

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: P518900

Luminaire Tested: **SQ4-BB-150U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518900  
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-830-1D-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, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

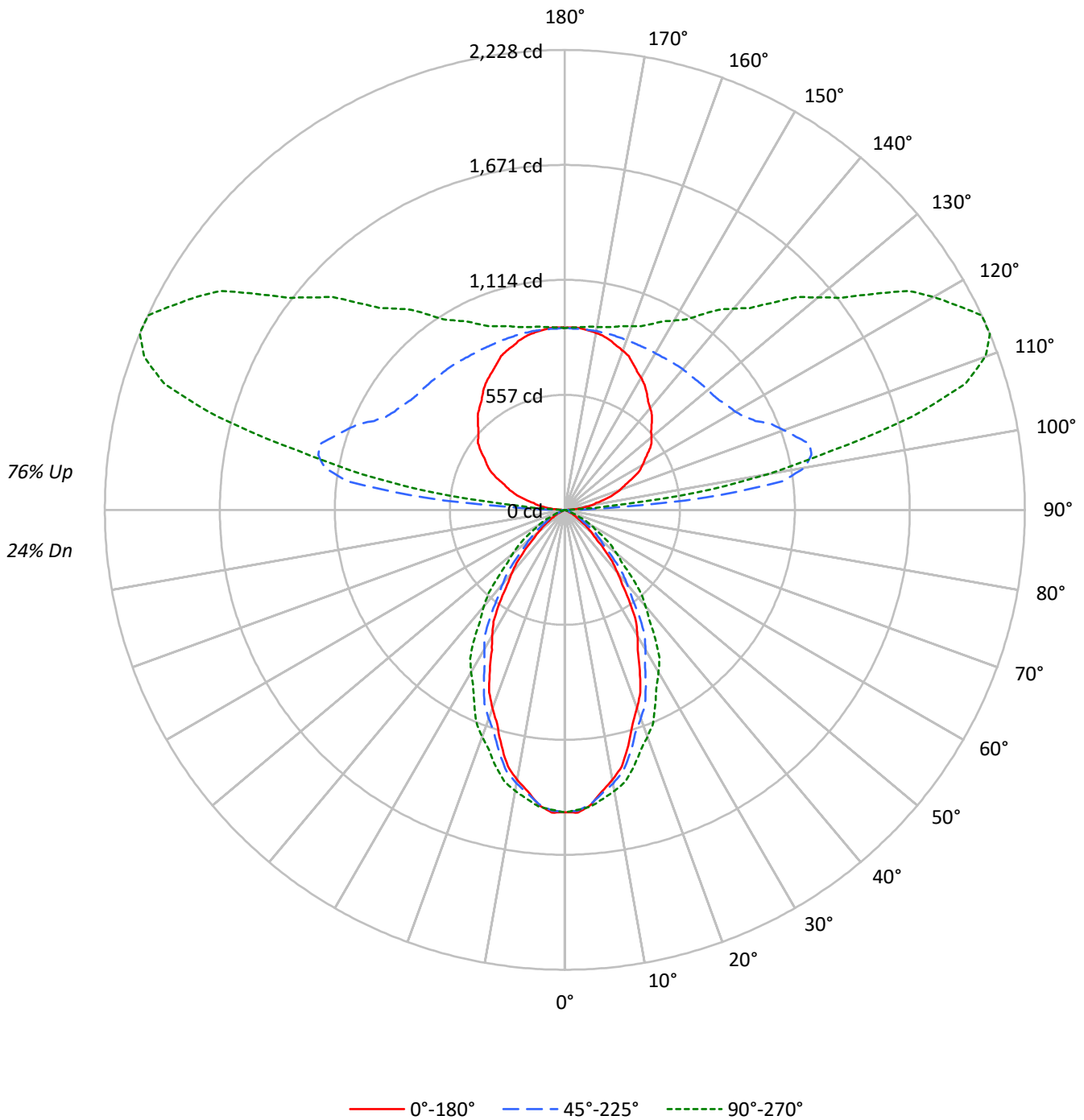
Lumens per Lamp: N/A  
Luminaire Lumens: 7435.1 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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°	13514	13514	13514
5°	13297	13263	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11486
25°	8744	9436	10554
30°	7489	8312	9671
35°	6209	7055	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3637
60°	876	1622	2628
65°	231	991	1330
70°	116	305	383
75°	50	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.7	1.8
10°-20°	341.8	4.6
20°-30°	428.0	5.8
30°-40°	395.3	5.3
40°-50°	265.6	3.6
50°-60°	137.2	1.8
60°-70°	43.0	0.6
70°-80°	2.7	0.0
80°-90°	1.9	0.0
90°-100°	409.8	5.5
100°-110°	1108.2	14.9
110°-120°	1165.1	15.7
120°-130°	946.4	12.7
130°-140°	742.3	10.0
140°-150°	569.7	7.7
150°-160°	409.7	5.5
160°-170°	250.3	3.4
170°-180°	84.4	1.1
0°-30°	903.5	12.2
0°-40°	1298.8	17.5
0°-60°	1701.6	22.9
0°-90°	1749.1	23.5
90°-120°	2683.1	36.1
90°-150°	4941.5	66.5
90°-180°	5686.0	76.5
0°-180°	7435.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1436	1421	1432	1437	1443	133
15°	1184	1180	1222	1263	1290	330
25°	859	866	927	990	1037	394
35°	551	565	626	700	764	342
45°	264	280	327	391	452	208
55°	95	111	143	184	226	89
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	6	12	13	12	4
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	888	84
180°	882	882	882	882	882	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1468.1	1454.3	1457.9	1457.8	1454.0
5°	1435.7	1421.1	1432.1	1437.2	1442.8
7.5°	1375.0	1363.7	1384.8	1400.7	1412.2
10°	1328.0	1318.3	1345.7	1367.3	1383.2
12.5°	1273.5	1266.1	1299.2	1328.9	1349.2
15°	1184.1	1180.0	1221.7	1262.7	1289.7
17.5°	1088.3	1088.2	1135.8	1186.7	1219.3
20°	1022.6	1024.6	1075.7	1131.8	1169.9
22.5°	956.8	961.6	1016.2	1074.7	1118.4
25°	858.9	865.8	926.9	990.3	1036.7
27.5°	764.8	774.9	839.2	905.1	961.6
30°	703.0	714.7	780.2	849.6	907.8
32.5°	642.3	656.3	720.1	793.5	852.8
35°	551.3	565.2	626.4	700.2	763.9
37.5°	457.3	470.9	530.8	603.3	672.2
40°	396.1	411.4	468.4	538.7	608.7
42.5°	340.6	355.8	409.4	478.6	544.7
45°	264.3	280.3	327.4	391.1	452.1
47.5°	201.1	218.4	259.8	317.5	373.0
50°	163.7	181.0	221.8	272.6	326.0
52.5°	133.6	150.4	187.2	235.1	284.0
55°	95.0	110.9	143.1	183.8	226.1
57.5°	65.6	79.3	108.3	142.2	175.3
60°	47.5	60.6	87.9	115.4	142.4
62.5°	31.6	43.7	70.3	91.4	109.6
65°	10.6	20.3	45.4	54.7	60.9
67.5°	5.4	6.5	23.8	25.1	27.2
70°	4.3	4.3	11.3	12.1	14.2
72.5°	3.1	3.1	4.5	5.8	6.2
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	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°	0.4	1.1	2.5	2.7	2.5
90°	1.9	5.6	12.3	13.3	12.3
92.5°	27.0	98.2	193.8	84.2	60.9
95°	63.6	223.3	681.6	352.7	209.8
97.5°	102.1	256.0	1062.5	879.3	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.6	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.0
115°	362.6	443.4	1019.6	1973.7	2228.0
117.5°	407.4	483.2	977.2	1854.3	2142.6
120°	434.8	509.0	952.2	1768.6	2062.8
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	918.9	1550.7	1821.7
127.5°	529.5	600.6	908.3	1447.8	1686.2
130°	547.7	621.1	903.7	1384.2	1599.6
132.5°	566.7	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.5	1152.3	1272.1
142.5°	662.6	721.1	885.5	1117.1	1221.9
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.7	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.6	1028.9
155°	781.3	811.9	874.3	961.4	993.0
157.5°	806.7	828.1	874.5	943.1	963.9
160°	821.1	838.8	875.3	931.6	946.5
162.5°	832.5	847.2	876.0	922.4	933.5
165°	850.6	858.9	878.1	912.4	917.0
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.1	899.9	899.9
172.5°	876.6	877.1	879.1	895.4	894.6
175°	882.9	881.9	879.1	890.4	888.5
177.5°	884.9	882.7	878.9	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)