

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: P892508

Luminaire Tested: 2MB-2SL-ASML-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892508
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-L950
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

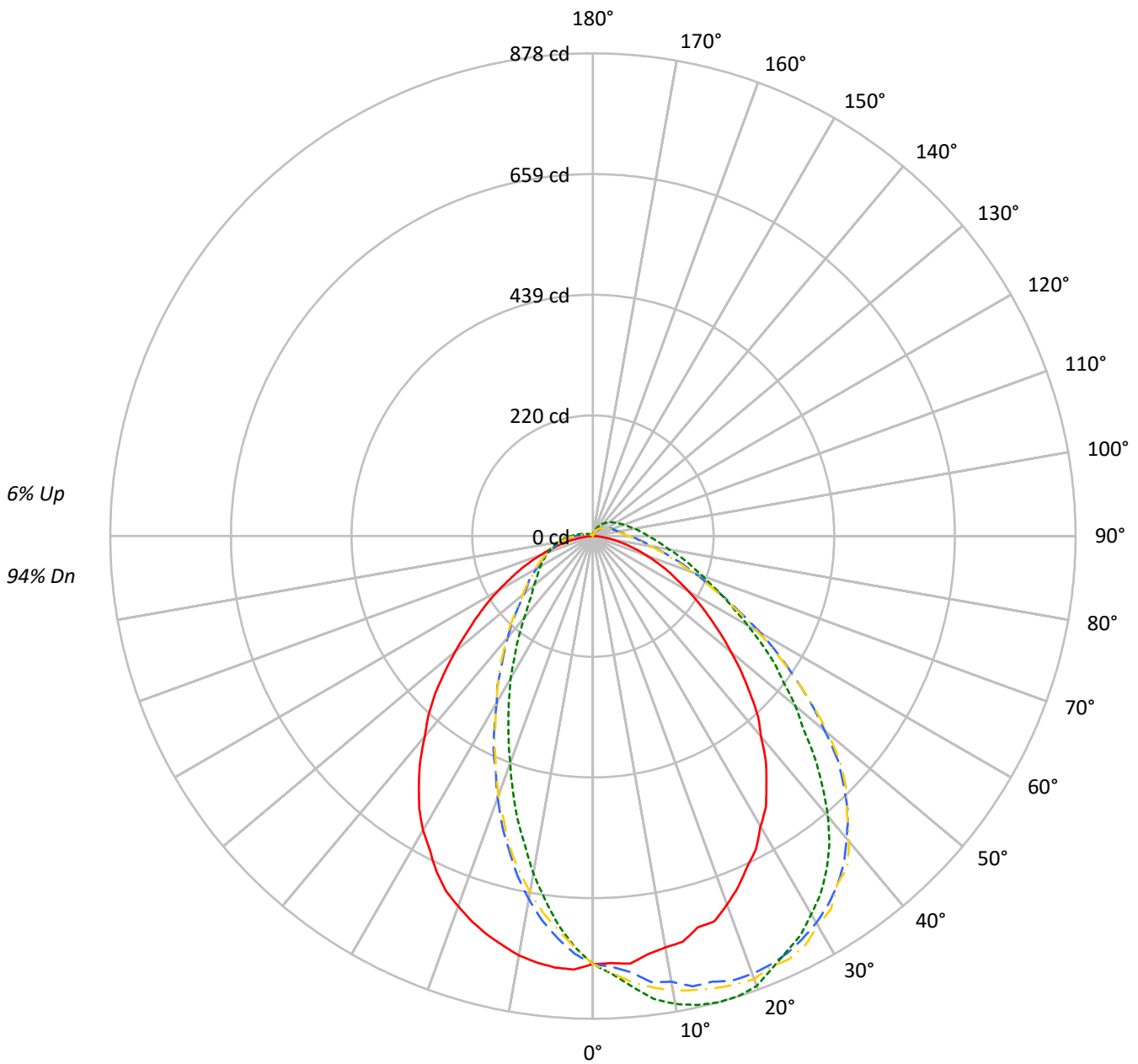
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1940.0 lumens
Efficiency: N/A
Efficacy: 130.2 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

TEST NUMBER: P892508
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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°	15939	15939	15939	15939
5°	15953	16242	16104	14038
10°	15624	16588	15926	11963
15°	15359	16528	15620	10004
20°	15196	16202	15260	8184
25°	14571	15450	14772	6733
30°	13913	14766	14093	5563
35°	13178	13936	13214	4533
40°	12078	12747	12073	3718
45°	10996	11252	11050	3166
50°	9726	9821	9679	2861
55°	8514	8602	8455	2628
60°	7405	7337	7339	2484
65°	6418	6318	6264	2361
70°	5372	5535	5188	2256
75°	4277	5032	4161	2173
80°	3160	4529	2874	2025
85°	1978	4376	1596	1897

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 15393 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	3.8
10°-20°	203.3	10.5
20°-30°	292.4	15.1
30°-40°	331.8	17.1
40°-50°	317.1	16.3
50°-60°	257.7	13.3
60°-70°	179.8	9.3
70°-80°	111.4	5.7
80°-90°	63.9	3.3
90°-100°	38.2	2.0
100°-110°	25.1	1.3
110°-120°	17.6	0.9
120°-130°	12.7	0.7
130°-140°	8.5	0.4
140°-150°	4.8	0.2
150°-160°	2.1	0.1
160°-170°	0.6	0.0
170°-180°	0.1	0.0
0°-30°	568.8	29.3
0°-40°	900.6	46.4
0°-60°	1475.4	76.1
0°-90°	1830.4	94.4
90°-120°	80.8	4.2
90°-150°	106.8	5.5
90°-180°	110.0	5.7
0°-180°	1940.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	778	778	778	778	778	
5°	780	823	788	711	780	74
15°	737	878	749	531	737	209
25°	664	834	673	363	664	306
35°	550	741	552	241	550	343
45°	404	571	406	161	404	312
55°	260	403	258	123	260	234
65°	150	262	147	98	150	149
75°	67	175	65	76	67	72
85°	14	119	12	52	14	16
90°	0	100	0	40	0	1
95°	1	87	0	30	1	1
105°	0	67	0	16	0	1
115°	0	54	0	9	0	0
125°	0	44	0	6	0	0
135°	0	35	0	5	0	0
145°	0	24	0	3	0	0
155°	1	15	0	2	1	0
165°	1	7	0	1	1	0
175°	1	0	0	0	1	0
180°	0	0	0	0	0	



TEST NUMBER: P892508
 CATALOG NUMBER: 2MB-2SL-ASML-UNV-L950

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4
2.5°	777.6	783.5	784.0	802.3	797.0	803.8	795.2	796.7	789.1	787.0	760.5
5°	780.4	792.9	796.2	827.8	822.7	826.3	814.3	805.6	787.8	777.1	734.3
7.5°	767.1	800.0	818.4	840.8	849.2	852.0	827.8	811.7	782.2	755.9	705.7
10°	759.8	805.1	823.0	856.6	864.0	858.6	839.8	813.3	774.5	732.2	670.6
12.5°	755.7	807.9	839.0	873.4	873.7	868.1	845.9	817.4	762.0	706.7	633.3
15°	736.8	807.4	839.3	874.2	878.0	874.4	851.8	814.6	749.3	675.1	590.5
17.5°	734.8	806.1	847.4	884.1	877.8	875.2	855.3	813.3	734.0	643.0	550.3
20°	713.4	803.3	847.4	872.9	870.9	871.9	857.6	811.5	716.4	608.4	506.2
22.5°	690.7	800.0	843.9	863.2	851.0	869.6	847.4	806.7	698.6	572.2	462.3
25°	663.9	794.7	837.0	849.5	833.9	848.4	848.2	799.3	673.1	533.2	427.7
27.5°	642.3	786.3	825.8	844.6	818.1	830.6	837.7	790.3	643.0	494.7	386.9
30°	609.9	775.6	812.3	815.1	794.2	810.0	818.1	779.1	617.8	451.1	349.7
32.5°	585.2	763.3	795.7	791.9	771.0	791.9	805.1	767.9	587.7	412.9	323.4
35°	550.5	748.5	775.0	754.9	741.2	758.5	774.0	755.9	552.0	372.1	289.8
37.5°	516.9	735.5	750.3	725.3	706.5	725.9	760.0	733.5	516.1	339.7	264.8
40°	475.8	705.7	718.0	684.1	665.2	693.7	725.1	714.1	475.6	306.1	240.6
42.5°	444.7	683.6	687.1	640.7	618.3	648.6	684.3	686.6	442.7	275.8	219.2
45°	403.7	652.5	645.8	594.9	571.4	598.7	652.2	658.3	405.7	249.5	198.3
47.5°	366.8	617.8	604.8	545.2	518.9	551.3	610.7	626.7	364.5	225.3	178.7
50°	328.3	579.1	550.3	498.8	481.2	497.2	557.9	584.4	326.7	201.3	163.6
52.5°	293.1	536.2	500.6	454.4	436.8	450.1	502.6	542.4	289.3	181.2	150.4
55°	260.0	493.4	447.3	406.5	402.9	407.0	446.5	492.1	258.2	163.4	142.0
57.5°	230.4	441.4	399.4	369.3	362.9	366.2	393.5	440.4	228.1	145.5	129.7
60°	200.6	388.2	352.0	328.8	325.2	327.8	345.3	389.9	198.8	130.5	118.3
62.5°	173.6	334.6	302.5	293.9	291.3	291.3	298.7	339.5	171.3	115.2	109.6
65°	150.4	288.8	264.6	261.2	262.0	261.7	257.2	283.4	146.8	101.7	101.9
67.5°	126.9	240.1	226.6	230.7	233.7	232.4	222.8	235.8	123.9	89.5	95.1
70°	105.3	198.3	195.7	204.9	212.0	205.4	191.4	192.7	101.7	77.5	86.1
72.5°	84.9	160.3	172.0	184.8	191.7	184.3	164.9	159.3	81.8	66.5	78.0
75°	66.8	129.0	147.6	166.4	175.3	165.9	143.5	124.4	65.0	56.1	71.4
77.5°	51.0	102.2	126.2	148.1	156.7	148.6	124.9	97.1	47.7	47.2	64.2
80°	36.4	80.8	111.9	133.0	140.9	133.0	108.3	76.7	33.1	37.7	56.6
82.5°	24.0	62.4	97.4	121.1	129.7	120.0	94.0	59.1	21.2	30.6	51.0
85°	14.5	49.4	84.9	108.8	118.8	109.3	82.3	44.9	11.7	23.4	44.3
87.5°	6.4	38.2	75.7	100.4	109.3	100.7	73.4	35.2	4.8	18.4	38.0
90°	0.5	30.3	66.8	92.5	100.4	92.3	65.0	28.5	0.0	13.3	32.6
92.5°	0.5	26.0	61.2	85.6	94.6	85.4	58.6	23.4	0.0	9.7	27.5
95°	0.8	21.9	55.6	80.3	87.4	79.5	53.5	20.1	0.0	6.6	23.2
97.5°	0.8	19.9	51.0	74.9	82.8	74.4	48.9	18.1	0.0	4.8	18.9
100°	0.5	18.4	47.4	69.8	77.2	69.3	45.4	16.3	0.0	3.1	15.3
102.5°	0.5	17.1	44.3	65.5	71.4	64.7	42.3	15.3	0.0	2.5	12.5
105°	0.5	16.3	41.5	60.4	67.3	60.4	39.8	14.3	0.0	2.0	9.7
107.5°	0.5	15.3	39.5	57.6	63.2	57.1	37.7	13.5	0.0	2.0	7.9
110°	0.5	14.5	37.7	53.5	59.9	54.0	35.9	12.2	0.0	1.3	6.4



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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°	0.5	13.3	35.9	50.7	56.8	51.0	34.4	11.2	0.0	1.3	5.6
115°	0.5	12.0	34.4	48.9	53.5	48.4	32.9	9.9	0.0	1.0	5.1
117.5°	0.5	11.2	33.4	46.6	51.2	46.1	31.6	9.4	0.0	1.0	4.8
120°	0.5	10.7	31.9	44.3	47.9	43.8	30.1	8.9	0.0	1.0	4.6
122.5°	0.5	10.2	30.6	42.3	46.1	42.1	28.8	8.7	0.0	0.8	4.1
125°	0.5	9.7	28.8	40.0	43.6	39.5	26.5	8.4	0.0	0.5	3.6
127.5°	0.5	9.2	27.0	38.2	41.5	37.7	25.0	8.2	0.0	0.5	3.3
130°	0.5	8.9	24.7	35.9	39.2	35.4	23.2	8.2	0.0	0.5	3.1
132.5°	0.5	8.7	22.2	33.6	37.2	33.1	21.4	7.9	0.0	0.5	2.5
135°	0.5	8.4	19.6	31.3	34.7	30.8	19.9	7.6	0.0	0.5	2.3
137.5°	0.5	7.9	17.3	28.8	32.1	28.3	18.9	7.1	0.0	0.5	2.0
140°	0.5	7.4	15.5	26.8	29.6	26.0	17.3	6.6	0.0	0.3	1.5
142.5°	0.5	6.6	14.0	24.2	27.0	23.7	15.5	5.6	0.0	0.3	1.5
145°	0.5	5.9	12.7	21.2	24.5	21.2	14.5	5.1	0.0	0.3	1.3
147.5°	0.5	5.4	11.5	17.8	22.2	19.4	13.0	4.3	0.0	0.3	1.0
150°	0.5	4.8	9.9	15.0	19.6	17.1	12.0	3.8	0.0	0.0	0.8
152.5°	0.5	4.3	8.7	12.5	17.6	15.5	10.7	3.3	0.0	0.0	0.5
155°	0.8	4.1	7.4	11.0	15.3	13.5	8.9	2.8	0.0	0.0	0.5
157.5°	0.8	3.6	6.1	8.9	13.5	11.7	7.1	2.3	0.0	0.0	0.3
160°	0.8	3.3	5.1	6.9	11.2	9.7	5.9	1.8	0.0	0.0	0.3
162.5°	0.8	3.1	4.3	5.1	9.2	7.6	4.6	1.3	0.0	0.0	0.3
165°	0.8	2.5	3.8	3.6	7.1	5.9	3.6	0.8	0.0	0.0	0.0
167.5°	0.8	2.3	3.1	2.5	5.4	4.3	2.5	0.5	0.0	0.0	0.0
170°	0.8	1.8	2.5	1.8	1.5	2.8	1.5	0.3	0.0	0.0	0.0
172.5°	0.8	1.5	2.0	1.3	0.5	1.5	0.8	0.0	0.0	0.0	0.0
175°	0.8	1.3	1.3	0.8	0.3	0.5	0.0	0.0	0.0	0.0	0.0
177.5°	0.8	1.0	0.8	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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CATALOG NUMBER: 2MB-2SL-ASML-UNV-L950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	778.4	778.4	778.4	778.4	778.4	778.4
2.5°	757.0	748.5	740.9	749.1	754.9	777.6
5°	720.0	711.1	712.1	719.5	739.1	780.4
7.5°	681.8	667.0	670.6	691.2	720.3	767.1
10°	636.7	623.1	626.5	657.6	698.3	759.8
12.5°	596.4	573.7	593.1	622.4	672.8	755.7
15°	549.2	531.4	541.8	585.2	648.4	736.8
17.5°	498.3	484.5	497.0	540.1	618.3	734.8
20°	459.0	439.9	454.7	502.1	581.1	713.4
22.5°	414.9	400.4	415.9	459.5	543.1	690.7
25°	378.7	363.4	379.0	422.3	509.5	663.9
27.5°	343.6	329.5	343.6	383.3	476.1	642.3
30°	312.7	299.2	313.5	351.7	437.1	609.9
32.5°	283.9	266.6	284.9	321.9	402.7	585.2
35°	254.1	241.1	254.9	295.9	364.5	550.5
37.5°	229.4	215.9	232.2	267.4	332.1	516.9
40°	205.9	194.0	207.0	244.4	304.6	475.8
42.5°	187.6	175.6	188.9	223.5	276.8	444.7
45°	169.7	160.8	171.5	200.6	248.7	403.7
47.5°	156.7	149.1	158.0	183.8	225.3	366.8
50°	145.5	140.2	146.5	166.9	201.1	328.3
52.5°	135.6	130.2	137.6	153.9	182.0	293.1
55°	127.9	123.1	128.7	141.7	162.9	260.0
57.5°	119.5	116.5	120.8	128.7	147.8	230.4
60°	113.4	110.1	114.7	121.1	130.7	200.6
62.5°	106.5	104.7	107.6	112.7	117.7	173.6
65°	100.4	97.9	101.4	103.2	102.7	150.4
67.5°	93.8	93.0	95.1	95.3	91.5	126.9
70°	86.9	86.4	88.9	87.4	79.5	105.3
72.5°	81.3	81.3	82.8	79.8	69.3	84.9
75°	75.2	75.7	77.0	73.4	58.4	66.8
77.5°	69.6	70.1	70.3	65.5	48.9	51.0
80°	63.2	63.0	65.5	59.4	39.8	36.4
82.5°	57.6	56.6	58.1	52.0	32.1	24.0
85°	51.2	51.5	52.5	45.4	25.7	14.5
87.5°	46.1	46.1	47.2	40.0	19.4	6.4
90°	40.0	39.5	41.0	33.9	14.5	0.5
92.5°	34.9	34.9	35.9	29.1	10.7	0.5
95°	29.8	30.1	30.8	24.0	8.2	0.8
97.5°	25.5	25.7	26.8	20.4	5.9	0.8
100°	21.7	21.9	22.4	16.3	4.6	0.5
102.5°	18.1	18.9	18.9	13.5	3.6	0.5
105°	15.3	16.3	15.8	11.0	3.3	0.5
107.5°	12.7	13.8	13.8	8.9	3.3	0.5
110°	10.4	12.0	11.7	7.6	2.5	0.5



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	8.9	10.2	9.4	6.6	2.5	0.5
115°	7.6	8.9	8.4	6.1	2.3	0.5
117.5°	6.9	7.6	7.6	5.9	2.3	0.5
120°	6.4	7.1	6.9	5.6	2.3	0.5
122.5°	5.9	6.4	6.4	5.1	2.0	0.5
125°	5.6	5.9	6.1	4.6	2.0	0.5
127.5°	5.4	5.9	5.9	4.3	1.8	0.5
130°	4.8	5.4	5.4	4.1	1.8	0.5
132.5°	4.3	4.8	4.8	3.8	1.8	0.5
135°	4.1	4.6	4.6	3.6	1.8	0.5
137.5°	3.8	4.1	4.1	3.3	1.8	0.5
140°	3.3	3.8	3.8	3.1	1.8	0.5
142.5°	3.1	3.6	3.6	2.8	1.5	0.5
145°	2.8	3.1	3.3	2.5	1.5	0.5
147.5°	2.3	2.8	3.1	2.3	1.5	0.5
150°	1.8	2.5	2.5	2.3	1.5	0.5
152.5°	1.3	2.3	2.3	2.0	1.3	0.5
155°	1.0	1.8	2.0	1.8	1.3	0.8
157.5°	0.8	1.5	1.8	1.8	1.3	0.8
160°	0.5	1.3	1.5	1.5	1.0	0.8
162.5°	0.3	1.0	1.3	1.5	1.0	0.8
165°	0.0	0.8	1.0	1.3	1.0	0.8
167.5°	0.0	0.5	0.8	1.0	0.8	0.8
170°	0.0	0.3	0.5	0.8	0.8	0.8
172.5°	0.0	0.0	0.3	0.5	0.5	0.8
175°	0.0	0.0	0.0	0.3	0.5	0.8
177.5°	0.0	0.0	0.0	0.3	0.5	0.8
180°	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P892508
 CATALOG NUMBER: 2MB-2SL-ASML-UNV-L950

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	18.51	19.96	18.96	20.40	20.85	20.67	22.13	21.12	22.56	23.01
	3H	19.33	20.65	19.80	21.09	21.59	22.34	23.66	22.80	24.10	24.60
	4H	19.53	20.78	20.02	21.24	21.75	23.15	24.39	23.64	24.85	25.37
	6H	19.62	20.78	20.13	21.25	21.78	23.98	25.13	24.48	25.61	26.14
	8H	19.63	20.73	20.14	21.22	21.76	24.42	25.52	24.93	26.02	26.55
	12H	19.61	20.67	20.13	21.16	21.72	24.91	25.96	25.43	26.45	27.01
4H	2H	18.93	20.17	19.42	20.63	21.15	21.04	22.28	21.53	22.74	23.26
	3H	20.03	21.07	20.53	21.58	22.11	22.89	23.94	23.39	24.44	24.98
	4H	20.37	21.31	20.89	21.83	22.40	23.84	24.79	24.36	25.30	25.87
	6H	20.56	21.39	21.10	21.93	22.52	24.84	25.67	25.38	26.21	26.79
	8H	20.59	21.37	21.14	21.91	22.50	25.36	26.14	25.91	26.69	27.28
	12H	20.59	21.30	21.16	21.87	22.47	25.96	26.67	26.53	27.24	27.84
8H	4H	20.68	21.46	21.23	22.01	22.60	23.98	24.76	24.53	25.31	25.90
	6H	21.01	21.66	21.59	22.25	22.85	25.11	25.77	25.69	26.35	26.96
	8H	21.09	21.68	21.69	22.28	22.90	25.76	26.35	26.35	26.95	27.56
	12H	21.15	21.67	21.74	22.26	22.94	26.52	27.04	27.11	27.63	28.31
12H	4H	20.76	21.46	21.33	22.03	22.63	23.98	24.68	24.55	25.25	25.85
	6H	21.14	21.73	21.73	22.33	22.94	25.13	25.72	25.72	26.32	26.93
	8H	21.29	21.82	21.89	22.40	23.09	25.83	26.35	26.42	26.94	27.62