

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: P1431675

Luminaire Tested: EHBR1-18-UNV-A1-L950

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1431675
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: EHBR1-18-UNV-A1-L950
Description: Elevate Round Highbay at, 19000 lumens, 5000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

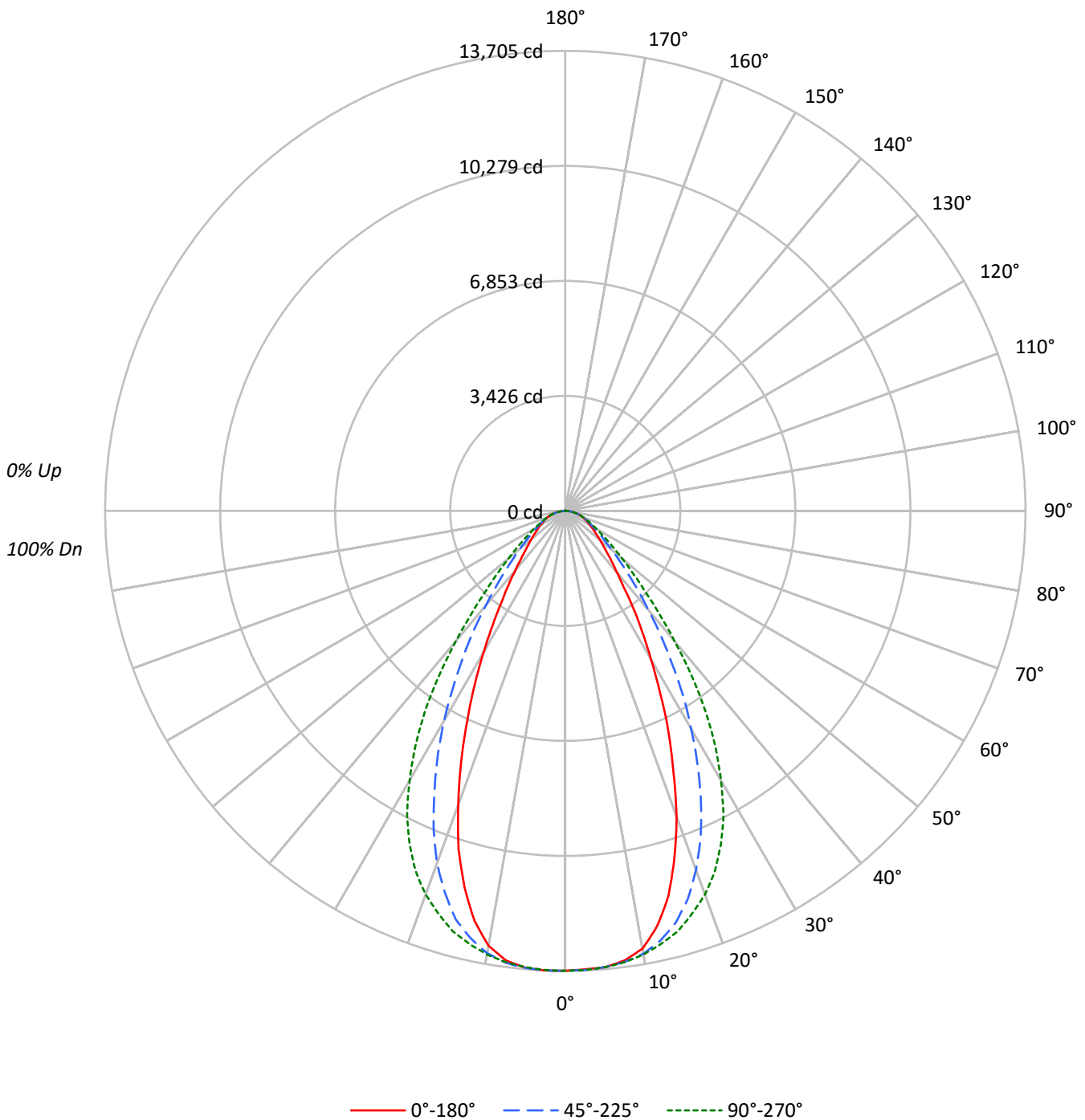
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17018.6 lumens
Efficiency: N/A
Efficacy: 179.7 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): 94.7
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: P1431675
CATALOG NUMBER: EHBR1-18-UNV-A1-L950

Luminous Intensity Polar Plot





TEST NUMBER: P1431675
 CATALOG NUMBER: EHBR1-18-UNV-A1-L950

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	64332	64332	64332	64332	64332
5°	64324	64314	64317	64430	64391
10°	63146	63882	63984	63803	62733
15°	57713	61740	63011	61245	56388
20°	48431	56881	60766	55810	46545
25°	37732	49548	56790	47738	35778
30°	27723	40673	50285	39130	26314
35°	20160	31624	41689	30263	18843
40°	14647	23587	31026	22591	14194
45°	11671	17451	21914	16694	11268
50°	9812	13286	16072	12847	9663
55°	8708	10661	12368	10481	8590
60°	8014	9081	10057	9025	8071
65°	7699	8228	8682	8254	7773
70°	7596	7777	8017	7819	7671
75°	7517	7470	7517	7492	7590
80°	7559	7015	6858	7123	7559
85°	6816	5782	5722	5873	7021

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 22960 cd/sqm



TEST NUMBER: P1431675
 CATALOG NUMBER: EHBR1-18-UNV-A1-L950

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1293.7	7.6
10°-20°	3476.9	20.4
20°-30°	4227.9	24.8
30°-40°	3443.9	20.2
40°-50°	2067.7	12.1
50°-60°	1190.0	7.0
60°-70°	744.7	4.4
70°-80°	438.6	2.6
80°-90°	128.3	0.8
90°-100°	0.1	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.2	0.0
130°-140°	0.9	0.0
140°-150°	1.6	0.0
150°-160°	1.7	0.0
160°-170°	1.6	0.0
170°-180°	0.7	0.0
0°-30°	8998.5	52.9
0°-40°	12442.4	73.1
0°-60°	15700.1	92.3
0°-90°	17011.8	100.0
90°-120°	0.2	0.0
90°-150°	2.9	0.0
90°-180°	7.0	0.0
0°-180°	17018.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13699	13699	13699	13699	13699	
5°	13645	13643	13644	13668	13660	1290
15°	11871	12699	12960	12597	11598	3266
25°	7282	9562	10960	9213	6905	3318
35°	3516	5516	7272	5279	3287	2225
45°	1757	2628	3300	2514	1697	1386
55°	1064	1302	1511	1280	1049	961
65°	693	740	781	743	700	689
75°	414	412	414	413	418	439
85°	126	107	106	109	130	135
90°	1	0	0	0	0	6
95°	1	0	0	0	0	0
105°	1	0	0	0	1	1
115°	1	0	0	0	1	1
125°	1	0	0	0	1	1
135°	1	1	1	1	1	1
145°	3	2	2	3	3	2
155°	4	3	3	4	5	2
165°	7	6	5	6	7	2
175°	9	7	6	7	9	1
180°	8	8	8	8	8	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0
2.5°	13668.9	13681.3	13686.4	13689.3	13692.4	13701.1	13704.8	13698.8	13704.0
5°	13645.2	13646.0	13643.1	13656.0	13643.7	13652.3	13667.8	13661.8	13659.5
7.5°	13506.3	13535.0	13551.9	13556.1	13558.5	13569.1	13580.0	13518.3	13509.1
10°	13242.3	13290.2	13396.6	13427.1	13417.9	13435.1	13380.0	13218.8	13155.6
12.5°	12663.5	12832.0	13108.6	13231.7	13209.3	13224.5	13036.9	12696.5	12500.9
15°	11870.8	12117.9	12699.1	12941.9	12960.5	12941.9	12597.3	11934.2	11598.2
17.5°	10816.9	11273.1	12129.0	12600.2	12573.1	12582.1	11927.9	10947.8	10563.3
20°	9691.0	10177.4	11381.9	12167.8	12159.4	12109.5	11167.6	9875.0	9313.7
22.5°	8417.7	9044.9	10525.7	11636.1	11633.0	11549.7	10241.6	8703.5	8099.2
25°	7282.0	7897.2	9562.3	10984.8	10960.1	10865.4	9213.0	7534.8	6904.8
27.5°	6108.0	6747.5	8533.6	10221.6	10204.6	10101.3	8229.7	6442.6	5842.8
30°	5112.6	5697.4	7500.7	9381.7	9273.3	9261.5	7216.1	5431.1	4852.7
32.5°	4259.9	4761.2	6526.8	8503.5	8311.6	8366.3	6205.8	4585.3	4012.0
35°	3516.5	3958.1	5516.3	7487.8	7272.0	7342.9	5278.8	3762.4	3286.9
37.5°	2854.1	3278.7	4659.9	6499.9	6170.0	6303.7	4463.4	3142.1	2761.0
40°	2389.2	2726.0	3847.6	5415.9	5061.0	5278.8	3685.2	2620.8	2315.4
42.5°	2058.6	2278.5	3175.6	4381.0	4108.7	4263.1	3037.4	2190.9	1962.6
45°	1757.4	1932.7	2627.6	3457.1	3299.6	3442.7	2513.7	1868.2	1696.6
47.5°	1535.0	1670.2	2163.1	2791.7	2693.9	2739.2	2099.4	1630.3	1490.9
50°	1343.0	1447.6	1818.5	2253.2	2199.9	2227.6	1758.5	1418.6	1322.7
52.5°	1193.9	1270.5	1525.2	1851.8	1825.4	1829.7	1498.6	1247.8	1178.4
55°	1063.6	1117.0	1302.1	1517.0	1510.6	1511.8	1280.2	1105.8	1049.2
57.5°	949.7	993.9	1119.0	1274.2	1265.1	1267.0	1108.6	982.2	945.7
60°	853.3	882.8	966.9	1076.8	1070.8	1068.2	960.9	872.0	859.3
62.5°	767.8	786.8	845.0	923.0	911.6	914.2	844.7	787.6	768.9
65°	692.9	699.5	740.5	788.7	781.3	787.6	742.8	703.8	699.5
67.5°	619.7	626.3	650.5	682.9	674.3	679.5	651.0	628.1	624.4
70°	553.2	552.9	566.4	583.9	583.9	584.8	569.5	555.8	558.7
72.5°	484.3	482.6	486.6	498.4	495.2	506.1	490.1	485.7	486.3
75°	414.3	409.5	411.7	417.7	414.3	420.1	412.9	418.3	418.3
77.5°	348.3	339.1	336.2	337.2	330.9	339.4	341.2	344.9	353.5
80°	279.5	266.6	259.4	259.1	253.6	259.1	263.4	271.1	279.5
82.5°	207.5	196.2	184.2	181.9	178.5	181.6	187.4	196.5	210.1
85°	126.5	114.7	107.3	103.3	106.2	106.2	109.0	121.9	130.3
87.5°	45.6	39.9	32.7	33.0	33.8	35.0	36.4	45.9	50.2
90°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
92.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
95°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
97.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
100°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
102.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
105°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
107.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
110°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6



TEST NUMBER: P1431675
 CATALOG NUMBER: EHBR1-18-UNV-A1-L950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
115°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
117.5°	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
120°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6
122.5°	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.8
125°	0.8	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.8
127.5°	0.8	0.3	0.0	0.0	0.0	0.0	0.3	0.6	0.8
130°	0.8	0.6	0.3	0.0	0.3	0.3	0.6	0.6	0.8
132.5°	1.1	0.8	0.8	0.6	0.6	0.8	0.8	1.1	1.1
135°	1.4	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.4
137.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.8
140°	2.0	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0
142.5°	2.3	2.3	2.0	2.0	2.0	2.3	2.3	2.3	2.6
145°	2.6	2.6	2.3	2.3	2.3	2.6	2.6	2.9	2.9
147.5°	3.4	3.2	2.6	2.6	2.6	2.6	2.9	3.2	3.4
150°	3.7	3.4	2.9	2.9	2.9	2.9	3.2	3.7	4.0
152.5°	4.0	3.7	3.2	2.9	2.9	2.9	3.4	3.7	4.3
155°	4.3	4.0	3.4	2.9	2.9	3.2	3.7	4.3	4.6
157.5°	5.2	4.6	4.0	3.4	3.4	3.7	4.3	4.8	5.2
160°	5.8	5.2	4.6	4.0	4.0	4.3	4.8	5.5	5.8
162.5°	6.3	5.8	4.8	4.6	4.3	4.6	5.2	6.0	6.3
165°	6.6	6.0	5.5	4.8	4.8	4.8	5.8	6.3	6.6
167.5°	6.9	6.6	5.8	5.2	5.2	5.2	6.0	6.6	6.9
170°	7.2	6.9	6.0	5.5	5.2	5.5	6.3	6.9	7.2
172.5°	7.7	7.4	6.6	6.0	5.8	6.0	6.9	7.4	7.7
175°	8.6	8.0	7.4	6.6	6.3	6.6	7.4	8.0	8.6
177.5°	8.9	8.4	7.7	6.9	6.6	6.9	7.7	8.4	8.9
180°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7



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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	16.85	18.12	17.22	18.43	18.75	17.83	19.10	18.20	19.41	19.73
	3H	18.42	19.55	18.80	19.88	20.24	19.18	20.30	19.56	20.63	21.00
	4H	19.09	20.14	19.49	20.49	20.87	19.74	20.78	20.14	21.14	21.52
	6H	19.64	20.61	20.06	20.98	21.37	20.17	21.13	20.58	21.50	21.90
	8H	19.84	20.76	20.27	21.15	21.56	20.30	21.22	20.74	21.61	22.02
	12H	19.97	20.84	20.40	21.23	21.66	20.38	21.25	20.82	21.64	22.07
4H	2H	17.42	18.47	17.83	18.83	19.21	18.19	19.24	18.60	19.60	19.98
	3H	19.22	20.08	19.63	20.48	20.89	19.78	20.65	20.20	21.05	21.46
	4H	20.01	20.78	20.45	21.20	21.65	20.48	21.25	20.92	21.68	22.12
	6H	20.70	21.36	21.16	21.81	22.28	21.05	21.72	21.52	22.17	22.64
	8H	20.94	21.57	21.41	22.01	22.49	21.24	21.86	21.71	22.31	22.78
	12H	21.11	21.66	21.60	22.15	22.62	21.36	21.91	21.84	22.39	22.87
8H	4H	20.29	20.91	20.76	21.36	21.84	20.71	21.34	21.18	21.79	22.26
	6H	21.11	21.62	21.61	22.12	22.60	21.41	21.92	21.92	22.42	22.90
	8H	21.44	21.89	21.96	22.41	22.90	21.68	22.13	22.20	22.65	23.14
	12H	21.69	22.09	22.21	22.59	23.16	21.87	22.27	22.39	22.76	23.34
12H	4H	20.31	20.86	20.80	21.34	21.82	20.73	21.28	21.21	21.76	22.24
	6H	21.16	21.61	21.68	22.13	22.62	21.46	21.91	21.98	22.43	22.92
	8H	21.54	21.94	22.06	22.44	23.01	21.78	22.18	22.29	22.67	23.25

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-8

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L950-N

Data in this report applies to families of products including EHBR-60-L950-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-8
 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-L950-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 4901
 CIE u': 0.2131
 CIE v': 0.4853
 Duv: -0.0008
 CIE x: 0.3477
 CIE y: 0.3520
 CIE z: 0.3003
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 574
 Purity: 9.953987
 Rf: 90.7
 Rg: 100.5

CRI (Ra):	94.3		
R1:	95.8	R9:	72.3
R2:	96.5	R10:	89.1
R3:	94.4	R11:	94.9
R4:	95.3	R12:	68.4
R5:	94.1	R13:	96.4
R6:	92.5	R14:	96.4
R7:	95.5	R15:	93.9
R8:	90.1		



Test Conditions

Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-8

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 5000K 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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 2.04

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.41

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

Summary

$R_f = 90.7$
 $R_g = 100.5$
 $CIE R_a = 94.3$
 $R_9 = 72.3$



Color Vector Graphics



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

CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 83
CES02 = 61	CES27 = 92	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 97	CES78 = 80
CES04 = 69	CES29 = 94	CES54 = 93	CES79 = 94
CES05 = 48	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 84
CES07 = 41	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 40	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 90	CES59 = 97	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 92	CES85 = 83
CES11 = 56	CES36 = 81	CES61 = 92	CES86 = 86
CES12 = 62	CES37 = 92	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 85	CES91 = 73
CES17 = 48	CES42 = 90	CES67 = 84	CES92 = 79
CES18 = 56	CES43 = 91	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 65	CES45 = 95	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 92
CES22 = 77	CES47 = 95	CES72 = 92	CES97 = 95
CES23 = 91	CES48 = 93	CES73 = 77	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 92	CES99 = 94
CES25 = 70	CES50 = 98	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)