

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: P1036292

Luminaire Tested: SQ4R-PR1-050D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036292
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_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

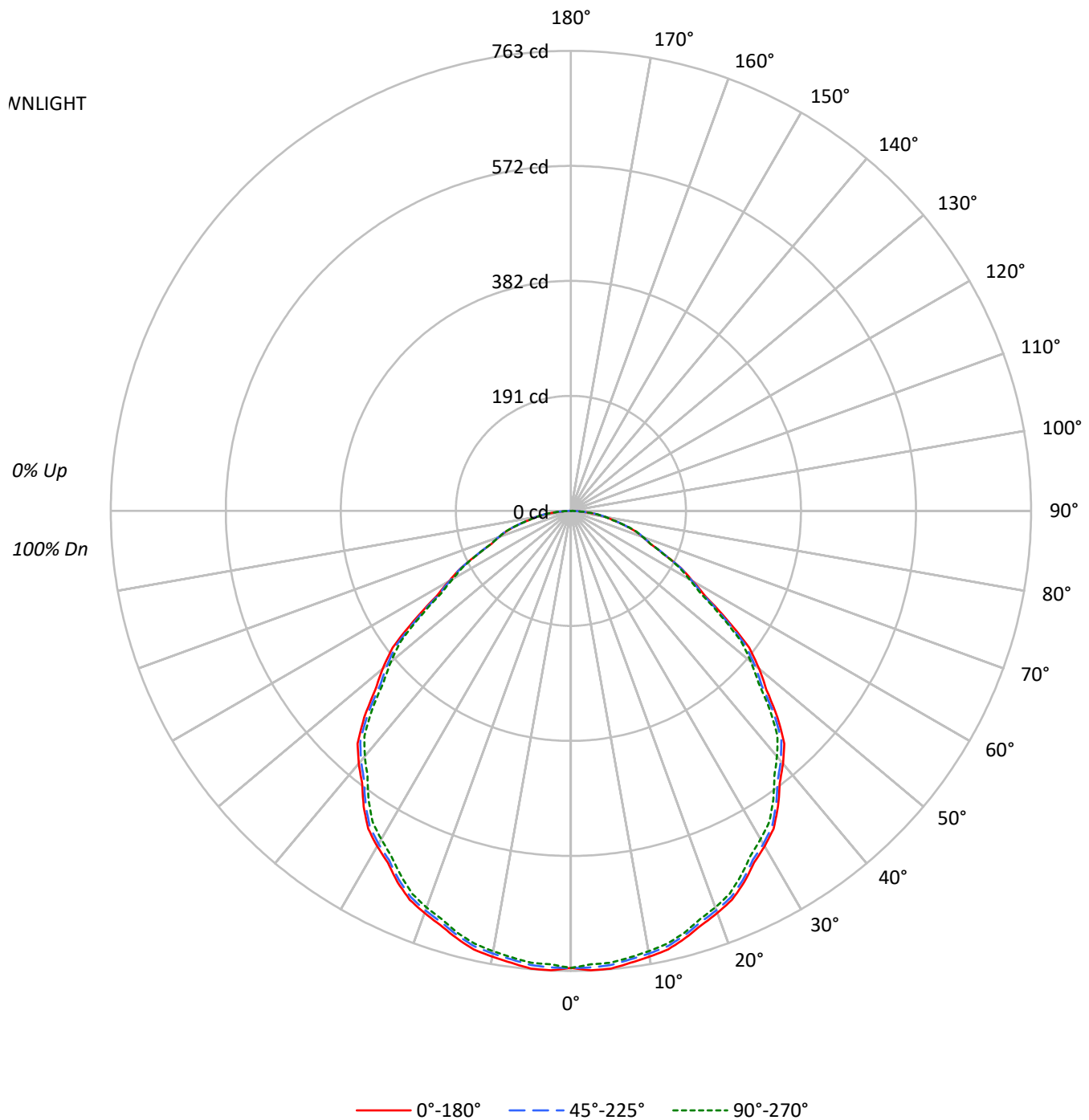
Lumens per Lamp: N/A
Luminaire Lumens: 1895.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6993	6993	6993
5°	7057	7003	6966
10°	7034	6985	6949
15°	7004	6959	6922
20°	6968	6923	6872
25°	6919	6874	6793
30°	6844	6796	6699
35°	6744	6685	6589
40°	6589	6518	6401
45°	6322	6211	6083
50°	5848	5707	5595
55°	5104	4990	4885
60°	4301	4266	4181
65°	3720	3735	3705
70°	3415	3434	3434
75°	3283	3283	3305
80°	3087	3124	3087
85°	2488	2763	2763

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6322 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	3.8
10°-20°	205.1	10.8
20°-30°	309.3	16.3
30°-40°	368.6	19.5
40°-50°	363.4	19.2
50°-60°	277.7	14.7
60°-70°	171.9	9.1
70°-80°	97.6	5.2
80°-90°	29.7	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°	586.1	30.9
0°-40°	954.7	50.4
0°-60°	1595.9	84.2
0°-90°	1895.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1895.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	762	754	756	753	752	72
15°	733	726	729	726	725	207
25°	680	671	675	668	667	313
35°	599	592	594	586	585	374
45°	484	478	476	467	466	371
55°	317	312	310	305	304	284
65°	170	169	171	170	170	173
75°	92	92	92	93	93	97
85°	24	25	26	26	26	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.0	758.0	758.0	758.0	758.0
2.5°	762.7	756.1	758.0	756.4	752.8
5°	762.0	753.6	756.1	753.4	752.2
7.5°	756.1	747.9	750.4	747.7	747.0
10°	750.8	743.2	745.6	743.0	741.7
12.5°	745.1	737.0	739.9	736.7	735.5
15°	733.3	725.6	728.6	726.0	724.7
17.5°	720.2	712.0	715.1	712.1	710.4
20°	709.7	702.1	705.1	700.6	699.9
22.5°	698.2	690.6	693.6	687.6	687.4
25°	679.7	671.3	675.2	668.0	667.3
27.5°	657.6	650.0	653.0	645.7	645.0
30°	642.4	634.8	637.9	630.0	628.8
32.5°	625.2	618.1	620.7	612.8	612.0
35°	598.8	591.7	593.5	585.7	585.0
37.5°	568.6	562.2	563.2	554.5	554.0
40°	547.1	540.8	541.2	532.1	531.5
42.5°	523.7	517.3	516.7	507.6	506.9
45°	484.5	478.1	476.0	467.4	466.2
47.5°	439.8	433.4	429.5	422.5	421.6
50°	407.4	401.0	397.6	391.7	389.8
52.5°	372.4	366.0	363.2	357.8	355.9
55°	317.3	312.2	310.2	304.9	303.7
57.5°	264.9	261.6	260.9	255.8	255.3
60°	233.1	231.2	231.2	226.6	226.6
62.5°	206.0	204.5	205.5	202.5	202.0
65°	170.4	169.2	171.1	169.7	169.7
67.5°	142.4	142.4	143.5	142.9	142.9
70°	126.6	126.6	127.3	127.3	127.3
72.5°	112.5	112.1	113.8	113.7	113.2
75°	92.1	92.1	92.1	92.7	92.7
77.5°	71.7	71.8	72.4	72.3	71.7
80°	58.1	58.8	58.8	58.1	58.1
82.5°	44.6	45.1	45.1	45.0	44.6
85°	23.5	24.8	26.1	26.1	26.1
87.5°	6.8	8.8	10.5	10.5	9.9
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	16.86	18.42	17.23	18.74	19.05	16.69	18.25	17.05	18.56	18.88
	3H	18.19	19.60	18.57	19.93	20.29	18.09	19.50	18.47	19.82	20.19
	4H	18.80	20.12	19.20	20.46	20.84	18.72	20.04	19.12	20.39	20.77
	6H	19.24	20.46	19.66	20.83	21.22	19.18	20.40	19.59	20.77	21.16
	8H	19.43	20.59	19.85	20.98	21.38	19.37	20.53	19.79	20.92	21.32
	12H	19.54	20.65	19.97	21.03	21.46	19.49	20.61	19.92	20.99	21.42
4H	2H	17.33	18.65	17.73	19.00	19.38	17.19	18.51	17.59	18.86	19.24
	3H	18.94	20.03	19.35	20.43	20.83	18.86	19.96	19.27	20.36	20.76
	4H	19.67	20.66	20.10	21.08	21.51	19.63	20.61	20.06	21.03	21.47
	6H	20.26	21.12	20.72	21.56	22.02	20.22	21.08	20.68	21.52	21.98
	8H	20.50	21.31	20.97	21.75	22.22	20.47	21.27	20.93	21.72	22.18
	12H	20.66	21.38	21.14	21.86	22.33	20.64	21.37	21.12	21.84	22.31
8H	4H	19.95	20.75	20.41	21.20	21.66	19.91	20.71	20.37	21.15	21.62
	6H	20.67	21.34	21.17	21.83	22.31	20.64	21.31	21.13	21.80	22.27
	8H	21.01	21.61	21.52	22.12	22.61	20.98	21.58	21.49	22.09	22.57
	12H	21.24	21.78	21.75	22.27	22.83	21.23	21.77	21.74	22.26	22.82
12H	4H	19.98	20.70	20.46	21.18	21.65	19.94	20.66	20.42	21.14	21.61
	6H	20.74	21.34	21.25	21.85	22.34	20.70	21.31	21.21	21.81	22.30
	8H	21.13	21.67	21.64	22.16	22.72	21.10	21.64	21.61	22.13	22.69

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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