

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: P1036207

Luminaire Tested: SQ4R-F-075D-B2750-1D-UNV-W2A_4000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036207
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P520092)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-075D-B2750-1D-UNV-W2A_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

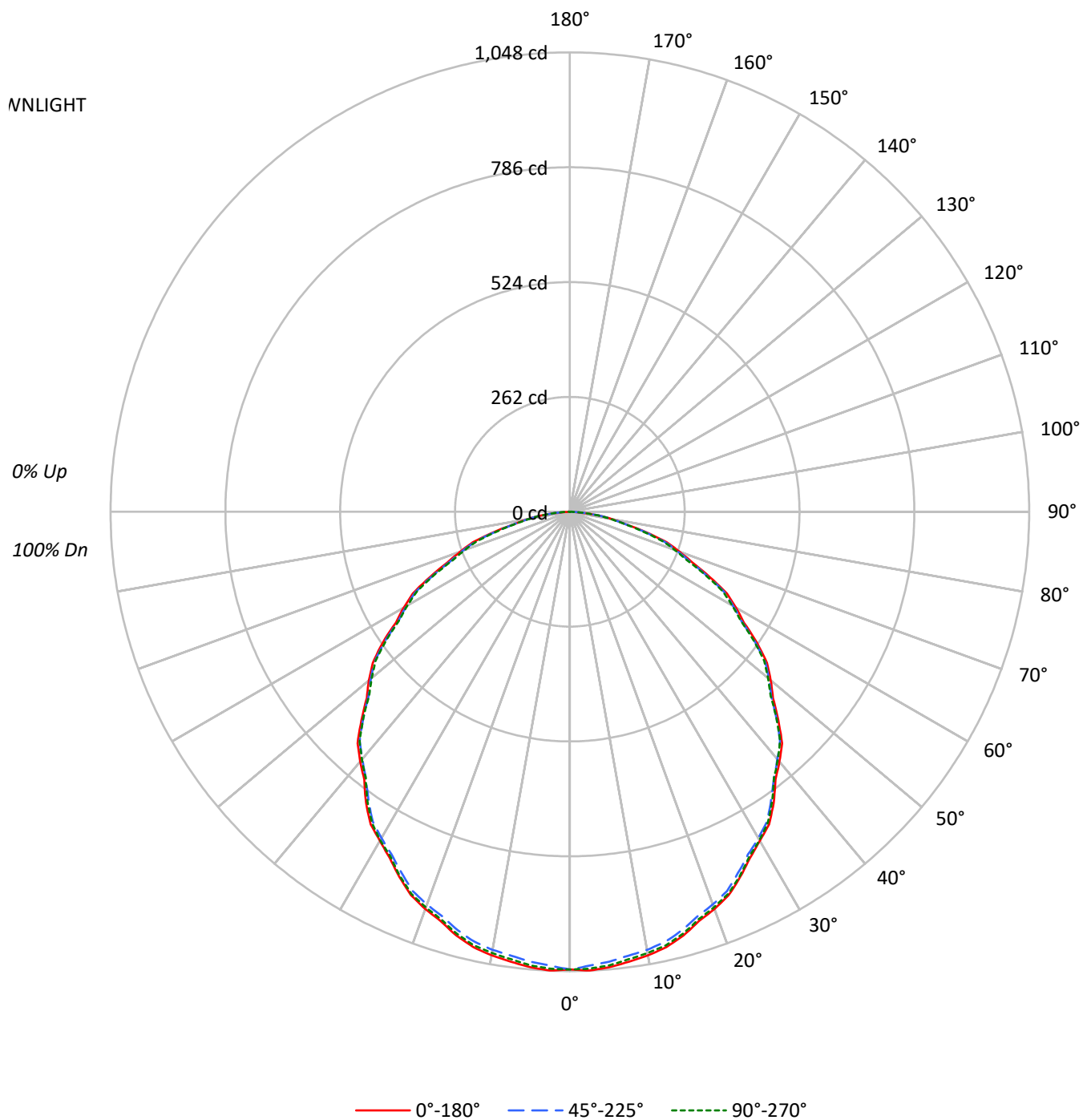
Lumens per Lamp: N/A
Luminaire Lumens: 2850.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.6
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	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9634	9634	9634
5°	9659	9542	9619
10°	9625	9507	9574
15°	9559	9440	9520
20°	9469	9361	9429
25°	9363	9250	9336
30°	9233	9159	9217
35°	9133	9023	9069
40°	8959	8873	8890
45°	8772	8700	8700
50°	8588	8509	8469
55°	8389	8276	8231
60°	8075	7946	7894
65°	7691	7538	7444
70°	7165	7011	6863
75°	6424	6228	6078
80°	5202	5133	4973
85°	3091	3557	3694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 8792 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	3.5
10°-20°	280.6	9.8
20°-30°	421.4	14.8
30°-40°	503.1	17.7
40°-50°	515.5	18.1
50°-60°	459.7	16.1
60°-70°	342.4	12.0
70°-80°	185.8	6.5
80°-90°	43.0	1.5
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°	800.5	28.1
0°-40°	1303.6	45.7
0°-60°	2278.8	80.0
0°-90°	2850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1043	1042	1030	1040	1039	99
15°	1001	998	988	997	997	282
25°	920	917	909	914	917	424
35°	811	808	801	801	805	506
45°	672	674	667	665	667	519
55°	522	522	514	510	512	464
65°	352	351	345	341	341	349
75°	180	179	175	172	170	191
85°	29	32	34	35	35	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1044.2	1044.2	1044.2	1044.2	1044.2
2.5°	1047.5	1045.3	1036.4	1044.2	1043.2
5°	1042.9	1041.5	1030.3	1040.0	1038.6
7.5°	1035.3	1032.6	1021.5	1031.2	1029.7
10°	1027.4	1024.6	1014.8	1023.1	1021.9
12.5°	1017.4	1015.8	1004.9	1013.3	1012.9
15°	1000.8	998.0	988.3	996.7	996.7
17.5°	979.1	977.5	967.8	975.8	975.1
20°	964.4	961.8	953.4	960.3	960.3
22.5°	946.7	945.0	936.7	942.4	943.6
25°	919.7	917.1	908.6	914.3	917.1
27.5°	890.2	888.0	881.1	884.7	886.6
30°	866.7	866.7	859.7	861.1	865.2
32.5°	845.5	845.5	837.4	838.8	840.8
35°	810.9	808.1	801.1	801.1	805.2
37.5°	770.4	769.1	764.7	763.9	765.1
40°	743.9	742.4	736.7	738.1	738.1
42.5°	716.9	715.5	709.7	707.9	710.0
45°	672.3	673.8	666.8	665.4	666.8
47.5°	628.6	628.6	622.9	619.0	621.2
50°	598.3	598.3	592.8	590.0	590.0
52.5°	567.0	568.1	561.3	557.5	558.7
55°	521.5	521.5	514.5	510.3	511.7
57.5°	471.1	471.1	464.2	459.9	462.3
60°	437.6	437.6	430.6	426.3	427.8
62.5°	404.0	404.0	397.1	392.9	393.1
65°	352.3	351.0	345.3	341.0	341.0
67.5°	302.4	298.9	294.7	289.1	289.1
70°	265.6	264.2	259.9	254.4	254.4
72.5°	232.0	229.6	225.3	220.9	220.9
75°	180.2	178.8	174.7	172.0	170.5
77.5°	129.2	128.1	127.7	123.8	125.0
80°	97.9	97.9	96.6	93.6	93.6
82.5°	69.9	70.9	68.5	67.8	66.8
85°	29.2	32.0	33.6	34.9	34.9
87.5°	5.7	8.8	7.8	9.0	9.0
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	19.46	21.08	19.82	21.40	21.71	19.29	20.92	19.66	21.24	21.55
	3H	21.20	22.67	21.57	22.99	23.35	20.99	22.46	21.37	22.78	23.15
	4H	21.85	23.24	22.25	23.58	23.96	21.62	23.00	22.02	23.35	23.73
	6H	22.22	23.50	22.63	23.87	24.26	21.99	23.27	22.40	23.63	24.03
	8H	22.35	23.57	22.77	23.96	24.36	22.11	23.33	22.53	23.72	24.12
	12H	22.40	23.57	22.83	23.95	24.38	22.18	23.35	22.61	23.73	24.16
4H	2H	20.08	21.46	20.48	21.81	22.18	19.95	21.33	20.35	21.68	22.06
	3H	22.05	23.21	22.46	23.60	24.00	21.87	23.03	22.28	23.43	23.83
	4H	22.81	23.86	23.24	24.27	24.71	22.61	23.65	23.04	24.06	24.50
	6H	23.29	24.20	23.74	24.64	25.10	23.07	23.99	23.53	24.43	24.88
	8H	23.45	24.31	23.91	24.75	25.21	23.23	24.09	23.69	24.53	25.00
	12H	23.54	24.30	24.02	24.78	25.25	23.33	24.10	23.81	24.58	25.05
8H	4H	23.07	23.92	23.53	24.36	24.83	22.89	23.74	23.35	24.18	24.65
	6H	23.65	24.36	24.14	24.85	25.32	23.46	24.16	23.95	24.65	25.13
	8H	23.88	24.52	24.39	25.02	25.51	23.68	24.32	24.19	24.82	25.31
	12H	24.01	24.57	24.52	25.06	25.62	23.83	24.40	24.34	24.89	25.45
12H	4H	23.09	23.85	23.57	24.33	24.80	22.91	23.68	23.39	24.15	24.62
	6H	23.69	24.32	24.19	24.83	25.31	23.50	24.14	24.01	24.64	25.13
	8H	23.97	24.53	24.47	25.02	25.58	23.77	24.34	24.28	24.83	25.39