

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: P518512

Luminaire Tested: **SQ4-BB-075U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518512
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-940-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

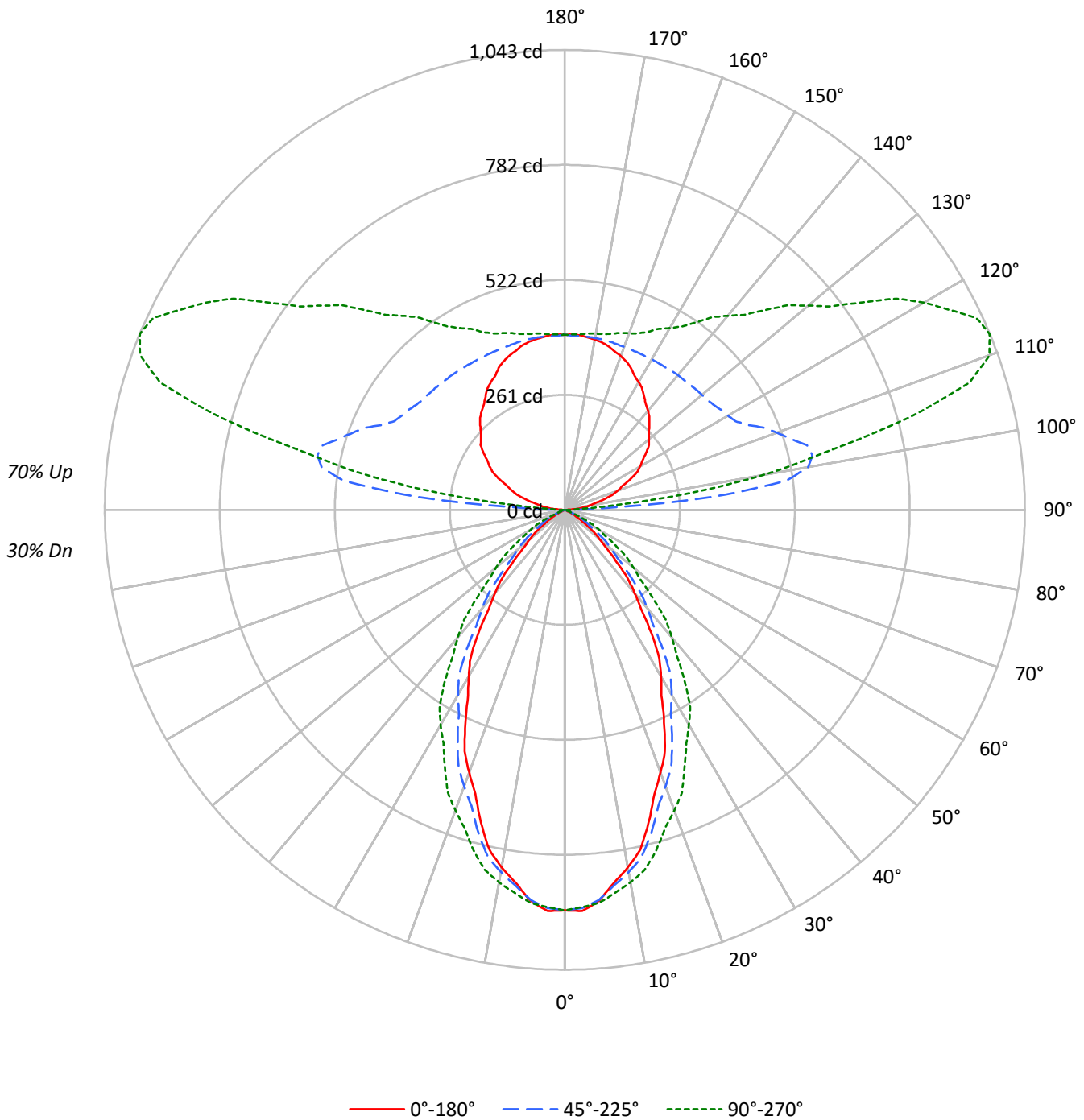
Lumens per Lamp: N/A
Luminaire Lumens: 3672.6 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	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°	8380	8380	8380
5°	8245	8225	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7123
25°	5422	5851	6545
30°	4644	5154	5997
35°	3851	4376	5335
40°	2959	3499	4547
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1629
65°	144	613	825
70°	70	189	237
75°	32	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	2.3
10°-20°	212.0	5.8
20°-30°	265.4	7.2
30°-40°	245.1	6.7
40°-50°	164.7	4.5
50°-60°	85.1	2.3
60°-70°	26.6	0.7
70°-80°	1.7	0.0
80°-90°	1.0	0.0
90°-100°	187.4	5.1
100°-110°	515.5	14.0
110°-120°	532.1	14.5
120°-130°	426.3	11.6
130°-140°	334.8	9.1
140°-150°	256.6	7.0
150°-160°	184.5	5.0
160°-170°	112.8	3.1
170°-180°	38.0	1.0
0°-30°	560.3	15.3
0°-40°	805.4	21.9
0°-60°	1055.2	28.7
0°-90°	1084.6	29.5
90°-120°	1235.0	33.6
90°-150°	2252.7	61.3
90°-180°	2588.0	70.5
0°-180°	3672.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	890	881	888	891	895	83
15°	734	732	758	783	800	205
25°	533	537	575	614	643	244
35°	342	350	388	434	474	212
45°	164	174	203	243	280	129
55°	59	69	89	114	140	55
65°	7	13	28	34	38	11
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	6	8	8	2
95°	28	102	331	142	90	29
105°	92	142	568	865	807	97
115°	163	199	456	907	1030	161
125°	225	256	413	699	819	201
135°	271	301	402	566	640	209
145°	314	335	396	482	519	197
155°	355	367	393	433	446	163
165°	384	389	395	411	413	108
175°	397	398	396	401	400	38
180°	397	397	397	397	397	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.3	908.3	908.3	908.3	908.3
2.5°	910.5	901.9	904.1	904.1	901.7
5°	890.3	881.3	888.1	891.3	894.7
7.5°	852.7	845.7	858.8	868.6	875.7
10°	823.5	817.5	834.5	847.9	857.8
12.5°	789.8	785.1	805.7	824.1	836.7
15°	734.3	731.7	757.6	783.0	799.8
17.5°	674.9	674.8	704.3	735.9	756.1
20°	634.1	635.4	667.1	701.9	725.5
22.5°	593.3	596.4	630.2	666.5	693.5
25°	532.6	536.9	574.8	614.1	642.9
27.5°	474.3	480.5	520.4	561.3	596.3
30°	435.9	443.2	483.8	526.8	562.9
32.5°	398.3	407.0	446.6	492.1	528.8
35°	341.9	350.5	388.5	434.2	473.7
37.5°	283.6	292.0	329.1	374.2	416.9
40°	245.7	255.1	290.5	334.1	377.5
42.5°	211.2	220.7	253.9	296.8	337.8
45°	163.9	173.8	203.0	242.6	280.4
47.5°	124.7	135.5	161.1	196.9	231.3
50°	101.5	112.3	137.5	169.1	202.1
52.5°	82.9	93.3	116.1	145.8	176.1
55°	58.9	68.8	88.8	114.0	140.2
57.5°	40.7	49.2	67.1	88.2	108.7
60°	29.4	37.6	54.5	71.6	88.3
62.5°	19.6	27.1	43.6	56.7	67.9
65°	6.6	12.6	28.1	33.9	37.8
67.5°	3.3	4.0	14.8	15.6	16.9
70°	2.6	2.6	7.0	7.5	8.8
72.5°	1.9	1.9	2.8	3.6	3.9
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.4	0.0	0.0
80°	0.4	0.4	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	1.2	1.5	1.5
90°	0.8	3.3	5.9	7.6	7.6
92.5°	11.7	49.8	86.4	33.2	27.2
95°	27.9	102.3	331.3	141.7	90.4
97.5°	45.5	113.4	505.6	389.6	274.9
100°	58.3	120.3	560.4	565.6	461.5
102.5°	70.5	128.5	574.6	701.8	606.2
105°	92.1	141.7	568.0	865.1	807.2
107.5°	112.8	158.0	535.7	945.1	962.2
110°	127.6	169.0	511.4	964.9	1024.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.2	181.2	487.0	952.1	1042.7
115°	163.1	198.7	455.6	907.2	1029.5
117.5°	184.1	216.8	435.6	844.2	982.5
120°	196.9	228.4	426.9	796.9	939.9
122.5°	208.4	239.8	420.8	755.5	891.2
125°	224.8	256.2	413.3	699.2	819.1
127.5°	240.4	270.3	408.4	652.2	757.4
130°	248.5	279.1	405.7	624.3	720.2
132.5°	258.0	288.6	403.7	599.7	686.4
135°	271.3	301.1	401.5	565.5	639.9
137.5°	283.8	311.4	399.6	537.8	599.1
140°	293.3	318.9	399.0	519.4	574.8
142.5°	301.4	325.1	397.6	503.0	550.4
145°	313.6	335.1	395.6	481.8	519.0
147.5°	326.6	345.1	394.6	463.0	492.8
150°	334.7	351.3	393.9	452.7	475.9
152.5°	342.2	357.4	393.2	443.9	463.0
155°	355.0	366.6	393.0	433.1	445.5
157.5°	364.3	373.7	393.0	424.2	432.8
160°	371.1	378.5	393.0	419.4	426.0
162.5°	376.5	382.6	393.7	415.3	420.6
165°	383.7	388.7	394.7	410.9	413.3
167.5°	388.8	392.6	395.6	407.1	407.8
170°	392.2	394.7	395.6	405.7	405.7
172.5°	394.9	396.1	395.6	403.7	403.0
175°	397.3	398.1	395.6	400.6	399.8
177.5°	397.9	397.9	395.2	399.3	397.9
180°	397.3	397.3	397.3	397.3	397.3

(END OF REPORT)