

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

(formerly Eaton)

Brand: CORELITE

Report Number: P518420

Luminaire Tested: **SQ4-BB-050U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518420  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-050U-075D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

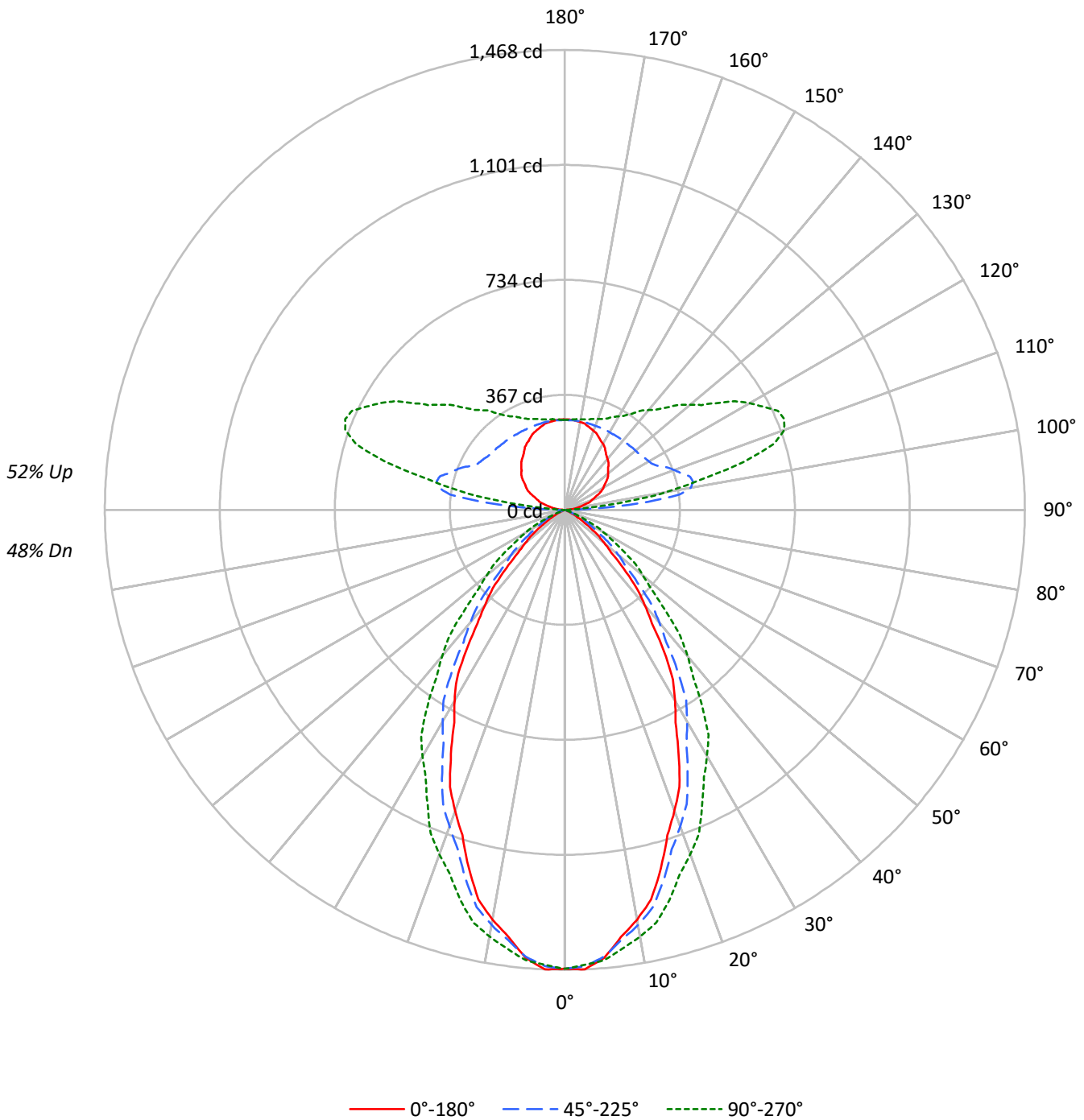
Lumens per Lamp: N/A  
Luminaire Lumens: 3628.5 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.3  
Input Voltage (V): 120  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13514	13514	13514
5°	13297	13263	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11486
25°	8744	9436	10554
30°	7489	8312	9671
35°	6209	7055	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3637
60°	876	1622	2628
65°	231	991	1330
70°	116	305	383
75°	50	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.7	3.7
10°-20°	341.8	9.4
20°-30°	428.0	11.8
30°-40°	395.3	10.9
40°-50°	265.6	7.3
50°-60°	137.2	3.8
60°-70°	43.0	1.2
70°-80°	2.7	0.1
80°-90°	1.2	0.0
90°-100°	138.2	3.8
100°-110°	375.5	10.3
110°-120°	386.1	10.6
120°-130°	308.7	8.5
130°-140°	242.5	6.7
140°-150°	186.0	5.1
150°-160°	133.7	3.7
160°-170°	81.8	2.3
170°-180°	27.6	0.8
0°-30°	903.5	24.9
0°-40°	1298.8	35.8
0°-60°	1701.6	46.9
0°-90°	1748.4	48.2
90°-120°	899.8	24.8
90°-150°	1637.0	45.1
90°-180°	1880.0	51.8
0°-180°	3628.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1436	1421	1432	1437	1443	133
15°	1184	1180	1222	1263	1290	330
25°	859	866	927	990	1037	394
35°	551	565	626	700	764	342
45°	264	280	327	391	452	208
55°	95	111	143	184	226	89
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	6	8	8	1
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1468.1	1454.3	1457.9	1457.8	1454.0
5°	1435.7	1421.1	1432.1	1437.2	1442.8
7.5°	1375.0	1363.7	1384.8	1400.7	1412.2
10°	1328.0	1318.3	1345.7	1367.3	1383.2
12.5°	1273.5	1266.1	1299.2	1328.9	1349.2
15°	1184.1	1180.0	1221.7	1262.7	1289.7
17.5°	1088.3	1088.2	1135.8	1186.7	1219.3
20°	1022.6	1024.6	1075.7	1131.8	1169.9
22.5°	956.8	961.6	1016.2	1074.7	1118.4
25°	858.9	865.8	926.9	990.3	1036.7
27.5°	764.8	774.9	839.2	905.1	961.6
30°	703.0	714.7	780.2	849.6	907.8
32.5°	642.3	656.3	720.1	793.5	852.8
35°	551.3	565.2	626.4	700.2	763.9
37.5°	457.3	470.9	530.8	603.3	672.2
40°	396.1	411.4	468.4	538.7	608.7
42.5°	340.6	355.8	409.4	478.6	544.7
45°	264.3	280.3	327.4	391.1	452.1
47.5°	201.1	218.4	259.8	317.5	373.0
50°	163.7	181.0	221.8	272.6	326.0
52.5°	133.6	150.4	187.2	235.1	284.0
55°	95.0	110.9	143.1	183.8	226.1
57.5°	65.6	79.3	108.3	142.2	175.3
60°	47.5	60.6	87.9	115.4	142.4
62.5°	31.6	43.7	70.3	91.4	109.6
65°	10.6	20.3	45.4	54.7	60.9
67.5°	5.4	6.5	23.8	25.1	27.2
70°	4.3	4.3	11.3	12.1	14.2
72.5°	3.1	3.1	4.5	5.8	6.2
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.7	1.3	1.7	1.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.5	691.1	757.9
115°	118.5	143.9	330.5	657.6	749.1
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.2	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.4
127.5°	173.9	196.3	295.9	471.8	549.4
130°	180.6	202.3	294.4	451.6	521.3
132.5°	187.2	208.9	293.0	434.4	496.1
135°	196.3	218.0	290.7	410.4	463.0
137.5°	206.1	225.8	289.6	389.3	433.5
140°	212.0	231.0	288.9	375.9	415.7
142.5°	218.0	235.5	288.1	365.4	398.7
145°	226.8	243.1	287.0	348.7	375.0
147.5°	236.8	250.8	286.1	335.6	356.3
150°	243.5	255.3	286.1	328.1	344.4
152.5°	248.7	259.0	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.2	322.2
157.5°	264.1	271.1	285.2	307.6	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.8	304.8
165°	277.8	281.4	286.1	298.2	299.1
167.5°	282.8	284.6	287.0	295.0	295.7
170°	284.3	286.1	287.0	293.5	293.5
172.5°	285.7	286.8	287.0	292.0	292.0
175°	288.0	288.9	287.0	290.7	289.8
177.5°	288.7	288.7	286.5	289.4	288.0
180°	288.0	288.0	288.0	288.0	288.0

(END OF REPORT)