

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521274

Luminaire Tested: **SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521274  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

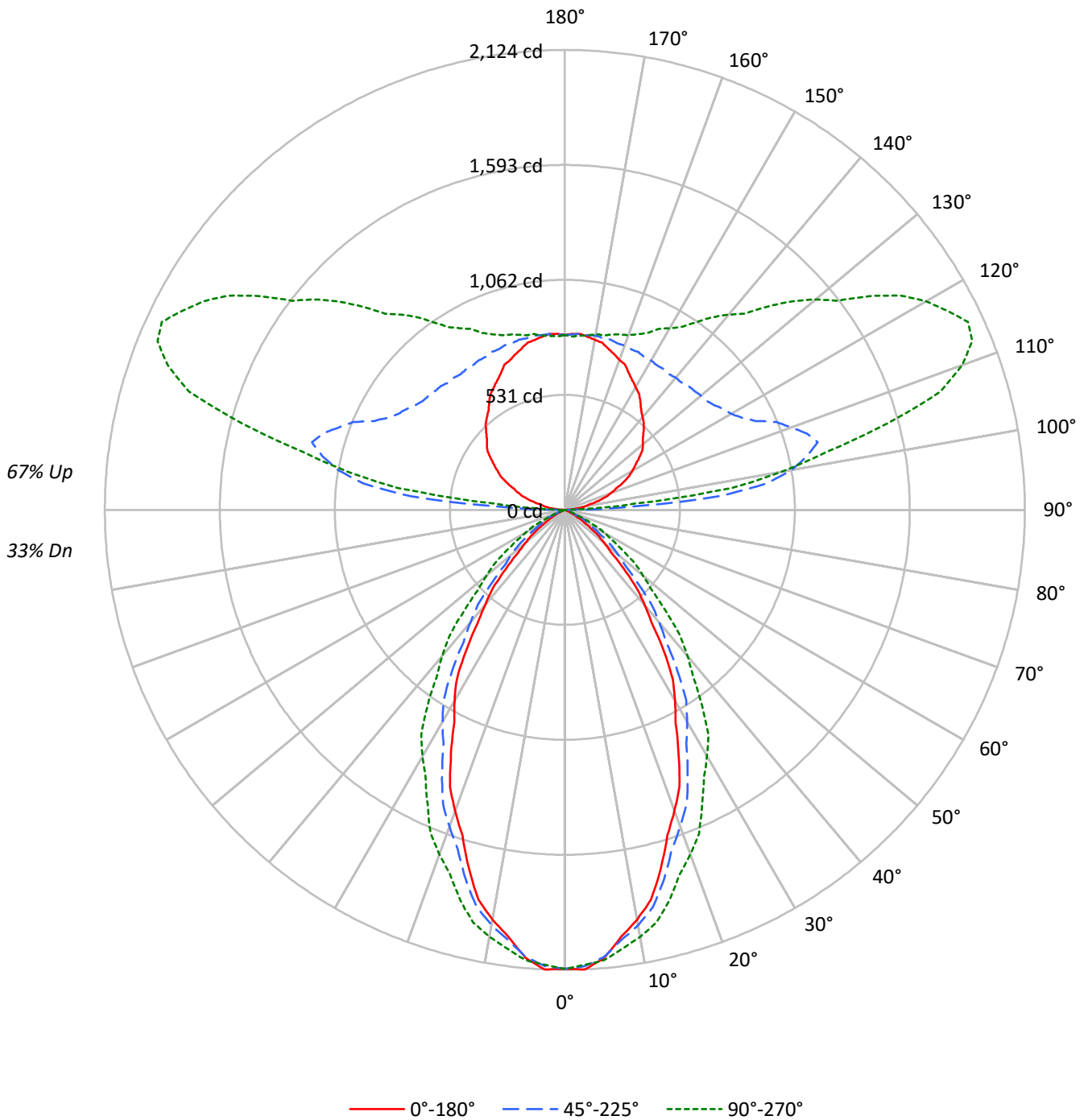
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7755.0 lumens  
Efficiency: N/A  
Efficacy: 92.8 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): 83.6  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	87	81	76	71	79	74	69	65	59	56	54	46	44	43	34	33	32	27
3	81	72	66	61	73	66	60	56	53	50	47	42	40	38	31	30	29	24
4	74	65	58	52	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	23	20
6	64	53	45	40	57	48	42	37	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	19	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	26	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	19555	19555	19555
5°	19241	19192	19335
10°	18003	18242	18752
15°	16367	16885	17825
20°	14528	15283	16621
25°	12652	13653	15272
30°	10837	12028	13993
35°	8986	10210	12450
40°	6904	8163	10608
45°	4991	6181	8536
50°	3400	4607	6771
55°	2210	3331	5262
60°	1268	2347	3803
65°	336	1432	1925
70°	167	442	553
75°	75	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.4	2.5
10°-20°	494.7	6.4
20°-30°	619.3	8.0
30°-40°	572.0	7.4
40°-50°	384.4	5.0
50°-60°	198.5	2.6
60°-70°	62.2	0.8
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	416.1	5.4
100°-110°	1005.7	13.0
110°-120°	1072.6	13.8
120°-130°	868.8	11.2
130°-140°	672.6	8.7
140°-150°	513.1	6.6
150°-160°	371.4	4.8
160°-170°	228.8	2.9
170°-180°	77.5	1.0
0°-30°	1307.3	16.9
0°-40°	1879.3	24.2
0°-60°	2462.2	31.8
0°-90°	2528.4	32.6
90°-120°	2494.5	32.2
90°-150°	4548.9	58.7
90°-180°	5227.0	67.4
0°-180°	7755.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2078	2056	2072	2080	2088	193
15°	1714	1707	1768	1827	1866	477
25°	1243	1253	1341	1433	1500	570
35°	798	818	906	1013	1105	494
45°	382	406	474	566	654	300
55°	137	160	207	266	327	128
65°	15	29	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	41	208	713	464	325	46
105°	161	278	1209	1564	1544	170
115°	294	376	971	1841	2053	291
125°	419	482	843	1464	1720	374
135°	515	575	809	1155	1328	397
145°	609	654	793	981	1058	380
155°	698	728	804	869	901	322
165°	771	783	814	826	838	218
175°	816	812	816	809	807	77
180°	807	807	807	807	807	



TEST NUMBER: P521274

CATALOG NUMBER: SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2119.5	2119.5	2119.5	2119.5	2119.5
2.5°	2124.4	2104.4	2109.7	2109.5	2103.9
5°	2077.5	2056.4	2072.3	2079.7	2087.7
7.5°	1989.7	1973.3	2003.8	2026.8	2043.4
10°	1921.6	1907.6	1947.2	1978.5	2001.6
12.5°	1842.9	1832.0	1880.0	1922.9	1952.4
15°	1713.5	1707.4	1767.8	1827.1	1866.2
17.5°	1574.8	1574.6	1643.5	1717.2	1764.3
20°	1479.7	1482.7	1556.6	1637.8	1692.9
22.5°	1384.5	1391.5	1470.4	1555.1	1618.3
25°	1242.8	1252.8	1341.2	1433.0	1500.2
27.5°	1106.6	1121.3	1214.3	1309.7	1391.5
30°	1017.2	1034.2	1129.0	1229.3	1313.5
32.5°	929.4	949.7	1042.0	1148.1	1234.0
35°	797.8	817.8	906.5	1013.1	1105.4
37.5°	661.8	681.4	768.0	873.0	972.7
40°	573.2	595.3	677.8	779.6	880.8
42.5°	492.8	514.9	592.5	692.5	788.1
45°	382.5	405.5	473.7	566.0	654.2
47.5°	291.0	316.1	375.9	459.4	539.8
50°	236.9	261.9	321.0	394.5	471.7
52.5°	193.4	217.7	270.9	340.2	411.0
55°	137.4	160.5	207.1	265.9	327.1
57.5°	95.0	114.8	156.7	205.8	253.7
60°	68.7	87.8	127.2	167.0	206.1
62.5°	45.7	63.2	101.7	132.3	158.5
65°	15.4	29.4	65.6	79.2	88.2
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.7	112.6	265.3	129.0	87.5
95°	41.0	208.2	712.9	463.6	324.8
97.5°	72.8	230.6	939.0	904.6	776.5
100°	97.5	244.6	1063.4	1122.6	1017.3
102.5°	120.7	257.1	1145.5	1304.1	1241.6
105°	160.7	277.7	1208.8	1563.9	1543.9
107.5°	200.0	302.0	1171.5	1772.3	1819.5
110°	227.4	322.7	1111.3	1862.2	1950.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	254.7	343.3	1058.0	1884.1	2035.6
115°	294.1	376.0	971.1	1841.0	2053.3
117.5°	333.0	410.3	920.2	1742.0	1990.8
120°	359.0	430.9	887.3	1664.3	1925.1
122.5°	386.4	452.9	866.8	1584.9	1841.7
125°	418.9	482.4	842.9	1464.2	1720.0
127.5°	451.0	510.9	826.1	1361.9	1586.6
130°	470.2	528.7	820.7	1290.7	1511.4
132.5°	487.9	549.1	812.4	1239.3	1426.6
135°	514.6	574.8	808.7	1154.6	1328.4
137.5°	539.9	600.4	796.7	1097.2	1228.2
140°	559.1	614.2	796.7	1055.9	1176.3
142.5°	578.2	633.4	789.9	1019.9	1121.6
145°	608.7	653.8	793.3	981.4	1058.3
147.5°	637.0	680.8	791.2	937.0	1000.5
150°	654.8	693.3	796.7	917.5	967.7
152.5°	674.0	711.1	795.4	896.9	941.7
155°	697.6	727.6	803.6	869.2	901.0
157.5°	725.9	751.7	801.8	858.7	877.4
160°	736.9	758.6	808.7	844.9	858.3
162.5°	754.7	773.7	806.0	840.7	848.7
165°	771.1	782.8	813.8	826.0	837.8
167.5°	791.2	798.9	811.8	825.1	825.4
170°	796.7	801.7	817.2	815.7	824.1
172.5°	806.3	810.0	813.1	816.8	811.8
175°	815.5	812.2	815.5	808.6	807.0
177.5°	813.8	813.8	811.1	808.2	801.5
180°	807.0	807.0	807.0	807.0	807.0

(END OF REPORT)