



Soraa Internal Test Report: IES LM79-08

Company Information:

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

SP20-11-36D-830-H1

Soraa PAR20 E26/120V, 3000K, 10.7W, 36D

Relevant Standards

IES LM-79

ANSI C78.377

IES PR-16

Soraa Lamp Lab

1.0 Product Information

Customer Reference ID	SP20-11-36D-830-H1
Manufacturer Reference ID	SP20-11-36D-830-H1
Lamp Description	LAMP, PAR20 E26/120V 10.7W 3000K 90 CRI 36D Soraa-US
Rated Input Voltage	120V
Rated Input Power	10.7W
Nominal CCT	3000K

Photos



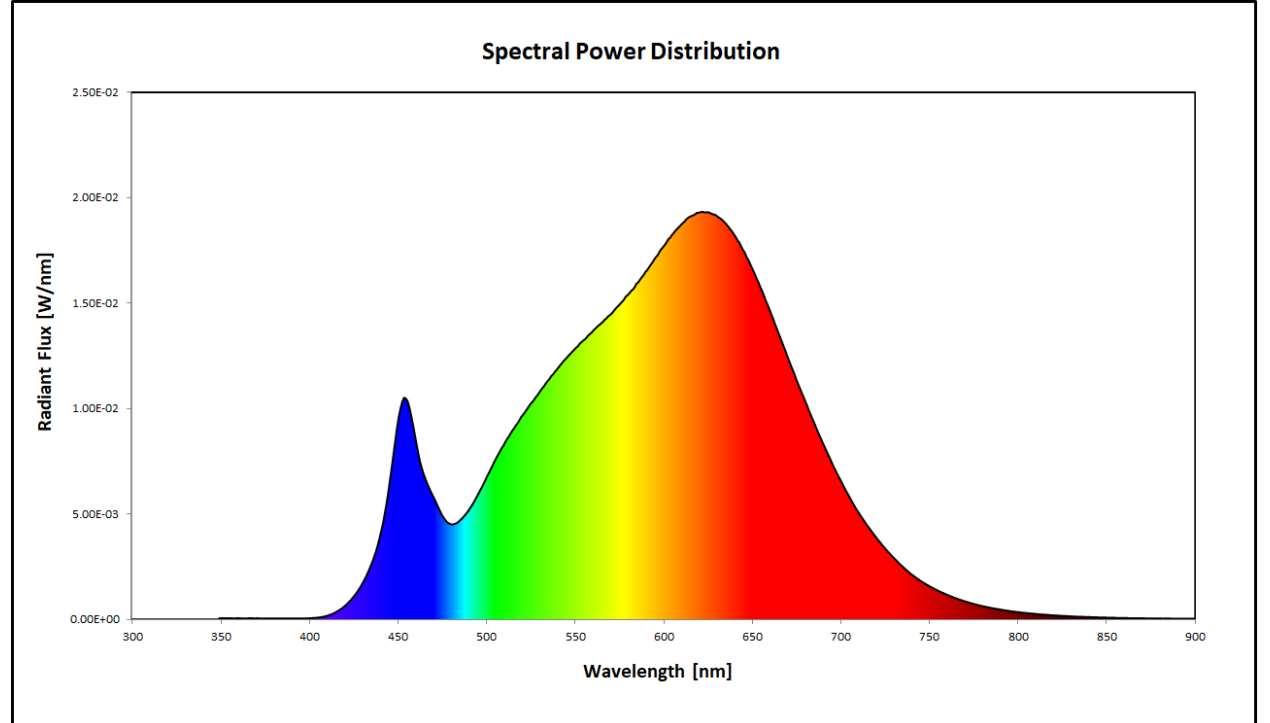
2.0 Results – Sphere Measurements

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

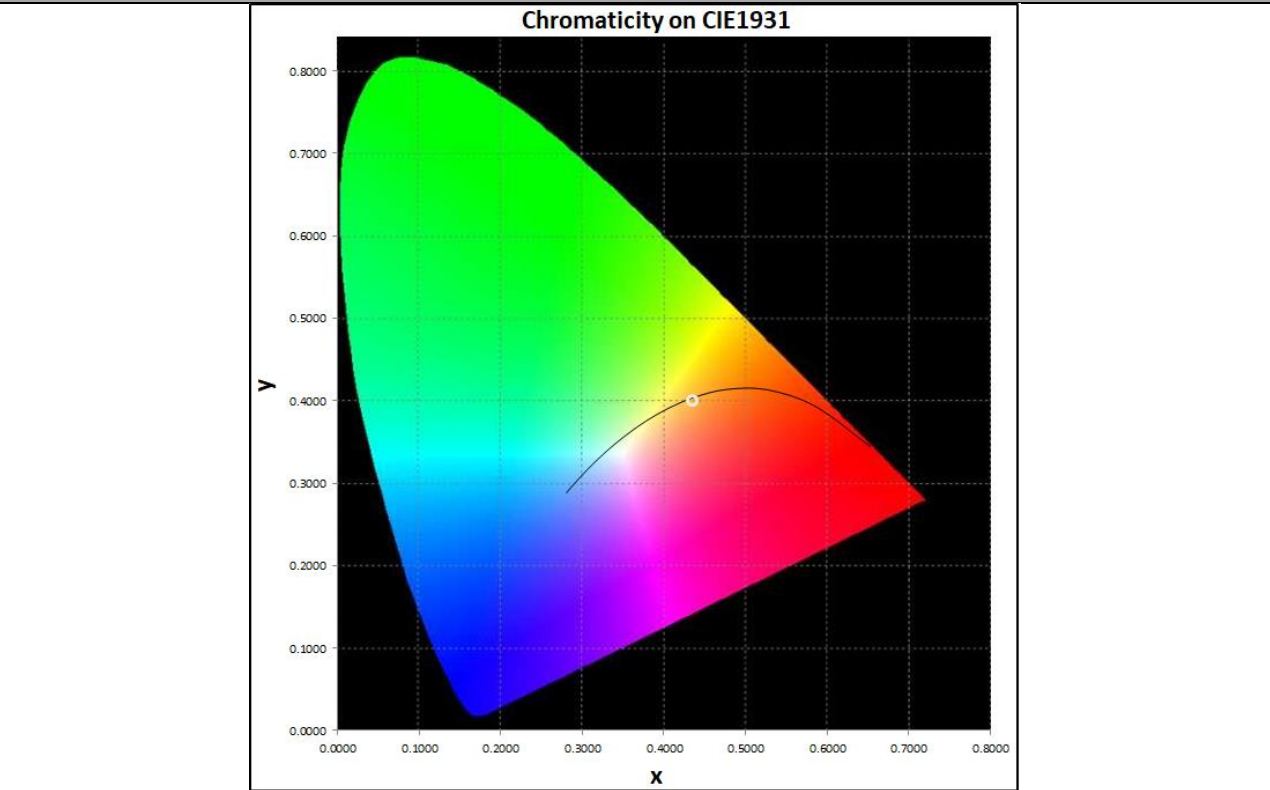
Instrument			
	Instrument	Manufacturer	Model
Photometric	Spectroradiometer	Otsuka Electronics	MC-9801:311C
	Integrating Sphere	Labsphere	2m
	Standard Lamp	Labsphere	CSFS-1400 Lamp
Electrical Instrument	Power Supply for Standard Lamp	Labsphere	LPS-150-0268
	Power Supply for Aux Lamp	Labsphere	LPS-100-0833
	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]	972	Input Voltage [V]	120.07
Luminous Efficacy [lm/W]	89.6	Frequency [Hz]	60.0
Chromaticity Coordinates	$u' = 0.2505$	Current [A]	0.0958
	$v' = 0.5196$	Power [W]	10.85
	$x = 0.4345$	Power Factor	0.9425
	$y = 0.4006$		
CCT [K]	3013		
CRI	93		
R9	63		
Duv	-0.0011		

Spectral Results

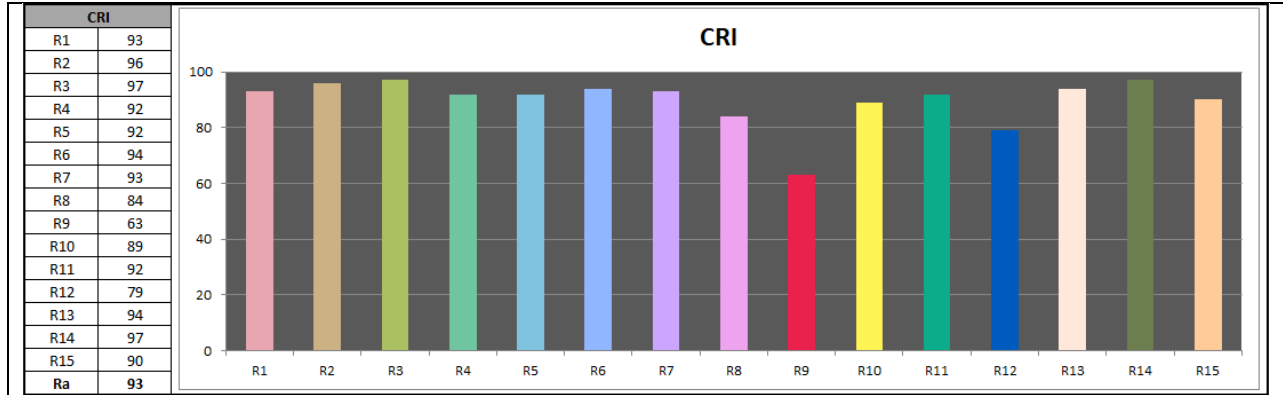


Chromaticity Results



CRI Results

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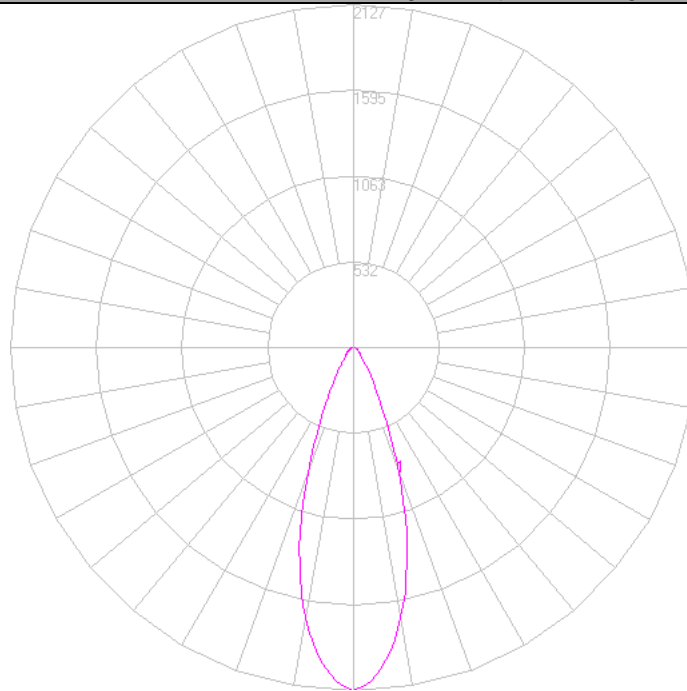
3.0 Results – Goniometric Measurements

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]	2127	Input Voltage [V]	120.07
Beam Angle [°]	34.8	Frequency [Hz]	60.0
Field Angle [°]	63.3		
Luminous Flux [lm]	965	Current [A]	0.0958
		Power [W]	10.85
		Power Factor	0.9425

Goniometric Results (Polar, 0°-180°)



Goniometric Results (Cartesian, 0°-180°)

