

FY 2022 Machine Studies Breakdown

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.1	Machine Intervention	10/11/2021 8:59	10/11/2021 15:00		6.02		Access SR Zone B, D.
2021-3.1	Downtime DIN#107442	10/11/2021 15:00	10/11/2021 15:47	0.78			S28A:S1 trip (PS)
TOTAL				0.78	6.02	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.2	Machine Intervention	10/18/2021 9:08	10/18/2021 12:41		3.55		Access SR Zone D.
2021-3.2	Training	10/18/2021 13:00	10/18/2021 13:51			0.85	PAR operator training
2021-3.2	Training	10/18/2021 15:10	10/18/2021 16:37			1.45	PAR operator training
2021-3.2	Training	10/18/2021 16:40	10/18/2021 17:16			0.60	PAR operator training
TOTAL				0.00	3.55	2.90	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.3	Machine Intervention	10/25/2021 8:54	10/25/2021 11:19		2.42		Maintenance activities
2021-3.3	Training	10/26/2021 5:00	10/26/2021 6:00			1.00	SR operator training
2021-3.3	Downtime DIN#107460	10/26/2021 6:00	10/26/2021 7:29	1.48			All L1-L5 klystron drives dropped to zero (RF)
TOTAL				1.48	2.42	1.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.4	Machine Intervention	11/1/2021 8:52	11/1/2021 16:35		7.72		Maintenance activities, access zone D
TOTAL				0.00	7.72	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.5	Machine Intervention	11/8/2021 8:57	11/8/2021 14:10		5.22		Maintenance activities, access zone D & F
2021-3.5	Training	11/8/2021 9:02	11/8/2021 9:24			0.37	SR operator training
2021-3.5	Training	11/8/2021 10:50	11/8/2021 11:56			1.10	PAR operator training
2021-3.5	Training	11/8/2021 12:04	11/8/2021 13:10			1.10	PAR operator training
2021-3.5	Training	11/8/2021 13:40	11/8/2021 14:10			0.50	SR operator training
2021-3.5	Training	11/8/2021 14:25	11/8/2021 14:44			0.32	SR operator training
2021-3.5	Training	11/9/2021 4:00	11/9/2021 6:10			2.17	Linac operator training
TOTAL				0.00	5.22	5.55	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.6	Machine Intervention	11/15/2021 8:52	11/15/2021 15:45		6.88		Maintenance activities, access zone E & F
2021-3.6	Training	11/15/2021 9:30	11/15/2021 10:30			1.00	Linac operator training
2021-3.6	Training	11/16/2021 7:00	11/16/2021 9:11			2.18	Linac operator training
TOTAL				0.00	6.88	3.18	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.7	Downtime DIN#107473	11/25/2021 4:20	11/25/2021 6:00	1.67			RG2 alpha magnet issue (PS)
2021-3.7	Training	11/25/2021 7:05	11/25/2021 9:00			1.92	Linac operator training
TOTAL				1.67	0.00	1.92	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.8	Machine Intervention	12/6/2021 9:13	12/6/2021 13:14		4.02		Maintenance activities, access PAR
2021-3.8	Training	12/6/2021 13:14	12/6/2021 15:00			1.77	SR operator training
2021-3.8	Training	12/6/2021 17:55	12/6/2021 20:00			2.08	Linac operator training
2021-3.8	Training	12/7/2021 9:00	12/7/2021 10:52			1.87	SR operator training
2021-3.8	Training	12/7/2021 17:05	12/7/2021 19:00			1.92	Booster operator training
TOTAL				0.00	4.02	7.63	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.9	Machine Intervention	12/13/2021 8:44	12/13/2021 11:00		2.27		Maintenance activities, access Booster
2021-3.9	Downtime DIN#107485	12/13/2021 11:00	12/13/2021 15:09	4.15			Water leak in the Booster tunnel on B1C2SF (MOM)
2021-3.9	Downtime DIN#107485	12/13/2021 17:28	12/13/2021 20:54	3.43			Faulty Booster RF-5 waveform generator card (RF)
2021-3.9	Training	12/14/2021 5:44	12/14/2021 7:00			1.27	PAR operator training
TOTAL				7.58	2.27	1.27	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2021-3.10	Training	12/21/2021 8:12	12/21/2021 8:43			0.52	SR operator training
2021-3.10	Machine Intervention	12/21/2021 22:15	12/22/2021 0:00		1.75		Maintenance activities, shutdown
TOTAL				0.00	1.75	0.52	

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Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.1	Machine Intervention	1/27/2022 13:52	1/27/2022 17:00		3.13		Maintenance activities, access SR Zone E
2022-1.1	Downtime DIN#107489	1/27/2022 17:00	1/27/2022 17:42	0.70			S32A:S3 fault (PS)

2022-1.1	Downtime DIN#107490		1/28/2022 19:49	1/28/2022 22:12	2.38			RF-2 trip (RF), S12B:S2 converter swap (PS)
2022-1.1	Downtime DIN#107491		1/29/2022 17:34	1/29/2022 17:50	0.27			RF-2 trip (RF)
2022-1.1	Training		1/30/2022 18:30	1/30/2022 19:00			0.50	SR operator training
TOTAL					3.35	3.13	0.50	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.2	Machine Intervention		2/7/2022 9:20	2/7/2022 12:07		2.78		Maintenance activities
2022-1.2	Training		2/8/2022 5:01	2/8/2022 6:44			1.72	PAR operator training
TOTAL					0.00	2.78	1.72	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.3	Machine Intervention		2/14/2022 9:12	2/14/2022 13:07		3.92		Maintenance activities, access SR Zone A
2022-1.3	Training		2/14/2022 9:30	2/14/2022 11:50			2.33	PAR operator training
2022-1.3	Downtime DIN#107504		2/14/2022 13:07	2/14/2022 14:22	1.25			L4:QM3 (PS)
TOTAL					1.25	3.92	2.33	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.4	Machine Intervention		2/21/2022 9:00	2/21/2022 12:20		3.33		Maintenance activities, access SR Zone B
2022-1.4	Training		2/21/2022 12:23	2/21/2022 13:32			1.15	PAR operator training
TOTAL					0.00	3.33	1.15	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.5	Machine Intervention		2/28/2022 9:01	2/28/2022 11:11		2.17		Maintenance activities
2022-1.5	Downtime DIN#107510		2/28/2022 15:44	2/28/2022 16:42	0.97			IOCS21FB (IT)
2022-1.5	Downtime DIN#107511		2/28/2022 18:05	2/28/2022 18:26	0.35			IOCS21FB (IT)
TOTAL					1.32	2.17	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.6	Downtime DIN#107517		3/7/2022 8:00	3/7/2022 10:15	2.25			ground fault on S8B:V3 (MOM)
2022-1.6	Training		3/7/2022 18:00	3/7/2022 19:50			1.83	PAR/ Booster operator training
TOTAL					2.25	0.00	1.83	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.7	Machine Intervention		3/14/2022 9:10	3/14/2022 11:07		1.95		Maintenance activities, access SR Zone A
2022-1.7	Training		3/15/2022 3:04	3/15/2022 4:23			1.32	PAR/ Booster operator training
2022-1.7	Training		3/16/2022 4:15	3/16/2022 5:47			1.53	PAR/ Booster operator training
TOTAL					0.00	1.95	2.85	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.8	Machine Intervention		3/21/2022 9:05	3/21/2022 11:30		2.42		Maintenance activities, access PAR
2022-1.8	Training		3/21/2022 11:30	3/21/2022 13:37			2.12	PAR/ Booster operator training
TOTAL					0.00	2.42	2.12	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.9	Machine Intervention		3/28/2022 8:54	3/28/2022 13:06		4.20		Maintenance activities, access PAR
2022-1.9	Training		3/28/2022 13:06	3/28/2022 15:00			1.90	PAR/ Booster operator training
TOTAL					0.00	4.20	1.90	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.10	Machine Intervention		4/4/2022 9:05	4/4/2022 12:52		3.78		Maintenance activities
2022-1.10	Downtime DIN#107533		4/4/2022 15:30	4/4/2022 16:23	0.88			K4 repair (RF)
TOTAL					0.88	3.78	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.11	Machine Intervention		4/11/2022 8:52	4/11/2022 17:00		8.13		Maintenance activities, access SR Zone E
2022-1.11	Training		4/11/2022 15:52	4/11/2022 17:00			1.13	Injector operator training
TOTAL					0.00	8.13	1.13	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.12	Machine Intervention		4/18/2022 9:14	4/18/2022 12:13		2.98		Maintenance activities
2022-1.12	Downtime DIN#107545		4/18/2022 15:45	4/18/2022 17:08	1.38			S4A:H1 trip (MOM)
TOTAL					1.38	2.98	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2022-1.13	Downtime DIN#107552		4/28/2022 14:01	4/28/2022 15:00	0.98			Switch gear start issue (FAC)
TOTAL					0.98	0.00	0.00	