

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: P892501

Luminaire Tested: 2MB-2SL-ASML-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892501
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-2SL-ASML-UNV-L830
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

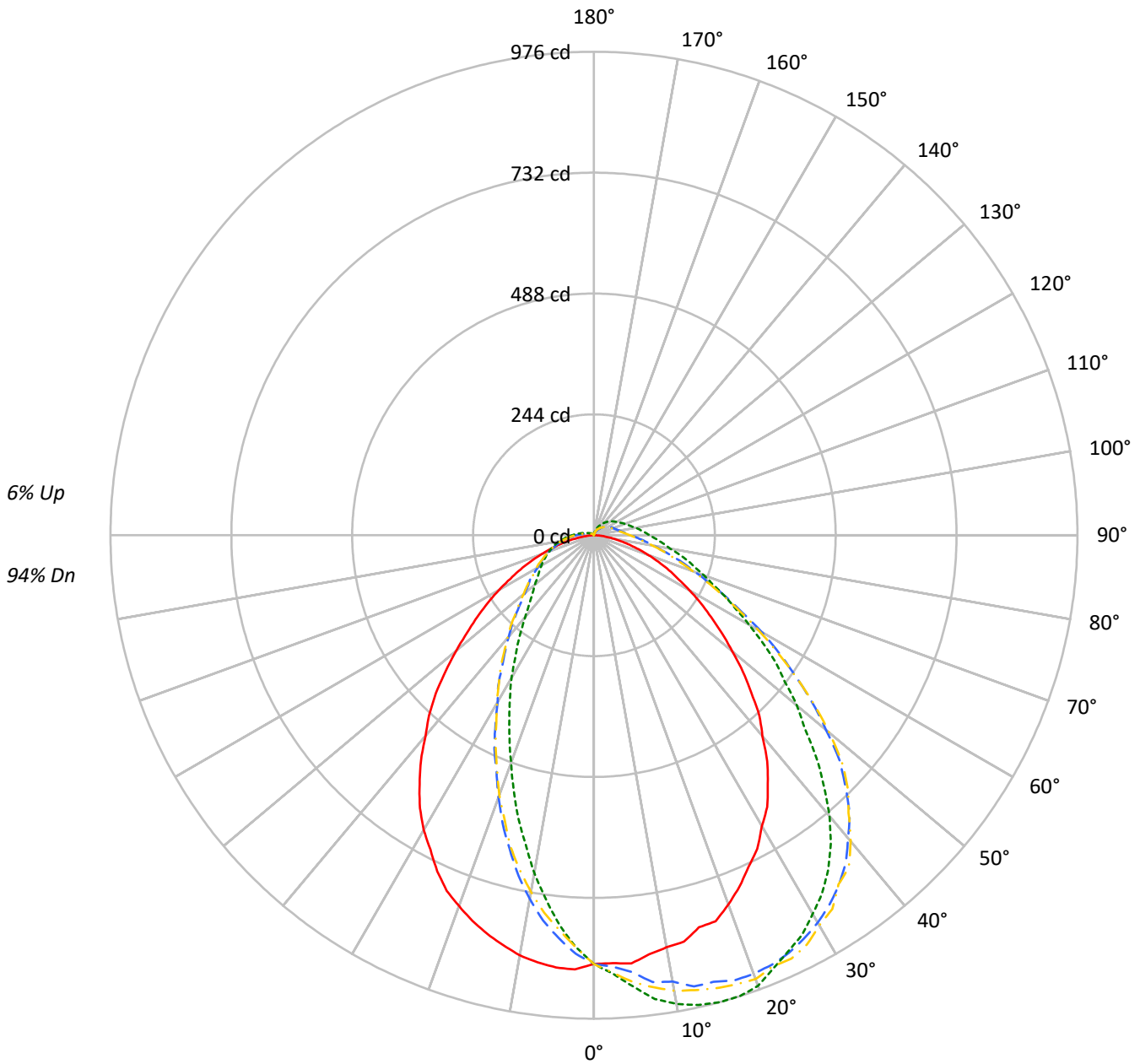
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2157.0 lumens
Efficiency: N/A
Efficacy: 144.8 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): 14.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.92
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°	17720	17720	17720	17720
5°	17737	18058	17905	15608
10°	17370	18443	17709	13303
15°	17077	18377	17367	11122
20°	16896	18014	16968	9099
25°	16201	17179	16425	7487
30°	15469	16417	15670	6186
35°	14653	15495	14693	5041
40°	13431	14173	13423	4132
45°	12227	12510	12287	3521
50°	10813	10919	10763	3182
55°	9464	9565	9401	2923
60°	8232	8159	8158	2762
65°	7135	7025	6964	2624
70°	5969	6157	5770	2509
75°	4751	5597	4629	2417
80°	3516	5036	3195	2250
85°	2210	4865	1774	2107

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 17116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.3	3.8
10°-20°	226.0	10.5
20°-30°	325.1	15.1
30°-40°	368.9	17.1
40°-50°	352.6	16.3
50°-60°	286.5	13.3
60°-70°	199.9	9.3
70°-80°	123.8	5.7
80°-90°	71.0	3.3
90°-100°	42.5	2.0
100°-110°	27.9	1.3
110°-120°	19.5	0.9
120°-130°	14.2	0.7
130°-140°	9.4	0.4
140°-150°	5.3	0.2
150°-160°	2.4	0.1
160°-170°	0.7	0.0
170°-180°	0.1	0.0
0°-30°	632.4	29.3
0°-40°	1001.3	46.4
0°-60°	1640.4	76.0
0°-90°	2035.2	94.3
90°-120°	89.9	4.2
90°-150°	118.8	5.5
90°-180°	122.0	5.7
0°-180°	2157.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	865	865	865	865	865	
5°	868	915	876	791	868	82
15°	819	976	833	591	819	233
25°	738	927	748	404	738	341
35°	612	824	614	268	612	382
45°	449	635	451	179	449	346
55°	289	448	287	137	289	260
65°	167	291	163	109	167	166
75°	74	195	72	84	74	80
85°	16	132	13	57	16	18
90°	1	112	0	44	1	1
95°	1	97	0	33	1	1
105°	1	75	0	18	1	1
115°	1	60	0	10	1	1
125°	1	48	0	6	1	1
135°	1	38	0	5	1	0
145°	1	27	0	3	1	0
155°	1	17	0	2	1	0
165°	1	8	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°	865.4	865.4	865.4	865.4	865.4	865.4	865.4	865.4	865.4	865.4	865.4
2.5°	864.6	871.1	871.7	892.1	886.1	893.8	884.1	885.8	877.3	875.1	845.6
5°	867.7	881.6	885.3	920.4	914.7	918.7	905.4	895.7	875.9	864.0	816.4
7.5°	853.0	889.5	909.9	934.9	944.2	947.3	920.4	902.5	869.7	840.5	784.7
10°	844.7	895.2	915.0	952.4	960.6	954.7	933.7	904.2	861.2	814.1	745.6
12.5°	840.2	898.3	932.9	971.1	971.4	965.2	940.5	908.8	847.3	785.8	704.2
15°	819.2	897.7	933.2	972.0	976.2	972.3	947.0	905.7	833.1	750.7	656.6
17.5°	817.0	896.3	942.2	983.0	975.9	973.1	951.0	904.2	816.1	715.0	611.8
20°	793.2	893.2	942.2	970.6	968.3	969.4	953.6	902.3	796.6	676.4	562.8
22.5°	767.9	889.5	938.3	959.8	946.2	966.9	942.2	896.9	776.7	636.2	514.0
25°	738.2	883.6	930.6	944.5	927.2	943.4	943.1	888.7	748.4	592.8	475.5
27.5°	714.1	874.2	918.1	939.1	909.6	923.5	931.5	878.7	715.0	550.0	430.2
30°	678.1	862.3	903.1	906.2	883.0	900.6	909.6	866.3	686.9	501.6	388.8
32.5°	650.6	848.7	884.7	880.4	857.2	880.4	895.2	853.8	653.5	459.1	359.6
35°	612.1	832.3	861.7	839.4	824.1	843.3	860.6	840.5	613.8	413.7	322.2
37.5°	574.7	817.8	834.3	806.5	785.5	807.0	845.0	815.6	573.8	377.7	294.4
40°	529.1	784.7	798.3	760.6	739.6	771.3	806.2	794.0	528.8	340.3	267.5
42.5°	494.5	760.0	764.0	712.4	687.5	721.2	760.9	763.4	492.2	306.6	243.7
45°	448.9	725.4	718.1	661.4	635.3	665.6	725.2	732.0	451.1	277.4	220.5
47.5°	407.8	686.9	672.4	606.1	576.9	612.9	679.0	696.8	405.2	250.5	198.6
50°	365.0	643.8	611.8	554.6	535.0	552.9	620.3	649.8	363.3	223.9	181.9
52.5°	325.9	596.2	556.5	505.3	485.7	500.4	558.8	603.0	321.6	201.5	167.2
55°	289.0	548.6	497.3	452.0	448.0	452.5	496.5	547.2	287.1	181.6	157.8
57.5°	256.2	490.8	444.0	410.6	403.5	407.2	437.5	489.7	253.6	161.8	144.2
60°	223.0	431.6	391.3	365.6	361.6	364.4	384.0	433.6	221.0	145.1	131.5
62.5°	193.0	372.1	336.4	326.7	323.9	323.9	332.1	377.5	190.4	128.1	121.9
65°	167.2	321.1	294.1	290.5	291.3	291.0	285.9	315.1	163.2	113.1	113.3
67.5°	141.1	266.9	251.9	256.5	259.9	258.4	247.7	262.1	137.7	99.5	105.7
70°	117.0	220.5	217.6	227.8	235.8	228.4	212.8	214.2	113.1	86.1	95.8
72.5°	94.4	178.2	191.3	205.4	213.1	204.9	183.3	177.1	91.0	74.0	86.7
75°	74.2	143.4	164.1	185.0	195.0	184.5	159.5	138.3	72.3	62.3	79.3
77.5°	56.7	113.6	140.3	164.6	174.3	165.2	138.9	108.0	53.0	52.4	71.4
80°	40.5	89.8	124.4	147.9	156.7	147.9	120.4	85.3	36.8	41.9	62.9
82.5°	26.6	69.4	108.2	134.6	144.2	133.5	104.6	65.7	23.5	34.0	56.7
85°	16.2	55.0	94.4	121.0	132.1	121.6	91.5	49.9	13.0	26.1	49.3
87.5°	7.1	42.5	84.2	111.6	121.6	111.9	81.6	39.1	5.4	20.4	42.2
90°	0.6	33.7	74.2	102.9	111.6	102.6	72.3	31.7	0.0	14.7	36.3
92.5°	0.6	28.9	68.0	95.2	105.1	94.9	65.2	26.1	0.0	10.8	30.6
95°	0.9	24.4	61.8	89.3	97.2	88.4	59.5	22.4	0.0	7.4	25.8
97.5°	0.9	22.1	56.7	83.3	92.1	82.7	54.4	20.1	0.0	5.4	21.0
100°	0.6	20.4	52.7	77.6	85.9	77.1	50.4	18.1	0.0	3.4	17.0
102.5°	0.6	19.0	49.3	72.8	79.3	72.0	47.0	17.0	0.0	2.8	13.9
105°	0.6	18.1	46.2	67.2	74.8	67.2	44.2	15.9	0.0	2.3	10.8
107.5°	0.6	17.0	43.9	64.0	70.3	63.5	41.9	15.0	0.0	2.3	8.8
110°	0.6	16.2	41.9	59.5	66.6	60.1	40.0	13.6	0.0	1.4	7.1



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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	14.7	40.0	56.4	63.2	56.7	38.3	12.5	0.0	1.4	6.2
115°	0.6	13.3	38.3	54.4	59.5	53.8	36.6	11.1	0.0	1.1	5.7
117.5°	0.6	12.5	37.1	51.9	57.0	51.3	35.1	10.5	0.0	1.1	5.4
120°	0.6	11.9	35.4	49.3	53.3	48.7	33.4	9.9	0.0	1.1	5.1
122.5°	0.6	11.3	34.0	47.0	51.3	46.8	32.0	9.6	0.0	0.9	4.5
125°	0.6	10.8	32.0	44.5	48.5	43.9	29.5	9.4	0.0	0.6	4.0
127.5°	0.6	10.2	30.0	42.5	46.2	41.9	27.8	9.1	0.0	0.6	3.7
130°	0.6	9.9	27.5	40.0	43.6	39.4	25.8	9.1	0.0	0.6	3.4
132.5°	0.6	9.6	24.7	37.4	41.4	36.8	23.8	8.8	0.0	0.6	2.8
135°	0.6	9.4	21.8	34.9	38.5	34.3	22.1	8.5	0.0	0.6	2.6
137.5°	0.6	8.8	19.3	32.0	35.7	31.5	21.0	7.9	0.0	0.6	2.3
140°	0.6	8.2	17.3	29.8	32.9	28.9	19.3	7.4	0.0	0.3	1.7
142.5°	0.6	7.4	15.6	26.9	30.0	26.4	17.3	6.2	0.0	0.3	1.7
145°	0.6	6.5	14.2	23.5	27.2	23.5	16.2	5.7	0.0	0.3	1.4
147.5°	0.6	6.0	12.8	19.8	24.7	21.5	14.5	4.8	0.0	0.3	1.1
150°	0.6	5.4	11.1	16.7	21.8	19.0	13.3	4.3	0.0	0.0	0.9
152.5°	0.6	4.8	9.6	13.9	19.6	17.3	11.9	3.7	0.0	0.0	0.6
155°	0.9	4.5	8.2	12.2	17.0	15.0	9.9	3.1	0.0	0.0	0.6
157.5°	0.9	4.0	6.8	9.9	15.0	13.0	7.9	2.6	0.0	0.0	0.3
160°	0.9	3.7	5.7	7.7	12.5	10.8	6.5	2.0	0.0	0.0	0.3
162.5°	0.9	3.4	4.8	5.7	10.2	8.5	5.1	1.4	0.0	0.0	0.3
165°	0.9	2.8	4.3	4.0	7.9	6.5	4.0	0.9	0.0	0.0	0.0
167.5°	0.9	2.6	3.4	2.8	6.0	4.8	2.8	0.6	0.0	0.0	0.0
170°	0.9	2.0	2.8	2.0	1.7	3.1	1.7	0.3	0.0	0.0	0.0
172.5°	0.9	1.7	2.3	1.4	0.6	1.7	0.9	0.0	0.0	0.0	0.0
175°	0.9	1.4	1.4	0.9	0.3	0.6	0.0	0.0	0.0	0.0	0.0
177.5°	0.9	1.1	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°	865.4	865.4	865.4	865.4	865.4	865.4
2.5°	841.6	832.3	823.8	832.8	839.4	864.6
5°	800.5	790.6	791.7	800.0	821.8	867.7
7.5°	758.0	741.6	745.6	768.5	800.8	853.0
10°	707.9	692.9	696.5	731.1	776.4	844.7
12.5°	663.1	637.9	659.4	692.0	748.1	840.2
15°	610.7	590.8	602.5	650.6	720.9	819.2
17.5°	554.0	538.7	552.6	600.5	687.5	817.0
20°	510.4	489.1	505.5	558.2	646.1	793.2
22.5°	461.3	445.2	462.5	510.9	603.9	767.9
25°	421.1	404.1	421.4	469.6	566.5	738.2
27.5°	382.0	366.4	382.0	426.2	529.3	714.1
30°	347.7	332.7	348.6	391.1	486.0	678.1
32.5°	315.7	296.4	316.8	357.9	447.7	650.6
35°	282.5	268.1	283.4	329.0	405.2	612.1
37.5°	255.0	240.0	258.2	297.3	369.2	574.7
40°	229.0	215.6	230.1	271.8	338.6	529.1
42.5°	208.6	195.2	210.0	248.5	307.7	494.5
45°	188.7	178.8	190.7	223.0	276.6	448.9
47.5°	174.3	165.8	175.7	204.3	250.5	407.8
50°	161.8	155.9	162.9	185.6	223.6	365.0
52.5°	150.8	144.8	153.0	171.2	202.3	325.9
55°	142.3	136.9	143.1	157.6	181.1	289.0
57.5°	132.9	129.5	134.3	143.1	164.4	256.2
60°	126.1	122.4	127.5	134.6	145.4	223.0
62.5°	118.5	116.5	119.6	125.3	130.9	193.0
65°	111.6	108.8	112.8	114.8	114.2	167.2
67.5°	104.3	103.4	105.7	106.0	101.7	141.1
70°	96.6	96.1	98.9	97.2	88.4	117.0
72.5°	90.4	90.4	92.1	88.7	77.1	94.4
75°	83.6	84.2	85.6	81.6	64.9	74.2
77.5°	77.4	77.9	78.2	72.8	54.4	56.7
80°	70.3	70.0	72.8	66.0	44.2	40.5
82.5°	64.0	62.9	64.6	57.8	35.7	26.6
85°	57.0	57.2	58.4	50.4	28.6	16.2
87.5°	51.3	51.3	52.4	44.5	21.5	7.1
90°	44.5	43.9	45.6	37.7	16.2	0.6
92.5°	38.8	38.8	40.0	32.3	11.9	0.6
95°	33.2	33.4	34.3	26.6	9.1	0.9
97.5°	28.3	28.6	29.8	22.7	6.5	0.9
100°	24.1	24.4	24.9	18.1	5.1	0.6
102.5°	20.1	21.0	21.0	15.0	4.0	0.6
105°	17.0	18.1	17.6	12.2	3.7	0.6
107.5°	14.2	15.3	15.3	9.9	3.7	0.6
110°	11.6	13.3	13.0	8.5	2.8	0.6



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	9.9	11.3	10.5	7.4	2.8	0.6
115°	8.5	9.9	9.4	6.8	2.6	0.6
117.5°	7.7	8.5	8.5	6.5	2.6	0.6
120°	7.1	7.9	7.7	6.2	2.6	0.6
122.5°	6.5	7.1	7.1	5.7	2.3	0.6
125°	6.2	6.5	6.8	5.1	2.3	0.6
127.5°	6.0	6.5	6.5	4.8	2.0	0.6
130°	5.4	6.0	6.0	4.5	2.0	0.6
132.5°	4.8	5.4	5.4	4.3	2.0	0.6
135°	4.5	5.1	5.1	4.0	2.0	0.6
137.5°	4.3	4.5	4.5	3.7	2.0	0.6
140°	3.7	4.3	4.3	3.4	2.0	0.6
142.5°	3.4	4.0	4.0	3.1	1.7	0.6
145°	3.1	3.4	3.7	2.8	1.7	0.6
147.5°	2.6	3.1	3.4	2.6	1.7	0.6
150°	2.0	2.8	2.8	2.6	1.7	0.6
152.5°	1.4	2.6	2.6	2.3	1.4	0.6
155°	1.1	2.0	2.3	2.0	1.4	0.9
157.5°	0.9	1.7	2.0	2.0	1.4	0.9
160°	0.6	1.4	1.7	1.7	1.1	0.9
162.5°	0.3	1.1	1.4	1.7	1.1	0.9
165°	0.0	0.9	1.1	1.4	1.1	0.9
167.5°	0.0	0.6	0.9	1.1	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: P892501
 CATALOG NUMBER: 2MB-2SL-ASML-UNV-L830

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	18.87	20.33	19.33	20.76	21.22	21.04	22.50	21.49	22.93	23.38
	3H	19.70	21.01	20.16	21.46	21.96	22.71	24.02	23.17	24.47	24.97
	4H	19.90	21.14	20.39	21.60	22.12	23.52	24.76	24.01	25.22	25.73
	6H	19.99	21.14	20.49	21.62	22.15	24.35	25.50	24.85	25.98	26.50
	8H	19.99	21.09	20.51	21.59	22.13	24.79	25.89	25.30	26.39	26.92
	12H	19.98	21.04	20.50	21.53	22.09	25.28	26.33	25.79	26.82	27.38
4H	2H	19.30	20.54	19.79	21.00	21.51	21.41	22.65	21.90	23.11	23.62
	3H	20.40	21.44	20.90	21.95	22.48	23.26	24.31	23.76	24.81	25.35
	4H	20.73	21.68	21.26	22.20	22.77	24.21	25.16	24.73	25.67	26.24
	6H	20.93	21.76	21.47	22.30	22.89	25.20	26.04	25.75	26.58	27.16
	8H	20.95	21.73	21.50	22.28	22.87	25.73	26.51	26.28	27.06	27.65
	12H	20.96	21.66	21.53	22.24	22.84	26.33	27.04	26.90	27.61	28.21
8H	4H	21.05	21.83	21.60	22.38	22.97	24.35	25.13	24.90	25.67	26.27
	6H	21.37	22.03	21.95	22.61	23.22	25.48	26.14	26.06	26.72	27.33
	8H	21.46	22.05	22.06	22.65	23.26	26.13	26.72	26.72	27.32	27.93
	12H	21.52	22.04	22.11	22.63	23.31	26.89	27.41	27.48	28.00	28.68
12H	4H	21.13	21.83	21.69	22.40	23.00	24.34	25.05	24.91	25.62	26.22
	6H	21.50	22.09	22.10	22.69	23.31	25.50	26.09	26.09	26.69	27.30
	8H	21.66	22.19	22.26	22.77	23.46	26.20	26.72	26.79	27.31	27.99