

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: P1432495

Luminaire Tested: EHBR1-54-UNV-TASM-L830-UPL30

Issue Date: 3/20/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1432495  
REPORT IS A COMBINATION OF REPORTS P1431872 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-54-UNV-TASM-L830-UPL30  
Description: Elevate Round Highbay at, 54000 lumens, 3000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

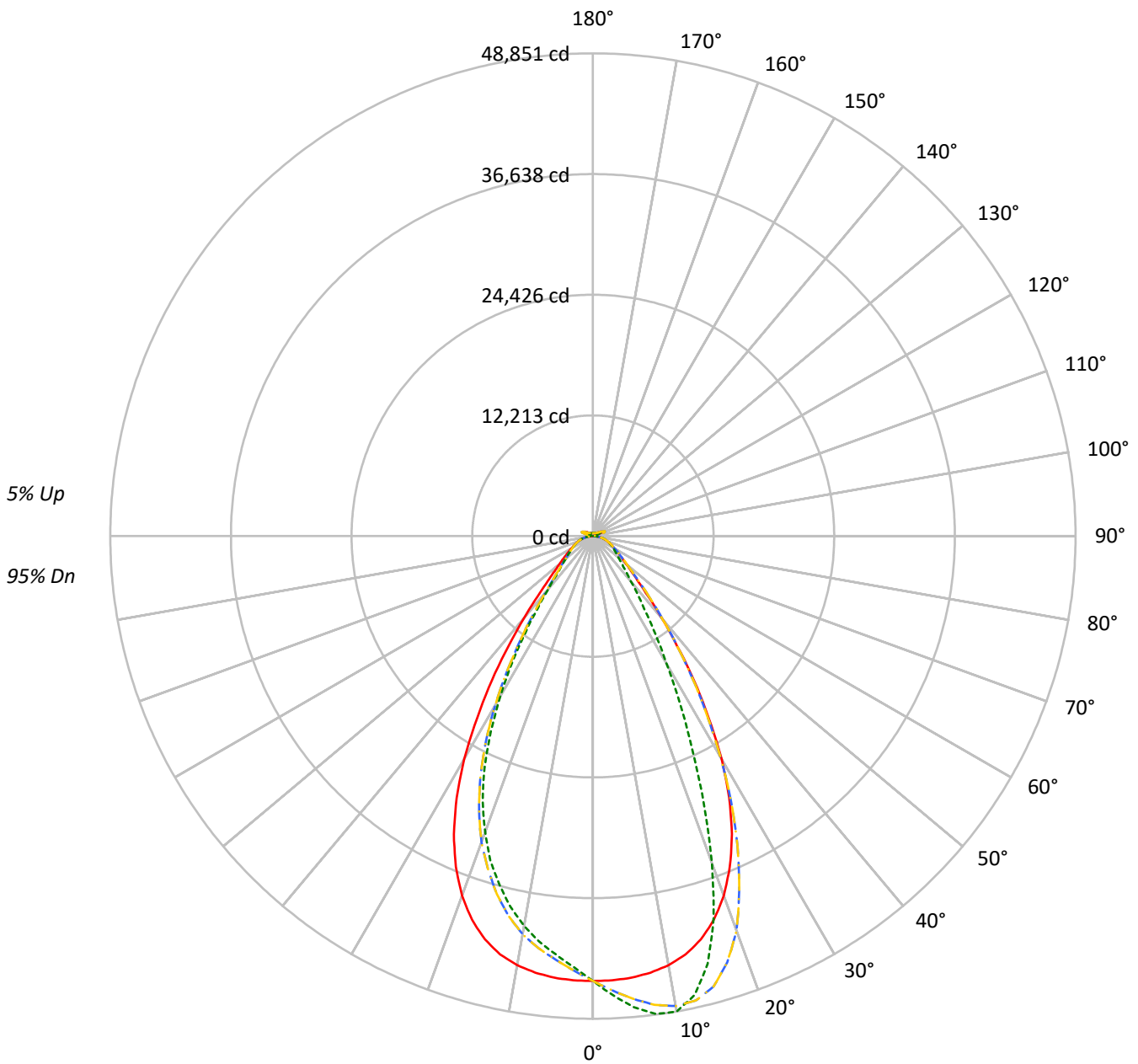
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 53196.6 lumens  
Efficiency: N/A  
Efficacy: 167.3 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): 318  
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: P1432495  
CATALOG NUMBER: EHBR1-54-UNV-TASM-L830-UPL30

### 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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	97	97	97	95
1	111	107	104	101	107	104	102	99	99	97	95	95	93	91	90	89	88	88	88	88	85
2	104	98	93	88	101	95	91	87	91	87	84	87	84	82	84	81	79	79	79	79	77
3	97	89	83	79	95	88	82	78	84	79	76	81	77	74	78	75	72	72	72	72	70
4	91	82	76	71	89	81	75	70	78	73	69	75	71	67	72	69	66	66	66	66	64
5	86	76	69	64	84	75	68	64	72	67	63	70	65	62	68	64	60	60	60	60	59
6	81	71	64	59	79	69	63	58	67	62	57	65	60	57	63	59	56	56	56	56	54
7	76	66	59	54	75	65	58	54	63	57	53	61	56	52	60	55	52	52	52	52	50
8	72	62	55	50	71	61	54	50	59	53	49	58	52	49	56	52	48	48	48	48	47
9	68	58	51	47	67	57	51	46	56	50	46	54	49	46	53	48	45	45	45	45	44
10	65	54	48	44	64	54	47	43	52	47	43	51	46	43	50	46	42	42	42	42	41

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

	0°	90°	180°	270°
0°	211420	211420	211420	211420
5°	210133	224173	210133	199229
10°	207550	229928	207550	188553
15°	201423	213675	201423	174172
20°	188380	171338	188380	155139
25°	166732	118713	166732	130013
30°	135380	77232	135380	97276
35°	97099	50016	97099	64758
40°	62777	34474	62777	40840
45°	39832	26705	39832	29099
50°	29580	22692	29580	24238
55°	24151	20671	24151	21396
60°	20912	19691	20912	19810
65°	19064	18991	19064	18909
70°	18068	18607	18068	18367
75°	16899	18000	16899	17461
80°	14842	16994	14842	15886
85°	9604	12133	9604	11568

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 56001 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4280.7	8.0
10°-20°	11646.1	21.9
20°-30°	13658.4	25.7
30°-40°	9498.6	17.9
40°-50°	4720.3	8.9
50°-60°	2823.3	5.3
60°-70°	1987.1	3.7
70°-80°	1280.1	2.4
80°-90°	411.6	0.8
90°-100°	77.6	0.1
100°-110°	500.8	0.9
110°-120°	924.2	1.7
120°-130°	550.1	1.0
130°-140°	333.9	0.6
140°-150°	232.1	0.4
150°-160°	152.8	0.3
160°-170°	88.9	0.2
170°-180°	29.8	0.1
0°-30°	29585.3	55.6
0°-40°	39083.8	73.5
0°-60°	46627.5	87.7
0°-90°	50306.3	94.6
90°-120°	1502.6	2.8
90°-150°	2618.8	4.9
90°-180°	2890.0	5.4
0°-180°	53196.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	45020	45020	45020	45020	45020	
5°	44867	47864	44867	42538	44867	4258
15°	42257	44828	42257	36540	42257	11809
25°	33296	23707	33296	25963	33296	15074
35°	17821	9180	17821	11886	17821	11125
45°	6445	4321	6445	4708	6445	5274
55°	3264	2794	3264	2891	3264	2984
65°	1990	1982	1990	1974	1990	1998
75°	1190	1268	1190	1230	1190	1250
85°	330	417	330	398	330	367
90°	22	27	22	22	22	26
95°	41	42	41	36	41	44
105°	230	120	230	175	230	310
115°	983	842	983	798	983	896
125°	630	662	630	577	630	580
135°	400	463	400	422	400	317
145°	364	381	364	354	364	228
155°	326	340	326	318	326	152
165°	312	323	312	306	312	89
175°	314	322	314	308	314	30
180°	314	314	314	314	314	



TEST NUMBER: P1432495  
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L830-UPL30

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4
2.5°	44994.3	45575.9	46046.9	46357.6	46511.3	46357.6	46046.9	45575.9	44994.3	44415.9	44018.3
5°	44866.8	46031.8	47018.7	47664.4	47864.5	47664.4	47018.7	46031.8	44866.8	43765.9	43035.7
7.5°	44562.0	46377.0	47843.4	48597.3	48781.4	48597.3	47843.4	46377.0	44562.0	43003.7	42080.9
10°	44096.9	46594.8	48289.1	48829.4	48851.4	48829.4	48289.1	46594.8	44096.9	41997.3	40909.2
12.5°	43354.8	46517.2	48139.7	47962.5	47559.8	47962.5	48139.7	46517.2	43354.8	40768.2	39395.5
15°	42257.4	46057.0	47193.4	45750.6	44827.9	45750.6	47193.4	46057.0	42257.4	39108.4	37516.3
17.5°	40710.8	45196.0	45217.9	42363.7	40623.0	42363.7	45217.9	45196.0	40710.8	37079.0	35325.6
20°	38717.6	43814.8	42497.9	37277.4	35215.0	37277.4	42497.9	43814.8	38717.6	34679.8	32959.3
22.5°	36218.8	41952.6	38710.0	32160.7	29347.0	32160.7	38710.0	41952.6	36218.8	31889.7	30099.2
25°	33296.2	39670.8	34635.0	26585.6	23706.9	26585.6	34635.0	39670.8	33296.2	28565.2	26946.0
27.5°	29858.5	36778.5	30295.9	21724.7	19068.8	21724.7	30295.9	36778.5	29858.5	25132.7	23478.9
30°	26040.2	33070.7	25780.2	17301.0	14855.5	17301.0	25780.2	33070.7	26040.2	21276.4	19795.7
32.5°	21765.2	29436.5	21443.5	13862.6	11790.9	13862.6	21443.5	29436.5	21765.2	17596.5	16049.1
35°	17821.1	24889.6	17533.2	10892.7	9179.8	10892.7	17533.2	24889.6	17821.1	14122.7	12603.0
37.5°	13985.9	20593.5	13976.6	8771.2	7445.9	8771.2	13976.6	20593.5	13985.9	10979.7	9746.3
40°	10880.9	16102.3	10951.0	7001.8	5975.3	7001.8	10951.0	16102.3	10880.9	8354.2	7564.9
42.5°	8244.4	12312.7	8607.5	5746.5	5075.4	5746.5	8607.5	12312.7	8244.4	6582.3	5991.3
45°	6444.7	9060.8	6721.5	4848.2	4320.7	4848.2	6721.5	9060.8	6444.7	5300.7	4904.0
47.5°	5248.4	7002.6	5447.6	4158.5	3788.8	4158.5	5447.6	7002.6	5248.4	4483.6	4186.4
50°	4408.4	5373.3	4523.3	3630.0	3381.9	3630.0	4523.3	5373.3	4408.4	3839.4	3641.1
52.5°	3787.1	4382.2	3852.1	3235.0	3067.8	3235.0	3852.1	4382.2	3787.1	3359.0	3235.9
55°	3263.7	3684.1	3349.8	2909.1	2793.5	2909.1	3349.8	3684.1	3263.7	2989.3	2898.2
57.5°	2866.0	3125.2	2909.1	2631.4	2554.6	2631.4	2909.1	3125.2	2866.0	2660.1	2611.1
60°	2514.0	2706.5	2567.2	2389.1	2367.2	2389.1	2567.2	2706.5	2514.0	2393.3	2361.3
62.5°	2243.0	2364.6	2270.0	2171.3	2151.9	2171.3	2270.0	2364.6	2243.0	2150.2	2156.1
65°	1989.8	2102.9	2028.6	1975.4	1982.2	1975.4	2028.6	2102.9	1989.8	1946.8	1956.0
67.5°	1793.9	1853.0	1821.0	1790.5	1798.1	1790.5	1821.0	1853.0	1793.9	1751.7	1766.1
70°	1585.4	1648.7	1615.8	1620.0	1632.7	1620.0	1615.8	1648.7	1585.4	1572.7	1583.7
72.5°	1386.1	1435.1	1424.2	1434.3	1447.8	1434.3	1424.2	1435.1	1386.1	1384.5	1385.3
75°	1190.4	1227.5	1232.5	1246.9	1268.0	1246.9	1232.5	1227.5	1190.4	1177.6	1192.9
77.5°	976.7	1019.0	1035.0	1054.5	1085.6	1054.5	1035.0	1019.0	976.7	985.1	992.8
80°	780.8	800.3	835.7	850.2	894.0	850.2	835.7	800.3	780.8	766.5	777.5
82.5°	571.5	589.3	619.6	646.7	672.0	646.7	619.6	589.3	571.5	564.7	565.6
85°	330.1	357.1	377.4	409.4	417.0	409.4	377.4	357.1	330.1	337.7	330.1
87.5°	115.7	124.1	141.8	154.5	155.3	154.5	141.8	124.1	115.7	118.2	107.3
90°	21.5	36.6	62.9	36.8	27.4	36.8	62.9	36.6	21.5	37.4	58.0
92.5°	27.8	49.3	88.2	47.9	35.3	47.9	88.2	49.3	27.8	48.4	92.9
95°	41.4	60.4	112.0	52.6	41.7	52.6	112.0	60.4	41.4	64.4	129.4
97.5°	63.6	74.7	126.4	55.8	49.6	55.8	126.4	74.7	63.6	78.6	148.5
100°	84.2	84.2	229.5	63.8	55.9	63.8	229.5	84.2	84.2	96.9	231.0
102.5°	127.1	164.4	530.3	125.0	67.1	125.0	530.3	164.4	127.1	181.1	489.6
105°	230.2	373.9	931.8	317.0	120.3	317.0	931.8	373.9	230.2	377.9	872.2
107.5°	434.9	696.1	1200.0	621.7	274.2	621.7	1200.0	696.1	434.9	668.2	1150.7
110°	695.2	972.2	1309.5	850.3	550.4	850.3	1309.5	972.2	695.2	917.4	1206.3



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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°	904.8	1083.3	1279.4	942.2	759.9	942.2	1279.4	1083.3	904.8	1012.7	1155.5
115°	983.4	1067.5	1142.9	939.1	842.4	939.1	1142.9	1067.5	983.4	988.9	1031.7
117.5°	950.0	977.0	987.4	882.0	847.2	882.0	987.4	977.0	950.0	889.7	876.2
120°	857.9	846.9	832.6	797.9	799.6	797.9	832.6	846.9	857.9	777.0	731.8
122.5°	743.0	719.1	704.1	713.0	734.5	713.0	704.1	719.1	743.0	662.0	627.9
125°	630.3	606.4	614.5	640.0	662.3	640.0	614.5	606.4	630.3	562.9	554.1
127.5°	535.9	524.7	549.4	578.1	597.2	578.1	549.4	524.7	535.9	493.0	501.7
130°	468.4	470.8	503.4	528.1	540.1	528.1	503.4	470.8	468.4	447.8	469.2
132.5°	426.5	438.3	469.3	490.9	498.0	490.9	469.3	438.3	426.5	421.0	447.1
135°	400.3	417.7	446.3	459.9	463.2	459.9	446.3	417.7	400.3	402.8	426.5
137.5°	385.3	402.7	424.1	435.4	433.0	435.4	424.1	402.7	385.3	390.9	409.2
140°	376.7	394.0	403.5	416.3	414.9	416.3	403.5	394.0	376.7	379.8	394.1
142.5°	367.9	383.8	388.5	398.1	395.8	398.1	388.5	383.8	367.9	371.1	380.7
145°	364.0	375.9	371.9	383.9	380.8	383.9	371.9	375.9	364.0	364.8	370.4
147.5°	356.1	364.8	360.0	370.4	367.3	370.4	360.0	364.8	356.1	356.1	358.6
150°	347.4	353.8	346.6	358.6	358.7	358.6	346.6	353.8	347.4	345.8	348.3
152.5°	335.5	341.9	335.5	349.1	348.4	349.1	335.5	341.9	335.5	333.9	336.4
155°	326.2	329.3	326.2	339.7	340.5	339.7	326.2	329.3	326.2	325.3	327.0
157.5°	319.9	322.3	320.7	332.7	333.6	332.7	320.7	322.3	319.9	319.9	320.7
160°	315.3	318.5	317.7	328.1	329.0	328.1	317.7	318.5	315.3	316.0	316.9
162.5°	313.8	313.8	314.0	324.3	326.0	324.3	314.0	313.8	313.8	313.8	315.4
165°	311.6	313.2	311.7	319.7	323.0	319.7	311.7	313.2	311.6	312.4	312.4
167.5°	311.7	310.1	311.8	319.1	322.4	319.1	311.8	310.1	311.7	312.5	312.5
170°	309.4	310.2	310.3	317.6	320.9	317.6	310.3	310.2	309.4	311.0	311.7
172.5°	311.9	311.9	311.3	317.0	321.9	317.0	311.3	311.9	311.9	312.7	314.3
175°	313.6	312.9	313.0	317.2	322.0	317.2	313.0	312.9	313.6	312.8	312.8
177.5°	312.0	313.7	315.4	319.6	326.1	319.6	315.4	313.7	312.0	312.8	312.8
180°	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4
2.5°	43712.7	43684.1	43712.7	44018.3	44415.9	44994.3
5°	42697.2	42538.5	42697.2	43035.7	43765.9	44866.8
7.5°	41514.5	41422.4	41514.5	42080.9	43003.7	44562.0
10°	40269.2	40060.7	40269.2	40909.2	41997.3	44096.9
12.5°	38734.5	38458.5	38734.5	39395.5	40768.2	43354.8
15°	36782.7	36540.4	36782.7	37516.3	39108.4	42257.4
17.5°	34688.2	34468.7	34688.2	35325.6	37079.0	40710.8
20°	32057.7	31885.5	32057.7	32959.3	34679.8	38717.6
22.5°	29298.0	29136.8	29298.0	30099.2	31889.7	36218.8
25°	26051.2	25963.4	26051.2	26946.0	28565.2	33296.2
27.5°	22542.7	22393.2	22542.7	23478.9	25132.7	29858.5
30°	18958.2	18710.9	18958.2	19795.7	21276.4	26040.2
32.5°	15452.2	15274.2	15452.2	16049.1	17596.5	21765.2
35°	12063.6	11885.5	12063.6	12603.0	14122.7	17821.1
37.5°	9400.2	9085.3	9400.2	9746.3	10979.7	13985.9
40°	7129.3	7078.6	7129.3	7564.9	8354.2	10880.9
42.5°	5803.8	5666.2	5803.8	5991.3	6582.3	8244.4
45°	4762.1	4708.1	4762.1	4904.0	5300.7	6444.7
47.5°	4095.2	4118.9	4095.2	4186.4	4483.6	5248.4
50°	3598.0	3612.3	3598.0	3641.1	3839.4	4408.4
52.5°	3231.6	3218.9	3231.6	3235.9	3359.0	3787.1
55°	2907.5	2891.4	2907.5	2898.2	2989.3	3263.7
57.5°	2623.8	2635.6	2623.8	2611.1	2660.1	2866.0
60°	2370.5	2381.5	2370.5	2361.3	2393.3	2514.0
62.5°	2157.0	2163.7	2157.0	2156.1	2150.2	2243.0
65°	1966.2	1973.7	1966.2	1956.0	1946.8	1989.8
67.5°	1783.8	1783.8	1783.8	1766.1	1751.7	1793.9
70°	1612.5	1611.6	1612.5	1583.7	1572.7	1585.4
72.5°	1406.5	1426.7	1406.5	1385.3	1384.5	1386.1
75°	1206.4	1230.0	1206.4	1192.9	1177.6	1190.4
77.5°	1003.8	1040.0	1003.8	992.8	985.1	976.7
80°	796.1	835.7	796.1	777.5	766.5	780.8
82.5°	588.4	617.9	588.4	565.6	564.7	571.5
85°	350.3	397.6	350.3	330.1	337.7	330.1
87.5°	112.3	143.5	112.3	107.3	118.2	115.7
90°	34.2	21.5	34.2	58.0	37.4	21.5
92.5°	51.6	31.0	51.6	92.9	48.4	27.8
95°	59.6	35.8	59.6	129.4	64.4	41.4
97.5°	65.9	46.1	65.9	148.5	78.6	63.6
100°	77.0	60.4	77.0	231.0	96.9	84.2
102.5°	162.7	101.6	162.7	489.6	181.1	127.1
105°	342.1	174.7	342.1	872.2	377.9	230.2
107.5°	611.9	301.6	611.9	1150.7	668.2	434.9
110°	811.8	561.9	811.8	1206.3	917.4	695.2



TEST NUMBER: P1432495

CATALOG NUMBER: EHBR1-54-UNV-TASM-L830-UPL30

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	872.2	758.7	872.2	1155.5	1012.7	904.8
115°	838.8	798.4	838.8	1031.7	988.9	983.4
117.5°	765.9	771.4	765.9	876.2	889.7	950.0
120°	681.7	714.2	681.7	731.8	777.0	857.9
122.5°	604.7	642.9	604.7	627.9	662.0	743.0
125°	538.1	577.0	538.1	554.1	562.9	630.3
127.5°	492.1	518.4	492.1	501.7	493.0	535.9
130°	456.5	478.7	456.5	469.2	447.8	468.4
132.5°	431.9	446.2	431.9	447.1	421.0	426.5
135°	410.5	422.4	410.5	426.5	402.8	400.3
137.5°	392.3	402.6	392.3	409.2	390.9	385.3
140°	376.6	385.2	376.6	394.1	379.8	376.7
142.5°	359.9	366.3	359.9	380.7	371.1	367.9
145°	348.9	353.7	348.9	370.4	364.8	364.0
147.5°	339.5	342.6	339.5	358.6	356.1	356.1
150°	330.1	333.3	330.1	348.3	345.8	347.4
152.5°	319.8	323.8	319.8	336.4	333.9	335.5
155°	313.5	317.5	313.5	327.0	325.3	326.2
157.5°	310.4	313.7	310.4	320.7	319.9	319.9
160°	308.3	310.7	308.3	316.9	316.0	315.3
162.5°	305.2	307.6	305.2	315.4	313.8	313.8
165°	305.3	306.1	305.3	312.4	312.4	311.6
167.5°	304.5	306.1	304.5	312.5	312.5	311.7
170°	305.4	306.2	305.4	311.7	311.0	309.4
172.5°	307.1	307.9	307.1	314.3	312.7	311.9
175°	307.1	308.0	307.1	312.8	312.8	313.6
177.5°	309.6	310.4	309.6	312.8	312.8	312.0
180°	313.7	313.7	313.7	313.7	313.7	313.7



TEST NUMBER: P1432495  
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L830-UPL30

**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	19.34	20.46	19.80	20.89	21.34	18.66	19.78	19.12	20.21	20.66
	3H	20.89	21.89	21.36	22.33	22.83	20.51	21.50	20.98	21.95	22.45
	4H	21.52	22.46	22.02	22.92	23.44	21.29	22.22	21.79	22.68	23.20
	6H	22.00	22.86	22.52	23.34	23.87	21.93	22.79	22.44	23.27	23.80
	8H	22.16	22.97	22.68	23.47	24.00	22.15	22.96	22.68	23.46	24.00
	12H	22.23	23.00	22.76	23.49	24.05	22.28	23.06	22.81	23.55	24.11
4H	2H	19.75	20.69	20.26	21.15	21.67	19.23	20.17	19.73	20.63	21.15
	3H	21.55	22.32	22.06	22.83	23.37	21.29	22.06	21.80	22.57	23.11
	4H	22.33	23.02	22.86	23.54	24.11	22.20	22.89	22.73	23.41	23.99
	6H	22.94	23.54	23.50	24.09	24.68	22.97	23.57	23.53	24.12	24.71
	8H	23.14	23.70	23.70	24.24	24.84	23.24	23.80	23.80	24.34	24.94
	12H	23.24	23.74	23.82	24.31	24.92	23.41	23.90	23.99	24.48	25.08
8H	4H	22.58	23.13	23.14	23.68	24.28	22.48	23.04	23.04	23.58	24.18
	6H	23.32	23.77	23.91	24.37	24.97	23.38	23.84	23.98	24.43	25.04
	8H	23.59	23.99	24.20	24.60	25.22	23.74	24.14	24.35	24.75	25.37
	12H	23.76	24.11	24.37	24.70	25.40	23.99	24.34	24.59	24.93	25.62
12H	4H	22.59	23.08	23.17	23.66	24.26	22.49	22.98	23.07	23.56	24.16
	6H	23.36	23.77	23.97	24.37	24.99	23.43	23.83	24.04	24.44	25.06
	8H	23.68	24.03	24.29	24.62	25.32	23.83	24.19	24.44	24.78	25.47

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: SP1-2506-472-2

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

REPORT NUMBER: SP1-2506-472-2

CIE 1931 Chromaticity Diagram



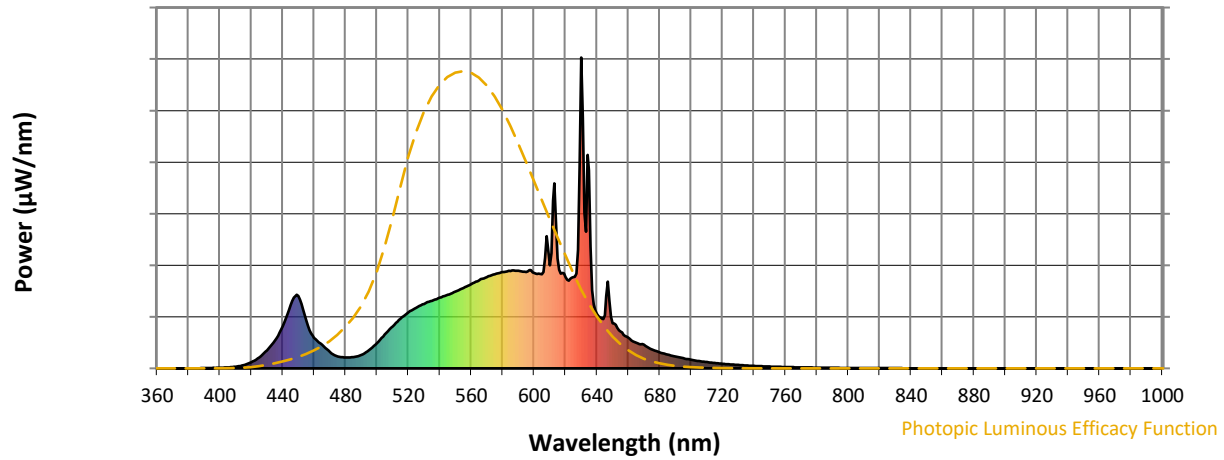
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (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	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**

$\lambda$ (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	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**

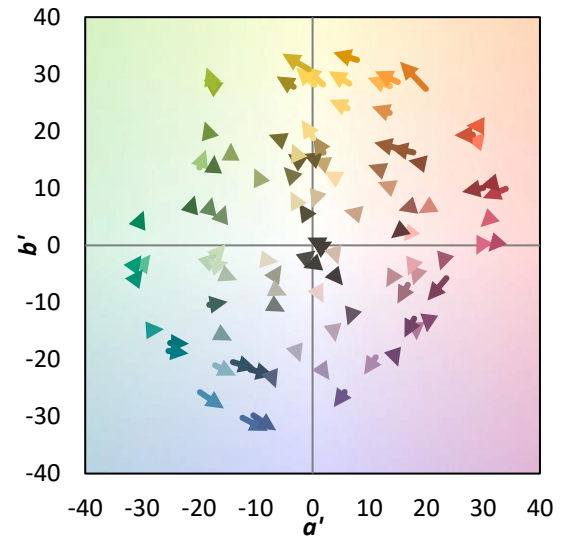
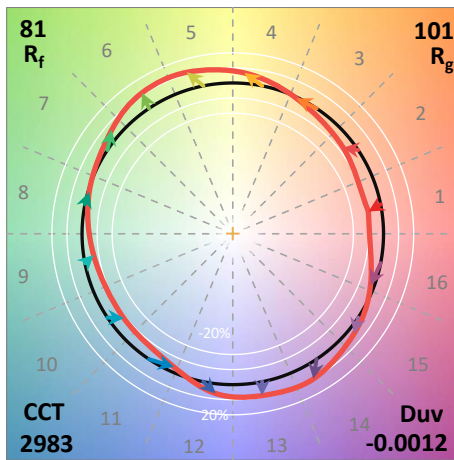
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	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**

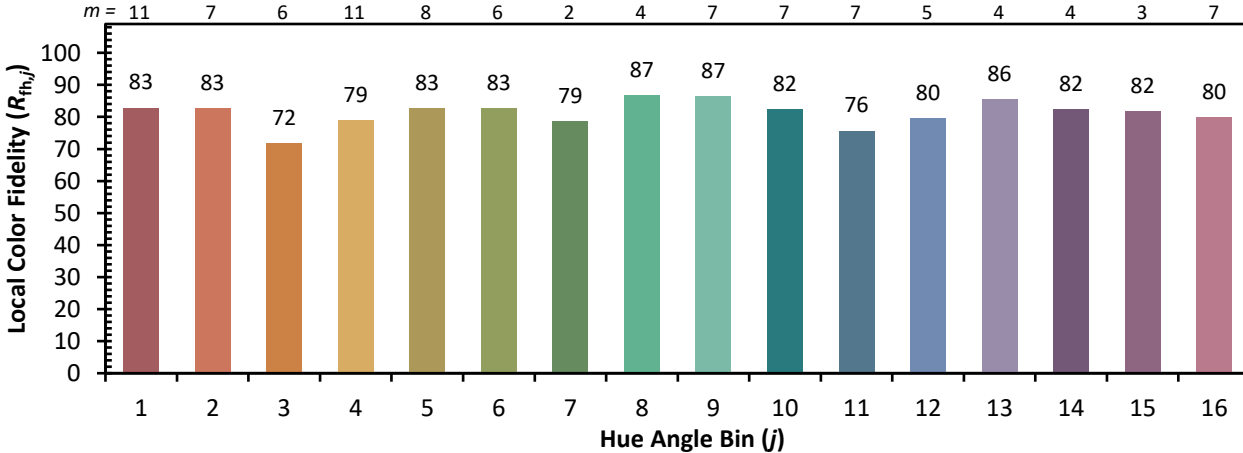
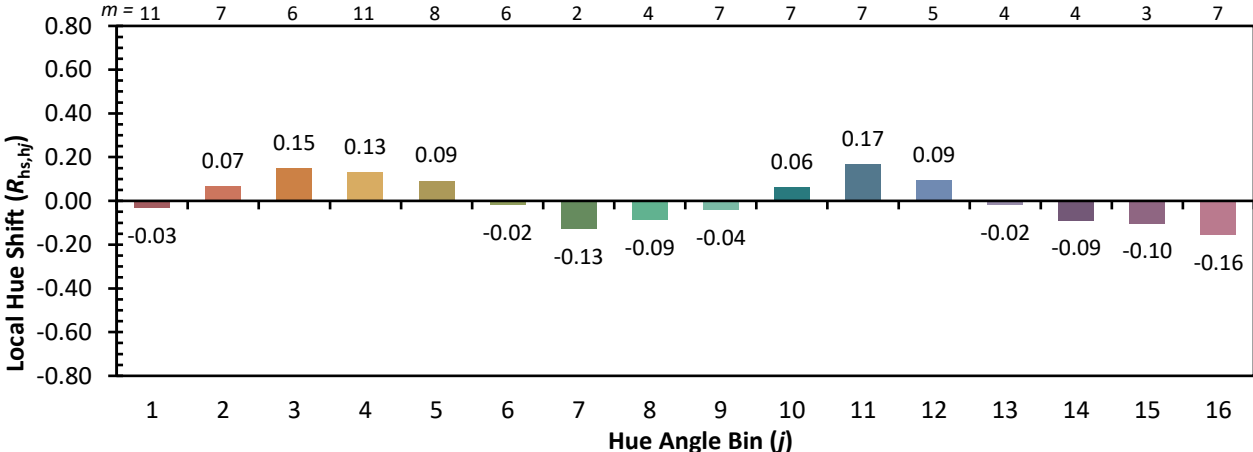
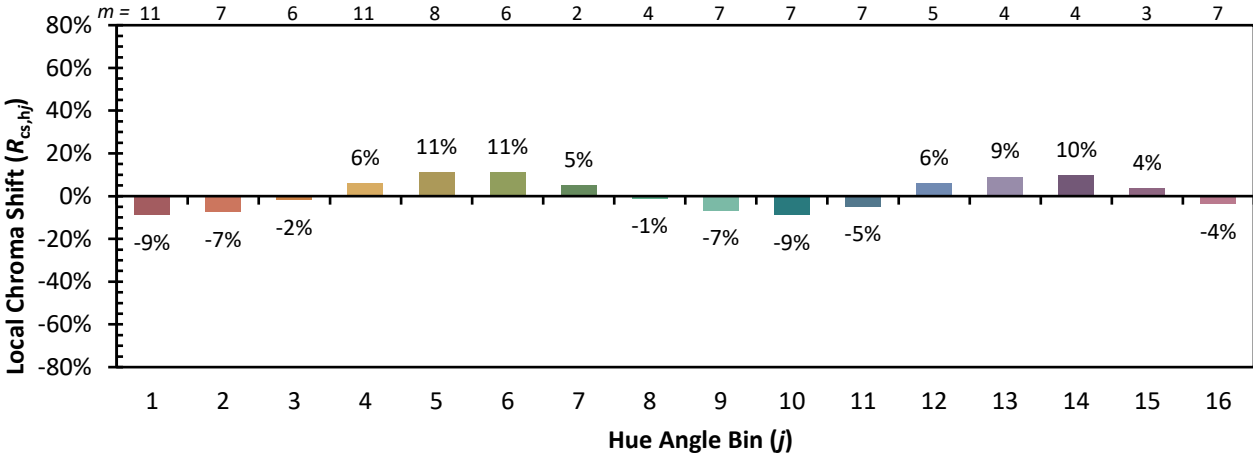


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

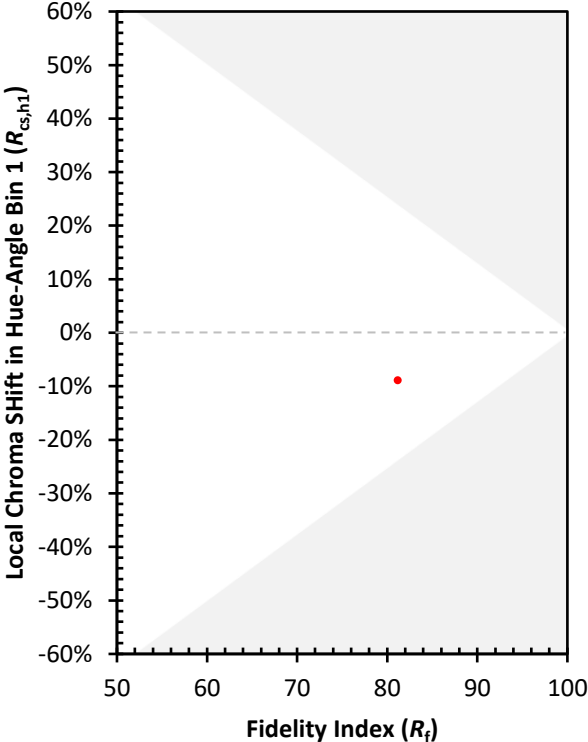
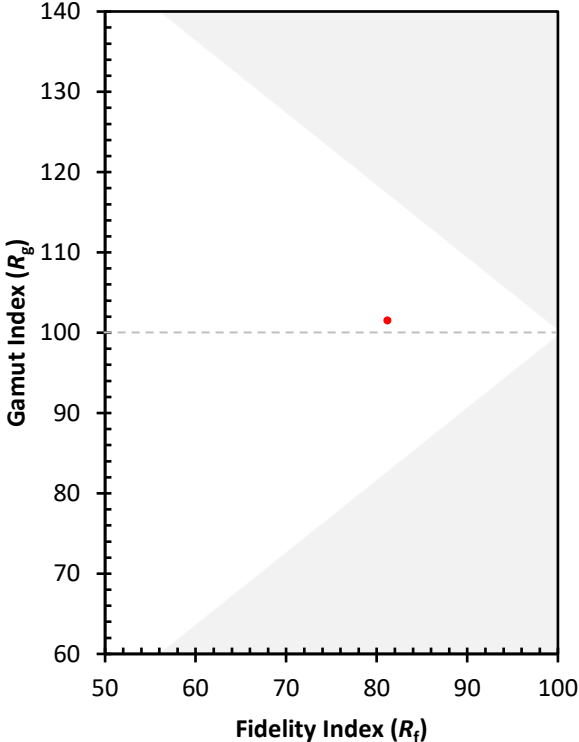
CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82 = 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)