



## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

System Name: FTIR

System ID:

# **OPERATIONAL QUALIFICATION**

# FOR

# **COMPUTER SYSTEM**

# OF

# FTIR

System Name	FTIR
System ID	
Location	Instrument Lab
Effective Date	

**Document No.:** 

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## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

#### System Name: FTIR

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## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

#### System Name: FTIR

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#### 1. PRE-APPROVALS:

The signature listed below indicates the pre-approval of this operational qualification. This approval is joint responsibility of listed functional areas.

	DOCUMENT DEVELOPMENT	SIGN / DATE
Name	:	
Designation	:	

DOCUMENT REVIEW AND APPROVAL (M/S)			
Sign / Date	•		
Name	:		
Designation	:		
	Engineering		
Sign / Date	•		
Name	:		
Designation	:		
	IT		
Sign / Date	•		
Name	:		
Designation	:		
	Quality Control		

DOCUMENT AUTHORIZATION (M/S)			
Sign / Date	:		
Name	:		
Designation	:		
	Quality Assurance		



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## 2. SIGNATURE OF EXECUTOR:

All the executer involved in this document have to sign within prescribed format given below.

#### M/s .....

Name	Designation	Signature	Initial	Date

## M/s .....

Name	Designation	Signature	Initial	Date

#### 3. REVISION HISTORY:

Date	Supersedes	Reason for Revision



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#### 4. OBJECTIVE:

The objective of the system requirement specification defines the requirements of hardware software, functions and documentation for the Computer System (FTIR) installed at M/s. ...... This document will be cross-referenced with the relevant system specification to ensure that the system specifications have been met according to M/s. ...... requirements.

#### 5. SCOPE:

This document is applicable to validation of Hardware and Software of computer system installed at M/s. ..... Quality control department. This system requirement specification shall define the documentation, references and acceptance criteria to establish that the validation of Hardware and Software of Computer system after modification is installed in accordance with the guidelines laid down by the manufacturer of the system.

#### 6. SYSTEM DESCRIPTION:

Computer system of FTIR defines the controlling of analytical instrument connected to the system. It controlled the process of instrument connected to it by the software installed in the CS. The operator interface is carried out by CS screen. The CS is used to feed required parameters and set points in the system during operation. The system is connected to data server for printing and data backup. The system is secured by IT through password only within the system.



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### 7. ROLE AND RESPONSIBILITY:

The validation team comprising of representative from each of the following departments should be responsible for overall compliance with this validation plan.

Department	Responsibilities				
Validation	To collect the necessary data for operational qualification activities.				
Agency ()	> To prepare and execute the operational qualification in coordination with				
()	engineering, validation and quality assurance team.				
	Comply with regulatory / Guidelines / Standards / validation plan requirements				
	throughout the validation life cycle.				
	> To submit operational qualification for approval.				
Engineering	> To provide the necessary data for operational qualification activities.				
(M/s)	> To review the operational qualification.				
IT	> To provide the necessary data for operational qualification activities.				
( <b>M</b> /s)	> To review the operational qualification.				
Quality Control	> To provide the necessary data for operational qualification activities.				
( <b>M/s.</b> )	<ul> <li>To review the operational qualification.</li> </ul>				
	<b>1</b> • • • • <b>1</b> • • • • •				
Quality					
Assurance	To approve and authorized the operational qualification.				
(M/s)					



## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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#### 8. REFERENCES:

The publication listed below form part of this reference documents. Each publication shall have latest revision in effect on the date of this document is approved for execution.

	Good Automated Manufacturing Practices, Version 5, Guideline		
GAMP 5	Document for Automated Systems from International Society of		
	Pharmaceutical Engineering		
21 Code of Federal	Current Good Manufacturing Practice in Manufacturing,		
<b>Regulations (CFR), Part 210</b>	Processing, Packing, or Holding off Drugs; General		
21 Code of Federal	Current Good Manufacturing Practice for finished Pharmacauticals		
Regulations (CFR), Part 211	Current Good Manufacturing Practice for finished Pharmaceuticals		
21 Code of Federal	21 Code of Federal Regulations (CFR), Part 11		
	Electronic Records, Electronic Signatures, Final Rule Electronic		
<b>Regulations (CFR), Part 11</b>	Submissions; Establishment of Public Docket, Notice		
ІСН Q9	International Conference of Harmonization (ICH) quality risk		
	assessment Q9		
FUCMD	Laying down the principles and guidelines of GMP in respect of		
EU GMP	medicinal products for human use.		
WHO	Appendix 5, validation of computerized systems.		



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#### 9. DOCUMENTATION PROCEDURE:

- Qualification activities will be performed as defined in the approved document.
- All documentation will be completed during the execution of the qualification.
- Recording of information will be made in permanent ink.
- Fill out complete information in the verification table provided.
- Do not keep any space blank. Mark blank space with a single line throughout the appropriate space with mentioning NA (Not Applicable) and put initial and date.
- Correct the mistakes by drawing a single line through the incorrect data, recording the correct information and then initial sign and date the change.

#### **10. QUALIFICATION COMPLETION AND APPROVAL:**

- Verify that all tests required by qualification are completed and attached.
- Verify that all amendments and discrepancies are documented, approved and attached.
- If all items in the qualification for the Computer System Based system (FTIR) have been reviewed and found to be acceptable, sign the corresponding block in the qualification completion and approval form.

#### **11. ACCEPTANCE CRITERIA:**

- Installation completion as per manufacturer's recommendations & cGMP requirements.
- Installation of major components as per the design specifications.
- The supply of all necessary documentation from manufacturer.
- The system is operating as intended and is under state of control.
- Operational features meet system requirements and system specifications.



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#### **12. OPERATIONAL VERIFICATION TEST:**

#### 12.1 Verification of Field Instruments Calibration

Objective	:	To verify the field instruments calibration.		
Tools Required	:	Not Applicable		
Procedure	:	1. Verify Instruments Name.		
		2. Verify Instruments ID.		
		3. Verify Instruments Calibration Date.		
		4. Verify Instruments Calibration Due Date.		
Acceptance	:	Fields instruments should be calibrated.		
Criteria				

#### **Verification Table:**

Instruments Name	Instruments ID	Calibration Done On	Calibration Due On	Verified (Yes/No)	Discrepancy? (Y/N)



## OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM

System Name: FTIR		System ID:	
Remarks:			
Meet the acceptance Criteria [	] Yes [	] No	Reference Attachment No. [ ]
Checked by :			Date:
Verified by :			Date:



## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

#### System Name: FTIR

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## 12.2 Verification of Windows Security:

Objective	:	To verify the Windows security as defined.
Tools Required	:	Not Applicable
Procedure	:	1. Check all the test given in verification table.
		2. Record the result in verification table.
Acceptance Criteria	:	All the test result shall match with expected result.

## Verification Table:

Description	Specified	Actual result (Yes/No)	Discrepancy? (Y/N)
Login to PC with blank	Access Denied & Error		
password.	message displayed.		
Login to PC with incorrect	Access Denied & Error		
password.	message displayed.		
Login to PC with correct	Access granted		
password.	Access granieu		

Remarks:

Meet the acceptance Criteria [	] Yes [	] No	Reference Attachment No. [ ]
Checked by :			Date :
Verified by :			Date:



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## 12.3 Verification of System Start-up & Shutdown:

Objective	:	To verify the system healthiness through start up and shutdown procedure.
Tools Required	:	Not Applicable
Procedure	:	1. Switch ON System Power Supply.
		2. Startup time should be minimum and during this time PC cannot
		generate any error message.
		3. System safe shutdown with Application.
Acceptance	:	1. System start and shutdown should as per procedure defined in test data
Criteria		table.
		2. Application software without any error.

## Verification Table for Startup and Shut down Process:

Description	Procedure	Expected Result	Actual Result (Yes/No)	Discrepancy? (Y/N)
To start up the system	Turn On the Power Supply of System	System should be turn on no error message displaye on screen		
Login to system	Click on application software to run the software	Application software run automatically without any error		
To Shut Down the System	Exit from the software & click on shut down	Shut down the PC		



## OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM

System Name: FTIR		System ID:	
Remarks:			
Meet the acceptance Criteria [	] Yes [	] No	Refer Attachment No. [
Checked by :			Date :
Verified by :			Date:

]



### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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#### 12.4 Verification of Password Security:

Objective	:	To verify the password security as defined.
Tools Required	:	Not Applicable
Procedure	:	1. Check all the test given in verification table.
		2. Record the result in verification table.
Acceptance Criteria	:	All the test result shall match with expected result.

#### **Verification Table:**

Description	Specified	Verified (Yes/No)	Discrepancy? (Y/N)
Minimum password length	Password should be minimum 6 characters.		
Password Expiry Days	The password shall expire after 90 days.		
Password Complexity	Password should be combinations of upper case letters, lower case letters, numbers and special characters.		
Wrong Password Entry	System shall be Generate the popup.		
Wrong User Name & Password Entry at Admin Level	System shall be Generate the wrong password or user name popup		
Correct User & Password Entry at Admin Level	Admin login the system successfully.		

#### Remarks:



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#### 12.5 Verification of User access and security features of the system:

Objective	:	To verify the user access and security features of the system as defined.
Tools Required	:	Not Applicable
Procedure	:	1. Verification of User level
		2. Login with each level and check all rights/screen.
		3. Record the result with privileges in test verification table.
Acceptance Criteria	:	All the result shall match with user rights/screen and level.

### **Verification Table for User Rights**

Rights/ screen	Analyst Level	Reviwer Level	Admin Level	Verified (Yes/No)	Discrepancy? (Y/N)
Login Screen	( )	( )	( )		
PerkinElmer spectrum ES	( )	( )	( )		
Setup	( )	( )	( )		
Spectral libraries	( )	( )	( )		
Equation	( )	( )	( )		

Remarks:

Meet the acceptance Criteria [ ] Yes [ ] No

Checked by :\_\_\_\_\_

Verified by : \_\_\_\_\_

Date:\_\_\_\_\_

Date:\_\_\_\_\_



## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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## 12.6 Verification of Application software Screens:

Objective	:	To verify the Software screens as defined.
Tools Required	:	Not Applicable
Procedure	:	1. Check all the test given in verification table.
		2. Record the result in verification table.
Acceptance Criteria	:	All the test result shall match with expected result.

#### Verification Table:

Screen No	Specified Screen	Actual Screen as per Specified? (Yes/No)	Verified (Yes/No)	Discrepancy? (Y/N)
1.	Login Screen	Yes ( ) / No ( )		
2.	PerkinElmer spectrum ES	Yes ( ) / No ( )		
3.	Setup	Yes ( ) / No ( )		
4.	Spectral libraries	Yes ( ) / No ( )		
5.	Equation	Yes ( ) / No ( )		

#### Remarks:

Meet the acceptance Criteria [	] Yes [	] No	Reference Attachment No. [ ]
Checked by :			Date:
Verified by :			Date:



## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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#### 12.7 Verification of System Response Failure:

Objective	:	To verify the system response failure as defined.	
Tools Required	:	Not Applicable	
Procedure	:	1. Operate the system in run mode.	
		2. If any hardware of Computer system goes to fail.	
		3. Record the result in verification table.	
Acceptance Criteria	:	All the test result shall match with expected result.	

#### Verification Table:

Description Specified		Observation (Yes/No)	Discrepancy? (Y/N)
CPU Failure	CPU should be off and monitor cannot be response.		
Monitor Failure	Monitor should be off and CPU Should Be On.		
UPS Failure	UPS should be off and CPU and Monitor cannot response.		
Communication cable failure between CPU and Monitor	Monitor should not be response.		
Communication failure between CPU and Monitor	Monitor should not be response.		
Communication failure with Local area network	Printing should be stop		
Power Failure	UPS supply connected with System to safe shutdown.		

#### Remarks:

 Meet the acceptance Criteria [ ] Yes [ ] No

 Checked by :
 \_\_\_\_\_\_\_\_

 Verified by :
 \_\_\_\_\_\_\_\_

 Date:
 \_\_\_\_\_\_\_\_

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## **12.8** Verification of Electronic Data Security:

Objective	:	To verify the electronic data security as defined.	
Tools Required	:	Not Applicable	
Procedure	:	1. Check all the test given in verification table.	
		2. Record the result in verification table.	
Acceptance Criteria	:	All the test result shall match with expected result.	

## Verification Table:

Description	Specified	Observation (Yes/No)	Discrepancy? (Y/N)
Electronic Record Storage	All the electronic should be store in a correct manner and specified location.		
Electronic Data Storage Path Accessbility	Only authorised user shall be access the elecronic storage data.		
Access of any other file beside the primary system software	Only qualified and authorized user shall be access other file beside the primary system software.		
Electronic Record Maintain	Electronic record should maintain in a redundent hard disk / IT server / DVD with specified location.		
Print the entire content of electronic records Electronic Data Edition and Deletion	User should be print the entire content of electroic records. No editions and deletion possible in the Electronic Data.		



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Remarks:	
Meet the acceptance Criteria [ ] Yes [	] No
Checked by :	Date:
Verified by :	Date:



#### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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#### 12.9 Verification of Audit Trail:

Objective	:	To verify the audit trail as defined.	
Tools Required	:	Not Applicable	
Procedure	:	1. Check all the test given in verification table.	
		2. Record the result in verification table.	
Acceptance Criteria	:	All the test result shall match with expected result.	

#### Verification Table:

Description Specified		Observation (Yes/No)	Discrepancy? (Y/N)
Attempt to login account	Login Successful. The same is logged in		
from authorised user	the audit trail automatically.		
Attempt to login account	Login Fail. The same is logged in the		
from unauthorised user	audit trail automatically.		
New Account Creation	Audit trail should record the creation of		
and Deletion	new account and deletion.		
Deserve al Change	Change in the password shall be logged		
Password Change	into the audit trail.		
	Audit trail should have facility to logged		
Audit Trail Content	the data with time, user identity, reason		
	of change and type of change.		

Remarks:

Meet the acceptance Criteria [ ] Yes [ ] No Reference Attachment No. [ ]

Checked by :\_\_\_\_\_

Date:\_\_\_\_\_

Verified by :\_\_\_\_\_

Date:\_\_\_\_\_

**Document No.:** 

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#### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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#### **12.10** Verification of Report Generation:

Objective:To verify the report generation and format as defined.Tools Required:Not ApplicableProcedure:Verify that the standard report and analytical report will generate.Acceptance:All the test result shall match with expected result.Criteria:

#### Verification Table:

Description	Expected Result	Actual Result (Yes/No)	Discrepancy? (Y/N)
Report	Report shall not be		
Edition/Deletion	edit/ delete by user		
Date and Time stamp	Date and Time stamp		
on Report during	on Report during		
generation/Print	generation/Print.		
Redable Formate	Report shall be in		
Redable Formate	human readable format		

Remarks:

Meet the acceptance Criteria [	] Yes [	] No	Reference Attachment No. [
--------------------------------	---------	------	----------------------------

Checked by :\_\_\_\_\_

Verified by :

Date: \_\_\_\_\_

1

Date:



### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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### 12.11 Verification of User Prevented From Alternating Date and Time:

- Objective
   : To verify the Verification of User Prevented from Alternating Date and Time as defined.

   Tools Required
   : Not Applicable
- Procedure : 1. Check all the test given in verification table.
  - 2. Record the result in verification table.
- Acceptance : User cannot change or alter the date and time of system.
- Criteria

### Verification Table:

User	Description	Observation	Discrepancy? (Y/N)
Analsyt	User access/ not access date & time		
Reviwer	User access/ not access date & time		
Admin	User access/ not access date & time		

Remarks:

Meet the acceptance Criteria [	] Yes [	] No	Reference Attachment No. [ ]
Checked by :			Date:

Verified by : \_\_\_\_\_

Date:\_\_\_\_\_

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## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

## System Name: FTIR

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## 12.12 Verification of Data Back Up:

Objective	:	To verify the data backup as defined.
Tools required	:	Not Applicable
Procedure	:	1. Check all the test given in verification table.
		2. Record the result in verification table.
Acceptance Criteria	:	All the test result should match with expected result.

## Verification Table

S.No.	Test	Expected Result	Actual Results (Yes/No)	Discrepancy? Y/N
1.	Go to the following folder. "D:\ftir data\2024	Data size, folder name should be noted.		
2.	Copy the same folder & paste in external storage device. Note the data size, files & folders.	Folder should be copied successfully & noted the Data size, folder name.		
3.	Compare the data size, files & folders of the same folder before & after data backup activity.	Data size, folder name of data should be matched.		

#### Remarks:

			_
] Yes [	] No	Reference Attachment No. [	]
		Date:	
		Date:	
	] Yes [		Date:



#### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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## 12.13 Verification of system software as per 21 CFR part 11 Clauses:

Objective	y the software as per 21 CFR Part 11 clauses
Tools Required	Applicable
Procedure	k and record of 21 CFR Part 11 clauses for software.
	Open the Software in normally.
	Login with higher level id and password.
	Verify all the points as per the test table clause wise & record
Acceptance Criteria	m should complies 21 CFR part 11.

#### **Verification Table:**

S.No. (As per clause)	Question	Testing procedure and requirement.	Actual Result	Discrepancy? (Y/N)
11.10(a)	Is it possible to	Try to change the		
	discern invalid or	possibilities of the record		
	altered records?	alteration in Process Data		
		file.		
		System should not allow		
		altering record.		
		Try to enter Invalid		
		character or Value in the		
		system.		
11.10(b)	Is the system capable	Take batch printout and		
	of producing accurate	Verify Print out of Data		
	and complete copies	Recorded. Data display and		
	of electronic records	Print should be match.		
	on paper?			
11.10(c)	Are the records	Verify data backup location		
	readily retrievable	and data retrieving		
	throughout their	facilities.		



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S.No. (As per clause)	Question	Testing procedure and requirement.	Actual Result	Discrepancy (Y/N)
,	retention period?	Check data retention		
		period. It should be		
		documented in DATA		
		Backup SOP.		
11.10(d)	Is the system access is authorized to individuals?	Try to access the system by entering invalid user ID and Password for All Level for operating System and Application software. Check access rights of each		
		level.		
		System should not allow		
		unauthorized person.		
11.10(e)	Is there a secure,	Try to change or modify		
	computer generated,	the set parameter and check		
	time stamped audit	for audit trail generated by		
	trail that records the	the system.		
	date and time of			
	operator entries and	Audit Trail should be		
	actions that create,	available for any		
	modify or delete	modification		
	electronic records?			
11.10(f)	Is an electronic	Verify that audit trail is		
	record's audit trail	available till data retention		
	retrievable throughout	period.		
	the record's retention			
	period?			
11.10(g)	If the sequence of system steps or events	Check sequence of		
Document		Check sequence of		Page 25 of 34



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S.No. (As per clause)	Question	Testing procedure and requirement.	Actual Result	Discrepancy? (Y/N)
11.10(h)	is important, is this enforced by the system (e.g. As would be the case in a process control system)? Does the system	operation of Application software as per operation procedure. System should be operates as per sequence written in SOP. Try to access the system by		
11.10(ll)	ensure that only authorized individuals can use the system, electronically sign records, access the operation, or computer system input or output device, alter a record or perform other operations?	<ul> <li>Ity to access the system by</li> <li>entering invalid user ID</li> <li>and Password for</li> <li>Application software.</li> <li>Check access rights of each</li> <li>level.</li> <li>Minimum 2 level is</li> <li>required in Application</li> <li>software</li> <li>System should not allow</li> <li>unauthorized person.</li> </ul>		



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S.No. (As per clause)	Question	Testing procedure and requirement.	Actual Result	Discrepancy? (Y/N)
11.10(i)	If it is a requirement	Verify system input data		
	of the system that	come from calibrated		
	input data or	sensors and Transmitters.		
	instructions can only			
	come from certain			
	input devices (e.g.			
	Terminals) does the			
	system check the			
	validity of the source			
	of any data or			
	instructions received?			
11.10 (j)	Is there documented	Verify the training record.		
	training, including on	Responsibility documents		
	the job training for	for the all system user and		
	system users,	related responsible person.		
	developers, it support			
	staff? Is there a			
	written policy that			
	makes individuals			
	fully accountable and			
	responsible for			
	actions initiated under			
	their electronic			
	signature?			
11.10(k)	System operation and	Verify and review System		
	maintenance	Operation and Maintenance		
	documentation	Document		



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S.No. (As per clause)	Question	Testing procedure and requirement.	Actual Result	Discrepancy? (Y/N)
	controlled?			
11.10	Is there a formal	Verify the sop of change		
	change control procedure for system documentation that maintains a time sequenced audit trail for those changes made by the	control, data backup, access control and maintenance.		
	pharmaceutical organization?			

## Remarks:

Meet the acceptance Criteria [	] Yes [	] No	
Checked by :			Date:
Verified by :			Date:



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## **13. OPERATIONAL QUALIFICATION TEST STATUS:**

The operational qualification test status is as per below mentioned table.

Test Description	Status (Pass / Fail)	Discrepancy? (Y/N)
Verification of Field Instruments Calibration		
Verification of Windows Security		
Verification of System Start-up & Shutdown		
Verification of Password Security		
Verification of User access and security features of the system		
Verification of Application software Screens.		
Verification of System Response Failure.		
Verification of Electronic Data Security		
Verification of Audit Trail		
Verification of Report Generation		
Verification of User Prevented From Alternating Date and Time		
Verification of Data Back Up		
Verification of system software as per 21 CFR part 11 Clauses		



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#### 14. DISCREPANCIES HANDLING DURING COMPUTER QUALIFICATION:

- In case of discrepancy observed during qualification, document in the defined column in each table and document the details of the observation in the discrepancy log sheet.
- Inform to engineering IT quality control and quality assurance about discrepancy.
- Investigate the discrepancy and ensure the possible impact.
- If discrepancy does not have potential to impact on operation as well as performance of the system, close the discrepancy with proper justification.
- The engineering IT QC and QA will decide whether discrepancy is acceptable or not.
- If discrepancy is acceptable, provide conclusion and recommendation if any into respective column.



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### **15. DISCREPANCY AND CORRECTIVE ACTION FORM:**

Protocol Reference	
Discrepancy Number	

### **DISCREPANCY:**

Describe the Discrepancy	
Reported by	Date

#### **CORRECTIVE ACTION:**

Describe corrective action taken (Attach additional sheets if necessary)	
Reported by	Date

#### **DISPOSITION ACTION ;**

Acceptable?	Yes	No		
Discussion				
Approved by			Date	
Approved by			Date	

## **COMPLETION:**

Completed by Date	
-------------------	--

**Document No.:** 



## **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

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#### **16. ABBREVIATION:**

Abbreviations	Description
GMP	Good Manufacturing Practices
COMPUTER	Programable Logic Controller
SRS	System Requirement and Specification
IQ	Installation Qualification
OQ	Operation Qualification
QA	Quality Assurance
SOP	Standard Operating Procedure
NA	Not Applicable
ICH	International Conference of Harmonization
mA	Mili Ampere
VAC	Alternate Current Voltage
VDC	Direct Current Voltage
RH	Relative Humidity



### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

#### System Name: FTIR

System ID:

#### **17. ATTACHMENT SUMMARY:**

Attachment No.	Description

## 18. OPERATIONAL QUALIFICATION SUMMARY & CONCLUSION:

Compiled by: \_\_\_\_\_

Date:\_\_\_\_\_

**Document No.:** 

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### **OPERATIONAL QUALIFICATION FOR COMPUTER SYSTEM**

System Name: FTIR

System ID:

### **19. POST APPROVALS:**

The signature listed below indicates the post approval of this operational qualification. This approval is joint responsibility of listed functional areas.

	DOCUMENT DEVELOPMENT	SIGN / DATE
Name	:	
Designation	:	

DOCUMENT REVIEW AND APPROVAL (M/S)		
Sign / Date	•	
Name	:	
Designation	:	
	Engineering	
Sign / Date	·	
Name	:	
Designation	:	
	IT	
Sign / Date	•	
Name	:	
Designation	:	
	Quality control	

	DOCUMENT AUTHORIZATION (M/S)
Sign / Date	:
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Designation	:
	Quality Assurance