

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: P1449899

Luminaire Tested: **TWC60_T3_24W_3000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449899
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_T3_24W_3000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T3 distribution, 24W
3000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4061 lumens
Efficiency: N/A
Efficacy: 168.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

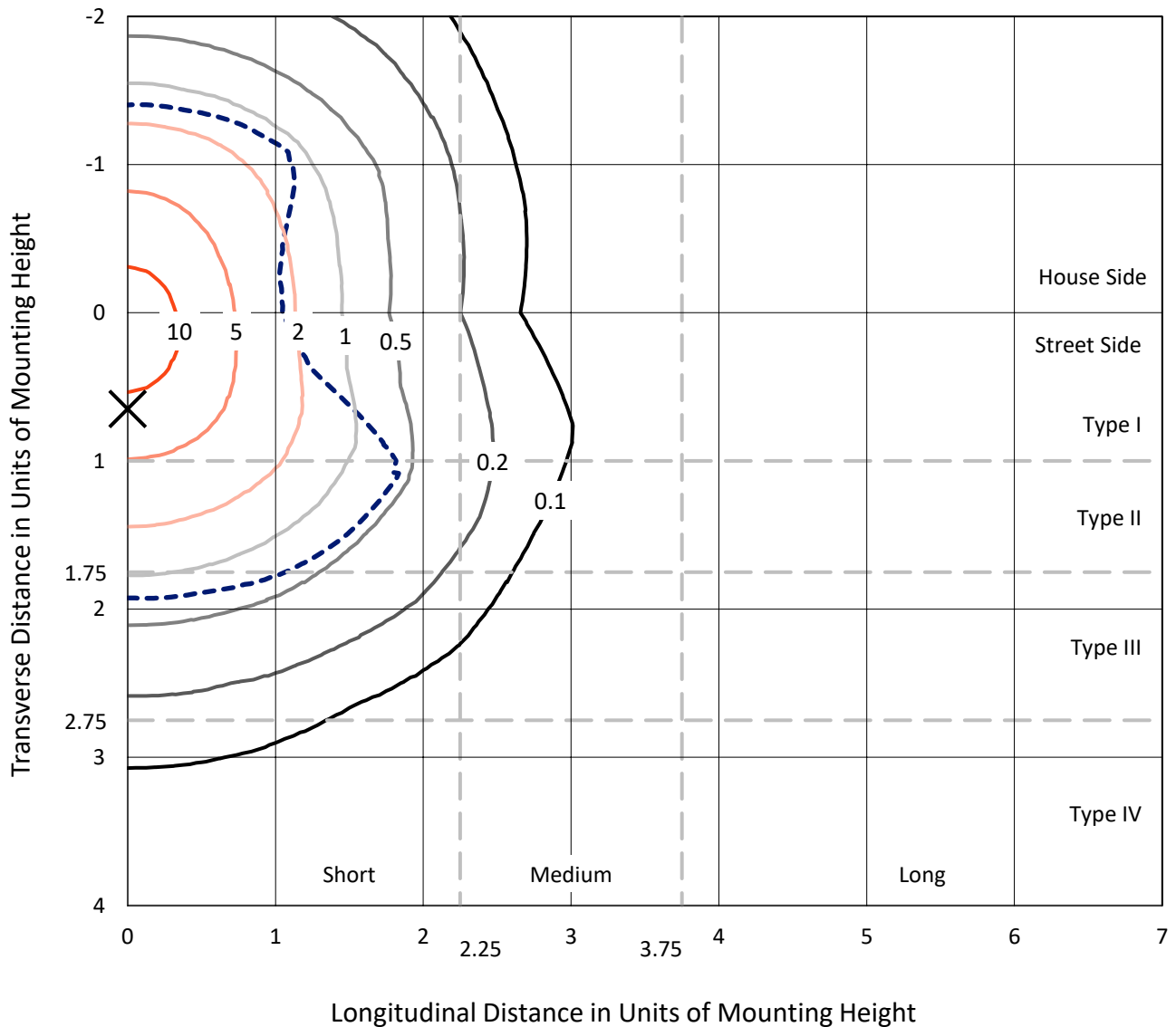
Input Watts (W): 24.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

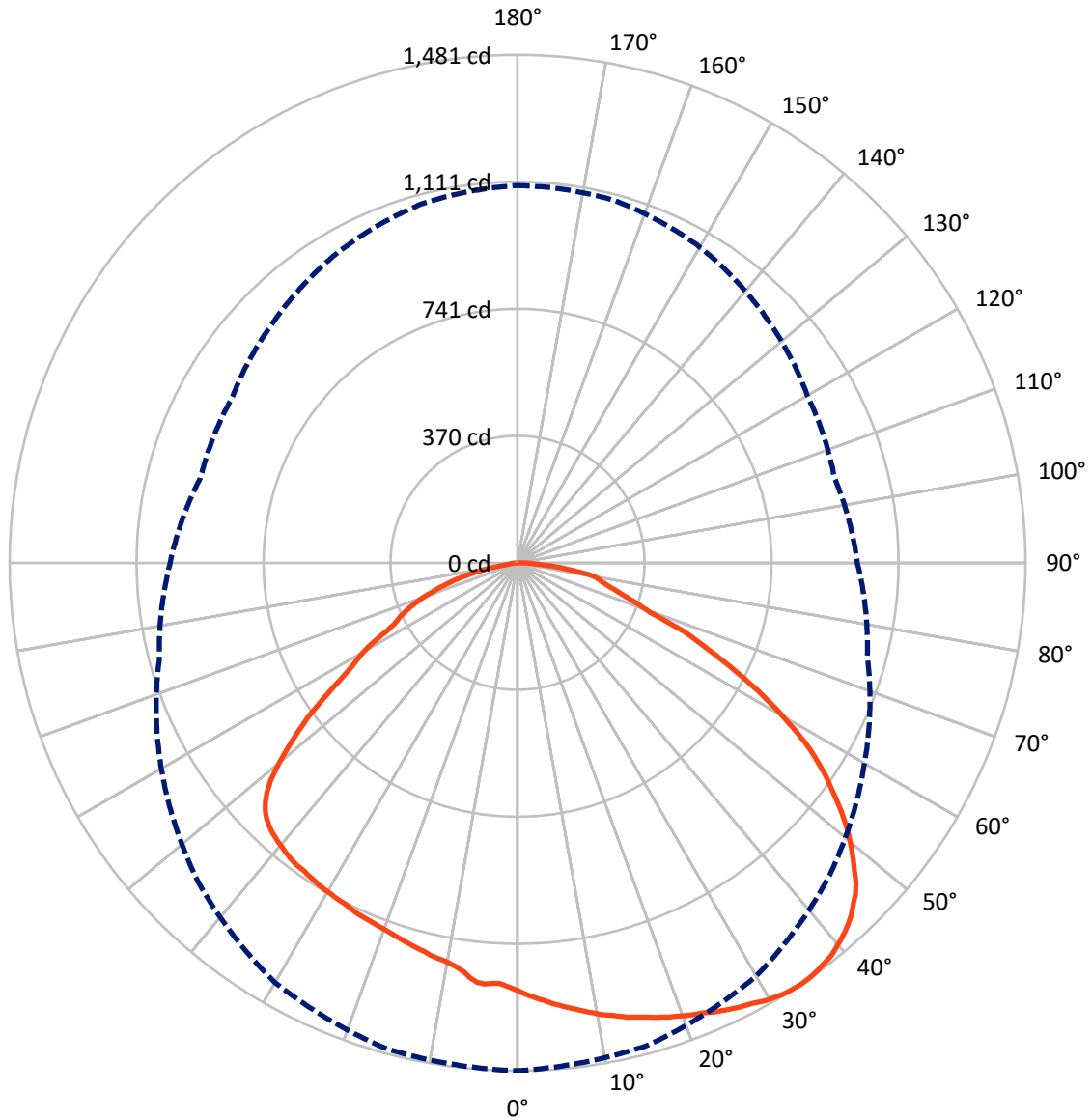
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 33-Deg Vertical

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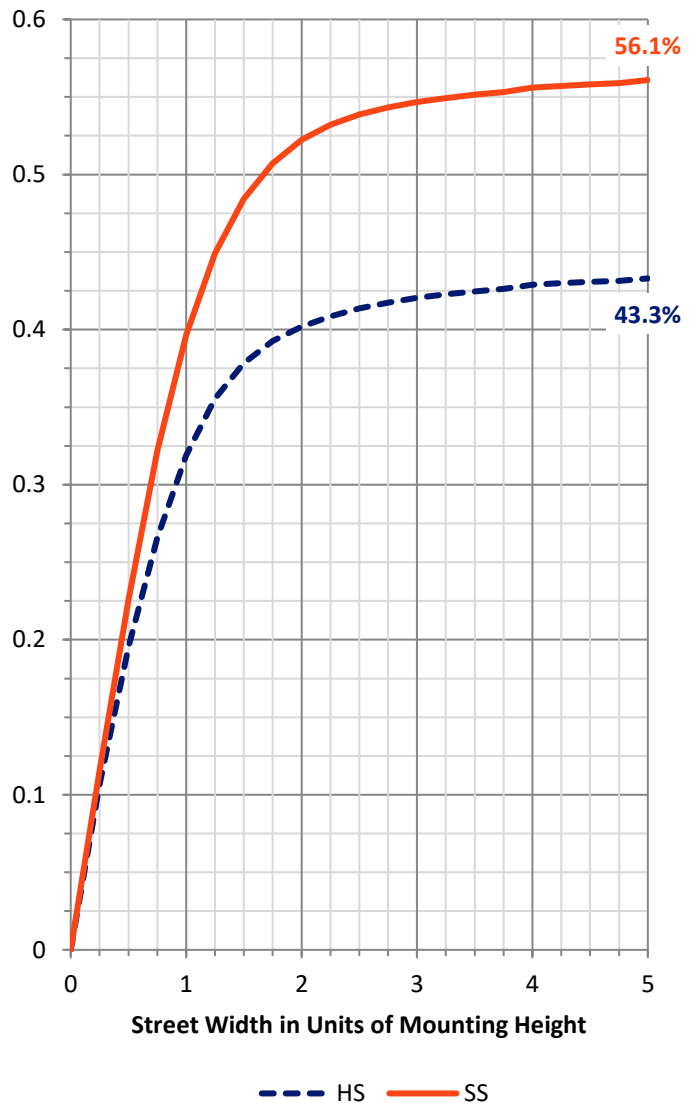
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1768.7	0.0	1768.7
	% Fixture	43.6	0.0	43.6
Street Side	Lumens	2292.3	0.0	2292.3
	% Fixture	56.4	0.0	56.4
Total	Lumens	4061.0	0.0	4061.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	2.9
10°-20°	349.6	8.6
20°-30°	552.5	13.6
30°-40°	710.0	17.5
40°-50°	792.7	19.5
50°-60°	734.2	18.1
60°-70°	507.2	12.5
70°-80°	240.3	5.9
80°-90°	55.0	1.4
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°	4061.0	100.0
0°-180°	4061.0	100.0

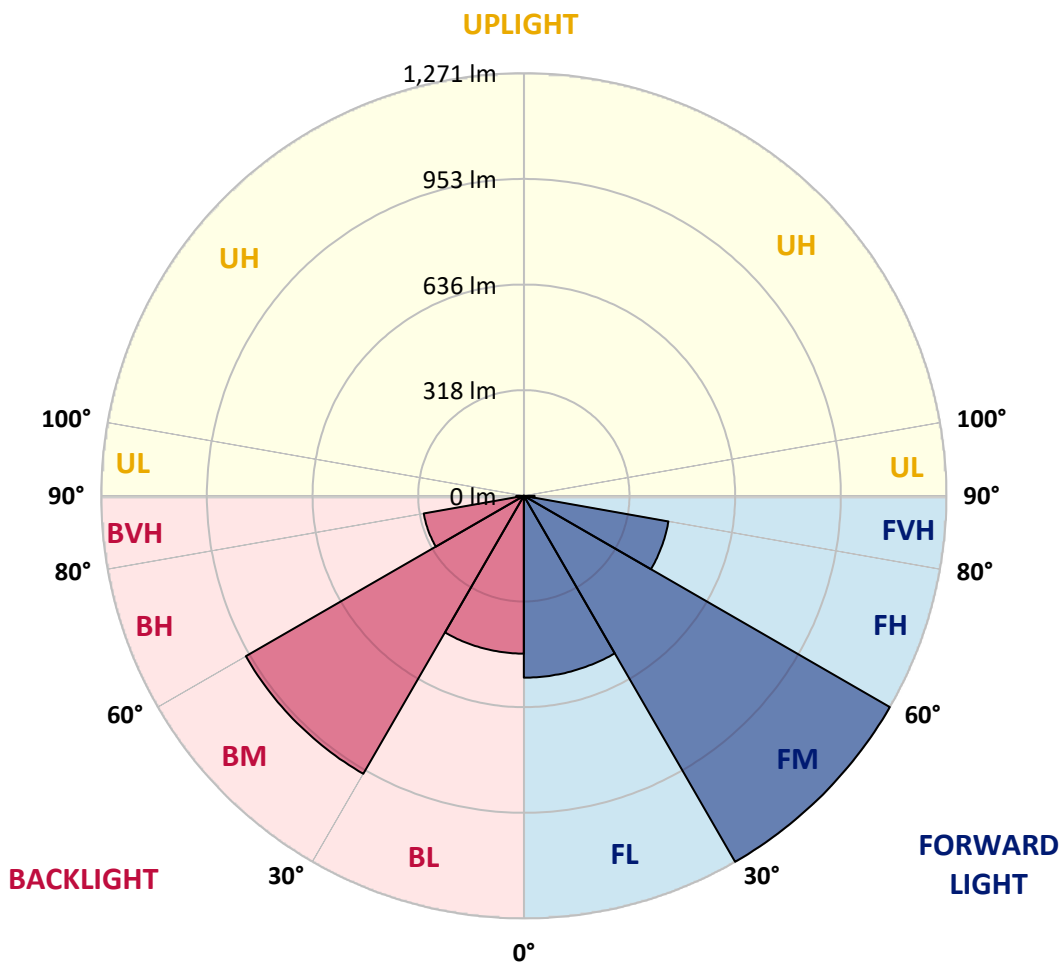


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	547.0	13.5			
FM (30°-60°)	1271.3	31.3			
FH (60°-80°)	441.7	10.9			G0/660
FVH (80°-90°)	32.3	0.8			G1/100
BL (0°-30°)	474.7	11.7	B1/500		
BM (30°-60°)	965.6	23.8	B1/1000		
BH (60°-80°)	305.8	7.5	B1/500		G1/500
BVH (80°-90°)	22.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3
1°	1261.9	1262.0	1260.0	1258.5	1257.7	1255.1	1250.5	1248.9	1247.0	1246.3	1242.8
2°	1271.0	1270.5	1268.3	1263.8	1261.3	1256.4	1250.3	1245.1	1240.6	1237.9	1236.7
3°	1278.7	1280.0	1275.1	1270.9	1264.2	1258.2	1248.6	1241.3	1236.2	1230.9	1229.4
4°	1288.9	1288.5	1282.7	1274.6	1268.3	1256.2	1246.2	1236.1	1230.6	1225.4	1227.6
5°	1296.7	1295.0	1290.0	1279.4	1268.6	1256.3	1243.5	1233.5	1226.2	1225.9	1229.3
6°	1305.5	1301.7	1295.6	1285.0	1272.4	1256.0	1238.3	1227.8	1222.2	1228.8	1231.0
7°	1313.1	1309.7	1301.9	1288.8	1273.2	1254.1	1234.9	1221.9	1221.8	1228.9	1224.9
8°	1322.5	1318.4	1307.1	1291.3	1274.3	1253.6	1231.1	1217.1	1221.5	1222.2	1211.8
9°	1330.8	1326.3	1314.0	1296.2	1274.1	1250.9	1226.4	1213.9	1221.5	1213.2	1196.8
10°	1339.5	1333.6	1320.1	1300.2	1274.8	1248.7	1221.2	1210.1	1216.2	1197.0	1187.8
11°	1346.3	1341.1	1325.8	1303.8	1275.6	1246.7	1216.8	1207.2	1208.4	1185.7	1181.8
12°	1353.7	1347.3	1330.9	1305.1	1275.3	1241.9	1210.9	1204.7	1194.6	1176.8	1174.5
13°	1362.3	1355.0	1337.0	1308.8	1274.7	1239.0	1204.2	1200.5	1180.1	1168.9	1168.8
14°	1368.5	1361.1	1339.3	1311.0	1274.7	1235.7	1195.9	1196.6	1169.2	1162.6	1164.7
15°	1374.9	1367.3	1343.7	1312.3	1273.5	1230.8	1189.1	1188.3	1159.2	1154.9	1158.4
16°	1382.2	1371.8	1347.5	1313.4	1270.5	1227.2	1181.6	1181.0	1149.7	1148.7	1152.6
17°	1389.3	1377.5	1350.3	1313.5	1269.2	1220.3	1175.0	1167.3	1141.3	1141.9	1146.5
18°	1396.6	1383.0	1354.5	1311.6	1266.6	1216.0	1167.1	1153.0	1131.5	1134.2	1141.2
19°	1402.6	1389.3	1356.9	1312.6	1264.0	1209.2	1159.9	1138.9	1123.2	1127.0	1135.2
20°	1409.0	1395.0	1360.9	1313.2	1259.3	1202.4	1152.6	1125.6	1114.3	1120.7	1128.8
21°	1414.7	1400.8	1364.6	1312.6	1256.0	1194.7	1146.4	1113.7	1104.4	1111.9	1123.9
22°	1420.4	1404.4	1367.4	1312.5	1249.6	1186.7	1138.9	1102.5	1094.2	1104.6	1118.2
23°	1428.6	1410.7	1368.8	1310.6	1245.2	1179.8	1131.8	1090.3	1084.9	1097.3	1112.3
24°	1435.3	1416.3	1372.0	1309.8	1238.6	1169.9	1124.5	1078.2	1075.2	1089.0	1106.6
25°	1441.7	1421.3	1374.6	1308.6	1233.0	1158.6	1113.3	1066.2	1064.6	1081.3	1102.1
26°	1448.3	1426.2	1377.3	1306.3	1226.6	1148.2	1102.6	1054.6	1053.0	1073.3	1098.4
27°	1452.7	1431.9	1379.2	1304.0	1220.6	1137.7	1090.9	1041.4	1043.3	1065.5	1092.8
28°	1459.2	1436.8	1381.2	1301.2	1212.0	1125.3	1075.3	1027.7	1032.3	1059.1	1087.8
29°	1467.2	1441.4	1382.8	1298.8	1204.6	1112.5	1058.9	1014.6	1022.2	1051.8	1082.7
30°	1471.9	1445.8	1384.8	1295.2	1195.7	1099.1	1042.9	1000.0	1010.2	1042.5	1076.5
31°	1476.7	1450.9	1387.2	1292.5	1187.8	1086.2	1024.8	985.5	998.5	1035.9	1072.7
32°	1479.1	1454.5	1388.5	1290.1	1179.5	1070.8	1007.6	971.8	987.4	1027.9	1068.1
33°	1481.1	1457.5	1391.5	1287.1	1168.2	1055.8	990.7	956.6	975.8	1019.3	1063.2
34°	1480.6	1457.9	1393.3	1282.5	1159.1	1041.2	972.7	940.3	963.3	1011.0	1057.6
35°	1479.3	1455.5	1392.2	1279.7	1149.3	1025.3	955.1	925.8	952.1	1002.1	1052.4
36°	1475.6	1455.3	1392.3	1276.4	1138.4	1008.0	938.0	911.0	939.6	995.1	1046.0
37°	1470.7	1449.8	1390.7	1273.1	1128.5	991.1	919.1	894.9	928.5	984.9	1040.1
38°	1466.2	1446.4	1387.2	1269.7	1116.4	974.9	900.5	878.6	914.6	975.9	1034.1
39°	1457.8	1438.5	1384.4	1266.3	1107.0	957.9	881.3	861.8	902.2	965.1	1029.4
40°	1448.9	1429.2	1379.6	1261.5	1096.4	940.3	862.4	845.6	890.8	955.7	1024.6
41°	1439.6	1420.9	1373.7	1256.8	1084.2	923.9	844.0	831.1	876.7	948.0	1019.0
42°	1427.9	1412.4	1364.1	1252.0	1074.5	905.1	825.5	816.5	863.2	940.3	1011.2
43°	1414.5	1399.3	1354.6	1246.2	1065.2	886.9	807.0	801.4	849.3	931.8	1005.3
44°	1396.5	1384.4	1343.7	1241.1	1053.8	868.9	787.0	784.7	837.0	920.4	999.6



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	1381.0	1369.3	1332.9	1235.2	1043.3	851.5	766.2	767.4	824.7	909.8	993.0
46°	1360.6	1350.4	1319.7	1228.2	1033.8	834.5	745.4	750.5	812.4	900.8	985.7
47°	1333.2	1330.2	1304.1	1220.2	1023.5	815.8	723.6	732.9	799.5	892.7	975.0
48°	1307.3	1306.7	1287.4	1209.9	1014.0	796.4	702.3	714.7	784.0	882.5	963.1
49°	1279.8	1278.4	1269.0	1198.1	1004.8	777.0	681.1	695.9	769.7	871.4	951.5
50°	1252.5	1252.5	1246.9	1185.6	995.3	756.5	659.4	675.8	756.8	859.9	933.6
51°	1222.6	1223.4	1222.2	1173.0	986.6	736.0	637.8	655.6	743.5	848.2	911.7
52°	1189.4	1193.4	1195.7	1158.1	976.0	714.8	615.1	636.8	729.2	836.5	884.3
53°	1153.7	1158.9	1168.9	1142.7	966.4	693.8	593.5	617.9	713.9	824.8	848.9
54°	1119.5	1123.8	1136.6	1122.8	956.9	672.4	570.7	598.7	697.1	813.0	813.5
55°	1087.2	1089.9	1102.9	1099.2	942.8	651.4	548.5	579.1	680.7	795.2	778.1
56°	1048.9	1055.5	1068.7	1074.5	930.0	630.3	525.7	559.3	664.4	770.7	739.0
57°	1009.8	1018.6	1031.2	1048.3	916.3	609.6	501.8	539.8	647.9	741.3	696.9
58°	964.6	978.7	996.4	1018.5	901.6	588.3	476.7	519.5	630.6	706.1	650.7
59°	915.9	934.3	957.6	986.3	885.6	566.6	453.9	498.8	612.1	669.5	608.1
60°	866.8	884.8	920.0	948.6	866.4	545.1	429.4	476.6	592.8	632.1	566.9
61°	817.9	837.4	877.1	908.5	844.5	525.3	406.4	453.9	573.6	591.5	531.4
62°	766.6	786.1	828.7	865.0	821.8	505.0	384.9	432.7	551.4	552.0	508.2
63°	712.9	733.5	781.5	818.1	797.6	485.3	362.5	411.2	525.8	512.2	484.5
64°	663.5	678.6	736.4	771.1	770.8	466.9	340.9	389.0	496.1	474.3	450.6
65°	613.7	625.2	689.1	720.4	738.6	449.3	320.4	368.0	463.4	448.0	412.1
66°	571.7	574.8	638.9	667.3	701.9	433.3	299.5	346.0	429.2	428.8	382.8
67°	526.9	531.4	586.3	614.7	661.0	418.7	278.2	324.8	392.4	404.3	363.8
68°	469.4	481.3	531.4	570.6	613.0	405.1	257.2	304.1	355.4	373.8	349.1
69°	412.3	423.1	476.8	538.8	562.1	394.3	236.1	282.9	320.6	350.6	333.8
70°	385.7	393.4	412.9	506.1	503.6	383.6	214.7	262.7	292.2	334.2	319.0
71°	360.1	364.7	370.1	461.4	432.5	372.9	193.3	242.0	273.5	318.4	305.4
72°	334.4	335.9	327.4	392.4	368.9	361.1	172.8	220.0	253.2	301.5	291.4
73°	312.7	317.9	284.8	341.3	305.3	343.5	152.7	196.8	233.9	284.9	275.4
74°	292.8	298.0	266.4	290.9	241.8	316.0	133.8	173.1	220.3	268.8	258.0
75°	276.2	276.0	247.6	240.5	260.2	284.1	115.9	147.9	209.0	253.8	239.6
76°	261.5	252.6	230.6	216.8	239.0	254.4	100.5	124.6	196.3	237.3	218.8
77°	250.1	229.5	213.1	204.0	168.3	223.8	85.1	108.7	184.0	222.5	195.2
78°	242.0	211.1	192.7	191.3	122.1	184.6	69.7	92.8	172.7	208.3	173.2
79°	231.1	198.1	174.5	166.0	97.2	146.8	57.2	76.8	160.7	194.5	153.8
80°	212.2	187.5	161.2	134.0	99.0	115.0	45.9	66.9	149.2	177.1	138.8
81°	183.8	175.3	148.8	112.9	102.4	84.9	35.9	57.0	137.1	158.4	123.3
82°	153.8	158.2	136.0	98.6	73.8	60.3	27.1	47.9	124.9	140.1	94.0
83°	126.3	140.7	117.9	85.9	48.1	40.8	20.1	39.4	112.5	126.5	64.5
84°	100.6	124.7	91.8	75.5	39.0	31.8	14.7	31.3	94.5	101.5	24.8
85°	69.7	97.9	70.8	64.2	30.1	22.9	11.1	23.9	76.7	76.6	17.7
86°	48.1	72.3	52.3	44.2	21.1	14.0	7.5	16.8	64.1	51.6	10.5
87°	38.5	42.2	34.8	24.7	14.9	8.1	4.0	11.5	42.6	26.7	3.4
88°	28.9	31.5	26.2	5.2	7.9	3.3	1.9	6.1	28.4	1.8	1.3
89°	19.4	21.1	17.6	3.2	5.3	1.7	0.6	0.8	14.2	0.5	0.4



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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: P1449899
 CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899
CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899

CATALOG NUMBER: TWC60_T3_24W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3	1252.3
1°	1243.0	1242.5	1242.9	1245.1	1246.7	1247.7	1250.3	1251.8	1254.8	1256.9	1258.7
2°	1234.7	1234.8	1236.6	1237.3	1239.7	1243.0	1248.2	1250.1	1255.7	1259.6	1265.1
3°	1228.2	1227.8	1228.9	1230.4	1232.8	1239.8	1244.6	1249.1	1257.5	1263.6	1271.7
4°	1228.1	1228.9	1228.9	1226.7	1227.7	1232.4	1240.0	1248.7	1257.8	1267.4	1276.2
5°	1230.9	1231.7	1230.3	1228.2	1224.9	1228.2	1236.0	1246.4	1258.5	1270.7	1280.9
6°	1229.5	1229.5	1230.6	1229.0	1225.4	1222.3	1231.6	1243.2	1258.5	1272.7	1286.3
7°	1220.4	1217.7	1222.2	1226.3	1226.0	1219.7	1227.5	1239.0	1256.9	1275.7	1291.1
8°	1202.9	1202.6	1205.6	1216.8	1223.9	1217.9	1222.8	1236.7	1257.8	1277.5	1295.8
9°	1193.4	1192.9	1193.0	1201.7	1216.5	1217.1	1216.1	1231.2	1256.3	1280.2	1300.9
10°	1186.8	1185.0	1185.7	1189.8	1204.0	1215.1	1210.9	1226.9	1254.5	1280.8	1304.9
11°	1180.1	1180.0	1180.2	1181.9	1189.7	1211.6	1204.8	1222.7	1252.1	1281.0	1308.5
12°	1175.4	1176.1	1175.2	1173.8	1178.6	1204.3	1200.6	1217.0	1250.1	1283.3	1311.7
13°	1170.9	1172.0	1171.3	1168.2	1170.0	1192.1	1196.3	1212.1	1246.1	1283.6	1315.8
14°	1166.1	1165.4	1165.7	1163.1	1162.6	1177.6	1193.0	1204.0	1244.6	1283.3	1317.6
15°	1161.2	1161.4	1160.5	1156.6	1154.2	1164.4	1188.4	1198.9	1240.8	1281.7	1319.4
16°	1157.0	1156.6	1153.9	1148.8	1146.8	1152.9	1183.1	1191.2	1237.6	1281.4	1321.6
17°	1152.5	1152.1	1150.4	1143.4	1138.4	1142.5	1175.4	1182.9	1232.5	1279.7	1323.6
18°	1146.8	1147.5	1143.4	1136.8	1131.6	1132.7	1166.6	1176.4	1228.3	1278.6	1323.8
19°	1142.0	1143.4	1139.1	1130.7	1122.4	1122.5	1155.6	1167.1	1222.8	1276.1	1325.0
20°	1138.1	1138.8	1134.6	1124.0	1114.1	1113.1	1140.2	1159.0	1216.9	1274.0	1326.2
21°	1133.9	1135.8	1129.4	1117.6	1106.4	1103.8	1127.0	1149.8	1210.9	1269.3	1326.2
22°	1128.8	1132.1	1124.5	1112.1	1097.8	1091.9	1111.1	1141.8	1202.7	1266.2	1327.3
23°	1127.0	1129.4	1120.7	1105.3	1089.6	1081.1	1098.0	1131.6	1194.7	1261.6	1327.6
24°	1123.7	1126.9	1118.2	1098.8	1080.1	1069.2	1086.2	1122.5	1185.8	1256.4	1327.0
25°	1118.8	1124.7	1114.4	1093.1	1071.7	1058.6	1072.4	1113.1	1176.9	1253.0	1326.0
26°	1116.9	1120.2	1111.0	1087.8	1062.8	1047.7	1058.9	1104.3	1166.8	1248.2	1327.6
27°	1111.6	1115.8	1105.9	1082.4	1053.9	1035.8	1046.1	1095.3	1156.8	1242.1	1324.9
28°	1108.8	1113.9	1102.1	1077.1	1044.7	1024.0	1032.6	1087.1	1145.9	1236.1	1324.5
29°	1104.4	1111.5	1096.5	1069.5	1036.1	1011.2	1018.1	1074.1	1133.3	1229.6	1323.1
30°	1101.9	1108.2	1092.8	1064.4	1028.4	999.5	1004.5	1060.8	1120.9	1222.9	1322.4
31°	1101.3	1106.3	1090.5	1057.4	1020.1	985.7	988.3	1047.2	1108.2	1215.3	1320.7
32°	1097.8	1104.2	1087.2	1051.3	1010.7	973.5	974.6	1031.4	1094.5	1207.2	1319.1
33°	1093.8	1100.1	1083.2	1045.9	1001.0	961.6	957.3	1012.9	1081.3	1199.5	1316.7
34°	1088.1	1097.4	1078.7	1039.8	989.6	948.9	942.3	992.4	1066.6	1190.6	1315.8
35°	1083.6	1093.6	1074.1	1033.6	980.6	935.0	925.6	973.5	1053.0	1183.3	1315.4
36°	1081.3	1092.1	1069.2	1027.6	970.4	921.5	909.6	954.3	1038.7	1174.6	1312.2
37°	1079.9	1090.4	1066.3	1019.4	960.7	908.2	892.3	934.9	1023.4	1166.1	1311.7
38°	1078.1	1087.0	1064.1	1013.0	950.0	894.7	875.7	916.0	1009.2	1158.2	1307.3
39°	1073.0	1082.6	1060.6	1006.3	940.0	880.0	858.8	896.1	993.8	1148.7	1303.4
40°	1067.1	1077.1	1054.4	1000.0	927.7	865.7	841.6	877.2	977.0	1140.9	1300.3
41°	1063.7	1072.7	1048.4	992.7	917.0	850.8	824.5	856.3	961.4	1132.2	1295.8
42°	1057.3	1067.0	1043.0	984.3	908.1	838.0	807.3	837.4	943.5	1123.8	1291.5
43°	1052.3	1061.7	1037.9	978.1	898.0	825.2	790.0	817.2	926.3	1116.3	1285.5
44°	1044.6	1053.7	1030.8	972.0	888.6	812.3	771.1	795.5	909.4	1109.1	1279.0



REPORT NUMBER: P1449899
 CATALOG NUMBER: TWC60_T3_24W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1035.0	1044.3	1022.9	964.3	877.2	795.0	751.7	773.6	891.5	1102.1	1270.3
46°	1024.3	1030.8	1012.4	956.0	865.1	778.3	734.1	752.0	873.1	1093.8	1259.8
47°	1010.6	1013.8	1000.7	948.1	853.9	762.5	714.8	729.9	854.6	1086.5	1250.0
48°	990.5	991.1	983.0	938.3	843.8	747.8	696.6	707.9	837.4	1078.9	1237.2
49°	965.9	962.4	962.0	928.2	832.8	732.4	676.6	685.9	818.2	1070.4	1225.3
50°	934.0	927.5	935.7	914.5	821.7	716.3	656.7	663.3	800.4	1063.1	1210.6
51°	897.1	886.6	902.6	899.5	810.6	700.2	636.5	641.9	784.3	1054.7	1194.6
52°	857.8	845.5	864.7	877.9	796.7	684.3	615.7	619.1	767.0	1044.1	1175.0
53°	818.4	804.3	826.8	848.4	783.3	669.8	594.3	595.5	749.7	1030.9	1152.6
54°	778.9	763.2	788.9	818.9	770.3	653.6	573.0	572.7	733.5	1018.1	1128.0
55°	732.8	715.5	746.2	789.2	755.7	635.6	552.7	548.5	717.7	1005.3	1103.3
56°	685.6	668.6	698.9	750.5	740.4	617.7	532.4	524.1	702.4	989.7	1074.7
57°	638.9	623.0	652.8	711.8	721.7	598.4	510.1	500.1	687.0	971.6	1042.4
58°	595.2	583.2	607.5	670.3	698.2	578.9	487.8	476.4	671.7	953.7	1008.6
59°	562.0	555.0	568.8	626.6	670.0	560.4	466.0	453.2	656.4	931.0	970.3
60°	536.7	531.4	539.4	584.4	636.1	540.5	444.2	430.7	642.0	907.9	930.0
61°	511.5	503.4	516.1	542.3	600.8	521.2	422.9	407.3	624.9	882.6	889.5
62°	480.5	468.4	488.6	509.5	562.8	501.4	400.7	385.2	609.3	854.8	847.4
63°	439.9	428.3	451.2	486.4	521.7	479.4	377.4	363.0	592.8	821.5	803.2
64°	406.8	402.8	412.5	463.4	482.1	458.0	354.6	340.9	577.2	783.3	755.0
65°	389.0	388.1	389.1	432.0	443.6	435.7	332.2	319.5	562.5	741.4	703.2
66°	374.4	373.3	373.1	395.3	410.3	409.6	309.4	297.2	548.4	695.2	653.9
67°	360.4	357.5	359.9	369.9	388.2	378.4	287.6	274.6	533.1	645.6	613.2
68°	344.3	339.9	344.9	350.7	370.1	344.9	266.0	251.8	515.4	589.5	574.9
69°	326.9	320.6	329.3	333.7	344.8	311.6	245.5	228.2	492.4	526.8	535.9
70°	308.7	300.5	313.4	317.1	322.2	276.6	225.0	205.4	465.8	455.2	487.9
71°	288.0	277.5	295.1	301.4	307.1	244.1	205.1	182.9	432.6	393.4	425.2
72°	266.0	255.9	274.9	288.3	294.2	217.2	186.5	161.1	399.4	368.5	371.7
73°	245.1	235.9	253.4	275.2	279.5	198.6	167.6	141.4	363.7	344.5	318.1
74°	223.2	213.8	232.0	261.9	264.8	180.2	149.7	123.0	327.9	338.3	264.6
75°	201.8	191.3	209.6	247.9	250.8	164.8	130.5	105.6	292.1	266.4	243.7
76°	178.5	167.0	188.5	232.2	236.4	153.0	112.6	90.0	246.3	194.7	225.0
77°	156.5	144.3	167.2	214.1	221.3	141.6	95.7	76.1	185.9	158.3	209.3
78°	136.8	122.9	148.1	192.0	205.2	129.7	78.9	64.3	139.0	134.8	187.5
79°	111.4	96.6	129.4	168.3	189.0	118.7	64.6	53.8	96.1	132.0	159.9
80°	86.0	70.4	101.0	148.4	172.4	108.2	53.6	44.3	71.8	133.0	134.8
81°	60.6	44.2	72.6	133.4	155.1	97.2	44.7	36.2	62.1	99.8	117.5
82°	32.0	25.0	44.4	121.2	137.3	86.1	37.0	28.2	55.4	66.2	104.4
83°	19.8	19.2	21.1	87.6	119.0	75.0	29.6	20.1	45.4	52.6	93.4
84°	14.4	13.9	14.7	54.5	99.1	63.7	22.8	14.7	35.7	43.2	80.5
85°	10.5	10.2	10.7	37.3	79.2	51.8	16.9	10.3	26.1	36.1	61.1
86°	6.6	6.4	6.8	20.2	59.3	39.2	12.3	6.7	16.4	29.1	33.0
87°	2.8	2.7	2.9	3.4	39.5	29.1	7.7	3.8	9.6	22.0	20.0
88°	1.1	1.1	1.2	1.1	19.8	19.5	3.1	2.0	3.7	9.2	7.3
89°	0.4	0.4	0.4	0.4	0.4	9.9	0.5	0.3	1.9	6.0	4.8



REPORT NUMBER: P1449899
 CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899
 CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899
CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899
 CATALOG NUMBER: TWC60_T3_24W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1252.3	1252.3	1252.3
1°	1259.1	1260.7	1261.9
2°	1268.2	1270.7	1271.0
3°	1275.0	1279.7	1278.7
4°	1282.7	1286.3	1288.9
5°	1289.8	1295.2	1296.7
6°	1295.9	1304.3	1305.5
7°	1303.0	1310.5	1313.1
8°	1310.5	1319.6	1322.5
9°	1317.0	1328.6	1330.8
10°	1324.0	1335.9	1339.5
11°	1329.8	1343.3	1346.3
12°	1335.4	1349.4	1353.7
13°	1341.6	1355.9	1362.3
14°	1344.7	1363.3	1368.5
15°	1350.0	1369.2	1374.9
16°	1354.6	1376.1	1382.2
17°	1357.8	1380.9	1389.3
18°	1363.2	1388.5	1396.6
19°	1367.6	1393.7	1402.6
20°	1370.3	1399.7	1409.0
21°	1374.5	1405.4	1414.7
22°	1378.3	1412.6	1420.4
23°	1381.0	1418.3	1428.6
24°	1384.6	1425.0	1435.3
25°	1388.1	1429.8	1441.7
26°	1392.6	1435.7	1448.3
27°	1395.0	1441.5	1452.7
28°	1398.1	1447.4	1459.2
29°	1401.8	1451.0	1467.2
30°	1404.4	1457.1	1471.9
31°	1408.5	1461.5	1476.7
32°	1411.2	1464.8	1479.1
33°	1413.7	1467.7	1481.1
34°	1415.1	1467.3	1480.6
35°	1414.8	1465.5	1479.3
36°	1413.5	1464.3	1475.6
37°	1412.4	1459.1	1470.7
38°	1408.3	1452.7	1466.2
39°	1405.4	1444.8	1457.8
40°	1397.8	1437.2	1448.9
41°	1388.8	1427.2	1439.6
42°	1379.8	1417.3	1427.9
43°	1368.8	1405.6	1414.5
44°	1358.7	1389.1	1396.5



REPORT NUMBER: P1449899
 CATALOG NUMBER: TWC60_T3_24W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	1347.8	1371.8	1381.0
46°	1332.1	1354.0	1360.6
47°	1313.9	1331.3	1333.2
48°	1296.0	1304.7	1307.3
49°	1272.8	1277.1	1279.8
50°	1249.1	1250.4	1252.5
51°	1221.5	1220.1	1222.6
52°	1193.3	1189.3	1189.4
53°	1163.7	1154.9	1153.7
54°	1130.2	1121.1	1119.5
55°	1095.9	1086.5	1087.2
56°	1059.6	1051.6	1048.9
57°	1023.5	1013.9	1009.8
58°	987.9	971.0	964.6
59°	949.2	922.8	915.9
60°	907.1	874.3	866.8
61°	859.7	825.1	817.9
62°	811.0	775.1	766.6
63°	765.3	721.6	712.9
64°	717.8	669.9	663.5
65°	664.9	617.9	613.7
66°	612.6	571.8	571.7
67°	559.0	528.6	526.9
68°	504.0	475.9	469.4
69°	448.6	416.7	412.3
70°	389.3	389.7	385.7
71°	349.5	362.9	360.1
72°	310.2	336.2	334.4
73°	293.2	315.6	312.7
74°	277.7	294.1	292.8
75°	262.2	272.4	276.2
76°	245.4	251.3	261.5
77°	225.6	233.6	250.1
78°	204.6	221.2	242.0
79°	187.5	212.6	231.1
80°	172.6	203.0	212.2
81°	157.5	185.2	183.8
82°	137.8	162.3	153.8
83°	113.8	140.9	126.3
84°	89.5	118.9	100.6
85°	76.6	88.3	69.7
86°	57.0	61.1	48.1
87°	37.3	48.7	38.5
88°	28.0	36.6	28.9
89°	18.8	24.5	19.4



REPORT NUMBER: P1449899
CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899
CATALOG NUMBER: TWC60_T3_24W_3000K

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: P1449899
CATALOG NUMBER: TWC60_T3_24W_3000K

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: SP1-2601-659-1

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-3000K

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

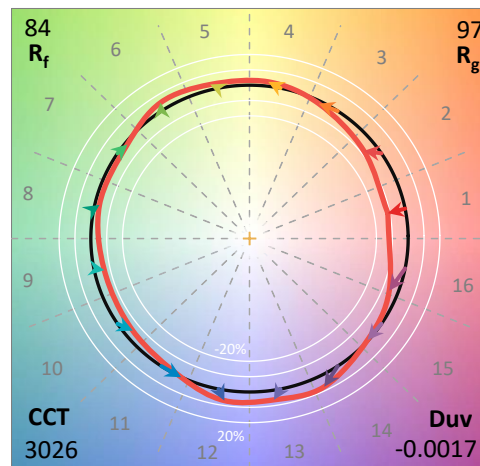
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-1
 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-3000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 3000K

Spectral Parameters

CCT (K): 3026
 CIE u': 0.2503
 CIE v': 0.5184
 Duv: -0.0017
 CIE x: 0.4326
 CIE y: 0.3983
 CIE z: 0.1691
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 583
 Purity: 49.3886
 Rf: 84
 Rg: 97.4

CRI (Ra):	82.7		
R1:	81.4	R9:	7.5
R2:	90.7	R10:	78.8
R3:	96.3	R11:	80.8
R4:	81.1	R12:	70.7
R5:	81.6	R13:	83.7
R6:	88.6	R14:	98.6
R7:	82.6	R15:	74.2
R8:	59.3		



Test Conditions

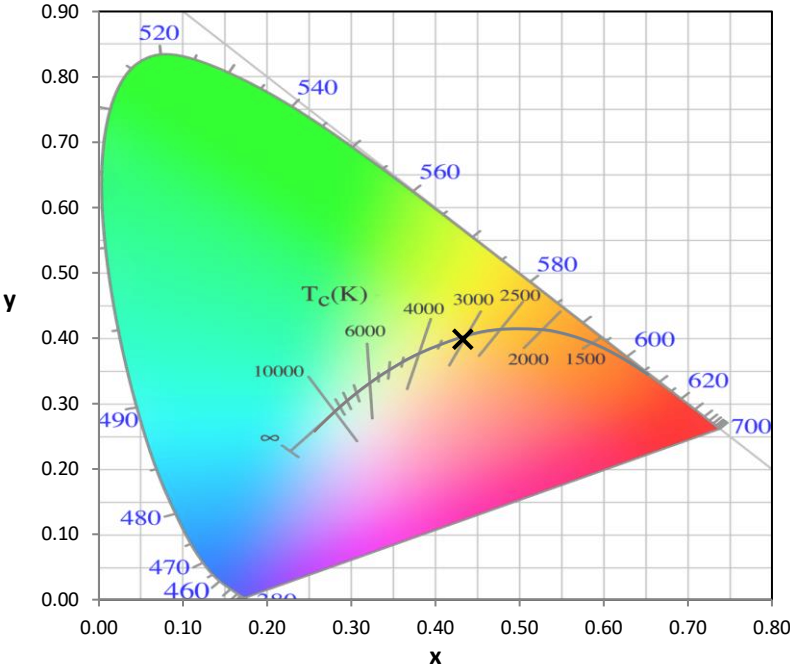
Stabilization Time: 64M
 Operation Time: 2H 4M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-1

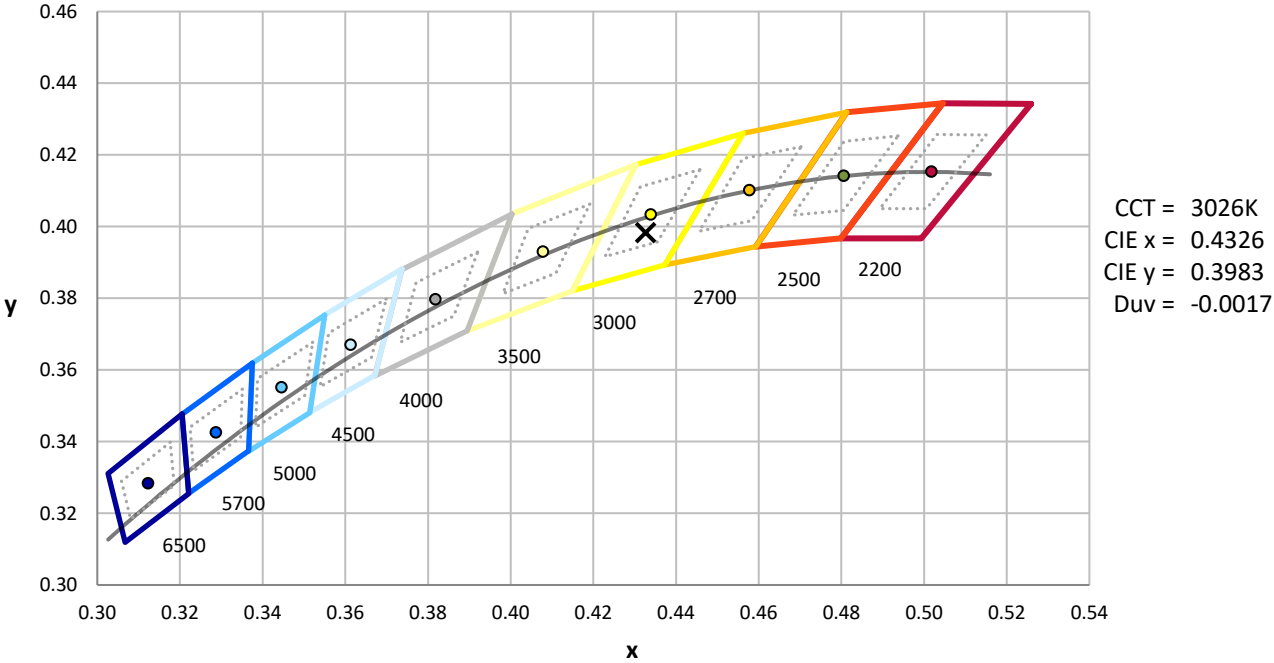
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2601-659-1

CIE 1931 Chromaticity Diagram



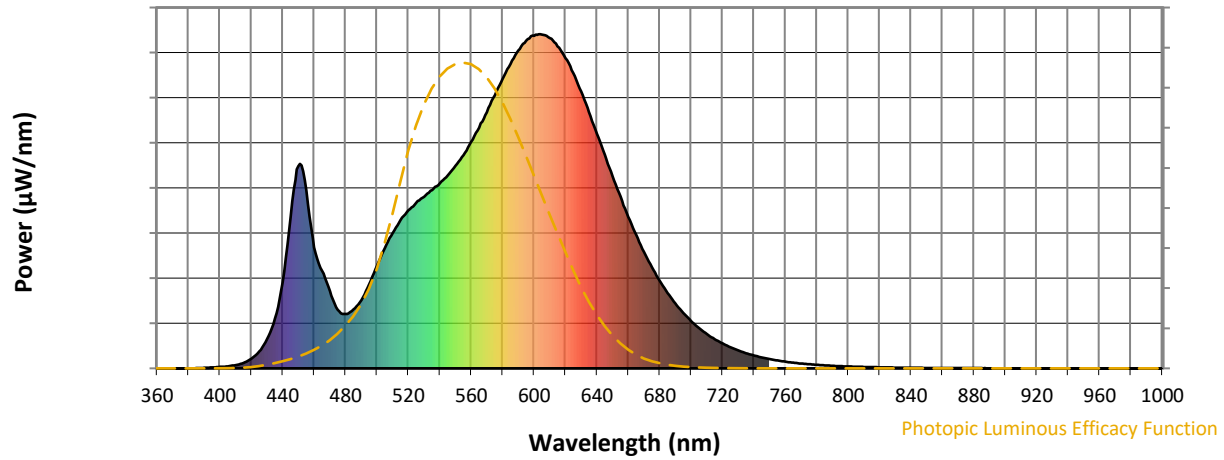
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2601-659-1

Photopic Flux vs. Wavelength

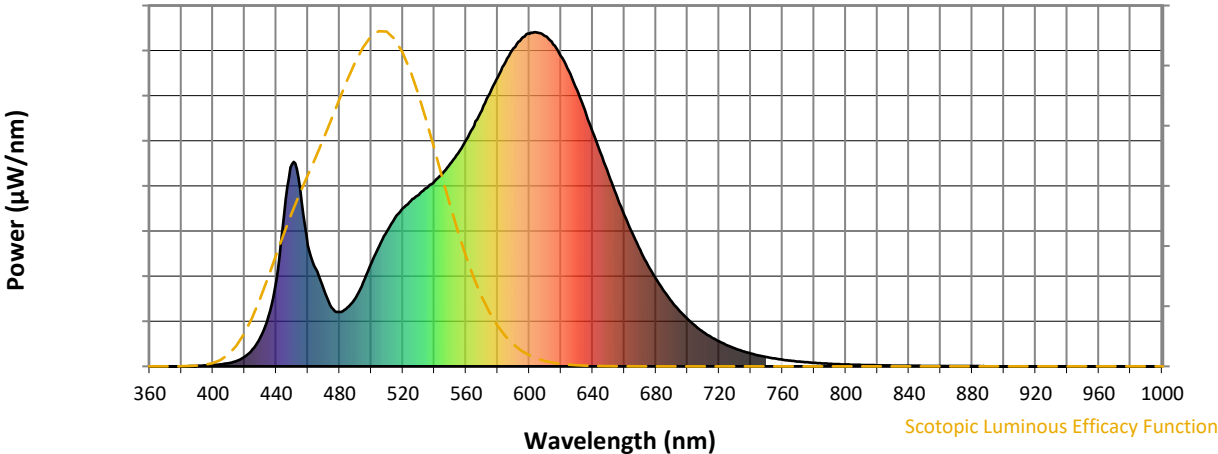


Photopic Lumens: NR

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	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-1

Scotopic Flux vs. Wavelength

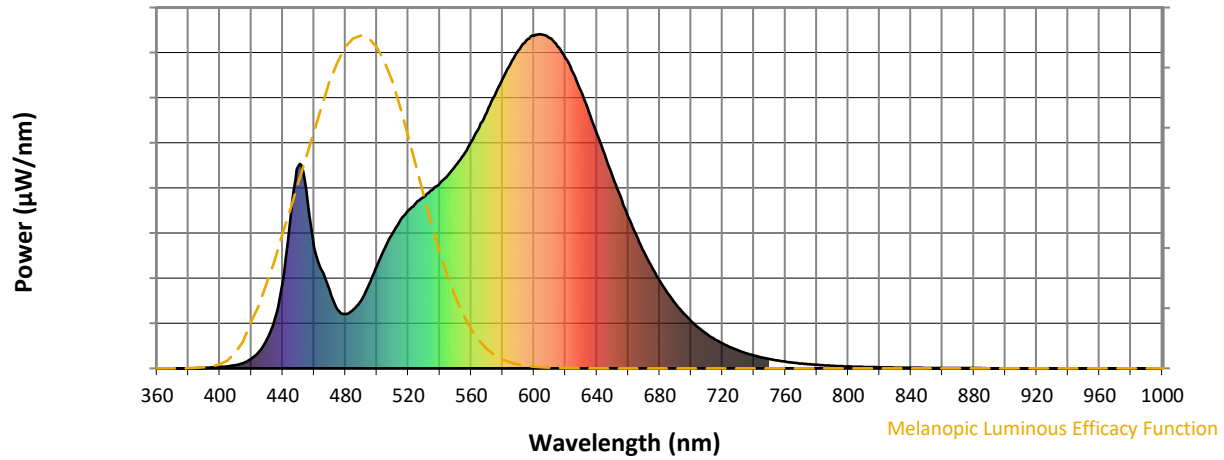


Scotopic Lumens: NR S/P: 1.35

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	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-1

Melanopic Flux vs. Wavelength



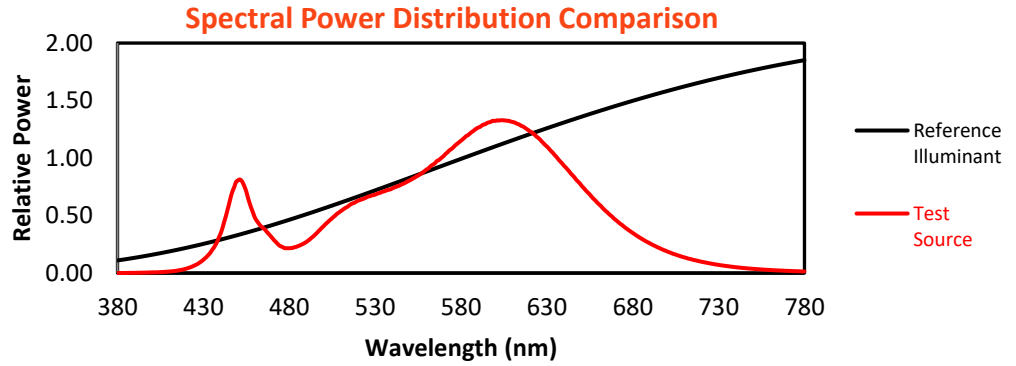
Melanopic Lumens: NR

M/P: 2.61

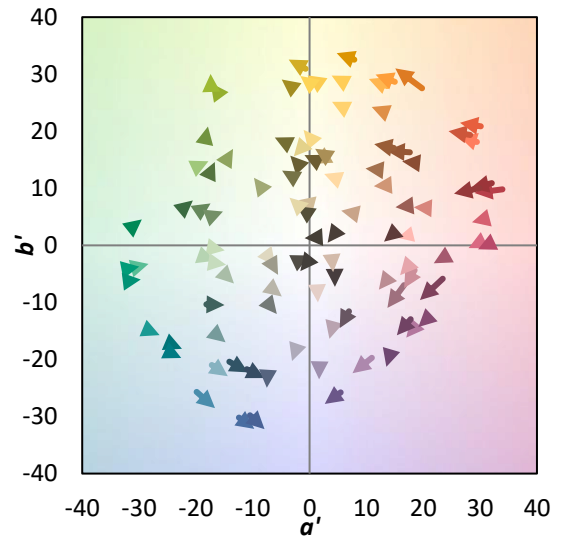
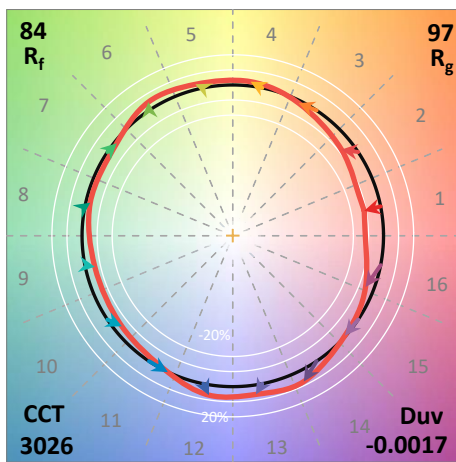
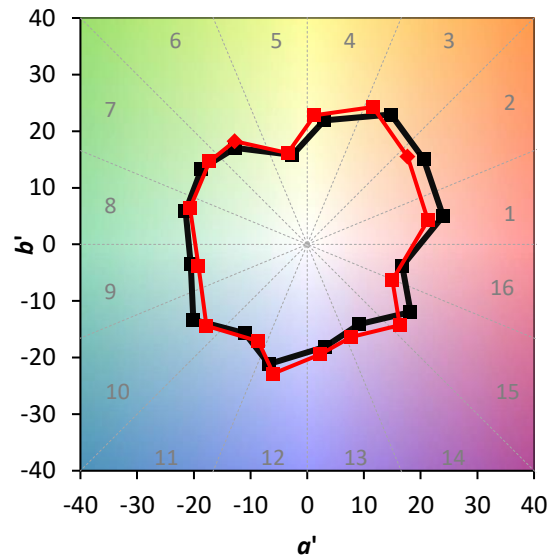
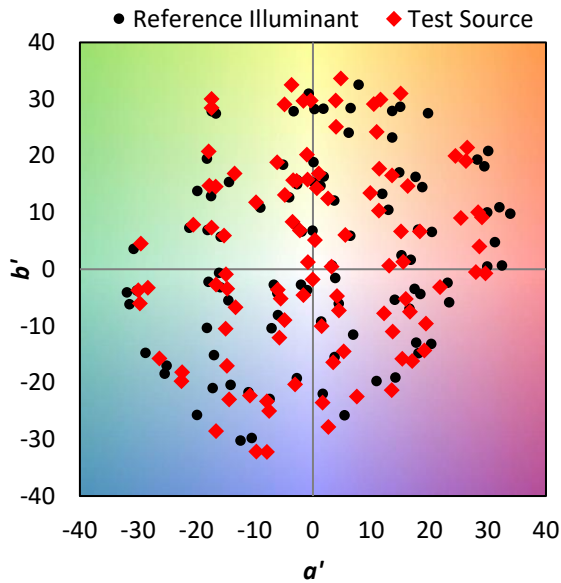
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

Summary

$R_f = 84$
 $R_g = 97.4$
 $CIE R_a = 82.7$
 $R_9 = 7.5$

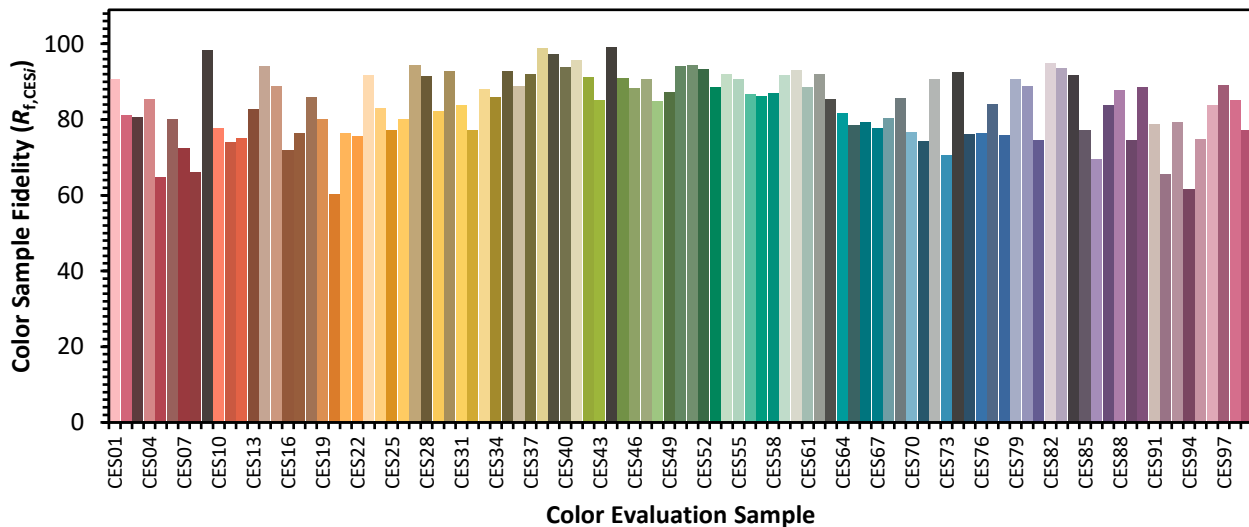


Color Vector Graphics

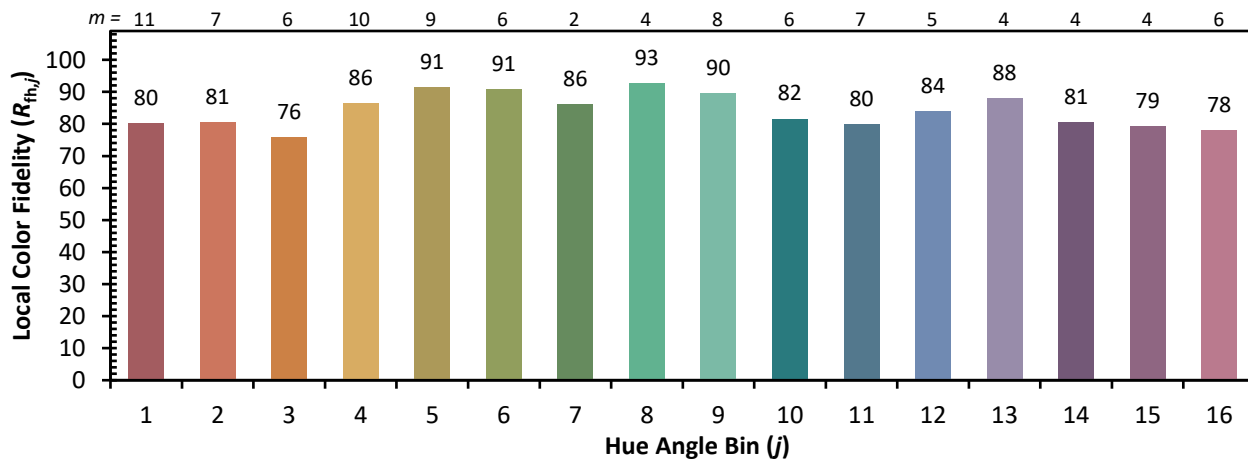
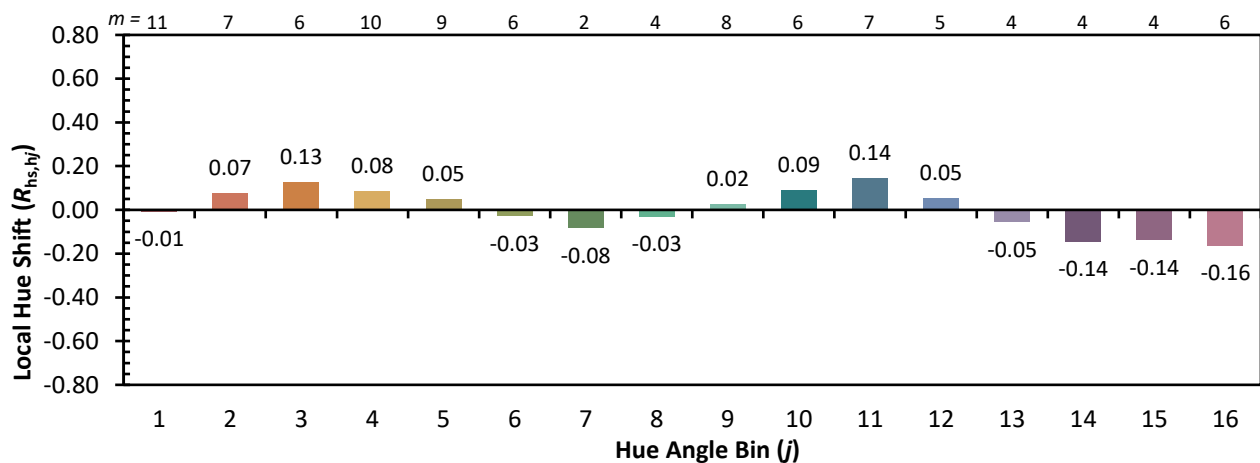
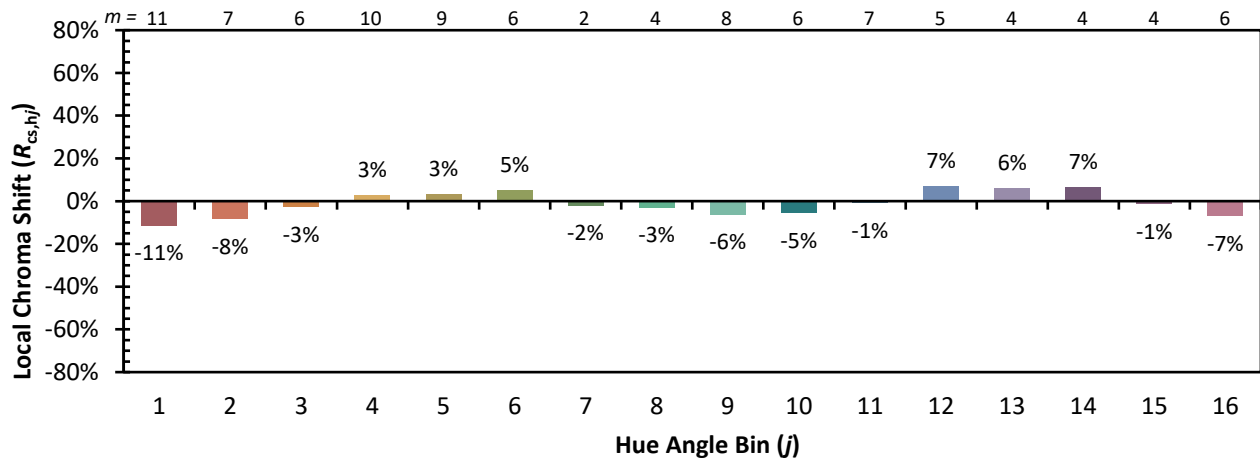


Individual Sample Fidelity Index ($R_{f,i}$)

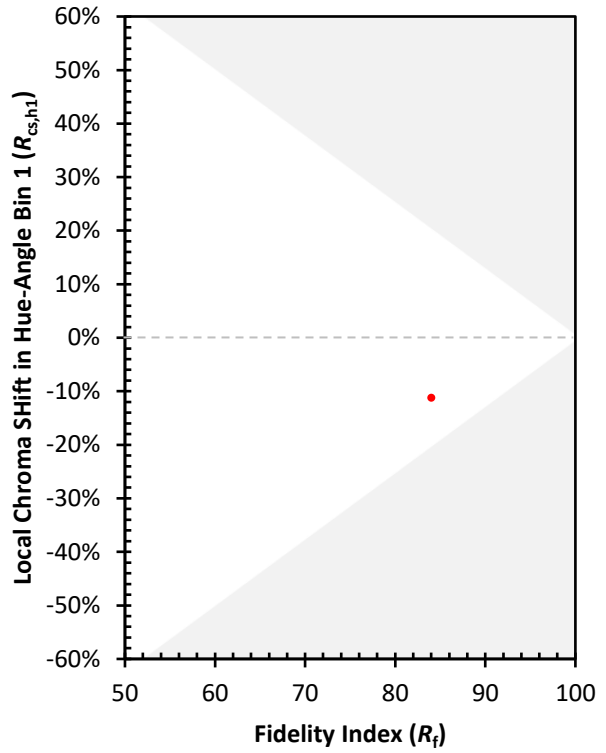
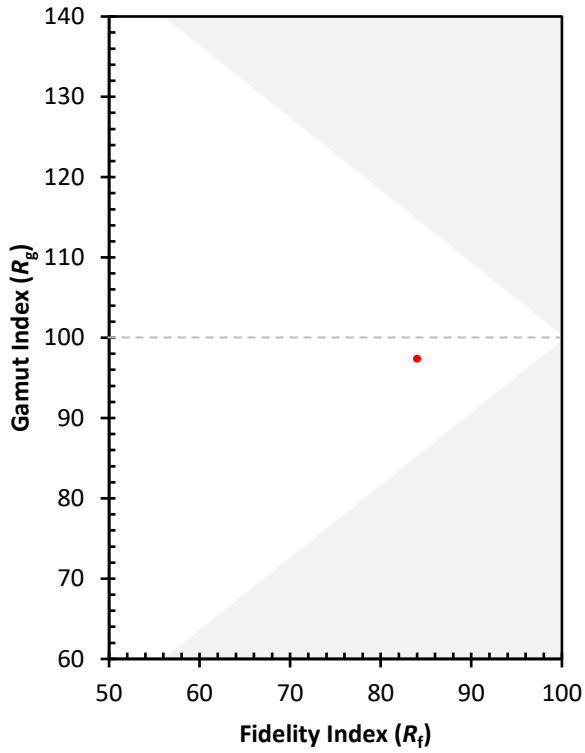
CES01 = 86	CES26 = 80	CES51 = 94	CES76 = 76
CES02 = 63	CES27 = 94	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 92	CES53 = 88	CES78 = 76
CES04 = 70	CES29 = 82	CES54 = 92	CES79 = 91
CES05 = 50	CES30 = 93	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 84	CES56 = 87	CES81 = 75
CES07 = 42	CES32 = 77	CES57 = 86	CES82 = 95
CES08 = 41	CES33 = 88	CES58 = 87	CES83 = 93
CES09 = 29	CES34 = 86	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 93	CES60 = 93	CES85 = 77
CES11 = 59	CES36 = 89	CES61 = 89	CES86 = 69
CES12 = 65	CES37 = 92	CES62 = 92	CES87 = 84
CES13 = 43	CES38 = 99	CES63 = 85	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 82	CES89 = 75
CES15 = 72	CES40 = 94	CES65 = 79	CES90 = 89
CES16 = 48	CES41 = 96	CES66 = 79	CES91 = 79
CES17 = 50	CES42 = 91	CES67 = 78	CES92 = 66
CES18 = 57	CES43 = 85	CES68 = 80	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 86	CES94 = 62
CES20 = 67	CES45 = 91	CES70 = 77	CES95 = 75
CES21 = 87	CES46 = 88	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 91	CES72 = 91	CES97 = 89
CES23 = 92	CES48 = 85	CES73 = 71	CES98 = 85
CES24 = 91	CES49 = 87	CES74 = 93	CES99 = 77
CES25 = 72	CES50 = 94	CES75 = 76	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)