

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: P1433777

Luminaire Tested: EHBR1-24-UNV-ASM-L940-UPL40

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433777
REPORT IS A COMBINATION OF REPORTS P1431714 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-24-UNV-ASM-L940-UPL40
Description: Elevate Round Highbay at, 24000 lumens, 4000K 90CRI LEDs with ASM lens
Light Source: -
Ballast/Driver: -

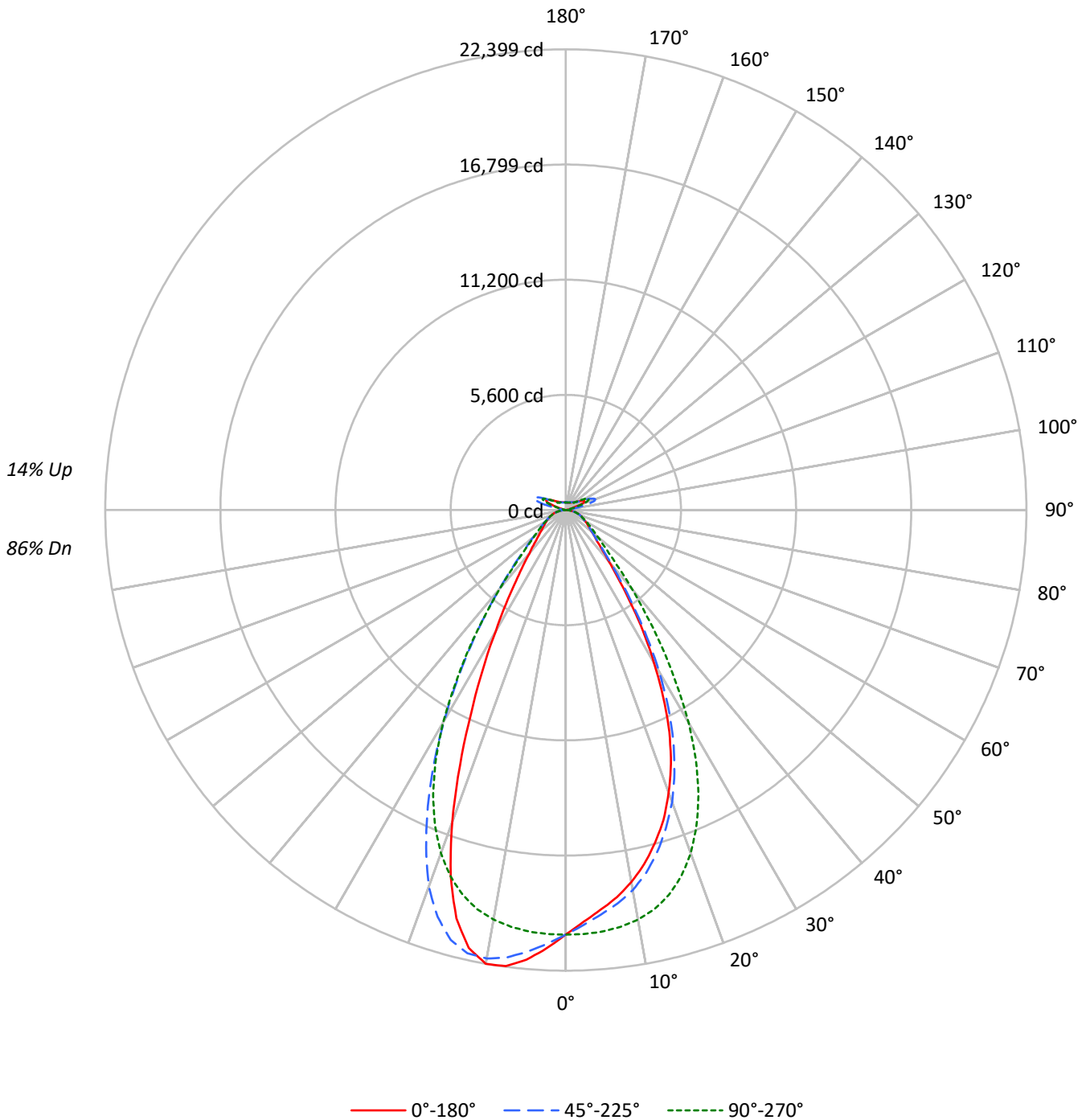
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26695.3 lumens
Efficiency: N/A
Efficacy: 168.0 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.99 / 0.92
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 158.9
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: P1433777
CATALOG NUMBER: EHBR1-24-UNV-ASM-L940-UPL40

Luminous Intensity Polar Plot





TEST NUMBER: P1433777

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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	116	116	116	116	112	112	112	112	104	104	104	96	96	96	90	90	90	90	90	90	86
1	108	105	102	99	105	101	99	96	95	93	91	89	87	86	83	82	81	81	81	81	78
2	101	95	90	86	98	92	88	84	87	83	80	82	79	76	77	75	73	73	73	73	70
3	95	87	81	76	92	85	79	75	80	75	72	76	72	69	72	69	66	66	66	66	64
4	89	80	73	68	86	78	72	67	74	69	65	70	66	63	67	63	61	61	61	61	58
5	84	74	67	62	81	72	66	61	69	63	59	65	61	57	62	59	56	56	56	56	54
6	79	68	61	56	76	67	60	56	64	58	54	61	56	53	58	54	51	51	51	51	49
7	74	64	57	52	72	62	56	51	60	54	50	57	52	49	55	51	48	48	48	48	46
8	70	59	52	48	68	58	52	47	56	50	46	54	49	45	52	47	44	44	44	44	43
9	66	55	49	44	64	54	48	44	52	47	43	51	46	42	49	44	41	41	41	41	40
10	63	52	46	41	61	51	45	41	49	44	40	48	43	40	46	42	39	39	39	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	96940	96940	96940	96940	96940
5°	91350	92417	96349	100971	102787
10°	86454	88286	95165	104212	105426
15°	79860	81993	92355	103143	97973
20°	71133	73529	86375	94809	78561
25°	59613	61869	76449	79523	54432
30°	44602	47189	62074	61454	35412
35°	29693	31485	44522	43802	22933
40°	18726	20012	28785	28970	15807
45°	13342	13897	18264	19048	12244
50°	11114	11202	13563	13916	10404
55°	9810	9833	11073	11365	9478
60°	9084	9006	9589	9792	9029
65°	8670	8593	8741	8912	8707
70°	8421	8275	8285	8443	8532
75°	8006	7765	7748	8022	8252
80°	7284	6777	6805	7284	7792
85°	5304	4405	4405	5034	5563

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 25677 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1962.8	7.4
10°-20°	5339.9	20.0
20°-30°	6262.6	23.5
30°-40°	4355.3	16.3
40°-50°	2164.4	8.1
50°-60°	1294.5	4.8
60°-70°	911.1	3.4
70°-80°	586.9	2.2
80°-90°	192.8	0.7
90°-100°	96.2	0.4
100°-110°	631.2	2.4
110°-120°	1166.7	4.4
120°-130°	693.0	2.6
130°-140°	418.4	1.6
140°-150°	288.9	1.1
150°-160°	187.9	0.7
160°-170°	107.3	0.4
170°-180°	35.5	0.1
0°-30°	13565.3	50.8
0°-40°	17920.5	67.1
0°-60°	21379.4	80.1
0°-90°	23070.3	86.4
90°-120°	1894.1	7.1
90°-150°	3294.4	12.3
90°-180°	3625.0	13.6
0°-180°	26695.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20643	20643	20643	20643	20643	
5°	19505	19732	20572	21559	21947	1830
15°	16754	17202	19376	21639	20554	4672
25°	11905	12355	15267	15881	10870	5371
35°	5450	5779	8171	8039	4209	3472
45°	2159	2248	2955	3082	1981	1745
55°	1326	1329	1496	1536	1281	1203
65°	905	897	912	930	909	899
75°	564	547	546	565	581	595
85°	182	151	151	173	191	188
90°	26	73	26	77	29	22
95°	44	163	51	140	47	43
105°	220	1102	290	1176	146	294
115°	1008	1304	1242	1443	1059	929
125°	728	698	795	773	831	663
135°	532	535	501	559	578	416
145°	440	460	452	464	473	279
155°	389	402	402	402	418	181
165°	368	377	376	374	386	105
175°	366	372	373	370	378	35
180°	372	372	372	372	372	



TEST NUMBER: P1433777
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	20642.6	20642.6	20642.6	20642.6	20642.6	20642.6	20642.6	20642.6	20642.6
2.5°	20029.8	20043.0	20183.1	20365.4	20630.6	20897.3	21113.2	21255.7	21326.1
5°	19504.6	19577.3	19732.5	20067.4	20572.1	21106.3	21558.8	21854.9	21946.6
7.5°	18992.8	19035.0	19294.8	19717.8	20432.4	21264.6	21936.9	22282.6	22367.0
10°	18368.4	18464.1	18757.5	19256.5	20219.1	21364.5	22141.3	22389.0	22399.1
12.5°	17633.8	17760.3	18063.5	18692.8	19878.8	21328.8	22072.8	21991.5	21806.9
15°	16754.3	16865.4	17201.8	17931.9	19375.6	21117.9	21638.9	20977.4	20554.3
17.5°	15804.4	15905.1	16197.3	17001.3	18666.6	20723.1	20733.1	19424.4	18626.3
20°	14619.9	14699.0	15112.3	15901.2	17752.6	20089.8	19485.9	17092.3	16146.6
22.5°	13359.6	13433.6	13800.9	14621.9	16606.9	19235.9	17749.2	14746.2	13456.0
25°	11904.7	11944.9	12355.2	13097.6	15266.8	18189.6	15880.7	12189.9	10870.0
27.5°	10267.7	10336.1	10765.4	11523.7	13690.6	16863.5	13891.1	9961.1	8743.3
30°	8579.2	8692.6	9076.7	9755.5	11939.9	15163.5	11820.6	7932.8	6811.5
32.5°	7003.5	7085.1	7358.8	8068.2	9979.7	13497.0	9832.2	6356.2	5406.3
35°	5449.7	5531.4	5778.7	6475.5	8171.3	11412.3	8039.3	4994.5	4209.1
37.5°	4165.8	4310.2	4468.8	5034.3	6412.7	9442.4	6408.5	4021.7	3414.0
40°	3245.7	3268.9	3468.6	3830.6	4989.1	7383.1	5021.2	3210.5	2739.8
42.5°	2598.1	2661.2	2747.1	3018.1	3780.2	5645.6	3946.6	2634.9	2327.2
45°	2158.7	2183.5	2248.5	2430.5	2955.0	4154.5	3081.9	2223.0	1981.1
47.5°	1888.5	1877.7	1919.6	2055.8	2406.4	3210.8	2497.8	1906.8	1737.2
50°	1656.3	1649.8	1669.5	1760.4	2021.3	2463.7	2073.9	1664.5	1550.6
52.5°	1475.9	1481.8	1483.6	1540.2	1736.4	2009.4	1766.2	1483.3	1406.7
55°	1325.7	1333.1	1328.8	1370.6	1496.4	1689.3	1535.9	1333.8	1280.8
57.5°	1208.4	1203.0	1197.3	1219.7	1314.2	1433.0	1333.8	1206.5	1171.3
60°	1092.0	1087.0	1082.7	1097.4	1152.7	1241.0	1177.1	1095.4	1085.4
62.5°	992.1	988.9	988.6	985.9	1028.4	1084.2	1040.8	995.6	986.7
65°	905.0	901.6	896.9	892.6	912.4	964.3	930.2	905.7	908.8
67.5°	817.9	817.9	809.8	803.2	822.6	849.7	834.9	821.0	824.5
70°	738.9	739.4	726.1	721.1	727.0	755.9	740.8	742.8	748.6
72.5°	654.2	644.9	635.2	634.8	635.6	658.0	653.0	657.6	663.8
75°	564.0	553.1	547.0	540.0	545.8	562.8	565.1	571.8	581.3
77.5°	476.9	460.2	455.2	451.8	447.8	467.2	474.6	483.4	497.8
80°	383.2	365.0	356.5	351.5	358.0	367.0	383.2	389.8	409.9
82.5°	283.3	269.8	259.4	259.0	262.1	270.2	284.2	296.5	308.1
85°	182.3	160.6	151.4	154.8	151.4	163.7	173.0	187.7	191.2
87.5°	65.8	51.5	49.2	54.2	53.0	56.9	65.0	70.8	71.2
90°	26.5	42.6	72.7	46.6	26.5	44.9	77.4	42.5	29.2
92.5°	38.5	64.7	116.8	60.6	34.5	60.9	109.6	56.6	39.2
95°	44.5	74.6	162.9	80.7	51.0	75.0	139.7	62.5	47.2
97.5°	56.9	82.6	187.1	98.8	79.0	93.1	157.7	66.6	57.3
100°	75.0	96.7	291.5	121.2	105.2	105.2	288.2	76.6	65.3
102.5°	127.3	205.1	618.7	227.6	159.3	205.9	668.1	153.3	79.4
105°	219.6	432.0	1102.5	476.5	289.8	470.9	1176.0	396.1	146.0
107.5°	380.2	773.3	1454.2	843.9	548.8	878.4	1515.2	781.7	340.7
110°	709.4	1026.2	1524.5	1159.1	878.1	1227.7	1653.8	1070.7	690.1



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 CATALOG NUMBER: EHBR1-24-UNV-ASM-L940-UPL40

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	958.4	1102.5	1460.3	1279.5	1143.0	1368.2	1615.7	1187.2	955.0
115°	1008.5	1060.4	1303.7	1249.4	1241.8	1348.2	1443.0	1183.1	1059.4
117.5°	974.4	968.0	1106.9	1123.4	1199.6	1233.8	1246.3	1110.9	1065.4
120°	902.1	861.6	924.2	980.8	1083.2	1069.2	1049.9	1004.5	1005.2
122.5°	811.8	763.6	792.1	834.8	937.1	907.0	887.3	896.4	922.9
125°	727.8	679.3	698.2	708.6	794.6	764.4	773.3	804.1	831.0
127.5°	653.5	621.0	631.9	620.3	674.5	660.4	690.9	725.8	748.7
130°	603.4	575.3	590.2	562.4	588.5	592.2	632.7	661.9	676.5
132.5°	561.7	543.6	560.8	527.0	534.7	550.4	588.9	614.2	622.6
135°	531.6	515.9	534.7	503.4	500.9	524.3	559.2	575.6	578.5
137.5°	505.9	492.2	511.4	487.7	481.3	504.6	531.0	544.0	540.3
140°	482.5	470.9	491.7	473.6	469.6	492.9	505.0	519.9	516.6
142.5°	457.2	449.1	474.0	462.0	458.0	479.2	485.3	496.1	492.5
145°	439.9	433.9	460.3	454.0	452.3	468.1	463.7	478.0	472.8
147.5°	424.6	420.6	444.7	442.3	442.3	454.0	447.9	460.3	455.1
150°	411.3	407.3	431.0	428.7	430.6	438.6	430.2	444.7	443.5
152.5°	398.1	393.6	415.3	412.9	415.0	423.0	415.0	431.4	429.8
155°	388.8	384.4	402.1	401.3	401.6	405.6	401.6	418.1	418.5
157.5°	381.9	379.1	392.8	392.4	392.4	394.8	392.8	407.2	407.6
160°	376.7	374.3	385.9	385.5	383.9	387.9	386.4	398.7	399.1
162.5°	371.4	369.0	382.7	380.7	380.7	380.7	379.5	391.9	392.6
165°	368.2	367.8	377.4	377.4	375.8	377.8	374.5	383.4	386.2
167.5°	368.2	366.1	376.2	376.2	374.5	372.6	373.4	380.5	383.4
170°	367.0	366.5	374.5	373.0	371.0	371.4	370.1	377.3	380.1
172.5°	367.7	367.3	375.7	373.8	372.1	372.1	369.3	374.4	379.2
175°	366.5	366.1	372.5	372.5	372.8	371.4	370.0	373.2	378.1
177.5°	368.8	368.5	372.5	372.5	370.9	371.7	372.5	375.6	382.4
180°	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7



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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	15.30	16.32	15.89	16.89	17.54	16.07	17.09	16.66	17.66	18.30
	3H	17.12	18.02	17.72	18.61	19.29	17.63	18.53	18.23	19.12	19.80
	4H	17.85	18.70	18.47	19.30	20.00	18.27	19.12	18.89	19.72	20.42
	6H	18.41	19.19	19.05	19.81	20.52	18.76	19.54	19.40	20.15	20.86
	8H	18.60	19.33	19.24	19.96	20.68	18.92	19.65	19.56	20.28	21.00
	12H	18.69	19.40	19.34	20.02	20.76	18.99	19.70	19.64	20.32	21.06
4H	2H	15.81	16.66	16.44	17.26	17.96	16.44	17.29	17.07	17.89	18.59
	3H	17.85	18.55	18.48	19.19	19.91	18.24	18.94	18.88	19.59	20.30
	4H	18.71	19.34	19.36	19.99	20.74	19.03	19.66	19.68	20.31	21.06
	6H	19.40	19.94	20.08	20.62	21.38	19.66	20.21	20.34	20.88	21.64
	8H	19.63	20.13	20.31	20.81	21.58	19.87	20.37	20.55	21.04	21.81
	12H	19.76	20.21	20.46	20.91	21.68	19.98	20.43	20.68	21.13	21.90
8H	4H	18.97	19.47	19.65	20.14	20.91	19.27	19.78	19.95	20.45	21.22
	6H	19.78	20.19	20.49	20.91	21.69	20.03	20.45	20.74	21.16	21.94
	8H	20.08	20.45	20.81	21.17	21.96	20.31	20.68	21.04	21.41	22.19
	12H	20.28	20.60	21.00	21.31	22.17	20.50	20.82	21.22	21.52	22.38
12H	4H	18.97	19.42	19.67	20.12	20.89	19.28	19.72	19.97	20.42	21.20
	6H	19.82	20.19	20.55	20.91	21.70	20.08	20.44	20.80	21.17	21.96
	8H	20.16	20.48	20.89	21.19	22.05	20.40	20.72	21.12	21.43	22.29

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



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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-7

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L940-N

Data in this report applies to families of products including EHBR-60-L940-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-7
 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-L940-N**
 Description: Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 3963
 CIE u': 0.2267
 CIE v': 0.5003
 Duv: -0.0016
 CIE x: 0.3810
 CIE y: 0.3738
 CIE z: 0.2453
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 580
 Purity: 26.49712
 Rf: 90.7
 Rg: 101

CRI (Ra):	93.4		
R1:	95.2	R9:	66.4
R2:	95.1	R10:	86.6
R3:	93.3	R11:	94.4
R4:	94.5	R12:	75.4
R5:	94.2	R13:	95.0
R6:	92.9	R14:	95.4
R7:	94.0	R15:	92.8
R8:	87.7		



Test Conditions

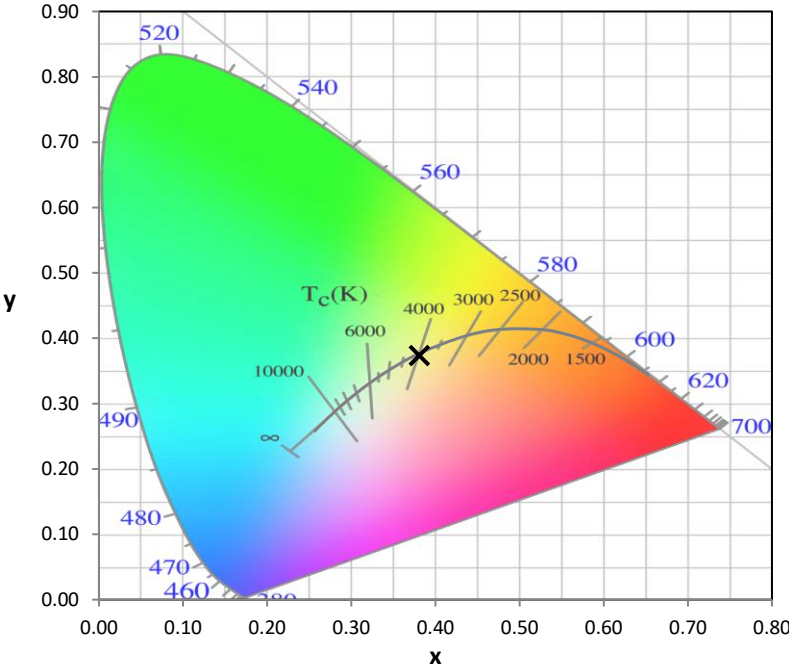
Stabilization Time: 44M
 Operation Time: 1H 44M
 Sphere Temperature (°C): 25.0

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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

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CIE 1931 Chromaticity Diagram



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



CCT = 3963K
 CIE x = 0.3810
 CIE y = 0.3738
 Duv = -0.0016

Point lies inside the ANSI 4000K 4-step quadrangle

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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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-7

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.76

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.64

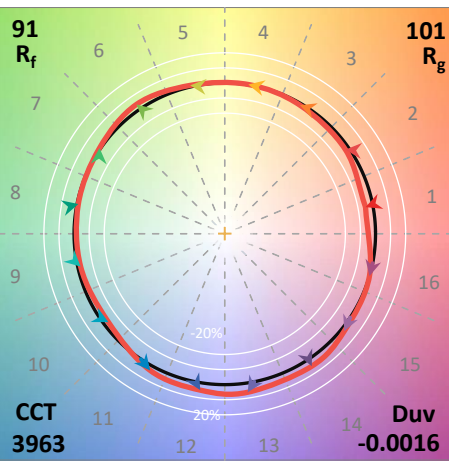
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

Summary

$R_f = 90.7$
 $R_g = 101$
 $CIE R_a = 93.4$
 $R_9 = 66.4$



Color Vector Graphics

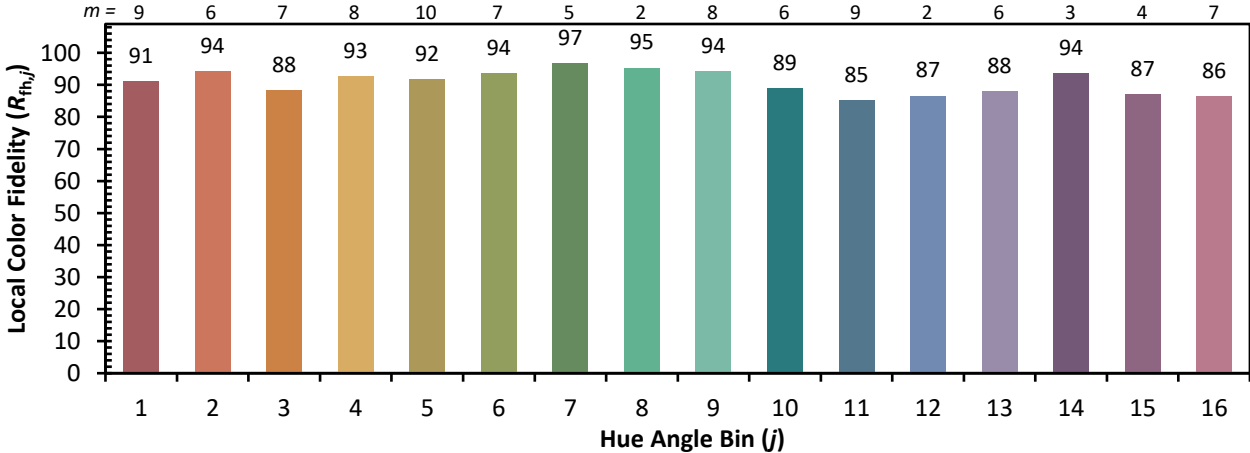


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 90	CES51 = 99	CES76 = 83
CES02 = 62	CES27 = 93	CES52 = 97	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 95	CES78 = 79
CES04 = 69	CES29 = 91	CES54 = 96	CES79 = 94
CES05 = 49	CES30 = 98	CES55 = 95	CES80 = 91
CES06 = 50	CES31 = 92	CES56 = 95	CES81 = 80
CES07 = 42	CES32 = 84	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 95	CES58 = 95	CES83 = 95
CES09 = 29	CES34 = 90	CES59 = 98	CES84 = 93
CES10 = 74	CES35 = 94	CES60 = 93	CES85 = 82
CES11 = 57	CES36 = 84	CES61 = 93	CES86 = 84
CES12 = 63	CES37 = 92	CES62 = 90	CES87 = 90
CES13 = 43	CES38 = 93	CES63 = 92	CES88 = 97
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 84
CES15 = 71	CES40 = 96	CES65 = 88	CES90 = 99
CES16 = 47	CES41 = 98	CES66 = 88	CES91 = 74
CES17 = 49	CES42 = 89	CES67 = 87	CES92 = 78
CES18 = 56	CES43 = 89	CES68 = 87	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 75
CES20 = 66	CES45 = 93	CES70 = 84	CES95 = 83
CES21 = 85	CES46 = 95	CES71 = 80	CES96 = 91
CES22 = 78	CES47 = 92	CES72 = 93	CES97 = 93
CES23 = 91	CES48 = 96	CES73 = 78	CES98 = 93
CES24 = 90	CES49 = 93	CES74 = 92	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 81	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)