

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: P892959

Luminaire Tested: 2MB-SC3-ASML-UNV-CC83-HI-5000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892959
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-HI-5000K
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 5000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

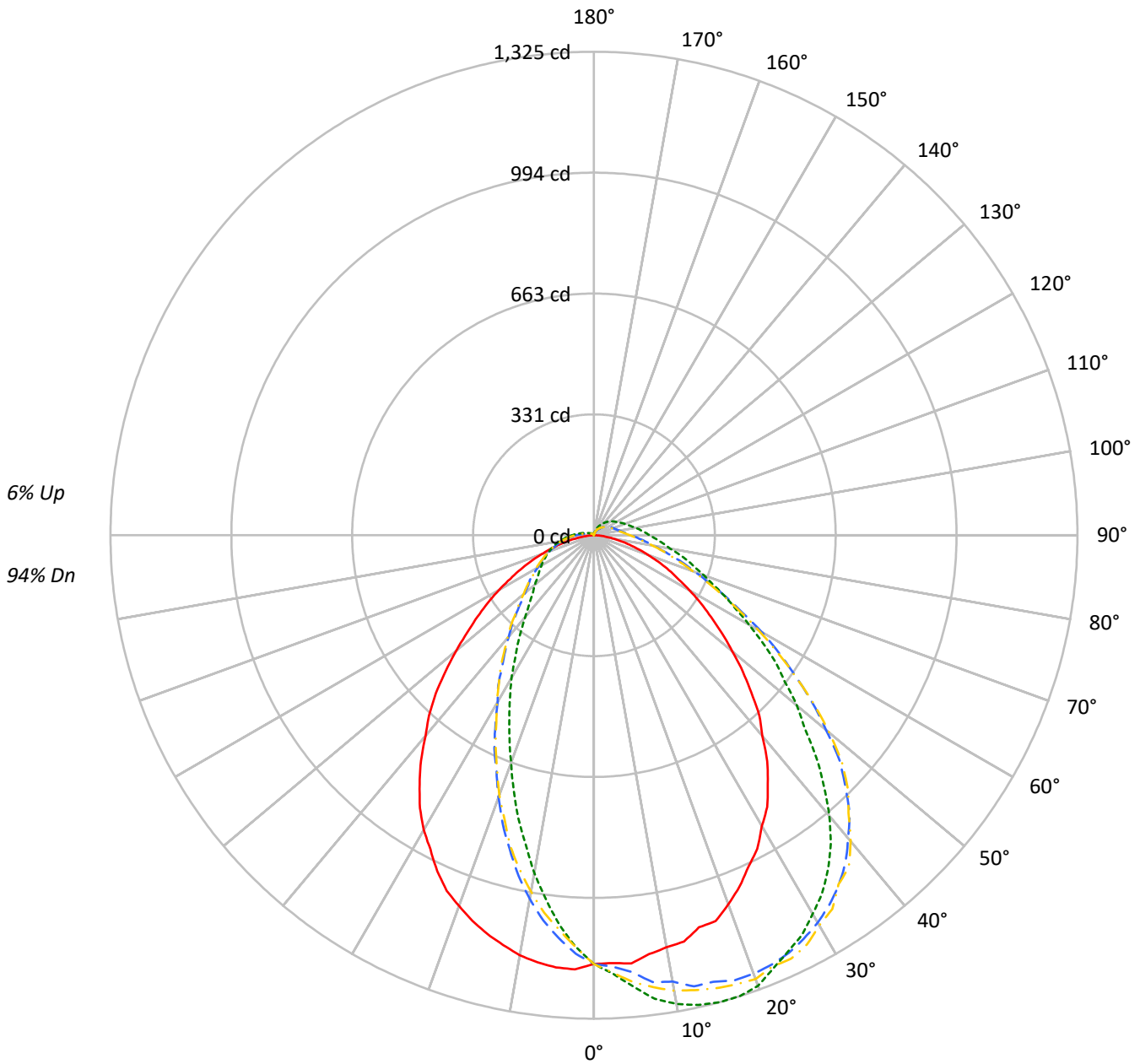
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2928.0 lumens
Efficiency: N/A
Efficacy: 139.4 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): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P892959
CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-5000K

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	81	81	81	79
2	98	90	83	78	95	88	82	76	83	78	74	79	75	71	75	72	69	69	69	69	66
3	90	80	72	65	87	78	70	64	74	68	63	70	65	61	67	63	59	59	59	59	57
4	83	71	63	56	80	69	61	55	66	59	54	63	57	53	60	55	51	51	51	51	49
5	76	64	55	49	74	62	54	48	60	53	47	57	51	46	55	49	45	45	45	45	43
6	71	58	49	43	68	56	48	42	54	47	42	52	46	41	50	44	40	40	40	40	38
7	66	53	44	38	64	51	43	38	49	42	37	48	41	36	46	40	36	36	36	36	34
8	61	48	40	34	59	47	39	34	45	38	33	44	37	33	42	37	32	32	32	32	30
9	57	44	36	31	56	43	36	31	42	35	30	40	34	30	39	33	29	29	29	29	28
10	54	41	33	28	52	40	33	28	39	32	28	38	31	27	36	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	24056	24056	24056	24056
5°	24076	24514	24305	21187
10°	23580	25036	24039	18057
15°	23183	24947	23575	15098
20°	22935	24453	23033	12351
25°	21991	23319	22296	10162
30°	20999	22285	21270	8396
35°	19890	21032	19946	6842
40°	18231	19240	18221	5609
45°	16596	16982	16680	4779
50°	14677	14821	14608	4319
55°	12849	12985	12761	3967
60°	11174	11074	11074	3750
65°	9686	9535	9456	3562
70°	8106	8355	7831	3405
75°	6454	7595	6281	3278
80°	4775	6836	4341	3053
85°	2988	6604	2415	2862

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 23233 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	3.8
10°-20°	306.8	10.5
20°-30°	441.3	15.1
30°-40°	500.8	17.1
40°-50°	478.6	16.3
50°-60°	388.9	13.3
60°-70°	271.3	9.3
70°-80°	168.1	5.7
80°-90°	96.4	3.3
90°-100°	57.6	2.0
100°-110°	37.8	1.3
110°-120°	26.5	0.9
120°-130°	19.2	0.7
130°-140°	12.8	0.4
140°-150°	7.2	0.2
150°-160°	3.2	0.1
160°-170°	0.9	0.0
170°-180°	0.1	0.0
0°-30°	858.5	29.3
0°-40°	1359.3	46.4
0°-60°	2226.8	76.0
0°-90°	2762.6	94.4
90°-120°	122.0	4.2
90°-150°	161.2	5.5
90°-180°	165.0	5.6
0°-180°	2928.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1175	1175	1175	1175	1175	
5°	1178	1242	1189	1073	1178	111
15°	1112	1325	1131	802	1112	316
25°	1002	1259	1016	548	1002	462
35°	831	1119	833	364	831	518
45°	609	862	612	243	609	470
55°	392	608	390	186	392	353
65°	227	395	222	148	227	225
75°	101	265	98	114	101	109
85°	22	179	18	78	22	25
90°	1	152	0	60	1	2
95°	1	132	0	45	1	1
105°	1	102	0	25	1	1
115°	1	81	0	14	1	1
125°	1	66	0	9	1	1
135°	1	52	0	7	1	1
145°	1	37	0	5	1	1
155°	1	23	0	3	1	0
165°	1	11	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°	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8
2.5°	1173.6	1182.5	1183.2	1210.9	1202.8	1213.2	1200.2	1202.5	1190.9	1187.8	1147.8
5°	1177.8	1196.7	1201.7	1249.4	1241.7	1247.1	1229.0	1215.9	1189.0	1172.8	1108.2
7.5°	1157.8	1207.5	1235.2	1269.0	1281.7	1285.9	1249.4	1225.2	1180.5	1140.9	1065.1
10°	1146.7	1215.2	1242.1	1292.9	1304.0	1295.9	1267.5	1227.5	1169.0	1105.1	1012.1
12.5°	1140.5	1219.4	1266.3	1318.2	1318.6	1310.2	1276.7	1233.6	1150.1	1066.7	955.9
15°	1112.1	1218.6	1266.7	1319.4	1325.2	1319.8	1285.5	1229.4	1130.9	1019.0	891.3
17.5°	1109.0	1216.7	1279.0	1334.4	1324.8	1320.9	1290.9	1227.5	1107.8	970.5	830.5
20°	1076.7	1212.5	1279.0	1317.5	1314.4	1315.9	1294.4	1224.8	1081.3	918.2	763.9
22.5°	1042.4	1207.5	1273.6	1302.9	1284.4	1312.5	1279.0	1217.5	1054.4	863.6	697.8
25°	1002.0	1199.4	1263.2	1282.1	1258.6	1280.5	1280.2	1206.3	1015.9	804.7	645.5
27.5°	969.4	1186.7	1246.3	1274.8	1234.8	1253.6	1264.4	1192.8	970.5	746.6	583.9
30°	920.5	1170.5	1225.9	1230.2	1198.6	1222.5	1234.8	1175.9	932.4	680.9	527.8
32.5°	883.2	1152.1	1200.9	1195.2	1163.6	1195.2	1215.2	1159.0	887.0	623.2	488.1
35°	830.9	1129.8	1169.8	1139.4	1118.6	1144.8	1168.2	1140.9	833.2	561.6	437.4
37.5°	780.1	1110.1	1132.5	1094.8	1066.3	1095.5	1147.1	1107.1	778.9	512.8	399.7
40°	718.2	1065.1	1083.6	1032.4	1004.0	1047.1	1094.4	1077.8	717.8	462.0	363.1
42.5°	671.2	1031.7	1037.1	967.0	933.2	979.0	1032.8	1036.3	668.2	416.2	330.8
45°	609.3	984.7	974.7	897.8	862.4	903.6	984.4	993.6	612.4	376.6	299.3
47.5°	553.5	932.4	912.8	822.8	783.2	832.0	921.7	945.9	550.1	340.0	269.6
50°	495.4	874.0	830.5	752.8	726.2	750.5	842.0	882.0	493.1	303.9	247.0
52.5°	442.4	809.3	755.5	685.9	659.3	679.3	758.6	818.6	436.6	273.5	227.0
55°	392.4	744.7	675.1	613.5	608.2	614.3	673.9	742.8	389.7	246.6	214.3
57.5°	347.7	666.2	602.8	557.4	547.8	552.8	593.9	664.7	344.3	219.6	195.8
60°	302.7	585.8	531.2	496.2	490.8	494.7	521.2	588.5	300.0	196.9	178.5
62.5°	262.0	505.1	456.6	443.5	439.7	439.7	450.8	512.4	258.5	173.9	165.4
65°	227.0	435.8	399.3	394.3	395.4	395.0	388.1	427.7	221.6	153.5	153.9
67.5°	191.6	362.4	342.0	348.1	352.7	350.8	336.2	355.8	186.9	135.0	143.5
70°	158.9	299.3	295.4	309.3	320.0	310.0	288.9	290.8	153.5	116.9	130.0
72.5°	128.1	242.0	259.6	278.9	289.3	278.1	248.9	240.4	123.5	100.4	117.7
75°	100.8	194.6	222.7	251.2	264.6	250.4	216.6	187.7	98.1	84.6	107.7
77.5°	76.9	154.3	190.4	223.5	236.6	224.3	188.5	146.6	71.9	71.2	96.9
80°	55.0	121.9	168.9	200.8	212.7	200.8	163.5	115.8	50.0	56.9	85.4
82.5°	36.2	94.2	146.9	182.7	195.8	181.2	141.9	89.2	31.9	46.2	76.9
85°	21.9	74.6	128.1	164.3	179.3	165.0	124.2	67.7	17.7	35.4	66.9
87.5°	9.6	57.7	114.2	151.6	165.0	151.9	110.8	53.1	7.3	27.7	57.3
90°	0.8	45.8	100.8	139.6	151.6	139.2	98.1	43.1	0.0	20.0	49.2
92.5°	0.8	39.2	92.3	129.2	142.7	128.9	88.5	35.4	0.0	14.6	41.5
95°	1.2	33.1	83.9	121.2	131.9	120.0	80.8	30.4	0.0	10.0	35.0
97.5°	1.2	30.0	76.9	113.1	125.0	112.3	73.9	27.3	0.0	7.3	28.5
100°	0.8	27.7	71.5	105.4	116.6	104.6	68.5	24.6	0.0	4.6	23.1
102.5°	0.8	25.8	66.9	98.9	107.7	97.7	63.9	23.1	0.0	3.8	18.8
105°	0.8	24.6	62.7	91.2	101.6	91.2	60.0	21.5	0.0	3.1	14.6
107.5°	0.8	23.1	59.6	86.9	95.4	86.2	56.9	20.4	0.0	3.1	11.9
110°	0.8	21.9	56.9	80.8	90.4	81.5	54.2	18.5	0.0	1.9	9.6



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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°	0.8	20.0	54.2	76.5	85.8	76.9	51.9	16.9	0.0	1.9	8.5
115°	0.8	18.1	51.9	73.9	80.8	73.1	49.6	15.0	0.0	1.5	7.7
117.5°	0.8	16.9	50.4	70.4	77.3	69.6	47.7	14.2	0.0	1.5	7.3
120°	0.8	16.2	48.1	66.9	72.3	66.2	45.4	13.5	0.0	1.5	6.9
122.5°	0.8	15.4	46.2	63.9	69.6	63.5	43.5	13.1	0.0	1.2	6.2
125°	0.8	14.6	43.5	60.4	65.8	59.6	40.0	12.7	0.0	0.8	5.4
127.5°	0.8	13.8	40.8	57.7	62.7	56.9	37.7	12.3	0.0	0.8	5.0
130°	0.8	13.5	37.3	54.2	59.2	53.5	35.0	12.3	0.0	0.8	4.6
132.5°	0.8	13.1	33.5	50.8	56.2	50.0	32.3	11.9	0.0	0.8	3.8
135°	0.8	12.7	29.6	47.3	52.3	46.5	30.0	11.5	0.0	0.8	3.5
137.5°	0.8	11.9	26.2	43.5	48.5	42.7	28.5	10.8	0.0	0.8	3.1
140°	0.8	11.2	23.5	40.4	44.6	39.2	26.2	10.0	0.0	0.4	2.3
142.5°	0.8	10.0	21.2	36.5	40.8	35.8	23.5	8.5	0.0	0.4	2.3
145°	0.8	8.8	19.2	31.9	36.9	31.9	21.9	7.7	0.0	0.4	1.9
147.5°	0.8	8.1	17.3	26.9	33.5	29.2	19.6	6.5	0.0	0.4	1.5
150°	0.8	7.3	15.0	22.7	29.6	25.8	18.1	5.8	0.0	0.0	1.2
152.5°	0.8	6.5	13.1	18.8	26.5	23.5	16.2	5.0	0.0	0.0	0.8
155°	1.2	6.2	11.2	16.5	23.1	20.4	13.5	4.2	0.0	0.0	0.8
157.5°	1.2	5.4	9.2	13.5	20.4	17.7	10.8	3.5	0.0	0.0	0.4
160°	1.2	5.0	7.7	10.4	16.9	14.6	8.8	2.7	0.0	0.0	0.4
162.5°	1.2	4.6	6.5	7.7	13.8	11.5	6.9	1.9	0.0	0.0	0.4
165°	1.2	3.8	5.8	5.4	10.8	8.8	5.4	1.2	0.0	0.0	0.0
167.5°	1.2	3.5	4.6	3.8	8.1	6.5	3.8	0.8	0.0	0.0	0.0
170°	1.2	2.7	3.8	2.7	2.3	4.2	2.3	0.4	0.0	0.0	0.0
172.5°	1.2	2.3	3.1	1.9	0.8	2.3	1.2	0.0	0.0	0.0	0.0
175°	1.2	1.9	1.9	1.2	0.4	0.8	0.0	0.0	0.0	0.0	0.0
177.5°	1.2	1.5	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P892959

CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8
2.5°	1142.5	1129.8	1118.2	1130.5	1139.4	1173.6
5°	1086.7	1073.2	1074.8	1085.9	1115.5	1177.8
7.5°	1029.0	1006.7	1012.1	1043.2	1087.1	1157.8
10°	960.9	940.5	945.5	992.4	1054.0	1146.7
12.5°	900.1	865.9	895.1	939.3	1015.5	1140.5
15°	829.0	802.0	817.8	883.2	978.6	1112.1
17.5°	752.0	731.2	750.1	815.1	933.2	1109.0
20°	692.8	663.9	686.2	757.8	877.0	1076.7
22.5°	626.2	604.3	627.8	693.5	819.7	1042.4
25°	571.6	548.5	572.0	637.4	768.9	1002.0
27.5°	518.5	497.4	518.5	578.5	718.6	969.4
30°	472.0	451.6	473.1	530.8	659.7	920.5
32.5°	428.5	402.4	430.1	485.8	607.8	883.2
35°	383.5	363.9	384.7	446.6	550.1	830.9
37.5°	346.2	325.8	350.4	403.5	501.2	780.1
40°	310.8	292.7	312.3	368.9	459.7	718.2
42.5°	283.1	265.0	285.0	337.4	417.7	671.2
45°	256.2	242.7	258.9	302.7	375.4	609.3
47.5°	236.6	225.0	238.5	277.3	340.0	553.5
50°	219.6	211.6	221.2	252.0	303.5	495.4
52.5°	204.6	196.6	207.7	232.3	274.6	442.4
55°	193.1	185.8	194.3	213.9	245.8	392.4
57.5°	180.4	175.8	182.3	194.3	223.1	347.7
60°	171.2	166.2	173.1	182.7	197.3	302.7
62.5°	160.8	158.1	162.3	170.0	177.7	262.0
65°	151.6	147.7	153.1	155.8	155.0	227.0
67.5°	141.6	140.4	143.5	143.9	138.1	191.6
70°	131.2	130.4	134.2	131.9	120.0	158.9
72.5°	122.7	122.7	125.0	120.4	104.6	128.1
75°	113.5	114.2	116.2	110.8	88.1	100.8
77.5°	105.0	105.8	106.2	98.9	73.9	76.9
80°	95.4	95.0	98.9	89.6	60.0	55.0
82.5°	86.9	85.4	87.7	78.5	48.5	36.2
85°	77.3	77.7	79.2	68.5	38.9	21.9
87.5°	69.6	69.6	71.2	60.4	29.2	9.6
90°	60.4	59.6	61.9	51.2	21.9	0.8
92.5°	52.7	52.7	54.2	43.9	16.2	0.8
95°	45.0	45.4	46.5	36.2	12.3	1.2
97.5°	38.5	38.9	40.4	30.8	8.8	1.2
100°	32.7	33.1	33.9	24.6	6.9	0.8
102.5°	27.3	28.5	28.5	20.4	5.4	0.8
105°	23.1	24.6	23.8	16.5	5.0	0.8
107.5°	19.2	20.8	20.8	13.5	5.0	0.8
110°	15.8	18.1	17.7	11.5	3.8	0.8



TEST NUMBER: P892959

CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	13.5	15.4	14.2	10.0	3.8	0.8
115°	11.5	13.5	12.7	9.2	3.5	0.8
117.5°	10.4	11.5	11.5	8.8	3.5	0.8
120°	9.6	10.8	10.4	8.5	3.5	0.8
122.5°	8.8	9.6	9.6	7.7	3.1	0.8
125°	8.5	8.8	9.2	6.9	3.1	0.8
127.5°	8.1	8.8	8.8	6.5	2.7	0.8
130°	7.3	8.1	8.1	6.2	2.7	0.8
132.5°	6.5	7.3	7.3	5.8	2.7	0.8
135°	6.2	6.9	6.9	5.4	2.7	0.8
137.5°	5.8	6.2	6.2	5.0	2.7	0.8
140°	5.0	5.8	5.8	4.6	2.7	0.8
142.5°	4.6	5.4	5.4	4.2	2.3	0.8
145°	4.2	4.6	5.0	3.8	2.3	0.8
147.5°	3.5	4.2	4.6	3.5	2.3	0.8
150°	2.7	3.8	3.8	3.5	2.3	0.8
152.5°	1.9	3.5	3.5	3.1	1.9	0.8
155°	1.5	2.7	3.1	2.7	1.9	1.2
157.5°	1.2	2.3	2.7	2.7	1.9	1.2
160°	0.8	1.9	2.3	2.3	1.5	1.2
162.5°	0.4	1.5	1.9	2.3	1.5	1.2
165°	0.0	1.2	1.5	1.9	1.5	1.2
167.5°	0.0	0.8	1.2	1.5	1.2	1.2
170°	0.0	0.4	0.8	1.2	1.2	1.2
172.5°	0.0	0.0	0.4	0.8	0.8	1.2
175°	0.0	0.0	0.0	0.4	0.8	1.2
177.5°	0.0	0.0	0.0	0.4	0.8	1.2
180°	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P892959
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-5000K

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	19.94	21.39	20.39	21.83	22.28	22.10	23.56	22.55	23.99	24.44
	3H	20.76	22.08	21.23	22.52	23.02	23.77	25.09	24.24	25.53	26.03
	4H	20.96	22.21	21.45	22.67	23.18	24.58	25.82	25.07	26.28	26.80
	6H	21.05	22.21	21.56	22.68	23.21	25.41	26.56	25.91	27.04	27.57
	8H	21.06	22.16	21.57	22.65	23.19	25.85	26.95	26.36	27.45	27.98
	12H	21.04	22.10	21.56	22.59	23.15	26.34	27.39	26.86	27.88	28.44
4H	2H	20.36	21.60	20.85	22.06	22.58	22.47	23.71	22.96	24.17	24.69
	3H	21.46	22.50	21.96	23.01	23.54	24.32	25.37	24.82	25.87	26.41
	4H	21.80	22.74	22.32	23.26	23.83	25.27	26.22	25.79	26.73	27.30
	6H	21.99	22.82	22.53	23.36	23.95	26.27	27.10	26.81	27.64	28.23
	8H	22.02	22.80	22.57	23.34	23.93	26.79	27.57	27.34	28.12	28.71
	12H	22.02	22.73	22.59	23.30	23.90	27.40	28.10	27.96	28.67	29.27
8H	4H	22.11	22.89	22.66	23.44	24.03	25.41	26.19	25.96	26.74	27.33
	6H	22.43	23.09	23.02	23.68	24.28	26.54	27.20	27.13	27.79	28.39
	8H	22.52	23.11	23.12	23.71	24.33	27.19	27.78	27.78	28.38	28.99
	12H	22.58	23.10	23.17	23.69	24.37	27.95	28.47	28.54	29.06	29.74
12H	4H	22.19	22.89	22.76	23.46	24.06	25.41	26.11	25.98	26.68	27.28
	6H	22.57	23.16	23.16	23.76	24.37	26.56	27.15	27.15	27.75	28.36
	8H	22.72	23.25	23.32	23.83	24.52	27.26	27.79	27.86	28.37	29.05