

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: P518358

Luminaire Tested: **SQ4-BB-025U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518358
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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

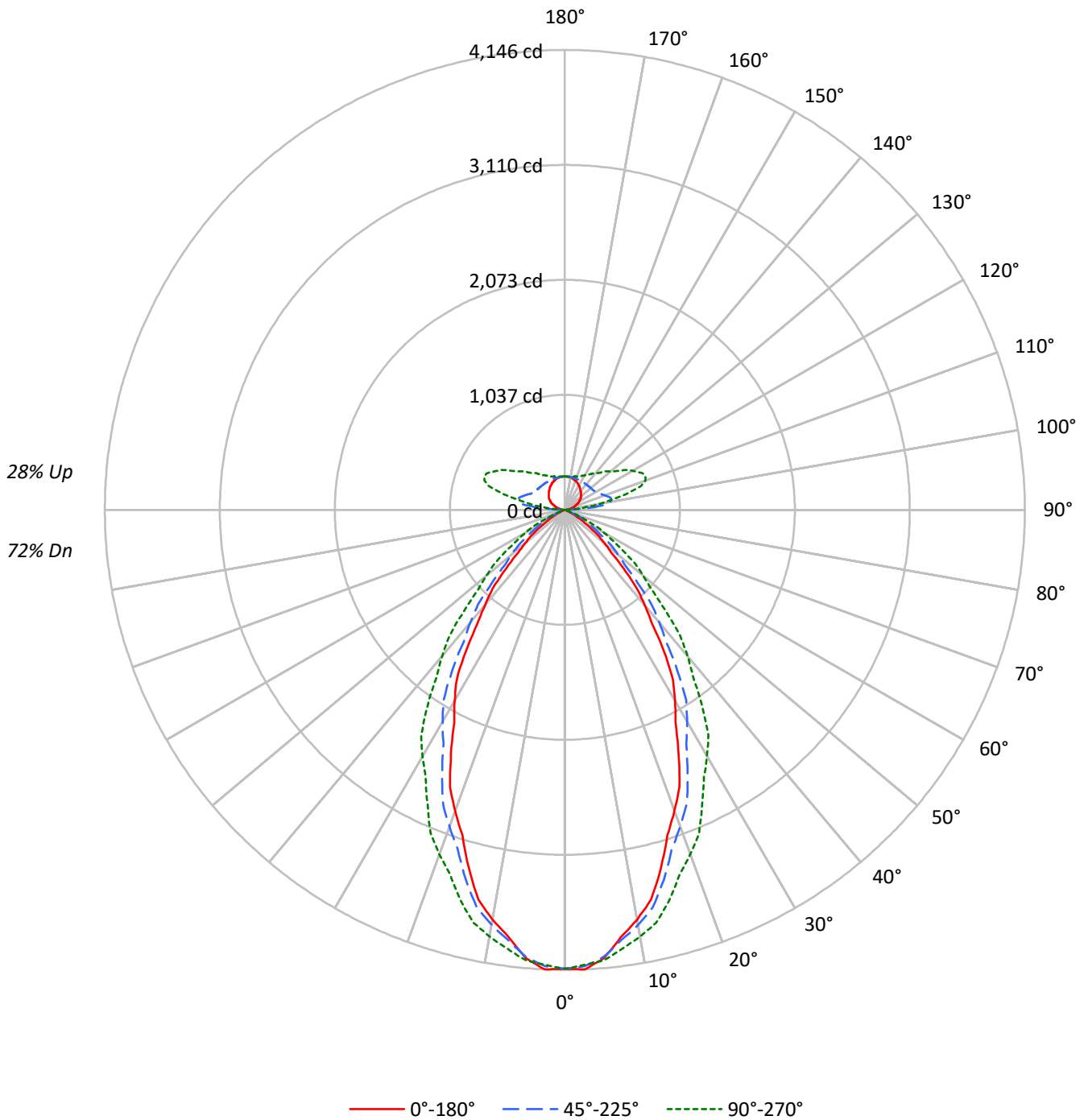
Lumens per Lamp: N/A
Luminaire Lumens: 6887.8 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 82.2
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°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10576	11737	13657
35°	8769	9963	12150
40°	6737	7966	10353
45°	4870	6032	8330
50°	3318	4495	6607
55°	2157	3252	5134
60°	1237	2290	3712
65°	327	1398	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.5	5.5
10°-20°	965.5	14.0
20°-30°	1208.7	17.5
30°-40°	1116.4	16.2
40°-50°	750.2	10.9
50°-60°	387.5	5.6
60°-70°	121.4	1.8
70°-80°	7.7	0.1
80°-90°	1.7	0.0
90°-100°	146.7	2.1
100°-110°	385.7	5.6
110°-120°	400.0	5.8
120°-130°	320.8	4.7
130°-140°	251.7	3.7
140°-150°	193.2	2.8
150°-160°	139.2	2.0
160°-170°	85.1	1.2
170°-180°	28.8	0.4
0°-30°	2551.7	37.0
0°-40°	3668.1	53.3
0°-60°	4805.7	69.8
0°-90°	4936.5	71.7
90°-120°	932.4	13.5
90°-150°	1698.2	24.7
90°-180°	1951.0	28.3
0°-180°	6887.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4137	4137	4137	4137	4137	
5°	4055	4014	4045	4059	4075	376
15°	3344	3333	3450	3566	3642	931
25°	2426	2445	2618	2797	2928	1112
35°	1557	1596	1769	1977	2158	965
45°	746	792	925	1105	1277	586
55°	268	313	404	519	638	250
65°	30	57	128	154	172	51
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	2	6	15	8	8	2
95°	19	76	253	130	89	22
105°	70	105	426	647	604	74
115°	124	150	342	682	778	122
125°	172	192	311	525	620	152
135°	205	225	301	424	480	158
145°	237	252	297	362	390	149
155°	268	276	297	326	336	123
165°	290	293	297	309	313	82
175°	301	301	299	303	303	29
180°	301	301	301	301	301	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4136.8	4136.8	4136.8	4136.8	4136.8
2.5°	4146.5	4107.3	4117.6	4117.4	4106.4
5°	4054.8	4013.7	4044.8	4059.1	4074.8
7.5°	3883.5	3851.4	3911.1	3955.9	3988.3
10°	3750.6	3723.2	3800.6	3861.7	3906.7
12.5°	3596.9	3575.7	3669.3	3753.1	3810.6
15°	3344.3	3332.6	3450.4	3566.2	3642.5
17.5°	3073.7	3073.3	3207.8	3351.6	3443.6
20°	2888.0	2893.9	3038.1	3196.6	3304.3
22.5°	2702.3	2716.0	2870.0	3035.3	3158.6
25°	2425.7	2445.2	2617.8	2796.9	2928.0
27.5°	2159.9	2188.5	2370.0	2556.2	2715.9
30°	1985.4	2018.6	2203.5	2399.4	2563.8
32.5°	1814.0	1853.6	2033.8	2240.9	2408.5
35°	1557.1	1596.2	1769.2	1977.4	2157.5
37.5°	1291.7	1330.0	1499.0	1704.0	1898.5
40°	1118.8	1161.8	1322.9	1521.5	1719.2
42.5°	961.9	1004.9	1156.4	1351.6	1538.3
45°	746.5	791.5	924.6	1104.7	1276.9
47.5°	568.0	616.9	733.7	896.6	1053.5
50°	462.3	511.2	626.4	770.0	920.6
52.5°	377.5	424.8	528.8	664.0	802.2
55°	268.2	313.2	404.3	519.1	638.4
57.5°	185.3	224.1	305.8	401.6	495.1
60°	134.1	171.3	248.2	326.0	402.3
62.5°	89.3	123.3	198.5	258.1	309.4
65°	30.0	57.4	128.1	154.5	172.1
67.5°	15.2	18.3	67.2	71.0	76.9
70°	12.0	12.0	32.0	34.2	40.0
72.5°	8.8	8.8	12.8	16.4	17.6
75°	4.0	4.0	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.1	3.1	1.5	1.5
90°	1.9	5.7	15.4	7.7	7.7
92.5°	8.1	39.1	86.5	38.3	24.7
95°	19.3	75.9	252.8	130.3	88.8
97.5°	33.6	83.4	378.2	300.8	221.5
100°	44.4	89.7	416.8	422.4	328.1
102.5°	53.6	95.9	427.6	526.2	445.4
105°	69.5	105.3	426.5	647.4	604.0
107.5°	85.7	118.9	402.2	710.4	721.0
110°	96.5	126.7	382.1	726.6	771.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.3	136.0	363.6	716.4	785.8
115°	123.5	149.9	341.6	681.5	777.7
117.5°	139.3	163.5	326.5	633.1	739.9
120°	148.6	171.2	320.3	600.6	704.4
122.5°	157.9	180.5	315.7	568.1	670.4
125°	171.8	192.5	310.7	525.1	619.5
127.5°	182.9	204.1	306.5	490.4	570.1
130°	189.1	211.8	304.9	468.7	542.3
132.5°	195.3	217.9	303.4	450.0	516.0
135°	204.6	225.3	301.0	423.9	480.5
137.5°	214.2	234.6	300.7	404.4	450.8
140°	221.9	240.8	299.1	388.9	432.3
142.5°	228.1	245.5	299.1	377.9	415.3
145°	237.4	252.5	297.2	361.5	389.8
147.5°	246.6	261.3	297.2	347.9	371.3
150°	252.8	266.0	297.2	340.1	358.9
152.5°	259.0	269.2	297.2	333.8	348.1
155°	268.2	275.8	297.2	326.4	335.8
157.5°	275.2	282.4	297.2	319.7	326.5
160°	279.8	285.5	297.2	316.6	320.3
162.5°	284.5	288.6	297.2	313.5	317.3
165°	289.5	293.2	297.2	308.9	312.6
167.5°	294.1	296.0	299.1	306.9	308.4
170°	297.2	299.1	299.1	306.8	306.8
172.5°	298.7	299.1	299.1	305.3	303.8
175°	301.0	301.0	299.1	303.0	303.0
177.5°	301.0	301.0	299.5	302.6	301.0
180°	301.0	301.0	301.0	301.0	301.0

(END OF REPORT)