

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1036298

Luminaire Tested: SQ4R-PR1-050D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

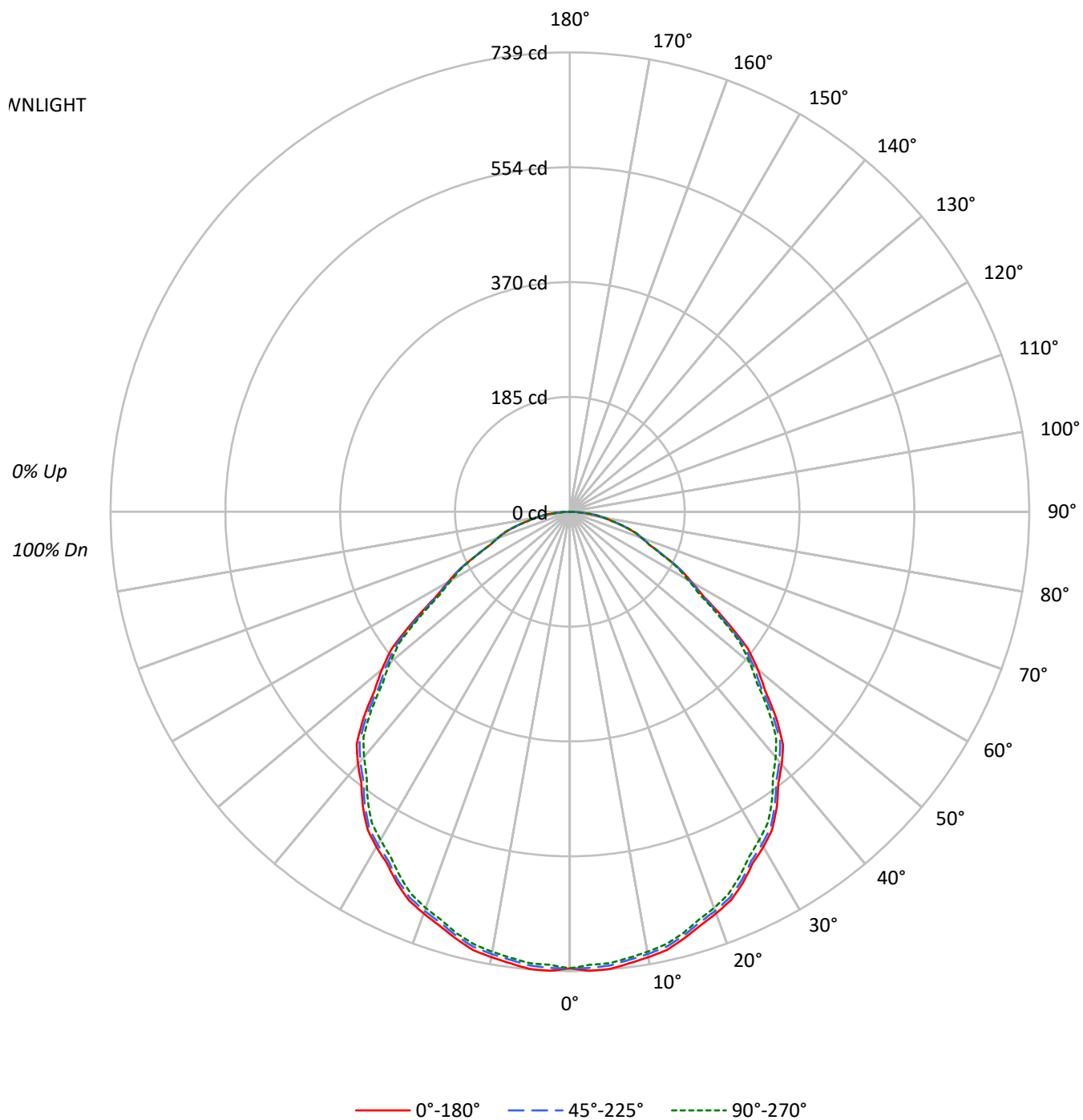
Lumens per Lamp: N/A
Luminaire Lumens: 1836.4 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.8
Input Voltage (V): NR
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: P1036298

CATALOG NUMBER: SQ4R-PR1-050D-B40-1D-UNV

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6777	6777	6777
5°	6839	6786	6751
10°	6817	6769	6734
15°	6787	6744	6708
20°	6752	6709	6659
25°	6706	6661	6583
30°	6632	6586	6491
35°	6536	6477	6385
40°	6386	6317	6204
45°	6126	6019	5895
50°	5667	5530	5421
55°	4946	4835	4734
60°	4168	4133	4052
65°	3604	3620	3589
70°	3310	3329	3329
75°	3183	3183	3201
80°	2991	3029	2991
85°	2414	2678	2678

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6126 cd/sqm

TEST NUMBER: P1036298

CATALOG NUMBER: SQ4R-PR1-050D-B40-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	3.8
10°-20°	198.8	10.8
20°-30°	299.8	16.3
30°-40°	357.2	19.5
40°-50°	352.1	19.2
50°-60°	269.1	14.7
60°-70°	166.5	9.1
70°-80°	94.6	5.2
80°-90°	28.8	1.6
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°	568.0	30.9
0°-40°	925.2	50.4
0°-60°	1546.5	84.2
0°-90°	1836.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1836.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	738	730	733	730	729	70
15°	711	703	706	704	702	201
25°	659	650	654	647	647	303
35°	580	573	575	568	567	362
45°	470	463	461	453	452	360
55°	308	302	301	296	294	276
65°	165	164	166	164	164	167
75°	89	89	89	90	90	94
85°	23	24	25	25	25	27
90°	0	0	0	0	0	

TEST NUMBER: P1036298

CATALOG NUMBER: SQ4R-PR1-050D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	734.5	734.5	734.5	734.5	734.5
2.5°	739.1	732.7	734.5	733.0	729.5
5°	738.4	730.3	732.7	730.1	728.9
7.5°	732.7	724.8	727.2	724.6	723.9
10°	727.6	720.2	722.5	720.0	718.8
12.5°	722.0	714.2	717.0	713.9	712.7
15°	710.6	703.2	706.1	703.5	702.3
17.5°	697.9	690.0	693.0	690.1	688.4
20°	687.7	680.4	683.3	678.9	678.2
22.5°	676.6	669.2	672.1	666.3	666.1
25°	658.7	650.5	654.3	647.3	646.7
27.5°	637.3	629.9	632.8	625.7	625.0
30°	622.5	615.2	618.2	610.5	609.3
32.5°	605.9	599.0	601.5	593.8	593.1
35°	580.3	573.4	575.1	567.6	566.9
37.5°	551.0	544.8	545.8	537.3	536.9
40°	530.2	524.1	524.5	515.6	515.1
42.5°	507.5	501.3	500.7	491.9	491.2
45°	469.5	463.3	461.3	452.9	451.8
47.5°	426.2	420.0	416.2	409.4	408.6
50°	394.8	388.6	385.3	379.6	377.7
52.5°	360.9	354.7	352.0	346.7	344.9
55°	307.5	302.5	300.6	295.5	294.3
57.5°	256.7	253.5	252.8	247.9	247.4
60°	225.9	224.0	224.0	219.6	219.6
62.5°	199.6	198.2	199.1	196.2	195.8
65°	165.1	164.0	165.8	164.4	164.4
67.5°	138.0	138.0	139.1	138.5	138.5
70°	122.7	122.7	123.4	123.4	123.4
72.5°	109.0	108.6	110.3	110.2	109.7
75°	89.3	89.3	89.3	89.8	89.8
77.5°	69.5	69.6	70.2	70.1	69.5
80°	56.3	57.0	57.0	56.3	56.3
82.5°	43.2	43.7	43.7	43.6	43.2
85°	22.8	24.0	25.3	25.3	25.3
87.5°	6.6	8.5	10.2	10.2	9.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036298

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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	16.75	18.31	17.12	18.63	18.94	16.58	18.14	16.94	18.46	18.77
	3H	18.09	19.49	18.46	19.82	20.18	17.98	19.39	18.36	19.72	20.08
	4H	18.69	20.01	19.09	20.36	20.73	18.61	19.93	19.01	20.28	20.66
	6H	19.14	20.36	19.55	20.72	21.11	19.07	20.29	19.48	20.66	21.05
	8H	19.32	20.48	19.75	20.87	21.27	19.26	20.42	19.68	20.81	21.21
	12H	19.43	20.54	19.86	20.92	21.35	19.38	20.50	19.81	20.88	21.31
4H	2H	17.23	18.54	17.62	18.89	19.27	17.08	18.40	17.48	18.75	19.13
	3H	18.83	19.92	19.24	20.32	20.72	18.75	19.85	19.16	20.25	20.65
	4H	19.56	20.55	20.00	20.97	21.40	19.52	20.50	19.95	20.92	21.36
	6H	20.15	21.01	20.61	21.46	21.91	20.11	20.97	20.57	21.42	21.87
	8H	20.40	21.20	20.86	21.65	22.11	20.36	21.16	20.82	21.61	22.07
	12H	20.55	21.28	21.03	21.75	22.22	20.53	21.26	21.02	21.73	22.20
8H	4H	19.84	20.65	20.30	21.09	21.56	19.80	20.60	20.26	21.05	21.51
	6H	20.57	21.24	21.06	21.73	22.20	20.53	21.20	21.02	21.69	22.17
	8H	20.90	21.50	21.41	22.01	22.50	20.87	21.47	21.38	21.98	22.46
	12H	21.13	21.67	21.64	22.16	22.72	21.13	21.66	21.63	22.15	22.71
12H	4H	19.87	20.59	20.35	21.07	21.54	19.83	20.55	20.31	21.03	21.50
	6H	20.63	21.23	21.14	21.74	22.23	20.59	21.20	21.11	21.71	22.19
	8H	21.03	21.56	21.53	22.05	22.62	20.99	21.53	21.50	22.02	22.58