

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: P938121

Luminaire Tested: SQ4-FB-125U-125D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938121
REPORT IS A COMBINATION OF REPORTS P933592 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-927-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

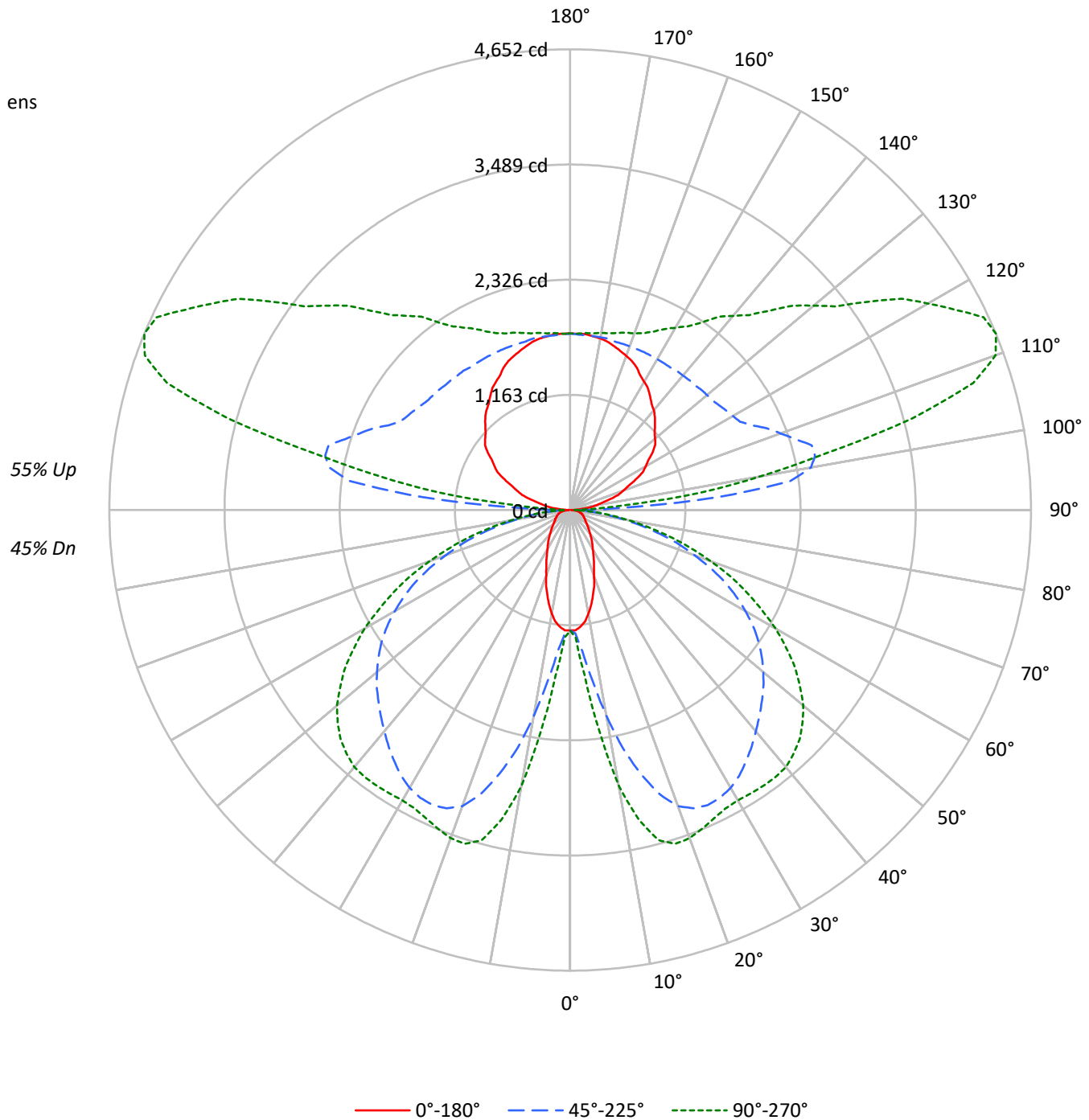
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20964.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 225.6
Input Voltage (V): NR
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45	
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37	
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30	30	30	30	
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25	
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21	
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18	
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15	
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13	
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12	
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10	
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3761	3761	3761
5°	3675	4347	5054
10°	3335	6339	8379
15°	2835	8283	10118
20°	2309	9601	10312
25°	1927	10049	10102
30°	1626	10116	10083
35°	1438	9950	10344
40°	1254	9735	10614
45°	1136	9578	10655
50°	1043	9437	10479
55°	1000	9230	10014
60°	1025	8828	9280
65°	1068	8217	8273
70°	1141	7171	6989
75°	1268	5852	5454
80°	1396	4063	3675
85°	1267	2159	1881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	0.8
10°-20°	697.0	3.3
20°-30°	1219.1	5.8
30°-40°	1569.4	7.5
40°-50°	1752.9	8.4
50°-60°	1678.9	8.0
60°-70°	1330.5	6.3
70°-80°	782.4	3.7
80°-90°	224.1	1.1
90°-100°	868.7	4.1
100°-110°	2283.8	10.9
110°-120°	2368.0	11.3
120°-130°	1899.5	9.1
130°-140°	1490.4	7.1
140°-150°	1143.9	5.5
150°-160°	823.8	3.9
160°-170°	504.1	2.4
170°-180°	170.3	0.8
0°-30°	2073.3	9.9
0°-40°	3642.7	17.4
0°-60°	7074.5	33.7
0°-90°	9411.6	44.9
90°-120°	5520.5	26.3
90°-150°	10054.3	48.0
90°-180°	11552.0	55.1
0°-180°	20964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1184	1270	1431	1618	1677	109
15°	887	1638	2760	3346	3452	247
25°	567	1857	3288	3432	3436	261
35°	383	1775	3096	3272	3401	239
45°	262	1415	2736	3135	3276	203
55°	188	899	2322	2697	2772	171
65°	148	477	1724	1939	1966	147
75°	109	293	946	1040	1044	115
85°	39	90	234	258	262	41
90°	12	34	91	45	45	12
95°	115	450	1496	772	525	127
105°	411	623	2525	3833	3576	436
115°	731	887	2022	4034	4605	722
125°	1017	1140	1840	3108	3667	903
135°	1212	1334	1782	2509	2845	937
145°	1405	1495	1759	2141	2308	880
155°	1588	1633	1759	1932	1988	730
165°	1714	1737	1759	1829	1852	484
175°	1782	1782	1771	1794	1794	169
180°	1782	1782	1782	1782	1782	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8	1215.8
2.5°	1215.8	1215.8	1223.5	1227.5	1235.2	1239.2	1247.0	1254.8	1278.3	1282.2	1290.0
5°	1184.4	1200.0	1250.9	1270.4	1325.2	1399.5	1430.7	1481.6	1587.0	1618.4	1637.9
7.5°	1137.5	1172.7	1297.8	1329.1	1465.9	1661.4	1743.4	1852.9	2021.0	2103.1	2169.6
10°	1063.3	1137.5	1360.4	1434.6	1657.4	1954.5	2107.0	2259.4	2513.5	2626.9	2669.9
12.5°	981.2	1102.3	1426.8	1528.4	1849.0	2282.9	2466.6	2634.7	2924.0	3076.5	3099.9
15°	887.3	1051.5	1489.3	1637.9	2052.3	2556.6	2759.8	2967.0	3236.7	3346.2	3373.5
17.5°	805.3	1012.5	1548.0	1704.3	2208.6	2802.8	3010.0	3181.9	3400.9	3475.2	3494.7
20°	703.6	949.9	1587.0	1790.3	2372.8	2982.6	3181.9	3314.8	3463.5	3510.4	3518.1
22.5°	629.3	883.4	1610.5	1821.6	2482.2	3092.1	3260.2	3365.7	3467.3	3482.9	3486.9
25°	566.8	809.2	1606.6	1856.8	2576.0	3158.5	3287.5	3365.7	3424.3	3432.1	3432.1
27.5°	508.2	727.1	1591.0	1864.6	2646.4	3174.2	3275.8	3330.5	3357.9	3373.5	3373.5
30°	457.4	648.9	1551.9	1849.0	2677.7	3158.5	3240.6	3268.0	3295.4	3318.8	3330.5
32.5°	418.3	574.7	1493.3	1817.7	2681.6	3119.4	3178.1	3193.7	3232.8	3287.5	3307.1
35°	383.1	500.3	1426.8	1774.7	2658.2	3056.9	3095.9	3111.6	3189.8	3271.9	3299.2
37.5°	347.9	445.6	1340.8	1700.5	2623.0	2982.6	3010.0	3037.3	3158.5	3256.3	3287.5
40°	312.7	398.7	1239.2	1618.4	2568.3	2892.7	2916.1	2959.2	3119.4	3232.8	3264.0
42.5°	285.4	359.7	1129.7	1532.4	2497.9	2791.1	2826.3	2888.8	3072.5	3193.7	3228.9
45°	261.9	320.6	1012.5	1415.1	2407.9	2685.5	2736.3	2822.4	3017.8	3135.1	3166.3
47.5°	238.5	293.2	891.3	1293.9	2310.2	2580.0	2646.4	2744.1	2943.6	3056.9	3084.2
50°	218.9	265.8	770.1	1164.9	2204.7	2466.6	2544.8	2646.4	2849.7	2955.3	2990.4
52.5°	203.3	242.4	656.7	1035.9	2083.5	2349.3	2439.3	2544.8	2736.3	2838.0	2861.4
55°	187.6	222.8	559.0	899.1	1958.4	2224.2	2322.0	2423.7	2611.2	2697.2	2712.9
57.5°	179.8	207.2	476.9	770.1	1825.5	2083.5	2193.0	2286.8	2462.7	2529.1	2544.8
60°	168.1	195.4	414.3	660.7	1680.9	1950.6	2044.4	2138.3	2286.8	2341.5	2353.3
62.5°	156.4	187.6	367.4	555.1	1532.4	1794.3	1888.0	1974.0	2099.2	2138.3	2153.9
65°	148.5	179.8	332.3	476.9	1379.9	1630.1	1723.9	1798.2	1899.8	1938.9	1946.7
67.5°	140.8	172.0	304.9	410.5	1227.5	1465.9	1536.2	1606.6	1684.8	1723.9	1727.8
70°	129.0	164.2	281.4	363.5	1071.1	1278.3	1336.9	1411.2	1473.7	1493.3	1505.0
72.5°	121.2	152.5	265.8	328.3	910.8	1098.5	1153.2	1196.2	1250.9	1270.4	1270.4
75°	109.4	136.8	250.2	293.2	746.6	899.1	946.0	989.0	1032.0	1039.8	1028.1
77.5°	97.7	121.2	215.0	246.2	582.4	711.5	750.5	774.0	809.2	817.0	820.9
80°	82.1	105.6	168.1	191.6	422.2	523.8	551.2	570.7	602.0	602.0	609.8
82.5°	62.5	82.1	121.2	136.8	285.4	359.7	383.1	394.8	414.3	414.3	414.3
85°	39.1	50.8	78.2	89.9	172.0	218.9	234.5	238.5	254.1	258.0	258.0
87.5°	19.6	27.3	50.8	54.7	89.9	113.3	113.3	121.2	121.2	117.3	113.3
90°	11.9	21.5	31.1	33.5	52.6	78.1	90.9	80.8	60.6	45.4	45.4
92.5°	47.8	129.1	210.5	230.8	324.6	449.4	511.9	448.6	322.1	227.2	218.2
95°	114.8	263.6	412.5	449.7	798.5	1263.6	1496.2	1335.1	1013.0	771.5	744.1
97.5°	198.5	329.8	461.2	494.0	1075.6	1851.2	2238.9	2137.1	1933.5	1780.9	1728.7
100°	263.1	382.2	501.3	531.1	1176.5	2037.1	2467.4	2474.9	2489.7	2500.9	2438.8
102.5°	318.2	429.3	540.3	568.1	1222.8	2095.6	2532.0	2661.7	2921.1	3115.7	3062.5
105°	411.4	505.5	599.6	623.2	1257.0	2102.2	2524.8	2815.5	3397.1	3833.2	3804.6
107.5°	507.1	594.8	682.5	704.5	1263.4	2008.7	2381.3	2786.9	3598.0	4206.4	4213.3
110°	571.7	650.9	730.1	749.9	1253.8	1925.7	2261.6	2715.1	3621.9	4302.1	4331.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	635.1	710.6	786.0	804.9	1254.2	1853.3	2152.8	2616.9	3545.0	4241.1	4286.8
115°	730.7	800.3	870.0	887.4	1265.8	1770.2	2022.5	2469.5	3363.6	4034.2	4097.6
117.5°	825.3	888.5	951.8	967.6	1289.3	1718.3	1932.8	2336.3	3143.1	3748.3	3818.6
120°	880.3	939.8	999.4	1014.2	1308.5	1700.8	1896.9	2265.6	3002.8	3555.8	3624.1
122.5°	934.1	994.1	1054.2	1069.2	1336.0	1691.6	1869.4	2201.4	2865.2	3363.2	3430.6
125°	1016.6	1071.4	1126.1	1139.8	1373.1	1684.0	1839.5	2121.4	2685.5	3108.4	3170.5
127.5°	1083.6	1138.9	1194.2	1208.0	1410.1	1679.6	1814.4	2056.4	2540.7	2903.9	2956.3
130°	1119.5	1179.0	1238.5	1253.4	1437.2	1682.3	1804.8	2020.3	2451.4	2774.8	2823.1
132.5°	1156.5	1216.1	1275.7	1290.5	1459.2	1684.0	1796.4	1989.4	2375.3	2664.7	2708.1
135°	1211.6	1265.8	1320.0	1333.6	1483.1	1682.4	1782.1	1943.7	2266.9	2509.3	2546.6
137.5°	1267.8	1321.5	1375.1	1388.5	1518.9	1692.8	1779.7	1916.3	2189.5	2394.4	2425.0
140°	1314.4	1363.8	1413.3	1425.7	1540.8	1694.5	1771.3	1889.3	2125.3	2302.3	2330.9
142.5°	1350.3	1396.0	1441.7	1453.1	1559.2	1700.6	1771.3	1875.0	2082.3	2237.8	2262.3
145°	1405.3	1445.2	1485.1	1495.0	1583.1	1700.6	1759.4	1844.2	2013.7	2140.8	2159.5
147.5°	1460.3	1499.1	1537.9	1547.6	1618.2	1712.3	1759.4	1826.1	1959.5	2059.5	2074.9
150°	1496.2	1531.3	1566.4	1575.2	1636.6	1718.4	1759.4	1815.7	1928.4	2012.9	2025.3
152.5°	1533.3	1559.9	1586.5	1593.1	1648.6	1722.4	1759.4	1807.5	1903.7	1975.8	1985.3
155°	1588.3	1608.0	1627.6	1632.6	1674.8	1731.2	1759.4	1797.6	1874.2	1931.5	1937.8
157.5°	1629.0	1648.1	1667.3	1672.1	1701.2	1740.0	1759.4	1789.1	1848.6	1893.3	1897.7
160°	1656.5	1671.4	1686.3	1690.0	1713.1	1744.0	1759.4	1784.9	1835.9	1874.2	1876.7
162.5°	1684.0	1695.2	1706.3	1709.1	1725.9	1748.2	1759.4	1780.9	1824.0	1856.2	1858.6
165°	1713.9	1724.0	1734.0	1736.6	1744.2	1754.3	1759.4	1774.8	1805.6	1828.7	1831.2
167.5°	1741.4	1746.2	1751.0	1752.1	1758.5	1767.1	1771.3	1781.4	1801.6	1816.7	1817.8
170°	1759.4	1764.1	1768.9	1770.1	1770.5	1771.0	1771.3	1781.4	1801.6	1816.7	1816.7
172.5°	1768.9	1770.0	1771.1	1771.3	1771.3	1771.3	1771.3	1779.3	1795.3	1807.2	1806.3
175°	1782.1	1782.1	1782.1	1782.1	1778.5	1773.7	1771.3	1776.4	1786.5	1794.0	1794.0
177.5°	1782.1	1782.1	1782.1	1782.1	1779.3	1775.5	1773.7	1777.7	1785.6	1791.6	1790.6
180°	1782.1	1782.1	1782.1	1782.1	1782.1	1782.1	1782.1	1782.1	1782.1	1782.1	1782.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1215.8	<i>1215.8</i>
2.5°	1297.8	<i>1290.0</i>
5°	1669.2	<i>1677.0</i>
7.5°	2247.7	<i>2243.8</i>
10°	2794.9	<i>2830.1</i>
12.5°	3193.7	<i>3201.5</i>
15°	3436.0	<i>3451.7</i>
17.5°	3529.9	<i>3533.8</i>
20°	3533.8	<i>3526.0</i>
22.5°	3490.8	<i>3482.9</i>
25°	3440.0	<i>3436.0</i>
27.5°	3393.1	<i>3397.0</i>
30°	3373.5	<i>3385.2</i>
32.5°	3373.5	<i>3393.1</i>
35°	3381.3	<i>3400.9</i>
37.5°	3377.5	<i>3400.9</i>
40°	3361.8	<i>3389.2</i>
42.5°	3318.8	<i>3338.3</i>
45°	3252.3	<i>3275.8</i>
47.5°	3166.3	<i>3181.9</i>
50°	3056.9	<i>3072.5</i>
52.5°	2920.1	<i>2924.0</i>
55°	2755.9	<i>2771.5</i>
57.5°	2580.0	<i>2583.9</i>
60°	2384.5	<i>2396.2</i>
62.5°	2177.3	<i>2177.3</i>
65°	1958.4	<i>1966.3</i>
67.5°	1731.7	<i>1751.3</i>
70°	1501.1	<i>1505.0</i>
72.5°	1274.4	<i>1274.4</i>
75°	1039.8	<i>1043.7</i>
77.5°	817.0	<i>817.0</i>
80°	605.9	<i>609.8</i>
82.5°	418.3	<i>426.1</i>
85°	261.9	<i>261.9</i>
87.5°	121.2	<i>109.4</i>
90°	45.4	<i>45.4</i>
92.5°	182.0	<i>145.9</i>
95°	634.6	<i>525.1</i>
97.5°	1520.4	<i>1312.0</i>
100°	2190.6	<i>1942.3</i>
102.5°	2849.8	<i>2637.2</i>
105°	3690.4	<i>3576.1</i>
107.5°	4240.9	<i>4268.6</i>
110°	4450.9	<i>4570.0</i>



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4469.6	4652.5
115°	4351.1	4604.7
117.5°	4099.8	4381.0
120°	3897.3	4170.5
122.5°	3700.1	3969.6
125°	3418.7	3667.0
127.5°	3165.7	3375.1
130°	3016.6	3210.1
132.5°	2881.3	3054.6
135°	2695.9	2845.3
137.5°	2547.2	2669.5
140°	2445.2	2559.5
142.5°	2360.7	2459.0
145°	2233.8	2308.3
147.5°	2136.6	2198.3
150°	2075.4	2125.4
152.5°	2023.0	2060.8
155°	1962.8	1987.8
157.5°	1915.2	1932.8
160°	1886.8	1896.9
162.5°	1868.2	1877.7
165°	1841.3	1851.5
167.5°	1822.1	1826.3
170°	1816.7	1816.7
172.5°	1802.5	1798.8
175°	1794.0	1794.0
177.5°	1786.3	1782.1
180°	1782.1	1782.1



TEST NUMBER: P938121
 CATALOG NUMBER: SQ4-FB-125U-125D-927-1D-UNV-STD-W-12

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	5.13	5.98	6.12	6.99	8.33	18.32	19.17	19.31	20.18	21.52
	3H	5.83	6.60	6.83	7.61	8.97	20.16	20.93	21.17	21.95	23.30
	4H	6.13	6.85	7.14	7.87	9.24	20.81	21.54	21.83	22.56	23.92
	6H	6.38	7.05	7.41	8.07	9.45	21.25	21.91	22.27	22.94	24.32
	8H	6.45	7.08	7.48	8.13	9.50	21.37	22.01	22.40	23.05	24.42
	12H	6.46	7.07	7.50	8.11	9.51	21.44	22.04	22.48	23.08	24.48
4H	2H	12.35	13.07	13.37	14.10	15.46	18.59	19.32	19.61	20.34	21.70
	3H	13.92	14.52	14.95	15.57	16.95	20.64	21.25	21.67	22.30	23.68
	4H	14.01	14.57	15.05	15.61	17.01	21.41	21.97	22.45	23.01	24.41
	6H	14.02	14.50	15.07	15.56	16.96	21.95	22.43	23.00	23.50	24.90
	8H	14.00	14.44	15.05	15.50	16.92	22.12	22.57	23.17	23.62	25.04
	12H	13.95	14.36	15.02	15.43	16.85	22.21	22.62	23.28	23.69	25.11
8H	4H	15.46	15.90	16.51	16.96	18.38	21.47	21.92	22.52	22.98	24.39
	6H	15.70	16.07	16.77	17.17	18.58	22.10	22.47	23.18	23.57	24.99
	8H	15.72	16.04	16.80	17.13	18.56	22.33	22.65	23.41	23.74	25.17
	12H	15.68	15.97	16.77	17.05	18.52	22.47	22.76	23.56	23.84	25.31
12H	4H	15.60	16.01	16.67	17.08	18.50	21.42	21.83	22.49	22.90	24.32
	6H	15.96	16.29	17.04	17.37	18.80	22.09	22.41	23.17	23.50	24.93
	8H	16.03	16.31	17.11	17.39	18.86	22.32	22.61	23.40	23.68	25.16