

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: P1191376

Luminaire Tested: SQ2-FA-150U-050D-L940-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191376
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-150U-050D-L940-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

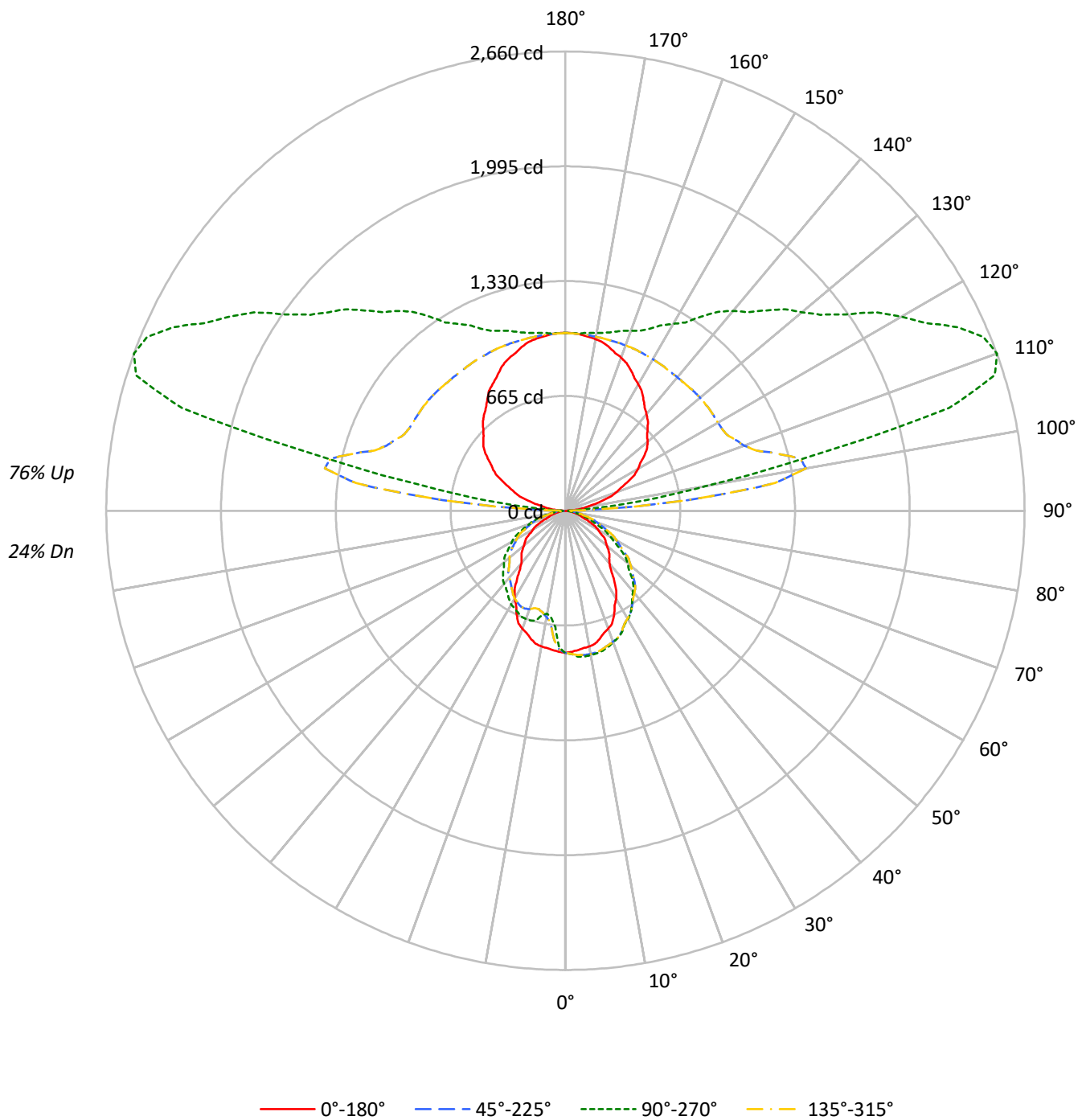
Lumens per Lamp: N/A
Luminaire Lumens: 8398.0 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.4
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	78	75	73	60	58	57	44	43	42	29	28	28
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	25	24	23
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11
8	50	38	31	26	44	34	28	24	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13294	13294	13294	13294
5°	13138	13759	13138	10966
10°	13082	13918	13082	9942
15°	12856	14029	12856	10989
20°	12502	13928	12502	11460
25°	11883	13816	11883	11598
30°	10948	13507	10948	11721
35°	9688	13210	9688	11511
40°	8340	12848	8340	11637
45°	8234	12387	8234	11659
50°	7857	11783	7857	11703
55°	7817	10871	7817	11589
60°	7007	9688	7007	11541
65°	5975	8535	5975	11217
70°	4820	7232	4820	10395
75°	4180	5970	4180	9557
80°	3561	4454	3561	7717
85°	2371	2371	2371	4724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 12826 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	0.9
10°-20°	207.0	2.5
20°-30°	314.4	3.7
30°-40°	369.1	4.4
40°-50°	374.5	4.5
50°-60°	328.1	3.9
60°-70°	232.7	2.8
70°-80°	119.9	1.4
80°-90°	26.3	0.3
90°-100°	392.1	4.7
100°-110°	1284.0	15.3
110°-120°	1269.4	15.1
120°-130°	1037.7	12.4
130°-140°	846.8	10.1
140°-150°	659.0	7.8
150°-160°	474.5	5.7
160°-170°	290.3	3.5
170°-180°	98.1	1.2
0°-30°	595.5	7.1
0°-40°	964.6	11.5
0°-60°	1667.2	19.9
0°-90°	2046.0	24.4
90°-120°	2945.6	35.1
90°-150°	5489.1	65.4
90°-180°	6352.0	75.6
0°-180°	8398.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	823	823	823	823	823	
5°	811	849	811	677	811	77
15°	769	839	769	657	769	216
25°	667	776	667	651	667	304
35°	492	670	492	584	492	306
45°	361	542	361	511	361	276
55°	278	386	278	412	278	240
65°	156	223	156	294	156	156
75°	67	96	67	153	67	72
85°	13	13	13	26	13	16
90°	1	8	1	8	1	3
95°	55	165	55	165	55	62
105°	223	2300	223	2300	223	235
115°	402	2512	402	2512	402	397
125°	560	1982	560	1982	560	498
135°	674	1640	674	1640	674	521
145°	788	1372	788	1372	788	494
155°	898	1164	898	1164	898	413
165°	980	1071	980	1071	980	276
175°	1025	1031	1025	1031	1025	97
180°	1029	1029	1029	1029	1029	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4
2.5°	818.3	830.8	831.0	831.0	831.0	831.0	831.0	830.8	818.3	818.3	805.5
5°	810.6	832.5	839.3	842.7	848.9	842.7	839.3	832.5	810.6	801.3	750.0
7.5°	803.0	832.3	842.5	848.3	851.5	848.3	842.5	832.3	803.0	761.1	653.6
10°	797.9	832.2	842.5	845.8	848.9	845.8	842.5	832.2	797.9	713.6	625.5
12.5°	790.2	827.0	840.0	843.2	846.4	843.2	840.0	827.0	790.2	671.0	605.1
15°	769.1	819.1	829.8	836.2	839.3	836.2	829.8	819.1	769.1	634.9	590.4
17.5°	743.0	803.5	817.6	823.4	825.9	823.4	817.6	803.5	743.0	602.5	591.0
20°	727.6	793.2	807.4	810.6	810.6	810.6	807.4	793.2	727.6	587.2	606.4
22.5°	707.2	780.2	794.7	795.4	797.9	795.4	794.7	780.2	707.2	569.3	614.0
25°	667.0	751.3	772.3	769.3	775.5	769.3	772.3	751.3	667.0	545.3	612.8
27.5°	617.9	724.0	739.1	742.3	742.3	742.3	739.1	724.0	617.9	521.7	600.0
30°	587.2	705.8	721.3	724.5	724.5	724.5	721.3	705.8	587.2	506.1	587.2
32.5°	548.9	690.0	703.4	704.0	704.0	704.0	703.4	690.0	548.9	490.3	566.8
35°	491.5	663.1	673.4	673.3	670.2	673.3	673.4	663.1	491.5	466.5	542.5
37.5°	434.0	628.8	642.8	638.2	635.1	638.2	642.8	628.8	434.0	442.1	522.1
40°	395.7	607.9	622.3	612.7	609.6	612.7	622.3	607.9	395.7	423.8	504.2
42.5°	375.3	585.0	599.3	587.1	584.0	587.1	599.3	585.0	375.3	405.9	488.9
45°	360.6	547.9	561.7	548.8	542.5	548.8	561.7	547.9	360.6	379.4	462.8
47.5°	338.3	503.1	522.8	503.5	497.2	503.5	522.8	503.1	338.3	352.0	439.1
50°	312.8	475.0	494.7	475.4	469.1	475.4	494.7	475.0	312.8	331.5	421.3
52.5°	294.9	447.2	464.0	442.2	435.9	442.2	464.0	447.2	294.9	306.1	405.9
55°	277.7	405.6	418.1	395.5	386.2	395.5	418.1	405.6	277.7	268.3	376.6
57.5°	237.4	359.1	372.1	346.3	335.7	346.3	372.1	359.1	237.4	229.3	345.9
60°	217.0	326.2	341.5	315.6	300.0	315.6	341.5	326.2	217.0	201.4	325.5
62.5°	194.0	290.8	310.8	285.0	269.4	285.0	310.8	290.8	194.0	183.4	302.5
65°	156.4	240.6	264.9	239.0	223.4	239.0	264.9	240.6	156.4	162.6	264.9
67.5°	122.6	194.9	222.1	193.8	181.3	193.8	222.1	194.9	122.6	143.1	230.4
70°	102.1	164.5	191.5	165.7	153.2	165.7	191.5	164.5	102.1	130.2	207.4
72.5°	89.4	136.8	166.0	137.6	127.7	137.6	166.0	136.8	89.4	117.4	179.4
75°	67.0	95.1	127.7	102.0	95.7	102.0	127.7	95.1	67.0	95.1	140.4
77.5°	48.5	61.6	90.0	68.2	65.7	68.2	90.0	61.6	48.5	71.6	102.1
80°	38.3	41.4	67.0	47.9	47.9	47.9	67.0	41.4	38.3	53.9	76.6
82.5°	25.5	28.7	46.6	32.5	30.0	32.5	46.6	28.7	25.5	38.6	53.6
85°	12.8	12.8	19.1	12.8	12.8	12.8	19.1	12.8	12.8	19.0	25.5
87.5°	2.8	3.2	6.8	4.0	4.2	4.0	6.8	3.2	2.8	5.7	6.8
90°	1.1	3.1	8.5	7.4	8.5	7.4	8.5	3.1	1.1	3.1	8.5
92.5°	18.0	65.6	201.4	65.5	52.5	65.5	201.4	65.6	18.0	65.6	201.4
95°	55.0	159.5	712.9	253.9	165.0	253.9	712.9	159.5	55.0	159.5	712.9
97.5°	99.8	210.3	1223.1	739.9	458.6	739.9	1223.1	210.3	99.8	210.3	1223.1
100°	131.2	236.6	1415.2	1263.8	837.7	1263.8	1415.2	236.6	131.2	236.6	1415.2
102.5°	166.7	269.7	1394.0	1862.2	1443.5	1862.2	1394.0	269.7	166.7	269.7	1394.0
105°	223.2	318.3	1274.5	2421.5	2300.5	2421.5	1274.5	318.3	223.2	318.3	1274.5
107.5°	278.8	366.1	1158.0	2473.8	2606.8	2473.8	1158.0	366.1	278.8	366.1	1158.0
110°	315.2	400.0	1102.1	2412.9	2660.1	2412.9	1102.1	400.0	315.2	400.0	1102.1

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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°	349.9	432.2	1068.3	2307.0	2623.7	2307.0	1068.3	432.2	349.9	432.2	1068.3
115°	401.9	480.5	1035.5	2139.7	2512.0	2139.7	1035.5	480.5	401.9	480.5	1035.5
117.5°	452.5	525.9	1023.0	1975.3	2353.4	1975.3	1023.0	525.9	452.5	525.9	1023.0
120°	485.5	554.8	1019.6	1879.4	2247.6	1879.4	1019.6	554.8	485.5	554.8	1019.6
122.5°	515.1	582.7	1019.6	1796.7	2138.4	1796.7	1019.6	582.7	515.1	582.7	1019.6
125°	559.5	623.6	1020.7	1687.4	1982.1	1687.4	1020.7	623.6	559.5	623.6	1020.7
127.5°	597.2	662.5	1019.4	1606.7	1863.2	1606.7	1019.4	662.5	597.2	662.5	1019.4
130°	620.9	687.1	1018.6	1558.0	1789.6	1558.0	1018.6	687.1	620.9	687.1	1018.6
132.5°	642.0	709.9	1016.0	1516.0	1726.1	1516.0	1016.0	709.9	642.0	709.9	1016.0
135°	673.7	745.1	1012.2	1455.4	1640.5	1455.4	1012.2	745.1	673.7	745.1	1012.2
137.5°	707.2	777.9	1009.9	1392.1	1559.5	1392.1	1009.9	777.9	707.2	777.9	1009.9
140°	730.9	799.1	1009.0	1352.2	1510.4	1352.2	1009.0	799.1	730.9	799.1	1009.0
142.5°	754.6	818.7	1009.0	1309.5	1452.8	1309.5	1009.0	818.7	754.6	818.7	1009.0
145°	788.0	845.9	1010.1	1251.9	1371.8	1251.9	1010.1	845.9	788.0	845.9	1010.1
147.5°	823.1	871.3	1011.6	1201.7	1292.3	1201.7	1011.6	871.3	823.1	871.3	1011.6
150°	845.1	887.5	1013.3	1172.6	1249.1	1172.6	1013.3	887.5	845.1	887.5	1013.3
152.5°	867.1	904.5	1014.1	1148.6	1211.9	1148.6	1014.1	904.5	867.1	904.5	1014.1
155°	898.0	928.0	1016.4	1120.0	1163.5	1120.0	1016.4	928.0	898.0	928.0	1016.4
157.5°	925.7	947.4	1018.8	1097.5	1129.0	1097.5	1018.8	947.4	925.7	947.4	1018.8
160°	943.5	961.0	1019.6	1084.7	1109.5	1084.7	1019.6	961.0	943.5	961.0	1019.6
162.5°	958.7	973.0	1019.6	1074.4	1092.6	1074.4	1019.6	973.0	958.7	973.0	1019.6
165°	980.5	989.8	1020.7	1060.1	1071.4	1060.1	1020.7	989.8	980.5	989.8	1020.7
167.5°	998.9	1003.4	1021.9	1048.9	1055.2	1048.9	1021.9	1003.4	998.9	1003.4	1021.9
170°	1009.0	1011.1	1022.8	1042.9	1045.0	1042.9	1022.8	1011.1	1009.0	1011.1	1022.8
172.5°	1016.7	1017.9	1025.3	1038.7	1039.1	1038.7	1025.3	1017.9	1016.7	1017.9	1025.3
175°	1024.9	1024.9	1026.0	1033.3	1031.2	1033.3	1026.0	1024.9	1024.9	1024.9	1026.0
177.5°	1029.1	1028.3	1027.4	1032.4	1029.1	1032.4	1027.4	1028.3	1029.1	1028.3	1027.4
180°	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	823.4	823.4	823.4	823.4	823.4	823.4
2.5°	797.8	795.3	797.8	805.5	818.3	818.3
5°	692.2	676.6	692.2	750.0	801.3	810.6
7.5°	629.2	624.2	629.2	653.6	761.1	803.0
10°	606.4	606.4	606.4	625.5	713.6	797.9
12.5°	604.1	616.6	604.1	605.1	671.0	790.2
15°	641.8	657.4	641.8	590.4	634.9	769.1
17.5°	654.5	667.0	654.5	591.0	602.5	743.0
20°	654.5	667.0	654.5	606.4	587.2	727.6
22.5°	652.0	664.5	652.0	614.0	569.3	707.2
25°	644.8	651.0	644.8	612.8	545.3	667.0
27.5°	632.0	636.4	632.0	600.0	521.7	617.9
30°	619.3	628.7	619.3	587.2	506.1	587.2
32.5°	606.4	608.3	606.4	566.8	490.3	548.9
35°	587.1	584.0	587.1	542.5	466.5	491.5
37.5°	561.1	564.9	561.1	522.1	442.1	434.0
40°	545.9	552.1	545.9	504.2	423.8	395.7
42.5°	530.6	536.8	530.6	488.9	405.9	375.3
45°	507.5	510.6	507.5	462.8	379.4	360.6
47.5°	480.7	483.8	480.7	439.1	352.0	338.3
50°	462.8	465.9	462.8	421.3	331.5	312.8
52.5°	442.4	445.5	442.4	405.9	306.1	294.9
55°	411.7	411.7	411.7	376.6	268.3	277.7
57.5°	376.7	380.4	376.7	345.9	229.3	237.4
60°	351.2	357.4	351.2	325.5	201.4	217.0
62.5°	328.2	331.9	328.2	302.5	183.4	194.0
65°	290.5	293.6	290.5	264.9	162.6	156.4
67.5°	248.3	250.8	248.3	230.4	143.1	122.6
70°	220.2	220.2	220.2	207.4	130.2	102.1
72.5°	192.2	194.7	192.2	179.4	117.4	89.4
75°	150.1	153.2	150.1	140.4	95.1	67.0
77.5°	107.9	111.1	107.9	102.1	71.6	48.5
80°	79.9	83.0	79.9	76.6	53.9	38.3
82.5°	56.8	57.4	56.8	53.6	38.6	25.5
85°	25.5	25.5	25.5	25.5	19.0	12.8
87.5°	6.6	6.8	6.6	6.8	5.7	2.8
90°	7.4	8.5	7.4	8.5	3.1	1.1
92.5°	65.5	52.5	65.5	201.4	65.6	18.0
95°	253.9	165.0	253.9	712.9	159.5	55.0
97.5°	739.9	458.6	739.9	1223.1	210.3	99.8
100°	1263.8	837.7	1263.8	1415.2	236.6	131.2
102.5°	1862.2	1443.5	1862.2	1394.0	269.7	166.7
105°	2421.5	2300.5	2421.5	1274.5	318.3	223.2
107.5°	2473.8	2606.8	2473.8	1158.0	366.1	278.8
110°	2412.9	2660.1	2412.9	1102.1	400.0	315.2

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2307.0	2623.7	2307.0	1068.3	432.2	349.9
115°	2139.7	2512.0	2139.7	1035.5	480.5	401.9
117.5°	1975.3	2353.4	1975.3	1023.0	525.9	452.5
120°	1879.4	2247.6	1879.4	1019.6	554.8	485.5
122.5°	1796.7	2138.4	1796.7	1019.6	582.7	515.1
125°	1687.4	1982.1	1687.4	1020.7	623.6	559.5
127.5°	1606.7	1863.2	1606.7	1019.4	662.5	597.2
130°	1558.0	1789.6	1558.0	1018.6	687.1	620.9
132.5°	1516.0	1726.1	1516.0	1016.0	709.9	642.0
135°	1455.4	1640.5	1455.4	1012.2	745.1	673.7
137.5°	1392.1	1559.5	1392.1	1009.9	777.9	707.2
140°	1352.2	1510.4	1352.2	1009.0	799.1	730.9
142.5°	1309.5	1452.8	1309.5	1009.0	818.7	754.6
145°	1251.9	1371.8	1251.9	1010.1	845.9	788.0
147.5°	1201.7	1292.3	1201.7	1011.6	871.3	823.1
150°	1172.6	1249.1	1172.6	1013.3	887.5	845.1
152.5°	1148.6	1211.9	1148.6	1014.1	904.5	867.1
155°	1120.0	1163.5	1120.0	1016.4	928.0	898.0
157.5°	1097.5	1129.0	1097.5	1018.8	947.4	925.7
160°	1084.7	1109.5	1084.7	1019.6	961.0	943.5
162.5°	1074.4	1092.6	1074.4	1019.6	973.0	958.7
165°	1060.1	1071.4	1060.1	1020.7	989.8	980.5
167.5°	1048.9	1055.2	1048.9	1021.9	1003.4	998.9
170°	1042.9	1045.0	1042.9	1022.8	1011.1	1009.0
172.5°	1038.7	1039.1	1038.7	1025.3	1017.9	1016.7
175°	1033.3	1031.2	1033.3	1026.0	1024.9	1024.9
177.5°	1032.4	1029.1	1032.4	1027.4	1028.3	1029.1
180°	1029.1	1029.1	1029.1	1029.1	1029.1	1029.1

TEST NUMBER: P1191376

CATALOG NUMBER: SQ2-FA-150U-050D-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	12.29	12.96	13.44	14.10	15.69	13.51	14.18	14.67	15.32	16.92
	3H	13.36	13.96	14.52	15.11	16.72	14.74	15.34	15.90	16.49	18.10
	4H	13.71	14.28	14.87	15.42	17.04	15.12	15.69	16.29	16.84	18.45
	6H	13.86	14.38	15.04	15.53	17.16	15.27	15.80	16.45	16.95	18.57
	8H	13.89	14.39	15.07	15.55	17.17	15.29	15.79	16.47	16.95	18.57
	12H	13.88	14.35	15.06	15.51	17.15	15.27	15.74	16.45	16.90	18.54
4H	2H	13.19	13.76	14.37	14.91	16.53	14.11	14.67	15.28	15.82	17.44
	3H	14.54	15.02	15.72	16.19	17.82	15.54	16.01	16.72	17.19	18.81
	4H	14.98	15.42	16.16	16.58	18.22	16.00	16.43	17.18	17.59	19.24
	6H	15.20	15.57	16.38	16.75	18.39	16.21	16.58	17.39	17.76	19.40
	8H	15.25	15.60	16.43	16.77	18.42	16.25	16.60	17.44	17.77	19.43
	12H	15.24	15.56	16.44	16.74	18.40	16.23	16.55	17.43	17.73	19.39
8H	4H	15.36	15.71	16.55	16.89	18.54	16.19	16.54	17.38	17.71	19.37
	6H	15.70	15.99	16.91	17.20	18.85	16.49	16.78	17.70	18.00	19.65
	8H	15.81	16.06	17.02	17.26	18.93	16.59	16.83	17.79	18.03	19.70
	12H	15.84	16.06	17.05	17.25	18.95	16.59	16.81	17.80	18.00	19.70
12H	4H	15.36	15.67	16.56	16.86	18.52	16.15	16.47	17.35	17.65	19.31
	6H	15.77	16.02	16.98	17.22	18.89	16.51	16.76	17.72	17.96	19.63
	8H	15.91	16.13	17.12	17.32	19.02	16.62	16.83	17.83	18.03	19.73

END OF REPORT