

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: P937321

Luminaire Tested: SQ4-FB-075U-125D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937321  
REPORT IS A COMBINATION OF REPORTS P933496 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-927-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

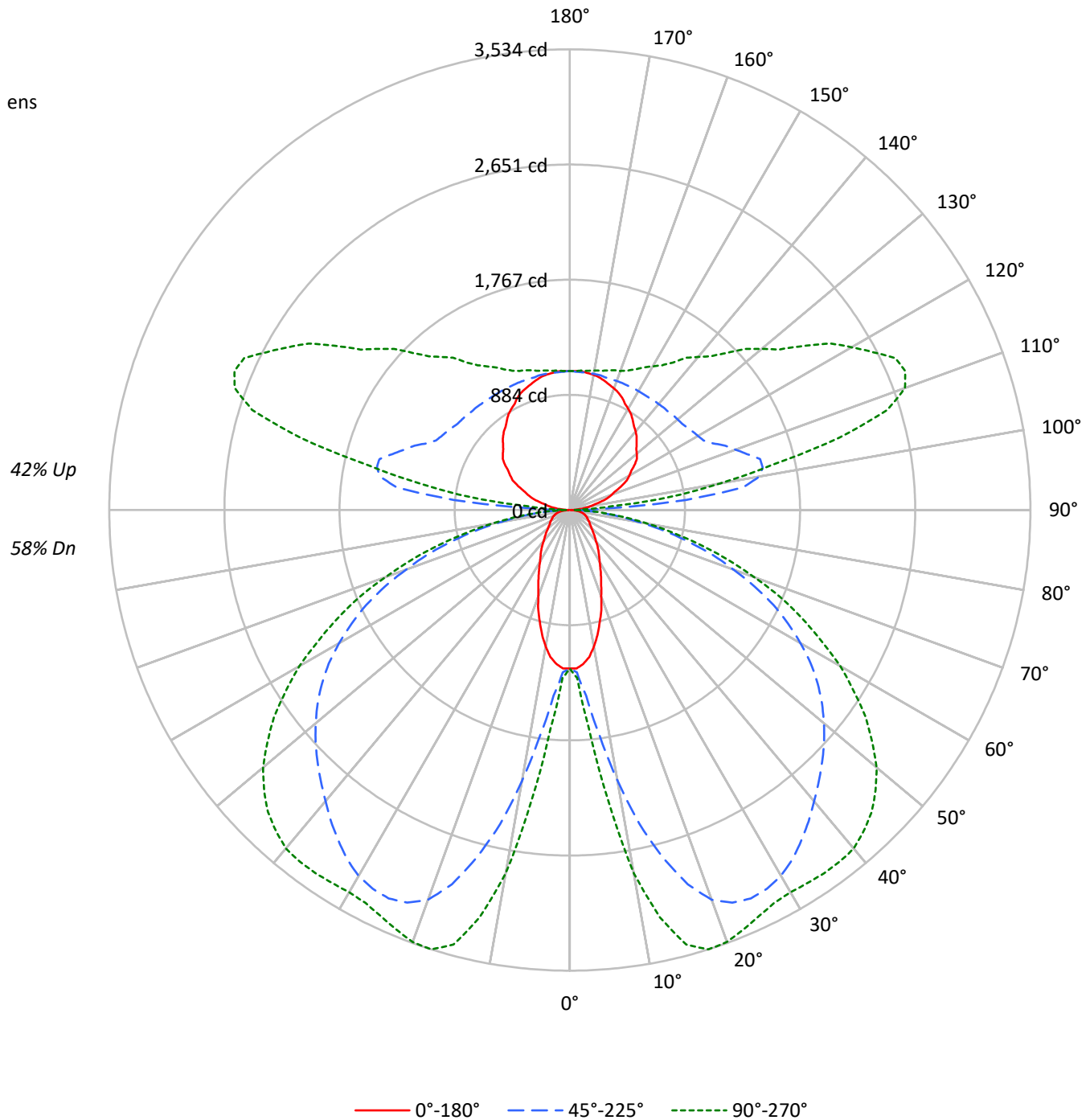
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16325.5 lumens  
Efficiency: N/A  
Efficacy: 87.8 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: General Diffuse

Input Watts (W): 186  
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

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20						20							20		
RC	80					70						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	101	101	101	101	88	88	88	75	75	75	63	63	63	58		
	1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47		
	2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38		
	3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32		
	4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27		
	5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23		
	6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19		
	7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17		
	8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15		
	9	49	36	28	23	46	34	27	22	30	24	20	26	21	17	22	18	15	13		
	10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3761	3761	3761
5°	3675	4347	5054
10°	3335	6339	8379
15°	2835	8283	10118
20°	2309	9601	10312
25°	1927	10049	10102
30°	1626	10116	10083
35°	1438	9950	10344
40°	1254	9735	10614
45°	1136	9578	10655
50°	1043	9437	10479
55°	1000	9230	10014
60°	1025	8828	9280
65°	1068	8217	8273
70°	1141	7171	6989
75°	1268	5852	5454
80°	1396	4063	3675
85°	1267	2159	1881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10655 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.3	1.0
10°-20°	697.0	4.3
20°-30°	1219.1	7.5
30°-40°	1569.4	9.6
40°-50°	1752.9	10.7
50°-60°	1678.9	10.3
60°-70°	1330.5	8.1
70°-80°	782.4	4.8
80°-90°	221.4	1.4
90°-100°	520.1	3.2
100°-110°	1367.3	8.4
110°-120°	1417.8	8.7
120°-130°	1137.2	7.0
130°-140°	892.3	5.5
140°-150°	684.9	4.2
150°-160°	493.2	3.0
160°-170°	301.8	1.8
170°-180°	102.0	0.6
0°-30°	2073.3	12.7
0°-40°	3642.7	22.3
0°-60°	7074.5	43.3
0°-90°	9408.8	57.6
90°-120°	3305.2	20.2
90°-150°	6019.7	36.9
90°-180°	6917.0	42.4
0°-180°	16325.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1184	1270	1431	1618	1677	109
15°	887	1638	2760	3346	3452	247
25°	567	1857	3288	3432	3436	261
35°	383	1775	3096	3272	3401	239
45°	262	1415	2736	3135	3276	203
55°	188	899	2322	2697	2772	171
65°	148	477	1724	1939	1966	147
75°	109	293	946	1040	1044	115
85°	39	90	234	258	262	41
90°	7	20	54	27	27	9
95°	69	269	896	462	314	76
105°	246	373	1512	2295	2141	261
115°	438	531	1211	2415	2757	432
125°	609	682	1101	1861	2196	540
135°	725	798	1067	1502	1704	561
145°	841	895	1053	1282	1382	527
155°	951	977	1053	1156	1190	437
165°	1026	1040	1053	1095	1108	290
175°	1067	1067	1060	1074	1074	101
180°	1067	1067	1067	1067	1067	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8
2.5°	1215.8	1215.8	1223.5	1227.5	1235.2	1239.2	1247.0	1254.8	1278.3	1282.2	1290.0
5°	1184.4	1200.0	1250.9	1270.4	1325.2	1399.5	1430.7	1481.6	1587.0	1618.4	1637.9
7.5°	1137.5	1172.7	1297.8	1329.1	1465.9	1661.4	1743.4	1852.9	2021.0	2103.1	2169.6
10°	1063.3	1137.5	1360.4	1434.6	1657.4	1954.5	2107.0	2259.4	2513.5	2626.9	2669.9
12.5°	981.2	1102.3	1426.8	1528.4	1849.0	2282.9	2466.6	2634.7	2924.0	3076.5	3099.9
15°	887.3	1051.5	1489.3	1637.9	2052.3	2556.6	2759.8	2967.0	3236.7	3346.2	3373.5
17.5°	805.3	1012.5	1548.0	1704.3	2208.6	2802.8	3010.0	3181.9	3400.9	3475.2	3494.7
20°	703.6	949.9	1587.0	1790.3	2372.8	2982.6	3181.9	3314.8	3463.5	3510.4	3518.1
22.5°	629.3	883.4	1610.5	1821.6	2482.2	3092.1	3260.2	3365.7	3467.3	3482.9	3486.9
25°	566.8	809.2	1606.6	1856.8	2576.0	3158.5	3287.5	3365.7	3424.3	3432.1	3432.1
27.5°	508.2	727.1	1591.0	1864.6	2646.4	3174.2	3275.8	3330.5	3357.9	3373.5	3373.5
30°	457.4	648.9	1551.9	1849.0	2677.7	3158.5	3240.6	3268.0	3295.4	3318.8	3330.5
32.5°	418.3	574.7	1493.3	1817.7	2681.6	3119.4	3178.1	3193.7	3232.8	3287.5	3307.1
35°	383.1	500.3	1426.8	1774.7	2658.2	3056.9	3095.9	3111.6	3189.8	3271.9	3299.2
37.5°	347.9	445.6	1340.8	1700.5	2623.0	2982.6	3010.0	3037.3	3158.5	3256.3	3287.5
40°	312.7	398.7	1239.2	1618.4	2568.3	2892.7	2916.1	2959.2	3119.4	3232.8	3264.0
42.5°	285.4	359.7	1129.7	1532.4	2497.9	2791.1	2826.3	2888.8	3072.5	3193.7	3228.9
45°	261.9	320.6	1012.5	1415.1	2407.9	2685.5	2736.3	2822.4	3017.8	3135.1	3166.3
47.5°	238.5	293.2	891.3	1293.9	2310.2	2580.0	2646.4	2744.1	2943.6	3056.9	3084.2
50°	218.9	265.8	770.1	1164.9	2204.7	2466.6	2544.8	2646.4	2849.7	2955.3	2990.4
52.5°	203.3	242.4	656.7	1035.9	2083.5	2349.3	2439.3	2544.8	2736.3	2838.0	2861.4
55°	187.6	222.8	559.0	899.1	1958.4	2224.2	2322.0	2423.7	2611.2	2697.2	2712.9
57.5°	179.8	207.2	476.9	770.1	1825.5	2083.5	2193.0	2286.8	2462.7	2529.1	2544.8
60°	168.1	195.4	414.3	660.7	1680.9	1950.6	2044.4	2138.3	2286.8	2341.5	2353.3
62.5°	156.4	187.6	367.4	555.1	1532.4	1794.3	1888.0	1974.0	2099.2	2138.3	2153.9
65°	148.5	179.8	332.3	476.9	1379.9	1630.1	1723.9	1798.2	1899.8	1938.9	1946.7
67.5°	140.8	172.0	304.9	410.5	1227.5	1465.9	1536.2	1606.6	1684.8	1723.9	1727.8
70°	129.0	164.2	281.4	363.5	1071.1	1278.3	1336.9	1411.2	1473.7	1493.3	1505.0
72.5°	121.2	152.5	265.8	328.3	910.8	1098.5	1153.2	1196.2	1250.9	1270.4	1270.4
75°	109.4	136.8	250.2	293.2	746.6	899.1	946.0	989.0	1032.0	1039.8	1028.1
77.5°	97.7	121.2	215.0	246.2	582.4	711.5	750.5	774.0	809.2	817.0	820.9
80°	82.1	105.6	168.1	191.6	422.2	523.8	551.2	570.7	602.0	602.0	609.8
82.5°	62.5	82.1	121.2	136.8	285.4	359.7	383.1	394.8	414.3	414.3	414.3
85°	39.1	50.8	78.2	89.9	172.0	218.9	234.5	238.5	254.1	258.0	258.0
87.5°	19.6	27.3	50.8	54.7	89.9	113.3	113.3	121.2	121.2	117.3	113.3
90°	7.2	12.9	18.6	20.0	31.5	46.8	54.4	48.4	36.3	27.2	27.2
92.5°	28.6	77.3	126.0	138.2	194.3	269.0	306.5	268.6	192.9	136.1	130.7
95°	68.8	157.8	247.0	269.3	478.1	756.6	895.8	799.4	606.5	461.8	445.4
97.5°	118.9	197.5	276.1	295.8	644.0	1108.3	1340.5	1279.5	1157.6	1066.2	1035.0
100°	157.5	228.8	300.1	317.9	704.4	1219.6	1477.2	1481.7	1490.6	1497.3	1460.2
102.5°	190.5	257.0	323.5	340.1	732.0	1254.6	1516.0	1593.6	1748.9	1865.4	1833.6
105°	246.3	302.7	359.0	373.1	752.6	1258.6	1511.7	1685.8	2034.0	2295.1	2278.0
107.5°	303.6	356.1	408.6	421.8	756.4	1202.7	1425.7	1668.6	2154.2	2518.4	2522.6
110°	342.3	389.7	437.1	449.0	750.7	1153.0	1354.1	1625.6	2168.6	2575.7	2593.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	380.2	425.4	470.6	481.9	751.0	1109.6	1289.0	1566.8	2122.5	2539.2	2566.6
115°	437.5	479.2	520.9	531.3	757.8	1059.9	1210.9	1478.6	2013.9	2415.3	2453.3
117.5°	494.1	532.0	569.8	579.3	771.9	1028.7	1157.2	1398.7	1881.8	2244.2	2286.3
120°	527.1	562.7	598.3	607.2	783.4	1018.2	1135.7	1356.4	1797.8	2128.9	2169.8
122.5°	559.3	595.2	631.2	640.2	799.9	1012.8	1119.2	1317.9	1715.5	2013.6	2054.0
125°	608.7	641.5	674.3	682.5	822.1	1008.2	1101.3	1270.2	1607.8	1861.1	1898.3
127.5°	648.8	681.9	715.0	723.3	844.3	1005.6	1086.3	1231.3	1521.2	1738.7	1770.0
130°	670.3	705.9	741.5	750.4	860.5	1007.2	1080.5	1209.6	1467.7	1661.3	1690.2
132.5°	692.5	728.1	763.7	772.6	873.6	1008.2	1075.5	1191.0	1422.1	1595.4	1621.4
135°	725.4	757.8	790.3	798.4	888.0	1007.3	1067.0	1163.7	1357.2	1502.3	1524.7
137.5°	759.1	791.2	823.4	831.4	909.4	1013.5	1065.5	1147.3	1310.9	1433.6	1451.9
140°	786.9	816.5	846.2	853.5	922.5	1014.6	1060.5	1131.2	1272.5	1378.5	1395.5
142.5°	808.4	835.8	863.2	870.0	933.5	1018.2	1060.5	1122.6	1246.7	1339.8	1354.5
145°	841.4	865.2	889.1	895.1	947.9	1018.2	1053.4	1104.1	1205.7	1281.8	1293.0
147.5°	874.3	897.6	920.8	926.6	968.9	1025.2	1053.4	1093.3	1173.2	1233.1	1242.3
150°	895.8	916.8	937.9	943.1	979.8	1028.9	1053.4	1087.1	1154.5	1205.1	1212.6
152.5°	918.0	933.9	949.8	953.8	987.0	1031.3	1053.4	1082.2	1139.8	1183.0	1188.6
155°	951.0	962.7	974.5	977.4	1002.8	1036.5	1053.4	1076.3	1122.1	1156.5	1160.2
157.5°	975.3	986.8	998.2	1001.1	1018.5	1041.7	1053.4	1071.1	1106.8	1133.5	1136.1
160°	991.8	1000.7	1009.6	1011.9	1025.7	1044.1	1053.4	1068.6	1099.2	1122.1	1123.7
162.5°	1008.2	1014.9	1021.6	1023.3	1033.3	1046.7	1053.4	1066.2	1092.0	1111.3	1112.8
165°	1026.2	1032.2	1038.2	1039.7	1044.3	1050.4	1053.4	1062.6	1081.0	1094.9	1096.4
167.5°	1042.6	1045.4	1048.4	1049.0	1052.9	1058.0	1060.5	1066.5	1078.6	1087.7	1088.3
170°	1053.4	1056.2	1059.1	1059.8	1060.1	1060.4	1060.5	1066.5	1078.6	1087.7	1087.7
172.5°	1059.1	1059.7	1060.4	1060.5	1060.5	1060.5	1060.5	1065.3	1074.8	1082.0	1081.5
175°	1067.0	1067.0	1067.0	1067.0	1064.8	1062.0	1060.5	1063.5	1069.6	1074.2	1074.2
177.5°	1067.0	1067.0	1067.0	1067.0	1065.3	1063.1	1062.0	1064.4	1069.1	1072.7	1072.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1215.8	1215.8
2.5°	1297.8	1290.0
5°	1669.2	1677.0
7.5°	2247.7	2243.8
10°	2794.9	2830.1
12.5°	3193.7	3201.5
15°	3436.0	3451.7
17.5°	3529.9	3533.8
20°	3533.8	3526.0
22.5°	3490.8	3482.9
25°	3440.0	3436.0
27.5°	3393.1	3397.0
30°	3373.5	3385.2
32.5°	3373.5	3393.1
35°	3381.3	3400.9
37.5°	3377.5	3400.9
40°	3361.8	3389.2
42.5°	3318.8	3338.3
45°	3252.3	3275.8
47.5°	3166.3	3181.9
50°	3056.9	3072.5
52.5°	2920.1	2924.0
55°	2755.9	2771.5
57.5°	2580.0	2583.9
60°	2384.5	2396.2
62.5°	2177.3	2177.3
65°	1958.4	1966.3
67.5°	1731.7	1751.3
70°	1501.1	1505.0
72.5°	1274.4	1274.4
75°	1039.8	1043.7
77.5°	817.0	817.0
80°	605.9	609.8
82.5°	418.3	426.1
85°	261.9	261.9
87.5°	121.2	109.4
90°	27.2	27.2
92.5°	109.0	87.4
95°	379.9	314.4
97.5°	910.3	785.6
100°	1311.5	1162.9
102.5°	1706.2	1579.0
105°	2209.5	2141.1
107.5°	2539.2	2555.7
110°	2664.8	2736.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2676.1	2785.6
115°	2605.1	2756.9
117.5°	2454.6	2623.0
120°	2333.4	2497.0
122.5°	2215.3	2376.7
125°	2046.9	2195.5
127.5°	1895.4	2020.8
130°	1806.1	1922.0
132.5°	1725.1	1828.9
135°	1614.2	1703.5
137.5°	1525.1	1598.3
140°	1464.0	1532.4
142.5°	1413.4	1472.2
145°	1337.5	1382.0
147.5°	1279.2	1316.2
150°	1242.5	1272.5
152.5°	1211.2	1233.8
155°	1175.2	1190.1
157.5°	1146.7	1157.2
160°	1129.7	1135.7
162.5°	1118.5	1124.3
165°	1102.4	1108.5
167.5°	1090.9	1093.5
170°	1087.7	1087.7
172.5°	1079.2	1077.0
175°	1074.2	1074.2
177.5°	1069.5	1067.0
180°	1067.0	1067.0



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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	6.28	7.26	7.16	8.17	9.32	19.47	20.45	20.35	21.36	22.51
	3H	6.99	7.88	7.88	8.79	9.97	21.32	22.21	22.22	23.12	24.30
	4H	7.30	8.13	8.20	9.05	10.24	21.98	22.81	22.89	23.74	24.92
	6H	7.55	8.32	8.47	9.25	10.46	22.42	23.19	23.34	24.12	25.32
	8H	7.62	8.36	8.55	9.31	10.51	22.55	23.28	23.47	24.23	25.43
	12H	7.65	8.35	8.58	9.29	10.51	22.62	23.32	23.55	24.26	25.49
4H	2H	13.52	14.35	14.43	15.27	16.46	19.76	20.59	20.67	21.52	22.70
	3H	15.09	15.79	16.02	16.75	17.95	21.82	22.52	22.74	23.47	24.68
	4H	15.19	15.83	16.13	16.78	18.01	22.60	23.24	23.53	24.18	25.41
	6H	15.21	15.77	16.16	16.74	17.97	23.15	23.70	24.10	24.67	25.90
	8H	15.19	15.71	16.14	16.68	17.92	23.32	23.83	24.27	24.80	26.04
	12H	15.15	15.62	16.13	16.61	17.85	23.42	23.89	24.39	24.87	26.12
8H	4H	16.65	17.17	17.60	18.14	19.38	22.67	23.18	23.62	24.15	25.39
	6H	16.90	17.33	17.88	18.34	19.58	23.31	23.74	24.28	24.74	25.98
	8H	16.92	17.30	17.91	18.30	19.56	23.53	23.91	24.52	24.91	26.17
	12H	16.89	17.23	17.89	18.22	19.53	23.68	24.02	24.67	25.01	26.31
12H	4H	16.80	17.27	17.77	18.25	19.50	22.63	23.09	23.60	24.08	25.33
	6H	17.16	17.54	18.15	18.54	19.80	23.29	23.67	24.28	24.67	25.93
	8H	17.24	17.57	18.23	18.56	19.87	23.53	23.86	24.52	24.85	26.16