

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: P937992

Luminaire Tested: SQ4-FB-125U-075D-B2750-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937992  
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-B2750-1D-UNV-STD-W-8-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

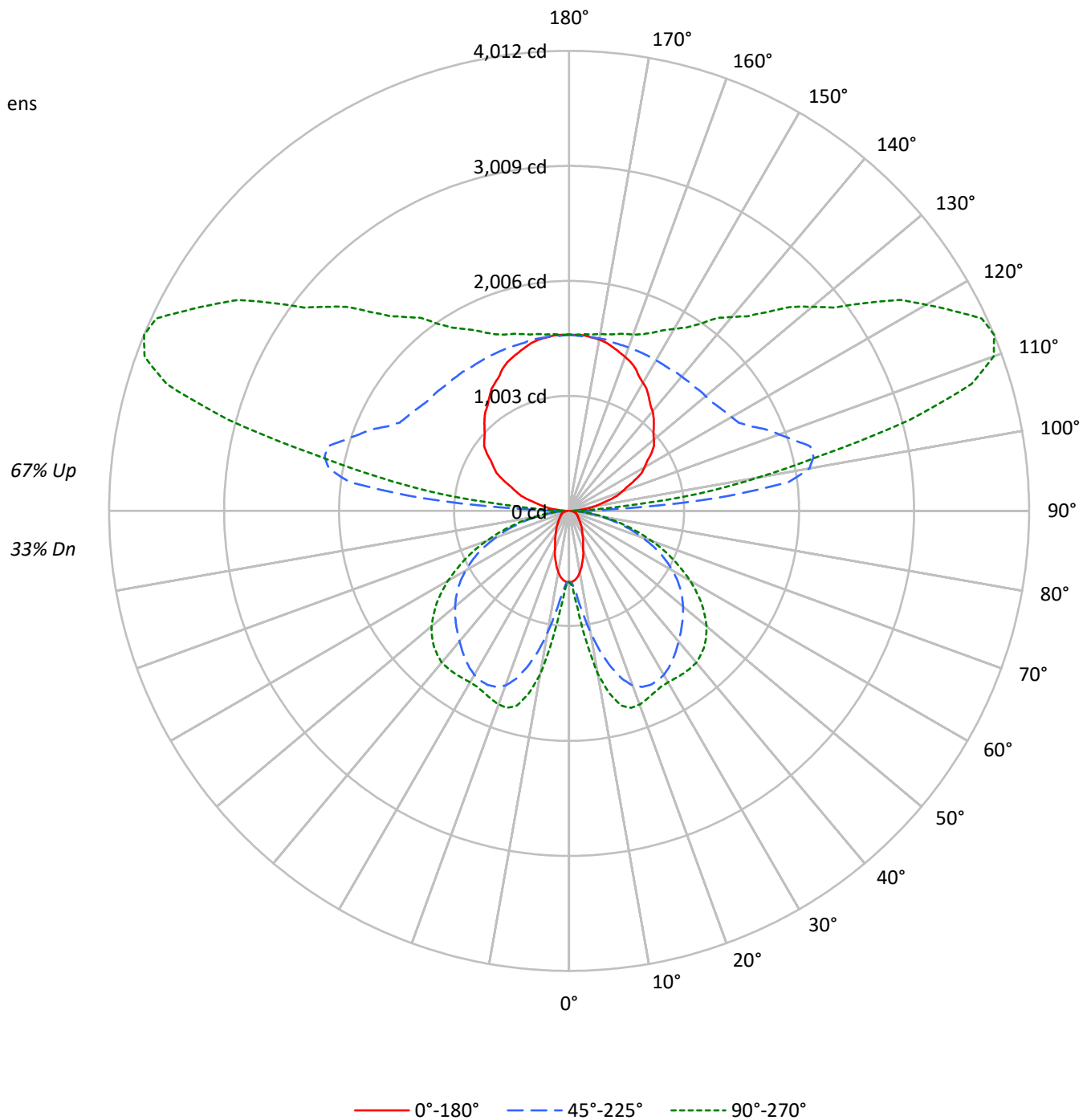
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14760.7 lumens  
Efficiency: N/A  
Efficacy: 132.7 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): 111.2  
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

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CATALOG NUMBER: SQ4-FB-125U-075D-B2750-1D-UNV-STD-W-8-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P937992

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**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	50	30	10	50	30	10	0			
RCR																														
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33												
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27												
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22												
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18												
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15												
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13												
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11												
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10												
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8												
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7												
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7												

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

	0°	45°	90°
0°	2874	2874	2874
5°	2808	3322	3864
10°	2547	4843	6405
15°	2165	6327	7734
20°	1763	7332	7883
25°	1470	7673	7723
30°	1240	7721	7708
35°	1096	7593	7907
40°	955	7426	8113
45°	865	7304	8145
50°	794	7195	8010
55°	760	7034	7655
60°	778	6724	7095
65°	809	6255	6324
70°	862	5455	5342
75°	956	4448	4169
80°	1043	3085	2810
85°	927	1636	1438

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8145 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.1	0.5
10°-20°	355.2	2.4
20°-30°	621.3	4.2
30°-40°	799.8	5.4
40°-50°	893.3	6.1
50°-60°	855.6	5.8
60°-70°	678.0	4.6
70°-80°	398.7	2.7
80°-90°	116.6	0.8
90°-100°	749.1	5.1
100°-110°	1969.4	13.3
110°-120°	2042.0	13.8
120°-130°	1638.0	11.1
130°-140°	1285.2	8.7
140°-150°	986.5	6.7
150°-160°	710.4	4.8
160°-170°	434.7	2.9
170°-180°	146.9	1.0
0°-30°	1056.6	7.2
0°-40°	1856.4	12.6
0°-60°	3605.3	24.4
0°-90°	4798.6	32.5
90°-120°	4760.5	32.3
90°-150°	8670.2	58.7
90°-180°	9962.0	67.5
0°-180°	14760.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	604	647	729	825	855	56
15°	452	835	1406	1705	1759	126
25°	289	946	1675	1749	1751	133
35°	195	904	1578	1667	1733	122
45°	134	721	1394	1598	1669	103
55°	96	458	1183	1375	1412	87
65°	76	243	878	988	1002	75
75°	56	149	482	530	532	58
85°	20	46	120	132	134	21
90°	10	29	78	39	39	10
95°	99	388	1290	665	453	110
105°	355	537	2177	3306	3084	376
115°	630	765	1744	3479	3971	622
125°	877	983	1586	2680	3162	778
135°	1045	1150	1537	2164	2454	808
145°	1212	1289	1517	1846	1990	759
155°	1370	1408	1517	1666	1714	629
165°	1478	1498	1517	1577	1597	417
175°	1537	1537	1528	1547	1547	146
180°	1537	1537	1537	1537	1537	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5
2.5°	619.5	619.5	623.5	625.5	629.5	631.5	635.4	639.4	651.4	653.4	657.4
5°	603.6	611.5	637.4	647.4	675.3	713.1	729.1	755.0	808.8	824.7	834.6
7.5°	579.7	597.6	661.3	677.3	747.0	846.6	888.4	944.2	1029.9	1071.7	1105.6
10°	541.8	579.7	693.2	731.1	844.6	996.0	1073.7	1151.5	1281.0	1338.7	1360.6
12.5°	500.0	561.7	727.1	778.9	942.2	1163.4	1257.1	1342.7	1490.1	1567.8	1579.8
15°	452.2	535.8	759.0	834.6	1045.8	1302.9	1406.5	1512.0	1649.5	1705.3	1719.2
17.5°	410.4	515.9	788.8	868.5	1125.5	1428.4	1533.9	1621.6	1733.1	1771.0	1780.9
20°	358.6	484.1	808.8	912.3	1209.2	1520.0	1621.6	1689.3	1765.0	1788.9	1792.9
22.5°	320.7	450.2	820.7	928.3	1265.0	1575.8	1661.4	1715.2	1767.0	1775.0	1777.0
25°	288.8	412.3	818.7	946.2	1312.8	1609.6	1675.4	1715.2	1745.1	1749.1	1749.1
27.5°	259.0	370.5	810.7	950.2	1348.7	1617.6	1669.4	1697.3	1711.2	1719.2	1719.2
30°	233.1	330.7	790.8	942.2	1364.6	1609.6	1651.5	1665.4	1679.4	1691.3	1697.3
32.5°	213.1	292.8	760.9	926.3	1366.6	1589.7	1619.6	1627.6	1647.5	1675.4	1685.3
35°	195.2	255.0	727.1	904.4	1354.7	1557.8	1577.8	1585.7	1625.6	1667.4	1681.3
37.5°	177.3	227.1	683.3	866.5	1336.7	1520.0	1533.9	1547.9	1609.6	1659.4	1675.4
40°	159.4	203.2	631.5	824.7	1308.8	1474.2	1486.1	1508.0	1589.7	1647.5	1663.4
42.5°	145.4	183.3	575.7	780.9	1273.0	1422.4	1440.3	1472.2	1565.8	1627.6	1645.5
45°	133.5	163.3	515.9	721.1	1227.2	1368.6	1394.5	1438.3	1537.9	1597.7	1613.6
47.5°	121.5	149.4	454.2	659.4	1177.4	1314.8	1348.7	1398.5	1500.1	1557.8	1571.8
50°	111.6	135.5	392.4	593.6	1123.5	1257.1	1296.9	1348.7	1452.3	1506.1	1524.0
52.5°	103.6	123.5	334.7	527.9	1061.7	1197.3	1243.1	1296.9	1394.5	1446.3	1458.2
55°	95.6	113.5	284.9	458.2	998.0	1133.5	1183.3	1235.1	1330.8	1374.6	1382.5
57.5°	91.6	105.6	243.0	392.4	930.3	1061.7	1117.5	1165.4	1255.1	1288.9	1296.9
60°	85.7	99.6	211.2	336.6	856.6	994.0	1041.8	1089.6	1165.4	1193.3	1199.3
62.5°	79.7	95.6	187.2	282.9	780.9	914.3	962.1	1006.0	1069.7	1089.6	1097.6
65°	75.7	91.6	169.3	243.0	703.2	830.7	878.5	916.3	968.1	988.0	992.0
67.5°	71.7	87.6	155.4	209.2	625.5	747.0	782.9	818.7	858.6	878.5	880.5
70°	65.7	83.7	143.4	185.3	545.8	651.4	681.3	719.1	751.0	760.9	766.9
72.5°	61.8	77.7	135.5	167.3	464.1	559.8	587.6	609.6	637.4	647.4	647.4
75°	55.8	69.7	127.5	149.4	380.5	458.2	482.1	504.0	525.9	529.9	523.9
77.5°	49.8	61.8	109.6	125.5	296.8	362.5	382.5	394.4	412.3	416.3	418.3
80°	41.8	53.8	85.7	97.6	215.1	266.9	280.9	290.8	306.8	306.8	310.8
82.5°	31.9	41.8	61.8	69.7	145.4	183.3	195.2	201.2	211.2	211.2	211.2
85°	19.9	25.9	39.8	45.8	87.6	111.6	119.5	121.5	129.5	131.5	131.5
87.5°	10.0	13.9	25.9	27.9	45.8	57.8	57.8	61.8	61.8	59.8	57.8
90°	10.4	18.6	26.8	28.9	45.4	67.4	78.4	69.6	52.2	39.1	39.1
92.5°	41.2	111.4	181.6	199.1	279.9	387.5	441.4	386.8	277.8	195.9	188.1
95°	99.0	227.4	355.8	387.8	688.6	1089.7	1290.2	1151.4	873.6	665.2	641.6
97.5°	171.2	284.5	397.7	426.0	927.6	1596.4	1930.7	1843.0	1667.4	1535.7	1490.8
100°	226.9	329.6	432.3	458.0	1014.5	1756.6	2127.8	2134.1	2147.0	2156.6	2103.2
102.5°	274.3	370.1	465.9	489.9	1054.5	1807.1	2183.4	2295.3	2519.0	2686.7	2640.9
105°	354.8	435.9	517.0	537.3	1083.9	1812.8	2177.3	2427.9	2929.4	3305.5	3280.9
107.5°	437.3	512.9	588.5	607.5	1089.4	1732.1	2053.5	2403.2	3102.7	3627.3	3633.3
110°	493.0	561.3	629.7	646.7	1081.3	1660.6	1950.4	2341.4	3123.4	3709.8	3735.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	547.7	612.7	677.9	694.1	1081.6	1598.2	1856.4	2256.6	3056.9	3657.2	3696.7
115°	630.2	690.2	750.2	765.2	1091.5	1526.6	1744.1	2129.5	2900.6	3478.8	3533.5
117.5°	711.6	766.2	820.7	834.3	1111.8	1481.7	1666.7	2014.6	2710.4	3232.3	3293.0
120°	759.1	810.4	861.7	874.6	1128.3	1466.6	1635.7	1953.7	2589.4	3066.3	3125.1
122.5°	805.5	857.3	909.0	922.0	1152.0	1458.6	1612.0	1898.3	2470.9	2900.3	2958.3
125°	876.7	923.9	971.1	982.9	1183.9	1452.2	1586.2	1829.5	2315.8	2680.5	2734.0
127.5°	934.4	982.2	1029.8	1041.7	1216.0	1448.4	1564.6	1773.4	2191.0	2504.1	2549.3
130°	965.3	1016.7	1068.0	1080.9	1239.3	1450.7	1556.3	1742.2	2114.0	2392.8	2434.5
132.5°	997.3	1048.7	1100.0	1112.8	1258.2	1452.2	1549.1	1715.5	2048.3	2297.9	2335.2
135°	1044.8	1091.5	1138.3	1150.0	1278.9	1450.8	1536.7	1676.1	1954.7	2163.8	2196.0
137.5°	1093.2	1139.5	1185.8	1197.4	1309.8	1459.7	1534.6	1652.5	1888.1	2064.8	2091.2
140°	1133.4	1176.1	1218.7	1229.4	1328.8	1461.2	1527.5	1629.3	1832.7	1985.4	2010.0
142.5°	1164.4	1203.9	1243.2	1253.1	1344.5	1466.5	1527.5	1616.8	1795.6	1929.7	1950.9
145°	1211.8	1246.2	1280.7	1289.2	1365.2	1466.5	1517.1	1590.2	1736.5	1846.2	1862.2
147.5°	1259.3	1292.8	1326.3	1334.6	1395.5	1476.6	1517.1	1574.7	1689.7	1776.1	1789.3
150°	1290.2	1320.5	1350.8	1358.3	1411.2	1481.8	1517.1	1565.7	1662.9	1735.8	1746.6
152.5°	1322.2	1345.1	1368.0	1373.8	1421.6	1485.2	1517.1	1558.6	1641.6	1703.9	1712.0
155°	1369.7	1386.6	1403.6	1407.8	1444.3	1492.8	1517.1	1550.2	1616.2	1665.7	1671.1
157.5°	1404.8	1421.2	1437.7	1441.8	1466.9	1500.4	1517.1	1542.8	1594.1	1632.6	1636.4
160°	1428.5	1441.3	1454.2	1457.3	1477.3	1503.9	1517.1	1539.1	1583.1	1616.1	1618.3
162.5°	1452.2	1461.7	1471.4	1473.8	1488.2	1507.4	1517.1	1535.6	1572.8	1600.7	1602.8
165°	1478.0	1486.7	1495.4	1497.6	1504.1	1512.7	1517.1	1530.5	1557.0	1577.0	1579.2
167.5°	1501.7	1505.8	1509.9	1510.9	1516.4	1523.8	1527.5	1536.1	1553.6	1566.6	1567.5
170°	1517.1	1521.3	1525.5	1526.5	1526.8	1527.3	1527.5	1536.1	1553.6	1566.6	1566.6
172.5°	1525.4	1526.3	1527.3	1527.5	1527.5	1527.5	1527.5	1534.3	1548.1	1558.4	1557.6
175°	1536.7	1536.7	1536.7	1536.7	1533.6	1529.6	1527.5	1531.8	1540.5	1547.1	1547.1
177.5°	1536.7	1536.7	1536.7	1536.7	1534.3	1531.2	1529.6	1532.9	1539.8	1545.0	1544.1
180°	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	619.5	619.5
2.5°	661.3	657.4
5°	850.6	854.6
7.5°	1145.5	1143.5
10°	1424.4	1442.3
12.5°	1627.6	1631.5
15°	1751.1	1759.0
17.5°	1798.9	1800.9
20°	1800.9	1796.9
22.5°	1779.0	1775.0
25°	1753.1	1751.1
27.5°	1729.2	1731.1
30°	1719.2	1725.2
32.5°	1719.2	1729.2
35°	1723.2	1733.1
37.5°	1721.2	1733.1
40°	1713.2	1727.2
42.5°	1691.3	1701.3
45°	1657.4	1669.4
47.5°	1613.6	1621.6
50°	1557.8	1565.8
52.5°	1488.1	1490.1
55°	1404.5	1412.4
57.5°	1314.8	1316.8
60°	1215.2	1221.2
62.5°	1109.5	1109.5
65°	998.0	1002.0
67.5°	882.5	892.4
70°	764.9	766.9
72.5°	649.4	649.4
75°	529.9	531.9
77.5°	416.3	416.3
80°	308.8	310.8
82.5°	213.1	217.1
85°	133.5	133.5
87.5°	61.8	55.8
90°	39.1	39.1
92.5°	157.0	125.8
95°	547.2	452.8
97.5°	1311.1	1131.5
100°	1889.0	1675.0
102.5°	2457.5	2274.2
105°	3182.3	3083.8
107.5°	3657.1	3680.9
110°	3838.2	3940.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3854.3	4012.0
115°	3752.1	3970.8
117.5°	3535.4	3777.9
120°	3360.8	3596.4
122.5°	3190.8	3423.2
125°	2948.2	3162.2
127.5°	2729.9	2910.5
130°	2601.4	2768.2
132.5°	2484.7	2634.1
135°	2324.9	2453.6
137.5°	2196.6	2302.1
140°	2108.6	2207.1
142.5°	2035.6	2120.5
145°	1926.4	1990.5
147.5°	1842.5	1895.7
150°	1789.7	1832.7
152.5°	1744.5	1777.1
155°	1692.6	1714.1
157.5°	1651.6	1666.7
160°	1627.0	1635.7
162.5°	1611.0	1619.3
165°	1587.8	1596.6
167.5°	1571.2	1574.9
170°	1566.6	1566.6
172.5°	1554.4	1551.2
175°	1547.1	1547.1
177.5°	1540.4	1536.7
180°	1536.7	1536.7



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CATALOG NUMBER: SQ4-FB-125U-075D-B2750-1D-UNV-STD-W-8-2700K

**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	2.81	3.56	3.90	4.65	6.15	15.99	16.74	17.08	17.83	19.33
	3H	3.51	4.18	4.60	5.28	6.79	17.82	18.49	18.92	19.59	21.10
	4H	3.80	4.44	4.91	5.54	7.06	18.46	19.10	19.57	20.20	21.72
	6H	4.04	4.63	5.16	5.73	7.27	18.88	19.47	20.00	20.57	22.11
	8H	4.11	4.67	5.23	5.79	7.31	19.00	19.56	20.12	20.68	22.21
	12H	4.12	4.65	5.25	5.77	7.32	19.07	19.60	20.19	20.71	22.26
4H	2H	10.01	10.65	11.13	11.75	13.27	16.25	16.89	17.36	17.99	19.51
	3H	11.57	12.10	12.69	13.23	14.76	18.28	18.82	19.41	19.94	21.48
	4H	11.66	12.15	12.78	13.26	14.82	19.05	19.54	20.17	20.65	22.21
	6H	11.66	12.08	12.79	13.22	14.77	19.58	20.00	20.71	21.14	22.68
	8H	11.64	12.03	12.77	13.16	14.72	19.74	20.13	20.87	21.26	22.82
	12H	11.59	11.94	12.74	13.09	14.65	19.82	20.18	20.97	21.32	22.89
8H	4H	13.09	13.48	14.23	14.62	16.18	19.10	19.49	20.23	20.62	22.18
	6H	13.33	13.65	14.48	14.83	16.39	19.72	20.04	20.87	21.22	22.78
	8H	13.35	13.63	14.51	14.78	16.36	19.94	20.22	21.10	21.37	22.95
	12H	13.31	13.56	14.47	14.71	16.32	20.08	20.33	21.24	21.48	23.09
12H	4H	13.23	13.59	14.38	14.73	16.30	19.04	19.40	20.19	20.54	22.11
	6H	13.59	13.87	14.75	15.02	16.60	19.70	19.99	20.86	21.14	22.72
	8H	13.65	13.90	14.81	15.05	16.66	19.93	20.18	21.09	21.33	22.94