

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: P1036178

Luminaire Tested: SQ4R-BB-075D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036178
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

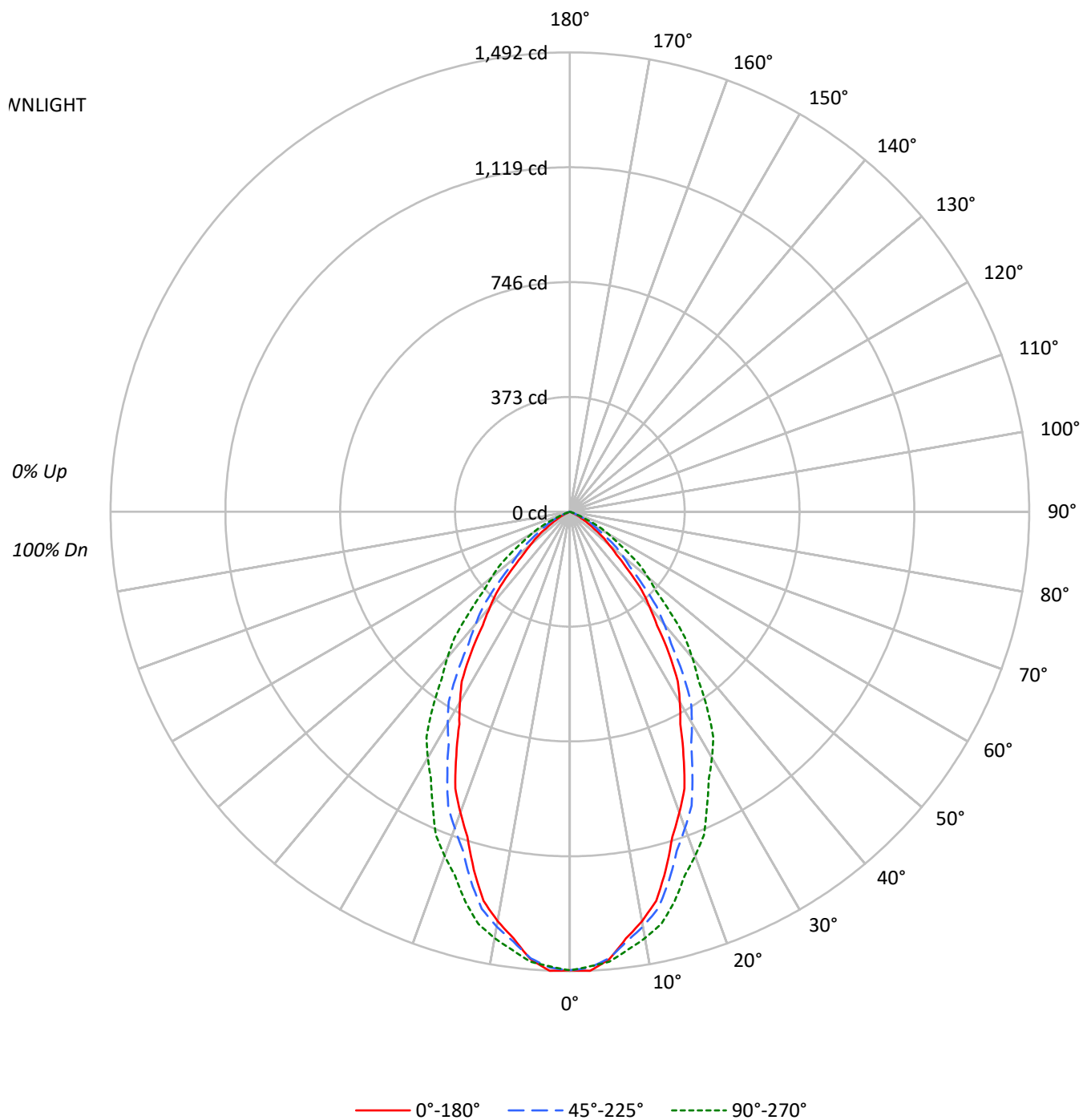
Lumens per Lamp: N/A
Luminaire Lumens: 1776.3 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	13739	13739	13739
5°	13517	13484	13585
10°	12647	12816	13174
15°	11498	11863	12523
20°	10207	10737	11677
25°	8887	9592	10730
30°	7614	8450	9831
35°	6312	7173	8746
40°	4849	5735	7452
45°	3507	4344	5997
50°	2388	3235	4757
55°	1552	2340	3696
60°	891	1648	2674
65°	236	1006	1354
70°	119	310	386
75°	53	25	0
80°	37	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	7.7
10°-20°	347.5	19.6
20°-30°	435.1	24.5
30°-40°	401.8	22.6
40°-50°	270.0	15.2
50°-60°	139.5	7.9
60°-70°	43.7	2.5
70°-80°	2.8	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°	918.5	51.7
0°-40°	1320.3	74.3
0°-60°	1729.8	97.4
0°-90°	1776.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1776.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1460	1445	1456	1461	1467	135
15°	1204	1200	1242	1284	1311	335
25°	873	880	942	1007	1054	400
35°	560	575	637	712	776	347
45°	269	285	333	398	460	211
55°	96	113	146	187	230	90
65°	11	21	46	56	62	18
75°	2	2	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°	1489.1	1489.1	1489.1	1489.1	1489.1
2.5°	1492.5	1478.5	1482.1	1482.1	1478.1
5°	1459.5	1444.7	1455.9	1461.1	1466.8
7.5°	1397.9	1386.3	1407.9	1423.8	1435.6
10°	1349.9	1340.1	1368.0	1389.9	1406.2
12.5°	1294.7	1287.0	1320.7	1351.0	1371.6
15°	1203.8	1199.6	1242.0	1283.5	1311.1
17.5°	1106.5	1106.3	1154.5	1206.4	1239.5
20°	1039.6	1041.7	1093.6	1150.7	1189.3
22.5°	972.7	977.6	1033.0	1092.6	1136.9
25°	873.0	880.1	942.2	1006.8	1054.0
27.5°	777.5	787.8	853.2	920.0	977.6
30°	714.7	726.6	793.2	863.6	922.8
32.5°	652.9	667.2	731.9	806.6	866.8
35°	560.4	574.6	636.9	711.8	776.5
37.5°	465.0	478.7	539.5	613.4	683.4
40°	402.6	418.2	476.2	547.7	618.7
42.5°	346.2	361.8	416.2	486.5	553.7
45°	268.8	284.9	332.9	397.6	459.6
47.5°	204.6	222.0	264.1	322.8	379.2
50°	166.4	183.9	225.4	277.1	331.4
52.5°	135.9	153.0	190.3	239.0	288.7
55°	96.5	112.7	145.5	186.9	229.8
57.5°	66.7	80.7	110.1	144.5	178.3
60°	48.3	61.6	89.3	117.3	144.9
62.5°	32.2	44.4	71.4	92.9	111.4
65°	10.8	20.7	46.1	55.6	62.0
67.5°	5.5	6.5	24.1	25.6	27.7
70°	4.4	4.4	11.5	12.2	14.3
72.5°	3.1	3.1	4.6	5.9	6.4
75°	1.5	1.5	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	9.03	10.26	9.40	10.57	10.89	13.62	14.85	13.98	15.16	15.48
	3H	8.91	9.99	9.29	10.32	10.69	13.59	14.67	13.97	15.01	15.37
	4H	8.83	9.83	9.24	10.19	10.57	13.51	14.51	13.92	14.87	15.25
	6H	8.74	9.66	9.16	10.03	10.43	13.42	14.34	13.84	14.71	15.11
	8H	8.70	9.56	9.13	9.95	10.36	13.38	14.24	13.81	14.63	15.04
	12H	8.65	9.48	9.08	9.86	10.29	13.33	14.15	13.76	14.54	14.97
4H	2H	9.39	10.40	9.80	10.75	11.13	13.55	14.55	13.96	14.91	15.29
	3H	9.28	10.09	9.70	10.50	10.90	13.53	14.34	13.94	14.75	15.15
	4H	9.19	9.91	9.62	10.33	10.77	13.43	14.15	13.87	14.57	15.02
	6H	9.10	9.72	9.57	10.16	10.63	13.34	13.96	13.81	14.41	14.88
	8H	9.04	9.61	9.51	10.06	10.53	13.28	13.85	13.75	14.30	14.78
	12H	8.98	9.49	9.47	9.97	10.45	13.23	13.73	13.72	14.22	14.69
8H	4H	9.05	9.62	9.52	10.07	10.54	13.28	13.86	13.75	14.30	14.78
	6H	8.94	9.40	9.44	9.90	10.38	13.17	13.64	13.68	14.13	14.62
	8H	8.87	9.29	9.39	9.80	10.30	13.10	13.52	13.63	14.04	14.53
	12H	8.82	9.19	9.34	9.68	10.26	13.05	13.42	13.57	13.92	14.49
12H	4H	8.99	9.50	9.48	9.98	10.46	13.23	13.73	13.72	14.22	14.69
	6H	8.87	9.29	9.39	9.80	10.30	13.10	13.52	13.63	14.04	14.53
	8H	8.82	9.19	9.34	9.68	10.26	13.05	13.42	13.57	13.92	14.49

END OF REPORT