

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: P854138

Luminaire Tested: SQ2-PP3-125U-050D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854138
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-125U-050D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

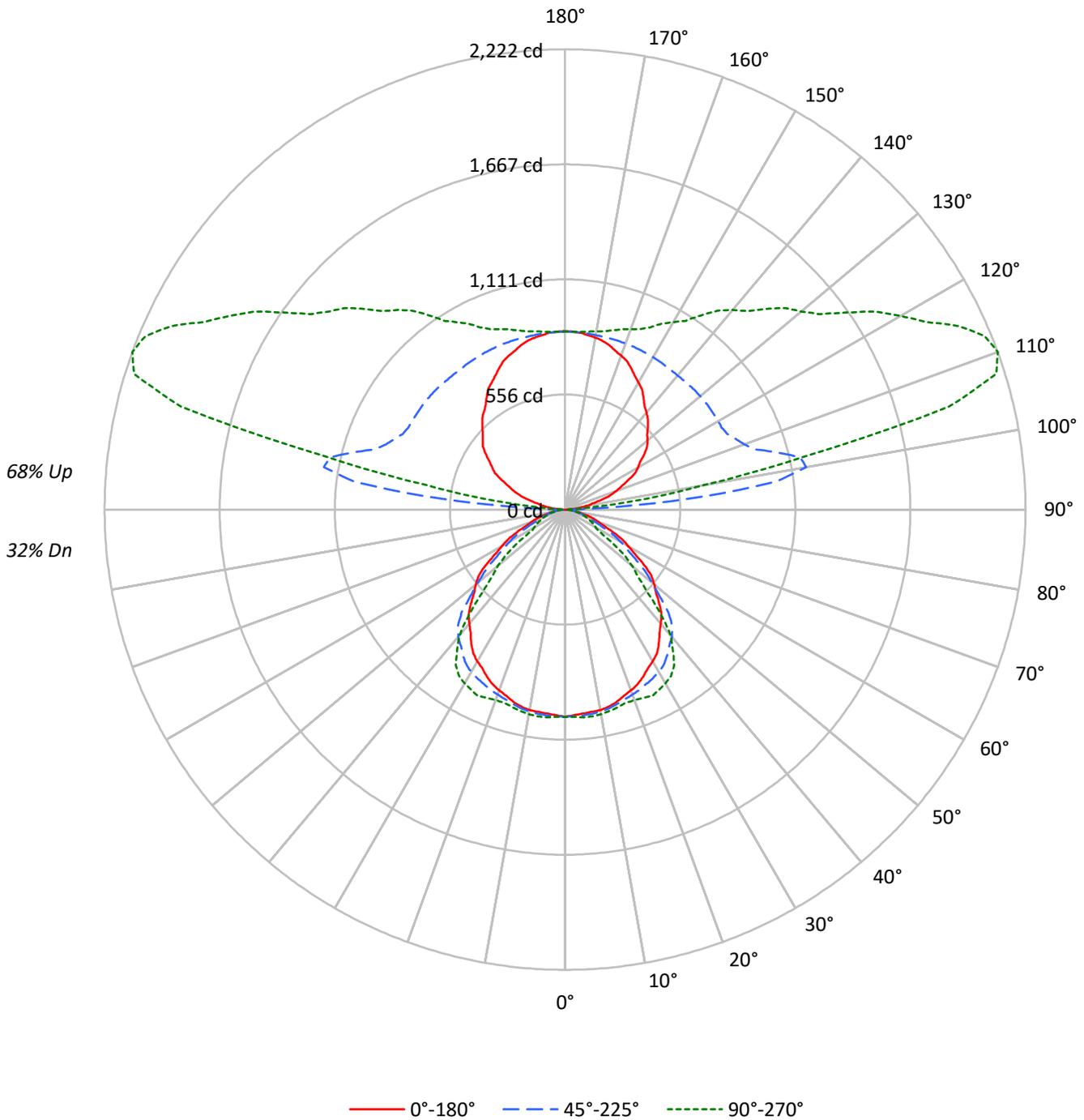
Lumens per Lamp: N/A
Luminaire Lumens: 7826.2 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 61.7
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

TEST NUMBER: P854138

CATALOG NUMBER: SQ2-PP3-125U-050D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854138

CATALOG NUMBER: SQ2-PP3-125U-050D-940-UNV-STD-W-4

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	67	62	57	54	51	44	42	40	32	30	29	24
3	79	70	63	57	71	63	57	52	51	46	43	39	36	34	28	27	25	21
4	72	62	54	48	65	56	50	45	45	40	37	35	32	29	26	24	22	18
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	28	28	25	22	21	19	17	14
7	56	44	37	31	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	28	47	37	30	26	30	25	22	24	20	17	18	15	14	11
9	48	37	29	25	43	33	27	23	27	23	19	22	18	16	16	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16157	16157	16157
5°	16029	16167	16321
10°	16111	16233	16441
15°	16072	16231	16478
20°	15957	16338	16811
25°	15866	16545	17696
30°	15776	16882	18064
35°	15554	16929	18096
40°	15137	16899	16720
45°	14684	16134	12727
50°	14109	13762	10603
55°	13132	11583	7623
60°	11305	9939	5464
65°	9536	7679	5375
70°	7940	6043	5146
75°	6731	5215	4816
80°	5709	4528	4324
85°	4502	3724	2353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16134 cd/sqm



TEST NUMBER: P854138

CATALOG NUMBER: SQ2-PP3-125U-050D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	1.2
10°-20°	275.8	3.5
20°-30°	432.0	5.5
30°-40°	532.9	6.8
40°-50°	501.8	6.4
50°-60°	355.3	4.5
60°-70°	202.4	2.6
70°-80°	100.2	1.3
80°-90°	25.4	0.3
90°-100°	328.9	4.2
100°-110°	1070.9	13.7
110°-120°	1059.3	13.5
120°-130°	865.7	11.1
130°-140°	707.5	9.0
140°-150°	551.1	7.0
150°-160°	397.2	5.1
160°-170°	242.8	3.1
170°-180°	81.9	1.0
0°-30°	803.0	10.3
0°-40°	1336.0	17.1
0°-60°	2193.0	28.0
0°-90°	2521.0	32.2
90°-120°	2459.0	31.4
90°-150°	4583.3	58.6
90°-180°	5305.0	67.8
0°-180°	7826.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	989	1007	998	1000	1007	94
15°	962	975	971	981	986	271
25°	891	913	929	966	993	410
35°	789	811	859	908	918	492
45°	643	692	707	599	557	495
55°	466	494	412	310	271	412
65°	250	263	201	142	141	251
75°	108	119	84	78	77	117
85°	24	22	20	16	13	29
90°	0	3	7	6	6	3
95°	44	135	603	215	132	52
105°	182	263	1061	2026	1919	194
115°	336	402	864	1781	2095	333
125°	468	521	852	1406	1657	416
135°	565	624	848	1214	1369	436
145°	660	709	846	1045	1144	413
155°	753	778	851	936	971	347
165°	822	829	854	886	896	231
175°	857	857	857	863	861	81
180°	860	860	860	860	860	



TEST NUMBER: P854138

CATALOG NUMBER: SQ2-PP3-125U-050D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.7	1000.7	1000.7	1000.7	1000.7
2.5°	993.0	1007.1	998.1	999.8	1001.5
5°	989.0	1006.6	997.5	999.8	1007.0
7.5°	985.2	1003.2	994.3	998.1	1007.0
10°	982.7	998.2	990.1	995.5	1002.8
12.5°	975.1	989.7	982.5	989.6	996.0
15°	961.5	975.0	971.0	980.7	985.8
17.5°	943.1	959.5	959.4	973.1	978.4
20°	928.7	948.4	950.9	968.1	978.4
22.5°	913.5	936.5	940.8	966.6	984.4
25°	890.6	913.4	928.7	966.4	993.3
27.5°	864.0	886.5	918.1	960.3	981.6
30°	846.2	867.9	905.5	949.3	968.9
32.5°	824.2	846.8	886.8	934.0	952.0
35°	789.1	810.8	858.9	907.8	918.1
37.5°	748.7	773.3	827.2	854.5	855.1
40°	718.2	750.3	801.8	806.8	793.3
42.5°	688.6	729.8	766.3	743.9	684.2
45°	643.1	691.7	706.6	598.8	557.4
47.5°	594.7	642.7	619.0	502.2	473.7
50°	561.7	607.2	547.9	448.9	422.1
52.5°	524.4	565.0	484.5	397.9	356.9
55°	466.5	494.4	411.5	310.1	270.8
57.5°	396.7	416.3	351.8	232.8	188.7
60°	350.1	365.6	307.8	191.0	169.2
62.5°	307.8	321.7	262.1	165.9	158.2
65°	249.6	263.1	201.0	141.7	140.7
67.5°	198.7	213.3	154.2	123.7	122.5
70°	168.2	183.7	128.0	111.0	109.0
72.5°	142.8	157.5	108.5	97.5	96.3
75°	107.9	119.3	83.6	78.3	77.2
77.5°	78.3	85.5	62.2	59.4	58.4
80°	61.4	64.5	48.7	47.6	46.5
82.5°	46.1	45.1	36.8	35.7	33.8
85°	24.3	22.3	20.1	15.8	12.7
87.5°	7.6	8.2	4.9	3.8	3.8
90°	0.0	3.1	7.4	6.3	6.3
92.5°	15.2	54.7	174.9	57.7	44.4
95°	44.4	135.4	602.9	214.9	132.2
97.5°	83.6	176.2	1023.2	623.1	380.3
100°	108.9	199.9	1181.4	1053.5	683.2
102.5°	137.7	225.4	1161.9	1558.5	1185.0
105°	181.9	262.6	1060.8	2026.1	1918.6
107.5°	229.7	305.6	964.8	2066.7	2180.7
110°	264.4	333.7	919.1	2016.3	2222.1



TEST NUMBER: P854138

CATALOG NUMBER: SQ2-PP3-125U-050D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	361.6	890.3	1925.4	2190.8
115°	336.3	401.5	864.1	1780.8	2095.2
117.5°	380.8	439.5	853.9	1648.4	1961.3
120°	406.1	464.0	851.4	1566.9	1869.9
122.5°	430.7	487.8	852.3	1496.2	1778.5
125°	467.5	521.3	852.5	1406.0	1657.3
127.5°	499.0	554.0	852.3	1338.5	1548.0
130°	519.3	575.1	851.4	1299.9	1487.1
132.5°	537.1	595.4	850.6	1264.1	1439.7
135°	564.8	623.7	848.2	1213.5	1368.6
137.5°	591.9	651.2	845.9	1162.1	1299.8
140°	611.3	668.2	845.1	1127.2	1257.5
142.5°	629.9	684.3	845.1	1093.9	1210.2
145°	660.0	708.6	846.1	1045.1	1144.4
147.5°	689.2	731.4	847.6	1003.5	1080.3
150°	708.6	745.9	849.3	978.7	1043.9
152.5°	728.1	758.7	850.1	959.8	1011.7
155°	753.0	777.9	851.4	935.8	970.9
157.5°	776.7	794.5	852.7	918.0	942.6
160°	791.1	805.6	853.5	906.8	926.5
162.5°	803.8	815.0	853.5	897.4	912.1
165°	821.8	829.0	853.5	885.5	895.8
167.5°	834.5	839.0	853.7	876.5	881.9
170°	842.9	845.0	854.6	870.5	872.6
172.5°	848.9	850.1	856.3	867.0	866.6
175°	856.7	856.7	856.7	863.0	860.9
177.5°	859.9	859.0	858.2	862.3	859.0
180°	859.9	859.9	859.9	859.9	859.9

TEST NUMBER: P854138

CATALOG NUMBER: SQ2-PP3-125U-050D-940-UNV-STD-W-4

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	15.27	15.98	16.38	17.07	18.58	11.67	12.37	12.77	13.47	14.98
	3H	16.36	16.98	17.47	18.09	19.61	12.76	13.39	13.87	14.49	16.02
	4H	16.69	17.29	17.81	18.39	19.92	13.22	13.81	14.34	14.92	16.45
	6H	16.90	17.45	18.03	18.55	20.09	13.55	14.10	14.68	15.21	16.75
	8H	16.94	17.46	18.08	18.59	20.12	13.64	14.16	14.77	15.28	16.81
	12H	16.95	17.45	18.09	18.56	20.12	13.65	14.14	14.78	15.26	16.81
4H	2H	15.36	15.96	16.49	17.06	18.59	12.36	12.96	13.49	14.06	15.59
	3H	16.66	17.15	17.79	18.28	19.82	13.60	14.09	14.73	15.22	16.77
	4H	17.12	17.58	18.26	18.70	20.26	14.15	14.60	15.28	15.72	17.28
	6H	17.45	17.84	18.60	18.98	20.54	14.58	14.97	15.72	16.11	17.66
	8H	17.54	17.91	18.69	19.04	20.61	14.70	15.06	15.84	16.19	17.76
	12H	17.57	17.90	18.73	19.05	20.62	14.72	15.05	15.88	16.19	17.77
8H	4H	17.13	17.49	18.27	18.63	20.20	14.41	14.77	15.55	15.91	17.48
	6H	17.56	17.86	18.72	19.03	20.60	14.95	15.25	16.11	16.43	17.99
	8H	17.71	17.97	18.88	19.13	20.72	15.14	15.40	16.30	16.55	18.14
	12H	17.79	18.02	18.97	19.18	20.80	15.20	15.43	16.37	16.59	18.21
12H	4H	17.08	17.41	18.24	18.56	20.13	14.41	14.74	15.57	15.89	17.46
	6H	17.55	17.81	18.71	18.96	20.55	15.00	15.26	16.17	16.42	18.01
	8H	17.71	17.94	18.88	19.09	20.71	15.20	15.43	16.38	16.59	18.21