

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: P1191270

Luminaire Tested: SQ2-FA-050U-125D-L835-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191270
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-125D-L835-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

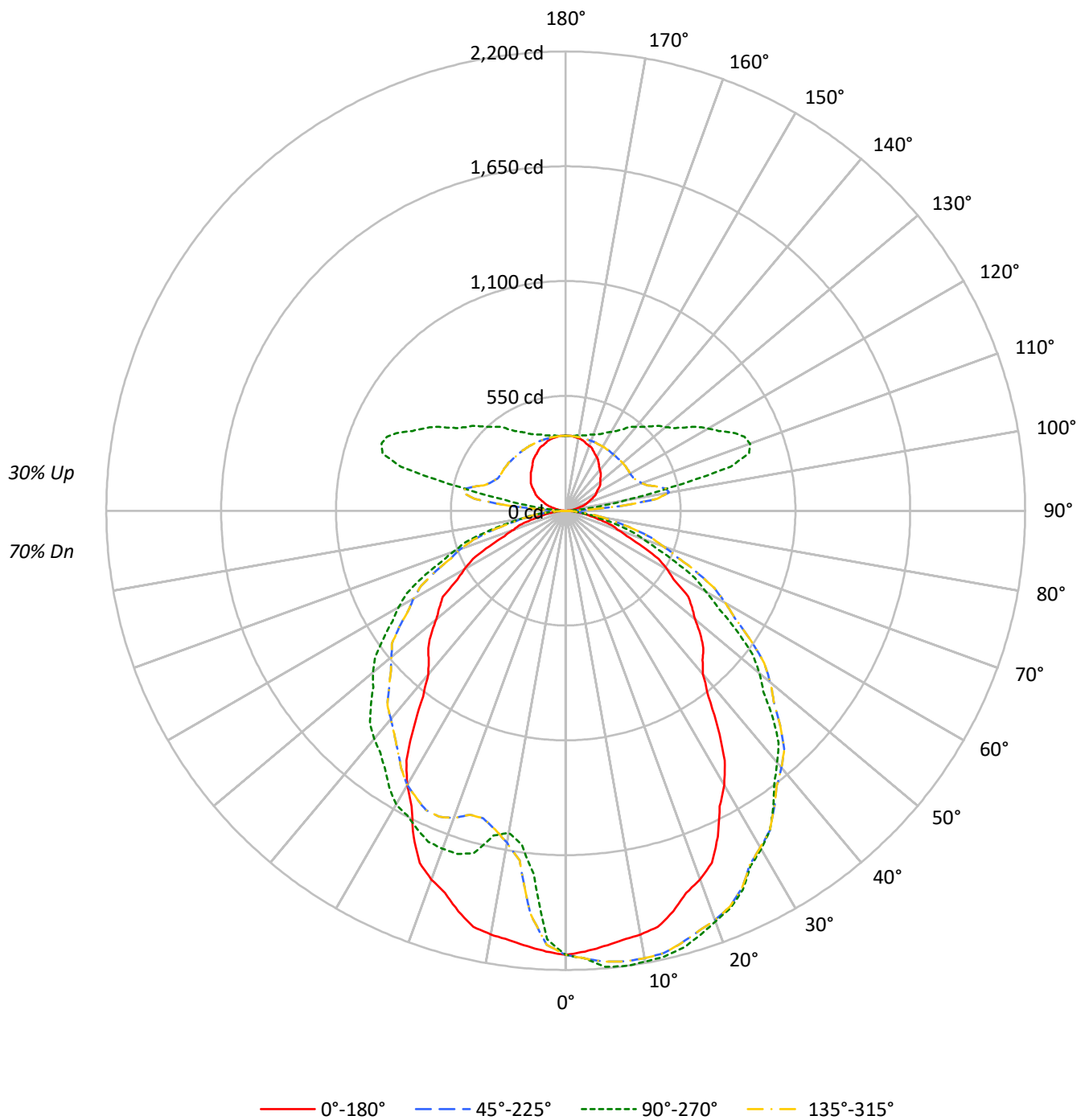
Lumens per Lamp: N/A
Luminaire Lumens: 7518.5 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64
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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	103	98	94	91	97	93	90	86	83	81	78	75	73	71	66	65	64
2	93	86	80	74	88	81	76	71	73	69	65	66	62	59	59	56	54
3	85	76	68	62	80	72	65	59	65	59	55	58	54	50	52	49	46
4	78	67	59	52	74	64	56	51	57	51	47	52	47	43	46	43	39
5	72	60	51	45	68	57	49	44	51	45	40	46	41	37	42	38	34
6	66	54	45	39	62	51	44	38	46	40	35	42	37	33	38	34	30
7	61	49	40	35	58	46	39	33	42	36	31	38	33	29	35	30	27
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	27	24
9	53	40	33	27	50	39	32	27	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	34349	34349	34349	34349
5°	33945	35550	33945	28332
10°	33798	35961	33798	25686
15°	33217	36251	33217	28393
20°	32302	35986	32302	29612
25°	30702	35696	30702	29967
30°	28286	34897	28286	30285
35°	25030	34131	25030	29743
40°	21551	33196	21551	30066
45°	21276	32008	21276	30124
50°	20298	30446	20298	30240
55°	20194	28085	20194	29943
60°	18106	25029	18106	29821
65°	15435	22052	15435	28982
70°	12458	18685	12458	26861
75°	10805	15433	10805	24691
80°	9196	11502	9196	19935
85°	6113	6113	6113	12227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 33138 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.4	2.5
10°-20°	534.9	7.1
20°-30°	812.3	10.8
30°-40°	953.6	12.7
40°-50°	967.7	12.9
50°-60°	847.7	11.3
60°-70°	601.4	8.0
70°-80°	309.7	4.1
80°-90°	65.4	0.9
90°-100°	143.3	1.9
100°-110°	454.6	6.0
110°-120°	445.8	5.9
120°-130°	362.7	4.8
130°-140°	295.7	3.9
140°-150°	230.6	3.1
150°-160°	166.1	2.2
160°-170°	101.5	1.3
170°-180°	34.3	0.5
0°-30°	1538.6	20.5
0°-40°	2492.2	33.1
0°-60°	4307.5	57.3
0°-90°	5284.0	70.3
90°-120°	1043.6	13.9
90°-150°	1932.7	25.7
90°-180°	2235.0	29.7
0°-180°	7518.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2127	2127	2127	2127	2127	
5°	2094	2193	2094	1748	2094	199
15°	1987	2169	1987	1699	1987	558
25°	1723	2004	1723	1682	1723	787
35°	1270	1732	1270	1509	1270	791
45°	932	1402	932	1319	932	712
55°	717	998	717	1064	717	621
65°	404	577	404	759	404	403
75°	173	247	173	396	173	187
85°	33	33	33	66	33	41
90°	0	3	0	3	0	2
95°	19	62	19	62	19	22
105°	79	818	79	818	79	84
115°	141	885	141	885	141	140
125°	196	695	196	695	196	174
135°	236	571	236	571	236	183
145°	276	476	276	476	276	173
155°	315	406	315	406	315	145
165°	343	373	343	373	343	97
175°	359	360	359	360	359	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°	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4
2.5°	2114.2	2146.5	2147.2	2147.2	2147.2	2147.2	2147.2	2146.5	2114.2	2114.2	2081.2
5°	2094.4	2150.9	2168.7	2177.3	2177.3	2177.3	2168.7	2150.9	2094.4	2070.3	1937.8
7.5°	2074.6	2150.4	2176.9	2191.9	2200.0	2191.9	2176.9	2150.4	2074.6	1966.6	1688.7
10°	2061.5	2150.1	2176.9	2185.3	2193.4	2185.3	2176.9	2150.1	2061.5	1843.8	1616.2
12.5°	2041.7	2136.8	2170.3	2178.7	2186.8	2178.7	2170.3	2136.8	2041.7	1733.7	1563.4
15°	1987.2	2116.2	2143.9	2160.6	2168.7	2160.6	2143.9	2116.2	1987.2	1640.6	1525.5
17.5°	1919.6	2076.0	2112.6	2127.6	2134.0	2127.6	2112.6	2076.0	1919.6	1556.8	1527.1
20°	1880.0	2049.4	2086.2	2094.4	2094.4	2094.4	2086.2	2049.4	1880.0	1517.2	1566.7
22.5°	1827.3	2015.9	2053.2	2055.0	2061.5	2055.0	2053.2	2015.9	1827.3	1470.9	1586.5
25°	1723.4	1941.1	1995.5	1987.6	2003.7	1987.6	1995.5	1941.1	1723.4	1408.9	1583.2
27.5°	1596.4	1870.5	1909.7	1918.0	1918.0	1918.0	1909.7	1870.5	1596.4	1348.1	1550.2
30°	1517.2	1823.6	1863.6	1871.8	1871.8	1871.8	1863.6	1823.6	1517.2	1307.6	1517.2
32.5°	1418.3	1782.7	1817.4	1819.0	1819.0	1819.0	1817.4	1782.7	1418.3	1266.7	1464.5
35°	1269.9	1713.3	1739.9	1739.7	1731.6	1739.7	1739.9	1713.3	1269.9	1205.4	1401.8
37.5°	1121.4	1624.5	1660.7	1649.0	1640.9	1649.0	1660.7	1624.5	1121.4	1142.4	1349.0
40°	1022.5	1570.7	1607.9	1583.0	1575.0	1583.0	1607.9	1570.7	1022.5	1095.0	1302.8
42.5°	969.7	1511.5	1548.6	1517.0	1509.0	1517.0	1548.6	1511.5	969.7	1048.7	1263.3
45°	931.8	1415.5	1451.3	1417.9	1401.8	1417.9	1451.3	1415.5	931.8	980.2	1195.6
47.5°	874.1	1299.8	1350.7	1300.8	1284.7	1300.8	1350.7	1299.8	874.1	909.5	1134.6
50°	808.1	1227.3	1278.1	1228.3	1212.1	1228.3	1278.1	1227.3	808.1	856.5	1088.4
52.5°	761.9	1155.4	1198.9	1142.5	1126.4	1142.5	1198.9	1155.4	761.9	790.9	1048.9
55°	717.4	1048.0	1080.2	1021.9	997.7	1021.9	1080.2	1048.0	717.4	693.2	973.0
57.5°	613.5	927.9	961.5	894.9	867.5	894.9	961.5	927.9	613.5	592.5	893.8
60°	560.7	842.9	882.3	815.4	775.1	815.4	882.3	842.9	560.7	520.4	841.1
62.5°	501.3	751.3	803.1	736.3	695.9	736.3	803.1	751.3	501.3	473.9	781.7
65°	404.0	621.7	684.4	617.5	577.2	617.5	684.4	621.7	404.0	420.2	684.4
67.5°	316.6	503.7	573.9	500.6	468.4	500.6	573.9	503.7	316.6	369.9	595.3
70°	263.9	425.1	494.7	428.0	395.8	428.0	494.7	425.1	263.9	336.4	536.0
72.5°	230.9	353.4	428.8	355.6	329.8	355.6	428.8	353.4	230.9	303.4	463.4
75°	173.2	245.7	329.8	263.5	247.4	263.5	329.8	245.7	173.2	245.7	362.8
77.5°	125.3	159.2	232.5	176.3	169.9	176.3	232.5	159.2	125.3	185.0	263.9
80°	98.9	107.0	173.2	123.7	123.7	123.7	173.2	107.0	98.9	139.3	197.9
82.5°	66.0	74.0	120.4	84.0	77.5	84.0	120.4	74.0	66.0	99.8	138.5
85°	33.0	33.0	49.5	33.0	33.0	33.0	49.5	33.0	33.0	49.1	66.0
87.5°	6.6	6.8	13.9	7.3	7.3	7.3	13.9	6.8	6.6	13.3	13.9
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	26.8	18.8	26.8	80.3	25.1	6.3	25.1	80.3
95°	19.2	58.0	260.3	96.5	62.2	96.5	260.3	58.0	19.2	58.0	260.3
97.5°	35.8	75.1	440.9	275.5	169.1	275.5	440.9	75.1	35.8	75.1	440.9
100°	47.5	85.1	502.4	458.0	297.6	458.0	502.4	85.1	47.5	85.1	502.4
102.5°	60.2	96.0	491.5	672.6	514.9	672.6	491.5	96.0	60.2	96.0	491.5
105°	79.2	111.3	448.1	853.5	818.1	853.5	448.1	111.3	79.2	111.3	448.1
107.5°	98.2	127.9	406.7	872.4	920.2	872.4	406.7	127.9	98.2	127.9	406.7
110°	110.9	139.7	385.9	850.7	939.2	850.7	385.9	139.7	110.9	139.7	385.9

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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°	123.6	150.6	374.1	813.2	925.6	813.2	374.1	150.6	123.6	150.6	374.1
115°	141.4	168.0	362.1	752.1	884.9	752.1	362.1	168.0	141.4	168.0	362.1
117.5°	158.9	184.1	357.3	693.3	827.2	693.3	357.3	184.1	158.9	184.1	357.3
120°	169.7	194.1	356.4	657.0	786.4	657.0	356.4	194.1	169.7	194.1	356.4
122.5°	180.6	204.1	356.4	627.8	748.4	627.8	356.4	204.1	180.6	204.1	356.4
125°	195.8	219.0	356.4	589.7	694.8	589.7	356.4	219.0	195.8	219.0	356.4
127.5°	209.1	231.5	356.4	560.1	649.7	560.1	356.4	231.5	209.1	231.5	356.4
130°	217.3	240.5	356.4	542.7	623.5	542.7	356.4	240.5	217.3	240.5	356.4
132.5°	225.4	248.6	355.5	529.0	601.8	529.0	355.5	248.6	225.4	248.6	355.5
135°	236.5	259.7	354.2	507.3	571.4	507.3	354.2	259.7	236.5	259.7	354.2
137.5°	247.4	271.7	354.0	486.5	543.8	486.5	354.0	271.7	247.4	271.7	354.0
140°	254.6	278.9	353.0	471.9	523.9	471.9	353.0	278.9	254.6	278.9	353.0
142.5°	263.7	287.1	354.0	457.3	505.8	457.3	354.0	287.1	263.7	287.1	354.0
145°	276.1	297.1	354.2	437.7	476.4	437.7	354.2	297.1	276.1	297.1	354.2
147.5°	288.5	306.5	354.4	420.3	451.9	420.3	354.4	306.5	288.5	306.5	354.4
150°	297.6	312.0	355.3	410.2	435.7	410.2	355.3	312.0	297.6	312.0	355.3
152.5°	304.8	317.5	355.3	402.0	423.0	402.0	355.3	317.5	304.8	317.5	355.3
155°	314.6	325.6	355.3	390.7	406.2	390.7	355.3	325.6	314.6	325.6	355.3
157.5°	325.0	332.5	356.4	383.8	394.5	383.8	356.4	332.5	325.0	332.5	356.4
160°	330.4	337.1	356.4	379.3	388.1	379.3	356.4	337.1	330.4	337.1	356.4
162.5°	335.8	340.7	356.4	375.6	381.8	375.6	356.4	340.7	335.8	340.7	356.4
165°	342.9	346.2	356.4	370.1	373.4	370.1	356.4	346.2	342.9	346.2	356.4
167.5°	349.4	350.3	357.6	366.2	369.1	366.2	357.6	350.3	349.4	350.3	357.6
170°	353.0	353.0	357.6	364.4	365.5	364.4	357.6	353.0	353.0	353.0	357.6
172.5°	354.9	355.7	357.6	362.6	362.8	362.6	357.6	355.7	354.9	355.7	357.6
175°	358.7	357.6	358.7	360.9	359.8	360.9	358.7	357.6	358.7	357.6	358.7
177.5°	359.8	359.0	358.9	360.7	358.9	360.7	358.9	359.0	359.8	359.0	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2127.4	2127.4	2127.4	2127.4	2127.4	2127.4
2.5°	2061.3	2054.9	2061.3	2081.2	2114.2	2114.2
5°	1788.4	1748.1	1788.4	1937.8	2070.3	2094.4
7.5°	1625.8	1612.9	1625.8	1688.7	1966.6	2074.6
10°	1566.7	1566.7	1566.7	1616.2	1843.8	2061.5
12.5°	1560.8	1593.1	1560.8	1563.4	1733.7	2041.7
15°	1658.3	1698.6	1658.3	1525.5	1640.6	1987.2
17.5°	1691.1	1723.4	1691.1	1527.1	1556.8	1919.6
20°	1691.1	1723.4	1691.1	1566.7	1517.2	1880.0
22.5°	1684.5	1716.8	1684.5	1586.5	1470.9	1827.3
25°	1666.0	1682.1	1666.0	1583.2	1408.9	1723.4
27.5°	1632.9	1644.2	1632.9	1550.2	1348.1	1596.4
30°	1600.2	1624.4	1600.2	1517.2	1307.6	1517.2
32.5°	1566.8	1571.7	1566.8	1464.5	1266.7	1418.3
35°	1517.0	1509.0	1517.0	1401.8	1205.4	1269.9
37.5°	1449.8	1459.5	1449.8	1349.0	1142.4	1121.4
40°	1410.4	1426.5	1410.4	1302.8	1095.0	1022.5
42.5°	1370.8	1386.9	1370.8	1263.3	1048.7	969.7
45°	1311.3	1319.3	1311.3	1195.6	980.2	931.8
47.5°	1242.0	1250.1	1242.0	1134.6	909.5	874.1
50°	1195.8	1203.9	1195.8	1088.4	856.5	808.1
52.5°	1143.1	1151.1	1143.1	1048.9	790.9	761.9
55°	1063.7	1063.7	1063.7	973.0	693.2	717.4
57.5°	973.2	982.9	973.2	893.8	592.5	613.5
60°	907.4	923.5	907.4	841.1	520.4	560.7
62.5°	847.9	857.6	847.9	781.7	473.9	501.3
65°	750.6	758.6	750.6	684.4	420.2	404.0
67.5°	641.7	648.1	641.7	595.3	369.9	316.6
70°	569.0	569.0	569.0	536.0	336.4	263.9
72.5°	496.5	503.0	496.5	463.4	303.4	230.9
75°	387.7	395.8	387.7	362.8	245.7	173.2
77.5°	278.9	287.0	278.9	263.9	185.0	125.3
80°	206.3	214.4	206.3	197.9	139.3	98.9
82.5°	146.8	148.4	146.8	138.5	99.8	66.0
85°	66.0	66.0	66.0	66.0	49.1	33.0
87.5°	13.9	13.9	13.9	13.9	13.3	6.6
90°	3.4	3.4	3.4	3.4	1.1	0.0
92.5°	26.8	18.8	26.8	80.3	25.1	6.3
95°	96.5	62.2	96.5	260.3	58.0	19.2
97.5°	275.5	169.1	275.5	440.9	75.1	35.8
100°	458.0	297.6	458.0	502.4	85.1	47.5
102.5°	672.6	514.9	672.6	491.5	96.0	60.2
105°	853.5	818.1	853.5	448.1	111.3	79.2
107.5°	872.4	920.2	872.4	406.7	127.9	98.2
110°	850.7	939.2	850.7	385.9	139.7	110.9

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	813.2	925.6	813.2	374.1	150.6	123.6
115°	752.1	884.9	752.1	362.1	168.0	141.4
117.5°	693.3	827.2	693.3	357.3	184.1	158.9
120°	657.0	786.4	657.0	356.4	194.1	169.7
122.5°	627.8	748.4	627.8	356.4	204.1	180.6
125°	589.7	694.8	589.7	356.4	219.0	195.8
127.5°	560.1	649.7	560.1	356.4	231.5	209.1
130°	542.7	623.5	542.7	356.4	240.5	217.3
132.5°	529.0	601.8	529.0	355.5	248.6	225.4
135°	507.3	571.4	507.3	354.2	259.7	236.5
137.5°	486.5	543.8	486.5	354.0	271.7	247.4
140°	471.9	523.9	471.9	353.0	278.9	254.6
142.5°	457.3	505.8	457.3	354.0	287.1	263.7
145°	437.7	476.4	437.7	354.2	297.1	276.1
147.5°	420.3	451.9	420.3	354.4	306.5	288.5
150°	410.2	435.7	410.2	355.3	312.0	297.6
152.5°	402.0	423.0	402.0	355.3	317.5	304.8
155°	390.7	406.2	390.7	355.3	325.6	314.6
157.5°	383.8	394.5	383.8	356.4	332.5	325.0
160°	379.3	388.1	379.3	356.4	337.1	330.4
162.5°	375.6	381.8	375.6	356.4	340.7	335.8
165°	370.1	373.4	370.1	356.4	346.2	342.9
167.5°	366.2	369.1	366.2	357.6	350.3	349.4
170°	364.4	365.5	364.4	357.6	353.0	353.0
172.5°	362.6	362.8	362.6	357.6	355.7	354.9
175°	360.9	359.8	360.9	358.7	357.6	358.7
177.5°	360.7	358.9	360.7	358.9	359.0	359.8
180°	359.8	359.8	359.8	359.8	359.8	359.8

TEST NUMBER: P1191270

CATALOG NUMBER: SQ2-FA-050U-125D-L835-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	20.33	21.41	21.09	22.19	23.14	21.55	22.63	22.32	23.41	24.36
	3H	21.44	22.40	22.21	23.19	24.17	22.81	23.78	23.59	24.57	25.55
	4H	21.80	22.71	22.59	23.51	24.50	23.21	24.12	24.01	24.93	25.92
	6H	21.97	22.81	22.78	23.62	24.63	23.39	24.23	24.19	25.04	26.04
	8H	22.01	22.81	22.83	23.64	24.65	23.42	24.22	24.23	25.05	26.05
	12H	22.02	22.78	22.84	23.60	24.63	23.41	24.17	24.23	24.99	26.03
4H	2H	21.28	22.20	22.08	23.00	23.99	22.20	23.11	22.99	23.91	24.90
	3H	22.67	23.43	23.48	24.27	25.27	23.67	24.43	24.48	25.26	26.27
	4H	23.13	23.82	23.95	24.65	25.69	24.14	24.83	24.97	25.67	26.70
	6H	23.37	23.96	24.21	24.82	25.86	24.38	24.97	25.22	25.83	26.87
	8H	23.43	23.98	24.27	24.84	25.89	24.43	24.99	25.27	25.84	26.89
	12H	23.44	23.94	24.30	24.82	25.87	24.43	24.93	25.29	25.80	26.86
8H	4H	23.54	24.10	24.39	24.95	26.01	24.37	24.93	25.21	25.78	26.83
	6H	23.90	24.36	24.77	25.25	26.31	24.69	25.15	25.56	26.05	27.10
	8H	24.01	24.42	24.90	25.31	26.38	24.78	25.19	25.67	26.08	27.15
	12H	24.06	24.42	24.95	25.30	26.43	24.81	25.17	25.69	26.05	27.18
12H	4H	23.56	24.06	24.42	24.93	25.99	24.35	24.85	25.21	25.72	26.78
	6H	23.97	24.38	24.85	25.27	26.34	24.71	25.12	25.59	26.01	27.08
	8H	24.12	24.48	25.01	25.37	26.49	24.83	25.19	25.72	26.08	27.20