

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: P1191257

Luminaire Tested: SQ2-FA-050U-075D-L830-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191257
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-L830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

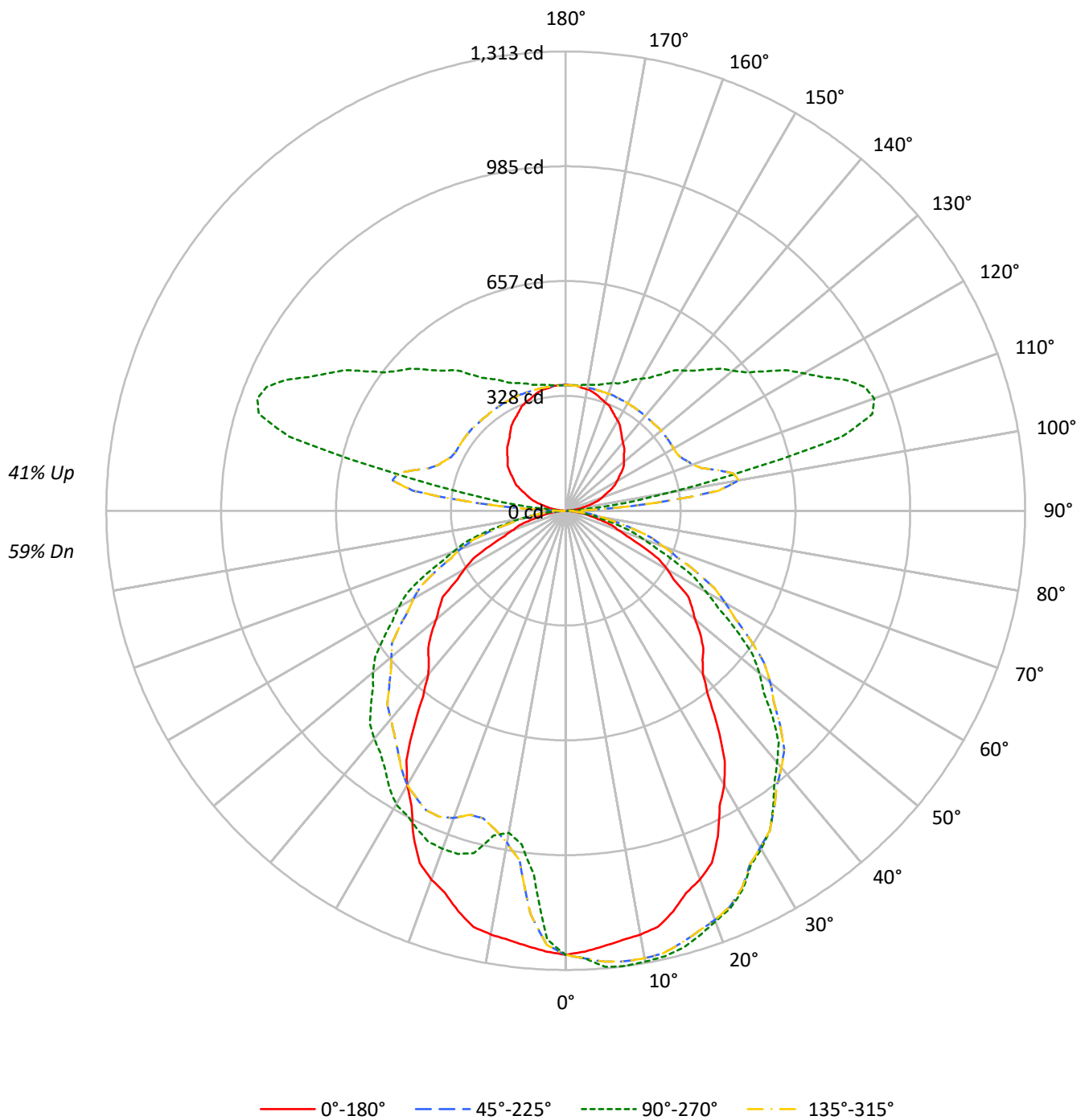
Lumens per Lamp: N/A
Luminaire Lumens: 5386.2 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	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	2.1
10°-20°	319.2	5.9
20°-30°	484.8	9.0
30°-40°	569.1	10.6
40°-50°	577.5	10.7
50°-60°	505.9	9.4
60°-70°	358.9	6.7
70°-80°	184.8	3.4
80°-90°	39.2	0.7
90°-100°	143.2	2.7
100°-110°	454.2	8.4
110°-120°	445.3	8.3
120°-130°	362.4	6.7
130°-140°	295.5	5.5
140°-150°	230.4	4.3
150°-160°	166.0	3.1
160°-170°	101.4	1.9
170°-180°	34.2	0.6
0°-30°	918.2	17.0
0°-40°	1487.3	27.6
0°-60°	2570.7	47.7
0°-90°	3153.6	58.6
90°-120°	1042.7	19.4
90°-150°	1930.9	35.8
90°-180°	2233.0	41.5
0°-180°	5386.2	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	3	0	3	0	1
95°	19	62	19	62	19	22
105°	79	817	79	817	79	83
115°	141	884	141	884	141	139
125°	196	694	196	694	196	174
135°	236	571	236	571	236	182
145°	276	476	276	476	276	173
155°	314	406	314	406	314	145
165°	343	373	343	373	343	97
175°	358	360	358	360	358	34
180°	360	360	360	360	360	

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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	4.2	8.6	4.6	4.6	4.6	8.6	4.2	3.9	8.0	8.6
90°	0.0	1.1	3.4	3.4	3.4	3.4	3.4	1.1	0.0	1.1	3.4
92.5°	6.3	25.1	80.3	26.7	18.8	26.7	80.3	25.1	6.3	25.1	80.3
95°	19.2	57.9	260.0	96.4	62.2	96.4	260.0	57.9	19.2	57.9	260.0
97.5°	35.7	75.1	440.5	275.2	168.9	275.2	440.5	75.1	35.7	75.1	440.5
100°	47.5	85.1	502.0	457.6	297.3	457.6	502.0	85.1	47.5	85.1	502.0
102.5°	60.1	96.0	491.1	672.0	514.4	672.0	491.1	96.0	60.1	96.0	491.1
105°	79.1	111.2	447.7	852.8	817.4	852.8	447.7	111.2	79.1	111.2	447.7
107.5°	98.1	127.8	406.3	871.6	919.4	871.6	406.3	127.8	98.1	127.8	406.3
110°	110.8	139.5	385.5	849.9	938.3	849.9	385.5	139.5	110.8	139.5	385.5

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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°	123.5	150.4	373.8	812.5	924.8	812.5	373.8	150.4	123.5	150.4	373.8
115°	141.3	167.8	361.8	751.4	884.1	751.4	361.8	167.8	141.3	167.8	361.8
117.5°	158.7	183.9	357.0	692.7	826.4	692.7	357.0	183.9	158.7	183.9	357.0
120°	169.6	193.9	356.1	656.4	785.7	656.4	356.1	193.9	169.6	193.9	356.1
122.5°	180.4	203.9	356.1	627.2	747.7	627.2	356.1	203.9	180.4	203.9	356.1
125°	195.6	218.8	356.1	589.1	694.2	589.1	356.1	218.8	195.6	218.8	356.1
127.5°	208.9	231.3	356.1	559.6	649.2	559.6	356.1	231.3	208.9	231.3	356.1
130°	217.1	240.3	356.1	542.2	622.9	542.2	356.1	240.3	217.1	240.3	356.1
132.5°	225.2	248.4	355.2	528.5	601.2	528.5	355.2	248.4	225.2	248.4	355.2
135°	236.3	259.5	353.9	506.8	570.9	506.8	353.9	259.5	236.3	259.5	353.9
137.5°	247.1	271.5	353.6	486.1	543.3	486.1	353.6	271.5	247.1	271.5	353.6
140°	254.4	278.7	352.7	471.5	523.4	471.5	352.7	278.7	254.4	278.7	352.7
142.5°	263.4	286.9	353.6	456.9	505.4	456.9	353.6	286.9	263.4	286.9	353.6
145°	275.9	296.9	353.9	437.3	476.0	437.3	353.9	296.9	275.9	296.9	353.9
147.5°	288.3	306.2	354.1	419.9	451.5	419.9	354.1	306.2	288.3	306.2	354.1
150°	297.3	311.7	355.0	409.8	435.3	409.8	355.0	311.7	297.3	311.7	355.0
152.5°	304.6	317.2	355.0	401.6	422.6	401.6	355.0	317.2	304.6	317.2	355.0
155°	314.3	325.3	355.0	390.4	405.9	390.4	355.0	325.3	314.3	325.3	355.0
157.5°	324.7	332.2	356.1	383.5	394.1	383.5	356.1	332.2	324.7	332.2	356.1
160°	330.1	336.7	356.1	378.9	387.8	378.9	356.1	336.7	330.1	336.7	356.1
162.5°	335.5	340.4	356.1	375.3	381.4	375.3	356.1	340.4	335.5	340.4	356.1
165°	342.6	345.9	356.1	369.8	373.1	369.8	356.1	345.9	342.6	345.9	356.1
167.5°	349.1	350.0	357.3	365.9	368.8	365.9	357.3	350.0	349.1	350.0	357.3
170°	352.7	352.7	357.3	364.1	365.2	364.1	357.3	352.7	352.7	352.7	357.3
172.5°	354.5	355.4	357.3	362.2	362.5	362.2	357.3	355.4	354.5	355.4	357.3
175°	358.4	357.3	358.4	360.6	359.5	360.6	358.4	357.3	358.4	357.3	358.4
177.5°	359.5	358.6	358.6	360.4	358.6	360.4	358.6	358.6	359.5	358.6	358.6
180°	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5

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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°	8.6	8.6	8.6	8.6	8.0	3.9
90°	3.4	3.4	3.4	3.4	1.1	0.0
92.5°	26.7	18.8	26.7	80.3	25.1	6.3
95°	96.4	62.2	96.4	260.0	57.9	19.2
97.5°	275.2	168.9	275.2	440.5	75.1	35.7
100°	457.6	297.3	457.6	502.0	85.1	47.5
102.5°	672.0	514.4	672.0	491.1	96.0	60.1
105°	852.8	817.4	852.8	447.7	111.2	79.1
107.5°	871.6	919.4	871.6	406.3	127.8	98.1
110°	849.9	938.3	849.9	385.5	139.5	110.8

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	812.5	924.8	812.5	373.8	150.4	123.5
115°	751.4	884.1	751.4	361.8	167.8	141.3
117.5°	692.7	826.4	692.7	357.0	183.9	158.7
120°	656.4	785.7	656.4	356.1	193.9	169.6
122.5°	627.2	747.7	627.2	356.1	203.9	180.4
125°	589.1	694.2	589.1	356.1	218.8	195.6
127.5°	559.6	649.2	559.6	356.1	231.3	208.9
130°	542.2	622.9	542.2	356.1	240.3	217.1
132.5°	528.5	601.2	528.5	355.2	248.4	225.2
135°	506.8	570.9	506.8	353.9	259.5	236.3
137.5°	486.1	543.3	486.1	353.6	271.5	247.1
140°	471.5	523.4	471.5	352.7	278.7	254.4
142.5°	456.9	505.4	456.9	353.6	286.9	263.4
145°	437.3	476.0	437.3	353.9	296.9	275.9
147.5°	419.9	451.5	419.9	354.1	306.2	288.3
150°	409.8	435.3	409.8	355.0	311.7	297.3
152.5°	401.6	422.6	401.6	355.0	317.2	304.6
155°	390.4	405.9	390.4	355.0	325.3	314.3
157.5°	383.5	394.1	383.5	356.1	332.2	324.7
160°	378.9	387.8	378.9	356.1	336.7	330.1
162.5°	375.3	381.4	375.3	356.1	340.4	335.5
165°	369.8	373.1	369.8	356.1	345.9	342.6
167.5°	365.9	368.8	365.9	357.3	350.0	349.1
170°	364.1	365.2	364.1	357.3	352.7	352.7
172.5°	362.2	362.5	362.2	357.3	355.4	354.5
175°	360.6	359.5	360.6	358.4	357.3	358.4
177.5°	360.4	358.6	360.4	358.6	358.6	359.5
180°	359.5	359.5	359.5	359.5	359.5	359.5

TEST NUMBER: P1191257

CATALOG NUMBER: SQ2-FA-050U-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	17.60	18.54	18.48	19.44	20.59	18.82	19.77	19.70	20.67	21.81
	3H	18.69	19.54	19.59	20.45	21.62	20.07	20.92	20.97	21.83	23.00
	4H	19.05	19.85	19.96	20.77	21.94	20.47	21.26	21.38	22.18	23.36
	6H	19.22	19.95	20.14	20.88	22.07	20.63	21.37	21.55	22.29	23.48
	8H	19.26	19.96	20.18	20.90	22.09	20.66	21.36	21.59	22.30	23.49
	12H	19.26	19.92	20.19	20.86	22.07	20.65	21.31	21.58	22.25	23.46
4H	2H	18.54	19.33	19.45	20.25	21.43	19.45	20.25	20.36	21.16	22.34
	3H	19.91	20.58	20.84	21.52	22.72	20.91	21.57	21.83	22.52	23.71
	4H	20.36	20.97	21.30	21.91	23.13	21.38	21.98	22.31	22.93	24.15
	6H	20.59	21.12	21.54	22.08	23.30	21.60	22.13	22.55	23.09	24.31
	8H	20.65	21.14	21.60	22.10	23.33	21.65	22.14	22.61	23.10	24.33
	12H	20.66	21.10	21.63	22.07	23.31	21.65	22.09	22.62	23.06	24.30
8H	4H	20.77	21.25	21.72	22.21	23.45	21.59	22.08	22.55	23.04	24.27
	6H	21.12	21.52	22.09	22.52	23.75	21.91	22.31	22.89	23.31	24.54
	8H	21.23	21.59	22.22	22.58	23.83	22.00	22.36	22.99	23.35	24.60
	12H	21.27	21.58	22.26	22.57	23.87	22.02	22.33	23.01	23.32	24.61
12H	4H	20.77	21.21	21.74	22.19	23.43	21.57	22.01	22.54	22.98	24.22
	6H	21.19	21.55	22.18	22.54	23.79	21.93	22.29	22.92	23.28	24.53
	8H	21.34	21.65	22.33	22.63	23.93	22.05	22.36	23.03	23.34	24.64