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:

Luminaire Tested: EHBR1-60-UNV-TASM-L840-UPL40

Issue Date: 3/20/2026

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	
	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-TASM-L840-UPL40
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	63273.1 lumens
Efficiency:	N/A
Efficacy:	175.3 lumens/watt
Spacing Criteria (0/90/45):	0.99 / 0.84 / 0.9
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

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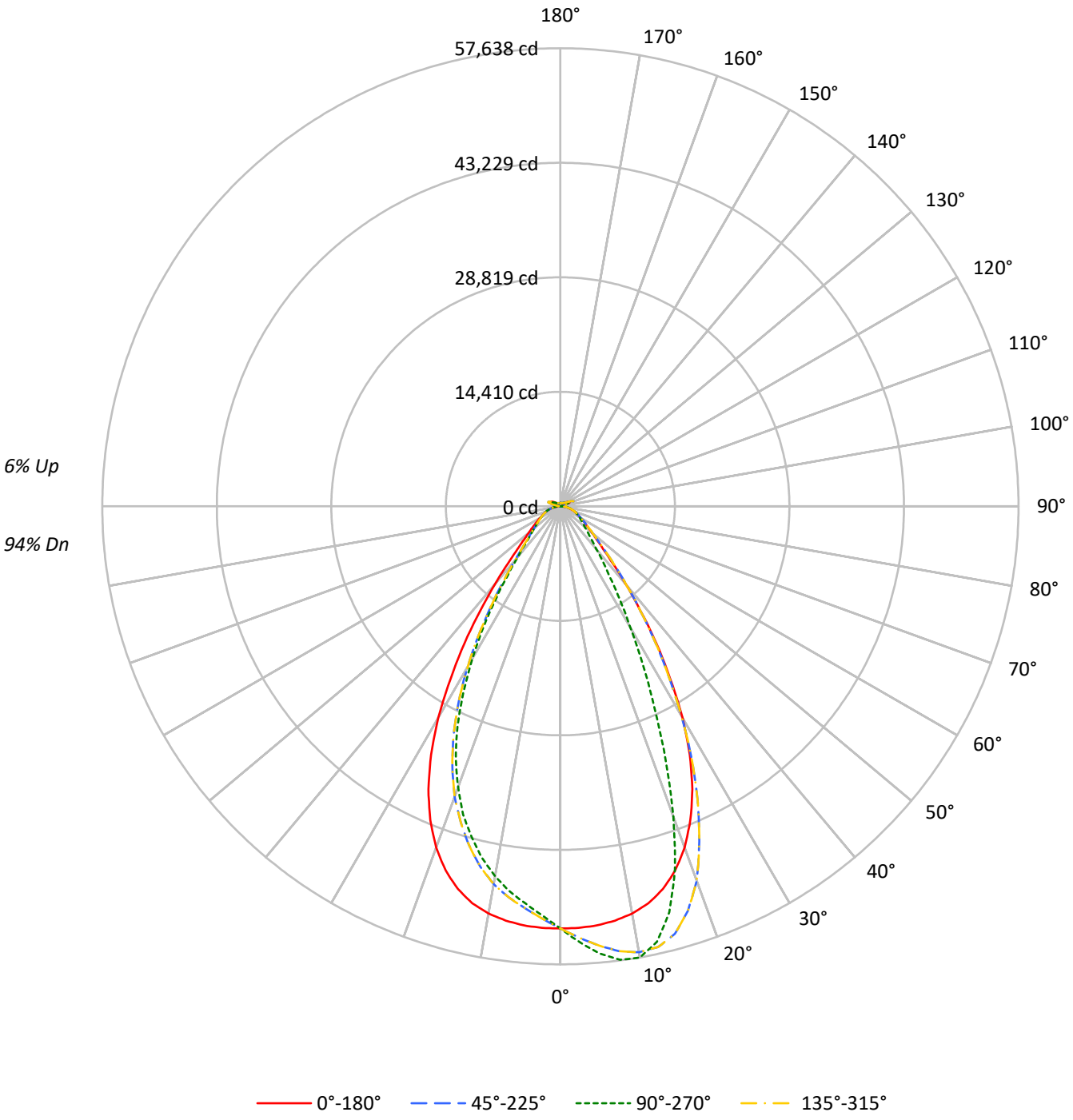
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	0
RCR																		
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	110	107	104	101	107	104	101	99	99	97	95	94	92	91	90	88	87	85
2	103	97	92	88	100	95	91	87	91	87	84	87	84	81	83	81	79	76
3	97	89	83	78	94	87	82	77	84	79	75	80	77	73	77	74	71	69
4	91	82	76	70	89	80	74	70	77	72	68	75	70	67	72	68	65	63
5	86	76	69	64	83	74	68	63	72	66	62	69	65	61	67	63	60	58
6	81	70	64	59	79	69	63	58	67	61	57	65	60	56	63	59	55	54
7	76	66	59	54	74	65	58	54	63	57	53	61	56	52	59	55	51	50
8	72	61	55	50	70	60	54	50	59	53	49	57	52	48	56	51	48	46
9	68	57	51	46	67	57	50	46	55	50	46	54	49	45	53	48	45	43
10	65	54	48	43	63	53	47	43	52	47	43	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	249447	249447	249447	249447
5°	247929	264494	247929	235063
10°	244881	271284	244881	222467
15°	237651	252108	237651	205499
20°	222263	202156	222263	183042
25°	196720	140065	196720	153397
30°	159730	91123	159730	114772
35°	114563	59013	114563	76406
40°	74069	40675	74069	48186
45°	46996	31507	46996	34333
50°	34900	26773	34900	28598
55°	28494	24389	28494	25244
60°	24674	23232	24674	23373
65°	22492	22406	22492	22310
70°	21319	21954	21319	21670
75°	19936	21238	19936	20601
80°	17513	20051	17513	18745
85°	11333	14315	11333	13649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 66074 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5050.7	8.0
10°-20°	13740.8	21.7
20°-30°	16115.1	25.5
30°-40°	11207.0	17.7
40°-50°	5569.4	8.8
50°-60°	3331.1	5.3
60°-70°	2344.5	3.7
70°-80°	1510.3	2.4
80°-90°	486.6	0.8
90°-100°	104.9	0.2
100°-110°	679.5	1.1
110°-120°	1254.3	2.0
120°-130°	746.3	1.2
130°-140°	452.5	0.7
140°-150°	314.1	0.5
150°-160°	206.2	0.3
160°-170°	119.6	0.2
170°-180°	40.0	0.1
0°-30°	34906.6	55.2
0°-40°	46113.6	72.9
0°-60°	55014.1	86.9
0°-90°	59355.5	93.8
90°-120°	2038.7	3.2
90°-150°	3551.7	5.6
90°-180°	3918.0	6.2
0°-180°	63273.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	53118	53118	53118	53118	53118	
5°	52937	56474	52937	50190	52937	5024
15°	49858	52891	49858	43113	49858	13934
25°	39285	27971	39285	30633	39285	17785
35°	21026	10831	21026	14023	21026	13126
45°	7604	5098	7604	5555	7604	6222
55°	3851	3296	3851	3411	3851	3521
65°	2348	2339	2348	2329	2348	2358
75°	1404	1496	1404	1451	1404	1474
85°	390	492	390	469	390	433
90°	29	36	29	29	29	32
95°	56	55	56	48	56	59
105°	312	162	312	237	312	421
115°	1335	1142	1335	1084	1335	1216
125°	855	898	855	783	855	787
135°	542	627	542	573	542	430
145°	492	515	492	479	492	309
155°	440	460	440	428	440	206
165°	419	434	419	412	419	119
175°	421	431	421	413	421	40
180°	420	420	420	420	420	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	53118.0	53118.0	53118.0	53118.0	*53118.0*	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0
2.5°	53087.1	53773.4	54329.2	54695.7	*54877.0*	54695.7	54329.2	53773.4	53087.1	52404.8	51935.7
5°	52936.7	54311.2	55475.6	56237.6	*56473.7*	56237.6	55475.6	54311.2	52936.7	51637.9	50776.3
7.5°	52577.1	54718.6	56448.8	57338.2	*57555.4*	57338.2	56448.8	54718.6	52577.1	50738.4	49649.8
10°	*52028.3*	*54975.6*	*56974.7*	*57612.1*	*57638.0*	*57612.1*	*56974.7*	*54975.6*	*52028.3*	*49551.2*	*48267.3*
12.5°	51152.8	54884.0	56798.4	56589.2	*56114.1*	56589.2	56798.4	54884.0	51152.8	48100.9	46481.3
15°	49857.9	54341.1	55681.8	53979.6	*52890.9*	53979.6	55681.8	54341.1	49857.9	46142.7	44264.2
17.5°	48033.2	53325.2	53351.1	49983.4	*47929.6*	49983.4	53351.1	53325.2	48033.2	43748.2	41679.4
20°	45681.5	51695.6	50141.8	43982.3	*41548.9*	43982.3	50141.8	51695.6	45681.5	40917.5	38887.5
22.5°	42733.2	49498.4	45672.6	37945.3	*34625.4*	37945.3	45672.6	49498.4	42733.2	37625.5	35512.9
25°	39284.9	46806.1	40864.7	31367.4	*27970.9*	31367.4	40864.7	46806.1	39284.9	33703.1	31792.7
27.5°	35229.0	43393.6	35745.0	25632.2	*22498.6*	25632.2	35745.0	43393.6	35229.0	29653.2	27702.0
30°	30723.9	39019.0	30417.2	20412.9	*17527.4*	20412.9	30417.2	39019.0	30723.9	25103.3	23356.2
32.5°	25680.0	34731.0	25300.5	16356.0	*13911.7*	16356.0	25300.5	34731.0	25680.0	20761.5	18935.8
35°	21026.5	29366.3	20686.8	12851.9	*10831.0*	12851.9	20686.8	29366.3	21026.5	16662.8	14869.9
37.5°	16501.4	24297.5	16490.5	10348.9	*8785.1*	10348.9	16490.5	24297.5	16501.4	12954.5	11499.3
40°	12838.0	18998.5	12920.7	8261.2	*7050.0*	8261.2	12920.7	18998.5	12838.0	9856.8	8925.5
42.5°	9727.4	14527.3	10155.7	6780.1	*5988.2*	6780.1	10155.7	14527.3	9727.4	7766.1	7068.9
45°	7603.8	10690.5	7930.5	5720.3	*5097.7*	5720.3	7930.5	10690.5	7603.8	6254.2	5786.0
47.5°	6192.4	8262.2	6427.5	4906.5	*4470.2*	4906.5	6427.5	8262.2	6192.4	5290.0	4939.4
50°	5201.3	6339.8	5336.8	4283.0	*3990.1*	4283.0	5336.8	6339.8	5201.3	4530.0	4295.9
52.5°	4468.2	5170.5	4544.9	3816.8	*3619.6*	3816.8	4544.9	5170.5	4468.2	3963.3	3817.8
55°	3850.7	4346.7	3952.3	3432.4	*3295.9*	3432.4	3952.3	4346.7	3850.7	3527.0	3419.4
57.5°	3381.6	3687.4	3432.4	3104.7	*3014.0*	3104.7	3432.4	3687.4	3381.6	3138.5	3080.8
60°	2966.2	3193.3	3029.0	2818.8	*2792.9*	2818.8	3029.0	3193.3	2966.2	2823.8	2785.9
62.5°	2646.5	2789.9	2678.4	2561.8	*2538.9*	2561.8	2678.4	2789.9	2646.5	2536.9	2543.9
65°	2347.7	2481.1	2393.5	2330.7	*2338.7*	2330.7	2393.5	2481.1	2347.7	2296.9	2307.8
67.5°	2116.6	2186.3	2148.5	2112.6	*2121.6*	2112.6	2148.5	2186.3	2116.6	2066.8	2083.7
70°	1870.6	1945.3	1906.4	1911.4	*1926.3*	1911.4	1906.4	1945.3	1870.6	1855.6	1868.6
72.5°	1635.5	1693.3	1680.3	1692.3	*1708.2*	1692.3	1680.3	1693.3	1635.5	1633.5	1634.5
75°	1404.4	1448.2	1454.2	1471.2	*1496.1*	1471.2	1454.2	1448.2	1404.4	1389.5	1407.4
77.5°	1152.4	1202.2	1221.1	1244.1	*1280.9*	1244.1	1221.1	1202.2	1152.4	1162.4	1171.3
80°	921.3	944.2	986.1	1003.0	*1054.8*	1003.0	986.1	944.2	921.3	904.4	917.4
82.5°	674.3	695.2	731.1	763.0	*792.9*	763.0	731.1	695.2	674.3	666.4	667.3
85°	389.5	421.3	445.2	483.1	*492.0*	483.1	445.2	421.3	389.5	398.4	389.5
87.5°	136.5	146.4	167.3	182.3	*183.3*	182.3	167.3	146.4	136.5	139.4	126.5
90°	29.0	49.4	84.9	49.1	*36.0*	49.1	84.9	49.4	29.0	50.6	78.6
92.5°	37.6	66.6	119.4	64.2	*46.8*	64.2	119.4	66.6	37.6	65.6	126.0
95°	55.9	81.7	151.7	70.6	*55.4*	70.6	151.7	81.7	55.9	87.2	175.5
97.5°	86.0	101.1	171.1	75.0	*66.2*	75.0	171.1	101.1	86.0	106.6	201.4
100°	114.1	114.1	311.1	85.7	*74.8*	85.7	311.1	114.1	114.1	131.3	313.5
102.5°	172.2	222.8	719.4	168.6	*89.9*	168.6	719.4	222.8	172.2	245.5	664.7
105°	312.3	507.2	1264.6	429.3	*162.0*	429.3	1264.6	507.2	312.3	512.7	1184.0
107.5°	590.3	944.7	1628.7	843.1	*371.0*	843.1	1628.7	944.7	590.3	907.0	1562.1
110°	943.7	1319.6	1777.4	1153.4	*746.0*	1153.4	1777.4	1319.6	943.7	1245.3	1637.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1228.1	1470.4	1736.5	1278.4	*1030.4*	1278.4	1736.5	1470.4	1228.1	1374.6	1568.6
115°	1334.7	1448.9	1551.2	1274.0	*1142.4*	1274.0	1551.2	1448.9	1334.7	1342.3	1400.5
117.5°	1289.4	1326.1	1340.0	1196.5	*1148.9*	1196.5	1340.0	1326.1	1289.4	1207.6	1189.3
120°	1164.5	1149.4	1129.8	1082.3	*1084.3*	1082.3	1129.8	1149.4	1164.5	1054.6	993.2
122.5°	1008.2	975.8	955.3	966.9	*995.9*	966.9	955.3	975.8	1008.2	898.3	852.0
125°	855.2	822.8	833.5	867.8	*897.8*	867.8	833.5	822.8	855.2	763.5	751.7
127.5°	726.9	711.8	745.1	783.7	*809.4*	783.7	745.1	711.8	726.9	668.7	680.6
130°	635.2	638.5	682.6	715.8	*731.9*	715.8	682.6	638.5	635.2	607.2	636.4
132.5°	578.0	594.3	636.2	665.1	*674.7*	665.1	636.2	594.3	578.0	570.4	606.0
135°	542.4	566.3	604.9	623.1	*627.3*	623.1	604.9	566.3	542.4	545.6	578.0
137.5°	521.9	545.7	574.7	589.7	*586.3*	589.7	574.7	545.7	521.9	529.3	554.2
140°	509.9	533.8	546.7	563.8	*561.5*	563.8	546.7	533.8	509.9	514.2	533.6
142.5°	498.0	519.7	526.2	538.9	*535.6*	538.9	526.2	519.7	498.0	502.3	515.2
145°	492.5	508.8	503.5	519.5	*515.0*	519.5	503.5	508.8	492.5	493.7	501.1
147.5°	481.8	493.7	487.2	501.1	*496.6*	501.1	487.2	493.7	481.8	481.8	484.8
150°	469.7	478.3	468.8	484.8	*484.7*	484.8	468.8	478.3	469.7	467.6	470.7
152.5°	453.5	462.1	453.5	471.7	*470.6*	471.7	453.5	462.1	453.5	451.3	454.5
155°	440.4	444.7	440.4	458.6	*459.6*	458.6	440.4	444.7	440.4	439.4	441.4
157.5°	431.6	434.8	432.6	448.7	*449.7*	448.7	432.6	434.8	431.6	431.6	432.6
160°	424.9	429.2	428.0	441.9	*442.9*	441.9	428.0	429.2	424.9	426.0	427.0
162.5°	422.5	422.5	422.4	436.3	*438.3*	436.3	422.4	422.5	422.5	422.5	424.7
165°	419.1	421.2	418.9	429.5	*433.7*	429.5	418.9	421.2	419.1	420.2	420.2
167.5°	418.9	416.8	418.8	428.2	*432.4*	428.2	418.8	416.8	418.9	420.1	420.1
170°	415.6	416.6	416.5	425.9	*430.0*	425.9	416.5	416.6	415.6	417.8	418.9
172.5°	418.6	418.6	417.3	424.5	*430.8*	424.5	417.3	418.6	418.6	419.8	421.9
175°	420.6	419.5	419.2	424.4	*430.7*	424.4	419.2	419.5	420.6	419.6	419.6
177.5°	418.5	420.5	422.4	427.5	*436.0*	427.5	422.4	420.5	418.5	419.6	419.6
180°	420.5	420.5	420.5	420.5	*420.5*	420.5	420.5	420.5	420.5	420.5	420.5

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0
2.5°	51575.1	51541.2	51575.1	51935.7	52404.8	53087.1
5°	50376.9	50189.6	50376.9	50776.3	51637.9	52936.7
7.5°	48981.4	48872.8	48981.4	49649.8	50738.4	52577.1
10°	*47512.3*	*47266.2*	*47512.3*	*48267.3*	*49551.2*	*52028.3*
12.5°	45701.4	45375.7	45701.4	46481.3	48100.9	51152.8
15°	43398.6	43112.7	43398.6	44264.2	46142.7	49857.9
17.5°	40927.4	40668.4	40927.4	41679.4	43748.2	48033.2
20°	37823.7	37620.5	37823.7	38887.5	40917.5	45681.5
22.5°	34567.7	34377.4	34567.7	35512.9	37625.5	42733.2
25°	30736.9	30633.3	30736.9	31792.7	33703.1	39284.9
27.5°	26597.3	26421.0	26597.3	27702.0	29653.2	35229.0
30°	22368.1	22076.3	22368.1	23356.2	25103.3	30723.9
32.5°	18231.6	18021.4	18231.6	18935.8	20761.5	25680.0
35°	14233.5	14023.3	14233.5	14869.9	16662.8	21026.5
37.5°	11090.9	10719.4	11090.9	11499.3	12954.5	16501.4
40°	8411.6	8351.8	8411.6	8925.5	9856.8	12838.0
42.5°	6847.8	6685.4	6847.8	7068.9	7766.1	9727.4
45°	5618.7	5554.9	5618.7	5786.0	6254.2	7603.8
47.5°	4831.8	4859.7	4831.8	4939.4	5290.0	6192.4
50°	4245.1	4262.1	4245.1	4295.9	4530.0	5201.3
52.5°	3812.9	3797.9	3812.9	3817.8	3963.3	4468.2
55°	3430.4	3411.4	3430.4	3419.4	3527.0	3850.7
57.5°	3095.7	3109.6	3095.7	3080.8	3138.5	3381.6
60°	2796.9	2809.8	2796.9	2785.9	2823.8	2966.2
62.5°	2544.9	2552.9	2544.9	2543.9	2536.9	2646.5
65°	2319.8	2328.7	2319.8	2307.8	2296.9	2347.7
67.5°	2104.6	2104.6	2104.6	2083.7	2066.8	2116.6
70°	1902.4	1901.4	1902.4	1868.6	1855.6	1870.6
72.5°	1659.4	1683.3	1659.4	1634.5	1633.5	1635.5
75°	1423.3	1451.2	1423.3	1407.4	1389.5	1404.4
77.5°	1184.3	1227.1	1184.3	1171.3	1162.4	1152.4
80°	939.3	986.1	939.3	917.4	904.4	921.3
82.5°	694.2	729.1	694.2	667.3	666.4	674.3
85°	413.4	469.1	413.4	389.5	398.4	389.5
87.5°	132.5	169.3	132.5	126.5	139.4	136.5
90°	46.3	29.0	46.3	78.6	50.6	29.0
92.5°	70.0	41.9	70.0	126.0	65.6	37.6
95°	80.7	48.4	80.7	175.5	87.2	55.9
97.5°	89.3	62.3	89.3	201.4	106.6	86.0
100°	104.4	81.7	104.4	313.5	131.3	114.1
102.5°	220.8	137.8	220.8	664.7	245.5	172.2
105°	464.3	236.9	464.3	1184.0	512.7	312.3
107.5°	830.6	409.3	830.6	1562.1	907.0	590.3
110°	1102.1	762.7	1102.1	1637.5	1245.3	943.7

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1184.0	1029.9	1184.0	1568.6	1374.6	1228.1
115°	1138.8	1083.7	1138.8	1400.5	1342.3	1334.7
117.5°	1039.6	1047.1	1039.6	1189.3	1207.6	1289.4
120°	925.4	969.5	925.4	993.2	1054.6	1164.5
122.5°	820.8	872.6	820.8	852.0	898.3	1008.2
125°	730.3	783.0	730.3	751.7	763.5	855.2
127.5°	667.8	703.3	667.8	680.6	668.7	726.9
130°	619.3	649.5	619.3	636.4	607.2	635.2
132.5°	585.8	605.2	585.8	606.0	570.4	578.0
135°	556.6	572.9	556.6	578.0	545.6	542.4
137.5°	531.8	545.9	531.8	554.2	529.3	521.9
140°	510.1	522.0	510.1	533.6	514.2	509.9
142.5°	487.4	496.0	487.4	515.2	502.3	498.0
145°	472.1	478.6	472.1	501.1	493.7	492.5
147.5°	459.0	463.3	459.0	484.8	481.8	481.8
150°	445.9	450.2	445.9	470.7	467.6	469.7
152.5°	431.8	437.1	431.8	454.5	451.3	453.5
155°	423.0	428.3	423.0	441.4	439.4	440.4
157.5°	418.5	422.7	418.5	432.6	431.6	431.6
160°	415.1	418.2	415.1	427.0	426.0	424.9
162.5°	410.6	413.8	410.6	424.7	422.5	422.5
165°	410.5	411.5	410.5	420.2	420.2	419.1
167.5°	409.3	411.5	409.3	420.1	420.1	418.9
170°	410.3	411.3	410.3	418.9	417.8	415.6
172.5°	412.3	413.3	412.3	421.9	419.8	418.6
175°	412.2	413.2	412.2	419.6	419.6	420.6
177.5°	415.3	416.3	415.3	419.6	419.6	418.5
180°	420.5	420.5	420.5	420.5	420.5	420.5

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: CATALOG
CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL40

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	19.85	20.97	20.33	21.41	21.88	19.17	20.28	19.65	20.73	21.20
	3H	21.40	22.39	21.89	22.85	23.37	21.02	22.01	21.51	22.47	22.99
	4H	22.04	22.96	22.55	23.44	23.97	21.80	22.73	22.31	23.20	23.74
	6H	22.52	23.37	23.04	23.86	24.41	22.44	23.29	22.97	23.79	24.33
	8H	22.67	23.47	23.21	23.98	24.54	22.67	23.47	23.20	23.98	24.54
	12H	22.74	23.51	23.28	24.01	24.59	22.79	23.56	23.33	24.06	24.64
4H	2H	20.27	21.19	20.78	21.67	22.20	19.75	20.67	20.26	21.15	21.68
	3H	22.07	22.83	22.59	23.35	23.91	21.80	22.57	22.33	23.09	23.64
	4H	22.84	23.53	23.38	24.06	24.65	22.71	23.40	23.26	23.93	24.52
	6H	23.46	24.05	24.02	24.61	25.22	23.48	24.07	24.05	24.63	25.25
	8H	23.65	24.20	24.22	24.76	25.38	23.75	24.31	24.33	24.86	25.48
	12H	23.76	24.24	24.35	24.83	25.45	23.92	24.41	24.51	25.00	25.62
8H	4H	23.09	23.64	23.66	24.20	24.82	22.99	23.54	23.57	24.10	24.72
	6H	23.83	24.28	24.44	24.89	25.51	23.90	24.34	24.50	24.95	25.57
	8H	24.10	24.50	24.73	25.12	25.76	24.25	24.65	24.87	25.27	25.90
	12H	24.27	24.62	24.89	25.22	25.93	24.50	24.85	25.12	25.45	26.16
12H	4H	23.10	23.59	23.69	24.18	24.80	23.00	23.49	23.59	24.08	24.70
	6H	23.87	24.27	24.50	24.89	25.53	23.94	24.34	24.56	24.96	25.60
	8H	24.19	24.54	24.81	25.14	25.85	24.35	24.70	24.96	25.30	26.01

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: SP1-2506-472-1

Test Date: 07/30/2025

Luminaire Tested: EHBR-60-L840-N

Data in this report applies to families of products including EHBR-60-L840-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

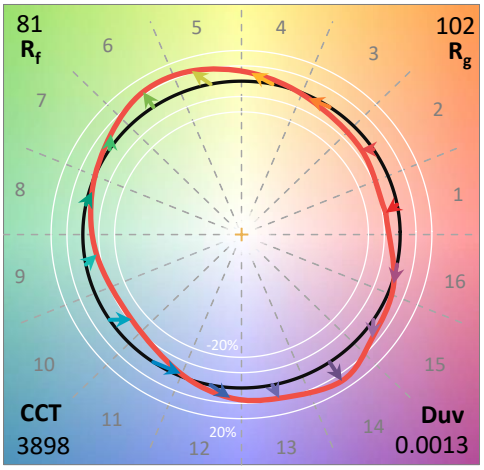
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-1
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-L840-N**
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	3898
CIE u':	0.2263
CIE v':	0.5052
Duv:	0.0013
CIE x:	0.3861
CIE y:	0.3831
CIE z:	0.2308
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	578
Purity:	30.85729
Rf:	80.7
Rg:	102.1

CRI (Ra):	82.1				
R1:	84.4	R9:	38.5		
R2:	83.5	R10:	58.9		
R3:	80.8	R11:	83.6		
R4:	83.9	R12:	54.2		
R5:	82.1	R13:	82.8		
R6:	77.3	R14:	88.2		
R7:	86.4	R15:	81.2		
R8:	78.3				



Test Conditions

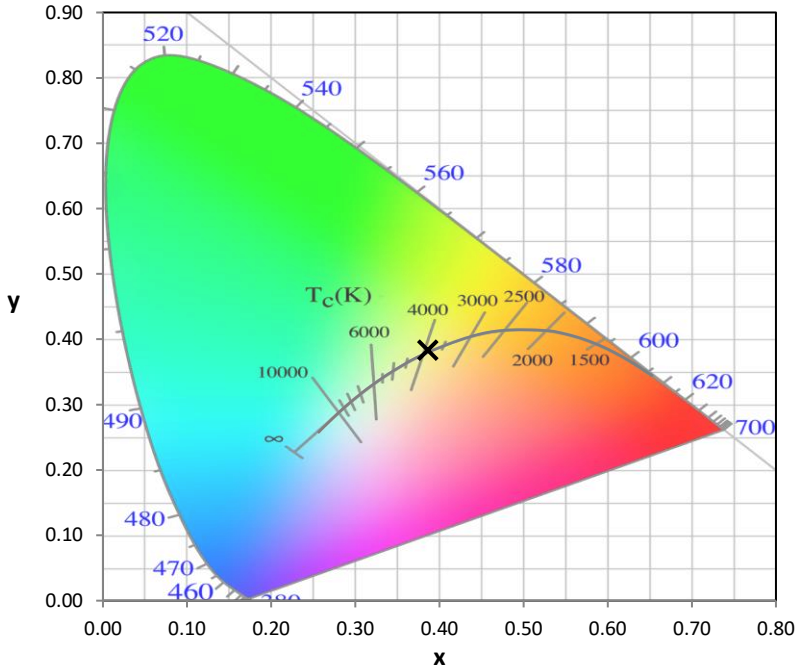
Stabilization Time:	42M
Operation Time:	1H 42M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-1

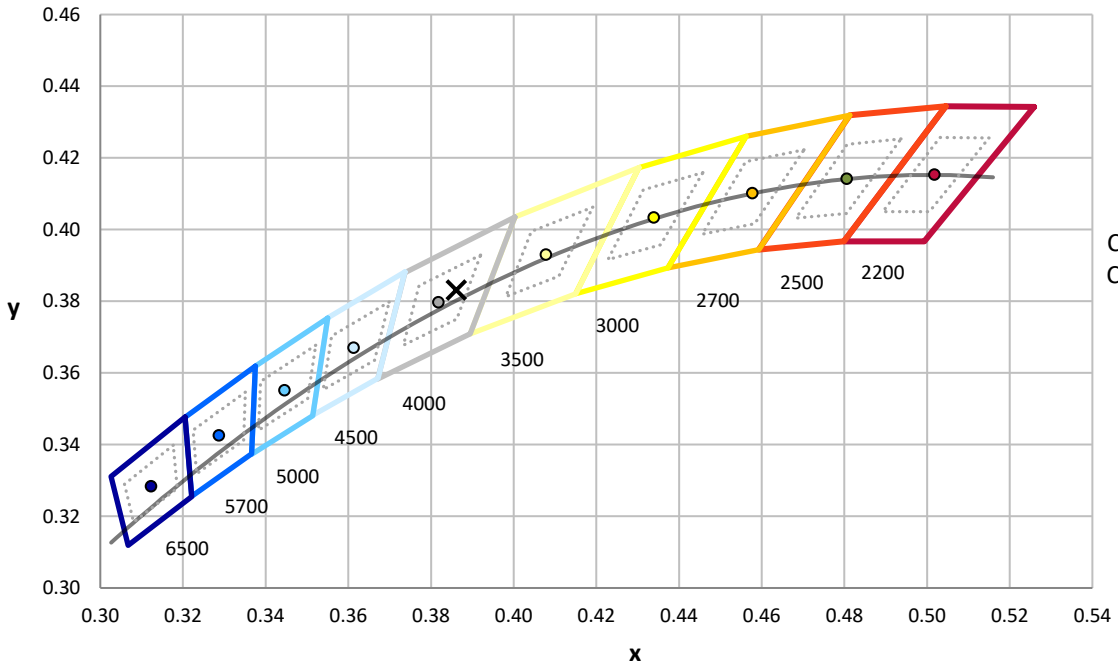
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-1

CIE 1931 Chromaticity Diagram



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

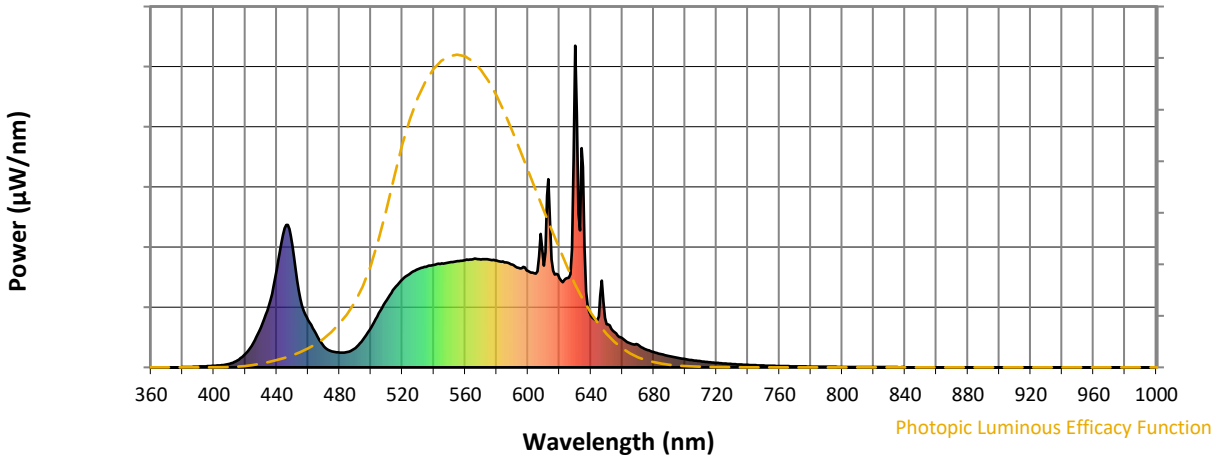


CCT = 3898K
CIE x = 0.3861
CIE y = 0.3831
Duv = 0.0013

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-1

Photopic Flux vs. Wavelength

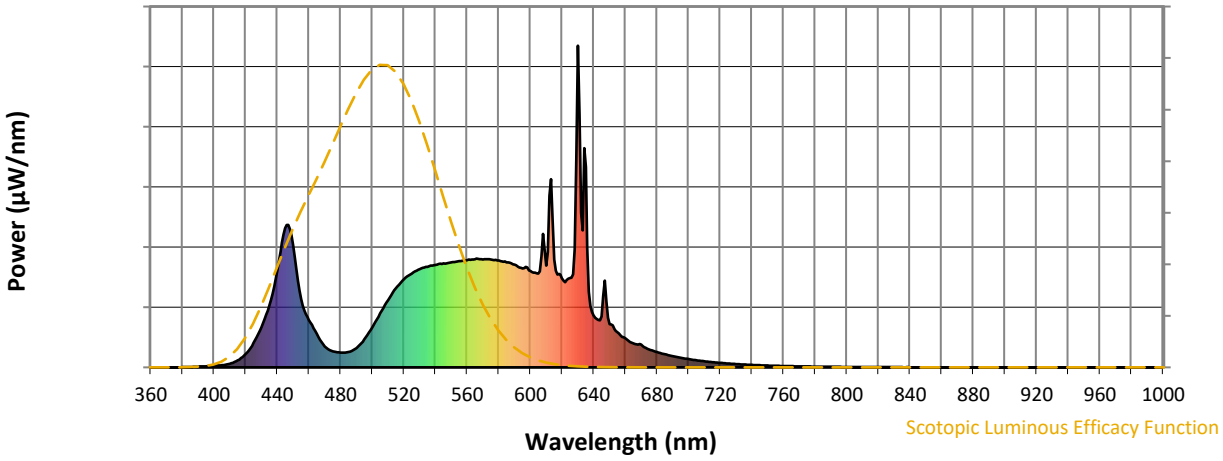


Photopic Lumens: NR

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-1

Scotopic Flux vs. Wavelength

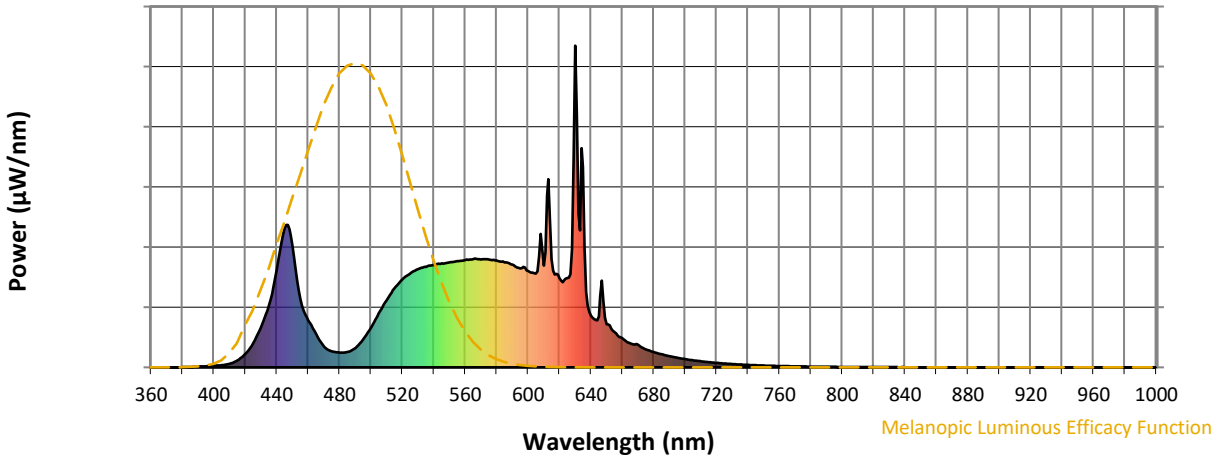


Scotopic Lumens: NR **S/P: 1.55**

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.99**

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

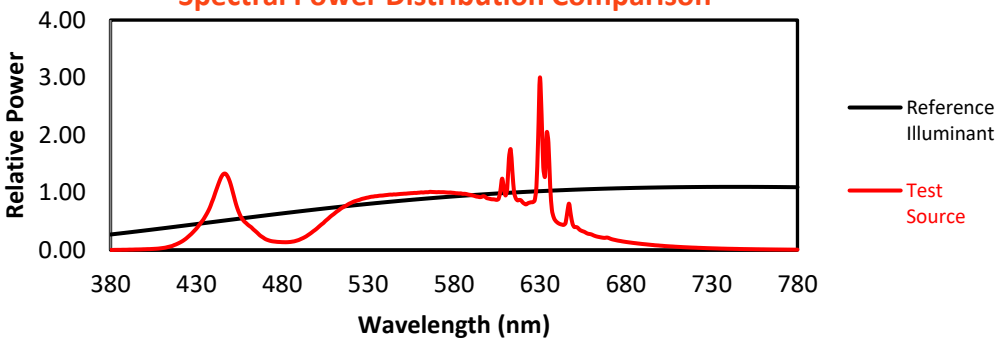
REPORT NUMBER: SP1-2506-472-1

TM-30-18

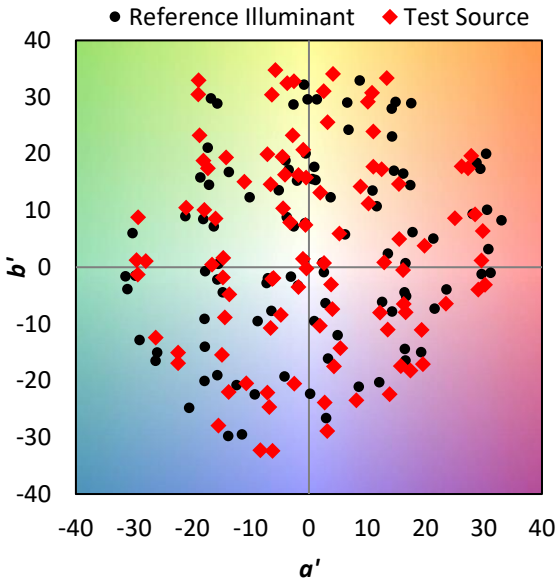
Summary

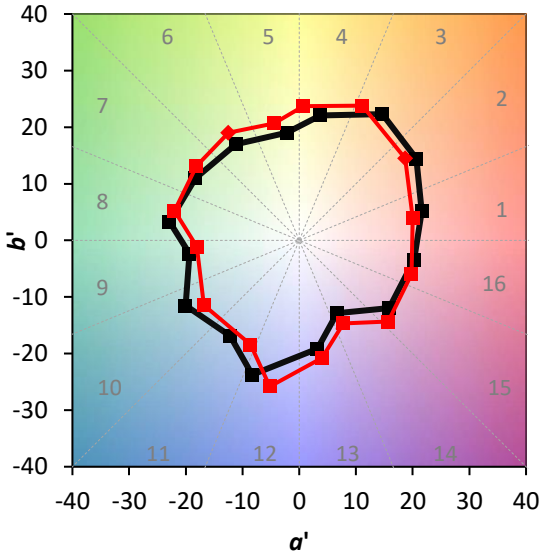
R_f = 80.7
R_g = 102.1
CIE R_a = 82.1
R_9 = 38.5

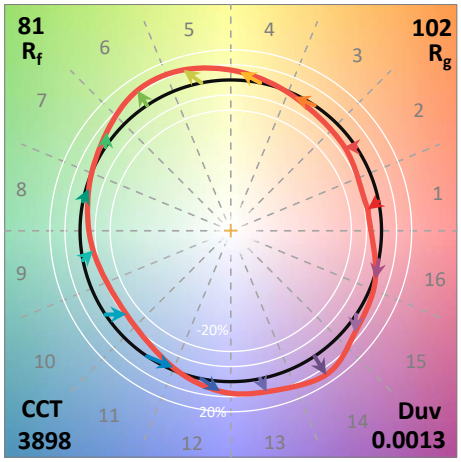
Spectral Power Distribution Comparison

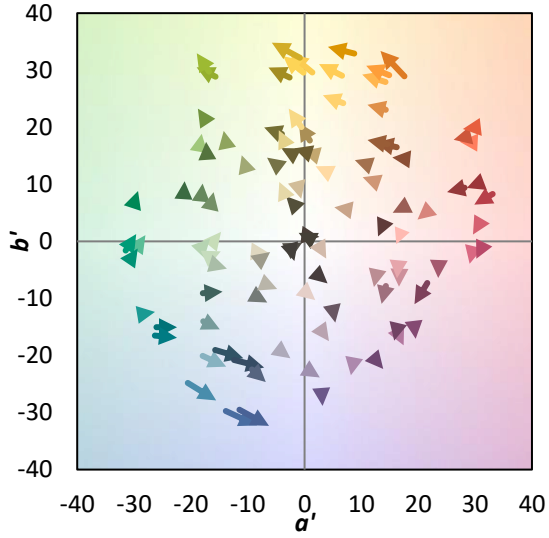


Color Vector Graphics







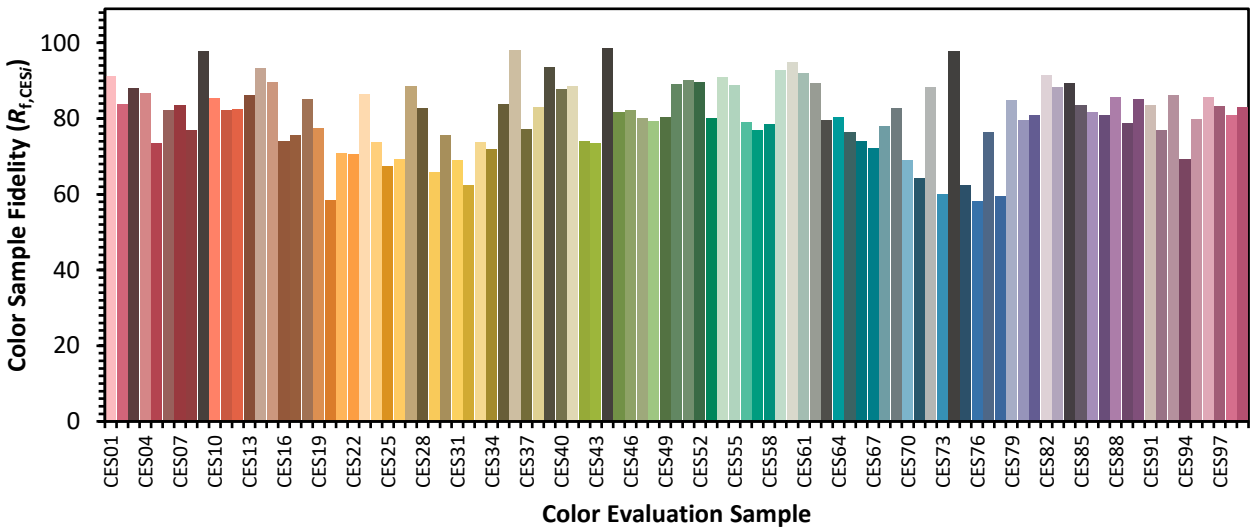


REPORT NUMBER: SP1-2506-472-1

TM-30-18

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

CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 58
CES02 = 61	CES27 = 89	CES52 = 90	CES77 = 76
CES03 = 31	CES28 = 83	CES53 = 80	CES78 = 60
CES04 = 69	CES29 = 66	CES54 = 91	CES79 = 85
CES05 = 48	CES30 = 76	CES55 = 89	CES80 = 79
CES06 = 50	CES31 = 69	CES56 = 79	CES81 = 81
CES07 = 41	CES32 = 62	CES57 = 77	CES82 = 91
CES08 = 40	CES33 = 74	CES58 = 79	CES83 = 88
CES09 = 29	CES34 = 72	CES59 = 93	CES84 = 89
CES10 = 74	CES35 = 84	CES60 = 95	CES85 = 84
CES11 = 57	CES36 = 98	CES61 = 92	CES86 = 82
CES12 = 63	CES37 = 77	CES62 = 89	CES87 = 81
CES13 = 43	CES38 = 83	CES63 = 80	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 80	CES89 = 79
CES15 = 71	CES40 = 88	CES65 = 77	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 74	CES91 = 83
CES17 = 49	CES42 = 74	CES67 = 72	CES92 = 77
CES18 = 56	CES43 = 73	CES68 = 78	CES93 = 86
CES19 = 71	CES44 = 98	CES69 = 83	CES94 = 69
CES20 = 65	CES45 = 82	CES70 = 69	CES95 = 80
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 86
CES22 = 78	CES47 = 80	CES72 = 88	CES97 = 83
CES23 = 91	CES48 = 79	CES73 = 60	CES98 = 81
CES24 = 90	CES49 = 80	CES74 = 98	CES99 = 83
CES25 = 71	CES50 = 89	CES75 = 62	



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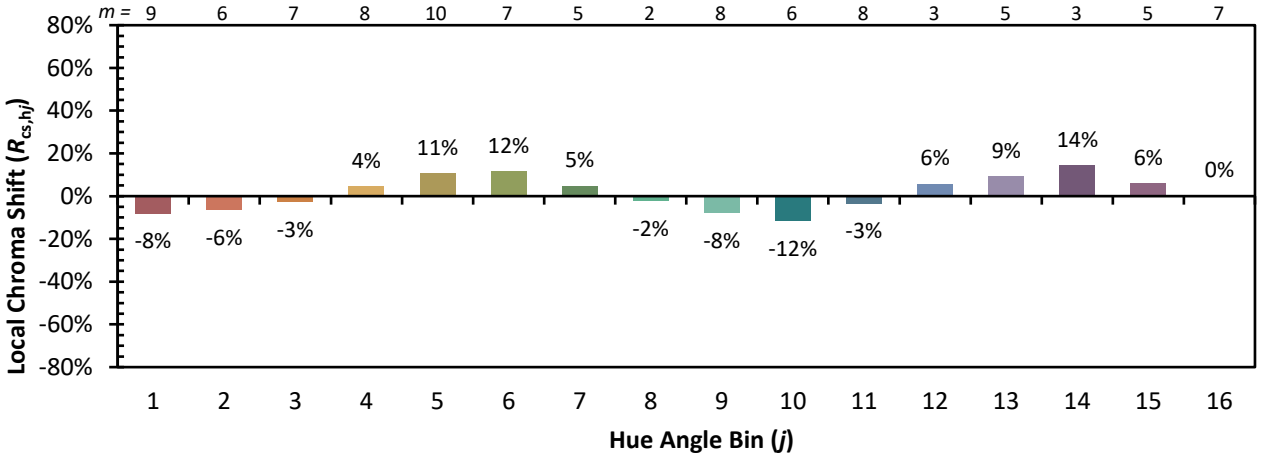
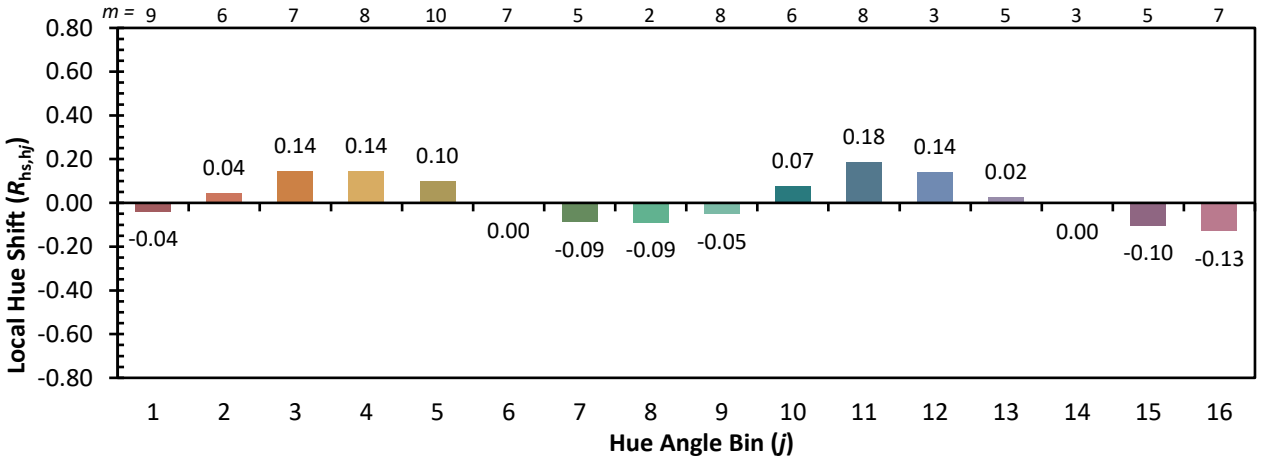
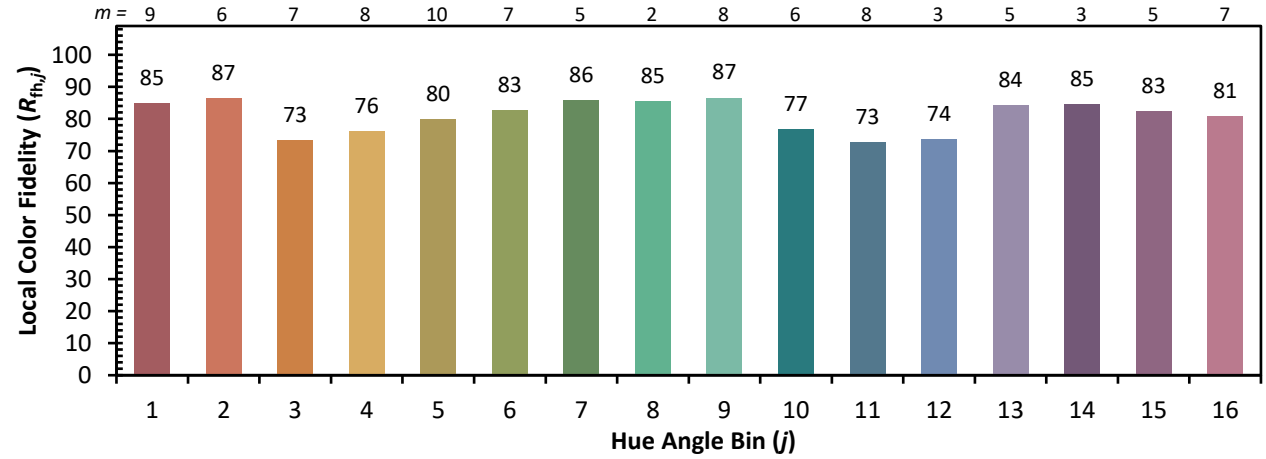
Color Rendition by Hue-Angle Bin







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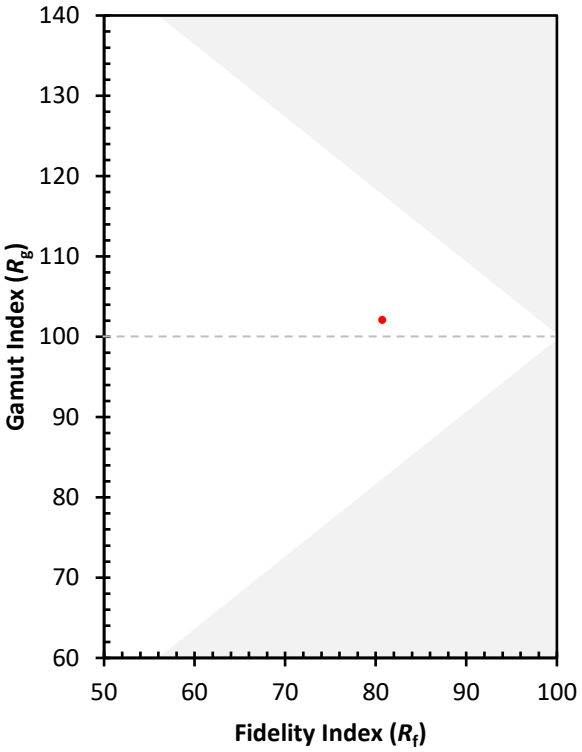
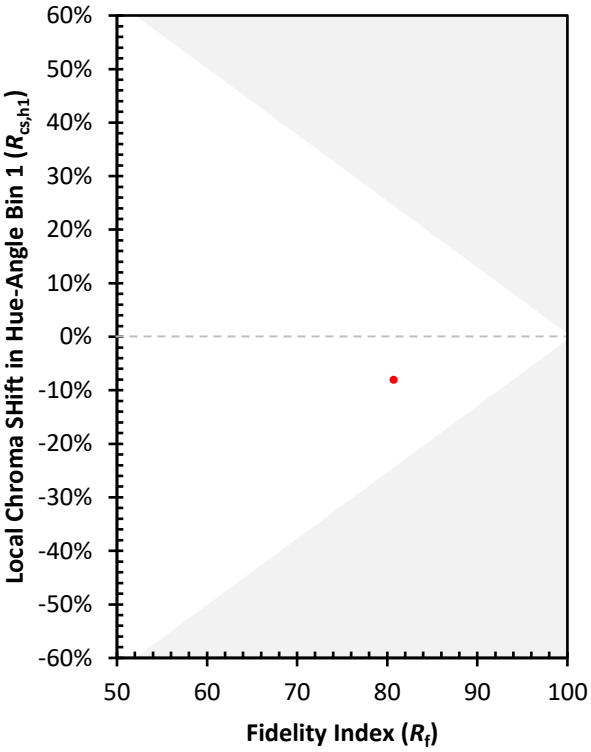
Measure Comparisons





(END OF REPORT)