

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: P892963

Luminaire Tested: 2MB-SC3-ASML-UNV-CC83-MID-3500K

Issue Date: 11/11/2024

**Test Information**

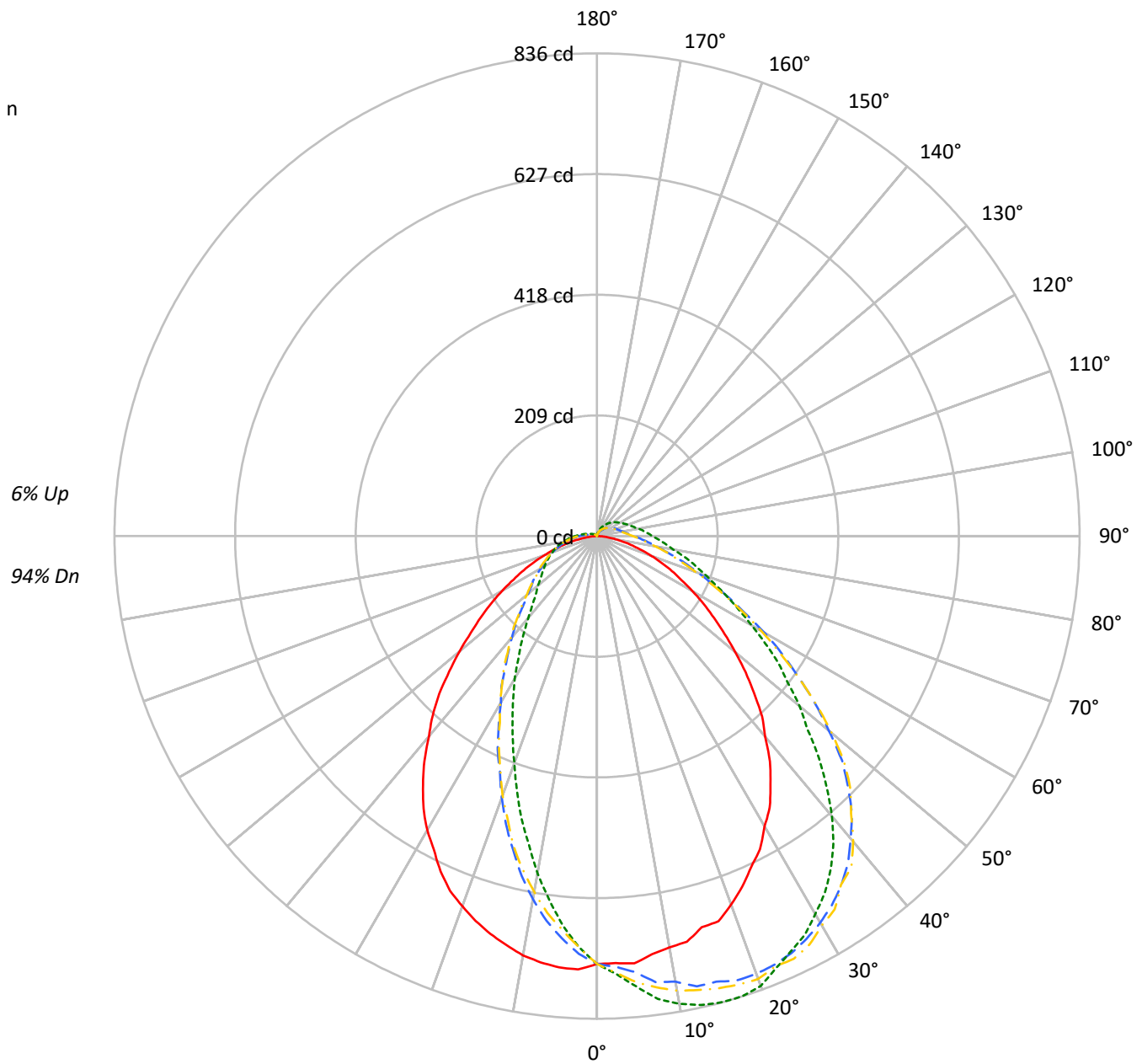
Test Method: LM-79-2019  
Report Number: P892963  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASML-UNV-CC83-MID-3500K  
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 3500K CCT, MID lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1847.0 lumens  
Efficiency: N/A  
Efficacy: 132.9 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: P892963  
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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°	15173	15173	15173	15173
5°	15188	15464	15331	13365
10°	14873	15793	15163	11391
15°	14623	15736	14872	9524
20°	14468	15425	14529	7791
25°	13873	14709	14064	6411
30°	13247	14058	13418	5297
35°	12546	13267	12582	4315
40°	11499	12136	11494	3539
45°	10470	10712	10522	3015
50°	9258	9350	9217	2725
55°	8105	8190	8049	2502
60°	7051	6985	6988	2365
65°	6111	6014	5965	2248
70°	5112	5272	4938	2149
75°	4072	4791	3963	2070
80°	3013	4313	2735	1925
85°	1883	4166	1528	1805

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 14656 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.6	3.8
10°-20°	193.5	10.5
20°-30°	278.4	15.1
30°-40°	315.9	17.1
40°-50°	301.9	16.3
50°-60°	245.3	13.3
60°-70°	171.2	9.3
70°-80°	106.0	5.7
80°-90°	60.8	3.3
90°-100°	36.4	2.0
100°-110°	23.9	1.3
110°-120°	16.7	0.9
120°-130°	12.1	0.7
130°-140°	8.1	0.4
140°-150°	4.5	0.2
150°-160°	2.0	0.1
160°-170°	0.6	0.0
170°-180°	0.1	0.0
0°-30°	541.5	29.3
0°-40°	857.4	46.4
0°-60°	1404.6	76.0
0°-90°	1742.7	94.4
90°-120°	77.0	4.2
90°-150°	101.7	5.5
90°-180°	104.0	5.6
0°-180°	1847.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	741	741	741	741	741	
5°	743	783	750	677	743	70
15°	702	836	713	506	702	199
25°	632	794	641	346	632	292
35°	524	706	526	230	524	327
45°	384	544	386	153	384	297
55°	248	384	246	117	248	223
65°	143	249	140	93	143	142
75°	64	167	62	72	64	69
85°	14	113	11	49	14	15
90°	0	96	0	38	0	1
95°	1	83	0	29	1	1
105°	0	64	0	16	0	1
115°	0	51	0	8	0	0
125°	0	42	0	6	0	0
135°	0	33	0	4	0	0
145°	0	23	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	0



TEST NUMBER: P892963

CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	741.0	741.0	741.0	741.0	741.0	741.0	741.0	741.0	741.0	741.0	741.0
2.5°	740.3	745.9	746.4	763.9	758.8	765.3	757.1	758.5	751.2	749.3	724.1
5°	743.0	754.9	758.0	788.1	783.3	786.7	775.3	767.0	750.0	739.8	699.1
7.5°	730.4	761.7	779.1	800.5	808.5	811.2	788.1	772.8	744.7	719.7	671.9
10°	723.3	766.5	783.5	815.5	822.6	817.5	799.5	774.3	737.4	697.1	638.4
12.5°	719.5	769.2	798.8	831.6	831.8	826.5	805.3	778.2	725.5	672.9	603.0
15°	701.5	768.7	799.0	832.3	835.9	832.5	810.9	775.5	713.4	642.8	562.2
17.5°	699.6	767.5	806.8	841.7	835.7	833.3	814.3	774.3	698.8	612.2	523.9
20°	679.2	764.8	806.8	831.1	829.1	830.1	816.5	772.6	682.1	579.2	481.9
22.5°	657.6	761.7	803.4	821.8	810.2	827.9	806.8	768.0	665.1	544.7	440.2
25°	632.1	756.6	796.9	808.7	793.9	807.8	807.5	760.9	640.8	507.6	407.2
27.5°	611.5	748.6	786.2	804.1	778.9	790.8	797.6	752.5	612.2	471.0	368.3
30°	580.7	738.4	773.3	776.0	756.1	771.1	778.9	741.8	588.2	429.5	332.9
32.5°	557.1	726.7	757.5	753.9	734.0	753.9	766.5	731.1	559.5	393.1	307.9
35°	524.1	712.7	737.9	718.7	705.6	722.1	736.9	719.7	525.6	354.3	275.9
37.5°	492.1	700.3	714.4	690.6	672.6	691.1	723.6	698.3	491.4	323.5	252.1
40°	453.0	671.9	683.5	651.3	633.3	660.5	690.3	679.9	452.8	291.4	229.1
42.5°	423.4	650.8	654.2	610.0	588.7	617.5	651.5	653.7	421.5	262.5	208.7
45°	384.4	621.2	614.9	566.3	544.0	570.0	620.9	626.8	386.3	237.6	188.8
47.5°	349.2	588.2	575.8	519.0	494.0	524.8	581.4	596.7	347.0	214.5	170.1
50°	312.5	551.3	523.9	474.9	458.1	473.4	531.2	556.4	311.1	191.7	155.8
52.5°	279.0	510.5	476.6	432.6	415.9	428.5	478.5	516.4	275.4	172.5	143.2
55°	247.5	469.8	425.8	387.0	383.6	387.5	425.1	468.6	245.8	155.5	135.2
57.5°	219.4	420.3	380.2	351.6	345.5	348.7	374.6	419.3	217.2	138.6	123.5
60°	191.0	369.6	335.1	313.0	309.6	312.0	328.8	371.3	189.3	124.2	112.6
62.5°	165.2	318.6	288.0	279.8	277.3	277.3	284.4	323.2	163.1	109.7	104.3
65°	143.2	274.9	251.9	248.7	249.4	249.2	244.8	269.8	139.8	96.8	97.1
67.5°	120.8	228.6	215.7	219.6	222.5	221.3	212.1	224.4	117.9	85.2	90.5
70°	100.2	188.8	186.4	195.1	201.9	195.6	182.2	183.4	96.8	73.8	82.0
72.5°	80.8	152.6	163.8	175.9	182.5	175.4	157.0	151.7	77.9	63.3	74.3
75°	63.6	122.8	140.5	158.4	166.9	158.0	136.6	118.4	61.9	53.4	67.9
77.5°	48.5	97.3	120.1	141.0	149.2	141.5	118.9	92.4	45.4	44.9	61.1
80°	34.7	76.9	106.5	126.7	134.2	126.7	103.1	73.0	31.5	35.9	53.9
82.5°	22.8	59.4	92.7	115.3	123.5	114.3	89.5	56.3	20.1	29.1	48.5
85°	13.8	47.1	80.8	103.6	113.1	104.1	78.4	42.7	11.2	22.3	42.2
87.5°	6.1	36.4	72.1	95.6	104.1	95.8	69.9	33.5	4.6	17.5	36.2
90°	0.5	28.9	63.6	88.1	95.6	87.8	61.9	27.2	0.0	12.6	31.1
92.5°	0.5	24.8	58.2	81.5	90.0	81.3	55.8	22.3	0.0	9.2	26.2
95°	0.7	20.9	52.9	76.4	83.2	75.7	51.0	19.2	0.0	6.3	22.1
97.5°	0.7	18.9	48.5	71.3	78.9	70.9	46.6	17.2	0.0	4.6	18.0
100°	0.5	17.5	45.1	66.5	73.5	66.0	43.2	15.5	0.0	2.9	14.6
102.5°	0.5	16.3	42.2	62.4	67.9	61.6	40.3	14.6	0.0	2.4	11.9
105°	0.5	15.5	39.6	57.5	64.1	57.5	37.9	13.6	0.0	1.9	9.2
107.5°	0.5	14.6	37.6	54.8	60.2	54.4	35.9	12.9	0.0	1.9	7.5
110°	0.5	13.8	35.9	51.0	57.0	51.4	34.2	11.6	0.0	1.2	6.1



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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°	0.5	12.6	34.2	48.3	54.1	48.5	32.8	10.7	0.0	1.2	5.3
115°	0.5	11.4	32.8	46.6	51.0	46.1	31.3	9.5	0.0	1.0	4.9
117.5°	0.5	10.7	31.8	44.4	48.8	43.9	30.1	9.0	0.0	1.0	4.6
120°	0.5	10.2	30.3	42.2	45.6	41.7	28.6	8.5	0.0	1.0	4.4
122.5°	0.5	9.7	29.1	40.3	43.9	40.0	27.4	8.3	0.0	0.7	3.9
125°	0.5	9.2	27.4	38.1	41.5	37.6	25.2	8.0	0.0	0.5	3.4
127.5°	0.5	8.7	25.7	36.4	39.6	35.9	23.8	7.8	0.0	0.5	3.2
130°	0.5	8.5	23.5	34.2	37.4	33.7	22.1	7.8	0.0	0.5	2.9
132.5°	0.5	8.3	21.1	32.0	35.4	31.5	20.4	7.5	0.0	0.5	2.4
135°	0.5	8.0	18.7	29.8	33.0	29.4	18.9	7.3	0.0	0.5	2.2
137.5°	0.5	7.5	16.5	27.4	30.6	26.9	18.0	6.8	0.0	0.5	1.9
140°	0.5	7.0	14.8	25.5	28.1	24.8	16.5	6.3	0.0	0.2	1.5
142.5°	0.5	6.3	13.3	23.1	25.7	22.6	14.8	5.3	0.0	0.2	1.5
145°	0.5	5.6	12.1	20.1	23.3	20.1	13.8	4.9	0.0	0.2	1.2
147.5°	0.5	5.1	10.9	17.0	21.1	18.4	12.4	4.1	0.0	0.2	1.0
150°	0.5	4.6	9.5	14.3	18.7	16.3	11.4	3.6	0.0	0.0	0.7
152.5°	0.5	4.1	8.3	11.9	16.7	14.8	10.2	3.2	0.0	0.0	0.5
155°	0.7	3.9	7.0	10.4	14.6	12.9	8.5	2.7	0.0	0.0	0.5
157.5°	0.7	3.4	5.8	8.5	12.9	11.2	6.8	2.2	0.0	0.0	0.2
160°	0.7	3.2	4.9	6.6	10.7	9.2	5.6	1.7	0.0	0.0	0.2
162.5°	0.7	2.9	4.1	4.9	8.7	7.3	4.4	1.2	0.0	0.0	0.2
165°	0.7	2.4	3.6	3.4	6.8	5.6	3.4	0.7	0.0	0.0	0.0
167.5°	0.7	2.2	2.9	2.4	5.1	4.1	2.4	0.5	0.0	0.0	0.0
170°	0.7	1.7	2.4	1.7	1.5	2.7	1.5	0.2	0.0	0.0	0.0
172.5°	0.7	1.5	1.9	1.2	0.5	1.5	0.7	0.0	0.0	0.0	0.0
175°	0.7	1.2	1.2	0.7	0.2	0.5	0.0	0.0	0.0	0.0	0.0
177.5°	0.7	1.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2



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CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	741.0	741.0	741.0	741.0	741.0	741.0
2.5°	720.7	712.7	705.4	713.1	718.7	740.3
5°	685.5	677.0	678.0	685.0	703.7	743.0
7.5°	649.1	635.0	638.4	658.1	685.7	730.4
10°	606.1	593.3	596.4	626.0	664.9	723.3
12.5°	567.8	546.2	564.6	592.5	640.6	719.5
15°	522.9	505.9	515.9	557.1	617.3	701.5
17.5°	474.4	461.3	473.2	514.2	588.7	699.6
20°	437.0	418.8	432.9	478.0	553.2	679.2
22.5°	395.0	381.2	396.0	437.5	517.1	657.6
25°	360.6	346.0	360.8	402.1	485.1	632.1
27.5°	327.1	313.7	327.1	364.9	453.3	611.5
30°	297.7	284.9	298.5	334.9	416.1	580.7
32.5°	270.3	253.8	271.3	306.5	383.4	557.1
35°	241.9	229.5	242.6	281.7	347.0	524.1
37.5°	218.4	205.5	221.1	254.5	316.2	492.1
40°	196.1	184.7	197.0	232.7	290.0	453.0
42.5°	178.6	167.2	179.8	212.8	263.5	423.4
45°	161.6	153.1	163.3	191.0	236.8	384.4
47.5°	149.2	141.9	150.4	174.9	214.5	349.2
50°	138.6	133.5	139.5	158.9	191.4	312.5
52.5°	129.1	124.0	131.0	146.6	173.3	279.0
55°	121.8	117.2	122.5	134.9	155.1	247.5
57.5°	113.8	110.9	115.0	122.5	140.7	219.4
60°	108.0	104.8	109.2	115.3	124.5	191.0
62.5°	101.4	99.7	102.4	107.3	112.1	165.2
65°	95.6	93.2	96.6	98.3	97.8	143.2
67.5°	89.3	88.6	90.5	90.8	87.1	120.8
70°	82.7	82.3	84.7	83.2	75.7	100.2
72.5°	77.4	77.4	78.9	75.9	66.0	80.8
75°	71.6	72.1	73.3	69.9	55.6	63.6
77.5°	66.2	66.7	67.0	62.4	46.6	48.5
80°	60.2	59.9	62.4	56.5	37.9	34.7
82.5°	54.8	53.9	55.3	49.5	30.6	22.8
85°	48.8	49.0	50.0	43.2	24.5	13.8
87.5°	43.9	43.9	44.9	38.1	18.4	6.1
90°	38.1	37.6	39.1	32.3	13.8	0.5
92.5°	33.2	33.2	34.2	27.7	10.2	0.5
95°	28.4	28.6	29.4	22.8	7.8	0.7
97.5°	24.3	24.5	25.5	19.4	5.6	0.7
100°	20.6	20.9	21.4	15.5	4.4	0.5
102.5°	17.2	18.0	18.0	12.9	3.4	0.5
105°	14.6	15.5	15.0	10.4	3.2	0.5
107.5°	12.1	13.1	13.1	8.5	3.2	0.5
110°	9.9	11.4	11.2	7.3	2.4	0.5





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	8.5	9.7	9.0	6.3	2.4	0.5
115°	7.3	8.5	8.0	5.8	2.2	0.5
117.5°	6.6	7.3	7.3	5.6	2.2	0.5
120°	6.1	6.8	6.6	5.3	2.2	0.5
122.5°	5.6	6.1	6.1	4.9	1.9	0.5
125°	5.3	5.6	5.8	4.4	1.9	0.5
127.5°	5.1	5.6	5.6	4.1	1.7	0.5
130°	4.6	5.1	5.1	3.9	1.7	0.5
132.5°	4.1	4.6	4.6	3.6	1.7	0.5
135°	3.9	4.4	4.4	3.4	1.7	0.5
137.5°	3.6	3.9	3.9	3.2	1.7	0.5
140°	3.2	3.6	3.6	2.9	1.7	0.5
142.5°	2.9	3.4	3.4	2.7	1.5	0.5
145°	2.7	2.9	3.2	2.4	1.5	0.5
147.5°	2.2	2.7	2.9	2.2	1.5	0.5
150°	1.7	2.4	2.4	2.2	1.5	0.5
152.5°	1.2	2.2	2.2	1.9	1.2	0.5
155°	1.0	1.7	1.9	1.7	1.2	0.7
157.5°	0.7	1.5	1.7	1.7	1.2	0.7
160°	0.5	1.2	1.5	1.5	1.0	0.7
162.5°	0.2	1.0	1.2	1.5	1.0	0.7
165°	0.0	0.7	1.0	1.2	1.0	0.7
167.5°	0.0	0.5	0.7	1.0	0.7	0.7
170°	0.0	0.2	0.5	0.7	0.7	0.7
172.5°	0.0	0.0	0.2	0.5	0.5	0.7
175°	0.0	0.0	0.0	0.2	0.5	0.7
177.5°	0.0	0.0	0.0	0.2	0.5	0.7
180°	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P892963  
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-MID-3500K

**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	18.34	19.79	18.79	20.23	20.68	20.50	21.96	20.95	22.39	22.84
	3H	19.16	20.48	19.62	20.92	21.42	22.17	23.49	22.63	23.93	24.43
	4H	19.36	20.61	19.85	21.07	21.58	22.98	24.22	23.47	24.68	25.19
	6H	19.45	20.61	19.95	21.08	21.61	23.81	24.96	24.31	25.44	25.97
	8H	19.46	20.56	19.97	21.05	21.59	24.25	25.35	24.76	25.85	26.38
	12H	19.44	20.50	19.96	20.99	21.55	24.74	25.79	25.26	26.28	26.84
4H	2H	18.76	20.00	19.25	20.46	20.98	20.87	22.11	21.36	22.57	23.08
	3H	19.86	20.90	20.36	21.41	21.94	22.72	23.77	23.22	24.27	24.81
	4H	20.20	21.14	20.72	21.66	22.23	23.67	24.62	24.19	25.13	25.70
	6H	20.39	21.22	20.93	21.76	22.35	24.67	25.50	25.21	26.04	26.62
	8H	20.42	21.20	20.96	21.74	22.33	25.19	25.97	25.74	26.52	27.11
	12H	20.42	21.13	20.99	21.70	22.30	25.79	26.50	26.36	27.07	27.67
8H	4H	20.51	21.29	21.06	21.84	22.43	23.81	24.59	24.36	25.14	25.73
	6H	20.83	21.49	21.42	22.08	22.68	24.94	25.60	25.52	26.18	26.79
	8H	20.92	21.51	21.52	22.11	22.73	25.59	26.18	26.18	26.78	27.39
	12H	20.98	21.50	21.57	22.09	22.77	26.35	26.87	26.94	27.46	28.14
12H	4H	20.59	21.29	21.16	21.86	22.46	23.81	24.51	24.37	25.08	25.68
	6H	20.97	21.55	21.56	22.16	22.77	24.96	25.55	25.55	26.15	26.76
	8H	21.12	21.65	21.72	22.23	22.92	25.66	26.18	26.25	26.77	27.45