

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: P518320

Luminaire Tested: **SQ4-BB-025U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518320
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-4
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

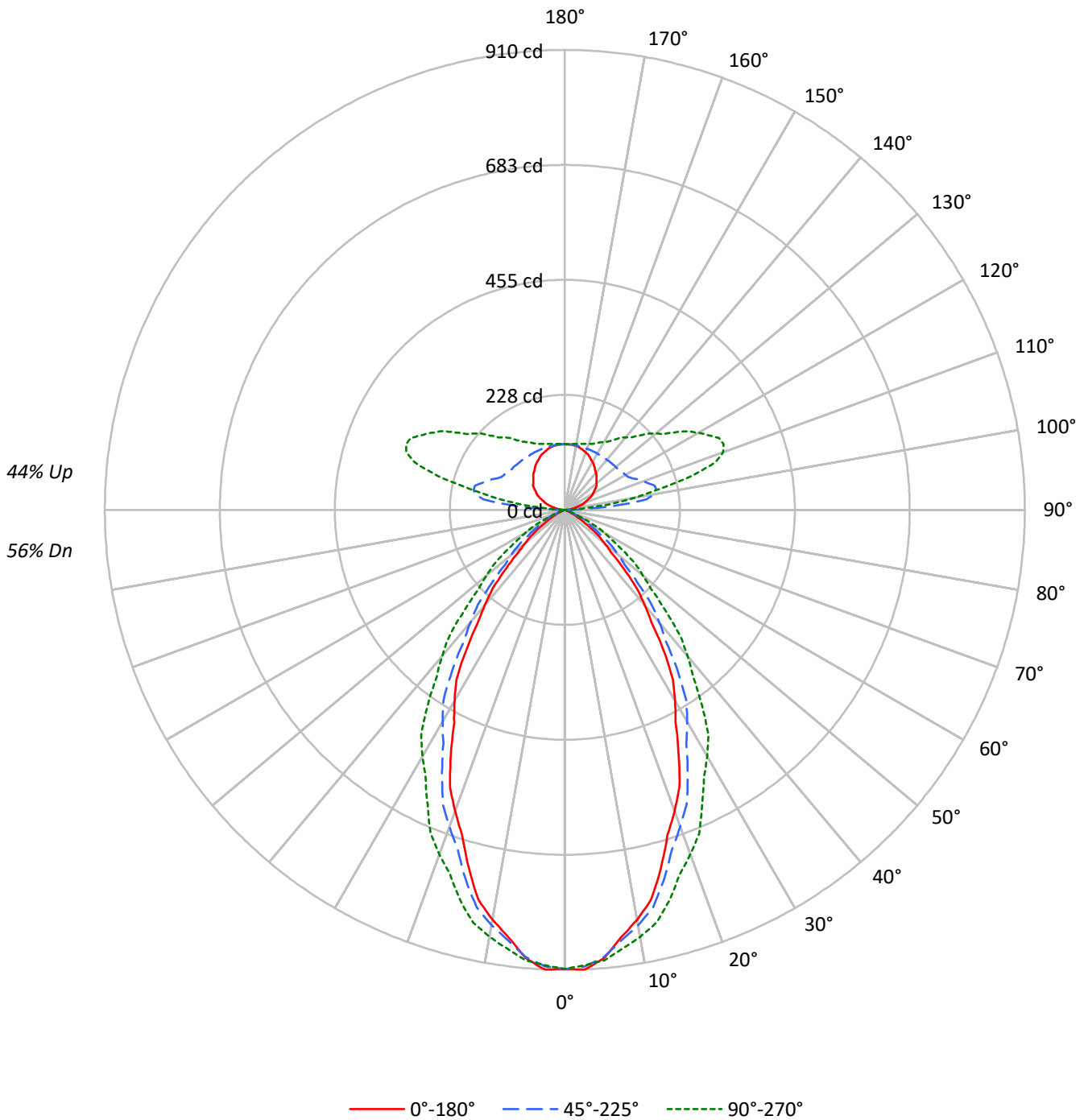
Lumens per Lamp: N/A
Luminaire Lumens: 1927.7 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 22.1
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
RC	80									50				30				10
RW	70	50	30	10	70	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°	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	4.3
10°-20°	212.0	11.0
20°-30°	265.4	13.8
30°-40°	245.1	12.7
40°-50°	164.7	8.5
50°-60°	85.1	4.4
60°-70°	26.6	1.4
70°-80°	1.7	0.1
80°-90°	0.7	0.0
90°-100°	63.4	3.3
100°-110°	166.7	8.6
110°-120°	172.9	9.0
120°-130°	138.7	7.2
130°-140°	108.8	5.6
140°-150°	83.5	4.3
150°-160°	60.2	3.1
160°-170°	36.8	1.9
170°-180°	12.4	0.6
0°-30°	560.3	29.1
0°-40°	805.4	41.8
0°-60°	1055.2	54.7
0°-90°	1084.3	56.2
90°-120°	403.0	20.9
90°-150°	734.0	38.1
90°-180°	843.0	43.7
0°-180°	1927.7	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	2	7	3	3	1
95°	8	33	109	56	38	9
105°	30	46	184	280	261	32
115°	53	65	148	295	336	53
125°	74	83	134	227	268	66
135°	88	97	130	183	208	68
145°	103	109	128	156	168	64
155°	116	119	128	141	145	53
165°	125	127	128	134	135	35
175°	130	130	129	131	131	12
180°	130	130	130	130	130	

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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	0.5	1.3	0.7	0.7
90°	0.8	2.5	6.7	3.3	3.3
92.5°	3.5	16.9	37.4	16.5	10.7
95°	8.3	32.8	109.3	56.3	38.4
97.5°	14.5	36.0	163.5	130.0	95.8
100°	19.2	38.8	180.2	182.6	141.8
102.5°	23.2	41.5	184.8	227.4	192.5
105°	30.0	45.5	184.3	279.8	261.1
107.5°	37.0	51.4	173.8	307.1	311.6
110°	41.7	54.8	165.2	314.1	333.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	46.4	58.8	157.2	309.6	339.7
115°	53.4	64.8	147.6	294.6	336.2
117.5°	60.2	70.7	141.1	273.6	319.8
120°	64.2	74.0	138.5	259.6	304.5
122.5°	68.2	78.0	136.5	245.6	289.8
125°	74.2	83.2	134.3	227.0	267.8
127.5°	79.1	88.2	132.5	212.0	246.4
130°	81.7	91.5	131.8	202.6	234.4
132.5°	84.4	94.2	131.1	194.5	223.0
135°	88.4	97.4	130.1	183.2	207.7
137.5°	92.6	101.4	130.0	174.8	194.9
140°	95.9	104.1	129.3	168.1	186.8
142.5°	98.6	106.1	129.3	163.4	179.5
145°	102.6	109.1	128.5	156.3	168.5
147.5°	106.6	113.0	128.5	150.4	160.5
150°	109.3	115.0	128.5	147.0	155.1
152.5°	111.9	116.3	128.5	144.3	150.5
155°	115.9	119.2	128.5	141.1	145.1
157.5°	118.9	122.0	128.5	138.2	141.1
160°	120.9	123.4	128.5	136.8	138.5
162.5°	123.0	124.7	128.5	135.5	137.1
165°	125.1	126.8	128.5	133.5	135.1
167.5°	127.1	127.9	129.3	132.6	133.3
170°	128.5	129.3	129.3	132.6	132.6
172.5°	129.1	129.3	129.3	131.9	131.3
175°	130.1	130.1	129.3	131.0	131.0
177.5°	130.1	130.1	129.5	130.8	130.1
180°	130.1	130.1	130.1	130.1	130.1

(END OF REPORT)