

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: P518488

Luminaire Tested: **SQ4-BB-050U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518488
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

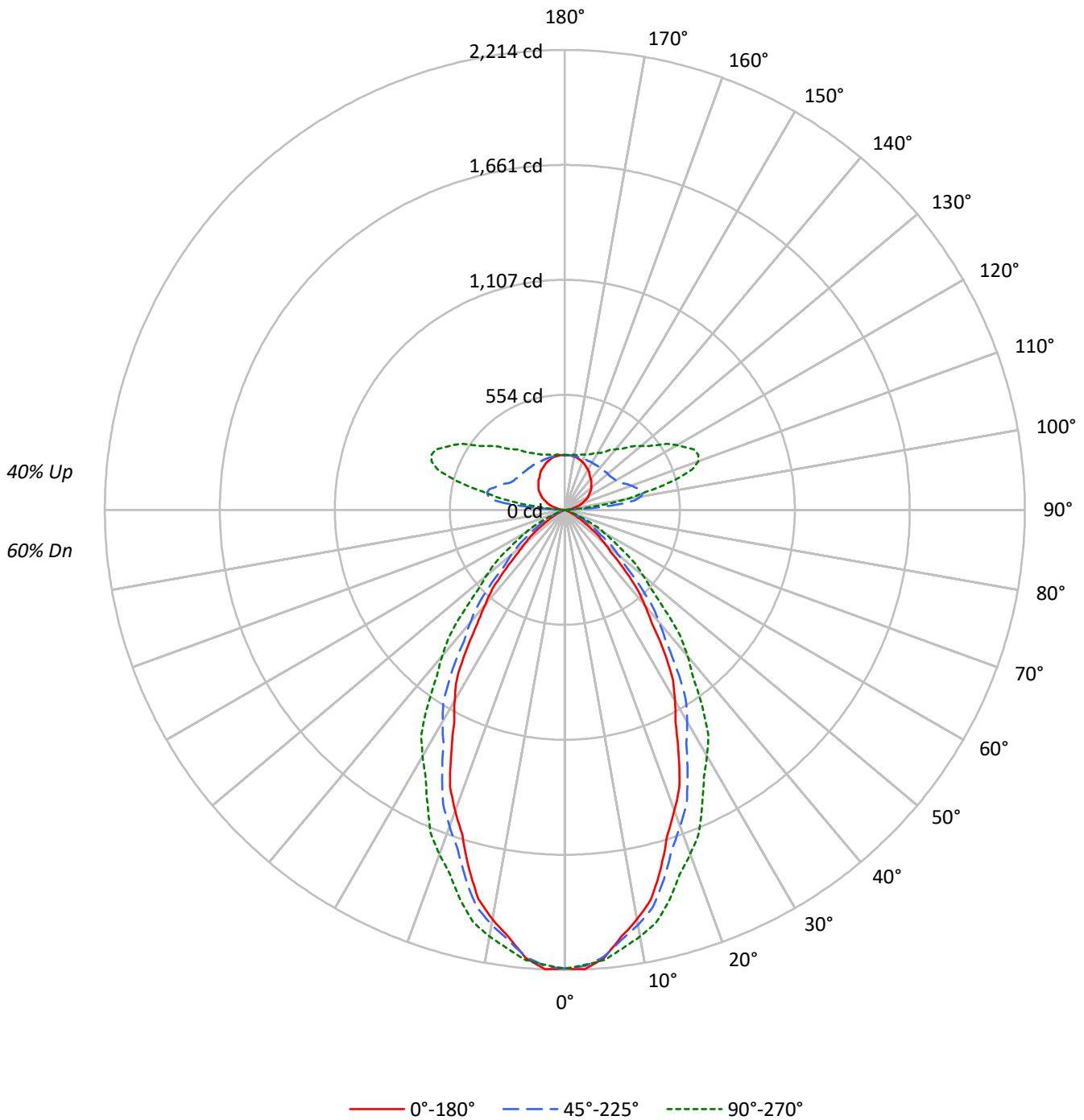
Lumens per Lamp: N/A
Luminaire Lumens: 4357.6 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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°	20376	20376	20376
5°	20048	19999	20147
10°	18759	19009	19540
15°	17054	17595	18574
20°	15138	15925	17320
25°	13183	14228	15913
30°	11292	12533	14581
35°	9363	10638	12973
40°	7194	8507	11054
45°	5200	6440	8895
50°	3542	4800	7055
55°	2303	3471	5482
60°	1321	2445	3964
65°	349	1493	2006
70°	173	461	577
75°	75	39	0
80°	58	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	4.6
10°-20°	515.4	11.8
20°-30°	645.3	14.8
30°-40°	596.0	13.7
40°-50°	400.5	9.2
50°-60°	206.9	4.7
60°-70°	64.8	1.5
70°-80°	4.1	0.1
80°-90°	1.1	0.0
90°-100°	126.6	2.9
100°-110°	343.9	7.9
110°-120°	353.6	8.1
120°-130°	282.7	6.5
130°-140°	222.2	5.1
140°-150°	170.3	3.9
150°-160°	122.5	2.8
160°-170°	74.9	1.7
170°-180°	25.2	0.6
0°-30°	1362.3	31.3
0°-40°	1958.3	44.9
0°-60°	2565.7	58.9
0°-90°	2635.6	60.5
90°-120°	824.1	18.9
90°-150°	1499.3	34.4
90°-180°	1722.0	39.5
0°-180°	4357.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2208	2208	2208	2208	2208	
5°	2165	2143	2159	2167	2175	201
15°	1785	1779	1842	1904	1945	497
25°	1295	1305	1398	1493	1563	594
35°	831	852	944	1056	1152	515
45°	398	423	494	590	682	313
55°	143	167	216	277	341	134
65°	16	31	68	82	92	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	3	6	8	8	1
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	343	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2208.5	2208.5	2208.5	2208.5	2208.5
2.5°	2213.7	2192.8	2198.3	2198.2	2192.3
5°	2164.7	2142.8	2159.4	2167.1	2175.4
7.5°	2073.3	2056.1	2088.0	2111.9	2129.3
10°	2002.3	1987.7	2029.0	2061.6	2085.7
12.5°	1920.3	1909.0	1959.0	2003.7	2034.4
15°	1785.4	1779.2	1842.1	1903.9	1944.6
17.5°	1641.0	1640.8	1712.6	1789.3	1838.4
20°	1541.8	1545.0	1622.0	1706.6	1764.1
22.5°	1442.7	1450.0	1532.2	1620.5	1686.3
25°	1295.0	1305.4	1397.6	1493.2	1563.2
27.5°	1153.1	1168.4	1265.3	1364.7	1449.9
30°	1059.9	1077.7	1176.4	1281.0	1368.7
32.5°	968.5	989.6	1085.8	1196.4	1285.8
35°	831.3	852.2	944.5	1055.7	1151.8
37.5°	689.6	710.1	800.3	909.7	1013.6
40°	597.3	620.3	706.3	812.3	917.8
42.5°	513.5	536.5	617.4	721.6	821.2
45°	398.5	422.6	493.6	589.8	681.7
47.5°	303.2	329.4	391.7	478.7	562.4
50°	246.8	272.9	334.4	411.1	491.5
52.5°	201.5	226.8	282.3	354.5	428.2
55°	143.2	167.2	215.8	277.1	340.8
57.5°	98.9	119.6	163.3	214.4	264.3
60°	71.6	91.4	132.5	174.0	214.8
62.5°	47.7	65.8	106.0	137.8	165.2
65°	16.0	30.7	68.4	82.5	91.9
67.5°	8.1	9.8	35.9	37.9	41.0
70°	6.4	6.4	17.1	18.2	21.4
72.5°	4.7	4.7	6.8	8.8	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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	1.2	1.5	1.5
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)