

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: P892504

Luminaire Tested: 2MB-2SL-ASML-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892504
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-L850
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

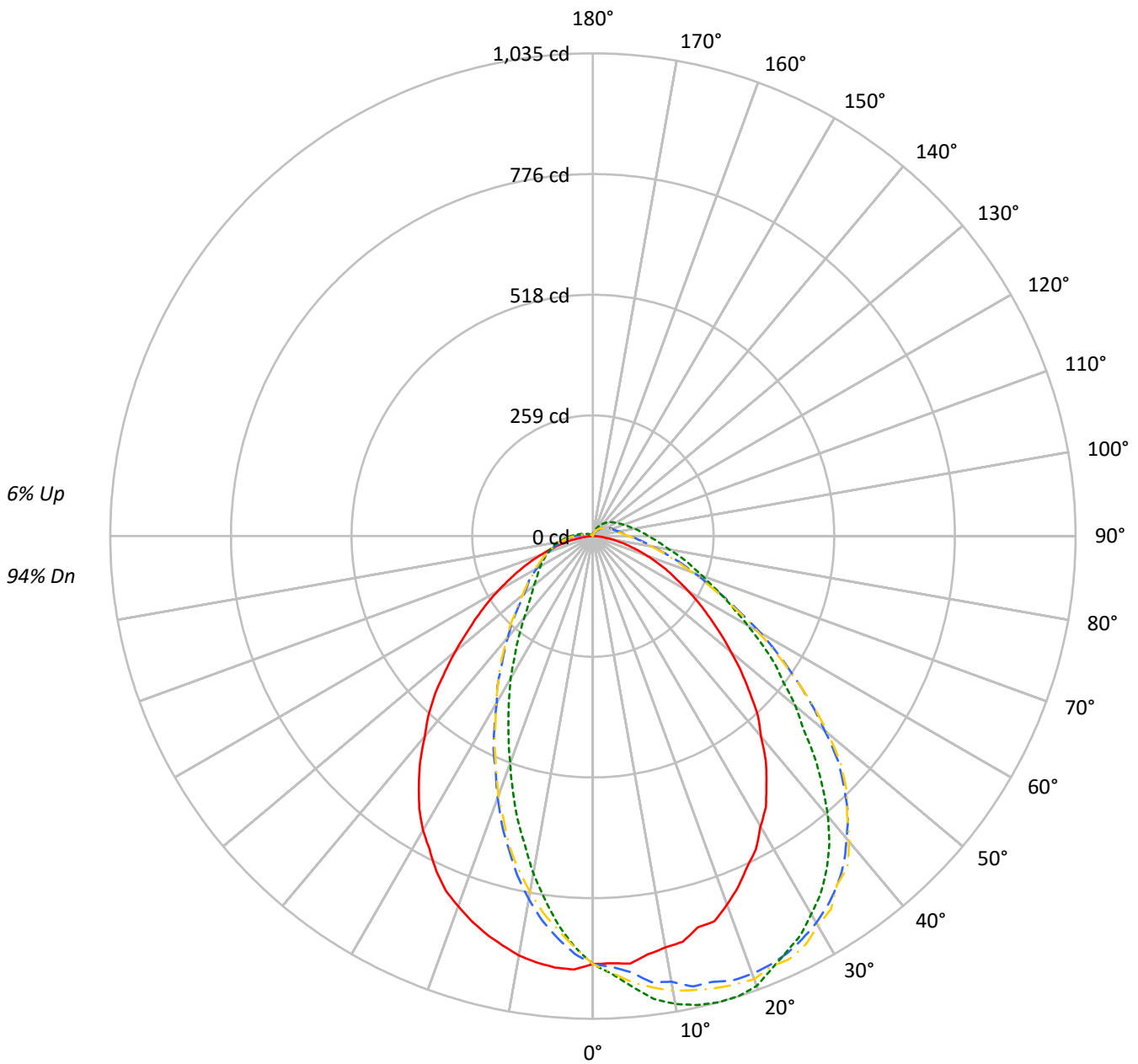
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2287.0 lumens
Efficiency: N/A
Efficacy: 153.5 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°	18789	18789	18789	18789
5°	18806	19148	18984	16550
10°	18419	19554	18776	14104
15°	18107	19486	18413	11792
20°	17914	19099	17991	9648
25°	17178	18215	17415	7937
30°	16402	17406	16614	6558
35°	15536	16427	15579	5343
40°	14238	15028	14231	4381
45°	12962	13264	13028	3734
50°	11465	11578	11412	3372
55°	10037	10142	9968	3098
60°	8730	8650	8653	2929
65°	7566	7449	7386	2783
70°	6331	6528	6117	2661
75°	5039	5933	4904	2560
80°	3733	5342	3395	2385
85°	2333	5156	1883	2236

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 18147 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	3.8
10°-20°	239.6	10.5
20°-30°	344.7	15.1
30°-40°	391.2	17.1
40°-50°	373.8	16.3
50°-60°	303.8	13.3
60°-70°	211.9	9.3
70°-80°	131.3	5.7
80°-90°	75.3	3.3
90°-100°	45.0	2.0
100°-110°	29.5	1.3
110°-120°	20.7	0.9
120°-130°	15.0	0.7
130°-140°	10.0	0.4
140°-150°	5.6	0.2
150°-160°	2.5	0.1
160°-170°	0.7	0.0
170°-180°	0.1	0.0
0°-30°	670.5	29.3
0°-40°	1061.7	46.4
0°-60°	1739.3	76.1
0°-90°	2157.8	94.4
90°-120°	95.3	4.2
90°-150°	125.9	5.5
90°-180°	129.0	5.6
0°-180°	2287.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	918	918	918	918	918	
5°	920	970	929	838	920	87
15°	869	1035	883	626	869	247
25°	783	983	794	428	783	361
35°	649	874	651	284	649	405
45°	476	674	478	190	476	367
55°	306	475	304	145	306	276
65°	177	309	173	115	177	176
75°	79	207	77	89	79	85
85°	17	140	14	61	17	19
90°	1	118	0	47	1	1
95°	1	103	0	36	1	1
105°	1	79	0	19	1	1
115°	1	63	0	10	1	1
125°	1	51	0	7	1	1
135°	1	41	0	5	1	0
145°	1	29	0	4	1	0
155°	1	18	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°	917.6	917.6	917.6	917.6	917.6	917.6	917.6	917.6	917.6	917.6	917.6
2.5°	916.7	923.6	924.2	945.8	939.5	947.6	937.4	939.2	930.2	927.8	896.6
5°	920.0	934.7	938.6	975.9	969.9	974.1	959.9	949.7	928.7	916.1	865.6
7.5°	904.4	943.1	964.8	991.2	1001.1	1004.4	975.9	956.9	922.1	891.1	832.0
10°	895.7	949.1	970.2	1009.8	1018.5	1012.2	990.0	958.7	913.1	863.2	790.5
12.5°	890.8	952.4	989.1	1029.7	1030.0	1023.3	997.2	963.6	898.4	833.2	746.6
15°	868.6	951.8	989.4	1030.6	1035.1	1030.9	1004.1	960.2	883.3	795.9	696.1
17.5°	866.2	950.3	999.0	1042.3	1034.8	1031.8	1008.3	958.7	865.3	758.0	648.7
20°	841.0	947.0	999.0	1029.1	1026.6	1027.8	1011.0	956.6	844.6	717.2	596.7
22.5°	814.2	943.1	994.8	1017.6	1003.2	1025.1	999.0	950.9	823.5	674.5	545.0
25°	782.7	936.8	986.7	1001.4	983.1	1000.2	999.9	942.2	793.5	628.5	504.2
27.5°	757.1	926.9	973.5	995.7	964.5	979.2	987.6	931.7	758.0	583.2	456.1
30°	719.0	914.3	957.5	960.8	936.2	954.8	964.5	918.5	728.3	531.8	412.2
32.5°	689.8	899.9	938.0	933.5	908.9	933.5	949.1	905.3	692.8	486.7	381.3
35°	649.0	882.4	913.7	889.9	873.7	894.1	912.5	891.1	650.8	438.7	341.6
37.5°	609.3	867.1	884.5	855.1	832.9	855.7	896.0	864.7	608.4	400.5	312.2
40°	560.9	832.0	846.4	806.4	784.2	817.8	854.8	841.9	560.6	360.8	283.6
42.5°	524.3	805.8	810.0	755.3	728.9	764.7	806.7	809.4	521.9	325.1	258.4
45°	475.9	769.2	761.3	701.3	673.6	705.8	768.9	776.1	478.3	294.1	233.8
47.5°	432.4	728.3	713.0	642.7	611.7	649.9	719.9	738.8	429.6	265.6	210.6
50°	387.0	682.6	648.7	588.0	567.3	586.2	657.7	688.9	385.2	237.4	192.9
52.5°	345.5	632.2	590.1	535.7	515.0	530.6	592.5	639.4	341.0	213.6	177.3
55°	306.5	581.7	527.3	479.2	475.0	479.8	526.4	580.2	304.4	192.6	167.4
57.5°	271.6	520.4	470.8	435.4	427.8	431.8	463.9	519.2	268.9	171.6	152.9
60°	236.5	457.6	414.9	387.6	383.4	386.4	407.1	459.7	234.4	153.8	139.4
62.5°	204.6	394.5	356.6	346.4	343.4	343.4	352.1	400.2	201.9	135.8	129.2
65°	177.3	340.4	311.9	308.0	308.9	308.6	303.2	334.1	173.1	119.9	120.2
67.5°	149.6	283.0	267.1	271.9	275.5	274.0	262.6	277.9	146.0	105.5	112.1
70°	124.1	233.8	230.7	241.6	250.0	242.2	225.6	227.1	119.9	91.3	101.6
72.5°	100.1	189.0	202.8	217.8	225.9	217.2	194.4	187.8	96.4	78.4	91.9
75°	78.7	152.0	174.0	196.2	206.7	195.6	169.2	146.6	76.6	66.1	84.1
77.5°	60.1	120.5	148.7	174.6	184.8	175.2	147.2	114.5	56.2	55.6	75.7
80°	43.0	95.2	131.9	156.8	166.2	156.8	127.7	90.4	39.1	44.5	66.7
82.5°	28.2	73.6	114.8	142.7	152.9	141.5	110.9	69.7	24.9	36.1	60.1
85°	17.1	58.3	100.1	128.3	140.0	128.9	97.0	52.9	13.8	27.6	52.3
87.5°	7.5	45.1	89.2	118.4	128.9	118.7	86.5	41.5	5.7	21.6	44.8
90°	0.6	35.8	78.7	109.1	118.4	108.8	76.6	33.7	0.0	15.6	38.5
92.5°	0.6	30.6	72.1	101.0	111.5	100.7	69.1	27.6	0.0	11.4	32.4
95°	0.9	25.8	65.5	94.6	103.1	93.7	63.1	23.7	0.0	7.8	27.3
97.5°	0.9	23.4	60.1	88.3	97.6	87.7	57.7	21.3	0.0	5.7	22.2
100°	0.6	21.6	55.9	82.3	91.0	81.7	53.5	19.2	0.0	3.6	18.0
102.5°	0.6	20.1	52.3	77.2	84.1	76.3	49.9	18.0	0.0	3.0	14.7
105°	0.6	19.2	49.0	71.2	79.3	71.2	46.9	16.8	0.0	2.4	11.4
107.5°	0.6	18.0	46.6	67.9	74.5	67.3	44.5	15.9	0.0	2.4	9.3
110°	0.6	17.1	44.5	63.1	70.6	63.7	42.4	14.4	0.0	1.5	7.5



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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°	0.6	15.6	42.4	59.8	67.0	60.1	40.6	13.2	0.0	1.5	6.6
115°	0.6	14.1	40.6	57.7	63.1	57.1	38.8	11.7	0.0	1.2	6.0
117.5°	0.6	13.2	39.4	55.0	60.4	54.4	37.3	11.1	0.0	1.2	5.7
120°	0.6	12.6	37.6	52.3	56.5	51.7	35.5	10.5	0.0	1.2	5.4
122.5°	0.6	12.0	36.1	49.9	54.4	49.6	34.0	10.2	0.0	0.9	4.8
125°	0.6	11.4	34.0	47.2	51.4	46.6	31.2	9.9	0.0	0.6	4.2
127.5°	0.6	10.8	31.8	45.1	49.0	44.5	29.4	9.6	0.0	0.6	3.9
130°	0.6	10.5	29.1	42.4	46.3	41.8	27.3	9.6	0.0	0.6	3.6
132.5°	0.6	10.2	26.1	39.7	43.9	39.1	25.2	9.3	0.0	0.6	3.0
135°	0.6	9.9	23.1	37.0	40.9	36.4	23.4	9.0	0.0	0.6	2.7
137.5°	0.6	9.3	20.4	34.0	37.9	33.4	22.2	8.4	0.0	0.6	2.4
140°	0.6	8.7	18.3	31.5	34.9	30.6	20.4	7.8	0.0	0.3	1.8
142.5°	0.6	7.8	16.5	28.5	31.8	27.9	18.3	6.6	0.0	0.3	1.8
145°	0.6	6.9	15.0	24.9	28.8	24.9	17.1	6.0	0.0	0.3	1.5
147.5°	0.6	6.3	13.5	21.0	26.1	22.8	15.3	5.1	0.0	0.3	1.2
150°	0.6	5.7	11.7	17.7	23.1	20.1	14.1	4.5	0.0	0.0	0.9
152.5°	0.6	5.1	10.2	14.7	20.7	18.3	12.6	3.9	0.0	0.0	0.6
155°	0.9	4.8	8.7	12.9	18.0	15.9	10.5	3.3	0.0	0.0	0.6
157.5°	0.9	4.2	7.2	10.5	15.9	13.8	8.4	2.7	0.0	0.0	0.3
160°	0.9	3.9	6.0	8.1	13.2	11.4	6.9	2.1	0.0	0.0	0.3
162.5°	0.9	3.6	5.1	6.0	10.8	9.0	5.4	1.5	0.0	0.0	0.3
165°	0.9	3.0	4.5	4.2	8.4	6.9	4.2	0.9	0.0	0.0	0.0
167.5°	0.9	2.7	3.6	3.0	6.3	5.1	3.0	0.6	0.0	0.0	0.0
170°	0.9	2.1	3.0	2.1	1.8	3.3	1.8	0.3	0.0	0.0	0.0
172.5°	0.9	1.8	2.4	1.5	0.6	1.8	0.9	0.0	0.0	0.0	0.0
175°	0.9	1.5	1.5	0.9	0.3	0.6	0.0	0.0	0.0	0.0	0.0
177.5°	0.9	1.2	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°	917.6	917.6	917.6	917.6	917.6	917.6
2.5°	892.3	882.4	873.4	883.0	889.9	916.7
5°	848.8	838.3	839.5	848.2	871.3	920.0
7.5°	803.7	786.3	790.5	814.8	849.1	904.4
10°	750.5	734.6	738.5	775.2	823.2	895.7
12.5°	703.1	676.3	699.2	733.7	793.2	890.8
15°	647.5	626.4	638.8	689.8	764.4	868.6
17.5°	587.4	571.2	585.9	636.7	728.9	866.2
20°	541.1	518.6	536.0	591.9	685.0	841.0
22.5°	489.1	472.0	490.3	541.7	640.3	814.2
25°	446.5	428.4	446.8	497.9	600.6	782.7
27.5°	405.0	388.5	405.0	451.9	561.2	757.1
30°	368.7	352.7	369.6	414.6	515.3	719.0
32.5°	334.7	314.3	335.9	379.5	474.7	689.8
35°	299.6	284.2	300.5	348.8	429.6	649.0
37.5°	270.4	254.5	273.7	315.2	391.5	609.3
40°	242.8	228.6	244.0	288.1	359.0	560.9
42.5°	221.1	207.0	222.6	263.5	326.3	524.3
45°	200.1	189.6	202.2	236.5	293.2	475.9
47.5°	184.8	175.8	186.3	216.6	265.6	432.4
50°	171.6	165.2	172.8	196.8	237.1	387.0
52.5°	159.8	153.5	162.2	181.5	214.5	345.5
55°	150.8	145.1	151.7	167.1	192.0	306.5
57.5°	140.9	137.3	142.4	151.7	174.3	271.6
60°	133.7	129.8	135.2	142.7	154.1	236.5
62.5°	125.6	123.5	126.8	132.8	138.8	204.6
65°	118.4	115.4	119.6	121.7	121.1	177.3
67.5°	110.6	109.7	112.1	112.4	107.9	149.6
70°	102.5	101.9	104.9	103.1	93.7	124.1
72.5°	95.8	95.8	97.6	94.0	81.7	100.1
75°	88.6	89.2	90.7	86.5	68.8	78.7
77.5°	82.0	82.6	82.9	77.2	57.7	60.1
80°	74.5	74.2	77.2	70.0	46.9	43.0
82.5°	67.9	66.7	68.5	61.3	37.9	28.2
85°	60.4	60.7	61.9	53.5	30.3	17.1
87.5°	54.4	54.4	55.6	47.2	22.8	7.5
90°	47.2	46.6	48.4	40.0	17.1	0.6
92.5°	41.2	41.2	42.4	34.3	12.6	0.6
95°	35.2	35.5	36.4	28.2	9.6	0.9
97.5°	30.0	30.3	31.5	24.0	6.9	0.9
100°	25.5	25.8	26.4	19.2	5.4	0.6
102.5°	21.3	22.2	22.2	15.9	4.2	0.6
105°	18.0	19.2	18.6	12.9	3.9	0.6
107.5°	15.0	16.2	16.2	10.5	3.9	0.6
110°	12.3	14.1	13.8	9.0	3.0	0.6



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CATALOG NUMBER: 2MB-2SL-ASML-UNV-L850

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	10.5	12.0	11.1	7.8	3.0	0.6
115°	9.0	10.5	9.9	7.2	2.7	0.6
117.5°	8.1	9.0	9.0	6.9	2.7	0.6
120°	7.5	8.4	8.1	6.6	2.7	0.6
122.5°	6.9	7.5	7.5	6.0	2.4	0.6
125°	6.6	6.9	7.2	5.4	2.4	0.6
127.5°	6.3	6.9	6.9	5.1	2.1	0.6
130°	5.7	6.3	6.3	4.8	2.1	0.6
132.5°	5.1	5.7	5.7	4.5	2.1	0.6
135°	4.8	5.4	5.4	4.2	2.1	0.6
137.5°	4.5	4.8	4.8	3.9	2.1	0.6
140°	3.9	4.5	4.5	3.6	2.1	0.6
142.5°	3.6	4.2	4.2	3.3	1.8	0.6
145°	3.3	3.6	3.9	3.0	1.8	0.6
147.5°	2.7	3.3	3.6	2.7	1.8	0.6
150°	2.1	3.0	3.0	2.7	1.8	0.6
152.5°	1.5	2.7	2.7	2.4	1.5	0.6
155°	1.2	2.1	2.4	2.1	1.5	0.9
157.5°	0.9	1.8	2.1	2.1	1.5	0.9
160°	0.6	1.5	1.8	1.8	1.2	0.9
162.5°	0.3	1.2	1.5	1.8	1.2	0.9
165°	0.0	0.9	1.2	1.5	1.2	0.9
167.5°	0.0	0.6	0.9	1.2	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: P892504
 CATALOG NUMBER: 2MB-2SL-ASML-UNV-L850

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	19.08	20.54	19.53	20.97	21.42	21.24	22.70	21.70	23.13	23.59
	3H	19.90	21.22	20.37	21.66	22.16	22.91	24.23	23.38	24.67	25.17
	4H	20.10	21.35	20.59	21.81	22.32	23.72	24.96	24.21	25.43	25.94
	6H	20.20	21.35	20.70	21.82	22.35	24.55	25.71	25.06	26.18	26.71
	8H	20.20	21.30	20.71	21.80	22.33	24.99	26.09	25.51	26.59	27.12
	12H	20.19	21.24	20.71	21.73	22.29	25.48	26.53	26.00	27.02	27.59
4H	2H	19.50	20.75	19.99	21.21	21.72	21.61	22.85	22.10	23.32	23.83
	3H	20.60	21.64	21.10	22.15	22.68	23.47	24.51	23.97	25.02	25.55
	4H	20.94	21.89	21.46	22.40	22.97	24.41	25.36	24.93	25.88	26.45
	6H	21.13	21.96	21.67	22.51	23.09	25.41	26.24	25.95	26.78	27.37
	8H	21.16	21.94	21.71	22.48	23.08	25.94	26.72	26.49	27.26	27.85
	12H	21.16	21.87	21.73	22.44	23.04	26.54	27.24	27.11	27.81	28.41
8H	4H	21.26	22.04	21.81	22.58	23.17	24.56	25.33	25.10	25.88	26.47
	6H	21.58	22.23	22.16	22.82	23.42	25.69	26.34	26.27	26.93	27.53
	8H	21.67	22.25	22.26	22.85	23.47	26.33	26.92	26.93	27.52	28.13
	12H	21.72	22.25	22.32	22.83	23.52	27.09	27.61	27.68	28.20	28.88
12H	4H	21.33	22.03	21.90	22.61	23.20	24.55	25.25	25.12	25.82	26.42
	6H	21.71	22.30	22.30	22.90	23.51	25.70	26.29	26.29	26.89	27.50
	8H	21.87	22.39	22.46	22.98	23.66	26.40	26.93	27.00	27.51	28.20