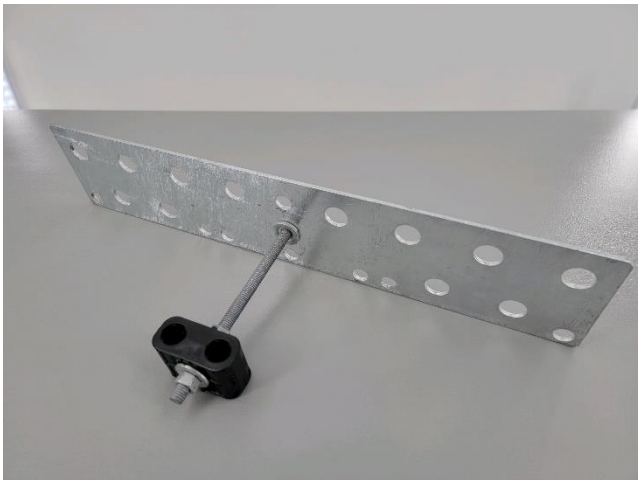
Part number(s): 901295-10, 900714-10, PSCB-1517-10

Description: The PIM Shield Threaded Rod Adapter is a low PIM, galvanized threaded insert for mounting Cable Support Blocks to 0.75-inch diameter snap-in mounting holes using 3/8" threaded hardware. Hardware must be galvanized to avoid corrosion. Assembly torque = 10 FT-LB.

Assembly under test:

- 901295-10 adapter
- Threaded Rod Kit
- Cable Support Block
- 900354 bar kit

PIM Shield Threaded Rod Adapters



Test conditions:

Tested in accordance with proposed IEC 62037-8 specification under the following test conditions:

- Object type: Non-flat
- Test type: Near Field
- Dynamic stimulus: Tap DUT with fiberglass rod while PIM testing
- Test power: 2x 43 dBm test tones
- IM product measured IM3
- Pass/Fail level: -97 dBm (-140 dBc)
- Frequency bands: 700 MHz band (F1 = 728 MHz, F2 = 757 MHz, IM3 = 786 MHz)
  1900 MHz band (F1 = 1930 MHz, F2 = 1990 MHz, IM3 = 1870 MHz)

Test distance calculations:

5.1.4.1.2	Lowest test frequency	(MHz)	728		1930	
	Wavelength	(in)	16.2		6.1	
	Galtronics D5778i	D (in)	13.8		13.8	
5.1.1	Antenna Gain (dBi)	10 dBi ± 3 dB	8.8 dBi		8.6 dBi	
	Antenna beamwidth (deg)		60		60	
				5.1.4.2		5.1.4.2
		Tolerance	Distance (in)	Test zone width (in)	Distance (in)	Test zone width (in)
	FarField min (in)	0.25	19.4	22.4	60.8	70.2
5.1.4.1.1	FarField nom (in)		23.5	27.1	62.3	71.9
	FarField max (in)	0.25	27.5	31.8	63.8	73.7
	NearField min (in)	0.1	14.6	30.6	5.5	20.2
5.1.4.1.2	NearField nom (in)		16.2	32.5	6.1	20.9
	NearField max (in)	0.1	17.8	34.4	6.7	21.6

Test Results Summary:

			IM3 @ 2x +43 dBm Test Power (dBm)				
Specification (dBm)	-100	Port / Band	Residual PIM	Front	R-Side	L-Side	Back
Result	PASS	M45 / 700	-113.3	-111.3	-112.1	-114.5	-117.6
		P45 / 700	-112.4	-110.5	-109.6	-109.1	-111.9
		M45 / 1900	-113.1	-109.6	-112.3	-113.2	-108.8
		P45 / 1900	-114.9	-111.8	-113.7	-110.6	-113.3

			Return Loss Verification (dB)		
			Frequency	P45	M45
Specification (dB)	10	F1	728 MHz	18.2	14.3
Result	PASS	F2	757 MHz	21.5	16.0
		IM3	786 MHz	22.1	17.0
		IM3	1870 MHz	18.6	20.0
		F2	1930 MHz	15.2	20.4
		F1	1990 MHz	18.4	21.2

PIM Test Data: 700 MHz

Site Test Report

SITE DETAILS

Site	Sector	Feeder	Operator
ADAPTER	700	NA	E ECONOMOU

TEST PARAMETERS

Tone 1 Frequency	Tone 2 Frequency	IM3 Frequency
728.0 MHz	757.0 MHz	786.0 MHz

TEST RESULTS

Test Point	Time	P1 P2	PIM Threshold	PIM	Peak PIM	Result
700 RES P45	2023-03-23 00:28	43.0 dBm 43.0 dBm	-100.0 dBm	-112.5 dBm	-112.4 dBm	Pass
700 FRONT P45	2023-03-23 00:32	43.0 dBm 43.0 dBm	-100.0 dBm	-110.8 dBm	-110.5 dBm	Pass
700 L SIDE P45	2023-03-23 00:32	43.0 dBm 43.0 dBm	-100.0 dBm	-112.6 dBm	-109.1 dBm	Pass
700 BACK P45	2023-03-23 00:33	43.0 dBm 43.0 dBm	-100.0 dBm	-112.6 dBm	-111.9 dBm	Pass
700 R SIDE P45	2023-03-23 00:35	43.0 dBm 43.0 dBm	-100.0 dBm	-111.3 dBm	-109.6 dBm	Pass
700 RES M45	2023-03-23 00:41	43.0 dBm 43.0 dBm	-100.0 dBm	-113.9 dBm	-113.3 dBm	Pass
700 FRONT M45	2023-03-23 00:42	43.0 dBm 43.0 dBm	-100.0 dBm	-111.3 dBm	-111.3 dBm	Pass
700 L SIDE M45	2023-03-23 00:42	43.0 dBm 43.0 dBm	-100.0 dBm	-115.4 dBm	-114.5 dBm	Pass
700 BACK M45	2023-03-23 00:43	43.0 dBm 43.0 dBm	-100.0 dBm	-118.1 dBm	-117.6 dBm	Pass
700 R SIDE M45	2023-03-23 00:43	43.0 dBm 43.0 dBm	-100.0 dBm	-112.5 dBm	-112.1 dBm	Pass

PIM Test Data: 1900 MHz

Site Test Report

SITE DETAILS

Site	Sector	Feeder	Operator
ADAPTER	1900	NA	E ECONOMOU

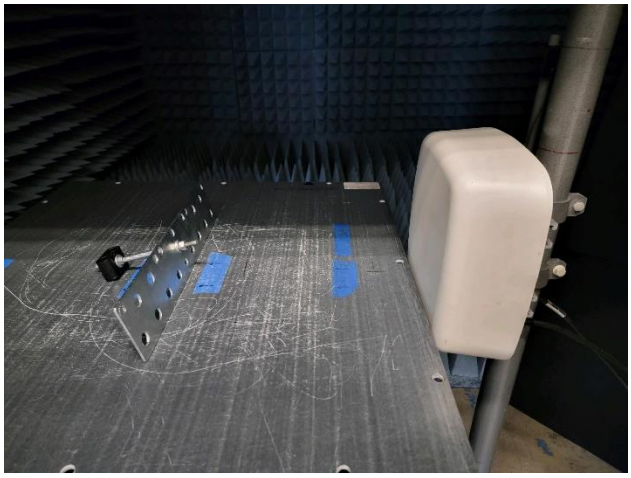
TEST PARAMETERS

Tone 1 Frequency	Tone 2 Frequency	IM3 Frequency
1930.0 MHz	1990.0 MHz	1870.0 MHz

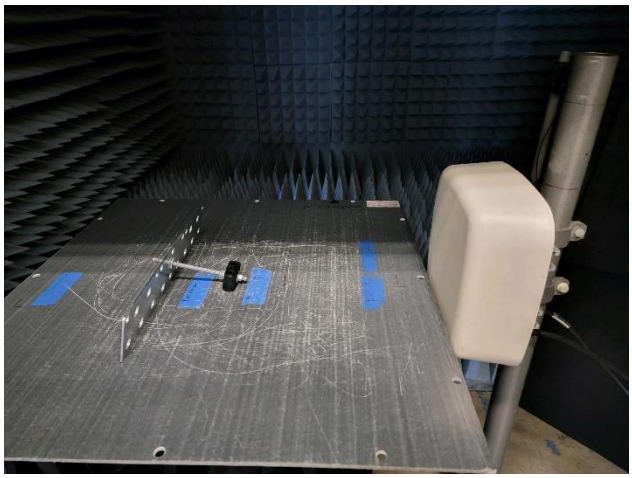
TEST RESULTS

Test Point	Time	P1 P2	PIM Threshold	PIM	Peak PIM	Result
1900 RES M45	2002-01-13 12:02	43.0 dBm 43.0 dBm	-100.0 dBm	-113.2 dBm	-113.1 dBm	Pass
1900 FRONT M45	2002-01-13 12:04	43.0 dBm 43.0 dBm	-100.0 dBm	-110.0 dBm	-109.6 dBm	Pass
1900 L SIDE M45	2002-01-13 12:04	43.0 dBm 43.0 dBm	-100.0 dBm	-116.4 dBm	-113.2 dBm	Pass
1900 BACK M45	2002-01-13 12:05	43.0 dBm 43.0 dBm	-100.0 dBm	-114.0 dBm	-108.8 dBm	Pass
1900 R SIDE M45	2002-01-13 12:05	43.0 dBm 43.0 dBm	-100.0 dBm	-113.2 dBm	-112.3 dBm	Pass
1900 RES P45	2002-01-13 12:08	43.0 dBm 43.0 dBm	-100.0 dBm	-115.1 dBm	-114.9 dBm	Pass
1900 FRONT P45	2002-01-13 12:11	43.0 dBm 43.0 dBm	-100.0 dBm	-111.8 dBm	-111.8 dBm	Pass
1900 L SIDE P45	2002-01-13 12:11	43.0 dBm 43.0 dBm	-100.0 dBm	-113.9 dBm	-110.6 dBm	Pass
1900 BACK P45	2002-01-13 12:12	43.0 dBm 43.0 dBm	-100.0 dBm	-115.1 dBm	-113.3 dBm	Pass
1900 R SIDE P45	2002-01-13 12:12	43.0 dBm 43.0 dBm	-100.0 dBm	-114.3 dBm	-113.7 dBm	Pass

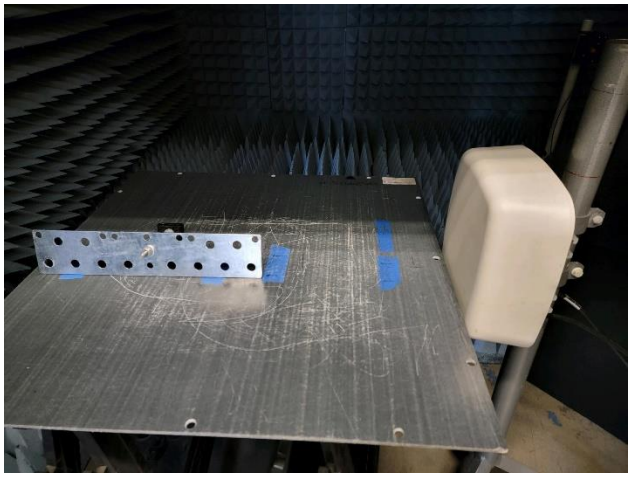
Test set-up photos 700 MHz:



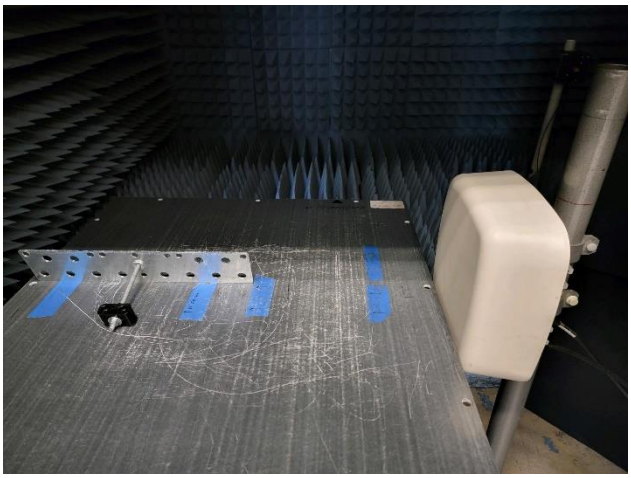
FRONT



BACK

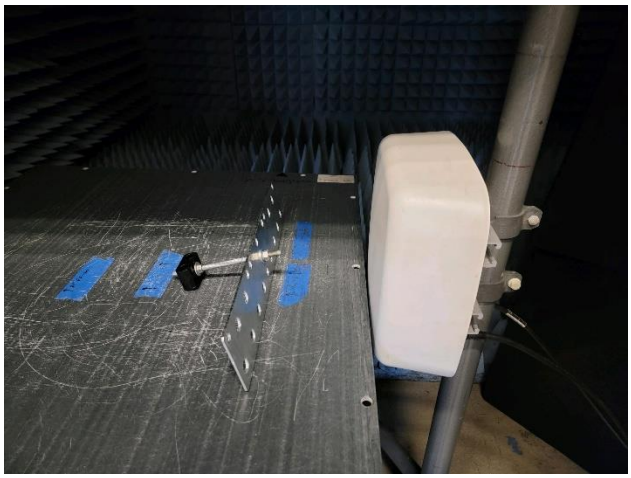


RIGHT SIDE

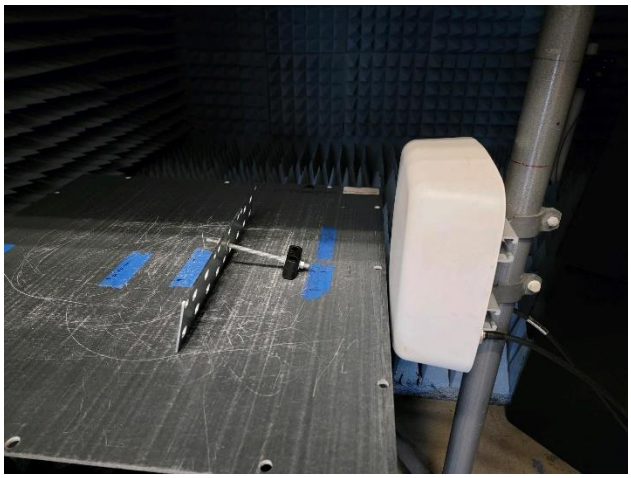


LEFT SIDE

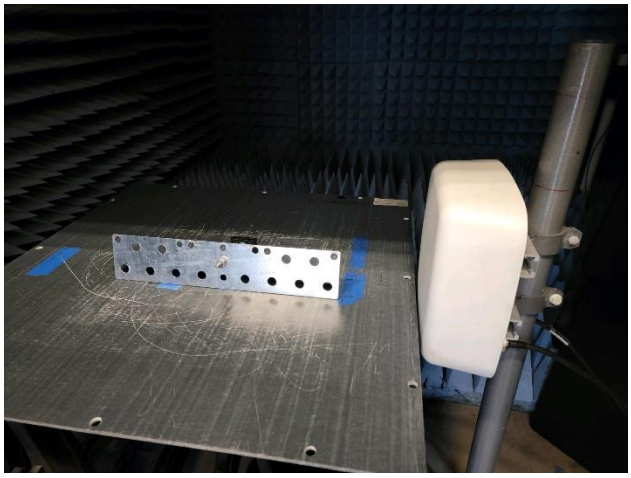
Test set-up photos 1900 MHz:



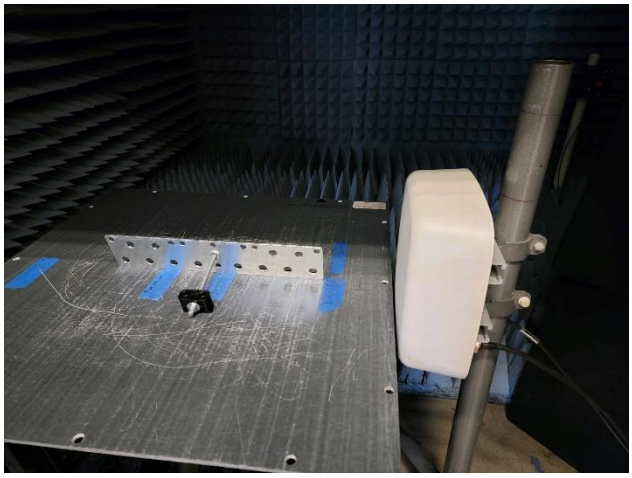
FRONT



BACK



RIGHT SIDE



LEFT SIDE