

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P894990

Luminaire Tested: 8TMB-4SL-FLT-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-327-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-4SL-FLT-UNV-L835
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

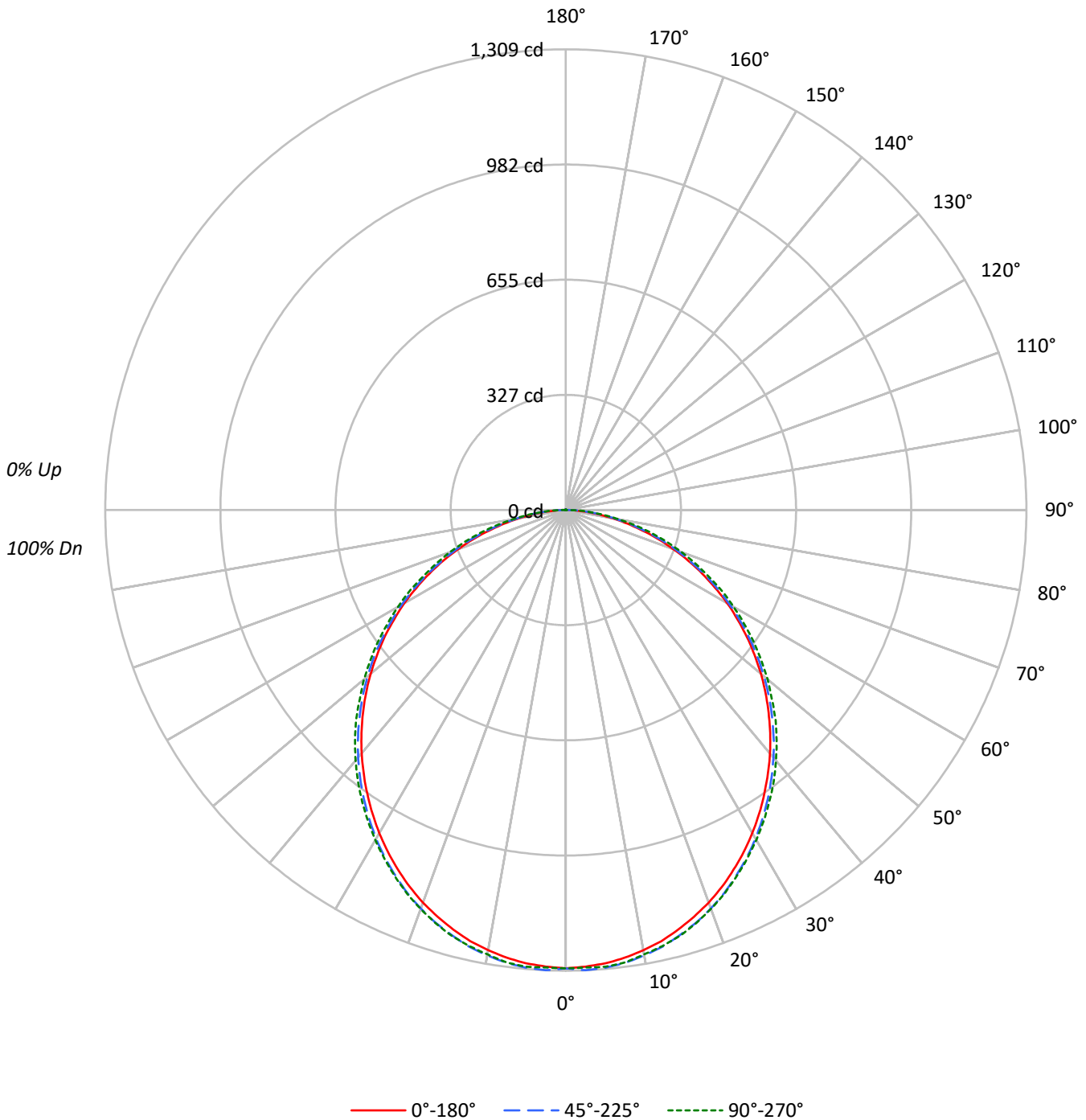
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3615.1 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P894990
CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

Luminous Intensity Polar Plot





TEST NUMBER: P894990

CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	99	96	106	101	98	94	97	94	91	93	91	88	90	88	86	86	86	86	83
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	69
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4621	4621	4621
5°	4604	4648	4638
10°	4575	4630	4620
15°	4535	4595	4602
20°	4482	4550	4554
25°	4415	4486	4497
30°	4343	4417	4437
35°	4261	4336	4373
40°	4182	4252	4305
45°	4090	4157	4229
50°	3994	4057	4131
55°	3887	3945	4028
60°	3762	3822	3910
65°	3593	3666	3762
70°	3382	3482	3639
75°	3111	3241	3451
80°	2746	2961	3116
85°	2369	2715	2911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4229 cd/sqm



TEST NUMBER: P894990
 CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	3.4
10°-20°	351.0	9.7
20°-30°	526.0	14.5
30°-40°	625.9	17.3
40°-50°	642.2	17.8
50°-60°	575.3	15.9
60°-70°	437.1	12.1
70°-80°	254.1	7.0
80°-90°	76.2	2.1
90°-100°	1.8	0.1
100°-110°	0.3	0.0
110°-120°	0.0	0.0
120°-130°	0.2	0.0
130°-140°	0.4	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1000.1	27.7
0°-40°	1626.0	45.0
0°-60°	2843.5	78.7
0°-90°	3610.9	99.9
90°-120°	2.2	0.1
90°-150°	3.3	0.1
90°-180°	4.0	0.1
0°-180°	3615.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1293	1315	1305	1298	1302	123
15°	1235	1258	1251	1249	1253	348
25°	1128	1154	1146	1144	1149	520
35°	984	1008	1001	1004	1010	616
45°	815	835	828	835	843	629
55°	628	644	638	645	651	561
65°	428	438	437	444	448	424
75°	227	236	236	245	252	241
85°	58	63	67	72	72	64
90°	1	4	4	7	6	4
95°	0	1	1	2	3	0
105°	0	0	0	1	1	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	1
135°	0	0	1	0	0	0
145°	1	1	1	1	1	1
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	2	2	2	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P894990

CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3
2.5°	1298.4	1296.5	1298.4	1297.5	1307.0	1318.5	1316.6	1308.0	1298.4	1301.3	1308.9
5°	1292.7	1291.8	1294.6	1292.7	1302.3	1314.7	1310.8	1303.2	1294.6	1297.5	1305.1
7.5°	1283.2	1283.2	1287.0	1285.1	1293.7	1306.1	1302.3	1295.6	1287.0	1289.9	1297.5
10°	1269.8	1270.8	1275.6	1272.7	1280.3	1293.7	1289.9	1283.2	1275.6	1277.5	1285.1
12.5°	1254.6	1254.6	1260.3	1257.5	1265.1	1277.5	1272.7	1267.9	1260.3	1262.2	1270.8
15°	1234.6	1235.5	1242.2	1239.3	1246.0	1258.4	1253.6	1249.8	1243.2	1244.1	1250.8
17.5°	1211.7	1214.6	1221.2	1218.4	1225.0	1237.4	1231.7	1227.9	1222.2	1223.1	1229.8
20°	1186.9	1189.8	1196.4	1194.5	1199.3	1211.7	1206.0	1204.1	1198.3	1199.3	1205.0
22.5°	1159.3	1162.1	1169.7	1167.8	1172.6	1185.0	1178.3	1177.4	1171.7	1172.6	1177.4
25°	1127.8	1131.6	1140.2	1138.3	1142.1	1153.5	1147.8	1145.9	1142.1	1142.1	1145.9
27.5°	1095.4	1099.2	1108.7	1105.9	1108.7	1121.1	1114.5	1113.5	1109.7	1109.7	1113.5
30°	1060.1	1063.9	1074.4	1071.6	1074.4	1084.9	1078.2	1079.2	1075.4	1075.4	1078.2
32.5°	1022.9	1025.8	1037.2	1035.3	1037.2	1047.7	1041.0	1042.0	1038.2	1039.1	1040.1
35°	983.8	986.7	999.1	997.2	998.1	1007.7	1002.9	1002.9	1000.1	999.1	1001.0
37.5°	943.8	946.7	961.9	957.2	957.2	966.7	962.9	962.9	960.0	959.1	960.0
40°	902.8	904.7	920.9	916.2	915.2	923.8	920.9	920.9	919.0	917.1	918.1
42.5°	859.9	862.8	879.0	875.2	871.4	880.9	878.0	879.0	876.1	874.2	874.2
45°	815.1	818.0	834.2	832.3	826.5	835.1	832.3	834.2	830.4	828.5	828.5
47.5°	770.3	774.1	789.4	786.5	780.8	789.4	786.5	788.4	784.6	782.7	782.7
50°	723.6	727.4	743.6	738.8	733.1	741.7	739.8	740.7	737.9	736.0	735.0
52.5°	675.9	680.7	695.9	690.2	685.5	693.1	692.1	693.1	689.3	688.3	687.4
55°	628.3	633.0	647.3	640.6	636.8	643.5	641.6	643.5	639.7	638.7	637.8
57.5°	578.7	583.4	596.8	590.1	587.3	593.0	592.0	593.0	590.1	589.2	588.2
60°	530.1	533.9	546.3	539.6	536.7	542.5	540.5	543.4	539.6	539.6	538.6
62.5°	478.6	483.3	495.7	488.1	486.2	491.0	489.1	491.9	490.0	488.1	487.2
65°	428.0	430.9	442.3	435.7	432.8	438.5	437.6	439.5	436.6	437.6	436.6
67.5°	377.5	379.4	390.9	383.2	381.3	387.1	388.0	387.1	385.1	386.1	385.1
70°	326.0	327.9	337.5	330.8	329.9	334.6	336.5	335.6	333.7	334.6	335.6
72.5°	276.5	277.4	286.0	280.3	279.3	285.0	285.0	285.0	285.0	285.0	287.0
75°	226.9	227.8	235.5	230.7	229.8	235.5	235.5	235.5	235.5	237.4	236.4
77.5°	179.2	178.3	185.9	183.0	181.1	186.9	186.9	187.8	189.7	191.6	188.8
80°	134.4	133.5	139.2	135.4	135.4	141.1	140.1	141.1	143.0	144.0	144.9
82.5°	94.4	92.5	97.2	96.3	95.3	100.1	101.1	100.1	103.0	103.9	103.9
85°	58.2	58.2	61.0	59.1	59.1	62.9	62.9	63.9	65.8	66.7	66.7
87.5°	27.6	26.7	29.6	28.6	27.6	30.5	30.5	31.5	32.4	33.4	32.4
90°	1.0	1.0	1.9	1.9	1.9	3.8	3.8	3.8	4.8	4.8	3.8
92.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.9	1.9	1.9	1.9
95°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	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	1.0



TEST NUMBER: P894990
 CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	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
117.5°	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
122.5°	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	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0
132.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
135°	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0
137.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
140°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
142.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
145°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
147.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
150°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
152.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
155°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
167.5°	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0
170°	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0
172.5°	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0
175°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.9	1.9
177.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P894990
 CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3
2.5°	1297.5	1290.8	1288.0	1289.9	1303.2	1289.9	1304.2	1308.9	1291.8	1301.3
5°	1293.7	1287.0	1283.2	1285.1	1298.4	1286.1	1301.3	1307.0	1292.7	1302.3
7.5°	1286.1	1278.4	1276.5	1279.4	1290.8	1280.3	1295.6	1301.3	1287.0	1296.5
10°	1274.6	1267.9	1266.0	1268.9	1279.4	1268.9	1282.2	1287.0	1273.7	1282.2
12.5°	1260.3	1253.6	1251.7	1255.5	1265.1	1255.5	1268.9	1273.7	1260.3	1268.9
15°	1242.2	1235.5	1234.6	1240.3	1248.9	1240.3	1253.6	1257.5	1244.1	1252.7
17.5°	1220.3	1213.6	1214.6	1221.2	1227.9	1220.3	1232.7	1236.5	1224.1	1230.8
20°	1196.4	1188.8	1190.7	1196.4	1202.2	1194.5	1206.9	1210.7	1199.3	1206.0
22.5°	1168.8	1161.2	1163.1	1169.7	1173.6	1166.9	1178.3	1182.1	1172.6	1179.3
25°	1138.3	1131.6	1134.5	1141.1	1144.0	1138.3	1148.8	1151.6	1143.1	1148.8
27.5°	1107.8	1100.2	1104.0	1110.6	1112.5	1106.8	1117.3	1119.2	1110.6	1116.4
30°	1073.5	1065.8	1070.6	1078.2	1078.2	1074.4	1083.0	1084.9	1078.2	1083.0
32.5°	1035.3	1029.6	1035.3	1042.0	1041.0	1038.2	1046.8	1048.7	1043.0	1046.8
35°	997.2	992.4	998.1	1004.8	1003.9	1001.0	1009.6	1010.5	1005.8	1009.6
37.5°	958.1	954.3	960.0	965.7	963.8	961.9	969.5	969.5	966.7	970.5
40°	918.1	914.3	919.0	925.7	921.9	921.9	926.6	928.6	925.7	929.5
42.5°	876.1	872.3	878.0	883.7	879.9	879.0	884.7	885.7	883.7	886.6
45°	832.3	828.5	834.2	838.9	835.1	835.1	839.9	839.9	838.9	842.8
47.5°	787.5	784.6	789.4	794.1	790.3	793.2	793.2	793.2	795.1	794.1
50°	741.7	738.8	742.7	748.4	743.6	744.6	746.5	746.5	747.4	748.4
52.5°	694.0	690.2	694.0	700.7	694.0	696.9	697.8	698.8	701.7	699.8
55°	646.4	642.6	646.4	652.1	645.4	649.2	649.2	650.2	653.0	651.1
57.5°	596.8	593.0	598.7	602.5	595.8	599.7	599.7	601.6	603.5	600.6
60°	547.2	544.4	546.3	552.9	546.3	550.1	550.1	550.1	553.9	551.0
62.5°	496.7	494.8	496.7	502.4	495.7	499.5	498.6	499.5	503.4	502.4
65°	445.2	443.3	445.2	450.9	444.3	448.1	448.1	449.0	451.9	448.1
67.5°	394.7	391.8	394.7	399.4	393.7	396.6	396.6	396.6	401.4	399.4
70°	343.2	341.3	343.2	348.0	343.2	345.1	345.1	345.1	349.9	350.8
72.5°	292.7	292.7	294.6	298.4	294.6	298.4	295.5	293.6	300.3	301.3
75°	243.1	244.1	245.0	248.8	245.0	248.8	246.9	245.0	250.7	251.7
77.5°	197.3	197.3	198.3	201.2	198.3	201.2	199.2	199.2	203.1	202.1
80°	150.6	150.6	151.6	154.4	151.6	154.4	152.5	152.5	156.3	152.5
82.5°	109.6	109.6	109.6	112.5	110.6	112.5	111.5	109.6	114.4	110.6
85°	70.5	71.5	71.5	72.5	71.5	72.5	72.5	71.5	74.4	71.5
87.5°	36.2	36.2	36.2	37.2	36.2	36.2	37.2	36.2	38.1	37.2
90°	6.7	5.7	5.7	7.6	6.7	6.7	7.6	5.7	6.7	5.7
92.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8
95°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9
97.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9	1.9
100°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
102.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
105°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0
107.5°	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	1.0	0.0	0.0	0.0	1.0



TEST NUMBER: P894990
 CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	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
117.5°	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
122.5°	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
127.5°	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0
140°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
142.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0
145°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
147.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
150°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
152.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
155°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
167.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
170°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
172.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
175°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
177.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P894990
 CATALOG NUMBER: 8TMB-4SL-FLT-UNV-L835

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.82	18.46	17.19	18.78	19.09	16.96	18.60	17.33	18.91	19.23
	3H	18.65	20.13	19.03	20.46	20.82	18.79	20.27	19.17	20.60	20.97
	4H	19.31	20.70	19.71	21.05	21.43	19.50	20.90	19.90	21.25	21.62
	6H	19.76	21.06	20.17	21.42	21.82	20.06	21.35	20.47	21.72	22.11
	8H	19.90	21.14	20.33	21.53	21.93	20.25	21.49	20.68	21.88	22.28
	12H	20.00	21.18	20.43	21.57	22.00	20.39	21.58	20.83	21.96	22.39
4H	2H	17.46	18.85	17.86	19.20	19.58	17.57	18.96	17.97	19.31	19.69
	3H	19.50	20.67	19.91	21.07	21.47	19.63	20.81	20.04	21.20	21.61
	4H	20.29	21.35	20.73	21.77	22.21	20.48	21.54	20.91	21.95	22.39
	6H	20.87	21.80	21.32	22.24	22.70	21.17	22.10	21.63	22.54	23.00
	8H	21.06	21.93	21.52	22.37	22.84	21.42	22.28	21.88	22.73	23.20
	12H	21.20	21.98	21.68	22.46	22.93	21.61	22.39	22.09	22.87	23.34
8H	4H	20.62	21.49	21.08	21.93	22.40	20.79	21.66	21.25	22.10	22.57
	6H	21.32	22.05	21.82	22.54	23.02	21.61	22.34	22.11	22.83	23.30
	8H	21.59	22.24	22.10	22.75	23.23	21.94	22.59	22.45	23.10	23.59
	12H	21.80	22.38	22.31	22.87	23.43	22.23	22.80	22.73	23.29	23.86
12H	4H	20.67	21.45	21.15	21.92	22.40	20.82	21.60	21.30	22.08	22.55
	6H	21.39	22.05	21.90	22.55	23.04	21.67	22.32	22.18	22.83	23.32
	8H	21.72	22.30	22.23	22.79	23.35	22.06	22.64	22.57	23.13	23.69