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: EHBR1-36-UNV-TASM-L840-UPL12

Issue Date: 3/20/2026

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	
	REPORT IS A COMBINATION OF REPORTS P1431772 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-36-UNV-TASM-L840-UPL12
Description:	Elevate Round Highbay at, 36000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	37279.9 lumens
Efficiency:	N/A
Efficacy:	187.5 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):	198.8
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

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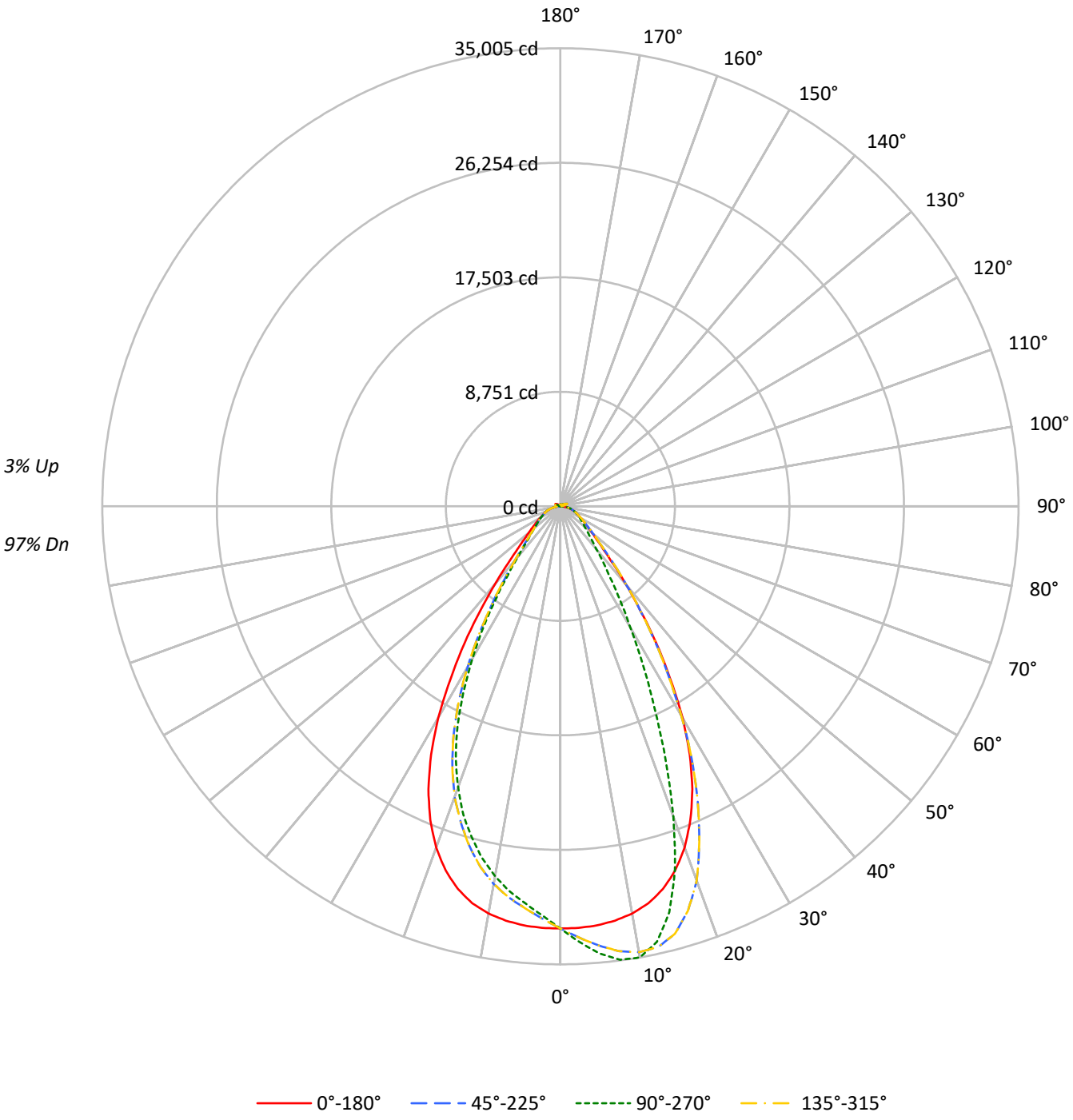
Luminous Intensity Polar Plot



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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	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	111	108	105	102	108	105	102	100	100	98	96	96	94	93	92	91	89	87
2	104	98	93	89	102	96	92	88	92	89	85	89	86	83	85	83	81	79
3	98	90	84	79	95	88	83	78	85	80	77	82	78	75	79	76	73	72
4	92	83	76	71	90	81	75	71	79	74	69	76	72	68	74	70	67	65
5	86	77	70	65	84	75	69	64	73	68	63	71	66	63	69	65	62	60
6	81	71	64	59	80	70	64	59	68	63	58	66	61	58	65	60	57	55
7	77	66	60	55	75	66	59	54	64	58	54	62	57	53	61	56	53	51
8	73	62	55	51	71	61	55	51	60	54	50	59	53	50	57	53	49	48
9	69	58	52	47	68	58	51	47	56	51	47	55	50	46	54	49	46	45
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	51	46	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	151494	151494	151494	151494
5°	150572	160632	150572	142758
10°	148720	164756	148720	135108
15°	144330	153109	144330	124803
20°	134984	122773	134984	111165
25°	119472	85064	119472	93161
30°	97007	55340	97007	69703
35°	69576	35839	69576	46403
40°	44983	24703	44983	29264
45°	28542	19135	28542	20851
50°	21196	16260	21196	17368
55°	17305	14812	17305	15331
60°	14985	14110	14985	14195
65°	13660	13607	13660	13550
70°	12947	13333	12947	13161
75°	12108	12898	12108	12512
80°	10635	12177	10635	11384
85°	6881	8694	6881	8289

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 40128 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3067.4	8.2
10°-20°	8345.0	22.4
20°-30°	9787.0	26.3
30°-40°	6806.2	18.3
40°-50°	3382.4	9.1
50°-60°	2023.0	5.4
60°-70°	1423.9	3.8
70°-80°	917.2	2.5
80°-90°	293.5	0.8
90°-100°	33.5	0.1
100°-110°	212.8	0.6
110°-120°	391.9	1.1
120°-130°	233.9	0.6
130°-140°	142.7	0.4
140°-150°	100.0	0.3
150°-160°	66.6	0.2
160°-170°	39.5	0.1
170°-180°	13.4	0.0
0°-30°	21199.4	56.9
0°-40°	28005.6	75.1
0°-60°	33411.0	89.6
0°-90°	36045.6	96.7
90°-120°	638.2	1.7
90°-150°	1114.8	3.0
90°-180°	1234.0	3.3
0°-180°	37279.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	32260	32260	32260	32260	32260	
5°	32149	34297	32149	30481	32149	3051
15°	30280	32122	30280	26183	30280	8462
25°	23858	16987	23858	18604	23858	10801
35°	12770	6578	12770	8517	12770	7972
45°	4618	3096	4618	3374	4618	3779
55°	2339	2002	2339	2072	2339	2139
65°	1426	1420	1426	1414	1426	1432
75°	853	909	853	881	853	895
85°	236	299	236	285	236	263
90°	9	14	9	9	9	16
95°	18	20	18	15	18	19
105°	98	53	98	74	98	132
115°	417	359	417	338	417	380
125°	268	283	268	245	268	247
135°	171	199	171	180	171	136
145°	157	164	157	152	157	98
155°	142	149	142	139	142	66
165°	138	145	138	136	138	39
175°	141	147	141	139	141	13
180°	142	142	142	142	142	

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TEST NUMBER:
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5
2.5°	32240.7	32657.5	32995.0	33217.7	33327.7	33217.7	32995.0	32657.5	32240.7	31826.3	31541.4
5°	32149.4	32984.2	33691.3	34154.1	34297.4	34154.1	33691.3	32984.2	32149.4	31360.6	30837.3
7.5°	31931.0	33231.6	34282.3	34822.5	34954.4	34822.5	34282.3	33231.6	31931.0	30814.3	30153.2
10°	31597.7	33387.6	34601.7	34988.8	35004.6	34988.8	34601.7	33387.6	31597.7	30093.3	29313.5
12.5°	31066.0	33332.0	34494.6	34367.6	34079.0	34367.6	34494.6	33332.0	31066.0	29212.5	28228.9
15°	30279.6	33002.3	33816.5	32782.7	32121.5	32782.7	33816.5	33002.3	30279.6	28023.3	26882.4
17.5°	29171.4	32385.3	32401.0	30355.8	29108.5	30355.8	32401.0	32385.3	29171.4	26569.0	25312.6
20°	27743.2	31395.7	30452.0	26711.2	25233.4	26711.2	30452.0	31395.7	27743.2	24849.9	23617.1
22.5°	25952.6	30061.2	27737.7	23044.8	21028.6	23044.8	27737.7	30061.2	25952.6	22850.6	21567.6
25°	23858.4	28426.1	24817.8	19050.0	16987.2	19050.0	24817.8	28426.1	23858.4	20468.5	19308.3
27.5°	21395.2	26353.7	21708.6	15566.9	13663.8	15566.9	21708.6	26353.7	21395.2	18008.9	16823.9
30°	18659.2	23696.9	18472.9	12397.1	10644.7	12397.1	18472.9	23696.9	18659.2	15245.7	14184.6
32.5°	15595.9	21092.8	15365.4	9933.3	8448.8	9933.3	15365.4	21092.8	15595.9	12608.8	11500.0
35°	12769.7	17834.7	12563.5	7805.2	6577.8	7805.2	12563.5	17834.7	12769.7	10119.6	9030.8
37.5°	10021.6	14756.3	10015.0	6285.1	5335.3	6285.1	10015.0	14756.3	10021.6	7867.5	6983.7
40°	7796.7	11538.1	7846.9	5017.2	4281.6	5017.2	7846.9	11538.1	7796.7	5986.2	5420.6
42.5°	5907.6	8822.7	6167.7	4117.7	3636.7	4117.7	6167.7	8822.7	5907.6	4716.5	4293.1
45°	4617.9	6492.5	4816.3	3474.0	3096.0	3474.0	4816.3	6492.5	4617.9	3798.3	3513.9
47.5°	3760.8	5017.8	3903.5	2979.8	2714.9	2979.8	3903.5	5017.8	3760.8	3212.7	2999.8
50°	3158.9	3850.3	3241.1	2601.1	2423.3	2601.1	3241.1	3850.3	3158.9	2751.1	2609.0
52.5°	2713.6	3140.1	2760.2	2318.0	2198.3	2318.0	2760.2	3140.1	2713.6	2407.0	2318.6
55°	2338.6	2639.8	2400.3	2084.5	2001.7	2084.5	2400.3	2639.8	2338.6	2142.0	2076.7
57.5°	2053.7	2239.4	2084.5	1885.5	1830.5	1885.5	2084.5	2239.4	2053.7	1906.1	1871.0
60°	1801.4	1939.4	1839.5	1711.9	1696.2	1711.9	1839.5	1939.4	1801.4	1714.9	1691.9
62.5°	1607.3	1694.4	1626.6	1555.8	1541.9	1555.8	1626.6	1694.4	1607.3	1540.7	1545.0
65°	1425.8	1506.8	1453.6	1415.5	1420.3	1415.5	1453.6	1506.8	1425.8	1394.9	1401.6
67.5°	1285.4	1327.8	1304.8	1283.0	1288.5	1283.0	1304.8	1327.8	1285.4	1255.2	1265.5
70°	1136.0	1181.4	1157.8	1160.8	1169.9	1160.8	1157.8	1181.4	1136.0	1127.0	1134.8
72.5°	993.3	1028.4	1020.5	1027.7	1037.4	1027.7	1020.5	1028.4	993.3	992.1	992.7
75°	852.9	879.5	883.2	893.5	908.6	893.5	883.2	879.5	852.9	843.9	854.7
77.5°	699.9	730.1	741.6	755.5	777.9	755.5	741.6	730.1	699.9	705.9	711.4
80°	559.5	573.5	598.9	609.1	640.6	609.1	598.9	573.5	559.5	549.3	557.1
82.5°	409.5	422.2	444.0	463.4	481.5	463.4	444.0	422.2	409.5	404.7	405.3
85°	236.5	255.9	270.4	293.4	298.8	293.4	270.4	255.9	236.5	242.0	236.5
87.5°	82.9	88.9	101.6	110.7	111.3	110.7	101.6	88.9	82.9	84.7	76.8
90°	9.3	16.0	27.3	17.0	13.5	17.0	27.3	16.0	9.3	16.0	24.8
92.5°	12.0	21.3	38.1	21.7	16.9	21.7	38.1	21.3	12.0	20.7	39.6
95°	18.0	26.0	48.1	23.7	19.6	23.7	48.1	26.0	18.0	27.5	55.0
97.5°	27.4	32.1	54.2	25.1	22.9	25.1	54.2	32.1	27.4	33.5	63.1
100°	36.1	36.1	97.8	28.4	25.6	28.4	97.8	36.1	36.1	41.5	98.0
102.5°	54.3	70.3	225.4	54.6	30.3	54.6	225.4	70.3	54.3	77.1	207.5
105°	97.9	159.0	395.3	135.8	53.1	135.8	395.3	159.0	97.9	160.4	369.3
107.5°	184.6	295.3	508.8	264.8	118.2	264.8	508.8	295.3	184.6	283.3	487.4
110°	294.7	412.2	555.1	361.5	235.1	361.5	555.1	412.2	294.7	388.7	511.0

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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°	383.3	459.2	542.4	400.5	*323.7*	400.5	542.4	459.2	383.3	429.0	489.5
115°	416.9	452.5	484.6	399.1	*358.7*	399.1	484.6	452.5	416.9	418.9	437.1
117.5°	402.8	414.2	418.8	374.9	*360.7*	374.9	418.8	414.2	402.8	377.2	371.3
120°	363.8	359.1	353.6	339.3	*340.5*	339.3	353.6	359.1	363.8	329.5	310.1
122.5°	315.4	305.3	299.2	303.7	*313.0*	303.7	299.2	305.3	315.4	281.1	266.4
125°	267.7	257.6	261.5	272.8	*282.7*	272.8	261.5	257.6	267.7	239.4	235.5
127.5°	228.0	223.3	234.0	246.6	*255.2*	246.6	234.0	223.3	228.0	209.9	213.3
130°	199.7	200.5	214.5	225.7	*231.0*	225.7	214.5	200.5	199.7	191.0	199.8
132.5°	182.2	187.0	200.3	210.2	*213.6*	210.2	200.3	187.0	182.2	180.1	190.9
135°	171.4	178.2	190.8	196.8	*198.8*	196.8	190.8	178.2	171.4	172.6	182.2
137.5°	165.2	172.1	181.4	186.7	*186.0*	186.7	181.4	172.1	165.2	167.9	175.3
140°	161.8	168.7	172.7	178.6	*178.6*	178.6	172.7	168.7	161.8	163.2	169.2
142.5°	158.5	164.6	166.6	171.2	*170.5*	171.2	166.6	164.6	158.5	159.8	163.9
145°	157.1	161.8	159.8	165.2	*164.4*	165.2	159.8	161.8	157.1	157.1	159.8
147.5°	153.7	157.1	155.1	159.8	*158.9*	159.8	155.1	157.1	153.7	153.7	155.0
150°	150.3	153.0	149.7	155.0	*155.5*	155.0	149.7	153.0	150.3	149.6	150.9
152.5°	145.5	148.2	145.5	151.5	*151.4*	151.5	145.5	148.2	145.5	144.8	146.1
155°	142.0	143.4	142.0	148.0	*148.6*	148.0	142.0	143.4	142.0	141.4	142.6
157.5°	139.9	141.1	140.5	145.8	*146.4*	145.8	140.5	141.1	139.9	139.9	140.5
160°	138.9	140.2	140.2	144.8	*145.4*	144.8	140.2	140.2	138.9	139.0	139.6
162.5°	138.7	138.7	139.3	143.9	*145.1*	143.9	139.3	138.7	138.7	138.7	139.4
165°	138.5	139.2	139.1	143.0	*144.9*	143.0	139.1	139.2	138.5	138.6	138.6
167.5°	139.1	138.4	139.7	143.5	*145.4*	143.5	139.7	138.4	139.1	139.1	139.1
170°	138.3	139.0	139.5	143.4	*145.2*	143.4	139.5	139.0	138.3	139.0	139.1
172.5°	140.2	140.2	140.7	143.8	*146.4*	143.8	140.7	140.2	140.2	140.3	141.0
175°	141.4	141.3	141.9	144.3	*146.9*	144.3	141.9	141.3	141.4	140.8	140.8
177.5°	140.7	141.9	143.1	145.6	*148.8*	145.6	143.1	141.9	140.7	140.8	140.8
180°	141.9	141.9	141.9	141.9	*141.9*	141.9	141.9	141.9	141.9	141.9	141.9

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	32259.5	32259.5	32259.5	32259.5	32259.5	32259.5
2.5°	31322.5	31301.9	31322.5	31541.4	31826.3	32240.7
5°	30594.7	30481.0	30594.7	30837.3	31360.6	32149.4
7.5°	29747.3	29681.3	29747.3	30153.2	30814.3	31931.0
10°	*28855.0*	*28705.6*	*28855.0*	*29313.5*	*30093.3*	*31597.7*
12.5°	27755.3	27557.5	27755.3	28228.9	29212.5	31066.0
15°	26356.7	26183.1	26356.7	26882.4	28023.3	30279.6
17.5°	24855.9	24698.6	24855.9	25312.6	26569.0	29171.4
20°	22971.0	22847.6	22971.0	23617.1	24849.9	27743.2
22.5°	20993.5	20878.0	20993.5	21567.6	22850.6	25952.6
25°	18667.0	18604.1	18667.0	19308.3	20468.5	23858.4
27.5°	16153.0	16046.0	16153.0	16823.9	18008.9	21395.2
30°	13584.6	13407.3	13584.6	14184.6	15245.7	18659.2
32.5°	11072.3	10944.7	11072.3	11500.0	12608.8	15595.9
35°	8644.2	8516.6	8644.2	9030.8	10119.6	12769.7
37.5°	6735.7	6510.1	6735.7	6983.7	7867.5	10021.6
40°	5108.5	5072.2	5108.5	5420.6	5986.2	7796.7
42.5°	4158.8	4060.2	4158.8	4293.1	4716.5	5907.6
45°	3412.3	3373.6	3412.3	3513.9	3798.3	4617.9
47.5°	2934.4	2951.4	2934.4	2999.8	3212.7	3760.8
50°	2578.1	2588.4	2578.1	2609.0	2751.1	3158.9
52.5°	2315.6	2306.5	2315.6	2318.6	2407.0	2713.6
55°	2083.3	2071.8	2083.3	2076.7	2142.0	2338.6
57.5°	1880.1	1888.5	1880.1	1871.0	1906.1	2053.7
60°	1698.6	1706.5	1698.6	1691.9	1714.9	1801.4
62.5°	1545.6	1550.4	1545.6	1545.0	1540.7	1607.3
65°	1408.8	1414.3	1408.8	1401.6	1394.9	1425.8
67.5°	1278.2	1278.2	1278.2	1265.5	1255.2	1285.4
70°	1155.4	1154.8	1155.4	1134.8	1127.0	1136.0
72.5°	1007.8	1022.3	1007.8	992.7	992.1	993.3
75°	864.4	881.4	864.4	854.7	843.9	852.9
77.5°	719.2	745.3	719.2	711.4	705.9	699.9
80°	570.4	598.9	570.4	557.1	549.3	559.5
82.5°	421.6	442.8	421.6	405.3	404.7	409.5
85°	251.0	284.9	251.0	236.5	242.0	236.5
87.5°	80.5	102.8	80.5	76.8	84.7	82.9
90°	14.7	9.3	14.7	24.8	16.0	9.3
92.5°	22.1	13.4	22.1	39.6	20.7	12.0
95°	25.4	15.4	25.4	55.0	27.5	18.0
97.5°	28.1	20.0	28.1	63.1	33.5	27.4
100°	32.8	26.0	32.8	98.0	41.5	36.1
102.5°	69.1	43.5	69.1	207.5	77.1	54.3
105°	145.0	74.4	145.0	369.3	160.4	97.9
107.5°	259.2	128.1	259.2	487.4	283.3	184.6
110°	343.8	238.3	343.8	511.0	388.7	294.7

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

Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-36-UNV-TASM-L840-UPL12

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	369.3	321.6	369.3	489.5	429.0	383.3
115°	355.2	338.4	355.2	437.1	418.9	416.9
117.5°	324.3	326.9	324.3	371.3	377.2	402.8
120°	288.7	302.8	288.7	310.1	329.5	363.8
122.5°	256.4	272.5	256.4	266.4	281.1	315.4
125°	228.2	244.9	228.2	235.5	239.4	267.7
127.5°	208.7	220.1	208.7	213.3	209.9	228.0
130°	193.9	203.3	193.9	199.8	191.0	199.7
132.5°	183.7	189.8	183.7	190.9	180.1	182.2
135°	174.9	179.7	174.9	182.2	172.6	171.4
137.5°	167.5	171.6	167.5	175.3	167.9	165.2
140°	161.3	164.7	161.3	169.2	163.2	161.8
142.5°	154.5	157.2	154.5	163.9	159.8	158.5
145°	150.4	152.4	150.4	159.8	157.1	157.1
147.5°	146.9	148.3	146.9	155.0	153.7	153.7
150°	143.4	144.8	143.4	150.9	149.6	150.3
152.5°	139.3	141.3	139.3	146.1	144.8	145.5
155°	137.2	139.1	137.2	142.6	141.4	142.0
157.5°	136.3	138.2	136.3	140.5	139.9	139.9
160°	136.1	137.4	136.1	139.6	139.0	138.9
162.5°	135.3	136.6	135.3	139.4	138.7	138.7
165°	135.8	136.4	135.8	138.6	138.6	138.5
167.5°	135.8	136.4	135.8	139.1	139.1	139.1
170°	136.4	137.0	136.4	139.1	139.0	138.3
172.5°	137.7	138.3	137.7	141.0	140.3	140.2
175°	138.2	138.8	138.2	140.8	140.8	141.4
177.5°	139.5	140.1	139.5	140.8	140.8	140.7
180°	141.9	141.9	141.9	141.9	141.9	141.9

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

Scaled Data Report

TEST NUMBER: CATALOG
CATALOG NUMBER: EHBR1-36-UNV-TASM-L840-UPL12

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	18.35	19.51	18.78	19.89	20.29	17.67	18.82	18.10	19.21	19.61
	3H	19.90	20.93	20.34	21.33	21.78	19.52	20.55	19.96	20.95	21.40
	4H	20.54	21.50	21.00	21.92	22.38	20.30	21.26	20.77	21.68	22.15
	6H	21.02	21.90	21.50	22.34	22.82	20.95	21.83	21.42	22.27	22.74
	8H	21.17	22.01	21.66	22.46	22.95	21.17	22.00	21.66	22.46	22.95
	12H	21.25	22.04	21.74	22.49	23.00	21.30	22.09	21.79	22.54	23.05
4H	2H	18.77	19.73	19.23	20.15	20.62	18.25	19.21	18.71	19.63	20.09
	3H	20.57	21.36	21.04	21.83	22.32	20.31	21.10	20.78	21.57	22.05
	4H	21.34	22.05	21.84	22.54	23.06	21.22	21.93	21.71	22.41	22.93
	6H	21.96	22.57	22.48	23.08	23.63	21.99	22.60	22.51	23.11	23.66
	8H	22.16	22.73	22.68	23.24	23.79	22.26	22.83	22.79	23.34	23.89
	12H	22.26	22.77	22.81	23.31	23.86	22.43	22.93	22.97	23.48	24.03
8H	4H	21.59	22.17	22.12	22.68	23.23	21.50	22.07	22.02	22.58	23.13
	6H	22.34	22.80	22.90	23.36	23.92	22.40	22.86	22.96	23.42	23.98
	8H	22.61	23.02	23.19	23.59	24.16	22.75	23.17	23.33	23.74	24.31
	12H	22.78	23.14	23.35	23.70	24.34	23.00	23.37	23.58	23.92	24.57
12H	4H	21.61	22.11	22.15	22.65	23.21	21.51	22.01	22.05	22.56	23.11
	6H	22.38	22.79	22.96	23.37	23.94	22.45	22.86	23.03	23.43	24.00
	8H	22.70	23.06	23.27	23.61	24.26	22.85	23.21	23.42	23.77	24.42

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

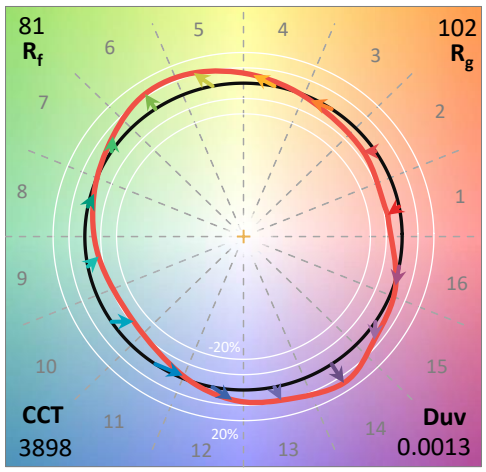
Test Information

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

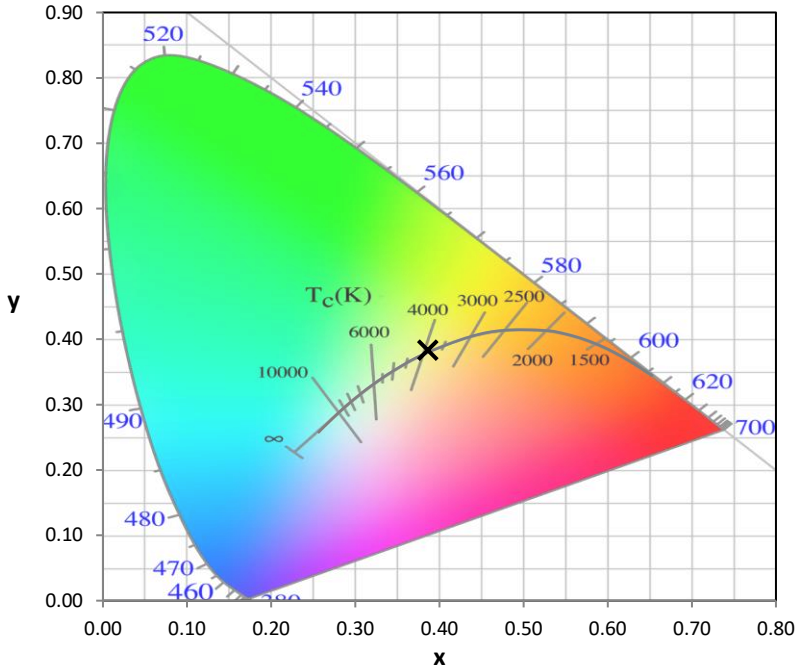
Stabilization Time:	42M
Operation Time:	1H 42M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-1

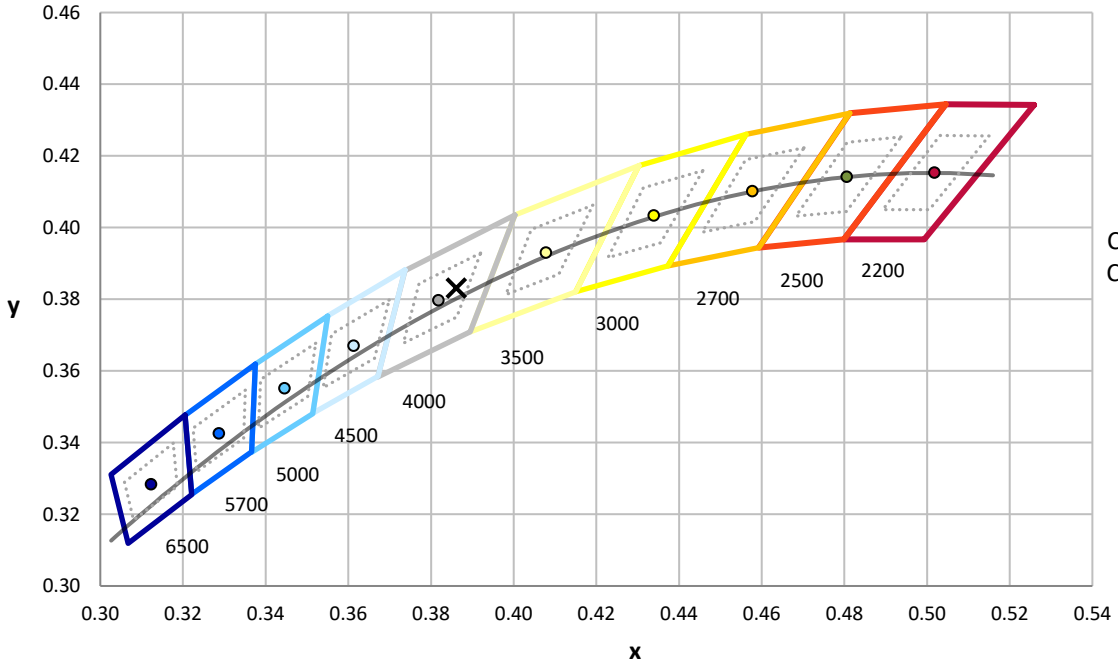
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

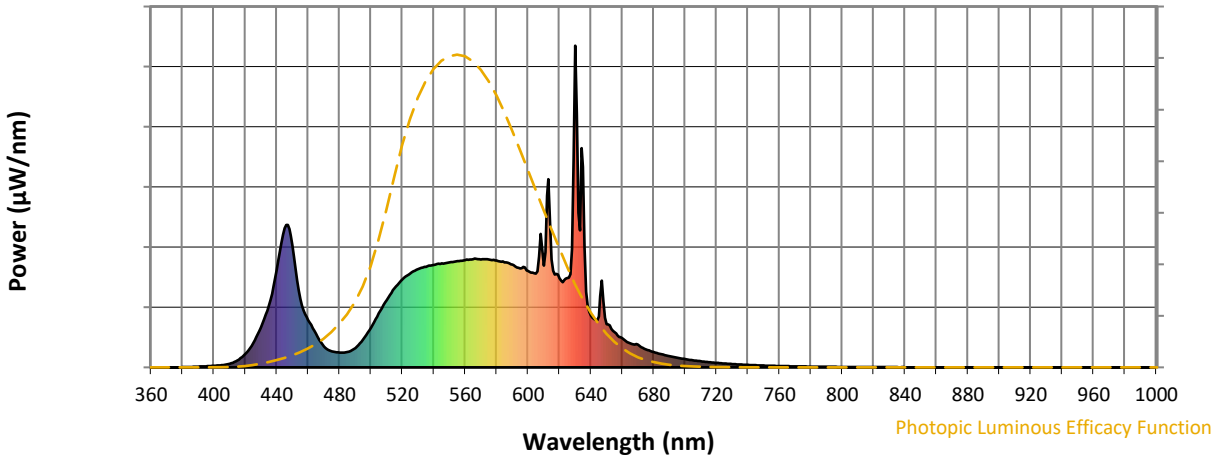


CCT = 3898K
CIE x = 0.3861
CIE y = 0.3831
Duv = 0.0013

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-1

Photopic Flux vs. Wavelength

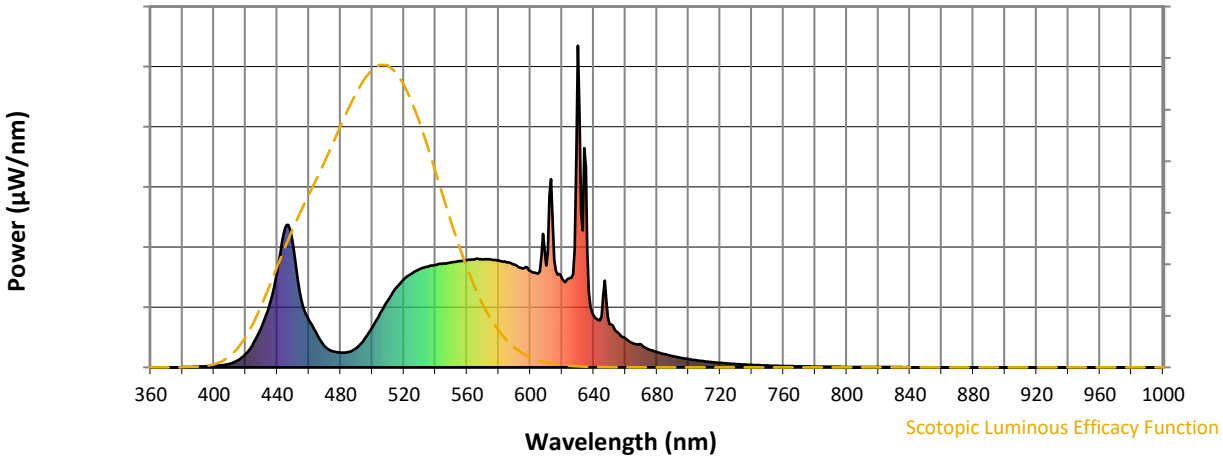


Photopic Lumens: NR

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

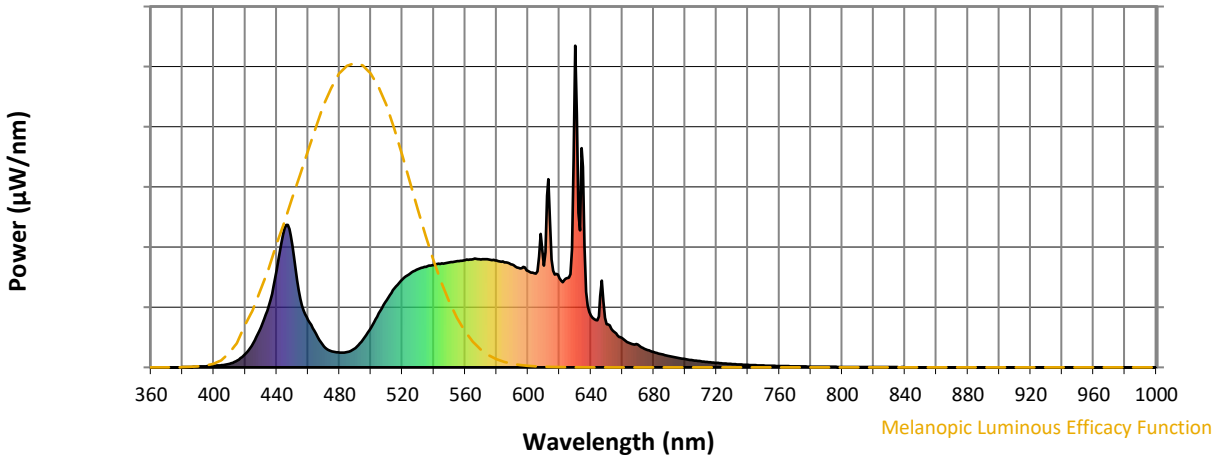


Scotopic Lumens: NR **S/P: 1.55**

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			

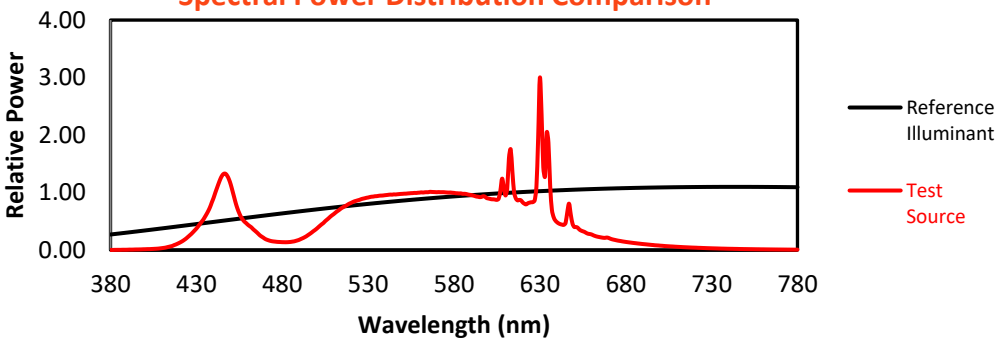
REPORT NUMBER: SP1-2506-472-1

TM-30-18

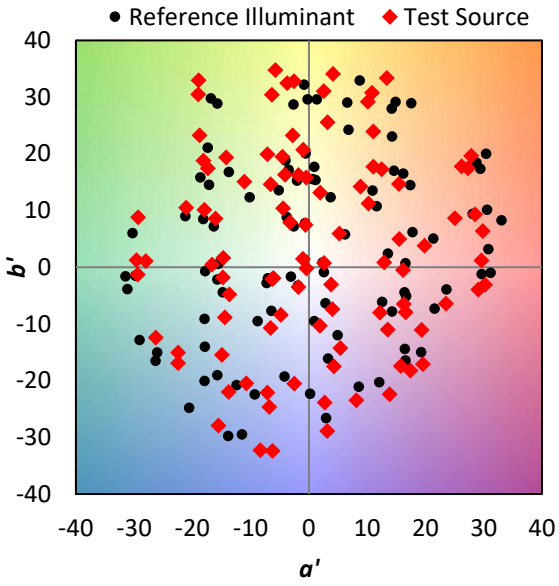
Summary

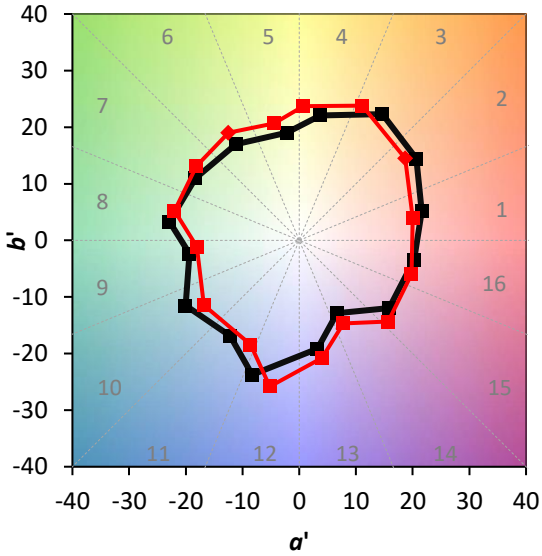
R_f = 80.7
R_g = 102.1
CIE R_a = 82.1
R_9 = 38.5

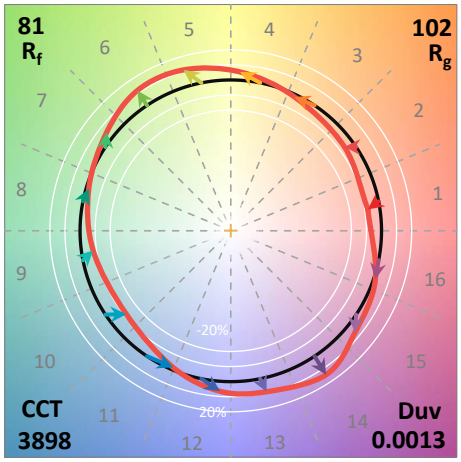
Spectral Power Distribution Comparison

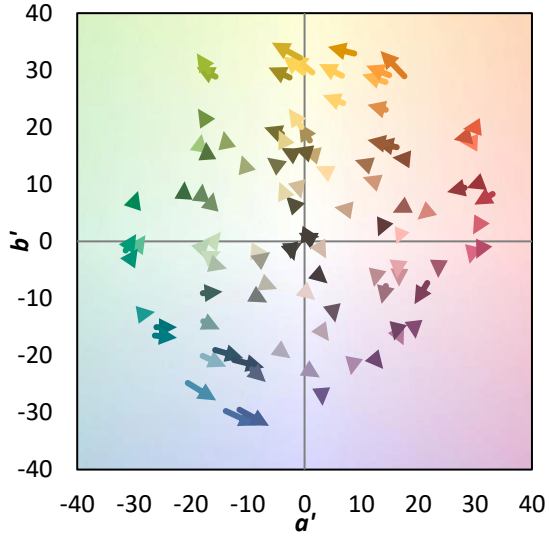


Color Vector Graphics







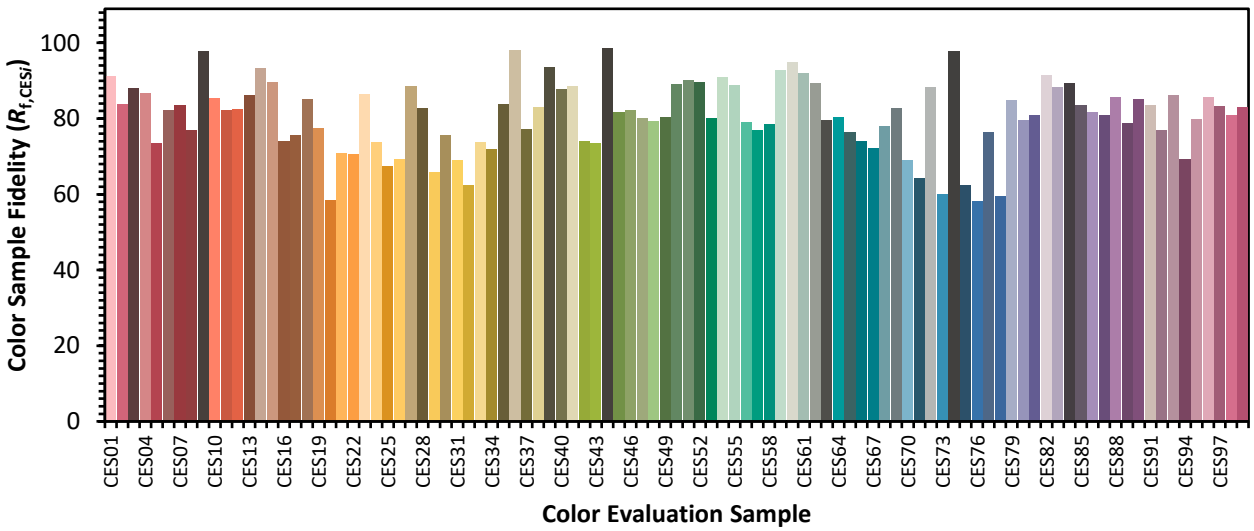


REPORT NUMBER: SP1-2506-472-1

TM-30-18

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

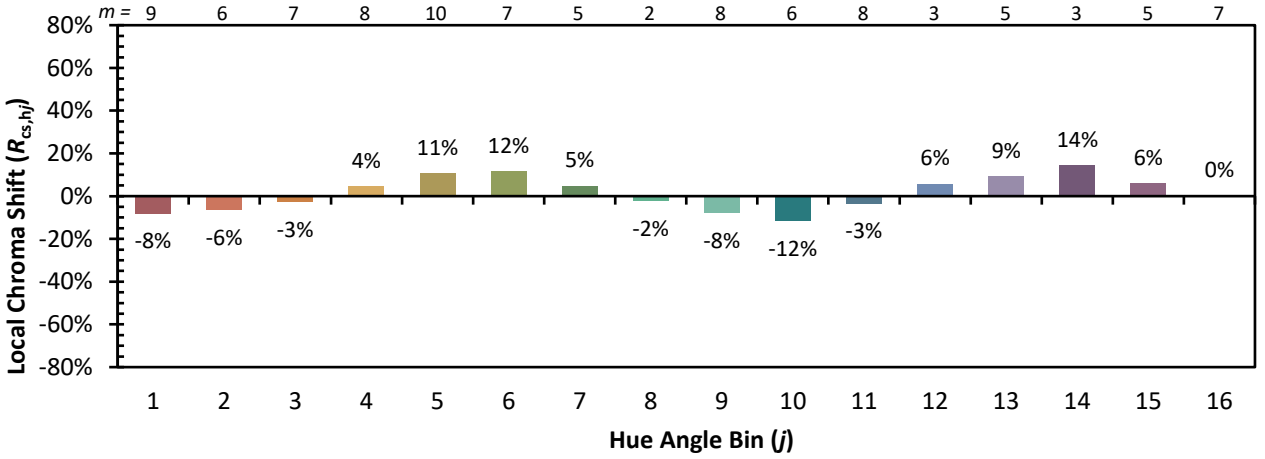
CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 58
CES02 = 61	CES27 = 89	CES52 = 90	CES77 = 76
CES03 = 31	CES28 = 83	CES53 = 80	CES78 = 60
CES04 = 69	CES29 = 66	CES54 = 91	CES79 = 85
CES05 = 48	CES30 = 76	CES55 = 89	CES80 = 79
CES06 = 50	CES31 = 69	CES56 = 79	CES81 = 81
CES07 = 41	CES32 = 62	CES57 = 77	CES82 = 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	

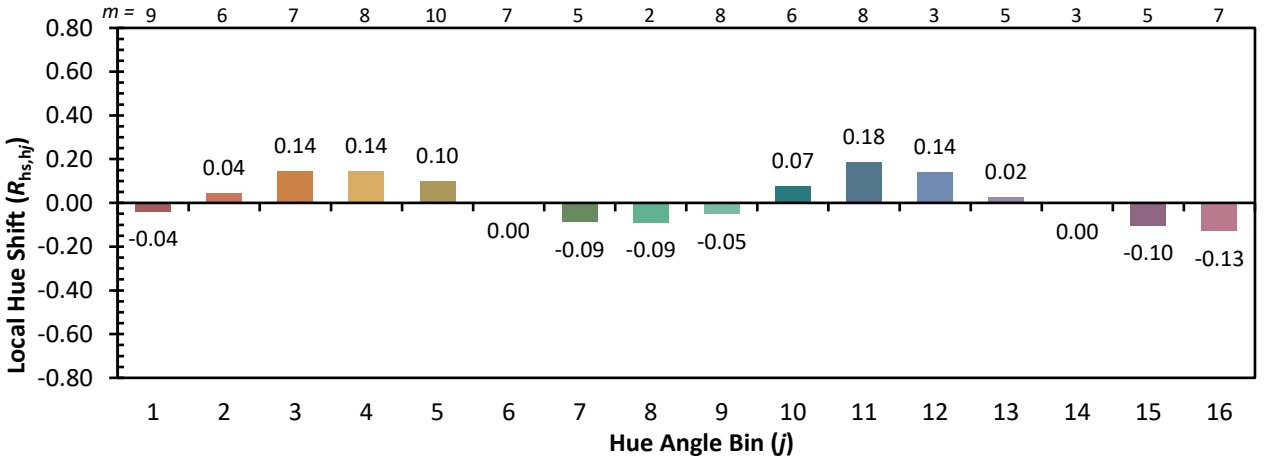


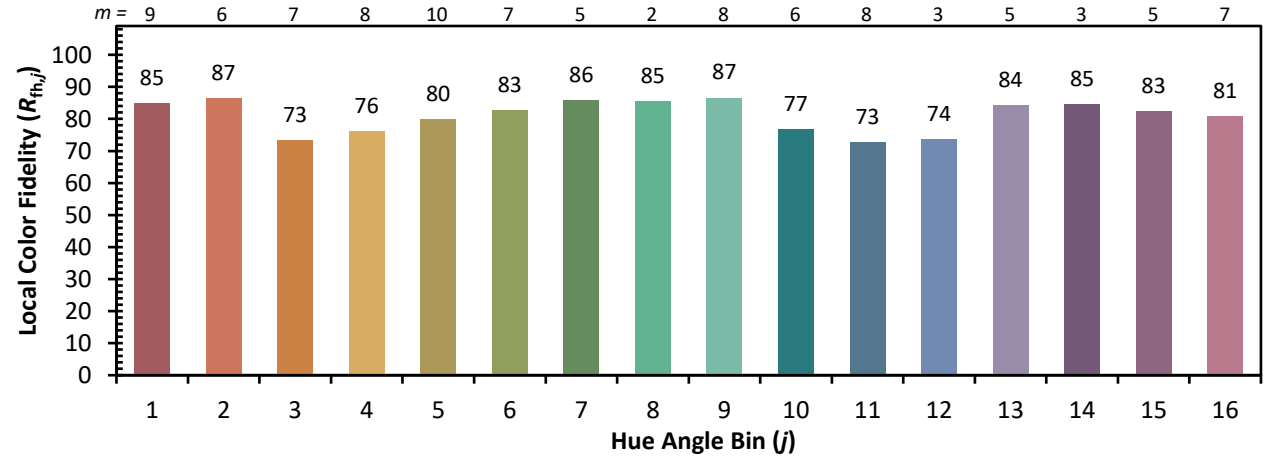
REPORT NUMBER: SP1-2506-472-1

TM-30-18

Color Rendition by Hue-Angle Bin



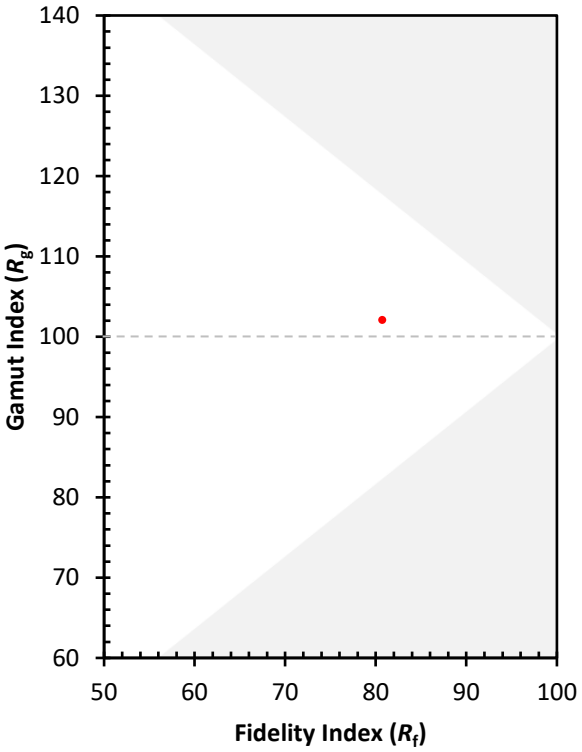


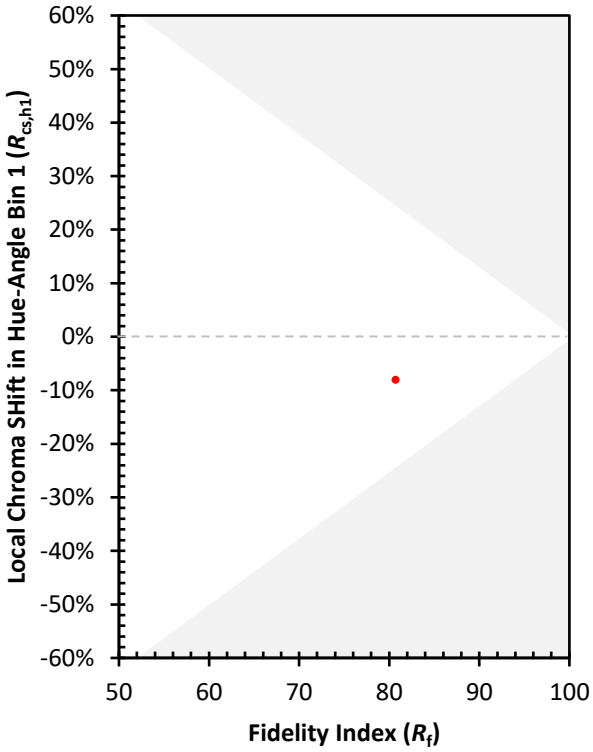


REPORT NUMBER: SP1-2506-472-1

TM-30-18

Measure Comparisons





(END OF REPORT)