

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: P854254

Luminaire Tested: SQ2-PW1-025U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854254
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-025U-125D-935-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

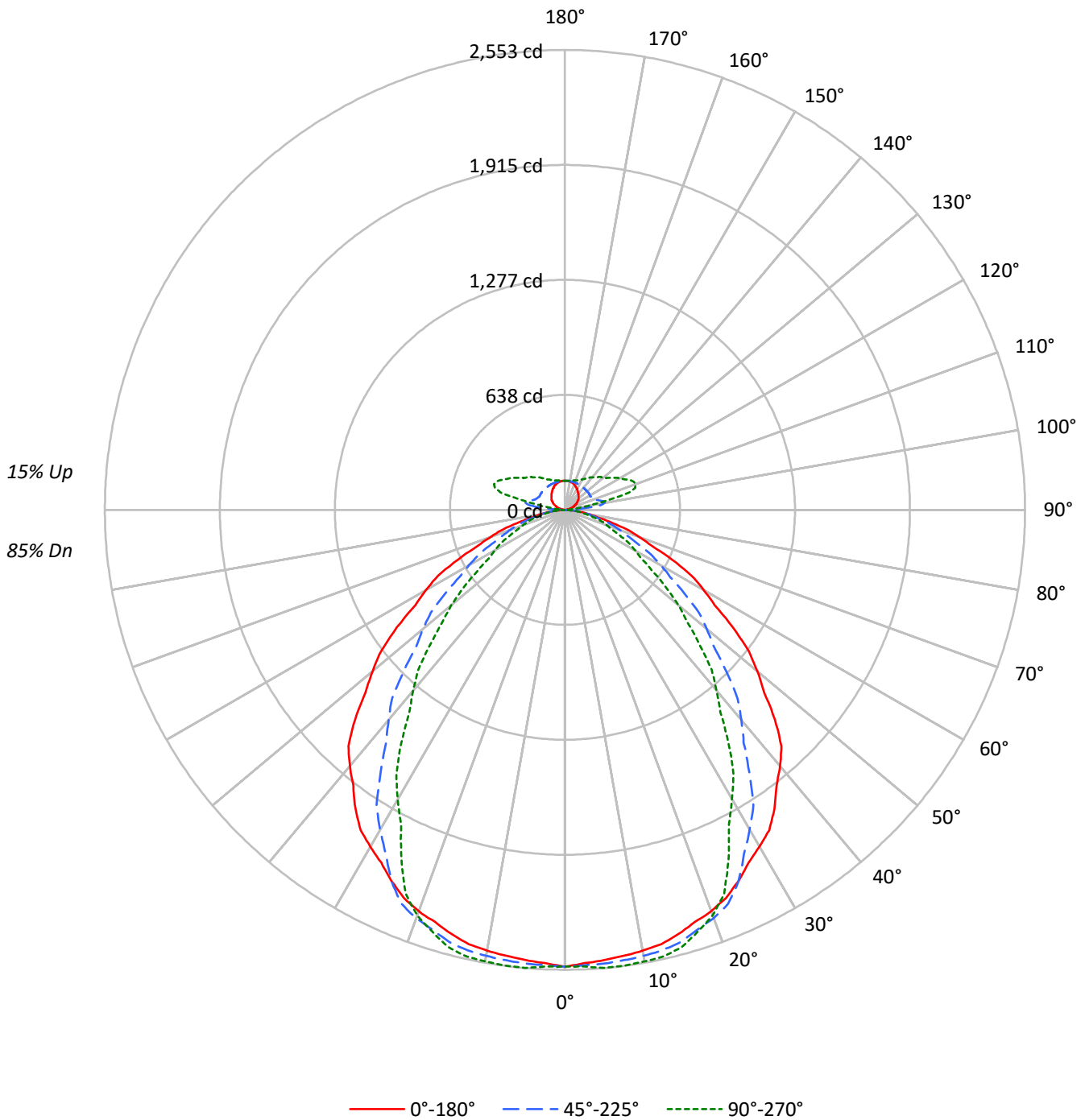
Lumens per Lamp: N/A
Luminaire Lumens: 6631.6 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	115	115	115	115	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	85	83	81	80	78	76	74
2	98	91	85	80	94	88	82	77	82	77	73	76	73	70	71	68	66	63
3	90	81	73	68	86	78	71	66	73	67	63	68	64	60	64	60	57	55
4	83	72	64	58	80	70	63	57	66	59	55	61	56	52	58	54	50	48
5	77	65	57	51	74	63	55	50	59	53	48	56	50	46	53	48	44	42
6	71	59	51	45	68	57	50	44	54	47	42	51	45	41	48	43	39	37
7	66	54	46	40	63	52	45	39	49	43	38	47	41	37	44	39	35	33
8	62	49	41	36	59	48	40	35	45	39	34	43	37	33	41	36	32	30
9	58	45	38	32	56	44	37	32	42	35	31	40	34	30	38	33	29	27
10	54	42	34	29	52	41	34	29	39	33	28	37	31	27	35	30	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40943	40943	40943
5°	40670	40982	41373
10°	40743	41218	41733
15°	40732	41499	41984
20°	40749	41453	41163
25°	40529	40572	38249
30°	40253	38227	34580
35°	39937	35177	31227
40°	39144	32068	27590
45°	37609	28841	24099
50°	35003	25782	20625
55°	32020	22773	16724
60°	28698	19808	14428
65°	25096	17070	12825
70°	20521	15163	11627
75°	15970	13107	10699
80°	11901	11232	9428
85°	8058	8503	5372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 37609 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.5	3.6
10°-20°	699.6	10.5
20°-30°	1029.6	15.5
30°-40°	1125.7	17.0
40°-50°	1009.8	15.2
50°-60°	753.3	11.4
60°-70°	476.0	7.2
70°-80°	235.8	3.6
80°-90°	55.6	0.8
90°-100°	65.5	1.0
100°-110°	203.8	3.1
110°-120°	199.3	3.0
120°-130°	162.7	2.5
130°-140°	133.1	2.0
140°-150°	103.9	1.6
150°-160°	75.0	1.1
160°-170°	45.9	0.7
170°-180°	15.5	0.2
0°-30°	1970.7	29.7
0°-40°	3096.4	46.7
0°-60°	4859.5	73.3
0°-90°	5626.9	84.9
90°-120°	468.6	7.1
90°-150°	868.4	13.1
90°-180°	1005.0	15.2
0°-180°	6631.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2536	2536	2536	2536	2536	
5°	2509	2549	2529	2532	2553	239
15°	2437	2484	2483	2500	2512	688
25°	2275	2325	2277	2182	2147	1048
35°	2026	2005	1785	1629	1584	1264
45°	1647	1515	1263	1105	1055	1263
55°	1138	1029	809	634	594	1016
65°	657	603	447	359	336	651
75°	256	275	210	176	172	282
85°	44	55	46	31	29	55
90°	0	1	3	3	3	2
95°	9	26	120	44	29	10
105°	36	50	201	383	366	38
115°	64	75	163	336	393	63
125°	88	98	161	264	310	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	183	65
165°	156	157	162	167	169	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2535.8	2535.8	2535.8	2535.8	2535.8
2.5°	2518.4	2550.5	2530.0	2532.1	2537.7
5°	2509.3	2549.4	2528.6	2531.5	2552.7
7.5°	2496.7	2537.3	2521.8	2530.5	2551.3
10°	2485.1	2527.6	2514.1	2526.6	2545.5
12.5°	2469.6	2514.0	2504.4	2518.9	2537.7
15°	2436.8	2484.0	2482.7	2499.9	2511.7
17.5°	2398.6	2445.9	2443.6	2448.0	2453.7
20°	2371.6	2418.8	2412.6	2395.7	2395.7
22.5°	2333.0	2384.0	2368.2	2322.0	2306.9
25°	2275.0	2324.6	2277.4	2182.4	2147.0
27.5°	2207.4	2247.5	2152.8	2017.9	1968.8
30°	2159.1	2189.8	2050.4	1902.0	1854.8
32.5°	2108.8	2120.6	1946.1	1791.8	1740.8
35°	2026.2	2005.0	1784.7	1629.1	1584.3
37.5°	1928.7	1865.4	1629.7	1466.7	1417.2
40°	1857.2	1767.5	1521.5	1358.6	1309.0
42.5°	1778.0	1665.6	1419.1	1256.1	1204.6
45°	1647.1	1514.8	1263.1	1105.0	1055.4
47.5°	1499.8	1368.5	1117.2	964.1	921.6
50°	1393.5	1266.0	1026.4	873.1	821.1
52.5°	1285.3	1171.0	937.5	779.9	709.1
55°	1137.5	1028.9	809.0	634.2	594.1
57.5°	985.3	891.4	692.6	533.9	500.9
60°	888.7	806.1	613.4	479.8	446.8
62.5°	796.0	722.8	536.1	429.7	402.3
65°	656.9	602.6	446.8	359.3	335.7
67.5°	521.7	491.4	371.4	294.8	279.2
70°	434.7	425.3	321.2	258.1	246.3
72.5°	359.4	363.1	272.9	223.5	215.4
75°	256.0	274.9	210.1	176.2	171.5
77.5°	174.4	202.7	155.5	130.3	126.5
80°	128.0	156.3	120.8	101.4	101.4
82.5°	89.4	112.0	86.0	76.3	76.3
85°	43.5	55.3	45.9	31.3	29.0
87.5°	11.6	17.5	8.3	6.4	6.4
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	37.9	12.5	10.1
95°	8.9	26.4	120.2	44.3	28.8
97.5°	16.3	34.3	199.0	123.9	78.1
100°	21.8	38.4	224.4	209.9	140.0
102.5°	27.4	43.1	219.7	299.8	235.4
105°	35.8	50.3	200.6	382.9	365.5
107.5°	44.1	57.7	182.3	389.3	408.6
110°	49.7	63.2	172.8	380.2	418.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.2	68.0	168.0	363.8	411.7
115°	63.6	75.2	162.9	336.0	393.3
117.5°	71.7	82.4	160.7	309.4	368.0
120°	76.5	87.2	159.9	294.2	350.6
122.5°	81.2	91.9	160.7	281.4	333.1
125°	88.4	98.1	160.9	264.2	309.8
127.5°	94.1	104.1	160.9	251.3	290.2
130°	97.3	108.0	160.9	244.1	279.1
132.5°	101.3	112.0	160.1	237.7	270.3
135°	106.3	117.9	159.9	228.1	256.2
137.5°	112.0	122.7	159.9	218.5	244.1
140°	115.2	125.9	159.9	212.1	235.4
142.5°	119.2	129.1	159.9	205.7	226.6
145°	124.1	133.8	159.9	197.0	214.5
147.5°	130.1	138.4	160.9	189.0	202.8
150°	134.1	140.9	160.9	185.0	195.6
152.5°	137.2	143.3	160.9	181.0	190.1
155°	142.0	146.9	160.9	176.9	182.7
157.5°	146.8	150.5	160.9	173.3	177.0
160°	150.0	152.9	160.9	170.9	173.8
162.5°	152.3	154.5	160.9	169.3	171.4
165°	155.9	156.9	161.9	166.9	168.8
167.5°	158.1	158.3	160.9	165.5	166.4
170°	158.9	159.9	160.9	163.9	164.9
172.5°	160.5	160.7	161.7	163.1	163.3
175°	161.9	161.9	161.9	162.8	161.9
177.5°	161.9	161.9	161.9	161.9	161.9
180°	161.9	161.9	161.9	161.9	161.9



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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	22.77	23.98	23.36	24.58	25.25	19.25	20.47	19.85	21.06	21.73
	3H	24.12	25.20	24.72	25.81	26.52	20.49	21.57	21.09	22.18	22.89
	4H	24.51	25.53	25.13	26.15	26.87	20.95	21.97	21.58	22.59	23.31
	6H	24.73	25.67	25.37	26.30	27.03	21.28	22.22	21.92	22.85	23.59
	8H	24.77	25.66	25.42	26.32	27.06	21.37	22.26	22.02	22.91	23.65
	12H	24.78	25.63	25.44	26.28	27.04	21.39	22.24	22.05	22.89	23.66
4H	2H	22.91	23.93	23.54	24.55	25.28	19.98	21.00	20.61	21.62	22.34
	3H	24.49	25.33	25.13	26.00	26.74	21.40	22.24	22.04	22.90	23.64
	4H	25.01	25.77	25.67	26.44	27.21	21.96	22.72	22.62	23.39	24.16
	6H	25.36	26.02	26.04	26.71	27.50	22.38	23.04	23.06	23.73	24.52
	8H	25.45	26.06	26.13	26.75	27.55	22.49	23.11	23.18	23.80	24.59
	12H	25.48	26.03	26.18	26.74	27.54	22.53	23.08	23.24	23.80	24.60
8H	4H	25.08	25.69	25.76	26.38	27.17	22.31	22.93	23.00	23.61	24.41
	6H	25.52	26.03	26.24	26.76	27.56	22.83	23.34	23.54	24.07	24.87
	8H	25.67	26.12	26.40	26.86	27.67	22.99	23.44	23.72	24.18	24.99
	12H	25.75	26.15	26.48	26.87	27.75	23.07	23.47	23.80	24.19	25.07
12H	4H	25.05	25.60	25.76	26.32	27.12	22.34	22.89	23.05	23.61	24.41
	6H	25.51	25.97	26.25	26.71	27.52	22.89	23.35	23.62	24.08	24.90
	8H	25.69	26.09	26.42	26.82	27.69	23.09	23.49	23.82	24.22	25.10