

Signify Classified - Internal
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: P1449864

Luminaire Tested: **TWC150_T3_120W_4000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449864
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ()
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2026
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: TWC150_T3_120W_4000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T3 distribution, 120W
4000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20417 lumens
Efficiency: N/A
Efficacy: 181.2 lumens/watt
Luminous Opening: Rectangular (W 1.33' x L: 0.42' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G3

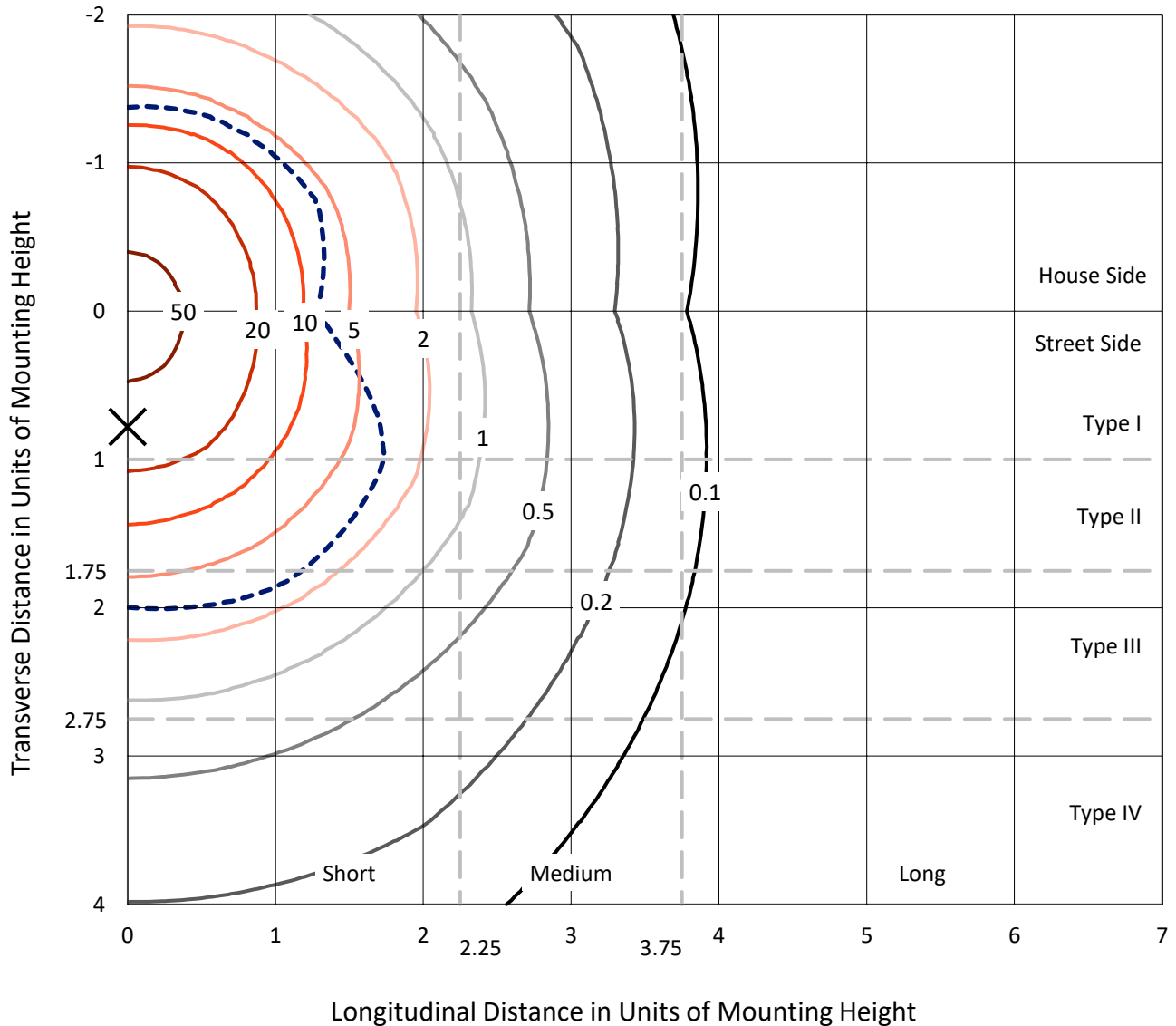
Input Watts (W): 112.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

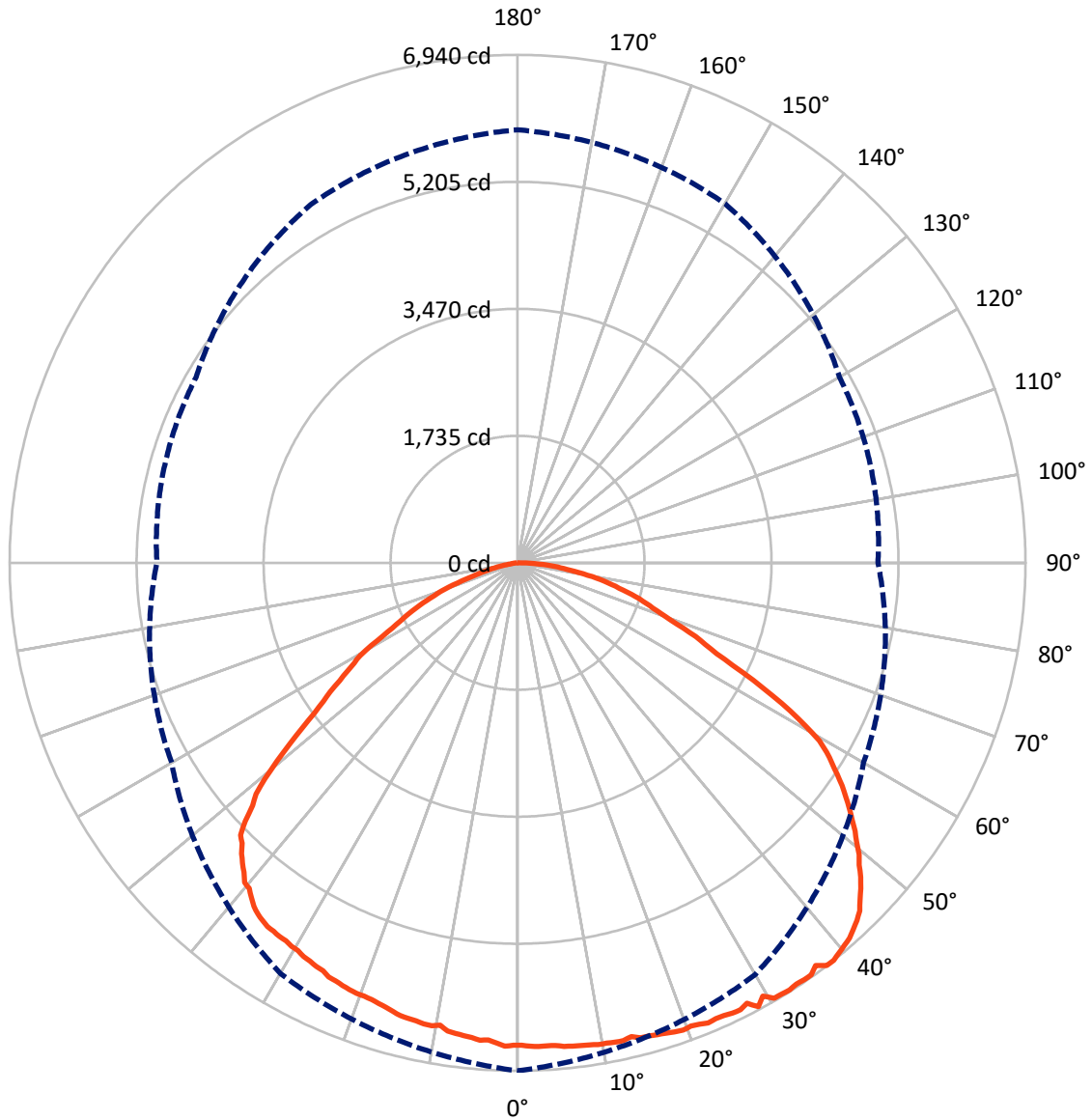
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 65.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 38-Deg Vertical

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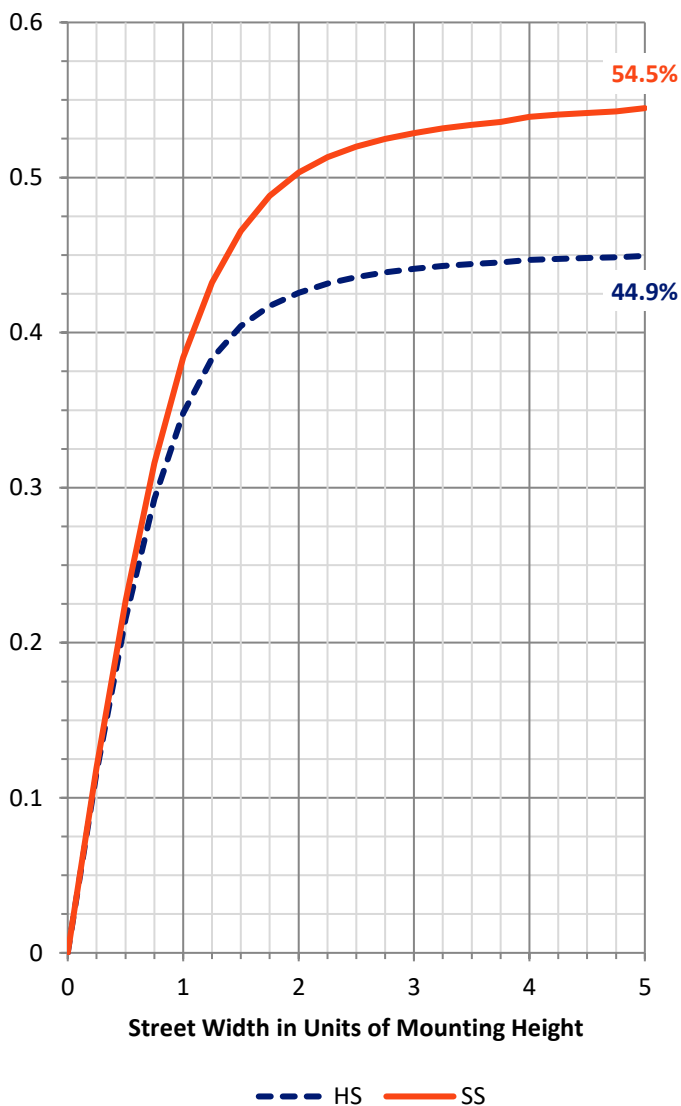
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9219.8	0.0	9219.8
	% Fixture	45.2	0.0	45.2
Street Side	Lumens	11197.2	0.0	11197.2
	% Fixture	54.8	0.0	54.8
Total	Lumens	20417.0	0.0	20417.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	625.6	3.1
10°-20°	1819.0	8.9
20°-30°	2852.7	14.0
30°-40°	3640.2	17.8
40°-50°	4016.4	19.7
50°-60°	3618.2	17.7
60°-70°	2464.6	12.1
70°-80°	1117.6	5.5
80°-90°	262.6	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	20417.0	100.0
0°-180°	20417.0	100.0

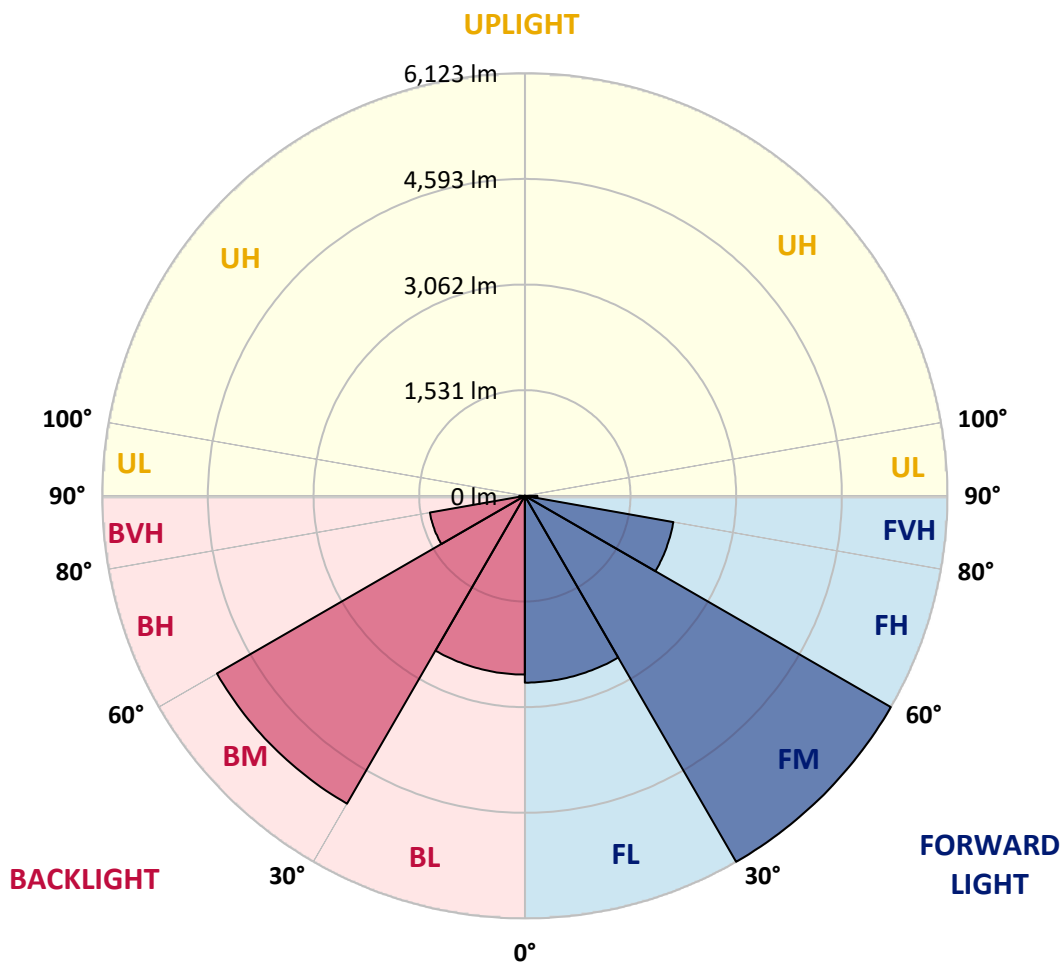


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2707.1	13.3			
FM	(30°-60°)	6123.4	30.0			
FH	(60°-80°)	2185.3	10.7			G2/5000
FVH	(80°-90°)	181.5	0.9			G2/225
BL	(0°-30°)	2590.2	12.7	B4/5000		
BM	(30°-60°)	5151.5	25.2	B4/8500		
BH	(60°-80°)	1396.9	6.8	B3/2500		G3/2500
BVH	(80°-90°)	81.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	6592.6	6592.6	6592.6	6592.6	6592.6	6592.6	6592.6	6592.6	6592.6	6592.6	6592.6
1°	6607.8	6629.4	6602.1	6582.5	6588.1	6593.0	6593.0	6570.7	6588.4	6590.8	6598.2
2°	6614.9	6624.0	6635.8	6596.2	6603.4	6575.8	6607.5	6594.8	6581.0	6496.2	6607.5
3°	6611.2	6637.5	6616.4	6578.1	6573.9	6580.0	6567.2	6559.1	6570.9	6584.7	6604.1
4°	6614.2	6613.0	6616.1	6580.8	6570.7	6544.9	6529.9	6551.5	6559.6	6594.0	6590.8
5°	6637.0	6608.5	6588.1	6618.6	6539.2	6524.7	6544.9	6540.5	6546.8	6579.3	6585.9
6°	6645.1	6611.7	6588.1	6545.6	6521.3	6505.8	6517.1	6523.5	6530.6	6612.5	6581.7
7°	6653.5	6616.1	6569.7	6525.5	6505.1	6492.3	6500.9	6526.4	6520.3	6527.4	6571.9
8°	6659.9	6623.8	6558.9	6499.4	6489.3	6479.5	6487.1	6518.6	6494.5	6520.3	6562.8
9°	6674.4	6635.1	6558.2	6476.3	6462.3	6385.4	6469.2	6477.3	6480.7	6499.2	6573.4
10°	6674.9	6629.9	6477.8	6467.5	6439.9	6433.8	6404.8	6453.5	6446.3	6475.1	6558.4
11°	6684.5	6640.0	6528.9	6451.7	6424.5	6413.1	6434.0	6425.4	6448.8	6474.1	6521.5
12°	6686.7	6637.5	6514.4	6439.2	6403.8	6402.1	6427.7	6458.1	6389.6	6409.7	6490.8
13°	6656.7	6629.9	6537.5	6391.5	6373.1	6380.5	6411.2	6393.2	6357.1	6382.2	6475.3
14°	6702.2	6642.4	6481.5	6365.7	6316.1	6375.5	6402.6	6304.0	6330.1	6358.6	6459.4
15°	6710.0	6604.8	6450.8	6319.8	6287.3	6359.1	6391.3	6334.8	6231.0	6324.7	6442.6
16°	6722.8	6707.1	6423.5	6280.2	6268.9	6329.1	6363.0	6329.6	6252.9	6303.8	6424.9
17°	6739.8	6659.4	6395.2	6263.7	6213.8	6303.8	6333.8	6296.9	6222.4	6260.8	6415.9
18°	6757.2	6625.7	6361.3	6259.3	6176.7	6256.8	6312.1	6262.7	6188.0	6204.0	6384.4
19°	6774.2	6634.1	6335.0	6166.4	6143.1	6225.1	6291.0	6253.4	6154.9	6188.0	6356.6
20°	6757.5	6634.1	6309.9	6128.3	6107.7	6193.7	6281.2	6245.8	6103.7	6154.4	6317.6
21°	6775.9	6625.7	6285.1	6082.1	6070.8	6241.9	6281.7	6200.8	6056.6	6088.7	6229.8
22°	6805.4	6537.0	6251.2	6042.0	6022.4	6164.7	6266.7	6176.7	6024.8	6041.1	6262.3
23°	6792.9	6597.2	6210.4	5989.7	5982.8	6151.2	6251.4	6131.0	5969.8	5989.5	6230.6
24°	6796.3	6598.9	6181.4	5933.7	5919.7	6132.5	6228.1	6113.8	5918.7	5942.3	6179.9
25°	6816.9	6594.5	6156.6	5887.0	5855.8	6091.2	6220.2	6080.4	5879.4	5887.7	6139.9
26°	6824.1	6573.4	6032.0	5830.2	5814.7	6060.2	6176.7	6103.5	5814.0	5839.1	6083.8
27°	6786.0	6569.7	5970.0	5783.5	5764.1	6037.1	6163.0	6024.8	5763.6	5777.6	6035.7
28°	6901.0	6562.1	6052.1	5697.5	5708.6	5983.3	6136.2	5993.1	5703.6	5710.3	5989.9
29°	6800.7	6554.0	5945.0	5672.2	5655.7	5968.8	6124.1	5958.0	5657.4	5647.6	5972.7
30°	6905.4	6567.5	5885.0	5562.6	5606.3	5937.8	6090.2	5923.6	5598.9	5586.2	5912.3
31°	6910.8	6565.5	5848.9	5494.2	5551.0	5913.0	6081.9	5890.9	5570.7	5510.5	5856.7
32°	6917.9	6564.8	5795.1	5422.5	5505.1	5861.2	6057.0	5864.6	5499.4	5440.7	5833.6
33°	6902.5	6555.7	5753.5	5352.9	5445.1	5842.7	6055.8	5842.0	5438.0	5343.4	5752.8
34°	6913.8	6533.6	5741.5	5269.6	5372.6	5808.6	6037.1	5818.9	5373.1	5259.8	5694.1
35°	6913.3	6510.5	5586.7	5186.8	5306.5	5782.5	6031.0	5778.3	5289.3	5184.8	5630.4
36°	6843.7	6512.4	5569.2	5103.7	5220.0	5745.9	6002.0	5717.2	5221.2	5095.9	5587.6
37°	6937.4	6496.2	5512.9	5009.4	5145.3	5704.4	5967.6	5690.6	5146.2	5021.4	5523.2
38°	6940.1	6493.5	5458.1	4923.3	5076.9	5666.3	5915.7	5652.3	5071.8	4928.0	5458.9
39°	6905.7	6458.1	5401.3	4831.4	5004.7	5616.9	5845.0	5616.6	5018.2	4850.6	5408.0
40°	6877.4	6442.6	5348.5	4751.1	4947.2	5559.1	5765.1	5567.2	4942.8	4757.7	5346.3
41°	6844.5	6419.5	5294.9	4659.2	4880.3	5502.1	5742.0	5527.2	4871.7	4661.4	5287.8
42°	6791.6	6385.4	5230.8	4550.3	4807.8	5428.6	5642.2	5459.6	4790.9	4563.8	5236.4
43°	6737.1	6368.9	5177.2	4459.8	4733.9	5352.4	5562.6	5391.3	4714.7	4457.6	5177.7
44°	6668.7	6349.0	5104.2	4360.3	4661.1	5278.5	5476.8	5318.5	4641.0	4363.0	5113.8



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	6561.6	6289.3	5050.4	4255.1	4570.9	5198.1	5370.6	5217.8	4577.8	4256.8	5052.1
46°	6465.3	6215.8	4991.9	4147.2	4487.9	5104.0	5306.2	5133.2	4489.6	4147.2	4995.1
47°	6357.9	6142.6	4930.2	4044.3	4409.0	4989.9	5131.0	5051.4	4393.0	4046.2	4915.5
48°	6233.3	6057.0	4863.1	3933.2	4312.4	4887.2	4909.6	4954.6	4305.0	3930.7	4850.6
49°	6136.9	5959.7	4810.8	3763.3	4215.8	4770.0	4770.7	4785.7	4226.9	3827.5	4803.9
50°	6004.2	5803.2	4751.6	3694.8	4108.9	4637.5	4536.5	4725.8	4111.6	3711.0	4747.4
51°	5891.4	5709.8	4699.2	3583.7	4011.8	4479.3	4257.3	4575.1	4010.1	3603.4	4702.6
52°	5759.2	5581.0	4656.2	3468.2	3902.9	4227.1	3979.1	4401.8	3906.9	3484.9	4650.3
53°	5640.0	5436.0	4608.5	3346.8	3801.0	3981.1	3710.0	4176.0	3838.1	3365.0	4592.1
54°	5510.5	5285.1	4557.9	3224.1	3696.5	3723.0	3453.4	3929.2	3684.0	3220.2	4529.6
55°	5379.5	5168.9	4499.7	3099.5	3587.9	3447.3	3258.8	3655.7	3567.2	3114.5	4486.9
56°	5236.0	5054.3	4429.4	2957.7	3447.8	3208.9	3108.9	3416.6	3460.8	2966.8	4429.1
57°	5092.4	4927.5	4369.4	2828.2	3328.6	3008.9	2915.0	3148.5	3341.4	2840.0	4368.2
58°	4954.3	4774.7	4269.1	2703.1	3208.9	2835.8	2754.5	2949.4	3222.2	2709.3	4328.8
59°	4782.8	4626.2	4162.7	2579.0	3088.2	2660.9	2617.9	2794.3	3102.0	2585.7	4193.7
60°	4520.5	4482.2	4041.8	2441.9	2963.4	2513.2	2495.0	2654.2	2977.2	2454.7	4071.5
61°	4238.7	4350.5	3909.1	2319.0	2838.1	2404.8	2296.2	2483.9	2852.1	2331.5	3943.2
62°	3930.5	4176.7	3749.8	2196.9	2700.4	2280.2	2093.2	2354.9	2719.4	2189.7	3795.5
63°	3599.7	3948.4	3558.9	2079.6	2537.0	2117.0	1929.5	2246.5	2578.0	2071.3	3627.2
64°	3251.7	3682.2	3368.9	1951.3	2341.1	1945.2	1799.2	2089.0	2417.6	1951.6	3428.6
65°	2991.9	3393.7	3170.1	1829.9	2178.7	1830.7	1688.9	1921.6	2242.8	1832.2	3232.7
66°	2798.2	3044.0	2963.9	1705.8	1976.2	1740.0	1577.3	1799.5	2057.5	1704.9	3039.8
67°	2635.1	2749.6	2759.4	1575.8	1786.4	1648.1	1456.1	1712.7	1829.5	1582.2	2822.8
68°	2434.8	2514.6	2530.1	1437.7	1603.4	1545.6	1345.3	1609.5	1650.0	1443.6	2602.6
69°	2231.3	2324.4	2334.2	1308.4	1461.1	1445.6	1223.2	1522.5	1484.6	1323.4	2403.1
70°	2082.1	2166.1	2169.6	1184.3	1351.4	1351.0	1119.7	1422.2	1365.5	1189.5	2216.5
71°	1949.6	1983.3	2026.3	1064.1	1254.6	1255.4	994.8	1332.3	1264.0	1074.2	2091.7
72°	1843.0	1833.4	1846.4	934.4	1148.4	1159.7	863.9	1239.4	1164.9	951.3	1923.6
73°	1736.3	1718.1	1616.1	826.2	1067.1	1058.5	738.0	1145.0	1070.8	834.1	1709.3
74°	1617.9	1614.4	1369.4	717.1	997.3	944.2	626.2	1037.9	995.3	720.1	1452.7
75°	1490.1	1502.8	1118.5	616.6	923.6	804.4	541.4	922.3	932.4	621.3	1204.2
76°	1372.3	1404.8	961.2	518.1	857.7	693.0	458.8	790.4	860.2	529.9	1018.2
77°	1262.7	1298.8	855.7	433.5	795.5	600.4	386.6	685.2	801.9	436.7	898.3
78°	1155.6	1192.9	740.7	357.8	735.8	518.1	316.3	582.5	740.0	361.0	790.4
79°	1036.1	1111.1	645.1	293.2	677.8	434.0	246.5	496.2	683.5	297.1	676.6
80°	910.1	1031.0	536.7	228.8	612.7	369.1	182.4	428.4	624.5	236.4	582.0
81°	781.8	941.8	448.3	181.1	551.7	303.5	121.2	363.0	562.8	185.8	481.9
82°	677.6	811.3	385.6	141.3	491.0	201.8	93.4	291.0	498.9	142.8	411.2
83°	593.3	646.6	338.9	104.7	419.8	89.5	70.0	169.6	437.0	110.3	354.6
84°	502.8	503.8	294.4	79.9	338.9	48.4	54.3	72.0	365.2	80.4	313.6
85°	408.0	417.8	254.1	57.5	277.2	33.9	36.6	45.0	292.9	58.5	273.8
86°	302.0	330.1	217.7	39.1	217.5	20.2	21.4	28.8	236.2	40.1	235.7
87°	224.6	236.9	174.2	26.1	128.3	13.8	0.0	16.7	163.2	25.3	204.0
88°	116.7	155.1	100.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	135.9
89°	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	50.1



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449864
 CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	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
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	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
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	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
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	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
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	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
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449864
CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449864
CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	6592.6	6592.6
1°	6592.3	6607.8
2°	6601.9	6614.9
3°	6600.2	6611.2
4°	6628.4	6614.2
5°	6626.0	6637.0
6°	6622.5	6645.1
7°	6623.3	6653.5
8°	6622.0	6659.9
9°	6608.0	6674.4
10°	6613.9	6674.9
11°	6643.4	6684.5
12°	6627.2	6686.7
13°	6681.8	6656.7
14°	6623.0	6702.2
15°	6610.3	6710.0
16°	6606.6	6722.8
17°	6606.3	6739.8
18°	6620.1	6757.2
19°	6618.4	6774.2
20°	6619.1	6757.5
21°	6564.5	6775.9
22°	6586.2	6805.4
23°	6579.3	6792.9
24°	6525.5	6796.3
25°	6582.7	6816.9
26°	6608.0	6824.1
27°	6563.3	6786.0
28°	6559.4	6901.0
29°	6568.7	6800.7
30°	6546.6	6905.4
31°	6537.0	6910.8
32°	6550.0	6917.9
33°	6525.2	6902.5
34°	6516.6	6913.8
35°	6500.9	6913.3
36°	6484.7	6843.7
37°	6467.5	6937.4
38°	6479.0	6940.1
39°	6411.7	6905.7
40°	6443.4	6877.4
41°	6417.8	6844.5
42°	6387.8	6791.6
43°	6349.0	6737.1
44°	6387.6	6668.7



REPORT NUMBER: P1449864
CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	6279.2	6561.6
46°	6240.6	6465.3
47°	6191.0	6357.9
48°	6110.1	6233.3
49°	6020.9	6136.9
50°	5903.4	6004.2
51°	5785.5	5891.4
52°	5655.0	5759.2
53°	5514.2	5640.0
54°	5379.5	5510.5
55°	5251.4	5379.5
56°	5118.2	5236.0
57°	4999.8	5092.4
58°	4858.7	4954.3
59°	4718.9	4782.8
60°	4572.1	4520.5
61°	4431.6	4238.7
62°	4265.2	3930.5
63°	4114.8	3599.7
64°	3860.2	3251.7
65°	3574.6	2991.9
66°	3272.1	2798.2
67°	2925.3	2635.1
68°	2691.3	2434.8
69°	2466.2	2231.3
70°	2284.4	2082.1
71°	2112.3	1949.6
72°	1927.8	1843.0
73°	1795.3	1736.3
74°	1690.8	1617.9
75°	1587.1	1490.1
76°	1481.7	1372.3
77°	1378.5	1262.7
78°	1281.4	1155.6
79°	1176.0	1036.1
80°	1078.9	910.1
81°	1014.0	781.8
82°	915.2	677.6
83°	784.2	593.3
84°	601.6	502.8
85°	483.9	408.0
86°	403.3	302.0
87°	310.6	224.6
88°	223.4	116.7
89°	132.0	0.0



REPORT NUMBER: P1449864
CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.0	0.0
91°	0.0	0.0
92°	0.0	0.0
93°	0.0	0.0
94°	0.0	0.0
95°	0.0	0.0
96°	0.0	0.0
97°	0.0	0.0
98°	0.0	0.0
99°	0.0	0.0
100°	0.0	0.0
101°	0.0	0.0
102°	0.0	0.0
103°	0.0	0.0
104°	0.0	0.0
105°	0.0	0.0
106°	0.0	0.0
107°	0.0	0.0
108°	0.0	0.0
109°	0.0	0.0
110°	0.0	0.0
111°	0.0	0.0
112°	0.0	0.0
113°	0.0	0.0
114°	0.0	0.0
115°	0.0	0.0
116°	0.0	0.0
117°	0.0	0.0
118°	0.0	0.0
119°	0.0	0.0
120°	0.0	0.0
121°	0.0	0.0
122°	0.0	0.0
123°	0.0	0.0
124°	0.0	0.0
125°	0.0	0.0
126°	0.0	0.0
127°	0.0	0.0
128°	0.0	0.0
129°	0.0	0.0
130°	0.0	0.0
131°	0.0	0.0
132°	0.0	0.0
133°	0.0	0.0
134°	0.0	0.0



REPORT NUMBER: P1449864
CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
135°	0.0	0.0
136°	0.0	0.0
137°	0.0	0.0
138°	0.0	0.0
139°	0.0	0.0
140°	0.0	0.0
141°	0.0	0.0
142°	0.0	0.0
143°	0.0	0.0
144°	0.0	0.0
145°	0.0	0.0
146°	0.0	0.0
147°	0.0	0.0
148°	0.0	0.0
149°	0.0	0.0
150°	0.0	0.0
151°	0.0	0.0
152°	0.0	0.0
153°	0.0	0.0
154°	0.0	0.0
155°	0.0	0.0
156°	0.0	0.0
157°	0.0	0.0
158°	0.0	0.0
159°	0.0	0.0
160°	0.0	0.0
161°	0.0	0.0
162°	0.0	0.0
163°	0.0	0.0
164°	0.0	0.0
165°	0.0	0.0
166°	0.0	0.0
167°	0.0	0.0
168°	0.0	0.0
169°	0.0	0.0
170°	0.0	0.0
171°	0.0	0.0
172°	0.0	0.0
173°	0.0	0.0
174°	0.0	0.0
175°	0.0	0.0
176°	0.0	0.0
177°	0.0	0.0
178°	0.0	0.0
179°	0.0	0.0



REPORT NUMBER: P1449864
CATALOG NUMBER: TWC150_T3_120W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
180°	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2601-659-2

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-4000K

Data in this report applies to families of products including ;MWP2460W34VDDKYYAD

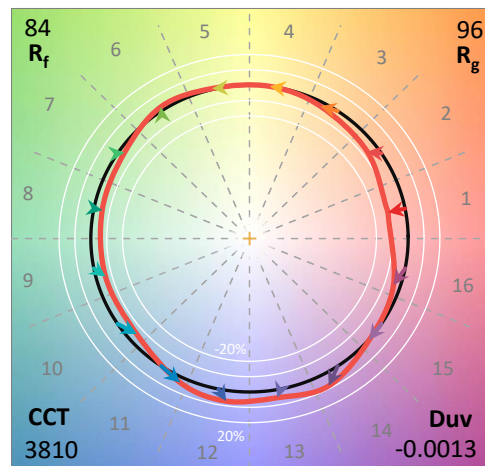
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 02/16/2026
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Lumark
 Catalog Number: **MWP2460W34VDDKYYAD-T4-24W-4000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 4000K

Spectral Parameters

CCT (K): 3810
 CIE u': 0.2295
 CIE v': 0.5035
 Duv: -0.0013
 CIE x: 0.3881
 CIE y: 0.3785
 CIE z: 0.2334
 Peak Wavelength (nm): 453
 Dominant Wavelength (nm): 580
 Purity: 30.07368
 Rf: 84.4
 Rg: 96.5

CRI (Ra):	84.5		
R1:	83.7	R9:	15.9
R2:	90.7	R10:	77.2
R3:	95.1	R11:	83.0
R4:	83.6	R12:	62.4
R5:	83.4	R13:	85.6
R6:	86.7	R14:	97.4
R7:	86.3	R15:	77.9
R8:	66.5		



Test Conditions

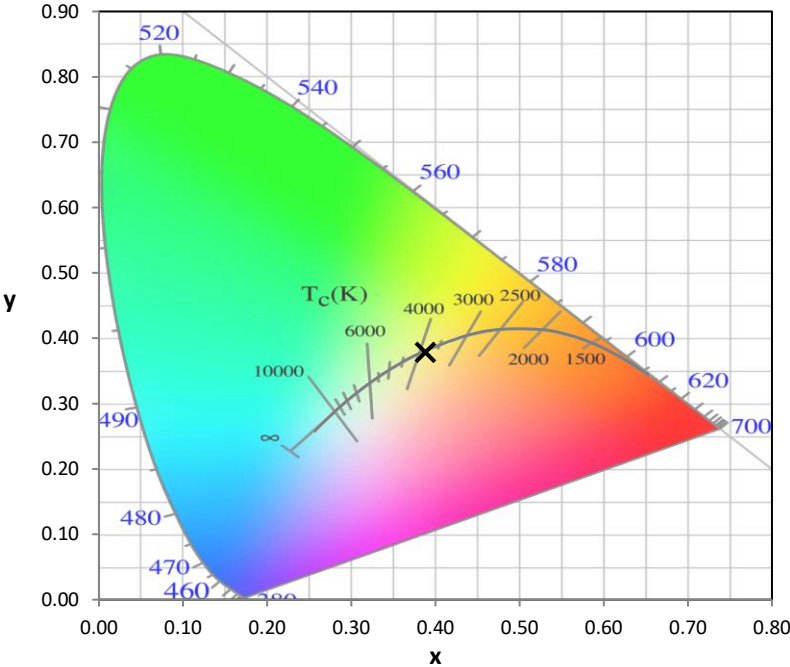
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-2

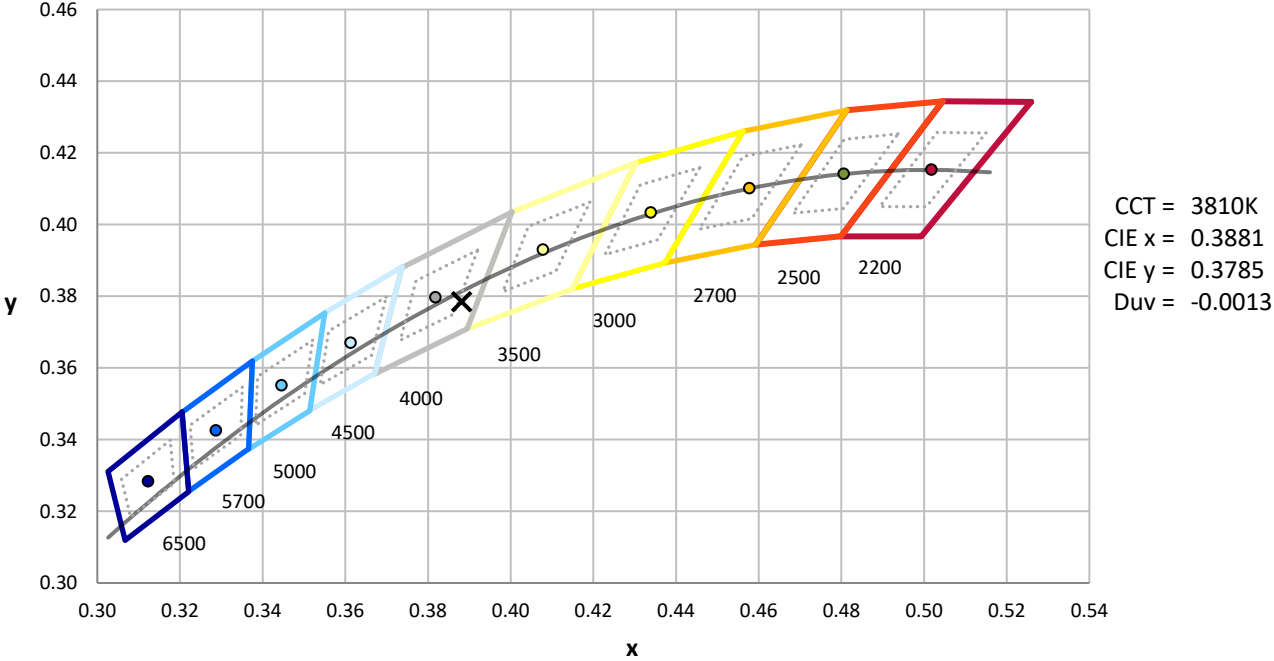
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2601-659-2

CIE 1931 Chromaticity Diagram



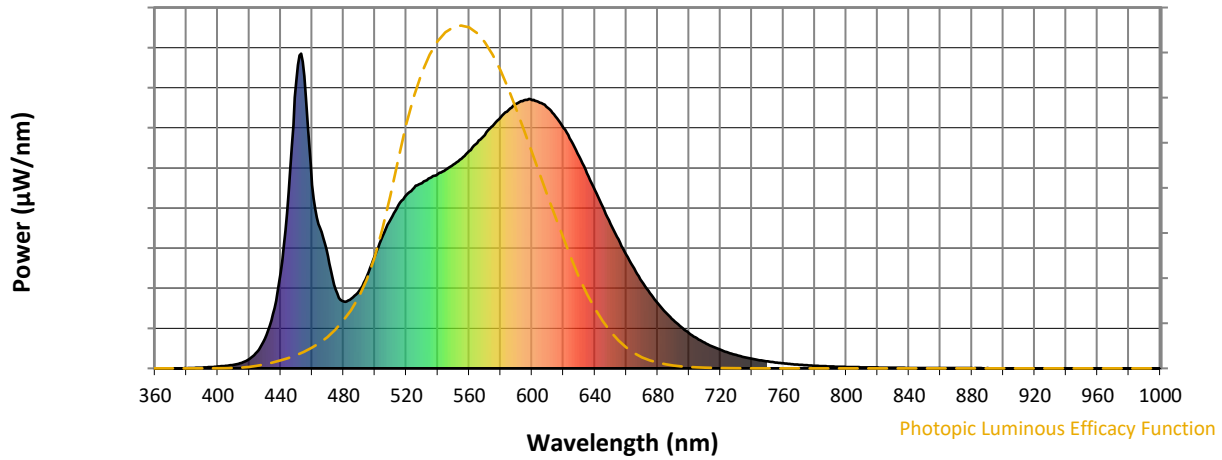
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2601-659-2

Photopic Flux vs. Wavelength

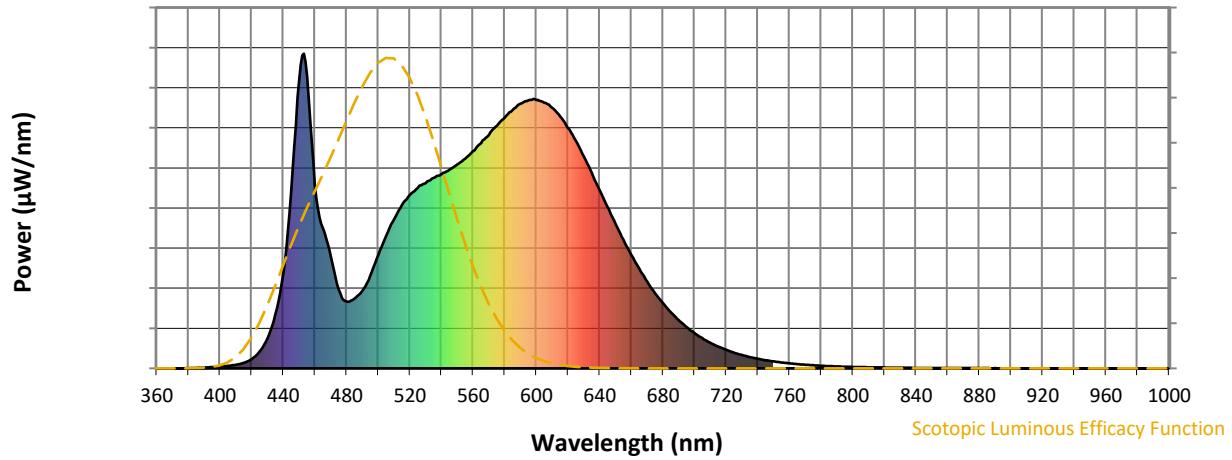


Photopic Lumens: NR

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	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	NR	630	674	NR	760	16	NR	890	1	NR
375	0	NR	505	421	NR	635	620	NR	765	14	NR	895	0	NR
380	1	NR	510	474	NR	640	566	NR	770	12	NR	900	0	NR
385	1	NR	515	518	NR	645	512	NR	775	10	NR	905	0	NR
390	3	NR	520	552	NR	650	459	NR	780	8	NR	910	0	NR
395	4	NR	525	574	NR	655	410	NR	785	7	NR	915	0	NR
400	6	NR	530	589	NR	660	361	NR	790	6	NR	920	0	NR
405	8	NR	535	605	NR	665	317	NR	795	5	NR	925	0	NR
410	11	NR	540	617	NR	670	276	NR	800	5	NR	930	0	NR
415	18	NR	545	632	NR	675	239	NR	805	4	NR	935	0	NR
420	30	NR	550	648	NR	680	207	NR	810	3	NR	940	0	NR
425	53	NR	555	666	NR	685	178	NR	815	3	NR	945	0	NR
430	95	NR	560	690	NR	690	153	NR	820	3	NR	950	0	NR
435	173	NR	565	716	NR	695	131	NR	825	2	NR	955	0	NR
440	304	NR	570	742	NR	700	112	NR	830	2	NR	960	0	NR
445	559	NR	575	771	NR	705	95	NR	835	2	NR	965	0	NR
450	915	NR	580	798	NR	710	81	NR	840	1	NR	970	0	NR
455	929	NR	585	820	NR	715	69	NR	845	1	NR	975	0	NR
460	582	NR	590	841	NR	720	59	NR	850	1	NR	980	0	NR
465	446	NR	595	852	NR	725	50	NR	855	1	NR	985	0	NR
470	356	NR	600	852	NR	730	42	NR	860	1	NR	990	0	NR
475	250	NR	605	845	NR	735	36	NR	865	1	NR	995	0	NR
480	212	NR	610	827	NR	740	30	NR	870	1	NR	1000	0	NR
485	221	NR	615	801	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-2

Scotopic Flux vs. Wavelength



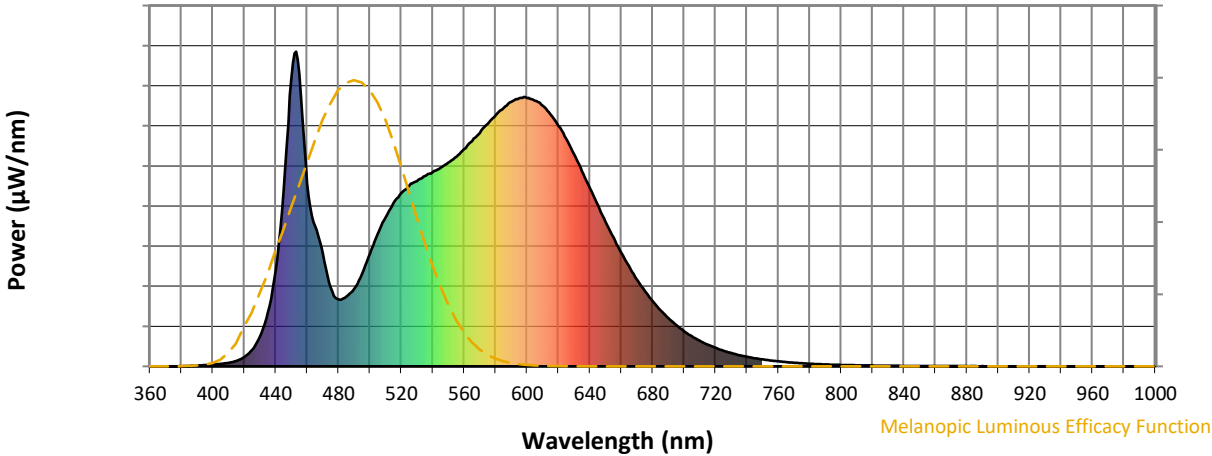
Scotopic Lumens: NR

S/P: 1.64

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	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	NR	630	674	NR	760	16	NR	890	1	NR
375	0	NR	505	421	NR	635	620	NR	765	14	NR	895	0	NR
380	1	NR	510	474	NR	640	566	NR	770	12	NR	900	0	NR
385	1	NR	515	518	NR	645	512	NR	775	10	NR	905	0	NR
390	3	NR	520	552	NR	650	459	NR	780	8	NR	910	0	NR
395	4	NR	525	574	NR	655	410	NR	785	7	NR	915	0	NR
400	6	NR	530	589	NR	660	361	NR	790	6	NR	920	0	NR
405	8	NR	535	605	NR	665	317	NR	795	5	NR	925	0	NR
410	11	NR	540	617	NR	670	276	NR	800	5	NR	930	0	NR
415	18	NR	545	632	NR	675	239	NR	805	4	NR	935	0	NR
420	30	NR	550	648	NR	680	207	NR	810	3	NR	940	0	NR
425	53	NR	555	666	NR	685	178	NR	815	3	NR	945	0	NR
430	95	NR	560	690	NR	690	153	NR	820	3	NR	950	0	NR
435	173	NR	565	716	NR	695	131	NR	825	2	NR	955	0	NR
440	304	NR	570	742	NR	700	112	NR	830	2	NR	960	0	NR
445	559	NR	575	771	NR	705	95	NR	835	2	NR	965	0	NR
450	915	NR	580	798	NR	710	81	NR	840	1	NR	970	0	NR
455	929	NR	585	820	NR	715	69	NR	845	1	NR	975	0	NR
460	582	NR	590	841	NR	720	59	NR	850	1	NR	980	0	NR
465	446	NR	595	852	NR	725	50	NR	855	1	NR	985	0	NR
470	356	NR	600	852	NR	730	42	NR	860	1	NR	990	0	NR
475	250	NR	605	845	NR	735	36	NR	865	1	NR	995	0	NR
480	212	NR	610	827	NR	740	30	NR	870	1	NR	1000	0	NR
485	221	NR	615	801	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-2

Melanopic Flux vs. Wavelength



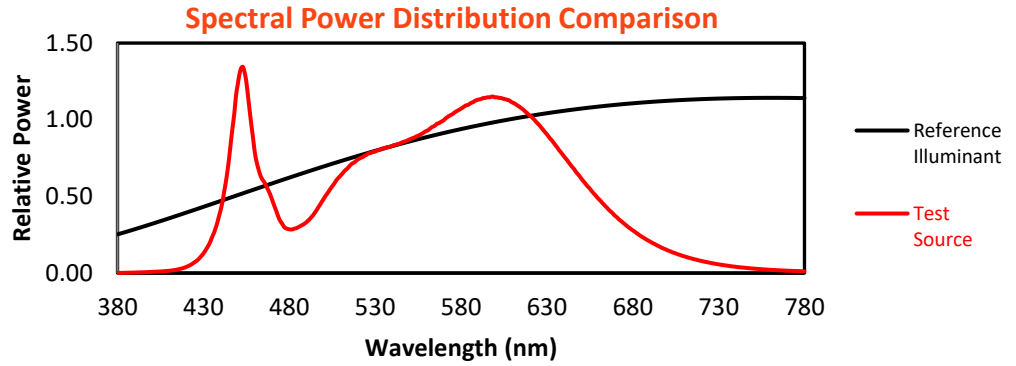
Melanopic Lumens: NR

M/P: 3.35

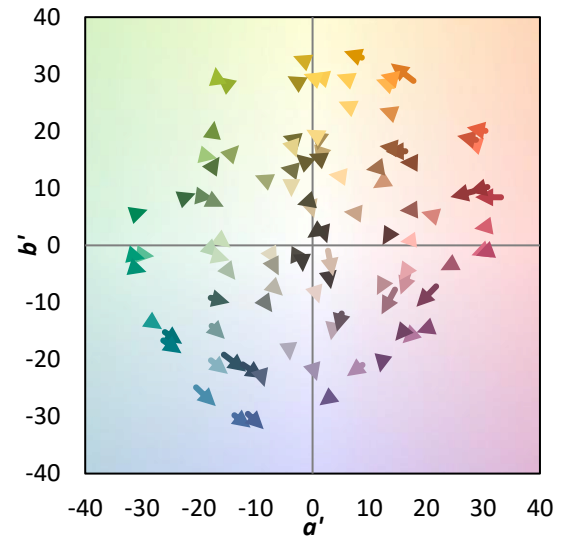
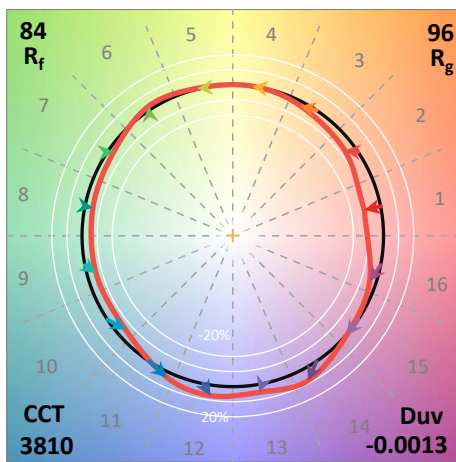
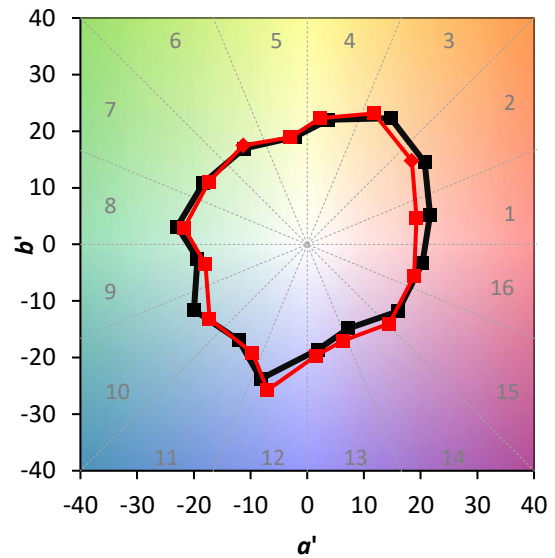
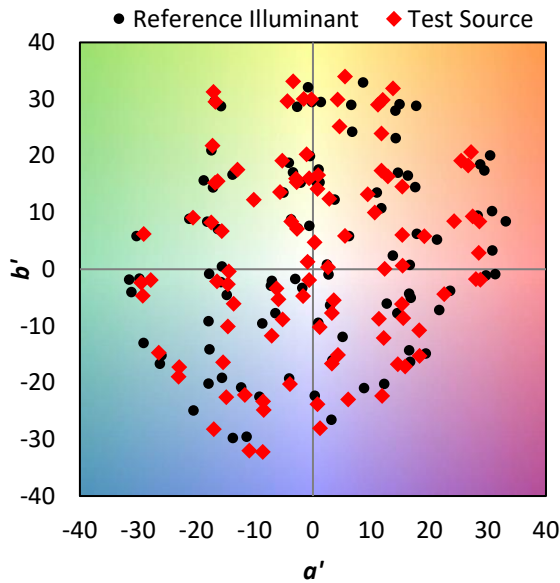
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	NR	630	674	NR	760	16	NR	890	1	NR
375	0	NR	505	421	NR	635	620	NR	765	14	NR	895	0	NR
380	1	NR	510	474	NR	640	566	NR	770	12	NR	900	0	NR
385	1	NR	515	518	NR	645	512	NR	775	10	NR	905	0	NR
390	3	NR	520	552	NR	650	459	NR	780	8	NR	910	0	NR
395	4	NR	525	574	NR	655	410	NR	785	7	NR	915	0	NR
400	6	NR	530	589	NR	660	361	NR	790	6	NR	920	0	NR
405	8	NR	535	605	NR	665	317	NR	795	5	NR	925	0	NR
410	11	NR	540	617	NR	670	276	NR	800	5	NR	930	0	NR
415	18	NR	545	632	NR	675	239	NR	805	4	NR	935	0	NR
420	30	NR	550	648	NR	680	207	NR	810	3	NR	940	0	NR
425	53	NR	555	666	NR	685	178	NR	815	3	NR	945	0	NR
430	95	NR	560	690	NR	690	153	NR	820	3	NR	950	0	NR
435	173	NR	565	716	NR	695	131	NR	825	2	NR	955	0	NR
440	304	NR	570	742	NR	700	112	NR	830	2	NR	960	0	NR
445	559	NR	575	771	NR	705	95	NR	835	2	NR	965	0	NR
450	915	NR	580	798	NR	710	81	NR	840	1	NR	970	0	NR
455	929	NR	585	820	NR	715	69	NR	845	1	NR	975	0	NR
460	582	NR	590	841	NR	720	59	NR	850	1	NR	980	0	NR
465	446	NR	595	852	NR	725	50	NR	855	1	NR	985	0	NR
470	356	NR	600	852	NR	730	42	NR	860	1	NR	990	0	NR
475	250	NR	605	845	NR	735	36	NR	865	1	NR	995	0	NR
480	212	NR	610	827	NR	740	30	NR	870	1	NR	1000	0	NR
485	221	NR	615	801	NR	745	26	NR	875	1	NR			

Summary

$R_f = 84.4$
 $R_g = 96.5$
 CIE $R_a = 84.5$
 $R_9 = 15.9$

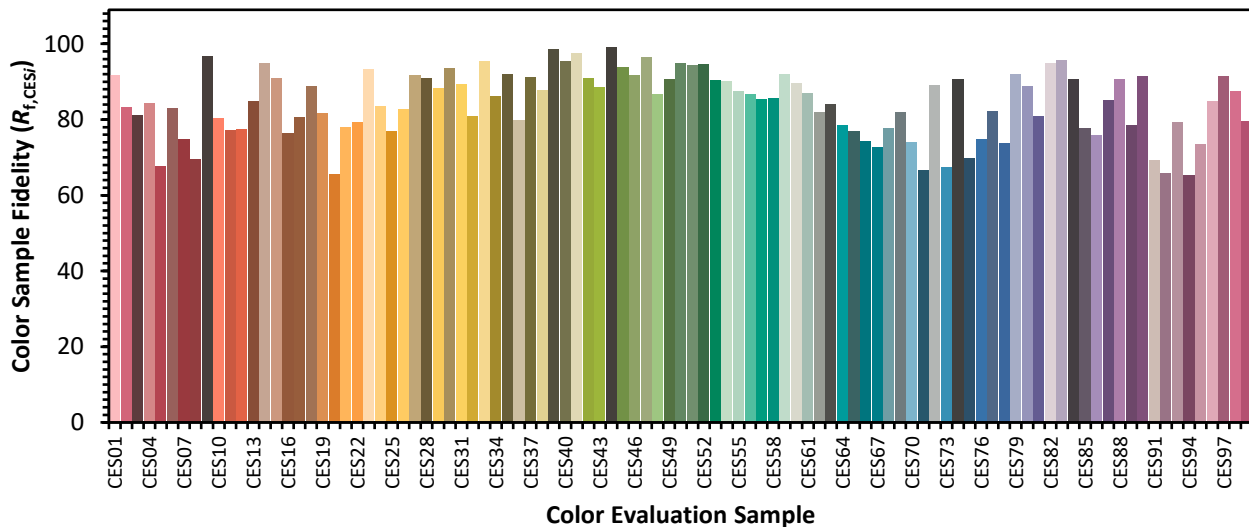


Color Vector Graphics

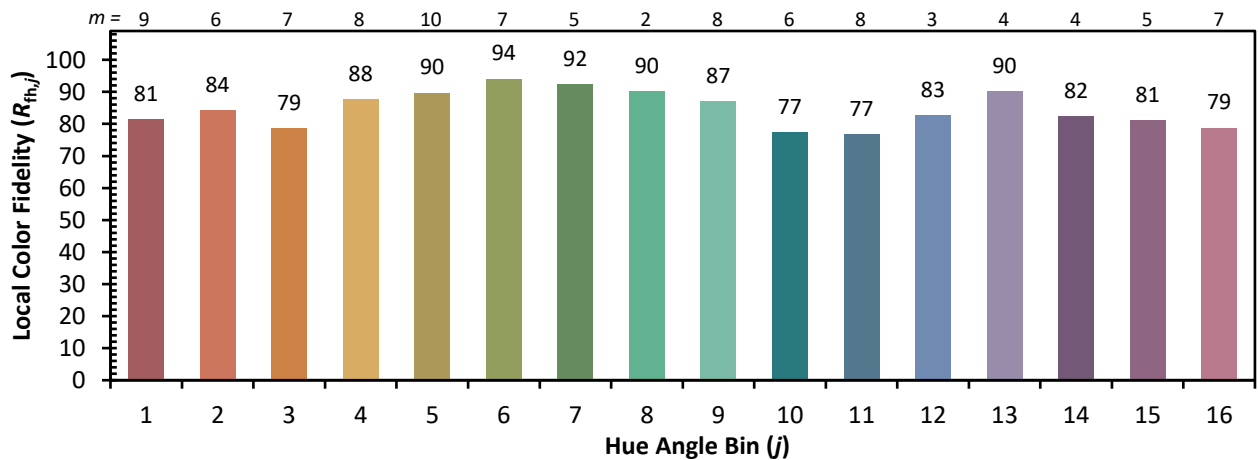
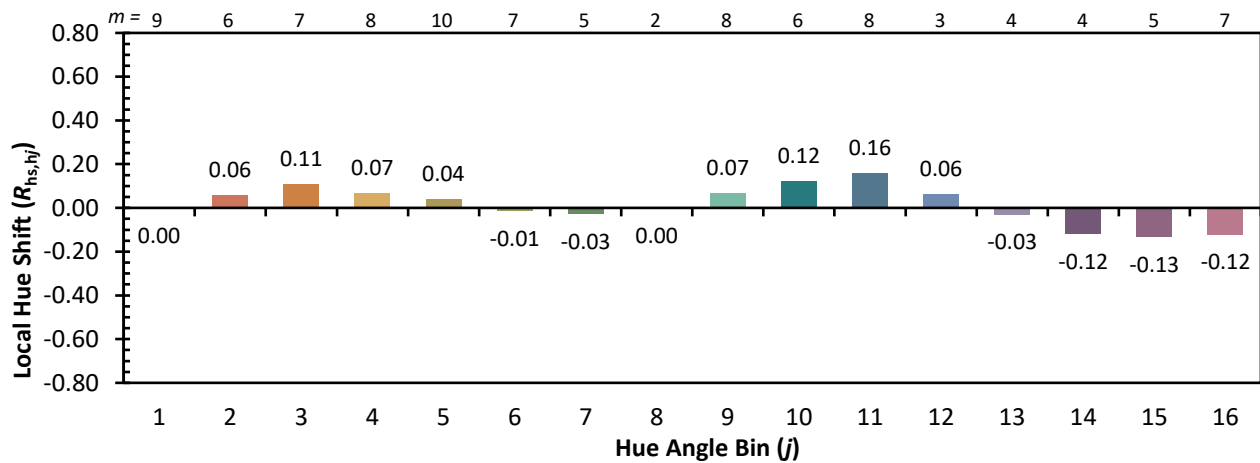
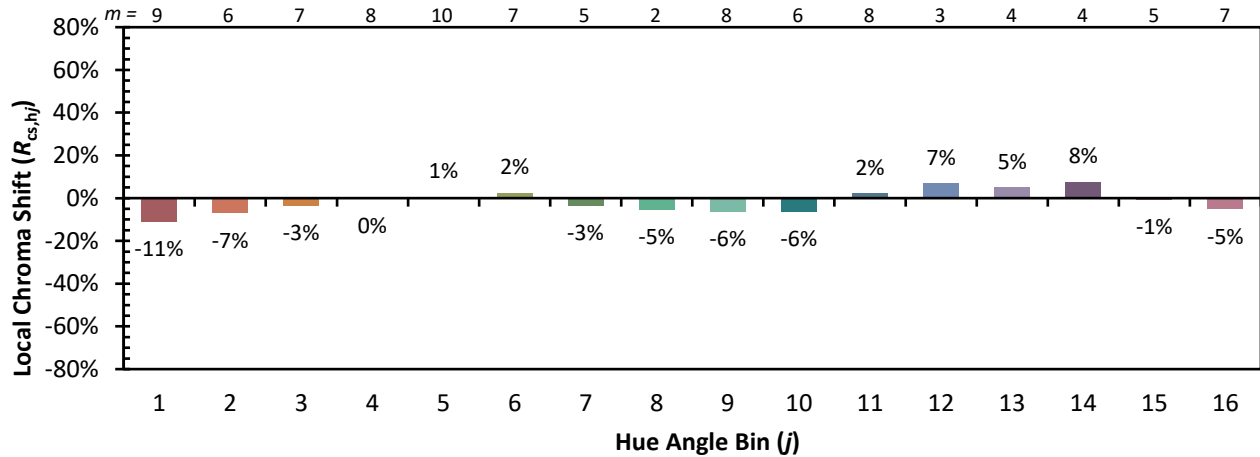


Individual Sample Fidelity Index ($R_{f,i}$)

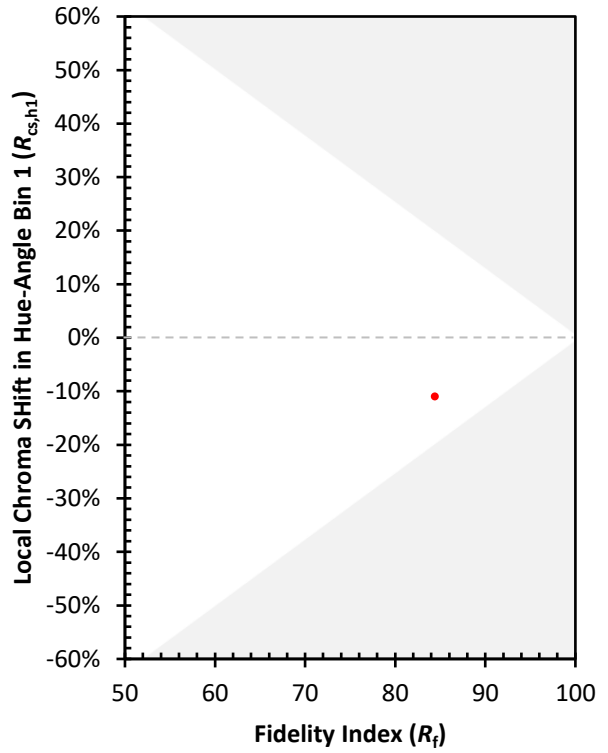
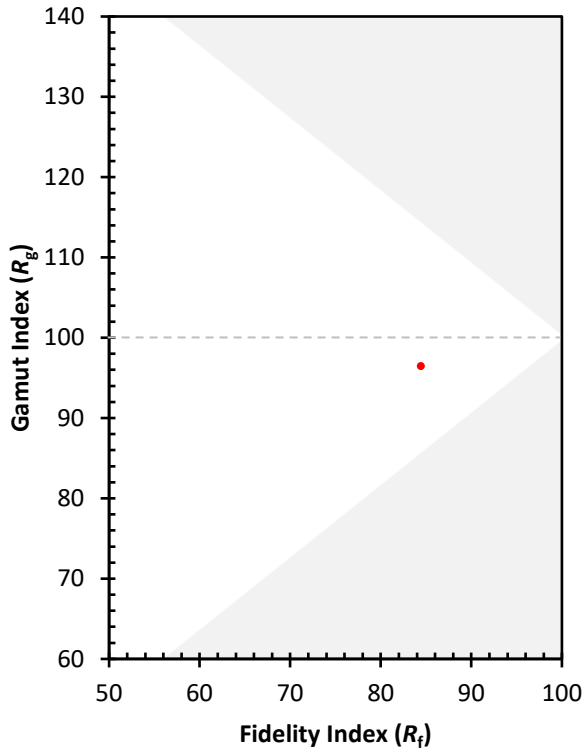
CES01 = 86	CES26 = 83	CES51 = 94	CES76 = 75
CES02 = 62	CES27 = 92	CES52 = 95	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 90	CES78 = 74
CES04 = 70	CES29 = 88	CES54 = 90	CES79 = 92
CES05 = 48	CES30 = 94	CES55 = 88	CES80 = 89
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 81
CES07 = 41	CES32 = 81	CES57 = 86	CES82 = 95
CES08 = 40	CES33 = 95	CES58 = 86	CES83 = 96
CES09 = 29	CES34 = 86	CES59 = 92	CES84 = 91
CES10 = 75	CES35 = 92	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 80	CES61 = 87	CES86 = 76
CES12 = 63	CES37 = 91	CES62 = 82	CES87 = 85
CES13 = 43	CES38 = 88	CES63 = 84	CES88 = 91
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 78
CES15 = 71	CES40 = 96	CES65 = 77	CES90 = 92
CES16 = 47	CES41 = 98	CES66 = 74	CES91 = 69
CES17 = 49	CES42 = 91	CES67 = 73	CES92 = 66
CES18 = 56	CES43 = 89	CES68 = 78	CES93 = 79
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 65
CES20 = 65	CES45 = 94	CES70 = 74	CES95 = 74
CES21 = 86	CES46 = 92	CES71 = 67	CES96 = 85
CES22 = 78	CES47 = 97	CES72 = 89	CES97 = 91
CES23 = 91	CES48 = 87	CES73 = 68	CES98 = 87
CES24 = 90	CES49 = 91	CES74 = 91	CES99 = 80
CES25 = 71	CES50 = 95	CES75 = 70	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)