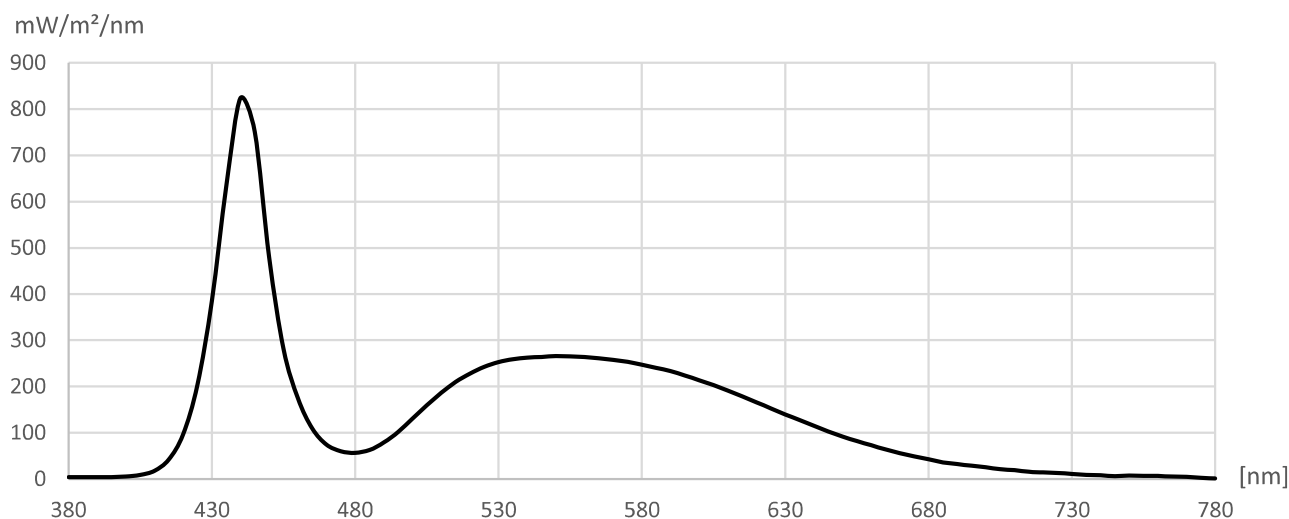


Measurement protocol

th.mann

Test object: Stairville
MH-X25 LED Spot Movinglight
Item 238185 / @ 1 m

Measurement file: 238185_1m.CSV
Date of measurement: 31.01.2018
Time of measurement: 17:03:33



R1 = 81,6	Ra = 73,9
R2 = 73,7	Re = 67,5
R3 = 64,1	GAI = 102,9
R4 = 75,7	
R5 = 82,3	
R6 = 65,9	
R7 = 74,1	
R8 = 73,5	
R9 = 18,5	
R10 = 34,5	
R11 = 82,8	
R12 = 51,7	
R13 = 76,7	
R14 = 79,3	
R15 = 77,9	

Illuminance	16319,4 lx
Ee	57,439 W/m ²
LER	284,1 lm/W
correlated color temperature (CCT)	8460 K
Duv	-0,0107
Saturation	17,6 %
Dominant wavelength	467 nm
Peak wavelength	440 nm
Flicker frequency	% < 2.5 Hz
Percent Flicker	< 2.5 %
Flicker index	% < 2.5

CIE1931
x = 0,2962
y = 0,2865
CIE1976
u' = 0,2027
v' = 0,4411
CIE1960
u = 0,2027
v = 0,2941
TM30
Rf = -
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	3,72	440	823,40	500	130,52	560	263,68	620	165,82	680	42,44	740	7,83
385	3,75	445	750,77	505	159,18	565	260,90	625	152,69	685	36,01	745	6,24
390	3,74	450	479,28	510	186,07	570	257,82	630	139,15	690	32,26	750	7,45
395	4,26	455	280,98	515	209,54	575	253,13	635	127,86	695	28,69	755	6,70
400	5,33	460	174,31	520	228,11	580	247,22	640	115,16	700	25,19	760	6,52
405	8,60	465	108,97	525	242,37	585	240,29	645	103,07	705	21,17	765	5,07
410	17,72	470	74,64	530	253,02	590	233,49	650	91,80	710	18,84	770	4,76
415	41,76	475	60,03	535	259,10	595	224,01	655	81,72	715	15,38	775	2,42
420	96,37	480	56,51	540	262,61	600	213,42	660	72,86	720	14,29	780	1,26
425	204,14	485	62,65	545	264,03	605	202,77	665	64,21	725	13,22		
430	385,12	490	78,94	550	265,90	610	191,40	670	56,03	730	10,78		
435	633,65	495	101,95	555	265,08	615	178,72	675	48,90	735	9,00		

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

Sebastian Laske

Burgebrach, 31.01.2018

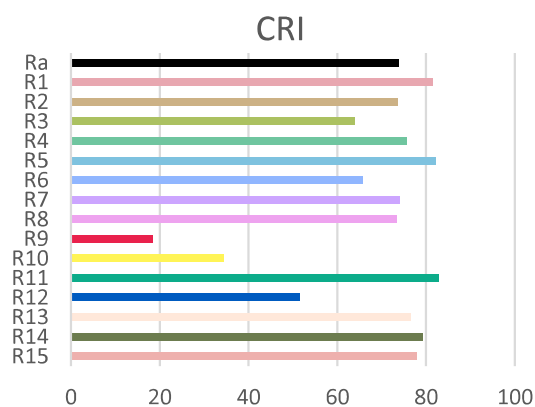
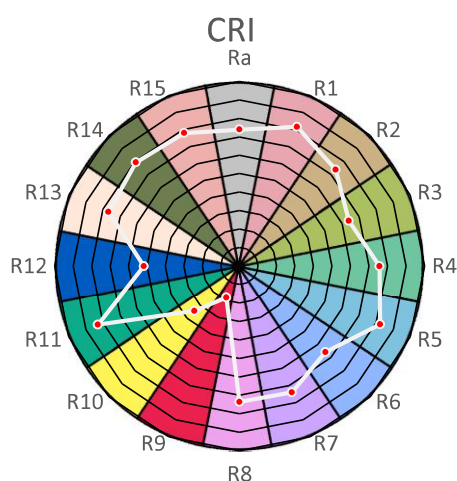
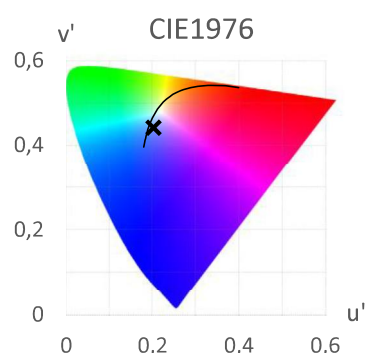
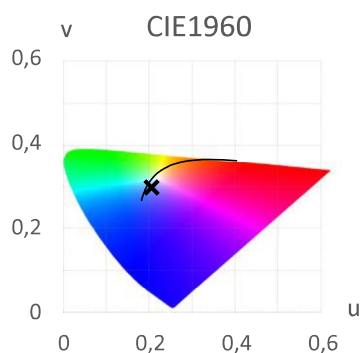
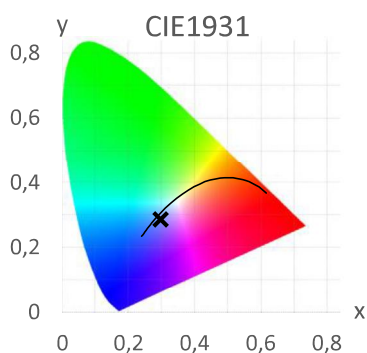
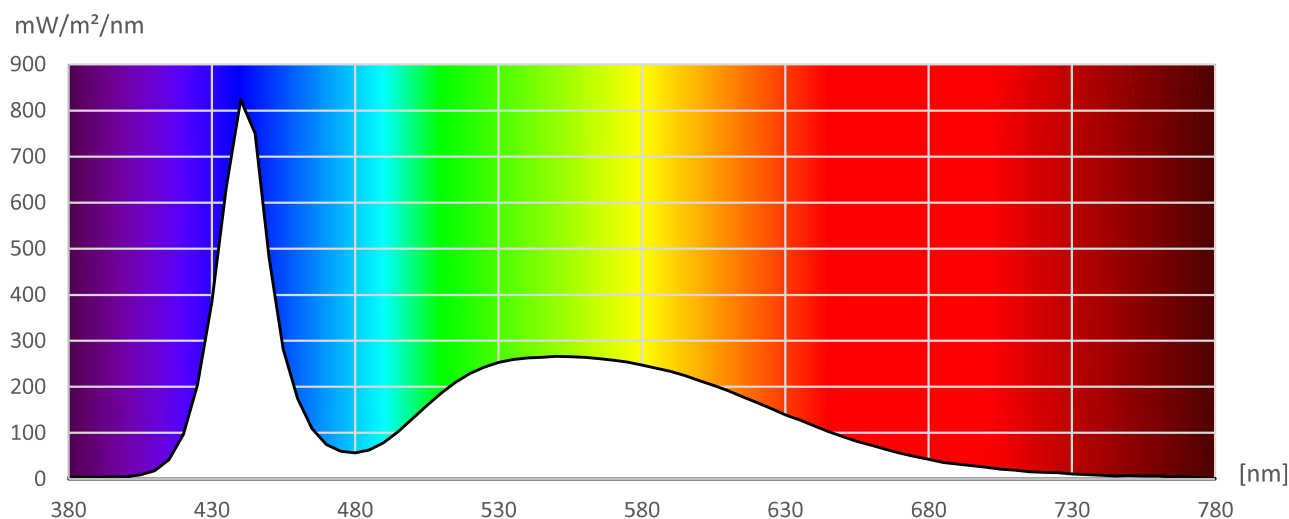
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
MH-X25 LED Spot Movinglight
Item 238185 / @ 1 m

Measurement file: 238185_1m.CSV
Date of measurement: 31.01.2018
Time of measurement: 17:03:33



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

Burgebrach, 31.01.2018

Sebastian Laske

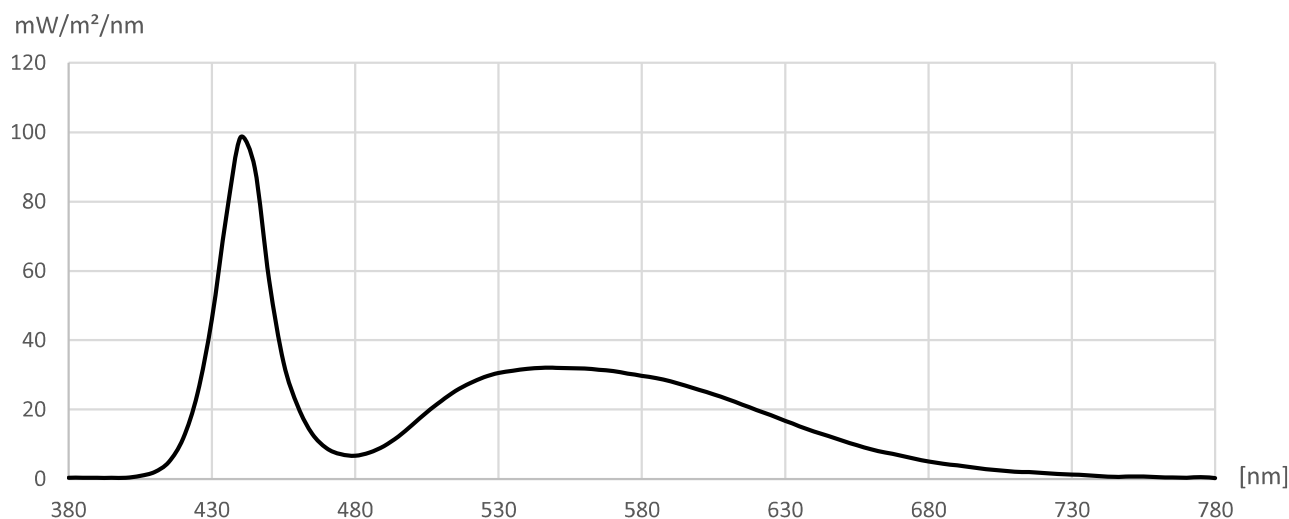
First, last name of inspector

Measurement protocol

th.mann

Test object: Stairville
MH-X25 LED Spot Movinglight
Item 238185 / @ 3 m

Measurement file: 238185_3m.CSV
Date of measurement: 31.01.2018
Time of measurement: 17:03:58



R1 = 81,1	Ra = 73,7
R2 = 73,6	Re = 67,2
R3 = 64,3	GAI = 102,4
R4 = 75,5	
R5 = 81,9	
R6 = 65,8	
R7 = 74,1	
R8 = 73,1	
R9 = 16,4	
R10 = 34,3	
R11 = 82,5	
R12 = 51,5	
R13 = 76,3	
R14 = 79,4	
R15 = 77,3	

Illuminance	1968,42 lx
Ee	6,892 W/m ²
LER	285,6 lm/W
correlated color temperature (CCT)	8386 K
Duv	-0,0101
Saturation	17,4 %
Dominant wavelength	468 nm
Peak wavelength	440 nm
Flicker frequency	% < 2.5 Hz
Percent Flicker	< 2.5 %
Flicker index	% < 2.5

CIE1931
x = 0,2965
y = 0,2878
CIE1976
u' = 0,2024
v' = 0,4419
CIE1960
u = 0,2024
v = 0,2946
TM30
Rf = -
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	0,36	440	98,50	500	15,63	560	31,86	620	19,92	680	5,07	740	0,84
385	0,39	445	89,75	505	19,27	565	31,52	625	18,38	685	4,37	745	0,59
390	0,32	450	57,30	510	22,50	570	31,13	630	16,79	690	3,90	750	0,73
395	0,31	455	33,58	515	25,37	575	30,40	635	15,19	695	3,40	755	0,71
400	0,39	460	20,85	520	27,60	580	29,77	640	13,73	700	2,86	760	0,51
405	0,88	465	13,01	525	29,33	585	29,06	645	12,43	705	2,47	765	0,42
410	2,02	470	8,90	530	30,57	590	28,14	650	11,01	710	2,07	770	0,39
415	4,89	475	7,12	535	31,23	595	26,94	655	9,71	715	1,99	775	0,53
420	11,71	480	6,74	540	31,77	600	25,69	660	8,56	720	1,73	780	0,29
425	24,68	485	7,60	545	32,05	605	24,43	665	7,61	725	1,45		
430	46,15	490	9,49	550	32,09	610	23,00	670	6,82	730	1,30		
435	75,72	495	12,26	555	31,92	615	21,46	675	5,83	735	1,09		

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

Sebastian Laske

Burgebrach, 31.01.2018

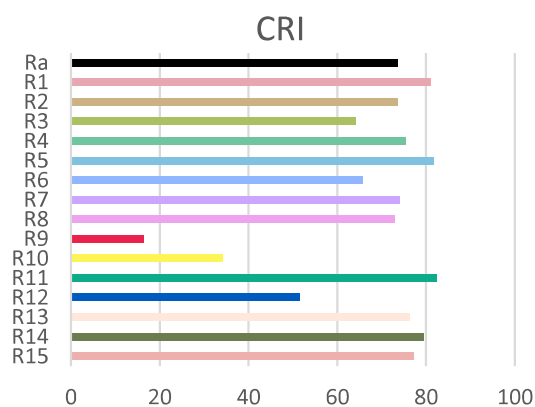
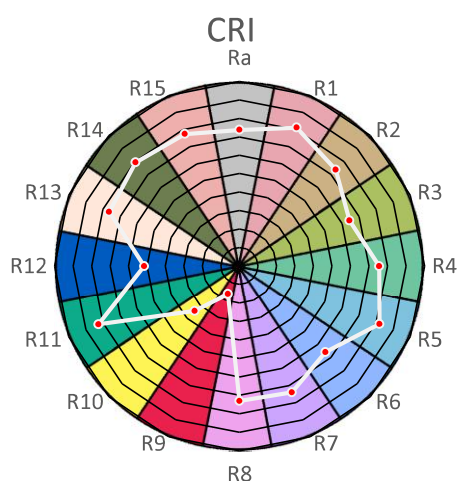
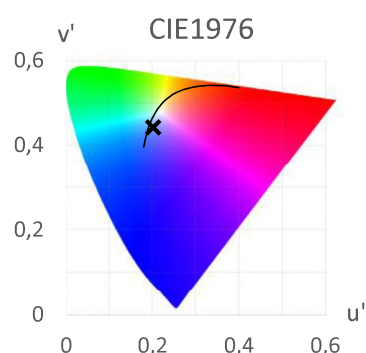
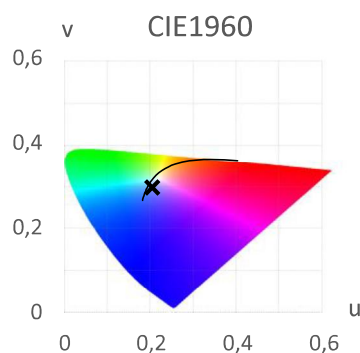
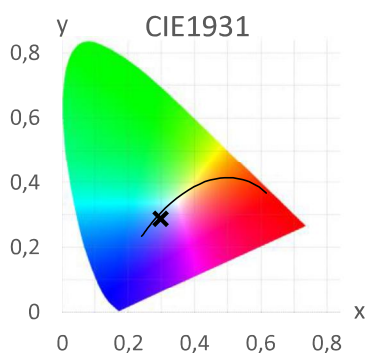
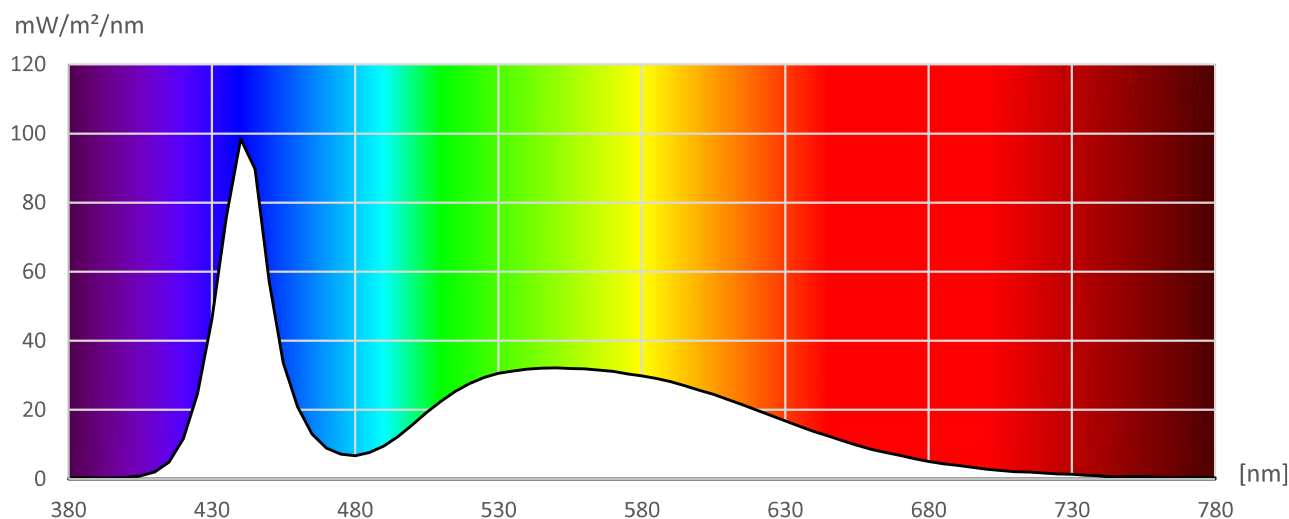
First, last name of inspector

Measurement protocol

th•mann

Test object: Stairville
MH-X25 LED Spot Movinglight
Item 238185 / @ 3 m

Measurement file: 238185_3m.CSV
Date of measurement: 31.01.2018
Time of measurement: 17:03:58



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

Burgebrach, 31.01.2018

Sebastian Laske

First, last name of inspector