

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: P938324

Luminaire Tested: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938324
REPORT IS A COMBINATION OF REPORTS P933646 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

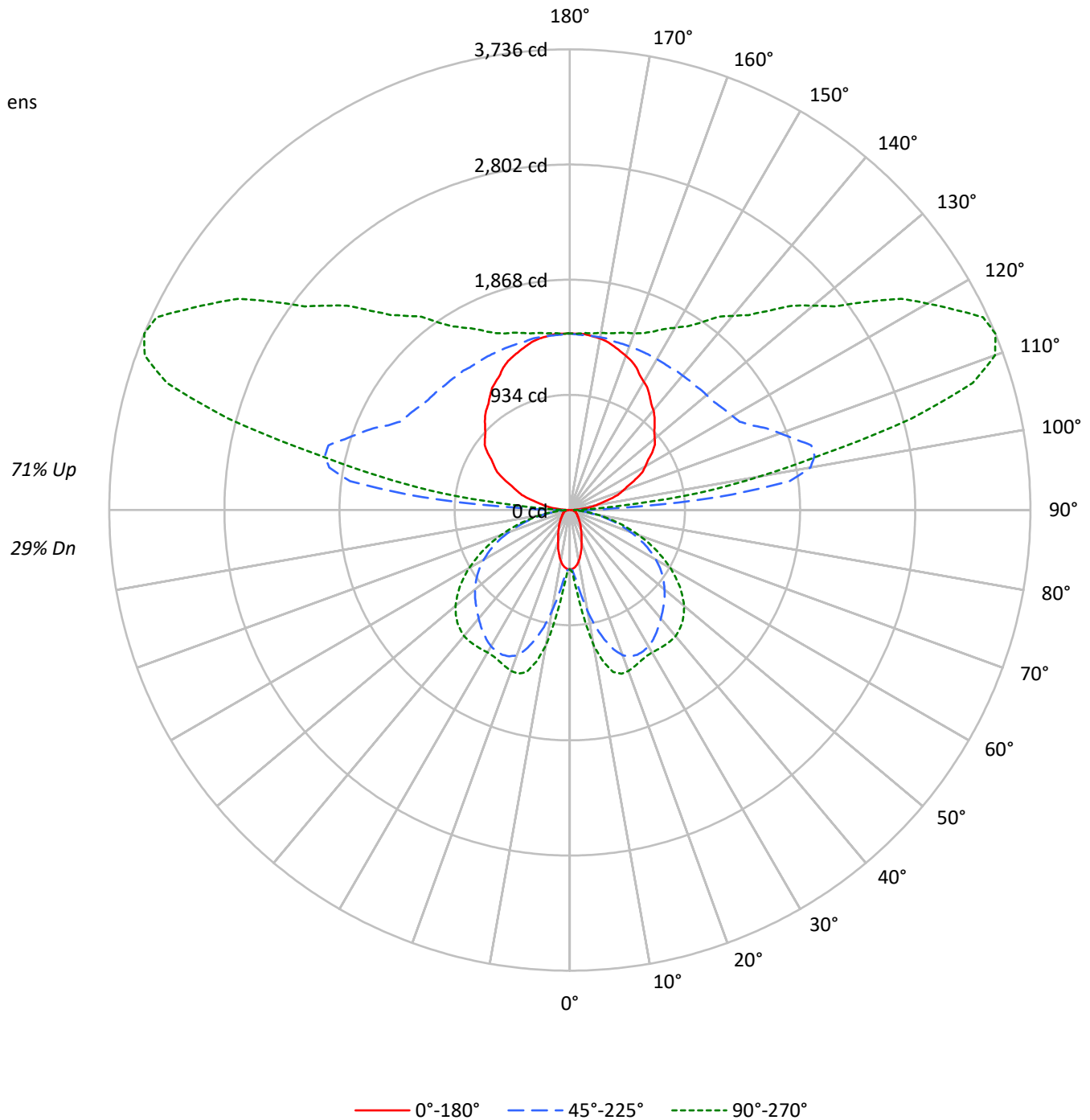
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12988.4 lumens
Efficiency: N/A
Efficacy: 102.1 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): 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

TEST NUMBER: P938324
CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2171	2568	2987
10°	1969	3744	4952
15°	1674	4891	5980
20°	1362	5668	6094
25°	1137	5932	5970
30°	958	5969	5959
35°	847	5870	6113
40°	738	5741	6272
45°	669	5647	6297
50°	613	5562	6193
55°	587	5438	5918
60°	601	5198	5485
65°	625	4835	4889
70°	666	4217	4130
75°	738	3439	3223
80°	806	2384	2171
85°	717	1265	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	0.5
10°-20°	274.6	2.1
20°-30°	480.3	3.7
30°-40°	618.3	4.8
40°-50°	690.6	5.3
50°-60°	661.5	5.1
60°-70°	524.2	4.0
70°-80°	308.2	2.4
80°-90°	91.1	0.7
90°-100°	697.6	5.4
100°-110°	1834.1	14.1
110°-120°	1901.7	14.6
120°-130°	1525.4	11.7
130°-140°	1196.9	9.2
140°-150°	918.7	7.1
150°-160°	661.6	5.1
160°-170°	404.8	3.1
170°-180°	136.8	1.1
0°-30°	816.8	6.3
0°-40°	1435.1	11.0
0°-60°	2787.2	21.5
0°-90°	3710.7	28.6
90°-120°	4433.5	34.1
90°-150°	8074.5	62.2
90°-180°	9278.0	71.4
0°-180°	12988.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	467	500	564	638	661	43
15°	350	645	1087	1318	1360	97
25°	223	732	1295	1352	1354	103
35°	151	699	1220	1289	1340	94
45°	103	558	1078	1235	1291	80
55°	74	354	915	1063	1092	67
65°	58	188	679	764	775	58
75°	43	116	373	410	411	45
85°	15	35	92	102	103	16
90°	10	27	73	36	36	9
95°	92	361	1202	620	422	102
105°	330	500	2028	3078	2872	350
115°	587	713	1624	3240	3698	580
125°	816	915	1477	2496	2945	725
135°	973	1071	1431	2015	2285	753
145°	1129	1201	1413	1719	1854	707
155°	1276	1311	1413	1551	1596	586
165°	1376	1395	1413	1469	1487	388
175°	1431	1431	1422	1441	1441	136
180°	1431	1431	1431	1431	1431	



TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9
2.5°	478.9	478.9	482.0	483.6	486.6	488.2	491.3	494.3	503.6	505.1	508.2
5°	466.6	472.8	492.8	500.5	522.1	551.3	563.6	583.7	625.2	637.6	645.3
7.5°	448.1	462.0	511.3	523.6	577.5	654.5	686.8	730.0	796.2	828.5	854.7
10°	418.9	448.1	535.9	565.2	653.0	770.0	830.1	890.2	990.3	1035.0	1051.9
12.5°	386.5	434.3	562.1	602.1	728.4	899.4	971.8	1038.0	1152.0	1212.1	1221.3
15°	349.6	414.3	586.7	645.3	808.5	1007.2	1087.3	1168.9	1275.2	1318.3	1329.1
17.5°	317.2	398.9	609.8	671.4	870.1	1104.3	1185.9	1253.6	1339.9	1369.1	1376.8
20°	277.2	374.2	625.2	705.3	934.9	1175.1	1253.6	1306.0	1364.5	1383.0	1386.1
22.5°	247.9	348.0	634.5	717.6	978.0	1218.2	1284.4	1326.0	1366.1	1372.2	1373.8
25°	223.3	318.8	632.9	731.5	1014.9	1244.4	1295.2	1326.0	1349.1	1352.2	1352.2
27.5°	200.2	286.4	626.8	734.6	1042.7	1250.6	1290.6	1312.2	1322.9	1329.1	1329.1
30°	180.2	255.6	611.4	728.4	1055.0	1244.4	1276.7	1287.5	1298.3	1307.5	1312.2
32.5°	164.8	226.4	588.3	716.1	1056.5	1229.0	1252.1	1258.3	1273.7	1295.2	1302.9
35°	150.9	197.1	562.1	699.2	1047.3	1204.4	1219.8	1225.9	1256.7	1289.1	1299.8
37.5°	137.1	175.6	528.2	669.9	1033.4	1175.1	1185.9	1196.7	1244.4	1282.9	1295.2
40°	123.2	157.1	488.2	637.6	1011.9	1139.7	1148.9	1165.9	1229.0	1273.7	1286.0
42.5°	112.4	141.7	445.1	603.7	984.1	1099.6	1113.5	1138.1	1210.5	1258.3	1272.1
45°	103.2	126.3	398.9	557.5	948.7	1058.1	1078.1	1112.0	1189.0	1235.2	1247.5
47.5°	93.9	115.5	351.1	509.7	910.2	1016.5	1042.7	1081.2	1159.7	1204.4	1215.1
50°	86.2	104.7	303.4	458.9	868.6	971.8	1002.6	1042.7	1122.7	1164.3	1178.2
52.5°	80.1	95.5	258.7	408.1	820.8	925.6	961.0	1002.6	1078.1	1118.1	1127.4
55°	73.9	87.8	220.2	354.2	771.5	876.3	914.8	954.9	1028.8	1062.7	1068.8
57.5°	70.8	81.6	187.9	303.4	719.2	820.8	863.9	901.0	970.3	996.5	1002.6
60°	66.2	77.0	163.2	260.3	662.2	768.5	805.4	842.4	901.0	922.5	927.2
62.5°	61.6	73.9	144.8	218.7	603.7	706.9	743.8	777.7	827.0	842.4	848.5
65°	58.5	70.8	130.9	187.9	543.6	642.2	679.1	708.4	748.4	763.8	766.9
67.5°	55.4	67.8	120.1	161.7	483.6	577.5	605.2	632.9	663.7	679.1	680.7
70°	50.8	64.7	110.9	143.2	422.0	503.6	526.7	555.9	580.6	588.3	592.9
72.5°	47.7	60.1	104.7	129.4	358.8	432.7	454.3	471.2	492.8	500.5	500.5
75°	43.1	53.9	98.6	115.5	294.1	354.2	372.7	389.6	406.6	409.6	405.0
77.5°	38.5	47.7	84.7	97.0	229.5	280.3	295.7	304.9	318.8	321.9	323.4
80°	32.3	41.6	66.2	75.5	166.3	206.4	217.1	224.8	237.2	237.2	240.2
82.5°	24.6	32.3	47.7	53.9	112.4	141.7	150.9	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.8	35.4	67.8	86.2	92.4	93.9	100.1	101.6	101.6
87.5°	7.7	10.8	20.0	21.6	35.4	44.7	44.7	47.7	47.7	46.2	44.7
90°	9.6	17.3	24.9	26.9	42.3	62.8	73.0	64.9	48.7	36.5	36.5
92.5°	38.4	103.7	169.1	185.4	260.6	361.0	411.1	360.3	258.7	182.5	175.3
95°	92.2	211.8	331.3	361.1	641.3	1014.8	1201.6	1072.2	813.6	619.5	597.5
97.5°	159.5	264.9	370.4	396.7	863.9	1486.7	1798.1	1716.3	1552.9	1430.2	1388.4
100°	211.3	306.9	402.6	426.5	944.9	1635.9	1981.5	1987.5	1999.5	2008.4	1958.6
102.5°	255.5	344.7	433.9	456.2	982.0	1682.9	2033.4	2137.6	2345.9	2502.1	2459.5
105°	330.4	405.9	481.6	500.4	1009.5	1688.2	2027.6	2261.2	2728.2	3078.5	3055.5
107.5°	407.3	477.7	548.1	565.7	1014.6	1613.2	1912.4	2238.1	2889.6	3378.1	3383.7
110°	459.2	522.8	586.4	602.2	1006.9	1546.5	1816.4	2180.5	2908.8	3455.0	3478.9



TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	510.0	570.6	631.2	646.4	1007.2	1488.3	1728.9	2101.6	2846.9	3405.9	3442.7
115°	586.9	642.8	698.7	712.7	1016.6	1421.7	1624.2	1983.2	2701.2	3239.8	3290.7
117.5°	662.7	713.6	764.4	777.1	1035.4	1379.9	1552.2	1876.2	2524.2	3010.2	3066.7
120°	706.9	754.8	802.6	814.5	1050.8	1365.8	1523.4	1819.4	2411.6	2855.6	2910.4
122.5°	750.1	798.4	846.6	858.7	1072.9	1358.5	1501.3	1767.8	2301.1	2700.9	2755.1
125°	816.4	860.4	904.4	915.4	1102.6	1352.4	1477.2	1703.7	2156.6	2496.3	2546.2
127.5°	870.3	914.6	959.0	970.1	1132.4	1348.9	1457.1	1651.5	2040.4	2332.1	2374.1
130°	899.1	946.9	994.7	1006.6	1154.2	1351.0	1449.4	1622.5	1968.7	2228.4	2267.3
132.5°	928.9	976.7	1024.5	1036.4	1171.9	1352.4	1442.7	1597.6	1907.5	2140.0	2174.8
135°	973.0	1016.6	1060.1	1071.0	1191.0	1351.1	1431.1	1560.9	1820.5	2015.2	2045.1
137.5°	1018.2	1061.3	1104.3	1115.1	1219.8	1359.4	1429.3	1539.0	1758.4	1922.9	1947.5
140°	1055.6	1095.3	1135.0	1144.9	1237.5	1360.8	1422.5	1517.3	1706.9	1849.0	1871.9
142.5°	1084.4	1121.1	1157.8	1167.0	1252.2	1365.7	1422.5	1505.7	1672.2	1797.1	1816.8
145°	1128.6	1160.6	1192.7	1200.7	1271.4	1365.7	1412.9	1480.9	1617.2	1719.3	1734.3
147.5°	1172.8	1204.0	1235.2	1242.9	1299.6	1375.1	1412.9	1466.5	1573.6	1654.0	1666.4
150°	1201.6	1229.8	1257.9	1265.0	1314.2	1380.0	1412.9	1458.1	1548.6	1616.5	1626.5
152.5°	1231.4	1252.7	1274.1	1279.4	1323.9	1383.2	1412.9	1451.5	1528.8	1586.7	1594.3
155°	1275.6	1291.4	1307.2	1311.1	1345.0	1390.2	1412.9	1443.6	1505.1	1551.2	1556.2
157.5°	1308.2	1323.6	1339.0	1342.8	1366.1	1397.3	1412.9	1436.8	1484.6	1520.5	1524.1
160°	1330.3	1342.3	1354.2	1357.2	1375.8	1400.5	1412.9	1433.4	1474.4	1505.1	1507.1
162.5°	1352.4	1361.4	1370.4	1372.6	1386.0	1403.9	1412.9	1430.2	1464.8	1490.7	1492.6
165°	1376.4	1384.5	1392.6	1394.6	1400.7	1408.8	1412.9	1425.3	1450.1	1468.6	1470.6
167.5°	1398.5	1402.3	1406.2	1407.2	1412.3	1419.1	1422.5	1430.6	1446.8	1459.0	1459.8
170°	1412.9	1416.7	1420.6	1421.6	1421.9	1422.3	1422.5	1430.6	1446.8	1459.0	1459.0
172.5°	1420.6	1421.4	1422.3	1422.5	1422.5	1422.5	1422.5	1428.9	1441.7	1451.3	1450.5
175°	1431.1	1431.1	1431.1	1431.1	1428.3	1424.4	1422.5	1426.6	1434.7	1440.7	1440.7
177.5°	1431.1	1431.1	1431.1	1431.1	1428.9	1425.9	1424.4	1427.7	1434.0	1438.8	1438.0
180°	1431.1	1431.1	1431.1	1431.1	1431.1	1431.1	1431.1	1431.1	1431.1	1431.1	1431.1



TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	478.9	478.9
2.5°	511.3	508.2
5°	657.6	660.7
7.5°	885.6	884.0
10°	1101.2	1115.0
12.5°	1258.3	1261.3
15°	1353.7	1359.9
17.5°	1390.7	1392.2
20°	1392.2	1389.2
22.5°	1375.3	1372.2
25°	1355.3	1353.7
27.5°	1336.8	1338.3
30°	1329.1	1333.7
32.5°	1329.1	1336.8
35°	1332.2	1339.9
37.5°	1330.6	1339.9
40°	1324.5	1335.3
42.5°	1307.5	1315.2
45°	1281.4	1290.6
47.5°	1247.5	1253.6
50°	1204.4	1210.5
52.5°	1150.5	1152.0
55°	1085.8	1091.9
57.5°	1016.5	1018.0
60°	939.5	944.1
62.5°	857.8	857.8
65°	771.5	774.6
67.5°	682.2	689.9
70°	591.4	592.9
72.5°	502.0	502.0
75°	409.6	411.2
77.5°	321.9	321.9
80°	238.7	240.2
82.5°	164.8	167.9
85°	103.2	103.2
87.5°	47.7	43.1
90°	36.5	36.5
92.5°	146.2	117.2
95°	509.6	421.7
97.5°	1221.0	1053.7
100°	1759.2	1559.9
102.5°	2288.7	2118.0
105°	2963.7	2871.9
107.5°	3405.9	3428.0
110°	3574.5	3670.1



TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3589.5	3736.3
115°	3494.3	3697.9
117.5°	3292.5	3518.4
120°	3129.9	3349.3
122.5°	2971.5	3188.0
125°	2745.6	2944.9
127.5°	2542.4	2710.6
130°	2422.7	2578.0
132.5°	2313.9	2453.1
135°	2165.1	2285.1
137.5°	2045.7	2143.8
140°	1963.7	2055.5
142.5°	1895.8	1974.8
145°	1794.0	1853.8
147.5°	1715.9	1765.4
150°	1666.7	1706.9
152.5°	1624.6	1655.0
155°	1576.3	1596.4
157.5°	1538.1	1552.2
160°	1515.3	1523.4
162.5°	1500.3	1508.0
165°	1478.8	1486.9
167.5°	1463.3	1466.7
170°	1459.0	1459.0
172.5°	1447.6	1444.6
175°	1440.7	1440.7
177.5°	1434.5	1431.1
180°	1431.1	1431.1



TEST NUMBER: P938324

CATALOG NUMBER: SQ4-FB-150U-075D-927-1D-UNV-STD-W-8

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	1.39	2.11	2.51	3.22	4.77	14.57	15.29	15.69	16.40	17.94
	3H	2.09	2.73	3.21	3.85	5.41	16.40	17.04	17.52	18.16	19.72
	4H	2.38	2.99	3.51	4.11	5.68	17.04	17.65	18.17	18.77	20.34
	6H	2.62	3.18	3.76	4.31	5.88	17.46	18.02	18.60	19.15	20.72
	8H	2.68	3.22	3.83	4.36	5.93	17.57	18.11	18.72	19.25	20.82
	12H	2.69	3.20	3.84	4.34	5.93	17.64	18.15	18.79	19.28	20.88
4H	2H	8.59	9.20	9.73	10.32	11.89	14.82	15.44	15.97	16.56	18.13
	3H	10.14	10.65	11.29	11.80	13.38	16.86	17.37	18.00	18.52	20.10
	4H	10.23	10.70	11.38	11.84	13.44	17.62	18.09	18.77	19.22	20.82
	6H	10.23	10.63	11.39	11.79	13.38	18.15	18.55	19.30	19.71	21.30
	8H	10.20	10.58	11.36	11.73	13.34	18.31	18.68	19.46	19.83	21.44
	12H	10.15	10.49	11.33	11.66	13.27	18.39	18.73	19.56	19.90	21.51
8H	4H	11.66	12.04	12.82	13.19	14.80	17.66	18.04	18.82	19.19	20.80
	6H	11.90	12.21	13.07	13.40	15.00	18.29	18.60	19.46	19.79	21.40
	8H	11.91	12.18	13.09	13.36	14.98	18.50	18.78	19.69	19.95	21.57
	12H	11.87	12.11	13.06	13.28	14.94	18.64	18.88	19.83	20.05	21.71
12H	4H	11.80	12.14	12.97	13.30	14.91	17.61	17.95	18.78	19.11	20.73
	6H	12.15	12.43	13.34	13.60	15.22	18.27	18.54	19.45	19.71	21.34
	8H	12.22	12.45	13.40	13.62	15.28	18.49	18.73	19.68	19.90	21.56