



## Soraa Internal Test Report: IES LM79-08

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<b>Company Information:</b>
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### **SM16GA-07-10D-830-H1**

**Soraa MR16 GU10/120V, 3000K, 7.5W, 10D**

**Relevant Standards**

**IES LM-79**

**ANSI C78.377**

**IES PR-16**

**Soraa Lamp Lab**

## 1.0 Product Information

Customer Reference ID	SM16GA-07-10D-830-H1
Manufacturer Reference ID	SM16GA-07-10D-830-H1
Lamp Description	LAMP, MR-16 GU10/120V 7.5W 3000K 90 CRI 10D Soraa-US
Rated Input Voltage	120V
Rated Input Power	7.5W
Nominal CCT	3000K

### Photos



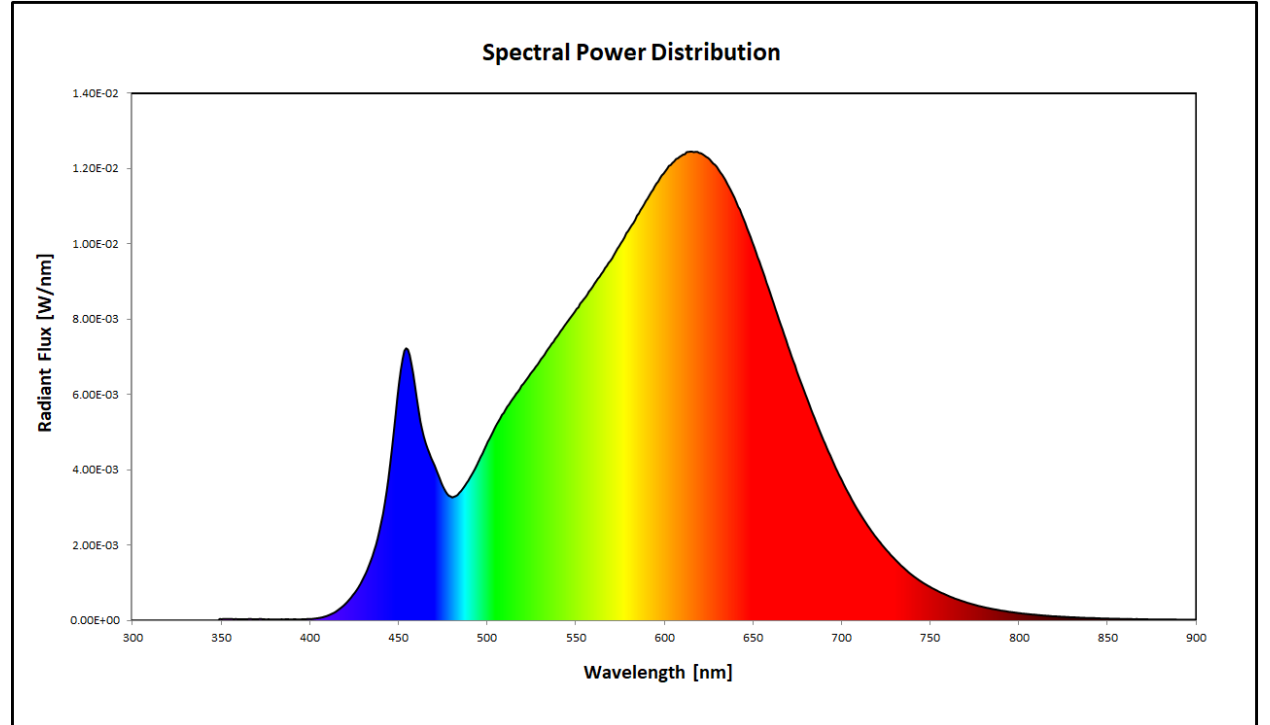
## 2.0 Results – Sphere Measurements

Test Conditions	
Orientation	Vertical
Stabilization Time (min)	35-40
Correction Factor Applied	Self-Absorption Correction
Sphere Geometry	2m Sphere
	95% Coating Reflectance
	4π Geometry
Ambient Temperature (°C)	23±1

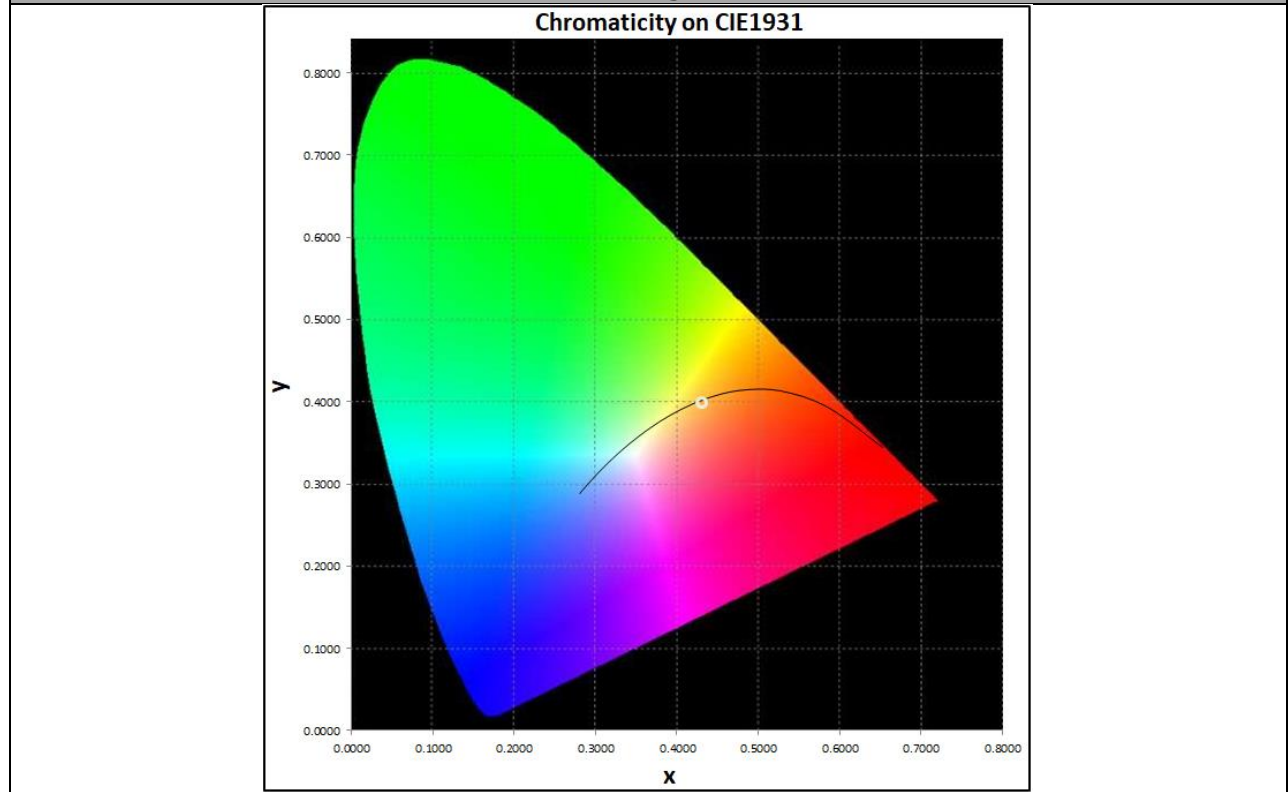
Instrument			
	Instrument	Manufacturer	Model
Photometric	Spectroradiometer	Otsuka Electronics	MC-9801:311C
	Integrating Sphere	Labsphere	2m
	Standard Lamp	Labsphere	CSFS-1400 Lamp
Electrical Instrument	Power Supply for Standard Lamp	Labsphere	LPS-150-0268
	Power Supply for Aux Lamp	Labsphere	LPS-100-0833
	Power Supply for Test Lamps	Ametek	1501i
	Power Meter for Test Lamps	Yokogawa	WT210
Thermometer	Digital Ambient Monitor	Mitsubishi	PAR-33MAA

Measurement Results			
Photometric		Electrical	
Total Flux [lm]	636	Input Voltage [V]	120.06
Luminous Efficacy [lm/W]	84.5	Frequency [Hz]	60.0
Chromaticity Coordinates	$u' = 0.2492$	Current [A]	0.0658
	$v' = 0.5182$	Power [W]	7.527
	$x = 0.4310$	Power Factor	0.9528
	$y = 0.3984$		
CCT [K]	3056		
CRI	91		
R9	53		
Duv	-0.0014		

## Spectral Results

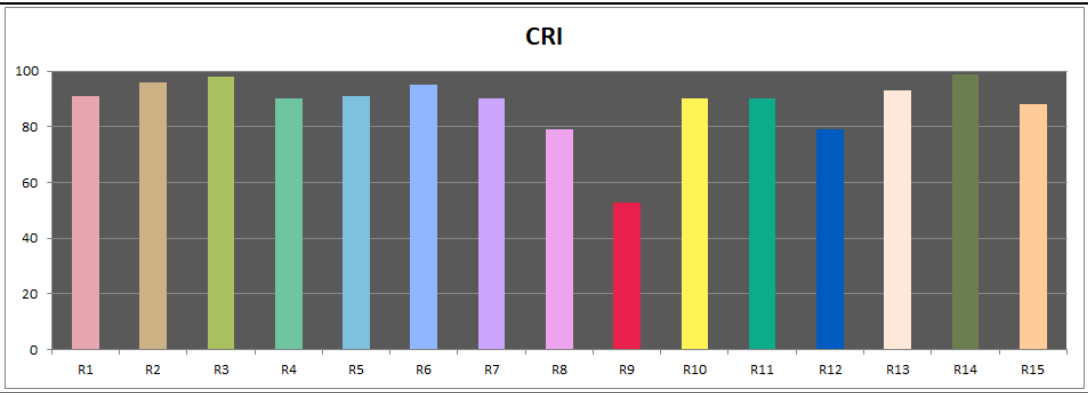


## Chromaticity Results



## CRI Results

CRI	
R1	91
R2	96
R3	98
R4	90
R5	91
R6	95
R7	90
R8	79
R9	53
R10	90
R11	90
R12	79
R13	93
R14	99
R15	88
<b>Ra</b>	<b>91</b>



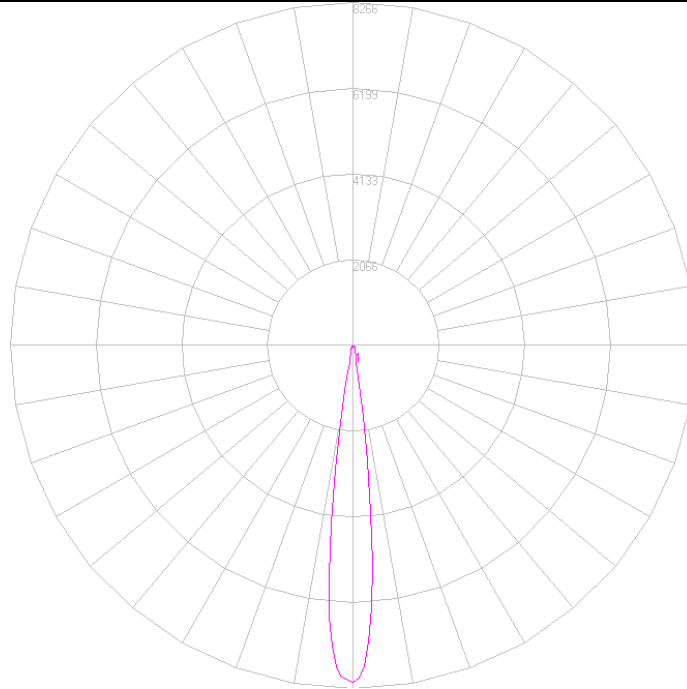
## 3.0 Results – Goniometric Measurements

Test Conditions	
Goniometer Distance (m)	Far-Field
Stabilization Time (min)	>30

Instrument			
	Instrument	Manufacturer	Model
Photometric	Photometer	TechnoTeam	Rigo801
Electrical Instrument	Power Supply for Test Lamps	Ametek	1501i
	Power Meter for Test Lamps	Yokogawa	WT210

Measurement Results			
Photometric		Electrical	
Center Beam Candlepower [cd]	8228	Input Voltage [V]	120.06
Beam Angle [°]	13.2	Frequency [Hz]	60.0
Field Angle [°]	20.3		
Luminous Flux [lm]	630	Current [A]	0.0658
		Power [W]	7.527
		Power Factor	0.9528

## Goniometric Results (Polar, 0°-180°)



## Goniometric Results (Cartesian, 0°-180°)

