

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: P938340

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938340  
REPORT IS A COMBINATION OF REPORTS P933638 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

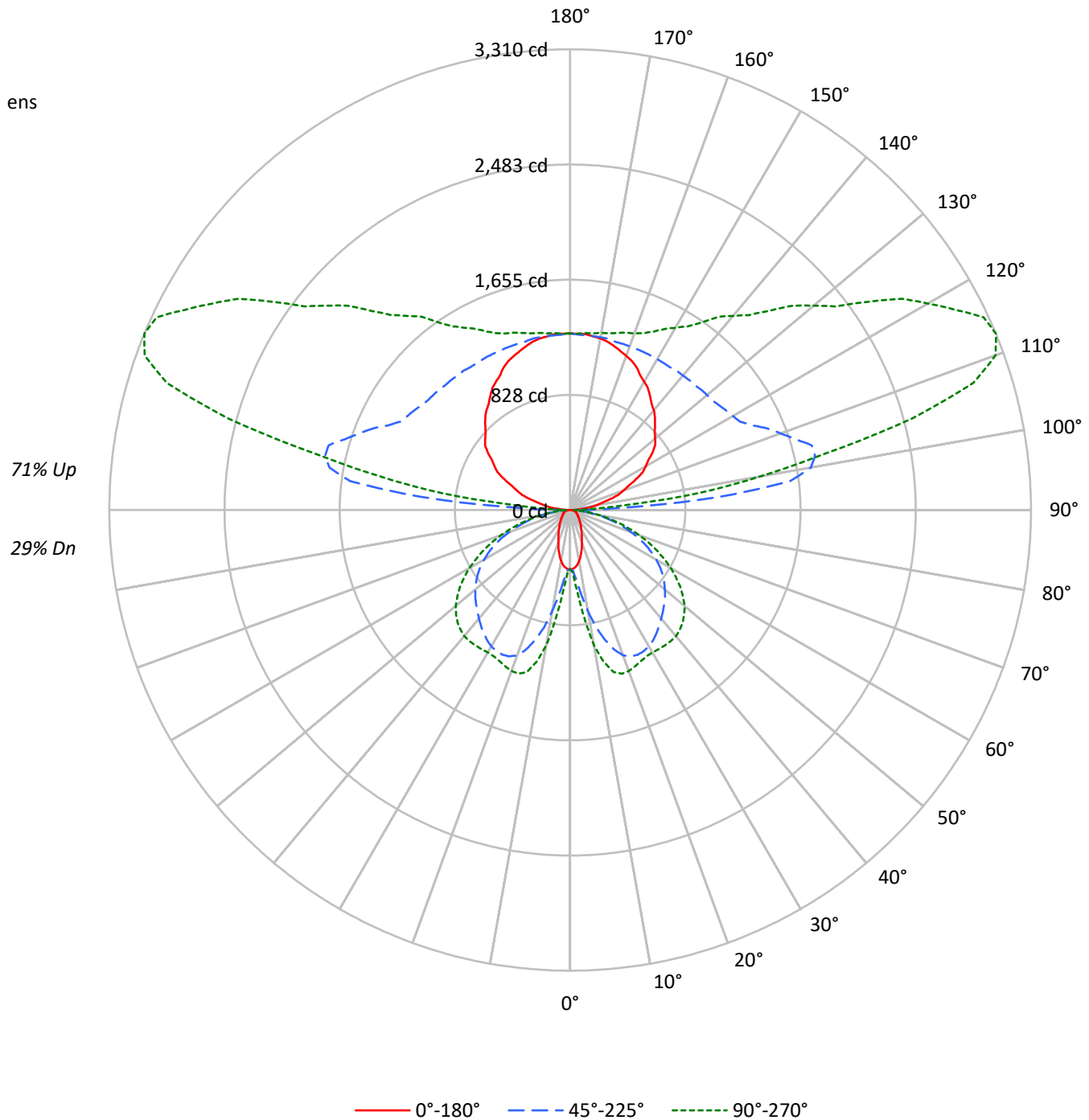
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11507.8 lumens  
Efficiency: N/A  
Efficacy: 120.6 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): 95.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P938340  
CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P938340

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	12	9	8	6

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

	0°	45°	90°
0°	2625	2625	2625
5°	2563	3033	3529
10°	2324	4420	5850
15°	1975	5774	7064
20°	1607	6690	7199
25°	1340	6999	7053
30°	1129	7041	7040
35°	998	6922	7222
40°	870	6768	7410
45°	787	6655	7439
50°	721	6553	7316
55°	690	6404	6991
60°	706	6120	6479
65°	732	5689	5775
70°	778	4958	4879
75°	860	4039	3807
80°	934	2798	2566
85°	811	1482	1313

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7439 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.9	0.5
10°-20°	243.3	2.1
20°-30°	425.6	3.7
30°-40°	547.8	4.8
40°-50°	611.9	5.3
50°-60°	586.0	5.1
60°-70°	464.4	4.0
70°-80°	273.1	2.4
80°-90°	80.7	0.7
90°-100°	618.1	5.4
100°-110°	1625.0	14.1
110°-120°	1685.0	14.6
120°-130°	1351.5	11.7
130°-140°	1060.5	9.2
140°-150°	814.0	7.1
150°-160°	586.2	5.1
160°-170°	358.7	3.1
170°-180°	121.2	1.1
0°-30°	723.7	6.3
0°-40°	1271.6	11.0
0°-60°	2469.5	21.5
0°-90°	3287.7	28.6
90°-120°	3928.1	34.1
90°-150°	7154.1	62.2
90°-180°	8220.0	71.4
0°-180°	11507.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	424	424	424	424	424	
5°	413	443	499	565	585	38
15°	310	572	963	1168	1205	86
25°	198	648	1148	1198	1199	91
35°	134	620	1081	1142	1187	83
45°	91	494	955	1094	1144	71
55°	66	314	810	942	967	60
65°	52	166	602	677	686	51
75°	38	102	330	363	364	40
85°	14	31	82	90	91	14
90°	9	24	65	32	32	8
95°	82	320	1065	549	374	91
105°	293	443	1796	2728	2544	310
115°	520	632	1439	2870	3276	514
125°	723	811	1309	2212	2609	642
135°	862	949	1268	1785	2025	667
145°	1000	1064	1252	1523	1642	626
155°	1130	1162	1252	1374	1414	519
165°	1220	1236	1252	1301	1317	344
175°	1268	1268	1260	1276	1276	120
180°	1268	1268	1268	1268	1268	



TEST NUMBER: P938340

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-400K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3
2.5°	424.3	424.3	427.1	428.4	431.2	432.5	435.3	438.0	446.2	447.5	450.3
5°	413.4	418.9	436.6	443.4	462.6	488.5	499.4	517.1	554.0	564.9	571.7
7.5°	397.1	409.3	453.0	463.9	511.7	579.9	608.5	646.8	705.4	734.1	757.3
10°	371.1	397.1	474.8	500.8	578.5	682.2	735.4	788.7	877.3	916.9	931.9
12.5°	342.5	384.8	498.0	533.5	645.4	796.8	861.0	919.6	1020.6	1073.9	1082.1
15°	309.7	367.0	519.9	571.7	716.3	892.4	963.3	1035.7	1129.9	1168.1	1177.6
17.5°	281.1	353.4	540.3	594.9	770.9	978.3	1050.7	1110.8	1187.2	1213.1	1219.9
20°	245.6	331.6	554.0	624.9	828.2	1041.2	1110.8	1157.1	1209.0	1225.4	1228.1
22.5°	219.7	308.4	562.2	635.8	866.4	1079.4	1138.0	1174.9	1210.4	1215.8	1217.2
25°	197.8	282.4	560.8	648.1	899.2	1102.6	1147.6	1174.9	1195.4	1198.1	1198.1
27.5°	177.4	253.8	555.3	650.8	923.7	1108.0	1143.5	1162.6	1172.2	1177.6	1177.6
30°	159.6	226.5	541.7	645.4	934.7	1102.6	1131.2	1140.8	1150.3	1158.5	1162.6
32.5°	146.0	200.6	521.2	634.5	936.0	1088.9	1109.4	1114.9	1128.5	1147.6	1154.4
35°	133.7	174.7	498.0	619.5	927.8	1067.1	1080.7	1086.2	1113.5	1142.1	1151.7
37.5°	121.4	155.5	468.0	593.5	915.5	1041.2	1050.7	1060.3	1102.6	1136.7	1147.6
40°	109.2	139.2	432.5	564.9	896.4	1009.7	1017.9	1032.9	1088.9	1128.5	1139.4
42.5°	99.6	125.5	394.3	534.9	871.9	974.2	986.5	1008.3	1072.6	1114.9	1127.1
45°	91.4	111.9	353.4	493.9	840.5	937.4	955.1	985.1	1053.5	1094.4	1105.3
47.5°	83.2	102.3	311.1	451.6	806.4	900.5	923.7	957.8	1027.4	1067.1	1076.6
50°	76.4	92.8	268.8	406.6	769.6	861.0	888.3	923.7	994.7	1031.5	1043.9
52.5°	71.0	84.6	229.2	361.6	727.3	820.0	851.4	888.3	955.1	990.6	998.8
55°	65.5	77.8	195.1	313.8	683.6	776.4	810.5	846.0	911.5	941.5	946.9
57.5°	62.8	72.3	166.5	268.8	637.2	727.3	765.5	798.2	859.6	882.8	888.3
60°	58.7	68.2	144.6	230.6	586.7	680.9	713.6	746.4	798.2	817.3	821.4
62.5°	54.6	65.5	128.3	193.8	534.9	626.3	659.0	689.1	732.7	746.4	751.8
65°	51.8	62.8	116.0	166.5	481.7	569.0	601.7	627.6	663.1	676.8	679.5
67.5°	49.1	60.0	106.4	143.3	428.4	511.7	536.2	560.8	588.1	601.7	603.1
70°	45.0	57.3	98.2	126.9	373.9	446.2	466.6	492.6	514.4	521.2	525.3
72.5°	42.3	53.2	92.8	114.6	317.9	383.4	402.5	417.5	436.6	443.4	443.4
75°	38.2	47.8	87.3	102.3	260.6	313.8	330.2	345.2	360.2	362.9	358.9
77.5°	34.1	42.3	75.0	86.0	203.3	248.3	262.0	270.2	282.4	285.2	286.5
80°	28.7	36.8	58.7	66.9	147.4	182.8	192.4	199.2	210.1	210.1	212.9
82.5°	21.8	28.7	42.3	47.8	99.6	125.5	133.7	137.8	144.6	144.6	144.6
85°	13.6	17.7	27.3	31.4	60.0	76.4	81.9	83.2	88.7	90.1	90.1
87.5°	6.8	9.6	17.7	19.1	31.4	39.6	39.6	42.3	42.3	40.9	39.6
90°	8.6	15.4	22.1	23.8	37.5	55.6	64.7	57.5	43.1	32.4	32.4
92.5°	34.0	91.9	149.8	164.3	231.0	319.8	364.2	319.2	229.2	161.7	155.3
95°	81.7	187.6	293.5	320.0	568.3	899.2	1064.6	950.0	720.8	548.9	529.4
97.5°	141.3	234.7	328.1	351.5	765.4	1317.2	1593.1	1520.7	1375.8	1267.2	1230.1
100°	187.2	272.0	356.7	377.9	837.1	1449.5	1755.7	1761.0	1771.6	1779.5	1735.4
102.5°	226.4	305.5	384.5	404.2	870.1	1491.1	1801.6	1893.9	2078.4	2216.9	2179.0
105°	292.7	359.7	426.6	443.4	894.4	1495.8	1796.5	2003.4	2417.2	2727.5	2707.2
107.5°	360.9	423.3	485.7	501.2	898.9	1429.2	1694.4	1983.0	2560.2	2993.1	2998.0
110°	406.8	463.2	519.5	533.6	892.2	1370.2	1609.2	1931.9	2577.2	3061.1	3082.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	451.9	505.6	559.2	572.7	892.4	1318.7	1531.8	1862.0	2522.4	3017.7	3050.3
115°	519.9	569.5	619.1	631.5	900.6	1259.6	1439.0	1757.1	2393.3	2870.5	2915.6
117.5°	587.2	632.2	677.2	688.5	917.5	1222.6	1375.3	1662.4	2236.4	2667.1	2717.1
120°	626.4	668.8	711.2	721.7	931.0	1210.2	1349.7	1612.1	2136.6	2530.1	2578.6
122.5°	664.7	707.4	750.2	760.8	950.6	1203.6	1330.2	1566.4	2038.8	2393.1	2441.0
125°	723.3	762.3	801.3	811.0	977.0	1198.3	1308.9	1509.5	1910.8	2211.8	2255.9
127.5°	771.0	810.3	849.7	859.5	1003.3	1195.1	1291.0	1463.2	1807.8	2066.2	2103.5
130°	796.6	839.0	881.3	891.9	1022.7	1197.1	1284.2	1437.6	1744.3	1974.4	2008.8
132.5°	822.9	865.3	907.7	918.3	1038.3	1198.3	1278.2	1415.5	1690.1	1896.0	1926.9
135°	862.1	900.6	939.3	948.9	1055.3	1197.1	1268.0	1383.0	1613.0	1785.4	1812.0
137.5°	902.1	940.3	978.5	988.0	1080.8	1204.5	1266.3	1363.5	1557.9	1703.8	1725.5
140°	935.3	970.5	1005.6	1014.4	1096.4	1205.7	1260.4	1344.4	1512.3	1638.3	1658.5
142.5°	960.8	993.3	1025.9	1034.0	1109.5	1210.1	1260.4	1334.2	1481.6	1592.2	1609.7
145°	1000.0	1028.3	1056.7	1063.8	1126.5	1210.1	1251.8	1312.2	1432.9	1523.4	1536.6
147.5°	1039.1	1066.7	1094.3	1101.2	1151.4	1218.4	1251.8	1299.3	1394.2	1465.4	1476.4
150°	1064.6	1089.6	1114.5	1120.8	1164.4	1222.7	1251.8	1292.0	1372.1	1432.2	1441.1
152.5°	1091.0	1109.9	1128.9	1133.6	1173.0	1225.6	1251.8	1286.0	1354.5	1405.8	1412.6
155°	1130.1	1144.1	1158.1	1161.6	1191.7	1231.8	1251.8	1279.0	1333.5	1374.4	1378.8
157.5°	1159.1	1172.7	1186.3	1189.7	1210.5	1238.0	1251.8	1273.0	1315.4	1347.2	1350.3
160°	1178.7	1189.3	1199.8	1202.4	1218.9	1240.8	1251.8	1270.0	1306.3	1333.5	1335.3
162.5°	1198.3	1206.2	1214.1	1216.1	1228.0	1243.9	1251.8	1267.1	1297.8	1320.8	1322.5
165°	1219.6	1226.7	1233.8	1235.7	1241.0	1248.2	1251.8	1262.8	1284.8	1301.2	1303.1
167.5°	1239.1	1242.5	1245.9	1246.7	1251.3	1257.4	1260.4	1267.6	1282.0	1292.7	1293.4
170°	1251.8	1255.2	1258.7	1259.5	1259.8	1260.2	1260.4	1267.6	1282.0	1292.7	1292.7
172.5°	1258.7	1259.4	1260.2	1260.4	1260.4	1260.4	1260.4	1266.0	1277.4	1285.9	1285.2
175°	1268.0	1268.0	1268.0	1268.0	1265.5	1262.1	1260.4	1263.9	1271.1	1276.5	1276.5
177.5°	1268.0	1268.0	1268.0	1268.0	1266.0	1263.4	1262.0	1264.9	1270.6	1274.9	1274.1
180°	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	424.3	424.3
2.5°	453.0	450.3
5°	582.6	585.4
7.5°	784.6	783.2
10°	975.6	987.9
12.5°	1114.9	1117.6
15°	1199.4	1204.9
17.5°	1232.2	1233.6
20°	1233.6	1230.8
22.5°	1218.5	1215.8
25°	1200.8	1199.4
27.5°	1184.4	1185.8
30°	1177.6	1181.7
32.5°	1177.6	1184.4
35°	1180.3	1187.2
37.5°	1179.0	1187.2
40°	1173.5	1183.1
42.5°	1158.5	1165.3
45°	1135.3	1143.5
47.5°	1105.3	1110.8
50°	1067.1	1072.6
52.5°	1019.2	1020.6
55°	961.9	967.4
57.5°	900.5	901.9
60°	832.3	836.4
62.5°	760.0	760.0
65°	683.6	686.3
67.5°	604.5	611.3
70°	524.0	525.3
72.5°	444.8	444.8
75°	362.9	364.3
77.5°	285.2	285.2
80°	211.5	212.9
82.5°	146.0	148.7
85°	91.4	91.4
87.5°	42.3	38.2
90°	32.4	32.4
92.5°	129.5	103.8
95°	451.5	373.6
97.5°	1081.8	933.6
100°	1558.8	1382.1
102.5°	2027.8	1876.5
105°	2625.8	2544.5
107.5°	3017.6	3037.3
110°	3167.0	3251.8





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3180.4	3310.4
115°	3095.9	3276.4
117.5°	2917.2	3117.3
120°	2773.1	2967.5
122.5°	2632.8	2824.5
125°	2432.6	2609.2
127.5°	2252.5	2401.6
130°	2146.5	2284.1
132.5°	2050.1	2173.5
135°	1918.3	2024.6
137.5°	1812.5	1899.5
140°	1739.9	1821.2
142.5°	1679.7	1749.7
145°	1589.5	1642.4
147.5°	1520.3	1564.2
150°	1476.7	1512.3
152.5°	1439.4	1466.3
155°	1396.6	1414.4
157.5°	1362.8	1375.3
160°	1342.5	1349.7
162.5°	1329.3	1336.1
165°	1310.2	1317.3
167.5°	1296.5	1299.5
170°	1292.7	1292.7
172.5°	1282.6	1280.0
175°	1276.5	1276.5
177.5°	1271.0	1268.0
180°	1268.0	1268.0



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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	1.97	2.68	3.08	3.80	5.34	15.13	15.85	16.25	16.96	18.51
	3H	2.66	3.30	3.78	4.42	5.98	16.95	17.59	18.08	18.72	20.28
	4H	2.95	3.56	4.09	4.68	6.25	17.59	18.20	18.72	19.32	20.89
	6H	3.19	3.76	4.34	4.88	6.46	18.01	18.57	19.15	19.69	21.27
	8H	3.26	3.79	4.40	4.93	6.50	18.12	18.66	19.27	19.80	21.37
	12H	3.27	3.78	4.42	4.91	6.51	18.18	18.69	19.33	19.82	21.42
4H	2H	9.15	9.76	10.29	10.89	12.45	15.39	16.00	16.53	17.12	18.69
	3H	10.71	11.22	11.86	12.37	13.95	17.41	17.92	18.56	19.07	20.65
	4H	10.80	11.27	11.95	12.40	14.00	18.17	18.64	19.32	19.78	21.38
	6H	10.80	11.20	11.95	12.36	13.95	18.70	19.10	19.85	20.26	21.85
	8H	10.77	11.15	11.93	12.30	13.91	18.85	19.23	20.01	20.38	21.99
	12H	10.72	11.06	11.89	12.23	13.84	18.94	19.28	20.11	20.44	22.05
8H	4H	12.22	12.60	13.38	13.75	15.36	18.22	18.59	19.37	19.75	21.35
	6H	12.46	12.77	13.64	13.97	15.57	18.84	19.15	20.01	20.34	21.94
	8H	12.48	12.75	13.66	13.92	15.54	19.05	19.32	20.23	20.50	22.12
	12H	12.44	12.68	13.62	13.85	15.50	19.19	19.42	20.37	20.59	22.25
12H	4H	12.36	12.70	13.53	13.86	15.48	18.16	18.50	19.34	19.67	21.28
	6H	12.72	12.99	13.90	14.16	15.78	18.82	19.09	20.00	20.26	21.88
	8H	12.78	13.02	13.96	14.19	15.84	19.04	19.28	20.22	20.45	22.10