

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: P1432653

Luminaire Tested: EHBR1-30-UNV-TASM-L835-UPL18

Issue Date: 3/20/2026

**Test Information**

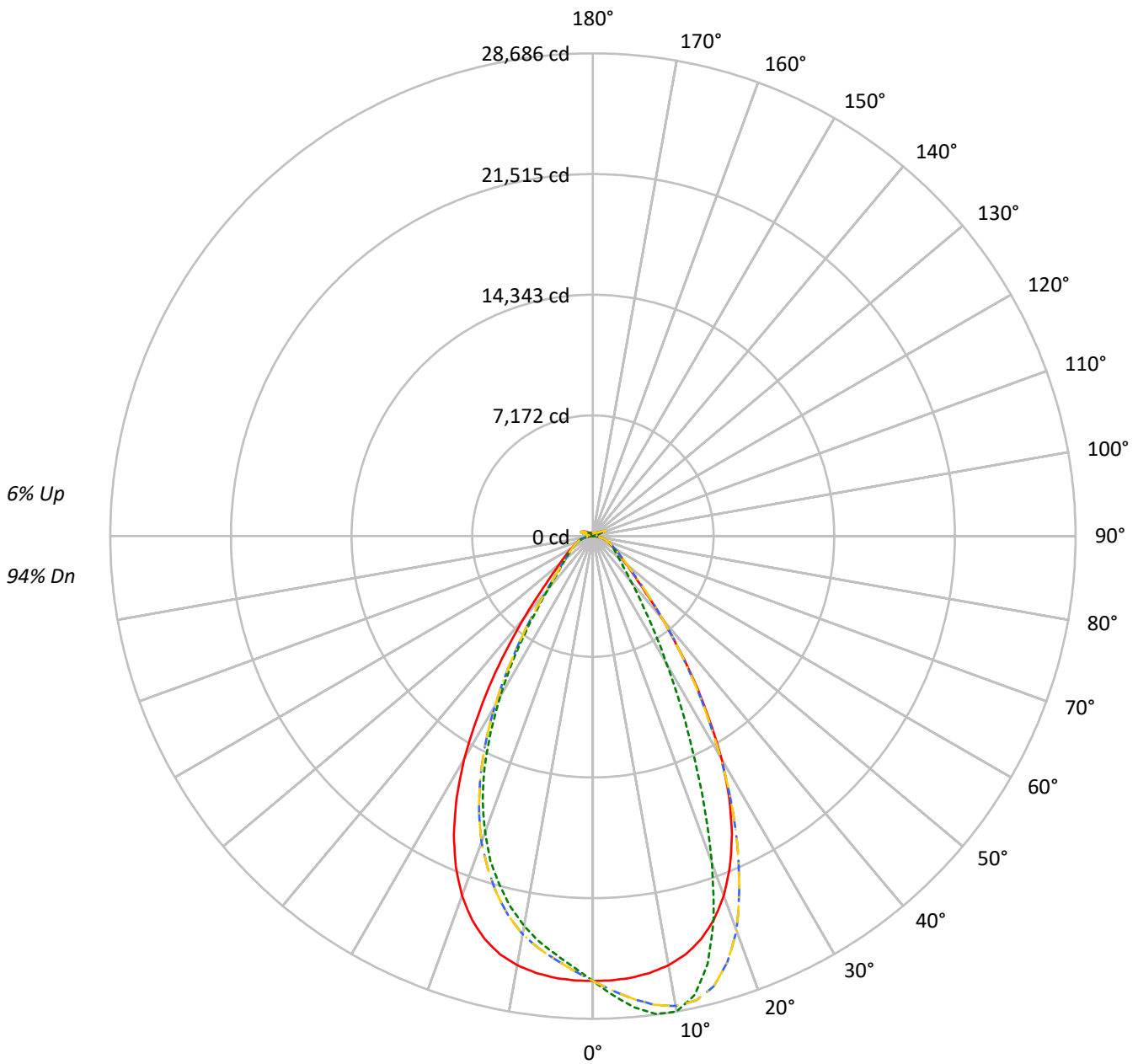
Test Method: LM-79-2019  
Report Number: P1432653  
REPORT IS A COMBINATION OF REPORTS P1431742 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-30-UNV-TASM-L835-UPL18  
Description: Elevate Round Highbay at, 30000 lumens, 3500K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31348.7 lumens  
Efficiency: N/A  
Efficacy: 182.6 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): 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: P1432653  
CATALOG NUMBER: EHBR1-30-UNV-TASM-L835-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°	124146	124146	124146	124146
5°	123391	131636	123391	116988
10°	121874	135015	121874	110719
15°	118276	125471	118276	102275
20°	110617	100611	110617	91098
25°	97906	69709	97906	76344
30°	79496	45350	79496	57121
35°	57017	29370	57017	38026
40°	36863	20243	36863	23981
45°	23389	15681	23389	17087
50°	17369	13325	17369	14232
55°	14181	12139	14181	12564
60°	12280	11563	12280	11632
65°	11194	11151	11194	11104
70°	10609	10927	10609	10785
75°	9923	10569	9923	10252
80°	8717	9980	8717	9330
85°	5639	7125	5639	6794

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 32884 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2513.7	8.0
10°-20°	6838.6	21.8
20°-30°	8020.3	25.6
30°-40°	5577.6	17.8
40°-50°	2771.8	8.8
50°-60°	1657.8	5.3
60°-70°	1166.9	3.7
70°-80°	751.7	2.4
80°-90°	241.9	0.8
90°-100°	48.5	0.2
100°-110°	313.5	1.0
110°-120°	578.6	1.8
120°-130°	344.4	1.1
130°-140°	208.9	0.7
140°-150°	145.1	0.5
150°-160°	95.4	0.3
160°-170°	55.4	0.2
170°-180°	18.6	0.1
0°-30°	17372.6	55.4
0°-40°	22950.2	73.2
0°-60°	27379.8	87.3
0°-90°	29540.3	94.2
90°-120°	940.6	3.0
90°-150°	1639.0	5.2
90°-180°	1808.0	5.8
0°-180°	31348.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	26436	26436	26436	26436	26436	
5°	26346	28106	26346	24979	26346	2500
15°	24814	26323	24814	21457	24814	6935
25°	19552	13921	19552	15246	19552	8852
35°	10465	5390	10465	6979	10465	6533
45°	3784	2537	3784	2765	3784	3097
55°	1916	1640	1916	1698	1916	1752
65°	1168	1164	1168	1159	1168	1173
75°	699	744	699	722	699	734
85°	194	245	194	234	194	216
90°	13	17	13	13	13	15
95°	26	26	26	22	26	27
105°	144	75	144	109	144	194
115°	616	527	616	500	616	561
125°	394	414	394	361	394	363
135°	250	290	250	264	250	199
145°	228	238	228	221	228	143
155°	204	213	204	198	204	95
165°	194	201	194	191	194	55
175°	195	200	195	192	195	19
180°	195	195	195	195	195	



TEST NUMBER: P1432653  
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L835-UPL18

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1
2.5°	26420.8	26762.3	27039.0	27221.4	27311.6	27221.4	27039.0	26762.3	26420.8	26081.2	25847.7
5°	26346.0	27030.1	27609.6	27988.7	28106.3	27988.7	27609.6	27030.1	26346.0	25699.5	25270.7
7.5°	26167.0	27232.8	28093.9	28536.5	28644.6	28536.5	28093.9	27232.8	26167.0	25251.9	24710.1
10°	25893.9	27360.7	28355.6	28672.9	28685.8	28672.9	28355.6	27360.7	25893.9	24661.0	24022.0
12.5°	25458.1	27315.1	28267.8	28163.8	27927.3	28163.8	28267.8	27315.1	25458.1	23939.2	23133.2
15°	24813.7	27044.9	27712.2	26864.9	26323.2	26864.9	27712.2	27044.9	24813.7	22964.7	22029.8
17.5°	23905.5	26539.3	26552.2	24876.2	23854.0	24876.2	26552.2	26539.3	23905.5	21773.0	20743.4
20°	22735.1	25728.2	24955.0	21889.5	20678.4	21889.5	24955.0	25728.2	22735.1	20364.1	19353.9
22.5°	21267.8	24634.7	22730.7	18884.9	17232.6	18884.9	22730.7	24634.7	21267.8	18725.8	17674.3
25°	19551.7	23294.8	20337.8	15611.2	13920.8	15611.2	20337.8	23294.8	19551.7	16773.7	15822.9
27.5°	17533.0	21596.5	17789.8	12756.8	11197.3	12756.8	17789.8	21596.5	17533.0	14758.0	13786.9
30°	15291.0	19419.3	15138.2	10159.3	8723.1	10159.3	15138.2	19419.3	15291.0	12493.5	11624.1
32.5°	12780.6	17285.2	12591.8	8140.2	6923.7	8140.2	12591.8	17285.2	12780.6	10332.7	9424.1
35°	10464.6	14615.3	10295.6	6396.3	5390.4	6396.3	10295.6	14615.3	10464.6	8292.9	7400.5
37.5°	8212.6	12092.6	8207.1	5150.5	4372.2	5150.5	8207.1	12092.6	8212.6	6447.3	5723.0
40°	6389.3	9455.4	6430.4	4111.5	3508.7	4111.5	6430.4	9455.4	6389.3	4905.7	4442.1
42.5°	4841.2	7230.1	5054.3	3374.4	2980.3	3374.4	5054.3	7230.1	4841.2	3865.1	3518.1
45°	3784.3	5320.5	3946.9	2846.9	2537.1	2846.9	3946.9	5320.5	3784.3	3112.6	2879.7
47.5°	3081.8	4112.0	3198.9	2441.9	2224.8	2441.9	3198.9	4112.0	3081.8	2632.8	2458.3
50°	2588.6	3155.2	2656.0	2131.6	1985.9	2131.6	2656.0	3155.2	2588.6	2254.6	2138.0
52.5°	2223.8	2573.3	2261.9	1899.6	1801.4	1899.6	2261.9	2573.3	2223.8	1972.5	1900.0
55°	1916.4	2163.3	1967.1	1708.2	1640.4	1708.2	1967.1	2163.3	1916.4	1755.4	1701.8
57.5°	1682.9	1835.2	1708.2	1545.1	1500.0	1545.1	1708.2	1835.2	1682.9	1562.0	1533.3
60°	1476.3	1589.3	1507.5	1402.9	1390.0	1402.9	1507.5	1589.3	1476.3	1405.4	1386.5
62.5°	1317.2	1388.5	1333.0	1275.0	1263.6	1275.0	1333.0	1388.5	1317.2	1262.6	1266.1
65°	1168.4	1234.8	1191.2	1160.0	1163.9	1160.0	1191.2	1234.8	1168.4	1143.1	1148.6
67.5°	1053.4	1088.1	1069.3	1051.5	1055.9	1051.5	1069.3	1088.1	1053.4	1028.6	1037.0
70°	930.9	968.2	948.8	951.3	958.8	951.3	948.8	968.2	930.9	923.6	930.0
72.5°	814.0	842.7	836.3	842.2	850.1	842.2	836.3	842.7	814.0	813.0	813.5
75°	699.0	720.8	723.8	732.1	744.5	732.1	723.8	720.8	699.0	691.5	700.4
77.5°	573.6	598.3	607.7	619.2	637.5	619.2	607.7	598.3	573.6	578.5	583.0
80°	458.6	469.9	490.8	499.2	525.0	499.2	490.8	469.9	458.6	450.1	456.5
82.5°	335.6	346.0	363.8	379.7	394.6	379.7	363.8	346.0	335.6	331.6	332.1
85°	193.8	209.7	221.6	240.4	244.9	240.4	221.6	209.7	193.8	198.3	193.8
87.5°	67.9	72.8	83.3	90.8	91.2	90.8	83.3	72.8	67.9	69.4	62.9
90°	13.4	22.8	39.2	22.9	16.9	22.9	39.2	22.8	13.4	23.4	36.3
92.5°	17.4	30.7	55.1	29.9	21.8	29.9	55.1	30.7	17.4	30.3	58.1
95°	25.8	37.7	70.0	32.8	25.8	32.8	70.0	37.7	25.8	40.2	81.0
97.5°	39.8	46.6	78.9	34.8	30.8	34.8	78.9	46.6	39.8	49.2	92.9
100°	52.7	52.7	143.6	39.8	34.8	39.8	143.6	52.7	52.7	60.6	144.6
102.5°	79.5	102.8	331.9	78.1	41.7	78.1	331.9	102.8	79.5	113.3	306.6
105°	144.1	234.0	583.4	198.3	75.1	198.3	583.4	234.0	144.1	236.5	546.1
107.5°	272.3	435.8	751.3	389.1	171.4	389.1	751.3	435.8	272.3	418.4	720.5
110°	435.3	608.7	819.9	532.3	344.3	532.3	819.9	608.7	435.3	574.5	755.3



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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°	566.5	678.3	801.0	589.9	475.5	589.9	801.0	678.3	566.5	634.1	723.5
115°	615.7	668.3	715.5	587.9	527.2	587.9	715.5	668.3	615.7	619.2	646.0
117.5°	594.8	611.7	618.2	552.2	530.2	552.2	618.2	611.7	594.8	557.0	548.6
120°	537.1	530.2	521.3	499.4	500.4	499.4	521.3	530.2	537.1	486.5	458.2
122.5°	465.1	450.1	440.8	446.3	459.6	446.3	440.8	450.1	465.1	414.4	393.0
125°	394.5	379.6	384.7	400.5	414.5	400.5	384.7	379.6	394.5	352.4	346.8
127.5°	335.4	328.5	343.9	361.8	373.6	361.8	343.9	328.5	335.4	308.7	314.0
130°	293.2	294.7	315.1	330.5	337.8	330.5	315.1	294.7	293.2	280.3	293.7
132.5°	266.9	274.3	293.7	307.1	311.6	307.1	293.7	274.3	266.9	263.4	279.8
135°	250.5	261.4	279.3	287.7	289.7	287.7	279.3	261.4	250.5	251.9	266.9
137.5°	241.0	251.9	265.4	272.3	270.8	272.3	265.4	251.9	241.0	244.5	255.9
140°	235.5	246.5	252.4	260.4	259.4	260.4	252.4	246.5	235.5	237.5	246.5
142.5°	230.0	240.0	243.0	248.9	247.5	248.9	243.0	240.0	230.0	232.1	238.0
145°	227.6	235.1	232.5	240.0	238.0	240.0	232.5	235.1	227.6	228.1	231.6
147.5°	222.5	228.1	225.1	231.6	229.6	231.6	225.1	228.1	222.5	222.5	224.1
150°	217.1	221.1	216.6	224.1	224.1	224.1	216.6	221.1	217.1	216.1	217.7
152.5°	209.7	213.7	209.7	218.2	217.7	218.2	209.7	213.7	209.7	208.8	210.2
155°	203.7	205.8	203.7	212.2	212.7	212.2	203.7	205.8	203.7	203.3	204.2
157.5°	199.8	201.2	200.2	207.7	208.2	207.7	200.2	201.2	199.8	199.8	200.2
160°	196.8	198.7	198.3	204.7	205.2	204.7	198.3	198.7	196.8	197.2	197.7
162.5°	195.8	195.8	195.8	202.2	203.2	202.2	195.8	195.8	195.8	195.8	196.8
165°	194.2	195.3	194.2	199.2	201.2	199.2	194.2	195.3	194.2	194.8	194.8
167.5°	194.2	193.3	194.2	198.8	200.7	198.8	194.2	193.3	194.2	194.7	194.7
170°	192.8	193.3	193.3	197.7	199.7	197.7	193.3	193.3	192.8	193.7	194.2
172.5°	194.3	194.3	193.7	197.2	200.2	197.2	193.7	194.3	194.3	194.8	195.8
175°	195.3	194.7	194.7	197.2	200.2	197.2	194.7	194.7	195.3	194.8	194.8
177.5°	194.2	195.2	196.2	198.8	202.7	198.8	196.2	195.2	194.2	194.8	194.8
180°	195.2	195.2	195.2	195.2	195.2	195.2	195.2	195.2	195.2	195.2	195.2



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	26436.1	26436.1	26436.1	26436.1	26436.1	26436.1
2.5°	25668.3	25651.4	25668.3	25847.7	26081.2	26420.8
5°	25071.9	24978.8	25071.9	25270.7	25699.5	26346.0
7.5°	24377.4	24323.4	24377.4	24710.1	25251.9	26167.0
10°	23646.3	23523.8	23646.3	24022.0	24661.0	25893.9
12.5°	22745.0	22583.0	22745.0	23133.2	23939.2	25458.1
15°	21598.9	21456.7	21598.9	22029.8	22964.7	24813.7
17.5°	20369.0	20240.2	20369.0	20743.4	21773.0	23905.5
20°	18824.4	18723.3	18824.4	19353.9	20364.1	22735.1
22.5°	17203.9	17109.3	17203.9	17674.3	18725.8	21267.8
25°	15297.4	15245.8	15297.4	15822.9	16773.7	19551.7
27.5°	13237.2	13149.5	13237.2	13786.9	14758.0	17533.0
30°	11132.4	10987.1	11132.4	11624.1	12493.5	15291.0
32.5°	9073.7	8969.0	9073.7	9424.1	10332.7	12780.6
35°	7083.8	6979.2	7083.8	7400.5	8292.9	10464.6
37.5°	5519.8	5335.0	5519.8	5723.0	6447.3	8212.6
40°	4186.3	4156.6	4186.3	4442.1	4905.7	6389.3
42.5°	3408.0	3327.3	3408.0	3518.1	3865.1	4841.2
45°	2796.4	2764.6	2796.4	2879.7	3112.6	3784.3
47.5°	2404.7	2418.7	2404.7	2458.3	2632.8	3081.8
50°	2112.7	2121.1	2112.7	2138.0	2254.6	2588.6
52.5°	1897.6	1890.2	1897.6	1900.0	1972.5	2223.8
55°	1707.3	1697.9	1707.3	1701.8	1755.4	1916.4
57.5°	1540.7	1547.7	1540.7	1533.3	1562.0	1682.9
60°	1392.0	1398.4	1392.0	1386.5	1405.4	1476.3
62.5°	1266.5	1270.5	1266.5	1266.1	1262.6	1317.2
65°	1154.5	1159.0	1154.5	1148.6	1143.1	1168.4
67.5°	1047.5	1047.5	1047.5	1037.0	1028.6	1053.4
70°	946.8	946.3	946.8	930.0	923.6	930.9
72.5°	825.9	837.7	825.9	813.5	813.0	814.0
75°	708.4	722.2	708.4	700.4	691.5	699.0
77.5°	589.4	610.7	589.4	583.0	578.5	573.6
80°	467.5	490.8	467.5	456.5	450.1	458.6
82.5°	345.5	362.9	345.5	332.1	331.6	335.6
85°	205.7	233.5	205.7	193.8	198.3	193.8
87.5°	65.9	84.3	65.9	62.9	69.4	67.9
90°	21.3	13.4	21.3	36.3	23.4	13.4
92.5°	32.3	19.4	32.3	58.1	30.3	17.4
95°	37.2	22.3	37.2	81.0	40.2	25.8
97.5°	41.2	28.8	41.2	92.9	49.2	39.8
100°	48.2	37.7	48.2	144.6	60.6	52.7
102.5°	101.8	63.6	101.8	306.6	113.3	79.5
105°	214.2	109.3	214.2	546.1	236.5	144.1
107.5°	383.1	188.8	383.1	720.5	418.4	272.3
110°	508.3	351.8	508.3	755.3	574.5	435.3



TEST NUMBER: P1432653

CATALOG NUMBER: EHBR1-30-UNV-TASM-L835-UPL18

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	546.1	475.1	546.1	723.5	634.1	566.5
115°	525.3	499.9	525.3	646.0	619.2	615.7
117.5°	479.5	483.0	479.5	548.6	557.0	594.8
120°	426.9	447.2	426.9	458.2	486.5	537.1
122.5°	378.7	402.5	378.7	393.0	414.4	465.1
125°	336.9	361.2	336.9	346.8	352.4	394.5
127.5°	308.1	324.5	308.1	314.0	308.7	335.4
130°	285.7	299.6	285.7	293.7	280.3	293.2
132.5°	270.3	279.3	270.3	279.8	263.4	266.9
135°	257.0	264.3	257.0	266.9	251.9	250.5
137.5°	245.5	252.0	245.5	255.9	244.5	241.0
140°	235.5	241.1	235.5	246.5	237.5	235.5
142.5°	225.1	229.0	225.1	238.0	232.1	230.0
145°	218.1	221.1	218.1	231.6	228.1	227.6
147.5°	212.2	214.1	212.2	224.1	222.5	222.5
150°	206.3	208.2	206.3	217.7	216.1	217.1
152.5°	199.8	202.3	199.8	210.2	208.8	209.7
155°	195.8	198.2	195.8	204.2	203.3	203.7
157.5°	193.7	195.7	193.7	200.2	199.8	199.8
160°	192.3	193.8	192.3	197.7	197.2	196.8
162.5°	190.4	191.8	190.4	196.8	195.8	195.8
165°	190.3	190.7	190.3	194.8	194.8	194.2
167.5°	189.8	190.7	189.8	194.7	194.7	194.2
170°	190.3	190.7	190.3	194.2	193.7	192.8
172.5°	191.2	191.8	191.2	195.8	194.8	194.3
175°	191.3	191.8	191.3	194.8	194.8	195.3
177.5°	192.8	193.3	192.8	194.8	194.8	194.2
180°	195.2	195.2	195.2	195.2	195.2	195.2



TEST NUMBER: P1432653  
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L835-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	17.46	18.58	17.93	19.02	19.48	16.78	17.90	17.25	18.33	18.80
	3H	19.01	20.00	19.49	20.46	20.96	18.63	19.62	19.11	20.08	20.58
	4H	19.65	20.58	20.15	21.04	21.57	19.41	20.34	19.92	20.81	21.33
	6H	20.13	20.98	20.65	21.47	22.00	20.05	20.91	20.57	21.39	21.93
	8H	20.28	21.09	20.81	21.59	22.14	20.28	21.08	20.81	21.59	22.13
	12H	20.35	21.12	20.89	21.62	22.19	20.40	21.18	20.94	21.67	22.24
4H	2H	17.88	18.81	18.38	19.28	19.80	17.36	18.29	17.86	18.75	19.28
	3H	19.68	20.44	20.19	20.96	21.50	19.41	20.18	19.93	20.70	21.24
	4H	20.45	21.14	20.99	21.67	22.25	20.32	21.01	20.86	21.54	22.12
	6H	21.07	21.66	21.63	22.21	22.81	21.09	21.69	21.66	22.24	22.84
	8H	21.26	21.82	21.83	22.37	22.97	21.36	21.92	21.93	22.47	23.08
	12H	21.37	21.86	21.95	22.44	23.05	21.53	22.02	22.12	22.61	23.21
8H	4H	20.70	21.25	21.27	21.81	22.41	20.60	21.16	21.17	21.71	22.31
	6H	21.44	21.89	22.04	22.49	23.11	21.51	21.96	22.11	22.56	23.17
	8H	21.71	22.11	22.33	22.73	23.35	21.86	22.26	22.48	22.87	23.50
	12H	21.88	22.24	22.50	22.83	23.53	22.11	22.46	22.72	23.05	23.75
12H	4H	20.71	21.20	21.29	21.78	22.39	20.61	21.10	21.20	21.69	22.30
	6H	21.48	21.89	22.10	22.50	23.13	21.55	21.95	22.17	22.57	23.19
	8H	21.80	22.15	22.41	22.75	23.45	21.96	22.31	22.57	22.90	23.60

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-3

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L835-N

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

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2506-472-3  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/05/2025  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Metalux  
 Catalog Number: **EHBR-60-L835-N**  
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with N lens

**Spectral Parameters**

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

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



**Test Conditions**

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

REPORT NUMBER: SP1-2506-472-3

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

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CIE 1931 Chromaticity Diagram



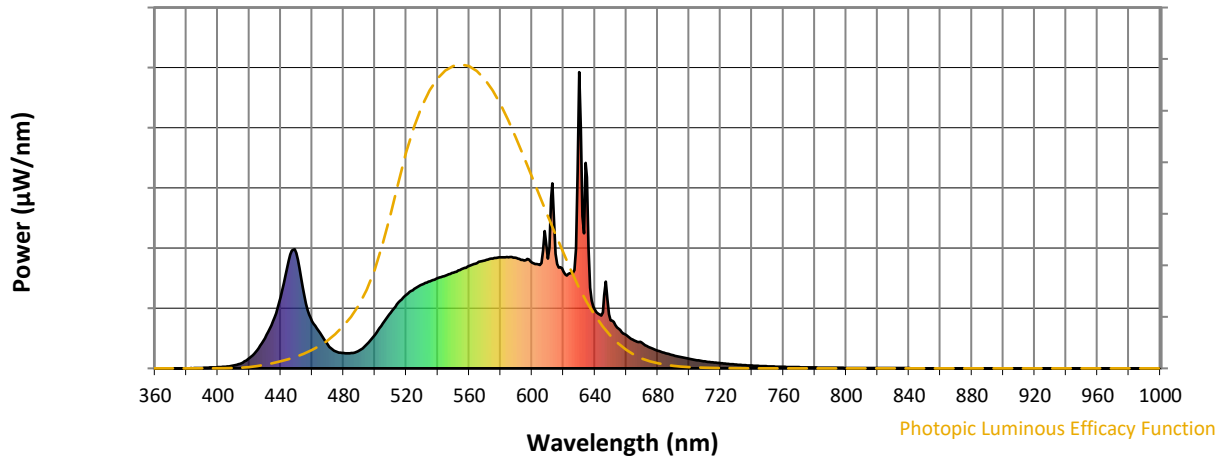
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-3

**Photopic Flux vs. Wavelength**

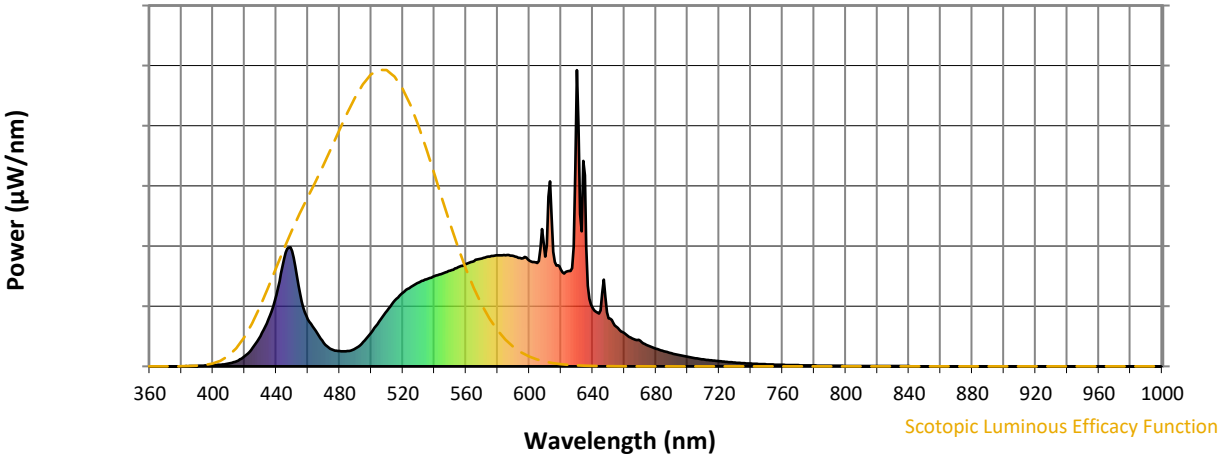


**Photopic Lumens: NR**

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

REPORT NUMBER: SP1-2506-472-3

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR S/P: 1.43**

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

REPORT NUMBER: SP1-2506-472-3

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.75**

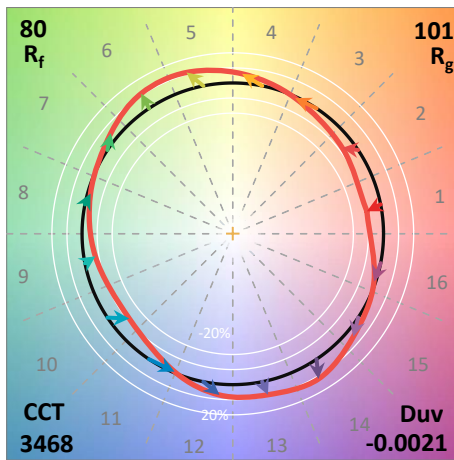
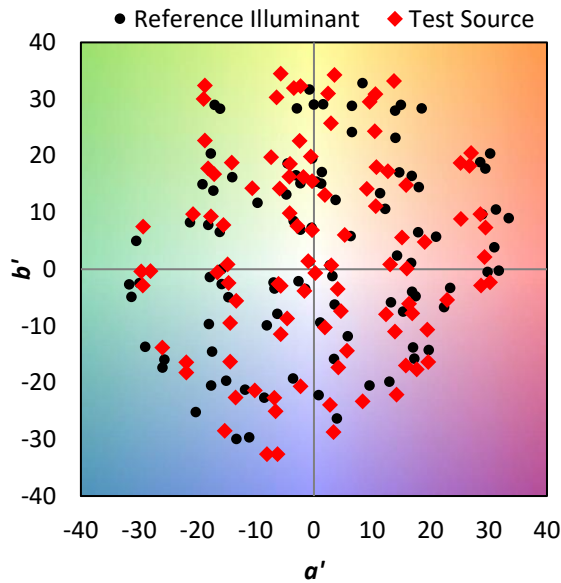
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625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

**Summary**

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

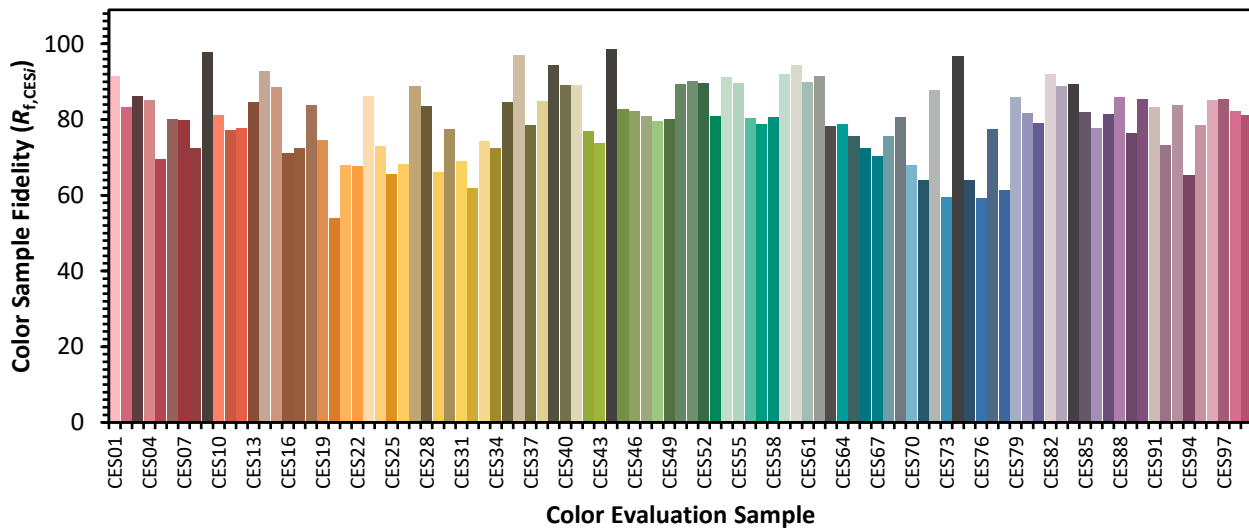


**Color Vector Graphics**

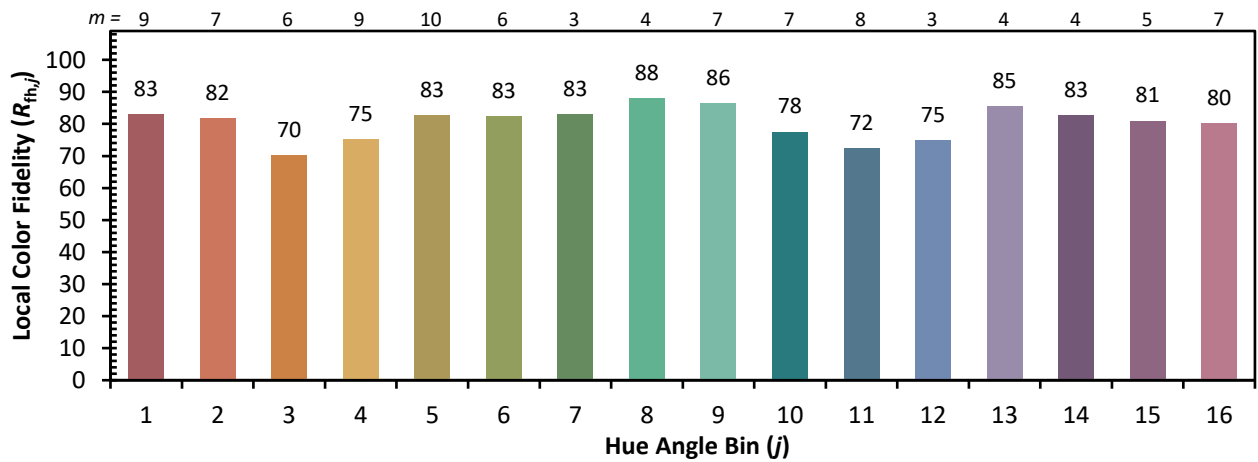


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

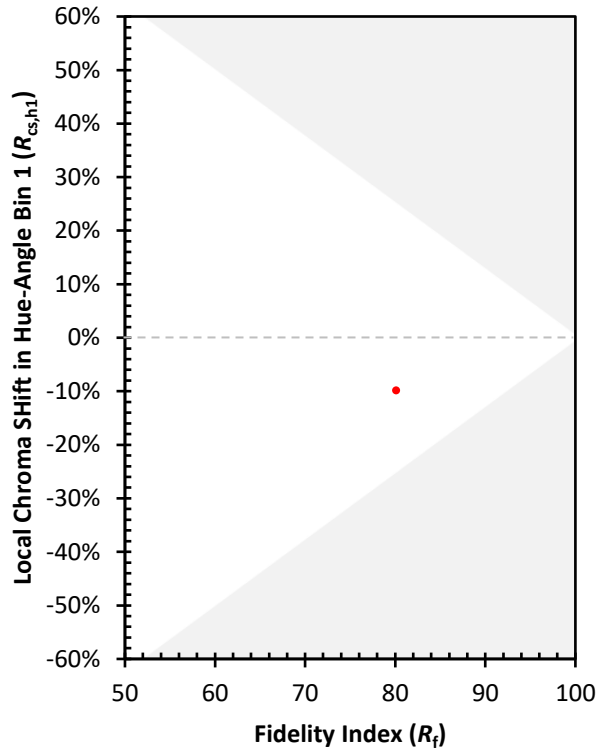
CES01 = 86	CES26 = 68	CES51 = 90	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 90	CES77 = 78
CES03 = 31	CES28 = 84	CES53 = 81	CES78 = 61
CES04 = 70	CES29 = 66	CES54 = 91	CES79 = 86
CES05 = 49	CES30 = 77	CES55 = 90	CES80 = 82
CES06 = 51	CES31 = 69	CES56 = 80	CES81 = 79
CES07 = 42	CES32 = 62	CES57 = 79	CES82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



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)