

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: P518500

Luminaire Tested: **SQ4-BB-075U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518500  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

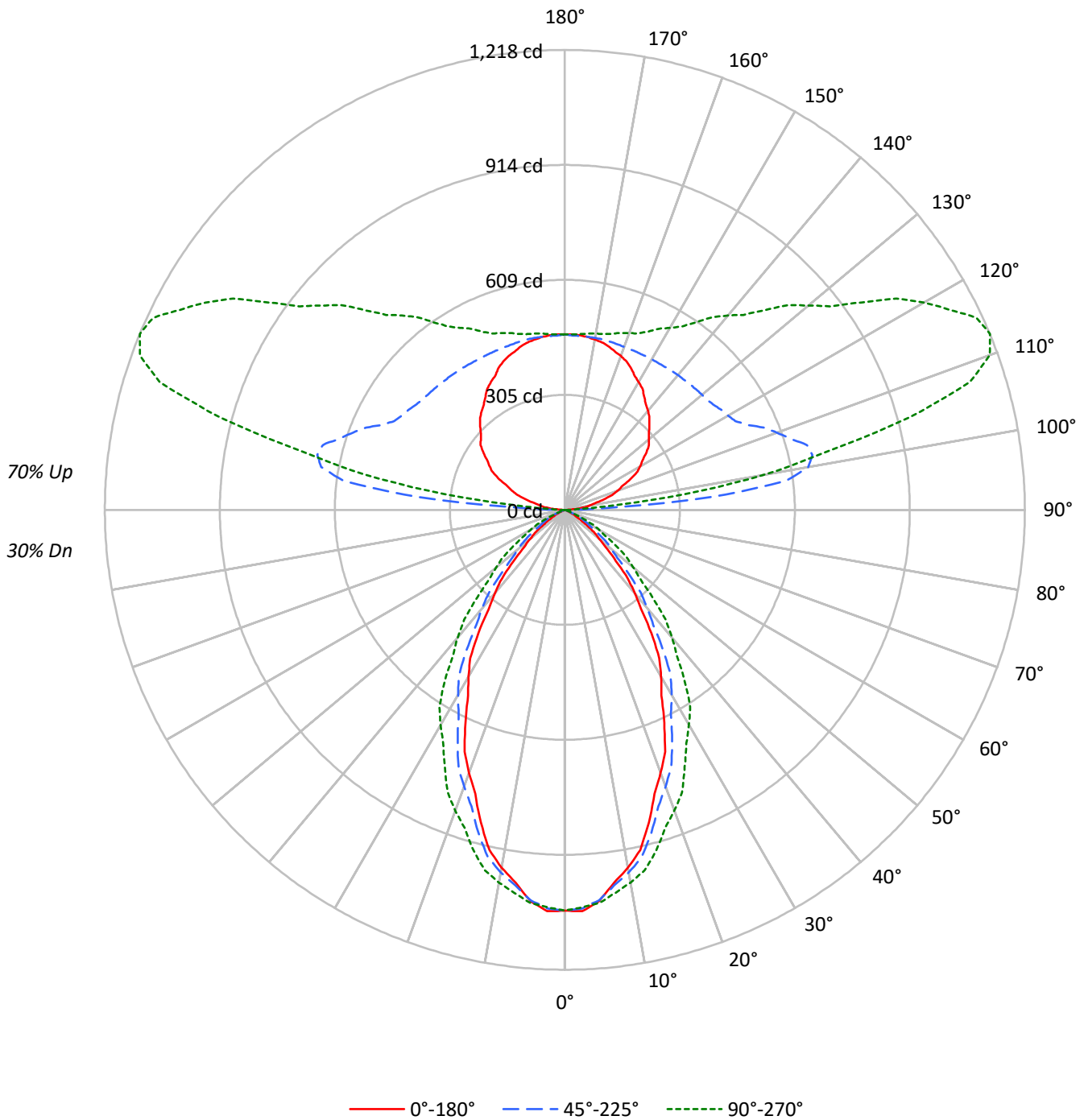
Lumens per Lamp: N/A  
Luminaire Lumens: 4291.1 lumens  
Efficiency: N/A  
Efficacy: 123.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 34.7  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

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

	0°	45°	90°
0°	9792	9792	9792
5°	9635	9611	9682
10°	9014	9134	9390
15°	8195	8455	8926
20°	7274	7652	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4500	5112	6234
40°	3457	4088	5313
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1668	2635
60°	635	1175	1904
65°	168	718	965
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.9	2.3
10°-20°	247.7	5.8
20°-30°	310.1	7.2
30°-40°	286.4	6.7
40°-50°	192.5	4.5
50°-60°	99.4	2.3
60°-70°	31.1	0.7
70°-80°	2.0	0.0
80°-90°	1.2	0.0
90°-100°	218.9	5.1
100°-110°	602.3	14.0
110°-120°	621.7	14.5
120°-130°	498.1	11.6
130°-140°	391.2	9.1
140°-150°	299.8	7.0
150°-160°	215.6	5.0
160°-170°	131.8	3.1
170°-180°	44.4	1.0
0°-30°	654.6	15.3
0°-40°	941.1	21.9
0°-60°	1232.9	28.7
0°-90°	1267.2	29.5
90°-120°	1442.9	33.6
90°-150°	2632.1	61.3
90°-180°	3024.0	70.5
0°-180°	4291.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1040	1030	1038	1041	1045	96
15°	858	855	885	915	934	239
25°	622	627	672	718	751	285
35°	400	410	454	507	554	247
45°	192	203	237	283	328	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	33	120	387	166	106	34
105°	108	166	664	1011	943	113
115°	191	232	532	1060	1203	188
125°	263	299	483	817	957	234
135°	317	352	469	661	748	245
145°	366	392	462	563	606	230
155°	415	428	459	506	520	191
165°	448	454	461	480	483	126
175°	464	465	462	468	467	44
180°	464	464	464	464	464	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1061.3	1061.3	1061.3	1061.3	1061.3
2.5°	1063.8	1053.7	1056.4	1056.3	1053.5
5°	1040.3	1029.7	1037.7	1041.4	1045.4
7.5°	996.3	988.1	1003.4	1014.9	1023.2
10°	962.2	955.2	975.0	990.7	1002.3
12.5°	922.8	917.4	941.4	962.9	977.6
15°	858.0	855.0	885.2	914.9	934.5
17.5°	788.6	788.5	823.0	859.9	883.4
20°	740.9	742.4	779.4	820.1	847.7
22.5°	693.3	696.8	736.3	778.7	810.3
25°	622.3	627.3	671.6	717.5	751.2
27.5°	554.1	561.4	608.0	655.8	696.8
30°	509.3	517.9	565.3	615.6	657.7
32.5°	465.4	475.5	521.8	574.9	617.9
35°	399.5	409.5	453.9	507.3	553.5
37.5°	331.4	341.2	384.6	437.2	487.1
40°	287.0	298.1	339.4	390.4	441.1
42.5°	246.8	257.8	296.7	346.7	394.6
45°	191.5	203.1	237.2	283.4	327.6
47.5°	145.7	158.3	188.2	230.0	270.3
50°	118.6	131.2	160.7	197.5	236.2
52.5°	96.8	109.0	135.7	170.3	205.8
55°	68.8	80.3	103.7	133.2	163.8
57.5°	47.5	57.5	78.5	103.0	127.0
60°	34.4	43.9	63.7	83.6	103.2
62.5°	22.9	31.6	50.9	66.2	79.4
65°	7.7	14.7	32.9	39.6	44.2
67.5°	3.9	4.7	17.3	18.2	19.7
70°	3.1	3.1	8.2	8.8	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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	0.8	1.4	1.8	1.8
90°	1.0	3.9	6.9	8.9	8.9
92.5°	13.6	58.2	100.9	38.8	31.8
95°	32.6	119.5	387.1	165.5	105.7
97.5°	53.1	132.5	590.8	455.2	321.2
100°	68.1	140.6	654.8	660.9	539.2
102.5°	82.4	150.2	671.4	819.9	708.3
105°	107.6	165.6	663.7	1010.8	943.2
107.5°	131.7	184.7	625.9	1104.2	1124.3
110°	149.1	197.4	597.5	1127.4	1197.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	164.9	211.7	569.1	1112.5	1218.3
115°	190.6	232.1	532.3	1060.0	1202.9
117.5°	215.1	253.3	509.0	986.3	1148.0
120°	230.1	266.8	498.7	931.2	1098.2
122.5°	243.5	280.2	491.6	882.8	1041.3
125°	262.7	299.4	482.9	817.0	957.0
127.5°	280.9	315.8	477.2	762.1	884.9
130°	290.4	326.1	474.1	729.4	841.4
132.5°	301.4	337.1	471.7	700.7	801.9
135°	317.0	351.8	469.1	660.7	747.6
137.5°	331.6	363.9	466.9	628.4	700.0
140°	342.7	372.6	466.1	606.9	671.6
142.5°	352.2	379.8	464.6	587.7	643.1
145°	366.4	391.5	462.2	562.9	606.4
147.5°	381.6	403.2	461.0	541.0	575.8
150°	391.1	410.4	460.2	529.0	556.0
152.5°	399.8	417.6	459.4	518.6	541.0
155°	414.8	428.3	459.2	506.0	520.5
157.5°	425.7	436.7	459.2	495.6	505.7
160°	433.6	442.2	459.2	490.0	497.8
162.5°	439.9	447.0	460.0	485.3	491.4
165°	448.4	454.2	461.2	480.0	482.9
167.5°	454.3	458.7	462.2	475.6	476.4
170°	458.2	461.1	462.2	474.1	474.1
172.5°	461.4	462.8	462.2	471.7	470.9
175°	464.2	465.1	462.2	468.1	467.1
177.5°	465.0	465.0	461.8	466.5	465.0
180°	464.2	464.2	464.2	464.2	464.2

(END OF REPORT)