

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: P518957

Luminaire Tested: **SQ4-BB-150U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518957
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-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

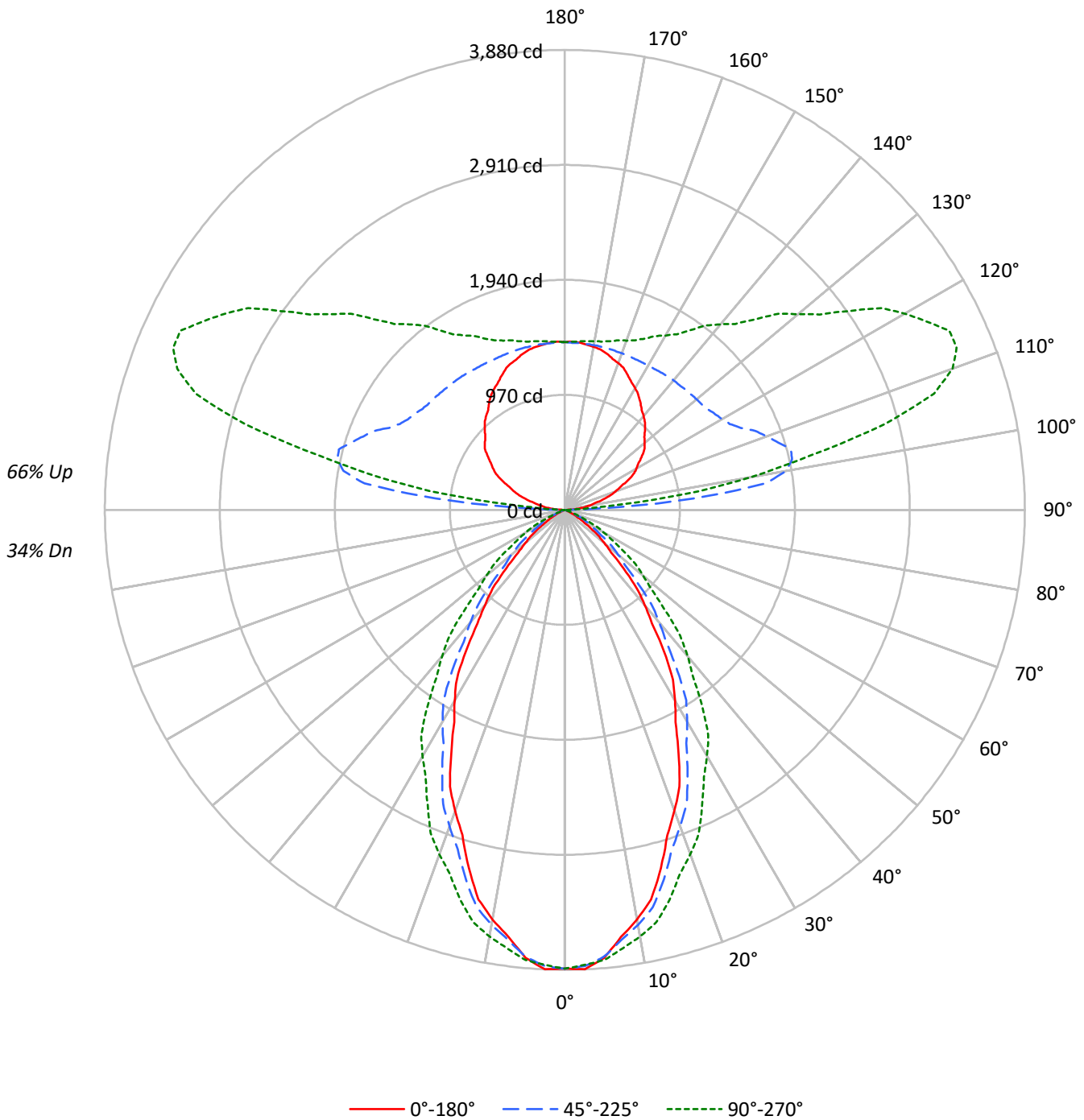
Lumens per Lamp: N/A
Luminaire Lumens: 13747.3 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 127.1
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				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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18606	20237
25°	15403	16623	18593
30°	13193	14644	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10392
50°	4140	5608	8243
55°	2691	4057	6406
60°	1544	2856	4630
65°	409	1744	2343
70°	201	540	674
75°	88	45	0
80°	67	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.2	2.6
10°-20°	903.4	6.6
20°-30°	1130.9	8.2
30°-40°	1044.6	7.6
40°-50°	701.9	5.1
50°-60°	362.6	2.6
60°-70°	113.6	0.8
70°-80°	7.2	0.1
80°-90°	3.1	0.0
90°-100°	657.9	4.8
100°-110°	1778.8	12.9
110°-120°	1870.1	13.6
120°-130°	1519.0	11.0
130°-140°	1191.6	8.7
140°-150°	914.5	6.7
150°-160°	657.7	4.8
160°-170°	401.8	2.9
170°-180°	135.5	1.0
0°-30°	2387.5	17.4
0°-40°	3432.1	25.0
0°-60°	4496.6	32.7
0°-90°	4620.4	33.6
90°-120°	4306.8	31.3
90°-150°	7931.9	57.7
90°-180°	9127.0	66.4
0°-180°	13747.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3871	3871	3871	3871	3871	
5°	3794	3756	3785	3798	3813	352
15°	3129	3118	3228	3337	3408	872
25°	2270	2288	2449	2617	2740	1041
35°	1457	1494	1655	1850	2019	903
45°	698	741	865	1034	1195	549
55°	251	293	378	486	597	234
65°	28	54	120	145	161	47
75°	4	4	2	0	0	5
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°	3870.7	3870.7	3870.7	3870.7	3870.7
2.5°	3879.7	3843.1	3852.7	3852.5	3842.3
5°	3793.9	3755.5	3784.6	3798.0	3812.7
7.5°	3633.6	3603.6	3659.5	3701.4	3731.8
10°	3509.3	3483.7	3556.1	3613.3	3655.4
12.5°	3365.5	3345.7	3433.3	3511.6	3565.5
15°	3129.2	3118.2	3228.4	3336.8	3408.2
17.5°	2876.0	2875.6	3001.4	3136.0	3222.0
20°	2702.2	2707.7	2842.6	2991.0	3091.7
22.5°	2528.4	2541.2	2685.3	2840.0	2955.4
25°	2269.6	2287.9	2449.4	2617.0	2739.7
27.5°	2020.9	2047.7	2217.6	2391.7	2541.2
30°	1857.6	1888.8	2061.8	2245.0	2398.8
32.5°	1697.3	1734.3	1903.0	2096.8	2253.5
35°	1456.9	1493.5	1655.4	1850.2	2018.7
37.5°	1208.6	1244.5	1402.6	1594.4	1776.4
40°	1046.8	1087.1	1237.8	1423.7	1608.6
42.5°	900.0	940.3	1082.0	1264.6	1439.3
45°	698.5	740.6	865.2	1033.6	1194.7
47.5°	531.5	577.2	686.5	838.9	985.7
50°	432.6	478.4	586.1	720.4	861.4
52.5°	353.2	397.5	494.7	621.3	750.5
55°	250.9	293.0	378.3	485.7	597.4
57.5°	173.4	209.7	286.1	375.8	463.3
60°	125.5	160.3	232.2	305.0	376.4
62.5°	83.5	115.4	185.8	241.5	289.5
65°	28.1	53.7	119.8	144.6	161.0
67.5°	14.2	17.2	62.9	66.4	71.9
70°	11.2	11.2	30.0	32.0	37.5
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	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)