

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: P1036296

Luminaire Tested: SQ4R-PR1-050D-B2750-1D-UNV-W2A_5000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036296
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-B2750-1D-UNV-W2A_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

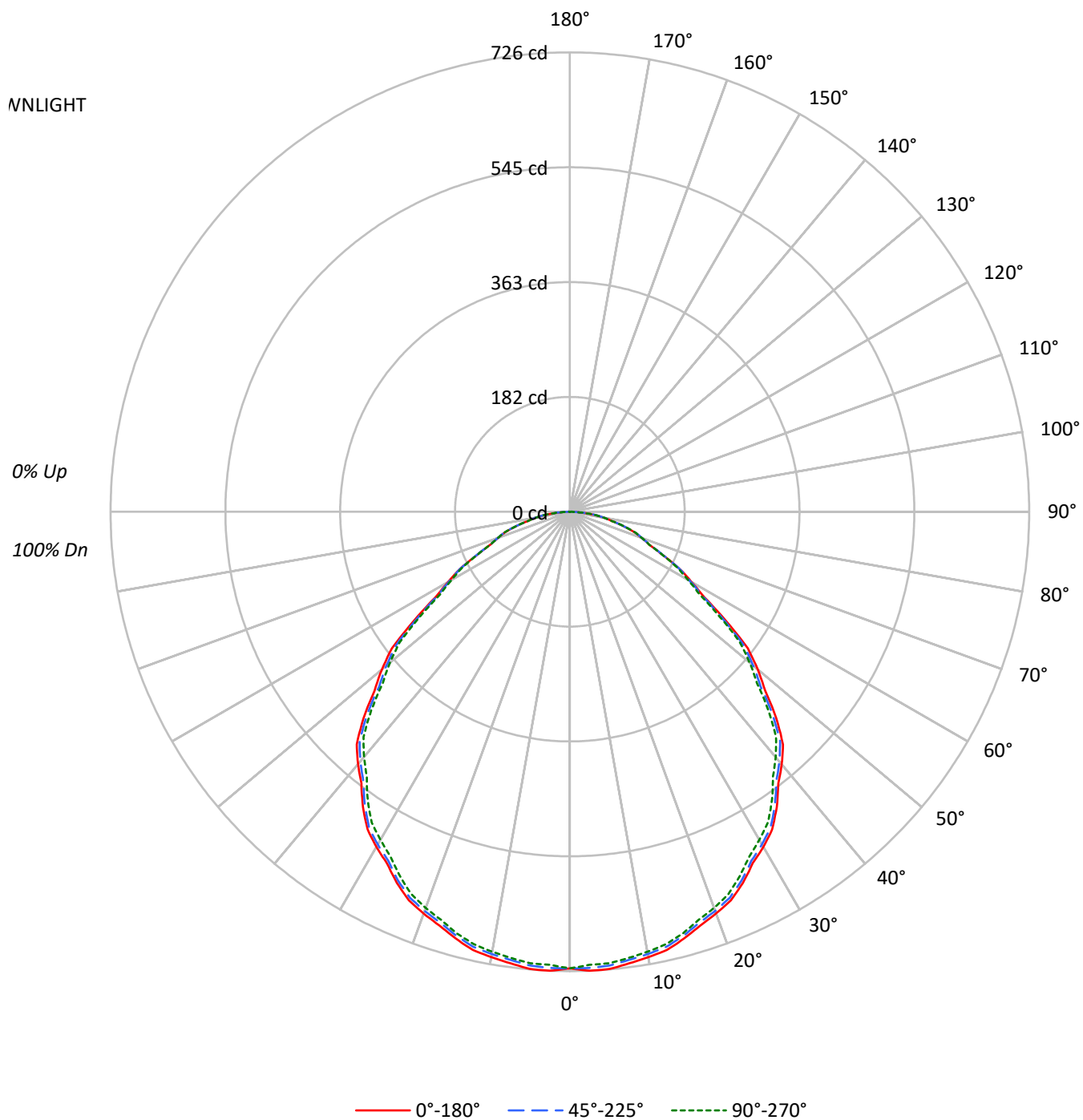
Lumens per Lamp: N/A
Luminaire Lumens: 1804.1 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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: P1036296

CATALOG NUMBER: SQ4R-PR1-050D-B2750-1D-UNV-W2A_5000K

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	64	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	56	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	49	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	43	43	41
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	39	39	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	35	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	31	31	30
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6658	6658	6658
5°	6718	6666	6632
10°	6697	6650	6615
15°	6668	6625	6590
20°	6634	6591	6542
25°	6587	6544	6467
30°	6516	6470	6377
35°	6421	6364	6272
40°	6274	6205	6094
45°	6019	5913	5791
50°	5568	5433	5327
55°	4859	4750	4650
60°	4095	4061	3980
65°	3541	3556	3528
70°	3251	3269	3269
75°	3126	3126	3148
80°	2938	2975	2938
85°	2371	2625	2625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6019 cd/sqm

TEST NUMBER: P1036296

CATALOG NUMBER: SQ4R-PR1-050D-B2750-1D-UNV-W2A_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	3.8
10°-20°	195.3	10.8
20°-30°	294.5	16.3
30°-40°	350.9	19.5
40°-50°	346.0	19.2
50°-60°	264.4	14.7
60°-70°	163.6	9.1
70°-80°	93.0	5.2
80°-90°	28.3	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°	558.0	30.9
0°-40°	908.9	50.4
0°-60°	1519.3	84.2
0°-90°	1804.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1804.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	725	717	720	717	716	69
15°	698	691	694	691	690	197
25°	647	639	643	636	635	298
35°	570	563	565	558	557	356
45°	461	455	453	445	444	353
55°	302	297	295	290	289	271
65°	162	161	163	162	162	164
75°	88	88	88	88	88	93
85°	22	24	25	25	25	27
90°	0	0	0	0	0	

TEST NUMBER: P1036296

CATALOG NUMBER: SQ4R-PR1-050D-B2750-1D-UNV-W2A_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.6	721.6	721.6	721.6	721.6
2.5°	726.1	719.8	721.6	720.1	716.7
5°	725.4	717.4	719.8	717.3	716.1
7.5°	719.8	712.0	714.4	711.8	711.2
10°	714.8	707.5	709.8	707.4	706.1
12.5°	709.4	701.6	704.4	701.4	700.2
15°	698.1	690.8	693.6	691.2	689.9
17.5°	685.6	677.8	680.8	677.9	676.3
20°	675.7	668.4	671.3	667.0	666.3
22.5°	664.7	657.5	660.3	654.6	654.4
25°	647.1	639.1	642.8	636.0	635.3
27.5°	626.1	618.8	621.7	614.7	614.1
30°	611.6	604.3	607.3	599.8	598.6
32.5°	595.2	588.4	590.9	583.4	582.6
35°	570.1	563.3	565.0	557.6	556.9
37.5°	541.3	535.2	536.2	527.9	527.4
40°	520.9	514.9	515.2	506.6	506.0
42.5°	498.6	492.5	491.9	483.2	482.6
45°	461.3	455.2	453.2	445.0	443.8
47.5°	418.7	412.6	408.9	402.2	401.4
50°	387.9	381.8	378.5	372.9	371.1
52.5°	354.5	348.4	345.8	340.6	338.8
55°	302.1	297.2	295.3	290.3	289.1
57.5°	252.2	249.0	248.4	243.5	243.1
60°	221.9	220.1	220.1	215.7	215.7
62.5°	196.1	194.7	195.6	192.8	192.3
65°	162.2	161.1	162.9	161.6	161.6
67.5°	135.6	135.6	136.6	136.0	136.0
70°	120.5	120.5	121.2	121.2	121.2
72.5°	107.1	106.7	108.3	108.2	107.8
75°	87.7	87.7	87.7	88.3	88.3
77.5°	68.3	68.4	68.9	68.8	68.3
80°	55.3	56.0	56.0	55.3	55.3
82.5°	42.5	42.9	42.9	42.8	42.5
85°	22.4	23.6	24.8	24.8	24.8
87.5°	6.5	8.4	10.0	10.0	9.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036296

CATALOG NUMBER: SQ4R-PR1-050D-B2750-1D-UNV-W2A_5000K

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	16.69	18.25	17.05	18.57	18.88	16.52	18.08	16.88	18.39	18.71
	3H	18.02	19.43	18.40	19.75	20.12	17.92	19.33	18.30	19.65	20.01
	4H	18.63	19.94	19.03	20.29	20.67	18.55	19.87	18.95	20.22	20.60
	6H	19.07	20.29	19.49	20.66	21.05	19.01	20.23	19.42	20.60	20.99
	8H	19.26	20.42	19.68	20.81	21.21	19.20	20.36	19.62	20.75	21.15
	12H	19.37	20.48	19.80	20.86	21.29	19.32	20.44	19.75	20.82	21.25
4H	2H	17.16	18.48	17.56	18.83	19.21	17.02	18.34	17.42	18.69	19.07
	3H	18.76	19.86	19.17	20.26	20.66	18.69	19.79	19.10	20.19	20.59
	4H	19.50	20.49	19.93	20.90	21.34	19.45	20.44	19.89	20.86	21.30
	6H	20.09	20.95	20.55	21.39	21.85	20.05	20.91	20.51	21.35	21.81
	8H	20.33	21.14	20.80	21.58	22.05	20.30	21.10	20.76	21.55	22.01
	12H	20.49	21.21	20.97	21.69	22.16	20.47	21.19	20.95	21.67	22.14
8H	4H	19.78	20.58	20.24	21.03	21.49	19.73	20.54	20.20	20.98	21.45
	6H	20.50	21.17	21.00	21.66	22.14	20.47	21.14	20.96	21.63	22.10
	8H	20.84	21.44	21.35	21.95	22.44	20.80	21.41	21.32	21.92	22.40
	12H	21.07	21.61	21.58	22.10	22.66	21.06	21.60	21.57	22.09	22.65
12H	4H	19.81	20.53	20.29	21.01	21.48	19.77	20.49	20.25	20.97	21.44
	6H	20.57	21.17	21.08	21.68	22.17	20.53	21.14	21.04	21.64	22.13
	8H	20.96	21.50	21.47	21.99	22.55	20.93	21.47	21.44	21.96	22.52