

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: P1449889

Luminaire Tested: **TWC60_T2_24W_5000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449889
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: TWC60_T2_24W_5000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T2 distribution, 24W
5000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4132 lumens
Efficiency: N/A
Efficacy: 164.6 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

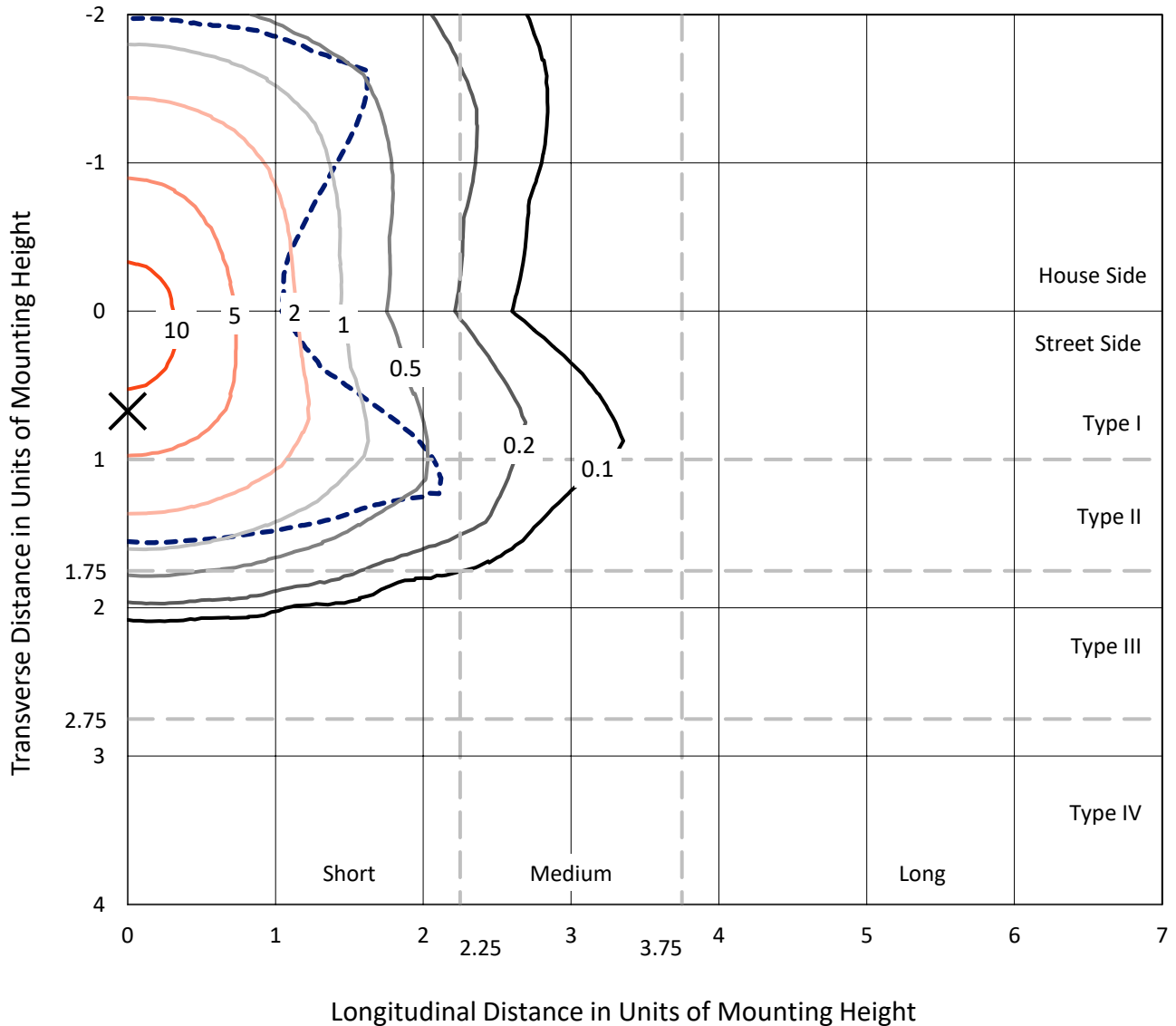
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

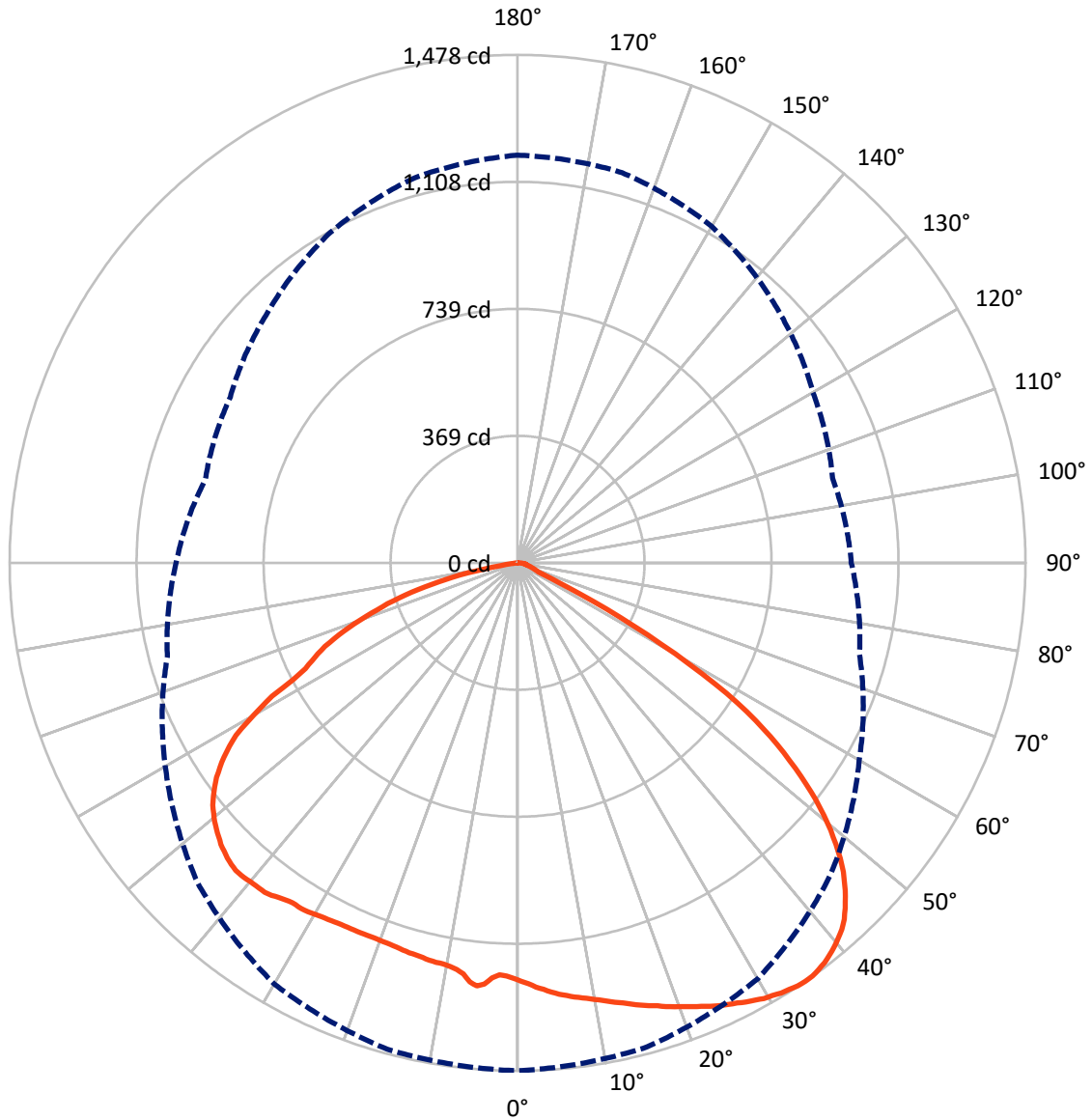
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 34-Deg Vertical

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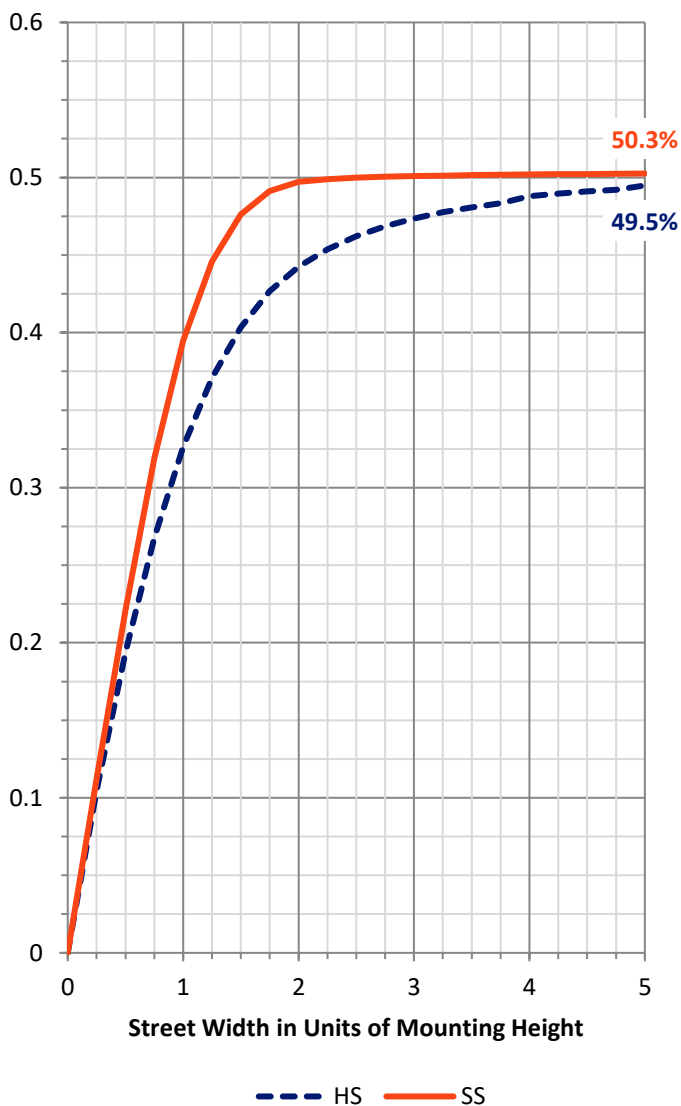
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2055.9	0.0	2055.9
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	2076.1	0.0	2076.1
	% Fixture	50.2	0.0	50.2
Total	Lumens	4132.0	0.0	4132.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	2.8
10°-20°	345.0	8.4
20°-30°	553.6	13.4
30°-40°	724.5	17.5
40°-50°	825.5	20.0
50°-60°	786.1	19.0
60°-70°	510.3	12.3
70°-80°	226.2	5.5
80°-90°	43.9	1.1
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°	4132.0	100.0
0°-180°	4132.0	100.0

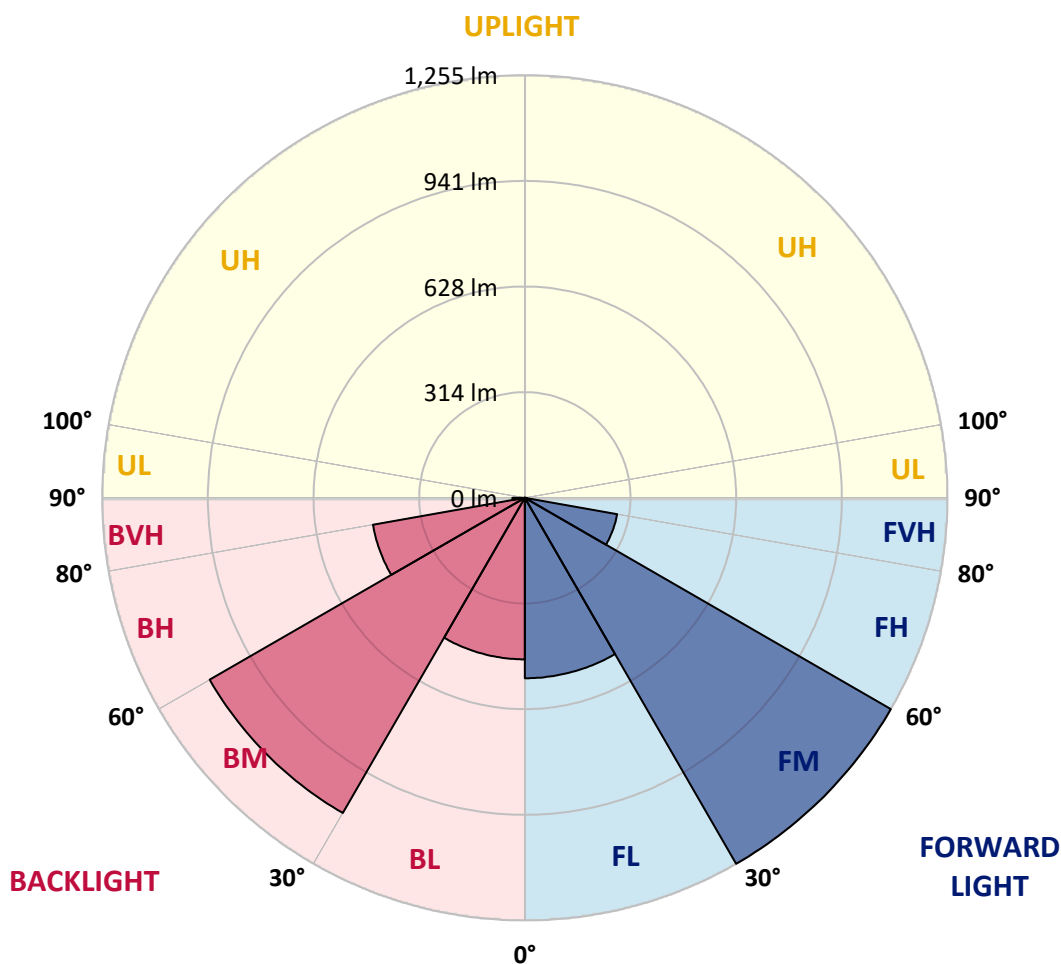


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	535.9	13.0			
FM (30°-60°)	1255.2	30.4			
FH (60°-80°)	278.4	6.7			G0/660
FVH (80°-90°)	6.7	0.2			G0/10
BL (0°-30°)	479.8	11.6	B1/500		
BM (30°-60°)	1080.8	26.2	B2/2500		
BH (60°-80°)	458.1	11.1	B1/500		G1/500
BVH (80°-90°)	37.2	0.9			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9
1°	1224.7	1223.9	1224.4	1221.4	1219.1	1218.2	1217.1	1214.8	1212.8	1211.3	1210.1
2°	1235.1	1233.1	1230.9	1227.5	1223.3	1219.3	1216.0	1211.8	1208.4	1206.7	1204.5
3°	1243.3	1242.3	1238.4	1233.0	1227.4	1219.6	1214.6	1208.5	1203.7	1200.4	1198.8
4°	1252.7	1250.0	1245.7	1238.8	1229.4	1219.9	1212.2	1205.0	1199.4	1199.0	1203.8
5°	1260.4	1257.9	1252.0	1243.8	1232.0	1220.4	1210.8	1201.4	1196.3	1204.9	1219.6
6°	1267.1	1264.0	1258.0	1248.1	1234.5	1219.0	1205.6	1195.6	1197.5	1219.1	1233.0
7°	1273.7	1269.5	1261.4	1251.0	1235.5	1218.7	1203.1	1192.1	1204.6	1230.4	1234.8
8°	1279.4	1275.3	1266.8	1253.2	1237.2	1217.8	1199.5	1189.0	1214.0	1231.5	1219.1
9°	1286.3	1281.7	1270.1	1257.1	1236.8	1215.5	1194.9	1186.2	1222.8	1222.0	1200.7
10°	1293.0	1286.7	1275.8	1258.9	1237.9	1212.2	1190.4	1187.7	1222.4	1202.2	1192.3
11°	1300.8	1294.7	1279.3	1260.7	1236.4	1210.4	1186.1	1191.3	1217.2	1188.1	1186.2
12°	1309.1	1302.2	1284.5	1263.8	1236.6	1207.6	1179.1	1194.9	1200.2	1180.9	1181.8
13°	1316.4	1308.9	1290.1	1264.9	1236.2	1203.7	1172.9	1197.4	1183.8	1174.5	1178.7
14°	1325.8	1317.0	1296.0	1267.3	1235.3	1199.7	1167.1	1198.9	1171.0	1169.0	1176.7
15°	1335.3	1326.0	1301.6	1269.9	1233.0	1194.8	1160.4	1194.0	1161.6	1164.5	1171.3
16°	1343.2	1333.6	1309.2	1272.0	1233.2	1191.7	1153.8	1185.3	1154.3	1159.5	1168.0
17°	1351.2	1341.8	1314.3	1276.0	1232.7	1187.6	1147.5	1171.7	1145.9	1154.3	1165.1
18°	1361.1	1348.4	1320.0	1279.1	1231.9	1182.9	1141.9	1153.0	1139.4	1147.9	1162.2
19°	1370.0	1357.2	1326.3	1282.4	1229.9	1177.1	1136.1	1136.0	1132.7	1143.1	1157.5
20°	1378.1	1363.5	1330.7	1284.4	1229.9	1172.9	1131.8	1121.7	1124.5	1137.2	1152.8
21°	1387.4	1371.9	1337.3	1286.1	1226.6	1168.7	1129.4	1110.7	1115.1	1130.8	1150.3
22°	1396.8	1379.0	1340.9	1288.0	1223.5	1163.6	1126.8	1099.9	1105.8	1125.2	1147.5
23°	1406.5	1388.5	1345.7	1288.4	1219.9	1156.3	1124.0	1089.1	1098.0	1119.5	1142.8
24°	1415.8	1396.6	1350.7	1289.6	1216.9	1150.0	1119.8	1079.4	1089.2	1114.2	1140.1
25°	1423.5	1404.1	1356.2	1288.9	1212.4	1139.7	1114.3	1069.7	1080.5	1108.5	1138.9
26°	1430.9	1411.8	1361.3	1288.3	1206.3	1130.0	1105.0	1056.4	1069.9	1101.4	1136.7
27°	1440.1	1418.9	1368.3	1289.3	1201.6	1121.0	1093.8	1045.2	1060.5	1095.7	1133.9
28°	1447.3	1425.3	1371.8	1287.2	1194.8	1109.7	1078.4	1032.0	1051.2	1090.8	1133.2
29°	1456.1	1433.5	1376.9	1287.6	1187.1	1099.0	1062.4	1019.1	1042.8	1084.5	1132.6
30°	1460.7	1440.9	1379.8	1286.4	1180.5	1085.6	1042.3	1005.8	1032.8	1079.1	1130.4
31°	1467.4	1445.7	1385.6	1287.8	1172.7	1072.6	1023.6	992.5	1021.9	1074.3	1130.2
32°	1471.5	1451.5	1388.6	1287.0	1164.0	1059.4	1005.1	977.9	1012.8	1069.2	1129.0
33°	1475.9	1454.5	1393.4	1286.2	1155.8	1044.6	986.9	963.6	1001.6	1064.3	1129.8
34°	1477.5	1457.8	1397.0	1286.1	1147.7	1029.6	970.7	948.7	992.1	1059.7	1129.5
35°	1476.6	1458.5	1400.7	1285.5	1139.7	1015.2	953.2	934.0	980.2	1054.1	1128.4
36°	1471.9	1457.9	1400.6	1283.2	1131.3	998.7	935.4	919.2	970.0	1050.8	1123.3
37°	1466.9	1453.2	1402.9	1283.8	1123.2	982.4	917.2	904.0	959.5	1044.6	1122.9
38°	1458.2	1447.0	1401.3	1284.7	1116.5	967.1	899.0	888.9	949.8	1037.9	1123.3
39°	1447.8	1439.5	1397.5	1284.4	1109.2	950.7	880.1	874.8	939.3	1029.5	1125.7
40°	1436.5	1429.0	1394.2	1285.0	1102.5	933.9	861.2	860.7	929.1	1023.7	1128.4
41°	1423.9	1417.3	1387.3	1285.0	1096.2	918.6	842.3	846.6	918.3	1021.8	1127.3
42°	1406.5	1402.8	1379.1	1284.3	1089.9	902.6	823.7	830.4	906.1	1018.6	1126.9
43°	1384.2	1386.1	1367.9	1283.6	1084.8	887.5	802.9	814.1	891.8	1012.0	1126.7
44°	1360.5	1365.3	1355.1	1282.4	1079.8	873.2	781.6	798.1	881.7	1004.6	1127.5



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	1334.4	1343.1	1341.6	1279.0	1075.3	859.4	760.5	780.7	871.5	997.0	1127.4
46°	1306.5	1317.2	1324.3	1274.7	1071.3	846.3	740.3	763.6	861.4	994.6	1124.7
47°	1272.8	1288.8	1306.9	1267.8	1068.7	832.5	717.8	746.5	850.1	991.1	1118.6
48°	1236.4	1256.8	1283.7	1261.0	1064.8	816.8	696.4	727.9	836.9	986.1	1111.5
49°	1197.4	1220.4	1258.5	1249.4	1062.0	800.3	673.8	707.6	823.8	979.8	1103.4
50°	1154.9	1179.1	1230.9	1237.2	1060.1	782.5	651.8	685.6	813.5	972.8	1094.0
51°	1108.4	1138.0	1199.5	1224.2	1057.8	764.1	629.3	664.2	802.5	963.9	1083.9
52°	1059.2	1090.7	1164.9	1209.6	1056.8	744.9	605.9	646.0	788.9	956.1	1074.2
53°	1006.1	1041.4	1125.2	1190.6	1054.1	722.5	583.6	628.7	774.3	948.8	1063.1
54°	951.1	988.3	1080.2	1168.5	1050.9	703.2	561.5	607.5	759.0	940.1	1051.2
55°	892.8	931.9	1032.4	1142.4	1048.5	683.4	537.4	585.9	742.3	930.3	1038.2
56°	830.3	872.3	981.1	1114.2	1044.3	664.0	513.9	565.9	728.4	918.9	1024.0
57°	759.5	807.7	924.5	1081.7	1037.9	645.4	490.6	546.1	712.3	907.2	1008.4
58°	674.5	737.2	864.8	1042.3	1027.9	626.8	466.3	525.4	697.1	895.3	990.4
59°	578.9	653.6	800.6	998.3	1016.6	608.5	442.2	503.1	680.5	883.4	969.2
60°	479.9	557.4	730.8	947.2	1001.6	590.2	417.2	480.2	663.5	871.3	945.6
61°	386.6	458.2	654.0	890.0	985.4	573.2	393.3	457.3	646.2	859.2	917.2
62°	293.4	365.2	561.6	822.5	965.3	558.4	371.0	435.8	629.9	842.8	874.4
63°	200.2	272.3	465.4	750.1	941.6	545.3	347.0	412.9	614.7	824.8	831.7
64°	129.8	179.4	369.4	674.8	913.2	534.5	323.4	391.6	598.5	804.4	788.1
65°	85.3	112.0	273.4	586.5	880.2	527.1	300.8	370.6	582.0	783.6	714.0
66°	65.7	73.8	177.4	488.4	840.7	523.6	278.4	349.6	564.1	755.6	660.3
67°	59.6	57.9	108.4	387.6	792.1	521.7	257.1	328.7	546.6	710.6	628.7
68°	55.4	52.6	68.6	286.7	732.1	520.8	235.6	308.4	526.0	654.9	602.3
69°	51.3	48.5	53.7	185.9	664.7	519.1	214.9	288.6	505.7	611.7	576.4
70°	47.2	44.5	48.3	108.3	578.8	518.8	194.8	269.7	486.2	584.5	551.5
71°	43.5	41.1	44.4	63.9	465.6	521.5	175.3	250.5	464.2	558.2	528.5
72°	40.4	37.8	40.4	46.4	344.7	522.0	157.6	231.8	429.1	529.2	504.3
73°	37.4	34.4	36.5	41.1	223.7	509.7	140.1	212.4	396.1	499.2	478.8
74°	34.4	31.5	32.5	36.1	102.6	474.2	123.4	193.7	374.2	471.0	450.1
75°	31.3	28.3	28.8	31.1	56.9	428.7	107.6	176.1	355.9	444.2	420.0
76°	28.7	25.4	24.6	27.7	48.0	379.8	91.9	158.6	335.8	418.2	383.8
77°	26.8	23.2	21.4	25.1	39.6	330.9	76.2	142.0	315.8	393.9	342.1
78°	25.5	21.3	18.7	22.1	31.1	282.0	63.1	122.1	297.3	370.5	304.3
79°	24.5	20.1	16.8	18.3	28.2	215.2	51.3	106.5	277.7	348.1	269.4
80°	23.1	19.1	15.3	14.9	28.2	162.6	40.7	90.9	258.5	319.1	242.3
81°	21.6	17.8	14.1	12.7	26.2	113.7	31.8	75.3	240.2	288.6	214.5
82°	19.7	16.4	13.0	11.1	22.4	74.0	24.1	63.2	220.3	257.6	152.9
83°	16.3	14.3	11.9	9.6	18.6	43.6	17.5	51.8	200.5	233.9	91.3
84°	12.9	11.7	10.1	8.4	12.8	32.5	13.4	40.6	173.3	212.5	30.8
85°	9.2	8.7	7.6	7.1	7.5	21.6	9.3	30.7	139.5	169.8	17.7
86°	6.5	6.5	5.5	5.3	4.8	10.6	5.2	21.4	111.7	127.1	4.9
87°	4.4	4.5	3.8	3.6	3.3	5.8	3.0	14.5	83.8	84.3	2.4
88°	2.4	2.4	2.0	2.0	1.7	3.9	1.4	7.6	55.9	41.6	0.8
89°	0.3	0.3	0.3	0.3	0.4	2.0	0.4	0.8	28.0	0.3	0.2



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
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: P1449889
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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
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: P1449889
CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
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: P1449889

CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9	1216.9
1°	1209.0	1208.9	1209.8	1209.0	1210.8	1212.2	1213.8	1217.3	1219.2	1220.5	1222.1
2°	1201.7	1202.4	1202.0	1202.8	1207.0	1209.0	1212.0	1216.3	1221.3	1224.1	1228.1
3°	1198.3	1199.7	1197.7	1198.0	1199.7	1205.0	1208.3	1214.6	1221.0	1227.5	1234.9
4°	1209.6	1209.3	1205.5	1199.2	1195.4	1199.7	1205.1	1213.8	1223.6	1231.2	1240.3
5°	1227.8	1228.7	1223.0	1212.8	1197.5	1194.6	1201.7	1211.2	1223.0	1235.2	1245.6
6°	1236.4	1236.6	1236.3	1225.9	1207.4	1191.7	1197.5	1208.3	1222.8	1238.0	1249.7
7°	1229.4	1227.1	1230.7	1232.0	1219.5	1192.8	1193.1	1206.1	1223.0	1240.0	1254.0
8°	1207.9	1205.6	1209.7	1224.0	1226.6	1197.5	1188.1	1203.3	1223.3	1241.5	1257.0
9°	1196.1	1196.1	1196.2	1203.0	1224.6	1206.1	1182.1	1198.4	1220.6	1242.0	1260.1
10°	1190.9	1190.5	1190.2	1189.9	1209.8	1212.0	1178.4	1194.8	1219.6	1243.3	1263.6
11°	1186.4	1186.9	1185.6	1183.7	1192.4	1212.9	1174.9	1190.4	1216.2	1242.7	1265.0
12°	1185.5	1185.8	1182.5	1177.3	1179.9	1207.6	1172.9	1184.0	1214.6	1242.6	1268.3
13°	1182.9	1184.1	1181.1	1173.7	1172.6	1194.4	1174.2	1178.1	1211.6	1242.5	1271.5
14°	1180.0	1181.0	1176.2	1170.7	1165.1	1177.4	1177.2	1173.3	1209.0	1242.6	1274.5
15°	1177.1	1178.0	1173.4	1166.8	1158.3	1162.6	1176.9	1168.2	1205.2	1243.8	1278.8
16°	1175.0	1177.0	1171.8	1161.1	1153.3	1151.2	1177.9	1159.9	1201.7	1244.8	1282.3
17°	1173.0	1174.7	1169.2	1157.6	1146.3	1143.1	1173.2	1153.6	1197.7	1244.3	1286.7
18°	1169.8	1171.5	1165.0	1152.8	1139.3	1133.7	1165.0	1145.9	1195.7	1244.3	1291.2
19°	1166.5	1170.3	1162.9	1149.4	1131.7	1125.1	1153.4	1139.8	1191.9	1243.6	1295.2
20°	1165.8	1169.4	1159.7	1143.8	1126.8	1116.8	1138.0	1130.8	1187.8	1243.1	1296.2
21°	1164.8	1168.2	1158.0	1139.0	1120.5	1108.7	1120.5	1123.7	1184.8	1243.3	1299.3
22°	1163.6	1167.9	1156.8	1135.1	1113.0	1098.6	1103.3	1116.0	1179.1	1240.7	1301.4
23°	1163.7	1169.1	1155.6	1132.1	1105.6	1086.5	1088.6	1109.5	1173.6	1239.0	1304.0
24°	1162.7	1169.1	1155.1	1126.6	1098.3	1076.4	1075.7	1102.7	1165.9	1235.5	1306.2
25°	1162.1	1169.5	1154.7	1124.3	1092.3	1067.6	1062.9	1098.9	1157.7	1231.7	1307.1
26°	1163.6	1170.3	1153.0	1120.7	1085.4	1056.3	1050.7	1095.2	1150.0	1227.5	1308.6
27°	1163.1	1171.2	1153.4	1118.5	1078.5	1044.7	1037.7	1089.9	1139.7	1224.5	1309.7
28°	1164.1	1173.5	1153.4	1114.9	1070.8	1032.9	1026.4	1084.6	1129.1	1217.9	1310.5
29°	1166.7	1175.7	1153.9	1110.9	1064.5	1023.1	1013.9	1077.1	1118.1	1213.2	1312.1
30°	1167.2	1178.2	1155.8	1108.3	1057.3	1011.2	999.5	1065.2	1105.8	1206.6	1314.6
31°	1172.0	1182.2	1156.5	1107.3	1050.6	1000.6	984.3	1051.8	1092.9	1201.1	1315.7
32°	1173.9	1185.5	1159.7	1104.3	1043.0	988.4	970.4	1035.0	1081.1	1196.1	1314.8
33°	1174.9	1186.4	1160.2	1103.5	1034.3	976.8	954.1	1014.8	1067.8	1189.0	1317.4
34°	1174.8	1185.7	1159.4	1102.3	1028.7	965.0	940.0	993.2	1054.6	1183.0	1316.2
35°	1175.0	1190.0	1158.2	1100.3	1020.4	953.8	924.5	971.2	1040.8	1176.8	1318.0
36°	1179.7	1195.7	1159.2	1096.4	1013.7	941.7	908.3	948.8	1027.0	1173.1	1318.9
37°	1185.7	1203.1	1163.9	1091.1	1007.0	929.7	891.5	929.7	1013.4	1166.3	1320.9
38°	1190.0	1207.7	1168.9	1089.9	999.9	917.0	875.9	909.4	1000.3	1163.0	1320.9
39°	1192.0	1208.4	1172.2	1089.1	991.0	903.7	860.3	890.2	986.7	1158.1	1321.4
40°	1192.9	1209.5	1171.5	1087.3	981.0	891.5	844.6	870.1	972.0	1153.5	1320.3
41°	1194.6	1211.5	1171.1	1085.5	973.3	879.7	825.4	851.4	957.7	1148.3	1321.7
42°	1196.3	1213.8	1175.0	1082.7	966.4	867.9	806.7	831.9	943.4	1145.6	1318.8
43°	1198.1	1213.5	1175.7	1082.5	961.2	856.1	787.0	811.2	929.7	1144.0	1316.5
44°	1195.5	1209.5	1175.5	1082.5	955.5	840.6	768.1	790.5	914.4	1143.1	1311.2



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CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1190.6	1204.2	1171.6	1081.3	945.2	824.0	749.1	769.6	899.1	1142.1	1304.7
46°	1183.4	1196.6	1164.9	1079.5	936.3	807.6	730.1	748.7	885.3	1140.1	1296.0
47°	1175.9	1189.7	1156.8	1075.7	928.3	791.8	711.4	726.5	870.5	1138.0	1285.2
48°	1167.7	1179.3	1149.0	1070.6	921.2	779.5	692.2	705.4	857.0	1136.9	1271.8
49°	1157.8	1169.6	1139.2	1063.8	912.6	764.4	672.7	682.3	843.0	1135.2	1259.0
50°	1147.3	1158.6	1130.4	1056.0	903.2	748.8	652.6	659.4	828.4	1132.8	1243.3
51°	1135.6	1146.0	1120.0	1045.1	892.4	733.7	632.1	637.5	815.2	1130.0	1225.3
52°	1124.1	1132.9	1108.0	1035.9	882.6	718.9	609.8	614.7	801.6	1126.8	1201.8
53°	1108.5	1114.7	1094.8	1024.7	874.9	705.6	587.1	592.1	789.2	1121.4	1176.9
54°	1091.8	1096.1	1081.1	1013.7	867.2	689.8	564.5	568.5	778.4	1113.3	1147.2
55°	1072.7	1075.2	1063.0	1001.4	859.6	673.1	544.2	544.6	768.1	1103.7	1114.4
56°	1051.0	1050.6	1043.4	989.3	849.3	653.7	522.7	520.4	760.2	1089.3	1077.9
57°	1026.1	1024.5	1020.4	974.2	838.0	635.1	499.9	496.0	754.9	1075.3	1034.2
58°	998.3	993.4	994.7	960.3	827.4	615.7	477.1	471.7	748.3	1058.1	987.3
59°	968.4	961.2	966.9	943.1	817.3	597.6	455.0	447.9	743.0	1037.9	932.6
60°	935.5	911.5	936.4	925.3	803.8	579.1	433.2	424.6	736.3	1015.2	872.9
61°	876.1	861.9	884.3	903.3	789.8	561.3	411.4	401.5	729.9	987.4	807.7
62°	816.8	812.0	832.2	874.4	775.1	542.3	388.9	378.3	727.2	956.6	736.1
63°	757.5	734.7	779.9	845.6	756.9	522.3	365.4	354.5	724.2	917.6	658.1
64°	697.0	689.2	708.6	816.2	739.1	504.0	342.0	330.6	722.8	874.0	572.0
65°	664.7	662.7	666.2	759.2	718.7	484.9	318.7	308.2	719.7	821.9	474.7
66°	640.3	638.0	638.0	690.2	698.0	465.1	296.2	286.3	717.9	760.6	376.5
67°	615.9	610.5	615.2	641.9	673.9	445.3	274.2	264.3	716.6	691.0	278.3
68°	587.5	578.5	591.1	610.1	644.1	425.0	252.5	240.9	708.5	605.2	180.1
69°	556.6	542.8	563.3	579.5	598.9	403.9	231.4	218.2	691.0	505.5	108.2
70°	524.4	507.4	535.4	550.8	558.0	383.7	211.0	196.3	660.4	390.2	66.1
71°	487.9	467.2	503.1	524.1	533.3	363.3	192.2	174.6	615.9	274.5	49.2
72°	450.8	430.8	469.3	501.7	512.4	343.6	174.7	154.5	574.3	158.8	43.8
73°	415.3	396.8	433.1	480.6	487.7	322.2	156.6	135.3	540.5	86.8	39.6
74°	378.0	358.9	395.7	459.1	463.6	291.2	140.2	118.3	486.4	51.5	35.4
75°	341.2	320.4	358.0	436.6	439.1	265.8	124.4	101.6	424.0	44.0	31.2
76°	301.7	276.9	321.6	411.8	414.8	247.1	110.6	86.5	337.2	36.9	26.7
77°	261.5	235.4	283.9	380.4	389.6	229.1	96.9	73.9	249.5	29.8	22.9
78°	224.9	195.5	250.0	342.3	362.6	210.3	83.2	63.4	161.9	27.2	19.4
79°	185.4	147.1	214.7	301.4	336.6	192.7	71.7	54.5	90.5	26.0	16.1
80°	133.9	98.8	176.6	264.0	308.9	176.1	58.8	45.4	48.9	23.7	13.7
81°	82.4	50.8	116.2	237.7	278.8	159.2	47.8	37.0	39.7	19.4	12.2
82°	32.0	16.6	56.1	216.9	250.6	142.4	38.9	28.6	31.0	15.3	10.8
83°	23.4	13.1	39.6	152.3	219.2	125.1	30.5	20.2	22.2	11.1	9.7
84°	14.8	9.6	23.0	87.7	195.1	106.1	23.3	14.5	21.5	7.8	8.5
85°	6.3	6.1	6.6	23.2	172.3	87.1	17.0	10.1	18.7	6.0	7.1
86°	3.9	3.6	4.2	12.9	107.8	68.1	12.3	6.5	13.8	4.8	4.9
87°	1.9	1.8	1.9	2.5	44.1	50.8	7.6	4.4	8.2	3.2	3.0
88°	0.7	0.7	0.7	0.7	21.8	33.8	2.9	2.4	5.4	1.6	1.2
89°	0.1	0.1	0.2	0.2	0.3	16.8	0.4	0.3	2.8	0.3	0.3



REPORT NUMBER: P1449889
 CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
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: P1449889
 CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
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: P1449889
CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
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: P1449889
 CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1216.9	1216.9	1216.9
1°	1224.0	1224.9	1224.7
2°	1231.7	1232.9	1235.1
3°	1238.3	1241.8	1243.3
4°	1246.6	1250.1	1252.7
5°	1253.0	1257.6	1260.4
6°	1258.6	1264.7	1267.1
7°	1264.0	1272.2	1273.7
8°	1269.5	1278.2	1279.4
9°	1274.2	1283.1	1286.3
10°	1278.5	1288.6	1293.0
11°	1283.7	1296.3	1300.8
12°	1289.2	1305.0	1309.1
13°	1296.3	1312.5	1316.4
14°	1302.5	1322.0	1325.8
15°	1309.7	1329.1	1335.3
16°	1316.4	1337.7	1343.2
17°	1322.0	1344.1	1351.2
18°	1328.2	1353.4	1361.1
19°	1334.6	1361.6	1370.0
20°	1341.1	1369.4	1378.1
21°	1348.0	1376.9	1387.4
22°	1353.2	1387.0	1396.8
23°	1358.2	1395.5	1406.5
24°	1365.8	1403.9	1415.8
25°	1371.1	1413.6	1423.5
26°	1377.9	1420.5	1430.9
27°	1384.1	1426.5	1440.1
28°	1389.4	1435.1	1447.3
29°	1392.8	1443.3	1456.1
30°	1400.1	1449.6	1460.7
31°	1404.9	1455.0	1467.4
32°	1409.3	1459.7	1471.5
33°	1413.6	1463.0	1475.9
34°	1414.7	1464.6	1477.5
35°	1418.7	1464.9	1476.6
36°	1420.2	1463.0	1471.9
37°	1418.2	1458.7	1466.9
38°	1417.0	1452.6	1458.2
39°	1412.7	1442.2	1447.8
40°	1406.0	1430.9	1436.5
41°	1396.4	1419.4	1423.9
42°	1386.3	1402.9	1406.5
43°	1373.5	1386.1	1384.2
44°	1359.1	1364.4	1360.5



REPORT NUMBER: P1449889
 CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	1342.7	1338.5	1334.4
46°	1323.3	1311.2	1306.5
47°	1299.1	1281.6	1272.8
48°	1274.2	1247.0	1236.4
49°	1244.2	1207.6	1197.4
50°	1211.6	1167.1	1154.9
51°	1175.4	1124.3	1108.4
52°	1135.4	1076.1	1059.2
53°	1093.9	1024.1	1006.1
54°	1045.6	970.6	951.1
55°	993.9	913.5	892.8
56°	938.5	851.0	830.3
57°	879.5	785.3	759.5
58°	815.5	708.7	674.5
59°	748.5	618.4	578.9
60°	671.2	520.7	479.9
61°	583.9	418.1	386.6
62°	484.7	324.5	293.4
63°	389.0	231.0	200.2
64°	293.4	153.3	129.8
65°	197.7	96.5	85.3
66°	124.7	68.1	65.7
67°	77.2	57.9	59.6
68°	56.8	53.4	55.4
69°	50.1	49.4	51.3
70°	45.9	45.5	47.2
71°	42.2	42.1	43.5
72°	38.4	38.7	40.4
73°	34.6	35.3	37.4
74°	31.7	32.4	34.4
75°	28.2	29.3	31.3
76°	24.4	26.5	28.7
77°	21.2	24.3	26.8
78°	19.0	22.7	25.5
79°	17.2	21.6	24.5
80°	15.9	20.5	23.1
81°	14.8	19.1	21.6
82°	13.6	17.5	19.7
83°	12.3	15.0	16.3
84°	9.9	12.2	12.9
85°	7.8	9.0	9.2
86°	5.0	6.5	6.5
87°	3.5	4.4	4.4
88°	1.9	2.4	2.4
89°	0.3	0.3	0.3



REPORT NUMBER: P1449889
CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0



REPORT NUMBER: P1449889
CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



REPORT NUMBER: P1449889
CATALOG NUMBER: TWC60_T2_24W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	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: SP1-2601-659-3

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-5000K

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

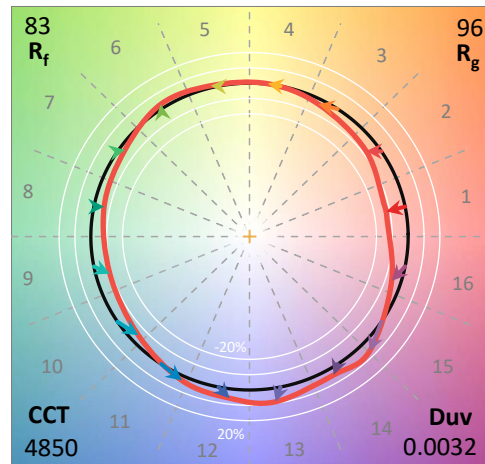
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-3
 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-5000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 5000K

Spectral Parameters

CCT (K): 4850
 CIE u': 0.2108
 CIE v': 0.4905
 Duv: 0.0032
 CIE x: 0.3503
 CIE y: 0.3623
 CIE z: 0.2875
 Peak Wavelength (nm): 452
 Dominant Wavelength (nm): 571
 Purity: 13.81051
 R_f: 83.1
 R_g: 95.8

CRI (Ra):	82.6		
R1:	80.9	R9:	8.5
R2:	87.6	R10:	69.7
R3:	92.0	R11:	80.6
R4:	81.9	R12:	52.2
R5:	80.4	R13:	82.7
R6:	82.0	R14:	95.7
R7:	88.2	R15:	74.9
R8:	67.7		



Test Conditions

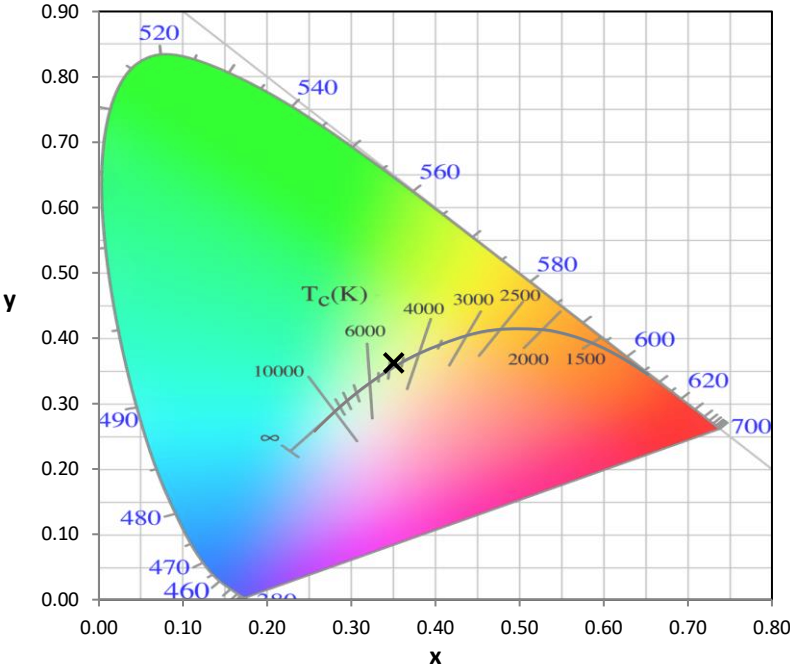
Stabilization Time: 25M
 Operation Time: 1H 25M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-3

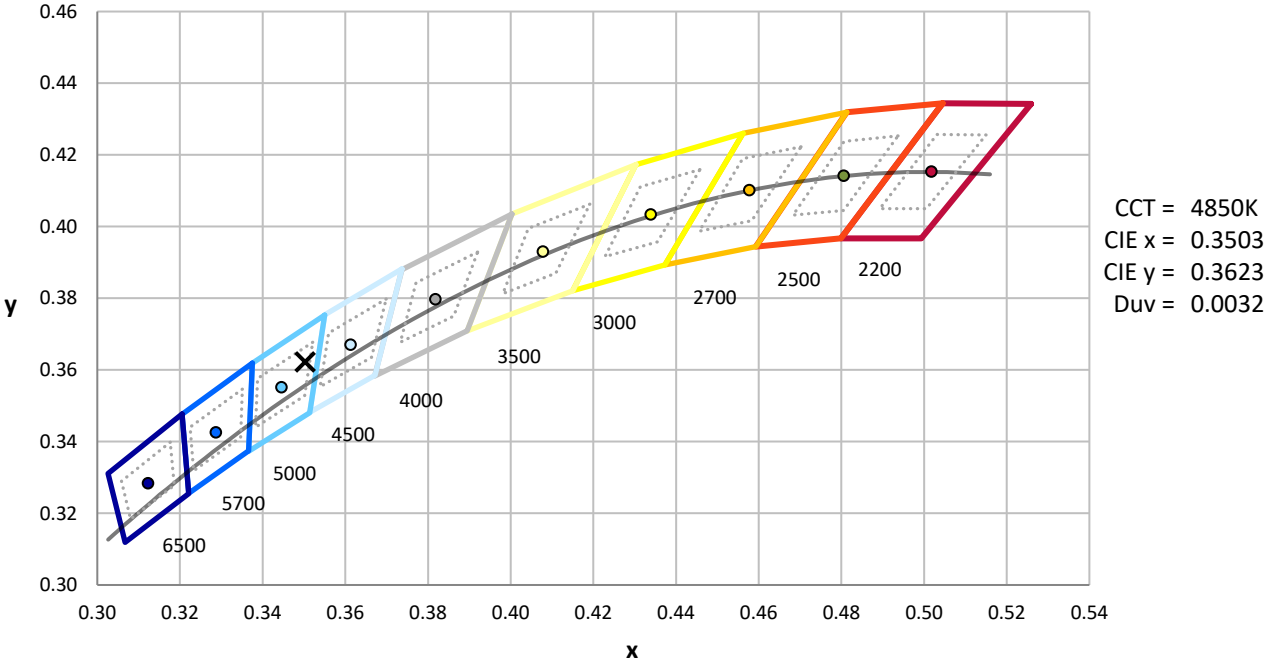
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2601-659-3

CIE 1931 Chromaticity Diagram



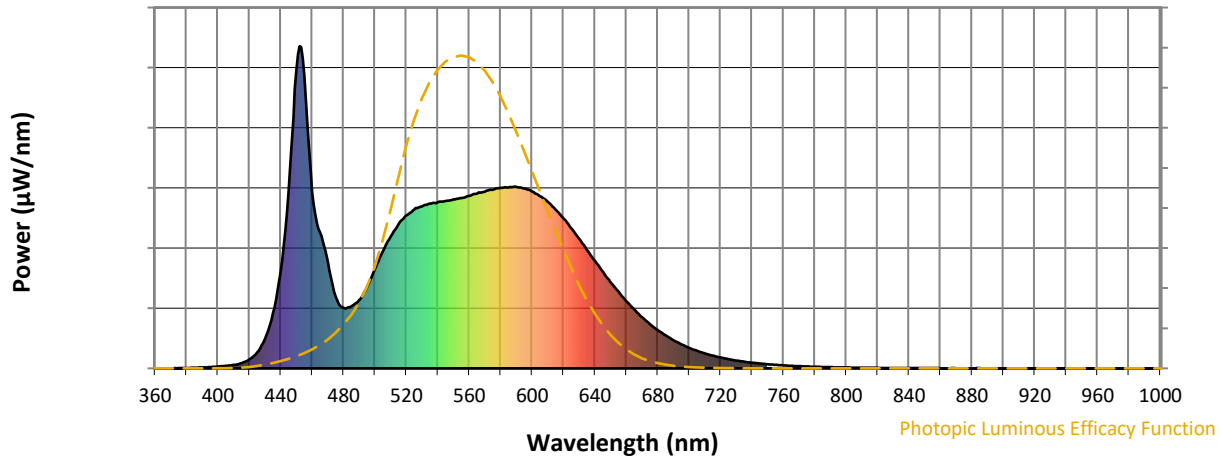
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2601-659-3

Photopic Flux vs. Wavelength

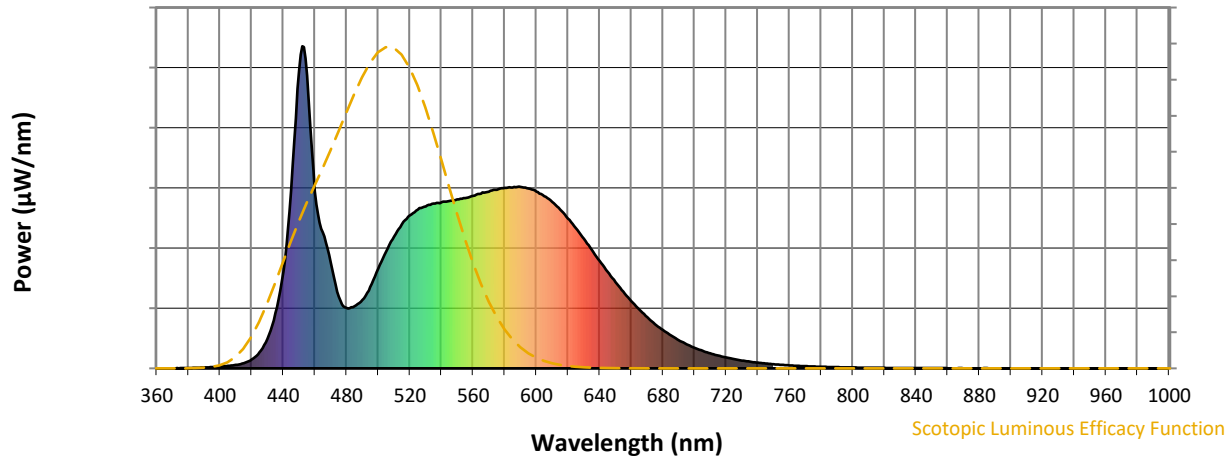


Photopic Lumens: NR

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	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	NR	630	403	NR	760	9	NR	890	0	NR
375	1	NR	505	363	NR	635	368	NR	765	8	NR	895	0	NR
380	1	NR	510	409	NR	640	334	NR	770	7	NR	900	0	NR
385	2	NR	515	448	NR	645	300	NR	775	6	NR	905	0	NR
390	3	NR	520	475	NR	650	268	NR	780	5	NR	910	0	NR
395	4	NR	525	493	NR	655	238	NR	785	4	NR	915	0	NR
400	6	NR	530	503	NR	660	209	NR	790	4	NR	920	0	NR
405	8	NR	535	512	NR	665	183	NR	795	3	NR	925	0	NR
410	11	NR	540	515	NR	670	159	NR	800	3	NR	930	0	NR
415	16	NR	545	520	NR	675	138	NR	805	2	NR	935	0	NR
420	28	NR	550	524	NR	680	119	NR	810	2	NR	940	0	NR
425	50	NR	555	528	NR	685	102	NR	815	2	NR	945	0	NR
430	92	NR	560	535	NR	690	88	NR	820	2	NR	950	0	NR
435	171	NR	565	542	NR	695	75	NR	825	1	NR	955	0	NR
440	300	NR	570	548	NR	700	64	NR	830	1	NR	960	0	NR
445	553	NR	575	555	NR	705	55	NR	835	1	NR	965	0	NR
450	925	NR	580	560	NR	710	46	NR	840	1	NR	970	0	NR
455	909	NR	585	562	NR	715	40	NR	845	1	NR	975	0	NR
460	550	NR	590	563	NR	720	34	NR	850	1	NR	980	0	NR
465	422	NR	595	558	NR	725	29	NR	855	1	NR	985	0	NR
470	328	NR	600	548	NR	730	24	NR	860	1	NR	990	0	NR
475	223	NR	605	534	NR	735	21	NR	865	0	NR	995	0	NR
480	188	NR	610	516	NR	740	18	NR	870	0	NR	1000	0	NR
485	193	NR	615	492	NR	745	15	NR	875	0	NR			

REPORT NUMBER: SP1-2601-659-3

Scotopic Flux vs. Wavelength



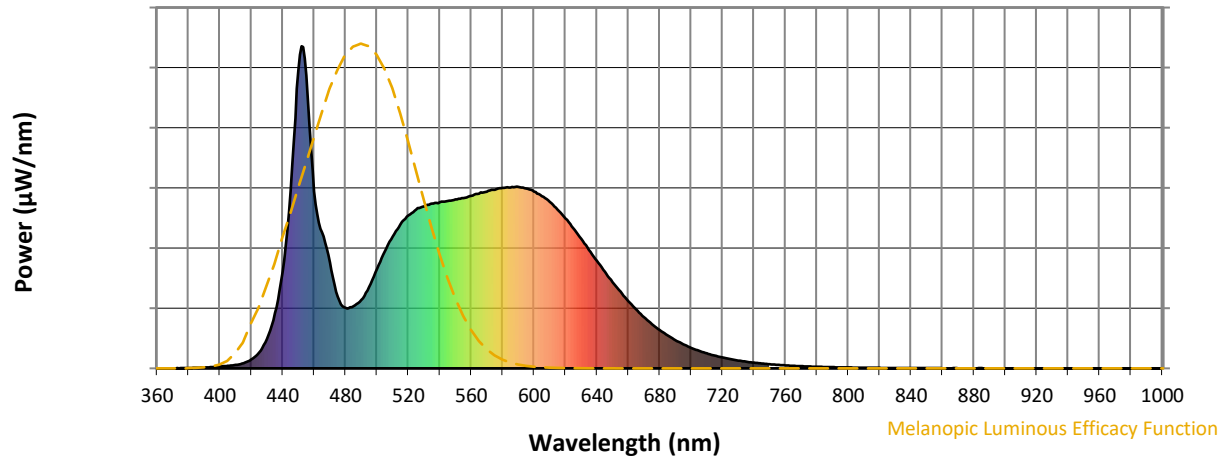
Scotopic Lumens: NR

S/P: 1.9

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	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	NR	630	403	NR	760	9	NR	890	0	NR
375	1	NR	505	363	NR	635	368	NR	765	8	NR	895	0	NR
380	1	NR	510	409	NR	640	334	NR	770	7	NR	900	0	NR
385	2	NR	515	448	NR	645	300	NR	775	6	NR	905	0	NR
390	3	NR	520	475	NR	650	268	NR	780	5	NR	910	0	NR
395	4	NR	525	493	NR	655	238	NR	785	4	NR	915	0	NR
400	6	NR	530	503	NR	660	209	NR	790	4	NR	920	0	NR
405	8	NR	535	512	NR	665	183	NR	795	3	NR	925	0	NR
410	11	NR	540	515	NR	670	159	NR	800	3	NR	930	0	NR
415	16	NR	545	520	NR	675	138	NR	805	2	NR	935	0	NR
420	28	NR	550	524	NR	680	119	NR	810	2	NR	940	0	NR
425	50	NR	555	528	NR	685	102	NR	815	2	NR	945	0	NR
430	92	NR	560	535	NR	690	88	NR	820	2	NR	950	0	NR
435	171	NR	565	542	NR	695	75	NR	825	1	NR	955	0	NR
440	300	NR	570	548	NR	700	64	NR	830	1	NR	960	0	NR
445	553	NR	575	555	NR	705	55	NR	835	1	NR	965	0	NR
450	925	NR	580	560	NR	710	46	NR	840	1	NR	970	0	NR
455	909	NR	585	562	NR	715	40	NR	845	1	NR	975	0	NR
460	550	NR	590	563	NR	720	34	NR	850	1	NR	980	0	NR
465	422	NR	595	558	NR	725	29	NR	855	1	NR	985	0	NR
470	328	NR	600	548	NR	730	24	NR	860	1	NR	990	0	NR
475	223	NR	605	534	NR	735	21	NR	865	0	NR	995	0	NR
480	188	NR	610	516	NR	740	18	NR	870	0	NR	1000	0	NR
485	193	NR	615	492	NR	745	15	NR	875	0	NR			

REPORT NUMBER: SP1-2601-659-3

Melanopic Flux vs. Wavelength



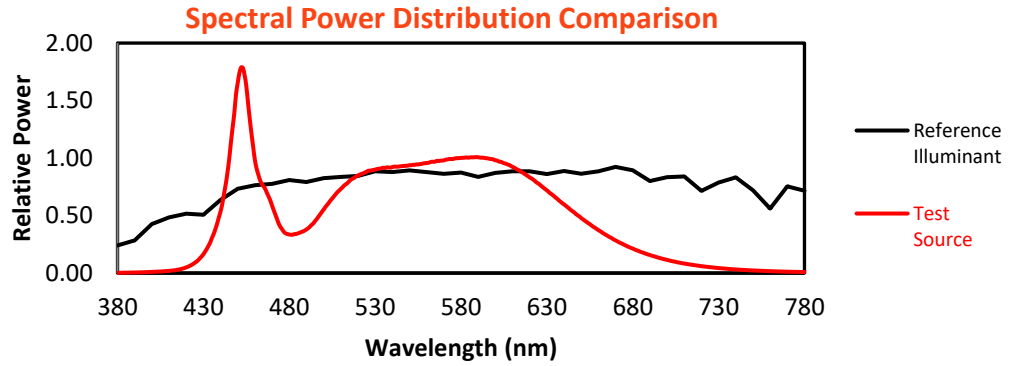
Melanopic Lumens: NR

M/P: 4

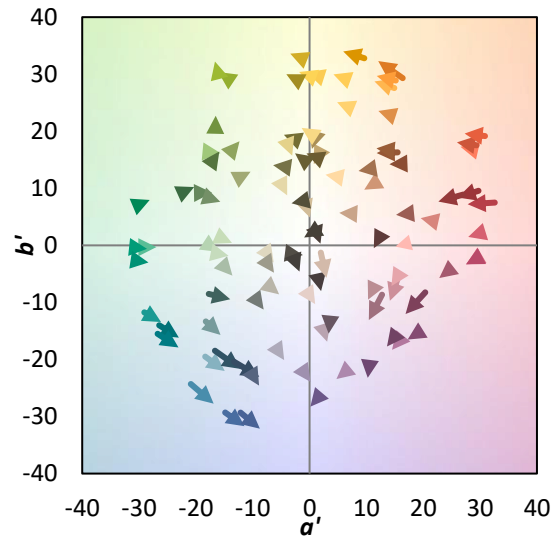
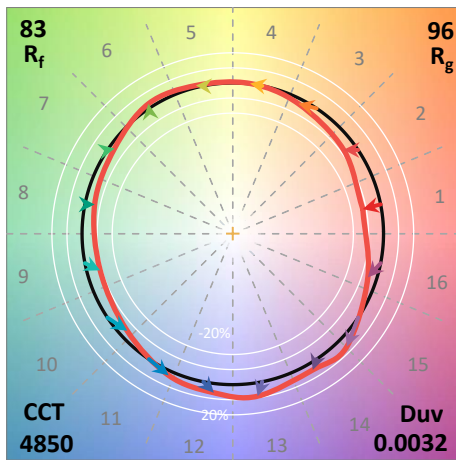
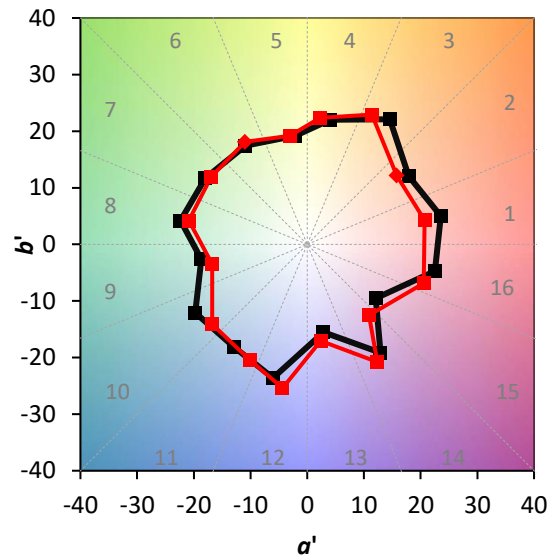
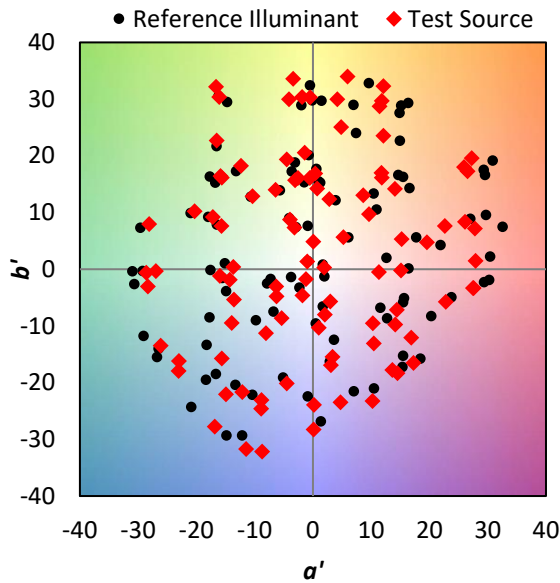
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	NR	630	403	NR	760	9	NR	890	0	NR
375	1	NR	505	363	NR	635	368	NR	765	8	NR	895	0	NR
380	1	NR	510	409	NR	640	334	NR	770	7	NR	900	0	NR
385	2	NR	515	448	NR	645	300	NR	775	6	NR	905	0	NR
390	3	NR	520	475	NR	650	268	NR	780	5	NR	910	0	NR
395	4	NR	525	493	NR	655	238	NR	785	4	NR	915	0	NR
400	6	NR	530	503	NR	660	209	NR	790	4	NR	920	0	NR
405	8	NR	535	512	NR	665	183	NR	795	3	NR	925	0	NR
410	11	NR	540	515	NR	670	159	NR	800	3	NR	930	0	NR
415	16	NR	545	520	NR	675	138	NR	805	2	NR	935	0	NR
420	28	NR	550	524	NR	680	119	NR	810	2	NR	940	0	NR
425	50	NR	555	528	NR	685	102	NR	815	2	NR	945	0	NR
430	92	NR	560	535	NR	690	88	NR	820	2	NR	950	0	NR
435	171	NR	565	542	NR	695	75	NR	825	1	NR	955	0	NR
440	300	NR	570	548	NR	700	64	NR	830	1	NR	960	0	NR
445	553	NR	575	555	NR	705	55	NR	835	1	NR	965	0	NR
450	925	NR	580	560	NR	710	46	NR	840	1	NR	970	0	NR
455	909	NR	585	562	NR	715	40	NR	845	1	NR	975	0	NR
460	550	NR	590	563	NR	720	34	NR	850	1	NR	980	0	NR
465	422	NR	595	558	NR	725	29	NR	855	1	NR	985	0	NR
470	328	NR	600	548	NR	730	24	NR	860	1	NR	990	0	NR
475	223	NR	605	534	NR	735	21	NR	865	0	NR	995	0	NR
480	188	NR	610	516	NR	740	18	NR	870	0	NR	1000	0	NR
485	193	NR	615	492	NR	745	15	NR	875	0	NR			

Summary

$R_f = 83.1$
 $R_g = 95.8$
 CIE $R_a = 82.6$
 $R_9 = 8.5$

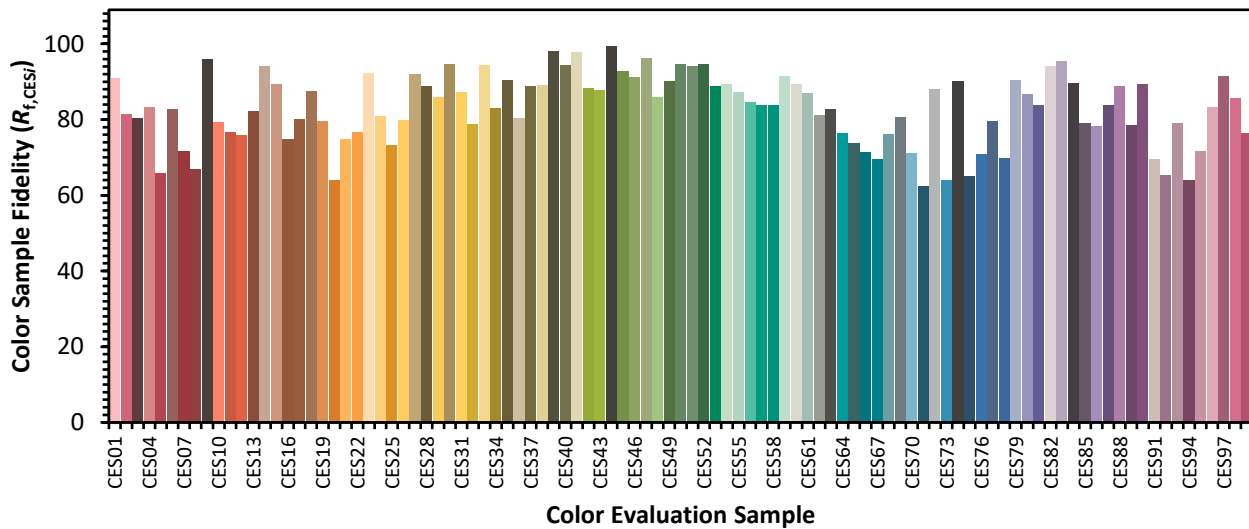


Color Vector Graphics

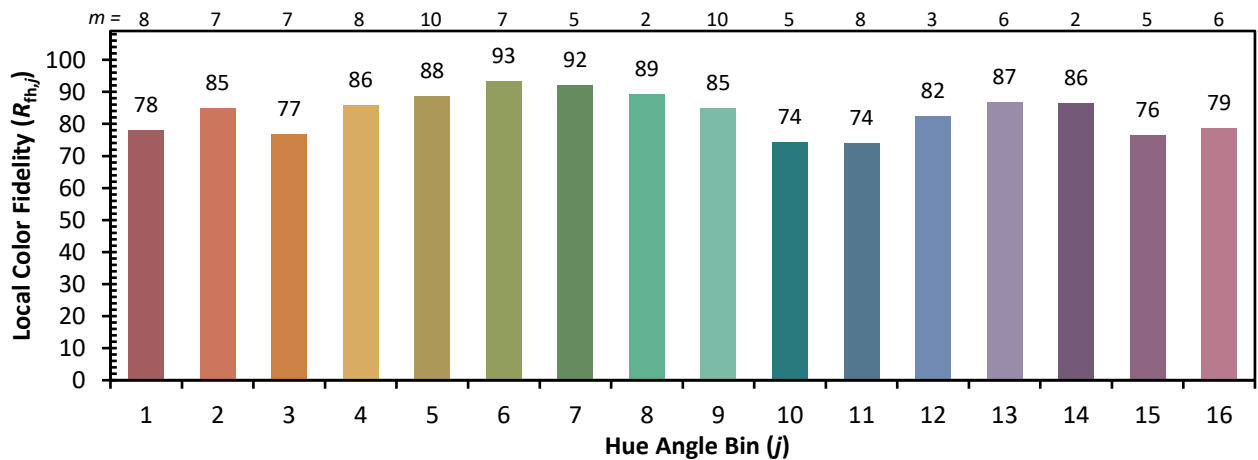
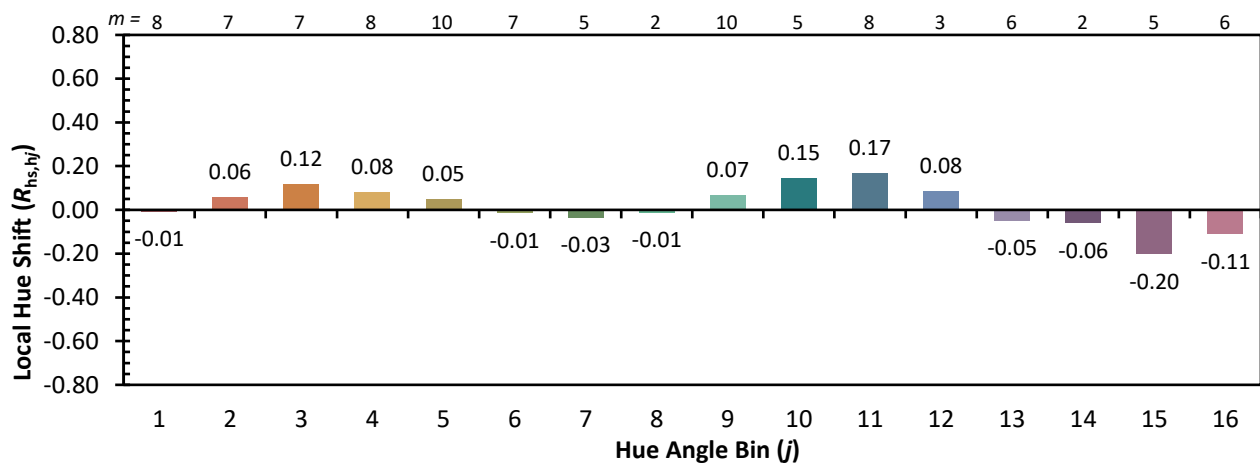
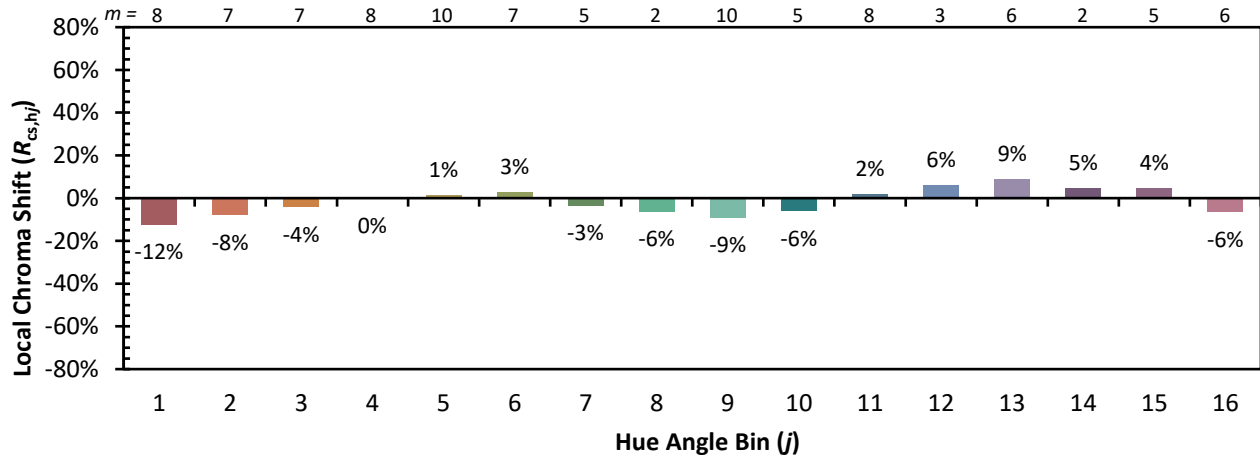


Individual Sample Fidelity Index ($R_{f,i}$)

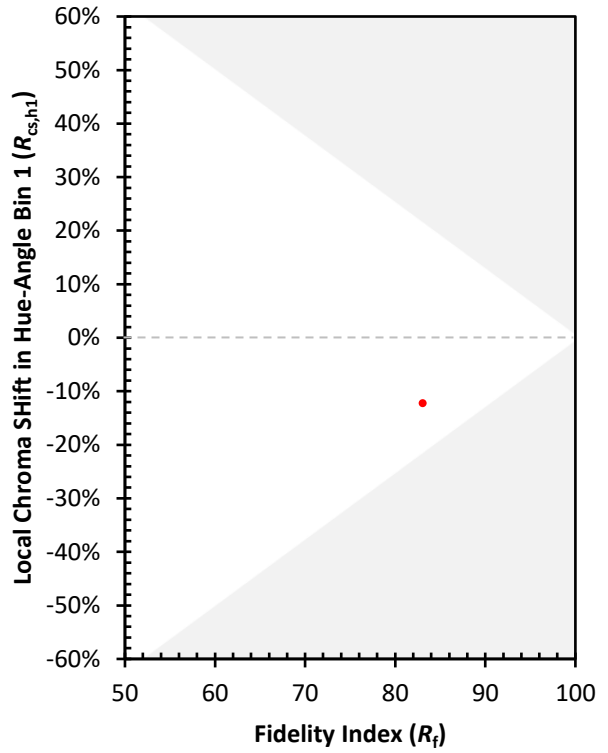
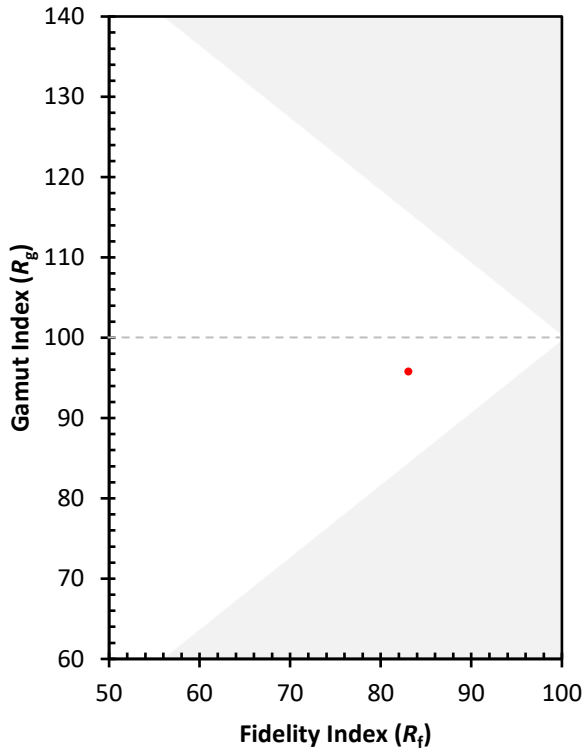
CES01 = 85	CES26 = 80	CES51 = 94	CES76 = 71
CES02 = 60	CES27 = 92	CES52 = 95	CES77 = 80
CES03 = 30	CES28 = 89	CES53 = 89	CES78 = 70
CES04 = 69	CES29 = 86	CES54 = 89	CES79 = 90
CES05 = 47	CES30 = 95	CES55 = 87	CES80 = 87
CES06 = 50	CES31 = 87	CES56 = 85	CES81 = 84
CES07 = 40	CES32 = 79	CES57 = 84	CES82 = 94
CES08 = 39	CES33 = 94	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 83	CES59 = 91	CES84 = 90
CES10 = 73	CES35 = 90	CES60 = 89	CES85 = 79
CES11 = 56	CES36 = 80	CES61 = 87	CES86 = 78
CES12 = 62	CES37 = 89	CES62 = 81	CES87 = 84
CES13 = 42	CES38 = 89	CES63 = 83	CES88 = 89
CES14 = 74	CES39 = 98	CES64 = 77	CES89 = 79
CES15 = 71	CES40 = 94	CES65 = 74	CES90 = 89
CES16 = 46	CES41 = 98	CES66 = 71	CES91 = 70
CES17 = 49	CES42 = 88	CES67 = 70	CES92 = 65
CES18 = 56	CES43 = 88	CES68 = 76	CES93 = 79
CES19 = 71	CES44 = 99	CES69 = 81	CES94 = 64
CES20 = 64	CES45 = 93	CES70 = 71	CES95 = 72
CES21 = 85	CES46 = 91	CES71 = 62	CES96 = 83
CES22 = 77	CES47 = 96	CES72 = 88	CES97 = 91
CES23 = 91	CES48 = 86	CES73 = 64	CES98 = 86
CES24 = 90	CES49 = 90	CES74 = 90	CES99 = 76
CES25 = 71	CES50 = 95	CES75 = 65	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)