

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: P518561

Luminaire Tested: **SQ4-BB-075U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518561
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-100D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

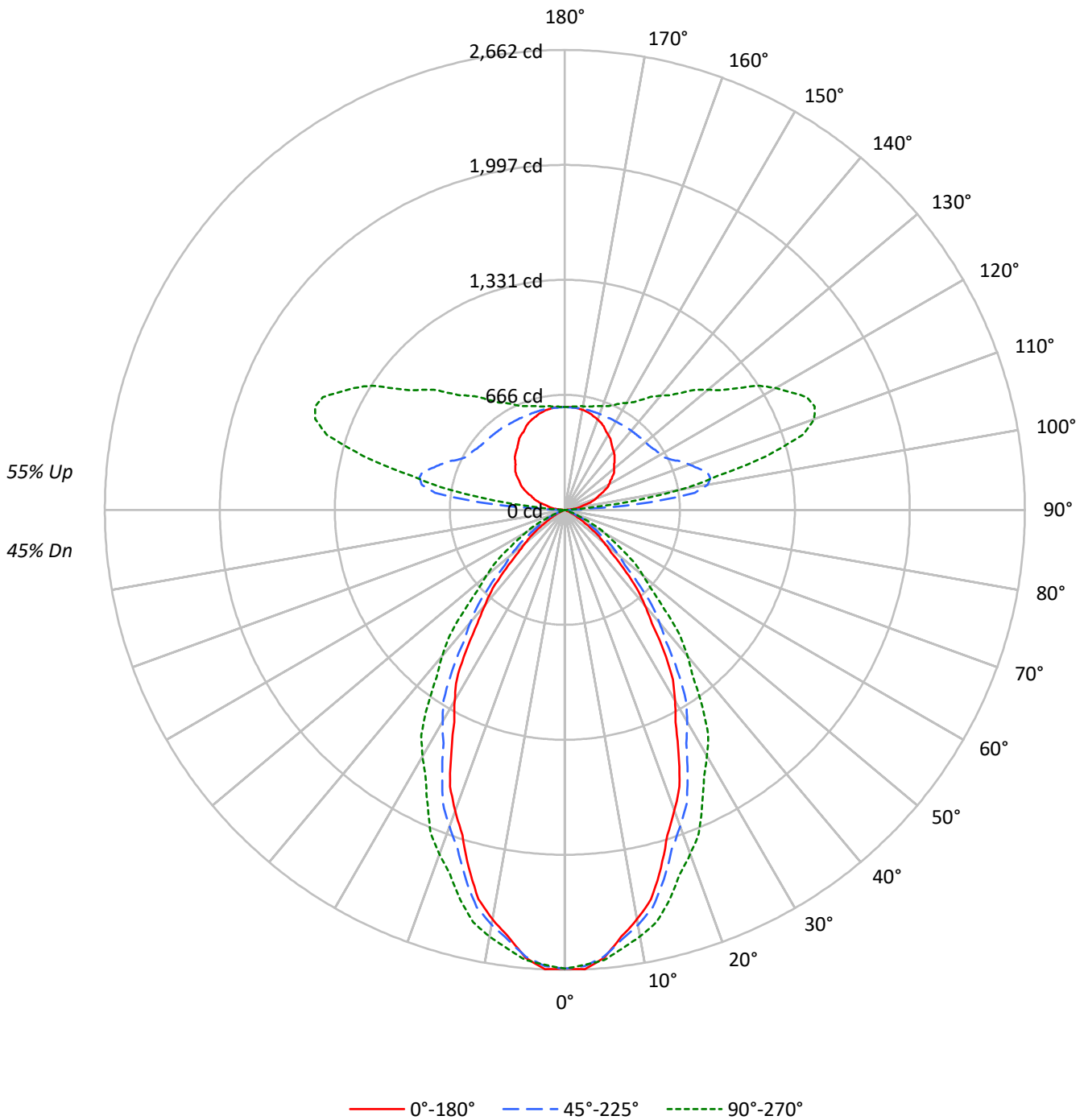
Lumens per Lamp: N/A
Luminaire Lumens: 7051.4 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.9
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	
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8528	10399
40°	5766	6818	8860
45°	4168	5163	7129
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	281	1196	1608
70°	138	370	462
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	3.4
10°-20°	619.7	8.8
20°-30°	775.8	11.0
30°-40°	716.6	10.2
40°-50°	481.5	6.8
50°-60°	248.7	3.5
60°-70°	77.9	1.1
70°-80°	4.9	0.1
80°-90°	1.6	0.0
90°-100°	281.1	4.0
100°-110°	773.3	11.0
110°-120°	798.1	11.3
120°-130°	639.5	9.1
130°-140°	502.3	7.1
140°-150°	384.9	5.5
150°-160°	276.7	3.9
160°-170°	169.2	2.4
170°-180°	57.0	0.8
0°-30°	1637.9	23.2
0°-40°	2354.6	33.4
0°-60°	3084.8	43.7
0°-90°	3169.3	44.9
90°-120°	1852.5	26.3
90°-150°	3379.1	47.9
90°-180°	3882.0	55.1
0°-180°	7051.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2655	2655	2655	2655	2655	
5°	2603	2576	2596	2606	2616	241
15°	2147	2139	2215	2289	2338	598
25°	1557	1570	1680	1795	1880	714
35°	1000	1025	1136	1269	1385	619
45°	479	508	594	709	820	376
55°	172	201	260	333	410	161
65°	19	37	82	99	110	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	1	5	9	11	11	3
95°	42	153	497	212	136	44
105°	138	213	852	1298	1211	146
115°	245	298	683	1361	1544	241
125°	337	384	620	1049	1229	301
135°	407	452	602	848	960	314
145°	470	503	593	723	778	295
155°	532	550	590	650	668	245
165°	576	583	592	616	620	162
175°	596	597	593	601	600	57
180°	596	596	596	596	596	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2655.4	2655.4	2655.4	2655.4	2655.4
2.5°	2661.6	2636.5	2643.1	2643.0	2635.9
5°	2602.8	2576.4	2596.4	2605.6	2615.6
7.5°	2492.8	2472.2	2510.5	2539.3	2560.1
10°	2407.5	2389.9	2439.6	2478.8	2507.7
12.5°	2308.8	2295.3	2355.3	2409.1	2446.0
15°	2146.7	2139.2	2214.8	2289.1	2338.1
17.5°	1973.0	1972.8	2059.1	2151.4	2210.4
20°	1853.8	1857.6	1950.2	2051.9	2121.0
22.5°	1734.6	1743.4	1842.2	1948.4	2027.5
25°	1557.0	1569.6	1680.4	1795.3	1879.5
27.5°	1386.4	1404.8	1521.3	1640.8	1743.3
30°	1274.4	1295.8	1414.4	1540.2	1645.7
32.5°	1164.4	1189.8	1305.5	1438.5	1546.0
35°	999.5	1024.6	1135.7	1269.3	1384.9
37.5°	829.1	853.8	962.2	1093.8	1218.7
40°	718.1	745.8	849.2	976.7	1103.5
42.5°	617.4	645.1	742.3	867.6	987.4
45°	479.2	508.1	593.5	709.1	819.6
47.5°	364.6	396.0	471.0	575.5	676.3
50°	296.8	328.2	402.1	494.2	591.0
52.5°	242.3	272.7	339.4	426.2	514.9
55°	172.1	201.0	259.5	333.2	409.8
57.5°	119.0	143.8	196.3	257.8	317.8
60°	86.1	109.9	159.3	209.2	258.2
62.5°	57.3	79.2	127.4	165.7	198.6
65°	19.3	36.9	82.2	99.2	110.5
67.5°	9.8	11.8	43.2	45.6	49.3
70°	7.7	7.7	20.6	21.9	25.7
72.5°	5.7	5.7	8.2	10.6	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	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°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.4	11.4
92.5°	17.5	74.8	129.6	49.8	40.8
95°	41.8	153.4	497.0	212.5	135.7
97.5°	68.2	170.1	758.5	584.4	412.3
100°	87.5	180.5	840.6	848.5	692.3
102.5°	105.7	192.8	861.9	1052.6	909.3
105°	138.2	212.6	852.0	1297.6	1210.8
107.5°	169.1	237.1	803.6	1417.6	1443.4
110°	191.5	253.4	767.1	1447.4	1536.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.7	271.7	730.6	1428.2	1564.1
115°	244.7	298.0	683.4	1360.8	1544.3
117.5°	276.1	325.2	653.5	1266.3	1473.8
120°	295.4	342.5	640.3	1195.4	1409.9
122.5°	312.7	359.8	631.2	1133.3	1336.9
125°	337.3	384.4	620.0	1048.8	1228.6
127.5°	360.6	405.5	612.6	978.3	1136.0
130°	372.8	418.6	608.6	936.4	1080.2
132.5°	387.0	432.8	605.5	899.6	1029.5
135°	407.0	451.6	602.2	848.2	959.8
137.5°	425.8	467.2	599.5	806.7	898.7
140°	440.0	478.4	598.4	779.1	862.2
142.5°	452.1	487.6	596.4	754.5	825.6
145°	470.4	502.6	593.4	722.7	778.5
147.5°	489.9	517.7	591.9	694.5	739.2
150°	502.1	526.9	590.8	679.1	713.8
152.5°	513.2	536.1	589.8	665.8	694.5
155°	532.5	549.9	589.6	649.6	668.2
157.5°	546.5	560.6	589.6	636.3	649.2
160°	556.6	567.8	589.6	629.1	639.0
162.5°	564.7	573.9	590.6	623.0	630.9
165°	575.6	583.1	592.1	616.3	620.0
167.5°	583.2	588.9	593.4	610.6	611.6
170°	588.3	592.0	593.4	608.6	608.6
172.5°	592.4	594.1	593.4	605.5	604.5
175°	595.9	597.1	593.4	601.0	599.7
177.5°	596.9	596.9	592.9	598.9	596.9
180°	595.9	595.9	595.9	595.9	595.9

(END OF REPORT)