

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: EHBR1-18-UNV-TASM-L840-UPL15

Issue Date: 3/20/2026

**Test Information**

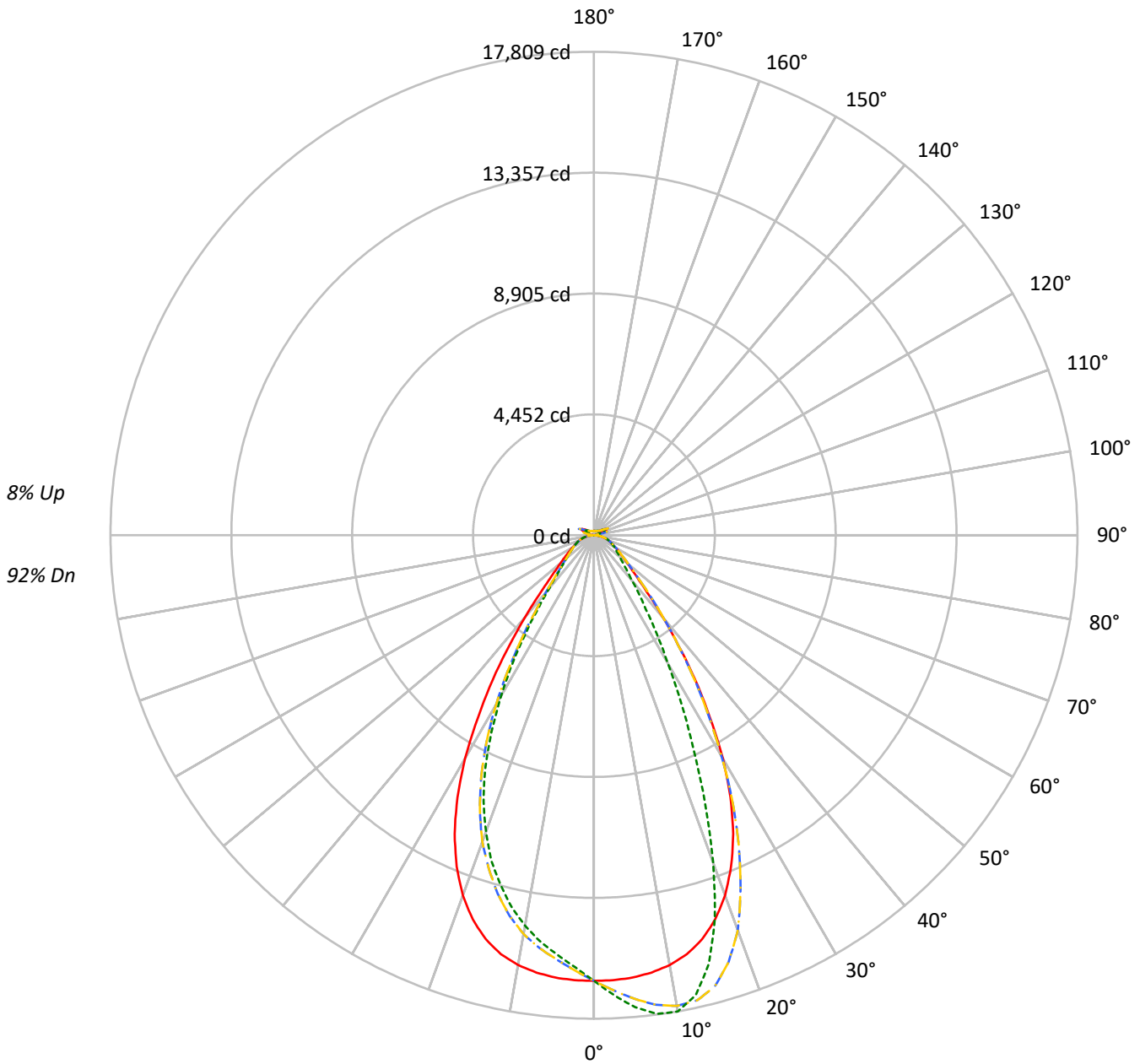
Test Method: LM-79-2019  
Report Number:  
REPORT IS A COMBINATION OF REPORTS P1431677 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-18-UNV-TASM-L840-UPL15  
Description: Elevate Round Highbay at, 18000 lumens, 4000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19839.9 lumens  
Efficiency: N/A  
Efficacy: 190.8 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): 104  
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:  
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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - · 90°-270°    - · - · 135°-315°



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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	50	30	10	0
RCR																					
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	95	95	95	92
1	110	107	103	101	107	104	101	98	98	96	94	93	91	90	88	87	86	88	87	86	83
2	103	97	92	88	100	95	90	86	90	86	83	86	83	80	82	80	78	82	80	78	75
3	97	89	83	78	94	87	81	77	83	78	75	79	76	73	76	73	70	76	73	70	68
4	91	82	75	70	88	80	74	69	77	72	68	74	69	66	71	67	64	71	67	64	62
5	85	75	69	64	83	74	68	63	71	66	62	69	64	60	66	62	59	66	62	59	57
6	80	70	63	58	78	69	62	58	66	61	57	64	59	56	62	58	55	62	58	55	53
7	76	65	58	54	74	64	58	53	62	56	52	60	55	51	58	54	51	58	54	51	49
8	72	61	54	50	70	60	54	49	58	53	49	57	52	48	55	51	47	55	51	47	46
9	68	57	51	46	66	56	50	46	55	49	45	53	48	45	52	47	44	52	47	44	43
10	64	54	47	43	63	53	47	43	52	46	42	50	45	42	49	45	41	49	45	41	40

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	77076	77076	77076	77076
5°	76607	81725	76607	72632
10°	75665	83823	75665	68740
15°	73431	77898	73431	63497
20°	68676	62464	68676	56558
25°	60784	43279	60784	47398
30°	49354	28156	49354	35463
35°	35399	18234	35399	23608
40°	22886	12568	22886	14889
45°	14521	9735	14521	10608
50°	10783	8273	10783	8836
55°	8804	7536	8804	7800
60°	7624	7179	7624	7222
65°	6950	6923	6950	6894
70°	6587	6783	6587	6696
75°	6160	6563	6160	6365
80°	5412	6195	5412	5792
85°	3500	4422	3500	4219

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 20416 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1560.6	7.9
10°-20°	4245.7	21.4
20°-30°	4979.4	25.1
30°-40°	3462.8	17.5
40°-50°	1720.9	8.7
50°-60°	1029.3	5.2
60°-70°	724.4	3.7
70°-80°	466.7	2.4
80°-90°	150.9	0.8
90°-100°	40.0	0.2
100°-110°	260.4	1.3
110°-120°	480.9	2.4
120°-130°	285.9	1.4
130°-140°	173.2	0.9
140°-150°	120.0	0.6
150°-160°	78.5	0.4
160°-170°	45.3	0.2
170°-180°	15.1	0.1
0°-30°	10785.7	54.4
0°-40°	14248.5	71.8
0°-60°	16998.7	85.7
0°-90°	18340.6	92.4
90°-120°	781.3	3.9
90°-150°	1360.4	6.9
90°-180°	1499.0	7.6
0°-180°	19839.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	16413	16413	16413	16413	16413	
5°	16357	17450	16357	15508	16357	1552
15°	15406	16343	15406	13321	15406	4305
25°	12139	8643	12139	9465	12139	5495
35°	6497	3347	6497	4333	6497	4056
45°	2350	1575	2350	1716	2350	1923
55°	1190	1018	1190	1054	1190	1088
65°	725	723	725	720	725	729
75°	434	462	434	448	434	456
85°	120	152	120	145	120	134
90°	11	13	11	11	11	11
95°	21	21	21	18	21	23
105°	120	62	120	91	120	161
115°	512	438	512	416	512	466
125°	328	344	328	300	328	302
135°	208	240	208	219	208	165
145°	188	197	188	183	188	118
155°	168	175	168	163	168	78
165°	159	164	159	156	159	45
175°	159	162	159	156	159	15
180°	158	158	158	158	158	



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°	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8
2.5°	16403.2	16615.3	16787.0	16900.3	16956.3	16900.3	16787.0	16615.3	16403.2	16192.4	16047.5
5°	16356.8	16781.5	17141.3	17376.7	17449.6	17376.7	17141.3	16781.5	16356.8	15955.5	15689.2
7.5°	16245.7	16907.4	17442.0	17716.8	17783.9	17716.8	17442.0	16907.4	16245.7	15677.5	15341.2
10°	16076.1	16986.8	17604.5	17801.4	17809.4	17801.4	17604.5	16986.8	16076.1	15310.7	14914.0
12.5°	15805.6	16958.5	17550.0	17485.4	17338.5	17485.4	17550.0	16958.5	15805.6	14862.6	14362.2
15°	15405.5	16790.7	17205.0	16679.0	16342.6	16679.0	17205.0	16790.7	15405.5	14257.5	13677.1
17.5°	14841.7	16476.8	16484.8	15444.3	14809.6	15444.3	16484.8	16476.8	14841.7	13517.6	12878.4
20°	14115.0	15973.3	15493.2	13590.0	12838.1	13590.0	15493.2	15973.3	14115.0	12643.0	12015.8
22.5°	13204.0	15294.4	14112.2	11724.6	10698.8	11724.6	14112.2	15294.4	13204.0	11625.8	10973.0
25°	12138.6	14462.5	12626.7	9692.1	8642.7	9692.1	12626.7	14462.5	12138.6	10413.8	9823.5
27.5°	10885.3	13408.1	11044.8	7920.0	6951.8	7920.0	11044.8	13408.1	10885.3	9162.5	8559.6
30°	9493.3	12056.4	9398.5	6307.3	5415.7	6307.3	9398.5	12056.4	9493.3	7756.6	7216.8
32.5°	7934.8	10731.5	7817.5	5053.8	4298.6	5053.8	7817.5	10731.5	7934.8	6415.0	5850.9
35°	6496.9	9073.8	6392.0	3971.1	3346.6	3971.1	6392.0	9073.8	6496.9	5148.6	4594.6
37.5°	5098.7	7507.6	5095.4	3197.7	2714.5	3197.7	5095.4	7507.6	5098.7	4002.8	3553.1
40°	3966.8	5870.3	3992.3	2552.6	2178.4	2552.6	3992.3	5870.3	3966.8	3045.6	2757.9
42.5°	3005.6	4488.7	3138.0	2095.0	1850.3	2095.0	3138.0	4488.7	3005.6	2399.6	2184.2
45°	2349.5	3303.2	2450.4	1767.5	1575.1	1767.5	2450.4	3303.2	2349.5	1932.5	1787.8
47.5°	1913.4	2552.9	1986.0	1516.0	1381.2	1516.0	1986.0	2552.9	1913.4	1634.5	1526.2
50°	1607.1	1958.9	1649.0	1323.4	1232.9	1323.4	1649.0	1958.9	1607.1	1399.7	1327.4
52.5°	1380.6	1597.6	1404.3	1179.4	1118.4	1179.4	1404.3	1597.6	1380.6	1224.6	1179.7
55°	1189.8	1343.1	1221.2	1060.6	1018.4	1060.6	1221.2	1343.1	1189.8	1089.8	1056.6
57.5°	1044.9	1139.3	1060.6	959.3	931.3	959.3	1060.6	1139.3	1044.9	969.8	951.9
60°	916.5	986.7	935.9	871.0	863.0	871.0	935.9	986.7	916.5	872.5	860.8
62.5°	817.7	862.0	827.6	791.6	784.5	791.6	827.6	862.0	817.7	783.9	786.0
65°	725.4	766.6	739.6	720.2	722.6	720.2	739.6	766.6	725.4	709.7	713.1
67.5°	654.0	675.5	663.8	652.8	655.5	652.8	663.8	675.5	654.0	638.6	643.8
70°	578.0	601.1	589.1	590.6	595.2	590.6	589.1	601.1	578.0	573.4	577.4
72.5°	505.3	523.2	519.2	522.9	527.8	522.9	519.2	523.2	505.3	504.7	505.0
75°	433.9	447.5	449.3	454.6	462.3	454.6	449.3	447.5	433.9	429.3	434.9
77.5°	356.1	371.5	377.3	384.4	395.8	384.4	377.3	371.5	356.1	359.2	361.9
80°	284.7	291.8	304.7	309.9	325.9	309.9	304.7	291.8	284.7	279.5	283.5
82.5°	208.4	214.8	225.9	235.7	245.0	235.7	225.9	214.8	208.4	205.9	206.2
85°	120.3	130.2	137.6	149.3	152.0	149.3	137.6	130.2	120.3	123.1	120.3
87.5°	42.2	45.2	51.7	56.3	56.6	56.3	51.7	45.2	42.2	43.1	39.1
90°	11.0	18.8	32.3	18.3	13.2	18.3	32.3	18.8	11.0	19.3	30.1
92.5°	14.4	25.4	45.5	24.1	17.4	24.1	45.5	25.4	14.4	25.1	48.2
95°	21.3	31.2	57.9	26.6	20.7	26.6	57.9	31.2	21.3	33.4	67.3
97.5°	32.8	38.6	65.4	28.3	24.8	28.3	65.4	38.6	32.8	40.8	77.2
100°	43.6	43.6	119.1	32.4	28.1	32.4	119.1	43.6	43.6	50.2	120.2
102.5°	65.9	85.2	275.6	64.2	33.9	64.2	275.6	85.2	65.9	94.0	254.9
105°	119.6	194.3	484.8	164.2	61.5	164.2	484.8	194.3	119.6	196.5	454.1
107.5°	226.3	362.1	624.5	322.9	141.7	322.9	624.5	362.1	226.3	347.8	599.1
110°	361.8	506.0	681.5	442.0	285.5	442.0	681.5	506.0	361.8	477.5	628.0



TEST NUMBER:

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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°	470.9	563.8	665.8	489.9	394.6	489.9	665.8	563.8	470.9	527.1	601.5
115°	511.7	555.6	594.7	488.2	437.6	488.2	594.7	555.6	511.7	514.7	537.1
117.5°	494.4	508.4	513.7	458.5	440.1	458.5	513.7	508.4	494.4	463.0	456.1
120°	446.4	440.7	433.0	414.7	415.3	414.7	433.0	440.7	446.4	404.3	380.8
122.5°	386.4	374.0	366.0	370.3	381.4	370.3	366.0	374.0	386.4	344.2	326.6
125°	327.7	315.3	319.2	332.3	343.7	332.3	319.2	315.3	327.7	292.5	288.0
127.5°	278.4	272.6	285.3	300.1	309.8	300.1	285.3	272.6	278.4	256.1	260.8
130°	243.2	244.5	261.4	273.9	280.0	273.9	261.4	244.5	243.2	232.4	243.7
132.5°	221.2	227.5	243.6	254.4	258.0	254.4	243.6	227.5	221.2	218.2	232.0
135°	207.5	216.7	231.5	238.4	239.8	238.4	231.5	216.7	207.5	208.6	221.2
137.5°	199.5	208.9	219.9	225.5	224.1	225.5	219.9	208.9	199.5	202.3	211.9
140°	194.9	204.2	209.2	215.5	214.5	215.5	209.2	204.2	194.9	196.5	204.0
142.5°	190.2	198.7	201.2	205.9	204.6	205.9	201.2	198.7	190.2	191.9	196.8
145°	188.0	194.3	192.4	198.5	196.6	198.5	192.4	194.3	188.0	188.6	191.3
147.5°	183.9	188.6	186.1	191.3	189.5	191.3	186.1	188.6	183.9	183.9	185.0
150°	179.2	182.5	178.9	185.0	184.8	185.0	178.9	182.5	179.2	178.4	179.5
152.5°	172.9	176.2	172.9	179.8	179.3	179.8	172.9	176.2	172.9	172.1	173.2
155°	167.7	169.4	167.7	174.7	175.0	174.7	167.7	169.4	167.7	167.4	168.0
157.5°	164.2	165.3	164.5	170.7	171.0	170.7	164.5	165.3	164.2	164.2	164.5
160°	161.4	163.0	162.5	167.8	168.1	167.8	162.5	163.0	161.4	161.9	162.2
162.5°	160.3	160.3	160.1	165.4	166.0	165.4	160.1	160.3	160.3	160.3	161.1
165°	158.7	159.6	158.5	162.4	163.9	162.4	158.5	159.6	158.7	159.3	159.3
167.5°	158.5	157.7	158.3	161.8	163.2	161.8	158.3	157.7	158.5	159.0	159.0
170°	157.2	157.5	157.3	160.7	162.1	160.7	157.3	157.5	157.2	158.0	158.5
172.5°	158.2	158.2	157.4	160.0	162.2	160.0	157.4	158.2	158.2	158.6	159.4
175°	158.8	158.2	158.0	159.7	162.0	159.7	158.0	158.2	158.8	158.5	158.5
177.5°	157.9	158.5	159.1	160.9	163.9	160.9	159.1	158.5	157.9	158.5	158.5
180°	158.5	158.5	158.5	158.5	158.5	158.5	158.5	158.5	158.5	158.5	158.5



TEST NUMBER:

CATALOG NUMBER: EHBR1-18-UNV-TASM-L840-UPL15

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	16412.8	16412.8	16412.8	16412.8	16412.8	16412.8
2.5°	15936.1	15925.6	15936.1	16047.5	16192.4	16403.2
5°	15565.8	15508.0	15565.8	15689.2	15955.5	16356.8
7.5°	15134.6	15101.1	15134.6	15341.2	15677.5	16245.7
10°	14680.7	14604.7	14680.7	14914.0	15310.7	16076.1
12.5°	14121.2	14020.5	14121.2	14362.2	14862.6	15805.6
15°	13409.6	13321.3	13409.6	13677.1	14257.5	15405.5
17.5°	12646.1	12566.0	12646.1	12878.4	13517.6	14841.7
20°	11687.1	11624.3	11687.1	12015.8	12643.0	14115.0
22.5°	10681.0	10622.2	10681.0	10973.0	11625.8	13204.0
25°	9497.3	9465.3	9497.3	9823.5	10413.8	12138.6
27.5°	8218.2	8163.8	8218.2	8559.6	9162.5	10885.3
30°	6911.5	6821.3	6911.5	7216.8	7756.6	9493.3
32.5°	5633.3	5568.4	5633.3	5850.9	6415.0	7934.8
35°	4398.0	4333.0	4398.0	4594.6	5148.6	6496.9
37.5°	3427.0	3312.2	3427.0	3553.1	4002.8	5098.7
40°	2599.1	2580.6	2599.1	2757.9	3045.6	3966.8
42.5°	2115.9	2065.7	2115.9	2184.2	2399.6	3005.6
45°	1736.1	1716.4	1736.1	1787.8	1932.5	2349.5
47.5°	1493.0	1501.6	1493.0	1526.2	1634.5	1913.4
50°	1311.7	1316.9	1311.7	1327.4	1399.7	1607.1
52.5°	1178.1	1173.5	1178.1	1179.7	1224.6	1380.6
55°	1059.9	1054.1	1059.9	1056.6	1089.8	1189.8
57.5°	956.5	960.8	956.5	951.9	969.8	1044.9
60°	864.2	868.2	864.2	860.8	872.5	916.5
62.5°	786.3	788.8	786.3	786.0	783.9	817.7
65°	716.8	719.6	716.8	713.1	709.7	725.4
67.5°	650.3	650.3	650.3	643.8	638.6	654.0
70°	587.8	587.5	587.8	577.4	573.4	578.0
72.5°	512.7	520.1	512.7	505.0	504.7	505.3
75°	439.8	448.4	439.8	434.9	429.3	433.9
77.5°	365.9	379.2	365.9	361.9	359.2	356.1
80°	290.2	304.7	290.2	283.5	279.5	284.7
82.5°	214.5	225.3	214.5	206.2	205.9	208.4
85°	127.7	145.0	127.7	120.3	123.1	120.3
87.5°	40.9	52.3	40.9	39.1	43.1	42.2
90°	17.7	11.0	17.7	30.1	19.3	11.0
92.5°	26.8	16.0	26.8	48.2	25.1	14.4
95°	30.9	18.5	30.9	67.3	33.4	21.3
97.5°	34.2	23.7	34.2	77.2	40.8	32.8
100°	40.0	31.2	40.0	120.2	50.2	43.6
102.5°	84.6	52.7	84.6	254.9	94.0	65.9
105°	178.0	90.7	178.0	454.1	196.5	119.6
107.5°	318.5	156.8	318.5	599.1	347.8	226.3
110°	422.7	292.4	422.7	628.0	477.5	361.8



TEST NUMBER:

CATALOG NUMBER: EHBR1-18-UNV-TASM-L840-UPL15

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	454.1	394.9	454.1	601.5	527.1	470.9
115°	436.7	415.6	436.7	537.1	514.7	511.7
117.5°	398.7	401.5	398.7	456.1	463.0	494.4
120°	354.9	371.7	354.9	380.8	404.3	446.4
122.5°	314.7	334.5	314.7	326.6	344.2	386.4
125°	280.0	300.1	280.0	288.0	292.5	327.7
127.5°	256.0	269.5	256.0	260.8	256.1	278.4
130°	237.3	248.9	237.3	243.7	232.4	243.2
132.5°	224.4	231.8	224.4	232.0	218.2	221.2
135°	213.1	219.4	213.1	221.2	208.6	207.5
137.5°	203.5	209.0	203.5	211.9	202.3	199.5
140°	195.1	199.8	195.1	204.0	196.5	194.9
142.5°	186.3	189.6	186.3	196.8	191.9	190.2
145°	180.3	182.8	180.3	191.3	188.6	188.0
147.5°	175.1	176.8	175.1	185.0	183.9	183.9
150°	169.9	171.6	169.9	179.5	178.4	179.2
152.5°	164.4	166.4	164.4	173.2	172.1	172.9
155°	160.9	162.9	160.9	168.0	167.4	167.7
157.5°	159.1	160.5	159.1	164.5	164.2	164.2
160°	157.5	158.7	157.5	162.2	161.9	161.4
162.5°	155.7	156.8	155.7	161.1	160.3	160.3
165°	155.4	155.7	155.4	159.3	159.3	158.7
167.5°	154.9	155.7	154.9	159.0	159.0	158.5
170°	155.2	155.5	155.2	158.5	158.0	157.2
172.5°	155.8	156.1	155.8	159.4	158.6	158.2
175°	155.7	156.0	155.7	158.5	158.5	158.8
177.5°	156.8	157.1	156.8	158.5	158.5	157.9
180°	158.5	158.5	158.5	158.5	158.5	158.5



TEST NUMBER: CATALOG  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L840-UPL15

**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	15.66	16.76	16.16	17.23	17.73	14.98	16.08	15.48	16.55	17.05
	3H	17.21	18.18	17.72	18.67	19.22	16.83	17.80	17.34	18.29	18.84
	4H	17.85	18.76	18.38	19.26	19.82	17.61	18.52	18.15	19.02	19.59
	6H	18.33	19.16	18.87	19.68	20.26	18.25	19.09	18.80	19.61	20.18
	8H	18.48	19.27	19.04	19.80	20.39	18.47	19.26	19.03	19.80	20.39
	12H	18.55	19.30	19.11	19.83	20.44	18.60	19.36	19.16	19.88	20.49
4H	2H	16.08	16.99	16.61	17.49	18.05	15.56	16.46	16.09	16.97	17.53
	3H	17.87	18.62	18.42	19.17	19.76	17.61	18.36	18.16	18.91	19.50
	4H	18.65	19.32	19.21	19.88	20.50	18.52	19.20	19.09	19.75	20.37
	6H	19.26	19.84	19.85	20.43	21.07	19.29	19.87	19.88	20.46	21.10
	8H	19.46	20.00	20.05	20.58	21.23	19.56	20.10	20.16	20.69	21.33
	12H	19.56	20.04	20.18	20.66	21.30	19.73	20.21	20.34	20.82	21.47
8H	4H	18.90	19.44	19.49	20.02	20.67	18.80	19.34	19.39	19.92	20.57
	6H	19.64	20.08	20.26	20.71	21.36	19.70	20.14	20.33	20.77	21.42
	8H	19.91	20.30	20.55	20.94	21.61	20.06	20.45	20.70	21.09	21.75
	12H	20.08	20.43	20.72	21.05	21.78	20.30	20.65	20.94	21.27	22.01
12H	4H	18.91	19.39	19.52	20.00	20.65	18.81	19.29	19.42	19.90	20.55
	6H	19.68	20.08	20.33	20.72	21.38	19.75	20.14	20.39	20.78	21.45
	8H	20.00	20.34	20.64	20.96	21.70	20.15	20.50	20.79	21.12	21.86

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

**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		



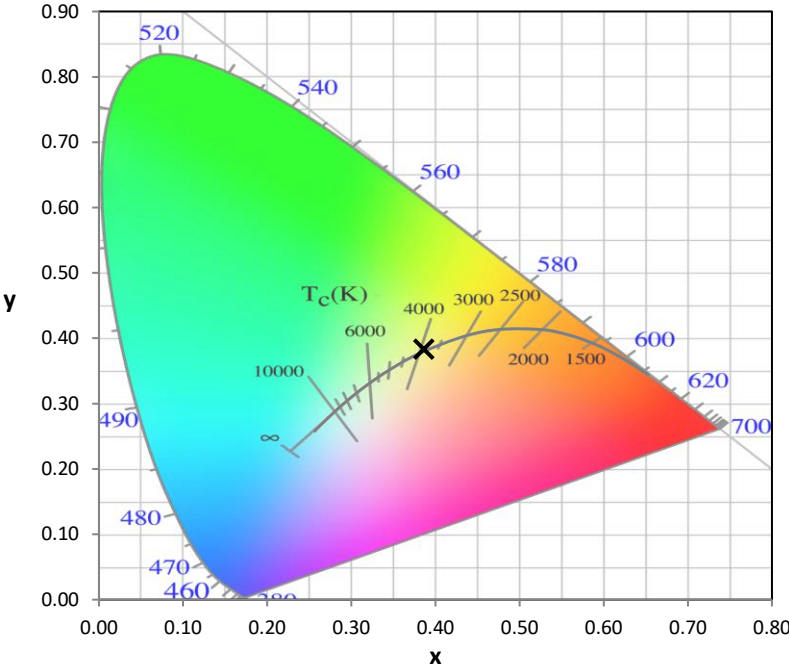
**Test Conditions**  
 Stabilization Time: 42M  
 Operation Time: 1H 42M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-1

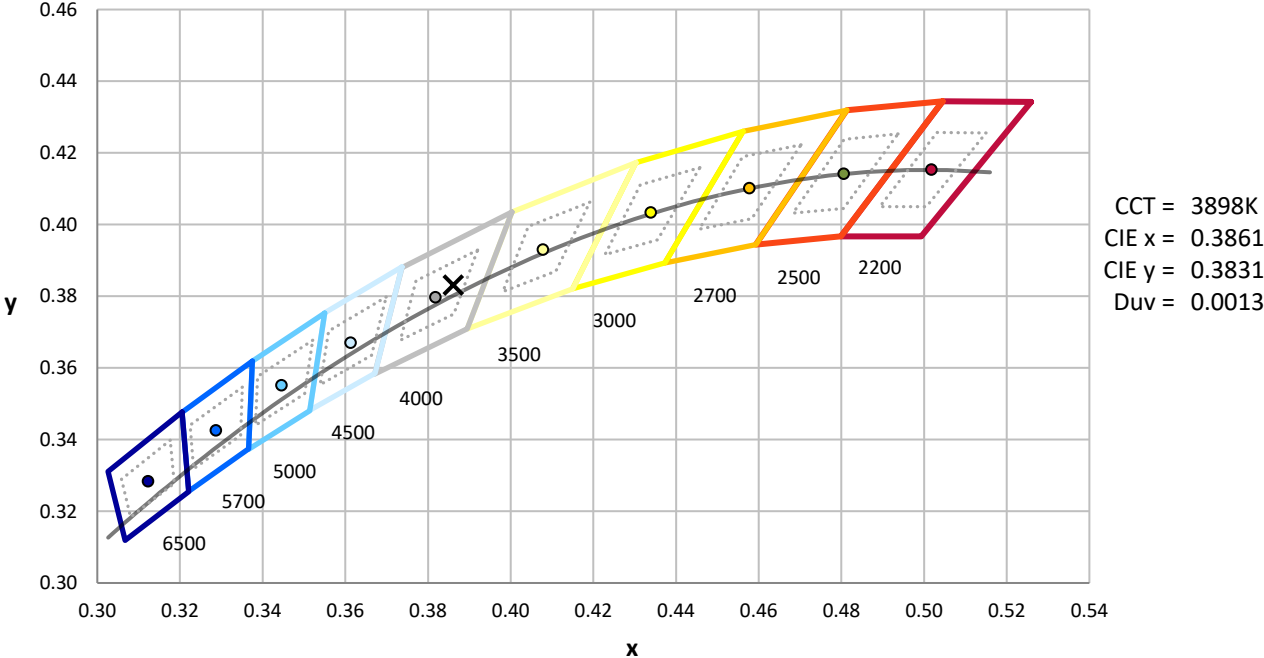
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

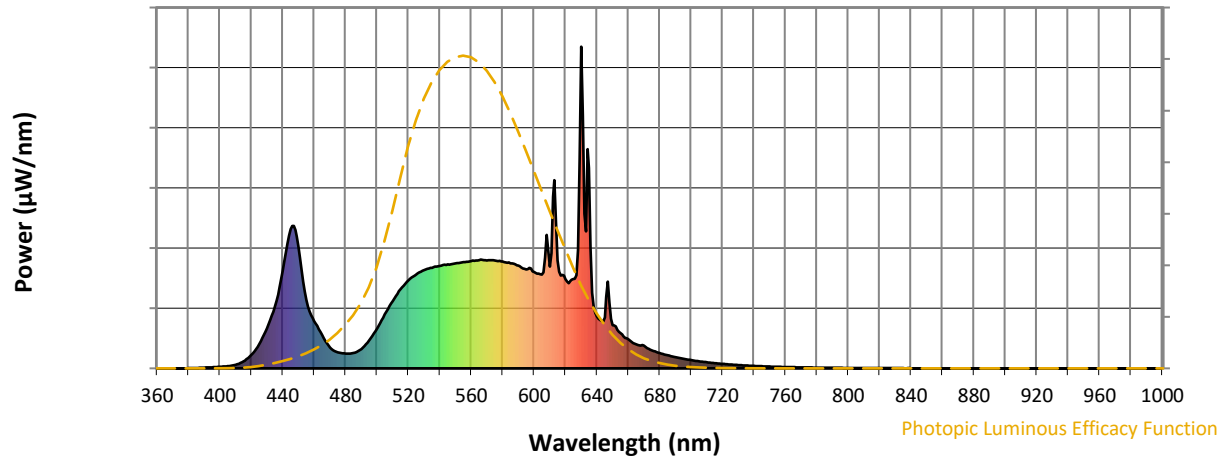


CCT = 3898K  
 CIE x = 0.3861  
 CIE y = 0.3831  
 Duv = 0.0013

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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

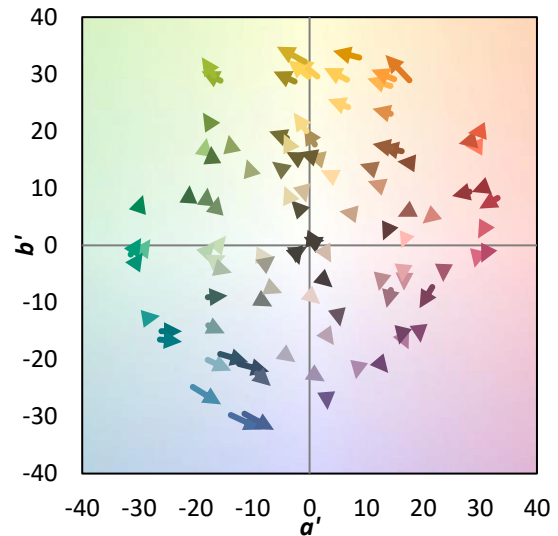
$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	60	NR	620	277	NR	750	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			

**Summary**

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



**Color Vector Graphics**

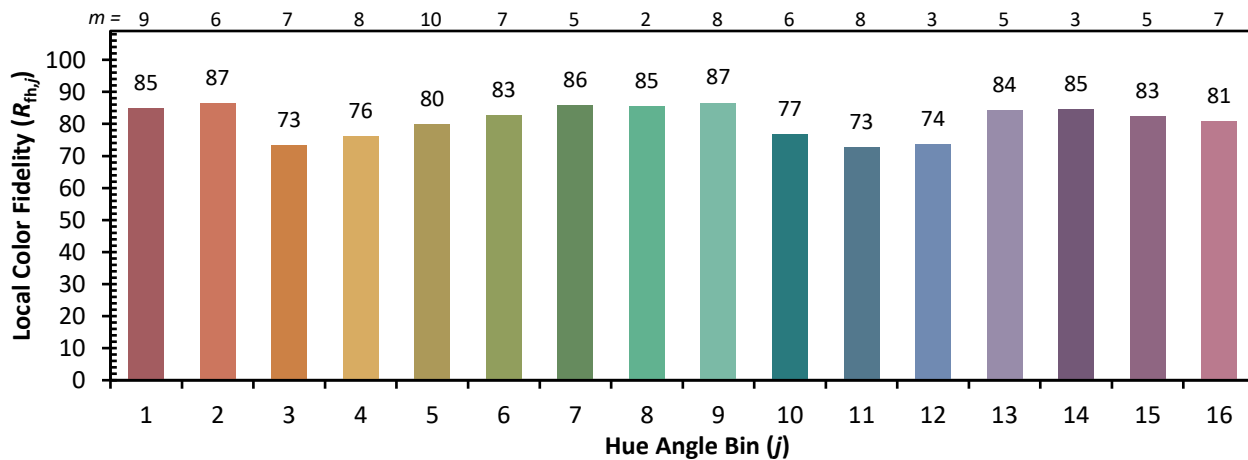
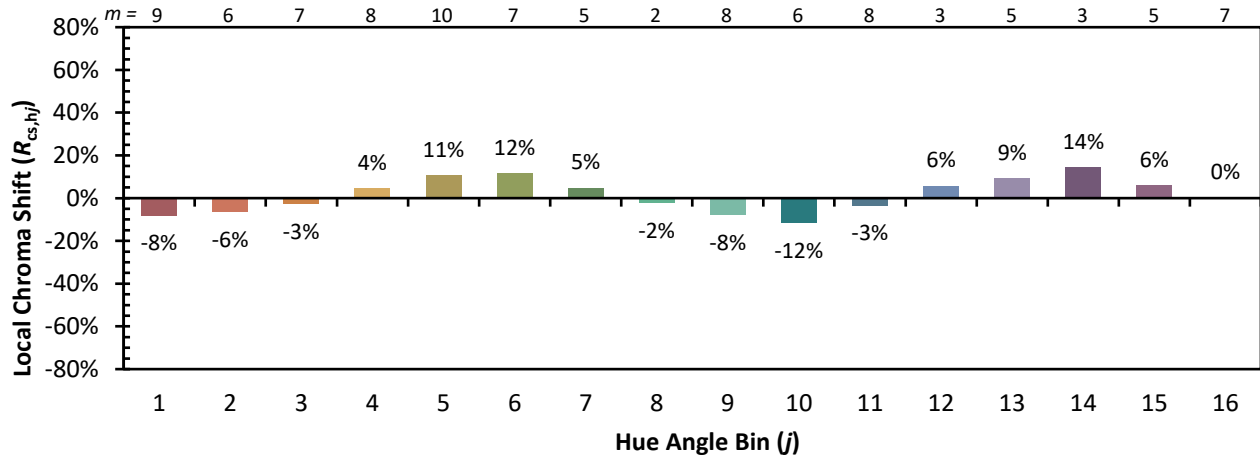


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)