

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: P518708

Luminaire Tested: **SQ4-BB-100U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518708
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

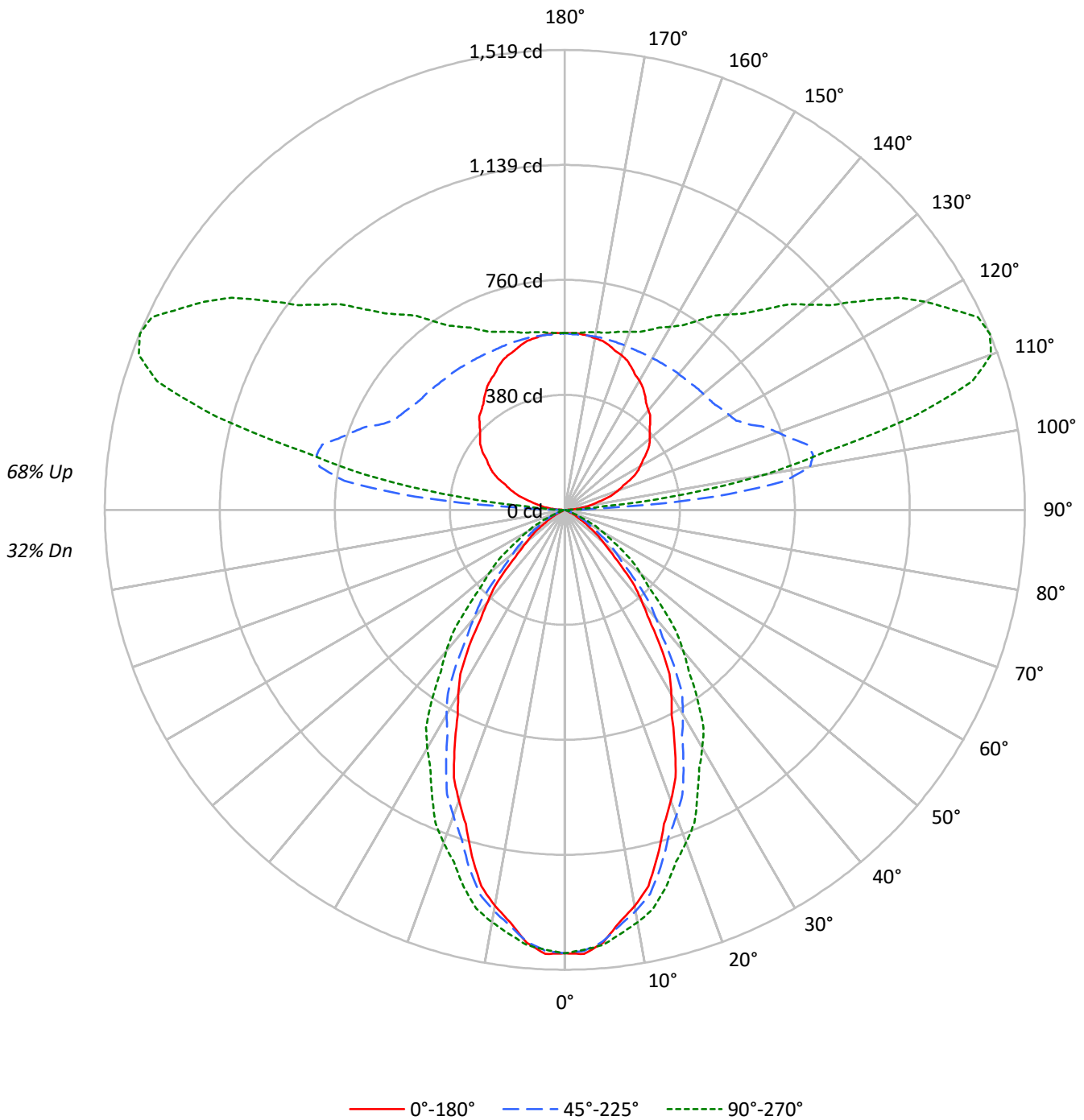
Lumens per Lamp: N/A
Luminaire Lumens: 5539.4 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.1
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

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	2.4
10°-20°	341.8	6.2
20°-30°	428.0	7.7
30°-40°	395.3	7.1
40°-50°	265.6	4.8
50°-60°	137.2	2.5
60°-70°	43.0	0.8
70°-80°	2.7	0.0
80°-90°	1.3	0.0
90°-100°	273.2	4.9
100°-110°	754.3	13.6
110°-120°	777.9	14.0
120°-130°	625.1	11.3
130°-140°	491.3	8.9
140°-150°	376.8	6.8
150°-160°	270.8	4.9
160°-170°	165.6	3.0
170°-180°	55.8	1.0
0°-30°	903.5	16.3
0°-40°	1298.8	23.4
0°-60°	1701.6	30.7
0°-90°	1748.5	31.6
90°-120°	1805.5	32.6
90°-150°	3298.7	59.5
90°-180°	3791.0	68.4
0°-180°	5539.4	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°	2	4	8	8	9	3
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	



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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°	0.4	0.7	1.5	1.7	1.9
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)