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: P821541

Luminaire Tested: **TT-D2-740-12VDC-WQ-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:	P821541
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-2)
Test Lab:	INNOVATION CENTER
Issue Date:	12/2/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D2-740-12VDC-WQ-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	4000K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4246.9 lumens
Efficiency:	N/A
Efficacy:	111.8 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U2 - G2

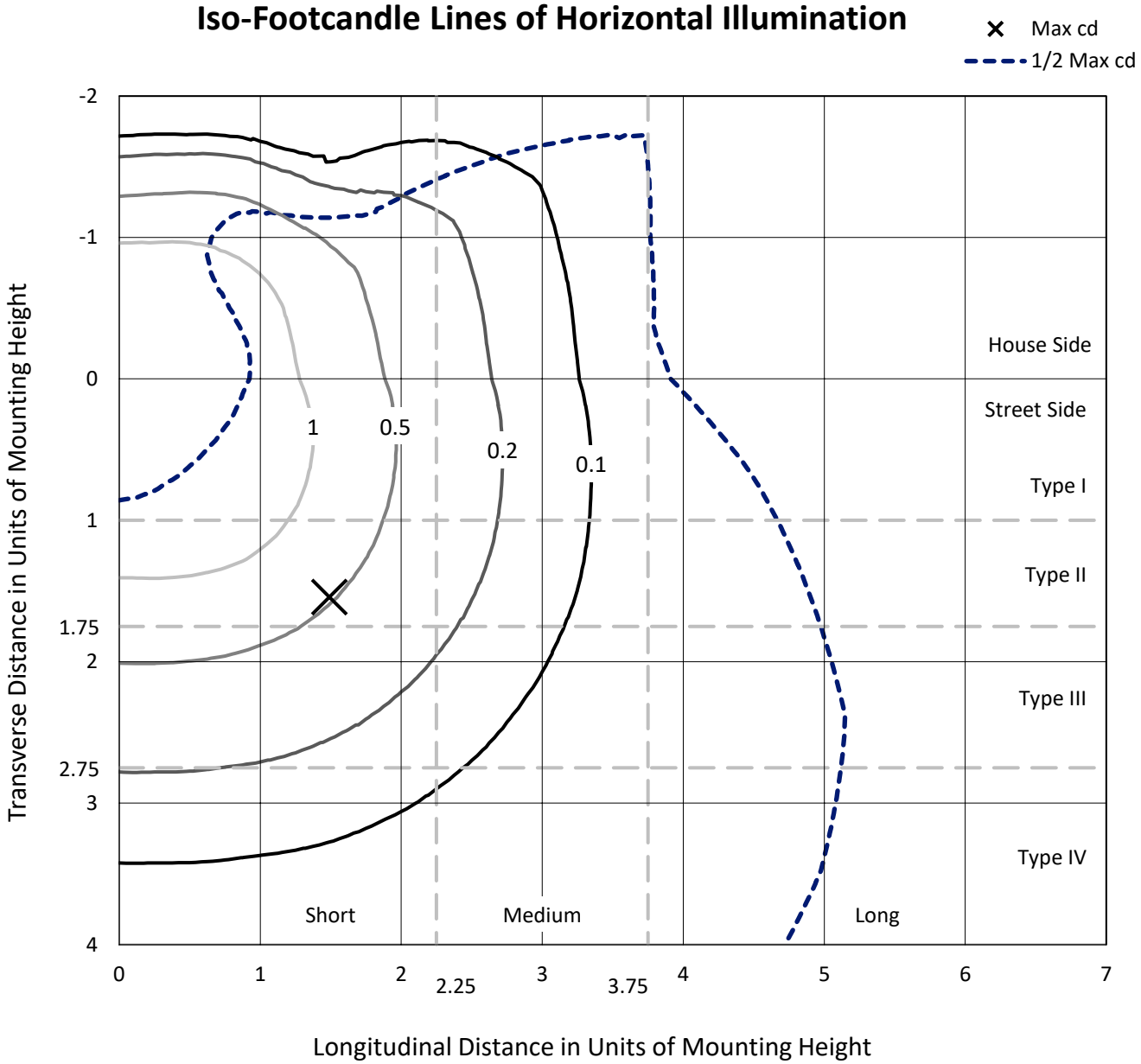
Input Watts (W):	38
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Iso-Footcandle Lines of Horizontal Illumination



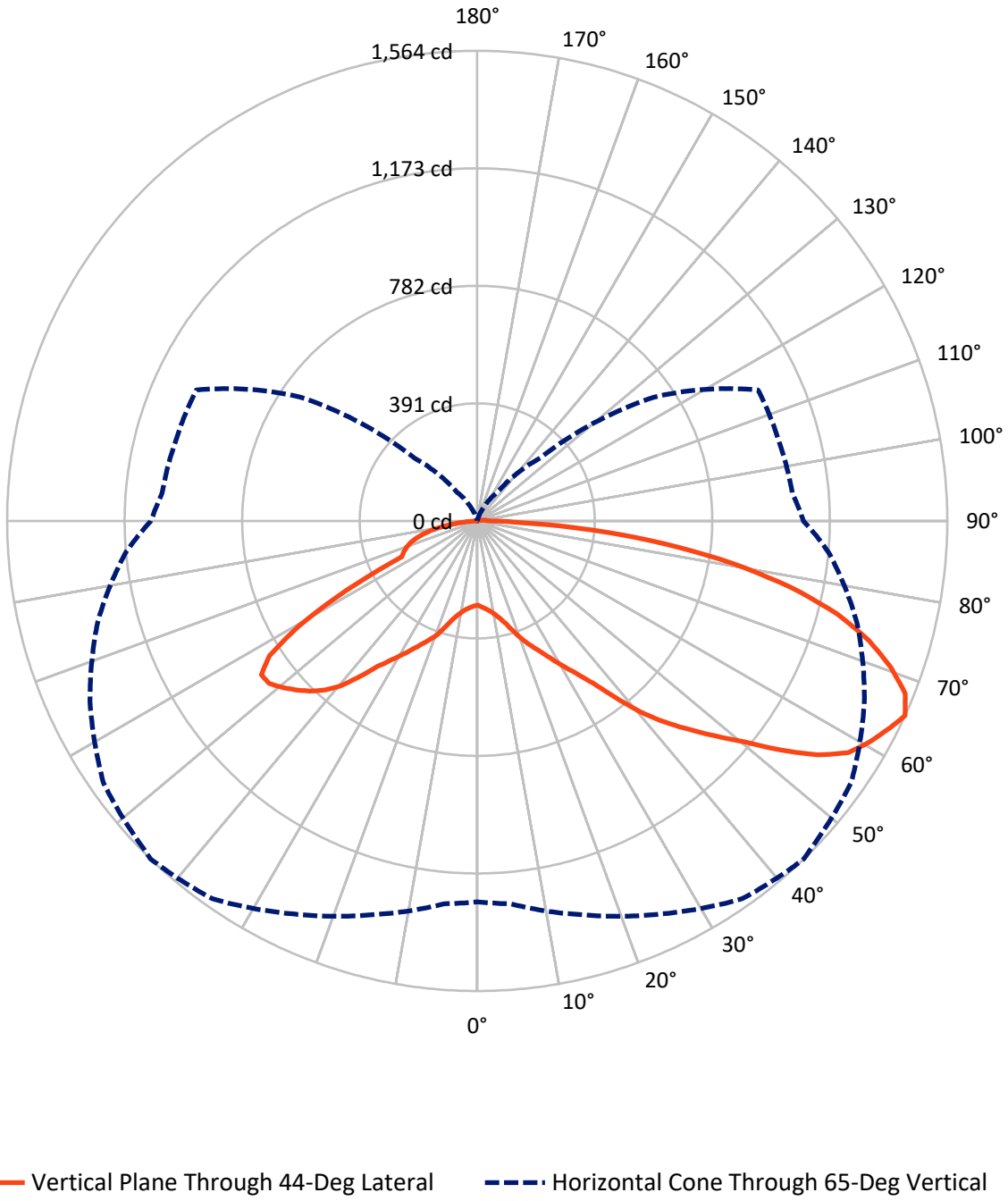
Based on 15 foot mounting height. Maximum calculated value = 1.7 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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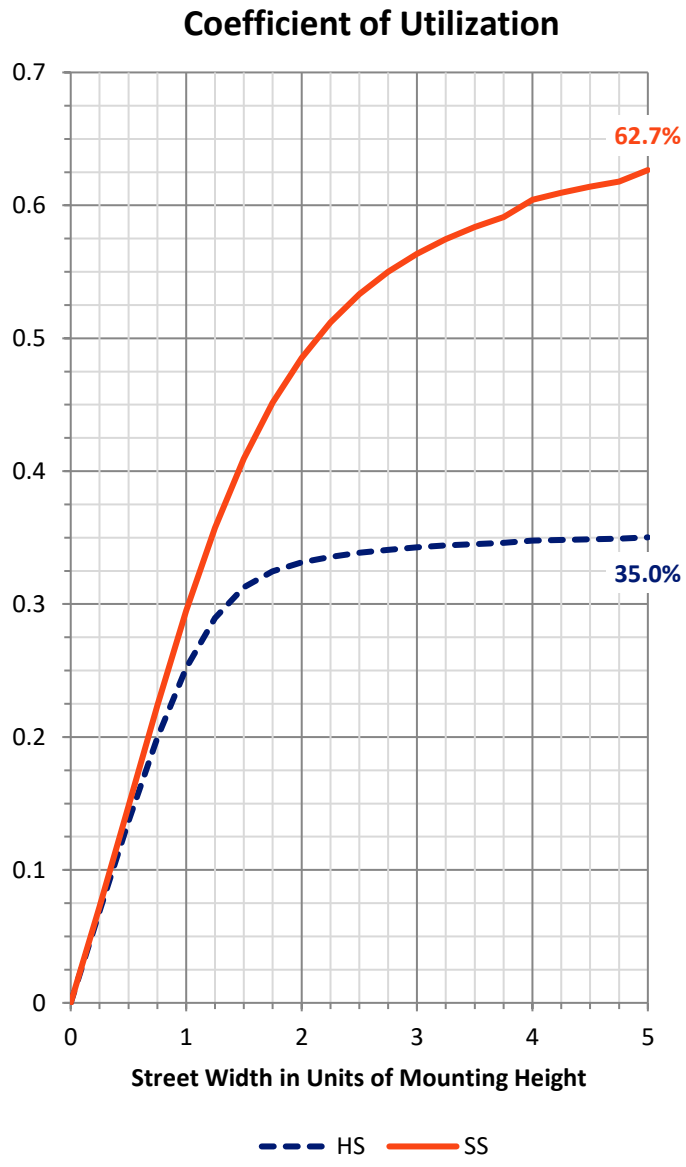
REPORT NUMBER: P821541
CATALOG NUMBER: TT-D2-740-12VDC-WQ-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1495.9	1.0	1496.8
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	2732.9	17.1	2750.1
	% Fixture	64.4	0.4	64.8
Total	Lumens	4228.8	18.1	4246.9
	% Fixture	99.6	0.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.4	0.7
10°-20°	100.9	2.4
20°-30°	216.2	5.1
30°-40°	391.5	9.2
40°-50°	653.3	15.4
50°-60°	904.8	21.3
60°-70°	937.7	22.1
70°-80°	754.7	17.8
80°-90°	241.4	5.7
90°-100°	12.2	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°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	4228.8	99.6
0°-180°	4246.9	100.0



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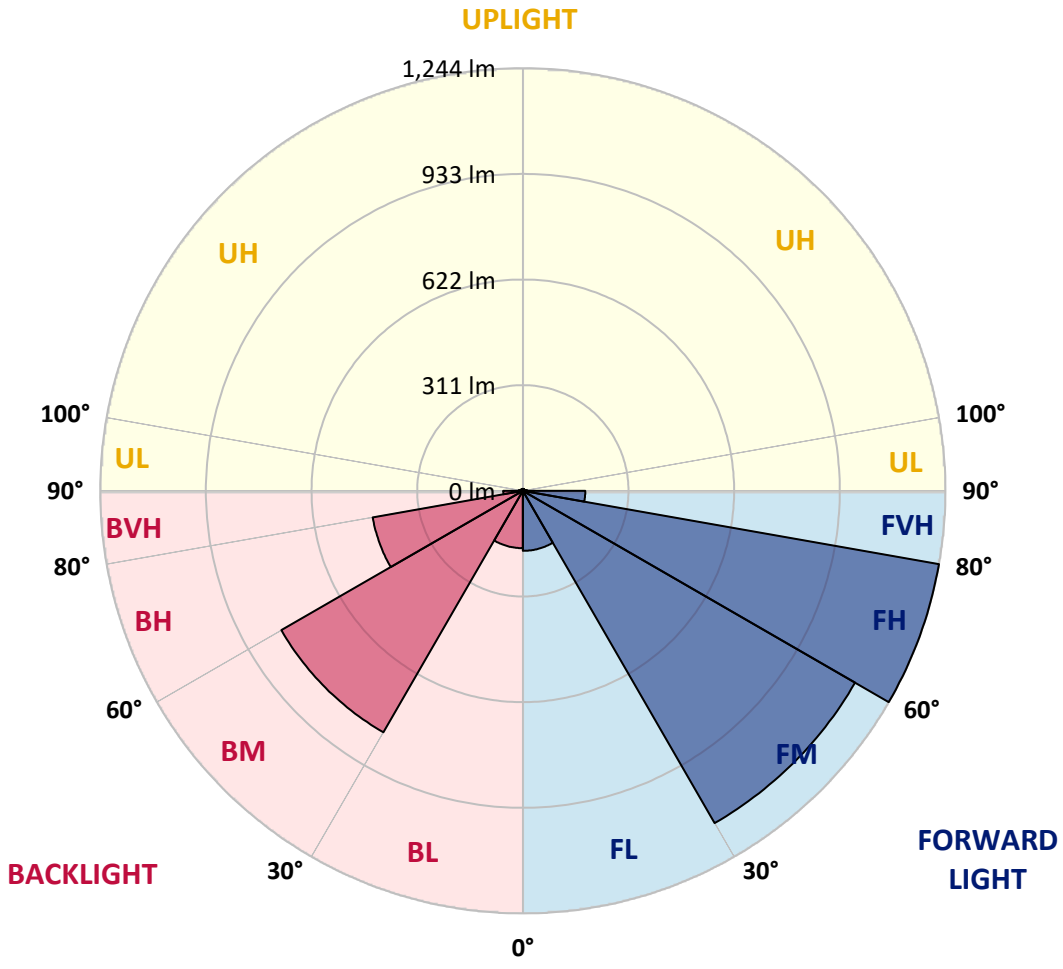
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	176.6	4.2			
FM	(30°-60°)	1129.1	26.6			
FH	(60°-80°)	1243.6	29.3			G1/1800
FVH	(80°-90°)	183.7	4.3			G2/225
BL	(0°-30°)	168.9	4.0	B1/500		
BM	(30°-60°)	820.5	19.3	B1/1000		
BH	(60°-80°)	448.8	10.6	B1/500		G1/500
BVH	(80°-90°)	57.7	1.4			G1/100
UL	(90°-100°)	12.2	0.3		U2/50	
UH	(100°-180°)	5.9	0.1		U1/10	

BUG Rating: B1-U2-G2
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2
2.5°	288.5	287.7	287.7	286.9	286.9	286.9	286.9	286.9	286.0	285.2	284.4
5°	296.0	296.0	295.2	295.2	294.3	293.5	294.3	293.5	292.7	291.9	291.0
7.5°	305.9	305.1	305.1	303.5	303.5	302.6	302.6	302.6	301.8	300.1	299.3
10°	320.0	318.4	318.4	316.7	315.9	315.1	315.1	313.4	313.4	312.6	311.8
12.5°	335.8	334.1	335.8	335.0	333.3	331.7	331.7	330.0	329.2	328.3	325.0
15°	356.5	354.0	355.7	355.7	354.9	354.0	354.0	350.7	349.1	347.4	344.1
17.5°	381.4	379.7	380.6	381.4	383.9	383.9	384.7	380.6	377.3	371.4	369.0
20°	412.9	412.1	414.6	414.6	417.1	417.1	417.9	413.7	407.9	403.8	398.8
22.5°	443.6	443.6	446.9	446.9	449.4	447.7	447.7	446.1	439.4	434.5	429.5
25°	475.1	474.3	477.6	480.1	483.4	479.2	480.9	478.4	471.8	465.1	458.5
27.5°	509.9	508.3	509.9	513.2	519.0	515.7	517.4	513.2	506.6	497.5	491.7
30°	548.1	545.6	548.1	553.0	557.2	558.8	558.0	552.2	546.4	533.1	529.0
32.5°	585.4	585.4	591.2	600.3	605.3	604.4	605.3	600.3	592.0	575.4	565.5
35°	631.0	634.3	641.7	655.0	665.8	661.6	661.6	660.0	645.9	626.0	612.7
37.5°	691.5	694.8	709.7	725.5	745.4	743.7	744.6	739.6	712.2	691.5	672.4
40°	762.0	765.3	787.7	810.1	829.1	834.9	835.8	825.0	795.1	765.3	735.4
42.5°	826.6	830.8	854.0	885.5	906.2	915.4	917.0	899.6	868.1	834.1	796.8
45°	891.3	896.3	922.8	956.0	985.8	990.0	990.8	975.9	941.1	902.1	854.0
47.5°	957.6	961.8	989.1	1028.9	1061.3	1069.6	1070.4	1056.3	1014.0	966.8	910.4
50°	1018.2	1026.5	1063.8	1106.1	1149.2	1155.8	1156.6	1140.9	1091.1	1038.1	963.4
52.5°	1089.5	1093.6	1133.4	1203.9	1240.4	1266.1	1266.9	1236.2	1183.2	1111.9	1015.7
55°	1172.4	1179.8	1220.5	1290.9	1356.5	1373.9	1378.8	1342.4	1271.9	1194.8	1082.0
57.5°	1220.5	1234.6	1294.3	1361.4	1443.5	1455.1	1457.6	1419.5	1341.5	1257.0	1131.8
60°	1246.2	1254.5	1317.5	1422.0	1485.8	1496.6	1495.7	1466.7	1388.8	1286.0	1155.0
62.5°	1275.2	1289.3	1342.4	1448.5	1504.0	1530.6	1526.4	1496.6	1417.0	1304.2	1177.4
65°	1266.9	1278.5	1356.5	1442.7	1534.7	1563.7	1557.9	1518.1	1421.1	1307.5	1171.6
67.5°	1233.7	1242.9	1320.0	1426.9	1514.8	1535.5	1545.5	1506.5	1397.9	1271.9	1135.1
70°	1165.8	1179.8	1254.5	1363.9	1444.3	1459.3	1460.9	1436.9	1339.0	1206.4	1074.5
72.5°	1072.1	1083.7	1164.9	1276.0	1345.7	1363.1	1364.7	1328.3	1254.5	1116.8	987.5
75°	960.1	970.9	1033.9	1150.0	1218.8	1236.2	1234.6	1200.6	1122.6	992.5	872.2
77.5°	821.7	841.6	897.1	992.5	1059.6	1068.7	1070.4	1033.1	970.1	857.3	740.4
80°	648.4	667.4	730.5	801.8	858.1	865.6	868.1	836.6	779.4	679.9	580.4
82.5°	461.0	477.6	527.3	585.4	632.6	632.6	634.3	608.6	564.6	479.2	401.3
85°	262.8	275.3	308.4	349.9	383.9	379.7	380.6	357.4	328.3	262.0	212.3
87.5°	86.2	92.0	99.5	115.2	131.0	121.1	126.0	104.5	94.5	70.5	54.7
90°	45.6	45.6	43.9	42.3	39.0	34.0	34.0	27.4	20.7	13.3	5.0
92.5°	41.5	41.5	39.8	38.1	34.8	30.7	30.7	24.9	18.2	11.6	4.1
95°	34.0	34.0	33.2	31.5	29.0	25.7	24.9	20.7	15.8	9.1	3.3
97.5°	26.5	26.5	25.7	24.9	22.4	19.9	19.9	15.8	11.6	7.5	2.5
100°	19.9	19.9	19.9	18.2	17.4	14.9	14.9	12.4	9.1	5.8	1.7
102.5°	14.1	14.9	14.1	13.3	12.4	10.8	10.8	9.1	6.6	4.1	1.7
105°	9.9	9.9	9.1	9.1	8.3	7.5	7.5	5.8	4.1	2.5	0.8
107.5°	5.8	5.8	5.8	5.8	5.0	5.0	5.0	4.1	2.5	1.7	0.8
110°	3.3	3.3	3.3	3.3	2.5	2.5	2.5	1.7	1.7	0.8	0.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	1.7	1.7	1.7	1.7	1.7	*1.7*	1.7	0.8	0.8	0.8	0.8
115°	0.8	0.8	0.8	1.7	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
117.5°	0.8	0.8	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
120°	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
122.5°	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
125°	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
127.5°	0.0	0.0	0.0	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
130°	0.0	0.0	0.0	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
132.5°	0.0	0.0	0.0	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
135°	0.0	0.0	0.0	0.0	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
137.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
140°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
142.5°	0.8	0.8	0.8	0.0	0.0	*0.8*	0.8	0.8	0.8	0.8	0.8
145°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
147.5°	0.8	0.8	0.8	0.0	0.0	*0.8*	0.8	0.8	0.8	0.8	0.8
150°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
152.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
155°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.8	0.8	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
160°	0.8	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
162.5°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
165°	0.8	0.0	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
167.5°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
170°	0.8	0.0	0.0	0.0	0.0	*0.8*	0.0	0.8	0.8	0.8	0.8
172.5°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
175°	0.8	0.8	0.8	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
177.5°	0.0	0.8	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
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°	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2	280.2
2.5°	284.4	284.4	283.6	282.7	282.7	282.7	281.9	281.9	281.9	281.1	281.1
5°	291.0	290.2	290.2	289.4	289.4	288.5	288.5	287.7	286.9	286.9	286.0
7.5°	300.1	299.3	297.7	298.5	296.8	296.0	295.2	295.2	295.2	294.3	294.3
10°	310.9	310.9	309.3	309.3	307.6	306.8	305.9	305.9	306.8	306.8	305.9
12.5°	325.0	324.2	324.2	323.4	322.5	321.7	322.5	322.5	321.7	320.9	320.0
15°	342.4	342.4	342.4	343.3	342.4	342.4	342.4	341.6	339.9	338.3	338.3
17.5°	369.0	368.1	366.5	367.3	369.0	371.4	369.0	366.5	364.0	364.0	363.2
20°	396.3	397.2	397.2	398.0	400.5	403.0	399.6	398.0	396.3	394.7	393.0
22.5°	426.2	427.0	427.0	426.2	427.8	427.0	425.3	423.7	422.0	419.5	417.9
25°	455.2	456.0	455.2	454.4	455.2	452.7	450.2	447.7	443.6	439.4	439.4
27.5°	487.5	486.7	483.4	484.2	482.6	480.9	475.9	470.1	464.3	460.2	460.2
30°	521.5	521.5	514.9	518.2	514.9	514.1	503.3	495.8	487.5	481.7	480.9
32.5°	558.8	557.2	552.2	555.5	552.2	548.9	535.6	525.7	511.6	503.3	502.5
35°	603.6	599.5	595.3	598.6	598.6	589.5	576.2	558.0	538.1	528.2	527.3
37.5°	658.3	655.8	650.9	655.0	658.3	649.2	629.3	602.8	574.6	559.7	558.8
40°	718.9	715.5	713.0	718.9	721.3	712.2	685.7	648.4	610.2	588.7	585.4
42.5°	776.1	768.6	764.5	772.7	770.3	760.3	723.8	680.7	628.5	603.6	599.5
45°	827.5	819.2	813.4	820.8	817.5	797.6	757.0	699.0	635.9	605.3	600.3
47.5°	878.0	865.6	856.5	866.4	859.8	829.1	779.4	708.1	627.6	591.2	582.9
50°	921.2	906.2	900.4	912.0	902.1	859.0	795.1	703.9	606.9	553.9	540.6
52.5°	972.6	950.2	944.4	966.8	944.4	887.2	798.4	694.0	559.7	495.8	483.4
55°	1024.8	999.9	990.8	1011.5	977.5	893.0	781.9	636.8	488.4	420.4	402.1
57.5°	1052.2	1028.9	1020.7	1035.6	972.6	836.6	708.1	530.6	381.4	305.1	285.2
60°	1077.0	1036.4	1025.6	1045.5	921.2	705.6	548.1	380.6	230.5	173.3	158.4
62.5°	1094.4	1055.5	1033.1	1042.2	826.6	513.2	315.1	183.2	87.1	60.5	59.7
65°	*1085.3*	*1052.2*	*1037.2*	*1030.6*	*718.0*	*295.2*	*116.1*	*46.4*	*2.5*	*2.5*	*1.7*
67.5°	1057.1	1020.7	1016.5	1022.3	710.6	283.6	107.8	42.3	0.0	0.0	0.0
70°	995.0	969.2	969.2	989.1	678.2	268.6	100.3	39.0	0.0	0.0	0.0
72.5°	911.2	891.3	902.9	932.8	630.1	247.9	90.4	34.8	0.0	0.0	0.0
75°	810.9	790.2	805.1	838.2	570.4	221.4	78.8	29.8	0.0	0.0	0.0
77.5°	683.2	669.1	692.3	723.0	490.8	186.6	64.7	24.0	0.0	0.0	0.0
80°	532.3	524.8	555.5	582.9	396.3	146.8	48.9	17.4	0.0	0.0	0.0
82.5°	367.3	364.0	393.8	422.0	283.6	102.8	33.2	11.6	0.0	0.0	0.0
85°	192.4	192.4	215.6	241.3	158.4	55.6	16.6	5.0	0.0	0.0	0.0
87.5°	42.3	40.6	43.9	56.4	31.5	10.8	2.5	0.8	0.0	0.0	0.0
90°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
105°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.8	0.8	0.8	0.8	0.8	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

Scaled Data Report

REPORT NUMBER: P821541
CATALOG NUMBER: TT-D2-740-12VDC-WQ-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
117.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
122.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
125°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.8	0.8	0.8	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

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: SP1-2407-176-5

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-740-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-740-U-WQ

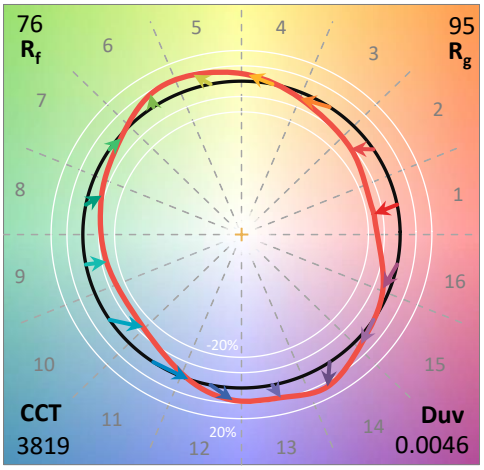
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-5
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-30-740-U-WQ**
Description:	EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K):	3819	CRI (Ra):	72.9		
CIE u':	0.2261	R1:	70.1	R9:	-21.5
CIE v':	0.5108	R2:	78.4	R10:	48.5
Duv:	0.0046	R3:	85.0	R11:	68.4
CIE x:	0.3926	R4:	72.9	R12:	39.0
CIE y:	0.3942	R5:	69.1	R13:	71.1
CIE z:	0.2132	R6:	69.2	R14:	91.3
Peak Wavelength (nm):	450	R7:	82.8	R15:	63.2
Dominant Wavelength (nm):	577	R8:	55.4		
Purity:	36.15483				
Rf:	75.6				
Rg:	94.8				



Test Conditions

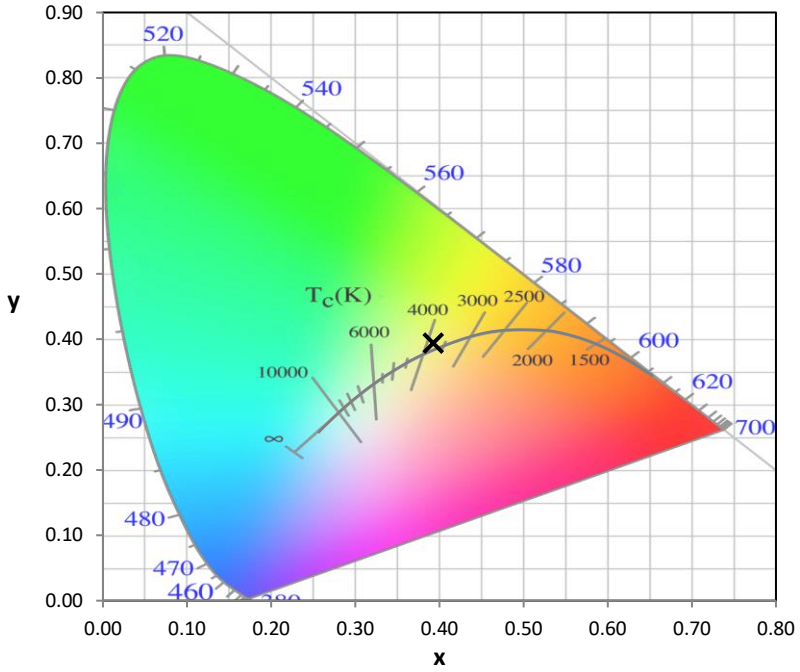
Stabilization Time:	30M
Operation Time:	1H 30M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-5

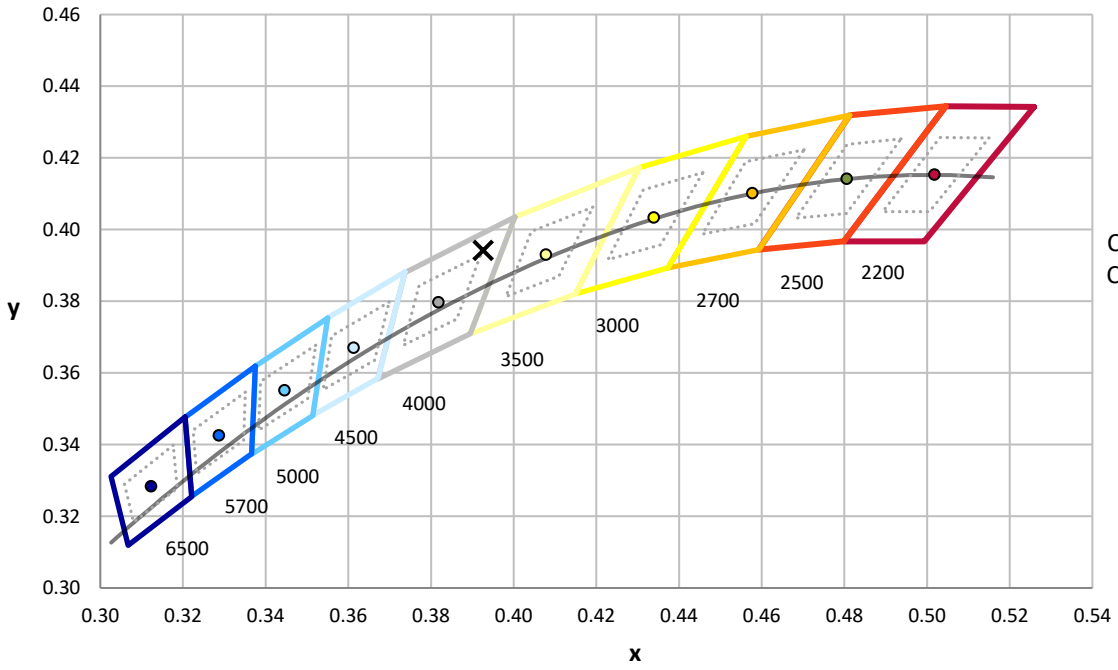
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-5

CIE 1931 Chromaticity Diagram



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

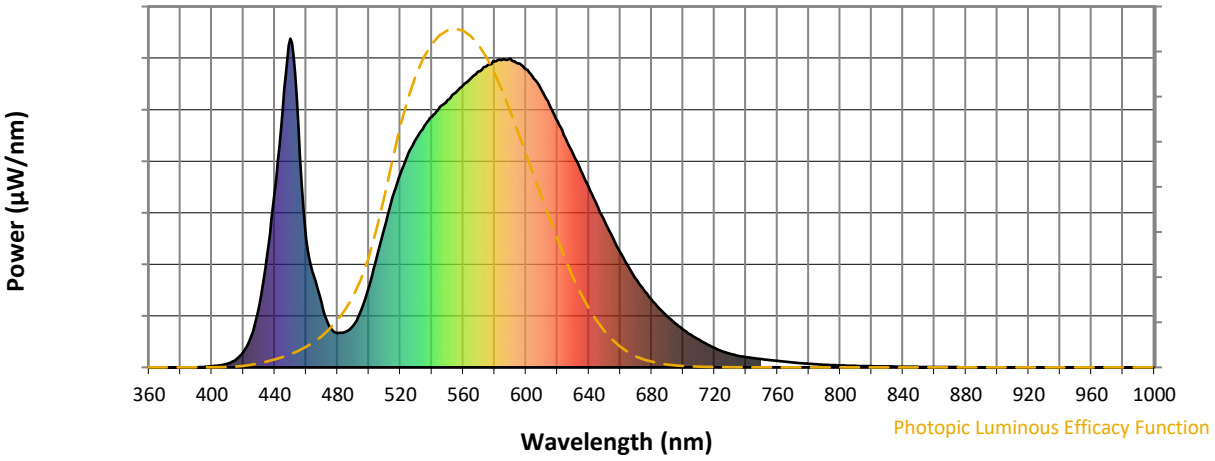


CCT = 3819K
CIE x = 0.3926
CIE y = 0.3942
Duv = 0.0046

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2407-176-5

Photopic Flux vs. Wavelength

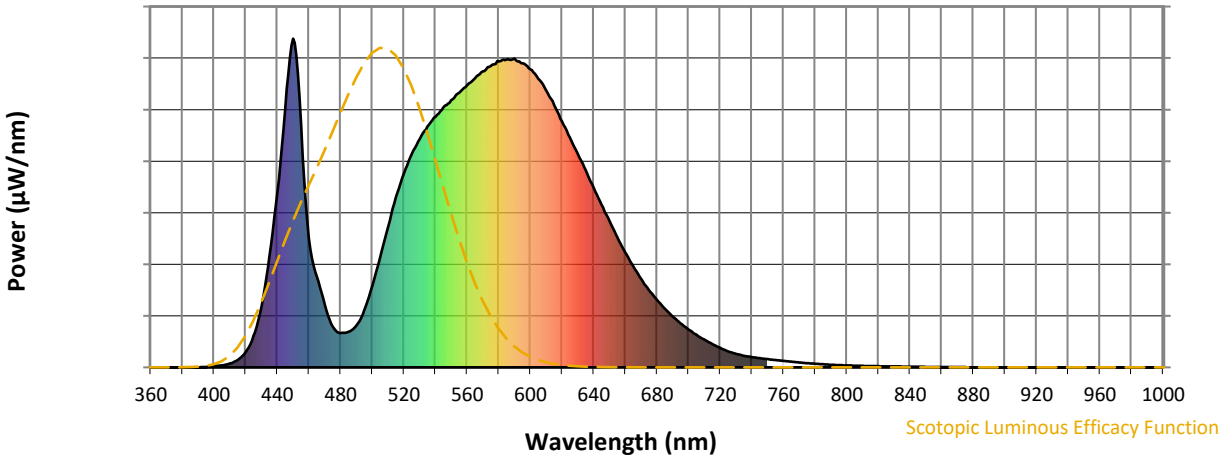


Photopic Lumens: NR

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-5

Scotopic Flux vs. Wavelength

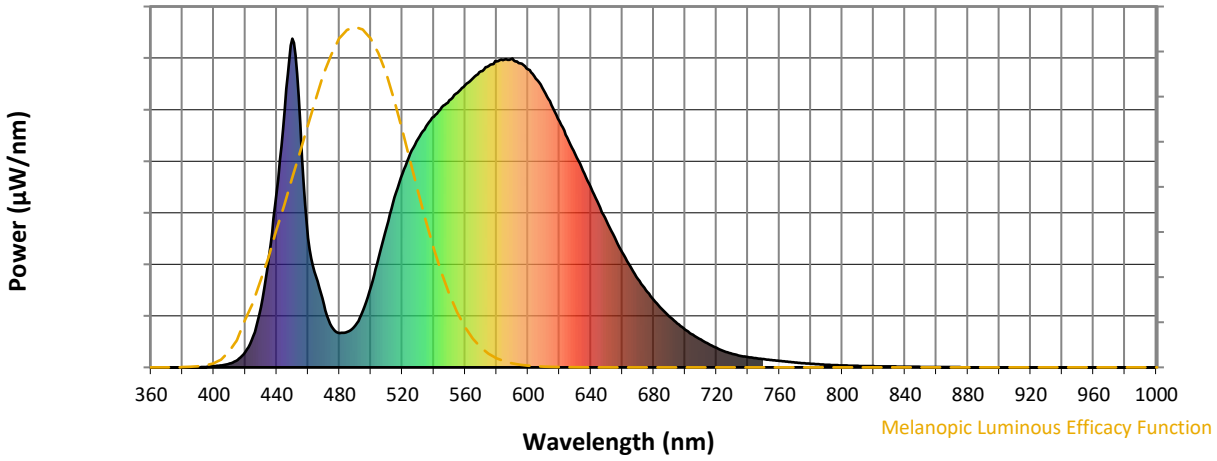


Scotopic Lumens: NR **S/P: 1.45**

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.76**

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

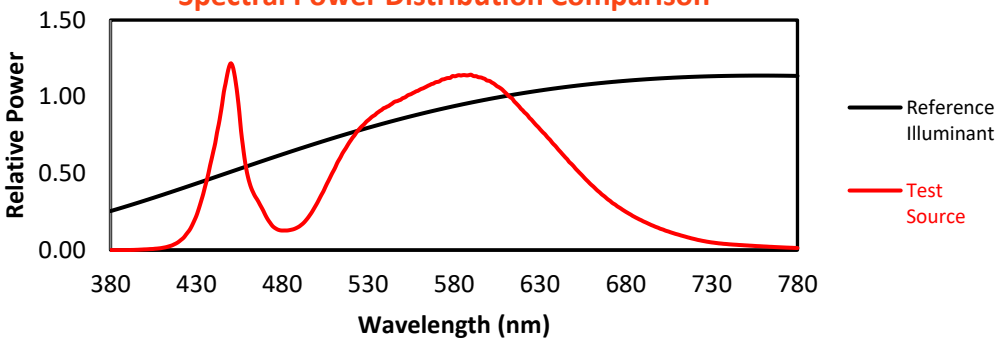
REPORT NUMBER: SP1-2407-176-5

TM-30-18

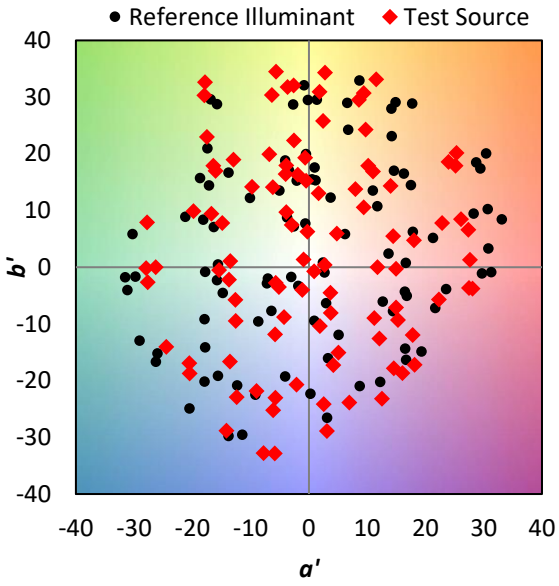
Summary

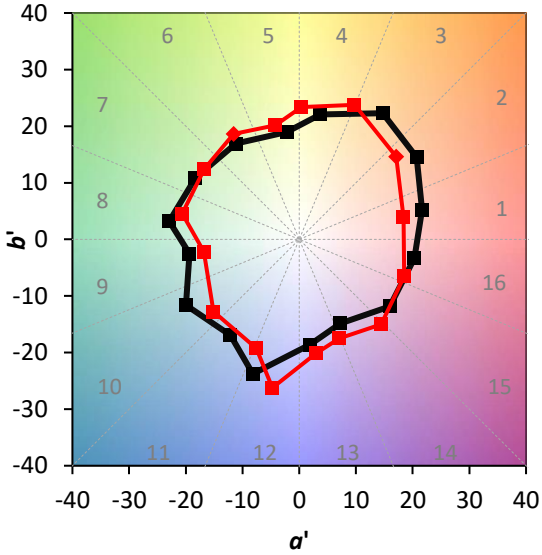
R_f = 75.6
R_g = 94.8
CIE R_a = 72.9
R_9 = -21.5

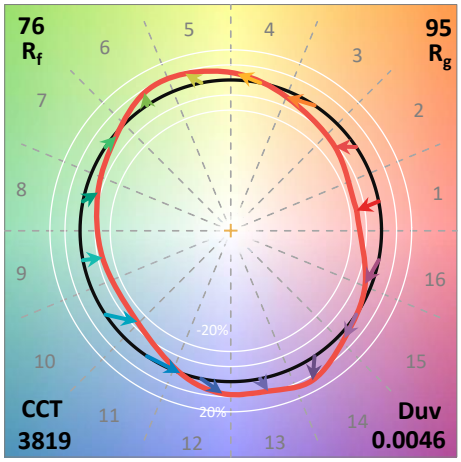
Spectral Power Distribution Comparison

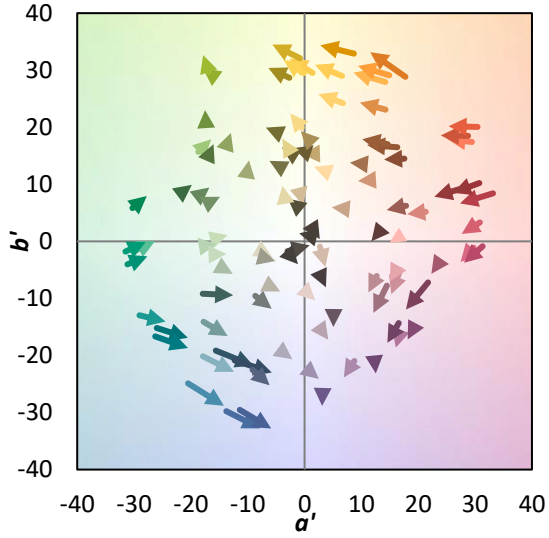


Color Vector Graphics







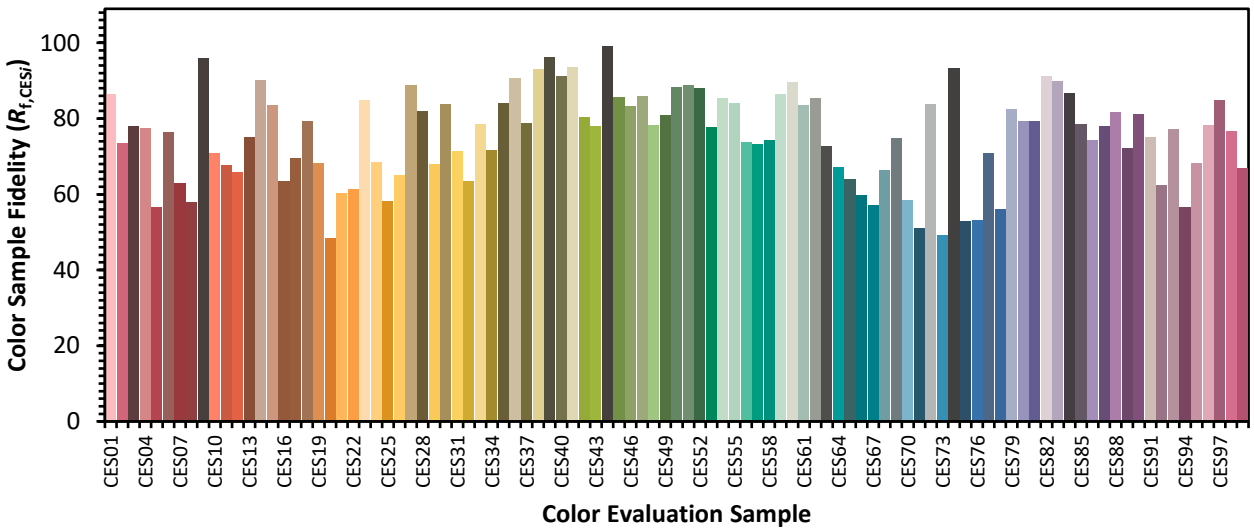


REPORT NUMBER: SP1-2407-176-5

TM-30-18

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

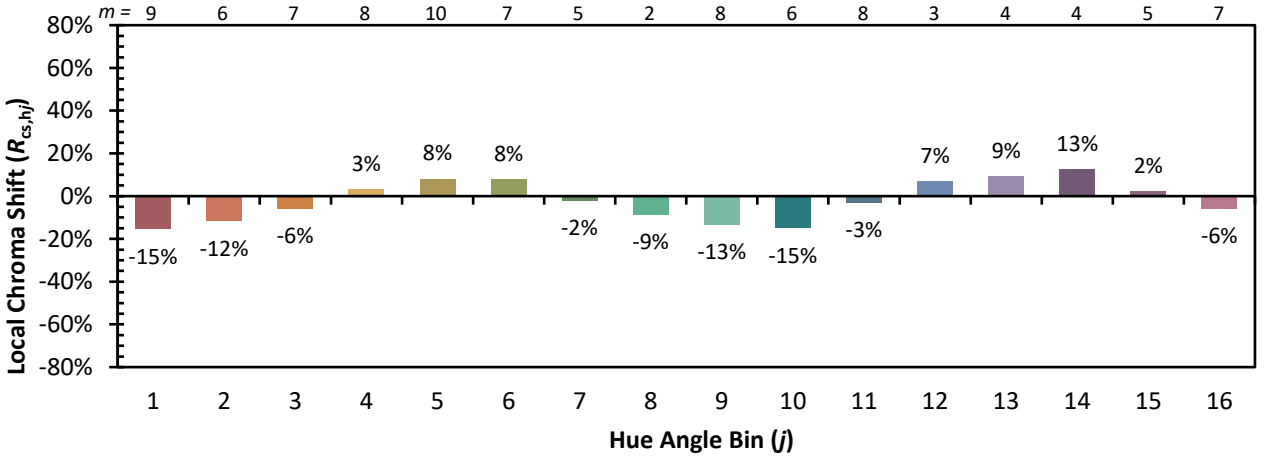
CES01 = 85	CES26 = 65	CES51 = 89	CES76 = 53
CES02 = 61	CES27 = 89	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 82	CES53 = 78	CES78 = 56
CES04 = 70	CES29 = 68	CES54 = 85	CES79 = 83
CES05 = 48	CES30 = 84	CES55 = 84	CES80 = 79
CES06 = 50	CES31 = 71	CES56 = 74	CES81 = 79
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 91
CES08 = 39	CES33 = 79	CES58 = 74	CES83 = 90
CES09 = 29	CES34 = 72	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 84	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 91	CES61 = 84	CES86 = 74
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 78
CES13 = 42	CES38 = 93	CES63 = 73	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 67	CES89 = 72
CES15 = 71	CES40 = 91	CES65 = 64	CES90 = 81
CES16 = 47	CES41 = 93	CES66 = 60	CES91 = 75
CES17 = 49	CES42 = 80	CES67 = 57	CES92 = 62
CES18 = 56	CES43 = 78	CES68 = 66	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 75	CES94 = 57
CES20 = 65	CES45 = 86	CES70 = 58	CES95 = 68
CES21 = 86	CES46 = 83	CES71 = 51	CES96 = 78
CES22 = 78	CES47 = 86	CES72 = 84	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 49	CES98 = 77
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 67
CES25 = 72	CES50 = 88	CES75 = 53	

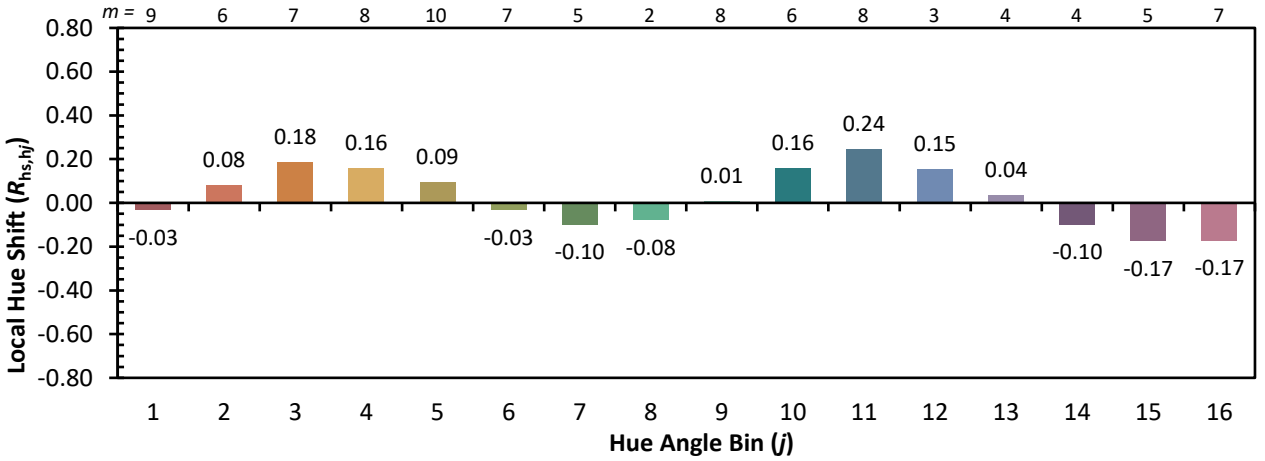


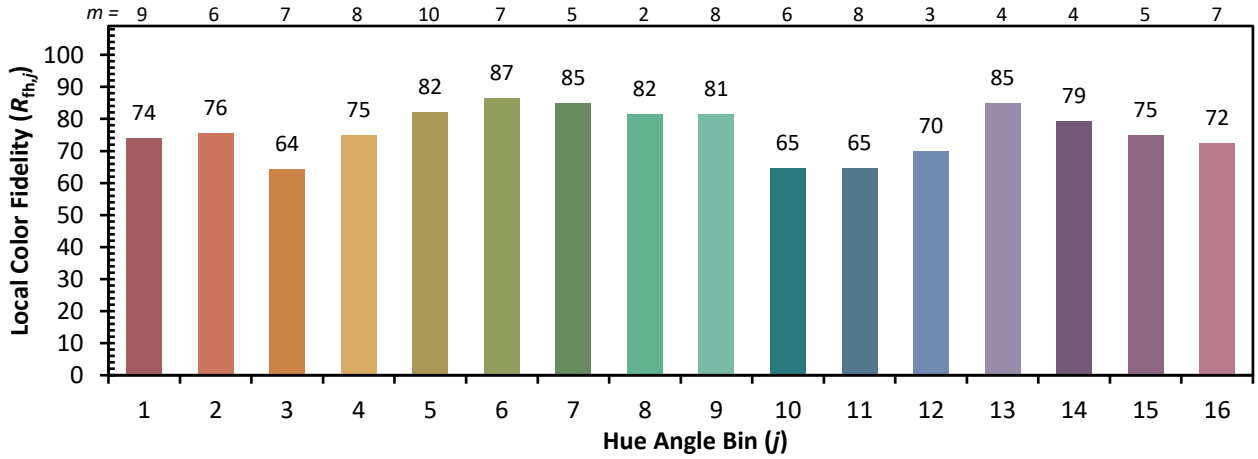
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Color Rendition by Hue-Angle Bin



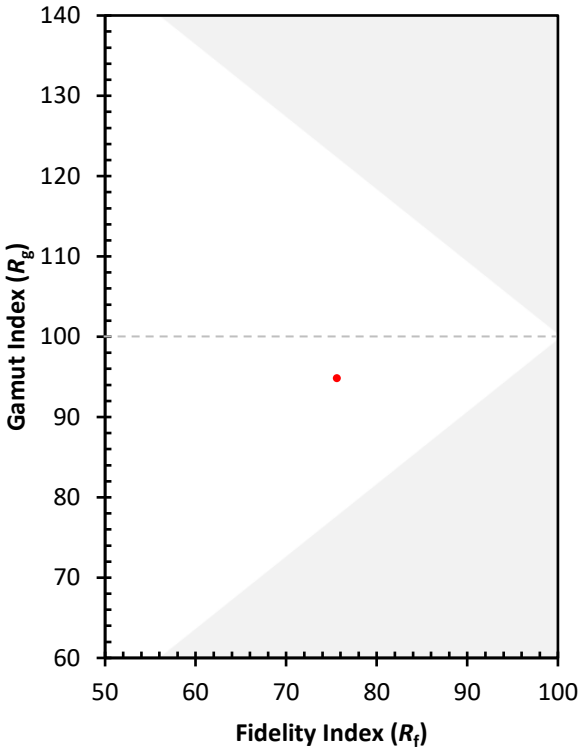


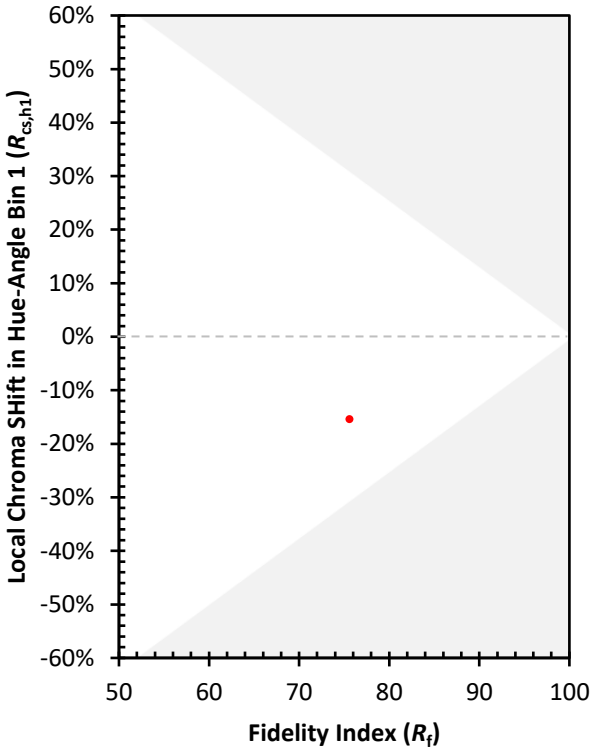


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Measure Comparisons





(END OF REPORT)