

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: P1036172

Luminaire Tested: SQ4R-BB-075D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036172
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-B2750-1D-UNV-W2A_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

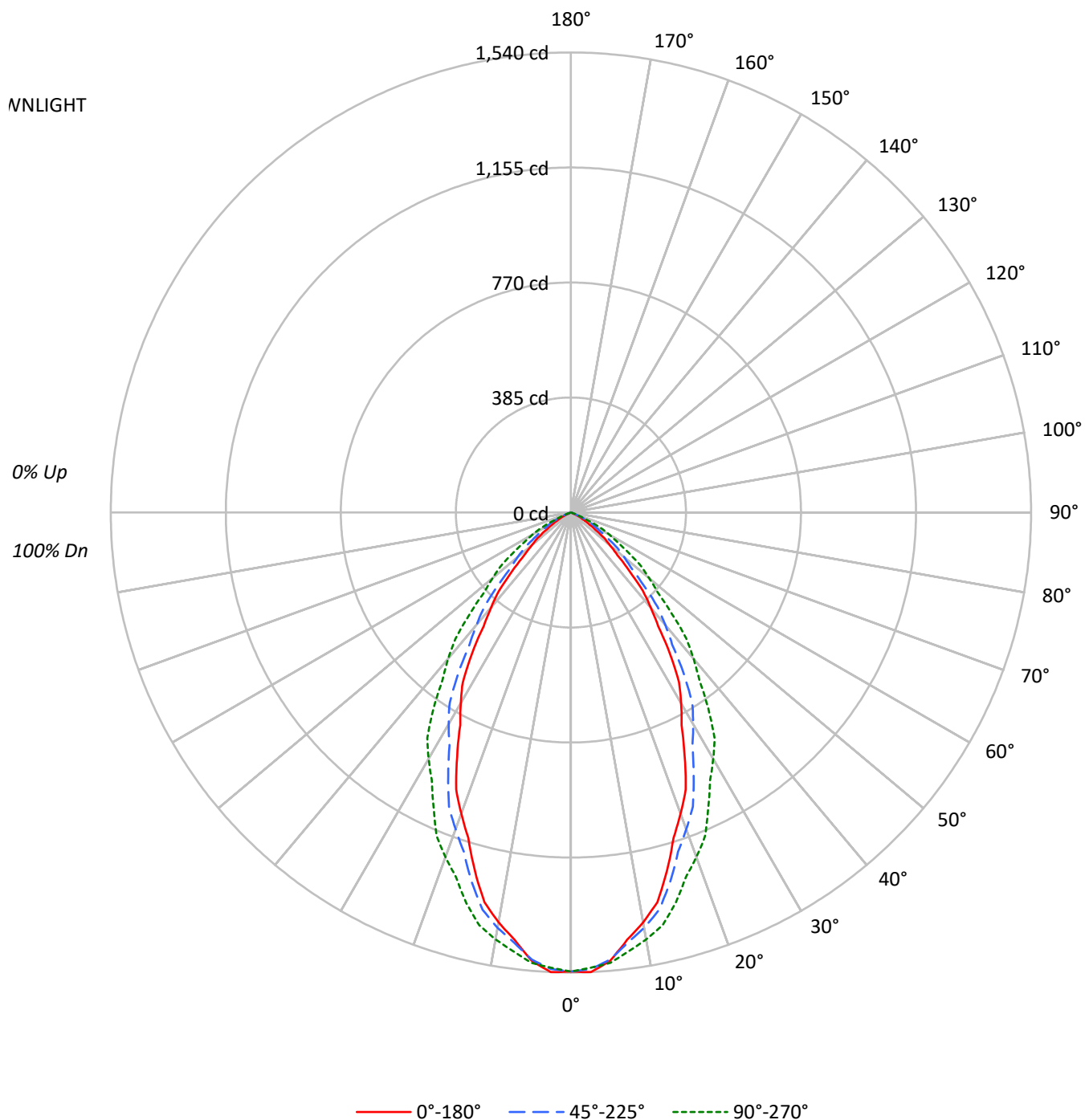
Lumens per Lamp: N/A
Luminaire Lumens: 1833.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	93	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	84	84	82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	76	76	74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	69	69	67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	63	63	61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	58	58	56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	53	53	51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	49	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	45	45	44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	42	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14177	14177	14177
5°	13949	13914	14018
10°	13050	13226	13595
15°	11865	12241	12923
20°	10533	11080	12050
25°	9171	9898	11072
30°	7857	8720	10145
35°	6513	7402	9025
40°	5004	5918	7690
45°	3619	4482	6189
50°	2464	3339	4909
55°	1602	2414	3814
60°	919	1701	2759
65°	242	1039	1397
70°	121	321	399
75°	53	25	0
80°	37	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.2	7.7
10°-20°	358.6	19.6
20°-30°	449.0	24.5
30°-40°	414.7	22.6
40°-50°	278.6	15.2
50°-60°	143.9	7.9
60°-70°	45.1	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°	947.8	51.7
0°-40°	1362.5	74.3
0°-60°	1785.0	97.4
0°-90°	1833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1506	1491	1502	1508	1514	140
15°	1242	1238	1282	1324	1353	346
25°	901	908	972	1039	1088	413
35°	578	593	657	734	801	358
45°	277	294	344	410	474	218
55°	100	116	150	193	237	93
65°	11	21	48	57	64	19
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°	1536.6	1536.6	1536.6	1536.6	1536.6
2.5°	1540.1	1525.7	1529.4	1529.4	1525.3
5°	1506.1	1490.8	1502.4	1507.7	1513.6
7.5°	1442.5	1430.6	1452.8	1469.3	1481.4
10°	1393.0	1382.9	1411.7	1434.3	1451.1
12.5°	1336.0	1328.1	1362.9	1394.1	1415.4
15°	1242.2	1237.9	1281.6	1324.5	1353.0
17.5°	1141.8	1141.6	1191.4	1244.9	1279.1
20°	1072.8	1075.0	1128.5	1187.4	1227.3
22.5°	1003.8	1008.8	1066.0	1127.5	1173.2
25°	900.9	908.2	972.3	1038.9	1087.6
27.5°	802.3	812.9	880.4	949.4	1008.8
30°	737.5	749.8	818.5	891.2	952.3
32.5°	673.7	688.5	755.3	832.4	894.5
35°	578.3	592.9	657.2	734.5	801.3
37.5°	479.8	494.0	556.7	633.0	705.2
40°	415.5	431.5	491.4	565.2	638.5
42.5°	357.3	373.3	429.5	502.0	571.4
45°	277.4	294.0	343.5	410.3	474.3
47.5°	211.1	229.1	272.5	333.1	391.3
50°	171.7	189.8	232.6	285.9	342.0
52.5°	140.2	157.9	196.4	246.6	297.9
55°	99.6	116.3	150.1	192.9	237.1
57.5°	68.8	83.3	113.6	149.1	184.0
60°	49.8	63.6	92.2	121.0	149.5
62.5°	33.2	45.8	73.7	95.9	115.0
65°	11.1	21.4	47.6	57.4	64.0
67.5°	5.7	6.7	24.9	26.4	28.6
70°	4.5	4.5	11.9	12.6	14.8
72.5°	3.2	3.2	4.7	6.1	6.6
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	9.14	10.37	9.51	10.68	11.00	13.73	14.96	14.09	15.27	15.58
	3H	9.02	10.10	9.40	10.43	10.80	13.70	14.78	14.08	15.11	15.48
	4H	8.94	9.94	9.35	10.30	10.68	13.62	14.62	14.02	14.97	15.36
	6H	8.85	9.77	9.27	10.14	10.54	13.53	14.45	13.95	14.82	15.22
	8H	8.81	9.67	9.24	10.06	10.47	13.48	14.35	13.92	14.74	15.15
	12H	8.76	9.59	9.19	9.97	10.40	13.44	14.26	13.87	14.65	15.08
4H	2H	9.51	10.51	9.91	10.86	11.24	13.66	14.66	14.06	15.01	15.40
	3H	9.39	10.20	9.81	10.61	11.01	13.64	14.45	14.05	14.85	15.26
	4H	9.30	10.02	9.73	10.44	10.88	13.54	14.26	13.98	14.68	15.13
	6H	9.21	9.83	9.68	10.27	10.74	13.45	14.07	13.92	14.52	14.99
	8H	9.15	9.72	9.62	10.17	10.64	13.39	13.96	13.86	14.41	14.88
	12H	9.09	9.60	9.58	10.08	10.56	13.34	13.84	13.82	14.32	14.80
8H	4H	9.16	9.73	9.63	10.18	10.65	13.39	13.96	13.86	14.41	14.89
	6H	9.05	9.51	9.55	10.01	10.49	13.28	13.74	13.78	14.24	14.73
	8H	8.98	9.40	9.51	9.91	10.41	13.21	13.63	13.74	14.15	14.64
	12H	8.93	9.30	9.45	9.79	10.37	13.16	13.53	13.68	14.02	14.60
12H	4H	9.10	9.61	9.59	10.09	10.57	13.34	13.84	13.83	14.33	14.80
	6H	8.98	9.40	9.50	9.91	10.41	13.21	13.63	13.74	14.15	14.64
	8H	8.93	9.30	9.45	9.79	10.37	13.16	13.53	13.68	14.02	14.60

END OF REPORT