CMU INFORMATION

Model	:	CMU2212-HV
Manufacturer	:	XYZ
Serial Number	:	123456-ABC
Agency	:	MyDOT
Location	:	Signal Shop
Tested By	:	John Doe
Notel	:	Yearly Certification Test
Note2	:	

TESTER INFORMATION

Model : ACMT-5000 Serial Number : 5000-9998 Firmware Version : 5 Software Version : ACMT-5000 Test Manager v1.3 Manufacturer : ATSI

Testing Started: Feb 24 2021 02:52 pm

CMU Memory Key = ATSI test key v1

SB#1 Valid Response Test

- CMU SB#1 Address set to 0x0F
- CMU is powered down
- CMU is powered up and reset in the No Fault state
- Valid Type 67 Command Frames were sent to CMU
- Valid Type 195 Response Frames were received from CMU
- Result = Pass

SB#1 Invalid CRC Test

- CMU SB#1 Address set to 0x0F
- CMU is powered down
- CMU is powered up and reset in the No Fault state
- Type 67 Command Frames were sent to CMU with invalid CRC
- No Type 195 Response Frames were received from CMU
- Result = Pass

SB#1 Invalid Address Test

- CMU SB#1 Address set to 0x0F
- CMU is powered down

- CMU is powered up and reset in the No Fault state
- Type 67 Command Frames were sent to CMU with invalid address
- No Type 195 Response Frames were received from CMU
- Result = Pass
- CMU SB#1 Address set to 0x10
- CMU is powered down
- CMU is powered up and reset in the No Fault state
- Type 67 Command Frames were sent to CMU with invalid address
- No Type 195 Response Frames were received from CMU
- Result = Pass
- CMU SB#1 Address set to 0x11
- CMU is powered down
- CMU is powered up and reset in the No Fault state
- Type 67 Command Frames were sent to CMU with invalid address
- No Type 195 Response Frames were received from CMU
- Result = Pass
- CMU SB#1 Address set to 0x12
- CMU is powered down
- CMU is powered up and reset in the No Fault state
- Type 67 Command Frames were sent to CMU with invalid address
- No Type 195 Response Frames were received from CMU
- Result = Pass

SB#1 Type 62 Send to Local Flash (Latch) Test

- CMU SB#1 Address set to 0x0F
- CMU is powered down
- CMU is powered up and reset in the No Fault state
- Type 62 and 67 Command Frames were sent to CMU for 5 sec
- All fault bits were cleared in the Type 62 Frames
- CMU output relay state = No Fault
- Type 62 and 67 Command Frames were sent to CMU for 5 sec
- The LFSA bit was set in the Type 62 Frames
- CMU output relay state = Fault
- Type 62 and 67 Command Frames were sent to CMU for 10 sec
- All fault bits were cleared in the Type 62 Frames
- CMU output relay state = Fault
- Result = Pass

SB#1 Type 62 Send to Local Flash (Non-Latch) Test

- CMU SB#1 Address set to 0x0F
- CMU is powered down

- CMU is powered up and reset in the No Fault state
- Type 62 and 67 Command Frames were sent to CMU for 5 sec
- All fault bits were cleared in the Type 62 Frames
- CMU output relay state = No Fault
- Type 62 and 67 Command Frames were sent to CMU for 5 sec
- The NFSA bit was set in the Type 62 Frames
- CMU output relay state = Fault
- Type 62 and 67 Command Frames were sent to CMU
- All fault bits were cleared in the Type 62 Frames
- CMU output relay state = No Fault
- Result = Pass

Local Flash Status Fault Test

- CMU is powered up and reset in the No Fault state
- LF Status is set to 48 Vdc
- LF Status is set to 38 Vdc for 433ms
- LF Status is set to 48 Vdc
- After 100ms delay, CMU output relay state is read
- CMU output relay state = Fault
- Result = Pass

Local Flash Status No Fault Test

- CMU is powered up and reset in the No Fault state
- LF Status is set to 48 Vdc
- LF Status is set to 38 Vdc for 190ms
- LF Status is set to 48 Vdc
- After 100ms delay, CMU output relay state is read
- CMU output relay state = No Fault
- Result = Pass

CB Trip Status Fault Test

- CMU is powered up and reset in the No Fault state
- CB Trip Status is set to 48 Vdc
- CB Trip Status is set to 38 Vdc for 433ms
- CB Trip Status is set to 48 Vdc
- After 100ms delay, CMU output relay state is read
- CMU output relay state = Fault
- Result = Pass

CB Trip Status No Fault Test

- CMU is powered up and reset in the No Fault state
- CB Trip Status is set to 48 Vdc

- CB Trip Status is set to 38 Vdc for 190ms
- CB Trip Status is set to 48 Vdc
- After 100ms delay, CMU output relay state is read
- CMU output relay state = No Fault
- Result = Pass

MC Coil Status Test

- CMU is powered up and reset in the No Fault state
- MC Coil Status is set to 38 Vdc
- Type 1 command frames received from the CMU for HDSP1-16
- Type 129 response frames sent for 3 sec with all signals set to 0 $\ensuremath{\mathsf{Vrms}}$
- CMU output relay state = No Fault
- Result = Pass

MC Secondary Status Test

- CMU is powered up and reset in the No Fault state
- CMU SB#1 Address set to 0x0F
- MC Secondary Status input set to 90 Vrms
- Type 67 Command Frames were sent to CMU
- Type 195 Response Frames from CMU indicate MC Secondary is active
- MC Secondary Status input is set to 69 Vrms
- Type 67 Command Frames were sent to CMU
- Type 195 Response Frames from CMU indicate MC Secondary not active
- Result = Pass

FTR Coil Status Test

- CMU is powered up and reset in the No Fault state
- CMU SB#1 Address set to 0x0F
- FTR Coil Status input set to 48 Vdc
- Type 67 Command Frames were sent to CMU
- Type 195 Response Frames from CMU indicate FTR Coil is active
- FTR Coil Status input is set to 38 Vdc
- Type 67 Command Frames were sent to CMU
- Type 195 Response Frames from CMU indicate FTR Coil not active
- Result = Pass

Door Switch Front Input Test

- CMU is powered up and reset in the No Fault state
- CMU SB#1 Address set to 0x0F
- Door Switch Front input set to 15 Vdc
- Type 67 Command Frames were sent to CMU
- Type 195 Response Frames from CMU indicate Door Switch Front is active

- Door Switch Front input is set to 9 Vdc Channel 1-16 Channel 17-32 - Type 67 Command Frames were sent to CMU - Type 195 Response Frames from CMU indicate Door Switch Front not active .R.RRRRRRRRRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - Result = Pass \therefore Y = 26 Vrms, \therefore = 0 Vrms G.G..... G = 26 Vrms, . = 0 Vrms Door Switch Rear Input Test - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - CMU SB#1 Address set to 0x0F - Door Switch Rear input set to 15 Vdc - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 67 Command Frames were sent to CMU - Type 195 Response Frames from CMU indicate Door Switch Rear is active - Type 129 response frames sent with the following data for 500ms: - Door Switch Rear input is set to 9 Vdc Channel 1-16 - Type 67 Command Frames were sent to CMU Channel 17-32 - Type 195 Response Frames from CMU indicate Door Switch Rear not active .RR.RRRRRRRRRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - Result = Pass G..G... G = 26 Vrms, I = 0 Vrms GRN Conflict Detect Test - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: Channel 1-16 Channel 17-32 GG...G = 26 Vrms, = 0 Vrms.RRR.RRRRRRRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault G...G. G = 26 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: ..RRRRRRRRRRRR RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y = 26 Vrms, = 0 VrmsChannel 1-16 Channel 17-32 GG..... G = 26 Vrms, . = 0 Vrms Y = 26 Vrms, z = 0 Vrms G....G. G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - Result = Pass - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state

- Type 1 command frames received from the CMU for HDSP1-16 - CMU is powered up and reset in the No Fault state - Type 129 response frames sent with the following data for 500ms: - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: Channel 1-16 Channel 17-32 G...,G. G = 26 Vrms, . = 0 Vrms .RRRRRRRR.RRRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRR.RRRRRRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Channel 17-32 Channel 1-16 .RRRRRRRRR.RRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 VrmsY = 26 Vrms, . = 0 Vrms G...G. G = 26 Vrms, I = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRR.RRRRRRR RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault G.....G....G...G...G...G..G. - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: Channel 1-16 Channel 17-32 G.....G.....G. Vrms, . = 0 Vrms .RRRRRRRRRR.RR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass

G..... G. ... G. ... G. G. = 26 Vrms, ... = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRR.R RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 G..., G = 26 Vrms, I = 0 Vrms .RRRRRRRRRRRR RR.RRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y = 26 Vrms, = 0 Vrms- CMU output relay state = Fault G..... G = 26 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRRR. RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms \therefore Y = 26 Vrms, \therefore = 0 Vrms Channel 1-16 Channel 17-32 .RRRRRRRRRRRRR RRR.RRRRRRRRRR R = 26 Vrms, . = 0 Vrms G.....GGG = 26 Vrms, . = 0 Vrms Y = 26 Vrms, = 0 VrmsG..... G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: Y = 26 Vrms, = 0 VrmsChannel 1-16 Channel 17-32 G..., C..., G..., G.., G..., G.., G..,.RRRRRRRRRRRRR RRRR.RRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault G....G = 26 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 - Type 129 response frames sent with the following data for 500ms: Channel 17-32 .RRRRRRRRRRRR R.RRRRRRRRRRR R = 26 Vrms, . = 0 VrmsY = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32

.RRRRRRRRRRRRRR RRRRR.RRRRRRRRR R = 26 Vrms, . = 0 Vrms	
	Channel 1-16 Channel 17-32
G G = 26 Vrms, . = 0 Vrms	.RRRRRRRRRRRRRRR RRRRRRRRRRRRRRRRRRRRR
	Y = 26 Vrms, . = 0 Vrms
- CMU output relay state = Fault	G G = 26 Vrms, . = 0 Vrms
- Result = Pass	
	- CMU output relay state = Fault
- CMU is powered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMU for HDSP1-16	
- Type 129 response frames sent with the following data for 500ms:	- CMU is powered up and reset in the No Fault state
II	- Type 1 command frames received from the CMU for HDSP1-16
Channel 1-16 Channel 17-32	- Type 129 response frames sent with the following data for 500ms:
RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	
V = 26 Vrms = 0 Vrms	Channel 1-16 Channel 17-32
G = -26 Vrms = -0 Vrms	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
$\mathbf{G}_{1} = \mathbf{G}_{1} $	X = 26 Vrms = 0 Vrms
OWI output volou atoto - Poult	$C \qquad \qquad C \qquad $
- CMO OULPUL IELAY SLALE = FAULL	G_{1}
- Result = Pass	(MIL autout vales state . Dault
OWNED is necessarily and warst in the Ma Dault state	- CMU Output relay state = Fault
- CMU is powered up and reset in the No Fault state	- Result = Pass
- Type I command frames received from the CMU for HDSPI-16	
- Type 129 response frames sent with the following data for 500ms:	- CMU is powered up and reset in the No Fault state
	- Type 1 command frames received from the CMU for HDSP1-16
Channel 1-16 Channel 17-32	- Type 129 response frames sent with the following data for 500ms:
.RRRRRRRRRRRRRR RRRRRRR.RRRRRRRR R = 26 Vrms, . = 0 Vrms	
Y = 26 Vrms, . = 0 Vrms	Channel 1-16 Channel 17-32
GG = 26 Vrms, = 0 Vrms	.RRRRRRRRRRRRRRR RRRRRRRRRRRRRRRRRRRRR
- CMU output relay state = Fault	G G = 26 Vrms, . = 0 Vrms
- Result = Pass	
	- CMU output relay state = Fault
- CMU is powered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMU for HDSP1-16	
- Type 129 response frames sent with the following data for 500ms:	- CMU is powered up and reset in the No Fault state
	- Type 1 command frames received from the CMU for HDSP1-16
Channel 1-16 Channel 17-32	- Type 129 response frames sent with the following data for 500ms:
.RRRRRRRRRRRRRRR RRRRRRRRRRRRRRRRRRRRR	
	Channel 1-16 Channel 17-32
G G = 26 Vrms, . = 0 Vrms	.RRRRRRRRRRRRRRR RRRRRRRRRRRRRRRRRRRRR
- CMU output relay state = Fault	G G = 26 Vrms, . = 0 Vrms
- Result = Pass	
	- CMU output relay state = Fault
- CMU is powered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMU for HDSP1-16	
- Type 129 response frames sent with the following data for 500ms:	- CMU is powered up and reset in the No Fault state

- Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Type 129 response frames sent with the following data for 500ms: - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: G.....G. = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 ..RRRRRRRRRRRR RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass YY.... Y = 26 Vrms, z = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Type 129 response frames sent with the following data for 500ms: - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16Y = 26 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 500ms: G...G = 26 Vrms, = 0 VrmsChannel 1-16 Channel 17-32 .R.RRRRRRRRRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass Y.Y... Y = 26 Vrms, z = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Type 129 response frames sent with the following data for 500ms: - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: G.....G G = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault .RR.RRRRRRRRRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms - Result = Pass Y...Y... Y = 26 Vrms, z = 0 Vrms G = 26 Vrms, . = 0 Vrms YEL Conflict Detect Test - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: ..RRRRRRRRRRRR RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms YY.... Y = 26 Vrms, z = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, . = 0 Vrms .RRR.RRRRRRRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms $Y \dots Y \dots Y = 26 \text{ Vrms}, = 0 \text{ Vrms}$

.RRRRRRR.RRRRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: Y....Y.....Y. Y. = 26 Vrms, ... = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, . = 0 Vrms .RRRRRRR.RRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, ... = 0 Vrms G = 26 Vrms, .. = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRR.RRRRRRRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms $Y \dots Y \dots Y = 26 \text{ Vrms}, = 0 \text{ Vrms}$ Channel 1-16 Channel 17-32 G = 26 Vrms, . = 0 Vrms Y....Y...Y...Y...Y = 26 Vrms, ... = 0 Vrms - CMU output relay state = Fault G = 26 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - Result = Pass - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: Y....Y...Y...Y = 26 Vrms, ... = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, = 0 Vrms.RRRRRRRRR.RRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms G = 26 Vrms, .. = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms:

Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRR.RRR RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Υ....Υ...Υ Y = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, .. = 0 Vrms .RRRRRRRRRRRRR .RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y.... Y. Y = 26 Vrms, Y = 0 Vrms G = 26 Vrms, .. = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: Channel 1-16 Channel 17-32 .RRRRRRRRRR.RR RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y.....Y.. Y. Y. Y = 26 Vrms, ... = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, = 0 Vrms.RRRRRRRRRRRR R.RRRRRRRRRR R = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - CMU is powered up and reset in the No Fault state - Type 129 response frames sent with the following data for 500ms: - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRR.R RRRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y. Y = 26 Vrms, z = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, = 0 Vrms.RRRRRRRRRRRR RR.RRRRRRRRRR R = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault G = 26 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRRR. RRRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 .RRRRRRRRRRRRR RRR.RRRRRRRRRR R = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms Y.... Y. Y = 26 Vrms, Y = 0 Vrms - CMU output relay state = Fault G = 26 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass

- Type 1 command frames received from the CMU for HDSP1-16

- CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRRRRR RRRR.RRRRRRRRR R = 26 Vrms, . = 0 Vrms Y.... Y. Y = 26 Vrms, Y = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, = 0 VrmsY....Y = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault G = 26 Vrms, = 0 Vrms- Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRRR RRRRR.RRRRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, . = 0 Vrms .RRRRRRRRRRRRR RRRRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRRRR RRRRRRRRRRRR R = 26 Vrms, . = 0 Vrms Y.... Y. Y = 26 Vrms, Y = 0 Vrms Channel 17-32 Channel 1-16 G = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 500ms: .RRRRRRRRRRRR RRRRRRR.RRRRRRR R = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 G = 26 Vrms, . = 0 Vrms Y....Y = 26 Vrms, . = 0 Vrms

..... G = 26 Vrms, . = 0 Vrms Y.....Y Y = 26 Vrms, . = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 500ms: Multiple Indication Detect Test Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Y....Y = 26 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 450ms: G = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault Y..... Y = 26 Vrms, . = 0 Vrms - Result = Pass G.... G = 26 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Type 129 response frames sent with the following data for 500ms: - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Y....Y = 26 Vrms, = 0 Vrms - Type 129 response frames sent with the following data for 450ms: G = 26 Vrms, .. = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault - Result = Pass Y = 26 Vrms, = 0 Vrms.G..... G = 26 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Type 129 response frames sent with the following data for 500ms: - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Y....Y. Y = 26 Vrms, z = 0 Vrms - Type 129 response frames sent with the following data for 450ms: G = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault - Result = Pass ...Y.....G..... G = 26 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Type 129 response frames sent with the following data for 500ms: - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state

- Type 1 command frames received from the CMU for HDSP1-16 - CMU is powered up and reset in the No Fault state - Type 129 response frames sent with the following data for 450ms: - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms: ...Y.....Y = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms:Y.....Y. Y = 26 Vrms, .. = 0 Vrms Channel 17-32 Channel 1-16Y....Y....Y...Y...Y. = 26 Vrms, ... = 0 VrmsG = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms:Y.....Y. Y = 26 Vrms, ... = 0 Vrms Channel 1-16 Channel 17-32Y....Y....Y...Y. Y = 26 Vrms, ... = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms:Y....Y. Y = 26 Vrms, ... = 0 Vrms Channel 1-16 Channel 17-32G.....G.G. - 26 Vrms, . = 0 Vrms \dots Y = 26 Vrms, μ = 0 Vrms - CMU output relay state = Fault - Result = Pass

.....G.G. G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms: Channel 1-16 Channel 17-32G = 26 Vrms, . = 0 VrmsYYYY = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 - Type 129 response frames sent with the following data for 450ms: Channel 17-32 Channel 1-16 Channel 17-32G....G....G...G = 26 Vrms, .. = 0 Vrms G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms: \dots Y = 26 Vrms, = 0 Vrms Channel 1-16 Channel 17-32G = 26 Vrms, . = 0 Vrms \ldots G = 26 Vrms, c = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - CMU is powered up and reset in the No Fault state - Type 129 response frames sent with the following data for 450ms: - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 - Type 129 response frames sent with the following data for 450ms: Channel 17-32Y.Y.Y = 26 Vrms, ... = 0 Vrms Channel 1-16 Channel 17-32

RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	
	Channel 1-16 Channel 17-32
G = 26 Vrms, . = 0 Vrms	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
	YY. Y = 26 Vrms, = 0 Vrms
- CMU output relay state = Fault	
- Result = Pass	
	- CMU output relay state = Fault
- CMU is powered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMU for HDSP1-16	
- Type 129 response frames sent with the following data for 450ms:	- CMU is powered up and reset in the No Fault state
	- Type 1 command frames received from the CMU for HDSP1-16
Channel 1-16 Channel 17-32	- Type 129 response frames sent with the following data for 450ms:
RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	
Y = 26 Vrms, = 0 Vrms	Channel 1-16 Channel 17-32
G = 26 Vrms, = 0 Vrms	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
······································	Y = 26 Vrms, = 0 Vrms
- CMIL output relay state = Fault	G = 26 Vrms
- Result = Pass	
	- CMIL output relay state = Fault
- CMU is powered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMU for HDSP1-16	
- Type 129 response frames sent with the following data for 450ms:	- CMIL is powered up and reset in the No Fault state
-17	- Type 1 command frames received from the CMU for HDSP1-16
Channel 1-16 Channel 17-32	- Type 129 response frames sent with the following data for 450ms:
RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	
Y = 26 Vrms = 0 Vrms	Channel 1-16 Channel 17-32
$G \qquad G = 26 \text{ Vrms} = 0 \text{ Vrms}$	REPRESENTED TO CHARMET 17 52 REPRESENTED TO CHARMET 17 52 REPRESENTED TO CHARMET 17 52
	$V \qquad V = 26 \text{ Vrms} = 0 \text{ Vrms}$
- CMIL output relay state = Fault	G = 26 Vrms, = 0 Vrms
- Regult = Dags	C = 20 vimb f = 0 vimb
	- (MIL output relay state = Fault
- CMIL is nowered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMII for HDSP1-16	Rebuild - Tubb
- Type 129 response frames sent with the following data for 450ms:	- CMII is nowered up and reset in the No Fault state
Type 129 response frames sene with the following data for 150ms.	- Type 1 command frames received from the CMI for HDSD1-16
Channel 1-16 Channel 17-32	- Type 129 response frames sent with the following data for 450ms:
REPRERERERERERERERERERERERERERERERERERE	Type 125 responde frames bene with the fortowing data for found.
Y = 26 Vrms, = 0 Vrms	Channel 1-16 Channel 17-32
$G \qquad G = 26 \text{ Vrms} = 0 \text{ Vrms}$	REPRESERVED TO COMMINST IN SECOND REPRESERVED AND A SECOND REPRESERVEDA AND A SECOND REPRESERVEDA A SECONDA
$\mathbf{G} = \mathbf{D} \mathbf{V} \mathbf{I} \mathbf{m} \mathbf{D} \mathbf{V} \mathbf{I} \mathbf{m} \mathbf{D}$	V = 26 Vrms = 0 Vrms
- CMU output relay state = Fault	$G_{} = 26 \text{ Vrms}$
- Result = Pass	$\mathbf{G} = 20 \mathbf{V} \mathbf{I} \mathbf{m} \mathbf{S} \mathbf{I} \mathbf{m} \mathbf{S} \mathbf{I} \mathbf{m} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{m} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{m} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{S} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} I$
	- CMII output relay state = Fault
- CMIL is powered up and reset in the No Fault state	- Result = Pass
- Type 1 command frames received from the CMU for HDSP1-16	
- Type 129 response frames sent with the following data for 450ms:	- CMIL is powered up and reset in the No Fault state
-iff response frames sens area one refronting data for 150ms.	

- Type 1 command frames received from the CMU for HDSP1-16 - CMU is powered up and reset in the No Fault state - Type 129 response frames sent with the following data for 450ms: - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms: Channel 1-16 Channel 17-32G = 26 Vrms, . = 0 Vrms RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 26 Vrms, . = 0 VrmsY. Y = 26 Vrms, . = 0 VrmsG = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 450ms: Channel 17-32 Channel 1-16G. = 26 Vrms, . = 0 VrmsY Y = 26 Vrms, . = 0 VrmsG G = 26 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 450ms: 15 Vrms Ignore Test Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16Y....Y = 26 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 1000ms:G = 26 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 - CMU output relay state = Fault RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - Result = Pass y = 14 Vrms, z = 0 Vrms уууууууууууууу уууууууууууууу - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = No Fault - Result = Pass - Type 129 response frames sent with the following data for 450ms: Channel 1-16 Channel 17-32 Lack of Signal Detect TestY...Y = 26 Vrms, .. = 0 Vrms - CMU is powered up and reset in the No Fault stateG = 26 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32

Channel 1-16 Channel 17-32 G = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: Channel 1-16 Channel 17-32 G = 120 Vrms, .. = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms - CMU output relay state = Fault G = 120 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRrRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, .. = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms - CMU output relay state = Fault G = 120 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRRrRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - Result = Pass - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state

- Type 1 command frames received from the CMU for HDSP1-16 - CMU is powered up and reset in the No Fault state - Type 129 response frames sent with the following data for 1533ms: - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms G = 120 Vrms, .. = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 17-32 Channel 1-16 G = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRRRRRRRRRRRRR RRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault G = 120 Vrms, .. = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: Channel 1-16 Channel 17-32 G = 120 Vrms, .. = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRR R = 120 Vrms, r = 49 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass

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RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRRRRRRRRRRRR RRRRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, .. = 0 Vrms - CMU output relay state = Fault G = 120 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: RRRRRRRRRRRRR RRRRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32 G = 120 Vrms, .. = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms - CMU output relay state = Fault G = 120 Vrms, . = 0 Vrms - Result = Pass - CMU output relay state = Fault - CMU is powered up and reset in the No Fault state - Result = Pass - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 Channel 1-16 Channel 17-32 - Type 129 response frames sent with the following data for 1533ms: Channel 1-16 Channel 17-32 G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = Fault - Result = Pass - CMU output relay state = Fault - Result = Pass - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 1533ms: - CMU is powered up and reset in the No Fault state

- Type 1 command frames received from the CMU for HDSP1-16Y = 120 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 1533ms: G = 120 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, r = 49 Vrms - CMU output relay state = Fault - Result = Pass G = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - CMU output relay state = Fault - Result = Pass - Type 129 response frames sent with the following data for 3000ms: Lack of Signal Ignore Test Channel 1-16 Channel 17-32 R.RRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 .G..... G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 700ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 rrrrrrrrrrr R = 120 Vrms, r = 49 Vrms Channel 1-16 Channel 17-32Y = 120 Vrms, .. = 0 Vrms R.RRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms .Y.....Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - CMU output relay state = No Fault - Result = Pass - Type 129 response frames sent with the following data for 3000ms: Short YEL Clearance Detect Test Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass - CMU is powered up and reset in the No Fault state G....G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RR.RRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, z = 0 Vrms Y..... Y = 120 Vrms, . = 0 Vrms ..G..... G = 120 Vrms, . = 0 Vrms G = 120 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RR.RRRRRRRRRRR RRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms

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- Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass RRRRRR.RRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 17-32 Channel 1-16 Channel 1-16 RRRRRRR.RRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Channel 17-32 Y = 120 Vrms, . = 0 Vrms R = 120 Vrms, = 0 Vrms.....Y.....Y.Y. Y = 120 Vrms, ... = 0 VrmsG..... G = 120 Vrms, = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 R = 120 Vrms, = 0 Vrms....Y....Y Y = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 - Result = Pass Channel 17-32 RRRRRRR RRRRRRRR RRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 RRRRRRRR.RRRRR RRRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32 RRRRRRR.RRRRRRRR RRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 VrmsY....Y. Y.Y. Y = 120 Vrms, .. = 0 Vrms G = 120 Vrms, . = 0 VrmsG..... G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 RRRRRRRR.RRRRR RRRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32Y....Y....Y. V = 120 Vrms, .. = 0 Vrms G = 120 Vrms, . = 0 Vrms

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- CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass Y = 120 Vrms, = 0 Vrms - CMU is powered up and reset in the No Fault state G = 120 Vrms, . = 0 VrmsG....G... - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR. RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms RRRRRRRRRRR.RR RRRRRRRRRRRRR R = 120 Vrms, . = 0 VrmsY...Y.. Y = 120 Vrms, = 0 Vrms G = 120 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR. RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass - CMU is powered up and reset in the No Fault stateG.G. G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRRR .RRRRRRRRRRRR R = 120 Vrms, . = 0 VrmsY.Y.Y = 120 Vrms, ... = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRRR .RRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRRR RRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms:

Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RR.RRRRRRRRRR R = 120 Vrms, . = 0 VrmsY....Y. Y = 120 Vrms, .. = 0 Vrms Y = 120 Vrms, = 0 Vrms G = 120 Vrms, = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 17-32 - Result = Pass Channel 1-16 RRRRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, G = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 17-32 Channel 1-16 - Result = Pass RRRRRRRRRRRR R.RRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRR.RRRRRRRRRR R = 120 Vrms, . = 0 Vrms Channel 1-16 Channel 17-32Y = 120 Vrms, .. = 0 Vrms RRRRRRRRRRRR R.RRRRRRRRRRR R = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRR.RRRRRRRRRR R = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass RRRRRRRRRRRRR RR.RRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32

RRRRRRRRRRRRR RRRR.RRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRRR RRRRRR RRRRRRRRRRR R = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRR RRRR.RRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 VrmsҮ..... Y = 120 Vrms, . = 0 VrmsG..... G = 120 Vrms, = 0 Vrms G = 120 Vrms, = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32Y.....Y.....Y. Y = 120 Vrms, ... = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state Y = 120 Vrms, = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass RRRRRRRRRRRRR RRRRR.RRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault stateG = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRRRR RRRRR.RRRRRRRRRR R = 120 Vrms, = 0 Vrms..... Y = 120 Vrms, . = 0 Vrms Y = 120 Vrms, = 0 VrmsG = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32Y = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, .. = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32

.....Y = 120 Vrms, .. = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, .. = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 - Result = Pass Channel 17-32 Y = 120 Vrms, z = 0 Vrms - CMU is powered up and reset in the No Fault state - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRR RRRRRRR R = 120 Vrms, . = 0 VrmsG = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 VrmsY = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 17-32 Channel 1-16 RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state Y = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 - Result = Pass Channel 17-32 RRRRRRRRRRRRR RRRRRRRR.RRRRRR R = 120 Vrms, . = 0 Vrms Y = 120 Vrms, z = 0 Vrms - CMU is powered up and reset in the No Fault stateG = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32

.....G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32Y = 120 Vrms, .. = 0 VrmsG. . G = 120 Vrms, . = 0 VrmsY....Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 VrmsY...Y = 120 Vrms, . = 0 Vrms Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 - CMU is powered up and reset in the No Fault state Y = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault Channel 1-16 Channel 17-32 - Result = Pass - CMU is powered up and reset in the No Fault stateG = 120 Vrms, . = 0 Vrms - Type 1 command frames received from the CMU for HDSP1-16 - Type 129 response frames sent with the following data for 3000ms: - Type 129 response frames sent with the following data for 2500ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32 Y = 120 Vrms, = 0 Vrms.....Y = 120 Vrms, . = 0 VrmsG. G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 2500ms: - Type 129 response frames sent with the following data for 3000ms: Channel 1-16 Channel 17-32 Channel 1-16 Channel 17-32Y. Y = 120 Vrms, . = 0 Vrms RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms G = 120 Vrms, . = 0 Vrms - Type 129 response frames sent with the following data for 3000ms: - CMU output relay state = Fault - Result = Pass Channel 1-16 Channel 17-32 RRRRRRRRRRRRR RRRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms - CMU is powered up and reset in the No Fault state

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..... G = 120 Vrms, . = 0 Vrms
- CMU output relay state = Fault
- Result = Pass
- CMU is powered up and reset in the No Fault state
- Type 1 command frames received from the CMU for HDSP1-16
- Type 129 response frames sent with the following data for 3000ms:
 Channel 1-16
             Channel 17-32
 ..... Y = 120 Vrms, . = 0 Vrms
 .....G G = 120 Vrms, . = 0 Vrms
- Type 129 response frames sent with the following data for 2500ms:
 Channel 1-16
             Channel 17-32
 .....Y Y = 120 Vrms, .. = 0 Vrms
 ..... G = 120 Vrms, . = 0 Vrms
- Type 129 response frames sent with the following data for 3000ms:
 Channel 1-16
             Channel 17-32
 RRRRRRRRRRRRRR RRRRRRRRRRRRR R = 120 Vrms, . = 0 Vrms
 ..... Y = 120 Vrms, . = 0 Vrms
 ..... G = 120 Vrms, . = 0 Vrms
- CMU output relay state = Fault
- Result = Pass
Testing Completed: Feb 24 2021 03:08 pm
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No failures