

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: P854281

Luminaire Tested: SQ2-PW1-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854281
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-PW1-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

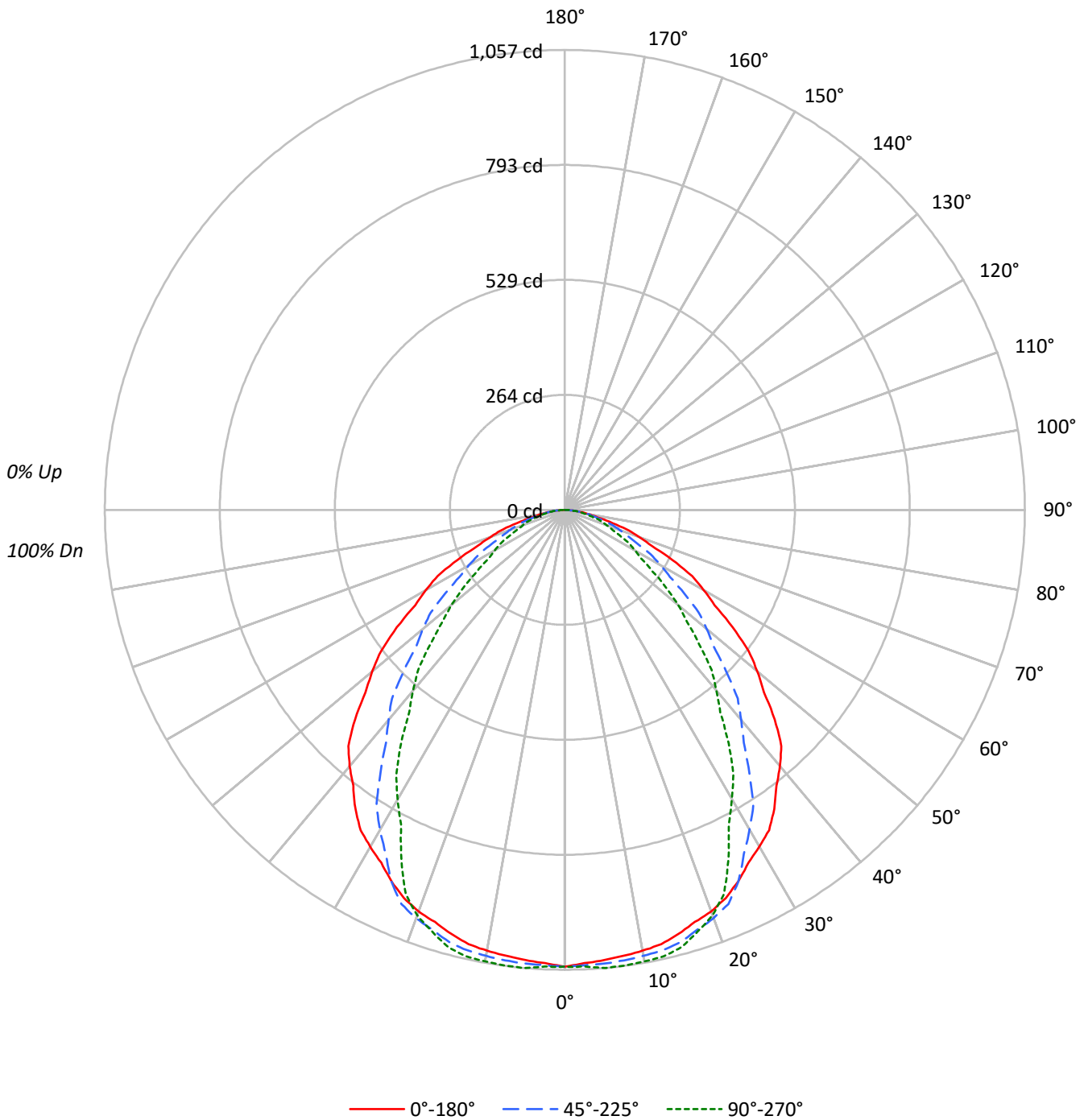
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2329.8 lumens
Efficiency: N/A
Efficacy: 130.9 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): 17.8
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: P854281
CATALOG NUMBER: SQ2-PW1-050D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854281

CATALOG NUMBER: SQ2-PW1-050D-935-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	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°	16953	16953	16953
5°	16840	16969	17131
10°	16870	17067	17280
15°	16866	17183	17384
20°	16873	17165	17045
25°	16782	16800	15838
30°	16667	15828	14318
35°	16537	14566	12930
40°	16208	13278	11424
45°	15573	11942	9978
50°	14493	10675	8540
55°	13258	9430	6925
60°	11883	8202	5974
65°	10392	7068	5310
70°	8497	6279	4815
75°	6613	5427	4429
80°	4928	4649	3905
85°	3335	3520	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15573 cd/sqm



TEST NUMBER: P854281

CATALOG NUMBER: SQ2-PW1-050D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	4.3
10°-20°	289.7	12.4
20°-30°	426.3	18.3
30°-40°	466.1	20.0
40°-50°	418.1	17.9
50°-60°	311.9	13.4
60°-70°	197.1	8.5
70°-80°	97.6	4.2
80°-90°	22.8	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°	816.0	35.0
0°-40°	1282.1	55.0
0°-60°	2012.2	86.4
0°-90°	2329.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2329.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1039	1056	1047	1048	1057	99
15°	1009	1029	1028	1035	1040	285
25°	942	962	943	904	889	434
35°	839	830	739	675	656	523
45°	682	627	523	458	437	523
55°	471	426	335	263	246	421
65°	272	250	185	149	139	270
75°	106	114	87	73	71	117
85°	18	23	19	13	12	23
90°	0	0	0	0	0	



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CATALOG NUMBER: SQ2-PW1-050D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.0	1050.0	1050.0	1050.0	1050.0
2.5°	1042.8	1056.1	1047.6	1048.5	1050.8
5°	1039.0	1055.6	1047.0	1048.2	1057.0
7.5°	1033.8	1050.6	1044.2	1047.8	1056.4
10°	1029.0	1046.6	1041.0	1046.2	1054.0
12.5°	1022.6	1041.0	1037.0	1043.0	1050.8
15°	1009.0	1028.6	1028.0	1035.1	1040.0
17.5°	993.2	1012.8	1011.8	1013.7	1016.0
20°	982.0	1001.6	999.0	992.0	992.0
22.5°	966.0	987.1	980.6	961.5	955.2
25°	942.0	962.5	943.0	903.7	889.0
27.5°	914.0	930.6	891.4	835.5	815.2
30°	894.0	906.7	849.0	787.6	768.0
32.5°	873.2	878.1	805.8	741.9	720.8
35°	839.0	830.2	739.0	674.6	656.0
37.5°	798.6	772.4	674.8	607.3	586.8
40°	769.0	731.9	630.0	562.5	542.0
42.5°	736.2	689.7	587.6	520.1	498.8
45°	682.0	627.3	523.0	457.5	437.0
47.5°	621.0	566.6	462.6	399.2	381.6
50°	577.0	524.2	425.0	361.5	340.0
52.5°	532.2	484.9	388.2	322.9	293.6
55°	471.0	426.0	335.0	262.6	246.0
57.5°	408.0	369.1	286.8	221.1	207.4
60°	368.0	333.8	254.0	198.7	185.0
62.5°	329.6	299.3	222.0	177.9	166.6
65°	272.0	249.5	185.0	148.8	139.0
67.5°	216.0	203.5	153.8	122.1	115.6
70°	180.0	176.1	133.0	106.9	102.0
72.5°	148.8	150.4	113.0	92.5	89.2
75°	106.0	113.8	87.0	73.0	71.0
77.5°	72.2	83.9	64.4	54.0	52.4
80°	53.0	64.7	50.0	42.0	42.0
82.5°	37.0	46.4	35.6	31.6	31.6
85°	18.0	22.9	19.0	13.0	12.0
87.5°	4.8	7.1	3.2	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P854281

CATALOG NUMBER: SQ2-PW1-050D-935-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	20.80	22.31	21.17	22.62	22.94	17.29	18.79	17.66	19.11	19.42
	3H	22.17	23.52	22.55	23.85	24.21	18.54	19.89	18.92	20.22	20.58
	4H	22.58	23.84	22.98	24.19	24.56	19.02	20.28	19.42	20.63	21.01
	6H	22.81	23.97	23.22	24.34	24.73	19.37	20.53	19.78	20.90	21.29
	8H	22.86	23.97	23.29	24.36	24.76	19.46	20.57	19.88	20.96	21.36
	12H	22.87	23.93	23.31	24.32	24.75	19.49	20.55	19.92	20.93	21.36
4H	2H	20.98	22.24	21.38	22.59	22.97	18.05	19.31	18.45	19.66	20.04
	3H	22.58	23.63	22.99	24.03	24.43	19.49	20.54	19.90	20.94	21.34
	4H	23.11	24.05	23.55	24.47	24.91	20.06	21.00	20.49	21.42	21.85
	6H	23.48	24.29	23.94	24.74	25.20	20.50	21.31	20.96	21.76	22.22
	8H	23.57	24.33	24.03	24.77	25.24	20.61	21.38	21.08	21.82	22.29
	12H	23.61	24.29	24.10	24.77	25.24	20.67	21.34	21.15	21.82	22.30
8H	4H	23.20	23.96	23.66	24.40	24.87	20.43	21.19	20.90	21.64	22.11
	6H	23.65	24.28	24.15	24.77	25.25	20.96	21.59	21.46	22.08	22.56
	8H	23.80	24.36	24.32	24.88	25.36	21.12	21.69	21.64	22.20	22.69
	12H	23.89	24.39	24.40	24.89	25.45	21.21	21.71	21.72	22.20	22.77
12H	4H	23.18	23.86	23.67	24.34	24.81	20.48	21.16	20.96	21.63	22.11
	6H	23.65	24.21	24.16	24.72	25.21	21.03	21.59	21.54	22.10	22.59
	8H	23.84	24.33	24.35	24.83	25.39	21.24	21.74	21.75	22.23	22.80