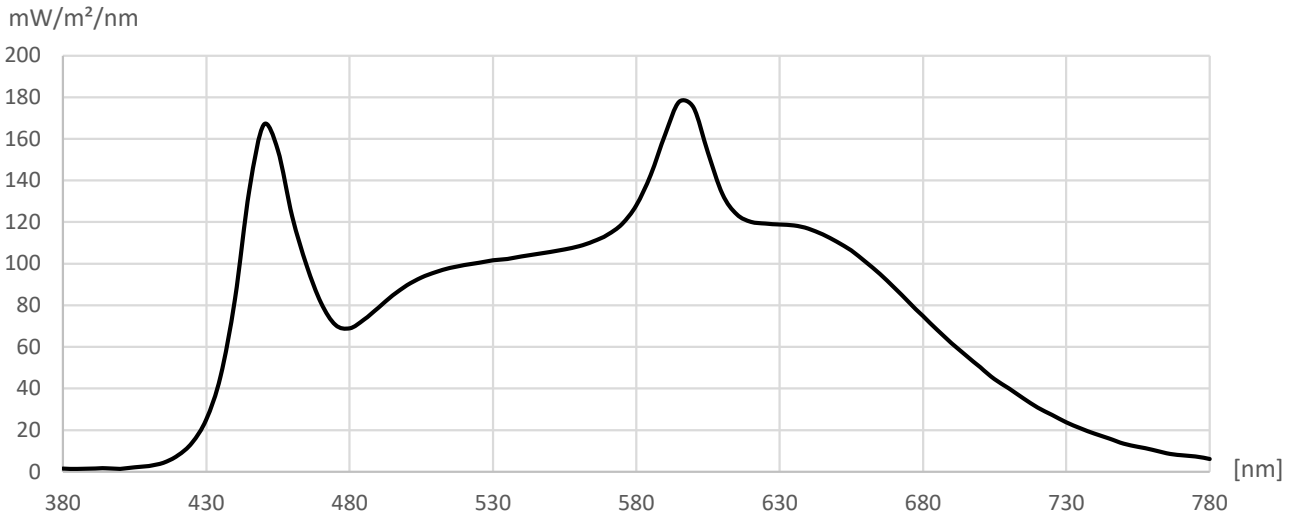


Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / all

Measurement file: 486485_1m_all.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:06:59



R1 = 95,0	Ra = 91,7	Illuminance	8476,51 lx	CIE1931
R2 = 97,0	Re = 89,8	Ee	30,509 W/m ²	x = 0,3741
R3 = 93,5	GAI = 85,4	LER	277,8 lm/W	y = 0,3554
R4 = 93,9				
R5 = 96,1		correlated color temperature (CCT)	4016 K	CIE1976
R6 = 92,7		Duv	-0,0085	u' = 0,2297
R7 = 87,3				v' = 0,4908
R8 = 78,3		Saturation	18,8 %	
R9 = 53,0				CIE1960
R10 = 95,6		Dominant wavelength	585 nm	u = 0,2297
R11 = 96,1		Peak wavelength	596 nm	v = 0,3272
R12 = 81,9				
R13 = 97,3		Flicker frequency	909,6 Hz	TM30
R14 = 97,0		Percent Flicker	f >= 400 Hz %	Rf = 89,8
R15 = 91,5		Flicker index	f >= 400 Hz	Rg = 99,4

[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	1,44	440	82,93	500	89,61	560	108,38	620	120,16	680	74,87	740	18,23
385	1,33	445	135,39	505	93,41	565	110,64	625	119,24	685	68,16	745	15,99
390	1,51	450	166,73	510	96,00	570	113,86	630	118,81	690	61,75	750	13,49
395	1,73	455	154,63	515	97,93	575	119,06	635	118,39	695	55,88	755	11,97
400	1,41	460	122,67	520	99,33	580	128,09	640	116,82	700	50,14	760	10,61
405	2,16	465	99,17	525	100,38	585	142,70	645	114,02	705	44,53	765	8,88
410	2,77	470	81,28	530	101,61	590	162,08	650	110,52	710	40,02	770	7,89
415	4,33	475	70,59	535	102,29	595	177,79	655	106,33	715	35,33	775	7,34
420	7,77	480	68,98	540	103,50	600	175,02	660	100,86	720	30,90	780	6,17
425	13,91	485	73,05	545	104,54	605	153,45	665	94,99	725	27,26		
430	25,08	490	78,79	550	105,71	610	133,52	670	88,50	730	23,81		
435	45,84	495	84,71	555	106,81	615	123,72	675	81,53	735	20,85		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

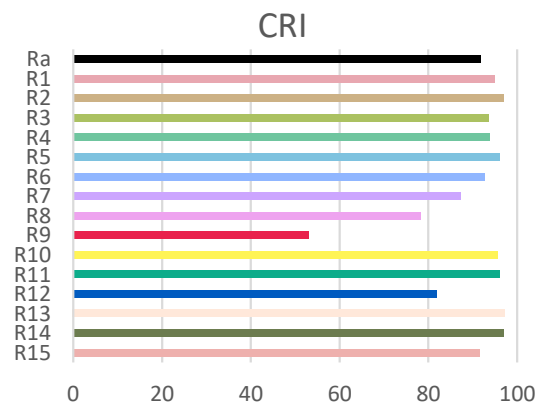
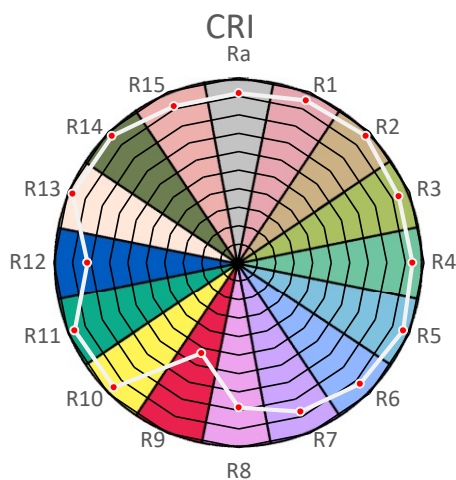
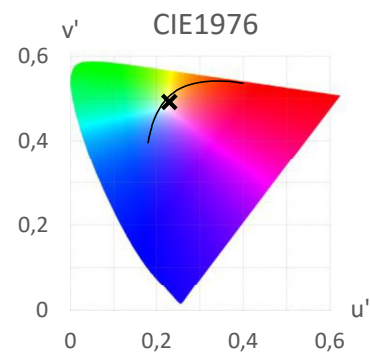
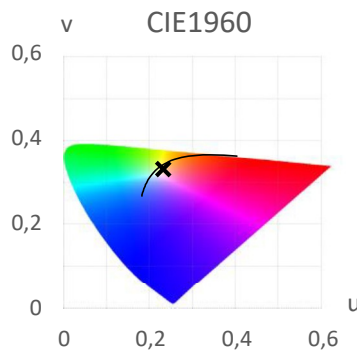
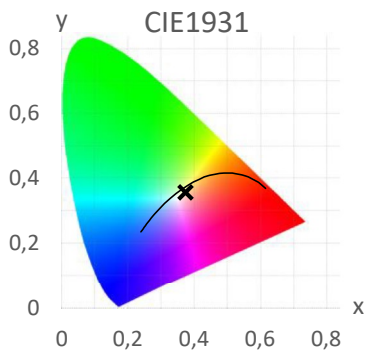
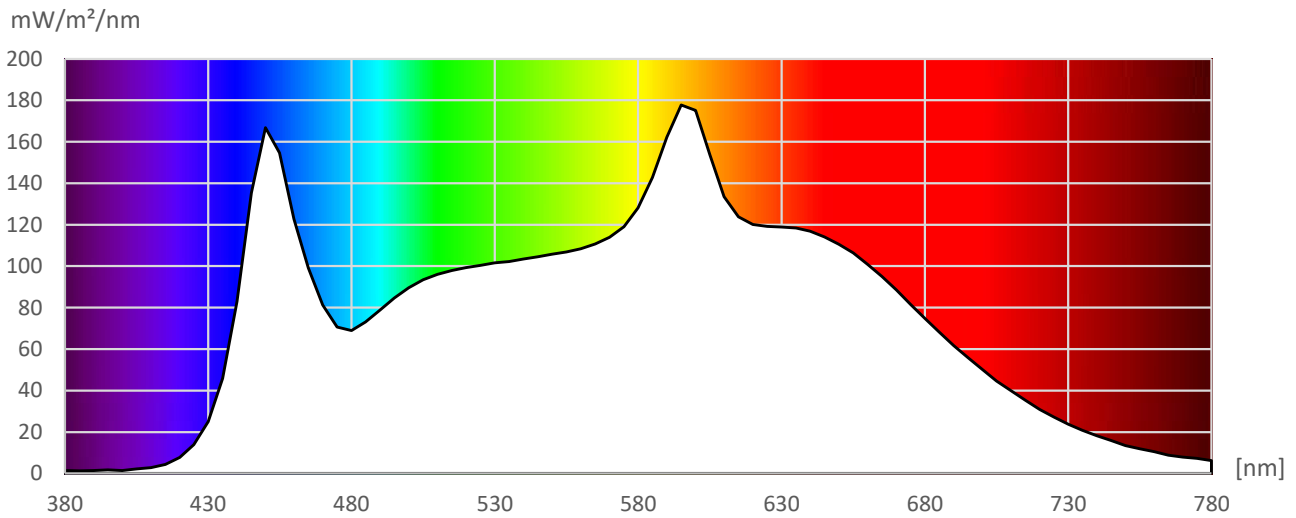
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / all

Measurement file: 486485_1m_all.CS
 Date of measurement: 23.03.2021
 Time of measurement: 17:06:59



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

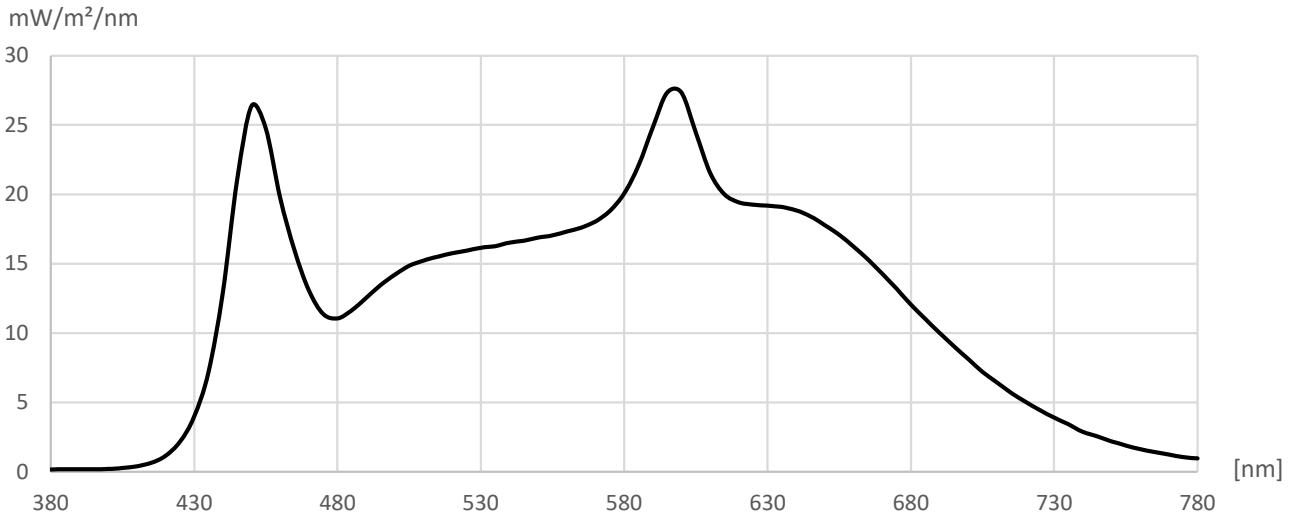
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / all

Measurement file: 486485_3m_all.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:07:11



R1 = 95,9	Ra = 92,4	Illuminance	1342,69 lx	CIE1931
R2 = 96,8	Re = 90,6	Ee	4,857 W/m ²	x = 0,3739
R3 = 94,0	GAI = 86,0	LER	276,4 lm/W	y = 0,3551
R4 = 94,8				
R5 = 96,7		correlated color temperature (CCT)	4021 K	CIE1976
R6 = 92,5		Duv	-0,0085	u' = 0,2296
R7 = 88,2				v' = 0,4907
R8 = 80,6		Saturation	18,7 %	
R9 = 58,6				CIE1960
R10 = 95,0		Dominant wavelength	585 nm	u = 0,2296
R11 = 96,5		Peak wavelength	598 nm	v = 0,3271
R12 = 81,7				
R13 = 97,6		Flicker frequency	909,5 Hz	TM30
R14 = 97,4		Percent Flicker	f >= 400 Hz %	Rf = 90,2
R15 = 93,3		Flicker index	f >= 400 Hz	Rg = 99,7

[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	0,17	440	12,91	500	14,20	560	17,31	620	19,42	680	12,07	740	2,87
385	0,18	445	21,07	505	14,85	565	17,61	625	19,25	685	11,03	745	2,56
390	0,17	450	26,38	510	15,22	570	18,04	630	19,18	690	10,02	750	2,19
395	0,18	455	24,78	515	15,51	575	18,80	635	19,09	695	9,05	755	1,89
400	0,20	460	19,79	520	15,76	580	20,05	640	18,85	700	8,12	760	1,63
405	0,26	465	15,98	525	15,94	585	22,08	645	18,41	705	7,20	765	1,43
410	0,40	470	13,08	530	16,15	590	24,85	650	17,79	710	6,45	770	1,24
415	0,64	475	11,36	535	16,27	595	27,33	655	17,10	715	5,70	775	1,05
420	1,15	480	11,06	540	16,52	600	27,35	660	16,24	720	5,04	780	0,95
425	2,16	485	11,64	545	16,66	605	24,46	665	15,31	725	4,44		
430	3,95	490	12,54	550	16,88	610	21,54	670	14,27	730	3,90		
435	7,16	495	13,45	555	17,03	615	19,99	675	13,20	735	3,43		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

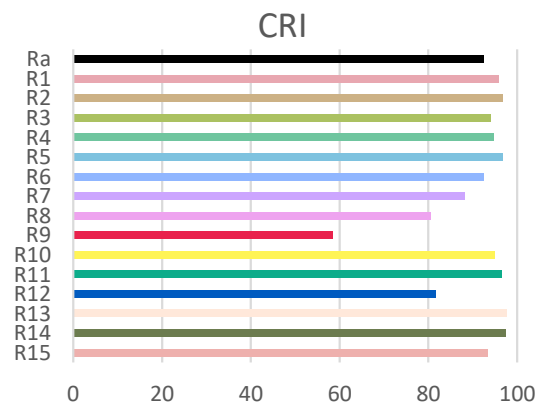
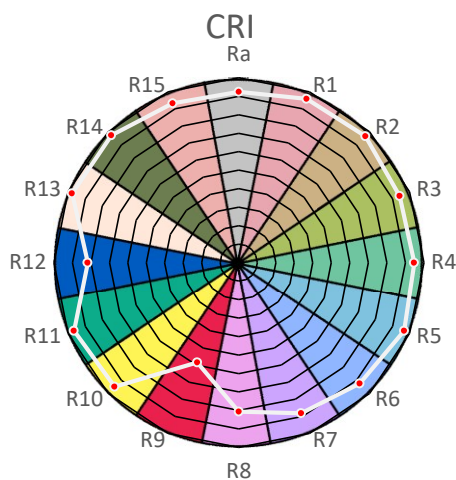
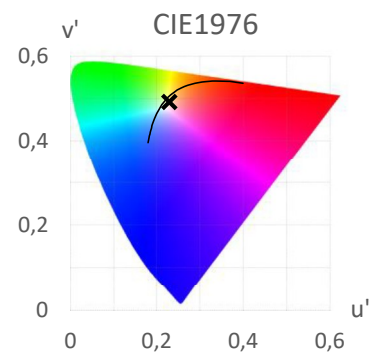
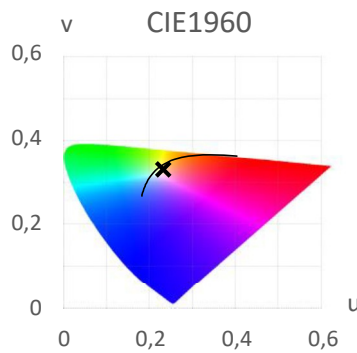
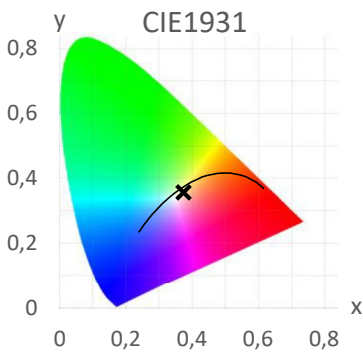
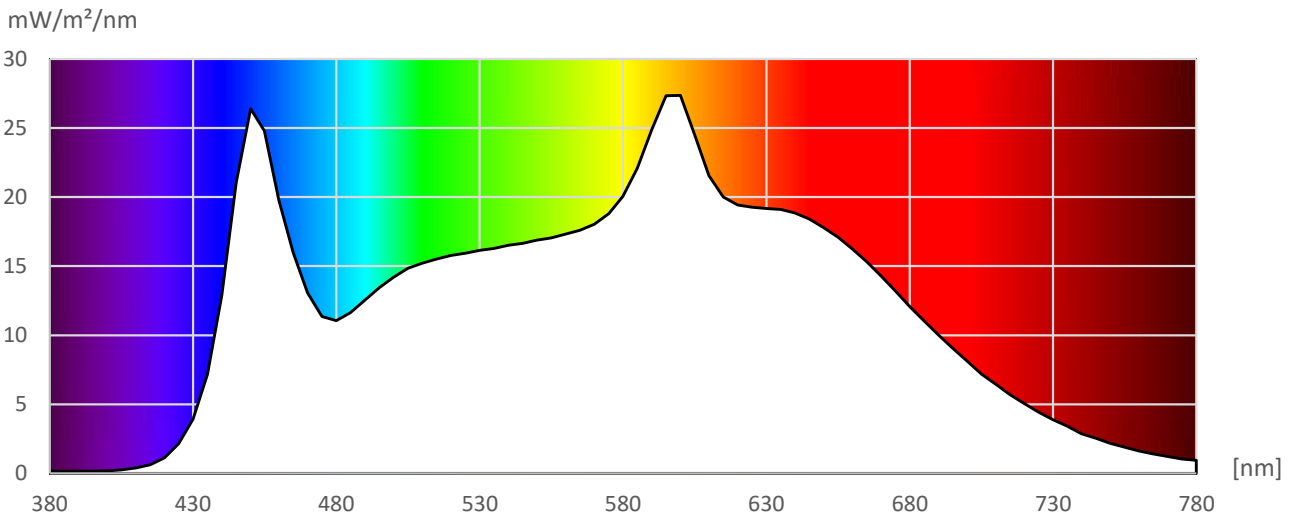
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / all

Measurement file: 486485_3m_all.CS
 Date of measurement: 23.03.2021
 Time of measurement: 17:07:11



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

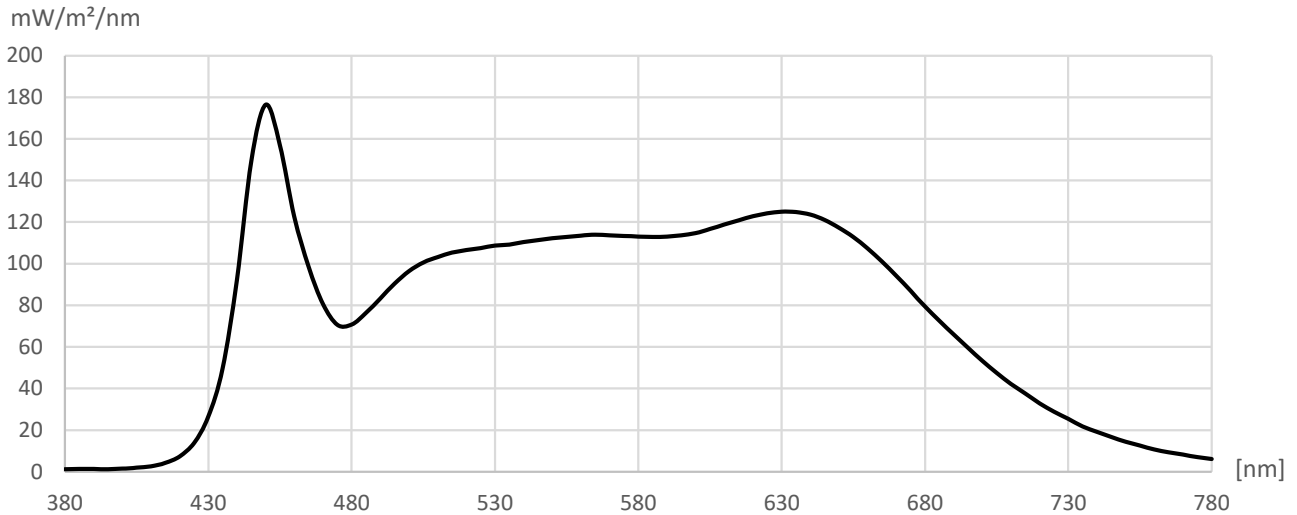
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / cw+ww

Measurement file: 486485_1m_cw+ww.CS
 Date of measurement: 23.03.2021
 Time of measurement: 17:02:55



R1 = 97,8	Ra = 98,0	Illuminance	8109,51 lx	CIE1931
R2 = 99,1	Re = 96,3	Ee	30,379 W/m ²	x = 0,3543
R3 = 96,8	GAI = 91,8	LER	266,9 lm/W	y = 0,3527
R4 = 99,1				
R5 = 98,1		correlated color temperature (CCT)	4660 K	CIE1976
R6 = 95,6		Duv	-0,0031	u' = 0,2173
R7 = 99,5				v' = 0,4866
R8 = 98,4		Saturation	12,1 %	
R9 = 95,1				CIE1960
R10 = 98,4		Dominant wavelength	578 nm	u = 0,2173
R11 = 96,5		Peak wavelength	449 nm	v = 0,3244
R12 = 78,2				
R13 = 98,4		Flicker frequency	% < 1.0 Hz	TM30
R14 = 97,9		Percent Flicker	< 1.0 %	Rf = 92,8
R15 = 96,1		Flicker index	% < 1.0	Rg = 101,4

[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	1,20	440	92,32	500	96,39	560	113,54	620	122,81	680	79,50	740	19,22
385	1,38	445	149,42	505	100,60	565	113,89	625	124,17	685	72,61	745	16,63
390	1,29	450	176,36	510	103,21	570	113,63	630	124,97	690	65,97	750	14,46
395	1,27	455	157,12	515	105,28	575	113,34	635	124,81	695	59,59	755	12,58
400	1,44	460	122,74	520	106,52	580	113,06	640	123,60	700	53,34	760	10,67
405	1,91	465	98,60	525	107,55	585	112,86	645	120,97	705	47,65	765	9,37
410	2,60	470	80,60	530	108,64	590	113,06	650	117,28	710	42,28	770	8,26
415	4,22	475	70,64	535	109,23	595	113,68	655	112,80	715	37,59	775	7,04
420	7,37	480	70,81	540	110,38	600	114,72	660	107,32	720	32,85	780	6,10
425	13,85	485	76,30	545	111,34	605	116,67	665	101,04	725	28,82		
430	26,33	490	83,26	550	112,18	610	118,80	670	94,11	730	25,41		
435	49,51	495	90,44	555	112,85	615	120,92	675	86,92	735	21,79		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

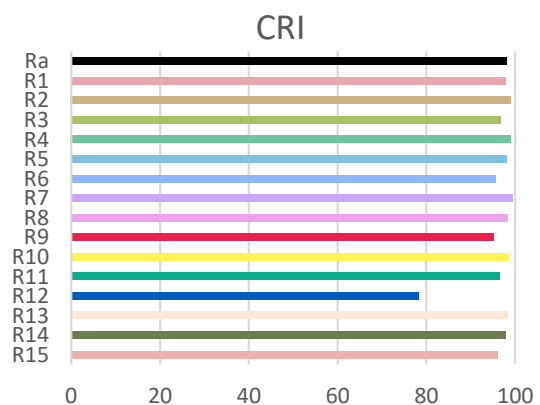
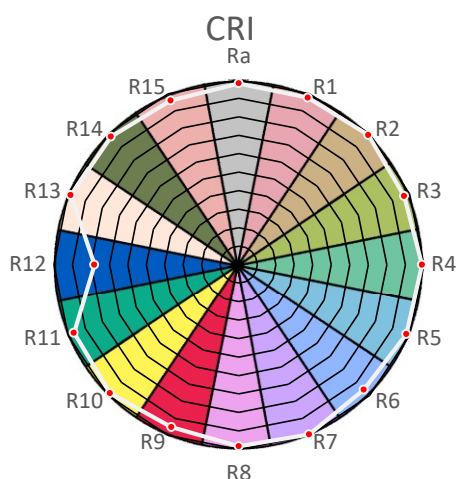
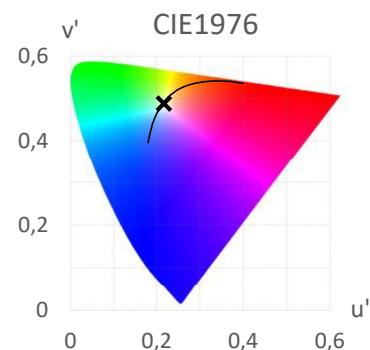
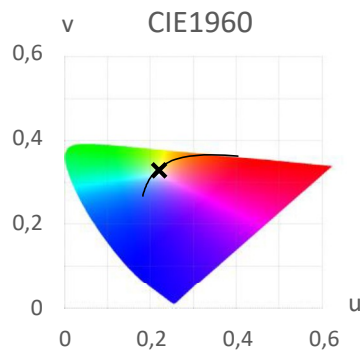
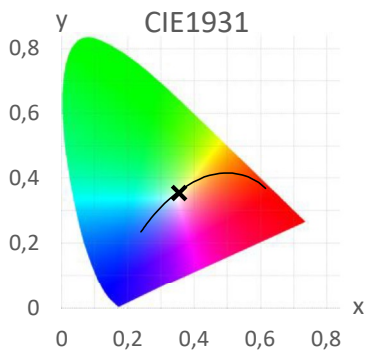
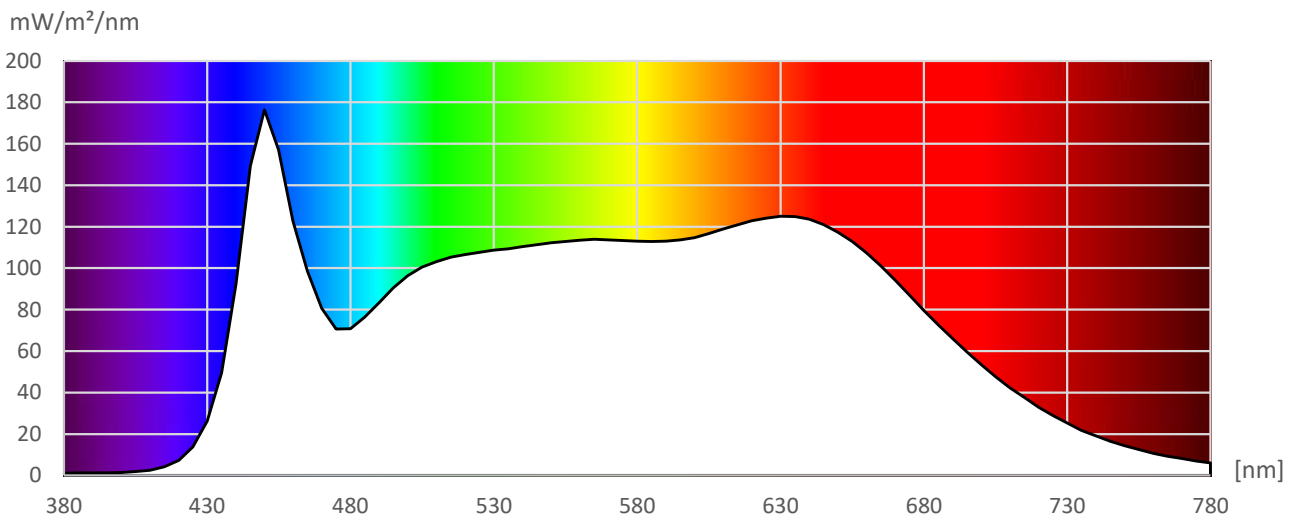
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / cw+ww

Measurement file: 486485_1m_cw+w
 Date of measurement: 23.03.2021
 Time of measurement: 17:02:55

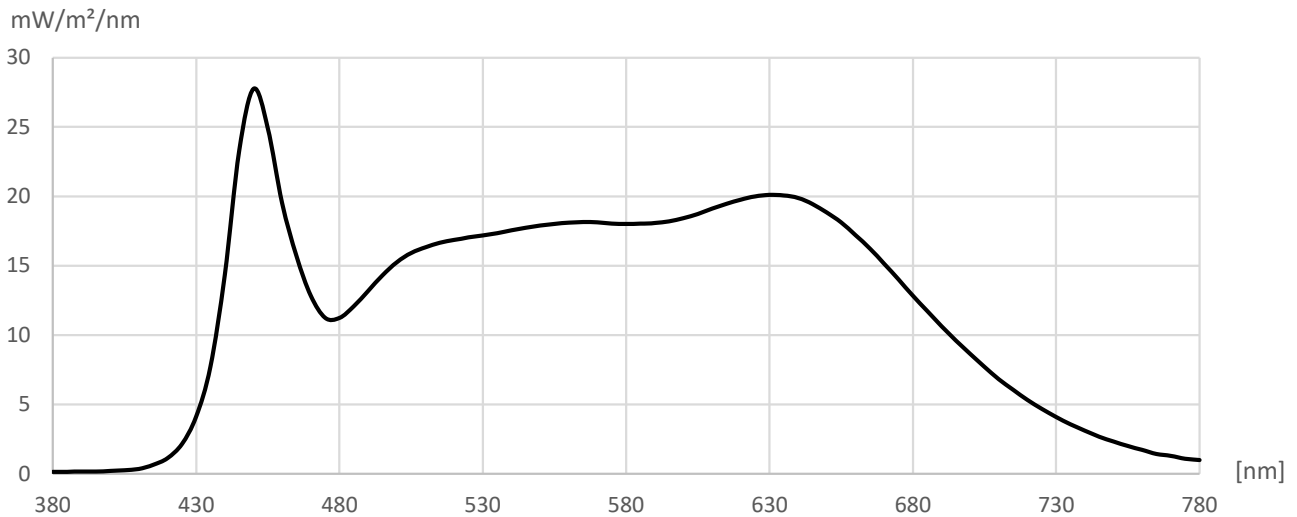


Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / cw+ww

Measurement file: 486485_3m_cw+ww.CS
 Date of measurement: 23.03.2021
 Time of measurement: 17:03:10



R1 = 97,6	Ra = 98,0	Illuminance	1292,79 lx	CIE1931
R2 = 99,0	Re = 96,3	Ee	4,844 W/m ²	x = 0,3560
R3 = 96,9	GAI = 91,4	LER	266,9 lm/W	y = 0,3535
R4 = 99,1				
R5 = 98,0		correlated color temperature (CCT)	4605 K	CIE1976
R6 = 95,6		Duv	-0,0033	u' = 0,2181
R7 = 99,4				v' = 0,4872
R8 = 98,2		Saturation	12,9 %	
R9 = 94,7				CIE1960
R10 = 98,5		Dominant wavelength	579 nm	u = 0,2181
R11 = 96,4		Peak wavelength	449 nm	v = 0,3248
R12 = 78,4				
R13 = 98,2		Flicker frequency	% < 1.0 Hz	TM30
R14 = 97,9		Percent Flicker	< 1.0 %	Rf = 92,8
R15 = 95,9		Flicker index	% < 1.0	Rg = 101,4

[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	0,14	440	14,34	500	15,25	560	18,10	620	19,77	680	12,84	740	3,11
385	0,14	445	23,29	505	15,93	565	18,14	625	20,00	685	11,74	745	2,67
390	0,17	450	27,76	510	16,33	570	18,13	630	20,10	690	10,65	750	2,32
395	0,16	455	24,95	515	16,65	575	18,04	635	20,07	695	9,61	755	1,99
400	0,20	460	19,54	520	16,85	580	18,01	640	19,88	700	8,63	760	1,72
405	0,25	465	15,70	525	17,03	585	18,03	645	19,44	705	7,70	765	1,42
410	0,35	470	12,82	530	17,19	590	18,07	650	18,84	710	6,82	770	1,29
415	0,64	475	11,24	535	17,34	595	18,21	655	18,13	715	6,05	775	1,08
420	1,12	480	11,23	540	17,55	600	18,43	660	17,21	720	5,33	780	0,98
425	2,15	485	12,06	545	17,73	605	18,73	665	16,24	725	4,67		
430	4,10	490	13,18	550	17,89	610	19,12	670	15,14	730	4,09		
435	7,71	495	14,31	555	18,01	615	19,46	675	14,01	735	3,57		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

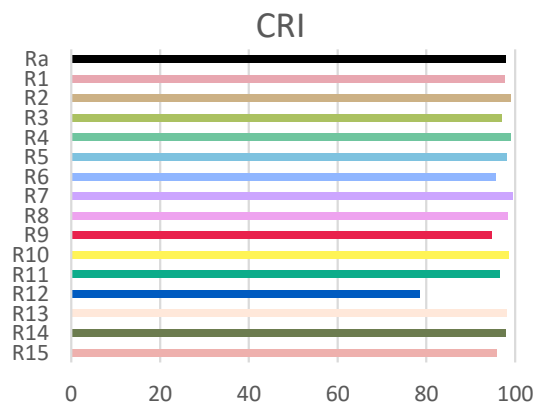
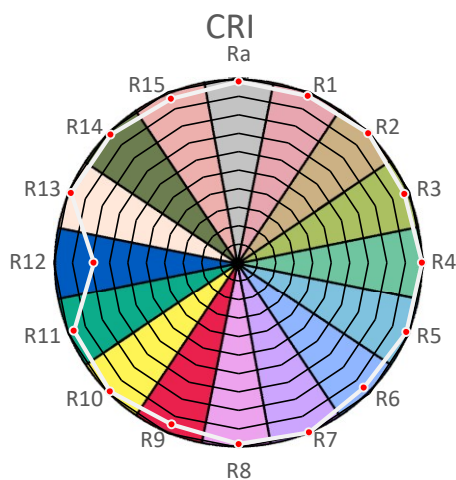
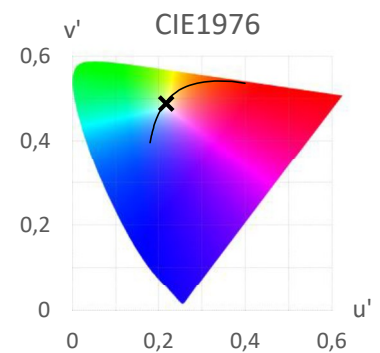
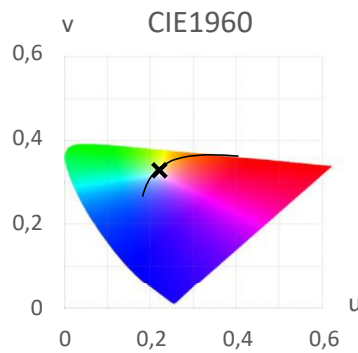
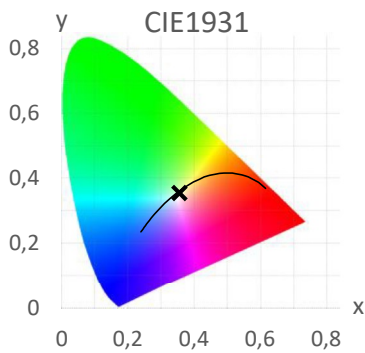
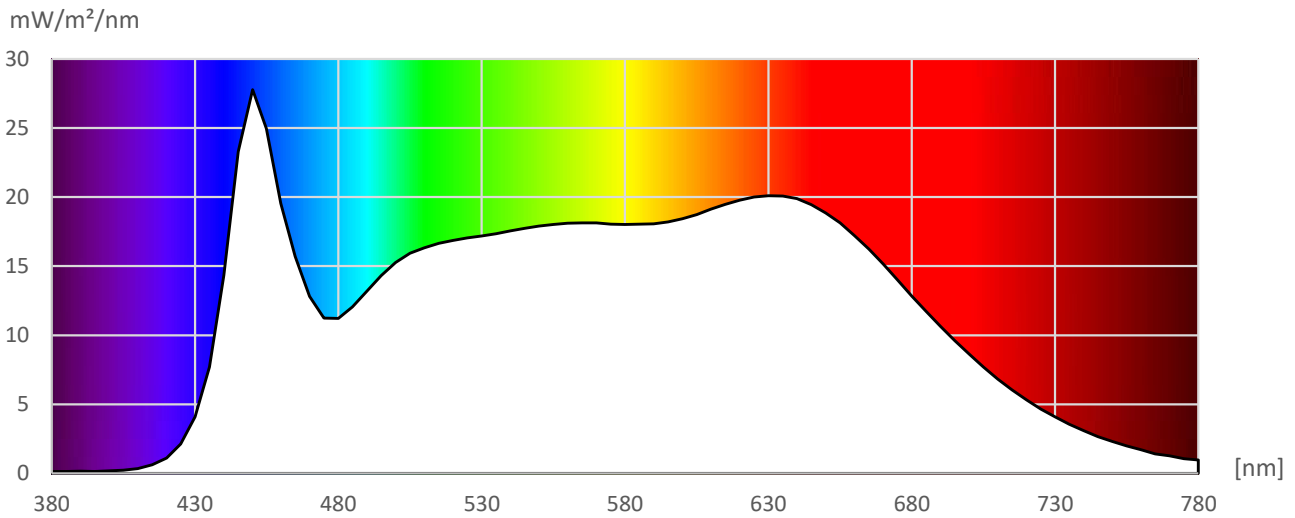
First, last name of inspector

Measurement protocol

th•mann

Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / cw+ww

Measurement file: 486485_3m_cw+w
 Date of measurement: 23.03.2021
 Time of measurement: 17:03:10



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

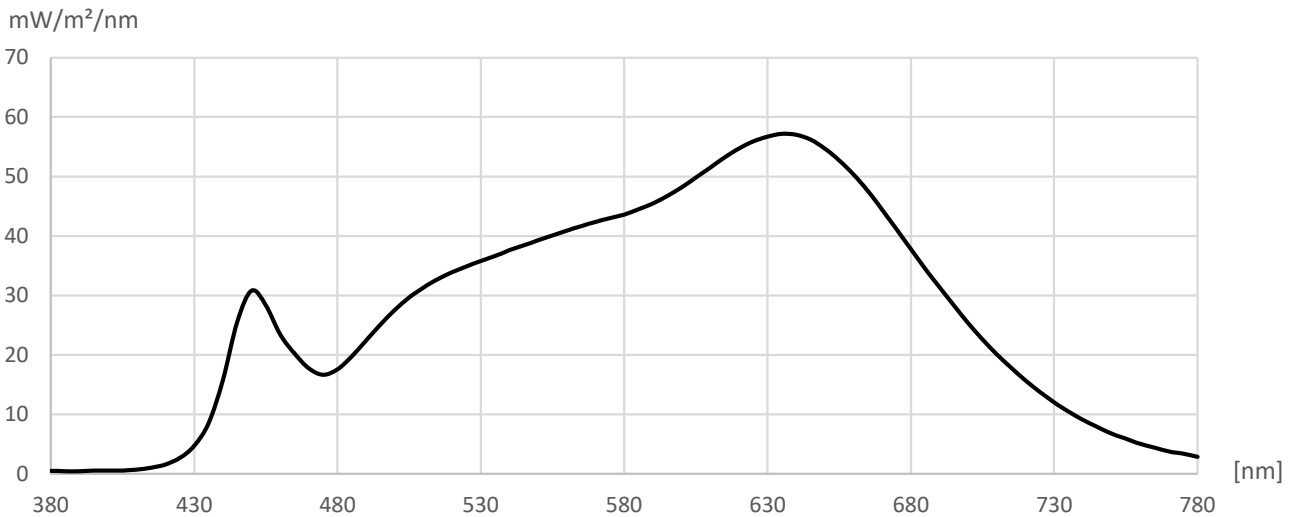
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / ww

Measurement file: 486485_1m_ww.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:03:45



R1 = 99,1	Ra = 98,4	Illuminance	2968,81 lx	CIE1931
R2 = 98,6	Re = 96,8	Ee	11,007 W/m ²	x = 0,4185
R3 = 96,8	GAI = 63,2	LER	269,7 lm/W	y = 0,4010
R4 = 99,6				
R5 = 98,4		correlated color temperature (CCT)	3308 K	CIE1976
R6 = 97,8		Duv	0,0017	u' = 0,2400
R7 = 99,2				v' = 0,5174
R8 = 97,3		Saturation	45,9 %	
R9 = 92,3				CIE1960
R10 = 96,0		Dominant wavelength	580 nm	u = 0,2400
R11 = 98,0		Peak wavelength	634 nm	v = 0,3450
R12 = 84,8				
R13 = 98,9		Flicker frequency	% < 1.0 Hz	TM30
R14 = 97,6		Percent Flicker	< 1.0 %	Rf = 94,6
R15 = 97,4		Flicker index	% < 1.0	Rg = 100,3

[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	0,47	440	15,69	500	27,56	560	40,90	620	54,71	680	37,83	740	9,08
385	0,44	445	25,51	505	29,66	565	41,66	625	55,90	685	34,51	745	7,88
390	0,40	450	30,82	510	31,33	570	42,36	630	56,69	690	31,37	750	6,73
395	0,54	455	28,37	515	32,74	575	43,02	635	57,19	695	28,33	755	5,89
400	0,51	460	23,46	520	33,89	580	43,61	640	57,03	700	25,30	760	5,02
405	0,55	465	20,24	525	34,86	585	44,50	645	56,20	705	22,61	765	4,41
410	0,71	470	17,75	530	35,79	590	45,48	650	54,74	710	20,11	770	3,73
415	1,02	475	16,63	535	36,64	595	46,72	655	52,74	715	17,84	775	3,39
420	1,57	480	17,58	540	37,60	600	48,15	660	50,34	720	15,69	780	2,83
425	2,67	485	19,73	545	38,43	605	49,80	665	47,58	725	13,77		
430	4,65	490	22,42	550	39,26	610	51,51	670	44,42	730	12,01		
435	8,43	495	25,08	555	40,11	615	53,21	675	41,12	735	10,46		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

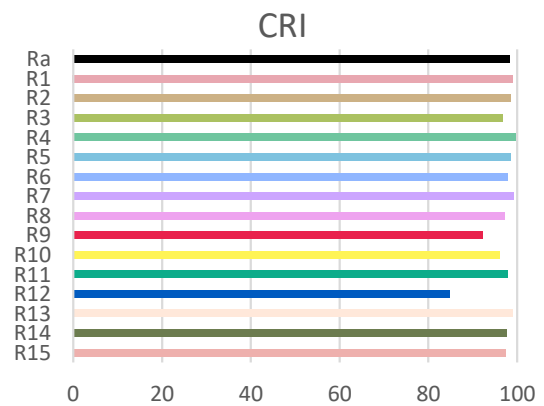
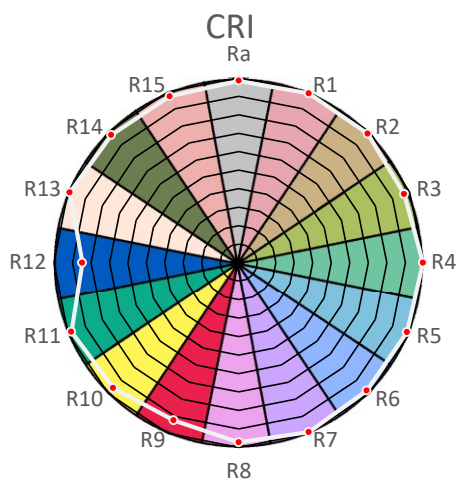
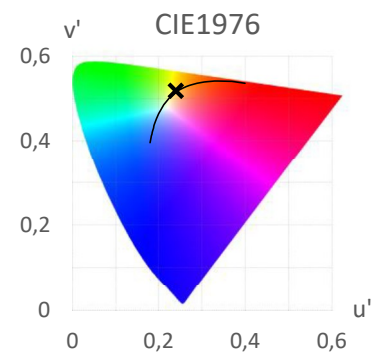
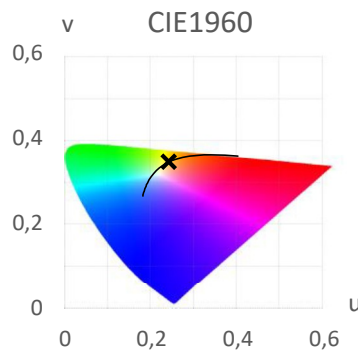
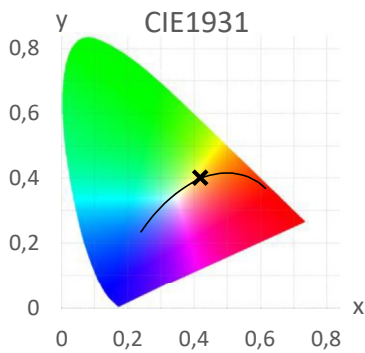
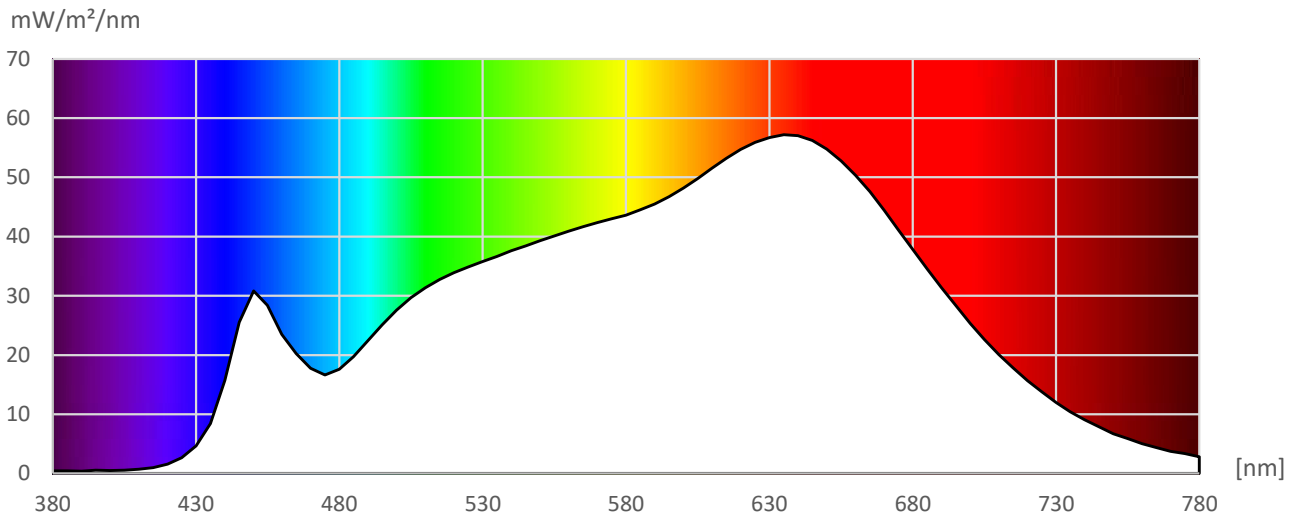
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / ww

Measurement file: 486485_1m_ww.C
 Date of measurement: 23.03.2021
 Time of measurement: 17:03:45



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

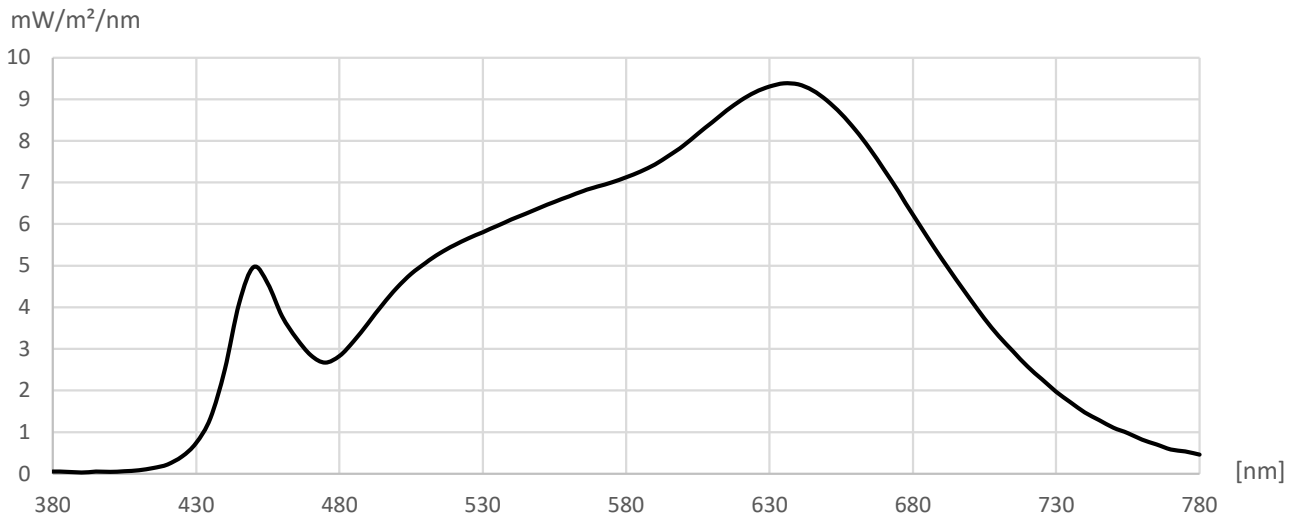
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / ww

Measurement file: 486485_3m_ww.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:03:59



R1 = 99,1	Ra = 98,3	Illuminance	484,07 lx	CIE1931
R2 = 98,6	Re = 96,8	Ee	1,796 W/m ²	x = 0,4201
R3 = 96,9	GAI = 62,5	LER	269,6 lm/W	y = 0,4017
R4 = 99,6				
R5 = 98,4		correlated color temperature (CCT)	3279 K	CIE1976
R6 = 97,9		Duv	0,0017	u' = 0,2408
R7 = 99,1				v' = 0,5179
R8 = 97,1		Saturation	46,6 %	
R9 = 92,0				CIE1960
R10 = 96,1		Dominant wavelength	580 nm	u = 0,2408
R11 = 98,0		Peak wavelength	638 nm	v = 0,3453
R12 = 84,9				
R13 = 98,9		Flicker frequency	% < 1.0 Hz	TM30
R14 = 97,7		Percent Flicker	< 1.0 %	Rf = 94,6
R15 = 97,4		Flicker index	% < 1.0	Rg = 100,2

[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	0,05	440	2,50	500	4,47	560	6,67	620	8,97	680	6,24	740	1,48
385	0,05	445	4,10	505	4,81	565	6,80	625	9,17	685	5,70	745	1,29
390	0,03	450	4,97	510	5,07	570	6,90	630	9,30	690	5,17	750	1,10
395	0,05	455	4,57	515	5,30	575	7,00	635	9,38	695	4,68	755	0,98
400	0,04	460	3,79	520	5,49	580	7,13	640	9,36	700	4,19	760	0,82
405	0,06	465	3,26	525	5,66	585	7,26	645	9,22	705	3,73	765	0,70
410	0,08	470	2,85	530	5,81	590	7,44	650	8,97	710	3,31	770	0,58
415	0,14	475	2,67	535	5,96	595	7,65	655	8,65	715	2,94	775	0,53
420	0,23	480	2,83	540	6,11	600	7,88	660	8,26	720	2,58	780	0,46
425	0,41	485	3,18	545	6,25	605	8,17	665	7,81	725	2,27		
430	0,74	490	3,62	550	6,39	610	8,44	670	7,30	730	1,97		
435	1,34	495	4,06	555	6,54	615	8,73	675	6,78	735	1,72		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

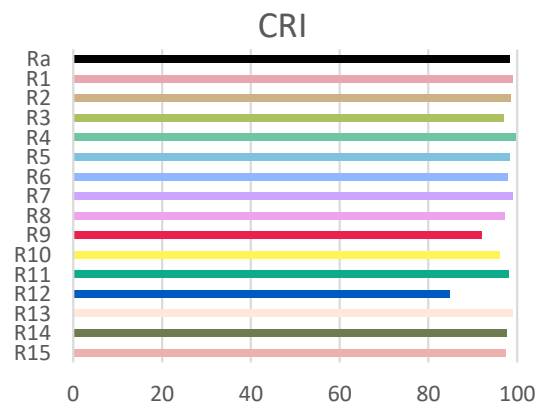
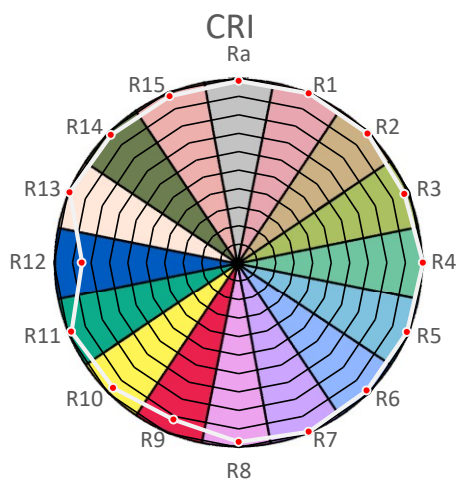
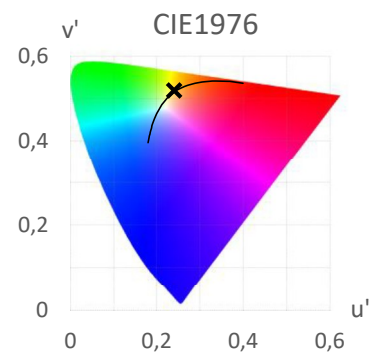
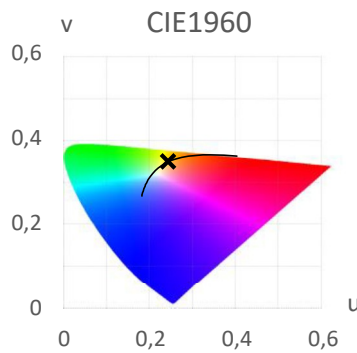
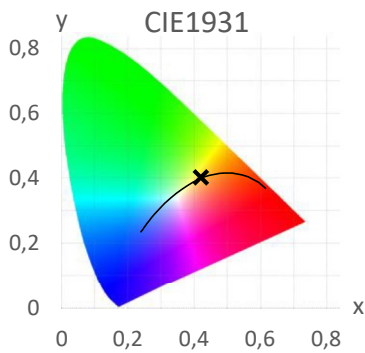
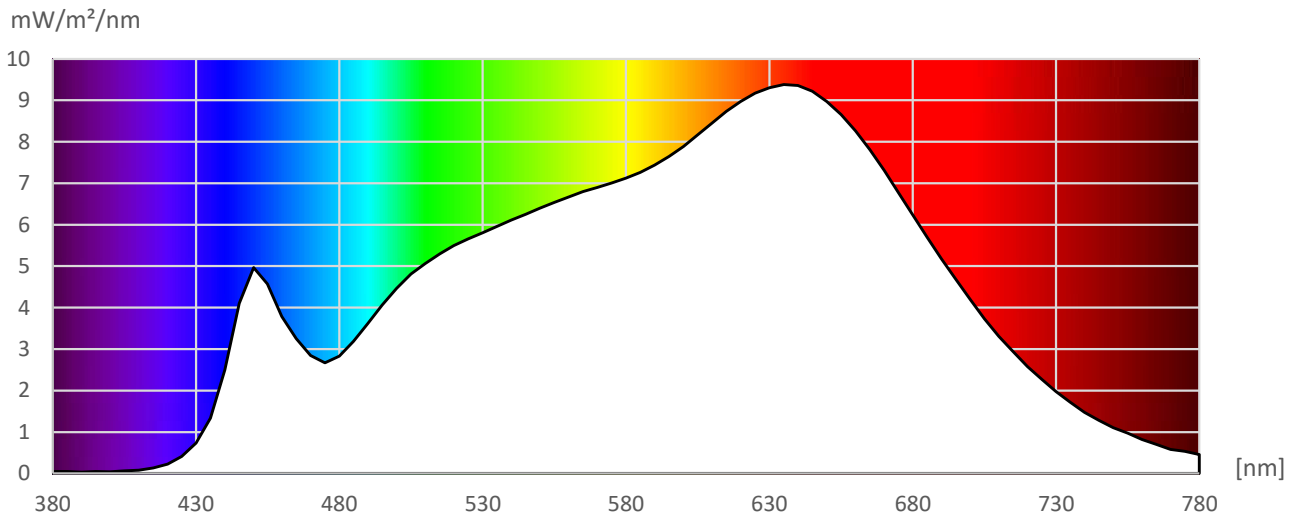
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / ww

Measurement file: 486485_3m_ww.C
 Date of measurement: 23.03.2021
 Time of measurement: 17:03:59



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

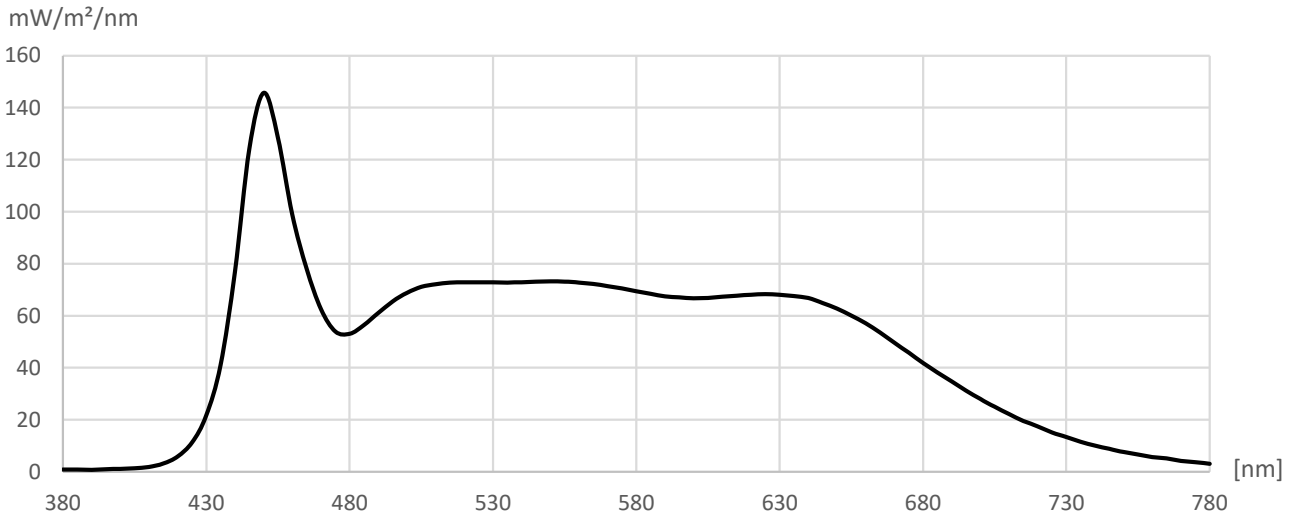
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / cw

Measurement file: 486485_1m_cw.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:04:25



R1 = 97,5	Ra = 97,4	Illuminance	5147,08 lx	CIE1931
R2 = 98,3	Re = 95,9	Ee	19,382 W/m ²	x = 0,3239
R3 = 95,8	GAI = 99,1	LER	265,6 lm/W	y = 0,3300
R4 = 98,1				
R5 = 97,8		correlated color temperature (CCT)	5914 K	CIE1976
R6 = 94,3		Duv	-0,0018	u' = 0,2053
R7 = 98,5				v' = 0,4705
R8 = 99,1		Saturation	3,5 %	
R9 = 96,1				CIE1960
R10 = 96,6		Dominant wavelength	484 nm	u = 0,2053
R11 = 95,7		Peak wavelength	449 nm	v = 0,3137
R12 = 78,5				
R13 = 98,3		Flicker frequency	% < 1.0 Hz	TM30
R14 = 97,6		Percent Flicker	< 1.0 %	Rf = 92,6
R15 = 96,5		Flicker index	% < 1.0	Rg = 102,1

[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	0,84	440	76,85	500	68,82	560	72,75	620	68,10	680	41,92	740	10,00		
385	0,81	445	124,24	505	71,10	565	72,18	625	68,30	685	38,16	745	8,77		
390	0,69	450	145,72	510	72,06	570	71,41	630	68,08	690	34,76	750	7,54		
395	0,99	455	128,59	515	72,66	575	70,47	635	67,50	695	31,20	755	6,65		
400	1,14	460	98,96	520	72,83	580	69,38	640	66,78	700	27,94	760	5,61		
405	1,28	465	78,11	525	72,86	585	68,43	645	64,90	705	24,99	765	5,11		
410	1,86	470	62,52	530	72,86	590	67,42	650	62,73	710	22,19	770	4,16		
415	3,12	475	53,92	535	72,78	595	67,02	655	60,06	715	19,57	775	3,71		
420	5,84	480	53,06	540	72,90	600	66,69	660	57,12	720	17,49	780	3,07		
425	11,28	485	56,39	545	73,03	605	66,87	665	53,53	725	15,07				
430	21,55	490	61,04	550	73,19	610	67,29	670	49,59	730	13,35				
435	41,04	495	65,46	555	73,11	615	67,72	675	45,80	735	11,57				

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

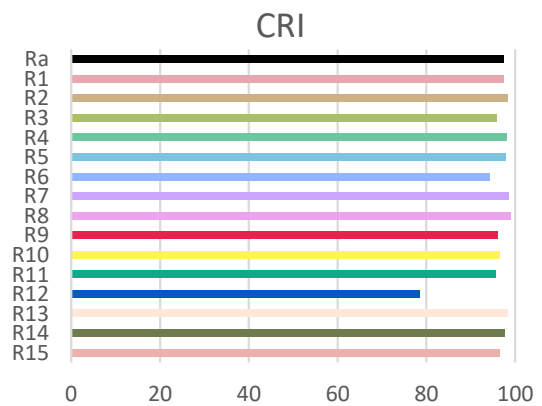
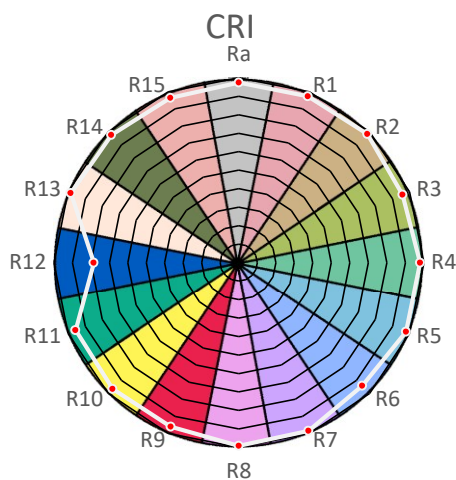
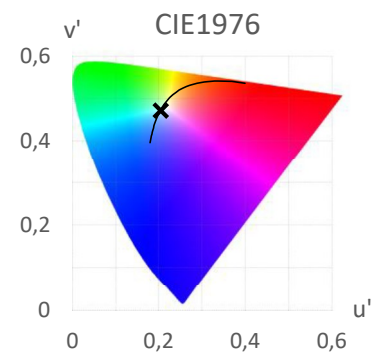
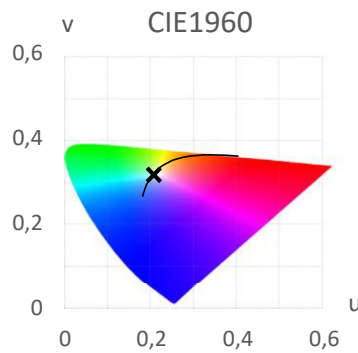
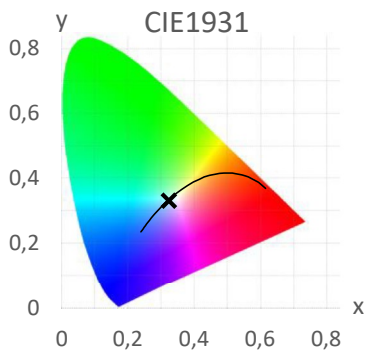
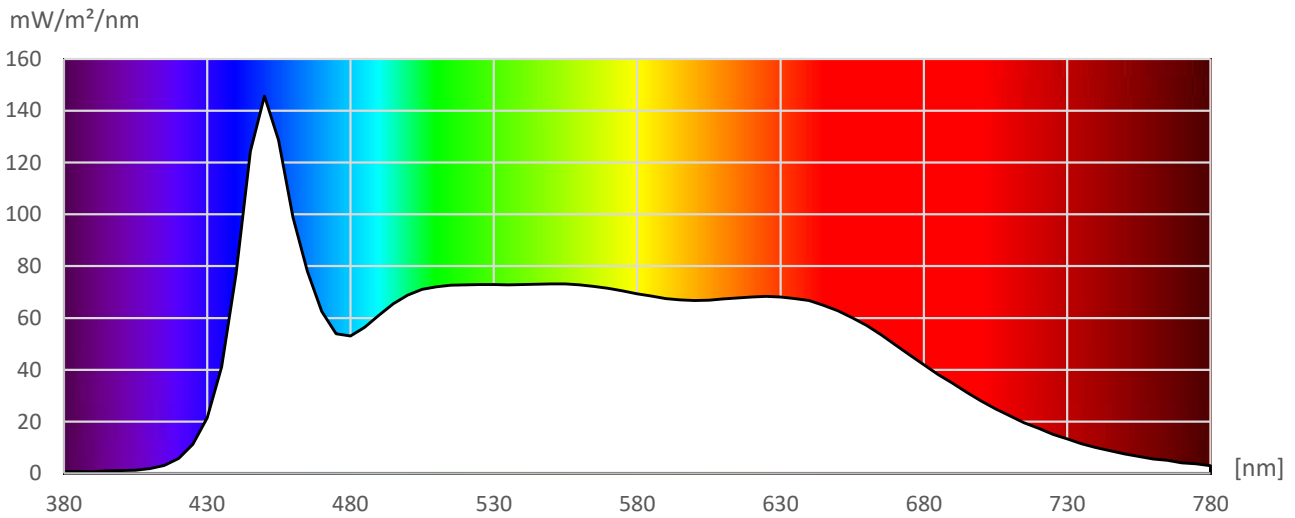
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / cw

Measurement file: 486485_1m_cw.CS
 Date of measurement: 23.03.2021
 Time of measurement: 17:04:25



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

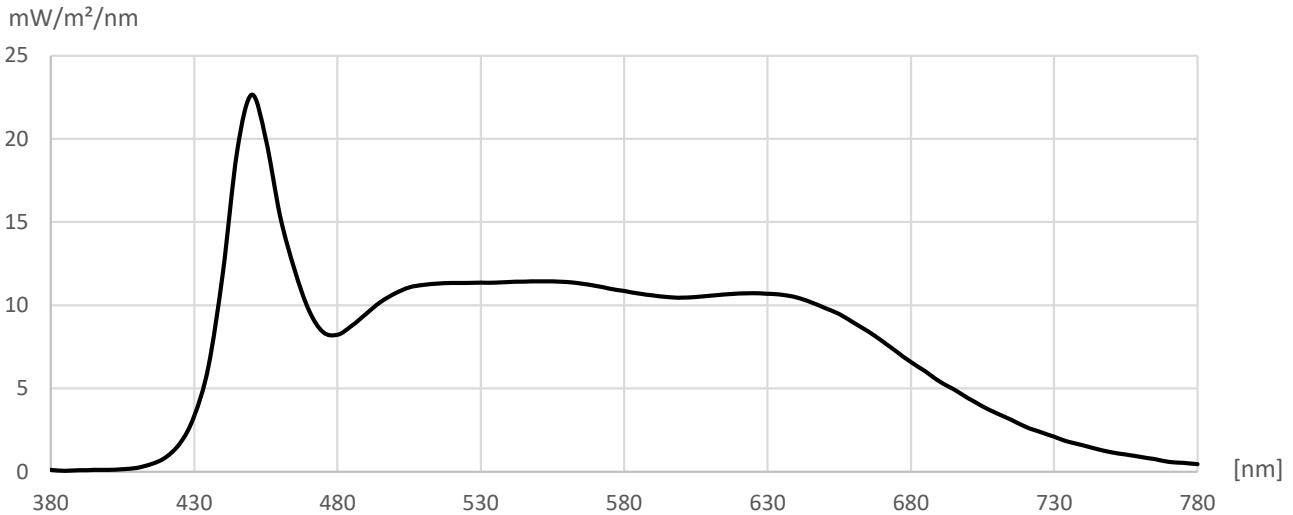
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / cw

Measurement file: 486485_3m_cw.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:04:39



R1 = 97,4	Ra = 97,4	Illuminance	804,9 lx	CIE1931
R2 = 98,3	Re = 95,9	Ee	3,027 W/m ²	x = 0,3249
R3 = 95,8	GAI = 98,9	LER	265,9 lm/W	y = 0,3307
R4 = 98,1				
R5 = 97,9		correlated color temperature (CCT)	5862 K	CIE1976
R6 = 94,3		Duv	-0,0019	u' = 0,2057
R7 = 98,5		Saturation	3,1 %	v' = 0,4710
R8 = 99,1				
R9 = 96,1				CIE1960
R10 = 96,6		Dominant wavelength	485 nm	u = 0,2057
R11 = 95,6		Peak wavelength	449 nm	v = 0,3140
R12 = 78,6				
R13 = 98,3		Flicker frequency	% < 1.0 Hz	TM30
R14 = 97,6		Percent Flicker	< 1.0 %	Rf = 92,6
R15 = 96,5		Flicker index	% < 1.0	Rg = 102,1

[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
380	0,11	440	11,92	500	10,70	560	11,40	620	10,70	680	6,59	740	1,59
385	0,05	445	19,26	505	11,08	565	11,30	625	10,73	685	6,04	745	1,36
390	0,09	450	22,66	510	11,23	570	11,17	630	10,70	690	5,43	750	1,16
395	0,10	455	20,02	515	11,31	575	11,00	635	10,63	695	4,95	755	1,03
400	0,11	460	15,38	520	11,34	580	10,86	640	10,48	700	4,42	760	0,90
405	0,15	465	12,16	525	11,34	585	10,71	645	10,19	705	3,94	765	0,76
410	0,23	470	9,71	530	11,37	590	10,59	650	9,84	710	3,50	770	0,60
415	0,46	475	8,38	535	11,36	595	10,50	655	9,48	715	3,13	775	0,53
420	0,86	480	8,23	540	11,41	600	10,45	660	8,96	720	2,70	780	0,46
425	1,70	485	8,76	545	11,42	605	10,50	665	8,44	725	2,39		
430	3,31	490	9,49	550	11,44	610	10,58	670	7,85	730	2,10		
435	6,32	495	10,19	555	11,43	615	10,65	675	7,21	735	1,80		

Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

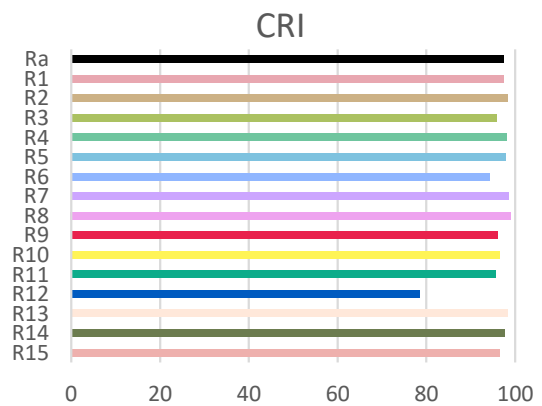
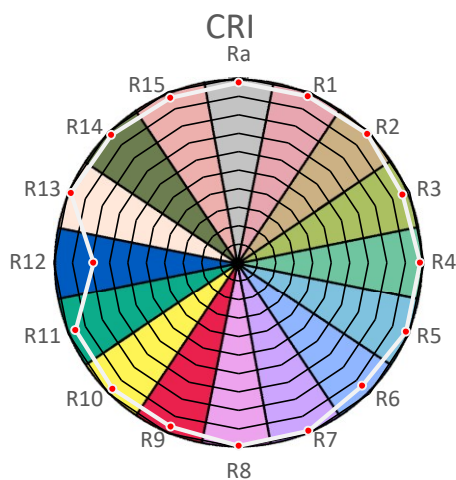
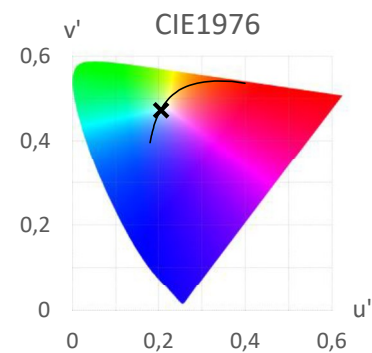
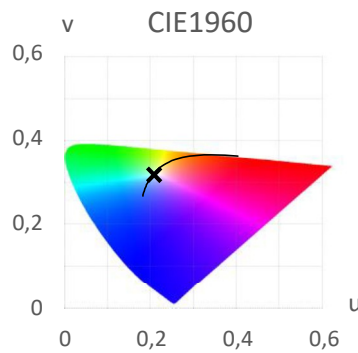
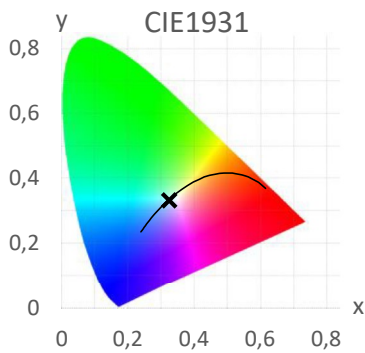
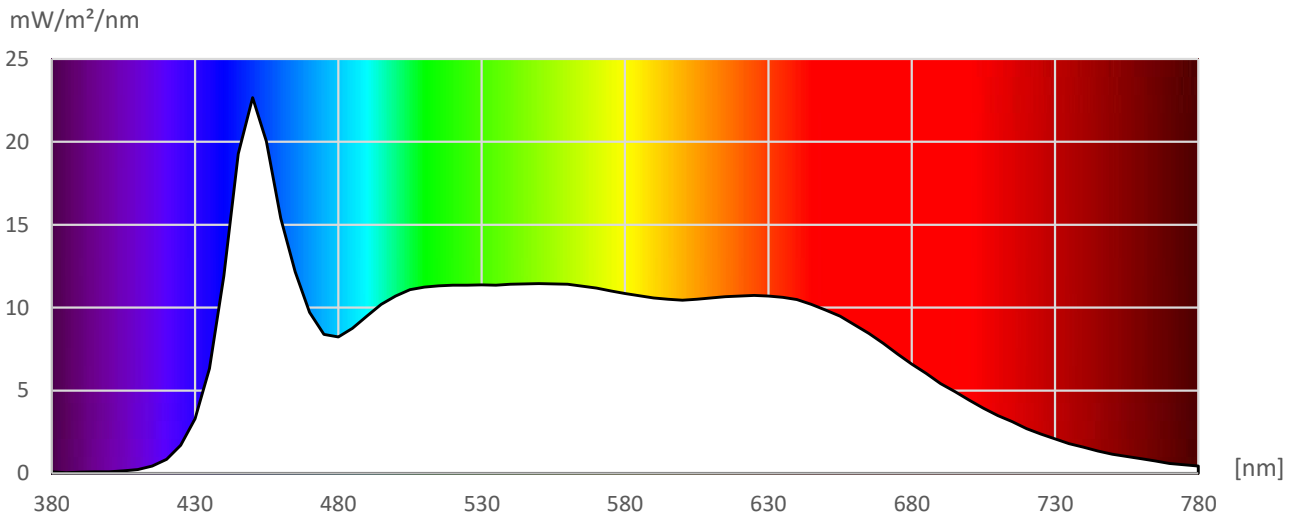
First, last name of inspector

Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / cw

Measurement file: 486485_3m_cw.CS
 Date of measurement: 23.03.2021
 Time of measurement: 17:04:39



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Burgebrach, 23.03.2021

Sebastian Laske

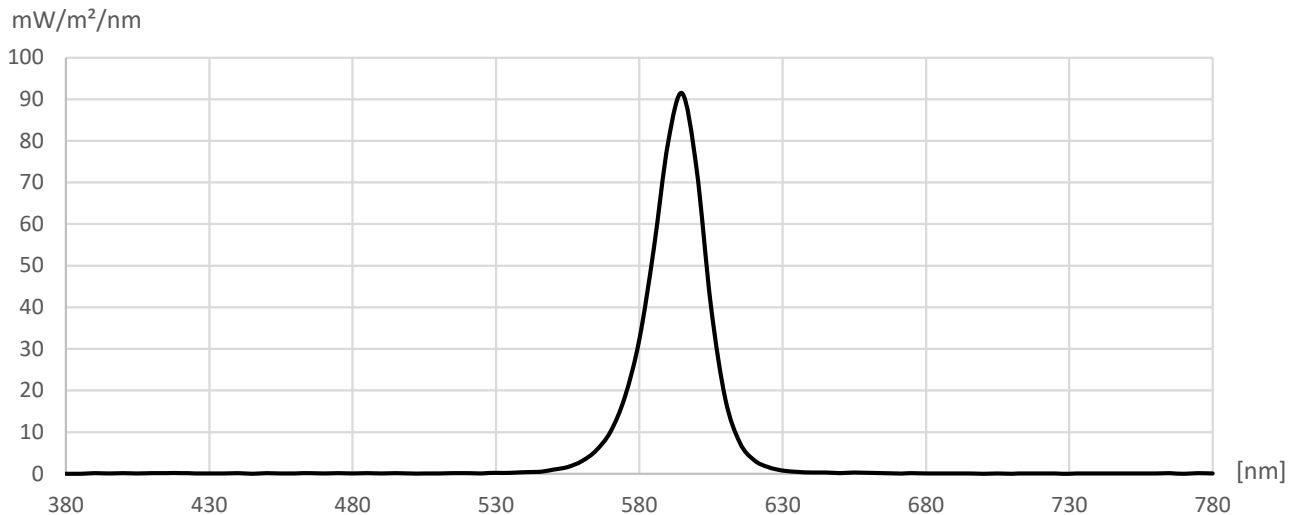
First, last name of inspector

Measurement protocol



Test object: Ignition
2bright Pint TW200 IP
486485 / 1m / amber

Measurement file: 486485_1m_a.CSV
Date of measurement: 23.03.2021
Time of measurement: 17:06:21



R1 = -	Ra = -	Illuminance	1092,21 lx	CIE1931
R2 = -	Re = -	Ee	2,244 W/m ²	x = 0,5788
R3 = -	GAI = -	LER	486,8 lm/W	y = 0,4179
R4 = -				
R5 = -		correlated color temperature (CCT)	< 1600 K	CIE1976
R6 = -		Duv	-	u' = 0,3377
R7 = -				v' = 0,5485
R8 = -		Saturation	98,7 %	
R9 = -				CIE1960
R10 = -		Dominant wavelength	591 nm	u = 0,3377
R11 = -		Peak wavelength	594 nm	v = 0,3657
R12 = -				
R13 = -		Flicker frequency	909,8 Hz	TM30
R14 = -		Percent Flicker	f >= 400 Hz %	Rf = -
R15 = -		Flicker index	f >= 400 Hz	Rg = -

[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	0,02	440	0,17	500	0,03	560	3,06	620	3,25	680	0,04	740	0,08
385	0,01	445	0,00	505	0,07	565	5,63	625	1,57	685	0,08	745	0,04
390	0,11	450	0,13	510	0,09	570	10,14	630	0,77	690	0,05	750	0,08
395	0,04	455	0,05	515	0,14	575	18,51	635	0,46	695	0,03	755	0,04
400	0,11	460	0,10	520	0,13	580	32,21	640	0,30	700	0,02	760	0,08
405	0,06	465	0,13	525	0,09	585	53,88	645	0,29	705	0,03	765	0,11
410	0,14	470	0,06	530	0,20	590	79,54	650	0,15	710	0,02	770	0,00
415	0,17	475	0,15	535	0,18	595	91,44	655	0,27	715	0,08	775	0,11
420	0,17	480	0,04	540	0,41	600	73,31	660	0,19	720	0,04	780	0,05
425	0,09	485	0,14	545	0,46	605	40,27	665	0,16	725	0,03		
430	0,08	490	0,05	550	0,98	610	17,93	670	0,03	730	0,02		
435	0,07	495	0,14	555	1,62	615	7,52	675	0,13	735	0,04		

Thomann GmbH
Hans-Thomann-Str. 1
D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

First, last name of inspector

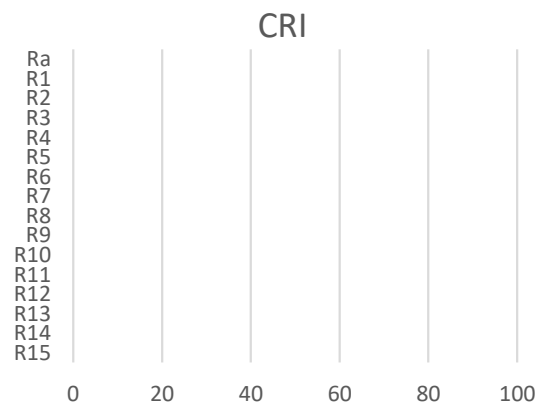
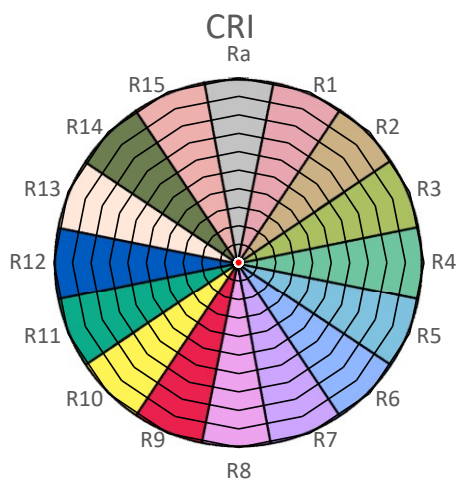
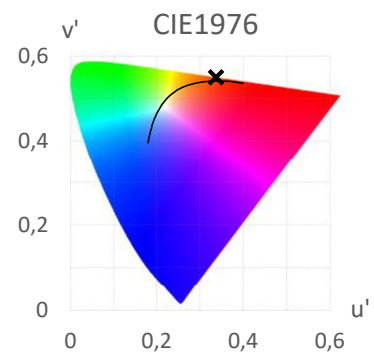
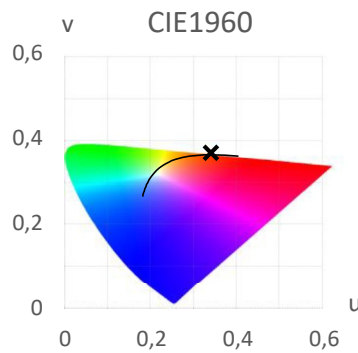
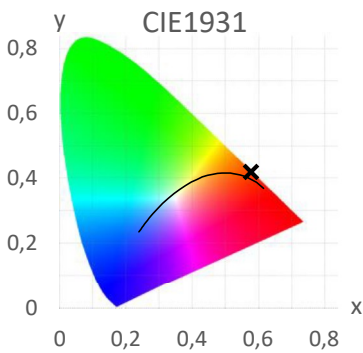
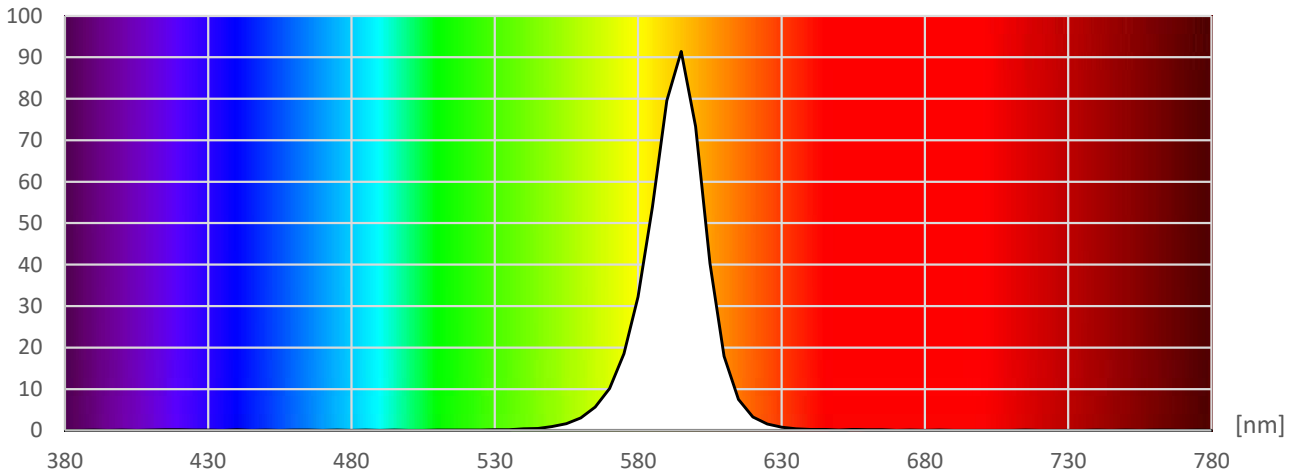
Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 1m / amber

Measurement file: 486485_1m_a.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:06:21

mW/m²/nm



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 23.03.2021

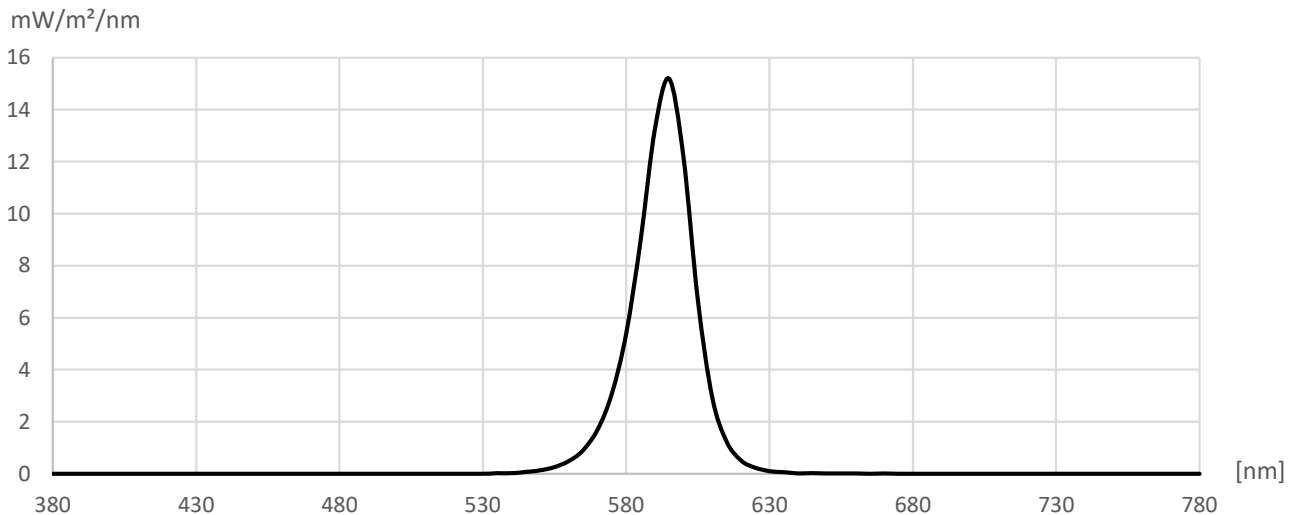
First, last name of inspector

Measurement protocol



Test object: Ignition
2bright Pint TW200 IP
486485 / 3m / amber

Measurement file: 486485_3m_a.CSV
Date of measurement: 23.03.2021
Time of measurement: 17:06:33



R1 = -	Ra = -	Illuminance	180,63 lx	CIE1931
R2 = -	Re = -	Ee	0,368 W/m ²	x = 0,5809
R3 = -	GAI = -	LER	491,4 lm/W	y = 0,4185
R4 = -				
R5 = -		correlated color temperature (CCT)	< 1600 K	CIE1976
R6 = -		Duv	-	u' = 0,3387
R7 = -				v' = 0,5490
R8 = -		Saturation	99,5 %	
R9 = -				CIE1960
R10 = -		Dominant wavelength	591 nm	u = 0,3387
R11 = -		Peak wavelength	594 nm	v = 0,3660
R12 = -				
R13 = -		Flicker frequency	909,9 Hz	TM30
R14 = -		Percent Flicker	f >= 400 Hz %	Rf = -
R15 = -		Flicker index	f >= 400 Hz	Rg = -

[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	0,00	440	0,00	500	0,00	560	0,48	620	0,52	680	0,00	740	0,00
385	0,00	445	0,00	505	0,00	565	0,91	625	0,23	685	0,00	745	0,00
390	0,00	450	0,00	510	0,00	570	1,68	630	0,10	690	0,00	750	0,00
395	0,00	455	0,00	515	0,00	575	3,07	635	0,06	695	0,00	755	0,00
400	0,00	460	0,00	520	0,00	580	5,38	640	0,01	700	0,00	760	0,00
405	0,00	465	0,00	525	0,00	585	8,96	645	0,02	705	0,00	765	0,00
410	0,00	470	0,00	530	0,00	590	13,26	650	0,01	710	0,00	770	0,00
415	0,00	475	0,00	535	0,02	595	15,20	655	0,01	715	0,00	775	0,00
420	0,00	480	0,00	540	0,02	600	12,20	660	0,01	720	0,00	780	0,00
425	0,00	485	0,00	545	0,07	605	6,69	665	0,00	725	0,00		
430	0,00	490	0,00	550	0,13	610	2,95	670	0,01	730	0,00		
435	0,00	495	0,00	555	0,26	615	1,24	675	0,00	735	0,00		

Thomann GmbH
Hans-Thomann-Str. 1
D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 24.03.2021

First, last name of inspector

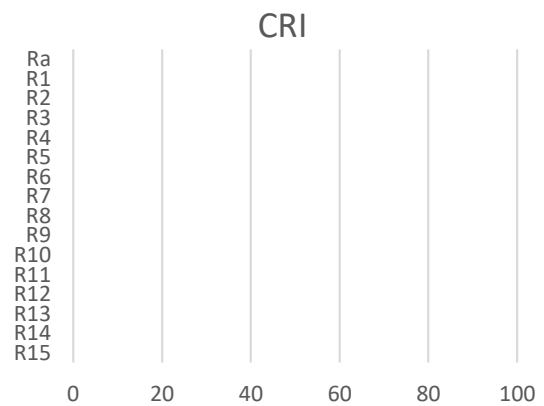
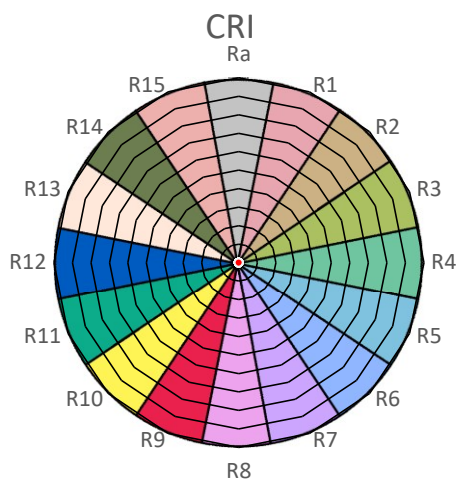
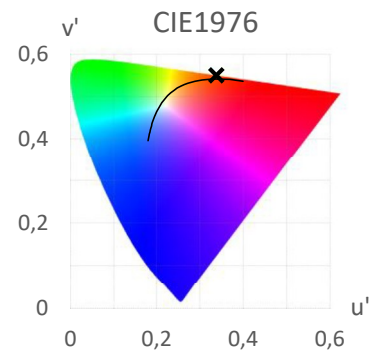
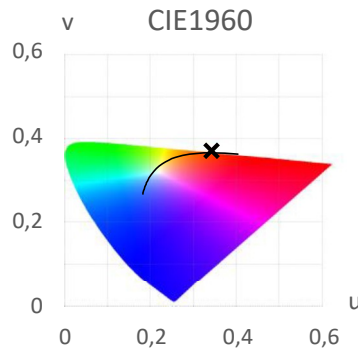
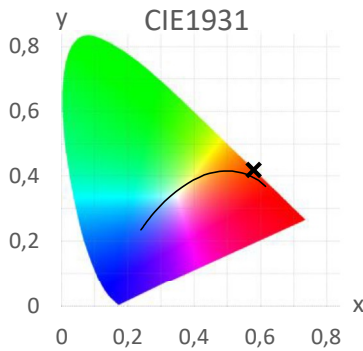
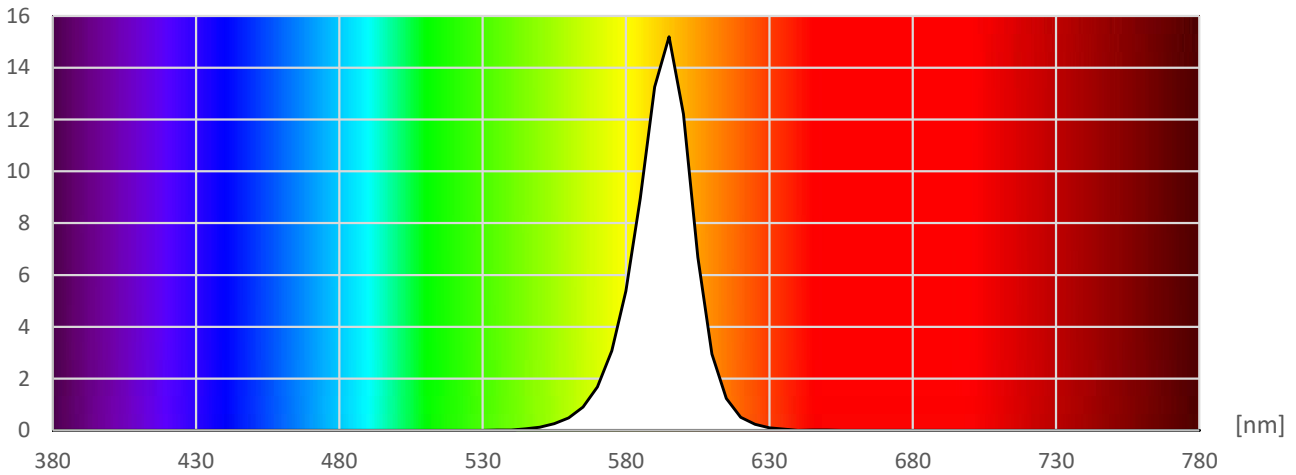
Measurement protocol



Test object: Ignition
 2bright Pint TW200 IP
 486485 / 3m / amber

Measurement file: 486485_3m_a.CSV
 Date of measurement: 23.03.2021
 Time of measurement: 17:06:33

mW/m²/nm



Thomann GmbH
 Hans-Thomann-Str. 1
 D-96138 Burgebrach, Germany

Sebastian Laske

Burgebrach, 23.03.2021

 First, last name of inspector