

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: P518327

Luminaire Tested: **SQ4-BB-025U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518327
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-075D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

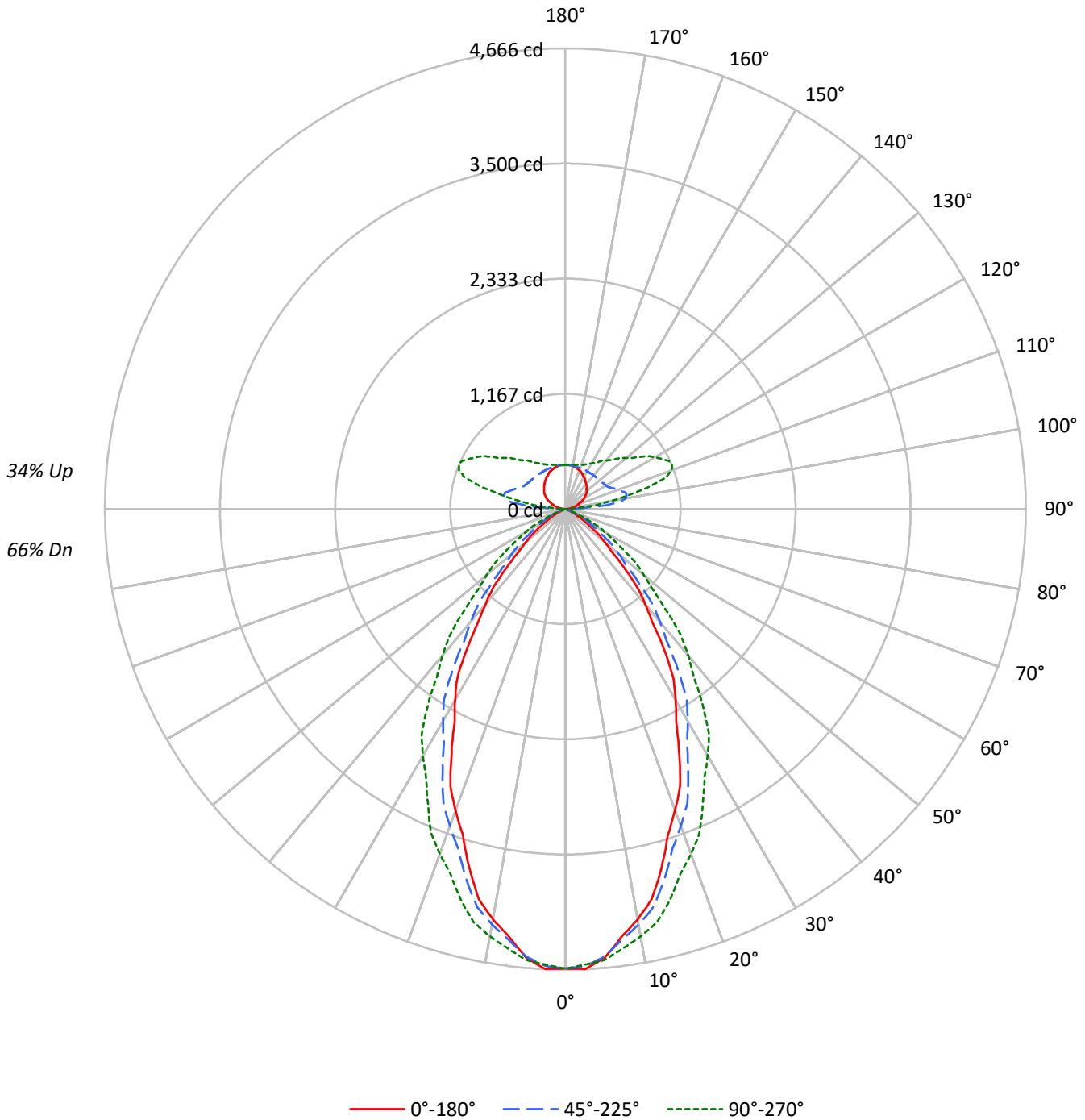
Lumens per Lamp: N/A
Luminaire Lumens: 8453.6 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 94.8
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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	104	100	97	94	98	95	92	89	84	82	80	75	73	72	66	65	64	60
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58	54
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52	49
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47	44
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43	40
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39	37
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36	34
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33	31
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31	29
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4525	6249
50°	2489	3373	4957
55°	1618	2440	3852
60°	928	1718	2784
65°	246	1049	1410
70°	121	324	405
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.9	5.0
10°-20°	1086.5	12.9
20°-30°	1360.2	16.1
30°-40°	1256.4	14.9
40°-50°	844.2	10.0
50°-60°	436.0	5.2
60°-70°	136.6	1.6
70°-80°	8.6	0.1
80°-90°	2.6	0.0
90°-100°	217.9	2.6
100°-110°	572.8	6.8
110°-120°	594.0	7.0
120°-130°	476.5	5.6
130°-140°	373.8	4.4
140°-150°	286.9	3.4
150°-160°	206.7	2.4
160°-170°	126.4	1.5
170°-180°	42.7	0.5
0°-30°	2871.5	34.0
0°-40°	4127.9	48.8
0°-60°	5408.1	64.0
0°-90°	5555.9	65.7
90°-120°	1384.7	16.4
90°-150°	2521.9	29.8
90°-180°	2898.0	34.3
0°-180°	8453.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4655	4655	4655	4655	4655	
5°	4563	4517	4552	4568	4586	423
15°	3764	3750	3883	4013	4099	1048
25°	2730	2752	2946	3148	3295	1251
35°	1752	1796	1991	2225	2428	1085
45°	840	891	1040	1243	1437	660
55°	302	352	455	584	718	282
65°	34	65	144	174	194	57
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	3	8	23	12	12	3
95°	29	113	375	194	132	32
105°	103	156	633	962	897	109
115°	183	223	507	1012	1155	181
125°	255	286	461	780	920	226
135°	304	335	447	630	714	235
145°	352	375	441	537	579	221
155°	398	410	441	485	499	183
165°	430	436	441	459	464	121
175°	447	447	444	450	450	42
180°	447	447	447	447	447	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4655.4	4655.4	4655.4	4655.4	4655.4
2.5°	4666.2	4622.2	4633.8	4633.5	4621.2
5°	4563.1	4516.8	4551.8	4568.0	4585.6
7.5°	4370.3	4334.2	4401.4	4451.7	4488.3
10°	4220.7	4189.9	4277.0	4345.8	4396.4
12.5°	4047.8	4024.0	4129.3	4223.5	4288.3
15°	3763.5	3750.3	3882.9	4013.2	4099.1
17.5°	3459.0	3458.6	3609.9	3771.7	3875.2
20°	3250.0	3256.6	3418.9	3597.4	3718.5
22.5°	3041.0	3056.4	3229.7	3415.8	3554.5
25°	2729.7	2751.8	2946.0	3147.5	3295.0
27.5°	2430.6	2462.8	2667.1	2876.6	3056.3
30°	2234.2	2271.7	2479.7	2700.2	2885.1
32.5°	2041.4	2085.9	2288.7	2521.9	2710.4
35°	1752.3	1796.3	1991.0	2225.3	2427.9
37.5°	1453.6	1496.8	1686.9	1917.6	2136.5
40°	1259.0	1307.5	1488.7	1712.3	1934.7
42.5°	1082.4	1130.9	1301.4	1521.0	1731.1
45°	840.1	890.7	1040.5	1243.1	1436.9
47.5°	639.2	694.2	825.7	1009.0	1185.6
50°	520.3	575.3	705.0	866.5	1036.0
52.5°	424.8	478.1	595.0	747.2	902.7
55°	301.8	352.5	455.0	584.1	718.5
57.5°	208.6	252.2	344.1	451.9	557.2
60°	150.9	192.7	279.3	366.8	452.7
62.5°	100.5	138.8	223.4	290.5	348.2
65°	33.8	64.6	144.1	173.9	193.7
67.5°	17.1	20.6	75.7	79.9	86.5
70°	13.5	13.5	36.0	38.4	45.0
72.5°	9.9	9.9	14.4	18.5	19.8
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.7	4.6	2.3	2.3
90°	2.9	8.5	22.9	11.5	11.5
92.5°	12.0	58.0	128.4	56.9	36.7
95°	28.7	112.7	375.4	193.5	131.8
97.5°	49.9	123.8	561.7	446.7	329.0
100°	65.9	133.2	619.0	627.3	487.2
102.5°	79.7	142.4	635.1	781.4	661.4
105°	103.2	156.4	633.4	961.5	897.0
107.5°	127.2	176.6	597.2	1055.0	1070.7
110°	143.3	188.1	567.4	1079.1	1146.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	159.3	201.9	539.9	1063.9	1167.0
115°	183.4	222.6	507.3	1012.0	1154.9
117.5°	206.9	242.8	484.9	940.2	1098.8
120°	220.7	254.3	475.7	891.9	1046.0
122.5°	234.4	268.1	468.9	843.7	995.6
125°	255.1	285.9	461.4	779.8	919.9
127.5°	271.7	303.1	455.1	728.3	846.6
130°	280.9	314.5	452.8	696.0	805.3
132.5°	290.0	323.7	450.5	668.3	766.3
135°	303.8	334.6	447.1	629.5	713.6
137.5°	318.1	348.4	446.5	600.5	669.5
140°	329.6	357.6	444.2	577.5	642.0
142.5°	338.7	364.5	444.2	561.3	616.7
145°	352.5	374.9	441.3	536.9	578.9
147.5°	366.3	388.1	441.3	516.6	551.4
150°	375.4	395.0	441.3	505.0	533.1
152.5°	384.6	399.7	441.3	495.7	517.0
155°	398.4	409.6	441.3	484.6	498.7
157.5°	408.7	419.3	441.3	474.8	484.9
160°	415.5	424.0	441.3	470.1	475.7
162.5°	422.4	428.6	441.3	465.5	471.1
165°	429.9	435.5	441.3	458.7	464.3
167.5°	436.8	439.6	444.2	455.7	458.0
170°	441.3	444.1	444.2	455.7	455.7
172.5°	443.6	444.2	444.2	453.3	451.1
175°	447.1	447.1	444.2	449.9	449.9
177.5°	447.1	447.1	444.8	449.3	447.1
180°	447.1	447.1	447.1	447.1	447.1

(END OF REPORT)