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: P1433485

Luminaire Tested: EHBR1-24-UNV-TASM-L935-UPL18

Issue Date: 3/20/2026

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1433485
	REPORT IS A COMBINATION OF REPORTS P1431710 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-TASM-L935-UPL18
Description:	Elevate Round Highbay at, 24000 lumens, 3500K 90CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24126.4 lumens
Efficiency:	N/A
Efficacy:	172.1 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):	140.2
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

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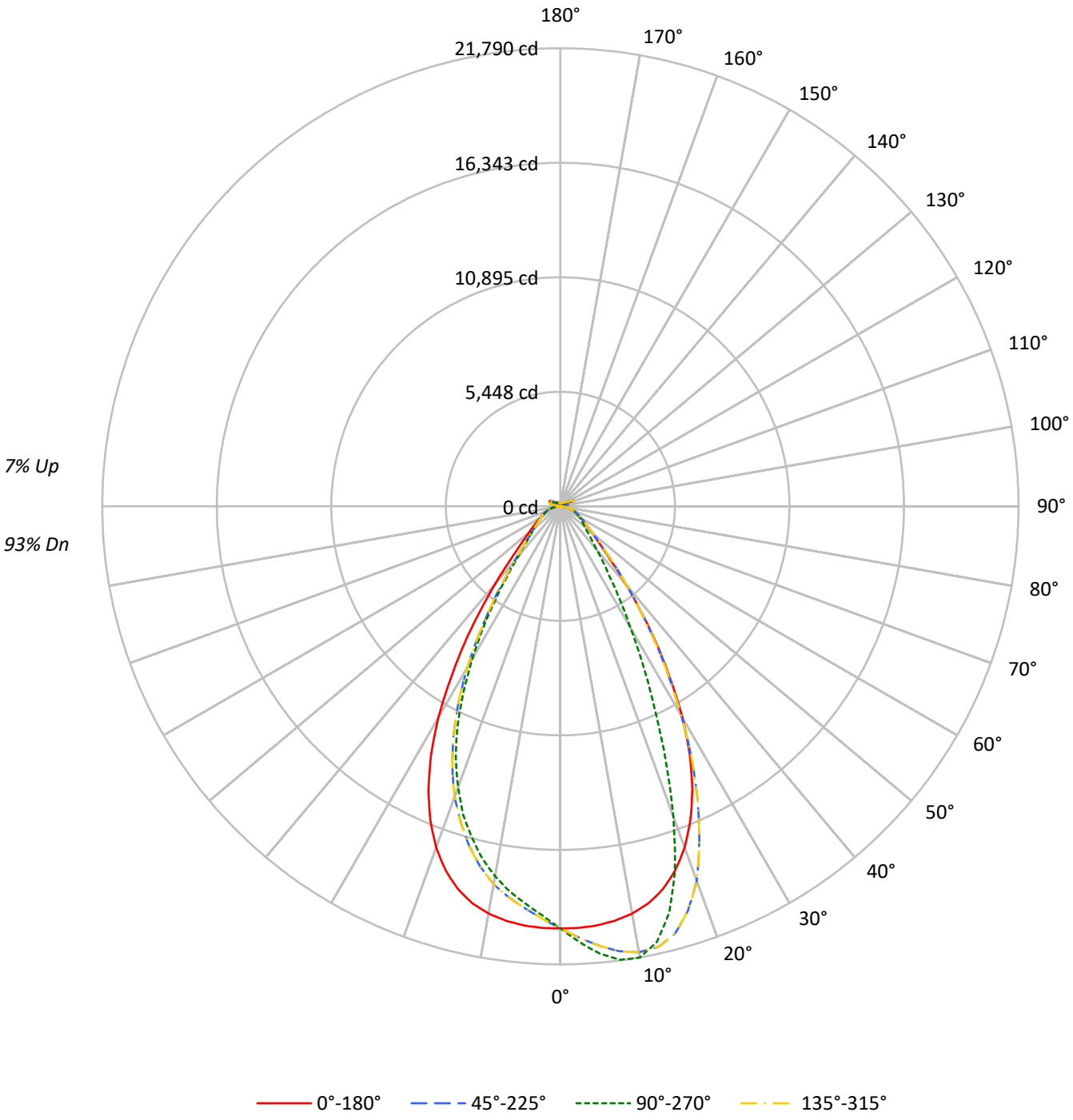
Luminous Intensity Polar Plot



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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	0
RCR																		
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	110	107	104	101	107	104	101	99	98	96	94	93	92	90	89	88	86	84
2	103	97	92	88	100	95	90	86	90	87	84	86	83	81	82	80	78	76
3	97	89	83	78	94	87	81	77	83	79	75	80	76	73	77	74	71	69
4	91	82	75	70	88	80	74	69	77	72	68	74	70	66	71	68	65	63
5	85	76	69	64	83	74	68	63	72	66	62	69	64	61	67	63	60	58
6	80	70	63	58	78	69	63	58	67	61	57	65	60	56	63	58	55	53
7	76	65	59	54	74	64	58	53	62	57	53	60	55	52	59	54	51	49
8	72	61	54	50	70	60	54	49	58	53	49	57	52	48	55	51	47	46
9	68	57	51	46	66	56	50	46	55	49	45	54	48	45	52	48	44	43
10	65	54	47	43	63	53	47	43	52	46	42	51	46	42	49	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	94305	94305	94305	94305
5°	93731	99994	93731	88867
10°	92579	102561	92579	84105
15°	89845	95311	89845	77691
20°	84028	76427	84028	69200
25°	74371	52953	74371	57993
30°	60387	34450	60387	43390
35°	43311	22310	43311	28886
40°	28002	15377	28002	18217
45°	17767	11911	17767	12980
50°	13194	10122	13194	10812
55°	10772	9220	10772	9543
60°	9328	8783	9328	8837
65°	8504	8470	8504	8435
70°	8060	8299	8060	8192
75°	7537	8028	7537	7789
80°	6621	7581	6621	7087
85°	4286	5412	4286	5162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 24980 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1909.5	7.9
10°-20°	5194.8	21.5
20°-30°	6092.4	25.3
30°-40°	4236.9	17.6
40°-50°	2105.5	8.7
50°-60°	1259.3	5.2
60°-70°	886.4	3.7
70°-80°	571.0	2.4
80°-90°	184.3	0.8
90°-100°	45.0	0.2
100°-110°	292.7	1.2
110°-120°	540.5	2.2
120°-130°	321.5	1.3
130°-140°	194.8	0.8
140°-150°	135.1	0.6
150°-160°	88.5	0.4
160°-170°	51.1	0.2
170°-180°	17.1	0.1
0°-30°	13196.7	54.7
0°-40°	17433.6	72.3
0°-60°	20798.5	86.2
0°-90°	22440.1	93.0
90°-120°	878.3	3.6
90°-150°	1529.6	6.3
90°-180°	1686.0	7.0
0°-180°	24126.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	20082	20082	20082	20082	20082	
5°	20013	21350	20013	18975	20013	1899
15°	18849	19996	18849	16299	18849	5268
25°	14852	10575	14852	11581	14852	6724
35°	7949	4095	7949	5302	7949	4962
45°	2875	1927	2875	2100	2875	2352
55°	1456	1246	1456	1290	1456	1331
65°	888	884	888	880	888	891
75°	531	566	531	549	531	557
85°	147	186	147	177	147	164
90°	12	15	12	12	12	13
95°	24	23	24	21	24	25
105°	134	69	134	102	134	181
115°	575	492	575	467	575	524
125°	368	386	368	337	368	339
135°	233	270	233	247	233	185
145°	212	221	212	206	212	133
155°	189	197	189	184	189	88
165°	179	185	179	176	179	51
175°	180	183	180	176	180	17
180°	179	179	179	179	179	

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TEST NUMBER: P1433485
CATALOG NUMBER: EHBR1-24-UNV-TASM-L935-UPL18

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	20081.6	20081.6	20081.6	20081.6	*20081.6*	20081.6	20081.6	20081.6	20081.6	20081.6	20081.6
2.5°	20070.0	20329.4	20539.5	20678.1	*20746.6*	20678.1	20539.5	20329.4	20070.0	19812.0	19634.6
5°	20013.1	20532.7	20972.9	21261.1	*21350.2*	21261.1	20972.9	20532.7	20013.1	19522.1	19196.3
7.5°	19877.2	20686.8	21340.8	21677.1	*21759.2*	21677.1	21340.8	20686.8	19877.2	19182.0	18770.5
10°	*19669.7*	*20784.0*	*21539.7*	*21780.7*	*21790.4*	*21780.7*	*21539.7*	*20784.0*	*19669.7*	*18733.2*	*18247.8*
12.5°	19338.6	20749.2	21473.0	21393.9	*21214.3*	21393.9	21473.0	20749.2	19338.6	18184.9	17572.7
15°	18849.1	20544.1	21050.9	20407.4	*19995.8*	20407.4	21050.9	20544.1	18849.1	17444.6	16734.4
17.5°	18159.3	20160.0	20169.7	18896.6	*18120.2*	18896.6	20169.7	20160.0	18159.3	16539.3	15757.2
20°	17270.2	19543.9	18956.4	16627.8	*15707.9*	16627.8	18956.4	19543.9	17270.2	15469.1	14701.7
22.5°	16155.6	18713.2	17266.9	14345.5	*13090.4*	14345.5	17266.9	18713.2	16155.6	14224.6	13425.9
25°	14851.9	17695.4	15449.2	11858.7	*10574.6*	11858.7	15449.2	17695.4	14851.9	12741.7	12019.5
27.5°	13318.6	16405.3	13513.7	9690.4	*8505.7*	9690.4	13513.7	16405.3	13318.6	11210.6	10472.9
30°	11615.4	14751.4	11499.4	7717.2	*6626.4*	7717.2	11499.4	14751.4	11615.4	9490.5	8830.0
32.5°	9708.5	13130.3	9565.0	6183.5	*5259.4*	6183.5	9565.0	13130.3	9708.5	7849.0	7158.8
35°	7949.2	11102.2	7820.8	4858.7	*4094.7*	4858.7	7820.8	11102.2	7949.2	6299.5	5621.7
37.5°	6238.5	9185.8	6234.4	3912.4	*3321.2*	3912.4	6234.4	9185.8	6238.5	4897.5	4347.4
40°	4853.5	7182.5	4884.8	3123.2	*2665.3*	3123.2	4884.8	7182.5	4853.5	3726.5	3374.4
42.5°	3677.5	5492.2	3839.4	2563.3	*2263.9*	2563.3	3839.4	5492.2	3677.5	2936.1	2672.5
45°	2874.7	4041.6	2998.1	2162.6	*1927.2*	2162.6	2998.1	4041.6	2874.7	2364.4	2187.4
47.5°	2341.1	3123.6	2430.0	1855.0	*1690.0*	1855.0	2430.0	3123.6	2341.1	1999.9	1867.4
50°	1966.4	2396.8	2017.6	1619.2	*1508.5*	1619.2	2017.6	2396.8	1966.4	1712.6	1624.1
52.5°	1689.2	1954.8	1718.2	1443.0	*1368.5*	1443.0	1718.2	1954.8	1689.2	1498.3	1443.3
55°	1455.7	1643.4	1494.2	1297.6	*1246.0*	1297.6	1494.2	1643.4	1455.7	1333.4	1292.7
57.5°	1278.5	1394.0	1297.6	1173.7	*1139.4*	1173.7	1297.6	1394.0	1278.5	1186.6	1164.7
60°	1121.4	1207.2	1145.1	1065.7	*1055.9*	1065.7	1145.1	1207.2	1121.4	1067.6	1053.2
62.5°	1000.5	1054.8	1012.6	968.5	*959.9*	968.5	1012.6	1054.8	1000.5	959.1	961.7
65°	887.6	938.1	904.9	881.1	*884.1*	881.1	904.9	938.1	887.6	868.4	872.5
67.5°	800.2	826.6	812.3	798.7	*802.1*	798.7	812.3	826.6	800.2	781.3	787.8
70°	707.2	735.4	720.7	722.6	*728.2*	722.6	720.7	735.4	707.2	701.5	706.4
72.5°	618.3	640.1	635.2	639.8	*645.8*	639.8	635.2	640.1	618.3	617.6	617.9
75°	530.9	547.5	549.8	556.2	*565.5*	556.2	549.8	547.5	530.9	525.3	532.1
77.5°	435.7	454.5	461.7	470.3	*484.3*	470.3	461.7	454.5	435.7	439.5	442.8
80°	348.3	357.0	372.8	379.2	*398.8*	379.2	372.8	357.0	348.3	342.0	346.9
82.5°	255.0	262.8	276.4	288.5	*299.7*	288.5	276.4	262.8	255.0	252.0	252.3
85°	147.3	159.2	168.3	182.6	*186.0*	182.6	168.3	159.2	147.3	150.6	147.3
87.5°	51.6	55.4	63.3	68.9	*69.2*	68.9	63.3	55.4	51.6	52.7	47.9
90°	12.4	21.1	36.3	20.8	*15.0*	20.8	36.3	21.1	12.4	21.8	33.8
92.5°	16.1	28.5	51.2	27.4	*19.7*	27.4	51.2	28.5	16.1	28.2	54.2
95°	23.9	35.1	65.2	30.1	*23.4*	30.1	65.2	35.1	23.9	37.5	75.6
97.5°	37.0	43.4	73.5	32.0	*28.1*	32.0	73.5	43.4	37.0	45.9	86.7
100°	49.0	49.0	134.0	36.6	*31.8*	36.6	134.0	49.0	49.0	56.5	135.0
102.5°	74.1	95.8	310.0	72.3	*38.2*	72.3	310.0	95.8	74.1	105.7	286.5
105°	134.5	218.4	545.0	184.7	*69.3*	184.7	545.0	218.4	134.5	220.9	510.4
107.5°	254.3	407.0	702.0	363.1	*159.4*	363.1	702.0	407.0	254.3	390.9	673.2
110°	406.7	568.6	766.0	496.9	*321.0*	496.9	766.0	568.6	406.7	536.7	705.8

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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°	529.3	633.7	748.4	550.7	*443.6*	550.7	748.4	633.7	529.3	592.5	676.0
115°	575.2	624.4	668.5	548.9	*492.0*	548.9	668.5	624.4	575.2	578.5	603.6
117.5°	555.7	571.4	577.5	515.4	*494.8*	515.4	577.5	571.4	555.7	520.3	512.5
120°	501.7	495.3	486.8	466.1	*466.9*	466.1	486.8	495.3	501.7	454.4	428.1
122.5°	434.4	420.4	411.6	416.4	*428.8*	416.4	411.6	420.4	434.4	387.0	367.1
125°	368.4	354.6	359.0	373.6	*386.5*	373.6	359.0	354.6	368.4	328.9	323.8
127.5°	313.0	306.6	320.8	337.4	*348.4*	337.4	320.8	306.6	313.0	288.0	293.2
130°	273.5	275.0	293.9	308.1	*314.9*	308.1	293.9	275.0	273.5	261.5	274.1
132.5°	248.8	255.9	273.9	286.2	*290.3*	286.2	273.9	255.9	248.8	245.4	260.8
135°	233.4	243.8	260.3	268.1	*269.8*	268.1	260.3	243.8	233.4	234.6	248.8
137.5°	224.4	234.8	247.3	253.7	*252.2*	253.7	247.3	234.8	224.4	227.7	238.4
140°	219.3	229.7	235.2	242.5	*241.4*	242.5	235.2	229.7	219.3	221.1	229.6
142.5°	214.1	223.5	226.3	231.7	*230.3*	231.7	226.3	223.5	214.1	216.0	221.5
145°	211.7	218.8	216.5	223.4	*221.3*	223.4	216.5	218.8	211.7	212.3	215.4
147.5°	207.0	212.3	209.5	215.4	*213.4*	215.4	209.5	212.3	207.0	207.0	208.4
150°	201.8	205.6	201.5	208.4	*208.1*	208.4	201.5	205.6	201.8	200.9	202.2
152.5°	194.8	198.5	194.8	202.6	*202.0*	202.6	194.8	198.5	194.8	193.9	195.1
155°	189.0	190.9	189.0	196.9	*197.2*	196.9	189.0	190.9	189.0	188.6	189.4
157.5°	185.2	186.4	185.5	192.4	*192.8*	192.4	185.5	186.4	185.2	185.2	185.5
160°	182.0	183.8	183.4	189.2	*189.6*	189.2	183.4	183.8	182.0	182.5	182.9
162.5°	180.9	180.9	180.7	186.6	*187.3*	186.6	180.7	180.9	180.9	180.9	181.8
165°	179.2	180.2	179.0	183.5	*185.2*	183.5	179.0	180.2	179.2	179.8	179.8
167.5°	179.0	178.1	178.9	182.8	*184.5*	182.8	178.9	178.1	179.0	179.5	179.5
170°	177.6	178.0	177.7	181.7	*183.4*	181.7	177.7	178.0	177.6	178.5	179.0
172.5°	178.7	178.7	178.0	181.0	*183.5*	181.0	178.0	178.7	178.7	179.3	180.2
175°	179.5	178.9	178.7	180.7	*183.4*	180.7	178.7	178.9	179.5	179.1	179.1
177.5°	178.5	179.3	180.0	182.2	*185.6*	182.2	180.0	179.3	178.5	179.1	179.1
180°	179.3	179.3	179.3	179.3	*179.3*	179.3	179.3	179.3	179.3	179.3	179.3

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	20081.6	20081.6	20081.6	20081.6	20081.6	20081.6
2.5°	19498.3	19485.6	19498.3	19634.6	19812.0	20070.0
5°	19045.3	18974.6	19045.3	19196.3	19522.1	20013.1
7.5°	18517.8	18476.7	18517.8	18770.5	19182.0	19877.2
10°	*17962.4*	*17869.3*	*17962.4*	*18247.8*	*18733.2*	*19669.7*
12.5°	17277.7	17154.7	17277.7	17572.7	18184.9	19338.6
15°	16407.1	16299.1	16407.1	16734.4	17444.6	18849.1
17.5°	15472.9	15375.0	15472.9	15757.2	16539.3	18159.3
20°	14299.5	14222.7	14299.5	14701.7	15469.1	17270.2
22.5°	13068.6	12996.6	13068.6	13425.9	14224.6	16155.6
25°	11620.3	11581.2	11620.3	12019.5	12741.7	14851.9
27.5°	10055.3	9988.7	10055.3	10472.9	11210.6	13318.6
30°	8456.4	8346.1	8456.4	8830.0	9490.5	11615.4
32.5°	6892.5	6813.2	6892.5	7158.8	7849.0	9708.5
35°	5381.1	5301.6	5381.1	5621.7	6299.5	7949.2
37.5°	4193.0	4052.6	4193.0	4347.4	4897.5	6238.5
40°	3180.0	3157.5	3180.0	3374.4	3726.5	4853.5
42.5°	2588.8	2527.5	2588.8	2672.5	2936.1	3677.5
45°	2124.2	2100.1	2124.2	2187.4	2364.4	2874.7
47.5°	1826.7	1837.2	1826.7	1867.4	1999.9	2341.1
50°	1604.9	1611.3	1604.9	1624.1	1712.6	1966.4
52.5°	1441.5	1435.8	1441.5	1443.3	1498.3	1689.2
55°	1296.9	1289.7	1296.9	1292.7	1333.4	1455.7
57.5°	1170.3	1175.6	1170.3	1164.7	1186.6	1278.5
60°	1057.4	1062.3	1057.4	1053.2	1067.6	1121.4
62.5°	962.1	965.2	962.1	961.7	959.1	1000.5
65°	877.1	880.4	877.1	872.5	868.4	887.6
67.5°	795.7	795.7	795.7	787.8	781.3	800.2
70°	719.3	718.8	719.3	706.4	701.5	707.2
72.5°	627.4	636.4	627.4	617.9	617.6	618.3
75°	538.1	548.7	538.1	532.1	525.3	530.9
77.5°	447.7	464.0	447.7	442.8	439.5	435.7
80°	355.1	372.8	355.1	346.9	342.0	348.3
82.5°	262.5	275.6	262.5	252.3	252.0	255.0
85°	156.3	177.4	156.3	147.3	150.6	147.3
87.5°	50.1	64.0	50.1	47.9	52.7	51.6
90°	19.8	12.4	19.8	33.8	21.8	12.4
92.5°	30.1	18.0	30.1	54.2	28.2	16.1
95°	34.7	20.8	34.7	75.6	37.5	23.9
97.5°	38.4	26.7	38.4	86.7	45.9	37.0
100°	45.0	35.1	45.0	135.0	56.5	49.0
102.5°	95.1	59.3	95.1	286.5	105.7	74.1
105°	200.1	102.0	200.1	510.4	220.9	134.5
107.5°	358.0	176.3	358.0	673.2	390.9	254.3
110°	475.0	328.6	475.0	705.8	536.7	406.7

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433485
CATALOG NUMBER: EHBR1-24-UNV-TASM-L935-UPL18

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	510.4	443.8	510.4	676.0	592.5	529.3
115°	490.9	467.0	490.9	603.6	578.5	575.2
117.5°	448.1	451.3	448.1	512.5	520.3	555.7
120°	398.9	417.8	398.9	428.1	454.4	501.7
122.5°	353.7	376.0	353.7	367.1	387.0	434.4
125°	314.7	337.3	314.7	323.8	328.9	368.4
127.5°	287.8	303.0	287.8	293.2	288.0	313.0
130°	266.7	279.8	266.7	274.1	261.5	273.5
132.5°	252.3	260.8	252.3	260.8	245.4	248.8
135°	239.7	246.8	239.7	248.8	234.6	233.4
137.5°	228.9	235.1	228.9	238.4	227.7	224.4
140°	219.4	224.7	219.4	229.6	221.1	219.3
142.5°	209.5	213.3	209.5	221.5	216.0	214.1
145°	202.9	205.7	202.9	215.4	212.3	211.7
147.5°	197.2	199.0	197.2	208.4	207.0	207.0
150°	191.4	193.2	191.4	202.2	200.9	201.8
152.5°	185.3	187.6	185.3	195.1	193.9	194.8
155°	181.4	183.6	181.4	189.4	188.6	189.0
157.5°	179.4	181.0	179.4	185.5	185.2	185.2
160°	177.7	179.1	177.7	182.9	182.5	182.0
162.5°	175.7	177.0	175.7	181.8	180.9	180.9
165°	175.5	175.8	175.5	179.8	179.8	179.2
167.5°	174.9	175.8	174.9	179.5	179.5	179.0
170°	175.3	175.7	175.3	179.0	178.5	177.6
172.5°	176.1	176.5	176.1	180.2	179.3	178.7
175°	175.9	176.3	175.9	179.1	179.1	179.5
177.5°	177.2	177.6	177.2	179.1	179.1	178.5
180°	179.3	179.3	179.3	179.3	179.3	179.3

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433485
CATALOG NUMBER: EHBR1-24-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	16.41	17.51	16.90	17.97	18.46	15.73	16.83	16.22	17.29	17.78
	3H	17.96	18.94	18.46	19.41	19.95	17.58	18.56	18.08	19.03	19.57
	4H	18.59	19.51	19.12	20.00	20.55	18.36	19.27	18.88	19.76	20.32
	6H	19.07	19.91	19.61	20.42	20.99	19.00	19.84	19.54	20.35	20.91
	8H	19.23	20.02	19.78	20.55	21.12	19.22	20.02	19.77	20.54	21.12
	12H	19.30	20.06	19.85	20.57	21.17	19.35	20.11	19.90	20.63	21.22
4H	2H	16.82	17.74	17.35	18.23	18.78	16.30	17.22	16.83	17.71	18.26
	3H	18.62	19.38	19.16	19.92	20.49	18.36	19.12	18.90	19.65	20.22
	4H	19.40	20.08	19.95	20.62	21.23	19.27	19.95	19.82	20.50	21.10
	6H	20.01	20.60	20.59	21.17	21.80	20.04	20.62	20.62	21.20	21.83
	8H	20.21	20.75	20.79	21.32	21.96	20.31	20.86	20.89	21.43	22.06
	12H	20.31	20.79	20.91	21.40	22.03	20.48	20.96	21.08	21.56	22.20
8H	4H	19.64	20.19	20.23	20.76	21.40	19.55	20.09	20.13	20.67	21.30
	6H	20.39	20.83	21.00	21.45	22.09	20.45	20.89	21.07	21.51	22.15
	8H	20.66	21.05	21.29	21.68	22.34	20.80	21.20	21.44	21.83	22.48
	12H	20.83	21.18	21.46	21.79	22.51	21.05	21.40	21.68	22.01	22.74
12H	4H	19.65	20.14	20.26	20.74	21.38	19.56	20.04	20.16	20.64	21.28
	6H	20.43	20.83	21.06	21.46	22.11	20.50	20.89	21.13	21.52	22.18
	8H	20.75	21.09	21.38	21.71	22.43	20.90	21.25	21.53	21.86	22.59

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-6

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

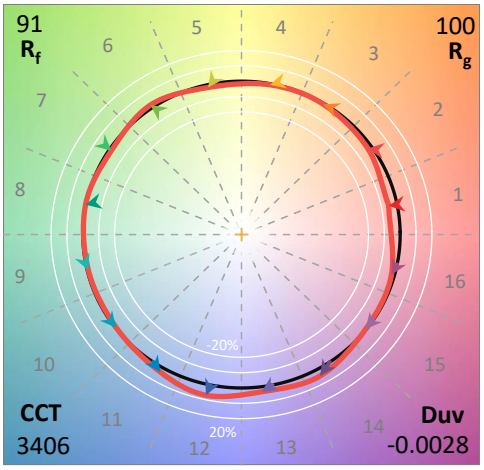
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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	CRI (Ra):	94.6		
CIE u':	0.2394	R1:	96.6	R9:	63.8
CIE v':	0.5094	R2:	98.4	R10:	94.7
Duv:	-0.0028	R3:	98.1	R11:	96.6
CIE x:	0.4076	R4:	95.8	R12:	80.9
CIE y:	0.3856	R5:	96.2	R13:	97.4
CIE z:	0.2068	R6:	95.4	R14:	98.3
Peak Wavelength (nm):	630	R7:	91.8	R15:	93.1
Dominant Wavelength (nm):	582	R8:	84.4		
Purity:	38.0517				
Rf:	91.3				
Rg:	100				



Test Conditions

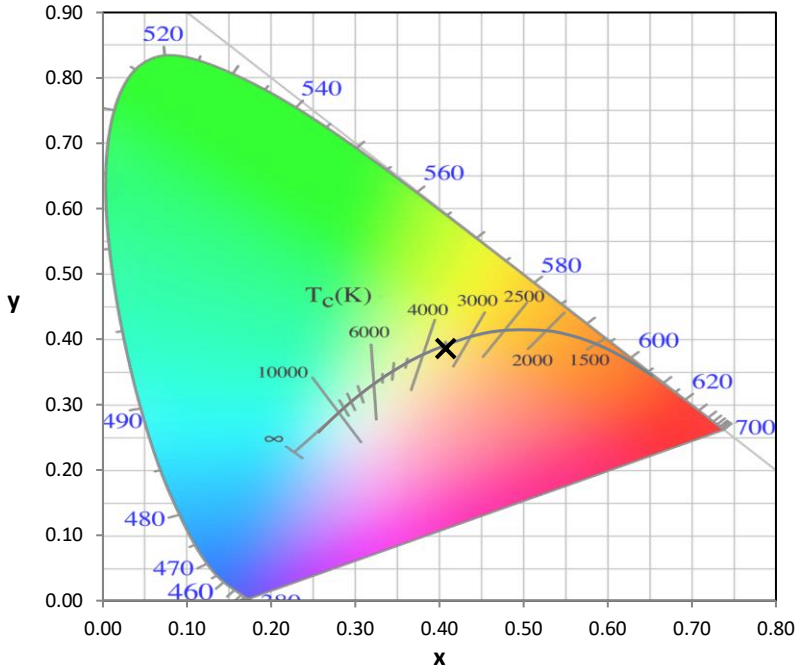
Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-6

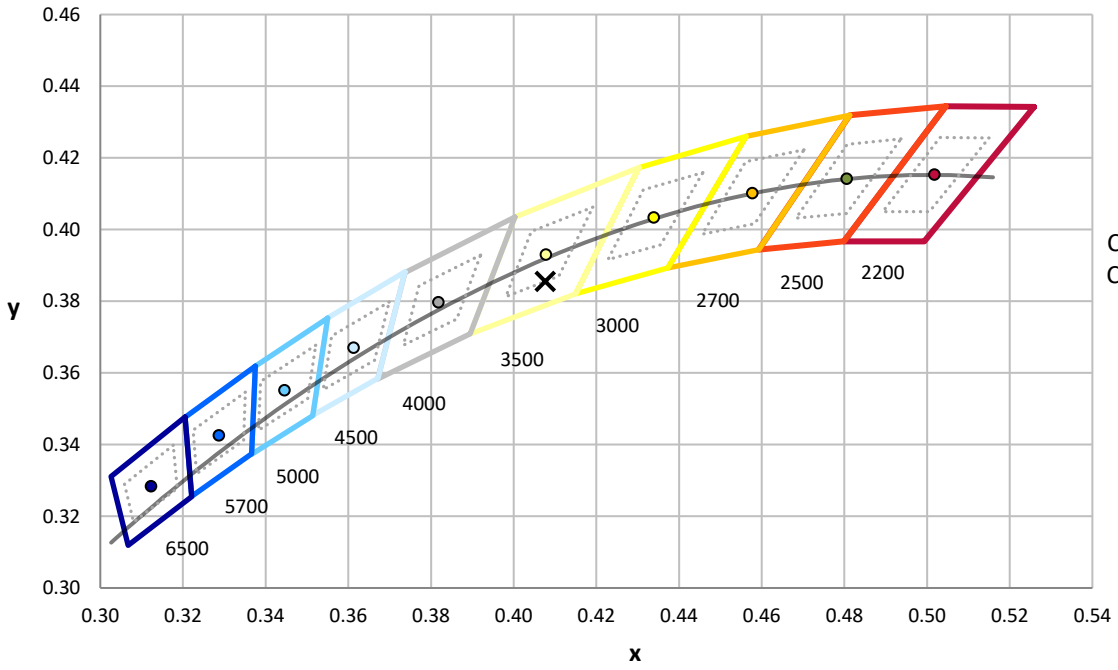
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

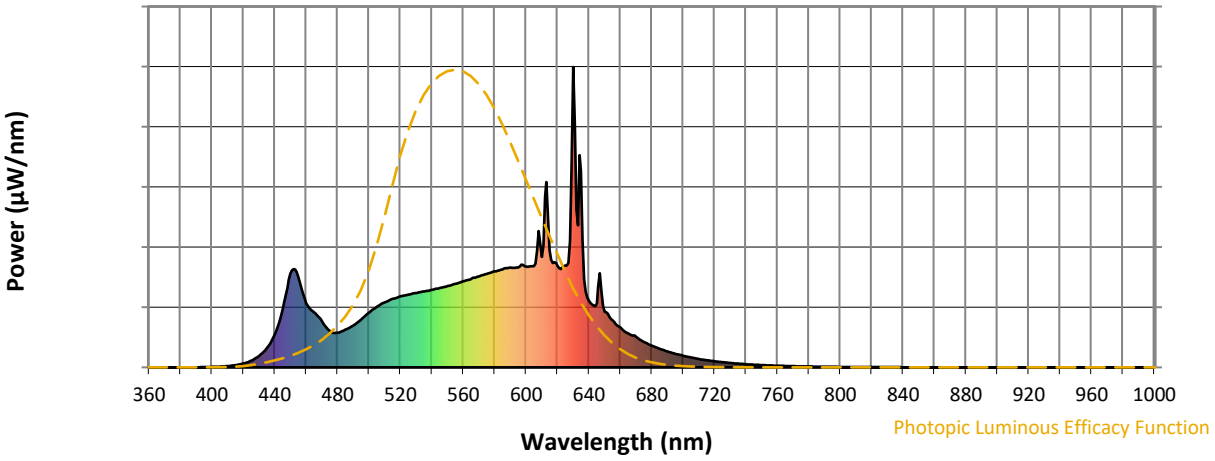


CCT = 3406K
CIE x = 0.4076
CIE y = 0.3856
Duv = -0.0028

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-6

Photopic Flux vs. Wavelength

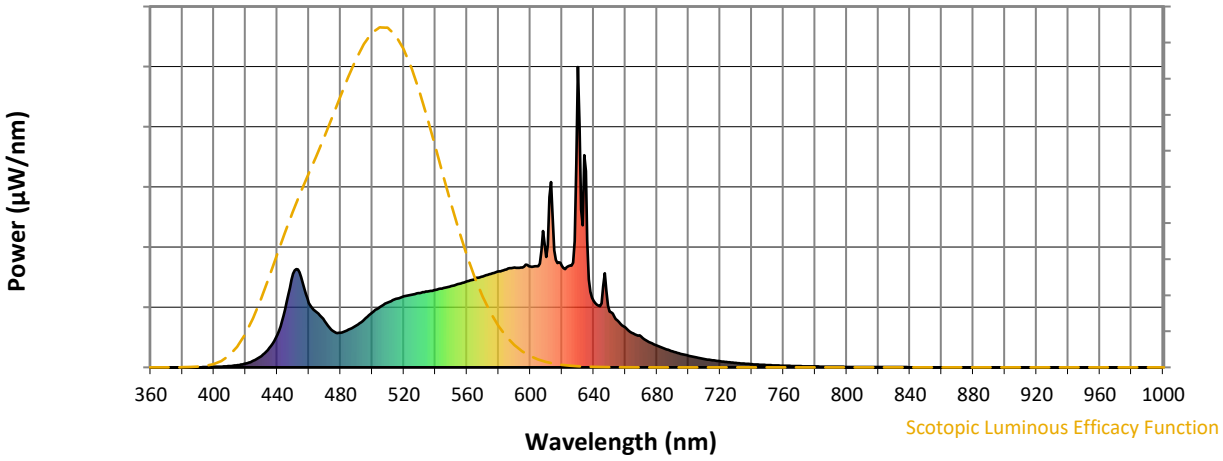


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	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

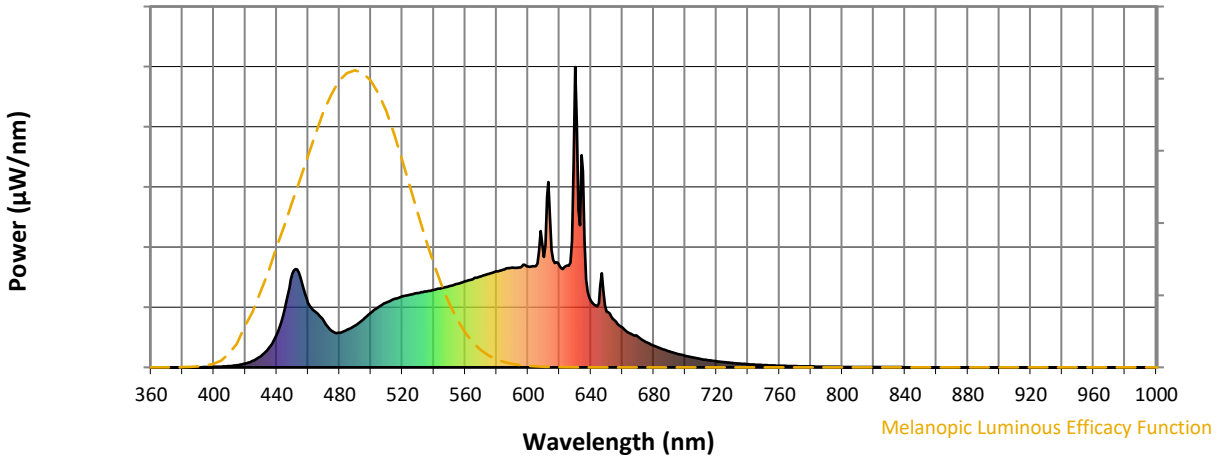


Scotopic Lumens: NR **S/P: 1.62**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	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^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	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			

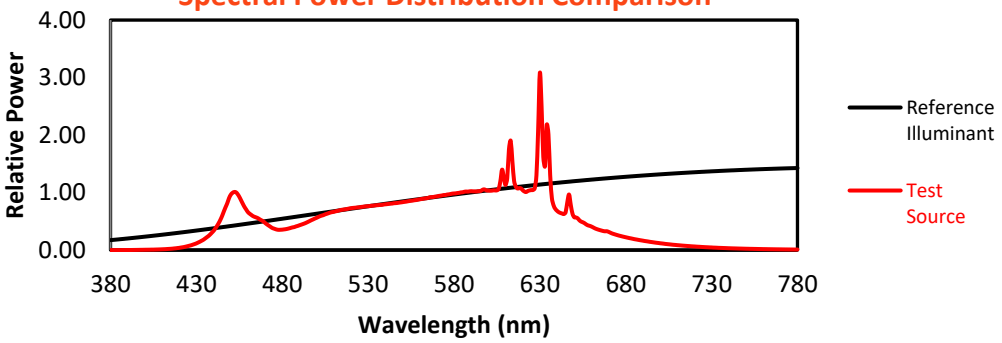
REPORT NUMBER: SP1-2506-472-6

TM-30-18

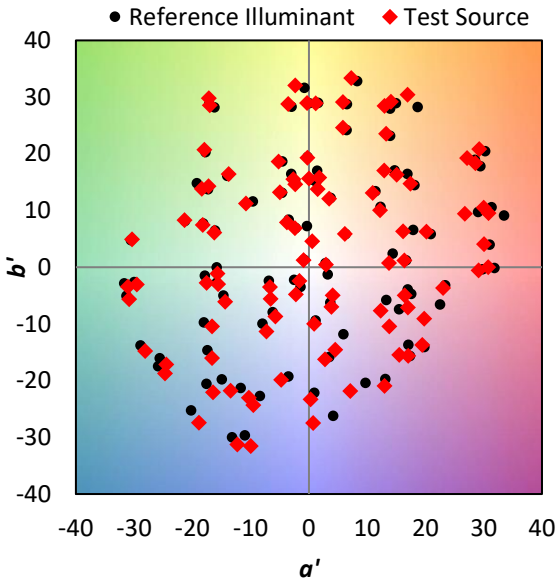
Summary

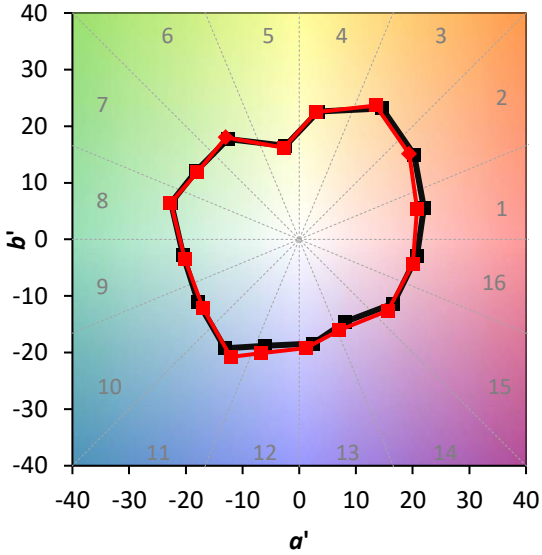
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

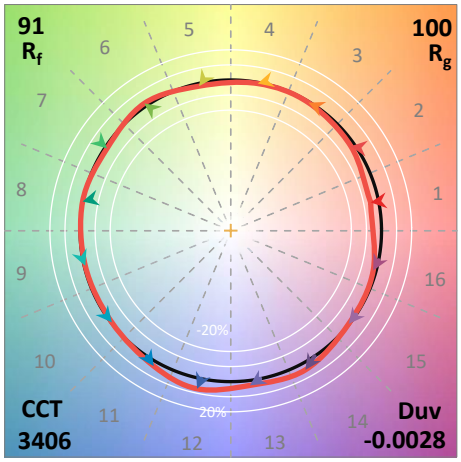
Spectral Power Distribution Comparison

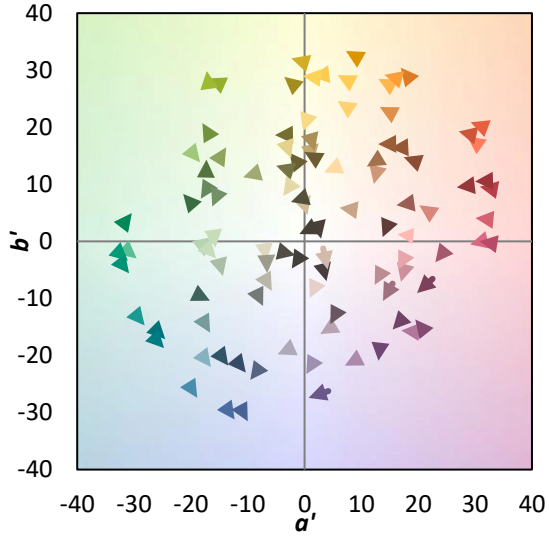


Color Vector Graphics







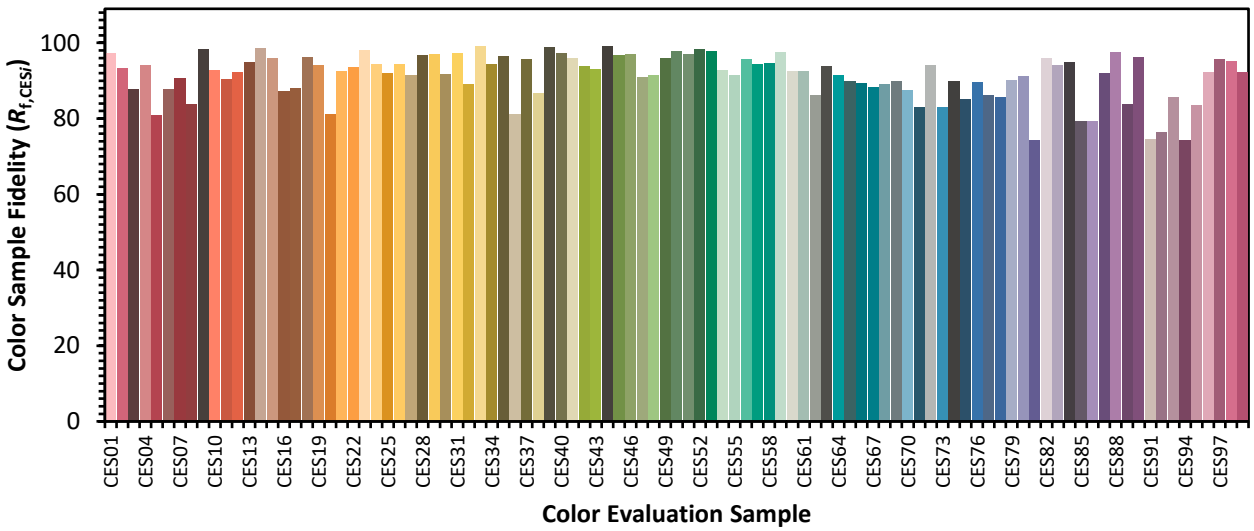


REPORT NUMBER: SP1-2506-472-6

TM-30-18

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	



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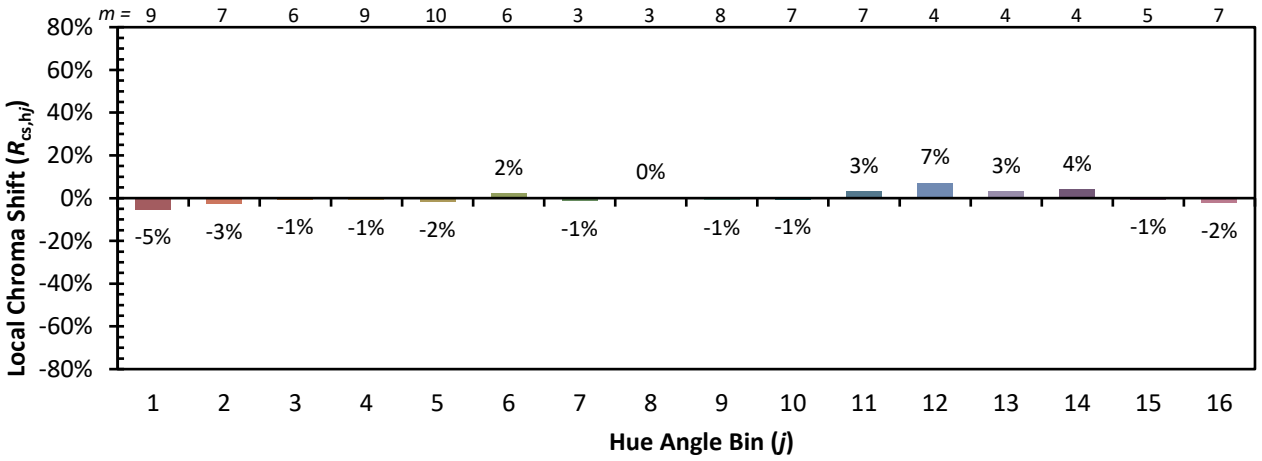
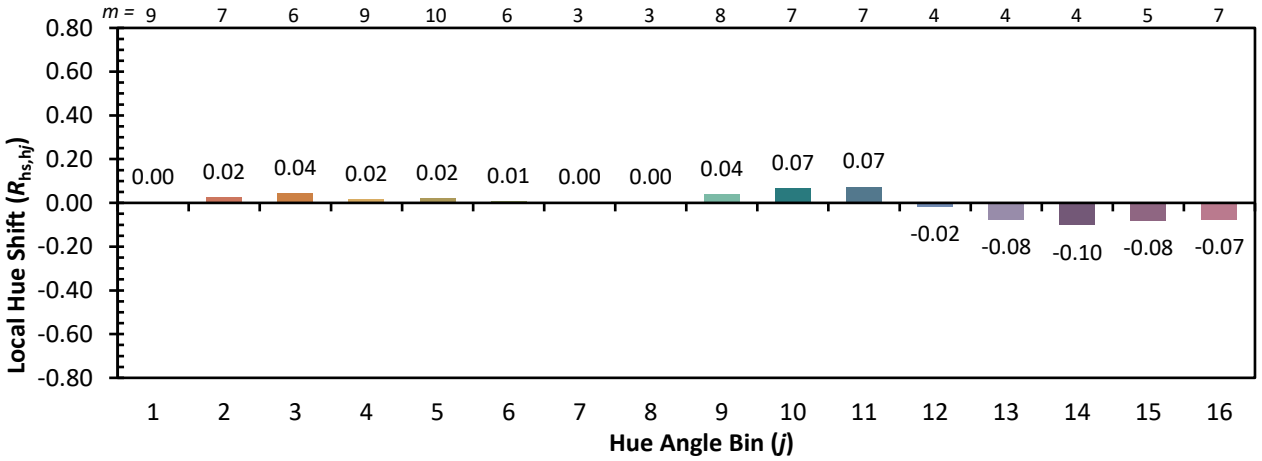
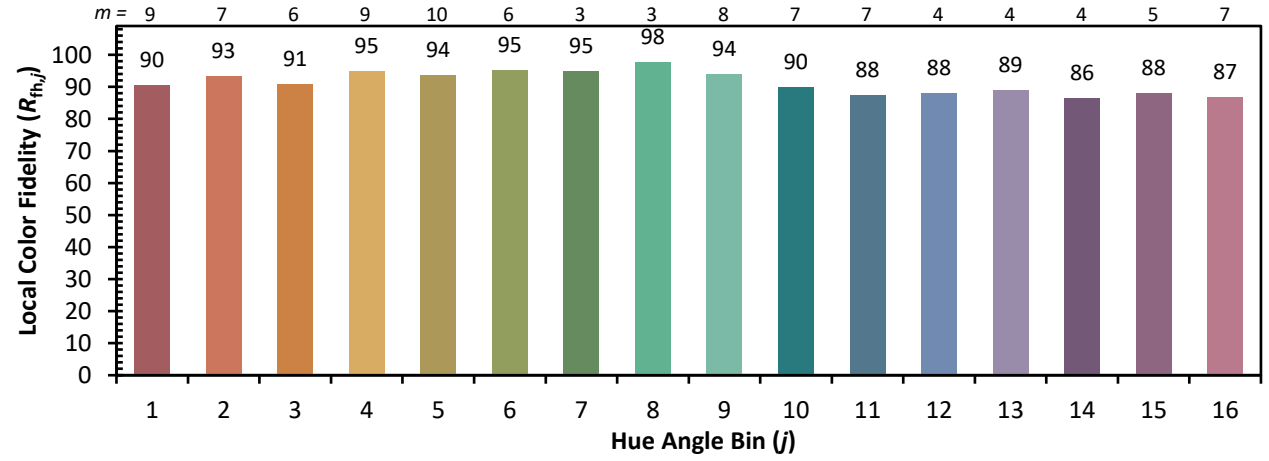
Color Rendition by Hue-Angle Bin







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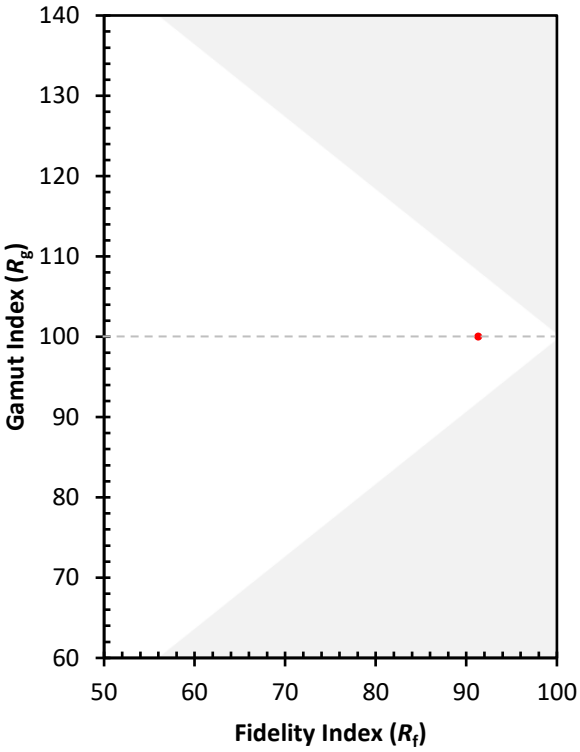
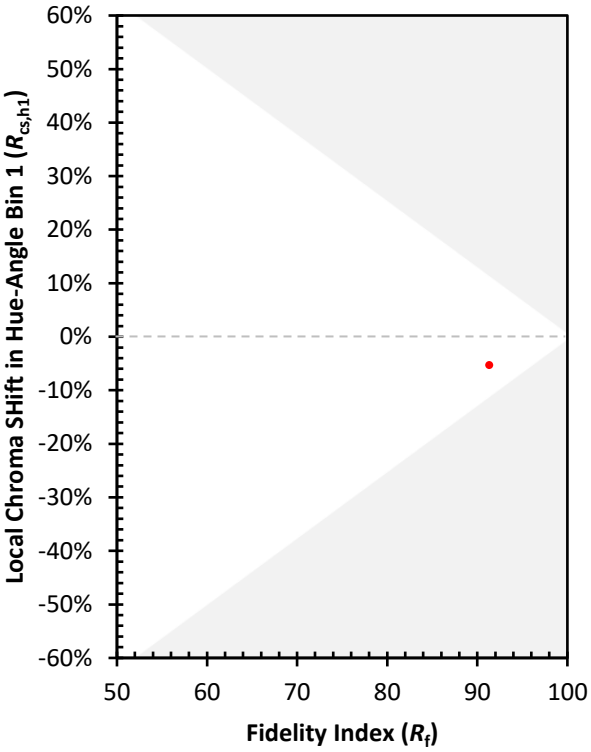
Measure Comparisons





(END OF REPORT)