

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: P1191353

Luminaire Tested: SQ2-FA-125U-075D-L830-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191353
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2502-345-2)
Test Lab: INNOVATION CENTER
Issue Date: 9/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-FA-125U-075D-L830-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

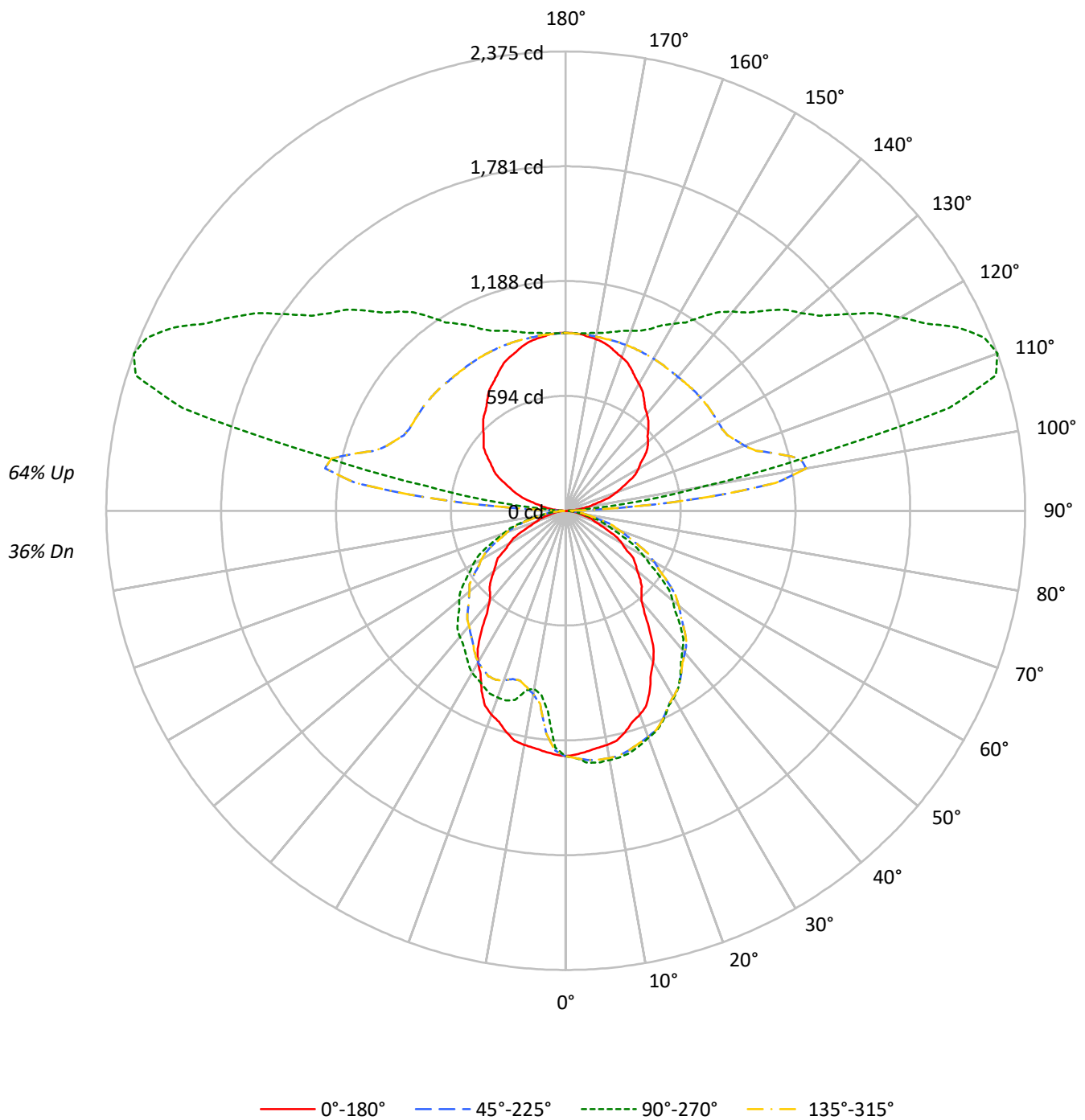
Lumens per Lamp: N/A
Luminaire Lumens: 8824.9 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 70.6
Input Voltage (V): 120
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

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Luminous Intensity Polar Plot



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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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	38	37	36
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	34	32	31
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	24	23
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	24	22	20
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17
7	56	44	36	31	50	40	33	29	33	28	24	26	22	20	20	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	20499	20499	20499	20499
5°	20258	21216	20258	16909
10°	20171	21461	20171	15329
15°	19824	21633	19824	16944
20°	19278	21476	19278	17672
25°	18323	21303	18323	17884
30°	16882	20827	16882	18073
35°	14937	20369	14937	17749
40°	12861	19810	12861	17943
45°	12698	19103	12698	17979
50°	12115	18171	12115	18048
55°	12051	16760	12051	17869
60°	10805	14938	10805	17799
65°	9211	13161	9211	17295
70°	7435	11150	7435	16032
75°	6444	9208	6444	14735
80°	5495	6862	5495	11892
85°	3649	3649	3649	7299

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 19776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	1.3
10°-20°	319.2	3.6
20°-30°	484.8	5.5
30°-40°	569.1	6.4
40°-50°	577.5	6.5
50°-60°	505.9	5.7
60°-70°	358.9	4.1
70°-80°	184.8	2.1
80°-90°	39.8	0.5
90°-100°	351.6	4.0
100°-110°	1144.6	13.0
110°-120°	1132.3	12.8
120°-130°	925.3	10.5
130°-140°	756.3	8.6
140°-150°	589.0	6.7
150°-160°	424.6	4.8
160°-170°	259.5	2.9
170°-180°	87.6	1.0
0°-30°	918.2	10.4
0°-40°	1487.3	16.9
0°-60°	2570.7	29.1
0°-90°	3154.2	35.7
90°-120°	2628.5	29.8
90°-150°	4899.1	55.5
90°-180°	5671.0	64.3
0°-180°	8824.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1270	1270	1270	1270	1270	
5°	1250	1309	1250	1043	1250	119
15°	1186	1294	1186	1014	1186	333
25°	1028	1196	1028	1004	1028	470
35°	758	1033	758	900	758	472
45°	556	837	556	787	556	425
55°	428	595	428	635	428	370
65°	241	344	241	453	241	241
75°	103	148	103	236	103	112
85°	20	20	20	39	20	25
90°	0	7	0	7	0	3
95°	48	141	48	141	48	55
105°	194	2051	194	2051	194	207
115°	360	2240	360	2240	360	356
125°	500	1772	500	1772	500	445
135°	604	1463	604	1463	604	466
145°	705	1223	705	1223	705	442
155°	805	1038	805	1038	805	371
165°	878	958	878	958	878	247
175°	916	920	916	920	916	87
180°	919	919	919	919	919	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6
2.5°	1261.7	1281.0	1281.4	1281.4	1281.4	1281.4	1281.4	1281.0	1261.7	1261.7	1242.1
5°	1249.9	1283.6	1294.2	1299.4	1309.0	1299.4	1294.2	1283.6	1249.9	1235.5	1156.4
7.5°	1238.1	1283.4	1299.1	1308.1	1312.9	1308.1	1299.1	1283.4	1238.1	1173.7	1007.8
10°	1230.3	1283.2	1299.1	1304.2	1309.0	1304.2	1299.1	1283.2	1230.3	1100.3	964.5
12.5°	1218.4	1275.2	1295.2	1300.2	1305.1	1300.2	1295.2	1275.2	1218.4	1034.6	933.0
15°	1186.0	1263.0	1279.5	1289.4	1294.2	1289.4	1279.5	1263.0	1186.0	979.1	910.4
17.5°	1145.6	1239.0	1260.8	1269.7	1273.6	1269.7	1260.8	1239.0	1145.6	929.1	911.4
20°	1122.0	1223.0	1245.0	1249.9	1249.9	1249.9	1245.0	1223.0	1122.0	905.5	935.0
22.5°	1090.5	1203.1	1225.3	1226.4	1230.3	1226.4	1225.3	1203.1	1090.5	877.8	946.8
25°	1028.5	1158.4	1190.9	1186.2	1195.8	1186.2	1190.9	1158.4	1028.5	840.8	944.8
27.5°	952.7	1116.3	1139.7	1144.6	1144.6	1144.6	1139.7	1116.3	952.7	804.5	925.2
30°	905.5	1088.3	1112.1	1117.1	1117.1	1117.1	1112.1	1088.3	905.5	780.4	905.5
32.5°	846.4	1063.9	1084.6	1085.6	1085.6	1085.6	1084.6	1063.9	846.4	756.0	874.0
35°	757.8	1022.5	1038.3	1038.2	1033.4	1038.2	1038.3	1022.5	757.8	719.3	836.6
37.5°	669.3	969.5	991.1	984.1	979.3	984.1	991.1	969.5	669.3	681.8	805.1
40°	610.2	937.4	959.6	944.7	939.9	944.7	959.6	937.4	610.2	653.5	777.5
42.5°	578.7	902.1	924.2	905.4	900.5	905.4	924.2	902.1	578.7	625.9	753.9
45°	556.1	844.8	866.1	846.2	836.6	846.2	866.1	844.8	556.1	584.9	713.5
47.5°	521.6	775.7	806.1	776.3	766.7	776.3	806.1	775.7	521.6	542.8	677.1
50°	482.3	732.5	762.8	733.0	723.4	733.0	762.8	732.5	482.3	511.1	649.6
52.5°	454.7	689.5	715.5	681.8	672.2	681.8	715.5	689.5	454.7	472.0	626.0
55°	428.1	625.4	644.7	609.9	595.4	609.9	644.7	625.4	428.1	413.7	580.7
57.5°	366.1	553.8	573.8	534.1	517.7	534.1	573.8	553.8	366.1	353.6	533.4
60°	334.6	503.0	526.5	486.6	462.6	486.6	526.5	503.0	334.6	310.6	501.9
62.5°	299.2	448.4	479.3	439.4	415.3	439.4	479.3	448.4	299.2	282.8	466.5
65°	241.1	371.0	408.4	368.5	344.5	368.5	408.4	371.0	241.1	250.8	408.4
67.5°	189.0	300.6	342.5	298.8	279.5	298.8	342.5	300.6	189.0	220.7	355.3
70°	157.5	253.7	295.3	255.5	236.2	255.5	295.3	253.7	157.5	200.8	319.9
72.5°	137.8	210.9	255.9	212.2	196.8	212.2	255.9	210.9	137.8	181.1	276.6
75°	103.3	146.6	196.8	157.3	147.6	157.3	196.8	146.6	103.3	146.6	216.5
77.5°	74.8	95.0	138.8	105.2	101.4	105.2	138.8	95.0	74.8	110.4	157.5
80°	59.1	63.9	103.3	73.8	73.8	73.8	103.3	63.9	59.1	83.1	118.1
82.5°	39.4	44.2	71.8	50.1	46.3	50.1	71.8	44.2	39.4	59.6	82.7
85°	19.7	19.7	29.5	19.7	19.7	19.7	29.5	19.7	19.7	29.3	39.4
87.5°	3.9	4.6	9.5	5.3	5.3	5.3	9.5	4.6	3.9	8.4	9.5
90°	0.0	3.3	7.9	6.8	6.8	6.8	7.9	3.3	0.0	3.3	7.9
92.5°	16.3	58.5	187.0	61.6	47.5	61.6	187.0	58.5	16.3	58.5	187.0
95°	47.5	144.8	644.4	229.7	141.3	229.7	644.4	144.8	47.5	144.8	644.4
97.5°	89.3	188.4	1093.7	666.1	406.5	666.1	1093.7	188.4	89.3	188.4	1093.7
100°	116.4	213.7	1262.8	1126.0	730.3	1126.0	1262.8	213.7	116.4	213.7	1262.8
102.5°	147.2	240.9	1242.0	1665.9	1266.6	1665.9	1242.0	240.9	147.2	240.9	1242.0
105°	194.4	280.7	1133.9	2165.7	2050.8	2165.7	1133.9	280.7	194.4	280.7	1133.9
107.5°	245.5	326.7	1031.3	2209.1	2330.9	2209.1	1031.3	326.7	245.5	326.7	1031.3
110°	282.6	356.7	982.4	2155.2	2375.2	2155.2	982.4	356.7	282.6	356.7	982.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	313.4	386.6	951.7	2058.1	2341.7	2058.1	951.7	386.6	313.4	386.6	951.7
115°	359.5	429.1	923.6	1903.5	2239.5	1903.5	923.6	429.1	359.5	429.1	923.6
117.5°	407.0	469.8	912.8	1761.9	2096.4	1761.9	912.8	469.8	407.0	469.8	912.8
120°	434.1	496.0	910.1	1674.9	1998.7	1674.9	910.1	496.0	434.1	496.0	910.1
122.5°	460.3	521.4	911.0	1599.3	1901.1	1599.3	911.0	521.4	460.3	521.4	911.0
125°	499.7	557.2	911.2	1502.9	1771.5	1502.9	911.2	557.2	499.7	557.2	911.2
127.5°	533.4	592.2	911.0	1430.7	1654.6	1430.7	911.0	592.2	533.4	592.2	911.0
130°	555.1	614.8	910.1	1389.4	1589.5	1389.4	910.1	614.8	555.1	614.8	910.1
132.5°	574.1	636.4	909.2	1351.2	1538.9	1351.2	909.2	636.4	574.1	636.4	909.2
135°	603.7	666.7	906.7	1297.1	1462.9	1297.1	906.7	666.7	603.7	666.7	906.7
137.5°	632.6	696.1	904.2	1242.2	1389.4	1242.2	904.2	696.1	632.6	696.1	904.2
140°	653.4	714.2	903.3	1204.9	1344.2	1204.9	903.3	714.2	653.4	714.2	903.3
142.5°	673.3	731.5	903.3	1169.3	1293.5	1169.3	903.3	731.5	673.3	731.5	903.3
145°	705.4	757.4	904.4	1117.1	1223.2	1117.1	904.4	757.4	705.4	757.4	904.4
147.5°	736.6	781.7	906.0	1072.7	1154.7	1072.7	906.0	781.7	736.6	781.7	906.0
150°	757.4	797.2	907.8	1046.2	1115.8	1046.2	907.8	797.2	757.4	797.2	907.8
152.5°	778.2	811.0	908.7	1026.0	1081.4	1026.0	908.7	811.0	778.2	811.0	908.7
155°	804.9	831.5	910.1	1000.2	1037.8	1000.2	910.1	831.5	804.9	831.5	910.1
157.5°	830.2	849.3	911.4	981.2	1007.5	981.2	911.4	849.3	830.2	849.3	911.4
160°	845.6	861.1	912.3	969.3	990.3	969.3	912.3	861.1	845.6	861.1	912.3
162.5°	859.2	871.1	912.3	959.3	975.0	959.3	912.3	871.1	859.2	871.1	912.3
165°	878.4	886.1	912.3	946.5	957.5	946.5	912.3	886.1	878.4	886.1	912.3
167.5°	892.0	896.8	912.6	936.9	942.6	936.9	912.6	896.8	892.0	896.8	912.6
170°	901.0	903.2	913.5	930.5	932.7	930.5	913.5	903.2	901.0	903.2	913.5
172.5°	907.4	908.7	915.3	926.8	926.3	926.8	915.3	908.7	907.4	908.7	915.3
175°	915.7	915.7	915.7	922.4	920.2	922.4	915.7	915.7	915.7	915.7	915.7
177.5°	919.1	918.2	917.3	921.7	918.2	921.7	917.3	918.2	919.1	918.2	917.3
180°	919.1	919.1	919.1	919.1	919.1	919.1	919.1	919.1	919.1	919.1	919.1

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1269.6	1269.6	1269.6	1269.6	1269.6	1269.6
2.5°	1230.2	1226.3	1230.2	1242.1	1261.7	1261.7
5°	1067.3	1043.3	1067.3	1156.4	1235.5	1249.9
7.5°	970.2	962.6	970.2	1007.8	1173.7	1238.1
10°	935.0	935.0	935.0	964.5	1100.3	1230.3
12.5°	931.5	950.7	931.5	933.0	1034.6	1218.4
15°	989.7	1013.7	989.7	910.4	979.1	1186.0
17.5°	1009.2	1028.5	1009.2	911.4	929.1	1145.6
20°	1009.2	1028.5	1009.2	935.0	905.5	1122.0
22.5°	1005.3	1024.6	1005.3	946.8	877.8	1090.5
25°	994.3	1003.9	994.3	944.8	840.8	1028.5
27.5°	974.5	981.3	974.5	925.2	804.5	952.7
30°	955.0	969.4	955.0	905.5	780.4	905.5
32.5°	935.1	937.9	935.1	874.0	756.0	846.4
35°	905.4	900.5	905.4	836.6	719.3	757.8
37.5°	865.2	871.0	865.2	805.1	681.8	669.3
40°	841.7	851.3	841.7	777.5	653.5	610.2
42.5°	818.1	827.7	818.1	753.9	625.9	578.7
45°	782.6	787.4	782.6	713.5	584.9	556.1
47.5°	741.2	746.0	741.2	677.1	542.8	521.6
50°	713.7	718.5	713.7	649.6	511.1	482.3
52.5°	682.2	687.0	682.2	626.0	472.0	454.7
55°	634.8	634.8	634.8	580.7	413.7	428.1
57.5°	580.8	586.6	580.8	533.4	353.6	366.1
60°	541.5	551.2	541.5	501.9	310.6	334.6
62.5°	506.0	511.8	506.0	466.5	282.8	299.2
65°	447.9	452.7	447.9	408.4	250.8	241.1
67.5°	382.9	386.8	382.9	355.3	220.7	189.0
70°	339.6	339.6	339.6	319.9	200.8	157.5
72.5°	296.3	300.2	296.3	276.6	181.1	137.8
75°	231.4	236.2	231.4	216.5	146.6	103.3
77.5°	166.4	171.3	166.4	157.5	110.4	74.8
80°	123.1	127.9	123.1	118.1	83.1	59.1
82.5°	87.6	88.6	87.6	82.7	59.6	39.4
85°	39.4	39.4	39.4	39.4	29.3	19.7
87.5°	9.2	9.2	9.2	9.5	8.4	3.9
90°	6.8	6.8	6.8	7.9	3.3	0.0
92.5°	61.6	47.5	61.6	187.0	58.5	16.3
95°	229.7	141.3	229.7	644.4	144.8	47.5
97.5°	666.1	406.5	666.1	1093.7	188.4	89.3
100°	1126.0	730.3	1126.0	1262.8	213.7	116.4
102.5°	1665.9	1266.6	1665.9	1242.0	240.9	147.2
105°	2165.7	2050.8	2165.7	1133.9	280.7	194.4
107.5°	2209.1	2330.9	2209.1	1031.3	326.7	245.5
110°	2155.2	2375.2	2155.2	982.4	356.7	282.6

TEST NUMBER: P1191353

CATALOG NUMBER: SQ2-FA-125U-075D-L830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2058.1	2341.7	2058.1	951.7	386.6	313.4
115°	1903.5	2239.5	1903.5	923.6	429.1	359.5
117.5°	1761.9	2096.4	1761.9	912.8	469.8	407.0
120°	1674.9	1998.7	1674.9	910.1	496.0	434.1
122.5°	1599.3	1901.1	1599.3	911.0	521.4	460.3
125°	1502.9	1771.5	1502.9	911.2	557.2	499.7
127.5°	1430.7	1654.6	1430.7	911.0	592.2	533.4
130°	1389.4	1589.5	1389.4	910.1	614.8	555.1
132.5°	1351.2	1538.9	1351.2	909.2	636.4	574.1
135°	1297.1	1462.9	1297.1	906.7	666.7	603.7
137.5°	1242.2	1389.4	1242.2	904.2	696.1	632.6
140°	1204.9	1344.2	1204.9	903.3	714.2	653.4
142.5°	1169.3	1293.5	1169.3	903.3	731.5	673.3
145°	1117.1	1223.2	1117.1	904.4	757.4	705.4
147.5°	1072.7	1154.7	1072.7	906.0	781.7	736.6
150°	1046.2	1115.8	1046.2	907.8	797.2	757.4
152.5°	1026.0	1081.4	1026.0	908.7	811.0	778.2
155°	1000.2	1037.8	1000.2	910.1	831.5	804.9
157.5°	981.2	1007.5	981.2	911.4	849.3	830.2
160°	969.3	990.3	969.3	912.3	861.1	845.6
162.5°	959.3	975.0	959.3	912.3	871.1	859.2
165°	946.5	957.5	946.5	912.3	886.1	878.4
167.5°	936.9	942.6	936.9	912.6	896.8	892.0
170°	930.5	932.7	930.5	913.5	903.2	901.0
172.5°	926.8	926.3	926.8	915.3	908.7	907.4
175°	922.4	920.2	922.4	915.7	915.7	915.7
177.5°	921.7	918.2	921.7	917.3	918.2	919.1
180°	919.1	919.1	919.1	919.1	919.1	919.1

TEST NUMBER: P1191353

CATALOG NUMBER: SQ2-FA-125U-075D-L830-UNV-STD-W-4

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	15.36	16.11	16.43	17.18	18.64	16.59	17.33	17.66	18.40	19.87
	3H	16.44	17.11	17.52	18.19	19.67	17.82	18.49	18.90	19.57	21.05
	4H	16.79	17.42	17.88	18.50	19.99	18.20	18.84	19.30	19.92	21.41
	6H	16.95	17.53	18.05	18.61	20.11	18.36	18.94	19.46	20.03	21.52
	8H	16.98	17.53	18.08	18.63	20.12	18.38	18.93	19.49	20.04	21.53
	12H	16.97	17.50	18.08	18.59	20.11	18.36	18.89	19.47	19.98	21.50
4H	2H	16.28	16.91	17.37	17.99	19.48	17.19	17.82	18.28	18.90	20.39
	3H	17.63	18.16	18.74	19.27	20.77	18.63	19.15	19.73	20.26	21.76
	4H	18.07	18.56	19.18	19.65	21.17	19.09	19.57	20.20	20.67	22.19
	6H	18.29	18.71	19.41	19.83	21.34	19.30	19.72	20.42	20.84	22.35
	8H	18.35	18.73	19.46	19.85	21.38	19.35	19.74	20.47	20.85	22.38
	12H	18.34	18.69	19.48	19.82	21.35	19.33	19.68	20.47	20.81	22.34
8H	4H	18.46	18.85	19.58	19.96	21.49	19.29	19.68	20.41	20.79	22.32
	6H	18.80	19.12	19.94	20.28	21.80	19.59	19.91	20.73	21.07	22.59
	8H	18.92	19.20	20.06	20.33	21.88	19.69	19.97	20.83	21.10	22.65
	12H	18.95	19.19	20.10	20.33	21.91	19.70	19.94	20.84	21.07	22.65
12H	4H	18.46	18.81	19.59	19.94	21.47	19.25	19.60	20.39	20.73	22.26
	6H	18.87	19.15	20.02	20.29	21.83	19.61	19.89	20.76	21.03	22.58
	8H	19.01	19.26	20.16	20.39	21.97	19.72	19.97	20.87	21.10	22.68