

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: P892619

Luminaire Tested: 2MB-3SL-ASML-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892619
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-L940
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

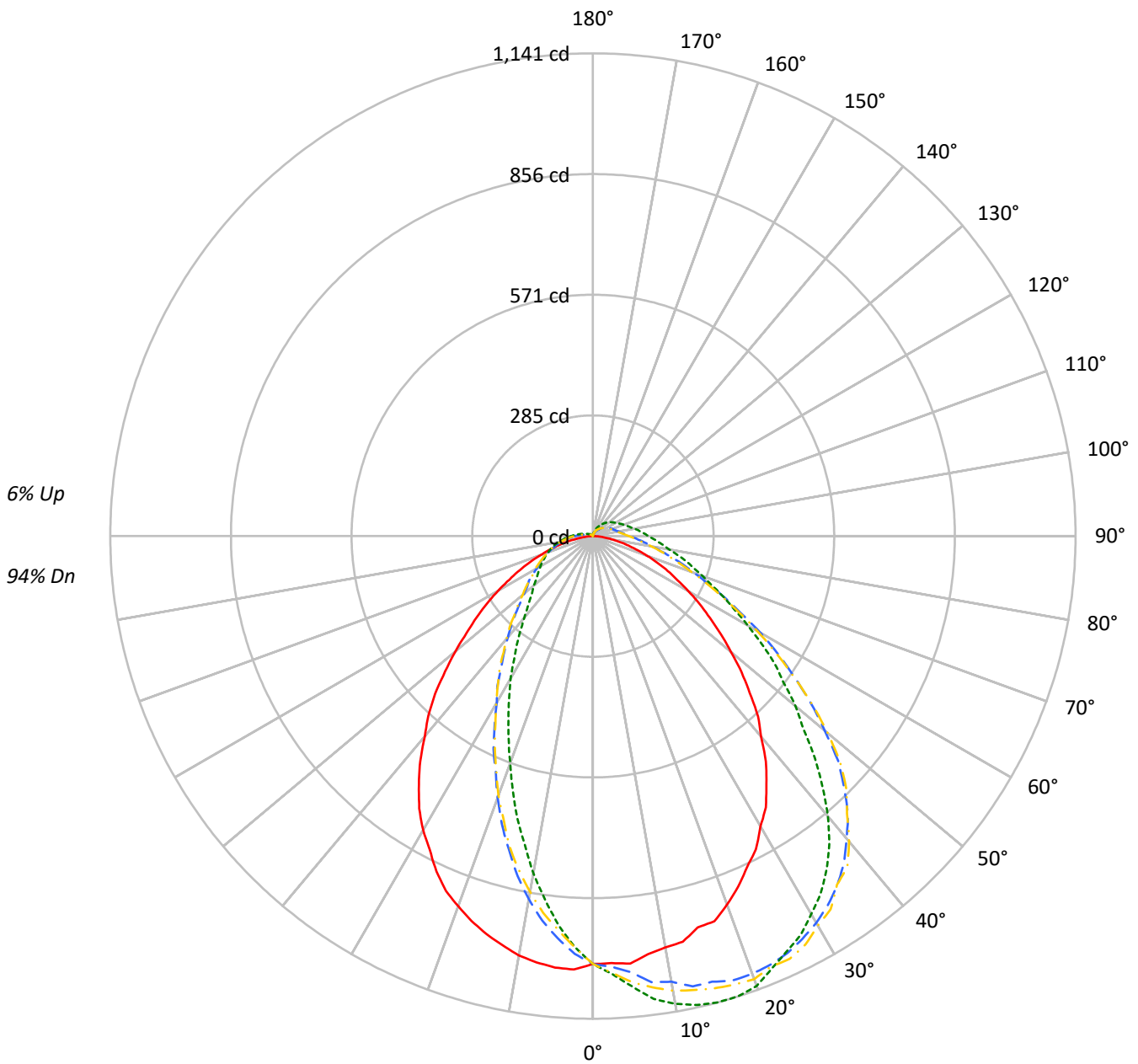
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2521.0 lumens
Efficiency: N/A
Efficacy: 120.0 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
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	85	83	81	79
2	98	90	83	78	95	88	82	76	83	78	74	79	75	71	75	72	69	75	72	69	66
3	90	80	72	65	87	78	70	64	74	68	63	70	65	61	67	63	59	67	63	59	57
4	83	71	63	56	80	69	61	55	66	59	54	63	57	53	60	55	51	60	55	51	49
5	76	64	55	49	74	62	54	48	60	53	47	57	51	46	55	49	45	55	49	45	43
6	71	58	49	43	68	56	48	42	54	47	42	52	46	41	50	44	40	50	44	40	38
7	66	53	44	38	64	51	43	38	49	42	37	48	41	36	46	40	36	46	40	36	34
8	61	48	40	34	59	47	39	34	45	38	33	44	37	33	42	37	32	42	37	32	30
9	57	44	36	31	56	43	36	31	42	35	30	40	34	30	39	33	29	39	33	29	28
10	54	41	33	28	52	40	33	28	39	32	28	38	31	27	36	31	27	36	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	20712	20712	20712	20712
5°	20730	21106	20926	18242
10°	20302	21555	20697	15548
15°	19960	21479	20298	12999
20°	19746	21054	19831	10634
25°	18936	20078	19197	8751
30°	18079	19188	18314	7229
35°	17126	18108	17173	5891
40°	15695	16565	15688	4829
45°	14289	14621	14362	4116
50°	12638	12762	12579	3719
55°	11062	11179	10986	3416
60°	9624	9535	9535	3229
65°	8338	8211	8142	3067
70°	6979	7196	6739	2932
75°	5557	6542	5410	2824
80°	4115	5888	3742	2629
85°	2579	5683	2074	2464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 20004 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	3.8
10°-20°	264.2	10.5
20°-30°	379.9	15.1
30°-40°	431.2	17.1
40°-50°	412.1	16.3
50°-60°	334.8	13.3
60°-70°	233.6	9.3
70°-80°	144.7	5.7
80°-90°	83.0	3.3
90°-100°	49.6	2.0
100°-110°	32.6	1.3
110°-120°	22.8	0.9
120°-130°	16.5	0.7
130°-140°	11.0	0.4
140°-150°	6.2	0.2
150°-160°	2.8	0.1
160°-170°	0.8	0.0
170°-180°	0.1	0.0
0°-30°	739.1	29.3
0°-40°	1170.3	46.4
0°-60°	1917.2	76.0
0°-90°	2378.6	94.4
90°-120°	105.0	4.2
90°-150°	138.8	5.5
90°-180°	142.0	5.6
0°-180°	2521.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1012	1012	1012	1012	1012	
5°	1014	1069	1024	924	1014	96
15°	958	1141	974	690	958	272
25°	863	1084	875	472	863	398
35°	715	963	717	313	715	446
45°	525	742	527	209	525	405
55°	338	524	336	160	338	304
65°	195	340	191	127	195	194
75°	87	228	84	98	87	94
85°	19	154	15	67	19	21
90°	1	130	0	51	1	1
95°	1	114	0	39	1	1
105°	1	87	0	21	1	1
115°	1	70	0	12	1	1
125°	1	57	0	8	1	1
135°	1	45	0	6	1	1
145°	1	32	0	4	1	0
155°	1	20	0	2	1	0
165°	1	9	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°	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5
2.5°	1010.5	1018.1	1018.8	1042.6	1035.6	1044.6	1033.3	1035.3	1025.4	1022.7	988.3
5°	1014.1	1030.3	1034.7	1075.7	1069.1	1073.7	1058.2	1046.9	1023.7	1009.8	954.2
7.5°	996.9	1039.6	1063.5	1092.6	1103.5	1107.2	1075.7	1054.9	1016.4	982.3	917.1
10°	987.3	1046.2	1069.4	1113.1	1122.7	1115.8	1091.3	1056.8	1006.5	951.5	871.4
12.5°	982.0	1049.9	1090.3	1135.0	1135.3	1128.0	1099.2	1062.1	990.3	918.4	823.0
15°	957.5	1049.2	1090.6	1136.0	1141.0	1136.3	1106.9	1058.5	973.7	877.3	767.4
17.5°	954.8	1047.6	1101.2	1148.9	1140.6	1137.3	1111.5	1056.8	953.8	835.6	715.0
20°	927.0	1043.9	1101.2	1134.3	1131.7	1133.0	1114.5	1054.5	931.0	790.6	657.8
22.5°	897.5	1039.6	1096.6	1121.8	1105.9	1130.0	1101.2	1048.2	907.8	743.5	600.8
25°	862.8	1032.7	1087.6	1103.9	1083.7	1102.5	1102.2	1038.6	874.7	692.9	555.7
27.5°	834.6	1021.7	1073.1	1097.6	1063.1	1079.4	1088.6	1027.0	835.6	642.8	502.8
30°	792.5	1007.8	1055.5	1059.2	1032.0	1052.5	1063.1	1012.5	802.8	586.2	454.4
32.5°	760.4	991.9	1034.0	1029.0	1001.9	1029.0	1046.2	997.9	763.7	536.5	420.3
35°	715.4	972.7	1007.2	981.0	963.1	985.6	1005.8	982.3	717.4	483.5	376.6
37.5°	671.7	955.8	975.0	942.6	918.1	943.2	987.6	953.2	670.7	441.5	344.1
40°	618.3	917.1	933.0	888.9	864.4	901.5	942.2	928.0	618.0	397.8	312.6
42.5°	577.9	888.3	892.9	832.6	803.5	842.9	889.3	892.2	575.3	358.4	284.8
45°	524.6	847.9	839.2	773.0	742.5	778.0	847.5	855.5	527.3	324.2	257.7
47.5°	476.6	802.8	785.9	708.4	674.3	716.4	793.5	814.4	473.6	292.8	232.2
50°	426.6	752.5	715.0	648.1	625.3	646.2	725.0	759.4	424.6	261.6	212.6
52.5°	380.9	696.8	650.5	590.5	567.7	584.9	653.1	704.8	375.9	235.5	195.4
55°	337.8	641.2	581.2	528.3	523.6	528.9	580.3	639.5	335.5	212.3	184.5
57.5°	299.4	573.6	519.0	479.9	471.6	475.9	511.4	572.3	296.4	189.1	168.6
60°	260.7	504.4	457.4	427.2	422.6	425.9	448.8	506.7	258.3	169.6	153.7
62.5°	225.5	434.9	393.1	381.9	378.6	378.6	388.2	441.2	222.6	149.7	142.4
65°	195.4	375.2	343.8	339.5	340.5	340.1	334.2	368.3	190.8	132.1	132.5
67.5°	164.9	312.0	294.4	299.7	303.7	302.0	289.5	306.4	161.0	116.2	123.5
70°	136.8	257.7	254.4	266.3	275.6	266.9	248.7	250.4	132.1	100.7	111.9
72.5°	110.3	208.3	223.6	240.1	249.1	239.5	214.3	207.0	106.3	86.4	101.3
75°	86.8	167.6	191.8	216.3	227.9	215.6	186.5	161.6	84.5	72.9	92.7
77.5°	66.2	132.8	163.9	192.4	203.7	193.1	162.3	126.2	61.9	61.3	83.5
80°	47.4	105.0	145.4	172.9	183.2	172.9	140.8	99.7	43.1	49.0	73.5
82.5°	31.1	81.1	126.5	157.3	168.6	156.0	122.2	76.8	27.5	39.7	66.2
85°	18.9	64.3	110.3	141.4	154.3	142.1	107.0	58.3	15.2	30.5	57.6
87.5°	8.3	49.7	98.4	130.5	142.1	130.8	95.4	45.7	6.3	23.8	49.3
90°	0.7	39.4	86.8	120.2	130.5	119.9	84.5	37.1	0.0	17.2	42.4
92.5°	0.7	33.8	79.5	111.3	122.9	111.0	76.2	30.5	0.0	12.6	35.8
95°	1.0	28.5	72.2	104.3	113.6	103.3	69.6	26.2	0.0	8.6	30.1
97.5°	1.0	25.8	66.2	97.4	107.6	96.7	63.6	23.5	0.0	6.3	24.5
100°	0.7	23.8	61.6	90.7	100.4	90.1	59.0	21.2	0.0	4.0	19.9
102.5°	0.7	22.2	57.6	85.1	92.7	84.1	55.0	19.9	0.0	3.3	16.2
105°	0.7	21.2	54.0	78.5	87.4	78.5	51.7	18.5	0.0	2.6	12.6
107.5°	0.7	19.9	51.3	74.8	82.1	74.2	49.0	17.6	0.0	2.6	10.3
110°	0.7	18.9	49.0	69.6	77.8	70.2	46.7	15.9	0.0	1.7	8.3



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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	17.2	46.7	65.9	73.9	66.2	44.7	14.6	0.0	1.7	7.3
115°	0.7	15.6	44.7	63.6	69.6	62.9	42.7	12.9	0.0	1.3	6.6
117.5°	0.7	14.6	43.4	60.6	66.6	59.9	41.1	12.3	0.0	1.3	6.3
120°	0.7	13.9	41.4	57.6	62.3	57.0	39.1	11.6	0.0	1.3	6.0
122.5°	0.7	13.2	39.7	55.0	59.9	54.6	37.4	11.3	0.0	1.0	5.3
125°	0.7	12.6	37.4	52.0	56.6	51.3	34.4	10.9	0.0	0.7	4.6
127.5°	0.7	11.9	35.1	49.7	54.0	49.0	32.5	10.6	0.0	0.7	4.3
130°	0.7	11.6	32.1	46.7	51.0	46.0	30.1	10.6	0.0	0.7	4.0
132.5°	0.7	11.3	28.8	43.7	48.4	43.1	27.8	10.3	0.0	0.7	3.3
135°	0.7	10.9	25.5	40.7	45.0	40.1	25.8	9.9	0.0	0.7	3.0
137.5°	0.7	10.3	22.5	37.4	41.7	36.8	24.5	9.3	0.0	0.7	2.6
140°	0.7	9.6	20.2	34.8	38.4	33.8	22.5	8.6	0.0	0.3	2.0
142.5°	0.7	8.6	18.2	31.5	35.1	30.8	20.2	7.3	0.0	0.3	2.0
145°	0.7	7.6	16.6	27.5	31.8	27.5	18.9	6.6	0.0	0.3	1.7
147.5°	0.7	7.0	14.9	23.2	28.8	25.2	16.9	5.6	0.0	0.3	1.3
150°	0.7	6.3	12.9	19.5	25.5	22.2	15.6	5.0	0.0	0.0	1.0
152.5°	0.7	5.6	11.3	16.2	22.9	20.2	13.9	4.3	0.0	0.0	0.7
155°	1.0	5.3	9.6	14.2	19.9	17.6	11.6	3.6	0.0	0.0	0.7
157.5°	1.0	4.6	7.9	11.6	17.6	15.2	9.3	3.0	0.0	0.0	0.3
160°	1.0	4.3	6.6	8.9	14.6	12.6	7.6	2.3	0.0	0.0	0.3
162.5°	1.0	4.0	5.6	6.6	11.9	9.9	6.0	1.7	0.0	0.0	0.3
165°	1.0	3.3	5.0	4.6	9.3	7.6	4.6	1.0	0.0	0.0	0.0
167.5°	1.0	3.0	4.0	3.3	7.0	5.6	3.3	0.7	0.0	0.0	0.0
170°	1.0	2.3	3.3	2.3	2.0	3.6	2.0	0.3	0.0	0.0	0.0
172.5°	1.0	2.0	2.6	1.7	0.7	2.0	1.0	0.0	0.0	0.0	0.0
175°	1.0	1.7	1.7	1.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0
177.5°	1.0	1.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1011.5	1011.5	1011.5	1011.5	1011.5	1011.5
2.5°	983.6	972.7	962.8	973.4	981.0	1010.5
5°	935.6	924.0	925.4	935.0	960.5	1014.1
7.5°	885.9	866.7	871.4	898.2	936.0	996.9
10°	827.3	809.8	814.1	854.5	907.5	987.3
12.5°	775.0	745.5	770.7	808.8	874.4	982.0
15°	713.7	690.5	704.1	760.4	842.6	957.5
17.5°	647.5	629.6	645.8	701.8	803.5	954.8
20°	596.5	571.6	590.9	652.5	755.1	927.0
22.5°	539.2	520.3	540.5	597.1	705.8	897.5
25°	492.2	472.3	492.5	548.8	662.1	862.8
27.5°	446.5	428.2	446.5	498.1	618.7	834.6
30°	406.4	388.8	407.4	457.0	568.0	792.5
32.5°	369.0	346.4	370.3	418.3	523.3	760.4
35°	330.2	313.3	331.2	384.5	473.6	715.4
37.5°	298.1	280.5	301.7	347.4	431.5	671.7
40°	267.6	252.0	268.9	317.6	395.8	618.3
42.5°	243.8	228.2	245.4	290.5	359.7	577.9
45°	220.6	209.0	222.9	260.7	323.2	524.6
47.5°	203.7	193.7	205.3	238.8	292.8	476.6
50°	189.1	182.2	190.4	216.9	261.3	426.6
52.5°	176.2	169.2	178.8	200.0	236.5	380.9
55°	166.3	160.0	167.3	184.1	211.6	337.8
57.5°	155.3	151.4	157.0	167.3	192.1	299.4
60°	147.4	143.1	149.0	157.3	169.9	260.7
62.5°	138.4	136.1	139.8	146.4	153.0	225.5
65°	130.5	127.2	131.8	134.1	133.5	195.4
67.5°	121.9	120.9	123.5	123.9	118.9	164.9
70°	112.9	112.3	115.6	113.6	103.3	136.8
72.5°	105.7	105.7	107.6	103.7	90.1	110.3
75°	97.7	98.4	100.0	95.4	75.8	86.8
77.5°	90.4	91.1	91.4	85.1	63.6	66.2
80°	82.1	81.8	85.1	77.2	51.7	47.4
82.5°	74.8	73.5	75.5	67.6	41.7	31.1
85°	66.6	66.9	68.2	59.0	33.5	18.9
87.5°	59.9	59.9	61.3	52.0	25.2	8.3
90°	52.0	51.3	53.3	44.0	18.9	0.7
92.5°	45.4	45.4	46.7	37.8	13.9	0.7
95°	38.7	39.1	40.1	31.1	10.6	1.0
97.5°	33.1	33.5	34.8	26.5	7.6	1.0
100°	28.2	28.5	29.1	21.2	6.0	0.7
102.5°	23.5	24.5	24.5	17.6	4.6	0.7
105°	19.9	21.2	20.5	14.2	4.3	0.7
107.5°	16.6	17.9	17.9	11.6	4.3	0.7
110°	13.6	15.6	15.2	9.9	3.3	0.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	11.6	13.2	12.3	8.6	3.3	0.7
115°	9.9	11.6	10.9	7.9	3.0	0.7
117.5°	8.9	9.9	9.9	7.6	3.0	0.7
120°	8.3	9.3	8.9	7.3	3.0	0.7
122.5°	7.6	8.3	8.3	6.6	2.6	0.7
125°	7.3	7.6	7.9	6.0	2.6	0.7
127.5°	7.0	7.6	7.6	5.6	2.3	0.7
130°	6.3	7.0	7.0	5.3	2.3	0.7
132.5°	5.6	6.3	6.3	5.0	2.3	0.7
135°	5.3	6.0	6.0	4.6	2.3	0.7
137.5°	5.0	5.3	5.3	4.3	2.3	0.7
140°	4.3	5.0	5.0	4.0	2.3	0.7
142.5°	4.0	4.6	4.6	3.6	2.0	0.7
145°	3.6	4.0	4.3	3.3	2.0	0.7
147.5°	3.0	3.6	4.0	3.0	2.0	0.7
150°	2.3	3.3	3.3	3.0	2.0	0.7
152.5°	1.7	3.0	3.0	2.6	1.7	0.7
155°	1.3	2.3	2.6	2.3	1.7	1.0
157.5°	1.0	2.0	2.3	2.3	1.7	1.0
160°	0.7	1.7	2.0	2.0	1.3	1.0
162.5°	0.3	1.3	1.7	2.0	1.3	1.0
165°	0.0	1.0	1.3	1.7	1.3	1.0
167.5°	0.0	0.7	1.0	1.3	1.0	1.0
170°	0.0	0.3	0.7	1.0	1.0	1.0
172.5°	0.0	0.0	0.3	0.7	0.7	1.0
175°	0.0	0.0	0.0	0.3	0.7	1.0
177.5°	0.0	0.0	0.0	0.3	0.7	1.0
180°	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P892619
 CATALOG NUMBER: 2MB-3SL-ASML-UNV-L940

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	19.42	20.88	19.87	21.31	21.76	21.58	23.04	22.03	23.47	23.92
	3H	20.24	21.56	20.71	22.00	22.50	23.25	24.57	23.72	25.01	25.51
	4H	20.44	21.69	20.93	22.15	22.66	24.06	25.30	24.55	25.76	26.28
	6H	20.53	21.69	21.04	22.16	22.69	24.89	26.04	25.39	26.52	27.05
	8H	20.54	21.64	21.05	22.13	22.67	25.33	26.43	25.84	26.93	27.46
	12H	20.52	21.58	21.04	22.07	22.63	25.82	26.87	26.34	27.36	27.92
4H	2H	19.84	21.08	20.33	21.54	22.06	21.95	23.19	22.44	23.65	24.17
	3H	20.94	21.98	21.44	22.49	23.02	23.80	24.85	24.30	25.35	25.89
	4H	21.28	22.22	21.80	22.74	23.31	24.75	25.70	25.27	26.22	26.78
	6H	21.47	22.30	22.01	22.84	23.43	25.75	26.58	26.29	27.12	27.71
	8H	21.50	22.28	22.05	22.82	23.41	26.28	27.05	26.82	27.60	28.19
	12H	21.50	22.21	22.07	22.78	23.38	26.88	27.58	27.44	28.15	28.75
8H	4H	21.59	22.37	22.14	22.92	23.51	24.89	25.67	25.44	26.22	26.81
	6H	21.91	22.57	22.50	23.16	23.76	26.02	26.68	26.61	27.27	27.87
	8H	22.00	22.59	22.60	23.19	23.81	26.67	27.26	27.26	27.86	28.47
	12H	22.06	22.58	22.65	23.17	23.85	27.43	27.95	28.02	28.54	29.22
12H	4H	21.67	22.37	22.24	22.94	23.54	24.89	25.59	25.46	26.16	26.76
	6H	22.05	22.64	22.64	23.24	23.85	26.04	26.63	26.63	27.23	27.84
	8H	22.20	22.73	22.80	23.31	24.00	26.74	27.27	27.34	27.85	28.54