

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: P518321

Luminaire Tested: **SQ4-BB-025U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518321
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

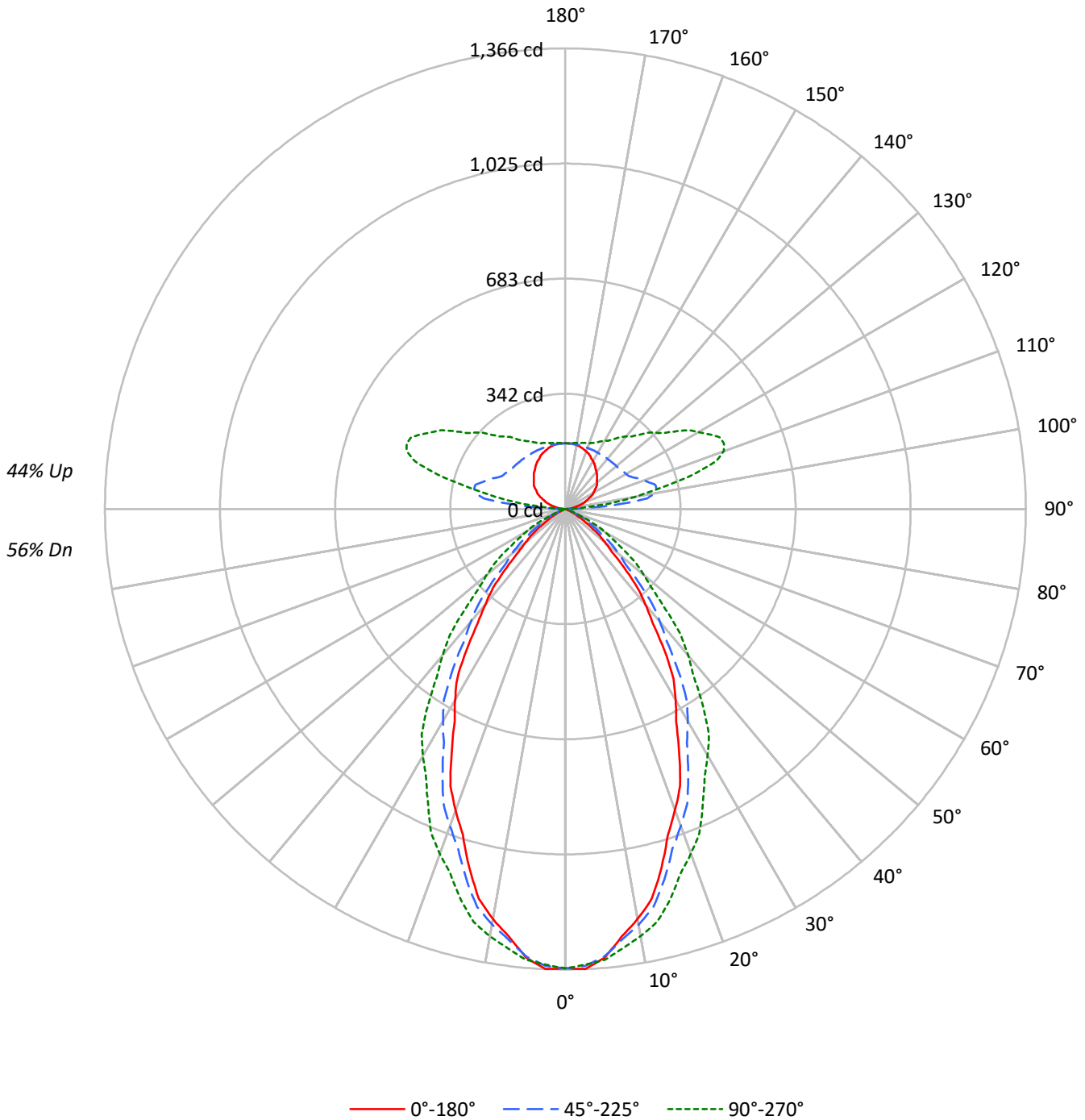
Lumens per Lamp: N/A
Luminaire Lumens: 2891.6 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.9
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																	
RC	80									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	50	30	10	50	30	10	50	30	10	0															
RCR																																													
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56																											
1	101	98	94	92	94	91	88	86	79	77	75	68	67	65	58	57	56	51																											
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	53	52	50	46																											
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	45	42																											
4	81	71	65	59	75	67	61	57	59	55	51	52	49	46	45	43	41	38																											
5	75	65	58	52	70	61	55	50	54	50	46	48	44	41	42	39	37	34																											
6	70	59	52	47	65	56	50	45	50	45	41	44	40	38	39	36	34	31																											
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	29																											
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27																											
9	57	46	39	35	54	44	38	33	40	35	31	36	32	29	32	29	26	25																											
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23																											

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6549	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3850	4375	5336
40°	2959	3498	4546
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	544	1005	1630
65°	144	614	825
70°	72	189	237
75°	31	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	4.3
10°-20°	318.0	11.0
20°-30°	398.1	13.8
30°-40°	367.7	12.7
40°-50°	247.1	8.5
50°-60°	127.6	4.4
60°-70°	40.0	1.4
70°-80°	2.5	0.1
80°-90°	1.1	0.0
90°-100°	95.1	3.3
100°-110°	250.1	8.6
110°-120°	259.3	9.0
120°-130°	208.0	7.2
130°-140°	163.2	5.6
140°-150°	125.3	4.3
150°-160°	90.2	3.1
160°-170°	55.2	1.9
170°-180°	18.6	0.6
0°-30°	840.4	29.1
0°-40°	1208.1	41.8
0°-60°	1582.8	54.7
0°-90°	1626.4	56.2
90°-120°	604.6	20.9
90°-150°	1101.1	38.1
90°-180°	1265.0	43.7
0°-180°	2891.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1336	1322	1332	1337	1342	124
15°	1102	1098	1136	1175	1200	307
25°	799	805	862	921	964	366
35°	513	526	583	651	711	318
45°	246	261	304	364	421	193
55°	88	103	133	171	210	82
65°	10	19	42	51	57	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	10	5	5	1
95°	12	49	164	84	58	14
105°	45	68	276	420	392	48
115°	80	97	222	442	504	79
125°	111	125	201	340	402	99
135°	133	146	195	275	312	103
145°	154	164	193	234	253	96
155°	174	179	193	212	218	80
165°	188	190	193	200	203	53
175°	195	195	194	196	196	19
180°	195	195	195	195	195	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.5	1362.5	1362.5	1362.5	1362.5
2.5°	1365.7	1352.8	1356.2	1356.1	1352.5
5°	1335.5	1322.0	1332.2	1336.9	1342.1
7.5°	1279.1	1268.5	1288.2	1302.9	1313.6
10°	1235.3	1226.3	1251.8	1271.9	1286.7
12.5°	1184.7	1177.7	1208.5	1236.1	1255.1
15°	1101.5	1097.6	1136.4	1174.6	1199.7
17.5°	1012.4	1012.2	1056.5	1103.9	1134.2
20°	951.2	953.1	1000.6	1052.8	1088.3
22.5°	890.0	894.5	945.3	999.7	1040.3
25°	798.9	805.4	862.2	921.2	964.4
27.5°	711.4	720.8	780.6	841.9	894.5
30°	653.9	664.9	725.8	790.3	844.4
32.5°	597.5	610.5	669.9	738.1	793.2
35°	512.8	525.7	582.7	651.3	710.6
37.5°	425.4	438.1	493.7	561.2	625.3
40°	368.5	382.7	435.7	501.1	566.2
42.5°	316.8	331.0	380.9	445.2	506.6
45°	245.9	260.7	304.5	363.8	420.6
47.5°	187.1	203.2	241.7	295.3	347.0
50°	152.3	168.4	206.3	253.6	303.2
52.5°	124.3	139.9	174.2	218.7	264.2
55°	88.3	103.2	133.2	171.0	210.3
57.5°	61.0	73.8	100.7	132.3	163.1
60°	44.2	56.4	81.7	107.4	132.5
62.5°	29.4	40.6	65.4	85.0	101.9
65°	9.9	18.9	42.2	50.9	56.7
67.5°	5.0	6.0	22.1	23.4	25.3
70°	4.0	4.0	10.5	11.2	13.2
72.5°	2.9	2.9	4.2	5.4	5.8
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	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°	0.3	0.7	2.0	1.0	1.0
90°	1.3	3.7	10.0	5.0	5.0
92.5°	5.3	25.3	56.1	24.8	16.0
95°	12.5	49.2	163.9	84.5	57.6
97.5°	21.8	54.1	245.2	195.0	143.6
100°	28.8	58.1	270.3	273.9	212.7
102.5°	34.8	62.2	277.3	341.1	288.8
105°	45.0	68.3	276.5	419.8	391.6
107.5°	55.6	77.1	260.8	460.6	467.5
110°	62.6	82.1	247.7	471.1	500.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	69.6	88.2	235.7	464.5	509.5
115°	80.1	97.2	221.5	441.8	504.2
117.5°	90.3	106.0	211.7	410.5	479.7
120°	96.3	111.0	207.7	389.4	456.7
122.5°	102.3	117.0	204.7	368.4	434.7
125°	111.4	124.8	201.4	340.5	401.6
127.5°	118.6	132.3	198.7	318.0	369.6
130°	122.6	137.3	197.7	303.9	351.6
132.5°	126.6	141.3	196.7	291.8	334.6
135°	132.6	146.1	195.2	274.8	311.6
137.5°	138.9	152.1	194.9	262.2	292.3
140°	143.9	156.1	193.9	252.1	280.3
142.5°	147.9	159.1	193.9	245.0	269.3
145°	153.9	163.7	192.7	234.4	252.7
147.5°	159.9	169.4	192.7	225.6	240.7
150°	163.9	172.5	192.7	220.5	232.7
152.5°	167.9	174.5	192.7	216.4	225.7
155°	173.9	178.8	192.7	211.6	217.7
157.5°	178.4	183.1	192.7	207.3	211.7
160°	181.4	185.1	192.7	205.3	207.7
162.5°	184.4	187.1	192.7	203.3	205.7
165°	187.7	190.1	192.7	200.2	202.7
167.5°	190.7	191.9	193.9	199.0	199.9
170°	192.7	193.9	193.9	198.9	198.9
172.5°	193.7	193.9	193.9	197.9	196.9
175°	195.2	195.2	193.9	196.4	196.4
177.5°	195.2	195.2	194.2	196.2	195.2
180°	195.2	195.2	195.2	195.2	195.2

(END OF REPORT)