

varian

A Siemens Healthineers Company

愛媛県 松山市南梅本町甲160番

customer support

作業情報

作業指示番号	WO-003979703	ケース	05384793
作業担当者	野村 拓哉	受注番号	

機器情報

納入商品	H193529	Product Name	TRUEBEAM
Beam Hours	2,093.50	Filament Hours	21,810.70
UDI	010089947500223311180512213529	取引先責任者	Sunouchi Mitsuaki

作業内容

件名	定期点検Q2 TB
作業内容	定期点検Q2(2/4回目)を実施いたしました。 点検内容の詳細に関しましては別紙保守点検報告書をご参照ください。

【特記事項】

- ・ MLC動作テストを実施。問題ないことを確認いたしました。
- ・ Carrousel各駆動軸の動作確認を実施。
- ・ Vaclon Pump電源電圧の確認を実施。
- ・ 各Beam照射時の波形測定を実施。

連絡事項	共同作業者： 岡崎純
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作業日時

障害発生日時	2025/12/11 11:00	装置復帰	2025/12/12 19:30
到着日時	2025/12/11 16:00	退出日時	2025/12/12 19:30
移動時間合計	6.00	作業時間合計	7.50
移動/作業時間合計	13.50	装置停止時間	

作業内訳

開始日	終了日	納入商品	作業区分	作業時間
2025-12-11 16:00	2025-12-11 20:00	H193529	PMP	4.00
2025-12-12 16:00	2025-12-12 19:30	H193529	PMP	3.50

取付 / 納入部品

部品番号	品名/規格	数量	ソース	納品
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品質に関する声明

すべての校正に関わる確認は、お客様の責任範囲となります。ご確認をお願いいたします。
また、ビーム品質ガイドライン (CTB-GE-871)に記載されている部品交換を実施した場合は、
治療を再開する前にビーム品質ガイドラインに従い、必要なビームQAテストおよびアライメントを
実施する必要があります。ご対応をお願いいたします。

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A Siemens Healthineers Company

愛媛県 松山市南梅本町甲160番

customer support

お客様の署名

お客様 :

須内 光明

電子サイン者 : mitsuaki
sunouchi
日付 : 2025年12月16日
17:04:10 GMT+9

日付 :

2025年12月16日

エンジニアの署名

担当者 :

野村 拓哉

電子サイン者 : Takuya
Nomura-JT
日付 : 2025年12月16日
16:08:15 GMT+9

日付 :

2025年12月16日

船多 聖士

電子サイン者 : Kiyoshi
Funada
日付 : 2025年12月16日
22:27:02 GMT+9

2025年12月16日

四国がんセンター 殿

TrueBeam #H193529

保守点検報告書

対象周期: Q2

点検日: 2025/12/11～2025/12/12

点検者: 岡崎 野村

Fil. Hrs: 21,810.70 Beam. Hrs: 2,093.50

特記事項

定期点検Q2(2/4回目)を実施いたしました。

【特記事項】

- ・MLC動作テストを実施。問題ないことを確認いたしました。
- ・Carousel各駆動軸の動作確認を実施。
- ・VacIon Pump電源電圧の確認を実施。
- ・各Beam照射時の波形測定を実施。

CHECKLIST SHEET REV: 05 PMP Active: True ACCEPTANCE DATE: 8/10/2018
 SITE: NHO SHIKOKU CANCER CENTER CITY: MATSUYAMA-SHI 790-0280 COUNTRY: Japan
 PCSN: H193529 PRINT DATE: 12/16/2025
 REP NAME : Takuya Nomura FILAMENT HOURS: 21810.7 BEAM HOURS: 2093.5
 Color Coding: Dark Green = Recently completed, Green = Within period, Yellow = Pending, Red = Overdue
 Abbreviaton: NA= Not Applicable, TR= Task Responsibility

Comments: Note, comments here are for information only. Use standard process for initiating and controlling follow up tasks

【特記事項】,12/12/2025,Takuya Nomura

- ・MLC動作テストを実施。問題ないことを確認いたしました。 ,12/16/2025,Takuya Nomura
 - ・Carousel各駆動軸の動作確認を実施。 ,12/16/2025,Takuya Nomura
 - ・VacIon Pump電源電圧の確認を実施。 ,12/16/2025,Takuya Nomura
 - ・各Beam照射時の波形測定を実施。 ,12/16/2025,Takuya Nomura
- motor power 15.12V/±15V +14.96V, -15.09V/5V high 5.217V/5V low 4.996V/,9/18/2025,Wataru Nishioka

Checklist	Date Completed	Target Date	HaspUser	TR
6 PMP Pre-Site Preparation				
6.1 Review PMP Checklist	12/11/2025	4/10/2026	Jun Okazaki	Varian
6.2 Customer Interview	12/11/2025	4/10/2026	Jun Okazaki	Varian
6.3 Review ViDA / Event Logs	12/11/2025	4/10/2026	Jun Okazaki	Varian
7 Initial Tasks				
7.1 Check Initial Beam Performance	12/12/2025	4/11/2026	Jun Okazaki	Varian
7.2 Capture Data in the HET PMI Application	12/12/2025	4/11/2026	Jun Okazaki	Varian
7.3 Analyze/Compare Data in the PMI Application	12/12/2025	4/11/2026	Jun Okazaki	Varian
7.4 Review Initialization, Calibration, Fault Frequency	9/18/2025	5/16/2026	Wataru Nishioka	Varian
8 Emergency Stop (EMS) Operation				
8.1 Test Emergency Operations with Side Panel and Service Pendant	12/12/2025	4/11/2026	Takuya Nomura	Varian
8.2 Test EMS Switches and Emergency Disconnect	9/19/2025	5/17/2026	Wataru Nishioka	Varian
9 Clean and Inspect				
9.1 Clean and Inspect Console Cabinets	9/18/2025	5/16/2026	Wataru Nishioka	Varian
9.2 Clean and Inspect Stand	9/19/2025	5/17/2026	Wataru Nishioka	Varian
9.3 Clean and Inspect Gantry	12/12/2025	8/09/2026	Jun Okazaki	Varian
9.4 Clean and Inspect Modulator	12/12/2025	8/09/2026	Jun Okazaki	Varian
10 Console				
10.1 Verify Cooling Fans/Power Supply Operation	12/12/2025	4/11/2026	Takuya Nomura	Varian
10.2 Test UPS Operation	3/06/2025	3/06/2026	Wataru Nishioka	Varian
11 Stand				
11.1 Verify Stand Fans Operation	9/18/2025	5/16/2026	Wataru Nishioka	Varian
11.2 Inspect SVC Pulse Tank Desiccant	9/18/2025	5/16/2026	Wataru Nishioka	Varian
11.3 Inspect Stand Water Flow Meters	9/18/2025	5/16/2026	Wataru Nishioka	Varian
11.4 Test Gantry Brake Operation	9/19/2025	5/17/2026	Wataru Nishioka	Varian
11.5 Inspect Gantry Rotation Drive Motor Chain and Sprocket	9/18/2025	5/16/2026	Wataru Nishioka	Varian
11.6 Inspect Gantry Chain Master Link	9/18/2025	5/16/2026	Wataru Nishioka	Varian
11.7 Inspect Gantry Chain Tension	9/18/2025	9/18/2026	Wataru Nishioka	Varian
11.8 Replace Water System Filter Cartridge	9/18/2025	9/18/2026	Wataru Nishioka	Varian
11.9 Measure/Compare Klystron Parameters	9/18/2025	5/16/2026	Wataru Nishioka	Varian
12 Gantry				
12.1 Inspect Counterweight Mounting Bolts	6/19/2025	6/19/2026	Wataru Nishioka	Varian
12.2 Verify Gantry Fan Operation	12/11/2025	8/08/2026	Jun Okazaki	Varian
12.3 Inspect Gantry Flow Meters	12/11/2025	8/08/2026	Jun Okazaki	Varian
12.4 Inspect Gantry Water Hoses	12/11/2025	8/08/2026	Jun Okazaki	Varian
12.5 Inspect Gantry Windup	12/11/2025	8/08/2026	Jun Okazaki	Varian
12.6 Measure/Compare Motor and Node Power Supply Voltage	12/11/2025	8/08/2026	Jun Okazaki	Varian
12.7 Measure/Compare VacIon Pump Current and Voltage	12/12/2025	8/09/2026	Jun Okazaki	Varian
12.8 Measure/Compare BMAG Coil Voltage	6/19/2025	6/19/2026	Wataru Nishioka	Varian
12.9 Inspect Skull Cap Fasteners	12/12/2025	8/09/2026	Jun Okazaki	Varian
12.10 Measure/Compare ASOL Coil Voltage	6/19/2025	6/19/2026	Wataru Nishioka	Varian
12.11 Inspect Energy Switch Assembly	12/11/2025	8/08/2026	Jun Okazaki	Varian
13 Gun Driver				

13.2	Verify HV Warning Lights and CroBar Operation	12/12/2025	8/09/2026	Jun Okazaki	Varian
13.3	Verify Cooling Fans Operation	12/12/2025	8/09/2026	Jun Okazaki	Varian
13.4	Measure/Compare Gun Driver Parameters	12/12/2025	8/09/2026	Jun Okazaki	Varian
13.5	Clean and Inspect Gun Driver	12/12/2025	8/09/2026	Jun Okazaki	Varian
14 Carousel					
14.1	Clean and Inspect Carousel Assembly	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.2	Clean and Inspect Carousel Transverse Axis Resolver	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.3	Clean and Inspect Carousel Radial Axis Resolver	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.4	Clean and Lubricate Carousel Radial Axis Lead Screw	12/11/2025	12/11/2026	Jun Okazaki	Varian
14.5	Inspect Ion Chamber Assembly	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.6	Clean and Lubricate Ion Chamber Lead Screw	12/11/2025	12/11/2026	Jun Okazaki	Varian
14.7	Clean and Lubricate Carousel and Ion Chamber Bearing	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.8	Clean and Inspect Target Drive Assembly	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.9	Initialize Carousel Axes	12/11/2025	8/08/2026	Jun Okazaki	Varian
14.10	Replace Field Lamps	6/19/2025	6/19/2026	Wataru Nishioka	Varian
15 MLC					
15.1	Inspect and Lubricate MLC	9/18/2025	5/16/2026	Wataru Nishioka	Varian
15.2	Measure MLC Power Supply Voltages	9/18/2025	5/16/2026	Wataru Nishioka	Varian
15.3	initialize MLC	12/11/2025	4/10/2026	Jun Okazaki	Varian
15.4	Verify Backlash v2.5	NA	Option is not installed/included	Yuuichi Fukuhara	
16 Automated Diagnostic Tests					
16.2	Perform v2.7 Automated Diagnostic Tests	9/18/2025	5/16/2026	Wataru Nishioka	Varian
16.3	Perform v2.5 Automated Diagnostic Tests	NA	Option is not installed/included	Yuuichi Fukuhara	
16.4	Perform v3.0 Auto Performance Test (ATP)	NA	Option is not installed/included	Yasutaka Tanaka	
17 Collimator					
17.1	Inspect Collimator	12/11/2025	8/08/2026	Jun Okazaki	Varian
17.2	Lubricate Lower Jaws	3/06/2025	3/06/2026	Wataru Nishioka	Varian
17.3	Lubricate Upper Jaws	3/06/2025	3/06/2026	Wataru Nishioka	Varian
17.4	Lubricate Collimator Rotation Bearing	3/06/2025	3/06/2026	Wataru Nishioka	Varian
18 Accessories					
18.1	Inspect Accessory Mount	9/18/2025	5/16/2026	Wataru Nishioka	Varian
18.2	Inspect and Test Electron Applicators	9/18/2025	5/16/2026	Wataru Nishioka	Varian
18.3	Inspect Wedges	NA	Customer responsible task	Yuuichi Fukuhara	
18.4	Check LaserGuard Alignment	NA	Customer responsible task	Yuuichi Fukuhara	
19 Couch					
19.2	Inspect IGRT Couch Top	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.3	Clean and Inspect Lower Couch Area	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.4	Clean, Inspect and Lubricate Lift Drive	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.5	Clean, Inspect and Lubricate LNG/LAT Carriage Rails	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.6	Clean and Inspect Couch Longitudinal Encoder and Cables	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.7	Clean, Inspect and Lubricate Perfect Pitch Couch	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.8	Test Couch Pendants and Side Panels	9/18/2025	5/16/2026	Wataru Nishioka	Varian
19.9	Clean, Inspect and Lubricate Couch Turntable	3/07/2025	3/07/2026	Wataru Nishioka	Varian
20 Modulator					
20.2	Verify Cooling Fans Operation	12/11/2025	8/08/2026	Jun Okazaki	Varian
20.3	Test High Voltage Crowbar Operation	12/11/2025	8/08/2026	Jun Okazaki	Varian
20.4	Measure/Compare Modulator Parameters	12/11/2025	8/08/2026	Jun Okazaki	Varian
21 Imaging System					
21.1	Collect XI Diagnostic Data	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
21.2	Clean and Inspect KV Generator	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.3	Verify Cooling Fans Operation	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.4	Verify Imaging Arms Positioning	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.5	Clean and Inspect Imaging Arms	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.6	Clean and Inspect KVS Collimator and Filter Deck	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.7	Verify Imaging Arms Motion Control Safety	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.8	Inspect X-Ray Tube and Heat Exchanger	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.9	Clean, Inspect and Grease HT Cable Candlesticks at X-Ray Tube	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.10	Inspect HT Cable Candlesticks at EMD Generator	9/19/2025	9/19/2026	Wataru Nishioka	Varian
21.11	Record Norm Chamber Values	9/19/2025	5/17/2026	Wataru Nishioka	Varian

21.12 Verify IsoCal	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.13 Compare MVD, KVD and KVS Reference Positions	9/19/2025	5/17/2026	Wataru Nishioka	Varian
21.14 Acquire Motion Records from MVD, KVD and KVS	NA	Option is not installed/included	Yasutaka Tanaka	
22 Tune Dose Rate and Compare Parameter Data				
22.1 Test MU Backup Counter	12/12/2025	4/11/2026	Takuya Nomura	Varian
22.2 Tune Dose Rate and Capture Data	12/12/2025	8/09/2026	Takuya Nomura	Varian
22.3 Test Unserved Output vs Rotation	12/12/2025	8/09/2026	Takuya Nomura	Varian
22.4 Inspect Waveforms	12/12/2025	8/09/2026	Takuya Nomura	Varian
23 Final PMP Items				
23.1 Finalize HET PMI Program	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.2 Replace Barcode Reader Batteries	NA	Function/feature disabled by customer	Yuuichi Fukuhara	
23.3 Initialize Axes	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.4 Install and Inspect Covers	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.5 Clean Covers	9/19/2025	5/17/2026	Wataru Nishioka	Varian
23.6 Backup Nodes, System, Preference Settings	9/19/2025	5/17/2026	Wataru Nishioka	Varian
23.7 Manage Saved Parameter Data	9/19/2025	5/17/2026	Wataru Nishioka	Varian
23.8 Distribute Official PMP Checklist	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.9 Test Clinical Operation	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.10 Review Low Frequency Tasks	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.11 Review Follow-up Actions	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
23.12 Clean Work Area	12/12/2025	4/11/2026	(*)Takuya Nomura	Varian
24 Calypso				
24.1 Complete 8 Month Tasks in Calypso PMI and Checklist	NA	Option is not installed/included	Yuuichi Fukuhara	
24.2 Complete 12 Month Tasks in Calypso PMI and Checklist	NA	Option is not installed/included	Yuuichi Fukuhara	
25 OSMS				
25.1 Complete 6 Month Tasks in OSMS PMI and Checklist	NA	Option is not installed/included	Yuuichi Fukuhara	
25.2 Complete 12 Month Tasks in OSMS PMI and Checklist	NA	Option is not installed/included	Yuuichi Fukuhara	
26 Low Frequency Tasks				
26.2 Replace Distilled Water and Clean Strainer (2 Years)	6/21/2024	6/21/2026	Takuya Nomura	Varian
26.3 Replace Emergency Operations Batteries (2 Years)	NA	Option is not installed/included	Takuya Nomura	
26.4 Lubricate Gantry Bearing (2 Years)	6/21/2024	6/21/2026	Takuya Nomura	Varian
26.5 Measure Generator Output (2 Years)	9/20/2024	9/20/2026	Takuya Nomura	Varian
26.6 Backup TrueBeam and Service Workstations (2 Years)	3/07/2025	3/07/2027	Wataru Nishioka	Varian
26.7 Replace Rangefinder Lamp (4 Years)	9/30/2022	9/29/2026	Takuya Nomura	Varian
26.8 Replace VMS-200 X-Ray Generator Fans (5 Years)	NA	Option is not installed/included	Yasutaka Tanaka	
26.9 Replace IGMA Workstation Batteries (5 Years)	6/16/2023	6/14/2028	Yasutaka Tanaka	Varian
26.10 Replace VMS-200 X-Ray Generator CPU Battery (5 Years)	NA	Option is not installed/included	Yasutaka Tanaka	
26.11 Replace Modulator T4-C1 Capacitor (5 years)	6/16/2023	6/14/2028	Yasutaka Tanaka	Varian
26.12 Replace Interface Mount Guide Blocks (7 Years)	6/19/2025	6/17/2032	Wataru Nishioka	Varian
26.13 Replace Gantry and Stand Hoses (10 Years)	No_date_yet	8/07/2028		Varian

PARAMETER SHEET																	
MODULATOR																	
Parameters	Tolerance	Value	Parameters	Tolerance	Value												
3 Phase input AB	±3 %	211.30	Main Thyatron Fil	±0.2 %	6.31												
3 Phase input AC	±3 %	214.40	Dging Thyatron Fil	±0.2 %	6.30												
3 Phase input BC	±3 %	213.80	Keep-Alive	≤23 VDC	18.87												
Plate XFMR Tap	NA	5.00															
STAND and POWER SUPPLIES																	
Parameters	Tolerance	Value	Parameters	Tolerance	Value	Parameters	Tolerance	Value									
Klystron SN	NA	21564	KLY I (Lo-X) (I1 @ Pulse Tank)	NA	6.48	KLY V Backswing Percentage (Lo-X)	NA	17.96									
KFI V	NA	236.90	KLY V (Lo-X) (J2 @ Pulse Tank)	NA	4.12	PFN V Actual (Lo-X)	NA	6.31									
KSOL I	NA	38.919	KLY I (Hi-e) (I1 @ Pulse Tank)	NA	8.56	PFN V Actual (Hi-e)	NA	7.96									
KSOL V	NA	106.430	KLY V (Hi-e) (J2 @ Pulse Tank)	NA	4.96	KLY I Comman Cal Factor (Amps/Volt)	NA	3.45									
VACUUM POWER SUPPLY																	
Parameters	Tolerance	Meter uA	Tolerance	Meter kW	Probe kW												
ACC PUMP	±20 uA	0.001	NA	-5.254	-5.25												
GUN PUMP	±20 uA	0.000	NA	3.232	3.27												
KLY PUMP	±20 uA	0.283	NA	3.226	3.20												
WATER and SF6																	
Parameters	Tolerance	Value	Parameters	Tolerance	Value												
System Water Pressure	NA	50.00	SF6 Regulator	NA	28.02												
Facility Water Pressure	NA	42.00	SF6 Fault level	NA	24.95												
OverTemp Trip	NA	42.000	SF6 Warning level	NA	27.97												
WATER FLOW and TEMPERATURE																	
Parameters	BMAG Flow	LGuide Flow	SGuide Flow	PriColl Flow	Target Flow	City Water Flow	Klystron Flow	Klys Sol Flow	Guide Flow	PumpOutlet T ^o	TankInput T ^o	City Water T ^o	Motor Valve	Pump Speed			
Standby	0.595			1.199	0.872	10.771	5.096	4.051	3.212	39.782	40.914	18.952	35.450	44.993			
ON	0.724			1.435	1.047	10.677	6.054	4.829	3.826	40.194	41.013	18.907	43.728	79.971			
POWER SUPPLIES (GPD, SPD, APD)																	
Parameters	GPD_24V	GPD_28V	SPD_5VP	SPD_24VP	SPD_28VP	SPD_48VP	SPD_3_3VP	SPD_EMO	SPD_24VBAT	CoreBiasI	CoreBiasV	APD_12VP	APD_24V	APD_28V			
Standby	23.424	27.791		23.795	27.911	47.859	3.280	26.002		0.223		12.005	23.606	0.034			
ON	23.424	27.695		23.795	27.876	47.859	3.280	26.051		0.221		12.005	23.578	0.000			
POWER SUPPLIES (BGM, DMD)																	
Parameters	BGM_5V	BGM_15VP	BGM_15NVP	BGM_24VP	BGM_N12VP	BGM_3_3VP	DMD_1_5VP	DMD_3_3VP	DMD_5VP	DMD_NSVA	DMD_PSVA	DMD_15VP	DMD_24VP	DMD_EMO24			
Standby	5.003	4.958	5.043	23.555	12.185	3.284	1.478	3.303	4.992	-5.018	4.943	14.830	23.904	23.889			
ON	5.003	4.958	5.044	23.509	12.185	3.284	1.478	3.304	4.993	-5.018	4.943	14.830	23.905	23.887			
POWER SUPPLIES [Console PU Motors]																	
Parameters	CONTPWRA	CONTPWRB	Console 220	EMO PS	Live24V	24V Node	28V Motor	48V PU	96V PU								
Values	115.86	116.21	211.10	24.50	23.77	23.82	27.93	48.09	96.46								
RF DRIVER																	
Parameters	Tolerance	Value	Parameters	Tolerance	Value												
RF Driver SN	NA	2241112	Sensitivity	NA	-215.00												
Center Freq	NA	2856.600															
BOARD TEMPERATURE																	
Nodes	STN	BGM	COL	MOD	PWM	RFSPS	CCHU	CCHL	KVS	KVD	MVD	XI	EGN				
Temperatures	36.899	33.945	37.730	39.856	33.274	38.441	37.509	34.389	32.038	32.519	31.038	55.850	50.526				
GANTRY																	
Parameters	Tolerance	Value	Parameters	Tolerance	Value												
ASOL Short Coil (Hi-X)	±3 %	93.68	Gun Fil V	NA	5.400												
ASOL Long Coil (Hi-X)	±3 %	43.63	Gun Fil I	NA	3.634												
ASOL PS Current (Hi-X)	±3 %	17.90	Gun 5V	NA	NA												
ASOL PS Voltage (Hi-X)	NA	145.50	Gun 15V	NA	NA												
BMAG E1-E2 (Hi-X)	±0.2 %	1.74	Gun -15V	NA	NA												
BMAG E3-E4 (Hi-X)	±0.2 %	1.74															
BGM																	
DOSIMETRY																	
Parameters	2.5x	4x	6x	6xFFF	10x	10xFFF	6e	6eHDTSE	9e	12e	15e	NA	NA	NA	NA	NA	NA
Buncher R	0.070	0.036	0.015	0.015	0.020	0.020	-0.230	-0.230	-0.505	0.260	0.240						
Buncher T	0.085	0.082	0.124	0.124	0.165	0.165	-0.110	-0.170	0.005	0.430	0.280						
Angle R	0.005	-0.036	-0.017	0.044	0.005	0.052	-0.183	-0.120	-0.101	-0.441	-0.407						
Angle T	0.066	0.023	0.092	0.236	0.141	0.358	-0.094	-0.048	-0.308	0.267	-0.133						
Position R	-0.399	-0.709	-1.491	-1.449	-1.467	-1.429	0.000	0.000	0.000	0.000	0.000						
Position T	0.631	0.156	0.503	0.473	0.366	0.330	0.000	0.000	0.000	0.000	0.000						
Trim	-0.048	-0.068	-0.029	-0.041	0.035	0.035	0.000	0.000	0.000	0.000	0.000						
Bal ANG R	1.002	0.992	0.994	0.996	0.995	0.993	0.902	0.923	0.922	0.922	0.743	0.856					
Bal ANG T	0.997	0.999	1.001	1.005	0.999	1.005	0.972	0.979	0.910	1.018	0.965						
Bal POS R	0.908	0.894	0.926	0.912	0.937	0.934	1.000	1.000	1.000	1.000	1.000						
Bal POS T	0.894	0.980	0.983	0.996	0.985	0.993	1.000	1.000	1.000	1.000	1.000						
Symmetry R	0.002	0.001	0.000	-0.001	0.000	-0.001	0.000	0.000	0.001	0.000	0.000						
Symmetry T	-0.003	-0.001	-0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001						
Nominal IonA	0.120	0.422	1.090	1.245	1.163	1.625	3.880	5.371	2.509	1.846	1.837						
Nominal IonB	0.120	0.426	1.097	1.250	1.169	1.636	4.300	5.818	2.720	2.484	2.148						
Nominal IonC	0.113	0.402	1.025	1.232	1.066	1.590	4.096	5.631	2.656	2.355	2.077						
Nominal IonD	0.114	0.402	1.024	1.226	1.067	1.583	4.212	5.749	2.918	2.313	2.151						
Nominal IonE	0.011	0.050	0.141	0.150	0.164	0.211	0.229	0.322	0.092	0.059	0.061						
Nominal IonF	0.012	0.056	0.153	0.164	0.175	0.226	0.328	0.447	0.114	0.081	0.076						
Nominal IonG	0.015	0.063	0.172	0.190	0.191	0.251	0.295	0.411	0.099	0.089	0.085						
Nominal IonH	0.016	0.065	0.175	0.191	0.194	0.253	0.305	0.422	0.118	0.076	0.090						
Nominal IonI	0.031	0.102	0.270	0.367	0.295	0.511	1.804	2.417	2.101	2.167	1.900						
Nominal IonJ	0.028	0.090	0.236	0.343	0.255	0.472	1.391	1.879	1.688	1.773	1.544						
Nominal Target	279.980	237.490	347.980	332.990	156.920	171.970	0.000	0.000	0.000	0.000	0.000						
Nominal FPWR	0.734	0.938	1.113	1.106	1.197	1.222	1.196	1.169	1.261	1.307	1.702						
Target I	276.920	225.750	342.640	328.410	156.500	168.500	-0.170	-0.140	-0.196	-0.183	-0.173						
Cal MU1	0.010	0.012	0.012	0.023	0.011	0.029	0.009	0.009	0.013	0.015	0.016						
Cal MU2	0.010	0.012	0.012	0.022	0.012	0.030	0.009	0.009	0.013	0.015	0.016						
DoseRate	69.812	277.310	557.150	866.150	574.800	860.400	561.250	2669.600	569.090	572.080	547.210						

BGM AXES																	
Parameters	2.5x	4x	6x	6FFF	10x	10XFFF	6e	6eHDTSE	9e	12e	15e	NA	NA	NA	NA	NA	NA
Pos Y-Axis	5.000	4.950	5.050	5.000	5.060	5.000	150.000	150.000	150.300	149.390	149.970						
Pos Rotation	327.530	147.470	207.520	327.530	87.493	327.530	267.530	267.530	246.420	108.660	101.600						
Pos Ion Chamber	203.200	203.200	203.200	203.200	203.200	203.200	203.200	203.200	203.200	203.200	203.200						
Pos Target	70.000	27.000	27.000	27.000	46.000	58.000	3.500	3.500	3.500	3.500	3.500						
Pos ENSW	11.700	10.800	10.510	10.510	9.350	9.350	27.000	27.000	27.000	27.000	27.000						
Port	Port 1	Port 4	Port 3	Port 1	Port 5	Port 1	Foil 8	Foil 8	Foil 9	Foil 1	Foil 2						
BGM RF/COILS																	
Parameters	2.5x	4x	6x	6FFF	10x	10XFFF	6e	6eHDTSE	9e	12e	15e	NA	NA	NA	NA	NA	NA
PFN V Set	6.318	6.318	6.318	6.318	6.318	6.318	6.318	6.318	6.318	6.318	7.999						
PFN V	6.318	6.318	6.318	6.318	6.318	6.318	6.318	6.318	6.318	6.318	7.999						
PFN Current	2.212	2.218	1.754	1.314	1.754	0.927	1.290	2.024	1.292	1.290	1.542						
AFC V	-5.067	-1.401	0.700	0.700	3.841	3.841	6.357	6.726	6.468	6.116	6.697						
AFC Bal	0.054	0.077	0.089	0.094	0.130	0.119	0.042	0.051	0.048	0.053	0.073						
ASOL V	114.930	83.038	143.260	147.570	144.030	147.290	146.160	148.390	159.850	107.830	63.583						
ASOL I	14.090	10.190	18.000	18.000	17.840	17.840	17.600	17.850	19.190	12.900	7.620						
BMAG V	0.920	1.710	2.242	2.249	3.819	3.846	2.628	2.626	3.652	4.857	6.008						
BMAG I	6.700	12.350	16.250	16.200	27.525	27.600	18.850	18.700	26.150	34.700	42.800						
RF Driver Freq																	
RF Driver Watts																	
RF Driver Console	1.822	2.427	3.148	3.100	3.606	3.731	3.537	3.389	3.989	4.400	2.849						
BGM GUN/TIMING																	
Parameters	2.5x	4x	6x	6FFF	10x	10XFFF	6e	6eHDTSE	9e	12e	15e	NA	NA	NA	NA	NA	NA
Pulse Width	0.050	0.049	0.047	0.046	0.043	0.040	0.050	0.045	0.050	0.050	0.050						
Delay	0.004	0.005	0.005	0.006	0.011	0.011	0.007	0.023	0.006	0.006	0.008						
Gun Grid	104.910	115.170	101.550	98.396	45.498	52.209	26.945	32.767	9.773	3.259	12.536						
Gun HV Meter	-18005.000	-18005.000	-16007.000	-16007.000	-10024.000	-10024.000	-5534.000	-6022.000	-5034.000	-5040.000	-3036.000						
Gun HV Probe																	
OUTPUT VS ROTATION																	
Parameters	2.5x	4x	6x	6FFF	10x	10XFFF	6e	6eHDTSE	9e	12e	15e	NA	NA	NA	NA	NA	NA
Max Dose	69.99		572.960				698.65										
Min Dose	67.46		564.940				678.79										
Deviation Percentage	3.68		1.412				2.89										
Lowest DR Angle	0.00		123.000				270.000										
Higest DR Angle	359.00		352.000				2.00										
CONMAN WAVEFORM MEASUREMENTS																	
Parameters	2.5x	4x	6x	6FFF	10x	10XFFF	6e	6eHDTSE	9e	12e	15e	NA	NA	NA	NA	NA	NA
FWD PWR	0.36	0.47	0.55	0.55	0.59	0.61	0.60	0.58	0.83	0.66	0.82						
TARG I	1.00	0.88	1.24	1.20	0.56	0.62											
KLY I	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.92	1.92	1.96	2.60						
KLY V	2.16	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.64						
HVPS I (DeQing%)	55.26	52.00	57.14	57.14	57.69	58.97	60.26	57.89	57.69	58.44	55.47						
BGM AXES CALIB																	
Parameters	Y-Stage	Carousel Rot	ENSW	Ion Chamber	Target Drive												
Positive limit Distance	0.768	9.148	1.325	1.369	1.518												
Negative Limit Distance	154.720	345.810	38.878	205.610	71.122												
Resolver Angle	4537.000	8213.000	13785.000	12747.000	15245.000												
Secondary Resolver Angle	4906.000	12164.000	NA	165.000	8405.000												
Travel Range	155.710	355.060	29.995	209.310	74.051												
Resolver Offset	-52.000	1398.000	206.000	-2.000	33.000												
AXES (Gant,COL,Couch)																	
Parameters	COL ROT	COL X1	COL X2	COL Y1	COL Y2	Parameters	Gantry	CCH VRT	CCH ROT	CCH LAT	CCH LNG	CCH PITCH	CCH ROLL				
DistHardStopB	355.000	9.629	9.628	10.358	10.317	PrimaryOffset	1.1151E005	71.406	15142.000	-79.953	7.905	-0.100	-0.019				
DistToLimitA	1.684	0.234	0.279	0.237	0.174	PrimaryCountPerUnit	-150.690	805.500	NA	1584.900	250.000	NA	NA				
DistToLimitB	353.450	9.511	9.473	10.110	10.039	SecondaryOffset	893.990	196.050	5560.000	-70.135	-191.760	-0.094	-0.017				
ResolverOffsetCalib	-27.000	-177.000	62.000	-126.000	-72.000	SecondaryCountPerUnit	-7.5193E005	805.440	NA	1584.800	541.230	NA	NA				
PrimaryIsoGain	1.000	2.477	2.480	0.999	0.999	ResolverOffsetCalib	NA	NA	-24.000	-138.000	-16.000	NA	NA				
PrimaryIsoOffset	-0.138	0.341	0.326	0.662	0.589	TertiaryOffset	NA	NA	2226.600	NA	NA	NA	NA				
SecondaryIsoGain	1.000	2.476	2.480	1.000	1.000												
SecondaryIsoOffset	-0.031	0.343	0.326	0.679	0.653												

IMAGING										
Inventory				MV/KV Test Image Chain						
Component	Type	Serial Number	Install Date	Parameter	Value					
X-Ray Tube	GS-1542	18722-M8	OCT-2018	KV Dark Field Image Mean	990.2182					
X-Ray Generator	EMD	18-E0173	OCT-2018	KV Noise Image SD	6.87					
KV Imaging Panel	4030CB	P8-A20505-0202	OCT-2018	MV Dark Field Image Mean	674.1495					
MV Imaging Panel	DMI	1393000243	OCT-2018	MV Noise Image SD	4.30					
				MV Drift Image Mean	701.1876					
				MV Drift Image SD	238.11					
X-Ray Generator										
Technique	DNC Counts	kVp	mA	mS	Miscellaneous Data	Value				
SF 60kVp 25mA 100ms	175.55	64.00	24.62	100.1	Tube Calibration Date YYYYMMDD	20200904				
SF 90kVp 50mA 100ms	1577.44	91.00	49.84	100.1	DNC Raw ADC Counts	15446				
SF 120kVp 80mA 20ms	1446.32	120.4	77.63	20.1						
LF 60kVp 25mA 100ms	114.69	61.98	24.65	99.9						
LF 90kVp 200mA 20ms	1283.11	90.6	198.4	19.8						
LF 90kVp 200mA 150ms	9572.83	90.8	198.7	149.7						
LF 120kVp 100mA 20ms	1873.84	120.9	99.4	20.0						
LF 120kVp 200mA 100ms	16352.04	120.7	198.8	99.8						
ARMS										
Parameters	KVD	KVS	MVD	Parameters	Blade X1	Blade X2	Blade Y1	Blade Y2	Foil	Shape
System Calibration VRT	0.102	-0.004	0.047	refPos	2.867	2.863	2.896	2.893	0.115	0.116
System Calibration LONG	0.131	0.121	0.001	distToHardstopA	-0.073	-0.077	-0.044	-0.047	NA	NA
System Calibration LAT	-0.052	0.000	-0.001	distToHardstopB	-3.504	-3.518	-3.557	-3.540	15.009	19.277
Teach Drive Elbow	88.823	120.040	84.963	TravelDist	-3.580	-3.580	-3.580	-3.580	NA	NA
Teach Drive Wrist	230.200	185.030	227.680	axisCalibOffset	0.000	-0.051	-0.084	0.043	0.000	0.172
Axes Cal Shoulder primZeroPhy	199.480	168.500	212.080	distToFocal	10.998	11.001	9.395	9.414		
Axes Cal Elbow distToIndex	6.248	6.910	6.525							
Axes Cal Elbow TerZeroPhy	127.000	98.710	-10.398							
Axes Cal Wrist distToIndex	-15.606	10.089	-15.894							
Axes Cal Wrist TerZeroPhy	278.280	202.520	133.690							
Axes Cal Hand distHardStopB	-36.333	NA	-36.269							
Axes Cal Hand primZeroPhy	-17.618	NA	-17.390							
Axes Cal Hand terZeroPhy	-16.321	NA	-17.602							
Shoulder refPos	343.850	340.140	282.810							
Elbow refPos	18.679	31.444	18.518							
Wrist refPos	338.070	155.910	338.450							
Hand refPos	18.166	NA	18.116							