

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: CORELITE

Report Number: P937348

Luminaire Tested: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937348
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

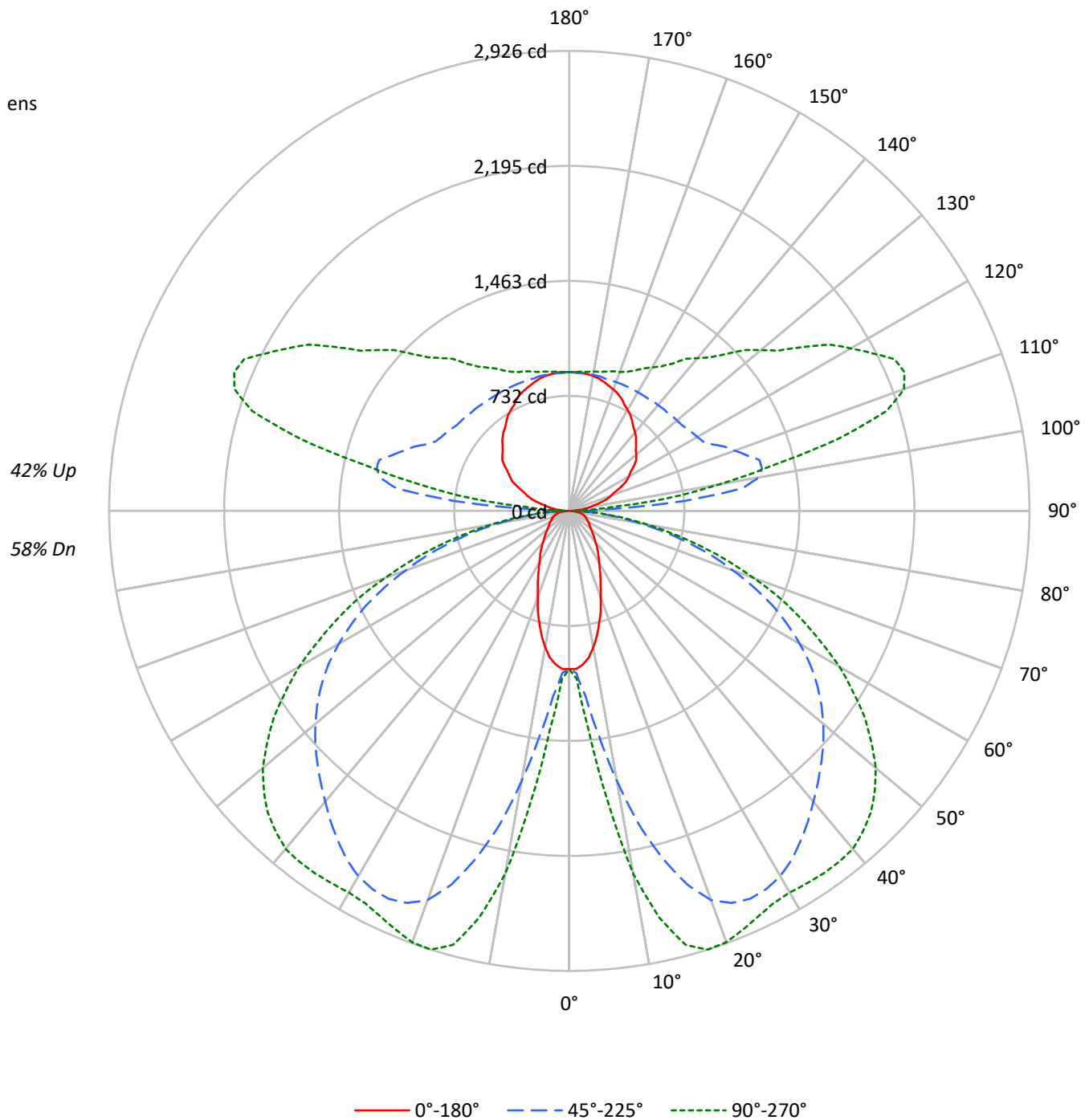
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13515.9 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P937348
CATALOG NUMBER: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-6500K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4670	4670	4670
5°	4562	5397	6277
10°	4138	7868	10407
15°	3517	10279	12565
20°	2863	11912	12806
25°	2389	12465	12546
30°	2014	12543	12522
35°	1781	12335	12846
40°	1552	12065	13180
45°	1406	11866	13232
50°	1289	11688	13013
55°	1235	11427	12436
60°	1263	10925	11525
65°	1315	10162	10274
70°	1401	8862	8679
75°	1552	7226	6773
80°	1697	5011	4564
85°	1504	2659	2337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13232 cd/sqm



TEST NUMBER: P937348

CATALOG NUMBER: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.0
10°-20°	577.0	4.3
20°-30°	1009.3	7.5
30°-40°	1299.3	9.6
40°-50°	1451.3	10.7
50°-60°	1390.0	10.3
60°-70°	1101.6	8.2
70°-80°	647.8	4.8
80°-90°	183.3	1.4
90°-100°	430.6	3.2
100°-110°	1132.0	8.4
110°-120°	1173.7	8.7
120°-130°	941.5	7.0
130°-140°	738.7	5.5
140°-150°	567.0	4.2
150°-160°	408.3	3.0
160°-170°	249.8	1.8
170°-180°	84.4	0.6
0°-30°	1716.5	12.7
0°-40°	3015.8	22.3
0°-60°	5857.0	43.3
0°-90°	7789.7	57.6
90°-120°	2736.3	20.2
90°-150°	4983.6	36.9
90°-180°	5726.0	42.4
0°-180°	13515.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	981	1052	1184	1340	1388	91
15°	735	1356	2285	2770	2858	204
25°	469	1537	2722	2842	2845	216
35°	317	1469	2563	2709	2816	198
45°	217	1172	2265	2596	2712	168
55°	155	744	1922	2233	2295	142
65°	123	395	1427	1605	1628	122
75°	91	243	783	861	864	95
85°	32	74	194	214	217	34
90°	6	17	45	23	23	7
95°	57	223	742	382	260	63
105°	204	309	1252	1900	1772	216
115°	362	440	1002	2000	2282	358
125°	504	565	912	1541	1818	447
135°	600	661	883	1244	1410	465
145°	697	741	872	1061	1144	436
155°	787	809	872	957	985	362
165°	850	861	872	906	918	240
175°	883	883	878	889	889	84
180°	883	883	883	883	883	



TEST NUMBER: P937348

CATALOG NUMBER: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-6500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5
2.5°	1006.5	1006.5	1013.0	1016.2	1022.6	1025.9	1032.4	1038.9	1058.3	1061.6	1068.0
5°	980.6	993.6	1035.7	1051.8	1097.1	1158.6	1184.5	1226.6	1313.9	1339.8	1356.0
7.5°	941.8	970.9	1074.5	1100.4	1213.6	1375.5	1443.4	1534.0	1673.1	1741.1	1796.2
10°	880.3	941.8	1126.2	1187.7	1372.2	1618.2	1744.4	1870.6	2081.0	2174.9	2210.4
12.5°	812.3	912.7	1181.3	1265.4	1530.8	1890.0	2042.1	2181.3	2420.8	2547.0	2566.4
15°	734.6	870.6	1233.0	1356.0	1699.1	2116.5	2284.8	2456.4	2679.7	2770.3	2792.9
17.5°	666.7	838.2	1281.6	1411.1	1828.5	2320.5	2491.9	2634.4	2815.6	2877.1	2893.2
20°	582.5	786.5	1313.9	1482.2	1964.5	2469.4	2634.4	2744.4	2867.4	2906.3	2912.7
22.5°	521.0	731.4	1333.4	1508.1	2055.0	2559.9	2699.1	2786.4	2870.6	2883.6	2886.8
25°	469.3	669.9	1330.2	1537.3	2132.8	2615.0	2721.8	2786.4	2835.0	2841.5	2841.5
27.5°	420.7	601.9	1317.2	1543.8	2191.0	2627.9	2712.1	2757.4	2780.0	2792.9	2792.9
30°	378.7	537.2	1284.8	1530.8	2216.9	2615.0	2682.9	2705.5	2728.2	2747.6	2757.4
32.5°	346.3	475.7	1236.3	1504.9	2220.1	2582.6	2631.2	2644.1	2676.5	2721.8	2738.0
35°	317.2	414.2	1181.3	1469.3	2200.7	2530.9	2563.2	2576.1	2640.8	2708.8	2731.5
37.5°	288.0	368.9	1110.0	1407.8	2171.6	2469.4	2491.9	2514.6	2615.0	2695.9	2721.8
40°	258.9	330.1	1025.9	1339.8	2126.3	2394.9	2414.3	2449.9	2582.6	2676.5	2702.3
42.5°	236.3	297.8	935.3	1268.7	2068.1	2310.7	2339.9	2391.6	2543.8	2644.1	2673.2
45°	216.9	265.3	838.2	1171.5	1993.6	2223.3	2265.4	2336.6	2498.4	2595.6	2621.4
47.5°	197.5	242.7	737.9	1071.2	1912.7	2135.9	2191.0	2271.9	2437.0	2530.9	2553.5
50°	181.2	220.1	637.6	964.4	1825.3	2042.1	2106.9	2191.0	2359.3	2446.7	2475.8
52.5°	168.3	200.6	543.7	857.6	1725.0	1945.0	2019.5	2106.9	2265.4	2349.6	2369.0
55°	155.4	184.4	462.8	744.4	1621.4	1841.4	1922.4	2006.6	2161.9	2233.1	2246.0
57.5°	148.9	171.5	394.8	637.6	1511.4	1725.0	1815.6	1893.3	2038.9	2093.9	2106.9
60°	139.1	161.8	343.1	546.9	1391.6	1614.9	1692.6	1770.3	1893.3	1938.6	1948.2
62.5°	129.5	155.4	304.3	459.5	1268.7	1485.4	1563.2	1634.3	1737.9	1770.3	1783.2
65°	123.0	148.9	275.1	394.8	1142.5	1349.6	1427.2	1488.7	1572.8	1605.3	1611.7
67.5°	116.5	142.4	252.4	339.8	1016.2	1213.6	1271.8	1330.2	1394.9	1427.2	1430.5
70°	106.8	136.0	233.0	301.0	886.8	1058.3	1106.8	1168.3	1220.1	1236.3	1246.0
72.5°	100.3	126.2	220.1	271.8	754.1	909.4	954.8	990.3	1035.7	1051.8	1051.8
75°	90.6	113.3	207.1	242.7	618.2	744.4	783.2	818.8	854.4	860.9	851.2
77.5°	80.9	100.3	178.0	203.9	482.2	589.0	621.3	640.8	669.9	676.4	679.7
80°	68.0	87.4	139.1	158.5	349.5	433.6	456.3	472.6	498.4	498.4	504.9
82.5°	51.8	68.0	100.3	113.3	236.3	297.8	317.2	326.8	343.1	343.1	343.1
85°	32.3	42.1	64.7	74.4	142.4	181.2	194.2	197.5	210.4	213.6	213.6
87.5°	16.2	22.7	42.1	45.3	74.4	93.9	93.9	100.3	100.3	97.1	93.9
90°	5.9	10.7	15.5	16.6	26.1	38.7	45.0	40.1	30.0	22.6	22.6
92.5°	23.7	64.1	104.4	114.5	160.9	222.8	253.8	222.4	159.7	112.6	108.1
95°	56.9	130.7	204.4	222.9	395.8	626.3	741.6	661.8	502.1	382.4	368.8
97.5°	98.4	163.5	228.6	244.9	533.2	917.6	1109.8	1059.3	958.4	882.8	856.9
100°	130.4	189.4	248.5	263.2	583.2	1009.7	1223.0	1226.7	1234.1	1239.6	1208.8
102.5°	157.7	212.8	267.8	281.6	606.0	1038.7	1255.0	1319.3	1447.9	1544.3	1518.0
105°	204.0	250.6	297.2	308.9	623.1	1042.0	1251.5	1395.6	1683.8	1900.0	1885.8
107.5°	251.4	294.9	338.3	349.2	626.2	995.6	1180.3	1381.3	1783.4	2085.0	2088.4
110°	283.4	322.6	361.8	371.7	621.4	954.5	1121.0	1345.7	1795.3	2132.4	2147.1



TEST NUMBER: P937348

CATALOG NUMBER: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-6500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	314.8	352.2	389.6	398.9	621.6	918.6	1067.1	1297.2	1757.2	2102.2	2124.9
115°	362.2	396.7	431.2	439.8	627.4	877.4	1002.5	1224.0	1667.2	1999.6	2031.0
117.5°	409.1	440.4	471.8	479.6	639.1	851.7	958.0	1157.9	1557.9	1857.9	1892.7
120°	436.3	465.8	495.3	502.7	648.5	843.0	940.2	1123.0	1488.4	1762.5	1796.3
122.5°	463.0	492.8	522.6	530.0	662.2	838.4	926.6	1091.1	1420.2	1667.0	1700.4
125°	503.9	531.1	558.1	564.9	680.5	834.7	911.7	1051.5	1331.0	1540.7	1571.5
127.5°	537.1	564.5	591.9	598.8	699.0	832.6	899.3	1019.3	1259.3	1439.4	1465.3
130°	554.9	584.3	613.9	621.2	712.4	833.9	894.6	1001.4	1215.1	1375.4	1399.4
132.5°	573.2	602.8	632.3	639.7	723.3	834.7	890.4	986.0	1177.4	1320.8	1342.3
135°	600.5	627.4	654.3	661.0	735.1	833.9	883.3	963.5	1123.6	1243.7	1262.3
137.5°	628.4	655.0	681.6	688.3	752.9	839.1	882.1	949.8	1085.3	1186.8	1201.9
140°	651.5	676.0	700.5	706.6	763.7	839.9	878.0	936.5	1053.4	1141.2	1155.4
142.5°	669.3	692.0	714.7	720.3	772.9	843.0	878.0	929.3	1032.1	1109.2	1121.3
145°	696.6	716.4	736.1	741.0	784.7	843.0	872.0	914.1	998.2	1061.2	1070.4
147.5°	723.8	743.1	762.4	767.2	802.2	848.7	872.0	905.1	971.2	1020.8	1028.5
150°	741.6	759.0	776.4	780.7	811.1	851.8	872.0	900.0	955.8	997.7	1003.9
152.5°	760.0	773.2	786.4	789.6	817.1	853.7	872.0	895.9	943.6	979.3	984.0
155°	787.2	797.0	806.7	809.2	830.2	858.1	872.0	891.0	928.9	957.4	960.5
157.5°	807.4	816.9	826.3	828.7	843.2	862.4	872.0	886.8	916.3	938.4	940.6
160°	821.1	828.4	835.8	837.6	849.1	864.4	872.0	884.7	910.0	928.9	930.2
162.5°	834.7	840.2	845.8	847.2	855.5	866.5	872.0	882.8	904.1	920.0	921.2
165°	849.5	854.5	859.5	860.8	864.5	869.6	872.0	879.7	895.0	906.5	907.7
167.5°	863.2	865.5	867.9	868.5	871.7	875.9	878.0	882.9	893.0	900.5	901.0
170°	872.0	874.4	876.8	877.4	877.6	877.9	878.0	882.9	893.0	900.5	900.5
172.5°	876.8	877.3	877.9	878.0	878.0	878.0	878.0	881.9	889.8	895.8	895.3
175°	883.3	883.3	883.3	883.3	881.5	879.1	878.0	880.5	885.5	889.3	889.3
177.5°	883.3	883.3	883.3	883.3	881.9	880.1	879.1	881.1	885.1	888.0	887.5
180°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3



TEST NUMBER: P937348

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1006.5	1006.5
2.5°	1074.5	1068.0
5°	1381.9	1388.4
7.5°	1860.8	1857.7
10°	2314.0	2343.2
12.5°	2644.1	2650.6
15°	2844.8	2857.7
17.5°	2922.4	2925.7
20°	2925.7	2919.2
22.5°	2890.1	2883.6
25°	2848.0	2844.8
27.5°	2809.1	2812.4
30°	2792.9	2802.7
32.5°	2792.9	2809.1
35°	2799.4	2815.6
37.5°	2796.2	2815.6
40°	2783.3	2805.9
42.5°	2747.6	2763.9
45°	2692.6	2712.1
47.5°	2621.4	2634.4
50°	2530.9	2543.8
52.5°	2417.5	2420.8
55°	2281.6	2294.6
57.5°	2135.9	2139.2
60°	1974.2	1983.9
62.5°	1802.6	1802.6
65°	1621.4	1627.9
67.5°	1433.7	1449.9
70°	1242.8	1246.0
72.5°	1055.1	1055.1
75°	860.9	864.1
77.5°	676.4	676.4
80°	501.6	504.9
82.5°	346.3	352.7
85°	216.9	216.9
87.5°	100.3	90.6
90°	22.6	22.6
92.5°	90.3	72.3
95°	314.6	260.3
97.5°	753.6	650.3
100°	1085.9	962.8
102.5°	1412.6	1307.2
105°	1829.1	1772.5
107.5°	2102.1	2115.8
110°	2206.2	2265.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2215.4	2306.1
115°	2156.7	2282.3
117.5°	2032.1	2171.5
120°	1931.8	2067.2
122.5°	1834.0	1967.6
125°	1694.6	1817.6
127.5°	1569.1	1673.0
130°	1495.2	1591.1
132.5°	1428.2	1514.0
135°	1336.3	1410.3
137.5°	1262.6	1323.2
140°	1212.1	1268.7
142.5°	1170.1	1218.9
145°	1107.3	1144.2
147.5°	1059.0	1089.6
150°	1028.7	1053.4
152.5°	1002.7	1021.4
155°	972.9	985.3
157.5°	949.3	958.0
160°	935.3	940.2
162.5°	926.0	930.8
165°	912.7	917.7
167.5°	903.1	905.2
170°	900.5	900.5
172.5°	893.5	891.6
175°	889.3	889.3
177.5°	885.4	883.3
180°	883.3	883.3



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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	7.03	8.01	7.91	8.91	10.07	20.21	21.19	21.08	22.09	23.25
	3H	7.74	8.62	8.63	9.54	10.72	22.05	22.94	22.95	23.85	25.03
	4H	8.04	8.88	8.95	9.80	10.99	22.70	23.54	23.61	24.46	25.65
	6H	8.30	9.07	9.22	10.00	11.20	23.14	23.91	24.06	24.84	26.04
	8H	8.37	9.11	9.30	10.05	11.26	23.27	24.00	24.19	24.95	26.15
	12H	8.39	9.10	9.33	10.04	11.26	23.34	24.04	24.27	24.98	26.21
4H	2H	14.26	15.09	15.17	16.01	17.20	20.49	21.33	21.41	22.25	23.44
	3H	15.83	16.54	16.76	17.49	18.69	22.55	23.25	23.47	24.20	25.41
	4H	15.93	16.57	16.87	17.52	18.75	23.32	23.96	24.26	24.91	26.14
	6H	15.95	16.51	16.90	17.48	18.71	23.87	24.42	24.82	25.39	26.62
	8H	15.93	16.45	16.88	17.42	18.66	24.03	24.55	24.99	25.52	26.76
	12H	15.90	16.36	16.87	17.35	18.60	24.13	24.60	25.10	25.58	26.83
8H	4H	17.39	17.91	18.34	18.87	20.12	23.39	23.91	24.34	24.88	26.12
	6H	17.64	18.07	18.61	19.07	20.32	24.03	24.46	25.01	25.46	26.71
	8H	17.66	18.04	18.64	19.03	20.29	24.25	24.63	25.24	25.63	26.89
	12H	17.63	17.97	18.62	18.96	20.26	24.40	24.74	25.39	25.72	27.03
12H	4H	17.54	18.01	18.51	18.99	20.24	23.35	23.82	24.32	24.80	26.05
	6H	17.90	18.28	18.88	19.27	20.53	24.01	24.39	25.00	25.39	26.65
	8H	17.97	18.31	18.96	19.30	20.60	24.25	24.58	25.24	25.57	26.88