

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: P1191298

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

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191298
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-075U-125D-L940-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

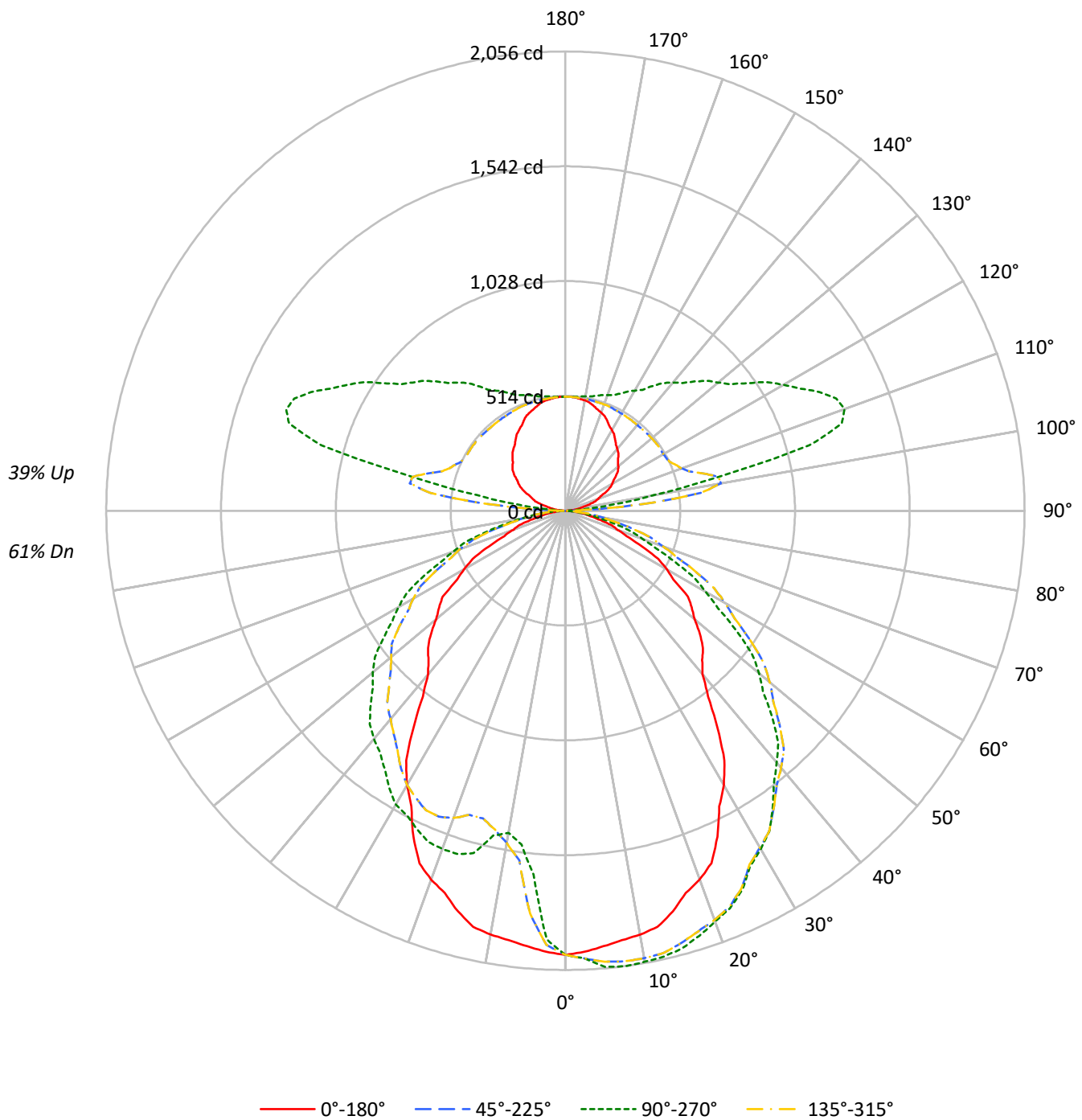
Lumens per Lamp: N/A
Luminaire Lumens: 8101.9 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 72.5
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	67	65	59	57	56
2	91	84	78	73	85	79	73	69	69	65	61	60	57	54	52	50	47
3	83	74	66	60	78	69	63	57	61	56	52	53	49	46	46	43	40
4	76	65	57	51	71	62	54	49	54	49	44	47	43	39	41	38	35
5	70	58	50	44	65	55	48	42	49	43	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	38	34	30	34	30	27
7	60	47	39	34	56	45	37	32	40	34	29	35	30	26	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	27	48	37	30	25	33	27	23	29	25	21	26	22	19
10	48	36	29	24	45	34	27	23	31	25	21	27	23	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	32106	32106	32106	32106
5°	31729	33229	31729	26483
10°	31590	33613	31590	24009
15°	31049	33882	31049	26539
20°	30194	33637	30194	27677
25°	28696	33366	28696	28010
30°	26440	32619	26440	28308
35°	23394	31901	23394	27800
40°	20143	31027	20143	28104
45°	19886	29919	19886	28158
50°	18972	28459	18972	28266
55°	18874	26252	18874	27989
60°	16924	23395	16924	27874
65°	14430	20611	14430	27091
70°	11641	17467	11641	25105
75°	10100	14423	10100	23082
80°	8601	10749	8601	18633
85°	5706	5706	5706	11430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 30974 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.9	2.2
10°-20°	499.9	6.2
20°-30°	759.3	9.4
30°-40°	891.3	11.0
40°-50°	904.5	11.2
50°-60°	792.4	9.8
60°-70°	562.1	6.9
70°-80°	289.4	3.6
80°-90°	61.2	0.8
90°-100°	193.2	2.4
100°-110°	640.4	7.9
110°-120°	635.6	7.8
120°-130°	517.7	6.4
130°-140°	420.8	5.2
140°-150°	326.8	4.0
150°-160°	235.4	2.9
160°-170°	144.2	1.8
170°-180°	48.7	0.6
0°-30°	1438.1	17.8
0°-40°	2329.4	28.8
0°-60°	4026.3	49.7
0°-90°	4939.0	61.0
90°-120°	1469.2	18.1
90°-150°	2734.5	33.8
90°-180°	3163.0	39.0
0°-180°	8101.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1988	1988	1988	1988	1988	
5°	1958	2050	1958	1634	1958	186
15°	1858	2027	1858	1588	1858	522
25°	1611	1873	1611	1572	1611	735
35°	1187	1618	1187	1410	1187	740
45°	871	1310	871	1233	871	666
55°	670	933	670	994	670	580
65°	378	540	378	709	378	377
75°	162	231	162	370	162	175
85°	31	31	31	62	31	39
90°	0	4	0	4	0	2
95°	28	84	28	84	28	31
105°	112	1131	112	1131	112	118
115°	200	1256	200	1256	200	198
125°	279	995	279	995	279	248
135°	334	818	334	818	334	259
145°	388	682	388	682	388	243
155°	443	578	443	578	443	204
165°	486	532	486	532	486	137
175°	509	512	509	512	509	48
180°	511	511	511	511	511	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5
2.5°	1976.2	2006.3	2007.0	2007.0	2007.0	2007.0	2007.0	2006.3	1976.2	1976.2	1945.3
5°	1957.7	2010.4	2027.0	2035.1	2035.1	2035.1	2027.0	2010.4	1957.7	1935.1	1811.2
7.5°	1939.2	2010.0	2034.7	2048.8	2056.3	2048.8	2034.7	2010.0	1939.2	1838.2	1578.5
10°	1926.8	2009.7	2034.7	2042.6	2050.2	2042.6	2034.7	2009.7	1926.8	1723.4	1510.6
12.5°	1908.3	1997.3	2028.6	2036.5	2044.0	2036.5	2028.6	1997.3	1908.3	1620.5	1461.3
15°	1857.5	1978.1	2003.9	2019.5	2027.0	2019.5	2003.9	1978.1	1857.5	1533.4	1425.9
17.5°	1794.3	1940.5	1974.6	1988.6	1994.7	1988.6	1974.6	1940.5	1794.3	1455.2	1427.4
20°	1757.3	1915.5	1950.0	1957.7	1957.7	1957.7	1950.0	1915.5	1757.3	1418.2	1464.4
22.5°	1708.0	1884.3	1919.1	1920.8	1926.8	1920.8	1919.1	1884.3	1708.0	1374.9	1482.9
25°	1610.8	1814.3	1865.2	1857.8	1872.9	1857.8	1865.2	1814.3	1610.8	1316.9	1479.8
27.5°	1492.1	1748.4	1785.0	1792.7	1792.7	1792.7	1785.0	1748.4	1492.1	1260.0	1449.0
30°	1418.2	1704.5	1741.9	1749.6	1749.6	1749.6	1741.9	1704.5	1418.2	1222.2	1418.2
32.5°	1325.7	1666.3	1698.7	1700.2	1700.2	1700.2	1698.7	1666.3	1325.7	1184.0	1368.8
35°	1186.9	1601.4	1626.3	1626.1	1618.5	1626.1	1626.3	1601.4	1186.9	1126.6	1310.3
37.5°	1048.2	1518.5	1552.3	1541.3	1533.8	1541.3	1552.3	1518.5	1048.2	1067.8	1260.9
40°	955.7	1468.2	1502.9	1479.6	1472.1	1479.6	1502.9	1468.2	955.7	1023.5	1217.8
42.5°	906.4	1412.8	1447.4	1418.0	1410.4	1418.0	1447.4	1412.8	906.4	980.2	1180.8
45°	870.9	1323.1	1356.5	1325.3	1310.3	1325.3	1356.5	1323.1	870.9	916.1	1117.6
47.5°	817.0	1214.9	1262.5	1215.9	1200.8	1215.9	1262.5	1214.9	817.0	850.1	1060.5
50°	755.3	1147.2	1194.6	1148.1	1133.0	1148.1	1194.6	1147.2	755.3	800.5	1017.4
52.5°	712.2	1079.9	1120.7	1067.9	1052.8	1067.9	1120.7	1079.9	712.2	739.3	980.4
55°	670.5	979.5	1009.7	955.2	932.6	955.2	1009.7	979.5	670.5	647.9	909.5
57.5°	573.4	867.3	898.7	836.4	810.8	836.4	898.7	867.3	573.4	553.8	835.5
60°	524.1	787.9	824.7	762.2	724.5	762.2	824.7	787.9	524.1	486.4	786.2
62.5°	468.6	702.2	750.7	688.2	650.5	688.2	750.7	702.2	468.6	443.0	730.7
65°	377.7	581.1	639.7	577.2	539.5	577.2	639.7	581.1	377.7	392.7	639.7
67.5°	296.0	470.8	536.4	467.9	437.8	467.9	536.4	470.8	296.0	345.7	556.5
70°	246.6	397.4	462.4	400.1	370.0	400.1	462.4	397.4	246.6	314.5	501.0
72.5°	215.8	330.4	400.8	332.4	308.3	332.4	400.8	330.4	215.8	283.6	433.2
75°	161.9	229.7	308.3	246.3	231.2	246.3	308.3	229.7	161.9	229.7	339.1
77.5°	117.2	148.8	217.3	164.8	158.8	164.8	217.3	148.8	117.2	172.9	246.6
80°	92.5	100.0	161.9	115.6	115.6	115.6	161.9	100.0	92.5	130.2	185.0
82.5°	61.7	69.2	112.5	78.5	72.4	78.5	112.5	69.2	61.7	93.3	129.5
85°	30.8	30.8	46.2	30.8	30.8	30.8	46.2	30.8	30.8	45.9	61.7
87.5°	6.2	6.4	13.0	7.0	7.0	7.0	13.0	6.4	6.2	12.4	13.0
90°	0.0	1.0	3.2	4.2	4.2	4.2	3.2	1.0	0.0	1.0	3.2
92.5°	8.5	32.7	96.2	31.2	26.2	31.2	96.2	32.7	8.5	32.7	96.2
95°	27.5	81.3	350.1	124.9	83.6	124.9	350.1	81.3	27.5	81.3	350.1
97.5°	50.6	106.8	611.1	356.4	225.3	356.4	611.1	106.8	50.6	106.8	611.1
100°	66.6	120.4	707.6	607.7	403.0	607.7	707.6	120.4	66.6	120.4	707.6
102.5°	84.4	136.5	701.6	928.7	701.6	928.7	701.6	136.5	84.4	136.5	701.6
105°	112.1	159.7	640.9	1209.2	1130.6	1209.2	640.9	159.7	112.1	159.7	640.9
107.5°	140.5	182.9	582.8	1237.7	1297.5	1237.7	582.8	182.9	140.5	182.9	582.8
110°	156.5	198.9	553.1	1209.5	1330.5	1209.5	553.1	198.9	156.5	198.9	553.1

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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°	173.5	215.0	535.4	1159.5	1313.6	1159.5	535.4	215.0	173.5	215.0	535.4
115°	199.9	239.2	516.1	1074.5	1256.5	1074.5	516.1	239.2	199.9	239.2	516.1
117.5°	226.1	261.1	509.1	993.2	1184.1	993.2	509.1	261.1	226.1	261.1	509.1
120°	242.2	276.3	506.6	942.3	1127.4	942.3	506.6	276.3	242.2	276.3	506.6
122.5°	256.6	289.9	506.6	900.6	1071.6	900.6	506.6	289.9	256.6	289.9	506.6
125°	279.2	310.2	506.6	844.3	995.2	844.3	506.6	310.2	279.2	310.2	506.6
127.5°	297.8	328.2	505.3	801.7	930.7	801.7	505.3	328.2	297.8	328.2	505.3
130°	308.8	340.9	504.5	776.8	892.6	776.8	504.5	340.9	308.8	340.9	504.5
132.5°	319.0	351.9	503.6	756.3	860.5	756.3	503.6	351.9	319.0	351.9	503.6
135°	334.2	368.3	502.4	724.5	817.6	724.5	502.4	368.3	334.2	368.3	502.4
137.5°	350.7	383.6	501.1	693.8	775.9	693.8	501.1	383.6	350.7	383.6	501.1
140°	361.7	393.8	500.3	673.3	748.8	673.3	500.3	393.8	361.7	393.8	500.3
142.5°	371.9	403.1	501.1	652.8	720.0	652.8	501.1	403.1	371.9	403.1	501.1
145°	388.2	417.1	501.3	623.2	682.2	623.2	501.3	417.1	388.2	417.1	501.3
147.5°	405.7	429.9	501.5	598.1	642.0	598.1	501.5	429.9	405.7	429.9	501.5
150°	416.7	438.4	502.4	583.6	620.8	583.6	502.4	438.4	416.7	438.4	502.4
152.5°	426.9	447.8	503.2	571.6	601.4	571.6	503.2	447.8	426.9	447.8	503.2
155°	443.1	458.7	504.5	556.8	577.5	556.8	504.5	458.7	443.1	458.7	504.5
157.5°	459.0	471.0	505.8	546.3	561.0	546.3	505.8	471.0	459.0	471.0	505.8
160°	467.5	477.8	506.6	538.6	550.0	538.6	506.6	477.8	467.5	477.8	506.6
162.5°	475.9	483.8	506.6	533.5	542.4	533.5	506.6	483.8	475.9	483.8	506.6
165°	486.5	491.7	506.6	526.8	532.0	526.8	506.6	491.7	486.5	491.7	506.6
167.5°	496.2	498.9	507.7	520.8	523.5	520.8	507.7	498.9	496.2	498.9	507.7
170°	501.3	502.4	507.7	518.3	519.3	518.3	507.7	502.4	501.3	502.4	507.7
172.5°	504.7	505.7	508.5	515.7	515.9	515.7	508.5	505.7	504.7	505.7	508.5
175°	508.7	508.7	509.8	512.9	511.9	512.9	509.8	508.7	508.7	508.7	509.8
177.5°	510.8	510.8	510.0	511.6	510.0	511.6	510.0	510.8	510.8	510.8	510.0
180°	510.8	510.8	510.8	510.8	510.8	510.8	510.8	510.8	510.8	510.8	510.8

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1988.5	1988.5	1988.5	1988.5	1988.5	1988.5
2.5°	1926.7	1920.7	1926.7	1945.3	1976.2	1976.2
5°	1671.6	1634.0	1671.6	1811.2	1935.1	1957.7
7.5°	1519.6	1507.6	1519.6	1578.5	1838.2	1939.2
10°	1464.4	1464.4	1464.4	1510.6	1723.4	1926.8
12.5°	1458.9	1489.1	1458.9	1461.3	1620.5	1908.3
15°	1550.0	1587.7	1550.0	1425.9	1533.4	1857.5
17.5°	1580.7	1610.8	1580.7	1427.4	1455.2	1794.3
20°	1580.7	1610.8	1580.7	1464.4	1418.2	1757.3
22.5°	1574.5	1604.7	1574.5	1482.9	1374.9	1708.0
25°	1557.2	1572.3	1557.2	1479.8	1316.9	1610.8
27.5°	1526.3	1536.9	1526.3	1449.0	1260.0	1492.1
30°	1495.7	1518.4	1495.7	1418.2	1222.2	1418.2
32.5°	1464.5	1469.0	1464.5	1368.8	1184.0	1325.7
35°	1418.0	1410.4	1418.0	1310.3	1126.6	1186.9
37.5°	1355.2	1364.2	1355.2	1260.9	1067.8	1048.2
40°	1318.3	1333.4	1318.3	1217.8	1023.5	955.7
42.5°	1281.3	1296.4	1281.3	1180.8	980.2	906.4
45°	1225.6	1233.2	1225.6	1117.6	916.1	870.9
47.5°	1160.9	1168.4	1160.9	1060.5	850.1	817.0
50°	1117.7	1125.3	1117.7	1017.4	800.5	755.3
52.5°	1068.4	1075.9	1068.4	980.4	739.3	712.2
55°	994.3	994.3	994.3	909.5	647.9	670.5
57.5°	909.7	918.7	909.7	835.5	553.8	573.4
60°	848.2	863.2	848.2	786.2	486.4	524.1
62.5°	792.5	801.6	792.5	730.7	443.0	468.6
65°	701.5	709.1	701.5	639.7	392.7	377.7
67.5°	599.8	605.8	599.8	556.5	345.7	296.0
70°	531.8	531.8	531.8	501.0	314.5	246.6
72.5°	464.1	470.1	464.1	433.2	283.6	215.8
75°	362.4	370.0	362.4	339.1	229.7	161.9
77.5°	260.7	268.2	260.7	246.6	172.9	117.2
80°	192.9	200.4	192.9	185.0	130.2	92.5
82.5°	137.2	138.7	137.2	129.5	93.3	61.7
85°	61.7	61.7	61.7	61.7	45.9	30.8
87.5°	13.2	13.2	13.2	13.0	12.4	6.2
90°	4.2	4.2	4.2	3.2	1.0	0.0
92.5°	31.2	26.2	31.2	96.2	32.7	8.5
95°	124.9	83.6	124.9	350.1	81.3	27.5
97.5°	356.4	225.3	356.4	611.1	106.8	50.6
100°	607.7	403.0	607.7	707.6	120.4	66.6
102.5°	928.7	701.6	928.7	701.6	136.5	84.4
105°	1209.2	1130.6	1209.2	640.9	159.7	112.1
107.5°	1237.7	1297.5	1237.7	582.8	182.9	140.5
110°	1209.5	1330.5	1209.5	553.1	198.9	156.5

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1159.5	1313.6	1159.5	535.4	215.0	173.5
115°	1074.5	1256.5	1074.5	516.1	239.2	199.9
117.5°	993.2	1184.1	993.2	509.1	261.1	226.1
120°	942.3	1127.4	942.3	506.6	276.3	242.2
122.5°	900.6	1071.6	900.6	506.6	289.9	256.6
125°	844.3	995.2	844.3	506.6	310.2	279.2
127.5°	801.7	930.7	801.7	505.3	328.2	297.8
130°	776.8	892.6	776.8	504.5	340.9	308.8
132.5°	756.3	860.5	756.3	503.6	351.9	319.0
135°	724.5	817.6	724.5	502.4	368.3	334.2
137.5°	693.8	775.9	693.8	501.1	383.6	350.7
140°	673.3	748.8	673.3	500.3	393.8	361.7
142.5°	652.8	720.0	652.8	501.1	403.1	371.9
145°	623.2	682.2	623.2	501.3	417.1	388.2
147.5°	598.1	642.0	598.1	501.5	429.9	405.7
150°	583.6	620.8	583.6	502.4	438.4	416.7
152.5°	571.6	601.4	571.6	503.2	447.8	426.9
155°	556.8	577.5	556.8	504.5	458.7	443.1
157.5°	546.3	561.0	546.3	505.8	471.0	459.0
160°	538.6	550.0	538.6	506.6	477.8	467.5
162.5°	533.5	542.4	533.5	506.6	483.8	475.9
165°	526.8	532.0	526.8	506.6	491.7	486.5
167.5°	520.8	523.5	520.8	507.7	498.9	496.2
170°	518.3	519.3	518.3	507.7	502.4	501.3
172.5°	515.7	515.9	515.7	508.5	505.7	504.7
175°	512.9	511.9	512.9	509.8	508.7	508.7
177.5°	511.6	510.0	511.6	510.0	510.8	510.8
180°	510.8	510.8	510.8	510.8	510.8	510.8

TEST NUMBER: P1191298

CATALOG NUMBER: SQ2-FA-075U-125D-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	19.36	20.32	20.21	21.20	22.31	20.58	21.55	21.44	22.43	23.53
	3H	20.46	21.32	21.33	22.21	23.34	21.83	22.70	22.70	23.59	24.72
	4H	20.81	21.63	21.70	22.53	23.67	22.23	23.05	23.12	23.94	25.08
	6H	20.98	21.74	21.88	22.64	23.79	22.40	23.15	23.29	24.05	25.21
	8H	21.02	21.74	21.93	22.66	23.81	22.42	23.14	23.33	24.06	25.22
	12H	21.02	21.70	21.93	22.62	23.80	22.41	23.10	23.32	24.01	25.19
4H	2H	20.30	21.12	21.19	22.01	23.16	21.21	22.03	22.10	22.92	24.07
	3H	21.68	22.36	22.58	23.29	24.44	22.67	23.35	23.57	24.28	25.44
	4H	22.13	22.75	23.04	23.67	24.85	23.14	23.76	24.06	24.69	25.87
	6H	22.36	22.90	23.29	23.84	25.03	23.37	23.91	24.30	24.85	26.04
	8H	22.42	22.92	23.35	23.86	25.06	23.42	23.92	24.35	24.86	26.06
	12H	22.43	22.88	23.38	23.84	25.04	23.42	23.87	24.37	24.82	26.03
8H	4H	22.54	23.04	23.47	23.98	25.17	23.36	23.86	24.29	24.80	26.00
	6H	22.89	23.30	23.84	24.28	25.48	23.68	24.09	24.63	25.07	26.27
	8H	23.00	23.37	23.97	24.34	25.55	23.77	24.14	24.74	25.11	26.32
	12H	23.04	23.36	24.01	24.33	25.59	23.79	24.11	24.76	25.08	26.34
12H	4H	22.54	22.99	23.49	23.95	25.16	23.34	23.79	24.29	24.74	25.95
	6H	22.96	23.32	23.92	24.30	25.51	23.70	24.06	24.66	25.04	26.25
	8H	23.11	23.43	24.08	24.39	25.66	23.82	24.14	24.78	25.10	26.37