

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1432266

Luminaire Tested: EHBR1-12-UNV-A1-L830

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1432266
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-12-UNV-A1-L830
Description: Elevate Round Highbay at, 12000 lumens, 3000K 80CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

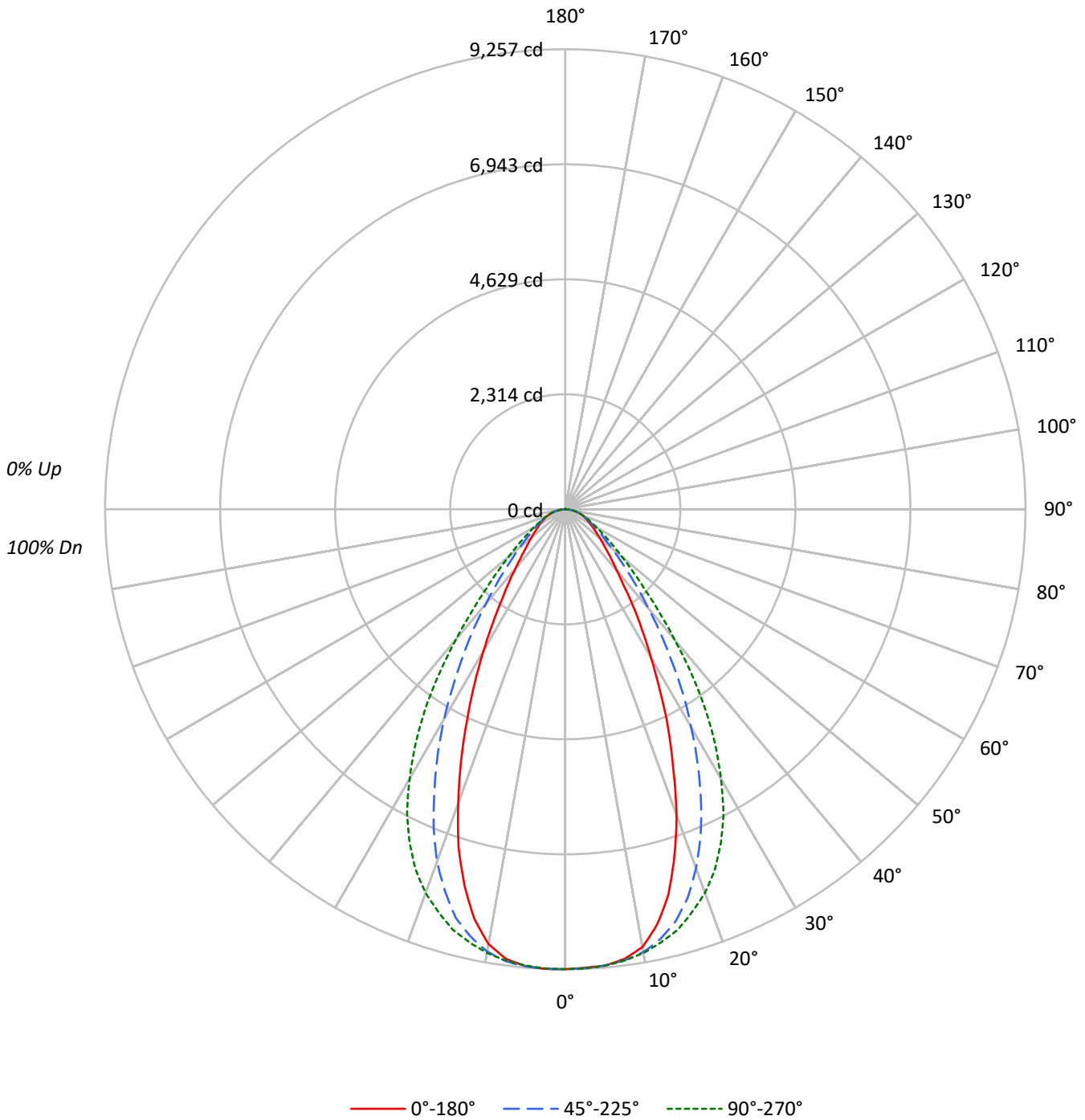
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11495.3 lumens
Efficiency: N/A
Efficacy: 177.7 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 1.07 / 0.95
Luminous Opening: Circular (Dia: 1.71' x H: 0')
CIE Type: Direct

Input Watts (W): 64.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1432266
CATALOG NUMBER: EHBR1-12-UNV-A1-L830

Luminous Intensity Polar Plot





TEST NUMBER: P1432266
 CATALOG NUMBER: EHBR1-12-UNV-A1-L830

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90	90	90	90	
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80	80	80	80	
3	98	90	83	78	95	88	82	78	85	81	77	83	79	75	80	77	74	72	72	72	72	
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	71	67	65	65	65	65	
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60	60	60	60	
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55	55	55	55	
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50	50	50	50	
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46	46	46	46	
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43	43	43	43	
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40	40	40	40	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	43453	43453	43453	43453	43453
5°	43448	43441	43443	43520	43494
10°	42652	43150	43218	43096	42373
15°	38983	41703	42561	41368	38087
20°	32713	38420	41045	37697	31439
25°	25487	33467	38360	32245	24166
30°	18726	27473	33965	26431	17774
35°	13617	21361	28159	20441	12728
40°	9893	15932	20956	15260	9588
45°	7883	11788	14801	11276	7611
50°	6628	8974	10856	8678	6527
55°	5883	7201	8354	7080	5802
60°	5414	6134	6792	6096	5452
65°	5201	5558	5864	5576	5250
70°	5131	5253	5415	5282	5181
75°	5079	5046	5079	5060	5128
80°	5103	4738	4633	4811	5103
85°	4601	3906	3869	3966	4742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 15508 cd/sqm



TEST NUMBER: P1432266
 CATALOG NUMBER: EHBR1-12-UNV-A1-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	873.8	7.6
10°-20°	2348.5	20.4
20°-30°	2855.8	24.8
30°-40°	2326.2	20.2
40°-50°	1396.7	12.1
50°-60°	803.8	7.0
60°-70°	503.0	4.4
70°-80°	296.3	2.6
80°-90°	86.6	0.8
90°-100°	0.0	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.6	0.0
140°-150°	1.1	0.0
150°-160°	1.2	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	6078.1	52.9
0°-40°	8404.3	73.1
0°-60°	10604.8	92.3
0°-90°	11490.7	100.0
90°-120°	0.1	0.0
90°-150°	1.9	0.0
90°-180°	5.0	0.0
0°-180°	11495.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9253	9253	9253	9253	9253	
5°	9217	9215	9216	9232	9226	871
15°	8018	8578	8754	8509	7834	2206
25°	4919	6459	7403	6223	4664	2241
35°	2375	3726	4912	3566	2220	1503
45°	1187	1775	2229	1698	1146	936
55°	718	880	1020	865	709	649
65°	468	500	528	502	472	465
75°	280	278	280	279	283	296
85°	85	72	72	74	88	91
90°	0	0	0	0	0	4
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	1	0	0	0	1	1
135°	1	1	1	1	1	1
145°	2	2	2	2	2	1
155°	3	2	2	2	3	1
165°	4	4	3	4	4	1
175°	6	5	4	5	6	1
180°	5	5	5	5	5	



TEST NUMBER: P1432266
 CATALOG NUMBER: EHBR1-12-UNV-A1-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9253.1	9253.1	9253.1	9253.1	9253.1	9253.1	9253.1	9253.1	9253.1
2.5°	9232.8	9241.1	9244.6	9246.5	9248.7	9254.5	9256.9	9252.9	9256.4
5°	9216.7	9217.2	9215.3	9224.1	9215.7	9221.5	9232.0	9227.9	9226.4
7.5°	9122.9	9142.3	9153.7	9156.6	9158.1	9165.3	9172.6	9131.0	9124.8
10°	8944.5	8977.0	9048.8	9069.4	9063.2	9074.8	9037.6	8928.7	8886.0
12.5°	8553.7	8667.5	8854.2	8937.4	8922.2	8932.6	8805.8	8575.9	8443.8
15°	8018.2	8185.1	8577.7	8741.6	8754.3	8741.6	8508.9	8061.0	7834.1
17.5°	7306.3	7614.5	8192.6	8510.8	8492.6	8498.7	8056.7	7394.8	7135.0
20°	6545.9	6874.4	7687.9	8218.8	8213.2	8179.4	7543.2	6670.1	6291.0
22.5°	5685.8	6109.4	7109.6	7859.6	7857.5	7801.3	6917.8	5878.8	5470.7
25°	4918.8	5334.2	6458.9	7419.8	7403.1	7339.1	6223.0	5089.4	4663.9
27.5°	4125.6	4557.7	5764.0	6904.2	6892.8	6823.0	5558.8	4351.7	3946.6
30°	3453.4	3848.4	5066.4	6336.9	6263.7	6255.7	4874.2	3668.5	3277.8
32.5°	2877.4	3216.0	4408.6	5743.7	5614.1	5651.1	4191.8	3097.1	2709.9
35°	2375.2	2673.5	3726.0	5057.7	4911.9	4959.8	3565.6	2541.3	2220.2
37.5°	1927.7	2214.6	3147.5	4390.4	4167.5	4257.8	3014.8	2122.3	1865.0
40°	1613.8	1841.3	2598.9	3658.2	3418.5	3565.6	2489.2	1770.2	1564.0
42.5°	1390.5	1539.0	2145.0	2959.2	2775.3	2879.5	2051.6	1479.9	1325.6
45°	1187.0	1305.5	1774.9	2335.1	2228.7	2325.5	1697.9	1261.8	1146.0
47.5°	1036.8	1128.1	1461.1	1885.7	1819.7	1850.2	1418.1	1101.2	1007.0
50°	907.2	977.7	1228.3	1522.0	1485.9	1504.7	1187.8	958.2	893.4
52.5°	806.4	858.1	1030.3	1250.8	1233.0	1235.9	1012.2	842.9	795.9
55°	718.5	754.5	879.5	1024.7	1020.4	1021.1	864.8	746.9	708.7
57.5°	641.5	671.3	755.8	860.6	854.5	855.9	748.9	663.4	638.7
60°	576.4	596.3	653.1	727.4	723.2	721.5	649.0	589.0	580.5
62.5°	518.7	531.4	570.7	623.5	615.7	617.5	570.5	532.0	519.4
65°	468.1	472.5	500.2	532.8	527.7	532.0	501.8	475.4	472.5
67.5°	418.6	423.1	439.3	461.2	455.4	458.9	439.7	424.2	421.7
70°	373.7	373.5	382.6	394.4	394.4	395.0	384.7	375.4	377.3
72.5°	327.1	326.0	328.7	336.7	334.5	341.9	331.0	328.1	328.5
75°	279.9	276.5	278.1	282.1	279.9	283.7	278.9	282.6	282.6
77.5°	235.3	229.1	227.2	227.7	223.5	229.3	230.4	233.0	238.8
80°	188.7	180.0	175.2	175.0	171.3	175.0	177.9	183.1	188.7
82.5°	140.1	132.5	124.4	122.9	120.6	122.7	126.5	132.7	141.8
85°	85.4	77.6	72.5	69.8	71.8	71.8	73.6	82.3	88.0
87.5°	30.8	27.0	22.1	22.3	22.9	23.6	24.6	31.0	33.9
90°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
92.5°	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
95°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
97.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
100°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
102.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
105°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
107.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
110°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4



TEST NUMBER: P1432266
 CATALOG NUMBER: EHBR1-12-UNV-A1-L830

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
115°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
117.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
120°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
122.5°	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.6
125°	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.6
127.5°	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.4	0.6
130°	0.6	0.4	0.2	0.0	0.2	0.2	0.4	0.4	0.6
132.5°	0.7	0.6	0.6	0.4	0.4	0.6	0.6	0.7	0.7
135°	0.9	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.9
137.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1
140°	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
142.5°	1.6	1.6	1.3	1.3	1.3	1.6	1.6	1.6	1.8
145°	1.8	1.8	1.6	1.6	1.6	1.8	1.8	2.0	2.0
147.5°	2.3	2.2	1.8	1.8	1.8	1.8	2.0	2.2	2.3
150°	2.5	2.3	2.0	2.0	2.0	2.0	2.2	2.5	2.7
152.5°	2.7	2.5	2.2	2.0	2.0	2.0	2.3	2.5	2.9
155°	2.9	2.7	2.3	2.0	2.0	2.2	2.5	2.9	3.1
157.5°	3.5	3.1	2.7	2.3	2.3	2.5	2.9	3.3	3.5
160°	3.8	3.5	3.1	2.7	2.7	2.9	3.3	3.7	3.8
162.5°	4.3	3.8	3.3	3.1	2.9	3.1	3.5	4.0	4.3
165°	4.5	4.0	3.7	3.3	3.3	3.3	3.8	4.3	4.5
167.5°	4.7	4.5	3.8	3.5	3.5	3.5	4.0	4.5	4.7
170°	4.9	4.7	4.0	3.7	3.5	3.7	4.3	4.7	4.9
172.5°	5.2	5.1	4.5	4.0	3.8	4.0	4.7	5.1	5.2
175°	5.8	5.4	5.1	4.5	4.3	4.5	5.1	5.4	5.8
177.5°	6.0	5.6	5.2	4.7	4.5	4.7	5.2	5.6	6.0
180°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2



TEST NUMBER: P1432266
 CATALOG NUMBER: EHBR1-12-UNV-A1-L830

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.49	16.76	15.86	17.07	17.38	16.47	17.74	16.84	18.05	18.37
	3H	17.06	18.18	17.44	18.51	18.88	17.81	18.94	18.19	19.27	19.64
	4H	17.72	18.77	18.13	19.13	19.51	18.37	19.42	18.78	19.77	20.16
	6H	18.28	19.24	18.70	19.62	20.01	18.80	19.77	19.22	20.14	20.54
	8H	18.48	19.39	18.91	19.78	20.19	18.94	19.85	19.37	20.25	20.65
	12H	18.61	19.48	19.04	19.86	20.30	19.02	19.89	19.45	20.28	20.71
4H	2H	16.06	17.11	16.47	17.46	17.85	16.83	17.88	17.24	18.23	18.62
	3H	17.85	18.72	18.27	19.12	19.53	18.42	19.28	18.84	19.69	20.09
	4H	18.65	19.42	19.08	19.84	20.29	19.12	19.89	19.55	20.31	20.76
	6H	19.33	20.00	19.80	20.45	20.92	19.69	20.36	20.15	20.80	21.27
	8H	19.58	20.20	20.05	20.65	21.12	19.87	20.50	20.34	20.95	21.42
	12H	19.75	20.30	20.24	20.78	21.26	19.99	20.54	20.48	21.03	21.50
8H	4H	18.93	19.55	19.40	20.00	20.47	19.35	19.97	19.82	20.42	20.89
	6H	19.75	20.25	20.25	20.75	21.23	20.05	20.56	20.56	21.06	21.54
	8H	20.08	20.53	20.60	21.05	21.54	20.31	20.77	20.84	21.28	21.78
	12H	20.33	20.73	20.84	21.22	21.80	20.51	20.91	21.02	21.40	21.97
12H	4H	18.94	19.49	19.43	19.98	20.45	19.36	19.91	19.85	20.40	20.87
	6H	19.79	20.25	20.32	20.76	21.26	20.10	20.55	20.62	21.07	21.56
	8H	20.18	20.58	20.70	21.08	21.65	20.41	20.81	20.93	21.31	21.88

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-2

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L830-N

Data in this report applies to families of products including EHBR-60-L830-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/05/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **EHBR-60-L830-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 2983
 CIE u': 0.2516
 CIE v': 0.5201
 Duv: -0.0012
 CIE x: 0.4364
 CIE y: 0.4010
 CIE z: 0.1626
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 583
 Purity: 51.34918
 Rf: 81.2
 Rg: 101.5

CRI (Ra):	83.4		
R1:	84.0	R9:	29.4
R2:	87.5	R10:	68.6
R3:	88.9	R11:	82.2
R4:	83.8	R12:	61.6
R5:	81.9	R13:	83.9
R6:	83.1	R14:	92.5
R7:	87.1	R15:	79.8
R8:	70.9		



Test Conditions

Stabilization Time: 38M
 Operation Time: 1H 38M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-2

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2506-472-2

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.34

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

Summary

$R_f = 81.2$
 $R_g = 101.5$
 CIE $R_a = 83.4$
 $R_9 = 29.4$



Color Vector Graphics

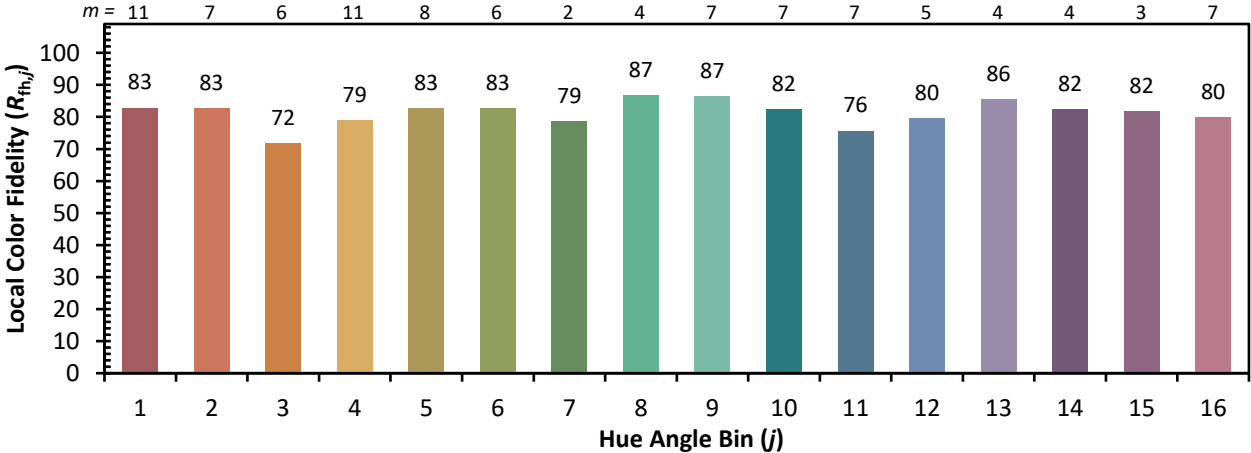


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82 = 93
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 76	CES59 = 92	CES84 = 91
CES10 = 76	CES35 = 87	CES60 = 96	CES85 = 81
CES11 = 59	CES36 = 99	CES61 = 91	CES86 = 74
CES12 = 65	CES37 = 81	CES62 = 93	CES87 = 83
CES13 = 44	CES38 = 83	CES63 = 79	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 81	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 78	CES90 = 85
CES16 = 48	CES41 = 88	CES66 = 76	CES91 = 87
CES17 = 50	CES42 = 80	CES67 = 74	CES92 = 73
CES18 = 57	CES43 = 75	CES68 = 79	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 83	CES94 = 64
CES20 = 67	CES45 = 83	CES70 = 72	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 70	CES96 = 86
CES22 = 79	CES47 = 79	CES72 = 90	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 65	CES98 = 83
CES24 = 91	CES49 = 79	CES74 = 94	CES99 = 82
CES25 = 72	CES50 = 88	CES75 = 70	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)