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: P1433158

Luminaire Tested: EHBR1-24-UNV-TASM-L930-UPL30

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:	P1433158
	REPORT IS A COMBINATION OF REPORTS P1431712 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-TASM-L930-UPL30
Description:	Elevate Round Highbay at, 24000 lumens, 3000K 90CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24795.9 lumens
Efficiency:	N/A
Efficacy:	165.0 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:	Semi-Direct

Input Watts (W):	150.3
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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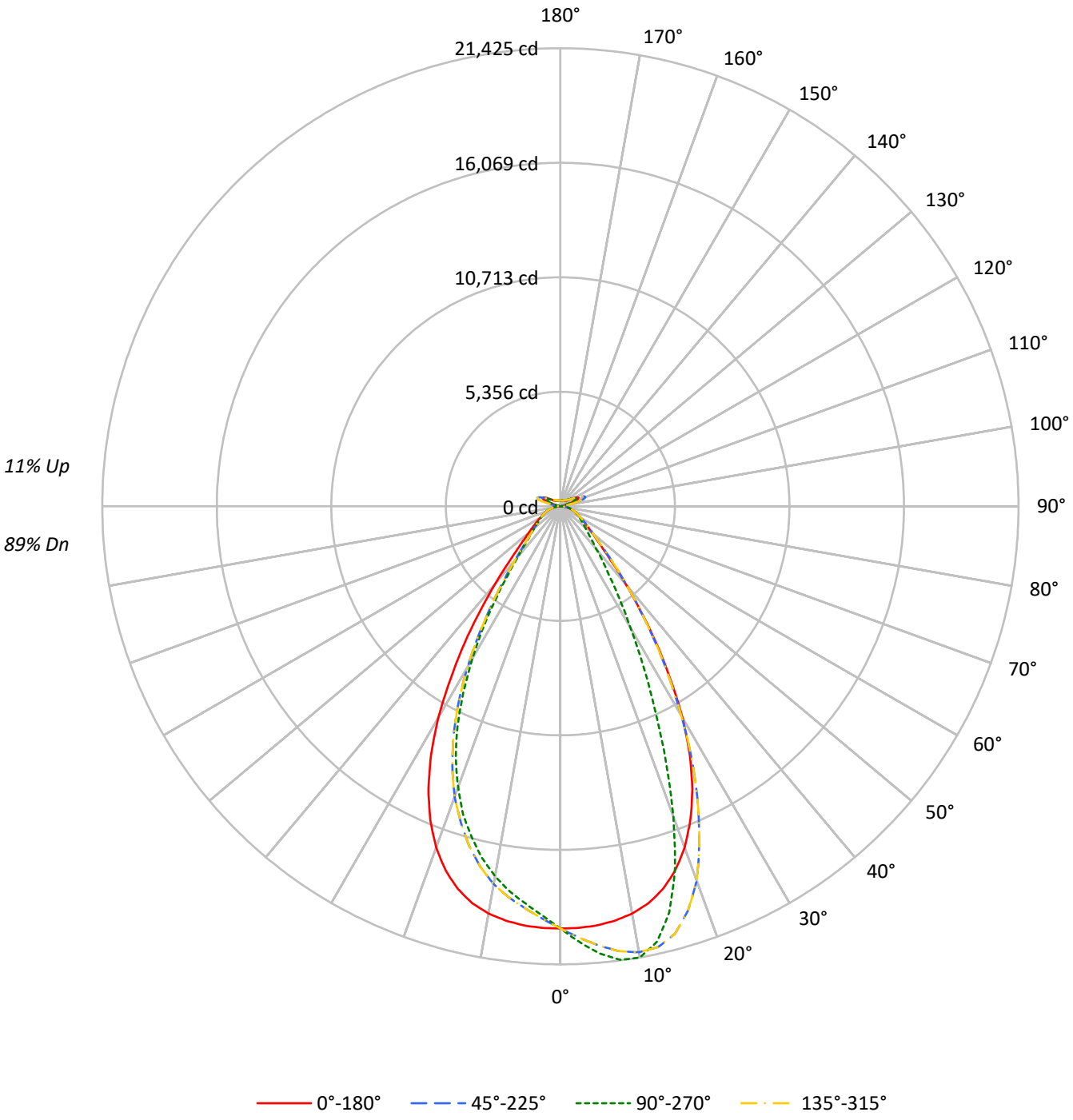
Luminous Intensity Polar Plot



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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	109	106	103	100	105	102	100	97	96	94	92	91	89	87	85	84	83	80
2	102	96	91	87	99	93	89	85	88	85	82	84	81	78	79	77	75	73
3	96	88	82	77	93	86	80	76	81	77	73	77	74	70	74	71	68	66
4	90	81	74	69	87	79	73	68	75	70	66	72	68	64	69	65	62	60
5	84	74	68	63	82	73	67	62	70	64	60	67	62	59	64	60	57	55
6	79	69	62	57	77	68	61	56	65	59	55	62	58	54	60	56	53	51
7	75	64	57	53	73	63	57	52	61	55	51	58	54	50	56	52	49	47
8	71	60	53	49	69	59	53	48	57	51	47	55	50	46	53	49	46	44
9	67	56	50	45	65	55	49	45	53	48	44	52	47	43	50	46	43	41
10	64	53	46	42	62	52	46	42	50	45	41	49	44	40	47	43	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	92725	92725	92725	92725
5°	92160	98318	92160	87378
10°	91028	100842	91028	82696
15°	88340	93714	88340	76388
20°	82620	75146	82620	68041
25°	73125	52065	73125	57021
30°	59375	33872	59375	42663
35°	42586	21936	42586	28402
40°	27533	15120	27533	17912
45°	17470	11712	17470	12762
50°	12973	9952	12973	10630
55°	10591	9065	10591	9384
60°	9172	8636	9172	8689
65°	8361	8328	8361	8294
70°	7925	8160	7925	8055
75°	7410	7894	7410	7659
80°	6511	7453	6511	6967
85°	4213	5322	4213	5074

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 24561 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1877.5	7.6
10°-20°	5107.7	20.6
20°-30°	5990.3	24.2
30°-40°	4165.9	16.8
40°-50°	2070.3	8.3
50°-60°	1238.2	5.0
60°-70°	871.5	3.5
70°-80°	561.4	2.3
80°-90°	183.1	0.7
90°-100°	72.6	0.3
100°-110°	475.0	1.9
110°-120°	877.8	3.5
120°-130°	521.5	2.1
130°-140°	315.1	1.3
140°-150°	217.8	0.9
150°-160°	141.9	0.6
160°-170°	81.3	0.3
170°-180°	27.0	0.1
0°-30°	12975.5	52.3
0°-40°	17141.4	69.1
0°-60°	20449.9	82.5
0°-90°	22065.9	89.0
90°-120°	1425.3	5.7
90°-150°	2479.8	10.0
90°-180°	2730.0	11.0
0°-180°	24795.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	19745	19745	19745	19745	19745	
5°	19678	20992	19678	18657	19678	1867
15°	18533	19661	18533	16026	18533	5179
25°	14603	10397	14603	11387	14603	6611
35°	7816	4026	7816	5213	7816	4879
45°	2826	1895	2826	2065	2826	2313
55°	1431	1225	1431	1268	1431	1309
65°	873	869	873	866	873	876
75°	522	556	522	540	522	548
85°	145	183	145	174	145	161
90°	20	22	20	20	20	16
95°	38	36	38	34	38	41
105°	218	110	218	165	218	294
115°	934	798	934	759	934	851
125°	598	626	598	548	598	551
135°	377	436	377	400	377	299
145°	341	357	341	332	341	214
155°	303	316	303	294	303	142
165°	285	293	285	279	285	81
175°	283	288	283	278	283	27
180°	282	282	282	282	282	

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TEST NUMBER: P1433158
CATALOG NUMBER: EHBR1-24-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	19745.1	19745.1	19745.1	19745.1	*19745.1*	19745.1	19745.1	19745.1	19745.1	19745.1	19745.1
2.5°	19733.6	19988.7	20195.3	20331.5	*20398.9*	20331.5	20195.3	19988.7	19733.6	19480.0	19305.6
5°	19677.7	20188.6	20621.4	20904.7	*20992.4*	20904.7	20621.4	20188.6	19677.7	19194.9	18874.6
7.5°	19544.0	20340.1	20983.1	21313.8	*21394.5*	21313.8	20983.1	20340.1	19544.0	18860.5	18455.9
10°	*19340.1*	*20435.6*	*21178.7*	*21415.6*	*21425.2*	*21415.6*	*21178.7*	*20435.6*	*19340.1*	*18419.2*	*17941.9*
12.5°	19014.5	20401.5	21113.2	21035.4	*20858.7*	21035.4	21113.2	20401.5	19014.5	17880.1	17278.1
15°	18533.2	20199.7	20698.1	20065.4	*19660.7*	20065.4	20698.1	20199.7	18533.2	17152.2	16453.9
17.5°	17855.0	19822.1	19831.7	18579.9	*17816.5*	18579.9	19831.7	19822.1	17855.0	16262.1	15493.1
20°	16980.8	19216.4	18638.7	16349.1	*15444.6*	16349.1	18638.7	19216.4	16980.8	15209.9	14455.3
22.5°	15884.8	18399.5	16977.5	14105.1	*12871.0*	14105.1	16977.5	18399.5	15884.8	13986.2	13200.9
25°	14603.0	17398.8	15190.3	11659.9	*10397.4*	11659.9	15190.3	17398.8	14603.0	12528.2	11818.0
27.5°	13095.4	16130.3	13287.2	9528.0	*8363.2*	9528.0	13287.2	16130.3	13095.4	11022.7	10297.4
30°	11420.8	14504.2	11306.7	7587.9	*6515.3*	7587.9	11306.7	14504.2	11420.8	9331.4	8682.0
32.5°	9545.8	12910.2	9404.7	6079.9	*5171.3*	6079.9	9404.7	12910.2	9545.8	7717.5	7038.8
35°	7816.0	10916.1	7689.7	4777.3	*4026.1*	4777.3	7689.7	10916.1	7816.0	6194.0	5527.5
37.5°	6133.9	9031.9	6129.9	3846.9	*3265.6*	3846.9	6129.9	9031.9	6133.9	4815.5	4274.5
40°	4772.1	7062.1	4802.9	3070.9	*2620.7*	3070.9	4802.9	7062.1	4772.1	3664.0	3317.8
42.5°	3615.9	5400.1	3775.0	2520.3	*2226.0*	2520.3	3775.0	5400.1	3615.9	2886.8	2627.7
45°	2826.5	3973.9	2947.9	2126.3	*1894.9*	2126.3	2947.9	3973.9	2826.5	2324.8	2150.8
47.5°	2301.8	3071.2	2389.2	1823.9	*1661.7*	1823.9	2389.2	3071.2	2301.8	1966.4	1836.1
50°	1933.4	2356.6	1983.8	1592.1	*1483.2*	1592.1	1983.8	2356.6	1933.4	1683.9	1596.9
52.5°	1660.9	1922.0	1689.4	1418.8	*1345.5*	1418.8	1689.4	1922.0	1660.9	1473.2	1419.1
55°	1431.3	1615.8	1469.1	1275.8	*1225.1*	1275.8	1469.1	1615.8	1431.3	1311.0	1271.0
57.5°	1257.0	1370.7	1275.8	1154.0	*1120.3*	1154.0	1275.8	1370.7	1257.0	1166.7	1145.2
60°	1102.6	1187.0	1126.0	1047.8	*1038.2*	1047.8	1126.0	1187.0	1102.6	1049.7	1035.6
62.5°	983.7	1037.1	995.6	952.3	*943.8*	952.3	995.6	1037.1	983.7	943.0	945.6
65°	872.7	922.3	889.7	866.4	*869.3*	866.4	889.7	922.3	872.7	853.8	857.9
67.5°	786.8	812.7	798.6	785.3	*788.7*	785.3	798.6	812.7	786.8	768.3	774.6
70°	695.4	723.1	708.6	710.5	*716.0*	710.5	708.6	723.1	695.4	689.7	694.6
72.5°	607.9	629.4	624.6	629.1	*634.9*	629.1	624.6	629.4	607.9	607.2	607.6
75°	522.0	538.3	540.6	546.9	*556.1*	546.9	540.6	538.3	522.0	516.5	523.2
77.5°	428.4	446.9	453.9	462.4	*476.1*	462.4	453.9	446.9	428.4	432.1	435.4
80°	342.5	351.0	366.5	372.9	*392.1*	372.9	366.5	351.0	342.5	336.2	341.0
82.5°	250.7	258.4	271.8	283.6	*294.7*	283.6	271.8	258.4	250.7	247.7	248.1
85°	144.8	156.6	165.5	179.6	*182.9*	179.6	165.5	156.6	144.8	148.1	144.8
87.5°	50.7	54.4	62.2	67.7	*68.1*	67.7	62.2	54.4	50.7	51.9	47.1
90°	20.0	34.0	58.5	32.4	*22.5*	32.4	58.5	34.0	20.0	35.1	54.7
92.5°	26.0	46.0	82.6	43.0	*30.1*	43.0	82.6	46.0	26.0	45.6	88.0
95°	38.5	56.6	105.2	47.5	*36.2*	47.5	105.2	56.6	38.5	60.8	122.6
97.5°	59.6	70.1	118.9	50.5	*43.7*	50.5	118.9	70.1	59.6	74.3	140.8
100°	79.2	79.2	217.0	58.1	*49.7*	58.1	217.0	79.2	79.2	91.3	219.3
102.5°	120.0	155.1	502.8	115.8	*60.3*	115.8	502.8	155.1	120.0	171.4	465.4
105°	218.2	354.4	884.8	298.5	*110.5*	298.5	884.8	354.4	218.2	358.6	829.3
107.5°	412.9	660.9	1139.9	588.4	*256.9*	588.4	1139.9	660.9	412.9	634.8	1093.9
110°	660.5	923.6	1244.1	805.9	*519.7*	805.9	1244.1	923.6	660.5	871.9	1146.7

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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°	859.9	1029.3	1215.4	893.4	*719.0*	893.4	1215.4	1029.3	859.9	962.5	1098.4
115°	934.2	1014.2	1085.6	890.4	*797.5*	890.4	1085.6	1014.2	934.2	939.9	980.6
117.5°	902.5	928.1	937.7	836.1	*802.0*	836.1	937.7	928.1	902.5	845.1	832.7
120°	814.9	804.3	790.0	756.0	*756.8*	756.0	790.0	804.3	814.9	737.9	695.3
122.5°	705.2	682.4	667.7	674.9	*694.8*	674.9	667.7	682.4	705.2	628.1	596.0
125°	598.0	575.2	582.0	605.4	*625.8*	605.4	582.0	575.2	598.0	533.3	525.4
127.5°	507.7	497.1	520.1	546.5	*563.9*	546.5	520.1	497.1	507.7	466.9	475.6
130°	443.1	445.7	476.3	498.5	*509.6*	498.5	476.3	445.7	443.1	423.5	444.2
132.5°	402.7	414.4	443.4	462.8	*469.1*	462.8	443.4	414.4	402.7	397.0	422.3
135°	377.4	394.8	421.2	433.6	*435.9*	433.6	421.2	394.8	377.4	379.3	402.7
137.5°	362.6	380.1	400.0	409.9	*407.3*	409.9	400.0	380.1	362.6	367.6	385.3
140°	354.0	371.3	380.4	391.7	*389.5*	391.7	380.4	371.3	354.0	357.1	370.6
142.5°	345.3	361.2	365.6	374.0	*371.3*	374.0	365.6	361.2	345.3	348.3	357.4
145°	341.1	352.9	349.5	360.5	*356.6*	360.5	349.5	352.9	341.1	342.3	347.2
147.5°	333.6	342.3	337.7	347.2	*343.4*	347.2	337.7	342.3	333.6	333.6	335.5
150°	324.9	331.0	324.6	335.5	*334.7*	335.5	324.6	331.0	324.9	323.4	325.3
152.5°	313.1	319.2	313.1	325.6	*324.5*	325.6	313.1	319.2	313.1	311.6	313.5
155°	303.3	306.4	303.3	315.8	*316.2*	315.8	303.3	306.4	303.3	303.0	303.8
157.5°	296.6	298.4	296.9	307.9	*308.2*	307.9	296.9	298.4	296.6	296.6	296.9
160°	290.4	293.5	292.4	301.8	*302.2*	301.8	292.4	293.5	290.4	291.6	291.9
162.5°	288.2	288.2	287.5	296.8	*297.6*	296.8	287.5	288.2	288.2	288.2	289.7
165°	284.8	286.3	284.0	290.8	*293.0*	290.8	284.0	286.3	284.8	286.0	286.0
167.5°	284.0	282.5	283.3	288.9	*291.2*	288.9	283.3	282.5	284.0	285.2	285.2
170°	281.4	281.8	281.0	286.7	*288.9*	286.7	281.0	281.8	281.4	282.9	284.0
172.5°	282.5	282.5	280.6	284.7	*288.5*	284.7	280.6	282.5	282.5	283.6	285.2
175°	283.2	282.1	281.3	283.9	*287.7*	283.9	281.3	282.1	283.2	282.8	282.8
177.5°	281.7	282.5	283.2	285.9	*291.1*	285.9	283.2	282.5	281.7	282.8	282.8
180°	282.5	282.5	282.5	282.5	*282.5*	282.5	282.5	282.5	282.5	282.5	282.5

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	19745.1	19745.1	19745.1	19745.1	19745.1	19745.1
2.5°	19171.5	19159.0	19171.5	19305.6	19480.0	19733.6
5°	18726.1	18656.6	18726.1	18874.6	19194.9	19677.7
7.5°	18207.4	18167.0	18207.4	18455.9	18860.5	19544.0
10°	*17661.3*	*17569.8*	*17661.3*	*17941.9*	*18419.2*	*19340.1*
12.5°	16988.2	16867.1	16988.2	17278.1	17880.1	19014.5
15°	16132.1	16025.9	16132.1	16453.9	17152.2	18533.2
17.5°	15213.5	15117.3	15213.5	15493.1	16262.1	17855.0
20°	14059.9	13984.3	14059.9	14455.3	15209.9	16980.8
22.5°	12849.5	12778.8	12849.5	13200.9	13986.2	15884.8
25°	11425.6	11387.1	11425.6	11818.0	12528.2	14603.0
27.5°	9886.8	9821.3	9886.8	10297.4	11022.7	13095.4
30°	8314.7	8206.2	8314.7	8682.0	9331.4	11420.8
32.5°	6777.0	6699.0	6777.0	7038.8	7717.5	9545.8
35°	5290.9	5212.7	5290.9	5527.5	6194.0	7816.0
37.5°	4122.8	3984.6	4122.8	4274.5	4815.5	6133.9
40°	3126.7	3104.6	3126.7	3317.8	3664.0	4772.1
42.5°	2545.5	2485.1	2545.5	2627.7	2886.8	3615.9
45°	2088.6	2064.9	2088.6	2150.8	2324.8	2826.5
47.5°	1796.1	1806.4	1796.1	1836.1	1966.4	2301.8
50°	1578.0	1584.3	1578.0	1596.9	1683.9	1933.4
52.5°	1417.4	1411.7	1417.4	1419.1	1473.2	1660.9
55°	1275.1	1268.1	1275.1	1271.0	1311.0	1431.3
57.5°	1150.7	1155.9	1150.7	1145.2	1166.7	1257.0
60°	1039.7	1044.5	1039.7	1035.6	1049.7	1102.6
62.5°	945.9	949.0	945.9	945.6	943.0	983.7
65°	862.4	865.7	862.4	857.9	853.8	872.7
67.5°	782.3	782.3	782.3	774.6	768.3	786.8
70°	707.2	706.8	707.2	694.6	689.7	695.4
72.5°	616.8	625.8	616.8	607.6	607.2	607.9
75°	529.1	539.5	529.1	523.2	516.5	522.0
77.5°	440.2	456.2	440.2	435.4	432.1	428.4
80°	349.1	366.5	349.1	341.0	336.2	342.5
82.5°	258.1	271.0	258.1	248.1	247.7	250.7
85°	153.6	174.4	153.6	144.8	148.1	144.8
87.5°	49.3	62.9	49.3	47.1	51.9	50.7
90°	32.1	20.0	32.1	54.7	35.1	20.0
92.5°	48.7	29.1	48.7	88.0	45.6	26.0
95°	56.2	33.6	56.2	122.6	60.8	38.5
97.5°	62.3	43.0	62.3	140.8	74.3	59.6
100°	72.8	56.6	72.8	219.3	91.3	79.2
102.5°	154.3	95.8	154.3	465.4	171.4	120.0
105°	325.0	165.3	325.0	829.3	358.6	218.2
107.5°	581.6	286.1	581.6	1093.9	634.8	412.9
110°	771.9	533.7	771.9	1146.7	871.9	660.5

TEST NUMBER: P1433158
CATALOG NUMBER: EHBR1-24-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	829.3	720.9	829.3	1098.4	962.5	859.9
115°	797.6	758.6	797.6	980.6	939.9	934.2
117.5°	728.2	733.0	728.2	832.7	845.1	902.5
120°	648.1	678.6	648.1	695.3	737.9	814.9
122.5°	574.4	610.7	574.4	596.0	628.1	705.2
125°	511.1	547.6	511.1	525.4	533.3	598.0
127.5°	467.2	491.8	467.2	475.6	466.9	507.7
130°	432.9	454.0	432.9	444.2	423.5	443.1
132.5°	409.2	422.8	409.2	422.3	397.0	402.7
135°	388.4	400.1	388.4	402.7	379.3	377.4
137.5°	370.6	380.9	370.6	385.3	367.6	362.6
140°	354.8	363.4	354.8	370.6	357.1	354.0
142.5°	338.5	344.5	338.5	357.4	348.3	345.3
145°	327.2	331.8	327.2	347.2	342.3	341.1
147.5°	317.3	320.4	317.3	335.5	333.6	333.6
150°	307.5	310.6	307.5	325.3	323.4	324.9
152.5°	297.3	300.8	297.3	313.5	311.6	313.1
155°	290.5	293.9	290.5	303.8	303.0	303.3
157.5°	286.7	288.9	286.7	296.9	296.6	296.6
160°	283.4	285.3	283.4	291.9	291.6	290.4
162.5°	279.6	281.4	279.6	289.7	288.2	288.2
165°	278.7	279.1	278.7	286.0	286.0	284.8
167.5°	277.6	279.1	277.6	285.2	285.2	284.0
170°	277.9	278.4	277.9	284.0	282.9	281.4
172.5°	278.7	279.1	278.7	285.2	283.6	282.5
175°	277.9	278.3	277.9	282.8	282.8	283.2
177.5°	279.8	280.2	279.8	282.8	282.8	281.7
180°	282.5	282.5	282.5	282.5	282.5	282.5

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

Scaled Data Report

TEST NUMBER: P1433158
CATALOG NUMBER: EHBR1-24-UNV-TASM-L930-UPL30

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	16.03	17.08	16.59	17.61	18.20	15.35	16.40	15.90	16.93	17.52
	3H	17.58	18.51	18.14	19.06	19.68	17.20	18.13	17.76	18.67	19.30
	4H	18.21	19.08	18.80	19.64	20.29	17.98	18.85	18.56	19.41	20.05
	6H	18.69	19.49	19.29	20.07	20.72	18.62	19.42	19.22	19.99	20.65
	8H	18.84	19.60	19.45	20.19	20.85	18.84	19.60	19.45	20.19	20.85
	12H	18.91	19.64	19.53	20.22	20.91	18.96	19.69	19.58	20.27	20.96
4H	2H	16.44	17.31	17.03	17.87	18.52	15.92	16.79	16.51	17.35	18.00
	3H	18.24	18.96	18.84	19.56	20.22	17.98	18.70	18.57	19.30	19.96
	4H	19.01	19.66	19.63	20.27	20.97	18.88	19.53	19.50	20.14	20.84
	6H	19.62	20.18	20.26	20.82	21.53	19.65	20.21	20.29	20.85	21.56
	8H	19.82	20.34	20.46	20.98	21.69	19.92	20.44	20.57	21.08	21.80
	12H	19.92	20.38	20.58	21.05	21.77	20.09	20.55	20.75	21.21	21.93
8H	4H	19.26	19.78	19.90	20.41	21.13	19.16	19.68	19.80	20.32	21.03
	6H	20.00	20.42	20.67	21.10	21.83	20.06	20.49	20.74	21.17	21.89
	8H	20.27	20.65	20.96	21.34	22.07	20.42	20.80	21.11	21.48	22.22
	12H	20.44	20.77	21.13	21.44	22.25	20.66	20.99	21.35	21.67	22.47
12H	4H	19.26	19.73	19.93	20.39	21.11	19.17	19.63	19.83	20.29	21.01
	6H	20.04	20.42	20.73	21.11	21.85	20.11	20.49	20.80	21.18	21.91
	8H	20.36	20.69	21.04	21.36	22.17	20.51	20.84	21.20	21.51	22.32

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

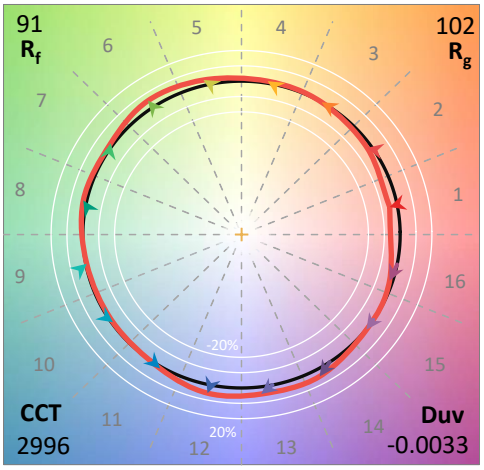
Test Information

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

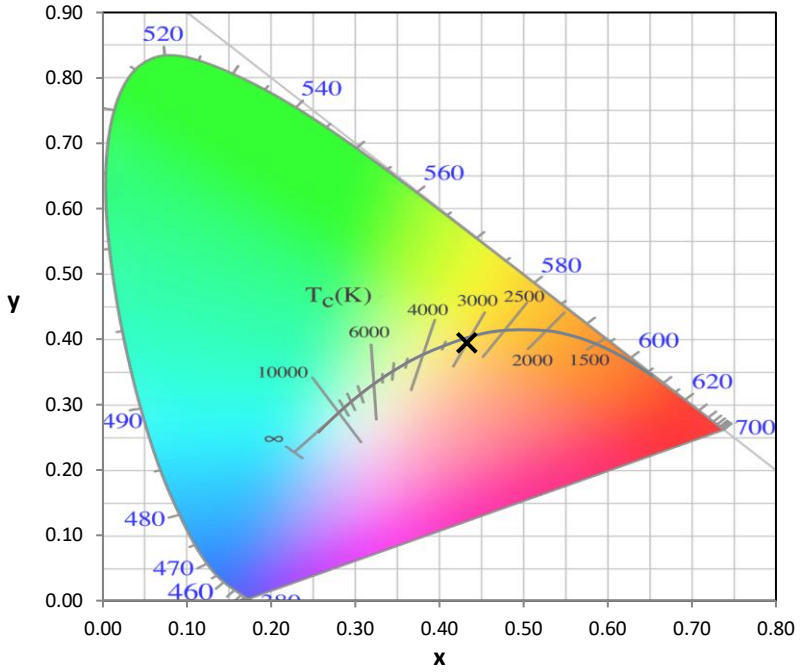
Stabilization Time:	40M
Operation Time:	1H 40M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-5

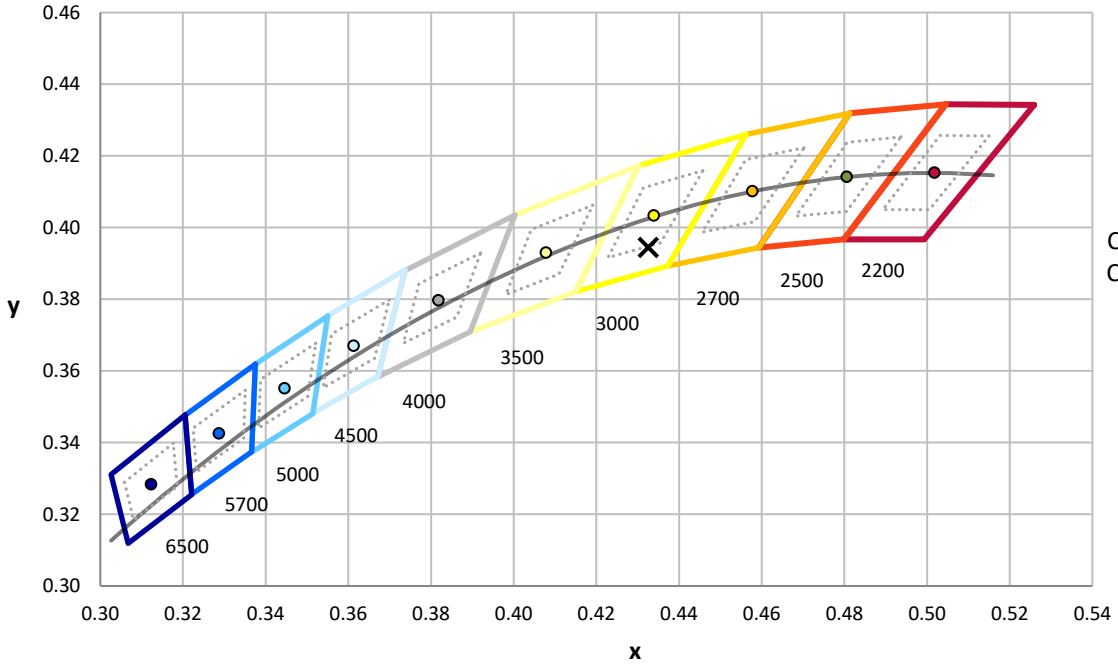
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

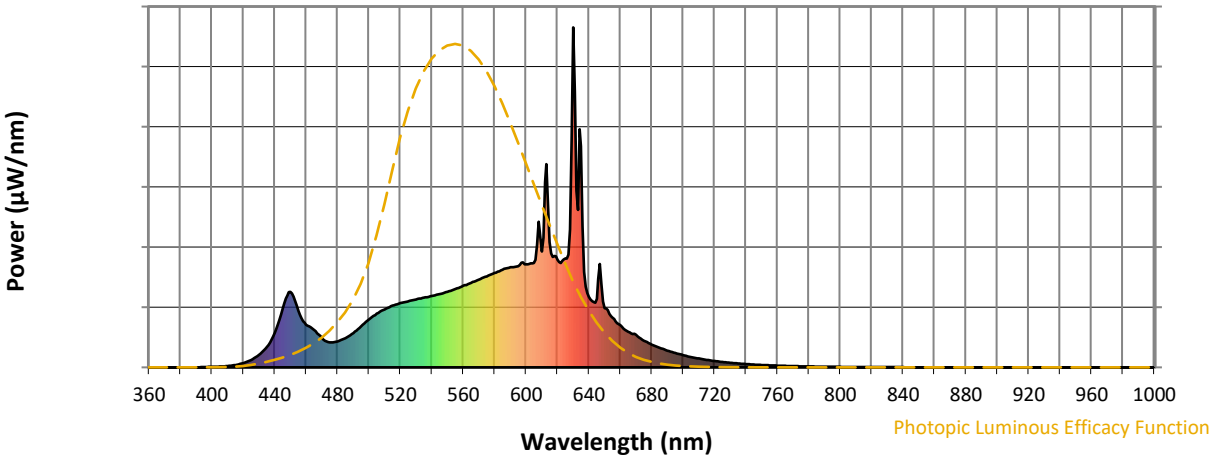


CCT = 2996K
CIE x = 0.4325
CIE y = 0.3945
Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

Photopic Flux vs. Wavelength

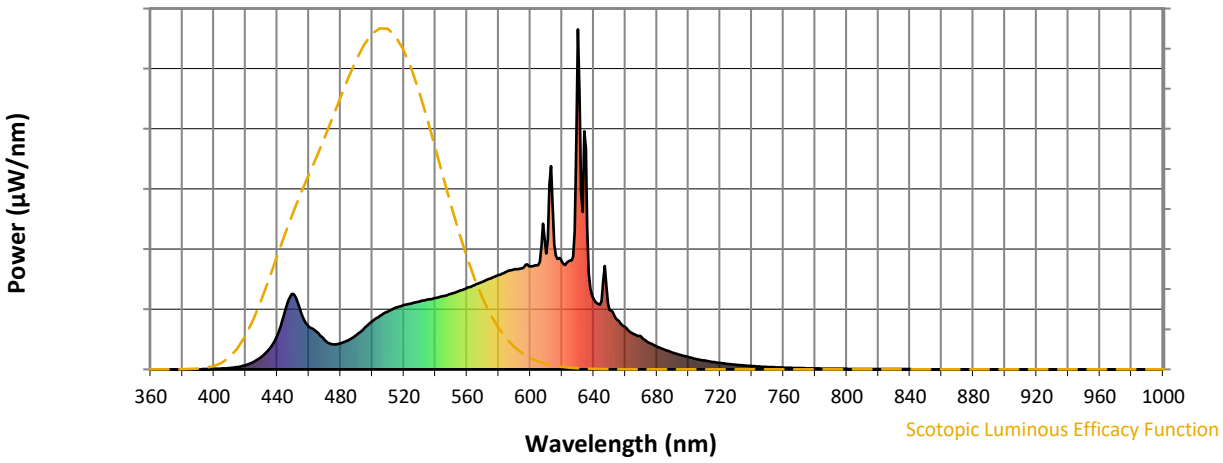


Photopic Lumens: NR

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

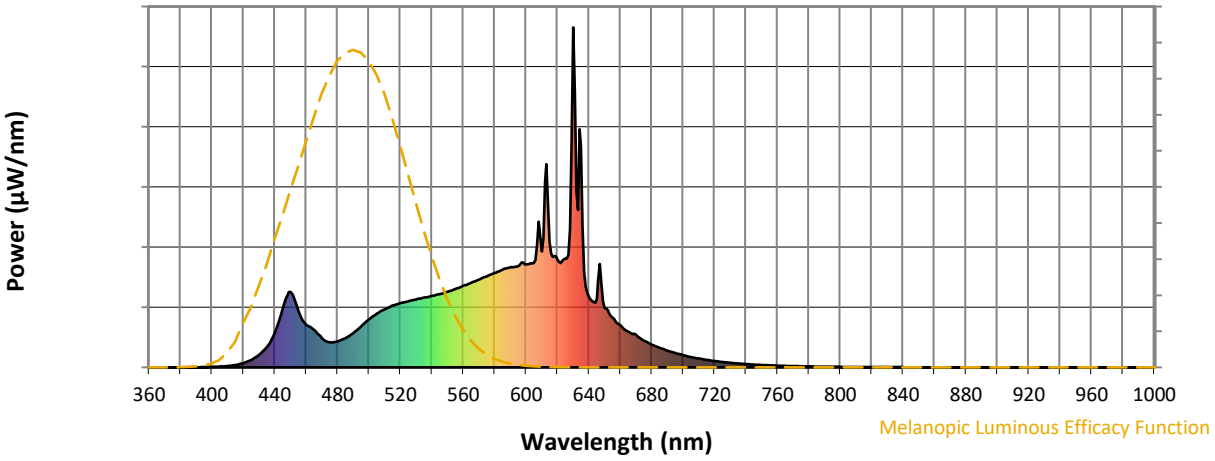


Scotopic Lumens: NR **S/P: 1.44**

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			

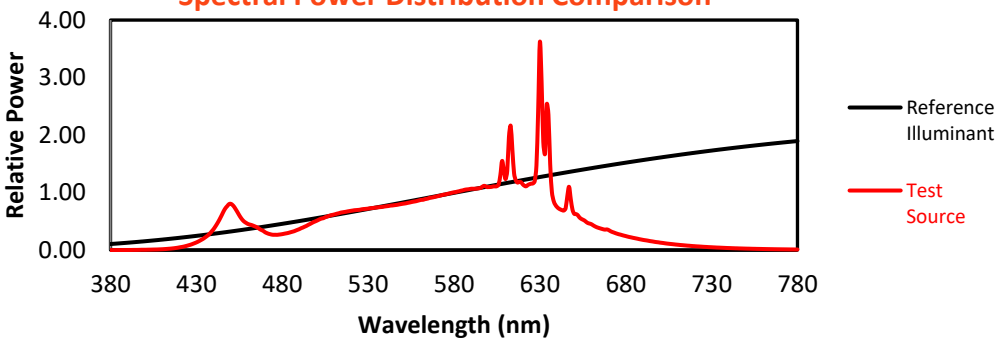
REPORT NUMBER: SP1-2506-472-5

TM-30-18

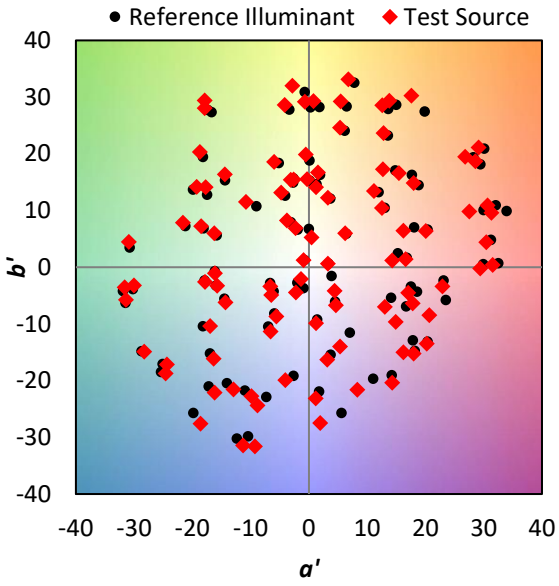
Summary

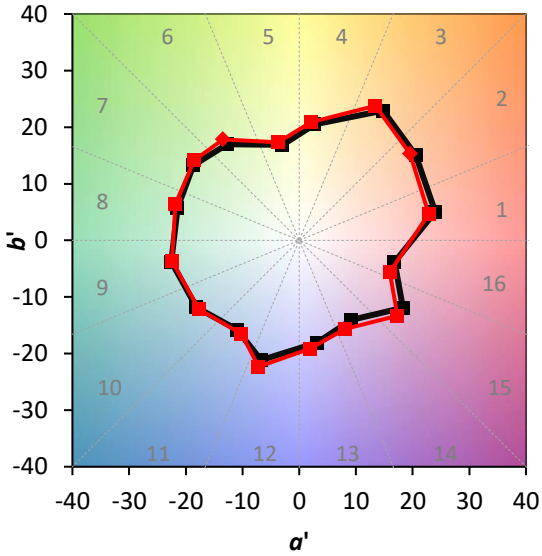
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

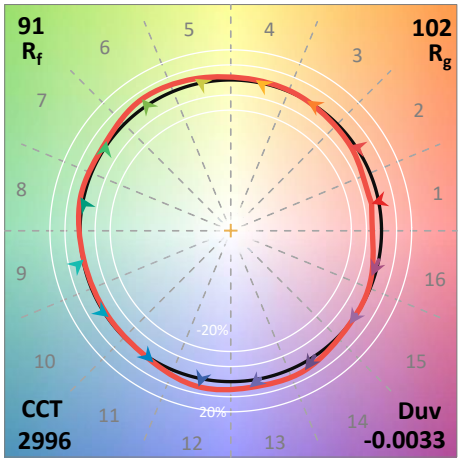
Spectral Power Distribution Comparison

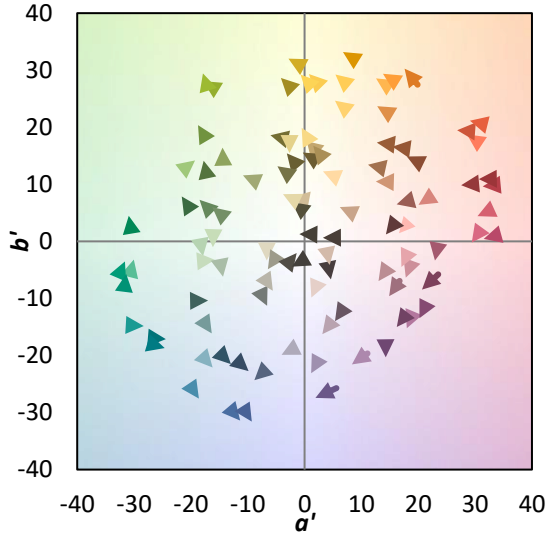


Color Vector Graphics









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
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
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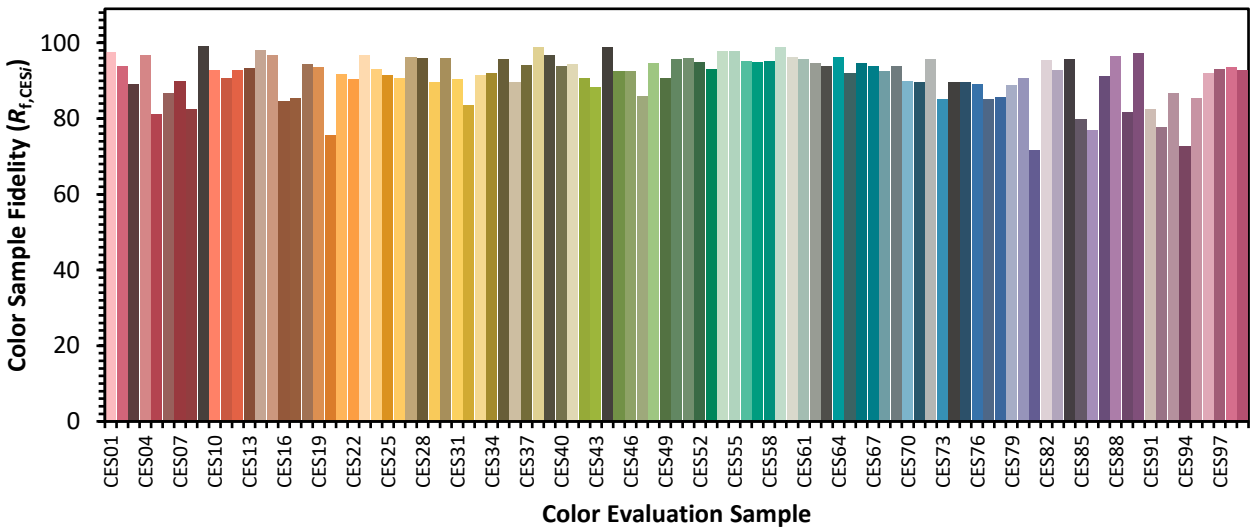

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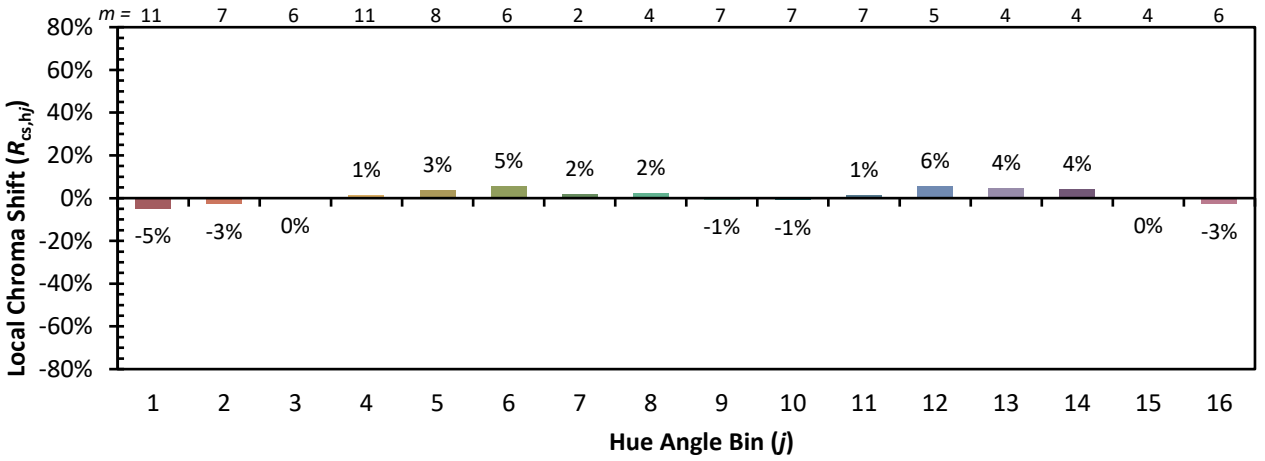
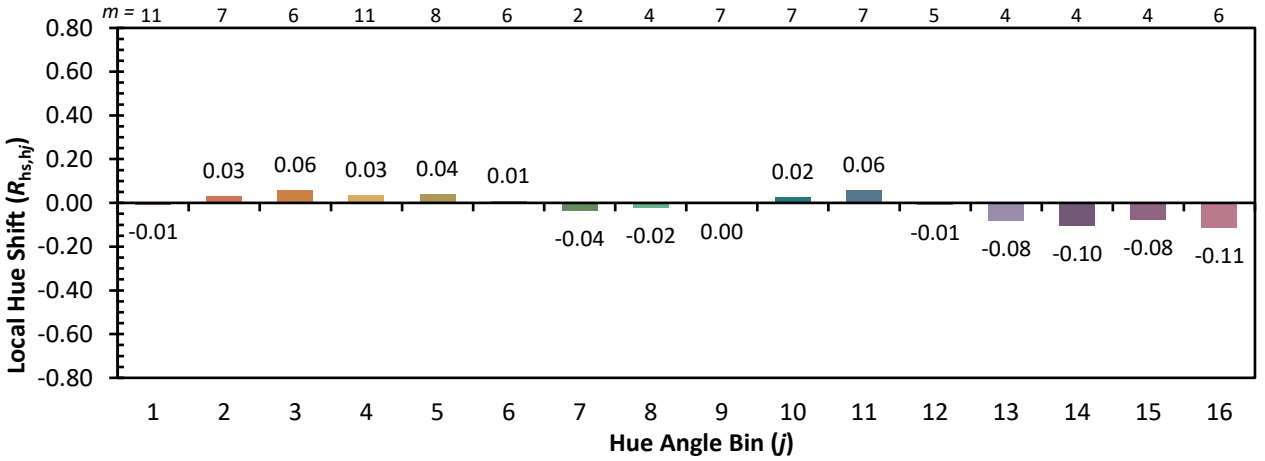
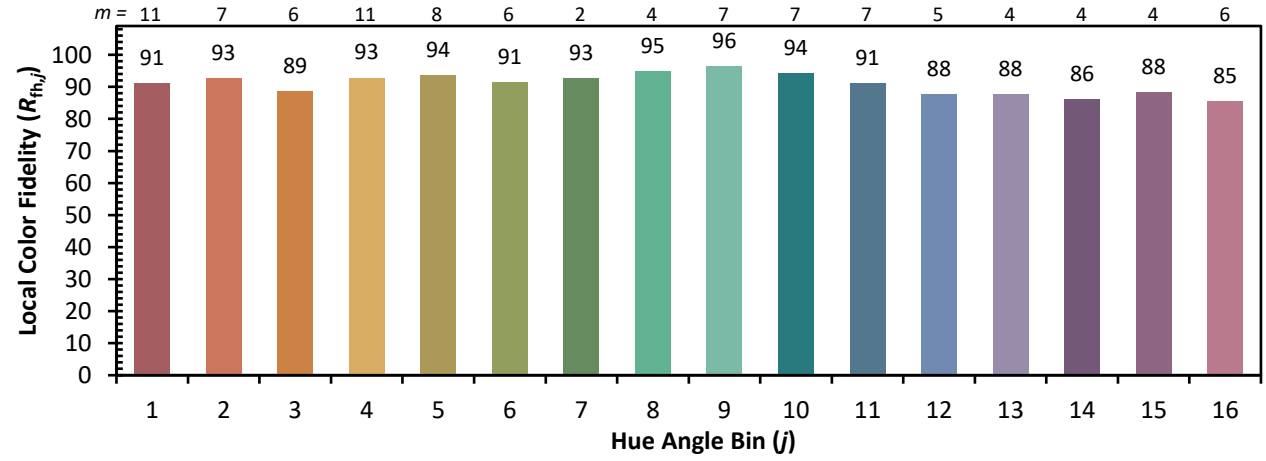
Color Rendition by Hue-Angle Bin







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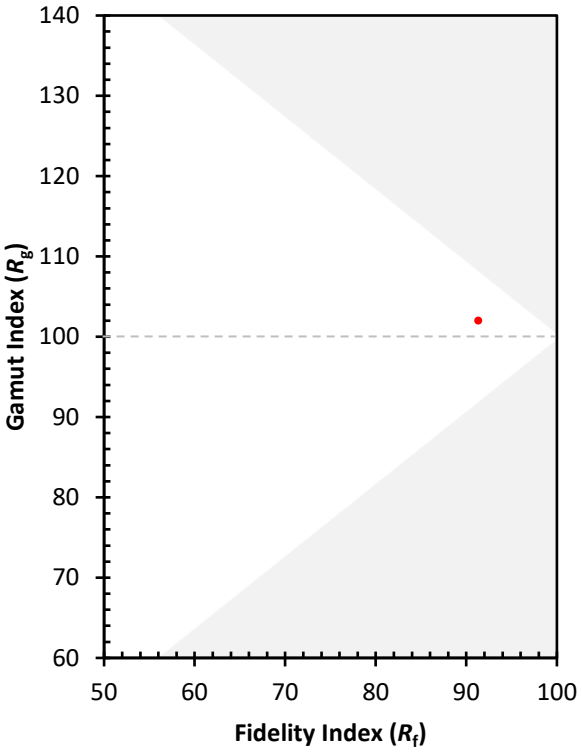
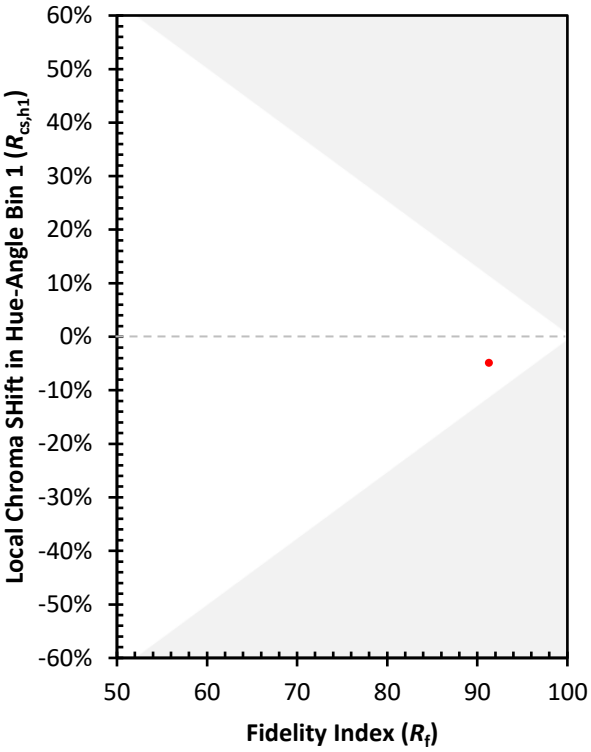
Measure Comparisons





(END OF REPORT)