

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: P854289

Luminaire Tested: SQ2-PW1-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854289
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

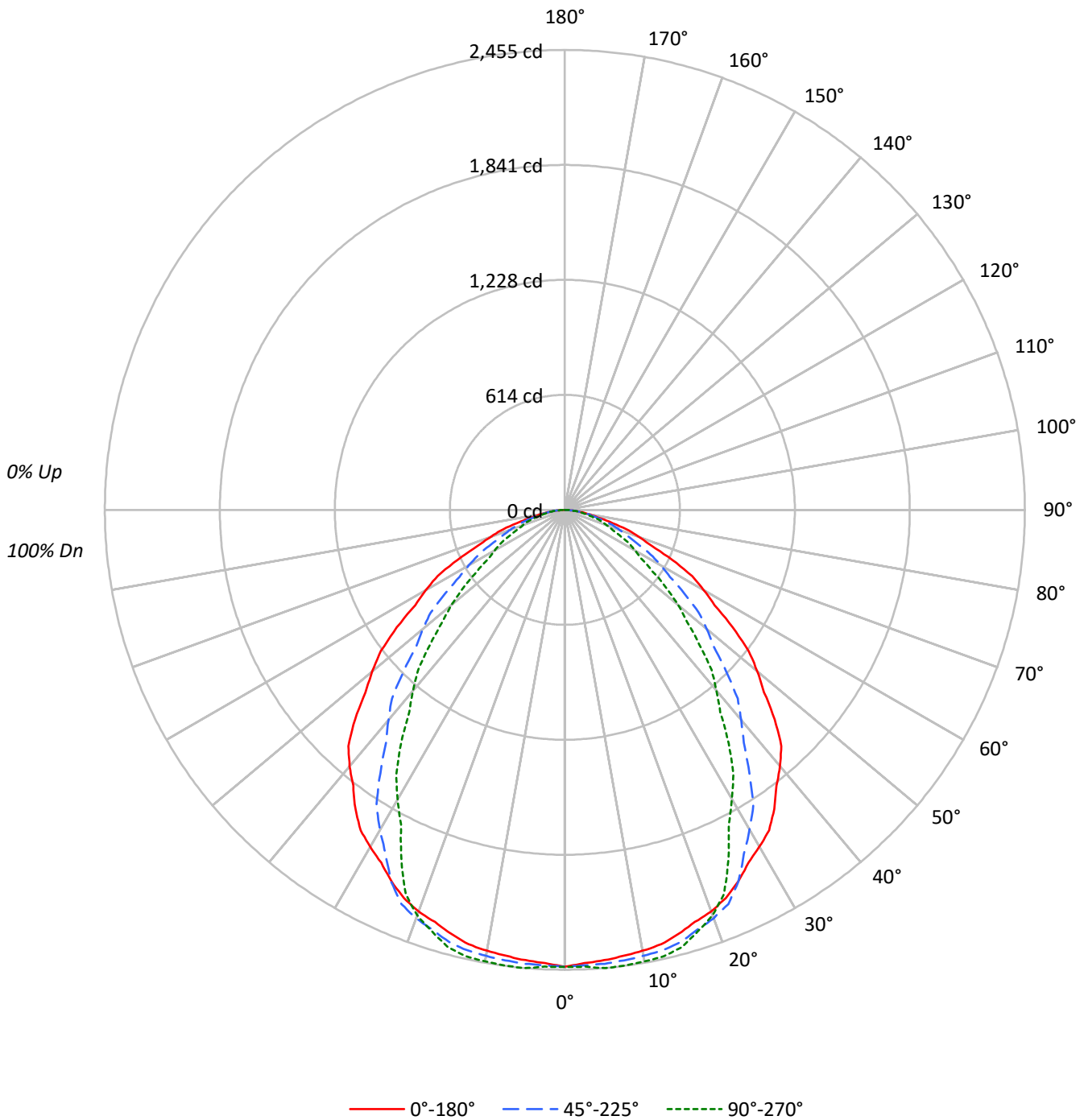
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5411.6 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.2
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74				74
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64				64
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				56
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49				49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	46	41	39				39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	37	47	42	37	35				35
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32				32
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39378	39378	39378
5°	39115	39417	39793
10°	39187	39643	40138
15°	39176	39913	40379
20°	39192	39871	39591
25°	38981	39022	36788
30°	38715	36767	33258
35°	38412	33835	30035
40°	37648	30844	26536
45°	36173	27738	23178
50°	33666	24797	19839
55°	30795	21903	16085
60°	27603	19052	13876
65°	24137	16416	12336
70°	19737	14582	11183
75°	15359	12608	10287
80°	11446	10795	9075
85°	7744	8170	5169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 36173 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.2	4.3
10°-20°	672.9	12.4
20°-30°	990.3	18.3
30°-40°	1082.7	20.0
40°-50°	971.3	17.9
50°-60°	724.5	13.4
60°-70°	457.9	8.5
70°-80°	226.8	4.2
80°-90°	53.1	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°	1895.4	35.0
0°-40°	2978.1	55.0
0°-60°	4673.8	86.4
0°-90°	5411.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5411.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2439	2439	2439	2439	2439	
5°	2413	2452	2432	2435	2455	230
15°	2344	2389	2388	2404	2416	662
25°	2188	2236	2190	2099	2065	1008
35°	1949	1928	1717	1567	1524	1215
45°	1584	1457	1215	1063	1015	1215
55°	1094	990	778	610	571	977
65°	632	580	430	346	323	626
75°	246	264	202	170	165	271
85°	42	53	44	30	28	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2438.9	2438.9	2438.9	2438.9	2438.9
2.5°	2422.2	2453.1	2433.4	2435.4	2440.8
5°	2413.4	2452.0	2432.0	2434.8	2455.2
7.5°	2401.3	2440.4	2425.5	2433.8	2453.8
10°	2390.2	2431.0	2418.0	2430.1	2448.2
12.5°	2375.3	2418.0	2408.7	2422.6	2440.8
15°	2343.7	2389.1	2387.8	2404.4	2415.7
17.5°	2307.0	2352.4	2350.2	2354.5	2360.0
20°	2281.0	2326.4	2320.5	2304.2	2304.2
22.5°	2243.8	2292.9	2277.7	2233.3	2218.7
25°	2188.1	2235.8	2190.4	2099.0	2065.0
27.5°	2123.0	2161.7	2070.5	1940.8	1893.5
30°	2076.6	2106.1	1972.1	1829.3	1783.9
32.5°	2028.3	2039.6	1871.7	1723.3	1674.3
35°	1948.8	1928.4	1716.6	1566.9	1523.8
37.5°	1855.0	1794.1	1567.4	1410.7	1363.0
40°	1786.2	1699.9	1463.4	1306.7	1259.0
42.5°	1710.0	1601.9	1364.9	1208.1	1158.6
45°	1584.2	1457.0	1214.8	1062.8	1015.1
47.5°	1442.5	1316.2	1074.5	927.3	886.4
50°	1340.3	1217.6	987.2	839.7	789.8
52.5°	1236.2	1126.3	901.7	750.1	682.0
55°	1094.0	989.6	778.1	610.0	571.4
57.5°	947.7	857.3	666.2	513.5	481.7
60°	854.8	775.3	590.0	461.5	429.7
62.5°	765.6	695.2	515.7	413.3	387.0
65°	631.8	579.6	429.7	345.6	322.9
67.5°	501.7	472.7	357.2	283.5	268.5
70°	418.1	409.0	308.9	248.3	236.9
72.5°	345.6	349.3	262.5	214.9	207.2
75°	246.2	264.4	202.1	169.5	164.9
77.5°	167.7	195.0	149.6	125.3	121.7
80°	123.1	150.4	116.1	97.6	97.6
82.5°	85.9	107.7	82.7	73.4	73.4
85°	41.8	53.2	44.1	30.1	27.9
87.5°	11.1	16.6	7.4	5.6	5.6
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	23.73	25.24	24.10	25.55	25.86	20.22	21.72	20.58	22.04	22.35
	3H	25.10	26.45	25.48	26.77	27.14	21.47	22.82	21.85	23.14	23.51
	4H	25.50	26.76	25.90	27.11	27.49	21.95	23.21	22.35	23.56	23.93
	6H	25.74	26.90	26.15	27.27	27.66	22.29	23.46	22.71	23.82	24.22
	8H	25.79	26.89	26.21	27.28	27.69	22.39	23.49	22.81	23.88	24.28
	12H	25.80	26.86	26.23	27.25	27.67	22.42	23.48	22.85	23.86	24.29
4H	2H	23.91	25.17	24.31	25.52	25.90	20.98	22.24	21.38	22.59	22.97
	3H	25.51	26.56	25.92	26.96	27.36	22.42	23.46	22.83	23.86	24.27
	4H	26.04	26.98	26.48	27.40	27.84	22.99	23.93	23.42	24.34	24.78
	6H	26.41	27.22	26.87	27.67	28.13	23.43	24.24	23.88	24.68	25.14
	8H	26.50	27.26	26.96	27.70	28.17	23.54	24.30	24.01	24.75	25.22
	12H	26.54	27.22	27.02	27.70	28.17	23.59	24.27	24.08	24.75	25.22
8H	4H	26.13	26.89	26.59	27.33	27.80	23.36	24.12	23.82	24.57	25.03
	6H	26.58	27.21	27.08	27.70	28.18	23.89	24.52	24.38	25.01	25.49
	8H	26.73	27.29	27.24	27.80	28.29	24.05	24.62	24.57	25.13	25.62
	12H	26.82	27.32	27.33	27.81	28.38	24.14	24.64	24.65	25.13	25.70
12H	4H	26.11	26.79	26.60	27.27	27.74	23.40	24.08	23.89	24.56	25.03
	6H	26.58	27.14	27.09	27.65	28.14	23.95	24.52	24.47	25.03	25.52
	8H	26.76	27.26	27.27	27.76	28.32	24.17	24.67	24.68	25.16	25.72