

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: P937965

Luminaire Tested: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

**Test Information**

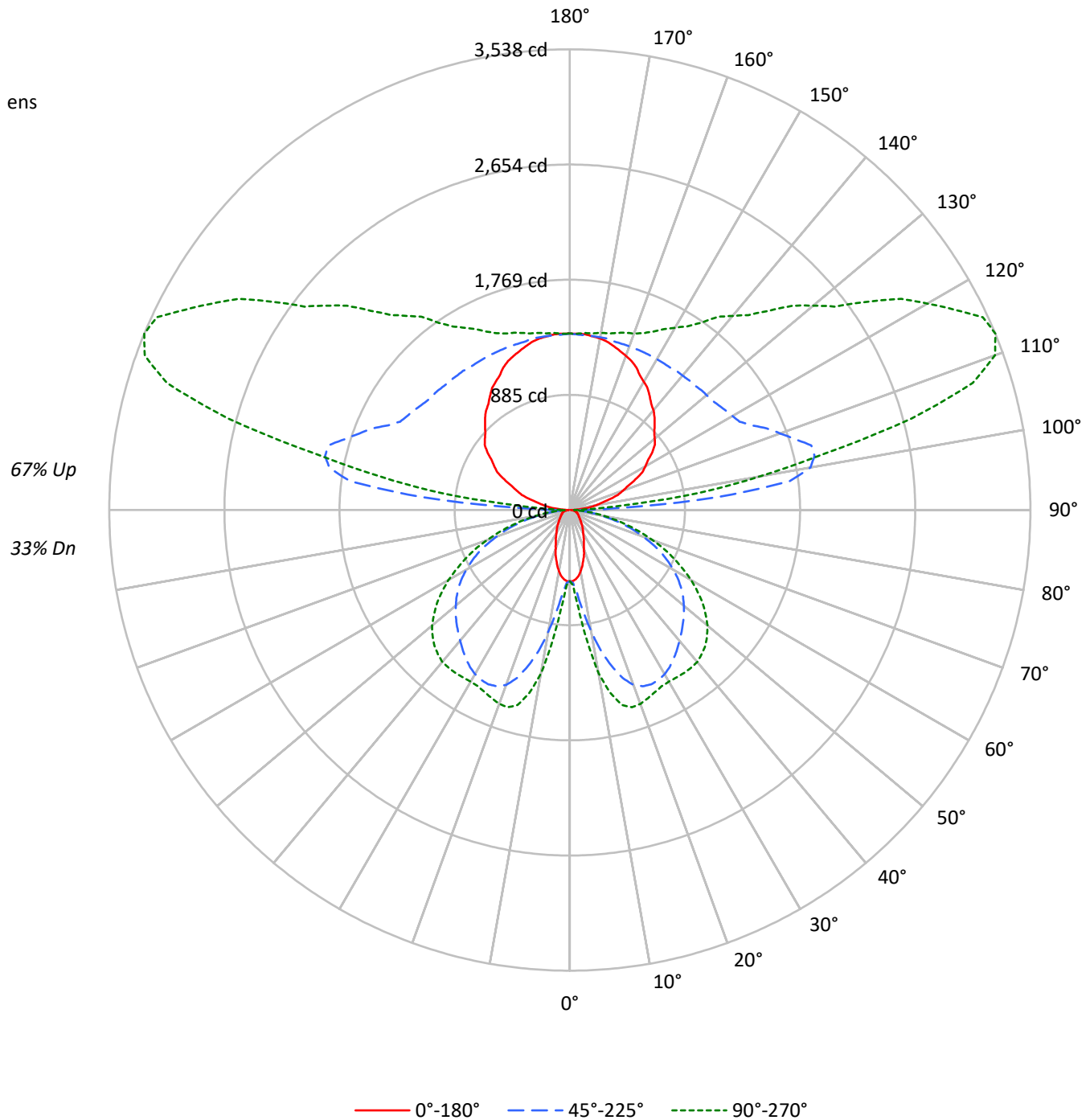
Test Method: LM-79-2019  
Report Number: P937965  
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-8-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13016.4 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 111.2  
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				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	0
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°	2535	2535	2535
5°	2476	2929	3407
10°	2246	4270	5649
15°	1909	5579	6821
20°	1554	6466	6951
25°	1296	6766	6810
30°	1093	6809	6797
35°	966	6696	6973
40°	842	6549	7155
45°	763	6441	7182
50°	700	6344	7064
55°	670	6203	6750
60°	686	5930	6256
65°	714	5516	5577
70°	761	4811	4711
75°	843	3922	3676
80°	921	2720	2477
85°	820	1443	1268

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7182 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.7	0.5
10°-20°	313.2	2.4
20°-30°	547.9	4.2
30°-40°	705.3	5.4
40°-50°	787.7	6.1
50°-60°	754.5	5.8
60°-70°	597.9	4.6
70°-80°	351.6	2.7
80°-90°	102.8	0.8
90°-100°	660.6	5.1
100°-110°	1736.7	13.3
110°-120°	1800.7	13.8
120°-130°	1444.4	11.1
130°-140°	1133.3	8.7
140°-150°	869.9	6.7
150°-160°	626.5	4.8
160°-170°	383.3	2.9
170°-180°	129.5	1.0
0°-30°	931.7	7.2
0°-40°	1637.0	12.6
0°-60°	3179.2	24.4
0°-90°	4231.5	32.5
90°-120°	4198.0	32.3
90°-150°	7645.6	58.7
90°-180°	8785.0	67.5
0°-180°	13016.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	532	571	643	727	754	49
15°	399	736	1240	1504	1551	111
25°	255	834	1477	1542	1544	117
35°	172	798	1391	1470	1528	107
45°	118	636	1230	1409	1472	91
55°	84	404	1044	1212	1246	77
65°	67	214	775	871	884	66
75°	49	132	425	467	469	52
85°	18	40	105	116	118	19
90°	9	26	69	34	34	9
95°	87	342	1138	587	399	97
105°	313	474	1920	2915	2719	332
115°	556	675	1538	3068	3502	549
125°	773	867	1399	2364	2788	686
135°	921	1014	1355	1908	2164	713
145°	1069	1137	1338	1628	1755	669
155°	1208	1242	1338	1469	1512	555
165°	1303	1321	1338	1391	1408	368
175°	1355	1355	1347	1364	1364	129
180°	1355	1355	1355	1355	1355	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	546.3	546.3	549.8	551.6	555.1	556.8	560.4	563.9	574.4	576.2	579.7
5°	532.3	539.3	562.1	570.9	595.5	628.9	642.9	665.8	713.2	727.2	736.0
7.5°	511.2	527.0	583.2	597.2	658.7	746.6	783.4	832.6	908.2	945.1	974.9
10°	477.8	511.2	611.3	644.7	744.8	878.3	946.8	1015.4	1129.6	1180.5	1199.8
12.5°	440.9	495.4	641.2	686.8	830.9	1025.9	1108.5	1184.0	1314.0	1382.5	1393.1
15°	398.7	472.5	669.3	736.0	922.2	1148.9	1240.2	1333.3	1454.6	1503.7	1516.0
17.5°	361.9	455.0	695.6	765.9	992.5	1259.6	1352.7	1430.0	1528.3	1561.7	1570.5
20°	316.2	426.9	713.2	804.5	1066.3	1340.4	1430.0	1489.7	1556.4	1577.5	1581.0
22.5°	282.8	397.0	723.7	818.6	1115.5	1389.6	1465.1	1512.5	1558.2	1565.2	1567.0
25°	254.7	363.6	722.0	834.4	1157.7	1419.4	1477.4	1512.5	1538.9	1542.4	1542.4
27.5°	228.4	326.7	714.9	837.9	1189.3	1426.4	1472.1	1496.7	1509.0	1516.0	1516.0
30°	205.5	291.6	697.4	830.9	1203.4	1419.4	1456.3	1468.6	1480.9	1491.4	1496.7
32.5°	188.0	258.2	671.0	816.8	1205.1	1401.9	1428.2	1435.2	1452.8	1477.4	1486.2
35°	172.1	224.8	641.2	797.5	1194.6	1373.8	1391.3	1398.3	1433.5	1470.4	1482.7
37.5°	156.3	200.3	602.5	764.1	1178.8	1340.4	1352.7	1365.0	1419.4	1463.3	1477.4
40°	140.5	179.2	556.8	727.2	1154.2	1300.0	1310.5	1329.8	1401.9	1452.8	1466.9
42.5°	128.2	161.6	507.7	688.6	1122.6	1254.3	1270.1	1298.2	1380.8	1435.2	1451.0
45°	117.7	144.0	455.0	635.9	1082.2	1206.9	1229.7	1268.4	1356.2	1408.9	1422.9
47.5°	107.2	131.7	400.5	581.4	1038.2	1159.4	1189.3	1233.2	1322.8	1373.8	1386.0
50°	98.4	119.4	346.1	523.5	990.7	1108.5	1143.6	1189.3	1280.7	1328.1	1343.9
52.5°	91.3	108.9	295.1	465.5	936.3	1055.8	1096.2	1143.6	1229.7	1275.4	1285.9
55°	84.3	100.1	251.2	404.0	880.1	999.6	1043.5	1089.2	1173.5	1212.1	1219.2
57.5°	80.8	93.1	214.3	346.1	820.3	936.3	985.5	1027.7	1106.7	1136.6	1143.6
60°	75.5	87.8	186.2	296.9	755.3	876.5	918.7	960.9	1027.7	1052.3	1057.6
62.5°	70.3	84.3	165.1	249.4	688.6	806.3	848.4	887.1	943.3	960.9	967.9
65°	66.8	80.8	149.3	214.3	620.1	732.5	774.7	808.0	853.7	871.3	874.8
67.5°	63.2	77.3	137.0	184.4	551.6	658.7	690.3	722.0	757.1	774.7	776.4
70°	58.0	73.8	126.5	163.4	481.3	574.4	600.8	634.1	662.2	671.0	676.3
72.5°	54.5	68.5	119.4	147.6	409.3	493.6	518.2	537.5	562.1	570.9	570.9
75°	49.2	61.5	112.4	131.7	335.5	404.0	425.1	444.4	463.7	467.3	462.0
77.5°	43.9	54.5	96.6	110.7	261.7	319.7	337.3	347.8	363.6	367.1	368.9
80°	36.9	47.4	75.5	86.1	189.7	235.4	247.7	256.5	270.5	270.5	274.0
82.5°	28.1	36.9	54.5	61.5	128.2	161.6	172.1	177.4	186.2	186.2	186.2
85°	17.6	22.8	35.1	40.4	77.3	98.4	105.4	107.2	114.2	115.9	115.9
87.5°	8.8	12.3	22.8	24.6	40.4	50.9	50.9	54.5	54.5	52.7	50.9
90°	9.1	16.4	23.6	25.5	40.1	59.5	69.1	61.4	46.0	34.5	34.5
92.5°	36.4	98.2	160.1	175.6	246.8	341.7	389.3	341.1	245.0	172.8	165.9
95°	87.3	200.5	313.7	342.0	607.3	960.9	1137.8	1015.3	770.4	586.6	565.8
97.5°	151.0	250.8	350.7	375.6	818.0	1407.7	1702.6	1625.2	1470.4	1354.3	1314.6
100°	200.1	290.6	381.2	403.8	894.6	1549.1	1876.3	1881.9	1893.3	1901.8	1854.6
102.5°	241.9	326.4	410.9	432.0	929.9	1593.6	1925.4	2024.0	2221.3	2369.2	2328.8
105°	312.9	384.4	455.9	473.8	955.9	1598.6	1920.0	2141.0	2583.3	2914.9	2893.2
107.5°	385.7	452.3	519.0	535.7	960.7	1527.5	1810.8	2119.3	2736.1	3198.7	3204.0
110°	434.8	495.0	555.3	570.3	953.5	1464.4	1719.9	2064.7	2754.3	3271.4	3294.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	483.0	540.3	597.8	612.1	953.7	1409.3	1637.1	1990.0	2695.7	3225.0	3259.8
115°	555.7	608.7	661.5	674.8	962.5	1346.2	1538.0	1877.9	2557.8	3067.7	3115.9
117.5°	627.5	675.7	723.7	735.8	980.4	1306.6	1469.7	1776.5	2390.1	2850.4	2903.8
120°	669.4	714.7	759.9	771.2	994.9	1293.3	1442.4	1722.8	2283.4	2703.9	2755.8
122.5°	710.3	756.0	801.6	813.0	1015.8	1286.3	1421.5	1674.0	2178.9	2557.5	2608.7
125°	773.1	814.7	856.3	866.7	1044.0	1280.6	1398.8	1613.3	2042.1	2363.8	2410.9
127.5°	824.0	866.1	908.1	918.6	1072.3	1277.2	1379.7	1563.8	1932.1	2208.2	2248.0
130°	851.2	896.6	941.8	953.1	1092.9	1279.2	1372.4	1536.3	1864.2	2110.0	2146.8
132.5°	879.4	924.8	970.0	981.3	1109.6	1280.6	1366.0	1512.8	1806.2	2026.3	2059.3
135°	921.3	962.5	1003.8	1014.1	1127.7	1279.3	1355.1	1478.0	1723.8	1908.1	1936.5
137.5°	964.0	1004.9	1045.7	1055.9	1155.1	1287.2	1353.3	1457.2	1665.0	1820.8	1844.1
140°	999.5	1037.1	1074.7	1084.1	1171.7	1288.6	1347.0	1436.7	1616.2	1750.8	1772.5
142.5°	1026.8	1061.6	1096.3	1105.0	1185.6	1293.2	1347.0	1425.7	1583.4	1701.6	1720.3
145°	1068.6	1098.9	1129.3	1136.9	1203.9	1293.2	1337.8	1402.3	1531.3	1628.0	1642.2
147.5°	1110.5	1140.0	1169.5	1176.9	1230.6	1302.1	1337.8	1388.6	1490.0	1566.2	1577.9
150°	1137.8	1164.5	1191.2	1197.8	1244.5	1306.7	1337.8	1380.7	1466.4	1530.7	1540.2
152.5°	1165.9	1186.1	1206.3	1211.4	1253.6	1309.7	1337.8	1374.5	1447.6	1502.5	1509.7
155°	1207.8	1222.8	1237.7	1241.5	1273.6	1316.4	1337.8	1367.0	1425.2	1468.9	1473.6
157.5°	1238.8	1253.2	1267.8	1271.4	1293.6	1323.1	1337.8	1360.5	1405.7	1439.7	1443.0
160°	1259.7	1271.0	1282.3	1285.1	1302.7	1326.1	1337.8	1357.2	1396.1	1425.1	1427.1
162.5°	1280.6	1289.0	1297.5	1299.6	1312.4	1329.3	1337.8	1354.2	1386.9	1411.5	1413.4
165°	1303.3	1311.0	1318.7	1320.6	1326.3	1334.0	1337.8	1349.6	1373.0	1390.6	1392.5
167.5°	1324.2	1327.8	1331.5	1332.4	1337.2	1343.7	1347.0	1354.6	1370.0	1381.5	1382.3
170°	1337.8	1341.5	1345.2	1346.1	1346.3	1346.8	1347.0	1354.6	1370.0	1381.5	1381.5
172.5°	1345.1	1345.9	1346.8	1347.0	1347.0	1347.0	1347.0	1353.0	1365.1	1374.3	1373.6
175°	1355.1	1355.1	1355.1	1355.1	1352.4	1348.8	1347.0	1350.8	1358.5	1364.3	1364.3
177.5°	1355.1	1355.1	1355.1	1355.1	1353.0	1350.2	1348.8	1351.8	1357.9	1362.4	1361.6
180°	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	546.3	546.3
2.5°	583.2	579.7
5°	750.1	753.6
7.5°	1010.1	1008.4
10°	1256.1	1271.9
12.5°	1435.2	1438.7
15°	1544.1	1551.2
17.5°	1586.3	1588.1
20°	1588.1	1584.5
22.5°	1568.7	1565.2
25°	1545.9	1544.1
27.5°	1524.8	1526.6
30°	1516.0	1521.3
32.5°	1516.0	1524.8
35°	1519.5	1528.3
37.5°	1517.8	1528.3
40°	1510.8	1523.1
42.5°	1491.4	1500.2
45°	1461.6	1472.1
47.5°	1422.9	1430.0
50°	1373.8	1380.8
52.5°	1312.3	1314.0
55°	1238.5	1245.5
57.5°	1159.4	1161.2
60°	1071.6	1076.9
62.5°	978.4	978.4
65°	880.1	883.6
67.5°	778.2	787.0
70°	674.5	676.3
72.5°	572.7	572.7
75°	467.3	469.0
77.5°	367.1	367.1
80°	272.3	274.0
82.5°	188.0	191.5
85°	117.7	117.7
87.5°	54.5	49.2
90°	34.5	34.5
92.5°	138.4	110.9
95°	482.5	399.3
97.5°	1156.2	997.7
100°	1665.8	1477.0
102.5°	2167.1	2005.4
105°	2806.3	2719.4
107.5°	3224.9	3245.9
110°	3384.6	3475.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3398.8	3537.9
115°	3308.7	3501.5
117.5°	3117.6	3331.5
120°	2963.7	3171.4
122.5°	2813.7	3018.6
125°	2599.8	2788.5
127.5°	2407.3	2566.6
130°	2293.9	2441.1
132.5°	2191.1	2322.8
135°	2050.1	2163.7
137.5°	1937.0	2030.0
140°	1859.5	1946.3
142.5°	1795.1	1869.9
145°	1698.7	1755.3
147.5°	1624.8	1671.7
150°	1578.2	1616.2
152.5°	1538.3	1567.1
155°	1492.6	1511.6
157.5°	1456.4	1469.7
160°	1434.7	1442.4
162.5°	1420.7	1427.9
165°	1400.2	1407.9
167.5°	1385.5	1388.8
170°	1381.5	1381.5
172.5°	1370.7	1367.9
175°	1364.3	1364.3
177.5°	1358.4	1355.1
180°	1355.1	1355.1



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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	2.37	3.12	3.46	4.21	5.71	15.55	16.30	16.64	17.39	18.89
	3H	3.07	3.74	4.17	4.84	6.35	17.38	18.05	18.48	19.15	20.67
	4H	3.36	4.00	4.47	5.10	6.62	18.02	18.66	19.13	19.76	21.28
	6H	3.61	4.19	4.72	5.30	6.83	18.45	19.03	19.56	20.14	21.67
	8H	3.67	4.23	4.79	5.35	6.88	18.56	19.12	19.68	20.24	21.77
	12H	3.69	4.22	4.81	5.33	6.88	18.63	19.16	19.75	20.27	21.82
4H	2H	9.58	10.21	10.69	11.31	12.83	15.81	16.45	16.93	17.55	19.07
	3H	11.13	11.66	12.25	12.79	14.32	17.85	18.38	18.97	19.51	21.04
	4H	11.22	11.71	12.35	12.83	14.38	18.61	19.10	19.73	20.21	21.77
	6H	11.23	11.64	12.36	12.78	14.33	19.14	19.56	20.27	20.70	22.25
	8H	11.20	11.59	12.33	12.72	14.29	19.30	19.69	20.43	20.82	22.39
	12H	11.15	11.51	12.30	12.65	14.22	19.39	19.74	20.54	20.89	22.45
8H	4H	12.66	13.05	13.79	14.18	15.74	18.66	19.05	19.79	20.18	21.75
	6H	12.89	13.22	14.05	14.39	15.95	19.28	19.61	20.44	20.78	22.34
	8H	12.91	13.19	14.07	14.35	15.92	19.50	19.79	20.66	20.94	22.52
	12H	12.87	13.12	14.04	14.27	15.88	19.64	19.89	20.80	21.04	22.65
12H	4H	12.79	13.15	13.94	14.29	15.86	18.61	18.96	19.76	20.11	21.67
	6H	13.15	13.43	14.31	14.59	16.17	19.26	19.55	20.42	20.70	22.28
	8H	13.21	13.46	14.38	14.61	16.23	19.49	19.74	20.65	20.89	22.50