

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: P518499

Luminaire Tested: **SQ4-BB-075U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518499
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-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

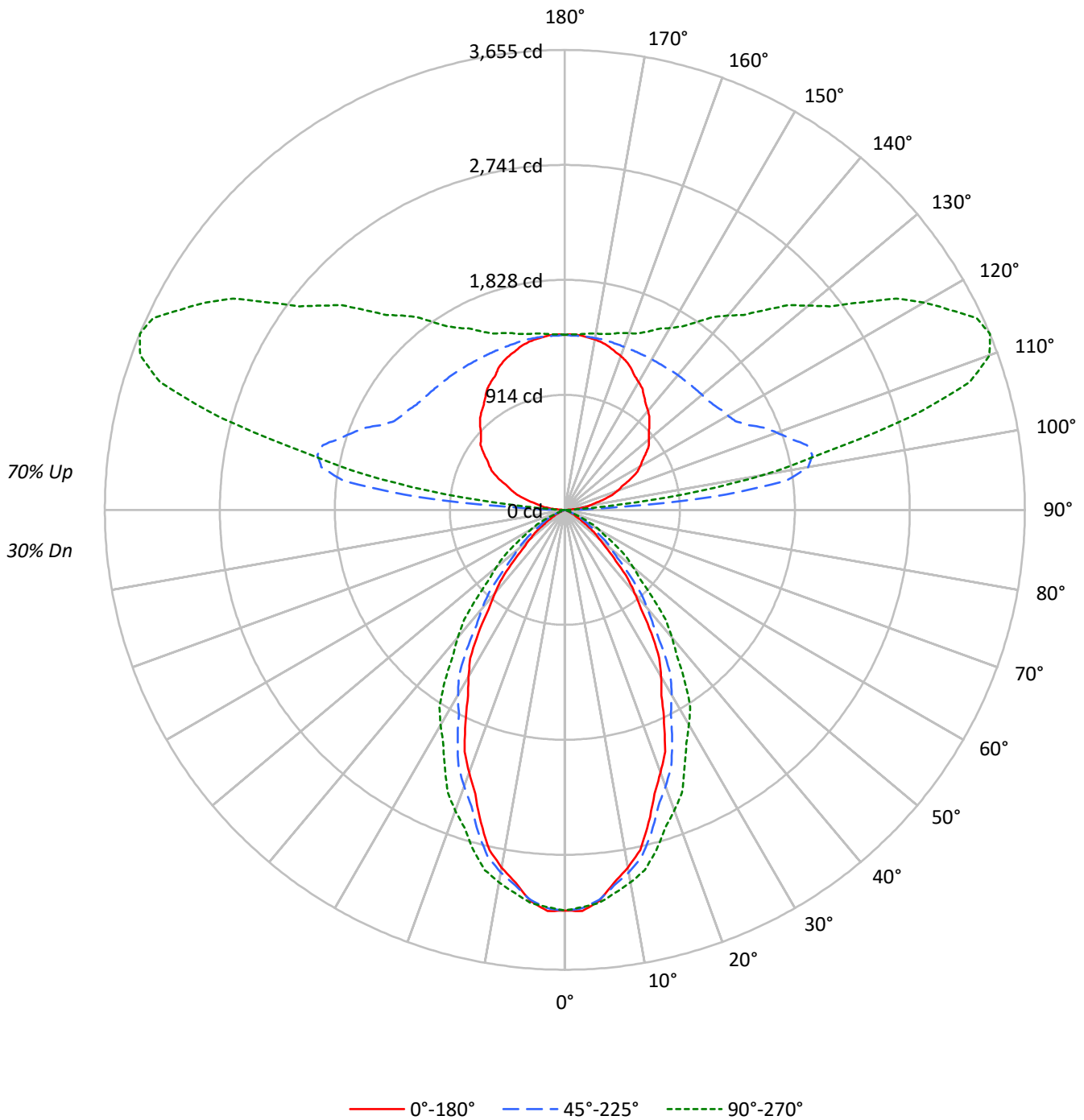
Lumens per Lamp: N/A
Luminaire Lumens: 12873.4 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.4
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	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°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7653	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	168	718	964
70°	83	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.6	2.3
10°-20°	743.1	5.8
20°-30°	930.3	7.2
30°-40°	859.2	6.7
40°-50°	577.4	4.5
50°-60°	298.2	2.3
60°-70°	93.4	0.7
70°-80°	5.9	0.0
80°-90°	3.6	0.0
90°-100°	656.8	5.1
100°-110°	1807.0	14.0
110°-120°	1865.1	14.5
120°-130°	1494.3	11.6
130°-140°	1173.7	9.1
140°-150°	899.4	7.0
150°-160°	646.7	5.0
160°-170°	395.4	3.1
170°-180°	133.3	1.0
0°-30°	1963.9	15.3
0°-40°	2823.1	21.9
0°-60°	3698.7	28.7
0°-90°	3801.7	29.5
90°-120°	4328.8	33.6
90°-150°	7896.3	61.3
90°-180°	9072.0	70.5
0°-180°	12873.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3121	3089	3113	3124	3136	289
15°	2574	2565	2656	2745	2804	717
25°	1867	1882	2015	2153	2254	856
35°	1198	1228	1362	1522	1660	742
45°	575	609	712	850	983	451
55°	206	241	311	400	491	193
65°	23	44	99	119	132	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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: P518499

CATALOG NUMBER: SQ4-BB-075U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3183.9	3183.9	3183.9	3183.9	3183.9
2.5°	3191.3	3161.2	3169.1	3168.9	3160.5
5°	3120.8	3089.1	3113.1	3124.1	3136.2
7.5°	2988.9	2964.2	3010.2	3044.6	3069.6
10°	2886.6	2865.6	2925.1	2972.1	3006.8
12.5°	2768.3	2752.1	2824.1	2888.6	2932.8
15°	2573.9	2564.9	2655.6	2744.7	2803.5
17.5°	2365.7	2365.4	2468.9	2579.6	2650.3
20°	2222.7	2227.3	2338.3	2460.3	2543.1
22.5°	2079.8	2090.3	2208.9	2336.1	2431.0
25°	1866.9	1882.0	2014.8	2152.6	2253.5
27.5°	1662.4	1684.3	1824.1	1967.4	2090.3
30°	1528.0	1553.6	1695.9	1846.7	1973.2
32.5°	1396.2	1426.6	1565.3	1724.7	1853.7
35°	1198.4	1228.5	1361.7	1521.9	1660.5
37.5°	994.1	1023.7	1153.7	1311.5	1461.2
40°	861.1	894.2	1018.2	1171.1	1323.2
42.5°	740.3	773.4	890.0	1040.2	1183.9
45°	574.6	609.2	711.6	850.2	982.8
47.5°	437.2	474.8	564.7	690.1	810.8
50°	355.8	393.5	482.1	592.6	708.6
52.5°	290.5	327.0	407.0	511.0	617.4
55°	206.4	241.0	311.2	399.5	491.4
57.5°	142.6	172.5	235.4	309.1	381.1
60°	103.2	131.8	191.0	250.9	309.6
62.5°	68.7	94.9	152.8	198.7	238.1
65°	23.1	44.2	98.6	118.9	132.5
67.5°	11.7	14.1	51.8	54.6	59.1
70°	9.2	9.2	24.6	26.3	30.8
72.5°	6.8	6.8	9.9	12.7	13.6
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.6	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: P518499

CATALOG NUMBER: SQ4-BB-075U-050D-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)