

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: P1432429

Luminaire Tested: EHBR1-42-UNV-TASM-L830-UPL18

Issue Date: 3/20/2026

**Test Information**

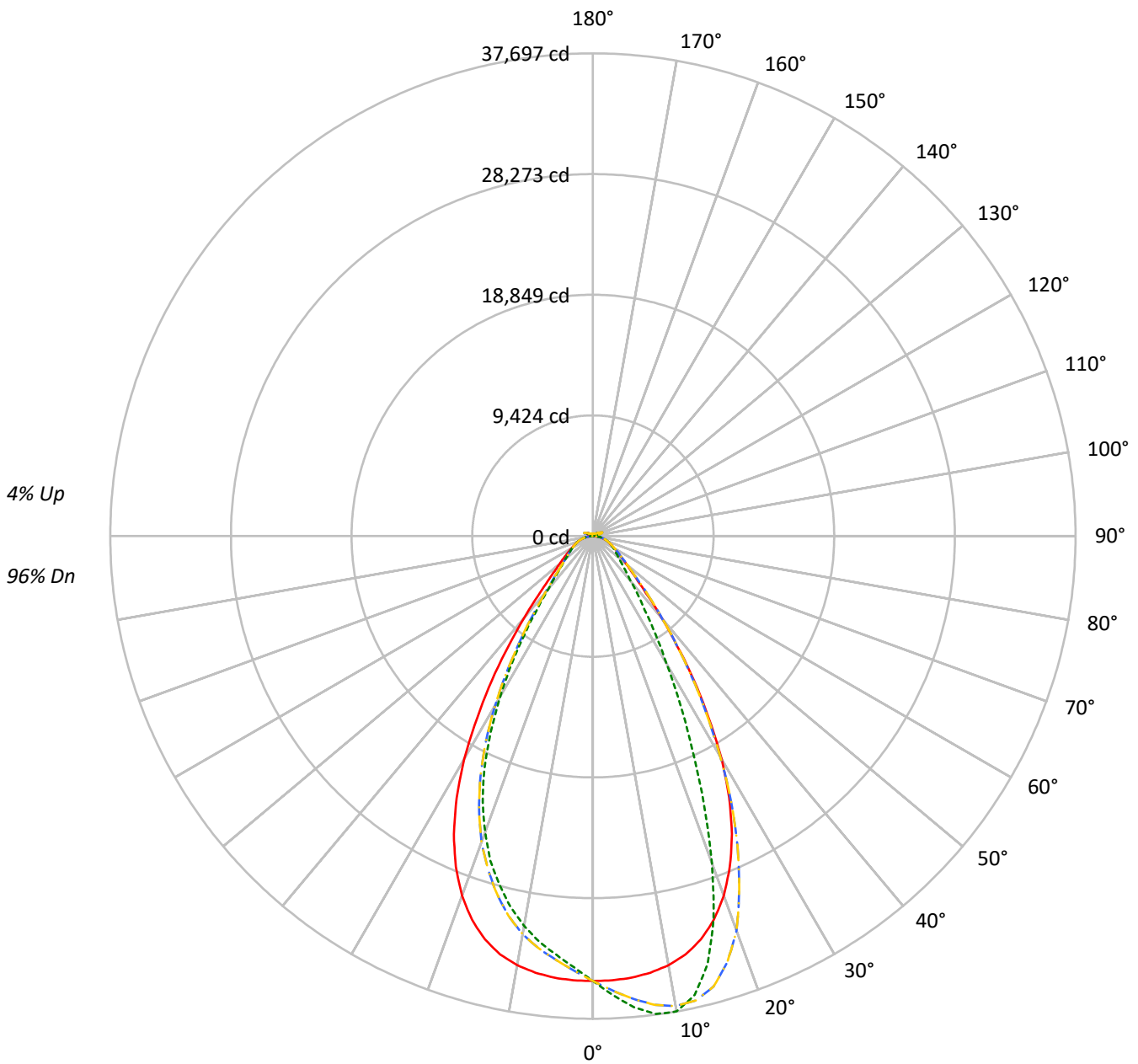
Test Method: LM-79-2019  
Report Number: P1432429  
REPORT IS A COMBINATION OF REPORTS P1431806 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-42-UNV-TASM-L830-UPL18  
Description: Elevate Round Highbay at, 42000 lumens, 3000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 40573.6 lumens  
Efficiency: N/A  
Efficacy: 171.7 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): 236.3  
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: P1432429  
CATALOG NUMBER: EHBR1-42-UNV-TASM-L830-UPL18

### Luminous Intensity Polar Plot



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



TEST NUMBER: P1432429  
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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	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	98	96
1	111	107	104	102	108	105	102	99	100	98	96	95	94	92	91	90	89	89	89	89	86
2	104	98	93	89	101	96	91	87	92	88	85	88	85	82	85	82	80	80	80	80	78
3	97	90	84	79	95	88	82	78	85	80	76	81	78	74	79	75	73	73	73	73	71
4	92	83	76	71	89	81	75	70	78	73	69	76	71	68	73	70	66	66	66	66	65
5	86	76	70	65	84	75	69	64	73	67	63	71	66	62	68	64	61	61	61	61	59
6	81	71	64	59	79	70	63	59	68	62	58	66	61	57	64	60	56	56	56	56	55
7	77	66	59	54	75	65	59	54	63	58	54	62	57	53	60	56	52	52	52	52	51
8	73	62	55	50	71	61	55	50	60	54	50	58	53	49	57	52	49	49	49	49	47
9	69	58	51	47	67	57	51	47	56	50	46	55	50	46	54	49	46	46	46	46	44
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	51	46	43	43	43	43	41

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

	0°	90°	180°	270°
0°	163146	163146	163146	163146
5°	162152	172987	162152	153738
10°	160159	177427	160159	145500
15°	155430	164885	155430	134402
20°	145366	132215	145366	119715
25°	128661	91606	128661	100326
30°	104468	59597	104468	75064
35°	74928	38596	74928	49972
40°	48443	26603	48443	31515
45°	30737	20606	30737	22455
50°	22826	17511	22826	18704
55°	18636	15951	18636	16510
60°	16138	15195	16138	15287
65°	14711	14655	14711	14592
70°	13943	14359	13943	14173
75°	13039	13891	13039	13475
80°	11455	13114	11455	12259
85°	7411	9366	7411	8929

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 43214 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3303.3	8.1
10°-20°	8986.8	22.1
20°-30°	10539.7	26.0
30°-40°	7329.7	18.1
40°-50°	3642.5	9.0
50°-60°	2178.6	5.4
60°-70°	1533.4	3.8
70°-80°	987.8	2.4
80°-90°	316.8	0.8
90°-100°	47.3	0.1
100°-110°	303.4	0.7
110°-120°	559.6	1.4
120°-130°	333.4	0.8
130°-140°	202.8	0.5
140°-150°	141.4	0.3
150°-160°	93.5	0.2
160°-170°	54.9	0.1
170°-180°	18.5	0.0
0°-30°	22829.9	56.3
0°-40°	30159.6	74.3
0°-60°	35980.7	88.7
0°-90°	38818.7	95.7
90°-120°	910.3	2.2
90°-150°	1588.0	3.9
90°-180°	1755.0	4.3
0°-180°	40573.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	34741	34741	34741	34741	34741	
5°	34622	36935	34622	32825	34622	3286
15°	32608	34592	32608	28197	32608	9113
25°	25694	18294	25694	20035	25694	11632
35°	13752	7084	13752	9172	13752	8585
45°	4973	3334	4973	3633	4973	4069
55°	2518	2156	2518	2231	2518	2303
65°	1536	1530	1536	1523	1536	1542
75°	918	978	918	949	918	964
85°	255	322	255	307	255	283
90°	13	18	13	13	13	18
95°	25	26	25	22	25	27
105°	140	74	140	106	140	188
115°	595	511	595	483	595	543
125°	382	402	382	350	382	352
135°	243	282	243	256	243	193
145°	222	232	222	216	222	139
155°	200	208	200	195	200	93
165°	192	200	192	189	192	55
175°	195	201	195	191	195	18
180°	195	195	195	195	195	



TEST NUMBER: P1432429  
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L830-UPL18

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7
2.5°	34720.4	35169.3	35532.7	35772.5	35891.0	35772.5	35532.7	35169.3	34720.4	34274.2	33967.4
5°	34622.1	35521.0	36282.6	36780.9	36935.4	36780.9	36282.6	35521.0	34622.1	33772.6	33209.1
7.5°	34386.9	35787.5	36919.1	37500.8	37642.8	37500.8	36919.1	35787.5	34386.9	33184.3	32472.3
10°	34027.9	35955.6	37263.0	37680.0	37696.8	37680.0	37263.0	35955.6	34027.9	32407.8	31568.1
12.5°	33455.3	35895.6	37147.7	37010.9	36700.2	37010.9	37147.7	35895.6	33455.3	31459.4	30400.0
15°	32608.4	35540.6	36417.5	35304.1	34592.1	35304.1	36417.5	35540.6	32608.4	30178.6	28950.0
17.5°	31415.1	34876.1	34893.1	32690.6	31347.2	32690.6	34893.1	34876.1	31415.1	28612.5	27259.5
20°	29877.0	33810.4	32794.1	28765.6	27174.1	28765.6	32794.1	33810.4	29877.0	26761.1	25433.5
22.5°	27948.7	32373.3	29871.1	24817.3	22646.0	24817.3	29871.1	32373.3	27948.7	24608.1	23226.4
25°	25693.5	30612.5	26726.6	20515.1	18293.7	20515.1	26726.6	30612.5	25693.5	22042.7	20793.3
27.5°	23040.8	28380.6	23378.2	16764.2	14714.8	16764.2	23378.2	28380.6	23040.8	19394.0	18117.8
30°	20094.3	25519.5	19893.6	13350.6	11463.4	13350.6	19893.6	25519.5	20094.3	16418.3	15275.6
32.5°	16795.4	22715.1	16547.2	10697.3	9098.6	10697.3	16547.2	22715.1	16795.4	13578.6	12384.5
35°	13751.9	19206.4	13529.7	8405.6	7083.8	8405.6	13529.7	19206.4	13751.9	10898.0	9725.4
37.5°	10792.4	15891.3	10785.3	6768.5	5745.7	6768.5	10785.3	15891.3	10792.4	8472.6	7520.8
40°	8396.4	12425.5	8450.5	5403.0	4610.9	5403.0	8450.5	12425.5	8396.4	6446.6	5837.6
42.5°	6361.9	9501.2	6642.1	4434.4	3916.5	4434.4	6642.1	9501.2	6361.9	5079.3	4623.3
45°	4973.1	6991.9	5186.7	3741.2	3334.0	3741.2	5186.7	6991.9	4973.1	4090.4	3784.2
47.5°	4050.0	5403.7	4203.8	3209.0	2923.7	3209.0	4203.8	5403.7	4050.0	3459.8	3230.5
50°	3401.8	4146.4	3490.5	2801.2	2609.7	2801.2	3490.5	4146.4	3401.8	2962.7	2809.7
52.5°	2922.3	3381.6	2972.6	2496.3	2367.3	2496.3	2972.6	3381.6	2922.3	2592.1	2497.0
55°	2518.4	2842.9	2584.9	2244.8	2155.6	2244.8	2584.9	2842.9	2518.4	2306.7	2236.4
57.5°	2211.7	2411.7	2244.8	2030.5	1971.2	2030.5	2244.8	2411.7	2211.7	2052.7	2014.9
60°	1940.0	2088.5	1981.0	1843.5	1826.7	1843.5	1981.0	2088.5	1940.0	1846.8	1822.1
62.5°	1730.9	1824.7	1751.7	1675.5	1660.5	1675.5	1751.7	1824.7	1730.9	1659.2	1663.8
65°	1535.5	1622.8	1565.4	1524.4	1529.6	1524.4	1565.4	1622.8	1535.5	1502.2	1509.4
67.5°	1384.3	1429.9	1405.2	1381.7	1387.5	1381.7	1405.2	1429.9	1384.3	1351.8	1362.8
70°	1223.4	1272.2	1246.9	1250.1	1259.9	1250.1	1246.9	1272.2	1223.4	1213.6	1222.1
72.5°	1069.6	1107.5	1098.9	1106.8	1117.2	1106.8	1098.9	1107.5	1069.6	1068.3	1069.0
75°	918.5	947.2	951.1	962.2	978.5	962.2	951.1	947.2	918.5	908.8	920.5
77.5°	753.7	786.3	798.6	813.6	837.8	813.6	798.6	786.3	753.7	760.2	766.1
80°	602.6	617.6	644.9	656.0	689.9	656.0	644.9	617.6	602.6	591.5	600.0
82.5°	441.0	454.7	478.2	499.0	518.6	499.0	478.2	454.7	441.0	435.9	436.5
85°	254.7	275.6	291.2	316.0	321.9	316.0	291.2	275.6	254.7	260.6	254.7
87.5°	89.3	95.7	109.4	119.2	119.9	119.2	109.4	95.7	89.3	91.2	82.7
90°	13.1	22.4	38.4	23.1	17.7	23.1	38.4	22.4	13.1	22.8	35.2
92.5°	17.0	30.1	53.8	29.9	22.5	29.9	53.8	30.1	17.0	29.4	56.3
95°	25.3	36.8	68.2	32.7	26.3	32.7	68.2	36.8	25.3	39.1	78.4
97.5°	38.8	45.4	76.8	34.7	31.2	34.7	76.8	45.4	38.8	47.7	89.9
100°	51.2	51.2	139.3	39.4	35.0	39.4	139.3	51.2	51.2	58.9	139.9
102.5°	77.2	99.9	321.4	76.6	41.7	76.6	321.4	99.9	77.2	109.8	296.4
105°	139.6	226.6	564.3	192.8	74.1	192.8	564.3	226.6	139.6	228.8	527.7
107.5°	263.4	421.5	726.5	377.1	167.2	377.1	726.5	421.5	263.4	404.6	696.3
110°	420.9	588.5	792.7	515.4	334.2	515.4	792.7	588.5	420.9	555.3	730.0



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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°	547.6	655.8	774.5	571.0	461.0	571.0	774.5	655.8	547.6	612.9	699.3
115°	595.3	646.1	691.9	569.1	510.9	569.1	691.9	646.1	595.3	598.5	624.4
117.5°	575.1	591.4	597.9	534.6	513.8	534.6	597.9	591.4	575.1	538.6	530.3
120°	519.4	512.8	504.4	483.6	484.9	483.6	504.4	512.8	519.4	470.5	443.0
122.5°	450.0	435.6	426.7	432.5	445.6	432.5	426.7	435.6	450.0	401.0	380.2
125°	381.8	367.5	372.6	388.3	402.1	388.3	372.6	367.5	381.8	341.2	335.7
127.5°	324.9	318.2	333.2	350.9	362.7	350.9	333.2	318.2	324.9	299.0	304.1
130°	284.3	285.5	305.4	320.8	328.1	320.8	305.4	285.5	284.3	271.8	284.6
132.5°	259.0	266.0	284.9	298.4	302.9	298.4	284.9	266.0	259.0	255.8	271.5
135°	243.4	253.6	271.2	279.5	281.8	279.5	271.2	253.6	243.4	244.9	259.0
137.5°	234.4	244.6	257.8	264.8	263.6	264.8	257.8	244.6	234.4	237.9	248.8
140°	229.3	239.5	245.2	253.3	252.6	253.3	245.2	239.5	229.3	231.2	239.9
142.5°	224.2	233.4	236.3	242.4	241.1	242.4	236.3	233.4	224.2	226.1	231.8
145°	221.9	229.0	226.4	233.8	232.1	233.8	226.4	229.0	221.9	222.3	225.7
147.5°	217.0	222.3	219.4	225.7	224.2	225.7	219.4	222.3	217.0	217.0	218.7
150°	212.0	215.8	211.3	218.7	219.0	218.7	211.3	215.8	212.0	211.0	212.6
152.5°	205.0	208.8	205.0	213.3	213.0	213.3	205.0	208.8	205.0	204.0	205.6
155°	199.5	201.5	199.5	207.9	208.5	207.9	199.5	201.5	199.5	198.9	200.2
157.5°	196.1	197.6	196.7	204.1	204.8	204.1	196.7	197.6	196.1	196.1	196.7
160°	193.9	195.8	195.5	201.9	202.5	201.9	195.5	195.8	193.9	194.2	194.8
162.5°	193.2	193.2	193.6	200.0	201.3	200.0	193.6	193.2	193.2	193.2	194.2
165°	192.3	193.3	192.7	197.8	200.1	197.8	192.7	193.3	192.3	192.7	192.7
167.5°	192.7	191.7	193.1	197.8	200.1	197.8	193.1	191.7	192.7	193.0	193.0
170°	191.5	192.1	192.4	197.2	199.4	197.2	192.4	192.1	191.5	192.4	192.7
172.5°	193.4	193.4	193.3	197.3	200.5	197.3	193.3	193.4	193.4	193.7	194.6
175°	194.6	194.3	194.6	197.6	200.8	197.6	194.6	194.3	194.6	194.0	194.0
177.5°	193.6	194.9	196.2	199.2	203.4	199.2	196.2	194.9	193.6	194.0	194.0
180°	194.9	194.9	194.9	194.9	194.9	194.9	194.9	194.9	194.9	194.9	194.9



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	34740.7	34740.7	34740.7	34740.7	34740.7	34740.7
2.5°	33731.5	33709.4	33731.5	33967.4	34274.2	34720.4
5°	32947.9	32825.4	32947.9	33209.1	33772.6	34622.1
7.5°	32035.2	31964.2	32035.2	32472.3	33184.3	34386.9
10°	31074.3	30913.5	31074.3	31568.1	32407.8	34027.9
12.5°	29890.0	29677.0	29890.0	30400.0	31459.4	33455.3
15°	28383.9	28196.9	28383.9	28950.0	30178.6	32608.4
17.5°	26767.7	26598.3	26767.7	27259.5	28612.5	31415.1
20°	24737.7	24604.9	24737.7	25433.5	26761.1	29877.0
22.5°	22608.2	22483.8	22608.2	23226.4	24608.1	27948.7
25°	20102.8	20035.0	20102.8	20793.3	22042.7	25693.5
27.5°	17395.4	17280.1	17395.4	18117.8	19394.0	23040.8
30°	14629.4	14438.5	14629.4	15275.6	16418.3	20094.3
32.5°	11923.9	11786.5	11923.9	12384.5	13578.6	16795.4
35°	9309.1	9171.6	9309.1	9725.4	10898.0	13751.9
37.5°	7253.8	7010.8	7253.8	7520.8	8472.6	10792.4
40°	5501.4	5462.3	5501.4	5837.6	6446.6	8396.4
42.5°	4478.7	4372.5	4478.7	4623.3	5079.3	6361.9
45°	3674.8	3633.1	3674.8	3784.2	4090.4	4973.1
47.5°	3160.2	3178.3	3160.2	3230.5	3459.8	4050.0
50°	2776.4	2787.6	2776.4	2809.7	2962.7	3401.8
52.5°	2493.7	2484.0	2493.7	2497.0	2592.1	2922.3
55°	2243.6	2231.1	2243.6	2236.4	2306.7	2518.4
57.5°	2024.7	2033.8	2024.7	2014.9	2052.7	2211.7
60°	1829.2	1837.7	1829.2	1822.1	1846.8	1940.0
62.5°	1664.4	1669.7	1664.4	1663.8	1659.2	1730.9
65°	1517.2	1523.1	1517.2	1509.4	1502.2	1535.5
67.5°	1376.5	1376.5	1376.5	1362.8	1351.8	1384.3
70°	1244.2	1243.6	1244.2	1222.1	1213.6	1223.4
72.5°	1085.3	1100.9	1085.3	1069.0	1068.3	1069.6
75°	930.9	949.2	930.9	920.5	908.8	918.5
77.5°	774.6	802.6	774.6	766.1	760.2	753.7
80°	614.3	644.9	614.3	600.0	591.5	602.6
82.5°	454.0	476.9	454.0	436.5	435.9	441.0
85°	270.3	306.9	270.3	254.7	260.6	254.7
87.5°	86.6	110.7	86.6	82.7	91.2	89.3
90°	20.8	13.1	20.8	35.2	22.8	13.1
92.5°	31.4	18.9	31.4	56.3	29.4	17.0
95°	36.2	21.7	36.2	78.4	39.1	25.3
97.5°	40.0	28.2	40.0	89.9	47.7	38.8
100°	46.7	36.8	46.7	139.9	58.9	51.2
102.5°	98.5	61.8	98.5	296.4	109.8	77.2
105°	207.1	105.9	207.1	527.7	228.8	139.6
107.5°	370.3	182.8	370.3	696.3	404.6	263.4
110°	491.2	340.2	491.2	730.0	555.3	420.9



TEST NUMBER: P1432429

CATALOG NUMBER: EHBR1-42-UNV-TASM-L830-UPL18

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	527.7	459.3	527.7	699.3	612.9	547.6
115°	507.6	483.2	507.6	624.4	598.5	595.3
117.5°	463.4	466.9	463.4	530.3	538.6	575.1
120°	412.5	432.4	412.5	443.0	470.5	519.4
122.5°	366.2	389.2	366.2	380.2	401.0	450.0
125°	325.8	349.5	325.8	335.7	341.2	381.8
127.5°	298.0	314.0	298.0	304.1	299.0	324.9
130°	276.5	290.0	276.5	284.6	271.8	284.3
132.5°	261.8	270.5	261.8	271.5	255.8	259.0
135°	249.1	256.1	249.1	259.0	244.9	243.4
137.5°	238.2	244.3	238.2	248.8	237.9	234.4
140°	228.9	234.1	228.9	239.9	231.2	229.3
142.5°	219.0	222.8	219.0	231.8	226.1	224.2
145°	212.6	215.5	212.6	225.7	222.3	221.9
147.5°	207.2	209.1	207.2	218.7	217.0	217.0
150°	201.8	203.6	201.8	212.6	211.0	212.0
152.5°	195.7	198.3	195.7	205.6	204.0	205.0
155°	192.2	194.7	192.2	200.2	198.9	199.5
157.5°	190.6	192.9	190.6	196.7	196.1	196.1
160°	189.7	191.4	189.7	194.8	194.2	193.9
162.5°	188.2	189.8	188.2	194.2	193.2	193.2
165°	188.5	189.1	188.5	192.7	192.7	192.3
167.5°	188.2	189.1	188.2	193.0	193.0	192.7
170°	188.8	189.5	188.8	192.7	192.4	191.5
172.5°	190.2	190.8	190.2	194.6	193.7	193.4
175°	190.5	191.1	190.5	194.0	194.0	194.6
177.5°	192.0	192.7	192.0	194.0	194.0	193.6
180°	194.9	194.9	194.9	194.9	194.9	194.9



TEST NUMBER: P1432429  
 CATALOG NUMBER: EHBR1-42-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	18.53	19.67	18.97	20.07	20.50	17.85	18.98	18.29	19.39	19.82
	3H	20.08	21.09	20.53	21.51	21.99	19.69	20.71	20.15	21.13	21.60
	4H	20.71	21.66	21.19	22.10	22.59	20.48	21.42	20.96	21.86	22.36
	6H	21.19	22.06	21.69	22.52	23.02	21.12	21.99	21.61	22.45	22.95
	8H	21.35	22.17	21.85	22.65	23.16	21.34	22.17	21.85	22.64	23.15
	12H	21.42	22.21	21.93	22.67	23.21	21.47	22.26	21.98	22.73	23.26
4H	2H	18.94	19.89	19.43	20.33	20.82	18.42	19.37	18.90	19.81	20.30
	3H	20.74	21.52	21.23	22.01	22.52	20.48	21.26	20.97	21.75	22.26
	4H	21.52	22.22	22.03	22.72	23.27	21.39	22.09	21.90	22.59	23.14
	6H	22.13	22.74	22.67	23.27	23.84	22.16	22.77	22.70	23.29	23.86
	8H	22.33	22.89	22.87	23.42	23.99	22.43	23.00	22.98	23.52	24.10
	12H	22.44	22.93	23.00	23.49	24.07	22.60	23.10	23.16	23.66	24.24
8H	4H	21.77	22.33	22.31	22.86	23.43	21.67	22.23	22.21	22.76	23.33
	6H	22.51	22.97	23.09	23.54	24.13	22.57	23.03	23.15	23.61	24.19
	8H	22.78	23.19	23.38	23.78	24.37	22.93	23.34	23.52	23.93	24.52
	12H	22.95	23.31	23.54	23.88	24.55	23.18	23.54	23.77	24.11	24.78
12H	4H	21.78	22.28	22.34	22.84	23.41	21.68	22.18	22.24	22.74	23.32
	6H	22.55	22.96	23.15	23.55	24.15	22.62	23.03	23.21	23.62	24.21
	8H	22.87	23.23	23.46	23.80	24.47	23.02	23.38	23.61	23.95	24.62

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 ( $\phi$ /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**

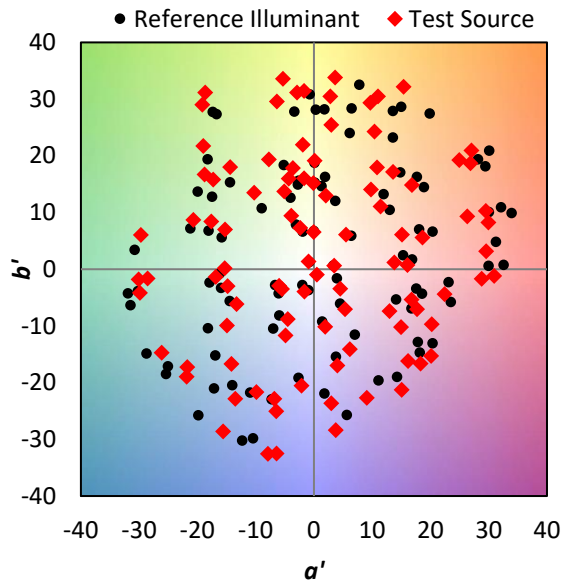
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625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

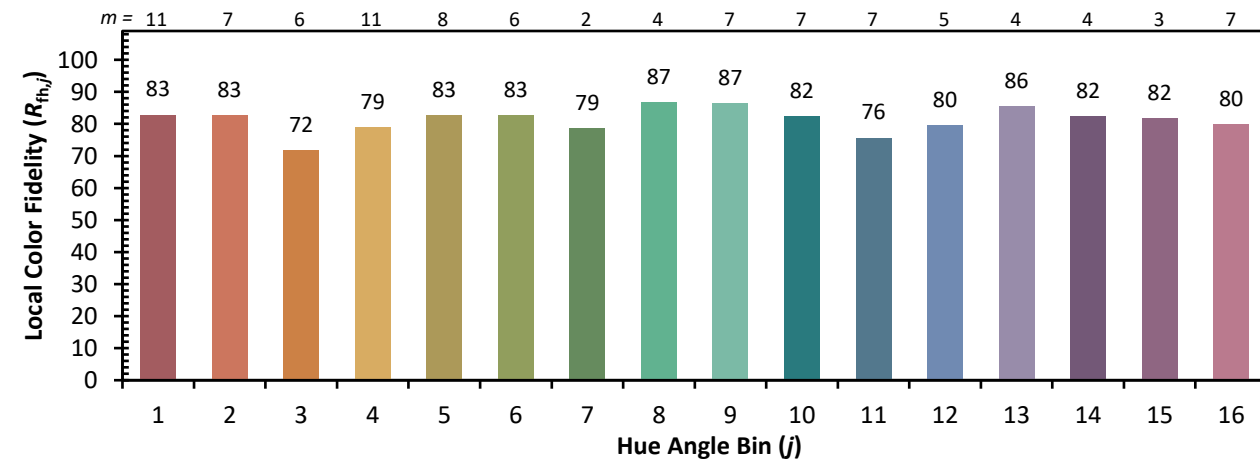
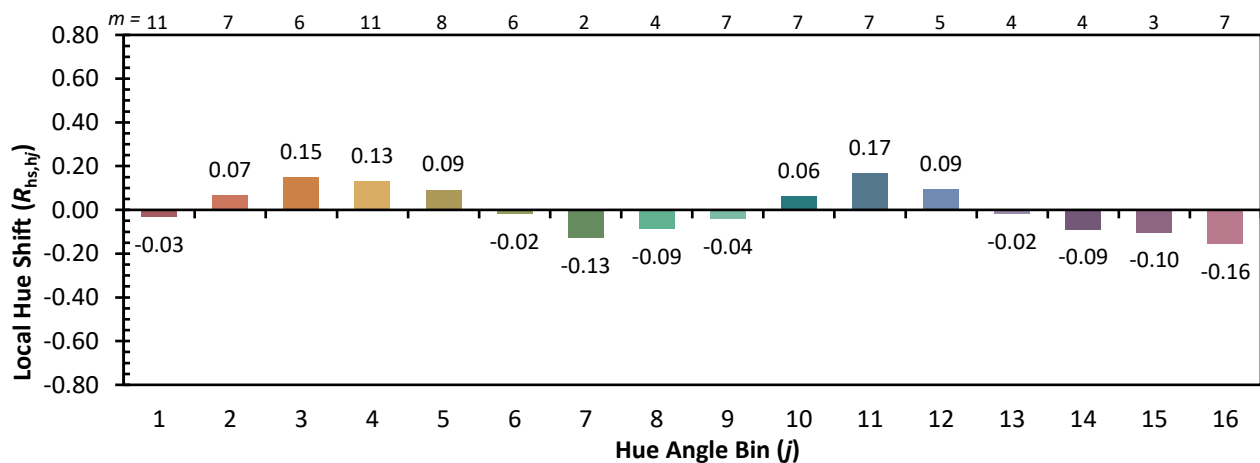


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

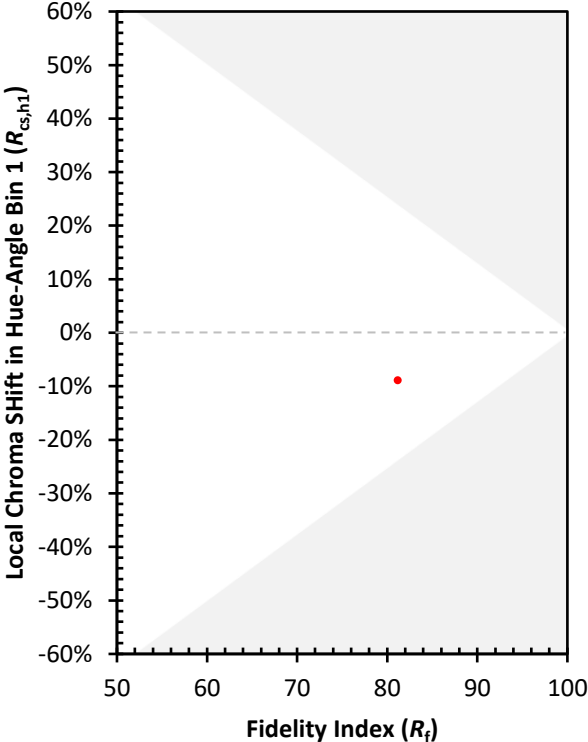
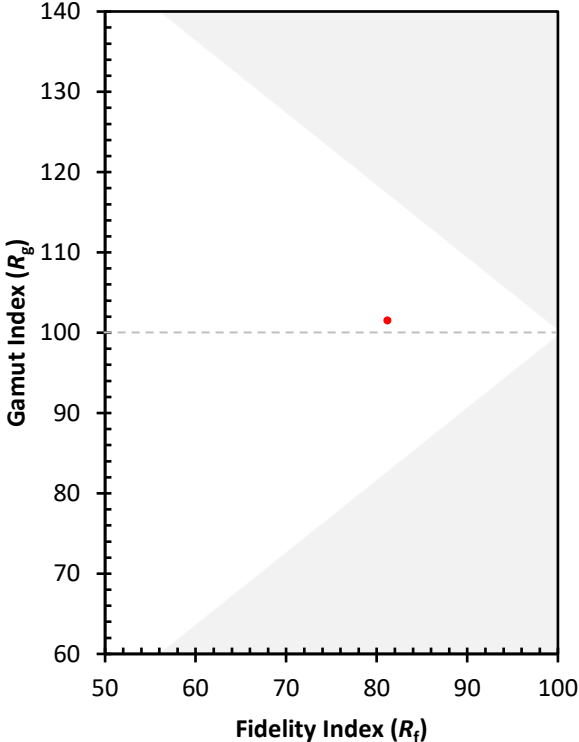
CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82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