

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: P518435

Luminaire Tested: **SQ4-BB-050U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518435
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

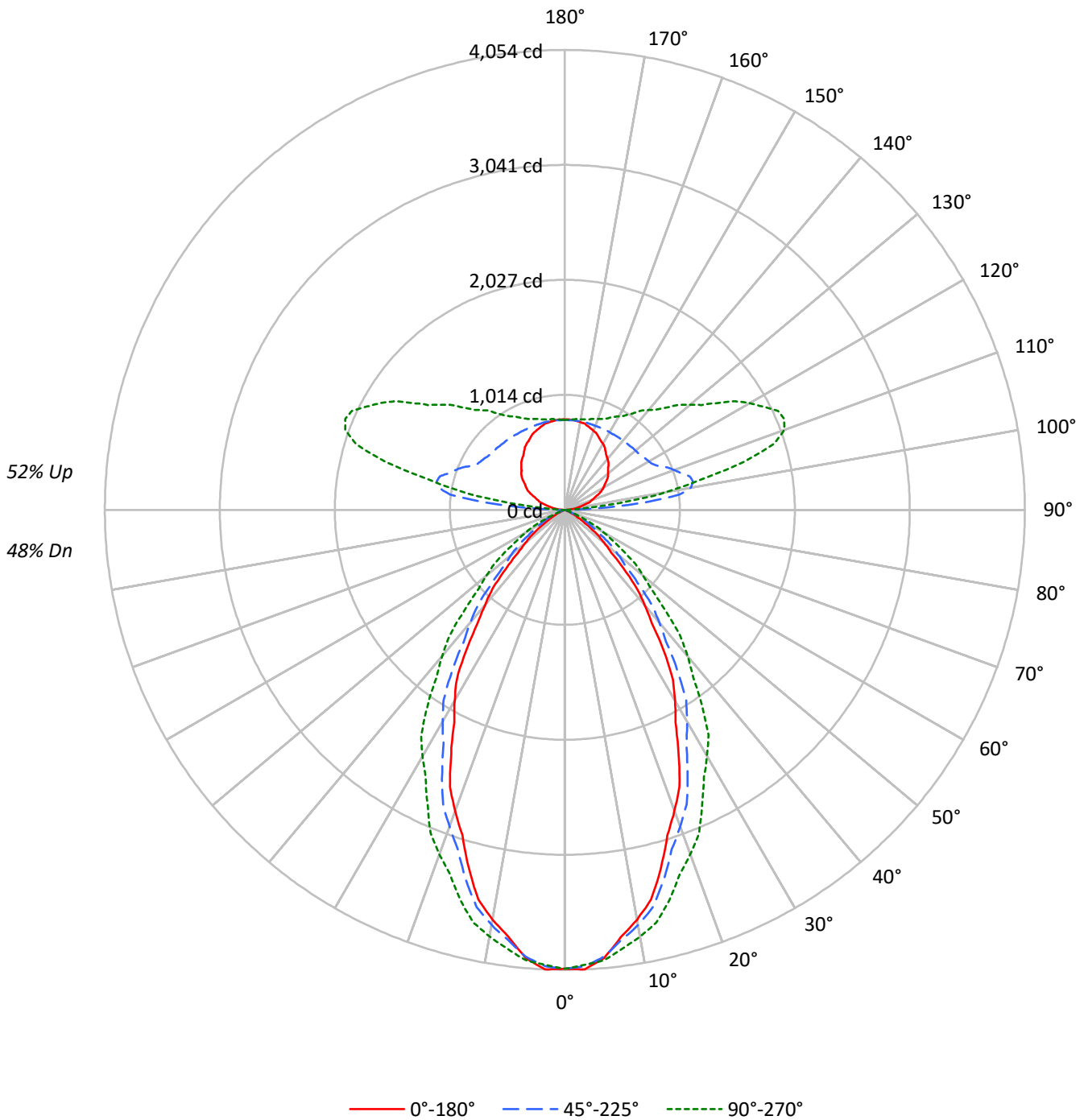
Lumens per Lamp: N/A
Luminaire Lumens: 10020.7 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 105.6
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44	44	44	44	
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40	40	40	40	
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36	36	36	36	
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32	32	32	32	
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29	29	29	29	
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27	27	27	27	
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25	25	25	25	
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23	23	23	23	
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21	21	21	21	
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20	20	20	20	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12440	12440	12440
5°	12240	12210	12300
10°	11453	11605	11929
15°	10412	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3932	5430
50°	2163	2930	4307
55°	1406	2120	3347
60°	806	1493	2420
65°	214	911	1225
70°	105	281	352
75°	46	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.2	3.7
10°-20°	944.0	9.4
20°-30°	1181.8	11.8
30°-40°	1091.6	10.9
40°-50°	733.5	7.3
50°-60°	378.9	3.8
60°-70°	118.7	1.2
70°-80°	7.5	0.1
80°-90°	3.2	0.0
90°-100°	381.7	3.8
100°-110°	1037.0	10.3
110°-120°	1066.3	10.6
120°-130°	852.5	8.5
130°-140°	669.8	6.7
140°-150°	513.6	5.1
150°-160°	369.4	3.7
160°-170°	225.9	2.3
170°-180°	76.1	0.8
0°-30°	2495.0	24.9
0°-40°	3586.7	35.8
0°-60°	4699.1	46.9
0°-90°	4828.5	48.2
90°-120°	2485.0	24.8
90°-150°	4521.0	45.1
90°-180°	5192.0	51.8
0°-180°	10020.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4045	4045	4045	4045	4045	
5°	3965	3925	3955	3969	3984	368
15°	3270	3259	3374	3487	3562	911
25°	2372	2391	2560	2735	2863	1087
35°	1522	1561	1730	1934	2110	943
45°	730	774	904	1080	1248	573
55°	262	306	395	508	624	245
65°	29	56	125	151	168	50
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	3	10	18	23	23	4
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4045.1	4045.1	4045.1	4045.1	4045.1
2.5°	4054.4	4016.2	4026.3	4026.0	4015.3
5°	3964.8	3924.6	3955.0	3969.1	3984.4
7.5°	3797.3	3765.9	3824.3	3868.1	3899.8
10°	3667.4	3640.6	3716.3	3776.0	3820.0
12.5°	3517.1	3496.4	3587.9	3669.8	3726.1
15°	3270.1	3258.6	3373.8	3487.1	3561.7
17.5°	3005.5	3005.1	3136.6	3277.2	3367.2
20°	2823.9	2829.6	2970.7	3125.7	3231.0
22.5°	2642.3	2655.7	2806.3	2967.9	3088.5
25°	2371.8	2391.0	2559.7	2734.8	2863.0
27.5°	2112.0	2139.9	2317.4	2499.5	2655.6
30°	1941.3	1973.8	2154.6	2346.1	2506.9
32.5°	1773.8	1812.4	1988.7	2191.2	2355.0
35°	1522.5	1560.8	1730.0	1933.6	2109.6
37.5°	1263.0	1300.5	1465.8	1666.2	1856.4
40°	1093.9	1136.0	1293.6	1487.8	1681.0
42.5°	940.5	982.6	1130.7	1321.6	1504.1
45°	729.9	774.0	904.1	1080.2	1248.5
47.5°	555.4	603.2	717.4	876.7	1030.1
50°	452.1	499.9	612.5	752.9	900.2
52.5°	369.1	415.4	517.0	649.3	784.4
55°	262.2	306.2	395.3	507.6	624.3
57.5°	181.2	219.1	299.0	392.7	484.2
60°	131.1	167.5	242.7	318.7	393.4
62.5°	87.3	120.6	194.1	252.4	302.5
65°	29.4	56.1	125.2	151.1	168.3
67.5°	14.9	17.9	65.8	69.4	75.1
70°	11.7	11.7	31.3	33.4	39.1
72.5°	8.6	8.6	12.5	16.1	17.2
75°	3.9	3.9	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	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°	0.5	2.0	3.6	4.6	4.6
90°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)