

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: P1432395

Luminaire Tested: EHBR1-36-UNV-TASM-L830-UPL12

Issue Date: 3/20/2026

**Test Information**

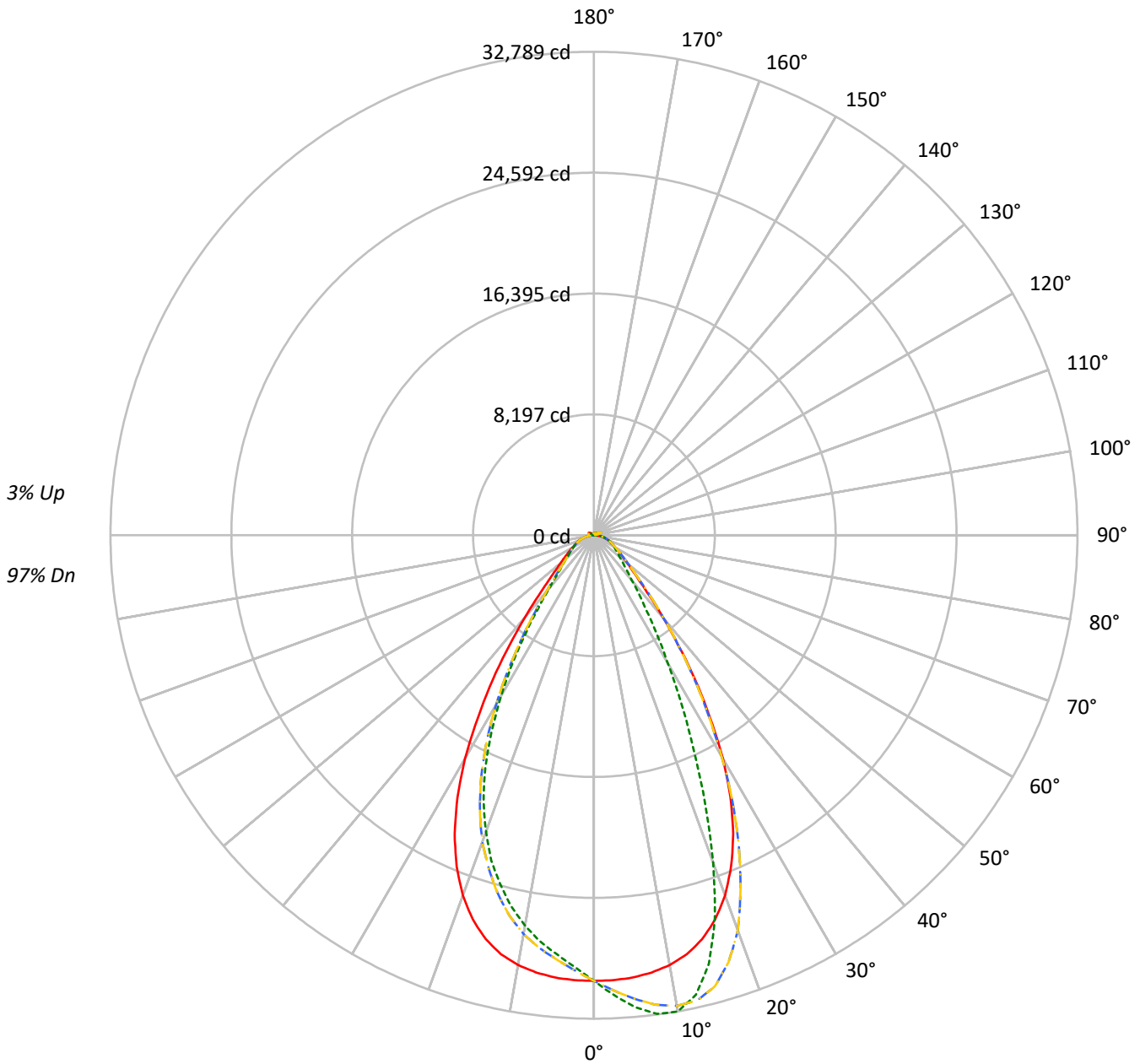
Test Method: LM-79-2019  
Report Number: P1432395  
REPORT IS A COMBINATION OF REPORTS P1431772 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-36-UNV-TASM-L830-UPL12  
Description: Elevate Round Highbay at, 36000 lumens, 3000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34920.4 lumens  
Efficiency: N/A  
Efficacy: 175.7 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): 198.8  
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: P1432395  
CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL12

### 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	97	
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	102	96	92	88	92	89	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	72	
4	92	83	76	71	90	81	75	71	79	74	69	76	72	68	74	70	67	67	65	
5	86	77	70	65	84	75	69	64	73	68	63	71	66	63	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	60	55	75	66	59	54	64	58	54	62	57	53	61	56	53	53	51	
8	73	62	55	51	71	61	55	51	60	54	50	59	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	45	
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	51	46	43	43	42	

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

	0°	90°	180°	270°
0°	141906	141906	141906	141906
5°	141042	150465	141042	133722
10°	139308	154328	139308	126557
15°	135195	143419	135195	116904
20°	126441	115003	126441	104129
25°	111910	79680	111910	87264
30°	90867	51838	90867	65291
35°	65173	33571	65173	43466
40°	42136	23139	42136	27412
45°	26735	17924	26735	19531
50°	19854	15231	19854	16269
55°	16210	13875	16210	14361
60°	14036	13216	14036	13297
65°	12796	12746	12796	12692
70°	12127	12490	12127	12328
75°	11341	12082	11341	11720
80°	9963	11407	9963	10664
85°	6445	8144	6445	7766

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 37588 cd/sqm



TEST NUMBER: P1432395  
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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2873.2	8.2
10°-20°	7816.8	22.4
20°-30°	9167.6	26.3
30°-40°	6375.5	18.3
40°-50°	3168.3	9.1
50°-60°	1895.0	5.4
60°-70°	1333.8	3.8
70°-80°	859.2	2.5
80°-90°	274.9	0.8
90°-100°	31.4	0.1
100°-110°	199.3	0.6
110°-120°	367.1	1.1
120°-130°	219.1	0.6
130°-140°	133.7	0.4
140°-150°	93.7	0.3
150°-160°	62.4	0.2
160°-170°	37.0	0.1
170°-180°	12.6	0.0
0°-30°	19857.6	56.9
0°-40°	26233.1	75.1
0°-60°	31296.4	89.6
0°-90°	33764.2	96.7
90°-120°	597.8	1.7
90°-150°	1044.2	3.0
90°-180°	1156.0	3.3
0°-180°	34920.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	30218	30218	30218	30218	30218	
5°	30115	32127	30115	28552	30115	2858
15°	28363	30088	28363	24526	28363	7926
25°	22348	15912	22348	17427	22348	10118
35°	11962	6162	11962	7978	11962	7467
45°	4326	2900	4326	3160	4326	3540
55°	2191	1875	2191	1941	2191	2003
65°	1336	1330	1336	1325	1336	1341
75°	799	851	799	826	799	839
85°	222	280	222	267	222	246
90°	9	13	9	9	9	15
95°	17	18	17	14	17	18
105°	92	50	92	70	92	123
115°	390	336	390	317	390	356
125°	251	265	251	229	251	231
135°	161	186	161	168	161	127
145°	147	154	147	143	147	92
155°	133	139	133	130	133	62
165°	130	136	130	128	130	37
175°	132	138	132	130	132	13
180°	133	133	133	133	133	



TEST NUMBER: P1432395

CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8
2.5°	30200.2	30590.6	30906.7	31115.3	31218.4	31115.3	30906.7	30590.6	30200.2	29812.0	29545.1
5°	30114.6	30896.6	31558.9	31992.5	32126.7	31992.5	31558.9	30896.6	30114.6	29375.8	28885.6
7.5°	29910.1	31128.3	32112.5	32618.5	32742.1	32618.5	32112.5	31128.3	29910.1	28864.0	28244.8
10°	29597.8	31274.5	32411.7	32774.3	32789.1	32774.3	32411.7	31274.5	29597.8	28188.7	27458.2
12.5°	29099.8	31222.4	32311.4	32192.4	31922.1	32192.4	32311.4	31222.4	29099.8	27363.6	26442.3
15°	28363.2	30913.6	31676.2	30707.9	30088.5	30707.9	31676.2	30913.6	28363.2	26249.7	25181.0
17.5°	27325.1	30335.6	30350.3	28434.6	27266.2	28434.6	30350.3	30335.6	27325.1	24887.4	23710.5
20°	25987.3	29408.6	28524.7	25020.6	23636.4	25020.6	28524.7	29408.6	25987.3	23277.1	22122.4
22.5°	24310.0	28158.6	25982.2	21586.3	19697.7	21586.3	25982.2	28158.6	24310.0	21404.4	20202.6
25°	22348.4	26627.0	23247.1	17844.3	15912.1	17844.3	23247.1	26627.0	22348.4	19173.0	18086.3
27.5°	20041.1	24685.7	20334.6	14581.7	12799.0	14581.7	20334.6	24685.7	20041.1	16869.1	15759.1
30°	17478.2	22197.1	17303.7	11612.5	9971.0	11612.5	17303.7	22197.1	17478.2	14280.8	13286.8
32.5°	14608.8	19757.8	14392.9	9304.6	7914.1	9304.6	14392.9	19757.8	14608.8	11810.8	10772.2
35°	11961.5	16705.9	11768.3	7311.2	6161.5	7311.2	11768.3	16705.9	11961.5	9479.1	8459.2
37.5°	9387.3	13822.4	9381.1	5887.3	4997.6	5887.3	9381.1	13822.4	9387.3	7369.6	6541.7
40°	7303.2	10807.8	7350.3	4699.7	4010.6	4699.7	7350.3	10807.8	7303.2	5607.3	5077.5
42.5°	5533.7	8264.3	5777.3	3857.1	3406.5	3857.1	5777.3	8264.3	5533.7	4418.0	4021.4
45°	4325.6	6081.6	4511.5	3254.1	2900.1	3254.1	4511.5	6081.6	4325.6	3557.9	3291.5
47.5°	3522.8	4700.2	3656.4	2791.2	2543.1	2791.2	3656.4	4700.2	3522.8	3009.4	2809.9
50°	2959.0	3606.6	3036.0	2436.5	2269.9	2436.5	3036.0	3606.6	2959.0	2577.0	2443.9
52.5°	2541.9	2941.4	2585.5	2171.3	2059.2	2171.3	2585.5	2941.4	2541.9	2254.7	2171.9
55°	2190.6	2472.7	2248.4	1952.6	1875.0	1952.6	2248.4	2472.7	2190.6	2006.4	1945.3
57.5°	1923.7	2097.7	1952.6	1766.2	1714.6	1766.2	1952.6	2097.7	1923.7	1785.5	1752.6
60°	1687.4	1816.7	1723.1	1603.6	1588.8	1603.6	1723.1	1816.7	1687.4	1606.4	1584.8
62.5°	1505.6	1587.2	1523.7	1457.3	1444.3	1457.3	1523.7	1587.2	1505.6	1443.2	1447.2
65°	1335.6	1411.4	1361.6	1325.9	1330.4	1325.9	1361.6	1411.4	1335.6	1306.6	1312.9
67.5°	1204.0	1243.8	1222.2	1201.8	1206.9	1201.8	1222.2	1243.8	1204.0	1175.8	1185.4
70°	1064.1	1106.6	1084.5	1087.3	1095.9	1087.3	1084.5	1106.6	1064.1	1055.7	1063.0
72.5°	930.4	963.3	955.9	962.7	971.7	962.7	955.9	963.3	930.4	929.3	929.9
75°	798.9	823.8	827.3	836.9	851.1	836.9	827.3	823.8	798.9	790.5	800.6
77.5°	655.6	683.9	694.7	707.7	728.7	707.7	694.7	683.9	655.6	661.2	666.4
80°	524.1	537.2	561.0	570.5	600.1	570.5	561.0	537.2	524.1	514.5	521.8
82.5°	383.6	395.5	415.9	434.1	451.0	434.1	415.9	395.5	383.6	379.1	379.6
85°	221.5	239.7	253.3	274.8	279.9	274.8	253.3	239.7	221.5	226.7	221.5
87.5°	77.7	83.3	95.2	103.7	104.3	103.7	95.2	83.3	77.7	79.3	71.9
90°	8.7	15.0	25.6	15.9	12.6	15.9	25.6	15.0	8.7	15.0	23.2
92.5°	11.2	20.0	35.7	20.3	15.8	20.3	35.7	20.0	11.2	19.4	37.1
95°	16.9	24.4	45.1	22.2	18.4	22.2	45.1	24.4	16.9	25.8	51.5
97.5°	25.7	30.1	50.8	23.5	21.5	23.5	50.8	30.1	25.7	31.4	59.1
100°	33.8	33.8	91.6	26.6	24.0	26.6	91.6	33.8	33.8	38.9	91.8
102.5°	50.9	65.9	211.1	51.1	28.4	51.1	211.1	65.9	50.9	72.2	194.4
105°	91.7	148.9	370.3	127.2	49.7	127.2	370.3	148.9	91.7	150.2	345.9
107.5°	172.9	276.6	476.6	248.0	110.7	248.0	476.6	276.6	172.9	265.4	456.6
110°	276.0	386.1	520.0	338.6	220.2	338.6	520.0	386.1	276.0	364.1	478.7



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 CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	359.0	430.1	508.1	375.2	303.2	375.2	508.1	430.1	359.0	401.8	458.5
115°	390.5	423.9	453.9	373.8	336.0	373.8	453.9	423.9	390.5	392.4	409.4
117.5°	377.3	388.0	392.3	351.2	337.9	351.2	392.3	388.0	377.3	353.3	347.8
120°	340.8	336.4	331.2	317.8	318.9	317.8	331.2	336.4	340.8	308.6	290.5
122.5°	295.4	286.0	280.3	284.5	293.2	284.5	280.3	286.0	295.4	263.3	249.5
125°	250.8	241.3	244.9	255.5	264.8	255.5	244.9	241.3	250.8	224.2	220.6
127.5°	213.6	209.2	219.2	231.0	239.0	231.0	219.2	209.2	213.6	196.6	199.8
130°	187.1	187.8	200.9	211.4	216.4	211.4	200.9	187.8	187.1	178.9	187.2
132.5°	170.7	175.2	187.6	196.9	200.1	196.9	187.6	175.2	170.7	168.7	178.8
135°	160.6	166.9	178.7	184.3	186.2	184.3	178.7	166.9	160.6	161.7	170.7
137.5°	154.7	161.2	169.9	174.9	174.2	174.9	169.9	161.2	154.7	157.3	164.2
140°	151.6	158.0	161.8	167.3	167.3	167.3	161.8	158.0	151.6	152.9	158.5
142.5°	148.5	154.2	156.1	160.4	159.7	160.4	156.1	154.2	148.5	149.7	153.5
145°	147.2	151.6	149.7	154.7	154.0	154.7	149.7	151.6	147.2	147.2	149.7
147.5°	144.0	147.2	145.3	149.7	148.8	149.7	145.3	147.2	144.0	144.0	145.2
150°	140.8	143.3	140.2	145.2	145.7	145.2	140.2	143.3	140.8	140.1	141.3
152.5°	136.3	138.8	136.3	141.9	141.8	141.9	136.3	138.8	136.3	135.6	136.9
155°	133.0	134.3	133.0	138.6	139.2	138.6	133.0	134.3	133.0	132.5	133.6
157.5°	131.0	132.2	131.6	136.6	137.1	136.6	131.6	132.2	131.0	131.0	131.6
160°	130.1	131.3	131.3	135.6	136.2	135.6	131.3	131.3	130.1	130.2	130.8
162.5°	129.9	129.9	130.5	134.8	135.9	134.8	130.5	129.9	129.9	129.9	130.6
165°	129.7	130.4	130.3	133.9	135.7	133.9	130.3	130.4	129.7	129.8	129.8
167.5°	130.3	129.6	130.9	134.4	136.2	134.4	130.9	129.6	130.3	130.3	130.3
170°	129.5	130.2	130.7	134.3	136.0	134.3	130.7	130.2	129.5	130.2	130.3
172.5°	131.3	131.3	131.8	134.7	137.1	134.7	131.8	131.3	131.3	131.4	132.1
175°	132.5	132.4	132.9	135.2	137.6	135.2	132.9	132.4	132.5	131.9	131.9
177.5°	131.8	132.9	134.0	136.4	139.4	136.4	134.0	132.9	131.8	131.9	131.9
180°	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8
2.5°	29340.1	29320.8	29340.1	29545.1	29812.0	30200.2
5°	28658.3	28551.8	28658.3	28885.6	29375.8	30114.6
7.5°	27864.6	27802.7	27864.6	28244.8	28864.0	29910.1
10°	27028.7	26888.8	27028.7	27458.2	28188.7	29597.8
12.5°	25998.6	25813.4	25998.6	26442.3	27363.6	29099.8
15°	24688.6	24525.9	24688.6	25181.0	26249.7	28363.2
17.5°	23282.7	23135.4	23282.7	23710.5	24887.4	27325.1
20°	21517.1	21401.6	21517.1	22122.4	23277.1	25987.3
22.5°	19664.8	19556.6	19664.8	20202.6	21404.4	24310.0
25°	17485.5	17426.6	17485.5	18086.3	19173.0	22348.4
27.5°	15130.7	15030.4	15130.7	15759.1	16869.1	20041.1
30°	12724.8	12558.7	12724.8	13286.8	14280.8	17478.2
32.5°	10371.5	10252.0	10371.5	10772.2	11810.8	14608.8
35°	8097.1	7977.6	8097.1	8459.2	9479.1	11961.5
37.5°	6309.4	6098.1	6309.4	6541.7	7369.6	9387.3
40°	4785.2	4751.2	4785.2	5077.5	5607.3	7303.2
42.5°	3895.6	3803.2	3895.6	4021.4	4418.0	5533.7
45°	3196.3	3160.1	3196.3	3291.5	3557.9	4325.6
47.5°	2748.7	2764.6	2748.7	2809.9	3009.4	3522.8
50°	2414.9	2424.6	2414.9	2443.9	2577.0	2959.0
52.5°	2169.0	2160.5	2169.0	2171.9	2254.7	2541.9
55°	1951.4	1940.7	1951.4	1945.3	2006.4	2190.6
57.5°	1761.1	1769.0	1761.1	1752.6	1785.5	1923.7
60°	1591.1	1598.5	1591.1	1584.8	1606.4	1687.4
62.5°	1447.8	1452.3	1447.8	1447.2	1443.2	1505.6
65°	1319.6	1324.8	1319.6	1312.9	1306.6	1335.6
67.5°	1197.3	1197.3	1197.3	1185.4	1175.8	1204.0
70°	1082.3	1081.7	1082.3	1063.0	1055.7	1064.1
72.5°	944.0	957.6	944.0	929.9	929.3	930.4
75°	809.7	825.6	809.7	800.6	790.5	798.9
77.5°	673.7	698.1	673.7	666.4	661.2	655.6
80°	534.3	561.0	534.3	521.8	514.5	524.1
82.5°	394.9	414.8	394.9	379.6	379.1	383.6
85°	235.1	266.9	235.1	221.5	226.7	221.5
87.5°	75.4	96.3	75.4	71.9	79.3	77.7
90°	13.8	8.7	13.8	23.2	15.0	8.7
92.5°	20.7	12.6	20.7	37.1	19.4	11.2
95°	23.8	14.4	23.8	51.5	25.8	16.9
97.5°	26.3	18.7	26.3	59.1	31.4	25.7
100°	30.7	24.4	30.7	91.8	38.9	33.8
102.5°	64.7	40.7	64.7	194.4	72.2	50.9
105°	135.8	69.7	135.8	345.9	150.2	91.7
107.5°	242.8	120.0	242.8	456.6	265.4	172.9
110°	322.0	223.2	322.0	478.7	364.1	276.0



TEST NUMBER: P1432395  
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL12

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	345.9	301.2	345.9	458.5	401.8	359.0
115°	332.7	317.0	332.7	409.4	392.4	390.5
117.5°	303.8	306.2	303.8	347.8	353.3	377.3
120°	270.4	283.6	270.4	290.5	308.6	340.8
122.5°	240.2	255.3	240.2	249.5	263.3	295.4
125°	213.8	229.4	213.8	220.6	224.2	250.8
127.5°	195.5	206.2	195.5	199.8	196.6	213.6
130°	181.6	190.4	181.6	187.2	178.9	187.1
132.5°	172.1	177.8	172.1	178.8	168.7	170.7
135°	163.8	168.3	163.8	170.7	161.7	160.6
137.5°	156.9	160.7	156.9	164.2	157.3	154.7
140°	151.1	154.3	151.1	158.5	152.9	151.6
142.5°	144.7	147.3	144.7	153.5	149.7	148.5
145°	140.9	142.8	140.9	149.7	147.2	147.2
147.5°	137.6	138.9	137.6	145.2	144.0	144.0
150°	134.3	135.6	134.3	141.3	140.1	140.8
152.5°	130.5	132.4	130.5	136.9	135.6	136.3
155°	128.5	130.3	128.5	133.6	132.5	133.0
157.5°	127.7	129.5	127.7	131.6	131.0	131.0
160°	127.5	128.7	127.5	130.8	130.2	130.1
162.5°	126.7	128.0	126.7	130.6	129.9	129.9
165°	127.2	127.8	127.2	129.8	129.8	129.7
167.5°	127.2	127.8	127.2	130.3	130.3	130.3
170°	127.8	128.3	127.8	130.3	130.2	129.5
172.5°	129.0	129.5	129.0	132.1	131.4	131.3
175°	129.5	130.0	129.5	131.9	131.9	132.5
177.5°	130.7	131.2	130.7	131.9	131.9	131.8
180°	132.9	132.9	132.9	132.9	132.9	132.9



TEST NUMBER: P1432395  
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL12

**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	18.12	19.28	18.55	19.66	20.06	17.44	18.60	17.87	18.98	19.38
	3H	19.67	20.70	20.11	21.10	21.55	19.29	20.32	19.73	20.72	21.17
	4H	20.31	21.27	20.77	21.69	22.16	20.07	21.03	20.54	21.45	21.92
	6H	20.79	21.67	21.27	22.11	22.59	20.72	21.60	21.19	22.04	22.52
	8H	20.95	21.78	21.44	22.24	22.72	20.94	21.77	21.43	22.23	22.72
	12H	21.02	21.81	21.51	22.26	22.78	21.07	21.87	21.56	22.32	22.83
4H	2H	18.54	19.50	19.01	19.92	20.39	18.02	18.98	18.48	19.40	19.87
	3H	20.34	21.13	20.82	21.60	22.09	20.08	20.87	20.55	21.34	21.83
	4H	21.12	21.83	21.61	22.31	22.83	20.99	21.70	21.48	22.18	22.71
	6H	21.73	22.34	22.25	22.85	23.40	21.76	22.37	22.28	22.88	23.43
	8H	21.93	22.50	22.46	23.01	23.56	22.03	22.60	22.56	23.11	23.66
	12H	22.04	22.54	22.58	23.08	23.64	22.20	22.70	22.75	23.25	23.80
8H	4H	21.37	21.94	21.89	22.45	23.00	21.27	21.84	21.80	22.35	22.90
	6H	22.11	22.57	22.67	23.13	23.69	22.17	22.64	22.73	23.20	23.76
	8H	22.38	22.79	22.96	23.37	23.94	22.53	22.94	23.11	23.52	24.09
	12H	22.55	22.92	23.13	23.47	24.12	22.78	23.14	23.35	23.69	24.34
12H	4H	21.38	21.88	21.92	22.43	22.98	21.28	21.79	21.83	22.33	22.88
	6H	22.15	22.57	22.73	23.14	23.71	22.22	22.63	22.80	23.21	23.78
	8H	22.47	22.83	23.04	23.39	24.04	22.62	22.99	23.20	23.54	24.19

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

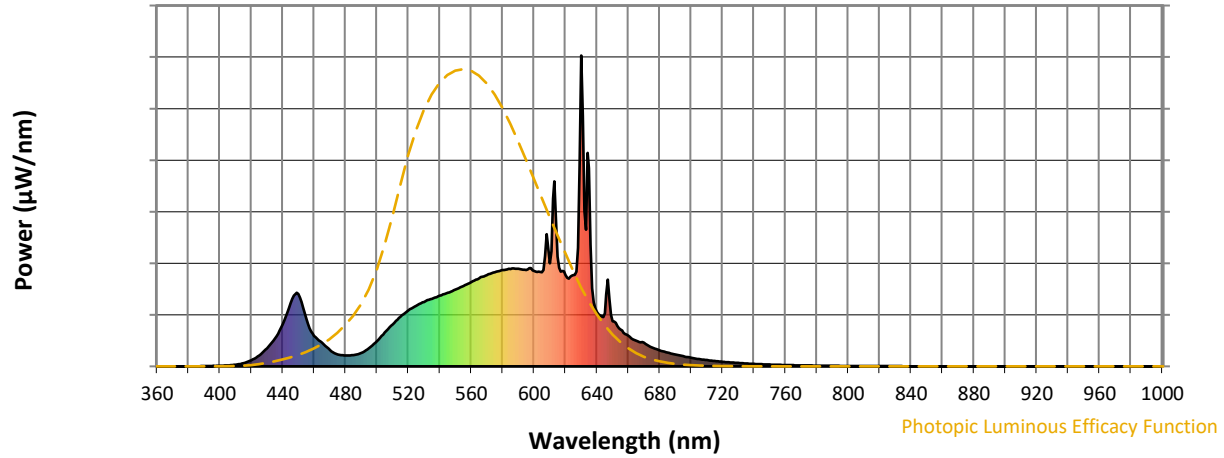


CCT = 2983K  
 CIE x = 0.4364  
 CIE y = 0.4010  
 Duv = -0.0012

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**

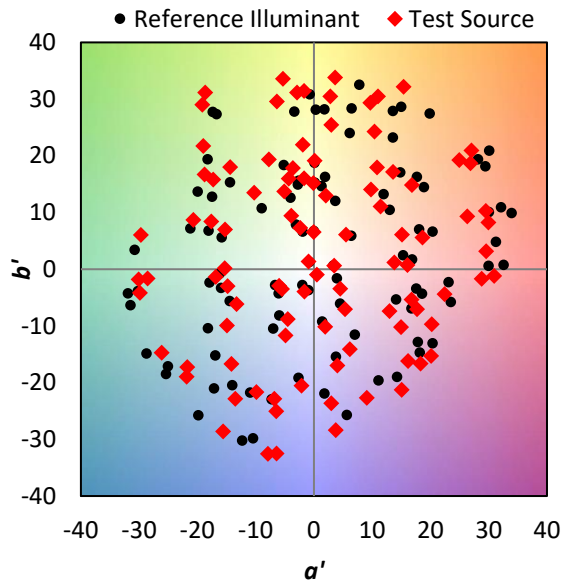
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625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

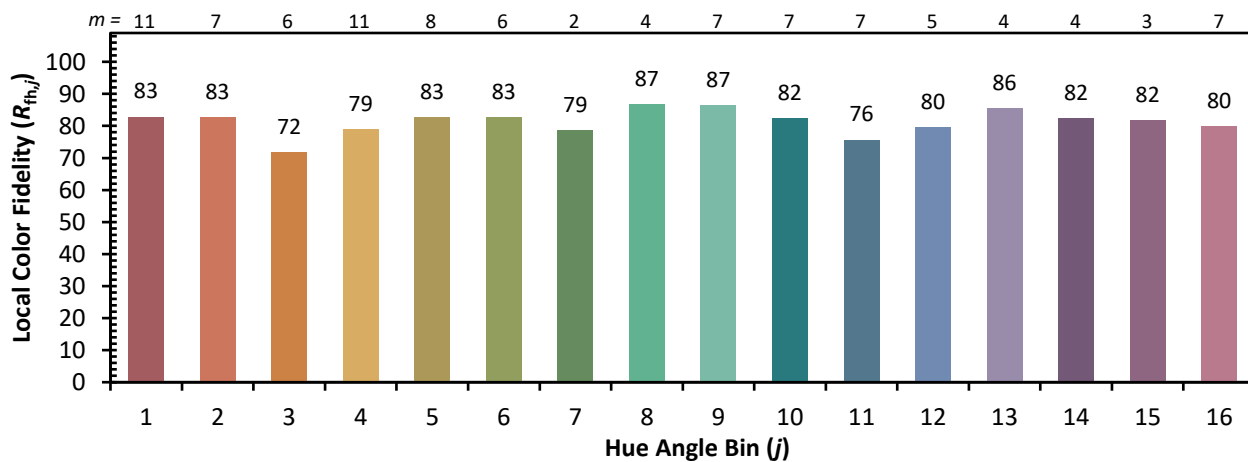


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

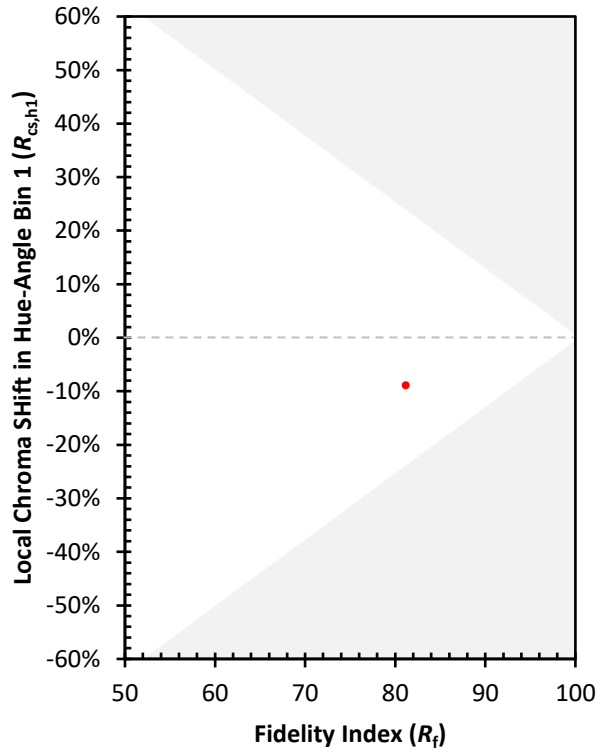
CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82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