Test Specification for MBF4126

This template is for creating the test specification document for MBFs. It contains one sheet for each band used in MBF with typical test limits set. The Responsible Engineer shall complete the template for Configuration Control to add to the product BOM in AGILE. The document will be released in AGILE after approval and then can only be changed with an ECO.

To use this template save it with document number equal to the product part number with suffix TP and then complete as follows:

1. Complete the cover page
2. Delete the band sheets that do not apply
3. Make the required changes to the limits on the remaining band sheets.
4. Complete the sheet for labelling the product and ports
5. Send the sheet to Configuration Control
6. Configuration control to formally release in AGILE.

Responsible Engineer:	Alexander Garkin
Date:	17/01/2018

Product Part Number:	MBF4126
Product Description:	MBF-3709-S
Product Revision, at first release of this document:	A
Software number & revision	SW00087

The product and software revisions will not be maintained in this document. For current revision see the latest product BOM in AGILE.

a. Country of Destination	USA	
b. PSU Voltage	115VAC	
c. Standard Gain	Yes/No	Yes
d. Stadium Gain	Yes/No	No
e. Fibre Configuration standard	Yes/No	Yes
f. Fibre Configuration details if non-standard		

Special Instructions:

g.

Gain Test

Select	Test Description	Setup	Min Limit	Max Limit	Units	Comments
☑	Nominal Gain DL	935-941MHz	45	50	dB	In the setup column, specify the start & stop frequencies to use for the measurement.
☑	Gain Variation DL		0	4	dB	
☑	Nominal Gain UL	896-902MHz	45	50	dB	
☑	Gain Variation UL		0	4	dB	

Intermod or Emission Mask Test

Select	Test Description	Setup	Min Limit	Max Limit	Units	Comments
☑	Pout DL	37	36	38	dBm	
☑	IM Max DL		-150	-66	dBc	
☑	Pout UL	-17	-20	-14	dBm	
☑	IM Max UL		-150	-70	dBc	

Input Power Level

Select	Test Description	Setup	Min Limit	Max Limit	Units	Comments
☑	IPL Level Diff (-35) DL	-35	-6	6	dBm	The setup column specifies the power at repeater input. The limits are the allowable difference from the setup.
☑	IPL Level Diff (-20) DL	-20	-6	6	dBm	
☑	IPL Level Diff (-45) UL	-45	-3	3	dBm	
☑	IPL Level Diff (-35) UL	-35	-3	3	dBm	

Output Power Level

Select	Test Description	Setup	Min Limit	Max Limit	Units	Comments
☑	OPL Level Diff (25) DL	25	-3	3	dBm	The setup column specifies the power at repeater output. The limits are the allowable difference from the setup.
☑	OPL Level Diff (35) DL	35	-3	3	dBm	
☑	OPL Level Diff (0) UL	0	-6	6	dBm	

Step Attenuator

Select	Test Description	Setup	Min Limit	Max Limit	Units	Comments
☑	StepAtt Diff (5db) DL	34.5	-1	1	dB	The setup column specifies the expected power at repeater output with the given attenuation. The limits are the allowable difference from the setup.
☑	StepAtt Diff (10db) DL	29.5	-1	1	dB	
☑	StepAtt Diff (15db) DL	24.5	-1	1	dB	
☑	StepAtt Diff (5db) UL		-1	1	dB	
☑	StepAtt Diff (10db) UL		-1	1	dB	
☑	StepAtt Diff (15db) UL		-1	1	dB	

Noise Figure

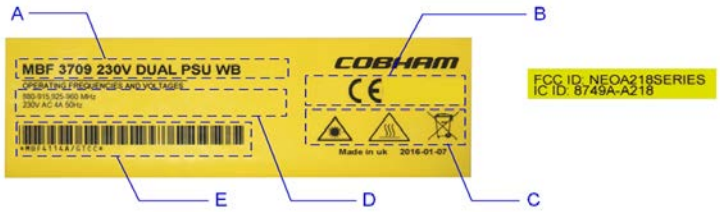
Select	Test Description	Setup	Min Limit	Max Limit	Units	Comments

☑	Marker Noise Figure UL		1	6	dB	Noise Figure calculated from PSA Marker Noise Function

Select	Test Description	Setup	Min Limit	Max Limit	Units
☑	Pilot Tone UL Availiable		YES	YES	
☑	Pilot Tone level		-23	-17	
☑	Pilot Tone Duration		25	31	

Product Labelling

MBF4126TP Rev A



Area	Text/Graphic Required in Area	Description
Area A	MBF3709 S	16 Character Sales descriptor as shown on sales datasheet (should match the IFS inventory part description)
Area B	NEOMBF3709-S	Certification reference: CE FCC ID number for USA or/and IC ID number for Canada.
Area C	WEEE, Hot surfaces, Laser	Warnings and information: WEEE, Hot surfaces, Lasers etc. where applicable.
Area D	896 - 901, 935 - 940 115V AC 4A	Operating Frequencies and Voltages.
Area E	MBF4126 A	This field is for part number and revision letter. The maximum size of this field is 9.

FCC Warning Label

Cellular ☐ Public Safety, Class B ☐

POWER		GRN	OPTO	SERVER	ALARM

MBF40OT rev E