

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: P855477

Luminaire Tested: SQ2-PR1-075D-830-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P855477  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PR1-075D-830-UNV-STD-W-4  
Description: CORELITE SQ2 SURFACE LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

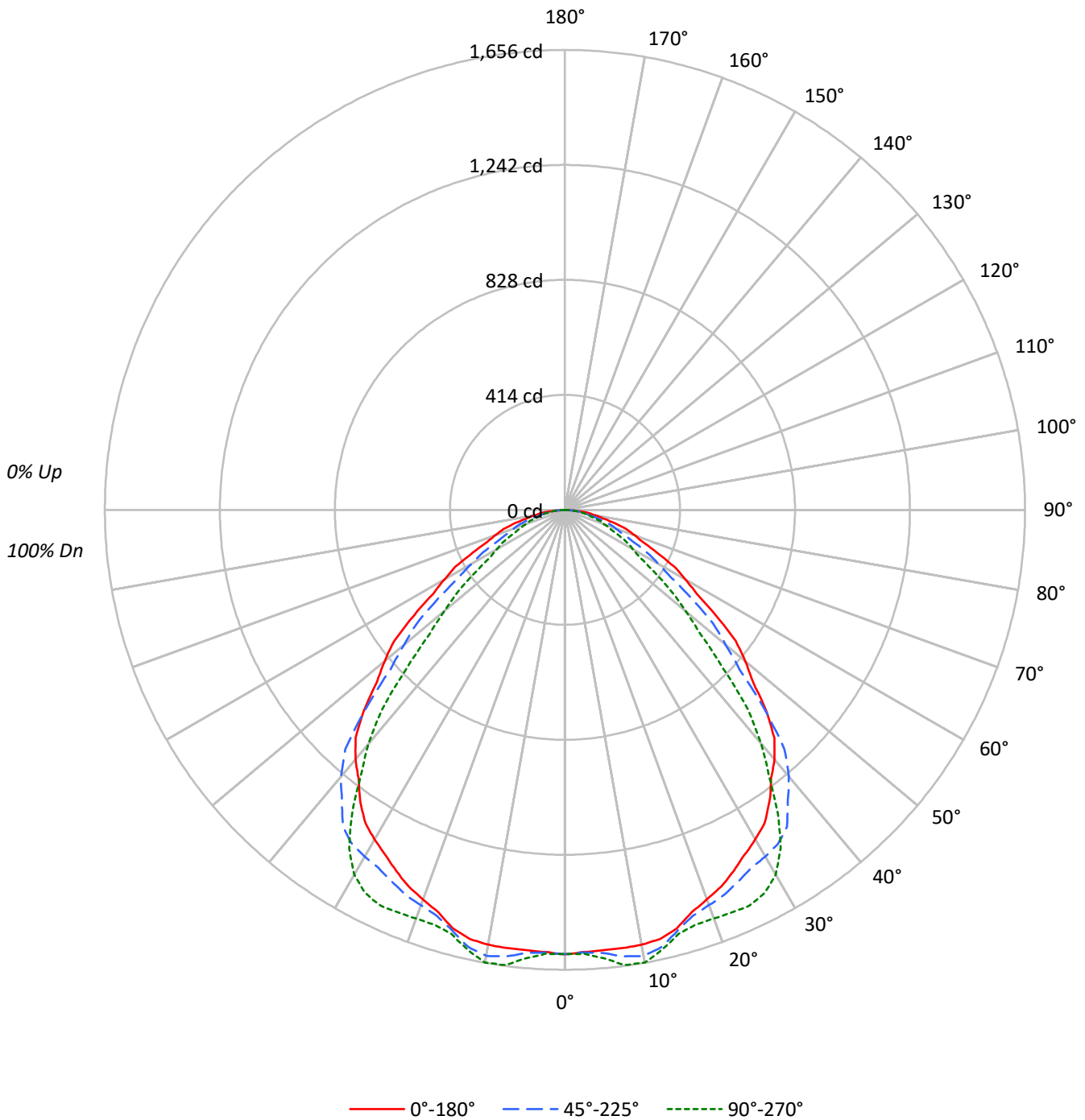
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3849.1 lumens  
Efficiency: N/A  
Efficacy: 144.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.7  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100													
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	90	89	87													
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56													
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50													
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44													
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39													
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35													
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32													
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	25835	25835	25835
5°	25801	25960	26276
10°	26071	26742	27142
15°	26064	26200	26419
20°	25642	26036	26904
25°	25572	26297	28010
30°	25544	26880	28280
35°	25300	27457	26331
40°	24717	26435	23170
45°	23386	23201	18322
50°	21263	18969	14217
55°	18686	15612	11066
60°	16172	12484	9113
65°	13956	10346	7977
70°	12548	9163	7081
75°	11497	7935	6513
80°	10005	6369	6369
85°	7243	5743	3020

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 25281 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.5	4.0
10°-20°	447.3	11.6
20°-30°	691.4	18.0
30°-40°	831.6	21.6
40°-50°	746.7	19.4
50°-60°	500.3	13.0
60°-70°	291.0	7.6
70°-80°	149.4	3.9
80°-90°	36.9	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1293.2	33.6
0°-40°	2124.9	55.2
0°-60°	3371.8	87.6
0°-90°	3849.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1592	1619	1602	1605	1621	152
15°	1559	1623	1567	1572	1580	438
25°	1435	1493	1476	1531	1572	662
35°	1284	1295	1393	1366	1336	800
45°	1024	1107	1016	857	802	784
55°	664	689	555	428	393	597
65°	365	373	271	220	209	370
75°	184	180	127	108	104	196
85°	39	31	31	21	16	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1600.1	1600.1	1600.1	1600.1	1600.1
2.5°	1593.5	1612.6	1594.9	1596.2	1600.1
5°	1591.9	1619.0	1601.7	1605.3	1621.2
7.5°	1591.6	1630.2	1621.9	1631.9	1652.9
10°	1590.2	1636.5	1631.1	1633.2	1655.5
12.5°	1582.4	1636.4	1611.5	1609.5	1621.6
15°	1559.3	1623.0	1567.4	1572.5	1580.5
17.5°	1518.5	1585.2	1532.2	1550.2	1565.8
20°	1492.4	1557.8	1515.3	1538.7	1565.8
22.5°	1468.9	1534.3	1499.6	1532.4	1569.7
25°	1435.4	1492.7	1476.1	1530.9	1572.3
27.5°	1400.1	1433.9	1453.6	1527.0	1556.0
30°	1370.1	1392.4	1441.8	1505.7	1516.9
32.5°	1337.4	1350.9	1426.2	1459.4	1445.1
35°	1283.6	1294.8	1393.0	1366.2	1335.9
37.5°	1219.7	1242.7	1318.2	1241.1	1206.3
40°	1172.7	1211.0	1254.2	1139.2	1099.3
42.5°	1115.3	1176.5	1169.4	1022.9	974.0
45°	1024.2	1107.2	1016.1	856.7	802.4
47.5°	917.0	1002.1	853.1	710.6	660.0
50°	846.5	915.1	755.2	621.7	566.0
52.5°	774.7	824.2	671.7	538.4	487.6
55°	663.8	689.4	554.6	428.2	393.1
57.5°	562.0	578.3	453.0	345.9	320.0
60°	500.8	511.8	386.6	302.9	282.2
62.5°	444.6	453.3	333.1	266.5	250.9
65°	365.3	373.3	270.8	219.9	208.8
67.5°	302.4	306.5	222.8	182.7	172.2
70°	265.8	267.5	194.1	158.1	150.0
72.5°	233.3	231.0	166.7	137.3	131.8
75°	184.3	179.5	127.2	107.5	104.4
77.5°	137.7	132.5	89.4	82.9	82.9
80°	107.6	101.3	68.5	68.5	68.5
82.5°	80.3	71.3	52.8	52.8	51.6
85°	39.1	31.2	31.0	21.1	16.3
87.5°	10.4	10.4	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0



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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	22.00	23.50	22.37	23.81	24.12	18.73	20.22	19.09	20.53	20.85
	3H	23.28	24.62	23.66	24.95	25.31	19.84	21.18	20.22	21.50	21.87
	4H	23.76	25.01	24.16	25.36	25.74	20.27	21.52	20.67	21.87	22.25
	6H	24.11	25.26	24.52	25.63	26.02	20.63	21.78	21.04	22.15	22.54
	8H	24.21	25.31	24.63	25.70	26.10	20.73	21.83	21.16	22.22	22.62
	12H	24.25	25.31	24.69	25.69	26.12	20.76	21.81	21.19	22.19	22.62
4H	2H	22.15	23.41	22.55	23.76	24.13	19.37	20.62	19.77	20.97	21.35
	3H	23.68	24.72	24.09	25.12	25.52	20.69	21.73	21.10	22.13	22.53
	4H	24.30	25.23	24.73	25.64	26.08	21.22	22.15	21.65	22.57	23.01
	6H	24.78	25.59	25.24	26.03	26.49	21.69	22.49	22.15	22.94	23.40
	8H	24.93	25.68	25.39	26.12	26.59	21.82	22.57	22.29	23.02	23.49
	12H	25.01	25.68	25.49	26.16	26.63	21.87	22.54	22.35	23.02	23.49
8H	4H	24.37	25.12	24.83	25.57	26.03	21.57	22.32	22.03	22.77	23.23
	6H	24.94	25.56	25.43	26.05	26.53	22.12	22.75	22.62	23.24	23.72
	8H	25.13	25.69	25.65	26.20	26.69	22.31	22.87	22.82	23.38	23.87
	12H	25.26	25.76	25.77	26.25	26.82	22.40	22.89	22.91	23.39	23.95
12H	4H	24.35	25.03	24.84	25.50	25.98	21.61	22.28	22.10	22.76	23.24
	6H	24.92	25.48	25.44	25.99	26.48	22.18	22.74	22.70	23.25	23.74
	8H	25.16	25.66	25.67	26.15	26.71	22.42	22.91	22.93	23.41	23.97