

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: P1433869

Luminaire Tested: EHBR1-42-UNV-ASM-L940-UPL18

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433869
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: EHBR1-42-UNV-ASM-L940-UPL18
Description: Elevate Round Highbay at, 42000 lumens, 4000K 90CRI LEDs with ASM lens
Light Source: -
Ballast/Driver: -

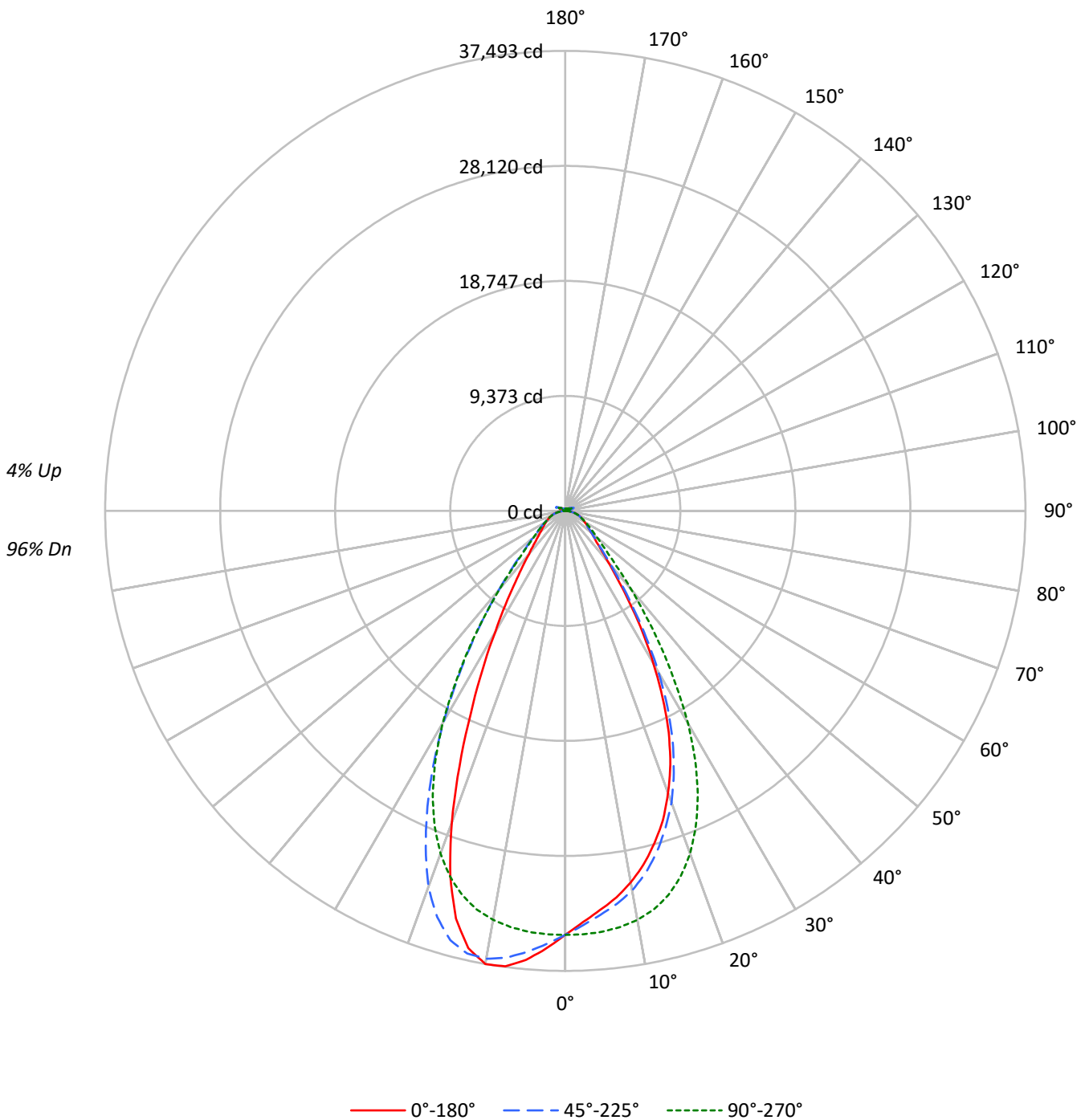
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40354.3 lumens
Efficiency: N/A
Efficacy: 170.8 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): 236.3
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: P1433869
CATALOG NUMBER: EHBR1-42-UNV-ASM-L940-UPL18

Luminous Intensity Polar Plot





TEST NUMBER: P1433869

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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
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	98	96	
1	111	107	104	102	108	105	102	99	100	98	96	95	94	92	91	90	89	89	86	
2	104	98	93	89	101	96	91	87	92	88	85	88	85	82	85	82	80	80	78	
3	97	90	84	79	95	88	82	78	85	80	76	81	78	74	79	75	73	73	71	
4	92	83	76	71	89	81	75	70	78	73	69	76	71	68	73	70	66	66	65	
5	86	76	70	65	84	75	69	64	73	67	63	71	66	62	68	64	61	61	59	
6	81	71	64	59	79	70	63	59	68	62	58	66	61	57	64	60	56	56	55	
7	77	66	59	54	75	65	59	54	63	58	54	62	57	53	60	56	52	52	51	
8	73	62	55	50	71	61	55	50	60	54	50	58	53	49	57	52	49	49	47	
9	69	58	51	47	67	57	51	47	56	50	46	55	50	46	54	49	46	46	44	
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	51	46	43	43	41	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	162264	162264	162264	162264	162264
5°	152907	154694	161276	169011	172051
10°	144714	147778	159293	174437	176468
15°	133676	137246	154590	172648	163994
20°	119068	123078	144581	158697	131501
25°	99784	103561	127966	133111	91112
30°	74658	78986	103903	102865	59274
35°	49701	52703	74523	73319	38388
40°	31345	33498	48181	48491	26458
45°	22334	23263	30571	31884	20495
50°	18603	18751	22703	23294	17416
55°	16421	16459	18535	19025	15865
60°	15204	15075	16050	16390	15113
65°	14514	14383	14632	14917	14575
70°	14097	13853	13868	14133	14281
75°	13401	12996	12969	13429	13815
80°	12192	11343	11392	12192	13044
85°	8880	7370	7370	8426	9313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 42981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3285.4	8.1
10°-20°	8938.3	22.1
20°-30°	10482.8	26.0
30°-40°	7290.1	18.1
40°-50°	3622.8	9.0
50°-60°	2166.8	5.4
60°-70°	1525.1	3.8
70°-80°	982.4	2.4
80°-90°	315.1	0.8
90°-100°	47.1	0.1
100°-110°	301.8	0.7
110°-120°	556.5	1.4
120°-130°	331.6	0.8
130°-140°	201.7	0.5
140°-150°	140.7	0.3
150°-160°	93.0	0.2
160°-170°	54.6	0.1
170°-180°	18.4	0.0
0°-30°	22706.5	56.3
0°-40°	29996.6	74.3
0°-60°	35786.3	88.7
0°-90°	38608.9	95.7
90°-120°	905.4	2.2
90°-150°	1579.4	3.9
90°-180°	1745.0	4.3
0°-180°	40354.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	34553	34553	34553	34553	34553	
5°	32648	33030	34435	36086	36736	3062
15°	28044	28794	32432	36221	34405	7821
25°	19927	20681	25555	26582	18195	8991
35°	9122	9673	13678	13457	7046	5811
45°	3614	3764	4946	5159	3316	2921
55°	2219	2224	2505	2571	2144	2013
65°	1515	1501	1527	1557	1521	1504
75°	944	916	914	946	973	996
85°	305	253	253	290	320	314
90°	13	35	13	38	18	21
95°	22	78	25	68	26	21
105°	105	525	139	561	74	141
115°	481	621	592	688	508	443
125°	348	334	380	371	400	317
135°	255	258	242	270	280	199
145°	214	224	221	225	231	136
155°	194	199	198	198	207	90
165°	188	192	191	192	199	53
175°	190	193	194	194	200	18
180°	194	194	194	194	194	



TEST NUMBER: P1433869

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9
2.5°	33527.2	33549.2	33783.8	34088.9	34532.8	34979.2	35340.7	35579.2	35697.0
5°	32648.0	32769.8	33029.6	33590.0	34434.9	35329.0	36086.5	36582.1	36735.7
7.5°	31791.4	31862.0	32296.8	33005.0	34201.0	35594.1	36719.5	37298.1	37439.3
10°	30746.4	30906.3	31397.5	32232.6	33844.0	35761.2	37061.6	37476.3	37493.1
12.5°	29516.6	29728.5	30235.7	31289.3	33274.5	35701.6	36946.9	36810.8	36501.8
15°	28044.5	28230.5	28793.5	30015.5	32432.2	35348.5	36220.6	35113.3	34405.1
17.5°	26454.6	26623.0	27112.2	28457.9	31245.3	34687.6	34704.5	32513.9	31177.8
20°	24471.9	24604.0	25296.1	26616.5	29715.5	33627.7	32616.8	28610.1	27027.2
22.5°	22362.3	22486.0	23100.9	24475.1	27797.6	32198.3	29709.6	24683.1	22523.6
25°	19926.7	19994.1	20681.0	21923.6	25554.6	30447.0	26582.2	20404.3	18194.9
27.5°	17186.7	17301.4	18019.9	19289.2	22916.3	28227.2	23251.8	16673.6	14635.2
30°	14360.5	14550.4	15193.0	16329.5	19985.7	25381.6	19786.1	13278.5	11401.4
32.5°	11722.8	11859.5	12317.6	13505.2	16704.6	22592.3	16457.8	10639.5	9049.5
35°	9122.0	9258.8	9672.8	10839.0	13677.6	19102.6	13456.6	8360.1	7045.5
37.5°	6972.9	7214.6	7480.2	8426.8	10734.1	15805.4	10727.0	6731.9	5714.6
40°	5432.8	5471.7	5806.0	6411.8	8351.0	12358.4	8404.8	5373.8	4585.9
42.5°	4348.8	4454.5	4598.3	5051.9	6327.6	9449.9	6606.2	4410.4	3895.3
45°	3613.5	3654.9	3763.8	4068.3	4946.2	6954.1	5158.7	3721.0	3316.0
47.5°	3161.2	3143.1	3213.1	3441.1	4028.1	5374.5	4181.0	3191.6	2907.9
50°	2772.5	2761.4	2794.5	2946.7	3383.5	4124.0	3471.6	2786.1	2595.6
52.5°	2470.5	2480.2	2483.5	2578.1	2906.5	3363.3	2956.5	2482.8	2354.5
55°	2219.1	2231.5	2224.3	2294.3	2504.8	2827.5	2571.0	2232.7	2144.0
57.5°	2022.8	2013.8	2004.0	2041.6	2199.7	2398.6	2232.7	2019.5	1960.6
60°	1827.8	1819.3	1812.2	1836.8	1929.5	2077.2	1970.3	1833.6	1816.8
62.5°	1660.7	1655.4	1654.8	1650.2	1721.5	1814.8	1742.3	1666.4	1651.5
65°	1514.9	1509.0	1501.3	1494.1	1527.2	1614.0	1557.0	1516.2	1521.3
67.5°	1369.1	1369.1	1355.5	1344.5	1376.8	1422.2	1397.6	1374.3	1380.0
70°	1236.9	1237.5	1215.5	1207.0	1216.8	1265.4	1240.1	1243.4	1253.1
72.5°	1095.0	1079.4	1063.2	1062.5	1063.8	1101.5	1093.0	1100.8	1111.2
75°	944.0	925.9	915.5	903.9	913.6	942.1	946.0	957.0	973.2
77.5°	798.2	770.4	762.0	756.1	749.6	782.0	794.3	809.2	833.3
80°	641.4	611.0	596.7	588.3	599.3	614.2	641.4	652.4	686.2
82.5°	474.3	451.6	434.1	433.5	438.6	452.2	475.6	496.3	515.8
85°	305.2	268.9	253.3	259.2	253.3	274.1	289.6	314.2	320.1
87.5°	110.1	86.2	82.3	90.7	88.8	95.2	108.8	118.6	119.3
90°	13.0	20.7	35.0	22.6	13.0	22.3	38.2	23.0	17.6
92.5°	18.8	31.2	56.0	29.3	16.9	29.9	53.5	29.7	22.4
95°	21.6	36.0	78.0	38.8	25.2	36.6	67.8	32.5	26.2
97.5°	28.0	39.8	89.4	47.4	38.6	45.2	76.4	34.5	31.0
100°	36.6	46.5	139.1	58.6	51.0	51.0	138.5	39.2	34.8
102.5°	61.5	98.0	294.8	109.2	76.8	99.3	319.6	76.2	41.5
105°	105.4	206.0	524.9	227.6	138.8	225.4	561.2	191.7	73.7
107.5°	181.8	368.3	692.6	402.4	262.0	419.2	722.6	375.1	166.3
110°	338.4	488.6	726.0	552.3	418.6	585.4	788.5	512.6	332.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	456.8	524.9	695.5	609.6	544.6	652.2	770.3	567.9	458.5
115°	480.6	504.9	621.0	595.2	592.1	642.6	688.2	566.1	508.1
117.5°	464.4	460.9	527.4	535.7	572.0	588.2	594.7	531.7	511.0
120°	430.0	410.3	440.6	468.0	516.6	510.0	501.7	481.0	482.3
122.5°	387.1	364.2	378.2	398.8	447.6	433.2	424.4	430.1	443.2
125°	347.6	324.0	333.9	339.4	379.7	365.5	370.6	386.2	400.0
127.5°	312.3	296.4	302.4	297.4	323.1	316.5	331.4	349.0	360.7
130°	288.4	275.0	283.0	270.4	282.8	284.0	303.7	319.1	326.4
132.5°	269.1	260.4	270.0	254.4	257.6	264.6	283.4	296.8	301.3
135°	254.7	247.7	257.6	243.6	242.0	252.2	269.7	278.0	280.2
137.5°	243.0	236.9	247.4	236.6	233.1	243.3	256.4	263.4	262.2
140°	232.8	227.7	238.6	229.9	228.1	238.2	243.9	251.9	251.3
142.5°	221.6	217.8	230.6	224.9	222.9	232.2	235.1	241.1	239.8
145°	214.4	211.5	224.5	221.1	220.7	227.8	225.2	232.5	230.9
147.5°	207.9	206.1	217.5	215.9	215.9	221.1	218.2	224.5	222.9
150°	202.5	200.7	211.5	209.9	210.8	214.7	210.2	217.5	217.8
152.5°	197.2	194.6	204.5	202.9	203.8	207.7	203.8	212.1	211.9
155°	193.7	191.2	199.1	197.8	198.4	200.4	198.4	206.7	207.4
157.5°	191.8	189.6	195.6	195.0	195.0	196.6	195.6	203.0	203.7
160°	190.3	188.7	193.8	193.1	192.9	194.7	194.4	200.8	201.4
162.5°	188.8	187.2	193.1	192.2	192.2	192.2	192.6	198.9	200.2
165°	188.1	187.4	191.6	191.6	191.3	192.3	191.6	196.8	199.0
167.5°	188.1	187.2	191.9	191.9	191.6	190.7	192.0	196.8	199.0
170°	188.5	187.8	191.6	191.4	190.4	191.1	191.4	196.1	198.3
172.5°	189.8	189.1	193.6	192.7	192.4	192.4	192.3	196.2	199.4
175°	190.1	189.5	192.9	192.9	193.6	193.2	193.6	196.5	199.7
177.5°	191.6	191.0	192.9	192.9	192.6	193.9	195.2	198.2	202.3
180°	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9



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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	17.83	18.97	18.27	19.37	19.80	18.59	19.73	19.04	20.14	20.57
	3H	19.65	20.66	20.10	21.08	21.56	20.16	21.17	20.61	21.59	22.07
	4H	20.38	21.33	20.86	21.77	22.26	20.80	21.75	21.28	22.19	22.68
	6H	20.95	21.82	21.45	22.28	22.78	21.30	22.17	21.79	22.63	23.13
	8H	21.14	21.96	21.64	22.44	22.95	21.46	22.28	21.96	22.76	23.27
	12H	21.24	22.02	21.75	22.49	23.03	21.54	22.32	22.05	22.79	23.33
4H	2H	18.35	19.29	18.83	19.73	20.23	18.98	19.92	19.46	20.36	20.85
	3H	20.39	21.17	20.88	21.66	22.17	20.79	21.57	21.28	22.06	22.57
	4H	21.25	21.95	21.76	22.45	23.00	21.57	22.27	22.08	22.77	23.32
	6H	21.95	22.55	22.49	23.08	23.65	22.21	22.81	22.75	23.34	23.91
	8H	22.17	22.74	22.72	23.27	23.84	22.41	22.98	22.96	23.50	24.08
	12H	22.31	22.81	22.87	23.37	23.94	22.53	23.03	23.09	23.59	24.16
8H	4H	21.51	22.08	22.06	22.60	23.18	21.82	22.38	22.36	22.91	23.48
	6H	22.33	22.79	22.91	23.36	23.95	22.58	23.04	23.16	23.61	24.20
	8H	22.63	23.04	23.22	23.63	24.22	22.86	23.27	23.46	23.86	24.45
	12H	22.83	23.19	23.42	23.76	24.43	23.05	23.40	23.64	23.98	24.65
12H	4H	21.52	22.02	22.08	22.58	23.15	21.83	22.32	22.39	22.88	23.46
	6H	22.37	22.78	22.96	23.37	23.96	22.62	23.03	23.22	23.62	24.22
	8H	22.71	23.07	23.30	23.64	24.31	22.95	23.31	23.54	23.88	24.55

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

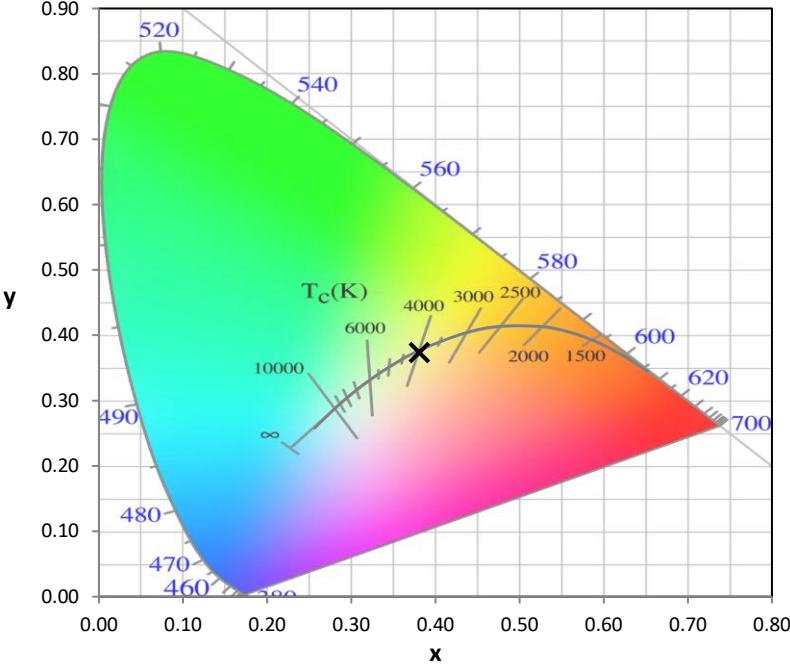
Stabilization Time: 44M
 Operation Time: 1H 44M
 Sphere Temperature (°C): 25.0

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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

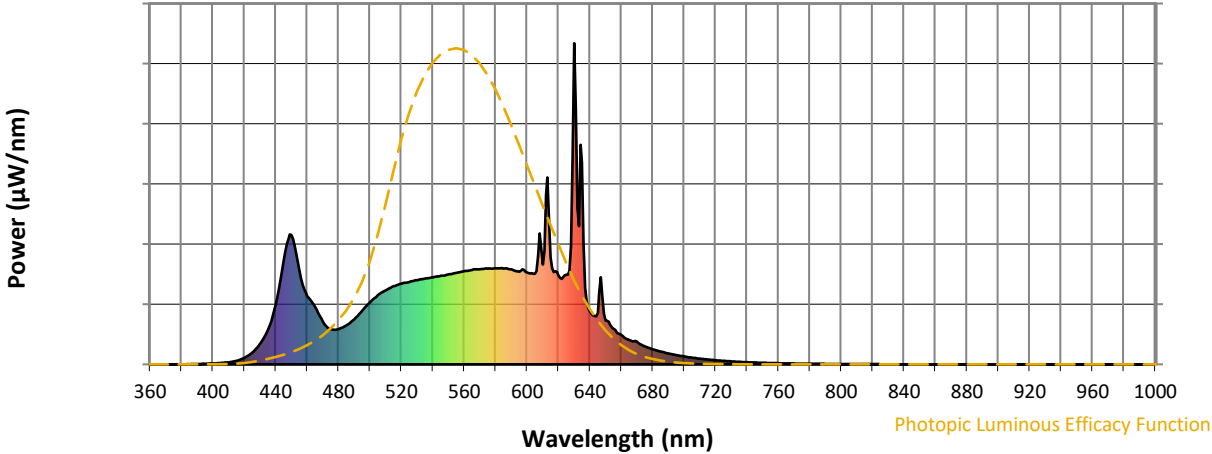


CCT = 3963K
 CIE x = 0.3810
 CIE y = 0.3738
 Duv = -0.0016

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			

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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

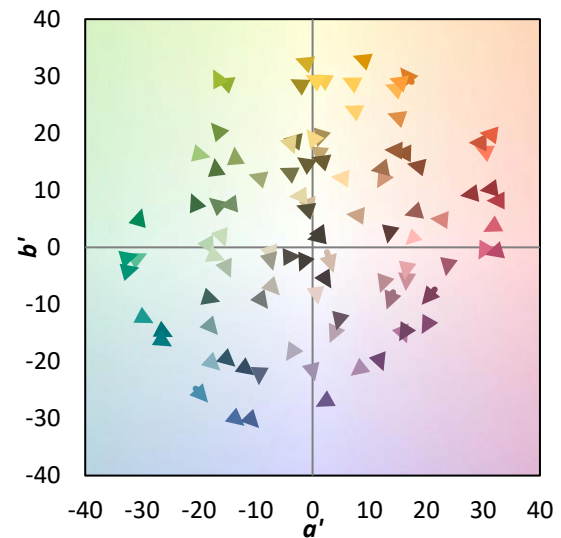
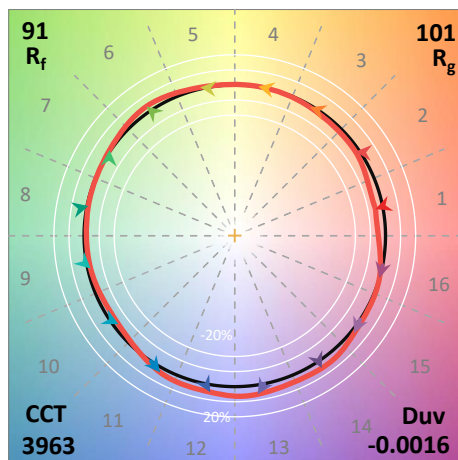
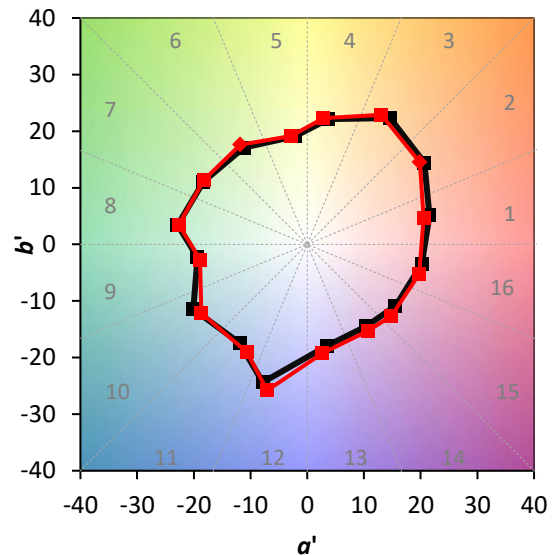
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR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

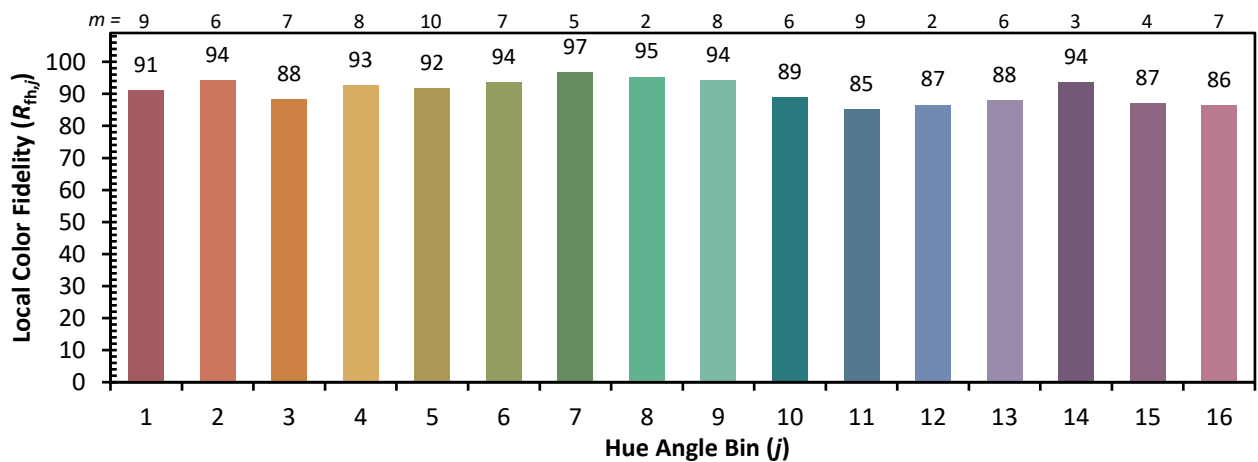
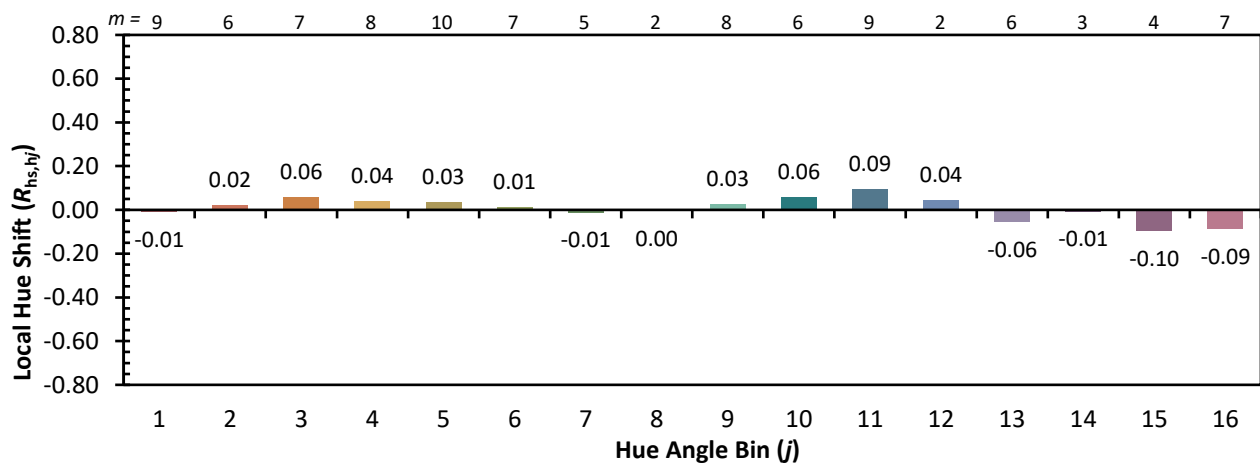


Individual Sample Fidelity Index ($R_{f,i}$)

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)