

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: P518319

Luminaire Tested: **SQ4-BB-025U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518319
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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

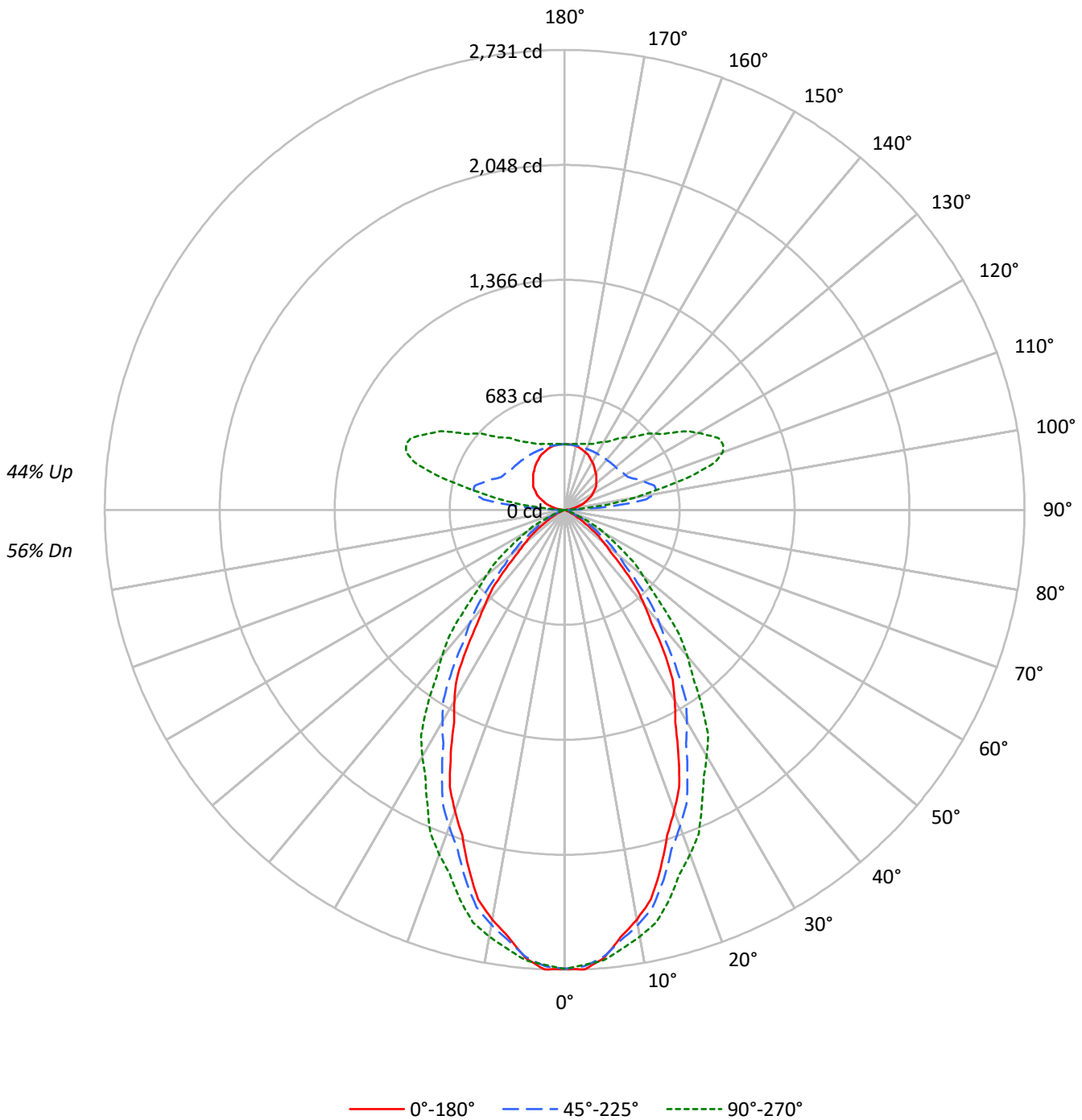
Lumens per Lamp: N/A
Luminaire Lumens: 5783.1 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.8
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56				
1	101	98	94	92	94	91	88	86	79	77	75	68	67	65	58	57	56	51				
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	53	52	50	46				
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	45	42				
4	81	71	65	59	75	67	61	57	59	55	51	52	49	46	45	43	41	38				
5	75	65	58	52	70	61	55	50	54	50	46	48	44	41	42	39	37	34				
6	70	59	52	47	65	56	50	45	50	45	41	44	40	38	39	36	34	31				
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	29				
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27				
9	57	46	39	35	54	44	38	33	40	35	31	36	32	29	32	29	26	25				
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3498	4547
45°	2139	2649	3658
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1630
65°	144	614	825
70°	71	190	237
75°	31	15	0
80°	23	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.7	4.3
10°-20°	636.0	11.0
20°-30°	796.2	13.8
30°-40°	735.4	12.7
40°-50°	494.2	8.5
50°-60°	255.2	4.4
60°-70°	79.9	1.4
70°-80°	5.0	0.1
80°-90°	2.2	0.0
90°-100°	190.3	3.3
100°-110°	500.2	8.6
110°-120°	518.7	9.0
120°-130°	416.0	7.2
130°-140°	326.4	5.6
140°-150°	250.5	4.3
150°-160°	180.4	3.1
160°-170°	110.4	1.9
170°-180°	37.3	0.6
0°-30°	1680.8	29.1
0°-40°	2416.2	41.8
0°-60°	3165.6	54.7
0°-90°	3252.8	56.2
90°-120°	1209.1	20.9
90°-150°	2202.1	38.1
90°-180°	2530.0	43.7
0°-180°	5783.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2671	2644	2664	2674	2684	248
15°	2203	2195	2273	2349	2399	614
25°	1598	1611	1724	1842	1929	733
35°	1026	1052	1165	1303	1421	635
45°	492	521	609	728	841	386
55°	177	206	266	342	421	165
65°	20	38	84	102	113	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	7	20	10	10	2
95°	25	98	328	169	115	28
105°	90	137	553	840	783	95
115°	160	194	443	884	1008	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	327	385	469	506	193
155°	348	358	385	423	435	160
165°	375	380	385	400	405	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	



TEST NUMBER: P518319

CATALOG NUMBER: SQ4-BB-025U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2725.0	2725.0	2725.0	2725.0	2725.0
2.5°	2731.4	2705.6	2712.4	2712.2	2705.0
5°	2671.0	2643.9	2664.4	2673.8	2684.2
7.5°	2558.1	2537.0	2576.3	2605.8	2627.2
10°	2470.6	2452.5	2503.5	2543.8	2573.4
12.5°	2369.3	2355.4	2417.1	2472.2	2510.1
15°	2203.0	2195.2	2272.8	2349.1	2399.4
17.5°	2024.7	2024.5	2113.0	2207.8	2268.3
20°	1902.4	1906.2	2001.3	2105.7	2176.6
22.5°	1780.0	1789.1	1890.5	1999.4	2080.6
25°	1597.8	1610.7	1724.4	1842.4	1928.7
27.5°	1422.8	1441.6	1561.2	1683.8	1789.0
30°	1307.8	1329.7	1451.5	1580.5	1688.8
32.5°	1195.0	1221.0	1339.7	1476.2	1586.5
35°	1025.7	1051.5	1165.4	1302.6	1421.2
37.5°	850.9	876.1	987.4	1122.5	1250.6
40°	737.0	765.3	871.4	1002.3	1132.5
42.5°	633.6	662.0	761.7	890.3	1013.3
45°	491.7	521.4	609.1	727.7	841.1
47.5°	374.1	406.4	483.3	590.6	694.0
50°	304.5	336.8	412.6	507.2	606.4
52.5°	248.6	279.8	348.3	437.4	528.4
55°	176.7	206.3	266.3	341.9	420.6
57.5°	122.1	147.6	201.4	264.5	326.2
60°	88.3	112.8	163.5	214.7	265.0
62.5°	58.8	81.2	130.8	170.0	203.8
65°	19.8	37.8	84.4	101.8	113.4
67.5°	10.0	12.1	44.3	46.8	50.6
70°	7.9	7.9	21.1	22.5	26.4
72.5°	5.8	5.8	8.4	10.8	11.6
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.5	4.0	2.0	2.0
90°	2.5	7.4	20.0	10.0	10.0
92.5°	10.5	50.6	112.1	49.6	32.0
95°	25.0	98.4	327.8	168.9	115.1
97.5°	43.5	108.1	490.5	390.0	287.3
100°	57.6	116.3	540.5	547.8	425.4
102.5°	69.6	124.4	554.5	682.3	577.6
105°	90.1	136.6	553.0	839.5	783.3
107.5°	111.1	154.2	521.5	921.2	934.9
110°	125.1	164.3	495.5	942.2	1001.0



TEST NUMBER: P518319

CATALOG NUMBER: SQ4-BB-025U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.1	176.3	471.5	928.9	1019.0
115°	160.2	194.4	442.9	883.7	1008.5
117.5°	180.7	212.0	423.4	820.9	959.4
120°	192.7	222.0	415.4	778.8	913.4
122.5°	204.7	234.1	409.4	736.7	869.3
125°	222.7	249.6	402.9	680.9	803.3
127.5°	237.2	264.6	397.4	636.0	739.2
130°	245.2	274.6	395.4	607.8	703.2
132.5°	253.2	282.6	393.4	583.5	669.1
135°	265.3	292.2	390.4	549.7	623.1
137.5°	277.8	304.2	389.9	524.4	584.6
140°	287.8	312.2	387.9	504.3	560.5
142.5°	295.8	318.3	387.9	490.1	538.5
145°	307.8	327.4	385.4	468.8	505.5
147.5°	319.8	338.9	385.4	451.1	481.5
150°	327.8	344.9	385.4	441.0	465.4
152.5°	335.8	349.0	385.4	432.8	451.4
155°	347.8	357.6	385.4	423.2	435.4
157.5°	356.8	366.1	385.4	414.6	423.4
160°	362.8	370.2	385.4	410.5	415.4
162.5°	368.9	374.2	385.4	406.5	411.4
165°	375.4	380.3	385.4	400.5	405.4
167.5°	381.4	383.8	387.9	397.9	399.9
170°	385.4	387.8	387.9	397.9	397.9
172.5°	387.4	387.9	387.9	395.8	393.9
175°	390.4	390.4	387.9	392.9	392.9
177.5°	390.4	390.4	388.4	392.3	390.4
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)