

Clarification Request

References: Addendum fix2 to BTL Test Package 26.0:

BTL-26.0 fix2-3: Lighting Command Operation RAMP_TO Test[BTLWG-1658]

Date of BTL-WG Response: November 20, 2025

Background: 135.1-2023 - 7.3.2.39.5

Problem:

Incorrect test specification in steps 10 and 24.

7.3.2.39.5 Lighting Command Operation RAMP_TO Test

Purpose: To verify the correct operation of RAMP_TO lighting command by observing the value of Present_Value, In_Progress and Tracking_Value.

Test Concept: The TD writes to Present_Value at each end of the range (i.e., 0% or 100%), and then writes to the Lighting Command Operation with RAMP_TO with a slow enough ramp rate to allow In_Progress and Tracking_Value to be observed while set to RAMP_ACTIVE. The Tracking_Value will be checked at the end of the ramp to verify that it tracked the target level. The IUT shall be tested for ramp up (0% to 100%) and ramp down (100% to 0%).

Configuration Requirements: O1 shall be configured such that all slots in the Priority_Array numerically less than PTY1 have a value of NULL and no internal algorithms are issuing commands to O1 at a priority numerically less than or equal to PTY1. V1 > 1 and V2 < 100%

Test Steps:

- Start with 0% Present_Value to test ramp up
 1. WRITE Present_Value = 0, ARRAY INDEX = PTY1
 2. VERIFY Present_Value = 0
 3. WAIT Internal Processing Fail Time
 4. VERIFY Tracking_Value = 0
- Write a RAMP_TO command (operation, target-value, priority, ramp-rate)
 5. WRITE Lighting_Command = (RAMP_TO, V1, PTY1, any valid rate)
 6. WAIT Internal Processing Fail Time
 7. VERIFY Priority_Array = V1, ARRAY INDEX = PTY1
 8. VERIFY Present_Value = V1
- Check In_Progress while ramping up
 9. VERIFY In_Progress = RAMP_ACTIVE
- Make sure that Tracking_Value increases with the ramp-rate
 10. WHILE (In_Progress <> IDLE == RAMP_ACTIVE) DO {
 11. VERIFY Tracking_Value > 0 < V1
 12. CHECK (Tracking_Value is increasing with the ramp-rate)}
- When ramping up is completed, check In_Progress and Tracking_Value

13. VERIFY In_Progress = IDLE
14. VERIFY Tracking_Value = V1

-- Now repeat the test with 100% Present_Value to test ramp down
15. WRITE Present_Value = 100, ARRAY INDEX = PTY1
16. VERIFY Present_Value = 100
17. WAIT Internal Processing Fail Time
18. VERIFY Tracking_Value = 100

-- Write a RAMP_TO command (operation, target-value, priority, ramp-rate)
19. WRITE Lighting_Command = (RAMP_TO, V2, PTY1, any valid rate)
20. WAIT Internal Processing Fail Time
21. VERIFY Priority_Array = V2, ARRAY INDEX = PTY1
22. VERIFY Present_Value = V2

-- Check In_Progress while ramping up
23. VERIFY In_Progress = RAMP_ACTIVE,

-- Make sure that Tracking_Value decreases with the ramp-rate
24. WHILE (In_Progress \neq RAMP_ACTIVE == RAMP_ACTIVE) DO {
25. VERIFY Tracking_Value < 100
26. VERIFY Tracking_Value > V2
27. CHECK (Tracking_Value is decreasing with the ramp-rate)}

-- Check In_Progress and Tracking_Value
28. VERIFY In_Progress = IDLE
29. VERIFY Tracking_Value = V2

Question:

Should steps 10 and 24 be changed as shown above?

Response:

Yes