

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: P854314

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854314
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-125U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

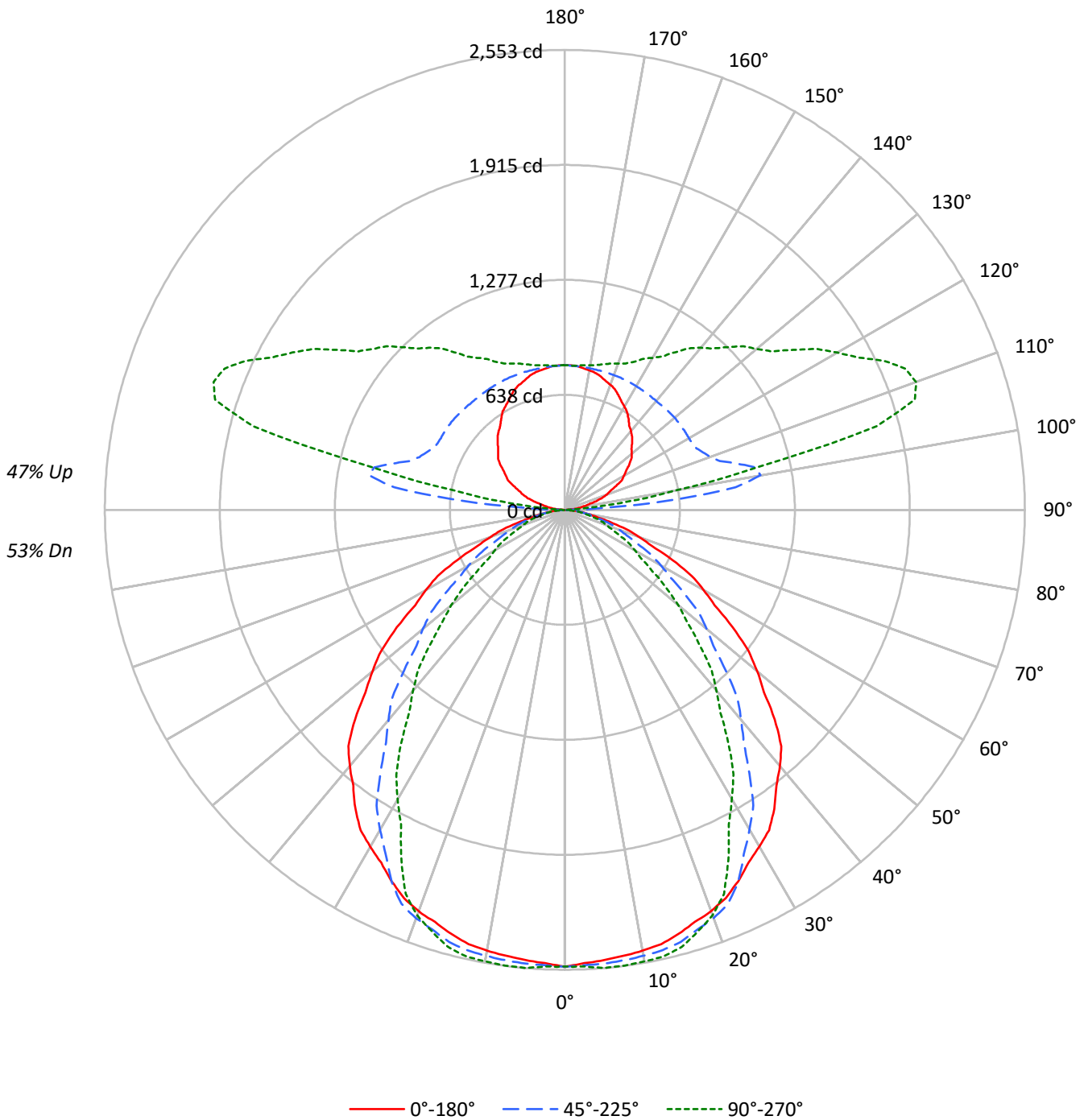
Lumens per Lamp: N/A
Luminaire Lumens: 10580.3 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 93.1
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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	95	91	88	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	52	48	46	44	40
3	83	74	67	61	77	69	63	58	60	55	51	51	47	44	43	40	38	34
4	76	66	58	53	71	62	55	50	53	48	44	46	42	39	38	36	33	30
5	70	59	51	45	65	55	48	43	48	43	38	41	37	34	35	32	29	26
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	32	29	26	23
7	60	48	40	35	56	45	38	33	40	34	30	34	30	27	29	26	23	21
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	27	24	21	19
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	22	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	18	16

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	2.3
10°-20°	699.6	6.6
20°-30°	1029.6	9.7
30°-40°	1125.7	10.6
40°-50°	1009.8	9.5
50°-60°	753.3	7.1
60°-70°	476.0	4.5
70°-80°	235.8	2.2
80°-90°	56.1	0.5
90°-100°	307.1	2.9
100°-110°	999.7	9.4
110°-120°	988.9	9.3
120°-130°	808.2	7.6
130°-140°	660.5	6.2
140°-150°	514.5	4.9
150°-160°	370.8	3.5
160°-170°	226.7	2.1
170°-180°	76.5	0.7
0°-30°	1970.7	18.6
0°-40°	3096.4	29.3
0°-60°	4859.5	45.9
0°-90°	5627.4	53.2
90°-120°	2295.8	21.7
90°-150°	4278.9	40.4
90°-180°	4953.0	46.8
0°-180°	10580.3	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	3	7	6	6	4
95°	42	126	563	201	123	48
105°	170	245	990	1892	1791	181
115°	314	375	807	1663	1956	311
125°	436	487	796	1313	1547	388
135°	527	582	792	1133	1278	407
145°	616	662	790	976	1068	386
155°	703	726	795	874	906	324
165°	767	774	797	827	836	216
175°	800	800	800	806	804	76
180°	803	803	803	803	803	



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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	17.8	9.1	7.0	7.0
90°	0.0	2.9	6.9	5.9	5.9
92.5°	14.2	51.1	163.3	53.8	41.5
95°	41.5	126.4	562.8	200.7	123.4
97.5°	78.0	164.5	955.2	581.8	355.1
100°	101.7	186.7	1102.9	983.5	637.9
102.5°	128.6	210.4	1084.8	1455.0	1106.3
105°	169.8	245.1	990.4	1891.6	1791.2
107.5°	214.5	285.3	900.7	1929.4	2035.8
110°	246.9	311.5	858.1	1882.4	2074.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	273.7	337.6	831.2	1797.6	2045.3
115°	314.0	374.8	806.7	1662.6	1956.1
117.5°	355.5	410.3	797.2	1538.9	1831.1
120°	379.2	433.2	794.9	1462.9	1745.7
122.5°	402.1	455.4	795.7	1396.9	1660.4
125°	436.4	486.6	795.9	1312.7	1547.3
127.5°	465.9	517.2	795.7	1249.6	1445.2
130°	484.8	537.0	794.9	1213.5	1388.3
132.5°	501.4	555.9	794.1	1180.1	1344.1
135°	527.3	582.3	791.9	1132.9	1277.7
137.5°	552.6	608.0	789.7	1084.9	1213.5
140°	570.7	623.8	788.9	1052.4	1174.0
142.5°	588.1	638.9	788.9	1021.3	1129.8
145°	616.1	661.5	789.9	975.7	1068.4
147.5°	643.4	682.8	791.3	936.9	1008.5
150°	661.6	696.3	792.9	913.7	974.6
152.5°	679.7	708.3	793.7	896.1	944.6
155°	703.0	726.2	794.9	873.6	906.4
157.5°	725.2	741.8	796.1	857.0	880.0
160°	738.6	752.1	796.8	846.6	865.0
162.5°	750.4	760.9	796.8	837.8	851.5
165°	767.2	774.0	796.8	826.7	836.3
167.5°	779.1	783.3	797.0	818.3	823.3
170°	787.0	788.9	797.8	812.7	814.6
172.5°	792.5	793.7	799.4	809.5	809.1
175°	799.8	799.8	799.8	805.7	803.8
177.5°	802.8	802.0	801.2	805.1	802.0
180°	802.8	802.8	802.8	802.8	802.8



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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	20.25	21.10	21.18	22.04	23.27	16.73	17.58	17.67	18.53	19.76
	3H	21.57	22.33	22.52	23.28	24.54	17.94	18.70	18.89	19.65	20.91
	4H	21.94	22.66	22.90	23.62	24.88	18.38	19.10	19.35	20.06	21.32
	6H	22.14	22.80	23.12	23.77	25.04	18.70	19.36	19.67	20.33	21.60
	8H	22.18	22.80	23.16	23.79	25.06	18.77	19.40	19.76	20.39	21.66
	12H	22.17	22.77	23.16	23.75	25.04	18.79	19.38	19.77	20.36	21.65
4H	2H	20.35	21.06	21.32	22.03	23.29	17.41	18.13	18.38	19.09	20.35
	3H	21.89	22.49	22.87	23.48	24.75	18.80	19.39	19.78	20.39	21.66
	4H	22.40	22.94	23.39	23.93	25.23	19.35	19.89	20.33	20.87	22.17
	6H	22.73	23.20	23.73	24.21	25.50	19.75	20.22	20.75	21.22	22.52
	8H	22.81	23.24	23.81	24.25	25.56	19.85	20.29	20.86	21.29	22.60
	12H	22.82	23.22	23.84	24.24	25.55	19.88	20.27	20.89	21.29	22.60
8H	4H	22.44	22.87	23.44	23.88	25.19	19.67	20.11	20.67	21.11	22.42
	6H	22.87	23.23	23.90	24.28	25.59	20.18	20.54	21.20	21.58	22.89
	8H	23.02	23.33	24.05	24.37	25.69	20.34	20.66	21.37	21.69	23.02
	12H	23.08	23.36	24.12	24.39	25.76	20.40	20.68	21.44	21.70	23.08
12H	4H	22.40	22.79	23.42	23.81	25.12	19.69	20.08	20.71	21.10	22.41
	6H	22.86	23.18	23.90	24.21	25.54	20.24	20.56	21.28	21.59	22.92
	8H	23.03	23.30	24.06	24.33	25.70	20.43	20.71	21.46	21.73	23.10