



Spectroradiometer Lightsource Test

Report No: 755**Test Time:** 2024-01-22 17:40:23

Category: Road Lighting

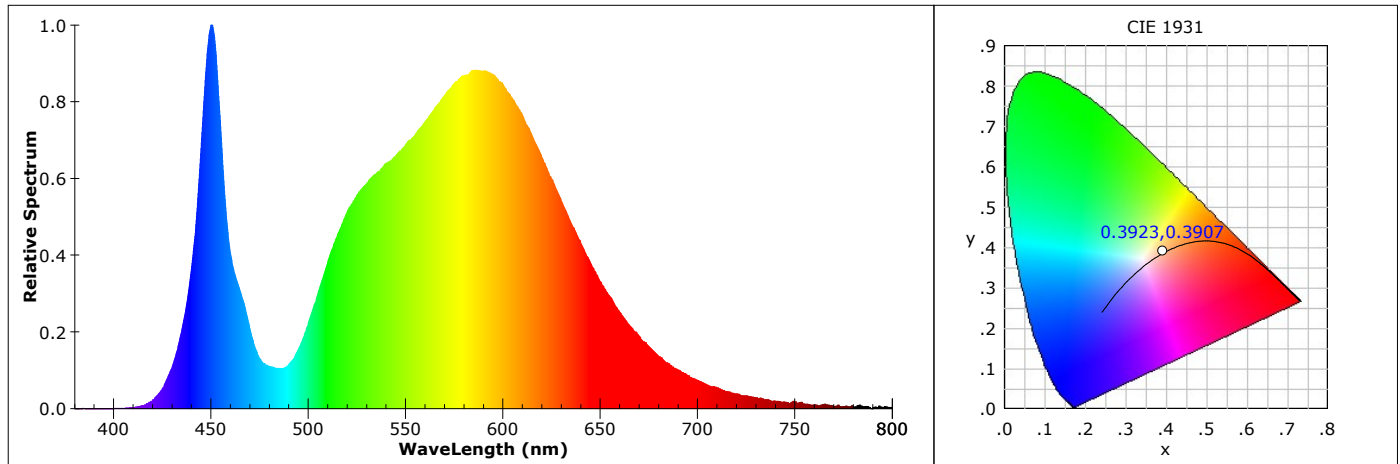
Type: LED

Spec: Dorado 30W24-230

Number: 755

Manufacturer: Industrial Lighting Ltd

Submitter:



CIE Colorimetric Parameters

CIE(x,y): 0.3923,0.3907

CIE(u,v): 0.2273,0.3396

CIE(u',v'): 0.2273,0.5093

CCT: 3800 K (Duv=0.003120)

Dominant Wavelength: 578.4 nm

Color Purity: 0.350

Peak Wavelength: 450.5 nm

Half Width: 15.6 nm

Color Ratio: R:0.172, G:0.806, B:0.022

Color Render Index: Ra:71.6, avgR(1~14):61.0, avgR(1~15):61.0

R1: 68

R2: 79

R3: 89

R4: 70

R5: 68

R6: 71

R7: 80

R8: 48

R9: -38

R10: 51

R11: 66

R12: 39

R13: 70

R14: 94

R15: 61

Color Quality Scale: Qa:72.6, Qf:72.8, Qp:72.8, Qg:88.3,

Q1: 74

Q2: 98

Q3: 68

Q4: 63

Q5: 70

Q6: 71

Q7: 74

Q8: 82

Q9: 95

Q10: 80

Q11: 75

Q12: 74

Q13: 74

Q14: 58

Q15: 64

Photometric Parameters

Luminous Flux: 5151.04 lm

Radiant Power: 14.310 W

Efficiency: 173.26 lm/W

Energy Efficiency Class:C (EU 2019/2015 η_{TM} :173.26lm/W)

S/P: 1.463

Pupil Flux: 6932.53 Plm (Kp=1.346)

Pupil Lumens per Watt: 233.18 Plm/W

Cirtopic Flux: 13707.39 lm

Mesopic Flux (CIE R.): 5644.88 lm (Lp=0.300)

Mesopic Flux (USP): 5727.25 lm (Lp=0.300)

Mesopic Flux (MOVE): 5760.64 lm (Lp=0.300)

Electric Parameters

Voltage: 230.400 V

Current: 0.1320 A

Power: 29.730 W

Power Factor: 0.9750

Frequency: 49.99 Hz

Geometry: 4n, m

Warmup Time: 4 Minutes 40 Seconds

Spectroradiometer: LMS-9000A

Self-absorption Factor: 1.039

Integration Time: 55 ms

Digital Power Meter: LS2010

Photometric Method: sphere-spectroradiometer

Peak of Signal: 48634

Power Source: LSP Series

Test Lab: TU-Gabrovo, Lighting Lab

Testing Environment: Ts:19.6°C, Ta:20.8°C,

Operator: Ivaylo Stoyanov

Approver:



IES TM-30-18 Color Rendition Report

Report No: 755

Test Time: 2024-01-22 17:40:23

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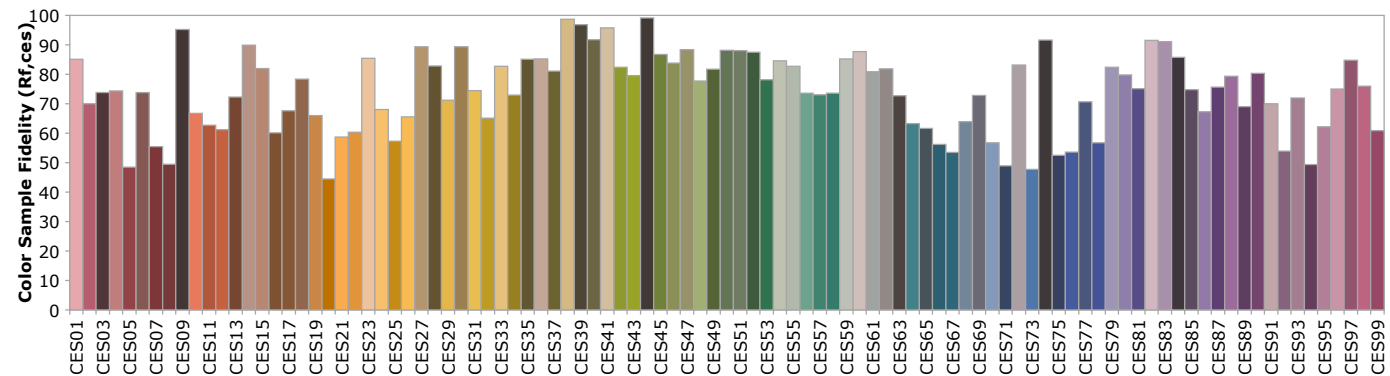
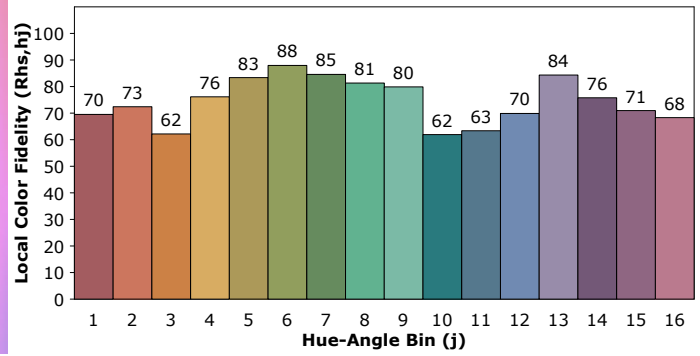
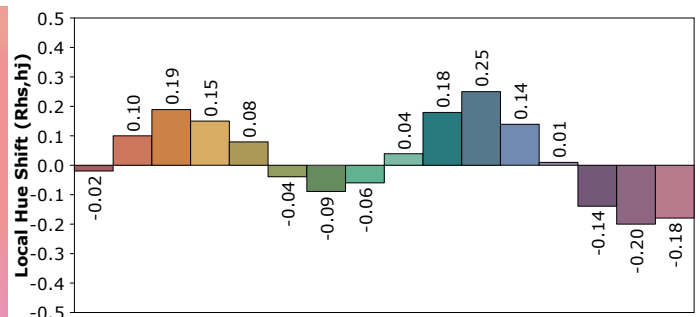
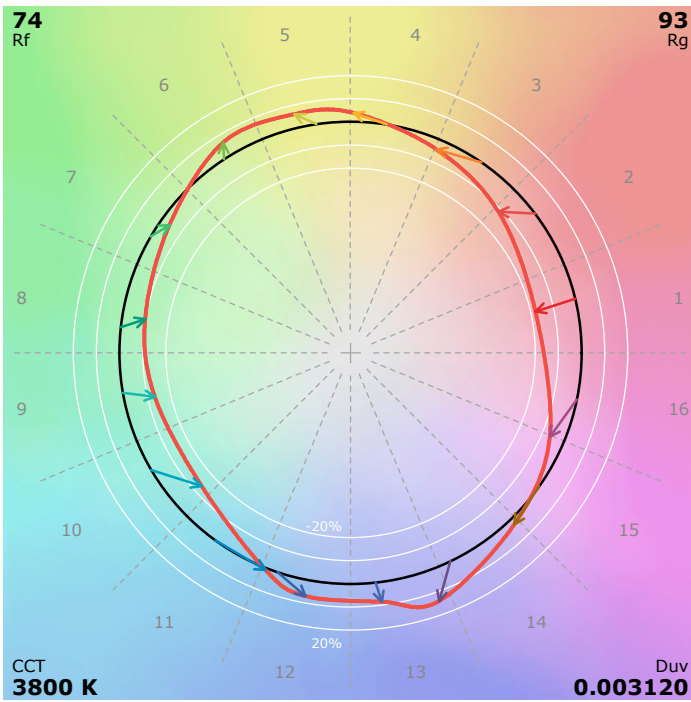
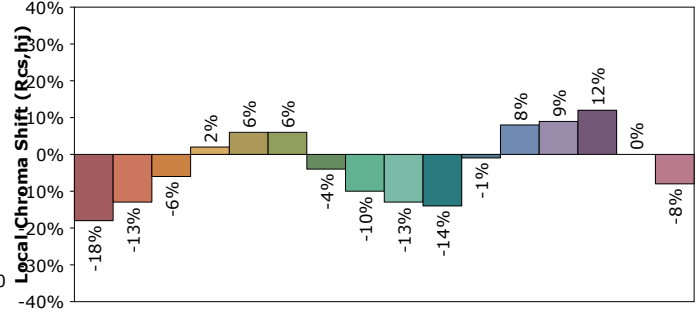
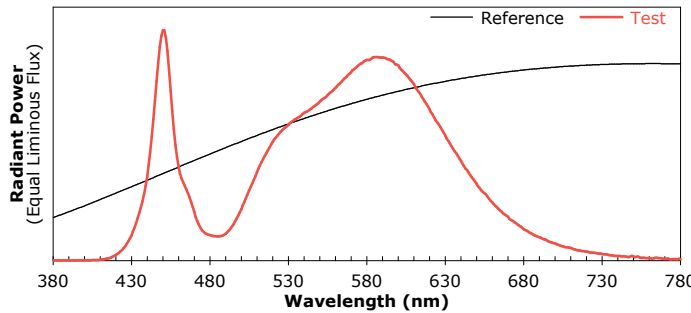
Type: LED

Spec: Dorado 30W24-230

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Submitter:



Notes: This is a recommended method for displaying IES TM-30-18 information.

x 0.3923
y 0.3907
u' 0.2273
v' 0.5093

CIE13.3-1995
(CRI)
Ra 72
R9 -38

Test Lab: TU-Gabrovo, Lighting Lab
Operator: Ivaylo Stoyanov

Testing Environment: Ts:19.6°C, Ta:20.8°C,
Approver:



Spectral Power Distribution Data

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Submitter:

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.0456	525	0.5573	60.4369	670	0.1901	20.6128
385	0.0000	0.0000	530	0.5884	63.8107	675	0.1632	17.6955
390	0.0003	0.0364	535	0.6141	66.5951	680	0.1359	14.7374
395	0.0000	0.0036	540	0.6404	69.4520	685	0.1176	12.7538
400	0.0010	0.1064	545	0.6605	71.6276	690	0.1008	10.9367
405	0.0016	0.1697	550	0.6889	74.7134	695	0.0865	9.3830
410	0.0033	0.3559	555	0.7167	77.7245	700	0.0737	7.9925
415	0.0090	0.9739	560	0.7490	81.2322	705	0.0617	6.6926
420	0.0241	2.6085	565	0.7840	85.0248	710	0.0551	5.9729
425	0.0533	5.7786	570	0.8178	88.6907	715	0.0443	4.8097
430	0.1096	11.8859	575	0.8481	91.9827	720	0.0385	4.1805
435	0.2060	22.3384	580	0.8698	94.3275	725	0.0337	3.6502
440	0.3646	39.5406	585	0.8824	95.6927	730	0.0285	3.0936
445	0.6939	75.2539	590	0.8808	95.5259	735	0.0236	2.5584
450	1.0000	108.4521	595	0.8705	94.4091	740	0.0193	2.0885
455	0.7362	79.8473	600	0.8475	91.9150	745	0.0170	1.8448
460	0.4075	44.1894	605	0.8076	87.5872	750	0.0180	1.9537
465	0.3091	33.5259	610	0.7663	83.1045	755	0.0123	1.3372
470	0.2101	22.7810	615	0.7119	77.2093	760	0.0103	1.1125
475	0.1311	14.2220	620	0.6567	71.2188	765	0.0122	1.3243
480	0.1100	11.9249	625	0.5995	65.0168	770	0.0065	0.7053
485	0.1051	11.4013	630	0.5421	58.7935	775	0.0063	0.6862
490	0.1158	12.5610	635	0.4852	52.6182	780	0.0050	0.5386
495	0.1562	16.9390	640	0.4323	46.8864	785	0.0053	0.5769
500	0.2235	24.2404	645	0.3814	41.3689	790	0.0041	0.4427
505	0.3031	32.8694	650	0.3326	36.0738	795	0.0035	0.3816
510	0.3834	41.5785	655	0.2930	31.7744	800	0.0024	0.2652
515	0.4539	49.2241	660	0.2521	27.3420			
520	0.5148	55.8299	665	0.2175	23.5853			