

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: P1191268

Luminaire Tested: SQ2-FA-050U-100D-L940-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191268
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-050U-100D-L940-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

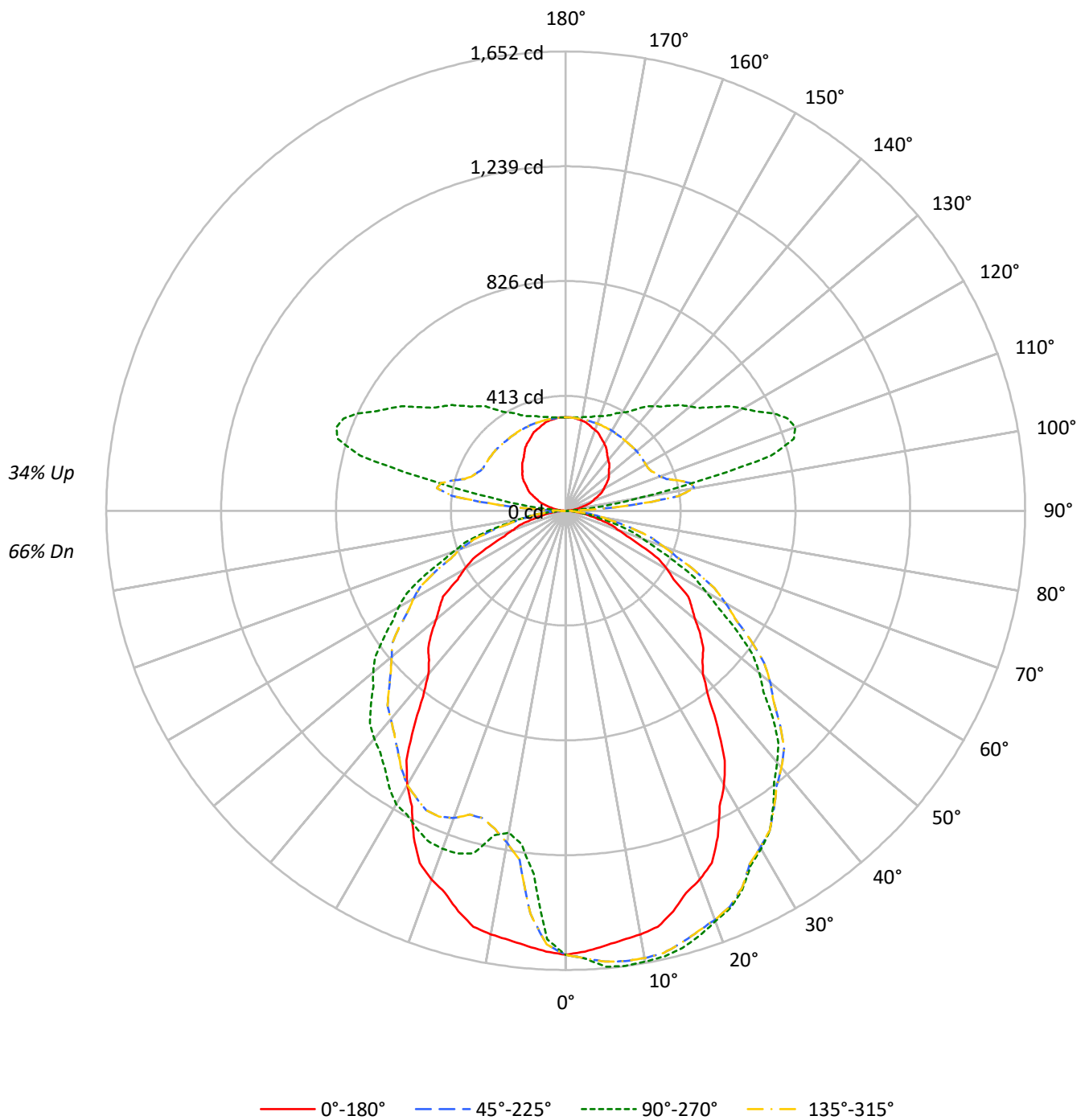
Lumens per Lamp: N/A
Luminaire Lumens: 6055.3 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 52.4
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	63	61	60
2	92	85	79	73	87	80	75	70	71	67	63	63	60	57	55	53	50
3	84	75	67	61	79	71	64	58	63	57	53	56	51	48	49	46	43
4	77	66	58	52	72	63	55	50	56	50	45	49	45	41	44	40	37
5	71	59	51	45	66	56	48	43	50	44	39	44	40	36	39	35	32
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	28
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	28	25
8	56	44	36	30	53	41	34	29	37	31	27	34	28	25	30	26	23
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	25785	25785	25785	25785
5°	25481	26686	25481	21269
10°	25371	26994	25371	19282
15°	24936	27211	24936	21314
20°	24249	27014	24249	22228
25°	23047	26795	23047	22495
30°	21233	26196	21233	22734
35°	18788	25622	18788	22328
40°	16177	24919	16177	22571
45°	15972	24028	15972	22614
50°	15237	22855	15237	22700
55°	15158	21084	15158	22477
60°	13592	18791	13592	22388
65°	11587	16554	11587	21757
70°	9352	14025	9352	20162
75°	8110	11584	8110	18534
80°	6908	8629	6908	14961
85°	4594	4594	4594	9170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 24875 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.7	2.4
10°-20°	401.5	6.6
20°-30°	609.8	10.1
30°-40°	715.8	11.8
40°-50°	726.4	12.0
50°-60°	636.3	10.5
60°-70°	451.4	7.5
70°-80°	232.5	3.8
80°-90°	49.2	0.8
90°-100°	134.0	2.2
100°-110°	424.9	7.0
110°-120°	416.6	6.9
120°-130°	339.0	5.6
130°-140°	276.4	4.6
140°-150°	215.5	3.6
150°-160°	155.3	2.6
160°-170°	94.9	1.6
170°-180°	32.0	0.5
0°-30°	1155.0	19.1
0°-40°	1870.8	30.9
0°-60°	3233.5	53.4
0°-90°	3966.6	65.5
90°-120°	975.5	16.1
90°-150°	1806.5	29.8
90°-180°	2089.0	34.5
0°-180°	6055.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1597	1597	1597	1597	1597	
5°	1572	1646	1572	1312	1572	149
15°	1492	1628	1492	1275	1492	419
25°	1294	1504	1294	1263	1294	591
35°	953	1300	953	1133	953	594
45°	700	1052	700	990	700	535
55°	538	749	538	798	538	466
65°	303	433	303	570	303	303
75°	130	186	130	297	130	141
85°	25	25	25	50	25	31
90°	0	3	0	3	0	1
95°	18	58	18	58	18	21
105°	74	765	74	765	74	78
115°	132	827	132	827	132	131
125°	183	649	183	649	183	163
135°	221	534	221	534	221	171
145°	258	445	258	445	258	162
155°	294	380	294	380	294	136
165°	320	349	320	349	320	90
175°	335	336	335	336	335	32
180°	336	336	336	336	336	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0
2.5°	1587.1	1611.3	1611.9	1611.9	1611.9	1611.9	1611.9	1611.3	1587.1	1587.1	1562.3
5°	1572.2	1614.6	1627.9	1634.4	1646.5	1634.4	1627.9	1614.6	1572.2	1554.1	1454.6
7.5°	1557.4	1614.3	1634.1	1645.4	1651.5	1645.4	1634.1	1614.3	1557.4	1476.3	1267.7
10°	1547.5	1614.1	1634.1	1640.5	1646.5	1640.5	1634.1	1614.1	1547.5	1384.1	1213.2
12.5°	1532.6	1604.0	1629.2	1635.5	1641.6	1635.5	1629.2	1604.0	1532.6	1301.4	1173.6
15°	1491.8	1588.6	1609.4	1621.9	1627.9	1621.9	1609.4	1588.6	1491.8	1231.5	1145.1
17.5°	1441.0	1558.4	1585.9	1597.1	1601.9	1597.1	1585.9	1558.4	1441.0	1168.7	1146.4
20°	1411.3	1538.4	1566.0	1572.2	1572.2	1572.2	1566.0	1538.4	1411.3	1138.9	1176.1
22.5°	1371.7	1513.3	1541.3	1542.6	1547.5	1542.6	1541.3	1513.3	1371.7	1104.2	1190.9
25°	1293.7	1457.1	1498.0	1492.0	1504.1	1492.0	1498.0	1457.1	1293.7	1057.6	1188.5
27.5°	1198.4	1404.1	1433.6	1439.8	1439.8	1439.8	1433.6	1404.1	1198.4	1012.0	1163.7
30°	1138.9	1368.9	1398.9	1405.1	1405.1	1405.1	1398.9	1368.9	1138.9	981.6	1138.9
32.5°	1064.7	1338.2	1364.3	1365.5	1365.5	1365.5	1364.3	1338.2	1064.7	950.9	1099.3
35°	953.2	1286.1	1306.1	1305.9	1299.9	1305.9	1306.1	1286.1	953.2	904.8	1052.3
37.5°	841.8	1219.5	1246.6	1237.8	1231.8	1237.8	1246.6	1219.5	841.8	857.6	1012.7
40°	767.5	1179.1	1207.0	1188.3	1182.3	1188.3	1207.0	1179.1	767.5	822.0	978.0
42.5°	727.9	1134.6	1162.5	1138.8	1132.8	1138.8	1162.5	1134.6	727.9	787.2	948.3
45°	699.5	1062.6	1089.4	1064.4	1052.3	1064.4	1089.4	1062.6	699.5	735.8	897.5
47.5°	656.1	975.7	1013.9	976.5	964.4	976.5	1013.9	975.7	656.1	682.8	851.7
50°	606.6	921.3	959.4	922.0	909.9	922.0	959.4	921.3	606.6	642.9	817.1
52.5°	571.9	867.3	900.0	857.6	845.5	857.6	900.0	867.3	571.9	593.7	787.4
55°	538.5	786.7	810.9	767.1	749.0	767.1	810.9	786.7	538.5	520.4	730.4
57.5°	460.5	696.6	721.7	671.8	651.2	671.8	721.7	696.6	460.5	444.8	671.0
60°	420.9	632.7	662.3	612.1	581.9	612.1	662.3	632.7	420.9	390.7	631.4
62.5°	376.3	564.0	602.9	552.7	522.4	552.7	602.9	564.0	376.3	355.8	586.8
65°	303.3	466.7	513.8	463.6	433.3	463.6	513.8	466.7	303.3	315.4	513.8
67.5°	237.7	378.1	430.8	375.8	351.6	375.8	430.8	378.1	237.7	277.6	446.9
70°	198.1	319.1	371.4	321.3	297.1	321.3	371.4	319.1	198.1	252.5	402.3
72.5°	173.3	265.3	321.9	267.0	247.6	267.0	321.9	265.3	173.3	227.8	347.9
75°	130.0	184.5	247.6	197.8	185.7	197.8	247.6	184.5	130.0	184.5	272.4
77.5°	94.1	119.5	174.6	132.4	127.5	132.4	174.6	119.5	94.1	138.9	198.1
80°	74.3	80.3	130.0	92.8	92.8	92.8	130.0	80.3	74.3	104.5	148.6
82.5°	49.5	55.6	90.4	63.0	58.2	63.0	90.4	55.6	49.5	74.9	104.0
85°	24.8	24.8	37.1	24.8	24.8	24.8	37.1	24.8	24.8	36.9	49.5
87.5°	5.0	5.2	10.5	5.6	5.6	5.6	10.5	5.2	5.0	10.0	10.5
90°	0.0	1.0	3.2	3.2	3.2	3.2	3.2	1.0	0.0	1.0	3.2
92.5°	5.9	23.5	75.1	25.0	17.6	25.0	75.1	23.5	5.9	23.5	75.1
95°	18.0	54.2	243.3	90.2	58.2	90.2	243.3	54.2	18.0	54.2	243.3
97.5°	33.4	70.2	412.1	257.5	158.0	257.5	412.1	70.2	33.4	70.2	412.1
100°	44.4	79.6	469.6	428.1	278.2	428.1	469.6	79.6	44.4	79.6	469.6
102.5°	56.3	89.8	459.5	628.7	481.2	628.7	459.5	89.8	56.3	89.8	459.5
105°	74.0	104.0	418.8	797.8	764.7	797.8	418.8	104.0	74.0	104.0	418.8
107.5°	91.8	119.5	380.1	815.4	860.1	815.4	380.1	119.5	91.8	119.5	380.1
110°	103.7	130.5	360.7	795.1	877.9	795.1	360.7	130.5	103.7	130.5	360.7

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CATALOG NUMBER: SQ2-FA-050U-100D-L940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	115.5	140.7	349.7	760.1	865.2	760.1	349.7	140.7	115.5	140.7	349.7
115°	132.2	157.0	338.5	703.0	827.1	703.0	338.5	157.0	132.2	157.0	338.5
117.5°	148.5	172.1	334.0	648.0	773.2	648.0	334.0	172.1	148.5	172.1	334.0
120°	158.7	181.4	333.2	614.1	735.1	614.1	333.2	181.4	158.7	181.4	333.2
122.5°	168.8	190.7	333.2	586.8	699.5	586.8	333.2	190.7	168.8	190.7	333.2
125°	183.0	204.7	333.2	551.2	649.4	551.2	333.2	204.7	183.0	204.7	333.2
127.5°	195.5	216.3	333.2	523.5	607.3	523.5	333.2	216.3	195.5	216.3	333.2
130°	203.1	224.8	333.2	507.3	582.8	507.3	333.2	224.8	203.1	224.8	333.2
132.5°	210.7	232.4	332.3	494.4	562.5	494.4	332.3	232.4	210.7	232.4	332.3
135°	221.1	242.8	331.1	474.1	534.1	474.1	331.1	242.8	221.1	242.8	331.1
137.5°	231.2	254.0	330.8	454.7	508.3	454.7	330.8	254.0	231.2	254.0	330.8
140°	238.0	260.7	330.0	441.1	489.7	441.1	330.0	260.7	238.0	260.7	330.0
142.5°	246.4	268.4	330.8	427.5	472.8	427.5	330.8	268.4	246.4	268.4	330.8
145°	258.1	277.7	331.1	409.1	445.3	409.1	331.1	277.7	258.1	277.7	331.1
147.5°	269.7	286.5	331.3	392.9	422.4	392.9	331.3	286.5	269.7	286.5	331.3
150°	278.2	291.6	332.1	383.4	407.2	383.4	332.1	291.6	278.2	291.6	332.1
152.5°	284.9	296.7	332.1	375.7	395.4	375.7	332.1	296.7	284.9	296.7	332.1
155°	294.0	304.4	332.1	365.2	379.7	365.2	332.1	304.4	294.0	304.4	332.1
157.5°	303.8	310.8	333.2	358.8	368.7	358.8	333.2	310.8	303.8	310.8	333.2
160°	308.8	315.0	333.2	354.5	362.8	354.5	333.2	315.0	308.8	315.0	333.2
162.5°	313.9	318.5	333.2	351.1	356.9	351.1	333.2	318.5	313.9	318.5	333.2
165°	320.5	323.6	333.2	345.9	349.0	345.9	333.2	323.6	320.5	323.6	333.2
167.5°	326.6	327.4	334.2	342.3	345.0	342.3	334.2	327.4	326.6	327.4	334.2
170°	330.0	330.0	334.2	340.6	341.6	340.6	334.2	330.0	330.0	330.0	334.2
172.5°	331.7	332.5	334.2	338.9	339.1	338.9	334.2	332.5	331.7	332.5	334.2
175°	335.3	334.2	335.3	337.4	336.3	337.4	335.3	334.2	335.3	334.2	335.3
177.5°	336.3	335.5	335.5	337.1	335.5	337.1	335.5	335.5	336.3	335.5	335.5
180°	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1597.0	1597.0	1597.0	1597.0	1597.0	1597.0
2.5°	1547.4	1542.5	1547.4	1562.3	1587.1	1587.1
5°	1342.5	1312.3	1342.5	1454.6	1554.1	1572.2
7.5°	1220.4	1210.7	1220.4	1267.7	1476.3	1557.4
10°	1176.1	1176.1	1176.1	1213.2	1384.1	1547.5
12.5°	1171.7	1195.9	1171.7	1173.6	1301.4	1532.6
15°	1244.9	1275.1	1244.9	1145.1	1231.5	1491.8
17.5°	1269.5	1293.7	1269.5	1146.4	1168.7	1441.0
20°	1269.5	1293.7	1269.5	1176.1	1138.9	1411.3
22.5°	1264.5	1288.7	1264.5	1190.9	1104.2	1371.7
25°	1250.6	1262.7	1250.6	1188.5	1057.6	1293.7
27.5°	1225.8	1234.3	1225.8	1163.7	1012.0	1198.4
30°	1201.3	1219.4	1201.3	1138.9	981.6	1138.9
32.5°	1176.2	1179.8	1176.2	1099.3	950.9	1064.7
35°	1138.8	1132.8	1138.8	1052.3	904.8	953.2
37.5°	1088.3	1095.6	1088.3	1012.7	857.6	841.8
40°	1058.7	1070.9	1058.7	978.0	822.0	767.5
42.5°	1029.0	1041.1	1029.0	948.3	787.2	727.9
45°	984.3	990.4	984.3	897.5	735.8	699.5
47.5°	932.3	938.4	932.3	851.7	682.8	656.1
50°	897.7	903.7	897.7	817.1	642.9	606.6
52.5°	858.1	864.1	858.1	787.4	593.7	571.9
55°	798.5	798.5	798.5	730.4	520.4	538.5
57.5°	730.6	737.8	730.6	671.0	444.8	460.5
60°	681.2	693.3	681.2	631.4	390.7	420.9
62.5°	636.5	643.7	636.5	586.8	355.8	376.3
65°	563.4	569.5	563.4	513.8	315.4	303.3
67.5°	481.7	486.5	481.7	446.9	277.6	237.7
70°	427.1	427.1	427.1	402.3	252.5	198.1
72.5°	372.7	377.6	372.7	347.9	227.8	173.3
75°	291.1	297.1	291.1	272.4	184.5	130.0
77.5°	209.4	215.4	209.4	198.1	138.9	94.1
80°	154.9	160.9	154.9	148.6	104.5	74.3
82.5°	110.2	111.4	110.2	104.0	74.9	49.5
85°	49.5	49.5	49.5	49.5	36.9	24.8
87.5°	10.5	10.5	10.5	10.5	10.0	5.0
90°	3.2	3.2	3.2	3.2	1.0	0.0
92.5°	25.0	17.6	25.0	75.1	23.5	5.9
95°	90.2	58.2	90.2	243.3	54.2	18.0
97.5°	257.5	158.0	257.5	412.1	70.2	33.4
100°	428.1	278.2	428.1	469.6	79.6	44.4
102.5°	628.7	481.2	628.7	459.5	89.8	56.3
105°	797.8	764.7	797.8	418.8	104.0	74.0
107.5°	815.4	860.1	815.4	380.1	119.5	91.8
110°	795.1	877.9	795.1	360.7	130.5	103.7

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	760.1	865.2	760.1	349.7	140.7	115.5
115°	703.0	827.1	703.0	338.5	157.0	132.2
117.5°	648.0	773.2	648.0	334.0	172.1	148.5
120°	614.1	735.1	614.1	333.2	181.4	158.7
122.5°	586.8	699.5	586.8	333.2	190.7	168.8
125°	551.2	649.4	551.2	333.2	204.7	183.0
127.5°	523.5	607.3	523.5	333.2	216.3	195.5
130°	507.3	582.8	507.3	333.2	224.8	203.1
132.5°	494.4	562.5	494.4	332.3	232.4	210.7
135°	474.1	534.1	474.1	331.1	242.8	221.1
137.5°	454.7	508.3	454.7	330.8	254.0	231.2
140°	441.1	489.7	441.1	330.0	260.7	238.0
142.5°	427.5	472.8	427.5	330.8	268.4	246.4
145°	409.1	445.3	409.1	331.1	277.7	258.1
147.5°	392.9	422.4	392.9	331.3	286.5	269.7
150°	383.4	407.2	383.4	332.1	291.6	278.2
152.5°	375.7	395.4	375.7	332.1	296.7	284.9
155°	365.2	379.7	365.2	332.1	304.4	294.0
157.5°	358.8	368.7	358.8	333.2	310.8	303.8
160°	354.5	362.8	354.5	333.2	315.0	308.8
162.5°	351.1	356.9	351.1	333.2	318.5	313.9
165°	345.9	349.0	345.9	333.2	323.6	320.5
167.5°	342.3	345.0	342.3	334.2	327.4	326.6
170°	340.6	341.6	340.6	334.2	330.0	330.0
172.5°	338.9	339.1	338.9	334.2	332.5	331.7
175°	337.4	336.3	337.4	335.3	334.2	335.3
177.5°	337.1	335.5	337.1	335.5	335.5	336.3
180°	336.3	336.3	336.3	336.3	336.3	336.3

TEST NUMBER: P1191268

CATALOG NUMBER: SQ2-FA-050U-100D-L940-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	18.96	19.98	19.77	20.81	21.85	20.19	21.21	21.00	22.04	23.07
	3H	20.06	20.98	20.89	21.82	22.88	21.44	22.36	22.27	23.20	24.26
	4H	20.42	21.29	21.27	22.14	23.21	21.84	22.70	22.68	23.55	24.62
	6H	20.60	21.39	21.45	22.25	23.33	22.01	22.80	22.86	23.66	24.75
	8H	20.63	21.39	21.50	22.27	23.35	22.04	22.79	22.90	23.67	24.76
	12H	20.64	21.36	21.51	22.23	23.34	22.03	22.75	22.90	23.62	24.73
4H	2H	19.91	20.77	20.76	21.62	22.69	20.82	21.68	21.67	22.53	23.61
	3H	21.29	22.01	22.15	22.89	23.98	22.29	23.01	23.15	23.89	24.98
	4H	21.74	22.40	22.62	23.28	24.39	22.76	23.41	23.63	24.30	25.41
	6H	21.98	22.54	22.87	23.45	24.57	22.99	23.56	23.88	24.46	25.58
	8H	22.04	22.57	22.93	23.47	24.60	23.04	23.57	23.93	24.47	25.60
	12H	22.05	22.53	22.96	23.44	24.58	23.04	23.51	23.95	24.43	25.57
8H	4H	22.16	22.68	23.05	23.58	24.71	22.98	23.51	23.87	24.41	25.54
	6H	22.51	22.94	23.43	23.89	25.01	23.30	23.74	24.22	24.68	25.81
	8H	22.63	23.01	23.55	23.94	25.09	23.40	23.78	24.32	24.72	25.86
	12H	22.67	23.01	23.60	23.93	25.13	23.42	23.76	24.35	24.68	25.88
12H	4H	22.17	22.64	23.08	23.56	24.70	22.96	23.43	23.87	24.35	25.49
	6H	22.58	22.97	23.51	23.90	25.05	23.32	23.71	24.25	24.64	25.79
	8H	22.73	23.07	23.66	24.00	25.20	23.44	23.78	24.37	24.71	25.90