

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: P892614

Luminaire Tested: 2MB-3SL-ASML-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892614
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-3SL-ASML-UNV-L835
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

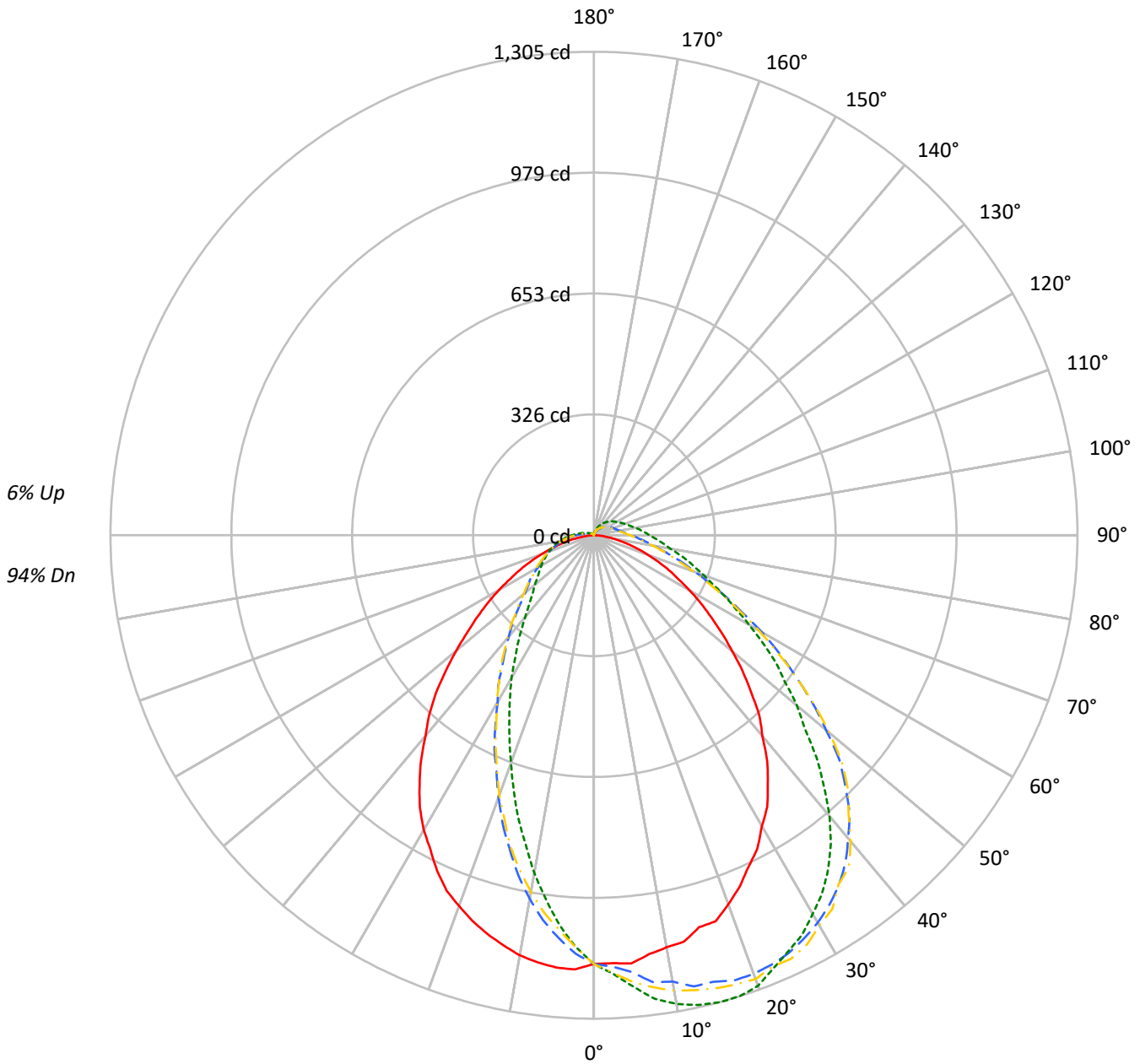
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2884.0 lumens
Efficiency: N/A
Efficacy: 137.3 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 (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 8
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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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			20
RC	80				70				50			30			10			0			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	94			
1	107	103	98	94	104	100	96	92	95	91	88	90	87	85	85	83	81	79			
2	98	90	83	78	95	88	82	76	83	78	74	79	75	71	75	72	69	66			
3	90	80	72	65	87	78	70	64	74	68	63	70	65	61	67	63	59	57			
4	83	71	63	56	80	69	61	55	66	59	54	63	57	53	60	55	51	49			
5	76	64	55	49	74	62	54	48	60	53	47	57	51	46	55	49	45	43			
6	71	58	49	43	68	56	48	42	54	47	42	52	46	41	50	44	40	38			
7	66	53	44	38	64	51	43	38	49	42	37	48	41	36	46	40	36	34			
8	61	48	40	34	59	47	39	34	45	38	33	44	37	33	42	37	32	30			
9	57	44	36	31	56	43	36	31	42	35	30	40	34	30	39	33	29	28			
10	54	41	33	28	52	40	33	28	39	32	28	38	31	27	36	31	27	25			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	23693	23693	23693	23693
5°	23714	24144	23939	20869
10°	23226	24660	23677	17786
15°	22835	24572	23220	14872
20°	22590	24085	22685	12167
25°	21662	22969	21960	10010
30°	20684	21951	20951	8270
35°	19591	20716	19646	6739
40°	17957	18950	17947	5525
45°	16348	16728	16430	4708
50°	14457	14599	14389	4253
55°	12656	12789	12568	3907
60°	11008	10909	10908	3693
65°	9537	9393	9311	3509
70°	7984	8230	7714	3353
75°	6357	7483	6185	3229
80°	4706	6733	4280	3008
85°	2947	6504	2374	2818

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 22885 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.7	3.8
10°-20°	302.2	10.5
20°-30°	434.7	15.1
30°-40°	493.3	17.1
40°-50°	471.4	16.3
50°-60°	383.0	13.3
60°-70°	267.3	9.3
70°-80°	165.6	5.7
80°-90°	95.0	3.3
90°-100°	56.8	2.0
100°-110°	37.3	1.3
110°-120°	26.1	0.9
120°-130°	18.9	0.7
130°-140°	12.6	0.4
140°-150°	7.1	0.2
150°-160°	3.2	0.1
160°-170°	0.9	0.0
170°-180°	0.1	0.0
0°-30°	845.6	29.3
0°-40°	1338.8	46.4
0°-60°	2193.3	76.0
0°-90°	2721.1	94.4
90°-120°	120.2	4.2
90°-150°	158.8	5.5
90°-180°	163.0	5.7
0°-180°	2884.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1157	1157	1157	1157	1157	
5°	1160	1223	1171	1057	1160	109
15°	1095	1305	1114	790	1095	311
25°	987	1240	1001	540	987	455
35°	818	1102	821	358	818	510
45°	600	850	603	239	600	463
55°	386	599	384	183	386	348
65°	224	390	218	146	224	222
75°	99	261	97	112	99	107
85°	22	177	17	76	22	24
90°	1	149	0	59	1	2
95°	1	130	0	45	1	1
105°	1	100	0	24	1	1
115°	1	80	0	13	1	1
125°	1	65	0	9	1	1
135°	1	52	0	7	1	1
145°	1	36	0	4	1	1
155°	1	23	0	3	1	0
165°	1	11	0	1	1	0
175°	1	0	0	0	1	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1
2.5°	1156.0	1164.7	1165.4	1192.7	1184.8	1195.0	1182.1	1184.4	1173.0	1170.0	1130.6
5°	1160.1	1178.7	1183.6	1230.6	1223.0	1228.3	1210.5	1197.7	1171.1	1155.2	1091.6
7.5°	1140.4	1189.3	1216.6	1249.9	1262.4	1266.6	1230.6	1206.7	1162.8	1123.8	1049.1
10°	1129.5	1196.9	1223.4	1273.4	1284.4	1276.5	1248.4	1209.0	1151.4	1088.5	996.8
12.5°	1123.4	1201.1	1247.3	1298.4	1298.8	1290.5	1257.5	1215.1	1132.9	1050.6	941.5
15°	1095.4	1200.3	1247.7	1299.6	1305.3	1299.9	1266.2	1210.9	1113.9	1003.7	877.9
17.5°	1092.3	1198.4	1259.8	1314.3	1304.9	1301.1	1271.5	1209.0	1091.2	955.9	818.0
20°	1060.5	1194.2	1259.8	1297.7	1294.6	1296.2	1274.9	1206.4	1065.0	904.4	752.5
22.5°	1026.8	1189.3	1254.5	1283.3	1265.1	1292.7	1259.8	1199.2	1038.5	850.6	687.3
25°	987.0	1181.4	1244.3	1262.8	1239.7	1261.3	1260.9	1188.2	1000.6	792.6	635.8
27.5°	954.8	1168.9	1227.6	1255.6	1216.2	1234.8	1245.4	1174.9	955.9	735.4	575.1
30°	906.7	1152.9	1207.5	1211.7	1180.6	1204.1	1216.2	1158.2	918.4	670.6	519.8
32.5°	869.9	1134.8	1182.9	1177.2	1146.1	1177.2	1196.9	1141.6	873.7	613.8	480.8
35°	818.4	1112.8	1152.2	1122.3	1101.8	1127.6	1150.7	1123.8	820.7	553.2	430.8
37.5°	768.4	1093.5	1115.4	1078.3	1050.3	1079.1	1129.8	1090.4	767.2	505.1	393.7
40°	707.4	1049.1	1067.3	1016.9	988.9	1031.3	1077.9	1061.6	707.0	455.0	357.7
42.5°	661.2	1016.2	1021.5	952.5	919.2	964.3	1017.3	1020.7	658.1	410.0	325.8
45°	600.2	969.9	960.1	884.3	849.5	890.0	969.6	978.7	603.2	370.9	294.8
47.5°	545.2	918.4	899.1	810.4	771.4	819.5	907.8	931.7	541.8	334.9	265.6
50°	488.0	860.8	818.0	741.5	715.3	739.2	829.4	868.8	485.7	299.3	243.2
52.5°	435.7	797.2	744.1	675.5	649.4	669.1	747.2	806.3	430.0	269.4	223.5
55°	386.5	733.5	664.9	604.3	599.0	605.1	663.8	731.6	383.8	242.9	211.0
57.5°	342.5	656.2	593.7	549.0	539.5	544.5	585.0	654.7	339.1	216.3	192.9
60°	298.2	577.0	523.2	488.8	483.5	487.2	513.4	579.7	295.5	194.0	175.8
62.5°	258.0	497.5	449.7	436.9	433.1	433.1	444.1	504.7	254.6	171.3	162.9
65°	223.5	429.3	393.3	388.4	389.5	389.1	382.3	421.3	218.2	151.2	151.6
67.5°	188.7	356.9	336.8	342.9	347.4	345.5	331.1	350.5	184.1	133.0	141.3
70°	156.5	294.8	291.0	304.6	315.2	305.4	284.5	286.4	151.2	115.2	128.1
72.5°	126.2	238.3	255.7	274.7	284.9	273.9	245.1	236.8	121.6	98.9	115.9
75°	99.3	191.7	219.4	247.4	260.7	246.7	213.3	184.9	96.6	83.4	106.1
77.5°	75.8	151.9	187.5	220.1	233.0	220.9	185.7	144.4	70.9	70.1	95.5
80°	54.2	120.1	166.3	197.8	209.5	197.8	161.0	114.0	49.3	56.1	84.1
82.5°	35.6	92.8	144.7	180.0	192.9	178.5	139.8	87.9	31.4	45.5	75.8
85°	21.6	73.5	126.2	161.8	176.6	162.5	122.4	66.7	17.4	34.9	65.9
87.5°	9.5	56.8	112.5	149.3	162.5	149.7	109.1	52.3	7.2	27.3	56.5
90°	0.8	45.1	99.3	137.5	149.3	137.2	96.6	42.4	0.0	19.7	48.5
92.5°	0.8	38.6	90.9	127.3	140.6	126.9	87.1	34.9	0.0	14.4	40.9
95°	1.1	32.6	82.6	119.3	130.0	118.2	79.6	29.9	0.0	9.9	34.5
97.5°	1.1	29.6	75.8	111.4	123.1	110.6	72.7	26.9	0.0	7.2	28.0
100°	0.8	27.3	70.5	103.8	114.8	103.1	67.4	24.2	0.0	4.5	22.7
102.5°	0.8	25.4	65.9	97.4	106.1	96.2	62.9	22.7	0.0	3.8	18.6
105°	0.8	24.2	61.8	89.8	100.0	89.8	59.1	21.2	0.0	3.0	14.4
107.5°	0.8	22.7	58.7	85.6	94.0	84.9	56.1	20.1	0.0	3.0	11.7
110°	0.8	21.6	56.1	79.6	89.0	80.3	53.4	18.2	0.0	1.9	9.5



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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°	0.8	19.7	53.4	75.4	84.5	75.8	51.1	16.7	0.0	1.9	8.3
115°	0.8	17.8	51.1	72.7	79.6	72.0	48.9	14.8	0.0	1.5	7.6
117.5°	0.8	16.7	49.6	69.3	76.2	68.6	47.0	14.0	0.0	1.5	7.2
120°	0.8	15.9	47.4	65.9	71.2	65.2	44.7	13.3	0.0	1.5	6.8
122.5°	0.8	15.2	45.5	62.9	68.6	62.5	42.8	12.9	0.0	1.1	6.1
125°	0.8	14.4	42.8	59.5	64.8	58.7	39.4	12.5	0.0	0.8	5.3
127.5°	0.8	13.6	40.2	56.8	61.8	56.1	37.1	12.1	0.0	0.8	4.9
130°	0.8	13.3	36.8	53.4	58.3	52.7	34.5	12.1	0.0	0.8	4.5
132.5°	0.8	12.9	33.0	50.0	55.3	49.3	31.8	11.7	0.0	0.8	3.8
135°	0.8	12.5	29.2	46.6	51.5	45.8	29.6	11.4	0.0	0.8	3.4
137.5°	0.8	11.7	25.8	42.8	47.7	42.1	28.0	10.6	0.0	0.8	3.0
140°	0.8	11.0	23.1	39.8	44.0	38.6	25.8	9.9	0.0	0.4	2.3
142.5°	0.8	9.9	20.8	36.0	40.2	35.2	23.1	8.3	0.0	0.4	2.3
145°	0.8	8.7	18.9	31.4	36.4	31.4	21.6	7.6	0.0	0.4	1.9
147.5°	0.8	8.0	17.0	26.5	33.0	28.8	19.3	6.4	0.0	0.4	1.5
150°	0.8	7.2	14.8	22.4	29.2	25.4	17.8	5.7	0.0	0.0	1.1
152.5°	0.8	6.4	12.9	18.6	26.1	23.1	15.9	4.9	0.0	0.0	0.8
155°	1.1	6.1	11.0	16.3	22.7	20.1	13.3	4.2	0.0	0.0	0.8
157.5°	1.1	5.3	9.1	13.3	20.1	17.4	10.6	3.4	0.0	0.0	0.4
160°	1.1	4.9	7.6	10.2	16.7	14.4	8.7	2.7	0.0	0.0	0.4
162.5°	1.1	4.5	6.4	7.6	13.6	11.4	6.8	1.9	0.0	0.0	0.4
165°	1.1	3.8	5.7	5.3	10.6	8.7	5.3	1.1	0.0	0.0	0.0
167.5°	1.1	3.4	4.5	3.8	8.0	6.4	3.8	0.8	0.0	0.0	0.0
170°	1.1	2.7	3.8	2.7	2.3	4.2	2.3	0.4	0.0	0.0	0.0
172.5°	1.1	2.3	3.0	1.9	0.8	2.3	1.1	0.0	0.0	0.0	0.0
175°	1.1	1.9	1.9	1.1	0.4	0.8	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°	1157.1	1157.1	1157.1	1157.1	1157.1	1157.1
2.5°	1125.3	1112.8	1101.4	1113.5	1122.3	1156.0
5°	1070.3	1057.1	1058.6	1069.6	1098.8	1160.1
7.5°	1013.5	991.5	996.8	1027.5	1070.7	1140.4
10°	946.5	926.4	931.3	977.5	1038.1	1129.5
12.5°	886.6	852.9	881.7	925.2	1000.3	1123.4
15°	816.5	790.0	805.5	869.9	963.9	1095.4
17.5°	740.7	720.3	738.8	802.9	919.2	1092.3
20°	682.4	654.0	675.9	746.4	863.9	1060.5
22.5°	616.8	595.2	618.3	683.1	807.4	1026.8
25°	563.0	540.3	563.4	627.8	757.4	987.0
27.5°	510.7	489.9	510.7	569.8	707.8	954.8
30°	464.9	444.8	466.0	522.9	649.8	906.7
32.5°	422.1	396.3	423.6	478.5	598.6	869.9
35°	377.7	358.4	378.9	439.9	541.8	818.4
37.5°	341.0	320.9	345.2	397.4	493.7	768.4
40°	306.1	288.3	307.7	363.3	452.8	707.4
42.5°	278.9	261.1	280.8	332.3	411.5	661.2
45°	252.3	239.1	255.0	298.2	369.8	600.2
47.5°	233.0	221.6	234.9	273.2	334.9	545.2
50°	216.3	208.4	217.9	248.2	298.9	488.0
52.5°	201.6	193.6	204.6	228.8	270.5	435.7
55°	190.2	183.0	191.3	210.7	242.1	386.5
57.5°	177.7	173.1	179.6	191.3	219.8	342.5
60°	168.6	163.7	170.5	180.0	194.4	298.2
62.5°	158.4	155.7	159.9	167.5	175.0	258.0
65°	149.3	145.5	150.8	153.4	152.7	223.5
67.5°	139.4	138.3	141.3	141.7	136.0	188.7
70°	129.2	128.4	132.2	130.0	118.2	156.5
72.5°	120.9	120.9	123.1	118.6	103.1	126.2
75°	111.8	112.5	114.4	109.1	86.8	99.3
77.5°	103.4	104.2	104.6	97.4	72.7	75.8
80°	94.0	93.6	97.4	88.3	59.1	54.2
82.5°	85.6	84.1	86.4	77.3	47.7	35.6
85°	76.2	76.5	78.0	67.4	38.3	21.6
87.5°	68.6	68.6	70.1	59.5	28.8	9.5
90°	59.5	58.7	61.0	50.4	21.6	0.8
92.5°	51.9	51.9	53.4	43.2	15.9	0.8
95°	44.3	44.7	45.8	35.6	12.1	1.1
97.5°	37.9	38.3	39.8	30.3	8.7	1.1
100°	32.2	32.6	33.3	24.2	6.8	0.8
102.5°	26.9	28.0	28.0	20.1	5.3	0.8
105°	22.7	24.2	23.5	16.3	4.9	0.8
107.5°	18.9	20.5	20.5	13.3	4.9	0.8
110°	15.5	17.8	17.4	11.4	3.8	0.8



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CATALOG NUMBER: 2MB-3SL-ASML-UNV-L835

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	13.3	15.2	14.0	9.9	3.8	0.8
115°	11.4	13.3	12.5	9.1	3.4	0.8
117.5°	10.2	11.4	11.4	8.7	3.4	0.8
120°	9.5	10.6	10.2	8.3	3.4	0.8
122.5°	8.7	9.5	9.5	7.6	3.0	0.8
125°	8.3	8.7	9.1	6.8	3.0	0.8
127.5°	8.0	8.7	8.7	6.4	2.7	0.8
130°	7.2	8.0	8.0	6.1	2.7	0.8
132.5°	6.4	7.2	7.2	5.7	2.7	0.8
135°	6.1	6.8	6.8	5.3	2.7	0.8
137.5°	5.7	6.1	6.1	4.9	2.7	0.8
140°	4.9	5.7	5.7	4.5	2.7	0.8
142.5°	4.5	5.3	5.3	4.2	2.3	0.8
145°	4.2	4.5	4.9	3.8	2.3	0.8
147.5°	3.4	4.2	4.5	3.4	2.3	0.8
150°	2.7	3.8	3.8	3.4	2.3	0.8
152.5°	1.9	3.4	3.4	3.0	1.9	0.8
155°	1.5	2.7	3.0	2.7	1.9	1.1
157.5°	1.1	2.3	2.7	2.7	1.9	1.1
160°	0.8	1.9	2.3	2.3	1.5	1.1
162.5°	0.4	1.5	1.9	2.3	1.5	1.1
165°	0.0	1.1	1.5	1.9	1.5	1.1
167.5°	0.0	0.8	1.1	1.5	1.1	1.1
170°	0.0	0.4	0.8	1.1	1.1	1.1
172.5°	0.0	0.0	0.4	0.8	0.8	1.1
175°	0.0	0.0	0.0	0.4	0.8	1.1
177.5°	0.0	0.0	0.0	0.4	0.8	1.1
180°	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P892614
 CATALOG NUMBER: 2MB-3SL-ASML-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	19.88	21.34	20.34	21.77	22.23	22.05	23.51	22.50	23.94	24.39
	3H	20.71	22.02	21.17	22.47	22.96	23.72	25.03	24.18	25.48	25.97
	4H	20.91	22.15	21.40	22.61	23.13	24.53	25.77	25.02	26.23	26.74
	6H	21.00	22.15	21.50	22.63	23.16	25.36	26.51	25.86	26.99	27.51
	8H	21.00	22.10	21.52	22.60	23.14	25.80	26.90	26.31	27.40	27.93
	12H	20.99	22.05	21.51	22.54	23.10	26.28	27.34	26.80	27.83	28.39
4H	2H	20.31	21.55	20.80	22.01	22.52	22.42	23.66	22.91	24.12	24.63
	3H	21.40	22.45	21.91	22.96	23.49	24.27	25.31	24.77	25.82	26.36
	4H	21.74	22.69	22.27	23.21	23.78	25.22	26.16	25.74	26.68	27.25
	6H	21.94	22.77	22.48	23.31	23.90	26.21	27.04	26.76	27.59	28.17
	8H	21.96	22.74	22.51	23.29	23.88	26.74	27.52	27.29	28.07	28.66
	12H	21.97	22.67	22.54	23.25	23.85	27.34	28.05	27.91	28.62	29.22
8H	4H	22.06	22.84	22.61	23.39	23.98	25.36	26.14	25.91	26.68	27.28
	6H	22.38	23.04	22.96	23.62	24.23	26.49	27.15	27.07	27.73	28.33
	8H	22.47	23.06	23.07	23.66	24.27	27.14	27.73	27.73	28.33	28.94
	12H	22.53	23.05	23.12	23.64	24.32	27.90	28.42	28.49	29.01	29.69
12H	4H	22.13	22.84	22.70	23.41	24.01	25.35	26.06	25.92	26.63	27.23
	6H	22.51	23.10	23.11	23.70	24.32	26.50	27.09	27.10	27.69	28.31
	8H	22.67	23.20	23.27	23.78	24.46	27.21	27.73	27.80	28.32	29.00