

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: P518505

Luminaire Tested: **SQ4-BB-075U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518505
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-050D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

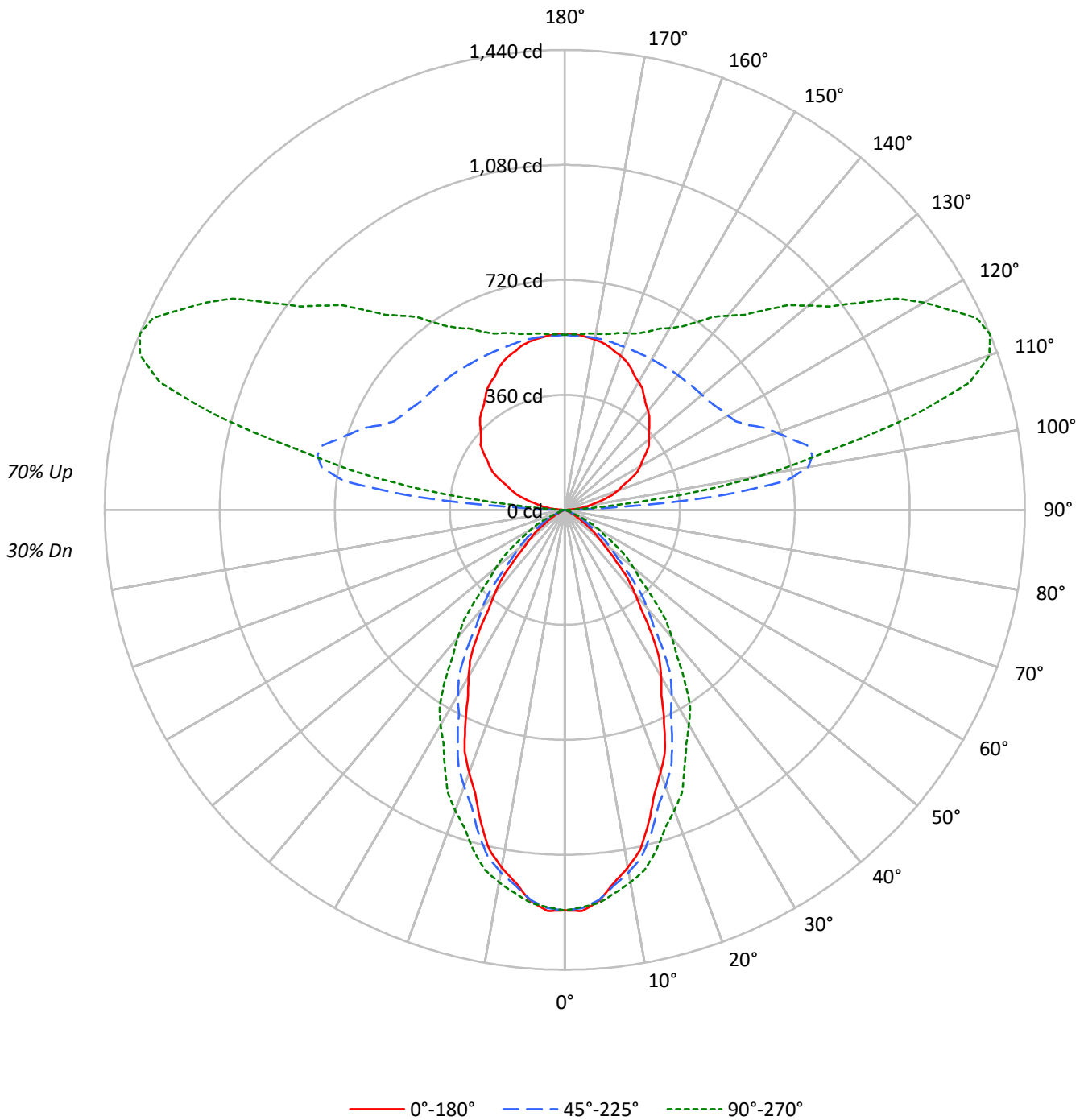
Lumens per Lamp: N/A
Luminaire Lumens: 5071.0 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5387	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2724	3221	4185
45°	1968	2438	3367
50°	1342	1817	2671
55°	872	1315	2076
60°	501	925	1501
65°	132	565	760
70°	65	174	218
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	2.3
10°-20°	292.7	5.8
20°-30°	366.4	7.2
30°-40°	338.5	6.7
40°-50°	227.4	4.5
50°-60°	117.5	2.3
60°-70°	36.8	0.7
70°-80°	2.3	0.0
80°-90°	1.4	0.0
90°-100°	258.7	5.1
100°-110°	711.8	14.0
110°-120°	734.7	14.5
120°-130°	588.6	11.6
130°-140°	462.3	9.1
140°-150°	354.3	7.0
150°-160°	254.7	5.0
160°-170°	155.8	3.1
170°-180°	52.5	1.0
0°-30°	773.6	15.3
0°-40°	1112.1	21.9
0°-60°	1457.0	28.7
0°-90°	1497.5	29.5
90°-120°	1705.2	33.6
90°-150°	3110.5	61.3
90°-180°	3573.0	70.5
0°-180°	5071.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1229	1217	1226	1231	1235	114
15°	1014	1010	1046	1081	1104	282
25°	735	741	794	848	888	337
35°	472	484	536	600	654	292
45°	226	240	280	335	387	178
55°	81	95	123	157	194	76
65°	9	17	39	47	52	15
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	5	8	10	10	3
95°	38	141	458	196	125	41
105°	127	196	784	1194	1115	134
115°	225	274	629	1253	1422	222
125°	310	354	571	965	1131	277
135°	375	416	554	781	884	289
145°	433	463	546	665	717	272
155°	490	506	543	598	615	225
165°	530	537	545	567	571	149
175°	548	550	546	553	552	52
180°	548	548	548	548	548	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.2	1254.2	1254.2	1254.2	1254.2
2.5°	1257.1	1245.2	1248.4	1248.3	1245.0
5°	1229.3	1216.9	1226.3	1230.6	1235.4
7.5°	1177.4	1167.6	1185.7	1199.3	1209.2
10°	1137.1	1128.8	1152.3	1170.8	1184.4
12.5°	1090.5	1084.1	1112.5	1137.8	1155.3
15°	1013.9	1010.4	1046.1	1081.2	1104.3
17.5°	931.9	931.8	972.5	1016.1	1044.0
20°	875.6	877.3	921.1	969.1	1001.8
22.5°	819.3	823.4	870.1	920.2	957.6
25°	735.4	741.3	793.7	848.0	887.7
27.5°	654.8	663.5	718.5	775.0	823.4
30°	601.9	612.0	668.1	727.4	777.3
32.5°	550.0	562.0	616.6	679.4	730.2
35°	472.1	483.9	536.4	599.5	654.1
37.5°	391.6	403.2	454.5	516.6	575.6
40°	339.2	352.2	401.1	461.3	521.2
42.5°	291.6	304.7	350.6	409.8	466.4
45°	226.3	240.0	280.3	334.9	387.1
47.5°	172.2	187.0	222.4	271.8	319.4
50°	140.2	155.0	189.9	233.4	279.1
52.5°	114.4	128.8	160.3	201.3	243.2
55°	81.3	95.0	122.6	157.4	193.6
57.5°	56.2	67.9	92.7	121.8	150.1
60°	40.7	51.9	75.2	98.8	122.0
62.5°	27.1	37.4	60.2	78.3	93.8
65°	9.1	17.4	38.8	46.8	52.2
67.5°	4.6	5.6	20.4	21.5	23.3
70°	3.6	3.6	9.7	10.4	12.1
72.5°	2.7	2.7	3.9	5.0	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°	0.2	0.9	1.6	2.1	2.1
90°	1.2	4.6	8.2	10.5	10.5
92.5°	16.1	68.8	119.3	45.8	37.6
95°	38.5	141.2	457.5	195.6	124.9
97.5°	62.8	156.6	698.2	537.9	379.5
100°	80.5	166.1	773.8	781.0	637.2
102.5°	97.3	177.4	793.4	969.0	837.0
105°	127.2	195.7	784.3	1194.5	1114.6
107.5°	155.7	218.2	739.7	1304.9	1328.6
110°	176.2	233.3	706.1	1332.4	1414.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	194.9	250.1	672.5	1314.7	1439.7
115°	225.2	274.3	629.1	1252.6	1421.5
117.5°	254.2	299.4	601.5	1165.6	1356.6
120°	271.9	315.3	589.4	1100.4	1297.8
122.5°	287.8	331.2	581.0	1043.2	1230.6
125°	310.4	353.8	570.7	965.4	1130.9
127.5°	331.9	373.2	563.9	900.6	1045.7
130°	343.1	385.3	560.2	862.0	994.4
132.5°	356.2	398.4	557.4	828.1	947.7
135°	374.6	415.7	554.4	780.8	883.5
137.5°	391.9	430.0	551.8	742.6	827.2
140°	405.0	440.4	550.9	717.2	793.6
142.5°	416.2	448.8	549.0	694.5	760.0
145°	433.0	462.7	546.2	665.2	716.6
147.5°	451.0	476.5	544.8	639.3	680.4
150°	462.2	485.0	543.9	625.1	657.1
152.5°	472.4	493.4	542.9	612.9	639.3
155°	490.2	506.2	542.7	597.9	615.1
157.5°	503.0	516.0	542.7	585.7	597.6
160°	512.4	522.6	542.7	579.1	588.2
162.5°	519.8	528.3	543.6	573.4	580.7
165°	529.9	536.7	545.0	567.3	570.7
167.5°	536.9	542.1	546.2	562.1	563.0
170°	541.5	545.0	546.2	560.2	560.2
172.5°	545.3	546.9	546.2	557.4	556.5
175°	548.5	549.7	546.2	553.2	552.0
177.5°	549.5	549.5	545.7	551.3	549.5
180°	548.5	548.5	548.5	548.5	548.5

(END OF REPORT)