

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: P1191337

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

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191337
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-100D-L840-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

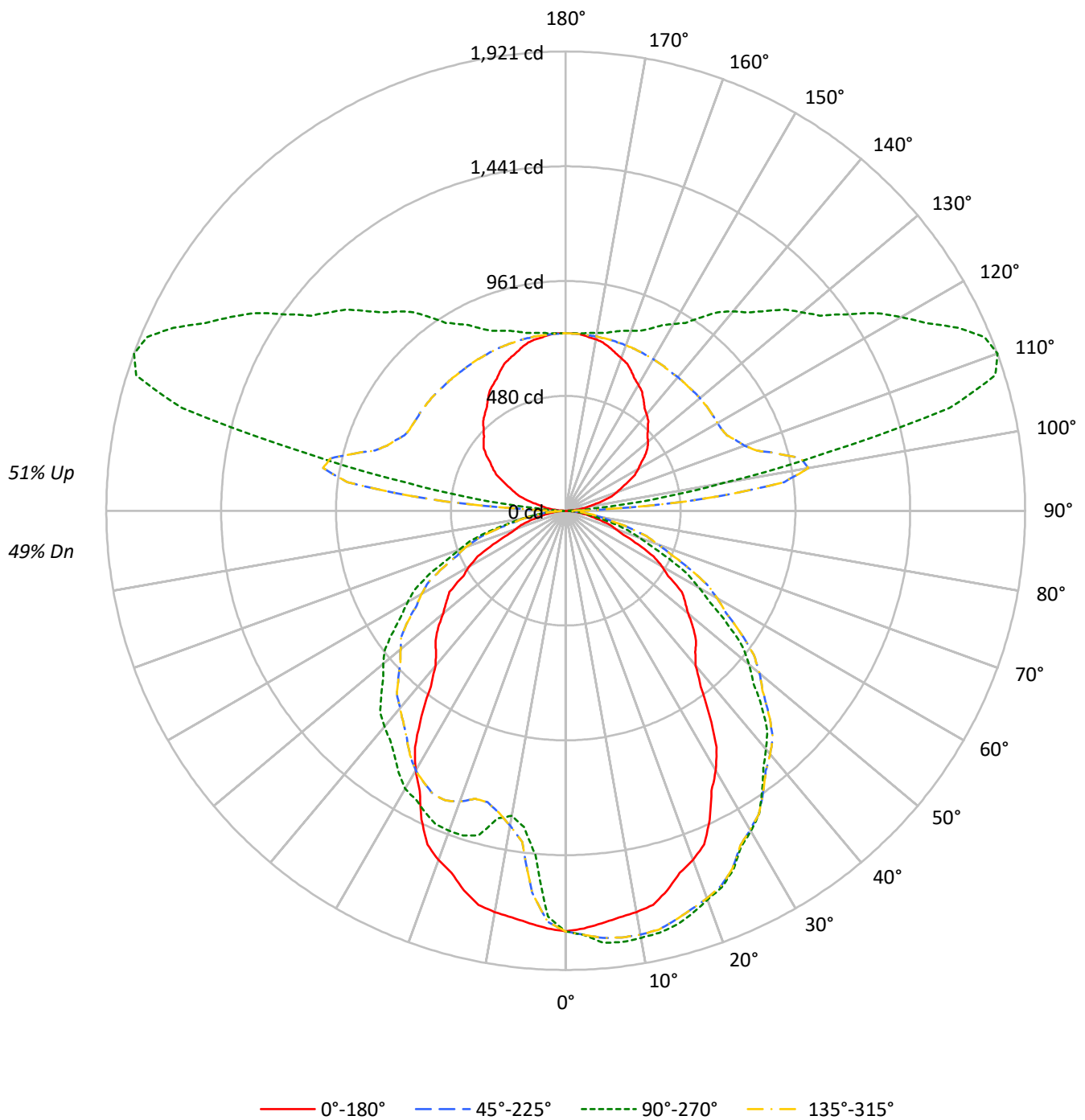
Lumens per Lamp: N/A
Luminaire Lumens: 8990.0 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.2
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33
4	74	63	56	50	68	59	52	46	50	45	40	42	38	35	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	30	34	29	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	29	24	30	25	21	26	22	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	28409	28409	28409	28409
5°	28075	29402	28075	23433
10°	27952	29742	27952	21245
15°	27473	29981	27473	23483
20°	26716	29763	26716	24490
25°	25392	29523	25392	24784
30°	23394	28862	23394	25048
35°	20700	28229	20700	24599
40°	17825	27455	17825	24867
45°	17596	26473	17596	24916
50°	16787	25181	16787	25010
55°	16701	23229	16701	24763
60°	14974	20702	14974	24664
65°	12768	18239	12768	23969
70°	10301	15451	10301	22216
75°	8933	12764	8933	20418
80°	7606	9512	7606	16485
85°	5057	5057	5057	10115

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 27407 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	1.8
10°-20°	442.4	4.9
20°-30°	671.8	7.5
30°-40°	788.7	8.8
40°-50°	800.3	8.9
50°-60°	701.1	7.8
60°-70°	497.4	5.5
70°-80°	256.1	2.8
80°-90°	55.1	0.6
90°-100°	309.9	3.4
100°-110°	937.4	10.4
110°-120°	915.1	10.2
120°-130°	747.8	8.3
130°-140°	610.4	6.8
140°-150°	475.2	5.3
150°-160°	342.6	3.8
160°-170°	209.7	2.3
170°-180°	70.8	0.8
0°-30°	1272.5	14.2
0°-40°	2061.2	22.9
0°-60°	3562.6	39.6
0°-90°	4371.1	48.6
90°-120°	2162.5	24.1
90°-150°	3995.9	44.4
90°-180°	4619.0	51.4
0°-180°	8990.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1760	1760	1760	1760	1760	
5°	1732	1814	1732	1446	1732	164
15°	1644	1794	1644	1405	1644	462
25°	1425	1657	1425	1391	1425	651
35°	1050	1432	1050	1248	1050	654
45°	771	1159	771	1091	771	589
55°	593	825	593	880	593	513
65°	334	477	334	627	334	334
75°	143	205	143	327	143	155
85°	27	27	27	55	27	34
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°	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5
2.5°	1748.6	1775.3	1775.9	1775.9	1775.9	1775.9	1775.9	1775.3	1748.6	1748.6	1721.3
5°	1732.2	1778.9	1793.6	1800.7	1814.1	1800.7	1793.6	1778.9	1732.2	1712.2	1602.6
7.5°	1715.9	1778.5	1800.4	1812.8	1819.5	1812.8	1800.4	1778.5	1715.9	1626.5	1396.7
10°	1704.9	1778.3	1800.4	1807.4	1814.1	1807.4	1800.4	1778.3	1704.9	1524.9	1336.7
12.5°	1688.6	1767.3	1795.0	1801.9	1808.6	1801.9	1795.0	1767.3	1688.6	1433.8	1293.0
15°	1643.6	1750.3	1773.1	1786.9	1793.6	1786.9	1773.1	1750.3	1643.6	1356.8	1261.7
17.5°	1587.6	1717.0	1747.2	1759.6	1765.0	1759.6	1747.2	1717.0	1587.6	1287.6	1263.0
20°	1554.9	1694.9	1725.4	1732.2	1732.2	1732.2	1725.4	1694.9	1554.9	1254.8	1295.8
22.5°	1511.3	1667.3	1698.1	1699.6	1704.9	1699.6	1698.1	1667.3	1511.3	1216.5	1312.1
25°	1425.3	1605.4	1650.4	1643.9	1657.2	1643.9	1650.4	1605.4	1425.3	1165.3	1309.4
27.5°	1320.3	1547.0	1579.5	1586.3	1586.3	1579.5	1547.0	1320.3	1114.9	1282.1	1282.1
30°	1254.8	1508.2	1541.3	1548.1	1548.1	1541.3	1508.2	1254.8	1081.5	1254.8	1254.8
32.5°	1173.0	1474.4	1503.1	1504.4	1504.4	1503.1	1474.4	1173.0	1047.6	1211.2	1211.2
35°	1050.2	1417.0	1439.0	1438.8	1432.2	1438.8	1439.0	1417.0	1050.2	996.9	1159.4
37.5°	927.5	1343.6	1373.5	1363.8	1357.1	1363.8	1373.5	1343.6	927.5	944.8	1115.7
40°	845.7	1299.1	1329.9	1309.2	1302.6	1309.2	1329.9	1299.1	845.7	905.7	1077.5
42.5°	802.0	1250.1	1280.8	1254.7	1248.0	1254.7	1280.8	1250.1	802.0	867.4	1044.8
45°	770.6	1170.7	1200.3	1172.7	1159.4	1172.7	1200.3	1170.7	770.6	810.6	988.9
47.5°	722.9	1075.0	1117.1	1075.9	1062.5	1075.9	1117.1	1075.0	722.9	752.2	938.4
50°	668.3	1015.1	1057.1	1015.8	1002.5	1015.8	1057.1	1015.1	668.3	708.3	900.2
52.5°	630.1	955.6	991.6	944.9	931.6	944.9	991.6	955.6	630.1	654.2	867.5
55°	593.3	866.7	893.4	845.2	825.2	845.2	893.4	866.7	593.3	573.3	804.7
57.5°	507.4	767.5	795.2	740.1	717.4	740.1	795.2	767.5	507.4	490.1	739.3
60°	463.7	697.1	729.7	674.4	641.1	674.4	729.7	697.1	463.7	430.4	695.6
62.5°	414.6	621.4	664.2	608.9	575.6	608.9	664.2	621.4	414.6	392.0	646.5
65°	334.2	514.2	566.0	510.7	477.4	510.7	566.0	514.2	334.2	347.5	566.0
67.5°	261.9	416.6	474.7	414.0	387.4	414.0	474.7	416.6	261.9	305.9	492.4
70°	218.2	351.6	409.2	354.0	327.3	354.0	409.2	351.6	218.2	278.2	443.3
72.5°	191.0	292.3	354.6	294.1	272.8	294.1	354.6	292.3	191.0	251.0	383.3
75°	143.2	203.2	272.8	217.9	204.6	217.9	272.8	203.2	143.2	203.2	300.1
77.5°	103.7	131.7	192.3	145.8	140.5	145.8	192.3	131.7	103.7	153.0	218.2
80°	81.8	88.5	143.2	102.3	102.3	102.3	143.2	88.5	81.8	115.2	163.7
82.5°	54.6	61.2	99.6	69.4	64.1	69.4	99.6	61.2	54.6	82.6	114.6
85°	27.3	27.3	40.9	27.3	27.3	27.3	40.9	27.3	27.3	40.6	54.6
87.5°	5.5	5.9	13.7	7.1	6.9	7.1	13.7	5.9	5.5	11.2	13.7
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°	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5
2.5°	1704.8	1699.5	1704.8	1721.3	1748.6	1748.6
5°	1479.1	1445.8	1479.1	1602.6	1712.2	1732.2
7.5°	1344.6	1333.9	1344.6	1396.7	1626.5	1715.9
10°	1295.8	1295.8	1295.8	1336.7	1524.9	1704.9
12.5°	1290.9	1317.6	1290.9	1293.0	1433.8	1688.6
15°	1371.5	1404.9	1371.5	1261.7	1356.8	1643.6
17.5°	1398.7	1425.3	1398.7	1263.0	1287.6	1587.6
20°	1398.7	1425.3	1398.7	1295.8	1254.8	1554.9
22.5°	1393.2	1419.9	1393.2	1312.1	1216.5	1511.3
25°	1377.9	1391.2	1377.9	1309.4	1165.3	1425.3
27.5°	1350.5	1359.9	1350.5	1282.1	1114.9	1320.3
30°	1323.5	1343.5	1323.5	1254.8	1081.5	1254.8
32.5°	1295.8	1299.8	1295.8	1211.2	1047.6	1173.0
35°	1254.7	1248.0	1254.7	1159.4	996.9	1050.2
37.5°	1199.1	1207.1	1199.1	1115.7	944.8	927.5
40°	1166.5	1179.8	1166.5	1077.5	905.7	845.7
42.5°	1133.7	1147.1	1133.7	1044.8	867.4	802.0
45°	1084.5	1091.2	1084.5	988.9	810.6	770.6
47.5°	1027.2	1033.9	1027.2	938.4	752.2	722.9
50°	989.0	995.7	989.0	900.2	708.3	668.3
52.5°	945.4	952.0	945.4	867.5	654.2	630.1
55°	879.7	879.7	879.7	804.7	573.3	593.3
57.5°	804.9	812.9	804.9	739.3	490.1	507.4
60°	750.5	763.8	750.5	695.6	430.4	463.7
62.5°	701.3	709.3	701.3	646.5	392.0	414.6
65°	620.7	627.4	620.7	566.0	347.5	334.2
67.5°	530.7	536.0	530.7	492.4	305.9	261.9
70°	470.6	470.6	470.6	443.3	278.2	218.2
72.5°	410.7	416.0	410.7	383.3	251.0	191.0
75°	320.7	327.3	320.7	300.1	203.2	143.2
77.5°	230.7	237.3	230.7	218.2	153.0	103.7
80°	170.6	177.3	170.6	163.7	115.2	81.8
82.5°	121.4	122.8	121.4	114.6	82.6	54.6
85°	54.6	54.6	54.6	54.6	40.6	27.3
87.5°	12.5	12.3	12.5	13.7	11.2	5.5
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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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: P1191337

CATALOG NUMBER: SQ2-FA-100U-100D-L840-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	17.85	18.70	18.82	19.68	20.97	19.07	19.92	20.04	20.91	22.20
	3H	18.94	19.70	19.92	20.69	22.00	20.32	21.08	21.30	22.07	23.38
	4H	19.29	20.01	20.28	21.01	22.33	20.71	21.42	21.70	22.42	23.74
	6H	19.45	20.11	20.46	21.12	22.45	20.87	21.53	21.87	22.53	23.86
	8H	19.49	20.12	20.50	21.13	22.46	20.89	21.52	21.90	22.54	23.87
	12H	19.48	20.08	20.50	21.09	22.45	20.87	21.47	21.89	22.48	23.84
4H	2H	18.78	19.49	19.78	20.49	21.81	19.69	20.41	20.69	21.40	22.72
	3H	20.14	20.74	21.15	21.77	23.10	21.14	21.74	22.15	22.76	24.10
	4H	20.59	21.13	21.61	22.15	23.51	21.60	22.15	22.62	23.17	24.53
	6H	20.81	21.28	21.84	22.33	23.68	21.82	22.29	22.85	23.34	24.69
	8H	20.87	21.31	21.90	22.34	23.71	21.87	22.31	22.90	23.34	24.71
	12H	20.87	21.27	21.92	22.32	23.69	21.86	22.26	22.91	23.31	24.68
8H	4H	20.99	21.42	22.02	22.46	23.83	21.81	22.25	22.84	23.28	24.65
	6H	21.33	21.69	22.38	22.77	24.14	22.12	22.48	23.18	23.56	24.93
	8H	21.45	21.76	22.51	22.82	24.21	22.22	22.53	23.28	23.59	24.98
	12H	21.48	21.76	22.55	22.82	24.25	22.23	22.51	23.29	23.56	24.99
12H	4H	20.99	21.38	22.04	22.43	23.81	21.78	22.18	22.83	23.23	24.60
	6H	21.40	21.72	22.46	22.78	24.17	22.14	22.46	23.20	23.52	24.91
	8H	21.55	21.83	22.61	22.88	24.31	22.25	22.53	23.32	23.59	25.02