

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: P937842

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937842
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

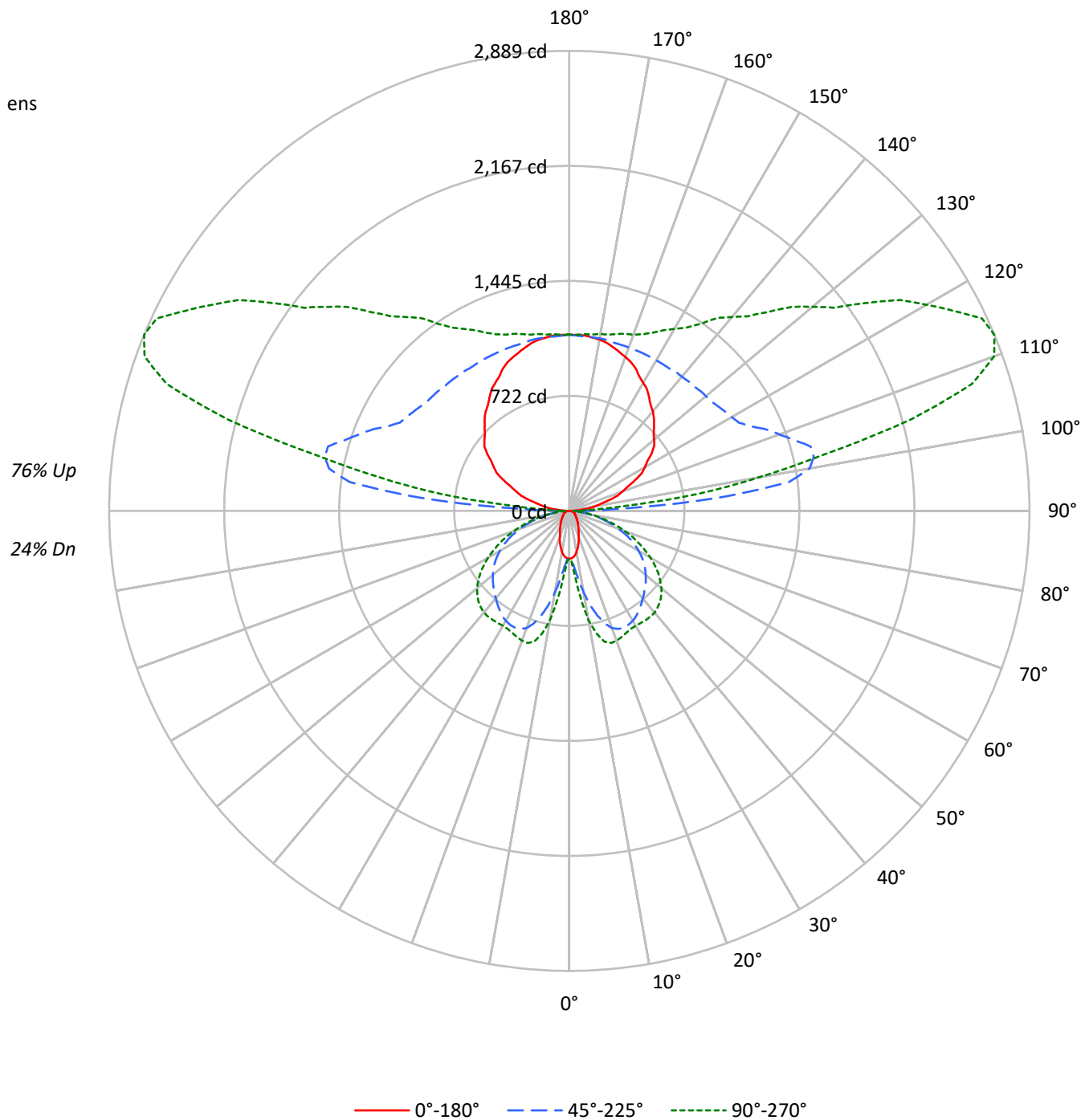
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9491.1 lumens
Efficiency: N/A
Efficacy: 132.9 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: Semi-Indirect

Input Watts (W): 71.4
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: P937842
CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

Luminous Intensity Polar Plot



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20				20
RC	80				70				50				30				10				0				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	0	
RCR																									
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24	24	24	24	24	24	24	
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20	20	20	20	20	20	20	
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16	16	16	16	16	16	16	
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13	13	13	13	13	13	13	
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11	11	11	11	11	11	11	
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10	10	10	10	10	10	10	
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8	8	8	8	8	8	8	
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7	7	7	7	7	7	7	
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6	6	6	6	6	6	6	
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6	6	6	6	6	6	6	
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5	5	5	5	5	5	5	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1850	1850	1850
5°	1807	2138	2487
10°	1638	3116	4123
15°	1392	4070	4979
20°	1133	4715	5075
25°	945	4933	4972
30°	796	4963	4962
35°	704	4879	5090
40°	613	4771	5223
45°	554	4691	5243
50°	508	4619	5157
55°	487	4514	4928
60°	498	4314	4567
65°	516	4011	4070
70°	548	3495	3439
75°	608	2846	2684
80°	657	1972	1808
85°	578	1046	925

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5243 cd/sqm



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.4
10°-20°	171.5	1.8
20°-30°	300.0	3.2
30°-40°	386.1	4.1
40°-50°	431.3	4.5
50°-60°	413.1	4.4
60°-70°	327.4	3.4
70°-80°	192.5	2.0
80°-90°	57.7	0.6
90°-100°	539.4	5.7
100°-110°	1418.0	14.9
110°-120°	1470.3	15.5
120°-130°	1179.4	12.4
130°-140°	925.4	9.7
140°-150°	710.3	7.5
150°-160°	511.5	5.4
160°-170°	313.0	3.3
170°-180°	105.7	1.1
0°-30°	510.1	5.4
0°-40°	896.3	9.4
0°-60°	1740.6	18.3
0°-90°	2318.2	24.4
90°-120°	3427.7	36.1
90°-150°	6242.7	65.8
90°-180°	7173.0	75.6
0°-180°	9491.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	291	313	352	398	413	27
15°	218	403	679	823	849	61
25°	140	457	809	844	846	64
35°	94	437	762	805	837	59
45°	64	348	673	771	806	50
55°	46	221	571	664	682	42
65°	36	117	424	477	484	36
75°	27	72	233	256	257	28
85°	10	22	58	64	64	10
90°	8	21	56	28	28	7
95°	71	279	929	479	326	79
105°	256	387	1568	2380	2220	271
115°	454	551	1256	2505	2859	448
125°	631	708	1142	1930	2277	560
135°	752	828	1106	1558	1767	582
145°	872	928	1092	1329	1433	547
155°	986	1014	1092	1199	1234	453
165°	1064	1078	1092	1136	1150	300
175°	1106	1106	1100	1114	1114	105
180°	1106	1106	1106	1106	1106	



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1
2.5°	299.1	299.1	301.0	302.0	304.0	304.9	306.8	308.8	314.5	315.4	317.4
5°	291.4	295.3	307.8	312.6	326.1	344.3	352.0	364.5	390.5	398.2	403.0
7.5°	279.9	288.6	319.3	327.0	360.7	408.8	428.9	455.9	497.2	517.5	533.8
10°	261.6	279.9	334.7	353.0	407.8	480.9	518.4	555.9	618.5	646.3	656.9
12.5°	241.4	271.3	351.0	376.1	455.0	561.7	606.9	648.3	719.4	756.9	762.7
15°	218.3	258.7	366.4	403.0	505.0	629.0	679.0	730.1	796.4	823.3	830.1
17.5°	198.1	249.1	380.9	419.4	543.4	689.6	740.6	782.9	836.8	855.0	859.8
20°	173.2	233.7	390.5	440.5	583.9	733.9	782.9	815.6	852.2	863.7	865.6
22.5°	154.8	217.3	396.2	448.2	610.7	760.7	802.2	828.1	853.1	856.9	857.9
25°	139.5	199.1	395.3	456.9	633.9	777.1	808.8	828.1	842.5	844.4	844.4
27.5°	125.1	178.9	391.5	458.8	651.2	781.0	806.0	819.5	826.2	830.1	830.1
30°	112.5	159.7	381.8	455.0	658.8	777.1	797.4	804.1	810.8	816.6	819.5
32.5°	102.9	141.4	367.4	447.2	659.8	767.5	782.0	785.8	795.4	808.8	813.7
35°	94.3	123.2	351.0	436.7	654.0	752.1	761.7	765.6	784.8	805.0	811.7
37.5°	85.6	109.7	329.9	418.4	645.3	733.9	740.6	747.4	777.1	801.2	808.8
40°	77.0	98.1	304.9	398.2	631.9	711.7	717.5	728.0	767.5	795.4	803.1
42.5°	70.2	88.4	278.0	377.0	614.5	686.7	695.3	710.7	756.0	785.8	794.4
45°	64.4	78.9	249.1	348.1	592.5	660.7	673.3	694.4	742.5	771.4	779.0
47.5°	58.7	72.1	219.3	318.3	568.5	634.8	651.2	675.2	724.2	752.1	758.8
50°	53.8	65.4	189.5	286.6	542.4	606.9	626.1	651.2	701.2	727.1	735.8
52.5°	50.0	59.7	161.6	254.9	512.6	578.0	600.2	626.1	673.3	698.3	704.0
55°	46.2	54.8	137.5	221.2	481.8	547.2	571.3	596.3	642.5	663.6	667.5
57.5°	44.3	51.0	117.3	189.5	449.1	512.6	539.6	562.6	605.9	622.3	626.1
60°	41.4	48.1	101.9	162.6	413.6	479.9	503.1	526.1	562.6	576.1	579.0
62.5°	38.4	46.2	90.5	136.5	377.0	441.5	464.5	485.7	516.4	526.1	529.9
65°	36.5	44.3	81.8	117.3	339.5	401.0	424.2	442.4	467.4	477.0	479.0
67.5°	34.6	42.4	75.1	101.0	302.0	360.7	378.0	395.3	414.5	424.2	425.1
70°	31.7	40.4	69.2	89.4	263.5	314.5	328.9	347.2	362.6	367.4	370.3
72.5°	29.8	37.5	65.4	80.8	224.1	270.2	283.7	294.3	307.8	312.6	312.6
75°	27.0	33.7	61.6	72.1	183.7	221.2	232.7	243.4	253.9	255.9	252.9
77.5°	24.0	29.8	52.9	60.6	143.3	175.1	184.6	190.5	199.1	201.0	201.9
80°	20.2	26.0	41.4	47.1	103.8	128.9	135.6	140.5	148.1	148.1	150.0
82.5°	15.4	20.2	29.8	33.7	70.2	88.4	94.3	97.1	101.9	101.9	101.9
85°	9.7	12.5	19.2	22.1	42.4	53.8	57.8	58.7	62.5	63.5	63.5
87.5°	4.8	6.7	12.5	13.5	22.1	27.9	27.9	29.8	29.8	28.9	27.9
90°	7.5	13.4	19.3	20.7	32.6	48.5	56.4	50.1	37.6	28.2	28.2
92.5°	29.7	80.2	130.7	143.3	201.5	279.0	317.8	278.5	200.0	141.1	135.5
95°	71.3	163.7	256.1	279.2	495.8	784.7	929.0	829.0	629.0	479.0	461.9
97.5°	123.3	204.7	286.3	306.7	667.8	1149.4	1390.2	1327.0	1200.6	1105.7	1073.4
100°	163.4	237.3	311.2	329.7	730.4	1264.9	1532.0	1536.6	1545.9	1552.8	1514.2
102.5°	197.5	266.5	335.5	352.7	759.2	1301.1	1572.1	1652.6	1813.7	1934.5	1901.5
105°	255.5	313.9	372.2	386.9	780.4	1305.3	1567.7	1748.2	2109.3	2380.1	2362.3
107.5°	314.9	369.3	423.8	437.4	784.5	1247.2	1478.6	1730.4	2234.0	2611.7	2616.0
110°	354.9	404.1	453.2	465.6	778.4	1195.6	1404.3	1685.8	2248.9	2671.2	2689.7



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	394.3	441.2	488.0	499.8	778.7	1150.7	1336.7	1624.8	2201.1	2633.3	2661.7
115°	453.7	496.9	540.2	551.1	786.0	1099.1	1255.8	1533.4	2088.5	2504.8	2544.2
117.5°	512.4	551.7	590.9	600.8	800.5	1066.8	1200.0	1450.5	1951.6	2327.4	2371.0
120°	546.6	583.6	620.5	629.7	812.4	1055.9	1177.7	1406.7	1864.4	2207.8	2250.2
122.5°	580.0	617.3	654.6	663.9	829.5	1050.3	1160.7	1366.9	1779.1	2088.2	2130.0
125°	631.2	665.2	699.2	707.7	852.5	1045.6	1142.2	1317.3	1667.4	1930.1	1968.6
127.5°	672.8	707.1	741.4	750.0	875.6	1042.9	1126.6	1276.9	1577.6	1803.1	1835.6
130°	695.1	732.1	769.0	778.2	892.3	1044.4	1120.6	1254.4	1522.1	1722.9	1752.9
132.5°	718.1	755.1	792.0	801.3	906.0	1045.6	1115.4	1235.2	1474.8	1654.5	1681.4
135°	752.2	785.9	819.6	828.0	920.8	1044.6	1106.5	1206.8	1407.5	1558.0	1581.2
137.5°	787.1	820.5	853.9	862.2	943.1	1051.0	1105.0	1189.8	1359.4	1486.7	1505.6
140°	816.1	846.8	877.5	885.1	956.7	1052.1	1099.8	1173.1	1319.6	1429.5	1447.3
142.5°	838.4	866.8	895.2	902.3	968.1	1055.9	1099.8	1164.2	1292.9	1389.4	1404.7
145°	872.5	897.3	922.1	928.3	983.0	1055.9	1092.4	1145.0	1250.3	1329.3	1340.9
147.5°	906.8	930.9	954.9	961.0	1004.8	1063.2	1092.4	1133.8	1216.7	1278.8	1288.4
150°	929.0	950.8	972.5	978.0	1016.1	1066.9	1092.4	1127.4	1197.3	1249.8	1257.6
152.5°	952.0	968.5	985.1	989.2	1023.6	1069.4	1092.4	1122.2	1182.0	1226.8	1232.6
155°	986.2	998.5	1010.6	1013.7	1039.9	1074.9	1092.4	1116.2	1163.7	1199.4	1203.3
157.5°	1011.5	1023.3	1035.2	1038.1	1056.2	1080.3	1092.4	1110.8	1147.8	1175.5	1178.2
160°	1028.5	1037.8	1047.0	1049.3	1063.7	1082.8	1092.4	1108.2	1139.9	1163.7	1165.2
162.5°	1045.6	1052.5	1059.5	1061.2	1071.6	1085.5	1092.4	1105.7	1132.4	1152.5	1154.0
165°	1064.1	1070.5	1076.8	1078.3	1083.0	1089.2	1092.4	1101.9	1121.1	1135.5	1137.0
167.5°	1081.3	1084.2	1087.2	1088.0	1091.9	1097.1	1099.8	1106.1	1118.7	1128.0	1128.7
170°	1092.4	1095.3	1098.3	1099.0	1099.3	1099.6	1099.8	1106.1	1118.7	1128.0	1128.0
172.5°	1098.3	1099.0	1099.6	1099.8	1099.8	1099.8	1099.8	1104.8	1114.6	1122.1	1121.5
175°	1106.5	1106.5	1106.5	1106.5	1104.3	1101.3	1099.8	1103.0	1109.3	1114.0	1114.0
177.5°	1106.5	1106.5	1106.5	1106.5	1104.8	1102.4	1101.2	1103.7	1108.7	1112.4	1111.8
180°	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	299.1	299.1
2.5°	319.3	317.4
5°	410.7	412.6
7.5°	553.1	552.1
10°	687.7	696.3
12.5°	785.8	787.7
15°	845.5	849.3
17.5°	868.5	869.5
20°	869.5	867.6
22.5°	858.9	856.9
25°	846.4	845.5
27.5°	834.9	835.8
30°	830.1	832.9
32.5°	830.1	834.9
35°	832.0	836.8
37.5°	831.0	836.8
40°	827.1	833.9
42.5°	816.6	821.4
45°	800.2	806.0
47.5°	779.0	782.9
50°	752.1	756.0
52.5°	718.5	719.4
55°	678.0	682.0
57.5°	634.8	635.8
60°	586.7	589.6
62.5°	535.8	535.8
65°	481.8	483.7
67.5°	426.1	430.9
70°	369.4	370.3
72.5°	313.5	313.5
75°	255.9	256.8
77.5°	201.0	201.0
80°	149.1	150.0
82.5°	102.9	104.8
85°	64.4	64.4
87.5°	29.8	27.0
90°	28.2	28.2
92.5°	113.0	90.6
95°	394.0	326.0
97.5°	944.0	814.7
100°	1360.2	1206.0
102.5°	1769.4	1637.5
105°	2291.3	2220.4
107.5°	2633.2	2650.4
110°	2763.6	2837.5



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2775.2	2888.8
115°	2701.6	2859.0
117.5°	2545.6	2720.2
120°	2419.8	2589.5
122.5°	2297.3	2464.7
125°	2122.7	2276.9
127.5°	1965.6	2095.7
130°	1873.1	1993.2
132.5°	1789.0	1896.6
135°	1673.9	1766.7
137.5°	1581.5	1657.5
140°	1518.2	1589.2
142.5°	1465.7	1526.8
145°	1387.1	1433.2
147.5°	1326.7	1365.0
150°	1288.7	1319.6
152.5°	1256.1	1279.5
155°	1218.8	1234.3
157.5°	1189.1	1200.0
160°	1171.5	1177.7
162.5°	1160.0	1165.9
165°	1143.3	1149.5
167.5°	1131.3	1133.9
170°	1128.0	1128.0
172.5°	1119.2	1116.9
175°	1114.0	1114.0
177.5°	1109.2	1106.5
180°	1106.5	1106.5



TEST NUMBER: P937842

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-6500K

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	0.12	0.81	1.27	1.95	3.54	13.29	13.98	14.43	15.11	16.71
	3H	0.82	1.43	1.97	2.58	4.18	15.11	15.73	16.26	16.87	18.48
	4H	1.11	1.69	2.27	2.84	4.45	15.74	16.33	16.91	17.47	19.09
	6H	1.35	1.89	2.52	3.03	4.66	16.16	16.70	17.33	17.85	19.47
	8H	1.41	1.92	2.58	3.09	4.70	16.27	16.79	17.45	17.95	19.57
	12H	1.42	1.91	2.60	3.07	4.71	16.33	16.82	17.51	17.98	19.62
4H	2H	7.31	7.90	8.48	9.04	10.65	13.54	14.13	14.71	15.27	16.89
	3H	8.86	9.35	10.04	10.52	12.15	15.57	16.06	16.74	17.23	18.85
	4H	8.95	9.40	10.12	10.56	12.20	16.32	16.77	17.50	17.93	19.58
	6H	8.95	9.33	10.13	10.52	12.15	16.85	17.23	18.03	18.41	20.05
	8H	8.92	9.28	10.10	10.45	12.11	17.00	17.36	18.18	18.53	20.19
	12H	8.87	9.20	10.07	10.38	12.04	17.08	17.41	18.28	18.59	20.25
8H	4H	10.37	10.73	11.55	11.91	13.56	16.37	16.73	17.55	17.90	19.55
	6H	10.61	10.91	11.81	12.12	13.77	16.98	17.28	18.18	18.50	20.14
	8H	10.62	10.88	11.83	12.08	13.74	17.20	17.46	18.40	18.65	20.32
	12H	10.58	10.81	11.79	12.00	13.70	17.33	17.56	18.54	18.75	20.45
12H	4H	10.51	10.84	11.70	12.02	13.67	16.31	16.64	17.51	17.82	19.48
	6H	10.86	11.12	12.07	12.32	13.98	16.96	17.22	18.17	18.42	20.08
	8H	10.92	11.15	12.13	12.34	14.04	17.18	17.41	18.39	18.60	20.30