

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: P854088

Luminaire Tested: SQ2-PP3-050U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854088
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-050U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

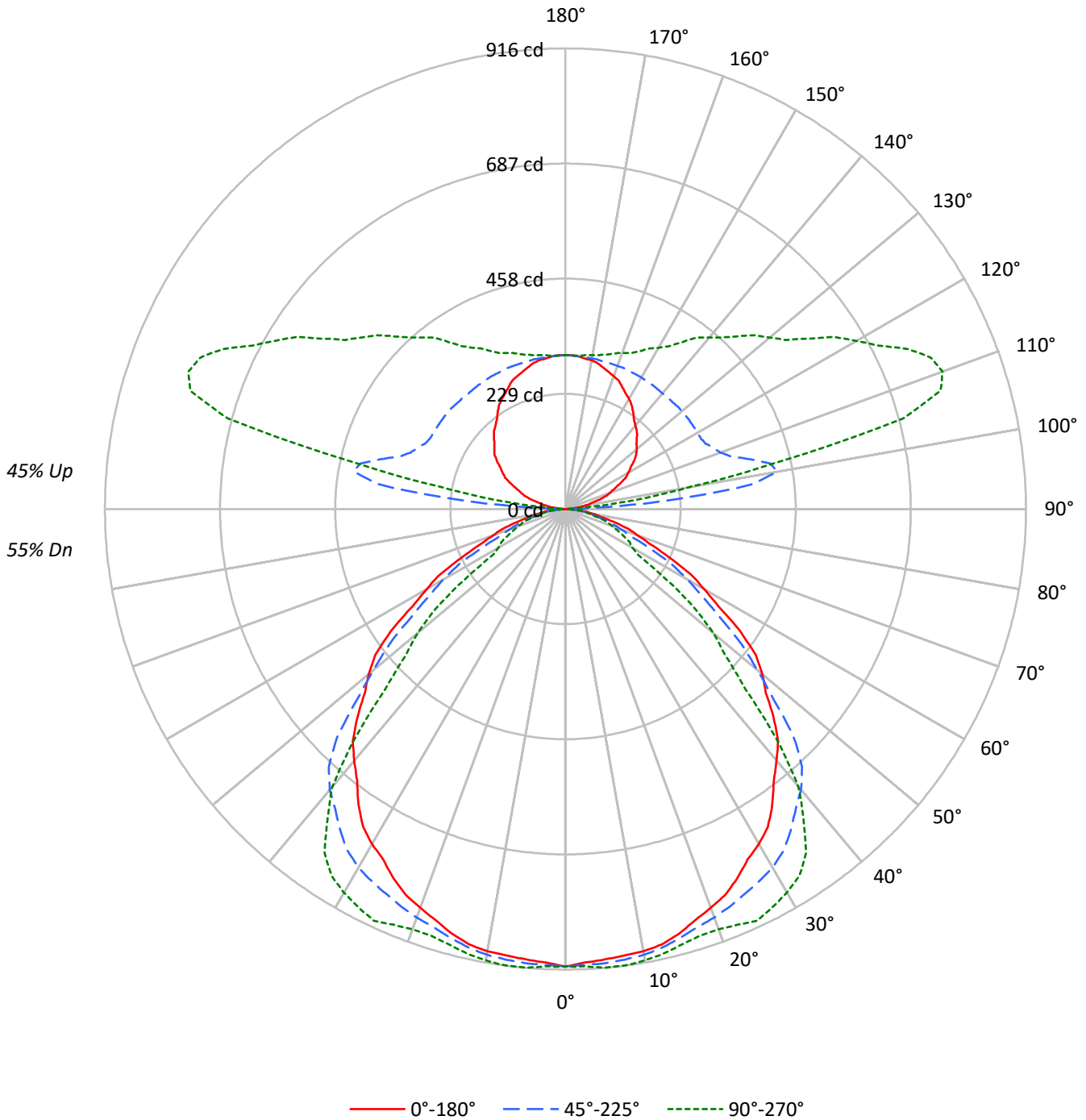
Lumens per Lamp: N/A
Luminaire Lumens: 4190.9 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 32.6
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	92	88	92	89	86	83	76	74	72	65	63	62	54	53	52	47
2	91	84	78	73	84	78	73	69	67	64	60	58	55	52	49	47	45	41
3	83	74	67	61	77	69	63	58	60	55	51	51	48	45	43	41	39	35
4	76	66	58	52	71	62	55	50	54	48	44	46	42	39	39	36	34	30
5	70	59	51	45	65	55	48	43	48	43	38	41	37	34	35	32	30	27
6	65	53	45	39	60	50	43	37	43	38	34	38	33	30	32	29	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	26	29	26	23	21
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	24	21	25	21	19	17
10	49	37	29	25	45	34	28	24	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14691	14691	14691
5°	14575	14700	14840
10°	14649	14759	14949
15°	14614	14758	14984
20°	14510	14857	15287
25°	14427	15045	16089
30°	14344	15349	16425
35°	14142	15394	16454
40°	13765	15365	15205
45°	13353	14671	11574
50°	12828	12514	9640
55°	11941	10531	6930
60°	10282	9038	4970
65°	8672	6980	4886
70°	7218	5495	4678
75°	6120	4741	4379
80°	5188	4110	3933
85°	4094	3390	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14671 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	2.1
10°-20°	250.7	6.0
20°-30°	392.8	9.4
30°-40°	484.6	11.6
40°-50°	456.2	10.9
50°-60°	323.0	7.7
60°-70°	184.0	4.4
70°-80°	91.1	2.2
80°-90°	22.7	0.5
90°-100°	121.8	2.9
100°-110°	386.3	9.2
110°-120°	378.8	9.0
120°-130°	308.3	7.4
130°-140°	251.4	6.0
140°-150°	196.0	4.7
150°-160°	141.2	3.4
160°-170°	86.3	2.1
170°-180°	29.1	0.7
0°-30°	730.2	17.4
0°-40°	1214.8	29.0
0°-60°	1994.0	47.6
0°-90°	2291.8	54.7
90°-120°	887.0	21.2
90°-150°	1642.6	39.2
90°-180°	1899.0	45.3
0°-180°	4190.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	899	915	907	909	916	86
15°	874	886	883	892	896	246
25°	810	830	844	879	903	373
35°	718	737	781	825	835	447
45°	585	629	642	544	507	450
55°	424	450	374	282	246	374
65°	227	239	183	129	128	228
75°	98	108	76	71	70	106
85°	22	20	18	14	12	26
90°	0	1	3	3	3	2
95°	16	49	221	82	53	19
105°	67	95	381	725	695	71
115°	120	143	308	639	752	119
125°	166	186	303	501	590	148
135°	201	221	301	431	486	155
145°	235	252	301	372	405	147
155°	267	277	302	332	345	123
165°	291	294	303	314	317	82
175°	305	304	305	307	306	29
180°	306	306	306	306	306	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	909.9	909.9	909.9	909.9	909.9
2.5°	902.9	915.7	907.6	909.1	910.6
5°	899.3	915.3	907.0	909.1	915.6
7.5°	895.8	912.2	904.1	907.6	915.6
10°	893.5	907.6	900.2	905.2	911.8
12.5°	886.6	899.9	893.3	899.8	905.6
15°	874.3	886.5	882.9	891.7	896.4
17.5°	857.5	872.4	872.4	884.8	889.7
20°	844.5	862.3	864.7	880.3	889.7
22.5°	830.6	851.5	855.4	878.9	895.1
25°	809.8	830.5	844.5	878.7	903.1
27.5°	785.6	806.1	834.8	873.2	892.6
30°	769.4	789.2	823.3	863.1	881.0
32.5°	749.4	769.9	806.4	849.3	865.6
35°	717.5	737.3	781.0	825.4	834.8
37.5°	680.8	703.1	752.1	777.0	777.5
40°	653.1	682.2	729.0	733.6	721.4
42.5°	626.1	663.6	696.7	676.5	622.1
45°	584.8	629.0	642.5	544.5	506.9
47.5°	540.7	584.4	562.8	456.7	430.7
50°	510.7	552.1	498.2	408.2	383.8
52.5°	476.9	513.7	440.5	361.8	324.5
55°	424.2	449.5	374.1	282.0	246.2
57.5°	360.7	378.5	319.9	211.6	171.6
60°	318.4	332.5	279.9	173.6	153.9
62.5°	279.9	292.5	238.3	150.8	143.9
65°	227.0	239.2	182.7	128.9	127.9
67.5°	180.6	194.0	140.2	112.5	111.4
70°	152.9	167.0	116.4	100.9	99.1
72.5°	129.8	143.2	98.7	88.7	87.5
75°	98.1	108.4	76.0	71.2	70.2
77.5°	71.2	77.8	56.6	54.0	53.1
80°	55.8	58.6	44.2	43.3	42.3
82.5°	41.9	41.0	33.5	32.5	30.8
85°	22.1	20.2	18.3	14.4	11.5
87.5°	6.9	7.1	3.7	2.9	2.9
90°	0.0	0.9	2.9	2.9	2.9
92.5°	5.4	21.4	68.3	22.7	16.0
95°	16.3	49.3	221.2	82.0	52.9
97.5°	30.4	63.9	374.7	234.1	143.7
100°	40.4	72.4	427.0	389.3	252.9
102.5°	51.2	81.6	417.8	571.7	437.6
105°	67.3	94.6	380.8	725.4	695.3
107.5°	83.5	108.7	345.6	741.4	782.1
110°	94.2	118.7	327.9	723.0	798.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.0	128.0	317.9	691.1	786.7
115°	120.2	142.8	307.7	639.2	752.1
117.5°	135.0	156.5	303.7	589.2	703.0
120°	144.3	164.9	302.9	558.4	668.4
122.5°	153.5	173.4	302.9	533.6	636.1
125°	166.4	186.1	302.9	501.2	590.5
127.5°	177.7	196.7	302.9	476.0	552.2
130°	184.6	204.4	302.9	461.3	529.9
132.5°	191.6	211.3	302.2	449.6	511.4
135°	201.0	220.7	301.0	431.1	485.7
137.5°	210.2	230.9	300.8	413.5	462.2
140°	216.4	237.1	300.1	401.1	445.3
142.5°	224.1	244.0	300.8	388.7	429.9
145°	234.7	252.5	301.0	372.0	404.9
147.5°	245.2	260.5	301.2	357.2	384.1
150°	252.9	265.2	302.0	348.6	370.3
152.5°	259.1	269.8	302.0	341.6	359.5
155°	267.4	276.8	302.0	332.1	345.3
157.5°	276.2	282.6	302.9	326.2	335.3
160°	280.8	286.5	302.9	322.3	329.9
162.5°	285.4	289.6	302.9	319.2	324.5
165°	291.4	294.2	302.9	314.5	317.4
167.5°	297.0	297.7	303.9	311.3	313.7
170°	300.1	300.1	303.9	309.7	310.6
172.5°	301.6	302.3	303.9	308.1	308.3
175°	304.9	303.9	304.9	306.8	305.8
177.5°	305.8	305.1	305.1	306.6	305.1
180°	305.8	305.8	305.8	305.8	305.8



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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	17.31	18.18	18.23	19.11	20.32	13.70	14.57	14.62	15.51	16.71
	3H	18.40	19.18	19.34	20.12	21.35	14.81	15.58	15.74	16.53	17.76
	4H	18.74	19.48	19.69	20.43	21.67	15.27	16.00	16.22	16.95	18.19
	6H	18.96	19.63	19.92	20.59	21.84	15.62	16.29	16.58	17.25	18.50
	8H	19.01	19.65	19.98	20.62	21.87	15.70	16.34	16.67	17.32	18.57
	12H	19.02	19.63	20.00	20.60	21.87	15.72	16.33	16.69	17.29	18.57
4H	2H	17.41	18.15	18.37	19.10	20.34	14.42	15.15	15.37	16.10	17.34
	3H	18.72	19.33	19.69	20.31	21.57	15.67	16.27	16.63	17.26	18.51
	4H	19.20	19.75	20.17	20.73	22.00	16.22	16.78	17.20	17.75	19.03
	6H	19.54	20.01	20.52	21.01	22.29	16.66	17.14	17.65	18.14	19.41
	8H	19.63	20.07	20.62	21.07	22.36	16.79	17.23	17.77	18.22	19.51
	12H	19.67	20.07	20.67	21.07	22.37	16.81	17.21	17.82	18.22	19.52
8H	4H	19.22	19.66	20.21	20.65	21.94	16.50	16.94	17.49	17.93	19.22
	6H	19.65	20.02	20.66	21.05	22.34	17.04	17.41	18.06	18.44	19.73
	8H	19.81	20.13	20.83	21.15	22.46	17.23	17.55	18.25	18.57	19.88
	12H	19.89	20.18	20.92	21.19	22.54	17.30	17.59	18.33	18.60	19.96
12H	4H	19.18	19.58	20.18	20.58	21.88	16.51	16.91	17.51	17.91	19.21
	6H	19.64	19.96	20.66	20.98	22.29	17.10	17.42	18.12	18.44	19.75
	8H	19.81	20.09	20.83	21.11	22.46	17.30	17.59	18.33	18.60	19.96