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: McGRAW-EDISON

Report Number: P821375

Luminaire Tested: **TT-D3-750-24VDC-RW-HSS**

Issue Date: 12/2/2020

Report Generated By 670245763

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P821375
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-5)
Test Lab:	INNOVATION CENTER
Issue Date:	12/2/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D3-750-24VDC-RW-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	5000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4013.1 lumens
Efficiency:	N/A
Efficacy:	87.2 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U2 - G3

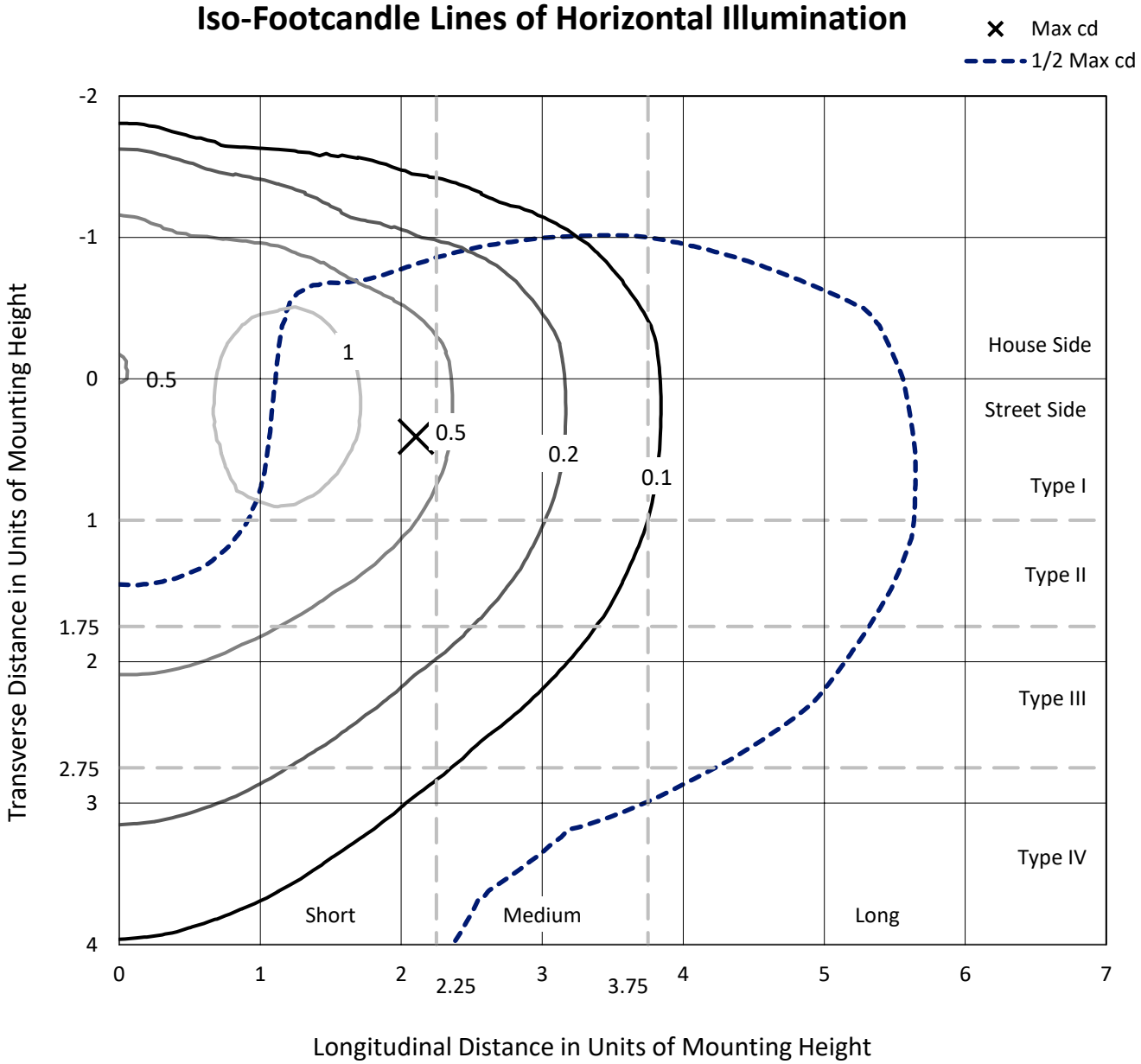
Input Watts (W):	46
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Iso-Footcandle Lines of Horizontal Illumination



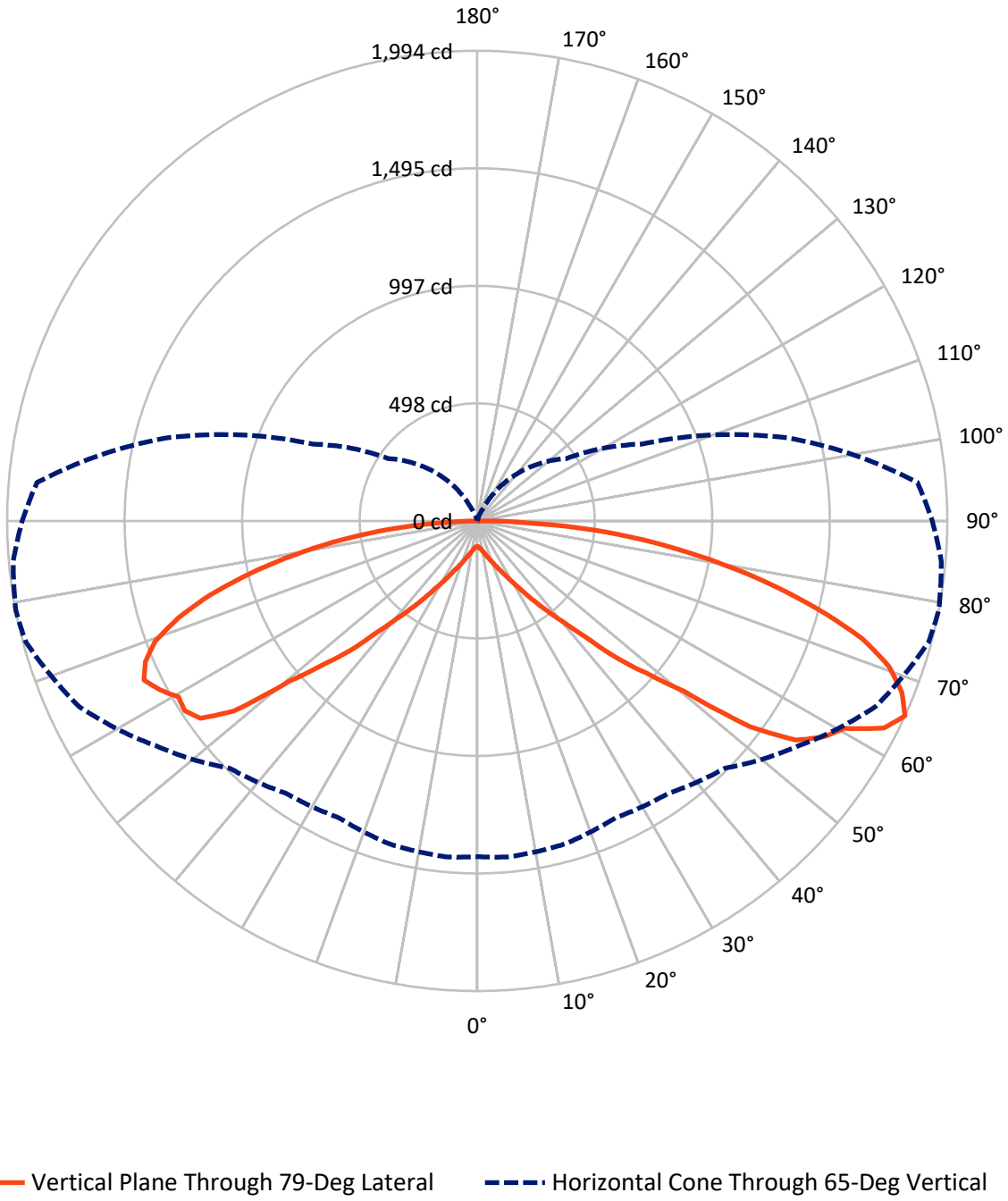
Based on 15 foot mounting height. Maximum calculated value = 1.4 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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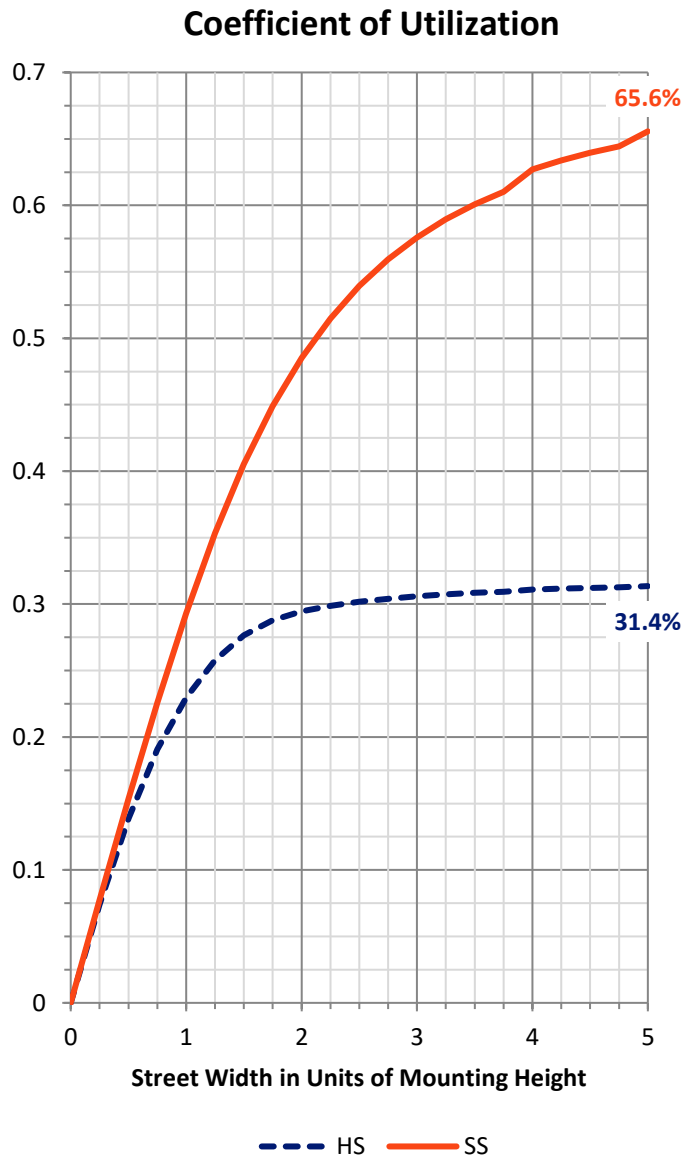
REPORT NUMBER: P821375
CATALOG NUMBER: TT-D3-750-24VDC-RW-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1267.3	1.6	1268.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	2726.5	17.7	2744.2
	% Fixture	67.9	0.4	68.4
Total	Lumens	3993.8	19.3	4013.1
	% Fixture	99.5	0.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.4	0.3
10°-20°	43.2	1.1
20°-30°	99.7	2.5
30°-40°	213.6	5.3
40°-50°	457.5	11.4
50°-60°	864.1	21.5
60°-70°	1073.9	26.8
70°-80°	919.3	22.9
80°-90°	311.0	7.7
90°-100°	13.4	0.3
100°-110°	3.9	0.1
110°-120°	0.8	0.0
120°-130°	0.5	0.0
130°-140°	0.3	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3993.8	99.5
0°-180°	4013.1	100.0



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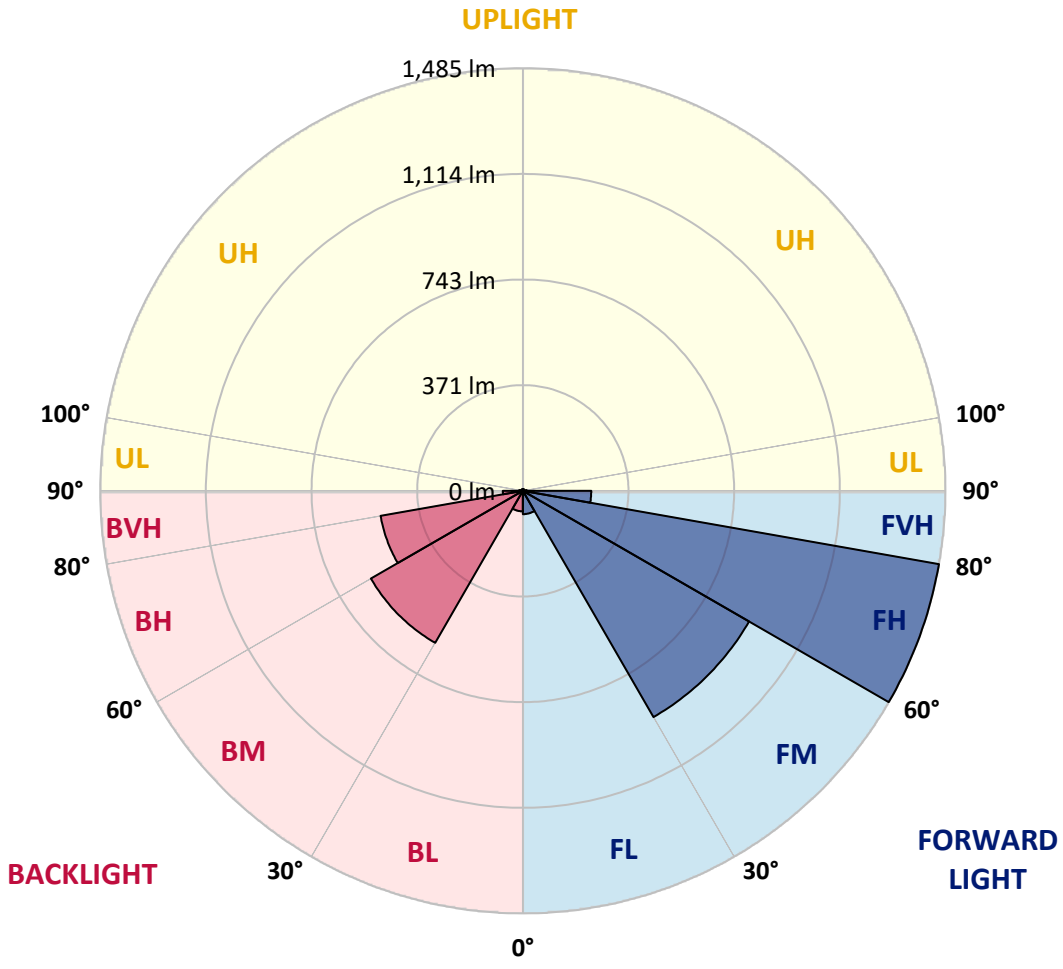
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	82.1	2.0			
FM	(30°-60°)	918.4	22.9			
FH	(60°-80°)	1485.5	37.0			G1/1800
FVH	(80°-90°)	240.6	6.0			G3/500
BL	(0°-30°)	72.3	1.8	B0/110		
BM	(30°-60°)	616.9	15.4	B1/1000		
BH	(60°-80°)	507.7	12.7	B2/1000		G2/1000
BVH	(80°-90°)	70.4	1.8			G1/100
UL	(90°-100°)	13.4	0.3		U2/50	
UH	(100°-180°)	5.9	0.1		U1/10	

BUG Rating: B2-U2-G3
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	*109.0*	109.0
2.5°	115.0	115.0	115.0	114.0	114.0	114.0	113.0	112.0	111.0	*111.0*	111.0
5°	121.0	121.0	121.0	121.0	120.0	119.0	118.0	117.0	116.0	*116.0*	115.0
7.5°	129.0	128.0	129.0	128.0	128.0	127.0	126.0	125.0	123.0	*123.0*	122.0
10°	137.0	137.0	137.0	137.0	137.0	136.0	135.0	134.0	133.0	*132.0*	131.0
12.5°	147.0	147.0	147.0	146.0	147.0	146.0	145.0	145.0	144.0	*142.0*	142.0
15°	157.0	157.0	157.0	157.0	158.0	158.0	158.0	157.0	157.0	*156.0*	155.0
17.5°	169.0	168.0	169.0	169.0	170.0	171.0	172.0	173.0	173.0	*172.0*	172.0
20°	182.0	181.0	182.0	182.0	184.0	186.0	189.0	191.0	192.0	*190.0*	190.0
22.5°	196.0	195.0	197.0	197.0	200.0	203.0	208.0	210.0	213.0	*212.0*	212.0
25°	213.0	212.0	213.0	214.0	218.0	223.0	229.0	234.0	237.0	*237.0*	238.0
27.5°	232.0	232.0	233.0	234.0	238.0	246.0	255.0	264.0	271.0	*270.0*	271.0
30°	258.0	258.0	260.0	261.0	266.0	275.0	287.0	299.0	309.0	*309.0*	311.0
32.5°	287.0	286.0	289.0	290.0	295.0	307.0	324.0	343.0	356.0	*356.0*	358.0
35°	322.0	321.0	324.0	324.0	330.0	347.0	369.0	395.0	417.0	*418.0*	421.0
37.5°	366.0	364.0	364.0	367.0	374.0	396.0	426.0	462.0	485.0	*487.0*	492.0
40°	418.0	417.0	419.0	418.0	427.0	454.0	492.0	534.0	561.0	*566.0*	572.0
42.5°	482.0	484.0	481.0	481.0	492.0	523.0	568.0	617.0	666.0	*672.0*	675.0
45°	560.0	564.0	560.0	559.0	569.0	605.0	667.0	753.0	810.0	*830.0*	836.0
47.5°	654.0	656.0	651.0	649.0	660.0	706.0	786.0	882.0	949.0	*964.0*	980.0
50°	759.0	756.0	752.0	749.0	770.0	827.0	920.0	1019.0	1134.0	*1136.0*	1142.0
52.5°	867.0	858.0	859.0	858.0	887.0	949.0	1073.0	1241.0	1416.0	*1451.9*	1455.9
55°	975.0	964.0	963.0	973.0	1014.0	1103.0	1259.0	1476.9	1618.9	*1640.9*	1637.9
57.5°	1083.0	1078.0	1076.0	1085.0	1145.0	1251.0	1427.0	1610.9	1731.9	*1729.9*	1708.9
60°	1195.0	1199.0	1192.0	1209.0	1271.0	1377.0	1504.9	1683.9	1795.9	*1786.9*	1765.9
62.5°	1310.0	1320.0	1313.0	1315.0	1355.0	1432.9	1558.9	1766.9	1921.9	*1934.9*	1910.9
65°	*1424.0*	*1431.0*	*1420.0*	*1389.0*	*1411.0*	*1483.9*	*1663.9*	*1863.9*	*1981.9*	*1993.9*	*1975.9*
67.5°	1519.9	1526.9	1488.9	1439.9	1442.9	1495.9	1653.9	1844.9	1949.9	*1941.9*	1912.9
70°	1601.9	1588.9	1526.9	1442.9	1408.0	1432.9	1581.9	1750.9	1857.9	*1853.9*	1819.9
72.5°	1628.9	1611.9	1506.9	1377.0	1308.0	1317.0	1461.9	1612.9	1699.9	*1706.9*	1665.9
75°	1585.9	1556.9	1413.0	1250.0	1161.0	1167.0	1291.0	1430.0	1499.9	*1491.9*	1459.9
77.5°	1431.0	1402.0	1246.0	1072.0	985.0	994.0	1092.0	1201.0	1259.0	*1256.0*	1234.0
80°	1188.0	1162.0	1025.0	863.0	784.0	789.0	864.0	950.0	995.0	*1005.0*	993.0
82.5°	878.0	860.0	763.0	632.0	568.0	567.0	624.0	690.0	734.0	*755.0*	747.0
85°	543.0	534.0	480.0	395.0	350.0	349.0	383.0	432.0	472.0	*500.0*	482.0
87.5°	216.0	213.0	197.0	159.0	139.0	132.0	124.0	155.0	158.0	*187.0*	186.0
90°	53.0	52.0	51.0	48.0	43.0	37.0	30.0	22.0	14.0	*11.0*	6.0
92.5°	47.0	47.0	46.0	43.0	39.0	33.0	27.0	20.0	13.0	*10.0*	5.0
95°	38.0	38.0	37.0	35.0	31.0	27.0	21.0	16.0	10.0	*8.0*	4.0
97.5°	29.0	28.0	28.0	26.0	24.0	20.0	16.0	12.0	8.0	*6.0*	3.0
100°	21.0	21.0	20.0	19.0	17.0	15.0	12.0	9.0	5.0	*4.0*	2.0
102.5°	15.0	14.0	14.0	14.0	12.0	10.0	8.0	6.0	4.0	*3.0*	1.0
105°	10.0	9.0	9.0	9.0	8.0	7.0	5.0	4.0	2.0	*2.0*	1.0
107.5°	6.0	6.0	6.0	6.0	5.0	4.0	3.0	2.0	1.0	*1.0*	1.0
110°	3.0	3.0	3.0	4.0	3.0	3.0	2.0	1.0	1.0	*1.0*	1.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
112.5°	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	*1.0*	1.0
115°	1.0	1.0	1.0	2.0	2.0	1.0	1.0	0.0	0.0	*1.0*	1.0
117.5°	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
120°	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
122.5°	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
125°	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
127.5°	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
130°	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
132.5°	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	*0.0*	1.0
135°	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	*0.0*	0.0
137.5°	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	*0.0*	0.0
140°	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	*0.0*	0.0
142.5°	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	*0.0*	0.0
145°	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	*0.0*	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	*0.0*	0.0
150°	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	*0.0*	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
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	1.0	0.0	0.0	0.0	0.0	*0.0*	0.0
160°	0.0	0.0	0.0	0.0	1.0	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	1.0	0.0	1.0	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0
2.5°	110.0	110.0	110.0	109.0	109.0	109.0	108.0	108.0	107.0	107.0	107.0
5°	114.0	114.0	113.0	113.0	112.0	111.0	111.0	110.0	110.0	109.0	109.0
7.5°	121.0	121.0	120.0	119.0	117.0	116.0	115.0	114.0	114.0	113.0	113.0
10°	130.0	130.0	128.0	126.0	124.0	122.0	121.0	119.0	118.0	118.0	118.0
12.5°	141.0	140.0	138.0	135.0	133.0	130.0	128.0	126.0	124.0	124.0	124.0
15°	154.0	154.0	150.0	147.0	143.0	139.0	136.0	133.0	131.0	130.0	130.0
17.5°	170.0	170.0	165.0	160.0	155.0	150.0	146.0	142.0	140.0	139.0	139.0
20°	188.0	188.0	183.0	177.0	170.0	163.0	157.0	152.0	149.0	148.0	148.0
22.5°	210.0	210.0	203.0	195.0	186.0	176.0	168.0	162.0	159.0	157.0	157.0
25°	235.0	233.0	226.0	216.0	203.0	191.0	180.0	174.0	170.0	167.0	168.0
27.5°	269.0	266.0	257.0	240.0	224.0	208.0	195.0	187.0	182.0	180.0	181.0
30°	308.0	305.0	292.0	273.0	249.0	228.0	212.0	203.0	198.0	195.0	196.0
32.5°	355.0	351.0	335.0	309.0	281.0	251.0	231.0	220.0	215.0	212.0	211.0
35°	417.0	412.0	392.0	356.0	317.0	281.0	253.0	239.0	234.0	231.0	232.0
37.5°	487.0	480.0	453.0	409.0	360.0	314.0	282.0	264.0	258.0	253.0	253.0
40°	567.0	559.0	524.0	466.0	407.0	350.0	309.0	289.0	282.0	282.0	282.0
42.5°	667.0	659.0	619.0	534.0	456.0	389.0	340.0	317.0	310.0	312.0	312.0
45°	822.0	811.0	747.0	635.0	520.0	429.0	372.0	346.0	341.0	346.0	346.0
47.5°	964.0	950.0	856.0	729.0	583.0	469.0	404.0	374.0	372.0	383.0	383.0
50°	1123.0	1105.0	1006.0	805.0	634.0	513.0	433.0	397.0	398.0	414.0	419.0
52.5°	1431.0	1412.0	1241.0	943.0	689.0	529.0	445.0	402.0	402.0	420.0	427.0
55°	1613.9	1574.9	1352.0	1033.0	712.0	548.0	440.0	382.0	380.0	400.0	406.0
57.5°	1673.9	1633.9	1375.0	1007.0	697.0	524.0	411.0	328.0	324.0	350.0	348.0
60°	1722.9	1669.9	1338.0	920.0	612.0	473.0	355.0	244.0	227.0	250.0	249.0
62.5°	1860.9	1803.9	1340.0	818.0	512.0	395.0	267.0	137.0	102.0	120.0	112.0
65°	*1929.9*	*1873.9*	*1361.0*	*770.0*	*461.0*	*327.0*	*191.0*	*56.0*	*4.0*	*4.0*	*2.0*
67.5°	1870.9	1820.9	1334.0	758.0	454.0	325.0	194.0	55.0	0.0	0.0	0.0
70°	1784.9	1736.9	1272.0	716.0	431.0	313.0	190.0	55.0	0.0	0.0	0.0
72.5°	1633.9	1584.9	1165.0	656.0	396.0	287.0	176.0	52.0	0.0	0.0	0.0
75°	1434.9	1398.0	1029.0	578.0	349.0	253.0	156.0	46.0	0.0	0.0	0.0
77.5°	1215.0	1171.0	863.0	481.0	292.0	210.0	132.0	38.0	0.0	0.0	0.0
80°	975.0	943.0	680.0	377.0	226.0	164.0	103.0	29.0	0.0	0.0	0.0
82.5°	725.0	698.0	503.0	270.0	161.0	114.0	71.0	19.0	0.0	0.0	0.0
85°	476.0	469.0	323.0	164.0	96.0	63.0	38.0	9.0	0.0	0.0	0.0
87.5°	172.0	178.0	118.0	47.0	26.0	11.0	5.0	1.0	0.0	0.0	0.0
90°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
105°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
110°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P821375
CATALOG NUMBER: TT-D3-750-24VDC-RW-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
115°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
120°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
125°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
130°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
135°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	1.0	1.0	1.0	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

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: SP1-2407-176-6

Test Date: 09/26/2024

Luminaire Tested: MEM2-HTN-VA-30-750-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-750-U-WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

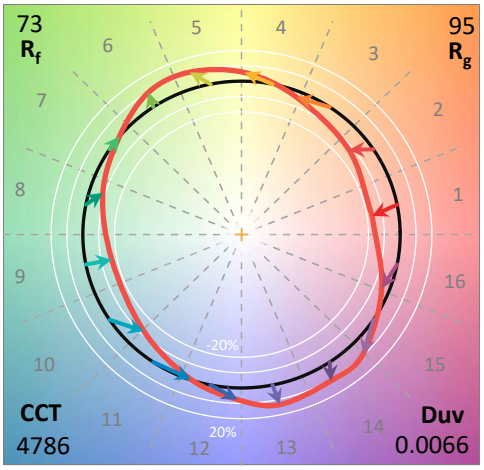
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-6
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	09/27/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**MEM2-HTN-VA-30-750-U-WQ**
Description:	EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K):	4786
CIE u':	0.2093
CIE v':	0.4953
Duv:	0.0066
CIE x:	0.3533
CIE y:	0.3716
CIE z:	0.2751
Peak Wavelength (nm):	449
Dominant Wavelength (nm):	570
Purity:	17.53512
Rf:	73
Rg:	94.6

CRI (Ra):	70.9				
R1:	67.8	R9:	-29.8		
R2:	75.1	R10:	40.9		
R3:	80.6	R11:	67.4		
R4:	71.6	R12:	35.3		
R5:	67.8	R13:	68.5		
R6:	65.4	R14:	89.0		
R7:	82.0	R15:	60.9		
R8:	57.0				



Test Conditions

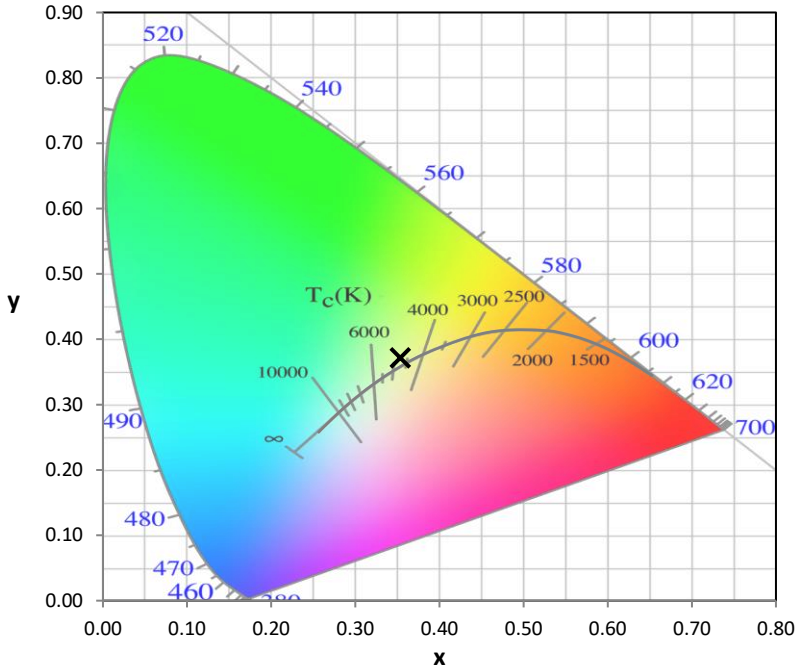
Stabilization Time:	45M
Operation Time:	1H 45M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-6

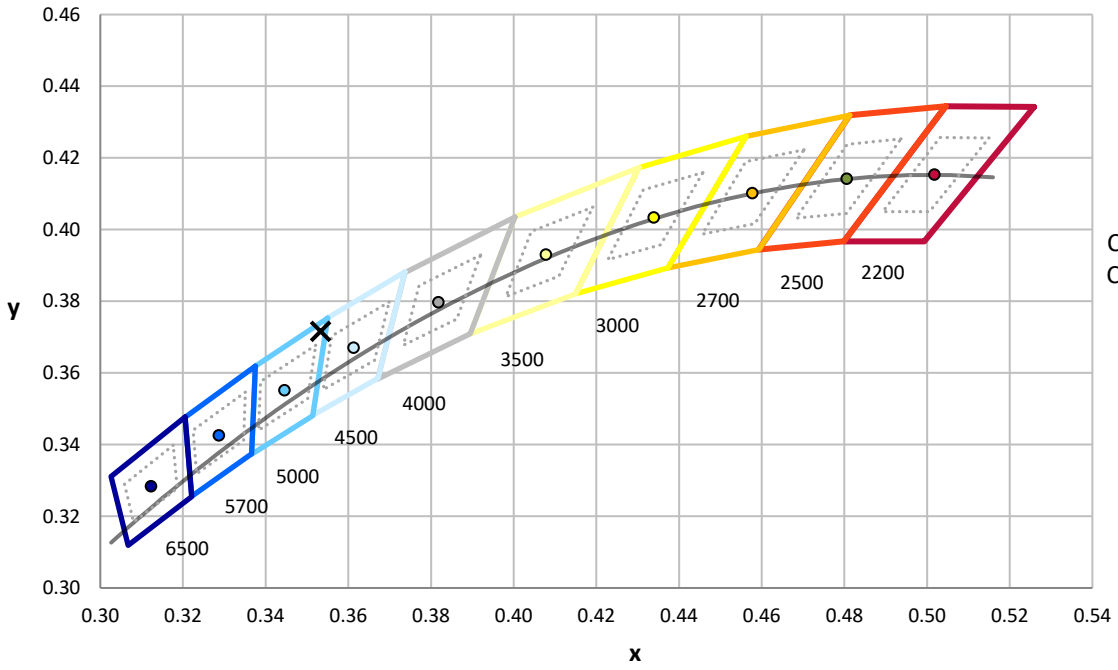
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2407-176-6

CIE 1931 Chromaticity Diagram



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

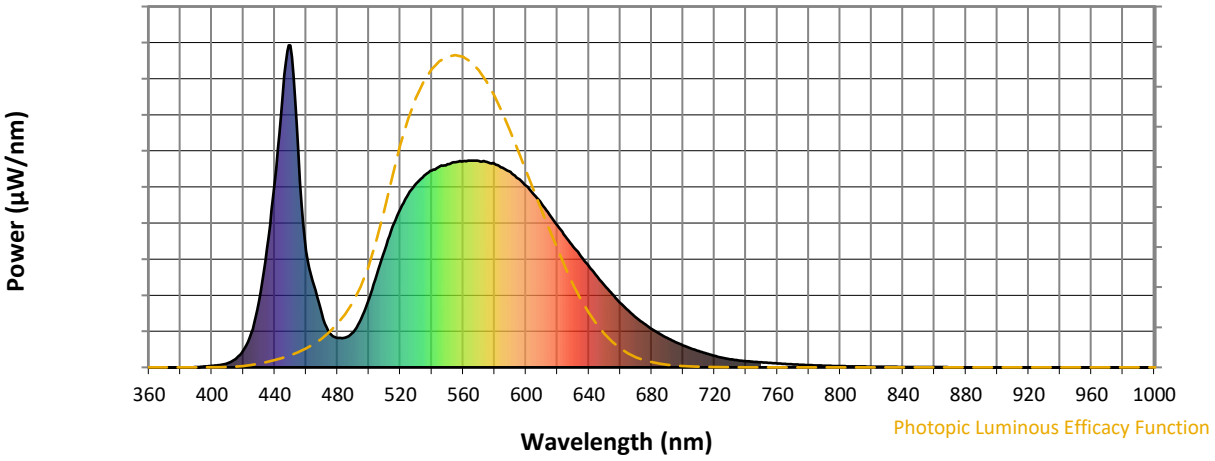


CCT = 4786K
CIE x = 0.3533
CIE y = 0.3716
Duv = 0.0066

Point lies inside the ANSI 5000K 7-step quadrangle

REPORT NUMBER: SP1-2407-176-6

Photopic Flux vs. Wavelength

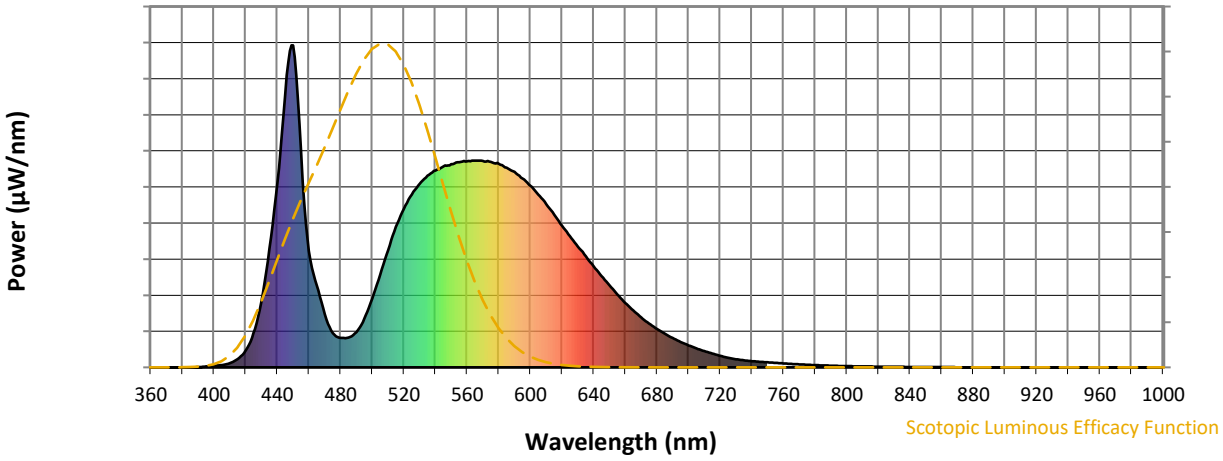


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	110	NR	620	440	NR	750	16	NR	880	0	NR
365	0	NR	495	150	NR	625	407	NR	755	14	NR	885	0	NR
370	0	NR	500	213	NR	630	375	NR	760	12	NR	890	0	NR
375	0	NR	505	288	NR	635	345	NR	765	11	NR	895	0	NR
380	0	NR	510	364	NR	640	314	NR	770	9	NR	900	0	NR
385	0	NR	515	436	NR	645	283	NR	775	8	NR	905	0	NR
390	1	NR	520	492	NR	650	254	NR	780	7	NR	910	0	NR
395	3	NR	525	537	NR	655	227	NR	785	6	NR	915	0	NR
400	5	NR	530	570	NR	660	200	NR	790	5	NR	920	0	NR
405	7	NR	535	595	NR	665	177	NR	795	4	NR	925	0	NR
410	13	NR	540	611	NR	670	155	NR	800	4	NR	930	0	NR
415	25	NR	545	624	NR	675	136	NR	805	3	NR	935	0	NR
420	52	NR	550	631	NR	680	119	NR	810	3	NR	940	0	NR
425	106	NR	555	637	NR	685	104	NR	815	3	NR	945	0	NR
430	204	NR	560	640	NR	690	91	NR	820	2	NR	950	0	NR
435	369	NR	565	642	NR	695	79	NR	825	2	NR	955	0	NR
440	573	NR	570	641	NR	700	68	NR	830	2	NR	960	0	NR
445	844	NR	575	638	NR	705	59	NR	835	2	NR	965	0	NR
450	999	NR	580	632	NR	710	50	NR	840	1	NR	970	0	NR
455	668	NR	585	620	NR	715	43	NR	845	1	NR	975	0	NR
460	361	NR	590	607	NR	720	36	NR	850	1	NR	980	0	NR
465	255	NR	595	586	NR	725	30	NR	855	1	NR	985	0	NR
470	165	NR	600	564	NR	730	25	NR	860	1	NR	990	0	NR
475	106	NR	605	537	NR	735	22	NR	865	1	NR	995	0	NR
480	91	NR	610	507	NR	740	19	NR	870	0	NR	1000	0	NR
485	93	NR	615	474	NR	745	17	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-6

Scotopic Flux vs. Wavelength

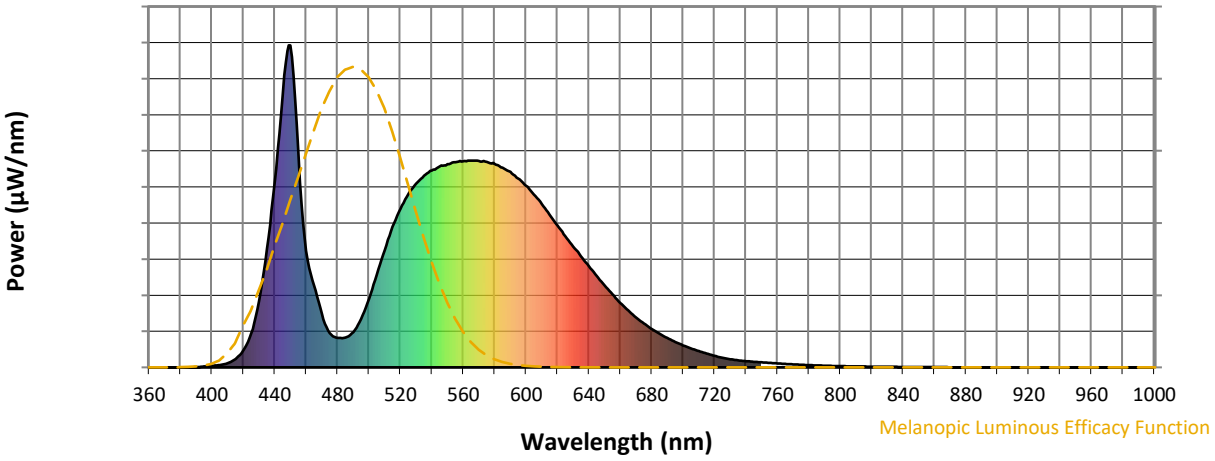


Scotopic Lumens: NR **S/P: 1.69**

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	110	NR	620	440	NR	750	16	NR	880	0	NR
365	0	NR	495	150	NR	625	407	NR	755	14	NR	885	0	NR
370	0	NR	500	213	NR	630	375	NR	760	12	NR	890	0	NR
375	0	NR	505	288	NR	635	345	NR	765	11	NR	895	0	NR
380	0	NR	510	364	NR	640	314	NR	770	9	NR	900	0	NR
385	0	NR	515	436	NR	645	283	NR	775	8	NR	905	0	NR
390	1	NR	520	492	NR	650	254	NR	780	7	NR	910	0	NR
395	3	NR	525	537	NR	655	227	NR	785	6	NR	915	0	NR
400	5	NR	530	570	NR	660	200	NR	790	5	NR	920	0	NR
405	7	NR	535	595	NR	665	177	NR	795	4	NR	925	0	NR
410	13	NR	540	611	NR	670	155	NR	800	4	NR	930	0	NR
415	25	NR	545	624	NR	675	136	NR	805	3	NR	935	0	NR
420	52	NR	550	631	NR	680	119	NR	810	3	NR	940	0	NR
425	106	NR	555	637	NR	685	104	NR	815	3	NR	945	0	NR
430	204	NR	560	640	NR	690	91	NR	820	2	NR	950	0	NR
435	369	NR	565	642	NR	695	79	NR	825	2	NR	955	0	NR
440	573	NR	570	641	NR	700	68	NR	830	2	NR	960	0	NR
445	844	NR	575	638	NR	705	59	NR	835	2	NR	965	0	NR
450	999	NR	580	632	NR	710	50	NR	840	1	NR	970	0	NR
455	668	NR	585	620	NR	715	43	NR	845	1	NR	975	0	NR
460	361	NR	590	607	NR	720	36	NR	850	1	NR	980	0	NR
465	255	NR	595	586	NR	725	30	NR	855	1	NR	985	0	NR
470	165	NR	600	564	NR	730	25	NR	860	1	NR	990	0	NR
475	106	NR	605	537	NR	735	22	NR	865	1	NR	995	0	NR
480	91	NR	610	507	NR	740	19	NR	870	0	NR	1000	0	NR
485	93	NR	615	474	NR	745	17	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-6

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.36**

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	110	NR	620	440	NR	750	16	NR	880	0	NR
365	0	NR	495	150	NR	625	407	NR	755	14	NR	885	0	NR
370	0	NR	500	213	NR	630	375	NR	760	12	NR	890	0	NR
375	0	NR	505	288	NR	635	345	NR	765	11	NR	895	0	NR
380	0	NR	510	364	NR	640	314	NR	770	9	NR	900	0	NR
385	0	NR	515	436	NR	645	283	NR	775	8	NR	905	0	NR
390	1	NR	520	492	NR	650	254	NR	780	7	NR	910	0	NR
395	3	NR	525	537	NR	655	227	NR	785	6	NR	915	0	NR
400	5	NR	530	570	NR	660	200	NR	790	5	NR	920	0	NR
405	7	NR	535	595	NR	665	177	NR	795	4	NR	925	0	NR
410	13	NR	540	611	NR	670	155	NR	800	4	NR	930	0	NR
415	25	NR	545	624	NR	675	136	NR	805	3	NR	935	0	NR
420	52	NR	550	631	NR	680	119	NR	810	3	NR	940	0	NR
425	106	NR	555	637	NR	685	104	NR	815	3	NR	945	0	NR
430	204	NR	560	640	NR	690	91	NR	820	2	NR	950	0	NR
435	369	NR	565	642	NR	695	79	NR	825	2	NR	955	0	NR
440	573	NR	570	641	NR	700	68	NR	830	2	NR	960	0	NR
445	844	NR	575	638	NR	705	59	NR	835	2	NR	965	0	NR
450	999	NR	580	632	NR	710	50	NR	840	1	NR	970	0	NR
455	668	NR	585	620	NR	715	43	NR	845	1	NR	975	0	NR
460	361	NR	590	607	NR	720	36	NR	850	1	NR	980	0	NR
465	255	NR	595	586	NR	725	30	NR	855	1	NR	985	0	NR
470	165	NR	600	564	NR	730	25	NR	860	1	NR	990	0	NR
475	106	NR	605	537	NR	735	22	NR	865	1	NR	995	0	NR
480	91	NR	610	507	NR	740	19	NR	870	0	NR	1000	0	NR
485	93	NR	615	474	NR	745	17	NR	875	0	NR			

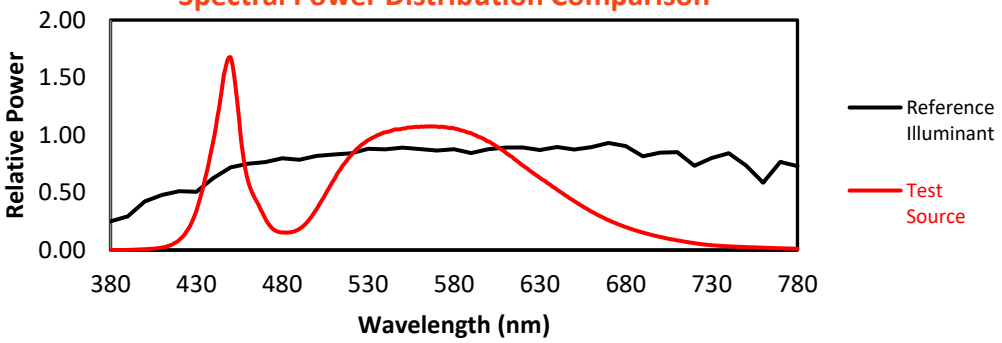
REPORT NUMBER: SP1-2407-176-6

TM-30-18

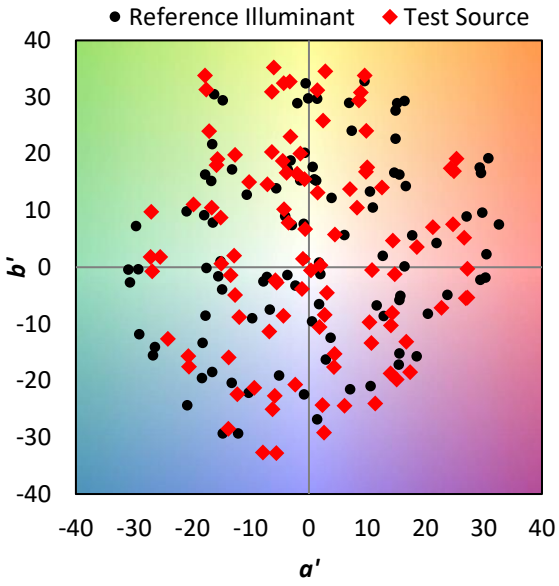
Summary

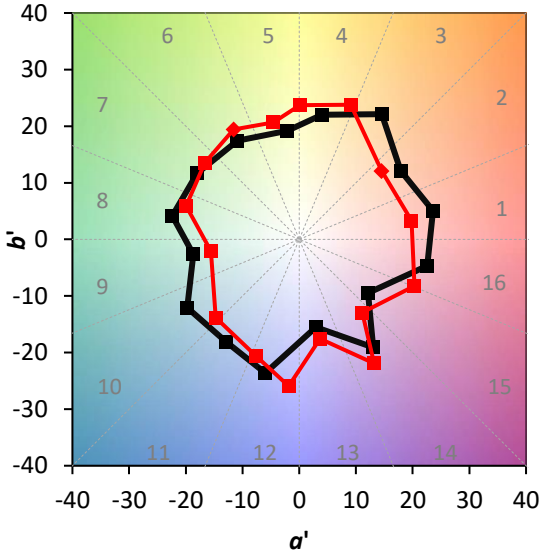
R_f = 73
R_g = 94.6
CIE R_a = 70.9
R_9 = -29.8

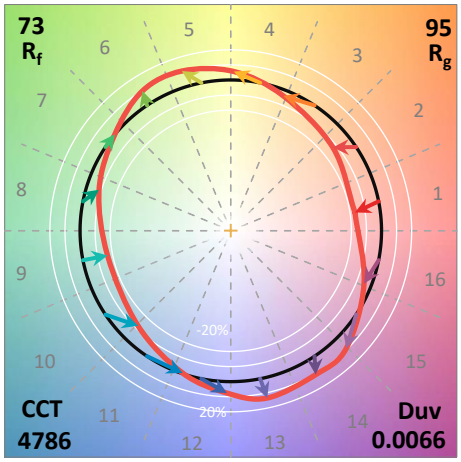
Spectral Power Distribution Comparison

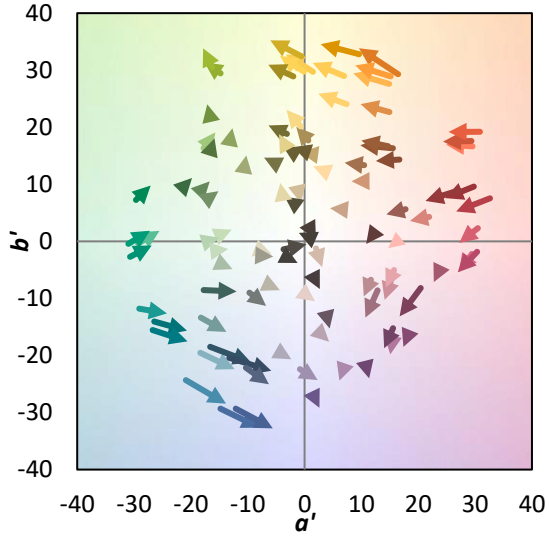


Color Vector Graphics







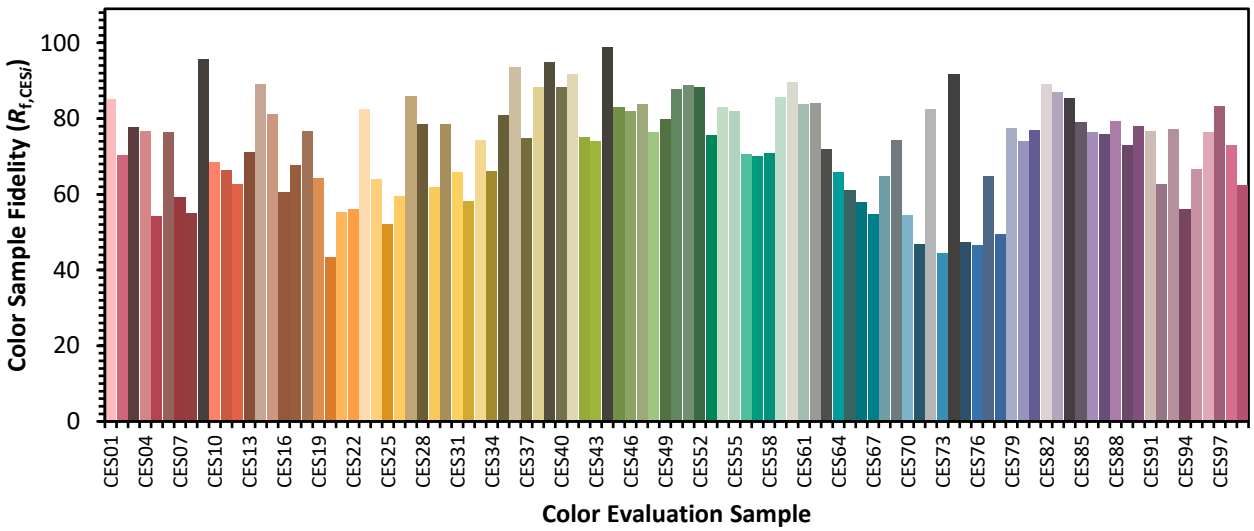


REPORT NUMBER: SP1-2407-176-6

TM-30-18

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

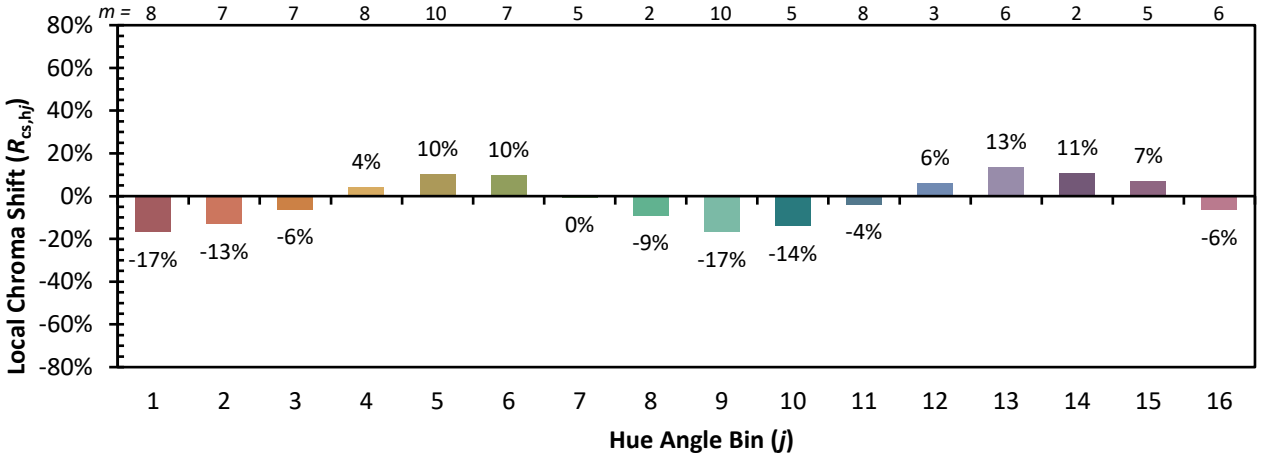
CES01 = 85	CES26 = 60	CES51 = 89	CES76 = 46
CES02 = 59	CES27 = 86	CES52 = 88	CES77 = 65
CES03 = 30	CES28 = 78	CES53 = 76	CES78 = 49
CES04 = 69	CES29 = 62	CES54 = 83	CES79 = 78
CES05 = 46	CES30 = 79	CES55 = 82	CES80 = 74
CES06 = 50	CES31 = 66	CES56 = 71	CES81 = 77
CES07 = 39	CES32 = 58	CES57 = 70	CES82 = 89
CES08 = 38	CES33 = 74	CES58 = 71	CES83 = 87
CES09 = 29	CES34 = 66	CES59 = 86	CES84 = 86
CES10 = 72	CES35 = 81	CES60 = 90	CES85 = 79
CES11 = 56	CES36 = 94	CES61 = 84	CES86 = 76
CES12 = 61	CES37 = 75	CES62 = 84	CES87 = 76
CES13 = 41	CES38 = 88	CES63 = 72	CES88 = 79
CES14 = 74	CES39 = 95	CES64 = 66	CES89 = 73
CES15 = 70	CES40 = 88	CES65 = 61	CES90 = 78
CES16 = 46	CES41 = 92	CES66 = 58	CES91 = 77
CES17 = 49	CES42 = 75	CES67 = 55	CES92 = 63
CES18 = 55	CES43 = 74	CES68 = 65	CES93 = 77
CES19 = 71	CES44 = 99	CES69 = 74	CES94 = 56
CES20 = 64	CES45 = 83	CES70 = 55	CES95 = 67
CES21 = 85	CES46 = 82	CES71 = 47	CES96 = 76
CES22 = 77	CES47 = 84	CES72 = 82	CES97 = 83
CES23 = 91	CES48 = 76	CES73 = 44	CES98 = 73
CES24 = 90	CES49 = 80	CES74 = 92	CES99 = 62
CES25 = 71	CES50 = 88	CES75 = 47	

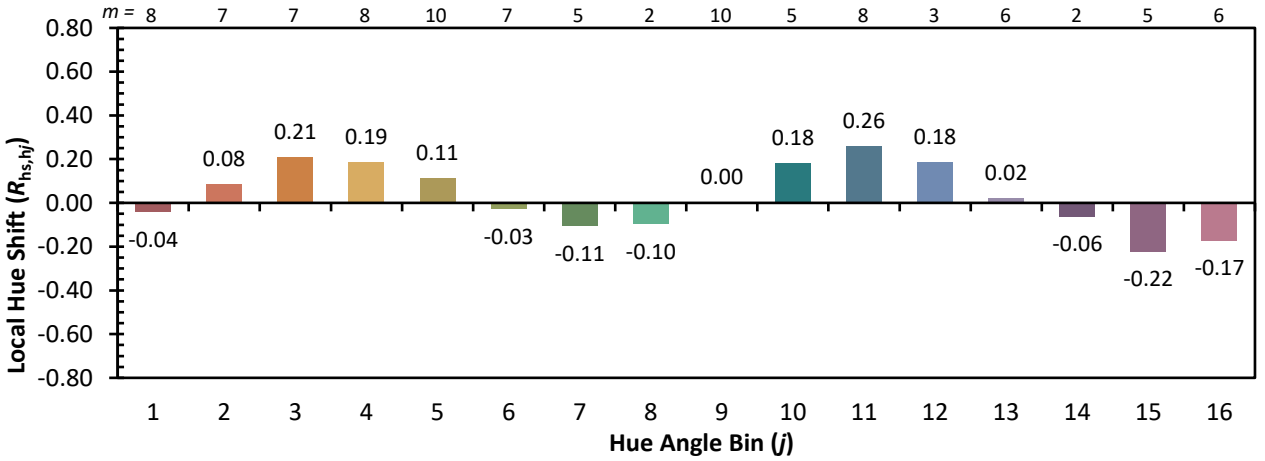


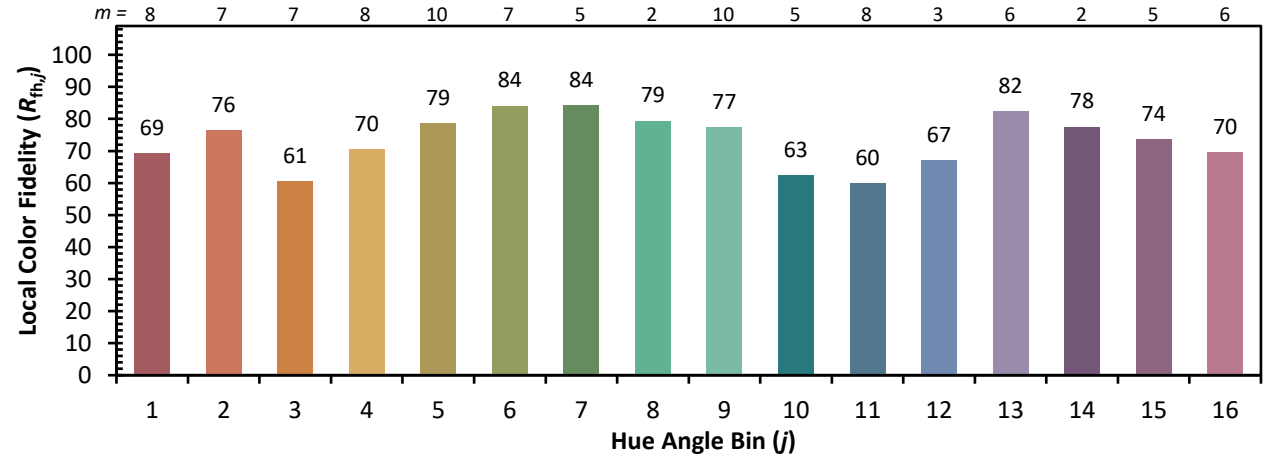
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Color Rendition by Hue-Angle Bin



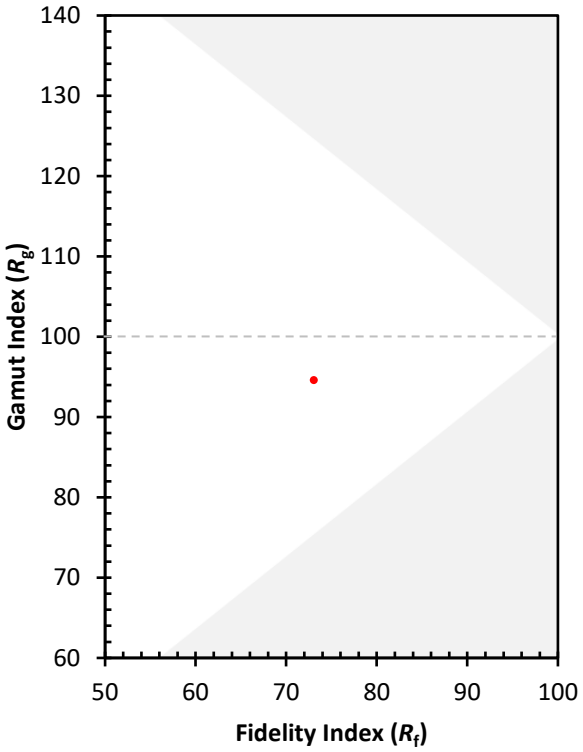


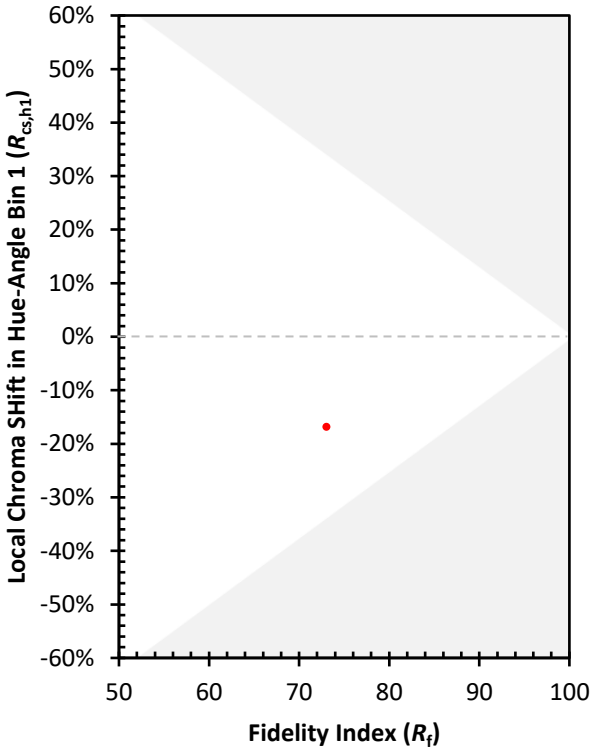


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Measure Comparisons





(END OF REPORT)