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: P1433934

Luminaire Tested: EHBR1-54-UNV-TASM-L940-UPL24

Issue Date: 3/20/2026

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1433934
	REPORT IS A COMBINATION OF REPORTS P1431871 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-54-UNV-TASM-L940-UPL24
Description:	Elevate Round Highbay at, 54000 lumens, 4000K 90CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	52334.3 lumens
Efficiency:	N/A
Efficacy:	167.5 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):	312.5
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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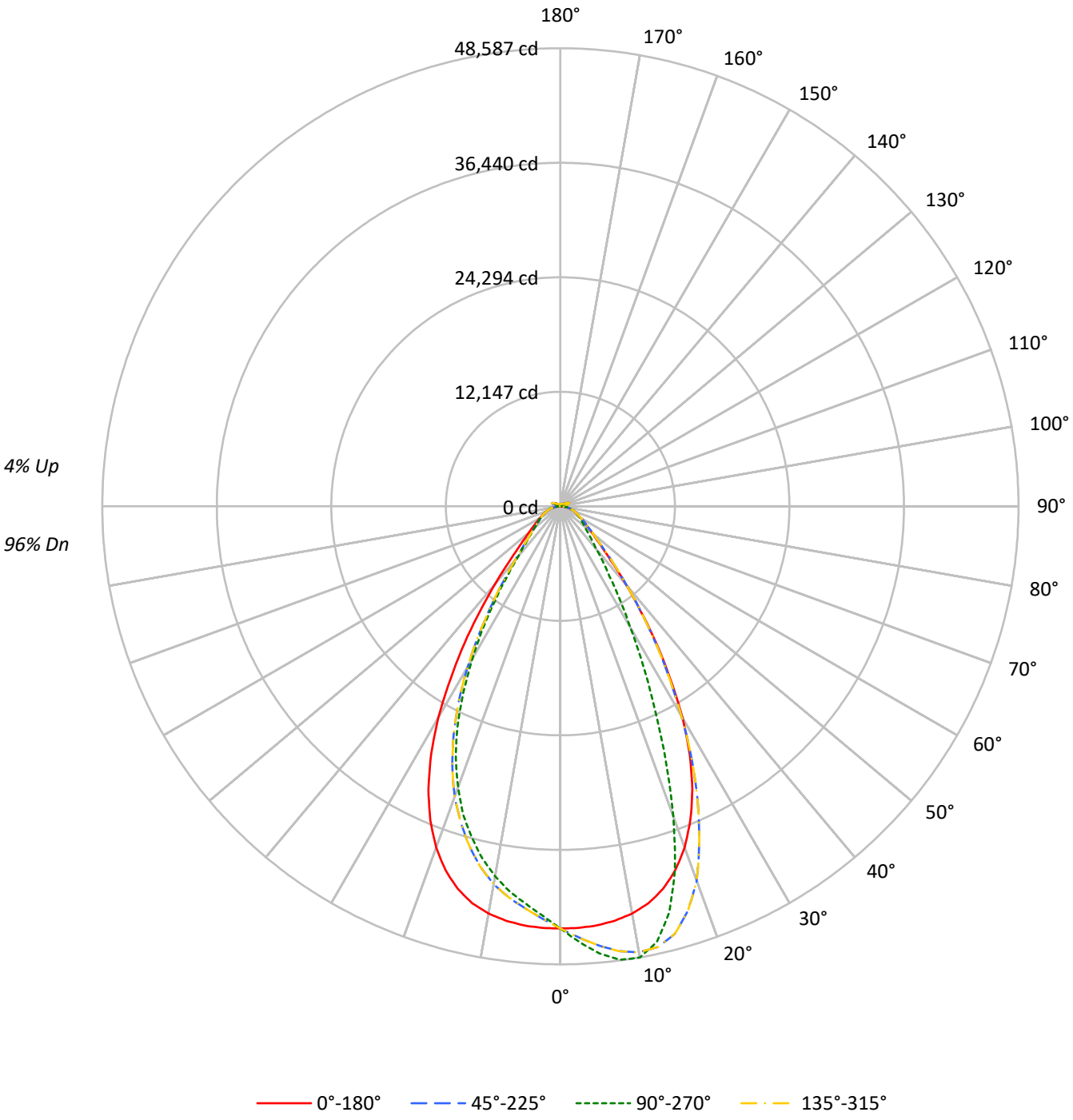
Luminous Intensity Polar Plot



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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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	111	107	104	101	108	105	102	99	100	98	96	95	94	92	91	90	88	86
2	104	98	93	89	101	96	91	87	92	88	85	88	85	82	85	82	80	78
3	97	90	84	79	95	88	82	78	85	80	76	81	78	74	79	75	73	71
4	92	83	76	71	89	81	75	70	78	73	69	76	71	68	73	70	66	65
5	86	76	70	65	84	75	69	64	73	67	63	71	66	62	68	64	61	59
6	81	71	64	59	79	70	63	59	68	62	58	66	61	57	64	60	56	55
7	77	66	59	54	75	65	59	54	63	58	54	62	57	53	60	56	52	51
8	73	62	55	50	71	61	55	50	59	54	50	58	53	49	57	52	49	47
9	69	58	51	47	67	57	51	47	56	50	46	55	50	46	54	49	46	44
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	51	46	43	41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	210277	210277	210277	210277
5°	208998	222961	208998	198152
10°	206428	228686	206428	187534
15°	200334	212520	200334	173231
20°	187362	170412	187362	154300
25°	165830	118071	165830	129310
30°	134648	76814	134648	96749
35°	96574	49746	96574	64409
40°	62438	34288	62438	40620
45°	39617	26560	39617	28941
50°	29420	22569	29420	24107
55°	24020	20559	24020	21280
60°	20799	19585	20799	19703
65°	18960	18888	18960	18808
70°	17970	18507	17970	18268
75°	16806	17904	16806	17366
80°	14762	16903	14762	15800
85°	9552	12069	9552	11507

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 55699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4257.6	8.1
10°-20°	11583.1	22.1
20°-30°	13584.6	26.0
30°-40°	9447.2	18.1
40°-50°	4694.8	9.0
50°-60°	2808.0	5.4
60°-70°	1976.4	3.8
70°-80°	1273.1	2.4
80°-90°	408.4	0.8
90°-100°	62.0	0.1
100°-110°	397.9	0.8
110°-120°	733.8	1.4
120°-130°	437.2	0.8
130°-140°	265.9	0.5
140°-150°	185.4	0.4
150°-160°	122.5	0.2
160°-170°	71.9	0.1
170°-180°	24.2	0.0
0°-30°	29425.3	56.2
0°-40°	38872.6	74.3
0°-60°	46375.4	88.6
0°-90°	50033.4	95.6
90°-120°	1193.8	2.3
90°-150°	2082.3	4.0
90°-180°	2301.0	4.4
0°-180°	52334.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	44777	44777	44777	44777	44777	
5°	44624	47606	44624	42309	44624	4235
15°	42029	44586	42029	36343	42029	11746
25°	33116	23579	33116	25823	33116	14993
35°	17725	9130	17725	11821	17725	11065
45°	6410	4297	6410	4683	6410	5245
55°	3246	2778	3246	2876	3246	2968
65°	1979	1972	1979	1963	1979	1988
75°	1184	1261	1184	1223	1184	1243
85°	328	415	328	396	328	365
90°	17	23	17	17	17	24
95°	33	34	33	28	33	35
105°	183	97	183	139	183	246
115°	781	670	781	634	781	711
125°	501	527	501	458	501	461
135°	319	369	319	336	319	253
145°	291	304	291	282	291	182
155°	262	273	262	255	262	122
165°	252	262	252	248	252	72
175°	255	263	255	250	255	24
180°	255	255	255	255	255	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	44777.0	44777.0	44777.0	44777.0	*44777.0*	44777.0	44777.0	44777.0	44777.0	44777.0	44777.0
2.5°	44751.1	45329.5	45798.0	46107.1	*46259.9*	46107.1	45798.0	45329.5	44751.1	44175.9	43780.4
5°	44624.3	45782.9	46764.5	47406.8	*47605.8*	47406.8	46764.5	45782.9	44624.3	43529.4	42803.1
7.5°	44321.1	46126.4	47584.8	48334.6	*48517.7*	48334.6	47584.8	46126.4	44321.1	42771.2	41853.5
10°	*43858.5*	*46343.0*	*48028.1*	*48565.5*	*48587.4*	*48565.5*	*48028.1*	*46343.0*	*43858.5*	*41770.3*	*40688.1*
12.5°	43120.5	46265.7	47879.5	47703.3	*47302.7*	47703.3	47879.5	46265.7	43120.5	40547.8	39182.5
15°	42029.0	45808.1	46938.3	45503.4	*44585.6*	45503.4	46938.3	45808.1	42029.0	38897.1	37313.5
17.5°	40490.7	44951.7	44973.5	42134.7	*40403.4*	42134.7	44973.5	44951.7	40490.7	36878.6	35134.7
20°	38508.4	43578.0	42268.2	37075.9	*35024.7*	37075.9	42268.2	43578.0	38508.4	34492.3	32781.2
22.5°	36023.0	41725.8	38500.7	31986.9	*29188.4*	31986.9	38500.7	41725.8	36023.0	31717.3	29936.5
25°	33116.2	39456.3	34447.8	26441.9	*23578.7*	26441.9	34447.8	39456.3	33116.2	28410.8	26800.4
27.5°	29697.1	36579.7	30132.1	21607.3	*18965.7*	21607.3	30132.1	36579.7	29697.1	24996.9	23352.0
30°	25899.5	32891.9	25640.9	17207.5	*14775.2*	17207.5	25640.9	32891.9	25899.5	21161.4	19688.7
32.5°	21647.5	29277.3	21327.6	13787.7	*11727.2*	13787.7	21327.6	29277.3	21647.5	17501.4	15962.4
35°	17724.8	24755.0	17438.5	10833.8	*9130.2*	10833.8	17438.5	24755.0	17724.8	14046.3	12534.9
37.5°	13910.3	20482.1	13901.1	8723.8	*7405.7*	8723.8	13901.1	20482.1	13910.3	10920.4	9693.6
40°	10822.1	16015.3	10891.8	6964.0	*5943.0*	6964.0	10891.8	16015.3	10822.1	8309.1	7524.0
42.5°	8199.9	12246.1	8561.0	5715.5	*5047.9*	5715.5	8561.0	12246.1	8199.9	6546.7	5958.9
45°	6409.8	9011.8	6685.2	4822.0	*4297.3*	4822.0	6685.2	9011.8	6409.8	5272.1	4877.4
47.5°	5220.0	6964.8	5418.2	4136.0	*3768.3*	4136.0	5418.2	6964.8	5220.0	4459.3	4163.8
50°	4384.6	5344.3	4498.8	3610.4	*3363.6*	3610.4	4498.8	5344.3	4384.6	3818.6	3621.4
52.5°	3766.6	4358.5	3831.3	3217.5	*3051.2*	3217.5	3831.3	4358.5	3766.6	3340.9	3218.4
55°	3246.0	3664.2	3331.7	2893.4	*2778.4*	2893.4	3331.7	3664.2	3246.0	2973.2	2882.5
57.5°	2850.6	3108.3	2893.4	2617.2	*2540.8*	2617.2	2893.4	3108.3	2850.6	2645.7	2597.0
60°	2500.4	2691.9	2553.4	2376.2	*2354.4*	2376.2	2553.4	2691.9	2500.4	2380.4	2348.5
62.5°	2230.9	2351.8	2257.8	2159.6	*2140.3*	2159.6	2257.8	2351.8	2230.9	2138.6	2144.5
65°	1979.0	2091.5	2017.7	1964.7	*1971.5*	1964.7	2017.7	2091.5	1979.0	1936.2	1945.5
67.5°	1784.2	1843.0	1811.1	1780.8	*1788.4*	1780.8	1811.1	1843.0	1784.2	1742.3	1756.5
70°	1576.8	1639.8	1607.1	1611.3	*1623.9*	1611.3	1607.1	1639.8	1576.8	1564.2	1575.1
72.5°	1378.6	1427.4	1416.5	1426.5	*1440.0*	1426.5	1416.5	1427.4	1378.6	1377.0	1377.8
75°	1183.9	1220.8	1225.9	1240.1	*1261.2*	1240.1	1225.9	1220.8	1183.9	1171.3	1186.5
77.5°	971.4	1013.4	1029.4	1048.8	*1079.8*	1048.8	1029.4	1013.4	971.4	979.8	987.5
80°	776.6	796.0	831.2	845.6	*889.2*	845.6	831.2	796.0	776.6	762.4	773.3
82.5°	568.4	586.1	616.3	643.2	*668.4*	643.2	616.3	586.1	568.4	561.7	562.5
85°	328.3	355.1	375.4	407.2	*414.8*	407.2	375.4	355.1	328.3	335.9	328.3
87.5°	115.1	123.4	141.1	153.6	*154.5*	153.6	141.1	123.4	115.1	117.6	106.7
90°	17.2	29.3	50.4	30.2	*23.1*	30.2	50.4	29.3	17.2	29.8	46.2
92.5°	22.3	39.4	70.5	39.0	*29.3*	39.0	70.5	39.4	22.3	38.6	73.9
95°	33.2	48.3	89.4	42.8	*34.4*	42.8	89.4	48.3	33.2	51.2	102.9
97.5°	50.8	59.6	100.7	45.4	*40.7*	45.4	100.7	59.6	50.8	62.5	117.9
100°	67.2	67.2	182.6	51.6	*45.7*	51.6	182.6	67.2	67.2	77.2	183.4
102.5°	101.2	131.0	421.4	100.3	*54.6*	100.3	421.4	131.0	101.2	143.9	388.7
105°	183.0	297.2	740.0	252.7	*97.0*	252.7	740.0	297.2	183.0	300.1	692.1
107.5°	345.5	552.7	952.8	494.4	*219.1*	494.4	952.8	552.7	345.5	530.6	913.3
110°	551.9	771.9	1039.6	675.7	*438.2*	675.7	1039.6	771.9	551.9	728.3	957.4

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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°	718.1	860.0	1015.8	748.8	*604.4*	748.8	1015.8	860.0	718.1	803.7	917.1
115°	780.7	847.4	907.4	746.2	*669.9*	746.2	907.4	847.4	780.7	784.9	818.9
117.5°	754.3	775.7	784.1	701.0	*673.7*	701.0	784.1	775.7	754.3	706.4	695.5
120°	681.2	672.4	661.5	634.2	*635.8*	634.2	661.5	672.4	681.2	617.0	580.9
122.5°	590.1	571.3	559.5	567.0	*584.2*	567.0	559.5	571.3	590.1	525.9	498.6
125°	500.8	481.8	488.6	509.1	*527.1*	509.1	488.6	481.8	500.8	447.5	440.3
127.5°	426.0	417.2	436.9	460.0	*475.5*	460.0	436.9	417.2	426.0	392.0	398.7
130°	372.8	374.4	400.4	420.5	*430.2*	420.5	400.4	374.4	372.8	356.4	373.1
132.5°	339.6	348.8	373.6	391.2	*397.1*	391.2	373.6	348.8	339.6	335.4	355.9
135°	319.0	332.4	355.5	366.4	*369.3*	366.4	355.5	332.4	319.0	321.0	339.6
137.5°	307.3	320.7	337.9	347.1	*345.5*	347.1	337.9	320.7	307.3	311.8	326.1
140°	300.5	314.0	321.5	332.0	*331.1*	332.0	321.5	314.0	300.5	303.1	314.3
142.5°	293.8	306.0	309.8	317.7	*316.0*	317.7	309.8	306.0	293.8	296.4	303.9
145°	290.9	300.1	296.7	306.4	*304.3*	306.4	296.7	300.1	290.9	291.3	295.9
147.5°	284.5	291.3	287.5	295.9	*293.8*	295.9	287.5	291.3	284.5	284.5	286.7
150°	277.8	282.8	277.0	286.7	*287.0*	286.7	277.0	282.8	277.8	276.6	278.7
152.5°	268.6	273.6	268.6	279.5	*279.1*	279.5	268.6	273.6	268.6	267.4	269.4
155°	261.5	264.0	261.5	272.4	*273.3*	272.4	261.5	264.0	261.5	260.7	262.4
157.5°	256.9	259.0	257.7	267.4	*268.2*	267.4	257.7	259.0	256.9	256.9	257.7
160°	253.9	256.4	256.0	264.4	*265.2*	264.4	256.0	256.4	253.9	254.3	255.2
162.5°	253.0	253.0	253.5	261.9	*263.6*	261.9	253.5	253.0	253.0	253.0	254.3
165°	251.8	253.0	252.2	258.9	*261.9*	258.9	252.2	253.0	251.8	252.2	252.2
167.5°	252.2	251.0	252.7	258.9	*261.9*	258.9	252.7	251.0	252.2	252.7	252.7
170°	250.5	251.4	251.8	258.1	*261.0*	258.1	251.8	251.4	250.5	251.8	252.2
172.5°	253.0	253.0	253.0	258.1	*262.4*	258.1	253.0	253.0	253.0	253.5	254.7
175°	254.7	254.3	254.7	258.6	*262.8*	258.6	254.7	254.3	254.7	253.9	253.9
177.5°	253.5	255.2	256.9	260.7	*266.2*	260.7	256.9	255.2	253.5	253.9	253.9
180°	255.2	255.2	255.2	255.2	*255.2*	255.2	255.2	255.2	255.2	255.2	255.2

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	44777.0	44777.0	44777.0	44777.0	44777.0	44777.0
2.5°	43476.5	43448.0	43476.5	43780.4	44175.9	44751.1
5°	42466.4	42308.6	42466.4	42803.1	43529.4	44624.3
7.5°	41290.1	41198.5	41290.1	41853.5	42771.2	44321.1
10°	*40051.6*	*39844.2*	*40051.6*	*40688.1*	*41770.3*	*43858.5*
12.5°	38525.1	38250.6	38525.1	39182.5	40547.8	43120.5
15°	36583.9	36342.9	36583.9	37313.5	38897.1	42029.0
17.5°	34500.7	34282.4	34500.7	35134.7	36878.6	40490.7
20°	31884.5	31713.1	31884.5	32781.2	34492.3	38508.4
22.5°	29139.7	28979.3	29139.7	29936.5	31717.3	36023.0
25°	25910.4	25823.1	25910.4	26800.4	28410.8	33116.2
27.5°	22420.9	22272.2	22420.9	23352.0	24996.9	29697.1
30°	18855.8	18609.7	18855.8	19688.7	21161.4	25899.5
32.5°	15368.7	15191.6	15368.7	15962.4	17501.4	21647.5
35°	11998.4	11821.3	11998.4	12534.9	14046.3	17724.8
37.5°	9349.3	9036.2	9349.3	9693.6	10920.4	13910.3
40°	7090.8	7040.4	7090.8	7524.0	8309.1	10822.1
42.5°	5772.5	5635.6	5772.5	5958.9	6546.7	8199.9
45°	4736.4	4682.6	4736.4	4877.4	5272.1	6409.8
47.5°	4073.1	4096.6	4073.1	4163.8	4459.3	5220.0
50°	3578.5	3592.8	3578.5	3621.4	3818.6	4384.6
52.5°	3214.2	3201.5	3214.2	3218.4	3340.9	3766.6
55°	2891.7	2875.8	2891.7	2882.5	2973.2	3246.0
57.5°	2609.6	2621.4	2609.6	2597.0	2645.7	2850.6
60°	2357.7	2368.6	2357.7	2348.5	2380.4	2500.4
62.5°	2145.3	2152.0	2145.3	2144.5	2138.6	2230.9
65°	1955.5	1963.1	1955.5	1945.5	1936.2	1979.0
67.5°	1774.1	1774.1	1774.1	1756.5	1742.3	1784.2
70°	1603.7	1602.9	1603.7	1575.1	1564.2	1576.8
72.5°	1398.9	1419.0	1398.9	1377.8	1377.0	1378.6
75°	1199.9	1223.3	1199.9	1186.5	1171.3	1183.9
77.5°	998.4	1034.4	998.4	987.5	979.8	971.4
80°	791.8	831.2	791.8	773.3	762.4	776.6
82.5°	585.3	614.6	585.3	562.5	561.7	568.4
85°	348.4	395.5	348.4	328.3	335.9	328.3
87.5°	111.7	142.7	111.7	106.7	117.6	115.1
90°	27.3	17.2	27.3	46.2	29.8	17.2
92.5°	41.2	24.8	41.2	73.9	38.6	22.3
95°	47.4	28.5	47.4	102.9	51.2	33.2
97.5°	52.5	36.9	52.5	117.9	62.5	50.8
100°	61.3	48.3	61.3	183.4	77.2	67.2
102.5°	129.3	81.0	129.3	388.7	143.9	101.2
105°	271.6	138.9	271.6	692.1	300.1	183.0
107.5°	485.7	239.6	485.7	913.3	530.6	345.5
110°	644.2	446.2	644.2	957.4	728.3	551.9

TEST NUMBER: P1433934
CATALOG NUMBER: EHBR1-54-UNV-TASM-L940-UPL24

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	692.1	602.3	692.1	917.1	803.7	718.1
115°	665.7	633.8	665.7	818.9	784.9	780.7
117.5°	607.8	612.4	607.8	695.5	706.4	754.3
120°	541.0	567.1	541.0	580.9	617.0	681.2
122.5°	480.2	510.4	480.2	498.6	525.9	590.1
125°	427.3	458.4	427.3	440.3	447.5	500.8
127.5°	390.7	411.8	390.7	398.7	392.0	426.0
130°	362.6	380.3	362.6	373.1	356.4	372.8
132.5°	343.3	354.7	343.3	355.9	335.4	339.6
135°	326.5	335.8	326.5	339.6	321.0	319.0
137.5°	312.3	320.2	312.3	326.1	311.8	307.3
140°	300.1	306.8	300.1	314.3	303.1	300.5
142.5°	287.0	292.2	287.0	303.9	296.4	293.8
145°	278.7	282.5	278.7	295.9	291.3	290.9
147.5°	271.6	274.1	271.6	286.7	284.5	284.5
150°	264.4	266.9	264.4	278.7	276.6	277.8
152.5°	256.5	259.8	256.5	269.4	267.4	268.6
155°	251.8	255.2	251.8	262.4	260.7	261.5
157.5°	249.7	252.7	249.7	257.7	256.9	256.9
160°	248.5	250.5	248.5	255.2	254.3	253.9
162.5°	246.3	248.5	246.3	254.3	253.0	253.0
165°	246.8	247.6	246.8	252.2	252.2	251.8
167.5°	246.3	247.6	246.3	252.7	252.7	252.2
170°	247.2	248.0	247.2	252.2	251.8	250.5
172.5°	248.8	249.7	248.8	254.7	253.5	253.0
175°	249.3	250.1	249.3	253.9	253.9	254.7
177.5°	251.4	252.2	251.4	253.9	253.9	253.5
180°	255.2	255.2	255.2	255.2	255.2	255.2

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

Scaled Data Report

TEST NUMBER: P1433934
CATALOG NUMBER: EHBR1-54-UNV-TASM-L940-UPL24

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	19.40	20.54	19.85	20.95	21.38	18.72	19.86	19.17	20.27	20.70
	3H	20.95	21.96	21.41	22.39	22.86	20.57	21.58	21.03	22.01	22.48
	4H	21.59	22.53	22.07	22.98	23.47	21.35	22.30	21.84	22.74	23.23
	6H	22.07	22.94	22.56	23.40	23.90	22.00	22.87	22.49	23.33	23.83
	8H	22.22	23.04	22.73	23.52	24.04	22.22	23.04	22.73	23.52	24.03
	12H	22.30	23.08	22.81	23.55	24.09	22.35	23.13	22.86	23.60	24.14
4H	2H	19.82	20.76	20.30	21.21	21.70	19.30	20.24	19.78	20.69	21.18
	3H	21.62	22.40	22.11	22.89	23.40	21.36	22.14	21.85	22.63	23.14
	4H	22.39	23.09	22.91	23.60	24.15	22.27	22.97	22.78	23.47	24.02
	6H	23.01	23.61	23.55	24.14	24.71	23.04	23.64	23.58	24.17	24.74
	8H	23.21	23.77	23.75	24.30	24.87	23.31	23.87	23.85	24.40	24.98
	12H	23.31	23.81	23.87	24.37	24.95	23.48	23.97	24.04	24.54	25.11
8H	4H	22.64	23.21	23.19	23.74	24.31	22.55	23.11	23.09	23.64	24.21
	6H	23.39	23.84	23.96	24.42	25.00	23.45	23.91	24.03	24.49	25.07
	8H	23.66	24.06	24.25	24.66	25.25	23.80	24.21	24.40	24.80	25.40
	12H	23.83	24.19	24.42	24.76	25.43	24.05	24.41	24.64	24.98	25.65
12H	4H	22.65	23.15	23.22	23.71	24.29	22.56	23.05	23.12	23.62	24.19
	6H	23.43	23.84	24.02	24.43	25.02	23.50	23.90	24.09	24.50	25.09
	8H	23.75	24.10	24.34	24.68	25.35	23.90	24.26	24.49	24.83	25.50

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

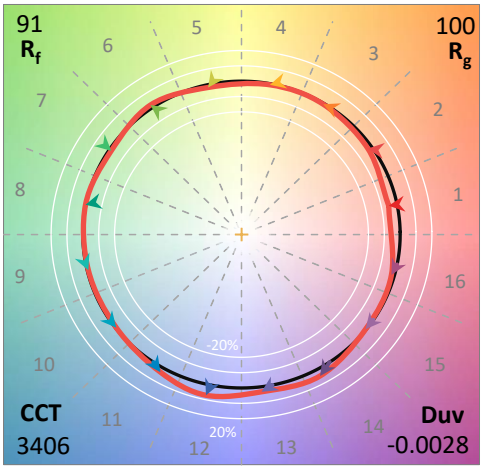
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

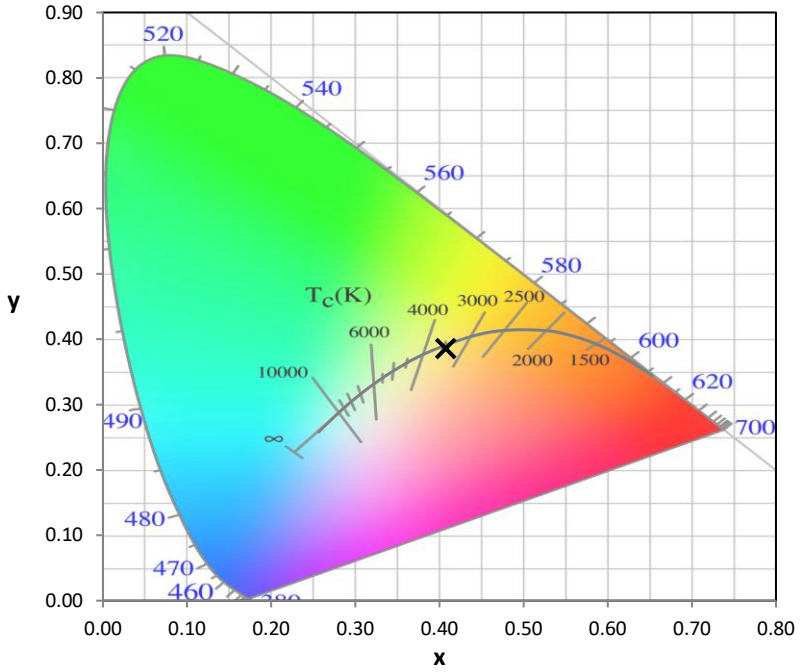
Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-6

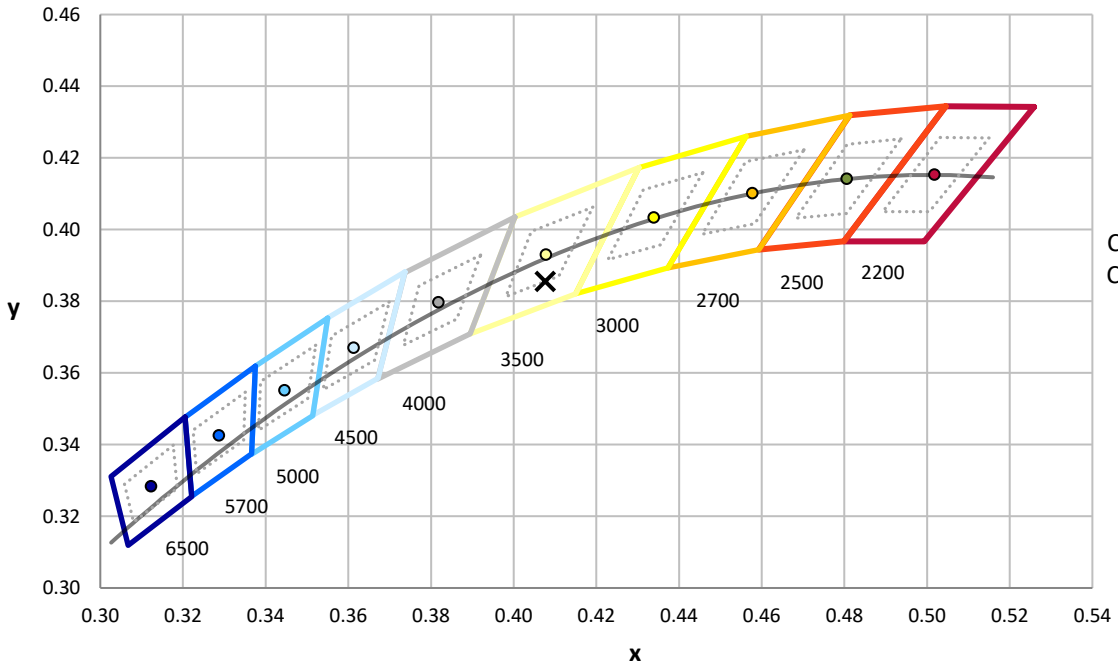
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

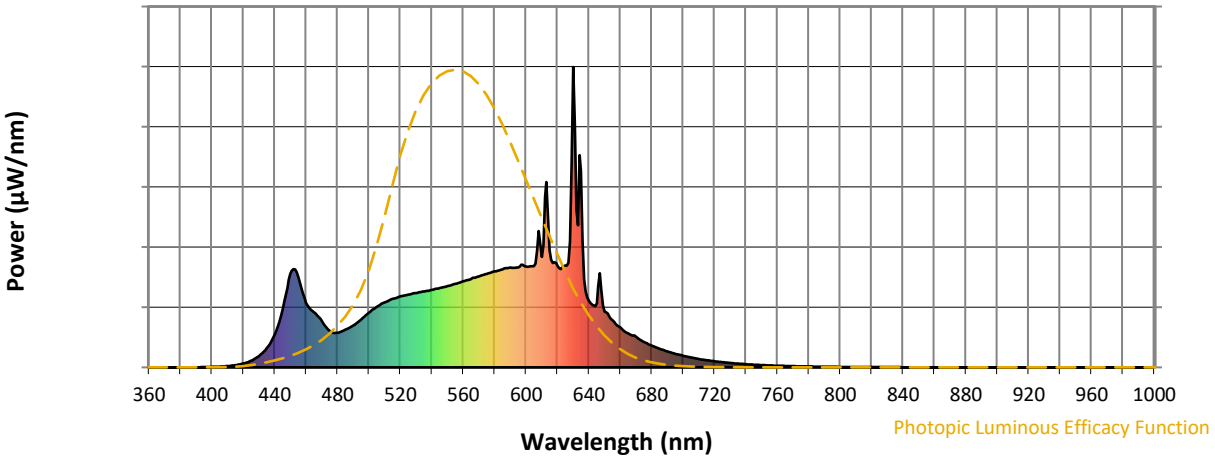


CCT = 3406K
CIE x = 0.4076
CIE y = 0.3856
Duv = -0.0028

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-6

Photopic Flux vs. Wavelength

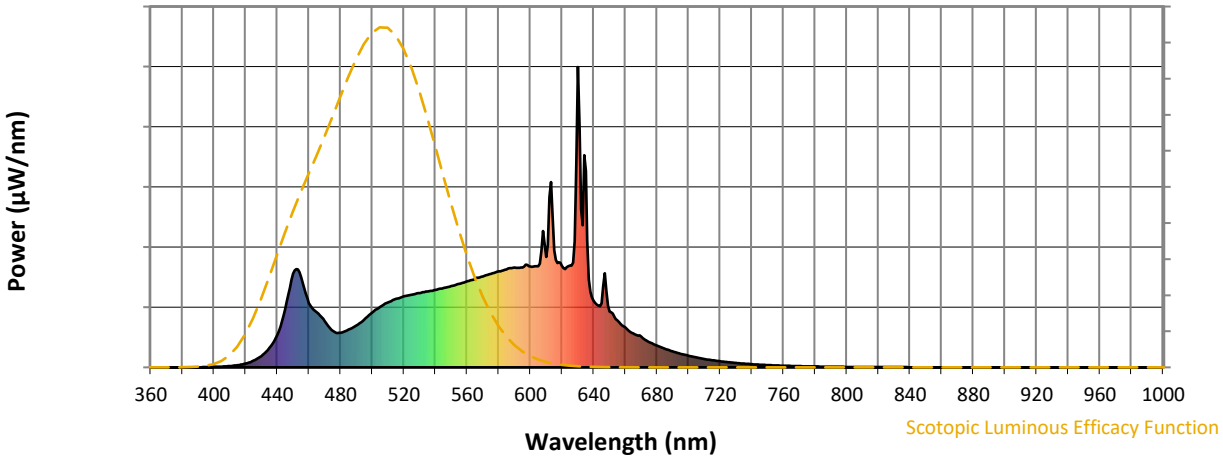


Photopic Lumens: NR

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

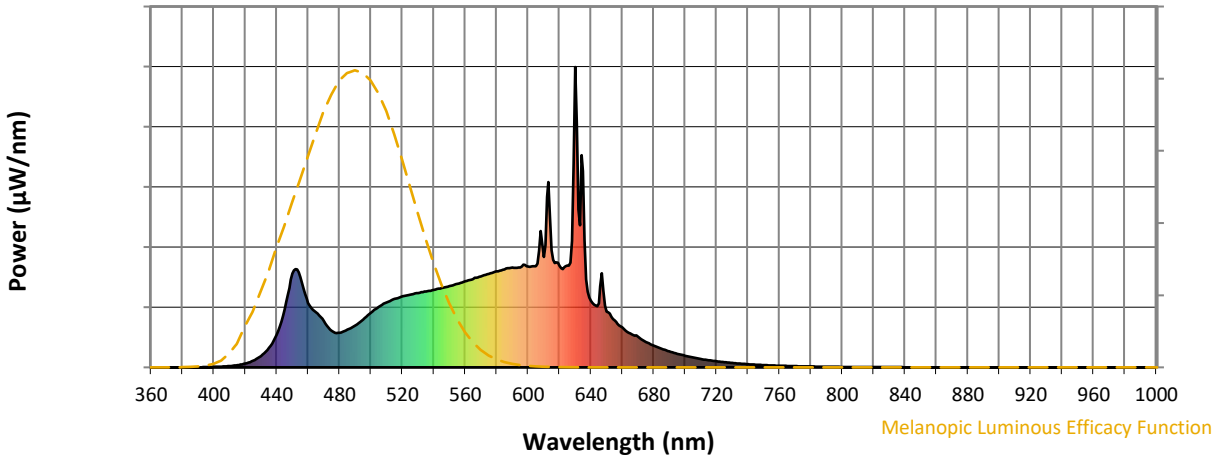


Scotopic Lumens: NR **S/P: 1.62**

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			

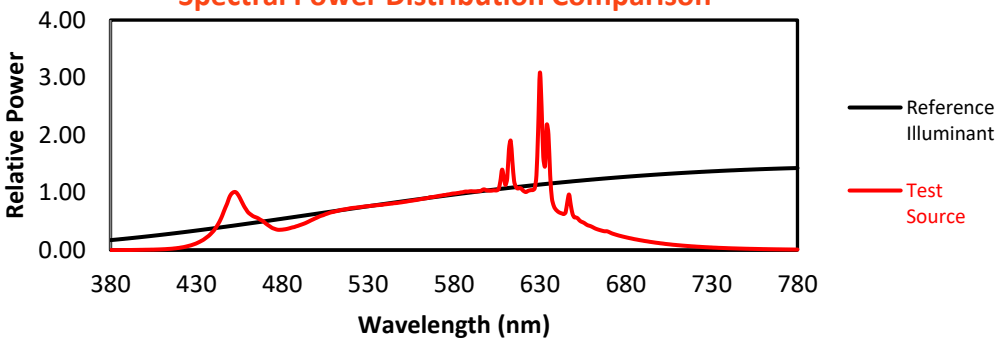
REPORT NUMBER: SP1-2506-472-6

TM-30-18

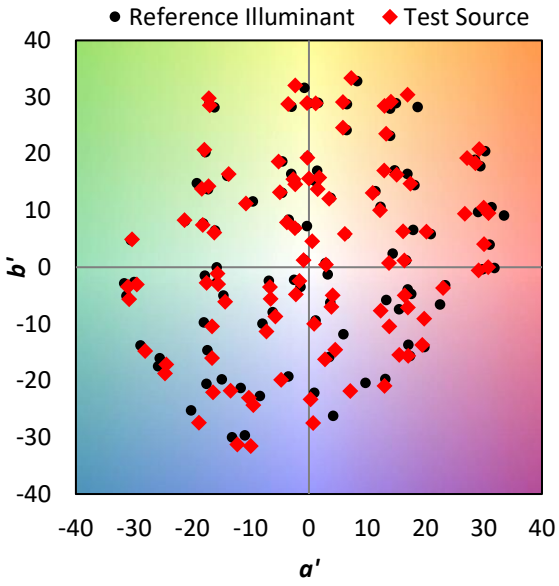
Summary

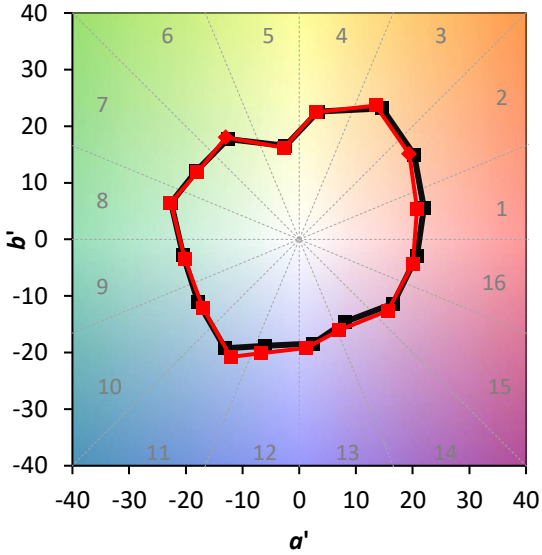
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

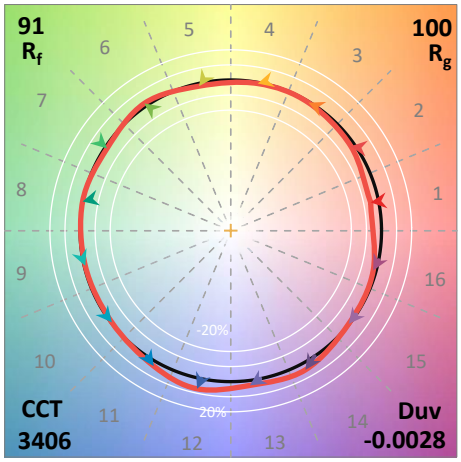
Spectral Power Distribution Comparison

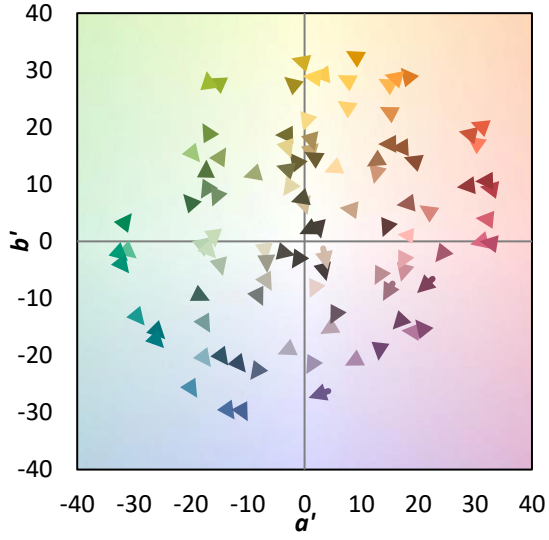


Color Vector Graphics







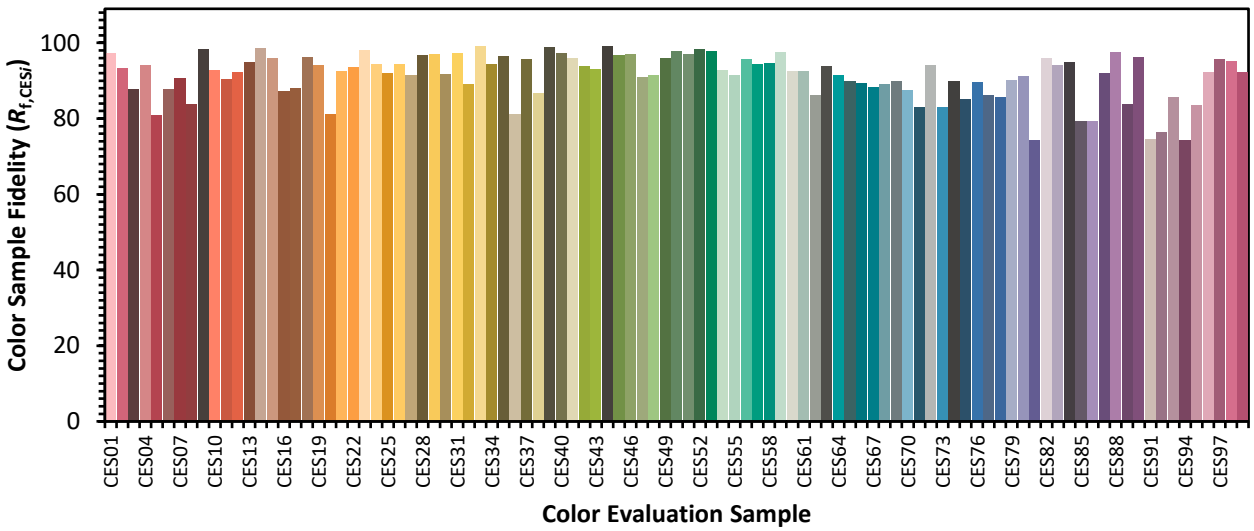


REPORT NUMBER: SP1-2506-472-6

TM-30-18

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

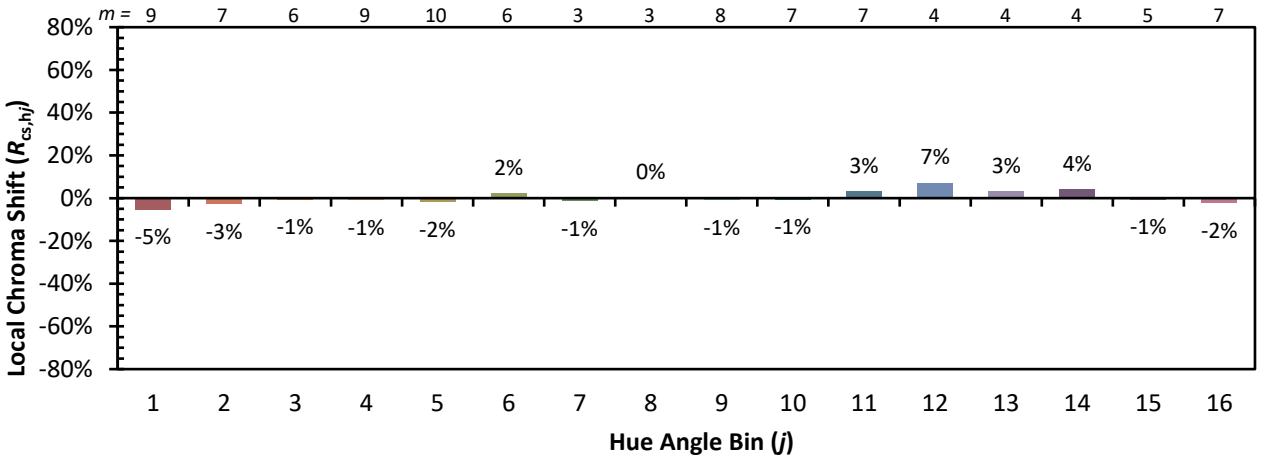
CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 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	

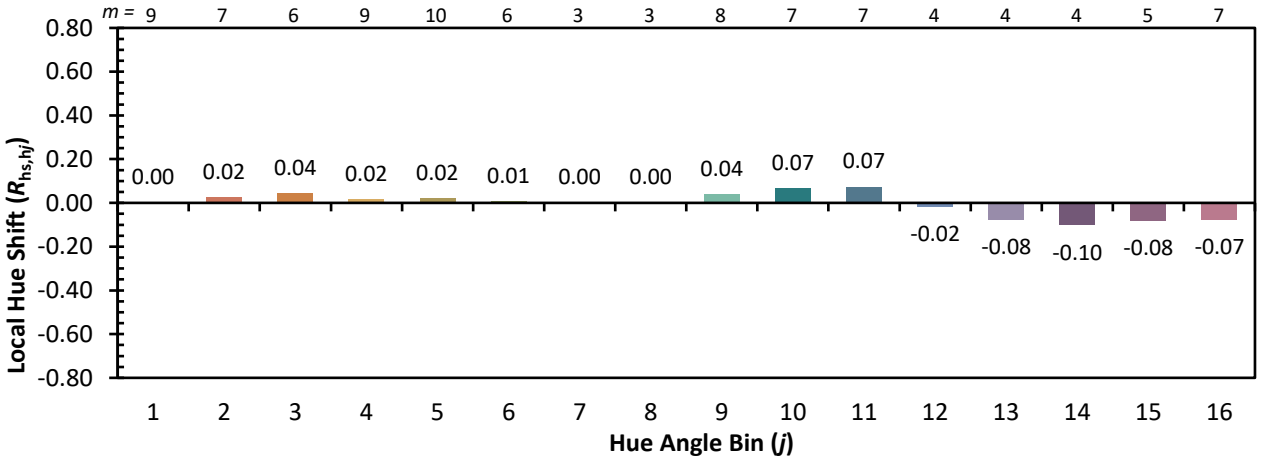


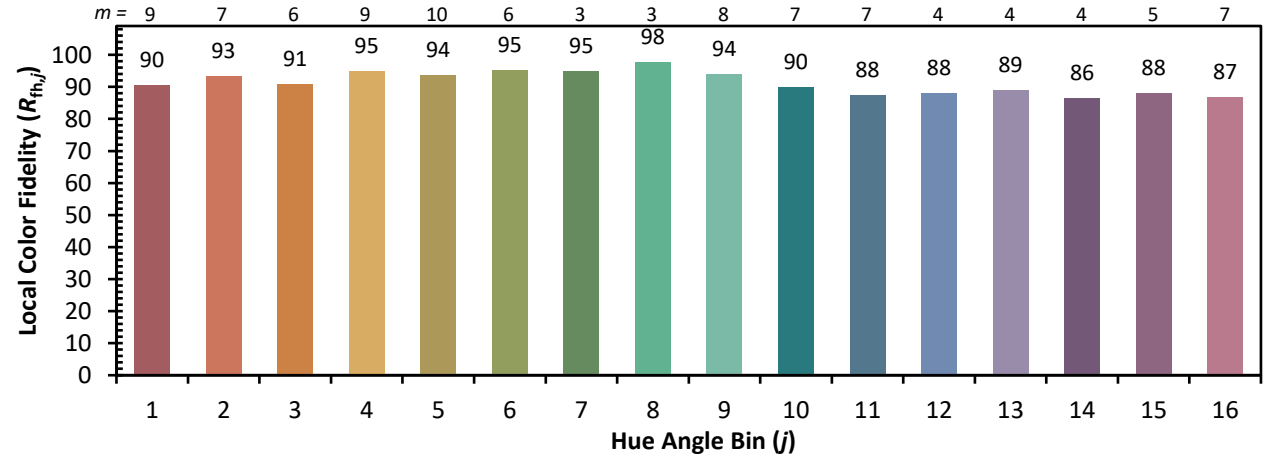
REPORT NUMBER: SP1-2506-472-6

TM-30-18

Color Rendition by Hue-Angle Bin



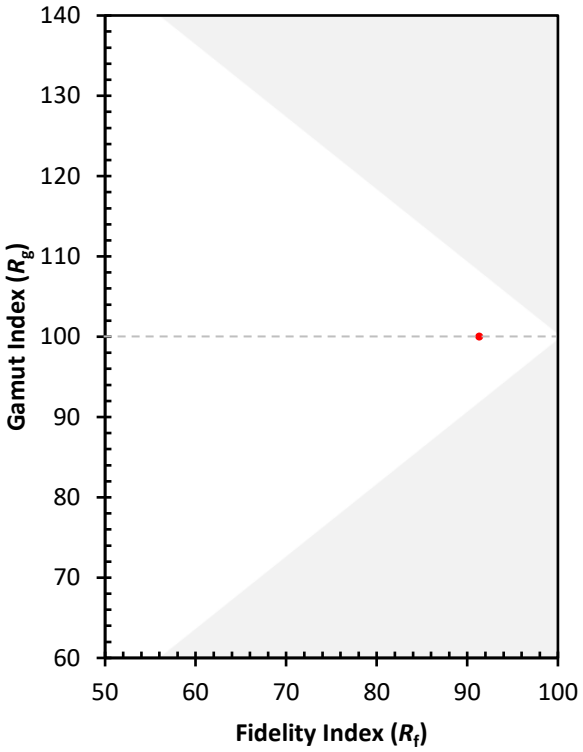


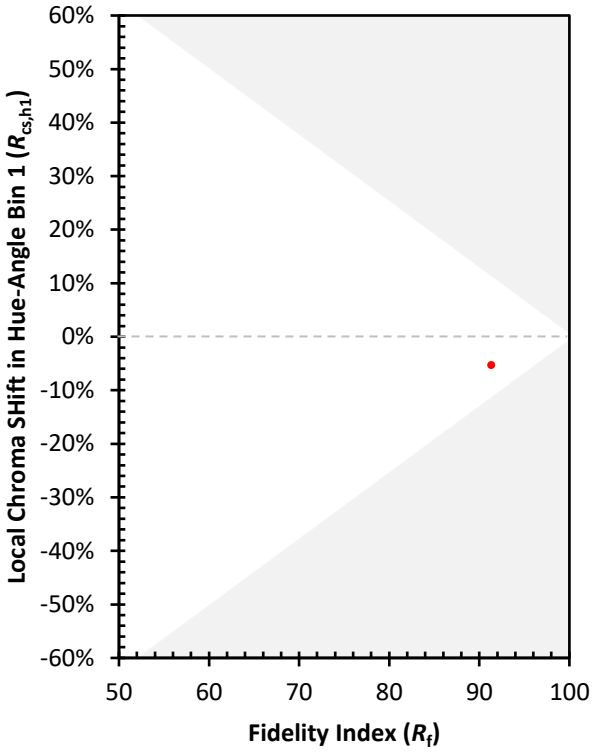


REPORT NUMBER: SP1-2506-472-6

TM-30-18

Measure Comparisons





(END OF REPORT)