

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: P938161

Luminaire Tested: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

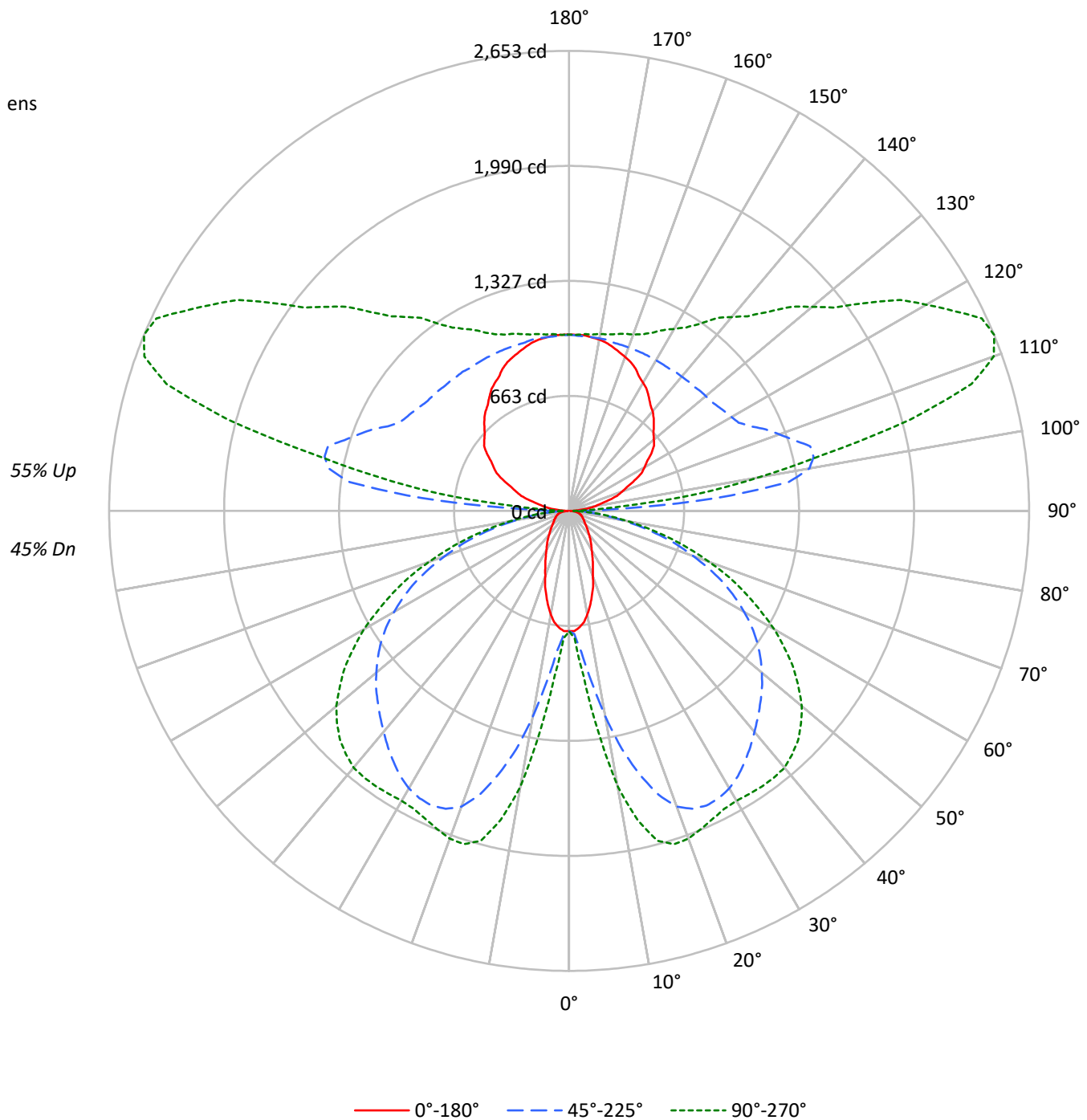
Test Method: LM-79-2019  
Report Number: P938161  
REPORT IS A COMBINATION OF REPORTS P933608 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11956.3 lumens  
Efficiency: N/A  
Efficacy: 106.0 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: General Diffuse  
  
Input Watts (W): 112.8  
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: P938161  
CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P938161

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

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

	0°	45°	90°
0°	4289	4289	4289
5°	4189	4956	5766
10°	3798	7223	9558
15°	3227	9434	11541
20°	2626	10930	11762
25°	2190	11435	11523
30°	1846	11504	11502
35°	1631	11310	11799
40°	1421	11059	12106
45°	1286	10874	12153
50°	1178	10707	11952
55°	1127	10463	11423
60°	1152	9999	10586
65°	1198	9296	9437
70°	1273	8102	7973
75°	1404	6599	6221
80°	1523	4571	4192
85°	1330	2422	2146

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12153 cd/sqm



TEST NUMBER: P938161

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	0.8
10°-20°	397.5	3.3
20°-30°	695.3	5.8
30°-40°	895.0	7.5
40°-50°	999.7	8.4
50°-60°	957.5	8.0
60°-70°	758.8	6.3
70°-80°	446.2	3.7
80°-90°	127.8	1.1
90°-100°	495.4	4.1
100°-110°	1302.5	10.9
110°-120°	1350.5	11.3
120°-130°	1083.3	9.1
130°-140°	850.0	7.1
140°-150°	652.4	5.5
150°-160°	469.8	3.9
160°-170°	287.5	2.4
170°-180°	97.1	0.8
0°-30°	1182.5	9.9
0°-40°	2077.5	17.4
0°-60°	4034.8	33.7
0°-90°	5367.6	44.9
90°-120°	3148.4	26.3
90°-150°	5734.2	48.0
90°-180°	6589.0	55.1
0°-180°	11956.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	693	693	693	693	693	
5°	676	725	816	923	956	62
15°	506	934	1574	1908	1969	141
25°	323	1059	1875	1958	1960	149
35°	218	1012	1766	1866	1940	136
45°	149	807	1561	1788	1868	116
55°	107	513	1324	1538	1581	98
65°	85	272	983	1106	1121	84
75°	62	167	540	593	595	65
85°	22	51	134	147	149	24
90°	7	19	52	26	26	7
95°	66	256	853	440	299	73
105°	235	355	1440	2186	2040	249
115°	417	506	1154	2301	2626	412
125°	580	650	1049	1773	2091	515
135°	691	760	1016	1431	1623	535
145°	801	853	1003	1221	1316	502
155°	906	931	1003	1102	1134	416
165°	978	990	1003	1043	1056	276
175°	1016	1016	1010	1023	1023	96
180°	1016	1016	1016	1016	1016	



TEST NUMBER: P938161

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3
2.5°	693.3	693.3	697.8	700.0	704.5	706.8	711.2	715.6	729.0	731.3	735.8
5°	675.5	684.5	713.4	724.6	755.8	798.1	815.9	844.9	905.2	923.0	934.2
7.5°	648.8	668.8	740.1	758.0	836.1	947.5	994.3	1056.8	1152.6	1199.4	1237.4
10°	606.4	648.8	775.8	818.2	945.3	1114.7	1201.7	1288.6	1433.6	1498.2	1522.7
12.5°	559.6	628.7	813.7	871.7	1054.5	1302.0	1406.8	1502.6	1667.6	1754.6	1767.9
15°	506.1	599.7	849.4	934.2	1170.4	1458.1	1574.0	1692.1	1846.0	1908.4	1924.0
17.5°	459.3	577.4	882.9	972.0	1259.7	1598.5	1716.6	1814.7	1939.6	1982.0	1993.1
20°	401.3	541.7	905.2	1021.1	1353.3	1701.1	1814.7	1890.5	1975.3	2002.0	2006.5
22.5°	359.0	503.9	918.5	1038.9	1415.7	1763.5	1859.4	1919.5	1977.5	1986.5	1988.6
25°	323.3	461.5	916.3	1059.0	1469.2	1801.4	1875.0	1919.5	1953.0	1957.5	1957.5
27.5°	289.8	414.6	907.4	1063.4	1509.4	1810.3	1868.2	1899.5	1915.0	1924.0	1924.0
30°	260.9	370.1	885.1	1054.5	1527.2	1801.4	1848.2	1863.8	1879.4	1892.8	1899.5
32.5°	238.5	327.7	851.6	1036.7	1529.4	1779.1	1812.5	1821.4	1843.7	1875.0	1886.1
35°	218.5	285.4	813.7	1012.2	1516.0	1743.4	1765.7	1774.6	1819.2	1866.0	1881.7
37.5°	198.4	254.2	764.7	969.8	1495.9	1701.1	1716.6	1732.3	1801.4	1857.1	1875.0
40°	178.4	227.4	706.8	923.0	1464.7	1649.8	1663.2	1687.7	1779.1	1843.7	1861.6
42.5°	162.7	205.1	644.3	873.9	1424.6	1591.8	1611.9	1647.5	1752.3	1821.4	1841.5
45°	149.4	182.8	577.4	807.1	1373.3	1531.6	1560.6	1609.7	1721.1	1788.0	1805.9
47.5°	136.0	167.2	508.3	737.9	1317.6	1471.4	1509.4	1565.0	1678.8	1743.4	1759.1
50°	124.8	151.6	439.2	664.3	1257.4	1406.8	1451.4	1509.4	1625.3	1685.5	1705.5
52.5°	115.9	138.2	374.5	590.8	1188.3	1339.8	1391.1	1451.4	1560.6	1618.5	1632.0
55°	107.0	127.1	318.8	512.8	1116.9	1268.5	1324.3	1382.3	1489.2	1538.3	1547.2
57.5°	102.6	118.1	272.0	439.2	1041.1	1188.3	1250.7	1304.2	1404.6	1442.4	1451.4
60°	95.8	111.5	236.4	376.8	958.7	1112.5	1166.0	1219.5	1304.2	1335.5	1342.1
62.5°	89.1	107.0	209.6	316.5	873.9	1023.3	1076.8	1125.9	1197.2	1219.5	1228.4
65°	84.8	102.6	189.5	272.0	787.0	929.7	983.2	1025.5	1083.5	1105.8	1110.3
67.5°	80.3	98.1	173.9	234.1	700.0	836.1	876.2	916.3	960.9	983.2	985.5
70°	73.6	93.6	160.6	207.4	610.9	729.0	762.5	804.8	840.5	851.6	858.4
72.5°	69.1	87.0	151.6	187.3	519.4	626.5	657.7	682.2	713.4	724.6	724.6
75°	62.4	78.0	142.7	167.2	425.8	512.8	539.5	564.0	588.5	593.0	586.4
77.5°	55.8	69.1	122.6	140.4	332.2	405.8	428.1	441.4	461.5	465.9	468.2
80°	46.8	60.2	95.8	109.3	240.7	298.7	314.3	325.5	343.3	343.3	347.8
82.5°	35.7	46.8	69.1	78.0	162.7	205.1	218.5	225.2	236.4	236.4	236.4
85°	22.3	29.0	44.6	51.3	98.1	124.8	133.8	136.0	144.9	147.1	147.1
87.5°	11.2	15.6	29.0	31.2	51.3	64.6	64.6	69.1	69.1	66.9	64.6
90°	6.9	12.3	17.7	19.1	30.0	44.5	51.8	46.0	34.5	25.9	25.9
92.5°	27.3	73.7	120.1	131.7	185.1	256.3	291.9	255.8	183.7	129.6	124.5
95°	65.5	150.4	235.2	256.5	455.4	720.7	853.4	761.5	577.7	439.9	424.3
97.5°	113.2	188.0	263.0	281.7	613.4	1055.8	1277.0	1218.9	1102.8	1015.7	986.0
100°	150.1	218.0	285.9	302.8	670.9	1161.8	1407.2	1411.4	1419.9	1426.3	1390.9
102.5°	181.5	244.8	308.2	324.0	697.4	1195.1	1444.0	1518.0	1666.0	1776.9	1746.6
105°	234.7	288.3	341.9	355.4	716.9	1199.0	1440.0	1605.8	1937.4	2186.2	2169.8
107.5°	289.2	339.2	389.3	401.7	720.6	1145.6	1358.1	1589.5	2052.1	2399.0	2402.9
110°	326.0	371.2	416.3	427.6	715.0	1098.2	1289.9	1548.4	2065.7	2453.6	2470.6



TEST NUMBER: P938161

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	362.2	405.2	448.3	459.1	715.3	1056.9	1227.8	1492.4	2021.8	2418.8	2444.8
115°	416.8	456.5	496.2	506.2	722.0	1009.6	1153.5	1408.4	1918.4	2300.8	2337.0
117.5°	470.7	506.8	542.8	551.8	735.3	979.9	1102.3	1332.4	1792.6	2137.8	2177.8
120°	502.0	536.0	569.9	578.4	746.2	969.9	1081.8	1292.1	1712.5	2027.9	2066.9
122.5°	532.8	567.0	601.3	609.8	761.9	964.7	1066.2	1255.5	1634.2	1918.1	1956.5
125°	579.8	611.0	642.2	650.0	783.1	960.4	1049.1	1209.9	1531.6	1772.9	1808.2
127.5°	618.0	649.5	681.0	688.9	804.3	958.0	1034.8	1172.9	1449.1	1656.2	1686.1
130°	638.4	672.4	706.3	714.8	819.6	959.4	1029.3	1152.2	1398.1	1582.5	1610.1
132.5°	659.6	693.6	727.5	736.0	832.2	960.4	1024.5	1134.6	1354.7	1519.7	1544.4
135°	691.0	721.9	752.8	760.5	845.8	959.5	1016.4	1108.5	1292.9	1431.1	1452.4
137.5°	723.0	753.7	784.3	792.0	866.3	965.4	1015.0	1092.9	1248.7	1365.6	1383.0
140°	749.6	777.8	806.0	813.0	878.7	966.4	1010.2	1077.5	1212.1	1313.1	1329.4
142.5°	770.1	796.2	822.3	828.8	889.3	969.9	1010.2	1069.3	1187.6	1276.3	1290.3
145°	801.4	824.2	846.9	852.7	902.9	969.9	1003.4	1051.8	1148.5	1221.0	1231.6
147.5°	832.9	855.0	877.2	882.7	922.9	976.6	1003.4	1041.4	1117.6	1174.6	1183.4
150°	853.4	873.4	893.3	898.3	933.4	980.0	1003.4	1035.5	1099.8	1148.0	1155.1
152.5°	874.4	889.6	904.8	908.6	940.2	982.3	1003.4	1030.8	1085.7	1126.9	1132.2
155°	905.9	917.1	928.3	931.1	955.2	987.3	1003.4	1025.2	1068.9	1101.7	1105.3
157.5°	929.1	940.0	950.8	953.6	970.2	992.3	1003.4	1020.3	1054.3	1079.8	1082.2
160°	944.7	953.2	961.7	963.8	977.0	994.6	1003.4	1018.0	1047.0	1068.9	1070.3
162.5°	960.4	966.7	973.2	974.7	984.3	997.0	1003.4	1015.7	1040.2	1058.6	1060.0
165°	977.5	983.3	989.1	990.5	994.8	1000.5	1003.4	1012.2	1029.8	1043.0	1044.4
167.5°	993.2	995.9	998.6	999.3	1002.9	1007.8	1010.2	1016.0	1027.5	1036.1	1036.7
170°	1003.4	1006.1	1008.8	1009.5	1009.8	1010.0	1010.2	1016.0	1027.5	1036.1	1036.1
172.5°	1008.8	1009.4	1010.0	1010.2	1010.2	1010.2	1010.2	1014.8	1023.8	1030.7	1030.2
175°	1016.4	1016.4	1016.4	1016.4	1014.3	1011.6	1010.2	1013.1	1018.9	1023.2	1023.2
177.5°	1016.4	1016.4	1016.4	1016.4	1014.8	1012.6	1011.5	1013.8	1018.4	1021.8	1021.2
180°	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4



TEST NUMBER: P938161

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	693.3	693.3
2.5°	740.1	735.8
5°	952.0	956.5
7.5°	1282.0	1279.7
10°	1594.0	1614.1
12.5°	1821.4	1825.9
15°	1959.7	1968.6
17.5°	2013.2	2015.4
20°	2015.4	2011.0
22.5°	1990.8	1986.5
25°	1961.9	1959.7
27.5°	1935.2	1937.4
30°	1924.0	1930.7
32.5°	1924.0	1935.2
35°	1928.5	1939.6
37.5°	1926.2	1939.6
40°	1917.3	1932.9
42.5°	1892.8	1904.0
45°	1854.9	1868.2
47.5°	1805.9	1814.7
50°	1743.4	1752.3
52.5°	1665.3	1667.6
55°	1571.7	1580.7
57.5°	1471.4	1473.6
60°	1360.0	1366.6
62.5°	1241.8	1241.8
65°	1116.9	1121.4
67.5°	987.6	998.8
70°	856.1	858.4
72.5°	726.8	726.8
75°	593.0	595.2
77.5°	465.9	465.9
80°	345.5	347.8
82.5°	238.5	243.0
85°	149.4	149.4
87.5°	69.1	62.4
90°	25.9	25.9
92.5°	103.8	83.2
95°	361.9	299.4
97.5°	867.1	748.3
100°	1249.4	1107.8
102.5°	1625.3	1504.1
105°	2104.7	2039.5
107.5°	2418.7	2434.5
110°	2538.5	2606.4





TEST NUMBER: P938161  
CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2549.1	2653.4
115°	2481.6	2626.1
117.5°	2338.2	2498.6
120°	2222.7	2378.5
122.5°	2110.2	2263.9
125°	1949.8	2091.4
127.5°	1805.5	1925.0
130°	1720.5	1830.8
132.5°	1643.3	1742.1
135°	1537.6	1622.7
137.5°	1452.7	1522.4
140°	1394.6	1459.7
142.5°	1346.3	1402.5
145°	1274.1	1316.5
147.5°	1218.6	1253.8
150°	1183.7	1212.1
152.5°	1153.7	1175.3
155°	1119.5	1133.7
157.5°	1092.3	1102.3
160°	1076.1	1081.8
162.5°	1065.5	1070.9
165°	1050.2	1055.9
167.5°	1039.1	1041.6
170°	1036.1	1036.1
172.5°	1028.1	1025.9
175°	1023.2	1023.2
177.5°	1018.8	1016.4
180°	1016.4	1016.4



TEST NUMBER: P938161

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-6-3000K

**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	5.58	6.43	6.57	7.43	8.77	18.74	19.59	19.73	20.60	21.94
	3H	6.28	7.04	7.28	8.06	9.42	20.57	21.34	21.58	22.36	23.72
	4H	6.58	7.30	7.59	8.32	9.69	21.21	21.94	22.23	22.96	24.33
	6H	6.83	7.50	7.85	8.52	9.90	21.64	22.31	22.67	23.33	24.71
	8H	6.90	7.53	7.93	8.57	9.95	21.76	22.40	22.79	23.44	24.81
	12H	6.91	7.52	7.95	8.55	9.96	21.82	22.43	22.86	23.47	24.87
4H	2H	12.78	13.51	13.80	14.53	15.89	19.01	19.74	20.04	20.76	22.13
	3H	14.35	14.95	15.38	16.00	17.39	21.05	21.66	22.08	22.71	24.09
	4H	14.44	15.00	15.48	16.04	17.44	21.82	22.37	22.85	23.41	24.82
	6H	14.45	14.93	15.50	16.00	17.40	22.35	22.83	23.40	23.89	25.29
	8H	14.43	14.88	15.48	15.93	17.35	22.51	22.96	23.56	24.01	25.43
	12H	14.39	14.79	15.45	15.86	17.28	22.60	23.01	23.67	24.08	25.50
8H	4H	15.88	16.33	16.93	17.39	18.80	21.88	22.32	22.93	23.38	24.80
	6H	16.12	16.50	17.20	17.59	19.01	22.50	22.87	23.57	23.97	25.38
	8H	16.14	16.47	17.22	17.55	18.98	22.72	23.04	23.80	24.13	25.56
	12H	16.11	16.40	17.20	17.48	18.95	22.86	23.15	23.94	24.22	25.70
12H	4H	16.02	16.43	17.09	17.50	18.92	21.83	22.23	22.90	23.30	24.73
	6H	16.38	16.71	17.46	17.79	19.22	22.48	22.81	23.56	23.89	25.32
	8H	16.45	16.74	17.54	17.82	19.29	22.71	23.00	23.80	24.08	25.55