

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: P1433453

Luminaire Tested: EHBR1-18-UNV-TASM-L935-UPL18

Issue Date: 3/20/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1433453  
REPORT IS A COMBINATION OF REPORTS P1431678 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-18-UNV-TASM-L935-UPL18  
Description: Elevate Round Highbay at, 18000 lumens, 3500K 90CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

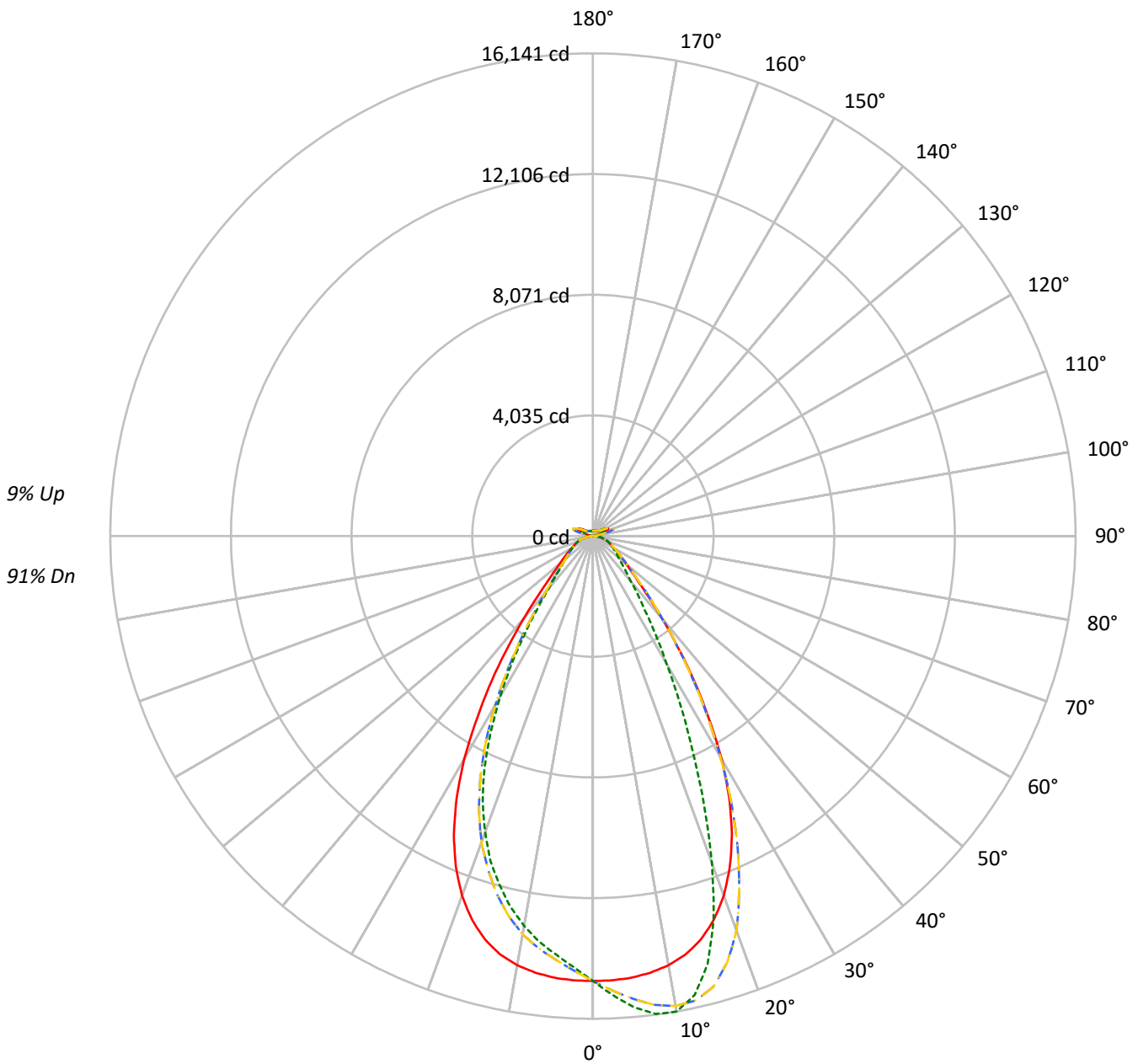
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18305.1 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): 106.6  
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: P1433453  
CATALOG NUMBER: EHBR1-18-UNV-TASM-L935-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				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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	94	94	94	91
1	110	106	103	100	106	103	100	98	97	95	93	92	90	89	87	86	84	84	84	84	82
2	103	97	92	87	99	94	90	86	89	86	82	85	82	79	81	78	76	76	76	76	74
3	96	88	82	78	93	86	81	76	82	78	74	78	75	72	75	72	69	69	69	69	67
4	90	81	75	70	88	79	73	69	76	71	67	73	69	65	70	66	63	63	63	63	61
5	85	75	68	63	82	73	67	62	71	65	61	68	63	60	65	61	58	58	58	58	56
6	80	70	63	58	78	68	62	57	66	60	56	63	59	55	61	57	54	54	54	54	52
7	75	65	58	53	73	64	57	53	61	56	52	59	54	51	57	53	50	50	50	50	48
8	71	60	54	49	69	59	53	49	58	52	48	56	51	47	54	50	46	46	46	46	45
9	67	57	50	46	66	56	50	45	54	49	45	53	48	44	51	47	43	43	43	43	42
10	64	53	47	43	62	52	46	42	51	46	42	50	45	41	48	44	41	41	41	41	39

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

	0°	90°	180°	270°
0°	69856	69856	69856	69856
5°	69431	74070	69431	65828
10°	68578	75972	68578	62301
15°	66553	70601	66553	57549
20°	62243	56613	62243	51260
25°	55091	39225	55091	42958
30°	44732	25518	44732	32141
35°	32083	16526	32083	21397
40°	20742	11391	20742	13494
45°	13161	8823	13161	9615
50°	9774	7498	9774	8008
55°	7980	6830	7980	7070
60°	6910	6507	6910	6546
65°	6299	6274	6299	6248
70°	5971	6147	5971	6069
75°	5583	5948	5583	5769
80°	4904	5615	4904	5250
85°	3171	4009	3171	3823

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 18504 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1414.4	7.7
10°-20°	3848.0	21.0
20°-30°	4513.0	24.7
30°-40°	3138.5	17.1
40°-50°	1559.7	8.5
50°-60°	932.9	5.1
60°-70°	656.6	3.6
70°-80°	423.0	2.3
80°-90°	137.3	0.8
90°-100°	44.8	0.2
100°-110°	292.4	1.6
110°-120°	540.2	3.0
120°-130°	321.1	1.8
130°-140°	194.2	1.1
140°-150°	134.4	0.7
150°-160°	87.7	0.5
160°-170°	50.4	0.3
170°-180°	16.8	0.1
0°-30°	9775.4	53.4
0°-40°	12913.9	70.5
0°-60°	15406.4	84.2
0°-90°	16623.2	90.8
90°-120°	877.4	4.8
90°-150°	1527.0	8.3
90°-180°	1682.0	9.2
0°-180°	18305.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	14875	14875	14875	14875	14875	
5°	14825	15815	14825	14055	14825	1407
15°	13962	14812	13962	12074	13962	3902
25°	11002	7833	11002	8579	11002	4981
35°	5888	3033	5888	3927	5888	3676
45°	2129	1428	2129	1556	2129	1742
55°	1078	923	1078	955	1078	986
65°	658	655	658	652	658	660
75°	393	419	393	406	393	413
85°	109	138	109	131	109	121
90°	12	14	12	12	12	11
95°	24	23	24	21	24	25
105°	134	68	134	102	134	181
115°	575	491	575	467	575	524
125°	368	386	368	337	368	339
135°	233	269	233	246	233	185
145°	210	220	210	205	210	132
155°	187	195	187	182	187	88
165°	177	182	177	173	177	50
175°	176	179	176	173	176	17
180°	176	176	176	176	176	



TEST NUMBER: P1433453  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L935-UPL18

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4
2.5°	14866.7	15058.9	15214.6	15317.2	15368.0	15317.2	15214.6	15058.9	14866.7	14675.7	14544.3
5°	14824.7	15209.6	15535.7	15749.0	15815.1	15749.0	15535.7	15209.6	14824.7	14460.9	14219.6
7.5°	14724.0	15323.7	15808.2	16057.3	16118.1	16057.3	15808.2	15323.7	14724.0	14209.0	13904.2
10°	14570.3	15395.6	15955.5	16133.9	16141.2	16133.9	15955.5	15395.6	14570.3	13876.5	13517.0
12.5°	14325.1	15370.0	15906.1	15847.5	15714.4	15847.5	15906.1	15370.0	14325.1	13470.4	13016.9
15°	13962.5	15217.9	15593.4	15116.7	14811.8	15116.7	15593.4	15217.9	13962.5	12922.0	12396.0
17.5°	13451.5	14933.4	14940.7	13997.6	13422.4	13997.6	14940.7	14933.4	13451.5	12251.4	11672.1
20°	12792.8	14477.1	14042.0	12317.0	11635.6	12317.0	14042.0	14477.1	12792.8	11458.7	10890.3
22.5°	11967.2	13861.8	12790.3	10626.4	9696.6	10626.4	12790.3	13861.8	11967.2	10536.8	9945.2
25°	11001.6	13107.8	11444.0	8784.2	7833.1	8784.2	11444.0	13107.8	11001.6	9438.3	8903.3
27.5°	9865.7	12152.2	10010.2	7178.1	6300.6	7178.1	10010.2	12152.2	9865.7	8304.2	7757.8
30°	8604.1	10927.1	8518.1	5716.5	4908.4	5716.5	8518.1	10927.1	8604.1	7030.0	6540.8
32.5°	7191.5	9726.3	7085.2	4580.4	3896.0	4580.4	7085.2	9726.3	7191.5	5814.1	5302.8
35°	5888.3	8223.9	5793.3	3599.1	3033.1	3599.1	5793.3	8223.9	5888.3	4666.3	4164.2
37.5°	4621.1	6804.4	4618.1	2898.2	2460.2	2898.2	4618.1	6804.4	4621.1	3627.9	3220.3
40°	3595.2	5320.4	3618.3	2313.5	1974.3	2313.5	3618.3	5320.4	3595.2	2760.3	2499.6
42.5°	2724.1	4068.2	2844.1	1898.8	1677.0	1898.8	2844.1	4068.2	2724.1	2174.8	1979.6
45°	2129.4	2993.8	2220.9	1601.9	1427.6	1601.9	2220.9	2993.8	2129.4	1751.5	1620.3
47.5°	1734.2	2313.8	1800.0	1374.0	1251.8	1374.0	1800.0	2313.8	1734.2	1481.4	1383.2
50°	1456.6	1775.4	1494.5	1199.4	1117.4	1199.4	1494.5	1775.4	1456.6	1268.6	1203.1
52.5°	1251.3	1448.0	1272.8	1068.9	1013.6	1068.9	1272.8	1448.0	1251.3	1109.9	1069.2
55°	1078.4	1217.3	1106.8	961.3	923.0	961.3	1106.8	1217.3	1078.4	987.7	957.6
57.5°	947.0	1032.6	961.3	869.4	844.1	869.4	961.3	1032.6	947.0	879.0	862.7
60°	830.7	894.3	848.2	789.4	782.2	789.4	848.2	894.3	830.7	790.8	780.2
62.5°	741.1	781.3	750.1	717.5	711.0	717.5	750.1	781.3	741.1	710.5	712.4
65°	657.5	694.8	670.3	652.7	654.9	652.7	670.3	694.8	657.5	643.2	646.3
67.5°	592.7	612.2	601.6	591.7	594.1	591.7	601.6	612.2	592.7	578.8	583.5
70°	523.9	544.8	533.9	535.3	539.4	535.3	533.9	544.8	523.9	519.7	523.3
72.5°	458.0	474.2	470.6	473.9	478.4	473.9	470.6	474.2	458.0	457.4	457.7
75°	393.3	405.6	407.2	412.0	419.0	412.0	407.2	405.6	393.3	389.1	394.2
77.5°	322.7	336.7	342.0	348.4	358.7	348.4	342.0	336.7	322.7	325.6	328.0
80°	258.0	264.5	276.2	280.9	295.4	280.9	276.2	264.5	258.0	253.3	256.9
82.5°	188.9	194.7	204.7	213.6	222.1	213.6	204.7	194.7	188.9	186.6	186.9
85°	109.0	118.0	124.7	135.3	137.8	135.3	124.7	118.0	109.0	111.6	109.0
87.5°	38.2	41.0	46.9	51.0	51.3	51.0	46.9	41.0	38.2	39.1	35.4
90°	12.3	20.9	36.1	20.2	14.3	20.2	36.1	20.9	12.3	21.7	33.7
92.5°	16.0	28.4	50.9	26.7	18.9	26.7	50.9	28.4	16.0	28.1	54.1
95°	23.7	34.9	64.9	29.5	22.7	29.5	64.9	34.9	23.7	37.4	75.5
97.5°	36.8	43.2	73.2	31.4	27.4	31.4	73.2	43.2	36.8	45.8	86.6
100°	48.9	48.9	133.7	36.0	31.1	36.0	133.7	48.9	48.9	56.3	135.0
102.5°	74.0	95.5	309.5	71.7	37.5	71.7	309.5	95.5	74.0	105.5	286.4
105°	134.3	218.2	544.5	184.1	68.5	184.1	544.5	218.2	134.3	220.7	510.3
107.5°	254.1	406.8	701.5	362.4	158.6	362.4	701.5	406.8	254.1	390.7	673.0
110°	406.5	568.4	765.6	496.2	320.2	496.2	765.6	568.4	406.5	536.5	705.6



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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°	529.1	633.4	747.9	550.1	442.8	550.1	747.9	633.4	529.1	592.3	675.9
115°	574.9	624.1	668.1	548.2	491.1	548.2	668.1	624.1	574.9	578.3	603.4
117.5°	555.4	571.2	577.1	514.8	493.9	514.8	577.1	571.2	555.4	520.1	512.3
120°	501.5	495.0	486.2	465.5	466.0	465.5	486.2	495.0	501.5	454.2	427.9
122.5°	434.0	420.0	411.0	415.6	428.0	415.6	411.0	420.0	434.0	386.5	366.8
125°	368.0	354.1	358.4	372.9	385.6	372.9	358.4	354.1	368.0	328.4	323.4
127.5°	312.5	306.1	320.2	336.7	347.4	336.7	320.2	306.1	312.5	287.5	292.7
130°	272.9	274.4	293.3	307.2	314.0	307.2	293.3	274.4	272.9	260.8	273.5
132.5°	248.2	255.2	273.3	285.2	289.2	285.2	273.3	255.2	248.2	244.7	260.2
135°	232.7	243.2	259.6	267.3	268.7	267.3	259.6	243.2	232.7	233.8	248.2
137.5°	223.6	234.2	246.6	252.7	251.1	252.7	246.6	234.2	223.6	226.7	237.5
140°	218.3	228.9	234.5	241.5	240.3	241.5	234.5	228.9	218.3	220.1	228.6
142.5°	213.0	222.7	225.5	230.7	229.1	230.7	225.5	222.7	213.0	214.9	220.4
145°	210.5	217.7	215.5	222.3	220.1	222.3	215.5	217.7	210.5	211.2	214.3
147.5°	205.8	211.2	208.4	214.3	212.0	214.3	208.4	211.2	205.8	205.8	207.1
150°	200.6	204.3	200.3	207.1	206.6	207.1	200.3	204.3	200.6	199.7	200.8
152.5°	193.4	197.1	193.4	201.1	200.5	201.1	193.4	197.1	193.4	192.5	193.7
155°	187.4	189.3	187.4	195.1	195.4	195.1	187.4	189.3	187.4	187.2	187.7
157.5°	183.4	184.5	183.6	190.5	190.8	190.5	183.6	184.5	183.4	183.4	183.6
160°	179.9	181.7	181.1	186.9	187.2	186.9	181.1	181.7	179.9	180.5	180.8
162.5°	178.5	178.5	178.2	184.0	184.5	184.0	178.2	178.5	178.5	178.5	179.5
165°	176.6	177.6	176.2	180.5	182.0	180.5	176.2	177.6	176.6	177.3	177.3
167.5°	176.2	175.3	175.8	179.5	181.0	179.5	175.8	175.3	176.2	176.8	176.8
170°	174.6	174.9	174.6	178.2	179.6	178.2	174.6	174.9	174.6	175.6	176.2
172.5°	175.6	175.6	174.5	177.2	179.5	177.2	174.5	175.6	175.6	176.1	177.0
175°	176.1	175.4	175.0	176.7	179.2	176.7	175.0	175.4	176.1	175.8	175.8
177.5°	175.1	175.6	176.2	178.0	181.3	178.0	176.2	175.6	175.1	175.8	175.8
180°	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6



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CATALOG NUMBER: EHBR1-18-UNV-TASM-L935-UPL18

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	14875.4	14875.4	14875.4	14875.4	14875.4	14875.4
2.5°	14443.4	14433.8	14443.4	14544.3	14675.7	14866.7
5°	14107.8	14055.4	14107.8	14219.6	14460.9	14824.7
7.5°	13716.9	13686.6	13716.9	13904.2	14209.0	14724.0
10°	13305.6	13236.7	13305.6	13517.0	13876.5	14570.3
12.5°	12798.5	12707.2	12798.5	13016.9	13470.4	14325.1
15°	12153.5	12073.5	12153.5	12396.0	12922.0	13962.5
17.5°	11461.5	11388.9	11461.5	11672.1	12251.4	13451.5
20°	10592.4	10535.5	10592.4	10890.3	11458.7	12792.8
22.5°	9680.5	9627.2	9680.5	9945.2	10536.8	11967.2
25°	8607.7	8578.7	8607.7	8903.3	9438.3	11001.6
27.5°	7448.4	7399.1	7448.4	7757.8	8304.2	9865.7
30°	6264.1	6182.3	6264.1	6540.8	7030.0	8604.1
32.5°	5105.6	5046.8	5105.6	5302.8	5814.1	7191.5
35°	3986.0	3927.1	3986.0	4164.2	4666.3	5888.3
37.5°	3106.0	3001.9	3106.0	3220.3	3627.9	4621.1
40°	2355.6	2338.9	2355.6	2499.6	2760.3	3595.2
42.5°	1917.7	1872.2	1917.7	1979.6	2174.8	2724.1
45°	1573.5	1555.6	1573.5	1620.3	1751.5	2129.4
47.5°	1353.2	1360.9	1353.2	1383.2	1481.4	1734.2
50°	1188.8	1193.5	1188.8	1203.1	1268.6	1456.6
52.5°	1067.7	1063.6	1067.7	1069.2	1109.9	1251.3
55°	960.6	955.4	960.6	957.6	987.7	1078.4
57.5°	866.9	870.8	866.9	862.7	879.0	947.0
60°	783.3	786.9	783.3	780.2	790.8	830.7
62.5°	712.6	714.9	712.6	712.4	710.5	741.1
65°	649.7	652.2	649.7	646.3	643.2	657.5
67.5°	589.4	589.4	589.4	583.5	578.8	592.7
70°	532.7	532.5	532.7	523.3	519.7	523.9
72.5°	464.7	471.4	464.7	457.7	457.4	458.0
75°	398.6	406.4	398.6	394.2	389.1	393.3
77.5°	331.6	343.7	331.6	328.0	325.6	322.7
80°	263.0	276.2	263.0	256.9	253.3	258.0
82.5°	194.4	204.2	194.4	186.9	186.6	188.9
85°	115.7	131.4	115.7	109.0	111.6	109.0
87.5°	37.1	47.4	37.1	35.4	39.1	38.2
90°	19.8	12.3	19.8	33.7	21.7	12.3
92.5°	30.0	17.9	30.0	54.1	28.1	16.0
95°	34.6	20.7	34.6	75.5	37.4	23.7
97.5°	38.3	26.6	38.3	86.6	45.8	36.8
100°	44.9	34.9	44.9	135.0	56.3	48.9
102.5°	95.0	59.1	95.0	286.4	105.5	74.0
105°	200.0	101.8	200.0	510.3	220.7	134.3
107.5°	357.9	176.1	357.9	673.0	390.7	254.1
110°	474.9	328.5	474.9	705.6	536.5	406.5



TEST NUMBER: P1433453

CATALOG NUMBER: EHBR1-18-UNV-TASM-L935-UPL18

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	510.3	443.6	510.3	675.9	592.3	529.1
115°	490.8	466.9	490.8	603.4	578.3	574.9
117.5°	448.0	451.1	448.0	512.3	520.1	555.4
120°	398.8	417.6	398.8	427.9	454.2	501.5
122.5°	353.6	375.9	353.6	366.8	386.5	434.0
125°	314.5	337.1	314.5	323.4	328.4	368.0
127.5°	287.6	302.7	287.6	292.7	287.5	312.5
130°	266.5	279.5	266.5	273.5	260.8	272.9
132.5°	251.9	260.3	251.9	260.2	244.7	248.2
135°	239.2	246.3	239.2	248.2	233.8	232.7
137.5°	228.3	234.6	228.3	237.5	226.7	223.6
140°	218.7	224.0	218.7	228.6	220.1	218.3
142.5°	208.7	212.4	208.7	220.4	214.9	213.0
145°	201.8	204.6	201.8	214.3	211.2	210.5
147.5°	195.9	197.8	195.9	207.1	205.8	205.8
150°	190.0	191.8	190.0	200.8	199.7	200.6
152.5°	183.7	185.9	183.7	193.7	192.5	193.4
155°	179.6	181.7	179.6	187.7	187.2	187.4
157.5°	177.5	178.9	177.5	183.6	183.4	183.4
160°	175.5	176.7	175.5	180.8	180.5	179.9
162.5°	173.3	174.5	173.3	179.5	178.5	178.5
165°	172.8	173.1	172.8	177.3	177.3	176.6
167.5°	172.2	173.1	172.2	176.8	176.8	176.2
170°	172.5	172.7	172.5	176.2	175.6	174.6
172.5°	173.0	173.3	173.0	177.0	176.1	175.6
175°	172.7	173.0	172.7	175.8	175.8	176.1
177.5°	173.9	174.2	173.9	175.8	175.8	175.1
180°	175.6	175.6	175.6	175.6	175.6	175.6



TEST NUMBER: P1433453  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L935-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	15.19	16.26	15.72	16.76	17.31	14.51	15.58	15.04	16.08	16.63
	3H	16.74	17.69	17.28	18.21	18.79	16.36	17.31	16.90	17.83	18.41
	4H	17.37	18.26	17.93	18.79	19.40	17.14	18.03	17.70	18.56	19.16
	6H	17.85	18.67	18.43	19.22	19.83	17.78	18.60	18.35	19.14	19.76
	8H	18.00	18.78	18.59	19.34	19.96	18.00	18.78	18.59	19.34	19.96
	12H	18.08	18.81	18.66	19.37	20.02	18.13	18.87	18.71	19.42	20.07
4H	2H	15.60	16.50	16.17	17.03	17.63	15.08	15.97	15.64	16.50	17.11
	3H	17.40	18.14	17.97	18.71	19.33	17.14	17.87	17.71	18.45	19.07
	4H	18.17	18.84	18.76	19.42	20.08	18.05	18.71	18.64	19.29	19.95
	6H	18.79	19.36	19.40	19.97	20.64	18.82	19.39	19.43	20.00	20.67
	8H	18.98	19.52	19.60	20.12	20.80	19.09	19.62	19.71	20.23	20.91
	12H	19.09	19.56	19.72	20.20	20.88	19.25	19.72	19.89	20.36	21.04
8H	4H	18.42	18.96	19.04	19.56	20.24	18.32	18.86	18.94	19.46	20.14
	6H	19.16	19.60	19.81	20.25	20.94	19.23	19.66	19.88	20.31	21.00
	8H	19.43	19.82	20.10	20.48	21.18	19.58	19.97	20.25	20.63	21.33
	12H	19.61	19.94	20.27	20.59	21.36	19.83	20.17	20.49	20.81	21.58
12H	4H	18.43	18.90	19.07	19.54	20.22	18.33	18.80	18.97	19.44	20.12
	6H	19.21	19.59	19.87	20.26	20.96	19.27	19.66	19.94	20.32	21.02
	8H	19.52	19.86	20.18	20.51	21.28	19.68	20.01	20.34	20.66	21.43

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-6

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L935-N

Data in this report applies to families of products including EHBR-60-L935-N

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2506-472-6  
 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-L935-N**  
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with N lens

**Spectral Parameters**

CCT (K): 3406  
 CIE u': 0.2394  
 CIE v': 0.5094  
 Duv: -0.0028  
 CIE x: 0.4076  
 CIE y: 0.3856  
 CIE z: 0.2068  
 Peak Wavelength (nm): 630  
 Dominant Wavelength (nm): 582  
 Purity: 38.0517  
 Rf: 91.3  
 Rg: 100

CRI (Ra):	94.6		
R1:	96.6	R9:	63.8
R2:	98.4	R10:	94.7
R3:	98.1	R11:	96.6
R4:	95.8	R12:	80.9
R5:	96.2	R13:	97.4
R6:	95.4	R14:	98.3
R7:	91.8	R15:	93.1
R8:	84.4		



**Test Conditions**

Stabilization Time: 35M  
 Operation Time: 1H 35M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-6

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: SP1-2506-472-6

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: SP1-2506-472-6

**Photopic Flux vs. Wavelength**

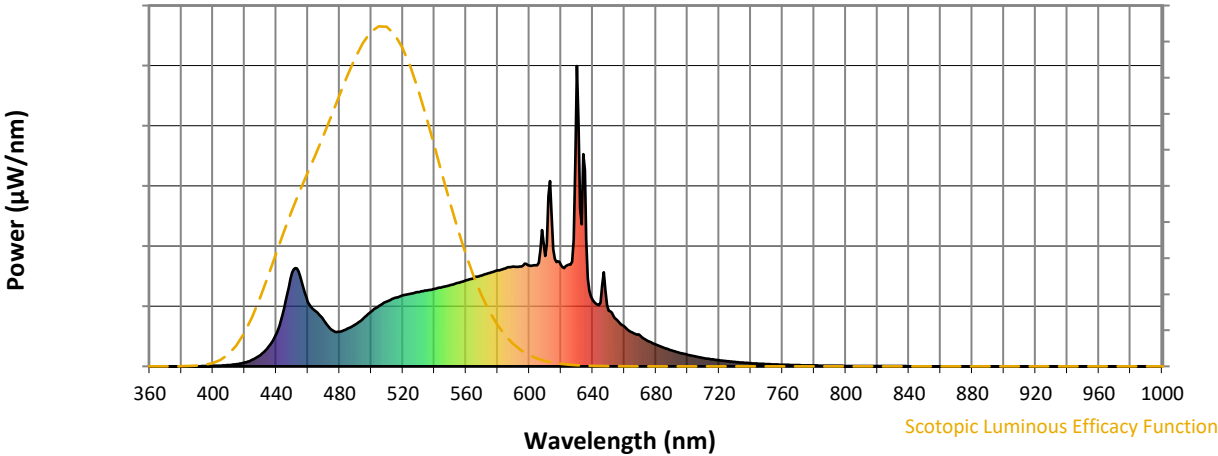


**Photopic Lumens: NR**

$\lambda$ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens $(\phi/\text{nm})$	$\lambda$ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens $(\phi/\text{nm})$	$\lambda$ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens $(\phi/\text{nm})$	$\lambda$ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens $(\phi/\text{nm})$	$\lambda$ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens $(\phi/\text{nm})$
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-6

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.62**

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-6

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 3.3**

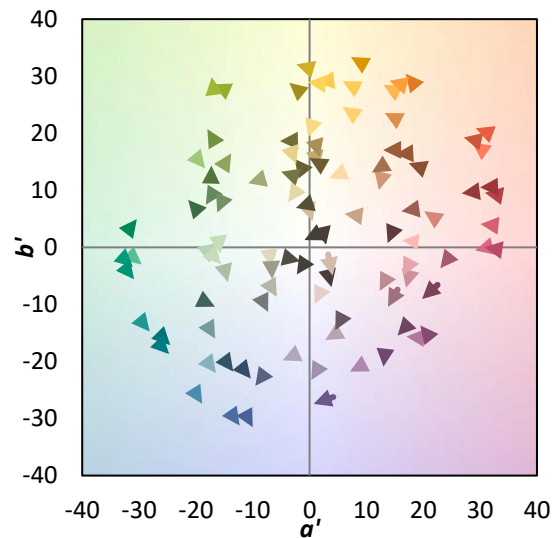
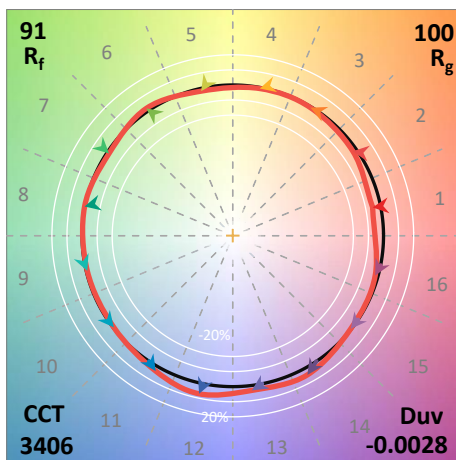
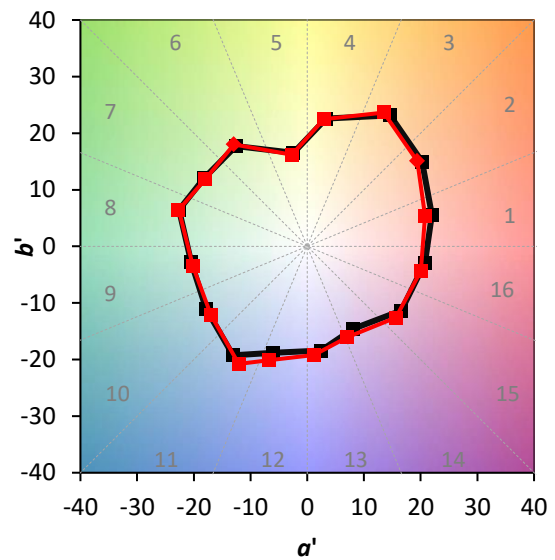
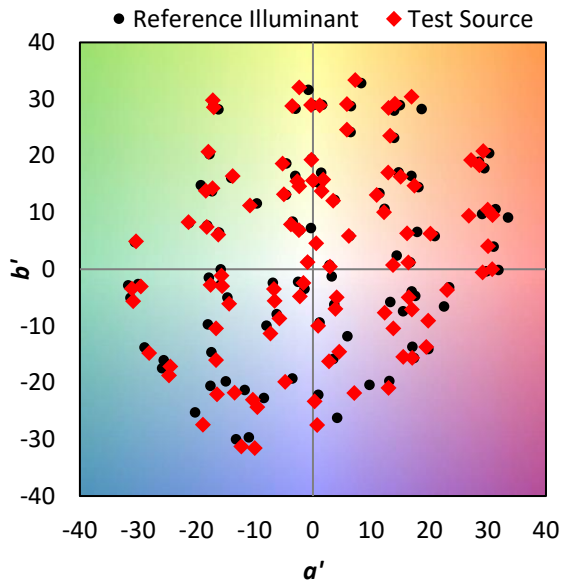
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

**Summary**

$R_f = 91.3$   
 $R_g = 100$   
 $CIE R_a = 94.6$   
 $R_9 = 63.8$



**Color Vector Graphics**

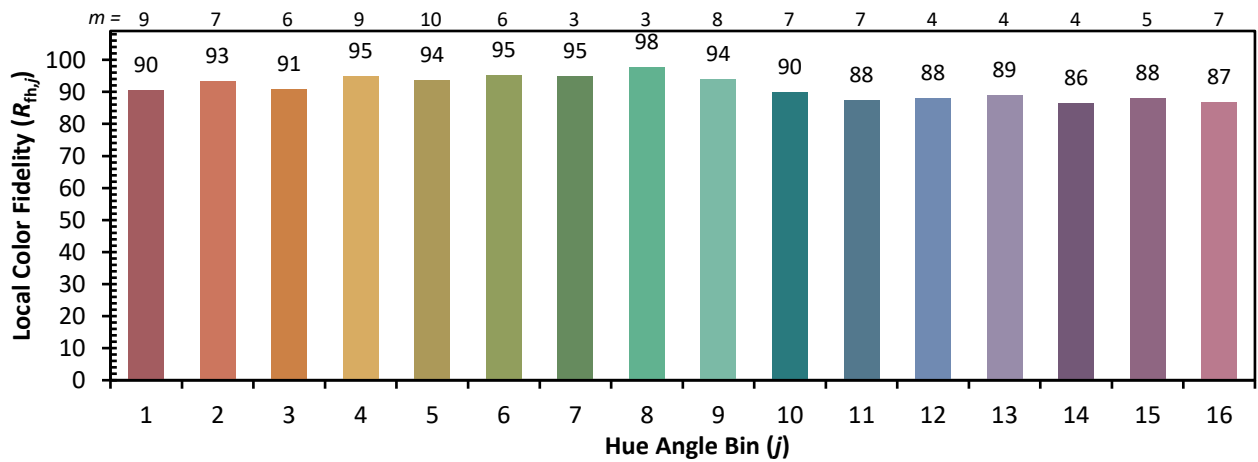
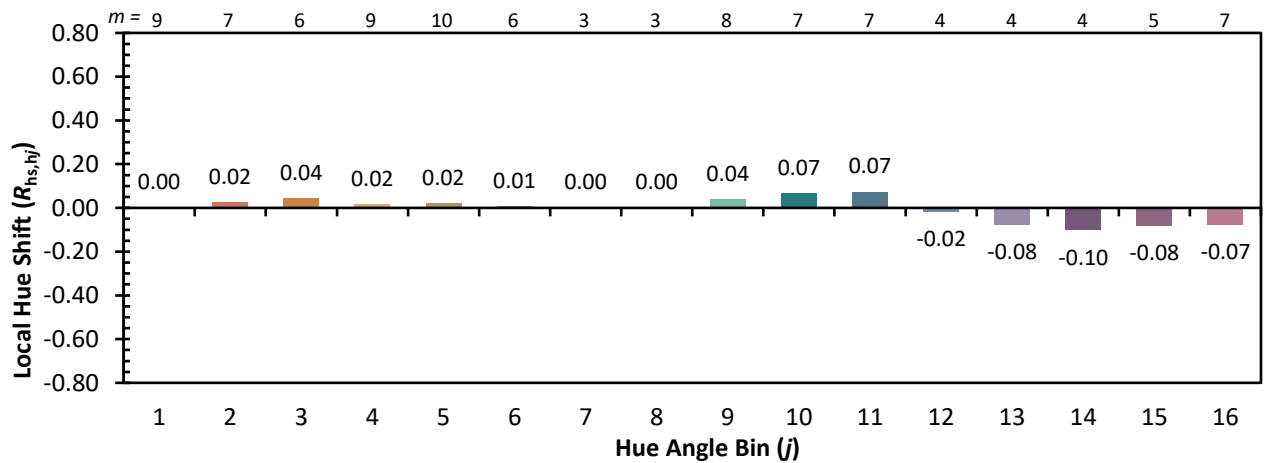
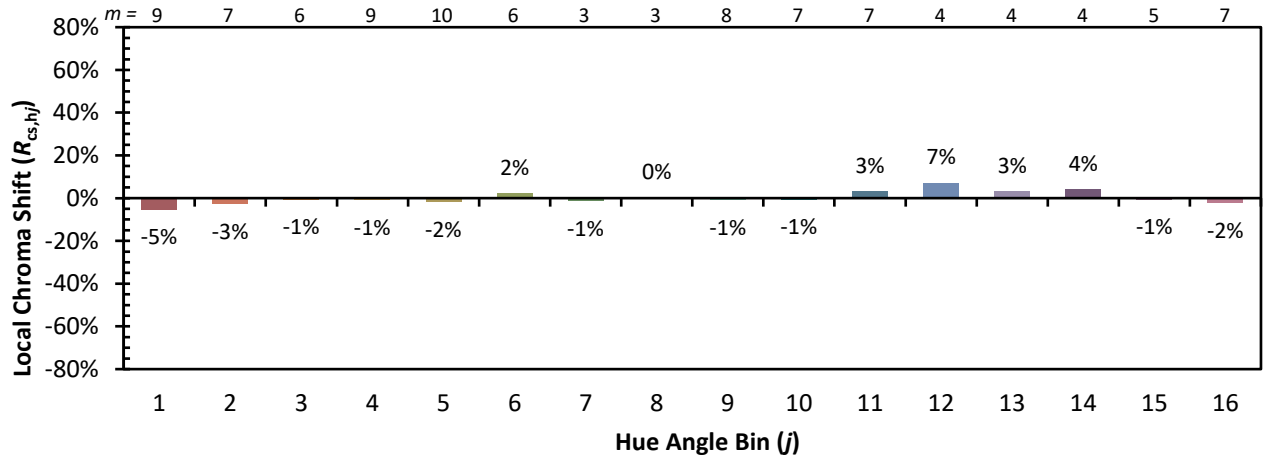


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

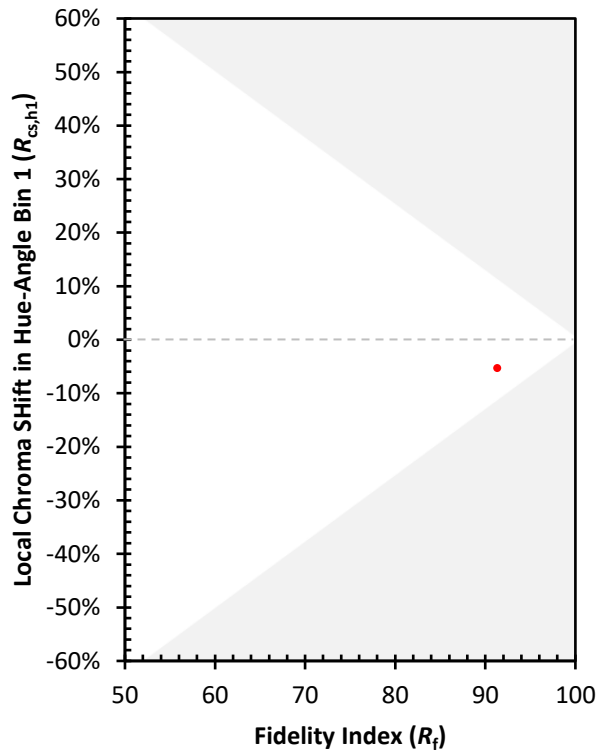
CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
CES11 = 58	CES36 = 81	CES61 = 93	CES86 = 79
CES12 = 64	CES37 = 96	CES62 = 86	CES87 = 92
CES13 = 44	CES38 = 87	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 84
CES15 = 72	CES40 = 97	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 75
CES17 = 49	CES42 = 94	CES67 = 88	CES92 = 76
CES18 = 56	CES43 = 93	CES68 = 89	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 90	CES94 = 74
CES20 = 67	CES45 = 97	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 91	CES72 = 94	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 90	CES99 = 92
CES25 = 71	CES50 = 98	CES75 = 85	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)