

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: P893713

Luminaire Tested: 4MB-6SL-ASML-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893713
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: 4MB-6SL-ASML-UNV-L830
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

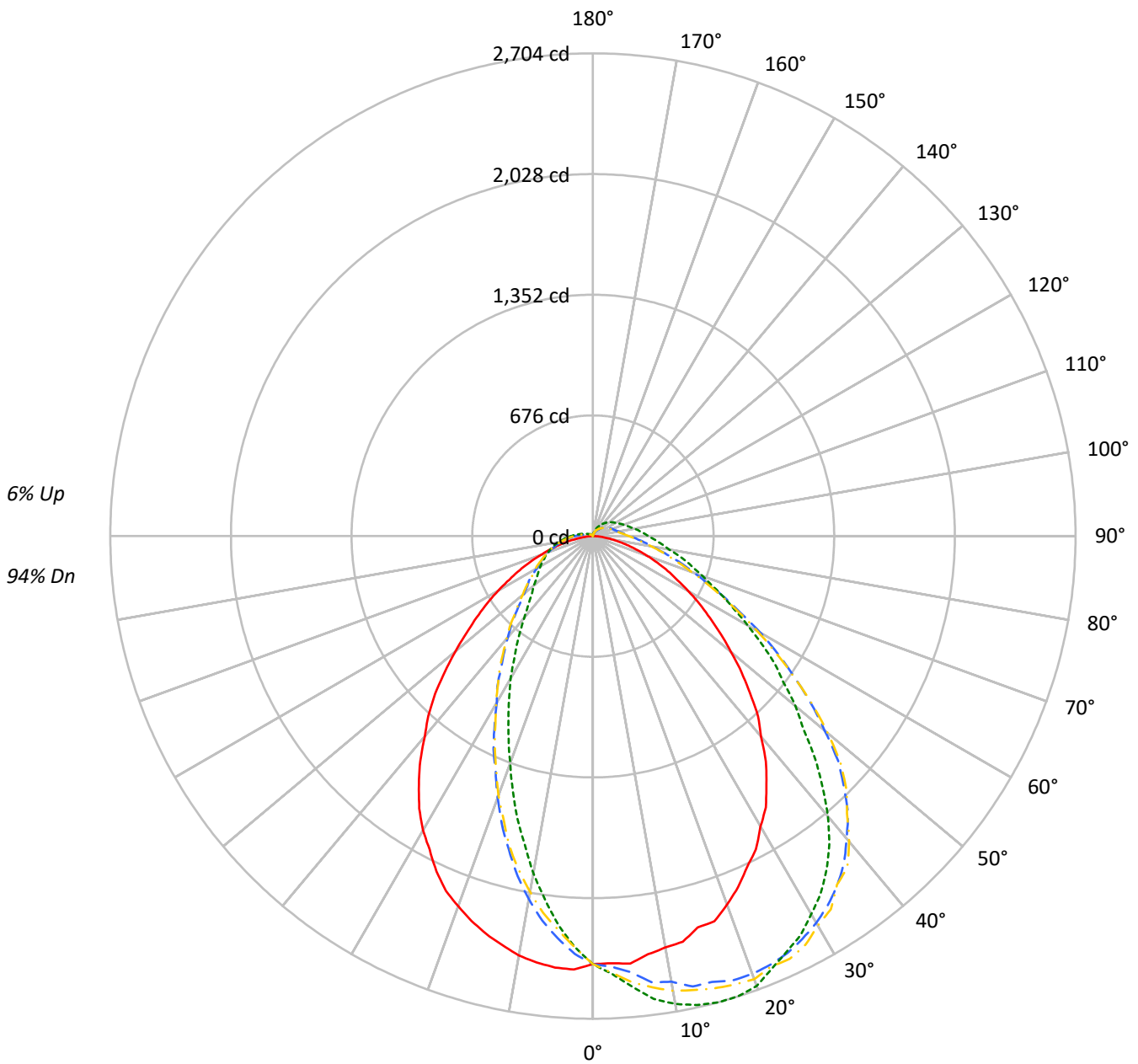
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5975.0 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.07 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.12')
CIE Type: Direct

Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893713
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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - 90°-270° - · - 135°-315°



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.3	3.8
10°-20°	626.1	10.5
20°-30°	900.5	15.1
30°-40°	1021.9	17.1
40°-50°	976.7	16.3
50°-60°	793.6	13.3
60°-70°	553.7	9.3
70°-80°	343.0	5.7
80°-90°	196.8	3.3
90°-100°	117.6	2.0
100°-110°	77.2	1.3
110°-120°	54.1	0.9
120°-130°	39.2	0.7
130°-140°	26.1	0.4
140°-150°	14.7	0.2
150°-160°	6.6	0.1
160°-170°	1.9	0.0
170°-180°	0.2	0.0
0°-30°	1751.8	29.3
0°-40°	2773.8	46.4
0°-60°	4544.0	76.0
0°-90°	5637.5	94.4
90°-120°	248.9	4.2
90°-150°	328.9	5.5
90°-180°	337.0	5.6
0°-180°	5975.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2397	2397	2397	2397	2397	
5°	2404	2534	2426	2190	2404	227
15°	2269	2704	2308	1637	2269	645
25°	2045	2568	2073	1119	2045	943
35°	1696	2283	1700	743	1696	1057
45°	1243	1760	1250	495	1243	959
55°	801	1241	795	379	801	721
65°	463	807	452	301	463	460
75°	206	540	200	233	206	222
85°	45	366	36	159	45	50
90°	2	309	0	122	2	3
95°	2	269	0	93	2	2
105°	2	207	0	50	2	2
115°	2	165	0	28	2	2
125°	2	134	0	18	2	1
135°	2	107	0	14	2	1
145°	2	75	0	9	2	1
155°	2	47	0	6	2	1
165°	2	22	0	2	2	1
175°	2	1	0	0	2	0
180°	1	1	1	1	1	



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 CATALOG NUMBER: 4MB-6SL-ASML-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3
2.5°	2394.9	2413.0	2414.5	2471.1	2454.6	2475.8	2449.1	2453.8	2430.2	2424.0	2342.3
5°	2403.6	2442.0	2452.2	2549.6	2533.9	2544.8	2508.0	2481.3	2426.3	2393.3	2261.5
7.5°	2362.7	2464.0	2520.5	2589.6	2615.5	2624.1	2549.6	2500.1	2409.0	2328.2	2173.6
10°	2340.0	2479.7	2534.6	2638.3	2661.0	2644.5	2586.4	2504.8	2385.5	2255.2	2065.2
12.5°	2327.4	2488.3	2584.1	2690.1	2690.8	2673.6	2605.3	2517.4	2347.0	2176.7	1950.6
15°	2269.3	2486.8	2584.9	2692.4	2704.2	2693.2	2623.3	2508.7	2307.8	2079.4	1818.8
17.5°	2263.0	2482.8	2610.0	2723.0	2703.4	2695.6	2634.3	2504.8	2260.7	1980.5	1694.7
20°	2197.1	2474.2	2610.0	2688.5	2682.2	2685.4	2641.4	2499.3	2206.5	1873.7	1558.9
22.5°	2127.2	2464.0	2599.0	2658.7	2621.0	2678.3	2610.0	2484.4	2151.6	1762.2	1423.9
25°	2044.8	2447.5	2577.8	2616.3	2568.4	2613.1	2612.4	2461.6	2073.1	1642.1	1317.2
27.5°	1978.1	2421.6	2543.3	2601.4	2519.7	2558.2	2580.2	2434.2	1980.5	1523.6	1191.6
30°	1878.4	2388.6	2501.7	2510.3	2445.9	2494.6	2519.7	2399.6	1902.7	1389.4	1077.0
32.5°	1802.3	2351.0	2450.6	2438.9	2374.5	2438.9	2479.7	2365.1	1810.1	1271.6	996.1
35°	1695.5	2305.4	2387.1	2325.1	2282.7	2336.0	2383.9	2328.2	1700.2	1146.0	892.5
37.5°	1591.9	2265.4	2310.9	2234.0	2175.9	2235.6	2340.8	2259.1	1589.5	1046.4	815.6
40°	1465.5	2173.6	2211.2	2106.8	2048.7	2136.7	2233.2	2199.5	1464.7	942.7	741.0
42.5°	1369.8	2105.3	2116.3	1973.4	1904.3	1997.7	2107.6	2114.7	1363.5	849.3	675.1
45°	1243.4	2009.5	1989.1	1832.1	1759.9	1843.9	2008.7	2027.6	1249.7	768.5	610.7
47.5°	1129.6	1902.7	1862.7	1679.0	1598.2	1697.9	1880.8	1930.2	1122.5	693.9	550.3
50°	1011.0	1783.4	1694.7	1536.2	1482.0	1531.5	1718.3	1799.9	1006.3	620.1	503.9
52.5°	902.7	1651.6	1541.7	1399.6	1345.4	1386.2	1547.9	1670.4	890.9	558.1	463.1
55°	800.7	1519.7	1377.6	1252.0	1241.0	1253.6	1375.3	1515.8	795.2	503.2	437.2
57.5°	709.6	1359.6	1230.0	1137.4	1117.8	1128.0	1212.0	1356.4	702.5	448.2	399.5
60°	617.8	1195.5	1084.0	1012.6	1001.6	1009.5	1063.6	1201.0	612.3	401.9	364.2
62.5°	534.6	1030.7	931.7	905.1	897.2	897.2	920.0	1045.6	527.5	354.8	337.5
65°	463.1	889.4	814.8	804.6	806.9	806.2	792.0	872.9	452.1	313.2	314.0
67.5°	390.9	739.4	697.8	710.4	719.8	715.9	686.1	726.1	381.5	275.5	292.8
70°	324.2	610.7	602.9	631.1	653.1	632.7	589.5	593.4	313.2	238.6	265.3
72.5°	261.4	493.7	529.8	569.1	590.3	567.5	507.9	490.6	252.0	204.9	240.2
75°	205.7	397.2	454.5	512.6	540.1	511.0	441.9	383.1	200.2	172.7	219.8
77.5°	157.0	314.8	388.6	456.1	482.8	457.6	384.6	299.1	146.8	145.2	197.8
80°	112.2	248.8	344.6	409.7	434.1	409.7	333.6	236.3	102.0	116.2	174.3
82.5°	73.8	192.3	299.9	372.9	399.5	369.7	289.7	182.1	65.2	94.2	157.0
85°	44.7	152.3	261.4	335.2	365.8	336.7	253.5	138.2	36.1	72.2	136.6
87.5°	19.6	117.7	233.1	309.3	336.7	310.1	226.1	108.3	14.9	56.5	117.0
90°	1.6	93.4	205.7	284.9	309.3	284.2	200.2	87.9	0.0	40.8	100.5
92.5°	1.6	80.1	188.4	263.7	291.2	263.0	180.5	72.2	0.0	29.8	84.8
95°	2.4	67.5	171.1	247.3	269.2	244.9	164.8	62.0	0.0	20.4	71.4
97.5°	2.4	61.2	157.0	230.8	255.1	229.2	150.7	55.7	0.0	14.9	58.1
100°	1.6	56.5	146.0	215.1	237.8	213.5	139.7	50.2	0.0	9.4	47.1
102.5°	1.6	52.6	136.6	201.7	219.8	199.4	130.3	47.1	0.0	7.8	38.5
105°	1.6	50.2	127.9	186.0	207.2	186.0	122.5	44.0	0.0	6.3	29.8
107.5°	1.6	47.1	121.7	177.4	194.7	175.8	116.2	41.6	0.0	6.3	24.3
110°	1.6	44.7	116.2	164.8	184.5	166.4	110.7	37.7	0.0	3.9	19.6



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CATALOG NUMBER: 4MB-6SL-ASML-UNV-L830

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1.6	40.8	110.7	156.2	175.0	157.0	106.0	34.5	0.0	3.9	17.3
115°	1.6	36.9	106.0	150.7	164.8	149.1	101.3	30.6	0.0	3.1	15.7
117.5°	1.6	34.5	102.8	143.6	157.8	142.1	97.3	29.0	0.0	3.1	14.9
120°	1.6	33.0	98.1	136.6	147.6	135.0	92.6	27.5	0.0	3.1	14.1
122.5°	1.6	31.4	94.2	130.3	142.1	129.5	88.7	26.7	0.0	2.4	12.6
125°	1.6	29.8	88.7	123.2	134.2	121.7	81.6	25.9	0.0	1.6	11.0
127.5°	1.6	28.3	83.2	117.7	127.9	116.2	76.9	25.1	0.0	1.6	10.2
130°	1.6	27.5	76.1	110.7	120.9	109.1	71.4	25.1	0.0	1.6	9.4
132.5°	1.6	26.7	68.3	103.6	114.6	102.0	65.9	24.3	0.0	1.6	7.8
135°	1.6	25.9	60.4	96.6	106.8	95.0	61.2	23.5	0.0	1.6	7.1
137.5°	1.6	24.3	53.4	88.7	98.9	87.1	58.1	22.0	0.0	1.6	6.3
140°	1.6	22.8	47.9	82.4	91.1	80.1	53.4	20.4	0.0	0.8	4.7
142.5°	1.6	20.4	43.2	74.6	83.2	73.0	47.9	17.3	0.0	0.8	4.7
145°	1.6	18.1	39.2	65.2	75.4	65.2	44.7	15.7	0.0	0.8	3.9
147.5°	1.6	16.5	35.3	54.9	68.3	59.7	40.0	13.3	0.0	0.8	3.1
150°	1.6	14.9	30.6	46.3	60.4	52.6	36.9	11.8	0.0	0.0	2.4
152.5°	1.6	13.3	26.7	38.5	54.2	47.9	33.0	10.2	0.0	0.0	1.6
155°	2.4	12.6	22.8	33.8	47.1	41.6	27.5	8.6	0.0	0.0	1.6
157.5°	2.4	11.0	18.8	27.5	41.6	36.1	22.0	7.1	0.0	0.0	0.8
160°	2.4	10.2	15.7	21.2	34.5	29.8	18.1	5.5	0.0	0.0	0.8
162.5°	2.4	9.4	13.3	15.7	28.3	23.5	14.1	3.9	0.0	0.0	0.8
165°	2.4	7.8	11.8	11.0	22.0	18.1	11.0	2.4	0.0	0.0	0.0
167.5°	2.4	7.1	9.4	7.8	16.5	13.3	7.8	1.6	0.0	0.0	0.0
170°	2.4	5.5	7.8	5.5	4.7	8.6	4.7	0.8	0.0	0.0	0.0
172.5°	2.4	4.7	6.3	3.9	1.6	4.7	2.4	0.0	0.0	0.0	0.0
175°	2.4	3.9	3.9	2.4	0.8	1.6	0.0	0.0	0.0	0.0	0.0
177.5°	2.4	3.1	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P893713

CATALOG NUMBER: 4MB-6SL-ASML-UNV-L830

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2397.3	2397.3	2397.3	2397.3	2397.3	2397.3
2.5°	2331.3	2305.4	2281.9	2307.0	2325.1	2394.9
5°	2217.5	2190.0	2193.2	2215.9	2276.4	2403.6
7.5°	2099.8	2054.2	2065.2	2128.8	2218.3	2362.7
10°	1960.8	1919.2	1929.4	2025.2	2150.8	2340.0
12.5°	1836.8	1766.9	1826.6	1916.9	2072.3	2327.4
15°	1691.6	1636.6	1668.8	1802.3	1996.9	2269.3
17.5°	1534.6	1492.2	1530.7	1663.3	1904.3	2263.0
20°	1413.7	1354.8	1400.4	1546.4	1789.7	2197.1
22.5°	1277.9	1233.2	1281.1	1415.3	1672.8	2127.2
25°	1166.5	1119.4	1167.2	1300.7	1569.1	2044.8
27.5°	1058.1	1015.0	1058.1	1180.6	1466.3	1978.1
30°	963.1	921.5	965.5	1083.2	1346.2	1878.4
32.5°	874.4	821.1	877.6	991.4	1240.2	1802.3
35°	782.6	742.6	785.0	911.3	1122.5	1695.5
37.5°	706.5	664.9	715.1	823.4	1022.8	1591.9
40°	634.2	597.4	637.4	752.8	938.0	1465.5
42.5°	577.7	540.8	581.7	688.4	852.5	1369.8
45°	522.8	495.3	528.3	617.8	766.1	1243.4
47.5°	482.8	459.2	486.7	566.0	693.9	1129.6
50°	448.2	431.7	451.4	514.1	619.3	1011.0
52.5°	417.6	401.1	423.9	474.1	560.5	902.7
55°	394.1	379.1	396.4	436.4	501.6	800.7
57.5°	368.1	358.7	372.1	396.4	455.3	709.6
60°	349.3	339.1	353.2	372.9	402.7	617.8
62.5°	328.1	322.6	331.3	347.0	362.7	534.6
65°	309.3	301.4	312.4	317.9	316.3	463.1
67.5°	288.9	286.5	292.8	293.6	281.8	390.9
70°	267.7	266.1	274.0	269.2	244.9	324.2
72.5°	250.4	250.4	255.1	245.7	213.5	261.4
75°	231.6	233.1	237.1	226.1	179.8	205.7
77.5°	214.3	215.9	216.6	201.7	150.7	157.0
80°	194.7	193.9	201.7	182.9	122.5	112.2
82.5°	177.4	174.3	179.0	160.1	98.9	73.8
85°	157.8	158.6	161.7	139.7	79.3	44.7
87.5°	142.1	142.1	145.2	123.2	59.7	19.6
90°	123.2	121.7	126.4	104.4	44.7	1.6
92.5°	107.5	107.5	110.7	89.5	33.0	1.6
95°	91.8	92.6	95.0	73.8	25.1	2.4
97.5°	78.5	79.3	82.4	62.8	18.1	2.4
100°	66.7	67.5	69.1	50.2	14.1	1.6
102.5°	55.7	58.1	58.1	41.6	11.0	1.6
105°	47.1	50.2	48.7	33.8	10.2	1.6
107.5°	39.2	42.4	42.4	27.5	10.2	1.6
110°	32.2	36.9	36.1	23.5	7.8	1.6



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CATALOG NUMBER: 4MB-6SL-ASML-UNV-L830

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	27.5	31.4	29.0	20.4	7.8	1.6
115°	23.5	27.5	25.9	18.8	7.1	1.6
117.5°	21.2	23.5	23.5	18.1	7.1	1.6
120°	19.6	22.0	21.2	17.3	7.1	1.6
122.5°	18.1	19.6	19.6	15.7	6.3	1.6
125°	17.3	18.1	18.8	14.1	6.3	1.6
127.5°	16.5	18.1	18.1	13.3	5.5	1.6
130°	14.9	16.5	16.5	12.6	5.5	1.6
132.5°	13.3	14.9	14.9	11.8	5.5	1.6
135°	12.6	14.1	14.1	11.0	5.5	1.6
137.5°	11.8	12.6	12.6	10.2	5.5	1.6
140°	10.2	11.8	11.8	9.4	5.5	1.6
142.5°	9.4	11.0	11.0	8.6	4.7	1.6
145°	8.6	9.4	10.2	7.8	4.7	1.6
147.5°	7.1	8.6	9.4	7.1	4.7	1.6
150°	5.5	7.8	7.8	7.1	4.7	1.6
152.5°	3.9	7.1	7.1	6.3	3.9	1.6
155°	3.1	5.5	6.3	5.5	3.9	2.4
157.5°	2.4	4.7	5.5	5.5	3.9	2.4
160°	1.6	3.9	4.7	4.7	3.1	2.4
162.5°	0.8	3.1	3.9	4.7	3.1	2.4
165°	0.0	2.4	3.1	3.9	3.1	2.4
167.5°	0.0	1.6	2.4	3.1	2.4	2.4
170°	0.0	0.8	1.6	2.4	2.4	2.4
172.5°	0.0	0.0	0.8	1.6	1.6	2.4
175°	0.0	0.0	0.0	0.8	1.6	2.4
177.5°	0.0	0.0	0.0	0.8	1.6	2.4
180°	0.8	0.8	0.8	0.8	0.8	0.8



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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	20.02	21.48	20.47	21.91	22.36	22.28	23.74	22.73	24.17	24.62
	3H	20.84	22.16	21.31	22.60	23.10	23.98	25.30	24.44	25.74	26.24
	4H	21.04	22.29	21.53	22.75	23.26	24.82	26.06	25.30	26.52	27.03
	6H	21.13	22.29	21.64	22.76	23.29	25.69	26.84	26.19	27.32	27.85
	8H	21.14	22.24	21.65	22.74	23.27	26.16	27.26	26.68	27.76	28.30
	12H	21.12	22.18	21.64	22.67	23.23	26.71	27.76	27.23	28.25	28.81
4H	2H	20.45	21.70	20.94	22.16	22.67	22.64	23.89	23.13	24.35	24.86
	3H	21.55	22.60	22.05	23.10	23.64	24.53	25.57	25.03	26.08	26.61
	4H	21.89	22.84	22.41	23.36	23.92	25.50	26.45	26.02	26.96	27.53
	6H	22.08	22.91	22.63	23.46	24.04	26.54	27.37	27.08	27.91	28.50
	8H	22.11	22.89	22.66	23.43	24.03	27.10	27.88	27.65	28.43	29.02
	12H	22.12	22.82	22.69	23.39	23.99	27.76	28.46	28.33	29.04	29.64
8H	4H	22.22	23.00	22.77	23.54	24.14	25.64	26.42	26.19	26.96	27.56
	6H	22.54	23.19	23.12	23.78	24.38	26.81	27.47	27.39	28.05	28.66
	8H	22.63	23.22	23.23	23.82	24.43	27.49	28.08	28.09	28.68	29.29
	12H	22.69	23.21	23.28	23.80	24.48	28.31	28.83	28.90	29.42	30.10
12H	4H	22.30	23.00	22.87	23.57	24.17	25.63	26.33	26.20	26.91	27.51
	6H	22.68	23.27	23.27	23.87	24.48	26.82	27.41	27.42	28.01	28.63
	8H	22.84	23.36	23.43	23.95	24.63	27.56	28.09	28.16	28.67	29.36