

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: P1191239

Luminaire Tested: SQ2-FA-025U-100D-L830-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191239
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-025U-100D-L830-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

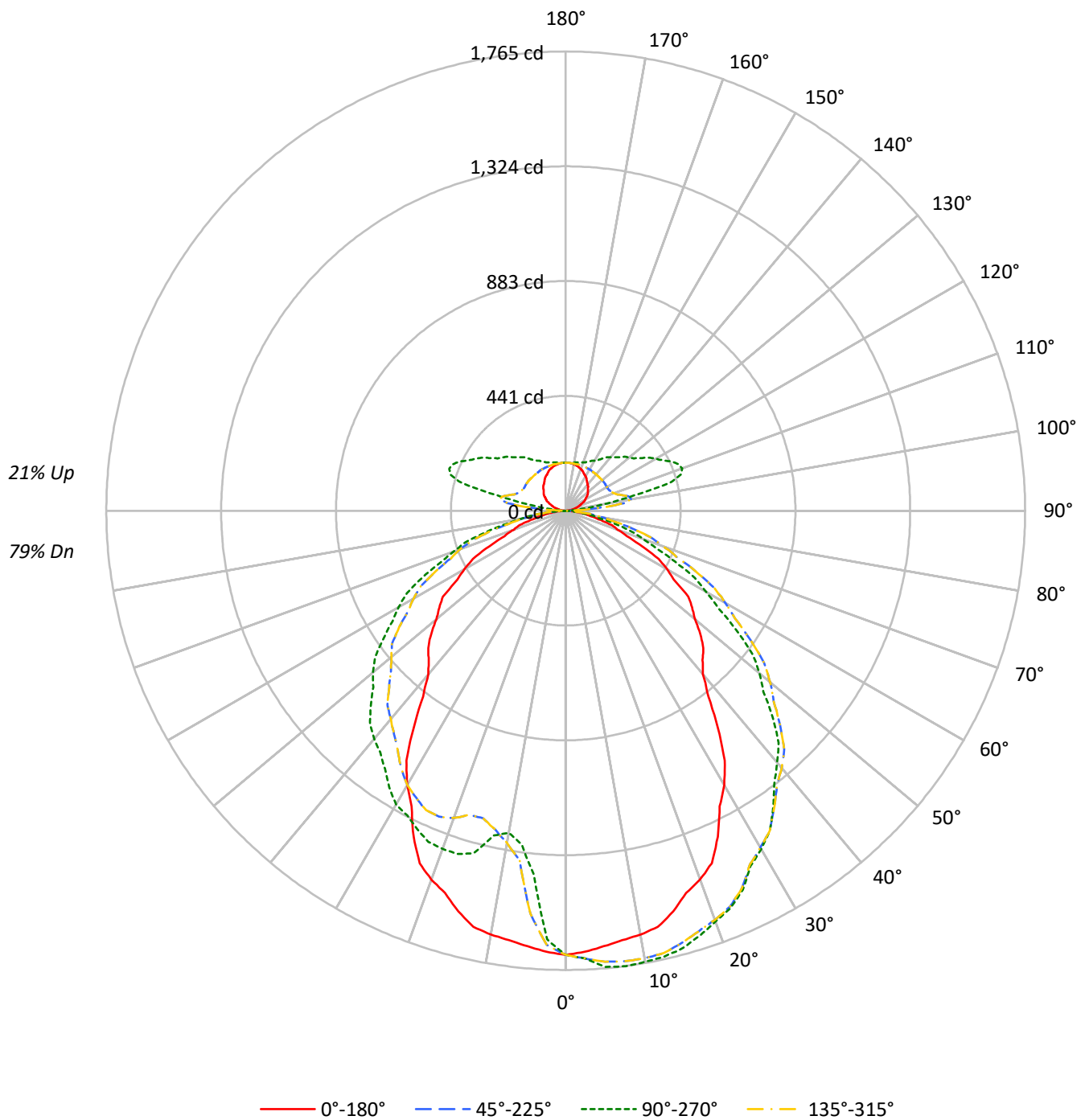
Lumens per Lamp: N/A
Luminaire Lumens: 5383.4 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45
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	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83
1	104	100	96	92	100	96	92	89	88	85	82	80	78	76	73	72	70
2	95	87	81	76	91	84	78	73	77	72	68	71	67	64	65	62	59
3	87	77	69	63	83	74	67	61	68	62	58	62	58	54	57	54	50
4	80	68	60	54	76	66	58	52	60	54	49	56	50	46	51	47	44
5	73	61	52	46	70	59	51	45	54	48	43	50	45	40	46	42	38
6	68	55	46	40	64	53	45	39	49	42	37	45	40	35	42	37	33
7	63	50	41	35	60	48	40	35	44	38	33	41	36	31	38	33	30
8	58	45	37	32	55	44	36	31	41	34	29	38	32	28	35	30	27
9	54	41	34	28	52	40	33	28	37	31	26	35	29	25	32	28	24
10	51	38	31	26	49	37	30	25	35	28	24	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	27561	27561	27561	27561
5°	27238	28525	27238	22734
10°	27119	28855	27119	20610
15°	26653	29086	26653	22783
20°	25919	28876	25919	23759
25°	24635	28643	24635	24045
30°	22697	28001	22697	24300
35°	20083	27386	20083	23865
40°	17291	26635	17291	24125
45°	17070	25683	17070	24172
50°	16287	24430	16287	24264
55°	16203	22536	16203	24026
60°	14528	20082	14528	23928
65°	12386	17692	12386	23255
70°	9994	14993	9994	21550
75°	8665	12383	8665	19813
80°	7383	9224	7383	15993
85°	4909	4909	4909	9800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 26590 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	2.9
10°-20°	429.2	8.0
20°-30°	651.8	12.1
30°-40°	765.2	14.2
40°-50°	776.4	14.4
50°-60°	680.2	12.6
60°-70°	482.5	9.0
70°-80°	248.5	4.6
80°-90°	52.6	1.0
90°-100°	74.6	1.4
100°-110°	231.9	4.3
110°-120°	226.9	4.2
120°-130°	185.2	3.4
130°-140°	151.5	2.8
140°-150°	118.3	2.2
150°-160°	85.3	1.6
160°-170°	52.2	1.0
170°-180°	17.6	0.3
0°-30°	1234.5	22.9
0°-40°	1999.7	37.1
0°-60°	3456.3	64.2
0°-90°	4239.9	78.8
90°-120°	533.3	9.9
90°-150°	988.3	18.4
90°-180°	1143.0	21.2
0°-180°	5383.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1707	1707	1707	1707	1707	
5°	1681	1760	1681	1403	1681	160
15°	1594	1740	1594	1363	1594	448
25°	1383	1608	1383	1350	1383	631
35°	1019	1389	1019	1211	1019	635
45°	748	1125	748	1059	748	572
55°	576	801	576	854	576	498
65°	324	463	324	609	324	324
75°	139	198	139	318	139	150
85°	26	26	26	53	26	33
90°	0	3	0	3	0	1
95°	10	33	10	33	10	12
105°	41	416	41	416	41	43
115°	72	448	72	448	72	71
125°	101	353	101	353	101	89
135°	121	292	121	292	121	94
145°	141	244	141	244	141	89
155°	162	208	162	208	162	75
165°	178	192	178	192	178	50
175°	184	184	184	184	184	17
180°	184	184	184	184	184	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0
2.5°	1696.4	1722.3	1722.9	1722.9	1722.9	1722.9	1722.9	1722.3	1696.4	1696.4	1670.0
5°	1680.6	1725.8	1740.1	1747.0	1760.0	1747.0	1740.1	1725.8	1680.6	1661.1	1554.8
7.5°	1664.7	1725.5	1746.7	1758.8	1765.2	1758.8	1746.7	1725.5	1664.7	1578.0	1355.0
10°	1654.1	1725.3	1746.7	1753.5	1760.0	1753.5	1746.7	1725.3	1654.1	1479.4	1296.8
12.5°	1638.2	1714.5	1741.4	1748.2	1754.7	1748.2	1741.4	1714.5	1638.2	1391.1	1254.5
15°	1594.5	1698.1	1720.3	1733.6	1740.1	1733.6	1720.3	1698.1	1594.5	1316.4	1224.0
17.5°	1540.3	1665.8	1695.1	1707.1	1712.3	1707.1	1695.1	1665.8	1540.3	1249.2	1225.4
20°	1508.5	1644.4	1673.9	1680.6	1680.6	1680.6	1673.9	1644.4	1508.5	1217.4	1257.1
22.5°	1466.2	1617.6	1647.5	1648.9	1654.1	1648.9	1647.5	1617.6	1466.2	1180.2	1273.0
25°	1382.8	1557.5	1601.2	1594.8	1607.8	1594.8	1601.2	1557.5	1382.8	1130.5	1270.3
27.5°	1280.9	1500.9	1532.3	1539.0	1539.0	1539.0	1532.3	1500.9	1280.9	1081.7	1243.9
30°	1217.4	1463.2	1495.3	1501.9	1501.9	1501.9	1495.3	1463.2	1217.4	1049.2	1217.4
32.5°	1138.0	1430.4	1458.2	1459.6	1459.6	1459.6	1458.2	1430.4	1138.0	1016.4	1175.1
35°	1018.9	1374.7	1396.1	1395.9	1389.4	1395.9	1396.1	1374.7	1018.9	967.2	1124.8
37.5°	899.8	1303.5	1332.5	1323.1	1316.7	1323.1	1332.5	1303.5	899.8	916.6	1082.4
40°	820.4	1260.3	1290.2	1270.2	1263.7	1270.2	1290.2	1260.3	820.4	878.7	1045.4
42.5°	778.1	1212.8	1242.6	1217.3	1210.8	1217.3	1242.6	1212.8	778.1	841.5	1013.6
45°	747.6	1135.8	1164.5	1137.7	1124.8	1137.7	1164.5	1135.8	747.6	786.5	959.4
47.5°	701.3	1042.9	1083.8	1043.8	1030.8	1043.8	1083.8	1042.9	701.3	729.8	910.4
50°	648.4	984.8	1025.5	985.5	972.6	985.5	1025.5	984.8	648.4	687.2	873.4
52.5°	611.4	927.1	962.0	916.7	903.8	916.7	962.0	927.1	611.4	634.6	841.6
55°	575.6	840.9	866.7	820.0	800.6	820.0	866.7	840.9	575.6	556.2	780.7
57.5°	492.3	744.6	771.5	718.0	696.0	718.0	771.5	744.6	492.3	475.4	717.2
60°	449.9	676.3	708.0	654.3	621.9	654.3	708.0	676.3	449.9	417.6	674.9
62.5°	402.3	602.8	644.4	590.8	558.4	590.8	644.4	602.8	402.3	380.3	627.2
65°	324.2	498.9	549.2	495.5	463.1	495.5	549.2	498.9	324.2	337.1	549.2
67.5°	254.1	404.2	460.5	401.7	375.8	401.7	460.5	404.2	254.1	296.8	477.7
70°	211.7	341.1	397.0	343.5	317.6	343.5	397.0	341.1	211.7	269.9	430.1
72.5°	185.3	283.6	344.1	285.4	264.7	285.4	344.1	283.6	185.3	243.5	371.8
75°	138.9	197.2	264.7	211.4	198.5	211.4	264.7	197.2	138.9	197.2	291.1
77.5°	100.6	127.7	186.6	141.5	136.3	141.5	186.6	127.7	100.6	148.4	211.7
80°	79.4	85.9	138.9	99.2	99.2	99.2	138.9	85.9	79.4	111.7	158.8
82.5°	52.9	59.4	96.6	67.4	62.2	67.4	96.6	59.4	52.9	80.1	111.2
85°	26.5	26.5	39.7	26.5	26.5	26.5	39.7	26.5	26.5	39.4	52.9
87.5°	5.3	5.5	11.3	6.0	6.0	6.0	11.3	5.5	5.3	10.7	11.3
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°	3.6	12.7	43.2	14.2	11.5	14.2	43.2	12.7	3.6	12.7	43.2
95°	10.2	30.1	136.8	50.5	32.8	50.5	136.8	30.1	10.2	30.1	136.8
97.5°	18.5	39.1	226.5	141.0	88.8	141.0	226.5	39.1	18.5	39.1	226.5
100°	24.9	43.7	255.4	238.9	159.4	238.9	255.4	43.7	24.9	43.7	255.4
102.5°	31.2	49.1	250.0	341.3	267.9	341.3	250.0	49.1	31.2	49.1	250.0
105°	40.7	57.3	228.3	435.8	415.9	435.8	228.3	57.3	40.7	57.3	228.3
107.5°	50.2	65.7	207.5	443.1	465.0	443.1	207.5	65.7	50.2	65.7	207.5
110°	56.5	72.0	196.7	432.7	475.8	432.7	196.7	72.0	56.5	72.0	196.7

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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°	62.8	77.4	191.2	414.0	468.6	414.0	191.2	77.4	62.8	77.4	191.2
115°	72.3	85.6	185.4	382.4	447.6	382.4	185.4	85.6	72.3	85.6	185.4
117.5°	81.6	93.8	182.9	352.1	418.9	352.1	182.9	93.8	81.6	93.8	182.9
120°	87.0	99.2	182.0	334.9	399.0	334.9	182.0	99.2	87.0	99.2	182.0
122.5°	92.5	104.6	182.9	320.3	379.1	320.3	182.9	104.6	92.5	104.6	182.9
125°	100.6	111.6	183.1	300.7	352.6	300.7	183.1	111.6	100.6	111.6	183.1
127.5°	107.2	118.4	183.1	286.1	330.3	286.1	183.1	118.4	107.2	118.4	183.1
130°	110.8	122.9	183.1	277.8	317.6	277.8	183.1	122.9	110.8	122.9	183.1
132.5°	115.3	127.4	182.2	270.5	307.7	270.5	182.2	127.4	115.3	127.4	182.2
135°	120.9	134.2	182.0	259.6	291.6	259.6	182.0	134.2	120.9	134.2	182.0
137.5°	127.5	139.7	182.0	248.6	277.8	248.6	182.0	139.7	127.5	139.7	182.0
140°	131.1	143.3	182.0	241.4	267.9	241.4	182.0	143.3	131.1	143.3	182.0
142.5°	135.6	146.9	182.0	234.1	257.9	234.1	182.0	146.9	135.6	146.9	182.0
145°	141.3	152.3	182.0	224.2	244.1	224.2	182.0	152.3	141.3	152.3	182.0
147.5°	148.1	157.6	183.1	215.1	230.8	215.1	183.1	157.6	148.1	157.6	183.1
150°	152.6	160.3	183.1	210.5	222.7	210.5	183.1	160.3	152.6	160.3	183.1
152.5°	156.2	163.1	183.1	205.9	216.3	205.9	183.1	163.1	156.2	163.1	183.1
155°	161.6	167.2	183.1	201.3	208.0	201.3	183.1	167.2	161.6	167.2	183.1
157.5°	167.1	171.3	183.1	197.2	201.4	197.2	183.1	171.3	167.1	171.3	183.1
160°	170.7	174.0	183.1	194.5	197.8	194.5	183.1	174.0	170.7	174.0	183.1
162.5°	173.4	175.8	183.1	192.7	195.1	192.7	183.1	175.8	173.4	175.8	183.1
165°	177.5	178.6	184.2	189.9	192.1	189.9	184.2	178.6	177.5	178.6	184.2
167.5°	179.9	180.2	183.1	188.3	189.4	188.3	183.1	180.2	179.9	180.2	183.1
170°	180.8	181.9	183.1	186.5	187.6	186.5	183.1	181.9	180.8	181.9	183.1
172.5°	182.7	182.9	184.0	185.6	185.8	185.6	184.0	182.9	182.7	182.9	184.0
175°	184.2	184.2	184.2	185.3	184.2	185.3	184.2	184.2	184.2	184.2	184.2
177.5°	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2
180°	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1707.0	1707.0	1707.0	1707.0	1707.0	1707.0
2.5°	1654.0	1648.8	1654.0	1670.0	1696.4	1696.4
5°	1435.0	1402.7	1435.0	1554.8	1661.1	1680.6
7.5°	1304.5	1294.2	1304.5	1355.0	1578.0	1664.7
10°	1257.1	1257.1	1257.1	1296.8	1479.4	1654.1
12.5°	1252.4	1278.3	1252.4	1254.5	1391.1	1638.2
15°	1330.6	1363.0	1330.6	1224.0	1316.4	1594.5
17.5°	1356.9	1382.8	1356.9	1225.4	1249.2	1540.3
20°	1356.9	1382.8	1356.9	1257.1	1217.4	1508.5
22.5°	1351.6	1377.5	1351.6	1273.0	1180.2	1466.2
25°	1336.8	1349.7	1336.8	1270.3	1130.5	1382.8
27.5°	1310.2	1319.3	1310.2	1243.9	1081.7	1280.9
30°	1284.0	1303.4	1284.0	1217.4	1049.2	1217.4
32.5°	1257.2	1261.1	1257.2	1175.1	1016.4	1138.0
35°	1217.3	1210.8	1217.3	1124.8	967.2	1018.9
37.5°	1163.3	1171.1	1163.3	1082.4	916.6	899.8
40°	1131.7	1144.6	1131.7	1045.4	878.7	820.4
42.5°	1099.9	1112.9	1099.9	1013.6	841.5	778.1
45°	1052.1	1058.6	1052.1	959.4	786.5	747.6
47.5°	996.6	1003.0	996.6	910.4	729.8	701.3
50°	959.5	966.0	959.5	873.4	687.2	648.4
52.5°	917.2	923.6	917.2	841.6	634.6	611.4
55°	853.5	853.5	853.5	780.7	556.2	575.6
57.5°	780.9	788.7	780.9	717.2	475.4	492.3
60°	728.1	741.0	728.1	674.9	417.6	449.9
62.5°	680.3	688.1	680.3	627.2	380.3	402.3
65°	602.2	608.7	602.2	549.2	337.1	324.2
67.5°	514.9	520.0	514.9	477.7	296.8	254.1
70°	456.5	456.5	456.5	430.1	269.9	211.7
72.5°	398.4	403.6	398.4	371.8	243.5	185.3
75°	311.1	317.6	311.1	291.1	197.2	138.9
77.5°	223.8	230.2	223.8	211.7	148.4	100.6
80°	165.6	172.0	165.6	158.8	111.7	79.4
82.5°	117.8	119.1	117.8	111.2	80.1	52.9
85°	52.9	52.9	52.9	52.9	39.4	26.5
87.5°	11.3	11.3	11.3	11.3	10.7	5.3
90°	3.4	3.4	3.4	3.4	1.1	0.0
92.5°	14.2	11.5	14.2	43.2	12.7	3.6
95°	50.5	32.8	50.5	136.8	30.1	10.2
97.5°	141.0	88.8	141.0	226.5	39.1	18.5
100°	238.9	159.4	238.9	255.4	43.7	24.9
102.5°	341.3	267.9	341.3	250.0	49.1	31.2
105°	435.8	415.9	435.8	228.3	57.3	40.7
107.5°	443.1	465.0	443.1	207.5	65.7	50.2
110°	432.7	475.8	432.7	196.7	72.0	56.5

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	414.0	468.6	414.0	191.2	77.4	62.8
115°	382.4	447.6	382.4	185.4	85.6	72.3
117.5°	352.1	418.9	352.1	182.9	93.8	81.6
120°	334.9	399.0	334.9	182.0	99.2	87.0
122.5°	320.3	379.1	320.3	182.9	104.6	92.5
125°	300.7	352.6	300.7	183.1	111.6	100.6
127.5°	286.1	330.3	286.1	183.1	118.4	107.2
130°	277.8	317.6	277.8	183.1	122.9	110.8
132.5°	270.5	307.7	270.5	182.2	127.4	115.3
135°	259.6	291.6	259.6	182.0	134.2	120.9
137.5°	248.6	277.8	248.6	182.0	139.7	127.5
140°	241.4	267.9	241.4	182.0	143.3	131.1
142.5°	234.1	257.9	234.1	182.0	146.9	135.6
145°	224.2	244.1	224.2	182.0	152.3	141.3
147.5°	215.1	230.8	215.1	183.1	157.6	148.1
150°	210.5	222.7	210.5	183.1	160.3	152.6
152.5°	205.9	216.3	205.9	183.1	163.1	156.2
155°	201.3	208.0	201.3	183.1	167.2	161.6
157.5°	197.2	201.4	197.2	183.1	171.3	167.1
160°	194.5	197.8	194.5	183.1	174.0	170.7
162.5°	192.7	195.1	192.7	183.1	175.8	173.4
165°	189.9	192.1	189.9	184.2	178.6	177.5
167.5°	188.3	189.4	188.3	183.1	180.2	179.9
170°	186.5	187.6	186.5	183.1	181.9	180.8
172.5°	185.6	185.8	185.6	184.0	182.9	182.7
175°	185.3	184.2	185.3	184.2	184.2	184.2
177.5°	184.2	184.2	184.2	184.2	184.2	184.2
180°	184.2	184.2	184.2	184.2	184.2	184.2

TEST NUMBER: P1191239

CATALOG NUMBER: SQ2-FA-025U-100D-L830-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	20.20	21.39	20.86	22.07	22.86	21.42	22.62	22.09	23.30	24.09
	3H	21.31	22.38	21.99	23.07	23.90	22.69	23.76	23.37	24.45	25.28
	4H	21.68	22.69	22.38	23.39	24.23	23.09	24.10	23.79	24.81	25.64
	6H	21.86	22.79	22.57	23.50	24.36	23.27	24.20	23.98	24.92	25.77
	8H	21.90	22.79	22.63	23.52	24.38	23.31	24.20	24.03	24.93	25.78
	12H	21.91	22.76	22.64	23.48	24.37	23.30	24.15	24.03	24.88	25.76
4H	2H	21.17	22.18	21.87	22.88	23.72	22.08	23.09	22.78	23.79	24.63
	3H	22.56	23.41	23.28	24.14	25.00	23.56	24.40	24.27	25.14	26.00
	4H	23.02	23.79	23.75	24.53	25.41	24.04	24.80	24.77	25.54	26.43
	6H	23.27	23.93	24.02	24.70	25.59	24.28	24.94	25.03	25.71	26.60
	8H	23.33	23.95	24.09	24.71	25.62	24.33	24.95	25.09	25.72	26.62
	12H	23.35	23.91	24.13	24.69	25.60	24.34	24.89	25.11	25.68	26.59
8H	4H	23.45	24.07	24.20	24.83	25.74	24.28	24.89	25.03	25.66	26.56
	6H	23.81	24.32	24.59	25.12	26.03	24.60	25.11	25.38	25.92	26.82
	8H	23.93	24.38	24.72	25.19	26.11	24.70	25.15	25.49	25.96	26.88
	12H	23.98	24.38	24.77	25.17	26.16	24.73	25.13	25.52	25.92	26.90
12H	4H	23.47	24.02	24.24	24.81	25.72	24.26	24.81	25.03	25.60	26.51
	6H	23.88	24.34	24.68	25.14	26.07	24.62	25.08	25.42	25.88	26.81
	8H	24.04	24.44	24.84	25.24	26.22	24.75	25.15	25.55	25.95	26.93

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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