

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: P937279

Luminaire Tested: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-12-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937279
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-B2750-1D-UNV-W2A-W-12-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

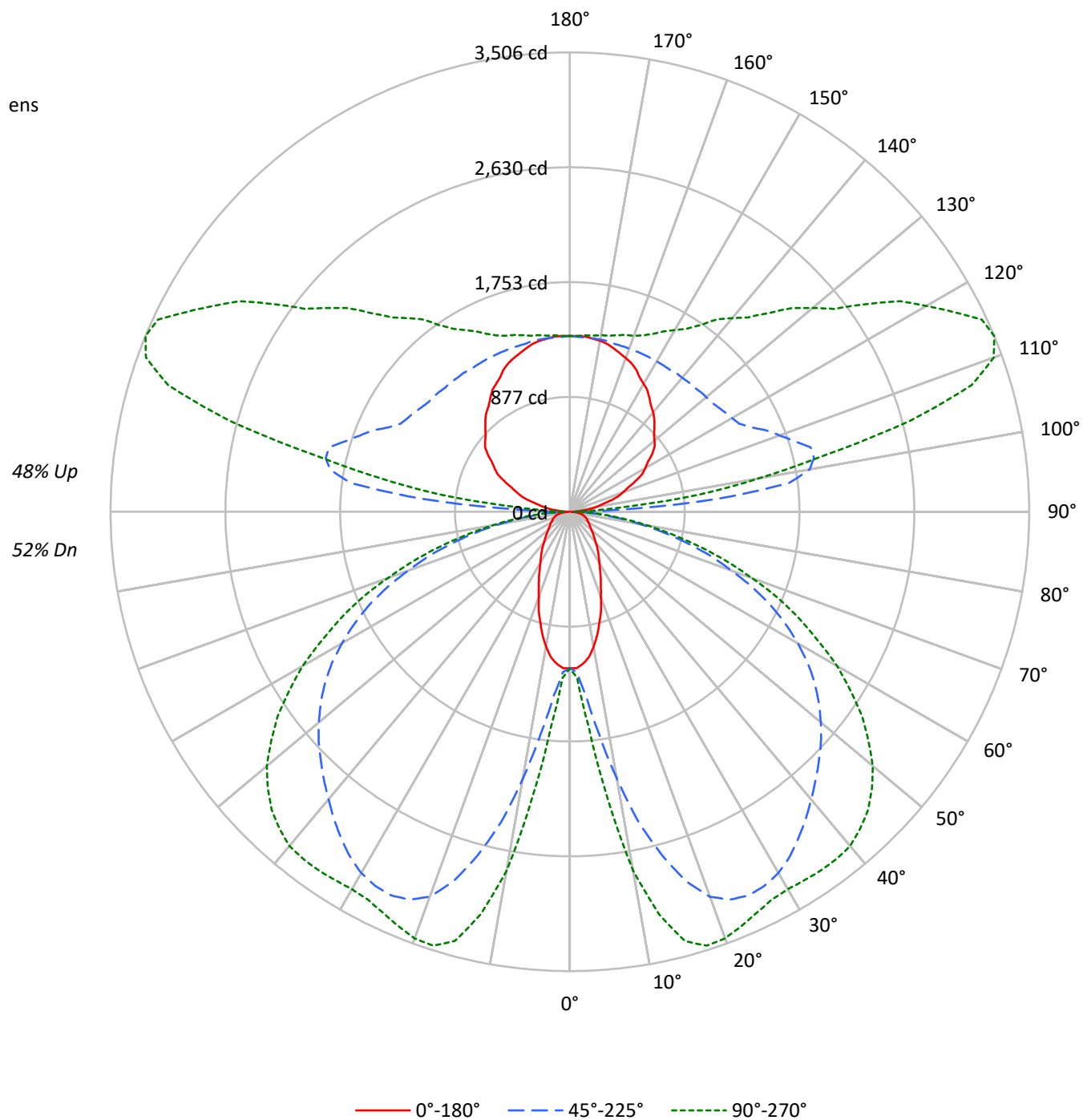
Lumens per Lamp: N/A
Luminaire Lumens: 17949.8 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P937279

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-12-3500K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3611	4271	4966
10°	3276	6228	8233
15°	2785	8138	9941
20°	2269	9433	10132
25°	1893	9874	9926
30°	1597	9939	9907
35°	1413	9777	10163
40°	1232	9564	10428
45°	1117	9410	10469
50°	1025	9272	10295
55°	983	9069	9839
60°	1007	8674	9119
65°	1049	8073	8128
70°	1120	7046	6867
75°	1247	5750	5359
80°	1371	3993	3611
85°	1244	2121	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10469 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	0.9
10°-20°	684.8	3.8
20°-30°	1197.8	6.7
30°-40°	1541.9	8.6
40°-50°	1722.3	9.6
50°-60°	1649.5	9.2
60°-70°	1307.3	7.3
70°-80°	768.7	4.3
80°-90°	218.7	1.2
90°-100°	654.5	3.6
100°-110°	1720.7	9.6
110°-120°	1784.2	9.9
120°-130°	1431.2	8.0
130°-140°	1122.9	6.3
140°-150°	861.9	4.8
150°-160°	620.7	3.5
160°-170°	379.8	2.1
170°-180°	128.3	0.7
0°-30°	2037.1	11.3
0°-40°	3579.0	19.9
0°-60°	6950.9	38.7
0°-90°	9245.5	51.5
90°-120°	4159.4	23.2
90°-150°	7575.4	42.2
90°-180°	8704.0	48.5
0°-180°	17949.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1164	1248	1406	1590	1648	107
15°	872	1609	2712	3288	3391	243
25°	557	1824	3230	3372	3376	257
35°	376	1744	3042	3215	3341	235
45°	257	1390	2688	3080	3218	199
55°	184	883	2281	2650	2723	168
65°	146	469	1694	1905	1932	145
75°	108	288	930	1022	1026	113
85°	38	88	230	254	257	41
90°	9	25	68	34	34	10
95°	86	339	1127	581	396	96
105°	310	470	1902	2888	2694	329
115°	551	669	1524	3040	3469	544
125°	766	859	1386	2342	2763	680
135°	913	1005	1343	1891	2144	706
145°	1059	1126	1326	1613	1739	663
155°	1197	1230	1326	1455	1498	550
165°	1291	1308	1326	1378	1395	364
175°	1343	1343	1335	1352	1352	127
180°	1343	1343	1343	1343	1343	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1194.5	1194.5	1202.1	1206.0	1213.7	1217.5	1225.2	1232.9	1255.9	1259.8	1267.5
5°	1163.8	1179.1	1229.1	1248.3	1302.0	1375.0	1405.7	1455.6	1559.3	1590.0	1609.2
7.5°	1117.6	1152.2	1275.1	1305.8	1440.2	1632.3	1713.0	1820.5	1985.7	2066.3	2131.6
10°	1044.7	1117.6	1336.5	1409.5	1628.5	1920.4	2070.2	2220.0	2469.6	2580.9	2623.2
12.5°	964.1	1083.1	1401.9	1501.8	1816.7	2242.9	2423.5	2588.7	2872.9	3022.7	3045.7
15°	871.8	1033.1	1463.3	1609.2	2016.4	2511.8	2711.6	2915.1	3180.2	3287.6	3314.6
17.5°	791.2	994.8	1520.9	1674.5	2170.0	2753.8	2957.4	3126.4	3341.4	3414.4	3433.7
20°	691.3	933.3	1559.3	1759.0	2331.3	2930.4	3126.4	3256.9	3402.8	3449.0	3456.6
22.5°	618.3	868.0	1582.4	1789.7	2438.9	3038.0	3203.1	3306.9	3406.7	3422.1	3425.9
25°	556.9	795.1	1578.5	1824.3	2531.0	3103.3	3230.1	3306.9	3364.5	3372.1	3372.1
27.5°	499.3	714.3	1563.2	1832.0	2600.2	3118.6	3218.5	3272.3	3299.2	3314.6	3314.6
30°	449.3	637.6	1524.7	1816.7	2630.9	3103.3	3183.9	3210.9	3237.7	3260.8	3272.3
32.5°	411.0	564.5	1467.2	1786.0	2634.7	3064.9	3122.5	3137.9	3176.3	3230.1	3249.3
35°	376.4	491.6	1401.9	1743.7	2611.6	3003.4	3041.9	3057.2	3134.0	3214.7	3241.6
37.5°	341.9	437.9	1317.4	1670.7	2577.2	2930.4	2957.4	2984.2	3103.3	3199.3	3230.1
40°	307.3	391.8	1217.5	1590.0	2523.4	2842.2	2865.1	2907.4	3064.9	3176.3	3207.0
42.5°	280.3	353.4	1110.0	1505.5	2454.2	2742.3	2776.9	2838.3	3018.8	3137.9	3172.4
45°	257.4	314.9	994.8	1390.3	2365.9	2638.6	2688.5	2773.0	2965.0	3080.3	3111.0
47.5°	234.3	288.1	875.7	1271.3	2269.9	2534.9	2600.2	2696.1	2892.1	3003.4	3030.4
50°	215.1	261.1	756.6	1144.6	2166.2	2423.5	2500.3	2600.2	2799.9	2903.6	2938.2
52.5°	199.7	238.1	645.3	1017.8	2047.1	2308.3	2396.6	2500.3	2688.5	2788.4	2811.5
55°	184.4	218.9	549.2	883.3	1924.2	2185.4	2281.4	2381.2	2565.6	2650.1	2665.4
57.5°	176.6	203.6	468.6	756.6	1793.6	2047.1	2154.7	2246.8	2419.7	2484.9	2500.3
60°	165.1	192.1	407.1	649.0	1651.5	1916.5	2008.7	2100.9	2246.8	2300.6	2312.1
62.5°	153.6	184.4	361.0	545.4	1505.5	1762.9	1855.1	1939.6	2062.5	2100.9	2116.2
65°	145.9	176.6	326.5	468.6	1355.8	1601.6	1693.7	1766.8	1866.6	1905.0	1912.7
67.5°	138.3	169.0	299.6	403.3	1206.0	1440.2	1509.4	1578.5	1655.3	1693.7	1697.6
70°	126.7	161.3	276.6	357.2	1052.3	1255.9	1313.6	1386.5	1448.0	1467.2	1478.7
72.5°	119.1	149.8	261.1	322.6	894.9	1079.3	1133.1	1175.3	1229.1	1248.3	1248.3
75°	107.6	134.4	245.8	288.1	733.5	883.3	929.5	971.7	1014.0	1021.6	1010.1
77.5°	96.0	119.1	211.2	242.0	572.3	699.0	737.4	760.5	795.1	802.7	806.6
80°	80.6	103.7	165.1	188.2	414.8	514.6	541.6	560.8	591.5	591.5	599.1
82.5°	61.4	80.6	119.1	134.4	280.3	353.4	376.4	387.9	407.1	407.1	407.1
85°	38.4	49.9	76.8	88.4	169.0	215.1	230.4	234.3	249.6	253.5	253.5
87.5°	19.2	26.8	49.9	53.8	88.4	111.3	111.3	119.1	119.1	115.2	111.3
90°	9.0	16.2	23.4	25.2	39.6	58.9	68.5	60.9	45.6	34.2	34.2
92.5°	36.0	97.3	158.6	173.9	244.5	338.6	385.7	338.0	242.7	171.2	164.4
95°	86.5	198.6	310.9	338.9	601.7	952.1	1127.3	1006.0	763.3	581.2	560.6
97.5°	149.6	248.5	347.5	372.2	810.5	1394.8	1686.9	1610.2	1456.8	1341.8	1302.5
100°	198.3	288.0	377.7	400.1	886.4	1534.8	1859.0	1864.6	1875.9	1884.3	1837.5
102.5°	239.7	323.5	407.1	428.0	921.2	1578.9	1907.8	2005.4	2200.9	2347.5	2307.5
105°	310.0	380.9	451.7	469.5	947.1	1583.9	1902.3	2121.4	2559.6	2888.2	2866.7
107.5°	382.1	448.2	514.2	530.8	951.9	1513.5	1794.2	2099.8	2711.0	3169.3	3174.5
110°	430.7	490.4	550.1	565.0	944.7	1451.0	1704.1	2045.8	2729.0	3241.4	3263.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	478.5	535.4	592.3	606.5	945.1	1396.4	1622.1	1971.7	2671.0	3195.5	3229.9
115°	550.6	603.0	655.5	668.6	953.7	1333.8	1523.8	1860.7	2534.3	3039.6	3087.3
117.5°	621.8	669.5	717.1	729.0	971.4	1294.6	1456.2	1760.2	2368.1	2824.2	2877.2
120°	663.3	708.1	752.9	764.2	985.9	1281.4	1429.2	1706.9	2262.4	2679.1	2730.5
122.5°	703.8	749.0	794.3	805.6	1006.6	1274.5	1408.4	1658.5	2158.8	2534.0	2584.8
125°	766.0	807.3	848.6	858.8	1034.5	1268.8	1386.0	1598.5	2023.4	2342.1	2388.9
127.5°	816.5	858.1	899.8	910.2	1062.5	1265.5	1367.1	1549.5	1914.4	2188.0	2227.4
130°	843.5	888.4	933.1	944.4	1082.9	1267.5	1359.8	1522.2	1847.0	2090.6	2127.1
132.5°	871.4	916.3	961.1	972.3	1099.3	1268.8	1353.5	1498.8	1789.6	2007.8	2040.4
135°	912.9	953.7	994.6	1004.8	1117.5	1267.6	1342.7	1464.4	1708.0	1890.6	1918.7
137.5°	955.2	995.6	1036.2	1046.2	1144.5	1275.4	1340.9	1443.8	1649.7	1804.1	1827.1
140°	990.3	1027.5	1064.8	1074.1	1161.0	1276.8	1334.6	1423.6	1601.4	1734.7	1756.2
142.5°	1017.4	1051.8	1086.2	1094.9	1174.8	1281.3	1334.6	1412.7	1568.9	1686.1	1704.6
145°	1058.8	1088.9	1118.9	1126.5	1192.8	1281.3	1325.6	1389.4	1517.3	1613.1	1627.1
147.5°	1100.3	1129.6	1158.8	1166.1	1219.3	1290.1	1325.6	1375.9	1476.4	1551.8	1563.4
150°	1127.3	1153.8	1180.2	1186.8	1233.1	1294.8	1325.6	1368.0	1452.9	1516.6	1526.0
152.5°	1155.2	1175.3	1195.3	1200.3	1242.1	1297.8	1325.6	1361.8	1434.3	1488.7	1495.7
155°	1196.7	1211.5	1226.4	1230.0	1261.9	1304.4	1325.6	1354.5	1412.1	1455.3	1460.1
157.5°	1227.3	1241.8	1256.2	1259.8	1281.7	1311.0	1325.6	1348.0	1392.8	1426.5	1429.8
160°	1248.1	1259.3	1270.6	1273.4	1290.8	1314.0	1325.6	1344.8	1383.2	1412.1	1414.1
162.5°	1268.8	1277.2	1285.6	1287.7	1300.3	1317.2	1325.6	1341.8	1374.2	1398.6	1400.4
165°	1291.4	1298.9	1306.5	1308.4	1314.2	1321.8	1325.6	1337.2	1360.4	1377.8	1379.8
167.5°	1312.0	1315.6	1319.3	1320.2	1325.0	1331.4	1334.6	1342.2	1357.4	1368.8	1369.6
170°	1325.6	1329.2	1332.9	1333.7	1334.0	1334.4	1334.6	1342.2	1357.4	1368.8	1368.8
172.5°	1332.8	1333.5	1334.4	1334.6	1334.6	1334.6	1334.6	1340.6	1352.6	1361.6	1361.0
175°	1342.7	1342.7	1342.7	1342.7	1340.0	1336.4	1334.6	1338.4	1346.0	1351.8	1351.8
177.5°	1342.7	1342.7	1342.7	1342.7	1340.6	1337.8	1336.4	1339.4	1345.5	1349.9	1349.1
180°	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1194.5	1194.5
2.5°	1275.1	1267.5
5°	1640.0	1647.7
7.5°	2208.4	2204.6
10°	2746.1	2780.6
12.5°	3137.9	3145.6
15°	3376.0	3391.4
17.5°	3468.1	3472.0
20°	3472.0	3464.4
22.5°	3429.8	3422.1
25°	3379.9	3376.0
27.5°	3333.7	3337.6
30°	3314.6	3326.1
32.5°	3314.6	3333.7
35°	3322.2	3341.4
37.5°	3318.3	3341.4
40°	3303.0	3329.9
42.5°	3260.8	3280.0
45°	3195.5	3218.5
47.5°	3111.0	3126.4
50°	3003.4	3018.8
52.5°	2869.0	2872.9
55°	2707.7	2723.1
57.5°	2534.9	2538.7
60°	2342.8	2354.4
62.5°	2139.3	2139.3
65°	1924.2	1931.9
67.5°	1701.5	1720.7
70°	1474.8	1478.7
72.5°	1252.0	1252.0
75°	1021.6	1025.5
77.5°	802.7	802.7
80°	595.4	599.1
82.5°	411.0	418.6
85°	257.4	257.4
87.5°	119.1	107.6
90°	34.2	34.2
92.5°	137.2	110.0
95°	478.1	395.6
97.5°	1145.6	988.6
100°	1650.5	1463.5
102.5°	2147.2	1987.0
105°	2780.5	2694.4
107.5°	3195.4	3216.2
110°	3353.5	3443.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3367.7	3505.5
115°	3278.3	3469.4
117.5°	3089.0	3300.9
120°	2936.5	3142.3
122.5°	2787.8	2990.9
125°	2575.9	2762.9
127.5°	2385.3	2543.0
130°	2272.9	2418.7
132.5°	2170.9	2301.6
135°	2031.3	2143.8
137.5°	1919.2	2011.4
140°	1842.4	1928.4
142.5°	1778.7	1852.7
145°	1683.2	1739.2
147.5°	1609.8	1656.3
150°	1563.7	1601.4
152.5°	1524.2	1552.6
155°	1478.9	1497.7
157.5°	1443.0	1456.2
160°	1421.6	1429.2
162.5°	1407.6	1414.8
165°	1387.3	1395.0
167.5°	1372.9	1376.1
170°	1368.8	1368.8
172.5°	1358.2	1355.3
175°	1351.8	1351.8
177.5°	1345.9	1342.7
180°	1342.7	1342.7

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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	5.69	6.60	6.62	7.56	8.81	18.88	19.79	19.82	20.75	22.00
	3H	6.40	7.22	7.34	8.19	9.46	20.73	21.55	21.68	22.52	23.79
	4H	6.70	7.48	7.66	8.45	9.73	21.38	22.16	22.34	23.13	24.41
	6H	6.95	7.67	7.92	8.65	9.94	21.82	22.54	22.79	23.51	24.81
	8H	7.02	7.71	8.00	8.70	9.99	21.94	22.63	22.92	23.62	24.91
	12H	7.04	7.69	8.03	8.68	10.00	22.01	22.67	23.00	23.66	24.97
4H	2H	12.92	13.70	13.88	14.67	15.95	19.16	19.94	20.13	20.91	22.19
	3H	14.49	15.14	15.47	16.14	17.44	21.22	21.87	22.19	22.87	24.16
	4H	14.59	15.18	15.57	16.18	17.49	21.99	22.59	22.98	23.58	24.90
	6H	14.60	15.12	15.60	16.14	17.45	22.54	23.05	23.53	24.07	25.38
	8H	14.58	15.06	15.58	16.07	17.40	22.70	23.18	23.70	24.20	25.52
	12H	14.54	14.97	15.56	16.00	17.34	22.80	23.24	23.82	24.26	25.60
8H	4H	16.04	16.52	17.04	17.53	18.86	22.05	22.54	23.05	23.55	24.88
	6H	16.28	16.68	17.31	17.74	19.06	22.69	23.09	23.72	24.14	25.47
	8H	16.30	16.66	17.34	17.70	19.04	22.91	23.27	23.95	24.31	25.65
	12H	16.27	16.58	17.31	17.62	19.01	23.06	23.37	24.10	24.41	25.80
12H	4H	16.19	16.62	17.21	17.65	18.99	22.01	22.45	23.03	23.47	24.81
	6H	16.54	16.90	17.58	17.94	19.28	22.67	23.03	23.71	24.07	25.41
	8H	16.62	16.93	17.66	17.96	19.35	22.91	23.22	23.95	24.25	25.64