

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: P938388

Luminaire Tested: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938388
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-B2750-1D-UNV-W2A-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

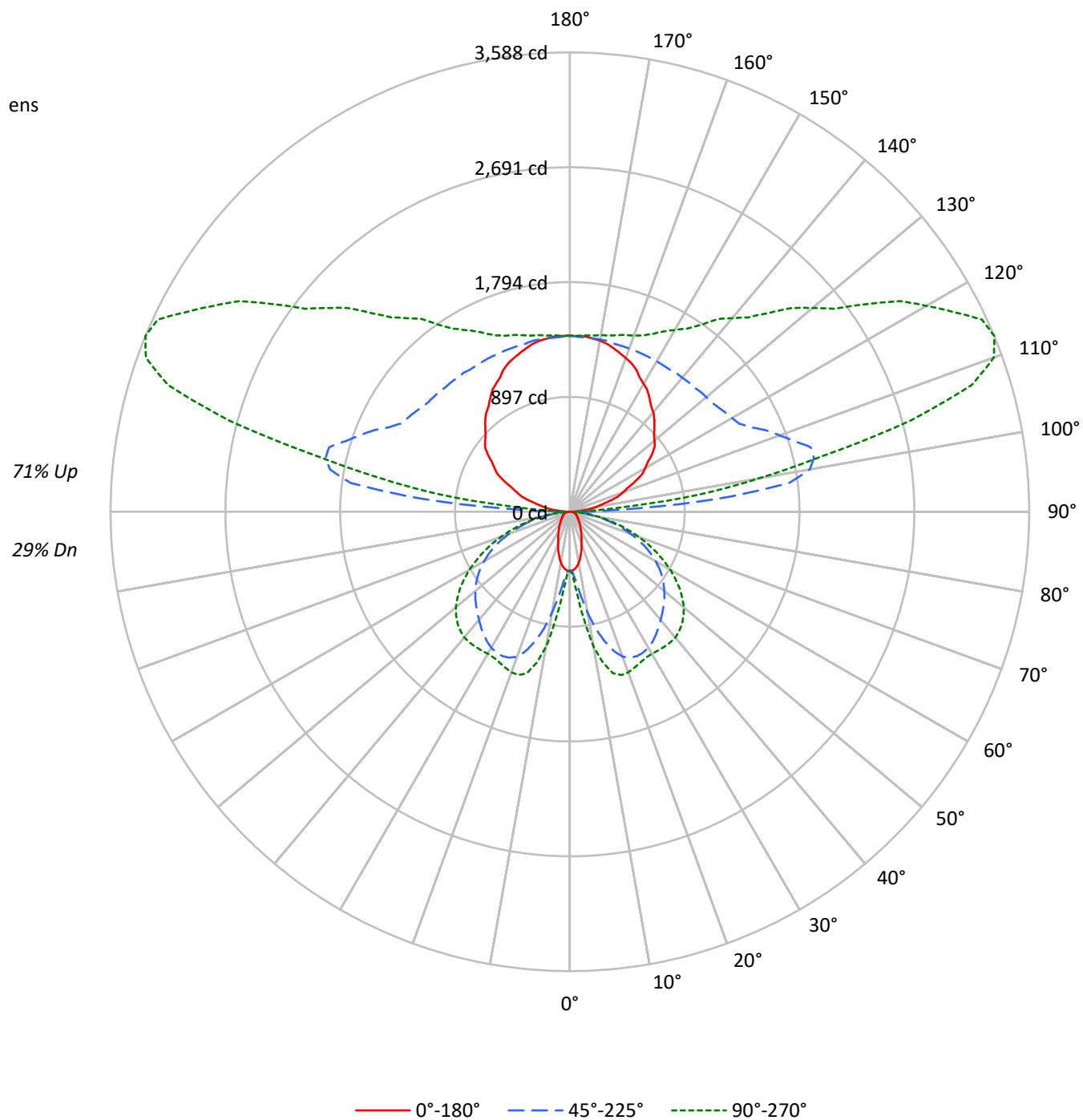
Lumens per Lamp: N/A
Luminaire Lumens: 12473.9 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 95.4
Input Voltage (V): NR
Input Current (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: P938388

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-6-3000K

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	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	30	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	25	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	21	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	17	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	15	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	13	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	11	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	10	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	9	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2846	2846	2846
5°	2779	3288	3825
10°	2520	4792	6341
15°	2140	6259	7657
20°	1742	7251	7804
25°	1453	7586	7645
30°	1224	7633	7631
35°	1082	7504	7828
40°	942	7336	8032
45°	853	7213	8063
50°	781	7102	7930
55°	748	6941	7578
60°	765	6633	7022
65°	794	6166	6260
70°	844	5374	5288
75°	932	4378	4127
80°	1012	3032	2781
85°	882	1605	1423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8063 cd/sqm

TEST NUMBER: P938388

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-6-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.5	0.5
10°-20°	263.7	2.1
20°-30°	461.3	3.7
30°-40°	593.8	4.8
40°-50°	663.2	5.3
50°-60°	635.2	5.1
60°-70°	503.4	4.0
70°-80°	296.0	2.4
80°-90°	87.5	0.7
90°-100°	670.0	5.4
100°-110°	1761.4	14.1
110°-120°	1826.4	14.6
120°-130°	1465.0	11.7
130°-140°	1149.5	9.2
140°-150°	882.3	7.1
150°-160°	635.4	5.1
160°-170°	388.8	3.1
170°-180°	131.3	1.1
0°-30°	784.5	6.3
0°-40°	1378.3	11.0
0°-60°	2676.8	21.5
0°-90°	3563.7	28.6
90°-120°	4257.9	34.1
90°-150°	7754.7	62.2
90°-180°	8910.0	71.4
0°-180°	12473.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	448	481	541	612	634	41
15°	336	620	1044	1266	1306	93
25°	214	702	1244	1299	1300	99
35°	145	672	1172	1238	1287	90
45°	99	535	1035	1186	1240	77
55°	71	340	878	1020	1049	65
65°	56	180	652	734	744	56
75°	41	111	358	393	395	43
85°	15	34	89	98	99	16
90°	9	26	70	35	35	9
95°	88	347	1154	595	405	98
105°	317	481	1947	2956	2758	336
115°	564	684	1560	3111	3552	557
125°	784	879	1419	2398	2828	696
135°	934	1029	1374	1935	2194	723
145°	1084	1153	1357	1651	1780	679
155°	1225	1259	1357	1490	1533	563
165°	1322	1339	1357	1410	1428	373
175°	1374	1374	1366	1384	1384	130
180°	1374	1374	1374	1374	1374	

TEST NUMBER: P938388

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0
2.5°	460.0	460.0	462.9	464.4	467.4	468.8	471.8	474.8	483.6	485.1	488.1
5°	448.1	454.1	473.3	480.7	501.4	529.5	541.3	560.5	600.5	612.3	619.7
7.5°	430.4	443.7	491.0	502.9	554.6	628.6	659.6	701.0	764.6	795.7	820.8
10°	402.3	430.4	514.7	542.8	627.1	739.5	797.2	854.9	951.0	993.9	1010.2
12.5°	371.2	417.1	539.8	578.3	699.6	863.7	933.2	996.8	1106.3	1164.1	1172.9
15°	335.7	397.9	563.5	619.7	776.5	967.3	1044.2	1122.7	1224.7	1266.1	1276.5
17.5°	304.7	383.1	585.7	644.8	835.6	1060.4	1138.9	1204.0	1286.8	1314.9	1322.3
20°	266.2	359.4	600.5	677.4	897.8	1128.6	1204.0	1254.3	1310.5	1328.2	1331.2
22.5°	238.1	334.3	609.3	689.2	939.2	1170.0	1233.6	1273.5	1312.0	1317.9	1319.4
25°	214.5	306.2	607.9	702.5	974.7	1195.1	1243.9	1273.5	1295.7	1298.7	1298.7
27.5°	192.3	275.1	602.0	705.5	1001.3	1201.0	1239.5	1260.2	1270.6	1276.5	1276.5
30°	173.0	245.5	587.2	699.6	1013.1	1195.1	1226.2	1236.5	1246.9	1255.8	1260.2
32.5°	158.3	217.4	565.0	687.7	1014.6	1180.3	1202.5	1208.4	1223.2	1243.9	1251.3
35°	144.9	189.3	539.8	671.5	1005.7	1156.7	1171.5	1177.4	1207.0	1238.0	1248.4
37.5°	131.6	168.6	507.3	643.4	992.4	1128.6	1138.9	1149.3	1195.1	1232.1	1243.9
40°	118.3	150.9	468.8	612.3	971.7	1094.5	1103.3	1119.6	1180.3	1223.2	1235.1
42.5°	108.0	136.1	427.4	579.8	945.1	1056.0	1069.3	1093.0	1162.6	1208.4	1221.8
45°	99.1	121.3	383.1	535.4	911.1	1016.1	1035.3	1067.8	1141.9	1186.3	1198.1
47.5°	90.2	110.9	337.2	489.5	874.1	976.1	1001.3	1038.3	1113.7	1156.7	1167.0
50°	82.8	100.6	291.4	440.7	834.2	933.2	962.8	1001.3	1078.2	1118.1	1131.5
52.5°	76.9	91.7	248.5	391.9	788.3	888.9	922.9	962.8	1035.3	1073.8	1082.6
55°	71.0	84.3	211.5	340.2	741.0	841.6	878.5	917.0	988.0	1020.5	1026.4
57.5°	68.0	78.4	180.4	291.4	690.7	788.3	829.7	865.2	931.8	956.9	962.8
60°	63.6	74.0	156.8	250.0	636.0	738.0	773.5	809.0	865.2	885.9	890.4
62.5°	59.2	71.0	139.0	210.0	579.8	678.9	714.4	746.9	794.2	809.0	814.9
65°	56.2	68.0	125.7	180.4	522.1	616.7	652.2	680.3	718.8	733.6	736.5
67.5°	53.2	65.1	115.4	155.3	464.4	554.6	581.2	607.9	637.4	652.2	653.7
70°	48.8	62.1	106.5	137.5	405.2	483.6	505.8	533.9	557.6	565.0	569.4
72.5°	45.8	57.7	100.6	124.2	344.6	415.6	436.3	452.6	473.3	480.7	480.7
75°	41.4	51.8	94.7	110.9	282.5	340.2	357.9	374.2	390.5	393.4	389.0
77.5°	37.0	45.8	81.3	93.2	220.4	269.2	284.0	292.8	306.2	309.1	310.6
80°	31.1	39.9	63.6	72.5	159.7	198.2	208.5	215.9	227.8	227.8	230.7
82.5°	23.7	31.1	45.8	51.8	108.0	136.1	144.9	149.4	156.8	156.8	156.8
85°	14.8	19.2	29.6	34.0	65.1	82.8	88.7	90.2	96.1	97.6	97.6
87.5°	7.4	10.4	19.2	20.7	34.0	42.9	42.9	45.8	45.8	44.4	42.9
90°	9.3	16.7	24.0	25.8	40.6	60.2	70.1	62.3	46.7	35.1	35.1
92.5°	36.9	99.6	162.4	178.1	250.3	346.7	394.8	346.0	248.5	175.3	168.3
95°	88.5	203.3	318.2	346.9	616.0	974.7	1154.0	1029.8	781.3	595.0	573.9
97.5°	153.1	254.4	355.7	381.0	829.6	1427.8	1726.9	1648.4	1491.3	1373.6	1333.4
100°	202.9	294.8	386.6	409.6	907.4	1571.2	1903.1	1908.8	1920.3	1928.9	1881.1
102.5°	245.4	331.1	416.8	438.2	943.1	1616.3	1952.9	2052.9	2252.9	2403.0	2362.0
105°	317.3	389.9	462.4	480.6	969.5	1621.4	1947.4	2171.6	2620.1	2956.5	2934.4
107.5°	391.1	458.8	526.4	543.3	974.4	1549.2	1836.6	2149.5	2775.1	3244.3	3249.7
110°	440.9	502.1	563.1	578.4	967.1	1485.2	1744.3	2094.1	2793.5	3318.1	3341.1

TEST NUMBER: P938388

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	489.8	548.0	606.2	620.8	967.4	1429.4	1660.4	2018.3	2734.2	3271.1	3306.4
115°	563.6	617.3	671.1	684.5	976.2	1365.3	1559.9	1904.7	2594.3	3111.4	3160.3
117.5°	636.5	685.3	734.1	746.3	994.5	1325.3	1490.7	1801.9	2424.2	2891.0	2945.2
120°	679.0	724.9	770.9	782.3	1009.2	1311.8	1463.0	1747.4	2316.0	2742.5	2795.1
122.5°	720.5	766.8	813.2	824.7	1030.4	1304.7	1441.8	1697.9	2209.9	2594.0	2645.9
125°	784.1	826.3	868.6	879.1	1059.0	1298.9	1418.8	1636.3	2071.2	2397.5	2445.3
127.5°	835.7	878.3	921.0	931.7	1087.6	1295.4	1399.3	1586.1	1959.6	2239.7	2280.1
130°	863.4	909.4	955.3	966.8	1108.6	1297.6	1392.0	1558.3	1890.8	2140.1	2177.4
132.5°	892.0	938.0	983.9	995.4	1125.4	1298.9	1385.5	1534.3	1832.0	2055.2	2088.6
135°	934.4	976.2	1018.1	1028.6	1143.9	1297.6	1374.5	1499.1	1748.4	1935.3	1964.1
137.5°	977.8	1019.2	1060.6	1071.0	1171.6	1305.6	1372.6	1478.0	1688.7	1846.8	1870.3
140°	1013.8	1052.0	1090.0	1099.6	1188.4	1306.9	1366.2	1457.2	1639.2	1775.8	1797.8
142.5°	1041.4	1076.7	1112.0	1120.8	1202.6	1311.7	1366.2	1446.2	1606.0	1725.9	1744.8
145°	1083.9	1114.7	1145.4	1153.1	1221.1	1311.7	1356.9	1422.3	1553.1	1651.3	1665.6
147.5°	1126.3	1156.3	1186.2	1193.7	1248.1	1320.6	1356.9	1408.4	1511.2	1588.4	1600.4
150°	1154.0	1181.0	1208.0	1214.9	1262.2	1325.4	1356.9	1400.4	1487.3	1552.5	1562.1
152.5°	1182.6	1203.1	1223.6	1228.8	1271.4	1328.4	1356.9	1394.0	1468.3	1523.9	1531.2
155°	1225.0	1240.2	1255.4	1259.1	1291.8	1335.2	1356.9	1386.4	1445.5	1489.7	1494.6
157.5°	1256.4	1271.2	1285.9	1289.6	1312.1	1341.9	1356.9	1379.9	1425.9	1460.3	1463.6
160°	1277.7	1289.1	1300.5	1303.4	1321.2	1345.0	1356.9	1376.7	1416.0	1445.5	1447.4
162.5°	1298.9	1307.4	1316.0	1318.2	1331.1	1348.4	1356.9	1373.5	1406.7	1431.7	1433.5
165°	1321.9	1329.7	1337.4	1339.4	1345.2	1353.0	1356.9	1368.9	1392.6	1410.5	1412.4
167.5°	1343.1	1346.8	1350.5	1351.4	1356.3	1362.9	1366.2	1374.0	1389.6	1401.2	1402.0
170°	1356.9	1360.6	1364.3	1365.2	1365.5	1366.0	1366.2	1374.0	1389.6	1401.2	1401.2
172.5°	1364.3	1365.1	1366.0	1366.2	1366.2	1366.2	1366.2	1372.3	1384.6	1393.8	1393.1
175°	1374.5	1374.5	1374.5	1374.5	1371.7	1368.1	1366.2	1370.0	1377.8	1383.7	1383.7
177.5°	1374.5	1374.5	1374.5	1374.5	1372.3	1369.5	1368.0	1371.0	1377.2	1381.9	1381.1
180°	1374.5	1374.5	1374.5	1374.5	1374.5	1374.5	1374.5	1374.5	1374.5	1374.5	1374.5

TEST NUMBER: P938388

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	460.0	460.0
2.5°	491.0	488.1
5°	631.5	634.5
7.5°	850.4	848.9
10°	1057.5	1070.8
12.5°	1208.4	1211.4
15°	1300.1	1306.1
17.5°	1335.6	1337.1
20°	1337.1	1334.2
22.5°	1320.8	1317.9
25°	1301.6	1300.1
27.5°	1283.9	1285.3
30°	1276.5	1280.9
32.5°	1276.5	1283.9
35°	1279.4	1286.8
37.5°	1278.0	1286.8
40°	1272.0	1282.4
42.5°	1255.8	1263.2
45°	1230.6	1239.5
47.5°	1198.1	1204.0
50°	1156.7	1162.6
52.5°	1104.8	1106.3
55°	1042.7	1048.6
57.5°	976.1	977.6
60°	902.2	906.6
62.5°	823.8	823.8
65°	741.0	743.9
67.5°	655.2	662.6
70°	567.9	569.4
72.5°	482.2	482.2
75°	393.4	394.9
77.5°	309.1	309.1
80°	229.2	230.7
82.5°	158.3	161.2
85°	99.1	99.1
87.5°	45.8	41.4
90°	35.1	35.1
92.5°	140.4	112.5
95°	489.4	405.0
97.5°	1172.6	1011.9
100°	1689.6	1498.1
102.5°	2198.0	2034.0
105°	2846.3	2758.1
107.5°	3271.0	3292.3
110°	3432.9	3524.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3447.4	3588.3
115°	3355.9	3551.5
117.5°	3162.1	3379.0
120°	3005.9	3216.6
122.5°	2853.8	3061.6
125°	2636.8	2828.2
127.5°	2441.6	2603.2
130°	2326.7	2475.8
132.5°	2222.2	2355.9
135°	2079.4	2194.5
137.5°	1964.7	2059.0
140°	1885.9	1974.1
142.5°	1820.7	1896.6
145°	1722.9	1780.3
147.5°	1647.9	1695.5
150°	1600.7	1639.2
152.5°	1560.2	1589.4
155°	1513.8	1533.1
157.5°	1477.2	1490.7
160°	1455.2	1463.0
162.5°	1440.8	1448.2
165°	1420.1	1427.9
167.5°	1405.3	1408.6
170°	1401.2	1401.2
172.5°	1390.3	1387.4
175°	1383.7	1383.7
177.5°	1377.7	1374.5
180°	1374.5	1374.5

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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	2.24	2.96	3.36	4.07	5.62	15.41	16.13	16.53	17.24	18.78
	3H	2.94	3.58	4.06	4.70	6.26	17.23	17.87	18.36	19.00	20.56
	4H	3.23	3.84	4.36	4.96	6.53	17.87	18.48	19.00	19.60	21.17
	6H	3.47	4.03	4.62	5.16	6.74	18.29	18.85	19.43	19.97	21.55
	8H	3.54	4.07	4.68	5.21	6.78	18.40	18.94	19.55	20.08	21.65
	12H	3.55	4.06	4.70	5.19	6.79	18.46	18.97	19.61	20.10	21.70
4H	2H	9.43	10.04	10.57	11.17	12.73	15.67	16.28	16.81	17.40	18.97
	3H	10.99	11.50	12.14	12.65	14.23	17.69	18.20	18.84	19.35	20.93
	4H	11.08	11.55	12.23	12.68	14.28	18.45	18.92	19.60	20.06	21.66
	6H	11.08	11.48	12.23	12.64	14.23	18.98	19.38	20.13	20.54	22.13
	8H	11.05	11.43	12.21	12.58	14.19	19.13	19.51	20.29	20.66	22.27
	12H	11.00	11.34	12.17	12.51	14.12	19.21	19.56	20.39	20.72	22.33
8H	4H	12.50	12.88	13.66	14.03	15.64	18.50	18.87	19.65	20.03	21.63
	6H	12.74	13.05	13.92	14.25	15.85	19.12	19.43	20.29	20.62	22.22
	8H	12.76	13.03	13.94	14.20	15.82	19.33	19.60	20.51	20.78	22.40
	12H	12.72	12.96	13.90	14.13	15.78	19.47	19.70	20.65	20.87	22.53
12H	4H	12.64	12.98	13.81	14.14	15.76	18.44	18.78	19.62	19.95	21.56
	6H	13.00	13.27	14.18	14.44	16.06	19.10	19.37	20.28	20.54	22.16
	8H	13.06	13.30	14.24	14.47	16.12	19.32	19.56	20.50	20.73	22.38