

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: P518541

Luminaire Tested: **SQ4-BB-075U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518541
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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

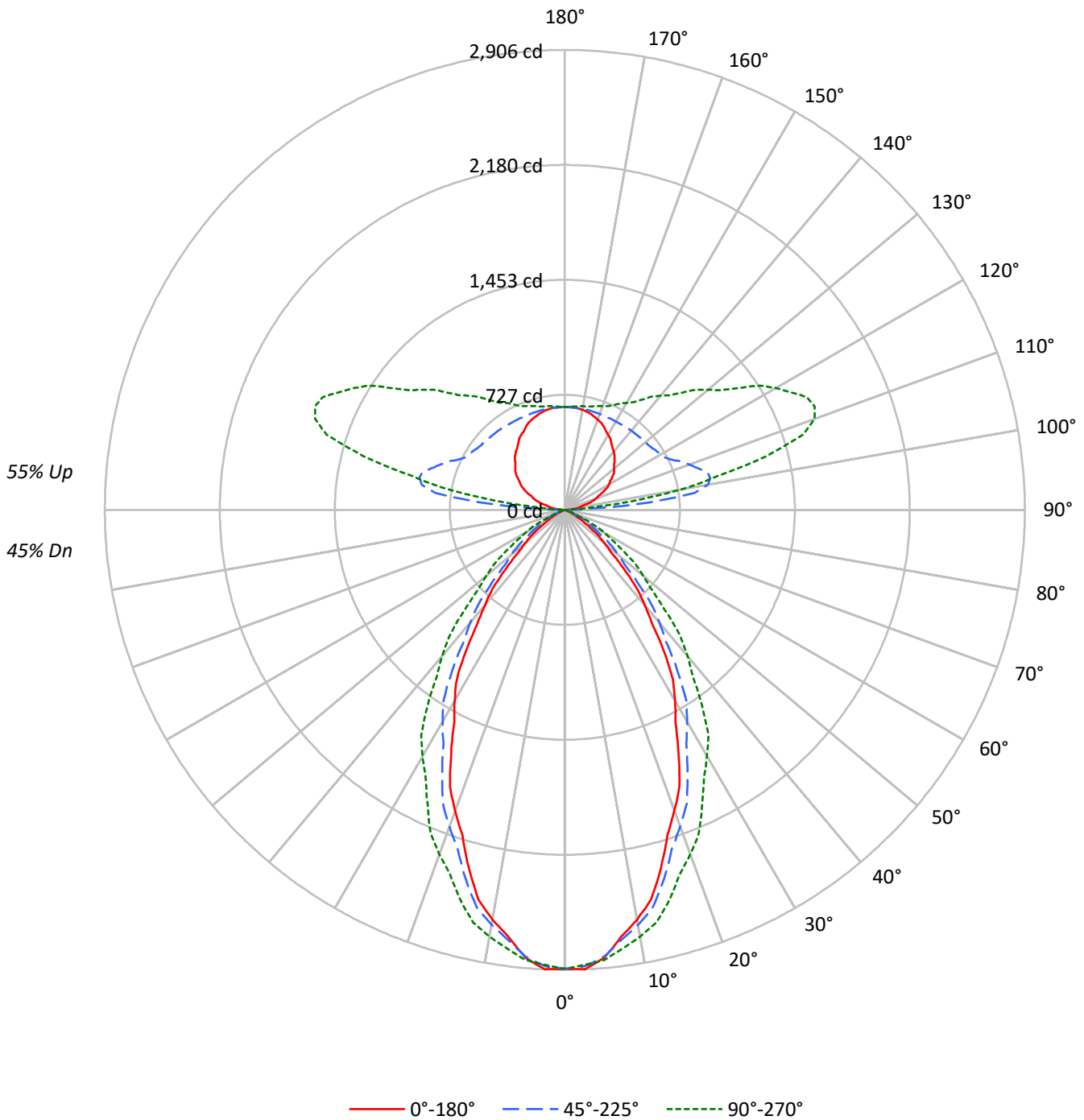
Lumens per Lamp: N/A
Luminaire Lumens: 7699.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.9
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°	17834	17834	17834
5°	17547	17504	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12451	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2016	3038	4799
60°	1156	2139	3468
65°	306	1307	1755
70°	151	403	505
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	3.4
10°-20°	676.7	8.8
20°-30°	847.1	11.0
30°-40°	782.5	10.2
40°-50°	525.8	6.8
50°-60°	271.6	3.5
60°-70°	85.0	1.1
70°-80°	5.4	0.1
80°-90°	1.8	0.0
90°-100°	306.9	4.0
100°-110°	844.3	11.0
110°-120°	871.5	11.3
120°-130°	698.2	9.1
130°-140°	548.4	7.1
140°-150°	420.3	5.5
150°-160°	302.2	3.9
160°-170°	184.8	2.4
170°-180°	62.3	0.8
0°-30°	1788.4	23.2
0°-40°	2570.8	33.4
0°-60°	3368.2	43.7
0°-90°	3460.3	44.9
90°-120°	2022.6	26.3
90°-150°	3689.5	47.9
90°-180°	4239.0	55.1
0°-180°	7699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2899	2899	2899	2899	2899	
5°	2842	2813	2835	2845	2856	263
15°	2344	2336	2418	2499	2553	653
25°	1700	1714	1835	1960	2052	779
35°	1091	1119	1240	1386	1512	676
45°	523	555	648	774	895	411
55°	188	220	283	364	448	175
65°	21	40	90	108	121	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	1	5	10	12	12	3
95°	46	168	543	232	148	48
105°	151	232	930	1417	1322	159
115°	267	325	746	1486	1686	264
125°	368	420	677	1145	1341	328
135°	444	493	658	926	1048	343
145°	514	549	648	789	850	322
155°	581	600	644	709	730	267
165°	628	637	646	673	677	177
175°	651	652	648	656	655	62
180°	651	651	651	651	651	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2899.4	2899.4	2899.4	2899.4	2899.4
2.5°	2906.1	2878.7	2885.9	2885.7	2878.1
5°	2841.9	2813.1	2834.9	2844.9	2855.9
7.5°	2721.8	2699.3	2741.2	2772.5	2795.3
10°	2628.7	2609.5	2663.7	2706.5	2738.1
12.5°	2520.9	2506.1	2571.7	2630.4	2670.7
15°	2343.9	2335.7	2418.3	2499.4	2552.9
17.5°	2154.3	2154.0	2248.2	2349.0	2413.5
20°	2024.1	2028.2	2129.3	2240.4	2315.9
22.5°	1893.9	1903.5	2011.5	2127.3	2213.7
25°	1700.1	1713.8	1834.7	1960.3	2052.1
27.5°	1513.8	1533.8	1661.1	1791.5	1903.5
30°	1391.5	1414.8	1544.4	1681.6	1796.9
32.5°	1271.4	1299.1	1425.4	1570.6	1688.0
35°	1091.3	1118.7	1240.0	1385.9	1512.1
37.5°	905.3	932.2	1050.6	1194.3	1330.6
40°	784.1	814.3	927.2	1066.4	1204.9
42.5°	674.1	704.3	810.5	947.3	1078.1
45°	523.2	554.8	648.0	774.2	894.9
47.5°	398.1	432.4	514.2	628.4	738.4
50°	324.0	358.3	439.0	539.6	645.2
52.5°	264.5	297.7	370.6	465.4	562.2
55°	188.0	219.5	283.3	363.8	447.5
57.5°	129.9	157.0	214.3	281.5	347.0
60°	94.0	120.0	173.9	228.5	281.9
62.5°	62.6	86.4	139.1	180.9	216.9
65°	21.0	40.2	89.8	108.3	120.6
67.5°	10.7	12.9	47.1	49.7	53.9
70°	8.4	8.4	22.4	23.9	28.1
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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°	0.3	1.1	1.9	2.5	2.5
90°	1.4	5.4	9.7	12.5	12.5
92.5°	19.1	81.6	141.5	54.3	44.6
95°	45.7	167.5	542.7	232.0	148.1
97.5°	74.5	185.7	828.1	638.1	450.2
100°	95.5	197.0	917.8	926.4	755.9
102.5°	115.5	210.5	941.1	1149.3	992.9
105°	150.9	232.1	930.3	1416.8	1322.1
107.5°	184.7	258.9	877.4	1547.8	1576.0
110°	209.0	276.7	837.5	1580.4	1677.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.2	296.7	797.7	1559.4	1707.7
115°	267.2	325.4	746.2	1485.8	1686.1
117.5°	301.5	355.1	713.5	1382.6	1609.2
120°	322.6	374.0	699.1	1305.2	1539.4
122.5°	341.4	392.8	689.1	1237.4	1459.7
125°	368.2	419.7	677.0	1145.2	1341.4
127.5°	393.7	442.7	668.9	1068.2	1240.4
130°	407.0	457.1	664.5	1022.5	1179.5
132.5°	422.5	472.6	661.2	982.2	1124.1
135°	444.4	493.1	657.6	926.1	1048.0
137.5°	464.9	510.1	654.5	880.8	981.2
140°	480.4	522.3	653.4	850.7	941.4
142.5°	493.7	532.4	651.2	823.8	901.5
145°	513.6	548.8	647.9	789.1	850.0
147.5°	534.9	565.2	646.2	758.4	807.1
150°	548.2	575.3	645.1	741.5	779.4
152.5°	560.4	585.3	644.0	726.9	758.4
155°	581.4	600.4	643.7	709.3	729.6
157.5°	596.7	612.1	643.7	694.7	708.8
160°	607.7	619.9	643.7	686.9	697.7
162.5°	616.6	626.6	644.8	680.2	688.9
165°	628.5	636.6	646.5	672.9	677.0
167.5°	636.8	643.0	647.9	666.7	667.8
170°	642.3	646.4	647.9	664.5	664.5
172.5°	646.8	648.7	647.9	661.1	660.1
175°	650.6	652.0	647.9	656.2	654.8
177.5°	651.8	651.8	647.3	653.9	651.8
180°	650.6	650.6	650.6	650.6	650.6

(END OF REPORT)