

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: P1036170

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P518604)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-BB-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

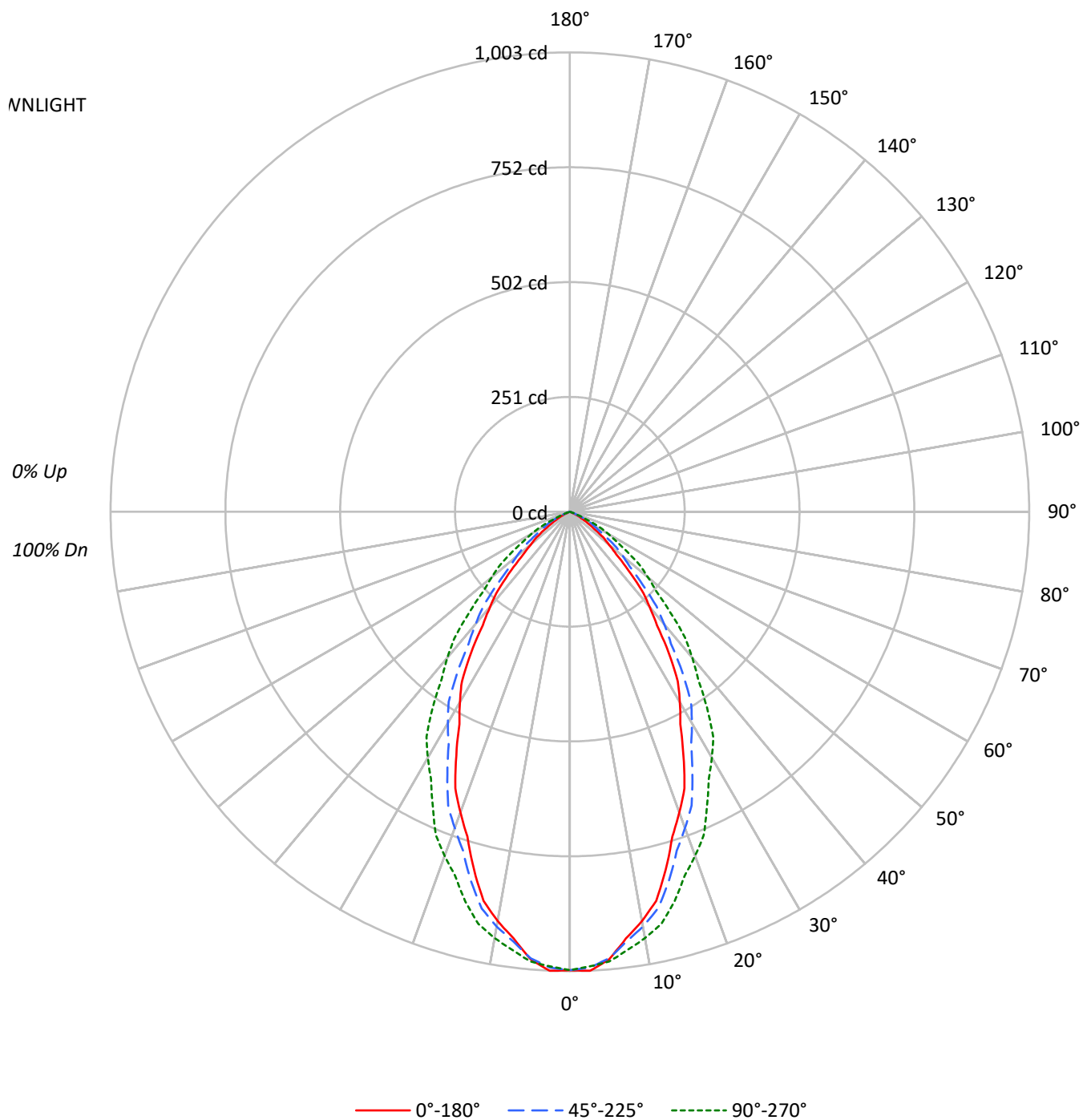
Lumens per Lamp: N/A
Luminaire Lumens: 1193.9 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	109	106	104	110	107	104	102	103	101	99		99	98	96		96
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89
3	99	91	85	81	97	90	84	80	87	82	79		85	81	77		82
4	93	84	77	72	91	82	76	72	80	75	71		78	74	70		76
5	87	77	70	65	85	76	70	65	74	68	64		72	67	64		71
6	82	71	64	59	80	70	64	59	69	63	58		67	62	58		66
7	77	66	59	54	75	65	59	54	64	58	53		62	57	53		61
8	72	61	54	50	71	61	54	49	59	53	49		58	53	49		57
9	68	57	50	46	67	57	50	46	56	50	46		55	49	45		54
10	65	54	47	42	63	53	47	42	52	46	42		51	46	42		51

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9234	9234	9234
5°	9085	9063	9130
10°	8500	8614	8854
15°	7728	7974	8418
20°	6860	7216	7849
25°	5974	6447	7212
30°	5118	5679	6607
35°	4243	4821	5878
40°	3260	3855	5009
45°	2356	2920	4030
50°	1605	2175	3198
55°	1044	1573	2485
60°	600	1109	1797
65°	159	677	910
70°	81	210	262
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4030 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	7.6
10°-20°	233.6	19.6
20°-30°	292.4	24.5
30°-40°	270.1	22.6
40°-50°	181.5	15.2
50°-60°	93.8	7.9
60°-70°	29.4	2.5
70°-80°	1.9	0.2
80°-90°	0.0	0.0
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°	617.3	51.7
0°-40°	887.4	74.3
0°-60°	1162.7	97.4
0°-90°	1193.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1193.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	981	971	979	982	986	91
15°	809	806	835	863	881	225
25°	587	592	633	677	708	269
35°	377	386	428	478	522	233
45°	181	192	224	267	309	142
55°	65	76	98	126	154	61
65°	7	14	31	37	42	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.8	1000.8	1000.8	1000.8	1000.8
2.5°	1003.2	993.7	996.1	996.1	993.5
5°	981.0	971.0	978.6	982.0	985.8
7.5°	939.6	931.8	946.3	956.9	964.9
10°	907.3	900.7	919.5	934.2	945.1
12.5°	870.1	865.0	887.7	908.0	921.9
15°	809.1	806.3	834.8	862.8	881.3
17.5°	743.7	743.6	776.0	810.9	833.1
20°	698.7	700.1	735.0	773.4	799.4
22.5°	653.7	657.0	694.3	734.4	764.2
25°	586.8	591.5	633.3	676.7	708.4
27.5°	522.5	529.5	573.4	618.4	657.0
30°	480.4	488.4	533.1	580.5	620.2
32.5°	438.8	448.5	492.0	542.2	582.6
35°	376.7	386.2	428.0	478.4	521.9
37.5°	312.5	321.7	362.6	412.2	459.3
40°	270.7	281.0	320.1	368.1	415.9
42.5°	232.8	243.1	279.8	327.0	372.1
45°	180.6	191.5	223.8	267.3	308.9
47.5°	137.5	149.2	177.4	217.0	254.9
50°	111.8	123.7	151.5	186.3	222.8
52.5°	91.3	102.8	127.9	160.6	194.0
55°	64.9	75.8	97.8	125.6	154.5
57.5°	44.9	54.3	74.0	97.1	119.8
60°	32.5	41.5	60.1	78.8	97.4
62.5°	21.6	29.8	48.0	62.5	74.9
65°	7.3	14.0	31.0	37.4	41.7
67.5°	3.7	4.4	16.2	17.2	18.6
70°	3.0	3.0	7.8	8.2	9.7
72.5°	2.0	2.0	3.1	4.0	4.3
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	7.66	8.89	8.02	9.20	9.52	12.24	13.47	12.60	13.78	14.09
	3H	7.54	8.62	7.92	8.95	9.32	12.21	13.29	12.59	13.62	13.99
	4H	7.46	8.46	7.86	8.81	9.20	12.13	13.13	12.53	13.48	13.87
	6H	7.37	8.29	7.79	8.66	9.06	12.04	12.96	12.46	13.33	13.73
	8H	7.33	8.19	7.76	8.58	8.99	11.99	12.86	12.43	13.25	13.66
	12H	7.28	8.10	7.71	8.49	8.92	11.95	12.77	12.38	13.16	13.59
4H	2H	8.02	9.02	8.43	9.38	9.76	12.17	13.17	12.57	13.52	13.91
	3H	7.91	8.72	8.32	9.12	9.53	12.15	12.96	12.56	13.36	13.77
	4H	7.82	8.53	8.25	8.95	9.40	12.05	12.77	12.49	13.19	13.64
	6H	7.73	8.34	8.19	8.79	9.26	11.96	12.58	12.43	13.02	13.49
	8H	7.67	8.24	8.14	8.69	9.16	11.90	12.47	12.37	12.92	13.39
	12H	7.61	8.12	8.10	8.60	9.08	11.85	12.35	12.33	12.83	13.31
8H	4H	7.67	8.25	8.15	8.70	9.17	11.90	12.47	12.37	12.92	13.40
	6H	7.56	8.03	8.07	8.53	9.01	11.79	12.25	12.29	12.75	13.24
	8H	7.50	7.91	8.02	8.43	8.93	11.72	12.14	12.25	12.66	13.15
	12H	7.45	7.81	7.96	8.31	8.88	11.67	12.04	12.19	12.53	13.11
12H	4H	7.62	8.12	8.11	8.61	9.08	11.85	12.35	12.34	12.84	13.31
	6H	7.50	7.91	8.02	8.43	8.93	11.72	12.14	12.25	12.66	13.15
	8H	7.45	7.81	7.96	8.31	8.88	11.67	12.04	12.19	12.53	13.11