

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: P892961

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

Issue Date: 11/11/2024

**Test Information**

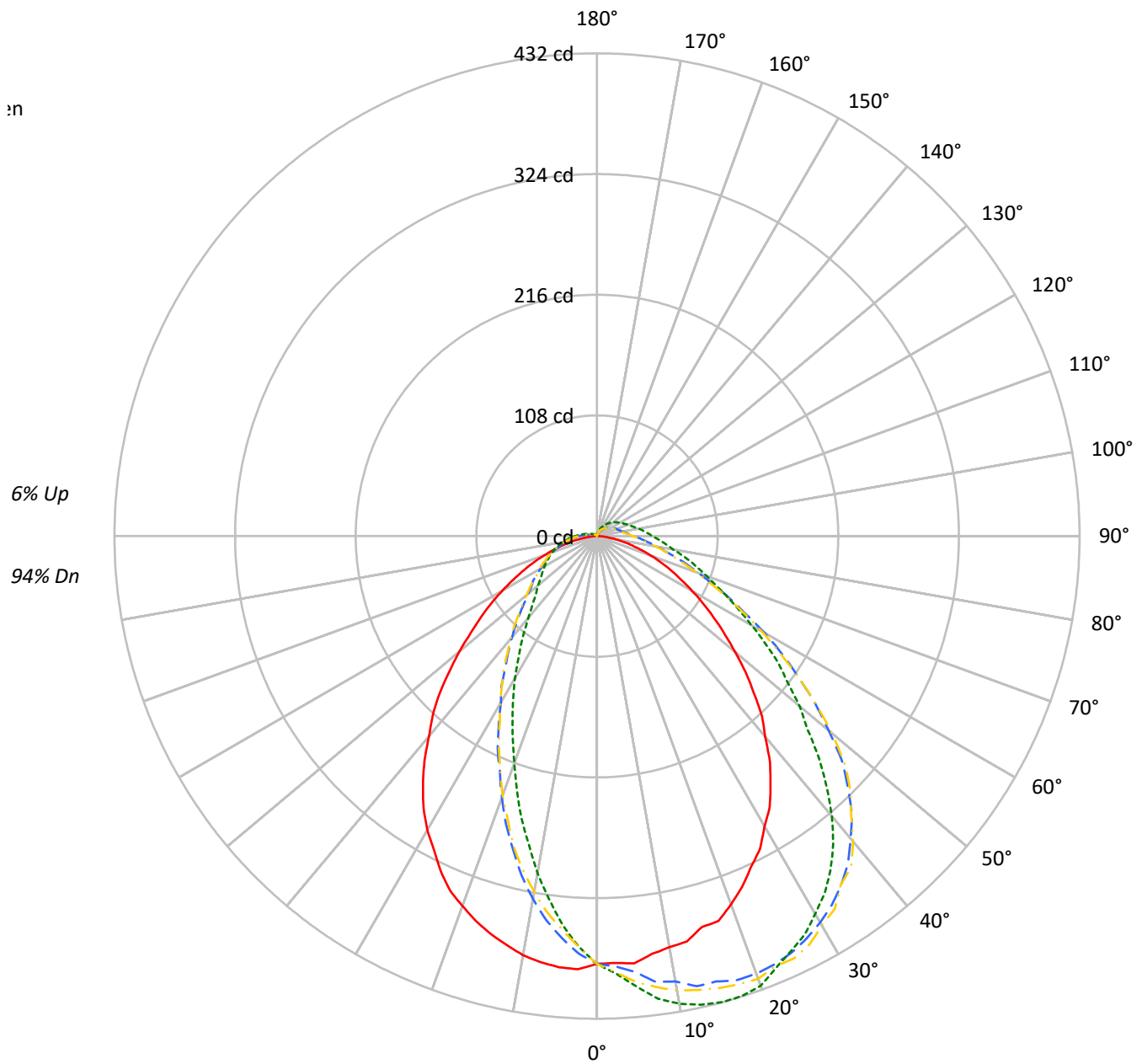
Test Method: LM-79-2019  
Report Number: P892961  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASML-UNV-CC83-LOW-4000K  
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 4000K CCT, LOW lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 954.0 lumens  
Efficiency: N/A  
Efficacy: 138.3 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): 6.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9915  
Total Harmonic Distortion (THDi): 6.67573310469889  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P892961  
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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°	7838	7838	7838	7838
5°	7846	7988	7919	6904
10°	7682	8158	7833	5883
15°	7553	8129	7682	4919
20°	7472	7968	7504	4024
25°	7166	7598	7264	3311
30°	6841	7260	6930	2735
35°	6480	6853	6499	2230
40°	5940	6268	5937	1828
45°	5407	5533	5434	1558
50°	4782	4829	4761	1406
55°	4185	4230	4159	1292
60°	3640	3608	3610	1221
65°	3153	3106	3081	1160
70°	2643	2723	2551	1110
75°	2100	2474	2049	1068
80°	1554	2227	1415	996
85°	969	2151	791	932

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 7569 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.0	3.8
10°-20°	100.0	10.5
20°-30°	143.8	15.1
30°-40°	163.2	17.1
40°-50°	155.9	16.3
50°-60°	126.7	13.3
60°-70°	88.4	9.3
70°-80°	54.8	5.7
80°-90°	31.4	3.3
90°-100°	18.8	2.0
100°-110°	12.3	1.3
110°-120°	8.6	0.9
120°-130°	6.3	0.7
130°-140°	4.2	0.4
140°-150°	2.4	0.2
150°-160°	1.0	0.1
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	279.7	29.3
0°-40°	442.9	46.4
0°-60°	725.5	76.0
0°-90°	900.1	94.3
90°-120°	39.8	4.2
90°-150°	52.5	5.5
90°-180°	54.0	5.7
0°-180°	954.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	383	383	383	383	383	
5°	384	405	387	350	384	36
15°	362	432	368	261	362	103
25°	326	410	331	179	326	151
35°	271	364	272	119	271	169
45°	198	281	200	79	198	153
55°	128	198	127	60	128	115
65°	74	129	72	48	74	73
75°	33	86	32	37	33	35
85°	7	58	6	25	7	8
90°	0	49	0	19	0	1
95°	0	43	0	15	0	0
105°	0	33	0	8	0	0
115°	0	26	0	4	0	0
125°	0	21	0	3	0	0
135°	0	17	0	2	0	0
145°	0	12	0	2	0	0
155°	0	8	0	1	0	0
165°	0	4	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P892961

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8
2.5°	382.4	385.3	385.5	394.5	391.9	395.3	391.0	391.8	388.0	387.0	374.0
5°	383.8	389.9	391.5	407.1	404.6	406.3	400.4	396.2	387.4	382.1	361.1
7.5°	377.2	393.4	402.4	413.5	417.6	419.0	407.1	399.2	384.6	371.7	347.0
10°	373.6	395.9	404.7	421.2	424.9	422.2	413.0	399.9	380.9	360.1	329.7
12.5°	371.6	397.3	412.6	429.5	429.6	426.9	416.0	401.9	374.7	347.5	311.4
15°	362.3	397.0	412.7	429.9	431.8	430.0	418.9	400.6	368.5	332.0	290.4
17.5°	361.3	396.4	416.7	434.8	431.6	430.4	420.6	399.9	361.0	316.2	270.6
20°	350.8	395.0	416.7	429.3	428.3	428.8	421.7	399.1	352.3	299.2	248.9
22.5°	339.6	393.4	415.0	424.5	418.5	427.6	416.7	396.7	343.5	281.4	227.4
25°	326.5	390.8	411.6	417.7	410.1	417.2	417.1	393.0	331.0	262.2	210.3
27.5°	315.8	386.6	406.1	415.3	402.3	408.5	412.0	388.7	316.2	243.3	190.3
30°	299.9	381.4	399.4	400.8	390.5	398.3	402.3	383.1	303.8	221.8	172.0
32.5°	287.8	375.4	391.3	389.4	379.1	389.4	395.9	377.6	289.0	203.0	159.0
35°	270.7	368.1	381.1	371.2	364.5	373.0	380.6	371.7	271.5	183.0	142.5
37.5°	254.2	361.7	369.0	356.7	347.4	356.9	373.7	360.7	253.8	167.1	130.2
40°	234.0	347.0	353.1	336.4	327.1	341.2	356.6	351.2	233.9	150.5	118.3
42.5°	218.7	336.1	337.9	315.1	304.1	319.0	336.5	337.6	217.7	135.6	107.8
45°	198.5	320.8	317.6	292.5	281.0	294.4	320.7	323.7	199.5	122.7	97.5
47.5°	180.4	303.8	297.4	268.1	255.2	271.1	300.3	308.2	179.2	110.8	87.9
50°	161.4	284.8	270.6	245.3	236.6	244.5	274.3	287.4	160.7	99.0	80.5
52.5°	144.1	263.7	246.2	223.5	214.8	221.3	247.2	266.7	142.3	89.1	73.9
55°	127.8	242.6	220.0	199.9	198.1	200.2	219.6	242.0	127.0	80.3	69.8
57.5°	113.3	217.1	196.4	181.6	178.5	180.1	193.5	216.6	112.2	71.6	63.8
60°	98.6	190.9	173.1	161.7	159.9	161.2	169.8	191.8	97.8	64.2	58.2
62.5°	85.4	164.6	148.8	144.5	143.3	143.3	146.9	166.9	84.2	56.6	53.9
65°	73.9	142.0	130.1	128.5	128.8	128.7	126.5	139.4	72.2	50.0	50.1
67.5°	62.4	118.1	111.4	113.4	114.9	114.3	109.5	115.9	60.9	44.0	46.7
70°	51.8	97.5	96.3	100.8	104.3	101.0	94.1	94.8	50.0	38.1	42.4
72.5°	41.7	78.8	84.6	90.9	94.2	90.6	81.1	78.3	40.2	32.7	38.4
75°	32.8	63.4	72.6	81.8	86.2	81.6	70.6	61.2	32.0	27.6	35.1
77.5°	25.1	50.3	62.0	72.8	77.1	73.1	61.4	47.8	23.4	23.2	31.6
80°	17.9	39.7	55.0	65.4	69.3	65.4	53.3	37.7	16.3	18.5	27.8
82.5°	11.8	30.7	47.9	59.5	63.8	59.0	46.2	29.1	10.4	15.0	25.1
85°	7.1	24.3	41.7	53.5	58.4	53.8	40.5	22.1	5.8	11.5	21.8
87.5°	3.1	18.8	37.2	49.4	53.8	49.5	36.1	17.3	2.4	9.0	18.7
90°	0.3	14.9	32.8	45.5	49.4	45.4	32.0	14.0	0.0	6.5	16.0
92.5°	0.3	12.8	30.1	42.1	46.5	42.0	28.8	11.5	0.0	4.8	13.5
95°	0.4	10.8	27.3	39.5	43.0	39.1	26.3	9.9	0.0	3.3	11.4
97.5°	0.4	9.8	25.1	36.8	40.7	36.6	24.1	8.9	0.0	2.4	9.3
100°	0.3	9.0	23.3	34.3	38.0	34.1	22.3	8.0	0.0	1.5	7.5
102.5°	0.3	8.4	21.8	32.2	35.1	31.8	20.8	7.5	0.0	1.3	6.1
105°	0.3	8.0	20.4	29.7	33.1	29.7	19.6	7.0	0.0	1.0	4.8
107.5°	0.3	7.5	19.4	28.3	31.1	28.1	18.5	6.6	0.0	1.0	3.9
110°	0.3	7.1	18.5	26.3	29.5	26.6	17.7	6.0	0.0	0.6	3.1



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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°	0.3	6.5	17.7	24.9	27.9	25.1	16.9	5.5	0.0	0.6	2.8
115°	0.3	5.9	16.9	24.1	26.3	23.8	16.2	4.9	0.0	0.5	2.5
117.5°	0.3	5.5	16.4	22.9	25.2	22.7	15.5	4.6	0.0	0.5	2.4
120°	0.3	5.3	15.7	21.8	23.6	21.6	14.8	4.4	0.0	0.5	2.3
122.5°	0.3	5.0	15.0	20.8	22.7	20.7	14.2	4.3	0.0	0.4	2.0
125°	0.3	4.8	14.2	19.7	21.4	19.4	13.0	4.1	0.0	0.3	1.8
127.5°	0.3	4.5	13.3	18.8	20.4	18.5	12.3	4.0	0.0	0.3	1.6
130°	0.3	4.4	12.2	17.7	19.3	17.4	11.4	4.0	0.0	0.3	1.5
132.5°	0.3	4.3	10.9	16.5	18.3	16.3	10.5	3.9	0.0	0.3	1.3
135°	0.3	4.1	9.7	15.4	17.0	15.2	9.8	3.8	0.0	0.3	1.1
137.5°	0.3	3.9	8.5	14.2	15.8	13.9	9.3	3.5	0.0	0.3	1.0
140°	0.3	3.6	7.6	13.2	14.5	12.8	8.5	3.3	0.0	0.1	0.8
142.5°	0.3	3.3	6.9	11.9	13.3	11.7	7.6	2.8	0.0	0.1	0.8
145°	0.3	2.9	6.3	10.4	12.0	10.4	7.1	2.5	0.0	0.1	0.6
147.5°	0.3	2.6	5.6	8.8	10.9	9.5	6.4	2.1	0.0	0.1	0.5
150°	0.3	2.4	4.9	7.4	9.7	8.4	5.9	1.9	0.0	0.0	0.4
152.5°	0.3	2.1	4.3	6.1	8.6	7.6	5.3	1.6	0.0	0.0	0.3
155°	0.4	2.0	3.6	5.4	7.5	6.6	4.4	1.4	0.0	0.0	0.3
157.5°	0.4	1.8	3.0	4.4	6.6	5.8	3.5	1.1	0.0	0.0	0.1
160°	0.4	1.6	2.5	3.4	5.5	4.8	2.9	0.9	0.0	0.0	0.1
162.5°	0.4	1.5	2.1	2.5	4.5	3.8	2.3	0.6	0.0	0.0	0.1
165°	0.4	1.3	1.9	1.8	3.5	2.9	1.8	0.4	0.0	0.0	0.0
167.5°	0.4	1.1	1.5	1.3	2.6	2.1	1.3	0.3	0.0	0.0	0.0
170°	0.4	0.9	1.3	0.9	0.8	1.4	0.8	0.1	0.0	0.0	0.0
172.5°	0.4	0.8	1.0	0.6	0.3	0.8	0.4	0.0	0.0	0.0	0.0
175°	0.4	0.6	0.6	0.4	0.1	0.3	0.0	0.0	0.0	0.0	0.0
177.5°	0.4	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P892961

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

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	382.8	382.8	382.8	382.8	382.8	382.8
2.5°	372.2	368.1	364.3	368.3	371.2	382.4
5°	354.1	349.7	350.2	353.8	363.5	383.8
7.5°	335.3	328.0	329.7	339.9	354.2	377.2
10°	313.1	306.4	308.1	323.4	343.4	373.6
12.5°	293.3	282.1	291.6	306.1	330.9	371.6
15°	270.1	261.3	266.5	287.8	318.8	362.3
17.5°	245.0	238.3	244.4	265.6	304.1	361.3
20°	225.7	216.3	223.6	246.9	285.8	350.8
22.5°	204.0	196.9	204.5	226.0	267.1	339.6
25°	186.2	178.7	186.4	207.7	250.5	326.5
27.5°	168.9	162.1	168.9	188.5	234.1	315.8
30°	153.8	147.1	154.2	173.0	214.9	299.9
32.5°	139.6	131.1	140.1	158.3	198.0	287.8
35°	125.0	118.6	125.3	145.5	179.2	270.7
37.5°	112.8	106.2	114.2	131.5	163.3	254.2
40°	101.3	95.4	101.8	120.2	149.8	234.0
42.5°	92.2	86.4	92.9	109.9	136.1	218.7
45°	83.5	79.1	84.3	98.6	122.3	198.5
47.5°	77.1	73.3	77.7	90.4	110.8	180.4
50°	71.6	68.9	72.1	82.1	98.9	161.4
52.5°	66.7	64.0	67.7	75.7	89.5	144.1
55°	62.9	60.5	63.3	69.7	80.1	127.8
57.5°	58.8	57.3	59.4	63.3	72.7	113.3
60°	55.8	54.1	56.4	59.5	64.3	98.6
62.5°	52.4	51.5	52.9	55.4	57.9	85.4
65°	49.4	48.1	49.9	50.8	50.5	73.9
67.5°	46.1	45.7	46.7	46.9	45.0	62.4
70°	42.7	42.5	43.7	43.0	39.1	51.8
72.5°	40.0	40.0	40.7	39.2	34.1	41.7
75°	37.0	37.2	37.8	36.1	28.7	32.8
77.5°	34.2	34.5	34.6	32.2	24.1	25.1
80°	31.1	31.0	32.2	29.2	19.6	17.9
82.5°	28.3	27.8	28.6	25.6	15.8	11.8
85°	25.2	25.3	25.8	22.3	12.7	7.1
87.5°	22.7	22.7	23.2	19.7	9.5	3.1
90°	19.7	19.4	20.2	16.7	7.1	0.3
92.5°	17.2	17.2	17.7	14.3	5.3	0.3
95°	14.7	14.8	15.2	11.8	4.0	0.4
97.5°	12.5	12.7	13.2	10.0	2.9	0.4
100°	10.7	10.8	11.0	8.0	2.3	0.3
102.5°	8.9	9.3	9.3	6.6	1.8	0.3
105°	7.5	8.0	7.8	5.4	1.6	0.3
107.5°	6.3	6.8	6.8	4.4	1.6	0.3
110°	5.1	5.9	5.8	3.8	1.3	0.3





TEST NUMBER: P892961

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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	4.4	5.0	4.6	3.3	1.3	0.3
115°	3.8	4.4	4.1	3.0	1.1	0.3
117.5°	3.4	3.8	3.8	2.9	1.1	0.3
120°	3.1	3.5	3.4	2.8	1.1	0.3
122.5°	2.9	3.1	3.1	2.5	1.0	0.3
125°	2.8	2.9	3.0	2.3	1.0	0.3
127.5°	2.6	2.9	2.9	2.1	0.9	0.3
130°	2.4	2.6	2.6	2.0	0.9	0.3
132.5°	2.1	2.4	2.4	1.9	0.9	0.3
135°	2.0	2.3	2.3	1.8	0.9	0.3
137.5°	1.9	2.0	2.0	1.6	0.9	0.3
140°	1.6	1.9	1.9	1.5	0.9	0.3
142.5°	1.5	1.8	1.8	1.4	0.8	0.3
145°	1.4	1.5	1.6	1.3	0.8	0.3
147.5°	1.1	1.4	1.5	1.1	0.8	0.3
150°	0.9	1.3	1.3	1.1	0.8	0.3
152.5°	0.6	1.1	1.1	1.0	0.6	0.3
155°	0.5	0.9	1.0	0.9	0.6	0.4
157.5°	0.4	0.8	0.9	0.9	0.6	0.4
160°	0.3	0.6	0.8	0.8	0.5	0.4
162.5°	0.1	0.5	0.6	0.8	0.5	0.4
165°	0.0	0.4	0.5	0.6	0.5	0.4
167.5°	0.0	0.3	0.4	0.5	0.4	0.4
170°	0.0	0.1	0.3	0.4	0.4	0.4
172.5°	0.0	0.0	0.1	0.3	0.3	0.4
175°	0.0	0.0	0.0	0.1	0.3	0.4
177.5°	0.0	0.0	0.0	0.1	0.3	0.4
180°	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P892961  
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-LOW-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	16.04	17.50	16.49	17.93	18.39	18.20	19.66	18.66	20.09	20.55
	3H	16.86	18.18	17.33	18.62	19.12	19.87	21.19	20.34	21.63	22.13
	4H	17.07	18.31	17.56	18.77	19.28	20.68	21.93	21.17	22.39	22.90
	6H	17.16	18.31	17.66	18.79	19.31	21.52	22.67	22.02	23.14	23.67
	8H	17.16	18.26	17.67	18.76	19.29	21.95	23.05	22.47	23.55	24.08
	12H	17.15	18.20	17.67	18.69	19.26	22.44	23.49	22.96	23.99	24.55
4H	2H	16.46	17.71	16.95	18.17	18.68	18.57	19.82	19.06	20.28	20.79
	3H	17.56	18.61	18.06	19.11	19.65	20.43	21.47	20.93	21.98	22.51
	4H	17.90	18.85	18.42	19.37	19.93	21.37	22.32	21.89	22.84	23.41
	6H	18.09	18.92	18.64	19.47	20.05	22.37	23.20	22.91	23.74	24.33
	8H	18.12	18.90	18.67	19.44	20.04	22.90	23.68	23.45	24.22	24.82
	12H	18.13	18.83	18.70	19.40	20.00	23.50	24.20	24.07	24.77	25.37
8H	4H	18.22	19.00	18.77	19.54	20.14	21.52	22.30	22.07	22.84	23.43
	6H	18.54	19.19	19.12	19.78	20.38	22.65	23.30	23.23	23.89	24.49
	8H	18.63	19.22	19.22	19.82	20.43	23.29	23.88	23.89	24.48	25.09
	12H	18.68	19.21	19.28	19.79	20.48	24.05	24.58	24.65	25.16	25.85
12H	4H	18.29	18.99	18.86	19.57	20.17	21.51	22.21	22.08	22.79	23.39
	6H	18.67	19.26	19.27	19.86	20.47	22.66	23.25	23.26	23.85	24.46
	8H	18.83	19.35	19.42	19.94	20.62	23.36	23.89	23.96	24.47	25.16