

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: P892964

Luminaire Tested: 2MB-SC3-ASML-UNV-CC83-MID-4000K

Issue Date: 11/11/2024

**Test Information**

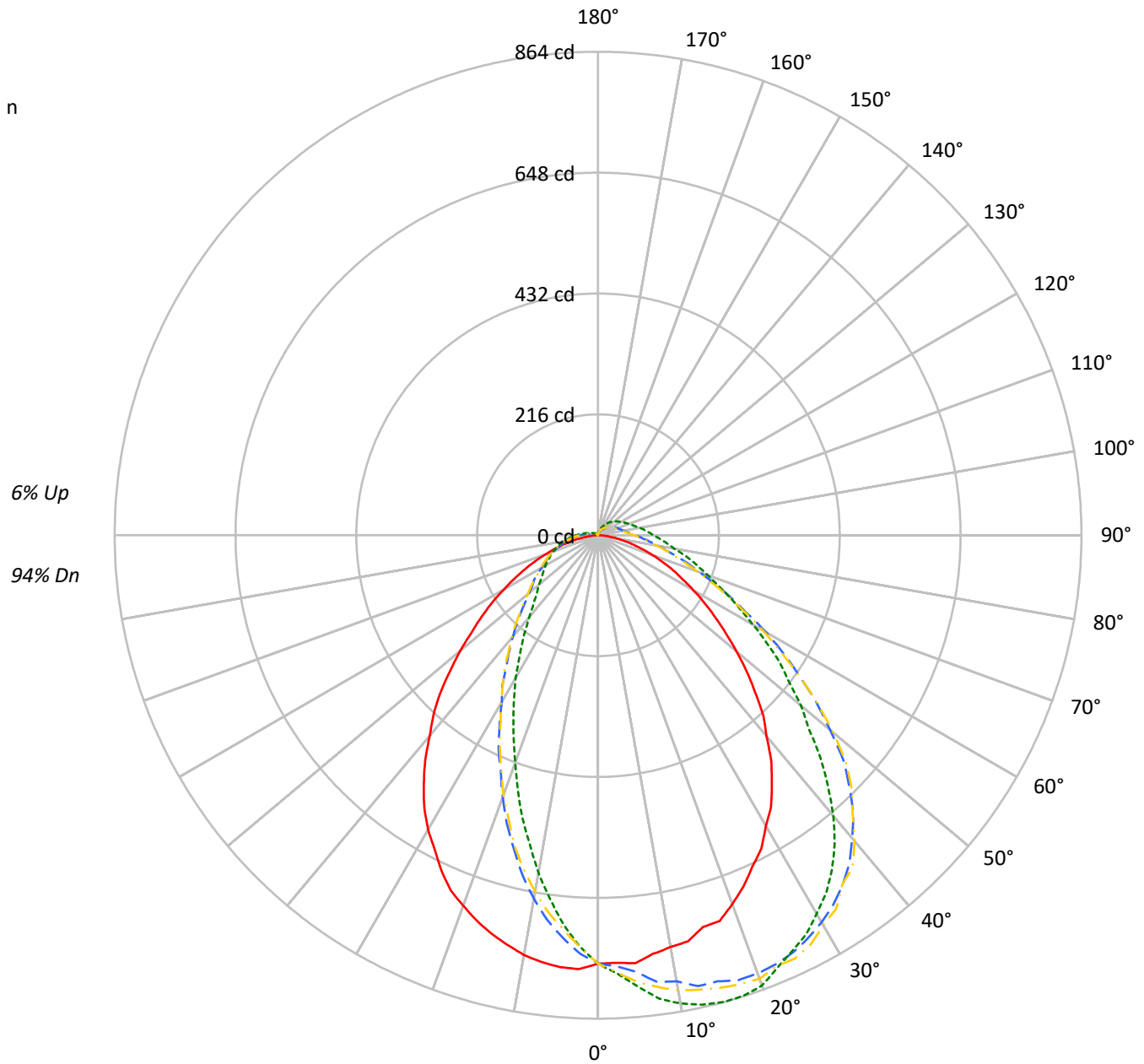
Test Method: LM-79-2019  
Report Number: P892964  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASML-UNV-CC83-MID-4000K  
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 4000K CCT, MID lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1908.0 lumens  
Efficiency: N/A  
Efficacy: 137.3 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): 13.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9948  
Total Harmonic Distortion (THDi): 5.65231997856897  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P892964  
CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-4000K

### 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
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°	15675	15675	15675	15675
5°	15689	15973	15838	13806
10°	15365	16314	15665	11767
15°	15107	16255	15361	9838
20°	14945	15934	15009	8048
25°	14331	15196	14529	6622
30°	13683	14523	13861	5472
35°	12960	13705	12996	4458
40°	11880	12537	11872	3656
45°	10813	11067	10871	3115
50°	9566	9658	9519	2814
55°	8373	8461	8314	2586
60°	7283	7216	7217	2444
65°	6311	6214	6162	2322
70°	5280	5447	5102	2219
75°	4206	4951	4091	2136
80°	3108	4455	2830	1990
85°	1951	4302	1569	1864

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 15140 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.9	3.8
10°-20°	199.9	10.5
20°-30°	287.6	15.1
30°-40°	326.3	17.1
40°-50°	311.9	16.3
50°-60°	253.4	13.3
60°-70°	176.8	9.3
70°-80°	109.5	5.7
80°-90°	62.8	3.3
90°-100°	37.6	2.0
100°-110°	24.7	1.3
110°-120°	17.3	0.9
120°-130°	12.5	0.7
130°-140°	8.3	0.4
140°-150°	4.7	0.2
150°-160°	2.1	0.1
160°-170°	0.6	0.0
170°-180°	0.1	0.0
0°-30°	559.4	29.3
0°-40°	885.7	46.4
0°-60°	1451.0	76.0
0°-90°	1800.2	94.4
90°-120°	79.5	4.2
90°-150°	105.0	5.5
90°-180°	108.0	5.7
0°-180°	1908.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	766	766	766	766	766	
5°	768	809	775	699	768	72
15°	725	864	737	523	725	206
25°	653	820	662	357	653	301
35°	541	729	543	237	541	337
45°	397	562	399	158	397	306
55°	256	396	254	121	256	230
65°	148	258	144	96	148	147
75°	66	172	64	74	66	71
85°	14	117	12	51	14	16
90°	0	99	0	39	0	1
95°	1	86	0	30	1	1
105°	0	66	0	16	0	1
115°	0	53	0	9	0	0
125°	0	43	0	6	0	0
135°	0	34	0	4	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: P892964

CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5
2.5°	764.8	770.5	771.0	789.1	783.8	790.6	782.1	783.6	776.0	774.0	748.0
5°	767.5	779.8	783.1	814.2	809.1	812.6	800.9	792.3	774.8	764.3	722.2
7.5°	754.5	786.8	804.9	826.9	835.2	838.0	814.2	798.4	769.3	743.5	694.1
10°	747.2	791.8	809.4	842.5	849.7	844.5	825.9	799.9	761.8	720.2	659.5
12.5°	743.2	794.6	825.2	859.0	859.3	853.8	831.9	803.9	749.5	695.1	622.9
15°	724.7	794.1	825.4	859.8	863.5	860.0	837.7	801.1	736.9	664.0	580.8
17.5°	722.7	792.8	833.5	869.5	863.3	860.8	841.2	799.9	721.9	632.4	541.2
20°	701.6	790.1	833.5	858.5	856.5	857.5	843.5	798.1	704.6	598.3	497.8
22.5°	679.3	786.8	829.9	849.0	837.0	855.3	833.5	793.3	687.1	562.7	454.7
25°	653.0	781.6	823.2	835.5	820.2	834.5	834.2	786.1	662.0	524.4	420.6
27.5°	631.7	773.3	812.1	830.7	804.6	816.9	823.9	777.3	632.4	486.5	380.5
30°	599.8	762.8	798.9	801.6	781.1	796.6	804.6	766.3	607.6	443.7	343.9
32.5°	575.5	750.7	782.6	778.8	758.3	778.8	791.8	755.2	578.0	406.1	318.1
35°	541.4	736.2	762.3	742.5	728.9	746.0	761.3	743.5	542.9	366.0	285.0
37.5°	508.3	723.4	737.9	713.4	694.8	713.9	747.5	721.4	507.6	334.1	260.4
40°	468.0	694.1	706.1	672.8	654.2	682.3	713.1	702.4	467.7	301.0	236.6
42.5°	437.4	672.3	675.8	630.2	608.1	637.9	673.0	675.3	435.4	271.2	215.6
45°	397.0	641.7	635.2	585.0	562.0	588.8	641.4	647.5	399.1	245.4	195.0
47.5°	360.7	607.6	594.8	536.2	510.3	542.2	600.6	616.4	358.4	221.6	175.7
50°	322.9	569.5	541.2	490.5	473.2	489.0	548.7	574.8	321.3	198.0	160.9
52.5°	288.3	527.4	492.3	446.9	429.6	442.7	494.3	533.4	284.5	178.2	147.9
55°	255.7	485.3	439.9	399.8	396.3	400.3	439.2	484.0	253.9	160.7	139.6
57.5°	226.6	434.1	392.8	363.2	356.9	360.2	387.0	433.1	224.3	143.1	127.6
60°	197.3	381.8	346.2	323.4	319.8	322.4	339.6	383.5	195.5	128.3	116.3
62.5°	170.7	329.1	297.5	289.0	286.5	286.5	293.8	333.9	168.4	113.3	107.8
65°	147.9	284.0	260.2	256.9	257.7	257.4	252.9	278.7	144.4	100.0	100.3
67.5°	124.8	236.1	222.8	226.8	229.9	228.6	219.1	231.9	121.8	88.0	93.5
70°	103.5	195.0	192.5	201.5	208.6	202.0	188.2	189.5	100.0	76.2	84.7
72.5°	83.5	157.7	169.2	181.7	188.5	181.2	162.2	156.7	80.5	65.4	76.7
75°	65.7	126.8	145.1	163.7	172.5	163.2	141.1	122.3	63.9	55.1	70.2
77.5°	50.1	100.5	124.1	145.6	154.2	146.1	122.8	95.5	46.9	46.4	63.2
80°	35.8	79.5	110.0	130.8	138.6	130.8	106.5	75.4	32.6	37.1	55.6
82.5°	23.6	61.4	95.8	119.1	127.6	118.1	92.5	58.2	20.8	30.1	50.1
85°	14.3	48.6	83.5	107.0	116.8	107.5	81.0	44.1	11.5	23.1	43.6
87.5°	6.3	37.6	74.4	98.8	107.5	99.0	72.2	34.6	4.8	18.0	37.3
90°	0.5	29.8	65.7	91.0	98.8	90.7	63.9	28.1	0.0	13.0	32.1
92.5°	0.5	25.6	60.2	84.2	93.0	84.0	57.7	23.1	0.0	9.5	27.1
95°	0.8	21.6	54.6	79.0	86.0	78.2	52.6	19.8	0.0	6.5	22.8
97.5°	0.8	19.6	50.1	73.7	81.5	73.2	48.1	17.8	0.0	4.8	18.5
100°	0.5	18.0	46.6	68.7	76.0	68.2	44.6	16.0	0.0	3.0	15.0
102.5°	0.5	16.8	43.6	64.4	70.2	63.7	41.6	15.0	0.0	2.5	12.3
105°	0.5	16.0	40.9	59.4	66.2	59.4	39.1	14.0	0.0	2.0	9.5
107.5°	0.5	15.0	38.9	56.6	62.2	56.1	37.1	13.3	0.0	2.0	7.8
110°	0.5	14.3	37.1	52.6	58.9	53.1	35.3	12.0	0.0	1.3	6.3



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CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.5	13.0	35.3	49.9	55.9	50.1	33.8	11.0	0.0	1.3	5.5
115°	0.5	11.8	33.8	48.1	52.6	47.6	32.3	9.8	0.0	1.0	5.0
117.5°	0.5	11.0	32.8	45.9	50.4	45.4	31.1	9.3	0.0	1.0	4.8
120°	0.5	10.5	31.3	43.6	47.1	43.1	29.6	8.8	0.0	1.0	4.5
122.5°	0.5	10.0	30.1	41.6	45.4	41.4	28.3	8.5	0.0	0.8	4.0
125°	0.5	9.5	28.3	39.4	42.9	38.9	26.1	8.3	0.0	0.5	3.5
127.5°	0.5	9.0	26.6	37.6	40.9	37.1	24.6	8.0	0.0	0.5	3.3
130°	0.5	8.8	24.3	35.3	38.6	34.8	22.8	8.0	0.0	0.5	3.0
132.5°	0.5	8.5	21.8	33.1	36.6	32.6	21.1	7.8	0.0	0.5	2.5
135°	0.5	8.3	19.3	30.8	34.1	30.3	19.6	7.5	0.0	0.5	2.3
137.5°	0.5	7.8	17.0	28.3	31.6	27.8	18.5	7.0	0.0	0.5	2.0
140°	0.5	7.3	15.3	26.3	29.1	25.6	17.0	6.5	0.0	0.3	1.5
142.5°	0.5	6.5	13.8	23.8	26.6	23.3	15.3	5.5	0.0	0.3	1.5
145°	0.5	5.8	12.5	20.8	24.1	20.8	14.3	5.0	0.0	0.3	1.3
147.5°	0.5	5.3	11.3	17.5	21.8	19.1	12.8	4.3	0.0	0.3	1.0
150°	0.5	4.8	9.8	14.8	19.3	16.8	11.8	3.8	0.0	0.0	0.8
152.5°	0.5	4.3	8.5	12.3	17.3	15.3	10.5	3.3	0.0	0.0	0.5
155°	0.8	4.0	7.3	10.8	15.0	13.3	8.8	2.8	0.0	0.0	0.5
157.5°	0.8	3.5	6.0	8.8	13.3	11.5	7.0	2.3	0.0	0.0	0.3
160°	0.8	3.3	5.0	6.8	11.0	9.5	5.8	1.8	0.0	0.0	0.3
162.5°	0.8	3.0	4.3	5.0	9.0	7.5	4.5	1.3	0.0	0.0	0.3
165°	0.8	2.5	3.8	3.5	7.0	5.8	3.5	0.8	0.0	0.0	0.0
167.5°	0.8	2.3	3.0	2.5	5.3	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



TEST NUMBER: P892964

CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	765.5	765.5	765.5	765.5	765.5	765.5
2.5°	744.5	736.2	728.7	736.7	742.5	764.8
5°	708.1	699.3	700.3	707.6	726.9	767.5
7.5°	670.5	656.0	659.5	679.8	708.4	754.5
10°	626.2	612.9	616.1	646.7	686.8	747.2
12.5°	586.5	564.2	583.3	612.1	661.7	743.2
15°	540.2	522.6	532.9	575.5	637.7	724.7
17.5°	490.0	476.5	488.8	531.2	608.1	722.7
20°	451.4	432.6	447.2	493.8	571.5	701.6
22.5°	408.1	393.8	409.1	451.9	534.2	679.3
25°	372.5	357.4	372.7	415.3	501.1	653.0
27.5°	337.9	324.1	337.9	377.0	468.2	631.7
30°	307.6	294.3	308.3	345.9	429.9	599.8
32.5°	279.2	262.2	280.2	316.6	396.0	575.5
35°	249.9	237.1	250.7	291.0	358.4	541.4
37.5°	225.6	212.3	228.4	262.9	326.6	508.3
40°	202.5	190.8	203.5	240.4	299.5	468.0
42.5°	184.5	172.7	185.7	219.8	272.2	437.4
45°	166.9	158.2	168.7	197.3	244.6	397.0
47.5°	154.2	146.6	155.4	180.7	221.6	360.7
50°	143.1	137.9	144.1	164.2	197.8	322.9
52.5°	133.4	128.1	135.4	151.4	179.0	288.3
55°	125.8	121.1	126.6	139.4	160.2	255.7
57.5°	117.6	114.6	118.8	126.6	145.4	226.6
60°	111.5	108.3	112.8	119.1	128.6	197.3
62.5°	104.8	103.0	105.8	110.8	115.8	170.7
65°	98.8	96.3	99.8	101.5	101.0	147.9
67.5°	92.2	91.5	93.5	93.7	90.0	124.8
70°	85.5	85.0	87.5	86.0	78.2	103.5
72.5°	80.0	80.0	81.5	78.5	68.2	83.5
75°	73.9	74.4	75.7	72.2	57.4	65.7
77.5°	68.4	68.9	69.2	64.4	48.1	50.1
80°	62.2	61.9	64.4	58.4	39.1	35.8
82.5°	56.6	55.6	57.2	51.1	31.6	23.6
85°	50.4	50.6	51.6	44.6	25.3	14.3
87.5°	45.4	45.4	46.4	39.4	19.1	6.3
90°	39.4	38.9	40.4	33.3	14.3	0.5
92.5°	34.3	34.3	35.3	28.6	10.5	0.5
95°	29.3	29.6	30.3	23.6	8.0	0.8
97.5°	25.1	25.3	26.3	20.1	5.8	0.8
100°	21.3	21.6	22.1	16.0	4.5	0.5
102.5°	17.8	18.5	18.5	13.3	3.5	0.5
105°	15.0	16.0	15.5	10.8	3.3	0.5
107.5°	12.5	13.5	13.5	8.8	3.3	0.5
110°	10.3	11.8	11.5	7.5	2.5	0.5





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CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	8.8	10.0	9.3	6.5	2.5	0.5
115°	7.5	8.8	8.3	6.0	2.3	0.5
117.5°	6.8	7.5	7.5	5.8	2.3	0.5
120°	6.3	7.0	6.8	5.5	2.3	0.5
122.5°	5.8	6.3	6.3	5.0	2.0	0.5
125°	5.5	5.8	6.0	4.5	2.0	0.5
127.5°	5.3	5.8	5.8	4.3	1.8	0.5
130°	4.8	5.3	5.3	4.0	1.8	0.5
132.5°	4.3	4.8	4.8	3.8	1.8	0.5
135°	4.0	4.5	4.5	3.5	1.8	0.5
137.5°	3.8	4.0	4.0	3.3	1.8	0.5
140°	3.3	3.8	3.8	3.0	1.8	0.5
142.5°	3.0	3.5	3.5	2.8	1.5	0.5
145°	2.8	3.0	3.3	2.5	1.5	0.5
147.5°	2.3	2.8	3.0	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: P892964  
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-4000K

**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	18.45	19.91	18.90	20.34	20.79	20.61	22.07	21.06	22.50	22.96
	3H	19.27	20.59	19.74	21.03	21.53	22.28	23.60	22.75	24.04	24.54
	4H	19.47	20.72	19.96	21.18	21.69	23.09	24.33	23.58	24.80	25.31
	6H	19.57	20.72	20.07	21.19	21.72	23.92	25.08	24.43	25.55	26.08
	8H	19.57	20.67	20.08	21.17	21.70	24.36	25.46	24.88	25.96	26.49
	12H	19.56	20.61	20.08	21.10	21.66	24.85	25.90	25.37	26.39	26.96
4H	2H	18.87	20.11	19.36	20.58	21.09	20.98	22.22	21.47	22.69	23.20
	3H	19.97	21.01	20.47	21.52	22.05	22.84	23.88	23.34	24.39	24.92
	4H	20.31	21.26	20.83	21.77	22.34	23.78	24.73	24.30	25.25	25.82
	6H	20.50	21.33	21.04	21.87	22.46	24.78	25.61	25.32	26.15	26.74
	8H	20.53	21.31	21.08	21.85	22.45	25.31	26.09	25.86	26.63	27.22
	12H	20.53	21.24	21.10	21.81	22.41	25.91	26.61	26.48	27.18	27.78
8H	4H	20.63	21.41	21.18	21.95	22.54	23.93	24.70	24.47	25.25	25.84
	6H	20.95	21.60	21.53	22.19	22.79	25.06	25.71	25.64	26.30	26.90
	8H	21.04	21.62	21.63	22.22	22.84	25.70	26.29	26.30	26.89	27.50
	12H	21.09	21.62	21.69	22.20	22.89	26.46	26.98	27.05	27.57	28.25
12H	4H	20.70	21.40	21.27	21.98	22.57	23.92	24.62	24.49	25.20	25.79
	6H	21.08	21.67	21.67	22.27	22.88	25.07	25.66	25.66	26.26	26.87
	8H	21.24	21.76	21.83	22.35	23.03	25.77	26.30	26.37	26.88	27.57