

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: P854197

Luminaire Tested: SQ2-PR1-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854197
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PR1-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

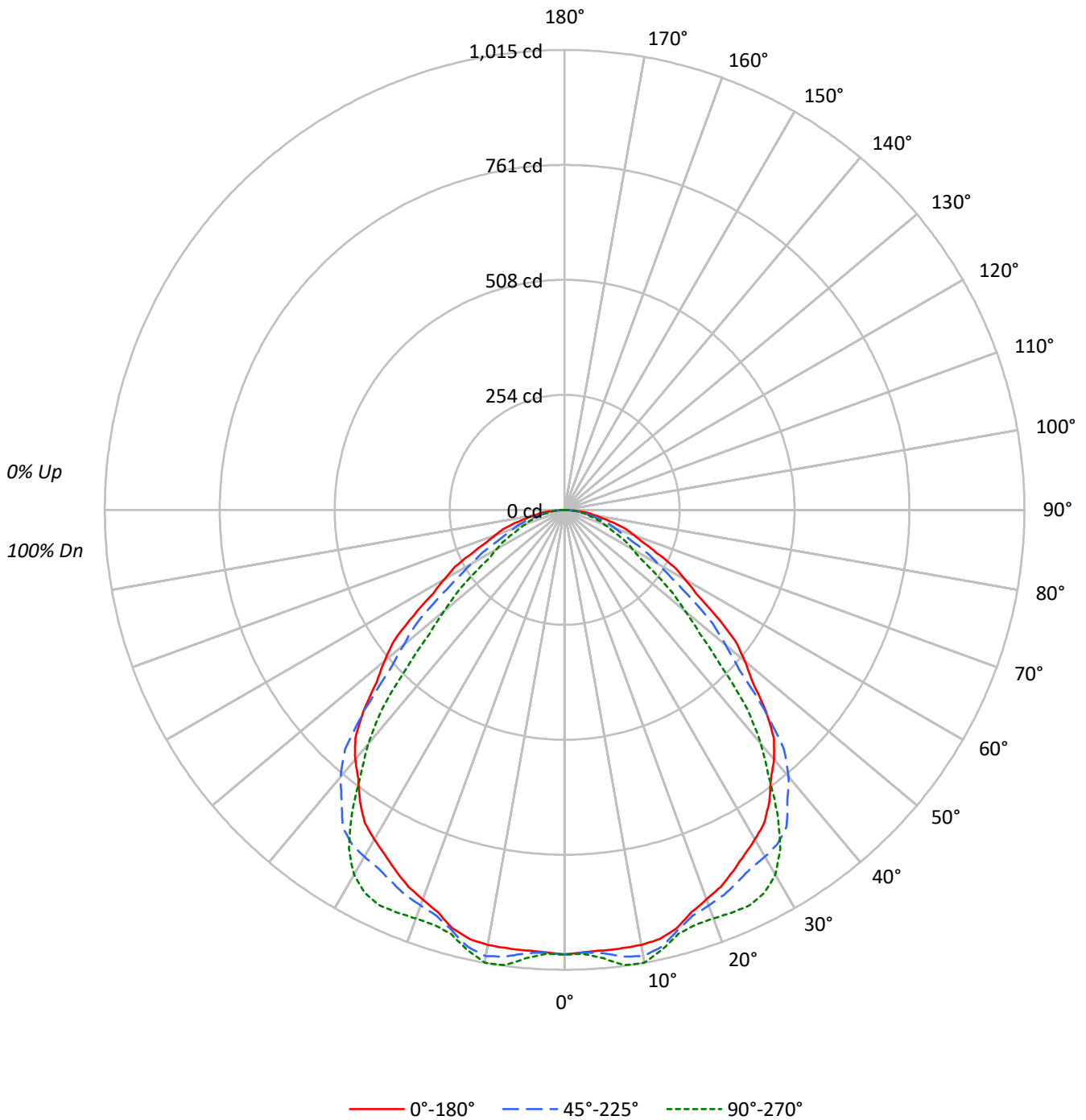
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2359.9 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36
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

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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	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	101	97	100	97	94	96	94	92	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
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	47	42	54	47	42	52	46	41	51	45	41	39			39	
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35			35	
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32	
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15839	15839	15839
5°	15819	15916	16110
10°	15985	16395	16641
15°	15980	16064	16197
20°	15722	15962	16495
25°	15677	16123	17174
30°	15661	16481	17339
35°	15512	16833	16143
40°	15154	16208	14206
45°	14340	14225	11234
50°	13036	11630	8716
55°	11457	9571	6784
60°	9914	7653	5586
65°	8558	6342	4890
70°	7695	5618	4343
75°	7049	4866	3992
80°	6137	3905	3905
85°	4446	3520	1853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15502 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	4.0
10°-20°	274.2	11.6
20°-30°	423.9	18.0
30°-40°	509.9	21.6
40°-50°	457.8	19.4
50°-60°	306.7	13.0
60°-70°	178.4	7.6
70°-80°	91.6	3.9
80°-90°	22.6	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°	792.9	33.6
0°-40°	1302.8	55.2
0°-60°	2067.3	87.6
0°-90°	2359.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	976	993	982	984	994	93
15°	956	995	961	964	969	268
25°	880	915	905	939	964	406
35°	787	794	854	838	819	491
45°	628	679	623	525	492	480
55°	407	423	340	262	241	366
65°	224	229	166	135	128	227
75°	113	110	78	66	64	120
85°	24	19	19	13	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	981.0	981.0	981.0	981.0	981.0
2.5°	977.0	988.7	977.8	978.7	981.0
5°	976.0	992.6	982.0	984.2	994.0
7.5°	975.8	999.5	994.4	1000.5	1013.4
10°	975.0	1003.4	1000.0	1001.3	1015.0
12.5°	970.2	1003.3	988.0	986.8	994.2
15°	956.0	995.1	961.0	964.1	969.0
17.5°	931.0	971.9	939.4	950.4	960.0
20°	915.0	955.1	929.0	943.4	960.0
22.5°	900.6	940.7	919.4	939.5	962.4
25°	880.0	915.2	905.0	938.6	964.0
27.5°	858.4	879.1	891.2	936.2	954.0
30°	840.0	853.7	884.0	923.2	930.0
32.5°	820.0	828.2	874.4	894.8	886.0
35°	787.0	793.9	854.0	837.6	819.0
37.5°	747.8	761.9	808.2	760.9	739.6
40°	719.0	742.5	769.0	698.5	674.0
42.5°	683.8	721.4	717.0	627.1	597.2
45°	628.0	678.9	623.0	525.2	492.0
47.5°	562.2	614.4	523.0	435.7	404.6
50°	519.0	561.0	463.0	381.2	347.0
52.5°	475.0	505.3	411.8	330.1	299.0
55°	407.0	422.6	340.0	262.5	241.0
57.5°	344.6	354.6	277.8	212.0	196.2
60°	307.0	313.8	237.0	185.7	173.0
62.5°	272.6	277.9	204.2	163.4	153.8
65°	224.0	228.9	166.0	134.8	128.0
67.5°	185.4	187.9	136.6	112.1	105.6
70°	163.0	164.0	119.0	96.9	92.0
72.5°	143.0	141.6	102.2	84.1	80.8
75°	113.0	110.1	78.0	66.0	64.0
77.5°	84.4	81.3	54.8	50.8	50.8
80°	66.0	62.1	42.0	42.0	42.0
82.5°	49.2	43.7	32.4	32.4	31.6
85°	24.0	19.1	19.0	12.9	10.0
87.5°	6.4	6.4	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

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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	20.30	21.80	20.67	22.11	22.42	17.03	18.52	17.39	18.83	19.15
	3H	21.58	22.92	21.96	23.25	23.61	18.14	19.48	18.52	19.80	20.17
	4H	22.06	23.31	22.46	23.66	24.04	18.57	19.82	18.97	20.17	20.55
	6H	22.41	23.56	22.82	23.93	24.32	18.93	20.08	19.34	20.45	20.84
	8H	22.51	23.61	22.93	24.00	24.40	19.03	20.13	19.46	20.52	20.92
	12H	22.56	23.61	22.99	23.99	24.42	19.06	20.11	19.49	20.49	20.92
4H	2H	20.45	21.71	20.85	22.05	22.43	17.67	18.92	18.07	19.27	19.65
	3H	21.98	23.02	22.39	23.42	23.82	18.99	20.03	19.40	20.43	20.83
	4H	22.60	23.53	23.03	23.94	24.38	19.52	20.45	19.95	20.87	21.31
	6H	23.08	23.89	23.54	24.33	24.79	19.99	20.79	20.45	21.24	21.70
	8H	23.23	23.98	23.69	24.43	24.89	20.12	20.88	20.59	21.32	21.79
	12H	23.31	23.98	23.79	24.46	24.93	20.17	20.84	20.65	21.32	21.79
8H	4H	22.67	23.42	23.13	23.87	24.33	19.87	20.62	20.33	21.07	21.54
	6H	23.24	23.86	23.74	24.35	24.83	20.42	21.05	20.92	21.54	22.02
	8H	23.44	24.00	23.95	24.51	24.99	20.61	21.17	21.12	21.68	22.17
	12H	23.57	24.06	24.08	24.55	25.12	20.70	21.19	21.21	21.69	22.25
12H	4H	22.65	23.33	23.14	23.81	24.28	19.91	20.59	20.40	21.06	21.54
	6H	23.22	23.78	23.74	24.29	24.78	20.48	21.04	21.00	21.56	22.04
	8H	23.46	23.96	23.97	24.45	25.02	20.72	21.21	21.23	21.71	22.27