

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: P937946

Luminaire Tested: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937946
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

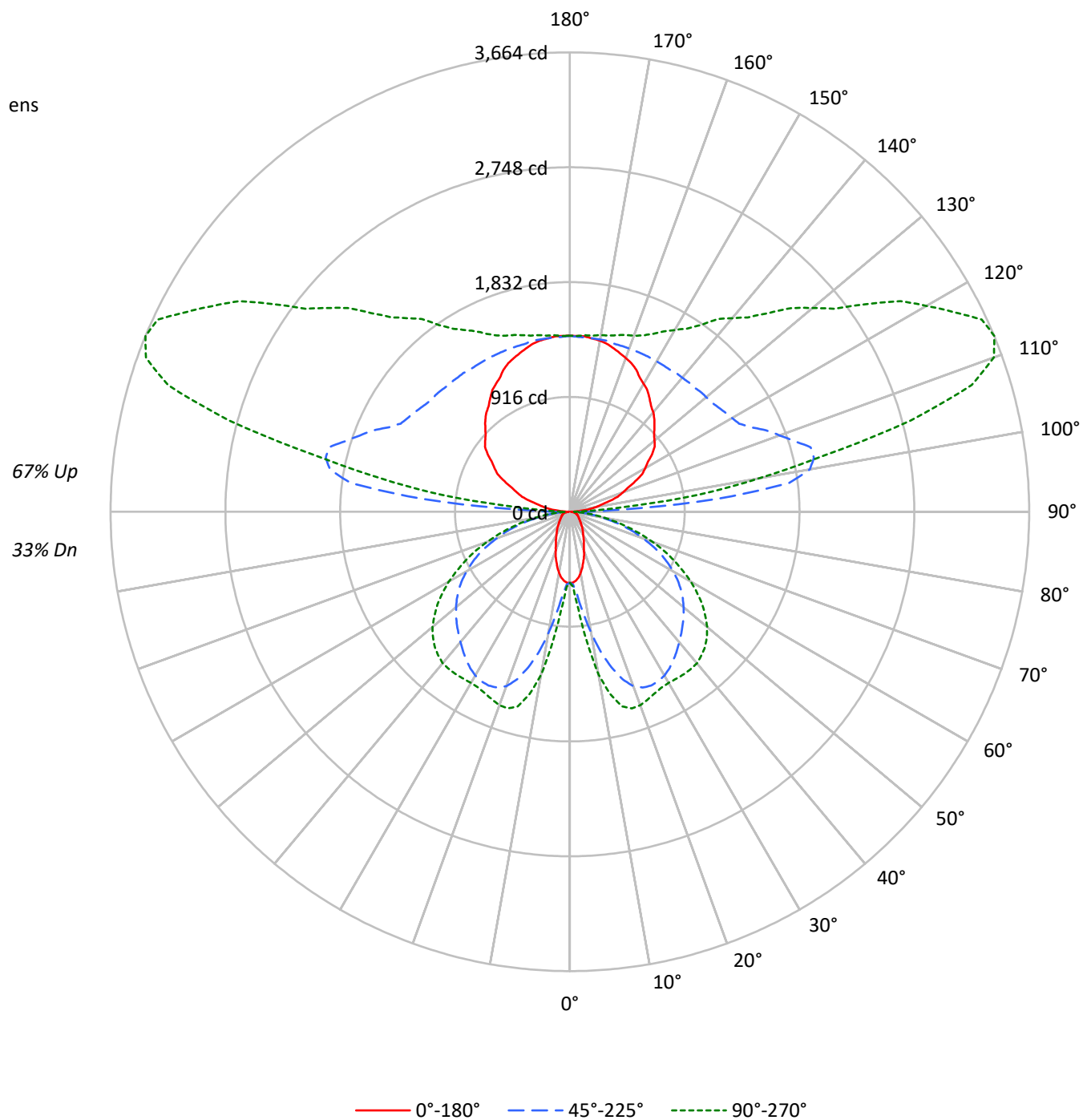
Lumens per Lamp: N/A
Luminaire Lumens: 13480.8 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 111.2
Input Voltage (V): NR
Input Current (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: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

Luminous Intensity Polar Plot



TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	103	103	103	103	93	93	93	93		74	74	74		56	56	56		40	40	40
1	94	89	85	82	84	80	77	74		64	62	60		49	47	46		35	34	33
2	85	77	71	66	76	70	65	60		55	52	49		42	40	38		30	29	27
3	77	68	60	54	69	61	55	50		49	44	40		37	34	31		26	24	23
4	70	59	52	46	63	54	47	42		43	38	34		33	29	26		23	21	19
5	64	53	45	39	57	48	41	35		38	33	29		29	25	23		21	18	16
6	59	47	39	33	53	42	35	30		34	29	25		26	22	19		19	16	14
7	54	42	34	29	49	38	31	26		31	25	22		23	20	17		17	14	12
8	50	38	30	25	45	34	28	23		28	23	19		21	18	15		15	13	11
9	47	34	27	22	42	31	25	20		25	20	17		19	16	13		14	12	10
10	43	31	24	19	39	28	22	18		23	18	15		18	14	12		13	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2625	2625	2625
5°	2564	3034	3529
10°	2326	4423	5850
15°	1977	5779	7064
20°	1610	6696	7199
25°	1343	7007	7053
30°	1132	7052	7040
35°	1001	6935	7222
40°	872	6783	7410
45°	790	6671	7439
50°	725	6570	7315
55°	694	6424	6992
60°	710	6141	6479
65°	739	5713	5775
70°	787	4982	4879
75°	872	4062	3807
80°	953	2817	2566
85°	848	1495	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7439 cd/sqm

TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.2	0.5
10°-20°	324.4	2.4
20°-30°	567.4	4.2
30°-40°	730.4	5.4
40°-50°	815.9	6.1
50°-60°	781.4	5.8
60°-70°	619.2	4.6
70°-80°	364.1	2.7
80°-90°	106.5	0.8
90°-100°	684.1	5.1
100°-110°	1798.6	13.3
110°-120°	1865.0	13.8
120°-130°	1495.9	11.1
130°-140°	1173.8	8.7
140°-150°	900.9	6.7
150°-160°	648.8	4.8
160°-170°	397.0	2.9
170°-180°	134.1	1.0
0°-30°	965.0	7.2
0°-40°	1695.4	12.6
0°-60°	3292.7	24.4
0°-90°	4382.5	32.5
90°-120°	4347.7	32.3
90°-150°	7918.4	58.7
90°-180°	9098.0	67.5
0°-180°	13480.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	551	591	666	753	780	51
15°	413	762	1284	1557	1606	115
25°	264	864	1530	1597	1599	122
35°	178	826	1441	1523	1583	111
45°	122	659	1274	1459	1525	94
55°	87	418	1081	1255	1290	80
65°	69	222	802	902	915	69
75°	51	136	440	484	486	53
85°	18	42	109	120	122	19
90°	10	26	72	36	36	9
95°	90	354	1178	608	414	100
105°	324	491	1988	3019	2816	343
115°	576	699	1593	3177	3626	568
125°	801	898	1449	2448	2888	711
135°	954	1050	1404	1976	2241	738
145°	1107	1177	1386	1686	1818	693
155°	1251	1286	1386	1521	1566	575
165°	1350	1368	1386	1440	1458	381
175°	1404	1404	1395	1413	1413	133
180°	1404	1404	1404	1404	1404	

TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	565.8	565.8	565.8	565.8	565.8	565.8	565.8	565.8	565.8	565.8	565.8
2.5°	565.8	565.8	569.4	571.3	574.9	576.7	580.3	584.0	594.9	596.7	600.4
5°	551.2	558.5	582.2	591.3	616.7	651.3	665.9	689.5	738.6	753.2	762.3
7.5°	529.4	545.8	604.0	618.6	682.2	773.2	811.4	862.3	940.6	978.8	1009.7
10°	494.8	529.4	633.1	667.7	771.4	909.6	980.6	1051.6	1169.9	1222.6	1242.7
12.5°	456.6	513.0	664.0	711.3	860.5	1062.5	1148.1	1226.3	1360.9	1431.9	1442.8
15°	413.0	489.4	693.1	762.3	955.1	1189.9	1284.5	1380.9	1506.4	1557.4	1570.1
17.5°	374.8	471.2	720.4	793.2	1027.9	1304.5	1400.9	1481.0	1582.9	1617.4	1626.5
20°	327.5	442.1	738.6	833.2	1104.4	1388.2	1481.0	1542.8	1612.0	1633.8	1637.4
22.5°	292.9	411.2	749.5	847.8	1155.3	1439.1	1517.4	1566.5	1613.8	1621.1	1622.9
25°	263.8	376.6	747.7	864.2	1199.0	1470.1	1530.1	1566.5	1593.8	1597.4	1597.4
27.5°	236.5	338.4	740.4	867.8	1231.7	1477.3	1524.6	1550.1	1562.8	1570.1	1570.1
30°	212.9	302.0	722.3	860.5	1246.3	1470.1	1508.3	1521.0	1533.7	1544.7	1550.1
32.5°	194.7	267.4	695.0	846.0	1248.1	1451.9	1479.2	1486.4	1504.6	1530.1	1539.2
35°	178.3	232.9	664.0	826.0	1237.2	1422.8	1441.0	1448.2	1484.6	1522.8	1535.6
37.5°	161.9	207.4	624.0	791.4	1220.8	1388.2	1400.9	1413.7	1470.1	1515.5	1530.1
40°	145.5	185.6	576.7	753.2	1195.4	1346.4	1357.3	1377.3	1451.9	1504.6	1519.2
42.5°	132.8	167.4	525.8	713.2	1162.6	1299.1	1315.4	1344.5	1430.0	1486.4	1502.8
45°	121.9	149.2	471.2	658.6	1120.8	1249.9	1273.6	1313.6	1404.6	1459.1	1473.7
47.5°	111.0	136.4	414.8	602.2	1075.3	1200.8	1231.7	1277.2	1370.0	1422.8	1435.5
50°	101.9	123.7	358.4	542.1	1026.1	1148.1	1184.4	1231.7	1326.3	1375.5	1391.8
52.5°	94.6	112.8	305.6	482.1	969.7	1093.5	1135.3	1184.4	1273.6	1320.9	1331.8
55°	87.3	103.7	260.2	418.4	911.5	1035.3	1080.7	1128.0	1215.4	1255.4	1262.7
57.5°	83.7	96.4	222.0	358.4	849.6	969.7	1020.6	1064.4	1146.2	1177.2	1184.4
60°	78.2	91.0	192.8	307.5	782.3	907.8	951.5	995.1	1064.4	1089.8	1095.3
62.5°	72.8	87.3	171.0	258.3	713.2	835.0	878.7	918.7	977.0	995.1	1002.4
65°	69.1	83.7	154.6	222.0	642.2	758.6	802.3	836.9	884.2	902.4	906.0
67.5°	65.5	80.0	141.9	191.0	571.3	682.2	715.0	747.7	784.1	802.3	804.1
70°	60.0	76.4	131.0	169.2	498.5	594.9	622.2	656.8	685.9	695.0	700.4
72.5°	56.4	71.0	123.7	152.8	423.9	511.2	536.7	556.7	582.2	591.3	591.3
75°	50.9	63.7	116.4	136.4	347.5	418.4	440.3	460.3	480.3	483.9	478.5
77.5°	45.5	56.4	100.1	114.6	271.1	331.1	349.3	360.2	376.6	380.2	382.0
80°	38.2	49.1	78.2	89.1	196.5	243.8	256.5	265.6	280.2	280.2	283.8
82.5°	29.1	38.2	56.4	63.7	132.8	167.4	178.3	183.7	192.8	192.8	192.8
85°	18.2	23.7	36.4	41.8	80.0	101.9	109.2	111.0	118.3	120.1	120.1
87.5°	9.1	12.7	23.7	25.5	41.8	52.8	52.8	56.4	56.4	54.6	52.8
90°	9.5	17.0	24.5	26.4	41.5	61.6	71.6	63.6	47.7	35.7	35.7
92.5°	37.7	101.7	165.8	181.8	255.6	353.9	403.2	353.3	253.7	178.9	171.8
95°	90.4	207.7	324.9	354.2	628.9	995.2	1178.3	1051.5	797.8	607.5	586.0
97.5°	156.4	259.8	363.2	389.1	847.1	1458.0	1763.3	1683.2	1522.8	1402.6	1361.5
100°	207.2	301.0	394.8	418.3	926.6	1604.3	1943.3	1949.1	1960.8	1969.6	1920.8
102.5°	250.5	338.0	425.5	447.5	963.0	1650.4	1994.1	2096.3	2300.6	2453.7	2411.9
105°	324.0	398.1	472.2	490.7	990.0	1655.6	1988.5	2217.4	2675.4	3018.9	2996.4
107.5°	399.4	468.5	537.5	554.8	995.0	1581.9	1875.4	2194.9	2833.7	3312.8	3318.3
110°	450.3	512.7	575.1	590.6	987.5	1516.6	1781.3	2138.4	2852.5	3388.1	3411.6

TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	500.2	559.6	619.1	633.9	987.8	1459.6	1695.5	2061.0	2791.9	3340.1	3376.1
115°	575.5	630.4	685.1	698.9	996.9	1394.2	1592.9	1944.9	2649.0	3177.2	3227.1
117.5°	649.9	699.8	749.5	762.0	1015.4	1353.3	1522.2	1839.9	2475.4	2952.0	3007.4
120°	693.2	740.2	787.0	798.8	1030.4	1339.4	1493.9	1784.3	2364.9	2800.4	2854.2
122.5°	735.6	782.9	830.2	842.1	1052.1	1332.2	1472.2	1733.7	2256.6	2648.8	2701.8
125°	800.7	843.8	886.9	897.6	1081.3	1326.3	1448.7	1670.8	2115.0	2448.1	2497.0
127.5°	853.4	897.0	940.5	951.4	1110.6	1322.8	1428.9	1619.6	2001.0	2287.0	2328.2
130°	881.6	928.6	975.4	987.1	1131.9	1324.9	1421.4	1591.1	1930.7	2185.3	2223.4
132.5°	910.8	957.8	1004.6	1016.3	1149.1	1326.3	1414.8	1566.8	1870.7	2098.6	2132.7
135°	954.2	996.9	1039.6	1050.3	1168.0	1325.0	1403.5	1530.7	1785.3	1976.2	2005.6
137.5°	998.4	1040.7	1083.0	1093.6	1196.3	1333.2	1401.6	1509.2	1724.4	1885.8	1909.9
140°	1035.2	1074.1	1113.0	1122.8	1213.5	1334.5	1395.0	1488.0	1673.8	1813.3	1835.7
142.5°	1063.5	1099.5	1135.4	1144.4	1227.9	1339.3	1395.0	1476.6	1639.9	1762.3	1781.7
145°	1106.8	1138.1	1169.6	1177.4	1246.8	1339.3	1385.6	1452.3	1586.0	1686.1	1700.7
147.5°	1150.1	1180.7	1211.3	1218.9	1274.5	1348.5	1385.6	1438.1	1543.2	1622.1	1634.2
150°	1178.3	1206.0	1233.6	1240.6	1288.9	1353.4	1385.6	1429.9	1518.7	1585.3	1595.1
152.5°	1207.5	1228.5	1249.4	1254.7	1298.3	1356.5	1385.6	1423.5	1499.3	1556.1	1563.6
155°	1250.9	1266.4	1281.9	1285.8	1319.1	1363.4	1385.6	1415.8	1476.1	1521.3	1526.2
157.5°	1283.0	1298.0	1313.1	1316.8	1339.7	1370.3	1385.6	1409.0	1455.9	1491.1	1494.5
160°	1304.6	1316.3	1328.1	1331.0	1349.2	1373.5	1385.6	1405.7	1445.9	1476.0	1478.0
162.5°	1326.3	1335.0	1343.8	1346.0	1359.2	1376.7	1385.6	1402.5	1436.4	1461.9	1463.8
165°	1349.8	1357.8	1365.7	1367.7	1373.6	1381.6	1385.6	1397.7	1422.0	1440.2	1442.2
167.5°	1371.5	1375.2	1379.0	1379.9	1384.9	1391.7	1395.0	1402.9	1418.9	1430.8	1431.6
170°	1385.6	1389.4	1393.2	1394.1	1394.4	1394.8	1395.0	1402.9	1418.9	1430.8	1430.8
172.5°	1393.1	1393.9	1394.8	1395.0	1395.0	1395.0	1395.0	1401.3	1413.8	1423.3	1422.6
175°	1403.5	1403.5	1403.5	1403.5	1400.7	1396.9	1395.0	1399.0	1406.9	1412.9	1412.9
177.5°	1403.5	1403.5	1403.5	1403.5	1401.3	1398.4	1396.9	1400.0	1406.3	1411.0	1410.2
180°	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5

TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	565.8	565.8
2.5°	604.0	600.4
5°	776.8	780.5
7.5°	1046.2	1044.4
10°	1300.9	1317.2
12.5°	1486.4	1490.1
15°	1599.2	1606.5
17.5°	1642.9	1644.7
20°	1644.7	1641.1
22.5°	1624.7	1621.1
25°	1601.1	1599.2
27.5°	1579.2	1581.0
30°	1570.1	1575.6
32.5°	1570.1	1579.2
35°	1573.8	1582.9
37.5°	1571.9	1582.9
40°	1564.7	1577.4
42.5°	1544.7	1553.8
45°	1513.7	1524.6
47.5°	1473.7	1481.0
50°	1422.8	1430.0
52.5°	1359.1	1360.9
55°	1282.7	1290.0
57.5°	1200.8	1202.6
60°	1109.8	1115.3
62.5°	1013.3	1013.3
65°	911.5	915.1
67.5°	805.9	815.0
70°	698.6	700.4
72.5°	593.1	593.1
75°	483.9	485.7
77.5°	380.2	380.2
80°	282.0	283.8
82.5°	194.7	198.3
85°	121.9	121.9
87.5°	56.4	50.9
90°	35.7	35.7
92.5°	143.4	114.9
95°	499.8	413.5
97.5°	1197.4	1033.3
100°	1725.2	1529.7
102.5°	2244.4	2077.0
105°	2906.4	2816.4
107.5°	3340.0	3361.7
110°	3505.4	3599.2



TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3520.1	3664.1
115°	3426.8	3626.4
117.5°	3228.8	3450.3
120°	3069.4	3284.5
122.5°	2914.1	3126.3
125°	2692.5	2888.0
127.5°	2493.2	2658.1
130°	2375.8	2528.2
132.5°	2269.3	2405.7
135°	2123.3	2240.9
137.5°	2006.1	2102.4
140°	1925.8	2015.8
142.5°	1859.1	1936.6
145°	1759.3	1817.9
147.5°	1682.7	1731.3
150°	1634.5	1673.8
152.5°	1593.2	1623.0
155°	1545.8	1565.5
157.5°	1508.4	1522.2
160°	1485.9	1493.9
162.5°	1471.3	1478.9
165°	1450.1	1458.1
167.5°	1435.0	1438.3
170°	1430.8	1430.8
172.5°	1419.6	1416.7
175°	1412.9	1412.9
177.5°	1406.8	1403.5
180°	1403.5	1403.5

TEST NUMBER: P937946

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-4000K

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	2.50	3.24	3.59	4.33	5.83	15.67	16.42	16.76	17.51	19.01
	3H	3.19	3.86	4.29	4.96	6.48	17.51	18.17	18.60	19.27	20.79
	4H	3.49	4.12	4.59	5.22	6.74	18.14	18.78	19.25	19.88	21.40
	6H	3.73	4.32	4.85	5.42	6.95	18.57	19.15	19.69	20.26	21.79
	8H	3.79	4.35	4.91	5.47	7.00	18.69	19.24	19.81	20.36	21.89
	12H	3.81	4.34	4.93	5.45	7.00	18.75	19.28	19.88	20.39	21.94
4H	2H	9.70	10.33	10.81	11.43	12.95	15.93	16.57	17.05	17.67	19.19
	3H	11.25	11.79	12.38	12.91	14.45	17.97	18.50	19.09	19.63	21.16
	4H	11.34	11.83	12.47	12.95	14.50	18.73	19.22	19.86	20.34	21.89
	6H	11.35	11.77	12.48	12.91	14.45	19.26	19.68	20.40	20.82	22.37
	8H	11.32	11.71	12.45	12.84	14.41	19.42	19.81	20.55	20.95	22.51
	12H	11.27	11.63	12.42	12.77	14.34	19.51	19.87	20.66	21.01	22.58
8H	4H	12.78	13.17	13.91	14.30	15.86	18.78	19.17	19.91	20.30	21.87
	6H	13.01	13.34	14.17	14.51	16.07	19.40	19.73	20.56	20.90	22.46
	8H	13.03	13.31	14.19	14.47	16.05	19.62	19.91	20.78	21.06	22.64
	12H	12.99	13.24	14.16	14.39	16.01	19.76	20.01	20.93	21.16	22.78
12H	4H	12.92	13.27	14.07	14.41	15.98	18.73	19.08	19.88	20.23	21.79
	6H	13.27	13.56	14.43	14.71	16.29	19.39	19.67	20.55	20.82	22.40
	8H	13.34	13.58	14.50	14.73	16.35	19.61	19.86	20.77	21.01	22.62