

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: P1432466

Luminaire Tested: EHBR1-48-UNV-TASM-L830

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1432466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-48-UNV-TASM-L830
Description: Elevate Round Highbay at, 48000 lumens, 3000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

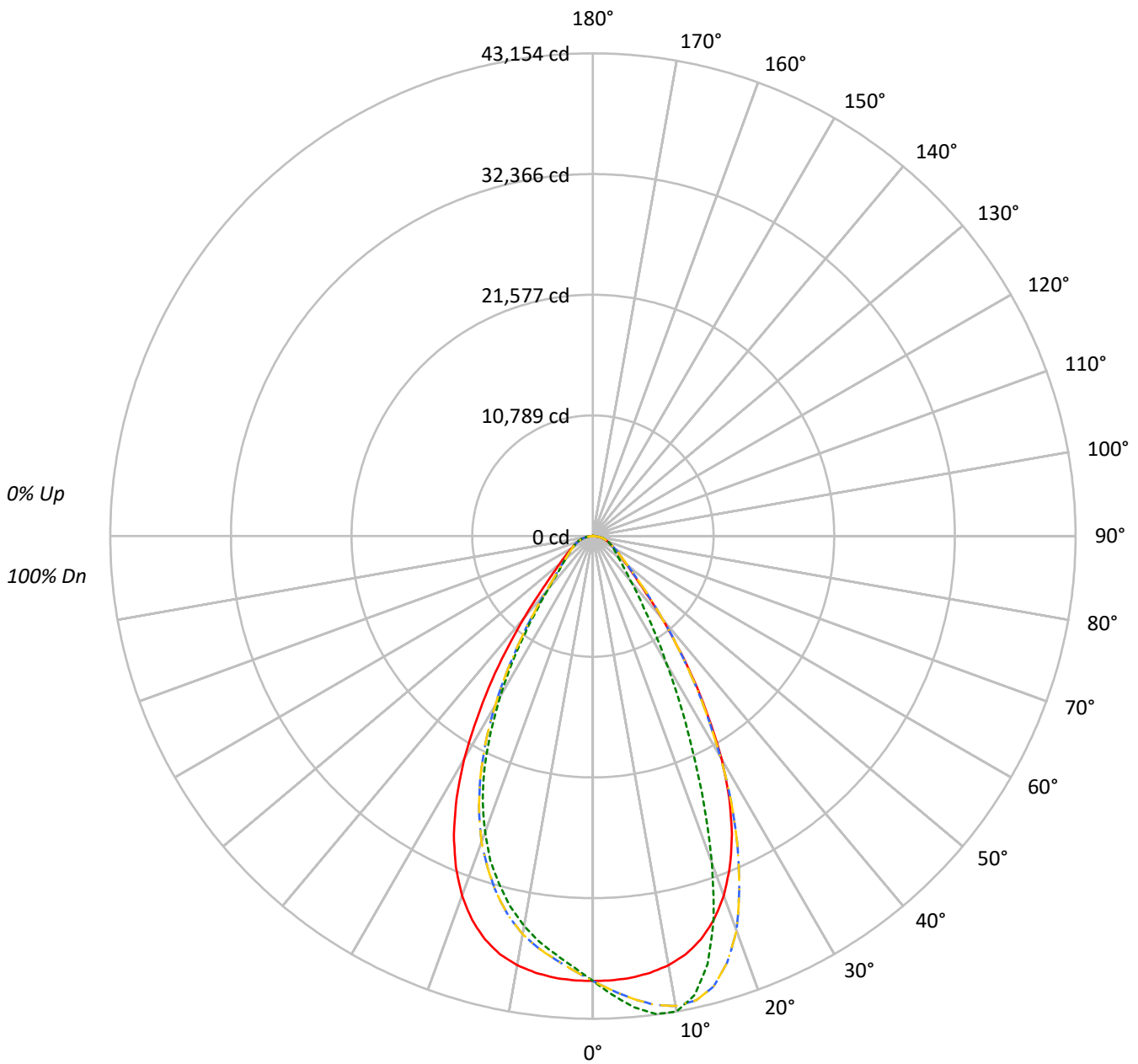
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44468.3 lumens
Efficiency: N/A
Efficacy: 172.0 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.84 / 0.9
Luminous Opening: Circular (Dia: 1.71' x H: 0')
CIE Type: Direct

Input Watts (W): 258.6
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



— 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90	90	90
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81	81	81
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74	74	74
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	72	69	67	67	67
5	87	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	62	62	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57	57	57
7	78	67	60	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53	53	53
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	49	49	49
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46	46	46
10	66	56	49	45	65	55	49	45	54	49	45	54	48	45	53	48	45	43	43	43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	186761	186761	186761	186761
5°	186835	199318	186835	177139
10°	185752	205780	185752	168751
15°	181483	192523	181483	156931
20°	170923	155460	170923	140762
25°	152404	108511	152404	118840
30°	124736	71159	124736	89628
35°	90250	46489	90250	60191
40°	58924	32358	58924	38333
45°	37808	25348	37808	27621
50°	28451	21825	28451	23313
55°	23604	20204	23604	20911
60°	20858	19639	20858	19759
65°	19531	19457	19531	19374
70°	19230	19803	19230	19547
75°	19079	20323	19079	19716
80°	18655	21356	18655	19966
85°	15712	19850	15712	18929

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 53157 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3781.5	8.5
10°-20°	10287.7	23.1
20°-30°	12065.4	27.1
30°-40°	8390.7	18.9
40°-50°	4169.8	9.4
50°-60°	2494.0	5.6
60°-70°	1755.4	3.9
70°-80°	1130.8	2.5
80°-90°	359.2	0.8
90°-100°	2.1	0.0
100°-110°	2.5	0.0
110°-120°	2.5	0.0
120°-130°	3.2	0.0
130°-140°	4.4	0.0
140°-150°	5.2	0.0
150°-160°	5.8	0.0
160°-170°	5.7	0.0
170°-180°	2.5	0.0
0°-30°	26134.6	58.8
0°-40°	34525.4	77.6
0°-60°	41189.1	92.6
0°-90°	44434.4	99.9
90°-120°	7.1	0.0
90°-150°	19.9	0.0
90°-180°	34.0	0.1
0°-180°	44468.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	39770	39770	39770	39770	39770	
5°	39634	42282	39634	37577	39634	3761
15°	37329	39600	37329	32279	37329	10432
25°	29413	20942	29413	22935	29413	13316
35°	15742	8109	15742	10499	15742	9828
45°	5693	3817	5693	4159	5693	4659
55°	2883	2468	2883	2554	2883	2636
65°	1758	1751	1758	1744	1758	1765
75°	1052	1120	1052	1087	1052	1104
85°	292	368	292	351	292	324
90°	1	6	1	1	1	14
95°	2	6	2	1	2	1
105°	2	7	2	2	2	2
115°	2	7	2	2	2	2
125°	3	8	3	2	3	3
135°	6	8	6	3	6	5
145°	9	10	9	8	9	5
155°	12	13	12	14	12	6
165°	20	25	20	21	20	6
175°	26	32	26	25	26	2
180°	28	28	28	28	28	



TEST NUMBER: P1432466
 CATALOG NUMBER: EHBR1-48-UNV-TASM-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5
2.5°	39746.4	40260.2	40676.3	40950.8	41086.5	40950.8	40676.3	40260.2	39746.4	39235.6	38884.3
5°	39633.8	40662.9	41534.7	42105.2	42281.9	42105.2	41534.7	40662.9	39633.8	38661.4	38016.3
7.5°	39364.5	40967.9	42263.3	42929.2	43091.8	42929.2	42263.3	40967.9	39364.5	37988.0	37172.8
10°	38953.7	41160.3	42657.0	43134.3	43153.7	43134.3	42657.0	41160.3	38953.7	37099.0	36137.8
12.5°	38298.2	41091.7	42525.0	42368.4	42012.7	42368.4	42525.0	41091.7	38298.2	36013.3	34800.7
15°	37328.7	40685.3	41689.1	40414.6	39599.5	40414.6	41689.1	40685.3	37328.7	34547.1	33140.7
17.5°	35962.5	39924.6	39944.0	37422.6	35884.9	37422.6	39944.0	39924.6	35962.5	32754.4	31205.4
20°	34201.9	38704.6	37541.2	32929.6	31107.7	32929.6	37541.2	38704.6	34201.9	30635.0	29115.2
22.5°	31994.4	37059.5	34195.1	28409.6	25924.2	28409.6	34195.1	37059.5	31994.4	28170.3	26588.6
25°	29412.7	35043.8	30595.4	23484.8	20941.8	23484.8	30595.4	35043.8	29412.7	25233.5	23803.3
27.5°	26376.0	32488.9	26762.3	19190.8	16844.7	19190.8	26762.3	32488.9	26376.0	22201.4	20740.5
30°	23003.0	29213.6	22773.4	15283.2	13122.7	15283.2	22773.4	29213.6	23003.0	18794.9	17486.9
32.5°	19226.6	26003.1	18942.5	12245.8	10415.7	12245.8	18942.5	26003.1	19226.6	15544.2	14177.3
35°	15742.5	21986.6	15488.3	9622.2	8109.2	9622.2	15488.3	21986.6	15742.5	12475.5	11133.2
37.5°	12354.6	18191.5	12346.5	7748.3	6577.4	7748.3	12346.5	18191.5	12354.6	9699.1	8609.6
40°	9611.9	14224.2	9673.8	6185.2	5278.4	6185.2	9673.8	14224.2	9611.9	7379.9	6682.6
42.5°	7282.9	10876.6	7603.5	5076.2	4483.4	5076.2	7603.5	10876.6	7282.9	5814.5	5292.5
45°	5692.9	8004.0	5937.6	4282.8	3816.7	4282.8	5937.6	8004.0	5692.9	4682.5	4332.0
47.5°	4636.2	6185.9	4812.2	3673.5	3346.9	3673.5	4812.2	6185.9	4636.2	3960.6	3698.1
50°	3894.3	4746.6	3995.6	3206.6	2987.4	3206.6	3995.6	4746.6	3894.3	3391.6	3216.4
52.5°	3345.4	3871.1	3402.8	2857.7	2710.0	2857.7	3402.8	3871.1	3345.4	2967.3	2858.5
55°	2883.0	3254.4	2959.1	2569.9	2467.7	2569.9	2959.1	3254.4	2883.0	2640.7	2560.1
57.5°	2531.8	2760.8	2569.9	2324.4	2256.6	2324.4	2569.9	2760.8	2531.8	2349.8	2306.6
60°	2220.8	2390.9	2267.8	2110.4	2091.0	2110.4	2267.8	2390.9	2220.8	2114.2	2085.9
62.5°	1981.4	2088.9	2005.3	1918.0	1900.9	1918.0	2005.3	2088.9	1981.4	1899.4	1904.6
65°	1757.7	1857.7	1792.0	1745.0	1751.0	1745.0	1792.0	1857.7	1757.7	1719.7	1727.9
67.5°	1584.7	1636.9	1608.5	1581.7	1588.5	1581.7	1608.5	1636.9	1584.7	1547.4	1560.1
70°	1400.5	1456.4	1427.4	1431.1	1442.3	1431.1	1427.4	1456.4	1400.5	1389.3	1399.0
72.5°	1224.5	1267.7	1258.1	1267.0	1279.0	1267.0	1258.1	1267.7	1224.5	1223.0	1223.7
75°	1051.5	1084.3	1088.7	1101.5	1120.1	1101.5	1088.7	1084.3	1051.5	1040.3	1053.7
77.5°	862.8	900.1	914.3	931.5	959.0	931.5	914.3	900.1	862.8	870.3	876.9
80°	689.8	706.9	738.3	751.0	789.7	751.0	738.3	706.9	689.8	677.1	686.8
82.5°	504.9	520.5	547.4	571.2	593.6	571.2	547.4	520.5	504.9	498.9	499.6
85°	291.6	315.5	333.4	361.7	368.4	361.7	333.4	315.5	291.6	298.3	291.6
87.5°	102.2	109.6	125.2	136.5	137.2	136.5	125.2	109.6	102.2	104.4	94.7
90°	0.7	1.5	2.2	4.5	6.0	4.5	2.2	1.5	0.7	0.7	0.7
92.5°	0.7	1.5	2.2	4.5	6.0	4.5	2.2	1.5	0.7	0.7	0.7
95°	1.5	1.5	2.2	4.5	6.0	4.5	2.2	1.5	1.5	0.7	0.7
97.5°	1.5	1.5	2.2	4.5	6.0	4.5	2.2	1.5	1.5	0.7	0.7
100°	1.5	1.5	2.2	4.5	6.0	4.5	2.2	1.5	1.5	1.5	0.7
102.5°	1.5	2.2	3.0	5.2	6.0	5.2	3.0	2.2	1.5	1.5	0.7
105°	1.5	2.2	3.0	5.2	6.7	5.2	3.0	2.2	1.5	1.5	0.7
107.5°	1.5	2.2	3.0	5.2	6.7	5.2	3.0	2.2	1.5	1.5	1.5
110°	1.5	2.2	3.0	5.2	6.7	5.2	3.0	2.2	1.5	1.5	1.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1.5	2.2	3.0	5.2	6.7	5.2	3.0	2.2	1.5	1.5	1.5
115°	2.2	2.2	3.0	5.2	6.7	5.2	3.0	2.2	2.2	1.5	1.5
117.5°	2.2	2.2	3.0	5.2	6.7	5.2	3.0	2.2	2.2	2.2	1.5
120°	2.2	2.2	3.7	5.2	6.7	5.2	3.7	2.2	2.2	2.2	1.5
122.5°	3.0	3.0	3.7	6.0	6.7	6.0	3.7	3.0	3.0	3.0	2.2
125°	3.0	3.0	4.5	6.0	7.5	6.0	4.5	3.0	3.0	3.7	3.0
127.5°	3.7	3.7	4.5	6.0	7.5	6.0	4.5	3.7	3.7	3.7	3.0
130°	4.5	3.7	4.5	6.7	7.5	6.7	4.5	3.7	4.5	4.5	3.7
132.5°	5.2	4.5	5.2	7.5	8.2	7.5	5.2	4.5	5.2	6.0	5.2
135°	6.0	4.5	6.0	6.7	8.2	6.7	6.0	4.5	6.0	6.7	5.2
137.5°	6.7	5.2	6.0	7.5	8.2	7.5	6.0	5.2	6.7	7.5	6.7
140°	7.5	6.0	6.0	7.5	9.0	7.5	6.0	6.0	7.5	7.5	7.5
142.5°	8.2	6.7	6.7	8.2	9.0	8.2	6.7	6.7	8.2	8.2	8.2
145°	9.0	8.2	7.5	8.2	9.6	8.2	7.5	8.2	9.0	8.2	9.0
147.5°	9.0	8.2	8.2	9.0	10.4	9.0	8.2	8.2	9.0	9.0	9.6
150°	9.6	9.6	9.0	9.6	11.1	9.6	9.0	9.6	9.6	9.6	10.4
152.5°	10.4	10.4	10.4	11.1	11.9	11.1	10.4	10.4	10.4	10.4	11.1
155°	11.9	11.9	11.9	12.6	13.4	12.6	11.9	11.9	11.9	11.1	12.6
157.5°	13.4	14.1	14.1	14.9	15.6	14.9	14.1	14.1	13.4	13.4	14.1
160°	16.4	16.4	17.1	17.9	18.6	17.9	17.1	16.4	16.4	15.6	16.4
162.5°	17.9	17.9	19.4	20.1	21.6	20.1	19.4	17.9	17.9	17.9	17.9
165°	20.1	20.1	21.6	23.1	24.6	23.1	21.6	20.1	20.1	19.4	19.4
167.5°	21.6	21.6	23.1	25.4	26.9	25.4	23.1	21.6	21.6	20.9	20.9
170°	22.4	23.1	24.6	26.9	28.4	26.9	24.6	23.1	22.4	22.4	21.6
172.5°	24.6	24.6	26.9	29.0	30.5	29.0	26.9	24.6	24.6	23.9	23.9
175°	26.1	26.9	28.4	30.5	32.0	30.5	28.4	26.9	26.1	25.4	25.4
177.5°	26.1	27.6	29.0	31.3	32.8	31.3	29.0	27.6	26.1	25.4	25.4
180°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5
2.5°	38614.3	38589.0	38614.3	38884.3	39235.6	39746.4
5°	37717.2	37577.0	37717.2	38016.3	38661.4	39633.8
7.5°	36672.4	36591.2	36672.4	37172.8	37988.0	39364.5
10°	35572.5	35388.3	35572.5	36137.8	37099.0	38953.7
12.5°	34216.8	33972.9	34216.8	34800.7	36013.3	38298.2
15°	32492.6	32278.6	32492.6	33140.7	34547.1	37328.7
17.5°	30642.5	30448.6	30642.5	31205.4	32754.4	35962.5
20°	28318.7	28166.6	28318.7	29115.2	30635.0	34201.9
22.5°	25880.9	25738.4	25880.9	26588.6	28170.3	31994.4
25°	23012.8	22935.2	23012.8	23803.3	25233.5	29412.7
27.5°	19913.5	19781.5	19913.5	20740.5	22201.4	26376.0
30°	16747.0	16528.6	16747.0	17486.9	18794.9	23003.0
32.5°	13650.0	13492.6	13650.0	14177.3	15544.2	19226.6
35°	10656.7	10499.3	10656.7	11133.2	12475.5	15742.5
37.5°	8303.8	8025.6	8303.8	8609.6	9699.1	12354.6
40°	6297.8	6253.0	6297.8	6682.6	7379.9	9611.9
42.5°	5127.0	5005.4	5127.0	5292.5	5814.5	7282.9
45°	4206.8	4159.0	4206.8	4332.0	4682.5	5692.9
47.5°	3617.6	3638.5	3617.6	3698.1	3960.6	4636.2
50°	3178.3	3191.0	3178.3	3216.4	3391.6	3894.3
52.5°	2854.7	2843.5	2854.7	2858.5	2967.3	3345.4
55°	2568.4	2554.1	2568.4	2560.1	2640.7	2883.0
57.5°	2317.8	2328.2	2317.8	2306.6	2349.8	2531.8
60°	2094.0	2103.8	2094.0	2085.9	2114.2	2220.8
62.5°	1905.4	1911.4	1905.4	1904.6	1899.4	1981.4
65°	1736.8	1743.5	1736.8	1727.9	1719.7	1757.7
67.5°	1575.7	1575.7	1575.7	1560.1	1547.4	1584.7
70°	1424.4	1423.6	1424.4	1399.0	1389.3	1400.5
72.5°	1242.4	1260.3	1242.4	1223.7	1223.0	1224.5
75°	1065.7	1086.6	1065.7	1053.7	1040.3	1051.5
77.5°	886.7	918.7	886.7	876.9	870.3	862.8
80°	703.2	738.3	703.2	686.8	677.1	689.8
82.5°	519.8	545.9	519.8	499.6	498.9	504.9
85°	309.5	351.3	309.5	291.6	298.3	291.6
87.5°	99.2	126.7	99.2	94.7	104.4	102.2
90°	0.7	0.7	0.7	0.7	0.7	0.7
92.5°	0.7	0.7	0.7	0.7	0.7	0.7
95°	0.7	0.7	0.7	0.7	0.7	1.5
97.5°	0.7	1.5	0.7	0.7	0.7	1.5
100°	0.7	1.5	0.7	0.7	1.5	1.5
102.5°	0.7	1.5	0.7	0.7	1.5	1.5
105°	0.7	1.5	0.7	0.7	1.5	1.5
107.5°	0.7	1.5	0.7	1.5	1.5	1.5
110°	0.7	1.5	0.7	1.5	1.5	1.5



TEST NUMBER: P1432466
 CATALOG NUMBER: EHBR1-48-UNV-TASM-L830

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.7	1.5	0.7	1.5	1.5	1.5
115°	0.7	1.5	0.7	1.5	1.5	2.2
117.5°	0.7	1.5	0.7	1.5	2.2	2.2
120°	0.7	1.5	0.7	1.5	2.2	2.2
122.5°	1.5	1.5	1.5	2.2	3.0	3.0
125°	1.5	2.2	1.5	3.0	3.7	3.0
127.5°	1.5	2.2	1.5	3.0	3.7	3.7
130°	2.2	2.2	2.2	3.7	4.5	4.5
132.5°	3.0	3.0	3.0	5.2	6.0	5.2
135°	3.7	3.0	3.7	5.2	6.7	6.0
137.5°	4.5	3.7	4.5	6.7	7.5	6.7
140°	6.0	5.2	6.0	7.5	7.5	7.5
142.5°	6.7	6.7	6.7	8.2	8.2	8.2
145°	8.2	8.2	8.2	9.0	8.2	9.0
147.5°	9.6	9.6	9.6	9.6	9.0	9.0
150°	11.1	11.1	11.1	10.4	9.6	9.6
152.5°	11.9	12.6	11.9	11.1	10.4	10.4
155°	13.4	14.1	13.4	12.6	11.1	11.9
157.5°	14.9	16.4	14.9	14.1	13.4	13.4
160°	17.1	17.9	17.1	16.4	15.6	16.4
162.5°	18.6	19.4	18.6	17.9	17.9	17.9
165°	20.1	20.9	20.1	19.4	19.4	20.1
167.5°	20.9	20.9	20.9	20.9	20.9	21.6
170°	21.6	22.4	21.6	21.6	22.4	22.4
172.5°	23.1	23.9	23.1	23.9	23.9	24.6
175°	24.6	25.4	24.6	25.4	25.4	26.1
177.5°	25.4	26.1	25.4	25.4	25.4	26.1
180°	27.6	27.6	27.6	27.6	27.6	27.6



TEST NUMBER: P1432466
 CATALOG NUMBER: EHBR1-48-UNV-TASM-L830

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.82	21.03	20.19	21.34	21.66	19.14	20.35	19.51	20.66	20.98
	3H	21.46	22.53	21.84	22.87	23.23	21.09	22.16	21.47	22.50	22.86
	4H	22.17	23.17	22.57	23.52	23.91	21.95	22.95	22.35	23.30	23.69
	6H	22.74	23.66	23.15	24.03	24.43	22.70	23.62	23.12	23.99	24.39
	8H	22.94	23.81	23.37	24.20	24.61	22.99	23.86	23.42	24.25	24.66
	12H	23.06	23.89	23.50	24.28	24.71	23.18	24.01	23.62	24.40	24.83
4H	2H	20.28	21.28	20.69	21.64	22.02	19.77	20.77	20.18	21.12	21.51
	3H	22.19	23.02	22.61	23.43	23.83	21.95	22.77	22.36	23.18	23.58
	4H	23.05	23.79	23.49	24.21	24.66	22.94	23.68	23.38	24.11	24.55
	6H	23.77	24.41	24.24	24.86	25.33	23.84	24.48	24.30	24.93	25.40
	8H	24.03	24.63	24.50	25.08	25.55	24.18	24.78	24.66	25.23	25.70
	12H	24.20	24.73	24.69	25.21	25.69	24.43	24.96	24.92	25.44	25.92
8H	4H	23.36	23.96	23.83	24.40	24.88	23.28	23.88	23.76	24.33	24.80
	6H	24.24	24.72	24.74	25.22	25.70	24.34	24.82	24.84	25.32	25.80
	8H	24.59	25.02	25.11	25.54	26.03	24.78	25.22	25.31	25.74	26.23
	12H	24.85	25.22	25.36	25.72	26.30	25.14	25.52	25.66	26.02	26.59
12H	4H	23.39	23.91	23.88	24.40	24.88	23.31	23.84	23.80	24.32	24.80
	6H	24.31	24.74	24.83	25.26	25.75	24.41	24.84	24.94	25.36	25.86
	8H	24.72	25.10	25.24	25.60	26.17	24.93	25.30	25.44	25.80	26.38

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-2

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L830-N

Data in this report applies to families of products including EHBR-60-L830-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-2
 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-L830-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 2983
 CIE u': 0.2516
 CIE v': 0.5201
 Duv: -0.0012
 CIE x: 0.4364
 CIE y: 0.4010
 CIE z: 0.1626
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 583
 Purity: 51.34918
 Rf: 81.2
 Rg: 101.5

CRI (Ra):	83.4		
R1:	84.0	R9:	29.4
R2:	87.5	R10:	68.6
R3:	88.9	R11:	82.2
R4:	83.8	R12:	61.6
R5:	81.9	R13:	83.9
R6:	83.1	R14:	92.5
R7:	87.1	R15:	79.8
R8:	70.9		



Test Conditions

Stabilization Time: 38M
 Operation Time: 1H 38M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-2

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

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CIE 1931 Chromaticity Diagram



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

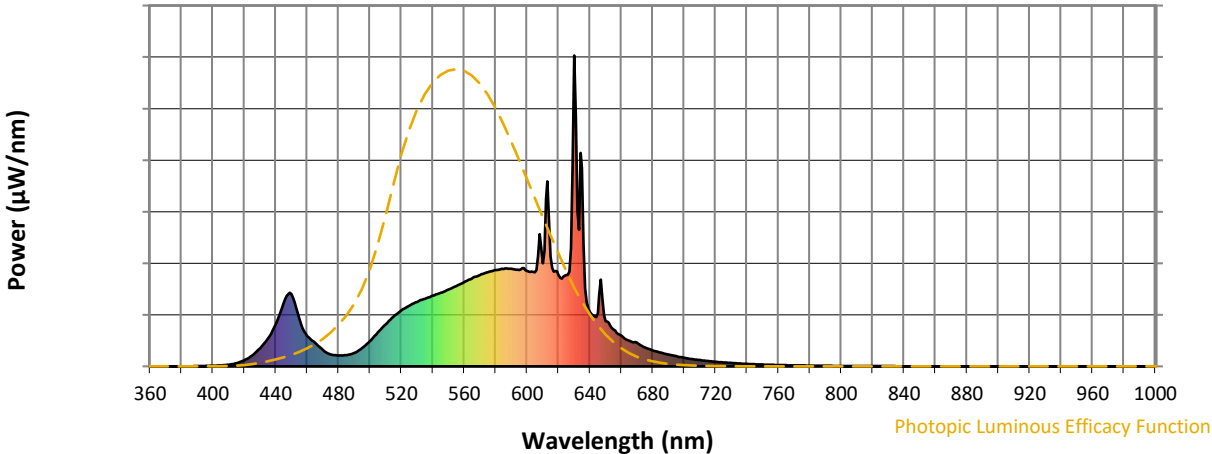


CCT = 2983K
 CIE x = 0.4364
 CIE y = 0.4010
 Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

Scotopic Flux vs. Wavelength



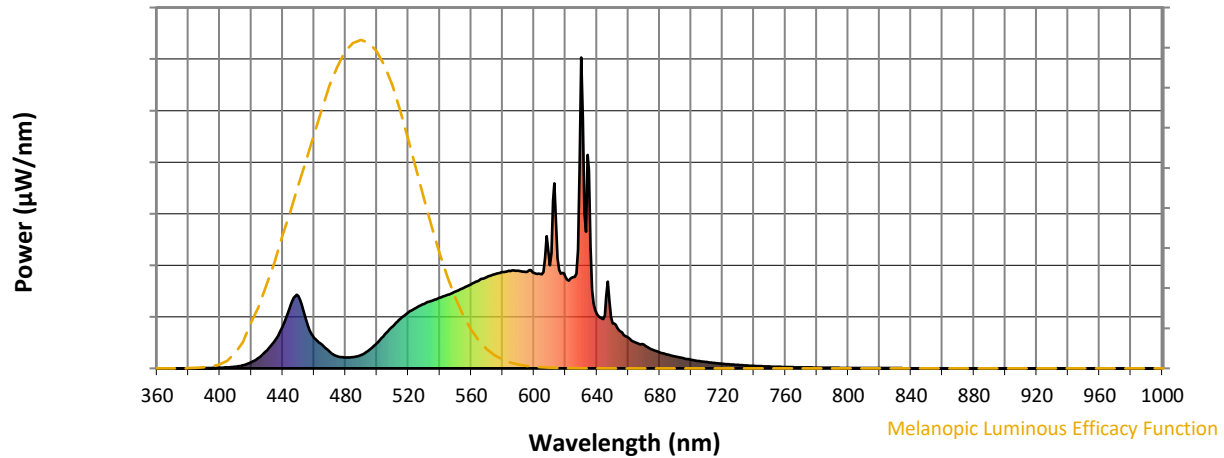
Scotopic Lumens: NR

S/P: 1.27

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.34

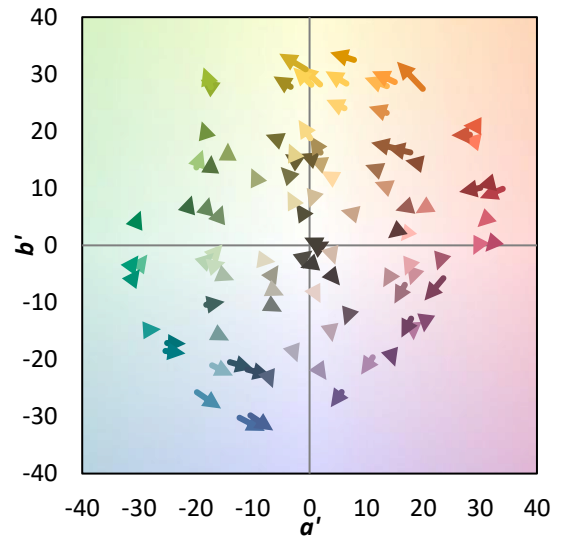
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

Summary

$R_f = 81.2$
 $R_g = 101.5$
 CIE $R_a = 83.4$
 $R_9 = 29.4$



Color Vector Graphics

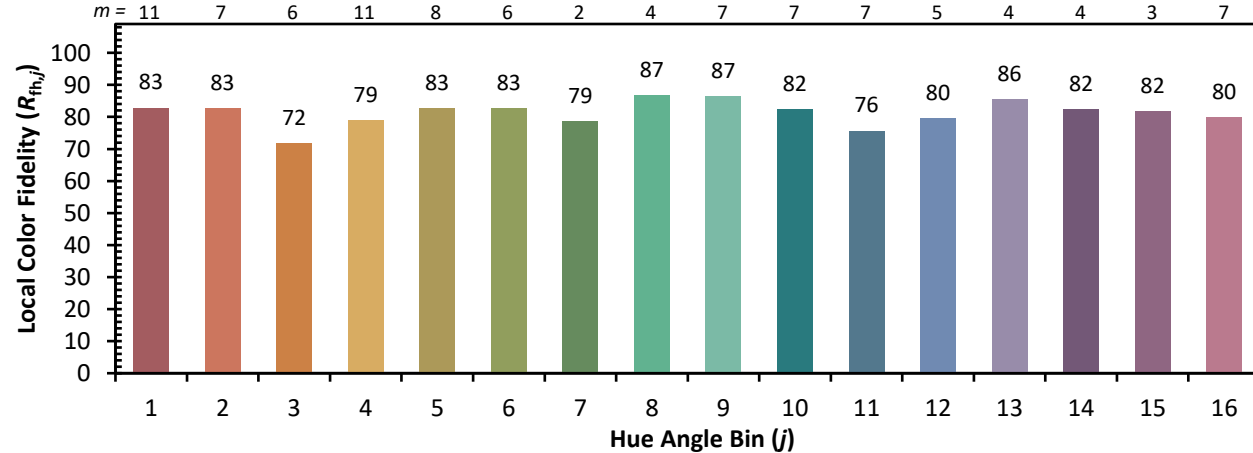
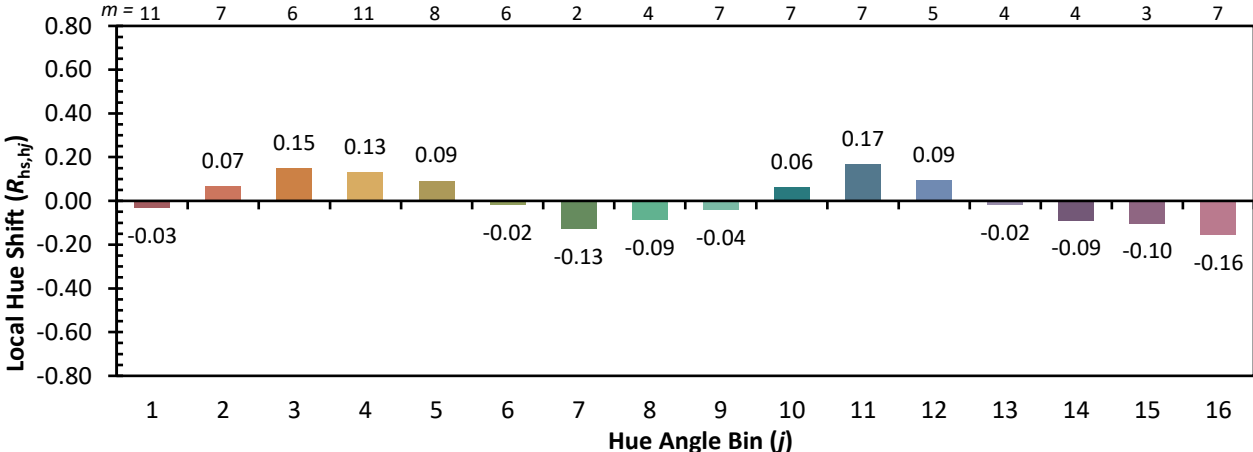
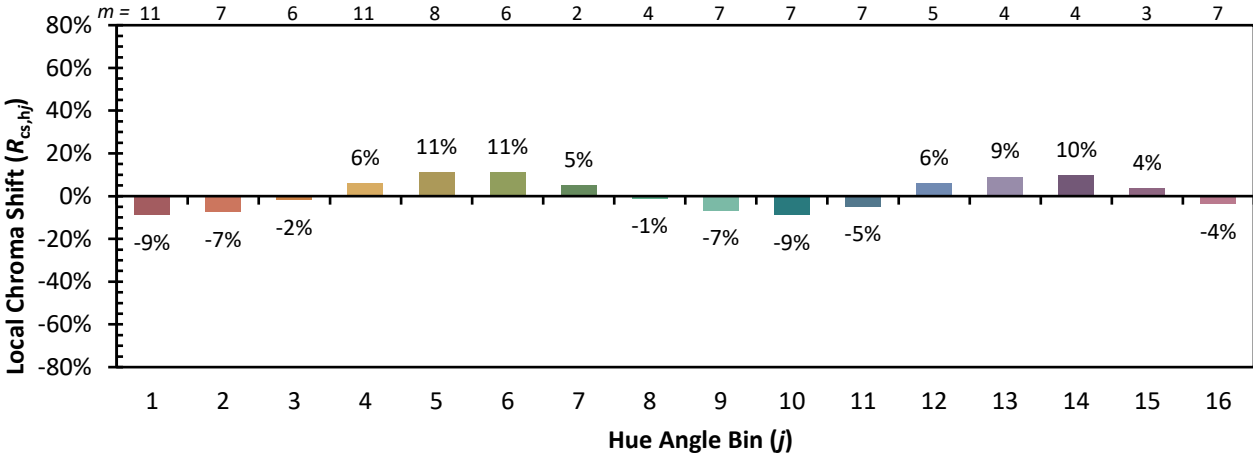


Individual Sample Fidelity Index ($R_{f,i}$)

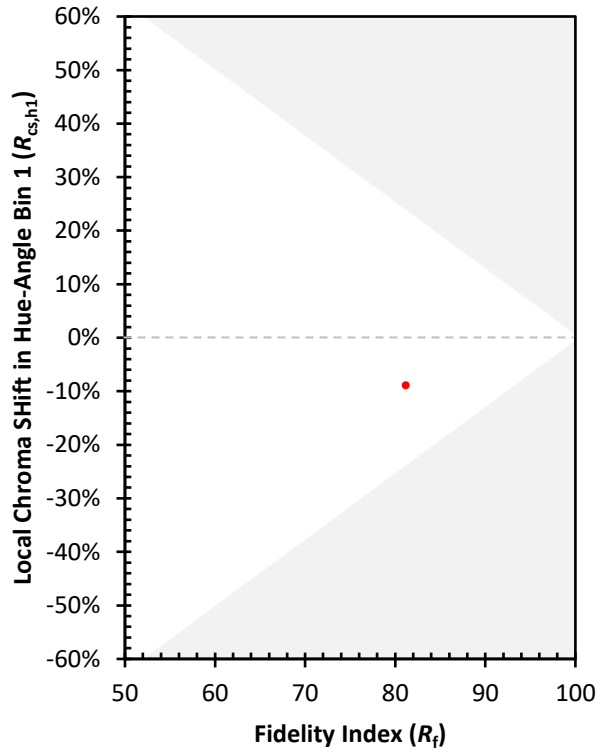
CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82 = 93
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 76	CES59 = 92	CES84 = 91
CES10 = 76	CES35 = 87	CES60 = 96	CES85 = 81
CES11 = 59	CES36 = 99	CES61 = 91	CES86 = 74
CES12 = 65	CES37 = 81	CES62 = 93	CES87 = 83
CES13 = 44	CES38 = 83	CES63 = 79	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 81	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 78	CES90 = 85
CES16 = 48	CES41 = 88	CES66 = 76	CES91 = 87
CES17 = 50	CES42 = 80	CES67 = 74	CES92 = 73
CES18 = 57	CES43 = 75	CES68 = 79	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 83	CES94 = 64
CES20 = 67	CES45 = 83	CES70 = 72	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 70	CES96 = 86
CES22 = 79	CES47 = 79	CES72 = 90	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 65	CES98 = 83
CES24 = 91	CES49 = 79	CES74 = 94	CES99 = 82
CES25 = 72	CES50 = 88	CES75 = 70	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)