

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521950

Luminaire Tested: **SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521950
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

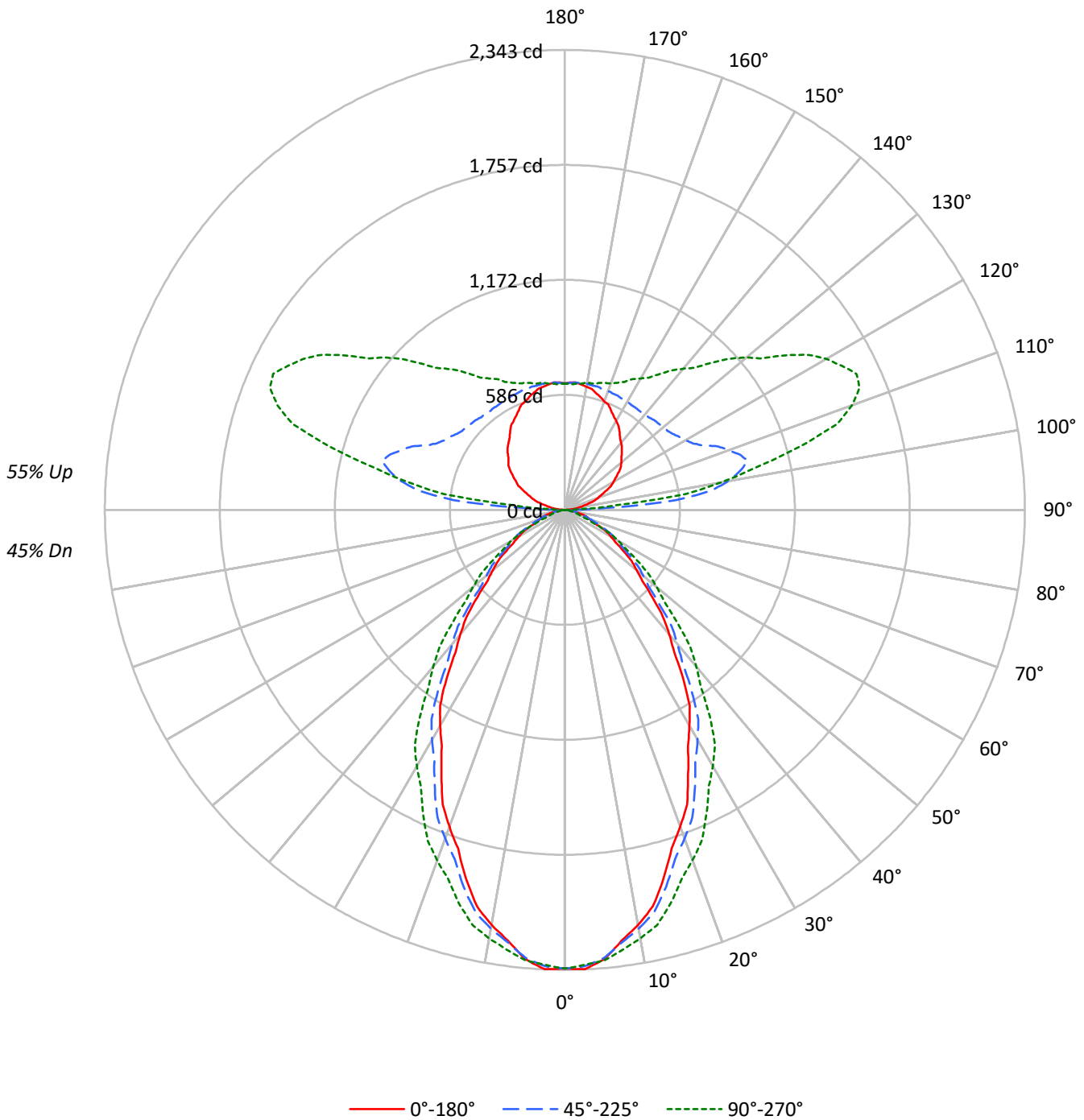
Lumens per Lamp: N/A
Luminaire Lumens: 7578.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.6
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	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	45	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	28
5	70	60	52	47	65	55	49	44	47	42	38	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	60	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	38	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21561	21561	21561
5°	21292	21216	21339
10°	20116	20299	20769
15°	18570	19001	19853
20°	16864	17498	18656
25°	15125	15950	17380
30°	13525	14409	16058
35°	11826	12681	14495
40°	9954	10744	12547
45°	8215	8923	10476
50°	6858	7477	8728
55°	5823	6416	7208
60°	4977	5563	5752
65°	3962	4678	3716
70°	3512	3652	2269
75°	3255	2962	1390
80°	2997	2726	1201
85°	2710	2498	974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.4	2.8
10°-20°	557.5	7.4
20°-30°	722.2	9.5
30°-40°	707.2	9.3
40°-50°	541.3	7.1
50°-60°	360.7	4.8
60°-70°	196.8	2.6
70°-80°	82.0	1.1
80°-90°	23.2	0.3
90°-100°	332.2	4.4
100°-110°	802.9	10.6
110°-120°	856.3	11.3
120°-130°	693.6	9.2
130°-140°	537.0	7.1
140°-150°	409.7	5.4
150°-160°	296.5	3.9
160°-170°	182.6	2.4
170°-180°	61.8	0.8
0°-30°	1494.0	19.7
0°-40°	2201.2	29.0
0°-60°	3103.2	41.0
0°-90°	3405.3	44.9
90°-120°	1991.5	26.3
90°-150°	3631.7	47.9
90°-180°	4173.0	55.1
0°-180°	7578.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2337	2337	2337	2337	2337	
5°	2299	2276	2291	2296	2304	214
15°	1944	1937	1989	2043	2078	543
25°	1486	1490	1567	1635	1707	683
35°	1050	1055	1126	1202	1287	653
45°	630	642	684	736	803	491
55°	362	377	399	414	448	328
65°	182	196	214	187	170	189
75°	91	91	83	57	39	97
85°	26	26	24	15	9	28
90°	0	0	0	0	0	3
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2336.9	2336.9	2336.9	2336.9	2336.9
2.5°	2342.6	2321.8	2327.1	2326.9	2320.5
5°	2299.0	2275.9	2290.8	2296.1	2304.1
7.5°	2213.6	2196.2	2223.3	2243.3	2259.6
10°	2147.2	2132.2	2166.7	2195.9	2216.9
12.5°	2070.1	2057.5	2100.2	2139.4	2166.9
15°	1944.2	1937.1	1989.3	2043.4	2078.5
17.5°	1809.4	1806.0	1865.8	1929.0	1973.9
20°	1717.6	1716.6	1782.2	1847.9	1900.1
22.5°	1624.9	1627.1	1696.0	1764.4	1823.8
25°	1485.8	1489.8	1566.8	1635.1	1707.3
27.5°	1357.2	1359.0	1438.6	1510.7	1587.7
30°	1269.5	1274.5	1352.5	1427.1	1507.3
32.5°	1181.7	1187.5	1263.9	1341.0	1422.9
35°	1050.0	1055.0	1125.9	1201.7	1286.9
37.5°	914.3	921.1	984.0	1055.6	1139.4
40°	826.5	836.5	892.1	959.6	1041.8
42.5°	742.0	754.4	806.0	870.0	944.2
45°	629.6	641.6	683.9	735.7	802.9
47.5°	532.8	546.6	579.1	623.7	681.1
50°	477.8	490.9	520.9	553.9	608.1
52.5°	429.4	442.5	469.2	494.7	540.8
55°	362.0	377.0	398.9	414.0	448.1
57.5°	306.6	321.0	338.4	345.2	365.9
60°	269.7	285.7	301.5	300.7	311.7
62.5°	236.0	249.7	265.4	254.5	255.1
65°	181.5	196.5	214.3	187.3	170.2
67.5°	146.6	149.8	168.2	130.6	110.3
70°	130.2	130.2	135.4	101.1	84.1
72.5°	114.6	114.6	109.9	82.2	64.4
75°	91.3	91.3	83.1	57.0	39.0
77.5°	70.3	69.5	63.6	42.5	28.3
80°	56.4	56.4	51.3	33.6	22.6
82.5°	44.1	44.1	39.8	26.2	16.8
85°	25.6	25.6	23.6	15.2	9.2
87.5°	9.0	9.0	8.2	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)