

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: P518492

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518492
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

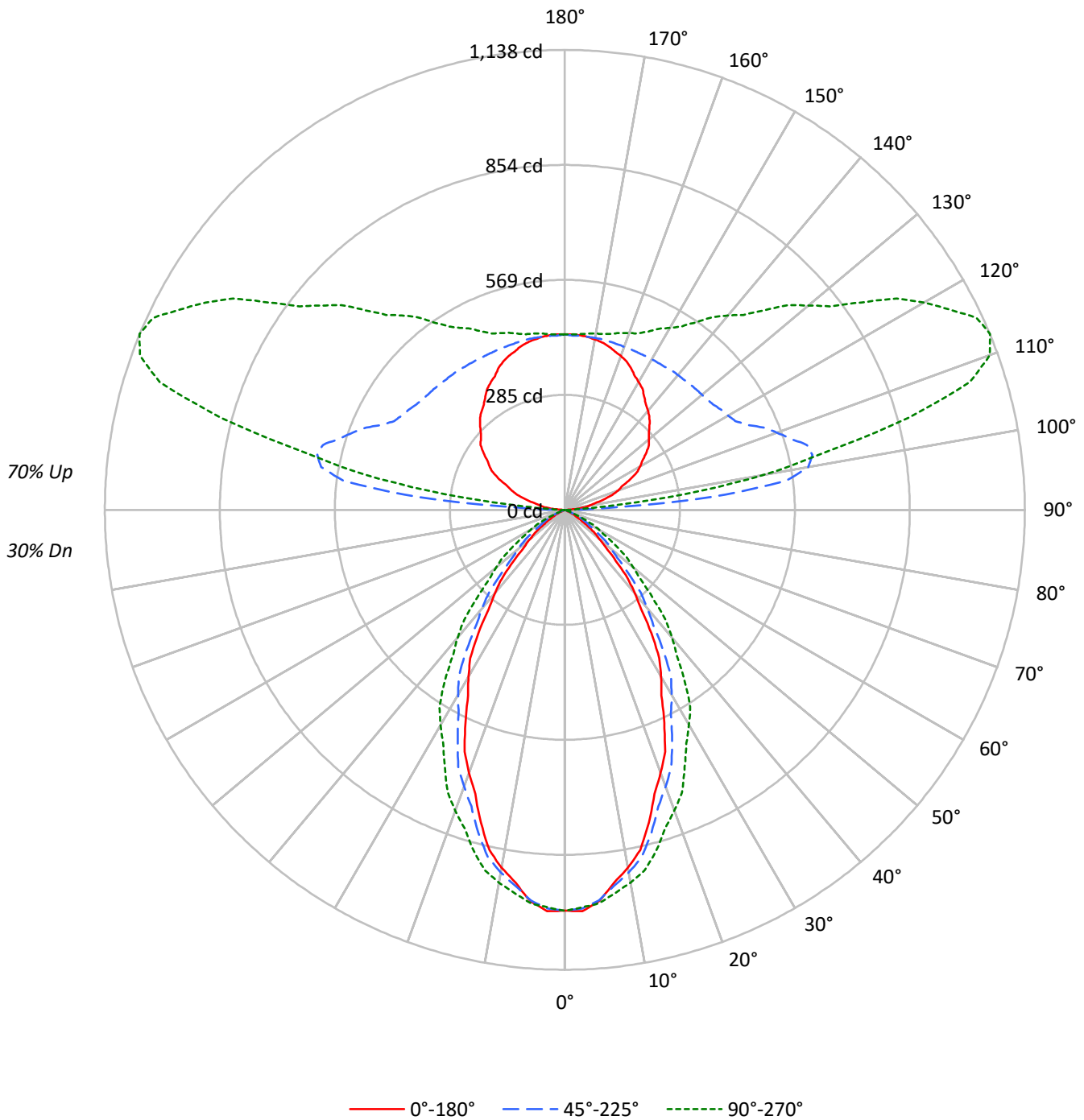
Lumens per Lamp: N/A
Luminaire Lumens: 4010.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7152	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4778	5825
40°	3230	3820	4965
45°	2336	2893	3994
50°	1590	2156	3168
55°	1034	1559	2463
60°	592	1098	1779
65°	157	670	902
70°	78	208	259
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	2.3
10°-20°	231.5	5.8
20°-30°	289.8	7.2
30°-40°	267.7	6.7
40°-50°	179.8	4.5
50°-60°	92.9	2.3
60°-70°	29.1	0.7
70°-80°	1.8	0.0
80°-90°	1.1	0.0
90°-100°	204.6	5.1
100°-110°	562.9	14.0
110°-120°	581.0	14.5
120°-130°	465.5	11.6
130°-140°	365.6	9.1
140°-150°	280.2	7.0
150°-160°	201.4	5.0
160°-170°	123.2	3.1
170°-180°	41.5	1.0
0°-30°	611.8	15.3
0°-40°	879.4	21.9
0°-60°	1152.1	28.7
0°-90°	1184.2	29.5
90°-120°	1348.4	33.6
90°-150°	2459.7	61.3
90°-180°	2826.0	70.5
0°-180°	4010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	972	962	970	973	977	90
15°	802	799	827	855	873	223
25°	582	586	628	670	702	267
35°	373	383	424	474	517	231
45°	179	190	222	265	306	141
55°	64	75	97	124	153	60
65°	7	14	31	37	41	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	4	6	8	8	2
95°	30	112	362	155	99	32
105°	101	155	620	944	881	106
115°	178	217	497	990	1124	176
125°	246	280	451	763	894	219
135°	296	329	438	617	699	229
145°	342	366	432	526	567	215
155°	388	400	429	473	486	178
165°	419	424	431	449	451	118
175°	434	435	432	437	436	41
180°	434	434	434	434	434	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.8	991.8	991.8	991.8	991.8
2.5°	994.1	984.7	987.2	987.1	984.5
5°	972.1	962.3	969.7	973.2	976.9
7.5°	931.0	923.3	937.7	948.4	956.2
10°	899.2	892.6	911.2	925.8	936.6
12.5°	862.3	857.3	879.7	899.8	913.6
15°	801.8	799.0	827.2	855.0	873.3
17.5°	736.9	736.8	769.1	803.5	825.6
20°	692.4	693.8	728.4	766.4	792.2
22.5°	647.8	651.1	688.1	727.7	757.2
25°	581.5	586.2	627.6	670.5	702.0
27.5°	517.8	524.7	568.2	612.8	651.1
30°	476.0	484.0	528.3	575.2	614.6
32.5°	434.9	444.4	487.6	537.3	577.4
35°	373.3	382.7	424.2	474.1	517.2
37.5°	309.7	318.9	359.4	408.5	455.2
40°	268.2	278.5	317.2	364.8	412.2
42.5°	230.6	240.9	277.2	324.0	368.8
45°	179.0	189.8	221.7	264.8	306.1
47.5°	136.2	147.9	175.9	214.9	252.6
50°	110.8	122.6	150.2	184.6	220.7
52.5°	90.5	101.8	126.8	159.2	192.3
55°	64.3	75.1	96.9	124.4	153.1
57.5°	44.4	53.7	73.3	96.3	118.7
60°	32.1	41.1	59.5	78.1	96.4
62.5°	21.4	29.6	47.6	61.9	74.2
65°	7.2	13.8	30.7	37.0	41.3
67.5°	3.6	4.4	16.1	17.0	18.4
70°	2.9	2.9	7.7	8.2	9.6
72.5°	2.1	2.1	3.1	3.9	4.2
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	0.7	1.3	1.7	1.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	12.7	54.4	94.3	36.2	29.7
95°	30.5	111.7	361.8	154.7	98.8
97.5°	49.7	123.8	552.1	425.4	300.1
100°	63.7	131.4	611.9	617.6	503.9
102.5°	77.0	140.3	627.4	766.2	661.9
105°	100.6	154.7	620.2	944.5	881.4
107.5°	123.1	172.6	584.9	1031.9	1050.6
110°	139.4	184.5	558.4	1053.6	1118.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.1	197.8	531.8	1039.6	1138.5
115°	178.1	216.9	497.4	990.5	1124.1
117.5°	201.0	236.7	475.7	921.7	1072.8
120°	215.0	249.3	466.1	870.2	1026.3
122.5°	227.6	261.9	459.4	824.9	973.1
125°	245.5	279.8	451.3	763.4	894.3
127.5°	262.5	295.1	445.9	712.1	826.9
130°	271.3	304.7	443.0	681.6	786.3
132.5°	281.7	315.1	440.8	654.8	749.4
135°	296.3	328.7	438.4	617.4	698.6
137.5°	309.9	340.1	436.3	587.2	654.2
140°	320.2	348.2	435.6	567.1	627.6
142.5°	329.1	354.9	434.1	549.2	601.0
145°	342.4	365.9	431.9	526.1	566.7
147.5°	356.6	376.8	430.8	505.6	538.1
150°	365.5	383.5	430.1	494.3	519.6
152.5°	373.6	390.2	429.3	484.6	505.6
155°	387.6	400.3	429.2	472.8	486.4
157.5°	397.8	408.1	429.2	463.1	472.5
160°	405.2	413.3	429.2	457.9	465.1
162.5°	411.1	417.7	429.9	453.5	459.2
165°	419.0	424.4	431.0	448.6	451.3
167.5°	424.5	428.7	431.9	444.5	445.2
170°	428.2	430.9	431.9	443.0	443.0
172.5°	431.2	432.4	431.9	440.8	440.0
175°	433.8	434.7	431.9	437.4	436.5
177.5°	434.5	434.5	431.6	435.9	434.5
180°	433.8	433.8	433.8	433.8	433.8

(END OF REPORT)