

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: P1432365

Luminaire Tested: EHBR1-30-UNV-TASM-L830-UPL18

Issue Date: 3/20/2026

**Test Information**

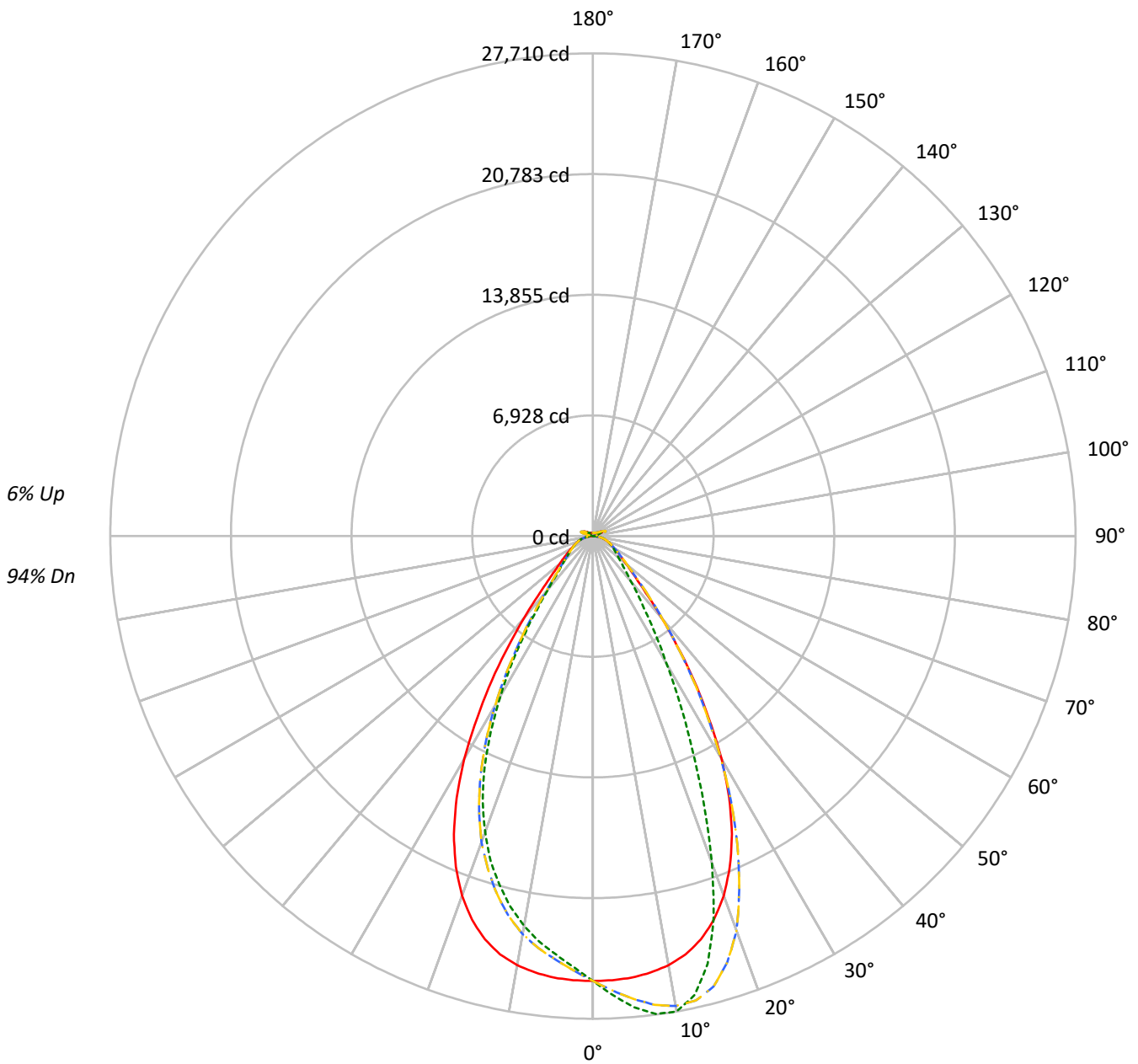
Test Method: LM-79-2019  
Report Number: P1432365  
REPORT IS A COMBINATION OF REPORTS P1431742 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-30-UNV-TASM-L830-UPL18  
Description: Elevate Round Highbay at, 30000 lumens, 3000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30281.9 lumens  
Efficiency: N/A  
Efficacy: 176.4 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): 171.7  
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: P1432365  
CATALOG NUMBER: EHBR1-30-UNV-TASM-L830-UPL18

### 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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	97	97	97	94
1	110	107	104	101	107	104	101	99	99	97	95	94	93	91	90	89	87	87	87	87	85
2	104	98	93	88	101	95	91	87	91	87	84	87	84	81	83	81	79	79	79	79	77
3	97	89	83	79	94	87	82	77	84	79	75	81	77	74	78	74	72	72	72	72	70
4	91	82	76	71	89	81	75	70	78	72	68	75	70	67	72	69	66	66	66	66	64
5	86	76	69	64	84	75	68	64	72	67	62	70	65	61	68	63	60	60	60	60	58
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	74	65	58	54	63	57	53	61	56	52	59	55	52	52	52	52	50
8	72	61	55	50	71	61	54	50	59	53	49	57	52	49	56	51	48	48	48	48	46
9	68	58	51	47	67	57	51	46	55	50	46	54	49	45	53	48	45	45	45	45	43
10	65	54	48	43	64	54	47	43	52	47	43	51	46	42	50	45	42	42	42	42	41

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

	0°	90°	180°	270°
0°	119922	119922	119922	119922
5°	119192	127156	119192	113007
10°	117727	130420	117727	106951
15°	114251	121201	114251	98794
20°	106853	97187	106853	87998
25°	94574	67336	94574	73745
30°	76790	43807	76790	55177
35°	55076	28370	55076	36732
40°	35609	19555	35609	23165
45°	22593	15147	22593	16506
50°	16778	12871	16778	13748
55°	13698	11725	13698	12136
60°	11862	11169	11862	11236
65°	10813	10771	10813	10726
70°	10248	10555	10248	10418
75°	9585	10210	9585	9904
80°	8421	9639	8421	9012
85°	5447	6881	5447	6564

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 31765 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2428.1	8.0
10°-20°	6605.9	21.8
20°-30°	7747.4	25.6
30°-40°	5387.8	17.8
40°-50°	2677.5	8.8
50°-60°	1601.4	5.3
60°-70°	1127.1	3.7
70°-80°	726.1	2.4
80°-90°	233.7	0.8
90°-100°	46.8	0.2
100°-110°	302.8	1.0
110°-120°	559.0	1.8
120°-130°	332.6	1.1
130°-140°	201.8	0.7
140°-150°	140.2	0.5
150°-160°	92.2	0.3
160°-170°	53.6	0.2
170°-180°	18.0	0.1
0°-30°	16781.4	55.4
0°-40°	22169.2	73.2
0°-60°	26448.1	87.3
0°-90°	28534.9	94.2
90°-120°	908.6	3.0
90°-150°	1583.3	5.2
90°-180°	1747.0	5.8
0°-180°	30281.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	25536	25536	25536	25536	25536	
5°	25449	27150	25449	24129	25449	2415
15°	23969	25427	23969	20726	23969	6699
25°	18886	13447	18886	14727	18886	8550
35°	10108	5207	10108	6742	10108	6310
45°	3656	2451	3656	2671	3656	2991
55°	1851	1584	1851	1640	1851	1693
65°	1129	1124	1129	1120	1129	1134
75°	675	719	675	698	675	709
85°	187	236	187	226	187	208
90°	13	16	13	13	13	15
95°	25	25	25	22	25	26
105°	139	72	139	106	139	188
115°	595	509	595	483	595	542
125°	381	400	381	349	381	351
135°	242	280	242	255	242	192
145°	220	230	220	214	220	138
155°	197	205	197	192	197	92
165°	188	194	188	184	188	53
175°	189	193	189	185	189	18
180°	189	189	189	189	189	



TEST NUMBER: P1432365  
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L830-UPL18

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5
2.5°	25521.7	25851.6	26118.8	26295.0	26382.1	26295.0	26118.8	25851.6	25521.7	25193.6	24968.1
5°	25449.4	26110.2	26670.0	27036.2	27149.8	27036.2	26670.0	26110.2	25449.4	24824.9	24410.7
7.5°	25276.5	26306.0	27137.8	27565.4	27669.7	27565.4	27137.8	26306.0	25276.5	24392.6	23869.1
10°	25012.7	26429.5	27390.6	27697.1	27709.5	27697.1	27390.6	26429.5	25012.7	23821.7	23204.5
12.5°	24591.7	26385.5	27305.8	27205.3	26976.8	27205.3	27305.8	26385.5	24591.7	23124.5	22345.9
15°	23969.3	26124.5	26769.1	25950.7	25427.3	25950.7	26769.1	26124.5	23969.3	22183.1	21280.1
17.5°	23091.9	25636.1	25648.6	24029.6	23042.2	24029.6	25648.6	25636.1	23091.9	21032.0	20037.4
20°	21961.4	24852.7	24105.7	21144.5	19974.7	21144.5	24105.7	24852.7	21961.4	19671.1	18695.2
22.5°	20544.0	23796.3	21957.1	18242.2	16646.2	18242.2	21957.1	23796.3	20544.0	18088.5	17072.8
25°	18886.3	22502.0	19645.7	15079.9	13447.0	15079.9	19645.7	22502.0	18886.3	16202.8	15284.4
27.5°	16936.4	20861.5	17184.4	12322.7	10816.3	12322.7	17184.4	20861.5	16936.4	14255.8	13317.8
30°	14770.6	18758.4	14623.1	9813.5	8426.3	9813.5	14623.1	18758.4	14770.6	12068.4	11228.5
32.5°	12345.6	16696.9	12163.3	7863.2	6688.1	7863.2	12163.3	16696.9	12345.6	9981.1	9103.4
35°	10108.5	14117.9	9945.2	6178.6	5207.0	6178.6	9945.2	14117.9	10108.5	8010.6	7148.7
37.5°	7933.1	11681.0	7927.8	4975.2	4223.4	4975.2	7927.8	11681.0	7933.1	6227.9	5528.3
40°	6171.9	9133.6	6211.6	3971.6	3389.3	3971.6	6211.6	9133.6	6171.9	4738.7	4291.0
42.5°	4676.4	6984.0	4882.3	3259.6	2878.9	3259.6	4882.3	6984.0	4676.4	3733.5	3398.4
45°	3655.5	5139.4	3812.6	2750.0	2450.7	2750.0	3812.6	5139.4	3655.5	3006.6	2781.7
47.5°	2977.0	3972.0	3090.0	2358.8	2149.1	2358.8	3090.0	3972.0	2977.0	2543.2	2374.7
50°	2500.5	3047.9	2565.6	2059.1	1918.3	2059.1	2565.6	3047.9	2500.5	2177.8	2065.3
52.5°	2148.2	2485.7	2185.0	1834.9	1740.1	1834.9	2185.0	2485.7	2148.2	1905.4	1835.4
55°	1851.2	2089.7	1900.1	1650.1	1584.5	1650.1	1900.1	2089.7	1851.2	1695.6	1643.9
57.5°	1625.7	1772.7	1650.1	1492.6	1449.0	1492.6	1650.1	1772.7	1625.7	1508.9	1481.1
60°	1426.0	1535.2	1456.2	1355.1	1342.7	1355.1	1456.2	1535.2	1426.0	1357.6	1339.3
62.5°	1272.3	1341.3	1287.6	1231.6	1220.6	1231.6	1287.6	1341.3	1272.3	1219.6	1223.0
65°	1128.6	1192.8	1150.7	1120.5	1124.3	1120.5	1150.7	1192.8	1128.6	1104.2	1109.5
67.5°	1017.5	1051.1	1032.9	1015.7	1020.0	1015.7	1032.9	1051.1	1017.5	993.6	1001.7
70°	899.2	935.2	916.5	918.9	926.1	918.9	916.5	935.2	899.2	892.1	898.3
72.5°	786.3	814.0	807.8	813.5	821.2	813.5	807.8	814.0	786.3	785.3	785.8
75°	675.2	696.3	699.2	707.2	719.2	707.2	699.2	696.3	675.2	668.0	676.6
77.5°	554.1	577.9	587.0	598.1	615.8	598.1	587.0	577.9	554.1	558.8	563.1
80°	443.0	453.9	474.1	482.2	507.1	482.2	474.1	453.9	443.0	434.8	441.0
82.5°	324.2	334.2	351.5	366.8	381.1	366.8	351.5	334.2	324.2	320.4	320.8
85°	187.2	202.5	214.0	232.2	236.5	232.2	214.0	202.5	187.2	191.6	187.2
87.5°	65.6	70.3	80.5	87.7	88.1	87.7	80.5	70.3	65.6	67.1	60.8
90°	12.9	22.0	37.8	22.1	16.3	22.1	37.8	22.0	12.9	22.6	35.0
92.5°	16.8	29.7	53.2	28.9	21.1	28.9	53.2	29.7	16.8	29.2	56.1
95°	24.9	36.4	67.6	31.7	24.9	31.7	67.6	36.4	24.9	38.9	78.2
97.5°	38.4	45.1	76.2	33.6	29.8	33.6	76.2	45.1	38.4	47.5	89.7
100°	50.9	50.9	138.7	38.4	33.6	38.4	138.7	50.9	50.9	58.5	139.7
102.5°	76.8	99.3	320.6	75.4	40.3	75.4	320.6	99.3	76.8	109.4	296.2
105°	139.2	226.0	563.5	191.6	72.5	191.6	563.5	226.0	139.2	228.5	527.6
107.5°	263.0	421.0	725.8	375.9	165.6	375.9	725.8	421.0	263.0	404.2	696.0
110°	420.5	588.0	792.0	514.2	332.6	514.2	792.0	588.0	420.5	554.9	729.6



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 CATALOG NUMBER: EHBR1-30-UNV-TASM-L830-UPL18

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	547.2	655.2	773.7	569.8	459.4	569.8	773.7	655.2	547.2	612.5	698.9
115°	594.7	645.6	691.2	567.9	509.3	567.9	691.2	645.6	594.7	598.1	624.0
117.5°	574.6	590.9	597.2	533.4	512.2	533.4	597.2	590.9	574.6	538.0	529.9
120°	518.8	512.2	503.6	482.4	483.3	482.4	503.6	512.2	518.8	469.9	442.6
122.5°	449.2	434.8	425.8	431.1	444.0	431.1	425.8	434.8	449.2	400.3	379.6
125°	381.1	366.7	371.6	386.9	400.3	386.9	371.6	366.7	381.1	340.4	335.0
127.5°	324.0	317.4	332.2	349.5	360.9	349.5	332.2	317.4	324.0	298.2	303.3
130°	283.3	284.7	304.3	319.2	326.3	319.2	304.3	284.7	283.3	270.8	283.7
132.5°	257.8	265.0	283.7	296.7	301.0	296.7	283.7	265.0	257.8	254.4	270.2
135°	242.0	252.5	269.8	277.9	279.8	277.9	269.8	252.5	242.0	243.4	257.8
137.5°	232.8	243.4	256.4	263.0	261.6	263.0	256.4	243.4	232.8	236.1	247.2
140°	227.5	238.1	243.8	251.5	250.6	251.5	243.8	238.1	227.5	229.4	238.1
142.5°	222.2	231.8	234.7	240.5	239.0	240.5	234.7	231.8	222.2	224.2	229.9
145°	219.8	227.1	224.6	231.8	229.9	231.8	224.6	227.1	219.8	220.3	223.7
147.5°	215.0	220.3	217.4	223.7	221.8	223.7	217.4	220.3	215.0	215.0	216.5
150°	209.7	213.6	209.3	216.5	216.5	216.5	209.3	213.6	209.7	208.8	210.3
152.5°	202.6	206.5	202.6	210.8	210.3	210.8	202.6	206.5	202.6	201.7	203.1
155°	196.8	198.8	196.8	205.0	205.4	205.0	196.8	198.8	196.8	196.3	197.3
157.5°	193.0	194.4	193.4	200.6	201.1	200.6	193.4	194.4	193.0	193.0	193.4
160°	190.1	191.9	191.6	197.7	198.2	197.7	191.6	191.9	190.1	190.5	191.0
162.5°	189.1	189.1	189.1	195.3	196.2	195.3	189.1	189.1	189.1	189.1	190.1
165°	187.6	188.7	187.6	192.4	194.4	192.4	187.6	188.7	187.6	188.2	188.2
167.5°	187.6	186.7	187.6	192.0	193.9	192.0	187.6	186.7	187.6	188.1	188.1
170°	186.2	186.7	186.7	191.0	192.9	191.0	186.7	186.7	186.2	187.2	187.6
172.5°	187.7	187.7	187.2	190.5	193.4	190.5	187.2	187.7	187.7	188.2	189.1
175°	188.7	188.1	188.1	190.5	193.4	190.5	188.1	188.1	188.7	188.2	188.2
177.5°	187.6	188.6	189.5	192.0	195.8	192.0	189.5	188.6	187.6	188.2	188.2
180°	188.6	188.6	188.6	188.6	188.6	188.6	188.6	188.6	188.6	188.6	188.6



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	25536.5	25536.5	25536.5	25536.5	25536.5	25536.5
2.5°	24794.8	24778.5	24794.8	24968.1	25193.6	25521.7
5°	24218.7	24128.7	24218.7	24410.7	24824.9	25449.4
7.5°	23547.8	23495.7	23547.8	23869.1	24392.6	25276.5
10°	22841.6	22723.2	22841.6	23204.5	23821.7	25012.7
12.5°	21971.0	21814.5	21971.0	22345.9	23124.5	24591.7
15°	20863.9	20726.5	20863.9	21280.1	22183.1	23969.3
17.5°	19675.9	19551.4	19675.9	20037.4	21032.0	23091.9
20°	18183.8	18086.1	18183.8	18695.2	19671.1	21961.4
22.5°	16618.4	16527.0	16618.4	17072.8	18088.5	20544.0
25°	14776.8	14726.9	14776.8	15284.4	16202.8	18886.3
27.5°	12786.7	12702.0	12786.7	13317.8	14255.8	16936.4
30°	10753.5	10613.2	10753.5	11228.5	12068.4	14770.6
32.5°	8764.9	8663.8	8764.9	9103.4	9981.1	12345.6
35°	6842.8	6741.7	6842.8	7148.7	8010.6	10108.5
37.5°	5331.9	5153.4	5331.9	5528.3	6227.9	7933.1
40°	4043.9	4015.1	4043.9	4291.0	4738.7	6171.9
42.5°	3292.1	3214.0	3292.1	3398.4	3733.5	4676.4
45°	2701.2	2670.6	2701.2	2781.7	3006.6	3655.5
47.5°	2322.9	2336.3	2322.9	2374.7	2543.2	2977.0
50°	2040.8	2049.0	2040.8	2065.3	2177.8	2500.5
52.5°	1833.0	1825.8	1833.0	1835.4	1905.4	2148.2
55°	1649.2	1640.1	1649.2	1643.9	1695.6	1851.2
57.5°	1488.2	1495.0	1488.2	1481.1	1508.9	1625.7
60°	1344.6	1350.8	1344.6	1339.3	1357.6	1426.0
62.5°	1223.4	1227.3	1223.4	1223.0	1219.6	1272.3
65°	1115.2	1119.6	1115.2	1109.5	1104.2	1128.6
67.5°	1011.8	1011.8	1011.8	1001.7	993.6	1017.5
70°	914.6	914.1	914.6	898.3	892.1	899.2
72.5°	797.8	809.2	797.8	785.8	785.3	786.3
75°	684.3	697.7	684.3	676.6	668.0	675.2
77.5°	569.3	589.9	569.3	563.1	558.8	554.1
80°	451.6	474.1	451.6	441.0	434.8	443.0
82.5°	333.7	350.5	333.7	320.8	320.4	324.2
85°	198.7	225.6	198.7	187.2	191.6	187.2
87.5°	63.7	81.4	63.7	60.8	67.1	65.6
90°	20.6	12.9	20.6	35.0	22.6	12.9
92.5°	31.2	18.7	31.2	56.1	29.2	16.8
95°	36.0	21.5	36.0	78.2	38.9	24.9
97.5°	39.8	27.8	39.8	89.7	47.5	38.4
100°	46.6	36.4	46.6	139.7	58.5	50.9
102.5°	98.4	61.4	98.4	296.2	109.4	76.8
105°	206.9	105.6	206.9	527.6	228.5	139.2
107.5°	370.1	182.4	370.1	696.0	404.2	263.0
110°	491.0	339.8	491.0	729.6	554.9	420.5



TEST NUMBER: P1432365  
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L830-UPL18

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	527.6	458.9	527.6	698.9	612.5	547.2
115°	507.4	482.9	507.4	624.0	598.1	594.7
117.5°	463.2	466.6	463.2	529.9	538.0	574.6
120°	412.3	432.0	412.3	442.6	469.9	518.8
122.5°	365.8	388.8	365.8	379.6	400.3	449.2
125°	325.4	348.9	325.4	335.0	340.4	381.1
127.5°	297.6	313.4	297.6	303.3	298.2	324.0
130°	276.0	289.4	276.0	283.7	270.8	283.3
132.5°	261.1	269.8	261.1	270.2	254.4	257.8
135°	248.2	255.3	248.2	257.8	243.4	242.0
137.5°	237.2	243.5	237.2	247.2	236.1	232.8
140°	227.5	232.9	227.5	238.1	229.4	227.5
142.5°	217.4	221.3	217.4	229.9	224.2	222.2
145°	210.7	213.6	210.7	223.7	220.3	219.8
147.5°	205.0	206.8	205.0	216.5	215.0	215.0
150°	199.2	201.1	199.2	210.3	208.8	209.7
152.5°	193.0	195.4	193.0	203.1	201.7	202.6
155°	189.1	191.5	189.1	197.3	196.3	196.8
157.5°	187.2	189.0	187.2	193.4	193.0	193.0
160°	185.7	187.2	185.7	191.0	190.5	190.1
162.5°	183.9	185.3	183.9	190.1	189.1	189.1
165°	183.8	184.3	183.8	188.2	188.2	187.6
167.5°	183.3	184.3	183.3	188.1	188.1	187.6
170°	183.8	184.3	183.8	187.6	187.2	186.2
172.5°	184.7	185.3	184.7	189.1	188.2	187.7
175°	184.8	185.3	184.8	188.2	188.2	188.7
177.5°	186.2	186.7	186.2	188.2	188.2	187.6
180°	188.6	188.6	188.6	188.6	188.6	188.6



TEST NUMBER: P1432365  
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L830-UPL18

**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	17.34	18.46	17.81	18.90	19.36	16.66	17.78	17.13	18.21	18.68
	3H	18.89	19.88	19.37	20.34	20.84	18.51	19.50	18.99	19.96	20.46
	4H	19.53	20.46	20.03	20.92	21.45	19.29	20.22	19.80	20.69	21.21
	6H	20.01	20.86	20.53	21.35	21.88	19.93	20.79	20.45	21.27	21.81
	8H	20.16	20.97	20.69	21.47	22.02	20.16	20.96	20.69	21.47	22.01
	12H	20.23	21.00	20.77	21.50	22.07	20.28	21.05	20.82	21.55	22.12
4H	2H	17.76	18.69	18.26	19.16	19.68	17.24	18.17	17.74	18.63	19.16
	3H	19.56	20.32	20.07	20.84	21.38	19.29	20.06	19.81	20.58	21.12
	4H	20.33	21.02	20.87	21.55	22.13	20.20	20.89	20.74	21.42	22.00
	6H	20.95	21.54	21.51	22.09	22.69	20.97	21.57	21.54	22.12	22.72
	8H	21.14	21.70	21.71	22.25	22.85	21.24	21.80	21.81	22.35	22.96
	12H	21.25	21.74	21.83	22.32	22.93	21.41	21.90	22.00	22.49	23.09
8H	4H	20.58	21.13	21.15	21.69	22.29	20.48	21.04	21.05	21.59	22.19
	6H	21.32	21.77	21.92	22.37	22.99	21.39	21.84	21.98	22.44	23.05
	8H	21.59	21.99	22.21	22.61	23.23	21.74	22.14	22.36	22.75	23.38
	12H	21.76	22.12	22.38	22.71	23.41	21.99	22.34	22.60	22.93	23.63
12H	4H	20.59	21.08	21.17	21.66	22.27	20.49	20.98	21.08	21.57	22.18
	6H	21.36	21.77	21.98	22.38	23.01	21.43	21.83	22.05	22.45	23.07
	8H	21.68	22.03	22.29	22.63	23.33	21.84	22.19	22.45	22.78	23.48

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



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**

$\lambda$ (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

**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**

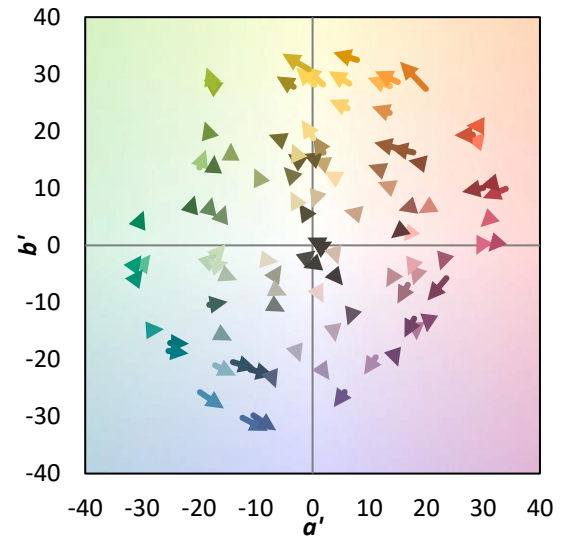
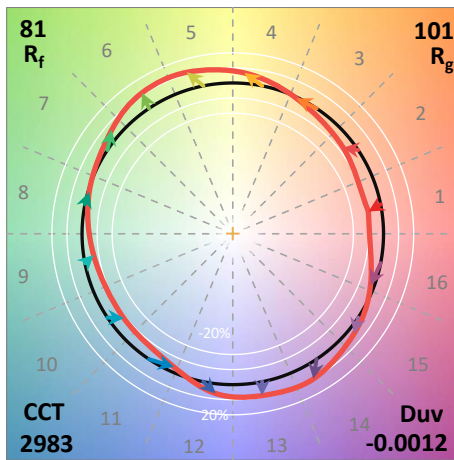
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625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

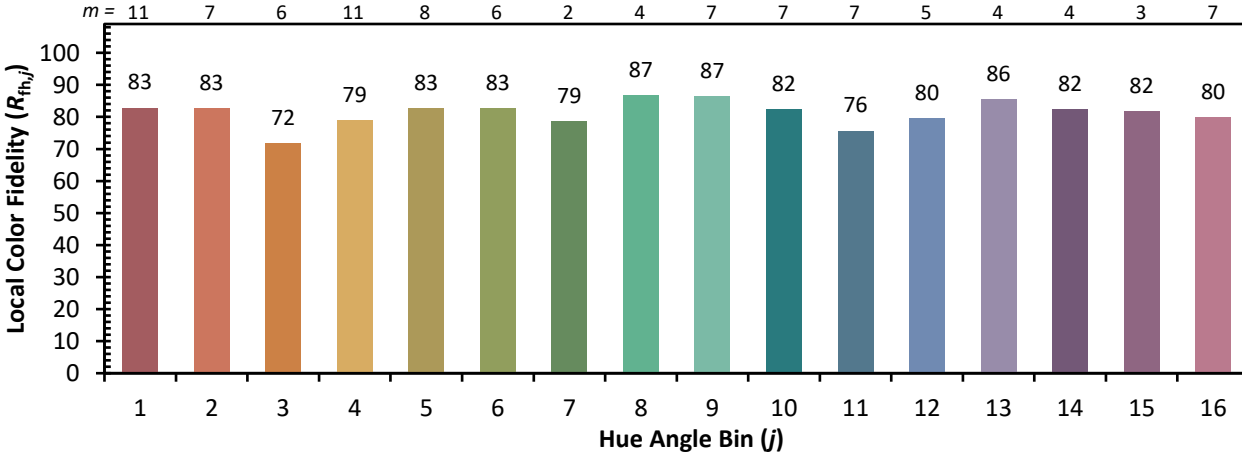
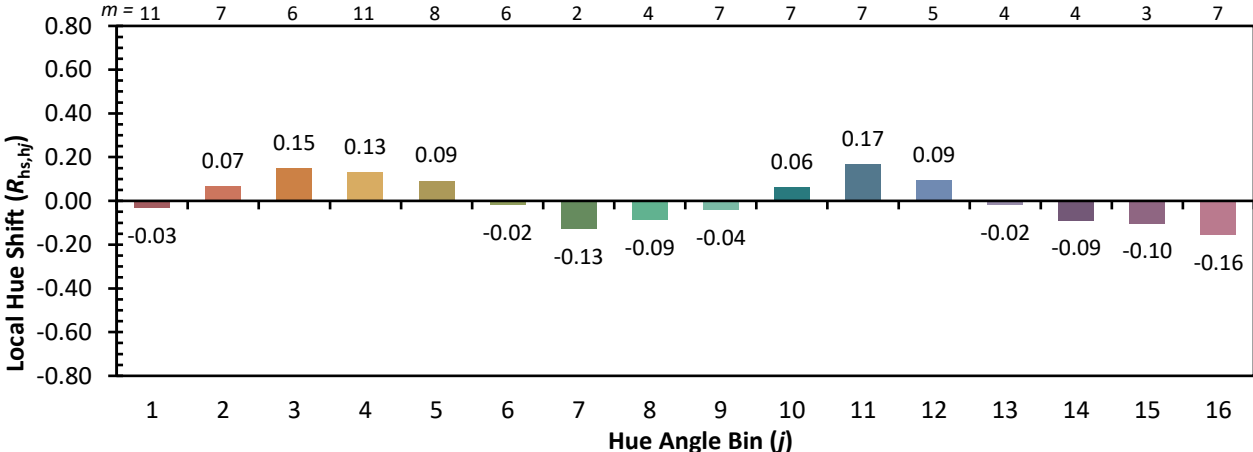
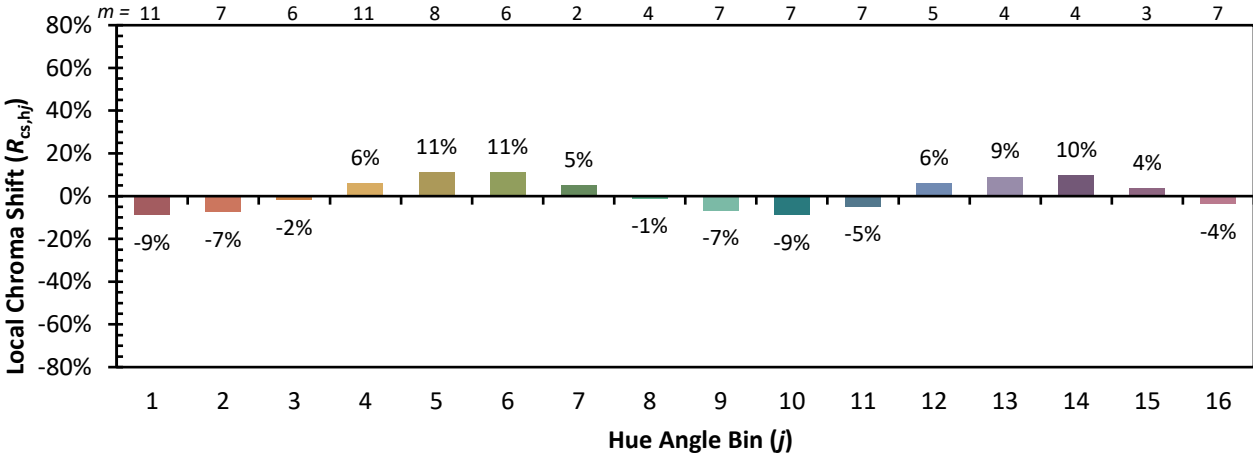


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

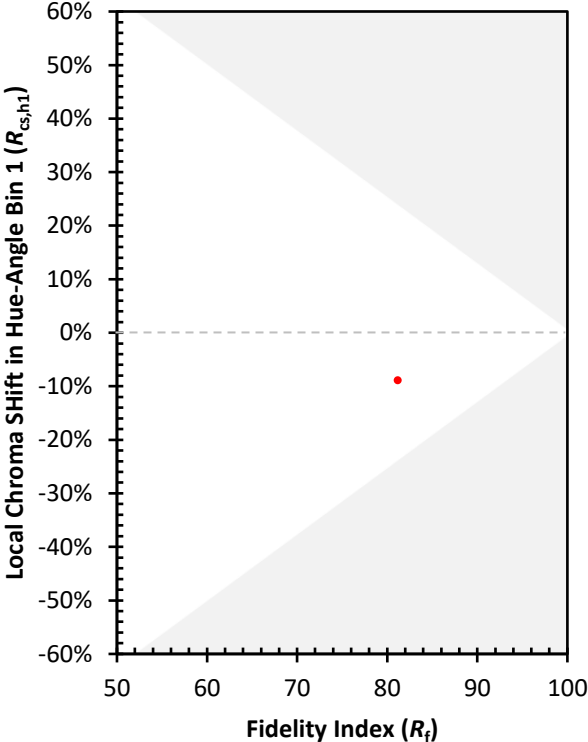
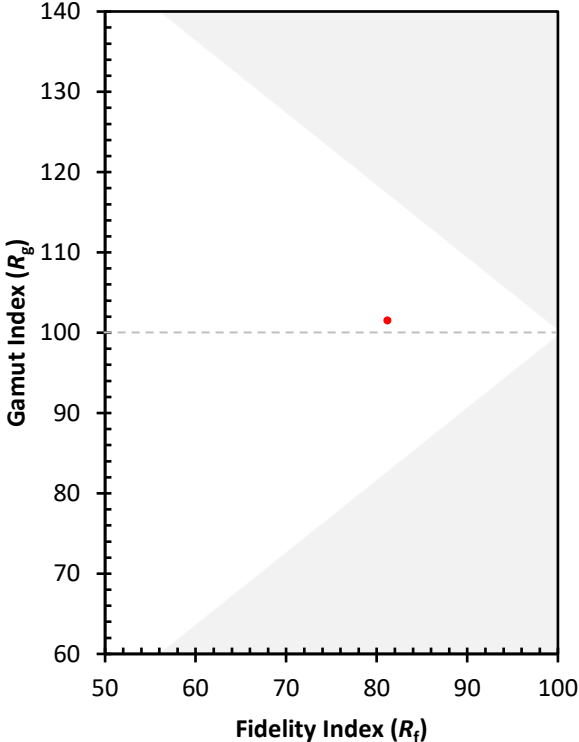
CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82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