

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: P1433004

Luminaire Tested: EHBR1-42-UNV-TASM-L850-UPL15

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433004
REPORT IS A COMBINATION OF REPORTS P1431805 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-42-UNV-TASM-L850-UPL15
Description: Elevate Round Highbay at, 42000 lumens, 5000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

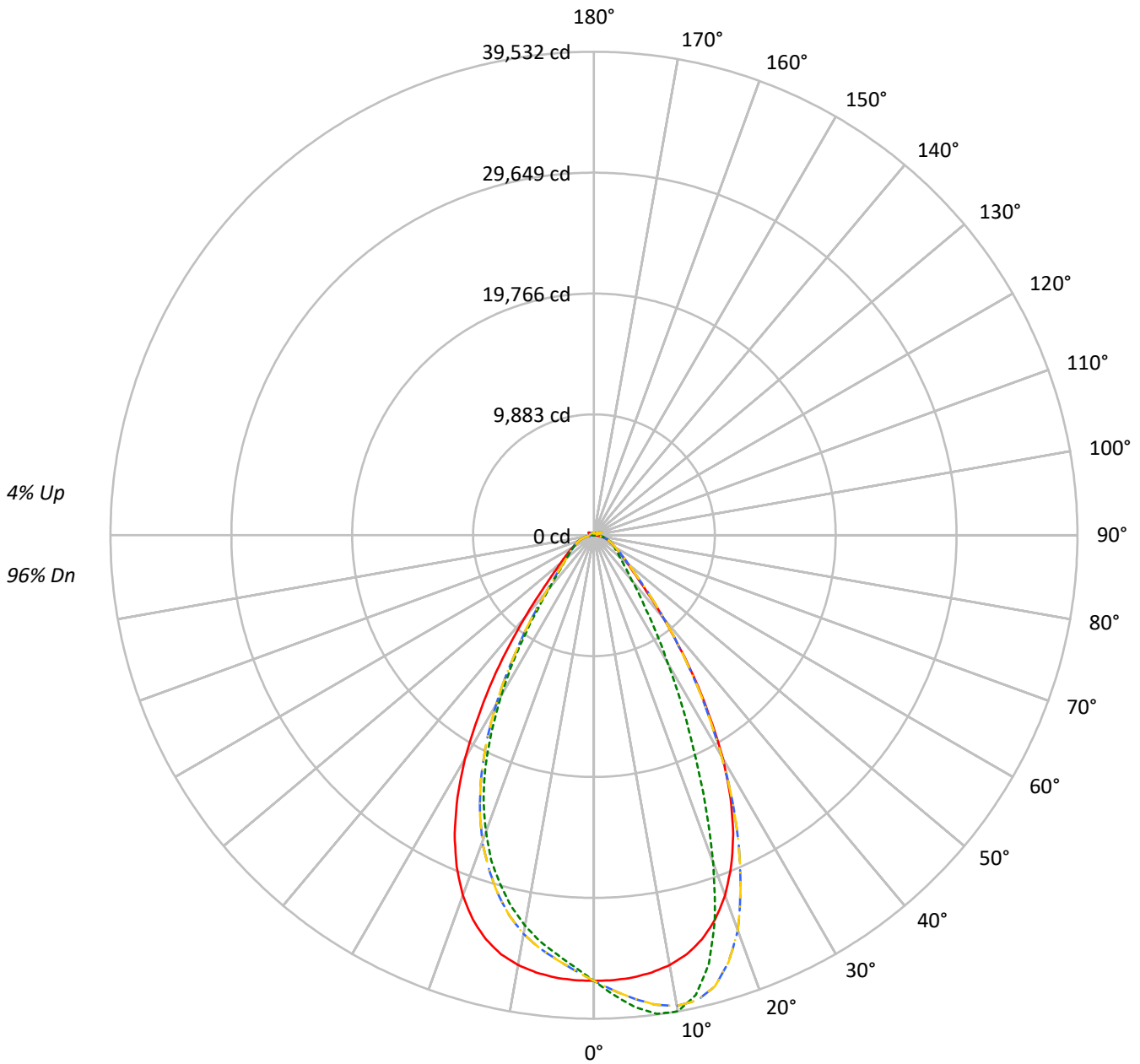
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42197.7 lumens
Efficiency: N/A
Efficacy: 180.6 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): 233.7
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: P1433004
CATALOG NUMBER: EHBR1-42-UNV-TASM-L850-UPL15

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	96	
1	111	108	105	102	108	105	102	100	100	98	96	96	94	93	92	91	89	89	87	
2	104	98	93	89	101	96	92	88	92	88	85	89	86	83	85	83	81	81	79	
3	98	90	84	79	95	88	83	78	85	80	77	82	78	75	79	76	73	73	71	
4	92	83	76	71	90	81	75	71	79	73	69	76	72	68	74	70	67	67	65	
5	86	77	70	65	84	75	69	64	73	68	63	71	66	62	69	65	62	62	60	
6	81	71	64	59	80	70	64	59	68	63	58	66	61	58	65	60	57	57	55	
7	77	66	59	55	75	65	59	54	64	58	54	62	57	53	61	56	53	53	51	
8	73	62	55	51	71	61	55	50	60	54	50	58	53	50	57	53	49	49	48	
9	69	58	52	47	68	58	51	47	56	51	47	55	50	46	54	49	46	46	44	
10	66	55	48	44	64	54	48	44	53	47	44	52	47	43	51	46	43	43	42	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	171086	171086	171086	171086
5°	170045	181406	170045	161220
10°	167954	186063	167954	152582
15°	162995	172910	162995	140944
20°	152441	138650	152441	125542
25°	134923	96065	134923	105209
30°	109552	62497	109552	78718
35°	78574	40474	78574	52404
40°	50800	27897	50800	33049
45°	32233	21609	32233	23548
50°	23937	18363	23937	19614
55°	19543	16728	19543	17313
60°	16923	15935	16923	16031
65°	15427	15367	15427	15302
70°	14622	15057	14622	14862
75°	13673	14566	13673	14130
80°	12012	13753	12012	12856
85°	7771	9820	7771	9363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 45318 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3464.1	8.2
10°-20°	9424.2	22.3
20°-30°	11052.7	26.2
30°-40°	7686.5	18.2
40°-50°	3819.8	9.1
50°-60°	2284.6	5.4
60°-70°	1608.0	3.8
70°-80°	1035.8	2.5
80°-90°	331.6	0.8
90°-100°	40.4	0.1
100°-110°	257.1	0.6
110°-120°	473.7	1.1
120°-130°	282.6	0.7
130°-140°	172.3	0.4
140°-150°	120.5	0.3
150°-160°	80.1	0.2
160°-170°	47.4	0.1
170°-180°	16.1	0.0
0°-30°	23941.0	56.7
0°-40°	31627.5	75.0
0°-60°	37732.0	89.4
0°-90°	40707.5	96.5
90°-120°	771.2	1.8
90°-150°	1346.6	3.2
90°-180°	1490.0	3.5
0°-180°	42197.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	36432	36432	36432	36432	36432	
5°	36307	38733	36307	34423	36307	3446
15°	34196	36276	34196	29569	34196	9556
25°	26944	19184	26944	21010	26944	12198
35°	14421	7428	14421	9618	14421	9003
45°	5215	3496	5215	3810	5215	4268
55°	2641	2261	2641	2340	2641	2415
65°	1610	1604	1610	1597	1610	1617
75°	963	1026	963	995	963	1011
85°	267	338	267	322	267	297
90°	11	16	11	11	11	18
95°	22	23	22	19	22	23
105°	118	64	118	90	118	159
115°	504	433	504	409	504	459
125°	324	341	324	296	324	298
135°	207	240	207	217	207	164
145°	189	198	189	184	189	119
155°	171	179	171	167	171	80
165°	166	174	166	164	166	47
175°	169	176	169	166	169	16
180°	170	170	170	170	170	



TEST NUMBER: P1433004
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L850-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5
2.5°	36410.3	36881.0	37262.2	37513.6	37637.9	37513.6	37262.2	36881.0	36410.3	35942.4	35620.7
5°	36307.2	37249.9	38048.5	38571.1	38733.1	38571.1	38048.5	37249.9	36307.2	35416.3	34825.5
7.5°	36060.5	37529.4	38716.0	39326.0	39474.9	39326.0	38716.0	37529.4	36060.5	34799.5	34052.8
10°	35684.1	37705.6	39076.7	39513.9	39531.6	39513.9	39076.7	37705.6	35684.1	33985.1	33104.6
12.5°	35083.6	37642.7	38955.8	38812.2	38486.4	38812.2	38955.8	37642.7	35083.6	32990.5	31879.7
15°	34195.5	37270.4	38190.0	37022.4	36275.7	37022.4	38190.0	37270.4	34195.5	31647.4	30359.1
17.5°	32944.1	36573.6	36591.4	34281.7	32873.0	34281.7	36591.4	36573.6	32944.1	30005.1	28586.3
20°	31331.1	35456.0	34390.2	30165.6	28496.7	30165.6	34390.2	35456.0	31331.1	28063.6	26671.4
22.5°	29309.0	33949.0	31325.0	26025.2	23748.2	26025.2	31325.0	33949.0	29309.0	25805.8	24356.9
25°	26944.0	32102.4	28027.5	21513.6	19184.1	21513.6	28027.5	32102.4	26944.0	23115.6	21805.4
27.5°	24162.2	29761.9	24516.0	17580.1	15431.0	17580.1	24516.0	29761.9	24162.2	20337.9	18999.6
30°	21072.3	26761.6	20861.9	14000.4	12021.3	14000.4	20861.9	26761.6	21072.3	17217.4	16019.1
32.5°	17612.8	23820.7	17352.6	11218.0	9541.5	11218.0	17352.6	23820.7	17612.8	14239.5	12987.3
35°	14421.2	20141.2	14188.2	8814.7	7428.5	8814.7	14188.2	20141.2	14421.2	11428.4	10198.7
37.5°	11317.7	16664.7	11310.2	7097.9	6025.3	7097.9	11310.2	16664.7	11317.7	8885.0	7886.9
40°	8805.0	13030.3	8861.8	5666.0	4835.3	5666.0	8861.8	13030.3	8805.0	6760.4	6121.7
42.5°	6671.6	9963.7	6965.4	4650.2	4107.1	4650.2	6965.4	9963.7	6671.6	5326.5	4848.3
45°	5215.1	7332.2	5439.2	3923.3	3496.3	3923.3	5439.2	7332.2	5215.1	4289.5	3968.4
47.5°	4247.1	5666.7	4408.4	3365.2	3066.0	3365.2	4408.4	5666.7	4247.1	3628.2	3387.8
50°	3567.4	4348.2	3660.3	2937.6	2736.7	2937.6	3660.3	4348.2	3567.4	3106.9	2946.4
52.5°	3064.6	3546.2	3117.2	2617.8	2482.6	2617.8	3117.2	3546.2	3064.6	2718.2	2618.5
55°	2641.0	2981.3	2710.8	2354.1	2260.6	2354.1	2710.8	2981.3	2641.0	2419.0	2345.2
57.5°	2319.3	2529.0	2354.1	2129.3	2067.2	2129.3	2354.1	2529.0	2319.3	2152.6	2112.9
60°	2034.4	2190.1	2077.5	1933.3	1915.6	1933.3	2077.5	2190.1	2034.4	1936.7	1910.8
62.5°	1815.1	1913.5	1837.0	1757.0	1741.3	1757.0	1837.0	1913.5	1815.1	1739.9	1744.8
65°	1610.2	1701.7	1641.6	1598.6	1604.0	1598.6	1641.6	1701.7	1610.2	1575.3	1582.9
67.5°	1451.6	1499.5	1473.5	1449.0	1455.1	1449.0	1473.5	1499.5	1451.6	1417.6	1429.1
70°	1283.0	1334.2	1307.5	1311.0	1321.2	1311.0	1307.5	1334.2	1283.0	1272.7	1281.6
72.5°	1121.7	1161.4	1152.4	1160.7	1171.6	1160.7	1152.4	1161.4	1121.7	1120.3	1121.0
75°	963.2	993.3	997.4	1009.0	1026.1	1009.0	997.4	993.3	963.2	953.0	965.3
77.5°	790.4	824.5	837.5	853.2	878.6	853.2	837.5	824.5	790.4	797.2	803.4
80°	631.9	647.6	676.3	687.9	723.5	687.9	676.3	647.6	631.9	620.3	629.2
82.5°	462.5	476.8	501.5	523.3	543.8	523.3	501.5	476.8	462.5	457.1	457.8
85°	267.1	289.0	305.4	331.3	337.5	331.3	305.4	289.0	267.1	273.3	267.1
87.5°	93.6	100.4	114.7	125.0	125.7	125.0	114.7	100.4	93.6	95.7	86.7
90°	11.2	19.3	32.9	20.3	16.0	20.3	32.9	19.3	11.2	19.4	30.0
92.5°	14.5	25.7	45.9	26.0	20.1	26.0	45.9	25.7	14.5	25.0	47.7
95°	21.7	31.4	58.1	28.5	23.4	28.5	58.1	31.4	21.7	33.2	66.5
97.5°	33.0	38.7	65.4	30.2	27.4	30.2	65.4	38.7	33.0	40.5	76.2
100°	43.6	43.6	118.2	34.2	30.6	34.2	118.2	43.6	43.6	50.1	118.5
102.5°	65.5	84.9	272.3	65.7	36.3	65.7	272.3	84.9	65.5	93.1	250.8
105°	118.3	192.0	477.8	163.9	63.8	163.9	477.8	192.0	118.3	193.8	446.5
107.5°	223.1	356.9	615.0	319.8	142.6	319.8	615.0	356.9	223.1	342.4	589.3
110°	356.2	498.2	671.0	436.8	283.9	436.8	671.0	498.2	356.2	469.8	617.7



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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°	463.4	555.0	655.6	483.9	391.1	483.9	655.6	555.0	463.4	518.6	591.6
115°	503.8	546.9	585.7	482.2	433.3	482.2	585.7	546.9	503.8	506.4	528.4
117.5°	486.8	500.6	506.2	453.0	435.7	453.0	506.2	500.6	486.8	456.0	448.8
120°	439.7	434.1	427.3	410.0	411.4	410.0	427.3	434.1	439.7	398.3	374.8
122.5°	381.1	369.0	361.5	366.8	378.1	366.8	361.5	369.0	381.1	339.7	322.0
125°	323.5	311.3	315.9	329.5	341.4	329.5	315.9	311.3	323.5	289.3	284.5
127.5°	275.4	269.7	282.6	297.8	308.1	297.8	282.6	269.7	275.4	253.5	257.8
130°	241.3	242.1	259.1	272.5	278.9	272.5	259.1	242.1	241.3	230.6	241.4
132.5°	219.9	225.8	241.9	253.7	257.7	253.7	241.9	225.8	219.9	217.4	230.5
135°	206.9	215.2	230.4	237.6	239.8	237.6	230.4	215.2	206.9	208.3	219.9
137.5°	199.4	207.9	219.1	225.3	224.4	225.3	219.1	207.9	199.4	202.6	211.6
140°	195.3	203.6	208.5	215.5	215.2	215.5	208.5	203.6	195.3	196.9	204.2
142.5°	191.1	198.6	201.1	206.5	205.5	206.5	201.1	198.6	191.1	192.7	197.5
145°	189.2	195.1	192.8	199.2	198.0	199.2	192.8	195.1	189.2	189.5	192.4
147.5°	185.2	189.5	187.0	192.4	191.5	192.4	187.0	189.5	185.2	185.2	186.6
150°	180.9	184.2	180.3	186.6	187.2	186.6	180.3	184.2	180.9	180.2	181.6
152.5°	175.1	178.4	175.1	182.3	182.2	182.3	175.1	178.4	175.1	174.4	175.8
155°	170.8	172.5	170.8	178.1	178.8	178.1	170.8	172.5	170.8	170.1	171.5
157.5°	168.2	169.6	168.9	175.2	175.9	175.2	168.9	169.6	168.2	168.2	168.9
160°	166.9	168.5	168.4	174.0	174.7	174.0	168.4	168.5	166.9	167.0	167.7
162.5°	166.6	166.6	167.2	172.8	174.2	172.8	167.2	166.6	166.6	166.6	167.4
165°	166.2	167.1	166.8	171.4	173.6	171.4	166.8	167.1	166.2	166.4	166.4
167.5°	166.8	166.0	167.4	171.8	174.0	171.8	167.4	166.0	166.8	166.9	166.9
170°	165.9	166.6	167.1	171.5	173.7	171.5	167.1	166.6	165.9	166.7	166.8
172.5°	168.0	168.0	168.3	172.0	174.9	172.0	168.3	168.0	168.0	168.1	168.9
175°	169.3	169.1	169.6	172.5	175.5	172.5	169.6	169.1	169.3	168.6	168.6
177.5°	168.4	169.7	171.1	174.1	177.8	174.1	171.1	169.7	168.4	168.6	168.6
180°	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	36431.5	36431.5	36431.5	36431.5	36431.5	36431.5
2.5°	35373.3	35350.1	35373.3	35620.7	35942.4	36410.3
5°	34551.5	34423.0	34551.5	34825.5	35416.3	36307.2
7.5°	33594.4	33519.9	33594.4	34052.8	34799.5	36060.5
10°	32586.7	32418.1	32586.7	33104.6	33985.1	35684.1
12.5°	31344.8	31121.4	31344.8	31879.7	32990.5	35083.6
15°	29765.4	29569.3	29765.4	30359.1	31647.4	34195.5
17.5°	28070.5	27892.9	28070.5	28586.3	30005.1	32944.1
20°	25941.8	25802.5	25941.8	26671.4	28063.6	31331.1
22.5°	23708.6	23578.1	23708.6	24356.9	25805.8	29309.0
25°	21081.2	21010.1	21081.2	21805.4	23115.6	26944.0
27.5°	18242.1	18121.2	18242.1	18999.6	20337.9	24162.2
30°	15341.5	15141.3	15341.5	16019.1	17217.4	21072.3
32.5°	12504.3	12360.2	12504.3	12987.3	14239.5	17612.8
35°	9762.2	9618.0	9762.2	10198.7	11428.4	14421.2
37.5°	7606.8	7352.0	7606.8	7886.9	8885.0	11317.7
40°	5769.1	5728.2	5769.1	6121.7	6760.4	8805.0
42.5°	4696.7	4585.3	4696.7	4848.3	5326.5	6671.6
45°	3853.7	3809.9	3853.7	3968.4	4289.5	5215.1
47.5°	3314.0	3333.0	3314.0	3387.8	3628.2	4247.1
50°	2911.5	2923.2	2911.5	2946.4	3106.9	3567.4
52.5°	2615.1	2604.9	2615.1	2618.5	2718.2	3064.6
55°	2352.8	2339.7	2352.8	2345.2	2419.0	2641.0
57.5°	2123.2	2132.8	2123.2	2112.9	2152.6	2319.3
60°	1918.2	1927.2	1918.2	1910.8	1936.7	2034.4
62.5°	1745.4	1750.9	1745.4	1744.8	1739.9	1815.1
65°	1591.0	1597.2	1591.0	1582.9	1575.3	1610.2
67.5°	1443.5	1443.5	1443.5	1429.1	1417.6	1451.6
70°	1304.8	1304.1	1304.8	1281.6	1272.7	1283.0
72.5°	1138.1	1154.5	1138.1	1121.0	1120.3	1121.7
75°	976.2	995.4	976.2	965.3	953.0	963.2
77.5°	812.3	841.6	812.3	803.4	797.2	790.4
80°	644.2	676.3	644.2	629.2	620.3	631.9
82.5°	476.1	500.1	476.1	457.8	457.1	462.5
85°	283.5	321.8	283.5	267.1	273.3	267.1
87.5°	90.9	116.1	90.9	86.7	95.7	93.6
90°	17.8	11.2	17.8	30.0	19.4	11.2
92.5°	26.7	16.1	26.7	47.7	25.0	14.5
95°	30.7	18.6	30.7	66.5	33.2	21.7
97.5°	34.0	24.1	34.0	76.2	40.5	33.0
100°	39.7	31.4	39.7	118.5	50.1	43.6
102.5°	83.5	52.6	83.5	250.8	93.1	65.5
105°	175.2	89.9	175.2	446.5	193.8	118.3
107.5°	313.3	154.8	313.3	589.3	342.4	223.1
110°	415.6	288.0	415.6	617.7	469.8	356.2



TEST NUMBER: P1433004
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L850-UPL15

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	446.5	388.7	446.5	591.6	518.6	463.4
115°	429.4	409.0	429.4	528.4	506.4	503.8
117.5°	392.0	395.2	392.0	448.8	456.0	486.8
120°	349.0	365.9	349.0	374.8	398.3	439.7
122.5°	309.9	329.4	309.9	322.0	339.7	381.1
125°	275.8	296.0	275.8	284.5	289.3	323.5
127.5°	252.3	265.9	252.3	257.8	253.5	275.4
130°	234.3	245.7	234.3	241.4	230.6	241.3
132.5°	222.0	229.3	222.0	230.5	217.4	219.9
135°	211.3	217.1	211.3	219.9	208.3	206.9
137.5°	202.3	207.3	202.3	211.6	202.6	199.4
140°	194.7	198.9	194.7	204.2	196.9	195.3
142.5°	186.4	189.7	186.4	197.5	192.7	191.1
145°	181.3	183.8	181.3	192.4	189.5	189.2
147.5°	176.9	178.6	176.9	186.6	185.2	185.2
150°	172.6	174.3	172.6	181.6	180.2	180.9
152.5°	167.6	169.9	167.6	175.8	174.4	175.1
155°	164.9	167.3	164.9	171.5	170.1	170.8
157.5°	163.8	166.0	163.8	168.9	168.2	168.2
160°	163.5	165.0	163.5	167.7	167.0	166.9
162.5°	162.5	163.9	162.5	167.4	166.6	166.6
165°	163.0	163.7	163.0	166.4	166.4	166.2
167.5°	162.9	163.7	162.9	166.9	166.9	166.8
170°	163.6	164.2	163.6	166.8	166.7	165.9
172.5°	164.9	165.6	164.9	168.9	168.1	168.0
175°	165.5	166.1	165.5	168.6	168.6	169.3
177.5°	166.9	167.6	166.9	168.6	168.6	168.4
180°	169.7	169.7	169.7	169.7	169.7	169.7



TEST NUMBER: P1433004
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L850-UPL15

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.76	19.91	19.19	20.30	20.70	18.07	19.23	18.50	19.62	20.02
	3H	20.30	21.33	20.75	21.74	22.19	19.92	20.95	20.37	21.35	21.81
	4H	20.94	21.90	21.41	22.32	22.80	20.71	21.66	21.17	22.09	22.56
	6H	21.42	22.30	21.90	22.75	23.23	21.35	22.23	21.83	22.67	23.16
	8H	21.58	22.41	22.07	22.87	23.36	21.57	22.40	22.07	22.87	23.36
	12H	21.65	22.44	22.15	22.90	23.41	21.70	22.50	22.20	22.95	23.47
4H	2H	19.17	20.13	19.64	20.55	21.03	18.65	19.61	19.12	20.03	20.51
	3H	20.97	21.76	21.45	22.24	22.73	20.71	21.50	21.19	21.98	22.47
	4H	21.75	22.46	22.25	22.94	23.47	21.62	22.33	22.12	22.82	23.35
	6H	22.36	22.97	22.89	23.49	24.04	22.39	23.00	22.92	23.52	24.07
	8H	22.56	23.13	23.09	23.64	24.20	22.66	23.23	23.19	23.75	24.30
	12H	22.67	23.17	23.22	23.72	24.27	22.83	23.33	23.38	23.88	24.44
8H	4H	22.00	22.57	22.53	23.08	23.64	21.90	22.47	22.43	22.98	23.54
	6H	22.74	23.20	23.30	23.77	24.33	22.81	23.27	23.37	23.83	24.39
	8H	23.01	23.42	23.59	24.00	24.58	23.16	23.57	23.74	24.15	24.72
	12H	23.18	23.55	23.76	24.10	24.76	23.41	23.77	23.99	24.33	24.98
12H	4H	22.01	22.51	22.56	23.06	23.62	21.91	22.42	22.46	22.96	23.52
	6H	22.78	23.20	23.37	23.77	24.35	22.85	23.26	23.43	23.84	24.42
	8H	23.10	23.46	23.68	24.02	24.67	23.26	23.62	23.83	24.18	24.83

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: SP1-2506-472-4

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L850-N

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

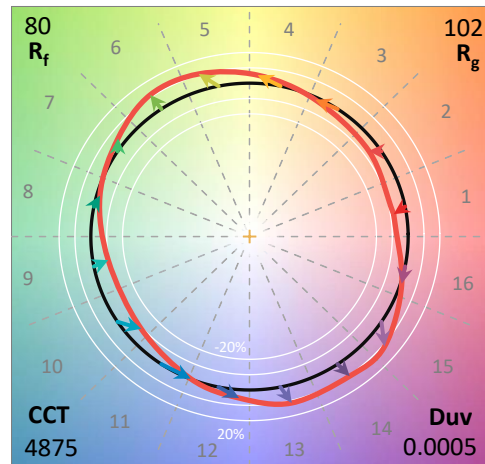
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/05/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **EHBR-60-L850-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 80CRI LEDs with N lens

Spectral Parameters

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

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



Test Conditions

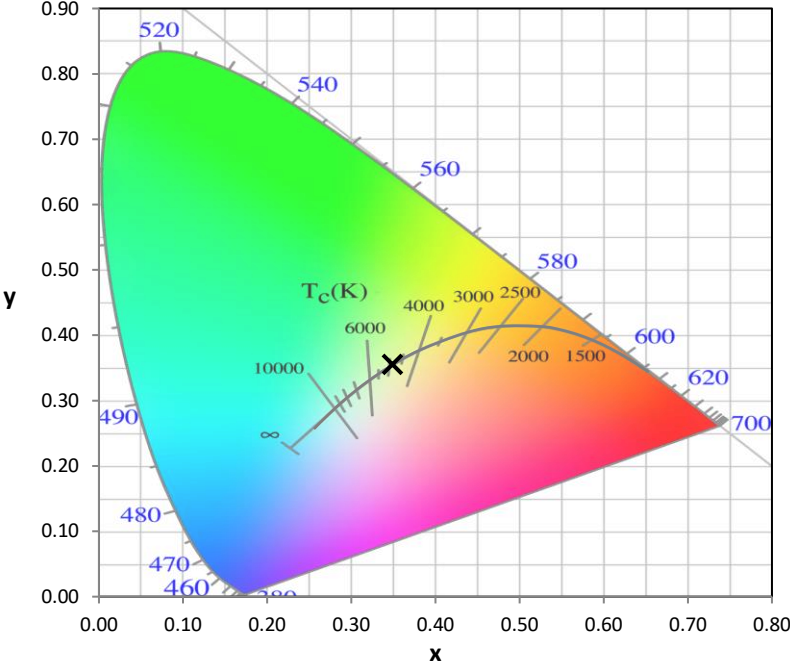
Stabilization Time: 39M
 Operation Time: 1H 39M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-4

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2506-472-4

CIE 1931 Chromaticity Diagram



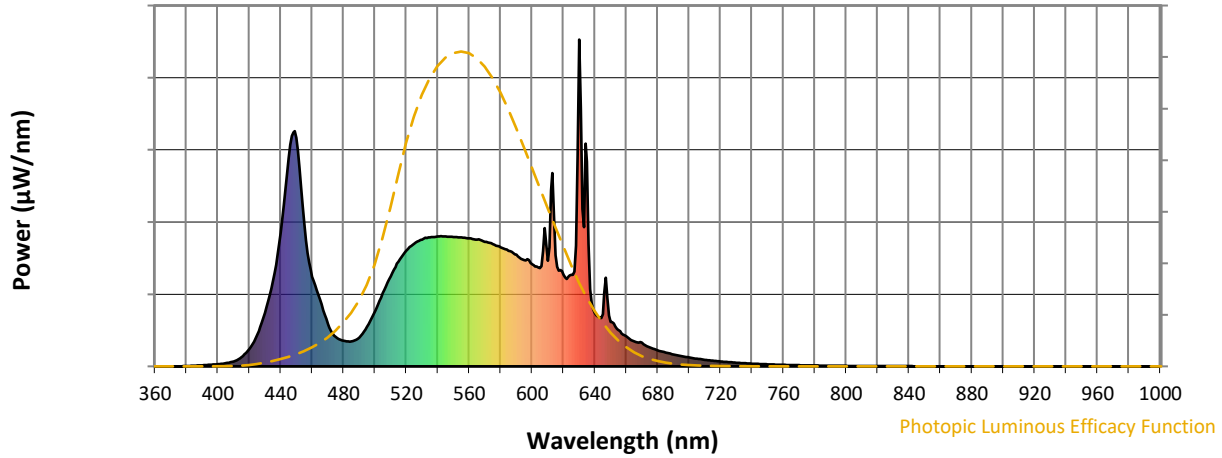
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-4

Photopic Flux vs. Wavelength



Photopic Lumens: NR

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

REPORT NUMBER: SP1-2506-472-4

Scotopic Flux vs. Wavelength



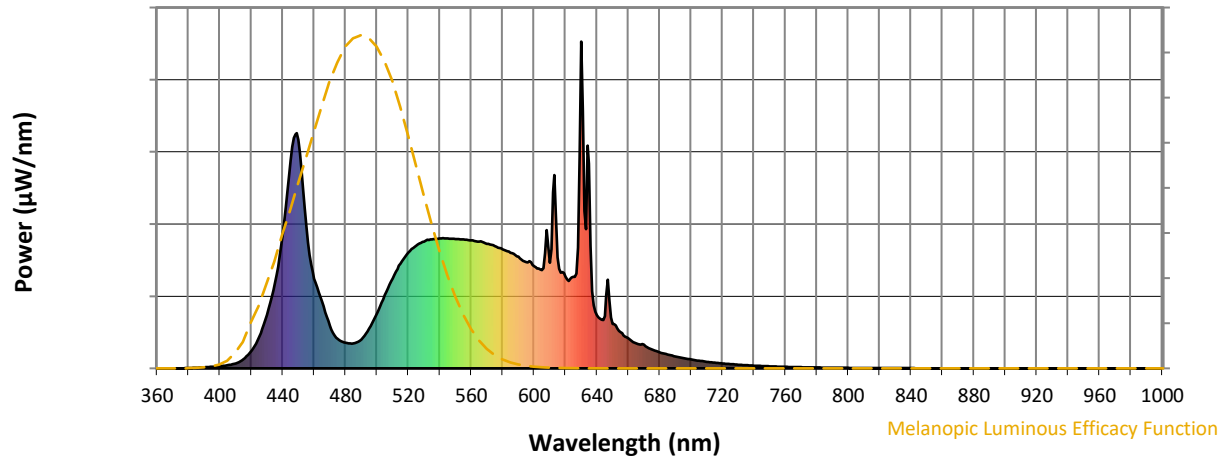
Scotopic Lumens: NR

S/P: 1.82

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

REPORT NUMBER: SP1-2506-472-4

Melanopic Flux vs. Wavelength



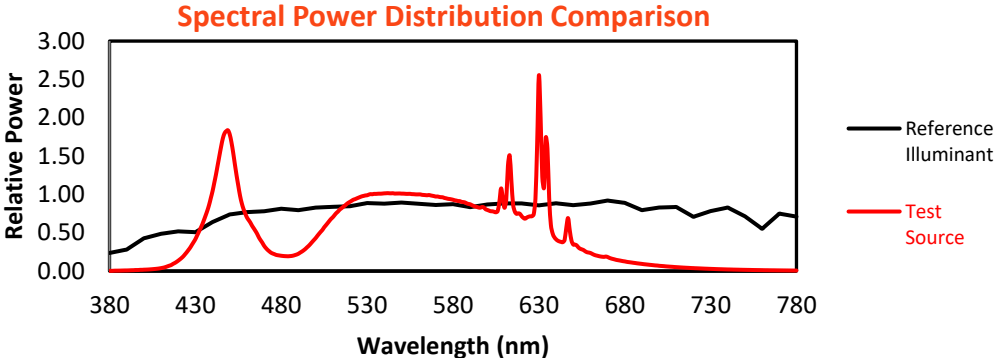
Melanopic Lumens: NR

M/P: 3.71

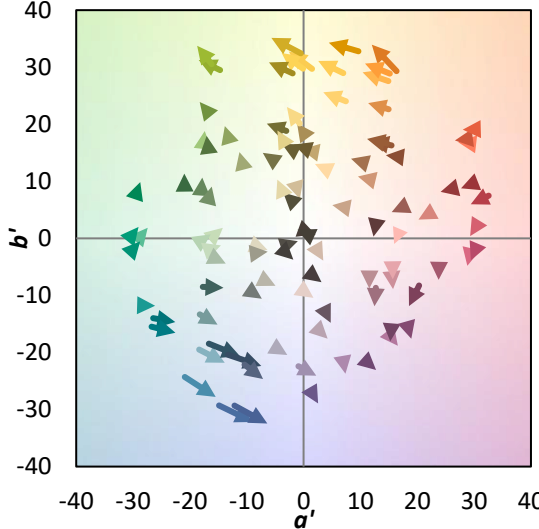
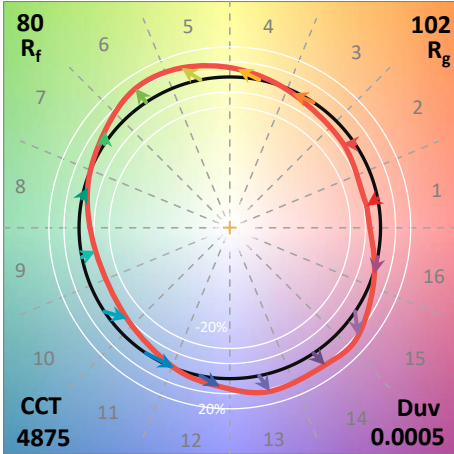
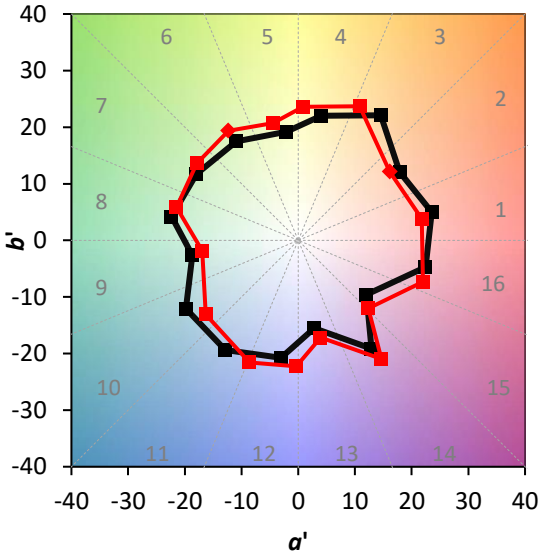
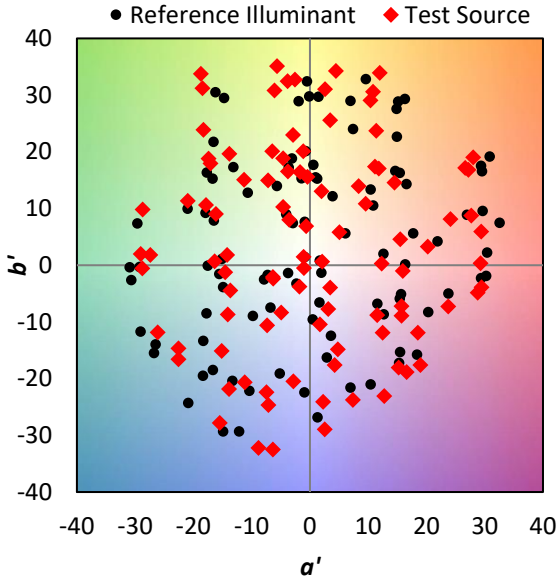
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR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

Summary

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

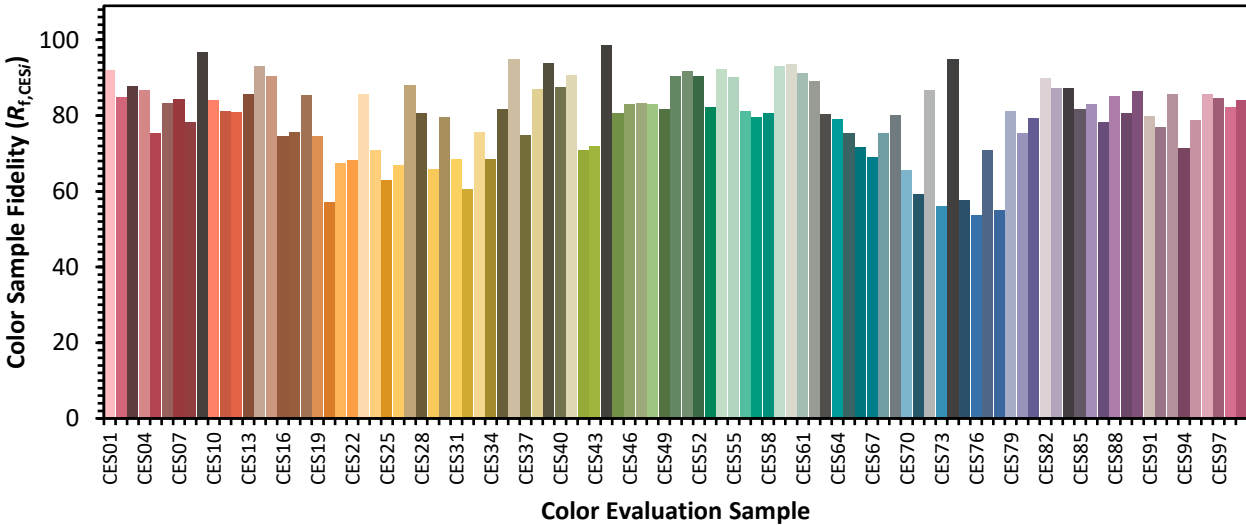


Color Vector Graphics

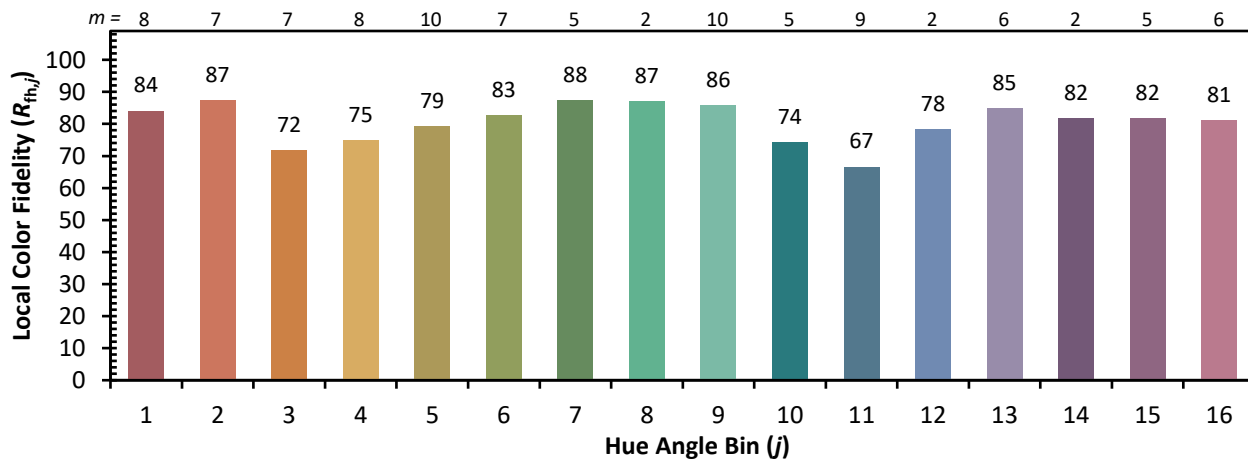
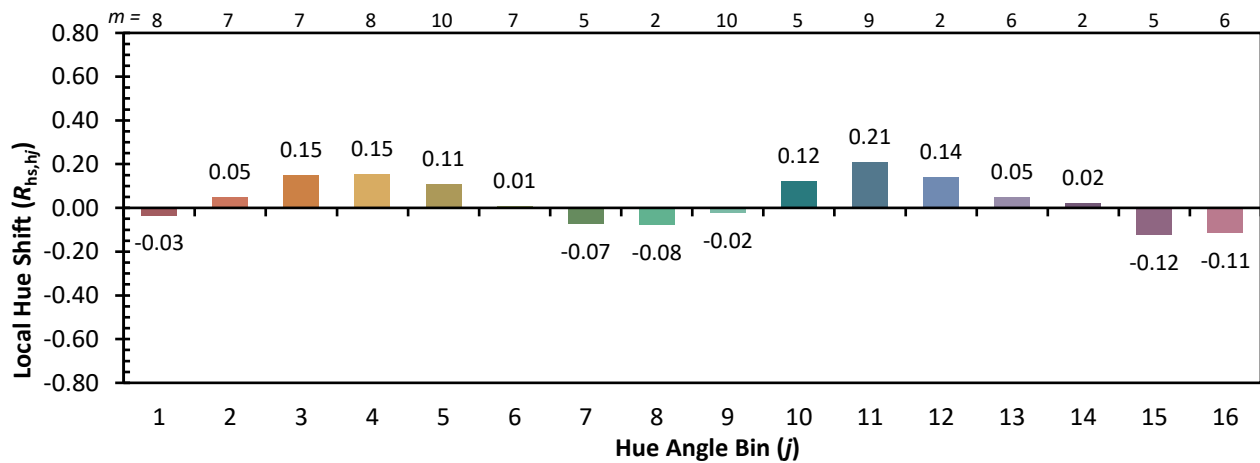
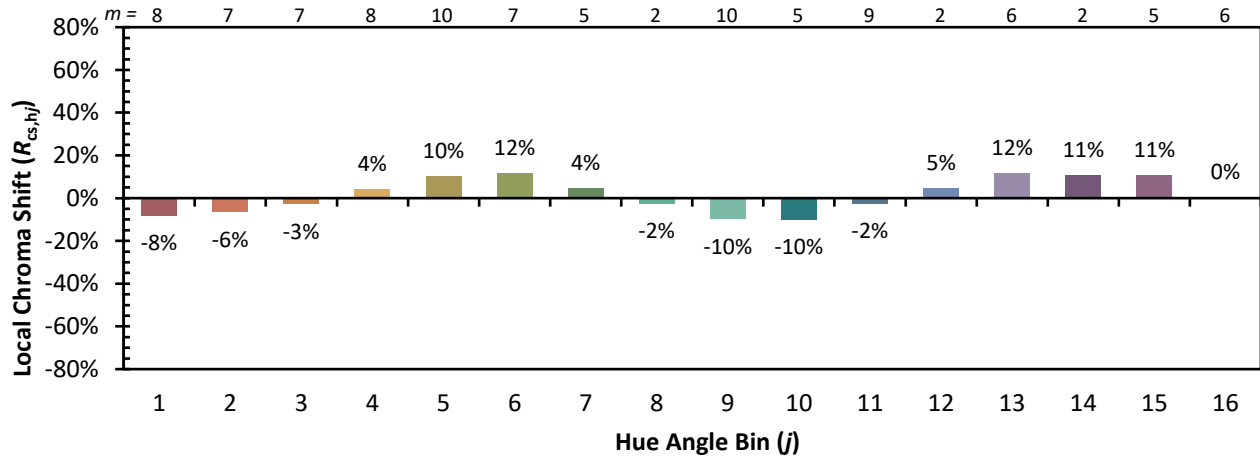


Individual Sample Fidelity Index ($R_{f,i}$)

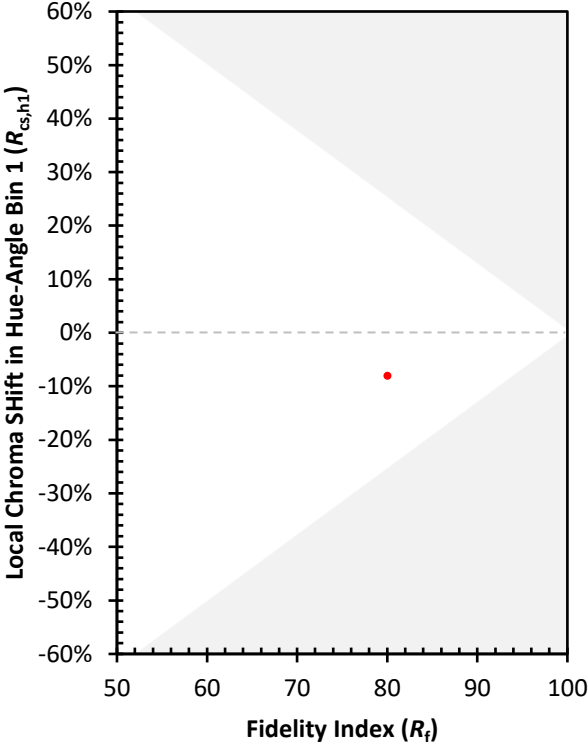
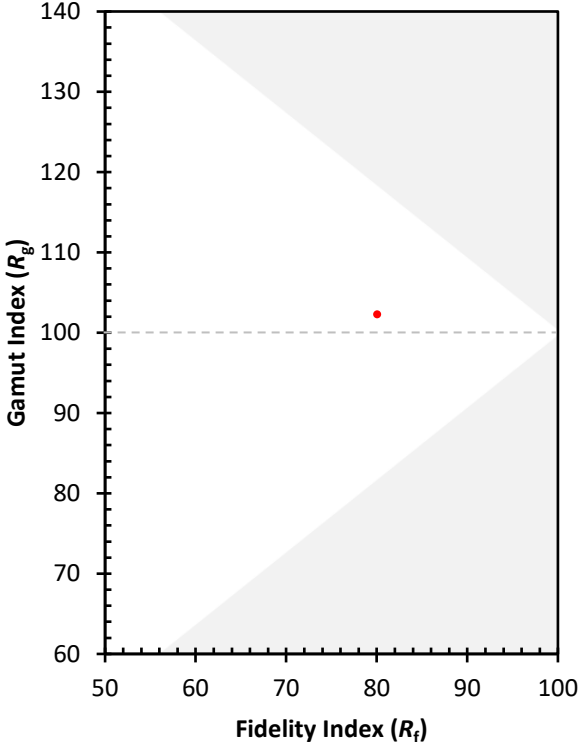
CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82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



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)