

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: P854936

Luminaire Tested: SQ2-PP3-025U-125D-830-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854936
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-125D-830-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

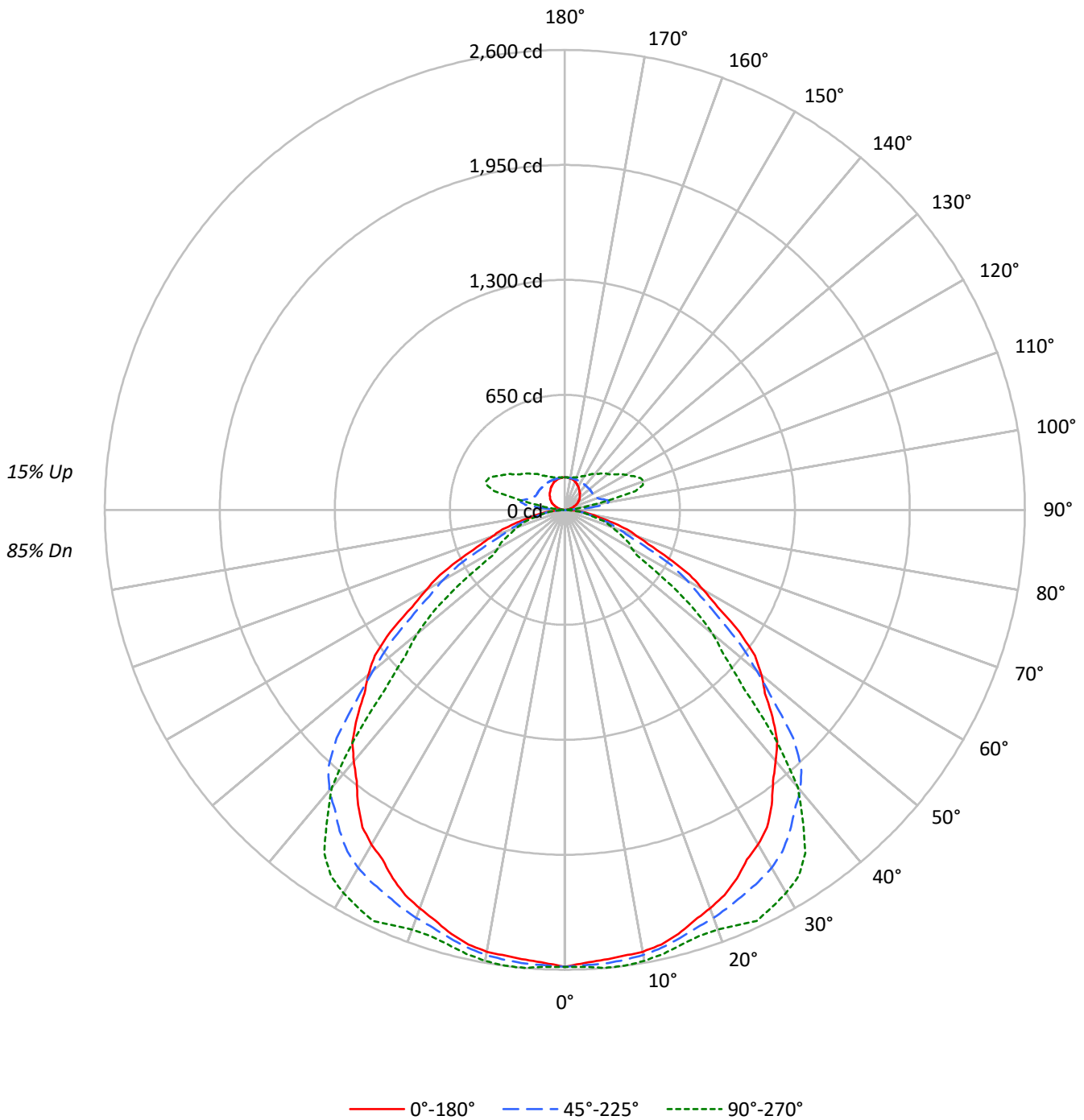
Lumens per Lamp: N/A
Luminaire Lumens: 7641.7 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 56.6
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	0
RCR																		
0	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85
1	107	102	99	95	102	99	95	92	92	89	87	86	83	82	80	78	77	74
2	98	91	84	79	94	87	82	77	82	77	73	76	73	69	71	68	66	63
3	90	80	73	67	86	78	71	66	73	67	63	68	64	60	64	60	57	54
4	83	72	64	58	79	69	62	56	65	59	54	61	56	52	57	53	50	47
5	76	64	56	50	73	62	55	49	59	52	47	55	50	45	52	47	44	41
6	70	58	50	44	68	56	49	43	53	47	42	50	44	40	47	42	39	36
7	65	53	45	39	63	51	44	38	48	42	37	46	40	36	43	38	35	32
8	61	48	40	35	59	47	39	34	44	38	33	42	36	32	40	35	31	29
9	57	44	36	31	55	43	36	31	41	34	30	39	33	29	37	32	28	26
10	53	41	33	28	51	40	33	28	38	31	27	36	30	26	34	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41706	41706	41706
5°	41379	41733	42131
10°	41589	41902	42440
15°	41489	41899	42539
20°	41192	42177	43397
25°	40960	42710	45678
30°	40725	43578	46631
35°	40150	43702	46718
40°	39077	43625	43163
45°	37908	41651	32858
50°	36419	35528	27367
55°	33895	29900	19679
60°	29185	25659	14108
65°	24623	19824	13876
70°	20497	15597	13279
75°	17374	13456	12433
80°	14728	11678	11176
85°	11634	9615	6076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 41651 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.0	3.2
10°-20°	711.8	9.3
20°-30°	1115.2	14.6
30°-40°	1375.7	18.0
40°-50°	1295.3	16.9
50°-60°	917.1	12.0
60°-70°	522.6	6.8
70°-80°	258.5	3.4
80°-90°	63.6	0.8
90°-100°	74.1	1.0
100°-110°	230.4	3.0
110°-120°	225.4	2.9
120°-130°	184.0	2.4
130°-140°	150.5	2.0
140°-150°	117.5	1.5
150°-160°	84.8	1.1
160°-170°	51.8	0.7
170°-180°	17.5	0.2
0°-30°	2073.0	27.1
0°-40°	3448.7	45.1
0°-60°	5661.0	74.1
0°-90°	6505.8	85.1
90°-120°	529.8	6.9
90°-150°	981.8	12.8
90°-180°	1136.0	14.9
0°-180°	7641.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2583	2583	2583	2583	2583	
5°	2553	2598	2575	2581	2600	243
15°	2482	2517	2507	2532	2545	699
25°	2299	2358	2397	2494	2564	1059
35°	2037	2093	2217	2344	2370	1270
45°	1660	1786	1824	1546	1439	1278
55°	1204	1276	1062	800	699	1062
65°	644	679	519	366	363	647
75°	278	308	216	202	199	302
85°	63	57	52	41	33	74
90°	0	1	3	3	3	3
95°	10	30	136	50	33	12
105°	40	57	227	433	413	43
115°	72	85	184	380	445	71
125°	100	111	182	299	350	89
135°	120	133	181	258	290	93
145°	140	151	181	223	242	88
155°	161	166	182	200	207	74
165°	176	177	183	189	191	50
175°	183	183	183	184	183	17
180°	183	183	183	183	183	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2583.1	2583.1	2583.1	2583.1	2583.1
2.5°	2563.5	2599.8	2576.5	2581.0	2585.3
5°	2553.1	2598.4	2574.9	2580.8	2599.5
7.5°	2543.3	2589.7	2566.8	2576.5	2599.5
10°	2536.7	2576.7	2555.8	2569.8	2588.6
12.5°	2517.0	2554.9	2536.1	2554.6	2571.1
15°	2482.1	2516.8	2506.6	2531.5	2544.9
17.5°	2434.6	2476.8	2476.7	2511.8	2525.7
20°	2397.4	2448.2	2454.7	2499.1	2525.7
22.5°	2358.1	2417.4	2428.5	2495.1	2541.1
25°	2299.2	2357.8	2397.4	2494.5	2564.0
27.5°	2230.3	2288.5	2370.2	2478.9	2534.0
30°	2184.4	2240.5	2337.4	2450.4	2501.2
32.5°	2127.6	2185.9	2289.3	2411.1	2457.5
35°	2037.0	2093.0	2217.2	2343.5	2370.2
37.5°	1932.7	1996.3	2135.3	2205.8	2207.4
40°	1854.0	1936.8	2069.8	2082.6	2047.9
42.5°	1777.6	1883.9	1978.1	1920.4	1766.2
45°	1660.2	1785.6	1824.1	1545.8	1439.0
47.5°	1535.1	1659.0	1597.9	1296.4	1222.8
50°	1449.9	1567.4	1414.4	1158.9	1089.5
52.5°	1353.8	1458.5	1250.6	1027.1	921.2
55°	1204.1	1276.3	1062.2	800.5	699.1
57.5°	1023.9	1074.7	908.1	600.8	487.1
60°	903.8	943.9	794.6	493.0	436.9
62.5°	794.6	830.3	676.7	428.3	408.5
65°	644.5	679.2	518.9	365.9	363.2
67.5°	512.7	550.7	398.1	319.4	316.2
70°	434.2	474.2	330.4	286.6	281.3
72.5°	368.6	406.6	280.2	251.7	248.5
75°	278.5	307.9	215.7	202.0	199.3
77.5°	202.0	220.7	160.6	153.4	150.7
80°	158.4	166.4	125.6	122.8	120.2
82.5°	119.1	116.3	95.0	92.1	87.4
85°	62.8	57.4	51.9	40.8	32.8
87.5°	19.7	19.9	9.4	7.2	7.2
90°	0.0	1.1	3.4	3.4	3.4
92.5°	3.6	12.6	42.9	14.1	11.4
95°	10.1	29.8	135.9	50.1	32.6
97.5°	18.4	38.8	225.0	140.1	88.3
100°	24.6	43.4	253.7	237.3	158.3
102.5°	31.0	48.7	248.4	339.0	266.2
105°	40.5	56.9	226.8	432.9	413.3
107.5°	49.9	65.2	206.1	440.2	462.0
110°	56.2	71.5	195.4	429.9	472.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.4	76.9	189.9	411.3	465.5
115°	71.9	85.0	184.2	379.9	444.7
117.5°	81.1	93.2	181.7	349.8	416.1
120°	86.5	98.6	180.8	332.6	396.4
122.5°	91.8	103.9	181.7	318.2	376.6
125°	99.9	110.9	181.9	298.7	350.3
127.5°	106.4	117.7	181.9	284.1	328.1
130°	110.0	122.1	181.9	276.0	315.6
132.5°	114.5	126.6	181.0	268.8	305.6
135°	120.2	133.3	180.8	257.9	289.7
137.5°	126.6	138.7	180.8	247.0	276.0
140°	130.3	142.3	180.8	239.8	266.2
142.5°	134.8	146.0	180.8	232.6	256.2
145°	140.3	151.3	180.8	222.7	242.5
147.5°	147.1	156.5	181.9	213.7	229.3
150°	151.6	159.3	181.9	209.2	221.2
152.5°	155.1	162.0	181.9	204.6	214.9
155°	160.6	166.1	181.9	200.0	206.6
157.5°	166.0	170.2	181.9	195.9	200.1
160°	169.6	172.9	181.9	193.2	196.5
162.5°	172.2	174.7	181.9	191.4	193.8
165°	176.3	177.4	183.1	188.7	190.9
167.5°	178.8	179.0	181.9	187.1	188.1
170°	179.7	180.8	181.9	185.3	186.4
172.5°	181.5	181.7	182.8	184.4	184.6
175°	183.1	183.1	183.1	184.1	183.1
177.5°	183.1	183.1	183.1	183.1	183.1
180°	183.1	183.1	183.1	183.1	183.1

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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	23.33	24.56	23.92	25.15	25.82	19.73	20.96	20.32	21.55	22.21
	3H	24.46	25.56	25.06	26.16	26.86	20.86	21.96	21.46	22.56	23.27
	4H	24.81	25.85	25.44	26.46	27.18	21.34	22.38	21.96	22.99	23.71
	6H	25.05	26.00	25.68	26.63	27.36	21.71	22.66	22.34	23.29	24.02
	8H	25.11	26.01	25.76	26.66	27.40	21.80	22.71	22.45	23.36	24.09
	12H	25.13	26.00	25.79	26.64	27.40	21.83	22.69	22.48	23.33	24.09
4H	2H	23.49	24.52	24.11	25.14	25.85	20.49	21.52	21.11	22.14	22.85
	3H	24.83	25.68	25.47	26.34	27.07	21.77	22.63	22.41	23.28	24.02
	4H	25.32	26.09	25.97	26.75	27.52	22.34	23.11	23.00	23.77	24.54
	6H	25.67	26.34	26.35	27.03	27.81	22.80	23.47	23.48	24.16	24.94
	8H	25.77	26.40	26.46	27.08	27.87	22.93	23.55	23.61	24.24	25.03
	12H	25.83	26.39	26.53	27.10	27.89	22.97	23.53	23.68	24.24	25.04
8H	4H	25.36	25.98	26.04	26.67	27.46	22.64	23.26	23.32	23.95	24.74
	6H	25.81	26.32	26.52	27.05	27.84	23.20	23.71	23.91	24.44	25.24
	8H	25.96	26.42	26.69	27.16	27.96	23.39	23.85	24.11	24.58	25.39
	12H	26.06	26.47	26.79	27.19	28.06	23.47	23.88	24.20	24.60	25.47
12H	4H	25.34	25.90	26.04	26.61	27.40	22.67	23.22	23.37	23.93	24.73
	6H	25.79	26.26	26.52	26.99	27.80	23.25	23.71	23.98	24.45	25.25
	8H	25.98	26.39	26.71	27.11	27.98	23.48	23.88	24.20	24.60	25.48