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: STREETWORKS

Report Number: P1440192

Luminaire Tested: **MPB-A4-D-U-ASYM-U-7027**

Issue Date: 04/14/2026

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Report Generated By 670245763

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P1440192
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	04/14/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	MPB-A4-D-U-ASYM-U-7027
Description:	BRECKENRIDGE POST TOP LUMINAIRE w/ ASYMMETRIC DISTRIBUTION 02700K CCT 70 CRI LIGHT ENGINE
Light Source:	(1) 02700K CCT, 70 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Luminaire Equipment:

Sample No.	Condition	Description
a	good	reflector
b	good	lens
c	good	housing
d	good	cord

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	3890.7 lumens
Efficiency:	N/A
Efficacy:	96.5 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 1' x H: 0.57')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U4 - G4

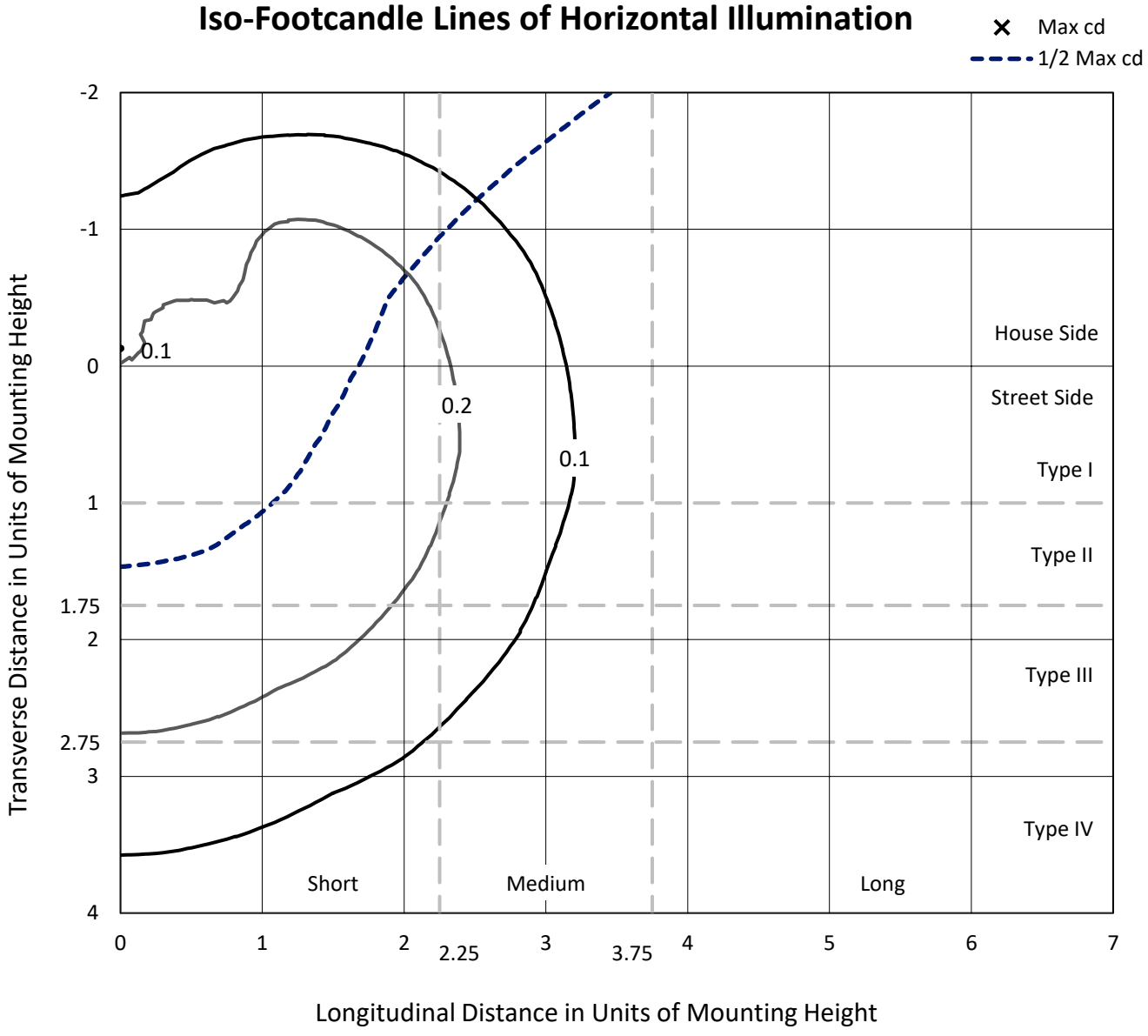
Input Watts (W):	40.3
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.95
Total Harmonic Distortion (THDi):	8.7%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination



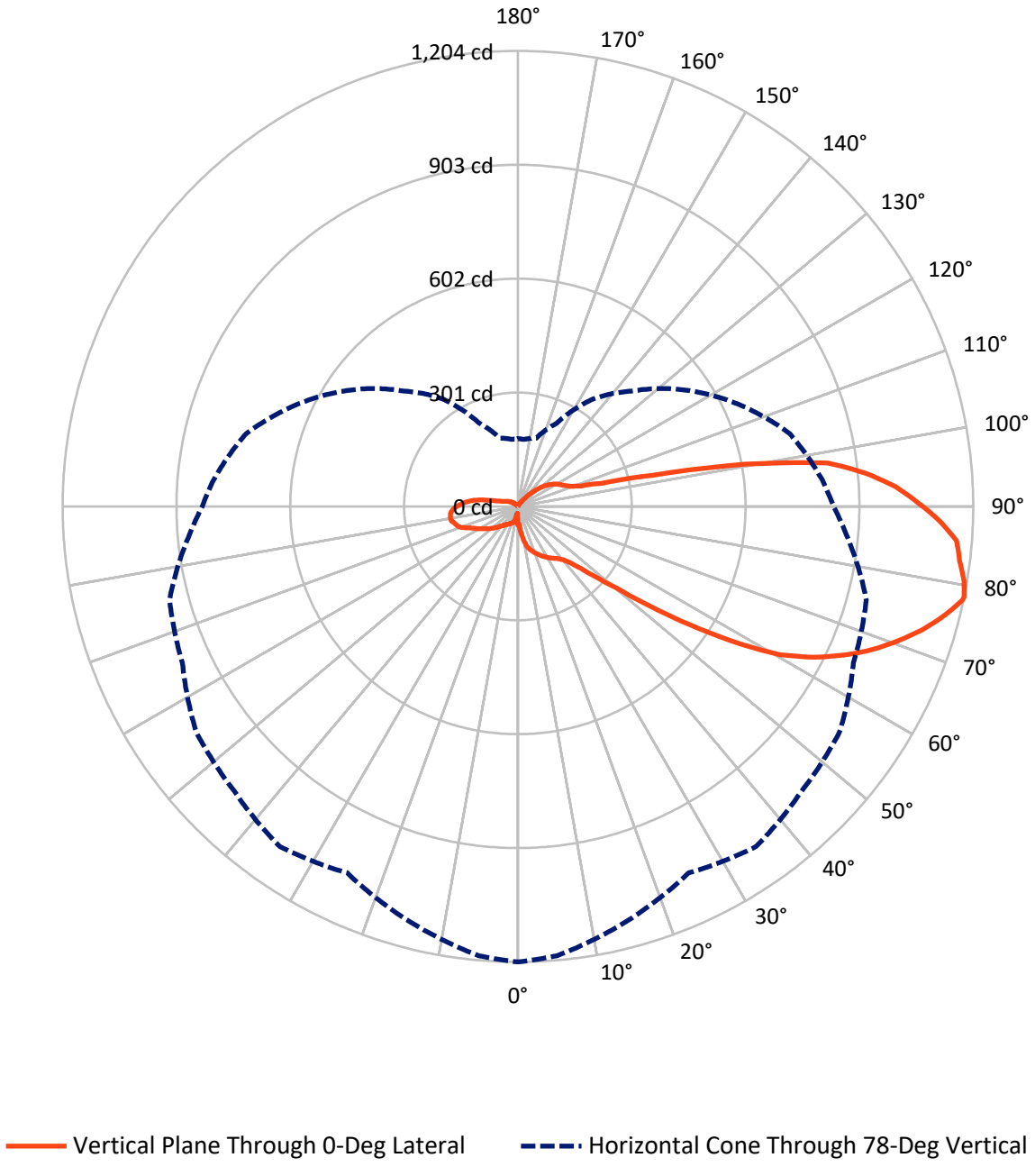
Based on 15 foot mounting height. Maximum calculated value = 0.5 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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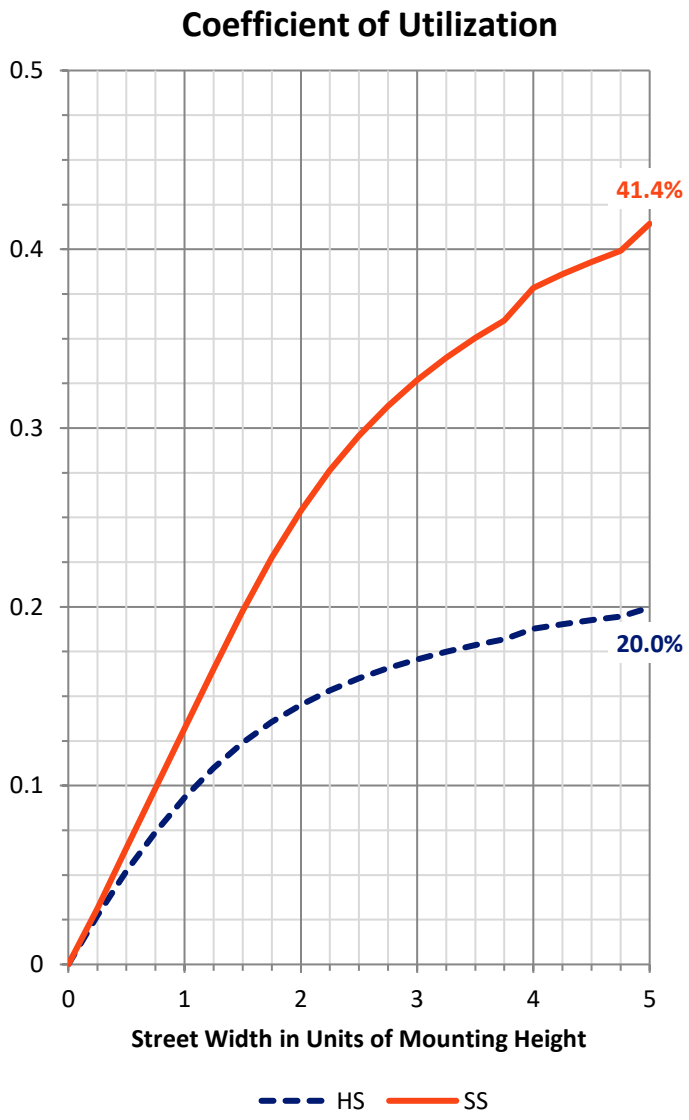
REPORT NUMBER: P1440192
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	882.0	339.8	1221.7
	% Fixture	22.7	8.7	31.4
Street Side	Lumens	1947.5	721.5	2669.0
	% Fixture	50.1	18.5	68.6
Total	Lumens	2829.5	1061.3	3890.7
	% Fixture	72.7	27.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.1	0.1
10°-20°	23.4	0.6
20°-30°	47.9	1.2
30°-40°	75.2	1.9
40°-50°	140.7	3.6
50°-60°	358.4	9.2
60°-70°	615.7	15.8
70°-80°	777.1	20.0
80°-90°	786.0	20.2
90°-100°	630.9	16.2
100°-110°	235.8	6.1
110°-120°	96.1	2.5
120°-130°	62.9	1.6
130°-140°	28.4	0.7
140°-150°	6.7	0.2
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2829.5	72.7
0°-180°	3890.7	100.0



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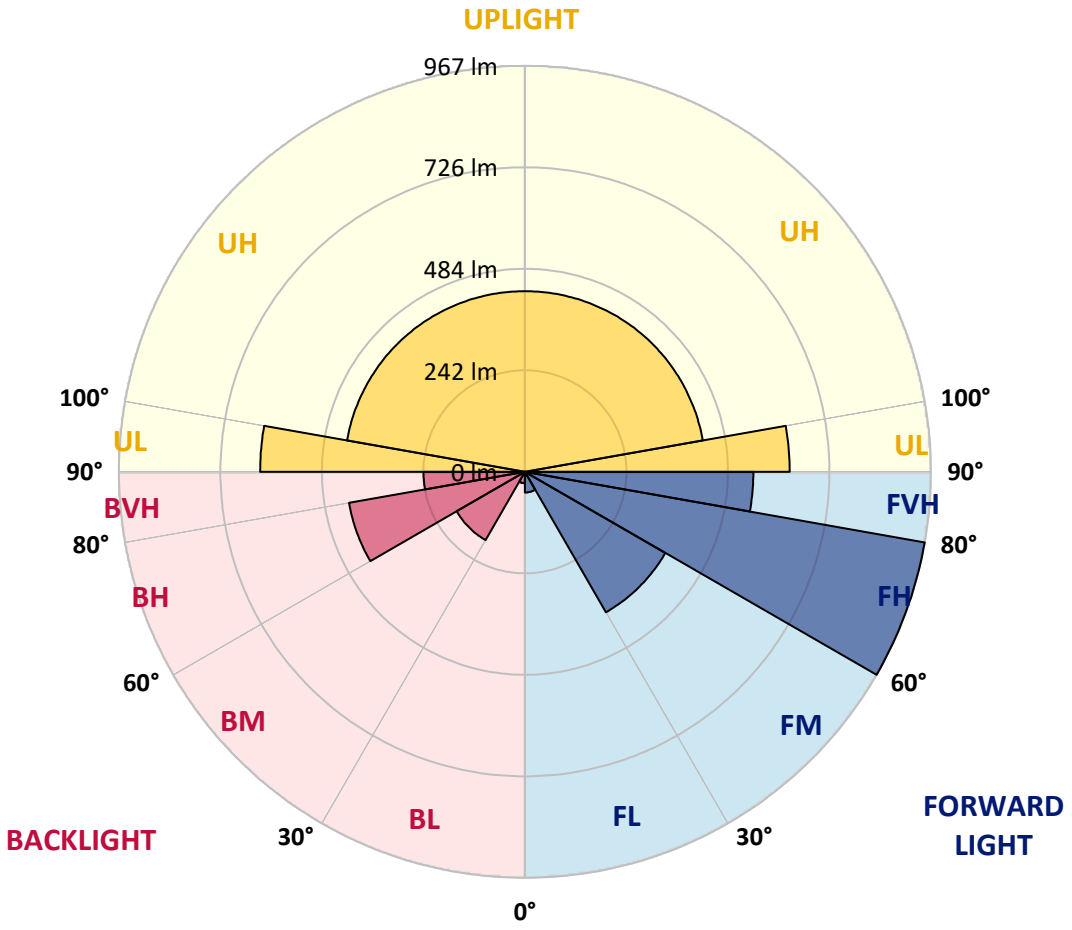
Scaled Data Report

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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°)	49.3	1.3			
FM	(30°-60°)	386.5	9.9			
FH	(60°-80°)	967.4	24.9			G1/1800
FVH	(80°-90°)	544.3	14.0			G4/750
BL	(0°-30°)	27.0	0.7	B0/110		
BM	(30°-60°)	187.9	4.8	B0/220		
BH	(60°-80°)	425.5	10.9	B1/500		G1/500
BVH	(80°-90°)	241.7	6.2			G3/500
UL	(90°-100°)	630.9	16.2		U4/1000	
UH	(100°-180°)	430.3	11.1		U3/500	

BUG Rating: B1-U4-G4
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
2.5°	45.2	45.8	46.3	48.5	50.7	51.8	52.9	51.8	51.2	51.8	50.7
5°	64.3	63.2	62.7	62.1	62.7	62.1	61.1	59.4	57.2	54.5	51.8
7.5°	79.0	79.6	79.6	78.0	76.9	75.2	72.0	68.1	65.4	64.3	62.1
10°	95.4	95.9	95.4	93.2	90.5	87.2	83.4	78.5	74.1	70.9	68.7
12.5°	109.0	107.9	107.4	106.3	103.0	99.8	94.9	90.0	85.0	80.1	76.9
15°	117.8	116.7	115.6	114.5	112.3	109.6	104.7	99.2	94.9	88.9	85.6
17.5°	124.3	123.7	122.7	122.1	119.9	116.7	111.8	107.4	102.5	95.9	92.7
20°	131.4	130.3	129.7	128.1	126.5	123.7	118.8	114.5	109.6	103.0	98.7
22.5°	137.4	136.8	136.8	135.2	133.6	130.3	125.9	121.6	116.1	109.0	104.7
25°	144.5	143.9	143.4	142.3	140.6	136.8	131.9	127.6	121.6	114.5	110.1
27.5°	150.5	149.4	148.8	147.7	146.1	142.3	137.4	132.5	126.5	118.3	114.5
30°	157.0	155.9	154.8	153.2	151.0	147.2	142.3	136.8	130.3	122.1	117.8
32.5°	162.5	161.4	159.7	158.6	155.4	151.6	146.1	140.1	133.0	124.3	120.5
35°	168.5	167.4	165.7	164.6	161.4	156.5	150.5	143.4	136.3	127.0	122.1
37.5°	175.0	174.4	172.8	171.2	167.9	163.0	155.9	148.8	141.2	130.8	126.5
40°	185.9	184.8	182.6	183.2	179.4	175.0	167.4	161.4	152.1	140.1	135.7
42.5°	203.3	202.3	201.7	201.7	201.7	196.3	189.7	185.9	176.6	161.4	154.8
45°	233.3	232.2	232.2	235.0	237.7	234.4	226.8	224.1	214.2	196.8	187.0
47.5°	280.8	277.5	281.8	284.0	286.8	286.2	277.5	281.3	264.4	243.7	231.1
50°	339.1	344.5	351.1	355.4	363.6	357.1	347.8	351.6	335.8	306.4	289.5
52.5°	436.7	438.3	440.5	439.4	456.3	450.3	430.7	441.0	417.6	389.8	371.8
55°	551.7	557.1	556.6	543.5	570.2	559.3	544.6	550.1	524.4	481.9	460.7
57.5°	676.0	686.9	684.7	662.9	680.9	672.7	657.5	650.4	616.6	573.0	546.8
60°	795.4	793.2	789.9	750.7	774.1	752.9	740.9	725.6	691.8	640.6	608.4
62.5°	877.7	873.9	863.0	818.3	843.9	827.0	801.9	777.9	743.6	691.8	659.1
65°	947.5	943.7	931.7	895.7	919.1	889.7	866.2	829.2	794.8	733.2	702.2
67.5°	1010.2	1005.8	986.7	945.3	972.0	944.8	919.1	875.0	846.6	775.2	743.6
70°	1065.2	1066.9	1042.3	998.2	1016.7	988.4	972.0	917.5	890.8	813.9	783.9
72.5°	1117.0	1113.7	1084.3	1036.9	1057.6	1026.5	1008.0	948.6	922.9	843.4	809.6
75°	1161.2	1159.0	1119.7	1066.3	1089.8	1052.1	1038.0	969.3	943.7	865.7	830.3
77.5°	1199.9	1185.7	1135.0	1077.2	1102.3	1058.1	1038.5	970.4	946.4	869.5	836.3
78°	1203.7	1191.7	1131.7	1068.5	1097.4	1062.0	1038.5	978.6	953.5	872.2	834.6
80°	1196.1	1179.2	1122.5	1068.0	1099.6	1045.6	1026.5	950.7	940.9	872.2	838.4
82.5°	1176.4	1159.0	1096.3	1052.1	1085.4	1040.2	1017.8	944.8	942.0	867.3	835.2
85°	1163.4	1145.4	1076.1	1038.0	1071.2	1024.3	1002.5	938.2	935.5	862.4	828.1
87.5°	1116.5	1102.8	1032.5	999.3	1036.9	999.8	979.1	914.8	907.7	836.3	799.2
90°	1058.7	1048.3	979.6	946.4	983.5	950.7	933.3	870.6	861.9	792.1	759.9
92.5°	999.8	987.8	926.8	891.9	925.1	895.1	881.5	822.6	811.7	739.8	711.4
95°	921.9	914.2	861.3	828.6	860.3	833.5	819.9	770.3	756.1	692.3	671.6
97.5°	826.5	810.1	773.6	736.5	771.4	758.9	743.6	706.0	698.3	641.6	619.8
100°	611.7	619.8	603.5	576.2	632.9	627.5	631.3	604.6	605.1	559.3	537.0
102.5°	364.2	365.3	357.6	361.4	387.1	405.0	406.7	394.7	411.6	384.3	373.4
105°	228.4	226.2	221.9	221.3	231.1	238.2	238.2	231.1	236.1	229.0	223.5
107.5°	175.5	172.3	171.7	166.8	175.0	175.5	175.5	169.5	170.1	161.4	158.1

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	*151.6*	149.4	148.8	146.1	150.5	151.0	150.5	145.6	143.4	136.8	133.0
112.5°	*139.6*	137.9	136.8	134.1	138.5	138.5	137.9	133.6	130.3	123.2	118.8
115°	*130.8*	129.2	128.1	125.9	129.2	129.2	128.1	125.4	122.7	116.1	112.8
117.5°	*123.7*	122.1	121.0	118.8	122.1	121.6	121.0	118.3	116.1	109.6	105.8
120°	*116.7*	115.0	114.5	112.3	115.0	114.5	112.8	111.2	107.9	102.5	99.2
122.5°	*107.4*	106.3	105.8	105.2	106.9	106.3	106.3	104.1	100.9	94.9	91.6
125°	*98.1*	97.0	96.5	95.4	97.6	97.6	97.6	95.4	92.1	86.7	84.0
127.5°	*87.2*	86.1	86.1	86.1	87.8	88.3	88.3	86.7	84.0	79.0	75.2
130°	*74.1*	73.6	74.7	74.7	75.8	76.9	78.0	76.9	74.1	68.7	66.0
132.5°	*61.1*	61.1	62.1	62.7	64.3	64.3	66.0	64.9	62.7	57.2	54.5
135°	*49.1*	49.1	49.6	50.2	51.8	52.3	53.4	52.9	50.2	45.8	43.6
137.5°	*37.6*	37.1	37.6	38.7	39.8	39.3	39.8	39.3	36.5	33.3	31.1
140°	*26.7*	26.7	27.3	27.3	27.8	28.9	28.9	27.8	25.6	23.4	22.4
142.5°	*19.6*	19.6	20.2	20.2	20.2	20.2	20.2	19.6	18.5	17.4	15.8
145°	*14.7*	15.3	15.3	14.7	14.7	15.3	15.3	14.7	13.6	12.5	11.4
147.5°	*11.4*	10.9	11.4	10.9	10.9	10.9	10.9	9.8	9.3	8.7	7.6
150°	*7.6*	7.6	7.6	7.1	7.1	6.5	6.5	6.0	4.9	4.9	4.4
152.5°	*3.8*	3.8	3.3	2.7	2.7	2.7	1.6	1.6	1.6	1.6	1.6
155°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
2.5°	49.6	47.4	46.3	40.9	36.0	32.2	30.5	30.5	31.6	31.6
5°	49.1	42.5	36.5	32.7	28.9	25.6	22.9	20.7	18.5	18.5
7.5°	59.4	52.9	46.9	40.3	35.4	30.5	26.2	24.0	21.3	20.7
10°	65.4	60.5	54.5	48.5	42.5	37.1	32.2	28.3	26.7	26.7
12.5°	73.6	67.6	61.6	56.2	50.2	44.7	40.3	37.6	34.9	34.3
15°	81.8	74.7	67.6	62.1	56.2	50.7	46.3	43.6	42.5	42.0
17.5°	88.3	80.7	73.1	66.5	60.0	54.0	49.1	46.3	44.7	44.7
20°	94.3	86.1	77.4	70.3	63.2	56.7	51.2	48.5	46.3	46.3
22.5°	100.3	90.5	82.3	74.7	66.0	59.4	54.0	50.2	48.0	48.0
25°	105.2	95.4	86.1	78.5	69.2	62.1	56.7	52.9	50.2	50.2
27.5°	109.6	99.8	90.5	81.8	72.5	64.9	59.4	54.5	51.8	51.8
30°	112.8	103.6	93.8	85.0	75.2	67.6	62.1	56.7	54.0	54.0
32.5°	115.6	106.3	97.0	88.3	78.0	70.9	64.9	59.4	56.7	56.2
35°	117.2	108.5	99.8	91.0	80.7	73.6	67.6	62.1	58.9	58.9
37.5°	121.0	110.7	102.5	93.8	83.4	76.9	71.4	66.0	62.7	62.1
40°	129.2	117.8	107.9	98.1	87.8	81.2	75.2	70.3	67.1	66.5
42.5°	148.3	133.6	120.5	106.9	94.9	87.2	80.1	75.2	71.4	70.9
45°	177.2	159.2	141.7	124.3	108.5	97.0	87.8	81.8	76.9	76.9
47.5°	223.0	198.4	171.7	149.4	128.7	111.8	98.7	88.9	82.9	82.9
50°	278.6	249.1	215.9	187.0	155.4	131.4	113.4	98.7	89.4	88.3
52.5°	350.5	314.6	270.9	231.7	190.8	157.0	131.9	111.2	96.5	94.9
55°	431.8	402.3	338.0	288.9	233.3	188.1	151.0	122.7	103.0	101.4
57.5°	517.9	476.5	406.1	341.8	274.8	217.5	172.3	134.7	111.8	108.5
60°	579.5	534.3	458.5	385.4	305.3	241.5	189.2	145.0	119.4	116.7
62.5°	632.9	580.6	498.8	414.9	330.4	258.9	200.6	151.6	127.6	124.3
65°	676.0	620.4	533.2	443.8	352.7	275.3	209.9	160.8	137.4	132.5
67.5°	711.4	653.6	566.4	469.4	375.1	294.4	220.8	168.5	149.9	144.5
70°	745.8	685.3	593.7	496.1	397.4	310.7	231.1	178.8	157.5	158.6
72.5°	775.2	713.6	617.1	516.3	414.3	326.0	236.6	183.7	167.9	167.4
75°	800.3	734.9	634.0	533.2	428.5	338.0	239.3	185.9	174.4	172.3
77.5°	810.1	750.1	648.2	546.2	438.8	350.0	241.5	185.9	177.2	177.2
78°	*807.4*	*743.6*	*640.6*	*537.0*	*431.8*	*346.7*	*242.6*	*187.0*	*177.7*	*179.4*
80°	817.2	753.9	644.4	543.0	437.8	351.1	238.8	185.4	177.7	181.0
82.5°	815.0	746.3	641.1	537.5	430.1	342.9	233.3	181.5	173.9	180.4
85°	804.6	736.0	630.7	526.1	420.3	332.5	225.1	176.1	170.1	178.8
87.5°	780.1	710.3	610.6	507.5	402.9	316.7	217.5	170.6	165.2	172.8
90°	735.4	676.5	581.1	479.2	381.1	300.9	208.8	163.5	158.6	164.1
92.5°	688.0	632.9	548.4	450.8	356.5	283.5	199.5	154.3	147.2	151.6
95°	648.2	598.6	516.8	421.9	333.6	266.6	187.0	144.5	135.7	139.6
97.5°	600.8	550.1	474.3	387.1	305.8	244.8	170.6	129.2	120.5	124.3
100°	520.6	484.6	410.5	334.7	266.0	210.4	148.8	110.1	100.9	104.1
102.5°	360.9	336.4	285.1	235.0	187.5	152.6	109.0	82.3	74.7	76.9
105°	214.2	199.5	172.8	148.3	123.2	100.9	75.8	62.1	56.2	57.8
107.5°	153.2	145.0	127.6	107.9	91.0	76.3	59.4	50.7	46.3	46.9

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

Scaled Data Report

REPORT NUMBER: P1440192
CATALOG NUMBER: MPB-A4-D-U-ASYM-U-7027

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	128.1	118.8	104.1	89.4	75.8	62.7	50.2	44.2	40.3	40.9
112.5°	115.0	106.9	94.3	80.1	67.6	55.6	44.2	38.7	36.0	36.0
115°	109.0	99.8	87.2	73.6	61.1	49.6	39.8	34.9	32.2	32.7
117.5°	101.9	93.8	81.8	68.1	55.6	44.7	36.0	31.6	28.9	28.9
120°	95.4	86.7	75.8	63.2	50.7	40.3	32.2	28.3	25.6	26.2
122.5°	88.3	80.1	69.8	58.3	45.8	36.5	28.9	24.5	22.4	22.4
125°	80.1	73.1	63.8	52.9	40.9	32.2	25.1	21.3	19.1	19.1
127.5°	72.0	65.4	56.7	46.3	36.0	27.8	21.8	18.0	15.8	15.8
130°	62.1	56.7	49.1	39.8	30.0	22.9	18.0	14.7	13.1	13.1
132.5°	51.8	46.3	39.8	32.2	24.0	18.5	14.2	12.0	10.4	10.4
135°	40.9	36.5	30.5	24.0	18.0	13.6	10.9	9.3	8.2	8.2
137.5°	29.4	25.6	21.8	16.9	13.1	9.8	8.2	7.1	6.0	6.0
140°	20.7	17.4	15.3	12.0	9.3	7.1	5.5	4.9	4.4	4.4
142.5°	14.7	12.5	10.9	8.7	6.0	4.9	4.4	3.8	3.3	3.3
145°	10.4	8.7	7.1	6.0	3.8	3.3	2.7	2.7	2.2	2.2
147.5°	6.5	5.5	4.4	3.3	2.2	1.6	1.6	1.6	1.1	1.1
150°	3.3	2.2	2.2	1.6	0.5	1.1	0.5	1.1	0.5	0.5
152.5°	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Streetworks

Report Number: SP3-2602-694-2

Test Date: 04/01/2026

Luminaire Tested: MPB-A2-D-U-SYM-7027

Data in this report applies to families of products including MPB*

Report Generated By FNC07603 / LDUCLS01DT01661
Version: v7.05

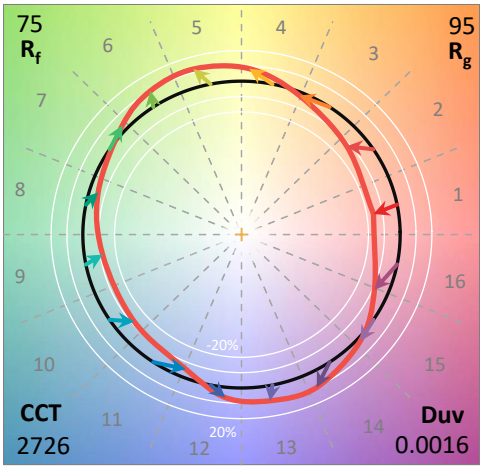
Test Information

Test Method:	LM-79-2019
Report Number:	SP3-2602-694-2
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP3 - 3M SPHERE
Measurement Geometry:	4π
Issue Date:	04/02/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**MPB-A2-D-U-SYM-7027**
Description:	MPB Breckenridge 20W DECORATIVE POSTTOP SYMMETRIC DISTRIBUTION

Spectral Parameters

CCT (K):	2726	CRI (Ra):	72.5		
CIE u':	0.2609	R1:	69.1	R9:	-28.3
CIE v':	0.5292	R2:	82.1	R10:	59.6
Duv:	0.0016	R3:	94.4	R11:	65.2
CIE x:	0.4605	R4:	69.4	R12:	50.1
CIE y:	0.4151	R5:	67.8	R13:	71.2
CIE z:	0.1244	R6:	75.9	R14:	96.7
Peak Wavelength (nm):	599	R7:	78.0	R15:	60.5
Dominant Wavelength (nm):	583	R8:	43.8		
Purity:	62.84065				

Rf:	75
Rg:	95.4



Test Conditions

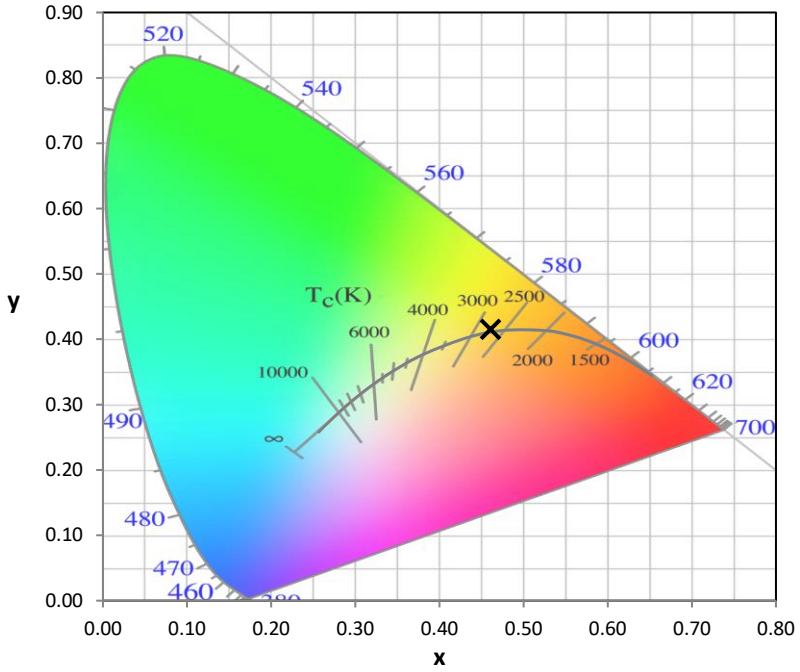
Stabilization Time:	21M
Operation Time:	1H 21M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP3-2602-694-2

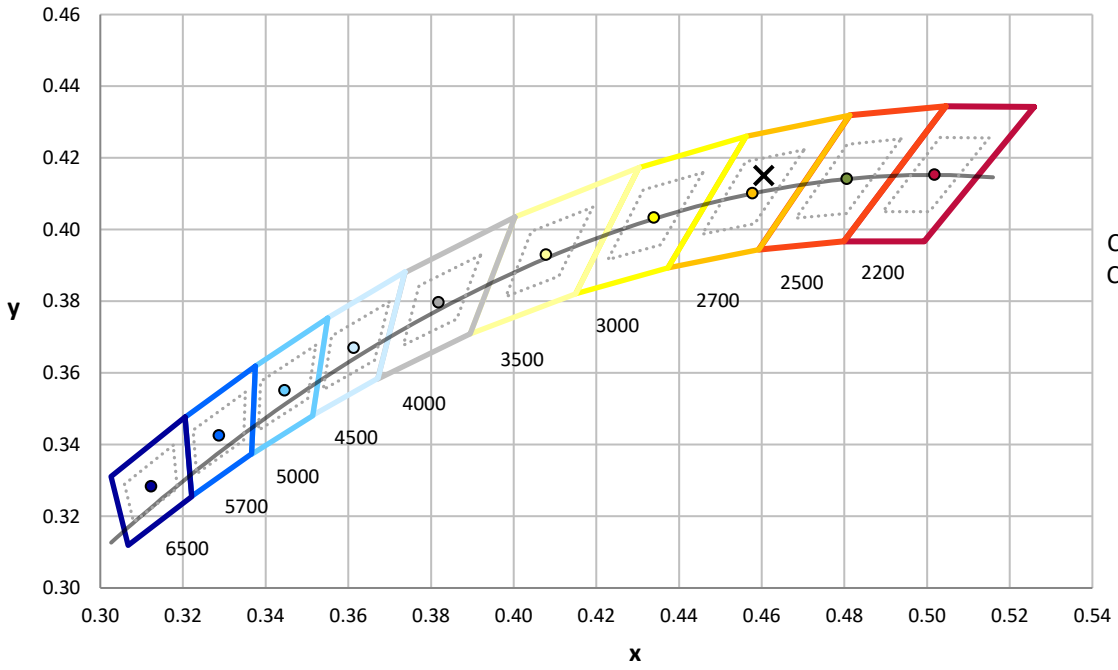
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	3M SPHERE IN02505	1/10/2026	7/10/2026
Power Meter	XITRON INXT2011006	10/21/2025	10/21/2026
AC Power Source	CHROMA 61604 IN6064A	10/20/2025	10/20/2026
DC Power Source	EYSIGHT N5770A IN0534	10/20/2025	10/20/2026
Sphere Thermometer	TANDD IN4036E	10/21/2025	10/21/2026

REPORT NUMBER: SP3-2602-694-2

CIE 1931 Chromaticity Diagram



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

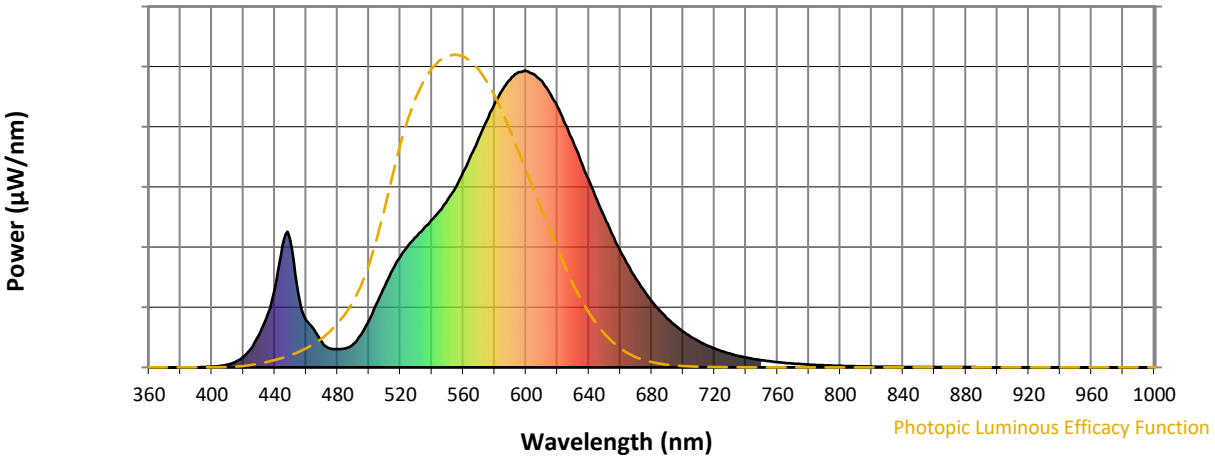


CCT = 2726K
CIE x = 0.4605
CIE y = 0.4151
Duv = 0.0016

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP3-2602-694-2

Photopic Flux vs. Wavelength

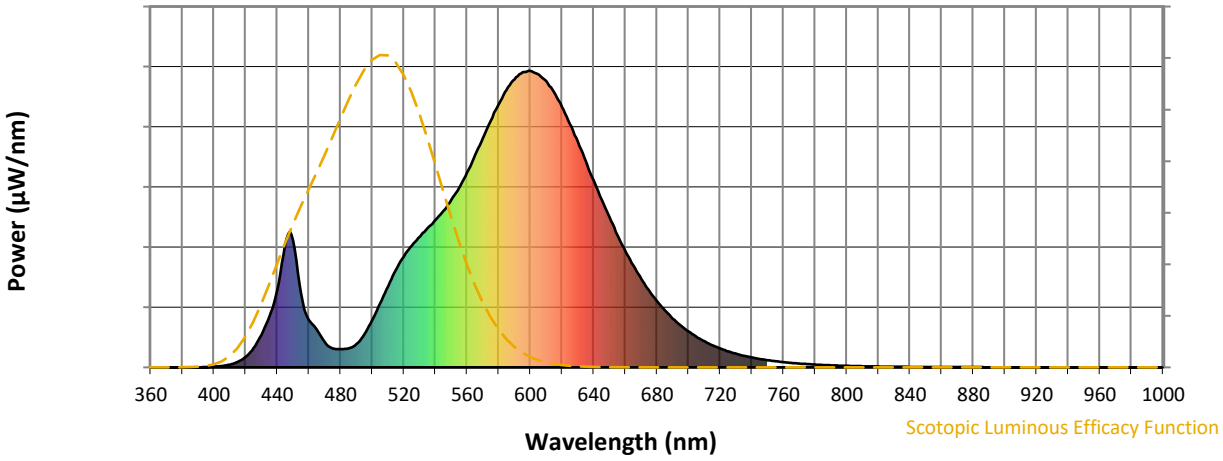


Photopic Lumens: NR

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	79	NR	620	878	NR	750	24	NR	880	1	NR
365	0	NR	495	110	NR	625	820	NR	755	21	NR	885	1	NR
370	0	NR	500	159	NR	630	761	NR	760	18	NR	890	1	NR
375	0	NR	505	215	NR	635	694	NR	765	15	NR	895	0	NR
380	0	NR	510	273	NR	640	632	NR	770	13	NR	900	0	NR
385	0	NR	515	328	NR	645	566	NR	775	11	NR	905	0	NR
390	0	NR	520	373	NR	650	506	NR	780	9	NR	910	0	NR
395	1	NR	525	410	NR	655	446	NR	785	8	NR	915	0	NR
400	3	NR	530	440	NR	660	392	NR	790	7	NR	920	0	NR
405	5	NR	535	469	NR	665	344	NR	795	6	NR	925	0	NR
410	9	NR	540	497	NR	670	299	NR	800	5	NR	930	0	NR
415	18	NR	545	527	NR	675	260	NR	805	4	NR	935	0	NR
420	36	NR	550	564	NR	680	223	NR	810	4	NR	940	0	NR
425	65	NR	555	605	NR	685	192	NR	815	3	NR	945	0	NR
430	109	NR	560	658	NR	690	164	NR	820	3	NR	950	0	NR
435	171	NR	565	716	NR	695	142	NR	825	2	NR	955	0	NR
440	264	NR	570	772	NR	700	121	NR	830	2	NR	960	0	NR
445	413	NR	575	832	NR	705	103	NR	835	2	NR	965	0	NR
450	427	NR	580	887	NR	710	88	NR	840	2	NR	970	0	NR
455	249	NR	585	935	NR	715	74	NR	845	1	NR	975	0	NR
460	160	NR	590	971	NR	720	64	NR	850	1	NR	980	0	NR
465	127	NR	595	995	NR	725	54	NR	855	1	NR	985	0	NR
470	85	NR	600	999	NR	730	46	NR	860	1	NR	990	0	NR
475	64	NR	605	988	NR	735	39	NR	865	1	NR	995	0	NR
480	61	NR	610	965	NR	740	33	NR	870	1	NR	1000	0	NR
485	64	NR	615	926	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP3-2602-694-2

Scotopic Flux vs. Wavelength

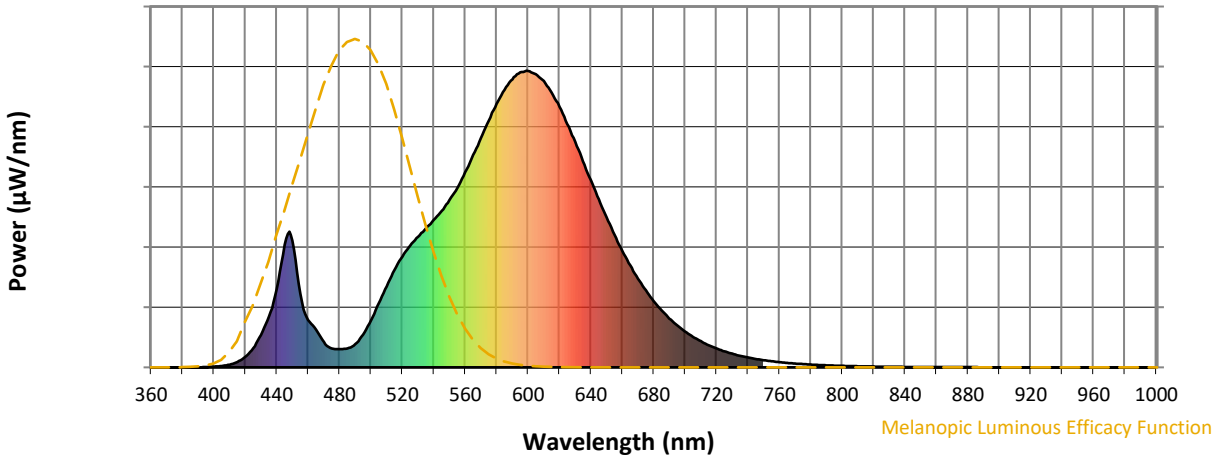


Scotopic Lumens: NR **S/P: 1.08**

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	79	NR	620	878	NR	750	24	NR	880	1	NR
365	0	NR	495	110	NR	625	820	NR	755	21	NR	885	1	NR
370	0	NR	500	159	NR	630	761	NR	760	18	NR	890	1	NR
375	0	NR	505	215	NR	635	694	NR	765	15	NR	895	0	NR
380	0	NR	510	273	NR	640	632	NR	770	13	NR	900	0	NR
385	0	NR	515	328	NR	645	566	NR	775	11	NR	905	0	NR
390	0	NR	520	373	NR	650	506	NR	780	9	NR	910	0	NR
395	1	NR	525	410	NR	655	446	NR	785	8	NR	915	0	NR
400	3	NR	530	440	NR	660	392	NR	790	7	NR	920	0	NR
405	5	NR	535	469	NR	665	344	NR	795	6	NR	925	0	NR
410	9	NR	540	497	NR	670	299	NR	800	5	NR	930	0	NR
415	18	NR	545	527	NR	675	260	NR	805	4	NR	935	0	NR
420	36	NR	550	564	NR	680	223	NR	810	4	NR	940	0	NR
425	65	NR	555	605	NR	685	192	NR	815	3	NR	945	0	NR
430	109	NR	560	658	NR	690	164	NR	820	3	NR	950	0	NR
435	171	NR	565	716	NR	695	142	NR	825	2	NR	955	0	NR
440	264	NR	570	772	NR	700	121	NR	830	2	NR	960	0	NR
445	413	NR	575	832	NR	705	103	NR	835	2	NR	965	0	NR
450	427	NR	580	887	NR	710	88	NR	840	2	NR	970	0	NR
455	249	NR	585	935	NR	715	74	NR	845	1	NR	975	0	NR
460	160	NR	590	971	NR	720	64	NR	850	1	NR	980	0	NR
465	127	NR	595	995	NR	725	54	NR	855	1	NR	985	0	NR
470	85	NR	600	999	NR	730	46	NR	860	1	NR	990	0	NR
475	64	NR	605	988	NR	735	39	NR	865	1	NR	995	0	NR
480	61	NR	610	965	NR	740	33	NR	870	1	NR	1000	0	NR
485	64	NR	615	926	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP3-2602-694-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 1.88**

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	79	NR	620	878	NR	750	24	NR	880	1	NR
365	0	NR	495	110	NR	625	820	NR	755	21	NR	885	1	NR
370	0	NR	500	159	NR	630	761	NR	760	18	NR	890	1	NR
375	0	NR	505	215	NR	635	694	NR	765	15	NR	895	0	NR
380	0	NR	510	273	NR	640	632	NR	770	13	NR	900	0	NR
385	0	NR	515	328	NR	645	566	NR	775	11	NR	905	0	NR
390	0	NR	520	373	NR	650	506	NR	780	9	NR	910	0	NR
395	1	NR	525	410	NR	655	446	NR	785	8	NR	915	0	NR
400	3	NR	530	440	NR	660	392	NR	790	7	NR	920	0	NR
405	5	NR	535	469	NR	665	344	NR	795	6	NR	925	0	NR
410	9	NR	540	497	NR	670	299	NR	800	5	NR	930	0	NR
415	18	NR	545	527	NR	675	260	NR	805	4	NR	935	0	NR
420	36	NR	550	564	NR	680	223	NR	810	4	NR	940	0	NR
425	65	NR	555	605	NR	685	192	NR	815	3	NR	945	0	NR
430	109	NR	560	658	NR	690	164	NR	820	3	NR	950	0	NR
435	171	NR	565	716	NR	695	142	NR	825	2	NR	955	0	NR
440	264	NR	570	772	NR	700	121	NR	830	2	NR	960	0	NR
445	413	NR	575	832	NR	705	103	NR	835	2	NR	965	0	NR
450	427	NR	580	887	NR	710	88	NR	840	2	NR	970	0	NR
455	249	NR	585	935	NR	715	74	NR	845	1	NR	975	0	NR
460	160	NR	590	971	NR	720	64	NR	850	1	NR	980	0	NR
465	127	NR	595	995	NR	725	54	NR	855	1	NR	985	0	NR
470	85	NR	600	999	NR	730	46	NR	860	1	NR	990	0	NR
475	64	NR	605	988	NR	735	39	NR	865	1	NR	995	0	NR
480	61	NR	610	965	NR	740	33	NR	870	1	NR	1000	0	NR
485	64	NR	615	926	NR	745	28	NR	875	1	NR			

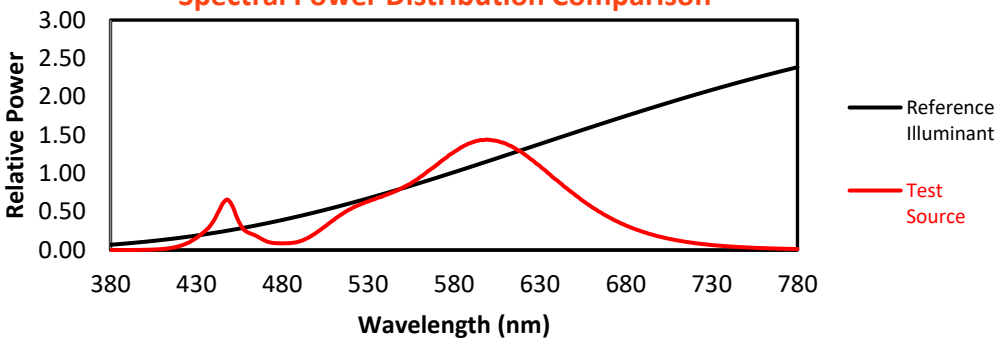
REPORT NUMBER: SP3-2602-694-2

TM-30-18

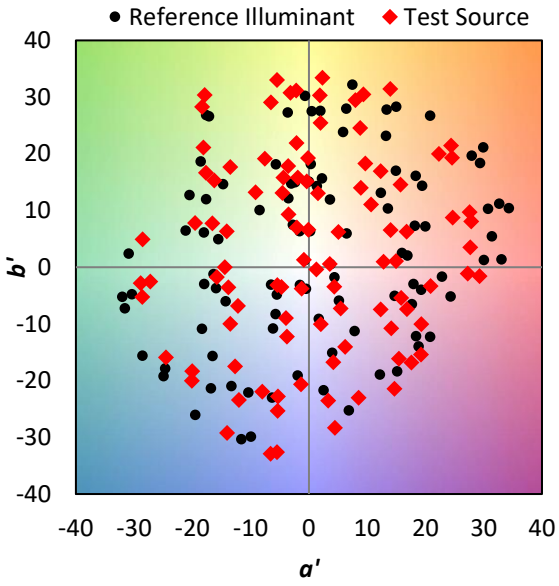
Summary

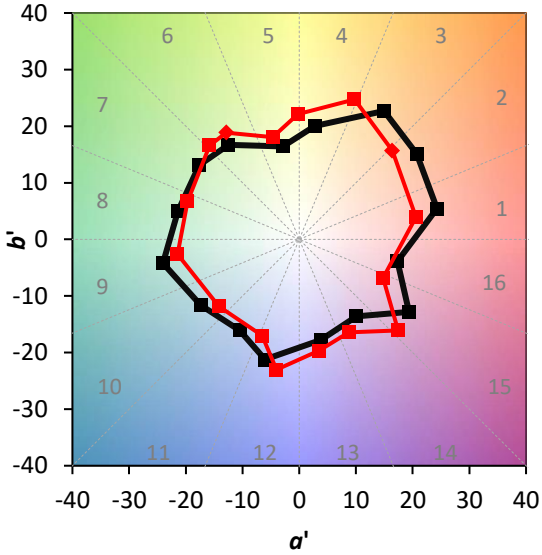
R_f = 75
R_g = 95.4
CIE R_a = 72.5
R_9 = -28.3

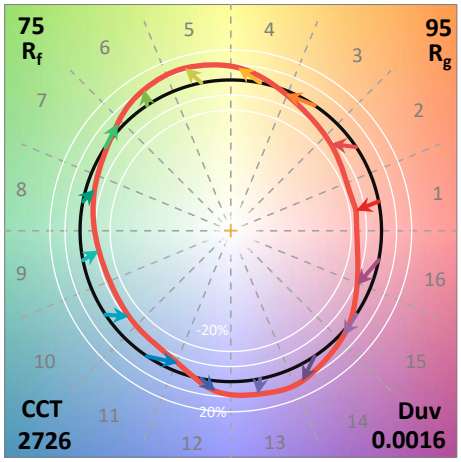
Spectral Power Distribution Comparison

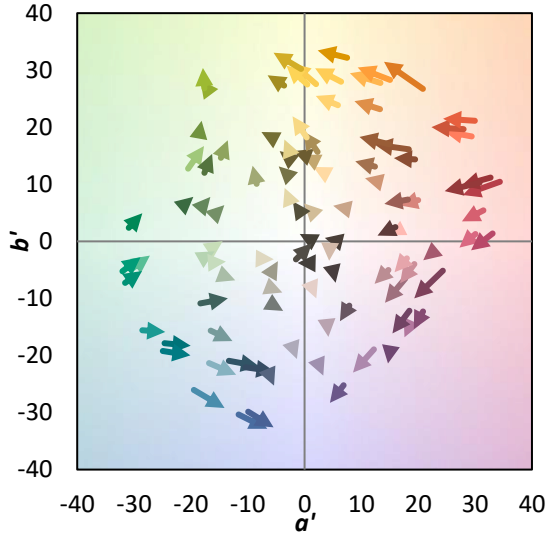


Color Vector Graphics







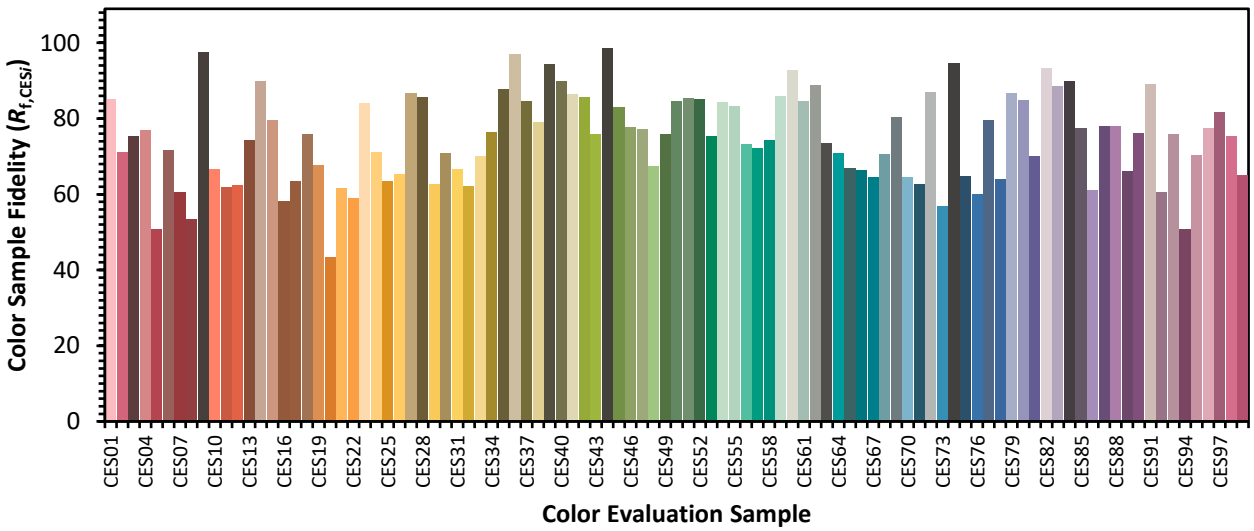


REPORT NUMBER: SP3-2602-694-2

TM-30-18

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

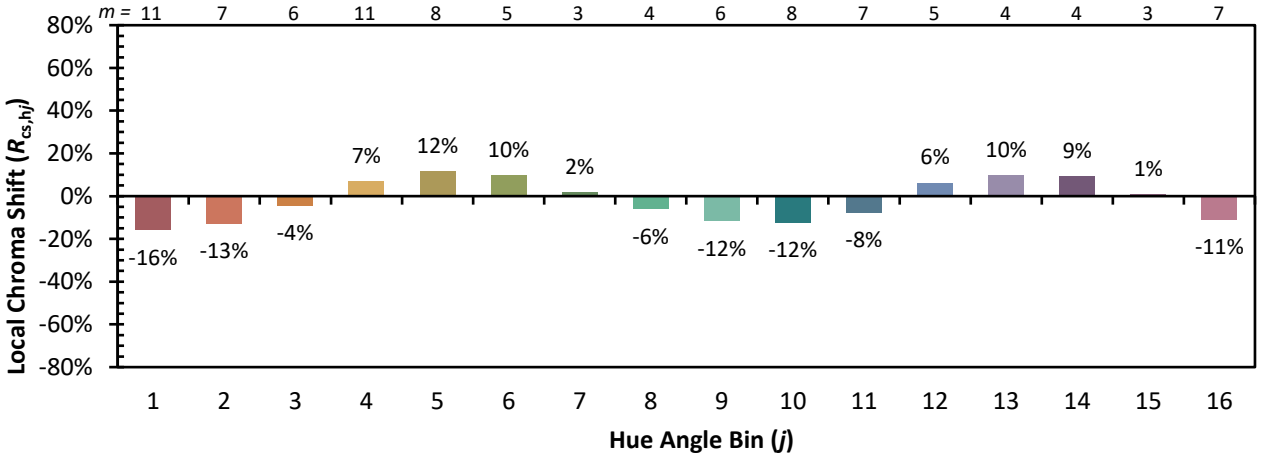
CES01 = 86	CES26 = 65	CES51 = 85	CES76 = 60
CES02 = 63	CES27 = 87	CES52 = 85	CES77 = 80
CES03 = 31	CES28 = 86	CES53 = 75	CES78 = 64
CES04 = 71	CES29 = 63	CES54 = 84	CES79 = 87
CES05 = 50	CES30 = 71	CES55 = 83	CES80 = 85
CES06 = 52	CES31 = 67	CES56 = 73	CES81 = 70
CES07 = 42	CES32 = 62	CES57 = 72	CES82 = 93
CES08 = 41	CES33 = 70	CES58 = 74	CES83 = 89
CES09 = 29	CES34 = 76	CES59 = 86	CES84 = 90
CES10 = 77	CES35 = 88	CES60 = 93	CES85 = 77
CES11 = 60	CES36 = 97	CES61 = 85	CES86 = 61
CES12 = 66	CES37 = 85	CES62 = 89	CES87 = 78
CES13 = 44	CES38 = 79	CES63 = 74	CES88 = 78
CES14 = 74	CES39 = 94	CES64 = 71	CES89 = 66
CES15 = 72	CES40 = 90	CES65 = 67	CES90 = 76
CES16 = 48	CES41 = 86	CES66 = 67	CES91 = 89
CES17 = 50	CES42 = 86	CES67 = 65	CES92 = 61
CES18 = 57	CES43 = 76	CES68 = 71	CES93 = 76
CES19 = 73	CES44 = 99	CES69 = 80	CES94 = 51
CES20 = 67	CES45 = 83	CES70 = 64	CES95 = 70
CES21 = 87	CES46 = 78	CES71 = 63	CES96 = 78
CES22 = 80	CES47 = 77	CES72 = 87	CES97 = 82
CES23 = 92	CES48 = 67	CES73 = 57	CES98 = 75
CES24 = 91	CES49 = 76	CES74 = 95	CES99 = 65
CES25 = 73	CES50 = 85	CES75 = 65	

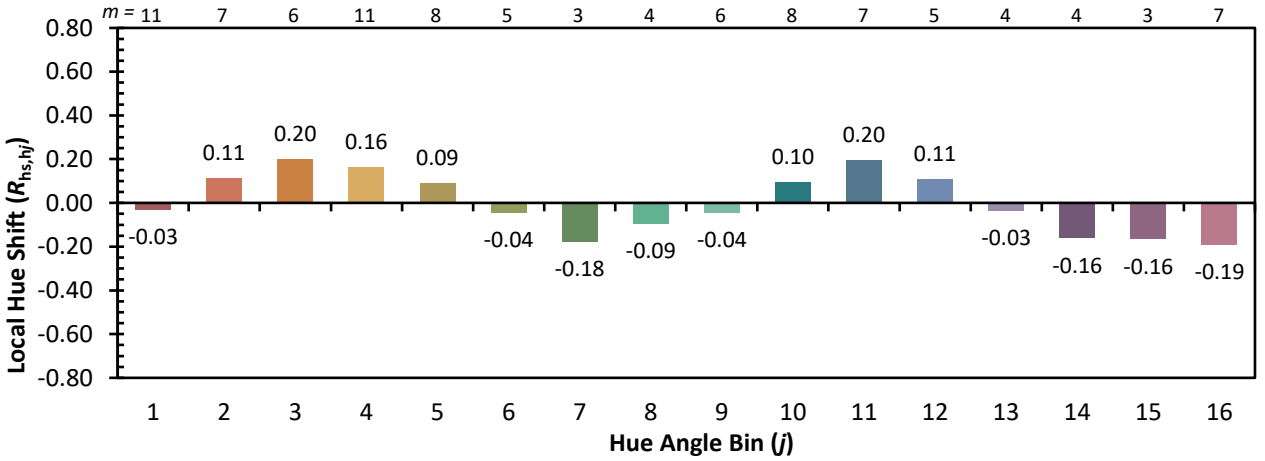


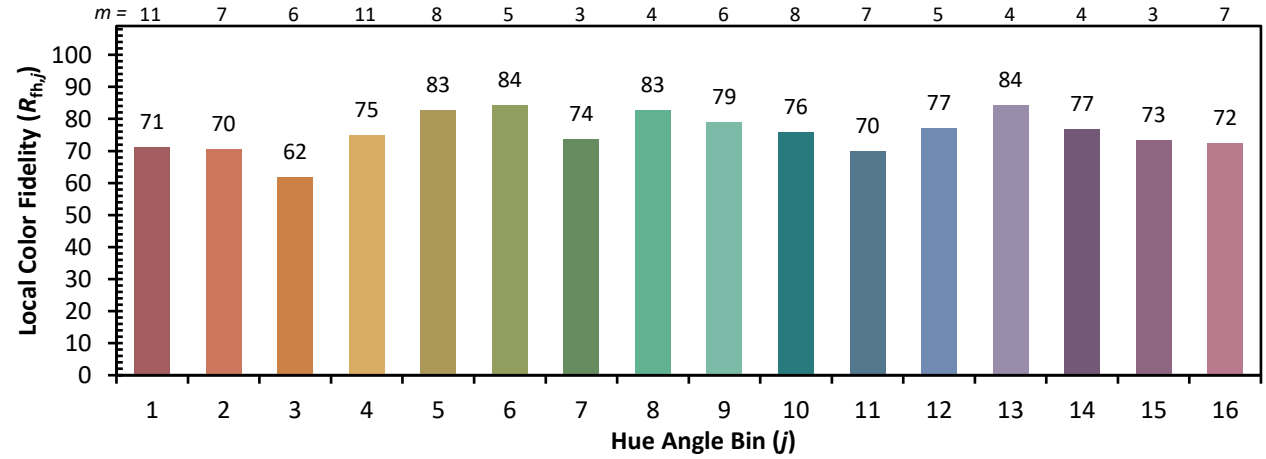
REPORT NUMBER: SP3-2602-694-2

TM-30-18

Color Rendition by Hue-Angle Bin



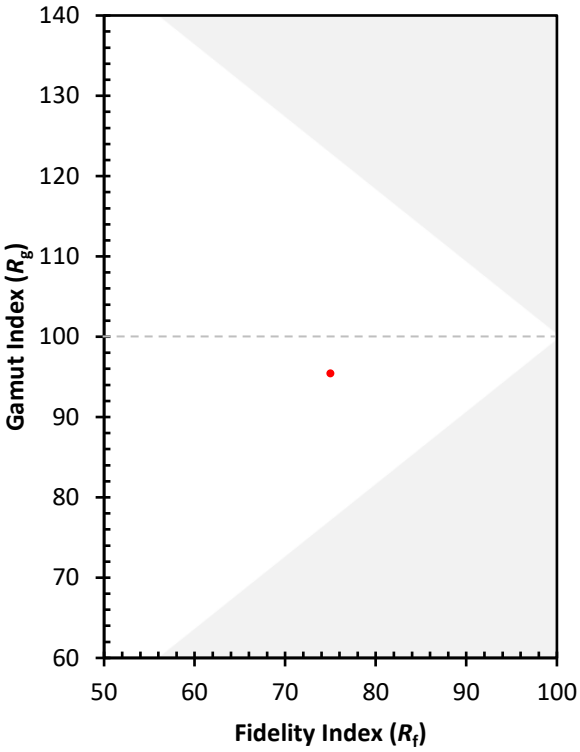


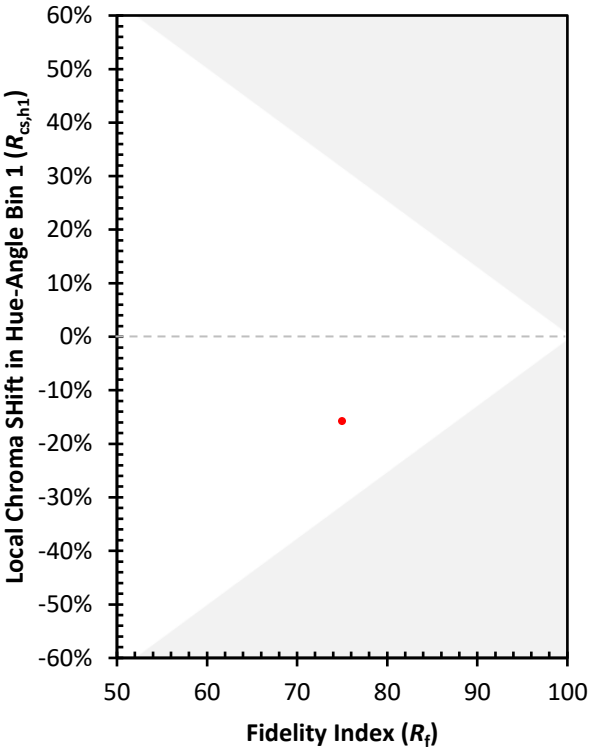


REPORT NUMBER: SP3-2602-694-2

TM-30-18

Measure Comparisons





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