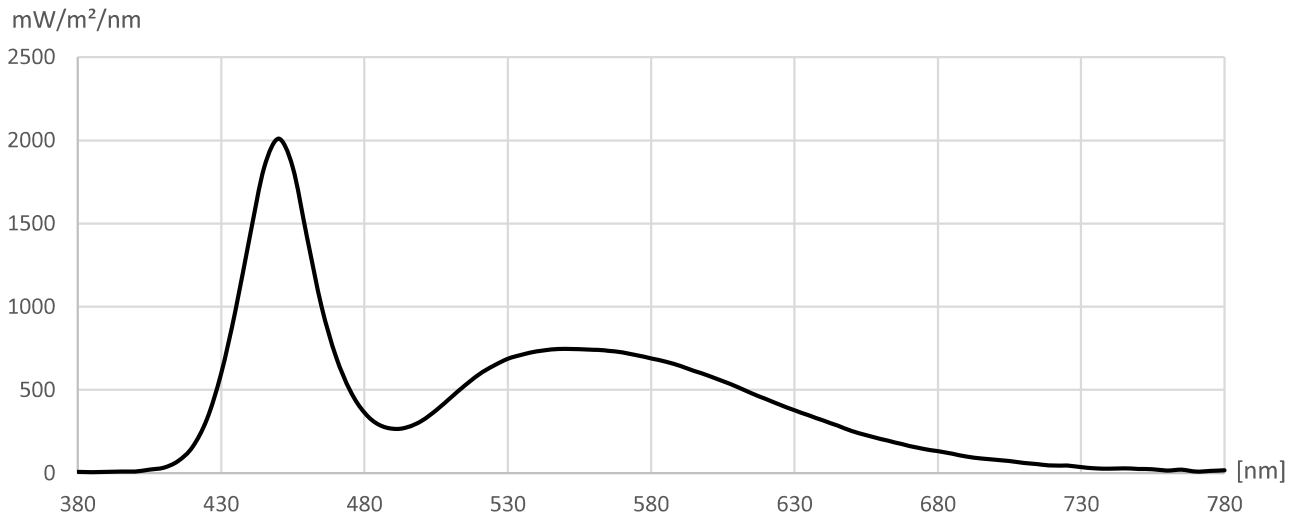


Measurement protocol



Test object: Varytec
 Hero Spot 90
 449224 / @ 1 m

Measurement file: 449224_1m.CSV
 Date of measurement: 09.05.2019
 Time of measurement: 11:07:30



R1 = 84,4	Ra = 81,0	Illuminance	45774,72 lx	CIE1931
R2 = 82,6	Re = 74,8	Ee	167,717 W/m ²	x = 0,2836
R3 = 73,4	GAI = 101,4	LER	272,9 lm/W	y = 0,2713
R4 = 86,3				
R5 = 82,5		correlated color temperature (CCT)	10810 K	CIE1976
R6 = 71,1		Duv	-0,0113	u' = 0,1994
R7 = 86,6				v' = 0,4293
R8 = 81,2		Saturation	23,5 %	
R9 = 33,9				CIE1960
R10 = 51,7		Dominant wavelength	467 nm	u = 0,1994
R11 = 83,3		Peak wavelength	449 nm	v = 0,2862
R12 = 48,7				
R13 = 83,5		Flicker frequency	827 Hz	TM30
R14 = 84,4		Percent Flicker	f > 400 Hz %	Rf = 71,4
R15 = 88,4		Flicker index	f > 400 Hz	Rg = 96,1

[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	8,61	440	1420,85	500	315,68	560	742,16	620	445,84	680	132,21	740	28,34		
385	6,58	445	1836,91	505	378,75	565	736,87	625	412,11	685	118,24	745	28,87		
390	8,50	450	2010,13	510	452,80	570	725,96	630	378,58	690	100,07	750	26,48		
395	10,34	455	1840,40	515	527,02	575	709,58	635	347,75	695	89,32	755	24,03		
400	11,15	460	1418,16	520	594,17	580	690,65	640	316,51	700	81,25	760	16,87		
405	21,31	465	1003,95	525	646,15	585	670,20	645	286,10	705	73,02	765	21,53		
410	33,50	470	703,17	530	687,59	590	645,41	650	254,69	710	62,59	770	10,13		
415	73,33	475	495,70	535	713,19	595	615,37	655	228,97	715	53,73	775	13,31		
420	157,94	480	362,76	540	731,84	600	586,23	660	206,75	720	45,75	780	18,38		
425	324,62	485	292,17	545	742,82	605	552,59	665	185,36	725	45,95				
430	596,55	490	267,05	550	748,00	610	519,56	670	164,24	730	36,88				
435	975,83	495	276,58	555	745,09	615	480,09	675	146,57	735	29,22				

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Burgebrach, 09.05.2019

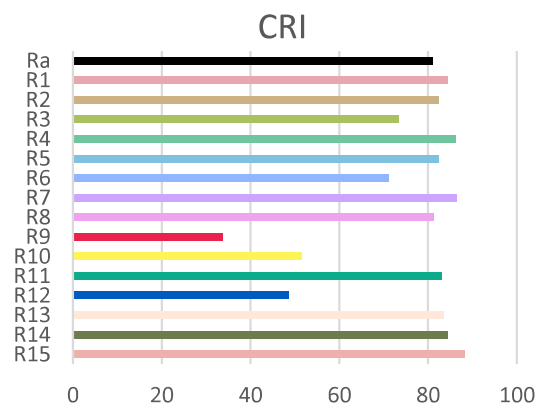
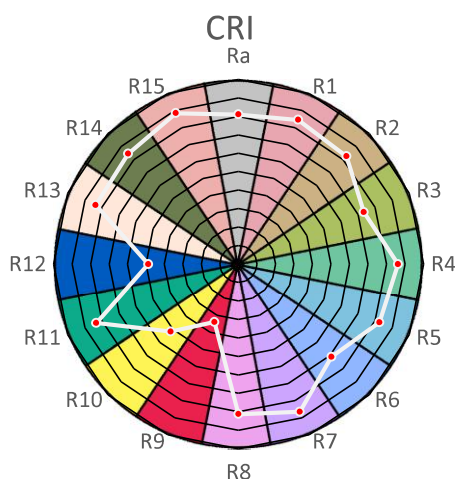
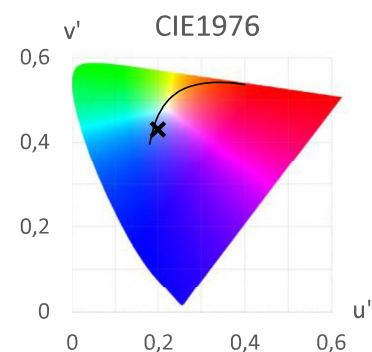
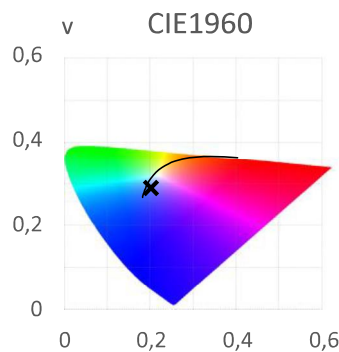
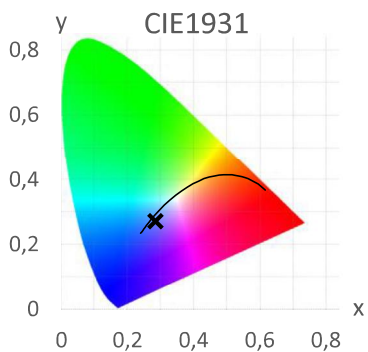
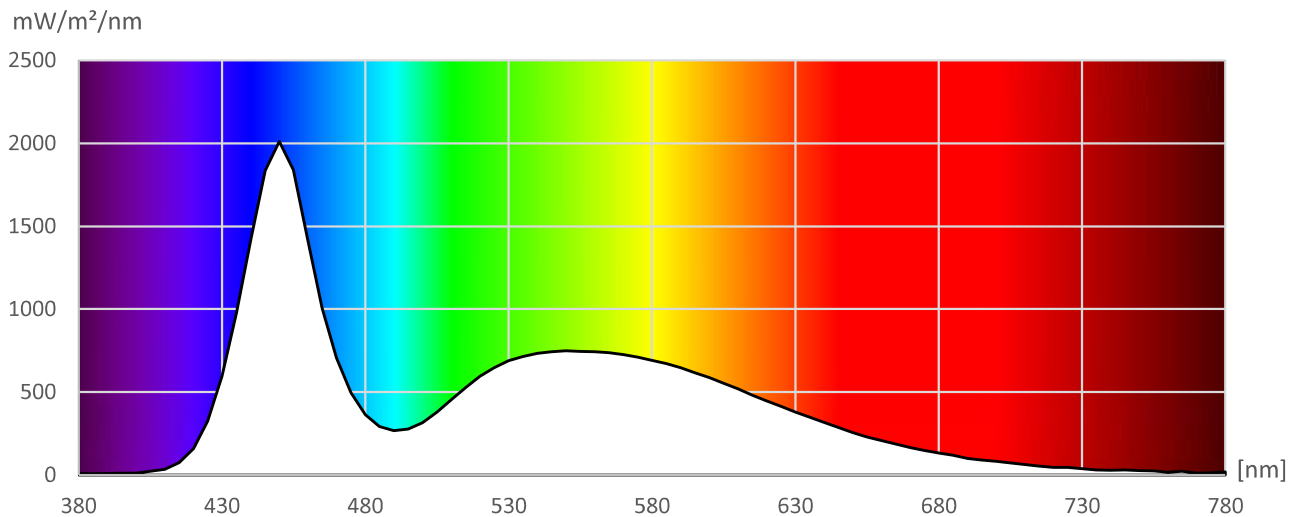
First, last name of inspector

Measurement protocol



Test object: Varytec
 Hero Spot 90
 449224 / @ 1 m

Measurement file: 449224_1m.CSV
 Date of measurement: 09.05.2019
 Time of measurement: 11:07:30

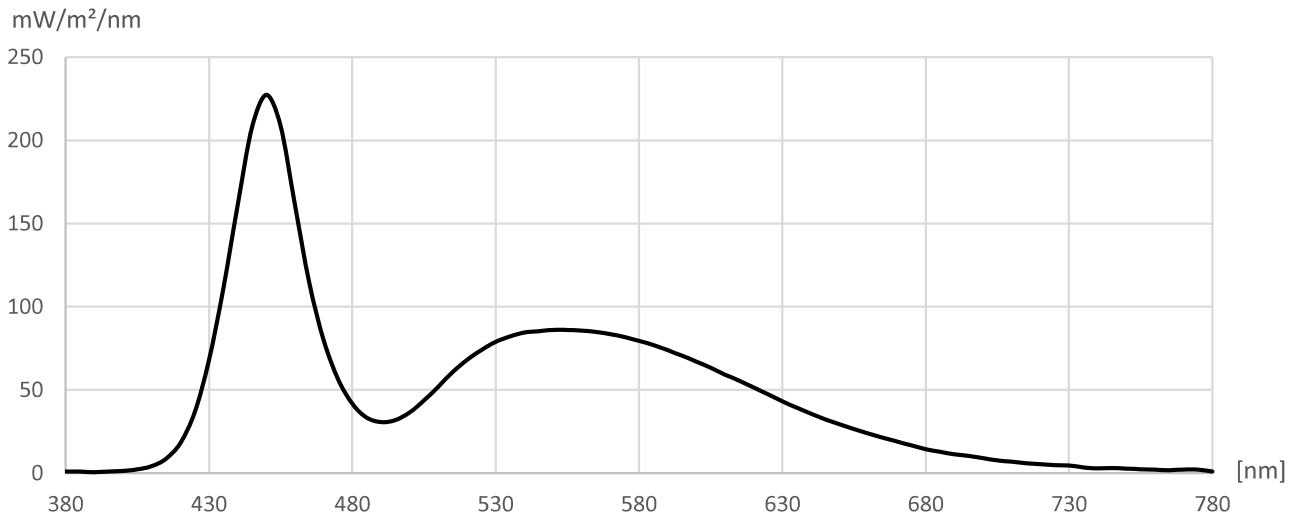


Measurement protocol



Test object: Varytec
 Hero Spot 90
 449224 / @ 3 m

Measurement file: 449224_3m.CSV
 Date of measurement: 09.05.2019
 Time of measurement: 11:07:43



R1 = 84,0	Ra = 80,8	Illuminance	5264,25 lx	CIE1931
R2 = 82,5	Re = 74,4	Ee	19,175 W/m ²	x = 0,2843
R3 = 73,8	GAI = 100,8	LER	274,5 lm/W	y = 0,2732
R4 = 85,8				
R5 = 82,2		correlated color temperature (CCT)	10554 K	CIE1976
R6 = 71,2		Duv	-0,0107	u' = 0,1992
R7 = 86,5				v' = 0,4306
R8 = 80,5		Saturation	23,1 %	
R9 = 31,4				CIE1960
R10 = 51,6		Dominant wavelength	468 nm	u = 0,1992
R11 = 82,7		Peak wavelength	449 nm	v = 0,2871
R12 = 48,6				
R13 = 83,2		Flicker frequency	534 Hz	TM30
R14 = 84,7		Percent Flicker	f > 400 Hz %	Rf = 71,5
R15 = 87,5		Flicker index	f > 400 Hz	Rg = 95,8

[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	1,08	440	160,99	500	36,55	560	85,70	620	51,46	680	14,51	740	2,92
385	0,94	445	207,97	505	43,83	565	84,89	625	47,50	685	12,83	745	3,05
390	0,73	450	227,33	510	52,10	570	83,66	630	43,22	690	11,45	750	2,83
395	1,04	455	209,01	515	60,67	575	81,77	635	39,42	695	10,38	755	2,41
400	1,39	460	161,44	520	68,12	580	79,60	640	35,78	700	9,01	760	2,09
405	2,35	465	114,40	525	74,05	585	77,05	645	32,36	705	7,74	765	1,87
410	4,24	470	79,90	530	79,01	590	73,91	650	29,38	710	6,89	770	2,24
415	8,78	475	56,59	535	82,17	595	70,62	655	26,51	715	6,09	775	2,14
420	18,16	480	41,63	540	84,53	600	67,14	660	23,90	720	5,41	780	1,05
425	36,70	485	33,54	545	85,36	605	63,36	665	21,41	725	4,85		
430	67,66	490	30,73	550	86,12	610	59,26	670	19,02	730	4,71		
435	110,64	495	31,97	555	86,16	615	55,54	675	16,67	735	3,51		

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Sebastian Laske

Burgebrach, 09.05.2019

First, last name of inspector

Measurement protocol

th•mann

Test object: Varytec
 Hero Spot 90
 449224 / @ 3 m

Measurement file: 449224_3m.CSV
 Date of measurement: 09.05.2019
 Time of measurement: 11:07:43

