

2021-1.3	Machine Intervention		2/8/2021 9:28	2/8/2021 12:30		3.03		Maintenance activities, access zone F
2021-1.3	Training		2/9/2021 5:13	2/9/2021 5:51			0.63	Booster operator training
TOTAL					0.00	3.03	0.63	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.4	Machine Intervention		2/15/2021 9:10	2/15/2021 11:36		2.43		Maintenance activities
TOTAL					0.00	2.43	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.5	Machine Intervention		2/22/2021 9:54	2/22/2021 12:30		2.60		Maintenance activities
2021-1.5	Downtime DIN#107320		2/22/2021 12:30	2/22/2021 13:32	1.03			Recovery from ACIS trip at SR zone B (SI)
TOTAL					1.03	2.60	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.6	Machine Intervention		3/1/2021 8:58	3/1/2021 14:13		5.25		Maintenance activities
TOTAL					0.00	5.25	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.7	Machine Intervention		3/8/2021 9:04	3/8/2021 13:45		4.68		Maintenance activities, access SR zone F & A
2021-1.7	Training		3/8/2021 21:01	3/8/2021 22:06			1.08	Booster operator training
2021-1.7	Training		3/9/2021 21:01	3/9/2021 22:33			1.53	Booster operator training
TOTAL					0.00	4.68	2.62	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.8	Machine Intervention		3/15/2021 8:49	3/15/2021 13:00		4.18		Maintenance activities, access PAR
2021-1.8	Training		3/16/2021 4:40	3/16/2021 6:00			1.33	Booster operator training
TOTAL					0.00	4.18	1.33	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.9	Machine Intervention		3/22/2021 9:13	3/22/2021 12:50		3.62		Maintenance activities
TOTAL					0.00	3.62	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.10	Machine Intervention		3/29/2021 8:56	3/29/2021 14:57		6.02		Maintenance activities, access SR zone D
2021-1.10	Training		3/29/2021 13:04	3/29/2021 15:00			1.93	Booster console test
2021-1.10	Downtime DIN#107339		3/29/2021 23:25	3/30/2021 8:00	8.58			9-ID fixed mask FM2 water leak (MOM)
TOTAL					8.58	6.02	1.93	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.11	Machine Intervention		4/5/2021 8:47	4/5/2021 14:05		5.30		Maintenance activities, access SR zone B&A, and PAR
2021-1.11	Downtime DIN#107343		4/5/2021 17:01	4/5/2021 21:50	4.82			PS2 fault at 9-ID (SI)
TOTAL					4.82	5.30	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.12	Machine Intervention		4/12/2021 8:50	4/12/2021 13:10		4.33		Maintenance activities, access PAR
2021-1.12	Training		4/12/2021 21:00	4/12/2021 22:42			1.70	SR operator training
TOTAL					0.00	4.33	1.70	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-1.13	Machine Intervention							
TOTAL					0.00	0.00	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.1	Downtime DIN#107351		5/25/2021 8:00	5/25/2021 13:00	5.00			Work on an insertion device (ASD-MD)
TOTAL					5.00	0.00	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.2	Machine Intervention		6/7/2021 9:42	6/7/2021 12:04		2.37		Access SR Zone F to replace S40 Cav3 IR detector
2021-2.2	Downtime DIN#107359		6/8/2021 6:04	6/8/2021 7:35	1.52			S25A:S4 converter swap (PS)
TOTAL					1.52	2.37	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.3	Machine Intervention		6/14/2021 10:50	6/14/2021 14:39		3.82		Access SR zone B to check safety shutter at 14ID
2021-2.3	Training		6/14/2021 21:13	6/14/2021 22:46			1.55	SR operator training
2021-2.3	Downtime DIN#107366		6/15/2021 6:29	6/15/2021 8:00	1.52			S23B:S1 converter issue (ASD-PS)
TOTAL					1.52	3.82	1.55	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.4	Machine Intervention	6/21/2021 14:00	6/21/2021 16:30		2.50		Maintenance activities, access SR zone A & E
2021-2.4	Downtime DIN#107370	6/21/2021 16:30	6/21/2021 18:57	2.45			S35A:Q4 magnet (AES-MOM), 2-ID limit switches (ASD-MD)
2021-2.4	Training	6/22/2021 3:39	6/22/2021 5:00			1.35	SR operator training
TOTAL				2.45	2.50	1.35	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.5	Machine Intervention	6/28/2021 9:51	6/28/2021 12:46		2.92		Maintenance activities, access SR zone A
2021-2.5	Training	6/29/2021 5:20	6/29/2021 6:55			1.58	SR operator training
TOTAL				0.00	2.92	1.58	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.6	Machine Intervention	7/6/2021 7:12	7/6/2021 10:42		3.50		Access SR zone D
TOTAL				0.00	3.50	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.7	Machine Intervention	7/12/2021 9:34	7/12/2021 12:25		2.85		Access SR zone B
TOTAL				0.00	2.85	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.8	Machine Intervention	7/19/2021 13:26	7/19/2021 15:30		2.07		Access SR Zone E
2021-2.8	Downtime DIN#107386	7/19/2021 15:30	7/19/2021 16:22	0.87			Water leak in S35 (MOM)
2021-2.8	Downtime DIN#107387	7/19/2021 18:37	7/19/2021 20:43	2.10			S34A:Q5 converter fault (ASD-PS)
TOTAL				2.97	2.07	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.9	Machine Intervention	7/26/2021 8:53	7/26/2021 14:08		5.25		Access SR Zone E
2021-2.9	Training	7/27/2021 5:00	7/27/2021 7:00			2.00	SR operator training
TOTAL				0.00	5.25	2.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.10	Downtime DIN#107404	8/3/2021 17:00	8/3/2021 19:10	2.17			iocbramp, iocbvp1 reboot (ASD-CTL)
TOTAL				2.17	0.00	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.11	Training	9/9/2021 8:00	9/9/2021 10:08			2.13	Injector operator training
2021-2.11	Training	9/10/2021 7:00	9/10/2021 9:16			2.27	Linac operator training
2021-2.11	Downtime DIN#107405	9/10/2021 9:16	9/10/2021 9:54	0.63			All RF systems tripped off along with MPS trip (RF, CTL)
2021-2.11	Machine Intervention	9/10/2021 14:32	9/10/2021 19:18		4.77		Access SR Zone E & A
2021-2.11	Machine Intervention	9/11/2021 3:47	9/11/2021 8:00		4.22		Access SR Zone A
2021-2.11	Downtime DIN#107406	9/11/2021 8:00	9/11/2021 18:23	10.38			5ID fixed mask FM2 replacement (AES-MOM)
TOTAL				11.02	8.98	4.40	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.12	Machine Intervention	9/20/2021 9:39	9/20/2021 14:31		4.87		Maintenance activities
2021-2.12	Training	9/21/2021 5:01	9/21/2021 7:00			1.98	SR operator training
TOTAL				0.00	4.87	1.98	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-2.13	Downtime DIN#107435	9/30/2021 9:30	9/30/2021 10:07	0.62			Issues with gap control at 24-ID-US and 16-ID-US (ASD-MD)
2021-2.13	Machine Intervention	9/30/2021 10:07	9/30/2021 13:09		3.03		Maintenance activities, access SR zone F
2021-2.13	Training	9/30/2021 13:09	9/30/2021 14:07			0.97	SR operator training
2021-2.13	Machine Intervention	10/1/2021 10:12	10/1/2021 13:15		3.05		Maintenance activities, access SR zone C
2021-2.13	Training	10/1/2021 23:56	10/2/2021 2:03			2.12	Linac operator training
2021-2.13	Training	10/3/2021 0:12	10/3/2021 2:00			1.80	Linac operator training
2021-2.13	Training	10/3/2021 0:39	10/3/2021 3:23			2.73	Linac operator training
TOTAL				0.62	6.08	7.62	