

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: P1036179

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036179
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-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

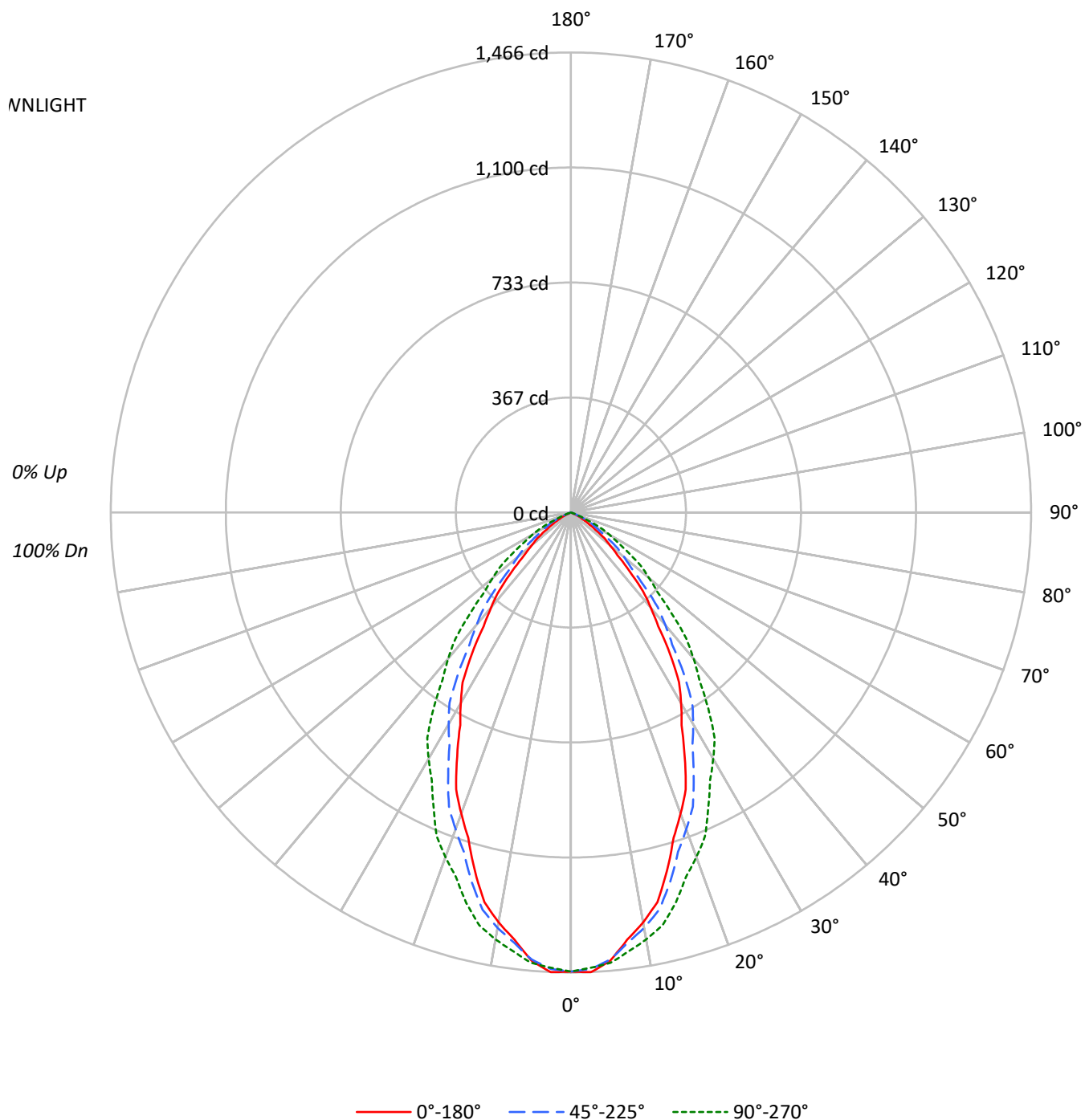
Lumens per Lamp: N/A
Luminaire Lumens: 1745.1 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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
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	83	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°	13497	13497	13497
5°	13279	13247	13346
10°	12425	12591	12943
15°	11296	11654	12304
20°	10027	10549	11472
25°	8731	9424	10540
30°	7480	8301	9658
35°	6201	7047	8593
40°	4765	5634	7322
45°	3446	4267	5891
50°	2347	3178	4673
55°	1525	2299	3630
60°	875	1620	2626
65°	231	989	1330
70°	116	305	380
75°	50	25	0
80°	37	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5891 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	7.7
10°-20°	341.4	19.6
20°-30°	427.4	24.5
30°-40°	394.8	22.6
40°-50°	265.3	15.2
50°-60°	137.0	7.9
60°-70°	42.9	2.5
70°-80°	2.7	0.2
80°-90°	0.1	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°	902.3	51.7
0°-40°	1297.1	74.3
0°-60°	1699.4	97.4
0°-90°	1745.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1745.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1434	1419	1430	1435	1441	133
15°	1183	1178	1220	1261	1288	329
25°	858	865	926	989	1035	393
35°	551	564	626	699	763	341
45°	264	280	327	391	452	207
55°	95	111	143	184	226	88
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
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°	1462.9	1462.9	1462.9	1462.9	1462.9
2.5°	1466.2	1452.5	1456.0	1456.0	1452.1
5°	1433.8	1419.3	1430.3	1435.4	1441.0
7.5°	1373.3	1362.0	1383.1	1398.8	1410.3
10°	1326.2	1316.6	1344.0	1365.5	1381.5
12.5°	1271.9	1264.4	1297.5	1327.2	1347.5
15°	1182.6	1178.5	1220.1	1261.0	1288.1
17.5°	1087.0	1086.8	1134.2	1185.2	1217.7
20°	1021.3	1023.4	1074.4	1130.4	1168.4
22.5°	955.6	960.4	1014.9	1073.4	1116.9
25°	857.7	864.6	925.7	989.1	1035.4
27.5°	763.8	773.9	838.2	903.9	960.4
30°	702.1	713.8	779.2	848.4	906.6
32.5°	641.4	655.5	719.1	792.5	851.6
35°	550.6	564.5	625.7	699.3	762.9
37.5°	456.8	470.3	530.0	602.6	671.4
40°	395.6	410.8	467.8	538.1	607.9
42.5°	340.2	355.4	408.9	477.9	544.0
45°	264.1	279.9	327.0	390.6	451.5
47.5°	201.0	218.1	259.4	317.1	372.5
50°	163.5	180.7	221.4	272.2	325.6
52.5°	133.5	150.3	187.0	234.8	283.6
55°	94.8	110.7	142.9	183.6	225.7
57.5°	65.5	79.3	108.2	141.9	175.2
60°	47.4	60.5	87.8	115.2	142.3
62.5°	31.6	43.6	70.2	91.3	109.5
65°	10.6	20.4	45.3	54.6	60.9
67.5°	5.4	6.4	23.7	25.1	27.2
70°	4.3	4.3	11.3	12.0	14.1
72.5°	3.0	3.0	4.5	5.8	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.7	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.2	0.2	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	8.97	10.20	9.34	10.51	10.83	13.55	14.79	13.92	15.10	15.41
	3H	8.85	9.93	9.23	10.26	10.63	13.53	14.61	13.91	14.94	15.31
	4H	8.77	9.77	9.17	10.12	10.51	13.45	14.45	13.85	14.80	15.19
	6H	8.68	9.60	9.10	9.97	10.37	13.36	14.28	13.78	14.65	15.04
	8H	8.64	9.50	9.07	9.89	10.30	13.31	14.18	13.74	14.57	14.98
	12H	8.59	9.41	9.02	9.80	10.23	13.26	14.09	13.70	14.47	14.90
4H	2H	9.33	10.34	9.74	10.69	11.07	13.49	14.49	13.89	14.84	15.23
	3H	9.22	10.03	9.63	10.44	10.84	13.47	14.28	13.88	14.68	15.09
	4H	9.13	9.85	9.56	10.27	10.71	13.37	14.09	13.81	14.51	14.95
	6H	9.04	9.65	9.50	10.10	10.57	13.28	13.90	13.75	14.34	14.81
	8H	8.98	9.55	9.45	10.00	10.47	13.22	13.79	13.69	14.24	14.71
	12H	8.92	9.43	9.41	9.91	10.39	13.16	13.67	13.65	14.15	14.63
8H	4H	8.98	9.56	9.46	10.01	10.48	13.22	13.79	13.69	14.24	14.71
	6H	8.88	9.34	9.38	9.84	10.32	13.11	13.57	13.61	14.07	14.55
	8H	8.81	9.23	9.33	9.74	10.24	13.04	13.46	13.56	13.97	14.47
	12H	8.76	9.13	9.27	9.62	10.20	12.99	13.36	13.51	13.85	14.43
12H	4H	8.93	9.43	9.42	9.92	10.40	13.17	13.67	13.65	14.15	14.63
	6H	8.81	9.22	9.33	9.74	10.24	13.04	13.46	13.56	13.97	14.47
	8H	8.76	9.13	9.27	9.62	10.20	12.99	13.36	13.51	13.85	14.43

END OF REPORT