

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: P518468

Luminaire Tested: **SQ4-BB-050U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518468
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

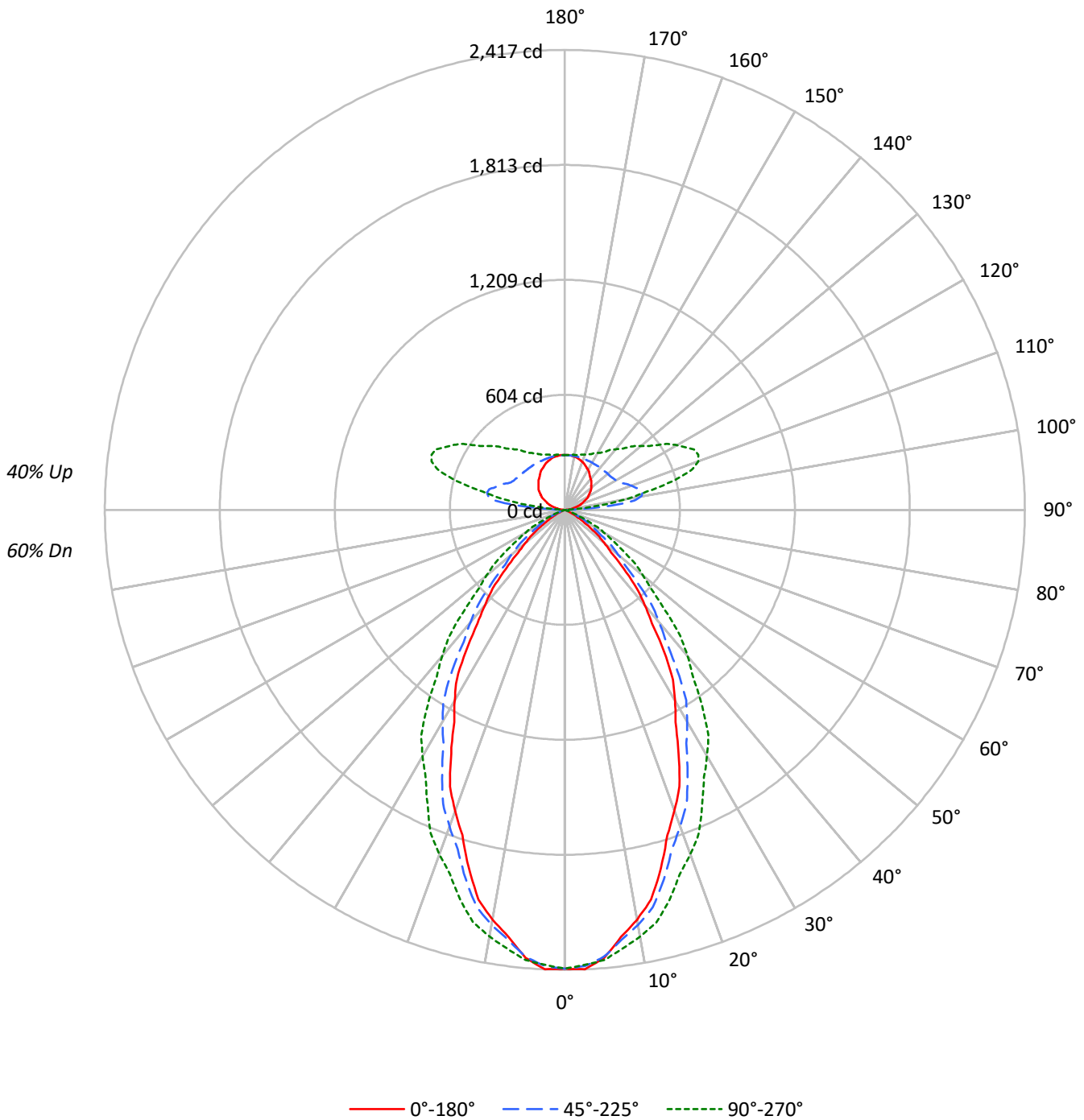
Lumens per Lamp: N/A
Luminaire Lumens: 4757.9 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22248	22248	22248
5°	21890	21837	21999
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17387	18911
25°	14395	15535	17375
30°	12329	13684	15922
35°	10222	11616	14164
40°	7854	9287	12069
45°	5678	7033	9711
50°	3868	5242	7703
55°	2514	3791	5987
60°	1443	2670	4327
65°	382	1631	2190
70°	189	504	629
75°	82	43	0
80°	64	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.1	4.6
10°-20°	562.8	11.8
20°-30°	704.6	14.8
30°-40°	650.8	13.7
40°-50°	437.3	9.2
50°-60°	225.9	4.7
60°-70°	70.8	1.5
70°-80°	4.5	0.1
80°-90°	1.2	0.0
90°-100°	138.2	2.9
100°-110°	375.5	7.9
110°-120°	386.1	8.1
120°-130°	308.7	6.5
130°-140°	242.5	5.1
140°-150°	186.0	3.9
150°-160°	133.7	2.8
160°-170°	81.8	1.7
170°-180°	27.6	0.6
0°-30°	1487.4	31.3
0°-40°	2138.2	44.9
0°-60°	2801.3	58.9
0°-90°	2877.7	60.5
90°-120°	899.8	18.9
90°-150°	1637.0	34.4
90°-180°	1880.0	39.5
0°-180°	4757.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2411	2411	2411	2411	2411	
5°	2364	2340	2358	2366	2375	219
15°	1949	1943	2011	2079	2123	543
25°	1414	1425	1526	1630	1707	648
35°	908	930	1031	1153	1258	562
45°	435	461	539	644	744	342
55°	156	183	236	303	372	146
65°	18	34	75	90	100	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	4	6	8	8	1
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2411.4	2411.4	2411.4	2411.4	2411.4
2.5°	2417.0	2394.2	2400.2	2400.1	2393.7
5°	2363.6	2339.6	2357.8	2366.1	2375.3
7.5°	2263.7	2245.0	2279.8	2305.9	2324.9
10°	2186.3	2170.3	2215.4	2251.0	2277.3
12.5°	2096.7	2084.4	2138.9	2187.7	2221.3
15°	1949.4	1942.6	2011.3	2078.8	2123.3
17.5°	1791.7	1791.5	1869.9	1953.7	2007.3
20°	1683.4	1686.9	1770.9	1863.4	1926.1
22.5°	1575.2	1583.2	1672.9	1769.3	1841.2
25°	1414.0	1425.4	1526.0	1630.4	1706.8
27.5°	1259.0	1275.7	1381.5	1490.0	1583.1
30°	1157.3	1176.7	1284.5	1398.6	1494.5
32.5°	1057.4	1080.5	1185.5	1306.3	1403.9
35°	907.6	930.5	1031.3	1152.7	1257.6
37.5°	752.9	775.3	873.8	993.3	1106.7
40°	652.1	677.2	771.1	886.9	1002.1
42.5°	560.7	585.8	674.1	787.8	896.7
45°	435.2	461.4	539.0	643.9	744.3
47.5°	331.1	359.6	427.7	522.6	614.1
50°	269.5	298.0	365.2	448.8	536.7
52.5°	220.0	247.6	308.2	387.1	467.6
55°	156.3	182.6	235.7	302.6	372.2
57.5°	108.0	130.6	178.3	234.1	288.6
60°	78.2	99.8	144.7	190.0	234.5
62.5°	52.0	71.9	115.7	150.5	180.4
65°	17.5	33.5	74.7	90.1	100.3
67.5°	8.9	10.7	39.2	41.4	44.8
70°	7.0	7.0	18.7	19.9	23.3
72.5°	5.1	5.1	7.5	9.6	10.3
75°	2.3	2.3	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.7	1.3	1.7	1.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.5	691.1	757.9
115°	118.5	143.9	330.5	657.6	749.1
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.2	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.4
127.5°	173.9	196.3	295.9	471.8	549.4
130°	180.6	202.3	294.4	451.6	521.3
132.5°	187.2	208.9	293.0	434.4	496.1
135°	196.3	218.0	290.7	410.4	463.0
137.5°	206.1	225.8	289.6	389.3	433.5
140°	212.0	231.0	288.9	375.9	415.7
142.5°	218.0	235.5	288.1	365.4	398.7
145°	226.8	243.1	287.0	348.7	375.0
147.5°	236.8	250.8	286.1	335.6	356.3
150°	243.5	255.3	286.1	328.1	344.4
152.5°	248.7	259.0	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.2	322.2
157.5°	264.1	271.1	285.2	307.6	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.8	304.8
165°	277.8	281.4	286.1	298.2	299.1
167.5°	282.8	284.6	287.0	295.0	295.7
170°	284.3	286.1	287.0	293.5	293.5
172.5°	285.7	286.8	287.0	292.0	292.0
175°	288.0	288.9	287.0	290.7	289.8
177.5°	288.7	288.7	286.5	289.4	288.0
180°	288.0	288.0	288.0	288.0	288.0

(END OF REPORT)