

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: P854081

Luminaire Tested: SQ2-PP3-025U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854081
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-025U-075D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

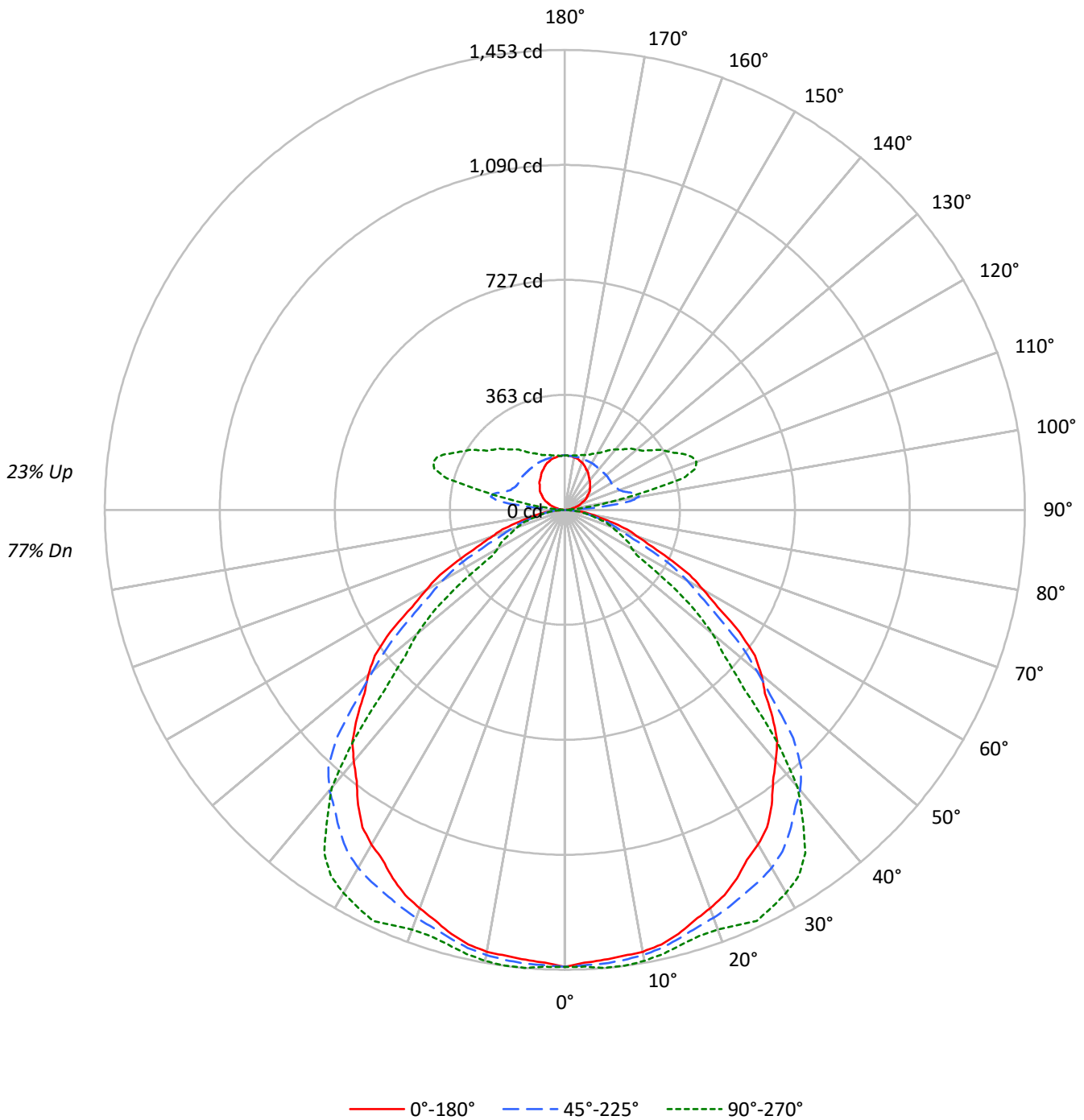
Lumens per Lamp: N/A
Luminaire Lumens: 4699.4 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 34.1
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
RCR																				
0	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81	77		
1	105	101	97	94	100	96	93	90	88	85	83	80	78	77	73	72	70	67		
2	96	89	83	78	91	85	80	75	78	74	70	71	68	65	65	63	60	57		
3	88	79	71	66	84	76	69	64	69	64	60	64	60	56	59	55	52	49		
4	81	70	62	56	77	67	60	55	62	56	52	57	52	49	53	49	46	43		
5	75	63	55	49	71	61	53	47	56	50	45	52	47	42	48	43	40	38		
6	69	57	49	43	66	55	47	42	51	44	40	47	42	37	43	39	35	33		
7	64	52	43	38	61	50	42	37	46	40	35	43	37	33	40	35	32	29		
8	60	47	39	34	57	45	38	33	42	36	31	39	34	30	37	32	28	26		
9	56	43	35	30	53	42	34	30	39	33	28	36	31	27	34	29	26	24		
10	52	40	32	27	50	38	31	27	36	30	26	34	28	25	31	27	23	22		

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	2.9
10°-20°	397.8	8.5
20°-30°	623.2	13.3
30°-40°	768.8	16.4
40°-50°	723.8	15.4
50°-60°	512.5	10.9
60°-70°	292.0	6.2
70°-80°	144.5	3.1
80°-90°	35.7	0.8
90°-100°	69.4	1.5
100°-110°	215.7	4.6
110°-120°	211.0	4.5
120°-130°	172.3	3.7
130°-140°	140.9	3.0
140°-150°	110.0	2.3
150°-160°	79.4	1.7
160°-170°	48.5	1.0
170°-180°	16.4	0.3
0°-30°	1158.4	24.7
0°-40°	1927.2	41.0
0°-60°	3163.5	67.3
0°-90°	3635.8	77.4
90°-120°	496.1	10.6
90°-150°	919.3	19.6
90°-180°	1064.0	22.6
0°-180°	4699.4	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	1	3	3	3	2
95°	10	28	127	47	30	11
105°	38	53	212	405	387	40
115°	67	80	172	356	416	66
125°	94	104	170	280	328	83
135°	112	125	169	241	271	87
145°	131	142	169	209	227	83
155°	150	156	170	187	193	69
165°	165	166	171	177	179	46
175°	171	171	171	172	171	16
180°	171	171	171	171	171	



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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	11.2	5.5	4.3	4.3
90°	0.0	1.0	3.2	3.2	3.2
92.5°	3.4	11.8	40.2	13.2	10.7
95°	9.5	28.0	127.2	46.9	30.5
97.5°	17.2	36.4	210.7	131.2	82.6
100°	23.1	40.6	237.6	222.3	148.2
102.5°	29.0	45.7	232.6	317.4	249.2
105°	37.8	53.3	212.4	405.4	386.9
107.5°	46.7	61.1	193.0	412.2	432.5
110°	52.6	67.0	182.9	402.5	442.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	58.5	72.0	177.9	385.1	435.9
115°	67.3	79.6	172.4	355.7	416.3
117.5°	75.9	87.2	170.1	327.5	389.6
120°	81.0	92.3	169.3	311.5	371.1
122.5°	86.0	97.3	170.1	297.9	352.6
125°	93.6	103.9	170.3	279.7	328.0
127.5°	99.7	110.2	170.3	266.1	307.2
130°	103.0	114.3	170.3	258.4	295.4
132.5°	107.2	118.5	169.5	251.6	286.2
135°	112.5	124.8	169.3	241.4	271.2
137.5°	118.6	129.9	169.3	231.3	258.4
140°	122.0	133.3	169.3	224.5	249.2
142.5°	126.2	136.6	169.3	217.7	239.9
145°	131.4	141.7	169.3	208.6	227.1
147.5°	137.7	146.6	170.3	200.1	214.7
150°	141.9	149.1	170.3	195.8	207.1
152.5°	145.3	151.7	170.3	191.6	201.2
155°	150.3	155.5	170.3	187.3	193.4
157.5°	155.4	159.3	170.3	183.4	187.4
160°	158.8	161.8	170.3	180.9	184.0
162.5°	161.3	163.5	170.3	179.2	181.5
165°	165.1	166.1	171.4	176.7	178.7
167.5°	167.4	167.6	170.3	175.2	176.2
170°	168.2	169.2	170.3	173.5	174.5
172.5°	169.9	170.1	171.2	172.6	172.8
175°	171.4	171.4	171.4	172.4	171.4
177.5°	171.4	171.4	171.4	171.4	171.4
180°	171.4	171.4	171.4	171.4	171.4



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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	20.74	21.85	21.42	22.55	23.37	17.13	18.25	17.82	18.95	19.77
	3H	21.85	22.85	22.55	23.56	24.42	18.26	19.25	18.96	19.97	20.82
	4H	22.21	23.14	22.93	23.87	24.73	18.73	19.67	19.45	20.39	21.26
	6H	22.43	23.30	23.17	24.03	24.91	19.09	19.95	19.82	20.69	21.57
	8H	22.49	23.31	23.23	24.06	24.95	19.18	20.00	19.93	20.76	21.64
	12H	22.51	23.30	23.26	24.04	24.95	19.21	19.99	19.95	20.73	21.64
4H	2H	20.88	21.81	21.60	22.54	23.40	17.88	18.82	18.60	19.54	20.40
	3H	22.21	22.99	22.95	23.74	24.63	19.15	19.93	19.89	20.69	21.57
	4H	22.69	23.40	23.45	24.16	25.07	19.72	20.42	20.47	21.18	22.09
	6H	23.04	23.65	23.82	24.44	25.36	20.17	20.78	20.94	21.56	22.49
	8H	23.14	23.71	23.92	24.49	25.42	20.30	20.86	21.07	21.64	22.58
	12H	23.19	23.70	23.98	24.50	25.44	20.34	20.84	21.13	21.65	22.59
8H	4H	22.73	23.30	23.50	24.08	25.01	20.01	20.58	20.78	21.36	22.29
	6H	23.17	23.64	23.97	24.46	25.40	20.56	21.03	21.37	21.85	22.79
	8H	23.33	23.74	24.14	24.57	25.52	20.75	21.17	21.56	21.99	22.94
	12H	23.42	23.79	24.24	24.60	25.62	20.83	21.20	21.65	22.01	23.02
12H	4H	22.70	23.21	23.49	24.01	24.95	20.03	20.54	20.82	21.34	22.28
	6H	23.16	23.58	23.97	24.40	25.35	20.62	21.03	21.43	21.86	22.81
	8H	23.34	23.71	24.16	24.52	25.53	20.83	21.20	21.65	22.02	23.03