

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: P937109

Luminaire Tested: SQ4-FB-075U-075D-830-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937109
REPORT IS A COMBINATION OF REPORTS P933494 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

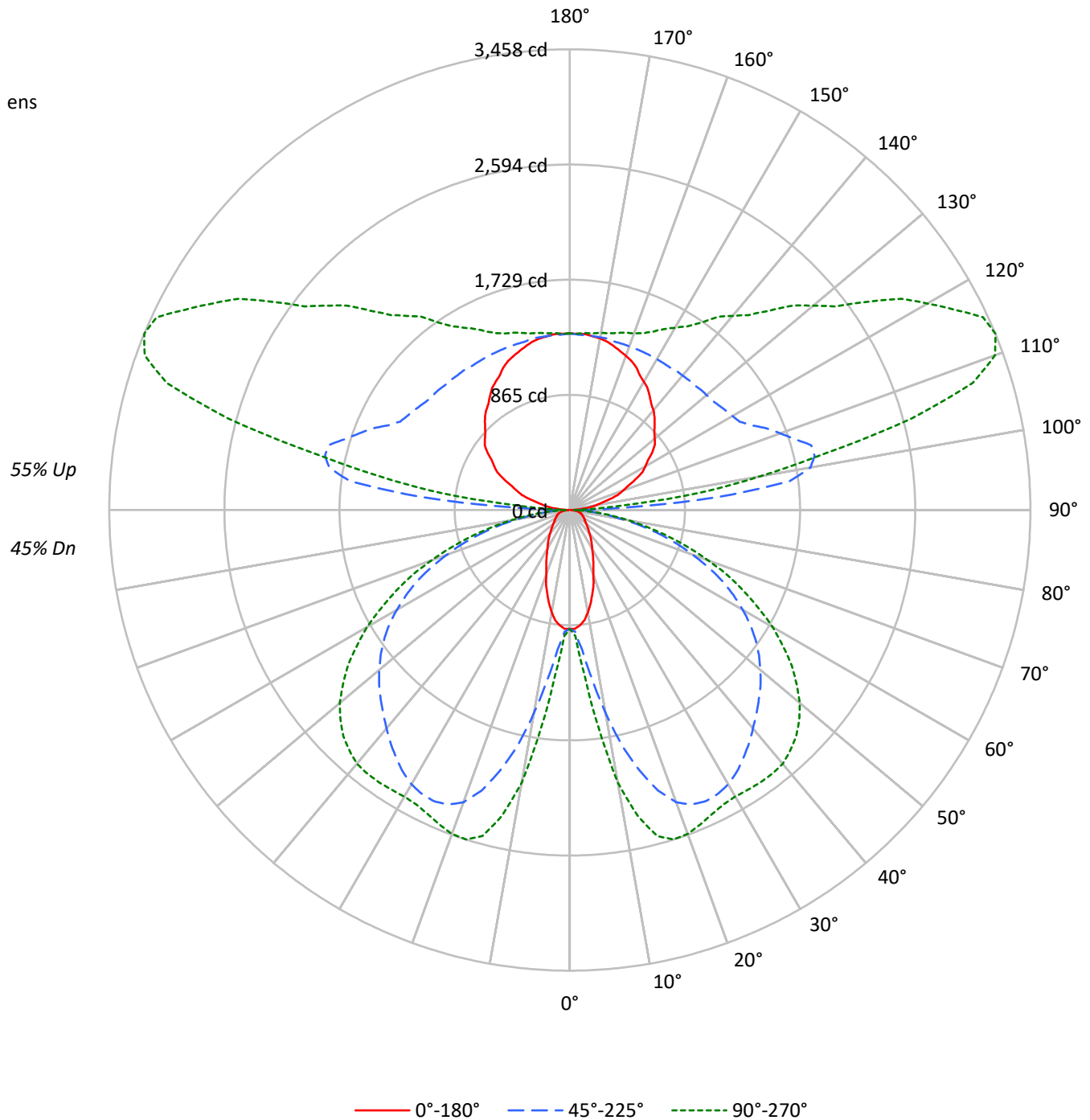
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15492.9 lumens
Efficiency: N/A
Efficacy: 121.8 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): 127.2
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				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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2696	3190	3709
10°	2447	4651	6148
15°	2080	6077	7424
20°	1694	7044	7566
25°	1414	7373	7412
30°	1193	7422	7398
35°	1055	7301	7590
40°	920	7142	7787
45°	834	7027	7818
50°	765	6924	7688
55°	734	6772	7348
60°	752	6478	6809
65°	784	6029	6070
70°	836	5261	5128
75°	931	4294	4002
80°	1024	2981	2696
85°	930	1585	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7818 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	0.7
10°-20°	511.4	3.3
20°-30°	894.5	5.8
30°-40°	1151.5	7.4
40°-50°	1286.1	8.3
50°-60°	1231.8	8.0
60°-70°	976.2	6.3
70°-80°	574.0	3.7
80°-90°	164.5	1.1
90°-100°	645.7	4.2
100°-110°	1697.7	11.0
110°-120°	1760.3	11.4
120°-130°	1411.9	9.1
130°-140°	1107.9	7.2
140°-150°	850.3	5.5
150°-160°	612.4	4.0
160°-170°	374.7	2.4
170°-180°	126.6	0.8
0°-30°	1521.2	9.8
0°-40°	2672.7	17.3
0°-60°	5190.7	33.5
0°-90°	6905.5	44.6
90°-120°	4103.6	26.5
90°-150°	7473.8	48.2
90°-180°	8587.0	55.4
0°-180°	15492.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	869	932	1050	1187	1230	80
15°	651	1202	2025	2455	2532	181
25°	416	1362	2412	2518	2521	192
35°	281	1302	2272	2401	2495	176
45°	192	1038	2008	2300	2404	149
55°	138	660	1704	1979	2034	125
65°	109	350	1265	1423	1443	108
75°	80	215	694	763	766	84
85°	29	66	172	189	192	30
90°	9	25	68	34	34	9
95°	85	334	1112	573	390	95
105°	306	463	1877	2850	2658	324
115°	543	660	1503	2999	3423	537
125°	756	847	1367	2311	2726	671
135°	901	991	1325	1865	2115	697
145°	1045	1111	1308	1592	1716	654
155°	1181	1214	1308	1436	1478	542
165°	1274	1291	1308	1359	1376	360
175°	1325	1325	1317	1334	1334	126
180°	1325	1325	1325	1325	1325	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9
2.5°	891.9	891.9	897.7	900.6	906.3	909.2	914.9	920.6	937.8	940.7	946.4
5°	869.0	880.5	917.8	932.1	972.3	1026.7	1049.7	1087.1	1164.5	1187.4	1201.8
7.5°	834.6	860.4	952.2	975.1	1075.5	1219.0	1279.2	1359.5	1482.9	1543.1	1591.8
10°	780.1	834.6	998.1	1052.6	1216.1	1434.1	1545.9	1657.8	1844.2	1927.4	1958.9
12.5°	719.9	808.8	1046.8	1121.5	1356.7	1675.0	1809.8	1933.1	2145.4	2257.2	2274.4
15°	651.0	771.5	1092.8	1201.8	1505.8	1875.8	2024.9	2176.9	2374.8	2455.1	2475.2
17.5°	590.8	742.8	1135.8	1250.5	1620.5	2056.5	2208.5	2334.6	2495.3	2549.7	2564.1
20°	516.2	696.9	1164.5	1313.6	1741.0	2188.4	2334.6	2432.2	2541.1	2575.6	2581.3
22.5°	461.7	648.2	1181.7	1336.6	1821.3	2268.7	2392.0	2469.4	2544.0	2555.5	2558.4
25°	415.9	593.7	1178.8	1362.4	1890.1	2317.4	2412.1	2469.4	2512.5	2518.2	2518.2
27.5°	372.8	533.4	1167.4	1368.1	1941.7	2328.9	2403.5	2443.6	2463.7	2475.2	2475.2
30°	335.6	476.1	1138.7	1356.7	1964.7	2317.4	2377.7	2397.7	2417.8	2435.0	2443.6
32.5°	306.9	421.6	1095.7	1333.7	1967.5	2288.8	2331.8	2343.3	2371.9	2412.1	2426.4
35°	281.1	367.1	1046.8	1302.2	1950.3	2242.9	2271.6	2283.0	2340.4	2400.6	2420.7
37.5°	255.3	327.0	983.7	1247.7	1924.5	2188.4	2208.5	2228.5	2317.4	2389.1	2412.1
40°	229.4	292.5	909.2	1187.4	1884.4	2122.4	2139.6	2171.2	2288.8	2371.9	2394.9
42.5°	209.4	263.9	828.9	1124.4	1832.7	2047.8	2073.7	2119.5	2254.3	2343.3	2369.1
45°	192.2	235.2	742.8	1038.2	1766.8	1970.4	2007.7	2070.8	2214.2	2300.2	2323.2
47.5°	174.9	215.1	653.9	949.3	1695.1	1893.0	1941.7	2013.4	2159.7	2242.9	2262.9
50°	160.6	195.0	565.0	854.7	1617.6	1809.8	1867.2	1941.7	2090.9	2168.3	2194.1
52.5°	149.1	177.8	481.8	760.0	1528.7	1723.8	1789.7	1867.2	2007.7	2082.3	2099.5
55°	137.7	163.5	410.1	659.6	1437.0	1632.0	1703.7	1778.3	1915.9	1979.0	1990.5
57.5°	131.9	152.0	349.9	565.0	1339.5	1528.7	1609.0	1677.9	1806.9	1855.7	1867.2
60°	123.3	143.4	304.0	484.7	1233.3	1431.2	1500.1	1568.9	1677.9	1718.0	1726.6
62.5°	114.7	137.7	269.6	407.3	1124.4	1316.5	1385.3	1448.4	1540.2	1568.9	1580.4
65°	109.0	131.9	243.8	349.9	1012.4	1196.1	1264.9	1319.4	1393.9	1422.6	1428.4
67.5°	103.2	126.2	223.7	301.1	900.6	1075.5	1127.2	1178.8	1236.2	1264.9	1267.8
70°	94.6	120.5	206.5	266.7	785.8	937.8	980.9	1035.3	1081.2	1095.7	1104.3
72.5°	88.9	111.9	195.0	240.9	668.2	805.9	846.1	877.6	917.8	932.1	932.1
75°	80.3	100.4	183.6	215.1	547.8	659.6	694.1	725.6	757.2	762.9	754.3
77.5°	71.7	88.9	157.7	180.7	427.3	522.0	550.7	567.9	593.7	599.4	602.3
80°	60.2	77.4	123.3	140.5	309.7	384.3	404.4	418.7	441.7	441.7	447.4
82.5°	45.9	60.2	88.9	100.4	209.4	263.9	281.1	289.7	304.0	304.0	304.0
85°	28.7	37.3	57.4	66.0	126.2	160.6	172.1	174.9	186.4	189.3	189.3
87.5°	14.3	20.1	37.3	40.2	66.0	83.2	83.2	88.9	88.9	86.0	83.2
90°	8.9	16.0	23.0	24.9	39.1	58.1	67.6	60.0	45.0	33.7	33.7
92.5°	35.6	96.0	156.5	171.6	241.2	334.0	380.5	333.5	239.5	168.9	162.2
95°	85.4	196.0	306.7	334.3	593.6	939.4	1112.2	992.5	753.0	573.4	553.0
97.5°	147.6	245.2	342.8	367.2	799.6	1376.1	1664.3	1588.6	1437.3	1323.8	1285.1
100°	195.6	284.1	372.6	394.7	874.5	1514.2	1834.1	1839.6	1850.7	1859.0	1812.9
102.5°	236.5	319.1	401.6	422.3	908.9	1557.7	1882.2	1978.5	2171.4	2316.0	2276.5
105°	305.8	375.8	445.7	463.2	934.4	1562.7	1876.8	2093.0	2525.3	2849.5	2828.2
107.5°	377.0	442.2	507.3	523.7	939.2	1493.2	1770.1	2071.7	2674.6	3126.8	3132.0
110°	424.9	483.8	542.7	557.4	932.0	1431.5	1681.2	2018.3	2692.4	3197.9	3220.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	472.1	528.2	584.3	598.4	932.4	1377.7	1600.3	1945.3	2635.2	3152.6	3186.5
115°	543.2	594.9	646.7	659.6	940.9	1315.9	1503.4	1835.7	2500.3	2998.8	3045.9
117.5°	613.5	660.5	707.4	719.2	958.4	1277.2	1436.7	1736.6	2336.4	2786.3	2838.6
120°	654.4	698.6	742.8	753.9	972.6	1264.2	1410.0	1684.0	2232.1	2643.1	2693.9
122.5°	694.3	739.0	783.6	794.8	993.1	1257.4	1389.5	1636.3	2129.9	2500.0	2550.1
125°	755.7	796.4	837.2	847.3	1020.6	1251.8	1367.4	1577.0	1996.2	2310.7	2356.8
127.5°	805.5	846.6	887.7	898.0	1048.3	1248.5	1348.7	1528.7	1888.7	2158.6	2197.6
130°	832.2	876.5	920.6	931.7	1068.3	1250.4	1341.6	1501.8	1822.2	2062.6	2098.5
132.5°	859.7	904.0	948.2	959.3	1084.6	1251.8	1335.3	1478.7	1765.6	1980.8	2013.0
135°	900.6	940.9	981.2	991.3	1102.5	1250.6	1324.7	1444.8	1685.0	1865.3	1893.0
137.5°	942.4	982.3	1022.3	1032.2	1129.1	1258.3	1322.9	1424.4	1627.6	1779.9	1802.6
140°	977.0	1013.7	1050.5	1059.7	1145.4	1259.6	1316.7	1404.5	1579.9	1711.4	1732.7
142.5°	1003.7	1037.7	1071.7	1080.2	1159.1	1264.1	1316.7	1393.8	1547.9	1663.4	1681.7
145°	1044.6	1074.3	1103.9	1111.4	1176.8	1264.1	1307.8	1370.8	1496.9	1591.5	1605.3
147.5°	1085.5	1114.4	1143.3	1150.5	1202.9	1272.8	1307.8	1357.4	1456.6	1530.9	1542.4
150°	1112.2	1138.3	1164.4	1170.9	1216.5	1277.4	1307.8	1349.7	1433.4	1496.2	1505.5
152.5°	1139.7	1159.5	1179.2	1184.2	1225.4	1280.4	1307.8	1343.6	1415.1	1468.7	1475.7
155°	1180.7	1195.3	1209.9	1213.5	1245.0	1286.9	1307.8	1336.3	1393.2	1435.8	1440.5
157.5°	1210.9	1225.1	1239.4	1242.9	1264.5	1293.4	1307.8	1329.9	1374.2	1407.3	1410.6
160°	1231.3	1242.4	1253.5	1256.3	1273.5	1296.3	1307.8	1326.7	1364.7	1393.2	1395.1
162.5°	1251.8	1260.1	1268.3	1270.4	1282.9	1299.5	1307.8	1323.8	1355.8	1379.8	1381.6
165°	1274.1	1281.5	1289.0	1290.9	1296.5	1304.1	1307.8	1319.3	1342.1	1359.3	1361.2
167.5°	1294.4	1298.0	1301.6	1302.5	1307.2	1313.5	1316.7	1324.2	1339.2	1350.4	1351.2
170°	1307.8	1311.3	1315.0	1315.8	1316.1	1316.5	1316.7	1324.2	1339.2	1350.4	1350.4
172.5°	1314.9	1315.6	1316.5	1316.7	1316.7	1316.7	1316.7	1322.6	1334.5	1343.4	1342.7
175°	1324.7	1324.7	1324.7	1324.7	1322.1	1318.5	1316.7	1320.4	1328.0	1333.6	1333.6
177.5°	1324.7	1324.7	1324.7	1324.7	1322.6	1319.9	1318.5	1321.5	1327.4	1331.8	1331.0
180°	1324.7	1324.7	1324.7	1324.7	1324.7	1324.7	1324.7	1324.7	1324.7	1324.7	1324.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	891.9	891.9
2.5°	952.2	946.4
5°	1224.7	1230.5
7.5°	1649.2	1646.3
10°	2050.7	2076.5
12.5°	2343.3	2349.0
15°	2521.1	2532.5
17.5°	2589.9	2592.8
20°	2592.8	2587.0
22.5°	2561.2	2555.5
25°	2523.9	2521.1
27.5°	2489.5	2492.4
30°	2475.2	2483.8
32.5°	2475.2	2489.5
35°	2480.9	2495.3
37.5°	2478.0	2495.3
40°	2466.6	2486.7
42.5°	2435.0	2449.4
45°	2386.3	2403.5
47.5°	2323.2	2334.6
50°	2242.9	2254.3
52.5°	2142.5	2145.4
55°	2022.0	2033.5
57.5°	1893.0	1895.8
60°	1749.6	1758.2
62.5°	1597.6	1597.6
65°	1437.0	1442.7
67.5°	1270.6	1285.0
70°	1101.4	1104.3
72.5°	935.0	935.0
75°	762.9	765.8
77.5°	599.4	599.4
80°	444.5	447.4
82.5°	306.9	312.6
85°	192.2	192.2
87.5°	88.9	80.3
90°	33.7	33.7
92.5°	135.4	108.5
95°	471.7	390.3
97.5°	1130.2	975.3
100°	1628.4	1443.8
102.5°	2118.4	1960.4
105°	2743.2	2658.3
107.5°	3152.5	3173.1
110°	3308.5	3397.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3322.5	3458.4
115°	3234.3	3422.9
117.5°	3047.5	3256.6
120°	2897.1	3100.1
122.5°	2750.4	2950.8
125°	2541.3	2725.8
127.5°	2353.3	2508.9
130°	2242.4	2386.3
132.5°	2141.8	2270.7
135°	2004.1	2115.1
137.5°	1893.5	1984.4
140°	1817.6	1902.5
142.5°	1754.8	1827.9
145°	1660.6	1715.8
147.5°	1588.2	1634.1
150°	1542.7	1579.9
152.5°	1503.8	1531.8
155°	1459.0	1477.6
157.5°	1423.7	1436.7
160°	1402.5	1410.0
162.5°	1388.7	1395.9
165°	1368.7	1376.3
167.5°	1354.5	1357.6
170°	1350.4	1350.4
172.5°	1339.9	1337.2
175°	1333.6	1333.6
177.5°	1327.9	1324.7
180°	1324.7	1324.7



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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	4.02	4.87	5.01	5.88	7.22	17.21	18.06	18.21	19.07	20.41
	3H	4.72	5.48	5.73	6.51	7.87	19.06	19.82	20.06	20.84	22.20
	4H	5.02	5.74	6.04	6.77	8.14	19.70	20.43	20.72	21.45	22.82
	6H	5.27	5.94	6.30	6.96	8.35	20.14	20.80	21.17	21.83	23.22
	8H	5.34	5.97	6.37	7.02	8.40	20.26	20.89	21.29	21.94	23.32
	12H	5.36	5.96	6.39	7.00	8.40	20.33	20.93	21.37	21.97	23.38
4H	2H	11.24	11.96	12.27	12.99	14.36	17.48	18.21	18.51	19.23	20.60
	3H	12.81	13.41	13.84	14.46	15.85	19.53	20.14	20.57	21.19	22.57
	4H	12.90	13.45	13.94	14.50	15.91	20.30	20.86	21.34	21.90	23.31
	6H	12.91	13.39	13.96	14.45	15.86	20.85	21.32	21.90	22.39	23.79
	8H	12.89	13.33	13.94	14.39	15.81	21.01	21.46	22.06	22.52	23.94
	12H	12.84	13.25	13.91	14.32	15.75	21.11	21.51	22.18	22.58	24.01
8H	4H	14.35	14.79	15.40	15.85	17.27	20.36	20.81	21.41	21.87	23.29
	6H	14.59	14.96	15.66	16.06	17.48	20.99	21.36	22.07	22.47	23.88
	8H	14.61	14.93	15.69	16.02	17.45	21.22	21.54	22.30	22.63	24.06
	12H	14.57	14.86	15.66	15.94	17.42	21.36	21.65	22.45	22.73	24.21
12H	4H	14.49	14.90	15.56	15.97	17.39	20.31	20.72	21.38	21.79	23.22
	6H	14.85	15.17	15.93	16.26	17.69	20.98	21.30	22.06	22.39	23.82
	8H	14.92	15.20	16.01	16.28	17.76	21.21	21.50	22.30	22.58	24.05