

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: P1191343

Luminaire Tested: SQ2-FA-100U-125D-L840-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191343
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-100U-125D-L840-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

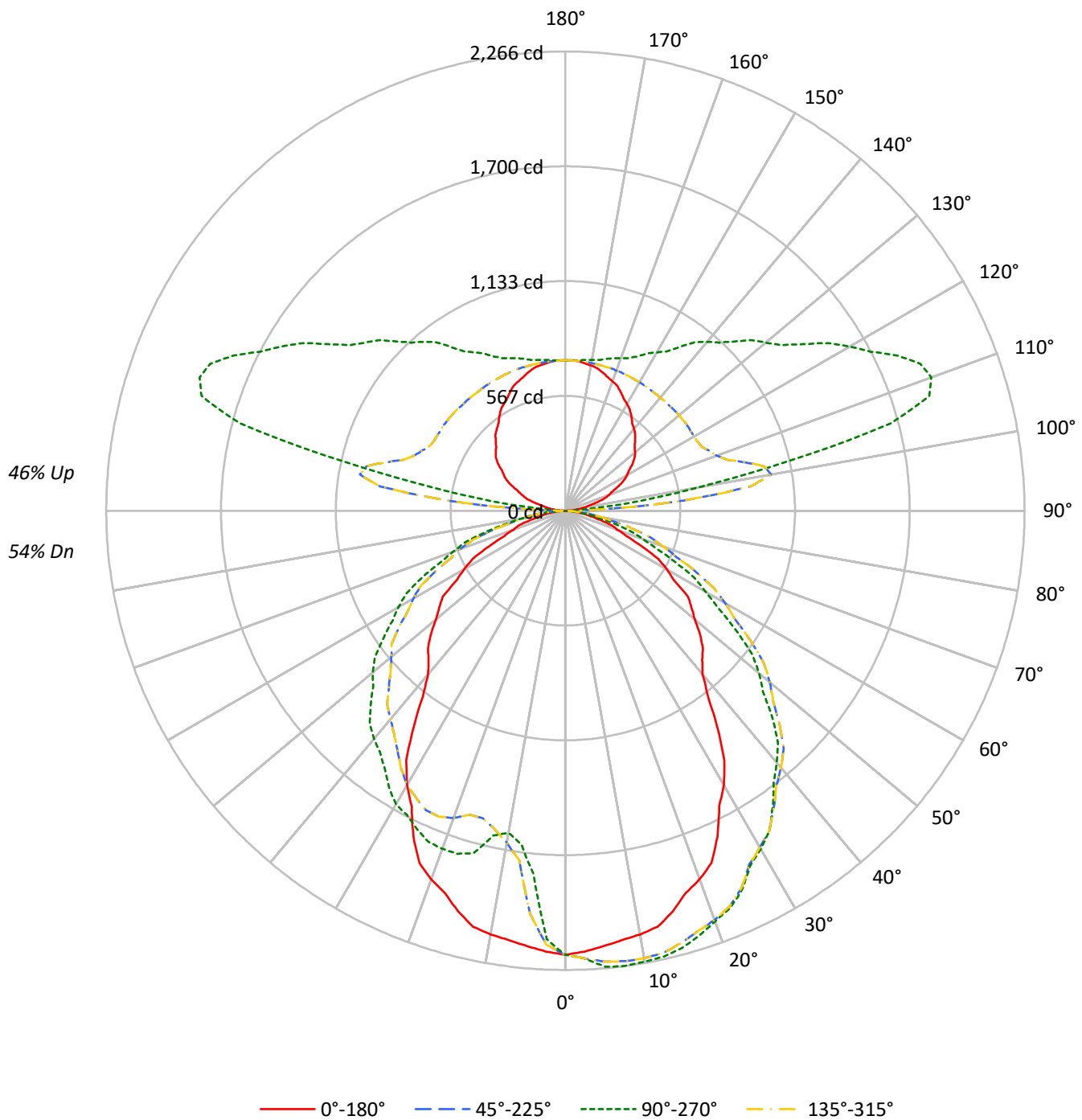
Lumens per Lamp: N/A
Luminaire Lumens: 10061.3 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 81.8
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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	95	91	87	92	88	85	82	75	73	71	64	62	60	53	52	51
2	90	83	76	71	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	31
5	69	57	49	43	64	54	46	41	46	41	36	40	35	32	33	30	27
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21
8	55	42	34	29	51	40	32	28	35	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	35372	35372	35372	35372
5°	34958	36610	34958	29177
10°	34805	37033	34805	26452
15°	34208	37331	34208	29240
20°	33266	37060	33266	30495
25°	31618	36761	31618	30861
30°	29131	35937	29131	31189
35°	25775	35148	25775	30630
40°	22194	34185	22194	30964
45°	21911	32963	21911	31024
50°	20904	31355	20904	31142
55°	20797	28924	20797	30835
60°	18645	25775	18645	30713
65°	15897	22709	15897	29845
70°	12826	19242	12826	27659
75°	11123	15889	11123	25427
80°	9475	11846	9475	20530
85°	6299	6299	6299	12579

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 34125 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.1	2.0
10°-20°	550.8	5.5
20°-30°	836.5	8.3
30°-40°	982.0	9.8
40°-50°	996.5	9.9
50°-60°	873.0	8.7
60°-70°	619.3	6.2
70°-80°	318.9	3.2
80°-90°	68.2	0.7
90°-100°	309.9	3.1
100°-110°	937.4	9.3
110°-120°	915.1	9.1
120°-130°	747.8	7.4
130°-140°	610.4	6.1
140°-150°	475.2	4.7
150°-160°	342.6	3.4
160°-170°	209.7	2.1
170°-180°	70.8	0.7
0°-30°	1584.5	15.7
0°-40°	2566.5	25.5
0°-60°	4436.0	44.1
0°-90°	5442.4	54.1
90°-120°	2162.5	21.5
90°-150°	3995.9	39.7
90°-180°	4619.0	45.9
0°-180°	10061.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2191	2191	2191	2191	2191	
5°	2157	2259	2157	1800	2157	205
15°	2046	2233	2046	1749	2046	575
25°	1775	2064	1775	1732	1775	810
35°	1308	1783	1308	1554	1308	815
45°	960	1444	960	1359	960	734
55°	739	1028	739	1095	739	639
65°	416	594	416	781	416	416
75°	178	255	178	408	178	193
85°	34	34	34	68	34	42
90°	0	7	0	7	0	3
95°	38	136	38	136	38	46
105°	163	1661	163	1661	163	171
115°	290	1809	290	1809	290	287
125°	406	1432	406	1432	406	360
135°	486	1180	486	1180	486	376
145°	567	987	567	987	567	355
155°	647	840	647	840	647	298
165°	707	775	707	775	707	199
175°	740	744	740	744	740	70
180°	742	742	742	742	742	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8
2.5°	2177.3	2210.5	2211.2	2211.2	2211.2	2211.2	2211.2	2210.5	2177.3	2177.3	2143.3
5°	2156.9	2215.0	2233.3	2242.2	2258.8	2242.2	2233.3	2215.0	2156.9	2132.0	1995.5
7.5°	2136.5	2214.5	2241.8	2257.3	2265.6	2257.3	2241.8	2214.5	2136.5	2025.2	1739.1
10°	2122.9	2214.2	2241.8	2250.5	2258.8	2250.5	2241.8	2214.2	2122.9	1898.7	1664.4
12.5°	2102.5	2200.5	2235.0	2243.7	2252.0	2243.7	2235.0	2200.5	2102.5	1785.4	1610.0
15°	2046.5	2179.3	2207.8	2225.0	2233.3	2225.0	2207.8	2179.3	2046.5	1689.5	1571.0
17.5°	1976.9	2137.9	2175.6	2191.0	2197.6	2191.0	2175.6	2137.9	1976.9	1603.2	1572.7
20°	1936.1	2110.5	2148.4	2156.9	2156.9	2156.9	2148.4	2110.5	1936.1	1562.5	1613.4
22.5°	1881.7	2076.0	2114.4	2116.3	2122.9	2116.3	2114.4	2076.0	1881.7	1514.8	1633.8
25°	1774.8	1998.9	2055.0	2046.9	2063.5	2046.9	2055.0	1998.9	1774.8	1450.9	1630.4
27.5°	1644.0	1926.3	1966.7	1975.2	1975.2	1975.2	1966.7	1926.3	1644.0	1388.3	1596.4
30°	1562.5	1878.0	1919.1	1927.6	1927.6	1927.6	1919.1	1878.0	1562.5	1346.6	1562.5
32.5°	1460.6	1835.9	1871.6	1873.3	1873.3	1873.3	1871.6	1835.9	1460.6	1304.5	1508.1
35°	1307.7	1764.4	1791.7	1791.5	1783.2	1791.5	1791.7	1764.4	1307.7	1241.3	1443.6
37.5°	1154.9	1673.0	1710.2	1698.1	1689.8	1698.1	1710.2	1673.0	1154.9	1176.5	1389.2
40°	1053.0	1617.6	1655.9	1630.2	1621.9	1630.2	1655.9	1617.6	1053.0	1127.7	1341.7
42.5°	998.6	1556.6	1594.7	1562.3	1554.0	1562.3	1594.7	1556.6	998.6	1080.0	1300.9
45°	959.6	1457.7	1494.5	1460.2	1443.6	1460.2	1494.5	1457.7	959.6	1009.4	1231.3
47.5°	900.1	1338.5	1390.9	1339.6	1323.0	1339.6	1390.9	1338.5	900.1	936.6	1168.5
50°	832.2	1263.9	1316.2	1264.9	1248.3	1264.9	1316.2	1263.9	832.2	882.0	1120.9
52.5°	784.6	1189.8	1234.7	1176.6	1160.0	1176.6	1234.7	1189.8	784.6	814.5	1080.1
55°	738.8	1079.2	1112.4	1052.4	1027.5	1052.4	1112.4	1079.2	738.8	713.9	1002.0
57.5°	631.8	955.6	990.1	921.6	893.3	921.6	990.1	955.6	631.8	610.2	920.5
60°	577.4	868.0	908.6	839.7	798.2	839.7	908.6	868.0	577.4	535.9	866.1
62.5°	516.3	773.7	827.1	758.2	716.7	758.2	827.1	773.7	516.3	488.1	805.0
65°	416.1	640.3	704.8	635.9	594.4	635.9	704.8	640.3	416.1	432.7	704.8
67.5°	326.1	518.7	591.0	515.5	482.3	515.5	591.0	518.7	326.1	380.9	613.1
70°	271.7	437.8	509.5	440.8	407.6	440.8	509.5	437.8	271.7	346.5	552.0
72.5°	237.8	364.0	441.6	366.2	339.7	366.2	441.6	364.0	237.8	312.5	477.2
75°	178.3	253.1	339.7	271.4	254.7	271.4	339.7	253.1	178.3	253.1	373.6
77.5°	129.1	163.9	239.5	181.6	174.9	181.6	239.5	163.9	129.1	190.5	271.7
80°	101.9	110.2	178.3	127.4	127.4	127.4	178.3	110.2	101.9	143.4	203.8
82.5°	67.9	76.2	124.0	86.5	79.8	86.5	124.0	76.2	67.9	102.8	142.7
85°	34.0	34.0	50.9	34.0	34.0	34.0	50.9	34.0	34.0	50.6	67.9
87.5°	6.8	7.2	16.4	8.4	8.2	8.4	16.4	7.2	6.8	13.9	16.4
90°	0.0	2.3	14.0	8.1	7.0	8.1	14.0	2.3	0.0	2.3	14.0
92.5°	13.0	52.7	189.2	62.7	45.2	62.7	189.2	52.7	13.0	52.7	189.2
95°	38.4	121.6	584.9	216.1	136.3	216.1	584.9	121.6	38.4	121.6	584.9
97.5°	74.3	154.8	921.8	610.0	371.4	610.0	921.8	154.8	74.3	154.8	921.8
100°	96.7	175.3	1029.9	995.7	668.8	995.7	1029.9	175.3	96.7	175.3	1029.9
102.5°	121.9	197.7	1007.6	1396.6	1113.4	1396.6	1007.6	197.7	121.9	197.7	1007.6
105°	163.1	229.2	920.4	1748.0	1661.4	1748.0	920.4	229.2	163.1	229.2	920.4
107.5°	202.3	265.4	836.5	1782.8	1883.0	1782.8	836.5	265.4	202.3	265.4	836.5
110°	228.4	288.7	794.6	1739.0	1921.2	1739.0	794.6	288.7	228.4	288.7	794.6

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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°	253.5	312.1	769.4	1665.5	1896.1	1665.5	769.4	312.1	253.5	312.1	769.4
115°	290.1	345.9	744.5	1540.5	1809.4	1540.5	744.5	345.9	290.1	345.9	744.5
117.5°	326.5	379.3	735.6	1423.5	1698.7	1423.5	735.6	379.3	326.5	379.3	735.6
120°	350.7	400.8	732.8	1355.2	1619.5	1355.2	732.8	400.8	350.7	400.8	732.8
122.5°	373.1	420.5	732.8	1295.1	1539.3	1295.1	732.8	420.5	373.1	420.5	732.8
125°	405.5	449.9	734.0	1216.6	1431.9	1216.6	734.0	449.9	405.5	449.9	734.0
127.5°	431.8	477.8	732.8	1157.4	1341.0	1157.4	732.8	477.8	431.8	477.8	732.8
130°	448.6	496.4	732.8	1123.4	1289.8	1123.4	732.8	496.4	448.6	496.4	732.8
132.5°	463.5	512.2	731.9	1092.4	1245.9	1092.4	731.9	512.2	463.5	512.2	731.9
135°	485.8	537.1	729.3	1049.2	1180.2	1049.2	729.3	537.1	485.8	537.1	729.3
137.5°	510.8	559.5	729.3	1003.1	1124.5	1003.1	729.3	559.5	510.8	559.5	729.3
140°	526.6	574.5	729.3	973.1	1088.2	973.1	729.3	574.5	526.6	574.5	729.3
142.5°	542.5	588.5	728.4	945.8	1046.3	945.8	728.4	588.5	542.5	588.5	728.4
145°	567.4	609.5	729.3	902.5	986.8	902.5	729.3	609.5	567.4	609.5	729.3
147.5°	592.3	628.1	730.7	866.9	931.6	866.9	730.7	628.1	592.3	628.1	730.7
150°	608.2	641.2	731.7	847.1	901.8	847.1	731.7	641.2	608.2	641.2	731.7
152.5°	623.1	652.5	732.6	830.1	874.8	830.1	732.6	652.5	623.1	652.5	732.6
155°	646.6	668.3	734.0	809.3	840.0	809.3	734.0	668.3	646.6	668.3	734.0
157.5°	667.1	684.7	735.4	793.9	815.3	793.9	735.4	684.7	667.1	684.7	735.4
160°	679.2	694.1	736.3	784.5	800.4	784.5	736.3	694.1	679.2	694.1	736.3
162.5°	691.4	702.5	737.3	776.0	789.2	776.0	737.3	702.5	691.4	702.5	737.3
165°	707.2	715.2	737.5	765.7	774.8	765.7	737.5	715.2	707.2	715.2	737.5
167.5°	720.7	724.8	738.9	757.6	761.5	757.6	738.9	724.8	720.7	724.8	738.9
170°	728.2	730.5	739.8	753.8	755.0	753.8	739.8	730.5	728.2	730.5	739.8
172.5°	732.8	734.2	739.8	750.1	750.3	750.1	739.8	734.2	732.8	734.2	739.8
175°	739.8	739.8	741.0	746.8	744.5	746.8	741.0	739.8	739.8	739.8	741.0
177.5°	743.1	742.2	741.2	744.0	742.2	744.0	741.2	742.2	743.1	742.2	741.2
180°	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2190.8	2190.8	2190.8	2190.8	2190.8	2190.8
2.5°	2122.8	2116.1	2122.8	2143.3	2177.3	2177.3
5°	1841.7	1800.2	1841.7	1995.5	2132.0	2156.9
7.5°	1674.3	1661.0	1674.3	1739.1	2025.2	2136.5
10°	1613.4	1613.4	1613.4	1664.4	1898.7	2122.9
12.5°	1607.4	1640.6	1607.4	1610.0	1785.4	2102.5
15°	1707.8	1749.3	1707.8	1571.0	1689.5	2046.5
17.5°	1741.5	1774.8	1741.5	1572.7	1603.2	1976.9
20°	1741.5	1774.8	1741.5	1613.4	1562.5	1936.1
22.5°	1734.7	1768.0	1734.7	1633.8	1514.8	1881.7
25°	1715.7	1732.3	1715.7	1630.4	1450.9	1774.8
27.5°	1681.6	1693.2	1681.6	1596.4	1388.3	1644.0
30°	1647.9	1672.9	1647.9	1562.5	1346.6	1562.5
32.5°	1613.5	1618.5	1613.5	1508.1	1304.5	1460.6
35°	1562.3	1554.0	1562.3	1443.6	1241.3	1307.7
37.5°	1493.1	1503.0	1493.1	1389.2	1176.5	1154.9
40°	1452.4	1469.1	1452.4	1341.7	1127.7	1053.0
42.5°	1411.7	1428.3	1411.7	1300.9	1080.0	998.6
45°	1350.4	1358.7	1350.4	1231.3	1009.4	959.6
47.5°	1279.0	1287.3	1279.0	1168.5	936.6	900.1
50°	1231.5	1239.8	1231.5	1120.9	882.0	832.2
52.5°	1177.1	1185.4	1177.1	1080.1	814.5	784.6
55°	1095.4	1095.4	1095.4	1002.0	713.9	738.8
57.5°	1002.2	1012.2	1002.2	920.5	610.2	631.8
60°	934.5	951.1	934.5	866.1	535.9	577.4
62.5°	873.2	883.1	873.2	805.0	488.1	516.3
65°	772.9	781.2	772.9	704.8	432.7	416.1
67.5°	660.8	667.4	660.8	613.1	380.9	326.1
70°	585.9	585.9	585.9	552.0	346.5	271.7
72.5°	511.3	518.0	511.3	477.2	312.5	237.8
75°	399.3	407.6	399.3	373.6	253.1	178.3
77.5°	287.2	295.5	287.2	271.7	190.5	129.1
80°	212.5	220.8	212.5	203.8	143.4	101.9
82.5°	151.2	152.8	151.2	142.7	102.8	67.9
85°	67.9	67.9	67.9	67.9	50.6	34.0
87.5°	15.2	15.0	15.2	16.4	13.9	6.8
90°	8.1	7.0	8.1	14.0	2.3	0.0
92.5°	62.7	45.2	62.7	189.2	52.7	13.0
95°	216.1	136.3	216.1	584.9	121.6	38.4
97.5°	610.0	371.4	610.0	921.8	154.8	74.3
100°	995.7	668.8	995.7	1029.9	175.3	96.7
102.5°	1396.6	1113.4	1396.6	1007.6	197.7	121.9
105°	1748.0	1661.4	1748.0	920.4	229.2	163.1
107.5°	1782.8	1883.0	1782.8	836.5	265.4	202.3
110°	1739.0	1921.2	1739.0	794.6	288.7	228.4

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CATALOG NUMBER: SQ2-FA-100U-125D-L840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1665.5	1896.1	1665.5	769.4	312.1	253.5
115°	1540.5	1809.4	1540.5	744.5	345.9	290.1
117.5°	1423.5	1698.7	1423.5	735.6	379.3	326.5
120°	1355.2	1619.5	1355.2	732.8	400.8	350.7
122.5°	1295.1	1539.3	1295.1	732.8	420.5	373.1
125°	1216.6	1431.9	1216.6	734.0	449.9	405.5
127.5°	1157.4	1341.0	1157.4	732.8	477.8	431.8
130°	1123.4	1289.8	1123.4	732.8	496.4	448.6
132.5°	1092.4	1245.9	1092.4	731.9	512.2	463.5
135°	1049.2	1180.2	1049.2	729.3	537.1	485.8
137.5°	1003.1	1124.5	1003.1	729.3	559.5	510.8
140°	973.1	1088.2	973.1	729.3	574.5	526.6
142.5°	945.8	1046.3	945.8	728.4	588.5	542.5
145°	902.5	986.8	902.5	729.3	609.5	567.4
147.5°	866.9	931.6	866.9	730.7	628.1	592.3
150°	847.1	901.8	847.1	731.7	641.2	608.2
152.5°	830.1	874.8	830.1	732.6	652.5	623.1
155°	809.3	840.0	809.3	734.0	668.3	646.6
157.5°	793.9	815.3	793.9	735.4	684.7	667.1
160°	784.5	800.4	784.5	736.3	694.1	679.2
162.5°	776.0	789.2	776.0	737.3	702.5	691.4
165°	765.7	774.8	765.7	737.5	715.2	707.2
167.5°	757.6	761.5	757.6	738.9	724.8	720.7
170°	753.8	755.0	753.8	739.8	730.5	728.2
172.5°	750.1	750.3	750.1	739.8	734.2	732.8
175°	746.8	744.5	746.8	741.0	739.8	739.8
177.5°	744.0	742.2	744.0	741.2	742.2	743.1
180°	742.2	742.2	742.2	742.2	742.2	742.2

TEST NUMBER: P1191343

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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	19.11	20.01	20.03	20.95	22.16	20.34	21.23	21.26	22.17	23.38
	3H	20.20	21.01	21.14	21.96	23.19	21.58	22.39	22.51	23.33	24.57
	4H	20.56	21.32	21.51	22.27	23.52	21.97	22.73	22.92	23.69	24.93
	6H	20.72	21.42	21.68	22.38	23.64	22.14	22.84	23.10	23.80	25.05
	8H	20.76	21.43	21.72	22.40	23.66	22.16	22.83	23.13	23.80	25.06
	12H	20.76	21.39	21.73	22.36	23.64	22.15	22.78	23.12	23.75	25.03
4H	2H	20.04	20.80	21.00	21.76	23.00	20.95	21.72	21.91	22.67	23.91
	3H	21.42	22.05	22.38	23.03	24.29	22.41	23.04	23.37	24.03	25.29
	4H	21.86	22.44	22.84	23.42	24.70	22.88	23.46	23.85	24.43	25.72
	6H	22.09	22.59	23.08	23.59	24.87	23.10	23.60	24.09	24.60	25.88
	8H	22.15	22.61	23.14	23.61	24.90	23.15	23.61	24.14	24.61	25.91
	12H	22.15	22.57	23.16	23.58	24.88	23.14	23.56	24.15	24.57	25.87
8H	4H	22.26	22.73	23.25	23.72	25.02	23.09	23.56	24.08	24.55	25.85
	6H	22.61	22.99	23.62	24.03	25.33	23.40	23.79	24.42	24.82	26.12
	8H	22.73	23.06	23.75	24.09	25.40	23.50	23.83	24.52	24.86	26.17
	12H	22.76	23.06	23.79	24.08	25.44	23.51	23.81	24.54	24.83	26.19
12H	4H	22.27	22.69	23.28	23.70	25.00	23.06	23.48	24.07	24.49	25.79
	6H	22.68	23.02	23.70	24.05	25.36	23.42	23.76	24.45	24.79	26.10
	8H	22.83	23.13	23.85	24.14	25.50	23.54	23.83	24.56	24.85	26.21