

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: P1191358

Luminaire Tested: SQ2-FA-125U-075D-L940-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191358
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-125U-075D-L940-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

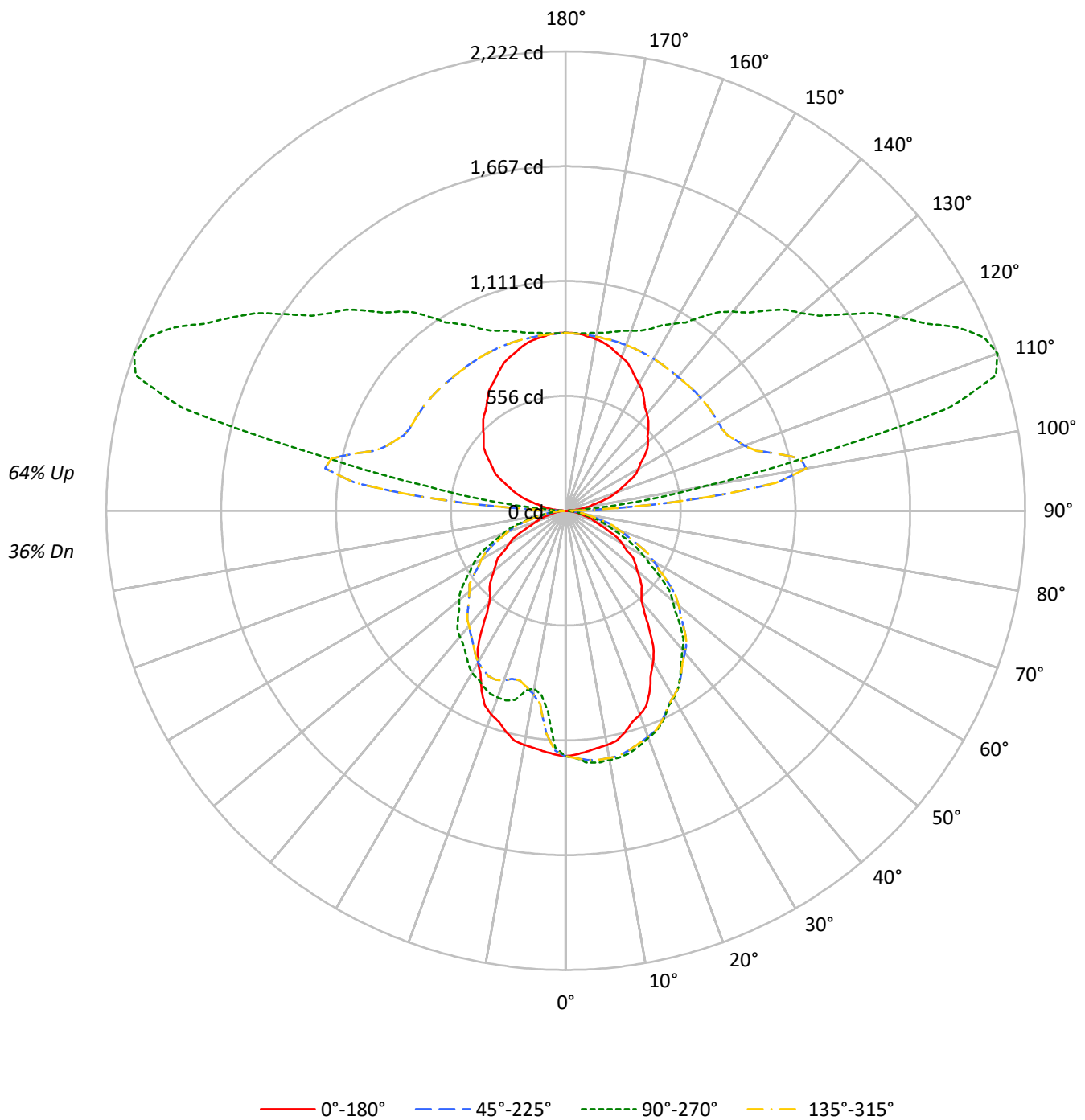
Lumens per Lamp: N/A
Luminaire Lumens: 8256.1 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 70.6
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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	38	37	36
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	34	32	31
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	24	23
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	24	22	20
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17
7	56	44	36	31	50	40	33	29	33	28	24	26	22	20	20	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19178	19178	19178	19178
5°	18953	19848	18953	15819
10°	18871	20077	18871	14341
15°	18546	20239	18546	15853
20°	18036	20093	18036	16533
25°	17142	19930	17142	16732
30°	15793	19484	15793	16910
35°	13975	19056	13975	16606
40°	12033	18533	12033	16788
45°	11878	17872	11878	16819
50°	11333	17000	11333	16885
55°	11274	15682	11274	16718
60°	10111	13976	10111	16650
65°	8619	12313	8619	16183
70°	6954	10433	6954	14998
75°	6032	8615	6032	13787
80°	5133	6425	5133	11130
85°	3409	3409	3409	6817

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 18502 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	1.3
10°-20°	298.6	3.6
20°-30°	453.5	5.5
30°-40°	532.4	6.4
40°-50°	540.3	6.5
50°-60°	473.3	5.7
60°-70°	335.8	4.1
70°-80°	172.9	2.1
80°-90°	37.2	0.5
90°-100°	328.9	4.0
100°-110°	1070.9	13.0
110°-120°	1059.3	12.8
120°-130°	865.7	10.5
130°-140°	707.5	8.6
140°-150°	551.1	6.7
150°-160°	397.2	4.8
160°-170°	242.8	2.9
170°-180°	81.9	1.0
0°-30°	859.0	10.4
0°-40°	1391.4	16.9
0°-60°	2405.0	29.1
0°-90°	2950.9	35.7
90°-120°	2459.0	29.8
90°-150°	4583.3	55.5
90°-180°	5305.0	64.3
0°-180°	8256.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1188	1188	1188	1188	1188	
5°	1169	1225	1169	976	1169	111
15°	1110	1211	1110	948	1110	312
25°	962	1119	962	939	962	439
35°	709	967	709	842	709	442
45°	520	783	520	737	520	398
55°	400	557	400	594	400	346
65°	226	322	226	424	226	225
75°	97	138	97	221	97	105
85°	18	18	18	37	18	23
90°	0	6	0	6	0	3
95°	44	132	44	132	44	52
105°	182	1919	182	1919	182	194
115°	336	2095	336	2095	336	333
125°	468	1657	468	1657	468	416
135°	565	1369	565	1369	565	436
145°	660	1144	660	1144	660	413
155°	753	971	753	971	753	347
165°	822	896	822	896	822	231
175°	857	861	857	861	857	81
180°	860	860	860	860	860	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8
2.5°	1180.4	1198.4	1198.8	1198.8	1198.8	1198.8	1198.8	1198.4	1180.4	1180.4	1162.0
5°	1169.4	1200.9	1210.8	1215.6	1224.6	1215.6	1210.8	1200.9	1169.4	1155.9	1081.9
7.5°	1158.3	1200.6	1215.4	1223.8	1228.3	1223.8	1215.4	1200.6	1158.3	1098.0	942.9
10°	1151.0	1200.5	1215.4	1220.1	1224.6	1220.1	1215.4	1200.5	1151.0	1029.4	902.4
12.5°	1139.9	1193.0	1211.7	1216.4	1220.9	1216.4	1211.7	1193.0	1139.9	967.9	872.9
15°	1109.5	1181.5	1197.0	1206.3	1210.8	1206.3	1197.0	1181.5	1109.5	916.0	851.7
17.5°	1071.8	1159.1	1179.5	1187.9	1191.5	1187.9	1179.5	1159.1	1071.8	869.2	852.6
20°	1049.7	1144.2	1164.8	1169.4	1169.4	1169.4	1164.8	1144.2	1049.7	847.1	874.7
22.5°	1020.2	1125.5	1146.4	1147.4	1151.0	1147.4	1146.4	1125.5	1020.2	821.2	885.8
25°	962.2	1083.7	1114.1	1109.7	1118.7	1109.7	1114.1	1083.7	962.2	786.6	883.9
27.5°	891.3	1044.4	1066.2	1070.9	1070.9	1070.9	1066.2	1044.4	891.3	752.7	865.5
30°	847.1	1018.2	1040.5	1045.1	1045.1	1045.1	1040.5	1018.2	847.1	730.1	847.1
32.5°	791.9	995.3	1014.7	1015.6	1015.6	1015.6	1014.7	995.3	791.9	707.2	817.6
35°	709.0	956.6	971.4	971.3	966.8	971.3	971.4	956.6	709.0	673.0	782.7
37.5°	626.1	907.0	927.2	920.7	916.2	920.7	927.2	907.0	626.1	637.8	753.2
40°	570.9	877.0	897.7	883.8	879.3	883.8	897.7	877.0	570.9	611.4	727.4
42.5°	541.4	843.9	864.6	847.0	842.5	847.0	864.6	843.9	541.4	585.5	705.3
45°	520.2	790.3	810.3	791.7	782.7	791.7	810.3	790.3	520.2	547.2	667.6
47.5°	488.0	725.7	754.1	726.3	717.3	726.3	754.1	725.7	488.0	507.8	633.5
50°	451.2	685.3	713.6	685.8	676.8	685.8	713.6	685.3	451.2	478.2	607.7
52.5°	425.4	645.1	669.4	637.9	628.9	637.9	669.4	645.1	425.4	441.6	585.6
55°	400.5	585.1	603.1	570.6	557.1	570.6	603.1	585.1	400.5	387.0	543.3
57.5°	342.5	518.1	536.8	499.6	484.3	499.6	536.8	518.1	342.5	330.8	499.1
60°	313.1	470.6	492.6	455.3	432.8	455.3	492.6	470.6	313.1	290.6	469.6
62.5°	279.9	419.5	448.4	411.1	388.6	411.1	448.4	419.5	279.9	264.6	436.4
65°	225.6	347.1	382.1	344.8	322.3	344.8	382.1	347.1	225.6	234.6	382.1
67.5°	176.8	281.2	320.4	279.5	261.5	279.5	320.4	281.2	176.8	206.5	332.4
70°	147.3	237.4	276.2	239.0	221.0	239.0	276.2	237.4	147.3	187.8	299.2
72.5°	128.9	197.3	239.4	198.6	184.2	198.6	239.4	197.3	128.9	169.4	258.7
75°	96.7	137.2	184.2	147.1	138.1	147.1	184.2	137.2	96.7	137.2	202.6
77.5°	70.0	88.9	129.8	98.4	94.8	98.4	129.8	88.9	70.0	103.3	147.3
80°	55.2	59.7	96.7	69.1	69.1	69.1	96.7	59.7	55.2	77.8	110.5
82.5°	36.8	41.3	67.2	46.9	43.3	46.9	67.2	41.3	36.8	55.7	77.3
85°	18.4	18.4	27.6	18.4	18.4	18.4	27.6	18.4	18.4	27.4	36.8
87.5°	3.7	4.3	8.8	5.0	5.0	5.0	8.8	4.3	3.7	7.9	8.8
90°	0.0	3.1	7.4	6.3	6.3	6.3	7.4	3.1	0.0	3.1	7.4
92.5°	15.2	54.7	174.9	57.7	44.4	57.7	174.9	54.7	15.2	54.7	174.9
95°	44.4	135.4	602.9	214.9	132.2	214.9	602.9	135.4	44.4	135.4	602.9
97.5°	83.6	176.2	1023.2	623.1	380.3	623.1	1023.2	176.2	83.6	176.2	1023.2
100°	108.9	199.9	1181.4	1053.5	683.2	1053.5	1181.4	199.9	108.9	199.9	1181.4
102.5°	137.7	225.4	1161.9	1558.5	1185.0	1558.5	1161.9	225.4	137.7	225.4	1161.9
105°	181.9	262.6	1060.8	2026.1	1918.6	2026.1	1060.8	262.6	181.9	262.6	1060.8
107.5°	229.7	305.6	964.8	2066.7	2180.7	2066.7	964.8	305.6	229.7	305.6	964.8
110°	264.4	333.7	919.1	2016.3	2222.1	2016.3	919.1	333.7	264.4	333.7	919.1

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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°	293.2	361.6	890.3	1925.4	2190.8	1925.4	890.3	361.6	293.2	361.6	890.3
115°	336.3	401.5	864.1	1780.8	2095.2	1780.8	864.1	401.5	336.3	401.5	864.1
117.5°	380.8	439.5	853.9	1648.4	1961.3	1648.4	853.9	439.5	380.8	439.5	853.9
120°	406.1	464.0	851.4	1566.9	1869.9	1566.9	851.4	464.0	406.1	464.0	851.4
122.5°	430.7	487.8	852.3	1496.2	1778.5	1496.2	852.3	487.8	430.7	487.8	852.3
125°	467.5	521.3	852.5	1406.0	1657.3	1406.0	852.5	521.3	467.5	521.3	852.5
127.5°	499.0	554.0	852.3	1338.5	1548.0	1338.5	852.3	554.0	499.0	554.0	852.3
130°	519.3	575.1	851.4	1299.9	1487.1	1299.9	851.4	575.1	519.3	575.1	851.4
132.5°	537.1	595.4	850.6	1264.1	1439.7	1264.1	850.6	595.4	537.1	595.4	850.6
135°	564.8	623.7	848.2	1213.5	1368.6	1213.5	848.2	623.7	564.8	623.7	848.2
137.5°	591.9	651.2	845.9	1162.1	1299.8	1162.1	845.9	651.2	591.9	651.2	845.9
140°	611.3	668.2	845.1	1127.2	1257.5	1127.2	845.1	668.2	611.3	668.2	845.1
142.5°	629.9	684.3	845.1	1093.9	1210.2	1093.9	845.1	684.3	629.9	684.3	845.1
145°	660.0	708.6	846.1	1045.1	1144.4	1045.1	846.1	708.6	660.0	708.6	846.1
147.5°	689.2	731.4	847.6	1003.5	1080.3	1003.5	847.6	731.4	689.2	731.4	847.6
150°	708.6	745.9	849.3	978.7	1043.9	978.7	849.3	745.9	708.6	745.9	849.3
152.5°	728.1	758.7	850.1	959.8	1011.7	959.8	850.1	758.7	728.1	758.7	850.1
155°	753.0	777.9	851.4	935.8	970.9	935.8	851.4	777.9	753.0	777.9	851.4
157.5°	776.7	794.5	852.7	918.0	942.6	918.0	852.7	794.5	776.7	794.5	852.7
160°	791.1	805.6	853.5	906.8	926.5	906.8	853.5	805.6	791.1	805.6	853.5
162.5°	803.8	815.0	853.5	897.4	912.1	897.4	853.5	815.0	803.8	815.0	853.5
165°	821.8	829.0	853.5	885.5	895.8	885.5	853.5	829.0	821.8	829.0	853.5
167.5°	834.5	839.0	853.7	876.5	881.9	876.5	853.7	839.0	834.5	839.0	853.7
170°	842.9	845.0	854.6	870.5	872.6	870.5	854.6	845.0	842.9	845.0	854.6
172.5°	848.9	850.1	856.3	867.0	866.6	867.0	856.3	850.1	848.9	850.1	856.3
175°	856.7	856.7	856.7	863.0	860.9	863.0	856.7	856.7	856.7	856.7	856.7
177.5°	859.9	859.0	858.2	862.3	859.0	862.3	858.2	859.0	859.9	859.0	858.2
180°	859.9	859.9	859.9	859.9	859.9	859.9	859.9	859.9	859.9	859.9	859.9

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1187.8	1187.8	1187.8	1187.8	1187.8	1187.8
2.5°	1150.9	1147.3	1150.9	1162.0	1180.4	1180.4
5°	998.5	976.0	998.5	1081.9	1155.9	1169.4
7.5°	907.7	900.5	907.7	942.9	1098.0	1158.3
10°	874.7	874.7	874.7	902.4	1029.4	1151.0
12.5°	871.5	889.5	871.5	872.9	967.9	1139.9
15°	925.9	948.4	925.9	851.7	916.0	1109.5
17.5°	944.2	962.2	944.2	852.6	869.2	1071.8
20°	944.2	962.2	944.2	874.7	847.1	1049.7
22.5°	940.5	958.5	940.5	885.8	821.2	1020.2
25°	930.2	939.2	930.2	883.9	786.6	962.2
27.5°	911.7	918.0	911.7	865.5	752.7	891.3
30°	893.4	907.0	893.4	847.1	730.1	847.1
32.5°	874.8	877.5	874.8	817.6	707.2	791.9
35°	847.0	842.5	847.0	782.7	673.0	709.0
37.5°	809.5	814.9	809.5	753.2	637.8	626.1
40°	787.5	796.5	787.5	727.4	611.4	570.9
42.5°	765.4	774.4	765.4	705.3	585.5	541.4
45°	732.1	736.6	732.1	667.6	547.2	520.2
47.5°	693.4	697.9	693.4	633.5	507.8	488.0
50°	667.7	672.2	667.7	607.7	478.2	451.2
52.5°	638.2	642.7	638.2	585.6	441.6	425.4
55°	593.9	593.9	593.9	543.3	387.0	400.5
57.5°	543.4	548.8	543.4	499.1	330.8	342.5
60°	506.6	515.6	506.6	469.6	290.6	313.1
62.5°	473.4	478.8	473.4	436.4	264.6	279.9
65°	419.1	423.6	419.1	382.1	234.6	225.6
67.5°	358.3	361.9	358.3	332.4	206.5	176.8
70°	317.7	317.7	317.7	299.2	187.8	147.3
72.5°	277.2	280.8	277.2	258.7	169.4	128.9
75°	216.5	221.0	216.5	202.6	137.2	96.7
77.5°	155.7	160.2	155.7	147.3	103.3	70.0
80°	115.2	119.7	115.2	110.5	77.8	55.2
82.5°	82.0	82.9	82.0	77.3	55.7	36.8
85°	36.8	36.8	36.8	36.8	27.4	18.4
87.5°	8.6	8.6	8.6	8.8	7.9	3.7
90°	6.3	6.3	6.3	7.4	3.1	0.0
92.5°	57.7	44.4	57.7	174.9	54.7	15.2
95°	214.9	132.2	214.9	602.9	135.4	44.4
97.5°	623.1	380.3	623.1	1023.2	176.2	83.6
100°	1053.5	683.2	1053.5	1181.4	199.9	108.9
102.5°	1558.5	1185.0	1558.5	1161.9	225.4	137.7
105°	2026.1	1918.6	2026.1	1060.8	262.6	181.9
107.5°	2066.7	2180.7	2066.7	964.8	305.6	229.7
110°	2016.3	2222.1	2016.3	919.1	333.7	264.4

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1925.4	2190.8	1925.4	890.3	361.6	293.2
115°	1780.8	2095.2	1780.8	864.1	401.5	336.3
117.5°	1648.4	1961.3	1648.4	853.9	439.5	380.8
120°	1566.9	1869.9	1566.9	851.4	464.0	406.1
122.5°	1496.2	1778.5	1496.2	852.3	487.8	430.7
125°	1406.0	1657.3	1406.0	852.5	521.3	467.5
127.5°	1338.5	1548.0	1338.5	852.3	554.0	499.0
130°	1299.9	1487.1	1299.9	851.4	575.1	519.3
132.5°	1264.1	1439.7	1264.1	850.6	595.4	537.1
135°	1213.5	1368.6	1213.5	848.2	623.7	564.8
137.5°	1162.1	1299.8	1162.1	845.9	651.2	591.9
140°	1127.2	1257.5	1127.2	845.1	668.2	611.3
142.5°	1093.9	1210.2	1093.9	845.1	684.3	629.9
145°	1045.1	1144.4	1045.1	846.1	708.6	660.0
147.5°	1003.5	1080.3	1003.5	847.6	731.4	689.2
150°	978.7	1043.9	978.7	849.3	745.9	708.6
152.5°	959.8	1011.7	959.8	850.1	758.7	728.1
155°	935.8	970.9	935.8	851.4	777.9	753.0
157.5°	918.0	942.6	918.0	852.7	794.5	776.7
160°	906.8	926.5	906.8	853.5	805.6	791.1
162.5°	897.4	912.1	897.4	853.5	815.0	803.8
165°	885.5	895.8	885.5	853.5	829.0	821.8
167.5°	876.5	881.9	876.5	853.7	839.0	834.5
170°	870.5	872.6	870.5	854.6	845.0	842.9
172.5°	867.0	866.6	867.0	856.3	850.1	848.9
175°	863.0	860.9	863.0	856.7	856.7	856.7
177.5°	862.3	859.0	862.3	858.2	859.0	859.9
180°	859.9	859.9	859.9	859.9	859.9	859.9

TEST NUMBER: P1191358

CATALOG NUMBER: SQ2-FA-125U-075D-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	15.13	15.87	16.20	16.95	18.41	16.35	17.10	17.43	18.17	19.63
	3H	16.21	16.88	17.29	17.96	19.44	17.59	18.26	18.67	19.34	20.82
	4H	16.56	17.19	17.65	18.27	19.76	17.97	18.61	19.06	19.69	21.17
	6H	16.71	17.30	17.81	18.38	19.88	18.13	18.71	19.23	19.80	21.29
	8H	16.75	17.30	17.85	18.40	19.89	18.15	18.70	19.25	19.80	21.30
	12H	16.74	17.26	17.85	18.36	19.87	18.13	18.66	19.24	19.75	21.27
4H	2H	16.04	16.68	17.14	17.76	19.24	16.95	17.59	18.05	18.67	20.16
	3H	17.40	17.93	18.51	19.04	20.54	18.40	18.92	19.50	20.03	21.53
	4H	17.84	18.32	18.95	19.42	20.94	18.86	19.34	19.97	20.44	21.96
	6H	18.06	18.48	19.18	19.60	21.11	19.07	19.49	20.19	20.61	22.12
	8H	18.12	18.50	19.23	19.62	21.14	19.12	19.50	20.23	20.62	22.15
	12H	18.11	18.46	19.25	19.59	21.12	19.10	19.45	20.23	20.58	22.11
8H	4H	18.23	18.62	19.35	19.73	21.26	19.06	19.44	20.17	20.56	22.09
	6H	18.57	18.89	19.71	20.05	21.57	19.36	19.68	20.50	20.84	22.36
	8H	18.68	18.96	19.83	20.10	21.65	19.46	19.73	20.60	20.87	22.42
	12H	18.72	18.96	19.86	20.09	21.67	19.46	19.71	20.61	20.84	22.42
12H	4H	18.23	18.58	19.36	19.71	21.24	19.02	19.37	20.15	20.50	22.03
	6H	18.64	18.92	19.79	20.06	21.60	19.38	19.66	20.53	20.80	22.34
	8H	18.78	19.03	19.93	20.16	21.74	19.49	19.73	20.64	20.87	22.45