

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: P1191259

Luminaire Tested: SQ2-FA-050U-075D-L840-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191259
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-075D-L840-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

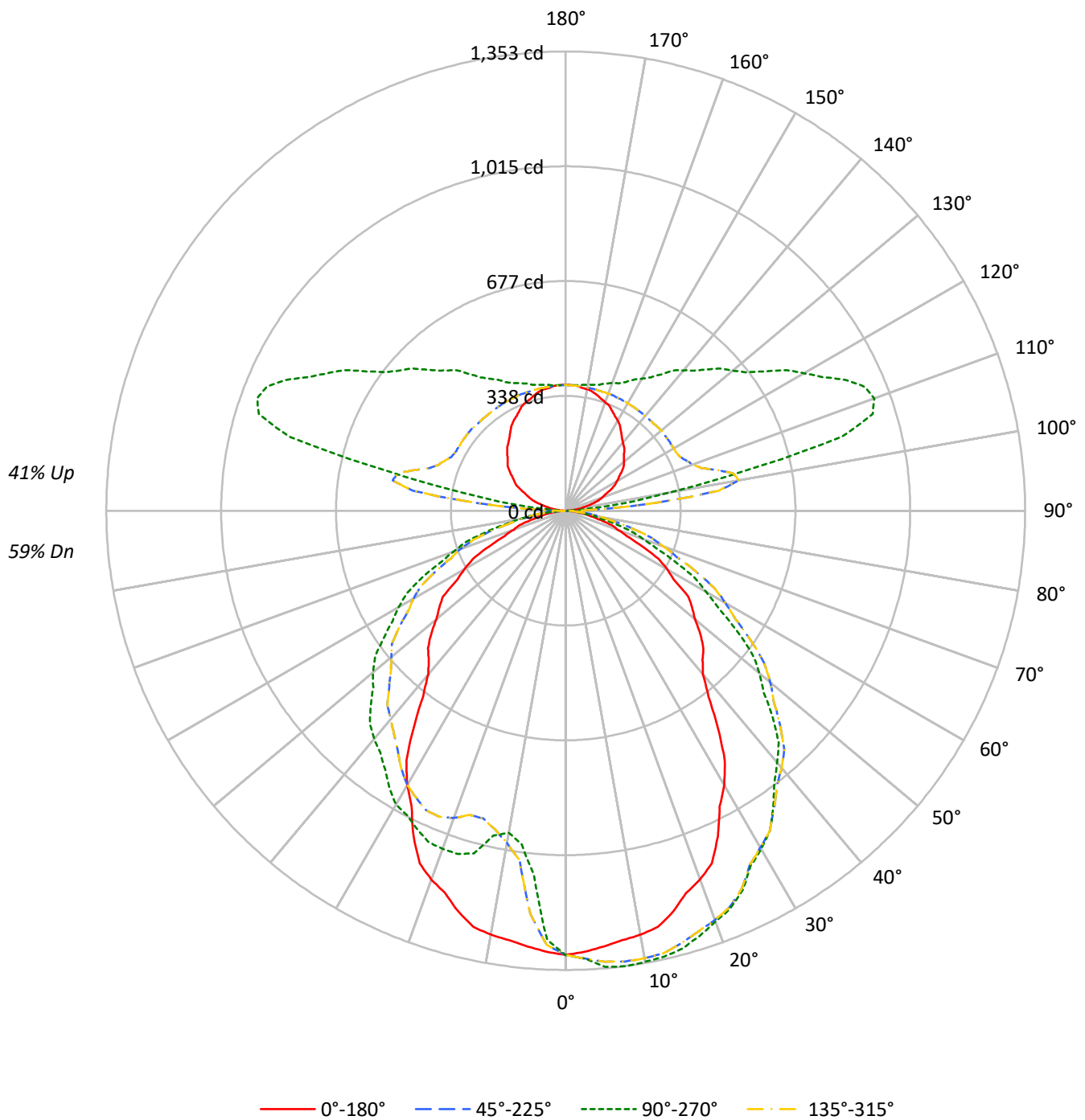
Lumens per Lamp: N/A
Luminaire Lumens: 5551.7 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 41.5
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	54
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	44	42	39
4	76	65	57	51	71	61	54	48	53	48	43	46	42	38	40	36	34
5	70	58	50	44	65	54	47	42	48	42	37	42	37	33	36	32	29
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	32	29	26
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	30	26	23
8	55	43	35	29	51	40	33	28	36	30	26	31	27	23	27	23	21
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19
10	48	36	28	24	45	34	27	23	30	25	21	27	22	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	21130	21130	21130	21130
5°	20882	21867	20882	17428
10°	20790	22120	20790	15800
15°	20433	22298	20433	17466
20°	19871	22137	19871	18215
25°	18886	21959	18886	18433
30°	17400	21466	17400	18629
35°	15396	20996	15396	18295
40°	13257	20419	13257	18495
45°	13088	19689	13088	18532
50°	12486	18728	12486	18603
55°	12422	17275	12422	18418
60°	11137	15397	11137	18345
65°	9494	13566	9494	17830
70°	7662	11495	7662	16523
75°	6644	9495	6644	15190
80°	5662	7076	5662	12264
85°	3761	3761	3761	7521

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 20384 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	2.1
10°-20°	329.0	5.9
20°-30°	499.7	9.0
30°-40°	586.6	10.6
40°-50°	595.2	10.7
50°-60°	521.4	9.4
60°-70°	369.9	6.7
70°-80°	190.5	3.4
80°-90°	40.4	0.7
90°-100°	147.6	2.7
100°-110°	468.1	8.4
110°-120°	459.0	8.3
120°-130°	373.5	6.7
130°-140°	304.6	5.5
140°-150°	237.4	4.3
150°-160°	171.1	3.1
160°-170°	104.5	1.9
170°-180°	35.3	0.6
0°-30°	946.4	17.0
0°-40°	1533.0	27.6
0°-60°	2649.7	47.7
0°-90°	3250.5	58.6
90°-120°	1074.8	19.4
90°-150°	1990.3	35.9
90°-180°	2301.0	41.4
0°-180°	5551.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1309	1309	1309	1309	1309	
5°	1288	1349	1288	1075	1288	122
15°	1222	1334	1222	1045	1222	343
25°	1060	1233	1060	1035	1060	484
35°	781	1065	781	928	781	487
45°	573	862	573	812	573	438
55°	441	614	441	654	441	382
65°	248	355	248	467	248	248
75°	106	152	106	244	106	115
85°	20	20	20	41	20	25
90°	0	4	0	4	0	1
95°	20	64	20	64	20	23
105°	82	842	82	842	82	86
115°	146	911	146	911	146	144
125°	202	716	202	716	202	179
135°	244	588	244	588	244	188
145°	284	491	284	491	284	178
155°	324	418	324	418	324	149
165°	353	384	353	384	353	100
175°	369	371	369	371	369	35
180°	371	371	371	371	371	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7
2.5°	1300.5	1320.4	1320.8	1320.8	1320.8	1320.8	1320.8	1320.4	1300.5	1300.5	1280.2
5°	1288.4	1323.1	1334.0	1339.3	1349.2	1339.3	1334.0	1323.1	1288.4	1273.5	1192.0
7.5°	1276.2	1322.8	1339.1	1348.3	1353.3	1348.3	1339.1	1322.8	1276.2	1209.7	1038.8
10°	1268.1	1322.6	1339.1	1344.3	1349.2	1344.3	1339.1	1322.6	1268.1	1134.2	994.2
12.5°	1255.9	1314.4	1335.0	1340.2	1345.2	1340.2	1335.0	1314.4	1255.9	1066.4	961.7
15°	1222.4	1301.8	1318.8	1329.1	1334.0	1329.1	1318.8	1301.8	1222.4	1009.2	938.4
17.5°	1180.8	1277.0	1299.5	1308.7	1312.7	1308.7	1299.5	1277.0	1180.8	957.6	939.4
20°	1156.5	1260.6	1283.3	1288.4	1288.4	1288.4	1283.3	1260.6	1156.5	933.3	963.7
22.5°	1124.0	1240.1	1263.0	1264.1	1268.1	1264.1	1263.0	1240.1	1124.0	904.8	975.9
25°	1060.1	1194.0	1227.5	1222.6	1232.6	1222.6	1227.5	1194.0	1060.1	866.7	973.9
27.5°	982.0	1150.6	1174.7	1179.8	1179.8	1179.8	1174.7	1150.6	982.0	829.2	953.6
30°	933.3	1121.8	1146.3	1151.4	1151.4	1151.4	1146.3	1121.8	933.3	804.4	933.3
32.5°	872.4	1096.6	1117.9	1118.9	1118.9	1118.9	1117.9	1096.6	872.4	779.2	900.8
35°	781.1	1053.9	1070.3	1070.1	1065.2	1070.1	1070.3	1053.9	781.1	741.5	862.3
37.5°	689.8	999.3	1021.6	1014.3	1009.4	1014.3	1021.6	999.3	689.8	702.7	829.8
40°	629.0	966.2	989.1	973.8	968.8	973.8	989.1	966.2	629.0	673.6	801.4
42.5°	596.5	929.8	952.6	933.2	928.2	933.2	952.6	929.8	596.5	645.1	777.1
45°	573.2	870.7	892.7	872.2	862.3	872.2	892.7	870.7	573.2	602.9	735.5
47.5°	537.7	799.5	830.8	800.2	790.3	800.2	830.8	799.5	537.7	559.5	697.9
50°	497.1	755.0	786.2	755.5	745.6	755.5	786.2	755.0	497.1	526.8	669.5
52.5°	468.7	710.7	737.5	702.8	692.9	702.8	737.5	710.7	468.7	486.5	645.2
55°	441.3	644.6	664.5	628.6	613.7	628.6	664.5	644.6	441.3	426.4	598.5
57.5°	377.4	570.8	591.4	550.5	533.6	550.5	591.4	570.8	377.4	364.5	549.8
60°	344.9	518.5	542.7	501.6	476.8	501.6	542.7	518.5	344.9	320.1	517.4
62.5°	308.4	462.1	494.0	452.9	428.1	452.9	494.0	462.1	308.4	291.5	480.9
65°	248.5	382.5	421.0	379.9	355.1	379.9	421.0	382.5	248.5	258.5	421.0
67.5°	194.8	309.8	353.0	307.9	288.1	307.9	353.0	309.8	194.8	227.5	366.2
70°	162.3	261.5	304.3	263.3	243.5	263.3	304.3	261.5	162.3	206.9	329.7
72.5°	142.0	217.4	263.8	218.8	202.9	218.8	263.8	217.4	142.0	186.7	285.1
75°	106.5	151.2	202.9	162.1	152.2	162.1	202.9	151.2	106.5	151.2	223.2
77.5°	77.1	97.9	143.0	108.5	104.5	108.5	143.0	97.9	77.1	113.8	162.3
80°	60.9	65.8	106.5	76.1	76.1	76.1	106.5	65.8	60.9	85.7	121.7
82.5°	40.6	45.5	74.1	51.6	47.7	51.6	74.1	45.5	40.6	61.4	85.2
85°	20.3	20.3	30.4	20.3	20.3	20.3	30.4	20.3	20.3	30.2	40.6
87.5°	4.1	4.3	8.8	4.8	4.8	4.8	8.8	4.3	4.1	8.3	8.8
90°	0.0	1.1	3.5	3.5	3.5	3.5	3.5	1.1	0.0	1.1	3.5
92.5°	6.5	25.9	82.7	27.5	19.3	27.5	82.7	25.9	6.5	25.9	82.7
95°	19.8	59.7	268.0	99.4	64.1	99.4	268.0	59.7	19.8	59.7	268.0
97.5°	36.8	77.4	454.0	283.7	174.1	283.7	454.0	77.4	36.8	77.4	454.0
100°	48.9	87.7	517.4	471.7	306.5	471.7	517.4	87.7	48.9	87.7	517.4
102.5°	62.0	98.9	506.2	692.7	530.2	692.7	506.2	98.9	62.0	98.9	506.2
105°	81.6	114.6	461.5	879.0	842.5	879.0	461.5	114.6	81.6	114.6	461.5
107.5°	101.1	131.7	418.8	898.4	947.6	898.4	418.8	131.7	101.1	131.7	418.8
110°	114.2	143.8	397.4	876.0	967.2	876.0	397.4	143.8	114.2	143.8	397.4

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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°	127.3	155.1	385.2	837.4	953.2	837.4	385.2	155.1	127.3	155.1	385.2
115°	145.7	173.0	372.9	774.5	911.3	774.5	372.9	173.0	145.7	173.0	372.9
117.5°	163.6	189.6	368.0	714.0	851.8	714.0	368.0	189.6	163.6	189.6	368.0
120°	174.8	199.9	367.1	676.6	809.9	676.6	367.1	199.9	174.8	199.9	367.1
122.5°	186.0	210.1	367.1	646.5	770.7	646.5	367.1	210.1	186.0	210.1	367.1
125°	201.6	225.5	367.1	607.2	715.5	607.2	367.1	225.5	201.6	225.5	367.1
127.5°	215.3	238.4	367.1	576.8	669.1	576.8	367.1	238.4	215.3	238.4	367.1
130°	223.7	247.7	367.1	558.9	642.1	558.9	367.1	247.7	223.7	247.7	367.1
132.5°	232.1	256.1	366.1	544.7	619.7	544.7	366.1	256.1	232.1	256.1	366.1
135°	243.5	267.5	364.7	522.4	588.5	522.4	364.7	267.5	243.5	267.5	364.7
137.5°	254.7	279.8	364.5	501.0	560.0	501.0	364.5	279.8	254.7	279.8	364.5
140°	262.2	287.3	363.6	486.0	539.5	486.0	363.6	287.3	262.2	287.3	363.6
142.5°	271.5	295.7	364.5	471.0	520.9	471.0	364.5	295.7	271.5	295.7	364.5
145°	284.3	306.0	364.7	450.7	490.6	450.7	364.7	306.0	284.3	306.0	364.7
147.5°	297.1	315.6	365.0	432.8	465.4	432.8	365.0	315.6	297.1	315.6	365.0
150°	306.5	321.3	365.9	422.4	448.6	422.4	365.9	321.3	306.5	321.3	365.9
152.5°	313.9	326.9	365.9	413.9	435.6	413.9	365.9	326.9	313.9	326.9	365.9
155°	324.0	335.3	365.9	402.4	418.3	402.4	365.9	335.3	324.0	335.3	365.9
157.5°	334.7	342.4	367.1	395.3	406.2	395.3	367.1	342.4	334.7	342.4	367.1
160°	340.3	347.1	367.1	390.6	399.7	390.6	367.1	347.1	340.3	347.1	367.1
162.5°	345.9	350.9	367.1	386.8	393.2	386.8	367.1	350.9	345.9	350.9	367.1
165°	353.1	356.5	367.1	381.1	384.5	381.1	367.1	356.5	353.1	356.5	367.1
167.5°	359.8	360.8	368.2	377.2	380.1	377.2	368.2	360.8	359.8	360.8	368.2
170°	363.6	363.6	368.2	375.3	376.4	375.3	368.2	363.6	363.6	363.6	368.2
172.5°	365.4	366.3	368.2	373.4	373.6	373.4	368.2	366.3	365.4	366.3	368.2
175°	369.4	368.3	369.4	371.7	370.6	371.7	369.4	368.3	369.4	368.3	369.4
177.5°	370.6	369.7	369.6	371.5	369.6	371.5	369.6	369.7	370.6	369.7	369.6
180°	370.6	370.6	370.6	370.6	370.6	370.6	370.6	370.6	370.6	370.6	370.6

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1308.7	1308.7	1308.7	1308.7	1308.7	1308.7
2.5°	1268.0	1264.0	1268.0	1280.2	1300.5	1300.5
5°	1100.1	1075.3	1100.1	1192.0	1273.5	1288.4
7.5°	1000.1	992.1	1000.1	1038.8	1209.7	1276.2
10°	963.7	963.7	963.7	994.2	1134.2	1268.1
12.5°	960.1	980.0	960.1	961.7	1066.4	1255.9
15°	1020.1	1044.9	1020.1	938.4	1009.2	1222.4
17.5°	1040.3	1060.1	1040.3	939.4	957.6	1180.8
20°	1040.3	1060.1	1040.3	963.7	933.3	1156.5
22.5°	1036.2	1056.1	1036.2	975.9	904.8	1124.0
25°	1024.8	1034.7	1024.8	973.9	866.7	1060.1
27.5°	1004.5	1011.4	1004.5	953.6	829.2	982.0
30°	984.4	999.2	984.4	933.3	804.4	933.3
32.5°	963.8	966.8	963.8	900.8	779.2	872.4
35°	933.2	928.2	933.2	862.3	741.5	781.1
37.5°	891.8	897.8	891.8	829.8	702.7	689.8
40°	867.6	877.5	867.6	801.4	673.6	629.0
42.5°	843.2	853.2	843.2	777.1	645.1	596.5
45°	806.6	811.6	806.6	735.5	602.9	573.2
47.5°	764.0	769.0	764.0	697.9	559.5	537.7
50°	735.6	740.6	735.6	669.5	526.8	497.1
52.5°	703.1	708.1	703.1	645.2	486.5	468.7
55°	654.3	654.3	654.3	598.5	426.4	441.3
57.5°	598.7	604.6	598.7	549.8	364.5	377.4
60°	558.2	568.1	558.2	517.4	320.1	344.9
62.5°	521.6	527.5	521.6	480.9	291.5	308.4
65°	461.7	466.7	461.7	421.0	258.5	248.5
67.5°	394.7	398.7	394.7	366.2	227.5	194.8
70°	350.0	350.0	350.0	329.7	206.9	162.3
72.5°	305.4	309.4	305.4	285.1	186.7	142.0
75°	238.5	243.5	238.5	223.2	151.2	106.5
77.5°	171.6	176.5	171.6	162.3	113.8	77.1
80°	126.9	131.9	126.9	121.7	85.7	60.9
82.5°	90.3	91.3	90.3	85.2	61.4	40.6
85°	40.6	40.6	40.6	40.6	30.2	20.3
87.5°	8.8	8.8	8.8	8.8	8.3	4.1
90°	3.5	3.5	3.5	3.5	1.1	0.0
92.5°	27.5	19.3	27.5	82.7	25.9	6.5
95°	99.4	64.1	99.4	268.0	59.7	19.8
97.5°	283.7	174.1	283.7	454.0	77.4	36.8
100°	471.7	306.5	471.7	517.4	87.7	48.9
102.5°	692.7	530.2	692.7	506.2	98.9	62.0
105°	879.0	842.5	879.0	461.5	114.6	81.6
107.5°	898.4	947.6	898.4	418.8	131.7	101.1
110°	876.0	967.2	876.0	397.4	143.8	114.2

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	837.4	953.2	837.4	385.2	155.1	127.3
115°	774.5	911.3	774.5	372.9	173.0	145.7
117.5°	714.0	851.8	714.0	368.0	189.6	163.6
120°	676.6	809.9	676.6	367.1	199.9	174.8
122.5°	646.5	770.7	646.5	367.1	210.1	186.0
125°	607.2	715.5	607.2	367.1	225.5	201.6
127.5°	576.8	669.1	576.8	367.1	238.4	215.3
130°	558.9	642.1	558.9	367.1	247.7	223.7
132.5°	544.7	619.7	544.7	366.1	256.1	232.1
135°	522.4	588.5	522.4	364.7	267.5	243.5
137.5°	501.0	560.0	501.0	364.5	279.8	254.7
140°	486.0	539.5	486.0	363.6	287.3	262.2
142.5°	471.0	520.9	471.0	364.5	295.7	271.5
145°	450.7	490.6	450.7	364.7	306.0	284.3
147.5°	432.8	465.4	432.8	365.0	315.6	297.1
150°	422.4	448.6	422.4	365.9	321.3	306.5
152.5°	413.9	435.6	413.9	365.9	326.9	313.9
155°	402.4	418.3	402.4	365.9	335.3	324.0
157.5°	395.3	406.2	395.3	367.1	342.4	334.7
160°	390.6	399.7	390.6	367.1	347.1	340.3
162.5°	386.8	393.2	386.8	367.1	350.9	345.9
165°	381.1	384.5	381.1	367.1	356.5	353.1
167.5°	377.2	380.1	377.2	368.2	360.8	359.8
170°	375.3	376.4	375.3	368.2	363.6	363.6
172.5°	373.4	373.6	373.4	368.2	366.3	365.4
175°	371.7	370.6	371.7	369.4	368.3	369.4
177.5°	371.5	369.6	371.5	369.6	369.7	370.6
180°	370.6	370.6	370.6	370.6	370.6	370.6

TEST NUMBER: P1191259

CATALOG NUMBER: SQ2-FA-050U-075D-L840-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	17.70	18.65	18.58	19.55	20.69	18.93	19.87	19.81	20.77	21.92
	3H	18.80	19.64	19.69	20.55	21.72	20.18	21.02	21.07	21.93	23.10
	4H	19.16	19.95	20.07	20.87	22.05	20.57	21.37	21.48	22.29	23.47
	6H	19.32	20.06	20.24	20.98	22.17	20.74	21.47	21.66	22.39	23.59
	8H	19.36	20.06	20.29	21.00	22.19	20.76	21.46	21.69	22.40	23.60
	12H	19.36	20.03	20.29	20.96	22.18	20.75	21.42	21.69	22.35	23.57
4H	2H	18.64	19.44	19.56	20.36	21.54	19.55	20.35	20.47	21.27	22.45
	3H	20.02	20.68	20.94	21.63	22.82	21.01	21.68	21.94	22.62	23.82
	4H	20.47	21.07	21.40	22.01	23.23	21.48	22.09	22.42	23.03	24.25
	6H	20.70	21.22	21.65	22.19	23.41	21.71	22.23	22.66	23.20	24.42
	8H	20.76	21.25	21.71	22.21	23.44	21.76	22.25	22.71	23.21	24.44
	12H	20.76	21.20	21.73	22.18	23.42	21.75	22.19	22.72	23.17	24.41
8H	4H	20.87	21.36	21.82	22.32	23.55	21.70	22.19	22.65	23.15	24.38
	6H	21.22	21.62	22.20	22.63	23.86	22.01	22.42	22.99	23.42	24.65
	8H	21.34	21.69	22.32	22.68	23.93	22.11	22.46	23.09	23.45	24.70
	12H	21.38	21.69	22.37	22.67	23.97	22.13	22.44	23.12	23.42	24.72
12H	4H	20.88	21.32	21.85	22.30	23.54	21.67	22.11	22.64	23.09	24.33
	6H	21.29	21.65	22.28	22.64	23.89	22.03	22.39	23.02	23.38	24.63
	8H	21.44	21.75	22.43	22.74	24.04	22.15	22.46	23.14	23.45	24.74