

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: P937566

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937566
REPORT IS A COMBINATION OF REPORTS P933582 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

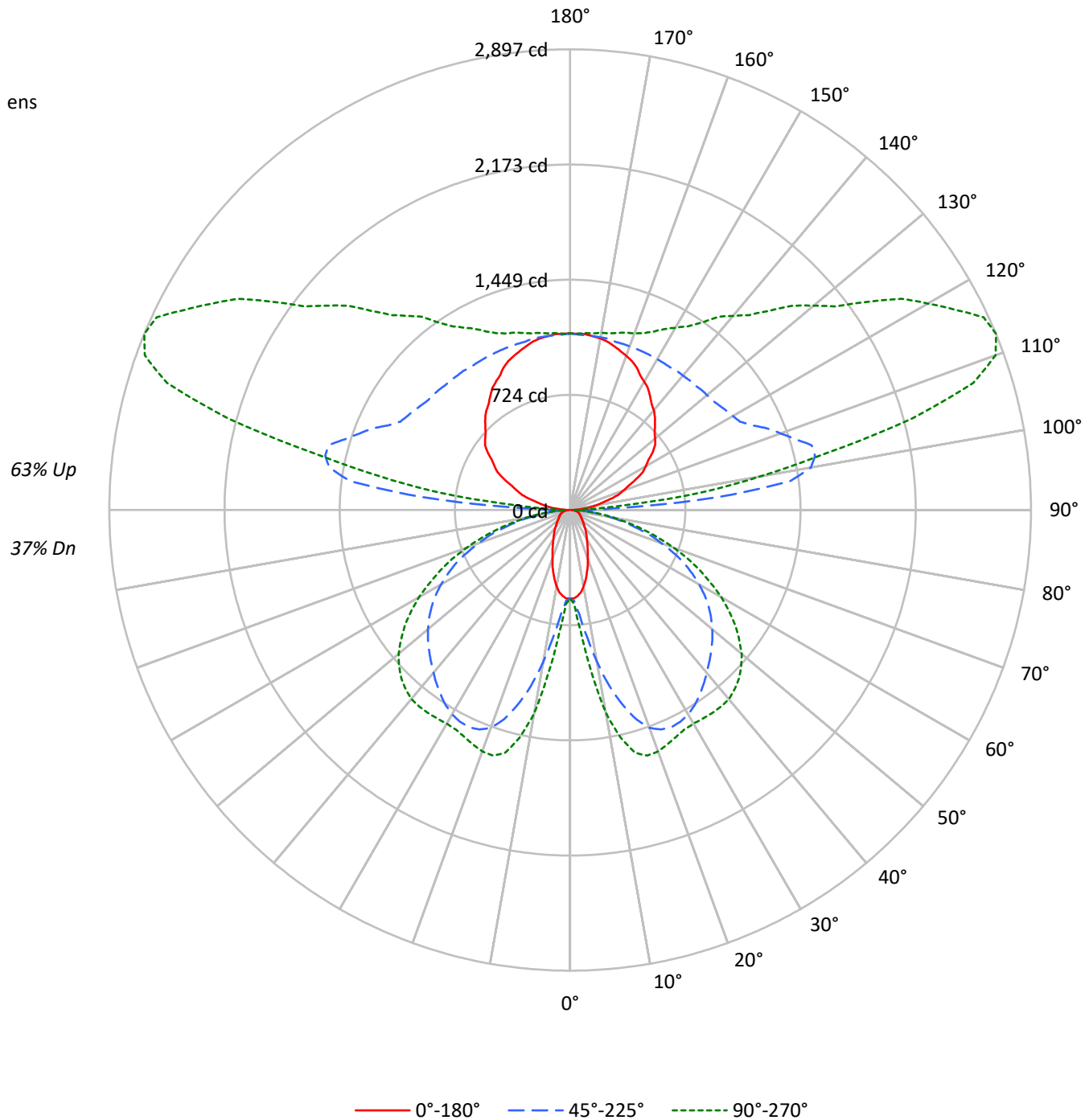
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11506.5 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: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 98.4
Input Voltage (V): NR
Input Current (A_{in}): 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: P937566
CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P937566

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

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	50	30	10	0
RCR																					
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2584	2584	2584
5°	2524	2986	3473
10°	2289	4353	5758
15°	1946	5688	6953
20°	1584	6591	7086
25°	1321	6897	6942
30°	1114	6941	6929
35°	985	6826	7108
40°	858	6676	7293
45°	778	6566	7321
50°	713	6467	7200
55°	683	6323	6881
60°	699	6045	6377
65°	727	5623	5685
70°	775	4903	4802
75°	858	3998	3748
80°	938	2773	2525
85°	834	1470	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7321 cd/sqm



TEST NUMBER: P937566

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	0.6
10°-20°	319.3	2.8
20°-30°	558.5	4.9
30°-40°	718.9	6.2
40°-50°	803.0	7.0
50°-60°	769.1	6.7
60°-70°	609.5	5.3
70°-80°	358.4	3.1
80°-90°	103.8	0.9
90°-100°	541.0	4.7
100°-110°	1422.2	12.4
110°-120°	1474.7	12.8
120°-130°	1182.9	10.3
130°-140°	928.1	8.1
140°-150°	712.4	6.2
150°-160°	513.0	4.5
160°-170°	313.9	2.7
170°-180°	106.0	0.9
0°-30°	949.8	8.3
0°-40°	1668.7	14.5
0°-60°	3240.8	28.2
0°-90°	4312.5	37.5
90°-120°	3437.8	29.9
90°-150°	6261.1	54.4
90°-180°	7194.0	62.5
0°-180°	11506.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	557	557	557	557	557	
5°	543	582	655	741	768	50
15°	406	750	1264	1533	1581	113
25°	260	850	1506	1572	1574	120
35°	176	813	1418	1499	1558	110
45°	120	648	1254	1436	1501	93
55°	86	412	1064	1236	1270	78
65°	68	218	790	888	901	67
75°	50	134	433	476	478	52
85°	18	41	107	118	120	19
90°	7	21	57	28	28	7
95°	72	280	932	480	327	79
105°	256	388	1572	2387	2227	272
115°	455	553	1259	2512	2868	449
125°	633	710	1146	1936	2284	562
135°	754	830	1110	1563	1772	584
145°	875	931	1096	1333	1437	548
155°	989	1017	1096	1203	1238	454
165°	1067	1081	1096	1139	1153	301
175°	1110	1110	1103	1117	1117	105
180°	1110	1110	1110	1110	1110	



TEST NUMBER: P937566

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9
2.5°	556.9	556.9	560.5	562.3	565.8	567.6	571.2	574.8	585.5	587.3	590.9
5°	542.6	549.7	573.0	582.0	607.0	641.0	655.4	678.6	727.0	741.3	750.3
7.5°	521.1	537.2	594.5	608.8	671.5	761.0	798.6	848.8	925.8	963.4	993.8
10°	487.0	521.1	623.1	657.2	759.2	895.3	965.1	1035.1	1151.5	1203.4	1223.1
12.5°	449.4	505.0	653.6	700.1	847.0	1045.8	1130.0	1207.0	1339.5	1409.3	1420.1
15°	406.5	481.7	682.2	750.3	940.1	1171.2	1264.3	1359.2	1482.7	1532.9	1545.4
17.5°	368.9	463.8	709.1	780.7	1011.7	1284.0	1378.9	1457.7	1557.9	1592.0	1600.9
20°	322.3	435.1	727.0	820.1	1087.0	1366.3	1457.7	1518.5	1586.6	1608.1	1611.7
22.5°	288.3	404.7	737.7	834.4	1137.1	1416.5	1493.5	1541.8	1588.4	1595.5	1597.3
25°	259.6	370.7	735.9	850.5	1180.1	1446.9	1506.0	1541.8	1568.7	1572.3	1572.3
27.5°	232.8	333.1	728.8	854.1	1212.3	1454.1	1500.6	1525.7	1538.2	1545.4	1545.4
30°	209.5	297.2	710.9	847.0	1226.7	1446.9	1484.5	1497.1	1509.6	1520.3	1525.7
32.5°	191.6	263.2	684.0	832.6	1228.5	1429.0	1455.9	1463.0	1480.9	1506.0	1515.0
35°	175.5	229.2	653.6	812.9	1217.7	1400.4	1418.3	1425.4	1461.2	1498.8	1511.4
37.5°	159.4	204.1	614.2	778.9	1201.6	1366.3	1378.9	1391.4	1446.9	1491.7	1506.0
40°	143.2	182.6	567.6	741.3	1176.5	1325.2	1335.9	1355.6	1429.0	1480.9	1495.3
42.5°	130.7	164.7	517.5	701.9	1144.3	1278.6	1294.7	1323.4	1407.5	1463.0	1479.1
45°	120.0	146.8	463.8	648.2	1103.1	1230.2	1253.5	1292.9	1382.5	1436.2	1450.5
47.5°	109.2	134.3	408.3	592.7	1058.3	1181.9	1212.3	1257.1	1348.4	1400.4	1412.9
50°	100.3	121.8	352.8	533.6	1009.9	1130.0	1165.8	1212.3	1305.5	1353.8	1369.9
52.5°	93.1	111.0	300.8	474.5	954.4	1076.3	1117.4	1165.8	1253.5	1300.1	1310.8
55°	85.9	102.1	256.1	411.8	897.1	1019.0	1063.7	1110.3	1196.2	1235.6	1242.8
57.5°	82.4	94.9	218.5	352.8	836.2	954.4	1004.5	1047.6	1128.2	1158.6	1165.8
60°	77.0	89.5	189.8	302.6	770.0	893.5	936.5	979.5	1047.6	1072.7	1078.0
62.5°	71.6	85.9	168.3	254.3	701.9	821.9	864.9	904.3	961.6	979.5	986.6
65°	68.0	82.4	152.2	218.5	632.1	746.7	789.7	823.7	870.2	888.1	891.7
67.5°	64.5	78.8	139.7	188.0	562.3	671.5	703.7	735.9	771.8	789.7	791.5
70°	59.1	75.2	128.9	166.5	490.6	585.5	612.4	646.4	675.1	684.0	689.4
72.5°	55.5	69.8	121.8	150.4	417.2	503.2	528.2	547.9	573.0	582.0	582.0
75°	50.1	62.7	114.6	134.3	342.0	411.8	433.3	453.0	472.7	476.3	470.9
77.5°	44.8	55.5	98.5	112.8	266.8	325.9	343.8	354.5	370.7	374.2	376.0
80°	37.6	48.3	77.0	87.7	193.4	239.9	252.5	261.4	275.8	275.8	279.3
82.5°	28.6	37.6	55.5	62.7	130.7	164.7	175.5	180.9	189.8	189.8	189.8
85°	17.9	23.3	35.8	41.2	78.8	100.3	107.4	109.2	116.4	118.2	118.2
87.5°	9.0	12.5	23.3	25.1	41.2	51.9	51.9	55.5	55.5	53.7	51.9
90°	7.4	13.4	19.3	20.9	32.8	48.6	56.6	50.3	37.7	28.3	28.3
92.5°	29.8	80.5	131.2	143.8	202.1	279.9	318.7	279.3	200.6	141.5	135.9
95°	71.5	164.2	256.9	280.1	497.3	786.9	931.8	831.5	630.8	480.4	463.4
97.5°	123.6	205.4	287.2	307.6	669.9	1152.8	1394.3	1330.9	1204.1	1109.0	1076.6
100°	163.8	238.0	312.2	330.7	732.6	1268.6	1536.5	1541.2	1550.4	1557.4	1518.7
102.5°	198.1	267.3	336.5	353.7	761.4	1304.9	1576.7	1657.5	1819.1	1940.2	1907.1
105°	256.2	314.8	373.3	388.0	782.8	1309.1	1572.3	1753.3	2115.4	2387.1	2369.3
107.5°	315.8	370.4	425.0	438.7	786.8	1250.8	1482.9	1735.5	2240.6	2619.4	2623.7
110°	356.0	405.3	454.6	467.0	780.8	1199.2	1408.4	1690.8	2255.5	2679.0	2697.6



TEST NUMBER: P937566

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	395.5	442.5	489.6	501.3	781.1	1154.1	1340.6	1629.6	2207.6	2641.1	2669.6
115°	455.1	498.4	541.8	552.7	788.2	1102.4	1259.4	1537.9	2094.7	2512.2	2551.7
117.5°	513.9	553.3	592.7	602.5	802.9	1070.0	1203.6	1454.8	1957.3	2334.2	2377.9
120°	548.2	585.3	622.3	631.6	814.8	1059.2	1181.3	1410.8	1869.9	2214.3	2256.8
122.5°	581.7	619.1	656.5	665.8	831.9	1053.3	1164.1	1370.8	1784.3	2094.4	2136.4
125°	633.1	667.2	701.3	709.8	855.0	1048.7	1145.5	1321.1	1672.4	1935.8	1974.4
127.5°	674.8	709.2	743.6	752.2	878.1	1046.0	1129.9	1280.7	1582.2	1808.4	1840.9
130°	697.1	734.2	771.2	780.5	895.0	1047.6	1123.9	1258.1	1526.6	1728.0	1758.0
132.5°	720.2	757.3	794.3	803.6	908.7	1048.7	1118.7	1238.8	1479.1	1659.4	1686.3
135°	754.5	788.2	822.1	830.5	923.6	1047.7	1109.7	1210.4	1411.6	1562.6	1585.9
137.5°	789.5	822.9	856.4	864.7	945.9	1054.1	1108.2	1193.3	1363.5	1491.1	1510.1
140°	818.5	849.3	880.1	887.8	959.5	1055.2	1103.0	1176.5	1323.5	1433.8	1451.6
142.5°	840.9	869.3	897.8	904.9	971.0	1059.0	1103.0	1167.6	1296.7	1393.6	1408.9
145°	875.2	900.0	924.9	931.0	985.9	1059.1	1095.6	1148.4	1254.0	1333.2	1344.8
147.5°	909.4	933.5	957.7	963.8	1007.8	1066.3	1095.6	1137.1	1220.2	1282.5	1292.1
150°	931.8	953.6	975.4	980.9	1019.1	1070.1	1095.6	1130.7	1200.9	1253.5	1261.3
152.5°	954.9	971.4	988.0	992.1	1026.6	1072.6	1095.6	1125.6	1185.5	1230.4	1236.3
155°	989.1	1001.3	1013.6	1016.6	1042.9	1078.0	1095.6	1119.4	1167.1	1202.9	1206.7
157.5°	1014.4	1026.3	1038.3	1041.2	1059.3	1083.5	1095.6	1114.1	1151.2	1179.0	1181.7
160°	1031.6	1040.9	1050.1	1052.4	1066.9	1086.0	1095.6	1111.5	1143.3	1167.1	1168.7
162.5°	1048.7	1055.7	1062.6	1064.3	1074.7	1088.6	1095.6	1109.0	1135.8	1155.9	1157.5
165°	1067.3	1073.6	1079.8	1081.4	1086.2	1092.5	1095.6	1105.2	1124.4	1138.8	1140.4
167.5°	1084.4	1087.4	1090.4	1091.1	1095.1	1100.3	1103.0	1109.3	1121.9	1131.3	1131.9
170°	1095.6	1098.5	1101.6	1102.3	1102.6	1102.8	1103.0	1109.3	1121.9	1131.3	1131.3
172.5°	1101.6	1102.2	1102.8	1103.0	1103.0	1103.0	1103.0	1108.0	1118.0	1125.4	1124.9
175°	1109.7	1109.7	1109.7	1109.7	1107.5	1104.5	1103.0	1106.2	1112.4	1117.2	1117.2
177.5°	1109.7	1109.7	1109.7	1109.7	1108.0	1105.7	1104.5	1107.1	1112.0	1115.7	1115.1
180°	1109.7	1109.7	1109.7	1109.7	1109.7	1109.7	1109.7	1109.7	1109.7	1109.7	1109.7



TEST NUMBER: P937566

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	556.9	556.9
2.5°	594.5	590.9
5°	764.6	768.2
7.5°	1029.7	1027.9
10°	1280.4	1296.5
12.5°	1463.0	1466.6
15°	1574.0	1581.2
17.5°	1617.0	1618.8
20°	1618.8	1615.2
22.5°	1599.1	1595.5
25°	1575.8	1574.0
27.5°	1554.4	1556.1
30°	1545.4	1550.8
32.5°	1545.4	1554.4
35°	1549.0	1557.9
37.5°	1547.2	1557.9
40°	1540.0	1552.6
42.5°	1520.3	1529.3
45°	1489.9	1500.6
47.5°	1450.5	1457.7
50°	1400.4	1407.5
52.5°	1337.7	1339.5
55°	1262.5	1269.6
57.5°	1181.9	1183.7
60°	1092.4	1097.7
62.5°	997.4	997.4
65°	897.1	900.7
67.5°	793.2	802.2
70°	687.6	689.4
72.5°	583.7	583.7
75°	476.3	478.1
77.5°	374.2	374.2
80°	277.5	279.3
82.5°	191.6	195.2
85°	120.0	120.0
87.5°	55.5	50.1
90°	28.3	28.3
92.5°	113.4	90.9
95°	395.2	327.0
97.5°	946.8	817.1
100°	1364.2	1209.6
102.5°	1774.7	1642.3
105°	2298.1	2226.9
107.5°	2641.0	2658.2
110°	2771.7	2845.8



TEST NUMBER: P937566

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2783.3	2897.2
115°	2709.6	2867.5
117.5°	2553.1	2728.2
120°	2427.0	2597.1
122.5°	2304.2	2472.0
125°	2129.0	2283.6
127.5°	1971.4	2101.8
130°	1878.5	1999.1
132.5°	1794.3	1902.2
135°	1678.9	1771.9
137.5°	1586.2	1662.4
140°	1522.7	1593.8
142.5°	1470.1	1531.3
145°	1391.1	1437.4
147.5°	1330.5	1368.9
150°	1292.4	1323.5
152.5°	1259.8	1283.3
155°	1222.3	1237.9
157.5°	1192.6	1203.6
160°	1175.0	1181.3
162.5°	1163.4	1169.4
165°	1146.7	1153.0
167.5°	1134.6	1137.3
170°	1131.3	1131.3
172.5°	1122.5	1120.2
175°	1117.2	1117.2
177.5°	1112.4	1109.7
180°	1109.7	1109.7



TEST NUMBER: P937566
 CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3500K

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	3.04	3.82	4.09	4.88	6.32	16.21	17.00	17.27	18.06	19.50
	3H	3.74	4.44	4.80	5.51	6.97	18.05	18.75	19.11	19.82	21.28
	4H	4.03	4.70	5.10	5.77	7.23	18.69	19.36	19.76	20.43	21.89
	6H	4.28	4.89	5.36	5.97	7.44	19.12	19.73	20.20	20.81	22.28
	8H	4.34	4.93	5.43	6.02	7.49	19.23	19.82	20.32	20.91	22.38
	12H	4.36	4.92	5.45	6.00	7.49	19.30	19.86	20.39	20.94	22.44
4H	2H	10.24	10.91	11.32	11.98	13.44	16.48	17.15	17.56	18.22	19.68
	3H	11.80	12.36	12.89	13.46	14.93	18.52	19.08	19.60	20.18	21.65
	4H	11.89	12.41	12.99	13.50	14.99	19.28	19.80	20.37	20.88	22.38
	6H	11.90	12.34	13.00	13.45	14.94	19.82	20.26	20.92	21.37	22.86
	8H	11.87	12.29	12.98	13.39	14.90	19.98	20.39	21.08	21.49	23.00
	12H	11.83	12.20	12.95	13.32	14.83	20.07	20.44	21.18	21.56	23.07
8H	4H	13.33	13.74	14.43	14.85	16.35	19.34	19.75	20.44	20.85	22.36
	6H	13.57	13.91	14.69	15.06	16.56	19.96	20.30	21.08	21.45	22.95
	8H	13.59	13.89	14.72	15.01	16.54	20.18	20.48	21.31	21.61	23.13
	12H	13.55	13.82	14.69	14.94	16.50	20.32	20.58	21.45	21.71	23.27
12H	4H	13.47	13.85	14.59	14.96	16.47	19.28	19.66	20.40	20.77	22.29
	6H	13.83	14.13	14.96	15.25	16.78	19.94	20.24	21.07	21.37	22.89
	8H	13.89	14.16	15.03	15.28	16.84	20.17	20.43	21.30	21.56	23.11