

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: P1432817

Luminaire Tested: EHBR1-60-UNV-ASM-L835-UPL40

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1432817
REPORT IS A COMBINATION OF REPORTS P1431906 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-60-UNV-ASM-L835-UPL40
Description: Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with ASM lens
Light Source: -
Ballast/Driver: -

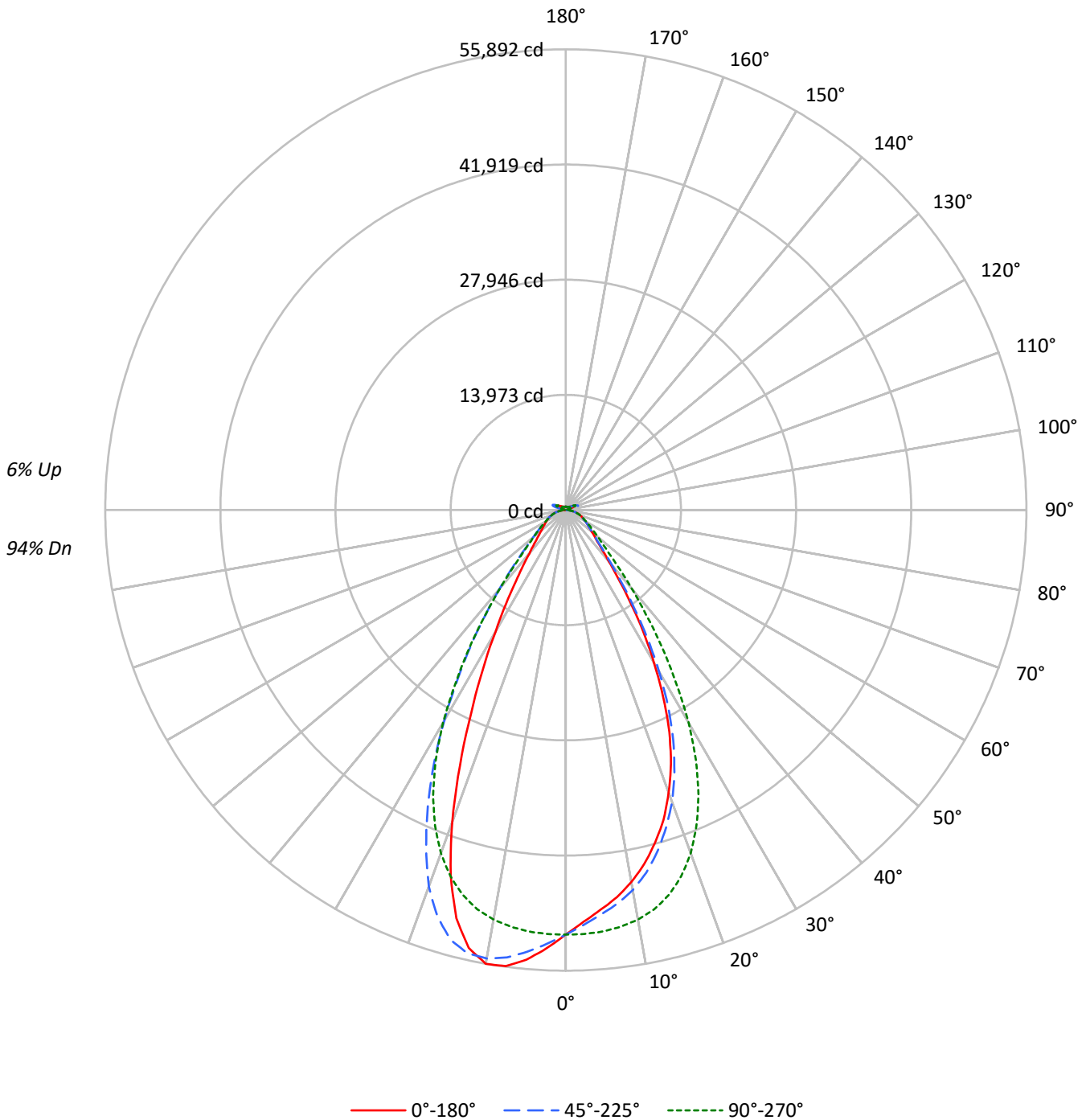
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61356.5 lumens
Efficiency: N/A
Efficacy: 170.0 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: Direct

Input Watts (W): 361
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: P1432817
CATALOG NUMBER: EHBR1-60-UNV-ASM-L835-UPL40

Luminous Intensity Polar Plot





TEST NUMBER: P1432817
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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	110	107	104	101	107	104	101	99	99	97	95	94	92	91	90	88	87	87	87	87	85
2	103	97	92	88	100	95	91	87	91	87	84	87	84	81	83	81	79	79	79	79	76
3	97	89	83	78	94	87	82	77	84	79	75	80	77	73	77	74	71	71	71	71	69
4	91	82	76	70	89	80	74	70	77	72	68	75	70	67	72	68	65	65	65	65	63
5	86	76	69	64	83	74	68	63	72	66	62	69	65	61	67	63	60	60	60	60	58
6	81	70	64	59	79	69	63	58	67	61	57	65	60	56	63	59	55	55	55	55	54
7	76	66	59	54	74	65	58	54	63	57	53	61	56	52	59	55	51	51	51	51	50
8	72	61	55	50	70	60	54	50	59	53	49	57	52	48	56	51	48	48	48	48	46
9	68	57	51	46	67	57	50	46	55	50	46	54	49	45	53	48	45	45	45	45	43
10	65	54	48	43	63	53	47	43	52	47	43	51	46	42	50	45	42	42	42	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	241892	241892	241892	241892	241892
5°	227943	230607	240419	251949	256483
10°	215729	220298	237464	260039	263067
15°	199275	204597	230452	257372	244471
20°	177498	183476	215531	236575	196033
25°	148751	154381	190762	198433	135823
30°	111295	117748	154892	153345	88363
35°	74092	78565	111093	109299	57225
40°	46726	49936	71825	72288	39443
45°	33293	34678	45573	47531	30553
50°	27732	27952	33843	34724	25962
55°	24479	24536	27631	28360	23650
60°	22665	22472	23927	24434	22529
65°	21635	21440	21811	22237	21728
70°	21013	20651	20673	21069	21289
75°	19976	19374	19333	20019	20595
80°	18176	16910	16983	18176	19444
85°	13235	10989	10989	12560	13881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 64073 cd/sqm



TEST NUMBER: P1432817
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4897.7	8.0
10°-20°	13324.6	21.7
20°-30°	15627.0	25.5
30°-40°	10867.6	17.7
40°-50°	5400.7	8.8
50°-60°	3230.2	5.3
60°-70°	2273.5	3.7
70°-80°	1464.5	2.4
80°-90°	471.8	0.8
90°-100°	101.7	0.2
100°-110°	658.9	1.1
110°-120°	1216.3	2.0
120°-130°	723.7	1.2
130°-140°	438.8	0.7
140°-150°	304.6	0.5
150°-160°	200.0	0.3
160°-170°	116.0	0.2
170°-180°	38.8	0.1
0°-30°	33849.3	55.2
0°-40°	44716.9	72.9
0°-60°	53347.7	86.9
0°-90°	57557.6	93.8
90°-120°	1977.0	3.2
90°-150°	3444.1	5.6
90°-180°	3799.0	6.2
0°-180°	61356.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	51509	51509	51509	51509	51509	
5°	48669	49238	51333	53795	54763	4565
15°	41807	42923	48348	53995	51289	11659
25°	29705	30830	38095	39627	27124	13403
35°	13598	14420	20390	20060	10503	8662
45°	5387	5611	7374	7690	4943	4354
55°	3308	3316	3734	3833	3196	3002
65°	2258	2238	2277	2321	2268	2242
75°	1407	1365	1362	1410	1451	1485
85°	455	378	378	432	477	468
90°	28	76	28	82	35	36
95°	47	170	54	147	54	45
105°	230	1148	303	1226	157	307
115°	1051	1358	1294	1504	1108	968
125°	759	729	829	808	871	692
135°	556	560	526	587	608	435
145°	464	486	478	488	499	294
155°	415	428	427	427	446	194
165°	399	408	406	406	421	114
175°	401	407	408	406	418	38
180°	408	408	408	408	408	



TEST NUMBER: P1432817
 CATALOG NUMBER: EHBR1-60-UNV-ASM-L835-UPL40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	51509.1	51509.1	51509.1	51509.1	51509.1	51509.1	51509.1	51509.1	51509.1
2.5°	49980.0	50012.9	50362.6	50817.5	51479.1	52144.6	52683.6	53039.0	53214.8
5°	48669.4	48851.0	49238.3	50073.8	51333.2	52666.1	53795.2	54534.2	54763.1
7.5°	47392.4	47497.8	48145.9	49201.5	50984.5	53061.2	54739.0	55601.4	55812.0
10°	45834.5	46073.2	46805.3	48050.3	50452.4	53310.4	55248.9	55867.0	55892.1
12.5°	44001.3	44317.1	45073.4	46643.9	49603.4	53221.6	55078.0	54875.1	54414.4
15°	41806.8	42084.1	42923.4	44745.0	48347.7	52695.1	53995.2	52344.6	51288.8
17.5°	39436.6	39687.7	40416.9	42423.1	46578.3	51710.0	51735.1	48469.4	46477.8
20°	36481.0	36678.0	37709.6	39678.1	44297.8	50129.7	48623.0	42650.1	40290.4
22.5°	33336.1	33520.6	34437.2	36485.8	41438.8	47999.1	44289.2	36795.9	33576.6
25°	29705.4	29805.9	30829.7	32682.2	38095.0	45388.3	39626.9	30417.3	27123.7
27.5°	25620.7	25791.7	26862.9	28755.0	34161.9	42079.2	34662.3	24855.8	21817.1
30°	21407.6	21690.6	22648.7	24342.9	29793.3	37837.1	29495.9	19794.6	16996.5
32.5°	17475.5	17679.4	18362.2	20132.6	24902.2	33679.0	24534.1	15860.6	13490.3
35°	13598.5	13802.4	14419.5	16158.1	20389.6	28476.8	20060.2	12462.6	10502.9
37.5°	10394.7	10755.0	11151.0	12562.1	16001.6	23561.5	15991.0	10035.4	8519.0
40°	8098.8	8156.8	8655.1	9558.2	12449.1	18423.0	12529.3	8011.0	6836.5
42.5°	6482.9	6640.4	6854.8	7530.9	9432.8	14087.3	9848.1	6574.7	5806.8
45°	5386.6	5448.5	5610.7	6064.8	7373.5	10366.7	7690.3	5547.0	4943.3
47.5°	4712.5	4685.4	4789.8	5129.8	6004.8	8011.9	6232.8	4757.9	4334.8
50°	4133.0	4116.5	4165.8	4392.8	5043.8	6147.8	5175.1	4153.3	3869.2
52.5°	3682.9	3697.4	3702.2	3843.3	4332.9	5013.9	4407.2	3701.2	3510.0
55°	3308.1	3326.5	3315.8	3420.2	3734.1	4215.0	3832.6	3328.4	3196.1
57.5°	3015.4	3001.9	2987.5	3043.4	3279.2	3575.7	3328.4	3010.7	2922.7
60°	2724.7	2712.2	2701.5	2738.3	2876.4	3096.6	2937.3	2733.4	2708.3
62.5°	2475.6	2467.8	2466.8	2460.1	2566.3	2705.4	2597.3	2484.2	2462.0
65°	2258.2	2249.5	2237.9	2227.3	2276.6	2405.9	2321.0	2260.1	2267.9
67.5°	2040.9	2040.9	2020.6	2004.2	2052.5	2120.1	2083.4	2048.6	2057.3
70°	1843.8	1844.8	1812.0	1799.4	1813.9	1886.4	1848.7	1853.5	1868.0
72.5°	1632.3	1609.1	1585.0	1584.0	1586.0	1642.0	1629.4	1641.0	1656.5
75°	1407.2	1380.2	1364.8	1347.4	1361.9	1404.3	1410.2	1426.6	1450.8
77.5°	1189.9	1148.4	1135.8	1127.2	1117.5	1165.8	1184.1	1206.4	1242.1
80°	956.2	910.8	889.6	877.0	893.4	915.6	956.2	972.6	1022.9
82.5°	707.0	673.2	647.1	646.2	653.9	674.1	709.0	739.9	768.9
85°	454.9	400.9	377.7	386.3	377.7	408.5	431.7	468.5	477.1
87.5°	164.2	128.5	122.7	135.2	132.4	142.0	162.2	176.8	177.7
90°	28.1	44.9	76.2	49.1	28.1	47.9	82.3	47.6	34.9
92.5°	40.6	67.9	122.2	63.6	36.5	64.6	115.8	62.3	45.4
95°	46.9	78.3	170.2	84.6	54.2	79.2	147.1	68.5	53.7
97.5°	60.4	86.6	195.3	103.4	83.4	98.0	165.9	72.7	64.2
100°	79.2	101.2	304.0	127.3	110.6	110.6	301.7	83.1	72.5
102.5°	133.6	214.1	644.6	238.1	167.0	216.1	697.6	163.5	87.2
105°	229.7	450.2	1148.1	497.2	302.8	491.8	1226.3	416.3	157.1
107.5°	396.9	805.4	1514.8	879.5	572.4	916.1	1579.4	817.6	359.8
110°	739.6	1068.7	1587.9	1207.6	915.1	1279.6	1723.6	1118.5	723.4



TEST NUMBER: P1432817
 CATALOG NUMBER: EHBR1-60-UNV-ASM-L835-UPL40

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	998.7	1148.1	1521.1	1333.0	1190.9	1425.9	1683.9	1239.7	999.2
115°	1050.9	1104.3	1358.1	1301.6	1294.3	1405.0	1504.2	1235.4	1107.8
117.5°	1015.4	1008.1	1153.3	1171.0	1250.3	1285.9	1299.4	1160.3	1114.1
120°	940.1	897.4	963.1	1022.7	1129.2	1114.6	1095.6	1049.5	1051.5
122.5°	846.2	795.9	826.2	871.1	977.7	946.2	926.4	937.6	965.7
125°	759.3	708.2	728.9	740.4	829.3	797.9	808.3	841.5	870.6
127.5°	682.0	647.6	660.0	648.4	704.9	690.2	722.5	760.0	784.9
130°	629.8	600.5	617.1	588.8	616.0	619.2	661.9	694.1	709.7
132.5°	586.9	568.1	587.6	553.1	560.5	576.3	616.9	645.0	654.3
135°	555.5	539.7	560.5	529.1	526.0	549.1	586.6	604.2	608.3
137.5°	529.4	515.7	537.4	513.3	506.1	529.2	557.3	571.8	568.5
140°	506.2	494.6	517.4	498.6	494.5	517.6	530.1	546.7	544.5
142.5°	481.0	472.6	499.6	487.1	482.9	504.0	510.3	522.6	519.4
145°	464.1	457.8	485.9	478.7	477.6	493.4	488.2	503.8	499.4
147.5°	449.3	445.1	470.1	467.2	467.2	478.7	472.4	485.9	481.6
150°	436.6	432.4	456.4	453.4	455.5	463.8	454.6	470.1	470.0
152.5°	423.9	418.7	440.7	437.6	439.8	448.1	439.8	457.4	456.3
155°	415.3	410.2	428.0	426.1	427.1	431.2	427.1	444.7	445.7
157.5°	409.9	405.8	419.5	418.5	418.5	421.6	419.5	435.1	436.1
160°	405.5	402.5	414.1	413.1	412.0	416.2	415.0	428.5	429.5
162.5°	401.3	398.2	411.8	409.7	409.7	409.7	409.6	423.1	425.0
165°	399.0	398.1	407.5	407.5	406.4	408.4	406.2	416.5	420.6
167.5°	399.0	396.9	407.4	407.4	406.2	404.2	406.1	415.2	419.3
170°	398.8	397.9	406.2	405.1	403.0	404.0	403.9	413.0	417.0
172.5°	400.8	399.8	409.1	407.1	405.9	405.9	404.7	411.6	417.8
175°	400.7	399.7	406.9	406.9	407.9	406.8	406.5	411.5	417.7
177.5°	403.7	402.7	406.9	406.9	405.8	407.8	409.6	414.6	422.8
180°	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8	407.8



TEST NUMBER: P1432817
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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	19.07	20.18	19.54	20.62	21.09	19.83	20.94	20.31	21.39	21.86
	3H	20.88	21.87	21.37	22.33	22.85	21.39	22.38	21.88	22.84	23.36
	4H	21.62	22.54	22.13	23.02	23.56	22.04	22.96	22.55	23.44	23.98
	6H	22.19	23.04	22.71	23.53	24.08	22.54	23.38	23.06	23.88	24.42
	8H	22.37	23.17	22.91	23.69	24.24	22.69	23.49	23.23	24.01	24.56
	12H	22.47	23.24	23.01	23.74	24.32	22.77	23.54	23.31	24.04	24.62
4H	2H	19.58	20.51	20.10	20.98	21.52	20.21	21.14	20.73	21.61	22.15
	3H	21.62	22.38	22.15	22.91	23.46	22.02	22.78	22.54	23.31	23.86
	4H	22.49	23.17	23.03	23.71	24.30	22.81	23.49	23.35	24.03	24.62
	6H	23.18	23.77	23.75	24.33	24.94	23.44	24.03	24.01	24.59	25.20
	8H	23.41	23.96	23.98	24.52	25.13	23.64	24.20	24.22	24.76	25.37
	12H	23.54	24.03	24.13	24.62	25.24	23.76	24.25	24.35	24.84	25.46
8H	4H	22.75	23.30	23.32	23.86	24.47	23.05	23.60	23.62	24.16	24.77
	6H	23.56	24.01	24.17	24.62	25.24	23.81	24.26	24.42	24.87	25.49
	8H	23.86	24.26	24.49	24.88	25.52	24.09	24.49	24.72	25.11	25.75
	12H	24.07	24.42	24.68	25.02	25.73	24.28	24.63	24.90	25.23	25.94
12H	4H	22.75	23.24	23.34	23.83	24.45	23.06	23.55	23.65	24.14	24.75
	6H	23.60	24.00	24.22	24.62	25.25	23.86	24.26	24.48	24.88	25.51
	8H	23.95	24.30	24.57	24.90	25.61	24.19	24.54	24.80	25.14	25.85

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-3

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L835-N

Data in this report applies to families of products including EHBR-60-L835-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-3
 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-L835-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 3468
 CIE u': 0.2375
 CIE v': 0.5091
 Duv: -0.0021
 CIE x: 0.4049
 CIE y: 0.3856
 CIE z: 0.2095
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 581
 Purity: 37.24544
 Rf: 80.1
 Rg: 101

CRI (Ra):	82.1		
R1:	82.9	R9:	27.6
R2:	85.6	R10:	63.8
R3:	85.9	R11:	81.2
R4:	82.8	R12:	57.2
R5:	81.0	R13:	82.6
R6:	79.7	R14:	91.0
R7:	86.5	R15:	79.4
R8:	72.1		



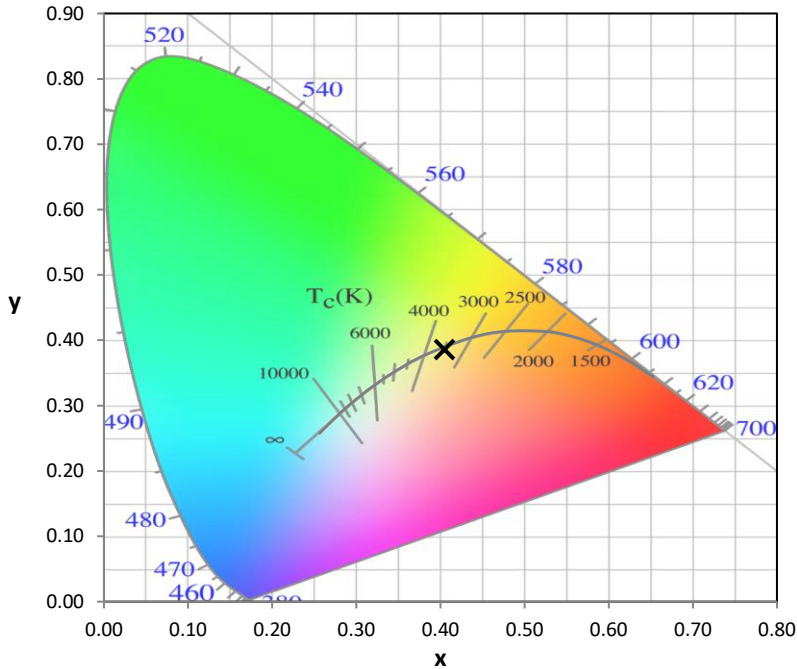
Test Conditions
 Stabilization Time: 39M
 Operation Time: 1H 39M
 Sphere Temperature (°C): 25.0

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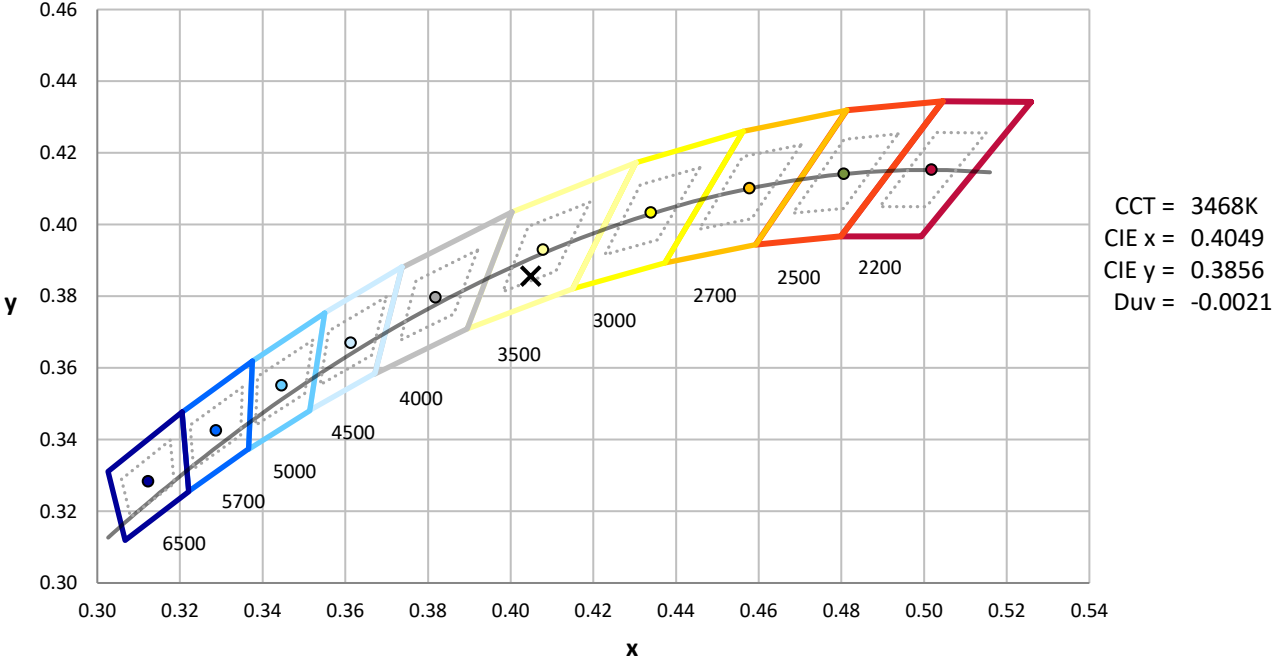
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



Point lies inside the ANSI 3500K 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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.43

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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



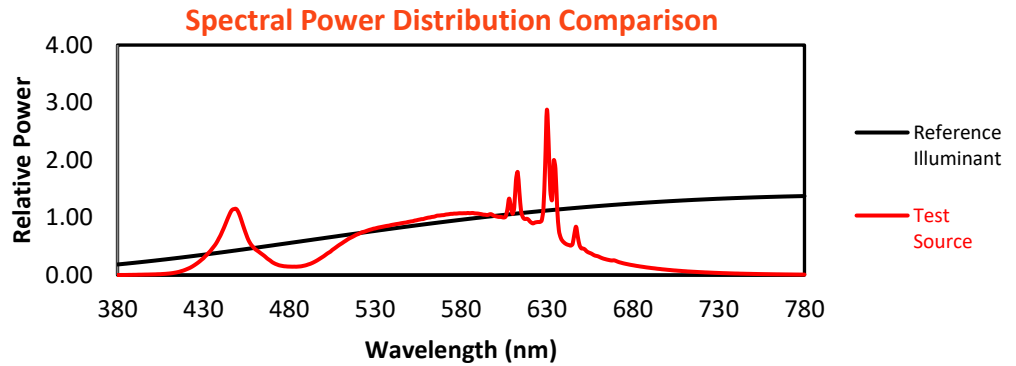
Melanopic Lumens: NR

M/P: 2.75

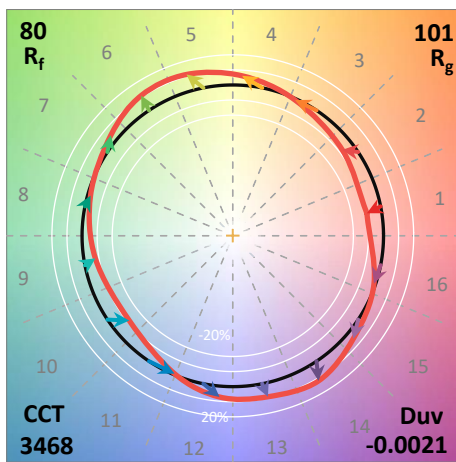
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

Summary

$R_f = 80.1$
 $R_g = 101$
 $CIE R_a = 82.1$
 $R_9 = 27.6$



Color Vector Graphics

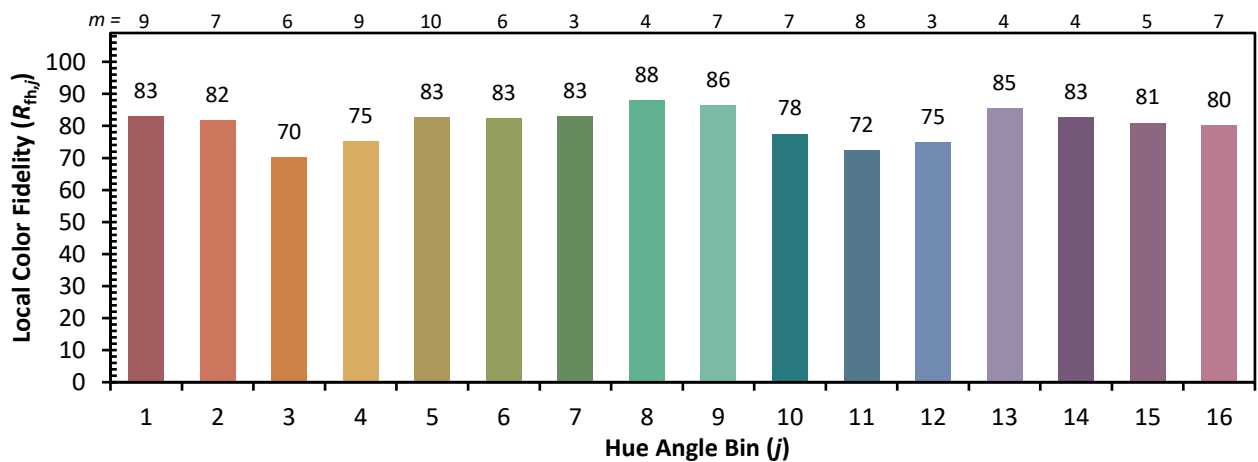


Individual Sample Fidelity Index ($R_{f,i}$)

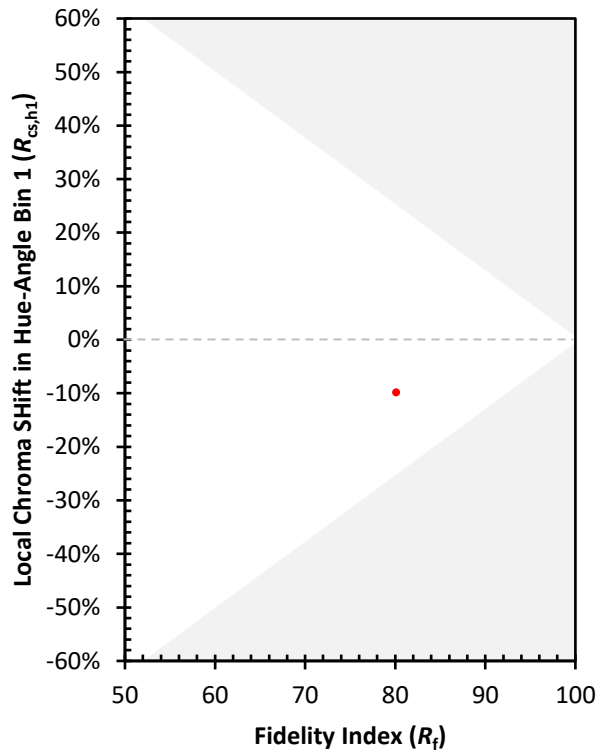
CES01 = 86	CES26 = 68	CES51 = 90	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 90	CES77 = 78
CES03 = 31	CES28 = 84	CES53 = 81	CES78 = 61
CES04 = 70	CES29 = 66	CES54 = 91	CES79 = 86
CES05 = 49	CES30 = 77	CES55 = 90	CES80 = 82
CES06 = 51	CES31 = 69	CES56 = 80	CES81 = 79
CES07 = 42	CES32 = 62	CES57 = 79	CES82 = 92
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 72	CES59 = 92	CES84 = 89
CES10 = 75	CES35 = 85	CES60 = 94	CES85 = 82
CES11 = 58	CES36 = 97	CES61 = 90	CES86 = 78
CES12 = 64	CES37 = 79	CES62 = 92	CES87 = 82
CES13 = 43	CES38 = 85	CES63 = 78	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 76
CES15 = 71	CES40 = 89	CES65 = 76	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 73	CES91 = 83
CES17 = 49	CES42 = 77	CES67 = 70	CES92 = 73
CES18 = 56	CES43 = 74	CES68 = 76	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 81	CES94 = 65
CES20 = 66	CES45 = 83	CES70 = 68	CES95 = 79
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 85
CES22 = 78	CES47 = 81	CES72 = 88	CES97 = 85
CES23 = 92	CES48 = 80	CES73 = 60	CES98 = 82
CES24 = 91	CES49 = 80	CES74 = 97	CES99 = 81
CES25 = 72	CES50 = 89	CES75 = 64	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)