

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: P853863

Luminaire Tested: SQ2-FB-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853863
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-FB-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

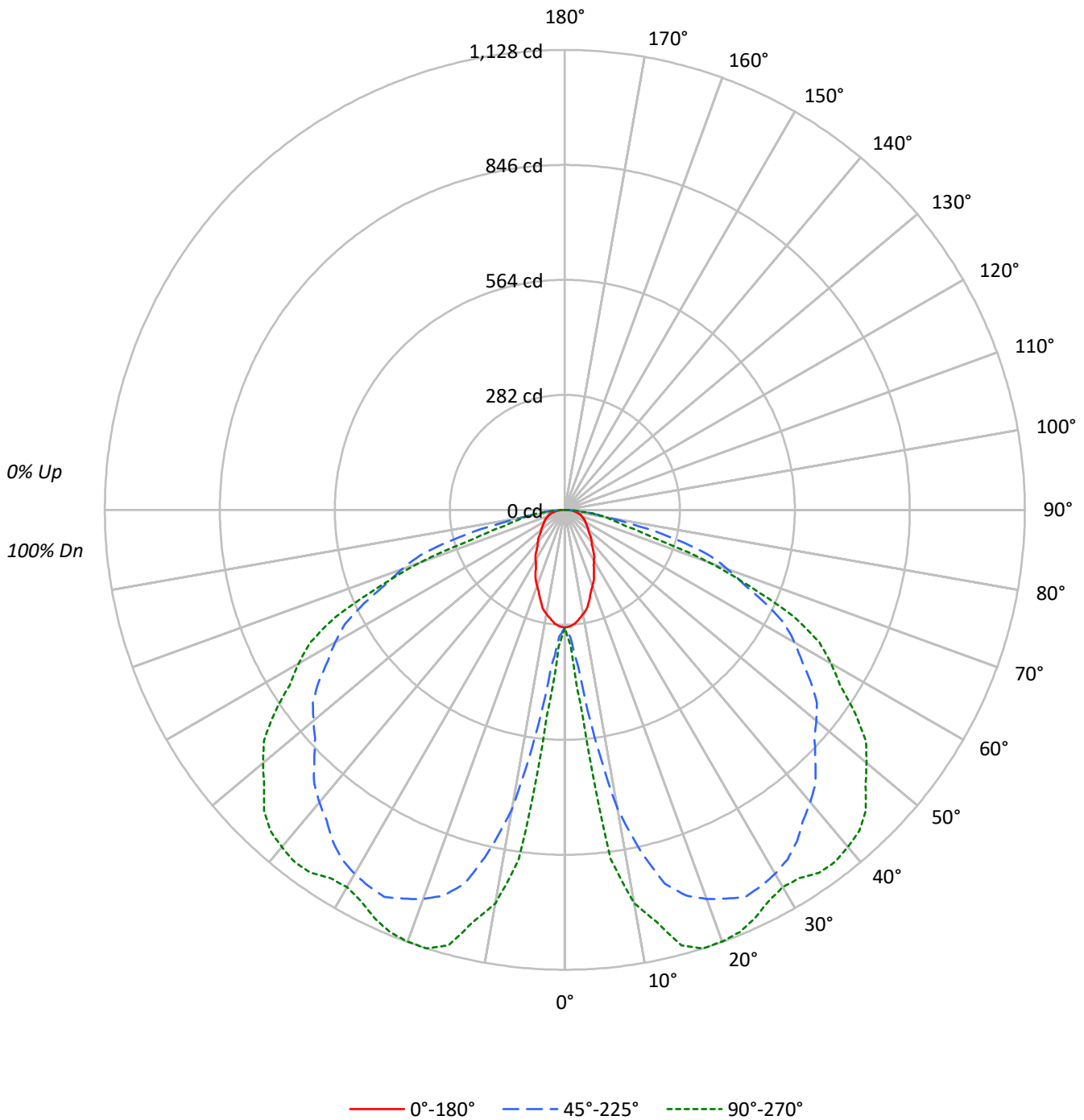
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2851.7 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 2.98 / 2.56
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	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69	69	69	
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57	57	57	
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48	48	48	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	43	54	48	43	41	41	41	
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35	35	35	
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31	31	31	
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27	27	27	
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24	24	24	
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21	21	21	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4660	4660	4660
5°	4543	6297	8253
10°	4254	12193	16060
15°	3850	15863	18484
20°	3409	17450	19357
25°	3016	18661	19675
30°	2664	19220	19919
35°	2379	19553	21413
40°	2165	19739	22753
45°	1996	19833	23825
50°	1881	20213	24257
55°	1835	20738	24451
60°	1883	21012	24329
65°	1960	20726	23641
70°	2030	20044	17882
75°	2252	18004	9869
80°	2325	9289	9159
85°	2316	6428	3853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 52.5°
 Luminance: 24671 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	1.7
10°-20°	220.7	7.7
20°-30°	388.3	13.6
30°-40°	502.6	17.6
40°-50°	554.4	19.4
50°-60°	517.6	18.1
60°-70°	400.0	14.0
70°-80°	184.5	6.5
80°-90°	35.2	1.2
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°	657.4	23.1
0°-40°	1160.0	40.7
0°-60°	2231.9	78.3
0°-90°	2851.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2851.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	289	289	289	289	289	
5°	280	321	388	474	509	26
15°	230	454	949	1062	1106	64
25°	169	610	1048	1094	1104	78
35°	121	589	992	1027	1086	76
45°	87	451	869	997	1043	68
55°	65	269	737	847	869	59
65°	51	152	542	608	619	50
75°	36	93	289	156	158	37
85°	12	27	35	24	21	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	288.6	288.6	288.6	288.6	288.6
2.5°	286.4	298.3	311.9	327.6	334.1
5°	280.3	321.0	388.5	473.9	509.2
7.5°	269.4	352.2	565.0	793.6	864.1
10°	259.5	374.8	743.7	941.6	979.6
12.5°	248.4	404.9	855.8	994.9	1033.9
15°	230.3	454.2	949.0	1062.4	1105.8
17.5°	211.7	509.6	992.3	1104.1	1127.7
20°	198.4	548.4	1015.6	1111.7	1126.6
22.5°	186.2	577.5	1032.3	1105.1	1121.1
25°	169.3	610.2	1047.5	1093.6	1104.4
27.5°	152.9	618.8	1040.9	1071.1	1081.7
30°	142.9	616.4	1030.9	1053.4	1068.4
32.5°	134.0	609.7	1016.5	1038.3	1070.6
35°	120.7	588.7	992.0	1026.7	1086.4
37.5°	109.3	555.1	959.9	1030.8	1088.3
40°	102.7	530.0	936.5	1030.6	1079.5
42.5°	96.0	500.6	909.9	1019.5	1068.4
45°	87.4	451.0	868.6	997.3	1043.4
47.5°	79.4	395.2	830.3	966.4	1000.1
50°	74.9	357.1	804.7	938.5	965.7
52.5°	70.5	320.1	779.2	905.2	930.2
55°	65.2	268.7	736.7	846.8	868.6
57.5°	60.5	224.6	688.5	782.4	800.0
60°	58.3	200.7	650.7	735.8	753.4
62.5°	54.9	178.9	608.5	686.9	703.4
65°	51.3	151.7	542.5	608.0	618.8
67.5°	46.3	131.5	472.3	512.3	492.0
70°	43.0	121.7	424.6	437.1	378.8
72.5°	40.8	110.8	372.4	339.4	228.9
75°	36.1	93.1	288.6	155.5	158.2
77.5°	29.4	72.0	189.8	119.4	121.8
80°	25.0	58.9	99.9	97.2	98.5
82.5°	20.5	45.8	68.8	71.6	69.7
85°	12.5	27.4	34.7	23.5	20.8
87.5°	4.4	9.9	5.5	5.5	5.5
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	16.17	17.85	16.53	18.17	18.48	24.91	26.59	25.27	26.91	27.22
	3H	16.96	18.48	17.33	18.81	19.17	26.59	28.11	26.96	28.44	28.80
	4H	17.30	18.73	17.69	19.08	19.45	26.80	28.24	27.20	28.59	28.96
	6H	17.55	18.89	17.96	19.25	19.64	26.93	28.26	27.34	28.63	29.02
	8H	17.64	18.91	18.06	19.30	19.69	26.96	28.23	27.38	28.62	29.02
	12H	17.69	18.91	18.12	19.29	19.72	26.96	28.18	27.39	28.56	28.99
4H	2H	20.66	22.10	21.06	22.45	22.82	25.44	26.88	25.84	27.23	27.60
	3H	21.67	22.87	22.08	23.27	23.67	27.35	28.55	27.75	28.94	29.34
	4H	21.99	23.08	22.42	23.49	23.92	27.62	28.70	28.05	29.12	29.55
	6H	22.17	23.12	22.62	23.56	24.01	27.81	28.76	28.27	29.20	29.65
	8H	22.21	23.10	22.67	23.54	24.00	27.86	28.74	28.32	29.19	29.65
	12H	22.25	23.04	22.72	23.51	23.98	27.87	28.67	28.35	29.14	29.61
8H	4H	23.24	24.12	23.70	24.56	25.03	27.81	28.69	28.27	29.13	29.60
	6H	23.51	24.24	24.00	24.73	25.21	28.05	28.78	28.54	29.27	29.74
	8H	23.59	24.25	24.10	24.75	25.24	28.12	28.78	28.63	29.28	29.77
	12H	23.66	24.24	24.17	24.73	25.29	28.16	28.73	28.66	29.22	29.78
12H	4H	23.29	24.09	23.77	24.56	25.03	27.80	28.59	28.28	29.07	29.54
	6H	23.62	24.27	24.12	24.78	25.26	28.04	28.70	28.55	29.21	29.69
	8H	23.76	24.34	24.27	24.83	25.39	28.15	28.73	28.66	29.22	29.78