

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: P518409

Luminaire Tested: **SQ4-BB-050U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518409
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-050D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

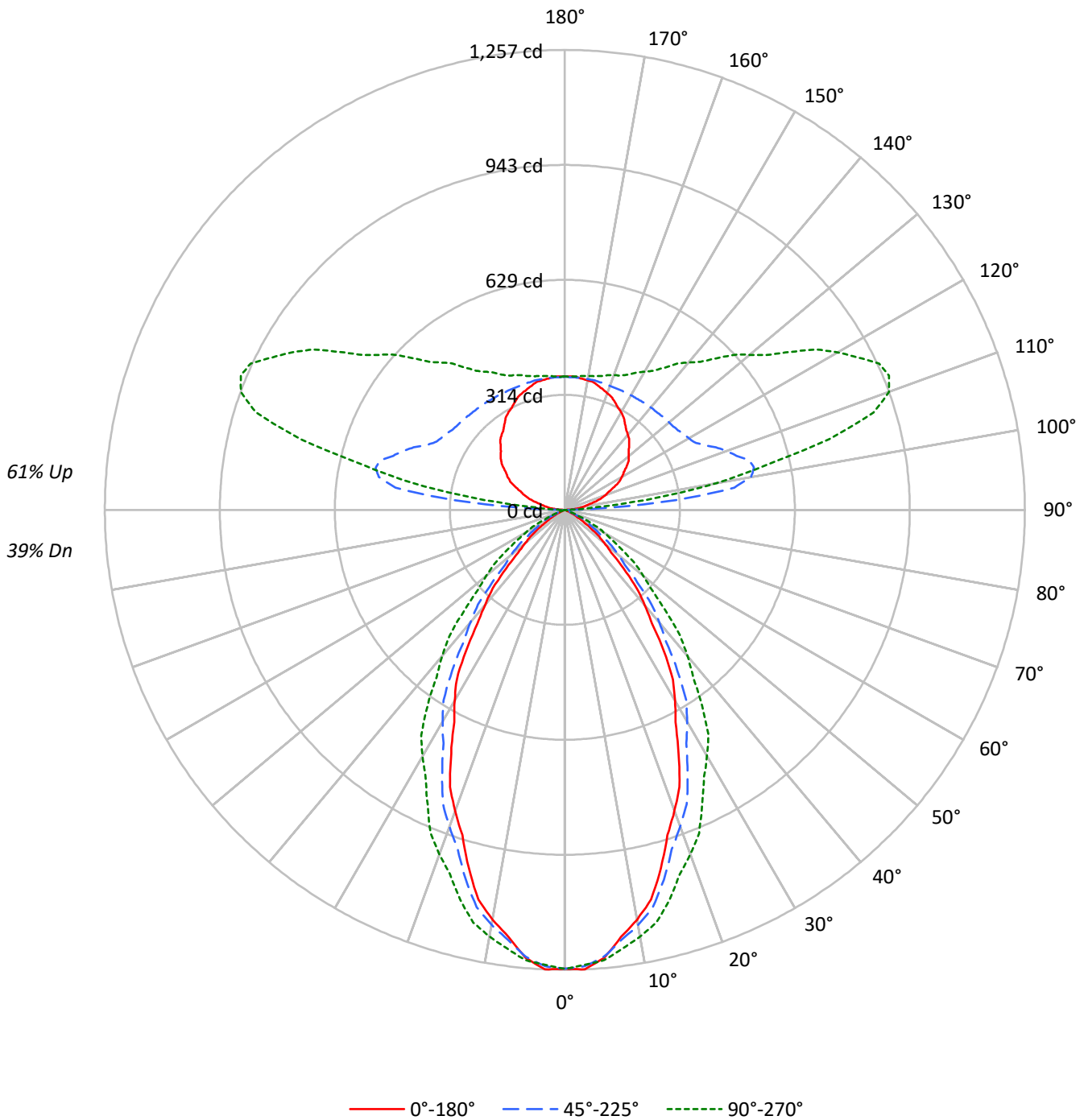
Lumens per Lamp: N/A
Luminaire Lumens: 3875.1 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.8
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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35				
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32				
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29				
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22				
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20				
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18				
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5387	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2724	3221	4185
45°	1968	2438	3367
50°	1342	1817	2671
55°	872	1315	2076
60°	501	925	1501
65°	132	565	760
70°	65	174	218
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	3.0
10°-20°	292.7	7.6
20°-30°	366.4	9.5
30°-40°	338.5	8.7
40°-50°	227.4	5.9
50°-60°	117.5	3.0
60°-70°	36.8	0.9
70°-80°	2.3	0.1
80°-90°	1.4	0.0
90°-100°	174.8	4.5
100°-110°	474.9	12.3
110°-120°	488.2	12.6
120°-130°	390.4	10.1
130°-140°	306.7	7.9
140°-150°	235.2	6.1
150°-160°	169.1	4.4
160°-170°	103.4	2.7
170°-180°	34.8	0.9
0°-30°	773.6	20.0
0°-40°	1112.1	28.7
0°-60°	1457.0	37.6
0°-90°	1497.5	38.6
90°-120°	1137.9	29.4
90°-150°	2070.2	53.4
90°-180°	2378.0	61.4
0°-180°	3875.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1229	1217	1226	1231	1235	114
15°	1014	1010	1046	1081	1104	282
25°	735	741	794	848	888	337
35°	472	484	536	600	654	292
45°	226	240	280	335	387	178
55°	81	95	123	157	194	76
65°	9	17	39	47	52	15
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	5	8	10	10	2
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	308	363	441	474	180
155°	324	336	361	396	408	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.2	1254.2	1254.2	1254.2	1254.2
2.5°	1257.1	1245.2	1248.4	1248.3	1245.0
5°	1229.3	1216.9	1226.3	1230.6	1235.4
7.5°	1177.4	1167.6	1185.7	1199.3	1209.2
10°	1137.1	1128.8	1152.3	1170.8	1184.4
12.5°	1090.5	1084.1	1112.5	1137.8	1155.3
15°	1013.9	1010.4	1046.1	1081.2	1104.3
17.5°	931.9	931.8	972.5	1016.1	1044.0
20°	875.6	877.3	921.1	969.1	1001.8
22.5°	819.3	823.4	870.1	920.2	957.6
25°	735.4	741.3	793.7	848.0	887.7
27.5°	654.8	663.5	718.5	775.0	823.4
30°	601.9	612.0	668.1	727.4	777.3
32.5°	550.0	562.0	616.6	679.4	730.2
35°	472.1	483.9	536.4	599.5	654.1
37.5°	391.6	403.2	454.5	516.6	575.6
40°	339.2	352.2	401.1	461.3	521.2
42.5°	291.6	304.7	350.6	409.8	466.4
45°	226.3	240.0	280.3	334.9	387.1
47.5°	172.2	187.0	222.4	271.8	319.4
50°	140.2	155.0	189.9	233.4	279.1
52.5°	114.4	128.8	160.3	201.3	243.2
55°	81.3	95.0	122.6	157.4	193.6
57.5°	56.2	67.9	92.7	121.8	150.1
60°	40.7	51.9	75.2	98.8	122.0
62.5°	27.1	37.4	60.2	78.3	93.8
65°	9.1	17.4	38.8	46.8	52.2
67.5°	4.6	5.6	20.4	21.5	23.3
70°	3.6	3.6	9.7	10.4	12.1
72.5°	2.7	2.7	3.9	5.0	5.3
75°	1.2	1.2	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	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	0.9	1.6	2.1	2.1
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.2	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.7	492.0	871.4	884.5
110°	118.3	156.0	469.5	886.5	942.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.0	874.0	958.5
115°	149.9	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.3	210.1	391.1	731.2	860.6
122.5°	190.6	220.4	385.5	690.9	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.2	596.6	694.8
130°	228.3	255.8	372.3	571.1	659.2
132.5°	236.8	264.2	370.5	549.3	627.4
135°	248.2	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.3	492.3	548.2
140°	268.1	292.2	365.3	475.4	525.7
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.9	307.5	363.0	441.0	474.2
147.5°	299.5	317.1	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.5
157.5°	333.9	342.9	360.6	388.9	397.6
160°	339.6	347.6	360.6	384.2	391.1
162.5°	345.2	351.4	361.6	380.4	385.5
165°	351.3	355.8	361.8	377.1	378.2
167.5°	357.6	359.9	363.0	373.1	374.0
170°	359.5	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.1	365.3	363.0	367.6	366.5
177.5°	365.1	365.1	362.3	366.0	364.1
180°	364.1	364.1	364.1	364.1	364.1

(END OF REPORT)