

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: P1432689

Luminaire Tested: EHBR1-36-UNV-TASM-L835-UPL40

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1432689
REPORT IS A COMBINATION OF REPORTS P1431778 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-36-UNV-TASM-L835-UPL40
Description: Elevate Round Highbay at, 36000 lumens, 3500K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

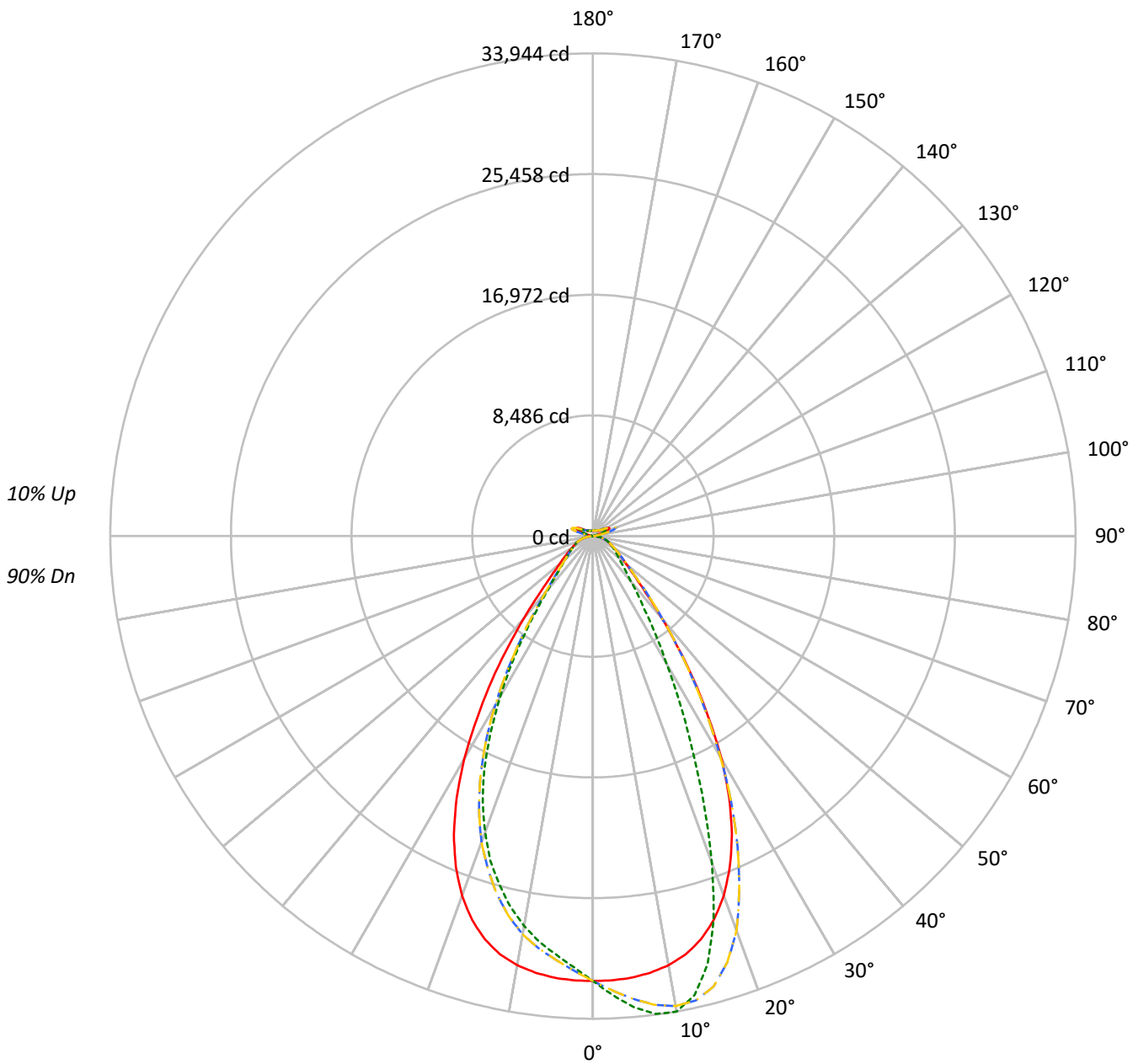
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38739.8 lumens
Efficiency: N/A
Efficacy: 174.5 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): 222
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: P1432689
CATALOG NUMBER: EHBR1-36-UNV-TASM-L835-UPL40

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
RCR																				
0	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	90	
1	109	106	103	100	106	103	100	98	97	95	93	92	90	88	87	85	84	84	81	
2	102	96	91	87	99	94	89	86	89	85	82	84	81	79	80	78	76	76	74	
3	96	88	82	77	93	86	81	76	82	77	74	78	74	71	75	72	69	69	67	
4	90	81	74	69	87	79	73	68	76	71	67	72	68	65	69	66	63	63	61	
5	85	75	68	63	82	73	67	62	70	65	61	67	63	59	65	61	58	58	56	
6	80	69	62	58	77	68	62	57	65	60	56	63	58	55	61	57	53	53	52	
7	75	65	58	53	73	63	57	52	61	56	51	59	54	51	57	53	50	50	48	
8	71	60	54	49	69	59	53	49	57	52	48	55	51	47	54	49	46	46	44	
9	67	57	50	45	66	56	49	45	54	48	44	52	47	44	51	46	43	43	42	
10	64	53	47	42	62	52	46	42	51	45	42	49	44	41	48	44	40	40	39	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	146905	146905	146905	146905
5°	146011	155766	146011	138433
10°	144216	159765	144216	131016
15°	139958	148471	139958	121023
20°	130896	119054	130896	107797
25°	115853	82488	115853	90339
30°	94068	53664	94068	67592
35°	67469	34754	67469	44997
40°	43620	23954	43620	28378
45°	27677	18555	27677	20219
50°	20554	15767	20554	16842
55°	16781	14364	16781	14866
60°	14531	13682	14531	13765
65°	13246	13195	13246	13140
70°	12555	12930	12555	12762
75°	11741	12508	11741	12133
80°	10314	11808	10314	11040
85°	6672	8429	6672	8039

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 38912 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2974.5	7.7
10°-20°	8092.2	20.9
20°-30°	9490.5	24.5
30°-40°	6600.1	17.0
40°-50°	3279.9	8.5
50°-60°	1961.7	5.1
60°-70°	1380.8	3.6
70°-80°	889.4	2.3
80°-90°	289.2	0.7
90°-100°	100.6	0.3
100°-110°	657.6	1.7
110°-120°	1215.0	3.1
120°-130°	722.0	1.9
130°-140°	436.5	1.1
140°-150°	302.0	0.8
150°-160°	197.0	0.5
160°-170°	113.1	0.3
170°-180°	37.6	0.1
0°-30°	20557.2	53.1
0°-40°	27157.3	70.1
0°-60°	32399.0	83.6
0°-90°	34958.3	90.2
90°-120°	1973.3	5.1
90°-150°	3433.8	8.9
90°-180°	3781.0	9.8
0°-180°	38739.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	31282	31282	31282	31282	31282	
5°	31176	33258	31176	29558	31176	2959
15°	29362	31148	29362	25390	29362	8206
25°	23136	16473	23136	18041	23136	10474
35°	12383	6379	12383	8259	12383	7730
45°	4478	3002	4478	3271	4478	3664
55°	2268	1941	2268	2009	2268	2074
65°	1383	1377	1383	1372	1383	1389
75°	827	881	827	855	827	868
85°	229	290	229	276	229	255
90°	28	32	28	28	28	24
95°	53	51	53	46	53	57
105°	302	154	302	229	302	407
115°	1293	1104	1293	1050	1293	1179
125°	828	867	828	758	828	762
135°	523	604	523	554	523	415
145°	473	495	473	460	473	296
155°	421	439	421	408	421	197
165°	396	408	396	388	396	113
175°	395	401	395	388	395	38
180°	394	394	394	394	394	



TEST NUMBER: P1432689
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4
2.5°	31264.1	31668.3	31995.6	32211.5	32318.2	32211.5	31995.6	31668.3	31264.1	30862.3	30586.0
5°	31175.6	31985.1	32670.8	33119.6	33258.5	33119.6	32670.8	31985.1	31175.6	30410.7	29903.2
7.5°	30963.8	32225.0	33243.9	33767.7	33895.6	33767.7	33243.9	32225.0	30963.8	29880.9	29239.9
10°	30640.6	32376.3	33553.6	33929.0	33944.3	33929.0	33553.6	32376.3	30640.6	29181.8	28425.6
12.5°	30125.0	32322.4	33449.8	33326.6	33046.7	33326.6	33449.8	32322.4	30125.0	28327.7	27373.8
15°	29362.4	32002.7	32792.2	31789.7	31148.5	31789.7	32792.2	32002.7	29362.4	27174.5	26068.1
17.5°	28287.8	31404.3	31419.6	29436.3	28226.8	29436.3	31419.6	31404.3	28287.8	25764.2	24545.9
20°	26902.9	30444.7	29529.6	25902.1	24469.1	25902.1	29529.6	30444.7	26902.9	24097.2	22901.7
22.5°	25166.5	29150.6	26897.5	22346.8	20391.6	22346.8	26897.5	29150.6	25166.5	22158.5	20914.3
25°	23135.7	27565.1	24066.1	18473.0	16472.7	18473.0	24066.1	27565.1	23135.7	19848.5	18723.5
27.5°	20747.1	25555.4	21051.0	15095.4	13249.9	15095.4	21051.0	25555.4	20747.1	17463.4	16314.3
30°	18094.0	22979.1	17913.4	12021.6	10322.3	12021.6	17913.4	22979.1	18094.0	14783.9	13754.9
32.5°	15123.5	20453.9	14900.0	9632.4	8192.9	9632.4	14900.0	20453.9	15123.5	12226.9	11151.7
35°	12382.9	17294.5	12183.0	7568.8	6378.6	7568.8	12183.0	17294.5	12382.9	9813.1	8757.3
37.5°	9718.0	14309.3	9711.6	6094.7	5173.7	6094.7	9711.6	14309.3	9718.0	7629.2	6772.2
40°	7560.5	11188.6	7609.2	4865.2	4151.9	4865.2	7609.2	11188.6	7560.5	5804.9	5256.4
42.5°	5728.7	8555.5	5980.9	3993.0	3526.5	3993.0	5980.9	8555.5	5728.7	4573.6	4163.1
45°	4478.0	6295.8	4670.4	3368.8	3002.2	3368.8	4670.4	6295.8	4478.0	3683.2	3407.5
47.5°	3646.9	4865.8	3785.3	2889.5	2632.7	2889.5	3785.3	4865.8	3646.9	3115.4	2908.9
50°	3063.2	3733.7	3142.9	2522.3	2349.9	2522.3	3142.9	3733.7	3063.2	2667.8	2530.0
52.5°	2631.4	3045.0	2676.6	2247.8	2131.7	2247.8	2676.6	3045.0	2631.4	2334.1	2248.4
55°	2267.8	2559.8	2327.6	2021.4	1941.1	2021.4	2327.6	2559.8	2267.8	2077.1	2013.8
57.5°	1991.5	2171.6	2021.4	1828.4	1775.1	1828.4	2021.4	2171.6	1991.5	1848.4	1814.3
60°	1746.8	1880.7	1783.8	1660.0	1644.8	1660.0	1783.8	1880.7	1746.8	1663.0	1640.7
62.5°	1558.6	1643.1	1577.3	1508.7	1495.2	1508.7	1577.3	1643.1	1558.6	1494.0	1498.2
65°	1382.6	1461.2	1409.6	1372.6	1377.3	1372.6	1409.6	1461.2	1382.6	1352.6	1359.1
67.5°	1246.5	1287.6	1265.3	1244.1	1249.5	1244.1	1265.3	1287.6	1246.5	1217.2	1227.2
70°	1101.6	1145.6	1122.7	1125.6	1134.5	1125.6	1122.7	1145.6	1101.6	1092.9	1100.4
72.5°	963.2	997.2	989.6	996.6	1006.0	996.6	989.6	997.2	963.2	962.0	962.6
75°	827.1	852.9	856.4	866.4	881.1	866.4	856.4	852.9	827.1	818.3	828.8
77.5°	678.7	708.0	719.1	732.6	754.3	732.6	719.1	708.0	678.7	684.5	689.9
80°	542.6	556.1	580.8	590.7	621.2	590.7	580.8	556.1	542.6	532.7	540.2
82.5°	397.1	409.4	430.6	449.4	466.9	449.4	430.6	409.4	397.1	392.4	393.0
85°	229.3	248.1	262.2	284.5	289.7	284.5	262.2	248.1	229.3	234.7	229.3
87.5°	80.4	86.2	98.5	107.3	107.9	107.3	98.5	86.2	80.4	82.1	74.5
90°	27.7	47.1	81.2	45.3	31.8	45.3	81.2	47.1	27.7	48.7	75.8
92.5°	36.1	63.8	114.6	59.9	42.3	59.9	114.6	63.8	36.1	63.2	121.8
95°	53.4	78.4	145.9	66.1	50.6	66.1	145.9	78.4	53.4	84.2	169.8
97.5°	82.6	97.3	164.8	70.4	61.1	70.4	164.8	97.3	82.6	103.0	194.9
100°	109.9	109.9	300.5	80.8	69.4	80.8	300.5	109.9	109.9	126.5	303.6
102.5°	166.2	214.9	696.1	160.8	84.1	160.8	696.1	214.9	166.2	237.3	644.2
105°	302.1	490.7	1224.7	413.6	153.6	413.6	1224.7	490.7	302.1	496.4	1147.7
107.5°	571.6	914.9	1577.8	814.8	356.3	814.8	1577.8	914.9	571.6	878.8	1514.0
110°	914.3	1278.5	1722.0	1115.7	719.9	1115.7	1722.0	1278.5	914.3	1206.8	1587.1



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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°	1190.1	1424.7	1682.3	1237.0	995.7	1237.0	1682.3	1424.7	1190.1	1332.2	1520.3
115°	1293.1	1403.8	1502.7	1232.7	1104.3	1232.7	1502.7	1403.8	1293.1	1300.9	1357.3
117.5°	1249.2	1284.8	1297.9	1157.5	1110.6	1157.5	1297.9	1284.8	1249.2	1169.9	1152.5
120°	1128.1	1113.4	1093.6	1046.8	1048.0	1046.8	1093.6	1113.4	1128.1	1021.5	962.3
122.5°	976.1	944.7	924.4	934.5	962.2	934.5	924.4	944.7	976.1	869.5	825.0
125°	827.7	796.3	805.9	838.4	866.7	838.4	805.9	796.3	827.7	738.4	727.4
127.5°	702.9	688.3	720.2	756.9	781.0	756.9	720.2	688.3	702.9	646.5	658.4
130°	613.6	617.2	659.6	690.6	705.9	690.6	659.6	617.2	613.6	586.5	615.2
132.5°	557.8	574.0	614.2	641.1	650.1	641.1	614.2	574.0	557.8	550.0	584.9
135°	522.9	546.8	583.5	600.7	604.1	600.7	583.5	546.8	522.9	525.6	557.8
137.5°	502.6	526.5	554.2	568.0	564.4	568.0	554.2	526.5	502.6	509.4	533.9
140°	490.6	514.5	527.0	542.8	539.9	542.8	527.0	514.5	490.6	494.7	513.6
142.5°	478.7	500.5	506.8	518.4	514.8	518.4	506.8	500.5	478.7	482.9	495.4
145°	473.0	489.2	484.4	499.6	494.6	499.6	484.4	489.2	473.0	474.6	481.4
147.5°	462.6	474.6	468.3	481.4	476.3	481.4	468.3	474.6	462.6	462.6	465.3
150°	450.6	459.0	450.0	465.3	464.4	465.3	450.0	459.0	450.6	448.6	451.2
152.5°	434.5	442.9	434.5	451.8	450.3	451.8	434.5	442.9	434.5	432.4	435.1
155°	421.0	425.2	421.0	438.3	438.9	438.3	421.0	425.2	421.0	420.5	421.6
157.5°	411.7	414.5	412.3	427.5	428.1	427.5	412.3	414.5	411.7	411.7	412.3
160°	403.7	407.9	406.3	419.4	420.0	419.4	406.3	407.9	403.7	405.1	405.7
162.5°	400.6	400.6	399.7	412.8	414.0	412.8	399.7	400.6	400.6	400.6	402.7
165°	396.1	398.2	395.2	404.8	408.1	404.8	395.2	398.2	396.1	397.6	397.6
167.5°	395.2	393.1	394.4	402.3	405.6	402.3	394.4	393.1	395.2	396.7	396.7
170°	391.6	392.2	391.4	399.3	402.6	399.3	391.4	392.2	391.6	393.7	395.2
172.5°	393.4	393.4	391.0	396.9	402.2	396.9	391.0	393.4	393.4	395.0	397.0
175°	394.6	393.1	392.2	396.0	401.4	396.0	392.2	393.1	394.6	394.0	394.0
177.5°	392.5	393.7	394.9	398.6	406.1	398.6	394.9	393.7	392.5	394.0	394.0
180°	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	31282.4	31282.4	31282.4	31282.4	31282.4	31282.4
2.5°	30373.7	30353.8	30373.7	30586.0	30862.3	31264.1
5°	29668.0	29557.7	29668.0	29903.2	30410.7	31175.6
7.5°	28846.3	28782.3	28846.3	29239.9	29880.9	30963.8
10°	27981.0	27836.1	27981.0	28425.6	29181.8	30640.6
12.5°	26914.6	26722.8	26914.6	27373.8	28327.7	30125.0
15°	25558.4	25390.0	25558.4	26068.1	27174.5	29362.4
17.5°	24103.0	23950.5	24103.0	24545.9	25764.2	28287.8
20°	22275.2	22155.5	22275.2	22901.7	24097.2	26902.9
22.5°	20357.6	20245.6	20357.6	20914.3	22158.5	25166.5
25°	18101.6	18040.6	18101.6	18723.5	19848.5	23135.7
27.5°	15663.7	15560.0	15663.7	16314.3	17463.4	20747.1
30°	13173.1	13001.2	13173.1	13754.9	14783.9	18094.0
32.5°	10736.9	10613.2	10736.9	11151.7	12226.9	15123.5
35°	8382.4	8258.6	8382.4	8757.3	9813.1	12382.9
37.5°	6531.7	6312.9	6531.7	6772.2	7629.2	9718.0
40°	4953.8	4918.6	4953.8	5256.4	5804.9	7560.5
42.5°	4032.8	3937.2	4032.8	4163.1	4573.6	5728.7
45°	3308.9	3271.4	3308.9	3407.5	3683.2	4478.0
47.5°	2845.5	2862.0	2845.5	2908.9	3115.4	3646.9
50°	2500.0	2510.0	2500.0	2530.0	2667.8	3063.2
52.5°	2245.5	2236.6	2245.5	2248.4	2334.1	2631.4
55°	2020.2	2009.0	2020.2	2013.8	2077.1	2267.8
57.5°	1823.2	1831.3	1823.2	1814.3	1848.4	1991.5
60°	1647.1	1654.8	1647.1	1640.7	1663.0	1746.8
62.5°	1498.8	1503.4	1498.8	1498.2	1494.0	1558.6
65°	1366.1	1371.5	1366.1	1359.1	1352.6	1382.6
67.5°	1239.5	1239.5	1239.5	1227.2	1217.2	1246.5
70°	1120.4	1119.8	1120.4	1100.4	1092.9	1101.6
72.5°	977.3	991.3	977.3	962.6	962.0	963.2
75°	838.2	854.7	838.2	828.8	818.3	827.1
77.5°	697.4	722.7	697.4	689.9	684.5	678.7
80°	553.1	580.8	553.1	540.2	532.7	542.6
82.5°	408.8	429.4	408.8	393.0	392.4	397.1
85°	243.4	276.3	243.4	229.3	234.7	229.3
87.5°	78.1	99.7	78.1	74.5	82.1	80.4
90°	44.5	27.7	44.5	75.8	48.7	27.7
92.5°	67.5	40.2	67.5	121.8	63.2	36.1
95°	77.9	46.5	77.9	169.8	84.2	53.4
97.5°	86.2	59.6	86.2	194.9	103.0	82.6
100°	100.8	78.4	100.8	303.6	126.5	109.9
102.5°	213.7	132.9	213.7	644.2	237.3	166.2
105°	449.8	228.9	449.8	1147.7	496.4	302.1
107.5°	805.1	396.1	805.1	1514.0	878.8	571.6
110°	1068.3	738.8	1068.3	1587.1	1206.8	914.3



TEST NUMBER: P1432689

CATALOG NUMBER: EHBR1-36-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1147.7	997.9	1147.7	1520.3	1332.2	1190.1
115°	1103.9	1050.1	1103.9	1357.3	1300.9	1293.1
117.5°	1007.7	1014.6	1007.7	1152.5	1169.9	1249.2
120°	897.0	939.4	897.0	962.3	1021.5	1128.1
122.5°	795.2	845.4	795.2	825.0	869.5	976.1
125°	707.4	758.1	707.4	727.4	738.4	827.7
127.5°	646.8	680.8	646.8	658.4	646.5	702.9
130°	599.4	628.7	599.4	615.2	586.5	613.6
132.5°	566.5	585.3	566.5	584.9	550.0	557.8
135°	537.8	554.0	537.8	557.8	525.6	522.9
137.5°	513.4	527.4	513.4	533.9	509.4	502.6
140°	491.5	503.5	491.5	513.6	494.7	490.6
142.5°	469.1	477.5	469.1	495.4	482.9	478.7
145°	453.6	459.9	453.6	481.4	474.6	473.0
147.5°	440.2	444.4	440.2	465.3	462.6	462.6
150°	426.8	430.9	426.8	451.2	448.6	450.6
152.5°	412.7	417.5	412.7	435.1	432.4	434.5
155°	403.4	408.2	403.4	421.6	420.5	421.0
157.5°	398.3	401.6	398.3	412.3	411.7	411.7
160°	393.8	396.4	393.8	405.7	405.1	403.7
162.5°	388.7	391.4	388.7	402.7	400.6	400.6
165°	387.8	388.4	387.8	397.6	397.6	396.1
167.5°	386.2	388.4	386.2	396.7	396.7	395.2
170°	386.8	387.4	386.8	395.2	393.7	391.6
172.5°	388.1	388.7	388.1	397.0	395.0	393.4
175°	387.2	387.8	387.2	394.0	394.0	394.6
177.5°	389.8	390.4	389.8	394.0	394.0	392.5
180°	393.7	393.7	393.7	393.7	393.7	393.7



TEST NUMBER: P1432689
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L835-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	17.73	18.79	18.26	19.30	19.86	17.05	18.11	17.58	18.62	19.18
	3H	19.28	20.22	19.82	20.75	21.35	18.89	19.84	19.44	20.37	20.97
	4H	19.91	20.80	20.48	21.33	21.95	19.67	20.56	20.24	21.10	21.72
	6H	20.39	21.20	20.97	21.76	22.38	20.32	21.13	20.90	21.68	22.31
	8H	20.54	21.31	21.13	21.88	22.52	20.54	21.31	21.13	21.88	22.51
	12H	20.61	21.35	21.21	21.91	22.57	20.66	21.40	21.26	21.96	22.62
4H	2H	18.14	19.03	18.71	19.57	20.18	17.62	18.50	18.19	19.04	19.66
	3H	19.94	20.67	20.52	21.25	21.89	19.68	20.41	20.26	20.99	21.62
	4H	20.71	21.37	21.31	21.96	22.63	20.58	21.24	21.18	21.83	22.50
	6H	21.32	21.89	21.95	22.51	23.19	21.35	21.92	21.97	22.54	23.22
	8H	21.52	22.05	22.15	22.66	23.36	21.62	22.15	22.25	22.77	23.46
	12H	21.62	22.09	22.27	22.74	23.43	21.79	22.26	22.43	22.90	23.60
8H	4H	20.96	21.49	21.59	22.10	22.79	20.86	21.39	21.49	22.01	22.70
	6H	21.70	22.13	22.36	22.79	23.49	21.76	22.19	22.42	22.86	23.55
	8H	21.97	22.35	22.64	23.02	23.74	22.12	22.50	22.79	23.17	23.88
	12H	22.14	22.48	22.81	23.13	23.91	22.36	22.70	23.03	23.35	24.14
12H	4H	20.97	21.43	21.61	22.08	22.77	20.87	21.34	21.51	21.98	22.68
	6H	21.74	22.13	22.42	22.80	23.51	21.81	22.19	22.48	22.87	23.58
	8H	22.06	22.39	22.73	23.05	23.83	22.21	22.55	22.88	23.20	23.98

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: SP1-2506-472-3

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L835-N

Data in this report applies to families of products including EHBR-60-L835-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-3
 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-L835-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 3468
 CIE u': 0.2375
 CIE v': 0.5091
 Duv: -0.0021
 CIE x: 0.4049
 CIE y: 0.3856
 CIE z: 0.2095
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 581
 Purity: 37.24544
 Rf: 80.1
 Rg: 101

CRI (Ra):	82.1		
R1:	82.9	R9:	27.6
R2:	85.6	R10:	63.8
R3:	85.9	R11:	81.2
R4:	82.8	R12:	57.2
R5:	81.0	R13:	82.6
R6:	79.7	R14:	91.0
R7:	86.5	R15:	79.4
R8:	72.1		



Test Conditions

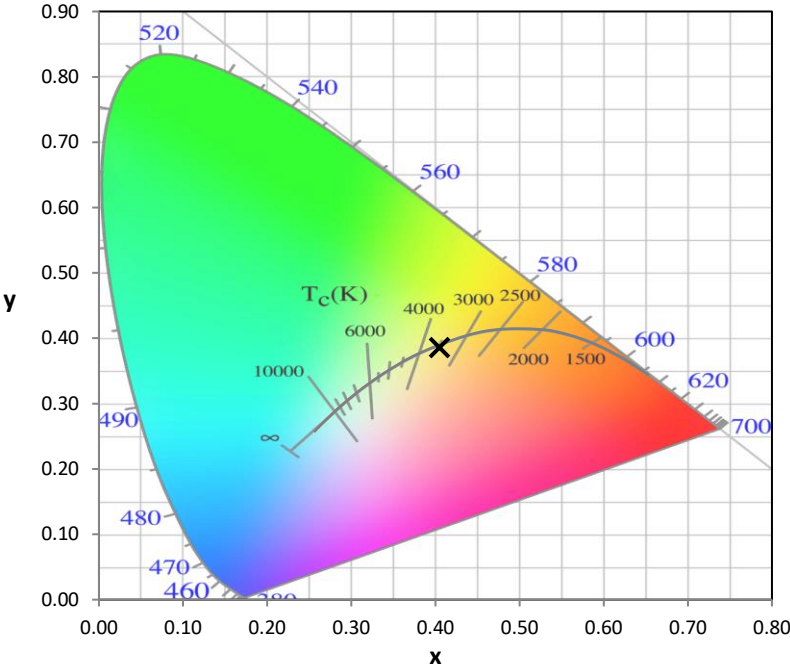
Stabilization Time: 39M
 Operation Time: 1H 39M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-3

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: SP1-2506-472-3

CIE 1931 Chromaticity Diagram



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



CCT = 3468K
 CIE x = 0.4049
 CIE y = 0.3856
 Duv = -0.0021

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-3

Photopic Flux vs. Wavelength

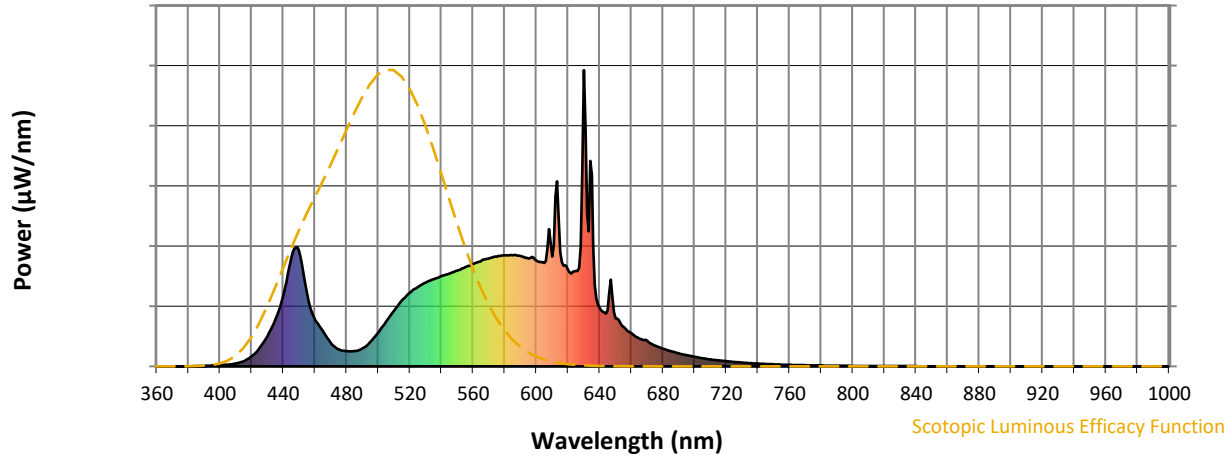


Photopic Lumens: NR

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	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-3

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.43

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	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.75

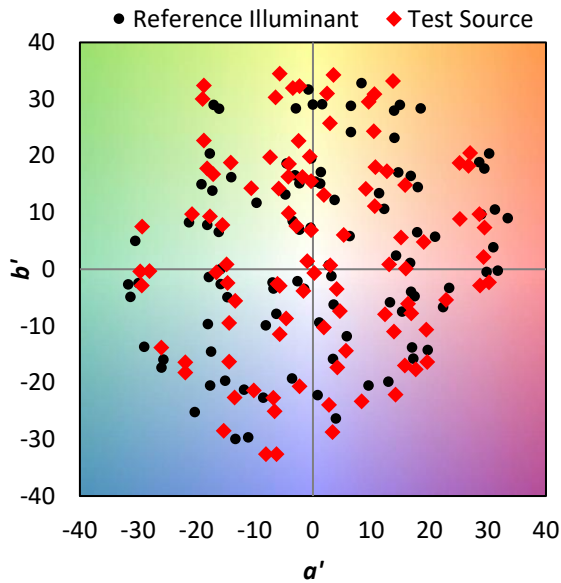
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

Summary

$R_f = 80.1$
 $R_g = 101$
 $CIE R_a = 82.1$
 $R_9 = 27.6$

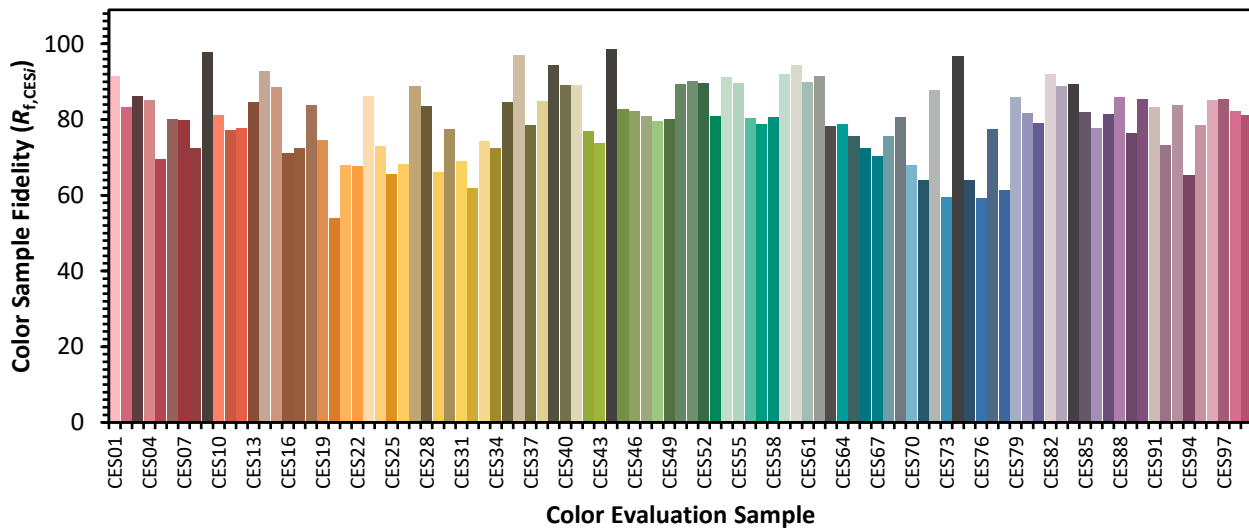


Color Vector Graphics

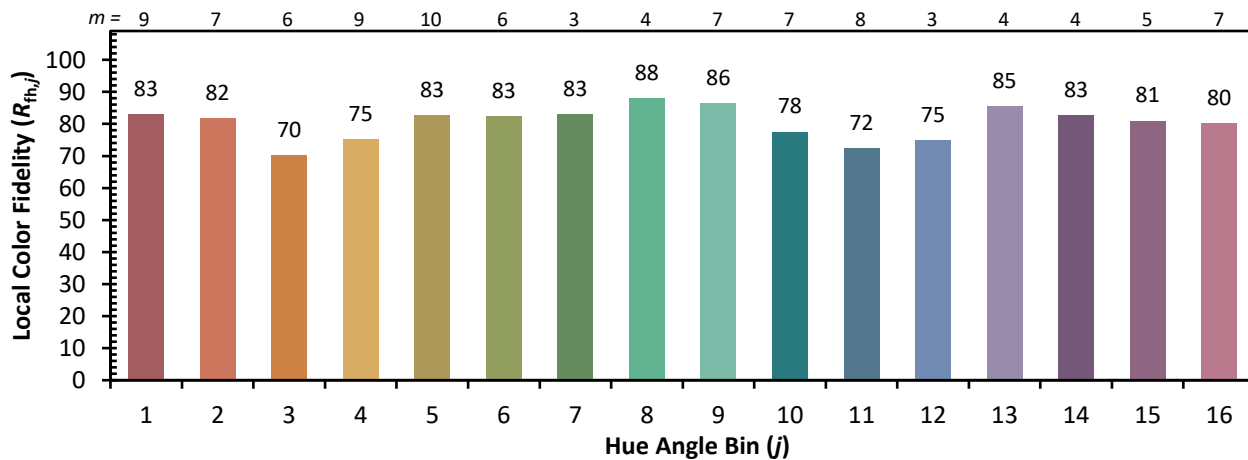
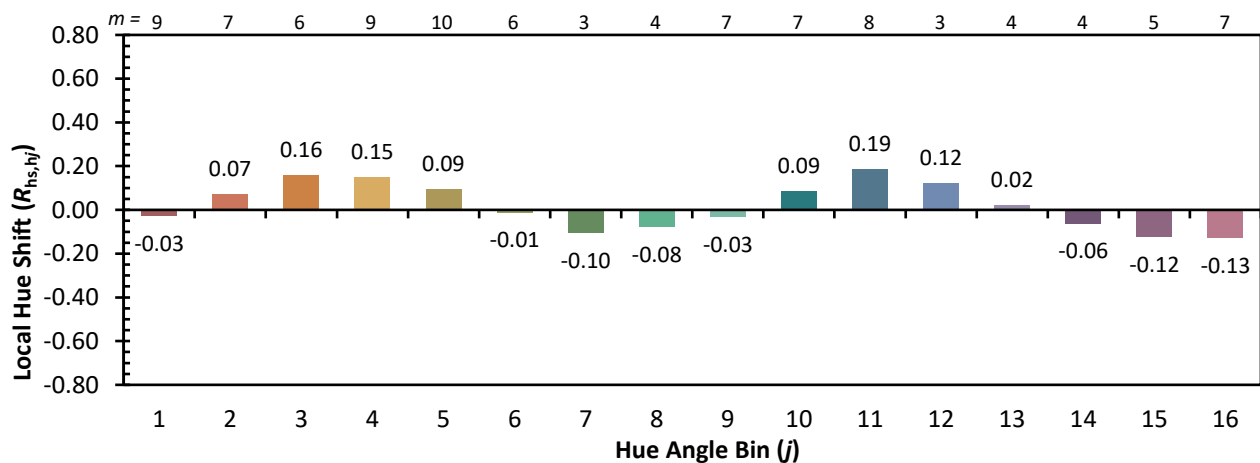
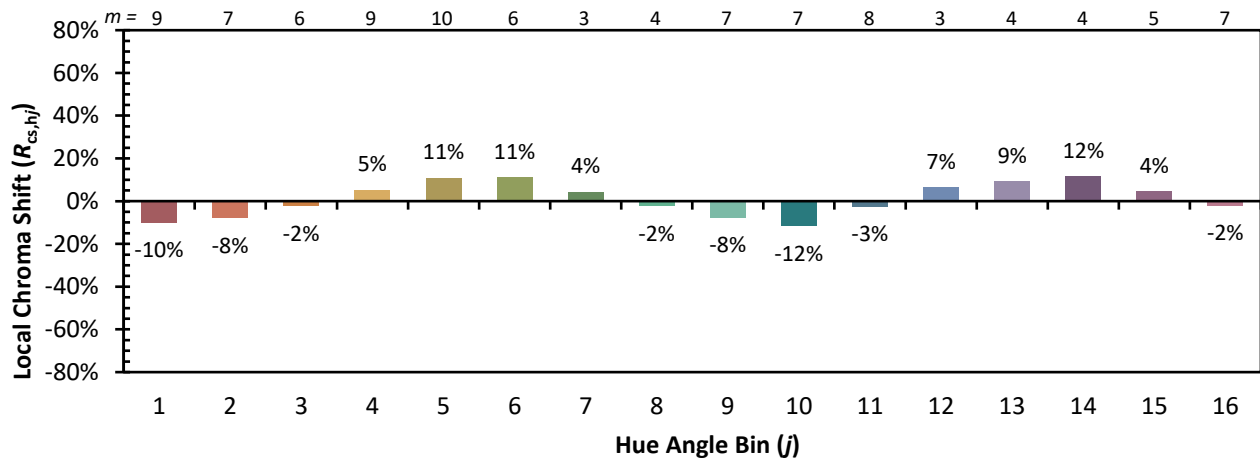


Individual Sample Fidelity Index ($R_{f,i}$)

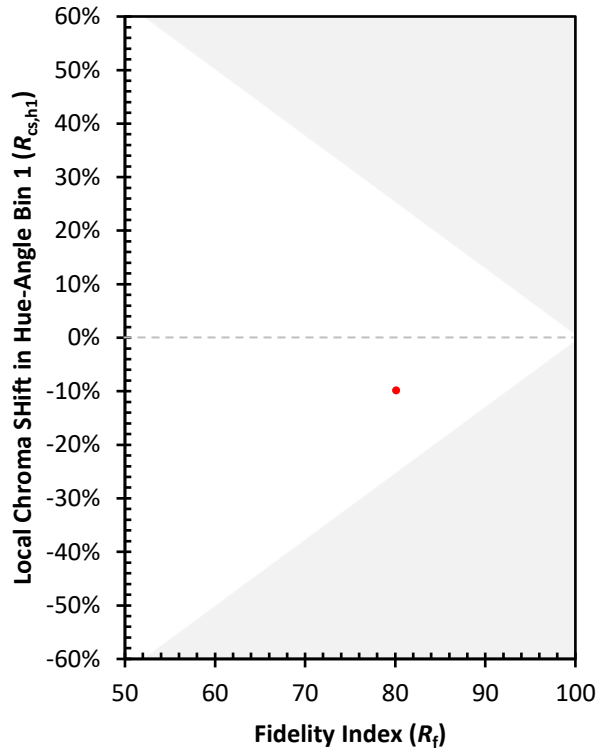
CES01 = 86	CES26 = 68	CES51 = 90	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 90	CES77 = 78
CES03 = 31	CES28 = 84	CES53 = 81	CES78 = 61
CES04 = 70	CES29 = 66	CES54 = 91	CES79 = 86
CES05 = 49	CES30 = 77	CES55 = 90	CES80 = 82
CES06 = 51	CES31 = 69	CES56 = 80	CES81 = 79
CES07 = 42	CES32 = 62	CES57 = 79	CES82 = 92
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 72	CES59 = 92	CES84 = 89
CES10 = 75	CES35 = 85	CES60 = 94	CES85 = 82
CES11 = 58	CES36 = 97	CES61 = 90	CES86 = 78
CES12 = 64	CES37 = 79	CES62 = 92	CES87 = 82
CES13 = 43	CES38 = 85	CES63 = 78	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 76
CES15 = 71	CES40 = 89	CES65 = 76	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 73	CES91 = 83
CES17 = 49	CES42 = 77	CES67 = 70	CES92 = 73
CES18 = 56	CES43 = 74	CES68 = 76	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 81	CES94 = 65
CES20 = 66	CES45 = 83	CES70 = 68	CES95 = 79
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 85
CES22 = 78	CES47 = 81	CES72 = 88	CES97 = 85
CES23 = 92	CES48 = 80	CES73 = 60	CES98 = 82
CES24 = 91	CES49 = 80	CES74 = 97	CES99 = 81
CES25 = 72	CES50 = 89	CES75 = 64	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)