

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: P1432844

Luminaire Tested: EHBR1-12-UNV-TASM-L850-UPL15

Issue Date: 3/20/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1432844  
REPORT IS A COMBINATION OF REPORTS P1431645 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-12-UNV-TASM-L850-UPL15  
Description: Elevate Round Highbay at, 12000 lumens, 5000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

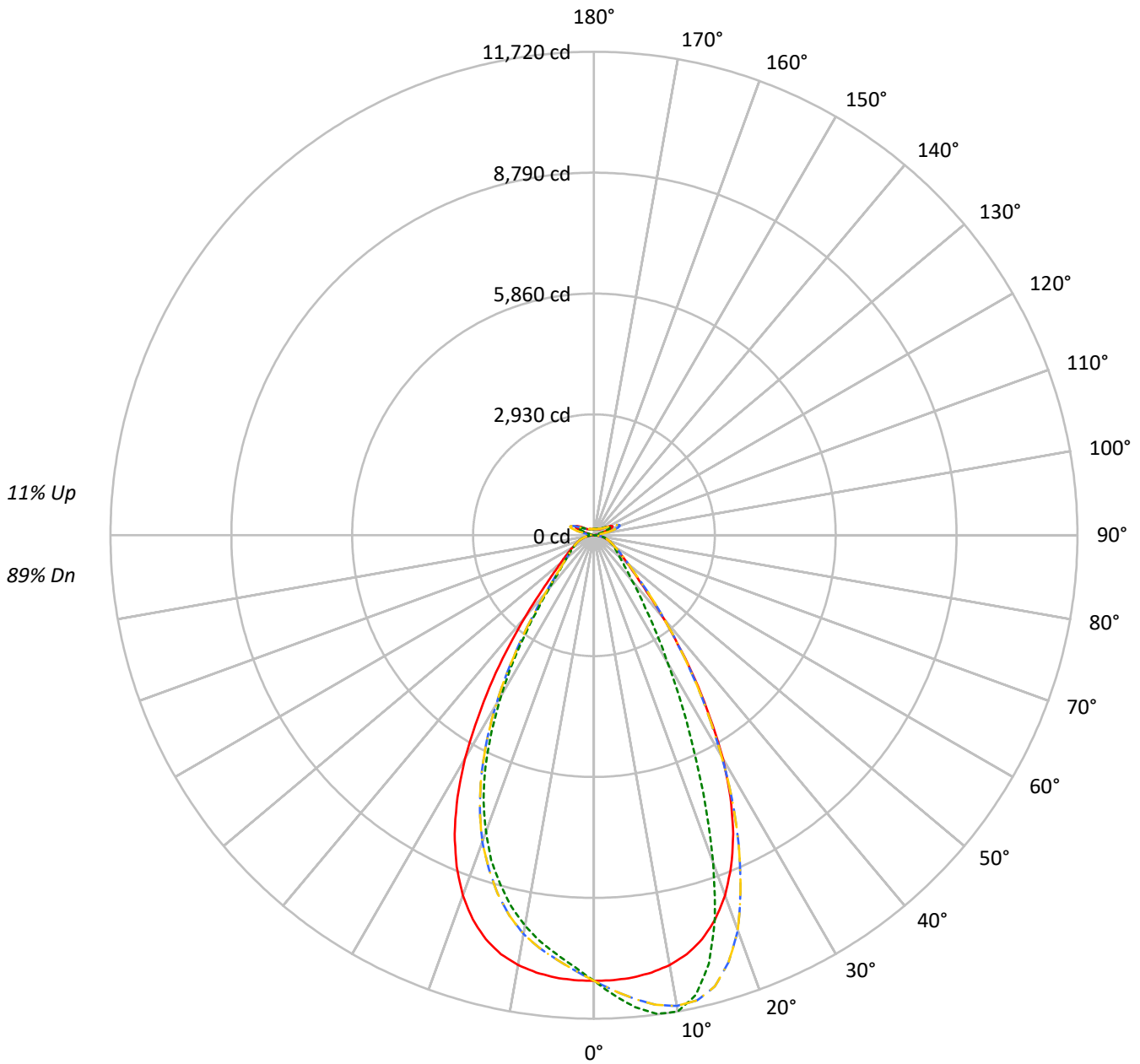
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13538.9 lumens  
Efficiency: N/A  
Efficacy: 183.0 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: Semi-Direct

Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P1432844  
CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL15

### 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				
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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89			89
1	109	106	103	100	106	102	100	97	96	94	92	91	89	87	86	84	83				80
2	102	96	91	87	99	93	89	85	88	85	82	84	81	78	79	77	75				73
3	96	88	82	77	93	86	80	76	81	77	73	77	74	71	74	71	68				66
4	90	81	74	69	87	79	73	68	75	70	66	72	68	64	69	65	62				60
5	84	75	68	63	82	73	67	62	70	64	60	67	62	59	64	60	57				55
6	79	69	62	57	77	68	61	57	65	59	55	62	58	54	60	56	53				51
7	75	64	57	53	73	63	57	52	61	55	51	59	54	50	56	52	49				47
8	71	60	53	49	69	59	53	48	57	51	47	55	50	46	53	49	46				44
9	67	56	50	45	65	55	49	45	53	48	44	52	47	43	50	46	43				41
10	64	53	46	42	62	52	46	42	50	45	41	49	44	41	47	43	40				38

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

	0°	90°	180°	270°
0°	50723	50723	50723	50723
5°	50415	53783	50415	47798
10°	49795	55164	49795	45237
15°	48325	51264	48325	41787
20°	45196	41107	45196	37221
25°	40002	28481	40002	31192
30°	32480	18529	32480	23338
35°	23296	12000	23296	15536
40°	15062	8271	15062	9798
45°	9556	6407	9556	6981
50°	7096	5444	7096	5815
55°	5794	4959	5794	5133
60°	5017	4725	5017	4753
65°	4574	4556	4574	4537
70°	4334	4464	4334	4406
75°	4054	4318	4054	4189
80°	3560	4077	3560	3811
85°	2304	2912	2304	2776

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 13435 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1027.0	7.6
10°-20°	2794.1	20.6
20°-30°	3276.9	24.2
30°-40°	2278.9	16.8
40°-50°	1132.5	8.4
50°-60°	677.3	5.0
60°-70°	476.7	3.5
70°-80°	307.1	2.3
80°-90°	100.1	0.7
90°-100°	39.0	0.3
100°-110°	255.4	1.9
110°-120°	472.0	3.5
120°-130°	280.4	2.1
130°-140°	169.5	1.3
140°-150°	117.2	0.9
150°-160°	76.4	0.6
160°-170°	43.7	0.3
170°-180°	14.5	0.1
0°-30°	7098.0	52.4
0°-40°	9376.9	69.3
0°-60°	11186.7	82.6
0°-90°	12070.7	89.2
90°-120°	766.5	5.7
90°-150°	1333.6	9.9
90°-180°	1468.0	10.8
0°-180°	13538.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	10801	10801	10801	10801	10801	
5°	10764	11484	10764	10206	10764	1022
15°	10138	10755	10138	8767	10138	2833
25°	7988	5688	7988	6229	7988	3617
35°	4276	2202	4276	2852	4276	2669
45°	1546	1037	1546	1130	1546	1265
55°	783	670	783	694	783	716
65°	477	476	477	474	477	479
75°	286	304	286	295	286	300
85°	79	100	79	95	79	88
90°	11	12	11	11	11	9
95°	21	19	21	18	21	22
105°	117	60	117	89	117	158
115°	502	429	502	408	502	458
125°	322	337	322	294	322	296
135°	203	234	203	215	203	161
145°	184	192	184	178	184	115
155°	163	170	163	158	163	76
165°	153	158	153	150	153	44
175°	152	155	152	150	152	15
180°	152	152	152	152	152	



TEST NUMBER: P1432844

CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL15

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2
2.5°	10794.9	10934.5	11047.4	11122.0	11158.8	11122.0	11047.4	10934.5	10794.9	10656.2	10560.8
5°	10764.3	11043.8	11280.6	11435.5	11483.6	11435.5	11280.6	11043.8	10764.3	10500.2	10325.1
7.5°	10691.3	11126.7	11478.5	11659.3	11703.5	11659.3	11478.5	11126.7	10691.3	10317.3	10096.0
10°	10579.6	11179.0	11585.4	11715.0	11720.3	11715.0	11585.4	11179.0	10579.6	10075.9	9814.8
12.5°	10401.6	11160.3	11549.6	11507.1	11410.4	11507.1	11549.6	11160.3	10401.6	9781.0	9451.7
15°	10138.3	11049.9	11322.5	10976.4	10755.0	10976.4	11322.5	11049.9	10138.3	9382.8	9000.8
17.5°	9767.2	10843.3	10848.6	10163.8	9746.2	10163.8	10848.6	10843.3	9767.2	8895.9	8475.3
20°	9289.0	10512.0	10196.0	8943.5	8448.7	8943.5	10196.0	10512.0	9289.0	8320.3	7907.5
22.5°	8689.5	10065.1	9287.3	7716.0	7040.8	7716.0	9287.3	10065.1	8689.5	7650.9	7221.3
25°	7988.4	9517.7	8309.6	6378.4	5687.7	6378.4	8309.6	9517.7	7988.4	6853.3	6464.8
27.5°	7163.6	8823.8	7268.5	5212.2	4575.0	5212.2	7268.5	8823.8	7163.6	6029.8	5633.0
30°	6247.5	7934.2	6185.2	4150.8	3564.1	4150.8	6185.2	7934.2	6247.5	5104.6	4749.3
32.5°	5221.8	7062.3	5144.7	3325.9	2828.8	3325.9	5144.7	7062.3	5221.8	4221.7	3850.4
35°	4275.6	5971.5	4206.5	2613.3	2202.4	2613.3	4206.5	5971.5	4275.6	3388.2	3023.7
37.5°	3355.4	4940.8	3353.3	2104.4	1786.4	2104.4	3353.3	4940.8	3355.4	2634.2	2338.3
40°	2610.6	3863.2	2627.4	1679.8	1433.6	1679.8	2627.4	3863.2	2610.6	2004.3	1815.0
42.5°	1978.0	2954.1	2065.1	1378.7	1217.7	1378.7	2065.1	2954.1	1978.0	1579.2	1437.4
45°	1546.1	2173.8	1612.6	1163.1	1036.6	1163.1	1612.6	2173.8	1546.1	1271.8	1176.5
47.5°	1259.2	1680.0	1307.0	997.7	909.0	997.7	1307.0	1680.0	1259.2	1075.7	1004.4
50°	1057.6	1289.2	1085.2	870.9	811.4	870.9	1085.2	1289.2	1057.6	921.1	873.6
52.5°	908.6	1051.4	924.1	776.1	736.0	776.1	924.1	1051.4	908.6	805.9	776.3
55°	783.0	883.9	803.7	697.9	670.2	697.9	803.7	883.9	783.0	717.2	695.3
57.5°	687.6	749.8	697.9	631.3	612.9	631.3	697.9	749.8	687.6	638.2	626.4
60°	603.1	649.3	615.9	573.2	568.0	573.2	615.9	649.3	603.1	574.2	566.5
62.5°	538.1	567.3	544.6	520.9	516.3	520.9	544.6	567.3	538.1	515.9	517.3
65°	477.4	504.5	486.7	474.0	475.5	474.0	486.7	504.5	477.4	467.1	469.2
67.5°	430.4	444.6	436.8	429.6	431.4	429.6	436.8	444.6	430.4	420.2	423.7
70°	380.3	395.6	387.6	388.7	391.7	388.7	387.6	395.6	380.3	377.3	380.0
72.5°	332.6	344.3	341.6	344.1	347.3	344.1	341.6	344.3	332.6	332.1	332.4
75°	285.6	294.5	295.7	299.1	304.2	299.1	295.7	294.5	285.6	282.5	286.1
77.5°	234.4	244.5	248.3	252.9	260.5	252.9	248.3	244.5	234.4	236.3	238.2
80°	187.3	192.0	200.5	203.9	214.5	203.9	200.5	192.0	187.3	183.9	186.5
82.5°	137.1	141.4	148.6	155.1	161.2	155.1	148.6	141.4	137.1	135.5	135.7
85°	79.2	85.7	90.6	98.2	100.1	98.2	90.6	85.7	79.2	81.0	79.2
87.5°	27.7	29.8	34.0	37.0	37.2	37.0	34.0	29.8	27.7	28.4	25.7
90°	10.7	18.3	31.4	17.4	12.1	17.4	31.4	18.3	10.7	18.9	29.5
92.5°	14.0	24.8	44.4	23.1	16.2	23.1	44.4	24.8	14.0	24.6	47.2
95°	20.7	30.5	56.6	25.5	19.4	25.5	56.6	30.5	20.7	32.7	66.0
97.5°	32.0	37.7	63.9	27.2	23.5	27.2	63.9	37.7	32.0	40.0	75.7
100°	42.6	42.6	116.7	31.2	26.7	31.2	116.7	42.6	42.6	49.1	118.0
102.5°	64.5	83.4	270.3	62.3	32.4	62.3	270.3	83.4	64.5	92.1	250.3
105°	117.3	190.6	475.8	160.5	59.5	160.5	475.8	190.6	117.3	192.8	446.0
107.5°	222.1	355.4	613.1	316.4	138.3	316.4	613.1	355.4	222.1	341.4	588.3
110°	355.2	496.7	669.0	433.4	279.6	433.4	669.0	496.7	355.2	468.9	616.7



TEST NUMBER: P1432844  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL15

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	462.4	553.5	653.6	480.4	386.7	480.4	653.6	553.5	462.4	517.6	590.7
115°	502.3	545.5	583.8	478.8	429.0	478.8	583.8	545.5	502.3	505.4	527.4
117.5°	485.4	499.1	504.2	449.6	431.4	449.6	504.2	499.1	485.4	454.5	447.8
120°	438.2	432.6	424.8	406.6	407.1	406.6	424.8	432.6	438.2	396.8	373.9
122.5°	379.2	367.0	359.0	362.9	373.8	362.9	359.0	367.0	379.2	337.7	320.5
125°	321.5	309.3	313.0	325.5	336.6	325.5	313.0	309.3	321.5	286.8	282.5
127.5°	273.0	267.3	279.7	293.9	303.3	293.9	279.7	267.3	273.0	251.1	255.8
130°	238.3	239.7	256.2	268.2	274.1	268.2	256.2	239.7	238.3	227.7	238.9
132.5°	216.5	222.9	238.5	248.9	252.4	248.9	238.5	222.9	216.5	213.5	227.1
135°	202.9	212.3	226.5	233.3	234.5	233.3	226.5	212.3	202.9	204.0	216.5
137.5°	195.1	204.4	215.1	220.5	219.1	220.5	215.1	204.4	195.1	197.7	207.3
140°	190.5	199.7	204.6	210.7	209.5	210.7	204.6	199.7	190.5	192.0	199.4
142.5°	185.8	194.3	196.8	201.2	199.8	201.2	196.8	194.3	185.8	187.4	192.2
145°	183.5	189.8	188.0	193.9	191.8	193.9	188.0	189.8	183.5	184.2	186.7
147.5°	179.5	184.2	181.7	186.7	184.8	186.7	181.7	184.2	179.5	179.5	180.4
150°	174.8	178.0	174.6	180.4	180.1	180.4	174.6	178.0	174.8	174.0	174.9
152.5°	168.5	171.7	168.5	175.1	174.6	175.1	168.5	171.7	168.5	167.7	168.7
155°	163.2	164.8	163.2	169.9	170.1	169.9	163.2	164.8	163.2	163.0	163.4
157.5°	159.5	160.5	159.7	165.6	165.8	165.6	159.7	160.5	159.5	159.5	159.7
160°	156.3	157.9	157.3	162.4	162.7	162.4	157.3	157.9	156.3	156.9	157.1
162.5°	155.0	155.0	154.7	159.8	160.2	159.8	154.7	155.0	155.0	155.0	155.8
165°	153.2	154.1	152.8	156.5	157.7	156.5	152.8	154.1	153.2	153.9	153.9
167.5°	152.8	152.1	152.5	155.5	156.7	155.5	152.5	152.1	152.8	153.4	153.4
170°	151.5	151.7	151.2	154.2	155.4	154.2	151.2	151.7	151.5	152.3	152.8
172.5°	152.1	152.1	151.0	153.2	155.3	153.2	151.0	152.1	152.1	152.6	153.4
175°	152.5	151.8	151.4	152.8	154.9	152.8	151.4	151.8	152.5	152.3	152.3
177.5°	151.6	152.0	152.4	153.9	156.7	153.9	152.4	152.0	151.6	152.3	152.3
180°	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0



TEST NUMBER: P1432844

CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL15

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2
2.5°	10487.4	10480.6	10487.4	10560.8	10656.2	10794.9
5°	10243.8	10205.7	10243.8	10325.1	10500.2	10764.3
7.5°	9960.0	9937.9	9960.0	10096.0	10317.3	10691.3
10°	9661.3	9611.3	9661.3	9814.8	10075.9	10579.6
12.5°	9293.0	9226.8	9293.0	9451.7	9781.0	10401.6
15°	8824.8	8766.7	8824.8	9000.8	9382.8	10138.3
17.5°	8322.3	8269.7	8322.3	8475.3	8895.9	9767.2
20°	7691.2	7649.9	7691.2	7907.5	8320.3	9289.0
22.5°	7029.1	6990.4	7029.1	7221.3	7650.9	8689.5
25°	6250.2	6229.1	6250.2	6464.8	6853.3	7988.4
27.5°	5408.3	5372.6	5408.3	5633.0	6029.8	7163.6
30°	4548.4	4489.1	4548.4	4749.3	5104.6	6247.5
32.5°	3707.3	3664.6	3707.3	3850.4	4221.7	5221.8
35°	2894.2	2851.5	2894.2	3023.7	3388.2	4275.6
37.5°	2255.3	2179.7	2255.3	2338.3	2634.2	3355.4
40°	1710.5	1698.3	1710.5	1815.0	2004.3	2610.6
42.5°	1392.4	1359.4	1392.4	1437.4	1579.2	1978.0
45°	1142.5	1129.5	1142.5	1176.5	1271.8	1546.1
47.5°	982.5	988.2	982.5	1004.4	1075.7	1259.2
50°	863.2	866.7	863.2	873.6	921.1	1057.6
52.5°	775.3	772.3	775.3	776.3	805.9	908.6
55°	697.5	693.7	697.5	695.3	717.2	783.0
57.5°	629.5	632.3	629.5	626.4	638.2	687.6
60°	568.8	571.4	568.8	566.5	574.2	603.1
62.5°	517.5	519.1	517.5	517.3	515.9	538.1
65°	471.7	473.6	471.7	469.2	467.1	477.4
67.5°	428.0	428.0	428.0	423.7	420.2	430.4
70°	386.8	386.6	386.8	380.0	377.3	380.3
72.5°	337.4	342.3	337.4	332.4	332.1	332.6
75°	289.4	295.1	289.4	286.1	282.5	285.6
77.5°	240.9	249.5	240.9	238.2	236.3	234.4
80°	191.0	200.5	191.0	186.5	183.9	187.3
82.5°	141.2	148.2	141.2	135.7	135.5	137.1
85°	84.1	95.4	84.1	79.2	81.0	79.2
87.5°	26.9	34.5	26.9	25.7	28.4	27.7
90°	17.3	10.7	17.3	29.5	18.9	10.7
92.5°	26.2	15.6	26.2	47.2	24.6	14.0
95°	30.3	18.1	30.3	66.0	32.7	20.7
97.5°	33.5	23.1	33.5	75.7	40.0	32.0
100°	39.2	30.5	39.2	118.0	49.1	42.6
102.5°	83.0	51.6	83.0	250.3	92.1	64.5
105°	174.8	88.9	174.8	446.0	192.8	117.3
107.5°	312.8	153.8	312.8	588.3	341.4	222.1
110°	415.1	287.0	415.1	616.7	468.9	355.2



TEST NUMBER: P1432844

CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL15

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	446.0	387.7	446.0	590.7	517.6	462.4
115°	428.9	408.0	428.9	527.4	505.4	502.3
117.5°	391.5	394.2	391.5	447.8	454.5	485.4
120°	348.5	364.9	348.5	373.9	396.8	438.2
122.5°	308.9	328.4	308.9	320.5	337.7	379.2
125°	274.8	294.5	274.8	282.5	286.8	321.5
127.5°	251.3	264.4	251.3	255.8	251.1	273.0
130°	232.8	244.2	232.8	238.9	227.7	238.3
132.5°	220.0	227.3	220.0	227.1	213.5	216.5
135°	208.8	215.1	208.8	216.5	204.0	202.9
137.5°	199.3	204.8	199.3	207.3	197.7	195.1
140°	190.8	195.5	190.8	199.4	192.0	190.5
142.5°	182.1	185.4	182.1	192.2	187.4	185.8
145°	176.0	178.5	176.0	186.7	184.2	183.5
147.5°	170.7	172.4	170.7	180.4	179.5	179.5
150°	165.4	167.1	165.4	174.9	174.0	174.8
152.5°	159.9	161.8	159.9	168.7	167.7	168.5
155°	156.3	158.2	156.3	163.4	163.0	163.2
157.5°	154.2	155.4	154.2	159.7	159.5	159.5
160°	152.4	153.4	152.4	157.1	156.9	156.3
162.5°	150.5	151.5	150.5	155.8	155.0	155.0
165°	150.0	150.2	150.0	153.9	153.9	153.2
167.5°	149.4	150.2	149.4	153.4	153.4	152.8
170°	149.6	149.8	149.6	152.8	152.3	151.5
172.5°	150.0	150.2	150.0	153.4	152.6	152.1
175°	149.6	149.8	149.6	152.3	152.3	152.5
177.5°	150.6	150.8	150.6	152.3	152.3	151.6
180°	152.0	152.0	152.0	152.0	152.0	152.0



TEST NUMBER: P1432844  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-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	13.95	15.00	14.50	15.53	16.11	13.27	14.32	13.82	14.85	15.43
	3H	15.49	16.43	16.06	16.97	17.60	15.11	16.05	15.68	16.59	17.21
	4H	16.13	17.00	16.71	17.56	18.20	15.89	16.77	16.48	17.32	17.96
	6H	16.61	17.41	17.20	17.98	18.63	16.53	17.34	17.13	17.91	18.56
	8H	16.76	17.52	17.37	18.11	18.77	16.75	17.51	17.36	18.10	18.76
	12H	16.83	17.55	17.44	18.14	18.82	16.88	17.61	17.49	18.19	18.87
4H	2H	14.36	15.23	14.95	15.79	16.43	13.84	14.71	14.43	15.27	15.91
	3H	16.15	16.88	16.75	17.48	18.13	15.89	16.61	16.49	17.22	17.87
	4H	16.93	17.58	17.54	18.19	18.88	16.80	17.45	17.41	18.06	18.75
	6H	17.54	18.10	18.18	18.73	19.44	17.57	18.13	18.21	18.76	19.47
	8H	17.74	18.26	18.38	18.89	19.61	17.84	18.36	18.48	18.99	19.71
	12H	17.84	18.30	18.50	18.96	19.68	18.00	18.47	18.66	19.13	19.85
8H	4H	17.17	17.70	17.82	18.33	19.04	17.08	17.60	17.72	18.23	18.95
	6H	17.92	18.34	18.59	19.02	19.74	17.98	18.41	18.65	19.08	19.80
	8H	18.19	18.57	18.88	19.25	19.99	18.33	18.71	19.02	19.40	20.13
	12H	18.36	18.69	19.04	19.36	20.16	18.58	18.91	19.27	19.58	20.39
12H	4H	17.18	17.64	17.84	18.31	19.02	17.09	17.55	17.75	18.21	18.93
	6H	17.96	18.34	18.65	19.03	19.76	18.03	18.41	18.72	19.09	19.83
	8H	18.27	18.61	18.96	19.28	20.08	18.43	18.76	19.11	19.43	20.23

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-4

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L850-N

Data in this report applies to families of products including EHBR-60-L850-N

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2506-472-4  
 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-L850-N**  
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 80CRI LEDs with N lens

**Spectral Parameters**

CCT (K): 4875  
 CIE u': 0.2124  
 CIE v': 0.4871  
 Duv: 0.0005  
 CIE x: 0.3488  
 CIE y: 0.3555  
 CIE z: 0.2957  
 Peak Wavelength (nm): 630  
 Dominant Wavelength (nm): 573  
 Purity: 11.33556  
 Rf: 80  
 Rg: 102.3

CRI (Ra):	82.3		
R1:	85.0	R9:	43.9
R2:	83.1	R10:	57.4
R3:	78.8	R11:	83.1
R4:	84.0	R12:	51.0
R5:	83.0	R13:	83.4
R6:	76.3	R14:	87.4
R7:	86.8	R15:	83.4
R8:	81.7		



**Test Conditions**

Stabilization Time: 39M  
 Operation Time: 1H 39M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-4

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: SP1-2506-472-4

CIE 1931 Chromaticity Diagram



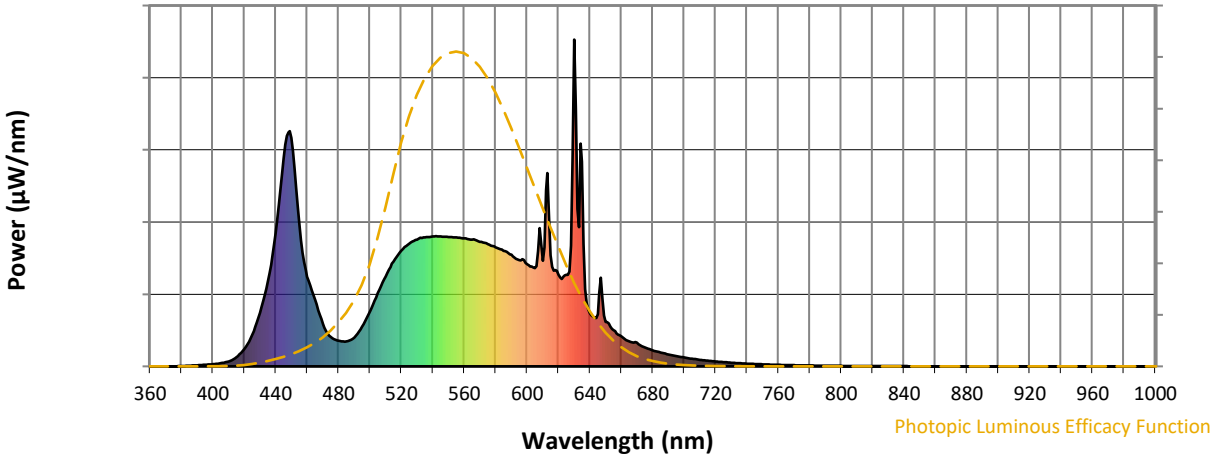
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-4

**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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

**Scotopic Flux vs. Wavelength**



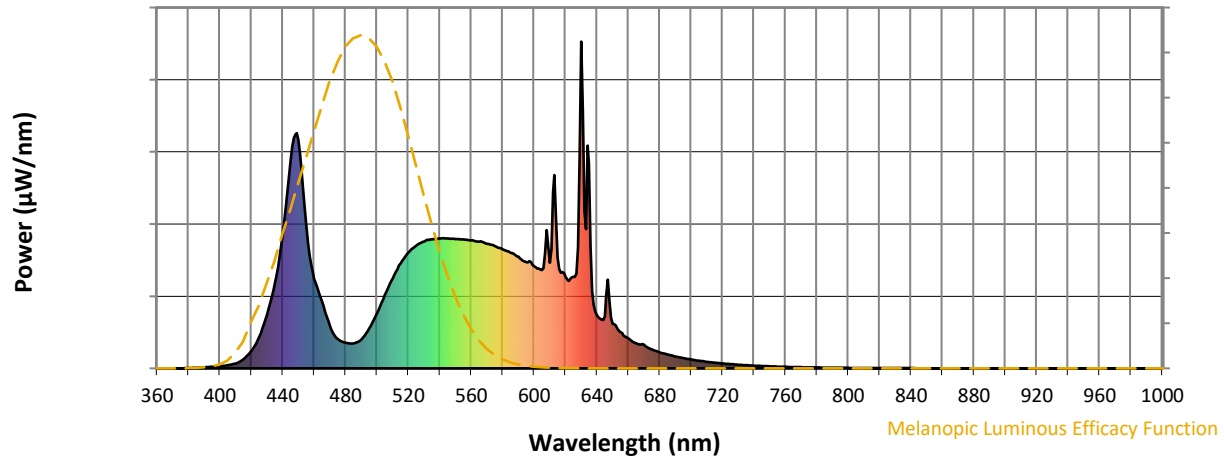
**Scotopic Lumens: NR**

**S/P: 1.82**

$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )
360	0	NR	490	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

Melanopic Flux vs. Wavelength



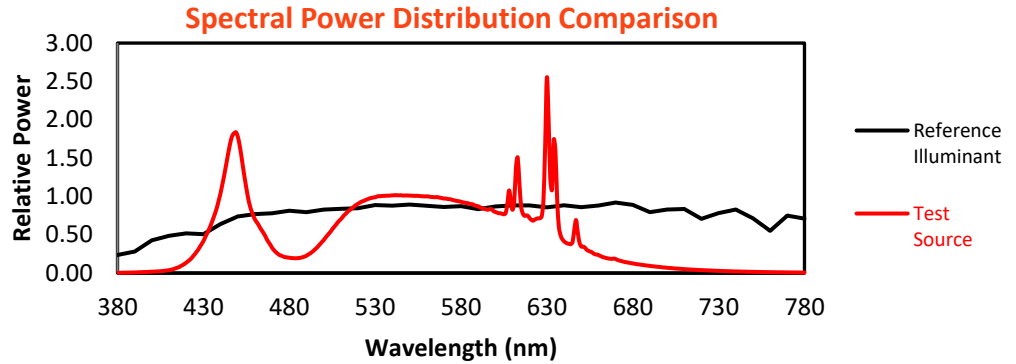
Melanopic Lumens: NR

M/P: 3.71

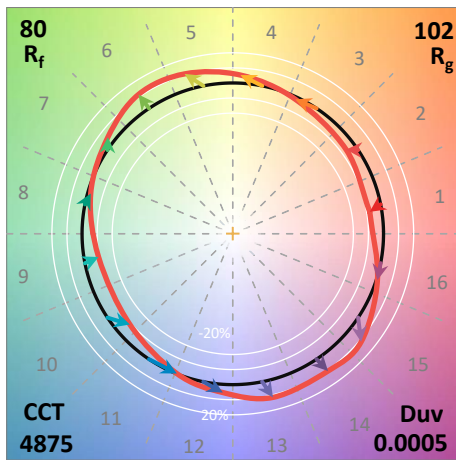
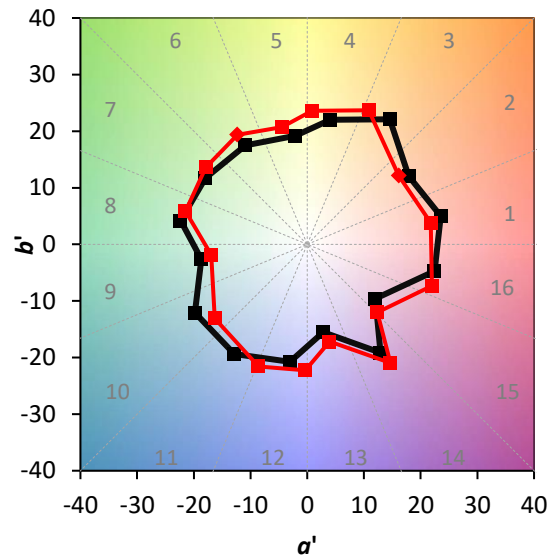
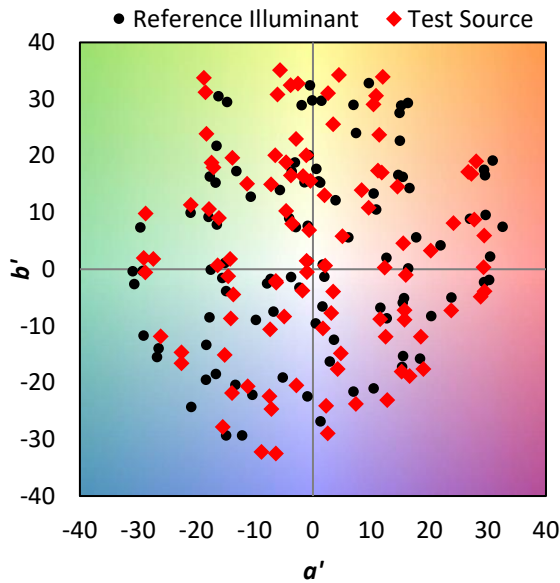
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

**Summary**

$R_f = 80$   
 $R_g = 102.3$   
 CIE  $R_a = 82.3$   
 $R_9 = 43.9$



**Color Vector Graphics**

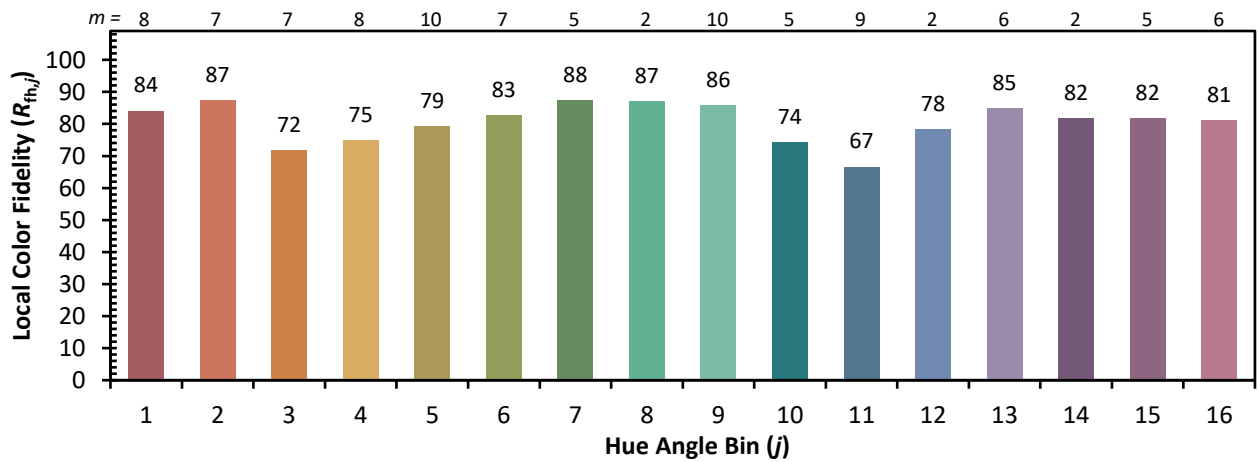
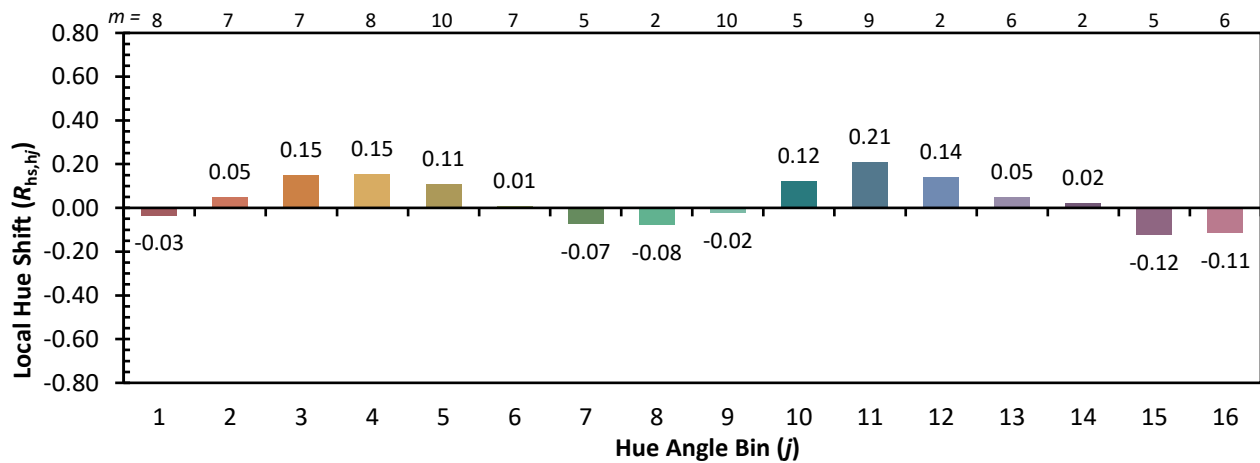
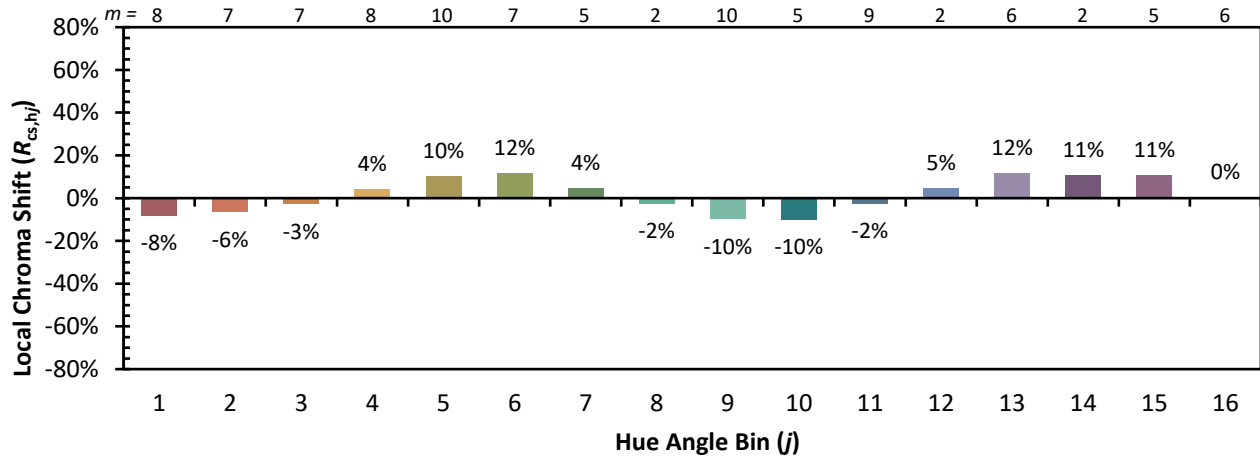


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

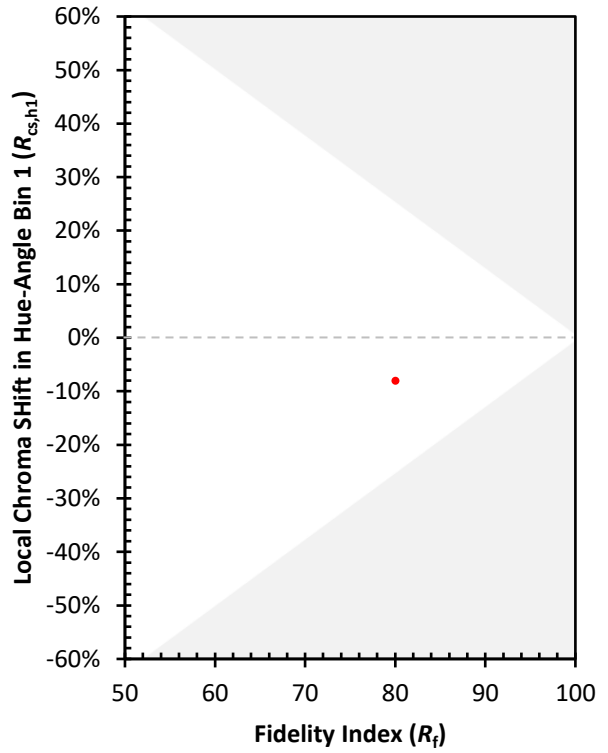
CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82 = 90
CES08 = 39	CES33 = 76	CES58 = 81	CES83 = 87
CES09 = 29	CES34 = 68	CES59 = 93	CES84 = 87
CES10 = 73	CES35 = 82	CES60 = 94	CES85 = 82
CES11 = 56	CES36 = 95	CES61 = 91	CES86 = 83
CES12 = 62	CES37 = 75	CES62 = 89	CES87 = 78
CES13 = 42	CES38 = 87	CES63 = 80	CES88 = 85
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 81
CES15 = 71	CES40 = 87	CES65 = 75	CES90 = 86
CES16 = 46	CES41 = 91	CES66 = 72	CES91 = 80
CES17 = 48	CES42 = 71	CES67 = 69	CES92 = 77
CES18 = 56	CES43 = 72	CES68 = 75	CES93 = 86
CES19 = 70	CES44 = 99	CES69 = 80	CES94 = 71
CES20 = 65	CES45 = 81	CES70 = 66	CES95 = 79
CES21 = 85	CES46 = 83	CES71 = 59	CES96 = 86
CES22 = 77	CES47 = 83	CES72 = 87	CES97 = 85
CES23 = 91	CES48 = 83	CES73 = 56	CES98 = 82
CES24 = 90	CES49 = 82	CES74 = 95	CES99 = 84
CES25 = 71	CES50 = 91	CES75 = 58	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)