

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: P937988

Luminaire Tested: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937988
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

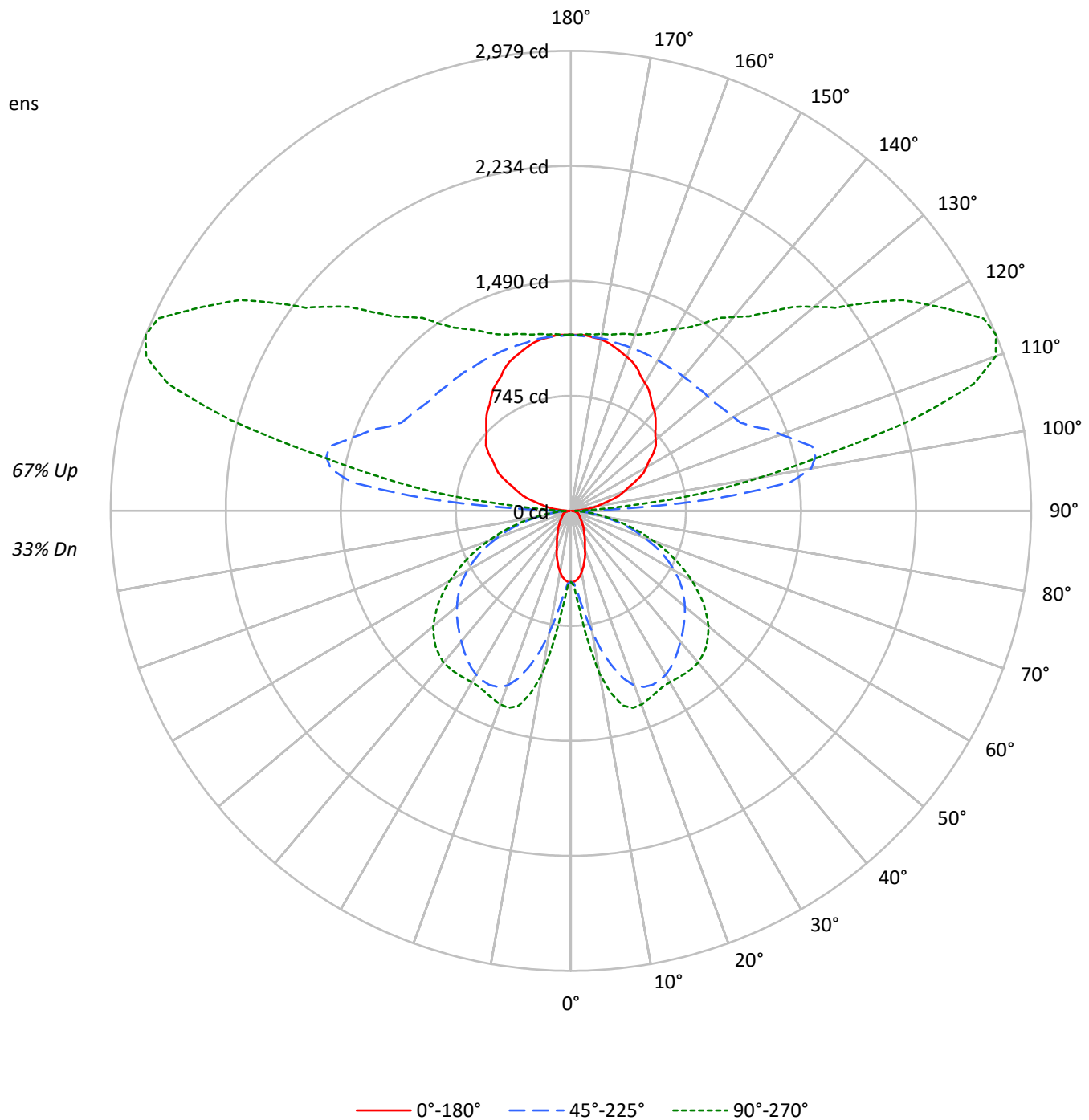
Lumens per Lamp: N/A
Luminaire Lumens: 10959.3 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 83.4
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: P937988

CATALOG NUMBER: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-6-3000K

Luminous Intensity Polar Plot



TEST NUMBER: P937988

CATALOG NUMBER: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-6-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33		
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27		
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22		
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18		
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15		
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13		
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11		
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10		
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8		
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7		
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2846	2846	2846
5°	2779	3288	3825
10°	2520	4792	6341
15°	2140	6259	7657
20°	1742	7251	7804
25°	1453	7586	7645
30°	1224	7633	7631
35°	1082	7504	7828
40°	942	7336	8032
45°	853	7213	8063
50°	781	7102	7930
55°	748	6941	7578
60°	765	6633	7022
65°	794	6166	6260
70°	844	5374	5288
75°	932	4378	4127
80°	1012	3032	2781
85°	882	1605	1423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8063 cd/sqm

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CATALOG NUMBER: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-6-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.5	0.5
10°-20°	263.7	2.4
20°-30°	461.3	4.2
30°-40°	593.8	5.4
40°-50°	663.2	6.1
50°-60°	635.2	5.8
60°-70°	503.4	4.6
70°-80°	296.0	2.7
80°-90°	86.6	0.8
90°-100°	556.2	5.1
100°-110°	1462.2	13.3
110°-120°	1516.1	13.8
120°-130°	1216.1	11.1
130°-140°	954.2	8.7
140°-150°	732.4	6.7
150°-160°	527.5	4.8
160°-170°	322.7	2.9
170°-180°	109.0	1.0
0°-30°	784.5	7.2
0°-40°	1378.3	12.6
0°-60°	2676.8	24.4
0°-90°	3562.8	32.5
90°-120°	3534.5	32.3
90°-150°	6437.3	58.7
90°-180°	7397.0	67.5
0°-180°	10959.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	448	481	541	612	634	41
15°	336	620	1044	1266	1306	93
25°	214	702	1244	1299	1300	99
35°	145	672	1172	1238	1287	90
45°	99	535	1035	1186	1240	77
55°	71	340	878	1020	1049	65
65°	56	180	652	734	744	56
75°	41	111	358	393	395	43
85°	15	34	89	98	99	16
90°	8	21	58	29	29	7
95°	74	288	958	494	336	82
105°	264	399	1616	2454	2290	279
115°	468	568	1295	2583	2948	462
125°	651	730	1178	1990	2348	578
135°	776	854	1141	1607	1822	600
145°	900	957	1126	1371	1478	564
155°	1017	1045	1126	1237	1273	467
165°	1097	1112	1126	1171	1185	310
175°	1141	1141	1134	1149	1149	108
180°	1141	1141	1141	1141	1141	

TEST NUMBER: P937988

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0
2.5°	460.0	460.0	462.9	464.4	467.4	468.8	471.8	474.8	483.6	485.1	488.1
5°	448.1	454.1	473.3	480.7	501.4	529.5	541.3	560.5	600.5	612.3	619.7
7.5°	430.4	443.7	491.0	502.9	554.6	628.6	659.6	701.0	764.6	795.7	820.8
10°	402.3	430.4	514.7	542.8	627.1	739.5	797.2	854.9	951.0	993.9	1010.2
12.5°	371.2	417.1	539.8	578.3	699.6	863.7	933.2	996.8	1106.3	1164.1	1172.9
15°	335.7	397.9	563.5	619.7	776.5	967.3	1044.2	1122.7	1224.7	1266.1	1276.5
17.5°	304.7	383.1	585.7	644.8	835.6	1060.4	1138.9	1204.0	1286.8	1314.9	1322.3
20°	266.2	359.4	600.5	677.4	897.8	1128.6	1204.0	1254.3	1310.5	1328.2	1331.2
22.5°	238.1	334.3	609.3	689.2	939.2	1170.0	1233.6	1273.5	1312.0	1317.9	1319.4
25°	214.5	306.2	607.9	702.5	974.7	1195.1	1243.9	1273.5	1295.7	1298.7	1298.7
27.5°	192.3	275.1	602.0	705.5	1001.3	1201.0	1239.5	1260.2	1270.6	1276.5	1276.5
30°	173.0	245.5	587.2	699.6	1013.1	1195.1	1226.2	1236.5	1246.9	1255.8	1260.2
32.5°	158.3	217.4	565.0	687.7	1014.6	1180.3	1202.5	1208.4	1223.2	1243.9	1251.3
35°	144.9	189.3	539.8	671.5	1005.7	1156.7	1171.5	1177.4	1207.0	1238.0	1248.4
37.5°	131.6	168.6	507.3	643.4	992.4	1128.6	1138.9	1149.3	1195.1	1232.1	1243.9
40°	118.3	150.9	468.8	612.3	971.7	1094.5	1103.3	1119.6	1180.3	1223.2	1235.1
42.5°	108.0	136.1	427.4	579.8	945.1	1056.0	1069.3	1093.0	1162.6	1208.4	1221.8
45°	99.1	121.3	383.1	535.4	911.1	1016.1	1035.3	1067.8	1141.9	1186.3	1198.1
47.5°	90.2	110.9	337.2	489.5	874.1	976.1	1001.3	1038.3	1113.7	1156.7	1167.0
50°	82.8	100.6	291.4	440.7	834.2	933.2	962.8	1001.3	1078.2	1118.1	1131.5
52.5°	76.9	91.7	248.5	391.9	788.3	888.9	922.9	962.8	1035.3	1073.8	1082.6
55°	71.0	84.3	211.5	340.2	741.0	841.6	878.5	917.0	988.0	1020.5	1026.4
57.5°	68.0	78.4	180.4	291.4	690.7	788.3	829.7	865.2	931.8	956.9	962.8
60°	63.6	74.0	156.8	250.0	636.0	738.0	773.5	809.0	865.2	885.9	890.4
62.5°	59.2	71.0	139.0	210.0	579.8	678.9	714.4	746.9	794.2	809.0	814.9
65°	56.2	68.0	125.7	180.4	522.1	616.7	652.2	680.3	718.8	733.6	736.5
67.5°	53.2	65.1	115.4	155.3	464.4	554.6	581.2	607.9	637.4	652.2	653.7
70°	48.8	62.1	106.5	137.5	405.2	483.6	505.8	533.9	557.6	565.0	569.4
72.5°	45.8	57.7	100.6	124.2	344.6	415.6	436.3	452.6	473.3	480.7	480.7
75°	41.4	51.8	94.7	110.9	282.5	340.2	357.9	374.2	390.5	393.4	389.0
77.5°	37.0	45.8	81.3	93.2	220.4	269.2	284.0	292.8	306.2	309.1	310.6
80°	31.1	39.9	63.6	72.5	159.7	198.2	208.5	215.9	227.8	227.8	230.7
82.5°	23.7	31.1	45.8	51.8	108.0	136.1	144.9	149.4	156.8	156.8	156.8
85°	14.8	19.2	29.6	34.0	65.1	82.8	88.7	90.2	96.1	97.6	97.6
87.5°	7.4	10.4	19.2	20.7	34.0	42.9	42.9	45.8	45.8	44.4	42.9
90°	7.7	13.8	19.9	21.4	33.6	50.0	58.2	51.7	38.7	29.1	29.1
92.5°	30.7	82.7	134.8	147.8	207.8	287.7	327.7	287.2	206.3	145.5	139.7
95°	73.6	168.8	264.1	287.9	511.2	809.1	958.0	854.9	648.6	493.9	476.3
97.5°	127.1	211.1	295.2	316.2	688.6	1185.3	1433.5	1368.4	1238.0	1140.2	1106.9
100°	168.5	244.7	320.9	340.0	753.2	1304.3	1579.8	1584.5	1594.1	1601.2	1561.4
102.5°	203.7	274.8	346.0	363.7	782.9	1341.7	1621.1	1704.1	1870.2	1994.8	1960.8
105°	263.5	323.7	383.8	398.9	804.8	1346.0	1616.5	1802.7	2175.0	2454.3	2435.9
107.5°	324.7	380.8	437.0	451.0	808.9	1286.0	1524.7	1784.4	2303.7	2693.2	2697.6
110°	366.0	416.7	467.4	480.1	802.7	1232.9	1448.0	1738.3	2319.0	2754.5	2773.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	406.6	454.9	503.3	515.4	803.0	1186.6	1378.3	1675.4	2269.7	2715.3	2744.6
115°	467.9	512.4	557.1	568.2	810.5	1133.4	1294.9	1581.1	2153.6	2582.9	2623.5
117.5°	528.4	568.9	609.3	619.5	825.5	1100.1	1237.4	1495.8	2012.4	2399.9	2444.9
120°	563.6	601.8	639.8	649.4	837.7	1088.8	1214.5	1450.5	1922.5	2276.6	2320.4
122.5°	598.1	636.6	675.0	684.6	855.4	1083.0	1196.9	1409.5	1834.6	2153.3	2196.4
125°	650.9	686.0	721.0	729.7	879.1	1078.2	1177.8	1358.3	1719.4	1990.2	2030.0
127.5°	693.7	729.1	764.5	773.4	902.9	1075.4	1161.7	1316.7	1626.8	1859.3	1892.8
130°	716.7	754.9	792.9	802.5	920.1	1077.0	1155.5	1293.5	1569.5	1776.6	1807.5
132.5°	740.5	778.6	816.7	826.3	934.2	1078.2	1150.2	1273.7	1520.8	1706.1	1733.8
135°	775.7	810.4	845.1	853.8	949.5	1077.2	1141.0	1244.4	1451.4	1606.6	1630.4
137.5°	811.7	846.1	880.5	889.1	972.5	1083.8	1139.4	1226.9	1401.8	1533.0	1552.6
140°	841.6	873.2	904.9	912.7	986.5	1084.9	1134.1	1209.6	1360.8	1474.1	1492.4
142.5°	864.5	893.8	923.1	930.4	998.3	1088.8	1134.1	1200.5	1333.2	1432.8	1448.5
145°	899.7	925.3	950.8	957.2	1013.6	1088.8	1126.4	1180.7	1289.3	1370.7	1382.7
147.5°	935.0	959.9	984.7	990.9	1036.1	1096.3	1126.4	1169.1	1254.6	1318.7	1328.5
150°	958.0	980.5	1002.9	1008.5	1047.8	1100.2	1126.4	1162.5	1234.7	1288.8	1296.8
152.5°	981.7	998.7	1015.8	1020.0	1055.5	1102.7	1126.4	1157.2	1218.8	1265.0	1271.1
155°	1017.0	1029.6	1042.1	1045.3	1072.3	1108.4	1126.4	1151.0	1200.0	1236.7	1240.8
157.5°	1043.0	1055.2	1067.4	1070.5	1089.1	1114.0	1126.4	1145.4	1183.6	1212.2	1214.9
160°	1060.5	1070.1	1079.7	1082.0	1096.8	1116.5	1126.4	1142.8	1175.4	1200.0	1201.5
162.5°	1078.2	1085.3	1092.5	1094.3	1105.0	1119.3	1126.4	1140.2	1167.7	1188.4	1190.0
165°	1097.3	1103.8	1110.3	1111.9	1116.7	1123.2	1126.4	1136.3	1156.1	1170.9	1172.5
167.5°	1115.0	1118.0	1121.1	1121.9	1125.9	1131.3	1134.1	1140.6	1153.5	1163.2	1163.9
170°	1126.4	1129.5	1132.5	1133.3	1133.6	1133.9	1134.1	1140.6	1153.5	1163.2	1163.2
172.5°	1132.5	1133.2	1133.9	1134.1	1134.1	1134.1	1134.1	1139.2	1149.4	1157.1	1156.5
175°	1141.0	1141.0	1141.0	1141.0	1138.7	1135.7	1134.1	1137.4	1143.9	1148.7	1148.7
177.5°	1141.0	1141.0	1141.0	1141.0	1139.2	1136.8	1135.6	1138.1	1143.3	1147.1	1146.4
180°	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	460.0	460.0
2.5°	491.0	488.1
5°	631.5	634.5
7.5°	850.4	848.9
10°	1057.5	1070.8
12.5°	1208.4	1211.4
15°	1300.1	1306.1
17.5°	1335.6	1337.1
20°	1337.1	1334.2
22.5°	1320.8	1317.9
25°	1301.6	1300.1
27.5°	1283.9	1285.3
30°	1276.5	1280.9
32.5°	1276.5	1283.9
35°	1279.4	1286.8
37.5°	1278.0	1286.8
40°	1272.0	1282.4
42.5°	1255.8	1263.2
45°	1230.6	1239.5
47.5°	1198.1	1204.0
50°	1156.7	1162.6
52.5°	1104.8	1106.3
55°	1042.7	1048.6
57.5°	976.1	977.6
60°	902.2	906.6
62.5°	823.8	823.8
65°	741.0	743.9
67.5°	655.2	662.6
70°	567.9	569.4
72.5°	482.2	482.2
75°	393.4	394.9
77.5°	309.1	309.1
80°	229.2	230.7
82.5°	158.3	161.2
85°	99.1	99.1
87.5°	45.8	41.4
90°	29.1	29.1
92.5°	116.5	93.4
95°	406.2	336.1
97.5°	973.5	840.1
100°	1402.6	1243.6
102.5°	1824.6	1688.5
105°	2362.8	2289.6
107.5°	2715.2	2733.0
110°	2849.7	2926.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2861.7	2978.8
115°	2785.8	2948.1
117.5°	2624.9	2805.0
120°	2495.3	2670.2
122.5°	2369.0	2541.5
125°	2188.9	2347.9
127.5°	2026.9	2161.0
130°	1931.5	2055.3
132.5°	1844.8	1955.7
135°	1726.1	1821.7
137.5°	1630.8	1709.1
140°	1565.6	1638.7
142.5°	1511.4	1574.4
145°	1430.3	1477.9
147.5°	1368.1	1407.5
150°	1328.8	1360.8
152.5°	1295.2	1319.4
155°	1256.8	1272.7
157.5°	1226.2	1237.4
160°	1208.0	1214.5
162.5°	1196.1	1202.2
165°	1179.0	1185.4
167.5°	1166.5	1169.3
170°	1163.2	1163.2
172.5°	1154.1	1151.7
175°	1148.7	1148.7
177.5°	1143.8	1141.0
180°	1141.0	1141.0

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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	2.77	3.52	3.86	4.61	6.11	15.94	16.68	17.02	17.77	19.27
	3H	3.47	4.14	4.56	5.24	6.75	17.76	18.43	18.86	19.53	21.05
	4H	3.76	4.40	4.87	5.50	7.02	18.40	19.03	19.51	20.13	21.66
	6H	4.00	4.59	5.12	5.69	7.23	18.82	19.40	19.93	20.51	22.04
	8H	4.07	4.63	5.19	5.75	7.27	18.93	19.49	20.05	20.61	22.14
	12H	4.08	4.61	5.21	5.73	7.28	18.99	19.52	20.12	20.64	22.19
4H	2H	9.96	10.60	11.08	11.70	13.22	16.20	16.83	17.31	17.93	19.45
	3H	11.52	12.05	12.64	13.18	14.71	18.23	18.76	19.35	19.88	21.42
	4H	11.61	12.10	12.74	13.22	14.77	18.98	19.47	20.11	20.59	22.14
	6H	11.61	12.03	12.75	13.17	14.72	19.51	19.93	20.65	21.07	22.62
	8H	11.59	11.98	12.72	13.11	14.67	19.67	20.06	20.80	21.19	22.76
	12H	11.54	11.89	12.69	13.04	14.61	19.75	20.11	20.90	21.25	22.82
8H	4H	13.04	13.43	14.17	14.57	16.13	19.04	19.43	20.17	20.56	22.12
	6H	13.28	13.60	14.43	14.78	16.34	19.65	19.98	20.81	21.15	22.71
	8H	13.30	13.58	14.45	14.73	16.31	19.87	20.15	21.03	21.31	22.89
	12H	13.26	13.51	14.42	14.66	16.27	20.01	20.26	21.17	21.41	23.02
12H	4H	13.18	13.53	14.33	14.68	16.25	18.98	19.34	20.13	20.48	22.05
	6H	13.53	13.82	14.69	14.97	16.55	19.64	19.92	20.80	21.07	22.65
	8H	13.60	13.85	14.76	15.00	16.61	19.86	20.11	21.02	21.26	22.87