

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: P518309

Luminaire Tested: **SQ4-BB-025U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518309
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

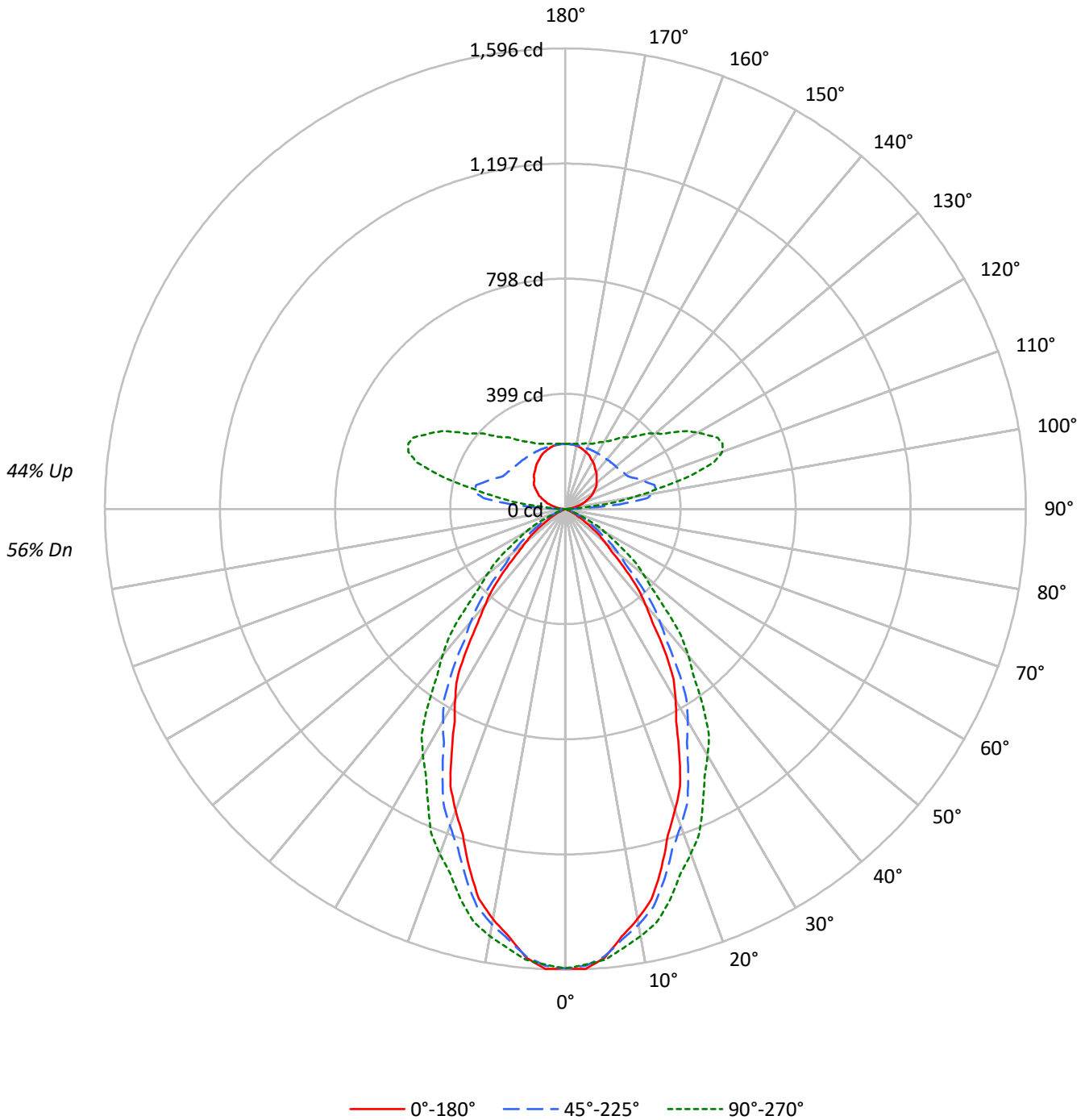
Lumens per Lamp: N/A
Luminaire Lumens: 3363.7 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.9
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									20
RC	80									50									30									10									0									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56									56																			
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52									52																			
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47									47																			
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42									42																			
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38									38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35									35																			
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32									32																			
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29									29																			
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27									27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25									25																			
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23									23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9610	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7275	7652	8323
25°	6335	6837	7647
30°	5426	6023	7007
35°	4499	5112	6235
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	169	718	963
70°	83	221	277
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	4.3
10°-20°	371.5	11.0
20°-30°	465.1	13.8
30°-40°	429.6	12.8
40°-50°	288.7	8.6
50°-60°	149.1	4.4
60°-70°	46.7	1.4
70°-80°	2.9	0.1
80°-90°	1.3	0.0
90°-100°	110.0	3.3
100°-110°	289.3	8.6
110°-120°	300.0	8.9
120°-130°	240.6	7.2
130°-140°	188.8	5.6
140°-150°	144.9	4.3
150°-160°	104.4	3.1
160°-170°	63.9	1.9
170°-180°	21.6	0.6
0°-30°	982.0	29.2
0°-40°	1411.6	42.0
0°-60°	1849.4	55.0
0°-90°	1900.3	56.5
90°-120°	699.3	20.8
90°-150°	1273.6	37.9
90°-180°	1463.0	43.5
0°-180°	3363.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1560	1545	1556	1562	1568	145
15°	1287	1282	1328	1372	1402	358
25°	934	941	1007	1076	1127	428
35°	599	614	681	761	830	371
45°	287	305	356	425	491	226
55°	103	120	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	12	6	6	1
95°	14	57	190	98	67	16
105°	52	79	320	486	453	55
115°	93	112	256	511	583	91
125°	129	144	233	394	465	114
135°	153	169	226	318	360	119
145°	178	189	223	271	292	112
155°	201	207	223	245	252	92
165°	217	220	223	232	234	61
175°	226	226	224	227	227	21
180°	226	226	226	226	226	



TEST NUMBER: P518309

CATALOG NUMBER: SQ4-BB-025U-050D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1595.7	1580.6	1584.6	1584.5	1580.3
5°	1560.4	1544.6	1556.5	1562.1	1568.1
7.5°	1494.5	1482.1	1505.1	1522.3	1534.8
10°	1443.3	1432.8	1462.6	1486.1	1503.4
12.5°	1384.2	1376.0	1412.0	1444.3	1466.4
15°	1287.0	1282.5	1327.8	1372.4	1401.7
17.5°	1182.8	1182.7	1234.4	1289.8	1325.2
20°	1111.4	1113.6	1169.1	1230.2	1271.6
22.5°	1039.9	1045.2	1104.4	1168.1	1215.5
25°	933.5	941.0	1007.4	1076.3	1126.8
27.5°	831.2	842.2	912.0	983.7	1045.1
30°	764.0	776.8	848.0	923.3	986.6
32.5°	698.1	713.3	782.7	862.4	926.8
35°	599.2	614.3	680.8	761.0	830.3
37.5°	497.1	511.8	576.9	655.7	730.6
40°	430.5	447.1	509.1	585.5	661.6
42.5°	370.1	386.7	445.0	520.1	592.0
45°	287.3	304.6	355.8	425.1	491.4
47.5°	218.6	237.4	282.3	345.0	405.4
50°	177.9	196.7	241.1	296.3	354.3
52.5°	145.3	163.5	203.5	255.5	308.7
55°	103.2	120.5	155.6	199.8	245.7
57.5°	71.3	86.2	117.7	154.5	190.5
60°	51.6	65.9	95.5	125.4	154.8
62.5°	34.4	47.5	76.4	99.3	119.1
65°	11.6	22.1	49.3	59.5	66.2
67.5°	5.9	7.1	25.9	27.3	29.6
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	0.3	0.9	2.3	1.2	1.2
90°	1.4	4.3	11.6	5.8	5.8
92.5°	6.1	29.3	64.8	28.7	18.5
95°	14.5	56.9	189.6	97.7	66.6
97.5°	25.2	62.5	283.7	225.6	166.2
100°	33.3	67.3	312.6	316.8	246.0
102.5°	40.2	71.9	320.7	394.6	334.0
105°	52.1	79.0	319.9	485.6	453.0
107.5°	64.3	89.2	301.6	532.8	540.7
110°	72.4	95.0	286.6	545.0	578.9



TEST NUMBER: P518309

CATALOG NUMBER: SQ4-BB-025U-050D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	80.5	102.0	272.7	537.3	589.4
115°	92.6	112.4	256.2	511.1	583.3
117.5°	104.5	122.6	244.9	474.8	554.9
120°	111.4	128.4	240.3	450.4	528.3
122.5°	118.4	135.4	236.8	426.1	502.8
125°	128.8	144.4	233.0	393.8	464.6
127.5°	137.2	153.1	229.8	367.8	427.5
130°	141.8	158.8	228.7	351.5	406.7
132.5°	146.5	163.5	227.5	337.5	387.0
135°	153.4	169.0	225.8	317.9	360.4
137.5°	160.7	175.9	225.5	303.3	338.1
140°	166.4	180.6	224.3	291.7	324.2
142.5°	171.1	184.1	224.3	283.4	311.5
145°	178.0	189.3	222.9	271.1	292.4
147.5°	185.0	196.0	222.9	260.9	278.5
150°	189.6	199.5	222.9	255.1	269.2
152.5°	194.2	201.9	222.9	250.3	261.1
155°	201.2	206.8	222.9	244.8	251.8
157.5°	206.4	211.8	222.9	239.8	244.9
160°	209.9	214.1	222.9	237.4	240.3
162.5°	213.3	216.5	222.9	235.1	237.9
165°	217.1	219.9	222.9	231.6	234.5
167.5°	220.6	222.0	224.3	230.2	231.3
170°	222.9	224.3	224.3	230.1	230.1
172.5°	224.0	224.3	224.3	228.9	227.8
175°	225.8	225.8	224.3	227.2	227.2
177.5°	225.8	225.8	224.6	226.9	225.8
180°	225.8	225.8	225.8	225.8	225.8

(END OF REPORT)