

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: P518560

Luminaire Tested: **SQ4-BB-075U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518560
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-4
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

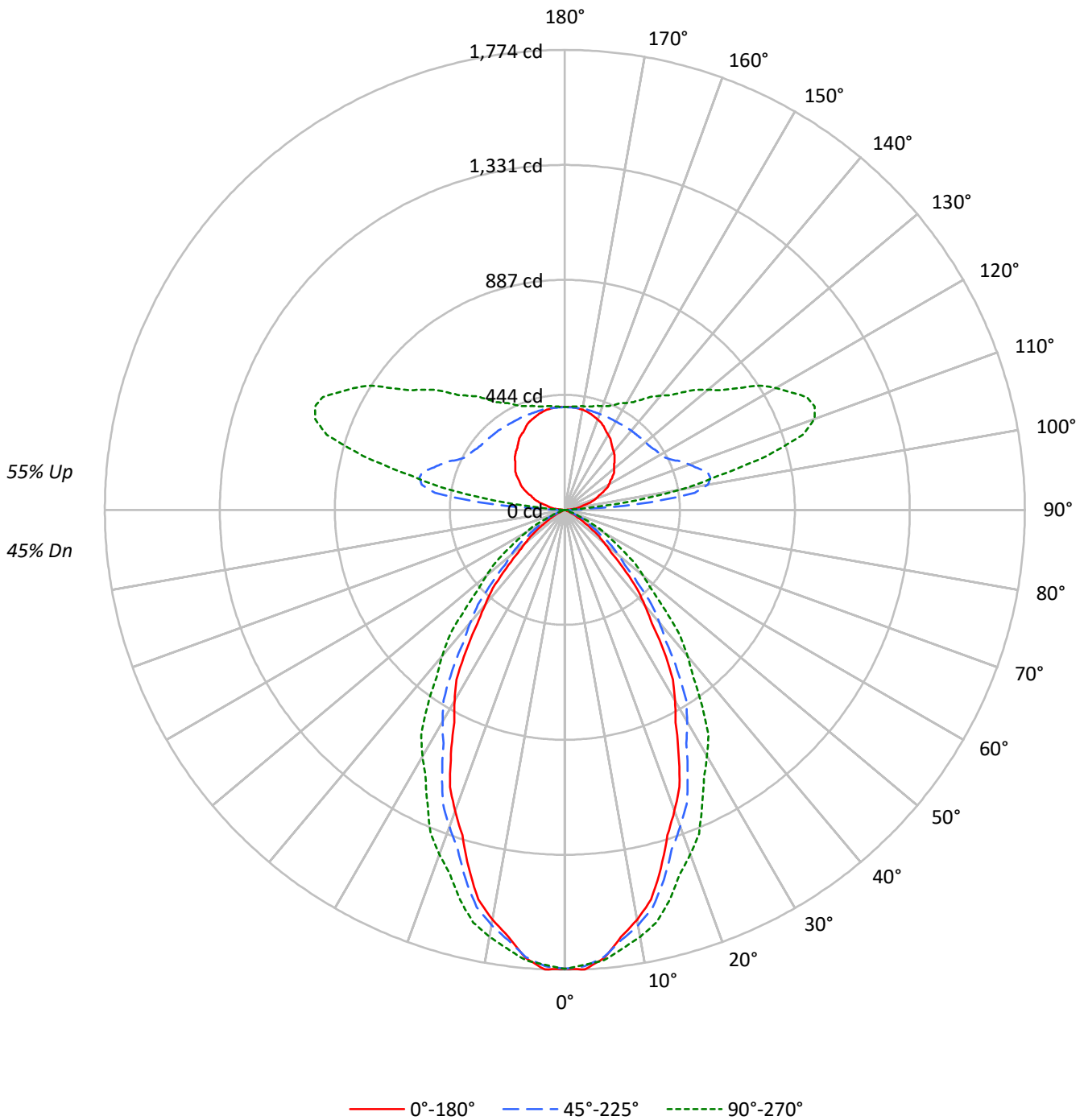
Lumens per Lamp: N/A
Luminaire Lumens: 4700.9 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	53	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°	13669	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5767	6818	8861
45°	4169	5163	7129
50°	2839	3848	5655
55°	1847	2783	4395
60°	1059	1960	3176
65°	279	1196	1609
70°	138	370	461
75°	61	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	3.4
10°-20°	413.2	8.8
20°-30°	517.2	11.0
30°-40°	477.8	10.2
40°-50°	321.0	6.8
50°-60°	165.8	3.5
60°-70°	51.9	1.1
70°-80°	3.3	0.1
80°-90°	1.1	0.0
90°-100°	187.4	4.0
100°-110°	515.5	11.0
110°-120°	532.1	11.3
120°-130°	426.3	9.1
130°-140°	334.8	7.1
140°-150°	256.6	5.5
150°-160°	184.5	3.9
160°-170°	112.8	2.4
170°-180°	38.0	0.8
0°-30°	1091.9	23.2
0°-40°	1569.7	33.4
0°-60°	2056.5	43.7
0°-90°	2112.8	44.9
90°-120°	1235.0	26.3
90°-150°	2252.7	47.9
90°-180°	2588.0	55.1
0°-180°	4700.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1735	1718	1731	1737	1744	161
15°	1431	1426	1476	1526	1559	399
25°	1038	1046	1120	1197	1253	476
35°	666	683	757	846	923	413
45°	320	339	396	473	546	251
55°	115	134	173	222	273	107
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	6	8	8	2
95°	28	102	331	142	90	29
105°	92	142	568	865	807	97
115°	163	199	456	907	1030	161
125°	225	256	413	699	819	201
135°	271	301	402	566	640	209
145°	314	335	396	482	519	197
155°	355	367	393	433	446	163
165°	384	389	395	411	413	108
175°	397	398	396	401	400	38
180°	397	397	397	397	397	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.3	1770.3	1770.3	1770.3	1770.3
2.5°	1774.4	1757.7	1762.1	1762.0	1757.3
5°	1735.2	1717.6	1730.9	1737.0	1743.7
7.5°	1661.9	1648.1	1673.7	1692.8	1706.7
10°	1605.0	1593.3	1626.4	1652.5	1671.8
12.5°	1539.2	1530.2	1570.2	1606.1	1630.7
15°	1431.1	1426.1	1476.5	1526.1	1558.8
17.5°	1315.3	1315.2	1372.7	1434.3	1473.6
20°	1235.9	1238.4	1300.1	1368.0	1414.0
22.5°	1156.4	1162.3	1228.2	1298.9	1351.7
25°	1038.0	1046.4	1120.2	1196.9	1253.0
27.5°	924.3	936.5	1014.2	1093.9	1162.2
30°	849.6	863.8	943.0	1026.8	1097.1
32.5°	776.3	793.2	870.3	959.0	1030.7
35°	666.3	683.1	757.1	846.2	923.3
37.5°	552.8	569.2	641.5	729.2	812.4
40°	478.8	497.2	566.1	651.1	735.7
42.5°	411.6	430.0	494.9	578.4	658.3
45°	319.5	338.7	395.7	472.7	546.4
47.5°	243.1	264.0	314.0	383.7	450.8
50°	197.8	218.8	268.1	329.5	394.0
52.5°	161.5	181.8	226.3	284.1	343.3
55°	114.8	134.0	173.0	222.1	273.2
57.5°	79.3	95.9	130.9	171.9	211.9
60°	57.4	73.3	106.2	139.5	172.1
62.5°	38.2	52.8	85.0	110.5	132.4
65°	12.8	24.6	54.8	66.1	73.7
67.5°	6.5	7.8	28.8	30.4	32.9
70°	5.1	5.1	13.7	14.6	17.1
72.5°	3.8	3.8	5.5	7.0	7.5
75°	1.7	1.7	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.2	0.7	1.2	1.5	1.5
90°	0.8	3.3	5.9	7.6	7.6
92.5°	11.7	49.8	86.4	33.2	27.2
95°	27.9	102.3	331.3	141.7	90.4
97.5°	45.5	113.4	505.6	389.6	274.9
100°	58.3	120.3	560.4	565.6	461.5
102.5°	70.5	128.5	574.6	701.8	606.2
105°	92.1	141.7	568.0	865.1	807.2
107.5°	112.8	158.0	535.7	945.1	962.2
110°	127.6	169.0	511.4	964.9	1024.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.2	181.2	487.0	952.1	1042.7
115°	163.1	198.7	455.6	907.2	1029.5
117.5°	184.1	216.8	435.6	844.2	982.5
120°	196.9	228.4	426.9	796.9	939.9
122.5°	208.4	239.8	420.8	755.5	891.2
125°	224.8	256.2	413.3	699.2	819.1
127.5°	240.4	270.3	408.4	652.2	757.4
130°	248.5	279.1	405.7	624.3	720.2
132.5°	258.0	288.6	403.7	599.7	686.4
135°	271.3	301.1	401.5	565.5	639.9
137.5°	283.8	311.4	399.6	537.8	599.1
140°	293.3	318.9	399.0	519.4	574.8
142.5°	301.4	325.1	397.6	503.0	550.4
145°	313.6	335.1	395.6	481.8	519.0
147.5°	326.6	345.1	394.6	463.0	492.8
150°	334.7	351.3	393.9	452.7	475.9
152.5°	342.2	357.4	393.2	443.9	463.0
155°	355.0	366.6	393.0	433.1	445.5
157.5°	364.3	373.7	393.0	424.2	432.8
160°	371.1	378.5	393.0	419.4	426.0
162.5°	376.5	382.6	393.7	415.3	420.6
165°	383.7	388.7	394.7	410.9	413.3
167.5°	388.8	392.6	395.6	407.1	407.8
170°	392.2	394.7	395.6	405.7	405.7
172.5°	394.9	396.1	395.6	403.7	403.0
175°	397.3	398.1	395.6	400.6	399.8
177.5°	397.9	397.9	395.2	399.3	397.9
180°	397.3	397.3	397.3	397.3	397.3

(END OF REPORT)