

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: P518324

Luminaire Tested: **SQ4-BB-025U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518324
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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

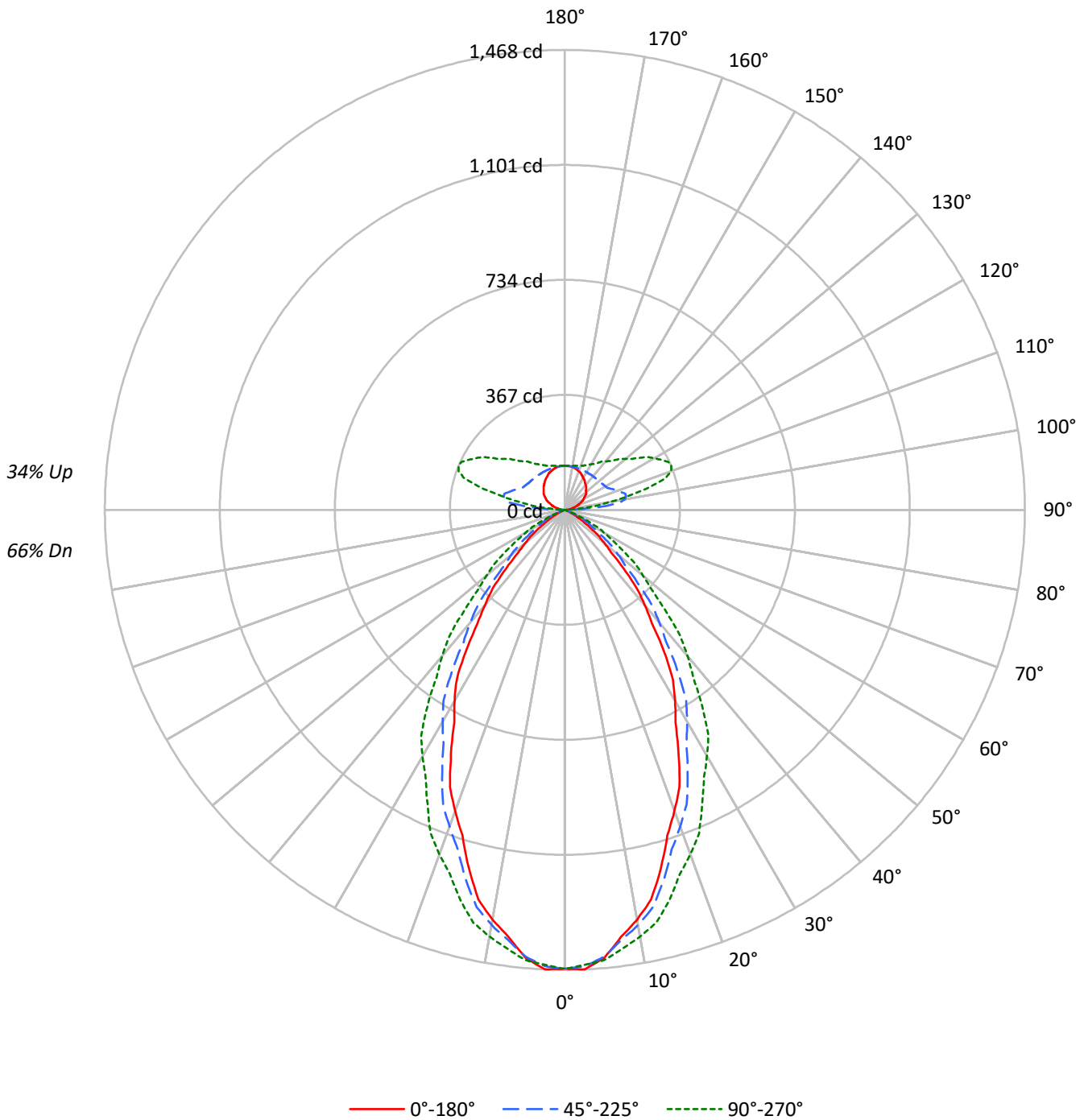
Lumens per Lamp: N/A
Luminaire Lumens: 2659.8 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 29.9
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°	13514	13514	13514
5°	13297	13263	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11486
25°	8744	9436	10554
30°	7489	8312	9671
35°	6209	7055	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3637
60°	876	1622	2628
65°	231	991	1330
70°	116	305	383
75°	50	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	5.0
10°-20°	341.8	12.9
20°-30°	428.0	16.1
30°-40°	395.3	14.9
40°-50°	265.6	10.0
50°-60°	137.2	5.2
60°-70°	43.0	1.6
70°-80°	2.7	0.1
80°-90°	0.8	0.0
90°-100°	68.6	2.6
100°-110°	180.2	6.8
110°-120°	186.9	7.0
120°-130°	149.9	5.6
130°-140°	117.6	4.4
140°-150°	90.3	3.4
150°-160°	65.0	2.4
160°-170°	39.8	1.5
170°-180°	13.4	0.5
0°-30°	903.5	34.0
0°-40°	1298.8	48.8
0°-60°	1701.6	64.0
0°-90°	1748.0	65.7
90°-120°	435.7	16.4
90°-150°	793.5	29.8
90°-180°	912.0	34.3
0°-180°	2659.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1436	1421	1432	1437	1443	133
15°	1184	1180	1222	1263	1290	330
25°	859	866	927	990	1037	394
35°	551	565	626	700	764	342
45°	264	280	327	391	452	208
55°	95	111	143	184	226	89
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	7	4	4	1
95°	9	36	118	61	42	10
105°	32	49	199	302	282	34
115°	58	70	160	318	363	57
125°	80	90	145	245	289	71
135°	96	105	141	198	224	74
145°	111	118	139	169	182	69
155°	125	129	139	152	157	58
165°	135	137	139	144	146	38
175°	141	141	140	142	142	13
180°	141	141	141	141	141	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1468.1	1454.3	1457.9	1457.8	1454.0
5°	1435.7	1421.1	1432.1	1437.2	1442.8
7.5°	1375.0	1363.7	1384.8	1400.7	1412.2
10°	1328.0	1318.3	1345.7	1367.3	1383.2
12.5°	1273.5	1266.1	1299.2	1328.9	1349.2
15°	1184.1	1180.0	1221.7	1262.7	1289.7
17.5°	1088.3	1088.2	1135.8	1186.7	1219.3
20°	1022.6	1024.6	1075.7	1131.8	1169.9
22.5°	956.8	961.6	1016.2	1074.7	1118.4
25°	858.9	865.8	926.9	990.3	1036.7
27.5°	764.8	774.9	839.2	905.1	961.6
30°	703.0	714.7	780.2	849.6	907.8
32.5°	642.3	656.3	720.1	793.5	852.8
35°	551.3	565.2	626.4	700.2	763.9
37.5°	457.3	470.9	530.8	603.3	672.2
40°	396.1	411.4	468.4	538.7	608.7
42.5°	340.6	355.8	409.4	478.6	544.7
45°	264.3	280.3	327.4	391.1	452.1
47.5°	201.1	218.4	259.8	317.5	373.0
50°	163.7	181.0	221.8	272.6	326.0
52.5°	133.6	150.4	187.2	235.1	284.0
55°	95.0	110.9	143.1	183.8	226.1
57.5°	65.6	79.3	108.3	142.2	175.3
60°	47.5	60.6	87.9	115.4	142.4
62.5°	31.6	43.7	70.3	91.4	109.6
65°	10.6	20.3	45.4	54.7	60.9
67.5°	5.4	6.5	23.8	25.1	27.2
70°	4.3	4.3	11.3	12.1	14.2
72.5°	3.1	3.1	4.5	5.8	6.2
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	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	1.4	0.7	0.7
90°	0.9	2.7	7.2	3.6	3.6
92.5°	3.8	18.2	40.4	17.9	11.5
95°	9.0	35.5	118.1	60.9	41.5
97.5°	15.7	39.0	176.7	140.5	103.5
100°	20.7	41.9	194.8	197.4	153.3
102.5°	25.1	44.8	199.8	245.8	208.1
105°	32.5	49.2	199.3	302.5	282.2
107.5°	40.0	55.6	187.9	331.9	336.9
110°	45.1	59.2	178.5	339.5	360.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	50.1	63.5	169.9	334.7	367.2
115°	57.7	70.1	159.6	318.4	363.4
117.5°	65.1	76.4	152.6	295.8	345.7
120°	69.4	80.0	149.7	280.6	329.1
122.5°	73.8	84.3	147.5	265.5	313.2
125°	80.3	89.9	145.2	245.4	289.4
127.5°	85.5	95.4	143.2	229.2	266.4
130°	88.4	98.9	142.5	219.0	253.4
132.5°	91.3	101.8	141.7	210.3	241.1
135°	95.6	105.3	140.7	198.1	224.5
137.5°	100.1	109.6	140.5	188.9	210.6
140°	103.7	112.5	139.8	181.7	202.0
142.5°	106.6	114.7	139.8	176.6	194.0
145°	110.9	118.0	138.9	168.9	182.1
147.5°	115.2	122.1	138.9	162.6	173.5
150°	118.1	124.3	138.9	158.9	167.7
152.5°	121.0	125.8	138.9	156.0	162.7
155°	125.3	128.9	138.9	152.5	156.9
157.5°	128.6	131.9	138.9	149.4	152.6
160°	130.7	133.4	138.9	147.9	149.7
162.5°	132.9	134.8	138.9	146.5	148.2
165°	135.3	137.0	138.9	144.3	146.1
167.5°	137.4	138.3	139.8	143.4	144.1
170°	138.9	139.7	139.8	143.4	143.4
172.5°	139.6	139.8	139.8	142.6	141.9
175°	140.7	140.7	139.8	141.6	141.6
177.5°	140.7	140.7	139.9	141.4	140.7
180°	140.7	140.7	140.7	140.7	140.7

(END OF REPORT)