

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: P518574

Luminaire Tested: **SQ4-BB-075U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518574  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

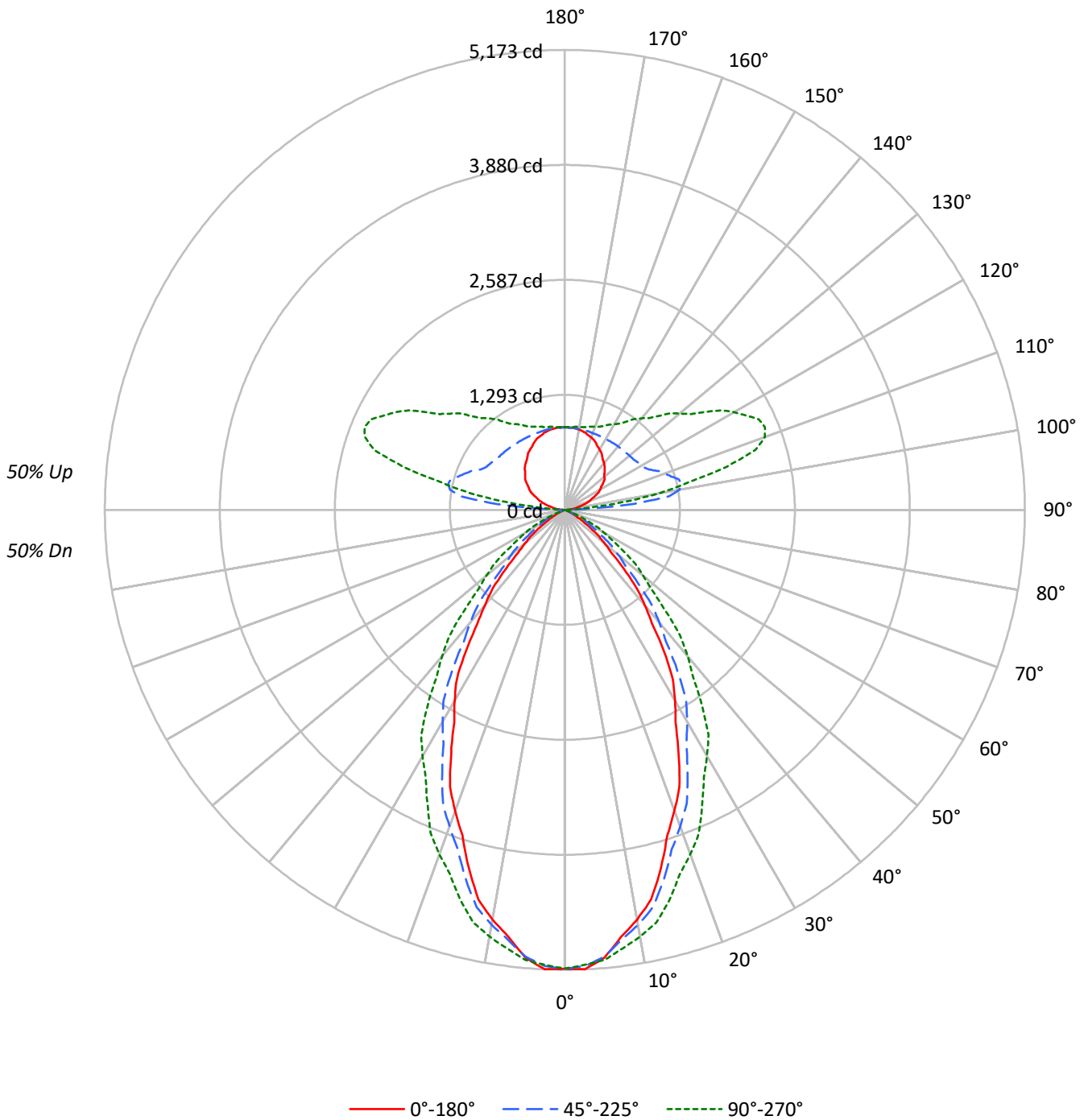
Lumens per Lamp: N/A  
Luminaire Lumens: 12206.8 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 127.7  
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	50	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

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

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7525	10393
50°	4140	5609	8242
55°	2691	4057	6406
60°	1544	2856	4631
65°	409	1744	2344
70°	202	538	673
75°	89	45	0
80°	66	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.0	3.9
10°-20°	1204.5	9.9
20°-30°	1507.9	12.4
30°-40°	1392.8	11.4
40°-50°	935.9	7.7
50°-60°	483.4	4.0
60°-70°	151.4	1.2
70°-80°	9.6	0.1
80°-90°	2.6	0.0
90°-100°	437.9	3.6
100°-110°	1204.6	9.9
110°-120°	1243.4	10.2
120°-130°	996.2	8.2
130°-140°	782.5	6.4
140°-150°	599.6	4.9
150°-160°	431.1	3.5
160°-170°	263.6	2.2
170°-180°	88.9	0.7
0°-30°	3183.4	26.1
0°-40°	4576.2	37.5
0°-60°	5995.4	49.1
0°-90°	6159.0	50.5
90°-120°	2885.9	23.6
90°-150°	5264.2	43.1
90°-180°	6048.0	49.5
0°-180°	12206.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5161	5161	5161	5161	5161	
5°	5059	5007	5046	5064	5084	469
15°	4172	4158	4304	4449	4544	1162
25°	3026	3051	3266	3489	3653	1387
35°	1942	1991	2207	2467	2692	1203
45°	931	988	1154	1378	1593	731
55°	335	391	504	648	796	312
65°	38	72	160	193	215	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	8	14	18	18	4
95°	65	239	774	331	211	69
105°	215	331	1327	2022	1886	227
115°	381	464	1065	2120	2406	376
125°	525	599	966	1634	1914	469
135°	634	704	938	1321	1495	489
145°	733	783	924	1126	1213	460
155°	830	857	918	1012	1041	381
165°	897	908	922	960	966	253
175°	928	930	924	936	934	88
180°	928	928	928	928	928	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5161.0	5161.0	5161.0	5161.0	5161.0
2.5°	5172.9	5124.1	5137.0	5136.7	5123.0
5°	5058.6	5007.3	5046.1	5064.0	5083.6
7.5°	4844.9	4804.8	4879.3	4935.2	4975.7
10°	4679.1	4644.9	4741.5	4817.7	4873.8
12.5°	4487.3	4460.9	4577.7	4682.2	4754.0
15°	4172.2	4157.6	4304.5	4449.0	4544.2
17.5°	3834.6	3834.1	4001.9	4181.3	4296.1
20°	3602.9	3610.3	3790.2	3988.0	4122.3
22.5°	3371.2	3388.3	3580.5	3786.7	3940.5
25°	3026.2	3050.6	3265.9	3489.3	3652.9
27.5°	2694.6	2730.2	2956.7	3189.0	3388.2
30°	2476.9	2518.4	2749.0	2993.4	3198.4
32.5°	2263.1	2312.4	2537.3	2795.7	3004.7
35°	1942.5	1991.4	2207.2	2467.0	2691.6
37.5°	1611.5	1659.3	1870.1	2125.8	2368.5
40°	1395.7	1449.4	1650.4	1898.2	2144.8
42.5°	1200.0	1253.7	1442.7	1686.2	1919.1
45°	931.3	987.5	1153.5	1378.1	1593.0
47.5°	708.6	769.6	915.3	1118.5	1314.3
50°	576.8	637.8	781.5	960.6	1148.5
52.5°	470.9	530.0	659.7	828.4	1000.7
55°	334.6	390.7	504.4	647.6	796.5
57.5°	231.2	279.5	381.5	501.0	617.7
60°	167.3	213.7	309.6	406.7	501.9
62.5°	111.4	153.8	247.7	322.0	386.0
65°	37.5	71.6	159.8	192.8	214.7
67.5°	19.0	22.9	83.9	88.6	95.9
70°	15.0	15.0	39.9	42.6	49.9
72.5°	11.0	11.0	16.0	20.5	22.0
75°	5.0	5.0	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.6	2.8	3.6	3.6
90°	2.0	7.8	13.8	17.8	17.8
92.5°	27.3	116.5	201.9	77.5	63.6
95°	65.2	239.0	774.3	331.1	211.3
97.5°	106.3	265.0	1181.6	910.4	642.3
100°	136.3	281.1	1309.6	1321.8	1078.5
102.5°	164.7	300.3	1342.7	1639.9	1416.6
105°	215.3	331.2	1327.3	2021.5	1886.3
107.5°	263.5	369.3	1251.9	2208.4	2248.6
110°	298.3	394.8	1195.0	2254.9	2394.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	329.9	423.3	1138.1	2224.9	2436.6
115°	381.2	464.3	1064.6	2120.0	2405.8
117.5°	430.2	506.7	1018.0	1972.7	2296.0
120°	460.2	533.6	997.5	1862.3	2196.4
122.5°	487.1	560.5	983.3	1765.5	2082.7
125°	525.4	598.8	965.9	1633.9	1914.0
127.5°	561.7	631.7	954.4	1524.1	1769.8
130°	580.7	652.2	948.1	1458.8	1682.9
132.5°	602.8	674.3	943.4	1401.5	1603.9
135°	634.0	703.6	938.2	1321.4	1495.2
137.5°	663.3	727.8	933.9	1256.7	1400.0
140°	685.4	745.3	932.3	1213.7	1343.1
142.5°	704.4	759.6	929.1	1175.4	1286.3
145°	732.8	783.0	924.4	1125.9	1212.8
147.5°	763.2	806.5	922.0	1082.0	1151.5
150°	782.2	820.8	920.4	1058.0	1112.0
152.5°	799.6	835.1	918.9	1037.2	1082.0
155°	829.6	856.6	918.5	1012.0	1040.9
157.5°	851.3	873.3	918.5	991.2	1011.3
160°	867.1	884.5	918.5	980.1	995.5
162.5°	879.8	894.0	920.1	970.5	982.9
165°	896.7	908.3	922.4	960.1	965.9
167.5°	908.6	917.5	924.4	951.3	952.8
170°	916.5	922.3	924.4	948.1	948.1
172.5°	922.8	925.5	924.4	943.3	941.8
175°	928.3	930.3	924.4	936.2	934.3
177.5°	929.9	929.9	923.6	933.0	929.9
180°	928.3	928.3	928.3	928.3	928.3

(END OF REPORT)