

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: P518776

Luminaire Tested: **SQ4-BB-100U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518776
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

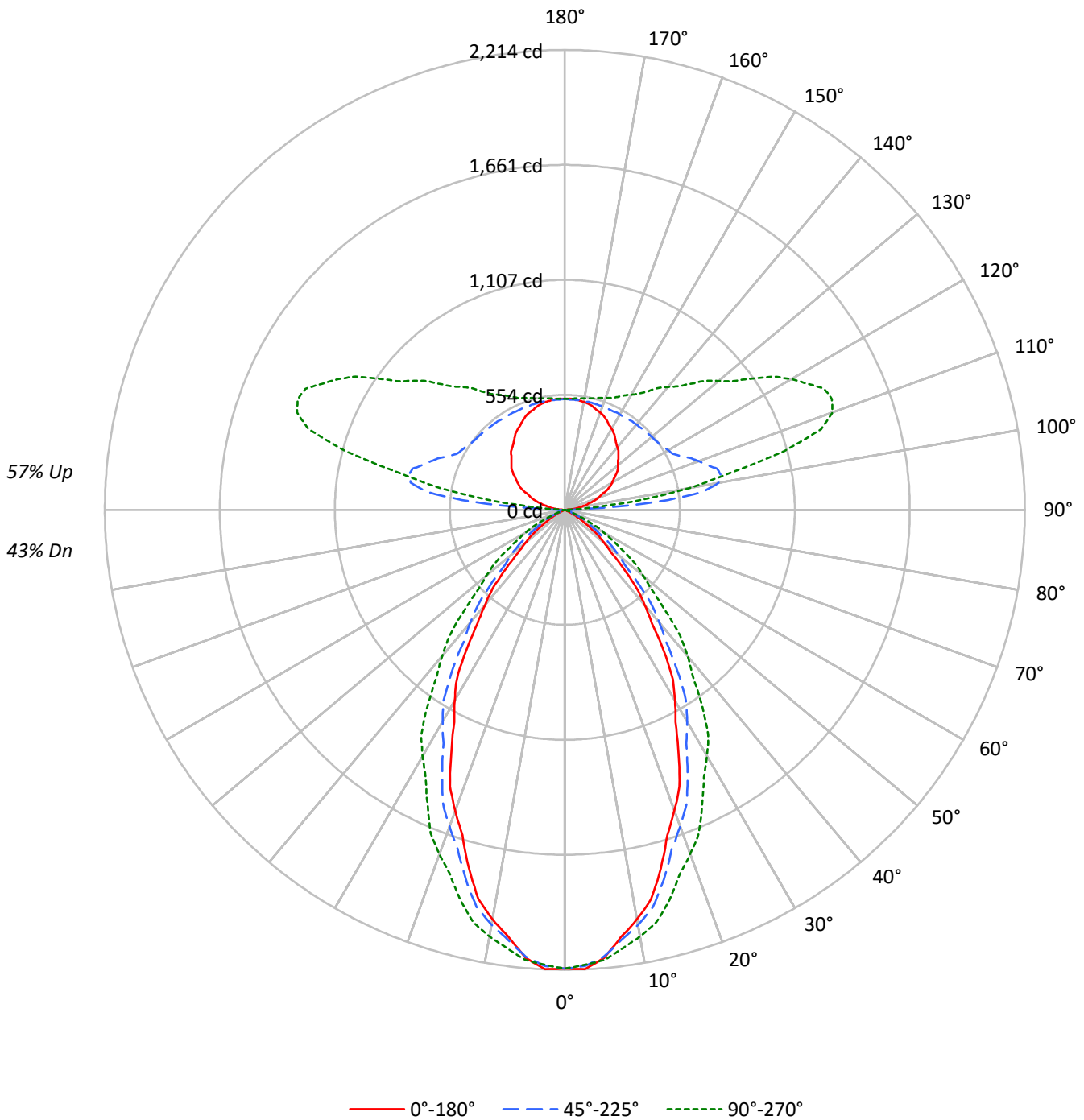
Lumens per Lamp: N/A
Luminaire Lumens: 6107.8 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17

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	3.3
10°-20°	515.4	8.4
20°-30°	645.3	10.6
30°-40°	596.0	9.8
40°-50°	400.5	6.6
50°-60°	206.9	3.4
60°-70°	64.8	1.1
70°-80°	4.1	0.1
80°-90°	1.2	0.0
90°-100°	250.2	4.1
100°-110°	690.9	11.3
110°-120°	712.5	11.7
120°-130°	572.6	9.4
130°-140°	450.0	7.4
140°-150°	345.1	5.7
150°-160°	248.0	4.1
160°-170°	151.7	2.5
170°-180°	51.1	0.8
0°-30°	1362.3	22.3
0°-40°	1958.3	32.1
0°-60°	2565.7	42.0
0°-90°	2635.7	43.2
90°-120°	1653.6	27.1
90°-150°	3021.2	49.5
90°-180°	3472.0	56.8
0°-180°	6107.8	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°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	



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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°	0.3	0.7	1.4	1.5	1.7
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.4	531.8	547.6	548.9
170°	527.5	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)