

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: P518441

Luminaire Tested: **SQ4-BB-050U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518441
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

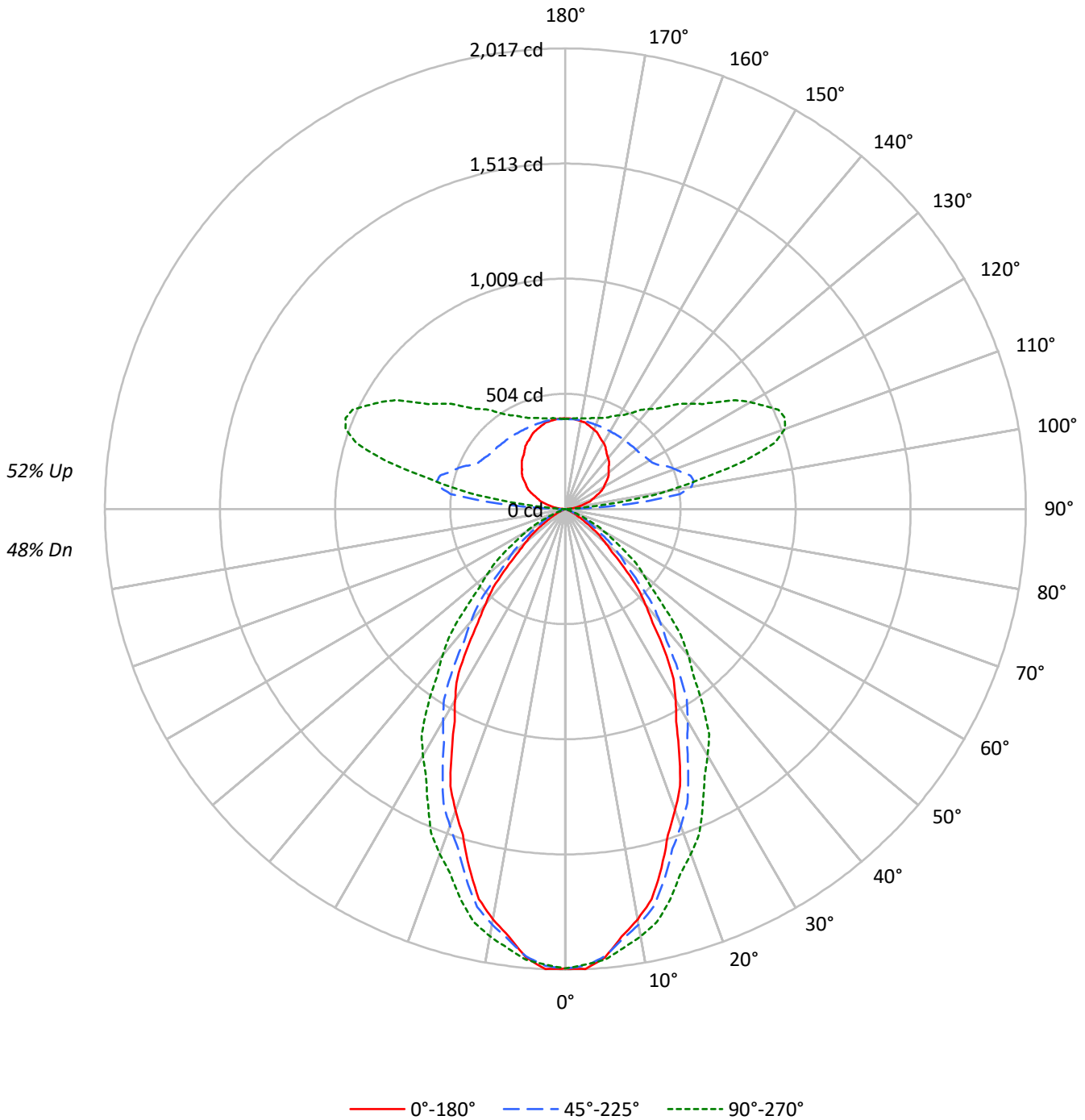
Lumens per Lamp: N/A
Luminaire Lumens: 4984.9 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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°	12377	12377	12377
5°	12178	12148	12238
10°	11395	11546	11869
15°	10358	10687	11282
20°	9195	9673	10521
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3158	3913	5403
50°	2152	2916	4285
55°	1399	2109	3331
60°	802	1485	2407
65°	212	907	1218
70°	104	281	351
75°	45	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	3.7
10°-20°	469.6	9.4
20°-30°	587.9	11.8
30°-40°	543.1	10.9
40°-50°	364.9	7.3
50°-60°	188.5	3.8
60°-70°	59.0	1.2
70°-80°	3.7	0.1
80°-90°	1.6	0.0
90°-100°	189.9	3.8
100°-110°	515.9	10.3
110°-120°	530.4	10.6
120°-130°	424.1	8.5
130°-140°	333.2	6.7
140°-150°	255.5	5.1
150°-160°	183.7	3.7
160°-170°	112.4	2.3
170°-180°	37.9	0.8
0°-30°	1241.2	24.9
0°-40°	1784.2	35.8
0°-60°	2337.6	46.9
0°-90°	2402.0	48.2
90°-120°	1236.2	24.8
90°-150°	2249.0	45.1
90°-180°	2583.0	51.8
0°-180°	4984.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2012	2012	2012	2012	2012	
5°	1972	1952	1968	1974	1982	183
15°	1627	1621	1678	1735	1772	453
25°	1180	1189	1273	1360	1424	541
35°	757	776	861	962	1050	469
45°	363	385	450	537	621	285
55°	130	152	197	252	311	122
65°	15	28	62	75	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	5	9	11	11	2
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	903	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2012.3	2012.3	2012.3	2012.3	2012.3
2.5°	2016.9	1997.9	2002.9	2002.8	1997.5
5°	1972.3	1952.4	1967.5	1974.5	1982.1
7.5°	1889.0	1873.4	1902.4	1924.2	1940.0
10°	1824.4	1811.0	1848.7	1878.4	1900.3
12.5°	1749.6	1739.3	1784.8	1825.6	1853.6
15°	1626.7	1621.0	1678.3	1734.7	1771.8
17.5°	1495.1	1494.9	1560.4	1630.3	1675.0
20°	1404.8	1407.6	1477.8	1554.9	1607.3
22.5°	1314.4	1321.1	1396.0	1476.4	1536.4
25°	1179.9	1189.4	1273.4	1360.5	1424.3
27.5°	1050.6	1064.5	1152.8	1243.4	1321.1
30°	965.7	981.9	1071.8	1167.1	1247.1
32.5°	882.4	901.6	989.3	1090.0	1171.5
35°	757.4	776.4	860.6	961.9	1049.5
37.5°	628.3	647.0	729.2	828.9	923.5
40°	544.2	565.1	643.5	740.1	836.3
42.5°	467.9	488.8	562.5	657.4	748.2
45°	363.1	385.0	449.8	537.3	621.1
47.5°	276.3	300.1	356.9	436.1	512.5
50°	224.9	248.7	304.7	374.5	447.8
52.5°	183.6	206.6	257.2	323.0	390.2
55°	130.5	152.3	196.7	252.5	310.6
57.5°	90.1	109.0	148.8	195.3	240.8
60°	65.2	83.3	120.7	158.6	195.7
62.5°	43.4	60.0	96.6	125.6	150.5
65°	14.6	27.9	62.3	75.2	83.7
67.5°	7.4	8.9	32.7	34.5	37.4
70°	5.8	5.8	15.6	16.6	19.5
72.5°	4.3	4.3	6.2	8.0	8.6
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.4	11.4
92.5°	11.4	52.0	90.3	38.8	32.8
95°	28.0	103.9	330.7	143.9	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	121.9	561.0	568.6	459.2
102.5°	70.7	129.2	575.2	703.3	606.8
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.2	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.7	949.5	1041.3
115°	162.8	197.6	454.1	903.4	1029.1
117.5°	182.7	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	934.9
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.9	255.0	410.9	692.3	816.6
127.5°	238.9	269.7	406.5	648.1	754.8
130°	248.0	277.9	404.5	620.4	716.1
132.5°	257.2	287.1	402.5	596.7	681.5
135°	269.7	299.5	399.4	563.9	636.0
137.5°	283.2	310.3	397.9	534.9	595.6
140°	291.3	317.4	396.9	516.4	571.1
142.5°	299.4	323.6	395.9	502.0	547.7
145°	311.6	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.1	461.1	489.5
150°	334.5	350.7	393.1	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	460.0
155°	352.3	364.8	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	375.0	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.1	409.6	410.9
167.5°	388.5	391.0	394.3	405.3	406.3
170°	390.5	393.0	394.3	403.2	403.2
172.5°	392.5	394.0	394.3	401.2	401.2
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)