

Calibration status of equipment, Electrical

Sheet updated: 10/4/2022
 Updated by: MK, PK, TuP, TD

	Calibration soon (<3 months)
	Calibration is ok
	Calibration is old

Category	DEVICE	Equipment registry code	Lab code	Serial number	Year of purchase	Latest calibration	Calibration certificate	Calibrated by	Calibration interval [years]	Next calibration	Next calibration in [months]	Remarks
DC-calibrator	Keithley 263	M333		0887727	2002	2/25/2021	M-21E047	MIKES	2	2023	5	
DVM	HP 3458A	MV188	HP-1	2823A07253	1992	4/22/2021	1-14356585086	Keysight	3	2024	19	Rebuilt by Keysight, April 2021 PK
		M17	HP-2	2823A10798	1994	6/28/2021	INT 187	MRI	3	2024	21	
		M94	HP-3	2823A15853	1997	9/22/2022	INT-192	MRI	3	2025	36	
		M150	HP-4	2823A20740	1998	9/22/2022	INT-192	MRI	3	2025	36	
		M203	HP-5	2823A22197	1999	6/28/2021	INT 182	MRI	3	2024	21	
		MR6	HP-6	US28032259	2004	6/7/2022	M-22E149	MIKES	3	2025	33	
	HP / Agilent 34401A	M26	HPS-1	3146A33530	1994	2/3/2022	INT 187	MRI	3	2025	28	
		M198	HPS-2	US36080707	?	2/3/2022	INT 187	MRI	3	2025	28	
		MR39	HPS-3	MY45022576	2006	2/3/2022	INT 187	MRI	3	2025	28	
		MR40	HPS-4	MY45022590	2006	2/3/2022	INT 187	MRI	3	2025	28	
		MR41	HPS-5	MY45001243	2006	9/22/2022	INT 192	MRI	3	2025	36	
		MR52	HPS-6	MY47000157	2006	9/22/2022	INT 192	MRI	3	2025	36	
		MR53	HPS-7	MY47000159	2006	2/3/2022	INT 187	MRI	3	2025	28	
		-	HPS-8	MY47026754	2012	2/3/2022	INT 187	MRI	3	2025	28	
		-	HPS-9	MY47026808	2012	2/3/2022	INT 187	MRI	3	2025	28	
		-	HPS-10	MY47026814	2012	2/3/2022	INT 187	MRI	3	2025	28	
		-	HPS-11	MY47026832	2012	2/3/2022	INT 187	MRI	3	2025	28	
		-	HPS-12	MY47026718	2012	9/22/2022	INT 192	MRI	3	2025	-	Currently at VTT MIKES
		-	HPS-13	MY53002490	2014	2/3/2022	INT 187	MRI	3	2025	28	
		-	HPS-14	MY53002506	2014	2/3/2022	INT 187	MRI	3	2025	28	
-	HPS-15	MY53002493	2014	2/3/2022	INT 187	MRI	3	2025	28			
Agilent / Keysight 34461A	-	HPG-1	MY53206436	2015	2/3/2022	INT 187	MRI	3	2025	28		
	-	HPG-2	MY53206420	2015	2/3/2022	INT 187	MRI	3	2025	28		
CVC	Lab Kinetics SP042	M127	VINCULUM-1	C358	1998	12/11/2020	INT 174	MRI	2	2022	2	
		M193	VINCULUM-2	SP042-01-003	1999	12/7/2017	INT 154	MRI	2	2019	-34	
		MR17	VINCULUM-3	SP042-02-006-1	2005	12/7/2017	INT 155	MRI	2	2019	-34	Not robust. Requires special attention.
		-	VINCULUM-4	SP042-03-002	2009	12/11/2020	INT 174	MRI	2	2022	2	
		-	VINCULUM-5	SP042-03-003	2009	12/11/2020	INT 174	MRI	2	2022	2	
	MRI Current-to-Voltage Converter	-	MRI-CVC-1	3415-0001	2015	12/11/2020	INT 173	MRI	2	2022	2	
		-	MRI-CVC-2	3415-0002	2015	12/11/2020	INT 173	MRI	2	2022	2	
		-	MRI-CVC-4	3415-0004	2015	12/11/2020	INT 173	MRI	2	2022	2	
		-	MRI-CVC-5	3415-0005	2015	5/29/2018	INT-161	MRI	2	2020	-29	
		-	MRI-CVC-6	3415-0006	2015	5/29/2018	INT-161	MRI	2	2020	-29	
		MRI CVC with bias	-	MRI-CVC-B-1	3415-0001-B	2015	6/1/2020	INT-193	MRI	2	2022	-4
	-		MRI-CVC-B-3	0217-0003-B	2017	6/1/2020	INT-172	MRI	2	2022	-4	
	-		MRI-CVC-B-4	0217-0004-B	2017	6/1/2020	INT-172	MRI	2	2022	-4	
	Stanford Model SR 570	M173	STANFORD-2	45455	1999	3/16/2021	INT 181	MRI	2	2023	5	
		MR16	STANFORD-3	71168	2005	3/16/2021	INT 181	MRI	2	2023	5	Back from VTT MIKES
		-	FEMTO-1	01-85-007	2010	12/11/2020	INT 175	MRI	2	2022	2	
		-	FEMTO-2	01-80-201	2012	12/11/2020	INT 175	MRI	2	2022	2	
Femto DDPKA-S	-	FEMTO-3	01-41-3936	2012	2/19/2014	INT 104	MRI	2	2016	-		
DCM	Keithley 6485 Picoam.	MR27	PICOAM-1	1065233	?	5/16/2012	INT 091	MRI	-	-	-	Not calibrated anymore
Power meter	Yokogawa WT-210	-	YOKOGAWA-1	91K635052	2017	12/19/2017	M-17E259	MIKES	-	-	-	Not calibrated anymore
	Yokogawa WT-1804	-	YOKOGAWA-2	91NC09124	2014	6/7/2017	M-17E123	MIKES	5	2022	-4	
Resistor	Guildline 9230/15	M97	GUILDLINE-1	62587	1996	6/19/2019	M-19E042	MIKES	4	2023	9	
		(MIKES registry)	GUILDLINE-2	65852	2000	6/18/2019	M-19E042	MIKES	4	2023	9	
Temp. & Humidity	Vaisala HMI41 (Probe HMP45)	-	VAISALA-1	C1050075 (probe C1320009)	2007	4/26/2021	INT 183	MRI	2	2023	7	
		-	VAISALA-2	T2130200 (probe T2630015)	1998	4/24/2017	K008-X01968	Vaisala Oyj	2	2019	-36	Broken
	Vaisala HM41 (Probe HMP113)	-	VAISALA-3	M4720195 (probe M4640207)	2016	4/26/2021	INT 183	Vaisala Oyj	2	2023	7	
		-	VAISALA-4	P4750157 / P4451171	2018	4/26/2021	INT 183	Vaisala Oyj	2	2023	7	
		-	VAISALA-5	P4750156 / P4451172	2018	4/26/2021	INT 183	Vaisala Oyj	2	2023	7	
		-	VAISALA-6	T0340188 / T0231053	2021	1/15/2021	H80-21030072	Vaisala Oyj	2	2023	3	
Filter temperature	Thoriabs Temperature Controllers	-	TEC 2000	-	?	6/9/2022	INT-191	MRI	4	2026	45	
	-	TED 200	M00217755	?	?	6/9/2022	INT-191	MRI	4	2026	45	

Calibration status of equipment, Photometry

Sheet updated: 10/4/2022
 Updated by: JA, PK, VM

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DEVICE	Category	Equipment registry code	Lab code	Serial number	Year of purchase	Latest calibration	Calibration certificate	Calibrated by	Calibration interval [years]	Next calibration	Next calibration in [months]
Reference photometer	Illuminance responsivity	-	Ref. Phot.	-	-	6/15/2021	T-R 1175	MRI	1	2022	-4
	Trap-detector	-	UVFR-8	-	-	8/26/2022	T-R 1226	MRI	3	2025	35
	V(λ)-filter	-	CDF-9501	-	-	11/19/2021	INT 190	MRI	1	2022	2
	Aperture	-	NFRA-1	-	-	2/22/2019	M-19L071	MIKES	4	2023	5
	Temperature probe (Black with Al ring)	-	FR Candela	-	-	6/9/2022	INT-191	MRI	1	2023	8
PRC TH15	Photometer	-	HUT-1	960319-1F	1996	6/15/2021	T-R 1176	MRI	1	2022	-4
	Photometer	-	HUT-2	960319-2F	1996	6/15/2021	T-R 1176	MRI	1	2022	-4
	Photometer	M160	LM-1	981129	1998	6/15/2021	T-R 1176	MRI	1	2022	-4
	Photometer	-	LM-2	120318	2012	6/15/2021	T-R 1176	MRI	1	2022	-4
LMT P11 SOT	Photometer	MR5	LED-1	06A428	2004	6/15/2021	T-R 1176	MRI	1	2022	-4
Gigahertz Optik X1 + VL-3701-4	Photometer		GO-1	54201 / 55000	2021	7/7/2021	2141468	Gigahertz	2	2023	9
SSL Resources	Photometer		SSL-1	00-004 / LH200-0	2018	6/28/2021	T-R 1181	MRI	2	2023	9
1.65-m integrating sphere, characterization	Sphere surface scan	-	-	-	-	10/18/2014	Certificate is not produced	MRI	4	2018	-48
	Spectral throughput	-	-	-	-	11/5/2015		MRI	4	2019	-35
	Incident angle factor	-	-	-	-	3/9/2018		MRI	8	2026	42
	Illuminance distribution	-	-	-	-	10/15/2014		MRI	4	2018	-48
LMT L 1009	Luminance meter	M262	LMT-1009	08A011	2000	2/27/2020	T-R 1119	MRI	2	2022	-7
Konica Minolta CS-X000	Spectral radiance	-	CS-1000	16711014	2001		Not calibrated	MRI	1	1901	Update
	Spectral irradiance	-	CS-2000A	2001096	2010	5/19/2022	T-R 1211	MRI	1	2023	8
	Spectral radiance	-	CS-2000A	2001096	2010	2/27/2020	No certificate	MRI	2	2022	-7
Instrument Systems, spectroradiometer	Spectral irradiance	Spectro 320D, PMT&Si, 250-1000nm			2016	5/19/2022	INT 188	MRI	1	2023	8
	Spectral irradiance		CAS 140D		2018						
Osram Wi41/G, Luminous intensity	Standard lamp	M56/2/5	CDS 9502	-	1995	11/22/2021	T-R 1193	MRI	2	2023	14
	Standard lamp	M56/3/5	CDS 9503	-	1995	11/22/2021	T-R 1193	MRI	2	2023	14
	Standard lamp	M197/1	CDS 9904	-	1999	11/22/2021	T-R 1193	MRI	2	2023	14
	Standard lamp (A)	M197/2	CDS 9905	-	1999	4/18/2021	T-R 1174	MRI	2	2023	7
	Standard lamp		CDS 1183	-	2020	11/22/2021	T-R 1193	MRI	2	2023	14
	Standard lamp		CDS 1194	-	2020	11/22/2021	T-R 1193	MRI	2	2023	14
	Standard lamp		CDS 1195	-	2020	11/22/2021	T-R 1193	MRI	2	2023	14
	Standard lamp		CDS 1196	-	2020	11/22/2021	T-R 1193	MRI	2	2023	14
Osram Sylvania	Standard lamp (A)	-	FEL-391	BN-9101-391	2004	4/18/2021	T-R 1174	MRI	2	2023	7
	Standard lamp (A)	-	FEL-601	BN-9101-601		4/18/2021	T-R 1174	MRI	2	2023	7
	Standard lamp (A)	-	FEL-465	BN-9101-465	2009	4/18/2021	T-R 1174	MRI	2	2023	7
Osram Wi40/G Globe, Luminous flux	Standard lamp	-	LMS 9901	-	1999	6/1/2016	T-R 945	MRI	2	2018	-53
	Standard lamp	-	LMS 9902	-	1999	6/1/2016	T-R 945	MRI	2	2018	-53
	Standard lamp	(MIKES registry)	LMS 0003	-	2000	6/1/2016	T-R 945	MRI	2	2018	-53
	Standard lamp	(MIKES registry)	LMS 0004	-	2000	6/1/2016	T-R 945	MRI	2	2018	-53
	Standard lamp	(MIKES registry)	LMS 0005	-	2000	6/1/2016	T-R 945	MRI	2	2018	-53
Optical rail	8 m		R-1		2017	3/23/2022	M-22L082	MIKES	5	2027	54
	1.5 m		R-2		2018				5		
	1 m					9/16/2008	M-08L357	MIKES	-	-	-

A = CCT of the lamp is adjusted to CIE Standard illuminant A (2856 K) by changing the DC-current.

Calibration status of equipment, Radiometry

Sheet updated: 10/4/2022
 Updated by: JA, KM, PK, FM

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Activity	Category	Lab code	Serial number	Year of purchase	Latest calibration	Calibration certificate	Calibrated by	Calibration interval [years]	Next calibration	Next calibration in [months]	Remarks	
Absolute power calibration, at least 3 trap detectors calibrated	POED	N7		2014	11/1/2021	Trinh Tran et al, Metrologia (2022).	MRI	3	2024	25	Absolute reference of optical power. Compared with POED of CMI (indirectly using IV-curves) in November 2021	
	POED	N8		2014			MRI	3	1903	Update	Absolute reference of optical power.	
	N2 Trap	TN-1901		2019	8/26/2022	T-R 1226	MRI	3	2025	35	N2 trap	
	N2 Trap	TN-1902		2019	8/26/2022	T-R 1226	MRI	3	2025	35	N2 trap	
		UVFR-7			8/21/2015	MTk5P00636-K01	SP	3	2018	-50		
		UVFR-2			8/21/2015	MTk5P00636-K01	SP	3	2018	-50		
Working standard calibration, at least 3 trap detectors calibrated		UVFR-1			6/12/2019	MT9P00013-K11	SP	3	2022	-4		
		UVFR-8			8/26/2022	T-R 1226	MRI	3	2025	35	Spare	
		UVFR-6			4/25/2016	T-R 933	MRI	3	2019	-42		
		UVFR-5			8/26/2022	T-R 1226	MRI	3	2025	35	Ref photometer (VM)	
		UVFR-3			8/26/2022	T-R 1226	MRI	3	2025	35	Spectral responsivity (FM)	
		MRI-9909			8/26/2022	T-R 1226	MRI	3	2025	35		
Spectral responsivity realisation, at least 5 trap detectors modeled		MRI-9911			8/26/2022	T-R 1226	MRI	3	2025	35	UV responsivity (FM)	
		MRI-9807			8/26/2022	T-R 1226	MRI	3	2025	35	N2 trap, spectral irradiance (PK)	
		TN-1901		2019			MRI	3	1903	Update	Optical power reference (KM)	
		UVFR-8			11/11/2019	KiM2019, INT-171 KIM2019B	MRI	3	2022	1	KiM2019B corrected in UV, spare	
		UVFR-6			2/26/2016	AnV2016 VIS	MRI	3	2019	-44		
		UVFR-5			11/11/2019	KiM2019, INT-171	MRI	3	2022	1	Ref photometer (VM)	
Pyroelectric radiometer calibration	RkP 5700 + RkP 575	Detector 1			9/30/2022	T-R 1230	MRI	1	2023	12		
		Detector 2			8/10/2021	T-R 1161	MRI	1	2022	-2	Broken 26.9.2022 PK	
	RS-5900				6/3/2022	T-R 1221	MRI	1	2023	8		
	Spectral irradiance realisation, at least 3 lamps calibrated		F257			8/25/2020	T-R 1135	MRI	2	2022	-1	
			F313			8/25/2020	T-R 1135	MRI	2	2022	-1	
			F460			4/14/2022	T-R 1208	MRI	2	2024	19	
		F238			8/6/2020	T-R 1134	MRI	2	2022	-2		
		F517			8/20/2013	T-R 803	MRI	2	2015	-87		
		F519			4/14/2022	T-R 1208	MRI	2	2024	19		
Spectral irradiance, traceability to NPL. Recalibration based on Burn hours.		F245			8/25/2020	T-R 1135	MRI	2	2022	-1		
		F527			4/14/2022	T-R 1208	MRI	2	2024	19		
	NPL calibr. @8.1000A	F517			8/1/2014	2014070088/IB5-14	NPL	20	2034	144		
	Calibr. @8.0000A	F517			1/12/2018	T-R 1035	MRI	20	2038	186		
		F257			5/23/2018	T-R 1036	MRI	20	2038	190		
		F460			5/22/2018	T-R 1036	MRI	20	2038	190		
Filter radiometer apertures		F519			5/21/2018	T-R 1036	MRI	20	2038	190		
	3 mm	NFRA-1			2/22/2019	M-19L071	MIKES	4	2023	5		
	3 mm	NFRA-2			2/22/2019	M-19L071	MIKES	4	2023	5		
	3 mm	HUT-2			8/4/2008	M-08L112	MIKES	4	2012	-124	Spare, not calibrated	
	3 mm	HUT-7			8/4/2008	M-08L112	MIKES	4	2012	-124	Spare, not calibrated	
	3 mm	TA-1			2/26/2008	M-08L104	MIKES	4	2012	-129	Spare, not calibrated	
Sphere apertures	40 mm	AV-2			4/15/2019	M-19L144	MIKES	4	2023	6		
	50 mm	AV-4			3/22/2012	M-12L059	MIKES	4	2016	-80		
	16 mm	AL-2			3/9/2020	M-20L091	MIKES	4	2024	17		
	55 mm	AL-5			3/22/2012	M-12L059	MIKES	4	2016	-80		
Other apertures	25 mm	DRAL-25			11/9/2020	M-20L332	MIKES	4	2024	26		
Optical rail	1.5 m	IRR-1							Update	Calibrated with length rod on demand.		
Temperature controller of the filter radiometer	Blue with Al ring	FR-2007			6/9/2022	INT-191	MRI	4	2026	45		

Calibration status of equipment, Spectrophotometry

Sheet updated: 10/4/2022
 Updated by: FM

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Activity	Category	Equipment registry code	Lab code	Serial number	Year of purchase	Latest calibration	Calibration certificate	Calibrated by	Calibration interval [years]	Next calibration	Next calibration in [months]
Transfer standard spectrometer, PE900	Transmittance measurement	MIKES004782	PE900	101N9091098	1999	9/15/2021	T-R 1177	MRI	2	2023	12
	Wavelength scale check					9/15/2021	T-R 1177	MRI	2	2023	12
Reference spectrometer, transmittance calibration	Wavelength scale check					9/7/2021	Notebook		2	2023	11
	Integrating sphere uniformity (visual check)					11/9/2020	Notebook		2	2022	1
	Integrating sphere throughput measurement					11/9/2020	Notebook		7	2027	62
	Filter holder unit check / calibration					11/9/2020	Notebook		2	2022	1
	Linearity (Si-detector)					11/10/2020	Notebook		5	2025	38
	Linearity (InGaAs-detector)								5		Update
Reference spectrometer, spectral responsivity calibration	Trap detector		MRI 9806			12/14/2020	Notebook	MRI	3	2023	15
	Trap detector		UVFR-3			11/11/2019	KIM2019, INT-171	MRI	3	2022	1
	Trap detector		MRI 9911			11/11/2019	KIM2019, INT-171	MRI	3	2022	1
	Reference detector, Irradiance		Refsil-planmec			12/14/2020	INT-176	MRI	3	2023	15
	InGaAs detectors, calibration at 633 nm, 932 nm and 1523		HUTIGA-1			10/23/2018	inza Mahan MS thes	MRI	3	2021	-12
			HUTIGA-2			10/23/2018	inza Mahan MS thes	MRI	3	2021	-12
Goniometer	Linearity of detector					9/21/2020	Notebook	MRI	5	2025	36
	Aperture area					11/9/2020	M-20L332	MIKES	4	2024	26
	Distance measurement rod					11/6/2020	M-20L331	MIKES	4	2024	25
	Angular alignment					9/21/2020	Notebook	MRI	1	2021	-13
	Wavelength scale check					9/21/2020	Notebook	MRI	2	2022	0
	Greasing of mechanics					2/19/2020	Notebook	MRI	5	2025	29
Temperature controller of the filter radiometer	Black with brass ring		FR Trans			2/7/2018	INT 160	MRI	4	2022	-8