

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: P518349

Luminaire Tested: **SQ4-BB-025U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518349
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-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

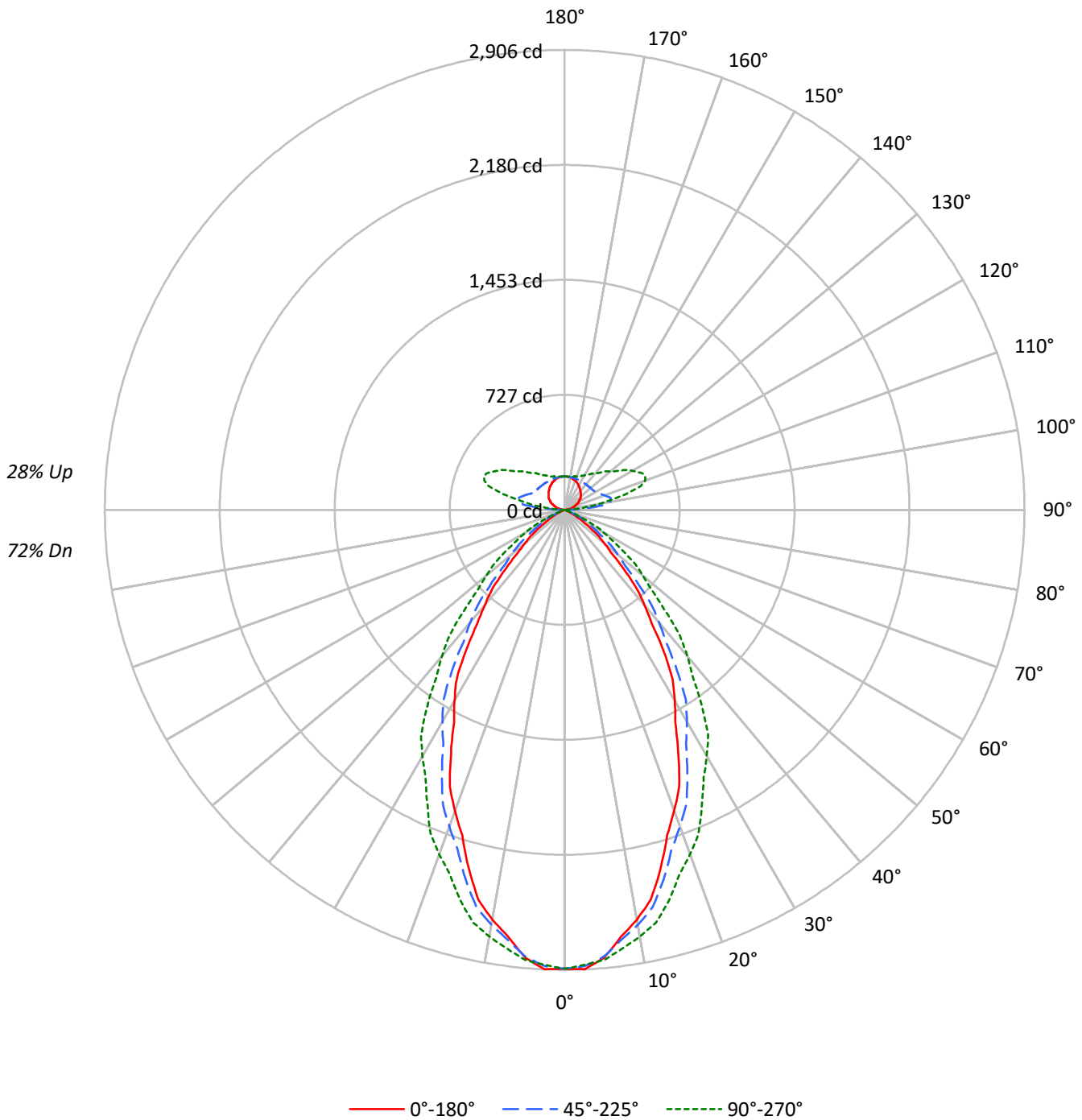
Lumens per Lamp: N/A
Luminaire Lumens: 4827.4 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 63.5
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17834	17834	17834
5°	17547	17504	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12451	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2016	3038	4799
60°	1156	2139	3468
65°	306	1307	1755
70°	151	403	505
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	5.5
10°-20°	676.7	14.0
20°-30°	847.1	17.5
30°-40°	782.5	16.2
40°-50°	525.8	10.9
50°-60°	271.6	5.6
60°-70°	85.0	1.8
70°-80°	5.4	0.1
80°-90°	1.2	0.0
90°-100°	102.8	2.1
100°-110°	270.3	5.6
110°-120°	280.3	5.8
120°-130°	224.9	4.7
130°-140°	176.4	3.7
140°-150°	135.4	2.8
150°-160°	97.5	2.0
160°-170°	59.7	1.2
170°-180°	20.2	0.4
0°-30°	1788.4	37.0
0°-40°	2570.8	53.3
0°-60°	3368.2	69.8
0°-90°	3459.8	71.7
90°-120°	653.5	13.5
90°-150°	1190.2	24.7
90°-180°	1368.0	28.3
0°-180°	4827.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2899	2899	2899	2899	2899	
5°	2842	2813	2835	2845	2856	263
15°	2344	2336	2418	2499	2553	653
25°	1700	1714	1835	1960	2052	779
35°	1091	1119	1240	1386	1512	676
45°	523	555	648	774	895	411
55°	188	220	283	364	448	175
65°	21	40	90	108	121	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	1	4	11	5	5	1
95°	14	53	177	91	62	15
105°	49	74	299	454	423	52
115°	87	105	239	478	545	85
125°	120	135	218	368	434	107
135°	143	158	211	297	337	111
145°	166	177	208	253	273	104
155°	188	193	208	229	235	86
165°	203	206	208	216	219	57
175°	211	211	210	212	212	20
180°	211	211	211	211	211	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2899.4	2899.4	2899.4	2899.4	2899.4
2.5°	2906.1	2878.7	2885.9	2885.7	2878.1
5°	2841.9	2813.1	2834.9	2844.9	2855.9
7.5°	2721.8	2699.3	2741.2	2772.5	2795.3
10°	2628.7	2609.5	2663.7	2706.5	2738.1
12.5°	2520.9	2506.1	2571.7	2630.4	2670.7
15°	2343.9	2335.7	2418.3	2499.4	2552.9
17.5°	2154.3	2154.0	2248.2	2349.0	2413.5
20°	2024.1	2028.2	2129.3	2240.4	2315.9
22.5°	1893.9	1903.5	2011.5	2127.3	2213.7
25°	1700.1	1713.8	1834.7	1960.3	2052.1
27.5°	1513.8	1533.8	1661.1	1791.5	1903.5
30°	1391.5	1414.8	1544.4	1681.6	1796.9
32.5°	1271.4	1299.1	1425.4	1570.6	1688.0
35°	1091.3	1118.7	1240.0	1385.9	1512.1
37.5°	905.3	932.2	1050.6	1194.3	1330.6
40°	784.1	814.3	927.2	1066.4	1204.9
42.5°	674.1	704.3	810.5	947.3	1078.1
45°	523.2	554.8	648.0	774.2	894.9
47.5°	398.1	432.4	514.2	628.4	738.4
50°	324.0	358.3	439.0	539.6	645.2
52.5°	264.5	297.7	370.6	465.4	562.2
55°	188.0	219.5	283.3	363.8	447.5
57.5°	129.9	157.0	214.3	281.5	347.0
60°	94.0	120.0	173.9	228.5	281.9
62.5°	62.6	86.4	139.1	180.9	216.9
65°	21.0	40.2	89.8	108.3	120.6
67.5°	10.7	12.9	47.1	49.7	53.9
70°	8.4	8.4	22.4	23.9	28.1
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.8	2.2	1.1	1.1
90°	1.4	4.0	10.8	5.4	5.4
92.5°	5.7	27.4	60.6	26.8	17.3
95°	13.5	53.2	177.2	91.3	62.2
97.5°	23.5	58.4	265.1	210.8	155.3
100°	31.1	62.8	292.1	296.1	229.9
102.5°	37.6	67.2	299.7	368.8	312.2
105°	48.7	73.8	298.9	453.8	423.3
107.5°	60.1	83.3	281.9	497.9	505.3
110°	67.6	88.8	267.8	509.3	541.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	75.2	95.3	254.8	502.1	550.8
115°	86.6	105.1	239.4	477.6	545.1
117.5°	97.7	114.6	228.8	443.7	518.6
120°	104.1	120.0	224.5	420.9	493.7
122.5°	110.6	126.5	221.3	398.2	469.9
125°	120.4	134.9	217.8	368.0	434.2
127.5°	128.2	143.0	214.8	343.7	399.5
130°	132.5	148.4	213.7	328.5	380.1
132.5°	136.9	152.7	212.6	315.4	361.7
135°	143.4	157.9	211.0	297.1	336.8
137.5°	150.1	164.4	210.7	283.4	316.0
140°	155.5	168.8	209.6	272.6	303.0
142.5°	159.9	172.0	209.6	264.9	291.1
145°	166.4	176.9	208.3	253.4	273.2
147.5°	172.9	183.2	208.3	243.8	260.2
150°	177.2	186.4	208.3	238.3	251.6
152.5°	181.5	188.7	208.3	233.9	244.0
155°	188.0	193.3	208.3	228.7	235.3
157.5°	192.9	197.9	208.3	224.1	228.8
160°	196.1	200.1	208.3	221.9	224.5
162.5°	199.4	202.3	208.3	219.7	222.4
165°	202.9	205.5	208.3	216.5	219.1
167.5°	206.1	207.4	209.6	215.1	216.1
170°	208.3	209.6	209.6	215.1	215.1
172.5°	209.4	209.6	209.6	213.9	212.9
175°	211.0	211.0	209.6	212.3	212.3
177.5°	211.0	211.0	209.9	212.1	211.0
180°	211.0	211.0	211.0	211.0	211.0

(END OF REPORT)