

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: P854129

Luminaire Tested: SQ2-PP3-100U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854129
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-100U-075D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

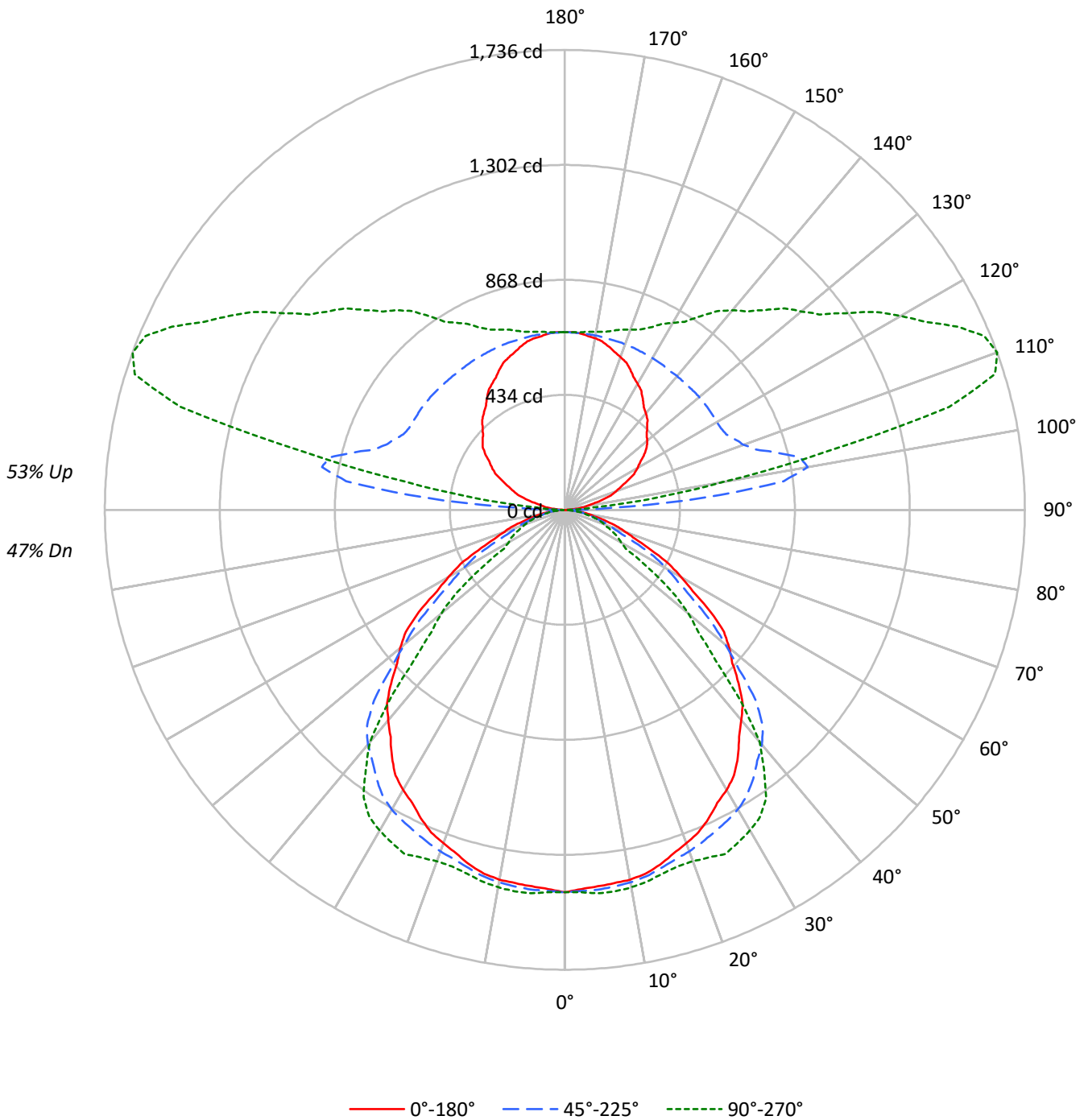
Lumens per Lamp: N/A
Luminaire Lumens: 7809.8 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.3
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	50	30	10	0	
RCR																						
0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47				47
1	98	93	90	86	89	86	83	80	72	70	68	59	58	56	48	47	46				40	
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	42	41	39				34	
3	82	73	66	60	75	67	61	56	57	52	48	47	44	41	38	36	34				30	
4	75	64	57	51	69	60	53	48	50	45	41	42	38	35	34	32	29				26	
5	69	57	50	44	63	53	46	41	45	40	36	38	34	31	31	28	26				23	
6	63	52	44	38	58	48	41	36	41	35	31	34	30	27	28	25	23				20	
7	59	47	39	33	54	43	36	32	37	32	28	31	27	24	26	23	20				18	
8	54	42	35	30	50	39	33	28	34	28	25	29	24	21	24	21	18				16	
9	51	39	31	26	47	36	29	25	31	26	22	26	22	19	22	19	16				14	
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	20	17	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23307	23307	23307
5°	23123	23321	23545
10°	23241	23417	23717
15°	23186	23415	23773
20°	23021	23570	24252
25°	22889	23868	25525
30°	22758	24352	26058
35°	22436	24421	26106
40°	21838	24378	24120
45°	21185	23274	18363
50°	20353	19854	15292
55°	18942	16709	10995
60°	16311	14338	7882
65°	13757	11075	7752
70°	11452	8714	7421
75°	9707	7517	6949
80°	8229	6527	6239
85°	6502	5372	3390

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23274 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.4	1.8
10°-20°	397.8	5.1
20°-30°	623.2	8.0
30°-40°	768.8	9.8
40°-50°	723.8	9.3
50°-60°	512.5	6.6
60°-70°	292.0	3.7
70°-80°	144.5	1.8
80°-90°	36.5	0.5
90°-100°	280.0	3.6
100°-110°	847.0	10.8
110°-120°	826.8	10.6
120°-130°	675.6	8.7
130°-140°	551.5	7.1
140°-150°	429.3	5.5
150°-160°	309.5	4.0
160°-170°	189.5	2.4
170°-180°	64.0	0.8
0°-30°	1158.4	14.8
0°-40°	1927.2	24.7
0°-60°	3163.5	40.5
0°-90°	3636.5	46.6
90°-120°	1953.8	25.0
90°-150°	3610.3	46.2
90°-180°	4173.0	53.4
0°-180°	7809.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1427	1452	1439	1442	1453	136
15°	1387	1406	1401	1415	1422	391
25°	1285	1318	1340	1394	1433	592
35°	1138	1170	1239	1310	1324	710
45°	928	998	1019	864	804	714
55°	673	713	594	447	391	594
65°	360	380	290	204	203	362
75°	156	172	120	113	111	169
85°	35	32	29	23	18	41
90°	0	2	13	7	6	3
95°	35	110	528	195	123	41
105°	147	207	832	1579	1501	155
115°	262	312	673	1392	1635	259
125°	366	406	663	1099	1294	325
135°	439	485	659	948	1066	340
145°	513	551	659	815	892	321
155°	584	604	663	731	759	269
165°	639	646	666	692	700	180
175°	668	668	670	675	673	63
180°	670	670	670	670	670	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1443.5	1443.5	1443.5	1443.5	1443.5
2.5°	1432.5	1452.8	1439.9	1442.3	1444.7
5°	1426.7	1452.1	1438.9	1442.2	1452.7
7.5°	1421.2	1447.2	1434.4	1439.8	1452.7
10°	1417.6	1440.0	1428.3	1436.1	1446.6
12.5°	1406.6	1427.8	1417.3	1427.5	1436.8
15°	1387.1	1406.5	1400.8	1414.7	1422.2
17.5°	1360.5	1384.1	1384.0	1403.7	1411.5
20°	1339.8	1368.1	1371.8	1396.5	1411.5
22.5°	1317.8	1350.9	1357.1	1394.4	1420.0
25°	1284.8	1317.6	1339.8	1394.0	1432.8
27.5°	1246.4	1278.9	1324.5	1385.3	1416.0
30°	1220.7	1252.1	1306.2	1369.4	1397.7
32.5°	1189.0	1221.5	1279.3	1347.4	1373.3
35°	1138.3	1169.7	1239.0	1309.6	1324.5
37.5°	1080.0	1115.6	1193.3	1232.7	1233.5
40°	1036.1	1082.3	1156.6	1163.8	1144.4
42.5°	993.4	1052.8	1105.4	1073.2	987.0
45°	927.8	997.9	1019.3	863.8	804.2
47.5°	857.9	927.1	893.0	724.5	683.3
50°	810.3	875.9	790.4	647.6	608.8
52.5°	756.5	815.0	698.9	573.9	514.8
55°	672.9	713.2	593.6	447.3	390.6
57.5°	572.2	600.6	507.5	335.8	272.2
60°	505.1	527.5	444.0	275.5	244.1
62.5°	444.0	464.0	378.1	239.3	228.3
65°	360.1	379.5	289.9	204.4	202.9
67.5°	286.6	307.8	222.5	178.5	176.7
70°	242.6	265.0	184.6	160.2	157.2
72.5°	206.0	227.2	156.6	140.6	138.9
75°	155.6	172.1	120.5	112.9	111.4
77.5°	112.9	123.4	89.7	85.7	84.2
80°	88.5	93.0	70.2	68.6	67.1
82.5°	66.5	65.0	53.1	51.5	48.8
85°	35.1	32.1	29.0	22.8	18.3
87.5°	11.0	11.4	7.4	5.1	4.9
90°	0.0	2.1	12.6	7.3	6.3
92.5°	11.8	47.6	171.0	56.7	40.8
95°	34.7	109.9	528.4	195.2	123.2
97.5°	67.2	139.8	832.9	551.1	335.6
100°	87.4	158.4	930.6	899.6	604.2
102.5°	110.1	178.7	910.3	1261.8	1005.9
105°	147.4	207.1	831.6	1579.3	1501.1
107.5°	182.7	239.8	755.8	1610.7	1701.3
110°	206.3	260.9	717.9	1571.2	1735.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	282.0	695.2	1504.8	1713.1
115°	262.1	312.5	672.7	1391.9	1634.8
117.5°	295.0	342.7	664.7	1286.1	1534.8
120°	316.9	362.1	662.1	1224.4	1463.2
122.5°	337.1	379.9	662.1	1170.1	1390.8
125°	366.3	406.5	663.2	1099.2	1293.7
127.5°	390.1	431.7	662.1	1045.7	1211.6
130°	405.3	448.5	662.1	1015.0	1165.3
132.5°	418.8	462.8	661.3	987.0	1125.7
135°	439.0	485.3	659.0	948.0	1066.3
137.5°	461.5	505.5	659.0	906.3	1016.0
140°	475.8	519.0	659.0	879.2	983.2
142.5°	490.1	531.7	658.1	854.5	945.3
145°	512.6	550.7	659.0	815.4	891.6
147.5°	535.2	567.5	660.2	783.2	841.7
150°	549.5	579.3	661.1	765.4	814.8
152.5°	563.0	589.5	661.9	750.0	790.3
155°	584.2	603.8	663.2	731.2	759.0
157.5°	602.8	618.6	664.4	717.3	736.7
160°	613.7	627.1	665.3	708.8	723.2
162.5°	624.7	634.7	666.1	701.1	713.1
165°	639.0	646.2	666.3	691.8	700.0
167.5°	651.2	654.9	667.6	684.5	688.0
170°	657.9	660.0	668.4	681.1	682.1
172.5°	662.1	663.4	668.4	677.7	677.9
175°	668.4	668.4	669.5	674.7	672.7
177.5°	671.4	670.6	669.7	672.2	670.5
180°	670.5	670.5	670.5	670.5	670.5



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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	18.15	18.96	19.14	19.96	21.28	14.55	15.35	15.54	16.35	17.67
	3H	19.24	19.96	20.25	20.97	22.31	15.65	16.36	16.65	17.37	18.72
	4H	19.58	20.26	20.60	21.27	22.62	16.11	16.79	17.12	17.80	19.15
	6H	19.79	20.42	20.82	21.43	22.80	16.45	17.07	17.48	18.09	19.45
	8H	19.84	20.43	20.87	21.47	22.83	16.53	17.13	17.57	18.16	19.52
	12H	19.85	20.42	20.89	21.44	22.83	16.55	17.11	17.58	18.14	19.52
4H	2H	18.25	18.93	19.28	19.94	21.29	15.25	15.93	16.28	16.94	18.30
	3H	19.56	20.12	20.59	21.16	22.52	16.50	17.06	17.53	18.10	19.47
	4H	20.03	20.54	21.07	21.57	22.96	17.05	17.57	18.09	18.60	19.99
	6H	20.36	20.80	21.41	21.86	23.24	17.49	17.93	18.54	18.99	20.37
	8H	20.45	20.87	21.50	21.91	23.31	17.61	18.02	18.66	19.07	20.47
	12H	20.49	20.86	21.56	21.92	23.33	17.63	18.01	18.70	19.07	20.47
8H	4H	20.04	20.45	21.09	21.50	22.90	17.32	17.73	18.37	18.78	20.18
	6H	20.47	20.81	21.54	21.90	23.30	17.86	18.20	18.94	19.29	20.69
	8H	20.63	20.93	21.71	22.00	23.42	18.05	18.35	19.13	19.42	20.84
	12H	20.71	20.97	21.79	22.04	23.50	18.12	18.38	19.20	19.45	20.91
12H	4H	20.00	20.37	21.06	21.43	22.84	17.33	17.70	18.39	18.76	20.16
	6H	20.46	20.76	21.54	21.83	23.25	17.92	18.22	19.00	19.29	20.71
	8H	20.63	20.89	21.71	21.96	23.42	18.12	18.39	19.21	19.46	20.91