

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: P938272

Luminaire Tested: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938272
REPORT IS A COMBINATION OF REPORTS P933645 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

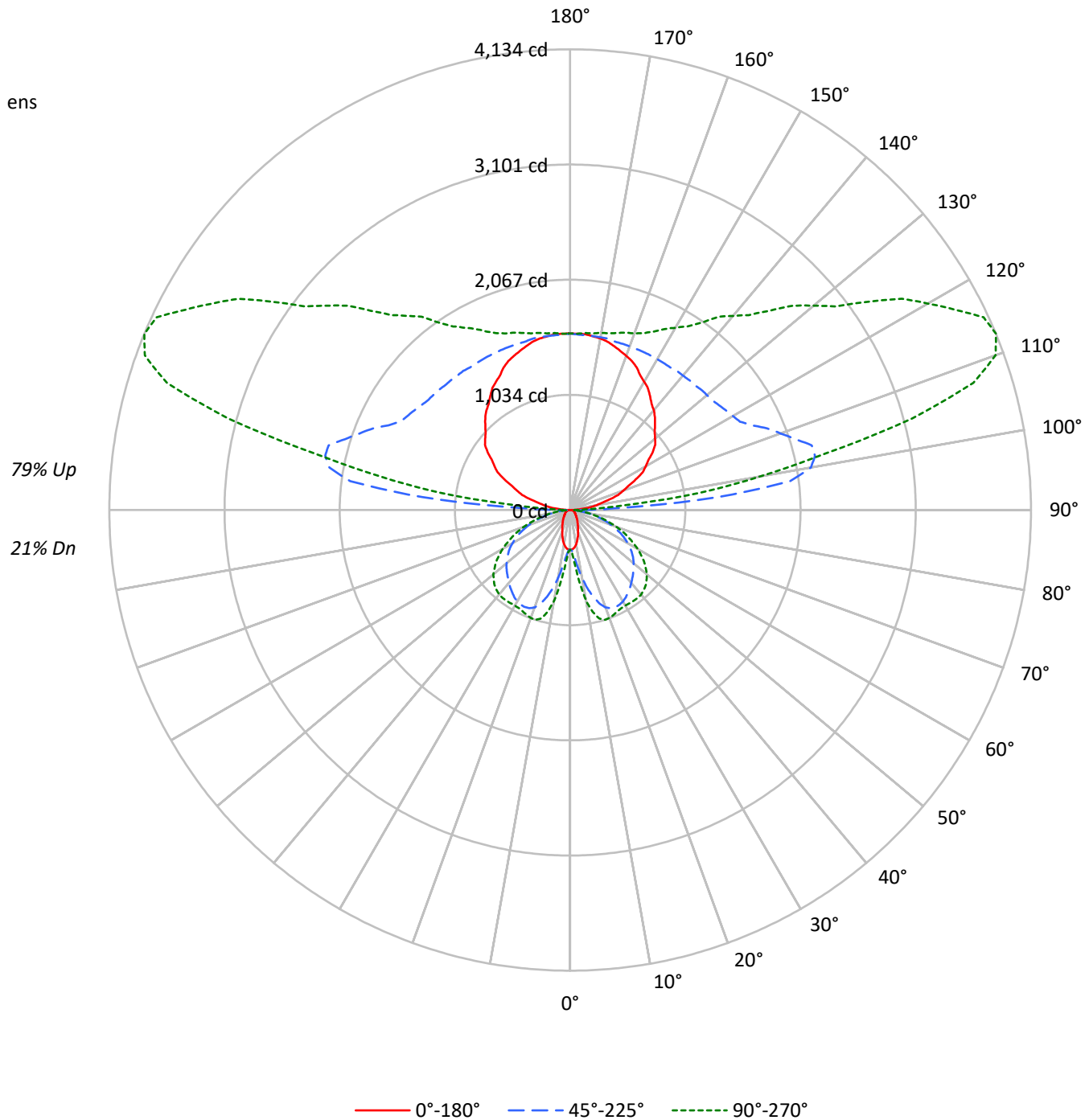
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13021.1 lumens
Efficiency: N/A
Efficacy: 117.1 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_{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: P938272
CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

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	0
RCR																					
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	24	24	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	20	20	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	17	17	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	14	14	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	12	12	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	11	11	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	9	9	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	8	8	8	5
9	45	34	26	21	40	30	24	19	23	18	15	16	13	11	10	9	7	7	7	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	6	6	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1649	1649	1649
5°	1611	1906	2216
10°	1461	2778	3675
15°	1242	3630	4437
20°	1011	4206	4521
25°	843	4402	4430
30°	711	4429	4422
35°	629	4356	4536
40°	548	4260	4654
45°	496	4190	4672
50°	455	4127	4595
55°	436	4035	4392
60°	447	3858	4070
65°	465	3589	3628
70°	494	3129	3065
75°	548	2552	2392
80°	599	1769	1611
85°	531	939	825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4672 cd/sqm



TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	0.4
10°-20°	203.8	1.6
20°-30°	356.4	2.7
30°-40°	458.8	3.5
40°-50°	512.4	3.9
50°-60°	490.8	3.8
60°-70°	389.0	3.0
70°-80°	228.7	1.8
80°-90°	69.6	0.5
90°-100°	771.9	5.9
100°-110°	2029.4	15.6
110°-120°	2104.3	16.2
120°-130°	1687.9	13.0
130°-140°	1324.4	10.2
140°-150°	1016.5	7.8
150°-160°	732.1	5.6
160°-170°	447.9	3.4
170°-180°	151.3	1.2
0°-30°	606.1	4.7
0°-40°	1064.9	8.2
0°-60°	2068.2	15.9
0°-90°	2755.5	21.2
90°-120°	4905.6	37.7
90°-150°	8934.4	68.6
90°-180°	10266.0	78.8
0°-180°	13021.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	355	355	355	355	355	
5°	346	371	418	473	490	32
15°	259	479	807	978	1009	72
25°	166	543	961	1003	1004	76
35°	112	519	905	956	994	70
45°	77	414	800	916	958	59
55°	55	263	679	788	810	50
65°	44	139	504	567	575	43
75°	32	86	277	304	305	33
85°	11	26	69	75	77	12
90°	11	30	81	40	40	10
95°	102	400	1330	686	467	113
105°	366	554	2244	3406	3178	388
115°	649	789	1797	3585	4092	641
125°	903	1013	1635	2762	3259	802
135°	1077	1185	1584	2230	2528	833
145°	1249	1328	1563	1902	2051	782
155°	1411	1451	1563	1716	1766	648
165°	1523	1543	1563	1625	1645	430
175°	1584	1584	1574	1594	1594	150
180°	1584	1584	1584	1584	1584	



TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4
2.5°	355.4	355.4	357.7	358.9	361.1	362.3	364.6	366.9	373.7	374.8	377.1
5°	346.3	350.9	365.7	371.4	387.4	409.1	418.2	433.1	464.0	473.1	478.8
7.5°	332.5	342.8	379.4	388.5	428.6	485.6	509.7	541.7	590.8	614.8	634.2
10°	310.8	332.5	397.7	419.4	484.5	571.4	616.0	660.6	734.8	767.9	780.5
12.5°	286.9	322.2	417.1	446.8	540.5	667.4	721.1	770.2	854.8	899.4	906.2
15°	259.4	307.4	435.4	478.8	600.0	747.4	806.8	867.3	946.2	978.2	986.2
17.5°	235.4	296.0	452.6	498.2	645.6	819.4	879.9	930.2	994.2	1015.9	1021.6
20°	205.7	277.7	464.0	523.4	693.7	871.9	930.2	969.1	1012.5	1026.2	1028.5
22.5°	183.9	258.2	470.8	532.5	725.6	904.0	953.0	984.0	1013.6	1018.2	1019.3
25°	165.7	236.5	469.7	542.8	753.1	923.4	961.1	984.0	1001.1	1003.4	1003.4
27.5°	148.6	212.6	465.1	545.1	773.7	927.9	957.6	973.7	981.7	986.2	986.2
30°	133.7	189.7	453.7	540.5	782.8	923.4	947.3	955.3	963.4	970.3	973.7
32.5°	122.3	168.0	436.6	531.4	783.9	911.9	929.1	933.6	945.0	961.1	966.8
35°	112.0	146.3	417.1	518.8	777.1	893.7	905.1	909.7	932.5	956.5	964.5
37.5°	101.7	130.3	392.0	497.1	766.8	871.9	879.9	888.0	923.4	951.9	961.1
40°	91.4	116.6	362.3	473.1	750.8	845.7	852.5	865.1	911.9	945.0	954.2
42.5°	83.4	105.1	330.2	448.0	730.2	816.0	826.3	844.5	898.3	933.6	943.9
45°	76.6	93.7	296.0	413.6	703.9	785.1	799.9	825.1	882.2	916.5	925.6
47.5°	69.7	85.7	260.5	378.3	675.4	754.3	773.7	802.2	860.5	893.7	901.7
50°	64.0	77.7	225.1	340.5	644.5	721.1	744.0	773.7	833.1	863.9	874.2
52.5°	59.4	70.9	192.0	302.8	609.1	686.8	713.1	744.0	799.9	829.7	836.5
55°	54.9	65.2	163.4	262.8	572.5	650.2	678.8	708.5	763.4	788.5	793.1
57.5°	52.6	60.6	139.4	225.1	533.7	609.1	641.1	668.6	719.9	739.4	744.0
60°	49.2	57.2	121.2	193.1	491.4	570.2	597.7	625.1	668.6	684.5	688.0
62.5°	45.8	54.9	107.4	162.3	448.0	524.6	551.9	577.1	613.7	625.1	629.7
65°	43.5	52.6	97.1	139.4	403.4	476.5	504.0	525.7	555.4	566.8	569.1
67.5°	41.2	50.3	89.1	120.0	358.9	428.6	449.1	469.7	492.5	504.0	505.1
70°	37.7	48.0	82.3	106.2	313.1	373.7	390.8	412.5	430.9	436.6	440.0
72.5°	35.4	44.6	77.7	96.0	266.2	321.1	337.1	349.7	365.7	371.4	371.4
75°	32.0	40.0	73.1	85.7	218.3	262.8	276.6	289.1	301.7	304.0	300.6
77.5°	28.5	35.4	62.9	72.0	170.3	208.0	219.4	226.3	236.5	238.8	240.0
80°	24.0	30.8	49.2	56.0	123.5	153.1	161.1	166.8	176.0	176.0	178.2
82.5°	18.3	24.0	35.4	40.0	83.4	105.1	112.0	115.4	121.2	121.2	121.2
85°	11.4	14.8	22.8	26.2	50.3	64.0	68.6	69.7	74.3	75.4	75.4
87.5°	5.7	8.0	14.8	16.0	26.2	33.1	33.1	35.4	35.4	34.3	33.1
90°	10.6	19.2	27.6	29.7	46.8	69.4	80.8	71.8	53.8	40.4	40.4
92.5°	42.5	114.8	187.1	205.2	288.4	399.4	454.9	398.7	286.3	201.9	193.9
95°	102.1	234.3	366.5	399.6	709.5	1122.9	1329.5	1186.4	900.2	685.5	661.2
97.5°	176.4	293.1	409.8	439.0	955.9	1645.0	1989.6	1899.1	1718.2	1582.5	1536.2
100°	233.8	339.6	445.4	471.9	1045.5	1810.2	2192.5	2199.2	2212.4	2222.3	2167.1
102.5°	282.7	381.4	480.1	504.8	1086.6	1862.1	2250.0	2365.2	2595.7	2768.6	2721.4
105°	365.6	449.2	532.8	553.7	1117.0	1868.0	2243.6	2502.0	3018.7	3406.3	3380.9
107.5°	450.6	528.6	606.5	626.0	1122.7	1784.9	2116.0	2476.4	3197.3	3737.9	3744.0
110°	508.0	578.4	648.8	666.3	1114.2	1711.2	2009.8	2412.7	3218.5	3822.9	3849.3



TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	564.4	631.4	698.5	715.3	1114.5	1646.8	1913.0	2325.4	3150.1	3768.7	3809.3
115°	649.4	711.2	773.1	788.6	1124.8	1573.0	1797.2	2194.4	2988.9	3584.8	3641.1
117.5°	733.3	789.5	845.8	859.8	1145.7	1526.9	1717.5	2076.0	2793.0	3330.8	3393.3
120°	782.2	835.1	888.0	901.2	1162.7	1511.3	1685.6	2013.2	2668.4	3159.7	3220.4
122.5°	830.0	883.4	936.8	950.2	1187.2	1503.2	1661.1	1956.1	2546.1	2988.6	3048.5
125°	903.4	952.0	1000.7	1012.9	1220.1	1496.4	1634.6	1885.1	2386.3	2762.2	2817.3
127.5°	962.9	1012.0	1061.2	1073.4	1253.0	1492.5	1612.2	1827.4	2257.7	2580.5	2627.0
130°	994.8	1047.7	1100.6	1113.8	1277.1	1494.8	1603.7	1795.2	2178.4	2465.7	2508.7
132.5°	1027.8	1080.7	1133.6	1146.8	1296.7	1496.5	1596.3	1767.7	2110.7	2367.9	2406.4
135°	1076.6	1124.8	1173.0	1185.0	1317.9	1495.0	1583.5	1727.2	2014.4	2229.8	2262.9
137.5°	1126.6	1174.3	1221.9	1233.9	1349.7	1504.2	1581.5	1702.9	1945.6	2127.7	2154.9
140°	1168.0	1212.0	1255.8	1266.8	1369.2	1505.7	1574.0	1678.9	1888.6	2045.9	2071.3
142.5°	1199.9	1240.5	1281.2	1291.3	1385.5	1511.2	1574.0	1666.1	1850.3	1988.5	2010.3
145°	1248.8	1284.2	1319.7	1328.5	1406.8	1511.2	1563.3	1638.7	1789.4	1902.4	1919.0
147.5°	1297.7	1332.2	1366.7	1375.3	1438.0	1521.6	1563.3	1622.6	1741.1	1830.1	1843.8
150°	1329.5	1360.7	1391.9	1399.7	1454.2	1527.0	1563.3	1613.4	1713.5	1788.7	1799.8
152.5°	1362.5	1386.1	1409.8	1415.7	1464.9	1530.5	1563.3	1606.1	1691.6	1755.7	1764.1
155°	1411.4	1428.9	1446.4	1450.7	1488.3	1538.3	1563.3	1597.3	1665.4	1716.4	1722.0
157.5°	1447.5	1464.6	1481.5	1485.8	1511.6	1546.1	1563.3	1589.8	1642.7	1682.4	1686.4
160°	1472.0	1485.2	1498.4	1501.7	1522.3	1549.6	1563.3	1586.0	1631.4	1665.4	1667.6
162.5°	1496.5	1506.3	1516.3	1518.8	1533.6	1553.5	1563.3	1582.5	1620.8	1649.5	1651.6
165°	1523.0	1531.9	1540.9	1543.1	1549.9	1558.8	1563.3	1577.1	1604.5	1625.0	1627.2
167.5°	1547.4	1551.7	1555.9	1557.0	1562.7	1570.2	1574.0	1582.9	1600.9	1614.4	1615.3
170°	1563.3	1567.6	1571.9	1573.0	1573.3	1573.7	1574.0	1582.9	1600.9	1614.4	1614.4
172.5°	1571.9	1572.8	1573.7	1574.0	1574.0	1574.0	1574.0	1581.1	1595.2	1605.8	1605.0
175°	1583.5	1583.5	1583.5	1583.5	1580.4	1576.1	1574.0	1578.5	1587.4	1594.2	1594.2
177.5°	1583.5	1583.5	1583.5	1583.5	1581.1	1577.7	1576.1	1579.7	1586.8	1592.0	1591.1
180°	1583.5	1583.5	1583.5	1583.5	1583.5	1583.5	1583.5	1583.5	1583.5	1583.5	1583.5



TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	355.4	355.4
2.5°	379.4	377.1
5°	487.9	490.2
7.5°	657.1	656.0
10°	817.1	827.4
12.5°	933.6	935.9
15°	1004.5	1009.1
17.5°	1031.9	1033.0
20°	1033.0	1030.7
22.5°	1020.5	1018.2
25°	1005.6	1004.5
27.5°	991.9	993.1
30°	986.2	989.7
32.5°	986.2	991.9
35°	988.5	994.2
37.5°	987.4	994.2
40°	982.8	990.8
42.5°	970.3	976.0
45°	950.8	957.6
47.5°	925.6	930.2
50°	893.7	898.3
52.5°	853.6	854.8
55°	805.7	810.3
57.5°	754.3	755.4
60°	697.1	700.5
62.5°	636.5	636.5
65°	572.5	574.8
67.5°	506.3	512.0
70°	438.9	440.0
72.5°	372.6	372.6
75°	304.0	305.1
77.5°	238.8	238.8
80°	177.1	178.2
82.5°	122.3	124.6
85°	76.6	76.6
87.5°	35.4	32.0
90°	40.4	40.4
92.5°	161.8	129.7
95°	563.9	466.6
97.5°	1351.0	1165.9
100°	1946.6	1726.0
102.5°	2532.4	2343.5
105°	3279.3	3177.8
107.5°	3768.6	3793.1
110°	3955.2	4061.0



TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3971.8	4134.2
115°	3866.5	4091.7
117.5°	3643.2	3893.0
120°	3463.2	3705.9
122.5°	3288.0	3527.5
125°	3038.0	3258.6
127.5°	2813.1	2999.2
130°	2680.6	2852.6
132.5°	2560.3	2714.4
135°	2395.7	2528.4
137.5°	2263.5	2372.1
140°	2172.9	2274.4
142.5°	2097.7	2185.1
145°	1985.1	2051.2
147.5°	1898.6	1953.4
150°	1844.2	1888.6
152.5°	1797.6	1831.2
155°	1744.2	1766.4
157.5°	1701.9	1717.5
160°	1676.7	1685.6
162.5°	1660.0	1668.6
165°	1636.3	1645.2
167.5°	1619.1	1622.9
170°	1614.4	1614.4
172.5°	1601.8	1598.4
175°	1594.2	1594.2
177.5°	1587.3	1583.5
180°	1583.5	1583.5



TEST NUMBER: P938272

CATALOG NUMBER: SQ4-FB-150U-050D-935-1D-UNV-STD-W-8

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	0.00	0.00	0.33	0.99	2.62	12.35	13.01	13.51	14.16	15.79
	3H	0.00	0.45	1.03	1.62	3.26	14.17	14.77	15.34	15.93	17.57
	4H	0.15	0.71	1.33	1.88	3.52	14.81	15.37	15.99	16.54	18.18
	6H	0.39	0.91	1.58	2.07	3.73	15.23	15.75	16.42	16.91	18.57
	8H	0.45	0.94	1.64	2.12	3.77	15.34	15.84	16.53	17.02	18.67
	12H	0.46	0.93	1.65	2.10	3.77	15.40	15.87	16.60	17.05	18.72
4H	2H	6.36	6.93	7.55	8.09	9.73	12.60	13.16	13.79	14.32	15.97
	3H	7.91	8.38	9.10	9.57	11.23	14.62	15.10	15.82	16.28	17.94
	4H	7.99	8.43	9.19	9.60	11.28	15.38	15.82	16.58	16.99	18.67
	6H	7.99	8.37	9.19	9.56	11.23	15.91	16.28	17.11	17.48	19.15
	8H	7.96	8.31	9.16	9.50	11.19	16.07	16.41	17.26	17.60	19.29
	12H	7.91	8.23	9.12	9.43	11.11	16.15	16.47	17.36	17.66	19.35
8H	4H	9.42	9.77	10.62	10.96	12.64	15.42	15.77	16.62	16.96	18.65
	6H	9.65	9.94	10.87	11.17	12.85	16.04	16.33	17.26	17.56	19.24
	8H	9.67	9.92	10.89	11.13	12.83	16.26	16.51	17.48	17.72	19.42
	12H	9.63	9.85	10.85	11.05	12.78	16.40	16.62	17.62	17.82	19.55
12H	4H	9.55	9.87	10.77	11.07	12.76	15.37	15.68	16.58	16.88	18.57
	6H	9.91	10.16	11.13	11.37	13.07	16.02	16.28	17.25	17.48	19.18
	8H	9.97	10.19	11.20	11.39	13.13	16.24	16.46	17.47	17.67	19.40