

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: P518308

Luminaire Tested: **SQ4-BB-025U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518308
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-840-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

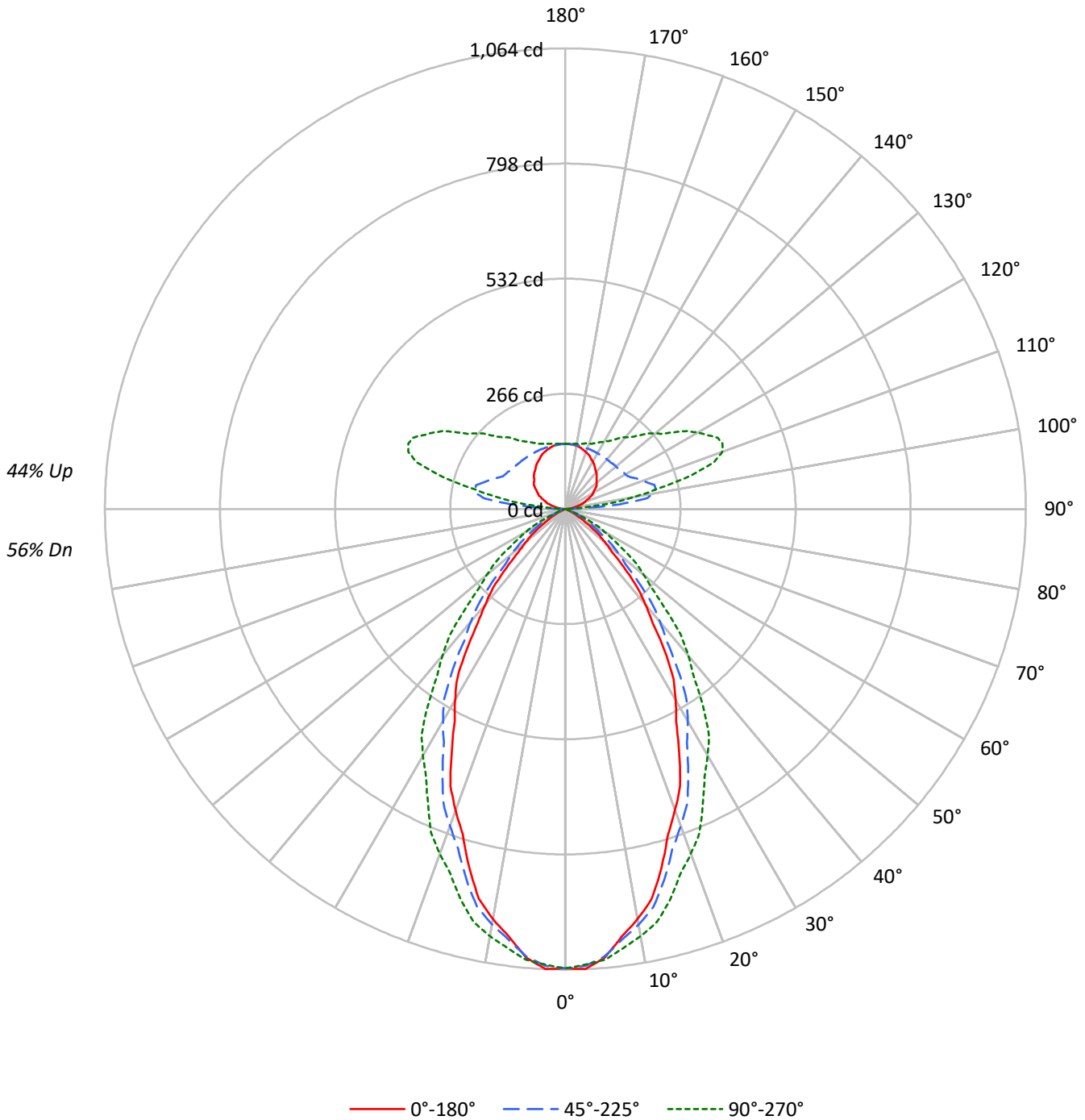
Lumens per Lamp: N/A
Luminaire Lumens: 2242.5 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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				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	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	89	86	79	77	76	68	67	66	58	57	56	52
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	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	34	40	35	31	36	32	29	32	29	27	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°	9792	9792	9792
5°	9635	9611	9682
10°	9014	9134	9390
15°	8195	8455	8926
20°	7274	7652	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4500	5112	6234
40°	3457	4088	5313
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1668	2635
60°	635	1175	1904
65°	168	718	965
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	4.3
10°-20°	247.7	11.0
20°-30°	310.1	13.8
30°-40°	286.4	12.8
40°-50°	192.5	8.6
50°-60°	99.4	4.4
60°-70°	31.1	1.4
70°-80°	2.0	0.1
80°-90°	0.8	0.0
90°-100°	73.4	3.3
100°-110°	192.9	8.6
110°-120°	200.0	8.9
120°-130°	160.4	7.2
130°-140°	125.9	5.6
140°-150°	96.6	4.3
150°-160°	69.6	3.1
160°-170°	42.6	1.9
170°-180°	14.4	0.6
0°-30°	654.6	29.2
0°-40°	941.1	42.0
0°-60°	1232.9	55.0
0°-90°	1266.9	56.5
90°-120°	466.2	20.8
90°-150°	849.1	37.9
90°-180°	976.0	43.5
0°-180°	2242.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1040	1030	1038	1041	1045	96
15°	858	855	885	915	934	239
25°	622	627	672	718	751	285
35°	400	410	454	507	554	247
45°	192	203	237	283	328	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	8	4	4	1
95°	10	38	126	65	44	11
105°	35	53	213	324	302	37
115°	62	75	171	341	389	61
125°	86	96	155	263	310	76
135°	102	113	150	212	240	79
145°	119	126	149	181	195	74
155°	134	138	149	163	168	62
165°	145	147	149	154	156	41
175°	150	150	150	152	152	14
180°	150	150	150	150	150	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.3	1061.3	1061.3	1061.3	1061.3
2.5°	1063.8	1053.7	1056.4	1056.3	1053.5
5°	1040.3	1029.7	1037.7	1041.4	1045.4
7.5°	996.3	988.1	1003.4	1014.9	1023.2
10°	962.2	955.2	975.0	990.7	1002.3
12.5°	922.8	917.4	941.4	962.9	977.6
15°	858.0	855.0	885.2	914.9	934.5
17.5°	788.6	788.5	823.0	859.9	883.4
20°	740.9	742.4	779.4	820.1	847.7
22.5°	693.3	696.8	736.3	778.7	810.3
25°	622.3	627.3	671.6	717.5	751.2
27.5°	554.1	561.4	608.0	655.8	696.8
30°	509.3	517.9	565.3	615.6	657.7
32.5°	465.4	475.5	521.8	574.9	617.9
35°	399.5	409.5	453.9	507.3	553.5
37.5°	331.4	341.2	384.6	437.2	487.1
40°	287.0	298.1	339.4	390.4	441.1
42.5°	246.8	257.8	296.7	346.7	394.6
45°	191.5	203.1	237.2	283.4	327.6
47.5°	145.7	158.3	188.2	230.0	270.3
50°	118.6	131.2	160.7	197.5	236.2
52.5°	96.8	109.0	135.7	170.3	205.8
55°	68.8	80.3	103.7	133.2	163.8
57.5°	47.5	57.5	78.5	103.0	127.0
60°	34.4	43.9	63.7	83.6	103.2
62.5°	22.9	31.6	50.9	66.2	79.4
65°	7.7	14.7	32.9	39.6	44.2
67.5°	3.9	4.7	17.3	18.2	19.7
70°	3.1	3.1	8.2	8.8	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
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	0.6	1.5	0.8	0.8
90°	1.0	2.9	7.7	3.9	3.9
92.5°	4.1	19.5	43.2	19.1	12.4
95°	9.6	38.0	126.4	65.1	44.4
97.5°	16.8	41.7	189.1	150.4	110.8
100°	22.2	44.8	208.4	211.2	164.0
102.5°	26.8	48.0	213.8	263.1	222.7
105°	34.7	52.7	213.2	323.7	302.0
107.5°	42.8	59.4	201.1	355.2	360.5
110°	48.2	63.3	191.1	363.3	386.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.6	68.0	181.8	358.2	392.9
115°	61.8	75.0	170.8	340.7	388.9
117.5°	69.7	81.7	163.3	316.5	369.9
120°	74.3	85.6	160.2	300.3	352.2
122.5°	78.9	90.3	157.9	284.1	335.2
125°	85.9	96.3	155.3	262.6	309.7
127.5°	91.5	102.0	153.2	245.2	285.0
130°	94.6	105.9	152.5	234.3	271.1
132.5°	97.6	109.0	151.7	225.0	258.0
135°	102.3	112.7	150.5	212.0	240.3
137.5°	107.1	117.3	150.3	202.2	225.4
140°	111.0	120.4	149.6	194.4	216.1
142.5°	114.1	122.7	149.6	189.0	207.6
145°	118.7	126.2	148.6	180.8	194.9
147.5°	123.3	130.7	148.6	173.9	185.6
150°	126.4	133.0	148.6	170.0	179.5
152.5°	129.5	134.6	148.6	166.9	174.1
155°	134.1	137.9	148.6	163.2	167.9
157.5°	137.6	141.2	148.6	159.9	163.3
160°	139.9	142.7	148.6	158.3	160.2
162.5°	142.2	144.3	148.6	156.7	158.6
165°	144.7	146.6	148.6	154.4	156.3
167.5°	147.1	148.0	149.6	153.4	154.2
170°	148.6	149.5	149.6	153.4	153.4
172.5°	149.4	149.6	149.6	152.6	151.9
175°	150.5	150.5	149.6	151.5	151.5
177.5°	150.5	150.5	149.8	151.3	150.5
180°	150.5	150.5	150.5	150.5	150.5

(END OF REPORT)