



Light quality control

GL OPTIC Polska Sp. z o.o., Poznańska 70, PL 62-040 Puszczykowo

RAPORT POMIARU SPEKTRALNEGO

Data wydania: 2024-08-27

Numer badania: GLR0252024

Opis

Zleceniodawca: Spacetronek Sp. z o. o.
64-000 Kościan
ul. Wiśniowa 36

Obiekt badania: GLOW D3 GL0182024
Zmierzył: Piotr Augustyniak

Wyposażenie

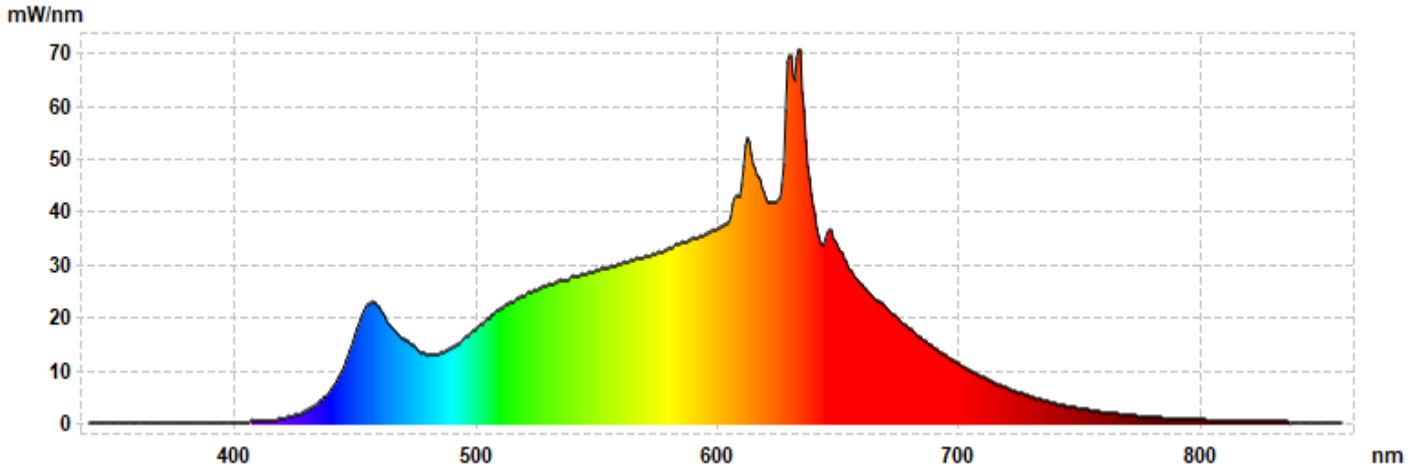
- Pomiar spektralny

Kula całkująca: GL OPTI SPHERE 2000 SN: GL180408
Spektroradiometr: GL SPECTIS 5.0 Touch UV-VIS-NIR SN: Xt050222

Warunki pomiarowe

Temperatura otoczenia: 25.3 +/- 0.4 °C
Zakres pomiarowy: 350 nm – 850 nm
Czas stabilizacji: 30 minut

tryb 1 100%
Spectrum (350nm – 850 nm)

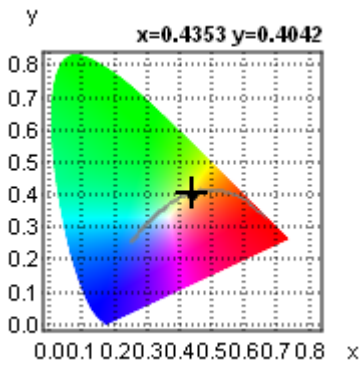


Results

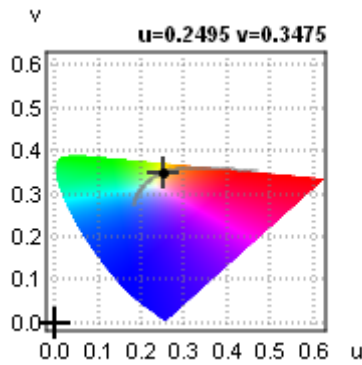
CIE 1931 2° observer	
x	0.4353
y	0.4042
u'	0.2495
v'	0.5212
CCT [K]	3029
Y [lm]	2220.11
Purity	0.520
Radiometric [W]	7.5319

Rendering Indices	
Ra	97.2
R1	98.6
R2	99.2
R3	98.2
R4	98.6
R5	98.1
R6	96.0
R7	95.5
R8	93.5
R9	85.6
R10	99.0
R11	97.6
R12	83.5
R13	98.7
R14	97.6

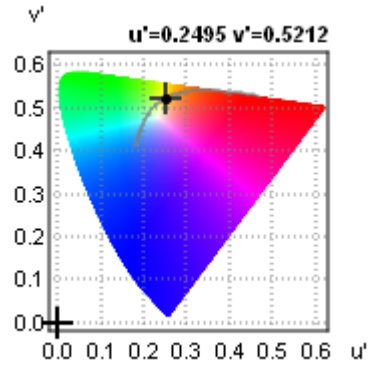
CIE 1931



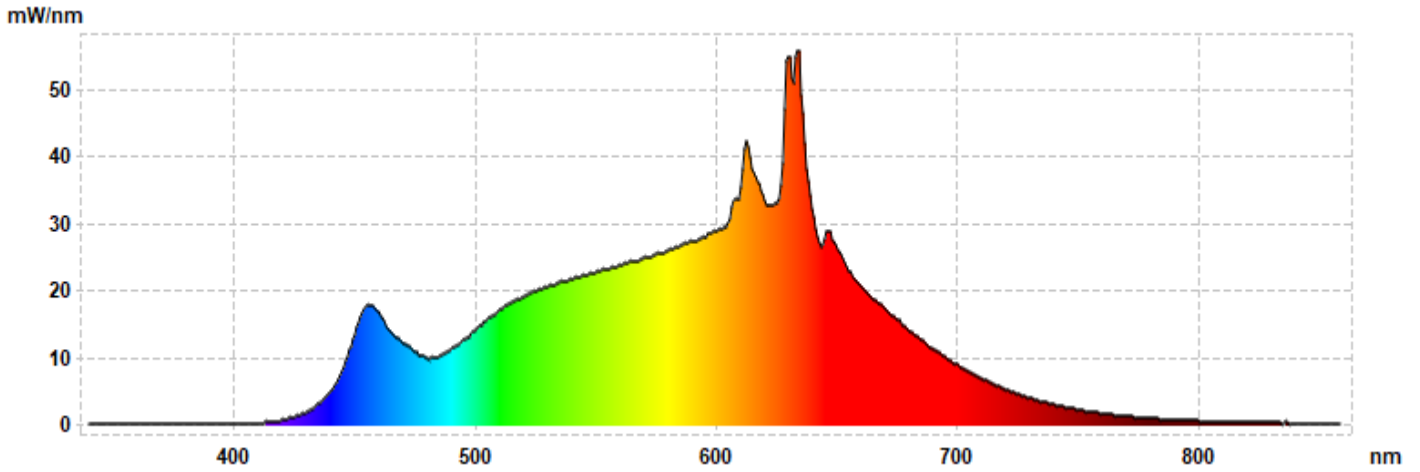
CIE 1960



CIE 1976



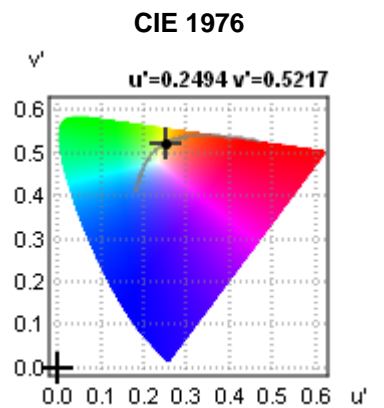
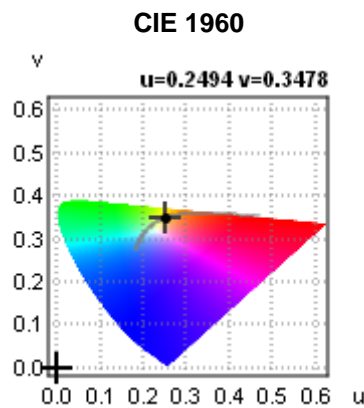
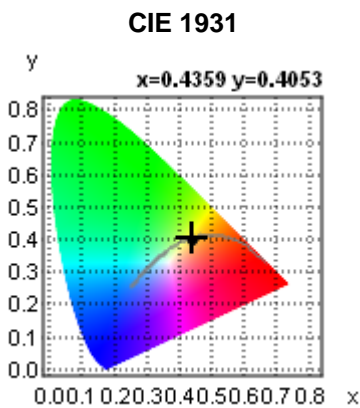
tryb 1 80%
Spectrum (350nm – 850 nm)



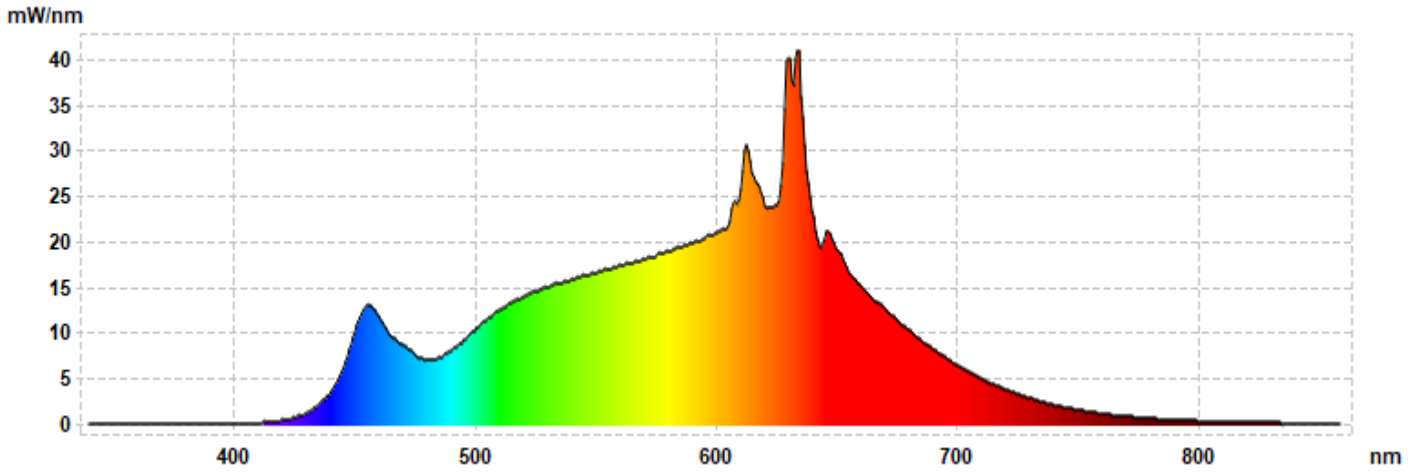
Results

CIE 1931 2° observer	
x	0.4359
y	0.4053
u'	0.2494
v'	0.5217
CCT [K]	3027
Y [lm]	1747.39
Purity	0.525
Radiometric [W]	5.9157

Rendering Indices	
Ra	97.4
R1	98.8
R2	99.5
R3	97.8
R4	98.6
R5	98.2
R6	96.5
R7	95.8
R8	93.7
R9	85.7
R10	98.4
R11	97.5
R12	83.2
R13	98.9
R14	97.4



tryb 1 60%
Spectrum (350nm – 850 nm)

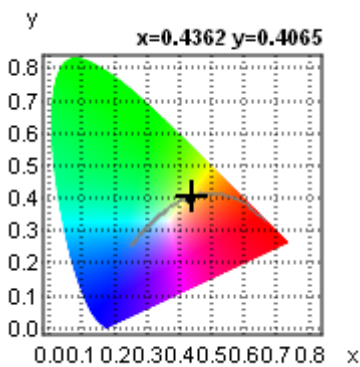


Results

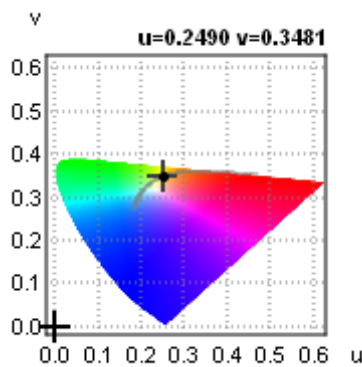
CIE 1931 2° observer	
x	0.4362
y	0.4065
u'	0.2490
v'	0.5222
CCT [K]	3032
Y [lm]	1275.05
Purity	0.529
Radiometric [W]	4.3092

Rendering Indices	
Ra	97.5
R1	98.9
R2	99.7
R3	97.5
R4	98.6
R5	98.3
R6	96.9
R7	96.1
R8	94.0
R9	86.0
R10	97.8
R11	97.5
R12	82.9
R13	99.1
R14	97.2

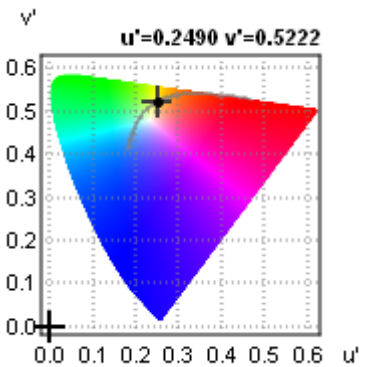
CIE 1931



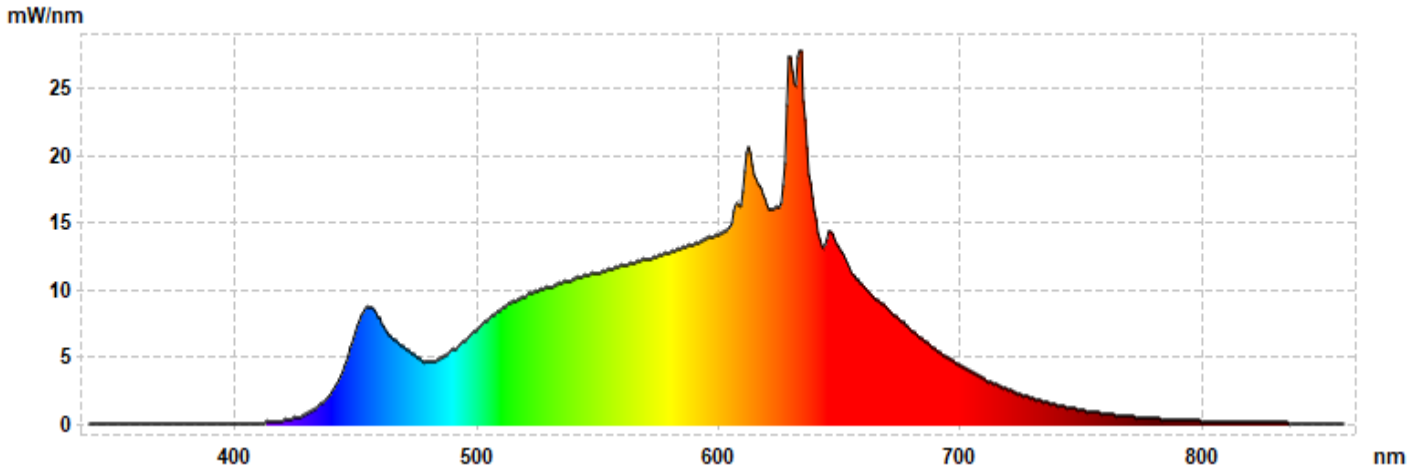
CIE 1960



CIE 1976



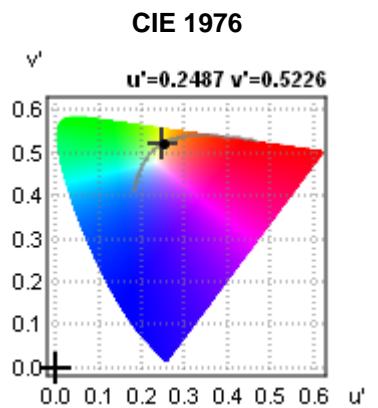
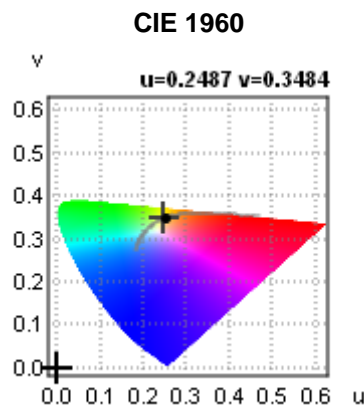
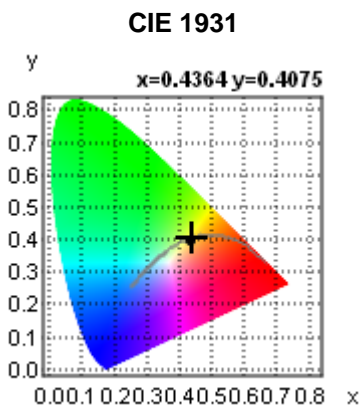
tryb 1 40%
Spectrum (350nm – 850 nm)



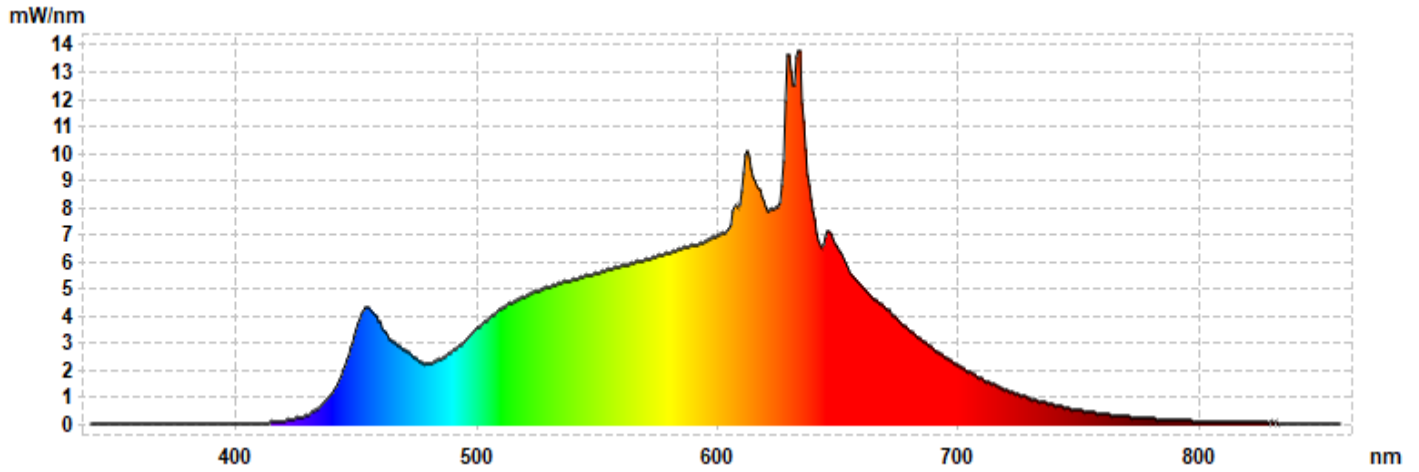
Results

CIE 1931 2° observer	
x	0.4364
y	0.4075
u'	0.2487
v'	0.5226
CCT [K]	3037
Y [lm]	862.14
Purity	0.533
Radiometric [W]	2.9108

Rendering Indices	
Ra	97.6
R1	99.0
R2	99.7
R3	97.1
R4	98.6
R5	98.3
R6	97.2
R7	96.4
R8	94.3
R9	86.3
R10	97.3
R11	97.4
R12	82.6
R13	99.2
R14	97.0



tryb 1 20%
Spectrum (350nm – 850 nm)

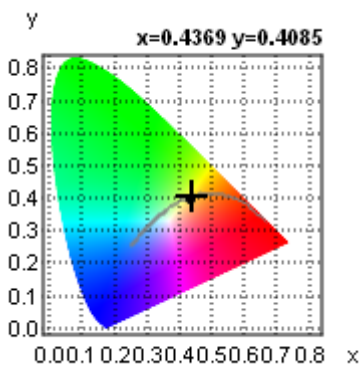


Results

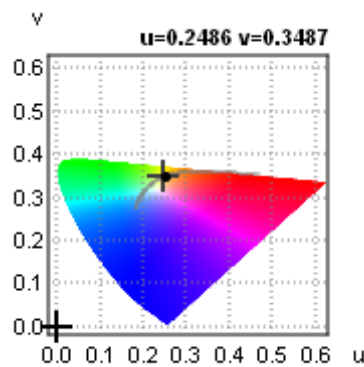
CIE 1931 2° observer	
x	0.4369
y	0.4085
u'	0.2486
v'	0.5231
CCT [K]	3037
Y [lm]	425.93
Purity	0.537
Radiometric [W]	1.4359

Rendering Indices	
Ra	97.6
R1	99.1
R2	99.5
R3	96.8
R4	98.6
R5	98.3
R6	97.5
R7	96.7
R8	94.6
R9	86.7
R10	96.8
R11	97.3
R12	82.3
R13	99.3
R14	96.9

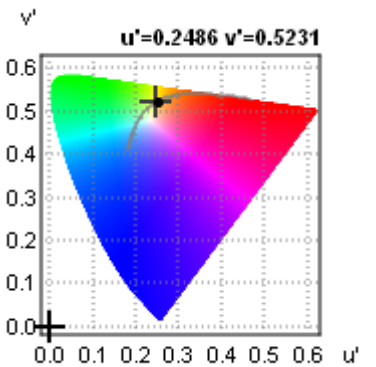
CIE 1931



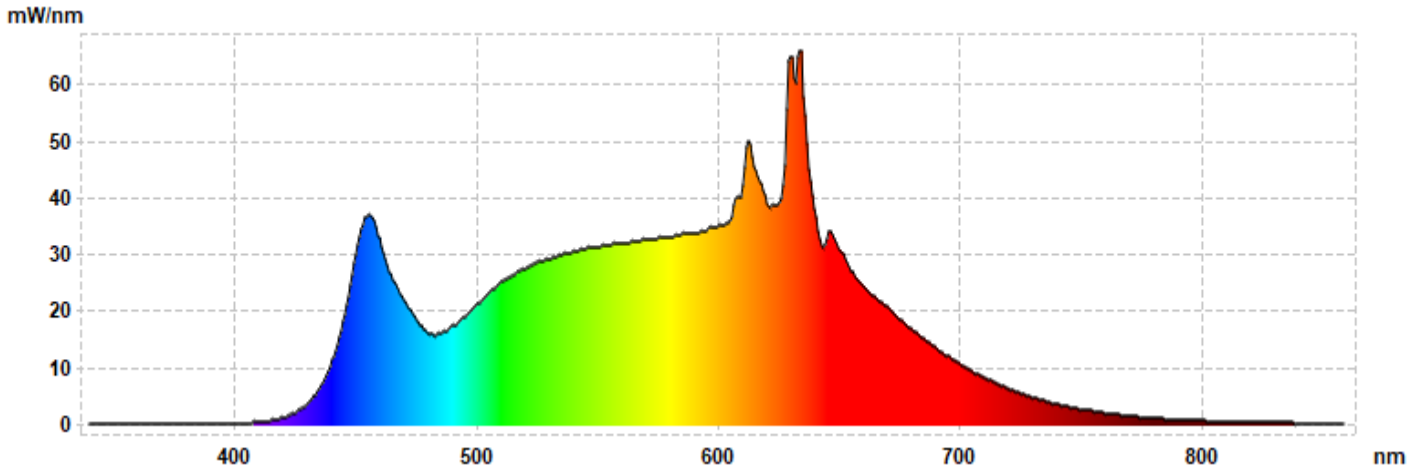
CIE 1960



CIE 1976



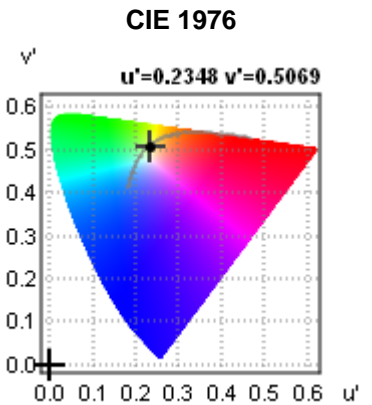
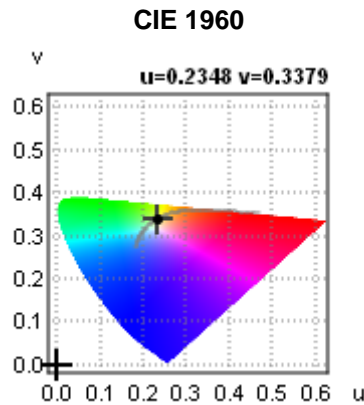
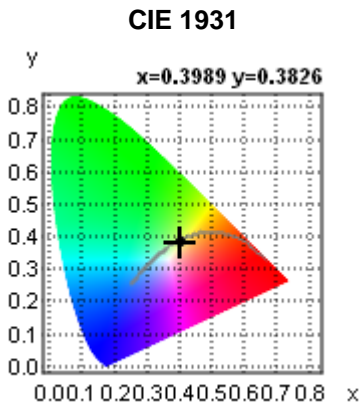
tryb 2 100%
Spectrum (350nm – 850 nm)



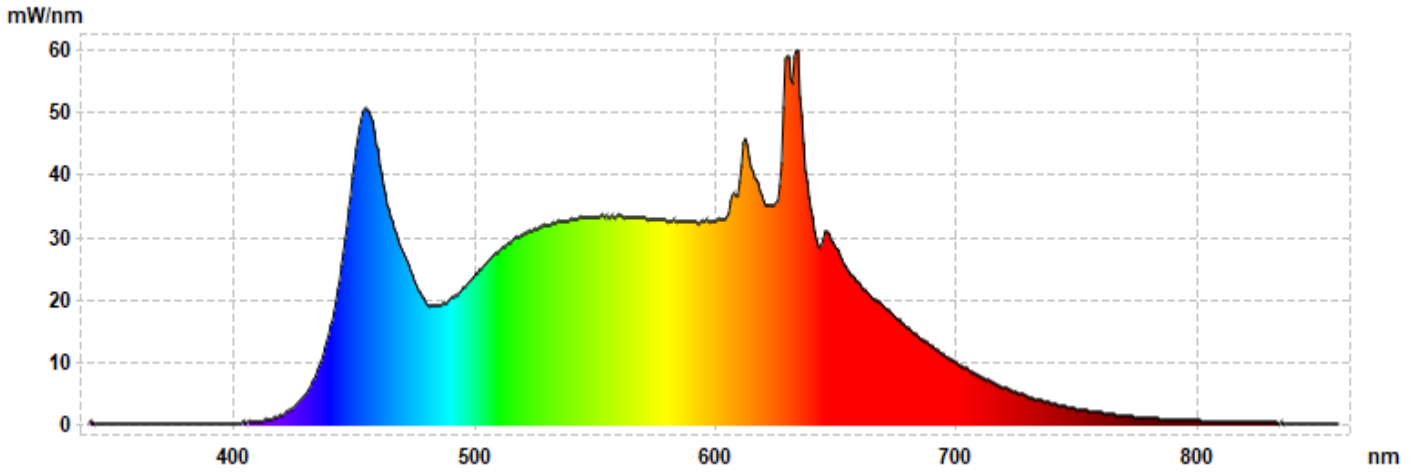
Results

CIE 1931 2° observer	
x	0.3989
y	0.3826
u'	0.2348
v'	0.5069
CCT [K]	3579
Y [lm]	2306.90
Purity	0.345
Radiometric [W]	7.9100

Rendering Indices	
Ra	97.3
R1	97.1
R2	98.4
R3	97.3
R4	99.0
R5	97.4
R6	95.5
R7	96.8
R8	97.2
R9	96.2
R10	99.4
R11	97.3
R12	78.6
R13	97.3
R14	97.3



tryb 3 100%
Spectrum (350nm – 850 nm)

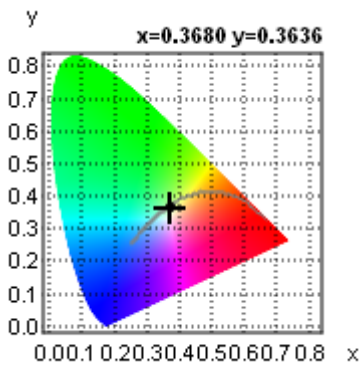


Results

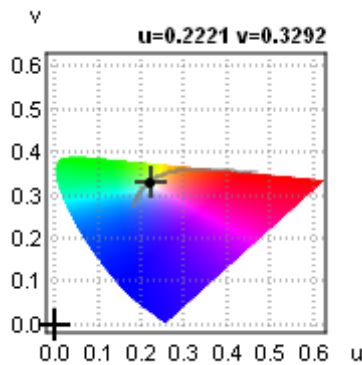
CIE 1931 2° observer	
x	0.3680
y	0.3636
u'	0.2221
v'	0.4938
CCT [K]	4269
Y [lm]	2354.81
Purity	0.196
Radiometric [W]	8.1646

Rendering Indices	
Ra	96.9
R1	96.8
R2	98.5
R3	96.4
R4	98.1
R5	96.6
R6	95.3
R7	96.9
R8	96.8
R9	95.8
R10	99.0
R11	98.3
R12	73.0
R13	97.3
R14	97.0

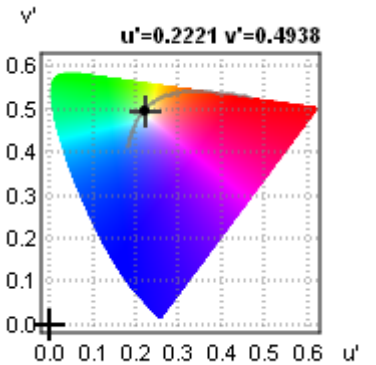
CIE 1931



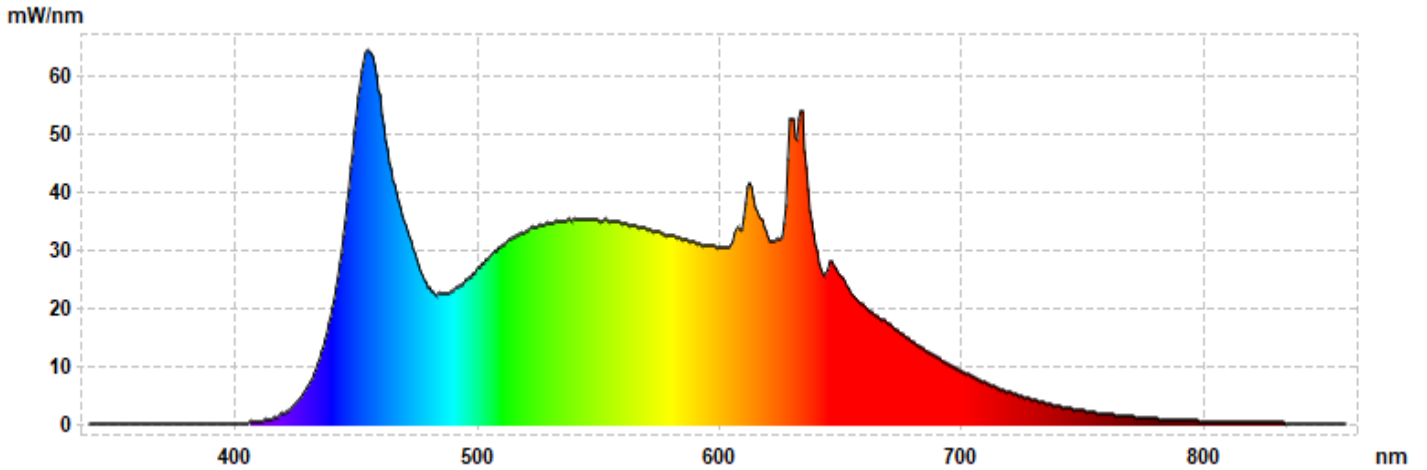
CIE 1960



CIE 1976



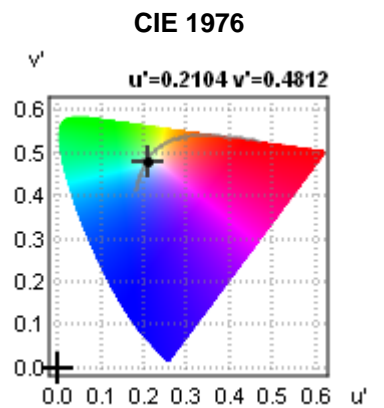
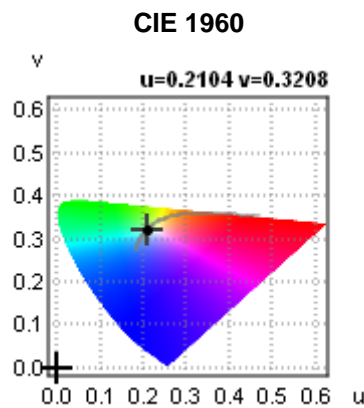
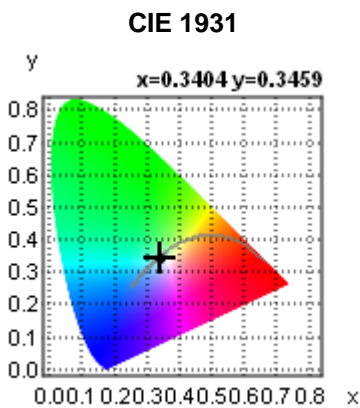
tryb 4 100%
Spectrum (350nm – 850 nm)



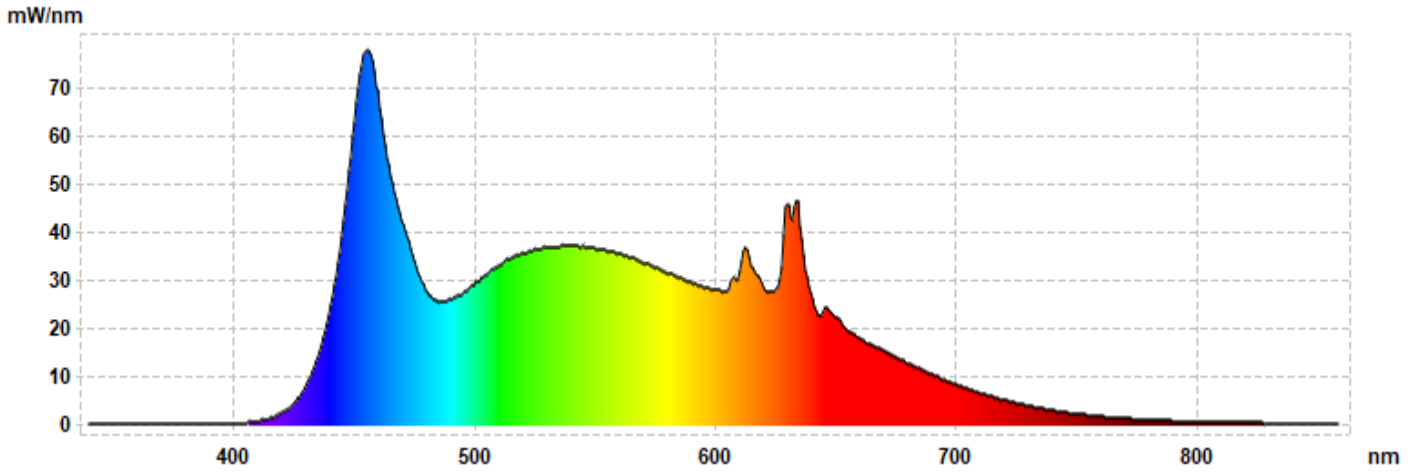
Results

CIE 1931 2° observer	
x	0.3404
y	0.3459
u'	0.2104
v'	0.4812
CCT [K]	5171
Y [lm]	2411.47
Purity	0.059
Radiometric [W]	8.4780

Rendering Indices	
Ra	96.8
R1	97.2
R2	98.6
R3	95.7
R4	97.8
R5	96.2
R6	94.4
R7	97.4
R8	97.3
R9	95.7
R10	97.0
R11	97.7
R12	73.2
R13	98.1
R14	96.9



tryb 5 100%
Spectrum (350nm – 850 nm)

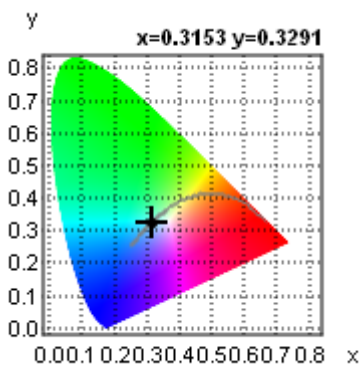


Results

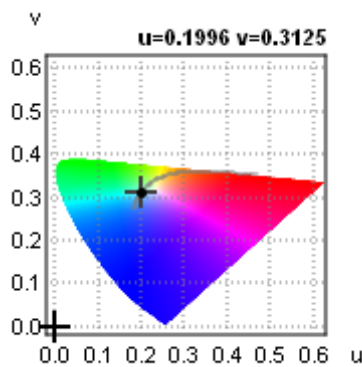
CIE 1931 2° observer	
x	0.3153
y	0.3291
u'	0.1996
v'	0.4688
CCT [K]	6368
Y [lm]	2425.84
Purity	0.064
Radiometric [W]	8.6636

Rendering Indices	
Ra	95.7
R1	97.3
R2	99.2
R3	95.7
R4	93.7
R5	93.9
R6	93.5
R7	96.0
R8	95.8
R9	97.2
R10	94.8
R11	94.8
R12	67.2
R13	99.2
R14	97.3

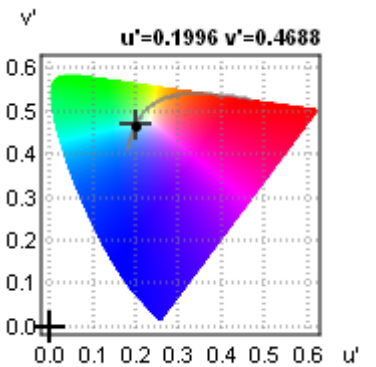
CIE 1931

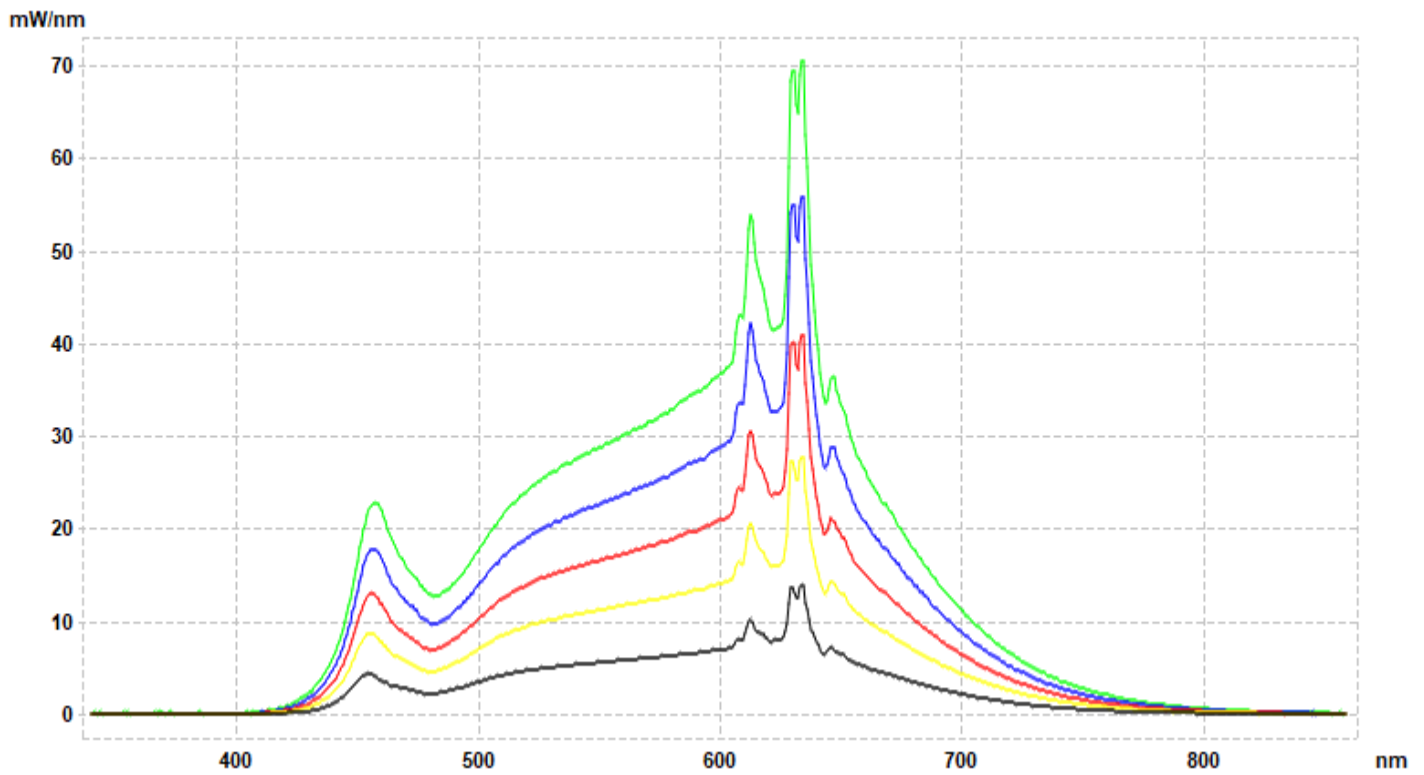


CIE 1960



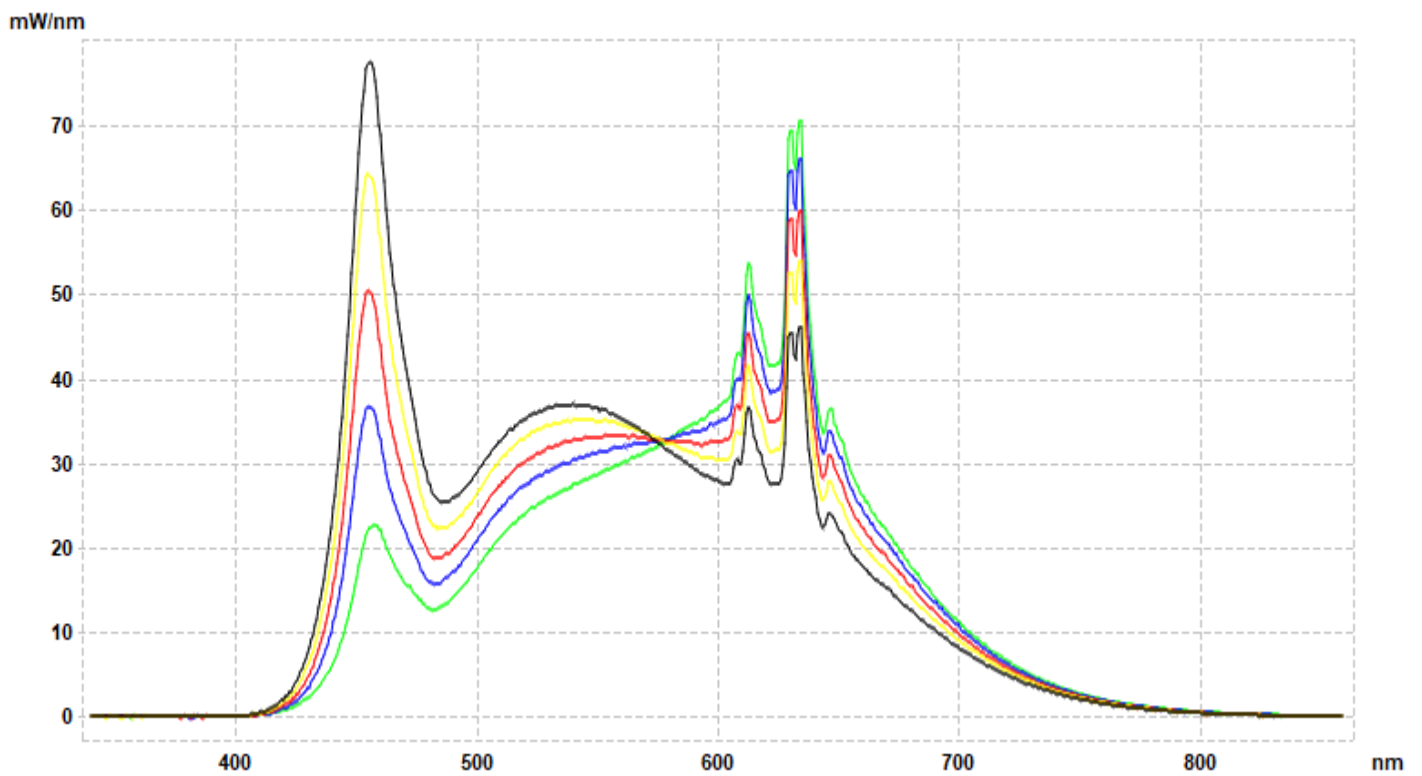
CIE 1976





Comparison table

Pos.	Name	x	y	CCT [K]	Y [lm]	Ra	Radiometric [W]
1	tryb 1 100%	0.4353	0.4042	3029	2220.11	97.2	7.5319
2	tryb 1 80%	0.4359	0.4053	3027	1747.39	97.4	5.9157
3	tryb 1 60%	0.4362	0.4065	3032	1275.05	97.5	4.3092
4	tryb 1 40%	0.4364	0.4075	3037	862.14	97.6	2.9108
5	tryb 1 20%	0.4369	0.4085	3037	425.93	97.6	1.4359



Comparison table

Pos.	Name	x	y	CCT [K]	Y [lm]	Ra	Radiometric [W]
1	tryb 1 100%	0.4353	0.4042	3029	2220.11	97.2	7.5319
2	tryb 2 100%	0.3989	0.3826	3579	2306.9	97.3	7.91
3	tryb 3 100%	0.368	0.3636	4269	2354.81	96.9	8.1646
4	tryb 4 100%	0.3404	0.3459	5171	2411.47	96.8	8.478
5	tryb 5 100%	0.3153	0.3291	6368	2425.84	95.7	8.6636