

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: P854091

Luminaire Tested: SQ2-PP3-050U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854091
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-050U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

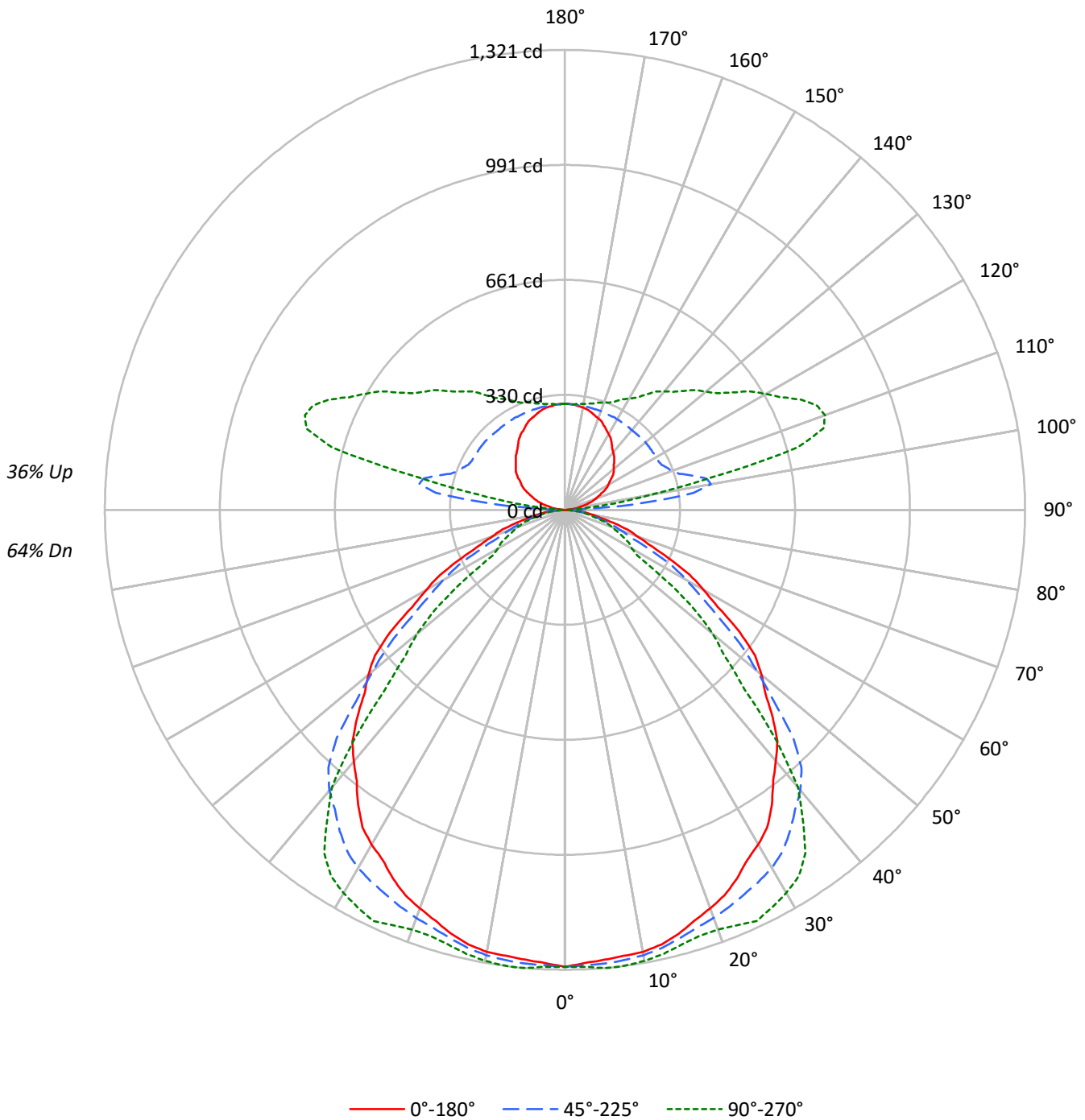
Lumens per Lamp: N/A
Luminaire Lumens: 5196.4 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 41.5
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	50	30	10	50	30	10	0																			
RCR																																														
0	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64																												
1	102	97	94	90	95	92	88	86	81	78	76	71	69	68	62	61	59	55																												
2	93	86	80	75	87	81	76	71	72	68	64	63	60	57	55	53	51	47																												
3	85	76	69	63	80	72	65	60	64	59	55	56	52	49	49	47	44	41																												
4	78	68	60	54	73	64	57	52	57	51	47	50	46	43	44	41	38	35																												
5	72	61	52	47	67	57	50	45	51	45	41	46	41	37	40	37	34	31																												
6	67	54	46	41	62	52	44	39	46	40	36	41	37	33	37	33	30	27																												
7	62	49	41	36	58	47	40	34	42	36	32	38	33	29	33	30	27	24																												
8	57	45	37	32	54	43	36	31	38	33	28	34	30	26	31	27	24	22																												
9	53	41	34	29	50	39	32	28	35	30	26	32	27	24	28	24	22	20																												
10	50	38	31	26	47	36	29	25	33	27	23	29	25	21	26	22	20	18																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21191	21191	21191
5°	21026	21206	21409
10°	21133	21292	21564
15°	21081	21290	21615
20°	20931	21431	22051
25°	20811	21702	23209
30°	20694	22143	23694
35°	20402	22206	23737
40°	19857	22167	21933
45°	19262	21162	16696
50°	18505	18053	13906
55°	17225	15192	9999
60°	14832	13039	7169
65°	12508	10071	7049
70°	10414	7926	6746
75°	8827	6837	6319
80°	7485	5932	5672
85°	5910	4891	3075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21162 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	2.4
10°-20°	361.7	7.0
20°-30°	566.7	10.9
30°-40°	699.0	13.5
40°-50°	658.1	12.7
50°-60°	466.0	9.0
60°-70°	265.5	5.1
70°-80°	131.4	2.5
80°-90°	32.5	0.6
90°-100°	121.3	2.3
100°-110°	384.6	7.4
110°-120°	377.1	7.3
120°-130°	306.9	5.9
130°-140°	250.2	4.8
140°-150°	195.1	3.8
150°-160°	140.6	2.7
160°-170°	85.9	1.7
170°-180°	29.0	0.6
0°-30°	1053.3	20.3
0°-40°	1752.4	33.7
0°-60°	2876.5	55.4
0°-90°	3305.9	63.6
90°-120°	883.0	17.0
90°-150°	1635.1	31.5
90°-180°	1891.0	36.4
0°-180°	5196.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1297	1320	1308	1311	1321	124
15°	1261	1279	1274	1286	1293	355
25°	1168	1198	1218	1268	1303	538
35°	1035	1064	1127	1191	1204	646
45°	844	907	927	786	731	649
55°	612	648	540	407	355	540
65°	327	345	264	186	184	329
75°	142	156	110	103	101	153
85°	32	29	26	21	17	37
90°	0	1	3	3	3	2
95°	16	49	220	82	53	19
105°	67	94	379	722	692	71
115°	120	142	306	636	749	118
125°	166	185	302	499	588	147
135°	200	220	300	429	483	154
145°	234	251	300	370	403	146
155°	266	276	301	331	344	123
165°	290	293	302	313	316	82
175°	304	302	304	305	304	29
180°	304	304	304	304	304	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.5	1312.5	1312.5	1312.5	1312.5
2.5°	1302.6	1321.0	1309.2	1311.5	1313.7
5°	1297.3	1320.3	1308.4	1311.4	1320.9
7.5°	1292.3	1315.9	1304.2	1309.2	1320.9
10°	1289.0	1309.3	1298.7	1305.8	1315.3
12.5°	1279.0	1298.2	1288.7	1298.0	1306.4
15°	1261.2	1278.8	1273.7	1286.3	1293.1
17.5°	1237.1	1258.5	1258.4	1276.4	1283.4
20°	1218.2	1244.0	1247.3	1269.8	1283.4
22.5°	1198.2	1228.3	1234.0	1267.8	1291.2
25°	1168.2	1198.1	1218.2	1267.6	1302.8
27.5°	1133.3	1162.9	1204.3	1259.6	1287.6
30°	1110.0	1138.5	1187.7	1245.1	1270.9
32.5°	1081.1	1110.7	1163.3	1225.1	1248.7
35°	1035.1	1063.5	1126.6	1190.8	1204.3
37.5°	982.1	1014.3	1085.0	1120.8	1121.6
40°	942.1	984.1	1051.7	1058.2	1040.6
42.5°	903.2	957.2	1005.1	975.8	897.4
45°	843.6	907.3	926.8	785.5	731.2
47.5°	780.0	843.0	811.9	658.8	621.3
50°	736.7	796.4	718.7	588.9	553.6
52.5°	687.9	741.1	635.5	521.9	468.1
55°	611.9	648.5	539.7	406.7	355.2
57.5°	520.3	546.1	461.5	305.3	247.5
60°	459.3	479.6	403.8	250.5	222.0
62.5°	403.8	421.9	343.8	217.6	207.6
65°	327.4	345.1	263.6	185.9	184.5
67.5°	260.6	279.8	202.3	162.3	160.7
70°	220.6	241.0	167.9	145.6	142.9
72.5°	187.3	206.6	142.4	127.9	126.3
75°	141.5	156.4	109.6	102.6	101.3
77.5°	102.7	112.2	81.6	77.9	76.6
80°	80.5	84.5	63.8	62.4	61.0
82.5°	60.5	59.1	48.3	46.8	44.4
85°	31.9	29.2	26.4	20.7	16.6
87.5°	10.0	10.2	5.0	3.9	3.9
90°	0.0	0.9	2.9	2.9	2.9
92.5°	5.4	21.3	68.0	22.6	15.9
95°	16.3	49.0	220.2	81.7	52.7
97.5°	30.3	63.6	373.0	233.1	143.0
100°	40.2	72.0	425.1	387.5	251.8
102.5°	50.9	81.3	415.9	569.1	435.6
105°	67.0	94.2	379.1	722.1	692.1
107.5°	83.1	108.2	344.1	738.1	778.5
110°	93.8	118.2	326.4	719.7	794.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.5	127.4	316.5	688.0	783.1
115°	119.7	142.1	306.3	636.3	748.6
117.5°	134.4	155.8	302.3	586.5	699.8
120°	143.6	164.2	301.6	555.8	665.3
122.5°	152.8	172.6	301.6	531.1	633.2
125°	165.6	185.3	301.6	498.9	587.8
127.5°	176.9	195.8	301.6	473.9	549.7
130°	183.8	203.5	301.6	459.2	527.5
132.5°	190.7	210.4	300.8	447.5	509.1
135°	200.1	219.7	299.6	429.2	483.4
137.5°	209.3	229.9	299.5	411.6	460.1
140°	215.4	236.0	298.7	399.2	443.2
142.5°	223.1	242.9	299.5	386.9	427.9
145°	233.6	251.4	299.6	370.3	403.0
147.5°	244.1	259.3	299.8	355.6	382.4
150°	251.8	263.9	300.6	347.0	368.6
152.5°	257.9	268.6	300.6	340.1	357.8
155°	266.1	275.5	300.6	330.6	343.7
157.5°	274.9	281.3	301.6	324.7	333.7
160°	279.5	285.2	301.6	320.9	328.4
162.5°	284.1	288.3	301.6	317.8	323.0
165°	290.1	292.9	301.6	313.1	315.9
167.5°	295.6	296.4	302.5	309.8	312.3
170°	298.7	298.7	302.5	308.3	309.2
172.5°	300.2	301.0	302.5	306.7	306.9
175°	303.5	302.5	303.5	305.4	304.4
177.5°	304.4	303.7	303.7	305.2	303.7
180°	304.4	304.4	304.4	304.4	304.4



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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	19.34	20.29	20.17	21.15	22.21	15.73	16.69	16.57	17.54	18.61
	3H	20.44	21.29	21.29	22.16	23.25	16.84	17.70	17.70	18.56	19.65
	4H	20.79	21.59	21.65	22.46	23.56	17.31	18.11	18.18	18.99	20.09
	6H	21.01	21.75	21.89	22.62	23.74	17.66	18.40	18.54	19.28	20.40
	8H	21.06	21.76	21.95	22.66	23.77	17.75	18.45	18.64	19.35	20.47
	12H	21.07	21.74	21.97	22.63	23.78	17.77	18.44	18.66	19.33	20.47
4H	2H	19.46	20.26	20.33	21.13	22.24	16.46	17.26	17.33	18.13	19.24
	3H	20.77	21.44	21.66	22.34	23.46	17.72	18.38	18.60	19.29	20.41
	4H	21.25	21.86	22.15	22.76	23.90	18.28	18.88	19.17	19.78	20.93
	6H	21.59	22.11	22.51	23.04	24.19	18.72	19.24	19.63	20.17	21.31
	8H	21.69	22.18	22.60	23.09	24.25	18.84	19.33	19.76	20.25	21.41
	12H	21.73	22.17	22.66	23.10	24.27	18.88	19.31	19.81	20.25	21.42
8H	4H	21.28	21.76	22.19	22.68	23.84	18.56	19.04	19.47	19.96	21.12
	6H	21.71	22.11	22.65	23.07	24.23	19.10	19.51	20.04	20.47	21.63
	8H	21.87	22.22	22.82	23.18	24.35	19.29	19.65	20.24	20.60	21.78
	12H	21.96	22.27	22.91	23.22	24.44	19.37	19.68	20.32	20.63	21.85
12H	4H	21.24	21.68	22.17	22.61	23.78	18.57	19.00	19.50	19.94	21.11
	6H	21.70	22.06	22.65	23.01	24.19	19.16	19.51	20.11	20.46	21.64
	8H	21.87	22.19	22.83	23.13	24.36	19.37	19.68	20.32	20.63	21.85