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: P1433377

Luminaire Tested: EHBR1-60-UNV-TASM-L930-UPL40

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:	P1433377
	REPORT IS A COMBINATION OF REPORTS P1431906 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-60-UNV-TASM-L930-UPL40
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	56385.2 lumens
Efficiency:	N/A
Efficacy:	156.2 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):	361
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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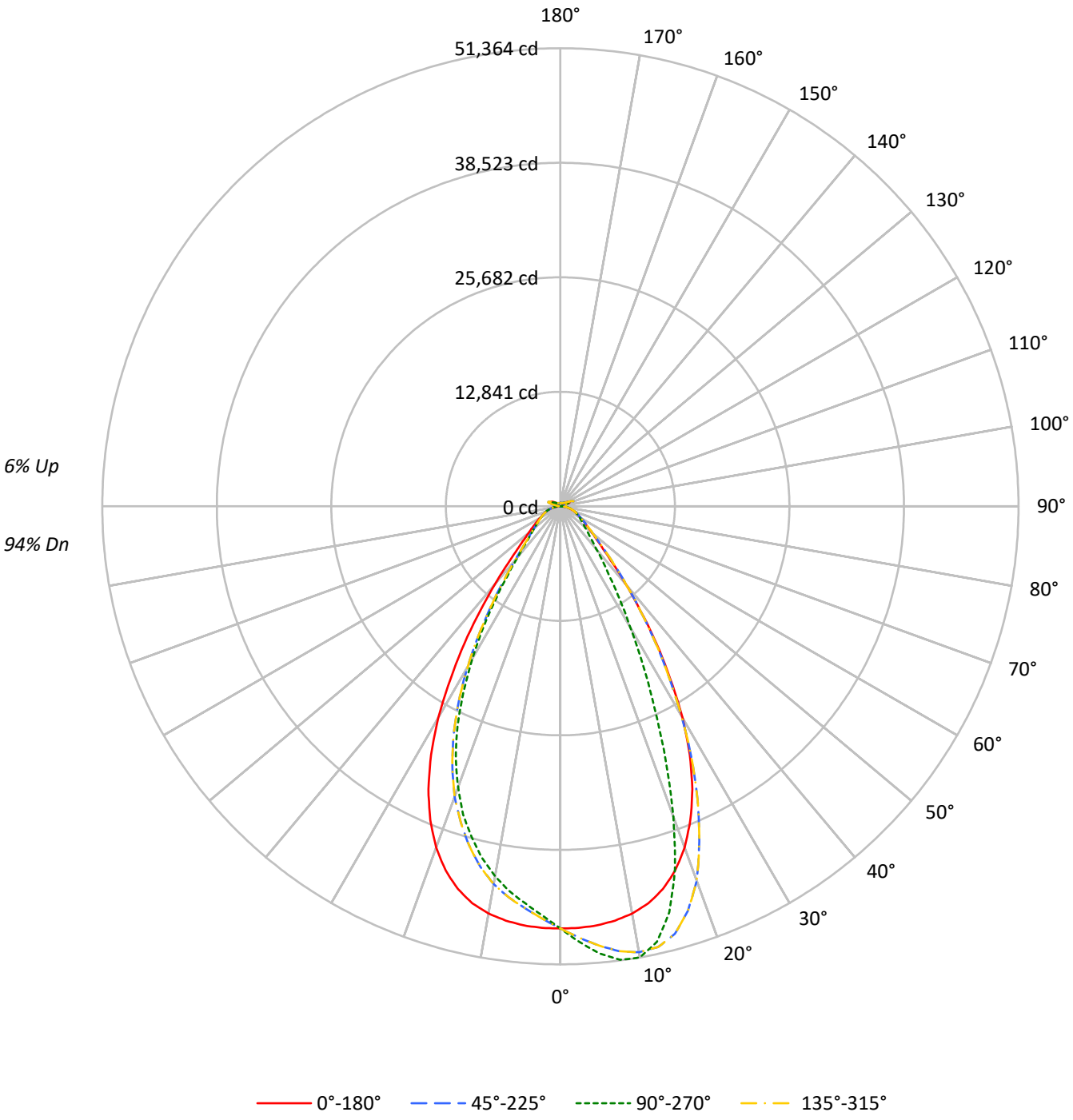
Luminous Intensity Polar Plot



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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	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	110	107	104	101	107	104	101	99	99	97	95	94	92	91	90	88	87	85
2	103	97	92	88	100	95	91	87	91	87	84	87	84	81	83	81	79	76
3	97	89	83	78	94	87	82	77	84	79	75	80	77	73	77	74	71	69
4	91	82	76	70	89	80	74	70	77	72	68	75	70	67	72	68	65	63
5	86	76	69	64	83	74	68	63	72	66	62	69	65	61	67	63	60	58
6	81	70	64	59	79	69	63	58	67	61	57	65	60	56	63	59	55	54
7	76	66	59	54	74	65	58	54	63	57	53	61	56	52	59	55	51	50
8	72	61	55	50	70	60	54	50	59	53	49	57	52	48	56	51	48	46
9	68	57	51	46	67	57	50	46	55	50	46	54	49	45	53	48	45	43
10	65	54	48	43	63	53	47	43	52	47	43	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	222292	222292	222292	222292
5°	220939	235702	220939	209474
10°	218223	241752	218223	198249
15°	211780	224663	211780	183129
20°	198067	180149	198067	163116
25°	175305	124818	175305	136699
30°	142341	81203	142341	102278
35°	102092	52589	102092	68089
40°	66006	36247	66006	42940
45°	41881	28077	41881	30595
50°	31101	23858	31101	25485
55°	25392	21734	25392	22495
60°	21988	20704	21988	20828
65°	20044	19967	20044	19882
70°	18998	19564	18998	19311
75°	17766	18926	17766	18358
80°	15606	17868	15606	16705
85°	10099	12755	10099	12162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 58881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4500.9	8.0
10°-20°	12244.9	21.7
20°-30°	14360.8	25.5
30°-40°	9987.1	17.7
40°-50°	4963.1	8.8
50°-60°	2968.4	5.3
60°-70°	2089.3	3.7
70°-80°	1345.9	2.4
80°-90°	433.6	0.8
90°-100°	93.5	0.2
100°-110°	605.5	1.1
110°-120°	1117.8	2.0
120°-130°	665.1	1.2
130°-140°	403.3	0.7
140°-150°	280.0	0.5
150°-160°	183.8	0.3
160°-170°	106.6	0.2
170°-180°	35.7	0.1
0°-30°	31106.7	55.2
0°-40°	41093.7	72.9
0°-60°	49025.3	86.9
0°-90°	52894.1	93.8
90°-120°	1816.8	3.2
90°-150°	3165.1	5.6
90°-180°	3491.0	6.2
0°-180°	56385.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	47336	47336	47336	47336	47336	
5°	47174	50326	47174	44726	47174	4477
15°	44430	47133	44430	38420	44430	12417
25°	35008	24926	35008	27299	35008	15849
35°	18738	9652	18738	12497	18738	11697
45°	6776	4543	6776	4950	6776	5545
55°	3432	2937	3432	3040	3432	3138
65°	2092	2084	2092	2075	2092	2101
75°	1252	1333	1252	1293	1252	1314
85°	347	438	347	418	347	386
90°	26	32	26	26	26	28
95°	50	49	50	43	50	53
105°	278	144	278	211	278	375
115°	1189	1018	1189	966	1189	1084
125°	762	800	762	698	762	702
135°	483	559	483	510	483	383
145°	439	459	439	426	439	275
155°	392	410	392	382	392	183
165°	374	386	374	367	374	106
175°	375	384	375	368	375	36
180°	375	375	375	375	375	

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TEST NUMBER: P1433377
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	47335.6	47335.6	47335.6	47335.6	*47335.6*	47335.6	47335.6	47335.6	47335.6	47335.6	47335.6
2.5°	47308.0	47919.6	48414.9	48741.5	*48903.1*	48741.5	48414.9	47919.6	47308.0	46700.0	46282.0
5°	47174.0	48398.9	49436.5	50115.6	*50326.0*	50115.6	49436.5	48398.9	47174.0	46016.6	45248.8
7.5°	46853.6	48761.9	50303.8	51096.4	*51289.9*	51096.4	50303.8	48761.9	46853.6	45215.0	44244.9
10°	*46364.5*	*48991.0*	*50772.4*	*51340.4*	*51363.5*	*51340.4*	*50772.4*	*48991.0*	*46364.5*	*44157.1*	*43012.9*
12.5°	45584.3	48909.3	50615.3	50428.9	*50005.5*	50428.9	50615.3	48909.3	45584.3	42864.6	41421.3
15°	44430.4	48425.5	49620.3	48103.4	*47133.2*	48103.4	49620.3	48425.5	44430.4	41119.6	39445.6
17.5°	42804.3	47520.2	47543.3	44542.2	*42712.0*	44542.2	47543.3	47520.2	42804.3	38985.8	37142.2
20°	40708.6	46068.0	44683.4	39194.4	*37025.9*	39194.4	44683.4	46068.0	40708.6	36463.2	34654.2
22.5°	38081.3	44110.0	40700.7	33814.6	*30856.1*	33814.6	40700.7	44110.0	38081.3	33529.6	31647.0
25°	35008.3	41710.8	36416.2	27952.7	*24926.0*	27952.7	36416.2	41710.8	35008.3	30034.2	28331.7
27.5°	31394.0	38669.8	31853.8	22841.9	*20049.4*	22841.9	31853.8	38669.8	31394.0	26425.2	24686.4
30°	27379.3	34771.4	27106.0	18190.8	*15619.4*	18190.8	27106.0	34771.4	27379.3	22370.6	20813.6
32.5°	22884.5	30950.2	22546.3	14575.5	*12397.3*	14575.5	22546.3	30950.2	22884.5	18501.4	16874.4
35°	18737.6	26169.5	18434.8	11452.8	*9651.9*	11452.8	18434.8	26169.5	18737.6	14848.9	13251.2
37.5°	14705.1	21652.5	14695.3	9222.3	*7828.8*	9222.3	14695.3	21652.5	14705.1	11544.3	10247.5
40°	11440.5	16930.3	11514.2	7361.9	*6282.5*	7361.9	11514.2	16930.3	11440.5	8783.8	7953.9
42.5°	8668.5	12945.9	9050.2	6042.0	*5336.3*	6042.0	9050.2	12945.9	8668.5	6920.7	6299.4
45°	6776.1	9526.7	7067.2	5097.6	*4542.8*	5097.6	7067.2	9526.7	6776.1	5573.4	5156.1
47.5°	5518.3	7362.8	5727.8	4372.4	*3983.6*	4372.4	5727.8	7362.8	5518.3	4714.1	4401.7
50°	4635.1	5649.6	4755.8	3816.8	*3555.7*	3816.8	4755.8	5649.6	4635.1	4036.9	3828.2
52.5°	3981.8	4607.6	4050.1	3401.3	*3225.6*	3401.3	4050.1	4607.6	3981.8	3531.9	3402.2
55°	3431.5	3873.5	3522.1	3058.7	*2937.1*	3058.7	3522.1	3873.5	3431.5	3143.1	3047.2
57.5°	3013.5	3286.0	3058.7	2766.7	*2685.9*	2766.7	3058.7	3286.0	3013.5	2796.8	2745.4
60°	2643.3	2845.7	2699.3	2511.9	*2488.9*	2511.9	2699.3	2845.7	2643.3	2516.4	2482.6
62.5°	2358.4	2486.2	2386.8	2282.9	*2262.5*	2282.9	2386.8	2486.2	2358.4	2260.7	2267.0
65°	2092.1	2211.0	2132.9	2077.0	*2084.1*	2077.0	2132.9	2211.0	2092.1	2046.9	2056.6
67.5°	1886.2	1948.3	1914.6	1882.6	*1890.6*	1882.6	1914.6	1948.3	1886.2	1841.8	1856.9
70°	1667.0	1733.5	1698.9	1703.3	*1716.6*	1703.3	1698.9	1733.5	1667.0	1653.6	1665.2
72.5°	1457.5	1509.0	1497.4	1508.1	*1522.2*	1508.1	1497.4	1509.0	1457.5	1455.7	1456.6
75°	1251.5	1290.5	1295.9	1311.0	*1333.2*	1311.0	1295.9	1290.5	1251.5	1238.2	1254.2
77.5°	1026.9	1071.3	1088.2	1108.7	*1141.5*	1108.7	1088.2	1071.3	1026.9	1035.9	1043.8
80°	821.0	841.4	878.8	893.8	*940.0*	893.8	878.8	841.4	821.0	805.9	817.5
82.5°	600.9	619.5	651.5	679.9	*706.6*	679.9	651.5	619.5	600.9	593.9	594.7
85°	347.1	375.4	396.7	430.5	*438.4*	430.5	396.7	375.4	347.1	355.0	347.1
87.5°	121.6	130.5	149.1	162.5	*163.3*	162.5	149.1	130.5	121.6	124.2	112.7
90°	25.8	44.0	75.7	43.8	*32.1*	43.8	75.7	44.0	25.8	45.1	70.0
92.5°	33.5	59.3	106.4	57.2	*41.7*	57.2	106.4	59.3	33.5	58.5	112.3
95°	49.8	72.8	135.2	62.9	*49.4*	62.9	135.2	72.8	49.8	77.7	156.4
97.5°	76.6	90.1	152.5	66.8	*59.0*	66.8	152.5	90.1	76.6	95.0	179.5
100°	101.7	101.7	277.2	76.4	*66.7*	76.4	277.2	101.7	101.7	117.0	279.4
102.5°	153.5	198.5	641.1	150.2	*80.1*	150.2	641.1	198.5	153.5	218.8	592.3
105°	278.3	452.0	1126.9	382.6	*144.4*	382.6	1126.9	452.0	278.3	456.9	1055.1
107.5°	526.0	841.9	1451.4	751.3	*330.6*	751.3	1451.4	841.9	526.0	808.3	1392.0
110°	841.0	1175.9	1583.9	1027.8	*664.8*	1027.8	1583.9	1175.9	841.0	1109.7	1459.2

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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°	1094.4	1310.3	1547.5	1139.2	*918.2*	1139.2	1547.5	1310.3	1094.4	1225.0	1397.8
115°	1189.4	1291.2	1382.3	1135.3	*1018.0*	1135.3	1382.3	1291.2	1189.4	1196.2	1248.0
117.5°	1149.0	1181.7	1194.1	1066.2	*1023.8*	1066.2	1194.1	1181.7	1149.0	1076.1	1059.8
120°	1037.7	1024.3	1006.8	964.5	*966.3*	964.5	1006.8	1024.3	1037.7	939.8	885.1
122.5°	898.4	869.6	851.3	861.6	*887.5*	861.6	851.3	869.6	898.4	800.5	759.3
125°	762.1	733.2	742.8	773.3	*800.1*	773.3	742.8	733.2	762.1	680.4	669.9
127.5°	647.8	634.3	664.0	698.4	*721.3*	698.4	664.0	634.3	647.8	595.9	606.5
130°	566.1	569.0	608.3	637.9	*652.2*	637.9	608.3	569.0	566.1	541.1	567.1
132.5°	515.1	529.6	566.9	592.7	*601.3*	592.7	566.9	529.6	515.1	508.3	540.0
135°	483.4	504.7	539.1	555.3	*559.0*	555.3	539.1	504.7	483.4	486.2	515.1
137.5°	465.1	486.3	512.1	525.5	*522.5*	525.5	512.1	486.3	465.1	471.7	493.9
140°	454.4	475.7	487.2	502.4	*500.4*	502.4	487.2	475.7	454.4	458.2	475.5
142.5°	443.8	463.1	468.9	480.2	*477.3*	480.2	468.9	463.1	443.8	447.6	459.1
145°	438.9	453.4	448.7	462.9	*458.9*	462.9	448.7	453.4	438.9	440.0	446.6
147.5°	429.4	440.0	434.2	446.6	*442.5*	446.6	434.2	440.0	429.4	429.4	432.0
150°	418.6	426.2	417.8	432.0	*431.9*	432.0	417.8	426.2	418.6	416.7	419.5
152.5°	404.1	411.8	404.1	420.4	*419.4*	420.4	404.1	411.8	404.1	402.2	405.0
155°	392.5	396.3	392.5	408.7	*409.6*	408.7	392.5	396.3	392.5	391.6	393.3
157.5°	384.6	387.5	385.5	399.9	*400.7*	399.9	385.5	387.5	384.6	384.6	385.5
160°	378.6	382.5	381.4	393.8	*394.7*	393.8	381.4	382.5	378.6	379.6	380.5
162.5°	376.5	376.5	376.4	388.8	*390.6*	388.8	376.4	376.5	376.5	376.5	378.5
165°	373.5	375.3	373.3	382.7	*386.5*	382.7	373.3	375.3	373.5	374.5	374.5
167.5°	373.3	371.4	373.2	381.6	*385.3*	381.6	373.2	371.4	373.3	374.4	374.4
170°	370.4	371.2	371.2	379.5	*383.2*	379.5	371.2	371.2	370.4	372.3	373.3
172.5°	373.0	373.0	371.9	378.3	*383.9*	378.3	371.9	373.0	373.0	374.1	376.0
175°	374.8	373.8	373.6	378.2	*383.8*	378.2	373.6	373.8	374.8	373.9	373.9
177.5°	372.9	374.7	376.4	381.0	*388.5*	381.0	376.4	374.7	372.9	373.9	373.9
180°	374.7	374.7	374.7	374.7	*374.7*	374.7	374.7	374.7	374.7	374.7	374.7

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	47335.6	47335.6	47335.6	47335.6	47335.6	47335.6
2.5°	45960.6	45930.4	45960.6	46282.0	46700.0	47308.0
5°	44892.9	44726.0	44892.9	45248.8	46016.6	47174.0
7.5°	43649.3	43552.5	43649.3	44244.9	45215.0	46853.6
10°	*42340.1*	*42120.8*	*42340.1*	*43012.9*	*44157.1*	*46364.5*
12.5°	40726.3	40436.1	40726.3	41421.3	42864.6	45584.3
15°	38674.2	38419.5	38674.2	39445.6	41119.6	44430.4
17.5°	36472.0	36241.2	36472.0	37142.2	38985.8	42804.3
20°	33706.2	33525.1	33706.2	34654.2	36463.2	40708.6
22.5°	30804.7	30635.1	30804.7	31647.0	33529.6	38081.3
25°	27390.9	27298.6	27390.9	28331.7	30034.2	35008.3
27.5°	23701.9	23544.8	23701.9	24686.4	26425.2	31394.0
30°	19933.1	19673.1	19933.1	20813.6	22370.6	27379.3
32.5°	16246.9	16059.6	16246.9	16874.4	18501.4	22884.5
35°	12684.0	12496.7	12684.0	13251.2	14848.9	18737.6
37.5°	9883.5	9552.5	9883.5	10247.5	11544.3	14705.1
40°	7495.9	7442.6	7495.9	7953.9	8783.8	11440.5
42.5°	6102.3	5957.6	6102.3	6299.4	6920.7	8668.5
45°	5007.0	4950.2	5007.0	5156.1	5573.4	6776.1
47.5°	4305.8	4330.7	4305.8	4401.7	4714.1	5518.3
50°	3783.0	3798.1	3783.0	3828.2	4036.9	4635.1
52.5°	3397.8	3384.5	3397.8	3402.2	3531.9	3981.8
55°	3057.0	3040.0	3057.0	3047.2	3143.1	3431.5
57.5°	2758.7	2771.1	2758.7	2745.4	2796.8	3013.5
60°	2492.4	2503.9	2492.4	2482.6	2516.4	2643.3
62.5°	2267.9	2275.0	2267.9	2267.0	2260.7	2358.4
65°	2067.3	2075.2	2067.3	2056.6	2046.9	2092.1
67.5°	1875.5	1875.5	1875.5	1856.9	1841.8	1886.2
70°	1695.3	1694.4	1695.3	1665.2	1653.6	1667.0
72.5°	1478.8	1500.1	1478.8	1456.6	1455.7	1457.5
75°	1268.4	1293.2	1268.4	1254.2	1238.2	1251.5
77.5°	1055.4	1093.5	1055.4	1043.8	1035.9	1026.9
80°	837.0	878.8	837.0	817.5	805.9	821.0
82.5°	618.6	649.7	618.6	594.7	593.9	600.9
85°	368.4	418.0	368.4	347.1	355.0	347.1
87.5°	118.1	150.9	118.1	112.7	124.2	121.6
90°	41.3	25.8	41.3	70.0	45.1	25.8
92.5°	62.4	37.3	62.4	112.3	58.5	33.5
95°	71.9	43.1	71.9	156.4	77.7	49.8
97.5°	79.6	55.5	79.6	179.5	95.0	76.6
100°	93.0	72.8	93.0	279.4	117.0	101.7
102.5°	196.8	122.8	196.8	592.3	218.8	153.5
105°	413.8	211.1	413.8	1055.1	456.9	278.3
107.5°	740.2	364.7	740.2	1392.0	808.3	526.0
110°	982.1	679.7	982.1	1459.2	1109.7	841.0

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

Scaled Data Report

TEST NUMBER: P1433377
CATALOG NUMBER: EHBR1-60-UNV-TASM-L930-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1055.1	917.8	1055.1	1397.8	1225.0	1094.4
115°	1014.8	965.7	1014.8	1248.0	1196.2	1189.4
117.5°	926.4	933.1	926.4	1059.8	1076.1	1149.0
120°	824.7	864.0	824.7	885.1	939.8	1037.7
122.5°	731.4	777.6	731.4	759.3	800.5	898.4
125°	650.8	697.8	650.8	669.9	680.4	762.1
127.5°	595.1	626.7	595.1	606.5	595.9	647.8
130°	551.9	578.8	551.9	567.1	541.1	566.1
132.5°	522.0	539.3	522.0	540.0	508.3	515.1
135°	496.0	510.5	496.0	515.1	486.2	483.4
137.5°	473.9	486.5	473.9	493.9	471.7	465.1
140°	454.6	465.2	454.6	475.5	458.2	454.4
142.5°	434.3	442.0	434.3	459.1	447.6	443.8
145°	420.7	426.5	420.7	446.6	440.0	438.9
147.5°	409.0	412.9	409.0	432.0	429.4	429.4
150°	397.4	401.2	397.4	419.5	416.7	418.6
152.5°	384.8	389.5	384.8	405.0	402.2	404.1
155°	377.0	381.7	377.0	393.3	391.6	392.5
157.5°	372.9	376.7	372.9	385.5	384.6	384.6
160°	369.9	372.7	369.9	380.5	379.6	378.6
162.5°	365.9	368.8	365.9	378.5	376.5	376.5
165°	365.8	366.7	365.8	374.5	374.5	373.5
167.5°	364.7	366.7	364.7	374.4	374.4	373.3
170°	365.6	366.5	365.6	373.3	372.3	370.4
172.5°	367.4	368.3	367.4	376.0	374.1	373.0
175°	367.3	368.2	367.3	373.9	373.9	374.8
177.5°	370.1	371.0	370.1	373.9	373.9	372.9
180°	374.7	374.7	374.7	374.7	374.7	374.7

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

Scaled Data Report

TEST NUMBER: P1433377
CATALOG NUMBER: EHBR1-60-UNV-TASM-L930-UPL40

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	19.45	20.57	19.93	21.01	21.48	18.77	19.88	19.25	20.33	20.80
	3H	21.00	21.99	21.49	22.45	22.97	20.62	21.61	21.11	22.07	22.59
	4H	21.64	22.56	22.15	23.04	23.57	21.40	22.32	21.91	22.80	23.34
	6H	22.12	22.97	22.64	23.46	24.01	22.04	22.89	22.57	23.39	23.93
	8H	22.27	23.07	22.81	23.58	24.14	22.27	23.07	22.80	23.58	24.14
	12H	22.34	23.11	22.88	23.61	24.19	22.39	23.16	22.93	23.66	24.24
4H	2H	19.87	20.79	20.38	21.27	21.80	19.35	20.27	19.86	20.75	21.28
	3H	21.67	22.43	22.19	22.95	23.51	21.40	22.17	21.93	22.69	23.24
	4H	22.44	23.13	22.98	23.66	24.25	22.31	23.00	22.85	23.53	24.12
	6H	23.05	23.65	23.62	24.21	24.82	23.08	23.67	23.65	24.23	24.84
	8H	23.25	23.80	23.82	24.36	24.98	23.35	23.91	23.93	24.46	25.08
	12H	23.36	23.84	23.95	24.43	25.05	23.52	24.01	24.11	24.60	25.22
8H	4H	22.69	23.24	23.26	23.80	24.41	22.59	23.14	23.17	23.70	24.32
	6H	23.43	23.88	24.04	24.49	25.11	23.50	23.94	24.10	24.55	25.17
	8H	23.70	24.10	24.32	24.72	25.36	23.85	24.25	24.47	24.87	25.50
	12H	23.87	24.22	24.49	24.82	25.53	24.10	24.45	24.72	25.05	25.76
12H	4H	22.70	23.19	23.29	23.78	24.39	22.60	23.09	23.19	23.68	24.30
	6H	23.47	23.87	24.10	24.49	25.13	23.54	23.94	24.16	24.56	25.20
	8H	23.79	24.14	24.41	24.74	25.45	23.95	24.29	24.56	24.90	25.60

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: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

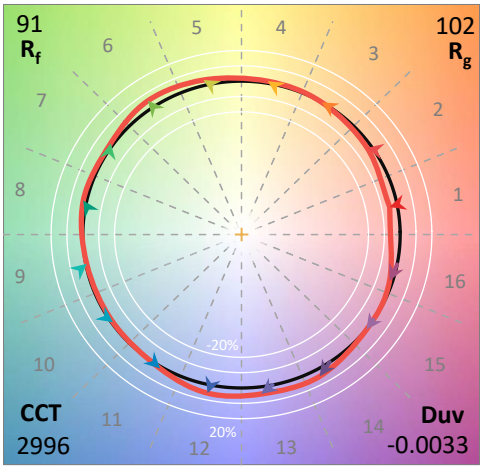
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-5
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-L930-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	2996
CIE u':	0.2519
CIE v':	0.5169
Duv:	-0.0033
CIE x:	0.4325
CIE y:	0.3945
CIE z:	0.1730
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	584
Purity:	48.21818
Rf:	91.3
Rg:	102

CRI (Ra):	94.4
R1:	96.8
R2:	98.1
R3:	97.8
R4:	95.6
R5:	96.9
R6:	95.7
R7:	90.9
R8:	83.0
R9:	61.4
R10:	94.4
R11:	95.7
R12:	88.5
R13:	97.3
R14:	97.8
R15:	92.3



Test Conditions

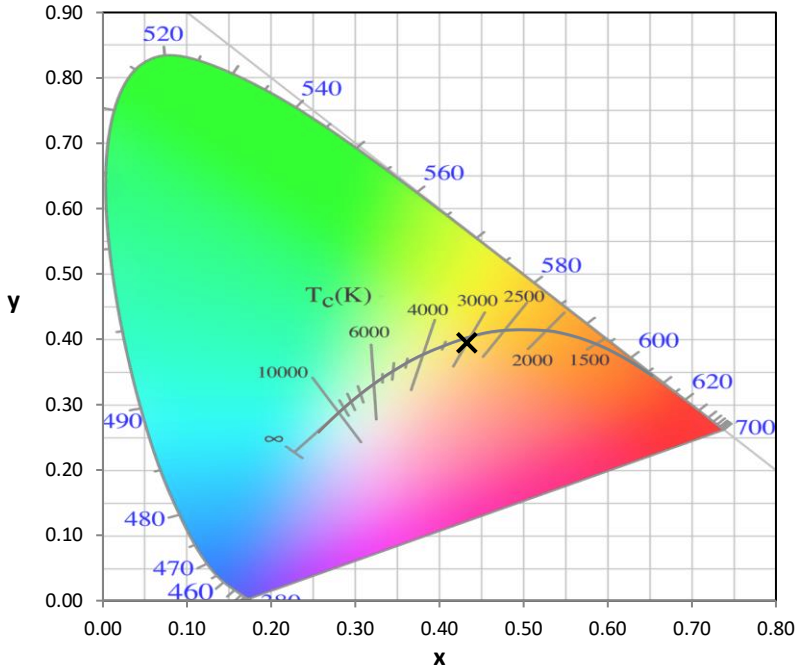
Stabilization Time:	40M
Operation Time:	1H 40M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-5

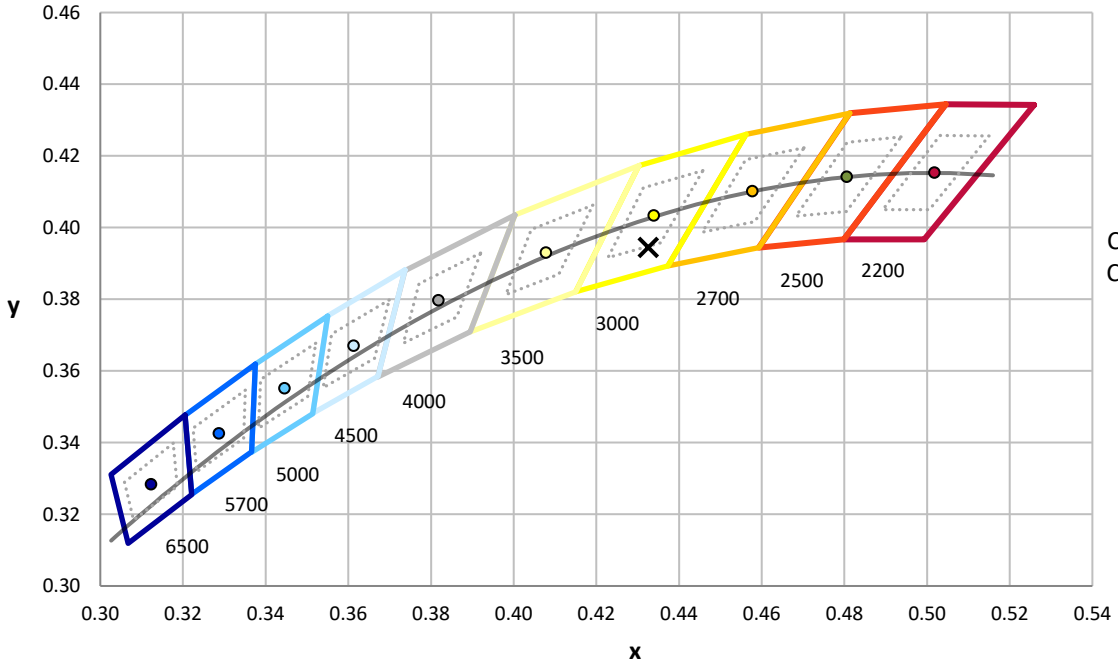
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

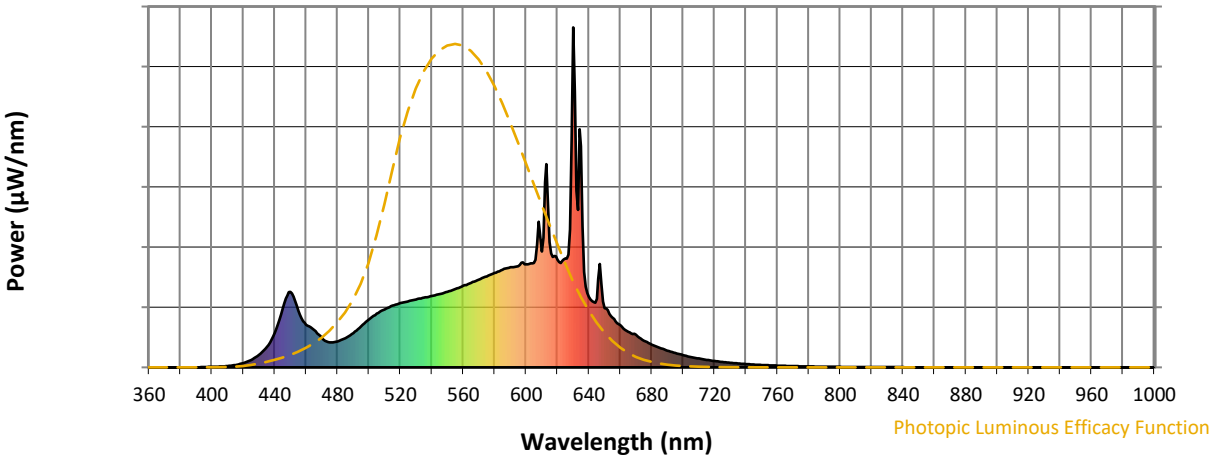


CCT = 2996K
CIE x = 0.4325
CIE y = 0.3945
Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

Photopic Flux vs. Wavelength

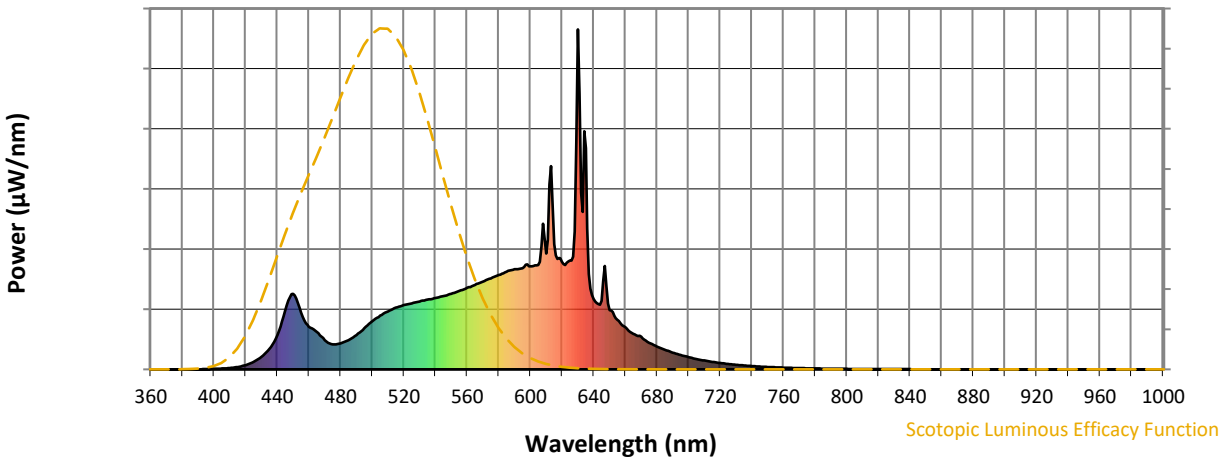


Photopic Lumens: NR

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Scotopic Flux vs. Wavelength

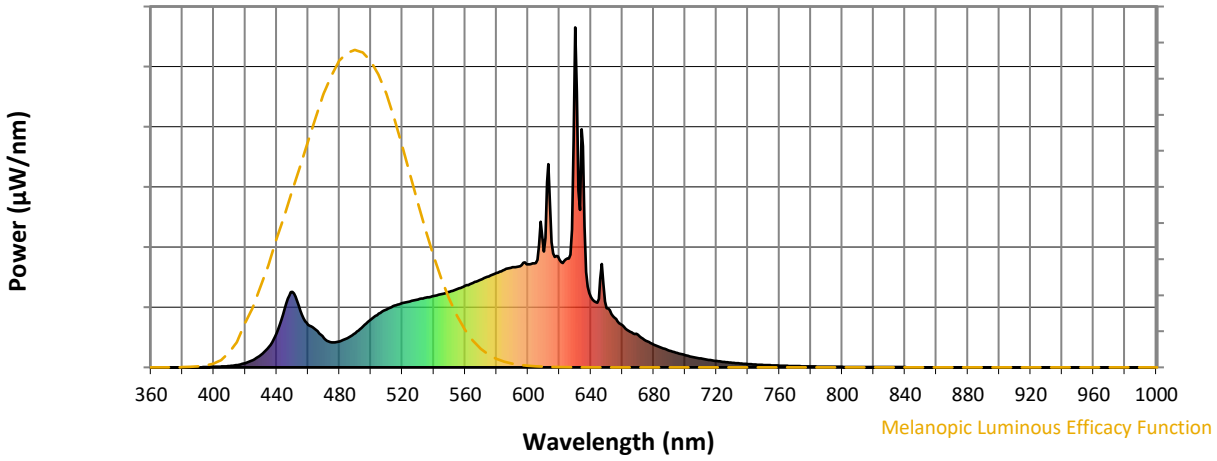


Scotopic Lumens: NR **S/P: 1.44**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.85**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

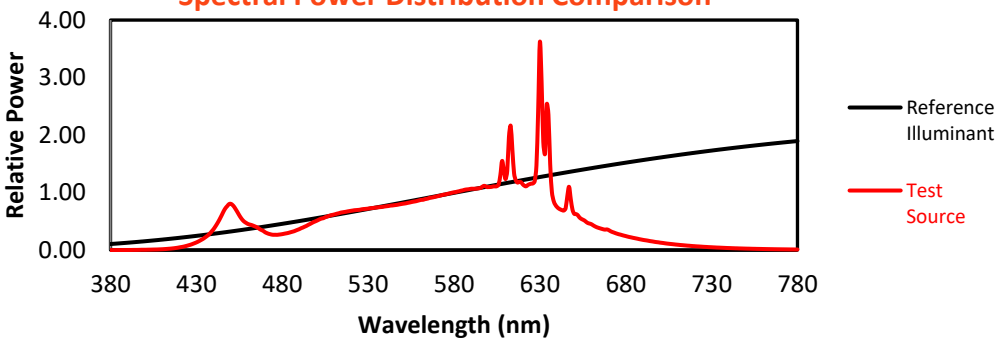
REPORT NUMBER: SP1-2506-472-5

TM-30-18

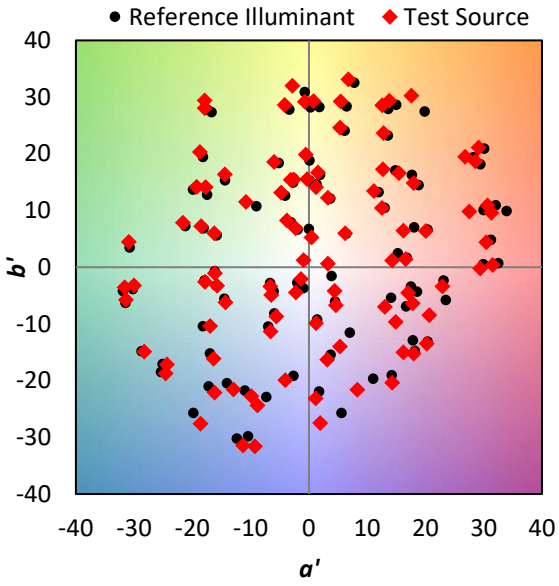
Summary

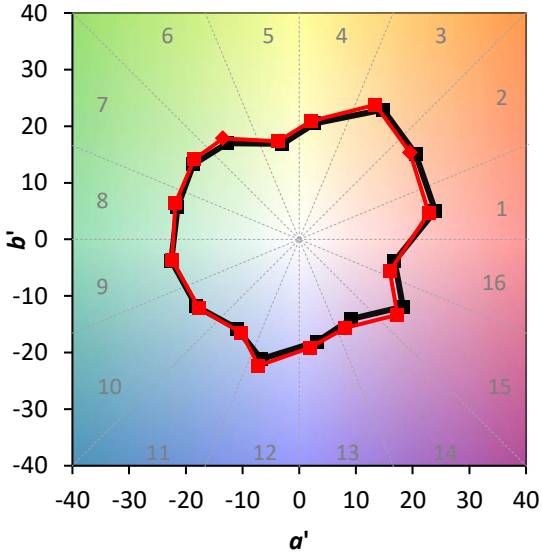
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

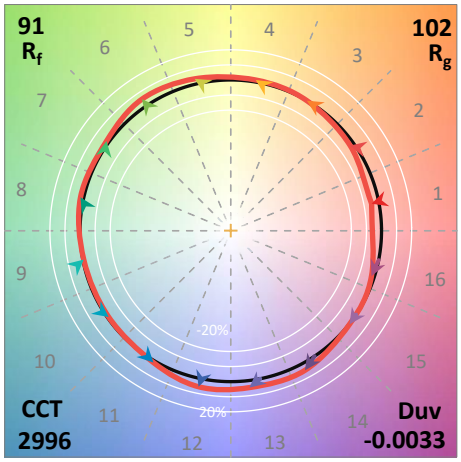
Spectral Power Distribution Comparison

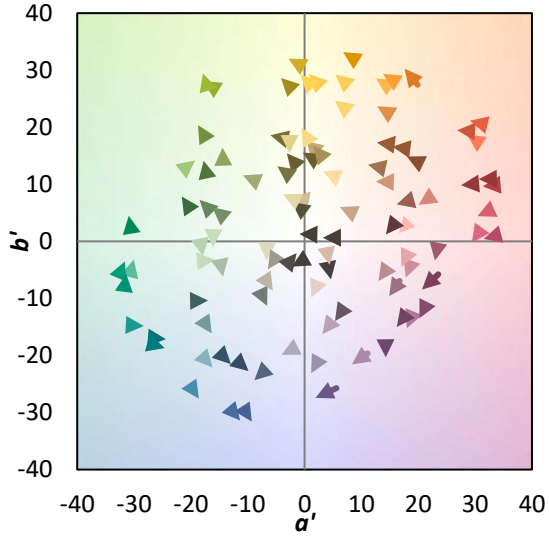


Color Vector Graphics









REPORT NUMBER: SP1-2506-472-5

TM-30-18

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

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
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CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
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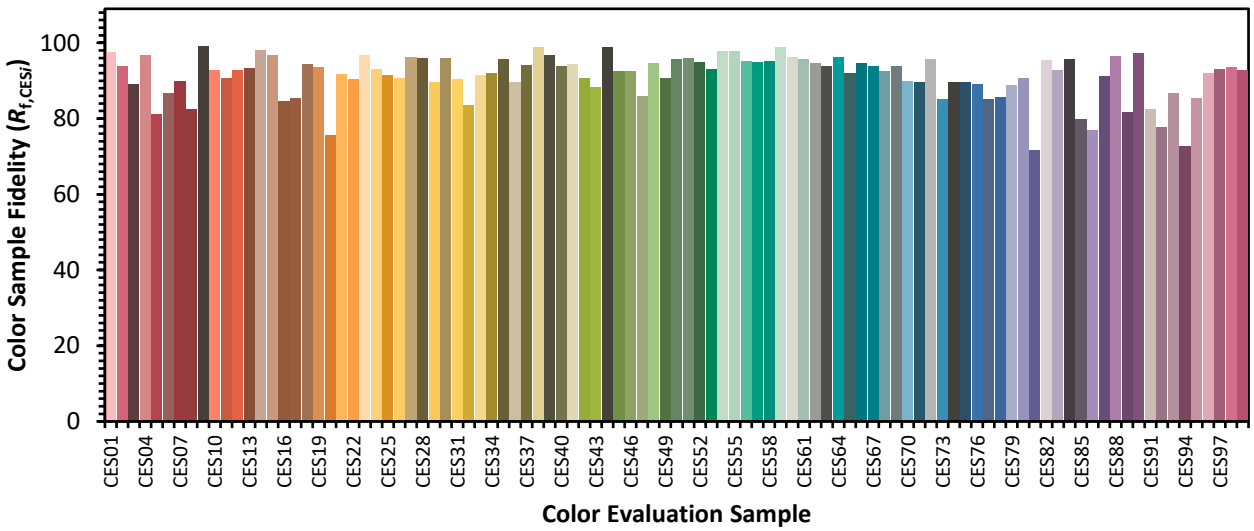

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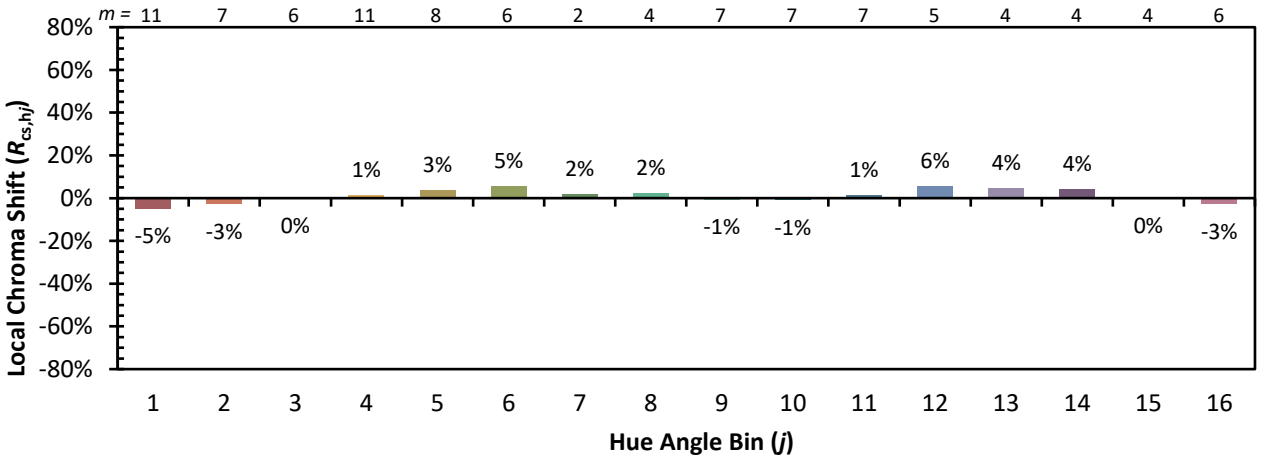
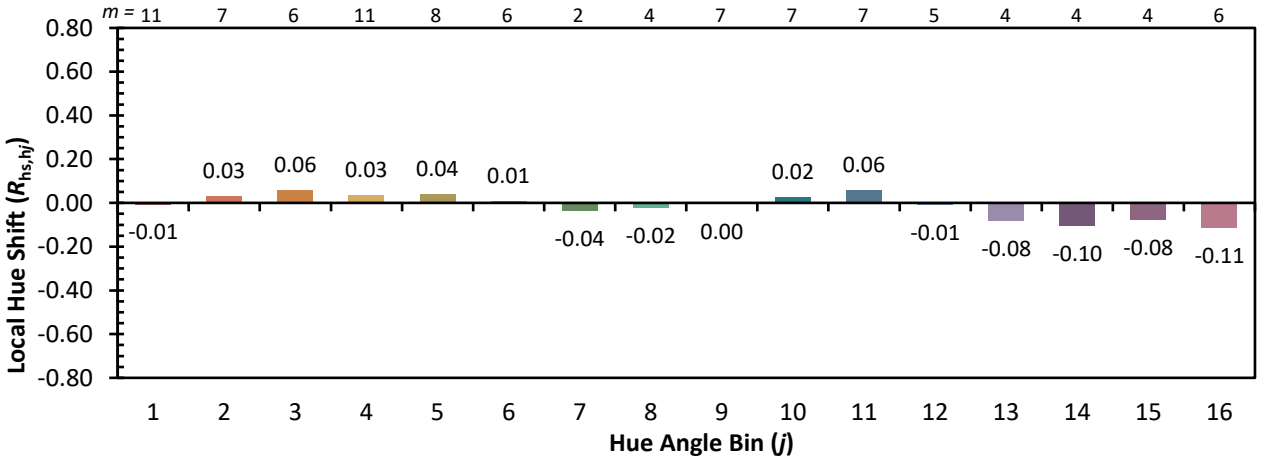
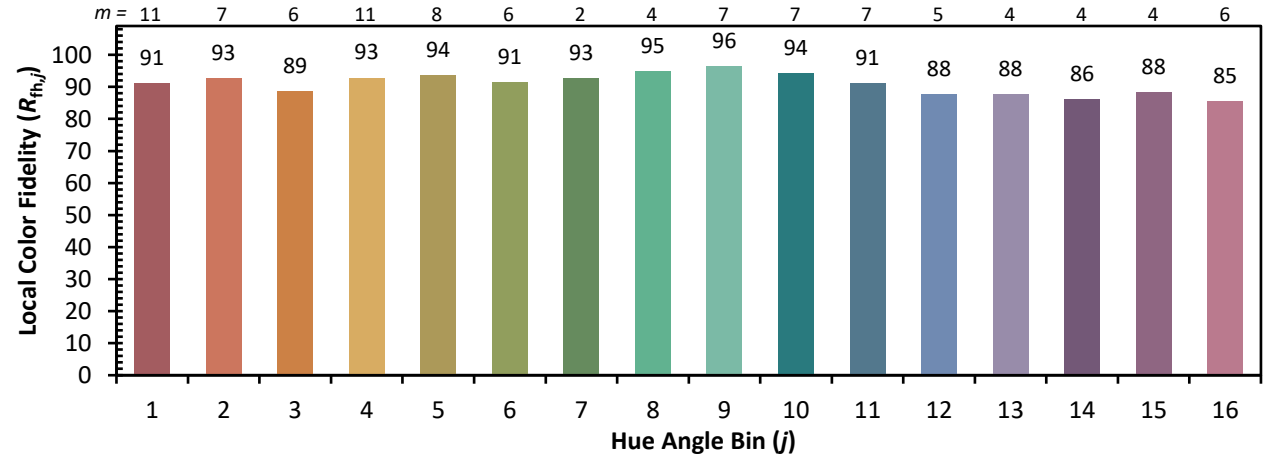
Color Rendition by Hue-Angle Bin







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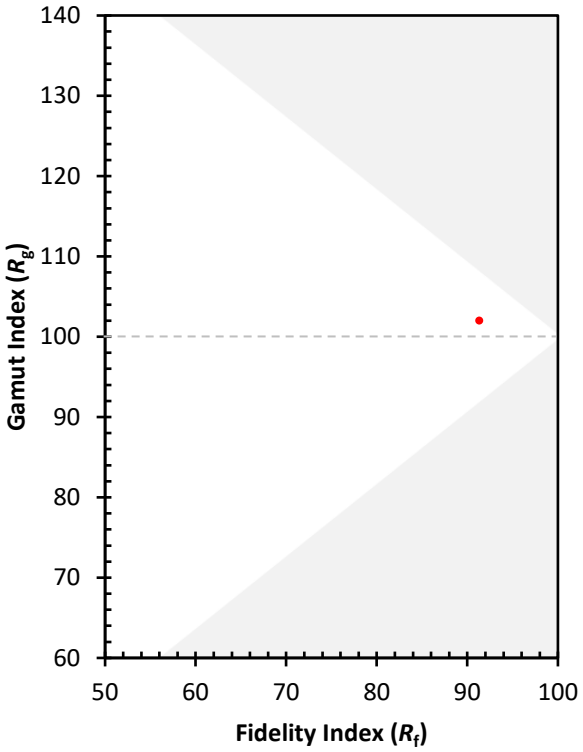
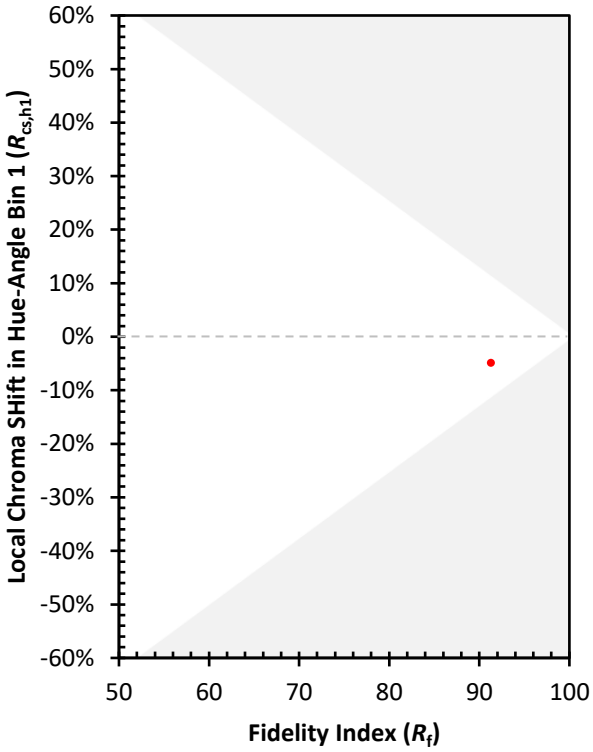
Measure Comparisons





(END OF REPORT)