

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: P853768

Luminaire Tested: SQ2-FA-075U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853768  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-FA-075U-075D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

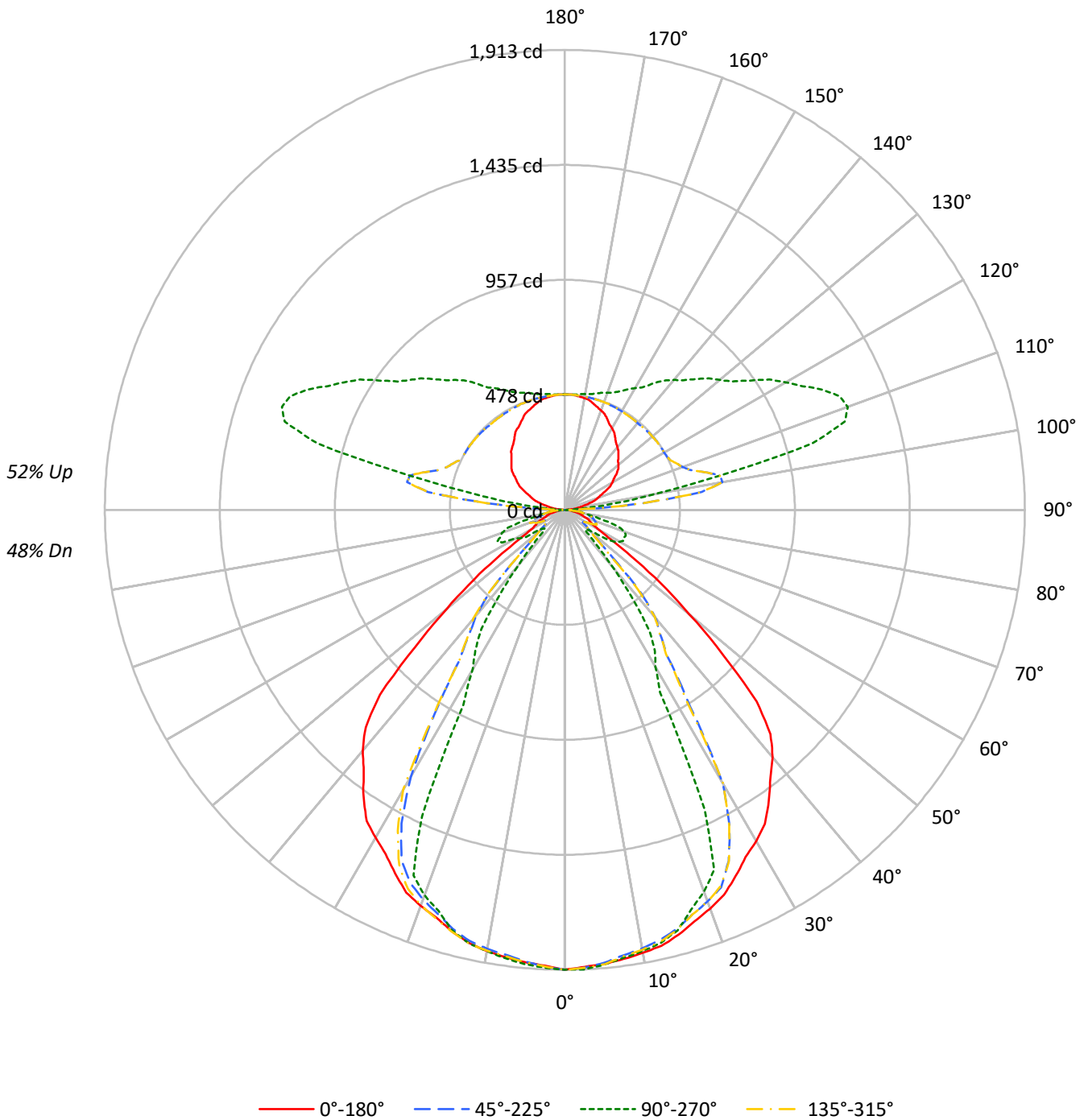
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5770.6 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.95 / 0.95  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 50  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	98	95	91	88	91	87	84	82	74	72	70	61	60	59	50	49	48	43
2	91	84	78	74	83	78	73	69	66	63	60	55	53	51	45	44	42	38
3	84	75	68	63	77	70	64	59	60	55	52	50	47	45	42	40	38	34
4	77	68	60	55	71	63	57	52	54	49	46	46	42	40	38	36	34	30
5	72	61	54	48	66	57	50	46	49	44	41	42	38	36	35	33	31	28
6	67	55	48	43	61	52	45	41	45	40	36	39	35	32	33	30	28	25
7	62	51	43	38	57	48	41	36	41	36	33	36	32	29	30	28	26	23
8	58	47	39	34	54	44	37	33	38	33	30	33	29	27	28	26	23	21
9	54	43	36	31	50	40	34	30	35	31	27	31	27	24	27	24	22	20
10	51	40	33	28	47	37	31	27	33	28	25	29	25	22	25	22	20	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	30885	30885	30885	30885
5°	30721	30768	30605	30746
10°	30675	30557	30557	30557
15°	30576	30262	30335	30262
20°	30338	29050	30115	29323
25°	29940	24517	29735	25032
30°	29666	14067	29343	14255
35°	29144	12084	28775	11913
40°	28338	6355	27548	6294
45°	25759	2733	24836	2733
50°	16995	3298	16124	3080
55°	9503	6092	9016	5523
60°	5125	8570	5031	7685
65°	4520	10414	4741	11851
70°	4220	12463	4017	13143
75°	3961	10711	4049	11067
80°	3357	7643	3357	8052
85°	2946	4279	2668	5076

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25759 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.0	3.1
10°-20°	510.7	8.8
20°-30°	696.3	12.1
30°-40°	585.2	10.1
40°-50°	332.4	5.8
50°-60°	176.3	3.1
60°-70°	162.4	2.8
70°-80°	119.2	2.1
80°-90°	31.6	0.5
90°-100°	181.8	3.2
100°-110°	602.7	10.4
110°-120°	598.2	10.4
120°-130°	487.2	8.4
130°-140°	396.0	6.9
140°-150°	307.5	5.3
150°-160°	221.6	3.8
160°-170°	135.7	2.4
170°-180°	45.8	0.8
0°-30°	1387.0	24.0
0°-40°	1972.2	34.2
0°-60°	2480.9	43.0
0°-90°	2794.0	48.4
90°-120°	1382.7	24.0
90°-150°	2573.4	44.6
90°-180°	2977.0	51.6
0°-180°	5770.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1913	1913	1913	1913	1913	
5°	1896	1898	1888	1897	1896	180
15°	1829	1810	1815	1810	1829	516
25°	1681	1376	1669	1405	1681	775
35°	1479	613	1460	604	1479	923
45°	1128	120	1088	120	1128	825
55°	338	216	320	196	338	325
65°	118	273	124	310	118	119
75°	64	172	65	177	64	65
85°	16	23	14	27	16	18
90°	0	4	0	4	0	2
95°	26	79	26	79	26	30
105°	106	1064	106	1064	106	111
115°	188	1182	188	1182	188	186
125°	263	937	263	937	263	234
135°	314	769	314	769	314	243
145°	365	642	365	642	365	229
155°	417	543	417	543	417	192
165°	458	501	458	501	458	129
175°	479	482	479	482	479	45
180°	481	481	481	481	481	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9
2.5°	1902.5	1930.7	1905.9	1902.7	1912.9	1910.6	1907.1	1920.4	1897.9	1920.4	1902.5
5°	1895.5	1928.0	1891.2	1881.5	1898.4	1887.1	1897.0	1916.5	1888.3	1913.7	1885.4
7.5°	1883.7	1912.5	1868.4	1862.2	1878.8	1868.9	1873.0	1900.2	1876.5	1893.2	1867.6
10°	1871.0	1896.4	1852.3	1848.3	1863.8	1853.9	1858.0	1886.4	1863.8	1879.3	1853.7
12.5°	1857.2	1876.9	1832.7	1830.9	1844.2	1837.7	1839.6	1863.4	1845.3	1860.9	1836.4
15°	1829.2	1847.5	1803.2	1796.3	1810.4	1804.8	1807.6	1828.9	1814.8	1824.6	1803.2
17.5°	1794.6	1809.2	1765.1	1744.4	1744.9	1752.0	1765.1	1790.8	1778.1	1791.1	1760.8
20°	1765.7	1782.6	1734.0	1693.5	1690.7	1697.8	1734.0	1759.8	1752.7	1766.8	1723.9
22.5°	1732.2	1743.5	1699.4	1631.0	1621.5	1628.5	1694.7	1725.3	1722.7	1732.3	1678.9
25°	1680.6	1691.9	1611.4	1513.0	1376.2	1504.6	1614.2	1669.1	1669.1	1677.5	1607.0
27.5°	1628.1	1628.4	1482.7	971.7	857.2	936.7	1480.7	1599.6	1613.1	1608.9	1470.3
30°	1591.2	1581.3	1314.2	785.5	754.5	774.2	1315.6	1551.3	1573.9	1558.3	1281.0
32.5°	1548.5	1520.5	970.3	722.2	696.8	714.3	938.3	1494.0	1533.5	1499.9	1007.5
35°	1478.6	1405.3	740.0	638.5	613.1	635.7	734.3	1380.9	1459.9	1369.6	764.6
37.5°	1403.3	1117.0	651.5	508.6	453.8	497.6	648.3	1105.0	1372.8	1079.4	650.9
40°	1344.5	877.6	585.7	372.0	301.5	350.9	581.4	837.3	1307.0	900.7	571.3
42.5°	1266.0	770.9	470.3	236.3	184.9	216.3	451.0	753.1	1226.2	780.5	454.7
45°	1128.1	662.6	278.4	129.6	119.7	125.4	256.8	650.4	1087.7	636.3	284.2
47.5°	893.5	505.4	178.9	110.2	120.9	110.2	173.4	489.3	843.9	488.5	178.6
50°	676.6	394.5	138.5	111.5	131.3	111.5	134.2	381.0	641.9	416.3	137.0
52.5°	501.2	329.6	113.1	122.3	157.8	124.5	109.9	320.9	475.8	335.8	107.0
55°	337.6	258.6	90.9	161.4	216.4	165.6	90.9	251.1	320.3	248.3	88.0
57.5°	214.1	192.4	92.0	207.5	247.0	211.4	93.5	185.4	205.4	186.2	80.8
60°	158.7	151.6	102.4	220.3	265.4	223.1	103.9	145.9	155.8	144.5	86.6
62.5°	131.0	119.4	123.2	238.6	275.8	232.4	125.8	113.9	136.2	109.1	95.8
65°	118.3	77.4	145.7	241.6	272.6	241.6	147.1	73.3	124.1	78.9	129.8
67.5°	106.8	57.4	140.8	240.0	274.4	240.5	137.3	54.7	102.4	53.3	132.7
70°	89.4	51.4	132.7	244.2	264.0	235.8	132.7	49.8	85.1	48.4	155.8
72.5°	74.4	48.8	123.5	225.5	234.0	217.1	124.6	48.5	74.7	43.7	146.6
75°	63.5	48.0	118.3	180.1	171.7	171.7	115.4	46.6	64.9	43.8	114.0
77.5°	47.6	42.5	98.1	117.6	111.1	111.1	96.4	41.1	45.3	38.5	92.6
80°	36.1	38.9	80.8	86.5	82.2	82.2	77.9	37.5	36.1	36.1	76.5
82.5°	28.0	33.1	62.3	63.4	60.3	59.2	60.6	32.8	28.0	30.2	59.1
85°	15.9	22.9	33.2	27.3	23.1	21.7	31.7	21.5	14.4	21.5	31.7
87.5°	5.8	10.5	5.2	5.4	5.4	5.4	5.2	10.5	5.8	9.4	6.4
90°	0.0	1.0	3.0	4.0	4.0	4.0	3.0	1.0	0.0	1.0	3.0
92.5°	8.0	30.7	90.6	29.4	24.7	29.4	90.6	30.7	8.0	30.7	90.6
95°	25.9	76.5	329.5	117.6	78.6	117.6	329.5	76.5	25.9	76.5	329.5
97.5°	47.6	100.5	575.1	335.4	212.0	335.4	575.1	100.5	47.6	100.5	575.1
100°	62.7	113.3	665.9	571.9	379.2	571.9	665.9	113.3	62.7	113.3	665.9
102.5°	79.4	128.5	660.3	874.0	660.3	874.0	660.3	128.5	79.4	128.5	660.3
105°	105.5	150.3	603.2	1138.0	1064.0	1138.0	603.2	150.3	105.5	150.3	603.2
107.5°	132.2	172.1	548.4	1164.8	1221.1	1164.8	548.4	172.1	132.2	172.1	548.4
110°	147.3	187.2	520.6	1138.2	1252.1	1138.2	520.6	187.2	147.3	187.2	520.6



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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°	163.2	202.4	503.8	1091.2	1236.2	1091.2	503.8	202.4	163.2	202.4	503.8
115°	188.1	225.1	485.7	1011.2	1182.4	1011.2	485.7	225.1	188.1	225.1	485.7
117.5°	212.8	245.7	479.1	934.7	1114.4	934.7	479.1	245.7	212.8	245.7	479.1
120°	227.9	260.0	476.8	886.8	1061.0	886.8	476.8	260.0	227.9	260.0	476.8
122.5°	241.5	272.8	476.8	847.5	1008.5	847.5	476.8	272.8	241.5	272.8	476.8
125°	262.8	292.0	476.8	794.5	936.6	794.5	476.8	292.0	262.8	292.0	476.8
127.5°	280.3	308.9	475.6	754.4	875.9	754.4	475.6	308.9	280.3	308.9	475.6
130°	290.6	320.8	474.8	731.0	840.0	731.0	474.8	320.8	290.6	320.8	474.8
132.5°	300.2	331.1	474.0	711.7	809.8	711.7	474.0	331.1	300.2	331.1	474.0
135°	314.5	346.6	472.8	681.8	769.4	681.8	472.8	346.6	314.5	346.6	472.8
137.5°	330.0	361.0	471.6	652.9	730.2	652.9	471.6	361.0	330.0	361.0	471.6
140°	340.4	370.6	470.8	633.6	704.7	633.6	470.8	370.6	340.4	370.6	470.8
142.5°	350.0	379.3	471.6	614.4	677.6	614.4	471.6	379.3	350.0	379.3	471.6
145°	365.3	392.5	471.8	586.5	642.0	586.5	471.8	392.5	365.3	392.5	471.8
147.5°	381.8	404.6	472.0	562.9	604.2	562.9	472.0	404.6	381.8	404.6	472.0
150°	392.2	412.6	472.8	549.2	584.3	549.2	472.8	412.6	392.2	412.6	472.8
152.5°	401.7	421.4	473.6	537.9	565.9	537.9	473.6	421.4	401.7	421.4	473.6
155°	417.0	431.6	474.8	524.0	543.4	524.0	474.8	431.6	417.0	431.6	474.8
157.5°	432.0	443.3	476.0	514.1	527.9	514.1	476.0	443.3	432.0	443.3	476.0
160°	439.9	449.7	476.8	506.9	517.6	506.9	476.8	449.7	439.9	449.7	476.8
162.5°	447.9	455.3	476.8	502.0	510.4	502.0	476.8	455.3	447.9	455.3	476.8
165°	457.8	462.7	476.8	495.8	500.6	495.8	476.8	462.7	457.8	462.7	476.8
167.5°	467.0	469.5	477.8	490.2	492.7	490.2	477.8	469.5	467.0	469.5	477.8
170°	471.8	472.8	477.8	487.7	488.7	487.7	477.8	472.8	471.8	472.8	477.8
172.5°	475.0	475.9	478.5	485.3	485.5	485.3	478.5	475.9	475.0	475.9	478.5
175°	478.7	478.7	479.7	482.7	481.7	482.7	479.7	478.7	478.7	478.7	479.7
177.5°	480.7	480.7	479.9	481.5	479.9	481.5	479.9	480.7	480.7	480.7	479.9
180°	480.7	480.7	480.7	480.7	480.7	480.7	480.7	480.7	480.7	480.7	480.7



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1912.9	1912.9	1912.9	1912.9	1912.9	1912.9
2.5°	1898.0	1905.9	1905.9	1901.3	1923.9	1902.5
5°	1878.7	1897.0	1888.5	1888.3	1916.7	1895.5
7.5°	1865.1	1882.3	1874.4	1872.8	1900.6	1883.7
10°	1851.1	1863.8	1858.2	1862.4	1888.0	1871.0
12.5°	1831.5	1846.5	1840.9	1847.4	1870.7	1857.2
15°	1797.7	1810.4	1813.3	1816.2	1843.3	1829.2
17.5°	1741.9	1748.1	1762.2	1782.2	1810.4	1794.6
20°	1698.1	1706.6	1715.0	1749.8	1782.6	1765.7
22.5°	1648.2	1645.4	1665.2	1706.0	1746.9	1732.2
25°	1513.7	1405.1	1525.0	1630.1	1684.8	1680.6
27.5°	1054.0	914.6	1037.9	1504.6	1619.6	1628.1
30°	829.5	764.6	828.0	1343.0	1571.4	1591.2
32.5°	736.4	691.9	730.5	1022.2	1510.7	1548.5
35°	635.5	604.4	635.5	764.6	1391.2	1478.6
37.5°	508.7	445.2	507.5	660.7	1124.6	1403.3
40°	379.0	298.6	367.7	591.5	898.8	1344.5
42.5°	252.5	192.4	239.0	465.7	777.4	1266.0
45°	136.7	119.7	131.0	281.3	634.4	1128.1
47.5°	107.2	113.4	107.2	177.4	485.3	893.5
50°	102.9	122.6	102.9	137.0	401.5	676.6
52.5°	112.1	133.0	111.0	108.2	327.7	501.2
55°	127.1	196.2	128.5	88.0	240.2	337.6
57.5°	180.9	220.7	182.9	83.4	185.0	214.1
60°	185.8	238.0	184.4	88.0	143.2	158.7
62.5°	219.8	294.6	219.5	100.7	106.4	131.0
65°	281.9	310.2	284.8	128.4	76.0	118.3
67.5°	267.6	287.7	264.8	137.6	52.3	106.8
70°	262.9	278.4	260.1	157.2	48.5	89.4
72.5°	245.3	247.3	240.2	145.7	43.7	74.4
75°	190.1	177.4	183.1	125.5	43.7	63.5
77.5°	118.2	113.1	113.9	95.8	38.6	47.6
80°	89.4	86.6	85.1	80.8	36.1	36.1
82.5°	66.3	63.5	62.1	62.3	30.2	28.0
85°	30.2	27.4	26.0	36.1	21.5	15.9
87.5°	6.6	6.6	5.4	6.4	8.2	5.8
90°	4.0	4.0	4.0	3.0	1.0	0.0
92.5°	29.4	24.7	29.4	90.6	30.7	8.0
95°	117.6	78.6	117.6	329.5	76.5	25.9
97.5°	335.4	212.0	335.4	575.1	100.5	47.6
100°	571.9	379.2	571.9	665.9	113.3	62.7
102.5°	874.0	660.3	874.0	660.3	128.5	79.4
105°	1138.0	1064.0	1138.0	603.2	150.3	105.5
107.5°	1164.8	1221.1	1164.8	548.4	172.1	132.2
110°	1138.2	1252.1	1138.2	520.6	187.2	147.3





TEST NUMBER: P853768

CATALOG NUMBER: SQ2-FA-075U-075D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1091.2	1236.2	1091.2	503.8	202.4	163.2
115°	1011.2	1182.4	1011.2	485.7	225.1	188.1
117.5°	934.7	1114.4	934.7	479.1	245.7	212.8
120°	886.8	1061.0	886.8	476.8	260.0	227.9
122.5°	847.5	1008.5	847.5	476.8	272.8	241.5
125°	794.5	936.6	794.5	476.8	292.0	262.8
127.5°	754.4	875.9	754.4	475.6	308.9	280.3
130°	731.0	840.0	731.0	474.8	320.8	290.6
132.5°	711.7	809.8	711.7	474.0	331.1	300.2
135°	681.8	769.4	681.8	472.8	346.6	314.5
137.5°	652.9	730.2	652.9	471.6	361.0	330.0
140°	633.6	704.7	633.6	470.8	370.6	340.4
142.5°	614.4	677.6	614.4	471.6	379.3	350.0
145°	586.5	642.0	586.5	471.8	392.5	365.3
147.5°	562.9	604.2	562.9	472.0	404.6	381.8
150°	549.2	584.3	549.2	472.8	412.6	392.2
152.5°	537.9	565.9	537.9	473.6	421.4	401.7
155°	524.0	543.4	524.0	474.8	431.6	417.0
157.5°	514.1	527.9	514.1	476.0	443.3	432.0
160°	506.9	517.6	506.9	476.8	449.7	439.9
162.5°	502.0	510.4	502.0	476.8	455.3	447.9
165°	495.8	500.6	495.8	476.8	462.7	457.8
167.5°	490.2	492.7	490.2	477.8	469.5	467.0
170°	487.7	488.7	487.7	477.8	472.8	471.8
172.5°	485.3	485.5	485.3	478.5	475.9	475.0
175°	482.7	481.7	482.7	479.7	478.7	478.7
177.5°	481.5	479.9	481.5	479.9	480.7	480.7
180°	480.7	480.7	480.7	480.7	480.7	480.7

TEST NUMBER: P853768

CATALOG NUMBER: SQ2-FA-075U-075D-935-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	11.68	12.43	12.67	13.42	14.72	10.54	11.29	11.53	12.28	13.58
	3H	12.38	13.05	13.38	14.05	15.37	16.69	17.36	17.69	18.35	19.68
	4H	12.78	13.42	13.80	14.42	15.75	17.96	18.59	18.97	19.59	20.93
	6H	13.14	13.72	14.16	14.73	16.07	18.56	19.15	19.59	20.15	21.49
	8H	13.25	13.81	14.28	14.83	16.17	18.68	19.24	19.71	20.26	21.60
	12H	13.32	13.85	14.36	14.86	16.23	18.72	19.25	19.76	20.26	21.63
4H	2H	12.07	12.70	13.09	13.71	15.04	11.06	11.70	12.08	12.70	14.03
	3H	13.06	13.59	14.09	14.62	15.96	17.38	17.91	18.41	18.94	20.29
	4H	13.62	14.11	14.65	15.13	16.50	18.83	19.32	19.86	20.34	21.71
	6H	14.09	14.51	15.14	15.55	16.92	19.57	19.98	20.61	21.03	22.39
	8H	14.26	14.65	15.31	15.69	17.07	19.73	20.12	20.78	21.16	22.53
	12H	14.38	14.73	15.44	15.78	17.16	19.79	20.14	20.85	21.19	22.57
8H	4H	14.72	15.10	15.76	16.14	17.52	18.95	19.34	19.99	20.38	21.75
	6H	15.32	15.64	16.39	16.72	18.10	19.83	20.15	20.89	21.23	22.60
	8H	15.56	15.84	16.63	16.90	18.30	20.08	20.36	21.15	21.42	22.82
	12H	15.73	15.97	16.80	17.03	18.47	20.20	20.44	21.27	21.50	22.94
12H	4H	14.86	15.21	15.92	16.26	17.64	18.91	19.26	19.97	20.31	21.69
	6H	15.60	15.88	16.67	16.94	18.34	19.84	20.12	20.91	21.18	22.58
	8H	15.90	16.14	16.97	17.20	18.64	20.12	20.36	21.19	21.42	22.86