

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: P892957

Luminaire Tested: 2MB-SC3-ASML-UNV-CC83-HI-3500K

Issue Date: 11/11/2024

**Test Information**

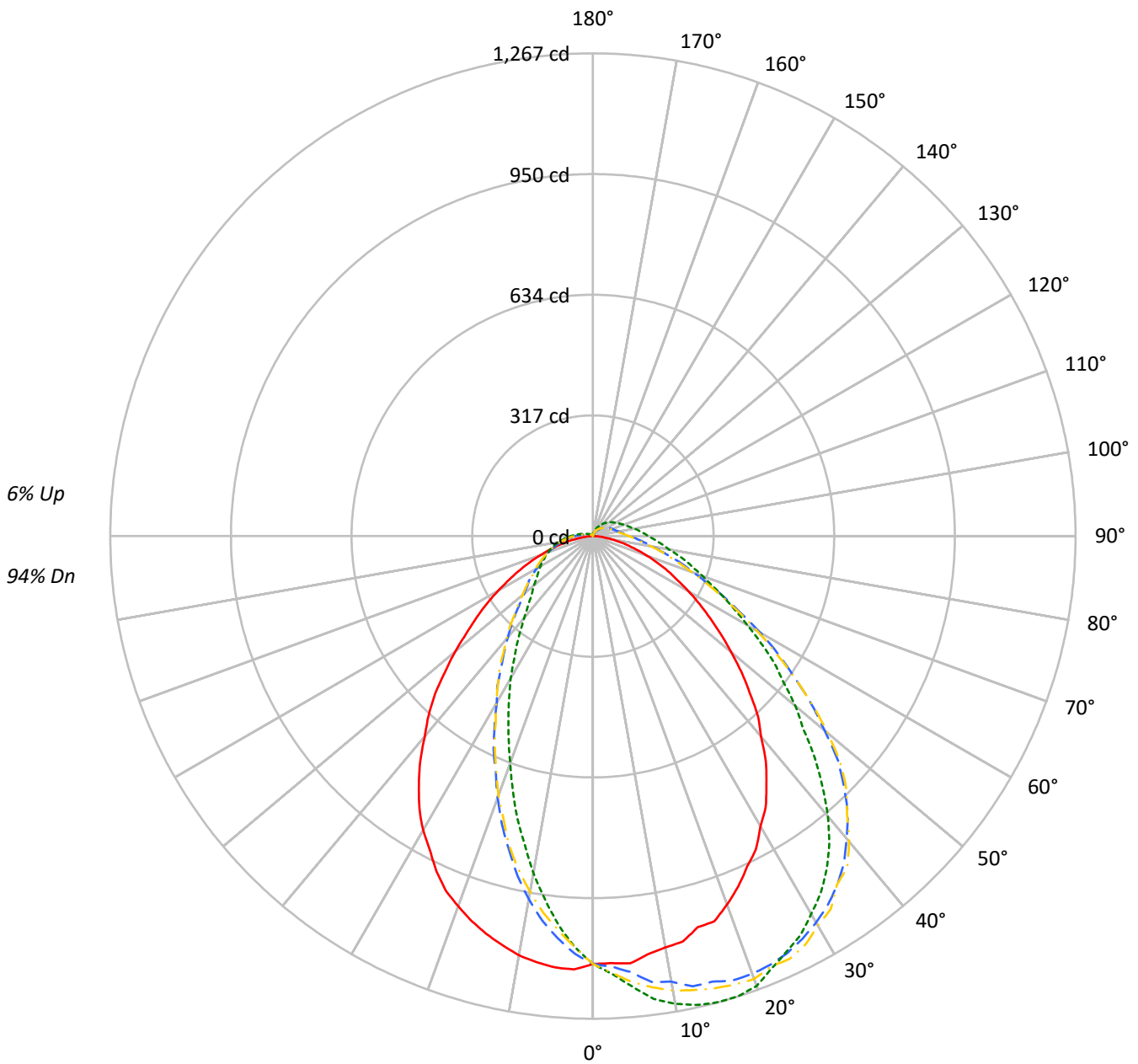
Test Method: LM-79-2019  
Report Number: P892957  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASML-UNV-CC83-HI-3500K  
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 3500K CCT, HI lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2799.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.07 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.12')  
CIE Type: Direct  
  
Input Watts (W): 21  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.39961257980444  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P892957  
CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-3500K

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - 90°-270°    - · - 135°-315°



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**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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	97	97	97	94
1	107	103	98	94	104	100	96	92	95	91	88	90	87	85	85	83	81	81	81	81	79
2	98	90	83	78	95	88	82	76	83	78	74	79	75	71	75	72	69	69	69	69	66
3	90	80	72	65	87	78	70	64	74	68	63	70	65	61	67	63	59	59	59	59	57
4	83	71	63	56	80	69	61	55	66	59	54	63	57	53	60	55	51	51	51	51	49
5	76	64	55	49	74	62	54	48	60	53	47	57	51	46	55	49	45	45	45	45	43
6	71	58	49	43	68	56	48	42	54	47	42	52	46	41	50	44	40	40	40	40	38
7	66	53	44	38	64	51	43	38	49	42	37	48	41	36	46	40	36	36	36	36	34
8	61	48	40	34	59	47	39	34	45	38	33	44	37	33	42	37	32	32	32	32	30
9	57	44	36	31	56	43	36	31	42	35	30	40	34	30	39	33	29	29	29	29	28
10	54	41	33	28	52	40	33	28	39	32	28	38	31	27	36	31	27	27	27	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	22995	22995	22995	22995
5°	23015	23434	23234	20253
10°	22542	23934	22980	17262
15°	22161	23848	22537	14433
20°	21923	23376	22019	11808
25°	21023	22292	21313	9716
30°	20073	21304	20333	8026
35°	19014	20105	19067	6541
40°	17427	18391	17419	5362
45°	15866	16234	15945	4568
50°	14031	14168	13966	4127
55°	12283	12413	12198	3792
60°	10683	10586	10587	3585
65°	9260	9115	9038	3405
70°	7749	7987	7484	3256
75°	6165	7262	6005	3134
80°	4567	6534	4150	2918
85°	2865	6313	2306	2737

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 22209 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.5	3.8
10°-20°	293.3	10.5
20°-30°	421.8	15.1
30°-40°	478.7	17.1
40°-50°	457.5	16.3
50°-60°	371.8	13.3
60°-70°	259.4	9.3
70°-80°	160.7	5.7
80°-90°	92.2	3.3
90°-100°	55.1	2.0
100°-110°	36.2	1.3
110°-120°	25.3	0.9
120°-130°	18.4	0.7
130°-140°	12.2	0.4
140°-150°	6.9	0.2
150°-160°	3.1	0.1
160°-170°	0.9	0.0
170°-180°	0.1	0.0
0°-30°	820.7	29.3
0°-40°	1299.4	46.4
0°-60°	2128.6	76.1
0°-90°	2640.9	94.4
90°-120°	116.6	4.2
90°-150°	154.1	5.5
90°-180°	158.0	5.6
0°-180°	2799.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1123	1123	1123	1123	1123	
5°	1126	1187	1137	1026	1126	106
15°	1063	1267	1081	767	1063	302
25°	958	1203	971	524	958	442
35°	794	1069	796	348	794	495
45°	582	824	585	232	582	449
55°	375	581	372	178	375	338
65°	217	378	212	141	217	215
75°	96	253	94	109	96	104
85°	21	171	17	74	21	24
90°	1	145	0	57	1	2
95°	1	126	0	43	1	1
105°	1	97	0	24	1	1
115°	1	77	0	13	1	1
125°	1	63	0	8	1	1
135°	1	50	0	7	1	1
145°	1	35	0	4	1	0
155°	1	22	0	3	1	0
165°	1	10	0	1	1	0
175°	1	0	0	0	1	0
180°	0	0	0	0	0	



TEST NUMBER: P892957  
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0
2.5°	1121.9	1130.4	1131.1	1157.6	1149.8	1159.8	1147.3	1149.5	1138.5	1135.5	1097.3
5°	1125.9	1144.0	1148.7	1194.3	1187.0	1192.1	1174.9	1162.4	1136.6	1121.2	1059.4
7.5°	1106.8	1154.3	1180.7	1213.1	1225.2	1229.3	1194.3	1171.2	1128.5	1090.6	1018.2
10°	1096.2	1161.6	1187.4	1235.9	1246.6	1238.8	1211.6	1173.4	1117.5	1056.4	967.5
12.5°	1090.3	1165.7	1210.5	1260.2	1260.5	1252.4	1220.5	1179.3	1099.5	1019.7	913.8
15°	1063.1	1164.9	1210.9	1261.3	1266.8	1261.6	1228.9	1175.2	1081.1	974.1	852.0
17.5°	1060.1	1163.1	1222.7	1275.6	1266.4	1262.7	1234.1	1173.4	1059.0	927.7	793.9
20°	1029.2	1159.0	1222.7	1259.4	1256.5	1258.0	1237.4	1170.8	1033.7	877.7	730.3
22.5°	996.5	1154.3	1217.5	1245.5	1227.8	1254.6	1222.7	1163.8	1007.9	825.5	667.0
25°	957.9	1146.5	1207.6	1225.6	1203.2	1224.1	1223.8	1153.2	971.1	769.3	617.0
27.5°	926.6	1134.4	1191.4	1218.6	1180.4	1198.4	1208.7	1140.3	927.7	713.7	558.2
30°	879.9	1119.0	1171.9	1176.0	1145.8	1168.6	1180.4	1124.1	891.3	650.9	504.5
32.5°	844.3	1101.3	1148.0	1142.5	1112.3	1142.5	1161.6	1107.9	848.0	595.7	466.6
35°	794.3	1080.0	1118.2	1089.2	1069.3	1094.3	1116.8	1090.6	796.5	536.9	418.1
37.5°	745.7	1061.2	1082.6	1046.5	1019.3	1047.3	1096.5	1058.3	744.6	490.2	382.1
40°	686.5	1018.2	1035.9	987.0	959.7	1000.9	1046.2	1030.3	686.2	441.6	347.1
42.5°	641.7	986.2	991.4	924.4	892.1	935.8	987.3	990.6	638.7	397.9	316.2
45°	582.5	941.4	931.8	858.3	824.4	863.8	941.0	949.8	585.4	360.0	286.1
47.5°	529.1	891.3	872.6	786.5	748.7	795.4	881.0	904.2	525.8	325.1	257.8
50°	473.6	835.5	793.9	719.6	694.2	717.4	804.9	843.2	471.4	290.5	236.1
52.5°	422.9	773.7	722.2	655.6	630.3	649.4	725.1	782.5	417.4	261.4	217.0
55°	375.1	711.9	645.3	586.5	581.4	587.2	644.2	710.1	372.5	235.7	204.8
57.5°	332.4	636.9	576.2	532.8	523.6	528.4	567.8	635.4	329.1	210.0	187.2
60°	289.4	560.0	507.8	474.4	469.2	472.9	498.3	562.6	286.8	188.3	170.6
62.5°	250.4	482.8	436.5	424.0	420.3	420.3	431.0	489.8	247.1	166.2	158.1
65°	217.0	416.6	381.7	376.9	378.0	377.6	371.0	408.9	211.8	146.7	147.1
67.5°	183.1	346.4	326.9	332.8	337.2	335.4	321.4	340.1	178.7	129.1	137.2
70°	151.9	286.1	282.4	295.6	305.9	296.4	276.2	278.0	146.7	111.8	124.3
72.5°	122.4	231.3	248.2	266.6	276.5	265.9	237.9	229.8	118.0	96.0	112.5
75°	96.3	186.1	212.9	240.1	253.0	239.4	207.0	179.4	93.8	80.9	103.0
77.5°	73.5	147.5	182.0	213.6	226.1	214.4	180.2	140.1	68.8	68.0	92.7
80°	52.6	116.6	161.4	191.9	203.3	191.9	156.3	110.7	47.8	54.4	81.6
82.5°	34.6	90.1	140.5	174.7	187.2	173.2	135.7	85.3	30.5	44.1	73.5
85°	21.0	71.3	122.4	157.0	171.4	157.8	118.8	64.7	16.9	33.8	64.0
87.5°	9.2	55.2	109.2	144.9	157.8	145.2	105.9	50.7	7.0	26.5	54.8
90°	0.7	43.8	96.3	133.5	144.9	133.1	93.8	41.2	0.0	19.1	47.1
92.5°	0.7	37.5	88.3	123.6	136.4	123.2	84.6	33.8	0.0	14.0	39.7
95°	1.1	31.6	80.2	115.8	126.1	114.7	77.2	29.0	0.0	9.6	33.5
97.5°	1.1	28.7	73.5	108.1	119.5	107.4	70.6	26.1	0.0	7.0	27.2
100°	0.7	26.5	68.4	100.8	111.4	100.0	65.5	23.5	0.0	4.4	22.1
102.5°	0.7	24.6	64.0	94.5	103.0	93.4	61.0	22.1	0.0	3.7	18.0
105°	0.7	23.5	59.9	87.1	97.1	87.1	57.4	20.6	0.0	2.9	14.0
107.5°	0.7	22.1	57.0	83.1	91.2	82.4	54.4	19.5	0.0	2.9	11.4
110°	0.7	21.0	54.4	77.2	86.4	78.0	51.8	17.7	0.0	1.8	9.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.7	19.1	51.8	73.2	82.0	73.5	49.6	16.2	0.0	1.8	8.1
115°	0.7	17.3	49.6	70.6	77.2	69.9	47.4	14.3	0.0	1.5	7.4
117.5°	0.7	16.2	48.2	67.3	73.9	66.6	45.6	13.6	0.0	1.5	7.0
120°	0.7	15.4	46.0	64.0	69.1	63.2	43.4	12.9	0.0	1.5	6.6
122.5°	0.7	14.7	44.1	61.0	66.6	60.7	41.6	12.5	0.0	1.1	5.9
125°	0.7	14.0	41.6	57.7	62.9	57.0	38.2	12.1	0.0	0.7	5.1
127.5°	0.7	13.2	39.0	55.2	59.9	54.4	36.0	11.8	0.0	0.7	4.8
130°	0.7	12.9	35.7	51.8	56.6	51.1	33.5	11.8	0.0	0.7	4.4
132.5°	0.7	12.5	32.0	48.5	53.7	47.8	30.9	11.4	0.0	0.7	3.7
135°	0.7	12.1	28.3	45.2	50.0	44.5	28.7	11.0	0.0	0.7	3.3
137.5°	0.7	11.4	25.0	41.6	46.3	40.8	27.2	10.3	0.0	0.7	2.9
140°	0.7	10.7	22.4	38.6	42.7	37.5	25.0	9.6	0.0	0.4	2.2
142.5°	0.7	9.6	20.2	34.9	39.0	34.2	22.4	8.1	0.0	0.4	2.2
145°	0.7	8.5	18.4	30.5	35.3	30.5	21.0	7.4	0.0	0.4	1.8
147.5°	0.7	7.7	16.5	25.7	32.0	27.9	18.8	6.3	0.0	0.4	1.5
150°	0.7	7.0	14.3	21.7	28.3	24.6	17.3	5.5	0.0	0.0	1.1
152.5°	0.7	6.3	12.5	18.0	25.4	22.4	15.4	4.8	0.0	0.0	0.7
155°	1.1	5.9	10.7	15.8	22.1	19.5	12.9	4.0	0.0	0.0	0.7
157.5°	1.1	5.1	8.8	12.9	19.5	16.9	10.3	3.3	0.0	0.0	0.4
160°	1.1	4.8	7.4	9.9	16.2	14.0	8.5	2.6	0.0	0.0	0.4
162.5°	1.1	4.4	6.3	7.4	13.2	11.0	6.6	1.8	0.0	0.0	0.4
165°	1.1	3.7	5.5	5.1	10.3	8.5	5.1	1.1	0.0	0.0	0.0
167.5°	1.1	3.3	4.4	3.7	7.7	6.3	3.7	0.7	0.0	0.0	0.0
170°	1.1	2.6	3.7	2.6	2.2	4.0	2.2	0.4	0.0	0.0	0.0
172.5°	1.1	2.2	2.9	1.8	0.7	2.2	1.1	0.0	0.0	0.0	0.0
175°	1.1	1.8	1.8	1.1	0.4	0.7	0.0	0.0	0.0	0.0	0.0
177.5°	1.1	1.5	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1123.0	1123.0	1123.0	1123.0	1123.0	1123.0
2.5°	1092.1	1080.0	1069.0	1080.7	1089.2	1121.9
5°	1038.8	1025.9	1027.4	1038.1	1066.4	1125.9
7.5°	983.6	962.3	967.5	997.2	1039.2	1106.8
10°	918.6	899.1	903.8	948.7	1007.5	1096.2
12.5°	860.5	827.7	855.7	898.0	970.8	1090.3
15°	792.4	766.7	781.8	844.3	935.5	1063.1
17.5°	718.9	699.0	717.0	779.2	892.1	1060.1
20°	662.3	634.7	656.0	724.4	838.4	1029.2
22.5°	598.6	577.7	600.1	663.0	783.6	996.5
25°	546.4	524.4	546.8	609.3	735.1	957.9
27.5°	495.7	475.5	495.7	553.0	686.9	926.6
30°	451.2	431.7	452.3	507.4	630.6	879.9
32.5°	409.6	384.6	411.1	464.4	581.0	844.3
35°	366.6	347.9	367.7	426.9	525.8	794.3
37.5°	330.9	311.5	335.0	385.7	479.1	745.7
40°	297.1	279.8	298.6	352.6	439.4	686.5
42.5°	270.6	253.4	272.5	322.5	399.3	641.7
45°	244.9	232.0	247.5	289.4	358.9	582.5
47.5°	226.1	215.1	228.0	265.1	325.1	529.1
50°	210.0	202.2	211.4	240.9	290.1	473.6
52.5°	195.6	187.9	198.6	222.1	262.5	422.9
55°	184.6	177.6	185.7	204.5	235.0	375.1
57.5°	172.5	168.0	174.3	185.7	213.3	332.4
60°	163.6	158.9	165.5	174.7	188.6	289.4
62.5°	153.7	151.1	155.2	162.5	169.9	250.4
65°	144.9	141.2	146.4	148.9	148.2	217.0
67.5°	135.3	134.2	137.2	137.5	132.0	183.1
70°	125.4	124.7	128.3	126.1	114.7	151.9
72.5°	117.3	117.3	119.5	115.1	100.0	122.4
75°	108.5	109.2	111.1	105.9	84.2	96.3
77.5°	100.4	101.1	101.5	94.5	70.6	73.5
80°	91.2	90.8	94.5	85.7	57.4	52.6
82.5°	83.1	81.6	83.8	75.0	46.3	34.6
85°	73.9	74.3	75.7	65.5	37.1	21.0
87.5°	66.6	66.6	68.0	57.7	27.9	9.2
90°	57.7	57.0	59.2	48.9	21.0	0.7
92.5°	50.4	50.4	51.8	41.9	15.4	0.7
95°	43.0	43.4	44.5	34.6	11.8	1.1
97.5°	36.8	37.1	38.6	29.4	8.5	1.1
100°	31.3	31.6	32.4	23.5	6.6	0.7
102.5°	26.1	27.2	27.2	19.5	5.1	0.7
105°	22.1	23.5	22.8	15.8	4.8	0.7
107.5°	18.4	19.9	19.9	12.9	4.8	0.7
110°	15.1	17.3	16.9	11.0	3.7	0.7





TEST NUMBER: P892957

CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	12.9	14.7	13.6	9.6	3.7	0.7
115°	11.0	12.9	12.1	8.8	3.3	0.7
117.5°	9.9	11.0	11.0	8.5	3.3	0.7
120°	9.2	10.3	9.9	8.1	3.3	0.7
122.5°	8.5	9.2	9.2	7.4	2.9	0.7
125°	8.1	8.5	8.8	6.6	2.9	0.7
127.5°	7.7	8.5	8.5	6.3	2.6	0.7
130°	7.0	7.7	7.7	5.9	2.6	0.7
132.5°	6.3	7.0	7.0	5.5	2.6	0.7
135°	5.9	6.6	6.6	5.1	2.6	0.7
137.5°	5.5	5.9	5.9	4.8	2.6	0.7
140°	4.8	5.5	5.5	4.4	2.6	0.7
142.5°	4.4	5.1	5.1	4.0	2.2	0.7
145°	4.0	4.4	4.8	3.7	2.2	0.7
147.5°	3.3	4.0	4.4	3.3	2.2	0.7
150°	2.6	3.7	3.7	3.3	2.2	0.7
152.5°	1.8	3.3	3.3	2.9	1.8	0.7
155°	1.5	2.6	2.9	2.6	1.8	1.1
157.5°	1.1	2.2	2.6	2.6	1.8	1.1
160°	0.7	1.8	2.2	2.2	1.5	1.1
162.5°	0.4	1.5	1.8	2.2	1.5	1.1
165°	0.0	1.1	1.5	1.8	1.5	1.1
167.5°	0.0	0.7	1.1	1.5	1.1	1.1
170°	0.0	0.4	0.7	1.1	1.1	1.1
172.5°	0.0	0.0	0.4	0.7	0.7	1.1
175°	0.0	0.0	0.0	0.4	0.7	1.1
177.5°	0.0	0.0	0.0	0.4	0.7	1.1
180°	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P892957  
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-3500K

**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	19.78	21.24	20.23	21.67	22.12	21.94	23.40	22.40	23.83	24.29
	3H	20.60	21.92	21.07	22.36	22.86	23.61	24.93	24.08	25.37	25.87
	4H	20.81	22.05	21.29	22.51	23.02	24.42	25.67	24.91	26.13	26.64
	6H	20.90	22.05	21.40	22.53	23.05	25.26	26.41	25.76	26.88	27.41
	8H	20.90	22.00	21.41	22.50	23.03	25.69	26.79	26.21	27.29	27.82
	12H	20.89	21.94	21.41	22.43	23.00	26.18	27.23	26.70	27.73	28.29
4H	2H	20.20	21.45	20.69	21.91	22.42	22.31	23.56	22.80	24.02	24.53
	3H	21.30	22.35	21.80	22.85	23.39	24.17	25.21	24.67	25.72	26.25
	4H	21.64	22.59	22.16	23.11	23.67	25.11	26.06	25.63	26.58	27.15
	6H	21.83	22.66	22.38	23.21	23.79	26.11	26.94	26.65	27.48	28.07
	8H	21.86	22.64	22.41	23.18	23.78	26.64	27.42	27.19	27.96	28.56
	12H	21.87	22.57	22.44	23.14	23.74	27.24	27.94	27.81	28.52	29.11
8H	4H	21.96	22.74	22.51	23.28	23.88	25.26	26.04	25.81	26.58	27.17
	6H	22.28	22.93	22.86	23.52	24.12	26.39	27.04	26.97	27.63	28.23
	8H	22.37	22.96	22.96	23.56	24.17	27.03	27.62	27.63	28.22	28.83
	12H	22.42	22.95	23.02	23.53	24.22	27.79	28.32	28.39	28.90	29.59
12H	4H	22.03	22.73	22.60	23.31	23.91	25.25	25.95	25.82	26.53	27.13
	6H	22.41	23.00	23.00	23.60	24.21	26.40	26.99	27.00	27.59	28.20
	8H	22.57	23.09	23.16	23.68	24.36	27.10	27.63	27.70	28.21	28.90