

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: P938119

Luminaire Tested: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938119
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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

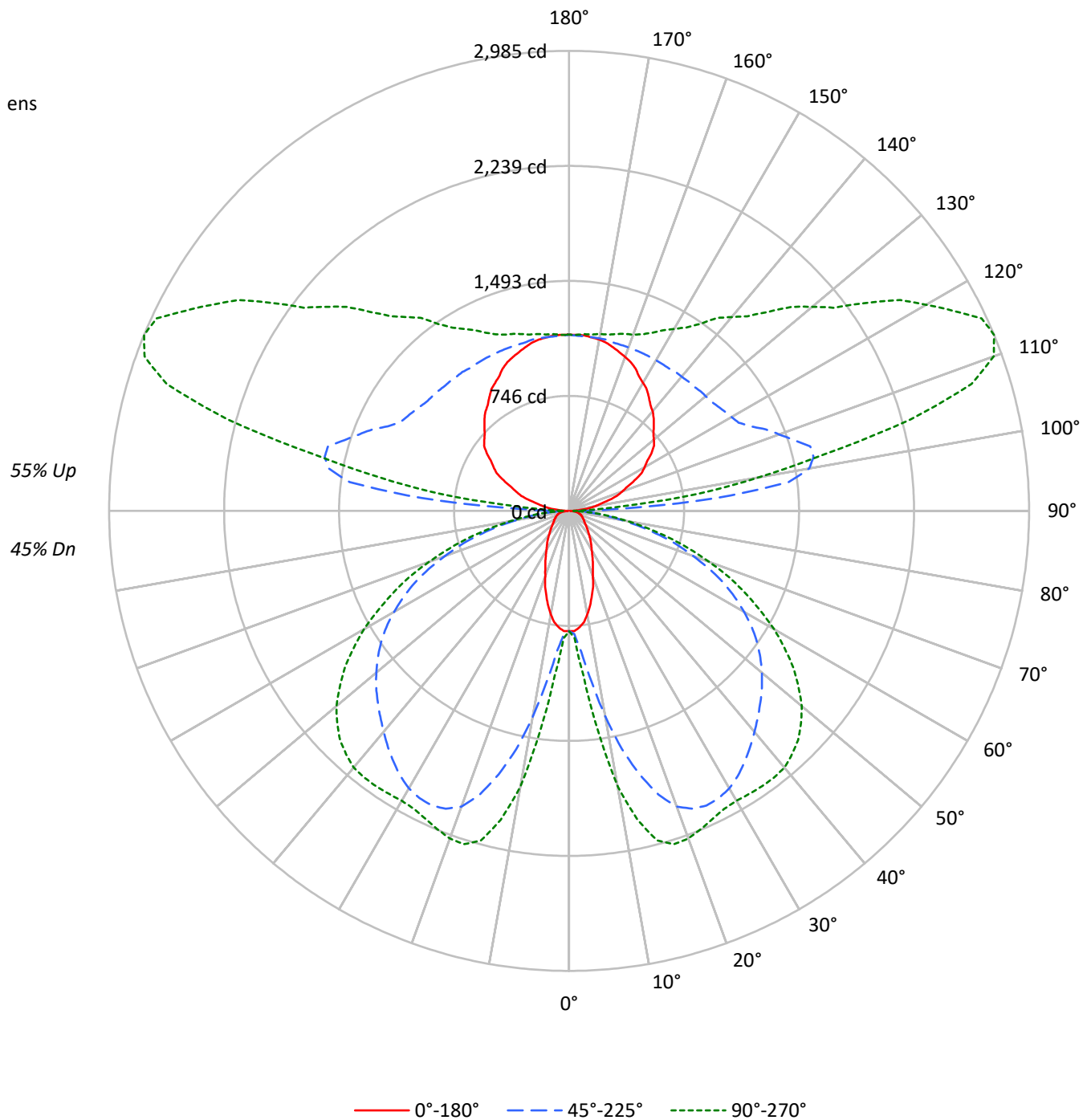
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13449.6 lumens
Efficiency: N/A
Efficacy: 119.2 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 (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: P938119
CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P938119

CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4825	4825	4825
5°	4712	5575	6485
10°	4272	8125	10752
15°	3630	10613	12983
20°	2954	12295	13231
25°	2463	12863	12962
30°	2076	12941	12938
35°	1835	12723	13273
40°	1598	12440	13618
45°	1447	12232	13672
50°	1325	12044	13445
55°	1267	11770	12849
60°	1296	11249	11908
65°	1347	10457	10615
70°	1432	9113	8968
75°	1580	7424	6998
80°	1715	5142	4715
85°	1496	2724	2415

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13672 cd/sqm



TEST NUMBER: P938119

CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	0.8
10°-20°	447.1	3.3
20°-30°	782.1	5.8
30°-40°	1006.8	7.5
40°-50°	1124.6	8.4
50°-60°	1077.1	8.0
60°-70°	853.6	6.3
70°-80°	501.9	3.7
80°-90°	143.8	1.1
90°-100°	557.3	4.1
100°-110°	1465.2	10.9
110°-120°	1519.2	11.3
120°-130°	1218.6	9.1
130°-140°	956.2	7.1
140°-150°	733.9	5.5
150°-160°	528.5	3.9
160°-170°	323.4	2.4
170°-180°	109.3	0.8
0°-30°	1330.2	9.9
0°-40°	2337.0	17.4
0°-60°	4538.7	33.7
0°-90°	6038.1	44.9
90°-120°	3541.7	26.3
90°-150°	6450.4	48.0
90°-180°	7412.0	55.1
0°-180°	13449.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	760	815	918	1038	1076	70
15°	569	1051	1771	2147	2214	158
25°	364	1191	2109	2202	2204	168
35°	246	1139	1986	2099	2182	153
45°	168	908	1756	2011	2102	130
55°	120	577	1490	1730	1778	110
65°	95	306	1106	1244	1262	94
75°	70	188	607	667	670	74
85°	25	58	150	166	168	27
90°	8	21	58	29	29	8
95°	74	288	960	495	337	82
105°	264	400	1620	2459	2294	280
115°	469	569	1298	2588	2954	463
125°	652	731	1180	1994	2353	579
135°	777	856	1143	1610	1825	601
145°	902	959	1129	1374	1481	565
155°	1019	1047	1129	1239	1275	468
165°	1100	1114	1129	1173	1188	310
175°	1143	1143	1136	1151	1151	109
180°	1143	1143	1143	1143	1143	



TEST NUMBER: P938119
 CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9
2.5°	779.9	779.9	785.0	787.4	792.5	795.0	800.0	805.0	820.0	822.6	827.6
5°	759.9	769.9	802.6	815.1	850.2	897.8	917.9	950.5	1018.2	1038.3	1050.8
7.5°	729.8	752.4	832.6	852.6	940.5	1065.9	1118.5	1188.8	1296.6	1349.2	1391.9
10°	682.1	729.8	872.7	920.4	1063.4	1254.0	1351.8	1449.6	1612.6	1685.3	1712.9
12.5°	629.5	707.2	915.4	980.6	1186.2	1464.6	1582.5	1690.3	1875.9	1973.7	1988.7
15°	569.3	674.6	955.5	1050.8	1316.6	1640.2	1770.6	1903.5	2076.6	2146.7	2164.3
17.5°	516.6	649.5	993.1	1093.4	1417.0	1798.2	1931.0	2041.4	2181.9	2229.5	2242.1
20°	451.4	609.4	1018.2	1148.6	1522.3	1913.6	2041.4	2126.7	2222.0	2252.0	2257.1
22.5°	403.8	566.8	1033.3	1168.7	1592.6	1983.7	2091.6	2159.3	2224.5	2234.6	2237.0
25°	363.7	519.1	1030.8	1191.2	1652.7	2026.4	2109.2	2159.3	2196.9	2202.0	2202.0
27.5°	326.0	466.4	1020.7	1196.3	1697.9	2036.4	2101.6	2136.7	2154.2	2164.3	2164.3
30°	293.4	416.3	995.6	1186.2	1717.9	2026.4	2079.0	2096.6	2114.1	2129.2	2136.7
32.5°	268.3	368.6	958.0	1166.1	1720.4	2001.3	2038.9	2048.9	2074.0	2109.2	2121.6
35°	245.8	321.0	915.4	1138.6	1705.4	1961.2	1986.3	1996.3	2046.4	2099.1	2116.7
37.5°	223.2	285.9	860.3	1090.9	1682.8	1913.6	1931.0	1948.6	2026.4	2089.0	2109.2
40°	200.7	255.8	795.0	1038.3	1647.7	1855.9	1870.9	1898.4	2001.3	2074.0	2094.1
42.5°	183.1	230.7	724.8	983.1	1602.5	1790.7	1813.2	1853.3	1971.2	2048.9	2071.5
45°	168.1	205.6	649.5	907.9	1544.8	1722.9	1755.5	1810.7	1936.1	2011.4	2031.4
47.5°	152.9	188.1	571.8	830.1	1482.2	1655.2	1697.9	1760.5	1888.5	1961.2	1978.8
50°	140.4	170.5	494.1	747.3	1414.4	1582.5	1632.7	1697.9	1828.3	1896.0	1918.5
52.5°	130.4	155.5	421.3	664.6	1336.7	1507.2	1564.9	1632.7	1755.5	1820.7	1835.8
55°	120.3	143.0	358.6	576.8	1256.4	1427.0	1489.7	1554.9	1675.3	1730.5	1740.5
57.5°	115.4	132.9	306.0	494.1	1171.2	1336.7	1406.9	1467.1	1580.0	1622.6	1632.7
60°	107.8	125.4	265.9	423.9	1078.4	1251.4	1311.7	1371.8	1467.1	1502.3	1509.8
62.5°	100.3	120.3	235.7	356.1	983.1	1151.1	1211.3	1266.5	1346.7	1371.8	1381.8
65°	95.3	115.4	213.2	306.0	885.2	1045.8	1106.0	1153.6	1218.8	1243.9	1248.9
67.5°	90.3	110.4	195.6	263.3	787.4	940.5	985.6	1030.8	1080.9	1106.0	1108.5
70°	82.8	105.3	180.6	233.3	687.2	820.0	857.7	905.3	945.5	958.0	965.6
72.5°	77.8	97.8	170.5	210.6	584.3	704.7	739.8	767.4	802.6	815.1	815.1
75°	70.2	87.7	160.6	188.1	479.0	576.8	606.9	634.5	662.1	667.1	659.6
77.5°	62.7	77.8	137.9	158.0	373.7	456.5	481.6	496.6	519.1	524.1	526.7
80°	52.7	67.7	107.8	122.9	270.8	336.0	353.6	366.2	386.2	386.2	391.2
82.5°	40.1	52.7	77.8	87.7	183.1	230.7	245.8	253.3	265.9	265.9	265.9
85°	25.1	32.6	50.2	57.7	110.4	140.4	150.5	152.9	163.0	165.5	165.5
87.5°	12.5	17.6	32.6	35.1	57.7	72.7	72.7	77.8	77.8	75.3	72.7
90°	7.7	13.8	20.0	21.4	33.7	50.1	58.3	51.8	38.8	29.1	29.1
92.5°	30.7	82.9	135.1	148.1	208.2	288.3	328.4	287.8	206.7	145.8	140.0
95°	73.7	169.1	264.6	288.5	512.3	810.8	959.9	856.6	649.9	494.9	477.3
97.5°	127.4	211.5	295.8	316.9	690.0	1187.7	1436.5	1371.1	1240.5	1142.5	1109.1
100°	168.8	245.2	321.6	340.7	754.7	1306.9	1583.0	1587.7	1597.3	1604.4	1564.6
102.5°	204.1	275.4	346.7	364.5	784.5	1344.4	1624.4	1707.6	1874.0	1998.8	1964.7
105°	264.0	324.4	384.6	399.7	806.4	1348.7	1619.8	1806.4	2179.4	2459.2	2440.9
107.5°	325.3	381.6	437.9	451.9	810.6	1288.6	1527.7	1788.0	2308.4	2698.6	2703.1
110°	366.7	417.5	468.3	481.1	804.3	1235.4	1451.0	1741.8	2323.7	2760.1	2779.1



TEST NUMBER: P938119

CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	407.5	455.9	504.3	516.4	804.6	1189.0	1381.1	1678.8	2274.3	2720.9	2750.2
115°	468.8	513.5	558.2	569.4	812.1	1135.7	1297.5	1584.4	2158.0	2588.2	2628.9
117.5°	529.5	570.1	610.6	620.8	827.2	1102.3	1239.9	1498.8	2016.5	2404.8	2449.8
120°	564.7	603.0	641.1	650.7	839.4	1091.0	1216.9	1453.4	1926.4	2281.2	2325.1
122.5°	599.3	637.9	676.4	686.0	857.1	1085.2	1199.3	1412.3	1838.3	2157.7	2200.9
125°	652.2	687.4	722.4	731.2	880.9	1080.4	1180.2	1361.1	1722.9	1994.3	2034.1
127.5°	695.2	730.6	766.1	775.0	904.7	1077.6	1164.1	1319.4	1630.1	1863.1	1896.7
130°	718.2	756.4	794.5	804.1	922.0	1079.2	1157.8	1296.2	1572.7	1780.2	1811.2
132.5°	742.0	780.2	818.4	827.9	936.1	1080.4	1152.5	1276.3	1523.9	1709.5	1737.3
135°	777.3	812.0	846.8	855.5	951.4	1079.4	1143.3	1247.0	1454.3	1609.8	1633.8
137.5°	813.3	847.8	882.3	890.9	974.5	1086.0	1141.7	1229.4	1404.6	1536.1	1555.7
140°	843.3	875.0	906.7	914.6	988.5	1087.1	1136.4	1212.1	1363.5	1477.1	1495.4
142.5°	866.3	895.6	925.0	932.3	1000.4	1091.0	1136.4	1202.9	1335.9	1435.7	1451.5
145°	901.6	927.1	952.7	959.2	1015.7	1091.0	1128.7	1183.1	1291.9	1373.5	1385.5
147.5°	936.9	961.8	986.7	992.9	1038.2	1098.6	1128.7	1171.5	1257.1	1321.4	1331.2
150°	959.9	982.5	1004.9	1010.5	1049.9	1102.4	1128.7	1164.9	1237.2	1291.4	1299.4
152.5°	983.7	1000.7	1017.8	1022.1	1057.7	1105.0	1128.7	1159.5	1221.3	1267.6	1273.6
155°	1019.0	1031.7	1044.2	1047.4	1074.4	1110.6	1128.7	1153.3	1202.4	1239.2	1243.3
157.5°	1045.1	1057.4	1069.6	1072.7	1091.3	1116.2	1128.7	1147.8	1186.0	1214.6	1217.4
160°	1062.7	1072.3	1081.9	1084.2	1099.1	1118.8	1128.7	1145.1	1177.8	1202.4	1204.0
162.5°	1080.4	1087.5	1094.7	1096.5	1107.3	1121.6	1128.7	1142.5	1170.1	1190.8	1192.4
165°	1099.5	1106.1	1112.6	1114.2	1119.0	1125.4	1128.7	1138.6	1158.4	1173.2	1174.8
167.5°	1117.2	1120.3	1123.4	1124.1	1128.2	1133.6	1136.4	1142.9	1155.9	1165.5	1166.2
170°	1128.7	1131.8	1134.8	1135.6	1135.9	1136.2	1136.4	1142.9	1155.9	1165.5	1165.5
172.5°	1134.8	1135.5	1136.2	1136.4	1136.4	1136.4	1136.4	1141.5	1151.7	1159.4	1158.8
175°	1143.3	1143.3	1143.3	1143.3	1141.0	1138.0	1136.4	1139.7	1146.2	1151.0	1151.0
177.5°	1143.3	1143.3	1143.3	1143.3	1141.5	1139.1	1137.9	1140.4	1145.6	1149.4	1148.7
180°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.3	1143.3	1143.3	1143.3	1143.3	1143.3



TEST NUMBER: P938119
CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	779.9	779.9
2.5°	832.6	827.6
5°	1070.9	1075.9
7.5°	1442.1	1439.5
10°	1793.1	1815.7
12.5°	2048.9	2054.0
15°	2204.4	2214.5
17.5°	2264.6	2267.2
20°	2267.2	2262.1
22.5°	2239.5	2234.6
25°	2206.9	2204.4
27.5°	2176.9	2179.3
30°	2164.3	2171.8
32.5°	2164.3	2176.9
35°	2169.4	2181.9
37.5°	2166.8	2181.9
40°	2156.8	2174.3
42.5°	2129.2	2141.8
45°	2086.6	2101.6
47.5°	2031.4	2041.4
50°	1961.2	1971.2
52.5°	1873.3	1875.9
55°	1768.0	1778.1
57.5°	1655.2	1657.7
60°	1529.8	1537.3
62.5°	1396.9	1396.9
65°	1256.4	1261.5
67.5°	1111.0	1123.6
70°	963.0	965.6
72.5°	817.6	817.6
75°	667.1	669.6
77.5°	524.1	524.1
80°	388.7	391.2
82.5°	268.3	273.4
85°	168.1	168.1
87.5°	77.8	70.2
90°	29.1	29.1
92.5°	116.8	93.6
95°	407.1	336.8
97.5°	975.5	841.8
100°	1405.4	1246.2
102.5°	1828.3	1692.0
105°	2367.5	2294.2
107.5°	2720.8	2738.5
110°	2855.5	2931.9



TEST NUMBER: P938119

CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2867.5	2984.8
115°	2791.5	2954.1
117.5°	2630.3	2810.7
120°	2500.3	2675.6
122.5°	2373.8	2546.7
125°	2193.4	2352.6
127.5°	2031.0	2165.4
130°	1935.4	2059.5
132.5°	1848.5	1959.7
135°	1729.6	1825.4
137.5°	1634.2	1712.6
140°	1568.7	1642.1
142.5°	1514.5	1577.6
145°	1433.2	1480.9
147.5°	1370.8	1410.4
150°	1331.5	1363.5
152.5°	1297.8	1322.0
155°	1259.3	1275.3
157.5°	1228.7	1239.9
160°	1210.5	1216.9
162.5°	1198.5	1204.7
165°	1181.4	1187.8
167.5°	1168.9	1171.7
170°	1165.5	1165.5
172.5°	1156.5	1154.1
175°	1151.0	1151.0
177.5°	1146.1	1143.3
180°	1143.3	1143.3



TEST NUMBER: P938119
 CATALOG NUMBER: SQ4-FB-125U-125D-840-1D-UNV-STD-W-6

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	5.98	6.83	6.98	7.84	9.18	19.15	20.00	20.14	21.01	22.35
	3H	6.69	7.45	7.69	8.47	9.83	20.98	21.75	21.98	22.76	24.12
	4H	6.99	7.71	8.00	8.73	10.10	21.62	22.35	22.64	23.37	24.74
	6H	7.24	7.91	8.26	8.93	10.31	22.05	22.72	23.08	23.74	25.12
	8H	7.30	7.94	8.34	8.98	10.36	22.17	22.80	23.20	23.85	25.22
	12H	7.32	7.93	8.36	8.96	10.37	22.23	22.84	23.27	23.87	25.28
4H	2H	13.19	13.91	14.21	14.94	16.30	19.42	20.15	20.44	21.17	22.54
	3H	14.76	15.36	15.79	16.41	17.79	21.46	22.07	22.49	23.12	24.50
	4H	14.85	15.41	15.89	16.45	17.85	22.22	22.78	23.26	23.82	25.23
	6H	14.86	15.34	15.91	16.41	17.80	22.76	23.24	23.81	24.30	25.70
	8H	14.84	15.29	15.89	16.34	17.76	22.92	23.37	23.97	24.42	25.84
	12H	14.79	15.20	15.86	16.27	17.69	23.01	23.41	24.08	24.49	25.91
8H	4H	16.29	16.74	17.34	17.80	19.21	22.28	22.73	23.33	23.79	25.21
	6H	16.53	16.90	17.61	18.00	19.42	22.91	23.28	23.98	24.38	25.79
	8H	16.55	16.88	17.63	17.96	19.39	23.13	23.45	24.21	24.54	25.97
	12H	16.52	16.81	17.60	17.88	19.36	23.27	23.55	24.35	24.63	26.10
12H	4H	16.43	16.84	17.50	17.91	19.33	22.24	22.64	23.31	23.71	25.13
	6H	16.79	17.12	17.87	18.20	19.63	22.89	23.22	23.97	24.30	25.73
	8H	16.86	17.15	17.95	18.23	19.70	23.12	23.41	24.20	24.48	25.96