

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: P518800

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518800
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

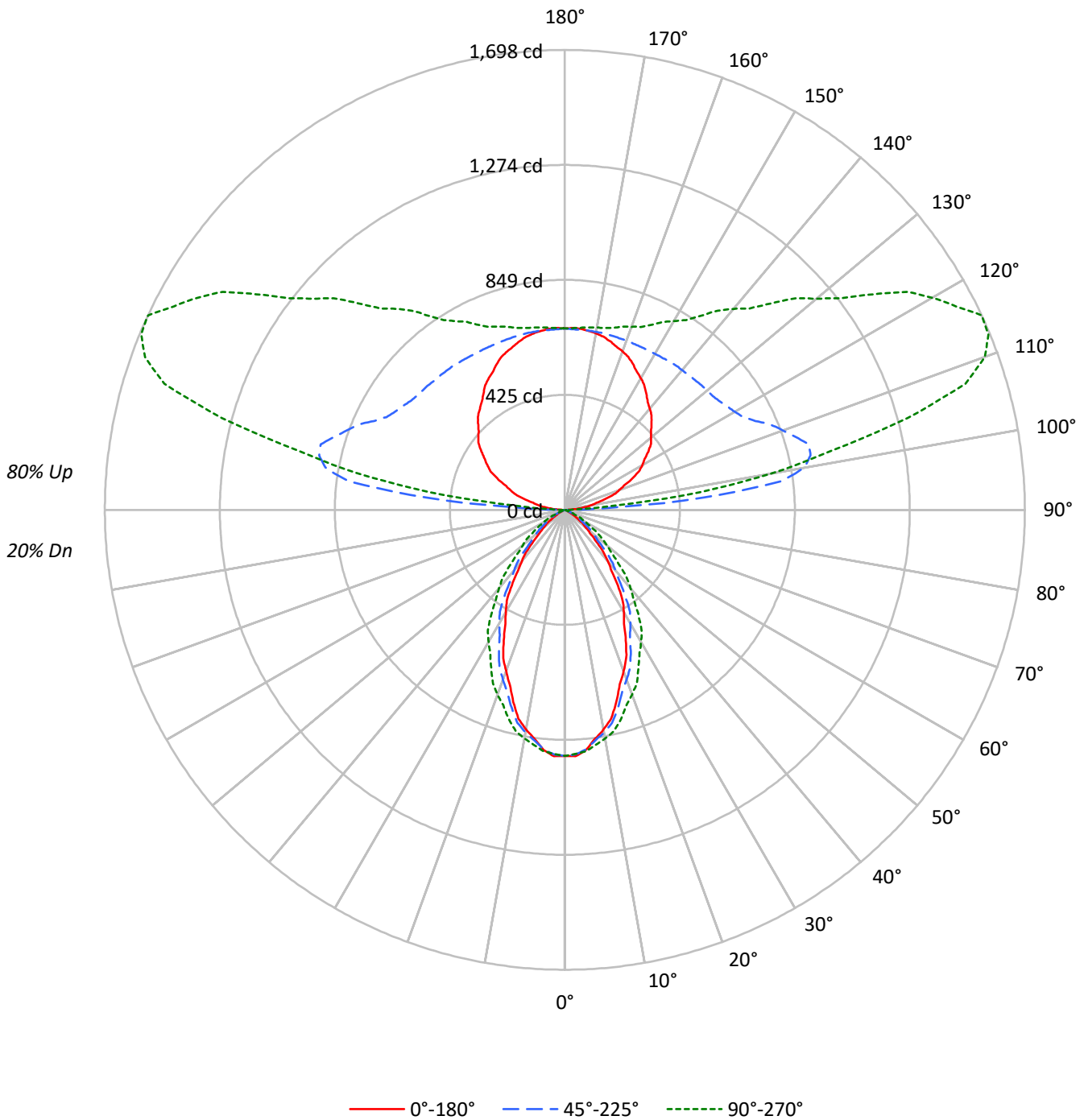
Lumens per Lamp: N/A
Luminaire Lumens: 5407.0 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 47.9
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8245	8225	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7123
25°	5422	5851	6545
30°	4644	5154	5997
35°	3851	4376	5335
40°	2959	3499	4547
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1629
65°	144	613	825
70°	70	189	237
75°	32	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.5
10°-20°	212.0	3.9
20°-30°	265.4	4.9
30°-40°	245.1	4.5
40°-50°	164.7	3.0
50°-60°	85.1	1.6
60°-70°	26.6	0.5
70°-80°	1.7	0.0
80°-90°	1.6	0.0
90°-100°	313.2	5.8
100°-110°	843.6	15.6
110°-120°	885.4	16.4
120°-130°	718.5	13.3
130°-140°	563.5	10.4
140°-150°	432.6	8.0
150°-160°	311.0	5.8
160°-170°	190.0	3.5
170°-180°	64.1	1.2
0°-30°	560.3	10.4
0°-40°	805.4	14.9
0°-60°	1055.2	19.5
0°-90°	1085.1	20.1
90°-120°	2042.2	37.8
90°-150°	3756.7	69.5
90°-180°	4322.0	79.9
0°-180°	5407.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	890	881	888	891	895	83
15°	734	732	758	783	800	205
25°	533	537	575	614	643	244
35°	342	350	388	434	474	212
45°	164	174	203	243	280	129
55°	59	69	89	114	140	55
65°	7	13	28	34	38	11
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	5	10	11	11	3
95°	48	170	513	262	182	50
105°	156	243	933	1396	1310	164
115°	276	337	777	1501	1698	271
125°	376	432	698	1179	1388	336
135°	453	505	678	951	1077	350
145°	524	564	670	813	873	328
155°	594	616	664	730	753	274
165°	645	652	666	693	696	182
175°	670	670	667	676	675	64
180°	670	670	670	670	670	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.3	908.3	908.3	908.3	908.3
2.5°	910.5	901.9	904.1	904.1	901.7
5°	890.3	881.3	888.1	891.3	894.7
7.5°	852.7	845.7	858.8	868.6	875.7
10°	823.5	817.5	834.5	847.9	857.8
12.5°	789.8	785.1	805.7	824.1	836.7
15°	734.3	731.7	757.6	783.0	799.8
17.5°	674.9	674.8	704.3	735.9	756.1
20°	634.1	635.4	667.1	701.9	725.5
22.5°	593.3	596.4	630.2	666.5	693.5
25°	532.6	536.9	574.8	614.1	642.9
27.5°	474.3	480.5	520.4	561.3	596.3
30°	435.9	443.2	483.8	526.8	562.9
32.5°	398.3	407.0	446.6	492.1	528.8
35°	341.9	350.5	388.5	434.2	473.7
37.5°	283.6	292.0	329.1	374.2	416.9
40°	245.7	255.1	290.5	334.1	377.5
42.5°	211.2	220.7	253.9	296.8	337.8
45°	163.9	173.8	203.0	242.6	280.4
47.5°	124.7	135.5	161.1	196.9	231.3
50°	101.5	112.3	137.5	169.1	202.1
52.5°	82.9	93.3	116.1	145.8	176.1
55°	58.9	68.8	88.8	114.0	140.2
57.5°	40.7	49.2	67.1	88.2	108.7
60°	29.4	37.6	54.5	71.6	88.3
62.5°	19.6	27.1	43.6	56.7	67.9
65°	6.6	12.6	28.1	33.9	37.8
67.5°	3.3	4.0	14.8	15.6	16.9
70°	2.6	2.6	7.0	7.5	8.8
72.5°	1.9	1.9	2.8	3.6	3.9
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.4	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	2.0	2.2	2.2
90°	1.7	5.0	10.2	11.1	11.1
92.5°	20.8	73.5	145.3	70.0	48.6
95°	47.8	170.3	513.4	262.5	181.7
97.5°	76.2	195.0	805.2	672.7	507.3
100°	98.1	204.8	898.0	939.6	779.5
102.5°	119.2	218.6	928.7	1139.5	1008.0
105°	156.1	242.8	933.0	1395.8	1309.9
107.5°	190.9	268.2	893.3	1527.6	1549.8
110°	214.1	287.4	857.1	1568.5	1649.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	238.6	306.7	822.3	1559.4	1692.4
115°	275.5	337.2	776.9	1501.2	1698.0
117.5°	309.1	366.9	741.8	1408.2	1627.4
120°	330.9	386.8	724.1	1341.5	1566.6
122.5°	350.0	405.2	711.1	1273.3	1497.7
125°	376.1	432.0	697.6	1179.1	1387.6
127.5°	401.2	456.2	689.1	1096.0	1282.1
130°	416.2	471.2	685.7	1048.4	1211.9
132.5°	431.2	485.6	682.3	1006.5	1156.6
135°	452.9	505.4	678.0	951.2	1077.1
137.5°	473.5	523.9	675.8	904.3	1007.7
140°	487.8	536.2	673.7	875.4	968.8
142.5°	502.8	547.9	672.4	848.5	927.2
145°	523.6	564.5	669.5	813.3	873.3
147.5°	546.2	581.7	666.6	783.6	830.8
150°	561.2	592.0	665.2	765.0	804.2
152.5°	574.8	601.7	664.5	749.8	781.7
155°	594.4	616.1	663.5	729.7	753.0
157.5°	611.6	628.5	663.7	715.5	731.2
160°	622.6	636.7	664.4	707.3	718.9
162.5°	632.1	643.6	665.0	700.4	708.7
165°	644.7	652.2	666.1	692.6	695.9
167.5°	655.0	659.3	666.9	686.6	687.9
170°	661.8	663.5	666.9	683.1	683.1
172.5°	665.9	666.2	667.6	679.7	679.7
175°	670.3	669.5	666.9	676.3	674.6
177.5°	672.2	670.9	667.4	672.9	671.5
180°	669.5	669.5	669.5	669.5	669.5

(END OF REPORT)