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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMARK

Report Number: P1449756

Luminaire Tested: **AXCS1ARL-W**

Issue Date: 5/12/2026

Report Generated By 670246072

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

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P1449756
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-196-6)
Test Lab:	INNOVATION CENTER
Issue Date:	5/12/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	LUMARK
Catalog Number:	AXCS1ARL-W
Description:	1A AXCENT LED REFRACTIVE LENS WALLPACK WITH 3000K 80CRI LEDS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1600 lumens
Efficiency:	N/A
Efficacy:	141.6 lumens/watt
Luminous Opening:	Rectangular w/ Sides (W: 0.17' x L: 0.5' x H: 0.17')
IES Classification:	Type IV - Short
BUG Rating:	B0 - U3 - G1

Input Watts (W):	11.3
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:	25 FT

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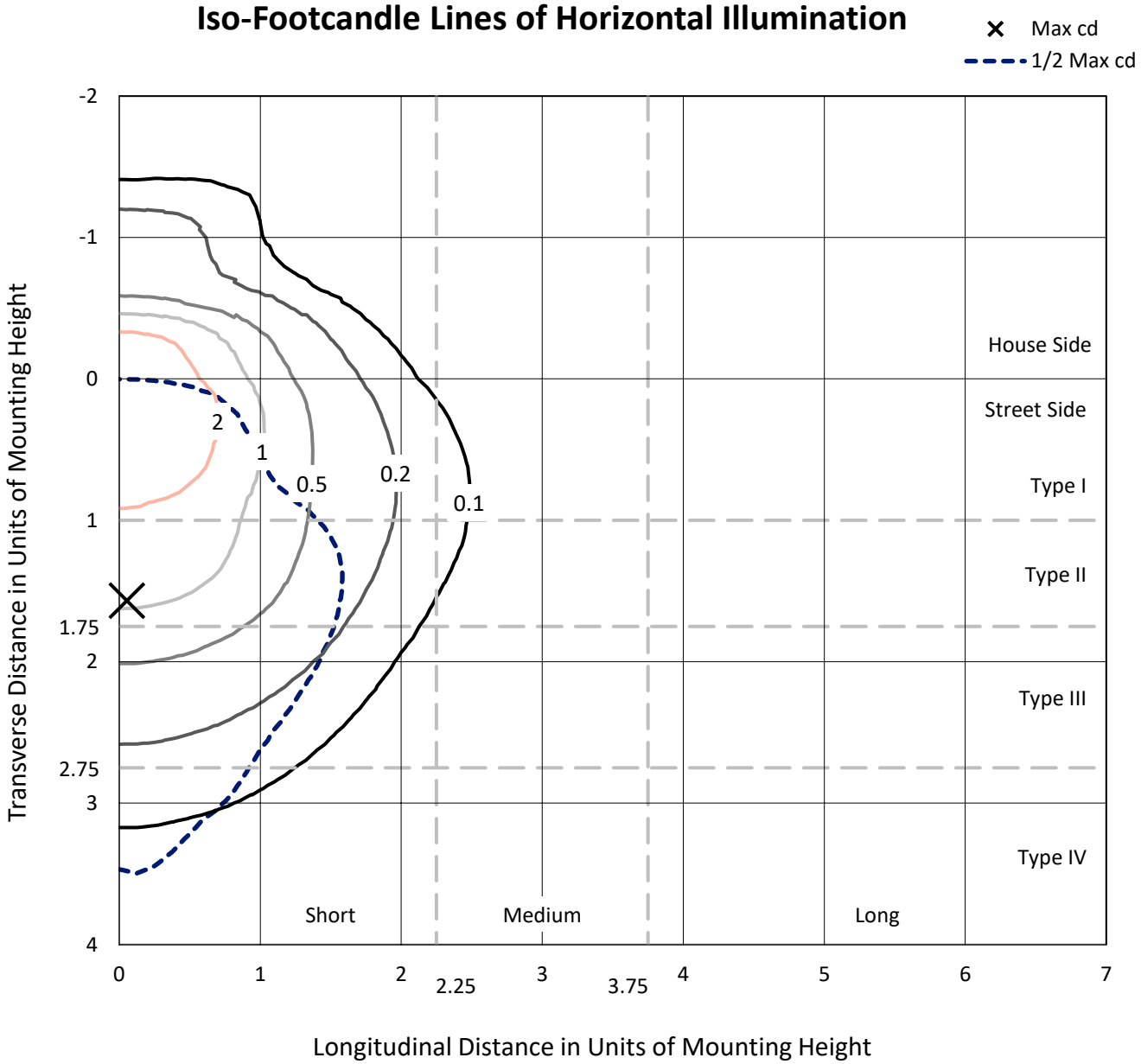
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
Type IV - Short - N/A

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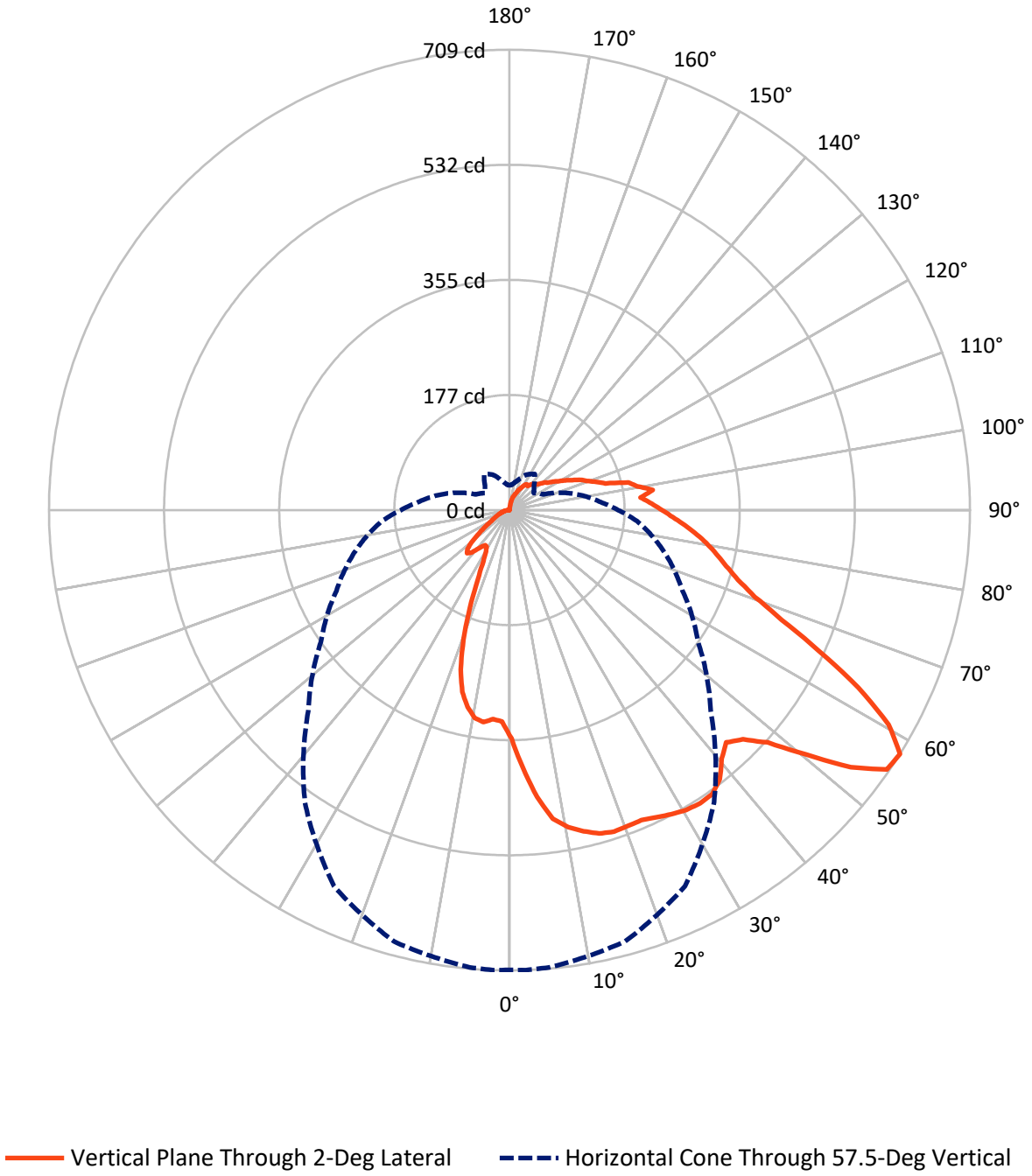
Luminous Intensity Polar Plot



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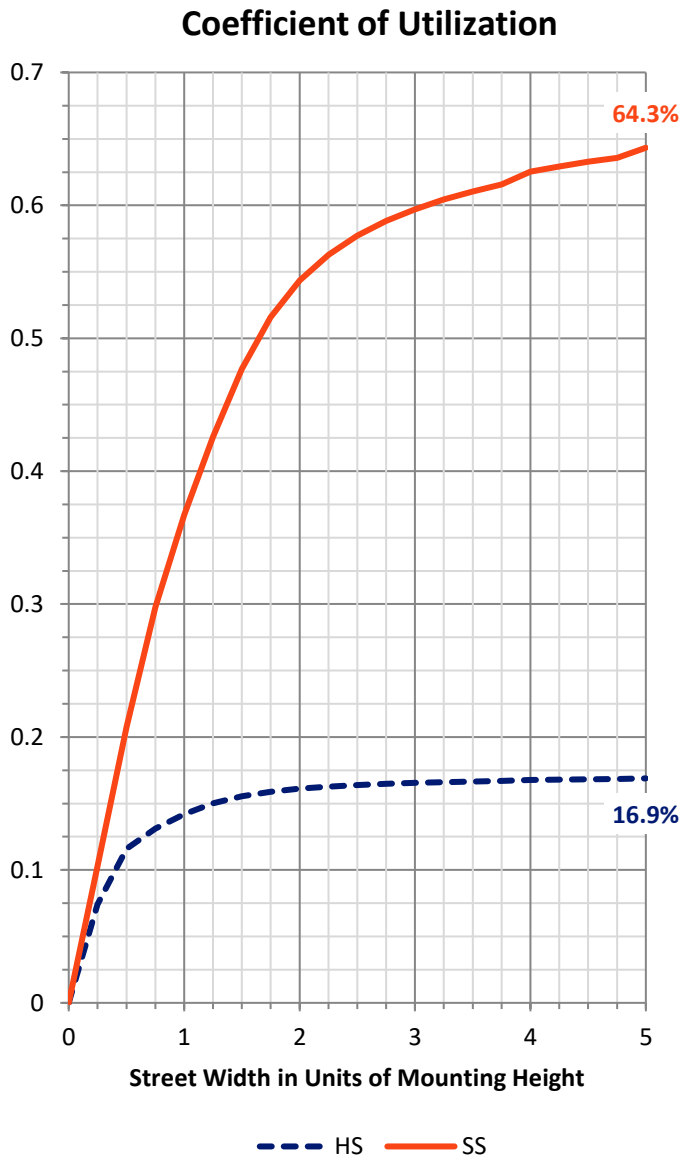
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	275.8	20.5	296.3
	% Fixture	17.2	1.3	18.5
Street Side	Lumens	1090.2	213.5	1303.7
	% Fixture	68.1	13.3	81.5
Total	Lumens	1366.0	234.0	1600.0
	% Fixture	85.4	14.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	2.2
10°-20°	109.2	6.8
20°-30°	158.8	9.9
30°-40°	187.7	11.7
40°-50°	204.3	12.8
50°-60°	233.6	14.6
60°-70°	202.8	12.7
70°-80°	136.1	8.5
80°-90°	97.7	6.1
90°-100°	75.4	4.7
100°-110°	56.3	3.5
110°-120°	38.7	2.4
120°-130°	26.2	1.6
130°-140°	17.9	1.1
140°-150°	11.5	0.7
150°-160°	5.9	0.4
160°-170°	2.0	0.1
170°-180°	0.2	0.0
0°-90°	1366.0	85.4
0°-180°	1600.0	100.0



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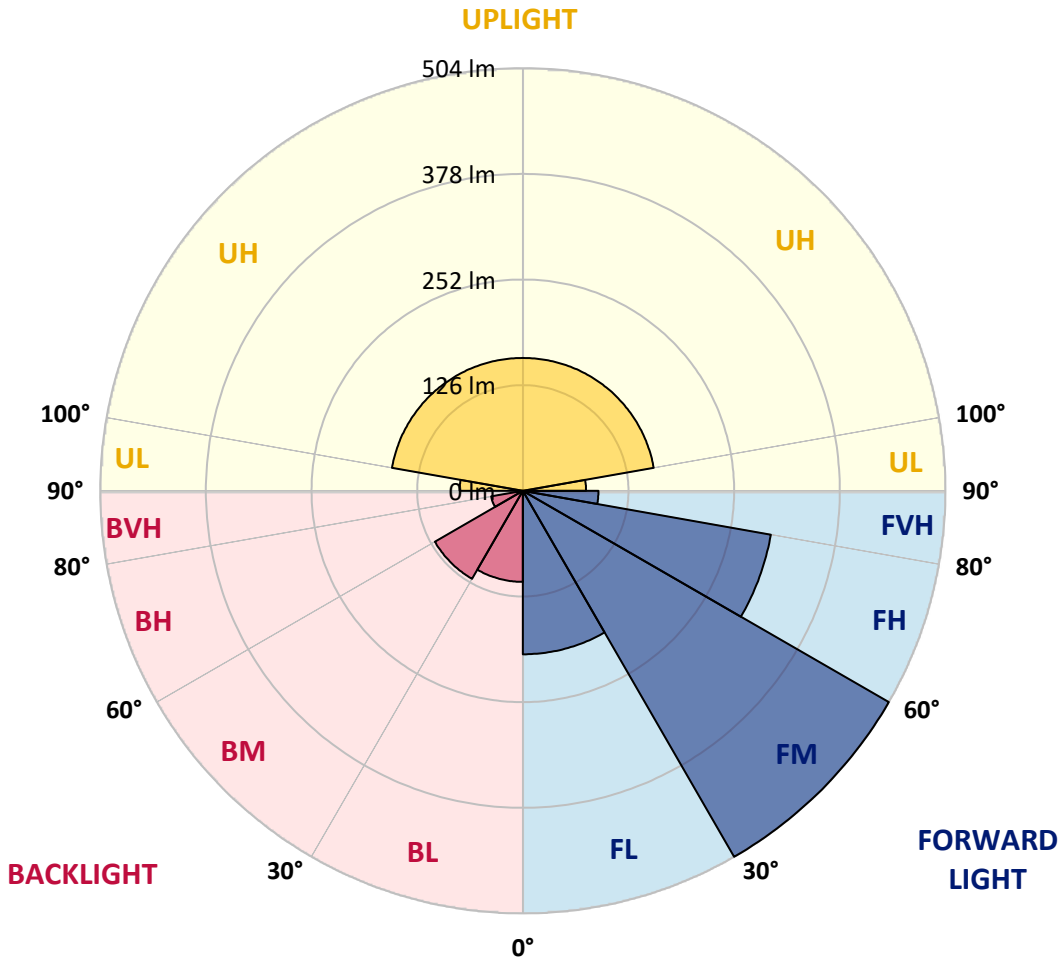
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	195.1	12.2			
FM	(30°-60°)	504.3	31.5			
FH	(60°-80°)	300.6	18.8			G0/660
FVH	(80°-90°)	90.2	5.6			G1/100
BL	(0°-30°)	108.7	6.8	B0/110		
BM	(30°-60°)	121.3	7.6	B0/220		
BH	(60°-80°)	38.3	2.4	B0/110		G0/110
BVH	(80°-90°)	7.5	0.5			G0/10
UL	(90°-100°)	75.4	4.7		U3/500	
UH	(100°-180°)	158.6	9.9		U3/500	

BUG Rating: B0-U3-G1
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9
2.5°	399.3	398.0	397.3	396.6	393.4	389.4	383.5	376.9	369.7	361.1	352.6
5°	444.7	444.0	443.3	440.7	435.5	428.2	415.7	405.2	390.1	373.0	357.2
7.5°	480.8	480.2	479.5	476.9	471.0	459.8	445.3	429.5	408.5	384.8	360.5
10°	496.6	496.6	496.6	494.7	490.0	482.2	468.3	448.6	423.6	394.0	361.1
12.5°	507.8	507.8	507.2	505.2	500.6	492.7	482.8	465.7	437.4	401.9	362.4
15°	516.4	517.0	517.0	514.4	509.8	501.2	491.4	476.2	449.9	409.8	364.4
17.5°	520.3	521.0	520.3	518.3	513.7	505.2	494.7	480.8	456.5	415.1	363.8
20°	519.6	519.6	519.0	517.0	513.1	505.2	494.7	479.5	457.2	416.4	361.1
22.5°	519.0	519.0	519.0	515.7	509.8	501.9	492.0	476.9	455.2	416.4	357.2
25°	524.3	524.3	523.6	519.0	511.1	499.9	488.1	472.9	451.2	415.1	353.2
27.5°	530.2	530.8	529.5	524.9	514.4	499.3	484.1	467.7	446.0	411.1	349.3
30°	536.1	536.1	535.4	529.5	517.0	499.9	479.5	459.8	437.4	405.2	342.7
32.5°	538.7	538.7	538.1	532.8	519.6	499.3	475.6	450.6	427.6	396.0	333.5
35°	536.8	537.4	537.4	532.8	522.3	501.2	472.9	442.7	416.4	384.8	323.0
37.5°	526.2	526.2	526.2	524.9	519.0	502.5	471.0	434.8	403.9	371.0	310.5
40°	501.9	503.2	503.2	503.2	503.9	497.3	471.0	427.6	389.4	355.9	296.7
42.5°	489.4	489.4	489.4	484.1	480.2	478.9	463.7	421.6	374.3	338.8	281.5
45°	503.9	503.9	503.2	493.3	471.6	456.5	446.0	411.1	359.8	321.0	266.4
47.5°	536.8	534.8	534.1	517.0	489.4	451.2	424.9	394.0	344.7	305.2	253.2
50°	593.3	591.3	589.4	565.0	519.0	467.7	415.1	374.9	327.6	289.4	237.5
52.5°	660.4	658.4	653.8	626.9	567.0	492.7	419.0	360.5	312.4	272.3	222.3
55°	705.1	705.1	701.9	676.9	615.0	524.9	429.5	355.2	301.9	257.2	209.8
57.5°	708.4	709.1	707.1	688.0	639.4	549.2	438.1	354.5	294.0	246.0	197.3
60°	669.6	670.9	671.6	653.2	618.3	545.3	435.5	349.3	288.1	236.1	184.8
62.5°	601.2	603.2	603.8	585.4	556.5	503.2	411.8	336.8	281.5	228.3	174.3
65°	521.6	523.6	523.6	503.9	475.6	434.8	367.7	313.1	270.3	221.7	163.1
67.5°	450.6	451.9	451.9	430.8	400.6	361.8	314.4	278.9	254.6	215.1	153.9
70°	399.3	400.6	399.3	380.2	344.0	303.2	263.1	243.4	234.2	203.9	142.7
72.5°	366.4	367.7	365.1	344.7	306.5	263.1	223.0	210.5	209.8	190.8	132.2
75°	343.4	344.7	342.0	320.3	281.5	236.8	195.4	184.2	190.1	178.3	121.7
77.5°	324.3	325.6	323.0	301.3	261.8	218.4	176.9	165.8	175.0	162.5	107.9
80°	305.9	307.2	304.6	282.8	245.4	205.2	162.5	149.3	154.6	140.8	90.8
82.5°	286.8	287.5	284.8	265.1	231.5	194.0	152.6	138.8	143.4	126.3	72.4
85°	265.7	267.1	265.1	246.7	217.1	184.2	143.4	131.6	133.5	109.8	54.6
87.5°	246.7	248.0	246.0	229.6	203.9	173.7	136.2	123.7	123.7	97.4	41.4
90°	230.9	231.5	229.6	215.8	192.1	165.1	129.6	116.4	113.8	86.2	32.9
92.5°	217.1	216.4	214.4	203.3	181.5	157.2	124.3	111.2	103.9	75.6	28.9
95°	201.9	202.6	201.3	190.8	172.3	148.7	119.7	105.2	93.4	63.8	25.7
97.5°	223.0	223.0	222.3	210.5	187.5	157.2	123.0	102.0	84.2	55.3	24.3
100°	202.6	200.0	200.0	190.8	173.7	149.3	117.7	94.7	75.6	48.7	23.7
102.5°	186.8	188.1	187.5	177.6	160.5	136.8	105.2	82.9	65.1	43.4	24.3
105°	155.9	153.3	151.3	144.7	132.9	117.1	93.4	75.0	58.5	40.8	25.0
107.5°	141.4	140.1	139.5	134.2	124.3	109.2	88.1	71.7	55.9	38.8	25.7
110°	128.3	127.6	127.0	122.3	113.8	99.3	82.2	68.4	53.3	36.8	25.7

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Scaled Data Report

REPORT NUMBER: P1449756
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CANDELA DISTRIBUTION (continued):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	119.1	*119.1*	117.7	113.8	104.6	90.8	76.3	65.1	49.3	35.5	25.7
115°	107.9	*107.2*	106.6	103.3	95.4	84.2	71.0	59.9	45.4	34.9	25.7
117.5°	97.4	*97.4*	97.4	93.4	86.2	76.3	67.1	55.9	42.8	33.5	25.0
120°	87.5	*87.5*	87.5	84.2	78.3	70.4	61.8	52.0	40.1	32.9	23.7
122.5°	80.9	*80.2*	80.2	77.0	71.7	64.5	57.2	48.7	38.8	31.6	22.4
125°	73.0	*72.4*	72.4	69.7	65.8	59.9	55.3	46.7	38.2	30.9	21.0
127.5°	69.7	*69.1*	69.1	66.4	62.5	57.2	52.6	44.1	36.8	28.9	19.7
130°	62.5	*62.5*	62.5	60.5	57.2	54.6	48.7	42.1	34.9	27.6	18.4
132.5°	57.9	*57.9*	57.2	56.6	55.3	52.6	46.0	40.8	33.5	25.7	17.1
135°	54.6	*54.6*	54.6	55.9	53.9	49.3	44.1	38.8	31.6	23.7	15.8
137.5°	54.6	*53.9*	53.9	53.3	50.6	46.7	43.4	36.8	29.6	22.4	14.5
140°	50.6	*50.6*	50.0	48.7	46.7	46.0	41.4	34.9	27.6	21.0	12.5
142.5°	46.0	*46.0*	46.0	46.0	47.4	44.1	38.8	32.9	25.7	19.1	11.8
145°	48.0	*48.0*	48.0	46.7	45.4	42.1	36.2	30.3	24.3	17.8	10.5
147.5°	46.0	*46.0*	46.0	44.7	42.1	38.2	32.9	27.6	22.4	16.4	9.2
150°	42.8	*42.1*	42.1	40.8	38.2	34.2	30.3	25.7	21.0	14.5	7.9
152.5°	37.5	*37.5*	37.5	36.2	34.2	31.6	27.0	23.7	18.4	13.2	7.2
155°	34.2	*34.2*	33.5	32.9	30.3	27.0	24.3	21.0	16.4	11.2	5.9
157.5°	28.9	*28.9*	28.9	27.6	26.3	24.3	22.4	18.4	13.8	9.9	4.6
160°	25.7	*25.7*	25.7	25.0	24.3	22.4	19.7	15.8	12.5	8.6	3.9
162.5°	23.0	*23.0*	23.0	22.4	21.0	19.1	16.4	13.2	9.9	6.6	3.3
165°	19.7	*19.7*	19.1	18.4	17.1	15.8	13.2	10.5	7.9	5.3	2.6
167.5°	15.1	*15.1*	15.1	14.5	13.8	12.5	10.5	8.6	5.9	3.3	2.0
170°	11.2	*11.2*	11.2	10.5	9.9	8.6	6.6	5.3	3.3	2.0	1.3
172.5°	7.2	*5.9*	5.3	4.6	4.6	3.9	3.3	2.6	1.3	1.3	1.3
175°	0.0	*0.0*	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
177.5°	0.0	*0.0*	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180°	0.7	*0.7*	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

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Scaled Data Report

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9
2.5°	349.3	346.0	341.4	336.1	332.2	328.9	327.6	326.9	326.3	326.3	325.6
5°	349.3	344.0	334.8	328.2	324.3	322.3	322.3	322.3	323.0	323.0	323.0
7.5°	349.3	340.1	329.5	323.0	320.3	321.7	324.3	326.3	328.2	328.9	329.5
10°	346.0	334.2	323.0	318.4	319.0	323.0	326.9	326.9	326.3	324.9	324.3
12.5°	343.4	329.5	317.7	315.7	320.3	323.0	319.7	316.4	313.1	310.5	309.8
15°	341.4	324.9	313.1	315.1	319.7	315.1	307.8	300.6	294.0	290.1	288.8
17.5°	336.8	319.0	308.5	312.4	310.5	301.3	288.8	276.3	265.7	257.9	255.9
20°	330.9	311.8	301.9	307.2	298.0	283.5	262.5	242.7	225.6	213.8	210.5
22.5°	324.3	303.9	295.3	297.3	282.8	260.5	228.9	200.0	175.6	161.8	163.1
25°	318.4	296.7	288.8	284.8	264.4	232.9	188.8	152.6	128.9	116.4	117.1
27.5°	311.8	288.8	281.5	273.0	244.7	199.3	146.0	113.8	96.0	87.5	88.1
30°	303.9	280.2	271.7	255.9	218.4	162.5	112.5	88.1	77.6	73.7	73.0
32.5°	294.7	269.7	260.5	238.1	190.8	128.3	89.5	74.3	68.4	67.1	66.4
35°	284.2	259.2	247.3	219.0	161.2	102.0	75.6	67.8	65.8	65.8	65.8
37.5°	271.7	246.7	232.9	198.0	132.2	83.5	67.8	65.1	67.1	69.7	70.4
40°	258.5	234.2	217.7	175.0	108.5	71.7	63.8	66.4	73.0	78.3	78.9
42.5°	246.0	222.3	201.9	151.9	90.1	64.5	62.5	70.4	80.9	87.5	88.8
45°	232.2	210.5	185.5	128.9	75.6	59.9	63.1	76.3	88.1	92.7	93.4
47.5°	219.0	196.7	167.7	109.2	65.8	57.2	65.8	82.2	89.5	88.1	88.8
50°	205.9	182.9	148.7	91.4	58.5	55.3	68.4	83.5	82.9	77.6	77.0
52.5°	192.1	170.4	130.9	77.6	52.6	53.9	71.0	78.9	71.0	62.5	61.8
55°	178.3	155.9	114.5	66.4	48.7	53.3	71.0	70.4	57.9	49.3	48.7
57.5°	*167.1*	*140.8*	*98.7*	*57.2*	*45.4*	*53.3*	*67.8*	*59.9*	*46.7*	*38.8*	*38.2*
60°	152.6	127.6	84.9	50.6	42.8	52.0	61.8	49.3	37.5	31.6	30.9
62.5°	139.5	115.8	73.0	44.7	40.1	50.6	53.9	40.8	30.9	26.3	26.3
65°	127.6	103.9	62.5	40.8	38.2	47.4	46.7	33.5	25.7	22.4	22.4
67.5°	117.7	92.1	53.3	36.8	36.2	44.1	39.5	27.6	22.4	19.1	19.1
70°	106.6	80.9	45.4	33.5	33.5	39.5	32.9	23.7	19.1	16.4	15.8
72.5°	94.7	68.4	38.8	30.9	30.9	34.9	27.0	19.7	15.8	13.8	13.2
75°	82.2	55.3	33.5	28.3	28.9	30.3	22.4	17.1	13.8	11.8	11.2
77.5°	69.1	42.8	28.9	26.3	26.3	25.7	18.4	14.5	11.2	9.9	9.2
80°	54.6	32.9	24.3	23.7	23.7	21.7	15.1	11.8	9.2	7.9	7.2
82.5°	40.1	25.0	21.0	21.7	21.0	17.8	12.5	9.9	7.2	5.9	5.3
85°	28.9	19.7	18.4	19.7	18.4	15.1	10.5	7.9	5.3	3.9	3.3
87.5°	22.4	16.4	16.4	18.4	16.4	11.8	8.6	5.9	3.3	2.0	1.3
90°	18.4	15.1	15.1	16.4	13.2	9.2	5.9	3.9	2.0	0.7	0.7
92.5°	17.8	14.5	15.1	15.8	13.2	9.2	5.9	3.3	2.0	0.7	0.7
95°	17.1	15.1	15.1	15.1	12.5	8.6	5.3	3.3	2.0	0.7	0.0
97.5°	17.8	15.8	15.8	15.1	12.5	8.6	5.3	3.3	2.0	0.7	0.0
100°	18.4	16.4	15.8	15.1	12.5	8.6	5.3	3.3	1.3	0.7	0.0
102.5°	19.7	17.8	16.4	15.1	11.8	8.6	5.3	3.3	1.3	0.7	0.0
105°	20.4	18.4	16.4	15.1	11.8	7.9	5.3	3.3	1.3	0.7	0.0
107.5°	21.0	18.4	16.4	14.5	11.8	7.9	5.3	3.3	1.3	0.7	0.0
110°	21.0	19.1	15.8	14.5	11.2	7.9	4.6	2.6	1.3	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P1449756
CATALOG NUMBER: AXCS1ARL-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	21.0	18.4	15.8	13.8	11.2	7.9	4.6	2.6	1.3	0.0	0.0
115°	21.0	18.4	15.1	13.2	10.5	7.2	4.6	2.6	1.3	0.0	0.0
117.5°	20.4	17.8	14.5	12.5	9.9	7.2	4.6	2.6	1.3	0.0	0.0
120°	19.1	17.1	13.8	11.8	9.9	6.6	3.9	2.6	1.3	0.0	0.0
122.5°	18.4	15.8	13.2	11.2	9.2	6.6	3.9	2.6	1.3	0.0	0.0
125°	17.1	15.1	12.5	10.5	8.6	5.9	3.9	2.6	1.3	0.0	0.0
127.5°	15.8	13.8	11.8	9.9	8.6	5.9	3.3	2.0	1.3	0.0	0.0
130°	14.5	13.2	11.2	9.2	7.9	5.3	3.3	2.0	1.3	0.0	0.0
132.5°	13.8	12.5	10.5	9.2	7.2	5.3	3.3	2.0	1.3	0.0	0.0
135°	12.5	11.2	9.2	7.9	6.6	4.6	3.3	2.0	0.7	0.0	0.0
137.5°	11.2	10.5	8.6	7.9	5.9	4.6	2.6	1.3	0.7	0.0	0.0
140°	10.5	9.2	7.9	7.2	5.9	3.9	2.6	1.3	0.7	0.0	0.0
142.5°	9.2	8.6	7.2	6.6	5.3	3.9	2.6	1.3	0.7	0.0	0.0
145°	8.6	7.9	6.6	5.9	4.6	3.3	2.0	1.3	0.7	0.0	0.0
147.5°	7.9	7.2	5.9	5.3	4.6	3.3	2.0	1.3	0.7	0.0	0.0
150°	7.2	6.6	5.9	4.6	3.9	2.6	1.3	0.7	0.7	0.0	0.0
152.5°	5.9	5.9	5.3	4.6	3.3	2.6	1.3	0.7	0.7	0.0	0.0
155°	5.3	5.3	4.6	3.9	2.6	2.0	1.3	0.7	0.0	0.0	0.0
157.5°	4.6	4.6	3.9	3.3	2.6	2.0	1.3	0.7	0.0	0.0	0.0
160°	3.9	3.9	3.3	2.6	2.0	1.3	0.7	0.7	0.0	0.0	0.0
162.5°	3.3	3.3	2.6	2.0	2.0	1.3	0.7	0.0	0.0	0.0	0.0
165°	2.6	2.6	2.0	2.0	1.3	0.7	0.7	0.0	0.0	0.0	0.0
167.5°	2.0	2.0	2.0	1.3	1.3	0.7	0.7	0.7	0.0	0.0	0.0
170°	1.3	1.3	1.3	1.3	0.7	0.7	0.7	0.0	0.0	0.0	0.0
172.5°	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
175°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
177.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

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

Lumark

Report Number: SP1-2512-637-1

Test Date: 01/12/2026

Luminaire Tested: AXCS4A-W

Data in this report applies to families of products including AXCS4A-W

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.05

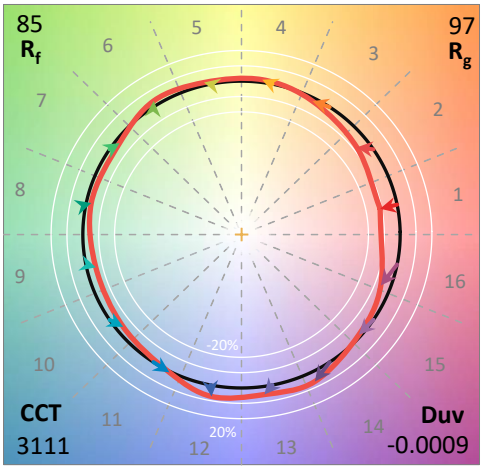
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2512-637-1
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	01/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Lumark
Catalog Number:	**AXCS4A-W**
Description:	4A AXCENT SMALL WALLPACK, FULL CUTOFF, 3000K

Spectral Parameters

CCT (K):	3111
CIE u':	0.2472
CIE v':	0.5179
Duv:	-0.0009
CIE x:	0.4280
CIE y:	0.3986
CIE z:	0.1733
Peak Wavelength (nm):	601
Dominant Wavelength (nm):	582
Purity:	48.11977
Rf:	85.3
Rg:	96.7

CRI (Ra):	83.4
R1:	82.0
R2:	91.4
R3:	96.3
R4:	81.9
R5:	82.5
R6:	89.7
R7:	83.1
R8:	60.2
R9:	8.9
R10:	80.6
R11:	81.8
R12:	73.2
R13:	84.3
R14:	98.6
R15:	74.6



Test Conditions

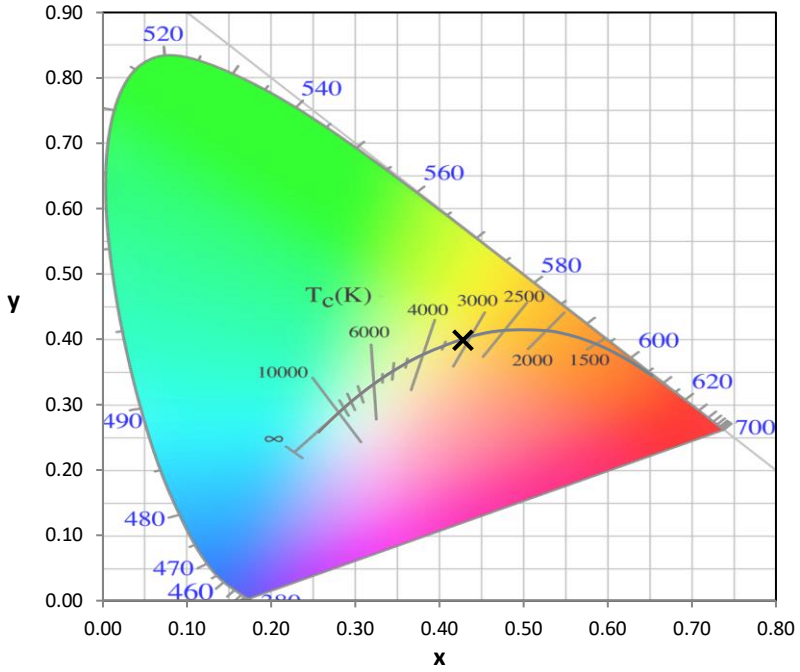
Stabilization Time:	52M
Operation Time:	1H 52M
Sphere Temperature (°C):	25.1

REPORT NUMBER: SP1-2512-637-1

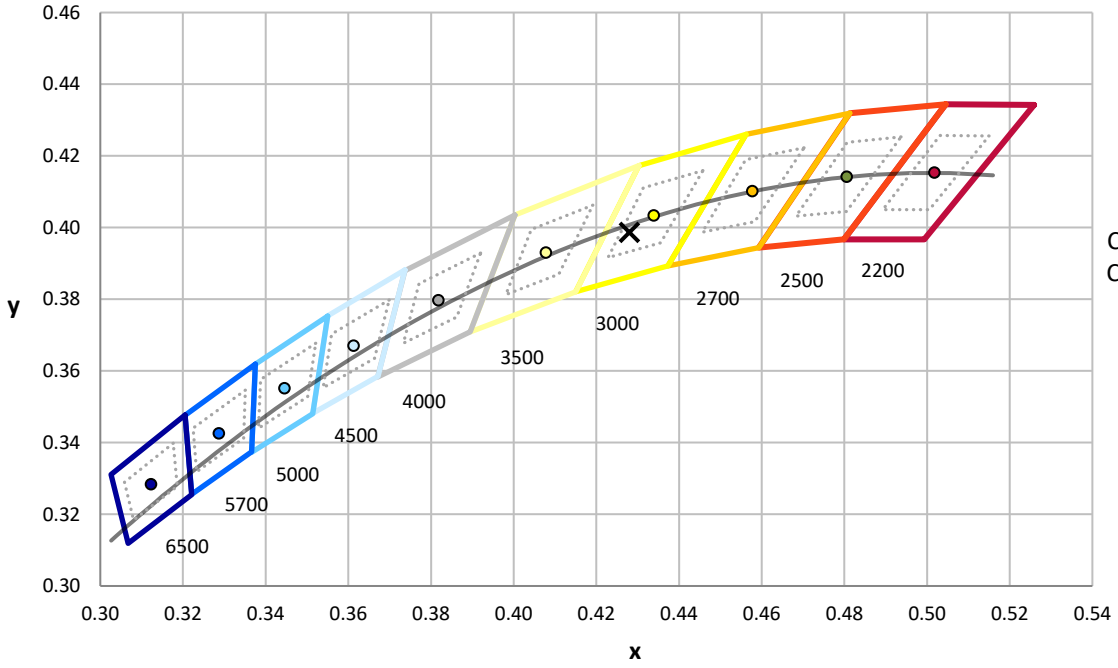
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	10/21/2025	10/21/2026
Sphere Thermometer	ONSET IN0085	10/21/2025	10/21/2026
Room Thermometer	ONSET IN0046	10/21/2025	10/21/2026

REPORT NUMBER: SP1-2512-637-1

CIE 1931 Chromaticity Diagram



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

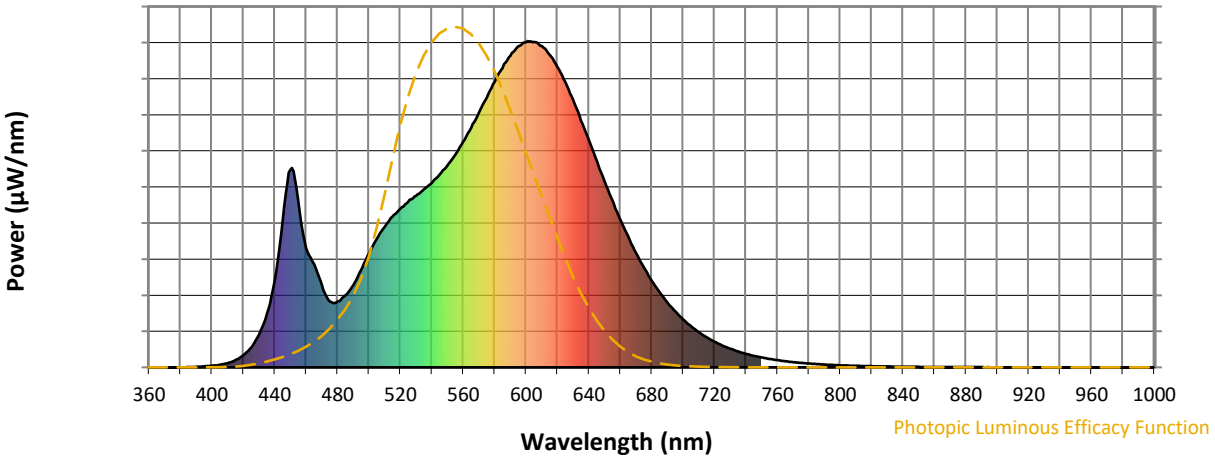


CCT = 3111K
CIE x = 0.4280
CIE y = 0.3986
Duv = -0.0009

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2512-637-1

Photopic Flux vs. Wavelength

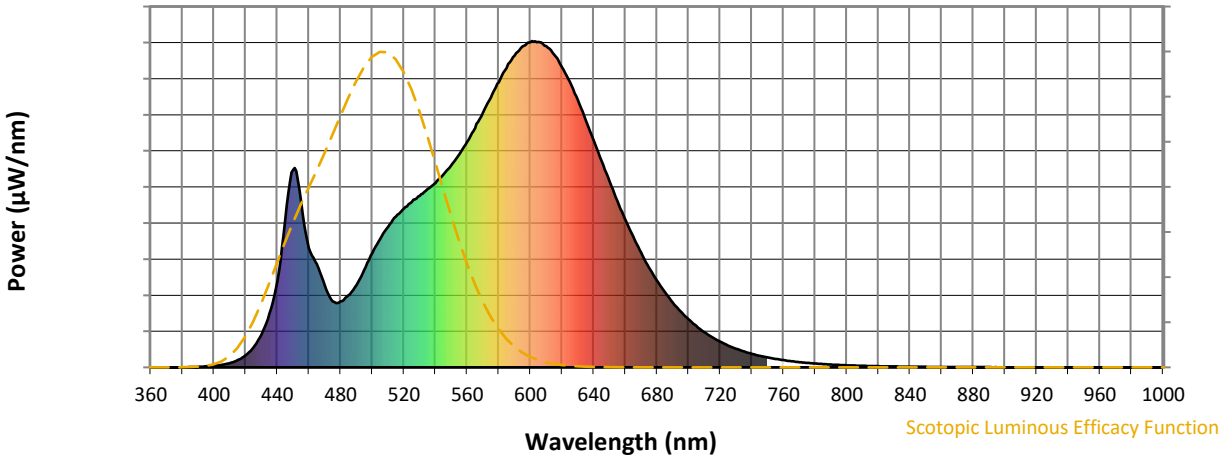


Photopic Lumens: NR

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	252	NR	620	920	NR	750	30	NR	880	1	NR
365	0	NR	495	298	NR	625	875	NR	755	26	NR	885	1	NR
370	0	NR	500	349	NR	630	819	NR	760	22	NR	890	1	NR
375	0	NR	505	394	NR	635	756	NR	765	19	NR	895	0	NR
380	0	NR	510	431	NR	640	696	NR	770	16	NR	900	1	NR
385	1	NR	515	462	NR	645	633	NR	775	14	NR	905	0	NR
390	2	NR	520	487	NR	650	570	NR	780	12	NR	910	0	NR
395	3	NR	525	507	NR	655	511	NR	785	10	NR	915	0	NR
400	5	NR	530	525	NR	660	453	NR	790	9	NR	920	0	NR
405	8	NR	535	546	NR	665	401	NR	795	7	NR	925	0	NR
410	13	NR	540	565	NR	670	352	NR	800	6	NR	930	0	NR
415	22	NR	545	591	NR	675	306	NR	805	6	NR	935	0	NR
420	38	NR	550	619	NR	680	266	NR	810	5	NR	940	0	NR
425	61	NR	555	652	NR	685	230	NR	815	4	NR	945	0	NR
430	100	NR	560	691	NR	690	199	NR	820	4	NR	950	0	NR
435	165	NR	565	734	NR	695	171	NR	825	3	NR	955	0	NR
440	265	NR	570	780	NR	700	147	NR	830	3	NR	960	0	NR
445	450	NR	575	826	NR	705	126	NR	835	2	NR	965	0	NR
450	605	NR	580	874	NR	710	108	NR	840	2	NR	970	0	NR
455	508	NR	585	917	NR	715	92	NR	845	2	NR	975	0	NR
460	366	NR	590	956	NR	720	79	NR	850	2	NR	980	0	NR
465	317	NR	595	983	NR	725	67	NR	855	1	NR	985	0	NR
470	251	NR	600	997	NR	730	57	NR	860	1	NR	990	0	NR
475	202	NR	605	997	NR	735	49	NR	865	1	NR	995	0	NR
480	202	NR	610	984	NR	740	42	NR	870	1	NR	1000	0	NR
485	220	NR	615	958	NR	745	35	NR	875	1	NR			

REPORT NUMBER: SP1-2512-637-1

Scotopic Flux vs. Wavelength

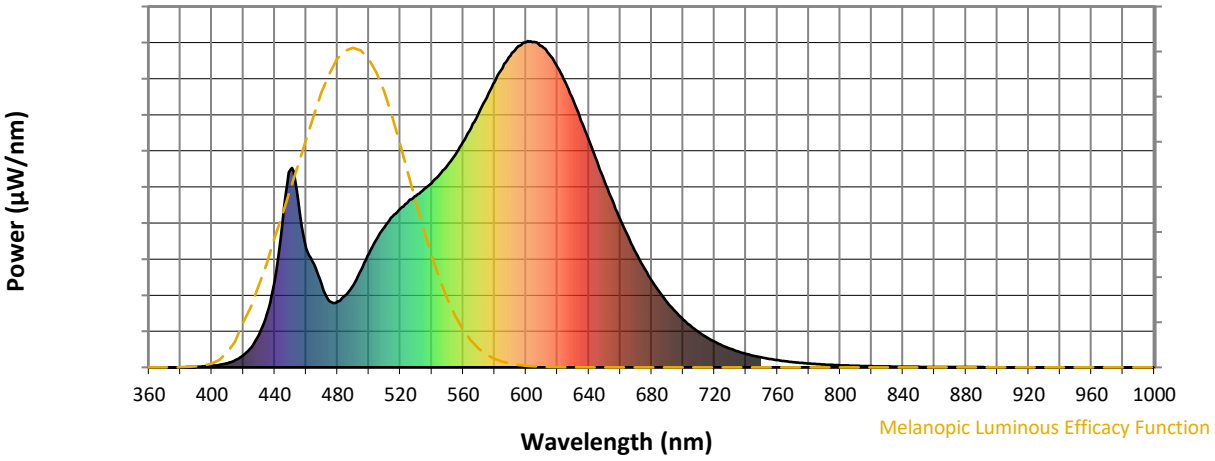


Scotopic Lumens: NR **S/P: 1.4**

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	252	NR	620	920	NR	750	30	NR	880	1	NR
365	0	NR	495	298	NR	625	875	NR	755	26	NR	885	1	NR
370	0	NR	500	349	NR	630	819	NR	760	22	NR	890	1	NR
375	0	NR	505	394	NR	635	756	NR	765	19	NR	895	0	NR
380	0	NR	510	431	NR	640	696	NR	770	16	NR	900	1	NR
385	1	NR	515	462	NR	645	633	NR	775	14	NR	905	0	NR
390	2	NR	520	487	NR	650	570	NR	780	12	NR	910	0	NR
395	3	NR	525	507	NR	655	511	NR	785	10	NR	915	0	NR
400	5	NR	530	525	NR	660	453	NR	790	9	NR	920	0	NR
405	8	NR	535	546	NR	665	401	NR	795	7	NR	925	0	NR
410	13	NR	540	565	NR	670	352	NR	800	6	NR	930	0	NR
415	22	NR	545	591	NR	675	306	NR	805	6	NR	935	0	NR
420	38	NR	550	619	NR	680	266	NR	810	5	NR	940	0	NR
425	61	NR	555	652	NR	685	230	NR	815	4	NR	945	0	NR
430	100	NR	560	691	NR	690	199	NR	820	4	NR	950	0	NR
435	165	NR	565	734	NR	695	171	NR	825	3	NR	955	0	NR
440	265	NR	570	780	NR	700	147	NR	830	3	NR	960	0	NR
445	450	NR	575	826	NR	705	126	NR	835	2	NR	965	0	NR
450	605	NR	580	874	NR	710	108	NR	840	2	NR	970	0	NR
455	508	NR	585	917	NR	715	92	NR	845	2	NR	975	0	NR
460	366	NR	590	956	NR	720	79	NR	850	2	NR	980	0	NR
465	317	NR	595	983	NR	725	67	NR	855	1	NR	985	0	NR
470	251	NR	600	997	NR	730	57	NR	860	1	NR	990	0	NR
475	202	NR	605	997	NR	735	49	NR	865	1	NR	995	0	NR
480	202	NR	610	984	NR	740	42	NR	870	1	NR	1000	0	NR
485	220	NR	615	958	NR	745	35	NR	875	1	NR			

REPORT NUMBER: SP1-2512-637-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.73**

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	252	NR	620	920	NR	750	30	NR	880	1	NR
365	0	NR	495	298	NR	625	875	NR	755	26	NR	885	1	NR
370	0	NR	500	349	NR	630	819	NR	760	22	NR	890	1	NR
375	0	NR	505	394	NR	635	756	NR	765	19	NR	895	0	NR
380	0	NR	510	431	NR	640	696	NR	770	16	NR	900	1	NR
385	1	NR	515	462	NR	645	633	NR	775	14	NR	905	0	NR
390	2	NR	520	487	NR	650	570	NR	780	12	NR	910	0	NR
395	3	NR	525	507	NR	655	511	NR	785	10	NR	915	0	NR
400	5	NR	530	525	NR	660	453	NR	790	9	NR	920	0	NR
405	8	NR	535	546	NR	665	401	NR	795	7	NR	925	0	NR
410	13	NR	540	565	NR	670	352	NR	800	6	NR	930	0	NR
415	22	NR	545	591	NR	675	306	NR	805	6	NR	935	0	NR
420	38	NR	550	619	NR	680	266	NR	810	5	NR	940	0	NR
425	61	NR	555	652	NR	685	230	NR	815	4	NR	945	0	NR
430	100	NR	560	691	NR	690	199	NR	820	4	NR	950	0	NR
435	165	NR	565	734	NR	695	171	NR	825	3	NR	955	0	NR
440	265	NR	570	780	NR	700	147	NR	830	3	NR	960	0	NR
445	450	NR	575	826	NR	705	126	NR	835	2	NR	965	0	NR
450	605	NR	580	874	NR	710	108	NR	840	2	NR	970	0	NR
455	508	NR	585	917	NR	715	92	NR	845	2	NR	975	0	NR
460	366	NR	590	956	NR	720	79	NR	850	2	NR	980	0	NR
465	317	NR	595	983	NR	725	67	NR	855	1	NR	985	0	NR
470	251	NR	600	997	NR	730	57	NR	860	1	NR	990	0	NR
475	202	NR	605	997	NR	735	49	NR	865	1	NR	995	0	NR
480	202	NR	610	984	NR	740	42	NR	870	1	NR	1000	0	NR
485	220	NR	615	958	NR	745	35	NR	875	1	NR			

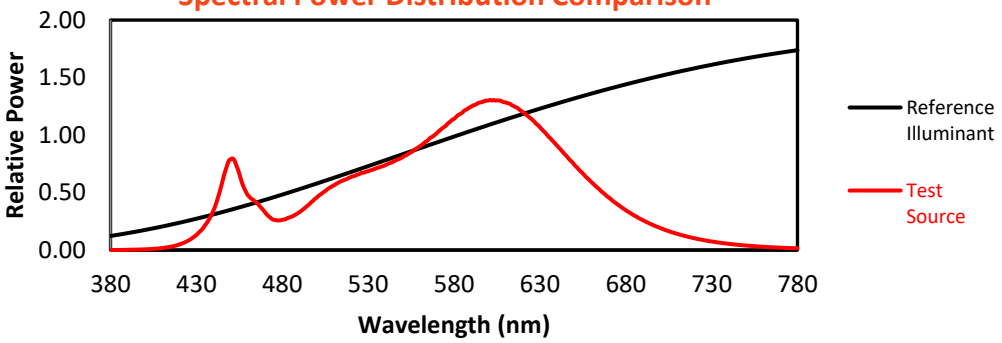
REPORT NUMBER: SP1-2512-637-1

TM-30-18

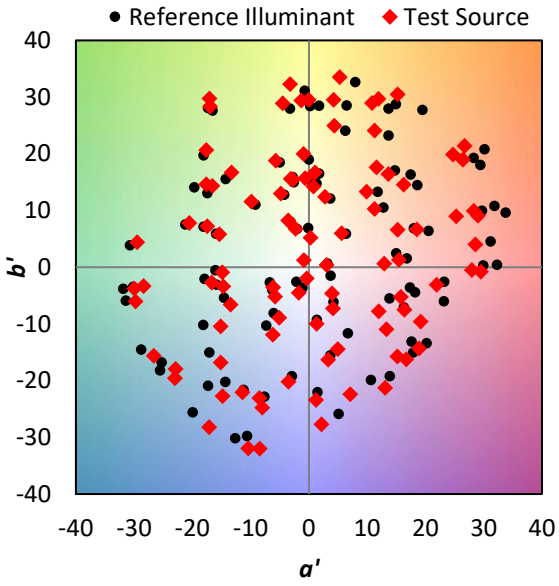
Summary

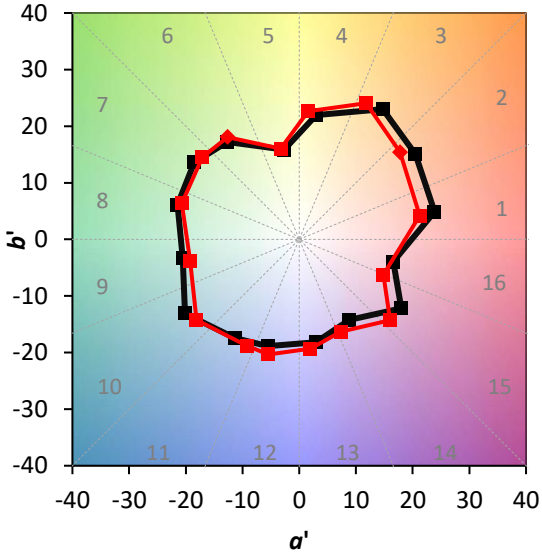
R_f = 85.3
R_g = 96.7
CIE R_a = 83.4
R_9 = 8.9

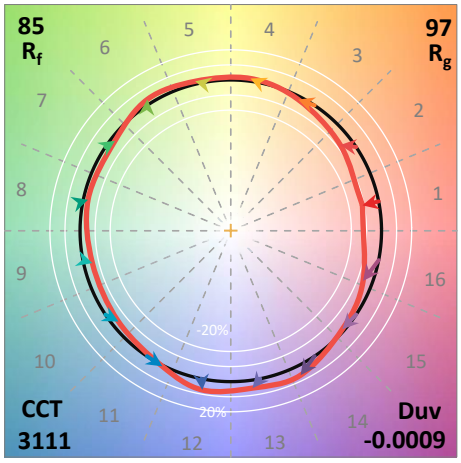
Spectral Power Distribution Comparison

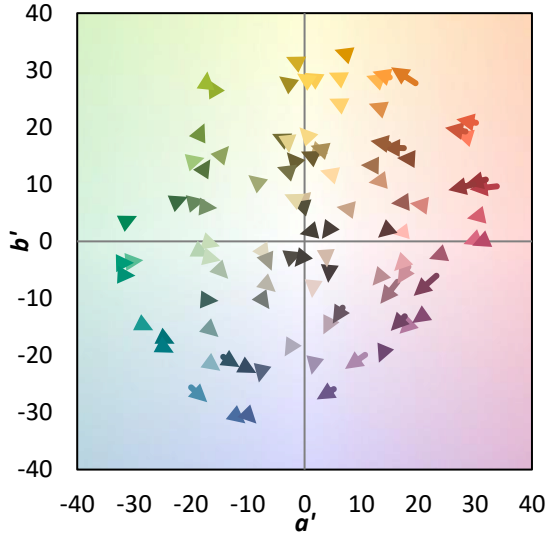


Color Vector Graphics







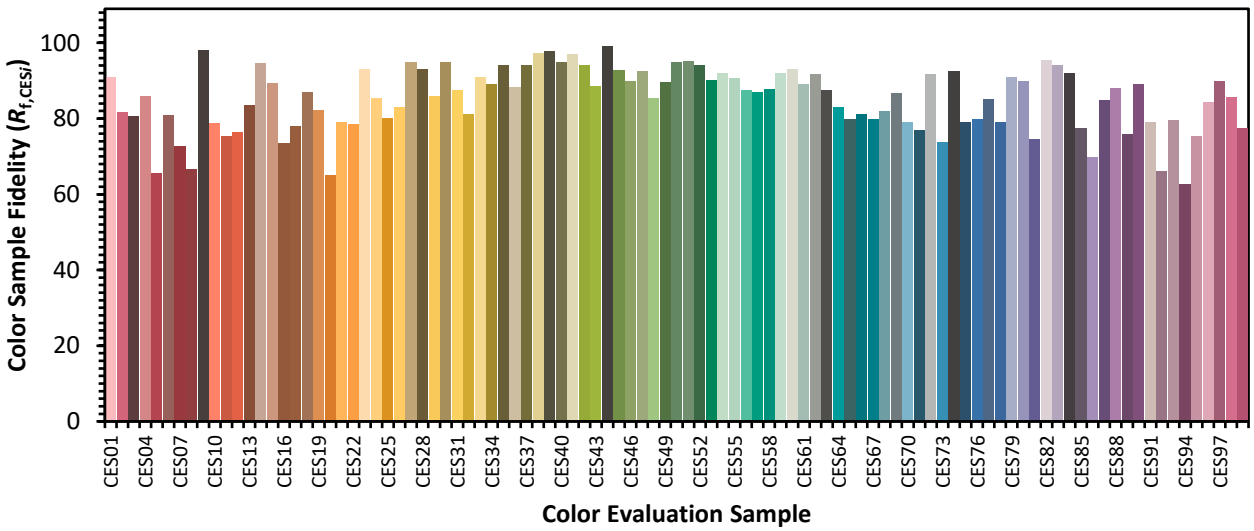


REPORT NUMBER: SP1-2512-637-1

TM-30-18

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

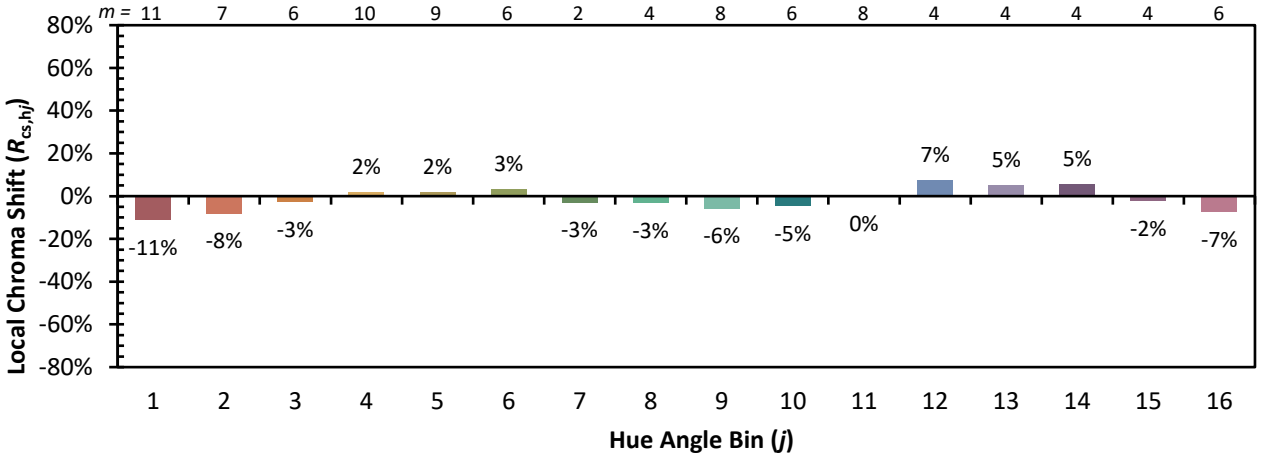
CES01 = 86	CES26 = 83	CES51 = 95	CES76 = 80
CES02 = 63	CES27 = 95	CES52 = 94	CES77 = 85
CES03 = 31	CES28 = 93	CES53 = 90	CES78 = 79
CES04 = 70	CES29 = 86	CES54 = 92	CES79 = 91
CES05 = 49	CES30 = 95	CES55 = 91	CES80 = 90
CES06 = 51	CES31 = 87	CES56 = 88	CES81 = 74
CES07 = 42	CES32 = 81	CES57 = 87	CES82 = 95
CES08 = 41	CES33 = 91	CES58 = 88	CES83 = 94
CES09 = 29	CES34 = 89	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 94	CES60 = 93	CES85 = 78
CES11 = 59	CES36 = 88	CES61 = 89	CES86 = 70
CES12 = 65	CES37 = 94	CES62 = 92	CES87 = 85
CES13 = 43	CES38 = 97	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 83	CES89 = 76
CES15 = 71	CES40 = 95	CES65 = 80	CES90 = 89
CES16 = 47	CES41 = 97	CES66 = 81	CES91 = 79
CES17 = 50	CES42 = 94	CES67 = 80	CES92 = 66
CES18 = 56	CES43 = 89	CES68 = 82	CES93 = 80
CES19 = 72	CES44 = 99	CES69 = 87	CES94 = 63
CES20 = 66	CES45 = 93	CES70 = 79	CES95 = 75
CES21 = 87	CES46 = 90	CES71 = 77	CES96 = 84
CES22 = 79	CES47 = 93	CES72 = 92	CES97 = 90
CES23 = 92	CES48 = 86	CES73 = 74	CES98 = 86
CES24 = 91	CES49 = 90	CES74 = 93	CES99 = 77
CES25 = 72	CES50 = 95	CES75 = 79	

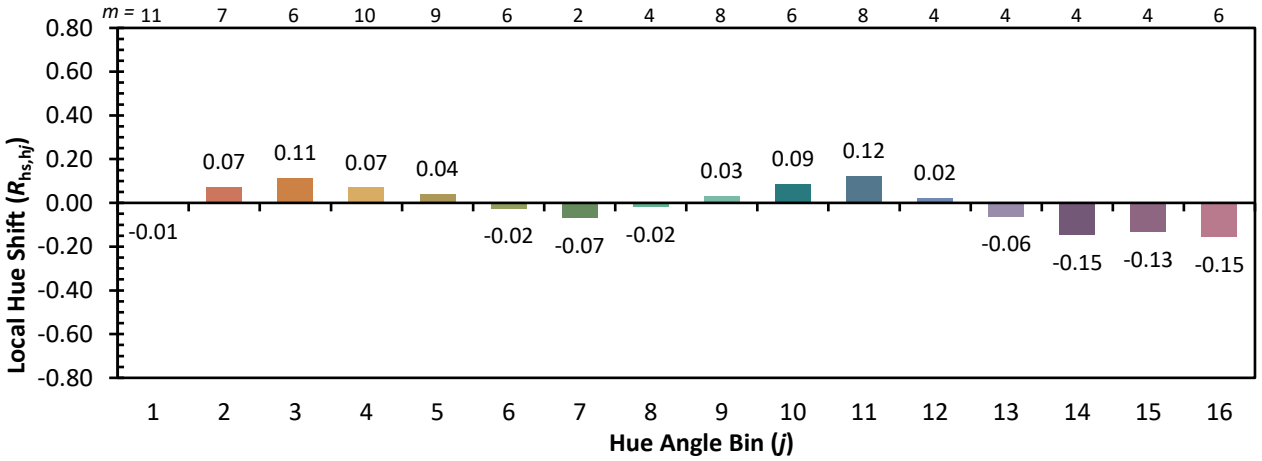


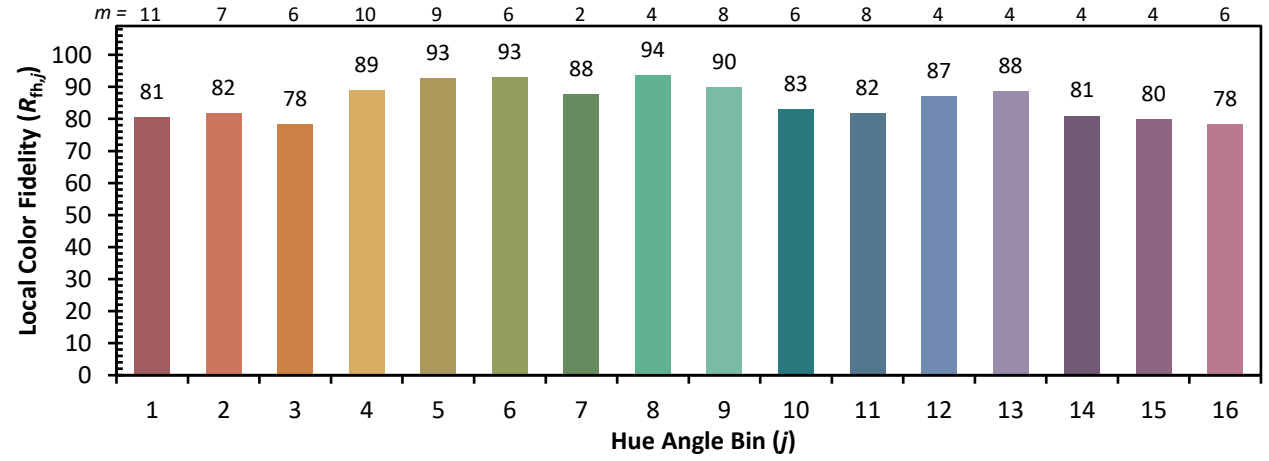
REPORT NUMBER: SP1-2512-637-1

TM-30-18

Color Rendition by Hue-Angle Bin



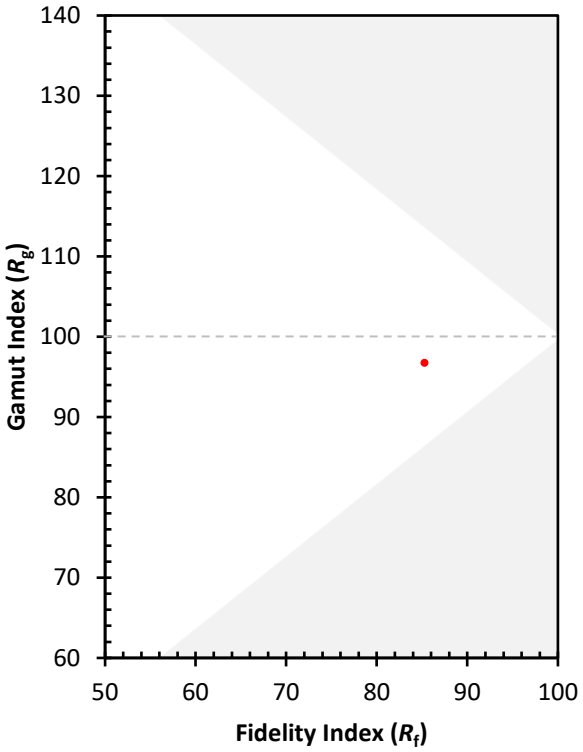


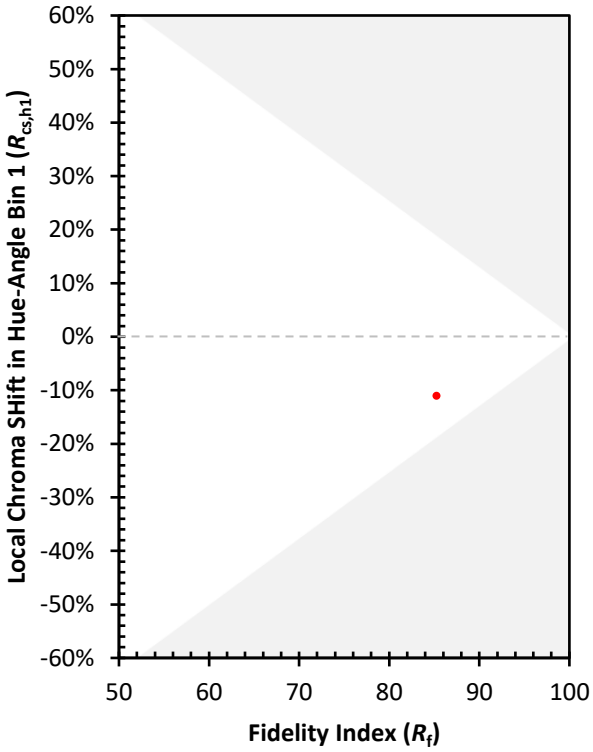


REPORT NUMBER: SP1-2512-637-1

TM-30-18

Measure Comparisons





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