

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: P1433703

Luminaire Tested: EHBR1-12-UNV-A1-L940-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433703
REPORT IS A COMBINATION OF REPORTS P1431640 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-12-UNV-A1-L940-UPL30
Description: Elevate Round Highbay at, 12000 lumens, 4000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

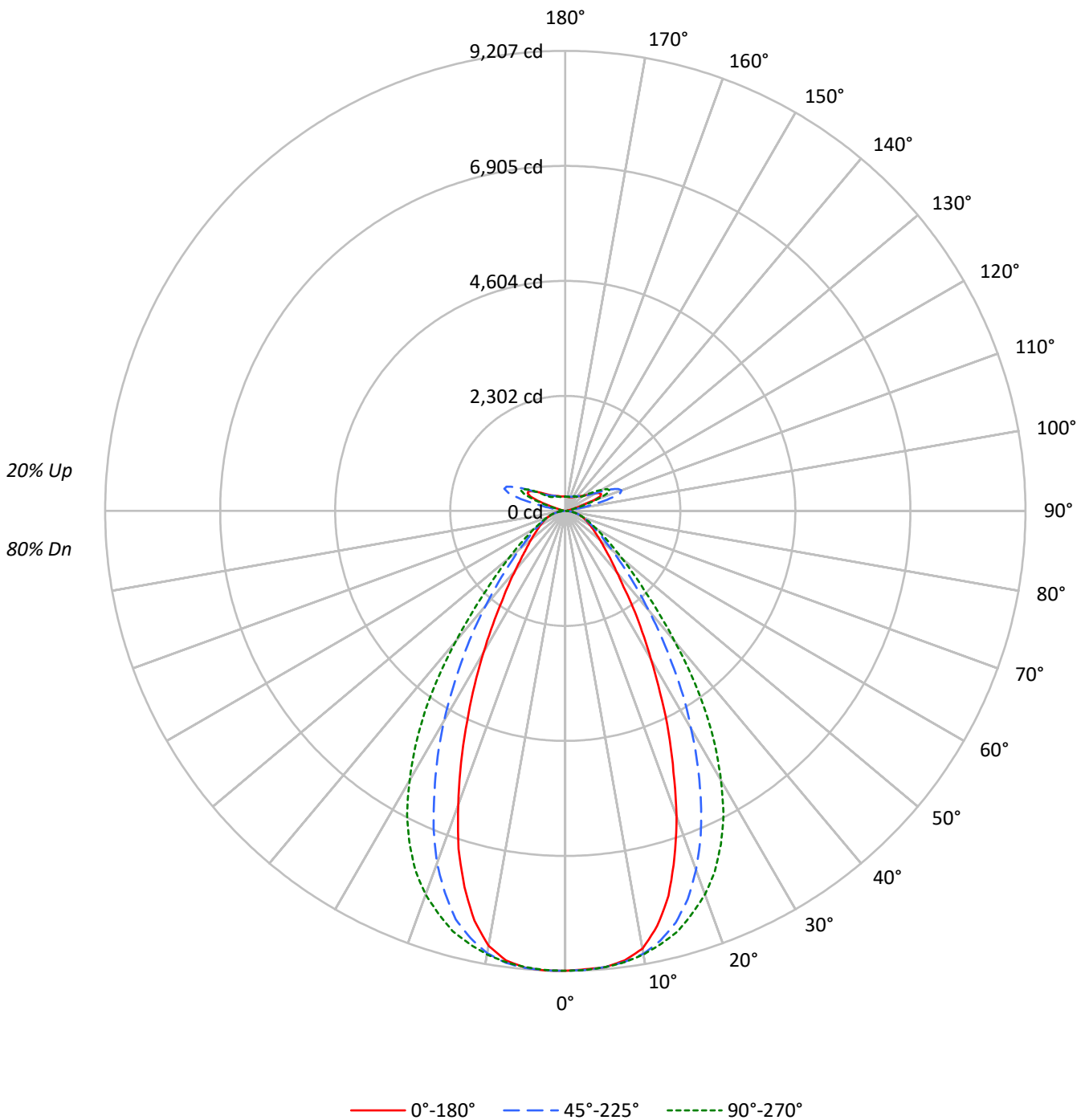
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14274.6 lumens
Efficiency: N/A
Efficacy: 164.6 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 1.07 / 0.95
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 86.7
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: P1433703
CATALOG NUMBER: EHBR1-12-UNV-A1-L940-UPL30

Luminous Intensity Polar Plot





TEST NUMBER: P1433703
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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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	84	84	84	80
1	107	103	100	97	102	99	96	93	91	89	87	84	82	81	77	76	75	75	75	75	72
2	99	93	88	83	95	90	85	81	83	79	76	77	74	72	71	69	67	67	67	67	64
3	92	84	78	73	89	81	76	71	76	71	67	71	67	64	66	63	61	61	61	61	58
4	86	77	70	65	83	74	68	63	70	64	60	65	61	58	61	58	55	55	55	55	52
5	81	70	63	58	77	68	62	57	64	59	54	60	56	52	57	53	50	50	50	50	48
6	76	65	58	52	73	63	56	51	59	54	50	56	51	48	53	49	46	46	46	46	44
7	71	60	53	48	68	58	52	47	55	49	45	52	47	44	49	45	42	42	42	42	40
8	67	56	49	44	64	54	48	43	51	46	42	49	44	40	46	42	39	39	39	39	37
9	63	52	45	40	61	50	44	40	48	42	39	46	41	37	43	39	36	36	36	36	34
10	59	48	42	37	57	47	41	37	45	40	36	43	38	35	41	37	34	34	34	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	43219	43219	43219	43219	43219
5°	42933	42927	42928	43004	42978
10°	41872	42360	42427	42307	41598
15°	38013	40665	41502	40339	37140
20°	31677	37204	39745	36503	30443
25°	24498	32168	36871	30994	23228
30°	17857	26197	32388	25203	16949
35°	12872	20192	26618	19322	12031
40°	9260	14914	19616	14284	8975
45°	7297	10911	13701	10437	7045
50°	6054	8197	9916	7927	5962
55°	5288	6473	7509	6365	5216
60°	4768	5403	5983	5369	4802
65°	4460	4766	5029	4782	4502
70°	4235	4336	4470	4360	4277
75°	3952	3927	3952	3938	3990
80°	3568	3311	3239	3363	3568
85°	2473	2098	2077	2130	2546

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 14355 cd/sqm



TEST NUMBER: P1433703
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	869.1	6.1
10°-20°	2335.8	16.4
20°-30°	2840.3	19.9
30°-40°	2313.6	16.2
40°-50°	1389.1	9.7
50°-60°	799.4	5.6
60°-70°	500.3	3.5
70°-80°	294.7	2.1
80°-90°	91.2	0.6
90°-100°	74.8	0.5
100°-110°	495.4	3.5
110°-120°	916.4	6.4
120°-130°	543.7	3.8
130°-140°	327.8	2.3
140°-150°	226.1	1.6
150°-160°	146.5	1.0
160°-170°	83.1	0.6
170°-180°	27.4	0.2
0°-30°	6045.2	42.3
0°-40°	8358.9	58.6
0°-60°	10547.4	73.9
0°-90°	11433.6	80.1
90°-120°	1486.6	10.4
90°-150°	2584.1	18.1
90°-180°	2841.0	19.9
0°-180°	14274.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9203	9203	9203	9203	9203	
5°	9167	9166	9166	9182	9176	866
15°	7975	8531	8707	8463	7792	2194
25°	4892	6424	7363	6189	4639	2229
35°	2362	3706	4885	3546	2208	1495
45°	1181	1765	2217	1689	1140	931
55°	715	875	1015	860	705	646
65°	466	498	525	499	470	463
75°	278	277	278	277	281	295
85°	85	72	71	73	88	91
90°	21	57	20	60	21	14
95°	35	128	40	109	35	34
105°	172	867	227	923	112	231
115°	793	1024	976	1133	831	730
125°	572	548	624	606	651	521
135°	418	419	392	438	452	327
145°	344	360	354	363	370	218
155°	303	313	313	314	327	141
165°	286	292	291	290	298	81
175°	284	288	287	284	290	27
180°	286	286	286	286	286	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9203.1	9203.1	9203.1	9203.1	9203.1	9203.1	9203.1	9203.1	9203.1
2.5°	9182.9	9191.2	9194.6	9196.6	9198.7	9204.5	9206.9	9202.9	9206.3
5°	9166.8	9167.4	9165.5	9174.2	9165.9	9171.7	9182.1	9178.0	9176.5
7.5°	9073.6	9092.9	9104.2	9107.1	9108.6	9115.8	9123.1	9081.7	9075.4
10°	8896.2	8928.4	8999.9	9020.4	9014.2	9025.8	8988.7	8880.4	8838.0
12.5°	8507.4	8620.6	8806.4	8889.1	8874.0	8884.3	8758.2	8529.6	8398.1
15°	7974.9	8140.8	8531.4	8694.4	8707.0	8694.4	8462.9	8017.5	7791.7
17.5°	7266.8	7573.4	8148.4	8464.8	8446.7	8452.7	8013.2	7354.8	7096.4
20°	6510.5	6837.3	7646.4	8174.4	8168.8	8135.2	7502.5	6634.1	6257.0
22.5°	5655.1	6076.4	7071.2	7817.2	7815.0	7759.1	6880.4	5847.0	5441.1
25°	4892.2	5305.4	6424.0	7379.7	7363.1	7299.4	6189.4	5061.9	4638.7
27.5°	4103.3	4533.0	5732.9	6866.9	6855.5	6786.1	5528.8	4328.1	3925.3
30°	3434.7	3827.6	5039.0	6302.7	6229.8	6221.9	4847.8	3648.7	3260.1
32.5°	2861.8	3198.6	4384.8	5712.7	5583.7	5620.5	4169.1	3080.4	2695.3
35°	2362.4	2659.0	3705.9	5030.3	4885.4	4933.0	3546.3	2527.6	2208.2
37.5°	1917.3	2202.6	3130.5	4366.7	4145.0	4234.8	2998.5	2110.8	1854.9
40°	1605.0	1831.3	2584.9	3638.5	3400.0	3546.3	2475.8	1760.6	1555.6
42.5°	1383.0	1530.7	2133.4	2943.2	2760.3	2864.0	2040.5	1471.9	1318.5
45°	1180.6	1298.4	1765.3	2322.5	2216.7	2312.9	1688.7	1255.0	1139.8
47.5°	1031.2	1122.0	1453.2	1875.5	1809.8	1840.2	1410.4	1095.2	1001.5
50°	902.3	972.5	1221.7	1513.7	1477.9	1496.6	1181.4	953.0	888.6
52.5°	802.1	853.5	1024.7	1244.0	1226.3	1229.2	1006.7	838.3	791.6
55°	714.6	750.4	874.7	1019.1	1014.8	1015.6	860.1	742.9	704.9
57.5°	638.0	667.7	751.7	856.0	849.8	851.2	744.9	659.8	635.3
60°	573.2	593.1	649.5	723.4	719.3	717.6	645.5	585.8	577.3
62.5°	515.9	528.5	567.7	620.1	612.4	614.1	567.5	529.1	516.6
65°	465.5	469.9	497.5	529.9	524.9	529.1	499.1	472.8	469.9
67.5°	416.4	420.8	436.9	458.7	453.0	456.4	437.3	421.9	419.4
70°	371.6	371.4	380.5	392.2	392.2	392.9	382.6	373.4	375.3
72.5°	325.3	324.2	326.9	334.8	332.7	340.1	329.2	326.4	326.7
75°	278.4	275.0	276.6	280.6	278.4	282.2	277.4	281.1	281.1
77.5°	234.0	227.9	225.9	226.5	222.3	228.1	229.2	231.7	237.5
80°	187.7	179.1	174.2	174.0	170.4	174.0	176.9	182.1	187.7
82.5°	139.4	131.8	123.7	122.2	119.9	122.0	125.9	132.0	141.1
85°	85.0	77.1	72.1	69.4	71.4	71.4	73.2	81.9	87.5
87.5°	30.7	26.8	22.0	22.2	22.7	23.5	24.5	30.8	33.7
90°	20.9	33.2	56.8	36.3	20.5	34.8	60.0	31.6	20.7
92.5°	30.2	50.5	91.6	47.3	26.8	47.3	85.2	42.6	28.6
95°	35.1	58.4	127.8	63.2	39.5	58.4	108.9	47.3	34.9
97.5°	44.5	64.7	146.8	77.3	61.6	72.6	123.2	50.5	42.8
100°	58.8	75.7	228.9	94.7	82.1	82.1	225.7	58.4	49.3
102.5°	99.8	161.0	486.1	178.4	124.7	161.0	524.1	118.4	60.4
105°	172.4	339.4	866.6	374.1	227.3	369.4	923.4	309.4	112.4
107.5°	298.7	607.7	1142.9	663.0	430.9	689.8	1190.2	612.5	265.5
110°	557.6	806.6	1198.1	910.8	689.8	964.4	1299.1	839.8	540.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	753.3	866.6	1147.6	1005.5	898.2	1074.9	1269.1	931.3	748.6
115°	792.7	833.5	1024.4	981.9	975.5	1059.2	1133.3	928.2	830.7
117.5°	766.1	760.9	869.8	882.4	942.4	969.2	978.7	871.4	835.4
120°	709.1	677.2	726.1	770.3	850.8	839.8	823.9	787.9	788.1
122.5°	638.3	600.0	622.0	655.0	735.6	711.9	696.1	702.6	723.5
125°	571.9	533.7	547.7	555.6	623.6	599.8	606.3	630.0	650.9
127.5°	513.6	487.9	495.6	486.1	528.8	517.7	541.6	568.7	586.2
130°	474.1	451.8	462.7	440.4	461.1	464.2	496.0	518.1	529.4
132.5°	441.1	426.8	439.4	412.3	418.7	431.4	461.4	480.6	486.9
135°	417.7	404.8	419.1	393.6	392.2	411.1	438.0	450.6	452.4
137.5°	397.2	386.1	400.3	381.3	376.6	395.6	416.1	425.6	422.6
140°	378.5	368.9	384.7	370.5	367.3	386.3	395.8	406.9	403.9
142.5°	358.3	352.0	370.7	361.2	358.0	375.7	380.4	388.3	385.3
145°	344.3	339.6	359.9	355.1	353.6	366.4	363.2	374.5	369.8
147.5°	332.2	328.9	347.5	345.9	345.9	355.3	350.8	360.5	355.9
150°	321.4	318.1	336.6	335.0	336.6	342.9	336.8	348.2	346.9
152.5°	310.5	307.2	324.1	322.3	323.9	330.3	324.3	337.2	336.0
155°	302.8	299.4	313.3	312.9	312.9	316.3	313.5	326.4	326.6
157.5°	297.0	295.1	305.8	305.4	305.4	307.2	306.0	317.4	317.6
160°	292.7	290.8	299.8	299.4	297.8	301.2	300.0	309.9	310.1
162.5°	288.4	286.4	296.8	295.1	294.9	295.1	293.9	303.9	304.2
165°	285.5	285.0	292.5	292.2	290.6	292.2	289.6	296.3	298.0
167.5°	285.6	283.9	291.1	290.8	289.2	287.6	288.2	293.4	295.1
170°	284.2	284.1	289.7	287.8	286.0	286.2	285.3	290.4	292.2
172.5°	284.6	284.4	290.2	288.2	286.4	286.6	284.1	287.6	291.0
175°	283.6	283.2	287.6	287.0	286.9	285.5	284.4	286.4	289.9
177.5°	285.4	285.0	287.8	287.2	285.5	285.6	286.2	288.2	293.3
180°	286.2	286.2	286.2	286.2	286.2	286.2	286.2	286.2	286.2



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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	13.43	14.42	14.10	15.09	15.86	14.41	15.40	15.09	16.07	16.84
	3H	14.90	15.78	15.59	16.46	17.27	15.67	16.54	16.35	17.22	18.03
	4H	15.49	16.32	16.20	17.01	17.83	16.16	16.98	16.86	17.67	18.50
	6H	15.95	16.71	16.67	17.41	18.25	16.51	17.26	17.22	17.97	18.80
	8H	16.10	16.81	16.83	17.53	18.37	16.60	17.32	17.33	18.04	18.88
	12H	16.17	16.85	16.90	17.56	18.43	16.63	17.32	17.37	18.03	18.89
4H	2H	13.93	14.76	14.64	15.45	16.27	14.71	15.54	15.42	16.23	17.05
	3H	15.61	16.29	16.32	17.02	17.85	16.19	16.87	16.91	17.60	18.44
	4H	16.32	16.93	17.05	17.66	18.54	16.81	17.43	17.54	18.16	19.03
	6H	16.89	17.42	17.65	18.18	19.06	17.28	17.81	18.03	18.57	19.45
	8H	17.08	17.57	17.83	18.32	19.21	17.41	17.91	18.17	18.66	19.55
	12H	17.18	17.62	17.95	18.39	19.29	17.47	17.91	18.25	18.69	19.58
8H	4H	16.54	17.03	17.29	17.78	18.67	16.98	17.48	17.74	18.23	19.12
	6H	17.22	17.63	18.01	18.42	19.31	17.56	17.97	18.35	18.76	19.65
	8H	17.48	17.83	18.28	18.63	19.54	17.76	18.12	18.56	18.91	19.82
	12H	17.64	17.95	18.43	18.73	19.71	17.87	18.19	18.67	18.97	19.94
12H	4H	16.53	16.97	17.30	17.74	18.64	16.97	17.41	17.75	18.19	19.08
	6H	17.25	17.61	18.05	18.40	19.31	17.59	17.94	18.38	18.74	19.65
	8H	17.53	17.85	18.33	18.63	19.60	17.81	18.13	18.61	18.91	19.88

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-7

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

REPORT NUMBER: SP1-2506-472-7

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: SP1-2506-472-7

CIE 1931 Chromaticity Diagram



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



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			

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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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.64

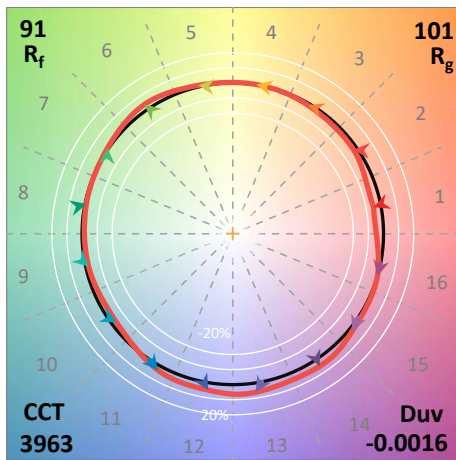
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	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

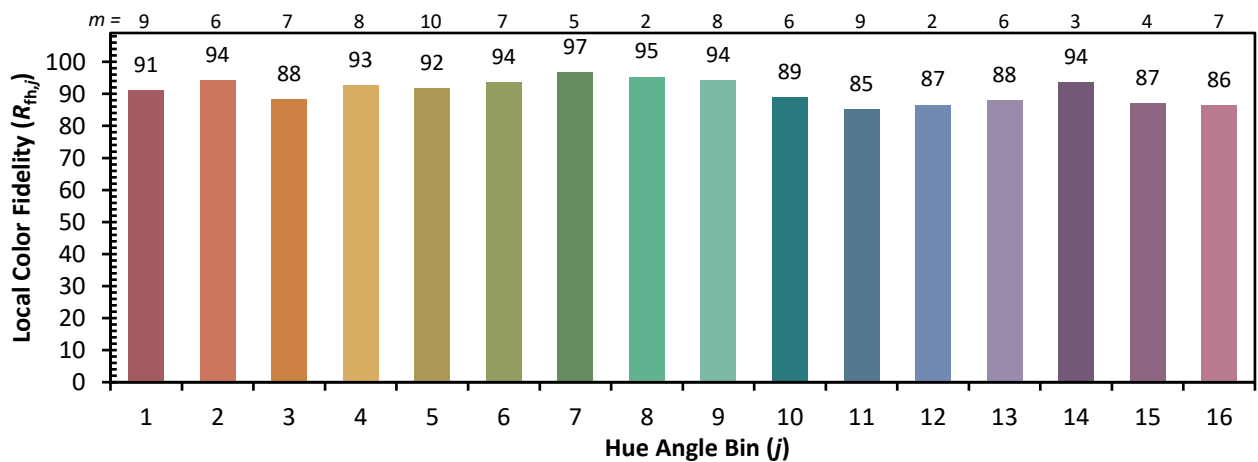
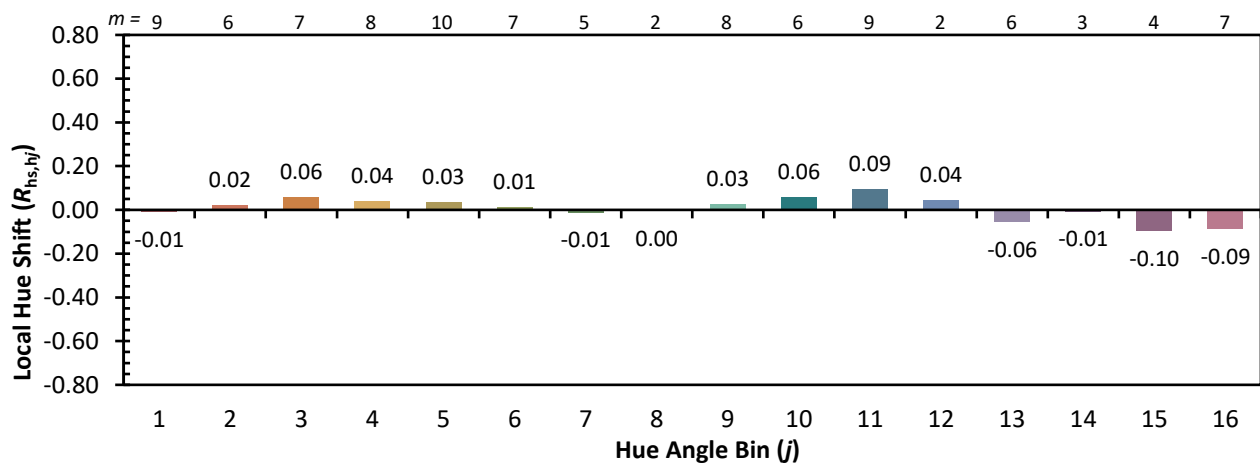


Individual Sample Fidelity Index ($R_{f,i}$)

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)