



Soraa Internal Test Report: IES LM79-08

Company Information:

SORAA Inc 6500 Kaiser Dr, Fremont, CA 94555 (510) 456-2200

SM16-09-36D-830-H1

Soraa MR16 GU5.3/12V, 3000K, 9W, 36D

Relevant Standards

IES LM-79

ANSI C78.377

IES PR-16

Soraa Lamp Lab

1.0 Product Information

Customer Reference ID	SM16-09-36D-830-H1
Manufacturer Reference ID	SM16-09-36D-830-H1
Lamp Description	LAMP, MR-16 GU5.3/12V 9W 3000K 90 CRI 36D Soraa-US
Rated Input Voltage	12V
Rated Input Power	9W
Nominal CCT	3000K

Photos



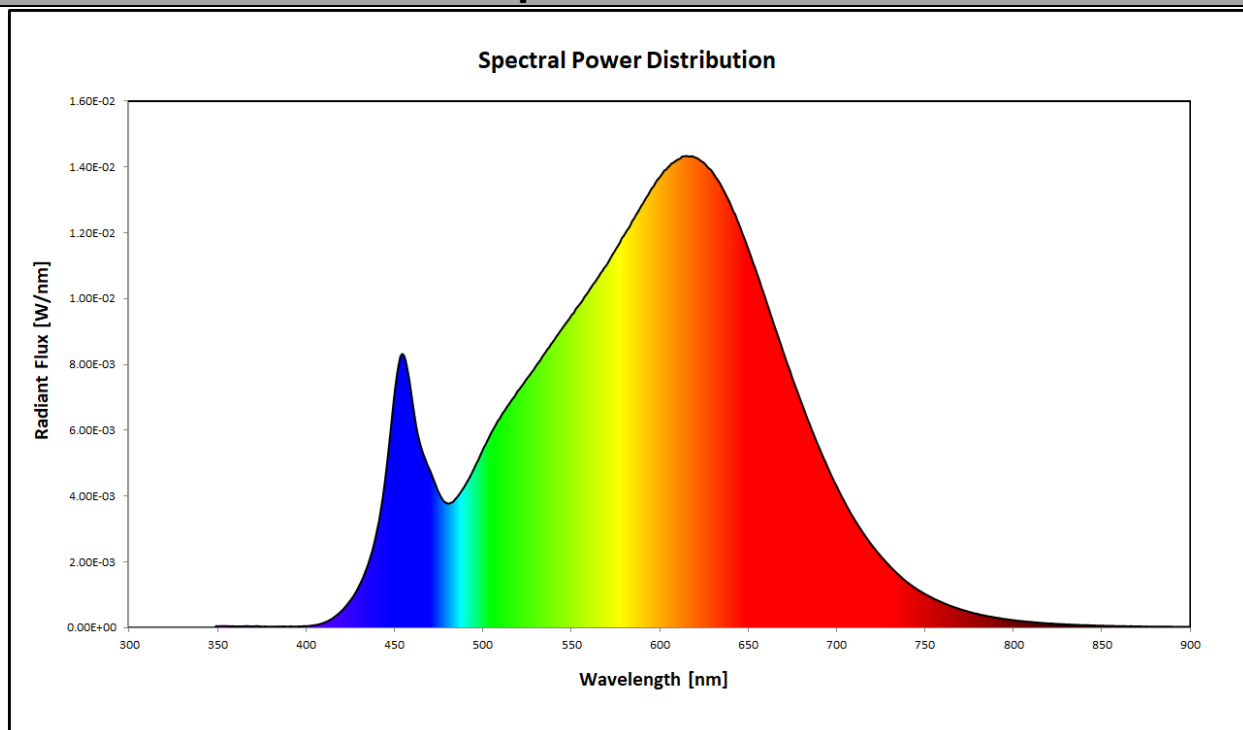
2.0 Results – Sphere Measurements

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

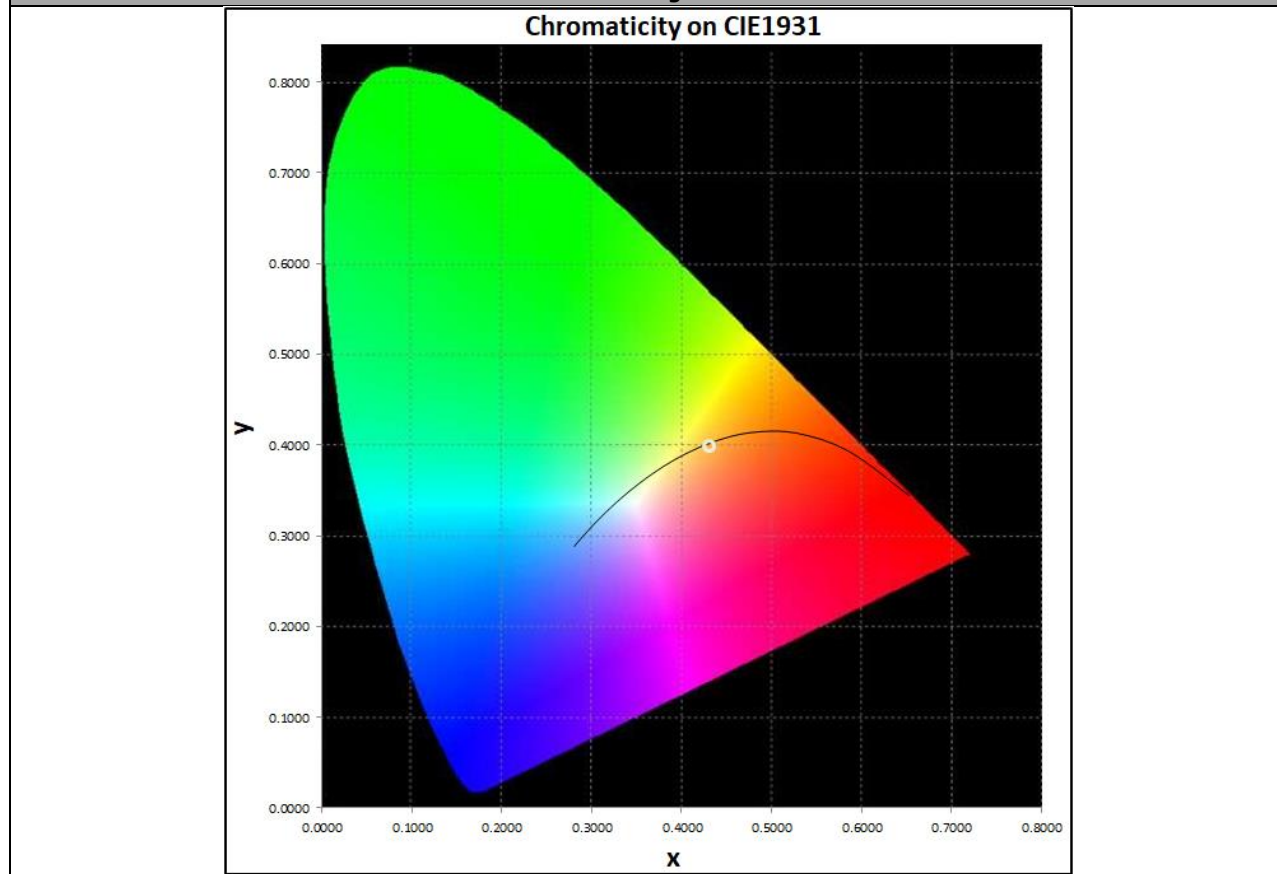
Instrument			
	Instrument	Manufacturer	Model
Photometric	Spectroradiometer	Otsuka Electronics	MC-9801:311C
	Integrating Sphere	Labsphere	2m
	Standard Lamp	Labsphere	CSFS-1400 Lamp
Electrical Instrument	Power Supply for Standard Lamp	Labsphere	LPS-150-0268
	Power Supply for Aux Lamp	Labsphere	LPS-100-0833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

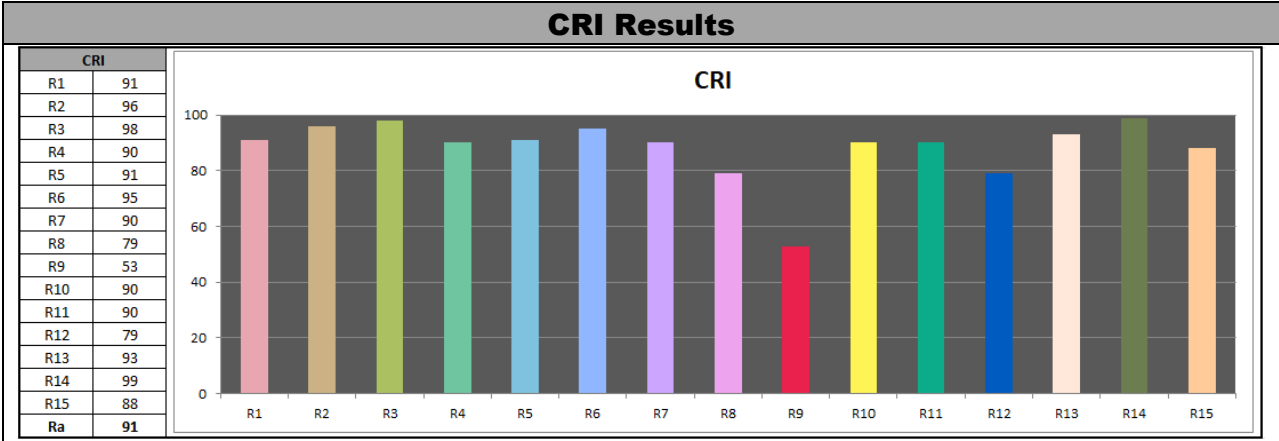
Measurement Results			
Photometric		Electrical	
Total Flux [lm]	732	Input Voltage [V]	11.71
Luminous Efficacy [lm/W]	81.9	Frequency [Hz]	60.0
Chromaticity Coordinates	$u' = 0.2491$	Current [A]	0.825
	$v' = 0.5182$	Power [W]	8.94
	$x = 0.4309$	Power Factor	0.9249
	$y = 0.3984$		
CCT [K]	3057		
CRI	91		
R9	53		
Duv	-0.0014		

Spectral Results



Chromaticity Results





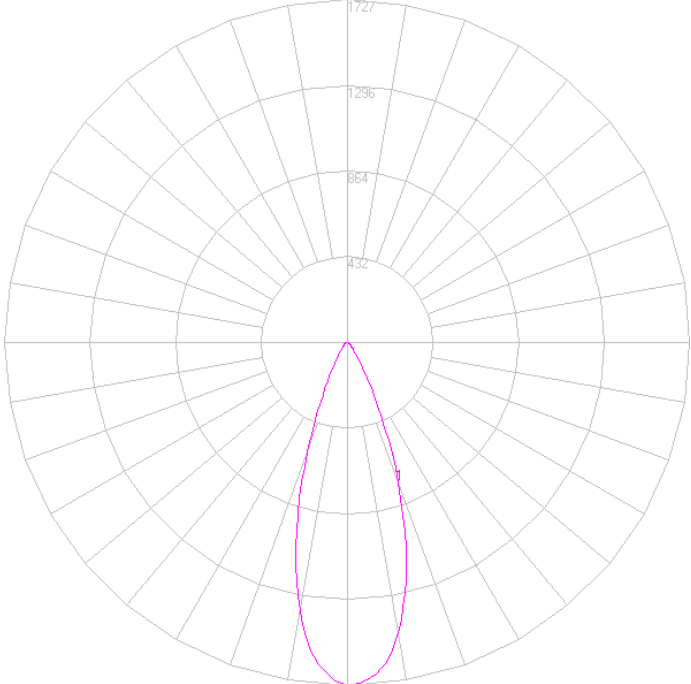
3.0 Results – Goniometric Measurements

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]	1728	Input Voltage [V]	11.71
Beam Angle [°]	35.4	Frequency [Hz]	60.0
Field Angle [°]	59.9		
Luminous Flux [lm]	726	Current [A]	0.825
		Power [W]	8.94
		Power Factor	0.9249

Goniometric Results (Polar, 0°-180°)



Goniometric Results (Cartesian, 0°-180°)

