

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: P936529

Luminaire Tested: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936529
REPORT IS A COMBINATION OF REPORTS P933432 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

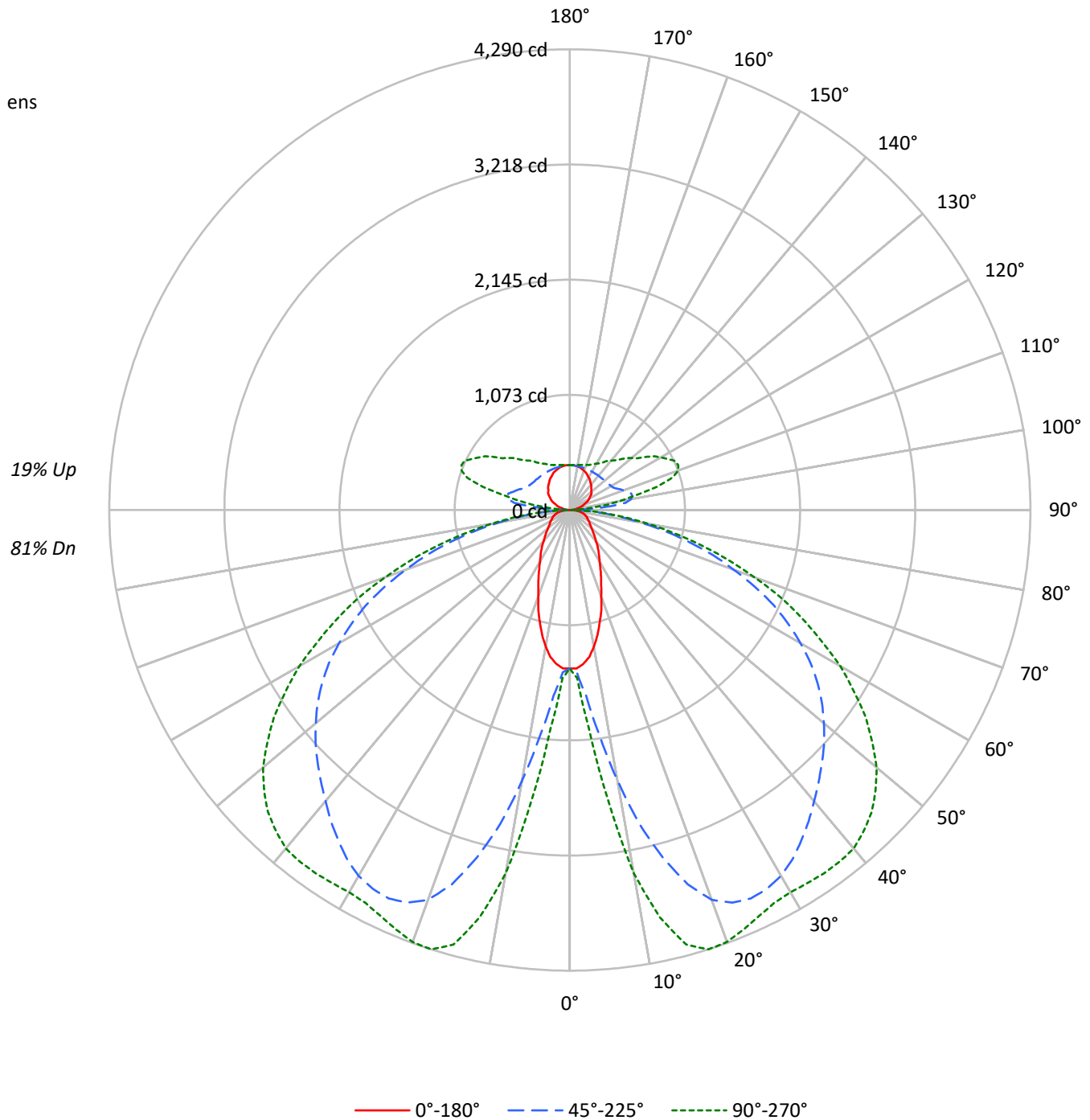
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14130.9 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 148.8
Input Voltage (V): NR
Input Current (A_{in}): 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: P936529
CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P936529

CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

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
RCR																				
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	81	
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	66	
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	54	
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	45	
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	37	
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	32	
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	27	
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	24	
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	21	
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	18	
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	16	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4565	4565	4565
5°	4461	5277	6136
10°	4048	7694	10172
15°	3442	10055	12282
20°	2803	11655	12518
25°	2339	12199	12263
30°	1973	12279	12240
35°	1746	12079	12556
40°	1522	11817	12884
45°	1379	11627	12934
50°	1266	11455	12720
55°	1214	11204	12156
60°	1244	10717	11266
65°	1296	9974	10043
70°	1385	8704	8484
75°	1539	7104	6621
80°	1694	4933	4461
85°	1539	2621	2283

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12934 cd/sqm



TEST NUMBER: P936529

CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.9	1.4
10°-20°	846.1	6.0
20°-30°	1479.9	10.5
30°-40°	1905.1	13.5
40°-50°	2127.9	15.1
50°-60°	2038.0	14.4
60°-70°	1615.1	11.4
70°-80°	949.7	6.7
80°-90°	265.4	1.9
90°-100°	204.0	1.4
100°-110°	536.3	3.8
110°-120°	556.1	3.9
120°-130°	446.0	3.2
130°-140°	350.0	2.5
140°-150°	268.6	1.9
150°-160°	193.5	1.4
160°-170°	118.4	0.8
170°-180°	40.0	0.3
0°-30°	2516.8	17.8
0°-40°	4421.9	31.3
0°-60°	8587.8	60.8
0°-90°	11418.1	80.8
90°-120°	1296.3	9.2
90°-150°	2361.0	16.7
90°-180°	2713.0	19.2
0°-180°	14130.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1438	1542	1737	1965	2036	133
15°	1077	1988	3350	4062	4190	300
25°	688	2254	3991	4166	4171	317
35°	465	2154	3758	3972	4128	290
45°	318	1718	3322	3806	3976	246
55°	228	1091	2819	3274	3364	208
65°	180	579	2093	2354	2387	179
75°	133	356	1148	1262	1267	139
85°	48	109	285	313	318	50
90°	3	8	21	11	11	6
95°	27	106	351	181	123	30
105°	97	146	593	900	840	102
115°	172	208	475	947	1081	169
125°	239	268	432	730	861	212
135°	284	313	418	589	668	220
145°	330	351	413	503	542	207
155°	373	383	413	454	467	171
165°	402	408	413	429	435	114
175°	418	418	416	421	421	40
180°	418	418	418	418	418	



TEST NUMBER: P936529

CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1475.8	1475.8	1475.8	1475.8	1475.8	1475.8	1475.8	1475.8	1475.8	1475.8	1475.8
2.5°	1475.8	1475.8	1485.2	1490.0	1499.5	1504.2	1513.8	1523.2	1551.7	1556.5	1565.9
5°	1437.8	1456.7	1518.4	1542.2	1608.6	1698.8	1736.8	1798.5	1926.5	1964.6	1988.2
7.5°	1380.8	1423.6	1575.4	1613.4	1779.5	2016.7	2116.4	2249.3	2453.3	2553.0	2633.6
10°	1290.7	1380.8	1651.3	1741.5	2012.0	2372.6	2557.6	2742.7	3051.2	3188.7	3241.0
12.5°	1191.1	1338.1	1732.0	1855.4	2244.5	2771.2	2994.2	3198.3	3549.5	3734.5	3762.9
15°	1077.2	1276.4	1807.9	1988.2	2491.3	3103.4	3350.1	3601.6	3929.0	4062.0	4095.1
17.5°	977.5	1229.0	1879.1	2068.9	2681.0	3402.3	3653.9	3862.6	4128.3	4218.5	4242.3
20°	854.1	1153.1	1926.5	2173.3	2880.4	3620.6	3862.6	4023.9	4204.3	4261.2	4270.7
22.5°	763.9	1072.4	1955.0	2211.2	3013.2	3753.5	3957.5	4085.6	4209.0	4228.0	4232.7
25°	688.0	982.3	1950.3	2254.0	3127.1	3834.2	3990.7	4085.6	4156.8	4166.3	4166.3
27.5°	616.9	882.6	1931.3	2263.5	3212.5	3853.1	3976.5	4042.9	4076.2	4095.1	4095.1
30°	555.2	787.7	1883.8	2244.5	3250.4	3834.2	3933.8	3967.0	4000.3	4028.7	4042.9
32.5°	507.7	697.6	1812.7	2206.6	3255.2	3786.7	3857.9	3876.9	3924.3	3990.7	4014.5
35°	465.0	607.4	1732.0	2154.3	3226.8	3710.8	3758.2	3777.2	3872.1	3971.8	4004.9
37.5°	422.3	540.9	1627.6	2064.2	3184.1	3620.6	3653.9	3687.0	3834.2	3952.8	3990.7
40°	379.6	484.0	1504.2	1964.6	3117.6	3511.5	3539.9	3592.2	3786.7	3924.3	3962.2
42.5°	346.4	436.6	1371.4	1860.2	3032.2	3388.1	3430.8	3506.7	3729.8	3876.9	3919.6
45°	317.9	389.1	1229.0	1717.8	2923.0	3260.0	3321.7	3426.1	3663.3	3805.7	3843.6
47.5°	289.5	355.9	1081.9	1570.7	2804.4	3131.8	3212.5	3331.1	3573.2	3710.8	3744.0
50°	265.7	322.7	934.8	1414.1	2676.3	2994.2	3089.1	3212.5	3459.3	3587.4	3630.1
52.5°	246.8	294.2	797.2	1257.5	2529.2	2851.9	2961.1	3089.1	3321.7	3445.0	3473.5
55°	227.8	270.5	678.6	1091.4	2377.3	2700.0	2818.7	2942.1	3169.8	3274.2	3293.2
57.5°	218.3	251.5	579.0	934.8	2216.0	2529.2	2662.0	2776.0	2989.5	3070.1	3089.1
60°	204.0	237.2	503.0	802.0	2040.5	2367.9	2481.7	2595.7	2776.0	2842.3	2856.6
62.5°	189.8	227.8	446.0	673.8	1860.2	2178.1	2291.9	2396.3	2548.2	2595.7	2614.7
65°	180.3	218.3	403.3	579.0	1675.1	1978.8	2092.6	2182.8	2306.2	2353.6	2363.1
67.5°	170.9	208.8	370.1	498.3	1490.0	1779.5	1864.8	1950.3	2045.2	2092.6	2097.4
70°	156.6	199.3	341.6	441.3	1300.2	1551.7	1622.8	1713.0	1788.9	1812.7	1826.9
72.5°	147.1	185.1	322.7	398.6	1105.7	1333.5	1399.8	1452.1	1518.4	1542.2	1542.2
75°	132.8	166.1	303.7	355.9	906.3	1091.4	1148.4	1200.5	1252.7	1262.2	1248.0
77.5°	118.6	147.1	261.0	298.9	707.0	863.7	911.1	939.6	982.3	991.7	996.5
80°	99.6	128.1	204.0	232.6	512.5	635.9	669.1	692.8	730.8	730.8	740.3
82.5°	75.9	99.6	147.1	166.1	346.4	436.6	465.0	479.2	503.0	503.0	503.0
85°	47.5	61.7	94.9	109.2	208.8	265.7	284.7	289.5	308.5	313.2	313.2
87.5°	23.7	33.2	61.7	66.5	109.2	137.6	137.6	147.1	147.1	142.4	137.6
90°	2.8	5.0	7.3	7.9	12.3	18.3	21.3	19.0	14.2	10.7	10.7
92.5°	11.2	30.3	49.4	54.2	76.2	105.5	120.2	105.3	75.6	53.4	51.2
95°	26.9	61.9	96.8	105.6	187.5	296.8	351.4	313.5	237.9	181.1	174.7
97.5°	46.6	77.5	108.3	116.0	252.6	434.7	525.8	501.8	454.1	418.2	405.9
100°	61.8	89.7	117.7	124.7	276.3	478.4	579.4	581.2	584.7	587.3	572.7
102.5°	74.7	100.8	126.8	133.4	287.1	492.1	594.6	625.0	685.9	731.6	719.1
105°	96.6	118.7	140.8	146.3	295.2	493.6	592.9	661.1	797.7	900.1	893.4
107.5°	119.1	139.6	160.3	165.4	296.7	471.7	559.1	654.4	844.9	987.8	989.4
110°	134.2	152.8	171.4	176.1	294.4	452.2	531.1	637.6	850.5	1010.2	1017.2



TEST NUMBER: P936529

CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	149.2	166.8	184.6	189.0	294.5	435.2	505.6	614.6	832.4	995.9	1006.7
115°	171.6	188.0	204.3	208.4	297.2	415.7	474.9	579.9	789.8	947.3	962.2
117.5°	193.8	208.6	223.5	227.2	302.8	403.5	453.9	548.7	738.1	880.2	896.8
120°	206.7	220.7	234.7	238.2	307.2	399.3	445.4	531.9	705.1	835.0	851.0
122.5°	219.4	233.5	247.5	251.1	313.7	397.2	438.9	516.9	672.8	789.7	805.5
125°	238.7	251.6	264.5	267.7	322.5	395.5	431.9	498.1	630.6	729.9	744.5
127.5°	254.4	267.4	280.4	283.7	331.2	394.4	426.0	482.9	596.6	681.9	694.2
130°	262.8	276.9	290.9	294.3	337.5	395.0	423.8	474.5	575.7	651.6	663.0
132.5°	271.6	285.6	299.6	303.0	342.7	395.5	421.8	467.2	557.8	625.8	636.0
135°	284.5	297.2	309.9	313.1	348.3	395.1	418.5	456.4	532.3	589.2	598.0
137.5°	297.7	310.3	322.8	326.0	356.7	397.5	417.9	450.0	514.1	562.2	569.4
140°	308.6	320.2	331.9	334.8	361.8	397.9	415.9	443.6	499.0	540.6	547.4
142.5°	317.1	327.8	338.6	341.3	366.1	399.3	415.9	440.2	488.9	525.5	531.3
145°	330.0	339.4	348.7	351.1	371.7	399.3	413.1	433.0	472.9	502.7	507.1
147.5°	342.9	352.0	361.2	363.4	380.0	402.1	413.1	428.8	460.2	483.6	487.3
150°	351.4	359.6	367.8	369.9	384.3	403.5	413.1	426.4	452.9	472.7	475.6
152.5°	360.0	366.3	372.5	374.1	387.1	404.4	413.1	424.4	447.1	464.0	466.2
155°	372.9	377.5	382.2	383.3	393.2	406.5	413.1	422.1	440.2	453.6	455.1
157.5°	382.5	387.0	391.5	392.7	399.5	408.6	413.1	420.2	434.1	444.5	445.6
160°	389.0	392.5	396.0	396.9	402.3	409.5	413.1	419.1	431.1	440.1	440.6
162.5°	395.5	398.1	400.7	401.4	405.3	410.5	413.1	418.2	428.3	435.9	436.4
165°	402.5	404.8	407.3	407.8	409.6	411.9	413.1	416.8	424.0	429.4	430.0
167.5°	408.9	410.1	411.2	411.5	413.0	414.9	415.9	418.3	423.0	426.6	426.9
170°	413.1	414.3	415.4	415.7	415.8	415.9	415.9	418.3	423.0	426.6	426.6
172.5°	415.4	415.7	415.9	415.9	415.9	415.9	415.9	417.8	421.6	424.4	424.2
175°	418.5	418.5	418.5	418.5	417.6	416.5	415.9	417.2	419.5	421.3	421.3
177.5°	418.5	418.5	418.5	418.5	417.8	417.0	416.5	417.4	419.3	420.7	420.4
180°	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5



TEST NUMBER: P936529

CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1475.8	1475.8
2.5°	1575.4	1565.9
5°	2026.3	2035.7
7.5°	2728.5	2723.7
10°	3392.8	3435.5
12.5°	3876.9	3886.3
15°	4171.0	4190.0
17.5°	4285.0	4289.6
20°	4289.6	4280.2
22.5°	4237.5	4228.0
25°	4175.8	4171.0
27.5°	4118.9	4123.6
30°	4095.1	4109.3
32.5°	4095.1	4118.9
35°	4104.6	4128.3
37.5°	4099.9	4128.3
40°	4080.9	4114.1
42.5°	4028.7	4052.4
45°	3948.0	3976.5
47.5°	3843.6	3862.6
50°	3710.8	3729.8
52.5°	3544.7	3549.5
55°	3345.4	3364.4
57.5°	3131.8	3136.6
60°	2894.6	2908.8
62.5°	2643.1	2643.1
65°	2377.3	2386.9
67.5°	2102.2	2125.9
70°	1822.2	1826.9
72.5°	1546.9	1546.9
75°	1262.2	1267.0
77.5°	991.7	991.7
80°	735.5	740.3
82.5°	507.7	517.3
85°	317.9	317.9
87.5°	147.1	132.8
90°	10.7	10.7
92.5°	42.8	34.3
95°	149.0	123.3
97.5°	357.1	308.1
100°	514.5	456.1
102.5°	669.2	619.2
105°	866.6	839.7
107.5°	995.9	1002.4
110°	1045.2	1073.1



TEST NUMBER: P936529

CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1049.6	1092.5
115°	1021.7	1081.3
117.5°	962.7	1028.7
120°	915.2	979.3
122.5°	868.9	932.2
125°	802.7	861.1
127.5°	743.4	792.5
130°	708.4	753.8
132.5°	676.6	717.3
135°	633.1	668.1
137.5°	598.1	626.9
140°	574.2	601.0
142.5°	554.4	577.5
145°	524.6	542.0
147.5°	501.8	516.2
150°	487.4	499.0
152.5°	475.0	483.9
155°	460.9	466.8
157.5°	449.8	453.9
160°	443.1	445.4
162.5°	438.7	440.9
165°	432.4	434.7
167.5°	427.8	428.8
170°	426.6	426.6
172.5°	423.2	422.4
175°	421.3	421.3
177.5°	419.5	418.5
180°	418.5	418.5



TEST NUMBER: P936529
 CATALOG NUMBER: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-5000K

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	8.71	10.01	9.34	10.66	11.41	21.90	23.20	22.53	23.85	24.60
	3H	9.45	10.62	10.09	11.28	12.07	23.78	24.96	24.42	25.62	26.40
	4H	9.76	10.88	10.43	11.55	12.34	24.45	25.56	25.11	26.23	27.03
	6H	10.04	11.07	10.71	11.75	12.56	24.90	25.93	25.58	26.62	27.43
	8H	10.12	11.10	10.81	11.81	12.62	25.04	26.02	25.73	26.73	27.54
	12H	10.15	11.09	10.85	11.79	12.63	25.13	26.07	25.82	26.76	27.61
4H	2H	15.98	17.10	16.65	17.77	18.56	22.23	23.34	22.89	24.01	24.81
	3H	17.59	18.53	18.27	19.24	20.05	24.32	25.25	25.00	25.96	26.78
	4H	17.70	18.56	18.40	19.27	20.11	25.11	25.96	25.80	26.67	27.51
	6H	17.74	18.48	18.46	19.22	20.07	25.68	26.42	26.39	27.16	28.01
	8H	17.73	18.42	18.45	19.16	20.03	25.85	26.55	26.57	27.28	28.15
	12H	17.71	18.33	18.45	19.09	19.97	25.97	26.60	26.71	27.36	28.23
8H	4H	19.19	19.88	19.91	20.62	21.49	25.20	25.90	25.92	26.63	27.50
	6H	19.45	20.03	20.20	20.81	21.68	25.86	26.44	26.61	27.21	28.08
	8H	19.48	19.99	20.24	20.77	21.66	26.09	26.60	26.85	27.38	28.27
	12H	19.47	19.92	20.23	20.69	21.63	26.26	26.71	27.02	27.48	28.42
12H	4H	19.36	19.98	20.10	20.74	21.61	25.18	25.80	25.92	26.56	27.44
	6H	19.72	20.24	20.48	21.01	21.90	25.85	26.36	26.61	27.14	28.03
	8H	19.81	20.27	20.58	21.03	21.98	26.10	26.56	26.87	27.33	28.27