

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: P937325

Luminaire Tested: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937325
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-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

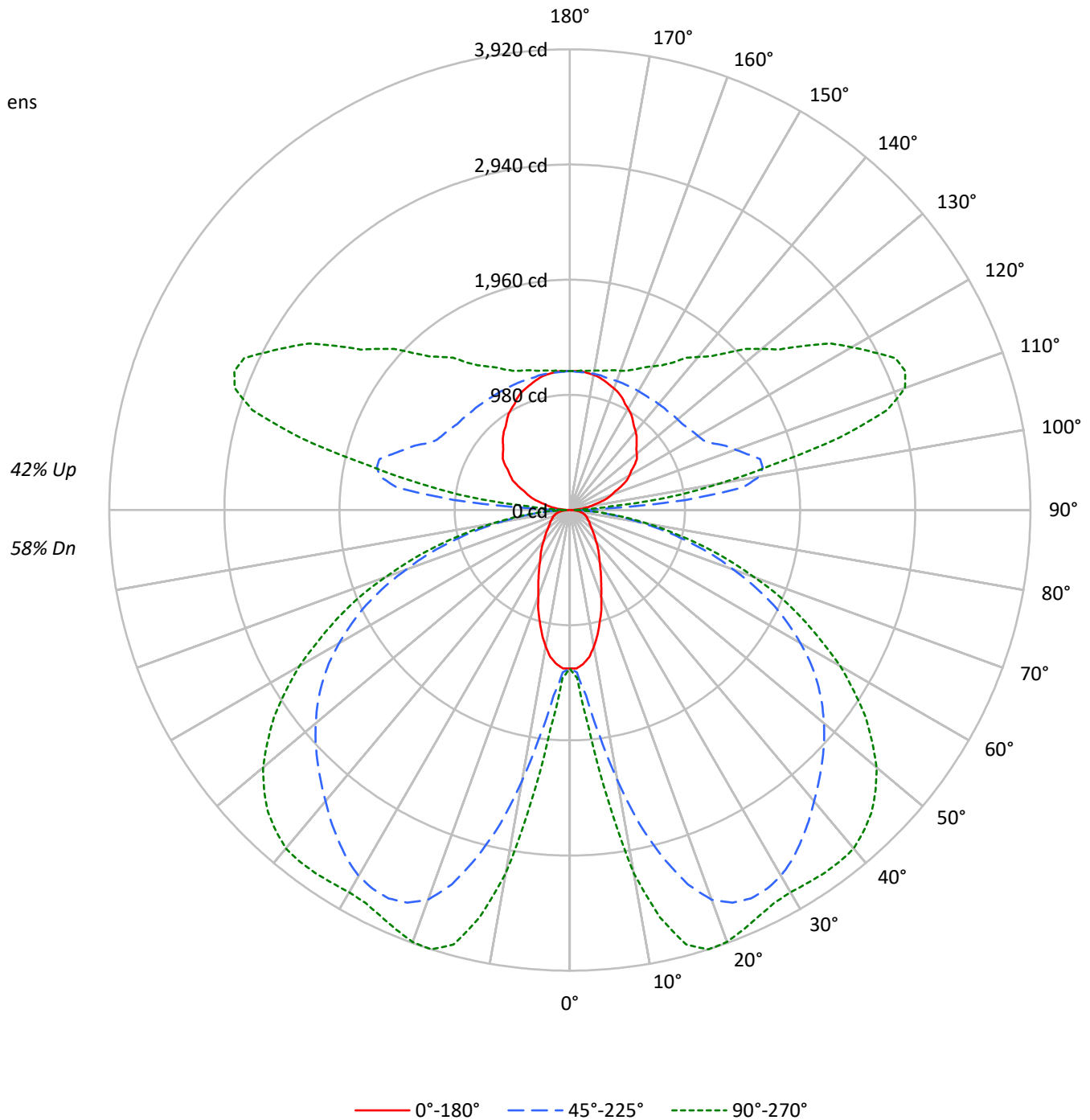
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18109.2 lumens
Efficiency: N/A
Efficacy: 97.4 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 (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

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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	101	101	101	101	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	17	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°	4171	4171	4171
5°	4076	4822	5607
10°	3699	7031	9295
15°	3145	9188	11224
20°	2561	10650	11438
25°	2137	11147	11206
30°	1804	11221	11185
35°	1595	11037	11474
40°	1391	10799	11773
45°	1260	10624	11819
50°	1157	10468	11624
55°	1110	10238	11108
60°	1137	9793	10294
65°	1185	9114	9177
70°	1265	7954	7753
75°	1407	6491	6050
80°	1549	4507	4077
85°	1406	2396	2086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	1.0
10°-20°	773.1	4.3
20°-30°	1352.3	7.5
30°-40°	1740.8	9.6
40°-50°	1944.4	10.7
50°-60°	1862.3	10.3
60°-70°	1475.9	8.1
70°-80°	867.9	4.8
80°-90°	245.6	1.4
90°-100°	576.9	3.2
100°-110°	1516.7	8.4
110°-120°	1572.7	8.7
120°-130°	1261.5	7.0
130°-140°	989.8	5.5
140°-150°	759.7	4.2
150°-160°	547.1	3.0
160°-170°	334.8	1.8
170°-180°	113.1	0.6
0°-30°	2299.9	12.7
0°-40°	4040.7	22.3
0°-60°	7847.5	43.3
0°-90°	10436.8	57.6
90°-120°	3666.4	20.2
90°-150°	6677.4	36.9
90°-180°	7672.0	42.4
0°-180°	18109.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1314	1409	1587	1795	1860	121
15°	984	1817	3061	3712	3829	274
25°	629	2060	3647	3807	3812	290
35°	425	1969	3434	3629	3772	265
45°	290	1570	3035	3478	3634	225
55°	208	997	2576	2992	3074	190
65°	165	529	1912	2151	2181	163
75°	121	325	1049	1153	1158	127
85°	43	100	260	286	290	46
90°	8	22	60	30	30	9
95°	76	299	994	512	349	85
105°	273	414	1677	2546	2375	290
115°	485	589	1343	2679	3058	479
125°	675	757	1222	2064	2435	599
135°	805	886	1184	1666	1890	623
145°	933	993	1168	1422	1533	585
155°	1055	1084	1168	1283	1320	485
165°	1138	1153	1168	1214	1230	321
175°	1184	1184	1176	1192	1192	112
180°	1184	1184	1184	1184	1184	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6
2.5°	1348.6	1348.6	1357.2	1361.6	1370.2	1374.5	1383.3	1391.9	1417.9	1422.3	1430.9
5°	1313.8	1331.2	1387.5	1409.2	1470.0	1552.4	1587.1	1643.4	1760.4	1795.2	1816.8
7.5°	1261.8	1300.8	1439.6	1474.3	1626.1	1842.9	1933.9	2055.4	2241.8	2332.9	2406.6
10°	1179.5	1261.8	1509.0	1591.3	1838.5	2168.0	2337.2	2506.3	2788.1	2913.9	2961.6
12.5°	1088.4	1222.8	1582.7	1695.4	2051.0	2532.3	2736.1	2922.6	3243.5	3412.6	3438.5
15°	984.3	1166.4	1652.1	1816.8	2276.5	2835.9	3061.3	3291.1	3590.3	3711.8	3742.1
17.5°	893.2	1123.1	1717.1	1890.5	2449.9	3109.0	3338.9	3529.6	3772.4	3854.9	3876.5
20°	780.5	1053.7	1760.4	1985.9	2632.1	3308.5	3529.6	3677.0	3841.9	3893.9	3902.5
22.5°	698.1	979.9	1786.5	2020.6	2753.5	3429.9	3616.4	3733.4	3846.1	3863.5	3867.8
25°	628.7	897.6	1782.1	2059.6	2857.5	3503.6	3646.7	3733.4	3798.5	3807.1	3807.1
27.5°	563.7	806.6	1764.8	2068.4	2935.6	3521.0	3633.7	3694.4	3724.8	3742.1	3742.1
30°	507.4	719.8	1721.4	2051.0	2970.2	3503.6	3594.7	3625.0	3655.4	3681.4	3694.4
32.5°	464.0	637.4	1656.4	2016.3	2974.6	3460.2	3525.3	3542.7	3586.0	3646.7	3668.4
35°	424.9	555.0	1582.7	1968.6	2948.6	3390.9	3434.2	3451.6	3538.3	3629.4	3659.7
37.5°	385.9	494.3	1487.3	1886.3	2909.6	3308.5	3338.9	3369.2	3503.6	3612.0	3646.7
40°	346.9	442.3	1374.5	1795.2	2848.9	3208.8	3234.8	3282.5	3460.2	3586.0	3620.6
42.5°	316.5	399.0	1253.2	1699.8	2770.8	3096.0	3135.1	3204.4	3408.2	3542.7	3581.7
45°	290.5	355.6	1123.1	1569.7	2671.0	2978.9	3035.3	3130.7	3347.5	3477.6	3512.3
47.5°	264.5	325.3	988.7	1435.3	2562.6	2861.8	2935.6	3043.9	3265.2	3390.9	3421.2
50°	242.8	294.8	854.2	1292.2	2445.6	2736.1	2822.8	2935.6	3161.0	3278.1	3317.2
52.5°	225.5	268.9	728.5	1149.1	2311.2	2606.0	2705.8	2822.8	3035.3	3148.1	3174.0
55°	208.2	247.2	620.1	997.3	2172.4	2467.2	2575.7	2688.5	2896.5	2991.9	3009.3
57.5°	199.4	229.8	529.0	854.2	2025.0	2311.2	2432.6	2536.7	2731.8	2805.5	2822.8
60°	186.5	216.8	459.6	732.8	1864.6	2163.8	2267.8	2371.9	2536.7	2597.3	2610.4
62.5°	173.5	208.2	407.6	615.7	1699.8	1990.3	2094.3	2189.7	2328.5	2371.9	2389.3
65°	164.8	199.4	368.6	529.0	1530.7	1808.2	1912.2	1994.6	2107.4	2150.7	2159.4
67.5°	156.1	190.8	338.2	455.3	1361.6	1626.1	1704.1	1782.1	1868.9	1912.2	1916.6
70°	143.1	182.1	312.2	403.2	1188.1	1417.9	1482.9	1565.4	1634.7	1656.4	1669.4
72.5°	134.4	169.1	294.8	364.2	1010.3	1218.5	1279.1	1326.9	1387.5	1409.2	1409.2
75°	121.4	151.8	277.5	325.3	828.2	997.3	1049.4	1097.0	1144.7	1153.4	1140.4
77.5°	108.4	134.4	238.5	273.2	646.1	789.2	832.5	858.6	897.6	906.2	910.6
80°	91.1	117.1	186.5	212.5	468.3	581.1	611.4	633.1	667.8	667.8	676.5
82.5°	69.4	91.1	134.4	151.8	316.5	399.0	424.9	437.9	459.6	459.6	459.6
85°	43.4	56.4	86.7	99.8	190.8	242.8	260.2	264.5	281.9	286.2	286.2
87.5°	21.7	30.3	56.4	60.7	99.8	125.7	125.7	134.4	134.4	130.1	125.7
90°	7.9	14.3	20.6	22.2	34.9	51.9	60.4	53.6	40.2	30.2	30.2
92.5°	31.8	85.8	139.8	153.3	215.5	298.4	339.9	297.9	214.0	150.9	144.9
95°	76.3	175.1	274.0	298.7	530.3	839.3	993.7	886.8	672.8	512.3	494.1
97.5°	131.9	219.1	306.3	328.1	714.4	1229.4	1487.0	1419.3	1284.1	1182.7	1148.1
100°	174.8	253.8	332.9	352.7	781.4	1352.9	1638.6	1643.6	1653.5	1660.9	1619.7
102.5°	211.3	285.1	358.8	377.3	812.0	1391.7	1681.6	1767.7	1940.0	2069.2	2033.9
105°	273.2	335.8	398.2	413.8	834.8	1396.2	1676.8	1869.9	2256.2	2545.8	2526.9
107.5°	336.8	395.0	453.3	467.9	839.1	1334.1	1581.5	1850.9	2389.6	2793.6	2798.2
110°	379.7	432.3	484.9	498.0	832.7	1279.0	1502.1	1803.2	2405.5	2857.1	2876.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	421.8	471.9	522.0	534.6	833.0	1230.9	1429.8	1738.0	2354.4	2816.7	2847.0
115°	485.3	531.5	577.8	589.3	840.6	1175.7	1343.2	1640.1	2233.9	2679.2	2721.3
117.5°	548.1	590.1	632.1	642.6	856.3	1141.1	1283.6	1551.5	2087.4	2489.4	2536.1
120°	584.7	624.2	663.7	673.6	869.0	1129.5	1259.8	1504.5	1994.2	2361.5	2406.8
122.5°	620.4	660.2	700.1	710.1	887.3	1123.4	1241.5	1461.9	1902.9	2233.6	2278.4
125°	675.2	711.6	748.0	757.0	911.9	1118.4	1221.7	1409.0	1783.5	2064.4	2105.7
127.5°	719.7	756.4	793.1	802.3	936.6	1115.5	1205.0	1365.8	1687.4	1928.6	1963.4
130°	743.5	783.1	822.5	832.4	954.5	1117.2	1198.6	1341.7	1628.1	1842.8	1874.9
132.5°	768.1	807.7	847.1	857.0	969.0	1118.4	1193.0	1321.2	1577.5	1769.8	1798.5
135°	804.7	840.6	876.7	885.6	985.0	1117.4	1183.6	1290.8	1505.5	1666.5	1691.3
137.5°	842.0	877.6	913.3	922.2	1008.8	1124.2	1181.9	1272.7	1454.2	1590.2	1610.5
140°	872.9	905.7	938.6	946.8	1023.3	1125.4	1176.4	1254.8	1411.5	1529.1	1548.0
142.5°	896.7	927.2	957.5	965.1	1035.5	1129.4	1176.4	1245.2	1382.9	1486.2	1502.5
145°	933.3	959.8	986.3	992.9	1051.4	1129.4	1168.4	1224.7	1337.4	1421.9	1434.3
147.5°	969.9	995.7	1021.5	1027.9	1074.7	1137.2	1168.4	1212.8	1301.3	1367.8	1378.1
150°	993.7	1017.0	1040.3	1046.1	1086.9	1141.3	1168.4	1205.9	1280.7	1336.8	1345.1
152.5°	1018.3	1036.0	1053.6	1058.0	1094.8	1143.9	1168.4	1200.4	1264.3	1312.2	1318.4
155°	1054.8	1067.9	1081.0	1084.2	1112.3	1149.7	1168.4	1193.9	1244.7	1282.8	1287.0
157.5°	1081.8	1094.6	1107.3	1110.5	1129.8	1155.5	1168.4	1188.2	1227.7	1257.4	1260.3
160°	1100.1	1110.0	1119.9	1122.4	1137.8	1158.2	1168.4	1185.4	1219.3	1244.7	1246.4
162.5°	1118.4	1125.8	1133.2	1135.1	1146.2	1161.0	1168.4	1182.7	1211.3	1232.8	1234.4
165°	1138.3	1145.0	1151.6	1153.3	1158.4	1165.1	1168.4	1178.7	1199.1	1214.5	1216.2
167.5°	1156.5	1159.6	1162.9	1163.7	1167.9	1173.6	1176.4	1183.1	1196.5	1206.5	1207.2
170°	1168.4	1171.6	1174.9	1175.6	1175.9	1176.2	1176.4	1183.1	1196.5	1206.5	1206.5
172.5°	1174.8	1175.5	1176.2	1176.4	1176.4	1176.4	1176.4	1181.7	1192.3	1200.2	1199.6
175°	1183.6	1183.6	1183.6	1183.6	1181.2	1178.0	1176.4	1179.7	1186.5	1191.5	1191.5
177.5°	1183.6	1183.6	1183.6	1183.6	1181.7	1179.2	1178.0	1180.7	1186.0	1189.9	1189.2
180°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1348.6	1348.6
2.5°	1439.6	1430.9
5°	1851.6	1860.2
7.5°	2493.3	2488.9
10°	3100.3	3139.3
12.5°	3542.7	3551.3
15°	3811.5	3828.8
17.5°	3915.6	3919.8
20°	3919.8	3911.2
22.5°	3872.2	3863.5
25°	3815.8	3811.5
27.5°	3763.8	3768.2
30°	3742.1	3755.1
32.5°	3742.1	3763.8
35°	3750.7	3772.4
37.5°	3746.5	3772.4
40°	3729.1	3759.4
42.5°	3681.4	3703.1
45°	3607.7	3633.7
47.5°	3512.3	3529.6
50°	3390.9	3408.2
52.5°	3239.1	3243.5
55°	3057.0	3074.3
57.5°	2861.8	2866.2
60°	2645.1	2658.0
62.5°	2415.2	2415.2
65°	2172.4	2181.1
67.5°	1920.9	1942.6
70°	1665.1	1669.4
72.5°	1413.6	1413.6
75°	1153.4	1157.8
77.5°	906.2	906.2
80°	672.1	676.5
82.5°	464.0	472.7
85°	290.5	290.5
87.5°	134.4	121.4
90°	30.2	30.2
92.5°	120.9	96.9
95°	421.4	348.7
97.5°	1009.8	871.4
100°	1454.8	1290.0
102.5°	1892.7	1751.5
105°	2450.9	2375.0
107.5°	2816.6	2834.9
110°	2956.0	3035.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2968.4	3089.9
115°	2889.7	3058.1
117.5°	2722.8	2909.6
120°	2588.3	2769.8
122.5°	2457.3	2636.4
125°	2270.5	2435.4
127.5°	2102.5	2241.6
130°	2003.4	2132.0
132.5°	1913.6	2028.7
135°	1790.5	1889.7
137.5°	1691.7	1772.9
140°	1624.0	1699.8
142.5°	1567.8	1633.1
145°	1483.6	1533.0
147.5°	1419.0	1460.0
150°	1378.3	1411.5
152.5°	1343.5	1368.6
155°	1303.6	1320.1
157.5°	1272.0	1283.6
160°	1253.1	1259.8
162.5°	1240.7	1247.1
165°	1222.9	1229.6
167.5°	1210.1	1212.9
170°	1206.5	1206.5
172.5°	1197.1	1194.7
175°	1191.5	1191.5
177.5°	1186.4	1183.6
180°	1183.6	1183.6



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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	6.64	7.62	7.52	8.53	9.68	19.83	20.81	20.71	21.72	22.87
	3H	7.35	8.24	8.24	9.15	10.33	21.68	22.57	22.58	23.48	24.66
	4H	7.66	8.49	8.56	9.41	10.60	22.34	23.17	23.25	24.10	25.28
	6H	7.91	8.68	8.83	9.61	10.82	22.78	23.55	23.70	24.48	25.68
	8H	7.98	8.72	8.91	9.67	10.87	22.91	23.64	23.83	24.59	25.79
	12H	8.01	8.71	8.94	9.65	10.88	22.98	23.68	23.92	24.62	25.85
4H	2H	13.88	14.71	14.79	15.63	16.82	20.12	20.95	21.03	21.88	23.07
	3H	15.45	16.15	16.38	17.11	18.31	22.18	22.88	23.10	23.83	25.04
	4H	15.55	16.19	16.49	17.14	18.37	22.96	23.60	23.89	24.54	25.77
	6H	15.57	16.13	16.52	17.10	18.33	23.51	24.06	24.46	25.03	26.26
	8H	15.55	16.07	16.50	17.04	18.28	23.68	24.19	24.63	25.16	26.40
	12H	15.51	15.98	16.49	16.97	18.21	23.78	24.25	24.75	25.23	26.48
8H	4H	17.01	17.53	17.96	18.50	19.74	23.03	23.54	23.98	24.51	25.75
	6H	17.26	17.69	18.24	18.70	19.94	23.67	24.10	24.64	25.10	26.34
	8H	17.28	17.66	18.27	18.66	19.92	23.89	24.27	24.88	25.27	26.53
	12H	17.25	17.59	18.25	18.58	19.89	24.04	24.38	25.03	25.37	26.68
12H	4H	17.16	17.63	18.13	18.61	19.86	22.99	23.45	23.96	24.44	25.69
	6H	17.52	17.90	18.51	18.90	20.16	23.65	24.03	24.64	25.03	26.29
	8H	17.60	17.93	18.59	18.92	20.23	23.89	24.22	24.88	25.21	26.52