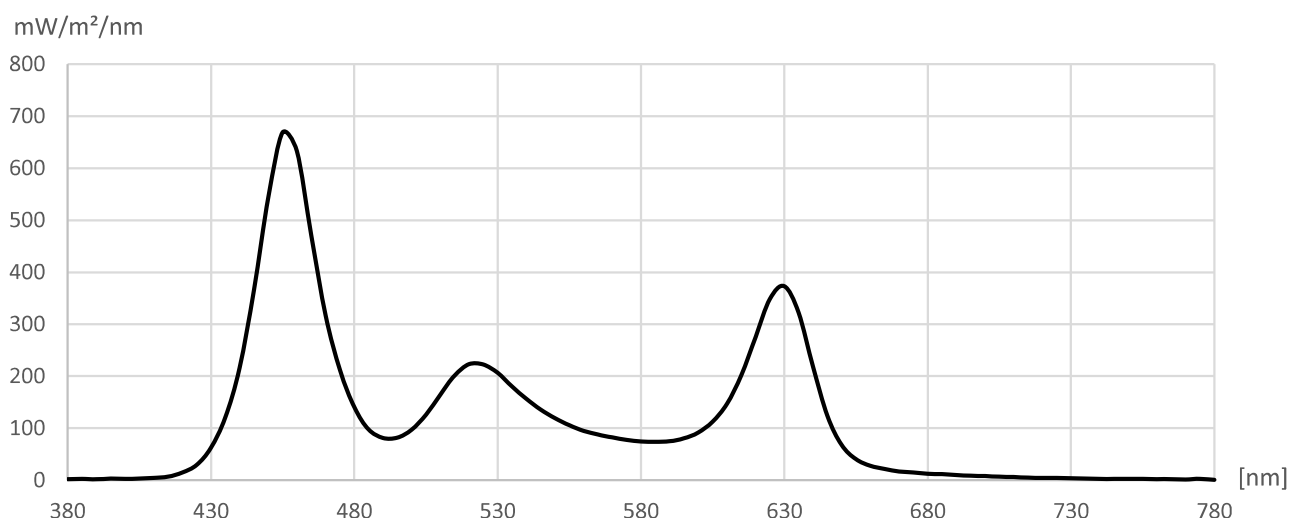


Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / all

Measurement file: 307515_1m_all.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:01:47



R1 = 30,5	Ra = 52,3
R2 = 66,1	Re = 34,2
R3 = 75,1	GAI = 154,5
R4 = 41,6	
R5 = 48,1	
R6 = 66,1	
R7 = 75,3	
R8 = 15,8	
R9 = #####	
R10 = 39,9	
R11 = 28,9	
R12 = 59,0	
R13 = 37,3	
R14 = 79,2	
R15 = 9,5	

Illuminance	10460,07 lx
Ee	45,897 W/m²
LER	227,9 lm/W
correlated color temperature (CCT)	19895 K
Duv	-0,0283
Saturation	30,9 %
Dominant wavelength	432 nm
Peak wavelength	456 nm
Flicker frequency	% < 2.5 Hz
Percent Flicker	< 2.5 %
Flicker index	% < 2.5

CIE1931
x = 0,2780
y = 0,2359
CIE1976
u' = 0,2108
v' = 0,4025
CIE1960
u = 0,2108
v = 0,2684
TM30
Rf = 66,4
Rg = 116,5

[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	2,18	440	216,49	500	97,16	560	95,10	620	276,22	680	12,63	740	2,40
385	2,58	445	366,10	505	126,30	565	87,85	625	348,26	685	11,68	745	2,63
390	1,75	450	545,14	510	164,59	570	82,33	630	373,24	690	9,97	750	2,59
395	2,99	455	668,62	515	201,31	575	77,74	635	321,85	695	8,50	755	2,83
400	2,48	460	632,89	520	223,02	580	74,59	640	218,08	700	8,06	760	2,02
405	3,23	465	471,07	525	222,59	585	73,72	645	123,65	705	6,93	765	2,30
410	4,61	470	316,32	530	206,46	590	74,83	650	68,36	710	6,24	770	1,58
415	6,79	475	211,59	535	180,02	595	80,61	655	40,43	715	4,89	775	2,85
420	14,80	480	139,97	540	156,76	600	91,67	660	27,94	720	4,46	780	0,53
425	29,60	485	97,65	545	136,05	605	112,54	665	21,86	725	4,64		
430	62,20	490	81,52	550	119,23	610	146,96	670	17,09	730	3,71		
435	120,31	495	81,98	555	105,83	615	202,39	675	14,99	735	3,57		

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D-96138 Burgebrach, Germany

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Burgebrach, 01.08.2018

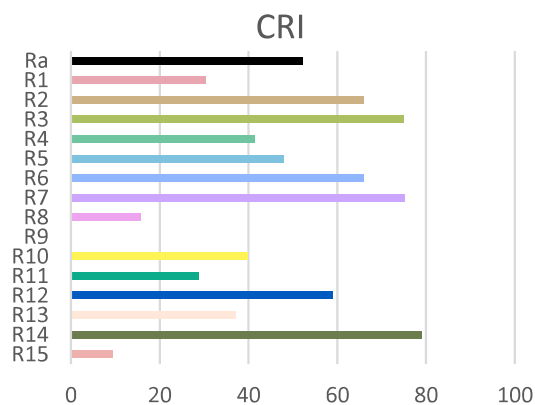
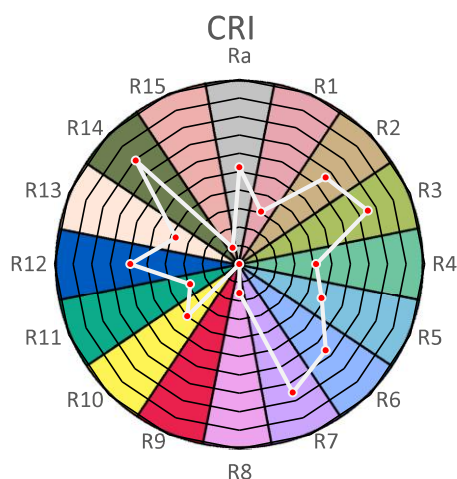
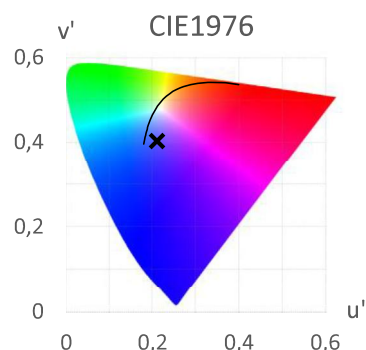
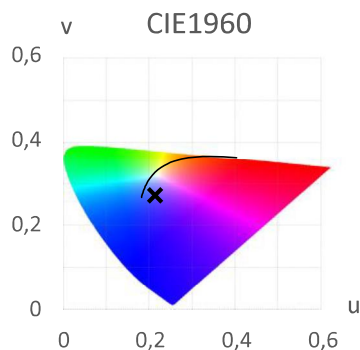
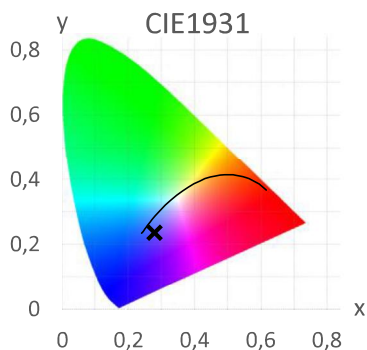
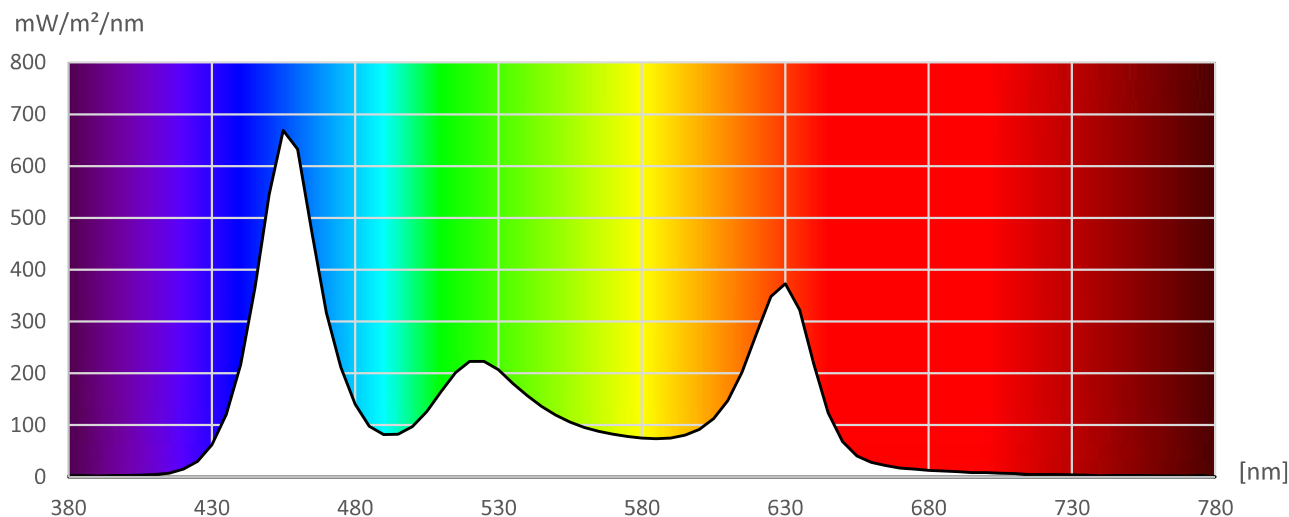
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / all

Measurement file: 307515_1m_all.CS'
Date of measurement: 01.08.2018
Time of measurement: 13:01:47



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Burgebrach, 01.08.2018

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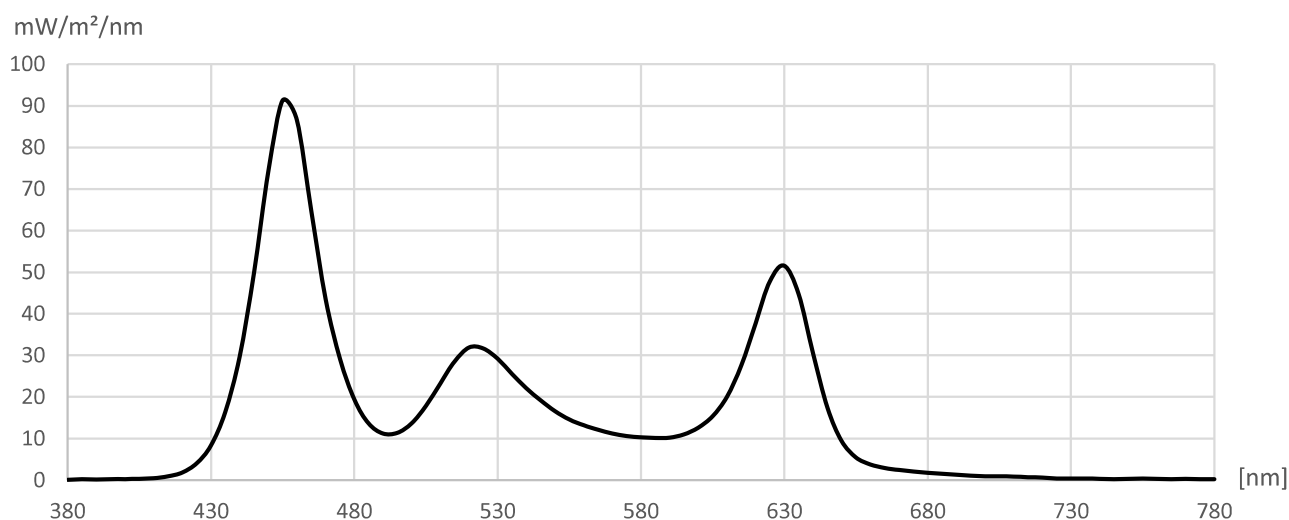
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / all

Measurement file: 307515_3m_all.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:06



R1 = 32,5	Ra = 53,5
R2 = 67,7	Re = 35,8
R3 = 75,1	GAI = 153,4
R4 = 43,0	
R5 = 49,8	
R6 = 67,6	
R7 = 75,3	
R8 = 17,2	
R9 = #####	
R10 = 42,6	
R11 = 30,3	
R12 = 60,1	
R13 = 39,2	
R14 = 79,4	
R15 = 12,0	

Illuminance	1458,35 lx
Ee	6,338 W/m ²
LER	230,1 lm/W
correlated color temperature (CCT)	18566 K
Duv	-0,0264
Saturation	30,3 %
Dominant wavelength	440 nm
Peak wavelength	456 nm
Flicker frequency	% < 2.5 Hz
Percent Flicker	< 2.5 %
Flicker index	% < 2.5

CIE1931
x = 0,2779
y = 0,2389
CIE1976
u' = 0,2093
v' = 0,4048
CIE1960
u = 0,2093
v = 0,2699
TM30
Rf = 67,0
Rg = 116,0

[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	0,13	440	29,67	500	13,68	560	13,21	620	37,80	680	1,77	740	0,37
385	0,22	445	49,84	505	17,90	565	12,16	625	47,83	685	1,57	745	0,28
390	0,15	450	74,38	510	23,26	570	11,24	630	51,55	690	1,33	750	0,32
395	0,28	455	91,27	515	28,54	575	10,64	635	44,73	695	1,10	755	0,41
400	0,29	460	86,54	520	31,90	580	10,31	640	30,51	700	0,96	760	0,34
405	0,35	465	64,79	525	31,69	585	10,20	645	17,47	705	0,94	765	0,29
410	0,50	470	43,52	530	29,18	590	10,23	650	9,44	710	0,89	770	0,32
415	0,94	475	29,14	535	25,55	595	11,02	655	5,51	715	0,73	775	0,27
420	1,87	480	19,34	540	22,15	600	12,65	660	3,80	720	0,64	780	0,22
425	4,09	485	13,66	545	19,23	605	15,38	665	2,93	725	0,44		
430	8,32	490	11,25	550	16,65	610	20,10	670	2,45	730	0,44		
435	16,40	495	11,40	555	14,61	615	27,64	675	2,13	735	0,39		

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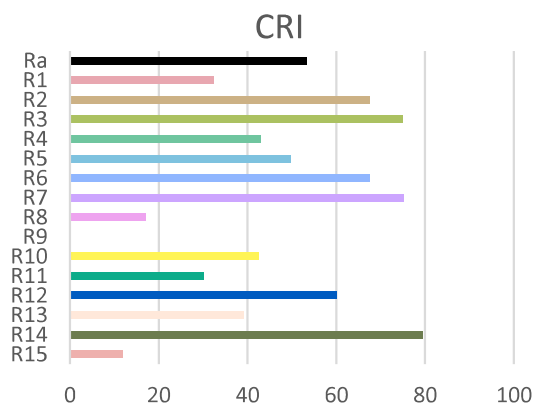
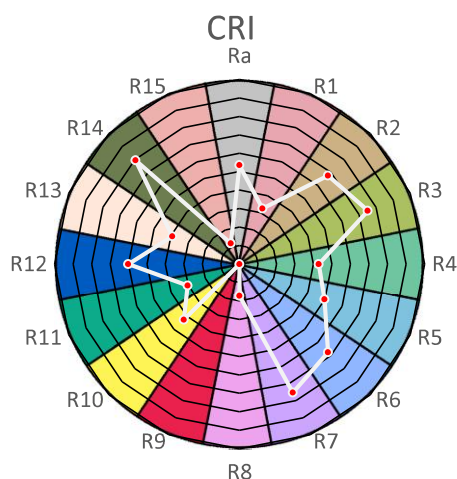
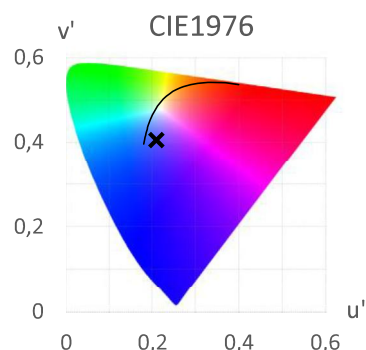
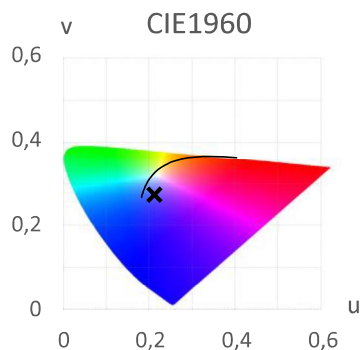
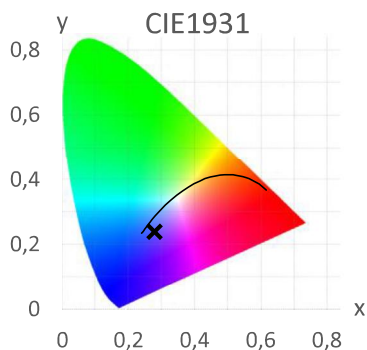
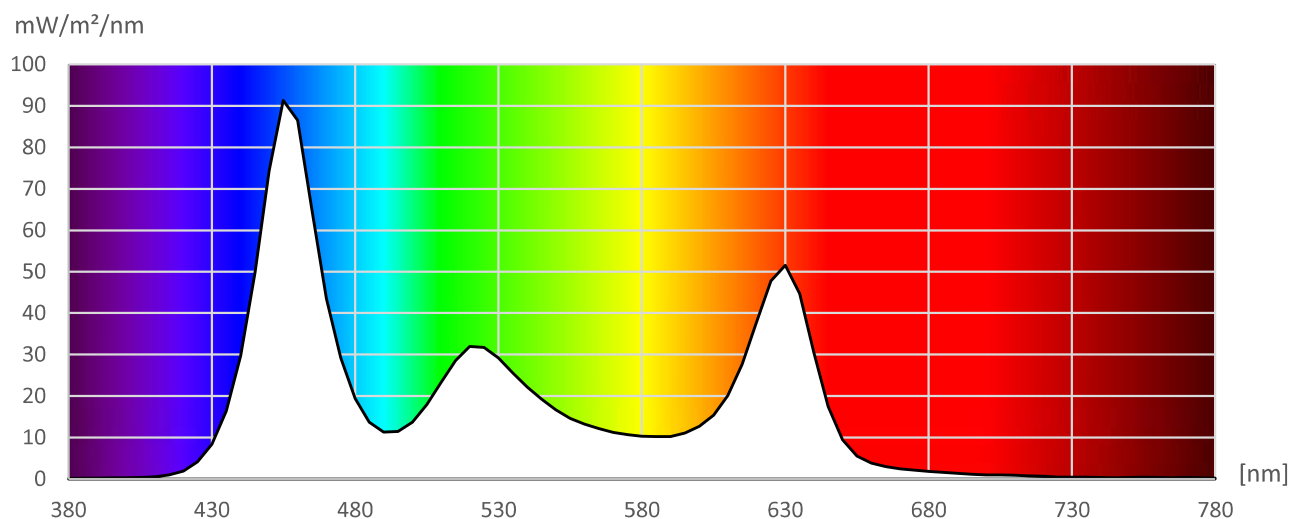
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / all

Measurement file: 307515_3m_all.CS'
Date of measurement: 01.08.2018
Time of measurement: 13:02:06



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D-96138 Burgebrach, Germany

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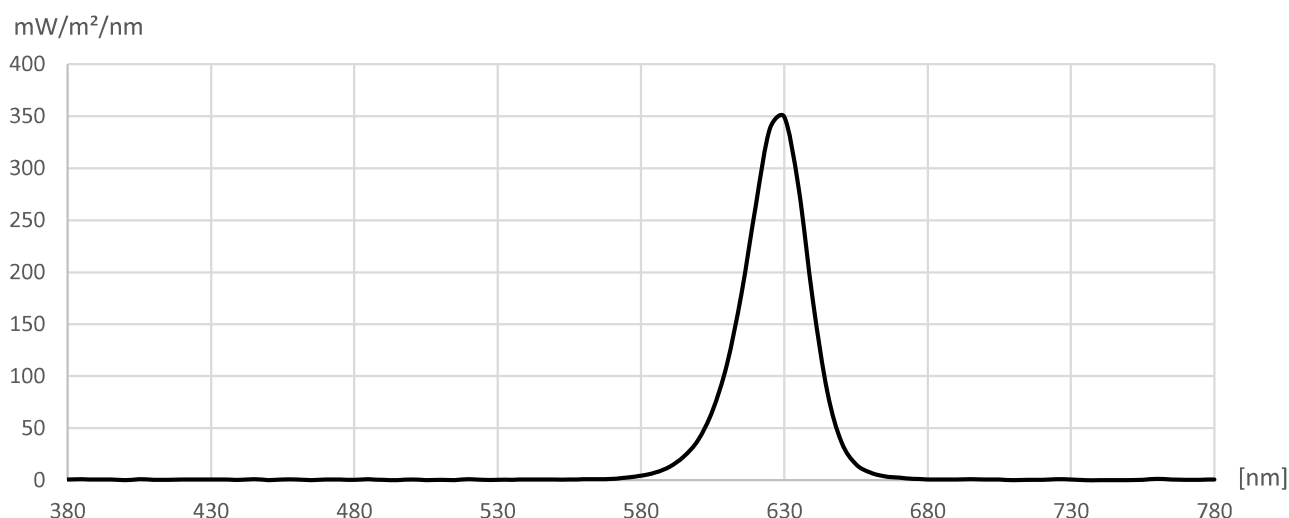
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / red

Measurement file: 307515_1m_r.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:18



R1 = -	Ra = -	Illuminance	2243,68 lx	CIE1931
R2 = -	Re = -	Ee	10,187 W/m²	x = 0,6814
R3 = -	GAI = -	LER	220,3 lm/W	y = 0,3126
R4 = -				
R5 = -		correlated color temperature (CCT)	< 1600 K	CIE1976
R6 = -		Duv	-	u' = 0,5058
R7 = -				v' = 0,5221
R8 = -		Saturation	98,3 %	
R9 = -				CIE1960
R10 = -		Dominant wavelength	622 nm	u = 0,5058
R11 = -		Peak wavelength	628 nm	v = 0,3481
R12 = -				
R13 = -		Flicker frequency	% < 2.5 Hz	TM30
R14 = -		Percent Flicker	< 2.5 %	Rf = -
R15 = -		Flicker index	% < 2.5	Rg = -

[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	0,83	440	0,27	500	0,63	560	0,93	620	264,09	680	0,76	740	0,00
385	0,87	445	0,98	505	0,25	565	1,06	625	338,08	685	0,69	745	0,20
390	0,60	450	0,22	510	0,53	570	1,19	630	349,46	690	0,78	750	0,03
395	0,75	455	0,74	515	0,23	575	2,63	635	280,85	695	0,89	755	0,51
400	0,05	460	0,80	520	0,95	580	4,29	640	171,36	700	0,75	760	1,23
405	0,94	465	0,21	525	0,28	585	7,33	645	84,42	705	0,57	765	0,82
410	0,48	470	0,73	530	0,53	590	13,13	650	36,61	710	0,00	770	0,32
415	0,38	475	0,61	535	0,55	595	22,83	655	15,37	715	0,38	775	0,55
420	0,75	480	0,35	540	0,66	600	38,88	660	7,38	720	0,49	780	0,77
425	0,65	485	0,87	545	0,70	605	67,14	665	3,77	725	0,87		
430	0,66	490	0,29	550	0,66	610	111,67	670	2,40	730	0,84		
435	0,65	495	0,25	555	0,59	615	179,00	675	1,48	735	0,08		

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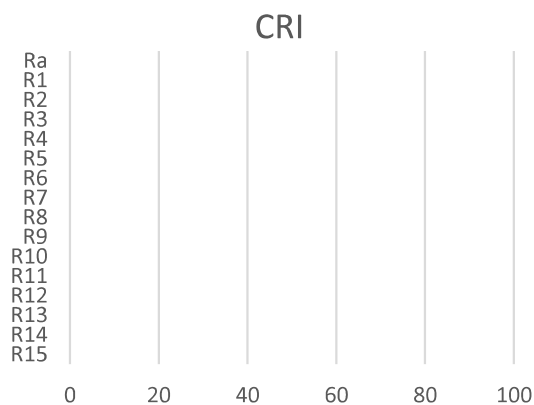
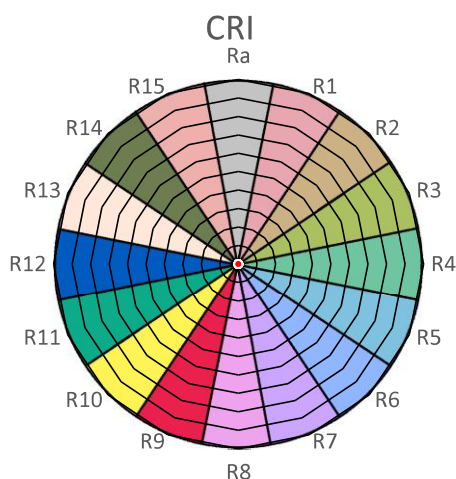
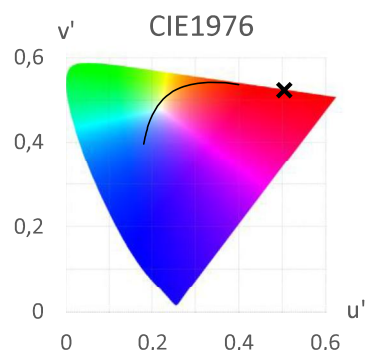
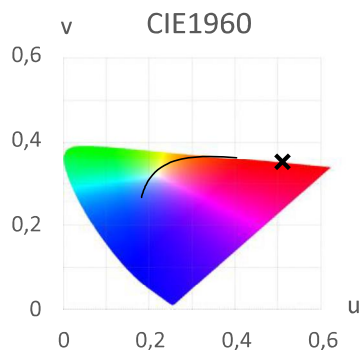
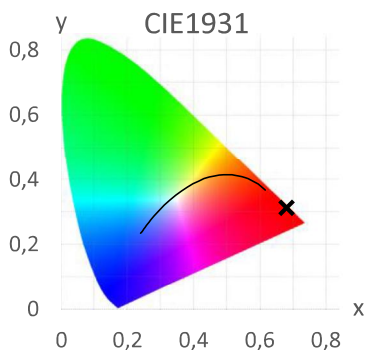
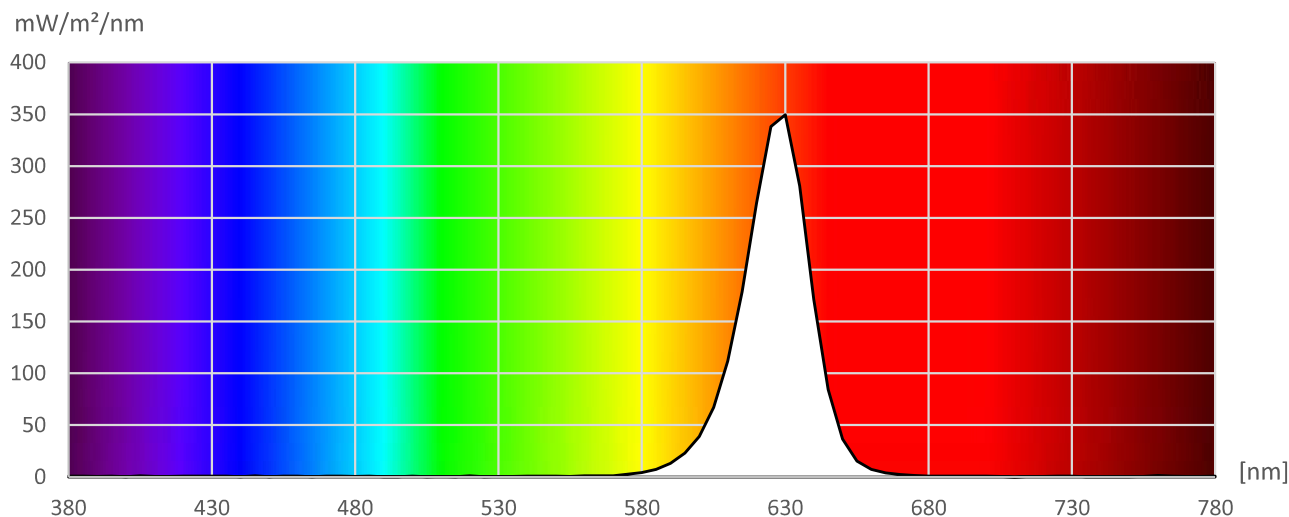
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / red

Measurement file: 307515_1m_r.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:18



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Hans-Thomann-Str. 1
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Burgebrach, 01.08.2018

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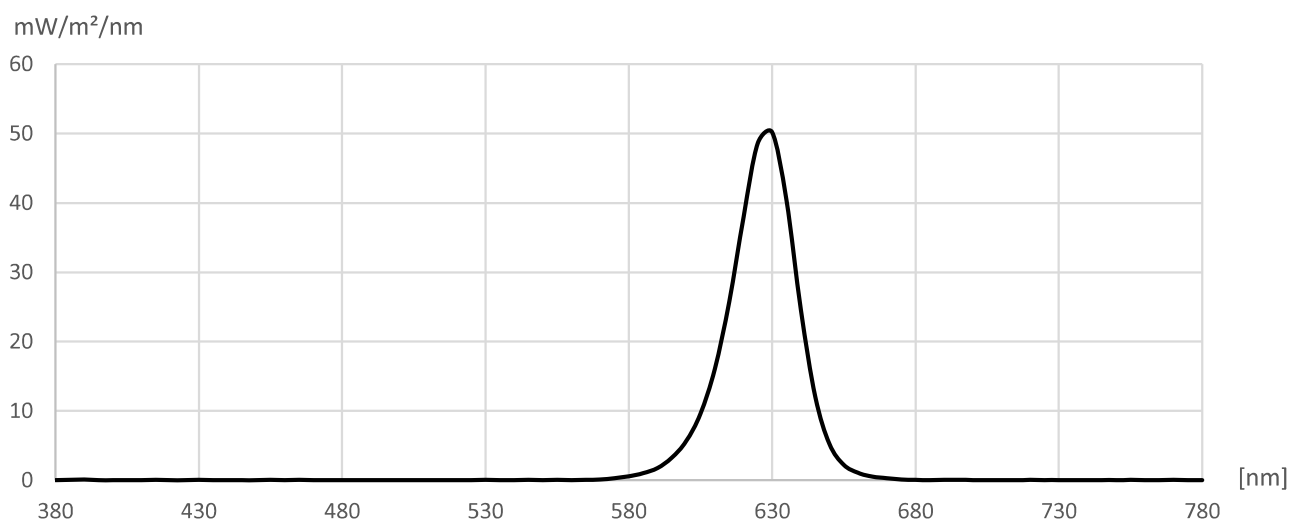
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / red

Measurement file: 307515_3m_r.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:26



R1 = -	Ra = -	Illuminance	318,94 lx	CIE1931
R2 = -	Re = -	Ee	1,444 W/m ²	x = 0,6858
R3 = -	GAI = -	LER	220,8 lm/W	y = 0,3125
R4 = -				
R5 = -		correlated color temperature (CCT)	< 1600 K	CIE1976
R6 = -		Duv	-	u' = 0,5101
R7 = -				v' = 0,5229
R8 = -		Saturation	99,5 %	
R9 = -				CIE1960
R10 = -		Dominant wavelength	622 nm	u = 0,5101
R11 = -		Peak wavelength	628 nm	v = 0,3486
R12 = -				
R13 = -		Flicker frequency	% < 2.5 Hz	TM30
R14 = -		Percent Flicker	< 2.5 %	Rf = -
R15 = -		Flicker index	% < 2.5	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	0,03	500	0,03	560	0,01	620	37,99	680	0,04	740	0,00
385	0,06	445	0,00	505	0,01	565	0,07	625	48,60	685	0,02	745	0,04
390	0,11	450	0,00	510	0,03	570	0,10	630	50,20	690	0,06	750	0,01
395	0,00	455	0,06	515	0,03	575	0,30	635	40,38	695	0,06	755	0,04
400	0,01	460	0,00	520	0,00	580	0,59	640	24,57	700	0,03	760	0,02
405	0,01	465	0,05	525	0,02	585	1,01	645	12,06	705	0,00	765	0,01
410	0,00	470	0,03	530	0,05	590	1,76	650	5,26	710	0,00	770	0,04
415	0,08	475	0,02	535	0,01	595	3,24	655	2,23	715	0,00	775	0,03
420	0,00	480	0,02	540	0,02	600	5,61	660	1,06	720	0,04	780	0,00
425	0,01	485	0,01	545	0,08	605	9,60	665	0,52	725	0,04		
430	0,05	490	0,00	550	0,02	610	16,07	670	0,31	730	0,03		
435	0,00	495	0,02	555	0,08	615	25,74	675	0,09	735	0,00		

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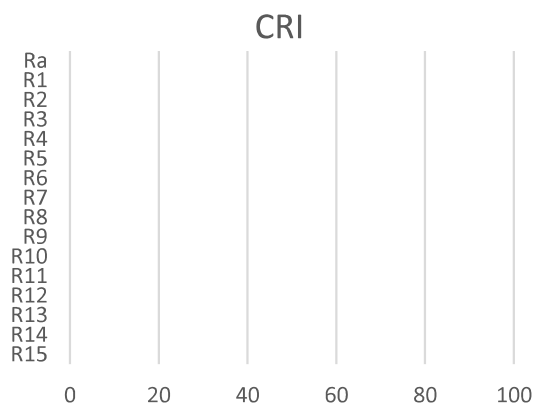
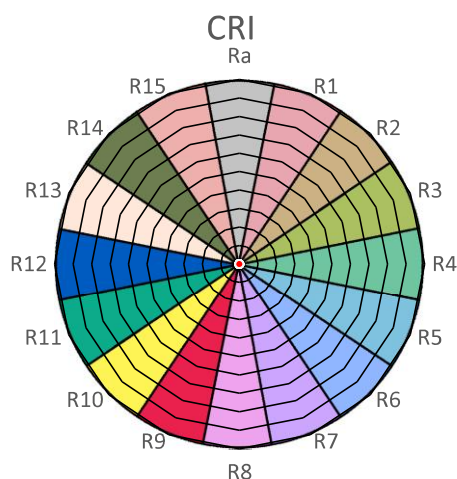
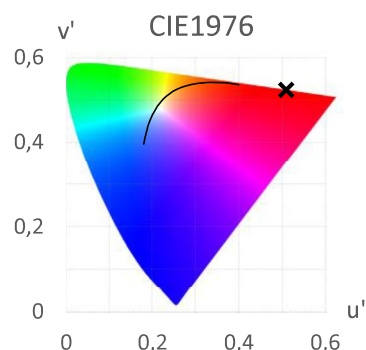
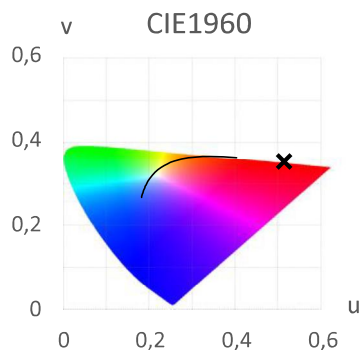
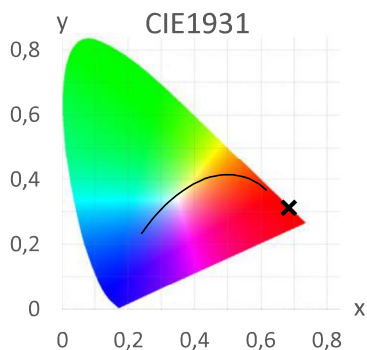
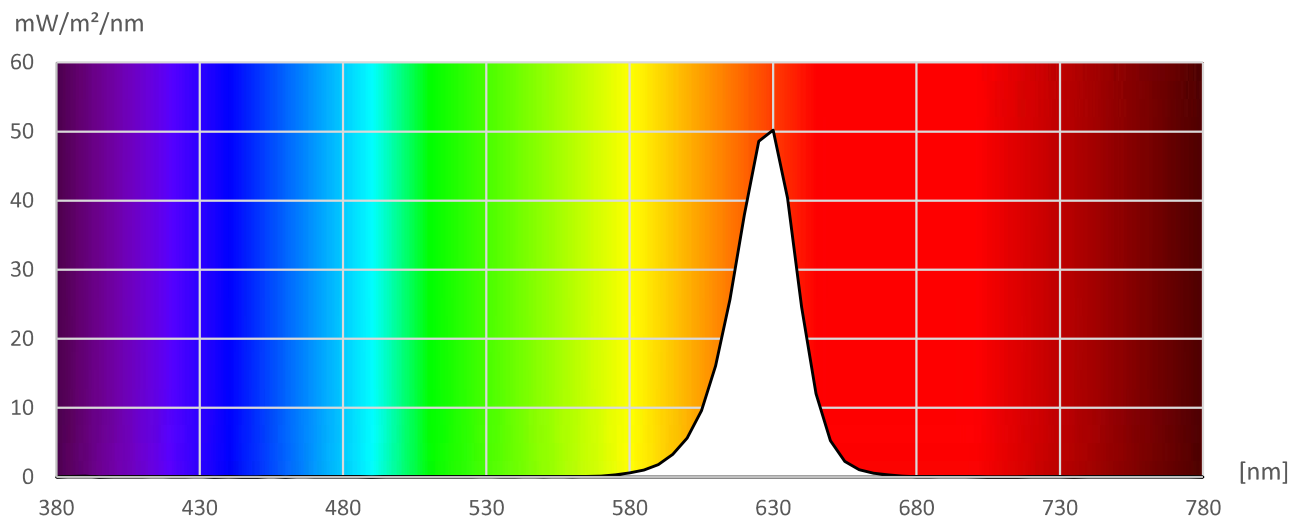
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / red

Measurement file: 307515_3m_r.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:26



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Burgebrach, 01.08.2018

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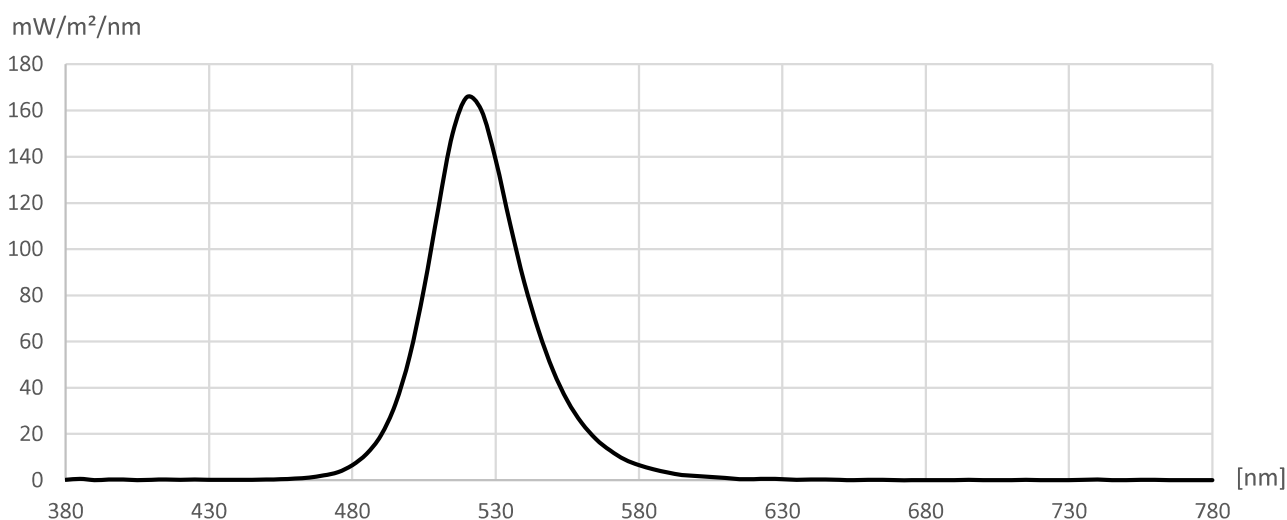
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / green

Measurement file: 307515_1m_g.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:40



R1 = -34,7	Ra = -21,5
R2 = -5,3	Re = -52,1
R3 = -15,1	GAI = 0,8
R4 = -61,7	
R5 = -9,1	
R6 = -12,1	
R7 = -2,7	
R8 = -31,4	
R9 = #####	
R10 = -98,1	
R11 = -90,7	
R12 = -26,9	
R13 = -39,3	
R14 = 42,8	
R15 = -38,9	

Illuminance	3392,94 lx
Ee	6,925 W/m ²
LER	489,9 lm/W
correlated color temperature (CCT)	7780 K
Duv	0,1559
Saturation	77 %
Dominant wavelength	524 nm
Peak wavelength	522 nm
Flicker frequency	% < 2.5 Hz
Percent Flicker	< 2.5 %
Flicker index	% < 2.5

CIE1931
x = 0,1743
y = 0,7185
CIE1976
u' = 0,0619
v' = 0,5736
CIE1960
u = 0,0619
v = 0,3824
TM30
Rf = 1,0
Rg = 9,6

[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	0,25	440	0,16	500	53,62	560	24,78	620	0,52	680	0,00	740	0,26
385	0,58	445	0,17	505	83,09	565	17,81	625	0,63	685	0,03	745	0,10
390	0,10	450	0,33	510	117,95	570	12,83	630	0,50	690	0,09	750	0,02
395	0,26	455	0,42	515	149,86	575	9,02	635	0,22	695	0,14	755	0,16
400	0,27	460	0,67	520	165,74	580	6,56	640	0,33	700	0,01	760	0,13
405	0,11	465	1,20	525	160,15	585	4,77	645	0,31	705	0,01	765	0,08
410	0,22	470	2,07	530	138,61	590	3,41	650	0,15	710	0,02	770	0,05
415	0,34	475	3,50	535	110,87	595	2,31	655	0,07	715	0,15	775	0,05
420	0,13	480	6,54	540	85,79	600	1,89	660	0,18	720	0,01	780	0,07
425	0,29	485	11,39	545	64,74	605	1,40	665	0,17	725	0,00		
430	0,21	490	19,35	550	47,57	610	1,00	670	0,00	730	0,03		
435	0,17	495	32,86	555	34,43	615	0,53	675	0,03	735	0,18		

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Burgebrach, 01.08.2018

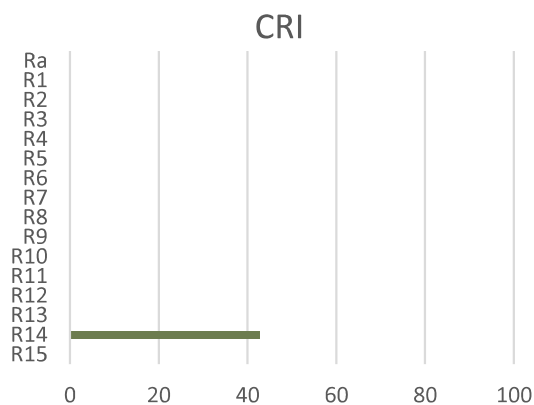
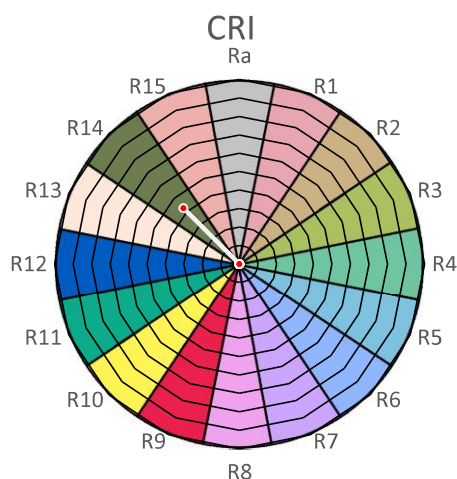
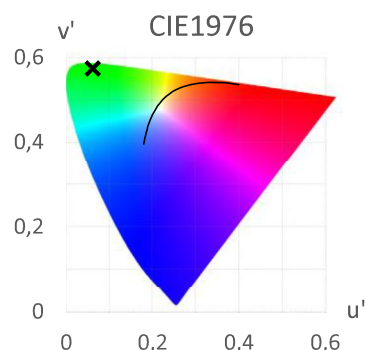
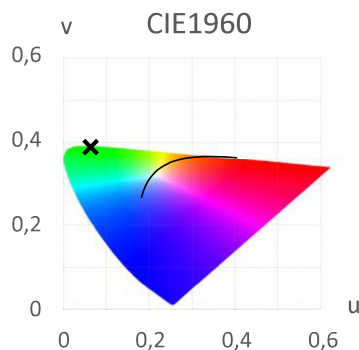
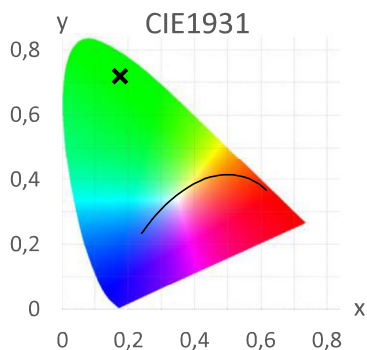
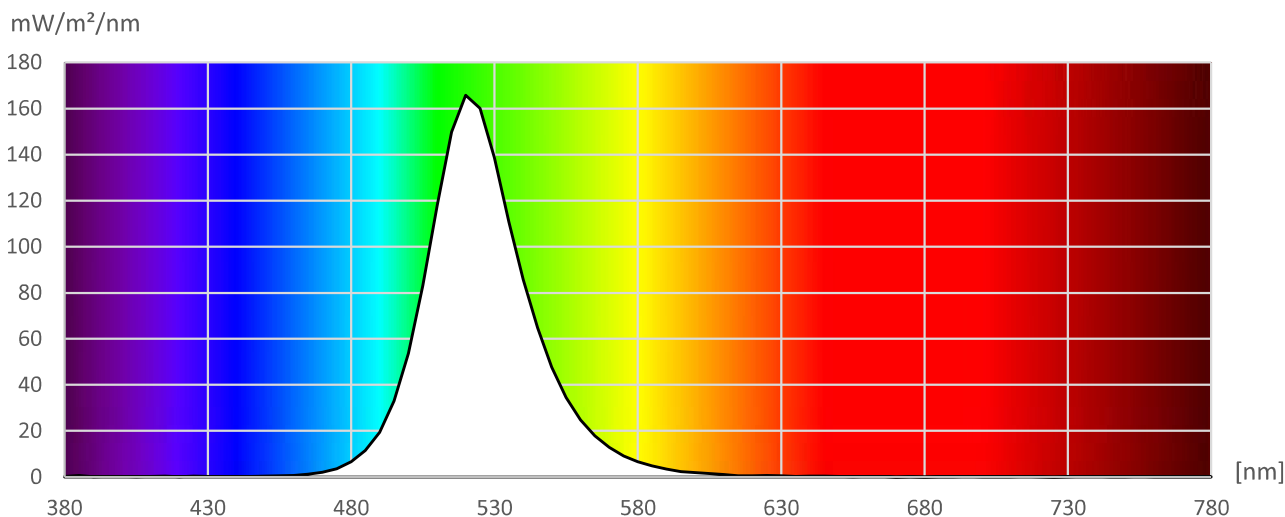
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / green

Measurement file: 307515_1m_g.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:40



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D-96138 Burgebrach, Germany

Burgebrach, 01.08.2018

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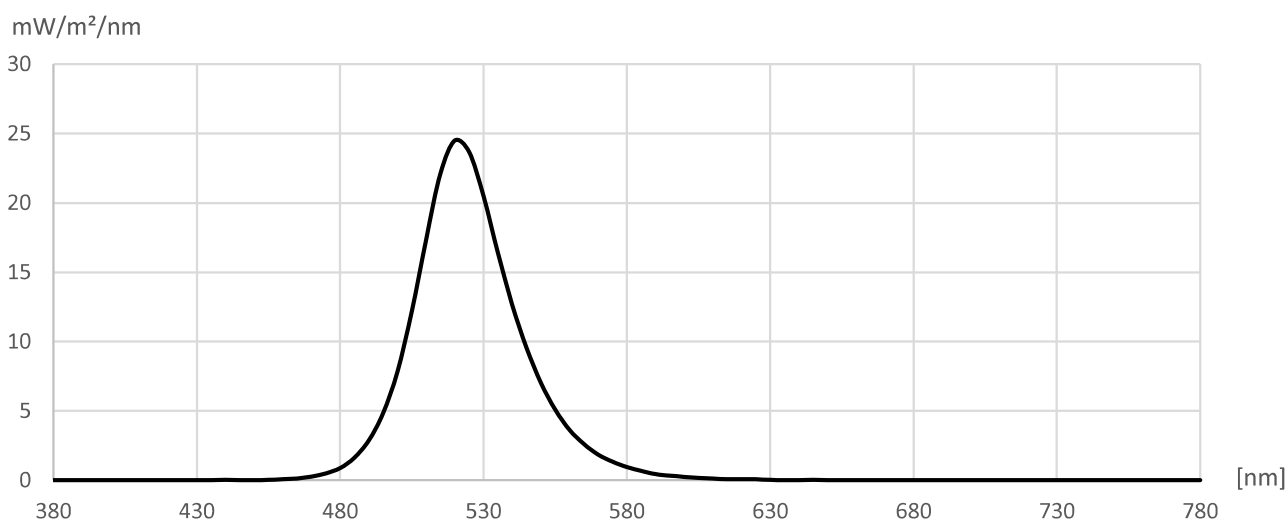
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / green

Measurement file: 307515_3m_g.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:51



R1 = -35,5	Ra = -23,7
R2 = -7,0	Re = -54,3
R3 = -18,6	GAI = 0,6
R4 = -64,8	
R5 = -9,8	
R6 = -13,7	
R7 = -6,6	
R8 = -33,7	
R9 = #####	
R10 = #####	
R11 = -93,9	
R12 = -28,3	
R13 = -40,4	
R14 = 41,1	
R15 = -39,8	

Illuminance	500,04 lx
Ee	1,015 W/m ²
LER	492,8 lm/W
correlated color temperature (CCT)	7780 K
Duv	0,1566
Saturation	78,7 %
Dominant wavelength	525 nm
Peak wavelength	522 nm
Flicker frequency	% < 2.5 Hz
Percent Flicker	< 2.5 %
Flicker index	% < 2.5

CIE1931
x = 0,1732
y = 0,7222
CIE1976
u' = 0,0612
v' = 0,5742
CIE1960
u = 0,0612
v = 0,3828
TM30
Rf = 0,8
Rg = 8,2

[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	0,00	440	0,02	500	7,85	560	3,63	620	0,07	680	0,00	740	0,00
385	0,00	445	0,00	505	12,22	565	2,61	625	0,07	685	0,00	745	0,00
390	0,00	450	0,00	510	17,40	570	1,86	630	0,03	690	0,00	750	0,00
395	0,00	455	0,03	515	22,11	575	1,34	635	0,00	695	0,00	755	0,00
400	0,00	460	0,07	520	24,49	580	0,95	640	0,01	700	0,00	760	0,02
405	0,00	465	0,13	525	23,66	585	0,67	645	0,02	705	0,00	765	0,00
410	0,00	470	0,27	530	20,48	590	0,44	650	0,01	710	0,00	770	0,00
415	0,00	475	0,50	535	16,39	595	0,33	655	0,01	715	0,00	775	0,00
420	0,00	480	0,89	540	12,67	600	0,25	660	0,01	720	0,00	780	0,00
425	0,00	485	1,63	545	9,58	605	0,17	665	0,00	725	0,00		
430	0,00	490	2,86	550	7,04	610	0,12	670	0,00	730	0,00		
435	0,00	495	4,85	555	5,09	615	0,07	675	0,00	735	0,00		

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D-96138 Burgebrach, Germany

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Burgebrach, 01.08.2018

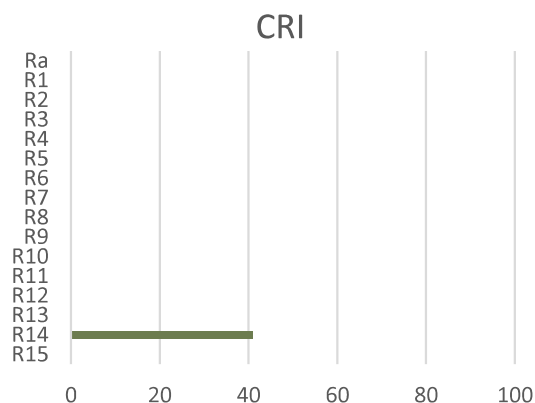
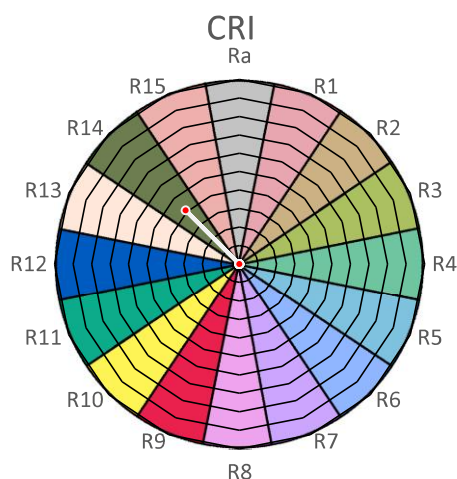
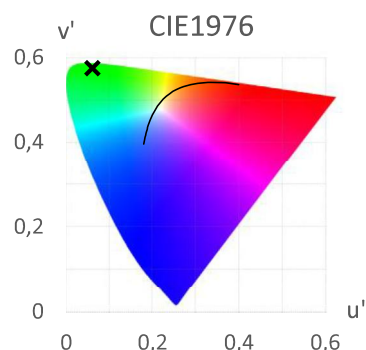
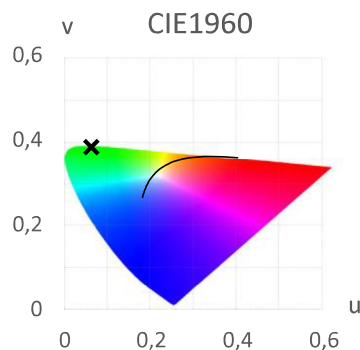
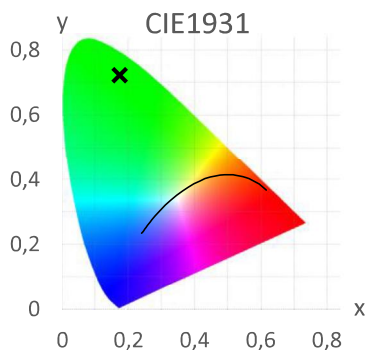
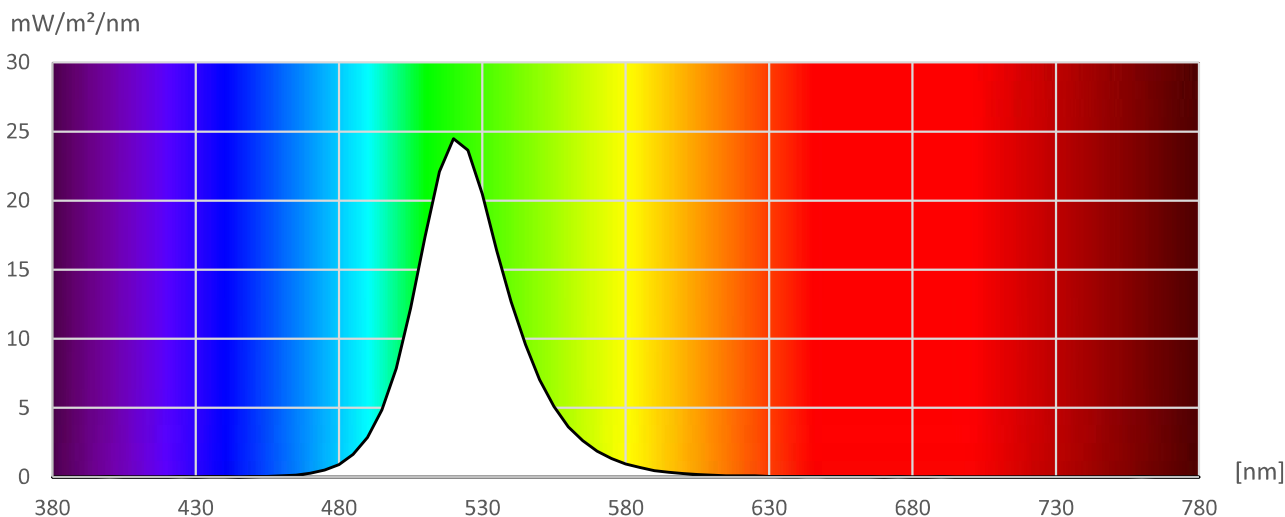
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / green

Measurement file: 307515_3m_g.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:02:51



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

Burgebrach, 01.08.2018

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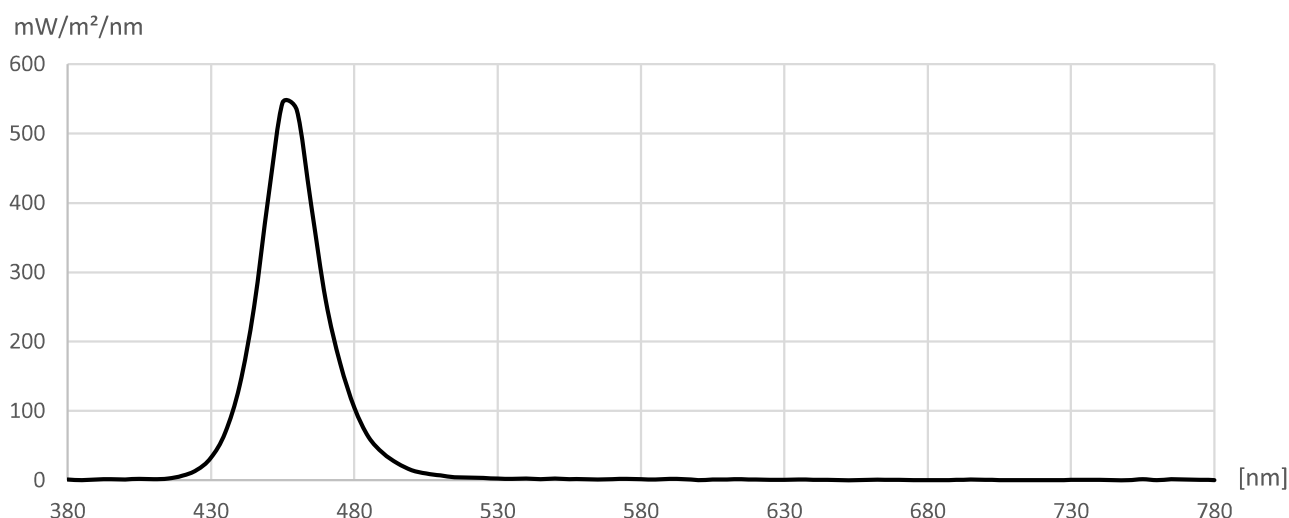
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / blue

Measurement file: 307515_1m_b.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:03:00



R1 = -	Ra = -	Illuminance	834,24 lx	CIE1931
R2 = -	Re = -	Ee	15,746 W/m²	x = 0,1466
R3 = -	GAI = -	LER	53,0 lm/W	y = 0,0420
R4 = -				
R5 = -		correlated color temperature (CCT)	> 50000 K	CIE1976
R6 = -		Duv	-	u' = 0,1826
R7 = -				v' = 0,1178
R8 = -		Saturation	97,3 %	
R9 = -				CIE1960
R10 = -		Dominant wavelength	454 nm	u = 0,1826
R11 = -		Peak wavelength	456 nm	v = 0,0785
R12 = -				
R13 = -		Flicker frequency	% < 2.5 Hz	TM30
R14 = -		Percent Flicker	< 2.5 %	Rf = -
R15 = -		Flicker index	% < 2.5	Rg = -

[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	1,07	440	136,52	500	14,62	560	1,74	620	1,00	680	0,06	740	0,63
385	0,00	445	249,55	505	9,65	565	1,22	625	0,68	685	0,15	745	0,14
390	1,11	450	408,88	510	6,85	570	1,69	630	0,64	690	0,39	750	0,07
395	1,33	455	544,39	515	4,30	575	1,93	635	1,10	695	0,85	755	1,38
400	1,26	460	533,32	520	3,94	580	1,36	640	0,83	700	0,52	760	0,19
405	1,85	465	395,72	525	3,22	585	1,05	645	0,56	705	0,35	765	1,37
410	1,64	470	259,99	530	2,32	590	2,00	650	0,10	710	0,21	770	1,00
415	2,41	475	169,22	535	2,13	595	1,69	655	0,02	715	0,00	775	0,58
420	6,50	480	104,37	540	2,40	600	0,32	660	0,75	720	0,06	780	0,35
425	14,76	485	62,50	545	1,61	605	0,87	665	0,82	725	0,12		
430	32,30	490	39,08	550	2,23	610	1,29	670	0,63	730	0,42		
435	68,73	495	24,49	555	1,61	615	1,34	675	0,20	735	0,65		

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Burgebrach, 01.08.2018

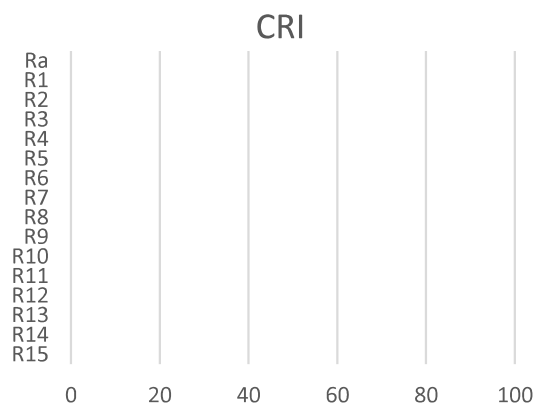
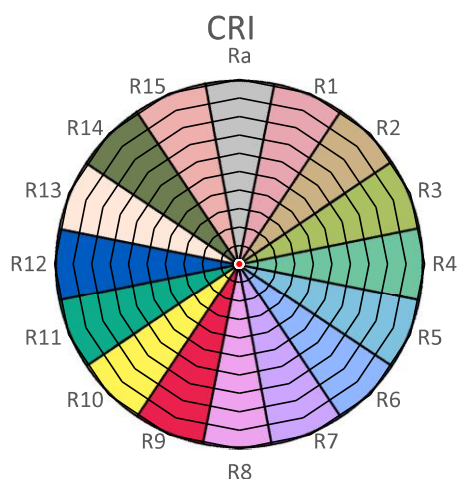
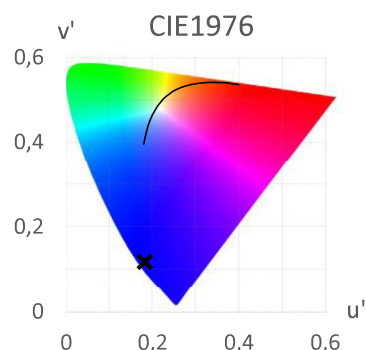
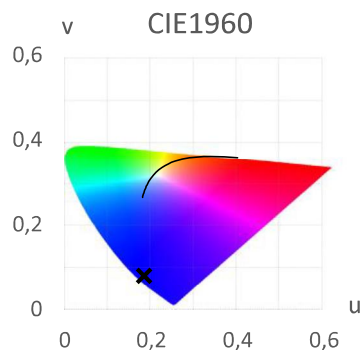
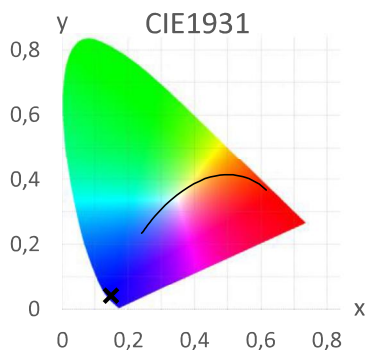
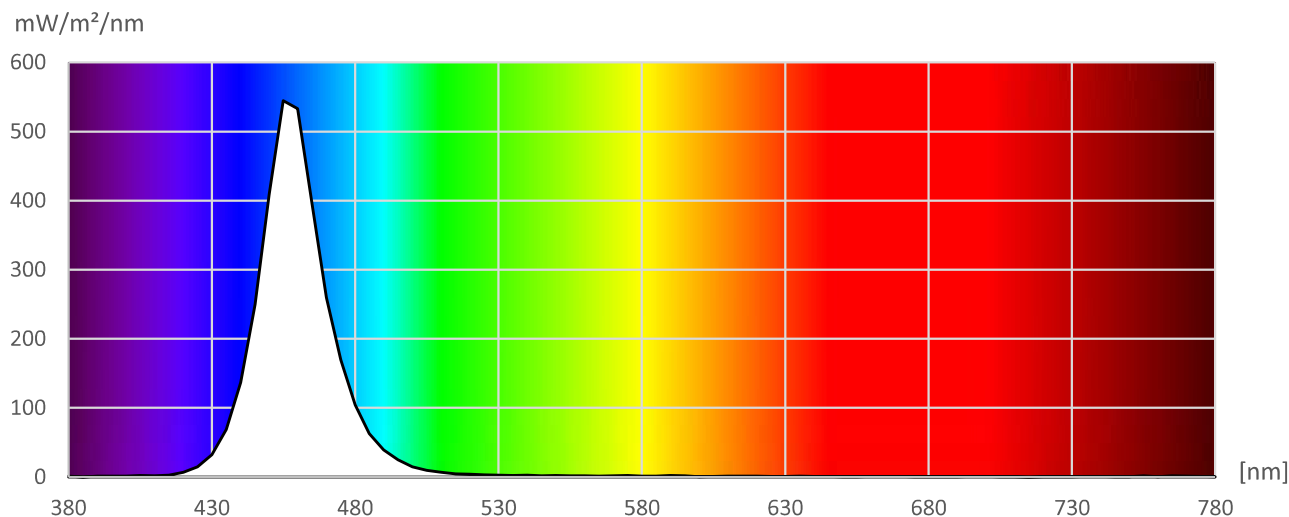
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / blue

Measurement file: 307515_1m_b.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:03:00



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D-96138 Burgebrach, Germany

Burgebrach, 01.08.2018

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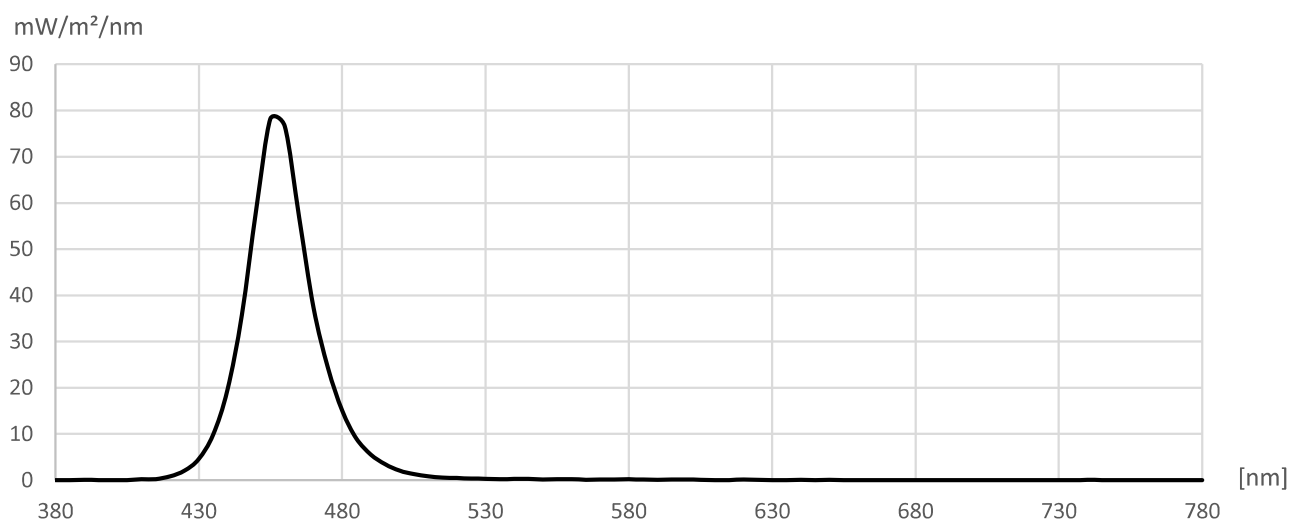
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / blue

Measurement file: 307515_3m_b.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:03:06



R1 = -	Ra = -	Illuminance	115,94 lx	CIE1931
R2 = -	Re = -	Ee	2,241 W/m²	x = 0,1458
R3 = -	GAI = -	LER	51,7 lm/W	y = 0,0408
R4 = -				
R5 = -		correlated color temperature (CCT)	> 50000 K	CIE1976
R6 = -		Duv	-	u' = 0,1823
R7 = -				v' = 0,1149
R8 = -		Saturation	97,7 %	
R9 = -				CIE1960
R10 = -		Dominant wavelength	454 nm	u = 0,1823
R11 = -		Peak wavelength	456 nm	v = 0,0766
R12 = -				
R13 = -		Flicker frequency	% < 2.5 Hz	TM30
R14 = -		Percent Flicker	< 2.5 %	Rf = -
R15 = -		Flicker index	% < 2.5	Rg = -

[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	0,03	440	19,57	500	2,07	560	0,24	620	0,14	680	0,02	740	0,06
385	0,01	445	35,72	505	1,32	565	0,12	625	0,08	685	0,00	745	0,06
390	0,10	450	58,63	510	0,86	570	0,15	630	0,04	690	0,00	750	0,02
395	0,05	455	78,16	515	0,56	575	0,17	635	0,03	695	0,00	755	0,02
400	0,04	460	76,58	520	0,47	580	0,20	640	0,10	700	0,00	760	0,00
405	0,05	465	56,91	525	0,37	585	0,16	645	0,04	705	0,00	765	0,01
410	0,20	470	37,35	530	0,33	590	0,10	650	0,08	710	0,00	770	0,02
415	0,25	475	24,36	535	0,22	595	0,14	655	0,00	715	0,00	775	0,00
420	0,85	480	15,02	540	0,27	600	0,15	660	0,03	720	0,01	780	0,00
425	2,08	485	9,03	545	0,28	605	0,11	665	0,02	725	0,01		
430	4,59	490	5,58	550	0,16	610	0,03	670	0,04	730	0,00		
435	9,84	495	3,47	555	0,23	615	0,05	675	0,05	735	0,00		

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D-96138 Burgebrach, Germany

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Burgebrach, 01.08.2018

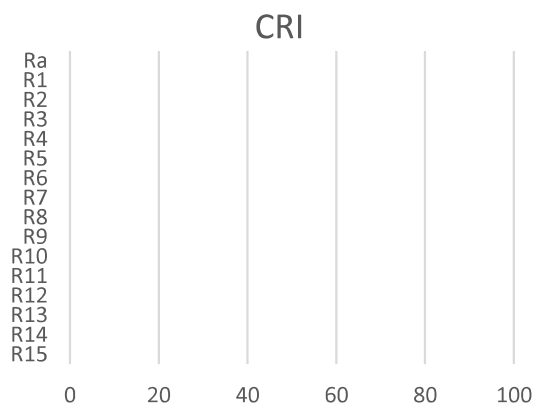
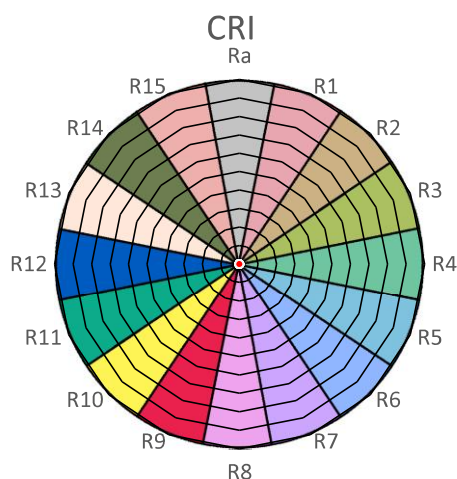
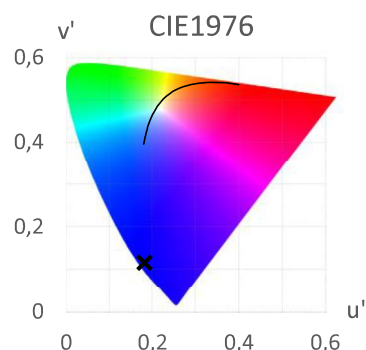
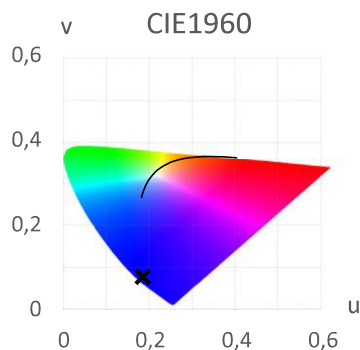
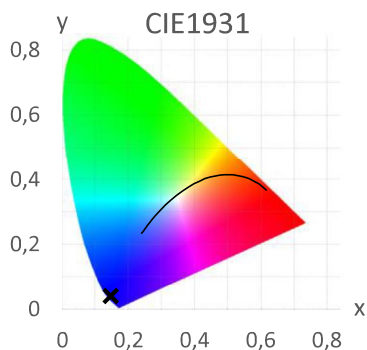
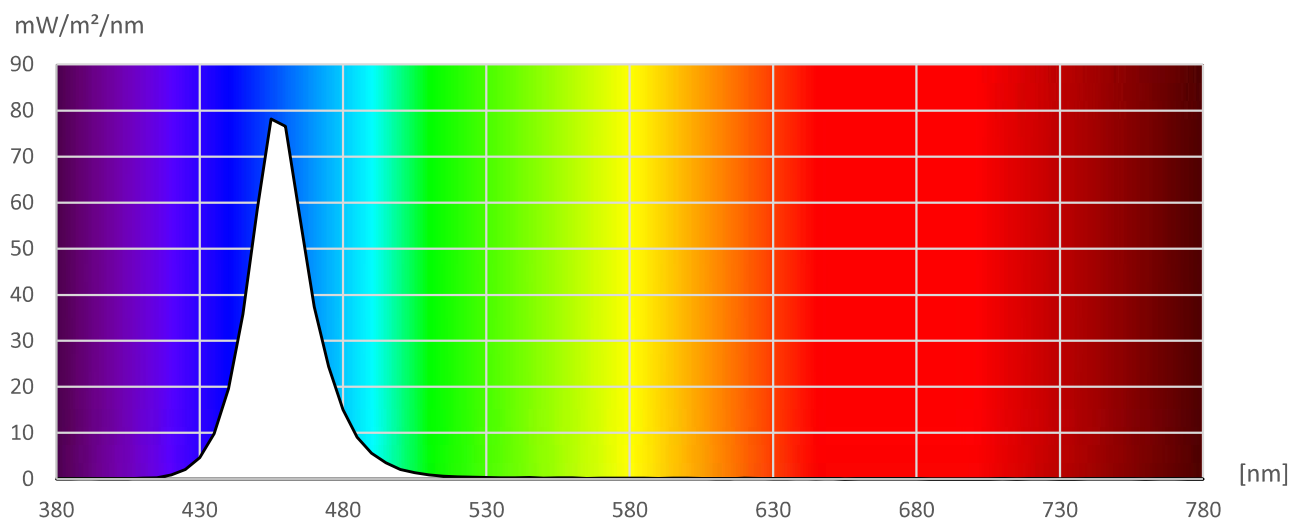
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / blue

Measurement file: 307515_3m_b.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:03:06



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

Burgebrach, 01.08.2018

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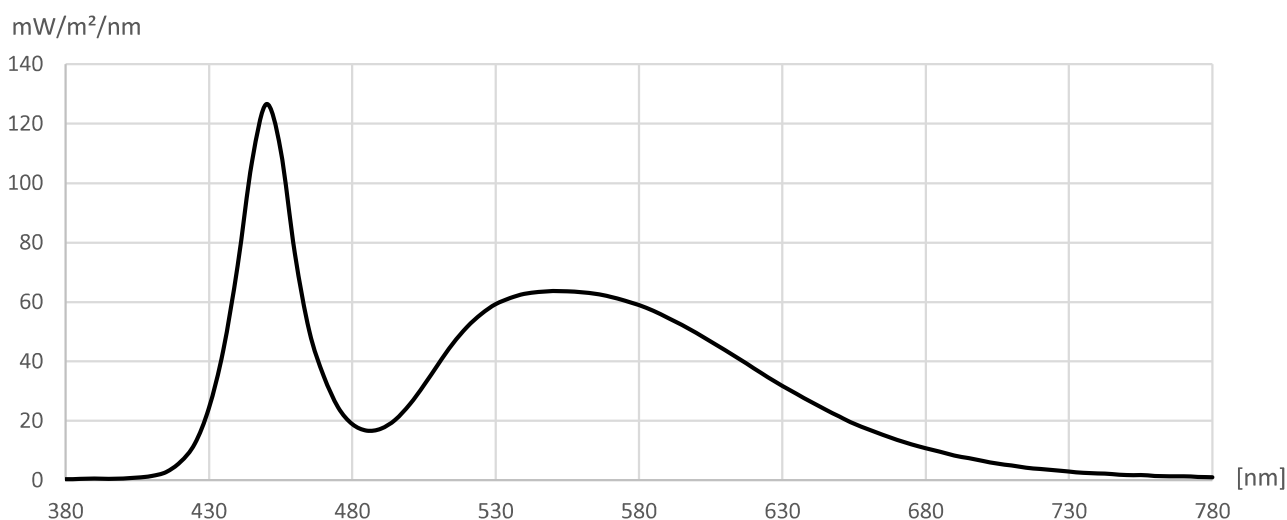
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / cw

Measurement file: 307515_1m_cw.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:03:19



R1 = 72,9	Ra = 74,7	Illuminance	3827,83 lx	CIE1931
R2 = 78,4	Re = 65,0	Ee	12,062 W/m²	x = 0,3138
R3 = 79,8	GAI = 86,6	LER	317,3 lm/W	y = 0,3288
R4 = 75,4				
R5 = 73,5		correlated color temperature (CCT)	6446 K	CIE1976
R6 = 69,4		Duv	0,0025	u' = 0,1987
R7 = 83,8				v' = 0,4684
R8 = 64,5		Saturation	7 %	
R9 = -15,5				CIE1960
R10 = 46,4		Dominant wavelength	486 nm	u = 0,1987
R11 = 72,0		Peak wavelength	449 nm	v = 0,3122
R12 = 42,7				
R13 = 73,8		Flicker frequency	% < 2.5 Hz	TM30
R14 = 88,6		Percent Flicker	< 2.5 %	Rf = 71,7
R15 = 68,8		Flicker index	% < 2.5	Rg = 94,1

[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	0,35	440	72,13	500	25,49	560	63,30	620	37,71	680	10,75	740	2,31
385	0,43	445	107,19	505	32,03	565	62,72	625	34,69	685	9,60	745	2,07
390	0,58	450	126,55	510	39,13	570	61,77	630	31,79	690	8,34	750	1,71
395	0,50	455	111,32	515	45,87	575	60,41	635	29,04	695	7,40	755	1,74
400	0,61	460	76,24	520	51,54	580	58,95	640	26,39	700	6,48	760	1,48
405	0,87	465	50,19	525	55,96	585	56,99	645	23,80	705	5,59	765	1,34
410	1,39	470	35,11	530	59,27	590	54,70	650	21,41	710	4,95	770	1,34
415	2,77	475	24,58	535	61,28	595	52,24	655	19,04	715	4,26	775	1,16
420	6,12	480	18,83	540	62,71	600	49,58	660	17,11	720	3,78	780	1,01
425	12,31	485	16,73	545	63,33	605	46,73	665	15,33	725	3,40		
430	24,28	490	17,35	550	63,64	610	43,75	670	13,62	730	2,91		
435	43,72	495	20,36	555	63,54	615	40,82	675	12,12	735	2,48		

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Burgebrach, 01.08.2018

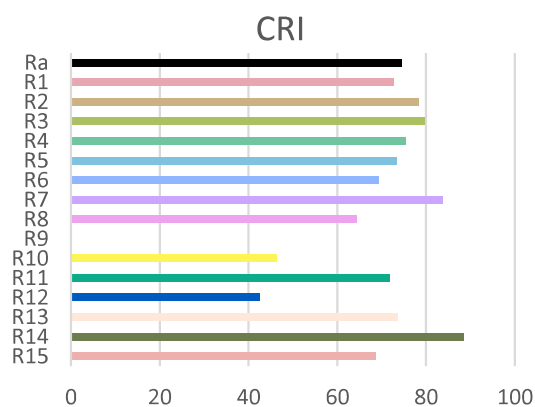
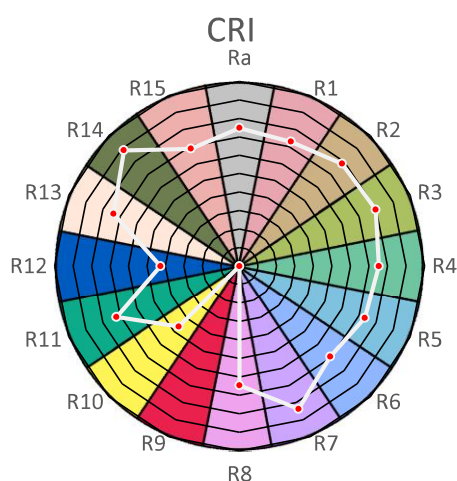
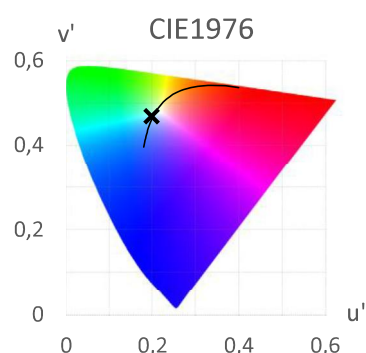
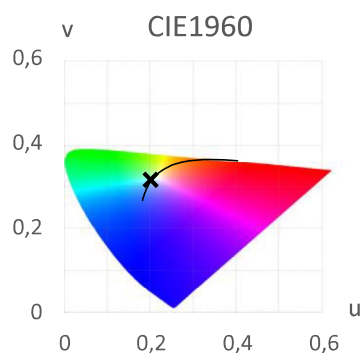
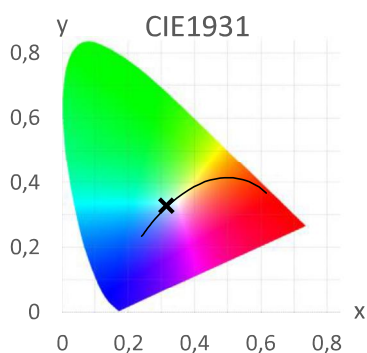
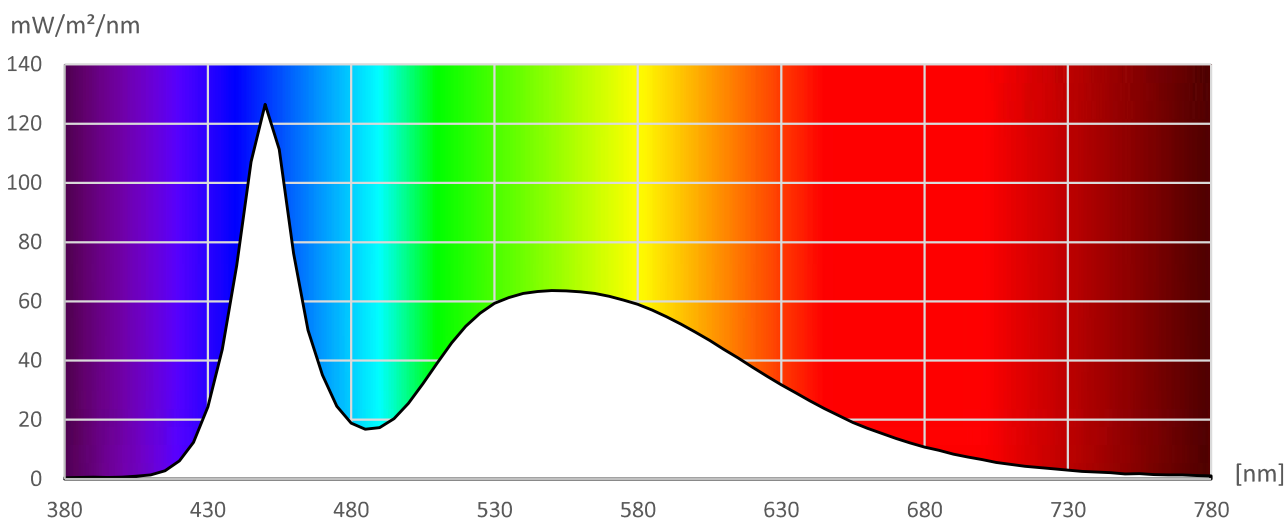
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 1 m / cw

Measurement file: 307515_1m_cw.CS
Date of measurement: 01.08.2018
Time of measurement: 13:03:19



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Hans-Thomann-Str. 1
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Burgebrach, 01.08.2018

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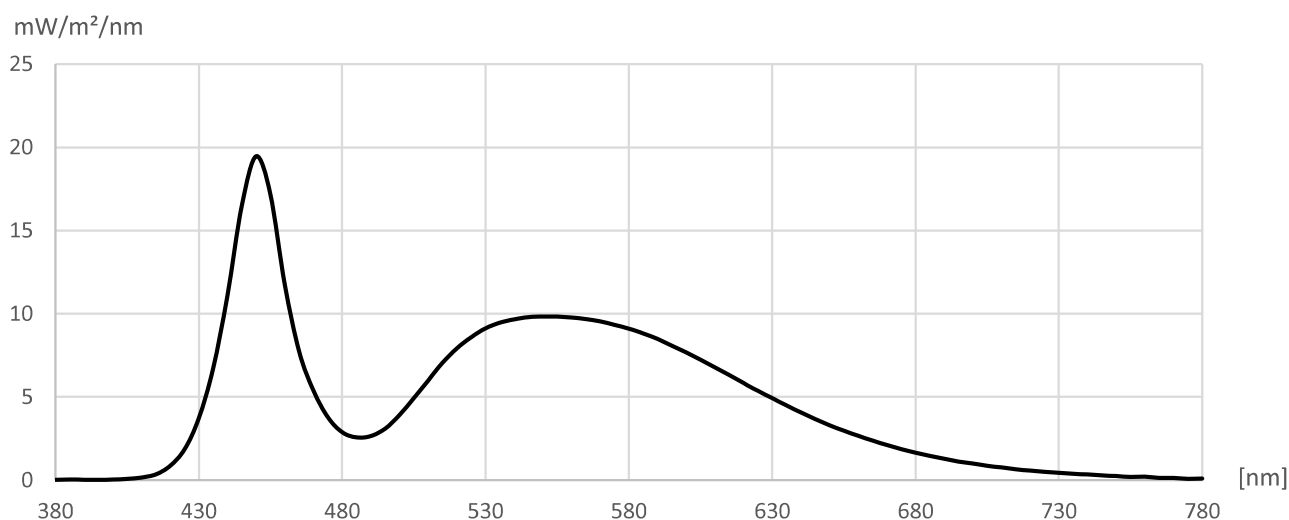
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / cw

Measurement file: 307515_3m_cw.CSV
Date of measurement: 01.08.2018
Time of measurement: 13:03:29



R1 = 72,9	Ra = 74,7	Illuminance	591,27 lx	CIE1931
R2 = 78,5	Re = 64,9	Ee	1,857 W/m²	x = 0,3144
R3 = 79,8	GAI = 86,6	LER	318,4 lm/W	y = 0,3291
R4 = 75,4				
R5 = 73,4		correlated color temperature (CCT)	6413 K	CIE1976
R6 = 69,4		Duv	0,0024	u' = 0,1989
R7 = 83,7				v' = 0,4686
R8 = 64,4		Saturation	6,7 %	
R9 = -15,6				CIE1960
R10 = 46,3		Dominant wavelength	486 nm	u = 0,1989
R11 = 71,9		Peak wavelength	449 nm	v = 0,3124
R12 = 42,5				
R13 = 73,8		Flicker frequency	% < 2.5 Hz	TM30
R14 = 88,6		Percent Flicker	< 2.5 %	Rf = 71,6
R15 = 68,8		Flicker index	% < 2.5	Rg = 94,1

[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	0,02	440	11,11	500	3,92	560	9,78	620	5,84	680	1,66	740	0,34
385	0,04	445	16,52	505	4,94	565	9,68	625	5,37	685	1,46	745	0,29
390	0,03	450	19,48	510	6,00	570	9,55	630	4,94	690	1,29	750	0,25
395	0,03	455	17,18	515	7,05	575	9,34	635	4,49	695	1,13	755	0,20
400	0,04	460	11,78	520	7,92	580	9,11	640	4,08	700	1,00	760	0,21
405	0,09	465	7,74	525	8,60	585	8,83	645	3,68	705	0,88	765	0,15
410	0,17	470	5,38	530	9,13	590	8,48	650	3,31	710	0,77	770	0,14
415	0,35	475	3,78	535	9,47	595	8,10	655	2,98	715	0,66	775	0,09
420	0,88	480	2,88	540	9,67	600	7,68	660	2,67	720	0,58	780	0,10
425	1,86	485	2,57	545	9,80	605	7,24	665	2,38	725	0,51		
430	3,71	490	2,65	550	9,83	610	6,78	670	2,12	730	0,44		
435	6,70	495	3,11	555	9,83	615	6,32	675	1,86	735	0,39		

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

Sebastian Laske

Burgebrach, 01.08.2018

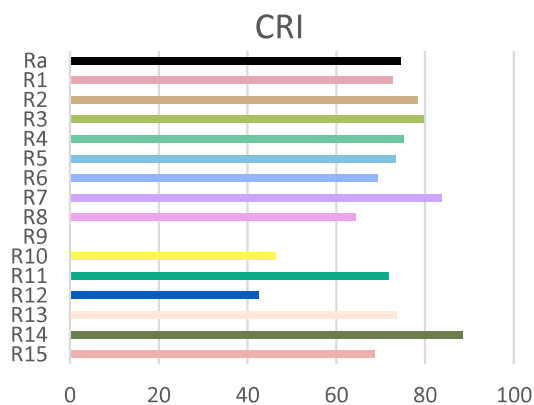
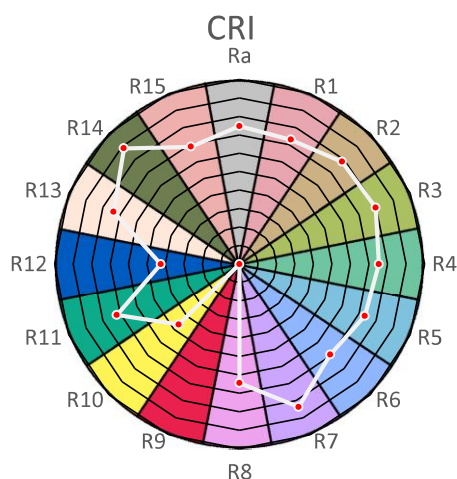
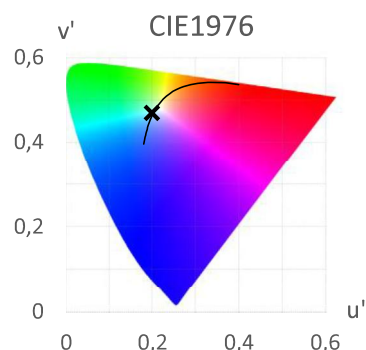
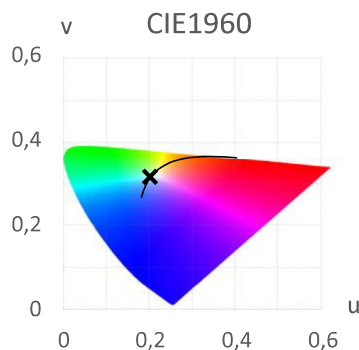
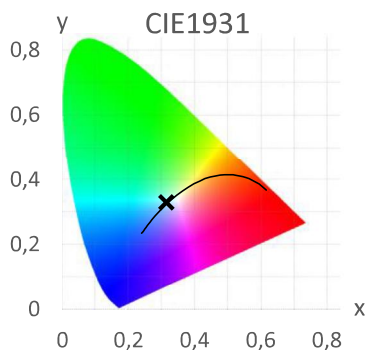
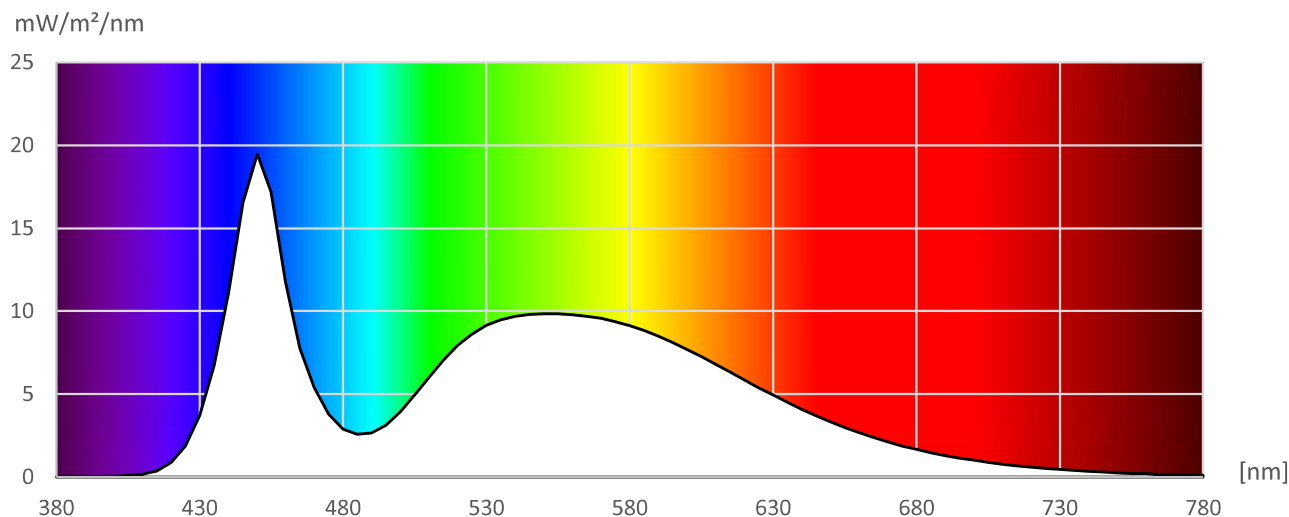
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
Quad Par Profile 5x8W 25°
Item 307515 / @ 3 m / cw

Measurement file: 307515_3m_cw.CS
Date of measurement: 01.08.2018
Time of measurement: 13:03:29



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

Burgebrach, 01.08.2018

Sebastian Laske

First, last name of inspector