

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: P892617

Luminaire Tested: 2MB-3SL-ASML-UNV-L930

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P892617  
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-L930  
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 90CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

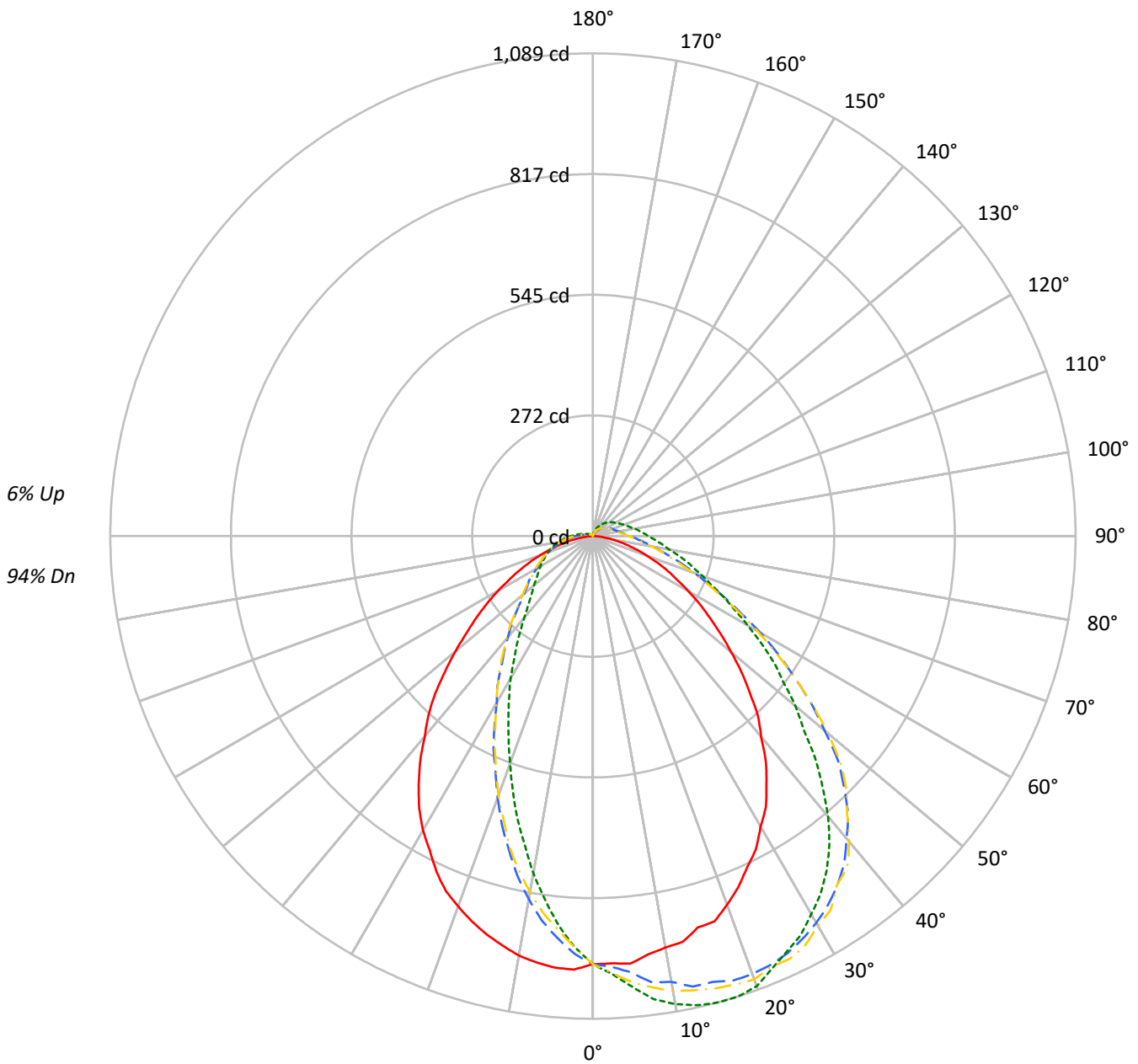
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2407.0 lumens  
Efficiency: N/A  
Efficacy: 114.6 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<sub>in</sub>): 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

TEST NUMBER: P892617  
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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°	19774	19774	19774	19774
5°	19794	20153	19980	17416
10°	19383	20582	19761	14845
15°	19057	20508	19381	12411
20°	18853	20102	18934	10154
25°	18078	19171	18328	8354
30°	17262	18319	17486	6902
35°	16350	17290	16395	5624
40°	14987	15815	14980	4611
45°	13643	13961	13711	3928
50°	12067	12185	12010	3549
55°	10561	10673	10488	3260
60°	9188	9104	9103	3082
65°	7962	7840	7770	2928
70°	6663	6870	6438	2799
75°	5301	6246	5160	2695
80°	3924	5621	3568	2510
85°	2456	5429	1978	2354

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 19099 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.7	3.8
10°-20°	252.2	10.5
20°-30°	362.8	15.1
30°-40°	411.7	17.1
40°-50°	393.4	16.3
50°-60°	319.7	13.3
60°-70°	223.1	9.3
70°-80°	138.2	5.7
80°-90°	79.3	3.3
90°-100°	47.4	2.0
100°-110°	31.1	1.3
110°-120°	21.8	0.9
120°-130°	15.8	0.7
130°-140°	10.5	0.4
140°-150°	5.9	0.2
150°-160°	2.6	0.1
160°-170°	0.8	0.0
170°-180°	0.1	0.0
0°-30°	705.7	29.3
0°-40°	1117.4	46.4
0°-60°	1830.5	76.1
0°-90°	2271.0	94.4
90°-120°	100.3	4.2
90°-150°	132.5	5.5
90°-180°	136.0	5.7
0°-180°	2407.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	966	966	966	966	966	
5°	968	1021	977	882	968	91
15°	914	1089	930	659	914	260
25°	824	1035	835	451	824	380
35°	683	920	685	299	683	426
45°	501	709	503	200	501	387
55°	322	500	320	153	322	290
65°	187	325	182	121	187	185
75°	83	218	81	94	83	89
85°	18	147	14	64	18	20
90°	1	125	0	49	1	1
95°	1	108	0	37	1	1
105°	1	84	0	20	1	1
115°	1	66	0	11	1	1
125°	1	54	0	7	1	1
135°	1	43	0	6	1	0
145°	1	30	0	4	1	0
155°	1	19	0	2	1	0
165°	1	9	0	1	1	0
175°	1	0	0	0	1	0
180°	0	0	0	0	0	



TEST NUMBER: P892617  
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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	965.7	965.7	965.7	965.7	965.7	965.7	965.7	965.7	965.7	965.7	965.7
2.5°	964.8	972.1	972.7	995.5	988.8	997.4	986.6	988.5	979.0	976.5	943.6
5°	968.3	983.8	987.9	1027.1	1020.8	1025.2	1010.3	999.6	977.4	964.1	911.0
7.5°	951.8	992.6	1015.4	1043.2	1053.6	1057.1	1027.1	1007.2	970.5	937.9	875.6
10°	942.6	998.9	1021.1	1062.8	1072.0	1065.3	1041.9	1009.1	961.0	908.5	832.0
12.5°	937.6	1002.4	1041.0	1083.7	1084.0	1077.0	1049.5	1014.1	945.5	876.9	785.8
15°	914.2	1001.8	1041.3	1084.6	1089.4	1084.9	1056.8	1010.6	929.7	837.7	732.7
17.5°	911.7	1000.2	1051.4	1097.0	1089.1	1085.9	1061.2	1009.1	910.7	797.8	682.7
20°	885.1	996.7	1051.4	1083.0	1080.5	1081.8	1064.1	1006.8	888.9	754.8	628.0
22.5°	857.0	992.6	1047.0	1071.0	1055.9	1078.9	1051.4	1000.8	866.8	709.9	573.6
25°	823.7	986.0	1038.5	1054.0	1034.7	1052.7	1052.4	991.7	835.1	661.5	530.6
27.5°	796.9	975.5	1024.5	1047.9	1015.1	1030.6	1039.4	980.6	797.8	613.8	480.0
30°	756.7	962.3	1007.8	1011.3	985.3	1004.9	1015.1	966.7	766.5	559.7	433.9
32.5°	726.0	947.1	987.2	982.5	956.6	982.5	998.9	952.8	729.2	512.3	401.3
35°	683.0	928.7	961.6	936.6	919.6	941.1	960.4	937.9	684.9	461.7	359.5
37.5°	641.3	912.6	930.9	900.0	876.6	900.6	943.0	910.1	640.3	421.5	328.6
40°	590.4	875.6	890.8	848.7	825.3	860.7	899.6	886.0	590.1	379.8	298.5
42.5°	551.8	848.1	852.5	795.0	767.1	804.8	849.0	851.9	549.3	342.1	271.9
45°	500.9	809.5	801.3	738.1	709.0	742.8	809.2	816.8	503.4	309.6	246.0
47.5°	455.0	766.5	750.4	676.4	643.8	684.0	757.7	777.6	452.2	279.5	221.7
50°	407.3	718.4	682.7	618.8	597.0	616.9	692.2	725.1	405.4	249.8	203.0
52.5°	363.7	665.3	621.1	563.8	542.0	558.4	623.6	672.9	358.9	224.8	186.6
55°	322.5	612.2	555.0	504.4	499.9	505.0	554.0	610.6	320.3	202.7	176.1
57.5°	285.9	547.7	495.5	458.2	450.3	454.4	488.2	546.4	283.0	180.6	161.0
60°	248.9	481.6	436.7	407.9	403.5	406.7	428.5	483.8	246.6	161.9	146.7
62.5°	215.3	415.2	375.4	364.6	361.4	361.4	370.6	421.2	212.5	142.9	136.0
65°	186.6	358.3	328.2	324.1	325.1	324.8	319.1	351.6	182.1	126.2	126.5
67.5°	157.5	297.9	281.1	286.2	290.0	288.4	276.4	292.5	153.7	111.0	117.9
70°	130.6	246.0	242.9	254.2	263.1	254.9	237.5	239.1	126.2	96.1	106.9
72.5°	105.3	198.9	213.4	229.3	237.8	228.6	204.6	197.6	101.5	82.5	96.8
75°	82.8	160.0	183.1	206.5	217.6	205.9	178.0	154.3	80.6	69.6	88.5
77.5°	63.2	126.8	156.5	183.7	194.5	184.4	154.9	120.5	59.1	58.5	79.7
80°	45.2	100.2	138.8	165.1	174.9	165.1	134.4	95.2	41.1	46.8	70.2
82.5°	29.7	77.5	120.8	150.2	161.0	148.9	116.7	73.4	26.2	37.9	63.2
85°	18.0	61.3	105.3	135.0	147.4	135.7	102.1	55.7	14.5	29.1	55.0
87.5°	7.9	47.4	93.9	124.6	135.7	124.9	91.1	43.6	6.0	22.8	47.1
90°	0.6	37.6	82.8	114.8	124.6	114.5	80.6	35.4	0.0	16.4	40.5
92.5°	0.6	32.3	75.9	106.2	117.3	105.9	72.7	29.1	0.0	12.0	34.2
95°	0.9	27.2	68.9	99.6	108.5	98.7	66.4	25.0	0.0	8.2	28.8
97.5°	0.9	24.7	63.2	93.0	102.8	92.3	60.7	22.5	0.0	6.0	23.4
100°	0.6	22.8	58.8	86.6	95.8	86.0	56.3	20.2	0.0	3.8	19.0
102.5°	0.6	21.2	55.0	81.3	88.5	80.3	52.5	19.0	0.0	3.2	15.5
105°	0.6	20.2	51.5	74.9	83.5	74.9	49.3	17.7	0.0	2.5	12.0
107.5°	0.6	19.0	49.0	71.5	78.4	70.8	46.8	16.8	0.0	2.5	9.8
110°	0.6	18.0	46.8	66.4	74.3	67.0	44.6	15.2	0.0	1.6	7.9



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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°	0.6	16.4	44.6	62.9	70.5	63.2	42.7	13.9	0.0	1.6	7.0
115°	0.6	14.9	42.7	60.7	66.4	60.1	40.8	12.3	0.0	1.3	6.3
117.5°	0.6	13.9	41.4	57.9	63.6	57.2	39.2	11.7	0.0	1.3	6.0
120°	0.6	13.3	39.5	55.0	59.4	54.4	37.3	11.1	0.0	1.3	5.7
122.5°	0.6	12.6	37.9	52.5	57.2	52.2	35.7	10.8	0.0	0.9	5.1
125°	0.6	12.0	35.7	49.6	54.1	49.0	32.9	10.4	0.0	0.6	4.4
127.5°	0.6	11.4	33.5	47.4	51.5	46.8	31.0	10.1	0.0	0.6	4.1
130°	0.6	11.1	30.7	44.6	48.7	44.0	28.8	10.1	0.0	0.6	3.8
132.5°	0.6	10.8	27.5	41.7	46.2	41.1	26.6	9.8	0.0	0.6	3.2
135°	0.6	10.4	24.3	38.9	43.0	38.3	24.7	9.5	0.0	0.6	2.8
137.5°	0.6	9.8	21.5	35.7	39.8	35.1	23.4	8.9	0.0	0.6	2.5
140°	0.6	9.2	19.3	33.2	36.7	32.3	21.5	8.2	0.0	0.3	1.9
142.5°	0.6	8.2	17.4	30.0	33.5	29.4	19.3	7.0	0.0	0.3	1.9
145°	0.6	7.3	15.8	26.2	30.4	26.2	18.0	6.3	0.0	0.3	1.6
147.5°	0.6	6.6	14.2	22.1	27.5	24.0	16.1	5.4	0.0	0.3	1.3
150°	0.6	6.0	12.3	18.7	24.3	21.2	14.9	4.7	0.0	0.0	0.9
152.5°	0.6	5.4	10.8	15.5	21.8	19.3	13.3	4.1	0.0	0.0	0.6
155°	0.9	5.1	9.2	13.6	19.0	16.8	11.1	3.5	0.0	0.0	0.6
157.5°	0.9	4.4	7.6	11.1	16.8	14.5	8.9	2.8	0.0	0.0	0.3
160°	0.9	4.1	6.3	8.5	13.9	12.0	7.3	2.2	0.0	0.0	0.3
162.5°	0.9	3.8	5.4	6.3	11.4	9.5	5.7	1.6	0.0	0.0	0.3
165°	0.9	3.2	4.7	4.4	8.9	7.3	4.4	0.9	0.0	0.0	0.0
167.5°	0.9	2.8	3.8	3.2	6.6	5.4	3.2	0.6	0.0	0.0	0.0
170°	0.9	2.2	3.2	2.2	1.9	3.5	1.9	0.3	0.0	0.0	0.0
172.5°	0.9	1.9	2.5	1.6	0.6	1.9	0.9	0.0	0.0	0.0	0.0
175°	0.9	1.6	1.6	0.9	0.3	0.6	0.0	0.0	0.0	0.0	0.0
177.5°	0.9	1.3	0.9	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°	965.7	965.7	965.7	965.7	965.7	965.7
2.5°	939.2	928.7	919.2	929.4	936.6	964.8
5°	893.3	882.2	883.5	892.7	917.0	968.3
7.5°	845.9	827.5	832.0	857.6	893.6	951.8
10°	789.9	773.2	777.3	815.8	866.4	942.6
12.5°	739.9	711.8	735.8	772.2	834.8	937.6
15°	681.4	659.3	672.3	726.0	804.5	914.2
17.5°	618.2	601.1	616.6	670.1	767.1	911.7
20°	569.5	545.8	564.1	622.9	721.0	885.1
22.5°	514.8	496.8	516.1	570.1	673.9	857.0
25°	469.9	450.9	470.2	524.0	632.1	823.7
27.5°	426.3	408.9	426.3	475.6	590.7	796.9
30°	388.0	371.2	388.9	436.4	542.3	756.7
32.5°	352.3	330.8	353.5	399.4	499.6	726.0
35°	315.3	299.1	316.2	367.1	452.2	683.0
37.5°	284.6	267.8	288.1	331.7	412.0	641.3
40°	255.5	240.6	256.8	303.3	377.9	590.4
42.5°	232.7	217.9	234.3	277.3	343.4	551.8
45°	210.6	199.5	212.8	248.9	308.6	500.9
47.5°	194.5	185.0	196.1	228.0	279.5	455.0
50°	180.6	173.9	181.8	207.1	249.5	407.3
52.5°	168.2	161.6	170.8	191.0	225.8	363.7
55°	158.7	152.7	159.7	175.8	202.1	322.5
57.5°	148.3	144.5	149.9	159.7	183.4	285.9
60°	140.7	136.6	142.3	150.2	162.2	248.9
62.5°	132.2	130.0	133.4	139.8	146.1	215.3
65°	124.6	121.4	125.9	128.1	127.4	186.6
67.5°	116.4	115.4	117.9	118.3	113.5	157.5
70°	107.8	107.2	110.4	108.5	98.7	130.6
72.5°	100.9	100.9	102.8	99.0	86.0	105.3
75°	93.3	93.9	95.5	91.1	72.4	82.8
77.5°	86.3	87.0	87.3	81.3	60.7	63.2
80°	78.4	78.1	81.3	73.7	49.3	45.2
82.5°	71.5	70.2	72.1	64.5	39.8	29.7
85°	63.6	63.9	65.1	56.3	31.9	18.0
87.5°	57.2	57.2	58.5	49.6	24.0	7.9
90°	49.6	49.0	50.9	42.1	18.0	0.6
92.5°	43.3	43.3	44.6	36.0	13.3	0.6
95°	37.0	37.3	38.3	29.7	10.1	0.9
97.5°	31.6	31.9	33.2	25.3	7.3	0.9
100°	26.9	27.2	27.8	20.2	5.7	0.6
102.5°	22.5	23.4	23.4	16.8	4.4	0.6
105°	19.0	20.2	19.6	13.6	4.1	0.6
107.5°	15.8	17.1	17.1	11.1	4.1	0.6
110°	13.0	14.9	14.5	9.5	3.2	0.6





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	11.1	12.6	11.7	8.2	3.2	0.6
115°	9.5	11.1	10.4	7.6	2.8	0.6
117.5°	8.5	9.5	9.5	7.3	2.8	0.6
120°	7.9	8.9	8.5	7.0	2.8	0.6
122.5°	7.3	7.9	7.9	6.3	2.5	0.6
125°	7.0	7.3	7.6	5.7	2.5	0.6
127.5°	6.6	7.3	7.3	5.4	2.2	0.6
130°	6.0	6.6	6.6	5.1	2.2	0.6
132.5°	5.4	6.0	6.0	4.7	2.2	0.6
135°	5.1	5.7	5.7	4.4	2.2	0.6
137.5°	4.7	5.1	5.1	4.1	2.2	0.6
140°	4.1	4.7	4.7	3.8	2.2	0.6
142.5°	3.8	4.4	4.4	3.5	1.9	0.6
145°	3.5	3.8	4.1	3.2	1.9	0.6
147.5°	2.8	3.5	3.8	2.8	1.9	0.6
150°	2.2	3.2	3.2	2.8	1.9	0.6
152.5°	1.6	2.8	2.8	2.5	1.6	0.6
155°	1.3	2.2	2.5	2.2	1.6	0.9
157.5°	0.9	1.9	2.2	2.2	1.6	0.9
160°	0.6	1.6	1.9	1.9	1.3	0.9
162.5°	0.3	1.3	1.6	1.9	1.3	0.9
165°	0.0	0.9	1.3	1.6	1.3	0.9
167.5°	0.0	0.6	0.9	1.3	0.9	0.9
170°	0.0	0.3	0.6	0.9	0.9	0.9
172.5°	0.0	0.0	0.3	0.6	0.6	0.9
175°	0.0	0.0	0.0	0.3	0.6	0.9
177.5°	0.0	0.0	0.0	0.3	0.6	0.9
180°	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P892617  
 CATALOG NUMBER: 2MB-3SL-ASML-UNV-L930

**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	19.26	20.71	19.71	21.15	21.60	21.42	22.88	21.87	23.31	23.76
	3H	20.08	21.40	20.54	21.84	22.34	23.09	24.41	23.55	24.85	25.35
	4H	20.28	21.53	20.77	21.99	22.50	23.90	25.14	24.39	25.60	26.12
	6H	20.37	21.53	20.87	22.00	22.53	24.73	25.88	25.23	26.36	26.89
	8H	20.38	21.48	20.89	21.97	22.51	25.17	26.27	25.68	26.77	27.30
	12H	20.36	21.42	20.88	21.91	22.47	25.66	26.71	26.18	27.20	27.76
4H	2H	19.68	20.92	20.17	21.38	21.90	21.79	23.03	22.28	23.49	24.01
	3H	20.78	21.82	21.28	22.33	22.86	23.64	24.69	24.14	25.19	25.73
	4H	21.12	22.06	21.64	22.58	23.15	24.59	25.54	25.11	26.05	26.62
	6H	21.31	22.14	21.85	22.68	23.27	25.59	26.42	26.13	26.96	27.55
	8H	21.34	22.11	21.88	22.66	23.25	26.11	26.89	26.66	27.44	28.03
	12H	21.34	22.04	21.91	22.62	23.22	26.72	27.42	27.28	27.99	28.59
8H	4H	21.43	22.21	21.98	22.76	23.35	24.73	25.51	25.28	26.06	26.65
	6H	21.75	22.41	22.34	23.00	23.60	25.86	26.52	26.44	27.11	27.71
	8H	21.84	22.43	22.44	23.03	23.65	26.51	27.10	27.10	27.70	28.31
	12H	21.90	22.42	22.49	23.01	23.69	27.27	27.79	27.86	28.38	29.06
12H	4H	21.51	22.21	22.08	22.78	23.38	24.73	25.43	25.30	26.00	26.60
	6H	21.88	22.47	22.48	23.07	23.69	25.88	26.47	26.47	27.07	27.68
	8H	22.04	22.57	22.64	23.15	23.84	26.58	27.11	27.18	27.69	28.37