

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: P518571

Luminaire Tested: **SQ4-BB-075U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518571
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-12
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

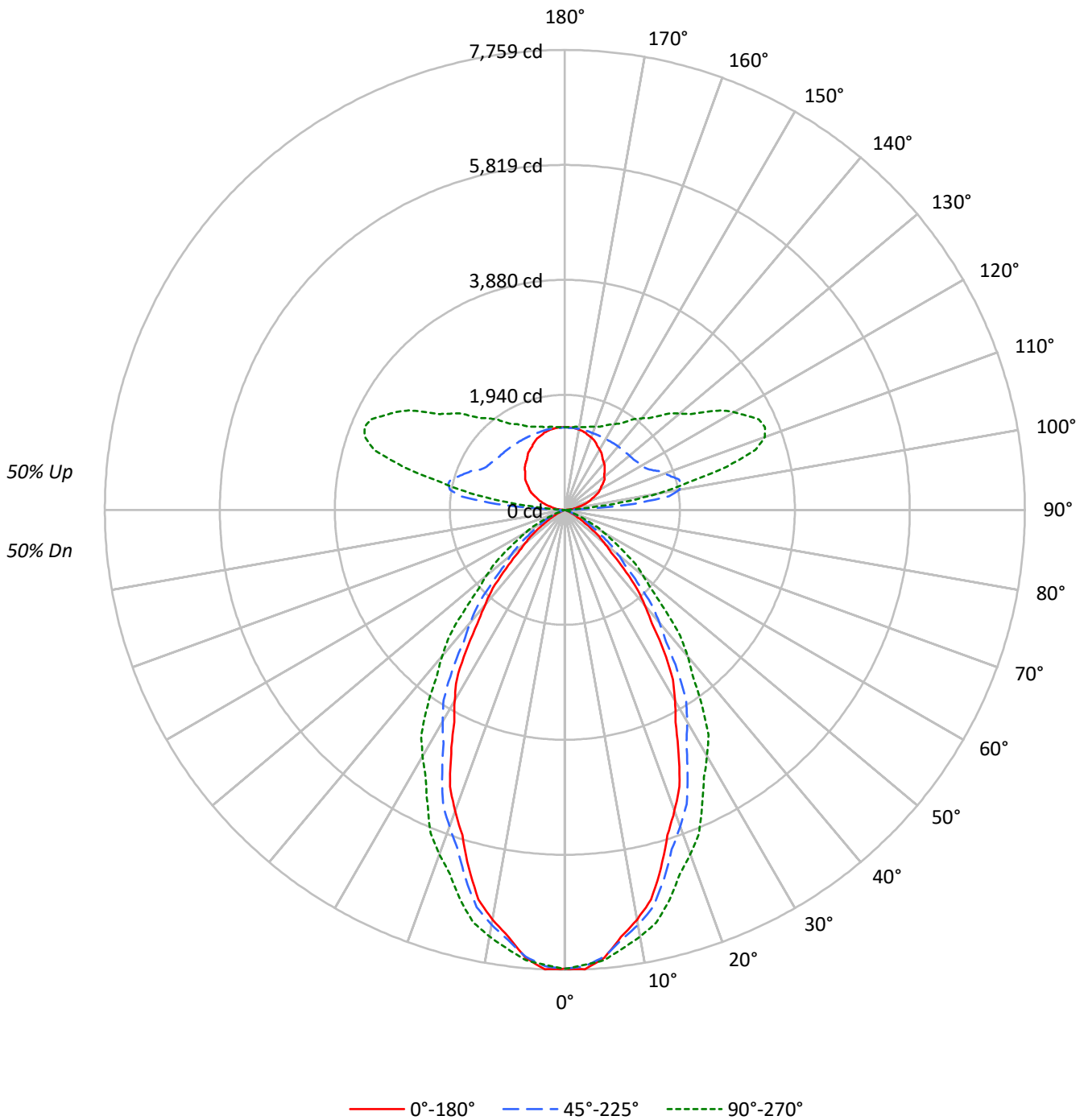
Lumens per Lamp: N/A
Luminaire Lumens: 18310.1 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 194.8
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	51	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	23540
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4056	6406
60°	1543	2856	4630
65°	409	1744	2344
70°	202	539	673
75°	89	44	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	706.5	3.9
10°-20°	1806.7	9.9
20°-30°	2261.8	12.4
30°-40°	2089.2	11.4
40°-50°	1403.8	7.7
50°-60°	725.1	4.0
60°-70°	227.1	1.2
70°-80°	14.4	0.1
80°-90°	3.8	0.0
90°-100°	656.8	3.6
100°-110°	1807.0	9.9
110°-120°	1865.1	10.2
120°-130°	1494.3	8.2
130°-140°	1173.7	6.4
140°-150°	899.4	4.9
150°-160°	646.7	3.5
160°-170°	395.4	2.2
170°-180°	133.3	0.7
0°-30°	4775.0	26.1
0°-40°	6864.2	37.5
0°-60°	8993.1	49.1
0°-90°	9238.4	50.5
90°-120°	4328.8	23.6
90°-150°	7896.3	43.1
90°-180°	9072.0	49.5
0°-180°	18310.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7741	7741	7741	7741	7741	
5°	7588	7511	7569	7596	7625	703
15°	6258	6236	6457	6674	6816	1743
25°	4539	4576	4899	5234	5479	2081
35°	2914	2987	3311	3700	4037	1805
45°	1397	1481	1730	2067	2390	1097
55°	502	586	756	971	1195	468
65°	56	107	240	289	322	95
75°	8	8	4	0	0	11
85°	0	0	0	0	0	1
90°	3	12	21	27	27	7
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

TEST NUMBER: P518571

CATALOG NUMBER: SQ4-BB-075U-125D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7741.4	7741.4	7741.4	7741.4	7741.4
2.5°	7759.4	7686.2	7705.5	7705.0	7684.5
5°	7587.9	7511.0	7569.1	7596.0	7625.3
7.5°	7267.3	7207.2	7319.0	7402.7	7463.5
10°	7018.6	6967.3	7112.2	7226.5	7310.7
12.5°	6731.0	6691.4	6866.5	7023.3	7131.0
15°	6258.3	6236.3	6456.8	6673.5	6816.4
17.5°	5752.0	5751.2	6002.9	6272.0	6444.1
20°	5404.4	5415.4	5685.3	5982.0	6183.4
22.5°	5056.8	5082.5	5370.7	5680.0	5910.8
25°	4539.2	4575.9	4898.8	5233.9	5479.3
27.5°	4041.9	4095.3	4435.1	4783.5	5082.3
30°	3715.3	3777.5	4123.5	4490.1	4797.7
32.5°	3394.7	3468.7	3805.9	4193.6	4507.0
35°	2913.8	2987.0	3310.8	3700.5	4037.4
37.5°	2417.2	2489.0	2805.2	3188.7	3552.7
40°	2093.6	2174.2	2475.6	2847.3	3217.2
42.5°	1800.0	1880.5	2164.0	2529.2	2878.6
45°	1397.0	1481.2	1730.3	2067.2	2389.5
47.5°	1062.9	1154.5	1373.0	1677.8	1971.5
50°	865.2	956.7	1172.3	1440.8	1722.8
52.5°	706.4	795.0	989.5	1242.6	1501.1
55°	501.9	586.1	756.5	971.4	1194.7
57.5°	346.8	419.3	572.3	751.5	926.6
60°	250.9	320.5	464.4	610.0	752.8
62.5°	167.0	230.8	371.5	483.1	579.0
65°	56.2	107.4	239.7	289.1	322.1
67.5°	28.5	34.3	125.8	132.8	143.8
70°	22.5	22.5	59.9	63.9	74.9
72.5°	16.5	16.5	24.0	30.8	33.0
75°	7.5	7.5	3.7	0.0	0.0
77.5°	3.7	3.7	3.0	0.0	0.0
80°	3.7	3.7	0.0	0.0	0.0
82.5°	0.7	0.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	2.3	4.1	5.3	5.3
90°	3.0	11.7	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.3	1982.7	1617.7
102.5°	247.1	450.5	2014.1	2459.8	2124.9
105°	322.9	496.8	1991.0	3032.3	2829.5
107.5°	395.2	554.0	1877.8	3312.6	3372.9
110°	447.4	592.2	1792.5	3382.3	3590.9



TEST NUMBER: P518571

CATALOG NUMBER: SQ4-BB-075U-125D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.3	800.4	1496.2	2793.5	3294.6
122.5°	730.6	840.7	1474.9	2648.3	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.6	2286.2	2654.7
130°	871.1	978.3	1422.2	2188.3	2524.3
132.5°	904.3	1011.4	1415.0	2102.2	2405.8
135°	951.1	1055.4	1407.3	1982.1	2242.8
137.5°	994.9	1091.7	1400.8	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.5	1139.4	1393.7	1763.1	1929.4
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.0	1623.0	1727.3
150°	1173.3	1231.2	1380.7	1586.9	1668.1
152.5°	1199.3	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1284.9	1377.7	1517.9	1561.4
157.5°	1277.0	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.6	1341.1	1380.1	1455.8	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1426.9	1429.3
170°	1374.7	1383.4	1386.6	1422.2	1422.2
172.5°	1384.2	1388.3	1386.6	1415.0	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)