

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: P1036307

Luminaire Tested: SQ4R-PR1-075D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036307
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-PR1-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

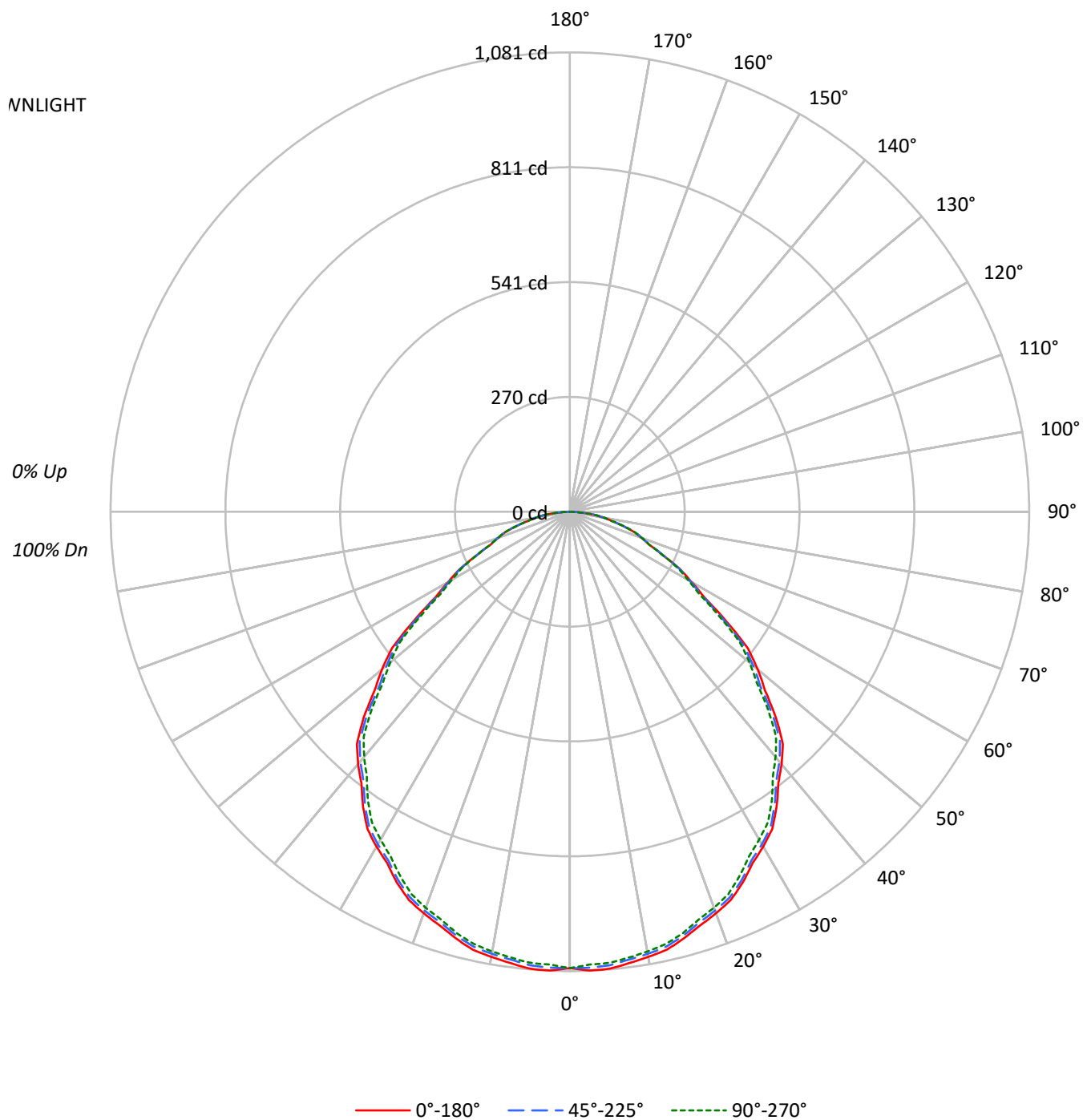
Lumens per Lamp: N/A
Luminaire Lumens: 2684.7 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1036307

CATALOG NUMBER: SQ4R-PR1-075D-B50-1D-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°	9908	9908	9908
5°	9998	9921	9869
10°	9965	9897	9844
15°	9922	9860	9807
20°	9872	9809	9736
25°	9802	9737	9624
30°	9696	9629	9490
35°	9554	9470	9335
40°	9334	9235	9069
45°	8956	8798	8617
50°	8285	8085	7926
55°	7230	7070	6920
60°	6095	6043	5921
65°	5270	5292	5250
70°	4839	4864	4864
75°	4648	4648	4684
80°	4373	4421	4373
85°	3525	3917	3917

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8956 cd/sqm

TEST NUMBER: P1036307

CATALOG NUMBER: SQ4R-PR1-075D-B50-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	3.8
10°-20°	290.6	10.8
20°-30°	438.3	16.3
30°-40°	522.2	19.5
40°-50°	514.8	19.2
50°-60°	393.5	14.7
60°-70°	243.5	9.1
70°-80°	138.3	5.2
80°-90°	42.1	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°	830.4	30.9
0°-40°	1352.6	50.4
0°-60°	2260.9	84.2
0°-90°	2684.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2684.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1080	1068	1071	1067	1066	102
15°	1039	1028	1032	1029	1027	293
25°	963	951	956	946	945	443
35°	848	838	841	830	829	529
45°	686	677	674	662	660	526
55°	450	442	440	432	430	403
65°	241	240	242	240	240	245
75°	130	130	130	131	131	138
85°	33	35	37	37	37	40
90°	0	0	0	0	0	

TEST NUMBER: P1036307

CATALOG NUMBER: SQ4R-PR1-075D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1073.9	1073.9	1073.9	1073.9	1073.9
2.5°	1080.6	1071.2	1073.9	1071.7	1066.6
5°	1079.5	1067.7	1071.2	1067.3	1065.6
7.5°	1071.2	1059.5	1063.0	1059.2	1058.3
10°	1063.7	1052.8	1056.4	1052.7	1050.7
12.5°	1055.6	1044.1	1048.3	1043.8	1042.0
15°	1038.8	1028.0	1032.3	1028.7	1026.7
17.5°	1020.3	1008.7	1013.1	1008.9	1006.5
20°	1005.5	994.7	999.0	992.6	991.6
22.5°	989.2	978.4	982.7	974.1	973.9
25°	962.9	951.2	956.5	946.3	945.4
27.5°	931.7	920.8	925.2	914.8	913.8
30°	910.1	899.3	903.8	892.6	890.8
32.5°	885.8	875.7	879.4	868.2	867.1
35°	848.3	838.3	840.8	829.8	828.8
37.5°	805.5	796.5	797.9	785.6	784.8
40°	775.0	766.2	766.8	753.9	753.0
42.5°	741.9	732.9	732.0	719.2	718.2
45°	686.4	677.4	674.3	662.2	660.4
47.5°	623.1	614.1	608.4	598.5	597.3
50°	577.2	568.2	563.3	554.9	552.2
52.5°	527.6	518.6	514.6	506.9	504.2
55°	449.5	442.3	439.5	431.9	430.2
57.5°	375.4	370.5	369.6	362.4	361.7
60°	330.3	327.5	327.5	320.9	320.9
62.5°	291.8	289.7	291.1	286.8	286.2
65°	241.4	239.6	242.4	240.5	240.5
67.5°	201.7	201.7	203.3	202.5	202.5
70°	179.4	179.4	180.3	180.3	180.3
72.5°	159.5	158.8	161.2	161.1	160.4
75°	130.4	130.4	130.4	131.4	131.4
77.5°	101.6	101.8	102.5	102.3	101.6
80°	82.3	83.2	83.2	82.3	82.3
82.5°	63.1	64.0	64.0	63.8	63.1
85°	33.3	35.0	37.0	37.0	37.0
87.5°	9.5	12.5	14.9	14.9	14.0
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	18.07	19.63	18.43	19.95	20.26	17.90	19.46	18.26	19.78	20.09
	3H	19.40	20.81	19.78	21.14	21.50	19.30	20.71	19.68	21.03	21.40
	4H	20.01	21.32	20.41	21.67	22.05	19.93	21.25	20.33	21.60	21.98
	6H	20.45	21.67	20.87	22.04	22.43	20.39	21.61	20.80	21.98	22.37
	8H	20.64	21.80	21.06	22.19	22.59	20.58	21.74	21.00	22.13	22.53
	12H	20.75	21.86	21.18	22.24	22.67	20.70	21.82	21.13	22.20	22.63
4H	2H	18.54	19.86	18.94	20.21	20.59	18.40	19.72	18.80	20.07	20.45
	3H	20.15	21.24	20.56	21.64	22.04	20.07	21.17	20.48	21.57	21.97
	4H	20.88	21.87	21.31	22.28	22.72	20.84	21.82	21.27	22.24	22.68
	6H	21.47	22.33	21.93	22.77	23.23	21.43	22.29	21.89	22.73	23.19
	8H	21.71	22.52	22.18	22.96	23.43	21.68	22.48	22.14	22.93	23.39
	12H	21.87	22.59	22.35	23.07	23.54	21.85	22.58	22.33	23.05	23.52
8H	4H	21.16	21.96	21.62	22.41	22.87	21.12	21.92	21.58	22.36	22.83
	6H	21.88	22.55	22.38	23.04	23.52	21.85	22.52	22.34	23.01	23.48
	8H	22.22	22.82	22.73	23.33	23.82	22.18	22.79	22.70	23.30	23.78
	12H	22.45	22.99	22.96	23.48	24.04	22.44	22.98	22.95	23.47	24.03
12H	4H	21.19	21.91	21.67	22.39	22.86	21.15	21.87	21.63	22.35	22.82
	6H	21.95	22.55	22.46	23.06	23.55	21.91	22.52	22.42	23.02	23.51
	8H	22.34	22.88	22.85	23.37	23.93	22.31	22.85	22.82	23.34	23.90