

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: P518912

Luminaire Tested: **SQ4-BB-150U-075D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518912  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-075D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

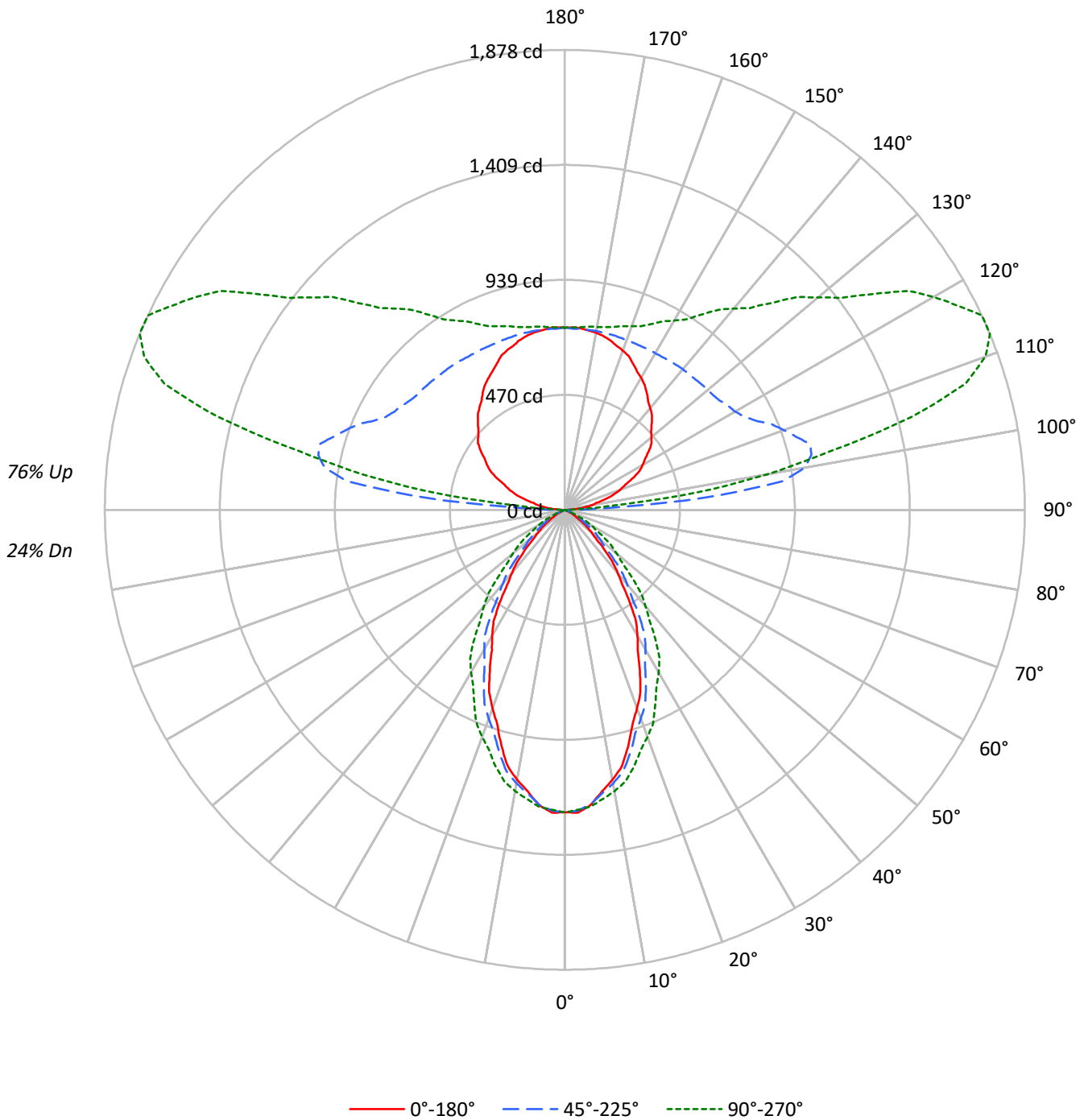
Lumens per Lamp: N/A  
Luminaire Lumens: 6268.2 lumens  
Efficiency: N/A  
Efficacy: 98.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 63.5  
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

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

	0°	45°	90°
0°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10926
15°	9535	9837	10386
20°	8464	8904	9684
25°	7371	7955	8897
30°	6313	7008	8153
35°	5235	5948	7253
40°	4023	4756	6181
45°	2907	3601	4974
50°	1981	2684	3944
55°	1288	1942	3066
60°	738	1367	2216
65°	196	834	1122
70°	97	259	321
75°	43	21	0
80°	32	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.7	1.8
10°-20°	288.2	4.6
20°-30°	360.8	5.8
30°-40°	333.3	5.3
40°-50°	223.9	3.6
50°-60°	115.7	1.8
60°-70°	36.2	0.6
70°-80°	2.3	0.0
80°-90°	1.6	0.0
90°-100°	345.5	5.5
100°-110°	934.2	14.9
110°-120°	982.2	15.7
120°-130°	797.8	12.7
130°-140°	625.8	10.0
140°-150°	480.3	7.7
150°-160°	345.4	5.5
160°-170°	211.0	3.4
170°-180°	71.1	1.1
0°-30°	761.7	12.2
0°-40°	1094.9	17.5
0°-60°	1434.5	22.9
0°-90°	1474.6	23.5
90°-120°	2262.0	36.1
90°-150°	4166.0	66.5
90°-180°	4794.0	76.5
0°-180°	6268.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1210	1198	1207	1212	1216	112
15°	998	995	1030	1064	1087	278
25°	724	730	781	835	874	332
35°	465	476	528	590	644	288
45°	223	236	276	330	381	175
55°	80	94	121	155	191	75
65°	9	17	38	46	51	15
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	10	11	10	4
95°	54	188	575	297	177	56
105°	174	268	1036	1529	1466	183
115°	306	374	860	1664	1878	302
125°	419	480	775	1307	1536	373
135°	502	561	754	1056	1195	388
145°	583	627	744	904	972	365
155°	659	684	737	810	837	304
165°	717	724	740	769	773	202
175°	744	744	741	751	749	71
180°	744	744	744	744	744	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1234.9	1234.9	1234.9	1234.9	1234.9
2.5°	1237.7	1226.0	1229.1	1229.0	1225.8
5°	1210.4	1198.1	1207.4	1211.7	1216.3
7.5°	1159.2	1149.6	1167.5	1180.8	1190.5
10°	1119.6	1111.4	1134.5	1152.7	1166.2
12.5°	1073.7	1067.4	1095.3	1120.3	1137.5
15°	998.3	994.8	1029.9	1064.5	1087.3
17.5°	917.5	917.4	957.5	1000.5	1027.9
20°	862.1	863.8	906.9	954.2	986.3
22.5°	806.6	810.7	856.7	906.0	942.8
25°	724.1	729.9	781.4	834.9	874.0
27.5°	644.7	653.3	707.5	763.0	810.7
30°	592.6	602.6	657.8	716.2	765.3
32.5°	541.5	553.3	607.1	668.9	718.9
35°	464.8	476.5	528.1	590.3	644.0
37.5°	385.6	397.0	447.5	508.6	566.7
40°	334.0	346.8	394.9	454.2	513.2
42.5°	287.1	300.0	345.2	403.4	459.2
45°	222.8	236.3	276.0	329.7	381.2
47.5°	169.5	184.1	219.0	267.6	314.5
50°	138.0	152.6	187.0	229.8	274.8
52.5°	112.7	126.8	157.8	198.2	239.4
55°	80.1	93.5	120.7	154.9	190.6
57.5°	55.3	66.9	91.3	119.9	147.8
60°	40.0	51.1	74.1	97.3	120.1
62.5°	26.6	36.8	59.3	77.1	92.4
65°	9.0	17.1	38.2	46.1	51.4
67.5°	4.5	5.5	20.1	21.2	22.9
70°	3.6	3.6	9.6	10.2	11.9
72.5°	2.6	2.6	3.8	4.9	5.3
75°	1.2	1.2	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	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	0.9	2.1	2.2	2.1
90°	1.6	4.7	10.4	11.2	10.4
92.5°	22.7	82.8	163.4	70.9	51.4
95°	53.6	188.2	574.6	297.4	176.9
97.5°	86.1	215.9	895.7	741.3	544.4
100°	110.4	227.0	995.6	1038.3	839.5
102.5°	132.9	242.6	1030.8	1263.5	1114.8
105°	173.7	268.4	1036.4	1528.8	1466.2
107.5°	211.4	297.8	991.1	1694.3	1715.1
110°	240.9	319.1	950.8	1738.7	1827.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	267.1	340.4	913.6	1729.8	1878.3
115°	305.7	373.8	859.5	1663.9	1878.3
117.5°	343.5	407.4	823.8	1563.3	1806.3
120°	366.5	429.1	802.7	1491.0	1739.1
122.5°	388.3	449.7	789.9	1413.6	1663.5
125°	418.6	479.6	774.7	1307.3	1535.8
127.5°	446.4	506.4	765.7	1220.6	1421.5
130°	461.8	523.6	761.9	1167.0	1348.5
132.5°	477.8	539.0	758.1	1118.6	1285.8
135°	501.8	561.3	753.9	1055.6	1194.9
137.5°	526.0	582.2	750.4	1004.4	1117.9
140°	542.6	595.0	749.1	971.5	1072.4
142.5°	558.6	607.9	746.5	941.7	1030.2
145°	583.4	627.3	743.5	903.5	972.4
147.5°	606.0	644.8	740.0	868.9	921.8
150°	622.6	657.1	738.7	850.1	892.4
152.5°	638.0	668.1	738.1	832.6	867.4
155°	658.7	684.5	737.1	810.5	837.1
157.5°	680.1	698.1	737.3	795.1	812.6
160°	692.3	707.1	737.9	785.4	797.9
162.5°	701.9	714.2	738.5	777.6	787.0
165°	717.1	724.1	740.3	769.2	773.1
167.5°	727.5	732.3	740.5	761.9	763.8
170°	733.9	736.2	741.1	758.7	758.7
172.5°	739.0	739.5	741.1	754.8	754.2
175°	744.3	743.5	741.1	750.7	749.1
177.5°	746.1	744.2	740.9	747.3	745.4
180°	743.5	743.5	743.5	743.5	743.5

(END OF REPORT)