Avg	162.00	111.05	
7440.00	51.38	H	73.97	-22.59	Peak	240.25	159.29	
7440.00	41.83	H	53.97	-12.14	Avg	240.25	159.29	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	51.10	H	73.97	-22.87	Peak	176.75	223.23	
12400.00	38.79	H	73.97	-35.18	Avg	176.75	223.23	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics High Channel - Z-Axis
USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	48.81	H	73.97	-25.16	Peak	314.75	190.70	
4960.00	38.81	H	53.97	-15.16	Avg	314.75	190.70	
7440.00	50.65	H	73.97	-23.32	Peak	281.75	142.94	
7440.00	40.77	H	53.97	-13.20	Avg	281.75	142.94	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.48	H	73.97	-23.49	Peak	0.75	111.41	
12400.00	38.89	H	73.97	-35.08	Avg	0.75	111.41	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.

RFID Reader

Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion - 9 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25 GHz

USB Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
								No Emissions Detected
								from 9 kHz to 30 MHz
								for the digital portion
								of the EUT
								No Emissions Detected
								from 9 kHz to 30 MHz
								for the Non-Harmonic Emissions
								of the Transmitter for the EUT
								No Emissions Detected
								from 1 GHz to 25 GHz
								for the digital portion
								of the EUT
								No Emissions Detected
								from 1 GHz to 25 GHz
								for the Non-Harmonic Emissions
								of the Transmitter for the EUT
								Investigated in the X-Axis,
								Y-Axis, and Z-Axis

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Low Channel - X-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	46.62	V	73.97	-27.35	Peak	32.75	191.41	
4804.00	37.95	V	53.97	-16.02	Avg	32.75	191.41	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	49.85	V	73.97	-24.12	Peak	133.00	223.41	
12010.00	38.12	V	53.97	-15.85	Avg	133.00	223.41	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Low Channel - Y-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	58.81	V	73.97	-15.16	Peak	15.00	111.35	
4804.00	52.38	V	53.97	-1.59	Avg	15.00	111.35	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	50.04	V	73.97	-23.93	Peak	255.75	158.88	
12010.00	38.14	V	53.97	-15.83	Avg	255.75	158.88	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

Harmonics Low Channel - Z-Axis

Battery Mode

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	53.73	H	73.97	-20.24	Peak	11.25	159.23	
4804.00	46.36	H	53.97	-7.61	Avg	11.25	159.23	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	49.89	H	73.97	-24.08	Peak	137.50	127.47	
12010.00	38.10	H	53.97	-15.87	Avg	137.50	127.47	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 WandDate:
08/15/2024
Lab: D
Tested By: Kyle Fujimoto**Harmonics Low Channel - X-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	55.59	H	73.97	-18.38	Peak	308.50	111.41	
4804.00	49.12	H	53.97	-4.85	Avg	308.50	111.41	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	49.89	H	73.97	-24.08	Peak	92.50	238.70	
12010.00	38.09	H	53.97	-15.88	Avg	92.50	238.70	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Low Channel - Y-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	52.76	H	73.97	-21.21	Peak	230.25	111.35	
4804.00	44.41	H	53.97	-9.56	Avg	230.25	111.35	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	50.22	H	73.97	-23.75	Peak	42.00	110.94	
12010.00	38.25	H	53.97	-15.72	Avg	42.00	110.94	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Low Channel - Z-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4804.00	49.05	H	73.97	-24.92	Peak	50.50	127.00	
4804.00	41.40	H	53.97	-12.57	Avg	50.50	127.00	
7206.00								Not in Restricted Band
7206.00								Done via Conducted
9608.00								Not in Restricted Band
9608.00								Done via Conducted
12010.00	49.97	H	73.97	-24.00	Peak	283.50	271.29	
12010.00	38.13	H	53.97	-15.84	Avg	283.50	271.29	
14412.00								No Emission
14412.00								Detected
16814.00								No Emission
16814.00								Detected
19216.00								No Emission
19216.00								Detected
21618.00								No Emission
21618.00								Detected
24020.00								No Emission
24020.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - X-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	52.12	V	73.97	-21.85	Peak	95.00	127.35	
4880.00	44.21	V	53.97	-9.76	Avg	95.00	127.35	
7320.00	48.08	V	73.97	-25.89	Peak	297.25	159.53	
7320.00	37.53	V	53.97	-16.44	Avg	297.25	159.53	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	51.05	V	73.97	-22.92	Peak	69.00	191.59	
12200.00	38.57	V	53.97	-15.40	Avg	69.00	191.59	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - Y-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	58.11	V	73.97	-15.86	Peak	172.75	110.82	
4880.00	51.70	V	53.97	-2.27	Avg	172.75	110.82	
7320.00	50.50	V	73.97	-23.47	Peak	243.25	175.23	
7320.00	40.23	V	53.97	-13.74	Avg	243.25	175.23	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.37	V	73.97	-23.60	Peak	250.25	127.59	
12200.00	38.68	V	53.97	-15.29	Avg	250.25	127.59	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - Z-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	54.78	V	73.97	-19.19	Peak	346.00	111.05	
4880.00	47.11	V	53.97	-6.86	Avg	346.00	111.05	
7320.00	49.64	V	73.97	-24.33	Peak	235.75	111.11	
7320.00	38.64	V	53.97	-15.33	Avg	235.75	111.11	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.40	V	73.97	-23.57	Peak	344.25	207.53	
12200.00	38.66	V	53.97	-15.31	Avg	344.25	207.53	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - X-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	55.02	H	73.97	-18.95	Peak	326.75	111.11	
4880.00	48.32	H	53.97	-5.65	Avg	326.75	111.11	
7320.00	50.28	H	73.97	-23.69	Peak	55.25	111.41	
7320.00	38.45	H	53.97	-15.52	Avg	55.25	111.41	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.13	H	73.97	-23.84	Peak	125.25	223.71	
12200.00	38.42	H	53.97	-15.55	Avg	125.25	223.71	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics Middle Channel - Y-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	50.41	H	73.97	-23.56	Peak	52.00	127.35	
4880.00	42.46	H	53.97	-11.51	Avg	52.00	127.35	
7320.00	50.89	H	73.97	-23.08	Peak	300.75	127.29	
7320.00	36.79	H	53.97	-17.18	Avg	300.75	127.29	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.63	H	73.97	-23.34	Peak	73.00	300.01	
12200.00	38.54	H	53.97	-15.43	Avg	73.00	300.01	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

**Harmonics Middle Channel - Z-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	51.26	H	73.97	-22.71	Peak	65.00	125.26	
4880.00	43.45	H	53.97	-10.52	Avg	65.00	125.26	
7320.00	51.01	H	73.97	-22.96	Peak	301.25	128.24	
7320.00	37.06	H	53.97	-16.91	Avg	301.25	128.24	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	50.59	H	73.97	-23.38	Peak	16.00	245.25	
12200.00	38.54	H	53.97	-15.43	Avg	16.00	245.25	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics High Channel - X-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	47.04	V	73.97	-26.93	Peak	37.25	143.29	
4960.00	38.25	V	53.97	-15.72	Avg	37.25	143.29	
7440.00	50.12	V	73.97	-23.85	Peak	62.50	111.41	
7440.00	39.48	V	53.97	-14.49	Avg	62.50	111.41	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.43	V	73.97	-23.54	Peak	131.50	159.59	
12400.00	38.90	V	73.97	-35.07	Peak	131.50	159.59	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics High Channel - Y-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	55.13	V	73.97	-18.84	Peak	199.00	142.88	
4960.00	47.54	V	53.97	-6.43	Avg	199.00	142.88	
7440.00	51.41	V	73.97	-22.56	Peak	273.00	111.47	
7440.00	41.71	V	53.97	-12.26	Avg	273.00	111.47	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.61	V	73.97	-23.36	Peak	185.25	111.47	
12400.00	38.99	V	73.97	-34.98	Peak	185.25	111.47	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics High Channel - Z-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	52.94	V	73.97	-21.03	Peak	346.25	126.94	
4960.00	45.49	V	53.97	-8.48	Avg	346.25	126.94	
7440.00	50.56	V	73.97	-23.41	Peak	270.75	207.35	
7440.00	40.38	V	53.97	-13.59	Avg	270.75	207.35	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.71	V	73.97	-23.26	Peak	196.75	142.88	
12400.00	38.97	V	73.97	-35.00	Peak	196.75	142.88	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024

Lab: D

Tested By: Kyle Fujimoto

**Harmonics High Channel - X-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	51.22	H	73.97	-22.75	Peak	301.00	110.76	
4960.00	43.71	H	53.97	-10.26	Avg	301.00	110.76	
7440.00	49.30	H	73.97	-24.67	Peak	0.25	111.35	
7440.00	38.80	H	53.97	-15.17	Avg	0.25	111.35	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.91	H	73.97	-23.06	Peak	333.50	111.23	
12400.00	39.02	H	73.97	-34.95	Peak	333.50	111.23	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics High Channel - Y-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	53.41	H	73.97	-20.56	Peak	164.00	110.94	
4960.00	46.12	H	53.97	-7.85	Avg	164.00	110.94	
7440.00	53.84	H	73.97	-20.13	Peak	224.75	111.35	
7440.00	44.64	H	53.97	-9.33	Avg	244.75	111.35	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.81	H	73.97	-23.16	Peak	303.25	245.23	
12400.00	38.93	H	53.97	-15.04	Avg	303.25	245.23	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

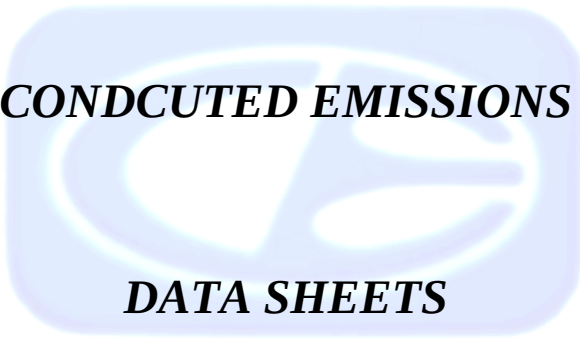
FCC 15.247 and RSS-247

AVID Identification Systems, Inc.
RFID Reader
Model: MiniTracker 4 Wand

Date: 08/15/2024
Lab: D
Tested By: Kyle Fujimoto

**Harmonics High Channel - Z-Axis
Battery Mode**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	48.40	H	73.97	-25.57	Peak	50.25	111.29	
4960.00	39.79	H	53.97	-14.18	Avg	50.25	111.29	
7440.00	49.49	H	73.97	-24.48	Peak	353.50	111.47	
7440.00	36.05	H	53.97	-17.92	Avg	353.50	111.47	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.60	H	73.97	-23.37	Peak	0.00	271.35	
12400.00	38.92	H	53.97	-15.05	Avg	0.00	271.35	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

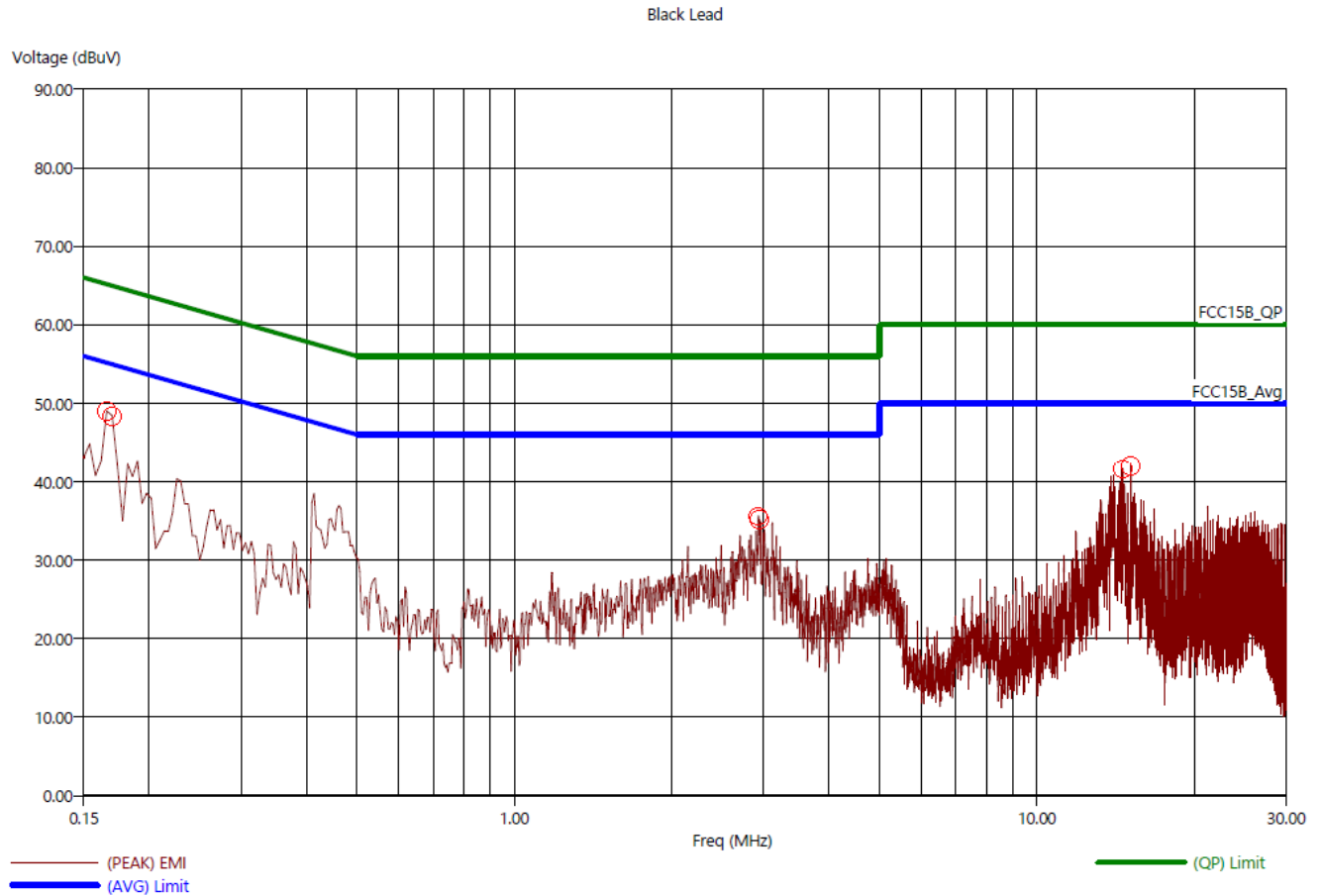


CONDCUTED EMISSIONS

DATA SHEETS

Test title: FCC Class B
File: 01 Conducted Pre-Scan - Line - CW.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in CW Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:55:38 AM
Sequence: Preliminary Scan



Test title: FCC Class B
File: 01 Conducted - Final - Line - CW.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in CW Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:56:56 AM
Sequence: Final Measurements

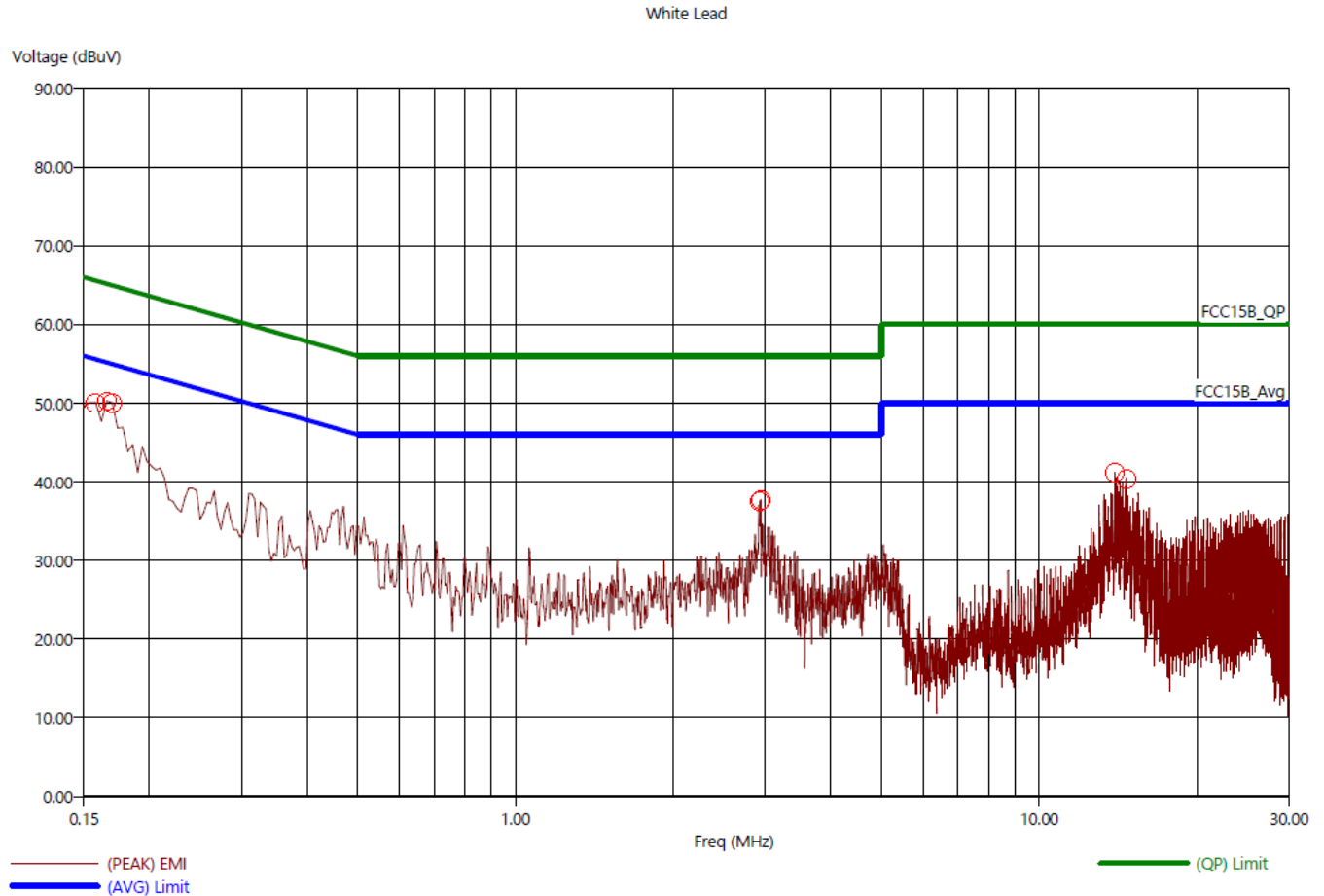
Black Lead

Freq (MHz)	(PEAK) EMI (dBuV)	(QP) EMI (dBuV)	(AVG) EMI (dBuV)	(QP) Margin QPL (dB)	(QP) Limit (dBuV)	(AVG) Margin AVL (dB)	(AVG) Limit (dBuV)
0.166	51.60	47.32	37.66	-18.36	65.68	-18.02	55.68
0.170	49.42	45.54	36.53	-19.56	65.09	-18.57	55.09
2.934	37.09	31.10	21.70	-24.90	56.00	-24.30	46.00
2.942	37.97	31.59	22.15	-24.41	56.00	-23.85	46.00
14.622	45.76	39.69	34.16	-20.31	60.00	-15.84	50.00
15.130	43.79	38.32	32.11	-21.68	60.00	-17.89	50.00



Test title: FCC Class B
File: 01 Conducted Pre-Scan - Neutral - CW.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in CW Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:51:13 AM
Sequence: Preliminary Scan



Test title: FCC Class B
File: 01 Conducted - Final - Neutral - CW.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in CW Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:53:03 AM
Sequence: Final Measurements

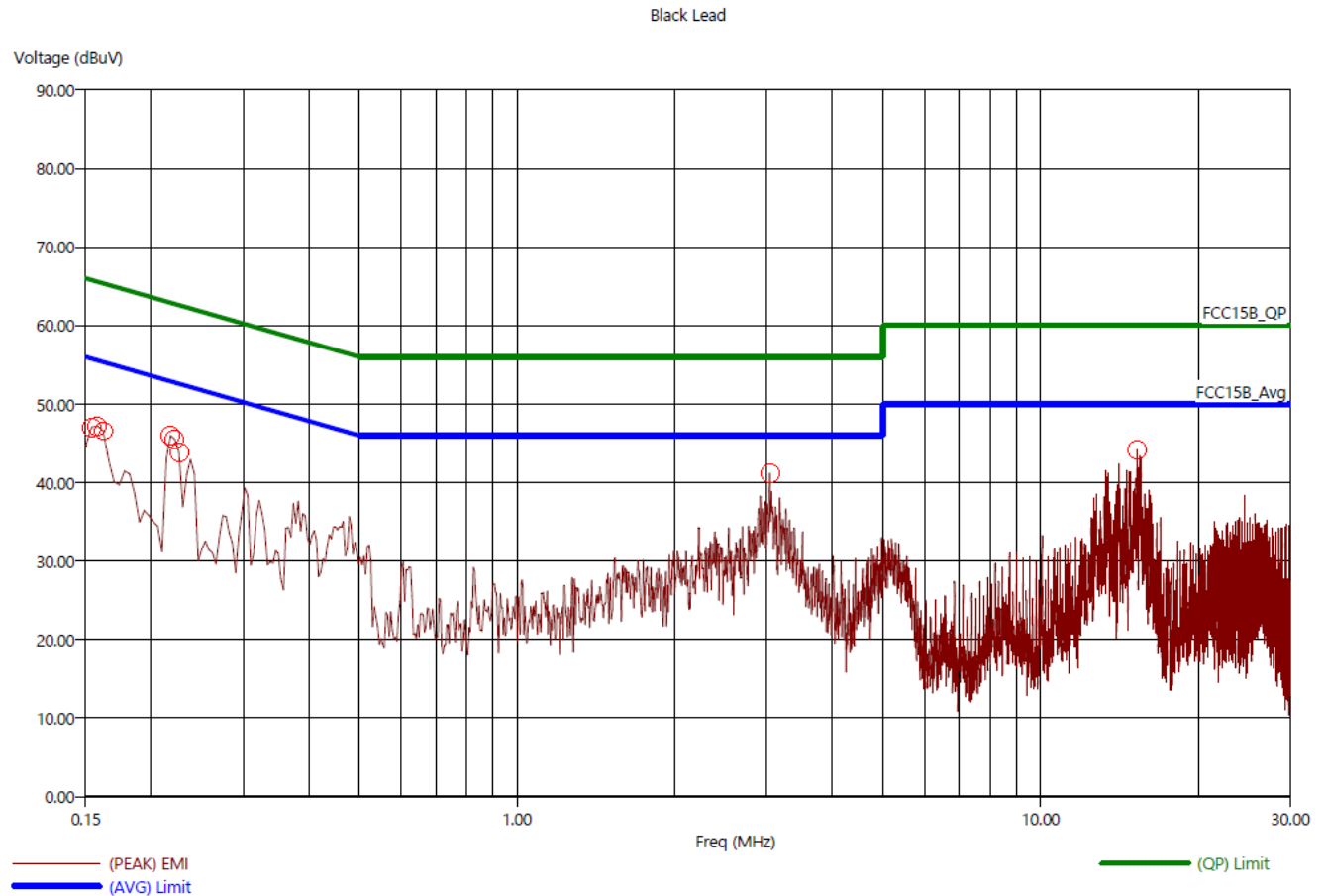
White Lead

Freq (MHz)	(PEAK) EMI (dBuV)	(QP) EMI (dBuV)	(AVG) EMI (dBuV)	(QP) Margin QPL (dB)	(QP) Limit (dBuV)	(AVG) Margin AVL (dB)	(AVG) Limit (dBuV)
0.158	52.50	49.75	40.33	-15.99	65.74	-15.41	55.74
0.166	52.47	49.17	40.01	-16.36	65.53	-15.52	55.53
0.170	50.91	45.30	36.97	-19.92	65.23	-18.25	55.23
2.930	37.22	32.29	20.93	-23.71	56.00	-25.07	46.00
2.938	36.60	31.95	21.94	-24.05	56.00	-24.06	46.00
13.938	41.89	36.20	26.10	-23.80	60.00	-23.90	50.00
14.638	43.33	37.82	27.04	-22.18	60.00	-22.96	50.00



Test title: FCC Class B
File: 01_Conducted_Pre-Scan - Line - Modulated.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in Modulated Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:29:40 AM
Sequence: Preliminary Scan



Test title: FCC Class B
File: 01 Conducted - Final - Line - Modulated.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in Modulated Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:34:52 AM
Sequence: Final Measurements

Black Lead

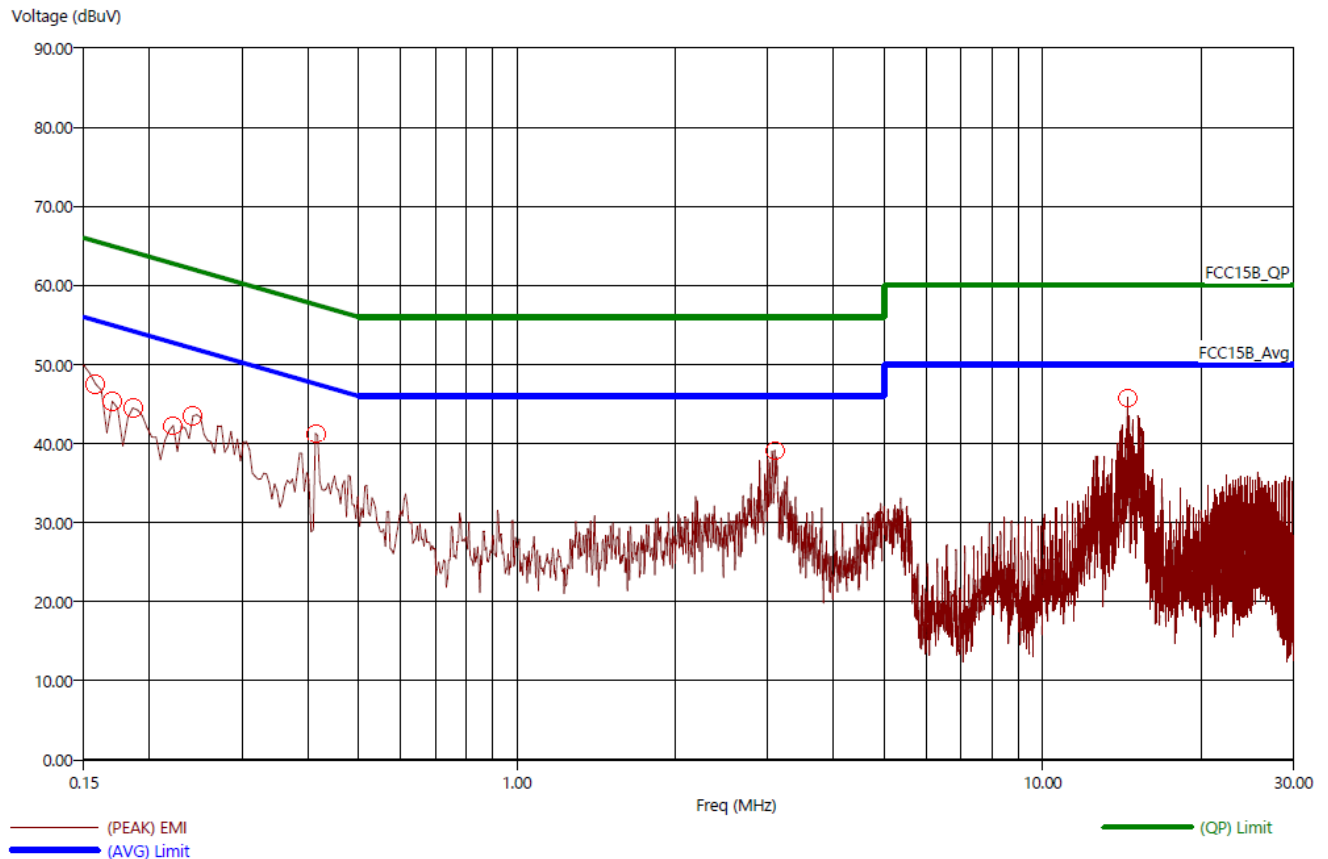
Freq (MHz)	(PEAK) EMI (dBuV)	(QP) EMI (dBuV)	(AVG) EMI (dBuV)	(QP) Margin QPL (dB)	(QP) Limit (dBuV)	(AVG) Margin AVL (dB)	(AVG) Limit (dBuV)
0.154	54.46	51.57	40.56	-14.23	65.81	-15.24	55.81
0.158	54.60	52.52	40.70	-13.35	65.87	-15.17	55.87
0.162	54.27	51.29	40.50	-14.48	65.78	-15.27	55.78
0.218	45.86	41.19	30.43	-21.83	63.02	-22.59	53.02
0.222	45.79	41.33	30.44	-21.63	62.95	-22.52	52.95
0.226	45.86	42.04	30.57	-20.93	62.97	-22.40	52.97
3.038	45.93	35.49	26.26	-20.51	56.00	-19.74	46.00
15.302	45.42	39.68	26.97	-20.32	60.00	-23.03	50.00



Test title: FCC Class B
File: 01 Conducted Pre-Scan - Neutral - Modulated.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in Modulated Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:41:50 AM
Sequence: Preliminary Scan

White Lead



Test title: FCC Class B
File: 01 Conducted - Final - Neutral - Modulated.set
Operator name: Kyle Fujimoto
EUT type: RFID Reader
EUT condition: The EUT is in Modulated Mode
Notes: Customer: AVID ID Systems, Inc.
Model: MiniTracker 4 Wand
S/N: Unit 1

9/12/2024 6:43:14 AM
Sequence: Final Measurements

White Lead

Freq (MHz)	(PEAK) EMI (dBuV)	(QP) EMI (dBuV)	(AVG) EMI (dBuV)	(QP) Margin QPL (dB)	(QP) Limit (dBuV)	(AVG) Margin AVL (dB)	(AVG) Limit (dBuV)
0.158	52.31	48.85	38.43	-16.61	65.45	-17.03	55.45
0.170	51.86	47.73	37.22	-17.51	65.25	-18.02	55.25
0.186	46.84	43.20	33.82	-20.62	63.82	-20.00	53.82
0.222	45.54	41.02	32.28	-22.02	63.04	-20.76	53.04
0.242	43.07	38.59	29.82	-23.68	62.27	-22.45	52.27
0.414	41.08	36.82	28.07	-20.74	57.56	-19.49	47.56
3.094	43.99	35.19	25.58	-20.81	56.00	-20.42	46.00
14.486	45.30	40.32	29.01	-19.68	60.00	-20.99	50.00

