

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: P937230

Luminaire Tested: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-12-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937230
REPORT IS A COMBINATION OF REPORTS P933495 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-12-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

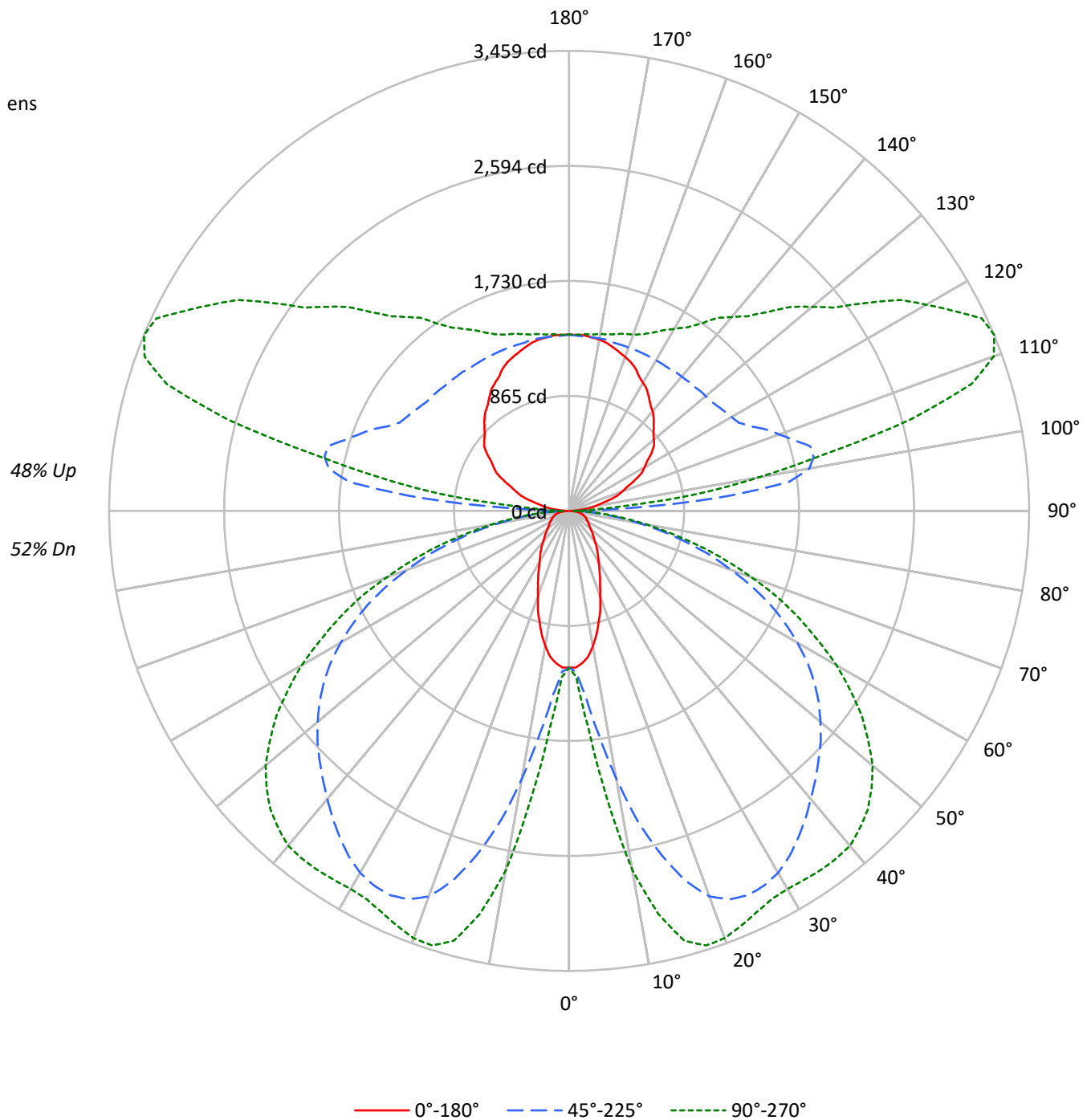
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17712.5 lumens
Efficiency: N/A
Efficacy: 115.3 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): 153.6
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3646	3646	3646
5°	3563	4215	4900
10°	3233	6145	8124
15°	2749	8031	9810
20°	2238	9309	9998
25°	1868	9743	9795
30°	1576	9808	9776
35°	1394	9647	10029
40°	1216	9438	10290
45°	1102	9286	10330
50°	1012	9150	10159
55°	970	8949	9709
60°	993	8560	8998
65°	1035	7966	8021
70°	1106	6952	6776
75°	1230	5674	5288
80°	1354	3940	3563
85°	1228	2094	1824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.5	0.9
10°-20°	675.7	3.8
20°-30°	1182.0	6.7
30°-40°	1521.5	8.6
40°-50°	1699.5	9.6
50°-60°	1627.7	9.2
60°-70°	1290.0	7.3
70°-80°	758.6	4.3
80°-90°	215.8	1.2
90°-100°	645.8	3.6
100°-110°	1698.0	9.6
110°-120°	1760.6	9.9
120°-130°	1412.2	8.0
130°-140°	1108.1	6.3
140°-150°	850.5	4.8
150°-160°	612.5	3.5
160°-170°	374.8	2.1
170°-180°	126.6	0.7
0°-30°	2010.2	11.3
0°-40°	3531.7	19.9
0°-60°	6859.0	38.7
0°-90°	9123.3	51.5
90°-120°	4104.5	23.2
90°-150°	7475.3	42.2
90°-180°	8589.0	48.5
0°-180°	17712.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1148	1232	1387	1569	1626	106
15°	860	1588	2676	3244	3347	239
25°	550	1800	3187	3328	3331	253
35°	371	1721	3002	3172	3297	232
45°	254	1372	2653	3040	3176	196
55°	182	872	2251	2615	2687	166
65°	144	462	1671	1880	1906	143
75°	106	284	917	1008	1012	111
85°	38	87	227	250	254	40
90°	9	25	68	34	34	10
95°	85	334	1112	574	390	95
105°	306	463	1877	2850	2659	324
115°	543	660	1504	2999	3424	537
125°	756	848	1368	2311	2726	671
135°	901	992	1325	1866	2116	697
145°	1045	1112	1308	1592	1716	655
155°	1181	1214	1308	1436	1478	543
165°	1274	1291	1308	1360	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°	1178.7	1178.7	1178.7	1178.7	1178.7	1178.7	1178.7	1178.7	1178.7	1178.7	1178.7
2.5°	1178.7	1178.7	1186.3	1190.1	1197.6	1201.5	1209.0	1216.6	1239.3	1243.1	1250.7
5°	1148.4	1163.5	1212.8	1231.8	1284.8	1356.8	1387.1	1436.4	1538.7	1569.0	1587.9
7.5°	1102.9	1137.0	1258.3	1288.6	1421.2	1610.7	1690.4	1796.4	1959.4	2039.0	2103.4
10°	1030.9	1102.9	1318.9	1390.9	1607.0	1895.0	2042.8	2190.6	2437.0	2546.8	2588.5
12.5°	951.3	1068.7	1383.3	1481.9	1792.7	2213.3	2391.4	2554.5	2834.9	2982.7	3005.4
15°	860.3	1019.5	1443.9	1587.9	1989.7	2478.6	2675.7	2876.6	3138.1	3244.2	3270.8
17.5°	780.7	981.6	1500.8	1652.4	2141.3	2717.4	2918.3	3085.1	3297.2	3369.2	3388.3
20°	682.1	921.0	1538.7	1735.8	2300.5	2891.7	3085.1	3213.9	3357.9	3403.4	3410.9
22.5°	610.1	856.6	1561.5	1766.1	2406.6	2997.9	3160.8	3263.2	3361.7	3376.9	3380.6
25°	549.5	784.6	1557.6	1800.2	2497.6	3062.3	3187.4	3263.2	3320.0	3327.6	3327.6
27.5°	492.7	704.9	1542.5	1807.8	2565.8	3077.4	3176.0	3229.1	3255.6	3270.8	3270.8
30°	443.4	629.2	1504.6	1792.7	2596.2	3062.3	3141.9	3168.4	3194.9	3217.7	3229.1
32.5°	405.5	557.1	1447.8	1762.4	2599.9	3024.4	3081.2	3096.4	3134.3	3187.4	3206.3
35°	371.4	485.1	1383.3	1720.7	2577.1	2963.7	3001.7	3016.8	3092.6	3172.2	3198.8
37.5°	337.3	432.1	1299.9	1648.7	2543.1	2891.7	2918.3	2944.8	3062.3	3157.1	3187.4
40°	303.2	386.6	1201.5	1569.0	2490.0	2804.6	2827.3	2869.0	3024.4	3134.3	3164.6
42.5°	276.6	348.7	1095.3	1485.6	2421.8	2706.0	2740.2	2800.8	2978.9	3096.4	3130.5
45°	254.0	310.8	981.6	1371.9	2334.6	2603.7	2653.0	2736.3	2925.9	3039.5	3069.9
47.5°	231.2	284.3	864.1	1254.5	2239.9	2501.4	2565.8	2660.5	2853.9	2963.7	2990.3
50°	212.3	257.7	746.6	1129.5	2137.6	2391.4	2467.3	2565.8	2762.9	2865.2	2899.4
52.5°	197.1	234.9	636.7	1004.4	2020.1	2277.7	2365.0	2467.3	2653.0	2751.5	2774.3
55°	182.0	216.0	542.0	871.7	1898.8	2156.5	2251.3	2349.7	2531.7	2615.1	2630.2
57.5°	174.3	200.9	462.4	746.6	1769.9	2020.1	2126.2	2217.1	2387.7	2452.1	2467.3
60°	162.9	189.5	401.7	640.5	1629.6	1891.2	1982.2	2073.1	2217.1	2270.2	2281.6
62.5°	151.6	182.0	356.3	538.1	1485.6	1739.6	1830.5	1913.9	2035.3	2073.1	2088.2
65°	144.0	174.3	322.1	462.4	1337.9	1580.4	1671.3	1743.4	1841.9	1879.8	1887.4
67.5°	136.4	166.8	295.7	398.0	1190.1	1421.2	1489.5	1557.6	1633.5	1671.3	1675.2
70°	125.1	159.2	272.9	352.5	1038.4	1239.3	1296.2	1368.2	1428.8	1447.8	1459.2
72.5°	117.5	147.8	257.7	318.3	883.0	1065.0	1118.1	1159.8	1212.8	1231.8	1231.8
75°	106.1	132.6	242.6	284.3	723.8	871.7	917.2	958.9	1000.6	1008.1	996.7
77.5°	94.8	117.5	208.5	238.8	564.7	689.8	727.7	750.4	784.6	792.1	795.9
80°	79.6	102.3	162.9	185.7	409.3	507.8	534.4	553.3	583.7	583.7	591.2
82.5°	60.6	79.6	117.5	132.6	276.6	348.7	371.4	382.8	401.7	401.7	401.7
85°	37.9	49.2	75.8	87.2	166.8	212.3	227.4	231.2	246.3	250.1	250.1
87.5°	18.9	26.5	49.2	53.1	87.2	109.9	109.9	117.5	117.5	113.7	109.9
90°	8.9	16.0	23.0	24.9	39.1	58.1	67.6	60.0	45.0	33.8	33.8
92.5°	35.6	96.0	156.5	171.6	241.2	334.1	380.6	333.5	239.5	169.0	162.3
95°	85.4	196.0	306.7	334.4	593.7	939.6	1112.4	992.7	753.2	573.5	553.2
97.5°	147.6	245.3	342.9	367.3	799.8	1376.3	1664.6	1588.9	1437.5	1324.0	1285.3
100°	195.6	284.2	372.7	394.8	874.7	1514.5	1834.5	1840.0	1851.1	1859.4	1813.2
102.5°	236.6	319.2	401.7	422.4	909.1	1558.0	1882.6	1978.9	2171.8	2316.5	2277.0
105°	305.9	375.9	445.8	463.3	934.6	1563.0	1877.2	2093.4	2525.8	2850.0	2828.8
107.5°	377.0	442.2	507.5	523.8	939.4	1493.5	1770.5	2072.1	2675.1	3127.4	3132.6
110°	425.0	483.9	542.8	557.6	932.2	1431.8	1681.6	2018.7	2692.9	3198.6	3220.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	472.2	528.3	584.4	598.5	932.6	1378.0	1600.7	1945.7	2635.7	3153.2	3187.2
115°	543.3	595.0	646.9	659.8	941.1	1316.2	1503.7	1836.1	2500.8	2999.4	3046.5
117.5°	613.6	660.6	707.6	719.3	958.6	1277.5	1437.0	1736.9	2336.8	2786.8	2839.1
120°	654.5	698.8	743.0	754.1	972.8	1264.5	1410.3	1684.3	2232.5	2643.7	2694.5
122.5°	694.5	739.1	783.8	795.0	993.3	1257.7	1389.8	1636.6	2130.3	2500.5	2550.6
125°	755.9	796.6	837.3	847.5	1020.8	1252.0	1367.6	1577.3	1996.6	2311.1	2357.3
127.5°	805.7	846.8	887.9	898.2	1048.5	1248.8	1349.0	1529.0	1889.1	2159.1	2198.0
130°	832.4	876.6	920.8	931.9	1068.5	1250.7	1341.8	1502.1	1822.6	2063.0	2098.9
132.5°	859.9	904.2	948.4	959.4	1084.8	1252.0	1335.6	1479.0	1766.0	1981.2	2013.5
135°	900.8	941.1	981.4	991.5	1102.7	1250.9	1325.0	1445.1	1685.4	1865.6	1893.4
137.5°	942.6	982.5	1022.5	1032.4	1129.4	1258.5	1323.2	1424.7	1627.9	1780.2	1803.0
140°	977.2	1013.9	1050.8	1059.9	1145.6	1259.9	1317.0	1404.7	1580.2	1711.8	1733.0
142.5°	1003.9	1037.9	1071.9	1080.4	1159.3	1264.4	1317.0	1394.0	1548.2	1663.8	1682.0
145°	1044.8	1074.5	1104.1	1111.6	1177.1	1264.4	1308.1	1371.1	1497.2	1591.8	1605.6
147.5°	1085.8	1114.6	1143.5	1150.7	1203.2	1273.1	1308.1	1357.7	1456.9	1531.2	1542.7
150°	1112.4	1138.5	1164.6	1171.1	1216.8	1277.7	1308.1	1350.0	1433.7	1496.5	1505.8
152.5°	1140.0	1159.8	1179.5	1184.4	1225.6	1280.6	1308.1	1343.8	1415.4	1469.0	1476.0
155°	1180.9	1195.5	1210.2	1213.8	1245.3	1287.1	1308.1	1336.6	1393.5	1436.1	1440.8
157.5°	1211.1	1225.4	1239.6	1243.1	1264.8	1293.6	1308.1	1330.2	1374.4	1407.6	1410.9
160°	1231.6	1242.7	1253.8	1256.5	1273.7	1296.6	1308.1	1327.0	1365.0	1393.5	1395.4
162.5°	1252.0	1260.4	1268.6	1270.7	1283.1	1299.8	1308.1	1324.0	1356.1	1380.1	1381.9
165°	1274.3	1281.8	1289.2	1291.1	1296.8	1304.3	1308.1	1319.5	1342.4	1359.6	1361.5
167.5°	1294.7	1298.2	1301.9	1302.7	1307.5	1313.8	1317.0	1324.4	1339.4	1350.7	1351.5
170°	1308.1	1311.6	1315.2	1316.1	1316.4	1316.8	1317.0	1324.4	1339.4	1350.7	1350.7
172.5°	1315.1	1315.9	1316.8	1317.0	1317.0	1317.0	1317.0	1322.9	1334.7	1343.6	1343.0
175°	1325.0	1325.0	1325.0	1325.0	1322.3	1318.8	1317.0	1320.7	1328.2	1333.9	1333.9
177.5°	1325.0	1325.0	1325.0	1325.0	1322.9	1320.1	1318.8	1321.7	1327.7	1332.1	1331.3
180°	1325.0	1325.0	1325.0	1325.0	1325.0	1325.0	1325.0	1325.0	1325.0	1325.0	1325.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1178.7	1178.7
2.5°	1258.3	1250.7
5°	1618.4	1625.9
7.5°	2179.3	2175.4
10°	2709.9	2743.9
12.5°	3096.4	3104.0
15°	3331.4	3346.6
17.5°	3422.3	3426.1
20°	3426.1	3418.6
22.5°	3384.4	3376.9
25°	3335.2	3331.4
27.5°	3289.7	3293.5
30°	3270.8	3282.1
32.5°	3270.8	3289.7
35°	3278.3	3297.2
37.5°	3274.5	3297.2
40°	3259.4	3285.9
42.5°	3217.7	3236.6
45°	3153.2	3176.0
47.5°	3069.9	3085.1
50°	2963.7	2978.9
52.5°	2831.1	2834.9
55°	2671.9	2687.1
57.5°	2501.4	2505.1
60°	2311.9	2323.3
62.5°	2111.0	2111.0
65°	1898.8	1906.4
67.5°	1679.0	1697.9
70°	1455.3	1459.2
72.5°	1235.5	1235.5
75°	1008.1	1011.9
77.5°	792.1	792.1
80°	587.5	591.2
82.5°	405.5	413.1
85°	254.0	254.0
87.5°	117.5	106.1
90°	33.8	33.8
92.5°	135.4	108.5
95°	471.8	390.4
97.5°	1130.4	975.5
100°	1628.7	1444.1
102.5°	2118.8	1960.8
105°	2743.8	2658.8
107.5°	3153.1	3173.7
110°	3309.2	3397.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3323.2	3459.1
115°	3235.0	3423.6
117.5°	3048.2	3257.3
120°	2897.6	3100.7
122.5°	2751.0	2951.4
125°	2541.8	2726.4
127.5°	2353.8	2509.4
130°	2242.8	2386.8
132.5°	2142.3	2271.1
135°	2004.5	2115.5
137.5°	1893.8	1984.8
140°	1818.0	1902.9
142.5°	1755.2	1828.2
145°	1660.9	1716.2
147.5°	1588.5	1634.4
150°	1543.0	1580.2
152.5°	1504.1	1532.1
155°	1459.3	1477.9
157.5°	1424.0	1437.0
160°	1402.8	1410.3
162.5°	1389.0	1396.1
165°	1369.0	1376.5
167.5°	1354.7	1357.9
170°	1350.7	1350.7
172.5°	1340.2	1337.4
175°	1333.9	1333.9
177.5°	1328.2	1325.0
180°	1325.0	1325.0



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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	5.64	6.56	6.58	7.52	8.76	18.83	19.75	19.77	20.71	21.95
	3H	6.35	7.17	7.30	8.14	9.41	20.68	21.50	21.63	22.47	23.74
	4H	6.65	7.43	7.61	8.40	9.68	21.33	22.11	22.29	23.09	24.36
	6H	6.90	7.62	7.88	8.60	9.89	21.77	22.49	22.74	23.47	24.76
	8H	6.97	7.66	7.95	8.66	9.94	21.90	22.58	22.88	23.58	24.86
	12H	6.99	7.65	7.98	8.64	9.95	21.97	22.62	22.95	23.61	24.92
4H	2H	12.87	13.65	13.84	14.62	15.90	19.11	19.89	20.08	20.87	22.14
	3H	14.44	15.10	15.42	16.10	17.39	21.17	21.82	22.15	22.82	24.12
	4H	14.54	15.14	15.53	16.13	17.45	21.94	22.54	22.93	23.53	24.85
	6H	14.55	15.07	15.55	16.09	17.40	22.49	23.01	23.49	24.02	25.34
	8H	14.53	15.01	15.53	16.03	17.36	22.66	23.14	23.66	24.15	25.48
	12H	14.49	14.93	15.51	15.96	17.29	22.75	23.19	23.77	24.22	25.55
8H	4H	15.99	16.48	16.99	17.49	18.82	22.01	22.49	23.01	23.50	24.83
	6H	16.24	16.64	17.26	17.69	19.02	22.64	23.04	23.67	24.10	25.42
	8H	16.26	16.61	17.29	17.65	18.99	22.87	23.22	23.90	24.26	25.60
	12H	16.23	16.54	17.27	17.57	18.96	23.02	23.33	24.06	24.36	25.75
12H	4H	16.14	16.58	17.16	17.60	18.94	21.96	22.40	22.98	23.43	24.76
	6H	16.50	16.85	17.53	17.89	19.24	22.63	22.98	23.66	24.02	25.37
	8H	16.57	16.88	17.61	17.92	19.30	22.86	23.17	23.90	24.21	25.60