

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: P936926

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936926
REPORT IS A COMBINATION OF REPORTS P933464 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

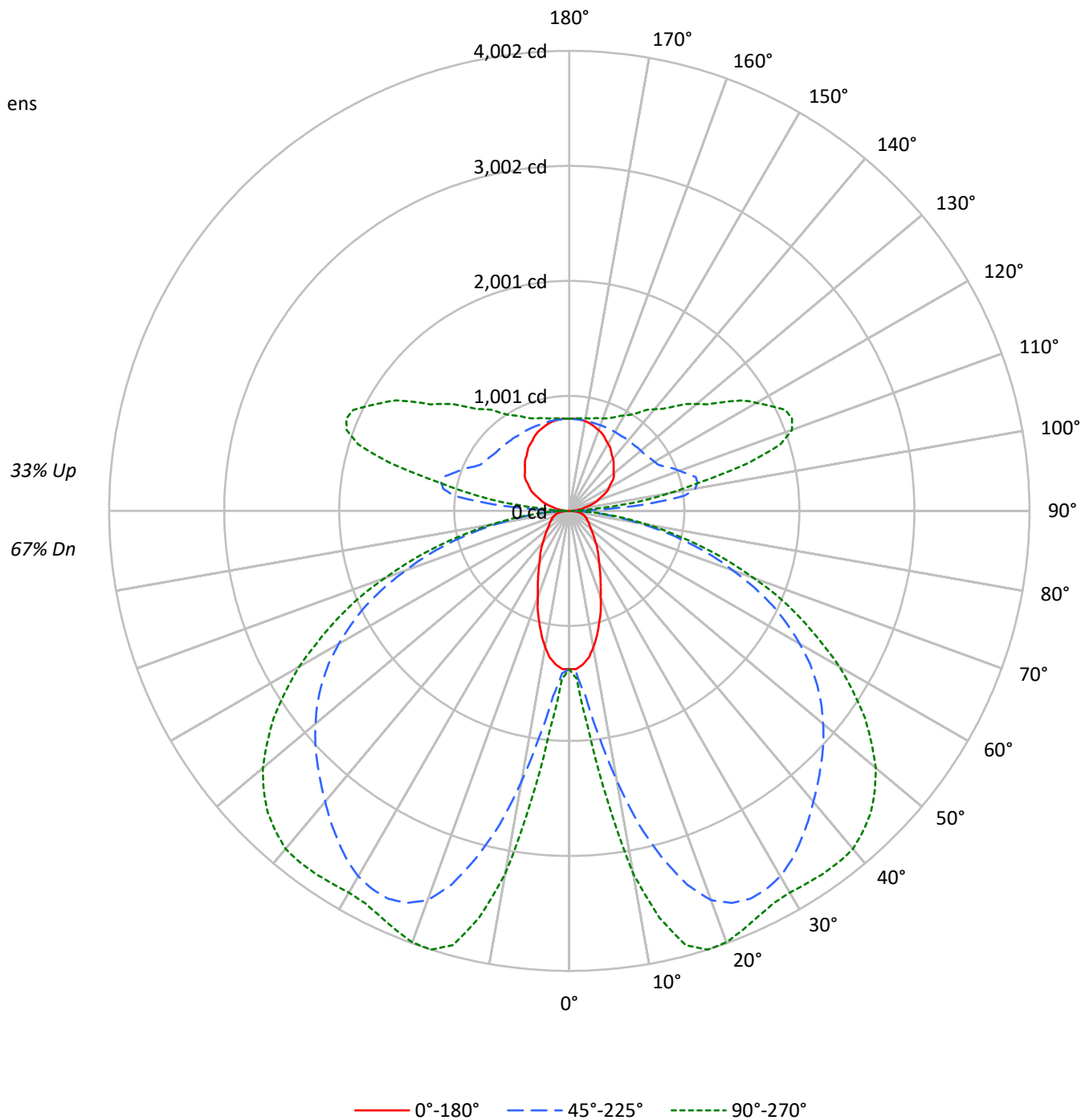
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15862.3 lumens
Efficiency: N/A
Efficacy: 94.4 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-Direct

Input Watts (W): 168
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: P936926
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P936926

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4162	4923	5724
10°	3777	7178	9490
15°	3211	9381	11459
20°	2615	10873	11678
25°	2182	11381	11441
30°	1841	11456	11419
35°	1629	11269	11715
40°	1420	11025	12020
45°	1287	10847	12067
50°	1181	10687	11867
55°	1132	10453	11341
60°	1161	9998	10511
65°	1209	9305	9369
70°	1292	8120	7915
75°	1436	6627	6177
80°	1582	4602	4163
85°	1435	2446	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12067 cd/sqm



TEST NUMBER: P936926

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.1	1.1
10°-20°	789.3	5.0
20°-30°	1380.7	8.7
30°-40°	1777.3	11.2
40°-50°	1985.2	12.5
50°-60°	1901.4	12.0
60°-70°	1506.8	9.5
70°-80°	886.1	5.6
80°-90°	249.2	1.6
90°-100°	391.6	2.5
100°-110°	1029.6	6.5
110°-120°	1067.6	6.7
120°-130°	856.3	5.4
130°-140°	671.9	4.2
140°-150°	515.7	3.3
150°-160°	371.4	2.3
160°-170°	227.2	1.4
170°-180°	76.8	0.5
0°-30°	2348.1	14.8
0°-40°	4125.4	26.0
0°-60°	8012.0	50.5
0°-90°	10654.1	67.2
90°-120°	2488.8	15.7
90°-150°	4532.7	28.6
90°-180°	5208.0	32.8
0°-180°	15862.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1341	1439	1620	1833	1899	124
15°	1005	1855	3126	3790	3909	280
25°	642	2103	3723	3887	3891	296
35°	434	2010	3506	3705	3852	271
45°	297	1603	3099	3550	3710	229
55°	212	1018	2630	3055	3139	194
65°	168	540	1952	2196	2227	167
75°	124	332	1071	1178	1182	130
85°	44	102	266	292	297	47
90°	5	15	41	20	20	7
95°	52	203	674	348	237	57
105°	186	281	1138	1728	1612	197
115°	330	400	912	1819	2076	325
125°	458	514	829	1401	1653	407
135°	546	601	803	1131	1283	423
145°	634	674	793	965	1041	397
155°	716	736	793	871	896	329
165°	773	783	793	824	835	218
175°	803	803	798	809	809	76
180°	803	803	803	803	803	



TEST NUMBER: P936926

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9
2.5°	1376.9	1376.9	1385.7	1390.1	1398.9	1403.4	1412.3	1421.1	1447.7	1452.1	1460.9
5°	1341.4	1359.1	1416.6	1438.8	1500.8	1584.9	1620.3	1677.9	1797.3	1832.8	1854.9
7.5°	1288.3	1328.1	1469.8	1505.2	1660.2	1881.5	1974.5	2098.5	2288.8	2381.8	2457.0
10°	1204.2	1288.3	1540.6	1624.7	1877.1	2213.5	2386.1	2558.8	2846.6	2974.9	3023.7
12.5°	1111.2	1248.4	1615.9	1731.0	2094.0	2585.4	2793.5	2983.8	3311.5	3484.1	3510.6
15°	1004.9	1190.8	1686.7	1854.9	2324.2	2895.3	3125.5	3360.1	3665.6	3789.6	3820.6
17.5°	912.0	1146.6	1753.1	1930.2	2501.3	3174.2	3408.9	3603.6	3851.5	3935.7	3957.8
20°	796.9	1075.7	1797.3	2027.6	2687.3	3377.8	3603.6	3754.1	3922.4	3975.5	3984.3
22.5°	712.7	1000.5	1823.9	2063.0	2811.2	3501.8	3692.2	3811.7	3926.8	3944.5	3948.9
25°	641.9	916.4	1819.5	2102.8	2917.4	3577.1	3723.1	3811.7	3878.1	3886.9	3886.9
27.5°	575.5	823.5	1801.8	2111.7	2997.1	3594.8	3709.9	3771.8	3802.9	3820.6	3820.6
30°	518.0	734.9	1757.5	2094.0	3032.5	3577.1	3670.0	3701.0	3732.0	3758.6	3771.8
32.5°	473.7	650.8	1691.1	2058.6	3036.9	3532.8	3599.2	3616.9	3661.1	3723.1	3745.3
35°	433.8	566.6	1615.9	2009.9	3010.4	3462.0	3506.2	3524.0	3612.5	3705.4	3736.4
37.5°	394.0	504.6	1518.5	1925.8	2970.6	3377.8	3408.9	3439.8	3577.1	3687.7	3723.1
40°	354.1	451.5	1403.4	1832.8	2908.6	3276.1	3302.6	3351.3	3532.8	3661.1	3696.6
42.5°	323.2	407.3	1279.4	1735.4	2828.9	3160.9	3200.8	3271.6	3479.7	3616.9	3656.8
45°	296.6	363.0	1146.6	1602.6	2727.0	3041.4	3098.9	3196.4	3417.7	3550.5	3585.9
47.5°	270.1	332.1	1009.4	1465.4	2616.4	2921.8	2997.1	3107.8	3333.6	3462.0	3492.9
50°	247.9	301.0	872.1	1319.3	2496.9	2793.5	2882.0	2997.1	3227.3	3346.9	3386.7
52.5°	230.2	274.5	743.8	1173.1	2359.6	2660.7	2762.5	2882.0	3098.9	3214.1	3240.6
55°	212.5	252.4	633.1	1018.2	2217.9	2519.0	2629.7	2744.8	2957.2	3054.6	3072.4
57.5°	203.6	234.7	540.1	872.1	2067.4	2359.6	2483.6	2589.9	2789.0	2864.3	2882.0
60°	190.4	221.3	469.2	748.2	1903.7	2209.1	2315.3	2421.6	2589.9	2651.8	2665.1
62.5°	177.1	212.5	416.1	628.6	1735.4	2032.0	2138.2	2235.6	2377.3	2421.6	2439.3
65°	168.2	203.6	376.3	540.1	1562.8	1846.1	1952.3	2036.5	2151.6	2195.8	2204.7
67.5°	159.4	194.8	345.3	464.9	1390.1	1660.2	1739.8	1819.5	1908.1	1952.3	1956.8
70°	146.1	185.9	318.7	411.7	1213.0	1447.7	1514.0	1598.2	1669.0	1691.1	1704.4
72.5°	137.3	172.7	301.0	371.8	1031.5	1244.0	1306.0	1354.7	1416.6	1438.8	1438.8
75°	123.9	155.0	283.3	332.1	845.5	1018.2	1071.4	1120.0	1168.7	1177.6	1164.3
77.5°	110.7	137.3	243.5	278.9	659.6	805.8	850.0	876.6	916.4	925.2	929.7
80°	93.0	119.6	190.4	217.0	478.1	593.2	624.2	646.4	681.8	681.8	690.7
82.5°	70.8	93.0	137.3	155.0	323.2	407.3	433.8	447.1	469.2	469.2	469.2
85°	44.3	57.6	88.5	101.9	194.8	247.9	265.6	270.1	287.8	292.2	292.2
87.5°	22.1	31.0	57.6	62.0	101.9	128.4	128.4	137.3	137.3	132.8	128.4
90°	5.4	9.7	14.0	15.1	23.7	35.2	41.0	36.5	27.3	20.5	20.5
92.5°	21.5	58.2	94.9	104.0	146.2	202.6	230.7	202.2	145.2	102.5	98.4
95°	51.8	118.9	186.0	202.7	360.0	569.7	674.5	601.9	456.7	347.8	335.4
97.5°	89.5	148.7	207.9	222.7	484.9	834.5	1009.4	963.5	871.7	802.9	779.4
100°	118.6	172.3	225.9	239.4	530.4	918.3	1112.4	1115.7	1122.4	1127.5	1099.5
102.5°	143.4	193.5	243.6	256.1	551.2	944.8	1141.5	1199.9	1316.9	1404.6	1380.6
105°	185.5	227.9	270.2	280.9	566.6	947.7	1138.3	1269.3	1531.5	1728.1	1715.2
107.5°	228.6	268.2	307.7	317.6	569.6	905.6	1073.6	1256.4	1622.2	1896.4	1899.6
110°	257.8	293.4	329.2	338.1	565.3	868.2	1019.7	1224.1	1632.9	1939.5	1952.9



TEST NUMBER: P936926

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	286.3	320.3	354.3	362.9	565.4	835.5	970.6	1179.8	1598.2	1912.0	1932.6
115°	329.5	360.8	392.2	400.1	570.7	798.1	911.8	1113.3	1516.4	1818.7	1847.3
117.5°	372.0	400.5	429.0	436.2	581.2	774.6	871.3	1053.2	1417.0	1689.8	1721.5
120°	396.9	423.7	450.5	457.2	589.8	766.8	855.2	1021.4	1353.7	1603.1	1633.8
122.5°	421.1	448.2	475.3	482.1	602.3	762.6	842.7	992.4	1291.7	1516.2	1546.6
125°	458.3	483.0	507.7	513.9	619.1	759.2	829.3	956.4	1210.6	1401.4	1429.4
127.5°	488.5	513.5	538.4	544.6	635.7	757.2	818.0	927.1	1145.4	1309.2	1332.8
130°	504.7	531.6	558.4	565.1	647.9	758.4	813.7	910.8	1105.2	1250.9	1272.7
132.5°	521.4	548.2	575.1	581.8	657.9	759.2	809.9	896.9	1070.9	1201.3	1220.8
135°	546.2	570.7	595.1	601.2	668.6	758.5	803.4	876.3	1022.0	1131.3	1148.1
137.5°	571.5	595.8	620.0	626.0	684.8	763.2	802.4	863.9	987.1	1079.5	1093.3
140°	592.5	614.9	637.1	642.7	694.7	763.9	798.5	851.7	958.2	1038.0	1050.9
142.5°	608.8	629.3	650.0	655.2	702.9	766.7	798.5	845.3	938.7	1008.9	1019.9
145°	633.5	651.5	669.5	674.0	713.8	766.7	793.2	831.4	907.9	965.2	973.5
147.5°	658.4	675.8	693.4	697.7	729.5	772.0	793.2	823.3	883.5	928.5	935.5
150°	674.5	690.3	706.2	710.1	737.8	774.7	793.2	818.6	869.3	907.4	913.1
152.5°	691.3	703.2	715.2	718.2	743.2	776.5	793.2	814.9	858.3	890.8	895.1
155°	716.0	724.9	733.8	736.0	755.1	780.5	793.2	810.5	844.9	870.8	873.6
157.5°	734.4	743.1	751.6	753.8	767.0	784.5	793.2	806.6	833.4	853.5	855.6
160°	746.8	753.5	760.2	761.9	772.4	786.2	793.2	804.7	827.6	844.9	846.0
162.5°	759.2	764.3	769.3	770.5	778.1	788.1	793.2	802.9	822.2	836.8	837.9
165°	772.7	777.2	781.8	782.9	786.3	790.9	793.2	800.2	814.0	824.4	825.6
167.5°	785.1	787.2	789.4	789.9	792.8	796.6	798.5	803.1	812.2	819.0	819.5
170°	793.2	795.3	797.5	798.0	798.2	798.4	798.5	803.1	812.2	819.0	819.0
172.5°	797.5	797.9	798.4	798.5	798.5	798.5	798.5	802.1	809.3	814.7	814.3
175°	803.4	803.4	803.4	803.4	801.7	799.6	798.5	800.8	805.4	808.8	808.8
177.5°	803.4	803.4	803.4	803.4	802.2	800.5	799.7	801.5	805.1	807.8	807.2
180°	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4



TEST NUMBER: P936926

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1376.9	1376.9
2.5°	1469.8	1460.9
5°	1890.4	1899.2
7.5°	2545.6	2541.1
10°	3165.3	3205.2
12.5°	3616.9	3625.7
15°	3891.4	3909.1
17.5°	3997.7	4002.0
20°	4002.0	3993.2
22.5°	3953.4	3944.5
25°	3895.8	3891.4
27.5°	3842.7	3847.2
30°	3820.6	3833.8
32.5°	3820.6	3842.7
35°	3829.4	3851.5
37.5°	3825.0	3851.5
40°	3807.3	3838.3
42.5°	3758.6	3780.7
45°	3683.3	3709.9
47.5°	3585.9	3603.6
50°	3462.0	3479.7
52.5°	3307.0	3311.5
55°	3121.1	3138.8
57.5°	2921.8	2926.3
60°	2700.5	2713.8
62.5°	2465.9	2465.9
65°	2217.9	2226.8
67.5°	1961.2	1983.4
70°	1700.0	1704.4
72.5°	1443.2	1443.2
75°	1177.6	1182.0
77.5°	925.2	925.2
80°	686.2	690.7
82.5°	473.7	482.6
85°	296.6	296.6
87.5°	137.3	123.9
90°	20.5	20.5
92.5°	82.1	65.8
95°	286.0	236.7
97.5°	685.4	591.5
100°	987.6	875.7
102.5°	1284.8	1188.9
105°	1663.8	1612.2
107.5°	1911.9	1924.4
110°	2006.6	2060.3



TEST NUMBER: P936926

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2015.1	2097.5
115°	1961.6	2076.0
117.5°	1848.3	1975.1
120°	1757.1	1880.2
122.5°	1668.1	1789.6
125°	1541.2	1653.2
127.5°	1427.2	1521.6
130°	1360.0	1447.2
132.5°	1299.0	1377.1
135°	1215.4	1282.8
137.5°	1148.4	1203.5
140°	1102.3	1153.9
142.5°	1064.3	1108.6
145°	1007.1	1040.7
147.5°	963.2	991.1
150°	935.6	958.2
152.5°	912.1	929.1
155°	884.9	896.2
157.5°	863.4	871.3
160°	850.7	855.2
162.5°	842.2	846.6
165°	830.2	834.7
167.5°	821.5	823.4
170°	819.0	819.0
172.5°	812.6	811.0
175°	808.8	808.8
177.5°	805.3	803.4
180°	803.4	803.4



TEST NUMBER: P936926
 CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-3000K

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	7.47	8.57	8.26	9.38	10.38	20.66	21.76	21.45	22.58	23.57
	3H	8.19	9.18	8.99	10.01	11.03	22.53	23.51	23.32	24.34	25.37
	4H	8.50	9.44	9.32	10.27	11.31	23.18	24.12	24.00	24.95	25.99
	6H	8.77	9.63	9.59	10.47	11.52	23.63	24.50	24.46	25.34	26.39
	8H	8.84	9.67	9.68	10.52	11.58	23.76	24.59	24.60	25.45	26.50
	12H	8.87	9.65	9.71	10.51	11.59	23.84	24.63	24.69	25.48	26.56
4H	2H	14.72	15.66	15.54	16.49	17.53	20.96	21.90	21.78	22.73	23.77
	3H	16.31	17.10	17.14	17.96	19.02	23.04	23.82	23.87	24.69	25.74
	4H	16.42	17.13	17.26	18.00	19.08	23.82	24.53	24.66	25.40	26.48
	6H	16.44	17.06	17.30	17.95	19.03	24.38	25.00	25.24	25.88	26.97
	8H	16.42	17.00	17.29	17.89	18.99	24.55	25.13	25.41	26.01	27.11
	12H	16.39	16.92	17.28	17.82	18.92	24.65	25.18	25.54	26.08	27.19
8H	4H	17.88	18.47	18.75	19.35	20.45	23.90	24.48	24.76	25.36	26.46
	6H	18.14	18.62	19.03	19.54	20.64	24.54	25.03	25.44	25.95	27.05
	8H	18.16	18.59	19.06	19.51	20.62	24.77	25.20	25.67	26.12	27.23
	12H	18.14	18.52	19.05	19.43	20.59	24.93	25.31	25.84	26.22	27.38
12H	4H	18.04	18.57	18.93	19.47	20.57	23.86	24.39	24.75	25.29	26.40
	6H	18.40	18.83	19.30	19.75	20.86	24.53	24.96	25.43	25.88	26.99
	8H	18.48	18.86	19.39	19.77	20.94	24.77	25.15	25.68	26.06	27.23