

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: P937097

Luminaire Tested: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

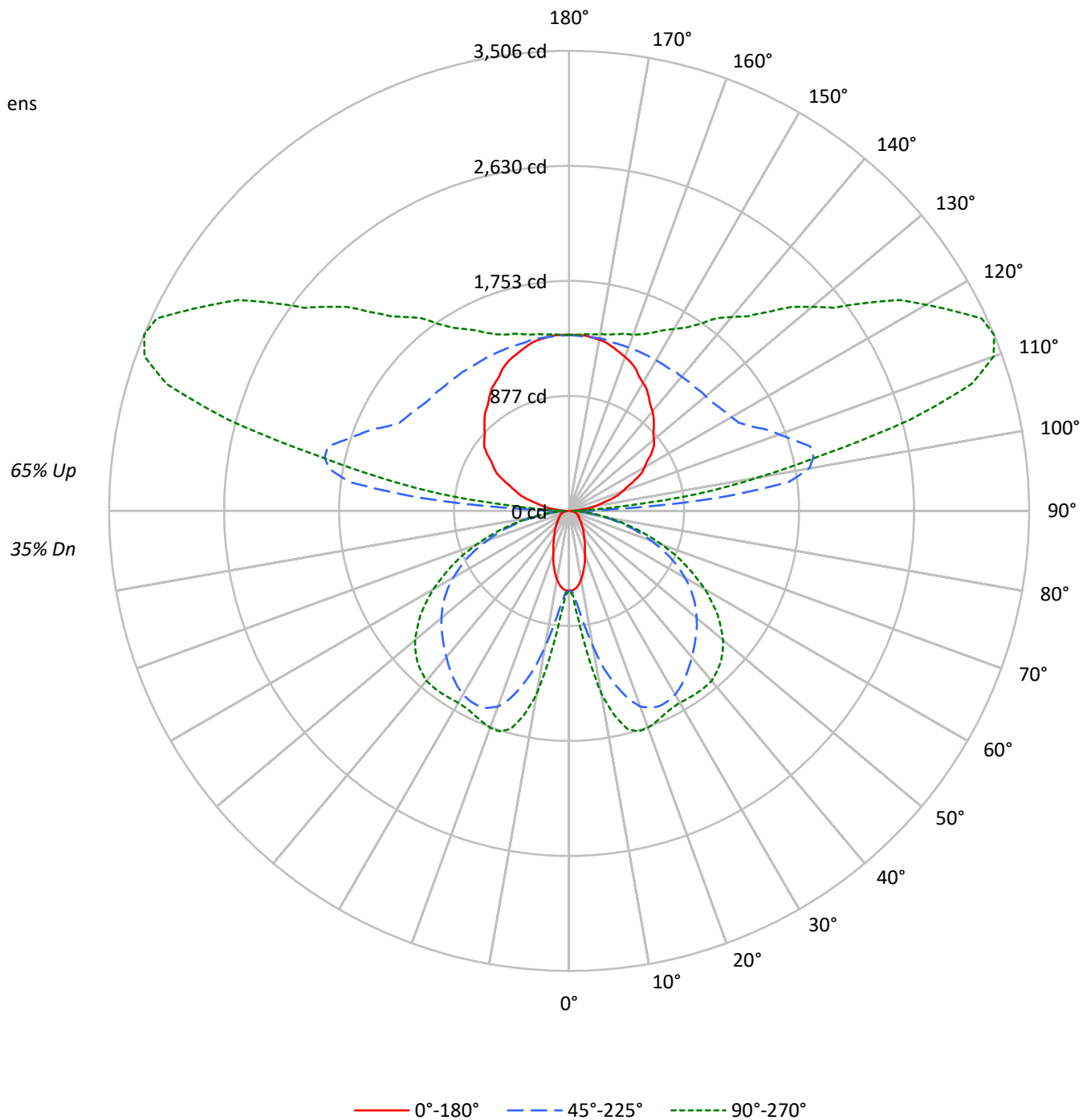
Test Method: LM-79-2019  
Report Number: P937097  
REPORT IS A COMBINATION OF REPORTS P933493 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13400.3 lumens  
Efficiency: N/A  
Efficacy: 129.8 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: Semi-Indirect  
  
Input Watts (W): 103.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P937097  
CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P937097

CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**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	75	75	75	58	58	58	42	42	42	35			35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29			29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23			23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19			19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16			16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14			14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12			12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10			10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9			9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7			7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1876	1876	1876
5°	1833	2168	2521
10°	1663	3161	4179
15°	1414	4132	5047
20°	1152	4789	5143
25°	961	5012	5039
30°	811	5046	5029
35°	717	4963	5159
40°	626	4856	5294
45°	567	4777	5315
50°	520	4707	5227
55°	499	4603	4995
60°	511	4404	4629
65°	533	4099	4126
70°	568	3577	3486
75°	633	2918	2720
80°	697	2027	1833
85°	632	1077	938

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5315 cd/sqm



TEST NUMBER: P937097

CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.4	0.6
10°-20°	347.6	2.6
20°-30°	608.1	4.5
30°-40°	782.8	5.8
40°-50°	874.3	6.5
50°-60°	837.4	6.2
60°-70°	663.6	5.0
70°-80°	390.2	2.9
80°-90°	113.5	0.8
90°-100°	654.5	4.9
100°-110°	1720.7	12.8
110°-120°	1784.2	13.3
120°-130°	1431.2	10.7
130°-140°	1122.9	8.4
140°-150°	861.9	6.4
150°-160°	620.7	4.6
160°-170°	379.8	2.8
170°-180°	128.3	1.0
0°-30°	1034.2	7.7
0°-40°	1816.9	13.6
0°-60°	3528.6	26.3
0°-90°	4696.1	35.0
90°-120°	4159.4	31.0
90°-150°	7575.4	56.5
90°-180°	8704.0	65.0
0°-180°	13400.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	591	634	714	807	836	55
15°	443	817	1377	1669	1722	123
25°	283	926	1640	1712	1714	130
35°	191	885	1544	1632	1696	119
45°	131	706	1365	1564	1634	101
55°	94	448	1158	1345	1382	85
65°	74	238	860	967	981	73
75°	55	146	472	519	520	57
85°	20	45	117	129	131	21
90°	9	25	68	34	34	9
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	



TEST NUMBER: P937097

CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	606.4	606.4	610.3	612.2	616.1	618.0	622.0	625.9	637.6	639.5	643.4
5°	590.8	598.6	623.9	633.6	661.0	698.0	713.6	739.0	791.6	807.2	817.0
7.5°	567.3	584.9	647.3	662.9	731.2	828.7	869.6	924.2	1008.1	1048.9	1082.1
10°	530.3	567.3	678.5	715.6	826.7	974.9	1050.9	1126.9	1253.7	1310.3	1331.7
12.5°	489.3	549.8	711.6	762.3	922.2	1138.7	1230.3	1314.2	1458.4	1534.5	1546.1
15°	442.6	524.5	742.8	817.0	1023.7	1275.1	1376.6	1479.9	1614.5	1669.0	1682.7
17.5°	401.7	504.9	772.1	850.1	1101.7	1398.0	1501.3	1587.1	1696.3	1733.3	1743.1
20°	351.0	473.8	791.6	893.0	1183.5	1487.7	1587.1	1653.4	1727.5	1750.9	1754.8
22.5°	314.0	440.6	803.3	908.6	1238.1	1542.3	1626.1	1678.8	1729.5	1737.2	1739.2
25°	282.8	403.6	801.4	926.2	1284.9	1575.4	1639.7	1678.8	1708.0	1711.9	1711.9
27.5°	253.5	362.7	793.5	930.0	1320.0	1583.2	1633.9	1661.2	1674.8	1682.7	1682.7
30°	228.1	323.6	774.0	922.2	1335.6	1575.4	1616.4	1630.1	1643.6	1655.3	1661.2
32.5°	208.6	286.6	744.8	906.6	1337.5	1555.9	1585.2	1592.9	1612.4	1639.7	1649.5
35°	191.1	249.6	711.6	885.2	1325.9	1524.7	1544.2	1552.0	1591.0	1632.0	1645.6
37.5°	173.5	222.3	668.8	848.2	1308.2	1487.7	1501.3	1514.9	1575.4	1624.1	1639.7
40°	156.0	198.8	618.0	807.2	1281.0	1442.8	1454.6	1476.0	1555.9	1612.4	1628.0
42.5°	142.3	179.4	563.5	764.3	1245.9	1392.2	1409.7	1440.9	1532.5	1592.9	1610.5
45°	130.6	159.9	504.9	705.8	1201.1	1339.4	1364.8	1407.8	1505.2	1563.7	1579.3
47.5°	118.9	146.2	444.6	645.4	1152.3	1286.8	1320.0	1368.7	1468.1	1524.7	1538.4
50°	109.2	132.6	384.1	581.0	1099.6	1230.3	1269.3	1320.0	1421.4	1474.0	1491.6
52.5°	101.4	120.9	327.5	516.7	1039.3	1171.8	1216.7	1269.3	1364.8	1415.5	1427.2
55°	93.6	111.1	278.8	448.5	976.8	1109.4	1158.1	1208.8	1302.4	1345.4	1353.1
57.5°	89.7	103.3	237.9	384.1	910.6	1039.3	1093.8	1140.6	1228.3	1261.5	1269.3
60°	83.8	97.5	206.7	329.6	838.4	973.0	1019.8	1066.5	1140.6	1167.9	1173.7
62.5°	78.0	93.6	183.2	276.8	764.3	895.0	941.8	984.6	1047.0	1066.5	1074.3
65°	74.1	89.7	165.7	237.9	688.3	813.1	859.9	896.9	947.6	967.1	970.9
67.5°	70.2	85.8	152.0	204.7	612.2	731.2	766.3	801.4	840.3	859.9	861.8
70°	64.3	81.9	140.4	181.3	534.2	637.6	666.9	703.9	735.1	744.8	750.7
72.5°	60.5	76.1	132.6	163.8	454.3	547.9	575.2	596.6	623.9	633.6	633.6
75°	54.6	68.2	124.8	146.2	372.4	448.5	471.8	493.3	514.7	518.6	512.8
77.5°	48.7	60.5	107.3	122.9	290.5	354.8	374.3	386.0	403.6	407.5	409.4
80°	41.0	52.6	83.8	95.5	210.6	261.2	274.9	284.7	300.3	300.3	304.2
82.5°	31.2	41.0	60.5	68.2	142.3	179.4	191.1	196.9	206.7	206.7	206.7
85°	19.5	25.4	39.0	44.9	85.8	109.2	117.0	118.9	126.7	128.7	128.7
87.5°	9.8	13.7	25.4	27.3	44.9	56.6	56.6	60.5	60.5	58.5	56.6
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



TEST NUMBER: P937097

CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**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



TEST NUMBER: P937097

CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	606.4	606.4
2.5°	647.3	643.4
5°	832.6	836.4
7.5°	1121.1	1119.2
10°	1394.1	1411.6
12.5°	1592.9	1596.8
15°	1713.9	1721.6
17.5°	1760.7	1762.6
20°	1762.6	1758.7
22.5°	1741.1	1737.2
25°	1715.8	1713.9
27.5°	1692.4	1694.4
30°	1682.7	1688.5
32.5°	1682.7	1692.4
35°	1686.5	1696.3
37.5°	1684.6	1696.3
40°	1676.8	1690.4
42.5°	1655.3	1665.1
45°	1622.2	1633.9
47.5°	1579.3	1587.1
50°	1524.7	1532.5
52.5°	1456.5	1458.4
55°	1374.6	1382.4
57.5°	1286.8	1288.8
60°	1189.4	1195.2
62.5°	1086.1	1086.1
65°	976.8	980.7
67.5°	863.8	873.5
70°	748.7	750.7
72.5°	635.7	635.7
75°	518.6	520.5
77.5°	407.5	407.5
80°	302.2	304.2
82.5°	208.6	212.5
85°	130.6	130.6
87.5°	60.5	54.6
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





TEST NUMBER: P937097  
CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**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



TEST NUMBER: P937097

CATALOG NUMBER: SQ4-FB-075U-050D-B35-1D-UNV-STD-W-12

**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	1.65	2.41	2.71	3.49	4.95	14.84	15.60	15.91	16.68	18.15
	3H	2.34	3.03	3.42	4.11	5.60	16.67	17.36	17.75	18.45	19.93
	4H	2.64	3.29	3.73	4.37	5.87	17.32	17.97	18.41	19.06	20.55
	6H	2.88	3.48	3.98	4.57	6.08	17.75	18.35	18.85	19.44	20.94
	8H	2.95	3.52	4.05	4.62	6.12	17.87	18.44	18.97	19.55	21.04
	12H	2.96	3.51	4.07	4.60	6.13	17.94	18.48	19.04	19.58	21.10
4H	2H	8.86	9.51	9.95	10.59	12.09	15.10	15.75	16.20	16.84	18.33
	3H	10.41	10.96	11.52	12.07	13.58	17.14	17.69	18.24	18.80	20.30
	4H	10.50	11.01	11.61	12.11	13.63	17.91	18.41	19.02	19.51	21.03
	6H	10.51	10.94	11.63	12.07	13.58	18.44	18.88	19.56	20.00	21.52
	8H	10.48	10.89	11.60	12.00	13.54	18.61	19.01	19.72	20.13	21.66
	12H	10.44	10.80	11.57	11.93	13.47	18.70	19.06	19.83	20.19	21.73
8H	4H	11.94	12.35	13.06	13.46	15.00	17.96	18.36	19.07	19.48	21.01
	6H	12.18	12.52	13.32	13.67	15.20	18.59	18.92	19.73	20.08	21.61
	8H	12.20	12.49	13.34	13.63	15.18	18.81	19.10	19.95	20.24	21.79
	12H	12.16	12.42	13.31	13.56	15.14	18.95	19.21	20.10	20.34	21.93
12H	4H	12.08	12.45	13.22	13.58	15.12	17.91	18.27	19.04	19.40	20.94
	6H	12.44	12.73	13.59	13.87	15.42	18.57	18.86	19.71	20.00	21.55
	8H	12.51	12.76	13.65	13.90	15.48	18.80	19.05	19.95	20.19	21.78