

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: P518812

Luminaire Tested: **SQ4-BB-125U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518812
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

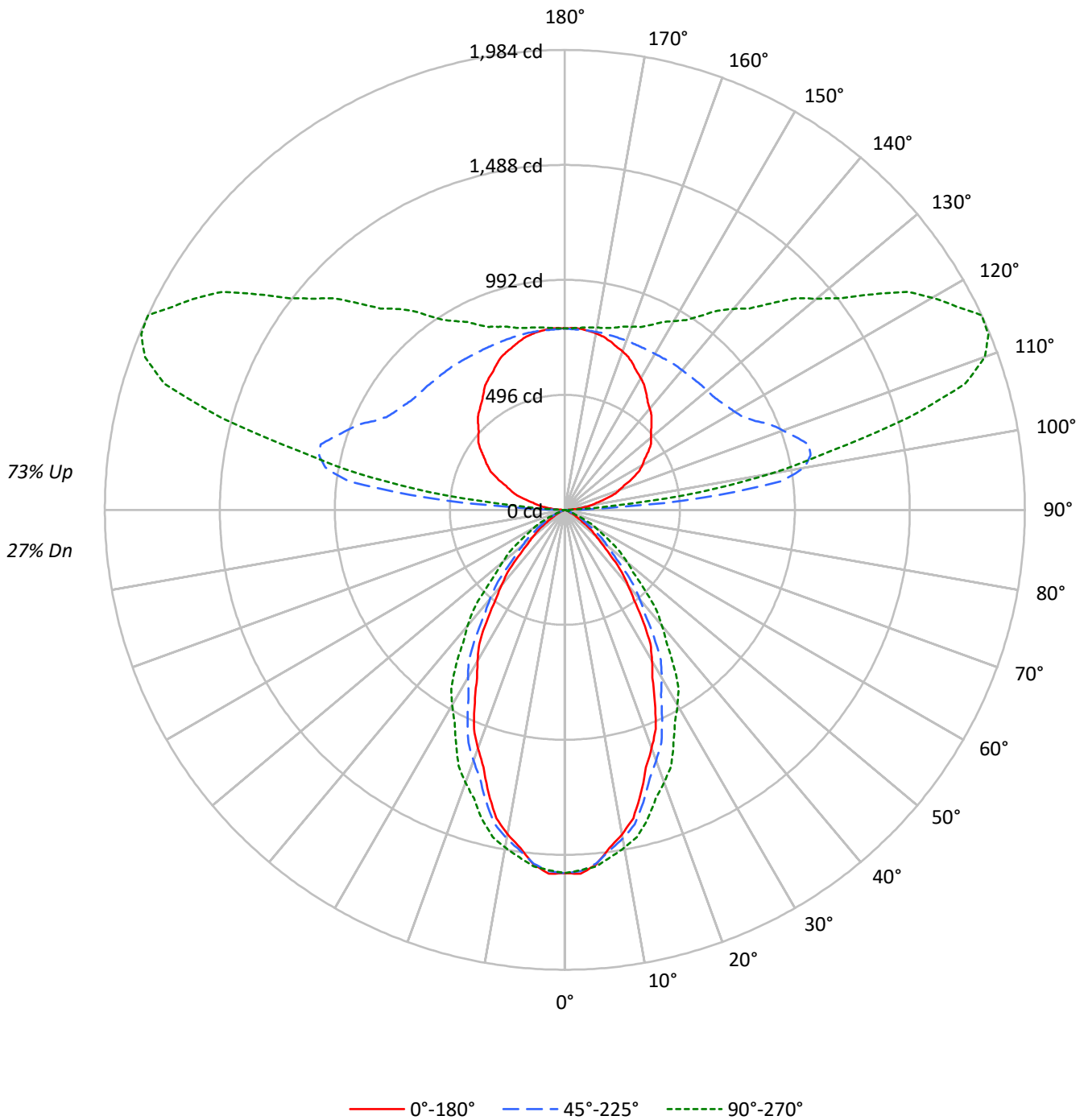
Lumens per Lamp: N/A
Luminaire Lumens: 6921.2 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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	91	91	91	91	71	71	71	52	52	52	35	35	35	27				
1	94	90	86	83	84	81	78	75	63	61	60	47	46	45	32	32	31	25				
2	86	80	74	70	77	71	67	63	56	53	51	43	41	39	30	29	28	22				
3	79	71	64	59	71	64	58	54	51	47	44	39	36	34	27	26	25	20				
4	73	63	56	51	65	57	51	47	46	42	38	35	32	30	25	24	22	18				
5	67	57	49	44	60	51	45	41	41	37	34	32	29	27	23	21	20	17				
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	20	18	15				
7	58	46	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17	14				
8	53	42	35	30	48	39	32	28	31	27	24	25	22	20	18	17	15	13				
9	50	39	32	27	45	35	29	25	29	25	22	23	20	18	17	15	14	12				
10	47	36	29	25	42	33	27	23	27	22	20	21	18	16	16	14	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14228	14193	14299
10°	13314	13491	13867
15°	12103	12487	13182
20°	10743	11302	12293
25°	9356	10098	11294
30°	8014	8895	10349
35°	6645	7550	9208
40°	5105	6036	7845
45°	3690	4571	6313
50°	2515	3406	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	2.1
10°-20°	365.8	5.3
20°-30°	458.0	6.6
30°-40°	423.0	6.1
40°-50°	284.2	4.1
50°-60°	146.8	2.1
60°-70°	46.0	0.7
70°-80°	2.9	0.0
80°-90°	1.9	0.0
90°-100°	365.9	5.3
100°-110°	985.7	14.2
110°-120°	1034.5	14.9
120°-130°	839.4	12.1
130°-140°	658.3	9.5
140°-150°	505.4	7.3
150°-160°	363.4	5.3
160°-170°	222.0	3.2
170°-180°	74.9	1.1
0°-30°	966.8	14.0
0°-40°	1389.8	20.1
0°-60°	1820.8	26.3
0°-90°	1871.6	27.0
90°-120°	2386.1	34.5
90°-150°	4389.3	63.4
90°-180°	5050.0	73.0
0°-180°	6921.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1521	1532	1538	1544	142
15°	1267	1263	1307	1351	1380	353
25°	919	926	992	1060	1109	421
35°	590	605	670	749	818	365
45°	283	300	350	419	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	6	12	13	13	4
95°	56	199	600	307	212	58
105°	182	284	1090	1631	1530	192
115°	322	394	908	1754	1984	317
125°	439	505	815	1378	1621	392
135°	529	590	792	1111	1258	408
145°	612	660	782	950	1020	384
155°	694	720	775	853	880	320
165°	753	762	778	809	813	212
175°	783	782	779	790	788	74
180°	782	782	782	782	782	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1567.4	1567.4	1567.4	1567.4	1567.4
2.5°	1571.1	1556.2	1560.1	1560.0	1555.9
5°	1536.3	1520.8	1532.5	1538.0	1543.9
7.5°	1471.4	1459.3	1481.9	1498.8	1511.2
10°	1421.1	1410.7	1440.0	1463.2	1480.2
12.5°	1362.8	1354.8	1390.3	1422.0	1443.8
15°	1267.1	1262.7	1307.3	1351.2	1380.1
17.5°	1164.6	1164.5	1215.4	1269.9	1304.7
20°	1094.2	1096.5	1151.1	1211.2	1252.0
22.5°	1023.9	1029.1	1087.4	1150.0	1196.8
25°	919.1	926.5	991.9	1059.7	1109.4
27.5°	818.4	829.2	898.0	968.5	1029.0
30°	752.2	764.8	834.9	909.1	971.4
32.5°	687.3	702.3	770.6	849.1	912.5
35°	590.0	604.8	670.3	749.2	817.5
37.5°	489.4	503.9	568.0	645.6	719.3
40°	423.9	440.2	501.2	576.5	651.4
42.5°	364.4	380.8	438.1	512.1	582.8
45°	282.8	299.9	350.3	418.6	483.8
47.5°	215.2	233.7	278.0	339.7	399.2
50°	175.2	193.7	237.3	291.7	348.8
52.5°	143.0	161.0	200.3	251.6	303.9
55°	101.6	118.7	153.2	196.7	241.9
57.5°	70.2	84.9	115.9	152.2	187.6
60°	50.8	64.9	94.0	123.5	152.4
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.8	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
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°	0.4	1.2	2.4	2.6	2.6
90°	2.0	5.9	12.0	13.0	13.0
92.5°	24.3	85.9	169.8	81.7	56.8
95°	55.8	199.0	599.9	306.8	212.2
97.5°	89.1	227.8	940.8	786.0	592.7
100°	114.6	239.3	1049.3	1097.8	910.8
102.5°	139.3	255.4	1085.1	1331.4	1177.8
105°	182.3	283.7	1090.1	1630.9	1530.5
107.5°	223.0	313.4	1043.7	1784.8	1810.7
110°	250.1	335.8	1001.4	1832.6	1927.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	278.8	358.3	960.8	1822.0	1977.3
115°	321.9	394.0	907.8	1754.0	1983.9
117.5°	361.1	428.7	866.7	1645.4	1901.4
120°	386.6	451.9	846.0	1567.4	1830.5
122.5°	408.9	473.4	830.8	1487.7	1750.0
125°	439.4	504.7	815.1	1377.6	1621.2
127.5°	468.7	533.0	805.1	1280.6	1498.1
130°	486.3	550.6	801.1	1225.0	1416.0
132.5°	503.8	567.3	797.2	1176.0	1351.4
135°	529.1	590.5	792.2	1111.4	1258.5
137.5°	553.2	612.1	789.6	1056.6	1177.4
140°	570.0	626.5	787.2	1022.8	1132.0
142.5°	587.5	640.1	785.6	991.4	1083.3
145°	611.8	659.6	782.2	950.2	1020.4
147.5°	638.1	679.6	778.8	915.6	970.7
150°	655.7	691.7	777.2	893.9	939.6
152.5°	671.6	703.0	776.4	876.1	913.3
155°	694.5	719.9	775.2	852.6	879.9
157.5°	714.7	734.3	775.4	836.0	854.4
160°	727.4	744.0	776.2	826.4	840.0
162.5°	738.6	752.0	777.0	818.3	828.0
165°	753.3	762.1	778.2	809.2	813.1
167.5°	765.3	770.3	779.2	802.2	803.7
170°	773.2	775.2	779.2	798.2	798.2
172.5°	778.0	778.4	780.0	794.2	794.2
175°	783.2	782.2	779.2	790.1	788.2
177.5°	785.4	783.8	779.8	786.2	784.6
180°	782.2	782.2	782.2	782.2	782.2

(END OF REPORT)