

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: P518432

Luminaire Tested: **SQ4-BB-050U-075D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518432
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-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

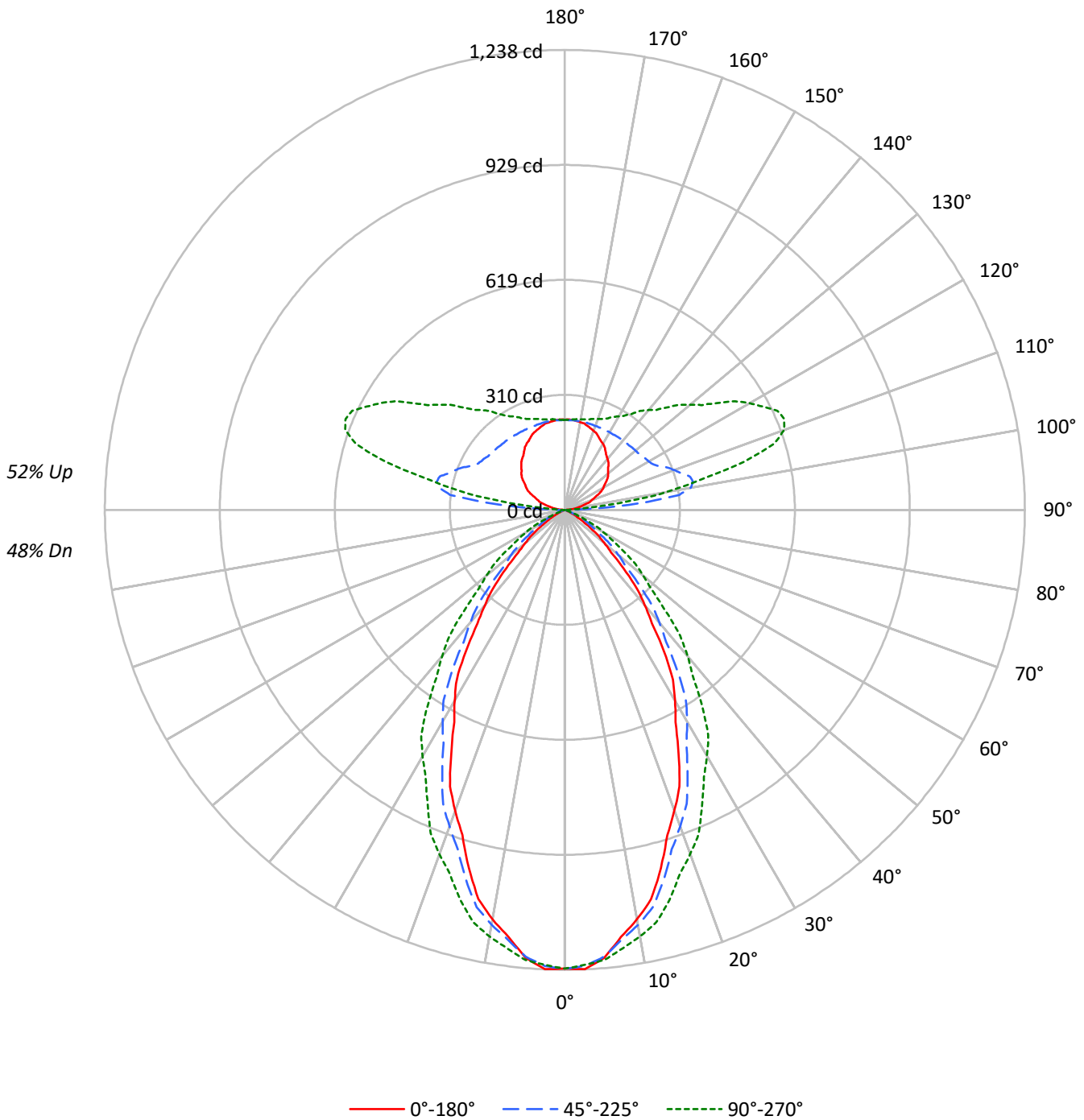
Lumens per Lamp: N/A
Luminaire Lumens: 3059.1 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44	44	44	44	
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40	40	40	40	
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36	36	36	36	
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32	32	32	32	
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29	29	29	29	
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27	27	27	27	
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25	25	25	25	
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23	23	23	23	
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21	21	21	21	
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20	20	20	20	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10926
15°	9535	9837	10386
20°	8464	8904	9684
25°	7371	7955	8897
30°	6313	7008	8153
35°	5235	5948	7253
40°	4023	4756	6181
45°	2907	3601	4974
50°	1981	2684	3944
55°	1288	1942	3066
60°	738	1367	2216
65°	196	834	1122
70°	97	259	321
75°	43	21	0
80°	32	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	3.7
10°-20°	288.2	9.4
20°-30°	360.8	11.8
30°-40°	333.3	10.9
40°-50°	223.9	7.3
50°-60°	115.7	3.8
60°-70°	36.2	1.2
70°-80°	2.3	0.1
80°-90°	1.0	0.0
90°-100°	116.5	3.8
100°-110°	316.6	10.3
110°-120°	325.5	10.6
120°-130°	260.2	8.5
130°-140°	204.5	6.7
140°-150°	156.8	5.1
150°-160°	112.8	3.7
160°-170°	69.0	2.3
170°-180°	23.2	0.8
0°-30°	761.7	24.9
0°-40°	1094.9	35.8
0°-60°	1434.5	46.9
0°-90°	1474.0	48.2
90°-120°	758.6	24.8
90°-150°	1380.1	45.1
90°-180°	1585.0	51.8
0°-180°	3059.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1210	1198	1207	1212	1216	112
15°	998	995	1030	1064	1087	278
25°	724	730	781	835	874	332
35°	465	476	528	590	644	288
45°	223	236	276	330	381	175
55°	80	94	121	155	191	75
65°	9	17	38	46	51	15
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	6	7	7	1
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	166	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.9	1234.9	1234.9	1234.9	1234.9
2.5°	1237.7	1226.0	1229.1	1229.0	1225.8
5°	1210.4	1198.1	1207.4	1211.7	1216.3
7.5°	1159.2	1149.6	1167.5	1180.8	1190.5
10°	1119.6	1111.4	1134.5	1152.7	1166.2
12.5°	1073.7	1067.4	1095.3	1120.3	1137.5
15°	998.3	994.8	1029.9	1064.5	1087.3
17.5°	917.5	917.4	957.5	1000.5	1027.9
20°	862.1	863.8	906.9	954.2	986.3
22.5°	806.6	810.7	856.7	906.0	942.8
25°	724.1	729.9	781.4	834.9	874.0
27.5°	644.7	653.3	707.5	763.0	810.7
30°	592.6	602.6	657.8	716.2	765.3
32.5°	541.5	553.3	607.1	668.9	718.9
35°	464.8	476.5	528.1	590.3	644.0
37.5°	385.6	397.0	447.5	508.6	566.7
40°	334.0	346.8	394.9	454.2	513.2
42.5°	287.1	300.0	345.2	403.4	459.2
45°	222.8	236.3	276.0	329.7	381.2
47.5°	169.5	184.1	219.0	267.6	314.5
50°	138.0	152.6	187.0	229.8	274.8
52.5°	112.7	126.8	157.8	198.2	239.4
55°	80.1	93.5	120.7	154.9	190.6
57.5°	55.3	66.9	91.3	119.9	147.8
60°	40.0	51.1	74.1	97.3	120.1
62.5°	26.6	36.8	59.3	77.1	92.4
65°	9.0	17.1	38.2	46.1	51.4
67.5°	4.5	5.5	20.1	21.2	22.9
70°	3.6	3.6	9.6	10.2	11.9
72.5°	2.6	2.6	3.8	4.9	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	0.6	1.1	1.4	1.4
90°	0.8	3.1	5.5	7.0	7.0
92.5°	7.0	31.9	55.4	23.8	20.1
95°	17.2	63.7	203.0	88.3	59.3
97.5°	28.4	70.4	311.1	242.1	170.0
100°	35.9	74.8	344.2	349.0	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.1	530.1	498.8
107.5°	69.5	97.1	328.0	581.0	589.7
110°	78.8	104.0	313.0	591.0	628.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>87.0</i>	110.9	298.0	582.7	639.0
115°	<i>99.9</i>	121.3	278.7	554.4	631.5
117.5°	<i>112.1</i>	132.5	266.3	514.4	601.2
120°	<i>120.2</i>	140.1	260.7	487.5	573.7
122.5°	<i>127.1</i>	146.9	257.0	460.6	543.8
125°	<i>137.4</i>	156.5	252.1	424.8	501.1
127.5°	<i>146.6</i>	165.5	249.5	397.7	463.2
130°	<i>152.2</i>	170.5	248.2	380.7	439.5
132.5°	<i>157.8</i>	176.2	247.0	366.2	418.2
135°	<i>165.5</i>	183.8	245.1	346.0	390.3
137.5°	<i>173.8</i>	190.4	244.2	328.2	365.5
140°	<i>178.8</i>	194.8	243.5	316.9	350.5
142.5°	<i>183.8</i>	198.6	242.9	308.0	336.1
145°	<i>191.2</i>	205.0	242.0	294.0	316.1
147.5°	<i>199.7</i>	211.4	241.2	283.0	300.4
150°	<i>205.3</i>	215.2	241.2	276.6	290.4
152.5°	<i>209.7</i>	218.4	240.6	271.0	282.3
155°	<i>216.2</i>	223.9	240.4	264.0	271.6
157.5°	<i>222.6</i>	228.6	240.4	259.3	265.1
160°	<i>226.4</i>	231.7	240.4	256.1	260.7
162.5°	<i>230.1</i>	234.2	241.0	253.6	257.0
165°	<i>234.2</i>	237.2	241.2	251.4	252.1
167.5°	<i>238.4</i>	239.9	242.0	248.7	249.3
170°	<i>239.6</i>	241.2	242.0	247.4	247.4
172.5°	<i>240.9</i>	241.8	242.0	246.2	246.2
175°	<i>242.8</i>	243.5	242.0	245.1	244.3
177.5°	<i>243.4</i>	243.4	241.5	244.0	242.8
180°	<i>242.8</i>	242.8	242.8	242.8	242.8

(END OF REPORT)