

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: P1191331

Luminaire Tested: SQ2-FA-100U-075D-L840-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191331
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-100U-075D-L840-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

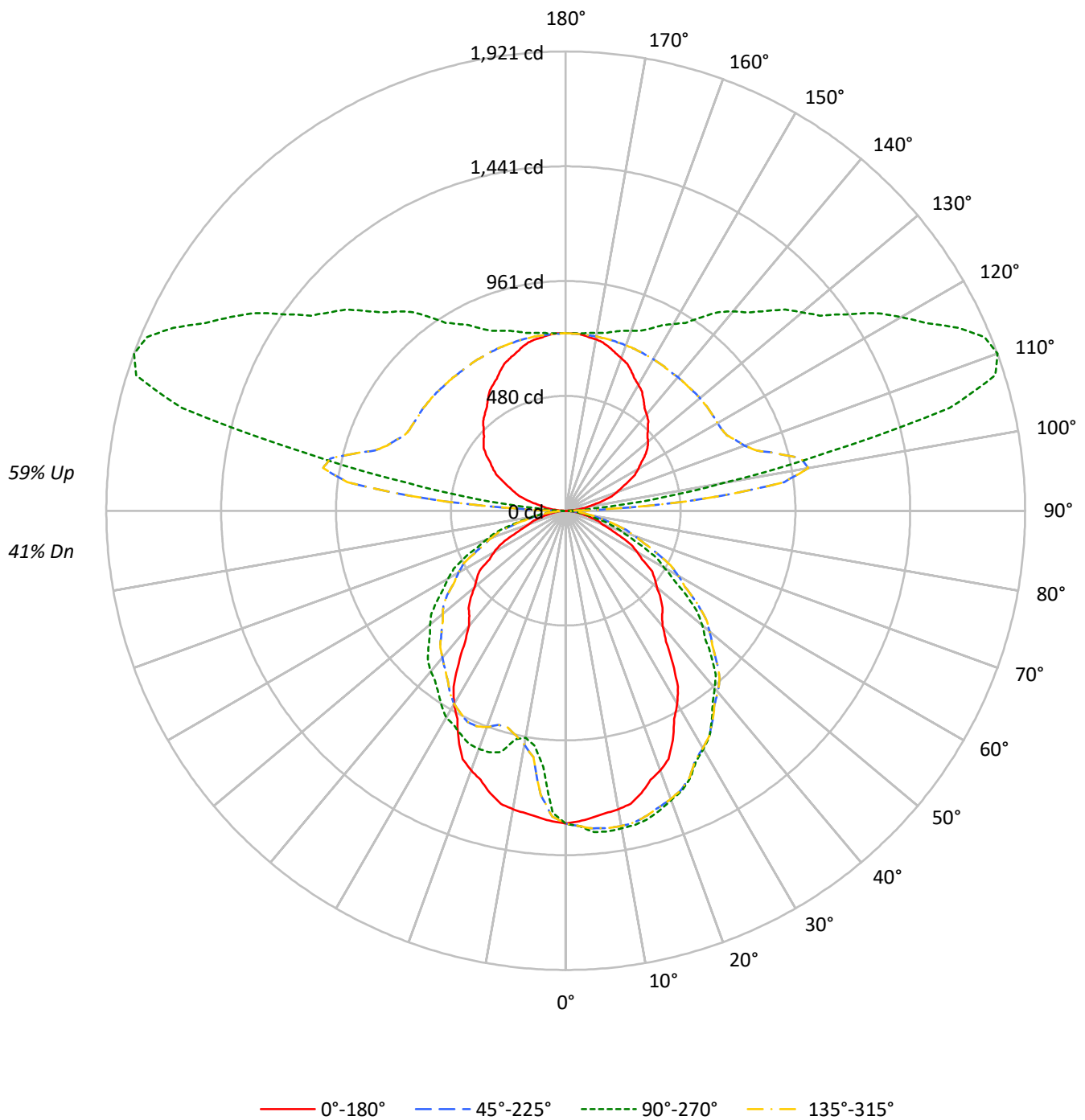
Lumens per Lamp: N/A
Luminaire Lumens: 7870.3 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.3
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	34
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29
4	73	62	54	49	66	57	50	45	47	42	38	38	35	32	30	27	25
5	67	55	47	42	61	51	44	39	42	37	33	34	30	27	27	24	22
6	61	50	42	36	56	46	39	33	38	33	29	31	27	24	24	21	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	17	15
9	49	37	30	25	45	34	27	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	15	13

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	1.5
10°-20°	329.0	4.2
20°-30°	499.7	6.3
30°-40°	586.6	7.5
40°-50°	595.2	7.6
50°-60°	521.4	6.6
60°-70°	369.9	4.7
70°-80°	190.5	2.4
80°-90°	41.3	0.5
90°-100°	309.9	3.9
100°-110°	937.4	11.9
110°-120°	915.1	11.6
120°-130°	747.8	9.5
130°-140°	610.4	7.8
140°-150°	475.2	6.0
150°-160°	342.6	4.4
160°-170°	209.7	2.7
170°-180°	70.8	0.9
0°-30°	946.4	12.0
0°-40°	1533.0	19.5
0°-60°	2649.7	33.7
0°-90°	3251.4	41.3
90°-120°	2162.5	27.5
90°-150°	3995.9	50.8
90°-180°	4619.0	58.7
0°-180°	7870.3	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	7	0	7	0	2
95°	38	136	38	136	38	46
105°	163	1661	163	1661	163	171
115°	290	1809	290	1809	290	287
125°	406	1432	406	1432	406	360
135°	486	1180	486	1180	486	376
145°	567	987	567	987	567	355
155°	647	840	647	840	647	298
165°	707	775	707	775	707	199
175°	740	744	740	744	740	70
180°	742	742	742	742	742	

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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	4.5	10.9	5.7	5.5	5.7	10.9	4.5	4.1	8.5	10.9
90°	0.0	2.3	14.0	8.1	7.0	8.1	14.0	2.3	0.0	2.3	14.0
92.5°	13.0	52.7	189.2	62.7	45.2	62.7	189.2	52.7	13.0	52.7	189.2
95°	38.4	121.6	584.9	216.1	136.3	216.1	584.9	121.6	38.4	121.6	584.9
97.5°	74.3	154.8	921.8	610.0	371.4	610.0	921.8	154.8	74.3	154.8	921.8
100°	96.7	175.3	1029.9	995.7	668.8	995.7	1029.9	175.3	96.7	175.3	1029.9
102.5°	121.9	197.7	1007.6	1396.6	1113.4	1396.6	1007.6	197.7	121.9	197.7	1007.6
105°	163.1	229.2	920.4	1748.0	1661.4	1748.0	920.4	229.2	163.1	229.2	920.4
107.5°	202.3	265.4	836.5	1782.8	1883.0	1782.8	836.5	265.4	202.3	265.4	836.5
110°	228.4	288.7	794.6	1739.0	1921.2	1739.0	794.6	288.7	228.4	288.7	794.6

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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°	253.5	312.1	769.4	1665.5	1896.1	1665.5	769.4	312.1	253.5	312.1	769.4
115°	290.1	345.9	744.5	1540.5	1809.4	1540.5	744.5	345.9	290.1	345.9	744.5
117.5°	326.5	379.3	735.6	1423.5	1698.7	1423.5	735.6	379.3	326.5	379.3	735.6
120°	350.7	400.8	732.8	1355.2	1619.5	1355.2	732.8	400.8	350.7	400.8	732.8
122.5°	373.1	420.5	732.8	1295.1	1539.3	1295.1	732.8	420.5	373.1	420.5	732.8
125°	405.5	449.9	734.0	1216.6	1431.9	1216.6	734.0	449.9	405.5	449.9	734.0
127.5°	431.8	477.8	732.8	1157.4	1341.0	1157.4	732.8	477.8	431.8	477.8	732.8
130°	448.6	496.4	732.8	1123.4	1289.8	1123.4	732.8	496.4	448.6	496.4	732.8
132.5°	463.5	512.2	731.9	1092.4	1245.9	1092.4	731.9	512.2	463.5	512.2	731.9
135°	485.8	537.1	729.3	1049.2	1180.2	1049.2	729.3	537.1	485.8	537.1	729.3
137.5°	510.8	559.5	729.3	1003.1	1124.5	1003.1	729.3	559.5	510.8	559.5	729.3
140°	526.6	574.5	729.3	973.1	1088.2	973.1	729.3	574.5	526.6	574.5	729.3
142.5°	542.5	588.5	728.4	945.8	1046.3	945.8	728.4	588.5	542.5	588.5	728.4
145°	567.4	609.5	729.3	902.5	986.8	902.5	729.3	609.5	567.4	609.5	729.3
147.5°	592.3	628.1	730.7	866.9	931.6	866.9	730.7	628.1	592.3	628.1	730.7
150°	608.2	641.2	731.7	847.1	901.8	847.1	731.7	641.2	608.2	641.2	731.7
152.5°	623.1	652.5	732.6	830.1	874.8	830.1	732.6	652.5	623.1	652.5	732.6
155°	646.6	668.3	734.0	809.3	840.0	809.3	734.0	668.3	646.6	668.3	734.0
157.5°	667.1	684.7	735.4	793.9	815.3	793.9	735.4	684.7	667.1	684.7	735.4
160°	679.2	694.1	736.3	784.5	800.4	784.5	736.3	694.1	679.2	694.1	736.3
162.5°	691.4	702.5	737.3	776.0	789.2	776.0	737.3	702.5	691.4	702.5	737.3
165°	707.2	715.2	737.5	765.7	774.8	765.7	737.5	715.2	707.2	715.2	737.5
167.5°	720.7	724.8	738.9	757.6	761.5	757.6	738.9	724.8	720.7	724.8	738.9
170°	728.2	730.5	739.8	753.8	755.0	753.8	739.8	730.5	728.2	730.5	739.8
172.5°	732.8	734.2	739.8	750.1	750.3	750.1	739.8	734.2	732.8	734.2	739.8
175°	739.8	739.8	741.0	746.8	744.5	746.8	741.0	739.8	739.8	739.8	741.0
177.5°	743.1	742.2	741.2	744.0	742.2	744.0	741.2	742.2	743.1	742.2	741.2
180°	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2

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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°	9.7	9.5	9.7	10.9	8.5	4.1
90°	8.1	7.0	8.1	14.0	2.3	0.0
92.5°	62.7	45.2	62.7	189.2	52.7	13.0
95°	216.1	136.3	216.1	584.9	121.6	38.4
97.5°	610.0	371.4	610.0	921.8	154.8	74.3
100°	995.7	668.8	995.7	1029.9	175.3	96.7
102.5°	1396.6	1113.4	1396.6	1007.6	197.7	121.9
105°	1748.0	1661.4	1748.0	920.4	229.2	163.1
107.5°	1782.8	1883.0	1782.8	836.5	265.4	202.3
110°	1739.0	1921.2	1739.0	794.6	288.7	228.4

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1665.5	1896.1	1665.5	769.4	312.1	253.5
115°	1540.5	1809.4	1540.5	744.5	345.9	290.1
117.5°	1423.5	1698.7	1423.5	735.6	379.3	326.5
120°	1355.2	1619.5	1355.2	732.8	400.8	350.7
122.5°	1295.1	1539.3	1295.1	732.8	420.5	373.1
125°	1216.6	1431.9	1216.6	734.0	449.9	405.5
127.5°	1157.4	1341.0	1157.4	732.8	477.8	431.8
130°	1123.4	1289.8	1123.4	732.8	496.4	448.6
132.5°	1092.4	1245.9	1092.4	731.9	512.2	463.5
135°	1049.2	1180.2	1049.2	729.3	537.1	485.8
137.5°	1003.1	1124.5	1003.1	729.3	559.5	510.8
140°	973.1	1088.2	973.1	729.3	574.5	526.6
142.5°	945.8	1046.3	945.8	728.4	588.5	542.5
145°	902.5	986.8	902.5	729.3	609.5	567.4
147.5°	866.9	931.6	866.9	730.7	628.1	592.3
150°	847.1	901.8	847.1	731.7	641.2	608.2
152.5°	830.1	874.8	830.1	732.6	652.5	623.1
155°	809.3	840.0	809.3	734.0	668.3	646.6
157.5°	793.9	815.3	793.9	735.4	684.7	667.1
160°	784.5	800.4	784.5	736.3	694.1	679.2
162.5°	776.0	789.2	776.0	737.3	702.5	691.4
165°	765.7	774.8	765.7	737.5	715.2	707.2
167.5°	757.6	761.5	757.6	738.9	724.8	720.7
170°	753.8	755.0	753.8	739.8	730.5	728.2
172.5°	750.1	750.3	750.1	739.8	734.2	732.8
175°	746.8	744.5	746.8	741.0	739.8	739.8
177.5°	744.0	742.2	744.0	741.2	742.2	743.1
180°	742.2	742.2	742.2	742.2	742.2	742.2

TEST NUMBER: P1191331

CATALOG NUMBER: SQ2-FA-100U-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	16.09	16.88	17.12	17.91	19.30	17.32	18.10	18.34	19.14	20.53
	3H	17.17	17.88	18.21	18.92	20.33	18.55	19.26	19.59	20.30	21.71
	4H	17.52	18.19	18.57	19.24	20.65	18.94	19.61	19.99	20.65	22.07
	6H	17.68	18.30	18.74	19.35	20.78	19.10	19.71	20.16	20.76	22.19
	8H	17.71	18.30	18.78	19.37	20.79	19.12	19.70	20.18	20.77	22.19
	12H	17.71	18.26	18.78	19.33	20.77	19.10	19.66	20.17	20.72	22.17
4H	2H	17.01	17.68	18.07	18.72	20.14	17.92	18.59	18.98	19.64	21.05
	3H	18.37	18.93	19.44	20.00	21.43	19.36	19.92	20.43	21.00	22.43
	4H	18.81	19.32	19.88	20.39	21.84	19.83	20.34	20.90	21.40	22.86
	6H	19.04	19.47	20.12	20.56	22.01	20.05	20.48	21.13	21.57	23.02
	8H	19.09	19.50	20.17	20.58	22.04	20.09	20.50	21.17	21.58	23.04
	12H	19.09	19.46	20.19	20.55	22.02	20.08	20.45	21.18	21.54	23.01
8H	4H	19.21	19.61	20.29	20.70	22.16	20.03	20.44	21.11	21.52	22.98
	6H	19.55	19.88	20.65	21.01	22.47	20.34	20.68	21.44	21.80	23.26
	8H	19.66	19.96	20.77	21.06	22.54	20.43	20.73	21.54	21.83	23.31
	12H	19.69	19.95	20.81	21.06	22.57	20.44	20.70	21.56	21.80	23.32
12H	4H	19.21	19.57	20.30	20.67	22.14	20.00	20.37	21.10	21.46	22.93
	6H	19.62	19.91	20.73	21.02	22.50	20.36	20.66	21.47	21.76	23.24
	8H	19.76	20.02	20.87	21.12	22.64	20.47	20.73	21.58	21.83	23.35