

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: P1433552

Luminaire Tested: EHBR1-36-UNV-ASM-L935-UPL36

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433552
REPORT IS A COMBINATION OF REPORTS P1431777 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-36-UNV-ASM-L935-UPL36
Description: Elevate Round Highbay at, 36000 lumens, 3500K 90CRI LEDs with ASM lens
Light Source: -
Ballast/Driver: -

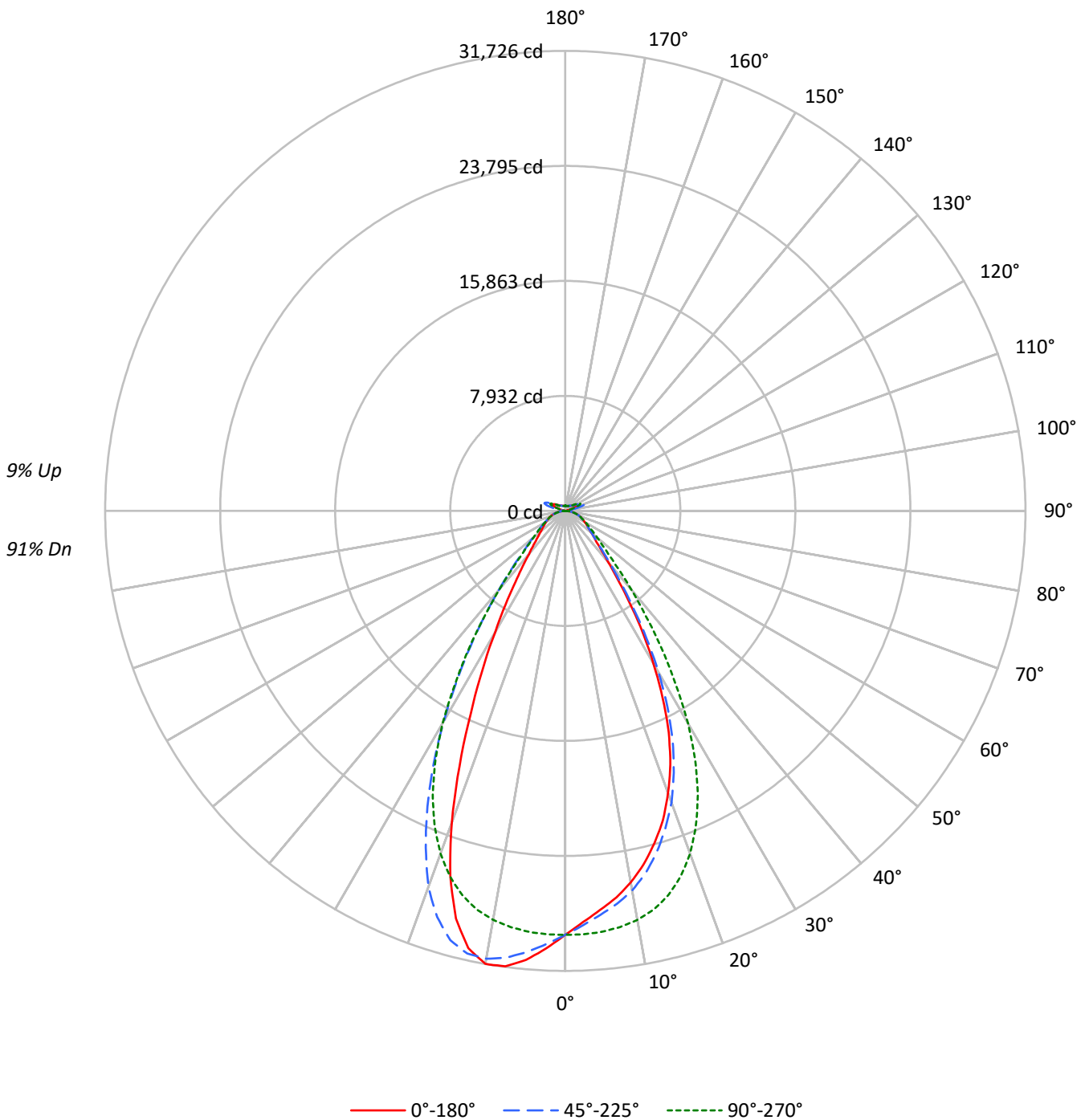
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36029.3 lumens
Efficiency: N/A
Efficacy: 163.9 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): 219.8
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: P1433552
CATALOG NUMBER: EHBR1-36-UNV-ASM-L935-UPL36

Luminous Intensity Polar Plot





TEST NUMBER: P1433552

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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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	91
1	110	106	103	100	106	103	100	98	97	95	93	92	90	89	87	86	84	84	84	84	82
2	103	97	92	87	99	94	89	86	89	86	82	85	82	79	81	78	76	76	76	76	74
3	96	88	82	77	93	86	81	76	82	78	74	78	75	71	75	72	69	69	69	69	67
4	90	81	75	70	88	79	73	69	76	71	67	73	68	65	70	66	63	63	63	63	61
5	85	75	68	63	82	73	67	62	70	65	61	68	63	60	65	61	58	58	58	58	56
6	80	70	63	58	78	68	62	57	66	60	56	63	58	55	61	57	54	54	54	54	52
7	75	65	58	53	73	64	57	53	61	56	52	59	54	51	57	53	50	50	50	50	48
8	71	60	54	49	69	59	53	49	58	52	48	56	51	47	54	50	46	46	46	46	45
9	67	57	50	46	66	56	50	45	54	48	45	52	47	44	51	47	43	43	43	43	42
10	64	53	47	43	62	52	46	42	51	45	42	50	45	41	48	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	137303	137303	137303	137303	137303
5°	129385	130898	136468	143012	145585
10°	122452	125046	134790	147604	149323
15°	113113	116134	130810	146090	138768
20°	100752	104145	122340	134286	111273
25°	84435	87630	108281	112635	77096
30°	63174	66836	87920	87042	50157
35°	42057	44596	63059	62041	32482
40°	26523	28345	40770	41032	22389
45°	18898	19684	25868	26980	17343
50°	15741	15866	19210	19710	14737
55°	13895	13928	15684	16098	13425
60°	12866	12755	13581	13868	12788
65°	12280	12170	12380	12621	12333
70°	11928	11722	11734	11959	12084
75°	11340	10996	10973	11364	11690
80°	10318	9598	9639	10318	11037
85°	7512	6235	6235	7131	7879

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 36369 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2780.1	7.7
10°-20°	7563.3	21.0
20°-30°	8870.2	24.6
30°-40°	6168.7	17.1
40°-50°	3065.6	8.5
50°-60°	1833.5	5.1
60°-70°	1290.5	3.6
70°-80°	831.3	2.3
80°-90°	269.9	0.7
90°-100°	89.4	0.2
100°-110°	583.5	1.6
110°-120°	1078.0	3.0
120°-130°	640.7	1.8
130°-140°	387.4	1.1
140°-150°	268.1	0.7
150°-160°	175.0	0.5
160°-170°	100.5	0.3
170°-180°	33.4	0.1
0°-30°	19213.6	53.3
0°-40°	25382.3	70.4
0°-60°	30281.4	84.0
0°-90°	32673.1	90.7
90°-120°	1750.9	4.9
90°-150°	3047.2	8.5
90°-180°	3356.0	9.3
0°-180°	36029.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29238	29238	29238	29238	29238	
5°	27626	27949	29138	30535	31085	2591
15°	23730	24364	27443	30649	29113	6618
25°	16862	17500	21624	22493	15396	7608
35°	7719	8185	11574	11387	5962	4917
45°	3058	3185	4185	4365	2806	2472
55°	1878	1882	2120	2176	1814	1704
65°	1282	1270	1292	1317	1287	1273
75°	799	775	773	800	824	843
85°	258	214	214	245	271	266
90°	25	67	25	72	28	24
95°	41	151	47	130	45	40
105°	203	1018	268	1087	136	272
115°	932	1204	1147	1333	980	858
125°	673	646	734	715	769	613
135°	492	495	464	518	536	385
145°	408	427	420	430	439	259
155°	363	374	374	374	390	169
165°	345	354	352	351	363	98
175°	345	350	351	349	357	33
180°	350	350	350	350	350	



TEST NUMBER: P1433552
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8
2.5°	28369.9	28388.5	28586.9	28845.1	29220.7	29598.5	29904.4	30106.2	30205.9
5°	27625.8	27728.9	27948.8	28423.1	29138.0	29894.6	30535.4	30954.9	31084.8
7.5°	26901.1	26960.9	27328.7	27927.9	28940.0	30118.8	31071.1	31560.7	31680.2
10°	26016.7	26152.2	26567.7	27274.5	28637.9	30260.2	31360.6	31711.4	31725.7
12.5°	24976.2	25155.5	25584.7	26476.2	28156.0	30209.8	31263.5	31148.4	30886.8
15°	23730.5	23887.9	24364.3	25398.4	27443.3	29911.0	30648.9	29711.9	29112.7
17.5°	22385.1	22527.6	22941.6	24080.3	26438.9	29351.8	29366.0	27512.4	26381.9
20°	20707.5	20819.3	21404.9	22522.2	25144.5	28454.9	27599.6	24209.2	22869.8
22.5°	18922.4	19027.0	19547.4	20710.2	23521.6	27245.4	25139.5	20886.2	19058.9
25°	16861.5	16918.5	17499.7	18551.2	21623.6	25763.4	22493.1	17265.6	15396.0
27.5°	14543.0	14639.9	15248.0	16322.0	19391.1	23885.1	19675.2	14108.7	12383.9
30°	12151.4	12312.1	12855.9	13817.6	16911.4	21477.2	16742.5	11235.9	9647.6
32.5°	9919.5	10035.2	10422.8	11427.7	14135.0	19117.0	13926.1	9002.8	7657.4
35°	7718.9	7834.5	8184.9	9171.7	11573.6	16164.1	11386.7	7074.1	5961.7
37.5°	5900.3	6104.8	6329.5	7130.6	9082.9	13374.1	9076.9	5696.4	4835.5
40°	4597.1	4630.0	4912.9	5425.5	7066.4	10457.3	7111.9	4547.2	3880.5
42.5°	3679.9	3769.2	3891.0	4274.7	5354.2	7996.3	5590.0	3732.0	3296.1
45°	3057.6	3092.7	3184.8	3442.5	4185.3	5884.3	4365.2	3148.6	2806.0
47.5°	2674.9	2659.5	2718.8	2911.8	3408.5	4547.8	3537.9	2700.7	2460.6
50°	2345.9	2336.6	2364.6	2493.4	2863.0	3489.6	2937.5	2357.5	2196.3
52.5°	2090.5	2098.7	2101.4	2181.5	2459.4	2846.0	2501.7	2100.9	1992.4
55°	1877.7	1888.2	1882.2	1941.4	2119.5	2392.5	2175.5	1889.2	1814.2
57.5°	1711.6	1704.0	1695.7	1727.6	1861.3	2029.6	1889.2	1708.9	1659.0
60°	1546.7	1539.5	1533.4	1554.3	1632.7	1757.7	1667.2	1551.5	1537.3
62.5°	1405.2	1400.8	1400.3	1396.4	1456.7	1535.7	1474.2	1410.1	1397.5
65°	1281.8	1276.8	1270.3	1264.2	1292.2	1365.7	1317.4	1282.9	1287.3
67.5°	1158.5	1158.5	1147.0	1137.6	1165.0	1203.4	1182.6	1162.8	1167.8
70°	1046.6	1047.2	1028.5	1021.4	1029.6	1070.7	1049.3	1052.1	1060.3
72.5°	926.5	913.4	899.7	899.2	900.3	932.1	924.9	931.4	940.2
75°	798.8	783.4	774.6	764.9	773.0	797.1	800.5	809.8	823.5
77.5°	675.5	651.8	644.8	639.8	634.3	661.7	672.1	684.7	705.0
80°	542.8	517.0	504.9	497.8	507.1	519.8	542.8	552.0	580.6
82.5°	401.3	382.1	367.3	366.8	371.1	382.7	402.4	420.0	436.4
85°	258.2	227.5	214.3	219.3	214.3	231.9	245.1	265.9	270.8
87.5°	93.2	73.0	69.6	76.8	75.1	80.6	92.1	100.3	100.9
90°	24.7	39.5	67.2	43.1	24.7	41.9	72.1	40.3	28.5
92.5°	35.8	59.9	108.0	56.2	32.1	56.7	101.8	53.3	37.7
95°	41.3	69.2	150.7	74.7	47.4	69.7	129.5	58.9	45.1
97.5°	53.0	76.6	172.9	91.4	73.4	86.4	146.2	62.6	54.4
100°	69.7	89.5	269.4	112.3	97.5	97.5	266.7	71.9	61.8
102.5°	117.9	189.6	571.5	210.5	147.6	190.7	617.7	142.8	74.8
105°	203.1	399.1	1018.3	440.5	268.0	435.4	1086.7	367.2	136.5
107.5°	351.5	714.3	1343.3	779.7	507.2	811.7	1399.9	723.1	316.3
110°	655.5	947.8	1408.2	1070.7	811.2	1134.3	1527.9	990.1	638.9



TEST NUMBER: P1433552

CATALOG NUMBER: EHBR1-36-UNV-ASM-L935-UPL36

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	885.4	1018.3	1348.8	1181.9	1055.9	1264.1	1492.6	1097.6	883.6
115°	931.7	979.4	1204.2	1154.1	1147.3	1245.6	1333.2	1093.8	980.0
117.5°	900.2	894.1	1022.5	1037.9	1108.4	1139.9	1151.5	1027.1	985.5
120°	833.5	795.8	853.9	906.3	1000.9	987.9	970.4	928.9	930.0
122.5°	750.0	705.6	732.0	771.5	866.1	838.3	820.2	829.3	853.9
125°	672.7	627.6	645.5	655.3	734.4	706.7	715.1	744.0	769.2
127.5°	604.2	573.9	584.3	573.7	623.7	610.8	639.1	671.7	693.2
130°	557.8	531.8	545.9	520.5	544.6	547.7	585.4	613.0	626.5
132.5°	519.4	502.7	519.1	488.1	495.0	509.4	545.2	569.0	577.1
135°	491.6	477.3	495.0	466.5	464.1	485.2	517.9	533.2	536.3
137.5°	468.0	455.6	473.9	452.2	446.1	467.2	491.9	504.1	501.0
140°	446.9	436.3	455.9	439.2	435.5	456.7	467.8	481.9	479.4
142.5°	423.9	416.5	439.8	428.8	425.1	444.3	449.8	460.2	457.1
145°	408.4	402.8	427.4	421.4	420.0	434.3	430.0	443.6	439.1
147.5°	394.6	390.9	413.1	410.7	410.7	421.4	415.7	427.4	423.0
150°	382.7	379.0	400.7	398.3	400.1	407.6	399.6	413.1	412.4
152.5°	370.9	366.6	386.5	384.0	385.9	393.3	385.9	401.2	400.0
155°	362.6	358.4	374.5	373.4	374.0	377.7	374.0	389.4	389.9
157.5°	356.8	353.9	366.3	365.8	365.8	368.2	366.3	379.8	380.4
160°	352.4	350.0	360.5	360.0	358.7	362.4	361.1	372.8	373.3
162.5°	347.9	345.5	357.9	356.1	356.1	356.1	355.4	367.0	368.1
165°	345.3	344.8	353.5	353.5	352.2	354.0	351.4	360.0	362.9
167.5°	345.3	343.4	352.7	352.7	351.4	349.6	350.7	357.9	360.9
170°	344.5	344.0	351.4	350.1	348.2	348.8	348.1	355.3	358.3
172.5°	345.7	345.1	353.1	351.3	349.9	349.9	347.8	353.2	358.0
175°	344.9	344.4	350.5	350.5	351.0	349.8	348.9	352.5	357.3
177.5°	347.3	346.8	350.5	350.5	349.2	350.3	351.4	354.8	361.5
180°	350.3	350.3	350.3	350.3	350.3	350.3	350.3	350.3	350.3



TEST NUMBER: P1433552
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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	17.92	17.38	18.42	18.97	17.62	18.69	18.14	19.19	19.73
	3H	18.66	19.62	19.21	20.13	20.72	19.17	20.13	19.72	20.64	21.23
	4H	19.40	20.29	19.96	20.82	21.43	19.82	20.71	20.38	21.24	21.85
	6H	19.97	20.79	20.54	21.33	21.95	20.31	21.13	20.89	21.68	22.30
	8H	20.15	20.92	20.74	21.49	22.11	20.47	21.24	21.06	21.81	22.43
	12H	20.25	20.99	20.84	21.54	22.19	20.55	21.29	21.14	21.84	22.49
4H	2H	17.36	18.25	17.93	18.79	19.39	17.99	18.88	18.56	19.41	20.02
	3H	19.40	20.14	19.97	20.71	21.34	19.80	20.53	20.37	21.11	21.73
	4H	20.26	20.93	20.86	21.51	22.17	20.58	21.25	21.18	21.83	22.49
	6H	20.96	21.53	21.57	22.14	22.82	21.22	21.79	21.83	22.40	23.08
	8H	21.18	21.72	21.80	22.32	23.01	21.42	21.95	22.04	22.56	23.24
	12H	21.32	21.79	21.95	22.43	23.11	21.54	22.01	22.17	22.65	23.33
8H	4H	20.52	21.05	21.14	21.66	22.35	20.83	21.36	21.45	21.97	22.65
	6H	21.34	21.77	21.99	22.43	23.12	21.59	22.02	22.24	22.68	23.37
	8H	21.64	22.03	22.31	22.69	23.39	21.87	22.26	22.54	22.92	23.62
	12H	21.84	22.18	22.50	22.83	23.60	22.05	22.39	22.72	23.04	23.81
12H	4H	20.53	21.00	21.17	21.64	22.32	20.83	21.30	21.47	21.94	22.63
	6H	21.38	21.76	22.05	22.43	23.13	21.63	22.02	22.30	22.68	23.39
	8H	21.72	22.06	22.39	22.71	23.48	21.96	22.30	22.63	22.95	23.72

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-6

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L935-N

Data in this report applies to families of products including EHBR-60-L935-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-6
 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-L935-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 3406
 CIE u': 0.2394
 CIE v': 0.5094
 Duv: -0.0028
 CIE x: 0.4076
 CIE y: 0.3856
 CIE z: 0.2068
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 582
 Purity: 38.0517
 Rf: 91.3
 Rg: 100

CRI (Ra): 94.6
 R1: 96.6
 R2: 98.4
 R3: 98.1
 R4: 95.8
 R5: 96.2
 R6: 95.4
 R7: 91.8
 R8: 84.4
 R9: 63.8
 R10: 94.7
 R11: 96.6
 R12: 80.9
 R13: 97.4
 R14: 98.3
 R15: 93.1



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

REPORT NUMBER: SP1-2506-472-6

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: SP1-2506-472-6

CIE 1931 Chromaticity Diagram



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



CCT = 3406K
 CIE x = 0.4076
 CIE y = 0.3856
 Duv = -0.0028

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-6

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.62

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



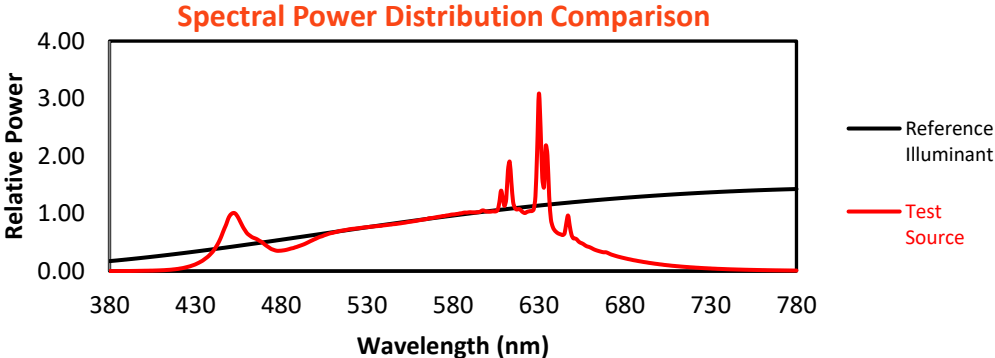
Melanopic Lumens: NR

M/P: 3.3

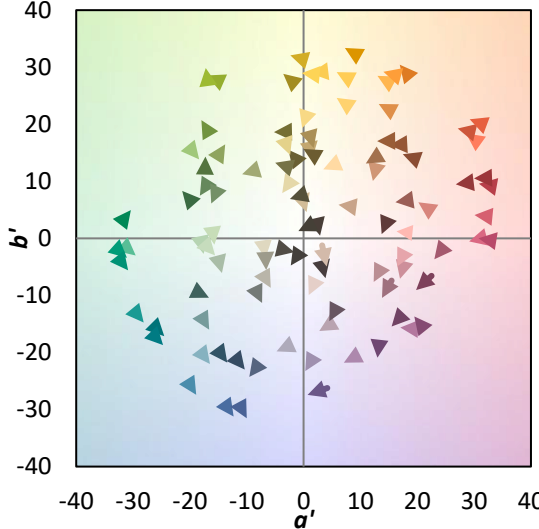
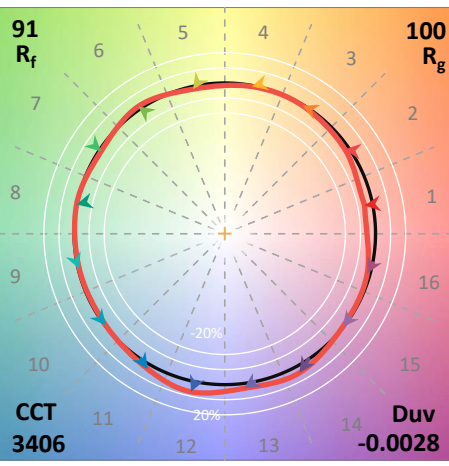
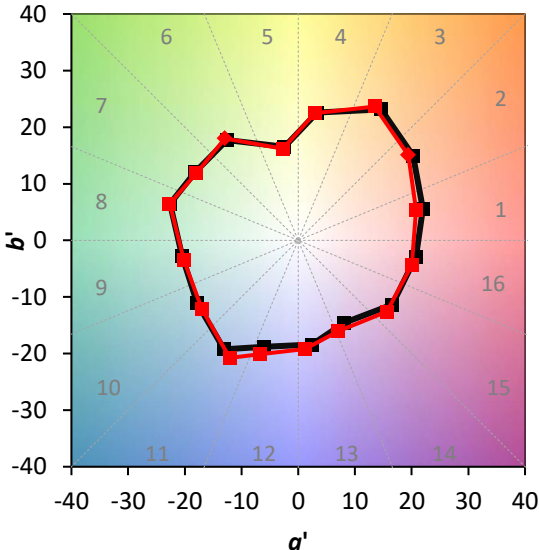
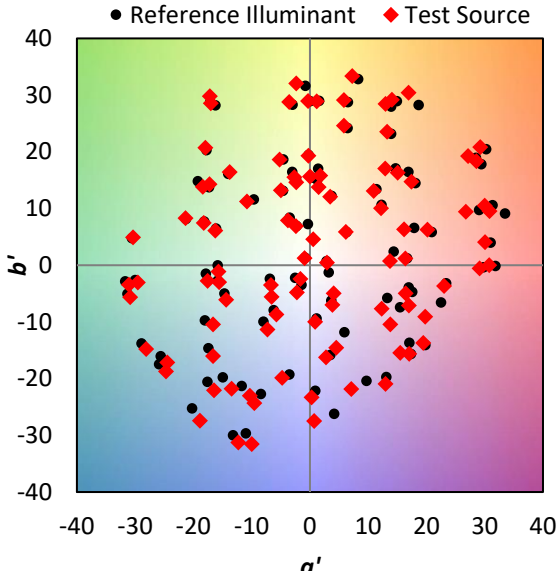
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

Summary

$R_f = 91.3$
 $R_g = 100$
 $CIE R_a = 94.6$
 $R_9 = 63.8$



Color Vector Graphics



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

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
CES11 = 58	CES36 = 81	CES61 = 93	CES86 = 79
CES12 = 64	CES37 = 96	CES62 = 86	CES87 = 92
CES13 = 44	CES38 = 87	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 84
CES15 = 72	CES40 = 97	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 75
CES17 = 49	CES42 = 94	CES67 = 88	CES92 = 76
CES18 = 56	CES43 = 93	CES68 = 89	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 90	CES94 = 74
CES20 = 67	CES45 = 97	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 91	CES72 = 94	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 90	CES99 = 92
CES25 = 71	CES50 = 98	CES75 = 85	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)