

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: P1433764

Luminaire Tested: EHBR1-24-UNV-A1-L940-UPL15

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433764
REPORT IS A COMBINATION OF REPORTS P1431701 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-24-UNV-A1-L940-UPL15
Description: Elevate Round Highbay at, 24000 lumens, 4000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

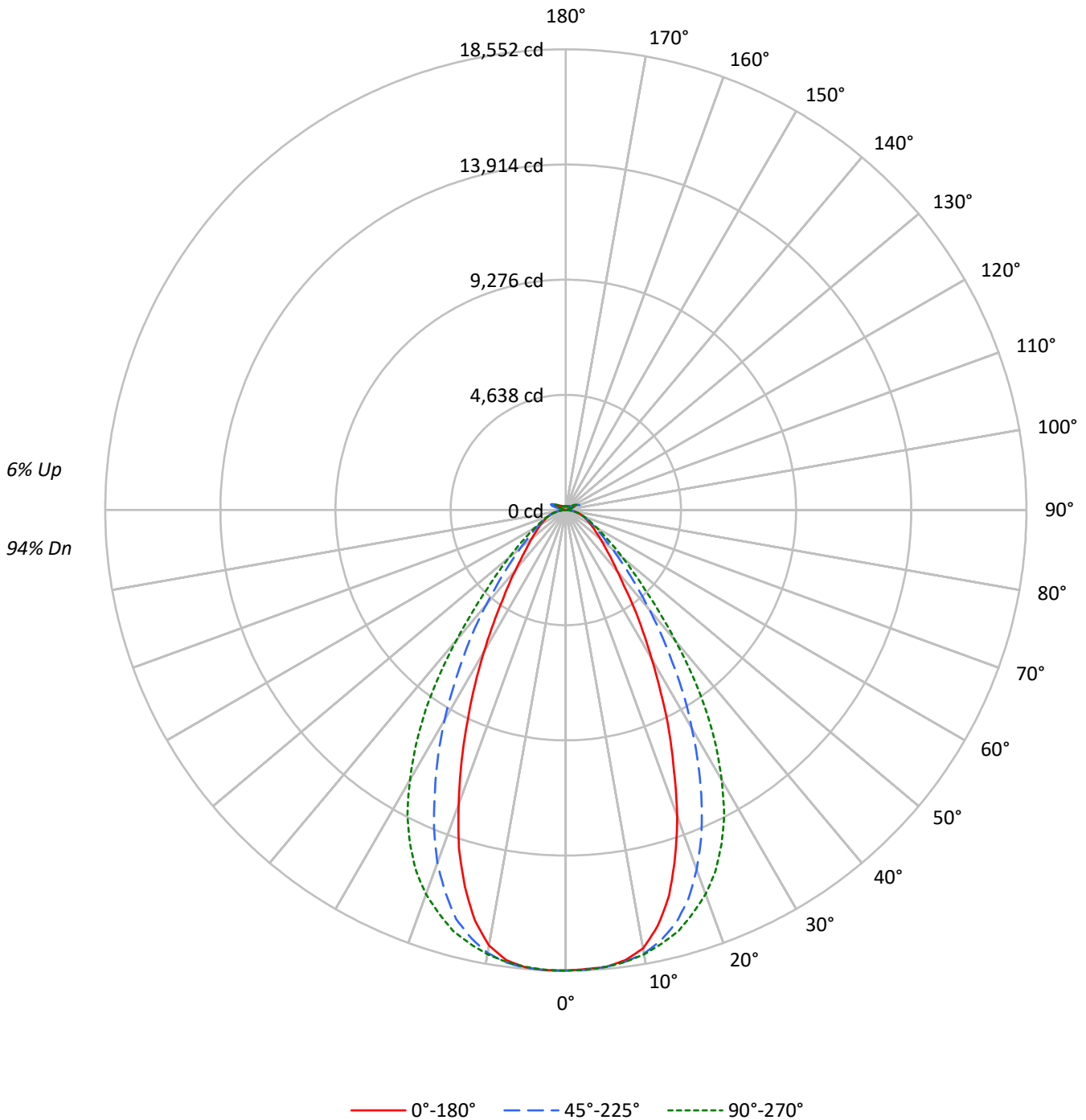
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24424.0 lumens
Efficiency: N/A
Efficacy: 177.5 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: Direct

Input Watts (W): 137.6
Input Voltage (V): NR
Input Current (A_{in}): 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: P1433764
CATALOG NUMBER: EHBR1-24-UNV-A1-L940-UPL15

Luminous Intensity Polar Plot





TEST NUMBER: P1433764
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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	97	97	97	97	97	97	94
1	110	107	103	101	107	104	101	98	99	96	94	94	92	91	90	88	87	87	87	87	85
2	103	97	92	87	100	94	90	86	90	86	83	86	83	80	83	80	78	78	78	78	76
3	96	88	82	77	94	86	81	76	83	78	74	79	75	72	76	73	70	70	70	70	68
4	90	81	74	69	88	79	73	68	76	71	66	73	69	65	71	67	64	64	64	64	62
5	84	74	67	62	82	73	66	61	70	65	60	68	63	59	66	61	58	58	58	58	56
6	79	69	61	56	77	67	61	56	65	59	55	63	58	54	61	57	53	53	53	53	51
7	75	64	56	51	73	63	56	51	61	55	50	59	54	50	57	53	49	49	49	49	47
8	70	59	52	47	69	58	52	47	57	51	47	55	50	46	54	49	45	45	45	45	44
9	66	55	48	44	65	55	48	44	53	47	43	52	46	43	50	46	42	42	42	42	41
10	63	52	45	41	62	51	45	41	50	44	40	49	43	40	48	43	39	39	39	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	87085	87085	87085	87085	87085
5°	86510	86497	86500	86653	86601
10°	84371	85355	85490	85248	83819
15°	76595	81940	83627	81283	74836
20°	63828	74965	80086	73554	61344
25°	49362	64819	74294	62452	46804
30°	35981	52787	65262	50784	34151
35°	25936	40686	53635	38934	24243
40°	18660	30050	39527	28782	18084
45°	14704	21984	27606	21031	14194
50°	12199	16518	19981	15973	12014
55°	10654	13043	15132	12824	10511
60°	9609	10888	12057	10821	9677
65°	8987	9605	10132	9633	9072
70°	8535	8738	9008	8786	8618
75°	7962	7911	7962	7934	8039
80°	7191	6674	6526	6777	7191
85°	4984	4225	4184	4294	5132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 28924 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1751.2	7.2
10°-20°	4706.6	19.3
20°-30°	5723.2	23.4
30°-40°	4662.0	19.1
40°-50°	2799.1	11.5
50°-60°	1610.9	6.6
60°-70°	1008.1	4.1
70°-80°	593.7	2.4
80°-90°	176.1	0.7
90°-100°	36.6	0.1
100°-110°	241.7	1.0
110°-120°	447.2	1.8
120°-130°	265.5	1.1
130°-140°	160.8	0.7
140°-150°	111.9	0.5
150°-160°	73.3	0.3
160°-170°	42.1	0.2
170°-180°	14.0	0.1
0°-30°	12181.1	49.9
0°-40°	16843.1	69.0
0°-60°	21253.0	87.0
0°-90°	23031.0	94.3
90°-120°	725.5	3.0
90°-150°	1263.6	5.2
90°-180°	1393.0	5.7
0°-180°	24424.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18544	18544	18544	18544	18544	
5°	18471	18468	18469	18502	18491	1746
15°	16069	17190	17544	17053	15700	4421
25°	9858	12944	14836	12472	9347	4491
35°	4760	7467	9844	7146	4450	3012
45°	2379	3557	4467	3403	2297	1877
55°	1440	1763	2045	1733	1420	1302
65°	938	1002	1058	1006	947	933
75°	561	557	561	559	566	594
85°	171	145	144	148	176	183
90°	11	28	10	29	10	13
95°	18	62	19	53	17	17
105°	85	423	111	450	55	113
115°	387	500	476	553	406	357
125°	280	267	304	296	318	255
135°	205	206	193	215	222	160
145°	171	178	175	180	183	108
155°	152	156	156	157	164	71
165°	146	148	147	147	152	42
175°	147	148	146	146	150	14
180°	148	148	148	148	148	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	18544.1	18544.1	18544.1	18544.1	18544.1	18544.1	18544.1	18544.1	18544.1
2.5°	18503.4	18520.1	18527.1	18531.0	18535.2	18546.9	18552.0	18543.8	18550.7
5°	18471.2	18472.3	18468.4	18485.9	18469.2	18480.9	18501.8	18493.6	18490.6
7.5°	18283.2	18322.0	18344.9	18350.7	18353.9	18368.2	18383.0	18299.5	18287.0
10°	17925.8	17990.7	18134.8	18175.9	18163.6	18186.8	18112.2	17893.9	17808.5
12.5°	17142.5	17370.4	17744.9	17911.5	17881.2	17901.8	17647.7	17187.1	16922.2
15°	16069.3	16403.7	17190.5	17519.1	17544.4	17519.1	17052.7	16155.1	15700.3
17.5°	14642.7	15260.3	16418.9	17056.6	17020.1	17032.2	16146.5	14819.8	14299.4
20°	13118.6	13776.9	15407.5	16471.3	16460.0	16392.4	15117.4	13367.5	12607.9
22.5°	11394.9	12244.0	14248.5	15751.5	15747.3	15634.7	13863.9	11781.7	10963.8
25°	9857.6	10690.4	12944.2	14869.9	14836.5	14708.4	12471.6	10199.8	9346.8
27.5°	8268.3	9134.0	11551.8	13836.7	13813.8	13674.0	11140.4	8721.1	7909.4
30°	6920.9	7712.4	10153.5	12699.9	12553.1	12537.2	9768.3	7352.0	6569.0
32.5°	5766.6	6445.1	8835.4	11511.0	11251.2	11325.4	8400.7	6207.0	5431.0
35°	4760.2	5358.0	7467.4	10136.1	9844.0	9939.9	7145.8	5093.1	4449.5
37.5°	3863.4	4438.3	6308.0	8798.8	8352.1	8533.1	6041.9	4253.3	3737.6
40°	3234.2	3690.2	5208.5	7331.4	6851.0	7145.8	4988.6	3547.6	3134.4
42.5°	2786.7	3084.3	4298.8	5930.5	5561.9	5770.9	4111.6	2965.8	2656.7
45°	2379.0	2616.2	3556.9	4679.8	4466.6	4660.4	3402.7	2528.9	2296.6
47.5°	2077.9	2260.9	2928.2	3779.1	3646.6	3708.0	2841.9	2206.9	2018.1
50°	1818.1	1959.4	2461.7	3050.1	2977.8	3015.6	2380.5	1920.2	1790.5
52.5°	1616.1	1719.8	2064.7	2506.8	2471.0	2476.9	2028.7	1689.2	1595.2
55°	1439.8	1512.1	1762.6	2053.4	2045.0	2046.5	1733.0	1496.9	1420.4
57.5°	1285.6	1345.4	1514.8	1724.8	1712.5	1715.2	1500.8	1329.5	1280.2
60°	1155.1	1195.1	1308.9	1457.7	1449.5	1446.0	1300.8	1180.3	1163.3
62.5°	1039.3	1065.0	1143.9	1249.5	1234.0	1237.4	1143.4	1066.2	1040.9
65°	938.0	946.9	1002.5	1067.7	1057.6	1066.2	1005.5	952.7	946.9
67.5°	838.9	847.9	880.5	924.4	912.7	919.7	881.2	850.2	845.2
70°	748.9	748.5	766.7	790.4	790.4	791.5	770.9	752.3	756.2
72.5°	655.6	653.3	658.8	674.6	670.4	685.1	663.4	657.6	658.3
75°	560.9	554.2	557.3	565.5	560.9	568.6	558.9	566.3	566.3
77.5°	471.5	459.1	455.2	456.4	447.8	459.5	461.8	466.8	478.5
80°	378.3	360.8	351.1	350.8	343.3	350.8	356.5	367.1	378.3
82.5°	280.8	265.7	249.3	246.2	241.6	245.9	253.6	266.1	284.3
85°	171.3	155.4	145.2	139.8	143.8	143.8	147.6	165.1	176.4
87.5°	61.8	53.9	44.3	44.6	45.8	47.4	49.3	62.1	68.0
90°	10.7	16.2	27.8	17.7	10.0	17.0	29.3	15.4	10.3
92.5°	15.0	24.7	44.6	23.1	13.1	23.1	41.6	20.8	14.3
95°	17.7	28.5	62.4	30.8	19.3	28.5	53.1	23.1	17.3
97.5°	22.3	31.6	71.6	37.7	30.0	35.4	60.1	24.7	21.1
100°	29.3	37.0	111.7	46.2	40.1	40.1	110.1	28.5	24.6
102.5°	49.3	78.5	237.2	87.0	60.8	78.5	255.6	57.8	30.0
105°	84.7	165.6	422.8	182.5	110.9	180.2	450.5	150.9	55.4
107.5°	146.3	296.4	557.6	323.5	210.3	336.5	580.7	298.8	130.2
110°	272.6	393.5	584.5	444.3	336.5	470.6	633.8	409.7	264.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	368.1	422.8	559.8	490.5	438.2	524.4	619.2	454.4	365.8
115°	387.4	406.6	499.8	479.0	475.9	516.8	552.9	452.8	405.8
117.5°	374.7	371.2	424.4	430.5	459.8	472.8	477.5	425.1	408.2
120°	346.5	330.4	354.2	375.8	415.0	409.7	402.0	384.7	385.0
122.5°	312.3	293.0	303.4	319.6	358.9	347.3	339.6	343.0	353.9
125°	280.0	260.7	267.2	271.1	304.2	292.6	296.1	307.6	318.5
127.5°	251.5	238.3	241.9	237.2	258.0	252.6	264.5	278.0	286.9
130°	232.3	221.0	226.0	214.8	225.3	226.8	242.6	253.3	259.2
132.5°	216.4	209.2	215.3	201.7	204.8	211.5	226.1	235.7	238.8
135°	205.2	198.7	205.6	192.9	192.6	201.8	214.9	221.1	222.2
137.5°	195.3	189.9	196.8	187.5	185.2	194.5	204.5	209.2	207.9
140°	186.8	181.8	189.5	182.5	181.0	190.2	194.9	200.6	199.1
142.5°	177.1	174.0	182.9	178.3	176.7	185.6	187.9	191.7	190.7
145°	170.7	168.3	177.9	175.6	174.8	181.4	179.9	185.7	183.3
147.5°	165.6	163.7	172.2	171.4	171.4	176.1	174.1	179.1	177.2
150°	160.6	158.7	167.1	166.4	167.1	170.2	167.5	173.7	173.3
152.5°	155.6	153.6	161.4	160.2	161.0	164.1	161.7	168.3	168.3
155°	152.2	150.2	156.3	155.6	155.6	157.5	156.7	163.8	164.2
157.5°	150.2	148.7	153.3	152.5	152.5	153.6	153.7	159.9	160.2
160°	148.7	147.1	151.0	150.2	149.4	151.4	151.4	156.8	157.2
162.5°	147.2	145.6	149.8	148.7	148.3	148.7	148.7	154.6	154.9
165°	146.0	145.2	148.3	147.6	146.7	147.6	147.1	151.0	152.1
167.5°	146.4	145.2	147.9	147.1	146.4	145.6	146.8	149.9	151.0
170°	146.0	145.6	147.6	146.0	144.9	145.2	145.6	148.7	149.8
172.5°	146.8	146.4	148.3	146.8	145.6	146.1	145.6	147.9	149.9
175°	147.2	146.5	147.9	146.8	146.5	146.0	146.4	147.9	150.3
177.5°	148.3	147.6	148.4	147.2	146.0	146.4	147.6	149.2	152.1
180°	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6



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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	16.98	18.15	17.44	18.58	19.04	17.96	19.13	18.42	19.56	20.02
	3H	18.45	19.50	18.94	19.94	20.45	19.22	20.26	19.70	20.71	21.22
	4H	19.06	20.03	19.56	20.49	21.02	19.72	20.69	20.22	21.16	21.68
	6H	19.52	20.41	20.04	20.90	21.43	20.08	20.97	20.59	21.45	21.99
	8H	19.67	20.52	20.20	21.02	21.56	20.17	21.02	20.70	21.52	22.06
	12H	19.75	20.55	20.28	21.05	21.62	20.21	21.02	20.74	21.51	22.08
4H	2H	17.50	18.47	18.00	18.93	19.46	18.28	19.25	18.78	19.71	20.24
	3H	19.18	19.98	19.69	20.49	21.04	19.76	20.57	20.28	21.08	21.62
	4H	19.90	20.61	20.43	21.14	21.72	20.39	21.11	20.92	21.63	22.21
	6H	20.48	21.10	21.03	21.65	22.25	20.86	21.48	21.42	22.04	22.63
	8H	20.66	21.24	21.23	21.79	22.39	21.00	21.58	21.56	22.13	22.73
	12H	20.77	21.28	21.35	21.86	22.47	21.07	21.58	21.65	22.16	22.77
8H	4H	20.12	20.70	20.69	21.25	21.85	20.57	21.15	21.13	21.70	22.30
	6H	20.81	21.28	21.41	21.88	22.49	21.15	21.62	21.75	22.22	22.83
	8H	21.06	21.48	21.68	22.10	22.72	21.34	21.77	21.96	22.38	23.00
	12H	21.23	21.60	21.84	22.19	22.89	21.46	21.84	22.07	22.43	23.13
12H	4H	20.12	20.63	20.70	21.21	21.82	20.56	21.08	21.15	21.66	22.27
	6H	20.83	21.26	21.45	21.87	22.49	21.17	21.59	21.78	22.20	22.83
	8H	21.13	21.50	21.74	22.09	22.79	21.41	21.78	22.01	22.37	23.07

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

REPORT NUMBER: SP1-2506-472-7

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

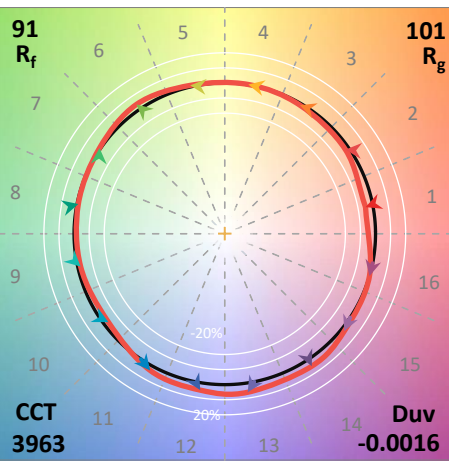
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR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