

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: P518885

Luminaire Tested: **SQ4-BB-150U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518885
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

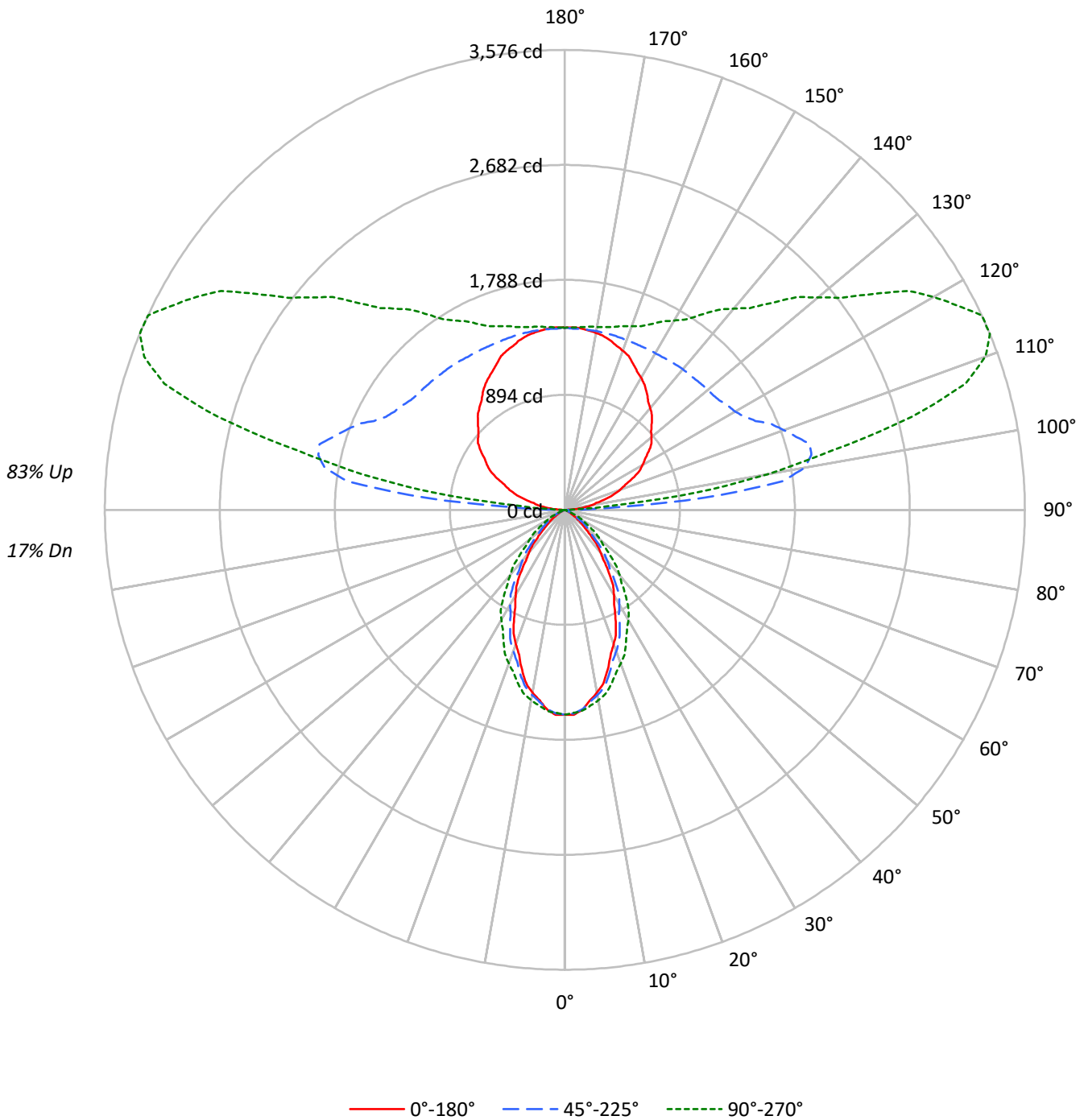
Lumens per Lamp: N/A
Luminaire Lumens: 11028.9 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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									
RC	80									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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17																			
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16																			
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14																			
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13																			
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12																			
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11																			
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10																			
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9																			
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8																			
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8																			
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7																			

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	1.3
10°-20°	371.5	3.4
20°-30°	465.1	4.2
30°-40°	429.6	3.9
40°-50°	288.7	2.6
50°-60°	149.1	1.4
60°-70°	46.7	0.4
70°-80°	2.9	0.0
80°-90°	3.0	0.0
90°-100°	657.9	6.0
100°-110°	1778.8	16.1
110°-120°	1870.1	17.0
120°-130°	1519.0	13.8
130°-140°	1191.6	10.8
140°-150°	914.5	8.3
150°-160°	657.7	6.0
160°-170°	401.8	3.6
170°-180°	135.5	1.2
0°-30°	982.0	8.9
0°-40°	1411.6	12.8
0°-60°	1849.4	16.8
0°-90°	1902.0	17.2
90°-120°	4306.8	39.0
90°-150°	7931.9	71.9
90°-180°	9127.0	82.8
0°-180°	11028.9	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°	3	9	20	21	20	7
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1403	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

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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°	0.6	1.8	4.0	4.3	4.0
90°	3.0	9.0	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.4	1094.1	566.2	336.8
97.5°	164.0	411.0	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.6	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.8	2791.6
107.5°	402.6	567.1	1887.1	3225.8	3265.5
110°	458.7	607.7	1810.3	3310.4	3478.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.5	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.6	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.1	1504.0	2691.5	3167.3
125°	796.9	913.2	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.6	1435.4	2009.8	2275.0
137.5°	1001.4	1108.4	1428.7	1912.4	2128.4
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.3	1851.4
147.5°	1153.8	1227.7	1408.9	1654.4	1755.1
150°	1185.5	1251.1	1406.5	1618.6	1699.0
152.5°	1214.8	1272.0	1405.2	1585.3	1651.5
155°	1254.1	1303.2	1403.4	1543.2	1593.9
157.5°	1294.9	1329.2	1403.7	1513.9	1547.2
160°	1318.1	1346.4	1404.9	1495.4	1519.2
162.5°	1336.4	1359.9	1406.1	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.8	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.2	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.8	1419.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)