

Report No.:

Test Time: 18.09.2019 13:29

Luminaire Property

Luminaire Manufacturer: FAROS LED

Luminaire Category: FD 112 150W 5000K PI90

Luminous Length (mm): 316

Luminous Width (mm): 316

Luminous Height (mm): 132

Voltage: 220.8 V

Current: 0.678 A

Power: 146.55 W

Power Factor: 0.977

Photometric Results

CIE Class: Direct

Measurement Flux: 21650.7 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 21650.7 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 122.0, 121.2, 121.4, 121.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 90.8, 93.9, 92.2, 92.3

Luminaire Efficacy Rating (LER): 147.79

Central Intensity: 10142.29 cd

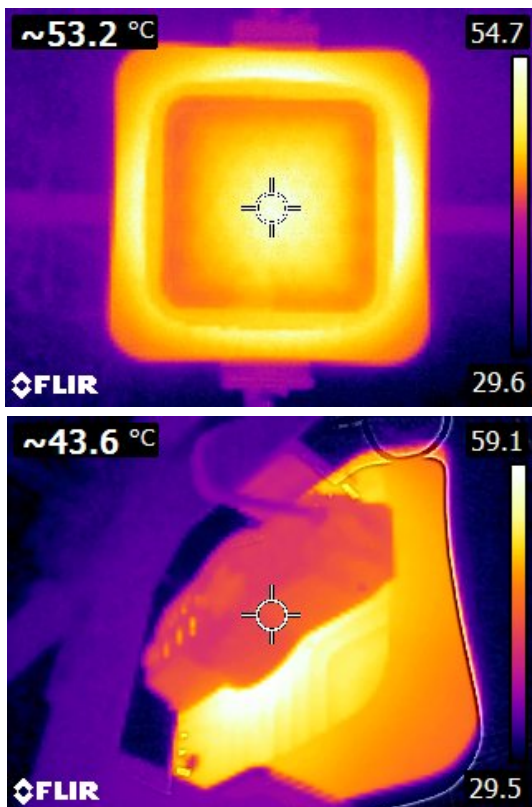
Max. Intensity: 11151.6 cd

Pos of Max. Intensity: H0 V25

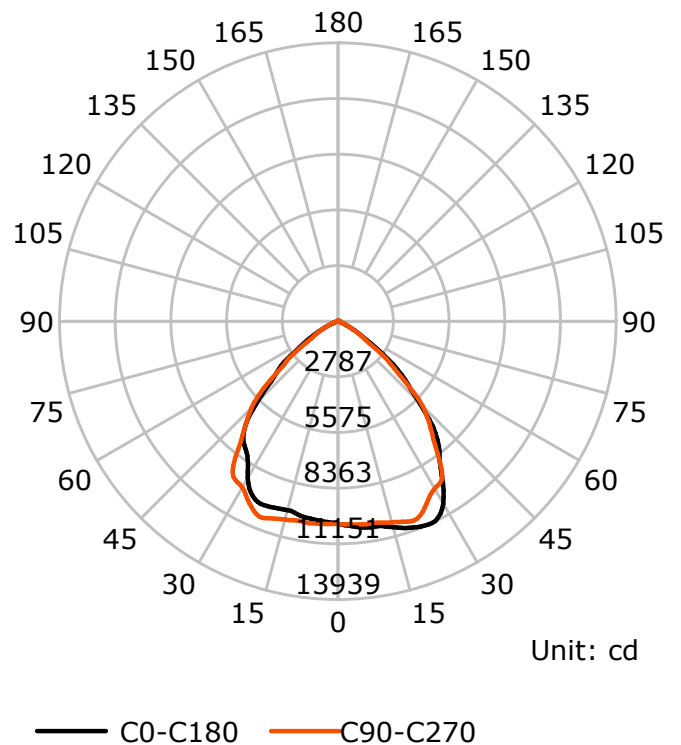
S/MH(C0/C180): 1.33

S/MH(C90/C270): 1.39

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab: FAROS LED Lab

Test Type: TYPE C

Temperature:

Operator: Lab

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Lightsource Test Report

Product Information

Product Type: FD 112 150W 5000K PI90

Manufacturer: FAROS LED

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3515$ $y=0.3558$ $u(u')=0.2141$ $v=0.3251$ $v'=0.4876$

CCT: $T_c=4780K$ ($duv=-0.00043$)

Color Ratio: $R=0.156$ $G=0.804$ $B=0.040$

Peak Wavelength: 457.8nm

Half Bandwidth: 19.7nm

Dominant Wavelength: 575.5nm

Color Purity: 0.122

CRI: $R_a=76.9$, $avgR(1\sim14)=67.5$, $avgR(1\sim15)=67.8$

TM30: $R_f=75$, $R_g=90$

GAI: $GAI_BB_8=88.0$, $GAI_BB_15=96.9$, $GAI_EES=78.3$

$R_1=75$

$R_2=85$

$R_3=88$

$R_4=72$

$R_5=73$

$R_6=76$

$R_7=85$

$R_8=61$

$R_9=-7$

$R_{10}=60$

$R_{11}=65$

$R_{12}=41$

$R_{13}=78$

$R_{14}=93$

$R_{15}=72$

Color Quality Scale: $Q_a=73.6$, $Q_f=73.7$, $Q_p=73.9$, $Q_g=88.7$

$Q_1=80$

$Q_2=98$

$Q_3=68$

$Q_4=56$

$Q_5=64$

$Q_6=68$

$Q_7=76$

$Q_8=84$

$Q_9=93$

$Q_{10}=81$

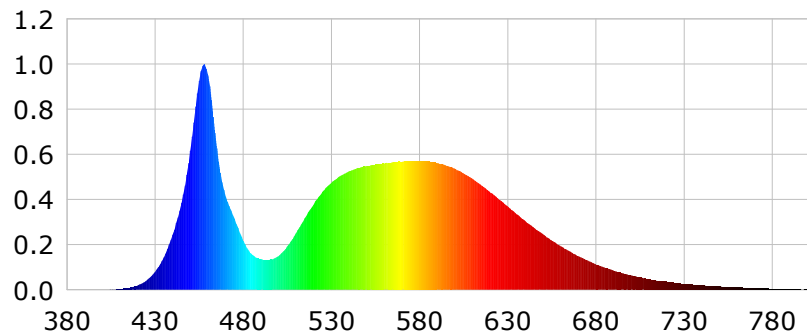
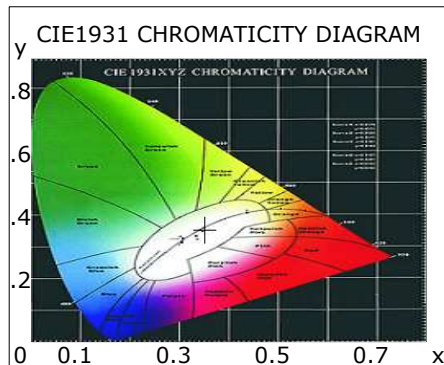
$Q_{11}=75$

$Q_{12}=75$

$Q_{13}=77$

$Q_{14}=67$

$Q_{15}=72$



Photometric Parameters

Luminous Flux:

EEI: 0.00

Efficiency: 0.00 lm/W

Energy Efficiency Class: A++ (EU 874-2012)

Radiant Power: 58.285 W

Electric Parameters

Voltage: 0.0000V

Power Factor: 0.0000

Current: 0.0000A

Frequency: 0.00Hz

Power: 0.00W

Test Information

Scan Range: 380~800:1nm

Stabilization Time: 0 ms ALC.: 1.0000

Max of Signal: 45463 (3091)

Photometric Method: sphere-spectroradiometer

Photometric Condition: Sphere diameter: 1.00m, 4PI

CCD Integration Time: 24.24 ms

Lightsource Test Report

Product Information

Product Type: FD 112 150W 5000K PI90

Manufacturer: FAROS LED

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0007	0.4103	525	0.4346	242.8456	670	0.1498	83.6879
385	0.0008	0.4661	530	0.4742	265.0277	675	0.1306	72.9988
390	0.0007	0.4165	535	0.5041	281.7066	680	0.1135	63.4097
395	0.0007	0.3906	540	0.5255	293.6560	685	0.0988	55.2393
400	0.0010	0.5854	545	0.5408	302.2089	690	0.0862	48.1697
405	0.0022	1.2385	550	0.5496	307.1271	695	0.0745	41.6348
410	0.0042	2.3420	555	0.5552	310.2648	700	0.0642	35.8970
415	0.0091	5.0902	560	0.5599	312.9094	705	0.0554	30.9421
420	0.0193	10.8034	565	0.5661	316.3335	710	0.0478	26.7175
425	0.0409	22.8475	570	0.5673	317.0388	715	0.0409	22.8588
430	0.0806	45.0354	575	0.5708	318.9949	720	0.0358	20.0038
435	0.1457	81.4483	580	0.5707	318.9377	725	0.0305	17.0495
440	0.2457	137.3248	585	0.5687	317.8079	730	0.0261	14.5683
445	0.3868	216.1480	590	0.5625	314.3537	735	0.0229	12.7749
450	0.6183	345.5200	595	0.5512	308.0466	740	0.0198	11.0845
455	0.9263	517.6775	600	0.5366	299.8793	745	0.0168	9.3668
460	0.9507	531.3166	605	0.5160	288.3368	750	0.0150	8.3864
465	0.6274	350.6319	610	0.4918	274.8422	755	0.0128	7.1294
470	0.4146	231.6955	615	0.4627	258.5896	760	0.0109	6.0878
475	0.3153	176.2255	620	0.4326	241.7350	765	0.0095	5.3079
480	0.2175	121.5357	625	0.4007	223.9418	770	0.0080	4.4950
485	0.1568	87.6261	630	0.3697	206.6148	775	0.0065	3.6476
490	0.1362	76.1151	635	0.3358	187.6724	780	0.0059	3.3056
495	0.1334	74.5348	640	0.3038	169.7704	785	0.0043	2.4223
500	0.1501	83.8617	645	0.2740	153.1281	790	0.0037	2.0552
505	0.1935	108.1452	650	0.2459	137.4311	795	0.0034	1.8782
510	0.2534	141.6021	655	0.2183	122.0128	800	0.0045	2.5153
515	0.3189	178.2406	660	0.1934	108.1028			
520	0.3800	212.3532	665	0.1705	95.3001			

Condition: Tx:26.0°C, Ti:0.0°C, R.H.:60%
Test Lab: FAROS LED Lab
Operator: Lab

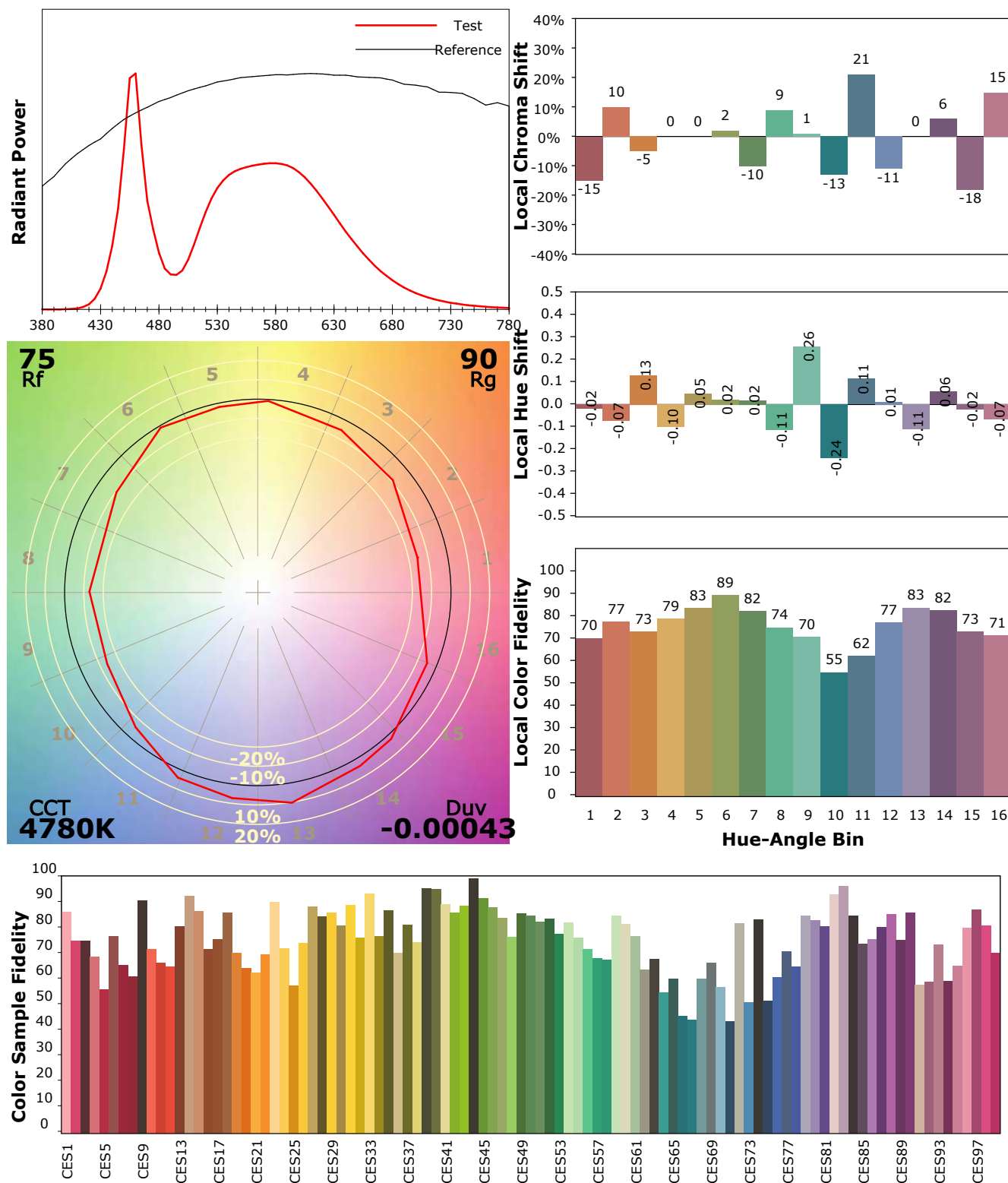
Test Device: Lisun LMS-9000A(Plus)
Test Time: 2021-08-26 14:07:32
Inspector:

IES TM-30-18 Color Rendition Report

Product Information

Product Type: FD 112 150W 5000K PI90

Manufacturer: FAROS LED



Condition: Tx:26.0°C, Ti:0.0°C, R.H.:60%

Test Lab: FAROS LED Lab

Operator: Lab

Test Device: Lisun LMS-9000A(Plus)

Test Time: 2021-08-26 14:07:32

Inspector: