

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: P518423

Luminaire Tested: **SQ4-BB-050U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518423
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-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

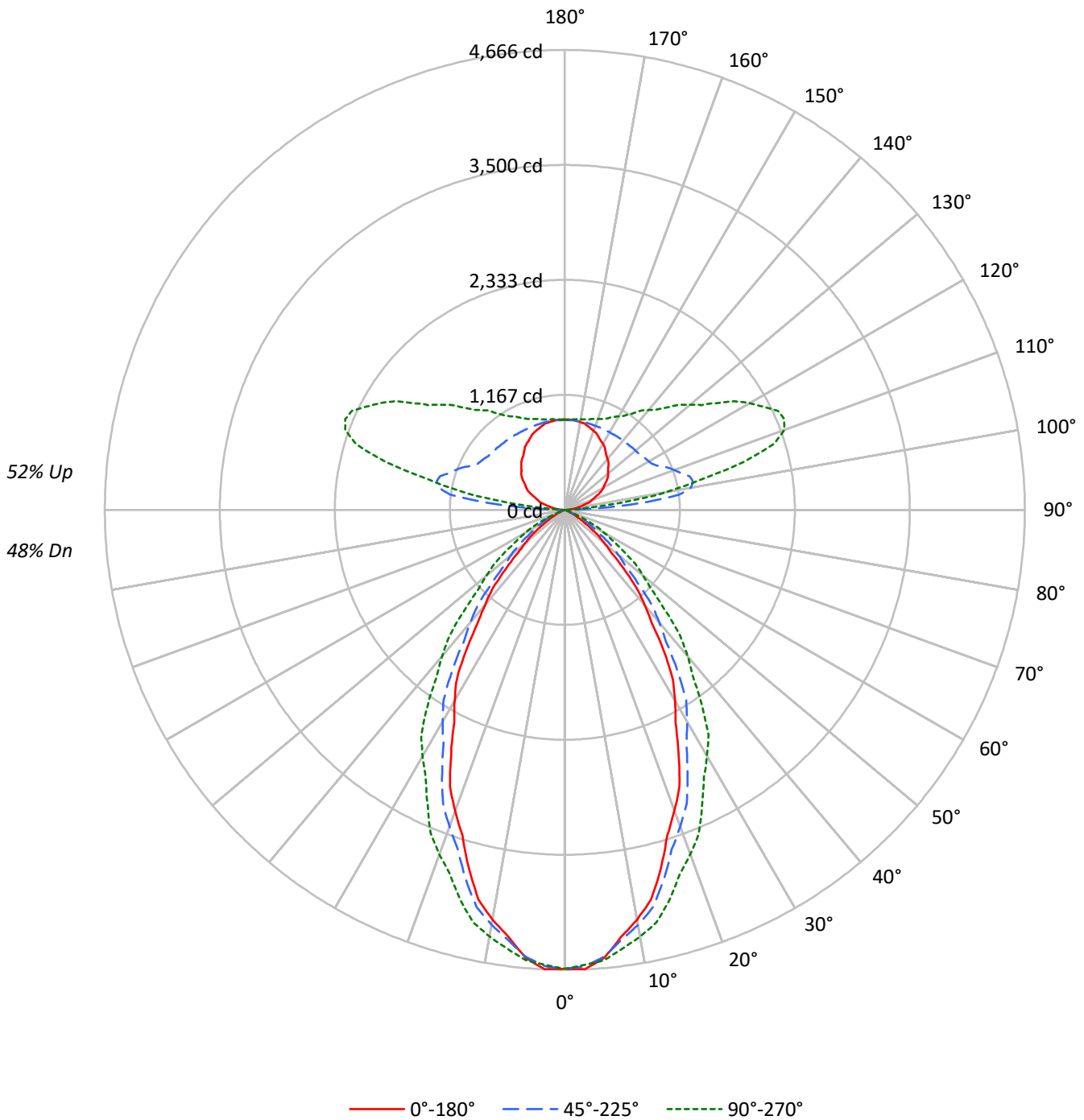
Lumens per Lamp: N/A
Luminaire Lumens: 11532.8 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 105.6
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°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4525	6249
50°	2489	3373	4957
55°	1618	2440	3852
60°	928	1718	2784
65°	246	1049	1410
70°	121	324	405
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.9	3.7
10°-20°	1086.5	9.4
20°-30°	1360.2	11.8
30°-40°	1256.4	10.9
40°-50°	844.2	7.3
50°-60°	436.0	3.8
60°-70°	136.6	1.2
70°-80°	8.6	0.1
80°-90°	3.7	0.0
90°-100°	439.4	3.8
100°-110°	1193.5	10.3
110°-120°	1227.1	10.6
120°-130°	981.1	8.5
130°-140°	770.9	6.7
140°-150°	591.1	5.1
150°-160°	425.1	3.7
160°-170°	260.0	2.3
170°-180°	87.6	0.8
0°-30°	2871.5	24.9
0°-40°	4127.9	35.8
0°-60°	5408.1	46.9
0°-90°	5557.0	48.2
90°-120°	2860.0	24.8
90°-150°	5203.1	45.1
90°-180°	5976.0	51.8
0°-180°	11532.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4655	4655	4655	4655	4655	
5°	4563	4517	4552	4568	4586	423
15°	3764	3750	3883	4013	4099	1048
25°	2730	2752	2946	3148	3295	1251
35°	1752	1796	1991	2225	2428	1085
45°	840	891	1040	1243	1437	660
55°	302	352	455	584	718	282
65°	34	65	144	174	194	57
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	3	12	21	26	26	5
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4655.4	4655.4	4655.4	4655.4	4655.4
2.5°	4666.2	4622.2	4633.8	4633.5	4621.2
5°	4563.1	4516.8	4551.8	4568.0	4585.6
7.5°	4370.3	4334.2	4401.4	4451.7	4488.3
10°	4220.7	4189.9	4277.0	4345.8	4396.4
12.5°	4047.8	4024.0	4129.3	4223.5	4288.3
15°	3763.5	3750.3	3882.9	4013.2	4099.1
17.5°	3459.0	3458.6	3609.9	3771.7	3875.2
20°	3250.0	3256.6	3418.9	3597.4	3718.5
22.5°	3041.0	3056.4	3229.7	3415.8	3554.5
25°	2729.7	2751.8	2946.0	3147.5	3295.0
27.5°	2430.6	2462.8	2667.1	2876.6	3056.3
30°	2234.2	2271.7	2479.7	2700.2	2885.1
32.5°	2041.4	2085.9	2288.7	2521.9	2710.4
35°	1752.3	1796.3	1991.0	2225.3	2427.9
37.5°	1453.6	1496.8	1686.9	1917.6	2136.5
40°	1259.0	1307.5	1488.7	1712.3	1934.7
42.5°	1082.4	1130.9	1301.4	1521.0	1731.1
45°	840.1	890.7	1040.5	1243.1	1436.9
47.5°	639.2	694.2	825.7	1009.0	1185.6
50°	520.3	575.3	705.0	866.5	1036.0
52.5°	424.8	478.1	595.0	747.2	902.7
55°	301.8	352.5	455.0	584.1	718.5
57.5°	208.6	252.2	344.1	451.9	557.2
60°	150.9	192.7	279.3	366.8	452.7
62.5°	100.5	138.8	223.4	290.5	348.2
65°	33.8	64.6	144.1	173.9	193.7
67.5°	17.1	20.6	75.7	79.9	86.5
70°	13.5	13.5	36.0	38.4	45.0
72.5°	9.9	9.9	14.4	18.5	19.8
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	2.3	4.1	5.3	5.3
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)