

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: P518357

Luminaire Tested: **SQ4-BB-025U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518357
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-6
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

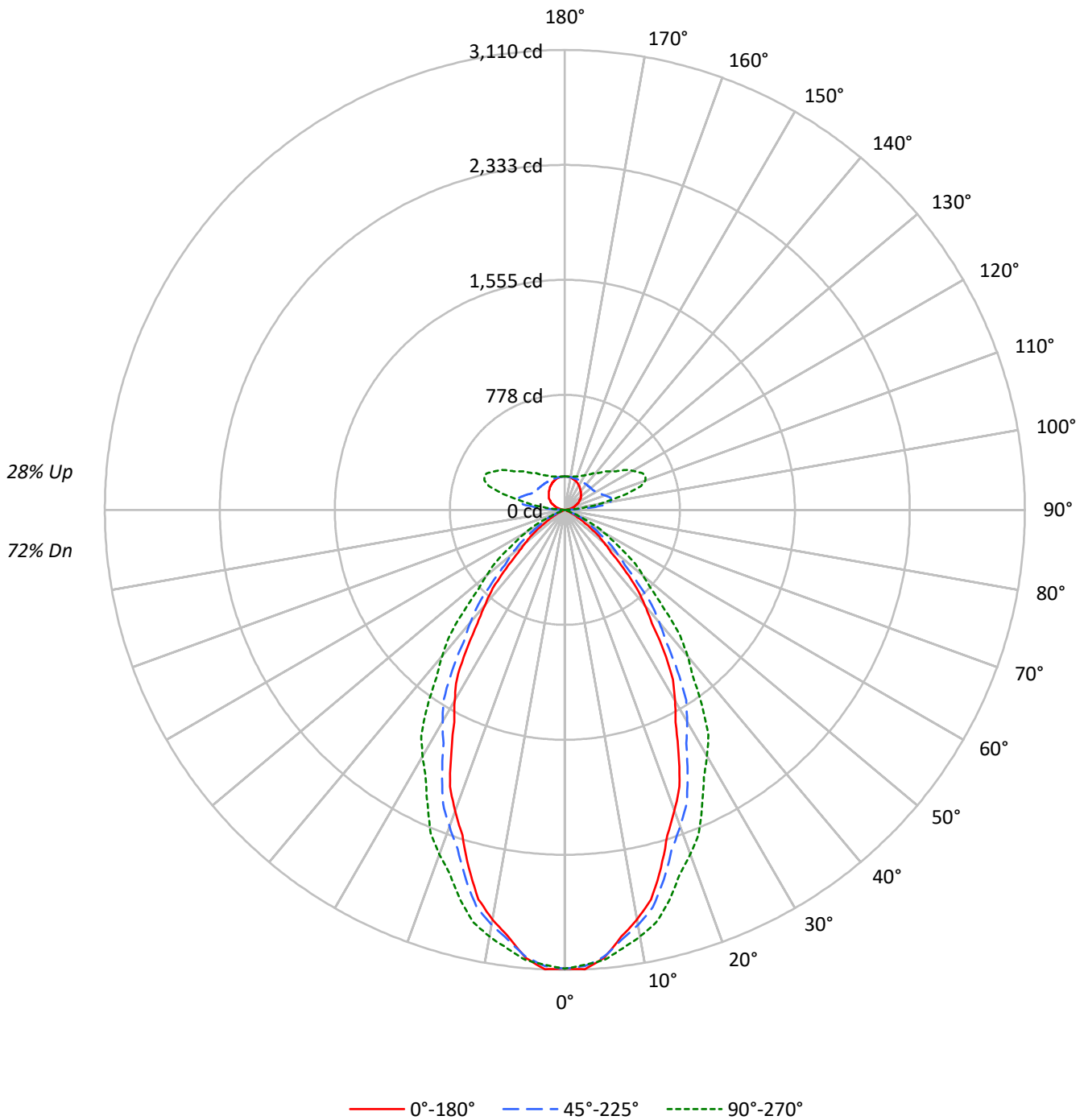
Lumens per Lamp: N/A
Luminaire Lumens: 5165.8 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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°	19083	19083	19083
5°	18777	18730	18869
10°	17568	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10575	11737	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8331
50°	3318	4495	6607
55°	2157	3251	5134
60°	1238	2289	3711
65°	327	1399	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°	283.2	5.5
10°-20°	724.1	14.0
20°-30°	906.5	17.5
30°-40°	837.3	16.2
40°-50°	562.6	10.9
50°-60°	290.6	5.6
60°-70°	91.0	1.8
70°-80°	5.7	0.1
80°-90°	1.3	0.0
90°-100°	110.0	2.1
100°-110°	289.3	5.6
110°-120°	300.0	5.8
120°-130°	240.6	4.7
130°-140°	188.8	3.7
140°-150°	144.9	2.8
150°-160°	104.4	2.0
160°-170°	63.9	1.2
170°-180°	21.6	0.4
0°-30°	1913.8	37.0
0°-40°	2751.1	53.3
0°-60°	3604.3	69.8
0°-90°	3702.4	71.7
90°-120°	699.3	13.5
90°-150°	1273.6	24.7
90°-180°	1463.0	28.3
0°-180°	5165.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3103	3103	3103	3103	3103	
5°	3041	3010	3034	3044	3056	282
15°	2508	2499	2588	2675	2732	699
25°	1819	1834	1963	2098	2196	834
35°	1168	1197	1327	1483	1618	723
45°	560	594	694	828	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	1	4	12	6	6	1
95°	14	57	190	98	67	16
105°	52	79	320	486	453	55
115°	93	112	256	511	583	91
125°	129	144	233	394	465	114
135°	153	169	226	318	360	119
145°	178	189	223	271	292	112
155°	201	207	223	245	252	92
165°	217	220	223	232	234	61
175°	226	226	224	227	227	21
180°	226	226	226	226	226	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3102.6	3102.6	3102.6	3102.6	3102.6
2.5°	3109.8	3080.5	3088.2	3088.0	3079.8
5°	3041.1	3010.3	3033.6	3044.4	3056.1
7.5°	2912.6	2888.5	2933.3	2966.9	2991.3
10°	2812.9	2792.4	2850.5	2896.3	2930.0
12.5°	2697.7	2681.8	2752.0	2814.8	2858.0
15°	2508.2	2499.4	2587.8	2674.6	2731.9
17.5°	2305.3	2305.0	2405.9	2513.7	2582.7
20°	2166.0	2170.4	2278.6	2397.5	2478.2
22.5°	2026.7	2037.0	2152.5	2276.5	2368.9
25°	1819.3	1833.9	1963.4	2097.7	2196.0
27.5°	1619.9	1641.3	1777.5	1917.1	2036.9
30°	1489.0	1514.0	1652.6	1799.5	1922.8
32.5°	1360.5	1390.2	1525.3	1680.7	1806.3
35°	1167.8	1197.2	1326.9	1483.1	1618.1
37.5°	968.8	997.5	1124.3	1278.0	1423.9
40°	839.1	871.4	992.2	1141.2	1289.4
42.5°	721.4	753.7	867.3	1013.7	1153.7
45°	559.9	593.6	693.5	828.5	957.7
47.5°	426.0	462.7	550.3	672.4	790.1
50°	346.7	383.4	469.8	577.5	690.5
52.5°	283.1	318.6	396.6	498.0	601.6
55°	201.1	234.9	303.2	389.3	478.8
57.5°	139.0	168.1	229.4	301.2	371.4
60°	100.6	128.5	186.1	244.5	301.7
62.5°	66.9	92.5	148.9	193.6	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.4	53.2	57.6
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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	0.9	2.3	1.2	1.2
90°	1.4	4.3	11.6	5.8	5.8
92.5°	6.1	29.3	64.8	28.7	18.5
95°	14.5	56.9	189.6	97.7	66.6
97.5°	25.2	62.5	283.7	225.6	166.2
100°	33.3	67.3	312.6	316.8	246.0
102.5°	40.2	71.9	320.7	394.6	334.0
105°	52.1	79.0	319.9	485.6	453.0
107.5°	64.3	89.2	301.6	532.8	540.7
110°	72.4	95.0	286.6	545.0	578.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	80.5	102.0	272.7	537.3	589.4
115°	92.6	112.4	256.2	511.1	583.3
117.5°	104.5	122.6	244.9	474.8	554.9
120°	111.4	128.4	240.3	450.4	528.3
122.5°	118.4	135.4	236.8	426.1	502.8
125°	128.8	144.4	233.0	393.8	464.6
127.5°	137.2	153.1	229.8	367.8	427.5
130°	141.8	158.8	228.7	351.5	406.7
132.5°	146.5	163.5	227.5	337.5	387.0
135°	153.4	169.0	225.8	317.9	360.4
137.5°	160.7	175.9	225.5	303.3	338.1
140°	166.4	180.6	224.3	291.7	324.2
142.5°	171.1	184.1	224.3	283.4	311.5
145°	178.0	189.3	222.9	271.1	292.4
147.5°	185.0	196.0	222.9	260.9	278.5
150°	189.6	199.5	222.9	255.1	269.2
152.5°	194.2	201.9	222.9	250.3	261.1
155°	201.2	206.8	222.9	244.8	251.8
157.5°	206.4	211.8	222.9	239.8	244.9
160°	209.9	214.1	222.9	237.4	240.3
162.5°	213.3	216.5	222.9	235.1	237.9
165°	217.1	219.9	222.9	231.6	234.5
167.5°	220.6	222.0	224.3	230.2	231.3
170°	222.9	224.3	224.3	230.1	230.1
172.5°	224.0	224.3	224.3	228.9	227.8
175°	225.8	225.8	224.3	227.2	227.2
177.5°	225.8	225.8	224.6	226.9	225.8
180°	225.8	225.8	225.8	225.8	225.8

(END OF REPORT)